



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Report of Analysis

Client:		Date Collected:	7/20/2017 12:00:00 AM
Project:	LB88988	Date Received:	7/20/2017 12:00:00 AM
Client Sample ID:	265434-265578-COMP	SDG No.:	LB88988
Lab Sample ID:	I4354-03	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Phenolics	0.0021	J	1	0.002		0.05	mg/L	07/24/2017	07/25/2017	420.1



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Report of Analysis

Client:		Date Collected:	7/21/2017 12:00:00 AM
Project:	LB88988	Date Received:	7/21/2017 12:00:00 AM
Client Sample ID:	FRAC-TANK-260783	SDG No.:	LB88988
Lab Sample ID:	I4402-07	Matrix:	WATER
Level (low/med):	low	% Solid:	0

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Phenolics	0.016	J	1	0.002		0.05	mg/L	07/24/2017	07/25/2017	420.1



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Report of Analysis

Client:		Date Collected:	7/21/2017 12:00:00 AM
Project:	LB88988	Date Received:	7/21/2017 12:00:00 AM
Client Sample ID:	FRAC-TANK-260783	SDG No.:	LB88988
Lab Sample ID:	I4402-07	Matrix:	WATER
Level (low/med):	low	% Solid:	0

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



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB88988

SDG No.: LB88988

Contract:

Lab Code: CHEM

Case No.: LB88988

SAS No.: LB88988

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB1	Phenolics	-0.0074	+/-0.05	U		0.05		07/25/2017	13:24	LB88988



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB88988

SDG No.: LB88988

Contract:

Lab Code: CHEM

Case No.: LB88988

SAS No.: LB88988

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB1	Phenolics	-0.007	+/-0.05	U		0.05		07/25/2017	13:24	LB88988
CCB2	Phenolics	-0.0028	+/-0.05	U		0.05		07/25/2017	13:32	LB88988



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB88988

SDG No.: LB88988

Contract: Lab Code: CHEM

Case No.: LB88988

SAS No.: LB88988

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
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- 3b -
PREPARATION BLANK SUMMARY

Client: LB88988

SDG No.: LB88988

Instrument: Konelab 20

Sample ID	Analyte	Result (mg/L)	Acceptance Limit	Conc Qual	LOD mg/L	CRQL mg/L	M	Analysis Date	Analysis Time	Run
PB100912BL	Phenolics	WATER -0.0094	<0.05	Batch Number: U		PB100912 0.05		Prep Date: 07/25/2017	07/24/2017 13:24	LB88988



GENCHEM
- 5a -
MATRIX SPIKE SUMMARY

client: LB88988 level: low sdg no.: LB88988
contract: lab code: CHEM case no.: LB88988 sas no.: LB88988
matrix: WATER sample id: I4354-03 client id: 265434-265578-COMPMS
Percent Solids for Sample: 0 Spiked ID: I4354-03MS Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Phenolics	mg/L	75 - 125	0.96		0.0021	J	1	96		



GENCHEM
- 5a -
MATRIX SPIKE DUPLICATE SUMMARY

client: LB88988 level: low sdg no.: LB88988
contract: lab code: CHEM case no.: LB88988 sas no.: LB88988
matrix: WATER sample id: I4354-03 client id: 265434-265578-COMPMSD
Percent Solids for Sample: 0 Spiked ID: I4354-03MSD Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Phenolics	mg/L	75 - 125	0.97		0.0021	J	1	97		

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DUPLICATE SAMPLE SUMMARY

Client: LB88988 **Level:** LOW **SDG No.:** LB88988
Contract: **Lab Code:** CHEM **Case No.:** LB88988 **SAS No.:** LB88988
Matrix: WATER **Sample ID:** I4354-03 **Client ID:** 265434-265578-COMPDUP
Percent Solids for Sample: 0 **Duplicate ID** I4354-03DUP **Percent Solids for Spike Sample:** 0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Phenolics	mg/L	20	0.0021	J		0	U	200.0	*

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DUPLICATE SAMPLE SUMMARY

Client: LB88988 Level: LOW SDG No.: LB88988
Contract: Lab Code: CHEM Case No.: LB88988 SAS No.: LB88988
Matrix: WATER Sample ID: I4354-03MS Client ID: 265434-265578-COMPMSD
Percent Solids for Sample: 0 Duplicate ID I4354-03MSD Percent Solids for Spike Sample: 0

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Phenolics	mg/L	20	0.96		0.97		1		

“A control limit of $\pm 20\%$ RPD for each matrix applies for sample values greater than 10 times Detection Limit”



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LABORATORY CONTROL SAMPLE SUMMARY

Client: LB88988

SDG No.: LB88988

Contract:

Lab Code: CHEM

Case No.: LB88988

SAS No.: LB88988

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB100912BS Phenolics	mg/L	1	0.95		95	80 - 120	



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- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB88988

SDG No.: LB88988

Contract:

Lab Code: CHEM

Case No.: LB88988

SAS No.: LB88988

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
ICB1	Phenolics	-0.0074	+/-0.05	U		0.05		07/25/2017	13:24	LB88988



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: LB88988

SDG No.: LB88988

Contract:

Lab Code: CHEM

Case No.: LB88988

SAS No.: LB88988

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
CCB1	Phenolics	-0.007	+/-0.05	U		0.05		07/25/2017	13:24	LB88988
CCB2	Phenolics	-0.0028	+/-0.05	U		0.05		07/25/2017	13:32	LB88988



GENCHEM

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client:

LB88988

SDG No.:

LB88988

Contract:

Lab Code:

CHEM

Case No.:

LB88988

SAS No.:

LB88988

Sample ID	Analyte	Result mg/L	Acceptance Limit	Conc Qual	LOD	CRQL	M	Analysis Date	Analysis Time	Run Number
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Daily Analysis Runlog For Sequence/QC Batch ID # LB88988

Review By		Review On				
SubDirectory		LB88988		Test : Phenolics		
STD. NAME		STD REF.#				
ICAL Standard		WP56664				
ICV Standard		WP56665				
CCV Standard		WP56666				
ICSA Standard		N/A				
CRI Standard		N/A				
LCS Standard		WP56615				
Chk Standard		WP56667,WP53648,WP53649				
Sr#	SampleID	ClientID	QcType	Date	Comment	Status
1	0.05PPM	0.05PPM	CAL1	07/25/17 11:21		OK
2	0.1PPM	0.1PPM	CAL2	07/25/17 11:21		OK
3	0.25PPM	0.25PPM	CAL3	07/25/17 11:21		OK
4	0.50PPM	0.50PPM	CAL4	07/25/17 11:21		OK
5	1.0PPM	1.0PPM	CAL5	07/25/17 11:21		OK
6	2.0PPM	2.0PPM	CAL6	07/25/17 11:21		OK
7	ICV1	ICV1	ICV	07/25/17 13:24		OK
8	ICB1	ICB1	ICB	07/25/17 13:24		OK
9	CCV1	CCV1	CCV	07/25/17 13:24		OK
10	CCB1	CCB1	CCB	07/25/17 13:24		OK
11	PB100912BL	PB100912BL	MB	07/25/17 13:24		OK
12	PB100912BS	PB100912BS	LCS	07/25/17 13:24		OK
13	I4354-03	265434-265578-COM	SAM	07/25/17 13:24		OK
14	I4354-03DUP	265434-265578-COM	DUP	07/25/17 13:24		OK
15	I4354-03MS	265434-265578-COM	MS	07/25/17 13:24		OK
16	I4354-03MSD	265434-265578-COM	MSD	07/25/17 13:24		OK
17	I4402-07	FRAC-TANK-260783	SAM	07/25/17 13:24		OK
18	CCV2	CCV2	CCV	07/25/17 13:32		OK
19	CCB2	CCB2	CCB	07/25/17 13:32		OK