

**Analytical Summary Report**

Analysis Method: 9038

ANALYST: AMANDEEP

Parameter: Dissolved Sulfate

SUPERVISOR REVIEW BY: apatel

Run Number: LB106502

| Reagent/Standard                   | Lot/Log # |
|------------------------------------|-----------|
| sulfate CCV 20ppm                  | WP80126   |
| sulfate ICV 20ppm                  | WP80127   |
| conditioning reagent               | WP80133   |
| Sulfate LCS std, 20ppm             | WP80128   |
| Sulfate Calibration std, 15ppm     | WP80120   |
| Sulfate Calibration std, 25ppm     | WP80122   |
| Sulfate Calibration std, 0ppm      | WP80117   |
| Sulfate Calibration std, 10ppm     | WP80119   |
| Sulfate Calibration std, 20ppm     | WP80121   |
| Sulfate Calibration std, 30ppm     | WP80123   |
| Sulfate Calibration std, 40ppm     | WP80125   |
| Sulfate Calibration std, 5ppm      | WP80118   |
| Sulfate Calibration std, 35ppm     | WP80124   |
| BARIUM CHLORIDE DIHYDRATE ACS 100G | W2210     |

Intercept: -0.9082

Slope: 3.1927

Regression: 0.998467

| 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  | 0.227              | 0.335            | 0.108      | 11/26/2019 | 08:20     |
| 2   | CAL2   | 5                  | 1  | Water  | 0.197              | 14.800           | 14.603     | 11/26/2019 | 08:26     |
| 3   | CAL3   | 10                 | 1  | Water  | 0.189              | 34.200           | 34.011     | 11/26/2019 | 08:32     |
| 4   | CAL4   | 15                 | 1  | Water  | 0.196              | 44.800           | 44.604     | 11/26/2019 | 08:37     |
| 5   | CAL5   | 20                 | 1  | Water  | 0.203              | 60.100           | 59.897     | 11/26/2019 | 08:40     |
| 6   | CAL6   | 25                 | 1  | Water  | 0.206              | 81.500           | 81.294     | 11/26/2019 | 08:45     |
| 7   | CAL7   | 30                 | 1  | Water  | 0.199              | 92.600           | 92.401     | 11/26/2019 | 08:50     |
| 8   | CAL8   | 35                 | 1  | Water  | 0.198              | 110.000          | 109.802    | 11/26/2019 | 08:56     |
| 9   | CAL9   | 40                 | 1  | Water  | 0.205              | 130.000          | 129.795    | 11/26/2019 | 09:02     |



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Parameter: Dissolved Sulfate

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Run Number: LB106502

| Seq | Lab ID      | Initial Weight | Final Vol | True Value (mg/L) | DF | MATRIX | Initial Reading | Final Reading | Difference | Result (mg/L) | AnalDate   | Anal Time |
|-----|-------------|----------------|-----------|-------------------|----|--------|-----------------|---------------|------------|---------------|------------|-----------|
| 1   | ICV         |                |           | 20                | 1  | Water  | 0.298           | 57.900        | 57.602     | 18.326        | 11/26/2019 | 09:07     |
| 2   | ICB         |                |           |                   | 1  | Water  | 0.216           | 0.330         | 0.114      | 0.320         | 11/26/2019 | 09:14     |
| 3   | CCV1        |                |           | 20                | 1  | Water  | 0.217           | 59.700        | 59.483     | 18.915        | 11/26/2019 | 15:05     |
| 4   | CCB1        |                |           |                   | 1  | Water  | 0.199           | 0.351         | 0.152      | 0.332         | 11/26/2019 | 15:10     |
| 5   | LB106502BL  | 50             | 50        |                   | 1  | Water  | 0.201           | 0.347         | 0.146      | 0.330         | 11/26/2019 | 15:20     |
| 6   | LB106502BS  | 50             | 50        | 20                | 1  | Water  | 0.297           | 58.900        | 58.603     | 18.640        | 11/26/2019 | 15:26     |
| 7   | K5980-13    | 50             | 50        |                   | 1  | Water  | 0.345           | 161.000       | 160.655    | 50.604        | 11/26/2019 | 15:31     |
| 8   | K5980-14    | 50             | 50        |                   | 1  | Water  | 0.426           | 70.500        | 70.074     | 22.233        | 11/26/2019 | 15:36     |
| 9   | K5980-15    | 50             | 50        |                   | 1  | Water  | 2.300           | 126.000       | 123.700    | 39.029        | 11/26/2019 | 15:42     |
| 10  | K5980-16    | 50             | 50        |                   | 1  | Water  | 0.179           | 35.600        | 35.421     | 11.379        | 11/26/2019 | 15:50     |
| 11  | K5980-17    | 50             | 50        |                   | 1  | Water  | 0.528           | 41.500        | 40.972     | 13.117        | 11/26/2019 | 15:56     |
| 12  | K5980-17DUP | 50             | 50        |                   | 1  | Water  | 0.520           | 40.800        | 40.280     | 12.901        | 11/26/2019 | 16:02     |
| 13  | K5980-17MS  | 50             | 50        | 20                | 1  | Water  | 0.574           | 111.000       | 110.426    | 34.871        | 11/26/2019 | 16:08     |
| 14  | K5980-17MSD | 50             | 50        | 20                | 1  | Water  | 0.570           | 113.000       | 112.430    | 35.499        | 11/26/2019 | 16:13     |
| 15  | CCV2        |                |           | 20                | 1  | Water  | 0.216           | 60.100        | 59.884     | 19.041        | 11/26/2019 | 16:20     |
| 16  | CCB2        |                |           |                   | 1  | Water  | 0.220           | 0.348         | 0.128      | 0.325         | 11/26/2019 | 16:26     |
| 17  | K5980-18    | 50             | 50        |                   | 1  | Water  | 6.850           | 33.900        | 27.050     | 8.757         | 11/26/2019 | 16:32     |
| 18  | K5980-19    | 50             | 50        |                   | 1  | Water  | 0.292           | 0.389         | 0.097      | 0.315         | 11/26/2019 | 16:39     |
| 19  | K5980-20    | 50             | 50        |                   | 1  | Water  | 0.603           | 55.900        | 55.297     | 17.604        | 11/26/2019 | 16:45     |
| 20  | K5980-21    | 50             | 50        |                   | 1  | Water  | 1.910           | 245.000       | 243.090    | 76.424        | 11/26/2019 | 16:52     |
| 21  | K5980-22    | 50             | 50        |                   | 1  | Water  | 0.822           | 0.827         | 0.005      | 0.286         | 11/26/2019 | 16:59     |
| 22  | K5980-23    | 50             | 50        |                   | 1  | Water  | 0.291           | 247.000       | 246.709    | 77.557        | 11/26/2019 | 17:05     |
| 23  | K5980-13    |                |           |                   | 2  | Water  | 0.298           | 65.600        | 65.302     | 20.738        | 11/26/2019 | 17:20     |
| 24  | K5980-21    |                |           |                   | 5  | Water  | 0.508           | 52.200        | 51.692     | 16.475        | 11/26/2019 | 17:25     |
| 25  | K5980-23    |                |           |                   | 5  | Water  | 0.198           | 39.800        | 39.602     | 12.688        | 11/26/2019 | 17:32     |
| 26  | CCV3        |                |           | 20                | 1  | Water  | 0.196           | 59.900        | 59.704     | 18.985        | 11/26/2019 | 17:40     |
| 27  | CCB3        |                |           |                   | 1  | Water  | 0.203           | 0.357         | 0.154      | 0.333         | 11/26/2019 | 17:45     |

# WORKLIST(Hardcopy Internal Chain)

WorkList Name : DSO411219      WorkList ID : 133611      Department : Wet-Chemistry      Date : 11-22-2019 09:51:18

| Due Date   | Matrix | Sample   | Test              | Preservative | Customer | Storage Location | Customer Sample | Collect Date | Method |
|------------|--------|----------|-------------------|--------------|----------|------------------|-----------------|--------------|--------|
| 12/05/2019 | Water  | K5980-13 | Dissolved Sulfate | Cool 4 deg C | WEST04   | I41              | MW9-063-1       | 11/21/2019   | 9038   |
| 12/05/2019 | Water  | K5980-14 | Dissolved Sulfate | Cool 4 deg C | WEST04   | I41              | MW1-063-1       | 11/21/2019   | 9038   |
| 12/05/2019 | Water  | K5980-15 | Dissolved Sulfate | Cool 4 deg C | WEST04   | I41              | MW10D-063-1     | 11/21/2019   | 9038   |
| 12/05/2019 | Water  | K5980-16 | Dissolved Sulfate | Cool 4 deg C | WEST04   | I41              | MW10M-063-1     | 11/21/2019   | 9038   |
| 12/05/2019 | Water  | K5980-17 | Dissolved Sulfate | Cool 4 deg C | WEST04   | I41              | MW10M-063-2     | 11/21/2019   | 9038   |
| 12/05/2019 | Water  | K5980-18 | Dissolved Sulfate | Cool 4 deg C | WEST04   | I41              | MW2S-063-1      | 11/21/2019   | 9038   |
| 12/05/2019 | Water  | K5980-19 | Dissolved Sulfate | Cool 4 deg C | WEST04   | I41              | MW11M-063-3     | 11/21/2019   | 9038   |
| 12/05/2019 | Water  | K5980-20 | Dissolved Sulfate | Cool 4 deg C | WEST04   | I41              | MW11M-063-1     | 11/21/2019   | 9038   |
| 12/05/2019 | Water  | K5980-21 | Dissolved Sulfate | Cool 4 deg C | WEST04   | I41              | MW11D-063-1     | 11/21/2019   | 9038   |
| 12/05/2019 | Water  | K5980-22 | Dissolved Sulfate | Cool 4 deg C | WEST04   | I41              | MW4D-063-1      | 11/21/2019   | 9038   |
| 12/05/2019 | Water  | K5980-23 | Dissolved Sulfate | Cool 4 deg C | WEST04   | I41              | MW4S-063-1      | 11/21/2019   | 9038   |

Date/Time 11-26-19 14:30  
 Received by: APC  
 Relinquished by: CP

Date/Time 11-26-19 18:00  
 Received by: CP  
 Relinquished by: APC