

EPA SAMPLE NO.

FORM 1 - IN

YE8E9

## INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3Matrix: SOIL Lab Sample ID: Q1105-13% Solids: 92.2 Date Received: 01/18/2025Analytical Method: HgConcentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	1.8		02/05/2025	1153

NOTE: Hardness (total) is reported in  $\text{mg/L}$ Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8F0

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-14  
% Solids: 97.3 Date Received: 01/18/2025  
Analytical Method: Hg  
Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	3.9	D	02/05/2025	1221

NOTE: Hardness (total) is reported in mg/L

Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8F1

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3Matrix: SOIL Lab Sample ID: Q1105-15% Solids: 92 Date Received: 01/18/2025Analytical Method: HgConcentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.54		02/05/2025	1158

NOTE: Hardness (total) is reported in  $\text{mg/L}$ Comments:  

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EPA SAMPLE NO.

YE8F2

FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEETLab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3Matrix: SOIL Lab Sample ID: Q1105-16% Solids: 80.8 Date Received: 01/18/2025Analytical Method: HgConcentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	2.6	D	02/05/2025	1223

NOTE: Hardness (total) is reported in  $\text{mg/L}$ Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8F3

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-17  
% Solids: 89.5 Date Received: 01/18/2025  
Analytical Method: Hg  
Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	3.3	D	02/05/2025	1252

NOTE: Hardness (total) is reported in mg/L

Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8F4

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-18  
% Solids: 92.1 Date Received: 01/18/2025

Analytical Method: HgConcentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.39		02/05/2025	1205

NOTE: Hardness (total) is reported in  $\text{mg/L}$ Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8F6

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-19  
% Solids: 90.8 Date Received: 01/18/2025  
Analytical Method: Hg  
Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.077	J	02/05/2025	1207

NOTE: Hardness (total) is reported in mg/L

Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8G0

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-20  
% Solids: 93.1 Date Received: 01/18/2025  
Analytical Method: Hg  
Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.098		02/05/2025	1214

NOTE: Hardness (total) is reported in mg/L

Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8G1

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-21  
% Solids: 80.3 Date Received: 01/18/2025

Analytical Method: HgConcentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.043	J	02/05/2025	1216

NOTE: Hardness (total) is reported in  $\text{mg/L}$ Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8G2

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-22  
% Solids: 94.9 Date Received: 01/18/2025  
Analytical Method: Hg  
Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.054	J	02/05/2025	1219

NOTE: Hardness (total) is reported in mg/L

Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8G3

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-01  
% Solids: 64.9 Date Received: 01/16/2025  
Analytical Method: Hg  
Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.14	U	02/05/2025	1126

NOTE: Hardness (total) is reported in mg/L

Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8G5

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-02  
% Solids: 94.8 Date Received: 01/16/2025  
Analytical Method: Hg  
Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.078	J	02/05/2025	1128

NOTE: Hardness (total) is reported in mg/L

Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8G6

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-03  
% Solids: 76.8 Date Received: 01/16/2025  
Analytical Method: Hg  
Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.027	J	02/05/2025	1131

NOTE: Hardness (total) is reported in mg/L

Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8H0

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-06  
% Solids: 87.9 Date Received: 01/16/2025  
Analytical Method: Hg  
Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.11	U	02/05/2025	1138

NOTE: Hardness (total) is reported in mg/L

Comments:  

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EPA SAMPLE NO.

FORM 1 - IN

YE8H1

## INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3Matrix: SOIL Lab Sample ID: Q1105-07% Solids: 76 Date Received: 01/16/2025Analytical Method: HgConcentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.23		02/05/2025	1140

NOTE: Hardness (total) is reported in  $\text{mg/L}$ Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8H2

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-08  
% Solids: 62.4 Date Received: 01/16/2025  
Analytical Method: Hg  
Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	2.3		02/05/2025	1142

NOTE: Hardness (total) is reported in mg/L

Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8H3

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-09  
% Solids: 82.7 Date Received: 01/16/2025  
Analytical Method: Hg  
Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	1.2		02/05/2025	1144

NOTE: Hardness (total) is reported in mg/L

Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8H4

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-10  
% Solids: 93.8 Date Received: 01/16/2025  
Analytical Method: Hg  
Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.090	U	02/05/2025	1147

NOTE: Hardness (total) is reported in mg/L

Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8H5

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-11  
% Solids: 83.3 Date Received: 01/16/2025  
Analytical Method: Hg  
Concentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.18		02/05/2025	1149

NOTE: Hardness (total) is reported in mg/L

Comments:  

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FORM 1 - IN  
INORGANIC ANALYSIS DATA SHEET

YE8H6

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011  
Lab Code: ACE Case No.: 51955 MA No. :                      SDG No.: YE8G3  
Matrix: SOIL Lab Sample ID: Q1105-12  
% Solids: 95.9 Date Received: 01/16/2025

Analytical Method: HgConcentration Units ( $\mu\text{g/L}$ ,  $\text{mg/L}$ ,  $\text{mg/kg}$  dry weight,  $\mu\text{g}$ , or  $\mu\text{g/cm}^2$ ): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.14		02/05/2025	1151

NOTE: Hardness (total) is reported in  $\text{mg/L}$ Comments:  

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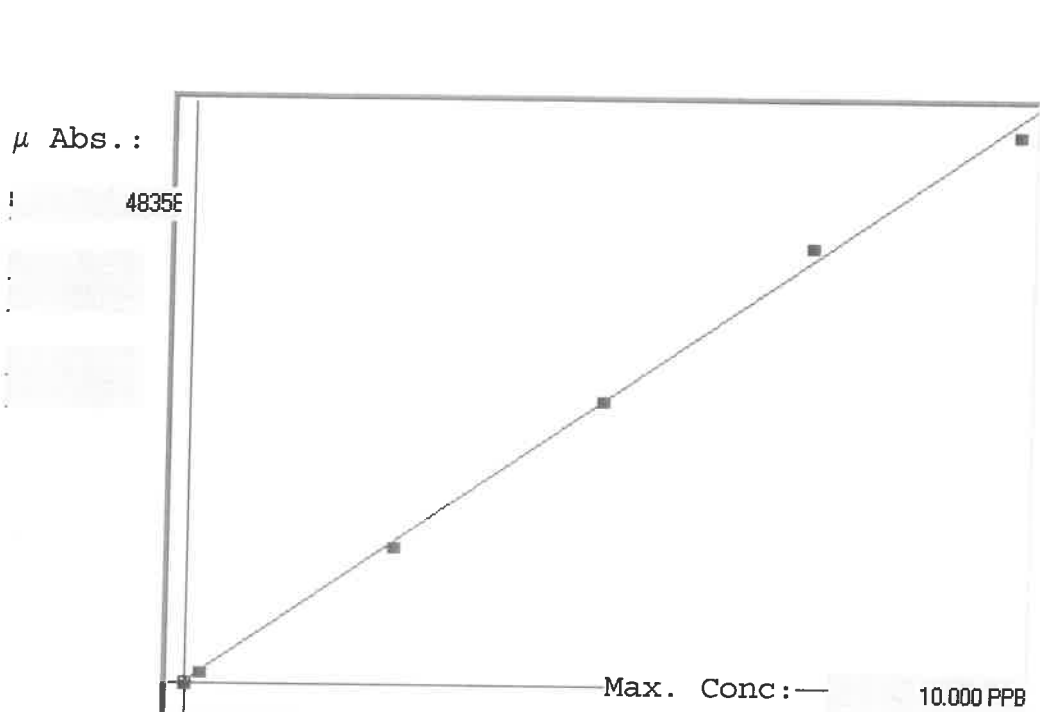
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LB134574

SFAM01.1

INSTRUMENT ID: CV1



Linear

A= 0.0000e+000

B= 2.0257e-004 slope

C= -2.9773e-002 intercept

Rho= 0.9991109

Accept = Accepted

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Std
0.00	0.000	-0.021	-0.021	44	0.000	44					0.00
0.05	0.050										0.05
0.20	0.200	0.194	-0.006	1103	0.0 %	1103					0.20
2.50	2.500	2.435	-0.065	12166	0.0 %	12166					2.50
5.00	5.000	5.036	0.036	25007	0.0 %	25007					5.00
7.50	7.500	7.791	0.291	38606	0.0 %	38606					7.50
10.0	10.000	9.766	-0.234	48358	0.0 %	48358					10.0

LB134574

INSTRUMENT ID: CV1

Sample ID	Extended ID	$\mu$ Abs.	Conc.	Stnd Conc	Method	Units	Date	Type
	0 S0	44	-		0 SFAM01.1	PPB	2/5/2025 10:55	Std
	0.2 S01	1103	-		0.2 SFAM01.1	PPB	2/5/2025 10:58	Std
	2.5 S02	12166	-		2.5 SFAM01.1	PPB	2/5/2025 11:00	Std
	5 S03	25007	-		5 SFAM01.1	PPB	2/5/2025 11:02	Std
	7.5 S04	38606	-		7.5 SFAM01.1	PPB	2/5/2025 11:04	Std
	10 S05	48358	-		10 SFAM01.1	PPB	2/5/2025 11:10	Std
ICV084	ICV084	19742	3.9693 -		SFAM01.1	PPB	2/5/2025 11:15	SMPL
ICB084	ICB084	-52	-0.0403 -		SFAM01.1	PPB	2/5/2025 11:17	SMPL
CCV021	CCV021	24795	4.9929 -		SFAM01.1	PPB	2/5/2025 11:19	SMPL
CCB021	CCB021	-163	-0.0628 -		SFAM01.1	PPB	2/5/2025 11:22	SMPL
PB166578BL	PBS578	69	-0.0158 -		SFAM01.1	PPB	2/5/2025 11:24	SMPL
Q1105-01	YE8G3	42	-0.0213 -		SFAM01.1	PPB	2/5/2025 11:26	SMPL
Q1105-02	YE8G5	2119	0.3995 -		SFAM01.1	PPB	2/5/2025 11:28	SMPL
Q1105-03	YE8G6	731	0.1183 -		SFAM01.1	PPB	2/5/2025 11:31	SMPL
Q1105-04	YE8G6D	692	0.1104 -		SFAM01.1	PPB	2/5/2025 11:33	SMPL
Q1105-05	YE8G6S	10818	2.1616 -		SFAM01.1	PPB	2/5/2025 11:35	SMPL
Q1105-06	YE8H0	367	0.0446 -		SFAM01.1	PPB	2/5/2025 11:38	SMPL
Q1105-07	YE8H1	5029	0.9889 -		SFAM01.1	PPB	2/5/2025 11:40	SMPL
Q1105-08	YE8H2	37899	7.6474 -		SFAM01.1	PPB	2/5/2025 11:42	SMPL
Q1105-09	YE8H3	25537	5.1432 -		SFAM01.1	PPB	2/5/2025 11:44	SMPL
Q1105-10	YE8H4	42	-0.0213 -		SFAM01.1	PPB	2/5/2025 11:47	SMPL
Q1105-11	YE8H5	4343	0.85 -		SFAM01.1	PPB	2/5/2025 11:49	SMPL
Q1105-12	YE8H6	3816	0.7432 -		SFAM01.1	PPB	2/5/2025 11:51	SMPL
Q1105-13	YE8E9	40966	8.2687 -		SFAM01.1	PPB	2/5/2025 11:53	SMPL
Q1105-14	YE8F0	99541	20.1341 -		SFAM01.1	PPB	2/5/2025 11:56	SMPL
Q1105-15	YE8F1	14257	2.8583 -		SFAM01.1	PPB	2/5/2025 11:58	SMPL
Q1105-16	YE8F2	54414	10.9928 -		SFAM01.1	PPB	2/5/2025 12:00	SMPL
Q1105-17	YE8F3	84553	17.098 -		SFAM01.1	PPB	2/5/2025 12:03	SMPL
Q1105-18	YE8F4	10001	1.9961 -		SFAM01.1	PPB	2/5/2025 12:05	SMPL
Q1105-19	YE8F6	2177	0.4112 -		SFAM01.1	PPB	2/5/2025 12:07	SMPL
CCV022	CCV022	23754	4.782 -		SFAM01.1	PPB	2/5/2025 12:10	SMPL
CCB022	CCB022	-124	-0.0549 -		SFAM01.1	PPB	2/5/2025 12:12	SMPL
Q1105-20	YE8G0	2763	0.5299 -		SFAM01.1	PPB	2/5/2025 12:14	SMPL
Q1105-21	YE8G1	1132	0.1995 -		SFAM01.1	PPB	2/5/2025 12:16	SMPL
Q1105-22	YE8G2	1466	0.2672 -		SFAM01.1	PPB	2/5/2025 12:19	SMPL
Q1105-14DLX5	YE8F0	19463	3.9128 -		SFAM01.1	PPB	2/5/2025 12:21	SMPL
Q1105-16DLX2	YE8F2	26735	5.3859 -		SFAM01.1	PPB	2/5/2025 12:23	SMPL
CCV023	CCV023	23882	4.808 -		SFAM01.1	PPB	2/5/2025 12:28	SMPL
CCB023	CCB023	-163	-0.0628 -		SFAM01.1	PPB	2/5/2025 12:30	SMPL
Q1105-17DLX5	YE8F3	15298	3.0691 -		SFAM01.1	PPB	2/5/2025 12:52	SMPL
CCV024	CCV024	23713	4.7737 -		SFAM01.1	PPB	2/5/2025 12:54	SMPL
CCB024	CCB024	-102	-0.0504 -		SFAM01.1	PPB	2/5/2025 12:57	SMPL

## Prep Standard - Chemical Standard Summary

**Order ID :** Q1105

**Test :** Mercury

**Prepbatch ID :** PB166578,

**Sequence ID/Qc Batch ID:** LB134574,

**Standard ID :**

MP83692,MP83694,MP84345,MP84346,MP84347,MP84348,MP84349,MP84350,MP84351,MP84352,MP84353,MP84354,MP84355,MP84358,MP84359,

**Chemical ID :**

M4371,M4916,M5062,M5532,M5882,M5884,M6121,M6126,W3112,

## Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
65	POTASSIUM PERMANGANATE SOLUTION 5 %	<a href="#">MP83692</a>	12/18/2024	06/18/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal
								12/18/2024

**FROM** 100.00000gram of M4916 + 2000.00000ml of W3112 = Final Quantity: 2000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
67	SODIUM CHLORIDE - HYDROXYL- CHLORIDE SOLUTION	<a href="#">MP83694</a>	12/18/2024	06/18/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal
								12/18/2024

**FROM** 2000.00000ml of W3112 + 240.00000gram of M4371 + 240.00000gram of M5884 = Final Quantity: 2000.000 ml





<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	<a href="#">MP84345</a>	02/05/2025	02/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal  02/06/2025
<u>FROM</u>	1.00000ml of M6126 + 2.50000ml of M5062 + 96.50000ml of W3112 = Final Quantity: 100.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1340	Hg 0.00 PPB STD	<a href="#">MP84346</a>	02/05/2025	02/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 02/06/2025
<u>FROM</u>	2.50000ml of M6126 + 247.50000ml of W3112 = Final Quantity: 250.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1341	Hg 0.2 PPB STD	<a href="#">MP84347</a>	02/05/2025	02/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Sarabjit Jaswal 02/06/2025
<b>FROM</b> 2.50000ml of M6126 + 247.30000ml of W3112 + 0.20000ml of MP84345 = Final Quantity: 250.000 ml 								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1342	Hg 2.5 PPB STD	<a href="#">MP84348</a>	02/05/2025	02/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 02/06/2025
<u>FROM</u>	2.50000ml of M6126 + 245.00000ml of W3112 + 2.50000ml of MP84345 = Final Quantity: 250.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1343	Hg 5.0 PPB STD	<a href="#">MP84349</a>	02/05/2025	02/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Sarabjit Jaswal 02/06/2025
<b>FROM</b> 2.50000ml of M6126 + 242.50000ml of W3112 + 5.00000ml of MP84345 = Final Quantity: 250.000 ml 								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1344	Hg 7.5 PPB STD	<a href="#">MP84350</a>	02/05/2025	02/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Sarabjit Jaswal 02/06/2025
<b>FROM</b> 2.50000ml of M6126 + 240.00000ml of W3112 + 7.50000ml of MP84345 = Final Quantity: 250.000 ml								



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1345	Hg 10.0 PPB STD	<a href="#">MP84351</a>	02/05/2025	02/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Sarabjit Jaswal
<p><b>FROM</b> 2.50000ml of M6126 + 237.50000ml of W3112 + 10.00000ml of MP84345 = Final Quantity: 250.000 ml</p>								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1346	Hg ICV SOLUTION	<a href="#">MP84352</a>	02/05/2025	02/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 02/06/2025
<u>FROM</u>	2.50000ml of M5532 + 2.50000ml of M6126 + 245.00000ml of W3112 = Final Quantity: 250.000 ml							



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1351	ICB (Hg 0.00 PPB SOLUTION)	<a href="#">MP84353</a>	02/05/2025	02/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 02/06/2025
<u>FROM</u>	2.50000ml of M6126 + 247.50000ml of W3112 = Final Quantity: 250.000 ml							

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1358	CCV (Hg 5.0 PPB SOLUTION)	<a href="#">MP84354</a>	02/05/2025	02/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 02/06/2025
<u>FROM</u>	485.00000ml of W3112 + 5.00000ml of M6126 + 10.00000ml of MP84345 = Final Quantity: 500.000 ml							

## Metals STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1352	CCB (Hg 0.00 PPB SOLUTION)	<a href="#">MP84355</a>	02/05/2025	02/06/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 02/06/2025

**FROM** 495.00000ml of W3112 + 5.00000ml of M6126 = Final Quantity: 500.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
887	AQUA REGIA FOR HG ON 7471A	<a href="#">MP84358</a>	02/05/2025	02/06/2025	Mohan Bera	None	None	Sarabjit Jaswal 02/06/2025

**FROM** 150.00000ml of M6121 + 50.00000ml of M6126 = Final Quantity: 200.000 ml



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
68	STANNOUS CHLORIDE SOLUTION	<a href="#">MP84359</a>	02/05/2025	02/06/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal 02/06/2025
<b><u>FROM</u></b> 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6121 = Final Quantity: 500.000 ml								

## CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-2196-01 / Hydroxylamine Hydrochloride, Crystal (cs/4x500g)	0000215387	06/25/2025	07/01/2019 / RICHARD	06/07/2019 / RICHARD	M4371

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3227-05 / Potassium Permanganate (2.5kg)	210800	03/31/2026	11/30/2022 / mohan	07/28/2021 / mohan	M4916

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	MSHG-10PPM / MERCURY HCl 125mL 10ug/mL	S2-HG709270	09/22/2026	05/28/2022 / mohan	01/27/2022 / mohan	M5062

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	ICV-5 / ICV ( HG ) STOCK SOLN	ICV5-0415	02/28/2025	01/02/2025 / mohan	03/30/2023 / mohan	M5532

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3980-01 / Stannous Chloride (cs/4x500g)	232820	08/31/2028	04/30/2024 / mohan	04/25/2024 / mohan	M5882

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3624-05 / Sodium Chloride, Crystal (cs/4x2.5kg)	0000281938	07/06/2026	04/30/2024 / mohan	04/25/2024 / mohan	M5884



## CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	0000275677	05/13/2025	11/13/2024 / Eman	10/13/2024 / Eman	M6121

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	06/03/2025	12/03/2024 / Janvi	11/12/2024 / Janvi	M6126

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / lwona	07/03/2024 / lwona	W3112

M5882  
 M3

## Certificate of Analysis

1 Reagent Lane  
 Fair Lawn, NJ 07410  
 201.796.7100 tel  
 201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System  
 Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120633

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	T142	Quality Test / Release Date	08/17/2023
Lot Number	232820		
Description	STANNOUS CHLORIDE, DIHYDRATE CERTIFIED ACS (Suitable for Mercury Determination)		
Country of Origin	United States	Suggested Retest Date	Aug/2028
Chemical Origin	Inorganic-non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear crystals
ASSAY	%	Inclusive Between 98 - 103	100.65
CALCIUM	%	<= 0.005	0.0017
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
IRON (Fe)	%	<= 0.003	0.0011
LEAD (Pb)	%	<= 0.01	0.0006
MERCURY (Hg)	ppm	<= 0.05	<0.05
POTASSIUM (K)	%	<= 0.005	0.0001
SODIUM (Na)	%	<= 0.01	<0.01
SOLUBILITY IN HCL	PASS/FAIL	= PASS TEST	PASS TEST
SULFATE (SO4)	PASS/FAIL	= P.T. (ABOUT 0.003%)	P.T. (ABOUT 0.003%)



Harout Sahagian - Quality Control Supervisor - Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.

If there are any questions with this certificate, please call at (800) 227-6701.

\*Based on suggested storage condition.

M4371

Hydroxylamine Hydrochloride, Crystal  
BAKER ANALYZED® A.C.S. Reagent  
Suitable for Mercury Determination  
(hydroxylammonium chloride)

Rec - 06.07.19



avantortm

Material No.: 2196-01  
Batch No.: 0000215387  
Manufactured Date: 2018/06/27  
Retest Date: 2025/06/25  
Revision No: 1

## Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (NH <sub>2</sub> OH · HCl) (by KMnO <sub>4</sub> titrn)	>= 96.0 %	99.1
Clarity of Alcohol Solution	Passes Test	PT
Residue after Ignition	<= 0.050 %	0.017
Titrate Free Acid (meq/g)	<= 0.25	0.19
Ammonium (NH <sub>4</sub> )	Passes Test	PT
Sulfur Compounds (as SO <sub>4</sub> )	<= 0.005 %	< 0.003
Trace Impurities - ACS - Heavy Metals (as Pb)	<= 5 ppm	4
Trace Impurities - Iron (Fe)	<= 5 ppm	< 3
Trace Impurities - Mercury (Hg)	<= 0.050 ppm	< 0.005

For Laboratory, Research or Manufacturing Use

Country of Origin: CN  
Packaging Site: Paris Mfg Ctr & DC

ISO

Phillipsburg, NJ 9001:2015, FSSC22000  
Paris, KY 9001:2008  
Mexico City, Mexico 9001:2008  
Gliwice, Poland 9001:2015, 13485:2012  
Selangor, Malaysia 9001:2008  
Dehradun, India, 9001:2008, 14001:2004, 13485:2003  
Mumbai, India, 9001:2015, 17025:2005  
Panoli, India 9001:2015

*James Ethier*

Jamie Ethier  
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087, U.S.A. Phone: 610.386.1700

M4913-16

MS

## Certificate of Analysis

1 Reagent Lane  
 Fair Lawn, NJ 07410  
 201.796.7100 tel  
 201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System  
 Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	P279	Quality Test / Release Date	01/12/2021
Lot Number	210306		
Description	POTASSIUM PERMANGANATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Jan/2026

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Dark purple to purple green crystals
ASSAY	%	>= 99	99.3
CHLORIDE & CHLORATE	%	<= 0.005	<0.005
IDENTIFICATION	PASS/FAIL	= PASS TEST	pass test
INSOLUBLE MATTER	%	<= 0.2	<0.2
MERCURY (Hg)	ppm	<= 0.05	<0.004
SULFATE (SO4)	%	<= 0.02	<0.02

*Julian Burton*

Julian Burton - Quality Control Manager – Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.  
 If there are any questions with this certificate, please call at (800) 227-6701.

\*Based on suggested storage condition.

300 Technology Drive  
Christiansburg, VA 24073 USA  
inorganicventures.com

P: 800-669-6799/540-585-3030  
F: 540-585-3012  
info@inorganicventures.com

MS062  
MS063  
MB

## 1.0 ACCREDITATION / REGISTRATION

**INORGANIC VENTURES** is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).



## 2.0 PRODUCT DESCRIPTION

Product Code: Single Analyte Mass Spec Solution  
Catalog Number: MSHG-10PPM  
Lot Number: S2-HG709270  
Matrix: 10% (v/v) HCl  
Value / Analyte(s): 10 µg/mL ea:  
Mercury  
Starting Material: Hg metal  
Starting Material Lot#: 1959  
Starting Material Purity: 99.9994%

## 3.0 CERTIFIED VALUES AND UNCERTAINTIES

**Certified Value:** 10.001 ± 0.053 µg/mL  
**Density:** 1.020 g/mL (measured at 20 ± 4 °C)

### Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	160921
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

### Characterization of CRM/RM by Two or More Methods

Certified Value,  $X_{CRM/RM}$ , where two or more methods of characterization are used is the weighted mean of the results:

$$X_{CRM/RM} = \sum (w_i) (X_i)$$

$X_i$  = mean of Assay Method i with standard uncertainty  $u_{char i}$

$w_i$  = the weighting factors for each method calculated using the inverse square of the variance.

$$w_i = (1/u_{char i}^2) / (\sum (1/u_{char i}^2))$$

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char} = [\sum ((w_i)^2 (u_{char i})^2)]^{1/2}$  where  $u_{char i}$  are the errors from each characterization method

$u_{bb}$  = bottle to bottle homogeneity standard uncertainty

$u_{lts}$  = long term stability standard uncertainty (storage)

$u_{ts}$  = transport stability standard uncertainty

### Characterization of CRM/RM by One Method

Certified Value,  $X_{CRM/RM}$ , where one method of characterization is used is the mean of individual results:

$$X_{CRM/RM} = (X_a) (u_{char a})$$

$X_a$  = mean of Assay Method A with

$u_{char a}$  = the standard uncertainty of characterization Method A

$$CRM/RM \text{ Expanded Uncertainty } (\pm) = U_{CRM/RM} = k (u_{char a}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$$

k = coverage factor = 2

$u_{char a}$  = the errors from characterization

$u_{bb}$  = bottle to bottle homogeneity standard uncertainty

$u_{lts}$  = long term stability standard uncertainty (storage)

$u_{ts}$  = transport stability standard uncertainty

## 4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

### 4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

### 4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

### 4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

## 5.0 TRACE METALLIC IMPURITIES (TMI ) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag	0.000011	M	Eu	<	0.000201	O	Na	0.000004	M	Se	<	0.015915	O	Zn	<	0.001510
O	Al	0.000001	O	Fe	0.000001	M	Nb	<	0.000201	O	Si	0.000005	M	Zr	<	0.000201	
M	As	<	0.000402	M	Ga	<	0.000201	M	Nd	<	0.000201	M	Sm	<	0.000201		
M	Au	<	0.003631	M	Gd	<	0.000201	M	Ni	<	0.000402	M	Sn	<	0.001007		
M	B	<	0.001208	M	Ge	<	0.000201	M	Os	<	0.000605	M	Sr	<	0.000201		
M	Ba	<	0.000201	M	Hf	<	0.000201	O	P	<	0.032370	M	Ta	<	0.000201		
M	Be	<	0.000201	s	Hg	<		M	Pb	<	0.000201	M	Tb	<	0.000201		
M	Bi	<	0.000201	M	Ho	<	0.000201	M	Pd	<	0.000403	M	Te	<	0.002216		
O	Ca	0.000007	M	In	<	0.000201	M	Pr	<	0.000201	M	Th	<	0.000201			
M	Cd	<	0.000201	M	Ir	<	0.000201	M	Pt	<	0.000402	M	Ti	<	0.000402		
M	Ce	<	0.000201	O	K	0.000020	M	Rb	<	0.000201	O	Tl	<	0.016508			
M	Co	<	0.000201	M	La	<	0.000201	M	Re	<	0.000201	M	Tm	<	0.000201		
O	Cr	<	0.003021	O	Li	<	0.000107	M	Rh	<	0.000201	M	U	<	0.008058		
M	Cs	<	0.001208	M	Lu	<	0.000201	M	Ru	<	0.000201	M	V	<	0.000201		
M	Cu	<	0.000402	O	Mg	0.000001	O	S	<	0.053950	M	W	<	0.000604			
M	Dy	<	0.000201	M	Mn	<	0.000604	M	Sb	<	0.001208	M	Y	<	0.000201		
M	Er	<	0.000201	M	Mo	0.000009	M	Sc	<	0.000201	M	Yb	<	0.000201			

M - Checked by ICP-MS      O - Checked by ICP-OES      i - Spectral Interference  
n - Not Checked For      s - Solution Standard Element

## 6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

## 7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

### 7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit [www.inorganicventures.com/TCT](http://www.inorganicventures.com/TCT)

**Atomic Weight; Valence; Coordination Number; Chemical Form in Solution** - 200.59 +2 4 Hg(OH)(aq) 1+

**Chemical Compatibility** - Stable in HNO<sub>3</sub>. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.

**Stability** - 2-100 ppb levels not stable in 1% HNO<sub>3</sub> / LDPE container, stable in 10% HNO<sub>3</sub> packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO<sub>3</sub> packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO<sub>3</sub> / LDPE container.

**Hg Containing Samples (Preparation and Solution)** - Metal (soluble in HNO<sub>3</sub>); Oxide (Soluble in HNO<sub>3</sub>); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).

**Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):**

Technique/Line	Estimated D.L.	Order	Interferences (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

## 8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

## 9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

## 10.0 QUALITY STANDARD DOCUMENTATION

### 10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

### 10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

### 10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va, 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; [inorganicventures.com](http://inorganicventures.com); [info@inorganicventures.com](mailto:info@inorganicventures.com)

## 11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

### 11.1 Certification Issue Date

September 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

### 11.2 Lot Expiration Date

- **September 22, 2026**

- The date after which this CRM/RM should not be used.
- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

### 11.3 Period of Validity

- Sealed TCT Bag Open Date: \_\_\_\_\_

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

## 12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

### Certificate Prepared By:

Uyen Truong  
Supervisor, Product Documentation



### Certificate Approved By:

Michael Booth  
Director, Quality Control



### Certifying Officer:

Paul Gaines  
Chairman / Senior Technical Director







QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY  
"An ISO 9001:2015 Certified Program"

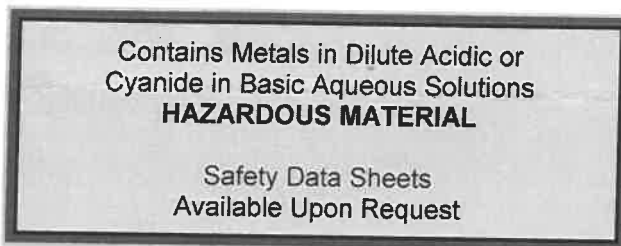
Instructions for QATS Reference Material: *Inorganic ICV Solutions*

QATS LABORATORY INORGANIC REFERENCE MATERIAL  
INITIAL CALIBRATION VERIFICATION SOLUTIONS  
(ICV1, ICV5, AND ICV6)

**NOTE:** These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocol or your contract, disregard these instructions.

**APPLICATION:** For use with the CLP SFAM01.0 SOW and revisions.

**CAUTION:** Read instructions carefully before opening bottle(s) and proceeding with the analyses.



**(A) SAMPLE DESCRIPTION**

Enclosed is a set of one (1) or more Aqueous Inorganic Reference Materials containing various analyte concentrations. ICV1 and ICV5 are in a matrix of dilute nitric acid. ICV6 is in a matrix of dilute basic solution. **For the reference material source in reporting ICVs use "USEPA". For the reference material lot number for the ICV1, ICV5, and ICV6 solutions use "ICV1-1014", "ICV5-0415", and "ICV6-0400", respectively.**

**(B) BREAKAGE OR MISSING ITEMS**

Check the contents of the shipment carefully for any broken, leaking, or missing items. Check that the seal is intact on each bottle. Refer to the enclosed chain of custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY  
APTIM Federal Services, LLC  
2700 Chandler Avenue - Building C  
Las Vegas, NV 89120

**(C) ANALYSIS OF SAMPLES**

The Initial Calibration Verification Solutions (ICVs) are to be used to evaluate the accuracy of the initial calibrations of ICP, AA, and Cyanide colorimetric instruments, and are to be used with the CLP SOWs and revisions. The values for each element in the ICVs are listed below in µg/L (ppb) for the resulting solution(s) after the dilution of the concentrate(s) according to the following instructions. Use Class 'A' glassware to prepare the solution(s).

**ICV1-1014** For ICP-AES analysis, use a 10-fold dilution by pipetting 10 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid.





**QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY**  
**"An ISO 9001:2015 Certified Program"**

**Instructions for QATS Reference Material: *Inorganic ICV Solutions***

**ICV1-1014**

For ICP-MS analysis, use a 50-fold dilution by pipetting 2 mL of the ICV1 concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

**ICV5-0415**

For the cold vapor analysis of mercury by AA, use a 100-fold dilution by pipetting 1 mL of the ICV5 concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v)  $K_2Cr_2O_7$  and 5% (v/v) nitric acid.

**ICV6-0400**

For the analysis of cyanide, use a 100-fold dilution by pipetting 1 mL of the ICV6 concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from  $K_3Fe(CN)_6$ , Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

**NOTE:** USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

**(D) CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS**

ICV1-1014		
Element	Concentration (µg/L) (after 10-fold dilution)	Concentration (µg/L) (after 50-fold dilution)
Al	2500	500
Sb	1000	200
As	1000	200
Ba	520	100
Be	510	100
Cd	510	100
Ca	10000	2000
Cr	520	100
Co	520	100
Cu	510	100
Fe	10000	2000
Pb	1000	200
Mg	6000	1200
Mn	520	100
Ni	530	110
K	9900	2000
Se	1000	200
Ag	250	50
Na	10000	2000
Tl	1000	210
V	500	100
Zn	1000	200

ICV5-0415		ICV6-0400	
Element	Concentration (µg/L) (after 100-fold dilution)	Analyte	Concentration (µg/L) (after 100-fold dilution)
Hg	4.0	CN <sup>-</sup>	99

Sodium Chloride, Crystal  
BAKER ANALYZED® A.C.S. Reagent



MS824  
MB

Material No.: 3624-01

Batch No.: 0000281938

Manufactured Date: 2021-06-07

Retest Date: 2026-06-07

Revision No.: 1

## Certificate of Analysis

Test	Specification	Result
Assay (NaCl) (by Ag titrn)	$\geq 99.0 \%$	100.0 %
pH of 5% Solution at 25°C	5.0 - 9.0	6.3
Insoluble Matter	$\leq 0.005 \%$	0.003 %
Iodide (I)	$\leq 0.002 \%$	< 0.002 %
Bromide (Br)	$\leq 0.01 \%$	< 0.01 %
Chlorate and Nitrate (as NO <sub>3</sub> )	$\leq 0.003 \%$	< 0.001 %
ACS - Phosphate (PO <sub>4</sub> )	$\leq 5$ ppm	< 5 ppm
Sulfate (SO <sub>4</sub> )	$\leq 0.004 \%$	< 0.004 %
Barium (Ba)	Passes Test	Passes Test
ACS - Heavy Metals (as Pb)	$\leq 5$ ppm	< 5 ppm
Iron (Fe)	$\leq 2$ ppm	< 1 ppm
Calcium (Ca)	$\leq 0.002 \%$	< 0.001 %
Magnesium (Mg)	$\leq 0.001 \%$	< 0.001 %
Potassium (K)	$\leq 0.005 \%$	0.001 %

For Laboratory, Research, or Manufacturing Use  
Meets Reagent Specifications for testing USP/NF monographs  
Country of Origin: USA  
Packaging Site: Paris Mfg Ctr & DC

  
Jamie Ethier  
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Mansford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700

Hydrochloric Acid, 36.5-38.0%  
BAKER INSTRA-ANALYZED® Reagent  
For Trace Metal Analysis



R → 16/13/24  
Met dig

M 6121

Material No.: 9530-33  
Batch No.: 0000275677  
Manufactured Date: 2020/12/16  
Retest Date: 2025/12/15  
Revision No: 1

## Certificate of Analysis

Test	Specification	Result
ACS - Assay (as HCl) (by acid-base titrn)	36.5 - 38.0 %	37.6
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	1
ACS - Specific Gravity at 60°/60°F	1.185 - 1.192	1.190
ACS - Bromide (Br)	<= 0.005 %	< 0.005
ACS - Extractable Organic Substances	<= 5 ppm	1
ACS - Free Chlorine (as Cl <sub>2</sub> )	<= 0.5 ppm	< 0.5
Phosphate (PO <sub>4</sub> )	<= 0.05 ppm	< 0.03
Sulfate (SO <sub>4</sub> )	<= 0.5 ppm	< 0.3
Sulfite (SO <sub>3</sub> )	<= 0.8 ppm	0.3
Ammonium (NH <sub>4</sub> )	<= 3 ppm	< 1
Trace Impurities - Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities - Aluminum (Al)	<= 10.0 ppb	< 0.2
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities - Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities - Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities - Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities - Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities - Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	29.7
Trace Impurities - Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities - Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities - Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities - Gallium (Ga)	<= 1.0 ppb	< 0.2

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Material No.: 9530-33  
Batch No.: 0000275677

Test	Specification	Result
Trace Impurities – Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities – Gold (Au)	<= 4.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities – Iron (Fe)	<= 15.0 ppb	< 1
Trace Impurities – Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities – Lithium (Li)	<= 1.0 ppb	0.2
Trace Impurities – Magnesium (Mg)	<= 10.0 ppb	0.4
Trace Impurities – Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities – Mercury (Hg)	<= 0.5 ppb	0.1
Trace Impurities – Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities – Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities – Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities – Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities – Selenium (Se), For Information Only	ppb	1.0
Trace Impurities – Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities – Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities – Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities – Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities – Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities – Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities – Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities – Titanium (Ti)	<= 1.0 ppb	0.2
Trace Impurities – Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities – Zinc (Zn)	<= 5.0 ppb	0.3
Trace Impurities – Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use

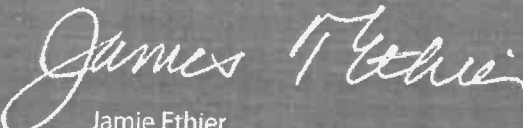
Product Information (not specifications):

Appearance (clear, fuming liquid)

Meets ACS Specifications

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr & DC

  
Jamie Ethier

Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Nitric Acid 69%  
CMOS



R → 11/12/24

M6126

Material No.: 9606-03  
Batch No.: 24D1062002  
Manufactured Date: 2024-03-26  
Retest Date: 2029-03-25  
Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
Assay (HNO <sub>3</sub> )	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO <sub>4</sub> )	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO <sub>4</sub> )	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%  
CMOS

 **avantor**<sup>TM</sup>



Material No.: 9606-03  
Batch No.: 24D1062002

Test	Specification	Result
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For Microelectronic Use

Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Croak  
Director Quality Operations, Bioscience Production

SOP ID : M7471B-Mercury-18, MSFAM01.1-Mercury in Soil-2

SDG No : YE8G3

Matrix : SOIL

Pipette ID: HG A

Balance ID : M SC-3

Filter paper ID : NA

pH Strip ID : NA

Hood ID : #1

Block ID: 1. HG HOT BLOCK#2 2. N/A

Start Digest Date: 02/05/2025 Time : 09:05 Temp : 93 °C

End Digest Date: 02/05/2025 Time : 09:35 Temp : 94 °C

Digestion tube ID: M6054

Block thermometer ID: HG-DIG#2

Dig Technician Signature:

Supervisor Signature:

Temp : 1. 93°C 2. N/A

Standardized Name	MLS USED	STD REF. # FROM LOG
ICV	100mL	MP84352
CCV	100mL	MP84354
Matrix Spike	1.0mL	MP84345
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
AQUA REGIA	5.0mL	MP84358
KMnO4 (5%)	15.0mL	MP83692
Hydroxylamine HCL (12%)	6.0mL	MP83694
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
0.0 ppb	S0	100mL	MP84346
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	100mL	MP84347
2.5 ppb	S2.5	100mL	MP84348
5.0 ppb	S5.0	100mL	MP84349
7.5 ppb	S7.5	100mL	MP84350
10.0 ppb	S10.0	100mL	MP84351
ICV	ICV	100mL	MP84352
ICB	ICB	100mL	MP84353
CCV	CCV	100mL	MP84354
CCB	CCB	100mL	MP84355
CRI	CRI	N/A	N/A
CHK STD	CHK STD	N/A	N/A

## Extraction Conformance/Non-Conformance Comments:

N/A		
Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
2/5/25 @ 10:15	MB - N/A	MB - N/A
	Preparation Group	Analysis Group



Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Comment	Prep Pos
PB166578BL	PBS578	0.50	100	NA	N/A	2-1
Q1105-01	YE8G3	0.53	100	NA	N/A	2
Q1105-02	YE8G5	0.54	100	NA	N/A	3
Q1105-03	YE8G6	0.57	100	NA	N/A	4
Q1105-04	YE8G6D	0.52	100	NA	N/A	5
Q1105-05	YE8G6S	0.55	100	NA	MP84345	6
Q1105-06	YE8H0	0.51	100	NA	N/A	7
Q1105-07	YE8H1	0.57	100	NA	N/A	8
Q1105-08	YE8H2	0.54	100	NA	N/A	9
Q1105-09	YE8H3	0.54	100	NA	N/A	10
Q1105-10	YE8H4	0.59	100	NA	N/A	11
Q1105-11	YE8H5	0.58	100	NA	N/A	12
Q1105-12	YE8H6	0.55	100	NA	N/A	13
Q1105-13	YE8E9	0.50	100	NA	N/A	14
Q1105-14	YE8F0	0.51	100	NA	N/A	15
Q1105-15	YE8F1	0.58	100	NA	N/A	16
Q1105-16	YE8F2	0.52	100	NA	N/A	17
Q1105-17	YE8F3	0.52	100	NA	N/A	18
Q1105-18	YE8F4	0.56	100	NA	N/A	19
Q1105-19	YE8F6	0.59	100	NA	N/A	20
Q1105-20	YE8G0	0.58	100	NA	N/A	21
Q1105-21	YE8G1	0.58	100	NA	N/A	22
Q1105-22	YE8G2	0.52	100	NA	N/A	23

**Instrument ID:** CV1

**Daily Analysis Runlog For Sequence/QC Batch ID # LB134574**

Review By	Sarabjit Jaswal	Review On	2/5/2025 10:05:17 PM
Supervise By	Mohan Bera	Supervise On	2/10/2025 12:01:23 PM
<b>STD. NAME</b>	<b>STD REF.#</b>		
ICAL Standard	MP84346,MP84347,MP84348,MP84349,MP84350,MP84351		
ICV Standard	MP84352		
CCV Standard	MP84354		
ICSA Standard			
CRI Standard			
LCS Standard			
Chk Standard	MP84353,MP84355,MP84359		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	02/05/25 10:55		Mohan	OK
2	S0.2	S01	CAL2	02/05/25 10:58		Mohan	OK
3	S2.5	S02	CAL3	02/05/25 11:00		Mohan	OK
4	S5	S03	CAL4	02/05/25 11:02		Mohan	OK
5	S7.5	S04	CAL5	02/05/25 11:04		Mohan	OK
6	S10	S05	CAL6	02/05/25 11:10		Mohan	OK
7	ICV084	ICV084	ICV	02/05/25 11:15		Mohan	OK
8	ICB084	ICB084	ICB	02/05/25 11:17		Mohan	OK
9	CCV021	CCV021	CCV	02/05/25 11:19		Mohan	OK
10	CCB021	CCB021	CCB	02/05/25 11:22		Mohan	OK
11	PB166578BL	PBS578	MB	02/05/25 11:24		Mohan	OK
12	Q1105-01	YE8G3	SAM	02/05/25 11:26		Mohan	OK
13	Q1105-02	YE8G5	SAM	02/05/25 11:28		Mohan	OK
14	Q1105-03	YE8G6	SAM	02/05/25 11:31		Mohan	OK
15	Q1105-04	YE8G6D	DUP	02/05/25 11:33		Mohan	OK
16	Q1105-05	YE8G6S	MS	02/05/25 11:35		Mohan	OK
17	Q1105-06	YE8H0	SAM	02/05/25 11:38		Mohan	OK
18	Q1105-07	YE8H1	SAM	02/05/25 11:40		Mohan	OK

Instrument ID: CV1

**Daily Analysis Runlog For Sequence/QC Batch ID # LB134574**

Review By	Sarabjit Jaswal	Review On	2/5/2025 10:05:17 PM
Supervise By	Mohan Bera	Supervise On	2/10/2025 12:01:23 PM
<b>STD. NAME</b>	<b>STD REF.#</b>		
ICAL Standard	MP84346,MP84347,MP84348,MP84349,MP84350,MP84351		
ICV Standard	MP84352		
CCV Standard	MP84354		
ICSA Standard			
CRI Standard			
LCS Standard			
Chk Standard	MP84353,MP84355,MP84359		

19	Q1105-08	YE8H2	SAM	02/05/25 11:42		Mohan	OK
20	Q1105-09	YE8H3	SAM	02/05/25 11:44		Mohan	OK
21	Q1105-10	YE8H4	SAM	02/05/25 11:47		Mohan	OK
22	Q1105-11	YE8H5	SAM	02/05/25 11:49		Mohan	OK
23	Q1105-12	YE8H6	SAM	02/05/25 11:51		Mohan	OK
24	Q1105-13	YE8E9	SAM	02/05/25 11:53		Mohan	OK
25	Q1105-14	YE8F0	SAM	02/05/25 11:56	Hg High	Mohan	Dilution
26	Q1105-15	YE8F1	SAM	02/05/25 11:58		Mohan	OK
27	Q1105-16	YE8F2	SAM	02/05/25 12:00	Hg High	Mohan	Dilution
28	Q1105-17	YE8F3	SAM	02/05/25 12:03	Hg High	Mohan	Dilution
29	Q1105-18	YE8F4	SAM	02/05/25 12:05		Mohan	OK
30	Q1105-19	YE8F6	SAM	02/05/25 12:07		Mohan	OK
31	CCV022	CCV022	CCV	02/05/25 12:10		Mohan	OK
32	CCB022	CCB022	CCB	02/05/25 12:12		Mohan	OK
33	Q1105-20	YE8G0	SAM	02/05/25 12:14		Mohan	OK
34	Q1105-21	YE8G1	SAM	02/05/25 12:16		Mohan	OK
35	Q1105-22	YE8G2	SAM	02/05/25 12:19		Mohan	OK
36	Q1105-14DL	YE8F0	SAM	02/05/25 12:21	5X for Hg	Mohan	Confirms
37	Q1105-16DL	YE8F2	SAM	02/05/25 12:23	2X for Hg	Mohan	Confirms
38	CCV023	CCV023	CCV	02/05/25 12:28		Mohan	OK

**Instrument ID:** CV1

**Daily Analysis Runlog For Sequence/QC Batch ID # LB134574**

Review By	Sarabjit Jaswal	Review On	2/5/2025 10:05:17 PM
Supervise By	Mohan Bera	Supervise On	2/10/2025 12:01:23 PM

STD. NAME	STD REF.#
ICAL Standard	MP84346,MP84347,MP84348,MP84349,MP84350,MP84351
ICV Standard	MP84352
CCV Standard	MP84354
ICSA Standard	
CRI Standard	
LCS Standard	
Chk Standard	MP84353,MP84355,MP84359

39	CCB023	CCB023	CCB	02/05/25 12:30		Mohan	OK
40	Q1105-17DL	YE8F3	SAM	02/05/25 12:52	5X for Hg	Mohan	Confirms
41	CCV024	CCV024	CCV	02/05/25 12:54		Mohan	OK
42	CCB024	CCB024	CCB	02/05/25 12:57		Mohan	OK