

# Analytical Summary Report

Analysis Method: 7196A

ANALYST: Indiana

Parameter: Hexavalent Chromium

SUPERVISOR REVIEW BY: apatel

Run Number: LB95586

pH Meter ID: WC pH Meter-1

| Reagent/Standard                      | Lot/Log # |
|---------------------------------------|-----------|
| Calibration Std. hexchrome 0.1 ppm    | WP64778   |
| Calibration Std. hexchrome 0.05 ppm   | WP64777   |
| 5N sulfuric acid                      | WP61786   |
| Calibratation STD HexaChrome 1 PPM    | WP64780   |
| Calibratation STD Hexa Chrome 0.5 PPM | WP64779   |
| calibration std. hexchrome 0.01 ppm   | WP64775   |
| calibration std. hexchrome 0 ppm      | WP64774   |
| Hexavalent Chromium ICV Std.          | WP64781   |
| Hexavalent Chromium CCV Std           | WP64783   |
| hexavalent chromium color reagent     | WP64738   |
| HNO3 Hex-Chrome, 5M                   | WP61785   |
| Calibration std Hexachrome, 0.025ppm  | WP64776   |

Intercept: 0.0003

Slope: 0.7701

Regression: 0.999985

| Seq | Lab ID | True Value (mg/l) | DF | Initial Vol (ml/gm) | Final Vol (ml) | pH HN03 | pH H2SO4 | Absorb. at 540 |       | Absorbance Difference | Anal Date  | Anal Time |
|-----|--------|-------------------|----|---------------------|----------------|---------|----------|----------------|-------|-----------------------|------------|-----------|
|     |        |                   |    |                     |                |         |          | Backgrnd       | Color |                       |            |           |
| 1   | CAL1   | 0                 | 1  | 100                 | 100            |         | 2.10     | 0.000          | 0.000 | 0.000                 | 05/24/2018 | 12:40     |
| 2   | CAL2   | 0.01              | 1  | 100                 | 100            |         | 1.88     | 0.000          | 0.007 | 0.007                 | 05/24/2018 | 12:40     |
| 3   | CAL3   | 0.025             | 1  | 100                 | 100            |         | 1.57     | 0.000          | 0.018 | 0.018                 | 05/24/2018 | 12:41     |
| 4   | CAL4   | 0.05              | 1  | 100                 | 100            |         | 2.29     | 0.000          | 0.039 | 0.039                 | 05/24/2018 | 12:41     |
| 5   | CAL5   | 0.1               | 1  | 100                 | 100            |         | 2.44     | 0.000          | 0.079 | 0.079                 | 05/24/2018 | 12:42     |
| 6   | CAL6   | 0.5               | 1  | 100                 | 100            |         | 1.63     | 0.000          | 0.388 | 0.388                 | 05/24/2018 | 12:42     |
| 7   | CAL7   | 1                 | 1  | 100                 | 100            |         | 2.39     | 0.000          | 0.769 | 0.769                 | 05/24/2018 | 12:43     |



# Analytical Summary Report

Analysis Method: 7196A

ANALYST: Indiana

Parameter: Hexavalent Chromium

SUPERVISOR REVIEW BY: apatel

Run Number: LB95586

pH Meter ID: WC pH Meter-1

| Seq | Lab ID          | True Value (mg/l) | DF | Initial Vol (ml/gm) | Final Vol (ml) | pH HN03 | pH H2SO4 | Absorb. at 540 |       | Absorbance Difference | Result | Anal Date  | Anal Time |
|-----|-----------------|-------------------|----|---------------------|----------------|---------|----------|----------------|-------|-----------------------|--------|------------|-----------|
|     |                 |                   |    |                     |                |         |          | Backgrnd       | Color |                       |        |            |           |
| 1   | ICV             | 0.5               | 1  | 100                 | 100            |         | 1.66     | 0.000          | 0.390 | 0.390                 | 0.506  | 05/24/2018 | 12:43     |
| 2   | ICB             |                   | 1  | 100                 | 100            |         | 2.39     | 0.000          | 0.000 | 0.000                 | 0.000  | 05/24/2018 | 12:44     |
| 3   | CCV1            | 0.5               | 1  | 100                 | 100            |         | 2.21     | 0.000          | 0.390 | 0.390                 | 0.506  | 05/24/2018 | 12:44     |
| 4   | CCB1            |                   | 1  | 100                 | 100            |         | 2.34     | 0.000          | 0.000 | 0.000                 | 0.000  | 05/24/2018 | 12:45     |
| 5   | PB109642BL      |                   | 1  | 2.52                | 100            | 7.36    | 1.58     | 0.000          | 0.000 | 0.000                 | 0.000  | 05/24/2018 | 12:45     |
| 6   | PB109642BS      | 20                | 1  | 2.53                | 100            | 7.20    | 1.63     | 0.000          | 0.360 | 0.360                 | 0.467  | 05/24/2018 | 12:46     |
| 7   | J3060-01        |                   | 1  | 2.51                | 100            | 7.41    | 2.05     | 0.008          | 0.008 | 0.000                 | 0.000  | 05/24/2018 | 12:46     |
| 8   | J3060-01DUP     |                   | 1  | 2.53                | 100            | 7.83    | 2.16     | 0.009          | 0.009 | 0.000                 | 0.000  | 05/24/2018 | 12:47     |
| 9   | J3060-01MSPre   | 40                | 2  | 2.55                | 100            | 7.60    | 2.27     | 0.010          | 0.350 | 0.340                 | 0.441  | 05/24/2018 | 12:47     |
| 10  | J3060-01MS2Ins  | 1284              | 40 | 2.55                | 100            | 7.30    | 1.84     | 0.007          | 0.619 | 0.612                 | 0.794  | 05/24/2018 | 12:48     |
| 11  | J3060-01MS3Post | 40                | 2  | 2.50                | 100            | 7.15    | 1.70     | 0.011          | 0.355 | 0.344                 | 0.446  | 05/24/2018 | 12:48     |
| 12  | J3060-03        |                   | 1  | 2.54                | 100            | 7.11    | 2.38     | 0.019          | 0.019 | 0.000                 | 0.000  | 05/24/2018 | 12:49     |
| 13  | J3060-05        |                   | 1  | 2.51                | 100            | 7.16    | 1.92     | 0.070          | 0.070 | 0.000                 | 0.000  | 05/24/2018 | 12:49     |
| 14  | J3074-01        |                   | 1  | 2.53                | 100            | 7.91    | 2.16     | 0.014          | 0.014 | 0.000                 | 0.000  | 05/24/2018 | 12:50     |
| 15  | CCV2            | 0.5               | 1  | 100                 | 100            |         | 2.45     | 0.000          | 0.390 | 0.390                 | 0.506  | 05/24/2018 | 12:50     |
| 16  | CCB2            |                   | 1  | 100                 | 100            |         | 1.61     | 0.000          | 0.000 | 0.000                 | 0.000  | 05/24/2018 | 12:50     |
| 17  | J3075-01        |                   | 1  | 2.50                | 100            | 7.63    | 1.80     | 0.028          | 0.028 | 0.000                 | 0.000  | 05/24/2018 | 12:51     |
| 18  | J3078-02        |                   | 1  | 2.51                | 100            | 7.72    | 2.12     | 0.010          | 0.010 | 0.000                 | 0.000  | 05/24/2018 | 12:51     |
| 19  | J3078-05        |                   | 1  | 2.54                | 100            | 7.88    | 2.43     | 0.015          | 0.015 | 0.000                 | 0.000  | 05/24/2018 | 12:52     |
| 20  | J3078-08        |                   | 1  | 2.50                | 100            | 7.95    | 2.39     | 0.013          | 0.013 | 0.000                 | 0.000  | 05/24/2018 | 12:52     |
| 21  | J3078-11        |                   | 1  | 2.52                | 100            | 7.40    | 1.60     | 0.012          | 0.012 | 0.000                 | 0.000  | 05/24/2018 | 12:53     |
| 22  | J3078-14        |                   | 1  | 2.50                | 100            | 7.63    | 1.78     | 0.062          | 0.062 | 0.000                 | 0.000  | 05/24/2018 | 12:53     |
| 23  | PB109641BL      |                   | 1  | 2.55                | 100            | 7.20    | 2.38     | 0.000          | 0.000 | 0.000                 | 0.000  | 05/24/2018 | 12:54     |
| 24  | PB109641BS      | 20                | 1  | 2.50                | 100            | 7.11    | 2.20     | 0.000          | 0.372 | 0.372                 | 0.483  | 05/24/2018 | 12:54     |
| 25  | J2669-09        |                   | 1  | 2.55                | 100            | 7.44    | 1.92     | 0.017          | 0.017 | 0.000                 | 0.000  | 05/24/2018 | 12:55     |
| 26  | J3006-01        |                   | 1  | 2.54                | 100            | 7.69    | 1.65     | 0.028          | 0.028 | 0.000                 | 0.000  | 05/24/2018 | 12:55     |
| 27  | CCV3            | 0.5               | 1  | 100                 | 100            |         | 2.33     | 0.000          | 0.390 | 0.390                 | 0.506  | 05/24/2018 | 12:56     |
| 28  | CCB3            |                   | 1  | 100                 | 100            |         | 2.21     | 0.000          | 0.000 | 0.000                 | 0.000  | 05/24/2018 | 12:56     |
| 29  | J3006-02        |                   | 1  | 2.50                | 100            | 7.91    | 1.75     | 0.016          | 0.016 | 0.000                 | 0.000  | 05/24/2018 | 12:57     |
| 30  | J3006-03        |                   | 1  | 2.55                | 100            | 7.22    | 1.64     | 0.033          | 0.033 | 0.000                 | 0.000  | 05/24/2018 | 12:57     |
| 31  | J3023-01        |                   | 1  | 2.54                | 100            | 7.12    | 1.89     | 0.180          | 0.180 | 0.000                 | 0.000  | 05/24/2018 | 12:58     |
| 32  | J3023-02        |                   | 1  | 2.52                | 100            | 7.07    | 2.33     | 0.006          | 0.006 | 0.000                 | 0.000  | 05/24/2018 | 12:58     |
| 33  | J3023-03        |                   | 1  | 2.54                | 100            | 7.36    | 2.02     | 0.010          | 0.010 | 0.000                 | 0.000  | 05/24/2018 | 12:59     |
| 34  | J3023-03DUP     |                   | 1  | 2.51                | 100            | 7.25    | 2.29     | 0.009          | 0.009 | 0.000                 | 0.000  | 05/24/2018 | 12:59     |
| 35  | J3023-03MSPre   | 40                | 2  | 2.50                | 100            | 7.18    | 1.76     | 0.000          | 0.366 | 0.366                 | 0.475  | 05/24/2018 | 13:00     |
| 36  | J3023-03MS2Ins  | 1284              | 40 | 2.53                | 100            | 7.96    | 1.54     | 0.009          | 0.628 | 0.619                 | 0.803  | 05/24/2018 | 13:00     |
| 37  | J3023-03MS3Post | 40                | 2  | 2.50                | 100            | 7.80    | 1.91     | 0.013          | 0.368 | 0.355                 | 0.461  | 05/24/2018 | 13:01     |
| 38  | CCV4            | 0.5               | 1  | 100                 | 100            |         | 2.30     | 0.000          | 0.391 | 0.391                 | 0.507  | 05/24/2018 | 13:01     |
| 39  | CCB4            |                   | 1  | 100                 | 100            |         | 2.20     | 0.000          | 0.000 | 0.000                 | 0.000  | 05/24/2018 | 13:02     |