

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

A6301

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011Lab Code: ACE Case No.: 51952 MA No. : SDG No.: A6301Matrix: SOIL Lab Sample ID: Q1223-01% Solids: 26.4 Date Received: 01/30/2025Analytical Method: HgConcentration Units ($\mu\text{g/L}$, mg/L , mg/kg dry weight, μg , or $\mu\text{g/cm}^2$): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.22		01/31/2025	1711

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

A6302

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51952 MA No. : SDG No.: A6301
Matrix: SOIL Lab Sample ID: Q1223-02
% Solids: 23.8 Date Received: 01/30/2025

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.16		01/31/2025	1714

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

A6303

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEETLab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011Lab Code: ACE Case No.: 51952 MA No. : SDG No.: A6301Matrix: SOIL Lab Sample ID: Q1223-03% Solids: 52.2 Date Received: 01/30/2025Analytical Method: HgConcentration Units ($\mu\text{g/L}$, mg/L , mg/kg dry weight, μg , or $\mu\text{g/cm}^2$): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.071	J	01/31/2025	1716

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

A6304

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51952 MA No. : SDG No.: A6301
Matrix: SOIL Lab Sample ID: Q1223-04
% Solids: 50.8 Date Received: 01/30/2025
Analytical Method: Hg
Concentration Units ($\mu\text{g/L}$, mg/L , mg/kg dry weight, μg , or $\mu\text{g/cm}^2$): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.083	J	01/31/2025	1718

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

Comments:

A6305

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51952 MA No. : SDG No.: A6301
Matrix: SOIL Lab Sample ID: Q1223-05
% Solids: 24.3 Date Received: 01/30/2025
Analytical Method: Hg
Concentration Units ($\mu\text{g/L}$, mg/L , mg/kg dry weight, μg , or $\mu\text{g/cm}^2$): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.16		01/31/2025	1721

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

Comments:

A6306

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51952 MA No. : SDG No.: A6301
Matrix: SOIL Lab Sample ID: Q1223-08
% Solids: 69 Date Received: 01/30/2025

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.098	J	01/31/2025	1727

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

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

A6307

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51952 MA No. : SDG No.: A6301
Matrix: SOIL Lab Sample ID: Q1223-09
% Solids: 24.7 Date Received: 01/30/2025
Analytical Method: Hg
Concentration Units ($\mu\text{g/L}$, mg/L , mg/kg dry weight, μg , or $\mu\text{g/cm}^2$): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.23		01/31/2025	1730

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

Comments:

A6308

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEETLab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011Lab Code: ACE Case No.: 51952 MA No. : SDG No.: A6301Matrix: SOIL Lab Sample ID: Q1223-10% Solids: 44.2 Date Received: 01/30/2025Analytical Method: HgConcentration Units ($\mu\text{g/L}$, mg/L , mg/kg dry weight, μg , or $\mu\text{g/cm}^2$): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.75		01/31/2025	1732

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

A6309

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51952 MA No. : SDG No.: A6301
Matrix: SOIL Lab Sample ID: Q1223-11
% Solids: 64.9 Date Received: 01/30/2025

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.026	J	01/31/2025	1734

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

A6320

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51952 MA No. : SDG No.: A6301
Matrix: SOIL Lab Sample ID: Q1223-12
% Solids: 84 Date Received: 01/30/2025

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.032	J	01/31/2025	1736

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

EPA SAMPLE NO.

A6321

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51952 MA No. : SDG No.: A6301
Matrix: SOIL Lab Sample ID: Q1223-13
% Solids: 47.9 Date Received: 01/30/2025

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

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.12	J	01/31/2025	1739

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

A6322

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEET

Lab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011
Lab Code: ACE Case No.: 51952 MA No. : SDG No.: A6301
Matrix: SOIL Lab Sample ID: Q1223-14
% Solids: 12.9 Date Received: 01/30/2025
Analytical Method: Hg
Concentration Units ($\mu\text{g/L}$, mg/L , mg/kg dry weight, μg , or $\mu\text{g/cm}^2$): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.17		01/31/2025	1741

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

Comments:

EPA SAMPLE NO.

A6323

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEETLab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011Lab Code: ACE Case No.: 51952 MA No. : SDG No.: A6301Matrix: SOIL Lab Sample ID: Q1223-15% Solids: 28.3 Date Received: 01/30/2025Analytical Method: HgConcentration Units ($\mu\text{g/L}$, mg/L , mg/kg dry weight, μg , or $\mu\text{g/cm}^2$): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.19		01/31/2025	1743

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

A6324

FORM 1 - IN
INORGANIC ANALYSIS DATA SHEETLab Name: Alliance Technical Group, LLC Contract: 68HERH20D0011Lab Code: ACE Case No.: 51952 MA No. : SDG No.: A6301Matrix: SOIL Lab Sample ID: Q1223-16% Solids: 25.5 Date Received: 01/30/2025Analytical Method: HgConcentration Units ($\mu\text{g/L}$, mg/L , mg/kg dry weight, μg , or $\mu\text{g/cm}^2$): mg/kg

CAS No.	Analyte	Concentration	Q	Date Analyzed	Time Analyzed
7439-97-6	Mercury	0.16		01/31/2025	1745

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

LB134514

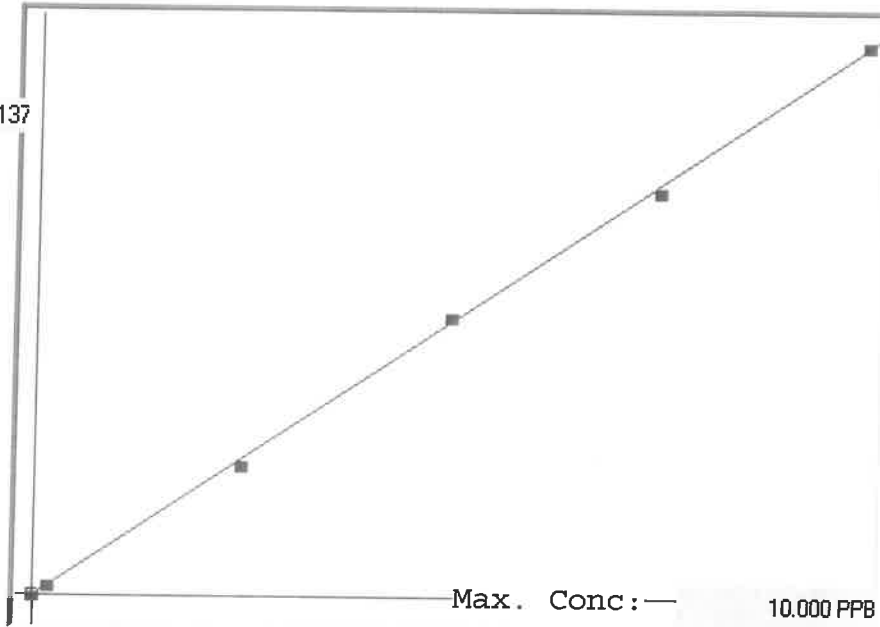
SFAM01.1

INSTRUMENT ID: CV1

Linear

μ Abs.:

52137



A= 0.0000e+000

B= 1.9235e-004 slope

C= 1.6048e-002 y-intercept

Rho= 0.9997877

Accept=Accepted

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	o/cd
0.00	0.000	0.050	0.050	174	0.000	174					1
0.05	0.050										3
0.20	0.200	0.205	0.005	982	0.0 %	982					5
2.50	2.500	2.397	-0.103	12380	0.0 %	12380					-4
5.00	5.000	5.101	0.101	26435	0.0 %	26435					2
7.50	7.500	7.403	-0.097	38401	0.0 %	38401					1
10.0	10.000	10.045	0.045	52137	0.0 %	52137					0

LB134514

INSTRUMENT ID: CV1

Sample ID	Extended ID	μ Abs.	Conc.	Std Conc	Method	Units	Date	Type
	0 S0	174	-	0	SFAM01.1	PPB	01/31/2025 16:43	Std
	0.2 S01	982	-	0.2	SFAM01.1	PPB	01/31/2025 16:46	Std
	2.5 S02	12380	-	2.5	SFAM01.1	PPB	01/31/2025 16:48	Std
	5 S03	26435	-	5	SFAM01.1	PPB	01/31/2025 16:50	Std
	7.5 S04	38401	-	7.5	SFAM01.1	PPB	01/31/2025 16:52	Std
	10 S05	52137	-	10	SFAM01.1	PPB	01/31/2025 16:55	Std
ICV078	ICV078	23075	4.4546 -		SFAM01.1	PPB	01/31/2025 17:00	SMPL
ICB078	ICB078	41	0.0239 -		SFAM01.1	PPB	01/31/2025 17:02	SMPL
CCV001	CCV001	25946	5.0068 -		SFAM01.1	PPB	01/31/2025 17:05	SMPL
CCB001	CCB001	1	0.0162 -		SFAM01.1	PPB	01/31/2025 17:07	SMPL
Q1223-01	A6301	5958	1.1621 -		SFAM01.1	PPB	01/31/2025 17:11	SMPL
Q1223-02	A6302	3948	0.7755 -		SFAM01.1	PPB	01/31/2025 17:14	SMPL
Q1223-03	A6303	955	0.1997 -		SFAM01.1	PPB	01/31/2025 17:16	SMPL
Q1223-04	A6304	1164	0.2399 -		SFAM01.1	PPB	01/31/2025 17:18	SMPL
Q1223-05	A6305	4331	0.8491 -		SFAM01.1	PPB	01/31/2025 17:21	SMPL
Q1223-06	A6305D	3979	0.7814 -		SFAM01.1	PPB	01/31/2025 17:23	SMPL
Q1223-07	A6305S	15712	3.0383 -		SFAM01.1	PPB	01/31/2025 17:25	SMPL
Q1223-08	A6306	1883	0.3782 -		SFAM01.1	PPB	01/31/2025 17:27	SMPL
Q1223-09	A6307	6207	1.21 -		SFAM01.1	PPB	01/31/2025 17:30	SMPL
Q1223-10	A6308	8899	1.7278 -		SFAM01.1	PPB	01/31/2025 17:32	SMPL
Q1223-11	A6309	353	0.0839 -		SFAM01.1	PPB	01/31/2025 17:34	SMPL
Q1223-12	A6320	609	0.1332 -		SFAM01.1	PPB	01/31/2025 17:36	SMPL
Q1223-13	A6321	1511	0.3067 -		SFAM01.1	PPB	01/31/2025 17:39	SMPL
Q1223-14	A6322	4503	0.8822 -		SFAM01.1	PPB	01/31/2025 17:41	SMPL
Q1223-15	A6323	5339	1.043 -		SFAM01.1	PPB	01/31/2025 17:43	SMPL
Q1223-16	A6324	4214	0.8266 -		SFAM01.1	PPB	01/31/2025 17:45	SMPL
PB166456BL	PBS456	12	0.0184 -		SFAM01.1	PPB	01/31/2025 17:48	SMPL
CCV002	CCV002	25435	4.9085 -		SFAM01.1	PPB	01/31/2025 17:50	SMPL
CCB002	CCB002	-4	0.0153 -		SFAM01.1	PPB	01/31/2025 17:52	SMPL

LB134741

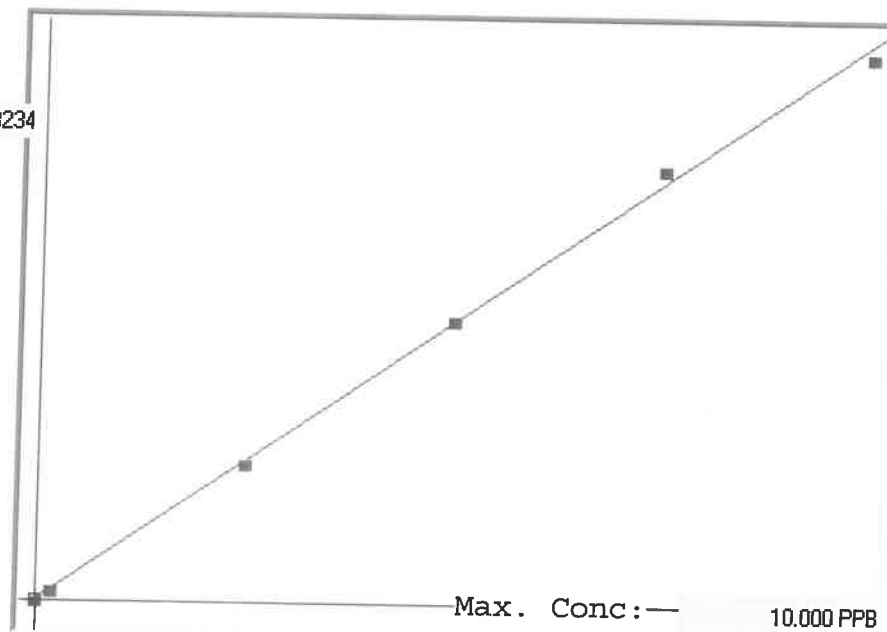
SFAM01.1

INSTRUMENT ID: CV1

Linear

μ Abs.:

43234



A= 0.0000e+000

B= 2.2697e-004 *slope*

C= -1.1753e-002 *+intercept*

Rho= 0.9993782

Accept=Accepted

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	G/D
0.00	0.000	-0.023	-0.023	-49	0.000	-49					=
0.05	0.050										
0.20	0.200	0.181	-0.019	848	0.0 %	848					-16
2.50	2.500	2.469	-0.031	10930	0.0 %	10930					-1
5.00	5.000	5.029	0.029	22207	0.0 %	22207					1
7.50	7.500	7.744	0.244	34169	0.0 %	34169					3
10.0	10.000	9.801	-0.199	43234	0.0 %	43234					-2

LB134741
INSTRUMENT ID : CV1

Sample ID	Extended ID	μ Abs.	Conc.	Std Conc	Method	Units	Date	Type
	0 S0	-49	-		0 SFAM01.1	PPB	2/18/2025 13:48	Std
	0.2 S01	848	-		0.2 SFAM01.1	PPB	2/18/2025 13:50	Std
	2.5 S02	10930	-		2.5 SFAM01.1	PPB	2/18/2025 13:53	Std
	5 S03	22207	-		5 SFAM01.1	PPB	2/18/2025 13:55	Std
	7.5 S04	34169	-		7.5 SFAM01.1	PPB	2/18/2025 13:57	Std
	10 S05	43234	-		10 SFAM01.1	PPB	2/18/2025 14:02	Std
ICV008	ICV008	16141	3.6518 -		SFAM01.1	PPB	2/18/2025 14:06	SMPL
ICB008	ICB008	-342	-0.0894 -		SFAM01.1	PPB	2/18/2025 14:08	SMPL
CCV081	CCV081	22369	5.0653 -		SFAM01.1	PPB	2/18/2025 14:10	SMPL
CCB081	CCB081	-329	-0.0864 -		SFAM01.1	PPB	2/18/2025 14:13	SMPL
PB166766BL	PBW766	-40	-0.0208 -		SFAM01.1	PPB	2/18/2025 14:15	SMPL
Q1200-01	ME2964	-20	-0.0163 -		SFAM01.1	PPB	2/18/2025 14:17	SMPL
Q1200-02	ME2964D	-65	-0.0265 -		SFAM01.1	PPB	2/18/2025 14:19	SMPL
Q1200-03	ME2964S	4648	1.0432 -		SFAM01.1	PPB	2/18/2025 14:22	SMPL
Q1200-04	ME2981	-155	-0.0469 -		SFAM01.1	PPB	2/18/2025 14:24	SMPL
Q1200-05	ME2982	-92	-0.0326 -		SFAM01.1	PPB	2/18/2025 14:26	SMPL
Q1200-06	ME2983	-66	-0.0267 -		SFAM01.1	PPB	2/18/2025 14:28	SMPL
Q1200-07	ME2984	-92	-0.0326 -		SFAM01.1	PPB	2/18/2025 14:31	SMPL
Q1200-08	ME2985	-94	-0.0331 -		SFAM01.1	PPB	2/18/2025 14:33	SMPL
Q1200-09	ME2986	-35	-0.0197 -		SFAM01.1	PPB	2/18/2025 14:35	SMPL
Q1200-10	ME2987	-246	-0.0676 -		SFAM01.1	PPB	2/18/2025 14:38	SMPL
Q1200-11	ME2988	5	-0.0106 -		SFAM01.1	PPB	2/18/2025 14:40	SMPL
Q1200-12	ME2992	29	-0.0052 -		SFAM01.1	PPB	2/18/2025 14:42	SMPL
Q1200-13	ME2994	-55	-0.0242 -		SFAM01.1	PPB	2/18/2025 14:44	SMPL
Q1200-14	ME2995	-49	-0.0229 -		SFAM01.1	PPB	2/18/2025 14:47	SMPL
Q1200-15	ME2999	-16	-0.0154 -		SFAM01.1	PPB	2/18/2025 14:49	SMPL
Q1200-16	ME2997	-54	-0.024 -		SFAM01.1	PPB	2/18/2025 14:51	SMPL
Q1200-17	ME2998	-25	-0.0174 -		SFAM01.1	PPB	2/18/2025 14:53	SMPL
Q1200-18	ME29A0	-43	-0.0215 -		SFAM01.1	PPB	2/18/2025 14:56	SMPL
Q1200-19	ME29A1	2	-0.0113 -		SFAM01.1	PPB	2/18/2025 14:58	SMPL
CCV082	CCV082	22378	5.0674 -		SFAM01.1	PPB	2/18/2025 15:00	SMPL
CCB082	CCB082	-255	-0.0696 -		SFAM01.1	PPB	2/18/2025 15:03	SMPL
Q1200-20	ME29A2	0	-0.0118 -		SFAM01.1	PPB	2/18/2025 15:05	SMPL
Q1200-21	ME29A3	-10	-0.014 -		SFAM01.1	PPB	2/18/2025 15:07	SMPL
Q1223-17	A6310	-70	-0.0276 -		SFAM01.1	PPB	2/18/2025 15:09	SMPL
PB166767BL	PBW767	330	0.0631 -		SFAM01.1	PPB	2/18/2025 15:12	SMPL
Q1204-01	ME2975	305	0.0575 -		SFAM01.1	PPB	2/18/2025 15:14	SMPL
Q1204-02	ME2975D	264	0.0482 -		SFAM01.1	PPB	2/18/2025 15:16	SMPL
Q1204-03	ME2975S	5854	1.3169 -		SFAM01.1	PPB	2/18/2025 15:18	SMPL
Q1204-04	ME2978	324	0.0618 -		SFAM01.1	PPB	2/18/2025 15:21	SMPL
Q1204-05	ME2979	470	0.0949 -		SFAM01.1	PPB	2/18/2025 15:23	SMPL
Q1204-06	ME2989	519	0.106 -		SFAM01.1	PPB	2/18/2025 15:25	SMPL
Q1204-07	ME2991	481	0.0974 -		SFAM01.1	PPB	2/18/2025 15:28	SMPL
Q1204-08	ME2996	4700	1.055 -		SFAM01.1	PPB	2/18/2025 15:30	SMPL
Q1204-09	ME29A4	70	0.0041 -		SFAM01.1	PPB	2/18/2025 15:32	SMPL
Q1204-10	ME29A5	484	0.0981 -		SFAM01.1	PPB	2/18/2025 15:34	SMPL

LB134741
INSTRUMENT ID : CV1

Q1204-11	ME29A7	329	0.0629 -	SFAM01.1	PPB	2/18/2025 15:37 SMPL
Q1204-12	ME29A8	290	0.0541 -	SFAM01.1	PPB	2/18/2025 15:39 SMPL
Q1204-13	ME29B0	379	0.0743 -	SFAM01.1	PPB	2/18/2025 15:41 SMPL
Q1204-14	ME29B1	413	0.082 -	SFAM01.1	PPB	2/18/2025 15:44 SMPL
Q1204-15	ME29A9	337	0.0647 -	SFAM01.1	PPB	2/18/2025 15:46 SMPL
Q1204-16	ME29B2	340	0.0654 -	SFAM01.1	PPB	2/18/2025 15:48 SMPL
CCV083	CCV083	21566	4.8831 -	SFAM01.1	PPB	2/18/2025 15:50 SMPL
CCB083	CCB083	-238	-0.0658 -	SFAM01.1	PPB	2/18/2025 15:53 SMPL
Q1204-17	ME29B3	320	0.0609 -	SFAM01.1	PPB	2/18/2025 15:55 SMPL
Q1204-18	ME29B4	293	0.0547 -	SFAM01.1	PPB	2/18/2025 15:57 SMPL
Q1204-19	ME29B5	355	0.0688 -	SFAM01.1	PPB	2/18/2025 15:59 SMPL
Q1204-20	ME29B8	317	0.0602 -	SFAM01.1	PPB	2/18/2025 16:02 SMPL
Q1204-21	ME29B9	360	0.07 -	SFAM01.1	PPB	2/18/2025 16:04 SMPL
Q1204-22	ME29C0	366	0.0713 -	SFAM01.1	PPB	2/18/2025 16:06 SMPL
CCV084	CCV084	21765	4.9282 -	SFAM01.1	PPB	2/18/2025 16:09 SMPL
CCB084	CCB084	-283	-0.076 -	SFAM01.1	PPB	2/18/2025 16:11 SMPL

Prep Standard - Chemical Standard Summary

Order ID : Q1223

Test : Mercury

Prepbatch ID : PB166456,PB166766,

Sequence ID/Qc Batch ID: LB134514,LB134741,

Standard ID :

MP83692,MP83694,MP84298,MP84299,MP84300,MP84301,MP84302,MP84303,MP84304,MP84305,MP84306,MP84307,MP84312,MP84313,MP84547,MP84548,MP84549,MP84550,MP84551,MP84552,MP84553,MP84554,MP84555,MP84556,MP84557,MP84561,MP84563,MP84564,MP84565,MP84566,

Chemical ID :

M4371,M4465,M4916,M5062,M5532,M5882,M5884,M6041,M6121,M6126,MP84309,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 %	MP83692	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	MP83694	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.	MP84298	01/31/2025	02/01/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Sarabjit Jaswal 02/04/2025
A)								
<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	MP84299	01/31/2025	02/01/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Sarabjit Jaswal 02/04/2025
<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	MP84300	01/31/2025	02/01/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Sarabjit Jaswal
FROM 2.50000ml of M6126 + 247.30000ml of W3112 + 0.20000ml of MP84298 = 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	MP84301	01/31/2025	02/01/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Sarabjit Jaswal
FROM 2.50000ml of M6126 + 245.00000ml of W3112 + 2.50000ml of MP84298 = 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	MP84302	01/31/2025	02/01/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 02/04/2025
<u>FROM</u>	2.50000ml of M6126 + 242.50000ml of W3112 + 5.00000ml of MP84298 = 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	MP84303	01/31/2025	02/01/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Sarabjit Jaswal
FROM 2.50000ml of M6126 + 240.00000ml of W3112 + 7.50000ml of MP84298 = 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	MP84304	01/31/2025	02/01/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Sarabjit Jaswal
FROM 2.50000ml of M6126 + 237.50000ml of W3112 + 10.00000ml of MP84298 = 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>
1346	Hg ICV SOLUTION	MP84305	01/31/2025	02/01/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Sarabjit Jaswal 02/04/2025
<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)	MP84306	01/31/2025	02/01/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG	Sarabjit Jaswal 02/04/2025

~~A)~~

<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)	MP84307	01/31/2025	02/01/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG	Sarabjit Jaswal 02/04/2025

A)

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>
887	AQUA REGIA FOR HG ON 7471A	MP84312	01/31/2025	02/01/2025	Mohan Bera	None	None	Sarabjit Jaswal
								02/04/2025

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	MP84313	01/31/2025	02/01/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Sarabjit Jaswal
								02/04/2025

FROM 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6121 = 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>
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	MP84547	02/18/2025	02/19/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Janvi Patel 02/19/2025
FROM 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	MP84548	02/18/2025	02/19/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/19/2025
<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	MP84549	02/18/2025	02/19/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Janvi Patel 02/19/2025
FROM 2.50000ml of M6126 + 247.30000ml of W3112 + 0.20000ml of MP84547 = 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	MP84550	02/18/2025	02/19/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/19/2025
<u>FROM</u>	2.50000ml of M6126 + 245.00000ml of W3112 + 2.50000ml of MP84547 = 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	MP84551	02/18/2025	02/19/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Janvi Patel 02/19/2025
A)								
<u>FROM</u>	2.50000ml of M6126 + 242.50000ml of W3112 + 5.00000ml of MP84547 = 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	MP84552	02/18/2025	02/19/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/19/2025
<u>FROM</u>	2.50000ml of M6126 + 240.00000ml of W3112 + 7.50000ml of MP84547 = 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	MP84553	02/18/2025	02/19/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Janvi Patel 02/19/2025
FROM 2.50000ml of M6126 + 237.50000ml of W3112 + 10.00000ml of MP84547 = 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>
1346	Hg ICV SOLUTION	MP84554	02/18/2025	02/19/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG)	Janvi Patel
FROM 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)	MP84555	02/18/2025	02/19/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Janvi Patel 02/19/2025
<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)	MP84556	02/18/2025	02/19/2025	Mohan Bera	None	METALS_PIPETTE_5 (HGA)	Janvi Patel 02/19/2025
FROM 485.00000ml of W3112 + 5.00000ml of M6126 + 10.00000ml of MP84547 = 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>
1352	CCB (Hg 0.00 PPB SOLUTION)	MP84557	02/18/2025	02/19/2025	Mohan Bera	None	METALS_PIPETTE_5 (HG A)	Janvi Patel 02/19/2025
<u>FROM</u> 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>
68	STANNOUS CHLORIDE SOLUTION	MP84561	02/18/2025	02/19/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Janvi Patel 02/19/2025
<u>FROM</u> 450.00000ml of W3112 + 50.00000gram of M5882 + 50.00000ml of M6121 = 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>
3965	2:1 H2SO4 : HNO3	MP84563	02/18/2025	06/03/2025	Mohan Bera	None	None	Janvi Patel
								02/19/2025

FROM 1600.00000ml of M6041 + 800.00000ml of M6126 = Final Quantity: 3200.000 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>
65	POTASSIUM PERMANGANATE SOLUTION 5 %	MP84564	02/18/2025	08/18/2025	Mohan Bera	None	None	Janvi Patel
								02/19/2025

FROM 100.00000gram of M4916 + 2000.00000ml of W3112 = Final Quantity: 2000.000 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>
66	POTASSIUM PERSULFATE SOLUTION 5 %	MP84565	02/18/2025	08/06/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Janvi Patel
								02/19/2025

FROM 100.00000ml of M4465 + 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	MP84566	02/18/2025	06/25/2025	Mohan Bera	METALS_SCALE_3 (M SC-3)	None	Janvi Patel
								02/19/2025

FROM 2000.00000ml of W3112 + 240.00000gram of M4371 + 240.00000gram of M5884 = Final Quantity: 2000.000 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-3238-05 / Potassium Persulfate (2.5kg)	0000234156	08/06/2025	07/23/2019 / mohan	07/25/2019 / manojkumar	M4465

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

CHEMICAL RECEIPT LOG BOOK

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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	08/16/2024 / mohan	08/16/2024 / mohan	M6041

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 ₂ OH · HCl) (by KMnO ₄ 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 ₄)	Passes Test	PT
Sulfur Compounds (as SO ₄)	<= 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

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

Chemical Compatibility - Stable in HNO₃. 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% HNO₃ / LDPE container, stable in 10% HNO₃ packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO₃ packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO₃ / LDPE container.

Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO₃); Oxide (Soluble in HNO₃); 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; 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"

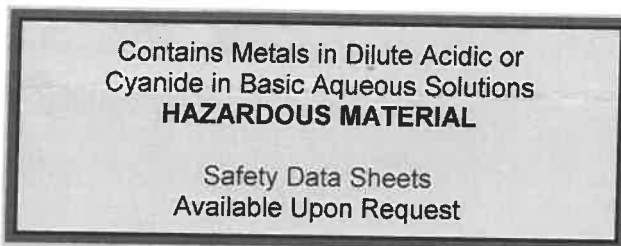
Instructions for QATS Reference Material: *Inorganic ICV Solutions*

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.



15528-32
MS

(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 $\mu\text{g/L}$ (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) K₂Cr₂O₇ 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 K₃Fe(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 ⁻	99

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



MS824
MB

Material No.: 3624-01

Batch No.: 0000281938

Manufactured Date: 2021-06-07

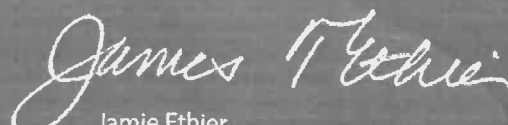
Retest Date: 2026-06-07

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 ₃)	$\leq 0.003 \%$	< 0.001 %
ACS - Phosphate (PO ₄)	≤ 5 ppm	< 5 ppm
Sulfate (SO ₄)	$\leq 0.004 \%$	< 0.004 %
Barium (Ba)	Passes Test	Passes Test
ACS - Heavy Metals (as Pb)	≤ 5 ppm	< 5 ppm
Iron (Fe)	≤ 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

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™



M 6041-4b
MS

Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H ₂ SO ₄)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO ₂)	≤ 2 ppm	< 2 ppm
Ammonium (NH ₄)	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO ₃)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO ₄)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

 **avantor™**

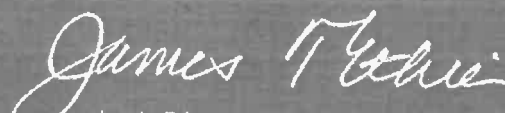


Material No.: 9673-33
Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities – Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities – Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory, Research, or Manufacturing Use

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


Jamie Ethier
Vice President Global Quality

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 ₂)	<= 0.5 ppm	< 0.5
Phosphate (PO ₄)	<= 0.05 ppm	< 0.03
Sulfate (SO ₄)	<= 0.5 ppm	< 0.3
Sulfite (SO ₃)	<= 0.8 ppm	0.3
Ammonium (NH ₄)	<= 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

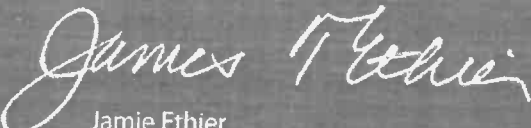
Avantor Performance Materials, LLC

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

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 ₃)	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 ₄)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO ₄)	≤ 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**TM



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

Test	Specification	Result
------	---------------	--------

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 : A6301
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#1 2. N/A

Start Digest Date: 01/31/2025 **Time :** 11:50 **Temp :** 95 °C
End Digest Date: 01/31/2025 **Time :** 12:20 **Temp :** 94 °C
Digestion tube ID: M6054
Block thermometer ID: HG-DIG#1
Dig Technician Signature: 
Supervisor Signature: 
Temp : 1. 95°C 2. N/A

Standard Name	MLS USED	STD REF. # FROM LOG
ICV	100mL	MP84305
CCV	100mL	MP84307
Matrix Spike	1.0mL	MP84298
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
AQUA REGIA	5.0mL	MP84312
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	MP84299
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	100mL	MP84300
2.5 ppb	S2.5	100mL	MP84301
5.0 ppb	S5.0	100mL	MP84302
7.5 ppb	S7.5	100mL	MP84303
10.0 ppb	S10.0	100mL	MP84304
ICV	ICV	100mL	MP84305
ICB	ICB	100mL	MP84306
CCV	CCV	100mL	MP84307
CCB	CCB	100mL	MP84308
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
1/31/25 13:25	MS - DIG - CAS	MS - ANAL - CAS
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Comment	Prep Pos
PB166456BL	PBS456	0.50	100	NA	N/A	1-1
Q1223-01	A6301	2.03	100	NA	N/A	2
Q1223-02	A6302	2.05	100	NA	N/A	3
Q1223-03	A6303	0.54	100	NA	N/A	4
Q1223-04	A6304	0.57	100	NA	N/A	5
Q1223-05	A6305	2.14	100	NA	N/A	6
Q1223-06	A6305D	2.07	100	NA	N/A	7
Q1223-07	A6305S	2.34	100	NA	MP84298	8
Q1223-08	A6306	0.56	100	NA	N/A	9
Q1223-09	A6307	2.15	100	NA	N/A	10
Q1223-10	A6308	0.52	100	NA	N/A	11
Q1223-11	A6309	0.50	100	NA	N/A	12
Q1223-12	A6320	0.50	100	NA	N/A	13
Q1223-13	A6321	0.55	100	NA	N/A	14
Q1223-14	A6322	3.95	100	NA	N/A	15
Q1223-15	A6323	1.92	100	NA	N/A	16
Q1223-16	A6324	1.98	100	NA	N/A	17

SOP ID : M7470A-Mercury-19, MSFAM01.1-Mercury in Water-2
SDG No : ME2964/A6301 **Start Digest Date:** 02/18/2025 **Time :** 10:40 **Temp :** 94 °C
Matrix : WATER **End Digest Date:** 02/18/2025 **Time :** 12:40 **Temp :** 95 °C
Pipette ID: HG A **Digestion tube ID:** M6054
Balance ID : N/A **Block thermometer ID:** HG-DIG#1
Filter paper ID : NA **Dig Technician Signature:** *MB*
pH Strip ID : M6069 **Supervisor Signature:** *12*
Hood ID : #1 **Temp :** 1. 94°C 2. N/A
Block ID: 1. HG HOT BLOCK#1 2. N/A

Standardized Name	MLS USED	STD REF. # FROM LOG
ICV	100mL	MP84554
CCV	100mL	MP84556
Matrix Spike	0.40mL	MP84547
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
HNO3/H2SO4(1:2)	7.5mL	MP84563
KMnO4 (5%)	15.0mL	MP84564
K2S2O8 (5%)	8.0mL	MP84565
Hydroxylamine HCL (12%)	6.0mL	MP84566
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	MP84548
0.05 ppb	S0.05	N/A	N/A
0.2 ppb	S0.2	100mL	MP84549
2.5 ppb	S2.5	100mL	MP84550
5.0 ppb	S5.0	100mL	MP84551
7.5 ppb	S7.5	100mL	MP84552
10.0 ppb	S10.0	100mL	MP84553
ICV	ICV	100mL	MP84554
ICB	ICB	100mL	MP84555
CCV	CCV	100mL	MP84556
CCB	CCB	100mL	MP84557
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
2/18/25 13:05	<i>MB - metal lab</i>	<i>MB - metal lab</i>
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Vol (ml)	Final Vol (ml)	pH	Comment	Prep Pos
PB166766BL	PBW766	100	100	<2	N/A	1-1
Q1200-01	ME2964	100	100	<2	N/A	2
Q1200-02	ME2964D	100	100	<2	N/A	3
Q1200-03	ME2964S	100	100	<2	N/A	4
Q1200-04	ME2981	100	100	<2	N/A	5
Q1200-05	ME2982	100	100	<2	N/A	6
Q1200-06	ME2983	100	100	<2	N/A	7
Q1200-07	ME2984	100	100	<2	N/A	8
Q1200-08	ME2985	100	100	<2	N/A	9
Q1200-09	ME2986	100	100	<2	N/A	10
Q1200-10	ME2987	100	100	<2	N/A	11
Q1200-11	ME2988	100	100	<2	N/A	12
Q1200-12	ME2992	100	100	<2	N/A	13
Q1200-13	ME2994	100	100	<2	N/A	14
Q1200-14	ME2995	100	100	<2	N/A	15
Q1200-15	ME2999	100	100	<2	N/A	16
Q1200-16	ME2997	100	100	<2	N/A	17
Q1200-17	ME2998	100	100	<2	N/A	18
Q1200-18	ME29A0	100	100	<2	N/A	19
Q1200-19	ME29A1	100	100	<2	N/A	20
Q1200-20	ME29A2	100	100	<2	N/A	21
Q1200-21	ME29A3	100	100	<2	N/A	22
Q1223-17	A6310	100	100	<2	N/A	23

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QC Batch ID # LB134514

Review By	Sarabjit Jaswal	Review On	2/3/2025 8:20:55 PM
Supervise By	Kareem Khairalla	Supervise On	2/19/2025 12:08:33 PM
STD. NAME	STD REF.#		
ICAL Standard	MP84299,MP84300,MP84301,MP84302,MP84303,MP84304		
ICV Standard	MP84305		
CCV Standard	MP84307		
ICSA Standard			
CRI Standard			
LCS Standard			
Chk Standard	MP84306, MP84309,MP84313		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	01/31/25 16:43		Mohan	OK
2	S0.2	S01	CAL2	01/31/25 16:46		Mohan	OK
3	S2.5	S02	CAL3	01/31/25 16:48		Mohan	OK
4	S5	S05	CAL4	01/31/25 16:50		Mohan	OK
5	S7.5	S04	CAL5	01/31/25 16:52		Mohan	OK
6	S10	S05	CAL6	01/31/25 16:55		Mohan	OK
7	ICV078	ICV078	ICV	01/31/25 17:00		Mohan	OK
8	ICB078	ICB078	ICB	01/31/25 17:02		Mohan	OK
9	CCV001	CCV001	CCV	01/31/25 17:05		Mohan	OK
10	CCB001	CCB001	CCB	01/31/25 17:07		Mohan	OK
11	Q1223-01	A6301	SAM	01/31/25 17:11		Mohan	OK
12	Q1223-02	A6302	SAM	01/31/25 17:14		Mohan	OK
13	Q1223-03	A6303	SAM	01/31/25 17:16		Mohan	OK
14	Q1223-04	A6304	SAM	01/31/25 17:18		Mohan	OK
15	Q1223-05	A6305	SAM	01/31/25 17:21		Mohan	OK
16	Q1223-06	A6305D	DUP	01/31/25 17:23		Mohan	OK
17	Q1223-07	A6305S	MS	01/31/25 17:25		Mohan	OK
18	Q1223-08	A6306	SAM	01/31/25 17:27		Mohan	OK

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QC Batch ID # LB134514

Review By	Sarabjit Jaswal	Review On	2/3/2025 8:20:55 PM
Supervise By	Kareem Khairalla	Supervise On	2/19/2025 12:08:33 PM
STD. NAME	STD REF.#		
ICAL Standard	MP84299,MP84300,MP84301,MP84302,MP84303,MP84304		
ICV Standard	MP84305		
CCV Standard	MP84307		
ICSA Standard			
CRI Standard			
LCS Standard			
Chk Standard	MP84306, MP84309,MP84313		

19	Q1223-09	A6307	SAM	01/31/25 17:30		Mohan	OK
20	Q1223-10	A6308	SAM	01/31/25 17:32		Mohan	OK
21	Q1223-11	A6309	SAM	01/31/25 17:34		Mohan	OK
22	Q1223-12	A6320	SAM	01/31/25 17:36		Mohan	OK
23	Q1223-13	A6321	SAM	01/31/25 17:39		Mohan	OK
24	Q1223-14	A6322	SAM	01/31/25 17:41		Mohan	OK
25	Q1223-15	A6323	SAM	01/31/25 17:43		Mohan	OK
26	Q1223-16	A6324	SAM	01/31/25 17:45		Mohan	OK
27	PB166456BL	PBS456	MB	01/31/25 17:48		Mohan	OK
28	CCV002	CCV002	CCV	01/31/25 17:50		Mohan	OK
29	CCB002	CCB002	CCB	01/31/25 17:52		Mohan	OK

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QC Batch ID # LB134741

Review By	Mohan Bera	Review On	2/19/2025 11:15:39 AM
Supervise By	Janvi Patel	Supervise On	2/19/2025 11:18:00 AM
STD. NAME	STD REF.#		
ICAL Standard	MP84548,MP84549,MP84550,MP84551,MP84552,MP84553		
ICV Standard	MP84554		
CCV Standard	MP84556		
ICSA Standard			
CRI Standard			
LCS Standard			
Chk Standard	MP84555,MP84557,MP84561		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	S0	S0	CAL1	02/18/25 13:48		Mohan	OK
2	S0.2	S01	CAL2	02/18/25 13:50		Mohan	OK
3	S2.5	S02	CAL3	02/18/25 13:53		Mohan	OK
4	S5	S05	CAL4	02/18/25 13:55		Mohan	OK
5	S7.5	S04	CAL5	02/18/25 13:57		Mohan	OK
6	S10	S05	CAL6	02/18/25 14:02		Mohan	OK
7	ICV008	ICV008	ICV	02/18/25 14:06		Mohan	OK
8	ICB008	ICB008	ICB	02/18/25 14:08		Mohan	OK
9	CCV081	CCV081	CCV	02/18/25 14:10		Mohan	OK
10	CCB081	CCB081	CCB	02/18/25 14:13		Mohan	OK
11	PB166766BL	PBW766	MB	02/18/25 14:15		Mohan	OK
12	Q1200-01	ME2964	SAM	02/18/25 14:17		Mohan	OK
13	Q1200-02	ME2964D	DUP	02/18/25 14:19		Mohan	OK
14	Q1200-03	ME2964S	MS	02/18/25 14:22		Mohan	OK
15	Q1200-04	ME2981	SAM	02/18/25 14:24		Mohan	OK
16	Q1200-05	ME2982	SAM	02/18/25 14:26		Mohan	OK
17	Q1200-06	ME2983	SAM	02/18/25 14:28		Mohan	OK
18	Q1200-07	ME2984	SAM	02/18/25 14:31		Mohan	OK

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QC Batch ID # LB134741

Review By	Mohan Bera	Review On	2/19/2025 11:15:39 AM
Supervise By	Janvi Patel	Supervise On	2/19/2025 11:18:00 AM
STD. NAME	STD REF.#		
ICAL Standard	MP84548,MP84549,MP84550,MP84551,MP84552,MP84553		
ICV Standard	MP84554		
CCV Standard	MP84556		
ICSA Standard			
CRI Standard			
LCS Standard			
Chk Standard	MP84555,MP84557,MP84561		

19	Q1200-08	ME2985	SAM	02/18/25 14:33		Mohan	OK
20	Q1200-09	ME2986	SAM	02/18/25 14:35		Mohan	OK
21	Q1200-10	ME2987	SAM	02/18/25 14:38		Mohan	OK
22	Q1200-11	ME2988	SAM	02/18/25 14:40		Mohan	OK
23	Q1200-12	ME2992	SAM	02/18/25 14:42		Mohan	OK
24	Q1200-13	ME2994	SAM	02/18/25 14:44		Mohan	OK
25	Q1200-14	ME2995	SAM	02/18/25 14:47		Mohan	OK
26	Q1200-15	ME2999	SAM	02/18/25 14:49		Mohan	OK
27	Q1200-16	ME2997	SAM	02/18/25 14:51		Mohan	OK
28	Q1200-17	ME2998	SAM	02/18/25 14:53		Mohan	OK
29	Q1200-18	ME29A0	SAM	02/18/25 14:56		Mohan	OK
30	Q1200-19	ME29A1	SAM	02/18/25 14:58		Mohan	OK
31	CCV082	CCV082	CCV	02/18/25 15:00		Mohan	OK
32	CCB082	CCB082	CCB	02/18/25 15:03		Mohan	OK
33	Q1200-20	ME29A2	SAM	02/18/25 15:05		Mohan	OK
34	Q1200-21	ME29A3	SAM	02/18/25 15:07		Mohan	OK
35	Q1223-17	A6310	SAM	02/18/25 15:09		Mohan	OK
36	PB166767BL	PBW767	MB	02/18/25 15:12		Mohan	OK
37	Q1204-01	ME2975	SAM	02/18/25 15:14		Mohan	OK
38	Q1204-02	ME2975D	DUP	02/18/25 15:16		Mohan	OK

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QC Batch ID # LB134741

Review By	Mohan Bera	Review On	2/19/2025 11:15:39 AM
Supervise By	Janvi Patel	Supervise On	2/19/2025 11:18:00 AM
STD. NAME	STD REF.#		
ICAL Standard	MP84548,MP84549,MP84550,MP84551,MP84552,MP84553		
ICV Standard	MP84554		
CCV Standard	MP84556		
ICSA Standard			
CRI Standard			
LCS Standard			
Chk Standard	MP84555,MP84557,MP84561		

39	Q1204-03	ME2975S	MS	02/18/25 15:18		Mohan	OK
40	Q1204-04	ME2978	SAM	02/18/25 15:21		Mohan	OK
41	Q1204-05	ME2979	SAM	02/18/25 15:23		Mohan	OK
42	Q1204-06	ME2989	SAM	02/18/25 15:25		Mohan	OK
43	Q1204-07	ME2991	SAM	02/18/25 15:28		Mohan	OK
44	Q1204-08	ME2996	SAM	02/18/25 15:30		Mohan	OK
45	Q1204-09	ME29A4	SAM	02/18/25 15:32		Mohan	OK
46	Q1204-10	ME29A5	SAM	02/18/25 15:34		Mohan	OK
47	Q1204-11	ME29A7	SAM	02/18/25 15:37		Mohan	OK
48	Q1204-12	ME29A8	SAM	02/18/25 15:39		Mohan	OK
49	Q1204-13	ME29B0	SAM	02/18/25 15:41		Mohan	OK
50	Q1204-14	ME29B1	SAM	02/18/25 15:44		Mohan	OK
51	Q1204-15	ME29A9	SAM	02/18/25 15:46		Mohan	OK
52	Q1204-16	ME29B2	SAM	02/18/25 15:48		Mohan	OK
53	CCV083	CCV083	CCV	02/18/25 15:50		Mohan	OK
54	CCB083	CCB083	CCB	02/18/25 15:53		Mohan	OK
55	Q1204-17	ME29B3	SAM	02/18/25 15:55		Mohan	OK
56	Q1204-18	ME29B4	SAM	02/18/25 15:57		Mohan	OK
57	Q1204-19	ME29B5	SAM	02/18/25 15:59		Mohan	OK
58	Q1204-20	ME29B8	SAM	02/18/25 16:02		Mohan	OK

Instrument ID: CV1

Daily Analysis Runlog For Sequence/QC Batch ID # LB134741

Review By	Mohan Bera	Review On	2/19/2025 11:15:39 AM
Supervise By	Janvi Patel	Supervise On	2/19/2025 11:18:00 AM
STD. NAME	STD REF.#		
ICAL Standard	MP84548,MP84549,MP84550,MP84551,MP84552,MP84553		
ICV Standard	MP84554		
CCV Standard	MP84556		
ICSA Standard			
CRI Standard			
LCS Standard			
Chk Standard	MP84555,MP84557,MP84561		

59	Q1204-21	ME29B9	SAM	02/18/25 16:04		Mohan	OK
60	Q1204-22	ME29C0	SAM	02/18/25 16:06		Mohan	OK
61	CCV084	CCV084	CCV	02/18/25 16:09		Mohan	OK
62	CCB084	CCB084	CCB	02/18/25 16:11		Mohan	OK