ALPHA ANALYTICAL

World Class Chemistry

www.alphalab.com

Lab Number: L1609539

Client: Apex Labs

ATTN: Philip Nerenberg

Project Name: A6C1076

Project Number:

Table of Contents

Sample Delivery Group Information

Sample Delivery Group Form

Laboratory Job number: L1609539
Project Manager: Elizabeth Porta **Review Date:** 04/01/2016
Project Number:
Project Name: A6C1076 **Received:** 04/01/2016 13:32
Client Account: Apex labs **Received by:** KB

Samples Delivered by: UPS **Call Tracker #**
Bill Of Laden Yes **Trackingnum** 1ZX4720R1399366736
Coc Present Present

Container Status Intact **Sample IDs**

All Containers Accounted For? Yes

Were Extra Samples Received? No

Do Sample Labels and COC agree? Yes

Are Samples in Appropriate Containers? Yes

Are Samples Received within Holding time? Yes

pH of Samples upon Receipt N/A **Are samples Properly Preserved?** Yes
Initial pH **preserved in house with** **Final pH**
Other Issues
Chlorine Check N/A

Are VOA/VPH Vials Present? No
Aqueous: Do Vials Contain Head Space? N/A
Soils: Is MeOHCovering the Soil? N/A
Reagent H2O Preserved vials Frozen on N/A
Frozen by Client N/A

Cooler	Seal	Ice Present	Blue Ice Present	Temp. (Celsius)	Frozen upon Receipt	Delivered Direct from Site
A	Absent	Yes	No	5.4 - IR Gun	No	No

LIMS Chain of Custody

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Apr 22 2016, 04:42 pm

Login Number: L1609539
Account: APEX-LABS Apex labs
Received: 01APR16 Due Date: 22APR16

Sample #	Client ID	Mat	PR	Collected	Container
L1609539-01	5237-160328-DC-SED0	3	S0	28MAR16 10:30	1-Glass-A.120
| A2-DPKG-FULL Package Due Date: 04/22/16					
A2-DPKG-FULL,A2-SOOT-LK-4REPS					
L1609539-02	5237-160328-DC-SED0	3	S0	28MAR16 11:00	1-Glass-A.120
| Package Due Date: 04/22/16					
A2-SOOT-LK-4REPS					
L1609539-03	5237-160328-DC-SED0	3	S0	28MAR16 11:30	1-Glass-A.120
| Package Due Date: 04/22/16					
A2-SOOT-LK-4REPS					
L1609539-04	5237-160328-DC-SED0	3	S0	28MAR16 12:05	1-Glass-A.120
| Package Due Date: 04/22/16					
A2-SOOT-LK-4REPS					
L1609539-05	5237-160328-DC-SED0	3	S0	28MAR16 12:30	1-Glass-A.120
| Package Due Date: 04/22/16					
A2-SOOT-LK-4REPS					
L1609539-06	5237-160328-DC-SED0	3	S0	28MAR16 12:50	1-Glass-A.120
| Package Due Date: 04/22/16					
A2-SOOT-LK-4REPS					
L1609539-07	5237-160328-DC-SED0	3	S0	28MAR16 12:50	1-Glass-A.120
| Package Due Date: 04/22/16					

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Apr 22 2016, 04:42 pm

Login Number: L1609539
Account: APEX-LABS Apex labs
Received: 01APR16 Due Date: 22APR16

Sample #	Client ID	Mat	PR	Collected	Container
A2-SOOT-LK-4REPS					
L1609539-08	5237-160328-DC-SED0	3	S0	28MAR16 13:15	1-Glass-A.120
| Package Due Date: 04/22/16					
A2-SOOT-LK-4REPS					
L1609539-09	5237-160328-DC-SED0	3	S0	28MAR16 13:45	1-Glass-A.120
| Package Due Date: 04/22/16					
A2-SOOT-LK-4REPS					
L1609539-10	5237-160328-DC-SED0	3	S0	28MAR16 14:15	1-Glass-A.120
| Package Due Date: 04/22/16					
A2-SOOT-LK-4REPS					
L1609539-11	5237-160328-DC-SED0	3	S0	28MAR16 14:45	1-Glass-A.120
| Package Due Date: 04/22/16					
A2-SOOT-LK-4REPS					

Logged By: Elizabeth Porta

Container Tracking

ALPHA ANALYTICAL LABORATORIES
Container Tracking Report

Container ID	Type	Status	Transaction Date	From Response	From Location	From Operator	To Response	To Location	To Operator
L1609539-01A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-WET CHEMISTRY	Amanda Luiz	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Amanda Luiz
L1609539-01A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-CUSTODY-REFRIG-D2	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1609539-01A	Glass-A.120	INTACT	01-APR-16	CUSTODY	A2-CUSTODY-REFRIDGE	Kim L. Bailey	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Kim L. Bailey
L1609539-01A	Glass-A.120	INTACT	01-APR-16	A2-LOGIN	A2-LOGIN	Kim L. Bailey	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Kim L. Bailey
L1609539-02A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-WET CHEMISTRY	Amanda Luiz	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Amanda Luiz
L1609539-02A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-CUSTODY-REFRIG-D2	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1609539-02A	Glass-A.120	INTACT	01-APR-16	CUSTODY	A2-CUSTODY-REFRIDGE	Kim L. Bailey	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Kim L. Bailey
L1609539-02A	Glass-A.120	INTACT	01-APR-16	A2-LOGIN	A2-LOGIN	Kim L. Bailey	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Kim L. Bailey
L1609539-03A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-WET CHEMISTRY	Amanda Luiz	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Amanda Luiz
L1609539-03A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-CUSTODY-REFRIG-D2	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1609539-03A	Glass-A.120	INTACT	01-APR-16	CUSTODY	A2-CUSTODY-REFRIDGE	Kim L. Bailey	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Kim L. Bailey
L1609539-03A	Glass-A.120	INTACT	01-APR-16	A2-LOGIN	A2-LOGIN	Kim L. Bailey	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Kim L. Bailey
L1609539-04A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-WET CHEMISTRY	Amanda Luiz	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Amanda Luiz
L1609539-04A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-CUSTODY-REFRIG-D2	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1609539-04A	Glass-A.120	INTACT	01-APR-16	CUSTODY	A2-CUSTODY-REFRIDGE	Kim L. Bailey	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Kim L. Bailey
L1609539-04A	Glass-A.120	INTACT	01-APR-16	A2-LOGIN	A2-LOGIN	Kim L. Bailey	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Kim L. Bailey
L1609539-05A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-WET CHEMISTRY	Amanda Luiz	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Amanda Luiz
L1609539-05A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-CUSTODY-REFRIG-D2	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1609539-05A	Glass-A.120	INTACT	01-APR-16	CUSTODY	A2-CUSTODY-REFRIDGE	Kim L. Bailey	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Kim L. Bailey
L1609539-05A	Glass-A.120	INTACT	01-APR-16	A2-LOGIN	A2-LOGIN	Kim L. Bailey	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Kim L. Bailey
L1609539-06A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-WET CHEMISTRY	Amanda Luiz	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Amanda Luiz
L1609539-06A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-CUSTODY-REFRIG-D2	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1609539-06A	Glass-A.120	INTACT	01-APR-16	CUSTODY	A2-CUSTODY-REFRIDGE	Kim L. Bailey	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Kim L. Bailey
L1609539-06A	Glass-A.120	INTACT	01-APR-16	A2-LOGIN	A2-LOGIN	Kim L. Bailey	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Kim L. Bailey
L1609539-07A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-WET CHEMISTRY	Amanda Luiz	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Amanda Luiz

Container ID	Type	Status	Transaction Date	From Response	Location	To Operator	Response	Location	Operator
L1609539-07A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-CUSTODY-REFRIG-D2	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1609539-07A	Glass-A.120	INTACT	01-APR-16	CUSTODY	A2-CUSTODY-REFRIDGE	Kim L. Bailey	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Kim L. Bailey
L1609539-07A	Glass-A.120	INTACT	01-APR-16	A2-LOGIN	A2-LOGIN	Kim L. Bailey	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Kim L. Bailey
L1609539-08A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-WET CHEMISTRY	Amanda Luiz	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Amanda Luiz
L1609539-08A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-CUSTODY-REFRIG-D2	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1609539-08A	Glass-A.120	INTACT	01-APR-16	CUSTODY	A2-CUSTODY-REFRIDGE	Kim L. Bailey	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Kim L. Bailey
L1609539-08A	Glass-A.120	INTACT	01-APR-16	A2-LOGIN	A2-LOGIN	Kim L. Bailey	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Kim L. Bailey
L1609539-09A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-WET CHEMISTRY	Amanda Luiz	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Amanda Luiz
L1609539-09A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-CUSTODY-REFRIG-D2	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1609539-09A	Glass-A.120	INTACT	01-APR-16	CUSTODY	A2-CUSTODY-REFRIDGE	Kim L. Bailey	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Kim L. Bailey
L1609539-09A	Glass-A.120	INTACT	01-APR-16	A2-LOGIN	A2-LOGIN	Kim L. Bailey	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Kim L. Bailey
L1609539-10A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-WET CHEMISTRY	Amanda Luiz	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Amanda Luiz
L1609539-10A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-CUSTODY-REFRIG-D2	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1609539-10A	Glass-A.120	INTACT	01-APR-16	CUSTODY	A2-CUSTODY-REFRIDGE	Kim L. Bailey	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Kim L. Bailey
L1609539-10A	Glass-A.120	INTACT	01-APR-16	A2-LOGIN	A2-LOGIN	Kim L. Bailey	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Kim L. Bailey
L1609539-11A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-WET CHEMISTRY	Amanda Luiz	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Amanda Luiz
L1609539-11A	Glass-A.120	INTACT	15-APR-16	CUSTODY	A2-CUSTODY-REFRIG-D2	Ashley Roulx	A2-WET CHEMISTRY	A2-WET CHEMISTRY	Ashley Roulx
L1609539-11A	Glass-A.120	INTACT	01-APR-16	CUSTODY	A2-CUSTODY-REFRIDGE	Kim L. Bailey	A2-CUSTODY-REFRIG-D2	A2-CUSTODY-REFRIG-D2	Kim L. Bailey
L1609539-11A	Glass-A.120	INTACT	01-APR-16	A2-LOGIN	A2-LOGIN	Kim L. Bailey	A2-CUSTODY-REFRIDGE	A2-CUSTODY-REFRIDGE	Kim L. Bailey

Chain of Custody

L1609539

LD 3/31/16

SUBCONTRACT ORDER

Apex Laboratories

A6C1076

SENDING LABORATORY:

Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Philip Nerenberg

RECEIVING LABORATORY:

Alpha Analytical, INC
320 Forbes Boulevard
Mansfield, MA 02048
Phone :(508) 822-9300
Fax:

09539

Sediment 0 to 6 bgs

Sample Name: 5237-160328-DC-SED063 **Sedimen** **Sampled: 03/28/16 10:30** (A6C1076-02)

.01

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 10:30	Carbon Black-Alpha Analytical Level IV DP needed
Containers Supplied: (F)4 oz Glass Jar			

Sediment 0 to 6 bgs

Sample Name: 5237-160328-DC-SED065 **Sedimen** **Sampled: 03/28/16 11:00** (A6C1076-04)

.02

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 11:00	Carbon Black-Alpha Analytical Level IV DP needed
Containers Supplied: (F)4 oz Glass Jar			

Sediment 0 to 6 bgs

Sample Name: 5237-160328-DC-SED068 **Sedimen** **Sampled: 03/28/16 11:30** (A6C1076-06)

.03

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 11:30	Carbon Black-Alpha Analytical Level IV DP needed
Containers Supplied: (D)4 oz Glass Jar			

Sediment 0 to 6 bgs

Sample Name: 5237-160328-DC-SED070 **Sedimen** **Sampled: 03/28/16 12:05** (A6C1076-08)

.04

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 12:05	Carbon Black-Alpha Analytical Level IV DP needed
Containers Supplied: (D)4 oz Glass Jar			

Standard TAT

Level IV DP

Marissa Kapa 3/31/16
Released By Date

UPS (Shipper)
Released By Date

UPS (Shipper)
Received By Date

Kim Parker - AAL 4/1/16 13:30
Received By Date

L1609539

Sample Name: 5237-160328-DC-SED072 **Sediment** **Sediment 0 to 6 bgs** **Sampled: 03/28/16 12:30** (A6C1076-10)

.05

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 12:30	Carbon Black-Alpha Analytical Level IV DP needed
Containers Supplied: (D)4 oz Glass Jar			

Sample Name: 5237-160328-DC-SED075 **Sediment** **Sediment 0 to 6 bgs** **Sampled: 03/28/16 12:50** (A6C1076-12)

.06

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 12:50	Carbon Black-Alpha Analytical Level IV DP needed
Containers Supplied: (D)4 oz Glass Jar			

Sample Name: 5237-160328-DC-SED077 **Sediment** **Sediment 0 to 6 bgs** **Sampled: 03/28/16 12:50** (A6C1076-14)

.07

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 12:50	Carbon Black-Alpha Analytical Level IV DP needed
Containers Supplied: (D)4 oz Glass Jar			

Sample Name: 5237-160328-DC-SED077D **Sediment** **Sediment 0 to 6 bgs** **Sampled: 03/28/16 13:15** (A6C1076-16)

.08

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 13:15	Carbon Black-Alpha Analytical Level IV DP needed
Containers Supplied: (D)4 oz Glass Jar			

Sample Name: 5237-160328-DC-SED082 **Sediment** **Sediment 0 to 6 bgs** **Sampled: 03/28/16 13:45** (A6C1076-18)

.09

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 13:45	Carbon Black-Alpha Analytical Level IV DP needed
Containers Supplied: (D)4 oz Glass Jar			

Released By: Melissa Kaya 3/31/16 Date — Received By: UPS (Shipper) Date

Released By: UPS (Shipper) Date — Received By: AAL 4/1/16 13:32 Date

SUBCONTRACT ORDER

Apex Laboratories

A6C1076

L1609539

			Sediment 0 to 6 bgs	
Sample Name: 5237-160328-DC-SED085		**Sedimen**	**Sampled: 03/28/16 14:15**	(A6C1076-20)

.10

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 14:15	Carbon Black-Alpha Analytical Level IV DP needed

Containers Supplied:
(D)4 oz Glass Jar

			Sediment 0 to 6 bgs	
Sample Name: 5237-160328-DC-SED087		**Sedimen**	**Sampled: 03/28/16 14:45**	(A6C1076-22)

.11

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 14:45	Carbon Black-Alpha Analytical Level IV DP needed

Containers Supplied:
(F)4 oz Glass Jar

Released By	Date	Received By	Date
Alissa Kyra	3/31/16	UPS (Shipper)	
UPS (Shipper)		[signature] -AAL	4/1/16 13:32

Wet Chemistry

Organic Carbon Analysis

Sequence Logs

Date of report: 4/22/2016 10:31 AM
User ID: mansfield_toc1

	Run Details				Results			Signals			
	Run	Run #	Weight	Created on	Carbon	Hydroge	Nitrogen	ZR	CR	HR	NR
⊞	K1	1	10.260	4/21/2016 9:30:08 AM	13.723	21.086	0.094	1546	1711	2860	15644
⊞	BLANK	2		4/21/2016 9:35:35 AM	64	1855	136	1547	1567	1753	15614
	0	3	9.900	4/21/2016 9:41:02 AM	-.003%	5.239%	7.741%	1547	1571	2712	15653
	1000	4	10.280	4/21/2016 9:45:46 AM	0.058%	5.030%	8.364%	1548	1581	2720	15676
	5000	5	10.370	4/21/2016 9:50:30 AM	0.495%	5.107%	9.643%	1549	1644	2809	15697
	10000	6	10.330	4/21/2016 9:55:14 AM	0.984%	5.448%	12.395%	1549	1715	2949	15730
	20000	7	10.490	4/21/2016 9:59:59 AM	2.031%	5.106%	12.206%	1550	1865	3042	15740
	40000	8	10.610	4/21/2016 10:04:42 AM	4.036%	5.144%	8.368%	1549	2149	3348	15694
	ICV	9	10.070	4/21/2016 10:26:46 AM	1.011%	5.604%	3.155%	1545	1702	2938	15593
	ICB	10	73.950	4/21/2016 10:31:30 AM	0.003%	0.059%	0.367%	1548	1570	1722	15610
	HICV	11	51.860	4/21/2016 10:36:16 AM	3.965%	1.140%	2.613%	1546	4335	5628	15713
	SRM1650	12	.660	4/21/2016 10:43:17 AM	81.976	133.852	50.977%	1546	2292	4193	15605
	MB	13	51.290	4/21/2016 10:48:01 AM	0.0%	0.270%	0.255%	1549	1567	1916	15612
	SRM1650	14	.550	4/21/2016 10:52:46 AM	89.221	3.413%	57.774%	1547	2224	2325	15606
	MB	15	56.850	4/21/2016 10:57:30 AM	0.0%	-.024%	0.345%	1546	1564	1597	15587
	SRM1650	16	.740	4/21/2016 11:02:14 AM	77.164	-2.284%	44.203%	1546	2331	2357	15595
	MB	17	62.470	4/21/2016 11:06:59 AM	0.001%	-.041%	0.314%	1545	1564	1572	15576
	SRM1650	18	.870	4/21/2016 11:11:43 AM	83.921	-2.197%	51.563%	1544	2545	2566	15597
	MB	19	65.920	4/21/2016 11:16:28 AM	0.001%	-.042%	0.468%	1545	1565	1569	15584
	160956303	20	16.460	4/21/2016 11:24:57 AM	-.002%	0.174%	2.725%	1544	1565	1686	15593
	160956303	21	9.540	4/21/2016 11:29:46 AM	-.011%	-.002%	4.604%	1545	1564	1625	15598
	CCV	22	9.820	4/21/2016 11:34:36 AM	0.995%	5.267%	5.044%	1545	1698	2836	15610
	CCB	23	62.400	4/21/2016 11:39:20 AM	0.001%	0.008%	0.270%	1548	1567	1638	15600
	160956303	24	11.690	4/21/2016 11:49:38 AM	-.012%	0.160%	1.999%	1544	1561	1661	15568
	160956303	25	11.930	4/21/2016 11:54:57 AM	0.009%	0.150%	2.272%	1545	1566	1664	15587
	160956303D	26	24.730	4/21/2016 12:00:33 PM	-.003%	0.268%	1.247%	1545	1563	1763	15585

Reported on 4/22/2016 10:31 AM by mansfield_toc1

Run Details				Results			Signals			
Run	Run #	Weight	Created on	Carbon	Hydroge	Nitrogen	ZR	CR	HR	NR
160956303D	27	13.120	4/21/2016 12:08:34 PM	-.001%	0.165%	3.704%	1544	1565	1672	15595
160956303D	28	9.680	4/21/2016 12:13:20 PM	-.002%	-.009%	4.731%	1545	1566	1625	15602
160956303D	29	12.360	4/21/2016 12:18:08 PM	-.002%	0.068%	3.176%	1544	1564	1643	15584
160956303MS	30	10.870	4/21/2016 12:22:56 PM	0.930%	4.900%	4.213%	1544	1701	2872	15598
160956303MS	31	12.950	4/21/2016 12:27:45 PM	0.809%	4.169%	3.681%	1546	1708	2894	15617
160956303MS	32	11.400	4/21/2016 12:32:34 PM	0.888%	4.739%	3.935%	1547	1703	2890	15618
160956303MS	33	9.340	4/21/2016 12:37:20 PM	1.098%	5.782%	3.002%	1548	1705	2891	15618
CCV	34	10.030	4/21/2016 12:42:05 PM	0.965%	5.327%	8.666%	1547	1703	2877	15671
CCB	35	44.550	4/21/2016 12:46:50 PM	-.001%	0.015%	0.462%	1547	1565	1641	15597
160956304	36	11.510	4/21/2016 12:55:54 PM	-.021%	0.190%	2.598%	1546	1562	1669	15597
160956304	37	14.890	4/21/2016 1:00:40 PM	-.007%	0.145%	2.134%	1545	1564	1670	15593
160956304	38	18.540	4/21/2016 1:05:25 PM	-.001%	0.157%	1.512%	1545	1564	1686	15584
160956304	39	16.460	4/21/2016 1:10:10 PM	-.005%	0.144%	1.533%	1544	1562	1673	15574
160956305	40	11.090	4/21/2016 1:14:56 PM	-.017%	-.014%	2.444%	1545	1561	1619	15579
160956305	41	11.780	4/21/2016 1:19:41 PM	-.016%	-.028%	2.539%	1544	1561	1615	15575
160956305	42	11.710	4/21/2016 1:24:27 PM	-.017%	-.056%	2.235%	1545	1562	1610	15586
160956305	43	6.850	4/21/2016 1:29:12 PM	-.062%	-.410%	3.684%	1543	1556	1559	15563
160956306	44	10.180	4/21/2016 1:33:58 PM	-.002%	0.137%	2.662%	1544	1562	1653	15569
160956306	45	14.930	4/21/2016 1:38:45 PM	-.015%	0.068%	2.879%	1544	1561	1644	15587
CCV	46	10.380	4/21/2016 1:43:33 PM	1.006%	3.123%	4.322%	1544	1705	2441	15592
CCB	47	44.750	4/21/2016 1:48:21 PM	-.002%	-.052%	1.107%	1546	1566	1579	15617
160956306	48	16.970	4/21/2016 2:58:09 PM	-.009%	0.193%	2.809%	1542	1561	1691	15578
160956306	49	14.950	4/21/2016 3:03:01 PM	-.009%	0.159%	2.938%	1541	1560	1671	15564
160956307	50	9.290	4/21/2016 3:07:48 PM	-.017%	-.191%	2.515%	1541	1558	1582	15541
160956307	51	13.470	4/21/2016 3:12:34 PM	-.018%	-.036%	1.735%	1541	1556	1607	15535
160956307	52	12.540	4/21/2016 3:17:20 PM	-.017%	-.095%	2.459%	1542	1559	1595	15557
160956307	53	12.790	4/21/2016 3:22:06 PM	-.014%	-.093%	2.338%	1541	1557	1594	15542

Reported on 4/22/2016 10:31 AM by mansfield_toc1

Run Details				Results			Signals			
Run	Run #	Weight	Created on	Carbon	Hydroge	Nitrogen	ZR	CR	HR	NR
160956307	53	12.790	4/21/2016 3:22:06 PM	-.014%	-.093%	2.338%	1541	1557	1594	15542
160956308	54	15.120	4/21/2016 3:26:53 PM	-.007%	0.050%	2.163%	1540	1558	1635	15536
160956308	55	13.580	4/21/2016 3:31:39 PM	-.010%	0.0%	2.271%	1541	1558	1620	15545
160956308	56	14.430	4/21/2016 3:36:26 PM	-.024%	-.188%	1.425%	1541	1555	1560	15536
160956308	57	10.450	4/21/2016 3:41:12 PM	0.006%	-.046%	3.220%	1543	1563	1614	15566
CCV	58	10.260	4/21/2016 3:45:58 PM	1.019%	5.616%	4.190%	1540	1701	2963	15554
CCB	59	45.850	4/21/2016 3:50:45 PM	-.001%	-.010%	0.876%	1542	1562	1614	15572
160956309	1	11.960	4/21/2016 3:58:38 PM	0.066%	0.009%	2.891%	1542	1573	1636	15565
160956309	2	17.450	4/21/2016 4:03:25 PM	-.006%	0.116%	1.821%	1541	1559	1663	15548
160956309	3	18.460	4/21/2016 4:08:12 PM	-.002%	0.123%	1.721%	1542	1561	1670	15560
160956309	4	12.750	4/21/2016 4:12:59 PM	-.004%	-.020%	2.785%	1540	1559	1616	15544
160956310	5	16.800	4/21/2016 4:17:46 PM	-.005%	0.105%	2.392%	1540	1559	1657	15547
160956310	6	13.410	4/21/2016 4:22:33 PM	-.008%	0.050%	3.066%	1542	1561	1636	15567
160956310	7	14.490	4/21/2016 4:27:20 PM	-.006%	0.045%	2.773%	1542	1561	1636	15563
160956310	8	15.320	4/21/2016 4:32:08 PM	0.019%	0.060%	3.050%	1540	1565	1646	15557
160953901	9	14.300	4/21/2016 4:36:57 PM	0.009%	0.296%	3.333%	1540	1563	1713	15557
160953901	10	19.870	4/21/2016 4:41:46 PM	0.009%	0.356%	2.493%	1540	1564	1773	15562
CCV	11	9.910	4/21/2016 4:46:35 PM	1.026%	5.776%	4.998%	1540	1698	2951	15556
CCB	12	53.060	4/21/2016 4:51:22 PM	0.001%	-.014%	0.881%	1544	1566	1612	15591
160953901	13	13.240	4/21/2016 4:56:58 PM	-.003%	0.477%	2.894%	1540	1560	1753	15548
160953901	14	18.820	4/21/2016 5:01:50 PM	0.007%	0.435%	2.185%	1543	1565	1797	15575
160953902	15	13.340	4/21/2016 5:06:43 PM	0.036%	0.233%	3.153%	1543	1570	1696	15577
160953902	16	12.740	4/21/2016 5:11:35 PM	0.040%	0.161%	3.228%	1541	1568	1672	15558
160953902	17	17.490	4/21/2016 5:16:27 PM	0.048%	0.218%	2.511%	1540	1572	1713	15556
160953902	18	15.910	4/21/2016 5:21:14 PM	0.052%	0.191%	2.467%	1541	1573	1698	15561
160953903	19	10.750	4/21/2016 5:26:00 PM	0.060%	-.027%	3.304%	1540	1569	1624	15544
160953903	20	17.0	4/21/2016 5:30:47 PM	0.102%	0.156%	2.309%	1543	1586	1703	15572

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Run Details				Results			Signals			
Run	Run #	Weight	Created on	Carbon	Hydroge	Nitrogen	ZR	CR	HR	NR
160953903	20	17.0	4/21/2016 5:30:47 PM	0.102%	0.156%	2.309%	1543	1586	1703	15572
160953903	21	17.410	4/21/2016 5:35:33 PM	0.073%	0.102%	2.308%	1540	1578	1676	15550
160953903	22	13.600	4/21/2016 5:40:20 PM	0.081%	0.062%	2.680%	1542	1577	1656	15568
CCV	23	10.140	4/21/2016 5:45:06 PM	0.999%	5.360%	2.673%	1540	1695	2889	15538
CCB	24	53.350	4/21/2016 5:49:52 PM	-.001%	-.009%	0.473%	1542	1560	1612	15553
160953904	25	13.300	4/22/2016 8:06:19 AM	0.033%	0.262%	27.686%	1547	1609	1743	15972
160953904	26	17.910	4/22/2016 8:11:01 AM	0.020%	0.266%	6.679%	1548	1581	1742	15709
160956304	27	15.740	4/22/2016 8:15:43 AM	0.018%	0.219%	2.613%	1548	1572	1706	15630
160953904	28	18.240	4/22/2016 8:20:25 AM	0.019%	0.227%	1.281%	1548	1571	1719	15612
160953905	29	10.260	4/22/2016 8:25:08 AM	0.007%	0.122%	2.095%	1548	1568	1655	15611
160953905	30	9.150	4/22/2016 8:29:50 AM	0.025%	0.046%	3.473%	1549	1572	1642	15633
160953905	31	8.340	4/22/2016 8:34:33 AM	0.030%	-.002%	4.034%	1549	1572	1633	15634
160953905	32	9.590	4/22/2016 8:39:16 AM	0.013%	0.101%	1.267%	1549	1568	1650	15609
160953906	33	12.430	4/22/2016 8:43:58 AM	0.004%	0.072%	0.677%	1550	1567	1647	15609
160953906	34	14.030	4/22/2016 8:48:40 AM	-.001%	0.090%	0.666%	1549	1566	1654	15608
CCV	35	10.240	4/22/2016 8:53:22 AM	0.886%	4.443%	18.527%	1549	1707	2716	15800
CCB	36	61.110	4/22/2016 8:58:04 AM	0.0%	-.023%	0.092%	1551	1568	1600	15622
160953906	37	17.310	4/22/2016 9:07:17 AM	0.003%	0.194%	0.540%	1549	1566	1698	15601
160953906	38	16.790	4/22/2016 9:11:59 AM	0.0%	0.207%	0.501%	1550	1566	1700	15609
160953907	39	13.430	4/22/2016 9:16:40 AM	-.003%	0.318%	0.835%	1549	1566	1717	15611
160953907	40	7.070	4/22/2016 9:21:22 AM	-.025%	0.082%	0.793%	1549	1564	1637	15603
160953907	41	10.210	4/22/2016 9:26:03 AM	-.015%	0.182%	1.007%	1549	1564	1665	15607
160953907	42	13.410	4/22/2016 9:30:45 AM	-.004%	0.284%	0.836%	1549	1565	1706	15606
160953908	43	12.110	4/22/2016 9:35:26 AM	-.005%	0.245%	0.695%	1549	1565	1688	15602
160953908	44	14.180	4/22/2016 9:40:07 AM	0.002%	0.289%	0.527%	1549	1566	1713	15599
160953908	45	13.220	4/22/2016 9:44:48 AM	-.002%	0.288%	1.131%	1549	1566	1707	15610
160953908	46	11.430	4/22/2016 9:49:30 AM	-.005%	0.229%	1.390%	1548	1565	1681	15604

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Run Details				Results			Signals			
Run	Run #	Weight	Created on	Carbon	Hydroge	Nitrogen	ZR	CR	HR	NR
160953908	46	11.430	4/22/2016 9:49:30 AM	-.005%	0.229%	1.390%	1548	1565	1681	15604
CCV	47	10.080	4/22/2016 9:54:59 AM	1.015%	5.157%	0.834%	1548	1702	2846	15594
CCB	48	63.780	4/22/2016 9:59:40 AM	-.001%	-.001%	0.029%	1550	1566	1627	15611
160953909	49	12.910	4/22/2016 10:07:17 AM	-.005%	0.254%	0.652%	1548	1564	1694	15591
160953909	50	15.250	4/22/2016 10:11:59 AM	-.005%	0.248%	1.287%	1548	1565	1706	15608
160953909	51	11.210	4/22/2016 10:16:39 AM	-.004%	0.157%	0.250%	1548	1564	1662	15587
160953909	52	11.840	4/22/2016 10:21:24 AM	-.008%	0.155%	1.815%	1548	1565	1665	15605
CCV	53	10.180	4/22/2016 10:26:09 AM	1.019%	5.058%	1.285%	1548	1705	2839	15600
CCB	54	71.680	4/22/2016 10:30:53 AM	0.0%	0.0%	0.156%	1549	1567	1629	15609

Date of report: 4/22/2016 2:51 PM
User ID: mansfield_toc1

Run Details				Results			Signals			
Run	Run #	Weight	Created on	Carbon	Hydroge	Nitrogen	ZR	CR	HR	NR
K1	1	10.070	4/22/2016 10:37:20 AM	13.436	21.498	0.002	1547	1699	2849	15580
BLANK	2		4/22/2016 10:42:01 AM	57	704	104	1551	1567	1638	15622
0	3	9.760	4/22/2016 10:46:41 AM	-.033%	5.195%	1.149%	1549	1562	2701	15606
1000	4	10.050	4/22/2016 10:51:22 AM	0.049%	5.250%	1.023%	1549	1573	2756	15611
5000	5	10.200	4/22/2016 10:56:02 AM	0.472%	5.087%	-.183%	1552	1633	2797	15625
10000	6	10.440	4/22/2016 11:00:43 AM	0.939%	5.037%	-.358%	1552	1700	2879	15627
20000	7	10.810	4/22/2016 11:05:23 AM	1.921%	4.884%	1.470%	1550	1847	3030	15625
40000	8	10.500	4/22/2016 11:10:04 AM	3.826%	5.157%	1.958%	1552	2110	3322	15649
ICV	9	9.860	4/22/2016 11:17:09 AM	0.919%	5.584%	1.990%	1549	1688	2919	15614
ICB	10	66.910	4/22/2016 11:21:52 AM	0.006%	0.027%	0.223%	1550	1573	1678	15620
HICV	11	51.490	4/22/2016 11:26:35 AM	3.939%	1.161%	0.309%	1551	4291	5623	15629
SRM1650	12	1.240	4/22/2016 11:31:38 AM	71.279	68.180	31.655%	1552	2758	4613	15665
MB	13	78.050	4/22/2016 11:36:22 AM	0.005%	0.148%	0.144%	1553	1575	1886	15649
SRM1650	14	.520	4/22/2016 11:41:06 AM	114.663	1.399%	62.904%	1551	2371	2452	15649
MB	15	79.740	4/22/2016 11:45:46 AM	0.002%	-.028%	-.023%	1550	1568	1586	15604
SRM1650	16	.950	4/22/2016 11:50:26 AM	86.342	-2.074%	28.529%	1549	2669	2693	15624
MB	17	78.170	4/22/2016 11:55:05 AM	0.001%	-.036%	0.060%	1547	1565	1571	15584
SRM1650	18	.940	4/22/2016 11:59:46 AM	85.018	-2.559%	47.723%	1547	2641	2656	15628
MB	19	80.090	4/22/2016 12:04:25 PM	0.001%	-.037%	0.0%	1547	1565	1568	15578
SRM1650	20	.860	4/22/2016 12:09:05 PM	96.911	-2.780%	28.255%	1547	2684	2700	15601
SRM1650	21	1.070	4/22/2016 12:16:44 PM	86.844	-2.124%	27.950%	1548	2814	2832	15616
CCV	22	10.080	4/22/2016 12:26:47 PM	1.001%	5.545%	0.278%	1546	1698	2947	15573
CCB	23	62.0	4/22/2016 12:31:26 PM	0.003%	0.003%	0.015%	1549	1569	1638	15602
160953910	26	17.820	4/22/2016 1:09:01 PM	1.124%	2.565%	3725.836	1921	9310	1034	90355
160953910	27	13.840	4/22/2016 1:13:35 PM	-.082%	0.454%	-86.435%	1552	1424	1623	14342
160953911	28	14.350	4/22/2016 1:18:09 PM	-.023%	0.360%	-24.553%	1540	1514	1689	15129

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Run Details				Results			Signals			
Run	Run #	Weight	Created on	Carbon	Hydroge	Nitrogen	ZR	CR	HR	NR
160953911	29	11.100	4/22/2016 1:22:43 PM	0.024%	0.235%	-11.703%	1539	1545	1666	15359
160953911	30	9.380	4/22/2016 1:27:17 PM	-.010%	0.118%	-6.277%	1538	1546	1636	15420
160953911	31	14.930	4/22/2016 1:31:51 PM	0.013%	0.282%	-2.128%	1535	1550	1705	15421
160953911D	32	16.890	4/22/2016 1:36:26 PM	0.011%	0.191%	-1.605%	1536	1552	1686	15442
160953911D	33	11.130	4/22/2016 1:41:00 PM	0.019%	0.089%	-2.183%	1537	1553	1640	15446
CCV	34	10.100	4/22/2016 1:45:34 PM	1.005%	1.173%	-2.498%	1537	1686	2003	15447
CCB	35	80.270	4/22/2016 1:50:09 PM	0.003%	-.036%	-.245%	1537	1554	1558	15453
160953910	36	23.510	4/22/2016 1:55:40 PM	0.002%	0.151%	-.755%	1535	1549	1690	15433
160953910	37	13.180	4/22/2016 2:00:15 PM	-.007%	-.026%	-1.205%	1537	1550	1608	15456
160953910	38	24.260	4/22/2016 2:04:49 PM	0.003%	0.173%	-.655%	1537	1553	1707	15461
160953910	39	22.130	4/22/2016 2:13:57 PM	0.003%	0.144%	-.845%	1538	1553	1686	15464
160953911D	40	17.230	4/22/2016 2:13:59 PM	0.011%	0.196%	-.922%	1536	1553	1690	15448
160953911D	41	13.730	4/22/2016 2:18:33 PM	0.027%	0.112%	-1.157%	1538	1557	1656	15470
160953911MS	42	13.310	4/22/2016 2:23:08 PM	0.720%	4.201%	-.983%	1538	1682	2931	15475
160953911MS	43	19.080	4/22/2016 2:27:43 PM	0.634%	2.951%	-.588%	1538	1716	2973	15478
160953911MS	44	15.710	4/22/2016 2:32:18 PM	0.698%	3.575%	-.833%	1539	1701	2955	15481
160953911MS	45	11.620	4/22/2016 2:36:53 PM	0.930%	4.896%	-1.206%	1539	1699	2969	15482
CCV	46	9.960	4/22/2016 2:41:28 PM	0.994%	5.834%	-.375%	1540	1688	2984	15501
CCB	47	78.680	4/22/2016 2:46:03 PM	0.001%	0.001%	-.190%	1541	1557	1625	15505

Sample Raw Data

Date of report	4/22/2016 10:31:14AM
User ID	mansfield_toc1

DATE & TIME	4/21/2016 9:30:08 AM	P_ID	042116CM
RUN TYPE	K1	USER ID	mansfield_toc1
WEIGHT (mg)	10.260	MODE	CHN

SIGNALS

				AVERAGE RESULTS	
		ZR	15466		
KC	13.723	NR	15644	KC	13.413
KH	21.086	CR	17110	KH	20.827
KN	0.094	HR	28607	KN	0.107

BLANKS	58	615	65
K FACTORS	1.0%	5.03%	11.67%
FILL TIME	28 Seconds		

NUMBER	MESSAGE
12	NITROGEN KFACTOR OUT OF TOLERANCE

DATE & TIME	4/21/2016 9:35:35 AM	P_ID	042116CM
RUN TYPE	BLANK	USER ID	mansfield_toc1
		MODE	CHN

SIGNALS

				AVERAGE RESULTS	
		ZR	15478		
CARBON	64	NR	15614	CARBON	61
HYDROGEN	1855	CR	15678	HYDROGEN	615
NITROGEN	136	HR	17533	NITROGEN	100
FILL TIME	25 Seconds				

NUMBER	MESSAGE
16	HYDROGEN BLANK OUT OF TOLERANCE

DATE & TIME	4/21/2016 9:41:02 AM	P_ID	042116CM
SAMPLE ID	0	USER ID	mansfield_toc1
WEIGHT (mg)	9.900	MODE	CHN

SIGNALS

		ZR	15471
CARBON	-.003%	NR	15653
HYDROGEN	5.239%	CR	15710
NITROGEN	7.741%	HR	27128

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 25 Seconds

DATE & TIME	4/21/2016 9:45:46 AM	P_ID	042116CM
SAMPLE ID	1000	USER ID	mansfield_toc1
WEIGHT (mg)	10.280	MODE	CHN

SIGNALS

		ZR	15484
CARBON	0.058%	NR	15676
HYDROGEN	5.030%	CR	15817
NITROGEN	8.364%	HR	27202

BLANKS	61	615	100

K FACTORS	13.413	20.827	0.107
FILL	COMB	BOOST1	BOOST2
0	0	0	0
FILL TIME	25 Seconds		

DATE & TIME	4/21/2016 9:50:30 AM	P_ID	042116CM
SAMPLE ID	5000	USER ID	mansfield_toc1
WEIGHT (mg)	10.370	MODE	CHN

		SIGNALS	
		ZR	15490
CARBON	0.495%	NR	15697
HYDROGEN	5.107%	CR	16446
NITROGEN	9.643%	HR	28091
BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107
FILL	COMB	BOOST1	BOOST2
0	0	0	0
FILL TIME	25 Seconds		

DATE & TIME	4/21/2016 9:55:14 AM	P_ID	042116CM
SAMPLE ID	10000	USER ID	mansfield_toc1
WEIGHT (mg)	10.330	MODE	CHN

		SIGNALS	
		ZR	15493
CARBON	0.984%	NR	15730
HYDROGEN	5.448%	CR	17154
NITROGEN	12.395%	HR	29490
BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107
FILL	COMB	BOOST1	BOOST2
0	0	0	0
FILL TIME	26 Seconds		

DATE & TIME	4/21/2016 9:59:59 AM	P_ID	042116CM
SAMPLE ID	20000	USER ID	mansfield_toc1
WEIGHT (mg)	10.490	MODE	CHN

		SIGNALS	
		ZR	15503
CARBON	2.031%	NR	15740
HYDROGEN	5.106%	CR	18659
NITROGEN	12.206%	HR	30429
BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107
FILL	COMB	BOOST1	BOOST2
0	0	0	0
FILL TIME	26 Seconds		

DATE & TIME	4/21/2016 10:04:42 AM	P_ID	042116CM
SAMPLE ID	40000	USER ID	mansfield_toc1
WEIGHT (mg)	10.610	MODE	CHN

				SIGNALS	
				ZR	15499
CARBON	4.036%			NR	15694
HYDROGEN	5.144%			CR	21499
NITROGEN	8.368%			HR	33482
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	25 Seconds				

DATE & TIME	4/21/2016 10:26:46 AM	P_ID	042116CM
SAMPLE ID	ICV	USER ID	mansfield_toc1
WEIGHT (mg)	10.070	MODE	CHN

				SIGNALS	
				ZR	15459
CARBON	1.011%			NR	15593
HYDROGEN	5.604%			CR	17020
NITROGEN	3.155%			HR	29388
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	25 Seconds				

DATE & TIME	4/21/2016 10:31:30 AM	P_ID	042116CM
SAMPLE ID	ICB	USER ID	mansfield_toc1
WEIGHT (mg)	73.950	MODE	CHN

				SIGNALS	
				ZR	15481
CARBON	0.003%			NR	15610
HYDROGEN	0.059%			CR	15701
NITROGEN	0.367%			HR	17227
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	26 Seconds				

DATE & TIME	4/21/2016 10:36:16 AM	P_ID	042116CM
SAMPLE ID	HICV	USER ID	mansfield_toc1
WEIGHT (mg)	51.860	MODE	CHN

				SIGNALS	
				ZR	15468
CARBON	3.965%			NR	15713
HYDROGEN	1.140%			CR	43354
NITROGEN	2.613%			HR	56282
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	27 Seconds				

DATE & TIME	4/21/2016 10:43:17 AM	P_ID	042116CM
SAMPLE ID	SRM1650	USER ID	mansfield_toc1
WEIGHT (mg)	.660	MODE	CHN

		SIGNALS	
		ZR	15469
CARBON	81.976%	NR	15605
HYDROGEN	133.852%	CR	22923
NITROGEN	50.977%	HR	41937

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 25 Seconds

DATE & TIME	4/21/2016 10:48:01 AM	P_ID	042116CM
SAMPLE ID	MB	USER ID	mansfield_toc1
WEIGHT (mg)	51.290	MODE	CHN

		SIGNALS	
		ZR	15498
CARBON	0.0%	NR	15612
HYDROGEN	0.270%	CR	15670
NITROGEN	0.255%	HR	19165

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 25 Seconds

DATE & TIME	4/21/2016 10:52:46 AM	P_ID	042116CM
SAMPLE ID	SRM1650	USER ID	mansfield_toc1
WEIGHT (mg)	.550	MODE	CHN

		SIGNALS	
		ZR	15472
CARBON	89.221%	NR	15606
HYDROGEN	3.413%	CR	22249
NITROGEN	57.774%	HR	23255

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 26 Seconds

DATE & TIME	4/21/2016 10:57:30 AM	P_ID	042116CM
SAMPLE ID	MB	USER ID	mansfield_toc1
WEIGHT (mg)	56.850	MODE	CHN

		SIGNALS	
		ZR	15466
CARBON	0.0%	NR	15587
HYDROGEN	-.024%	CR	15646
NITROGEN	0.345%	HR	15973

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 26 Seconds

DATE & TIME	4/21/2016 11:02:14 AM	P_ID	042116CM
SAMPLE ID	SRM1650	USER ID	mansfield_toc1
WEIGHT (mg)	.740	MODE	CHN

		SIGNALS	
		ZR	15460
CARBON	77.164%	NR	15595
HYDROGEN	-2.284%	CR	23315
NITROGEN	44.203%	HR	23578

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 26 Seconds

DATE & TIME	4/21/2016 11:06:59 AM	P_ID	042116CM
SAMPLE ID	MB	USER ID	mansfield_toc1
WEIGHT (mg)	62.470	MODE	CHN

		SIGNALS	
		ZR	15455
CARBON	0.001%	NR	15576
HYDROGEN	-.041%	CR	15643
NITROGEN	0.314%	HR	15723

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 26 Seconds

DATE & TIME	4/21/2016 11:11:43 AM	P_ID	042116CM
SAMPLE ID	SRM1650	USER ID	mansfield_toc1
WEIGHT (mg)	.870	MODE	CHN

		SIGNALS	
		ZR	15449
CARBON	83.921%	NR	15597
HYDROGEN	-2.197%	CR	25451
NITROGEN	51.563%	HR	25668

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 26 Seconds

DATE & TIME	4/21/2016 11:16:28 AM	P_ID	042116CM
SAMPLE ID	MB	USER ID	mansfield_toc1
WEIGHT (mg)	65.920	MODE	CHN

				SIGNALS	
				ZR	15451
CARBON	0.001%			NR	15584
HYDROGEN	-.042%			CR	15655
NITROGEN	0.468%			HR	15696
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	26 Seconds				

DATE & TIME	4/21/2016 11:24:57 AM	P_ID	042116CM
SAMPLE ID	160956303	USER ID	mansfield_toc1
WEIGHT (mg)	16.460	MODE	CHN

				SIGNALS	
				ZR	15445
CARBON	-.002%			NR	15593
HYDROGEN	0.174%			CR	15650
NITROGEN	2.725%			HR	16863
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	30 Seconds				

DATE & TIME	4/21/2016 11:29:46 AM	P_ID	042116CM
SAMPLE ID	160956303	USER ID	mansfield_toc1
WEIGHT (mg)	9.540	MODE	CHN

				SIGNALS	
				ZR	15451
CARBON	-.011%			NR	15598
HYDROGEN	-.002%			CR	15645
NITROGEN	4.604%			HR	16257
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	31 Seconds				

DATE & TIME	4/21/2016 11:34:36 AM	P_ID	042116CM
SAMPLE ID	CCV	USER ID	mansfield_toc1
WEIGHT (mg)	9.820	MODE	CHN

				SIGNALS	
				ZR	15457
CARBON	0.995%			NR	15610
HYDROGEN	5.267%			CR	16982
NITROGEN	5.044%			HR	28369
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	31 Seconds				

DATE & TIME	4/21/2016 11:39:20 AM	P_ID	042116CM
SAMPLE ID	CCB	USER ID	mansfield_toc1
WEIGHT (mg)	62.400	MODE	CHN

		SIGNALS	
		ZR	15482
CARBON	0.001%	NR	15600
HYDROGEN	0.008%	CR	15672
NITROGEN	0.270%	HR	16386

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 26 Seconds

DATE & TIME	4/21/2016 11:49:38 AM	P_ID	042116CM
SAMPLE ID	160956303	USER ID	mansfield_toc1
WEIGHT (mg)	11.690	MODE	CHN

		SIGNALS	
		ZR	15443
CARBON	.012%	NR	15568
HYDROGEN	0.160%	CR	15610
NITROGEN	1.999%	HR	16614

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 26 Seconds

DATE & TIME	4/21/2016 11:54:57 AM	P_ID	042116CM
SAMPLE ID	160956303	USER ID	mansfield_toc1
WEIGHT (mg)	11.930	MODE	CHN

		SIGNALS	
		ZR	15458
CARBON	0.009%	NR	15587
HYDROGEN	0.150%	CR	15662
NITROGEN	2.272%	HR	16649

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 27 Seconds

DATE & TIME	4/21/2016 12:00:33 PM	P_ID	042116CM
SAMPLE ID	160956303D	USER ID	mansfield_toc1
WEIGHT (mg)	24.730	MODE	CHN

		SIGNALS	
		ZR	15452
CARBON	.003%	NR	15585
HYDROGEN	0.268%	CR	15636
NITROGEN	1.247%	HR	17633

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 26 Seconds

DATE & TIME	4/21/2016 12:08:34 PM	P_ID	042116CM
SAMPLE ID	160956303D	USER ID	mansfield_toc1
WEIGHT (mg)	13.120	MODE	CHN

		SIGNALS	
		ZR	15443
CARBON	-.001%	NR	15595
HYDROGEN	0.165%	CR	15655
NITROGEN	3.704%	HR	16720

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 27 Seconds

DATE & TIME	4/21/2016 12:13:20 PM	P_ID	042116CM
SAMPLE ID	160956303D	USER ID	mansfield_toc1
WEIGHT (mg)	9.680	MODE	CHN

		SIGNALS	
		ZR	15453
CARBON	-.002%	NR	15602
HYDROGEN	-.009%	CR	15661
NITROGEN	4.731%	HR	16258

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 28 Seconds

DATE & TIME	4/21/2016 12:18:08 PM	P_ID	042116CM
SAMPLE ID	160956303D	USER ID	mansfield_toc1
WEIGHT (mg)	12.360	MODE	CHN

		SIGNALS	
		ZR	15442
CARBON	-.002%	NR	15584
HYDROGEN	0.068%	CR	15642
NITROGEN	3.176%	HR	16433

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 29 Seconds

DATE & TIME	4/21/2016 12:22:56 PM	P_ID	042116CM
SAMPLE ID	160956303MS	USER ID	mansfield_toc1
WEIGHT (mg)	10.870	MODE	CHN

				SIGNALS	
				ZR	15449
CARBON	0.930%			NR	15598
HYDROGEN	4.900%			CR	17015
NITROGEN	4.213%			HR	28724
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	30 Seconds				

DATE & TIME	4/21/2016 12:27:45 PM	P_ID	042116CM
SAMPLE ID	160956303MS	USER ID	mansfield_toc1
WEIGHT (mg)	12.950	MODE	CHN

				SIGNALS	
				ZR	15466
CARBON	0.809%			NR	15617
HYDROGEN	4.169%			CR	17083
NITROGEN	3.681%			HR	28941
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	30 Seconds				

DATE & TIME	4/21/2016 12:32:34 PM	P_ID	042116CM
SAMPLE ID	160956303MS	USER ID	mansfield_toc1
WEIGHT (mg)	11.400	MODE	CHN

				SIGNALS	
				ZR	15470
CARBON	0.888%			NR	15618
HYDROGEN	4.739%			CR	17037
NITROGEN	3.935%			HR	28904
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	31 Seconds				

DATE & TIME	4/21/2016 12:37:20 PM	P_ID	042116CM
SAMPLE ID	160956303MS	USER ID	mansfield_toc1
WEIGHT (mg)	9.340	MODE	CHN

				SIGNALS	
				ZR	15488
CARBON	1.098%			NR	15618
HYDROGEN	5.782%			CR	17055
NITROGEN	3.002%			HR	28918
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	27 Seconds				

DATE & TIME	4/21/2016 12:42:05 PM	P_ID	042116CM
SAMPLE ID	CCV	USER ID	mansfield_toc1
WEIGHT (mg)	10.030	MODE	CHN

		SIGNALS	
		ZR	15478
CARBON	0.965%	NR	15671
HYDROGEN	5.327%	CR	17030
NITROGEN	8.666%	HR	28773

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0
FILL TIME	27 Seconds		

DATE & TIME	4/21/2016 12:46:50 PM	P_ID	042116CM
SAMPLE ID	CCB	USER ID	mansfield_toc1
WEIGHT (mg)	44.550	MODE	CHN

		SIGNALS	
		ZR	15475
CARBON	-.001%	NR	15597
HYDROGEN	0.015%	CR	15654
NITROGEN	0.462%	HR	16411

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0
FILL TIME	27 Seconds		

DATE & TIME	4/21/2016 12:55:54 PM	P_ID	042116CM
SAMPLE ID	160956304	USER ID	mansfield_toc1
WEIGHT (mg)	11.510	MODE	CHN

		SIGNALS	
		ZR	15465
CARBON	-.021%	NR	15597
HYDROGEN	0.190%	CR	15626
NITROGEN	2.598%	HR	16697

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0
FILL TIME	27 Seconds		

DATE & TIME	4/21/2016 1:00:40 PM	P_ID	042116CM
SAMPLE ID	160956304	USER ID	mansfield_toc1
WEIGHT (mg)	14.890	MODE	CHN

		SIGNALS	
		ZR	15459
CARBON	-.007%	NR	15593
HYDROGEN	0.145%	CR	15641
NITROGEN	2.134%	HR	16706

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 27 Seconds

DATE & TIME	4/21/2016 1:05:25 PM	P_ID	042116CM
SAMPLE ID	160956304	USER ID	mansfield_toc1
WEIGHT (mg)	18.540	MODE	CHN

		SIGNALS	
		ZR	15454
CARBON	.001%	NR	15584
HYDROGEN	0.157%	CR	15642
NITROGEN	1.512%	HR	16863

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 27 Seconds

DATE & TIME	4/21/2016 1:10:10 PM	P_ID	042116CM
SAMPLE ID	160956304	USER ID	mansfield_toc1
WEIGHT (mg)	16.460	MODE	CHN

		SIGNALS	
		ZR	15447
CARBON	.005%	NR	15574
HYDROGEN	0.144%	CR	15625
NITROGEN	1.533%	HR	16732

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 27 Seconds

DATE & TIME	4/21/2016 1:14:56 PM	P_ID	042116CM
SAMPLE ID	160956305	USER ID	mansfield_toc1
WEIGHT (mg)	11.090	MODE	CHN

		SIGNALS	
		ZR	15450
CARBON	.017%	NR	15579
HYDROGEN	-.014%	CR	15614
NITROGEN	2.444%	HR	16197

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 27 Seconds

DATE & TIME	4/21/2016 1:19:41 PM	P_ID	042116CM
SAMPLE ID	160956305	USER ID	mansfield_toc1
WEIGHT (mg)	11.780	MODE	CHN

				SIGNALS	
				ZR	15443
CARBON	-.016%			NR	15575
HYDROGEN	-.028%			CR	15610
NITROGEN	2.539%			HR	16157
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	27 Seconds				

DATE & TIME	4/21/2016 1:24:27 PM	P_ID	042116CM
SAMPLE ID	160956305	USER ID	mansfield_toc1
WEIGHT (mg)	11.710	MODE	CHN

				SIGNALS	
				ZR	15458
CARBON	-.017%			NR	15586
HYDROGEN	-.056%			CR	15621
NITROGEN	2.235%			HR	16100
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	27 Seconds				

DATE & TIME	4/21/2016 1:29:12 PM	P_ID	042116CM
SAMPLE ID	160956305	USER ID	mansfield_toc1
WEIGHT (mg)	6.850	MODE	CHN

				SIGNALS	
				ZR	15436
CARBON	-.062%			NR	15563
HYDROGEN	-.410%			CR	15567
NITROGEN	3.684%			HR	15597
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	27 Seconds				

DATE & TIME	4/21/2016 1:33:58 PM	P_ID	042116CM
SAMPLE ID	160956306	USER ID	mansfield_toc1
WEIGHT (mg)	10.180	MODE	CHN

				SIGNALS	
				ZR	15440
CARBON	-.002%			NR	15569
HYDROGEN	0.137%			CR	15627
NITROGEN	2.662%			HR	16532
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	27 Seconds				

DATE & TIME	4/21/2016 1:38:45 PM	P_ID	042116CM
SAMPLE ID	160956306	USER ID	mansfield_toc1
WEIGHT (mg)	14.930	MODE	CHN

				SIGNALS	
				ZR	15441
CARBON	-.015%			NR	15587
HYDROGEN	0.068%			CR	15618
NITROGEN	2.879%			HR	16445
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	29 Seconds				

DATE & TIME	4/21/2016 1:43:33 PM	P_ID	042116CM
SAMPLE ID	CCV	USER ID	mansfield_toc1
WEIGHT (mg)	10.380	MODE	CHN

				SIGNALS	
				ZR	15444
CARBON	1.006%			NR	15592
HYDROGEN	3.123%			CR	17053
NITROGEN	4.322%			HR	24419
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	29 Seconds				

DATE & TIME	4/21/2016 1:48:21 PM	P_ID	042116CM
SAMPLE ID	CCB	USER ID	mansfield_toc1
WEIGHT (mg)	44.750	MODE	CHN

				SIGNALS	
				ZR	15464
CARBON	-.002%			NR	15617
HYDROGEN	-.052%			CR	15665
NITROGEN	1.107%			HR	15799
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	29 Seconds				

DATE & TIME	4/21/2016 2:58:09 PM	P_ID	042116CM
SAMPLE ID	160956306	USER ID	mansfield_toc1
WEIGHT (mg)	16.970	MODE	CHN

		SIGNALS	
		ZR	15427
CARBON	-.009%	NR	15578
HYDROGEN	0.193%	CR	15618
NITROGEN	2.809%	HR	16914

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 34 Seconds

DATE & TIME	4/21/2016 3:03:01 PM	P_ID	042116CM
SAMPLE ID	160956306	USER ID	mansfield_toc1
WEIGHT (mg)	14.950	MODE	CHN

		SIGNALS	
		ZR	15417
CARBON	-.009%	NR	15564
HYDROGEN	0.159%	CR	15607
NITROGEN	2.938%	HR	16716

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 34 Seconds

DATE & TIME	4/21/2016 3:07:48 PM	P_ID	042116CM
SAMPLE ID	160956307	USER ID	mansfield_toc1
WEIGHT (mg)	9.290	MODE	CHN

		SIGNALS	
		ZR	15416
CARBON	-.017%	NR	15541
HYDROGEN	-.191%	CR	15581
NITROGEN	2.515%	HR	15827

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 28 Seconds

DATE & TIME	4/21/2016 3:12:34 PM	P_ID	042116CM
SAMPLE ID	160956307	USER ID	mansfield_toc1
WEIGHT (mg)	13.470	MODE	CHN

		SIGNALS	
		ZR	15410
CARBON	-.018%	NR	15535
HYDROGEN	-.036%	CR	15563
NITROGEN	1.735%	HR	16077

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 27 Seconds

DATE & TIME	4/21/2016 3:17:20 PM	P_ID	042116CM
SAMPLE ID	160956307	USER ID	mansfield_toc1
WEIGHT (mg)	12.540	MODE	CHN

				SIGNALS	
				ZR	15424
CARBON	-.017%			NR	15557
HYDROGEN	-.095%			CR	15590
NITROGEN	2.459%			HR	15957
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	28 Seconds				

DATE & TIME	4/21/2016 3:22:06 PM	P_ID	042116CM
SAMPLE ID	160956307	USER ID	mansfield_toc1
WEIGHT (mg)	12.790	MODE	CHN

				SIGNALS	
				ZR	15410
CARBON	-.014%			NR	15542
HYDROGEN	-.093%			CR	15579
NITROGEN	2.338%			HR	15947
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	28 Seconds				

DATE & TIME	4/21/2016 3:26:53 PM	P_ID	042116CM
SAMPLE ID	160956308	USER ID	mansfield_toc1
WEIGHT (mg)	15.120	MODE	CHN

				SIGNALS	
				ZR	15401
CARBON	-.007%			NR	15536
HYDROGEN	0.050%			CR	15583
NITROGEN	2.163%			HR	16356
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	28 Seconds				

DATE & TIME	4/21/2016 3:31:39 PM	P_ID	042116CM
SAMPLE ID	160956308	USER ID	mansfield_toc1
WEIGHT (mg)	13.580	MODE	CHN

				SIGNALS	
				ZR	15412
CARBON	-.010%			NR	15545
HYDROGEN	0.0%			CR	15587
NITROGEN	2.271%			HR	16202
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	28 Seconds				

DATE & TIME	4/21/2016 3:36:26 PM	P_ID	042116CM
SAMPLE ID	160956308	USER ID	mansfield_toc1
WEIGHT (mg)	14.430	MODE	CHN

			SIGNALS	
			ZR	15414
CARBON	-.024%		NR	15536
HYDROGEN	-.188%		CR	15551
NITROGEN	1.425%		HR	15601
BLANKS	61	615	100	
K FACTORS	13.413	20.827	0.107	

FILL	COMB	BOOST1	BOOST2
0	0	0	0
FILL TIME	28 Seconds		

DATE & TIME	4/21/2016 3:41:12 PM	P_ID	042116CM
SAMPLE ID	160956308	USER ID	mansfield_toc1
WEIGHT (mg)	10.450	MODE	CHN

			SIGNALS	
			ZR	15430
CARBON	0.006%		NR	15566
HYDROGEN	-.046%		CR	15635
NITROGEN	3.220%		HR	16149
BLANKS	61	615	100	
K FACTORS	13.413	20.827	0.107	

FILL	COMB	BOOST1	BOOST2
0	0	0	0
FILL TIME	28 Seconds		

DATE & TIME	4/21/2016 3:45:58 PM	P_ID	042116CM
SAMPLE ID	CCV	USER ID	mansfield_toc1
WEIGHT (mg)	10.260	MODE	CHN

			SIGNALS	
			ZR	15408
CARBON	1.019%		NR	15554
HYDROGEN	5.616%		CR	17017
NITROGEN	4.190%		HR	29633
BLANKS	61	615	100	
K FACTORS	13.413	20.827	0.107	

FILL	COMB	BOOST1	BOOST2
0	0	0	0
FILL TIME	28 Seconds		

DATE & TIME	4/21/2016 3:50:45 PM	P_ID	042116CM
SAMPLE ID	CCB	USER ID	mansfield_toc1
WEIGHT (mg)	45.850	MODE	CHN

		SIGNALS	
		ZR	15429
CARBON	-.001%	NR	15572
HYDROGEN	-.010%	CR	15628
NITROGEN	0.876%	HR	16145

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 29 Seconds

DATE & TIME	4/21/2016 3:58:38 PM	P_ID	042116CM
SAMPLE ID	160956309	USER ID	mansfield_toc1
WEIGHT (mg)	11.960	MODE	CHN

		SIGNALS	
		ZR	15428
CARBON	0.066%	NR	15565
HYDROGEN	0.009%	CR	15732
NITROGEN	2.891%	HR	16369

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 28 Seconds

DATE & TIME	4/21/2016 4:03:25 PM	P_ID	042116CM
SAMPLE ID	160956309	USER ID	mansfield_toc1
WEIGHT (mg)	17.450	MODE	CHN

		SIGNALS	
		ZR	15414
CARBON	-.006%	NR	15548
HYDROGEN	0.116%	CR	15595
NITROGEN	1.821%	HR	16633

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 28 Seconds

DATE & TIME	4/21/2016 4:08:12 PM	P_ID	042116CM
SAMPLE ID	160956309	USER ID	mansfield_toc1
WEIGHT (mg)	18.460	MODE	CHN

		SIGNALS	
		ZR	15426
CARBON	-.002%	NR	15560
HYDROGEN	0.123%	CR	15615
NITROGEN	1.721%	HR	16704

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 28 Seconds

DATE & TIME	4/21/2016 4:12:59 PM	P_ID	042116CM
SAMPLE ID	160956309	USER ID	mansfield_toc1
WEIGHT (mg)	12.750	MODE	CHN

				SIGNALS	
				ZR	15406
	CARBON	.004%		NR	15544
	HYDROGEN	.020%		CR	15599
	NITROGEN	2.785%		HR	16160
	BLANKS	61	615	100	
	K FACTORS	13.413	20.827	0.107	
	FILL	COMB	BOOST1	BOOST2	
	0	0	0	0	
	FILL TIME	28 Seconds			

DATE & TIME	4/21/2016 4:17:46 PM	P_ID	042116CM
SAMPLE ID	160956310	USER ID	mansfield_toc1
WEIGHT (mg)	16.800	MODE	CHN

				SIGNALS	
				ZR	15404
	CARBON	.005%		NR	15547
	HYDROGEN	0.105%		CR	15597
	NITROGEN	2.392%		HR	16579
	BLANKS	61	615	100	
	K FACTORS	13.413	20.827	0.107	
	FILL	COMB	BOOST1	BOOST2	
	0	0	0	0	
	FILL TIME	28 Seconds			

DATE & TIME	4/21/2016 4:22:33 PM	P_ID	042116CM
SAMPLE ID	160956310	USER ID	mansfield_toc1
WEIGHT (mg)	13.410	MODE	CHN

				SIGNALS	
				ZR	15423
	CARBON	.008%		NR	15567
	HYDROGEN	0.050%		CR	15613
	NITROGEN	3.066%		HR	16368
	BLANKS	61	615	100	
	K FACTORS	13.413	20.827	0.107	
	FILL	COMB	BOOST1	BOOST2	
	0	0	0	0	
	FILL TIME	29 Seconds			

DATE & TIME	4/21/2016 4:27:20 PM	P_ID	042116CM
SAMPLE ID	160956310	USER ID	mansfield_toc1
WEIGHT (mg)	14.490	MODE	CHN

				SIGNALS	
				ZR	15420
	CARBON	.006%		NR	15563
	HYDROGEN	0.045%		CR	15612
	NITROGEN	2.773%		HR	16364
	BLANKS	61	615	100	
	K FACTORS	13.413	20.827	0.107	
	FILL	COMB	BOOST1	BOOST2	
	0	0	0	0	
	FILL TIME	29 Seconds			

DATE & TIME	4/21/2016 4:32:08 PM	P_ID	042116CM
SAMPLE ID	160956310	USER ID	mansfield_toc1
WEIGHT (mg)	15.320	MODE	CHN

		SIGNALS	
		ZR	15407
CARBON	0.019%	NR	15557
HYDROGEN	0.060%	CR	15657
NITROGEN	3.050%	HR	16464

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 29 Seconds

DATE & TIME	4/21/2016 4:36:57 PM	P_ID	042116CM
SAMPLE ID	160953901	USER ID	mansfield_toc1
WEIGHT (mg)	14.300	MODE	CHN

		SIGNALS	
		ZR	15406
CARBON	0.009%	NR	15557
HYDROGEN	0.296%	CR	15636
NITROGEN	3.333%	HR	17134

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 30 Seconds

DATE & TIME	4/21/2016 4:41:46 PM	P_ID	042116CM
SAMPLE ID	160953901	USER ID	mansfield_toc1
WEIGHT (mg)	19.870	MODE	CHN

		SIGNALS	
		ZR	15409
CARBON	0.009%	NR	15562
HYDROGEN	0.356%	CR	15648
NITROGEN	2.493%	HR	17735

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 30 Seconds

DATE & TIME	4/21/2016 4:46:35 PM	P_ID	042116CM
SAMPLE ID	CCV	USER ID	mansfield_toc1
WEIGHT (mg)	9.910	MODE	CHN

		SIGNALS	
		ZR	15403
CARBON	1.026%	NR	15556
HYDROGEN	5.776%	CR	16981
NITROGEN	4.998%	HR	29518

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 30 Seconds

DATE & TIME	4/21/2016 4:51:22 PM	P_ID	042116CM
SAMPLE ID	CCB	USER ID	mansfield_toc1
WEIGHT (mg)	53.060	MODE	CHN

		SIGNALS	
		ZR	15441
CARBON	0.001%	NR	15591
HYDROGEN	-.014%	CR	15661
NITROGEN	0.881%	HR	16120

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 28 Seconds

DATE & TIME	4/21/2016 4:56:58 PM	P_ID	042116CM
SAMPLE ID	160953901	USER ID	mansfield_toc1
WEIGHT (mg)	13.240	MODE	CHN

		SIGNALS	
		ZR	15407
CARBON	-.003%	NR	15548
HYDROGEN	0.477%	CR	15603
NITROGEN	2.894%	HR	17533

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 29 Seconds

DATE & TIME	4/21/2016 5:01:50 PM	P_ID	042116CM
SAMPLE ID	160953901	USER ID	mansfield_toc1
WEIGHT (mg)	18.820	MODE	CHN

		SIGNALS	
		ZR	15431
CARBON	0.007%	NR	15575
HYDROGEN	0.435%	CR	15653
NITROGEN	2.185%	HR	17975

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 34 Seconds

DATE & TIME	4/21/2016 5:06:43 PM	P_ID	042116CM
SAMPLE ID	160953902	USER ID	mansfield_toc1
WEIGHT (mg)	13.340	MODE	CHN

				SIGNALS	
				ZR	15432
CARBON	0.036%			NR	15577
HYDROGEN	0.233%			CR	15702
NITROGEN	3.153%			HR	16964
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	34 Seconds				

DATE & TIME	4/21/2016 5:11:35 PM	P_ID	042116CM
SAMPLE ID	160953902	USER ID	mansfield_toc1
WEIGHT (mg)	12.740	MODE	CHN

				SIGNALS	
				ZR	15414
CARBON	0.040%			NR	15558
HYDROGEN	0.161%			CR	15687
NITROGEN	3.228%			HR	16728
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	34 Seconds				

DATE & TIME	4/21/2016 5:16:27 PM	P_ID	042116CM
SAMPLE ID	160953902	USER ID	mansfield_toc1
WEIGHT (mg)	17.490	MODE	CHN

				SIGNALS	
				ZR	15409
CARBON	0.048%			NR	15556
HYDROGEN	0.218%			CR	15729
NITROGEN	2.511%			HR	17139
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	34 Seconds				

DATE & TIME	4/21/2016 5:21:14 PM	P_ID	042116CM
SAMPLE ID	160953902	USER ID	mansfield_toc1
WEIGHT (mg)	15.910	MODE	CHN

				SIGNALS	
				ZR	15419
CARBON	0.052%			NR	15561
HYDROGEN	0.191%			CR	15733
NITROGEN	2.467%			HR	16980
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	28 Seconds				

DATE & TIME	4/21/2016 5:26:00 PM	P_ID	042116CM
SAMPLE ID	160953903	USER ID	mansfield_toc1
WEIGHT (mg)	10.750	MODE	CHN

		SIGNALS	
		ZR	15406
CARBON	0.060%	NR	15544
HYDROGEN	.027%	CR	15692
NITROGEN	3.304%	HR	16246

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 28 Seconds

DATE & TIME	4/21/2016 5:30:47 PM	P_ID	042116CM
SAMPLE ID	160953903	USER ID	mansfield_toc1
WEIGHT (mg)	17.0	MODE	CHN

		SIGNALS	
		ZR	15430
CARBON	0.102%	NR	15572
HYDROGEN	0.156%	CR	15866
NITROGEN	2.309%	HR	17035

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 28 Seconds

DATE & TIME	4/21/2016 5:35:33 PM	P_ID	042116CM
SAMPLE ID	160953903	USER ID	mansfield_toc1
WEIGHT (mg)	17.410	MODE	CHN

		SIGNALS	
		ZR	15407
CARBON	0.073%	NR	15550
HYDROGEN	0.102%	CR	15781
NITROGEN	2.308%	HR	16765

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 28 Seconds

DATE & TIME	4/21/2016 5:40:20 PM	P_ID	042116CM
SAMPLE ID	160953903	USER ID	mansfield_toc1
WEIGHT (mg)	13.600	MODE	CHN

		SIGNALS	
		ZR	15429
CARBON	0.081%	NR	15568
HYDROGEN	0.062%	CR	15776
NITROGEN	2.680%	HR	16568

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 28 Seconds

DATE & TIME	4/21/2016 5:45:06 PM	P_ID	042116CM
SAMPLE ID	CCV	USER ID	mansfield_toc1
WEIGHT (mg)	10.140	MODE	CHN

		SIGNALS	
		ZR	15409
CARBON	0.999%	NR	15538
HYDROGEN	5.360%	CR	16958
NITROGEN	2.673%	HR	28893

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 28 Seconds

DATE & TIME	4/21/2016 5:49:52 PM	P_ID	042116CM
SAMPLE ID	CCB	USER ID	mansfield_toc1
WEIGHT (mg)	53.350	MODE	CHN

		SIGNALS	
		ZR	15426
CARBON	-.001%	NR	15553
HYDROGEN	-.009%	CR	15607
NITROGEN	0.473%	HR	16120

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 28 Seconds

DATE & TIME	4/22/2016 8:06:19 AM	P_ID	042116CM
SAMPLE ID	160953904	USER ID	mansfield_toc1
WEIGHT (mg)	13.300	MODE	CHN

		SIGNALS	
		ZR	15478
CARBON	0.033%	NR	15972
HYDROGEN	0.262%	CR	16091
NITROGEN	27.686%	HR	17431

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 24 Seconds

DATE & TIME	4/22/2016 8:11:01 AM	P_ID	042116CM
SAMPLE ID	160953904	USER ID	mansfield_toc1
WEIGHT (mg)	17.910	MODE	CHN

				SIGNALS	
				ZR	15481
CARBON	0.020%			NR	15709
HYDROGEN	0.266%			CR	15817
NITROGEN	6.679%			HR	17426
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	24 Seconds				

DATE & TIME	4/22/2016 8:15:43 AM	P_ID	042116CM
SAMPLE ID	160956304	USER ID	mansfield_toc1
WEIGHT (mg)	15.740	MODE	CHN

				SIGNALS	
				ZR	15486
CARBON	0.018%			NR	15630
HYDROGEN	0.219%			CR	15728
NITROGEN	2.613%			HR	17061
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	24 Seconds				

DATE & TIME	4/22/2016 8:20:25 AM	P_ID	042116CM
SAMPLE ID	160953904	USER ID	mansfield_toc1
WEIGHT (mg)	18.240	MODE	CHN

				SIGNALS	
				ZR	15487
CARBON	0.019%			NR	15612
HYDROGEN	0.227%			CR	15719
NITROGEN	1.281%			HR	17198
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	24 Seconds				

DATE & TIME	4/22/2016 8:25:08 AM	P_ID	042116CM
SAMPLE ID	160953905	USER ID	mansfield_toc1
WEIGHT (mg)	10.260	MODE	CHN

				SIGNALS	
				ZR	15488
CARBON	0.007%			NR	15611
HYDROGEN	0.122%			CR	15681
NITROGEN	2.095%			HR	16557
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	24 Seconds				

DATE & TIME	4/22/2016 8:29:50 AM	P_ID	042116CM
SAMPLE ID	160953905	USER ID	mansfield_toc1
WEIGHT (mg)	9.150	MODE	CHN

			SIGNALS	
			ZR	15499
CARBON	0.025%		NR	15633
HYDROGEN	0.046%		CR	15725
NITROGEN	3.473%		HR	16428
BLANKS	61	615	100	
K FACTORS	13.413	20.827	0.107	

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 24 Seconds

DATE & TIME	4/22/2016 8:34:33 AM	P_ID	042116CM
SAMPLE ID	160953905	USER ID	mansfield_toc1
WEIGHT (mg)	8.340	MODE	CHN

			SIGNALS	
			ZR	15498
CARBON	0.030%		NR	15634
HYDROGEN	.002%		CR	15728
NITROGEN	4.034%		HR	16339
BLANKS	61	615	100	
K FACTORS	13.413	20.827	0.107	

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 25 Seconds

DATE & TIME	4/22/2016 8:39:16 AM	P_ID	042116CM
SAMPLE ID	160953905	USER ID	mansfield_toc1
WEIGHT (mg)	9.590	MODE	CHN

			SIGNALS	
			ZR	15496
CARBON	0.013%		NR	15609
HYDROGEN	0.101%		CR	15687
NITROGEN	1.267%		HR	16504
BLANKS	61	615	100	
K FACTORS	13.413	20.827	0.107	

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 24 Seconds

DATE & TIME	4/22/2016 8:43:58 AM	P_ID	042116CM
SAMPLE ID	160953906	USER ID	mansfield_toc1
WEIGHT (mg)	12.430	MODE	CHN

		SIGNALS	
		ZR	15500
CARBON	0.004%	NR	15609
HYDROGEN	0.072%	CR	15677
NITROGEN	0.677%	HR	16478

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 24 Seconds

DATE & TIME	4/22/2016 8:48:40 AM	P_ID	042116CM
SAMPLE ID	160953906	USER ID	mansfield_toc1
WEIGHT (mg)	14.030	MODE	CHN

		SIGNALS	
		ZR	15498
CARBON	-.001%	NR	15608
HYDROGEN	0.090%	CR	15667
NITROGEN	0.666%	HR	16546

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 24 Seconds

DATE & TIME	4/22/2016 8:53:22 AM	P_ID	042116CM
SAMPLE ID	CCV	USER ID	mansfield_toc1
WEIGHT (mg)	10.240	MODE	CHN

		SIGNALS	
		ZR	15497
CARBON	0.886%	NR	15800
HYDROGEN	4.443%	CR	17078
NITROGEN	18.527%	HR	27169

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 23 Seconds

DATE & TIME	4/22/2016 8:58:04 AM	P_ID	042116CM
SAMPLE ID	CCB	USER ID	mansfield_toc1
WEIGHT (mg)	61.110	MODE	CHN

		SIGNALS	
		ZR	15516
CARBON	0.0%	NR	15622
HYDROGEN	-.023%	CR	15686
NITROGEN	0.092%	HR	16008

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 23 Seconds

DATE & TIME	4/22/2016 9:07:17 AM	P_ID	042116CM
SAMPLE ID	160953906	USER ID	mansfield_toc1
WEIGHT (mg)	17.310	MODE	CHN

				SIGNALS	
				ZR	15491
CARBON	0.003%			NR	15601
HYDROGEN	0.194%			CR	15669
NITROGEN	0.540%			HR	16984
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	23 Seconds				

DATE & TIME	4/22/2016 9:11:59 AM	P_ID	042116CM
SAMPLE ID	160953906	USER ID	mansfield_toc1
WEIGHT (mg)	16.790	MODE	CHN

				SIGNALS	
				ZR	15500
CARBON	0.0%			NR	15609
HYDROGEN	0.207%			CR	15669
NITROGEN	0.501%			HR	17007
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	23 Seconds				

DATE & TIME	4/22/2016 9:16:40 AM	P_ID	042116CM
SAMPLE ID	160953907	USER ID	mansfield_toc1
WEIGHT (mg)	13.430	MODE	CHN

				SIGNALS	
				ZR	15499
CARBON	.003%			NR	15611
HYDROGEN	0.318%			CR	15667
NITROGEN	0.835%			HR	17171
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	23 Seconds				

DATE & TIME	4/22/2016 9:21:22 AM	P_ID	042116CM
SAMPLE ID	160953907	USER ID	mansfield_toc1
WEIGHT (mg)	7.070	MODE	CHN

				SIGNALS	
				ZR	15497
CARBON	.025%			NR	15603
HYDROGEN	0.082%			CR	15640
NITROGEN	0.793%			HR	16376
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	23 Seconds				

DATE & TIME	4/22/2016 9:26:03 AM	P_ID	042116CM
SAMPLE ID	160953907	USER ID	mansfield_toc1
WEIGHT (mg)	10.210	MODE	CHN

		SIGNALS	
		ZR	15496
CARBON	-.015%	NR	15607
HYDROGEN	0.182%	CR	15647
NITROGEN	1.007%	HR	16650

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 23 Seconds

DATE & TIME	4/22/2016 9:30:45 AM	P_ID	042116CM
SAMPLE ID	160953907	USER ID	mansfield_toc1
WEIGHT (mg)	13.410	MODE	CHN

		SIGNALS	
		ZR	15494
CARBON	-.004%	NR	15606
HYDROGEN	0.284%	CR	15659
NITROGEN	0.836%	HR	17068

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 23 Seconds

DATE & TIME	4/22/2016 9:35:26 AM	P_ID	042116CM
SAMPLE ID	160953908	USER ID	mansfield_toc1
WEIGHT (mg)	12.110	MODE	CHN

		SIGNALS	
		ZR	15493
CARBON	-.005%	NR	15602
HYDROGEN	0.245%	CR	15655
NITROGEN	0.695%	HR	16889

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 23 Seconds

DATE & TIME	4/22/2016 9:40:07 AM	P_ID	042116CM
SAMPLE ID	160953908	USER ID	mansfield_toc1
WEIGHT (mg)	14.180	MODE	CHN

		SIGNALS	
		ZR	15491
CARBON	0.002%	NR	15599
HYDROGEN	0.289%	CR	15663
NITROGEN	0.527%	HR	17132

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 23 Seconds

DATE & TIME	4/22/2016 9:44:48 AM	P_ID	042116CM
SAMPLE ID	160953908	USER ID	mansfield_toc1
WEIGHT (mg)	13.220	MODE	CHN

		SIGNALS	
		ZR	15494
CARBON	-.002%	NR	15610
HYDROGEN	0.288%	CR	15667
NITROGEN	1.131%	HR	17075

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 23 Seconds

DATE & TIME	4/22/2016 9:49:30 AM	P_ID	042116CM
SAMPLE ID	160953908	USER ID	mansfield_toc1
WEIGHT (mg)	11.430	MODE	CHN

		SIGNALS	
		ZR	15487
CARBON	-.005%	NR	15604
HYDROGEN	0.229%	CR	15658
NITROGEN	1.390%	HR	16819

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 23 Seconds

DATE & TIME	4/22/2016 9:54:59 AM	P_ID	042116CM
SAMPLE ID	CCV	USER ID	mansfield_toc1
WEIGHT (mg)	10.080	MODE	CHN

		SIGNALS	
		ZR	15485
CARBON	1.015%	NR	15594
HYDROGEN	5.157%	CR	17027
NITROGEN	0.834%	HR	28469

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 22 Seconds

DATE & TIME	4/22/2016 9:59:40 AM	P_ID	042116CM
SAMPLE ID	CCB	USER ID	mansfield_toc1
WEIGHT (mg)	63.780	MODE	CHN

				SIGNALS	
				ZR	15509
CARBON	.001%			NR	15611
HYDROGEN	.001%			CR	15666
NITROGEN	0.029%			HR	16272
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	22 Seconds				

DATE & TIME	4/22/2016 10:07:17 AM	P_ID	042116CM
SAMPLE ID	160953909	USER ID	mansfield_toc1
WEIGHT (mg)	12.910	MODE	CHN

				SIGNALS	
				ZR	15482
CARBON	.005%			NR	15591
HYDROGEN	0.254%			CR	15643
NITROGEN	0.652%			HR	16942
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	22 Seconds				

DATE & TIME	4/22/2016 10:11:59 AM	P_ID	042116CM
SAMPLE ID	160953909	USER ID	mansfield_toc1
WEIGHT (mg)	15.250	MODE	CHN

				SIGNALS	
				ZR	15487
CARBON	.005%			NR	15608
HYDROGEN	0.248%			CR	15659
NITROGEN	1.287%			HR	17062
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	23 Seconds				

DATE & TIME	4/22/2016 10:16:39 AM	P_ID	042116CM
SAMPLE ID	160953909	USER ID	mansfield_toc1
WEIGHT (mg)	11.210	MODE	CHN

				SIGNALS	
				ZR	15484
CARBON	.004%			NR	15587
HYDROGEN	0.157%			CR	15642
NITROGEN	0.250%			HR	16624
BLANKS	61	615	100		
K FACTORS	13.413	20.827	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	22 Seconds				

DATE & TIME	4/22/2016 10:21:24 AM	P_ID	042116CM
SAMPLE ID	160953909	USER ID	mansfield_toc1
WEIGHT (mg)	11.840	MODE	CHN

		SIGNALS	
		ZR	15482
CARBON	-.008%	NR	15605
HYDROGEN	0.155%	CR	15654
NITROGEN	1.815%	HR	16651

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 26 Seconds

DATE & TIME	4/22/2016 10:26:09 AM	P_ID	042116CM
SAMPLE ID	CCV	USER ID	mansfield_toc1
WEIGHT (mg)	10.180	MODE	CHN

		SIGNALS	
		ZR	15486
CARBON	1.019%	NR	15600
HYDROGEN	5.058%	CR	17052
NITROGEN	1.285%	HR	28391

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 26 Seconds

DATE & TIME	4/22/2016 10:30:53 AM	P_ID	042116CM
SAMPLE ID	CCB	USER ID	mansfield_toc1
WEIGHT (mg)	71.680	MODE	CHN

		SIGNALS	
		ZR	15497
CARBON	0.0%	NR	15609
HYDROGEN	0.0%	CR	15673
NITROGEN	0.156%	HR	16292

BLANKS	61	615	100
K FACTORS	13.413	20.827	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 26 Seconds

Date of report	4/22/2016 2:51:15PM
User ID	mansfield_toc1

DATE & TIME	4/22/2016 10:37:20 AM	P_ID	042216CM
RUN TYPE	K1	USER ID	mansfield_toc1
WEIGHT (mg)	10.070	MODE	CHN

			SIGNALS		
			ZR	15478	AVERAGE RESULTS
KC	13.436		NR	15580	KC 13.424
KH	21.498		CR	16994	KH 21.162
KN	0.002		HR	28498	KN 0.107
BLANKS	61	615	100		
K FACTORS	1.0%	5.03%	11.67%		
FILL TIME	22 Seconds				

DATE & TIME	4/22/2016 10:42:01 AM	P_ID	042216CM
RUN TYPE	BLANK	USER ID	mansfield_toc1
		MODE	CHN

			SIGNALS		
			ZR	15518	AVERAGE RESULTS
CARBON	57		NR	15622	CARBON 59
HYDROGEN	704		CR	15679	HYDROGEN 659
NITROGEN	104		HR	16383	NITROGEN 102
FILL TIME	22 Seconds				

DATE & TIME	4/22/2016 10:46:41 AM	P_ID	042216CM
SAMPLE ID	0	USER ID	mansfield_toc1
WEIGHT (mg)	9.760	MODE	CHN

			SIGNALS		
			ZR	15492	
CARBON	-.033%		NR	15606	
HYDROGEN	5.195%		CR	15622	
NITROGEN	1.149%		HR	27010	
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	22 Seconds				

DATE & TIME	4/22/2016 10:51:22 AM	P_ID	042216CM
SAMPLE ID	1000	USER ID	mansfield_toc1
WEIGHT (mg)	10.050	MODE	CHN

			SIGNALS		
			ZR	15498	
CARBON	0.049%		NR	15611	
HYDROGEN	5.250%		CR	15736	
NITROGEN	1.023%		HR	27560	
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	22 Seconds				

DATE & TIME	4/22/2016 10:56:02 AM	P_ID	042216CM
SAMPLE ID	5000	USER ID	mansfield_toc1
WEIGHT (mg)	10.200	MODE	CHN

		SIGNALS	
		ZR	15525
CARBON	0.472%	NR	15625
HYDROGEN	5.087%	CR	16330
NITROGEN	-.183%	HR	27970

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 22 Seconds

DATE & TIME	4/22/2016 11:00:43 AM	P_ID	042216CM
SAMPLE ID	10000	USER ID	mansfield_toc1
WEIGHT (mg)	10.440	MODE	CHN

		SIGNALS	
		ZR	15529
CARBON	0.939%	NR	15627
HYDROGEN	5.037%	CR	17002
NITROGEN	-.358%	HR	28790

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 22 Seconds

DATE & TIME	4/22/2016 11:05:23 AM	P_ID	042216CM
SAMPLE ID	20000	USER ID	mansfield_toc1
WEIGHT (mg)	10.810	MODE	CHN

		SIGNALS	
		ZR	15506
CARBON	1.921%	NR	15625
HYDROGEN	4.884%	CR	18472
NITROGEN	1.470%	HR	30303

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 22 Seconds

DATE & TIME	4/22/2016 11:10:04 AM	P_ID	042216CM
SAMPLE ID	40000	USER ID	mansfield_toc1
WEIGHT (mg)	10.500	MODE	CHN

		SIGNALS	
		ZR	15525
CARBON	3.826%	NR	15649
HYDROGEN	5.157%	CR	21101
NITROGEN	1.958%	HR	33220

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 22 Seconds

DATE & TIME	4/22/2016 11:17:09 AM	P_ID	042216CM
SAMPLE ID	ICV	USER ID	mansfield_toc1
WEIGHT (mg)	9.860	MODE	CHN

		SIGNALS	
		ZR	15491
CARBON	0.919%	NR	15614
HYDROGEN	5.584%	CR	16889
NITROGEN	1.990%	HR	29199

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 24 Seconds

DATE & TIME	4/22/2016 11:21:52 AM	P_ID	042216CM
SAMPLE ID	ICB	USER ID	mansfield_toc1
WEIGHT (mg)	66.910	MODE	CHN

		SIGNALS	
		ZR	15502
CARBON	0.006%	NR	15620
HYDROGEN	0.027%	CR	15737
NITROGEN	0.223%	HR	16782

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 24 Seconds

DATE & TIME	4/22/2016 11:26:35 AM	P_ID	042216CM
SAMPLE ID	HICV	USER ID	mansfield_toc1
WEIGHT (mg)	51.490	MODE	CHN

		SIGNALS	
		ZR	15510
CARBON	3.939%	NR	15629
HYDROGEN	1.161%	CR	42916
NITROGEN	0.309%	HR	56230

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 25 Seconds

DATE & TIME	4/22/2016 11:31:38 AM	P_ID	042216CM
SAMPLE ID	SRM1650	USER ID	mansfield_toc1
WEIGHT (mg)	1.240	MODE	CHN

				SIGNALS	
				ZR	15521
CARBON	71.279%			NR	15665
HYDROGEN	68.180%			CR	27589
NITROGEN	31.655%			HR	46139
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	25 Seconds				

DATE & TIME	4/22/2016 11:36:22 AM	P_ID	042216CM
SAMPLE ID	MB	USER ID	mansfield_toc1
WEIGHT (mg)	78.050	MODE	CHN

				SIGNALS	
				ZR	15535
CARBON	0.005%			NR	15649
HYDROGEN	0.148%			CR	15757
NITROGEN	0.144%			HR	18865
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	26 Seconds				

DATE & TIME	4/22/2016 11:41:06 AM	P_ID	042216CM
SAMPLE ID	SRM1650	USER ID	mansfield_toc1
WEIGHT (mg)	.520	MODE	CHN

				SIGNALS	
				ZR	15512
CARBON	114.663%			NR	15649
HYDROGEN	1.399%			CR	23712
NITROGEN	62.904%			HR	24525
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	25 Seconds				

DATE & TIME	4/22/2016 11:45:46 AM	P_ID	042216CM
SAMPLE ID	MB	USER ID	mansfield_toc1
WEIGHT (mg)	79.740	MODE	CHN

				SIGNALS	
				ZR	15504
CARBON	0.002%			NR	15604
HYDROGEN	-.028%			CR	15683
NITROGEN	-.023%			HR	15867
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	21 Seconds				

DATE & TIME	4/22/2016 11:50:26 AM	P_ID	042216CM
SAMPLE ID	SRM1650	USER ID	mansfield_toc1
WEIGHT (mg)	.950	MODE	CHN

		SIGNALS	
		ZR	15493
CARBON	86.342%	NR	15624
HYDROGEN	-2.074%	CR	26694
NITROGEN	28.529%	HR	26936

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 21 Seconds

DATE & TIME	4/22/2016 11:55:05 AM	P_ID	042216CM
SAMPLE ID	MB	USER ID	mansfield_toc1
WEIGHT (mg)	78.170	MODE	CHN

		SIGNALS	
		ZR	15477
CARBON	0.001%	NR	15584
HYDROGEN	-.036%	CR	15653
NITROGEN	0.060%	HR	15710

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 21 Seconds

DATE & TIME	4/22/2016 11:59:46 AM	P_ID	042216CM
SAMPLE ID	SRM1650	USER ID	mansfield_toc1
WEIGHT (mg)	.940	MODE	CHN

		SIGNALS	
		ZR	15478
CARBON	85.018%	NR	15628
HYDROGEN	-2.559%	CR	26415
NITROGEN	47.723%	HR	26565

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 21 Seconds

DATE & TIME	4/22/2016 12:04:25 PM	P_ID	042216CM
SAMPLE ID	MB	USER ID	mansfield_toc1
WEIGHT (mg)	80.090	MODE	CHN

		SIGNALS	
		ZR	15476
CARBON	0.001%	NR	15578
HYDROGEN	-.037%	CR	15651
NITROGEN	0.0%	HR	15688

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 21 Seconds

DATE & TIME	4/22/2016 12:09:05 PM	P_ID	042216CM
SAMPLE ID	SRM1650	USER ID	mansfield_toc1
WEIGHT (mg)	.860	MODE	CHN

		SIGNALS	
		ZR	15473
CARBON	96.911%	NR	15601
HYDROGEN	-2.780%	CR	26848
NITROGEN	28.255%	HR	27001

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 21 Seconds

DATE & TIME	4/22/2016 12:16:44 PM	P_ID	042216CM
SAMPLE ID	SRM1650	USER ID	mansfield_toc1
WEIGHT (mg)	1.070	MODE	CHN

		SIGNALS	
		ZR	15482
CARBON	86.844%	NR	15616
HYDROGEN	-2.124%	CR	28149
NITROGEN	27.950%	HR	28327

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 21 Seconds

DATE & TIME	4/22/2016 12:26:47 PM	P_ID	042216CM
SAMPLE ID	CCV	USER ID	mansfield_toc1
WEIGHT (mg)	10.080	MODE	CHN

		SIGNALS	
		ZR	15468
CARBON	1.001%	NR	15573
HYDROGEN	5.545%	CR	16986
NITROGEN	0.278%	HR	29473

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 21 Seconds

DATE & TIME	4/22/2016 12:31:26 PM	P_ID	042216CM
SAMPLE ID	CCB	USER ID	mansfield_toc1
WEIGHT (mg)	62.0	MODE	CHN

				SIGNALS	
				ZR	15499
CARBON	0.003%			NR	15602
HYDROGEN	0.003%			CR	15690
NITROGEN	0.015%			HR	16383
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	21 Seconds				

DATE & TIME	4/22/2016 1:09:01 PM	P_ID	042216CM
SAMPLE ID	160953910	USER ID	mansfield_toc1
WEIGHT (mg)	17.820	MODE	CHN

				SIGNALS	
				ZR	19211
CARBON	1.124%			NR	90355
HYDROGEN	2.565%			CR	93103
NITROGEN	3725.836%			HR	103436
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	212 Seconds				

DATE & TIME	4/22/2016 1:13:35 PM	P_ID	042216CM
SAMPLE ID	160953910	USER ID	mansfield_toc1
WEIGHT (mg)	13.840	MODE	CHN

				SIGNALS	
				ZR	15520
CARBON	-.082%			NR	14342
HYDROGEN	0.454%			CR	14248
NITROGEN	-86.435%			HR	16236
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	15 Seconds				

DATE & TIME	4/22/2016 1:18:09 PM	P_ID	042216CM
SAMPLE ID	160953911	USER ID	mansfield_toc1
WEIGHT (mg)	14.350	MODE	CHN

				SIGNALS	
				ZR	15404
CARBON	-.023%			NR	15129
HYDROGEN	0.360%			CR	15144
NITROGEN	-24.553%			HR	16897
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	15 Seconds				

DATE & TIME	4/22/2016 1:22:43 PM	P_ID	042216CM
SAMPLE ID	160953911	USER ID	mansfield_toc1
WEIGHT (mg)	11.100	MODE	CHN

				SIGNALS	
				ZR	15396
CARBON	0.024%			NR	15359
HYDROGEN	0.235%			CR	15454
NITROGEN	-11.703%			HR	16664
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 15 Seconds

DATE & TIME	4/22/2016 1:27:17 PM	P_ID	042216CM
SAMPLE ID	160953911	USER ID	mansfield_toc1
WEIGHT (mg)	9.380	MODE	CHN

				SIGNALS	
				ZR	15381
CARBON	-.010%			NR	15420
HYDROGEN	0.118%			CR	15466
NITROGEN	-6.277%			HR	16360
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 15 Seconds

DATE & TIME	4/22/2016 1:31:51 PM	P_ID	042216CM
SAMPLE ID	160953911	USER ID	mansfield_toc1
WEIGHT (mg)	14.930	MODE	CHN

				SIGNALS	
				ZR	15353
CARBON	0.013%			NR	15421
HYDROGEN	0.282%			CR	15507
NITROGEN	-2.128%			HR	17056
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 15 Seconds

DATE & TIME	4/22/2016 1:36:26 PM	P_ID	042216CM
SAMPLE ID	160953911D	USER ID	mansfield_toc1
WEIGHT (mg)	16.890	MODE	CHN

				SIGNALS	
				ZR	15369
CARBON	0.011%			NR	15442
HYDROGEN	0.191%			CR	15525
NITROGEN	-1.605%			HR	16868

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 16 Seconds

DATE & TIME	4/22/2016 1:41:00 PM	P_ID	042216CM
SAMPLE ID	160953911D	USER ID	mansfield_toc1
WEIGHT (mg)	11.130	MODE	CHN

		SIGNALS	
		ZR	15370
CARBON	0.019%	NR	15446
HYDROGEN	0.089%	CR	15533
NITROGEN	-2.183%	HR	16402

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 16 Seconds

DATE & TIME	4/22/2016 1:45:34 PM	P_ID	042216CM
SAMPLE ID	CCV	USER ID	mansfield_toc1
WEIGHT (mg)	10.100	MODE	CHN

		SIGNALS	
		ZR	15372
CARBON	1.005%	NR	15447
HYDROGEN	1.173%	CR	16868
NITROGEN	-2.498%	HR	20035

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 16 Seconds

DATE & TIME	4/22/2016 1:50:09 PM	P_ID	042216CM
SAMPLE ID	CCB	USER ID	mansfield_toc1
WEIGHT (mg)	80.270	MODE	CHN

		SIGNALS	
		ZR	15372
CARBON	0.003%	NR	15453
HYDROGEN	-.036%	CR	15543
NITROGEN	-.245%	HR	15585

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 16 Seconds

DATE & TIME	4/22/2016 1:55:40 PM	P_ID	042216CM
SAMPLE ID	160953910	USER ID	mansfield_toc1
WEIGHT (mg)	23.510	MODE	CHN

				SIGNALS	
				ZR	15350
CARBON	0.002%			NR	15433
HYDROGEN	0.151%			CR	15499
NITROGEN	-.755%			HR	16907
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	16 Seconds				

DATE & TIME	4/22/2016 2:00:15 PM	P_ID	042216CM
SAMPLE ID	160953910	USER ID	mansfield_toc1
WEIGHT (mg)	13.180	MODE	CHN

				SIGNALS	
				ZR	15371
CARBON	-.007%			NR	15456
HYDROGEN	-.026%			CR	15503
NITROGEN	-1.205%			HR	16089
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	16 Seconds				

DATE & TIME	4/22/2016 2:04:49 PM	P_ID	042216CM
SAMPLE ID	160953910	USER ID	mansfield_toc1
WEIGHT (mg)	24.260	MODE	CHN

				SIGNALS	
				ZR	15376
CARBON	0.003%			NR	15461
HYDROGEN	0.173%			CR	15530
NITROGEN	-.655%			HR	17077
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	16 Seconds				

DATE & TIME	4/22/2016 2:13:57 PM	P_ID	042216CM
SAMPLE ID	160953910	USER ID	mansfield_toc1
WEIGHT (mg)	22.130	MODE	CHN

				SIGNALS	
				ZR	15382
CARBON	0.003%			NR	15464
HYDROGEN	0.144%			CR	15533
NITROGEN	-.845%			HR	16867
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		
FILL	COMB	BOOST1	BOOST2		
0	0	0	0		
FILL TIME	16 Seconds				

DATE & TIME	4/22/2016 2:13:59 PM	P_ID	042216CM
SAMPLE ID	160953911D	USER ID	mansfield_toc1
WEIGHT (mg)	17.230	MODE	CHN

		SIGNALS	
		ZR	15363
CARBON	0.011%	NR	15448
HYDROGEN	0.196%	CR	15532
NITROGEN	-.922%	HR	16906

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 16 Seconds

DATE & TIME	4/22/2016 2:18:33 PM	P_ID	042216CM
SAMPLE ID	160953911D	USER ID	mansfield_toc1
WEIGHT (mg)	13.730	MODE	CHN

		SIGNALS	
		ZR	15385
CARBON	0.027%	NR	15470
HYDROGEN	0.112%	CR	15578
NITROGEN	-1.157%	HR	16561

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 16 Seconds

DATE & TIME	4/22/2016 2:23:08 PM	P_ID	042216CM
SAMPLE ID	160953911MS	USER ID	mansfield_toc1
WEIGHT (mg)	13.310	MODE	CHN

		SIGNALS	
		ZR	15387
CARBON	0.720%	NR	15475
HYDROGEN	4.201%	CR	16820
NITROGEN	-.983%	HR	29311

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 16 Seconds

DATE & TIME	4/22/2016 2:27:43 PM	P_ID	042216CM
SAMPLE ID	160953911MS	USER ID	mansfield_toc1
WEIGHT (mg)	19.080	MODE	CHN

		SIGNALS	
		ZR	15388
CARBON	0.634%	NR	15478
HYDROGEN	2.951%	CR	17162
NITROGEN	-.588%	HR	29736

BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 16 Seconds

DATE & TIME	4/22/2016 2:32:18 PM	P_ID	042216CM
SAMPLE ID	160953911MS	USER ID	mansfield_toc1
WEIGHT (mg)	15.710	MODE	CHN

		SIGNALS	
		ZR	15393
CARBON	0.698%	NR	15481
HYDROGEN	3.575%	CR	17011
NITROGEN	.833%	HR	29555
BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 16 Seconds

DATE & TIME	4/22/2016 2:36:53 PM	P_ID	042216CM
SAMPLE ID	160953911MS	USER ID	mansfield_toc1
WEIGHT (mg)	11.620	MODE	CHN

		SIGNALS	
		ZR	15395
CARBON	0.930%	NR	15482
HYDROGEN	4.896%	CR	16991
NITROGEN	-1.206%	HR	29690
BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 16 Seconds

DATE & TIME	4/22/2016 2:41:28 PM	P_ID	042216CM
SAMPLE ID	CCV	USER ID	mansfield_toc1
WEIGHT (mg)	9.960	MODE	CHN

		SIGNALS	
		ZR	15403
CARBON	0.994%	NR	15501
HYDROGEN	5.834%	CR	16889
NITROGEN	-.375%	HR	29845
BLANKS	59	659	102
K FACTORS	13.424	21.162	0.107

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 16 Seconds

DATE & TIME	4/22/2016 2:46:03 PM	P_ID	042216CM
SAMPLE ID	CCB	USER ID	mansfield_toc1
WEIGHT (mg)	78.680	MODE	CHN

				SIGNALS	
				ZR	15419
CARBON	0.001%			NR	15505
HYDROGEN	0.001%			CR	15575
NITROGEN	-.190%			HR	16251
BLANKS	59	659	102		
K FACTORS	13.424	21.162	0.107		

FILL	COMB	BOOST1	BOOST2
0	0	0	0

FILL TIME 16 Seconds

Work Group

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Apr 22 2016, 03:46 pm

Work Group: WG886298 for Department: 7 Wet Chemistry

Created: 22-APR-16 Due: Operator: AR

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1609539-01	5237-160328-DC-SED06	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0411	0422	S0	Glass-A.120
L1609539-02	5237-160328-DC-SED06	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0411	0422	S0	Glass-A.120
L1609539-03	5237-160328-DC-SED06	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0411	0422	S0	Glass-A.120
L1609539-04	5237-160328-DC-SED07	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0411	0422	S0	Glass-A.120
L1609539-05	5237-160328-DC-SED07	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0411	0422	S0	Glass-A.120
L1609539-06	5237-160328-DC-SED07	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0411	0422	S0	Glass-A.120
L1609539-07	5237-160328-DC-SED07	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0411	0422	S0	Glass-A.120
L1609539-08	5237-160328-DC-SED07	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0411	0422	S0	Glass-A.120
L1609539-09	5237-160328-DC-SED08	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0411	0422	S0	Glass-A.120
L1609563-03	5237-160329-DC-EMB02	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0413	0422	S0	Glass-A.120
L1609563-04	5237-160330-DC-EMB02	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0413	0422	S0	Glass-A.120
L1609563-05	5237-160330-DC-EMB05	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0413	0422	S0	Glass-A.120
L1609563-06	5237-160330-DC-EMB05	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0413	0422	S0	Glass-A.120
L1609563-07	5237-160329-DC-EMB05	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0413	0422	S0	Glass-A.120
L1609563-08	5237-160330-DC-EMB05	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0413	0422	S0	Glass-A.120
L1609563-09	5237-160330-DC-EMB03	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0413	0422	S0	Glass-A.120
L1609563-10	5237-160330-DC-EMB03	S	A2-SOOT-LK-4REPS	SOIL	DONE	U	0413	0422	S0	Glass-A.120
WG886298-1	Laboratory Method Bl	S	A2-SOOT-LK-4REPS	SOIL	DONE	U				
WG886298-2	Standard Reference M	S	A2-SOOT-LK-4REPS	SOIL	DONE	U				
WG886298-3	Duplicate Sample	S	A2-SOOT-LK-4REPS	SOIL	DONE	U				
WG886298-4	Matrix Spike	S	A2-SOOT-LK-4REPS	SOIL	DONE	U				

Comments:

WG886298-3 L1609563-03
WG886298-4 L1609563-03

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Apr 22 2016, 03:46 pm

Work Group: WG886401 for Department: 7 Wet Chemistry

Created: 22-APR-16 Due: Operator: AR

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L1609539-10	5237-160328-DC-SED08	S	A2-SOOT-LK-4REPS	SOIL	DONE	U		0411 0422	S0	Glass-A.120
L1609539-11	5237-160328-DC-SED08	S	A2-SOOT-LK-4REPS	SOIL	DONE	U		0411 0422	S0	Glass-A.120
WG886401-1	Laboratory Method Bl	S	A2-SOOT-LK-4REPS	SOIL	DONE	U				
WG886401-2	Standard Reference M	S	A2-SOOT-LK-4REPS	SOIL	DONE	U				
WG886401-3	Duplicate Sample	S	A2-SOOT-LK-4REPS	SOIL	DONE	U				
WG886401-4	Matrix Spike	S	A2-SOOT-LK-4REPS	SOIL	DONE	U				

Comments:

WG886401-3	L1609539-11
WG886401-4	L1609539-11

Sample Preparation

TOC Instrument: (#1) - SN: 241N8102003
(Circle one) #2 - SN: 241N9041221
#3 - SN: 241L1308211

Date: 4/21/16
Analyst: CW
2° Review:
CCV ID: WW120315A→E
SRM 1944 ID:
Filter Aid ID: 030411A

ICV ID: WW120315F
Balance ID: 002288
Other SRM ID: WS070714A

Login	SAMPLE	QC D/MS	TRAY LOCATION	AUTO SLOT	WEIGHT (mg)
~~Conditioning Std~~ K				1	10.26
Blank				2	53.72
~~K Factor~~ 0				3	9.90
~~Blank~~ 1000				4	10.28
~~K Factor~~ 5000				5	10.37
~~K Factor~~ 10000				6	10.33
~~ICV~~ 20000				7	10.49
~~ICB~~ 40000				8	10.61
~~LCS~~ ICV				9	10.07
~~Blank~~ ICB				10	73.95
HCV				11	51.86
SRM1650b				12	0.66
MB				13	51.29
SRM1650b				14	0.55
MB				15	56.85
SRM1650b				16	0.74
MB				17	62.47
SRM1650b				18	0.87
~~CCV~~ MB				19	65.92
~~CCB~~ L1609563	03			20	16.46
↓	03			21	9.54
CCV				22	9.82

Login	SAMPLE	QC D/MS	TRAY LOCATION	AUTO SLOT	WEIGHT (mg)
CCB				23	62.40
L1609563	03			24	11.69
	03			25	11.93
	03D			26	24.73
	03D			27	13.12
	03D			28	9.68
	03D			29	12.36
	03MS	10.10		30	10.87
~~CCV~~	03MS	10.27		31	12.95
~~CCB~~	03MS	10.09		32	11.40
↓	03MS	10.24		33	9.34
CCV				34	10.03
CCB				35	44.55
L1609563	04			36	11.57
↓	04			37	14.89
	04			38	18.54
	04			39	16.46
	05			40	11.09
	05			41	11.78
	05			42	11.71
~~CCV~~	05			43	6.85
~~CCB~~ ↓	06			44	10.18

TOC Instrument: #1 - SN: 241N8102003 #3 - SN: 241L1308211
(Circle one) #2 - SN: 241N9041221

Date: _____ 2° Review: _____ CCV ID: _____ ICV ID: _____
Analyst: _____ SRM 1944 ID: _____ Balance ID: _____
Filter Aid ID: _____ Other SRM ID: _____

Login	SAMPLE	QC D/MS	TRAY LOCATION	AUTO SLOT	WEIGHT (mg)
Conditioning Std					
Blank					
K Factor					
Blank					
K Factor					
K Factor					
ICV					
ICB					
LCS					
~~Blank~~					
L1609563	06			45	14.93
CCV				46	10.38
CCB				47	44.75
L1609563	06			48	16.97
	06			49	14.95
	07			50	9.29
	07			51	13.47
	07			52	12.54
CCV	07			53	12.79
~~CCB~~	08			54	15.12
	08			55	13.58
	08			56	14.43

Login	SAMPLE	QC D/MS	TRAY LOCATION	AUTO SLOT	WEIGHT (mg)
L1609563	08			57	10.45
CCV				58	10.26
CCB				59	45.85
L1609563	09			01	11.96
	09			02	17.45
	09			03	18.46
	09			04	12.75
	10			05	16.80
~~CCV~~	10			06	15.41
~~CCB~~	10			07	14.49
	10			08	15.32
L1609539	01			09	14.30
	01			10	19.87
CCV				11	9.91
CCB				12	53.06
L1609539	01			13	13.24
	01			14	18.82
	02			15	13.34
	02			16	12.74
	02			17	17.49
CCV	02			18	15.91
~~CCB~~					

TOC Instrument: (#1) - SN: 241N8102003 #3 - SN: 241L1308211
(Circle one) #2 - SN: 241N9041221

Date: 9/21/16 CCV ID: WW120315A→E ICV ID: WW120315F
Analyst: CW 2° Review: _____ SRM 1944 ID: _____ Balance ID: 002288
Filter Aid ID: WS030411A Other SRM ID: WS070114A

Login	SAMPLE	QC D/MS	TRAY LOCATION	AUTO SLOT	WEIGHT (mg)
Conditioning Std					
Blank					
K Factor					
Blank					
K Factor					
K Factor					
ICV					
ICB					
LCS					
Blank					
L1609539	03			19	10.75
	03			20	17.00
	03			21	17.41
	03			22	13.60
CCV				23	10.14
CCB				24	53.35
L1609539	04			25	~~13.44~~ 13.30
	04			26	17.91
~~CCV~~	04			27	15.74
~~CCB~~	04			28	18.24
	05			29	10.26
	05			30	9.45

Login	SAMPLE	QC D/MS	TRAY LOCATION	AUTO SLOT	WEIGHT (mg)
L1609539	05			31	8.34
	05			32	9.59
	06			33	12.43
	06			34	14.03
CCV				35	10.24
CCB				36	61.11
L1609539	06			37	17.31
	06			38	16.79
~~CCV~~	07			39	13.43
~~CCB~~	07			40	7.07
	07			41	10.21
	07			42	13.41
	08			43	12.11
	08			44	14.18
	08			45	13.22
	08			46	11.43
CCV				47	10.08
CCB				48	63.78
L1609539	09			49	12.91
	09			50	15.25
~~CCV~~	09			51	11.21
~~CCB~~	09			52	11.84

TOC Instrument: #1 - SN: 241N6102003 #3 - SN: 241L1306211
(Circle one) #2 - SN: 241N9041221

Date: _____ CCV ID: _____ ICV ID: _____
Analyst: _____ 2° Review: _____ SRM 1944 ID: _____ Balance ID: _____
Filter Aid ID: _____ Other SRM ID: _____

Login	SAMPLE	QC D/MS	TRAY LOCATION	AUTO SLOT	WEIGHT (mg)
Conditioning Std					
Blank					
K Factor					
Blank					
K Factor					
K Factor					
ICV					
ICB					
LCS					
Blank					
CCV				53	10.18
CCB				54	71.68
CCV					
CCB					

Login	SAMPLE	QC D/MS	TRAY LOCATION	AUTO SLOT	WEIGHT (mg)
CCV					
CCB					
CCV					
CCB					

Document Type: Form

Pre-Qualtrax Document ID: 107-02

TOC Instrument: (#1) - SN: 241N8102003 #3 - SN: 241L1308211
(Circle one) #2 - SN: 241N9041221

Date: 4/22/16
Analyst: CW
2° Review: _____

CCV ID: WW120315A → E
SRM 1944 ID: WS081824A
Filter Aid ID: WS030411A

ICV ID: WW120315F
Balance ID: 002288
Other SRM ID: WS070714A

Login	SAMPLE	QC D/MS	TRAY LOCATION	AUTO SLOT	WEIGHT (mg)
~~Conditioning Std~~ K				1	10.07
Blank				2	67.25
~~K Factor~~ O				3	9.76
~~Blank~~ 1000				4	10.05
~~K Factor~~ 5000				5	10.20
~~K Factor~~ 10000				6	10.44
~~ICV~~ 20000				7	10.81
~~ICB~~ 40000				8	10.50
~~LCS~~ ICV				9	9.86
~~Blank~~ ICB				10	66.91
HICV				11	51.49
SRM1650				12	1.24
MB				13	78.05
SRM1650				14	0.52
MB				15	79.74
SRM1650				16	0.95
MB				17	78.17
SRM1650				18	0.94
~~CCV~~ MB				19	80.19
~~CCB~~ SRM1650				20	0.86
MB SRM1650				21	1.07
CCV				22	10.08

Login	SAMPLE	QC D/MS	TRAY LOCATION	AUTO SLOT	WEIGHT (mg)
CCB				23	62.00
L1609539	10			24	16.24
	10			25	20.36
	10			26	17.82
	10			27	13.84
	11			28	14.35
	11			29	11.10
	11			30	9.38
~~CCV~~	11			31	14.93
~~CCB~~	11D			32	16.89
	11D			33	11.13
CCV				34	10.10
CCB				35	80.27
L1609539	10RR			36	23.51
	10RR			37	13.18
	10RR			38	24.26
	10RR			39	22.13
	11D			40	17.23
	11D			41	13.73
	11MS	9.72		42	13.31
~~CCV~~	11MS	11.01		43	19.08
~~CCB~~	11MS	9.90		44	15.71

TOC Instrument: #1 - SN: 241N8102003 #3 - SN: 241L1308211
(Circle one) #2 - SN: 241N9041221

Date: _____
Analyst: _____ 2° Review: _____

CCV ID: _____ ICV ID: _____
SRM 1944 ID: _____ Balance ID: _____
Filter Aid ID: _____ Other SRM ID: _____

Login	SAMPLE	QC D/MS	TRAY LOCATION	AUTO SLOT	WEIGHT (mg)
Conditioning Std					
Blank					
K Factor					
Blank					
K Factor					
K Factor					
ICV					
ICB					
LCS					
Blank					
L1609539	11MS	10-05		45	11-62
CCV				46	9.96
CCB				47	78-68
CCV					
CCB					

Login	SAMPLE	QC D/MS	TRAY LOCATION	AUTO SLOT	WEIGHT (mg)
CCV					
CCB					
CCV					
CCB					

Alpha Report

ANALYTICAL REPORT

Lab Number:	L1609539
Client:	Apex labs 12232 SW Garden Place Tigard, OR 97223
ATTN:	Philip Nerenberg
Phone:	(503) 718-2323
Project Name:	A6C1076
Project Number:	Not Specified
Report Date:	04/22/16

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), ME (MA00030), PA (68-02089), VA (460194), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), USFWS (Permit #LE2069641), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: A6C1076
Project Number: Not Specified

Lab Number: L1609539
Report Date: 04/22/16

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1609539-01	5237-160328-DC-SED063	SEDIMENT	Not Specified	03/28/16 10:30	04/01/16
L1609539-02	5237-160328-DC-SED065	SEDIMENT	Not Specified	03/28/16 11:00	04/01/16
L1609539-03	5237-160328-DC-SED068	SEDIMENT	Not Specified	03/28/16 11:30	04/01/16
L1609539-04	5237-160328-DC-SED070	SEDIMENT	Not Specified	03/28/16 12:05	04/01/16
L1609539-05	5237-160328-DC-SED072	SEDIMENT	Not Specified	03/28/16 12:30	04/01/16
L1609539-06	5237-160328-DC-SED075	SEDIMENT	Not Specified	03/28/16 12:50	04/01/16
L1609539-07	5237-160328-DC-SED077	SEDIMENT	Not Specified	03/28/16 12:50	04/01/16
L1609539-08	5237-160328-DC-SED077D	SEDIMENT	Not Specified	03/28/16 13:15	04/01/16
L1609539-09	5237-160328-DC-SED082	SEDIMENT	Not Specified	03/28/16 13:45	04/01/16
L1609539-10	5237-160328-DC-SED085	SEDIMENT	Not Specified	03/28/16 14:15	04/01/16
L1609539-11	5237-160328-DC-SED087	SEDIMENT	Not Specified	03/28/16 14:45	04/01/16

Project Name: A6C1076 **Lab Number:** L1609539
Project Number: Not Specified **Report Date:** 04/22/16

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: A6C1076 **Lab Number:** L1609539
Project Number: Not Specified **Report Date:** 04/22/16

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Elizabeth Porta

Title: Technical Director/Representative Date: 04/22/16

INORGANICS
&
MISCELLANEOUS

Project Name: A6C1076
Project Number: Not Specified

Lab Number: L1609539
Report Date: 04/22/16

SAMPLE RESULTS

Lab ID: L1609539-01
Client ID: 5237-160328-DC-SED063
Sample Location: Not Specified
Matrix: Sediment

Date Collected: 03/28/16 10:30
Date Received: 04/01/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
% Soot (Rep 1)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 2)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 3)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 4)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Average)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM

Project Name: A6C1076
Project Number: Not Specified

Lab Number: L1609539
Report Date: 04/22/16

SAMPLE RESULTS

Lab ID: L1609539-02
Client ID: 5237-160328-DC-SED065
Sample Location: Not Specified
Matrix: Sediment

Date Collected: 03/28/16 11:00
Date Received: 04/01/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
% Soot (Rep 1)	0.050		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 2)	0.055		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 3)	0.058		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 4)	0.064		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Average)	0.057		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM

Project Name: A6C1076
Project Number: Not Specified

Lab Number: L1609539
Report Date: 04/22/16

SAMPLE RESULTS

Lab ID: L1609539-03
Client ID: 5237-160328-DC-SED068
Sample Location: Not Specified
Matrix: Sediment

Date Collected: 03/28/16 11:30
Date Received: 04/01/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
% Soot (Rep 1)	0.078		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 2)	0.112		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 3)	0.083		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 4)	0.094		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Average)	0.092		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM

Project Name: A6C1076
Project Number: Not Specified

Lab Number: L1609539
Report Date: 04/22/16

SAMPLE RESULTS

Lab ID: L1609539-04
Client ID: 5237-160328-DC-SED070
Sample Location: Not Specified
Matrix: Sediment

Date Collected: 03/28/16 12:05
Date Received: 04/01/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
% Soot (Rep 1)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 2)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 3)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 4)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Average)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM

Project Name: A6C1076
Project Number: Not Specified

Lab Number: L1609539
Report Date: 04/22/16

SAMPLE RESULTS

Lab ID: L1609539-05
Client ID: 5237-160328-DC-SED072
Sample Location: Not Specified
Matrix: Sediment

Date Collected: 03/28/16 12:30
Date Received: 04/01/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
% Soot (Rep 1)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 2)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 3)	0.053		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 4)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Average)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM

Project Name: A6C1076
Project Number: Not Specified

Lab Number: L1609539
Report Date: 04/22/16

SAMPLE RESULTS

Lab ID: L1609539-06
Client ID: 5237-160328-DC-SED075
Sample Location: Not Specified
Matrix: Sediment

Date Collected: 03/28/16 12:50
Date Received: 04/01/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
% Soot (Rep 1)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 2)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 3)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 4)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Average)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM

Project Name: A6C1076
Project Number: Not Specified

Lab Number: L1609539
Report Date: 04/22/16

SAMPLE RESULTS

Lab ID: L1609539-07
Client ID: 5237-160328-DC-SED077
Sample Location: Not Specified
Matrix: Sediment

Date Collected: 03/28/16 12:50
Date Received: 04/01/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
% Soot (Rep 1)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 2)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 3)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 4)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Average)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM

Project Name: A6C1076
Project Number: Not Specified

Lab Number: L1609539
Report Date: 04/22/16

SAMPLE RESULTS

Lab ID: L1609539-08
Client ID: 5237-160328-DC-SED077D
Sample Location: Not Specified
Matrix: Sediment

Date Collected: 03/28/16 13:15
Date Received: 04/01/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
% Soot (Rep 1)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 2)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 3)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 4)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Average)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM

Project Name: A6C1076
Project Number: Not Specified

Lab Number: L1609539
Report Date: 04/22/16

SAMPLE RESULTS

Lab ID: L1609539-09
Client ID: 5237-160328-DC-SED082
Sample Location: Not Specified
Matrix: Sediment

Date Collected: 03/28/16 13:45
Date Received: 04/01/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
% Soot (Rep 1)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 2)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 3)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 4)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Average)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM

Project Name: A6C1076
Project Number: Not Specified

Lab Number: L1609539
Report Date: 04/22/16

SAMPLE RESULTS

Lab ID: L1609539-10
Client ID: 5237-160328-DC-SED085
Sample Location: Not Specified
Matrix: Sediment

Date Collected: 03/28/16 14:15
Date Received: 04/01/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
% Soot (Rep 1)	ND		%	0.050	NA	1	-	04/22/16 11:17	91,-	CM
% Soot (Rep 2)	ND		%	0.050	NA	1	-	04/22/16 11:17	91,-	CM
% Soot (Rep 3)	ND		%	0.050	NA	1	-	04/22/16 11:17	91,-	CM
% Soot (Rep 4)	ND		%	0.050	NA	1	-	04/22/16 11:17	91,-	CM
% Soot (Average)	ND		%	0.050	NA	1	-	04/22/16 11:17	91,-	CM

Project Name: A6C1076
Project Number: Not Specified

Lab Number: L1609539
Report Date: 04/22/16

SAMPLE RESULTS

Lab ID: L1609539-11
Client ID: 5237-160328-DC-SED087
Sample Location: Not Specified
Matrix: Sediment

Date Collected: 03/28/16 14:45
Date Received: 04/01/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab										
% Soot (Rep 1)	ND		%	0.050	NA	1	-	04/22/16 11:17	91,-	CM
% Soot (Rep 2)	0.051		%	0.050	NA	1	-	04/22/16 11:17	91,-	CM
% Soot (Rep 3)	ND		%	0.050	NA	1	-	04/22/16 11:17	91,-	CM
% Soot (Rep 4)	ND		%	0.050	NA	1	-	04/22/16 11:17	91,-	CM
% Soot (Average)	ND		%	0.050	NA	1	-	04/22/16 11:17	91,-	CM

Project Name: A6C1076 **Lab Number:** L1609539

Project Number: Not Specified **Report Date:** 04/22/16

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Mansfield Lab for sample(s): 01-09 Batch: WG886298-1										
% Soot (Rep 1)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 2)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 3)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Rep 4)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
% Soot (Average)	ND		%	0.050	NA	1	-	04/21/16 10:26	91,-	CM
General Chemistry - Mansfield Lab for sample(s): 10-11 Batch: WG886401-1										
% Soot (Rep 1)	ND		%	0.050	NA	1	-	04/22/16 11:17	91,-	CM
% Soot (Rep 2)	ND		%	0.050	NA	1	-	04/22/16 11:17	91,-	CM
% Soot (Rep 3)	ND		%	0.050	NA	1	-	04/22/16 11:17	91,-	CM
% Soot (Rep 4)	ND		%	0.050	NA	1	-	04/22/16 11:17	91,-	CM
% Soot (Average)	ND		%	0.050	NA	1	-	04/22/16 11:17	91,-	CM

Matrix Spike Analysis
Batch Quality Control

Project Name: A6C1076
Project Number: Not Specified

Lab Number: L1609539
Report Date: 04/22/16

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG886298-4 QC Sample: L1609563-03 Client ID: MS Sample												
% Soot (Rep 1)	ND	0.929	0.934	100		-	-		75-125	-		25
% Soot (Rep 2)	ND	0.793	0.812	102		-	-		75-125	-		25
% Soot (Rep 3)	ND	0.885	0.892	101		-	-		75-125	-		25
% Soot (Rep 4)	ND	1.1	1.10	100		-	-		75-125	-		25
General Chemistry - Mansfield Lab Associated sample(s): 10-11 QC Batch ID: WG886401-4 QC Sample: L1609539-11 Client ID: 5237-160328-DC-SED087												
% Soot (Rep 1)	ND	0.73	0.767	105		-	-		75-125	-		25
% Soot (Rep 2)	0.051	0.577	0.672	108		-	-		75-125	-		25
% Soot (Rep 3)	ND	0.63	0.741	118		-	-		75-125	-		25
% Soot (Rep 4)	ND	0.865	0.988	114		-	-		75-125	-		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: A6C1076
Project Number: Not Specified

Lab Number: L1609539
Report Date: 04/22/16

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Mansfield Lab Associated sample(s): 01-09 QC Batch ID: WG886298-3 QC Sample: L1609563-03 Client ID: DUP Sample						
% Soot (Rep 1)	ND	ND	%	NC		25
% Soot (Rep 2)	ND	ND	%	NC		25
% Soot (Rep 3)	ND	ND	%	NC		25
% Soot (Rep 4)	ND	ND	%	NC		25
% Soot (Average)	ND	ND	%	NC		25
General Chemistry - Mansfield Lab Associated sample(s): 10-11 QC Batch ID: WG886401-3 QC Sample: L1609539-11 Client ID: 5237-160328-DC-SED087						
% Soot (Rep 1)	ND	ND	%	NC		25
% Soot (Rep 2)	0.051	ND	%	NC		25
% Soot (Rep 3)	ND	ND	%	NC		25
% Soot (Rep 4)	ND	ND	%	NC		25
% Soot (Average)	ND	ND	%	NC		25

Project Name: A6C1076 **Lab Number:** L1609539

Project Number: Not Specified **Report Date:** 04/22/16

S.R.M. Standard Quality Control

Standard Reference Material (SRM): WG886298-2

Parameter	% Recovery	Qual	QC Criteria
% Soot (Rep 1)	104		75-125
% Soot (Rep 2)	113		75-125
% Soot (Rep 3)	98		75-125
% Soot (Rep 4)	106		75-125

Project Name: A6C1076 **Lab Number:** L1609539

Project Number: Not Specified **Report Date:** 04/22/16

S.R.M. Standard Quality Control

Standard Reference Material (SRM): WG886401-2

Parameter	% Recovery	Qual	QC Criteria
% Soot (Rep 1)	95		75-125
% Soot (Rep 2)	115		75-125
% Soot (Rep 3)	113		75-125
% Soot (Rep 4)	116		75-125

Project Name: A6C1076
Project Number: Not Specified

Lab Number: L1609539
Report Date: 04/22/16

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1609539-01A	Glass 120ml/4oz unpreserved	A	N/A	5.4	Y	Absent	A2-SOOT-LK-4REPS(14)
L1609539-02A	Glass 120ml/4oz unpreserved	A	N/A	5.4	Y	Absent	A2-SOOT-LK-4REPS(14)
L1609539-03A	Glass 120ml/4oz unpreserved	A	N/A	5.4	Y	Absent	A2-SOOT-LK-4REPS(14)
L1609539-04A	Glass 120ml/4oz unpreserved	A	N/A	5.4	Y	Absent	A2-SOOT-LK-4REPS(14)
L1609539-05A	Glass 120ml/4oz unpreserved	A	N/A	5.4	Y	Absent	A2-SOOT-LK-4REPS(14)
L1609539-06A	Glass 120ml/4oz unpreserved	A	N/A	5.4	Y	Absent	A2-SOOT-LK-4REPS(14)
L1609539-07A	Glass 120ml/4oz unpreserved	A	N/A	5.4	Y	Absent	A2-SOOT-LK-4REPS(14)
L1609539-08A	Glass 120ml/4oz unpreserved	A	N/A	5.4	Y	Absent	A2-SOOT-LK-4REPS(14)
L1609539-09A	Glass 120ml/4oz unpreserved	A	N/A	5.4	Y	Absent	A2-SOOT-LK-4REPS(14)
L1609539-10A	Glass 120ml/4oz unpreserved	A	N/A	5.4	Y	Absent	A2-SOOT-LK-4REPS(14)
L1609539-11A	Glass 120ml/4oz unpreserved	A	N/A	5.4	Y	Absent	A2-SOOT-LK-4REPS(14)

*Values in parentheses indicate holding time in days

Project Name:	A6C1076	**Lab Number:**	L1609539
Project Number:	Not Specified	**Report Date:**	04/22/16

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

Report Format: DU Report with 'J' Qualifiers

Project Name:	A6C1076	**Lab Number:**	L1609539
Project Number:	Not Specified	**Report Date:**	04/22/16

Data Qualifiers

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name: A6C1076 **Lab Number:** L1609539

Project Number: Not Specified **Report Date:** 04/22/16

REFERENCES

91 Analysis of Soot following ES&T publications by Accardi-Dey and Gschwend, 2003; and Gustafsson (et. al.), 1997.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 524.2: 1,2-Dibromo-3-chloropropane, 1,2-Dibromoethane, m/p-xylene, o-xylene
EPA 624: 2-Butanone (MEK), 1,4-Dioxane, tert-Amylmethyl Ether, tert-Butyl Alcohol, m/p-xylene, o-xylene
EPA 625: Aniline, Benzoic Acid, Benzyl Alcohol, 4-Chloroaniline, 3-Methylphenol, 4-Methylphenol.
EPA 1010A: NPW: Ignitability
EPA 6010C: NPW: Strontium; SCM: Strontium
EPA 8151A: NPW: 2,4-DB, Dicamba, Dichloroprop, MCPA, MCPP; SCM: 2,4-DB, Dichloroprop, MCPA, MCPP
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene, Isopropanol; SCM: Iodomethane (methyl iodide), Methyl methacrylate (soil); 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Pentachloronitrobenzene, 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 9010: NPW: Amenable Cyanide Distillation, Total Cyanide Distillation
EPA 9038: NPW: Sulfate
EPA 9050A: NPW: Specific Conductance
EPA 9056: NPW: Chloride, Nitrate, Sulfate
EPA 9065: NPW: Phenols
EPA 9251: NPW: Chloride
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
EPA 8270D: NPW: Biphenyl; SCM: Biphenyl, Caprolactam
EPA 8270D-SIM Isotope Dilution: SCM: 1,4-Dioxane
SM 2540D: TSS
SM2540G: SCM: Percent Solids
EPA 1631E: SCM: Mercury
EPA 7474: SCM: Mercury
EPA 8081B: NPW and SCM: Mirex, Hexachlorobenzene.
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA 8270-SIM: NPW and SCM: Alkylated PAHs.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene, n-Butylbenzene, n-Propylbenzene, sec-Butylbenzene, tert-Butylbenzene.
Biological Tissue Matrix: ***8270D-SIM; 3050B; 3051A; 7471B; 8081B; 8082A; 6020A:*** Lead***; 8270D:*** bis(2-ethylhexyl)phthalate, Butylbenzylphthalate, Diethyl phthalate, Dimethyl phthalate, Di-n-butyl phthalate, Di-n-octyl phthalate, Fluoranthene, Pentachlorophenol.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F,**
EPA 353.2: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

L1609539

LD 3/31/16

SUBCONTRACT ORDER

Apex Laboratories

A6C1076

SENDING LABORATORY:

Apex Laboratories
12232 S.W. Garden Place
Tigard, OR 97223
Phone: (503) 718-2323
Fax: (503) 718-0333
Project Manager: Philip Nerenberg

RECEIVING LABORATORY:

Alpha Analytical, INC
320 Forbes Boulevard
Mansfield, MA 02048
Phone :(508) 822-9300
Fax:

09539

Sediment 0 to 6 bgs

Sample Name: 5237-160328-DC-SED063 **Sedimen** **Sampled: 03/28/16 10:30** (A6C1076-02)

.01

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 10:30	Carbon Black-Alpha Analytical Level IV DP needed
Containers Supplied: (F)4 oz Glass Jar			

Sediment 0 to 6 bgs

Sample Name: 5237-160328-DC-SED065 **Sedimen** **Sampled: 03/28/16 11:00** (A6C1076-04)

.02

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 11:00	Carbon Black-Alpha Analytical Level IV DP needed
Containers Supplied: (F)4 oz Glass Jar			

Sediment 0 to 6 bgs

Sample Name: 5237-160328-DC-SED068 **Sedimen** **Sampled: 03/28/16 11:30** (A6C1076-06)

.03

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 11:30	Carbon Black-Alpha Analytical Level IV DP needed
Containers Supplied: (D)4 oz Glass Jar			

Sediment 0 to 6 bgs

Sample Name: 5237-160328-DC-SED070 **Sedimen** **Sampled: 03/28/16 12:05** (A6C1076-08)

.04

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 12:05	Carbon Black-Alpha Analytical Level IV DP needed
Containers Supplied: (D)4 oz Glass Jar			

Standard TAT

Level IV DP

Marissa Kapa 3/31/16
Released By Date

UPS (Shipper)
Received By Date

UPS (Shipper)
Released By Date

Kim Parker - AAL 4/1/16 13:30
Received By Date

SUBCONTRACT ORDER

Apex Laboratories

A6C1076

L1609539

Sample Name: 5237-160328-DC-SED072		**Sedimen**	**Sampled: Sediment 0 to 6 bgs 03/28/16 12:30**	(A6C1076-10)
.05 Analysis	Due	Expires	Comments	
Subcontract Outside	04/11/16 17:00	09/24/16 12:30	Carbon Black-Alpha Analytical Level IV DP needed	
Containers Supplied: (D)4 oz Glass Jar				

Sample Name: 5237-160328-DC-SED075		**Sedimen**	**Sampled: Sediment 0 to 6 bgs 03/28/16 12:50**	(A6C1076-12)
.06 Analysis	Due	Expires	Comments	
Subcontract Outside	04/11/16 17:00	09/24/16 12:50	Carbon Black-Alpha Analytical Level IV DP needed	
Containers Supplied: (D)4 oz Glass Jar				

Sample Name: 5237-160328-DC-SED077		**Sedimen**	**Sampled: Sediment 0 to 6 bgs 03/28/16 12:50**	(A6C1076-14)
.07 Analysis	Due	Expires	Comments	
Subcontract Outside	04/11/16 17:00	09/24/16 12:50	Carbon Black-Alpha Analytical Level IV DP needed	
Containers Supplied: (D)4 oz Glass Jar				

Sample Name: 5237-160328-DC-SED077D		**Sedimen**	**Sampled: Sediment 0 to 6 bgs 03/28/16 13:15**	(A6C1076-16)
.08 Analysis	Due	Expires	Comments	
Subcontract Outside	04/11/16 17:00	09/24/16 13:15	Carbon Black-Alpha Analytical Level IV DP needed	
Containers Supplied: (D)4 oz Glass Jar				

Sample Name: 5237-160328-DC-SED082		**Sedimen**	**Sampled: Sediment 0 to 6 bgs 03/28/16 13:45**	(A6C1076-18)
.09 Analysis	Due	Expires	Comments	
Subcontract Outside	04/11/16 17:00	09/24/16 13:45	Carbon Black-Alpha Analytical Level IV DP needed	
Containers Supplied: (D)4 oz Glass Jar				

Released By	Date	Received By	Date
[signature]	3/31/16	UPS (Shipper)	
UPS (Shipper)		[signature] -AAL	4/1/16 13:32

SUBCONTRACT ORDER

Apex Laboratories

A6C1076

L1609539

			Sediment 0 to 6 bgs	
Sample Name: 5237-160328-DC-SED085		**Sedimen**	**Sampled:** **03/28/16 14:15**	(A6C1076-20)

.10

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 14:15	Carbon Black-Alpha Analytical Level IV DP needed

Containers Supplied:
(D)4 oz Glass Jar

			Sediment 0 to 6 bgs	
Sample Name: 5237-160328-DC-SED087		**Sedimen**	**Sampled:** **03/28/16 14:45**	(A6C1076-22)

.11

Analysis	Due	Expires	Comments
Subcontract Outside	04/11/16 17:00	09/24/16 14:45	Carbon Black-Alpha Analytical Level IV DP needed

Containers Supplied:
(F)4 oz Glass Jar

Released By	Date	Received By	Date
Arissa Keya	3/31/16	UPS (Shipper)	
UPS (Shipper)		[signature] -AAL	4/1/16 13:32