# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-001A

**Client Sample ID** MW-12-3
**Collection Date:** 10/23/01 1:45:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 6.4 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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013

# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-002A

**Client Sample ID** MW-12-2
**Collection Date:** 10/23/01 3:00:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 7.4 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-003A

**Client Sample ID** MW-12-2D
**Collection Date:** 10/23/01 3:10:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 6.6 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-004A

**Client Sample ID** MW-12-1
**Collection Date:** 10/23/01 3:50:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 6.7 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

| | | | |
|---|---|---|---|
| **CLIENT:** | Applied P & Ch Laboratories | **Client Sample ID** | ER-12 |
| **Lab Order:** | 053831 | | |
| **Project:** | JPL | **Collection Date:** | 10/23/01 12:35:00 PM |
| **Lab ID:** | 053831-005A | **Matrix:** | Water |

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | ND | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-006A

**Client Sample ID** MW-23-4
**Collection Date:** 10/24/01 12:15:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 5.9 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-007A

**Client Sample ID** MW-23-3
**Collection Date:** 10/24/01 1:10:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 5.8 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-008A

**Client Sample ID** MW-23-2
**Collection Date:** 10/24/01 2:30:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 7.4 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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020

# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-009A

**Client Sample ID** MW-23-2D
**Collection Date:** 10/24/01 3:00:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 6.3 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-010A

**Client Sample ID** MW-23-1
**Collection Date:** 10/24/01 3:30:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 6.7 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-011A

**Client Sample ID** ER-23
**Collection Date:** 10/24/01 11:00:00 AM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | ND | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-012A

**Client Sample ID** MW-11-3
**Collection Date:** 10/25/01 12:50:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 4.1 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-013A

**Client Sample ID** MW-11-2
**Collection Date:** 10/25/01 2:00:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 3.5 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-014A

**Client Sample ID** MW-11-1
**Collection Date:** 10/25/01 2:35:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 3.5 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-015A

**Client Sample ID** ER-11
**Collection Date:** 10/25/01 12:20:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | ND | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-016A

**Client Sample ID** MW-24-4
**Collection Date:** 10/26/01 10:20:00 AM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 5.2 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** PA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-017A

**Client Sample ID** MW-24-3
**Collection Date:** 10/26/01 10:50:00 AM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 6.9 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-018A

**Client Sample ID** MW-24-2
**Collection Date:** 10/26/01 11:15:00 AM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 4.7 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-019A

**Client Sample ID** MW-24-1
**Collection Date:** 10/26/01 11:40:00 AM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 5.7 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA

031

*Advanced Technology Laboratories*
*3275 Walnut Avenue Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040*

# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-020A

**Client Sample ID** ER-24
**Collection Date:** 10/26/01 10:35:00 AM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112D** BatchID: **6452** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | ND | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-021A

**Client Sample ID** MW-13
**Collection Date:** 10/29/01 10:55:00 AM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112C** BatchID: **6451** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 33 | 2.0 | | µg/L | 2.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-022A

**Client Sample ID** MW-10
**Collection Date:** 10/29/01 2:15:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112D** BatchID: **6452** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 13 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



*Advanced Technology Laboratories*
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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-023A

**Client Sample ID** MW-10-D
**Collection Date:** 10/29/01 2:15:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112D** BatchID: **6452** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 10 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



*Advanced Technology Laboratories*
*3275 Walnut Avenue Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040*

# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-024A

**Client Sample ID** MW-16
**Collection Date:** 10/29/01 3:20:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112D** BatchID: **6452** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 140 | 10 | | µg/L | 10 | 11/12/01 |

**Qualifiers**

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-025A

**Client Sample ID** MW-8
**Collection Date:** 10/30/01 11:30:00 AM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112B** BatchID: **6450** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 4.7 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-026A

**Client Sample ID** MW-5
**Collection Date:** 10/30/01 2:30:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112D** BatchID: **6452** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 7.4 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-027A

**Client Sample ID** MW-5-D
**Collection Date:** 10/30/01 2:30:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112D** BatchID: **6452** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 6.5 | 1.0 | | µg/L | 1.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
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E - Value above quantitation range
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**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-028A

**Client Sample ID** MW-6
**Collection Date:** 10/30/01 4:00:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112D** BatchID: **6452** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 34 | 4.0 | | µg/L | 4.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
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S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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# Advanced Technology Laboratories

**Print Date:** *11/14/01*

**CLIENT:** Applied P & Ch Laboratories
**Lab Order:** 053831
**Project:** JPL
**Lab ID:** 053831-029A

**Client Sample ID** MW-6-D
**Collection Date:** 10/30/01 4:00:00 PM
**Matrix:** Water

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|---|---|---|---|---|---|---|
| **ICP-MS METALS** | | | **EPA 200.8** | | | |
| RunID: **ICP4_011112D** BatchID: **6452** | | | | PrepDate: **11/12/01** | | Analyst: **NS** |
| Chromium | 32 | 4.0 | | µg/L | 4.0 | 11/12/01 |

**Qualifiers**
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
DO - Surrogate Diluted Out
S - Spike/Surrogate outside of limits due to matrix interference.
H - Samples exceeding analytical holding time
E - Value above quantitation range
M - Not Monitored. Highly Reactive

**Initials:** RA



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*3275 Walnut Avenue Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040*

Client: Applied P & Ch Laboratory
Attn: Jim Lin
Client's Project: JPL
ATL Number: 053831-001A / 029A
Date Received: 11/07/01

## (EPA 200.8) - INITIAL CALIBRATION

Instrument ID: ICP4
Date(s) Analyzed: 11/12/01

Initial Calibration: **Source:** Leeman (Lot 435401 and 435402)

| | INTENSITY | | | | |
|---|---|---|---|---|---|
| COMPOUND | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 | r2 |
| Chromium | 8810 | 27220 | 50148 | 96115 | 0.9999 |
| | | | | | |
| | | | | | |

| Standard Concentration: | 1 ppm | 5 ppb | 10 ppb | 20 ppb |
|---|---|---|---|---|
| Standard ID: | MST011112F | MST011112E | MST011112D | MST011112C |

Calibration Acceptance Criteria: > 0.995 Correlation



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Client: Applied P & Ch Laboratory
Attn: Jim Lin
Client's Project: JPL
ATL Number: 053830-001A / 033A
Date Received: 11/07/01

## (EPA 200.8) INITIAL AND CONTINUING CALIBRATION VERFICATION
(EXTERNAL REFERENCE STANDARD)

Instrument ID: ICP4

Date Analyzed: 11/12/01

| | Source: | Standard Code: |
|---|---|---|
| Initial Calibration Verification: | CPI (1FF002) | MST011112H |
| Continuing Calibration Verification: | CPI(1FF02) | MST011112H |

Concentration Units: ug/L

| Analyte | Initial Calibration True | Initial Calibration Found | Initial Calibration %R(1) | Continuing Calibration True | Continuing Calibration Found CCV1 | Continuing Calibration %R(1) | Continuing Calibration Found CCV2 | Continuing Calibration %R(1) | M |
|---|---|---|---|---|---|---|---|---|---|
| Chromium | 10.0 | 10.2 | 102 | 10.0 | 10.3 | 103 | 10.4 | 104 | PM |
| | | | | | | | | | |
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ICV Limits: 90 -110%
CCV Limits: 85 -115%



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