

May 12, 2009

Kamron Saremi  
Santa Ana Regional Water Quality Control Board  
3737 Main St., Suite 500  
Riverside, CA 92501

Subject: Revised copy of the *On-Site Biotreatment and Disposal of Investigation-Derived Water, Lockheed Martin Corporation, Beaumont Site 2, Riverside County, California*

Dear Mr. Saremi,

Please accept a revised copy of the *On-Site Biotreatment and Disposal of Investigation-Derived Water, Lockheed Martin Corporation, Beaumont Site 2, Riverside County, California*. The table for the summary of analytical results was inadvertently omitted from the original submitted yesterday, May 11, 2009.

Please accept our apologies for this oversight. If you have any questions, please do not hesitate to contact us at (909) 381-1674.

Sincerely,

**Tetra Tech, Inc.**



Mark Feldman, CHG CEG  
Senior Geochemist

Thomas Villeneuve, PE  
Project Manager

Enclosure: As stated

cc: Denise Kato, Lockheed-Martin (1 pdf only)  
Gene Matsushita, Lockheed-Martin (1 hard copy and 1 pdf)

May 11, 2009

Mr. Kamron Saremi  
Santa Ana Regional Water Quality Control Board  
3737 Main St., Suite 500  
Riverside, CA 92501

SUBJECT: On-Site Biotreatment And Disposal Of Investigation-Derived Water, Lockheed Martin Corporation, Beaumont Site 2, Riverside County, California

Dear Mr. Saremi:

The following letter has been prepared by Tetra Tech, Inc. on behalf of Lockheed Martin Corporation (LMC) in support of a planned request to discharge treated water to land at LMC Beaumont Site 2, located southwest of the City of Beaumont in Riverside County, California (the Site; Figure 1). The water was produced during recent site investigation activities at the Site, which are being conducted with oversight from the California Department of Toxic Substances Control (DTSC). Site activities which resulted in generation of the water include drilling, well development, groundwater sampling, and equipment decontamination. The water is currently being stored on-Site in two 20,000-gallon portable aboveground tanks and one roll-off bin.

LMC is in the process of conducting on-site biotreatment of the water to reduce perchlorate concentrations in the water to levels below the California Maximum Contaminant Level (MCL) of 6 µg/L. At the conclusion of treatment, and with the concurrence of the Santa

after the start of the test, and final confirmation samples were collected approximately 19 days after the start of the test. The initial water tank samples and/or the initial drum samples were analyzed for the following:

- Perchlorate (EPA Method 332.0)
- VOCs (EPA Method 8260B; tank sample only)
- TPH as gasoline and diesel (EPA Method 8015m; tank sample only)
- California Title 22 Metals (EPA Methods 6020/ 200.8; filtered samples)
- Nitrate (EPA Method 300.0)
- Orthophosphate Phosphorous (SM 4500P)
- Total Organic Carbon (TOC; SM 5310B)

The progress samples were analyzed for perchlorate only. The final confirmation samples were analyzed for most of the same compounds as the initial samples. Analytical results for the pilot test are summarized in Table 1; copies of the laboratory reports are provided in Attachment 1.

Briefly, the results of the pilot test were as follows:

- Biotreatment reduced perchlorate concentrations in the water to essentially non-detectable levels within approximately two to three weeks.
- The treatment process did not result in significant changes in dissolved metals concentrations, indicating that the anaerobic conditions under which biodegradation occurred did not result in undesirable solubilization of metals.
- Due to the uncertainty of the quantity of glycerine needed to achieve the appropriate redox conditions, the drum was dosed generously. As a result, phosphate and TOC concentrations increased slightly in the post-treatment sample. The quantity of amendments added for full-scale treatment will therefore be reduced accordingly.

Based on the results of the pilot test, full-scale treatment of the water tanks has been initiated. Treatment consists of amending each tank with approximately 27.5 gallons of water from the pilot test drum, 50 pounds of glycerine, and 2 pounds of diammonium phosphate, and closing off hatches and vents on the tanks to allow anaerobic conditions to develop. The glycerine dosage rate is approximately 22 times less than used in the pilot test; if necessary, additional glycerin can be added to maintain redox conditions.

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Saremi  
May 11, 2009  
Page 3 of 3

Based on the results of the pilot test, LMC requests that the SARWQCB provide concurrence that discharge of the treated water to land is an acceptable disposal option. The results of the confirmation sampling will be provided in a future submittal to the SARWQCB for review and final approval prior to discharging the water.

If you have any questions regarding this letter, please feel free to contact Tom Villeneuve or Mark Feldman of Tetra Tech at (909) 381-1674.

Sincerely,

**Tetra Tech, Inc.**



Mark Feldman, CHG CEG  
Senior Geochemist

Thomas Villeneuve, PE  
Project Manager

MF:dc

Attachments:    Table 1 – Pilot Test Results  
                      Figure 1 – Site Location Map  
                      Figure 2 – Proposed Discharge Point  
                      Attachment 1 – Laboratory Reports  
                      Attachment 2 – Amendment Receipts and Material Safety Data Sheets

cc:        Denise Kato (1 pdf only)  
            Gene Matsushita, LMC (1 hard copy & 1 pdf)

TABLE 1  
Summary of Analytical Results  
Biotreatment Pilot Test  
LMC Beaumont Site 2

| Analyte                                       | Disposal Water Container | IDW1-031109 | IDW-011809 | IDW-032609 | IDW1-033009 |
|---|--------------------------|-------------|------------|------------|-------------|
|   | 01/09/09                 | 03/11/09    | 03/18/09   | 03/26/09   | 03/30/09    |
| Perchlorate <sup>1</sup> (µg/L)               | 3,100                    | 2,200       | 1,600      | <0.071     | 0.39        |
| TPH gasoline <sup>2</sup> (mg/L)              | <0.024                   | -           | -          | -          | -           |
| TPH diesel <sup>2</sup> (mg/L)                | <0.46                    | -           | -          | -          | -           |
| VOCs <sup>3</sup> (µg/L)                      | All ND                   | -           | -          | -          | -           |
| Dissolved Metals <sup>4</sup> (mg/L)          |                          |             |            |            |             |
| Antimony                                      | -                        | <0.0030     | -          | -          | <0.0030     |
| Arsenic                                       | -                        | 0.0054      | -          | -          | 0.009       |
| Barium  | -                        | 0.18        | -          | -          | 0.15        |
| Beryllium                                     | -                        | 0.00058 J   | -          | -          | 0.00052 J   |
| Cadmium                                       | -                        | 0.000098 J  | -          | -          | 0.00014 J   |
| Total Chromium                                | -                        | 0.029       | -          | -          | 0.034       |
| Cobalt  | -                        | 0.0059 J    | -          | -          | 0.0049 J    |
| Copper  | -                        | 0.019       | -          | -          | 0.014       |
| Lead  | -                        | 0.0071      | -          | -          | 0.005       |
| Mercury                                       | -                        | <0.000032   | -          | -          | <0.000032   |
| Molybdenum                                    | -                        | 0.056       | -          | -          | 0.065       |
| Nickel  | -                        | 0.0098 J    | -          | -          | 0.0091 J    |
| Selenium                                      | -                        | 0.0027 J    | -          | -          | <0.0025     |
| Silver  | -                        | <0.0050     | -          | -          | <0.0050     |
| Thallium                                      | -                        | <0.00098    | -          | -          | <0.00098    |
| Vanadium                                      | -                        | 0.049       | -          | -          | 0.029       |
| Zinc  | -                        | 0.026       | -          | -          | 0.025       |
| Nitrate <sup>5</sup> (mg/L)                   | -                        | 0.14        | -          | -          | <0.11       |
| Orthophosphate Phosphorus <sup>6</sup> (mg/L) | -                        | 4.1         | -          | -          | 13          |
| Total Organic Carbon <sup>7</sup> (mg/L)      | -                        | 740         | -          | -          | 2,900       |

Notes

- indicates not analyzed.

< indicates concentration below specified method detection limit (MDL).

J indicates estimated concentration.

ND indicates not detected above MDL; MDL varies by compound.

mg/L: milligrams per liter

µg/L: micrograms per liter

1) EPA Method 332.0

2) EPA Method 8015m

3) EPA Method 8260B

4) EPA Method 6020/200.8. Only results for filtered samples are shown.

5) EPA Method 300.0

6) Standard Method 4500P

7) Standard Method 5310B











Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 1 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 14-Jan-2009

Work Order Number: A9A0762  
Received on Ice (Y/N): Yes      Temp: 5 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

### Sample Identification

| <u>Lab Sample #</u> | <u>Client Sample ID</u>       | <u>Matrix</u>       | <u>Date Sampled</u> | <u>By</u>           | <u>Date Submitted</u> | <u>By</u>           |
|---------------------|-------------------------------|---------------------|---------------------|---------------------|-----------------------|---------------------|
| A9A0762-01          | Disposal Water Container<br>2 | Beaumont SiteLiquid | 01/09/09 15:00      | Fernando<br>Ramirez | 01/09/09 16:44        | Fernando<br>Ramirez |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Report Date: 14-Jan-2009

Analytical Report: Page 2 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Work Order Number: A9A0762

Yes

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Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 3 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 14-Jan-2009

Work Order Number: A9A0762  
Received on Ice (Y/N): Yes      Temp: 5 °C

Laboratory Reference Number  
**A9A0762-01**

| <u>Sample Description</u>                | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
|--|---------------|--------------------------|---------------------------|
| Disposal Water Container Beaumont Site 2 | Liquid        | 01/09/09 15:00           | 01/09/09 16:44            |

| <u>Analyte(s)</u>                       | <u>Result</u> | <u>RDL</u> | <u>MDL</u> | <u>Units</u> | <u>Method</u> | <u>Analysis Date</u> | <u>Analyst</u> | <u>Flag</u> |
|---|---------------|------------|------------|--------------|---------------|----------------------|----------------|-------------|
| Volatile Organic Compounds by EPA 8260B | ND            |            |            |              |               |                      |                |             |

Client Name: Tetra Tech, Inc. - San Bernardino  
 Contact: Mark Feldman  
 Address: 348 West Hospitality Lane, Suite 100  
 San Bernardino, CA 92408-3216

Analytical Report: Page 4 of 18  
 Project Name: Tetra-Tech Lockheed  
 Project Number: [none]

Report Date: 14-Jan-2009

Work Order Number: A9A0762  
 Received on Ice (Y/N): Yes      Temp: 5 °C

Laboratory Reference Number  
**A9A0762-01**

|   |               |                          |                           |
|---|---------------|--------------------------|---------------------------|
| <u>Sample Description</u>                   | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
| Disposal Water Container    Beaumont Site 2 | Liquid        | 01/09/09 15:00           | 01/09/09 16:44            |

| Analyte(s)                                     | Result | RDL  | MDL    | Units | Method    | Analysis Date  | Analyst | Flag |
|--|--------|------|--------|-------|-----------|----------------|---------|------|
| <b>Volatile Organic Compounds by EPA 8260B</b> |        |      |        |       |           |                |         |      |
| trans-1,2-Dichloroethene                       | ND     | 0.50 | 0.10   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| trans-1,3-Dichloropropene                      | ND     | 0.50 | 0.24   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Trichloroethene                                | ND     | 0.50 | 0.17   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Trichlorofluoromethane                         | ND     | 5.0  | 0.16   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Vinyl Acetate                                  | ND     | 10   | 0.48   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Vinyl Chloride                                 | ND     | 0.50 | 0.13   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Xylenes (m+p)                                  | ND     | 0.50 | 0.36   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Xylenes (ortho)                                | ND     | 0.50 | 0.41   | ug/L  | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Surrogate: 1,2-Dichloroethane-d4               | 109    | %    | 80-124 |       | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Surrogate: Bromofluorobenzene                  | 105    | %    | 71-149 |       | EPA 8260B | 01/12/09 23:53 | jes     |      |
| Surrogate: Toluene-d8                          | 98.4   | %    | 80-120 |       | EPA 8260B | 01/12/09 23:53 | jes     |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
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San Bernardino, CA 92408-3216

Analytical Report: Page 5 of 18

Project Number:

Report Date:



Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 7 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 14-Jan-2009

Work Order Number: A9A0762  
Received on Ice (Y/N): Yes      Temp: 5 °C

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| Result | RDL | Units | Spike<br>Level | Result |
|--------|-----|-------|----------------|--------|
|        |     |       |                |        |
|        |     |       |                |        |
|        |     |       |                |        |
|        |     |       |                |        |
|        |     |       |                |        |

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Client Name: Tetra Tech, Inc. - San Bernardino  
 Contact: Mark Feldman  
 Address: 348 West Hospitality Lane, Suite 100  
 San Bernardino, CA 92408-3216

Analytical Report: Page 9 of 18  
 Project Name: Tetra-Tech Lockheed  
 Project Number: [none]

Report Date: 14-Jan-2009

Work Order Number: A9A0762  
 Received on Ice (Y/N): Yes      Temp: 5 °C

Metals and Metalloids; EPA SW846 Series - Batch Quality Control

| Analyte(s)  | Result | RDL    | MDL     | Units | Spike Level | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Flag |
|---|--------|--------|---------|-------|-------------|---------------|------|-------------|------|-----------|------|
| Batch 9A12042 - EPA 3015A SOP M02A  |        |        |         |       |             |               |      |             |      |           |      |
| Matrix Spike (9A12042-MS1)      Source: A9A0762-01      Prepared: 01/12/09      Analyzed: 01/13/09      |        |        |         |       |             |               |      |             |      |           |      |
| Antimony  | 0.997  | 0.030  | 0.015   | mg/L  | 1.00        | ND            | 99.7 | 75-125      |      |           |      |
| Arsenic   | 0.993  | 0.010  | 0.0081  | mg/L  | 1.00        | 0.0310        | 96.2 | 75-125      |      |           |      |
| Barium  | 2.12   | 0.50   | 0.00028 | mg/L  | 1.00        | 1.26          | 85.5 | 75-125      |      |           |      |
| Beryllium   | 1.04   | 0.0050 | 0.00086 | mg/L  | 1.00        | 0.00453       | 103  | 75-125      |      |           |      |
| Cadmium   | 1.01   | 0.0050 | 0.00039 | mg/L  | 1.00        | 0.000453      | 101  | 75-125      |      |           |      |
| Total Chromium  | 1.23   | 0.050  | 0.0025  | mg/L  | 1.00        | 0.238         | 99.5 | 75-125      |      |           |      |
| Cobalt  | 1.07   | 0.050  | 0.0014  | mg/L  | 1.00        | 0.0496        | 102  | 75-125      |      |           |      |
| Copper  | 1.13   | 0.050  | 0.0095  | mg/L  | 1.00        | 0.134         | 99.9 | 75-125      |      |           |      |
| Lead  | 1.04   | 0.025  | 0.00042 | mg/L  | 1.00        | 0.0455        | 99.3 | 75-125      |      |           |      |
| Molybdenum  | 1.13   | 0.050  | 0.0045  | mg/L  | 1.00        | 0.0878        | 105  | 75-125      |      |           |      |
| Nickel  | 1.09   | 0.050  | 0.0075  | mg/L  | 1.00        | 0.0879        | 101  | 75-125      |      |           |      |
| Selenium  | 0.946  | 0.025  | 0.013   | mg/L  | 1.00        | ND            | 94.6 | 75-125      |      |           |      |
| Silver  | 1.03   | 0.050  | 0.025   | mg/L  | 1.00        | ND            | 103  | 75-125      |      |           |      |
| Thallium  | 0.995  | 0.0050 | 0.0049  | mg/L  | 1.00        | ND            | 99.5 | 75-125      |      |           |      |
| Vanadium  | 1.25   | 0.050  | 0.013   | mg/L  | 1.00        | 0.288         | 95.8 | 75-125      |      |           |      |
| Zinc  | 1.32   | 0.050  | 0.0070  | mg/L  | 1.00        | 0.250         | 107  | 75-125      |      |           |      |
| Matrix Spike Dup (9A12042-MSD1)      Source: A9A0762-01      Prepared: 01/12/09      Analyzed: 01/13/09 |        |        |         |       |             |               |      |             |      |           |      |
| Antimony  | 0.975  | 0.030  | 0.015   | mg/L  | 1.00        | ND            | 97.5 | 75-125      | 2.27 | 20        |      |
| Arsenic   | 1.00   | 0.010  | 0.0081  | mg/L  | 1.00        | 0.0310        | 97.4 | 75-125      | 1.19 | 20        |      |
| Barium  | 1.95   | 0.50   | 0.00028 | mg/L  | 1.00        | 1.26          | 68.5 | 75-125      | 8.40 | 20        | QMSD |

Client Name: Tetra Tech, Inc. - San Bernardino  
 Contact: Mark Feldman  
 Address: 348 West Hospitality Lane, Suite 100  
 San Bernardino, CA 92408-3216

Analytical Report: Page 10 of 18  
 Project Name: Tetra-Tech Lockheed  
 Project Number: [none]

Report Date: 14-Jan-2009

Work Order Number: A9A0762  
 Received on Ice (Y/N): Yes      Temp: 5 °C

**Diesel Range Organics by EPA 8015 - Batch Quality Control**

| Analyte(s)                             | Result | RDL | MDL  | Units | Spike Level  | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Flag  |
|--|--------|-----|------|-------|--|---------------|------|-------------|------|-----------|-------|
| <b>Batch 9A12009 - Microextraction</b> |        |     |      |       |  |               |      |             |      |           |       |
| Blank (9A12009-BLK1)                   |        |     |      |       | Prepared: 01/12/09 Analyzed: 01/13/09                    |               |      |             |      |           |       |
| Diesel Range Hydrocarbons              | 6.22   | 2.0 | 0.46 | mg/L  |  |               |      |             |      |           | QHCno |
| Surrogate: Decachlorobiphenyl          | 0.967  |     |      | mg/L  | 1.14   |               | 84.7 | 56-117      |      |           |       |
| LCS (9A12009-BS1)                      |        |     |      |       | Prepared: 01/12/09 Analyzed: 01/13/09                    |               |      |             |      |           |       |
| Diesel Range Hydrocarbons              | 44.4   | 2.0 | 0.46 | mg/L  | 45.7   |               | 97.1 | 60-110      |      |           |       |
| Surrogate: Decachlorobiphenyl          | 0.782  |     |      | mg/L  | 1.14   |               | 68.5 | 56-117      |      |           |       |
| LCS Dup (9A12009-BSD1)                 |        |     |      |       | Prepared: 01/12/09 Analyzed: 01/13/09                    |               |      |             |      |           |       |
| Diesel Range Hydrocarbons              | 37.4   | 2.0 | 0.46 | mg/L  | 45.7   |               | 81.8 | 60-110      | 17.1 | 40        |       |
| Surrogate: Decachlorobiphenyl          | 1.02   |     |      | mg/L  | 1.14   |               | 89.1 | 56-117      |      |           |       |
| Matrix Spike (9A12009-MS1)             |        |     |      |       | Source: A9A0762-01 Prepared: 01/12/09 Analyzed: 01/13/09 |               |      |             |      |           |       |
| Diesel Range Hydrocarbons              | 41.1   | 2.0 | 0.46 | mg/L  | 45.7   | ND            | 89.9 | 28-126      |      |           |       |
| Surrogate: Decachlorobiphenyl          | 1.04   |     |      | mg/L  | 1.14   |               | 90.8 | 56-117      |      |           |       |
| Matrix Spike Dup (9A12009-MSD1)        |        |     |      |       | Source: A9A0762-01 Prepared: 01/12/09 Analyzed: 01/13/09 |               |      |             |      |           |       |
| Diesel Range Hydrocarbons              | 38.0   | 2.0 | 0.46 | mg/L  | 45.7   | ND            | 83.2 | 28-126      | 7.71 | 40        |       |
| Surrogate: Decachlorobiphenyl          | 0.988  |     |      | mg/L  | 1.14   |               | 86.5 | 56-117      |      |           |       |



Client Name: Tetra Tech, Inc. - San Bernardino

Contact: Mark Feldman

Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Report Date:

Client Name: Tetra Tech, Inc. - San Bernardino  
 Contact: Mark Feldman  
 Address: 348 West Hospitality Lane, Suite 100  
 San Bernardino, CA 92408-3216

Analytical Report: Page 13 of 18  
 Project Name: Tetra-Tech Lockheed  
 Project Number: [none]

Report Date: 14-Jan-2009

Work Order Number: A9A0762  
 Received on Ice (Y/N): Yes      Temp: 5 °C

Volatile Organic Compounds by EPA 8260B - Batch Quality Control

| Analyte(s)                       | Result | RDL  | MDL   | Units | Spike Level | Source Result                 | %REC | %REC Limits | RPD | RPD Limit | Flag |
|----------------------------------|--------|------|-------|-------|-------------|-------------------------------|------|-------------|-----|-----------|------|
| Batch 9A12002 - Purge and Trap   |        |      |       |       |             |                               |      |             |     |           |      |
| Blank (9A12002-BLK1)             |        |      |       |       |             | Prepared & Analyzed: 01/12/09 |      |             |     |           |      |
| Trichlorofluoromethane           | ND     | 5.0  | 0.16  | ug/L  |             |                               |      |             |     |           |      |
| Vinyl Acetate                    | ND     | 10   | 0.48  | ug/L  |             |                               |      |             |     |           |      |
| Vinyl Chloride                   | ND     | 0.50 | 0.13  | ug/L  |             |                               |      |             |     |           |      |
| Xylenes (m+p)                    | ND     | 0.50 | 0.36  | ug/L  |             |                               |      |             |     |           |      |
| Xylenes (ortho)                  | ND     | 0.50 | 0.41  | ug/L  |             |                               |      |             |     |           |      |
| Surrogate: 1,2-Dichloroethane-d4 | 107    |      |       | ug/L  | 100         |                               | 107  | 80-124      |     |           |      |
| Surrogate: Bromofluorobenzene    | 105    |      |       | ug/L  | 100         |                               | 105  | 71-149      |     |           |      |
| Surrogate: Toluene-d8            | 98.2   |      |       | ug/L  | 100         |                               | 98.2 | 80-120      |     |           |      |
| LCS (9A12002-BS1)                |        |      |       |       |             | Prepared & Analyzed: 01/12/09 |      |             |     |           |      |
| 1,1-Dichloroethane               | 25.6   | 0.50 | 0.098 | ug/L  | 25.0        |                               | 102  | 76-130      |     |           |      |
| 1,1-Dichloroethene               | 26.2   | 0.50 | 0.12  | ug/L  | 25.0        |                               | 105  | 70-130      |     |           |      |
| 1,4-Dichlorobenzene              | 24.2   | 0.50 | 0.072 | ug/L  | 25.0        |                               | 96.9 | 79-130      |     |           |      |
| Benzene                          | 26.9   | 0.50 | 0.14  | ug/L  | 25.0        |                               | 108  | 70-130      |     |           |      |
| Bromodichloromethane             | 24.8   | 0.50 | 0.11  | ug/L  | 25.0        |                               | 99.3 | 70-132      |     |           |      |
| Bromoform                        | 24.5   | 0.50 | 0.13  | ug/L  | 25.0        |                               | 98.0 | 65-141      |     |           |      |
| Chloroform                       | 27.5   | 0.50 | 0.17  | ug/L  | 25.0        |                               | 110  | 70-130      |     |           |      |
| Dibromochloromethane             | 25.7   | 0.50 | 0.37  | ug/L  | 25.0        |                               | 103  | 70-130      |     |           |      |
| Ethylbenzene                     | 24.6   | 0.50 | 0.26  | ug/L  | 25.0        |                               | 98.6 | 70-136      |     |           |      |
| Methyl tert Butyl Ether          | 27.5   | 5.0  | 0.29  | ug/L  | 25.0        |                               | 110  | 70-130      |     |           |      |
| Tetrachloroethene                | 23.2   | 0.50 | 0.17  | ug/L  | 25.0        |                               | 92.8 | 70-130      |     |           |      |
| Toluene                          | 25.0   | 0.50 | 0.22  | ug/L  | 25.0        |                               | 99.8 | 70-130      |     |           |      |
| Trichloroethene                  | 25.2   | 0.50 | 0.17  | ug/L  | 25.0        |                               | 101  | 70-130      |     |           |      |
| Vinyl Chloride                   | 26.8   | 0.50 | 0.13  | ug/L  | 25.0        |                               | 107  | 60-130      |     |           |      |
| Xylenes (m+p)                    | 51.9   | 0.50 | 0.36  | ug/L  | 50.0        |                               | 104  | 70-137      |     |           |      |
| Xylenes (ortho)                  | 24.8   | 0.50 | 0.41  | ug/L  | 25.0        |                               | 99.0 | 70-136      |     |           |      |
| Surrogate: 1,2-Dichloroethane-d4 | 96.1   |      |       | ug/L  | 100         |                               | 96.1 | 80-124      |     |           |      |
| Surrogate: Bromofluorobenzene    | 99.5   |      |       | ug/L  | 100         |                               | 99.5 | 71-149      |     |           |      |
| Surrogate: Toluene-d8            | 99.8   |      |       | ug/L  | 100         |                               | 99.8 | 80-120      |     |           |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
Mark Feldman  
348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Report Date:

Client Name: Tetra Tech, Inc. - San Bernardino  
 Contact: Mark Feldman  
 Address: 348 West Hospitality Lane, Suite 100  
 San Bernardino, CA 92408-3216

Analytical Report: Page 15 of 18  
 Project Name: Tetra-Tech Lockheed  
 Project Number: [none]

Report Date: 14-Jan-2009

Work Order Number: A9A0762  
 Received on Ice (Y/N): Yes      Temp: 5 °C

Volatile Organic Compounds by EPA 8260B - Batch Quality Control

| Analyte(s)                       | Result | RDL                | MDL  | Units | Spike Level                   | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|----------------------------------|--------|--------------------|------|-------|-------------------------------|---------------|------|-------------|-----|-----------|------|
| Batch 9A12002 - Purge and Trap   |        |                    |      |       |                               |               |      |             |     |           |      |
| Duplicate (9A12002-DUP1)         |        | Source: A9A0313-01 |      |       | Prepared & Analyzed: 01/12/09 |               |      |             |     |           |      |
| Bromoform                        | ND     | 0.50               | 0.13 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Bromomethane                     | ND     | 0.50               | 0.48 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Carbon Disulfide                 | ND     | 0.50               | 0.36 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Carbon Tetrachloride             | ND     | 0.50               | 0.15 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Chlorobenzene                    | ND     | 0.50               | 0.23 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Chloroethane                     | ND     | 0.50               | 0.35 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Chloroform                       | ND     | 0.50               | 0.17 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Chloromethane                    | ND     | 0.50               | 0.36 | ug/L  |                               | ND            |      |             |     | 40        |      |
| cis-1,2-Dichloroethene           | ND     | 0.50               | 0.18 | ug/L  |                               | ND            |      |             |     | 40        |      |
| cis-1,3-Dichloropropene          | ND     | 0.50               | 0.30 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Dibromochloromethane             | ND     | 0.50               | 0.37 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Ethylbenzene                     | ND     | 0.50               | 0.26 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Methyl tert Butyl Ether          | ND     | 5.0                | 0.29 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Methylene Chloride               | ND     | 3.0                | 0.15 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Styrene                          | ND     | 0.50               | 0.22 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Tetrachloroethene                | ND     | 0.50               | 0.17 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Toluene                          | ND     | 0.50               | 0.22 | ug/L  |                               | ND            |      |             |     | 40        |      |
| trans-1,2-Dichloroethene         | ND     | 0.50               | 0.10 | ug/L  |                               | ND            |      |             |     | 40        |      |
| trans-1,3-Dichloropropene        | ND     | 0.50               | 0.24 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Trichloroethene                  | ND     | 0.50               | 0.17 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Trichlorofluoromethane           | ND     | 5.0                | 0.16 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Vinyl Acetate                    | ND     | 10                 | 0.48 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Vinyl Chloride                   | ND     | 0.50               | 0.13 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Xylenes (m+p)                    | ND     | 0.50               | 0.36 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Xylenes (ortho)                  | ND     | 0.50               | 0.41 | ug/L  |                               | ND            |      |             |     | 40        |      |
| Surrogate: 1,2-Dichloroethane-d4 | 108    |                    |      | ug/L  | 100                           |               | 108  | 80-124      |     |           |      |
| Surrogate: Bromofluorobenzene    | 104    |                    |      | ug/L  | 100                           |               | 104  | 71-149      |     |           |      |
| Surrogate: Toluene-d8            | 97.1   |                    |      | ug/L  | 100                           |               | 97.1 | 80-120      |     |           |      |



Client Name:

Report Date:

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 17 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 14-Jan-2009

Work Order Number: A9A0762  
Received on Ice (Y/N): Yes      Temp: 5 °C

## Notes and Definitions

- J      Estimated value
- NRPDo    The RPD/precision of replicate analyses performed on this sample did not meet laboratory acceptance criteria.
- QBLK    The method blank did not meet laboratory acceptance criteria.
- QHCno    The quality control sample chromatographic pattern does NOT resemble the fuel standard used for quantitation.
- QL-MS    Batch acceptance based on MS and/or MSD recovery within LCS criteria. The LCS recovery did not meet laboratory acceptance criteria.
- QMint    Due to matrix interference, the MS and/or MSD did not meet laboratory acceptance criteria.

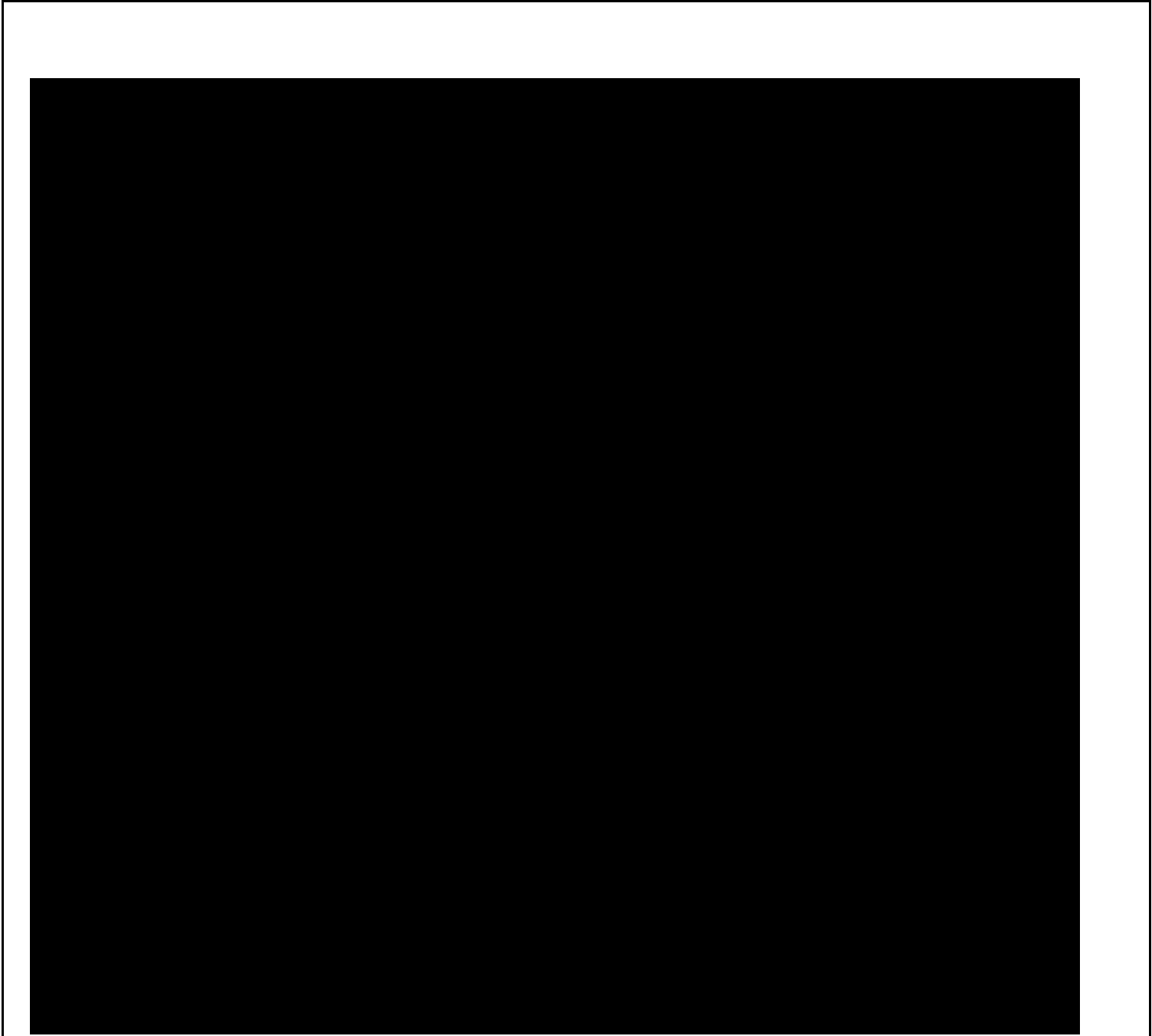
Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 18 of 18  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 14-Jan-2009

Work Order Number: A9A0762

Received on Ice (Y/N): Yes      Temp: 5 °C



Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 1 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 14-Jan-2009

Work Order Number: A9A0768  
Received on Ice (Y/N): Yes      Temp: 5 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

### Sample Identification

| <u>Lab Sample #</u> | <u>Client Sample ID</u>       | <u>Matrix</u>       | <u>Date Sampled</u> | <u>By</u>           | <u>Date Submitted</u> | <u>By</u>           |
|---------------------|-------------------------------|---------------------|---------------------|---------------------|-----------------------|---------------------|
| A9A0768-01          | Disposal Water Container<br>2 | Beaumont SiteLiquid | 01/09/09 15:00      | Fernando<br>Ramirez | 01/09/09 16:44        | Fernando<br>Ramirez |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 2 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 14-Jan-2009

Work Order Number: A9A0768  
Received on Ice (Y/N): Yes      Temp: 5 °C

Laboratory Reference Number  
**A9A0768-01**

| <u>Sample Description</u>                   | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
|---|---------------|--------------------------|---------------------------|
| Disposal Water Container    Beaumont Site 2 | Liquid        | 01/09/09 15:00           | 01/09/09 16:44            |

| Analyte(s)                        | Result | RDL | MDL | Units | Method    | Analysis Date  | Analyst | Flag |
|-----------------------------------|--------|-----|-----|-------|-----------|----------------|---------|------|
| General Inorganics<br>Perchlorate | 3100   | 100 | 71  | ug/L* | EPA 332.0 | 01/13/09 07:36 | aa      |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Report Date: 14-Jan-2009

Analytical Report: Page 3 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]  
Work Order Number: A9A0768

Client Name: Tetra Tech, Inc. - San Bernardino

Report Date:

Client Name:

Report Date:



Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 1 of 12  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 23-Mar-2009

Work Order Number: A9C1065  
Received on Ice (Y/N): Yes      Temp: 0 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

### Sample Identification

| <u>Lab Sample #</u> | <u>Client Sample ID</u>                 | <u>Matrix</u> | <u>Date Sampled</u> | <u>By</u>        | <u>Date Submitted</u> | <u>By</u>        |
|---------------------|---|---------------|---------------------|------------------|-----------------------|------------------|
| A9C1065-01          | IDW1-031109 Beaumont Site 2             | Liquid        | 03/11/09 15:36      | David Bertolacci | 03/11/09 16:06        | David Bertolacci |
| A9C1065-02          | IDW1-031109 (Dissolved) Beaumont Site 2 | Liquid        | 03/11/09 15:36      | David Bertolacci | 03/11/09 16:06        | David Bertolacci |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Report Date:



Client Name: Tetra Tech, Inc. - San Bernardino

348 West Hospitality Lane, Suite 100

Report Date:

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 5 of 12  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date:

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 6 of 12  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 23-Mar-2009

Work Order Number: A9C1065  
Received on Ice (Y/N): Yes      Temp: 10 °C

### General Inorganics - Batch Quality Control

| Analyte(s) | Result | RDL | MDL | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|------------|--------|-----|-----|-------|-------------|---------------|------|-------------|-----|-----------|------|
|------------|--------|-----|-----|-------|-------------|---------------|------|-------------|-----|-----------|------|

Batch 9C12054 - Analyzed as received

Blank (9C12054-BLK1)

Prepared: 03/12/09 Analyzed: 03/14/09

Perchlorate (P) 0.03 f 0)11S Analyzed: 03/14/09

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216  
Report Date: 23-Mar-2009

Analytical Report: Page 7 of 12  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]  
Work Order Number: A9C1065  
Yes 10

Client Name: Tetra Tech, Inc. - San Bernardino  
 Contact: Mark Feldman  
 Address: 348 West Hospitality Lane, Suite 100  
 San Bernardino, CA 92408-3216

Analytical Report: Page 8 of 12  
 Project Name: Tetra-Tech Lockheed  
 Project Number: [none]

Report Date: 23-Mar-2009

Work Order Number: A9C1065  
 Received on Ice (Y/N): Yes      Temp: 0 °C

Metals and Metalloids - Batch Quality Control

| Analyte(s)   | Result  | RDL    | MDL      | Units | Spike Level | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Flag |
|--|---------|--------|----------|-------|-------------|---------------|------|-------------|------|-----------|------|
| Batch 9C16020 - 200.8/ No Digest M12   |         |        |          |       |             |               |      |             |      |           |      |
| Blank (9C16020-BLK1)      Prepared & Analyzed: 03/16/09                                    |         |        |          |       |             |               |      |             |      |           |      |
| Mercury  | ND      | 0.0010 | 0.000032 | mg/L  |             |               |      |             |      |           |      |
| LCS (9C16020-BS1)      Prepared & Analyzed: 03/16/09                                       |         |        |          |       |             |               |      |             |      |           |      |
| Mercury  | 0.00589 | 0.0010 | 0.000032 | mg/L  | 0.00625     |               | 94.2 | 85-115      |      |           |      |
| Matrix Spike (9C16020-MS1)      Source: A9C1065-02      Prepared & Analyzed: 03/16/09      |         |        |          |       |             |               |      |             |      |           |      |
| Mercury  | 0.00638 | 0.0010 | 0.000032 | mg/L  | 0.00625     | ND            | 102  | 75-125      |      |           |      |
| Matrix Spike Dup (9C16020-MSD1)      Source: A9C1065-02      Prepared & Analyzed: 03/16/09 |         |        |          |       |             |               |      |             |      |           |      |
| Mercury  | 0.00628 | 0.0010 | 0.000032 | mg/L  | 0.00625     | ND            | 100  | 75-125      | 1.56 | 20        |      |



Client Name: Tetra Tech, Inc. - San Bernardino  
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 San Bernardino, CA 92408-3216

Analytical Report: Page 9 of 12  
 Project Name: Tetra-Tech Lockheed  
 Project Number: [none]

Report Date: 23-Mar-2009

Work Order Number: A9C1065  
 Received on Ice (Y/N): Yes      Temp: 0 °C

Metals and Metalloids; EPA SW846 Series - Batch Quality Control

| Analyte(s)                           | Result  | RDL    | MDL      | Units | Spike Level | Source Result                 | %REC | %REC Limits | RPD | RPD Limit | Flag |
|--------------------------------------|---------|--------|----------|-------|-------------|-------------------------------|------|-------------|-----|-----------|------|
| Batch 9C16020 - 200.8/ No Digest M12 |         |        |          |       |             |                               |      |             |     |           |      |
| Blank (9C16020-BLK1)                 |         |        |          |       |             | Prepared & Analyzed: 03/16/09 |      |             |     |           |      |
| Antimony                             | ND      | 0.0060 | 0.0030   | mg/L  |             |                               |      |             |     |           |      |
| Arsenic                              | ND      | 0.0020 | 0.0016   | mg/L  |             |                               |      |             |     |           |      |
| Barium                               | ND      | 0.10   | 0.000056 | mg/L  |             |                               |      |             |     |           |      |
| Beryllium                            | ND      | 0.0010 | 0.00017  | mg/L  |             |                               |      |             |     |           |      |
| Cadmium                              | ND      | 0.0010 | 0.000077 | mg/L  |             |                               |      |             |     |           |      |
| Total Chromium                       | 0.00262 | 0.010  | 0.00050  | mg/L  |             |                               |      |             |     |           | J    |
| Cobalt                               | ND      | 0.010  | 0.00028  | mg/L  |             |                               |      |             |     |           |      |
| Copper                               | ND      | 0.010  | 0.0019   | mg/L  |             |                               |      |             |     |           |      |
| Lead                                 | ND      | 0.0050 | 0.000084 | mg/L  |             |                               |      |             |     |           |      |
| Molybdenum                           | ND      | 0.010  | 0.00090  | mg/L  |             |                               |      |             |     |           |      |
| Nickel                               | ND      | 0.010  | 0.0015   | mg/L  |             |                               |      |             |     |           |      |
| Selenium                             | ND      | 0.0050 | 0.0025   | mg/L  |             |                               |      |             |     |           |      |
| Silver                               | ND      | 0.010  | 0.0050   | mg/L  |             |                               |      |             |     |           |      |
| Thallium                             | ND      | 0.0010 | 0.00098  | mg/L  |             |                               |      |             |     |           |      |
| Vanadium                             | ND      | 0.010  | 0.0027   | mg/L  |             |                               |      |             |     |           |      |
| Zinc                                 | ND      | 0.010  | 0.0014   | mg/L  |             |                               |      |             |     |           |      |
| LCS (9C16020-BS1)                    |         |        |          |       |             | Prepared & Analyzed: 03/16/09 |      |             |     |           |      |
| Antimony                             | 0.119   | 0.0060 | 0.0030   | mg/L  | 0.125       |                               | 95.3 | 85-115      |     |           |      |
| Arsenic                              | 0.124   | 0.0020 | 0.0016   | mg/L  | 0.125       |                               | 98.9 | 85-115      |     |           |      |
| Barium                               | 0.125   | 0.10   | 0.000056 | mg/L  | 0.125       |                               | 99.9 | 85-115      |     |           |      |
| Beryllium                            | 0.111   | 0.0010 | 0.00017  | mg/L  | 0.125       |                               | 88.9 | 85-115      |     |           |      |
| Cadmium                              | 0.119   | 0.0010 | 0.000077 | mg/L  | 0.125       |                               | 95.1 | 85-115      |     |           |      |
| Total Chromium                       | 0.122   | 0.010  | 0.00050  | mg/L  | 0.125       |                               | 97.6 | 85-115      |     |           |      |
| Cobalt                               | 0.122   | 0.010  | 0.00028  | mg/L  | 0.125       |                               | 97.3 | 85-115      |     |           |      |
| Copper                               | 0.120   | 0.010  | 0.0019   | mg/L  | 0.125       |                               | 95.8 | 85-115      |     |           |      |
| Lead                                 | 0.119   | 0.0050 | 0.000084 | mg/L  | 0.125       |                               | 95.2 | 85-115      |     |           |      |
| Molybdenum                           | 0.125   | 0.010  | 0.00090  | mg/L  | 0.125       |                               | 100  | 85-115      |     |           |      |
| Nickel                               | 0.122   | 0.010  | 0.0015   | mg/L  | 0.125       |                               | 97.4 | 85-115      |     |           |      |
| Selenium                             | 0.120   | 0.0050 | 0.0025   | mg/L  | 0.125       |                               | 95.7 | 85-115      |     |           |      |
| Silver                               | 0.136   | 0.010  | 0.0050   | mg/L  | 0.125       |                               | 109  | 85-115      |     |           |      |
| Thallium                             | 0.120   | 0.0010 | 0.00098  | mg/L  | 0.125       |                               | 95.8 | 85-115      |     |           |      |
| Vanadium                             | 0.133   | 0.010  | 0.0027   | mg/L  | 0.125       |                               | 106  | 85-115      |     |           |      |
| Zinc                                 | 0.123   | 0.010  | 0.0014   | mg/L  | 0.125       |                               | 98.0 | 85-115      |     |           |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 10 of 12  
Project Name:  
Project Number: [none]

Report Date:

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Report Date:

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 12 of 12

Project Number:

Report Date:

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 1 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 19-Mar-2009

Work Order Number: A9C1623  
Received on Ice (Y/N): Yes      Temp:4 °C

Attached is the analytical report for the sample(s) received for your project. Below is a list of the individual sample descriptions with the corresponding laboratory number(s). Also, enclosed is a copy of the Chain of Custody document (if received with your sample(s)). Please note any unused portion of the sample(s) may be responsibly discarded after 30 days from the above report date, unless you have requested otherwise.

Thank you for the opportunity to serve your analytical needs. If you have any questions or concerns regarding this report please contact our client service department.

### Sample Identification

| <u>Lab Sample #</u> | <u>Client Sample ID</u> | <u>Matrix</u>   | <u>Date Sampled</u> | <u>By</u>      | <u>Date Submitted</u> | <u>By</u>      |                 |
|---------------------|-------------------------|-----------------|---------------------|----------------|-----------------------|----------------|-----------------|
| A9C1623-01          | IDW-031809              | Beaumont Site 2 | Liquid              | 03/18/09 14:50 | Jose R. Santoya       | 03/18/09 15:20 | Jose R. Santoya |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 2 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 19-Mar-2009

Work Order Number: A9C1623  
Received on Ice (Y/N): Yes      Temp:4 °C

Laboratory Reference Number  
**A9C1623-01**

| <u>Sample Description</u>  | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
|----------------------------|---------------|--------------------------|---------------------------|
| IDW-031809 Beaumont Site 2 | Liquid        | 03/18/09 14:50           | 03/18/09 15:20            |

| Analyte(s)                        | Result | RDL | MDL | Units | Method    | Analysis Date  | Analyst | Flag |
|-----------------------------------|--------|-----|-----|-------|-----------|----------------|---------|------|
| General Inorganics<br>Perchlorate | 1600   | 100 | 71  | ug/L* | EPA 332.0 | 03/19/09 08:52 | aa      |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 3 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Report Date: 19-Mar-2009

Work Order Number: A9C1623  
Received on Ice (Y/N): Yes      Temp:4 °C

### General Inorganics - Batch Quality Control

| Analyte(s)   | Result | RDL  | MDL   | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|--|--------|------|-------|-------|-------------|---------------|------|-------------|-----|-----------|------|
| Batch 9C18040 - Analyzed as received                               |        |      |       |       |             |               |      |             |     |           |      |
| Blank (9C18040-BLK1)      Prepared: 03/18/09    Analyzed: 03/19/09 |        |      |       |       |             |               |      |             |     |           |      |
| Perchlorate  | ND     | 0.10 | 0.071 | ug/L* |             |               |      |             |     |           |      |
| LCS (9C18040-BS1)      Prepared: 03/18/09    Analyzed: 03/19/09    |        |      |       |       |             |               |      |             |     |           |      |
| Perchlorate  | 5.03   | 0.10 | 0.071 | ug/L* | 5.00        |               | 101  | 80-120      |     |           |      |

Client Name: Tetra Tech, Inc. - San Bernardino

348 West Hospitality Lane, Suite 100

Report Date:



Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 5 of 5  
Project Name:  
Project Number: [none]

Report Date:

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Report Date:



Client Name: Tetra Tech, Inc. - San Bernardino  
 Contact: Mark Feldman  
 Address: 348 West Hospitality Lane, Suite 100  
 San Bernardino, CA 92408-3216

Analytical Report: Page 3 of 5  
 Project Name: Tetra-Tech Lockheed  
 Project Number: [none]

Report Date: 27-Mar-2009

Work Order Number: A9C2262  
 Received on Ice (Y/N): Yes Temp: 7C

General Inorganics - Batch Quality Control

| Analyte(s)                           | Result | RDL  | MDL   | Units | Spike Level                           | Source Result | %REC | %REC Limits | RPD | RPD Limit | Flag |
|--------------------------------------|--------|------|-------|-------|---------------------------------------|---------------|------|-------------|-----|-----------|------|
| Batch 9C26042 - Analyzed as received |        |      |       |       |                                       |               |      |             |     |           |      |
| Blank (9C26042-BLK1)                 |        |      |       |       | Prepared: 03/26/09 Analyzed: 03/27/09 |               |      |             |     |           |      |
| Perchlorate                          | ND     | 0.10 | 0.071 | ug/L* |                                       |               |      |             |     |           |      |
| LCS (9C26042-BS1)                    |        |      |       |       | Prepared: 03/26/09 Analyzed: 03/27/09 |               |      |             |     |           |      |
| Perchlorate                          | 5.03   | 0.10 | 0.071 | ug/L* | 5.00                                  |               | 101  | 80-120      |     |           |      |

Client Name: Tetra Tech, Inc. - San Bernardino

348 West Hospitality Lane, Suite 100

Report Date:

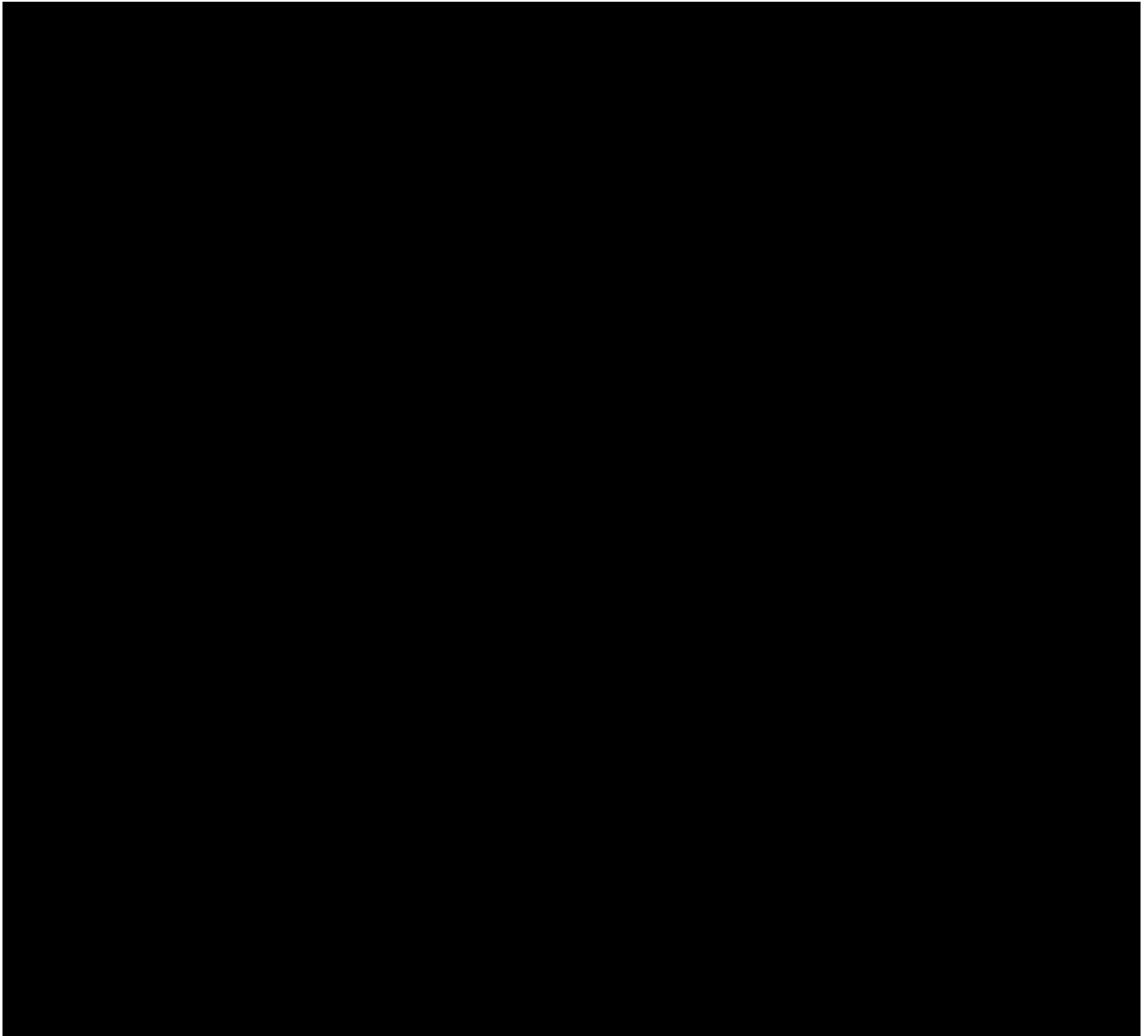
Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Mark Feldman  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Report Date: 27-Mar-2009

Analytical Report: Page 5 of 5  
Project Name: Tetra-Tech Lockheed  
Project Number: [none]

Work Order Number: A9C2262

Received on Ice (Y/N): Yes Temp: 7C



Client Name: Tetra Tech, Inc. - San Bernardino

Contact: Michael Wilson

Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Project Number:

Report Date:

Client Name: Tetra Tech, Inc. - San Bernardino  
 Contact: Michael Wilson  
 Address: 348 West Hospitality Lane, Suite 100  
 San Bernardino, CA 92408-3216

Analytical Report: Page 2 of 8  
 Project Name: Tetra-Tech Lockheed  
 Project Number: TC#22289-090108

Report Date: 31-Mar-2009

**Work Order Number: A9C2429**

Received on Ice (Y/N): Yes Temp: 10 °C

Laboratory Reference Number  
**A9C2429-01**

|                           |               |                          |                           |
|---------------------------|---------------|--------------------------|---------------------------|
| <u>Sample Description</u> | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
| IDW1-033009               | Liquid        | 03/30/09 13:30           | 03/30/09 14:35            |

| Analyte(s)                         | Result | RDL  | MDL   | Units | Method      | Analysis Date  | Analyst | Flag |
|------------------------------------|--------|------|-------|-------|-------------|----------------|---------|------|
| <b>Anions</b>                      |        |      |       |       |             |                |         |      |
| Sulfate                            | 50     | 0.50 |       | mg/L  | EPA 300.0   | 03/30/09 19:11 | AA      |      |
| Nitrate as N                       | ND     | 0.20 | 0.11  | mg/L  | EPA 300.0   | 03/30/09 19:11 | AA      |      |
| <b>Aggregate Organic Compounds</b> |        |      |       |       |             |                |         |      |
| Total Organic Carbon               | 2900   | 70   |       | mg/L  | SM 5310B    | 03/31/09 13:51 | krv     |      |
| <b>General Inorganics</b>          |        |      |       |       |             |                |         |      |
| Perchlorate                        | 0.39   | 0.10 | 0.071 | ug/L* | EPA 332.0   | 03/30/09 23:05 | aa      |      |
| Sulfide                            | ND     | 0.10 |       | mg/L  | SM 4500S2 D | 03/30/09 18:10 | kam     |      |
| <b>Nutrients</b>                   |        |      |       |       |             |                |         |      |
| Ortho Phosphate Phosphorus         | 13     | 2.0  |       | mg/L  | SM 4500P E  | 03/31/09 11:40 | je      |      |



Client Name: Tetra Tech, Inc. - San Bernardino  
 Contact: Michael Wilson  
 Address: 348 West Hospitality Lane, Suite 100  
 San Bernardino, CA 92408-3216

Analytical Report: Page 3 of 8  
 Project Name: Tetra-Tech Lockheed  
 Project Number: TC#22289-090108

Report Date: 31-Mar-2009

**Work Order Number: A9C2429**

Received on Ice (Y/N): Yes Temp: 10 °C

**Anions - Batch Quality Control**

| Analyte(s)  | Result | RDL  | MDL  | Units | Spike Level | Source Result | %REC | %REC Limits | RPD   | RPD Limit | Flag |
|---|--------|------|------|-------|-------------|---------------|------|-------------|-------|-----------|------|
| <b>Batch 9C30028 - Analyzed as received</b>             |        |      |      |       |             |               |      |             |       |           |      |
| <b>Blank (9C30028-BLK1)</b>                             |        |      |      |       |             |               |      |             |       |           |      |
| Prepared & Analyzed: 03/30/09                           |        |      |      |       |             |               |      |             |       |           |      |
| Sulfate   | ND     | 0.50 |      | mg/L  |             |               |      |             |       |           |      |
| Nitrate as N  | ND     | 0.20 | 0.11 | mg/L  |             |               |      |             |       |           |      |
| <b>LCS (9C30028-BS1)</b>                                |        |      |      |       |             |               |      |             |       |           |      |
| Prepared & Analyzed: 03/30/09                           |        |      |      |       |             |               |      |             |       |           |      |
| Sulfate   | 46.8   | 0.50 |      | mg/L  | 50.0        |               | 93.6 | 90-110      |       |           |      |
| Nitrate as N  | 10.8   | 0.20 | 0.11 | mg/L  | 11.3        |               | 95.7 | 90-110      |       |           |      |
| <b>Matrix Spike (9C30028-MS1)</b>                       |        |      |      |       |             |               |      |             |       |           |      |
| <b>Source: A9C2359-02</b> Prepared & Analyzed: 03/30/09 |        |      |      |       |             |               |      |             |       |           |      |
| Sulfate   | 191    | 0.50 |      | mg/L  | 100         | 85.6          | 105  | 87-114      |       |           |      |
| Nitrate as N  | 7.94   | 0.20 | 0.11 | mg/L  | 4.52        | 3.25          | 104  | 78-120      |       |           |      |
| <b>Matrix Spike Dup (9C30028-MSD1)</b>                  |        |      |      |       |             |               |      |             |       |           |      |
| <b>Source: A9C2359-02</b> Prepared & Analyzed: 03/30/09 |        |      |      |       |             |               |      |             |       |           |      |
| Sulfate   | 192    | 0.50 |      | mg/L  | 100         | 85.6          | 106  | 87-114      | 0.487 | 20        |      |
| Nitrate as N  | 7.87   | 0.20 | 0.11 | mg/L  | 4.52        | 3.25          | 102  | 78-120      | 0.886 | 20        |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
 Contact: Michael Wilson  
 Address: 348 West Hospitality Lane, Suite 100  
 San Bernardino, CA 92408-3216

Analytical Report: Page 4 of 8  
 Project Name: Tetra-Tech Lockheed  
 Project Number: TC#22289-090108

**Work Order Number: A9C2429**

Report Date: 31-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C

**Aggregate Organic Compounds - Batch Quality Control**

| Analyte(s)                             | Result | RDL  | MDL | Units | Spike Level                                      | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Flag  |
|--|--------|------|-----|-------|--|---------------|------|-------------|------|-----------|-------|
| <b>Batch 9C31004 - As recieved</b>     |        |      |     |       |  |               |      |             |      |           |       |
| <b>Blank (9C31004-BLK1)</b>            |        |      |     |       | Prepared & Analyzed: 03/31/09                    |               |      |             |      |           |       |
| Total Organic Carbon                   | ND     | 0.70 |     | mg/L  |  |               |      |             |      |           |       |
| <b>Blank (9C31004-BLK2)</b>            |        |      |     |       | Prepared & Analyzed: 03/31/09                    |               |      |             |      |           |       |
| Total Organic Carbon                   | ND     | 0.70 |     | mg/L  |  |               |      |             |      |           |       |
| <b>LCS (9C31004-BS1)</b>               |        |      |     |       | Prepared & Analyzed: 03/31/09                    |               |      |             |      |           |       |
| Total Organic Carbon                   | 4.52   | 0.70 |     | mg/L  | 4.00   |               | 113  | 90-110      |      |           | QL-MS |
| <b>LCS (9C31004-BS2)</b>               |        |      |     |       | Prepared & Analyzed: 03/31/09                    |               |      |             |      |           |       |
| Total Organic Carbon                   | 4.55   | 0.70 |     | mg/L  | 4.00   |               | 114  | 90-110      |      |           | QL-MS |
| <b>Matrix Spike (9C31004-MS1)</b>      |        |      |     |       | Source: A9C2280-01 Prepared & Analyzed: 03/31/09 |               |      |             |      |           |       |
| Total Organic Carbon                   | 11.4   | 0.70 |     | mg/L  | 4.00   | 7.14          | 106  | 80-120      |      |           |       |
| <b>Matrix Spike Dup (9C31004-MSD1)</b> |        |      |     |       | Source: A9C2280-01 Prepared & Analyzed: 03/31/09 |               |      |             |      |           |       |
| Total Organic Carbon                   | 11.6   | 0.70 |     | mg/L  | 4.00   | 7.14          | 111  | 80-120      | 1.57 | 10        |       |

Client Name:  
Contact: Michael Wilson  
Address: 348 West Hospitality Lane, Suite 100

Analytical Report: Page 5 of 8  
Project Name:  
Project Number: TC#22289-090108

Report Date: 31-Mar-2009

**Work Order Number: A9C2429**

Received on Ice (Y/N):p: Yes°C 10

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Client Name: Tetra Tech, Inc. - San Bernardino  
 Contact: Michael Wilson  
 Address: 348 West Hospitality Lane, Suite 100  
 San Bernardino, CA 92408-3216

Analytical Report: Page 6 of 8  
 Project Name: Tetra-Tech Lockheed  
 Project Number: TC#22289-090108

**Work Order Number: A9C2429**

Report Date: 31-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C

**Nutrients - Batch Quality Control**

| Analyte(s)                               | Result | RDL   | MDL | Units | Spike Level                                      | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Flag |
|--|--------|-------|-----|-------|--|---------------|------|-------------|------|-----------|------|
| <b>Batch 9C31027 - Filter if turbid.</b> |        |       |     |       |  |               |      |             |      |           |      |
| <b>LCS (9C31027-BS1)</b>                 |        |       |     |       |  |               |      |             |      |           |      |
|  |        |       |     |       | Prepared & Analyzed: 03/31/09                    |               |      |             |      |           |      |
| Ortho Phosphate Phosphorus               | 0.551  | 0.050 |     | mg/L  | 0.500  |               | 110  | 90-110      |      |           |      |
| <b>Matrix Spike (9C31027-MS1)</b>        |        |       |     |       |  |               |      |             |      |           |      |
|  |        |       |     |       | Source: A9C2429-01 Prepared & Analyzed: 03/31/09 |               |      |             |      |           |      |
| Ortho Phosphate Phosphorus               | 35.9   | 2.0   |     | mg/L  | 20.0   | 13.2          | 114  | 80-120      |      |           |      |
| <b>Matrix Spike Dup (9C31027-MSD1)</b>   |        |       |     |       |  |               |      |             |      |           |      |
|  |        |       |     |       | Source: A9C2429-01 Prepared & Analyzed: 03/31/09 |               |      |             |      |           |      |
| Ortho Phosphate Phosphorus               | 34.9   | 2.0   |     | mg/L  | 20.0   | 13.2          | 109  | 80-120      | 2.71 | 20        |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Michael Wilson  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Report Date: 31-Mar-2009

Analytical Report: Page 7 of 8  
Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

**Work Order Number: A9C2429**

Received on Ice (Y/N): Yes Temp: 10 °C

## Notes and Definitions

QL-MS Batch acceptance based on MS and/or MSD recovery within LCS criteria. The LCS recovery did not meet laboratory acceptance criteria.

ND: Analyte NOT DETECTED at or above the Method Detection Limit (**if MDL is reported**), otherwise at or above the Reportable Detection Limit (RDL)

NR: Not Reported

RDL: Reportable Detection Limit

MDL: Method Detection Limit

\* / (

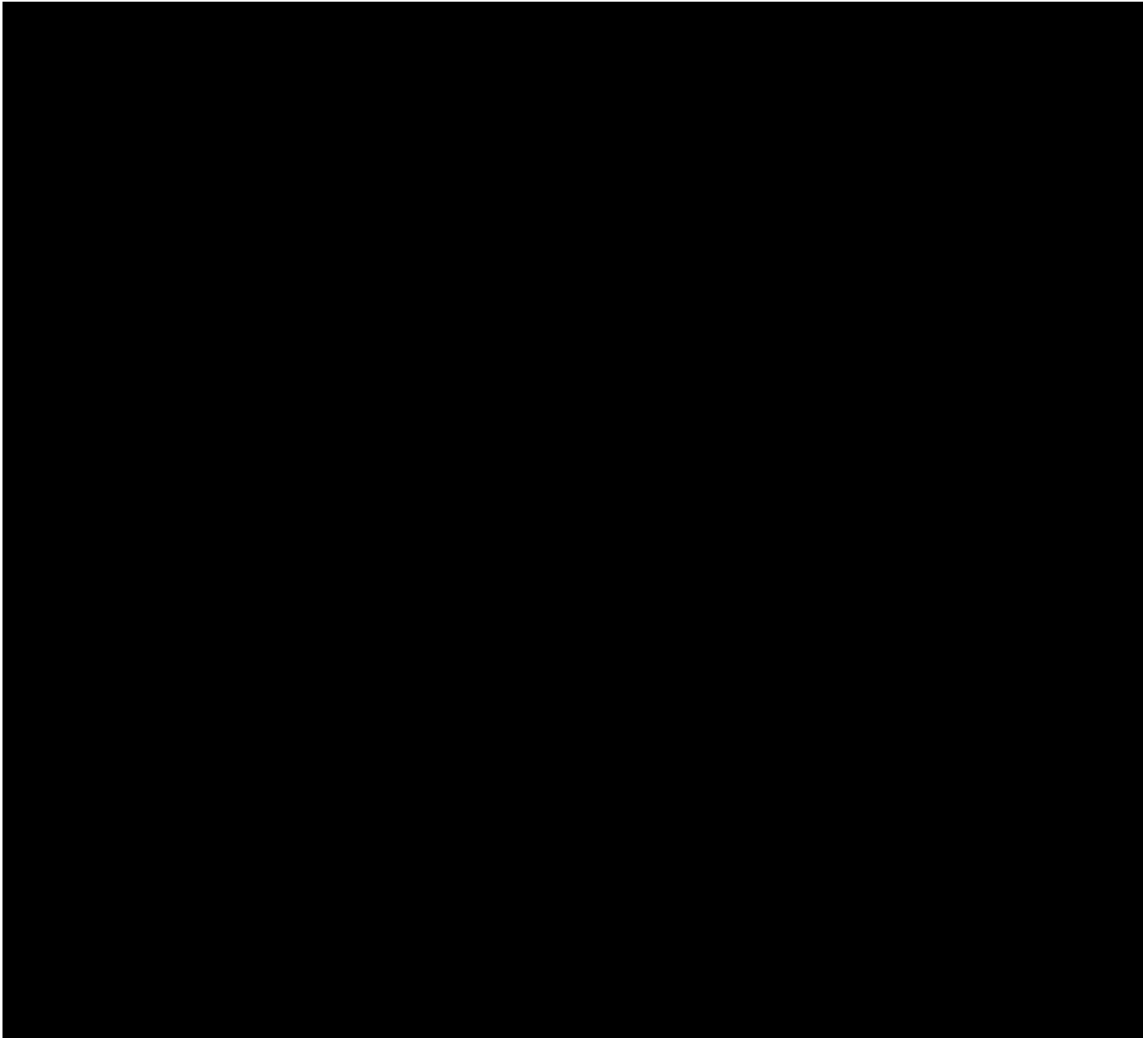
Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Michael Wilson  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 8 of 8  
Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

**Work Order Number: A9C2429**

Report Date: 31-Mar-2009

Received on Ice (Y/N): Yes Temp: 10 °C



Client Name: Tetra Tech, Inc. - San Bernardino

Report Date:

Client Name: Tetra Tech, Inc. - San Bernardino  
 Contact: Michael Wilson  
 Address: 348 West Hospitality Lane, Suite 100  
 San Bernardino, CA 92408-3216

Analytical Report: Page 2 of 11  
 Project Name: Tetra-Tech Lockheed  
 Project Number: TC#22289-090108

**Work Order Number: A9C2432**

Report Date: 06-Apr-2009

Received on Ice (Y/N): Yes Temp: 10 °C

Laboratory Reference Number

**A9C2432-01**

|                           |               |                          |                           |
|---------------------------|---------------|--------------------------|---------------------------|
| <u>Sample Description</u> | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
| IDW1-033009 (Total)       | Liquid        | 03/30/09 13:30           | 03/30/09 14:35            |

| Analyte(s)                              | Result  | RDL    | MDL      | Units | Method    | Analysis Date  | Analyst | Flag |
|---|---------|--------|----------|-------|-----------|----------------|---------|------|
| Metals and Metalloids                   |         |        |          |       |           |                |         |      |
| Mercury                                 | ND      | 0.0010 | 0.000032 | mg/L  | EPA 200.8 | 04/02/09 11:16 | krv     |      |
| Metals and Metalloids; EPA SW846 Series |         |        |          |       |           |                |         |      |
| Antimony                                | ND      | 0.0060 | 0.0030   | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     | NLOh |
| Arsenic                                 | 0.010   | 0.0020 | 0.0016   | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Barium                                  | 0.23    | 0.10   | 0.000056 | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Beryllium                               | 0.00071 | 0.0010 | 0.00017  | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     | J    |
| Cadmium                                 | 0.00019 | 0.0010 | 0.000077 | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     | J    |
| Total Chromium                          | 0.032   | 0.010  | 0.00050  | mg/L  | EPA 6020  | 04/02/09 14:30 | krv     |      |
| Cobalt                                  | 0.0080  | 0.010  | 0.00028  | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     | J    |
| Copper                                  | 0.024   | 0.010  | 0.0019   | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Lead                                    | 0.0085  | 0.0050 | 0.000084 | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Molybdenum                              | 0.069   | 0.010  | 0.00090  | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Nickel                                  | 0.015   | 0.010  | 0.0015   | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Selenium                                | ND      | 0.0050 | 0.0025   | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Silver                                  | ND      | 0.010  | 0.0050   | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Thallium                                | ND      | 0.0010 | 0.00098  | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |
| Vanadium                                | 0.056   | 0.010  | 0.0027   | mg/L  | EPA 6020  | 04/03/09 17:24 | ap      |      |
| Zinc                                    | 0.047   | 0.010  | 0.0014   | mg/L  | EPA 6020  | 04/02/09 11:16 | krv     |      |



Client Name: Tetra Tech, Inc. - San Bernardino  
 Contact: Michael Wilson  
 Address: 348 West Hospitality Lane, Suite 100  
 San Bernardino, CA 92408-3216

Analytical Report: Page 3 of 11  
 Project Name: Tetra-Tech Lockheed  
 Project Number: TC#22289-090108

**Work Order Number: A9C2432**

Report Date: 06-Apr-2009

Received on Ice (Y/N): Yes Temp: 10 °C

Laboratory Reference Number  
**A9C2432-02**

| <u>Sample Description</u> | <u>Matrix</u> | <u>Sampled Date/Time</u> | <u>Received Date/Time</u> |
|---------------------------|---------------|--------------------------|---------------------------|
| IDW1-033009 (Dissolved)   | Liquid        | 03/30/09 13:30           | 03/30/09 14:35            |

| <b>Analyte(s)</b>                              | <b>Result</b> | <b>RDL</b> | <b>MDL</b> | <b>Units</b> | <b>Method</b> | <b>Analysis Date</b> | <b>Analyst</b> | <b>Flag</b> |
|--|---------------|------------|------------|--------------|---------------|----------------------|----------------|-------------|
| <b>Metals and Metalloids</b>                   |               |            |            |              |               |                      |                |             |
| Mercury  | ND            | 0.0010     | 0.000032   | mg/L         | EPA 200.8     | 04/02/09 10:46       | krv            |             |
| <b>Metals and Metalloids; EPA SW846 Series</b> |               |            |            |              |               |                      |                |             |
| Antimony                                       | ND            | 0.0060     | 0.0030     | mg/L         | EPA 6020      | 04/02/09 10:46       | krv            |             |
| Arsenic  | 0.0090        | 0.0020     | 0.0016     | mg/L         | EPA 6020      | 04/02/09 10:46       | krv            |             |
| Barium   | 0.15          | 0.10       | 0.000056   | mg/L         | EPA 6020      | 04/02/09 10:46       | krv            |             |
| Beryllium                                      | 0.00052       | 0.0010     | 0.00017    | mg/L         | EPA 6020      | 04/02/09 10:46       | krv            | J           |
| Cadmium  | 0.00014       | 0.0010     | 0.000077   | mg/L         | EPA 6020      | 04/02/09 10:46       | krv            | J           |
| Total Chromium                                 | 0.034         | 0.010      | 0.00050    | mg/L         | EPA 6020      | 04/02/09 14:49       | krv            |             |
| Cobalt   | 0.0049        | 0.010      | 0.00028    | mg/L         | EPA 6020      | 04/02/09 10:46       | krv            | J           |
| Copper   | 0.014         | 0.010      | 0.0019     | mg/L         | EPA 6020      | 04/02/09 10:46       | krv            |             |
| Lead   | 0.0050        | 0.0050     | 0.000000   | mg/L         | EPA 6020      | 04/02/09 10:46       | krv            |             |

|        |       |      |          |                |                       |
|--------|-------|------|----------|----------------|-----------------------|
| Copper | 0.010 | mg/L | EPA 6020 | 04/02/09 10:46 | 0865.5(0)Tj9 0 0 9 22 |
|--------|-------|------|----------|----------------|-----------------------|



Client Name: Tetra Tech, Inc. - San Bernardino  
 Contact: Michael Wilson  
 Address: 348 West Hospitality Lane, Suite 100  
 San Bernardino, CA 92408-3216

Analytical Report: Page 5 of 11  
 Project Name: Tetra-Tech Lockheed  
 Project Number: TC#22289-090108

**Work Order Number: A9C2432**

Report Date: 06-Apr-2009

Received on Ice (Y/N): Yes Temp: 10 °C

**Metals and Metalloids; EPA SW846 Series - Batch Quality Control**

| Analyte(s)                                | Result    | RDL    | MDL      | Units | Spike Level | Source Result                         | %REC | %REC Limits | RPD | RPD Limit | Flag  |
|---|-----------|--------|----------|-------|-------------|---------------------------------------|------|-------------|-----|-----------|-------|
| <b>Batch 9D01003 - EPA 3015A SOP M02A</b> |           |        |          |       |             |                                       |      |             |     |           |       |
| <b>Blank (9D01003-BLK1)</b>               |           |        |          |       |             | Prepared: 04/01/09 Analyzed: 04/02/09 |      |             |     |           |       |
| Antimony                                  | ND        | 0.0060 | 0.0030   | mg/L  |             |                                       |      |             |     |           |       |
| Arsenic                                   | ND        | 0.0020 | 0.0016   | mg/L  |             |                                       |      |             |     |           |       |
| Barium                                    | 0.0000880 | 0.10   | 0.000056 | mg/L  |             |                                       |      |             |     |           | J     |
| Beryllium                                 | ND        | 0.0010 | 0.00017  | mg/L  |             |                                       |      |             |     |           |       |
| Cadmium                                   | ND        | 0.0010 | 0.000077 | mg/L  |             |                                       |      |             |     |           |       |
| Total Chromium                            | ND        | 0.010  | 0.00050  | mg/L  |             |                                       |      |             |     |           |       |
| Cobalt                                    | ND        | 0.010  | 0.00028  | mg/L  |             |                                       |      |             |     |           |       |
| Copper                                    | ND        | 0.010  | 0.0019   | mg/L  |             |                                       |      |             |     |           |       |
| Lead                                      | 0.000115  | 0.0050 | 0.000084 | mg/L  |             |                                       |      |             |     |           | J     |
| Molybdenum                                | ND        | 0.010  | 0.00090  | mg/L  |             |                                       |      |             |     |           |       |
| Nickel                                    | ND        | 0.010  | 0.0015   | mg/L  |             |                                       |      |             |     |           |       |
| Selenium                                  | ND        | 0.0050 | 0.0025   | mg/L  |             |                                       |      |             |     |           |       |
| Silver                                    | ND        | 0.010  | 0.0050   | mg/L  |             |                                       |      |             |     |           |       |
| Thallium                                  | ND        | 0.0010 | 0.00098  | mg/L  |             |                                       |      |             |     |           |       |
| Zinc                                      | 0.00412   | 0.010  | 0.0014   | mg/L  |             |                                       |      |             |     |           | J     |
| <b>LCS (9D01003-BS1)</b>                  |           |        |          |       |             | Prepared: 04/01/09 Analyzed: 04/02/09 |      |             |     |           |       |
| Antimony                                  | 0.246     | 0.0060 | 0.0030   | mg/L  | 0.200       |                                       | 123  | 85-115      |     |           | QLout |
| Arsenic                                   | 0.219     | 0.0020 | 0.0016   | mg/L  | 0.200       |                                       | 110  | 85-115      |     |           |       |
| Barium                                    | 0.226     | 0.10   | 0.000056 | mg/L  | 0.200       |                                       | 113  | 85-115      |     |           |       |
| Beryllium                                 | 0.229     | 0.0010 | 0.00017  | mg/L  | 0.200       |                                       | 115  | 85-115      |     |           |       |
| Cadmium                                   | 0.224     | 0.0010 | 0.000077 | mg/L  | 0.200       |                                       | 112  | 85-115      |     |           |       |
| Total Chromium                            | 0.209     | 0.010  | 0.00050  | mg/L  | 0.200       |                                       | 104  | 85-115      |     |           |       |
| Cobalt                                    | 0.227     | 0.010  | 0.00028  | mg/L  | 0.200       |                                       | 113  | 85-115      |     |           |       |
| Copper                                    | 0.224     | 0.010  | 0.0019   | mg/L  | 0.200       |                                       | 112  | 85-115      |     |           |       |
| Lead                                      | 0.234     | 0.0050 | 0.000084 | mg/L  | 0.200       |                                       | 117  | 85-115      |     |           | QL-MS |
| Molybdenum                                | 0.234     | 0.010  | 0.00090  | mg/L  | 0.200       |                                       | 117  | 85-115      |     |           | QL-MS |
| Nickel                                    | 0.233     | 0.010  | 0.0015   | mg/L  | 0.200       |                                       | 117  | 85-115      |     |           | QL-MS |
| Selenium                                  | 0.220     | 0.0050 | 0.0025   | mg/L  | 0.200       |                                       | 110  | 85-115      |     |           |       |
| Silver                                    | 0.227     | 0.010  | 0.0050   | mg/L  | 0.200       |                                       | 113  | 85-115      |     |           |       |
| Thallium                                  | 0.229     | 0.0010 | 0.00098  | mg/L  | 0.200       |                                       | 114  | 85-115      |     |           |       |
| Zinc                                      | 0.230     | 0.010  | 0.0014   | mg/L  | 0.200       |                                       | 115  | 85-115      |     |           |       |

Client Name: Tetra Tech, Inc. - San Bernardino  
 Contact: Michael Wilson  
 Address: 348 West Hospitality Lane, Suite 100  
 San Bernardino, CA 92408-3216

Analytical Report: Page 6 of 11  
 Project Name: Tetra-Tech Lockheed  
 Project Number: TC#22289-090108

**Work Order Number: A9C2432**

Report Date: 06-Apr-2009

Received on Ice (Y/N): Yes Temp: 10 °C

**Metals and Metalloids; EPA SW846 Series - Batch Quality Control**

| Analyte(s)                                | Result | RDL                       | MDL      | Units              | Spike Level | Source Result      | %REC | %REC Limits | RPD | RPD Limit | Flag |
|---|--------|---------------------------|----------|--------------------|-------------|--------------------|------|-------------|-----|-----------|------|
| <b>Batch 9D01003 - EPA 3015A SOP M02A</b> |        |                           |          |                    |             |                    |      |             |     |           |      |
| <b>Matrix Spike (9D01003-MS1)</b>         |        | <b>Source: A9C2369-01</b> |          | Prepared: 04/01/09 |             | Analyzed: 04/02/09 |      |             |     |           |      |
| Antimony                                  | 0.280  | 0.0060                    | 0.0030   | mg/L               | 0.200       | 0.0352             | 122  | 75-125      |     |           |      |
| Arsenic                                   | 0.230  | 0.0020                    | 0.0016   | mg/L               | 0.200       | 0.0190             | 105  | 75-125      |     |           |      |
| Barium                                    | 0.955  | 0.10                      | 0.000056 | mg/L               | 0.200       | 0.746              | 104  | 75-125      |     |           |      |
| Beryllium                                 | 0.221  | 0.0010                    | 0.00017  | mg/L               | 0.200       | 0.00320            | 109  | 75-125      |     |           |      |
| Cadmium                                   | 0.255  | 0.0010                    | 0.000077 | mg/L               | 0.200       | 0.0348             | 110  | 75-125      |     |           |      |
| Total Chromium                            | 0.279  | 0.010                     | 0.00050  | mg/L               | 0.200       | 0.0681             | 105  | 75-125      |     |           |      |
| Cobalt                                    | 0.218  | 0.010                     | 0.00028  | mg/L               | 0.200       | 0.000309           | 109  | 75-125      |     |           |      |
| Copper                                    | 0.270  | 0.010                     | 0.0019   | mg/L               | 0.200       | 0.0582             | 106  | 75-125      |     |           |      |
| Lead                                      | 0.271  | 0.0050                    | 0.000084 | mg/L               | 0.200       | 0.0440             | 113  | 75-125      |     |           |      |
| Molybdenum                                | 0.348  | 0.010                     | 0.00090  | mg/L               | 0.200       | 0.117              | 115  | 75-125      |     |           |      |
| Nickel                                    | 0.516  | 0.010                     | 0.0015   | mg/L               | 0.200       | 0.303              | 106  | 75-125      |     |           |      |
| Selenium                                  | 0.274  | 0.0050                    | 0.0025   | mg/L               | 0.200       | 0.0622             | 106  | 75-125      |     |           |      |
| Silver                                    | 0.280  | 0.010                     | 0.0050   | mg/L               | 0.200       | 0.0566             | 112  | 75-125      |     |           |      |
| Thallium                                  | 0.224  | 0.0010                    | 0.00098  | mg/L               | 0.200       | 0.00382            | 110  | 75-125      |     |           |      |
| Zinc                                      | 1.21   | 0.010                     | 0.0014   | mg/L               | 0.200       | 0.974              | 116  | 75-125      |     |           |      |
| <b>Matrix Spike Dup (9D01003-MSD1)</b>    |        | <b>e0</b>                 |          | Prepared: 04/01/09 |             | Analyzed: 04/02/09 |      |             |     |           |      |





Client Name: Tetra Tech, Inc. - San Bernardino  
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Analytical Report: Page 9 of 11  
 Project Name: Tetra-Tech Lockheed  
 Project Number: TC#22289-090108

**Work Order Number: A9C2432**

Report Date: 06-Apr-2009

Received on Ice (Y/N): Yes Temp: 10 °C

**Metals and Metalloids; EPA SW846 Series - Batch Quality Control**

| Analyte(s)   | Result  | RDL   | MDL    | Units | Spike Level | Source Result | %REC | %REC Limits | RPD  | RPD Limit | Flag |
|--|---------|-------|--------|-------|-------------|---------------|------|-------------|------|-----------|------|
| <b>Batch 9D03005 - EPA 3015A SOP M02A</b>          |         |       |        |       |             |               |      |             |      |           |      |
| <b>Blank (9D03005-BLK1)</b>                        |         |       |        |       |             |               |      |             |      |           |      |
| Prepared & Analyzed: 04/03/09                      |         |       |        |       |             |               |      |             |      |           |      |
| Vanadium   | 0.00303 | 0.010 | 0.0027 | mg/L  |             |               |      |             |      |           | J    |
| <b>LCS (9D03005-BS1)</b>                           |         |       |        |       |             |               |      |             |      |           |      |
| Prepared & Analyzed: 04/03/09                      |         |       |        |       |             |               |      |             |      |           |      |
| Vanadium   | 0.208   | 0.010 | 0.0027 | mg/L  | 0.200       |               | 104  | 85-115      |      |           |      |
| <b>Matrix Spike (9D03005-MS1)</b>                  |         |       |        |       |             |               |      |             |      |           |      |
| Source: A9C2369-01RE Prepared & Analyzed: 04/03/09 |         |       |        |       |             |               |      |             |      |           |      |
| Vanadium   | 0.595   | 0.010 | 0.0027 | mg/L  | 0.200       | 0.417         | 88.8 | 75-125      |      |           |      |
| <b>Matrix Spike Dup (9D03005-MSD1)</b>             |         |       |        |       |             |               |      |             |      |           |      |
| Source: A9C2369-01RE Prepared & Analyzed: 04/03/09 |         |       |        |       |             |               |      |             |      |           |      |
| Vanadium   | 0.640   | 0.010 | 0.0027 | mg/L  | 0.200       | 0.417         | 112  | 75-125      | 7.40 | 20        |      |

Client Name: Tetra Tech, Inc. - San Bernardino  
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Analytical Report: Page 10 of 11  
Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

**Work Order Number: A9C2432**

Report Date: 06-Apr-2009

Received on Ice (Y/N): Yes Temp: 10 °C

## Notes and Definitions

- J Estimated value
- NLOh The LCS was biased high. The recovery did not meet laboratory acceptance criteria. Data is suspect.
- QL-MS Batch acceptance based on MS and/or MSD recovery within LCS criteria. The LCS recovery did not meet laboratory acceptance criteria.
- QLout The LCS and/or LCSD recovery did not meet laboratory acceptance criteria.
- ND: Analyte NOT DETECTED at or above the Method Detection Limit (**if MDL is reported**), otherwise at or above the Reportable Detection Limit (RDL)
- NR: Not Reported
- RDL: Reportable Detection Limit
- MDL: Method Detection Limit

\* / (Non-NELAP): NELAP does not offer accreditation for this analyte/method/matrix combination

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## Approval

Enclosed are the analytical results for the submitted sample(s). Babcock Laboratories certify the data presented as part of this report meet the minimum quality standards in the referenced analytical methods. Any exceptions have been noted. Babcock Laboratories and its officers and employees assume no responsibility and make no warranty, express or implied, for uses or interpretations made by any recipients, intended or unintended, of this report.



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Lawrence J. Chrystal

Laboratory Director

cc:

ESB\_mdI\_PDF Report



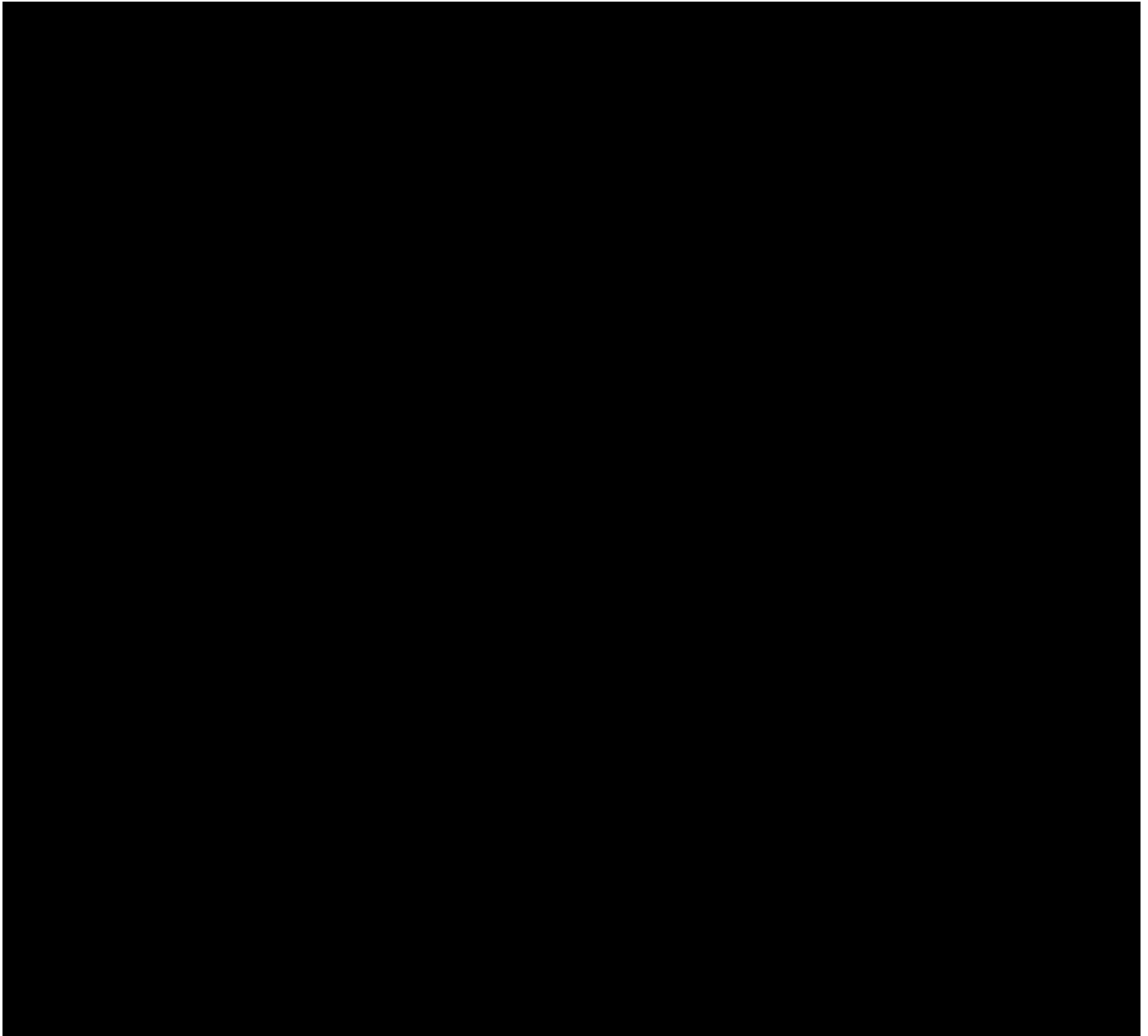
Client Name: Tetra Tech, Inc. - San Bernardino  
Contact: Michael Wilson  
Address: 348 West Hospitality Lane, Suite 100  
San Bernardino, CA 92408-3216

Analytical Report: Page 11 of 11  
Project Name: Tetra-Tech Lockheed  
Project Number: TC#22289-090108

**Work Order Number: A9C2432**

Report Date: 06-Apr-2009

Received on Ice (Y/N): Yes Temp: 10 °C





Email to: CHRISTOPHER PATRICK

christopher.patrick@tetrattech.com



4/08/09  
14:39:21

TETRA TECH  
348 WEST HOSPITALITY LANE  
SUITE 100  
SAN BERNARDINO, CA 92408

THANK YOU FOR PLACING YOUR ORDER WITH BRENNTAG PACIFIC. PLEASE TAKE A MOMENT TO REVIEW YOUR ORDER CONFIRMATION TO ENSURE THAT WE HAVE MET YOUR REQUIREMENTS AND NOTIFY ME IF YOU FIND ANY DISCREPANCIES.

PLEASE NOTE THAT YOUR ORDER WILL BE INVOICED AT YOUR CURRENT PRICE IN EFFECT AT THE TIME OF SHIPMENT.

WE APPRECIATE YOUR CHOOSING BRENNTAG TO SERVICE YOUR CHEMICAL NEEDS. IF YOU HAVE ANY QUESTIONS OR CONCERNS, PLEASE DO NOT HESITATE TO CONTACT ME.

JANET WRAY, INSIDE SALES  
PHONE: 562-777-9306  
EMAIL: JWRAY@BRENNTAG.COM

NOTE: OUR TERMS ARE AVAILABLE FOR REVIEW AT WWW.BRENNTAG.CC. TERMS IN EFFECT AT THE TIME OF DELIVERY SHALL GOVERN THIS ORDER.

# BRENNTAG

B/L#....: 680343-00                      Ship Date.: 4/08/09  
 Cust#...: 403557                         PO#.....: 22289-090108  
 Ship Via: UPS                             Ordered by: CHRISTOPHER PATRICK  
 Terms...: COD-CO CHECK

Ship to: TETRA TECH  
 348 WEST HOSPITALITY LANE  
 SUITE 100  
 SAN BERNARDINO, CA 92408

| Product Name       | Prod#           | Quantity     | Unit Price | Ext Price |
|--------------------|-----------------|--------------|------------|-----------|
| Product Desc       | -- Packaging -- | Cust         | Prod Desc  |           |
| GLYCERINE 96-99.5% | 309308          | 2.0000       | 4.5400     | 454.00    |
|                    | >A RPK          | 50.0000#PAIL |            |           |

|                        |        |
|------------------------|--------|
| Total Merchandise....: | 454.00 |
| Freight Charge.....:   | 50.00  |
| Insurance Surcharge..: | 25.00  |
| Fuel Surcharge.....:   | 27.50  |
| Tax.....:              | 45.61  |
|                        | -----  |
| Total Order Value....: | 602.11 |

# Material Safety Data Sheet

## Glycerol

ACC# 96127

### Section 1 - Chemical Product and Company Identification

MSDS Name: Glycerol

Catalog Numbers: AC158920000, AC158920200, 15892-0010, 15892-0025, 15892-0250, G33-1, G33-1LC, G33-20, G33-200, G33-4, G33-4LC, G33-500, G33P-200, NC9581172

Synonyms: Glycerol; 1,2,3-Propanetriol; Glyceritol; Glyceric Alcohol; 1,2,3-Trihydroxypropane; 1,2,3-Propanetriol

Company Identification:

Fisher Scientific

1 Reagent Lane

Fair Lawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Glycerol

99.0

2 0-289-5

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: Clear liquid.

**Caution!** May cause eye, skin, and respiratory tract irritation. This is expected to be a low hazard

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cups of milk or water. Get medical aid if irritation or symptoms occur.

Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician: Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.

Extinguishing Media: Use water spray to cool fire-exposed containers. Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: 193 deg C ( 379.40 deg F)

Autoignition Temperature: 400 deg C ( 752.00 deg F)

Explosion Limits, Lower: 1.1

Upper: Not available.

NFPA Rating: (estimated) Health: 0; Flammability: 1; Instability: 0

## Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation.

## Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Wash clothing before reuse.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. No special precautions indicated.

## Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

#### Exposure Limits

| Chemical Name | ACGIH        | NIOSH       | OSHA - Final PELs                                       |
|---------------|--------------|-------------|---|
| Glycerol      | 10 mg/m3 TWA | none listed | 15 mg/m3 TWA (total); 5 mg/m3 TWA (respirable fraction) |

OSHA Vacated PELs: Glycerol: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

#### Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: Clear

Odor: faint odor

pH: Not available.

Vapor Pressure: 0.003 mbar @ 50 deg C

Vapor Density: 3.17 (H<sub>2</sub>O=1)

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 290 deg C

Freezing/Melting Point: -6.7 deg C

Decomposition Temperature: 290 deg C

Solubility: Miscible in water. Insol. in chloroform,

Specific Gravity/Density: 1.4746

Molecular Formula: C<sub>3</sub>H<sub>8</sub>O<sub>3</sub>

Molecular Weight: 92.05

## Section 10 - Stability and Reactivity

Chemical Stability: Stable.

Conditions to Avoid: Incompatible materials, ignition sources, excess heat.

Incompatibilities with Other Materials: Not available.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Will not occur.

## Section 11 - Toxicological Information

RTECS#:

CAS# 56-81-5: MA8050000

LD50/LC50:

CAS# 56-81-5:

Draize test, rabbit, eye: 126 mg Mild;  
 Draize test, rabbit, eye: 500 mg/24H Mild;  
 Draize test, rabbit, skin: 500 mg/24H Mild;  
 Inhalation, rat: LC50 = >570 mg/m<sup>3</sup>/1H;  
 Oral, mouse: LD50 = 4090 mg/kg;  
 Oral, rabbit: LD50 = 27 gm/kg;  
 Oral, rat: LD50 = 12600 mg/kg;  
 Skin, rabbit: LD50 = >10 gm/kg;

Carcinogenicity:

CAS# 56-81-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Mutagenicity: No information available.

Neurotoxicity: No information available.

Other Studies:

## Section 12 - Ecological Information

Ecotoxicity: No data available. Cas# 56-81-5:LC50 (96 Hr.) rainbow trout = 50-67 mg/L; 12 degrees CLC50 (96 Hr.) goldfish = >5000 mg/L

Environmental: No information available.

Physical: No information available.

Other: No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

her a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

## Section 14 - Transport Information

|                | US DOT  | Canada TDG                |
|----------------|---|---------------------------|
| Shipping Name: | Please contact Fisher Scientific for shipping information | No information available. |
| Hazard Class:  |   |                           |
| UN Number:     |   |                           |



## US FEDERAL

### TSCA

CAS# 56-81-5 is listed on the TSCA inventory.

### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

### Section 12b

None of the chemicals are listed under TSCA Section 12b.

### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

### CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

### SARA Codes

CAS # 56-81-5: delayed.

### Section 313

No chemicals are reportable under Section 313.

### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.





# Material Safety Data Sheet

## Ammonium phosphate, dibasic

ACC# 01350

MSDS Name: Ammonium phosphate, dibasic

Catalog Numbers: AC201820000, AC201822500, AC201825000, AC423370000, AC423370050, 42337-5000, A686-500, A686500LC, BP361-500

Synonyms: Diammonium hydrogen phosphate; DAP.

Company Identification:

Fisher Scientific

1 Reagent Lane

Fair Lawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

### EMERGENCY OVERVIEW

Appearance: white solid.

**Warning!** Causes eye, skin, and respiratory tract irritation.

Target Organs: Respiratory system, eyes, skin.

#### Potential Health Effects

Eye: Causes eye irritation.

Skin: Causes skin irritation. May be harmful if absorbed through the skin.

Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.

Inhalation: Causes respiratory tract irritation. May be harmful if inhaled.

Chronic: No information found.

Eyes:

Ingestion: Do not induce vomiting. Get medical aid.  
Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.  
Notes to Physician: Treat symptomatically and supportively.

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Substance is noncombustible.

Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 0; Instability: 1

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place in to a suitable disposal container. Avoid generating dusty conditions. Provide ventilation. Do not let this chemical enter the environment.

Handling: Use with adequate ventilation. Minimize dust generation and accumulation. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale.

Storage: Store in a cool, dry place. Store in a tightly closed container.

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

OSHA Vacated PELs: Ammonium p875 /F1 1 Limits

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Physical State: Solid

Appearance:

Other Studies:

## Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.

Environmental: No information available.

Physical: No information available.

Other: Do not empty into drains.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

## Section 14 - Transport Information

|                | US DOT        | Canada TDG    |
|----------------|---------------|---------------|
| Shipping Name: | Not regulated | Not Regulated |
| Hazard Class:  |               |               |
| UN Number:     |               |               |
| Packing Group: |               |               |

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 7783-28-0 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 7783-28-0: immediate.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 7783-28-0 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

### European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

XI

Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 7783-28-0: 1

Canada - DSL/NDSL

CAS# 7783-28-0 is listed on Canada's DSL List.

Canada - WHMIS

not available.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.