

**Analytical Summary Report**Analysis Method: SM4500-SO4 EANALYST: AMANDEEPParameter: Dissolved SulfateSUPERVISOR REVIEW BY: apatelRun Number: LB95007

| Reagent/Standard                   | Lot/Log # |
|------------------------------------|-----------|
| sulfate ICV 20ppm                  | WP64112   |
| Sulfate LCS std, 20ppm             | WP64114   |
| sulfate 0.0ppm                     | WP64103   |
| sulfate 5ppm                       | WP64104   |
| sulfate 10ppm                      | WP64105   |
| sulfate 20ppm                      | WP64107   |
| sulfate 30ppm                      | WP64109   |
| sulfate 40ppm                      | WP64111   |
| sulfate CCV 20ppm                  | WP64113   |
| Sulfate Buffer solution A          | WP63591   |
| Sulfate std, 15ppm                 | WP64106   |
| Sulfate std, 35ppm                 | WP64110   |
| Sulfate std, 25ppm                 | WP64108   |
| BARIUM CHLORIDE DIHYDRATE ACS 100G | W2210     |

Intercept: -0.1571Slope: 2.9901Regression: 0.999908

| Seq | Lab ID | True Val<br>(mg/l) | DF | MATRIX | Initial<br>Reading | Final<br>Reading | Difference | AnalDate   | Anal Time |
|-----|--------|--------------------|----|--------|--------------------|------------------|------------|------------|-----------|
| 1   | CAL1   | 0                  | 1  | Water  | 0.225              | 0.346            | 0.121      | 05/01/2018 | 08:46     |
| 2   | CAL2   | 5                  | 1  | Water  | 0.210              | 14.900           | 14.690     | 05/01/2018 | 08:52     |
| 3   | CAL3   | 10                 | 1  | Water  | 0.201              | 29.900           | 29.699     | 05/01/2018 | 08:57     |
| 4   | CAL4   | 15                 | 1  | Water  | 0.210              | 44.000           | 43.790     | 05/01/2018 | 09:04     |
| 5   | CAL5   | 20                 | 1  | Water  | 0.206              | 60.900           | 60.694     | 05/01/2018 | 09:09     |
| 6   | CAL6   | 25                 | 1  | Water  | 0.220              | 74.600           | 74.380     | 05/01/2018 | 09:14     |
| 7   | CAL7   | 30                 | 1  | Water  | 0.216              | 89.900           | 89.684     | 05/01/2018 | 09:19     |
| 8   | CAL8   | 35                 | 1  | Water  | 0.231              | 104.200          | 103.969    | 05/01/2018 | 09:24     |
| 9   | CAL9   | 40                 | 1  | Water  | 0.219              | 120.000          | 119.781    | 05/01/2018 | 09:30     |



## Analytical Summary Report

Analysis Method: SM4500-SO4 E

ANALYST: AMANDEEP

Parameter: Dissolved Sulfate

SUPERVISOR REVIEW BY: apatel

Run Number: LB95007

| Seq | Lab ID      | Initial Weight | Final Vol | True Value | DF | MATRIX | Initial Reading | Final Reading | Difference | Result (mg/L) | AnalDate   | Anal Time |
|-----|-------------|----------------|-----------|------------|----|--------|-----------------|---------------|------------|---------------|------------|-----------|
| 1   | ICV         |                |           | 20         | 1  | Water  | 0.287           | 58.900        | 58.613     | 19.655        | 05/01/2018 | 09:37     |
| 2   | ICB         |                |           |            | 1  | Water  | 0.218           | 0.342         | 0.124      | 0.094         | 05/01/2018 | 09:43     |
| 3   | CCV1        |                |           | 20         | 1  | Water  | 0.241           | 60.100        | 59.859     | 20.072        | 05/01/2018 | 13:58     |
| 4   | CCB1        |                |           |            | 1  | Water  | 0.231           | 0.339         | 0.108      | 0.089         | 05/01/2018 | 14:05     |
| 5   | LB95007BL   | 50             | 50        |            | 1  | Water  | 0.232           | 0.351         | 0.119      | 0.092         | 05/01/2018 | 14:16     |
| 6   | LB95007BS   | 50             | 50        | 20         | 1  | Water  | 0.256           | 58.700        | 58.444     | 19.598        | 05/01/2018 | 14:22     |
| 7   | J2614-11    | 50             | 50        |            | 1  | Water  | 0.335           | 151.000       | 150.665    | 50.440        | 05/01/2018 | 14:27     |
| 8   | J2614-11DUP | 50             | 50        |            | 1  | Water  | 0.338           | 153.000       | 152.662    | 51.108        | 05/01/2018 | 14:33     |
| 9   | CCV2        |                |           | 20         | 1  | Water  | 0.249           | 59.100        | 58.851     | 19.734        | 05/01/2018 | 14:39     |
| 10  | CCB2        |                |           |            | 1  | Water  | 0.244           | 0.356         | 0.112      | 0.090         | 05/01/2018 | 14:45     |
| 11  | J2614-11MS  | 50             | 50        | 20         | 1  | Water  | 0.390           | 153.000       | 152.610    | 51.091        | 05/01/2018 | 14:52     |
| 12  | J2614-11MSD | 50             | 50        | 20         | 1  | Water  | 0.385           | 155.000       | 154.615    | 51.762        | 05/01/2018 | 14:58     |
| 13  | J2614-12    | 50             | 50        |            | 1  | Water  | 0.447           | 38.600        | 38.153     | 12.812        | 05/01/2018 | 15:04     |
| 14  | J2614-13    | 50             | 50        |            | 1  | Water  | 0.325           | 59.800        | 59.475     | 19.943        | 05/01/2018 | 15:09     |
| 15  | CCV3        |                |           | 20         | 1  | Water  | 0.251           | 58.900        | 58.649     | 19.667        | 05/01/2018 | 15:15     |
| 16  | CCB3        |                |           |            | 1  | Water  | 0.239           | 0.346         | 0.107      | 0.088         | 05/01/2018 | 15:21     |
| 17  | J2614-14    | 50             | 50        |            | 1  | Water  | 0.395           | 53.400        | 53.005     | 17.779        | 05/01/2018 | 15:26     |
| 18  | J2614-15    | 50             | 50        |            | 1  | Water  | 0.461           | 107.000       | 106.539    | 35.683        | 05/01/2018 | 15:32     |
| 19  | J2614-16    | 50             | 50        |            | 1  | Water  | 0.420           | 80.200        | 79.780     | 26.734        | 05/01/2018 | 15:37     |
| 20  | J2614-17    | 50             | 50        |            | 1  | Water  | 0.484           | 167.000       | 166.516    | 55.742        | 05/01/2018 | 15:43     |
| 21  | CCV4        |                |           | 20         | 1  | Water  | 0.275           | 60.200        | 59.925     | 20.094        | 05/01/2018 | 15:49     |
| 22  | CCB4        |                |           |            | 1  | Water  | 0.239           | 0.360         | 0.121      | 0.093         | 05/01/2018 | 15:56     |
| 23  | J2614-18    | 50             | 50        |            | 1  | Water  | 0.433           | 244.000       | 243.567    | 81.510        | 05/01/2018 | 16:04     |
| 24  | J2614-19    | 50             | 50        |            | 1  | Water  | 0.291           | 0.667         | 0.376      | 0.178         | 05/01/2018 | 16:09     |
| 25  | J2614-20    | 50             | 50        |            | 1  | Water  | 0.205           | 0.347         | 0.142      | 0.100         | 05/01/2018 | 16:15     |
| 26  | J2622-06    | 50             | 50        |            | 1  | Water  | 0.499           | 189.000       | 188.501    | 63.094        | 05/01/2018 | 16:21     |
| 27  | CCV5        |                |           | 20         | 1  | Water  | 0.244           | 58.700        | 58.456     | 19.602        | 05/01/2018 | 16:27     |
| 28  | CCB5        |                |           |            | 1  | Water  | 0.235           | 0.335         | 0.100      | 0.086         | 05/01/2018 | 16:33     |
| 29  | J2622-07    | 50             | 50        |            | 1  | Water  | 0.434           | 82.600        | 82.166     | 27.532        | 05/01/2018 | 16:39     |
| 30  | J2622-08    | 50             | 50        |            | 1  | Water  | 0.548           | 85.100        | 84.552     | 28.330        | 05/01/2018 | 16:45     |
| 31  | J2622-09    | 50             | 50        |            | 1  | Water  | 0.332           | 77.100        | 76.768     | 25.727        | 05/01/2018 | 16:52     |
| 32  | J2622-10    | 50             | 50        |            | 1  | Water  | 0.364           | 80.400        | 80.036     | 26.820        | 05/01/2018 | 16:59     |
| 33  | J2614-11    |                |           |            | 2  | Water  | 0.284           | 69.200        | 68.916     | 23.101        | 05/01/2018 | 17:05     |
| 34  | J2614-11DUP |                |           |            | 2  | Water  | 0.286           | 69.800        | 69.514     | 23.301        | 05/01/2018 | 17:17     |
| 35  | J2614-11MS  |                |           | 20         | 2  | Water  | 0.159           | 92.400        | 92.241     | 30.901        | 05/01/2018 | 17:23     |
| 36  | J2614-11MSD |                |           | 20         | 2  | Water  | 0.160           | 92.700        | 92.540     | 31.001        | 05/01/2018 | 17:30     |
| 37  | J2614-17    |                |           |            | 2  | Water  | 0.324           | 96.000        | 95.676     | 32.050        | 05/01/2018 | 17:35     |
| 38  | J2614-18    |                |           |            | 5  | Water  | 0.259           | 59.900        | 59.641     | 19.999        | 05/01/2018 | 17:41     |
| 39  | CCV6        |                |           | 20         | 1  | Water  | 0.256           | 59.600        | 59.344     | 19.899        | 05/01/2018 | 17:47     |
| 40  | CCB6        |                |           |            | 1  | Water  | 0.251           | 0.349         | 0.098      | 0.085         | 05/01/2018 | 17:52     |

|    |          |  |  |    |   |       |       |        |        |        |            |       |
|----|----------|--|--|----|---|-------|-------|--------|--------|--------|------------|-------|
| 41 | J2622-06 |  |  |    | 2 | Water | 0.255 | 91.200 | 90.945 | 30.468 | 05/01/2018 | 17:58 |
| 42 | CCV7     |  |  | 20 | 1 | Water | 0.235 | 59.800 | 59.565 | 19.973 | 05/01/2018 | 18:04 |
| 43 | CCB7     |  |  |    | 1 | Water | 0.249 | 0.358  | 0.109  | 0.089  | 05/01/2018 | 18:09 |

# WORKLIST(Hardcopy Internal Chain)

WorkList Name : DSO4042718

WorkList ID : 111373

Date : 4/27/2018 10:52:42 AM

| Due Date   | Matrix | Sample   | Test              | Preservative | Customer | Storage Location | Customer Sample | Collect Date | Method       |
|------------|--------|----------|-------------------|--------------|----------|------------------|-----------------|--------------|--------------|
| 05/10/2018 | Water  | J2614-11 | Dissolved Sulfate | Cool 4 deg C | WEST04   | H53              | MW9-057-1       | 04/26/2018   | SM4500-SO4 E |
| 05/10/2018 | Water  | J2614-12 | Dissolved Sulfate | Cool 4 deg C | WEST04   | H53              | MW2S-057-1      | 04/26/2018   | SM4500-SO4 E |
| 05/10/2018 | Water  | J2614-13 | Dissolved Sulfate | Cool 4 deg C | WEST04   | H53              | MW10M-057-1     | 04/26/2018   | SM4500-SO4 E |
| 05/10/2018 | Water  | J2614-14 | Dissolved Sulfate | Cool 4 deg C | WEST04   | H53              | MW10M-057-2     | 04/26/2018   | SM4500-SO4 E |
| 05/10/2018 | Water  | J2614-15 | Dissolved Sulfate | Cool 4 deg C | WEST04   | H53              | MW10D-057-1     | 04/26/2018   | SM4500-SO4 E |
| 05/10/2018 | Water  | J2614-16 | Dissolved Sulfate | Cool 4 deg C | WEST04   | H53              | MW11M-057-1     | 04/26/2018   | SM4500-SO4 E |
| 05/10/2018 | Water  | J2614-17 | Dissolved Sulfate | Cool 4 deg C | WEST04   | H53              | MW11D-057-1     | 04/26/2018   | SM4500-SO4 E |
| 05/10/2018 | Water  | J2614-18 | Dissolved Sulfate | Cool 4 deg C | WEST04   | H53              | MW4S-057-1      | 04/26/2018   | SM4500-SO4 E |
| 05/10/2018 | Water  | J2614-19 | Dissolved Sulfate | Cool 4 deg C | WEST04   | H53              | MW4D-057-3      | 04/26/2018   | SM4500-SO4 E |
| 05/10/2018 | Water  | J2614-20 | Dissolved Sulfate | Cool 4 deg C | WEST04   | H53              | MW4D-057-1      | 04/26/2018   | SM4500-SO4 E |
| 05/11/2018 | Water  | J2622-06 | Dissolved Sulfate | Cool 4 deg C | WEST04   | H41              | I01I-057-1      | 04/22/2018   | SM4500-SO4 E |
| 05/11/2018 | Water  | J2622-07 | Dissolved Sulfate | Cool 4 deg C | WEST04   | H41              | I03I-057-1      | 04/22/2018   | SM4500-SO4 E |
| 05/11/2018 | Water  | J2622-08 | Dissolved Sulfate | Cool 4 deg C | WEST04   | H41              | I04I-057-1      | 04/22/2018   | SM4500-SO4 E |
| 05/11/2018 | Water  | J2622-09 | Dissolved Sulfate | Cool 4 deg C | WEST04   | H41              | I05I-057-1      | 04/22/2018   | SM4500-SO4 E |
| 05/11/2018 | Water  | J2622-10 | Dissolved Sulfate | Cool 4 deg C | WEST04   | H41              | I06I-057-1      | 04/22/2018   | SM4500-SO4 E |

Date/Time 5-1-2018 14:18

Received by: AUC

Relinquished by: [Signature]

Date/Time 5-1-2018 18:20

Received by: [Signature]

Relinquished by: [Signature]