

21390016

Test results

Aquakem 7.2AQ1

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CHEMTECH  
284 Sheffield Street,  
Mountainside, NJ 07092  
Reviewed by : DP

9/12/2017 11:57

Test: TKN-NH3

mg/L

| Sample Id       | Result | Dil. 1 + | Response | Errors                    |
|-----------------|--------|----------|----------|---------------------------|
| ICV1            | 4.929  | 0.0      | 1.095    |                           |
| ICB1            | 0.187  | 0.0      | 0.073    |                           |
| CCV1            | 4.975  | 0.0      | 1.104    |                           |
| CCB1            | 0.166  | 0.0      | 0.068    |                           |
| PB102151BL      | 0.168  | 0.0      | 0.069    |                           |
| PB102151BS      | 4.793  | 0.0      | 1.065    |                           |
| I5138-01        | 11.073 | 0.0      | 2.418    | Test limit high           |
| I5138-01DUP     | 10.466 | 0.0      | 2.288    | Test limit high           |
| I5138-02MS      | 15.179 | 0.0      | 3.303    | Init abs., Test limit hig |
| I5138-03MSD     | 15.311 | 0.0      | 3.331    | Init abs., Test limit hig |
| I5138-04        | 9.176  | 0.0      | 2.010    |                           |
| I5138-05        | 12.667 | 0.0      | 2.762    | Init abs., Test limit hig |
| I5138-06        | 6.596  | 0.0      | 1.454    |                           |
| I5138-07        | 4.889  | 0.0      | 1.086    |                           |
| CCV2            | 4.888  | 0.0      | 1.086    |                           |
| CCB2            | 0.233  | 0.0      | 0.083    |                           |
| I5138-08        | 8.197  | 0.0      | 1.799    |                           |
| I5138-09        | 18.387 | 0.0      | 3.994    | Init abs., Test limit hig |
| I5138-10        | 14.940 | 0.0      | 3.251    | Init abs., Test limit hig |
| I5138-11        | 5.117  | 0.0      | 1.135    |                           |
| I5138-12        | 6.445  | 0.0      | 1.421    |                           |
| I5138-13        | 8.763  | 0.0      | 1.921    |                           |
| I5138-14        | 5.665  | 0.0      | 1.253    |                           |
| I5138-15        | 14.458 | 0.0      | 3.148    | Init abs., Test limit hig |
| I5138-16        | 13.244 | 0.0      | 2.886    | Init abs., Test limit hig |
| I5138-17        | 17.439 | 0.0      | 3.790    | Init abs., Test limit hig |
| CCV3            | 4.745  | 0.0      | 1.055    |                           |
| CCB3            | 0.282  | 0.0      | 0.093    |                           |
| I5138-18        | 10.382 | 0.0      | 2.269    | Test limit high           |
| I5138-19        | 46.512 | 0.0      | 10.054   | Abs. high, Init abs., Tes |
| I5138-20        | 46.508 | 0.0      | 10.053   | Abs. high, Init abs., Tes |
| I5138-21        | 46.512 | 0.0      | 10.054   | Abs. high, Init abs., Tes |
| I5138-22        | 15.078 | 0.0      | 3.281    | Init abs., Test limit hig |
| CCV4            | 4.884  | 0.0      | 1.085    |                           |
| CCB4            | 0.190  | 0.0      | 0.073    |                           |
| I5138-01DLX2    | 5.499  | 0.0      | 1.217    |                           |
| I5138-01DUPDLX2 | 5.477  | 0.0      | 1.213    |                           |
| I5138-02MSDLX2  | 7.532  | 0.0      | 1.655    |                           |
| I5138-03MSDDLX2 | 7.884  | 0.0      | 1.731    |                           |
| I5138-05DLX2    | 6.349  | 0.0      | 1.401    |                           |
| I5138-09DLX5    | 2.373  | 0.0      | 0.544    |                           |
| I5138-10DLX2    | 7.268  | 0.0      | 1.598    |                           |
| I5138-15DLX2    | 7.234  | 0.0      | 1.591    |                           |
| I5138-16DLX2    | 6.916  | 0.0      | 1.523    |                           |
| I5138-17DLX5    | 3.357  | 0.0      | 0.756    |                           |
| CCV5            | 4.730  | 0.0      | 1.052    |                           |
| CCB5            | 0.165  | 0.0      | 0.068    |                           |
| I5138-18DLX2    | 5.476  | 0.0      | 1.212    |                           |
| I5138-19DLX10   | 2.442  | 0.0      | 0.559    |                           |
| I5138-20DLX10   | 2.303  | 0.0      | 0.529    |                           |
| I5138-21DLX10   | 2.362  | 0.0      | 0.541    |                           |
| I5138-22DLX2    | 7.491  | 0.0      | 1.647    |                           |
| CCV6            | 4.877  | 0.0      | 1.083    |                           |
| CCB6            | 0.170  | 0.0      | 0.069    |                           |

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Test results

Aquakem 7.2AQ1

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CHEMTECH  
284 Sheffield Street,  
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9/12/2017 11:57

Test: TKN-NH3

mg/L

Sample Id Result Dil. 1 + Response  $\hat{\sigma}_{\text{L}}$

|      |         |
|------|---------|
| N    | 54      |
| Mean | 8.951   |
| SD   | 10.3543 |
| CV%  | 115.68  |

LB 900 16

Aquakem v. 7.2AQ1

Results from time period:

Tue Sep 12 09:01:03 2017

Tue Sep 12 11:42:03 2017

| Sample Id    | Sam/Ctr/c/ | Test short | Test type | Result  | Result unit | Result date and time | Stat |
|--------------|------------|------------|-----------|---------|-------------|----------------------|------|
| 0.5PPM       | A          | TKN-NH3    | P         | 0.597   | mg/l        | 9/12/2017 9:25:12    |      |
| 1.0PPM       | A          | TKN-NH3    | P         | 1.0722  | mg/l        | 9/12/2017 9:25:13    |      |
| 2.5PPM       | A          | TKN-NH3    | P         | 2.3573  | mg/l        | 9/12/2017 9:25:14    |      |
| 5.0PPM       | A          | TKN-NH3    | P         | 4.7926  | mg/l        | 9/12/2017 9:25:15    |      |
| 6.7PPM       | A          | TKN-NH3    | P         | 6.8273  | mg/l        | 9/12/2017 9:25:16    |      |
| 10.0PPM      | A          | TKN-NH3    | P         | 10.0202 | mg/l        | 9/12/2017 9:25:17    |      |
| ICV1         | S          | TKN-NH3    | P         | 4.9292  | mg/l        | 9/12/2017 9:58:57    |      |
| ICB1         | S          | TKN-NH3    | P         | 0.1874  | mg/l        | 9/12/2017 9:58:58    |      |
| CCV1         | S          | TKN-NH3    | P         | 4.9749  | mg/l        | 9/12/2017 9:59:01    |      |
| CCB1         | S          | TKN-NH3    | P         | 0.1659  | mg/l        | 9/12/2017 9:59:02    |      |
| PB102151BL   | S          | TKN-NH3    | P         | 0.1678  | mg/l        | 9/12/2017 9:59:03    |      |
| PB102151BS   | S          | TKN-NH3    | P         | 4.7935  | mg/l        | 9/12/2017 9:59:04    |      |
| I5138-01     | S          | TKN-NH3    | P         | 11.0734 | mg/l        | 9/12/2017 10:22:54   |      |
| I5138-01DUP  | S          | TKN-NH3    | P         | 10.4659 | mg/l        | 9/12/2017 10:22:55   |      |
| I5138-02MS   | S          | TKN-NH3    | P         | 15.1785 | mg/l        | 9/12/2017 10:22:56   |      |
| I5138-03MSD  | S          | TKN-NH3    | P         | 15.3108 | mg/l        | 9/12/2017 10:22:57   |      |
| I5138-04     | S          | TKN-NH3    | P         | 9.1757  | mg/l        | 9/12/2017 10:22:58   |      |
| I5138-05     | S          | TKN-NH3    | P         | 12.6669 | mg/l        | 9/12/2017 10:22:59   |      |
| I5138-06     | S          | TKN-NH3    | P         | 6.5962  | mg/l        | 9/12/2017 10:23:00   |      |
| I5138-07     | S          | TKN-NH3    | P         | 4.8892  | mg/l        | 9/12/2017 10:23:01   |      |
| CCV2         | S          | TKN-NH3    | P         | 4.8876  | mg/l        | 9/12/2017 10:23:02   |      |
| CCB2         | S          | TKN-NH3    | P         | 0.2333  | mg/l        | 9/12/2017 10:23:03   |      |
| I5138-08     | S          | TKN-NH3    | P         | 8.1968  | mg/l        | 9/12/2017 10:23:04   |      |
| I5138-09     | S          | TKN-NH3    | P         | 18.3871 | mg/l        | 9/12/2017 10:23:05   |      |
| I5138-10     | S          | TKN-NH3    | P         | 14.9395 | mg/l        | 9/12/2017 10:33:35   |      |
| I5138-11     | S          | TKN-NH3    | P         | 5.1165  | mg/l        | 9/12/2017 10:33:36   |      |
| I5138-12     | S          | TKN-NH3    | P         | 6.4449  | mg/l        | 9/12/2017 10:33:37   |      |
| I5138-13     | S          | TKN-NH3    | P         | 8.7629  | mg/l        | 9/12/2017 10:33:38   |      |
| I5138-14     | S          | TKN-NH3    | P         | 5.6653  | mg/l        | 9/12/2017 10:33:39   |      |
| I5138-15     | S          | TKN-NH3    | P         | 14.4582 | mg/l        | 9/12/2017 10:33:40   |      |
| I5138-16     | S          | TKN-NH3    | P         | 13.2441 | mg/l        | 9/12/2017 10:33:41   |      |
| I5138-17     | S          | TKN-NH3    | P         | 17.439  | mg/l        | 9/12/2017 10:33:42   |      |
| CCV3         | S          | TKN-NH3    | P         | 4.7447  | mg/l        | 9/12/2017 10:33:43   |      |
| CCB3         | S          | TKN-NH3    | P         | 0.2824  | mg/l        | 9/12/2017 10:33:44   |      |
| I5138-18     | S          | TKN-NH3    | P         | 10.3817 | mg/l        | 9/12/2017 10:33:45   |      |
| I5138-19     | S          | TKN-NH3    | P         | 46.5124 | mg/l        | 9/12/2017 10:33:46   |      |
| I5138-20     | S          | TKN-NH3    | P         | 46.5084 | mg/l        | 9/12/2017 10:40:14   |      |
| I5138-21     | S          | TKN-NH3    | P         | 46.5123 | mg/l        | 9/12/2017 10:40:15   |      |
| I5138-22     | S          | TKN-NH3    | P         | 15.0776 | mg/l        | 9/12/2017 10:40:16   |      |
| CCV4         | S          | TKN-NH3    | P         | 4.8845  | mg/l        | 9/12/2017 10:40:17   |      |
| CCB4         | S          | TKN-NH3    | P         | 0.1897  | mg/l        | 9/12/2017 10:40:18   |      |
| I5138-01DLX2 | S          | TKN-NH3    | P         | 5.4988  | mg/l        | 9/12/2017 11:34:08   |      |

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|                 |   |         |   |             |                    |
|-----------------|---|---------|---|-------------|--------------------|
| I5138-01DUPDLX2 | S | TKN-NH3 | P | 5.4766 mg/l | 9/12/2017 11:34:09 |
| I5138-02MSDLX2  | S | TKN-NH3 | P | 7.5317 mg/l | 9/12/2017 11:34:10 |
| I5138-03MSDDLX2 | S | TKN-NH3 | P | 7.8836 mg/l | 9/12/2017 11:34:11 |
| I5138-05DLX2    | S | TKN-NH3 | P | 6.3491 mg/l | 9/12/2017 11:34:12 |
| I5138-09DLX5    | S | TKN-NH3 | P | 2.3726 mg/l | 9/12/2017 11:34:13 |
| I5138-10DLX2    | S | TKN-NH3 | P | 7.2676 mg/l | 9/12/2017 11:34:14 |
| I5138-15DLX2    | S | TKN-NH3 | P | 7.2345 mg/l | 9/12/2017 11:34:15 |
| I5138-16DLX2    | S | TKN-NH3 | P | 6.9158 mg/l | 9/12/2017 11:34:16 |
| I5138-17DLX5    | S | TKN-NH3 | P | 3.3575 mg/l | 9/12/2017 11:34:17 |
| CCV5            | S | TKN-NH3 | P | 4.7297 mg/l | 9/12/2017 11:34:18 |
| CCB5            | S | TKN-NH3 | P | 0.1648 mg/l | 9/12/2017 11:34:19 |
| I5138-18DLX2    | S | TKN-NH3 | P | 5.476 mg/l  | 9/12/2017 11:41:57 |
| I5138-19DLX10   | S | TKN-NH3 | P | 2.4423 mg/l | 9/12/2017 11:41:58 |
| I5138-20DLX10   | S | TKN-NH3 | P | 2.3034 mg/l | 9/12/2017 11:41:59 |
| I5138-21DLX10   | S | TKN-NH3 | P | 2.3617 mg/l | 9/12/2017 11:42:00 |
| I5138-22DLX2    | S | TKN-NH3 | P | 7.4913 mg/l | 9/12/2017 11:42:01 |
| CCV6            | S | TKN-NH3 | P | 4.8766 mg/l | 9/12/2017 11:42:02 |
| CCB6            | S | TKN-NH3 | P | 0.1699 mg/l | 9/12/2017 11:42:03 |

CHEMTECH  
284 Sheffield Street,  
Mountainside, NJ 07092  
Reviewed by : DP

9/12/2017 9:27

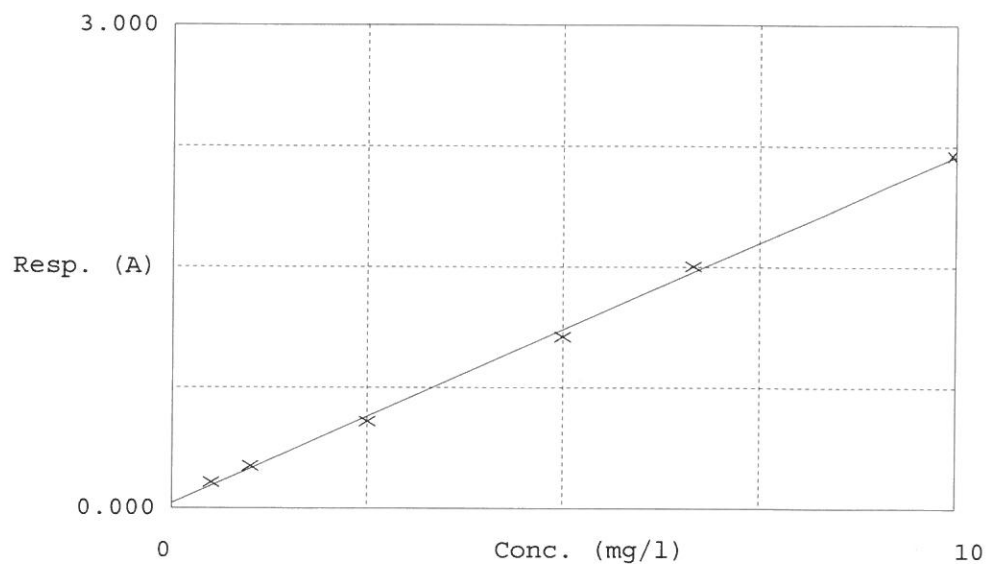
Test TKN-NH3

Accepted 9/12/2017 9:27

Factor 4.641  
Bias 0.033

Coeff. of det. 0.998450

Errors



|   | Calibrator | Response | Calc. con. | Conc.   | Errors |
|---|------------|----------|------------|---------|--------|
| 1 | TKN-10     | 0.161    | 0.5970     | 0.5000  |        |
| 2 | TKN-10     | 0.264    | 1.0722     | 1.0000  |        |
| 3 | TKN-10     | 0.541    | 2.3573     | 2.5000  |        |
| 4 | TKN-10     | 1.065    | 4.7926     | 5.0000  |        |
| 5 | TKN-10     | 1.504    | 6.8273     | 6.6667  |        |
| 6 | TKN-10     | 2.192    | 10.0202    | 10.0000 |        |