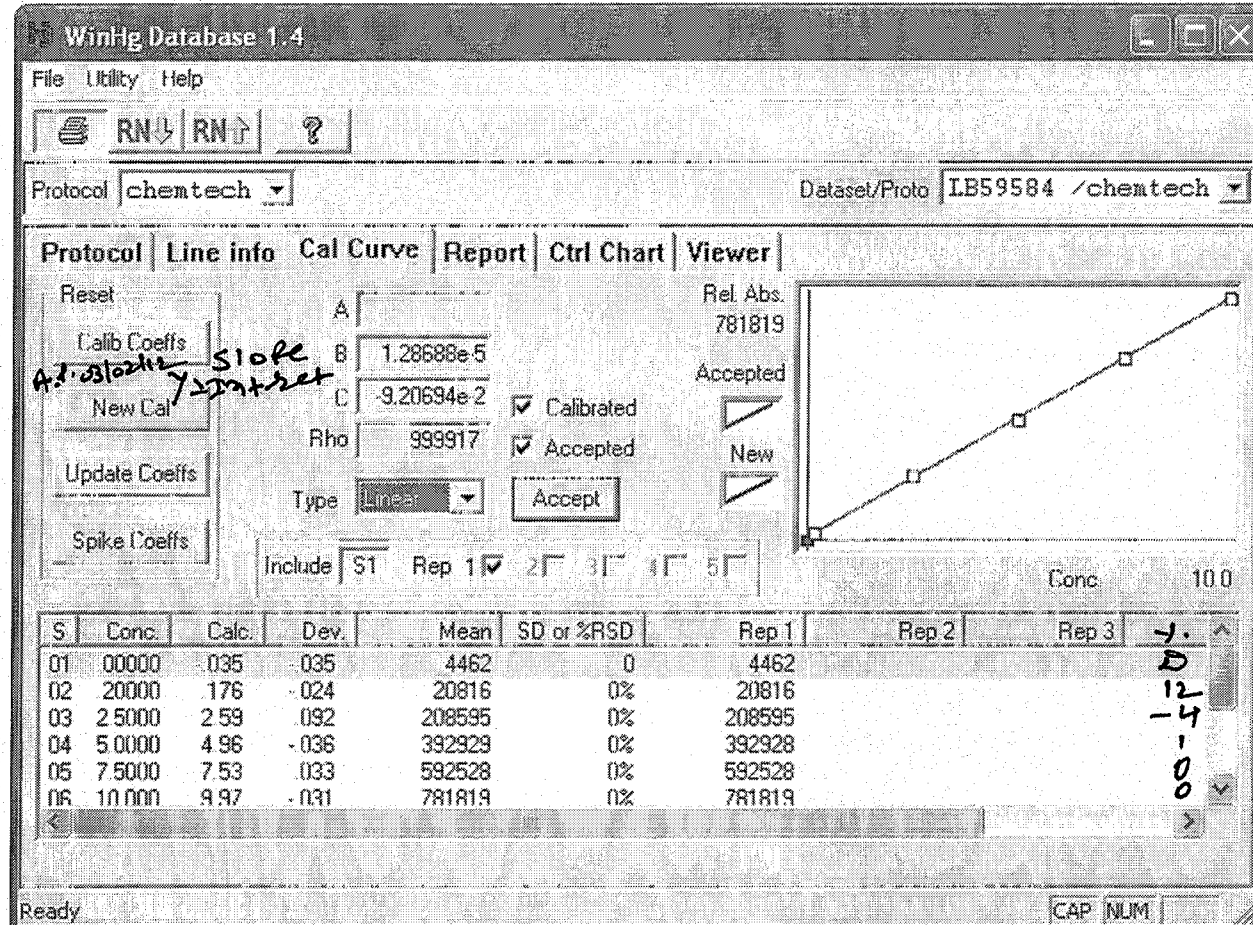


# MERCURY ANALYSIS LOGBOOK

# MERCURY ANALYSIS LOGBOOK

Date	Case Number	Batch Number	Start Time	BLK	STD1	STD2	STD3	STD4
02/22/12	D15702	PB61299	14:14	5749	21621	198466	366388	552089
	D15703	PB61300						
	D15704	PB61301						
	D15706	PB61309						
02/22/12	D15706	PB61309	13:46	2385	35249	24560	467613	70111
02/24/12	D1576	PB61343	13:05	4606	16745	193532	34946	556793
	D1577							
	D1578							
	D1596							
	D1548							
02/28/12	D1507	PB61393	13:36	-4094	16070	190182	389215	556071
	D1508	PB61394						
	D1509	PB61395						
	D1510	PB61396						
	D1511	PB61397						
02/29/12	D1510	PB61396	11:03	713	24050	184376	388155	543729
	D1511	PB61397						
02/29/12	D1616	PB61443	12:49	-3635	2408	173845	34807	464609
	D1618	PB61441						
	D1619	PB61442						
	D1628	PB61443						
	D1634							
	D1636	PB61444						
	D1647							
	D1648							
03/02/12	D1658	PB61487	14:37	4462	20816	20855	392928	591578
	D1657	PB61482						
	D1634	PB61483						

[illegible]



Instrument ID: A2 K3 59584 A.P.

Line	Conc.	Units	SD/RSD	1	2	3	4	5
<hr/>								
*** Standard: 1 Rep: 1			50	Seq: 1		14:37:49 02 Mar 12	HG	
Hg	.000	ppb	4462					
*** Standard: 2 Rep: 1			50.2	Seq: 2		14:39:51 02 Mar 12	HG	
Hg	.200	ppb	20816					
*** Standard: 3 Rep: 1			52.5	Seq: 3		14:42:12 02 Mar 12	HG	
Hg	2.50	ppb	208595					
*** Standard: 4 Rep: 1			55.0	Seq: 4		14:45:08 02 Mar 12	HG	
Hg	5.00	ppb	392928					
*** Standard: 5 Rep: 1			57.5	Seq: 5		14:47:36 02 Mar 12	HG	
Hg	7.50	ppb	592528					
*** Standard: 6 Rep: 1			510.0	Seq: 6		14:49:59 02 Mar 12	HG	
Hg	10.0	ppb	781819					

03/02/12

Line	Conc.	Units	SD/RSD	1	2	3	4	5
-----								
***	Sample ID: ICV			Seq: 7		15:18:45 02 Mar 12		HG
			ICV62					
Hg	3.96	ppb	.000	3.96				
***	Sample ID: ICB			Seq: 8		15:20:58 02 Mar 12		HG
			ICB62					
Hg	-.023	ppb	.000	-.023				
***	Sample ID: CCV			Seq: 9		15:23:00 02 Mar 12		HG
			CCV83					
Hg	4.95	ppb	.000	4.95				
***	Sample ID: CCB			Seq: 10		15:25:19 02 Mar 12		HG
			CCB83					
Hg	-.027	ppb	.000	-.027				
***	Sample ID: PB61481BL			Seq: 11		15:27:19 02 Mar 12		HG
			PBW01					
Hg	-.034	ppb	.000	-.034				
***	Sample ID: D1656-01			Seq: 12		15:29:18 02 Mar 12		HG
			MCY3P2					
Hg	-.019	ppb	.000	-.019				
***	Sample ID: D1656-02			Seq: 13		15:31:26 02 Mar 12		HG
			MCY3P3					
Hg	.268	ppb	.000	.268				
***	Sample ID: D1656-03			Seq: 14		15:33:25 02 Mar 12		HG
			MCY3P4					
Hg	-.011	ppb	.000	-.011				
***	Sample ID: D1656-04			Seq: 15		15:35:29 02 Mar 12		HG
			MCY3P5					
Hg	.002	ppb	.000	.002				
***	Sample ID: D1656-05			Seq: 16		15:37:33 02 Mar 12		HG
			MCY3P6					
Hg	.051	ppb	.000	.051				
***	Sample ID: D1656-06			Seq: 17		15:40:04 02 Mar 12		HG
			MCY3P7					
Hg	.013	ppb	.000	.013				
***	Sample ID: D1656-07			Seq: 18		15:42:08 02 Mar 12		HG
			MCY3P7D					
Hg	-.006	ppb	.000	-.006				

Line	Conc.	Units	SD/RSD	1	2	3	4	5
-----								
*** Sample ID: D1656-08				Seq: 19		15:44:29 02 Mar 12		HG
Hg	1.01	ppb	.000	1.01				
*** Sample ID: D1656-09				Seq: 20		15:46:30 02 Mar 12		HG
Hg	.012	ppb	.000	.012				
*** Sample ID: D1656-10				Seq: 21		15:48:31 02 Mar 12		HG
Hg	-.003	ppb	.000	-.003				
*** Sample ID: D1656-11				Seq: 22		15:50:32 02 Mar 12		HG
Hg	-.030	ppb	.000	-.030				
*** Sample ID: D1656-12				Seq: 23		15:52:31 02 Mar 12		HG
Hg	.017	ppb	.000	.017				
*** Sample ID: D1656-13				Seq: 24		15:54:39 02 Mar 12		HG
Hg	.010	ppb	.000	.010				
*** Sample ID: D1656-14				Seq: 25		15:56:50 02 Mar 12		HG
Hg	.014	ppb	.000	.014				
*** Sample ID: D1656-15				Seq: 26		15:58:50 02 Mar 12		HG
Hg	.012	ppb	.000	.012				
*** Sample ID: CCV				Seq: 27		16:00:50 02 Mar 12		HG
Hg	4.96	ppb	.000	4.96				
*** Sample ID: CCB				Seq: 28		16:03:06 02 Mar 12		HG
Hg	-.020	ppb	.000	-.020				
*** Sample ID: D1656-16				Seq: 29		16:05:09 02 Mar 12		HG
Hg	-.010	ppb	.000	-.010				
*** Sample ID: D1656-17				Seq: 30		16:07:07 02 Mar 12		HG
Hg	.008	ppb	.000	.008				

Line	Conc.	Units	SD/RSD	1	2	3	4	5
-----								
*** Sample ID: D1656-18				Seq: 31		16:09:16 02 Mar 12		HG
			MCY3R4					
Hg	.005	ppb	.000	.005				
*** Sample ID: D1656-19				Seq: 32		16:11:17 02 Mar 12		HG
			MCY3R5					
Hg	.007	ppb	.000	.007				
*** Sample ID: PB61482BL				Seq: 33		16:13:29 02 Mar 12		HG
			PBW01					
Hg	-.034	ppb	.000	-.034				
*** Sample ID: D1657-01				Seq: 34		16:15:32 02 Mar 12		HG
			MCY3P9					
Hg	.005	ppb	.000	.005				
*** Sample ID: D1657-02				Seq: 35		16:18:12 02 Mar 12		HG
			MCY3P9D					
Hg	-.002	ppb	.000	-.002				
*** Sample ID: D1657-03				Seq: 36		16:20:14 02 Mar 12		HG
			MCY3P9S					
Hg	.985	ppb	.000	.985				
*** Sample ID: D1657-04				Seq: 37		16:22:14 02 Mar 12		HG
			MCY3Q0					
Hg	.001	ppb	.000	.001				
*** Sample ID: D1657-05				Seq: 38		16:24:17 02 Mar 12		HG
			MCY3Q1					
Hg	-.022	ppb	.000	-.022				
*** Sample ID: D1657-06				Seq: 39		16:26:22 02 Mar 12		HG
			MCY3Q2					
Hg	-.007	ppb	.000	-.007				
*** Sample ID: D1657-07				Seq: 40		16:28:33 02 Mar 12		HG
			MCY3Q3					
Hg	-.003	ppb	.000	-.003				
*** Sample ID: D1657-08				Seq: 41		16:31:42 02 Mar 12		HG
			MCY3Q4					
Hg	.022	ppb	.000	.022				
*** Sample ID: D1657-09				Seq: 42		16:33:43 02 Mar 12		HG
			MCY3Q5					
Hg	-.027	ppb	.000	-.027				

Line	Conc.	Units	SD/RSD	1	2	3	4	5
-----								
*** Sample ID: D1657-10				Seq: 43		16:35:53 02 Mar 12		HG
			MCY3Q6					
Hg	.136	ppb	.000	.136				
*** Sample ID: D1657-11				Seq: 44		16:37:53 02 Mar 12		HG
			MCY3R8					
Hg	-.042	ppb	.000	-.042				
*** Sample ID: CCV				Seq: 45		16:40:36 02 Mar 12		HG
			CCV85					
Hg	5.08	ppb	.000	5.08				
*** Sample ID: CCB				Seq: 46		16:43:08 02 Mar 12		HG
			CCB85					
Hg	-.003	ppb	.000	-.003				
*** Sample ID: PB61483BL				Seq: 47		16:45:28 02 Mar 12		HG
			PBW01					
Hg	-.015	ppb	.000	-.015				
*** Sample ID: D1534-01				Seq: 48		16:47:48 02 Mar 12		HG
			MB9B37					
Hg	.001	ppb	.000	.001				
*** Sample ID: D1534-02				Seq: 49		16:50:10 02 Mar 12		HG
			MB9B39					
Hg	-.002	ppb	.000	-.002				
*** Sample ID: D1534-03				Seq: 50		16:52:33 02 Mar 12		HG
			MB9B40					
Hg	-.003	ppb	.000	-.003				
*** Sample ID: D1534-04				Seq: 51		16:54:33 02 Mar 12		HG
			MB9B41					
Hg	-.020	ppb	.000	-.020				
*** Sample ID: D1534-05				Seq: 52		16:57:37 02 Mar 12		HG
			MB9B46					
Hg	-.012	ppb	.000	-.012				
*** Sample ID: D1534-06				Seq: 53		16:59:36 02 Mar 12		HG
			MB9B46D					
Hg	-.012	ppb	.000	-.012				
*** Sample ID: D1534-07				Seq: 54		17:01:36 02 Mar 12		HG
			MB9B46S					
Hg	1.03	ppb	.000	1.03				

Line	Conc.	Units	SD/RSD	1	2	3	4	5
-----								
***	Sample ID: D1534-08			Seq:	55	17:04:01	02 Mar 12	HG
			MB9B48					
Hg	-.005	ppb	.000	-.005				
***	Sample ID: D1534-09			Seq:	56	17:15:35	02 Mar 12	HG
			MB9B49					
Hg	-.011	ppb	.000	-.011				
***	Sample ID: D1534-10			Seq:	57	17:23:38	02 Mar 12	HG
			MB9B43					
Hg	-.009	ppb	.000	-.009				
***	Sample ID: D1534-11			Seq:	58	17:25:37	02 Mar 12	HG
			MB9B44					
Hg	-.005	ppb	.000	-.005				
***	Sample ID: D1534-12			Seq:	59	17:28:31	02 Mar 12	HG
			MB9B45					
Hg	-.001	ppb	.000	-.001				
***	Sample ID: D1534-13			Seq:	60	17:31:03	02 Mar 12	HG
			MB9B50					
Hg	-.000	ppb	.000	-.000				
***	Sample ID: CCV			Seq:	61	17:33:54	02 Mar 12	HG
			CCV86					
Hg	5.13	ppb	.000	5.13				
***	Sample ID: CCB			Seq:	62	17:35:57	02 Mar 12	HG
			CCB86					
Hg	-.016	ppb	.000	-.016				



```

7,"",0,"02 Mar 12","14:36:00"
6,1,"Std01Rep1",1,"02 Mar 12","14:37:49","chemtech",1,1,1,"Hg ","ppb"," ",",",.000,4462
6,1,"Std02Rep1",2,"02 Mar 12","14:39:51","chemtech",2,1,1,"Hg ","ppb"," ",",",.200,20816
6,1,"Std03Rep1",3,"02 Mar 12","14:42:12","chemtech",3,1,1,"Hg ","ppb"," ",",",2.50,208595
6,1,"Std04Rep1",4,"02 Mar 12","14:45:08","chemtech",4,1,1,"Hg ","ppb"," ",",",5.00,392928
6,1,"Std05Rep1",5,"02 Mar 12","14:47:36","chemtech",5,1,1,"Hg ","ppb"," ",",",7.50,592528
6,1,"Std06Rep1",6,"02 Mar 12","14:49:59","chemtech",6,1,1,"Hg ","ppb"," ",",",10.0,781819
2,1,"ICV",7,"02 Mar 12","15:18:45","chemtech","",1,1.00,1.00,1,"","Hg ","ppb"," ",3.96,.000,315004,3.96
2,1,"ICB",8,"02 Mar 12","15:20:58","chemtech","",2,1.00,1.00,1,"","Hg ","ppb"," ",-.023,.000,5368,-.023
2,1,"CCV",9,"02 Mar 12","15:23:00","chemtech","",3,1.00,1.00,1,"","Hg ","ppb"," ",4.95,.000,392170,4.95
2,1,"CCB",10,"02 Mar 12","15:25:19","chemtech","",4,1.00,1.00,1,"","Hg ","ppb"," ",-.027,.000,5087,-.027
2,1,"PB61481BL",11,"02 Mar 12","15:27:19","chemtech","",5,1.00,1.00,1,"","Hg ","ppb"," ",-.034,.000,4476,-.034
2,1,"D1656-01",12,"02 Mar 12","15:29:18","chemtech","",6,1.00,1.00,1,"","Hg ","ppb"," ",-.019,.000,5701,-.019
2,1,"D1656-02",13,"02 Mar 12","15:31:26","chemtech","",7,1.00,1.00,1,"","Hg ","ppb"," ",.268,.000,28013,.268
2,1,"D1656-03",14,"02 Mar 12","15:33:25","chemtech","",8,1.00,1.00,1,"","Hg ","ppb"," ",-.011,.000,6266,-.011
2,1,"D1656-04",15,"02 Mar 12","15:35:29","chemtech","",9,1.00,1.00,1,"","Hg ","ppb"," ",.002,.000,7319,.002
2,1,"D1656-05",16,"02 Mar 12","15:37:33","chemtech","",10,1.00,1.00,1,"","Hg ",",",.051,.000,11140,.051
2,1,"D1656-06",17,"02 Mar 12","15:40:04","chemtech","",11,1.00,1.00,1,"","Hg ",",",.013,.000,8127,.013
2,1,"D1656-07",18,"02 Mar 12","15:42:08","chemtech","",12,1.00,1.00,1,"","Hg ",",",-.006,.000,6686,-.006
2,1,"D1656-08",19,"02 Mar 12","15:44:29","chemtech","",13,1.00,1.00,1,"","Hg ",",",1.01,.000,85337,1.01
2,1,"D1656-09",20,"02 Mar 12","15:46:30","chemtech","",14,1.00,1.00,1,"","Hg ",",",.012,.000,8070,.012
2,1,"D1656-10",21,"02 Mar 12","15:48:31","chemtech","",15,1.00,1.00,1,"","Hg ",",",-.003,.000,6925,-.003
2,1,"D1656-11",22,"02 Mar 12","15:50:32","chemtech","",16,1.00,1.00,1,"","Hg ",",",-.030,.000,4858,-.030
2,1,"D1656-12",23,"02 Mar 12","15:52:31","chemtech","",17,1.00,1.00,1,"","Hg ",",",.017,.000,8475,.017
2,1,"D1656-13",24,"02 Mar 12","15:54:39","chemtech","",18,1.00,1.00,1,"","Hg ",",",.010,.000,7961,.010
2,1,"D1656-14",25,"02 Mar 12","15:56:50","chemtech","",19,1.00,1.00,1,"","Hg ",",",.014,.000,8270,.014
2,1,"D1656-15",26,"02 Mar 12","15:58:50","chemtech","",20,1.00,1.00,1,"","Hg ",",",.012,.000,8081,.012
2,1,"CCV",27,"02 Mar 12","16:00:50","chemtech","",21,1.00,1.00,1,"","Hg ",",",4.96,.000,392680,4.96
2,1,"CCB",28,"02 Mar 12","16:03:06","chemtech","",22,1.00,1.00,1,"","Hg ",",",-.020,.000,5576,-.020
2,1,"D1656-16",29,"02 Mar 12","16:05:09","chemtech","",23,1.00,1.00,1,"","Hg ",",",-.010,.000,6400,-.010
2,1,"D1656-17",30,"02 Mar 12","16:07:07","chemtech","",24,1.00,1.00,1,"","Hg ",",",.008,.000,7807,.008
2,1,"D1656-18",31,"02 Mar 12","16:09:16","chemtech","",25,1.00,1.00,1,"","Hg ",",",.005,.000,7552,.005
2,1,"D1656-19",32,"02 Mar 12","16:11:17","chemtech","",26,1.00,1.00,1,"","Hg ",",",.007,.000,7713,.007
2,1,"PB61482BL",33,"02 Mar 12","16:13:29","chemtech","",27,1.00,1.00,1,"","Hg

```

## LB59584.PRN

```

", "ppb", " ", " ", " ", "-.034,.000,4550,-.034
2,1,"D1657-01", " ", " ", " ", ".34,"02 Mar 12", "16:15:32", "chemtech", "", 28,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", ".005,.000,7569,.005
2,1,"D1657-02", " ", " ", " ", ".35,"02 Mar 12", "16:18:12", "chemtech", "", 29,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", "-.002,.000,6999,-.002
2,1,"D1657-03", " ", " ", " ", ".36,"02 Mar 12", "16:20:14", "chemtech", "", 30,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", ".985,.000,83691,-.985
2,1,"D1657-04", " ", " ", " ", ".37,"02 Mar 12", "16:22:14", "chemtech", "", 31,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", ".001,.000,7249,-.001
2,1,"D1657-05", " ", " ", " ", ".38,"02 Mar 12", "16:24:17", "chemtech", "", 32,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", "-.022,.000,5426,-.022
2,1,"D1657-06", " ", " ", " ", ".39,"02 Mar 12", "16:26:22", "chemtech", "", 33,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", "-.007,.000,6611,-.007
2,1,"D1657-07", " ", " ", " ", ".40,"02 Mar 12", "16:28:33", "chemtech", "", 34,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", "-.003,.000,6960,-.003
2,1,"D1657-08", " ", " ", " ", ".41,"02 Mar 12", "16:31:42", "chemtech", "", 35,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", ".022,.000,8869,-.022
2,1,"D1657-09", " ", " ", " ", ".42,"02 Mar 12", "16:33:43", "chemtech", "", 36,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", "-.027,.000,5068,-.027
2,1,"D1657-10", " ", " ", " ", ".43,"02 Mar 12", "16:35:53", "chemtech", "", 37,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", ".136,.000,17745,-.136
2,1,"D1657-11", " ", " ", " ", ".44,"02 Mar 12", "16:37:53", "chemtech", "", 38,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", "-.042,.000,3882,-.042
2,1,"CCV", " ", " ", " ", ".45,"02 Mar 12", "16:40:36", "chemtech", "", 39,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", "5.08,.000,401837,5.08
2,1,"CCB", " ", " ", " ", ".46,"02 Mar 12", "16:43:08", "chemtech", "", 40,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", "-.003,.000,6941,-.003
2,1,"PB61483BL", " ", " ", " ", ".47,"02 Mar 12", "16:45:28", "chemtech", "", 41,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", "-.015,.000,6003,-.015
2,1,"D1534-01", " ", " ", " ", ".48,"02 Mar 12", "16:47:48", "chemtech", "", 42,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", ".001,.000,7247,-.001
2,1,"D1534-02", " ", " ", " ", ".49,"02 Mar 12", "16:50:10", "chemtech", "", 43,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", "-.002,.000,7023,-.002
2,1,"D1534-03", " ", " ", " ", ".50,"02 Mar 12", "16:52:33", "chemtech", "", 44,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", "-.003,.000,6897,-.003
2,1,"D1534-04", " ", " ", " ", ".51,"02 Mar 12", "16:54:33", "chemtech", "", 1,1.00,1.00,1,"", "Hg ", "ppb", "
", " ", "-.020,.000,5615,-.020
2,1,"D1534-05", " ", " ", " ", ".52,"02 Mar 12", "16:57:37", "chemtech", "", 2,1.00,1.00,1,"", "Hg ", "ppb", "
", " ", "-.012,.000,6203,-.012
2,1,"D1534-06", " ", " ", " ", ".53,"02 Mar 12", "16:59:36", "chemtech", "", 3,1.00,1.00,1,"", "Hg ", "ppb", "
", " ", "-.012,.000,6190,-.012
2,1,"D1534-07", " ", " ", " ", ".54,"02 Mar 12", "17:01:36", "chemtech", "", 4,1.00,1.00,1,"", "Hg ", "ppb", "
", " ", "1.03,.000,87121,1.03
2,1,"D1534-08", " ", " ", " ", ".55,"02 Mar 12", "17:04:01", "chemtech", "", 5,1.00,1.00,1,"", "Hg ", "ppb", "
", " ", "-.005,.000,6789,-.005
2,1,"D1534-09", " ", " ", " ", ".56,"02 Mar 12", "17:15:35", "chemtech", "", 6,1.00,1.00,1,"", "Hg ", "ppb", "
", " ", "-.011,.000,6324,-.011
2,1,"D1534-10", " ", " ", " ", ".57,"02 Mar 12", "17:23:38", "chemtech", "", 7,1.00,1.00,1,"", "Hg ", "ppb", "
", " ", "-.009,.000,6454,-.009
2,1,"D1534-11", " ", " ", " ", ".58,"02 Mar 12", "17:25:37", "chemtech", "", 8,1.00,1.00,1,"", "Hg ", "ppb", "
", " ", "-.005,.000,6740,-.005
2,1,"D1534-12", " ", " ", " ", ".59,"02 Mar 12", "17:28:31", "chemtech", "", 9,1.00,1.00,1,"", "Hg ", "ppb", "
", " ", "-.001,.000,7075,-.001
2,1,"D1534-13", " ", " ", " ", ".60,"02 Mar 12", "17:31:03", "chemtech", "", 10,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", "-.000,.000,7132,-.000
2,1,"CCV", " ", " ", " ", ".61,"02 Mar 12", "17:33:54", "chemtech", "", 11,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", "5.13,.000,405906,5.13
2,1,"CCB", " ", " ", " ", ".62,"02 Mar 12", "17:35:57", "chemtech", "", 12,1.00,1.00,1,"", "Hg
", "ppb", " ", " ", " ", "-.016,.000,5942,-.016

```

# CHEMTECH

284, Sheffield Street, Mountainside NJ 07092 (908) 789 - 8900

## Metals STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
871	MERCURY INTERMEDIATE B 250PPB WORKING STD.	<a href="#">MP10706</a>	03/01/2012	03/02/2012	narendra
<b>FROM</b> 1.000ml of Nitric Acid, Instra-Analyzed (cs/4x2.5L)(M2264) + 2000.000ml of Mercury Stock Solution, 10 ug/ml(M2310) + 96.500ml of DI Water(W1152) = Final Quantity: 100.000 ml					

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
1340	Hg 0.00 PPB STD	<a href="#">MP10707</a>	03/01/2012	03/02/2012	narendra
<b>FROM</b> 2.500ml of Nitric Acid, Instra-Analyzed (cs/4x2.5L)(M2264) + 247.500ml of DI Water(W1152) = Final Quantity: 250.000 ml					

# CHEMTECH

284, Sheffield Street, Mountainside NJ 07092 (908) 789 - 8900

## Metals STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
1341	Hg 0.2 PPB STD	<a href="#">MP10708</a>	03/01/2012	03/02/2012	narendra
<b>FROM</b> 2.500ml of Nitric Acid, Instra-Analyzed (cs/4x2.5L)(M2264) + 247.300ml of DI Water(W1152) + 0.200ml of MERCURY INTERMEDIATE B 250PPB WORKING STD.(MP10706) = Final Quantity: 250.000 ml					

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
1342	Hg 2.5 PPB STD	<a href="#">MP10709</a>	03/01/2012	03/02/2012	narendra
<b>FROM</b> 2.500ml of Nitric Acid, Instra-Analyzed (cs/4x2.5L)(M2264) + 245.000ml of DI Water(W1152) + 2.500ml of MERCURY INTERMEDIATE B 250PPB WORKING STD.(MP10706) = Final Quantity: 250.000 ml					

# CHEMTECH

284, Sheffield Street, Mountainside NJ 07092 (908) 789 - 8900

## Metals STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
1343	Hg 5.0 PPB STD	<a href="#">MP10710</a>	03/01/2012	03/02/2012	narendra
<b>FROM</b> 2.500ml of Nitric Acid, Instra-Analyzed (cs/4x2.5L)(M2264) + 242.500ml of DI Water(W1152) + 5.000ml of MERCURY INTERMEDIATE B 250PPB WORKING STD.(MP10706) = Final Quantity: 250.000 ml					

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
1344	Hg 7.5 PPB STD	<a href="#">MP10711</a>	03/01/2012	03/02/2012	narendra
<b>FROM</b> 2.500ml of Nitric Acid, Instra-Analyzed (cs/4x2.5L)(M2264) + 240.000ml of DI Water(W1152) + 7.500ml of MERCURY INTERMEDIATE B 250PPB WORKING STD.(MP10706) = Final Quantity: 250.000 ml					

# CHEMTECH

284, Sheffield Street, Mountainside NJ 07092 (908) 789 - 8900

## Metals STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
1345	Hg 10.0 PPB STD	<a href="#">MP10712</a>	03/01/2012	03/02/2012	narendra
<b>FROM</b> 2.500ml of Nitric Acid, Instra-Analyzed (cs/4x2.5L)(M2264) + 240.000ml of DI Water(W1152) + 100.000ml of MERCURY INTERMEDIATE B 250PPB WORKING STD.(MP10706) = Final Quantity: 250.000 ml					

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
1346	Hg ICV SOLUTION	<a href="#">MP10713</a>	03/01/2012	03/02/2012	narendra
<b>FROM</b> 2.500ml of Nitric Acid, Instra-Analyzed (cs/4x2.5L)(W1586) + 240.000ml of ICV ( HG ) STOCK SOLN(M2099) + 247.300ml of DI Water(W1152) = Final Quantity: 250.000 ml					

# CHEMTECH

284, Sheffield Street, Mountainside NJ 07092 (908) 789 - 8900

## Metals STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
1351	ICB (Hg 0.00 PPB SOLUTION)	<a href="#">MP10714</a>	03/01/2012	03/02/2012	narendra
<b>FROM</b> 2.500ml of Nitric Acid, Instra-Analyzed (cs/4x2.5L)(M2264) + 247.500ml of DI Water(W1152) = Final Quantity: 250.000 ml					

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
1358	CCV (Hg 5.0 PPB SOLUTION)	<a href="#">MP10715</a>	03/01/2012	03/02/2012	narendra
<b>FROM</b> 485.000ml of DI Water(W1152) + 5.000ml of Nitric Acid, Instra-Analyzed (cs/4x2.5L)(M2264) + 10.000ml of MERCURY INTERMEDIATE B 250PPB WORKING STD.(MP10706) = Final Quantity: 500.000 ml					

# CHEMTECH

284, Sheffield Street, Mountainside NJ 07092 (908) 789 - 8900

## Metals STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
1352	CCB (Hg 0.00 PPB SOLUTION)	<a href="#">MP10716</a>	03/01/2012	03/02/2012	narendra
<b>FROM</b> 495.000ml of DI Water(W1152) + 5.000ml of Nitric Acid, Instra-Analyzed (cs/4x2.5L)(M2264) = Final Quantity: 500.000 ml					



# CHEMTECH

284, Sheffield Street, Mountainside NJ 07092 (908) 789 - 8900

## Metals STANDARD PREPARATION LOG

RecipeID	NAME	NO.	Prep Date	Expiration D	Prepared By
68	STANNOUS CHLORIDE SOLUTION	<a href="#">MP10721</a>	03/02/2012	03/03/2012	ALPA
<b>FROM</b> 450.000ml of DI Water(W1152) + 50.000gram of Stannous Chloride (cs/4x500g)(M2180) + 50.000ml of Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)(M2309) = Final Quantity: 500.000 ml					

**QATS INORGANIC REFERENCE MATERIAL  
INITIAL CALIBRATION VERIFICATION SOLUTIONS  
(ICVs)**

*m 2097 - m2101*

*see data  
11/16/11  
A.P.*

ICV4-0499	
Element	Concentration (µg/L) (after 10 fold dilution)
Cd	98.7
Pb	99.8
Ag	101.9
Tl	98.8

ICV5-0508	
Element	Concentration (µg/L) (after 100 fold dilution)
Hg	4.0

ICV6-0400	
Element	Concentration (µg/L) (after 100 fold dilution)
CN-	99

# PLASMA-PURE™

## Standard Certificate

Catalog Number: 610-8002

Lot Number: 1199004

Starting Material: 99.999% purity Hg metal

Diluent/Matrix: 5% HNO<sub>3</sub>

Preparation Date: Dec-11

Expiration Date: Dec-12

Element

Concentration

### Mercury Stock Solution

Hg

10.00 ± 0.02 µg/ml

M2310  
Rec. date: 01/18/12  
A-E

Residual Impurities \*

Concentration

None Detected

\* Impurities were determined via ICP Emission Spectroscopy. Only elements detected are reported.

#### Traceability

1. This standard is certified using wet chemistry assay procedures and/or plasma emission spectroscopy, traceable to primary or well-characterized secondary standards. Traceable to: NIST SRM 3133, Hg  
Lot#991304
2. Analytical balances are routinely calibrated using NIST weight sets.

#### Certification

Leeman Labs, Inc. certifies that PLASMA-PURE Standards have been formulated to the concentrations listed above (±0.5% of reported value). This certification does not apply and will be considered null and void if PLASMA-PURE Standards are used in a manner or in an environment not consistent with their intended purpose or are modified by the Customer in any manner.

#### Limitations

THE ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

#### Limitation of Liability

In no event shall Leeman Labs, Inc. be liable for any indirect, incidental, special, or consequential damages, including loss of profits, revenue, or used incurred by Customer or any third party, whether in an action in contract or tort. Leeman Labs Inc's liability for damages hereunder shall in no event exceed the amounts paid for the PLASMA-PURE Standards.

QC Analyst: *SUS*

Date: December 1, 2011



**TELEDYNE Leeman Labs**

A Teledyne Technologies Company  
6 Wentworth Drive Hudson, NH 03051  
Tel: 603.886.8400 Fax: 603.886.9141