CHEMTECH

Instrument ID: CN

284 Sheffield Street, Mountainside, New Jersey 07092 Phone : 908 789 8900 Fax : 908 789 8922

Daily Analysis Runlog For Sequence/QCBatch ID # LB86162

Review By

Review On

SubDirectory LB86162

Test : Cyanide

STD. NAME	STD REF.#
ICAL Standard	WP53338,WP53337,WP53336,WP653335,WP53334,WP53333
ICV Standard	WP53339
CCV Standard	WP53340
ICSA Standard	
CRI Standard	
LCS Standard	
Chk Standard	WP53341,WP50159,WP51626

Sr#	SampleId	ClientID	QcType	Date	Comment	Status
1	S0.0	S0.0	CAL1	03/06/17 09:38		OK
2	S5.0	S5.0	CAL2	03/06/17 09:38		OK
3	S10.0	S10.0	CAL3	03/06/17 09:38		OK
4	S100.0	S100.0	CAL4	03/06/17 09:38		OK
5	S250.0	S250.0	CAL5	03/06/17 09:38		OK
6	S500.0	S500.0	CAL6	03/06/17 09:38		OK
7	ICV	ICV	ICV	03/06/17 10:04		OK
8	ICB	ICB	ICB	03/06/17 10:04		OK
9	CCV001	CCV001	CCV	03/06/17 10:04		OK
10	CCB001	CCB001	CCB	03/06/17 10:04		OK
11	PB97331BL	PBS006	MB	03/06/17 10:04		OK
12	I2032-01	MBC874	SAM	03/06/17 10:04		OK
13	I2032-02	MBC874D	DUP	03/06/17 10:04		OK
14	I2032-03	MBC874S	MS	03/06/17 10:04		OK
15	I2032-04	MBC875	SAM	03/06/17 10:04		OK
16	I2032-05	MBC876	SAM	03/06/17 10:04		OK
17	I2032-06	MBC877	SAM	03/06/17 10:04		OK
18	CCV002	CCV002	CCV	03/06/17 10:08		OK
19	CCB002	CCB002	CCB	03/06/17 10:08		OK

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB86162 **SDG No.:** LB86162

Contract: **Lab Code:** CHEM **Case No.:** LB86162 **SAS No.:** LB86162

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value	% Recovery	% RSD	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV	Cyanide	92.4	99	93	0	85 - 115	CN	03/06/2017	10:04	LB86162

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Metals

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB86162 **SDG No.:** LB86162

Contract: **Lab Code:** CHEM **Case No.:** LB86162 **SAS No.:** LB86162

Initial Calibration Source:

Continuing Calibration Source:

Sample ID	Analyte	Result ug/L	True Value	% Recovery	% RSD	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV001	Cyanide	241	250	96	0	85 - 115	CN	03/06/2017	10:04	LB86162
CCV002	Cyanide	254	250	102	0	85 - 115	CN	03/06/2017	10:08	LB86162

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB86162 **SDG No.:** LB86162

Contract: **Lab Code:** CHEM **Case No.:** LB86162 **SAS No.:** LB86162

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB	Cyanide	0.83	+/-10.0	U	5.0	10.0	CN	03/06/2017	10:04	LB86162

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB86162 **SDG No.:** LB86162

Contract: **Lab Code:** CHEM **Case No.:** LB86162 **SAS No.:** LB86162

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB001	Cyanide	0.94	+/-10.0	U	5.0	10.0	CN	03/06/2017	10:04	LB86162
CCB002	Cyanide	0.61	+/-10.0	U	5.0	10.0	CN	03/06/2017	10:08	LB86162

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Metals

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB86162 **SDG No.:** LB86162

Contract: **Lab Code:** CHEM **Case No.:** LB86162 **SAS No.:** LB86162

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number

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Report of Analysis

Client:		Date Collected:	2/28/2017 12:00:00 AM
Project:	LB86162	Date Received:	2/28/2017 12:00:00 AM
Client Sample ID:	MBC874	SDG No.:	LB86162
Lab Sample ID:	I2032-01	Matrix:	Solid
Level (low/med):	low	% Solid:	62.2

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.16	J	1	0.084	0.019	0.77	mg/kg	03/03/2017	03/06/2017	ISM02.2_CN

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Report of Analysis

Client:		Date Collected:	2/28/2017 12:00:00 AM
Project:	LB86162	Date Received:	2/28/2017 12:00:00 AM
Client Sample ID:	MBC875	SDG No.:	LB86162
Lab Sample ID:	I2032-04	Matrix:	Solid
Level (low/med):	low	% Solid:	62.8

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.097	J	1	0.083	0.019	0.76	mg/kg	03/03/2017	03/06/2017	ISM02.2_CN

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Report of Analysis

Client:		Date Collected:	2/28/2017 12:00:00 AM
Project:	LB86162	Date Received:	2/28/2017 12:00:00 AM
Client Sample ID:	MBC876	SDG No.:	LB86162
Lab Sample ID:	I2032-05	Matrix:	Solid
Level (low/med):	low	% Solid:	63.8

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.11	J	1	0.082	0.019	0.75	mg/kg	03/03/2017	03/06/2017	ISM02.2_CN

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Report of Analysis

Client:		Date Collected:	2/28/2017 12:00:00 AM
Project:	LB86162	Date Received:	2/28/2017 12:00:00 AM
Client Sample ID:	MBC877	SDG No.:	LB86162
Lab Sample ID:	I2032-06	Matrix:	Solid
Level (low/med):	low	% Solid:	60.6

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
57-12-5	Cyanide	0.055	U	1	0.086	0.02	0.79	mg/kg	03/03/2017	03/06/2017	ISM02.2_CN

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Report of Analysis

Client:		Date Collected:	2/28/2017 12:00:00 AM
Project:	LB86162	Date Received:	2/28/2017 12:00:00 AM
Client Sample ID:	MBC877	SDG No.:	LB86162
Lab Sample ID:	I2032-06	Matrix:	Solid
Level (low/med):	low	% Solid:	60.6

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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PREPARATION BLANK SUMMARY

Client: LB86162 **SDG No.:** LB86162

Instrument: CN

Sample ID	Analyte	Result (mg/kg)	Acceptance Limit	Conc Qual	LOD mg/kg	CRQL mg/kg	M	Analysis Date	Analysis Time	Run
PB97331BL		**SOLID**		**Batch Number:**		**PB97331**		**Prep Date:**	**03/03/2017**	
	Cyanide	0.036	<0.5	U	0.013	0.5	CN	03/06/2017	10:04	LB86162

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MATRIX SPIKE SUMMARY

client: LB86162 **level:** low **sdg no.:** LB86162

contract: **lab code:** CHEM **case no.:** LB86162 **sas no.:** LB86162

matrix: Solid **sample id:** I2032-01 **client id:** MBC874S

Percent Solids for Sample: 62.2 **Spiked ID:** I2032-03 **Percent Solids for Spike Sample:** 62.2

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Cyanide	mg/kg	75 - 125	6.3		0.16	J	8	77		CN

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DUPLICATE SAMPLE SUMMARY

Client: LB86162 **Level:** LOW **SDG No.:** LB86162

Contract: **Lab Code:** CHEM **Case No.:** LB86162 **SAS No.:** LB86162

Matrix: Solid **Sample ID:** I2032-01 **Client ID:** MBC874D

Percent Solids for Sample: 62.2 **Duplicate ID** I2032-02 **Percent Solids for Spike Sample:** 62.2

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Cyanide	mg/kg	20	0.16	J	0.18	J	12		CN

"A control limit of ±20% RPD for each matrix applies for sample values greater than 10 times Detection Limit"

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SAMPLE PREPARATION SUMMARY

Client: LB86162 **SDG No.:** LB86162

Contract: **Lab Code:** CHEM **Method:**

Case No.: LB86162 **SAS No.:** LB86162

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(g)	Final Sample Volume (mL)	Percent Solids
Batch Number:	**PB97331**						
PB97331BL	PBS006	MB	SOLID	03/06/2017	1.00	50.0	100.00
I2032-01	MBC874	SAM	SOLID	03/06/2017	1.05	50.0	62.20
I2032-02	MBC874D	DUP	SOLID	03/06/2017	1.05	50.0	62.20
I2032-03	MBC874S	MS	SOLID	03/06/2017	1.01	50.0	62.20
I2032-04	MBC875	SAM	SOLID	03/06/2017	1.05	50.0	62.80
I2032-05	MBC876	SAM	SOLID	03/06/2017	1.05	50.0	63.80
I2032-06	MBC877	SAM	SOLID	03/06/2017	1.05	50.0	60.60