Standard summaries for Uncertainty Calculations
Project Number: VP0973 Western Zirconium
Analyst: Jim Hoban and Bob Bohn
Date: March 5, 2012

Data File Name	Standard Information	Experimental Result {%}	Theoretical Result {%}	% Recovery
SIG1000033	H2 QC Std 9.98% Linw lot# 706224 (1172)	10.07488	9.98	10095
SIG1000034	H2 QC Std 0.99% Hogen Gen# 5471 (1245)	0968669	0.99	97.85
SIG1000037	H2 CC Std 10.01% M-L (1051)	9.99413	10.01	99.84
SIG1000038	H2 QC Std 9.98% Linw lot# 706224 (1172)	10.06931	9.98	100.89
SIG1000054	H2 CC Std 10.01% M-L (1051)	9.97733	10.01	99.67
SIG1000055	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.92471	9.98	99.45
SIG1000059	H2 CC Std 10.01% M-L (1051)	10.05820	10.01	100.48
SIG1000060	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.48099	9.98	95.00
SIG1000066	H2 CC Std 2.46% M-L (1053)	2.30938	2.46	93,88
SIG1000067	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.26482	9.98	92.83
SIG1000073	H2 CC Std 1.00% M-L (1007)	0.890044	1.00	89.00
SIG1000077	H2 CC Std 1.00% M-L (1007)	0.908217	1.00	90.82
SIG1000080	H2 CC Std 2.46% M-L (1053)	2.32389	2.46	94.47
SIG1000081	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.53818	9.98	95.57
SIG1000093	H2 CC Std 2.46% M-L (1053)	2.32418	2.46	94.48
SIG1000104	H2 CC Std 2.46% M-L (1053)	2.33882	2.46	95.07
SIG1000106	H2 CC Std 2.46% M-L (1053)	2.32664	2.46	94,58
SIG1000107	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.50724	998	95,26
SIG1000118	H2 CC Std 2.46% M-L (1053)	2.35391	2.46	95.69
SIG1000133	H2 CC Std 2.46% M-L (1053)	2.32890	2.46	94,67
SIG1000134	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.50557	9.98	95.25
SIG1000136	H2 CC Std 2.46% M-L (1053}	2.30882	2.46	93.85
SIG1000137	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.39019	9.98	94.09
SIG1000142	H2 CC Std 2.46% M-L (1053)	2.27685	2.46	92.55
SIG1000145	H2 CC Std 2.46% M-L (1053)	2.32350	2.46	94.45
SIG1000148	H2 CC Std 10.01% M-L (1051)	9.40934	10.01	94.00
SIG1000152	H2 CC Std 1.00% M-L (1007)	0.884755	1.00	88.48
SIG1000153	H2 CC Std 2.46% M-L (1053)	2.32601	2.46	94.55
SIG1000156	H2 CC Std 2.46% M-L (1053)	2.34777	2.46	95.44
SIG1000157	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.64463	9.98	96.64
SIG1000173	H2 CC Std 2.46% M-L (1053)	2.18842	2.46	88,96
SIG1000174	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.42387	9.98	94.43
SIG1000175	H2 CC Std 1.00% M-L (1007)	0.942408	1.00	94.24
SIG1000192	H2 CC Std 1.00% M-L (1007)	0.956849	1.00	95.68
SIG1000193	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.39394	9.98	94.13
SIG1000195	H2 CC Std 1.00% M-L (1007)	0.91452	1.00	91.45
SIG1000196	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.4277	9.98	94.47
SIG1000213	H2 CC Std 10.01% M·L (1051)	9.3373	10.01	93.28
SIG1000214	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.30991	9.98	93.29
SIG1000232	H2 CC Std 10.01% M-L (1051)	9.40715	10.01	93.98
SIG1000249	H2 CC Std 10.01% M-L (1051)	966287	10.01	96.53
SIG1000250	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.25455	9.98	92,73
SIG1000252	H2 CC Std 10.01% M-L (1051)	9.59952	10.01	95.90
SIG1000253	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.35503	9.98	93.74
SIG1000269	H2 CC Std 10.01% M-L (1051)	9.36113	10.01	93.52
SIG1000288	H2 CC Std 19.98% M-L (1052)	18,79784	19.98	94,08
SIG1000289	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.32465	9.98	93.43
SIG1000305	H2 CC Std 10.01% M-L (1051)	9.41341	10.01	94.04
SIG1000306	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.25295	9.98	92.71
SIG1000309	H2 CC Std 10.01% M-L (1051)	9.36521	10,01	93,56
SIG1000310	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.42329	9.98	94.42
SIG1000313	H2 CC Std 10.01% M-L (1051)	9.37934	10.01	93.70
SIG1000314	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.38887	9.98	94.08
SIG1000332	H2 CC Std 19.98% M-L (1052)	18.43425	19.98	92.26
SIG1000333	H2 QC Std 9.98% Linw lot# 706224 (1172)	9.23737	9.98	92.56

Mean:	94.56
Std.Dev.:	2.64
¾RSD:	2.80.

Run Log of all analyses on the GC/TCD for project VP0973 Western Zirconium

Project Number: VP0973

Analyst: Bob Bohn (N-5 and Mason Cooper) and Jim Hoban (Dumpster Scenario)

Date: 3/14/2012

Data File Name	Sample Information
	Analysis Date: 11/16/2011
SIG1000001	10% H2 Std Linweld Gas
SIG1000002	10% H2 Hogen Gas QC Std
SIG1000003	Canister Clean Check (1165)
SIG1000004	Canister Clean Check (1168)
SIG1000005	Canister Clean Check (1234)
SIG1000006	Canister Clean Check (1236)
SIG1000007	Canister Clean Check (1233)
SIG1000008	Canister Clean Check (1167)
SIG1000009	Canister Clean Check (1170)
SIG1000010	Canister Clean Check (1158)
SIG1000011	Canister Clean Check (1052)
SIG1000012	Canister Clean Check (1051)
SIG1000013	Canister Clean Check (1053)
SIG1000014	Canister Clean Check (1007)
SIG1000015	Canister Clean Check (1054)
SIG1000016	Canister Clean Check (1239)
SIG1000017	Canister Clean Check (1151)
SIG1000018	Canister Clean Check (1237)
SIG1000019	Canister Clean Check (1172)
SIG1000020	Canister Clean Check (1245)
SIG1000021	Canister Clean Check (1238)
SIG1000022	Canister Clean Check (1240)
	Analysis Date: 11/30/2011
SIG1000024	Laboratory Air Blank
SIG1000025	N2 Prep Blank (1168)
SIG1000026	H2 IC Std 0.10% Math-Linw lot# E1SG011409
SIG1000027	H2 IC Std 1.00% M-L (1007)
SIG1000028	H2 IC Std 2.46% M-L (1053)
SIG1000029	H2 IC Std 4.99% M-L (1054)
SIG1000030	H2 IC Std 10.01% M-L (1051)
SIG1000031	H2 IC Std 19.98% M-L (1052)
SIG1000032	N2 Prep Blank (1168)
SIG1000033	H2 QC Std 9.98% Linw lot# 706224 (1172)
SIG1000034	H2 QC Std 0.99% Hogen Gen# 5471 (1245)
	Analysis Date: 12/7/2011
SIG1000035	Laboratory Air Blank
SIG1000036	N2 Prep Blank (1168)
SIG1000037	H2 CC Std 10.01% M-L (1051)
SIG1000038	H2 QC Std 9.98% Linw lot# 706224 (1172)
	Analysis Date: 12/7/2011
SIG1000039	N2 Prep Blank (1168)
SIG1000040	NE 30177-1 M/C Test-1

Run Log of all analyses on the GC/TCD for project VP0973 Western Zirconium
Project Number: VP0973
Analyst: Bob Bohn (N-5 and Mason Cooper) and Jim Hoban (Dumpster Scenario)
Date: 3/14/2012

Data File Name	Sample Information
	Analysis Date: 12/7/2011 (Continued)
SIG1000041	NE 30177-1 M/C Test-2
SIG1000042	NE 30177-1 M/C Test-3
SIG1000043	NE 30178-1 M/C Test-1
SIG1000044	NE 30178-1 M/C Test-2
SIG1000045	NE 30179-1 M/C Test-1
SIG1000046	NE 30179-1 M/C Test-2
SIG1000047	NE 30180-1 M/C Test-1
SIG1000048	NE 30180-1 M/C Test-2
SIG1000049	N2 Prep Blank (1168)
SIG1000050	H2 CC Std 2.46% M-L (1053)
SIG1000051	H2 CC Std 2.46% M-L (1053) inlet line flushed dry after sample moisture
	Analysis Date: 12/8/2011
SIG1000052	Laboratory Air Blank
SIG1000053	N2 Prep Blank (1168)
SIG1000054	H2 CC Std 10.01% M-L (1051)
SIG1000055	H2 QC Std 9.98% Linw lot# 706224 (1172)
SIG1000056	N2 Prep Blank (1168)
	Analysis Date: 12/12/2011
SIG1000057	Laboratory Air Blank
SIG1000058	N2 Prep Blank (1168)
SIG1000059	H2 CC Std 10.01% M-L (1051)
SIG1000060	H2 QC Std 9.98% Linw lot# 706224 (1172)
SIG1000061	N2 Prep Blank (1168)
SIG1000062	N.5 test sample #1 10X dilution in Lab Air
SIG1000063	N.5 test sample #1 Undiluted

Run Log of all analyses on the GC/TCD for project VP0973 Western Zirconium
Project Number: VP0973
Analyst: Bob Bohn (N-5 and Mason Cooper) and Jim Hoban (Dumpster Scenario)
Date: 3/14/2012

The 10X sample dilutions were performed by withdrawing 1.0-mL of sample from the bag into the syringe then removing the syringe from the bag and withdrawing 9.0-mL of Laboratory Air into the syringe.

	Analysis Date: 12/14/2011
SIG1000064	Laboratory Air Blank
SIG1000065	N2 Prep Blank (1168)
SIG1000066	H2 CC Std 2.46% M-L (1053)
SIG1000067	H2 QC Std 9.98% Linw lot# 706224 (1172)
SIG1000068	N2 Prep Blank (1168)
SIG1000069	NE 30177-1 N.5 test 12/14/11 run 1
SIG1000070	NE 30177-1 N.5 test@ 10X

Run Log of all analyses on the GC/TCO for project VP0973 Western Zirconium
Project Number: VP0973
Analyst: Bob Bohn (N-5 and Mason Cooper) and Jim Hoban (Dumpster Scenario)
Date: 3/14/2012

Data File Name	Sample Information
	Analysis Date: 12/14/2011 (Continued)
SIG1000071	NE 30177-1 N.5 test@ 10X R2
SIG1000072	NE 30177-1 N.5 test@ 10X R3
SIG1000073	H2 CC Std 1.00% M-L (1007)
SIG1000074	NE 30178-1 N.5 test@ 10X R1
SIG1000075	NE 30178-1 N.5 test@ 10X R2
SIG1000076	NE 30178-1 N.5 test@ 10X R3
SIG1000077	H2 CC Std 1.00% M-L (1007)
	Analysis Date: 12/15/2011
SIG1000078	Laboratory Air Blank
SIG1000079	N2 Prep Blank (1168)
SIG1000080	H2 CC Std 2.46% M-L (1053)
SIG1000081	H2 QC Std 9.98% Linw lot# 706224 (1172)
SIG1000082	Laboratory Air Blank
SIG1000083	NE 30180-1 N.5 test@ 10X R1
SIG1000084	NE 30180-1 N.5 test@ 10X R2
SIG1000085	NE 30180-1 N.5 test@ 10X R3
SIG1000086	NE 30179-1 N.5 test@ 10X R1
SIG1000087	NE 30179-1 N.5 test@ 10X R2
SIG1000088	NE 30179-1 N.5 test@ 10X R3
SIG1000089	NE 30178-2 N.5 test@ 10X R1
SIG1000090	NE 30178-2 N.5 test@ 10X R2
SIG1000091	NE 30178-2 N.5 test@ 10X R3
SIG1000092	Laboratory Air Blank
SIG1000093	H2 CC Std 2.46% M-L (1053)
SIG1000094	Laboratory Air Blank
SIG1000095	NE 30178-3 N.5 test@ 10X R1
SIG1000096	NE 30178-3 N.5 test@ 10X R2
SIG1000097	NE 30178-3 N.5 test@ 10X R3
	Analysis Date: 12/15/2011 (Continued)
SIG1000098	NE 30178-4 N.5 test@ 10X R1
SIG1000099	NE 30178-4 N.5 test@ 10X R2
SIG1000100	NE 30178-4 N.5 test@ 10X R3
SIG1000101	NE 30178-5 N.5 test@ 10X R1
SIG1000102	NE 30178-5 N.5 test@ 10X R2
SIG1000103	NE 30178-5 N.5 test@ 10X R3
SIG1000104	H2 CC Std 2.46% M-L (1053)
	Analysis Date: 12/16/2011
SIG1000105	Laboratory Air Blank
SIG1000106	H2 CC Std 2.46% M-L (1053)
SIG1000107	H2 QC Std 9.98% Linw lot# 706224 (1172)
SIG1000108	Laboratory Air Blank
SIG1000109	NE 30178-5 N.5 test@ 10X overnite R1
SIG1000110	NE 30178-5 N.5 test@ 10X overnite R2

Run Log of all analyses on the *GCfTCD* for project VP0973 Western Zirconium
Project Number: VP0973
Analyst: Bob Bohn (N-5 and Mason Cooper) and Jim Hoban (Dumpster Scenario)
Date: 3/14/2012

Data File Name	Sample Information
	Analysis Date: 12/16/2011 (Continued)
SIG1000111	NE 30178-5 N.5 test@ 10X overnite R3
SIG1000112	NE 30177-2 N.5 test@ 10X R1
SIG1000113	NE 30177-2 N.5 test@ 10X R2
SIG1000114	NE 30177-2 N.5 test@ 10X R3
SIG1000115	NE 30177-3 N.5 test@ 10X R1
SIG1000116	NE 30177-3 N.5 test@ 10X R2
SIG1000117	NE 30177-3 N.5 test@ 10X R3
SIG1000118	H2 CC Std 2.46% M-L (1053)
SIG1000119	Laboratory Air Blank
SIG1000120	NE 30180-4 N.5 test@ 10X R1
SIG1000121	NE 30180-4 N.5 test@ 10X R2
SIG1000122	NE 30180-4 N.5 test@ 10X R3
SIG1000123	NE 30180-5 N.5 test@ 10X R1
SIG1000124	NE 30180-5 N.5 test@ 10X R2
SIG1000125	NE 30180-5 N.5 test@ 10X R3
SIG1000126	NE 30179-3 N.5 test@ 10X R1
SIG1000127	NE 30179-3 N.5 test@ 10X R2
SIG1000128	NE 30179-3 N.5 test@ 10X R3
SIG1000129	NE 30179-4 N.5 test@ 10X R1
SIG1000130	NE 30179-4 N.5 test@ 10X R2
SIG1000131	NE 30179-4 N.5 test@ 10X R3
SIG1000132	Laboratory Air Blank
SIG1000133	H2 CC Std 2.46% M-L (1053)
SIG1000134	H2 QC Std 9.98% Linw lot# 706224 (1172)
	Analysis Date: 1/19/2012
After each sample test, an approximate 5-minute purge was performed to dry the injection area.	
SIG1000135	Laboratory Air Blank
SIG1000136	H2 CC Std 2.46% M-L (1053)
SIG1000137	H2 QC Std 9.98% Linw lot# 706224 (1172)
SIG1000138	Laboratory Air Blank
	Analysis Date: 1/19/2012 (Continued)
SIG1000139	NE 30177-4 M/C Test-1
SIG1000140	NE 30177-4 MIC Test-2
SIG1000141	NE 30177-4 M/C Test-3
SIG1000142	H2 CC Std 2.46% M-L (1053)
SIG1000143	NE 30178-4 M/C Test-1
SIG1000144	NE 30178-4 MIC Test-2
SIG1000145	H2 CC Std 2.46% M-L (1053)
SIG1000146	NE 30179-4 M/C Test-1
SIG1000147	NE 30179-4 M/C Test-2
SIG1000148	H2 CC Std 10.01% M-L (1051)
SIG1000149	NE 30180-4 M/C Test-1
SIG1000150	NE 30180-4 MIC Test-2
SIG1000151	Laboratory Air Blank
SIG1000152	H2 CC Std 1.00% M-L (1007)

Run Log of all analyses on the GC/TCD for project VP0973 Western Zirconium
Project Number: VP0973
Analyst: Bob Bohn (N-5 and Mason Cooper) and Jim Hoban (Dumpster Scenario)
Date: 3/14/2012

Data File Name	Sample Information
	Analysis Date: 12/19/2011 (Continued)
SIG1000153	H2 CC Std 2.46% M-L (1053)

1-Gallon Can TESTS (Dumpster scenario)
Analyst: Jim Hoban

Analysis Date: 2/1/2012

After each sample test, an approximate 5-minute purge was performed to dry the injection area.

SIG1000155	Laboratory Air Blank	
SIG1000156	H2 CC Std 2.46% M-L (1053)	
SIG1000157	H2 QC Std 9.98% Linw lot# 706224 (1172)	
SIG1000158	Laboratory Air Blank	
SIG1000159	NE 30180 Test-1- 30 SEC	0.5 min
SIG1000160	NE 30180 Test-1- 60 SEC	1.0 min
SIG1000161	NE 30180 Test-1-90 SEC	1.5 min
SIG1000162	NE 30180 Test-1-120 SEC	2.0 min
SIG1000163	NE 30180 Test-1- 150 SEC	2.5 min
SIG1000164	NE 30180 Test-1- 180 SEC	3.0 min
SIG1000165	NE 30180 Test-1- 210 SEC	3.5 min
SIG1000166	NE 30180 Test-1- 240 SEC	4.34 min
SIG1000167	NE 30180 Test-1- 270 SEC	4.5 min
SIG1000168	NE 30180 Test-1- 420 SEC	7.0 min
SIG1000169	NE 30180 Test-1-	8.30 min
SIG1000170	NE 30180 Test-1-	16.05 Min
SIG1000171	NE 30180 Test-1-	30 Min
SIG1000172	Laboratory Air Blank	
SIG1000173	H2 CC Std 2.46% M-L (1053)	
SIG1000174	H2 QC Std 9.98% Linw lot# 706224 (1172)	
SIG1000175	H2 CC Std 1.00% M-L (1007)	
SIG1000176	Laboratory Air Blank	
SIG1000177	NE 30180 Test-2 Syringe #1 1mL:10mL lab Air	
SIG1000178	NE 30180 Test-2 Syringe #2 2mL:10mL Lab Air	
SIG1000179	NE 30180 Test-2 Syringe #3 4mL:10mL Dilution	
SIG1000180	NE 30180 Test-2 Syringe #4 10 ml, no Dilution	

Run Log of all analyses on the GC/TCD for project VP0973 Western Zirconium
Project Number: VP0973
Analyst: Bob Bohn (N-5 and Mason Cooper) and Jim Hoban (Dumpster Scenario)
Date: 3/14/2012

Analysis Date: 2/1/2012 (Continued)

SIG1000181	NE 30180 Test-2 Syringe #5 10 ml, no Dilution
SIG1000182	NE 30180 Test-2 Syringe #6 10 ml, no Dilution
SIG1000183	NE 30180 Test-2 Syringe #7 10 ml, no Dilution
SIG1000184	NE 30180 Test-2 Syringe #8 10 ml, no Dilution
SIG1000185	NE 30180 Test-2 Syringe #9 10 ml, no Dilution

Run Log of all analyses on the GCfTCD for project VP0973 Western Zirconium
Project Number: VP0973
Analyst: Bob Bohn (N-5 and Mason Cooper) and Jim Hoban (Dumpster Scenario)
Date: 3/14/2012

Data File Name	Sample Information
	Analysis Date: 2/1/2012 (Continued)
SIG1000186	NE 30180 Test-2 Syringe #10 10 ml, no Dilution 5 minutes
SIG1000187	NE 30180 Test-2 Syringe #1 10 ml, no Dilution
SIG1000188	NE 30180 Test-2 Syringe #2 10 ml, no Dilution
SIG1000189	NE 30180 Test-2 Syringe #3 10 ml, no Dilution 27 min
SIG1000190	NE 30180 Test-2 Syringe #4 10 ml, no Dilution
SIG1000191	Laboratory Air Blank
SIG1000192	H2 CC Std 1.00% M-L (1007)
SIG1000193	H2 QC Std 9.98% Linw lot# 706224 (1172)
	Analysis Date: 2/2/2012

After each sample test, an approximate 5-minute purge was performed to dry the injection area.

SIG1000194	Laboratory Air Blank
SIG1000195	H2 CC Std 1.00% M-L (1007)
SIG1000196	H2 QC Std 9.98% Linw lot# 706224 (1172)
SIG1000197	Laboratory Air Blank
SIG1000198	NE 30179 Test-1 Syringe #1 1mL:10mL lab Air
SIG1000199	NE 30179 Test-1 Syringe #2 2mL:10mL lab Air
SIG1000200	NE 30179 Test-1 Syringe #3 0.4mL:4mL lab Air
SIG1000201	NE 30179 Test-1Syringe#40.4mL:4mL lab Air
SIG1000202	NE 30179 Test-1 Syringe #5 2mL:10mL lab Air
SIG1000203	NE 30179 Test-1 Syringe #6 No Dilution
SIG1000204	NE 30179 Test-1 Syringe #7 No Dilution
SIG1000205	NE 30179 Test-1 Syringe #8 No Dilution
SIG1000206	NE 30179 Test-1 Syringe #9 No Dilution
SIG1000207	NE 30179 Test-1 Syringe #10 No Dilution
SIG1000208	NE 30179 Test-1 Syringe #1 No Dilution
SIG1000209	NE 30179 Test-1 Syringe #2 No Dilution
	Analysis Date: 2/1/2012 (Continued)
SIG1000210	NE 30179 Test-1 Syringe #3 No Dilution
SIG1000211	NE 30179 Test-1 Syringe #4 No Dilution
SIG1000212	Laboratory Air Blank
SIG1000213	H2 CC Std 10.01% M-L (1051)
SIG1000214	H2 QC Std 9.98% Linw lot# 706224 (1172)
SIG1000215	Laboratory Air Blank
SIG1000216	NE 30177 Test-1 Syringe #1 No Dilution
SIG1000218	NE 30177 Test-1 Syringe #2 0.5mL:5mL lab Air
SIG1000217	NE 30177 Test-1 Syringe #3 0.3mL:4mL lab Air
SIG1000219	NE 30177 Test-1 Syringe #4 0.4mL:4mL lab Air
SIG1000220	NE 30177 Test-1 Syringe #5 2.2mL:5mL lab Air
SIG1000221	NE 30177 Test-1 Syringe #6 No Dilution
SIG1000222	NE 30177 Test-1 Syringe #7 No Dilution
SIG1000223	NE 30177 Test-1 Syringe #8 No Dilution
SIG1000225	NE 30177 Test-1 Syringe #9 No Dilution

Run Log of all analyses on the GC/TCD for project VP0973 Western Zirconium
Project Number: VP0973
Analyst: Bob Bohn (N-5 and Mason Cooper) and Jim Hoban (Dumpster Scenario)
Date: 3/14/2012

Data File Name	Sample Information
	Analysis Date: 2/1/2012 (Continued)
SIG1000226	NE 30177 Test-1 Syringe #1 0 No Dilution
SIG1000227	NE 30177 Test-1 Syringe #1 No Dilution
SIG1000228	NE 30177 Test-1 Syringe #3 No Dilution
SIG1000229	NE 30177 Test-1 Syringe #2 No Dilution
SIG1000230	NE 30177 Test-1 Syringe #4 No Dilution
SIG1000231	Laboratory Air Blank
SIG1000232	H2 CC Std 10.01% M-L (1051)
SIG1000233	Laboratory Air Blank
SIG1000234	NE 30178 Test-1 Syringe #1 No Dilution
SIG1000235	NE 30178 Test-1 Syringe #2 0.6mL:5mL lab Air
SIG1000236	NE 30178 Test-1 Syringe #3 0.5mL:5mL lab Air
SIG1000237	NE 30178 Test-1 Syringe #4 0.4mL:5mL lab Air
SIG1000238	NE 30178 Test-1 Syringe #5 4:10 m l
SIG1000239	NE 30178 Test-1 Syringe #6 No Dilution
	Analysis Date: 2/1/2012 (Continued)
SIG1000240	NE 30178 Test-1 Syringe #7 No Dilution
SIG1000241	NE 30178 Test-1 Syringe #8 No Dilution
SIG1000242	NE 30178 Test-1 Syringe #9 No Dilution
SIG1000243	NE 30178 Test-1 Syringe#10 No Dilution
SIG1000244	NE 30178 Test-1 Syringe #1 No Dilution
SIG1000245	NE 30178 Test-1 Syringe #2 No Dilution
SIG1000246	NE 30178 Test-1 Syringe#3 No Dilution
SIG1000247	NE 30178 Test-1 Syringe#4 No Dilution
SIG1000248	Laboratory Air Blank
SIG1000249	H2 CC Std 10.01% M-L (1051)
SIG1000250	H2 QC Std 9.98% Linw lot# 706224 (1172)
	Analysis Date: 2/6/2012

After each sample test, an approximate 5-minute purge was performed to dry the injection area.

SIG1000251	Laboratory Air Blank
SIG1000252	H2 CC Std 10.01% M-L (1051)
SIG1000253	H2 QC Std 9.98% Linw lot# 706224 (1172)
SIG1000254	Laboratory Air Blank
SIG1000254	NE 30178 Duplicate Syringe #1 2: 10 Dilution
SIG1000255	NE 30178 Duplicate Syringe #2 0.6:6 Dilution
SIG1000256	NE 30178 Duplicate Syringe #3 0.3:6 Dilution
SIG1000257	NE 30178 Duplicate Syringe #4 0.3:6 Dilution
SIG1000258	NE 30178 Duplicate Syringe #5 0.4:6 Dilution
SIG1000259	NE 30178 Duplicate Syringe #6 0.7:6 Dilution
SIG1000260	NE 30178 Duplicate Syringe #7 1.9:6 Dilution
SIG1000261	NE 30178 Duplicate Syringe #8 No Dilution
SIG1000262	NE 30178 Duplicate Syringe #9 No Dilution
SIG1000263	NE 30178 Duplicate Syringe #10 No Dilution

Run Log of all analyses on the GC/TCD for project VP0973 Western Zirconium
Project Number: VP0973
Analyst: Bob Bohn (N-5 and Mason Cooper) and Jim Hoban (Dumpster Scenario)
Date: 3/14/2012

Data File Name	Sample Information
	Analysis Date: 2/6/2012 (Continued)
SIG1000264	NE 30178 Duplicate Syringe #1 No Dilution
SIG1000265	NE 30178 Duplicate Syringe #2 No Dilution
SIG1000266	NE 30178 Duplicate Syringe #3 No Dilution
	Analysis Date: 2/6/2012 (Continued)
SIG1000267	NE 30178 Duplicate Syringe #4 No Dilution
SIG1000268	Laboratory Air Blank
SIG1000269	H2 CC Std 10.01% M-L (1051)
SIG1000270	Laboratory Air Blank
SIG1000271	NE 30178 Spike Syringe #1 No Dilution
SIG1000272	NE 30178 Spike Syringe #2 8->2:10 Dilution
SIG1000273	NE 30178 Spike Syringe #3 3->2: 10 Dilution
SIG1000274	NE 30178 Spike Syringe #4 3->2:10 Dilution
SIG1000275	NE 30178 Spike Syringe #5 4->2:10 Dilution
SIG1000276	NE 30178 Spike Syringe #6 4->2:10 Dilution
SIG1000277	NE 30178 Spike Syringe #7 4->2: 10 Dilution
SIG1000278	NE 30178 Spike Syringe #8 4->2: 10 Dilution
SIG1000279	NE 30178 Spike Syringe #9 10->2:10 Dilution
SIG1000280	NE 30178 Spike Syringe #10 10->2: 10 Dilution
SIG1000281	NE 30178 Spike Syringe #1 10->5:10 Dilution
SIG1000283	NE 30178 Spike Syringe #2 10->5: 10 Dilution
SIG1000284	NE 30178 Spike Syringe #3 No Dilution
SIG1000285	NE 30178 Spike Syringe #4 No Dilution
SIG1000286	NE 30178 Spike Syringe #5 No Dilution
SIG1000287	Laboratory Air Blank
SIG1000288	H2 CC Std 19.98% M-L (1052)
SIG1000289	H2 QC Std 9.98% Linw lot# 706224 (1172)
SIG1000290	Laboratory Air Blank
SIG1000291	NE 30178 Triplicate Syringe #1 No Dilution
SIG1000292	NE 30178 Triplicate Syringe #2 5: 10 Dilution
SIG1000293	NE 30178 Triplicate Syringe #3 0.5:6 Dilution
SIG1000294	NE 30178 Triplicate Syringe #4 0.4:6 Dilution
SIG1000295	NE 30178 Triplicate Syringe #5 0.25:6 Dilution
SIG1000296	NE 30178 Triplicate Syringe #6 3.6:6 Dilution
	Analysis Date: 2/6/2012 (Continued)
SIG1000297	NE 30178 Triplicate Syringe #7 No Dilution
SIG1000298	NE 30178 Triplicate Syringe #8 No Dilution
SIG1000299	NE 30178 Triplicate Syringe #9 No Dilution
SIG1000300	NE 30178 Triplicate Syringe #10 No Dilution
SIG1000301	NE 30178 Triplicate Syringe #1 No Dilution
SIG1000302	NE 30178 Triplicate Syringe #2 No Dilution
SIG1000303	NE 30178 Triplicate Syringe #3 No Dilution

Run Log of all analyses on the GC/TCD for project VP0973 Western Zirconium

Project Number: VP0973

Analyst: Bob Bohn (N-5 and Mason Cooper) and Jim Hoban (Dumpster Scenario)

Date: 3/14/2012

Data File Name	Sample Information
	Analysis Date: 2/6/2012 (Continued)
SIG1000304	Laboratory Air Blank
SIG1000305	H2 CC Std 10.01% M-L (1051)
SIG1000306	H2 QC Std 9.98% Linw lot# 706224 (1172)
SIG1000307	Laboratory Air Blank
	Analysis Date: 2/7/2012
After each sample test, an approximate 5-minute purge was performed to dry the injection area.	
SIG1000308	Laboratory Air Blank
SIG1000309	H2 CC Std 10.01% M-L (1051)
SIG1000310	H2 QC Std 9.98% Linw lot# 706224 (1172)
SIG1000311	Laboratory Air Blank
	Analysis Date: 2/8/2012
After each sample test, an approximate 5-minute purge was performed to dry the injection area.	
SIG1000312	Laboratory Air Blank
SIG1000313	H2 CC Std 10.01% M-L (1051)
SIG1000314	H2 QC Std 9.98% Linw lot# 706224 (1172)
SIG1000315	Laboratory Air Blank
SIG1000316	NE 30178 Spike #2 Syringe #1 No Dilution
SIG1000317	NE 30178 Spike #2 Syringe #2 2.7ml to 10 ml
SIG1000318	NE 30178 Spike #2 Syringe #3 3.6 ml to 10 ml
SIG1000319	NE 30178 Spike #2 Syringe #4 3.2 ml to 10 ml
SIG1000320	NE 30178 Spike #2 Syringe #5@ 10ml
SIG1000321	NE 30178 Spike #2 Syringe #6@ 10ml
	Analysis Date: 2/8/2012 (Continued)
SIG1000322	NE 30178 Spike #2 Syringe #7 10ml -> 5 ml-> 10ml
SIG1000323	NE 30178 Spike #2 Syringe #8 10ml -> 5 ml-> 10ml
SIG1000324	NE 30178 Spike #2 Syringe #9 10ml -> 5 ml-> 10ml
SIG1000325	NE 30178 Spike #2 Syringe #10@ 10ml
SIG1000326	NE 30178 Spike #2 Syringe #1 @ 10ml
SIG1000327	NE 30178 Spike #2 Syringe #2@ 10ml
SIG1000328	NE 30178 Spike #2 Syringe #3 @ 10ml
SIG1000329	NE 30178 Spike #2 Syringe #4@ 10ml
SIG1000330	NE 30178 Spike #2 Syringe #5 @ 10ml
SIG1000331	Laboratory Air Blank
SIG1000332	H2 CC Std 19.98% M-L (1052)
SIG1000333	H2 QC Std 9.98% Linw lot# 706224 (1172)
SIG1000334	H2 Standard AR-1 99.9995% Linw lot# 706224 (1243) 10ml -> 5ml -> 10ml
SIG1000335	H2 Standard AR-2 99.9995% Linw lot# 706224 (1243) 10ml -> 5ml -> 10ml
SIG1000336	H2 Standard AR-3 99.9995% Linw lot# 706224 (1243) 10ml -> 5ml -> 10ml
SIG1000337	Laboratory Air Blank

30180

623.6 mm Hg

PrOJCCt VP0973
Hydrogen Sulfide Testing
Name. :T. .. "' ((s. ı |
Date. "J.-(!ı|. ___

Dumpster Jc(c....-._ testing

	Synnqe #	Empty we1qht q	Total we1qht g	Trap Sol weight o
0	1	7.- b'1t/0	:3.<fYtf9	
0.5	2	7, 7 33	13,/'f37	
1	3	7.7/ifi;--	/3,oi/-lf &	
1.5	4	7, 738 7	/3, ı 31/7	
2	5	7.hi,:,7	(3,/2DF:	
2.5	6	Z 78(, ı>	13. ZS— i	
3	7	7. 7(60	ı3.o 3l 1	
3.5	8	7, 7790	ı 3, /993	
4	9	7 7'792-	13,/!601/-	
4.5	10	7, 7711	ı J, /1 'f:!,	
5	11	7, 79 'i S"	!3.i5!s	
5.5	12	7, 7i;-7()	;3. 02.fj	
6	13	1,8/?:,/	ı 3 l/j{)	
ı/ıJ • ·)"	14	7-300&	13 ı O'fd50	
(	15	7. 7i 7	\,- _ ,,:q	
q	16	7. 79 1	i-,,; lb ı t	
::;	17	77<&21	i3. OZ-z/-	
/u	18	7 .?y- ()	J:3 l-111	
lh	19	7. &123	·5 :Zt/CJ9	
2-u	20	1,go2/	)Z, ,iJ_f(q	
z_ı,""	21	7.85'3(;;,	,3 ,yd?	
3(,;	22	7, 80/ 'ı6	I->; i,1IU	
B/J_ I	23	7. 7 3 t &	L2.; 7l,t, Z	
£{,,,J, 7-	24	7, "9 33	·3.liOJ	
(7	25	7,8t/z.'il	Vi.. c,t<Jo	
	26			
	27			
	28			
	29			
	30			

6 mL gas

Cl

D

:<,:"01 9

#5 79

#10 7m

0
16
lfl
/: 07
I: 37
2: ı o
2:33
3
4 5.6 gas
5
6
7

0. 0 (00 tr—)
0. 0 l-O
t>.01.-<;o
O. o'f.o l
o. osf) l
0.o?si...
0. (001-
0. {S°Dl.

-tic' < t / 1 / 1 ... u, 1/7 d/'l/,;;..-
l-e ı r-/r fu _ r-,. r r ...
u l ıt>,NI ___,Y_Jt7 ı e;_ρ ..,../J s;, ;'
]J J()C-'.Jı ... 'Ltli -{-'-ıt 7",,.,- Jı
c SI-..,," J_..,
/1f1 1. 5" ı].], l-

Project VP0973
Hydrogen Sulfide Testing
Name. -1
Date:

Synnqe ll	Empty we1qht q	Total weiaht a	Trap Sol we1aht a
1	1.115:3	,.:;,0 7G	
2	7.1. t/W	(3, o 72–2-	
3	7 .11,r;	;J.,4 8°\C	
4	7,10 2_	y	
5	1/ iff/f	s,J.t...,).<-1	
6	70-).0\		
7	7 7)-\		
8	7,151<6	JtD'1S	
9		J ,) Oi J-	
10	- o c2H-f	:3,o&-64	
11	7,77a5	i). /':0	
12	l ,rt.c10	13 s4	
13	·7 iC,':J.,	)3. /J–7	
14	-, 1 c;1-'"L	-1'.i')	
15	7,ip°p ..0	Ij , 0·1	
16	7.7&/6 7	jl.,, 151	
17	7,7C,5C	') ,11J	
18	7,7Gfo0	11, o1 1:F\	
19	1,,-:590	,1.11fV-1	
20	7. ·7-i YG	,J,,).77	
21	7.7.157	/).D'Vi<	
22	7, 7c\ bO	·:..,I SI<	
23			
24			
25			
26			
27			
28			
29			
30			

7.8166

7.8093

02/1/12 minutes: seconds

	Time Jim	Time Jim	
JJ	0	0	
0.5	10	15	
1	44	31	
1.5	1:07	56	
2	1:39	1.30	
2.5	2.00	2.00	
3	2:33	2:40	
3.5	3.00	3.00	
	LI. uJ	S (,6'	4.00
{	S .jJ		S.00
S--			
5.	< 6.00		
1	7.00		
-	8.00	8.00	surge #1
1		15.00	#2
:1	9.00		
10	IC. c>		#3
15		25.00	
20	15.00		
25	20.00	34.10	#4
30	25.00		
	30.00		

3/18/12 Test 2 final 2.1.2012

3.5.2012

Sample: 30179

Proiect VP0973
Hydrogen fide Testing
Name: ~J cJl--.... 'CL'''?(..-4].
Date.--12.? 12.--

Synnge #	Empty we.aht a	Total weight q	Trap Sol werght a
1	7 76 J ff	13. 1()1 7	
2	"7. 7"6CZ>	13,6517	
3	1.1+07	1'3.n:JS-◆	
4	7,711(..,r	1.I'l1iO	
5	17S ;7·1	\ - OJ.?	
6	7, 7;"2Л	/3. lo.?S-	
7	7.S332	13. Ho	
8	7.8l'/1 •	13.1 i	
9	77301/	13. ıY'9	
10	7,<is?oo	13 .JoJ	
11	7. "77;	1J 1'iS	
12	7 7i3b	13.o;7'-I	
13	7, 7to93	13. o e i 7 /	
14	7. 7300	13.1G,7c,	
15	1. n 71	\3, ;io'{	
16	7.g S°Ds7	13. J I 'I I	
17	l,N-J'f	13.	
18	7. 73e 'f	\'1 /C/ /?.,.	
19	7•7'flf	11.0C{/9'	
20	7 <37)-§	/3./(,, ""1,	
21	7,71/ :J'I–	13. // b<(	
22	7, 71p'10	15. ;Ij 3	
23	·7,.7qI q	13. 'JCfJ.'!,	
24	7. 71 7.8	13. I◆S'f	
25	7.1)i	13. 1 3'i	
26	. . 7t;<"")q	1s.3:Hb	
27	7, IL / <?	13. li'ir	
28			
29			
30			

Time	
6	6
20	o
3()	>t
½"	'–('1
o	I : t;).
I :} c, ./;;t	/ :c)
·-cio i	;) : 0-C
;) : o	:>o
3:oo	) : 0-0
>0	'. > 0
c.j; , g	C :?C
)- -t?,	
<f:)o	J:Ot>
6:crO	-'124'I
S: :,o	32:oo
(;, ;cr-o	
7' / :,,-,- ;).- 0-	
7 ·,o:;,. t!>6	
'6-.oo	
a: C,-0	
Lo:o0	
1s o	
?u=Uc:.	
:oo	
30:c-o	
'1.I.-"::, I	
◆L-v◆)–	
fb lc..vK ?	

Sample : 30177

Project VP0973
Hydrogen Sulfide T e s f ;
Name: J r f ' : , ..–
Date: 2-?--l :i

3.5.2012

minutes/seconds

H2S Synnge #	Empty weight g	Total we1ghtg	Trap Sol weight g	H2S Time	H2 Time	H2 Synnge #
1	7, 777	/3.?o33		o- r)	n :a5f	l
2	7. <'t'-/(,, ';l	11; :r.5'3:;)		C:-;o	O:?-'f	?
3	7. / 1)	I. JSS'D		0·<..£1	0.9	3
4	7. 'tO? I			I: 07	,-')_	~{
5	7.'K·n'-/	1) s;e Yi		I :O	I :L£7	
6	7. 3'-o-/	1.'n'.?)		I : <t]	'·:) ◇ c:<·	c;.
7	n. ii't<-1	Z, 7.'CGi		···>;	-2-19	7
8	7. -,-·}	\?..>11(,,		;:):?-i	? : y C,	'?
9	7. 133	I>.'l'=>a-1		').'yc.r	"J'. l::i. -1 2- .7P	'i1
10	7.9o, -	17:.'). 1'1		5:1?-	:S; y $	,a
11	1.q-ic,	13. 0/		3:y3	G :C-O	I
12	7. ,,t/i	\5,I).'-1"		({ u0	'g: '3 c:?fao	3
13	7.i, 3.	13,)<,1<{,		5''-;r..		1
14	7.SoS-lo	ls'tc: –ri		<α ere	SO:ao	-t-
15	7.'?'S /	13. '-IJ7D		7 :er,		
16	17. ?.GS'	/5. C;,f		¥''. ir.		
17	1. 's<o3o	1s. '-1:17		q : c/""\		
18	7. , S-	13. "		f.r) : (f U		
19	7. caG, <{	1'>::n,?		t-:-7x....		
20	'?.O'-/◆S'	13, ')7o3		:) a : o o		
21	.ol'?O	13.?8fl		?'5': era		
22	7 -'le,?	I. 'J11/7		;x) : dc>		
23	1,9.,'X'D	13. G1		13]k \		
24	i.1'--((	\.<o7i$''		e,l'''' cl-		
25	7is'''iS'>	13.1 x;,		t,__ I,(: ,		
26						
27						
28						
29						
30						

2-2-12 DS
2-2-12 DS

Hr
2-1-2012

Project VP0973
Hydrogen Sulfide Testing
Name: _____
Date: 2-2- 1;1
Sample: 3 O 1 1' f s :

J m/ftbm
3.5.2012

:.- "'•1ci - J:. ., -1.!1

H2S SyrinQe #	Empty weight q	Total weight q	Trap Sol weight q	H2 S Time	H2 Time	H2 Syringe#
1	7. 0(.,0	13.'"/ Y:-,->		o:o)-	o:o',-	I
2	1. (o ')	13. 'fu o		0'.).G,,	Q:;,.."'i	2
3	1.9;i/o	13.<,, //		o·'-{ s;,	C).'7	3
4	, _7qf, '{	13.3.;)17		I:u 1	e>.'':,'t.f	'-f
5	{, 4006	I , '{c,?:il		I .'I 't,	I:e:,	-S-
6	7.6 S<1S-	J'3 c c;-c,		I:<-£ D	-;J o 9	6
7	f.Cif\o<;'	1·>-<>¢ I?>. er'<»		I :C::,7	;;1:31	t
8	I.'iL/ 07	·I r , } IJ 7 I"I, : ! 7		;) : 11	/4,")7	
9	1. tt:,9	.)-;,,-,:, h6 13, s-,'i'		? ?. J	S:10	9
10	1.91	I . C :25		.57	<-'o\-	lo
11	7. 7b'i	I:>, /Go'T{		°?>-,,o	7·ern-:;	I
12	1, >5"3	13. /1'-f		<.{ :OO	)?,.to	
13	f,fjodt	13. q<{		Sern.	"J.J : : , o	3
14	7.i /ii	Is. ll'lc,9-		r:. , era	30. 01'"'"	<f
15	7. 's 3lC,	13":.J'-l'l'i		7 : IIC,		
16	7 .<?S77	1-:, ...)		:Cr()		
17	7' '6"$ac:;	13.1 IGO		'l :co		
18	t.'64	13 .3o3<o		lo CD		
19	i,O'?''-:,-1-S. ?s-'6			1$:0D		
20	7 .'67?. /	13.::l(;, I		-:o:on		
21	t.'r;l/1(,,	15. k,Od		d:err,		
22	7 'i'I 39	13. o-:}		50 ae;		
23	'?. o Otb	n.S- f;).t		fsl ..... u. I		
24	'6.ol../c;,'7'134			()..L.....k, :)-		
25	7.'loO'/	)$, (') '83 /		13l.:,.. u?,		
26						
27						
28						
29						
30						

Project VP0973
Hydrogen Sulfide Testing
Name:_ _ _ _
Date: 3 0 r] ◆ , C L p
Sample: ,;;J - G - la,-

9: [illegible]
3 5, 2012 minutes/seconds

H2S Syringe #	Empty weight g	Total weight g	Trap Sol weight g	H2S Time	H2 Time	H2 Syringe #
1	7. '8'-, SCo	I 3.<o y;;.		0:.0M	0 :oc,,	I
2	cid9	l'>.S711		C))C(	0 :.1 {.	?
3	J,'ir'io :;l.	13, 3/'i'-{		n:'?.9	O: O	S
4	7.7'li	l°S.<-tG◆l		L'1:\Co	0 - 3 . 9	'j
5	I<iS04	I 3, (io19		I ◆ k ?	0- ': ; {	5
6 ;)-	i ▼:;;)2.4:l) i:)	I . 9 3 7 '9		I ; ? I	I: I: ; -	y,
7	. [\?oS	I3 <?i,-y		◆ , ; - 0	I : ?, I	7
8	'P. 0 5'C7	13.tJ3:)		-;;J:o i-	) ◆	i"
9	<?.oS-t 3	I 3, <H3		':1:s,.	;).:u'<"	<i
10	7 S q 7 ' J	1'?..C..%'-1		'3:o-o	?: !)	(O
11	15. o:i S'T>	P.'-(;2Ss		ct oo	<o:oo	I
12	◆-oS-'8'<o	/3.3o$";1		S:0u	//;<.re:;-	
13	.15(o S	I - 'i'i9I		Gi:D'D	I : '-lfo	3
14	'?;.[Od'J,.	13.¥1?,'j		, :ao	3o:	-H
15	1,'i Olfo	131 '(		<Z: Ct()		
16	i.101q	IJ.4.iot		G- 0 0		
17	.(')10	11,;J.s-1;;		lo: n-c		
18	3. co G,,"	/3,.;:,,r;		Is-:oo		
19	◆.d-/c)6	13.'3/'j		.-ur,		
20	?i.oi'-1 I	13.<f<:/90		)f-. ur,		
21	<?..//1<(	I 3. ◆ S7f,		1.r.; 0 r.		
22	t. '1 6 -;)/	13.tf15""q		()L...-.u. I		
23	-14/S-	I 3, S I 7 V		iSi.,,,.V..').,		
24	,."1◆c€	I 5. J9◆'1		,'''''''V..		
25	- – q::J/ –	D-(,,–t;} 85				
26						
27						
28						
29						
30						

136.9°C
98.3°C
621.8 mm Hg
20.36°C
2/6/12

Project VP0973
Hydrogen Sulfide Testing
Name:
Date: .;;1-G-/ >
Sample. lof7 S . -Y. :p

3 5.2012

tM. :_ If, Se c.•-1./J

H2S Syringe #	Empty weight g	Total weight Q	Trap Sol weight Q	H2S Time	H2 Time	H2 Syringe#
1	i . I<-/7'-I	ls<i		0, "c..	c, :r,r-	I
2	1 . 9'6 /(o	13. (;,"fo'i		o : 19	(t: t:-	:)
3	1 03"	ls_ <ii<T?.		C; 33	0.- ;2'1	3
4	'6°.o S7	ls.C, J I		0 : 5 O	0: « I	y
5	¥.o't.2"1	J?. 1./9)		I : o b	I .·o	s'
6	8. o?,"f'{	I . c_1-=c.		I - ?9	(: ?-'1	C
7	-033S-	13 . '-/S79.		I."--f7	I ; <7	-,
8	15 octo '{	I . 5 d59		) ; o s	;;;;o>-	i
9	, , <H)'a7	13.?1./37		J; ,	.?-7 .	1
10	<ioYir	ts.3 7 -		');<{ ⊳	2; 'Ci(	10
11	'6. 1o	13. '-(31</		's 1o	5_: 1$"	I
12	?.o 7S-3	13. 3 6 7 -		'-/: o O	/I.' d',	
13	-O'-f7(,	J ';)</'.IR		S":oo	2o .;.,	'3,
14	7_q d90	/ 3 . / 1 3 7		(. : Oo		
15	30<:1$7	Is. 49 S b		7 : ae:;		
16	7.C'ffn<(	13.JSV'l		q : o - a		
17	q. ono,	. . JC		Cz <rfl		
18	i., ;i'1	13.s .Sl'		tu: cro		
19	'is.o3V(	13. 33 'i		. : o O		
20	1 . Cfo<{	3'f <;3		:V: 0 - 0		
21	" · o(o'>o	/3:)-;Jf, 't		');i: ae		
22	-ICl	l'?. 3o <4		30: 00		
23	'3.oo	I 3. ;)V'ii'o		/sk...V– I		
24	<?.0717	/3. s-J .a		111:,Iu. ,.		
25	y;_o97/	r3. s-o, c:;-		P.,Lt<. 3		
26						
27						
28						
29						
30						

~0.5g of Mg spike, #2

Project VP0973
Hydrogen Sulfide Testing
Name: _____
Date: ;l-'ii--12:: ____
Sample: ~~X>17% M o f.'.'~~ Yp:1y µ

Pressure: lo?'s. 2
Initial Temperature: ~~20.66~~ 44
2-8-12 25

minutes: seconds,
9 m 4 3.5: 2012

H2S Syringe #	Empty weight g	Total weight g	Trap Sol weight g	H2S Time	H2 Time	H2 Syringe#
1					o:o'T	t
2					o.. o	;}-
3					0:'-{0	J
4					O 5-/	'-I
5					':/\	S-
6					I •.H1	(;
7					/ ::>-/	7
8					I: Lt 9	
9					?: 06	7
10					. , -. I	tO
11					L{: c;)..	I
12					10:.:u	2
13				.;t-s-.,- <f>	":o ~~T~~	3
14					:::l:l <l	<l
15				:2-@1@@	3LI:33 ~~78:00~~	S-
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

Blank Summaries

Project Number: VP0973
Analyst: Jim Hoban
Date: March 6, 2012
LOQ = 0.1 %

5 pound Can TESTS, Dumpster Scenario

GC RUN NUMBER	Syringe#		Detected %H
		Analysis Date: 2/1/2012	
SIG1000155		Laboratory Air Blank	0
SIG1000158		Laboratory Air Blank	0
SIG1000172		Laboratory Air Blank	0
SIG1000176		Laboratory Air Blank	0
SIG1000191		Laboratory Air Blank	0
		Analysis Date: 2/2/2012	
SIG1000194		Laboratory Air Blank	0
SIG1000197		Laboratory Air Blank	0
SIG1000212		Laboratory Air Blank	0
SIG1000215		Laboratory Air Blank	0
SIG1000231		Laboratory Air Blank	0
SIG1000233		Laboratory Air Blank	0
SIG1000248		Laboratory Air Blank	0
		Analysis Date: 2/6/2012	
SIG1000251		Laboratory Air Blank	0
SIG1000254		Laboratory Air Blank	0
SIG1000268		Laboratory Air Blank	0
SIG1000270		Laboratory Air Blank	0
SIG1000287		Laboratory Air Blank	0
SIG1000290		Laboratory Air Blank	0
SIG1000304		Laboratory Air Blank	0
SIG1000307		Laboratory Air Blank	0
		Analysis Date: 2/7/2012	
SIG1000308		Laboratory Air Blank	0
SIG1000311		Laboratory Air Blank	0
		Analysis Date: 2/8/2012	
SIG1000312		Laboratory Air Blank	0
SIG1000315		Laboratory Air Blank	0
SIG1000331		Laboratory Air Blank	0
SIG1000337		Laboratory Air Blank	0

Hydrogen was not detected in any blank above the limit of Quantitation of 0.1 % Hydrogen.

Synnge Volume Corrected Results for the 1-Gallon can, dumpster senano test
Proiect Number VP0973
Analyst Jim Hoban
Date February 22. 2012

After adding water to the 1..gallon can, a v10lent reaction occurred Hydrogen gas was released along with steam and a lot of heat I (and others) collected 10 Milhhters of the headspaca gas h a 10 m l synnge Afte< cooling and the steam condensing, the volume of gas in the synnge condensed, and would decrease to es low as 0.25 m l h order to determine the concenllatJon of hydrogen h the hitlal 10 m l volume collected, Which is the ocncentrallOn of hydrogen h the headspace). a calculatJon was made to correct the detected %hydrogen on the GC instrument to the actual 1Om l collected Imt1ally

Analysis Date; 211/2012

After each sample test, an approximate 5-minute purge was performed to dry the iniecuon area

			TIME (Sec)	Detected %H	Volumes corrected to 10 m l Corrected calculation	Converted by Joe to 10ml % H	REPORTED %H	
SIG1000159	NE 30180 Test-1 • 30 SEC	Synnge #l	30	38 09317	38 09317 X (2 4/10 ml)	9 1423608	9 14	< This run exceeded ICal Range
SIG1000160	NE 30180 Test-1· 60 SEC	Synnge #2	60	3 98915	= 3 98915X8/ 10	3 19132	319	
SIG1000161	NE 30180 Test-1· 90 SEC	Synnge #3	90	233566		2 33566	2 34	
SIG1000162	NE 30180 Test-1• 120 SEC	Synnge #4	120	1 74912		1 74912	1 75	
SIG1000163	NE 30180 Test-1• 150 SEC	Synnge #9	150	1 47011	= 147011X55110	0 8085605	0809	
SIG1000184	NE 30180 Test-1• 180 SEC	Synnge♦	180	1 26484	= 1 26484 X 6.6 / 10	0.8347944	0 835	
SIG1000165	NE 30180 Test-1• 210 SEC	Syringe #5	210	1 18771	= 1 1 18771 X 7.5 / 10	0 8907825	0 891	
SIG1000166	NE 30180 Test-1- 240 SEC	Synnge #7	274	1 00337	= 100337X68/10	0 6822916	0.682	
SIG1000167	NE 30180 Test-1• 270 SEC	Synnge #6	290	1 0827	= 1 0827 X 7 75 / 10	0.8390925	0 839	
SIG1000168	NE 30180 Test-1- 420 SEC	Synnge #10	420	0 88537	= O68537 X 5 45 / 10	0 37352665	0374	
SIG1000169	NE 30180 Test-1•	Synnge #l	510	0,8116765		0 696765	0697	
SIG1000170	NE 30180 Test-1-	Synnge #2	965	0 390473		0 390473	0 390	
SIG1000171	NE 30180 Test-1•	Syringe #3	1aoo	0 194318		0 194318	0 194	
				'lltR				
			TIME (Sec)			% H	'lltH	Synnge Vol
SIG1000177	NE 30180 Test-2 Syringe #l 1ml 10ml lab Air		0	2 7851	Samples analyzed@ 10ml		2 79	1 m l put into 1Om l lab air
SIG1000178	NE 30180 Test-2 Syringe #2 2ml 10ml Lab Air		15	5 8522		5 8522	585	2 m l put into 1Om l lab air
SIG1000179	NE 30180 Test-2 Syrtnge #3 4ml 10ml Dliution		3l	4 14656		.y' 4 14656	4 15	4 m l put into 10 m l Lab Air
SIG1000180	NE 30180 Test-2 Syringe #4 10 ml. no Dilution		56	4 34974		4 34974	4 35	
SIG1000181	NE 30180 Test-2 Synnge #5 10 m l, no Dilution		90	3 79016		3 79016	3 79	
SIG1000182	NE 30180 Test-2 Synnge #6 10 ml. no Driuuon		120	2 86355		2 86355	286	
SIG1000183	NE 30180 Test-2 Syringe #7 10 m l, no Dlu110n		160	2 36063		2 36063	236	
SIG1000184	NE 30180 Test-2 Synnge #8 10 ml. no DlullOn		180	2 19498		2 19498	2 19	
SIG1000185	NE 30180 Test-2 Synnge #9 10 m l, no DilutlOn		240	1 92239		1 92239	1 92	
SIG1000186	NE 30180 Test-2 Synnge #10 10 ml. no Dliution 5 minutes		300	1 6473		1 6473	1 85	
SIG1000187	NE 30180 Test-2 Syringe #1 1o m l, no DlutJon		480	1 40854		1 40854	1 41	
SIG1000188	NE 30180 Test-2 Syringe #2 1Om l, no D1lu110n		900	1 0121		1 0121	1.01	
SIG1000189	NE 30180 Test-2 Synnge #3 10 ml, no Dilution 27 mm		1500	0 697546		0 697546	0698	
SIG1000190	NE 30180 Test-2 Syringe #4 10 ml. no Dilution		2050	0.50053'4		0 500534	0 501	

Syringe Volume Corrected Results for the 1-Gallon can, dumpster senario test
Proiect Number VP0973
Analyst Jim Hoban
Date February 22, 2012

Anall!SiS Date: 2/2/2012

After each sample test, an approximate 5-minute purge was performed to dry the InJectJOn area.

		TIME (Sec)	Detected %H	Volumes corrected to 10 m l Corrected calculation	Converted by Joe to 10 m l %H	REPORTED %H	This was created dunng anal◆1s Synnge Vol
SIG1000198	NE 30179 Test-1 Syringe #l 1ml 10ml lab Air	6	0		0	0	10 m l to 1 m l back to 10 m l lab air
SIG1000199	NE 30179 Test-1 Syringe #2 2ml 10ml lab Air	20	0.228491	= 0.228491 X 10 I 2	1 142455	1.14	10 m l to 2 m l back to 10 m l lab air
SIG1000200	NE 30179 Test-1 Synnge #3 0 4ml 4ml lab Air	37	2.89734	= 2.89734 X 4 / 10	1.158936	1.16	0 4 ml• back to 4 m l with Lab air
SIG1000201	NE 30179 Test-1 Synnge #4 0 4ml 4ml lab Air	49	4.2106	=4 2 1 0 6 X 4 / 1 0	1 68424	1.68	0 4 m l' back to 4 m l with Lab air
SIG1000202	NE 30179 Test-1 Synnge #5 2ml 10ml lab Air	72	1.78141	= 1 78141X1012	8 90705	8.91	10 m l to 2 m l back to 10 m l lab air
SIG1000203	NE 30179 Test-1 Synnge #6 No Dilution	90	16.92065	=16 92065 X 6 4 / 10	10 829216	10 8	6 4 m l total
SIG1000204	NE 30179 Test-1 Syringe #7 No Dilution	120	6.03379		6 03379	603	10 m l total
SIG1000205	NE 30179 Test-1 Syringe #8 No D1lut1on	150	6.68365		6 68365	6.68	10 m l total
SIG1000206	NE 30179 Test-1 Synnge #9 No Dliution	180	5.18024		5 18024	518	10 m l total
SIG1000207	NE 30179 Test-1 Synnge #10 No Dilution	210	2.94204		2 94204	294	10 m l total
SIG1000208	NE 30179 Test-1 Synnge #l No Dilution	390	2 78203		2 78203	2.78	10 m l total
SIG1000209	NE 30179 Test-1 Syringe #2 No Dilution	900	1.71665		1 71665	1.72	10 m l total
SIG1000210	NE 30179 Test-1 Syringe #3 No Dilution	1444	1.26897		1 26897	1.27	10 m l total
SIG1000211	NE 30179 Test-1 Syringe #4 No Dilution	1920	1.01536		1 01536	1.02	10 m l total
		TIME (Sec)				%H	This was created dunng anall!SIS
SIG1000216	NE 30177 Test-1 Synnge #l No Dilution	8	0.0185198		0 01852	00185	10 m l total
SIG1000218	NE 30177 Test-1 Syringe #2 0 5ml 5ml lab Air	24	2.32374	= 2 32374X5/ 10	1 16187	1.16	0 5 ml· back to 5 m l w,th Lab air
SIG1000217	NE 30177 Test-1 Synnge #3 0 3ml 4ml lab Air	39	1.87962	= 1 87962 X 4 / 10	0 751848	0.75	0 3 ml· back to 4 m l w,th Lab air
SIG1000219	NE 30177 Test-1 Synnge #4 0 4ml 4ml lab Air	85	1.84392	= 1.84392 X 1.5 / 10	0 737568	0.74	1 5 ml· back to 4 m l w,th Lab air
SIG1000220	NE 30177 Test-1 Synnge #5 2 2ml 5ml lab Air	107	3.6517	=3 6 5 1 7X5/1 0	1 82585	1.83	2 2 m l to 5 m l with lab air
SIG1000221	NE 30177 Test-1 Synnge #6 No Dilution	128	2.81355		2 81355	2.81	10 m l total
SIG1000222	NE 30177 Test-1 Synnge #7 No D1lut1on	149	1.65991		1 65991	1 66	1 0 m l total
SIG1000223	NE 30177 Test-1 Syringe #8 No Dilution	169	1 2523		1 2523	1.25	10 m l total
SIG1000225	NE 30177 Test-1 Syringe #9 No Dilution	192	1.03518		1 03518	1.04	10 m l total
SIG1000226	NE 30177 Test-1 Syringe #10 No Dilution	223	0.677298		0 677298	0.677	10 m l total
SIG1000227	NE 30177 Test-1 Syringe #l No Dilution	360	0.565644		0 565644	0566	10 m l total
SIG1000228	NE 30177 Test-1 Syringe #3 No Dilution	803	0.43473		0 43473	0435	10 m l total
SIG1000229	NE 30177 Test-1 Synnge #2 No Dilution	1260	0.368927		0 368927	0.369	10 m l total
SIG1000230	NE 30177 Test-1 Synnge #4 No Dilution	1800	0.324896		0 324896	0.325	10 m l total
							This was created dunng anal!!s1s
SIG1000234	NE 30178 Test-1 Syringe #l No Dilution	5	0.0201344		0 0201344	0.0201	10 m l total
SIG1000235	NE 30178 Test-1 Synnge #2 0 6ml 5ml lab Air	2	2.54568	= 2.54568 X 5110	1 27284	1.27	0 6 ml· back to 5 m l with Lab air
SIG1000236	NE 30178 Test-1 Synnge #3 0.5ml'5ml lab Air	39	3.0981	= 3 0981 X 5 / 10	1 54905	1.55	0 5 ml• back to 5 m l with Lab air
SIG1000237	NE 30178 Test-1 Syringe #4 0 4ml 5ml lab Air	54	2.99361	=2 9 9 3 6 1X5/10	1 496805	1.50	0 4 ml· back to 5 m l with Lab air
SIG1000238	NE 30178 Test-1 Syringe #5 4 10 m l	96	1.25607	= 1 25607 X 10/4X10110	3 140175	3.14	10 m l to 4 m l back to 10 m l with Lab air
SIG1000239	NE 30178 Test-1 Syringe #6 No D1lut1on	129	2.21544		2 21544	2.22	10 m l total
SIG1000240	NE 30178 Test-1 Synnge #7 No D1lut1on	159	1 77035		1 77035	1.77	10 m l total
SIG1000241	NE 30178 Test-1 Syringe #8 No D1lullon	179	1.54011		1 54011	1.54	10 m l total
SIG1000242	NE 30178 Test-1 Synnge #9 No Dilution	210	1.35626		1 35626	1.36	10 m l total
SIG1000243	NE 30178 Test-1 Synnge #10 No D1lubon	245	0.604004		0 604004	0604	10 m l total
SIG1000244	NE 30178 Test-1 Synnge #l No Dilution	420	0.943748		0 943748	0.944	10 m l total
SIG1000245	NE 30178 Test-1 Syringe #2 No Dilution	790	0 757569		0 757569	0.758	10 m l total
SIG1000246	NE 30178 Test-1 Synnge #3 No Dilution	1290	0.606138		0 606138	0.606	1 0 m l total
SIG1000247	NE 30178 Test-1 Syringe #4 No Dliution	1800	0.496001		0 496001	0.496	10 m l total

Synnge Volume Corrected Results for the 1-Gallon can. dumpster seneno test
Sequence Log for the 1°Gallon can, dumpster senano test
Project Number: VP0973
Analyst: Jon Hoban
Date: February 22. 2012

Anall(SIS Date: 2/6/2012

After each sample test, an approximate 5-monute purge was performed to dry the injection area.

		TIME (Sec)	Detected %H		Converted by Joe to 10 m l %H	REPORTED %H	
SIG1000254	NE 30178 Duplicate Syringe #1 2 10 D1lut1on	6	0		0	0	This was created duriQQ anall(sos 10 m l to 2 m l back to 10 m l with Lab air
SIG1000255	NE 30178 Duplicate Syringe #2 0.6:6 Dilution	16	1.83447	= 1.83447 X 6 / 10	1.100682	1.10	0.6 ml· back to 6 m l with Lab air
SIG1000256	NE 30178 Duplicate Syringe #3 0.3:6 Dilution	30	1.6767	= 1.6767 X 6 / 10	1.00602	1.01	0.3 ml· back to 6 m l with Lab air
SIG1000257	NE 30178 Duplicate Synnge #4 O3:6 Dilution	39	1.39443	= 1.39443 X 6 / 10	0.836658	0.837	0.3 ml· back to 6 m l with Lab air
SIG1000258	NE 30178 Duphcale Syringe #5 0.4:6 Dilution	57	1.98636	= 1.98636 X 6 / 10	1.191816	1.19	0.4 ml· back to 6 m l with Lab air
SIG1000259	NE 30178 Duplicate Synnge #6 O7:6 Dilution	75	2.27596	= 2.27596 X 6 / 10	1.365576	1.37	0.7 ml· back to 6 m l with Lab air
SIG1000260	NE 30178 Duplicate Syringe #7 1.9:6 Dilution	91	2.17875	= 2.17875 X 6 / 10	1.30725	1.31	1.9 ml· back to 6 m l with Lab a,r
SIG1000261	NE 30178 Duplicate Synnge #8 No Dolubon	110	3.38704	= 3.38704 X 6 / 1O	2.032224	2.03	6 m l total
SIG1000262	NE 30178 Duphcate Synnge #9 No Dliution	128	2.03961	=203961 X 9 2 / 1 0	1,8764412	1.88	9 2 m l total
SIG1000263	NE 30178 Duplicate Syringe #10 No Dilu\ion	152	1.54089		1.54089	1.54	10 m l total
SIG1000264	NE 30178 Duphcate Syringe #1 No Dilution	300	1.00463		1.00463	1.00	10 m l total
SIG1000265	NE 30178 Duplicate Synnge #2 No Dilution	705	0.50617		0.50617	0.506	10 m l total
SIG1000266	NE 30178 Duphcate Syringe #3 No Dilution	1126	0.267395		0.267395	0.267	10 m l total
SIG1000267	NE 30178 Duplicate Synnge #4 No Dilution	1800	0.108199		0.108199	0.108	10 m l total
							This was created during ana!}:sis
SIG1000271	NE 30178 Spoke Synnge #1 No D1lut1on	5	3.66348		3.66348	3.66	
SIG1000272	NE 30178 Spike Syringe #2 8->2: 10 Dilution	18	6.61356	= 6.61356 X 8/2	26.45424	26.5	8 to 2 m l back to 10 m l with Lab acr
SIG1000273	NE 30178 Spoke Synnge #3 3->2· 10 D1lut1on	30	10.88741	= 10.88741 X 3/2	16.331115	16.3	3 to 2 m l back to 10 m l with Lab a,r
SIG1000274	NE 30178 Spoke Synnge #4 3->2 10 D1lut1on	41	18.19095	= 18.19095 X 3/2	27.286425	27.3	3 to 2 m l back to 10 m l with Lab air
SIG1000275	NE 30178 Spoke Syringe #5 4->2· 10 Dilubon	58	13.03835	= 13.03835 X 4/2	26.0767	26.1	4 to 2 m l back to 10 m l with Lab acr
SIG1000276	NE 30178 Spike Syringe #6 4->2:10 Dilu\ion	72	11.16958	= 11.16958 X 4/2	22.33916	22.3	4 to 2 m l back to 10 m l with Lab acr
SIG1000277	NE 30178 Spike Syringe #7 4->2· 10 Dilution	85	13.958	= 13.956 X 4/2	27.912	27.9	4 to 2 m l back to 1Om l with Lab acr
SIG1000278	NE 30178 Spoke Syringe #8 4->2: 10 Dilution	98	8.42877	= 8.42877 X 4/2	16.85754	16.9	4 to 2 m l back to 10 m l with Lab air
SIG1000279	NE 30178 Spike Syringe #9 10->2 10 Dolubon	111	6.87939	= 6.67939 X 10/2	33.39695	33.4	10 to 2 m l back to 10 m l with Lab air
SIG1000280	NE 30178 Spoke Synnge #10 10->2 10 Dilubon	124	2.48691	= 2.48691 X 10/2	12.43455	12.4	10 to 2 m l back to 10 m l with Lab air
SIG1000281	NE 30178 Spike Syringe #1 10->5:10 Dliution	300	8.14349	= 8.14349 X 10/5	16.28698	18.3	10 to 5 m l back to 10 m l with Lab air
SIG1000283	NE 30178 Spoke Syringe #2 10->5:10 D1lubon	722	4.13992	= 4.13992 X 10/5	8.27984	8.28	10 to 5 m l back to 10 m l with Lab air
SIG1000284	NE 30178 Spoke Syringe #3 No Dliution	1140	5.77383		5.77383	5.77	
SIG1000285	NE 30178 Spoke Syringe #4 No Dolubon	1500	4.44499		4.44499	4.44	
SIG1000266	NE 30178 Spike Synnge #5 No Doluuon	1920	3.22546		3.22546	3.23	
SIG1000291	NE 30178 Tnphcate Syringe #1 No Dilution	6	0.0327718		0.0327718	0.0328	
SIG1000292	NE 30178 Tnphcate Syringe #2 5.10 D1lut10n	16	0.102001		0.102001	0.102	Plunger came out when sampling
SIG1000293	NE 30178 Triplicate Synnge #3 0.5:6 Dolubon	30	0.00264987	= 0.00265 X 6/10	0.001589922	0.00159	
SIG1000294	NE 30178 Triplicate Syringe #4 0.4:6 Dilution	39	1.93465	= 1.93465 X 6/10	1.16079	1.16079	
SIG1000295	NE 30178 Triplicate *Syringe* #5 0.25:6 Dilubon	57	2.86219	= 2.86219 X 6/10	1.717314	1.71731	
SIG1000296	NE 30178 Triplicate Syringe #6 3.S:S DoluUon	75	3.27348	= 3.27348 X 6/10	1.964088	1.96409	
SIG1000297	NE 30178 Triphcate Syringe #7 No Dilution	91	3.60291		3.60291	3.60	
SIG1000298	NE 30178 Tnphcate Syringe #8 No Dilution	110	2.18067		2.18067	2.18	
SIG1000299	NE 30178 Tnplicate Syringe #9 No Dilution	128	1.61765		1.61765	1.62	
SIG1000300	NE 30178 Triphcate Syringe #10 No D1lut1on	152	1.15822		1.15822	1.16	
SIG1000301	NE 30178 Triplicate Syringe #1 No Dilution	300	0.829691		0.829691	0.630	
SIG1000302	NE 30178 Tnplicate Syringe #2 No D1lut1on	705	0.570111		0.570111	0.570	
SIG1000303	NE 30178 Triplicate Synnge #3 No D1lut1on	1126	0.405617		0.405617	0.406	

Syringe Volume Corrected Results for the 1-Gallon can. dumpster senano test
ProJect Number: VP0973
Analyst Jim Hoban
Date: February 22, 2012

Analysis Date: 2/8/2012

After each sample test. an approximate 5-minute purge was performed to dry the injection area.

		TIME (Sec)	Detected %H			REPORTED %H	
SIG1000316	NE 30178 Spike #2 Syringe #1 No Dilution	9	0.320311			0.320	
SIG1000317	NE 30178 Spike #2 Syringe #2 2.7ml to 10 ml	20	13.00046			13.0	
SIG1000318	NE 30178 Spike #2 Syringe #3 3.6 ml to 10 ml	40	14.90013			14.9	
SIG1000319	NE 30178 Spike #2 Syringe #4 3.2 ml to 10 ml	51	**16.12276**			16.1	
SIG1000320	NE 30178 Spike #2 Syringe #5 @ 10ml	69	**48.78441**			**48.8**	< These two runs exceeded
SIG1000321	NE 30178 Spike #2 Syringe #6@ 10ml	80	**42.90765**			42.9	< the cahbrat1on range
SIG1000322	NE 30178 Spike #2 Syringe #7 10ml -> 5 ml-> 10ml	94	14.46757	= 14.46757 X 10/5		28.9	2 X Dilution
SIG1000323	NE 30178 Spike #2 Synnge #8 10ml -> 5 ml-> 10ml	109	12.94377	= 12.94377 X 10/5		25.9	2 X Dilution
SIG1000324	NE 30178 Spike #2 Syringe #9 10ml -> 5 ml-> 10ml	126	9.94281	= 9.94281 X 10/5		19.9	2 X Dilution
SIG1000325	NE 30178 Spike #2 Syringe #10@ 10ml	141	7.13658			7.14	
SIG1000326	NE 30178 Spike #2 Syringe #1@ 10ml	292	**8.79045**			8.79	
SIG1000327	NE 30178 Spike #2 Syrnge #2@ 10ml	650	**5.89173**			5.89	
SIG1000328	NE 30178 Spike #2 Syringe #3 @ 10ml	962	**4.8346**			**4.83**	
SIG1000329	NE 30178 Spike #2 Syringe #4@ 10ml	1334	**4.07966**			4.08	
SIG1000330	NE 30178 Spike #2 Syringe #5@ 10ml	1833	3.31001			3.31	
SIG1000331	Laboratory Air Blank	Cone%		0			
SIG1000332	H2 QC Std 19.98% M-L (1052)		18.43425	92.26			
SIG1000333	H2 QC Std 9.98% Linw lot# 706224 (1172)		9.23737	92.56			
SIG1000334	H2 Standard AR-1 99.9995% Linw lot# 706224 (1243)	=50%	44.51754	89.04	0ml -> 5ml -> 10ml		
SIG1000335	H2 Standard AR-2 99.9995% Linw lot# 706224 (1243)	=50%	46.31584	92.63	0ml -> 5ml -> 10ml		
SIG1000336	H2 Standard AR-3 99.9995% Llnw lot# 706224 (1243)	=50%	47.54213	95.08	0ml -> 5ml -> 10ml		
SIG1000337	Laboratory Air Blank			0			

Sequ.nce Loti and analytical rHultl tor the 5 pound can dumps1u ac.nario tut

VfOI7J
J < f f l -
RdlWV 7l 2012

5 pMM Can TESTS

N1♦ ..cft umDla 1 1 ♦ ac,o,o.omta ♦ CUM ..es "Iffo,,,,,,. b dV the lackMl .,, .

ANtn•• Data VI'101Z

GC "t, , NUMBER	a,, •			TJME11«1	0ıl..... IIII				
$1G1000195		Laboratory Ar Blank			0				
&I01000158		H2 CC Std 2 40% M-L (1063)			2				
S,01000157		H2 QC Std 9 99% Lmw \cal 70@224 (1172)							
SI010001SI		Laboratory Ar Blank			0				
				ft;1E 15«1	S,t""9				
S-IG10001SI	1	NE X/190 TMM• ID SEC	os	JO	2 . ""-	Ie 01311	9 1•nt101	00,4	< fcb yn uceaded " - C . 'aNtl:
SIGIoOOIIO	2	RE JOIIO T•t. 1.90 SEC	♦0 IIV	● ●	' 0 ""-	3 N t t S	311132	006	AIAolIIeMMIIICMII
SICJ100191		NE >0110 I•t-1- ID SEC	1 S,,,,	● ●	,0	2,,,,,,	233560	01	_,-e .,...tyz-, • 'D ml
SIG1000182		NE 30180 TeMI- 120 SEC	2 Ofth	120	10ml	, 7912	1 74112	01	If♦"""•noce11omL
SIG1000193		NE 30180 Iat.t•1• 180 SEC	2Sm.n	,50	S5ml	t •10	0 -	0066	the ffinQa wat ...
P3100016'		tE 30110 T•t•I• 180 SEC	3 0 =	100	●●●●●●		04347	0060	I0•10ffII..,_,..PfIOI'
$IG00CL8S		tE I011O r. .t.t-210SEC	3 5 IIIt	210	ıS ...	111111	O!I0712S	007S	●●●●●●●●●●
$IG10001e5		,E JOIIO T•I-t- 240 SEC	●●●●●●●●	224	● ●--	100337	0&122916	000I	T♦e|01•tN ..... It,oleactus:
SIG1000181		NE 30180 T • H - 270SEC	● ● ● ● ●	250	715ml.	●.,,,,,	●.,,,,,,,	0077S	♦ITCIDf'I♦U--.or..,..,oml
SIG1000155	10	NE 30180 T.I-t- QO SEC	I,0Q,..	420	5455ml	0611.17	0 73S2S4	0054S	● ●
SIG1000141	1	NE 301IOTNt-1-		510	[illegible]	09.N1M	0811555	0 I	
SIG1000170	2	NE 30180 TMI-I-	18@9M.n	I●●♦	10ml	038)C7J	0351043	0 '	
SIG1000171	J	tE 30110 fett-1•			10ml	0 194311	0 1943UI	0 1	
S'Gt0001n		Labo<story A• 8ell,			0				
SIG1000H3		12 CC Std 2. . . MH 11031			216142	● ● ● ●			
SIGHK0174		H2OC Sll IN,I, L - - - 1002411 1121			1'28 1	●●,			
SIG1000175		H1CCStd100'l,...._ L / 1007			0 942408	t-IZ4			
SIG1000179		L1lbdfiay AA SWI,			0				
				r|tE I5«I					
SIGIOOC177	t	NE I0180 TMI-2 SIIIIQe • 1 1MI 10m, IIb At		0		2.75L	r't•t	001	1 mICM1t|IO 10"" 1a|t1
SIG1000111	2	""6.J01IOT•I .2 $ ♦ 9 2 2ml 10IN.UIbA,		,?		56522		0 '	2%.DUIbMO 10"- 1eIb•r
SIG1000171	J	RE)0180 TMI 2 S|IIIQe O 4'N 1Q1| Q1.con		3		|| IIIII	14558	0,	Aml DI •ID IOmLLabA,
s1O1000,ao	●	NE JOIIo h U 2 SIOnO• ... 'D ♦ N| DuJon			● ●	4 3497,1	; 34974	0 1	
s.010001a1	●	NE JO80 Tnt.2 Sumpa 15 'D IN. "' Olubof,			● ●	3 7901 8	3 7011	0 '	
SIG1000182	●	NE 30180 fNf-2 SIINM '8 'D ml N• oluoon		120		2'"355	2IOJ55	0 '	
SIG1000183		NE I0180 T•t-2 SIhOM •7 'D /N. ro Oluoof		, ● ●		2 30003	2 -	0,	
SIGIOOOIIC	/	NEJ01IOT•t2S♦-e1om1.. IIO||ulon		100		2 1 k M	211411	0,	
SIO1000SS	●	HEJ011GT111t-2SvmcMI91DIII. noC>M,on		240		I m I t	,r.mo	0 I	
S1G000815	,b	NE 30180 I . .,2 S v r ♦•10 'D ITI. ro OI,IOII SrnnAft		.00		16473	1&7J	0 I	
SIG1000117		♦E IOUIO fMI-2 s.-..... •t 'D n'll ro O|oan		●●●		1 -	1.....	0 '	
SIOIOOOIIJ	2	N E J O t 8 0 T ♦ 2 S ♦ ♦ t 0 m L notwubon		●●●		10121	10121	0 I	
$101000189	●	tE JO80 Tefl2 S,,rnpa 3 'D ml ro o.rt'"" 2/ nil		180		0897,16	0ll7s.te	01	
$101000190	●	NE JOIeo Tffl-2 S Y f♦ ... 'D ml ro O/Ulst		2050		0 5005)4	0.....,.	0 I	
S1GI0000I9t		Labor tory All&•ta			0..c,,. 0				
SIOI000191		"H2 c c 52 100.. ...I. 11001,			o..	% I I			
SIG1000193		H2OC 5I• Ite,r, L-MIOUI 70822411172,				8 3			

Sequence Log and 1n.alytical reauNs for the 5 pound can dumpster scenario test.

Pro,«e Numo« \R087 3
M•"nt ⌟ m Hoban
0••· ;.ec,n;.,v22 20,2

Analyal9 Oat« 2/2/2012

Met HOt UITPM ~~[illegible] 180,0,U[illegible]~~ule PiQe WH !Hrlotm.d to 0V 1le in•abOl .,. .

		TIME <Sel	Oococtoo					
SIGH>C,0114	bofatorvAlF 8.Iwk		0					
	c		0 91452	a, ,S				
	H2ac : : = 1 :\ ..0		9 •277	. ! : ! £				
S1O1000197	LabofMOrYAlr Btar1.		- 0 -					
		T•YE ⌟s«1		– •	C o n " " - Fonnua	eor,ea 1omr.	LOO ' ' ' '	Tas WH QWed dUlfSl antlyslt: Symnp Vol
SIG10001ie	NE 30179 Tnt•1 Syrnqe •1 1ml 10ml '-b AA		0	101x10f11	0		1	10ml to 1 ml NCkto 10 ml 1•H at
SIGH>00109	,E 30179 Tett-1 Svunce #2 2ml 10ml tb AM		20	0 728491	{0228,,191llll1Dr.II		1 142455	05	10 ml to 2 ml to 10 ml tb a,
SIG1000200	NE 30179 Tftl-1 SW"Oe eJO 4ml ◄m tb Af		37	28973'	(21t7341x(101		1 1589Je	004	4 ml: bad, to• ml wih Lab ...
SK,1000201	NEJ0179T•11 S'tftlCMM0'ffll•1'11LIM>M		●●	4 2f15	8 2D151 x(4/10J		1151424	004	041'ftl."bado.lo4ml..'lllI'ltf'llao..,
SIGI000202	NE 30f5l T•t-t St"ffICM-S2"'1 1 ""-. · . O N		72	1 78141	1 711411-(1CV2		• i070S	05	10rnt.to2'''''-ble:tlo 10mlIia&l
SIG1000203	"E 30179 Tffl-1 SY•nQe"6No]Jut.Jon		00	●●	18 920851 • IS 4110		10829218	0004	$ 4 ml lota I
SK,100020<	NE 30179 r..i., Sv,noe •1 Nb		120	8/03319			803379	0 1	10 ml tota,
SIG 1000205	NE 30179 h•t 1 Svonqe JB Nb I)ivt;on		150	S 63315			8,60305	0 1	10ml.10lal
S101000208	NE 30170 Tetst SYIIOll 59 Nb C>Mon		180	8 11021			S 11021	0 1	10ml lotll
$1G1000207	Nb 30179 T• 1·1 Sv1,qp •tO Nb Ollut,oti		210				2	0 1	10 ml total
SIG1000208	'E J0179 Tnt-1 STIIIQe •1 Nb i>.Jt,on		JIO	2 78203			2 78203	0 1	10tl'lLICU
$101000209	,_ J0179 TKI I Svince S2 tto OlutOn		000	1 71165			1 71e65	0 1	lOmllot.I'
SIG1000210	NE 30179 Iftr.1 5,,,nqe •J Dtution		,, ●●	1215997			1 '''''''	0 1	l0mL.lotaJ
s101000211	NE 30179 T " H SYTvpe M Nb OlMton		1020	1 01515			1 015Je	0 1	,a mllOIII

s1O1000212	LabofalOly At S.,,,k	0	
SIG1000213	ti2 CC SD 'D 0191 M4 II U	9 3313	9328
SIGH>00214	H2 CC SG $N . . L - k n 705224 f 1172	• JOOII	93 29
SIG1000215	I100ftI0f'IM SIMI\	- 0 -	

		HJEIS.CI		Ml'ned	Couedon FomUla	cor,.clec,,p 'lomIl.	LOO ' ' ' '	Ths WS tfMIH dVIIIl anain,s
S10100021&	NE JO: 7 r. .11 S'tf.-ia• •1 Nb OlMon		℮	OOta51ie		0 018S1Wl	0 1	10ml 1•t1
$1G1000218	NE 30177 Tnt-1 Svt"Oa ¥2 0 5,nt tb At		24	2 32374	t2 32374) • '8H01	1 18187	005	05ffIl."DadlIOSrrll''''''hLIOI•I
SIG1000217	NE 30177 T n t, s.,i,,qe 0lml4'''-. •abAi		311	1 1 1 m	2 89734'. ,4/101	0751141	004	03 mt· bK\r o • mLWChL.oa,,
SIG1000219	NE 30177 Tat-1SW'inoa ... 04ml 4ml a D N		●●	184302	... 21081 • 1•101	0 737568	004	, 5 •baQ1o•mt..-.nLaoa.1
SIG1000220	NE 30177 Tnt-1 S'''''''.S22mLSml. aoAlt'		107	:16517	,, 711'11 ii (5110)	182585	005	22mlI0Stnf..#tlIIIba,t
SIG1000221	NE J0177 Tftt·I Svr,no• Ie Nb (Murl,ot,		128	211355		2 81355	0 1	10 ml lota
slc;1ooozn	NEJ0177 r. .11 Svnnae•7 NoOMutOll		●●●	165091		1 85901	0 1	10 ml IOIII
SIG100022J	NE 30177 T. t ·1 s,, #8 Nb OMuton		1••	1 2523		1 2523	0 1	10ml.!otal
SIG1000225	NE 30177 T•t-1 5'tf.n<M-9No I».,tion		,,,	1 03511		1 03511	0 1	10ml..lotal
$101000228	NE 30177 T..i 1 SYIIIQe •10 Nb D,lut,o,		/1/2	087710 8		0877291	0 1	10 ml tcu
SIGI000227	NE 30177 Tnt-1 5f'1nce •1 Ovuhon			05"Se44		05'S&O•	01	10 mt IOtl
SIG 1000228	NE 30177T. .11 S'tf.-iqw«IMO...,.O,.		◄NI●	0 43413		0 43473	01	10mltot•
SIG 1000229	NE 30177 Titt 1 Svr.noe-i Oilwon		1200	03&a927		0 368927	0 1	tOmltotaJ
5101000230	NE 30177 TNt-1 Stfnce ... Nb OM.on		1800	0 324198		0 326915	0 1	10mlI0I1J

SIG1000231	labO{afOl.JAl	0	
SIG1000231	H2 CC SD 'D 011 MK J 10511	940715	●●
SIGICXJ0233	L•00l•OIVA_,r a..,,-,	0	

		TI'-E tS.C)		Aaal	CoIlOLCNI Formwa	Couectio 10 ml	LOO ' ' ' '	Th WH CINfad dulfg ,nalyl•I
SIG100023A	NE 30171 Tft1 1 Svn •t No°''''''°''		S	0 0701314		0 02013'•	0 1	10 ml tcul
5IG1000235	NE 30178 TetH S:f'''4e _,.O&ml 5ml ,'1bA.t		2	254568	'2 S4S61l' '8H01	1 2728'	005	1 OS mt:• to 5 mLWIh LU 11
S1C100023e	,/(30171TMS:-1 5't'''''Oea30Sn-. $mt labAs		311	30811	1IOM11111S/01	154005	005	@5ml'Mc:Alo5"7'1.WChLaa,1
SIGIJ00237	E 30178 Tnt-1 S,,!NM «0'ffII.5ml :ab		●●	2 93181	219181 • '8H01	14...0S	005	0 • mL" back to 5 mlweh Lao ar
S1G1000738	NE I0178 TK1-1 Svr 95 • 10 ml		●●	125007	112seo1,.1101•1	I 140175	025	10 ml to 4 ml tad, b 10 ml Wih Labar
SIG100023I	NE 30178 TMI 1 SYIIIQa 16 Nb I),tyt,on		12'	2 215"		221544	0 1	10ml.lotal
SIG1000240	'E 30171 Tett-1 SvrnQe •7 Nb 0.l'Y,on		159	1 77035		1 77035	0 1	10ml tolI!
SJG1000241	NE 30178 T. , 1 Svr .a Nb OJurl,on		179	1 5'011		1 5'011	0 1	10 ml tCUI
SIG 1000242	NE 30171 TMI 1 ST'1nqr 98 Nb tMut,on		210	135020		1 , . . , .	01	10ml 10III
S1G100024I	NE 30178 r. .,., s'''''''''•1op.;c,o,,,IOI\		2+S	0ll04)004		0'''4004	0 I	10mLIC(_
SIG1000244	NE 30178 TMI 1 SIIIone •1 Nb o,t,hof1		420	0943748		0 9437'6	0 1	lOmlIotal
SIG100024S	NE3017! Tnt-1 STT<nQe\2N00)hJ.oon		710	0 757569		0 757569	0 1	10mltotal
SIGUXJ02	NE 30178 hsl-1 Sv,nqp 93 Nb t•Lurlion		1290	0&08136		01506138	0 1	10 ml total
SIG1000247	NE 30178 TMI 1 SYIIIQa ... No°''°''°''		1110	0496001		0 496001	0 1	10ml!Olal

S1GI000248	LIOOHOIy A I 8IIl&	0	
SIG1000249	H2 CC SD 'D 0,,.. I I-.', 10811	9 287	●●
S1GI000250	H2 CC Sb 9 M-. L'''' 70S224 /1172	•9••••	. E I !

Sequenc:. LcO and ntyhçal ruuJU for the 5 pound can dumpster scenario tut.

Pfo;ect,...,._ VRO73
AnalSt .,_ ◆
Otf• F'Nt"..." ,o,,

Anaiyejt 091• 2N2012

AIM Nch ◆ Int a &MIOXIN• s.m.ute IMO- Wll pafcIMcJ ©d/ 1e ◆ 8fN

SIG1000251	L.ebOlto.W /ot Blank					
SK310002U	H2 ©C Sl 0 01,. MLI101)	1B1				
SG 1000253	H2 ©C Sl. 2N "' IfW_ bll 70522. (1172					
SIG1000254	Laboratory Air Blank					
SIG1000254	◆ J 0 1 7 1 ◆ • • ◆ • 1 } 100rlulon	TM(JS<l	0	IOI• :fN21	0	05
S,0,,,,,,,,,	NE 30171 Dw11ate S,•,riqe.:IOlfl DMo,	8	1.,,..,	,t 0447111 DI01	I DCM2	001
©HOOO2Se	JE I0171C),,,ocalte5yr,.,,,.003fI0Mlon	©D	11797	,11797)-,.t,t-01	100IO2	001
S J G t ◆ 7	NE 301,a 0 1 , ◆ s..-ice M o Je ◆	©!	I . . . . ,	,t Jlr,44.JAI8'10I	● ● ● ● ●	001
S(;10002U	NE 3017101.0©lle SVVOt.SO 4fCMubsll		I	1 IIIJI11116'10I	11$1111	001
SI3IOOO2Y	NE 30171 ◆ • ©NDe 15 0 7 8 DM.o,,	15	22751B	©2 2780) I B101	1.J6M7fl	001
$•01000200	NE 30171 ◆ SMIOe 6/ 1 I f I ◆	●●	217US	1217175t11©10)	1 I0725	000
SJ1000281	NE 30171 ◆ • I••"IN . . N ©IOWI	1D	3 31704	1.J3170ÿ©8'I01	2ew22,	000
SIG1000©I2	HE 30171 ◆ 8ylcIçe t I N ◆ DNIçn	121	2 0:.1	2 0881111 fll 2I0I	11194412	0002
SG I I0002U	NE)0171 Dusik-. SfNM •10No ◆	152	, , ,		15'011	0 1
SIG10002M	©E 30178 ""olcate SIDM •1 N o ◆	JJ.I	I OM8		100403	0 1
SJ3 1 ◆	NE 30171 0.ulOM SfIOe S2 N ©Mlsn		0©I817		0 50117	0 I
SIG1000256	NE30171""◆•&,..otI0ee3 N>©Il,ccn	112•	0 29I305		0 2873"	01
SIG000287	NE 30178 CLDIOle 1IIAM .. N ÿIU,on	IOO	010819Q		0IOI199	0 I
SIG000281	I"°'•IOIY A/ Bla_					
s0100028I1	H2 ©C Sl 0 0L MI ÿ10S1)				0852	
SIG1000270	Lat,o,•o,v At BIfIl					
s,01000211	NE 30171 Sc;-° S't f ◆ •1 to DU.on	Title /Seel 5				
SIG1000272	NE 30171 ◆ • S/°©II S2 8•2 0 CIOIon	8	811I6fl	IfIfI3Mat81'21	2145424	
SIG1000273	NE 30178 .SO.. SwIOe • I .b2 0 Ceibon	10	10N741	It011741•• 1In◆	11331115	0 5
SIG1000277	NE 30171 ◆ S.-,,.. M I•>2 0 ou.o,,	●●	1111015	(18 1D161 1 181	. . . _ . .	015
SIG1000275	NE 30171 S...• SfOM ◆ • •2 to o.u.n	● ●	I]	18 03Q5I • 421	29 0I97	02
SGH-K0276	NE I01714SY1111'1Qe194 :2 © CIMW	12	1 18851	(1119ISI1J1142)	22 IJIte	02
SIG1000277	M: 30171 So,." 8Vlçp •1•>-110 OIulon	●●	1, . . .	I131681 • 121	27112	02
S1G1000271	NE 3071 S . . . 8Inlce . . •>2 0 DIMen	M	1421n	I I 42771 • 182	◆ 85$4	02
SIG1000278	©E >01719-.• SYnd• . . 10>2 0 ◆	111	887939	$ 87881 d: 1D81	)) . .	05
sGH-I•00210	©E 30111 Sole S.?4e •10 10•2 0 CIUbon	12•	2 - 1	(2 aaaf11111D21	2 48035	05
S1010000281	NE 30178 IP/\.- S.jlçp 1 10•5 0 []Ulion	JOO	, ,o.,g	1 104UI • I U)◆,	1$216N	02
SIG1000283	NE 3071 Sple Svlno• S2 10•5 0 CIjUbn	777	• 13002	◆ 1Ub21 x I tat,J	I 2784	O,
SIG1000214	NE 30178 Sole Syfno• S N ÿ[]Iwon	110	5 7383		5 7383	0 '
SG 1000215	NE 3017110<!- Svynqp •4 N 0-.C◆	150	●●●●●●		●●●●●●	0 I
SIG1000286	NE 30171 SIM• Sinqp ◆ N ÿUbon	100	,,,, ●●●		I _ ◆	0 I
SIG1000287	I . . ◆ ◆ v_ M ◆					
SIG1000288	10 ©C Sb t I N ◆ J.t 1D21					
SIG1000280	H2 Q C Sl 11111 IfIWlo[] 70822]1172,]					
s,o,aomgo	IIIbol•to,vN 91.,,					
S4CD0211	"c IOt 7I Tr.pcal• 6v'°"" •t N ©M.tpn	t,\4[J1«1	0 0I27I2		OCJ2nt1	0 I
SID 1000©2	NE 30178 Tr,jlCaIMSMeIfIQe•IS 10°""""	1D	0 10001	1D 81381 • '14101	0 10001	0 I
SIG1000203	NE 3017t f ◆ S y r . - . o e , 0 0 5 8 ◆	11	0002MQI7	110•1•1111]IIIO1	000150N22	000
SIG0002SM	NE JC78 r,.,.._..s◆.,.o•s°""""		113465	111180851 • DI01	1 HD79	000
SI3D0281S	NE 30171 Tr•SY'1f'IN-S02SI(),u,on		2IIIB1	(13◆11119110I	1717314	DCI
SG 1000200	NE 30178 t,D(lat• 5YIIOe . . 318 OVIlon	15	327. .	1I 1181 Ic8IIl10	I	000
SIG1000297	©E 10171 T r ◆ • SWIOl •7 N ÿ.tbon	●●	3I0211		300201	0 I
SG 1D002NI	NE 30171 Trocat• SIlno• . . ND Clwon	1D	2 1B057		211087	0 I
SIG100029I	NE 30171 T r ◆ • 6Vlçp •9 N ÿ Clulon	121	1157M		18085	0 I
SIDOOOIOO	NE 30171 TIpIOe SvIOe •to N o.won	1'2	1 1B02		1 1B22	0 I
SIG1000301	NE 30171 TIIOLIKe SIIIOe •1 NO°""""	.00	029811		0 29811	0 I
SG 1000302	NE 30171 T1,t,k•t• 8Vlnde S2 N ÿ.ulion	,● ●	0 50111		0570111	0 1
SG 1000303	NE 30178 TIIFlçp I'II◆• •J N ÿ CLbon	112'	0405817		0405817	0 I
SK0003OM	UbOlc.qq At ...,._					
61G1000305	H2 c'c'sld1o o,,.u-t'10811					
$I|OOOOO5	H20CSIdIN,..._ L,_ ◆ 103124111m1					
SIG1000307	Loo,,to,vA'18',,,,					

!!!!.. !	Corrdlon	OtIOWCI,' 0 ml	IOIDI
0	IOI• :fN21	0	05
1.,,..,	,t 0447111 DI01	I DCM2	001
11797	,11797)-,.t,t-01	100IO2	001
I . . . . ,	,t Jlr,44.JAI8'10I	● ● ● ● ●	001
I	1 IIIJI11116'10I	11$1111	001
22751B	©2 2780) I B101	1.J6M7fl	001
217US	1217175t11©10)	1 I0725	000
3 31704	1.J3170ÿ©8'I01	2ew22,	000
2 0:.1	2 0881111 fll 2I0I	11194412	0002
, , ,		15'011	0 1
I OM8		100403	0 1
0©I817		0 50117	0 I
0 29I305		0 2873"	01
010819Q		0IOI199	0 I

...t.t.I...	C . . , . . -	Cousdeqlp 0 ml	IOD Mu[illegible] 10IIL
, . . , . .	, ...	, . . , . .	0 I
811I6fl	IfIfI3Mat81'21	2145424	O•
10N741	It011741•• 1In◆	11331115	0 5
1111015	(18 1D161 1 181	. . . _ . .	015
I]	18 03Q5I • 421	29 0I97	02
1 18851	(1119ISI1J1142)	22 IJIte	02
1, . . .	I131681 • 121	27112	02
1421n	I I 42771 • 182	◆ 85$4	02
887939	$ 87881 d: 1D81	)) . .	05
2 - 1	(2 aaaf11111D21	2 48035	05
, ,o.,g	1 104UI • I U)◆,	1$216N	02
• 13002	◆ 1Ub21 x I tat,J	I 2784	O,
5 7383		5 7383	0 '
●●●●●●		●●●●●●	0 I
,,,, ●●●		I _ ◆	0 I

=- !	c.,,,,,,_,	Con<tesllim 10n,I	,[illegible]
0 0I27I2		OCJ2nt1	0 I
0 10001	1D 81381 • '14101	0 10001	0 I
0002MQI7	110•1•1111]IIIO1	000150N22	000
113465	111180851 • DI01	1 HD79	000
2IIIB1	(13◆11119110I	1717314	DCI
327. .	1I 1181 Ic8IIl10	I	000
3I0211		300201	0 I
2 1B057		211087	0 I
1157M		18085	0 I
1 1B02		1 1B22	0 I
029811		0 29811	0 I
0 50111		0570111	0 1
0405817		0405817	0 I

Sequence Log and 1natytic1I rtautts to, the 5 pound can dumpster tcenario teat.

P10,x:1 N#Tlbef VPOI73
AnaV,1 JomHocan
O.te F.ctuarv 22 2012

Anatysis D..te. V71201Z

AA• N(.h " " ' '"J an aRGWX S-fllnuce °"CM . . . °"°mod to dV the., . . I-MIE1S.C-1 Ooledod

SIG1000309 LatOEa@w Aj &.nil 0
SrG100030CI H2 CC Std 10 0fff| (1051' 8 36521 •,● ●
SIG1000310 H20C5td8N"Ni.U.....lot#708124 f 1172 8 42329 . . .2
StG100031 I L,bofatorv AM Blank 0

Anatvll• Date: INJOU

AA• ead1 Hmo-e tMI an a00tox,m.ie ,nute DUfM wH pen'Offlled to dV the ,...IOn A/N

SIC:31000312 labofato,y AA &an., 0
SIGIOOOJ13 H2 CC Std 10 0fN MH 7 1051; I 37[illegible] 8 7 [illegible]
SIG I 0DDI 1' H2 0 C Std 8 . . LMM 10811! ● ● ● ●
SK;10Q)J1S ubot'atCIfYAd&.ru,. 0

		TIMEtS.c:>						
SIG1000J18	NE 30178 Sot• '2 SMnQe •1 Nb 0UUOn	•		0 320311		0 320311	0 \	
SIGH)00317	NE 30178& So•L ri. S rJ 2 7ml b 10 ml	20		13000..		13000..	0 I	
SIG1000318	NE 30171 Sp)le ,n SvMfQe •J 3 e mL 10 10 mL	•0		ⅱ 50013		ⅱ 51008	0 \	
SIG1000319	"E 30171 So,..,erJ Syr,nqe... I 2 ml to 10 ml	SI		ⅱ 12279		16 12279	0 I	
SIGH)00320	ta 30171 Sp,e'1.Sv,,noes5CI 10mL	● ●		4.878441		ⅱa 71441	01	· TrqMe tv.o """"" •:.,c--,.,.
SIG 1000321	NE 30178 So,U '1. Svmnce ,e CI 10mL	90		4290165		4190165	0 \	• U'lc,ⅱ-Dfat,ot\IIIfl(M
SIG1000J22	.£ 30178 So•• W S'WQe •1 I()rr,L-> Sml-> 10mL	● ●		1448757	ⅱ 40757 ,r t 10SI	189351'	02	2
SIG1000323	NE 30178 Sa le '1. Sv,"CM -S 10ml .» SmL > 10mL	100		12 94377	1214377-i:\101'51	2SN75A	02	2 ©U,IIIIIIIIII
SIG 1000324	NE 30178 So '2 S'ffCM . a 10ml, ⇔ 5 mL > '°"""-	120		9 94281	9 . .2,1 • . 1051	•1K512	02	2
SIG1000325	NE 30178 So,U '1. S'TI'I-M •tO O 10mL	,•,,		7 \JOSa		7 tJOSa	0 \	
SIG 100)3215	,-e 30178 Soih'2S'tf'Inoe•1 CI 10ml	m		8 790AS		1790AS	0 \	
SIG1000327	NE 30178 So-II• CI StffCM '1 A 10n1.	(H)		S 89173		S 80173	0 \	
SIG1000328	-E 30171 Sckle r.l. SMnQe IJ A 10ml	••••,		●,●•		●•,••	0 \	
SIG1000329	1E 30178 Sa ..e 12 S',1',nq• .. Q 10ml	1334		4 079M		4 0796e	0 \	
SIG1000330	"e 30119 s01-• 12 SMMQe 95 n 10nL	1133		3 31001		3 31001	0 1	

SIG1000331 labolatory N Blan, O
SIG100031 2 H2CC Std 1851'1N,1112 1843425 V229
SIG1000333 H2 a c Std 9 N , unw tots 705224, 11n1 9 23131 92 se
SIG1000334 H2 Star-oa,oAR-1 99'199S'N,UfMIOC#708224 -1243, °°°°'-->Sm&.. > 10,1 :so-II, 4ⅱ 51;5,4 IV04 IhMettvNI'-"'1--•00MIOI,I'!Ow(t'I.M tl'<e'"""°h.rSabove
SIG1000.JJS H2St.arcaraAR-299'99S,L.,,,wk:07082'24,12C.3110mL >5,n,L->10,.-< .soft, 4831564 9263 ttia1..,•or..r•thanttMt,n.1.a1u•bfanonra ,bllprO'lOI!
S1Gt0003Je H2Slar>d.,OAA-30SI M S 1 ' L...., Ioel 705214 1243 10ml-> > 10rl =60'1. 47 213 9501 KCUirate, ...'1l o.aMdonUM yoft,,MatfttNstAf!OatdI
SIGIOOOJ)7 L.CX.,,ato,VNsl.t,' 0.

ad