



GENCHEM

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB87480

SDG No.: LB87480

Contract: _____ Lab Code: CHEM

Case No.: LB87480

SAS No.: LB87480

Initial Calibration Source: _____

Continuing Calibration Source: _____

Sample ID	Analyte	Result mg/L	True Value	% Recovery	% RSD	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV1	Ammonia as N	0.94	1	94	0	90 - 110		05/16/2017	10:58	LB87480



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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: LB87480

SDG No.: LB87480

Contract: _____ Lab Code: CHEM

Case No.: LB87480

SAS No.: LB87480

Initial Calibration Source: _____

Continuing Calibration Source: _____

Sample ID	Analyte	Result mg/L	True Value	% Recovery	% RSD	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV1	Ammonia as N	0.98	1	98	0	90 - 110		05/16/2017	10:58	LB87480
CCV2	Ammonia as N	1.1	1	110	0	90 - 110		05/16/2017	11:20	LB87480

Report of Analysis

Client:		Date Collected:	5/12/2017 12:00:00 AM
Project:	LB87480	Date Received:	5/12/2017 12:00:00 AM
Client Sample ID:	FK-PS-01_002	SDG No.:	LB87480
Lab Sample ID:	I3141-01	Matrix:	Solid
Level (low/med):	low	% Solid:	85.8

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Ammonia as N	13.6	1	1.9		5.6		mg/Kg	05/15/2017	05/16/2017	SM4500-NH3

Report of Analysis

Client:		Date Collected:	5/12/2017 12:00:00 AM
Project:	LB87480	Date Received:	5/12/2017 12:00:00 AM
Client Sample ID:	FK-PS-01-002	SDG No.:	LB87480
Lab Sample ID:	I3144-01	Matrix:	Solid
Level (low/med):	low	% Solid:	78.3

Cas	Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
	Ammonia as N	30.3		1	2.1		6.1	mg/Kg	05/15/2017	05/16/2017	SM4500-NH3

Report of Analysis

Client:		Date Collected:	5/12/2017 12:00:00 AM
Project:	LB87480	Date Received:	5/12/2017 12:00:00 AM
Client Sample ID:	FK-PS-01-002	SDG No.:	LB87480
Lab Sample ID:	I3144-01	Matrix:	Solid
Level (low/med):	low	% Solid:	78.3

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



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PREPARATION BLANK SUMMARY

Client: LB87480

SDG No.: LB87480

Instrument: Konelab 20

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	LOD mg/Kg	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB98968BL	Ammonia as N	SOLID 0.9	<4.9	Batch Number: U		PB98968 4.9		Prep Date: 05/16/2017	05/15/2017 10:58	LB87480



GENCHEM
- 3b -
PREPARATION BLANK SUMMARY

Client: LB87480

SDG No.: LB87480

Instrument: Konelab 20

Sample ID	Analyte	Result (mg/Kg)	Acceptance Limit	Conc Qual	LOD mg/Kg	CRQL mg/Kg	M	Analysis Date	Analysis Time	Run
PB98968BL	Ammonia as N	SOLID 0.9	<4.9	Batch Number: U		PB98968 4.9		Prep Date: 05/16/2017	05/15/2017 10:58	LB87480

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MATRIX SPIKE SUMMARY

client: LB87480 **level:** low **sdg no.:** LB87480
contract: _____ **lab code:** CHEM **case no.:** LB87480 **sas no.:** LB87480
matrix: Solid **sample id:** I3141-01 **client id:** FK-PS-01_002MS
Percent Solids for Sample: 85.8 **Spiked ID:** I3141-01MS **Percent Solids for Spike Sample:** 85.8

Analyte	Units	Acceptance Limit %R	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Ammonia as N	mg/Kg	75 - 125	65.9		13.6		56.6	92		

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MATRIX SPIKE DUPLICATE SUMMARY

client: LB87480 **level:** low **sdg no.:** LB87480
contract: _____ **lab code:** CHEM **case no.:** LB87480 **sas no.:** LB87480
matrix: Solid **sample id:** I3141-01 **client id:** FK-PS-01_002MSD
Percent Solids for Sample: 85.8 **Spiked ID:** I3141-01MSD **Percent Solids for Spike Sample:** 85.8

Analyte	Units	Acceptance Limit %R	MSD Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Ammonia as N	mg/Kg	75 - 125	64.3		13.6		56	91		

GENCHEM**- 6 -****DUPLICATE SAMPLE SUMMARY**

Client: LB87480 **Level:** LOW **SDG No.:** LB87480
Contract: _____ **Lab Code:** CHEM **Case No.:** LB87480 **SAS No.:** LB87480
Matrix: Solid **Sample ID:** I3141-01 **Client ID:** FK-PS-01_002DUP
Percent Solids for Sample: 85.8 **Duplicate ID** I3141-01DUP **Percent Solids for Spike Sample:** 85.8

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Ammonia as N	mg/Kg	20	13.6		14		3		

GENCHEM**- 6 -****DUPLICATE SAMPLE SUMMARY**

Client: LB87480 **Level:** LOW **SDG No.:** LB87480
Contract: _____ **Lab Code:** CHEM **Case No.:** LB87480 **SAS No.:** LB87480
Matrix: Solid **Sample ID:** I3141-01MS **Client ID:** FK-PS-01_002MSD
Percent Solids for Sample: 85.8 **Duplicate ID** I3141-01MSD **Percent Solids for Spike Sample:** 85.8

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Ammonia as N	mg/Kg	20	65.9		64.3		2		

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LABORATORY CONTROL SAMPLE SUMMARY

Client: LB87480 **SDG No.:** LB87480
Contract: _____ **Lab Code:** CHEM **Case No.:** LB87480 **SAS No.:** LB87480

Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limits	M
PB98968BS Ammonia as N	mg/Kg	48.5	46.7		96.3	80 - 120	
