

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

Daily Analysis Runlog For Sequence/QCBatch ID # LB92346

| Revi | ew By | Re | view On | | | |
|--|--------------|---------------|-------------|----------------|---------|--------|
| Sub | Directory LB | 92346 Tes | st: Ammonia | | | |
| ICAL Standard WP6 ICV Standard WP6 CCV Standard WP6 ICSA Standard N/A CRI Standard N/A LCS Standard WP6 | | | 5,WP59926 | | | |
| Sr# | SampleId | ClientID | QсТуре | Date | Comment | Status |
| 1 | 0.1PPM | 0.1PPM | CAL1 | 12/22/17 08:27 | | ОК |
| 2 | 0.2PPM | 0.2PPM | CAL2 | 12/22/17 08:27 | | ОК |
| 3 | 0.4PPM | 0.4PPM | CAL3 | 12/22/17 08:27 | | ОК |
| 4 | 1.0PPM | 1.0PPM | CAL4 | 12/22/17 08:27 | | ОК |
| 5 | 1.3PPM | 1.3PPM | CAL5 | 12/22/17 08:27 | | ОК |
| 6 | 2.0PPM | 2.0PPM | CAL6 | 12/22/17 08:27 | | ОК |
| 7 | ICV1 | ICV1 | ICV | 12/22/17 10:08 | | ОК |
| 8 | ICB1 | ICB1 | ICB | 12/22/17 10:08 | | ОК |
| 9 | CCV1 | CCV1 | CCV | 12/22/17 10:08 | | ОК |
| 10 | CCB1 | CCB1 | ССВ | 12/22/17 10:08 | | ОК |
| 11 | PB105262BL | PB105262BL | MB | 12/22/17 10:08 | | ОК |
| 12 | PB105262BS | PB105262BS | LCS | 12/22/17 10:08 | | ОК |
| 13 | 17011-02 | MW-1-121917 | SAM | 12/22/17 10:08 | | ОК |
| 14 | I7011-02DUP | MW-1-121917DU | JP DUP | 12/22/17 10:08 | | ОК |
| 15 | 17011-02MS | MW-1-121917MS | S MS | 12/22/17 10:08 | | ОК |
| 16 | I7011-02MSD | MW-1-121917MS | SD MSD | 12/22/17 10:08 | | ОК |
| 17 | 17011-03 | MW-2-121917 | SAM | 12/22/17 10:08 | | ок |
| 18 | 17011-05 | SVMP-121917 | SAM | 12/22/17 10:08 | | ОК |
| 19 | 17011-06 | MW-8S-121917 | SAM | 12/22/17 10:13 | | ок |
| 20 | CCV2 | CCV2 | ссу | 12/22/17 10:13 | | ОК |
| 21 | CCB2 | CCB2 | ССВ | 12/22/17 10:13 | | ОК |



| Client: | | Date Collected: | 12/19/2017 12:00:00 AM |
|-------------------|-------------------|--------------------------------|------------------------|
| Project: | LB92346 | Date Received: | 12/20/2017 12:00:00 AM |
| Client Sample ID: | MW-1-121917 | SDG No.: | LB92346 |
| Lab Sample ID: | 17011-02 | Matrix: | WATER |
| Level (low/med): | low | % Solid: | 0 |
| Cas Parameter | Conc. Qua. DF MDL | LOD LOQ / CRQL Units Prep Date | Date Ana. Ana Met. |

| Ammonia as N | 0.49 | 1 | 0.034 | 0.1 | mg/L | 12/21/2017 | 12/22/2017 SM4500-NH3 |
|--------------|------|---|-------|-----|------|------------|-----------------------|
|--------------|------|---|-------|-----|------|------------|-----------------------|



| Client: | | Date Collected: | 12/19/2017 12:00:00 AM |
|-------------------|-----------------------|------------------------------|------------------------|
| Project: | LB92346 | Date Received: | 12/20/2017 12:00:00 AM |
| Client Sample ID: | MW-2-121917 | SDG No.: | LB92346 |
| Lab Sample ID: | 17011-03 | Matrix: | WATER |
| Level (low/med): | low | % Solid: | 0 |
| Cas Parameter | Conc. Qua. DF MDL LOI | D LOQ / CRQL Units Prep Date | Date Ana. Ana Met. |

| Ammonia as N | 0.14 | 1 | 0.034 | 0.1 | mg/L | 12/21/2017 | 12/22/2017 SM4500-NH3 |
|--------------|------|---|-------|-----|------|------------|-----------------------|



| Client: | | Date Collected: | 12/19/2017 12:00:00 AM |
|-------------------|---------------------|-------------------------------|------------------------|
| Project: | LB92346 | Date Received: | 12/20/2017 12:00:00 AM |
| Client Sample ID: | SVMP-121917 | SDG No.: | LB92346 |
| Lab Sample ID: | 17011-05 | Matrix: | WATER |
| Level (low/med): | low | % Solid: | 0 |
| Cas Parameter | Conc. Qua. DF MDL L | OD LOQ / CRQL Units Prep Date | Date Ana. Ana Met. |

| Ammonia as N 0.56 | 1 | 0.034 | 0.1 | mg/L | 12/21/2017 | 12/22/2017 SM4500-NH3 |
|-------------------|---|-------|-----|------|------------|-----------------------|
|-------------------|---|-------|-----|------|------------|-----------------------|



| Client: | | Date Collected: | 12/19/2017 12:00:00 AM |
|-------------------|---------------------|--------------------------------|------------------------|
| Project: | LB92346 | Date Received: | 12/20/2017 12:00:00 AM |
| Client Sample ID: | MW-8S-121917 | SDG No.: | LB92346 |
| Lab Sample ID: | 17011-06 | Matrix: | WATER |
| Level (low/med): | low | % Solid: | 0 |
| Cas Parameter | Conc. Qua. DF MDL I | LOD LOQ / CRQL Units Prep Date | Date Ana. Ana Met. |

| Ammonia as N | 0.3 | 1 | 0.034 | 0.1 | mg/L | 12/21/2017 | 12/22/2017 SM4500-NH3 |
|--------------|-----|---|-------|-----|------|------------|-----------------------|



| Client: | | Date Collected: | 12/19/2017 12:00:00 AM |
|-------------------|-------------------|--------------------------------|------------------------|
| Project: | LB92346 | Date Received: | 12/20/2017 12:00:00 AM |
| Client Sample ID: | MW-8S-121917 | SDG No.: | LB92346 |
| Lab Sample ID: | 17011-06 | Matrix: | WATER |
| Level (low/med): | low | % Solid: | 0 |
| 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: | | | | |
| | | I - Fatimated Value | | |
| U = Not Detected | | J = Estimated Value | | |
| LOQ = Limit of Quantitation | | B = Analyte Found in Associated Method Blank | | |
| MDL = Method Detection Limit | | * = indicates the duplicate analysis is not within control limits. | | |
| LOD = Limit of Detection | | E = Indicates the reported value is estimated because of the presence | | |
| D = Dilution | | of interference. | | |

Q = indicates LCS control criteria did not meet requirements

OR = Over Range

N =Spiked sample recovery not within control limits



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INITIAL AND CONTINUING CALIBRATION VERIFICATION

| Client: LB92346 | | | SDG No.: | LB92346 | |
|--------------------------------|-----------|------|-----------|---------|-------------------------|
| Contract: | Lab Code: | CHEM | Case No.: | LB92346 | SAS No.: LB92346 |
| Initial Calibration Source: | | | | | |
| Continuing Calibration Source: | | | | | |

| | | Result mg/L | True Value | % | % | Acceptance | | Analysis | Analysis | Run |
|-----------|--------------|----------------|------------|----------|-----|-------------|---|------------|----------|---------|
| Sample ID | Analyte | | | Recovery | RSD | Window (%R) | Μ | Date | Time | Number |
| ICV1 | Ammonia as N | 1 | 1 | 100 | 0 | 90 - 110 | | 12/22/2017 | 10:08 | LB92346 |



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INITIAL AND CONTINUING CALIBRATION VERIFICATION

| Client: LB92346 | | | SDG No.: | LB92346 | |
|---------------------------------------|-----------|------|-----------|---------|------------------|
| Contract: | Lab Code: | CHEM | Case No.: | LB92346 | SAS No.: LB92346 |
| Initial Calibration Source: | | - | | | |
| Continuing Calibration Source: | | | | | |

| | | Result mg/L | True Value | % | % | Acceptance | | Analysis | Analysis | Run |
|-----------|--------------|----------------|------------|----------|-----|-------------|---|------------|----------|---------|
| Sample ID | Analyte | | | Recovery | RSD | Window (%R) | Μ | Date | Time | Number |
| | | | | | | | | | | |
| CCV1 | Ammonia as N | 1 | 1 | 100 | 0 | 90 - 110 | | 12/22/2017 | 10:08 | LB92346 |
| CCV2 | Ammonia as N | 1 | 1 | 100 | 0 | 90 - 110 | | 12/22/2017 | 10:13 | LB92346 |



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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

| Client: <u>I</u> | LB92346 | | | | SDG | No.: <u>LB9</u> | 2346 | | | |
|------------------|--------------|----------------|---------------------|--------------|--------|-----------------|------|------------------|------------------|---------------|
| Contract: | | Lab Code | : CHEM | | . Case | No.: <u>LB9</u> | 2346 | SA | S No.: LB | 92346 |
| Sample ID | Analyte | Result mg/L | Acceptance Limit | Conc Qual | LOD | CRQL | М | Analysis Date | Analysis Time | Run Number |
| | | | | | | | | | | |
| ICB1 | Ammonia as N | 0.013 | +/-0.1 | U | | 0.1 | | 12/22/2017 | 10:08 | LB92346 |



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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

| Client: L | B92346 | | | | SDO | G No.: <u>LB</u> | 92346 | | | |
|--------------|------------------------------|----------------|---------------------|--------------|-------|------------------|-------|--------------------------|------------------|--------------------|
| Contract: | | Lab Code | e: <u>CHEM</u> | | . Cas | e No.: <u>LB</u> | 92346 | SA | S No.: <u>LB</u> | 92346 |
| Sample ID | Analyte | Result mg/L | Acceptance Limit | Conc Qual | LOD | CRQL | М | Analysis Date | Analysis Time | Run Number |
| CCB1 CCB2 | Ammonia as N Ammonia as N | 0.013 0.03 | +/-0.1 +/-0.1 | U U | | 0.1 | | 12/22/2017 12/22/2017 | 10:08 10:13 | LB92346 LB92346 |



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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

| Client: LB92346 | | | | SDG | No.: | LB92346 | | | |
|-------------------|----------------|---------------------|--------------|------|------|---------|------------------|------------------|---------------|
| Contract: | Lab Code | : <u>CHEM</u> | | Case | No.: | LB92346 | _ | SAS No.: LB | 92346 |
| Sample ID Analyte | Result mg/L | Acceptance Limit | Conc Qual | LOD | CROI | L M | Analysis Date | Analysis Time | Run Number |



GENCHEM - 3b -PREPARATION BLANK SUMMARY

Client: LB92346

SDG No.: LB92346

Instrument: Konelab 20

| Sample ID | Analyte | Result (mg/L) | Acceptance Limit | Conc Qual | LOD mg/L | CRQL mg/L | Μ | Analysis Date | Analysis Time | Run |
|------------|--------------|------------------|---------------------|--------------|-------------|--------------|---|------------------|------------------|---------|
| PB105262BL | | WATER | | Batch Nu | mber: | PB105262 | | Prep Date: | 12/21/20 |)17 |
| | Ammonia as N | 0.013 | < 0.1 | U | | 0.1 | | 12/22/2017 | 10:08 | LB92346 |



GENCHEM - 5a -MATRIX SPIKE SUMMARY

| client: Ll | 392346 | | lev | el: | low | | sdg no.: | LB92346 | | | |
|---------------|---------------|------------|----------|------|---------------|----|---------------|-----------------|-------|--------|---------|
| contract: | | | lab | code | : <u>CHEM</u> | [| case no.: | LB92346 | sa | s no.: | LB92346 |
| matrix: | WATER | | sample | id: | 17011-02 | | client id: | MW-1-1219 | 17MS | | |
| Percent Solid | s for Sample: | 0 | Spiked 1 | ID: | I7011-02N | 4S | Percent Solid | ls for Spike Sa | mple: | 0 | |
| | | Acceptance | Spiked | | Sample | | Spike | % | | | |
| Analyte | Units | Limit %R | Result | С | Result | С | Added | Recovery | Qual | Μ | |
| | | | | | | | | 121 | | | |



GENCHEM - 5a -MATRIX SPIKE DUPLICATE SUMMARY

| client: LB9 | 2346 | | level: | low | | sdg no.: | LB92346 | | _ | |
|------------------|-------------|------------|------------|----------------|-----|---------------|-----------------|-------|------|---------|
| contract: | | | lab code | e: <u>CHEM</u> | | case no.: | LB92346 | sas | no.: | LB92346 |
| matrix: | WATER | | sample id: | 17011-02 | | client id: | MW-1-12191 | 7MSD | _ | |
| Percent Solids f | for Sample: | 0 | Spiked ID: | I7011-02N | ISD | Percent Solid | ls for Spike Sa | mple: | 0 | |
| | | Acceptance | MSD | Sample | | Spike | % | | | |
| Analyte | Units | Limit %R | Result C | Result | С | Added | Recovery | Qual | Μ | |
| Ammonia as N | mg/L | 75 - 125 | 1.6 | 0.49 | | 1 | 111 | | | |



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DUPLICATE SAMPLE SUMMARY

| Client: LB92 | 2346 | | Level: LC |)W | SDC | G No.: | LB92346 | | | |
|--------------------|------------|------------|------------------|-----------|-----------|----------|--------------|--------|---------|---------|
| Contract: | | | Lab Code: | CHEM | Cas | e No.: | LB92346 | SA | AS No.: | LB92346 |
| Matrix: | WATER | | Sample ID: 170 | 011-02 | Client 1 | ID: | MW-1-1219 | 17DUP | _ | |
| Percent Solids for | or Sample: | 0 | Duplicate ID 170 |)11-02DUP | Percen | t Solids | for Spike Sa | ample: | 0 | |
| | | Acceptance | Sample | | Duplicate | | | | | |
| Analyte | Units | Limit | Result | С | Result | С | RPD | Qual | Μ | |
| Ammonia as N | mg/L | 20 | 0.49 | | 0.45 | | 9 | | | |

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



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DUPLICATE SAMPLE SUMMARY

| Client: LB9 | 02346 | | Level: L(| OW | SDG | No.: | LB92346 | | | |
|----------------|-------------|------------|-----------------|-----------|-----------|--------|----------------|-------|---------|---------|
| Contract: | | | Lab Code: | CHEM | Case | No.: | LB92346 | S. | AS No.: | LB92346 |
| Matrix: | WATER | | Sample ID: 17 | 011-02MS | Client I | D: | MW-1-12191 | 17MSD | _ | |
| Percent Solids | for Sample: | 0 | Duplicate ID 17 | 011-02MSD | Percent | Solids | s for Spike Sa | mple: | 0 | |
| | | Acceptance | Sample | | Duplicate | | | | | |
| Analyte | Units | Limit | Result | С | Result | С | RPD | Qual | Μ | |
| Ammonia as N | mg/L | 20 | 1.7 | | 1.6 | | 6 | | | |

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



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LABORATORY CONTROL SAMPLE SUMMARY

| Client: LB92 | 2346 | | | | SDG No.: | LB92346 | | |
|--------------|-------|------------|-----------|------|---------------|-------------------|----------|---------|
| Contract: | | | Lab Code: | CHEM | Case No.: | LB92346 | SAS No.: | LB92346 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | % | Accepta | nce | |
| Analyte | Units | True Value | Result | С | % Recovery | Accepta Limits | | M |