**Plasma Plus+** *Application & Research Laboratory*

House No:48/6 Road No: 9A on Saat Masjid Road Dhanmondi Dhaka - 1209 Bangladesh
Tel: (880-2) 9122407 & 9112290 Fax: (880-2) 9880790 Email: plasma@bdcom.com

Department: Environmental & Analytical

# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1013-7 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 28-Aug-01 | Water supplied in PVC bottles. |
| Contact Person: | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Service ID | | PPWQ-EA26 | PPWQ-EA25 | | | |
| Analyte | | Dissolved Fe | Dissolved Mn | | | |
| Method | | FAAS | FAAS | | | |
| PQL | | 0.2 | 0.08 | | | |
| Precision(%CV)** | | 6% | 5% | | | |
| Accuracy(%Recovery)** | | 90% - 110% | 85% - 115% | | | |
| Unit | | mg/L | mg/L | | | |
| User Sample ID | Laboratory Sample ID | Dissolved Fe (mg/L) | Dissolved Mn (mg/L) | | | |
| OW-JS-2-BP-FeMn | EA20010828201 | 2.90 | 0.35 | | | |
| OW-JS-2-CP-48h-FeMn | EA20010828202 | 0.86 | 0.13 | | | |
| OW-JS-2-CP-48h-FeMn(D) | EA20010828203 | 0.97 | 0.12 | | | |
| OW-JS-2-CP-48h-FeMn(B) | EA20010828204 | 0.45 | <PQL | | | |
| OH-JS-2-1-BP-FeMn | EA20010828205 | 3.38 | 2.87 | | | |
| OH-JS-2-1-SIP-30min-FeMn | EA20010828206 | 1.76 | 1.66 | | | |
| OH-JS-2-1-SIP-140min-FeMn | EA20010828207 | 1.26 | 1.08 | | | |
| OH-JS-2-2-BP-FeMn | EA20010828208 | 5.18 | 3.16 | | | |
| OH-JS-2-2-SIP-30min-FeMn | EA20010828209 | 4.02 | 1.07 | | | |
| OH-JS-2-2-SIP-140min-FeMn | EA20010828210 | 2.85 | 0.58 | | | |
| OH-JS-2-3-BP-FeMn | EA20010828211 | 0.92 | 0.39 | | | |
| OH-JS-2-3-SIP-30min-FeMn | EA20010828212 | 2.12 | 0.95 | | | |
| OH-JS-2-3-SIP-140min-FeMn | EA20010828213 | 2.15 | 0.72 | | | |
| OH-JS-2-4-BP-FeMn | EA20010828214 | 3.42 | 0.29 | | | |
| OH-JS-2-4-SIP-30min-FeMn | EA20010828215 | 2.82 | 0.20 | | | |
| OH-JS-2-4-SIP-140min-FeMn | EA20010828216 | 1.97 | 0.19 | | | |
| OW-JH-1-3M-FeMn | EA20010828217 | 9.95 | 0.15 | | | |
| OW-JH-2-2M-FeMn | EA20010828218 | 0.56 | <PQL | | | |
| OW-CH-1-5M-FeMn | EA20010828219 | 2.696 | 0.327 | | | |
| CB-JhKc-3M-FeMn | EA20010828220 | 2.373 | 0.103 | | | |
| OW-CH-2-4M-FeMn | EA20010828221 | 0.319 | <PQL | | | |
| CB-CdBd-6M-FeMn | EA20010828222 | 2.591 | 0.391 | | | |
| OW-JS-1-1M-FeMn | EA20010828223 | 8.391 | 0.687 | | | |
| CB-JsRb-3M-FeMn | EA20010828224 | <PQL | <PQL | | | |
| | | | | | | |
| | | | | | | |
| Total No. of Samples | 24 | | | | | |
| Total No. of Services | | 24 | 24 | | | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1013-8

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: 28-Aug-01 | Sample Type: Water supplied in PVC bottles. |
| Customer: | JICA STUDY TEAM | | |
| Contact Person: | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

## ANION-CATION BALANCE* SHEET

| User Sample ID | Laboratory Sample ID | Total Anions (meq/L) | Total Cations (meq/L) | % (= Anion-Cation Ratio*100) |
|---|---|---|---|---|
| OW-JS-2-BP-OI | EA20010828001 | 8.80 | 8.89 | 98.99 |
| OW-JS-2-CP-48h-OI | EA20010828002 | 8.78 | 8.87 | 98.99 |
| OW-JS-2-CP-48h-OI(D) | EA20010828003 | 8.41 | 8.63 | 97.45 |
| OW-JS-2-CP-48h-OI(B) | EA20010828004 | 0.13 | 0.21 | 61.90 |
| OH-JS-2-1-BP-OI | EA20010828005 | 7.64 | 8.55 | 89.36 |
| OH-JS-2-1-SIP-30min-OI | EA20010828006 | 7.19 | 7.48 | 96.12 |
| OH-JS-2-1-SIP-140min-OI | EA20010828007 | 7.23 | 7.45 | 97.05 |
| OH-JS-2-2-BP-OI | EA20010828008 | 7.85 | 8.21 | 95.62 |
| OH-JS-2-2-SIP-30min-OI | EA20010828009 | 7.32 | 7.97 | 91.84 |
| OH-JS-2-2-SIP-140min-OI | EA20010828010 | 7.22 | 7.29 | 99.04 |
| OH-JS-2-3-BP-OI | EA20010828011 | 7.54 | 7.53 | 100.13 |
| OH-JS-2-3-SIP-30min-OI | EA20010828012 | 7.42 | 7.93 | 93.57 |
| OH-JS-2-3-SIP-140min-OI | EA20010828013 | 6.08 | 7.66 | 79.37 |
| OH-JS-2-4-BP-OI | EA20010828014 | 8.94 | 11.27 | 79.33 |
| OH-JS-2-4-SIP-30min-OI | EA20010828015 | 7.09 | 8.80 | 80.57 |
| OH-JS-2-4-SIP-140min-OI | EA20010828016 | 8.49 | 9.07 | 93.61 |
| OW-JH-1-3M-OI | EA20010828017 | 6.22 | 7.75 | 80.26 |
| OW-JH-2-2M-OI | EA20010828018 | 3.94 | 4.89 | 80.57 |
| OW-CH-1-5M-OI | EA20010828019 | 5.84 | 7.19 | 81.22 |
| CB-JhKc-3M-OI | EA20010828020 | 8.58 | 9.00 | 95.33 |
| OW-CH-2-4M-OI | EA20010828021 | 4.40 | 4.42 | 99.55 |
| CB-CdBd-6M-OI | EA20010828022 | 8.07 | 7.91 | 102.02 |
| OW-JS-1-1M-OI | EA20010828023 | 7.36 | 8.66 | 84.99 |
| CB-JsRb-3M-OI | EA20010828024 | 6.1 | 8.22 | 73.84 |

*Anion sums and cation sums are calculated based on the major anionic and cationic contributions.

| | |
|---|---|
| Total No. of Samples | 24 |
| Total No. of Services | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1014-1

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 17-Sep-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA34.1 | PPWQ-EA34 | PPWQ-EA16 | PPWQ-EA34.1 | PPWQ-EA30.1 |
|---|---|---|---|---|---|---|
| Analyte | | Temperature | pH | Conductivity | at Temperature | Ammonium |
| Method | | Thermometer | pH meter | Conductivity meter | Thermometer | SP |
| PQL | | 0 Deg C | 0 | 0.2 | 0 | 0.1 |
| Precision(%CV)** | | <8% | <8% | <8% | <8% | <8% |
| Accuracy(%Recovery)** | | 90% - 110% | 90% - 110% | 90% -110% | 90% - 110% | 90% - 110% |
| Unit | | Deg C | | uS/cm | Deg C | mg/L |
| User Sample ID | Laboratory Sample ID | T (deg C) | pH | EC | at T(deg C) | NH4 (mg/L) |
| OW-JS-2-1M-OI | EA20010917001 | 28.00 | 7.19 | 633.30 | 27.50 | <PQL |
| CB-JsRb-4M-OI | EA20010917002 | 28.20 | 7.94 | 535.30 | 27.40 | 0.84 |
| OW-CH-1-6M-OI | EA20010917003 | 27.10 | 7.18 | 549.30 | 27.50 | 0.26 |
| OW-CH-2-5M-OI | EA20010917004 | 28.10 | 7.62 | 433.00 | 27.50 | 0.15 |
| CB-JhKc-4M-OI | EA20010917005 | 28.00 | 7.17 | 585.00 | 27.60 | 1.23 |
| OW-JH-2-3M-OI | EA20010917006 | 28.20 | 7.77 | 425.30 | 27.60 | <PQL |
| OW-JS-1-2M-OI | EA20010917007 | 28.20 | 7.13 | 605.30 | 27.60 | <PQL |
| OW-JH-1-4M-OI | EA20010917008 | 28.50 | 7.72 | 474.00 | 27.80 | <PQL |
| OW-JH-1-4M-OI(B) | EA20010917009 | 28.60 | 6.20 | 2.95 | 27.80 | <PQL |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | 9 | | 9 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1014-2

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 17-Sep-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA30.6 | PPWQ-EA30.4 | PPWQ-EA42 | PPWQ-EA10 | PPWQ-EA2.1 |
|---|---|---|---|---|---|---|
| Analyte | | Nitrite | Nitrate | Sulfate | Chloride | Bicarbonate |
| Method | | SP | SP | SP | SP | Titration |
| PQL | | 0.02 | 0.2 | 5 | 0.6 | 20 |
| Precision(%CV)** | | <8% | <8% | <8% | <8% | <8% |
| Accuracy(%Recovery)** | | 90% - 110% | 90% - 110% | 90% - 110% | 90% - 110% | 90% - 110% |
| Unit | | mg/L | mg/L | mg/L | mg/L | mg CaCO3/L |
| User Sample ID | Laboratory Sample ID | NO2 (mg/L) | NO3 (mg/L) | SO4 (mg/L) | Cl (mg/L) | HCO3 (mg CaCO3/L) |
| OW-JS-2-1M-OI | EA20010917001 | <PQL | <PQL | <PQL | 41.80 | 507.00 |
| CB-JsRb-4M-OI | EA20010917002 | 0.97 | <PQL | <PQL | 24.74 | 347.10 |
| OW-CH-1-6M-OI | EA20010917003 | <PQL | <PQL | <PQL | 1.86 | 487.50 |
| OW-CH-2-5M-OI | EA20010917004 | <PQL | <PQL | <PQL | 8.00 | 306.20 |
| CB-JhKc-4M-OI | EA20010917005 | <PQL | <PQL | <PQL | 2.92 | 516.80 |
| OW-JH-2-3M-OI | EA20010917006 | <PQL | <PQL | <PQL | 4.81 | 312.00 |
| OW-JS-1-2M-OI | EA20010917007 | <PQL | <PQL | <PQL | 7.35 | 487.50 |
| OW-JH-1-4M-OI | EA20010917008 | <PQL | <PQL | <PQL | 4.36 | 370.50 |
| OW-JH-1-4M-OI(B) | EA20010917009 | <PQL | <PQL | <PQL | <PQL | <PQL |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | 9 | 9 | 9 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1014-3 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 17-Sep-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA24.1 | PPWQ-EA28 | PPWQ-EA20.1 | PPWQ-EA7 | PPWQ-EA40 |
|---|---|---|---|---|---|---|
| Analyte | | Fluoride | Hardness | Free CN | COD | TDS |
| Method | | SP | Standard | SP | CR titration | Standard |
| PQL | | 0.1 | 0.5 | 0.009 | 20 | 0.13 |
| Precision(%CV)** | | <8% | <5% | <10% | <5% | <10% |
| Accuracy(%Recovery)** | | 90% - 110% | 90% - 110% | 90% - 110% | 90% - 110% | 85% - 115% |
| Unit | | mg/L | mg CaCO3/L | mg/L | mg O2/L | mg/L |
| User Sample ID | Laboratory Sample ID | F (mg/L) | Hardn.(mg CaCO3/L) | CN (mg/L) | COD (mg/L) | TDS (mg/L) |
| OW-JS-2-1M-OI | EA20010917001 | 0.25 | 109.35 | <PQL | <PQL | 405.31 |
| CB-JsRb-4M-OI | EA20010917002 | 0.41 | 39.39 | <PQL | <PQL | 342.49 |
| OW-CH-1-6M-OI | EA20010917003 | 0.21 | 152.71 | <PQL | <PQL | 351.55 |
| OW-CH-2-5M-OI | EA20010917004 | 0.17 | 88.13 | <PQL | <PQL | 277.12 |
| CB-JhKc-4M-OI | EA20010917005 | 0.20 | 146.95 | <PQL | <PQL | 374.40 |
| OW-JH-2-3M-OI | EA20010917006 | 0.21 | 71.65 | <PQL | <PQL | 272.19 |
| OW-JS-1-2M-OI | EA20010917007 | 0.24 | 104.18 | <PQL | 15.36 | 387.39 |
| OW-JH-1-4M-OI | EA20010917008 | 0.26 | 78.96 | <PQL | <PQL | 303.36 |
| OW-JH-1-4M-OI(B) | EA20010917009 | <PQL | <PQL | <PQL | <PQL | 1.88 |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | 9 | 9 | 9 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



Form:QF-5.12-ver.1.0

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Department: Environmental & Analytical

# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1014-4 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 17-Sep-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA11 | PPWQ-EA19 | PPWQ-EA20 | PPWQ-EA12 | |
|---|---|---|---|---|---|---|
| Analyte | | Sodium | Potassium | Calcium | Magnesium | |
| Method | | FAAS | FAAS | FAAS | FAAS | |
| PQL | | 0.05 | 0.1 | 0.5 | 0.05 | |
| Precision(%CV)** | | <5% | <5% | <5% | <5% | |
| Accuracy(%Recovery)** | | 85% - 115% | 85% - 115% | 85% - 115% | 85% - 115% | |
| Unit | | mg/L | mg/L | mg/L | mg/L | |
| User Sample ID | Laboratory Sample ID | Sodium Na (mg/L) | Potassium K (mg/L) | Calcium Ca (mg/L) | Magnesium Mg (mg/L) | |
| OW-JS-2-1M-HM | EA20010917101 | 80.38 | 4.88 | 73.46 | 35.89 | |
| CB-JsRb-4M-HM | EA20010917102 | 97.00 | 3.57 | 22.70 | 16.70 | |
| OW-CH-1-6M-HM | EA20010917103 | 10.04 | 3.55 | 125.27 | 27.44 | |
| OW-CH-2-5M-HM | EA20010917104 | 11.94 | 3.64 | 58.58 | 29.54 | |
| CB-JhKc-4M-HM | EA20010917105 | 20.01 | 3.87 | 118.03 | 28.92 | |
| OW-JH-2-3M-HM | EA20010917106 | 20.97 | 11.07 | 36.22 | 35.43 | |
| OW-JS-1-2M-HM | EA20010917107 | 63.01 | 4.88 | 71.47 | 32.72 | |
| OW-JH-1-4M-HM | EA20010917108 | 36.01 | 3.94 | 42.91 | 36.05 | |
| OW-JH-1-4M-HM(B) | EA20010917109 | <PQL | <PQL | <PQL | <PQL | |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | 9 | 9 | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1014-5

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 17-Sep-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA34 | PPWQ-EA24 | PPWQ-EA16 | PPWQ-EA82 | PPWQ-EA29 |
|---|---|---|---|---|---|---|
| Analyte | | Nickel | Total Cr | Zinc | Lead | Copper |
| Method | | GFAAS | GFAAS | Extraction / FAAS | GFAAS | GFAAS |
| PQL | | 5.00 | 10.00 | 5.00 | 5.00 | 5.00 |
| Precision(%CV)** | | <10% | <10% | <10% | <10% | <10% |
| Accuracy(%Recovery)** | | 85% - 115% | 85% - 115% | 85% - 115% | 80% - 120% | 85% - 115% |
| Unit | | ug/L | ug/L | ug/L | ug/L | ug/L |
| User Sample ID | Laboratory Sample ID | Nickel | Total Cr | Zinc | Lead | Copper |
| OW-JS-2-1M-HM | EA20010917101 | <PQL | <PQL | <PQL | <PQL | <PQL |
| CB-JsRb-4M-HM | EA20010917102 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-CH-1-6M-HM | EA20010917103 | 4.56 | <PQL | <PQL | <PQL | <PQL |
| OW-CH-2-5M-HM | EA20010917104 | <PQL | <PQL | <PQL | <PQL | <PQL |
| CB-JhKc-4M-HM | EA20010917105 | <PQL | <PQL | 5.23 | <PQL | <PQL |
| OW-JH-2-3M-HM | EA20010917106 | <PQL | <PQL | <PQL | <PQL | 6.86 |
| OW-JS-1-2M-HM | EA20010917107 | <PQL | <PQL | <PQL | <PQL | 8.24 |
| OW-JH-1-4M-HM | EA20010917108 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-JH-1-4M-HM(B) | EA20010917109 | <PQL | <PQL | <PQL | <PQL | <PQL |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | 9 | 9 | 9 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



Form:QF-5.12-ver.1.0

**Plasma Plus+** *Application & Research Laboratory*

House No:48/6 Road No: 9A on Saat Masjid Road Dhanmondi Dhaka - 1209 Bangladesh
Tel: (880-2) 9122407 & 9112290 Fax: (880-2) 9880790 Email: plasma@bdcom.com

Department: Environmental & Analytical

# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1014-6 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 17-Sep-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA48.1 | PPWQ-EA80.1 | | | |
|---|---|---|---|---|---|---|
| Analyte | | Cadmium | Mercury | | | |
| Method | | GFAAS | FAAS-MVU | | | |
| PQL | | 1.5 | 1.00 | | | |
| Precision(%CV)** | | <10% | <10% | | | |
| Accuracy(%Recovery)** | | 85% - 115% | 85% - 115% | | | |
| Unit | | ug/L | ug/L | | | |
| User Sample ID | Laboratory Sample ID | Cadmium | Mercury | | | |
| OW-JS-2-1M-HM | EA20010917101 | <PQL | <PQL | | | |
| CB-JsRb-4M-HM | EA20010917102 | <PQL | <PQL | | | |
| OW-CH-1-6M-HM | EA20010917103 | <PQL | <PQL | | | |
| OW-CH-2-5M-HM | EA20010917104 | <PQL | <PQL | | | |
| CB-JhKc-4M-HM | EA20010917105 | <PQL | <PQL | | | |
| OW-JH-2-3M-HM | EA20010917106 | <PQL | <PQL | | | |
| OW-JS-1-2M-HM | EA20010917107 | <PQL | <PQL | | | |
| OW-JH-1-4M-HM | EA20010917108 | <PQL | <PQL | | | |
| OW-JH-1-4M-HM(B) | EA20010917109 | <PQL | <PQL | | | |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | | | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

** The Precision & Accuracy are defined only for the laboratory process not for the sampling, transporting and storage processes.

Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1014-7

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 17-Sep-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA26 | PPWQ-EA25 | | | |
|---|---|---|---|---|---|---|
| Analyte | | Dissolved Fe | Dissolved Mn | | | |
| Method | | FAAS | FAAS | | | |
| PQL | | 0.2 | 0.08 | | | |
| Precision(%CV)** | | 6% | 5% | | | |
| Accuracy(%Recovery)** | | 90% - 110% | 85% - 115% | | | |
| Unit | | mg/L | mg/L | | | |
| User Sample ID | Laboratory Sample ID | Dissolved Fe (mg/L) | Dissolved Mn (mg/L) | | | |
| OW-JS-2-1M-FeMn | EA20010917201 | 10.46 | 2.34 | | | |
| CB-JsRb-4M-FeMn | EA20010917202 | 0.39 | 0.08 | | | |
| OW-CH-1-6M-FeMn | EA20010917203 | 1.54 | 0.70 | | | |
| OW-CH-2-5M-FeMn | EA20010917204 | 3.74 | <PQL | | | |
| CB-JhKc-4M-FeMn | EA20010917205 | 2.47 | 0.17 | | | |
| OW-JH-2-3M-FeMn | EA20010917206 | 1.82 | <PQL | | | |
| OW-JS-1-2M-FeMn | EA20010917207 | 8.80 | 1.12 | | | |
| OW-JH-1-4M-FeMn | EA20010917208 | 2.65 | <PQL | | | |
| OW-JH-1-4M-FeMn(B) | EA20010917209 | 0.41 | <PQL | | | |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | | | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1014-8

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: 17-Sep-01 | Sample Type: Water supplied in PVC bottles. |
| Customer: | JICA STUDY TEAM | | |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

## ANION-CATION BALANCE* SHEET

| User Sample ID | Laboratory Sample ID | Total Anions (meq/L) | Total Cations (meq/L) | Anion-Cation Ratio |
|---|---|---|---|---|
| OW-JS-2-1M-OI | EA20010917001 | 9.56 | 10.71 | 89.26 |
| CB-JsRb-4M-OI | EA20010917002 | 6.50 | 6.88 | 94.48 |
| OW-CH-1-6M-OI | EA20010917003 | 8.11 | 9.13 | 88.83 |
| OW-CH-2-5M-OI | EA20010917004 | 5.31 | 6.11 | 86.91 |
| CB-JhKc-4M-OI | EA20010917005 | 8.62 | 9.40 | 91.70 |
| OW-JH-2-3M-OI | EA20010917006 | 5.31 | 5.99 | 88.65 |
| OW-JS-1-2M-OI | EA20010917007 | 8.26 | 9.49 | 87.04 |
| OW-JH-1-4M-OI | EA20010917008 | 6.26 | 6.88 | 90.99 |
| OW-JH-1-4M-OI(B) | EA20010917009 | 0.13 | 0.06 | 216.67 |

*Anion sums and cation sums are calculated based on the major anionic and cationic contributions.

| | |
|---|---|
| Total No. of Samples | 9 |
| Total No. of Services | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1015-1

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 21-Oct-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA34.1 | PPWQ-EA34 | PPWQ-EA16 | PPWQ-EA34.1 | PPWQ-EA30.1 |
|---|---|---|---|---|---|---|
| Analyte | | Temperature | pH | Conductivity | at Temperature | Ammonium |
| Method | | Thermometer | pH meter | Conductivity meter | Thermometer | SP |
| PQL | | 0 Deg C | 0 | 0.2 | 0 | 0.1 |
| Precision(%CV)** | | <8% | <8% | <8% | <8% | <8% |
| Accuracy(%Recovery)** | | 90% - 110% | 90% - 110% | 90% -110% | 90% - 110% | 90% - 110% |
| Unit | | Deg C | | uS/cm | Deg C | mg/L |
| User Sample ID | Laboratory Sample ID | T (deg C) | pH | EC | at T(deg C) | NH4 (mg/L) |
| OW-CH-1-7M-OI | EA20011021001 | 29.80 | 7.32 | 828.70 | 28.60 | 0.34 |
| OW-JS-1-3M-OI | EA20011021002 | 30.00 | 7.20 | 827.70 | 30.00 | 0.14 |
| CB-JsRb-5M-OI | EA20011021003 | 29.70 | 8.06 | 664.00 | 28.70 | 1.07 |
| CB-JhKc-5M-OI | EA20011021004 | 29.60 | 7.23 | 877.00 | 28.60 | 1.42 |
| OW-CH-2-6M-OI | EA20011021001 | 29.80 | 7.61 | 579.10 | 28.70 | 1.16 |
| OW-JS-2-2M-OI | EA20011021006 | 29.90 | 7.24 | 948.00 | 29.00 | <PQL |
| OW-JH-2-4M-OI | EA20011021007 | 29.80 | 7.91 | 469.70 | 28.90 | <PQL |
| OW-JH-2-4M-OI(D) | EA20011021008 | 29.80 | 7.89 | 475.30 | 28.90 | <PQL |
| OW-JH-1-5M-OI | EA20011021009 | 29.70 | 7.43 | 760.40 | 28.60 | <PQL |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | 9 | | 9 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-HVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1015-2 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 21-Oct-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA30.6 | PPWQ-EA30.4 | PPWQ-EA42 | PPWQ-EA10 | PPWQ-EA2.1 |
|---|---|---|---|---|---|---|
| Analyte | | Nitrite | Nitrate | Sulfate | Chloride | Bicarbonate |
| Method | | SP | SP | SP | SP | Titration |
| PQL | | 0.02 | 0.2 | 5 | 0.6 | 20 |
| Precision(%CV)** | | <8% | <8% | <8% | <8% | <8% |
| Accuracy(%Recovery)** | | 90% - 110% | 90% - 110% | 90% - 110% | 90% - 110% | 90% - 110% |
| Unit | | mg/L | mg/L | mg/L | mg/L | mg CaCO3/L |
| User Sample ID | Laboratory Sample ID | NO2 (mg/L) | NO3 (mg/L) | SO4 (mg/L) | Cl (mg/L) | HCO3 (mg CaCO3/L) |
| OW-CH-1-7M-OI | EA20011021001 | <PQL | <PQL | <PQL | 0.73 | 507.00 |
| OW-JS-1-3M-OI | EA20011021002 | <PQL | <PQL | <PQL | 9.99 | 497.30 |
| CB-JsRb-5M-OI | EA20011021003 | 0.25 | 1.62 | <PQL | 26.29 | 351.00 |
| CB-JhKc-5M-OI | EA20011021004 | <PQL | <PQL | <PQL | 2.23 | 512.90 |
| OW-CH-2-6M-OI | EA20011021001 | <PQL | <PQL | <PQL | 4.68 | 331.50 |
| OW-JS-2-2M-OI | EA20011021006 | <PQL | <PQL | <PQL | 46.68 | 507.00 |
| OW-JH-2-4M-OI | EA20011021007 | <PQL | <PQL | <PQL | 2.22 | 278.90 |
| OW-JH-2-4M-OI(D) | EA20011021008 | <PQL | <PQL | <PQL | 4.05 | 282.80 |
| OW-JH-1-5M-OI | EA20011021009 | <PQL | <PQL | <PQL | 1.47 | 448.50 |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | 9 | 9 | 9 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



Form:QF-5.12-ver.1.0

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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1015-3

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 21-Oct-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA24.1 | PPWQ-EA28 | PPWQ-EA20.1 | PPWQ-EA7 | PPWQ-EA40 |
|---|---|---|---|---|---|---|
| Analyte | | Fluoride | Hardness | Free CN | COD | TDS |
| Method | | SP | Standard | SP | CR titration | Standard |
| PQL | | 0.1 | 0.5 | 0.009 | 20 | 0.13 |
| Precision(%CV)** | | <8% | <5% | <10% | <5% | <10% |
| Accuracy(%Recovery)** | | 90% - 110% | 90% - 110% | 90% - 110% | 90% - 110% | 85% - 115% |
| Unit | | mg/L | mg CaCO3/L | mg/L | mg O2/L | mg/L |
| User Sample ID | Laboratory Sample ID | F (mg/L) | Hardn.(mg CaCO3/L) | CN (mg/L) | COD (mg/L) | TDS (mg/L) |
| OW-CH-1-7M-OI | EA20011021001 | 0.31 | 156.92 | <PQL | <PQL | 530.37 |
| OW-JS-1-3M-OI | EA20011021002 | 0.26 | 109.12 | <PQL | <PQL | 529.73 |
| CB-JsRb-5M-OI | EA20011021003 | 0.39 | 40.19 | <PQL | <PQL | 424.96 |
| CB-JhKc-5M-OI | EA20011021004 | 0.22 | 159.18 | <PQL | <PQL | 561.28 |
| OW-CH-2-6M-OI | EA20011021001 | 0.25 | 90.83 | <PQL | <PQL | 370.62 |
| OW-JS-2-2M-OI | EA20011021006 | 0.34 | 110.23 | <PQL | <PQL | 606.72 |
| OW-JH-2-4M-OI | EA20011021007 | 0.27 | 56.97 | <PQL | <PQL | 300.61 |
| OW-JH-2-4M-OI(D) | EA20011021008 | 0.22 | 57.39 | <PQL | <PQL | 304.13 |
| OW-JH-1-5M-OI | EA20011021009 | 0.38 | 110.46 | <PQL | <PQL | 486.66 |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | 9 | 9 | 9 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



Form:QF-5.12-ver.1.0

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Department: Environmental & Analytical

# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1015-4 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 21-Oct-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA11 | PPWQ-EA19 | PPWQ-EA20 | PPWQ-EA12 | |
|---|---|---|---|---|---|---|
| Analyte | | Sodium | Potassium | Calcium | Magnesium | |
| Method | | FAAS | FAAS | FAAS | FAAS | |
| PQL | | 0.05 | 0.1 | 0.5 | 0.05 | |
| Precision(%CV)** | | <5% | <5% | <5% | <5% | |
| Accuracy(%Recovery)** | | 85% - 115% | 85% - 115% | 85% - 115% | 85% - 115% | |
| Unit | | mg/L | mg/L | mg/L | mg/L | |
| User Sample ID | Laboratory Sample ID | Sodium Na (mg/L) | Potassium K (mg/L) | Calcium Ca (mg/L) | Magnesium Mg (mg/L) | |
| OW-CH-1-7M-HM | EA20011021101 | 10.04 | 4.68 | 131.27 | 25.66 | |
| OW-JS-1-3M-HM | EA20011021102 | 54.79 | 5.58 | 81.57 | 27.55 | |
| CB-JsRb-5M-HM | EA20011021103 | 93.55 | 4.19 | 24.04 | 16.15 | |
| CB-JhKc-5M-HM | EA20011021104 | 19.47 | 4.78 | 132.78 | 26.41 | |
| OW-CH-2-6M-HM | EA20011021105 | 12.17 | 5.11 | 64.20 | 26.64 | |
| OW-JS-2-2M-HM | EA20011021106 | 74.72 | 6.22 | 82.40 | 28.45 | |
| OW-JH-2-4M-HM | EA20011021107 | 15.09 | 5.10 | 27.97 | 29.00 | |
| OW-JH-2-4M-HM(D) | EA20011021108 | 14.66 | 5.01 | 27.92 | 29.47 | |
| OW-JH-1-5M-HM | EA20011021109 | 18.87 | 4.89 | 80.04 | 30.42 | |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | 9 | 9 | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Department: Environmental & Analytical

# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1015-5 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 21-Oct-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA34 | PPWQ-EA24 | PPWQ-EA16 | PPWQ-EA82 | PPWQ-EA29 |
|---|---|---|---|---|---|---|
| Analyte | | Nickel | Total Cr | Zinc | Lead | Copper |
| Method | | GFAAS | GFAAS | Extraction / FAAS | GFAAS | GFAAS |
| PQL | | 5.00 | 10.00 | 5.00 | 5.00 | 5.00 |
| Precision(%CV)** | | <10% | <10% | <10% | <10% | <10% |
| Accuracy(%Recovery)** | | 85% - 115% | 85% - 115% | 85% - 115% | 80% - 120% | 85% - 115% |
| Unit | | ug/L | ug/L | ug/L | ug/L | ug/L |
| User Sample ID | Laboratory Sample ID | Nickel | Total Cr | Zinc | Lead | Copper |
| OW-CH-1-7M-HM | EA20011021101 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-JS-1-3M-HM | EA20011021102 | <PQL | <PQL | <PQL | <PQL | <PQL |
| CB-JsRb-5M-HM | EA20011021103 | <PQL | <PQL | <PQL | <PQL | <PQL |
| CB-JhKc-5M-HM | EA20011021104 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-CH-2-6M-HM | EA20011021105 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-JS-2-2M-HM | EA20011021106 | <PQL | <PQL | 4.32 | <PQL | <PQL |
| OW-JH-2-4M-HM | EA20011021107 | <PQL | <PQL | 7.35 | <PQL | <PQL |
| OW-JH-2-4M-HM(D) | EA20011021108 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-JH-1-5M-HM | EA20011021109 | <PQL | <PQL | <PQL | <PQL | <PQL |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | 9 | 9 | 9 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)

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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1015-6

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: 21-Oct-01 | Sample Type: Water supplied in PVC bottles. |
| Customer: | JICA STUDY TEAM | | |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA48.1 | PPWQ-EA80.1 | | | |
|---|---|---|---|---|---|---|
| Analyte | | Cadmium | Mercury | | | |
| Method | | GFAAS | FAAS-MVU | | | |
| PQL | | 1.5 | 1.00 | | | |
| Precision(%CV)** | | <10% | <10% | | | |
| Accuracy(%Recovery)** | | 85% - 115% | 85% - 115% | | | |
| Unit | | ug/L | ug/L | | | |
| User Sample ID | Laboratory Sample ID | Cadmium | Mercury | | | |
| OW-CH-1-7M-HM | EA20011021101 | <PQL | <PQL | | | |
| OW-JS-1-3M-HM | EA20011021102 | <PQL | <PQL | | | |
| CB-JsRb-5M-HM | EA20011021103 | <PQL | <PQL | | | |
| CB-JhKc-5M-HM | EA20011021104 | <PQL | <PQL | | | |
| OW-CH-2-6M-HM | EA20011021105 | <PQL | <PQL | | | |
| OW-JS-2-2M-HM | EA20011021106 | <PQL | <PQL | | | |
| OW-JH-2-4M-HM | EA20011021107 | <PQL | <PQL | | | |
| OW-JH-2-4M-HM(D) | EA20011021108 | <PQL | <PQL | | | |
| OW-JH-1-5M-HM | EA20011021109 | <PQL | <PQL | | | |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | | | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1015-7 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 21-Oct-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA26 | PPWQ-EA25 | | | |
|---|---|---|---|---|---|---|
| Analyte | | Dissolved Fe | Dissolved Mn | | | |
| Method | | FAAS | FAAS | | | |
| PQL | | 0.2 | 0.08 | | | |
| Precision(%CV)** | | 6% | 5% | | | |
| Accuracy(%Recovery)** | | 90% - 110% | 85% - 115% | | | |
| Unit | | mg/L | mg/L | | | |
| User Sample ID | Laboratory Sample ID | Dissolved Fe (mg/L) | Dissolved Mn (mg/L) | | | |
| OW-CH-1-7M-FeMn | EA20011021201 | 2.56 | 0.87 | | | |
| OW-JS-1-3M-FeMn | EA20011021202 | 5.46 | 1.19 | | | |
| CB-JsRb-5M-FeMn | EA20011021203 | 0.32 | 0.10 | | | |
| CB-JhKc-5M-FeMn | EA20011021204 | 2.71 | 0.24 | | | |
| OW-CH-2-6M-FeMn | EA20011021205 | 2.17 | <PQL | | | |
| OW-JS-2-2M-FeMn | EA20011021206 | 6.26 | 0.55 | | | |
| OW-JH-2-4M-FeMn | EA20011021207 | 0.40 | <PQL | | | |
| OW-JH-2-4M-FeMn(D) | EA20011021208 | 1.52 | <PQL | | | |
| OW-JH-1-5M-FeMn | EA20011021209 | 7.51 | <PQL | | | |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | | | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1015-8 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: 21-Oct-01 | Sample Type: Water supplied in PVC bottles. |
| Customer: | JICA STUDY TEAM | | |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

## ANION-CATION BALANCE* SHEET

| User Sample ID | Laboratory Sample ID | Total Anions (meq/L) | Total Cations (meq/L) | Anion-Cation Ratio |
|---|---|---|---|---|
| OW-CH-1-7M-OI | EA20011021001 | 8.40 | 9.36 | 89.74 |
| OW-JS-1-3M-OI | EA20011021002 | 8.50 | 9.11 | 93.30 |
| CB-JsRb-5M-OI | EA20011021003 | 6.60 | 6.78 | 97.35 |
| CB-JhKc-5M-OI | EA20011021004 | 8.53 | 9.95 | 85.73 |
| OW-CH-2-6M-OI | EA20011021001 | 5.63 | 6.20 | 90.81 |
| OW-JS-2-2M-OI | EA20011021006 | 9.70 | 10.11 | 95.94 |
| OW-JH-2-4M-OI | EA20011021007 | 4.70 | 4.59 | 102.40 |
| OW-JH-2-4M-OI(D) | EA20011021008 | 4.81 | 4.65 | 103.44 |
| OW-JH-1-5M-OI | EA20011021009 | 7.47 | 7.72 | 96.76 |

*Anion sums and cation sums are calculated based on the major anionic and cationic contributions.

| | |
|---|---|
| Total No. of Samples | 9 |
| Total No. of Services | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1016-1

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 20-Nov-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA34.1 | PPWQ-EA34 | PPWQ-EA16 | PPWQ-EA34.1 | PPWQ-EA30.1 |
|---|---|---|---|---|---|---|
| Analyte | | Temperature | pH | Conductivity | at Temperature | Ammonium |
| Method | | Thermometer | pH meter | Conductivity meter | Thermometer | SP |
| PQL | | 0 Deg C | 0 | 0.2 | 0 | 0.1 |
| Precision(%CV)** | | <8% | <8% | <8% | <8% | <8% |
| Accuracy(%Recovery)** | | 90% - 110% | 90% - 110% | 90% -110% | 90% - 110% | 90% - 110% |
| Unit | | Deg C | | uS/cm | Deg C | mg/L |
| User Sample ID | Laboratory Sample ID | T (deg C) | pH | EC | at T(deg C) | NH4 (mg/L) |
| OW-CH-2-7M-OI | EA20011120001 | 27.10 | 7.41 | 666.30 | 26.10 | 0.18 |
| OW-JH-2-5M-OI | EA20011120002 | 26.80 | 7.38 | 713.30 | 25.90 | 0.15 |
| OW-JS-2-3M-OI | EA20011120003 | 27.10 | 7.99 | 897.70 | 26.00 | 0.37 |
| OW-JS-1-4M-OI | EA20011120004 | 26.90 | 7.43 | 818.30 | 25.90 | <PQL |
| CB-JsRb-6M-OI | EA20011120005 | 27.00 | 7.88 | 664.40 | 26.20 | <PQL |
| OW-CH-1-8M-OI | EA20011120006 | 27.00 | 7.24 | 618.70 | 26.30 | 0.37 |
| CB-JhKc-6M-OI | EA20011120007 | 27.30 | 7.29 | 857.00 | 26.50 | 1.51 |
| CB-JhKc-6M-OI(B) | EA20011120008 | 27.10 | 6.22 | 1.20 | 26.10 | <PQL |
| OW-JH-1-6M-OI | EA20011120009 | 27.10 | 7.25 | 824.70 | 26.10 | <PQL |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | 9 | | 9 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1016-2

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 20-Nov-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA30.6 | PPWQ-EA30.4 | PPWQ-EA42 | PPWQ-EA10 | PPWQ-EA2.1 |
|---|---|---|---|---|---|---|
| Analyte | | Nitrite | Nitrate | Sulfate | Chloride | Bicarbonate |
| Method | | SP | SP | SP | SP | Titration |
| PQL | | 0.02 | 0.2 | 5 | 0.6 | 20 |
| Precision(%CV)** | | <8% | <8% | <8% | <8% | <8% |
| Accuracy(%Recovery)** | | 90% - 110% | 90% - 110% | 90% - 110% | 90% - 110% | 90% - 110% |
| Unit | | mg/L | mg/L | mg/L | mg/L | mg CaCO3/L |
| User Sample ID | Laboratory Sample ID | NO2 (mg/L) | NO3 (mg/L) | SO4 (mg/L) | Cl (mg/L) | HCO3 (mg CaCO3/L) |
| OW-CH-2-7M-OI | EA20011120001 | <PQL | <PQL | <PQL | 6.19 | 380.00 |
| OW-JH-2-5M-OI | EA20011120002 | <PQL | <PQL | <PQL | 4.50 | 418.00 |
| OW-JS-2-3M-OI | EA20011120003 | <PQL | <PQL | <PQL | 40.11 | 456.00 |
| OW-JS-1-4M-OI | EA20011120004 | <PQL | <PQL | <PQL | 8.25 | 456.00 |
| CB-JsRb-6M-OI | EA20011120005 | 1.94 | 0.49 | <PQL | 21.15 | 342.00 |
| OW-CH-1-8M-OI | EA20011120006 | <PQL | <PQL | <PQL | 1.42 | 494.00 |
| CB-JhKc-6M-OI | EA20011120007 | <PQL | <PQL | <PQL | 1.82 | 513.00 |
| CB-JhKc-6M-OI(B) | EA20011120008 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-JH-1-6M-OI | EA20011120009 | <PQL | <PQL | <PQL | 2.40 | 494.00 |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | 9 | 9 | 9 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1016-3

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: 20-Nov-01 | Sample Type: Water supplied in PVC bottles. |
| Customer: | JICA STUDY TEAM | | |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA24.1 | PPWQ-EA28 | PPWQ-EA20.1 | PPWQ-EA7 | PPWQ-EA40 |
|---|---|---|---|---|---|---|
| Analyte | | Fluoride | Hardness | Free CN | COD | TDS |
| Method | | SP | Standard | SP | CR titration | Standard |
| PQL | | 0.1 | 0.5 | 0.009 | 20 | 0.13 |
| Precision(%CV)** | | <8% | <5% | <10% | <5% | <10% |
| Accuracy(%Recovery)** | | 90% - 110% | 90% - 110% | 90% - 110% | 90% - 110% | 85% - 115% |
| Unit | | mg/L | mg CaCO3/L | mg/L | mg O2/L | mg/L |
| User Sample ID | Laboratory Sample ID | F (mg/L) | Hardn.(mg CaCO3/L) | CN (mg/L) | COD (mg/L) | TDS (mg/L) |
| OW-CH-2-7M-OI | EA20011120001 | 0.30 | 121.48 | <PQL | <PQL | 426.43 |
| OW-JH-2-5M-OI | EA20011120002 | 0.25 | 122.15 | <PQL | <PQL | 456.51 |
| OW-JS-2-3M-OI | EA20011120003 | 0.26 | 113.18 | <PQL | 38.08 | 574.53 |
| OW-JS-1-4M-OI | EA20011120004 | 0.26 | 115.03 | <PQL | <PQL | 523.71 |
| CB-JsRb-6M-OI | EA20011120005 | 0.36 | 43.10 | <PQL | <PQL | 425.22 |
| OW-CH-1-8M-OI | EA20011120006 | 0.25 | 155.64 | <PQL | <PQL | 395.97 |
| CB-JhKc-6M-OI | EA20011120007 | 0.17 | 150.68 | <PQL | <PQL | 548.48 |
| CB-JhKc-6M-OI(B) | EA20011120008 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-JH-1-6M-OI | EA20011120009 | 0.28 | 143.04 | <PQL | <PQL | 527.81 |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | 9 | 9 | 9 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1016-4

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: 20-Nov-01 | Sample Type: Water supplied in PVC bottles. |
| Customer: | JICA STUDY TEAM | | |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA11 | PPWQ-EA19 | PPWQ-EA20 | PPWQ-EA12 | |
|---|---|---|---|---|---|---|
| Analyte | | Sodium | Potassium | Calcium | Magnesium | |
| Method | | FAAS | FAAS | FAAS | FAAS | |
| PQL | | 0.05 | 0.1 | 0.5 | 0.05 | |
| Precision(%CV)** | | <5% | <5% | <5% | <5% | |
| Accuracy(%Recovery)** | | 85% - 115% | 85% - 115% | 85% - 115% | 85% - 115% | |
| Unit | | mg/L | mg/L | mg/L | mg/L | |
| User Sample ID | Laboratory Sample ID | Sodium Na (mg/L) | Potassium K (mg/L) | Calcium Ca (mg/L) | Magnesium Mg (mg/L) | |
| OW-CH-2-7M-HM | EA20011120101 | 12.98 | 3.67 | 88.66 | 32.83 | |
| OW-JH-2-5M-HM | EA20011120102 | 15.25 | 3.65 | 83.02 | 39.13 | |
| OW-JS-2-3M-HM | EA20011120103 | 67.17 | 4.50 | 80.80 | 32.38 | |
| OW-JS-1-4M-HM | EA20011120104 | 51.37 | 5.01 | 82.16 | 32.87 | |
| CB-JsRb-6M-HM | EA20011120105 | 86.04 | 3.68 | 26.67 | 16.43 | |
| OW-CH-1-8M-HM | EA20011120106 | 14.69 | 3.86 | 126.69 | 28.95 | |
| CB-JhKc-6M-HM | EA20011120107 | 26.96 | 4.04 | 121.80 | 28.88 | |
| CB-JhKc-6M-HM(B) | EA20011120108 | <PQL | <PQL | <PQL | <PQL | |
| OW-JH-1-6M-HM | EA20011120109 | 20.99 | 3.67 | 101.96 | 41.07 | |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | 9 | 9 | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1016-5

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 20-Nov-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA34 | PPWQ-EA24 | PPWQ-EA16 | PPWQ-EA82 | PPWQ-EA29 |
|---|---|---|---|---|---|---|
| Analyte | | Nickel | Total Cr | Zinc | Lead | Copper |
| Method | | GFAAS | GFAAS | Extraction / FAAS | GFAAS | GFAAS |
| PQL | | 5.00 | 10.00 | 5.00 | 5.00 | 5.00 |
| Precision(%CV)** | | <10% | <10% | <10% | <10% | <10% |
| Accuracy(%Recovery)** | | 85% - 115% | 85% - 115% | 85% - 115% | 80% - 120% | 85% - 115% |
| Unit | | ug/L | ug/L | ug/L | ug/L | ug/L |
| User Sample ID | Laboratory Sample ID | Nickel | Total Cr | Zinc | Lead | Copper |
| OW-CH-2-7M-HM | EA20011120101 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-JH-2-5M-HM | EA20011120102 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-JS-2-3M-HM | EA20011120103 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-JS-1-4M-HM | EA20011120104 | <PQL | <PQL | <PQL | <PQL | <PQL |
| CB-JsRb-6M-HM | EA20011120105 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-CH-1-8M-HM | EA20011120106 | <PQL | <PQL | <PQL | <PQL | <PQL |
| CB-JhKc-6M-HM | EA20011120107 | <PQL | <PQL | <PQL | <PQL | <PQL |
| CB-JhKc-6M-HM(B) | EA20011120108 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-JH-1-6M-HM | EA20011120109 | <PQL | <PQL | <PQL | <PQL | <PQL |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | 9 | 9 | 9 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1016-6 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: 20-Nov-01 | Sample Type: Water supplied in PVC bottles. |
| Customer: | JICA STUDY TEAM | | |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA48.1 | PPWQ-EA80.1 | | | |
|---|---|---|---|---|---|---|
| Analyte | | Cadmium | Mercury | | | |
| Method | | GFAAS | FAAS-MVU | | | |
| PQL | | 1.5 | 1.00 | | | |
| Precision(%CV)** | | <10% | <10% | | | |
| Accuracy(%Recovery)** | | 85% - 115% | 85% - 115% | | | |
| Unit | | ug/L | ug/L | | | |
| User Sample ID | Laboratory Sample ID | Cadmium | Mercury | | | |
| OW-CH-2-7M-HM | EA20011120101 | <PQL | <PQL | | | |
| OW-JH-2-5M-HM | EA20011120102 | <PQL | <PQL | | | |
| OW-JS-2-3M-HM | EA20011120103 | <PQL | <PQL | | | |
| OW-JS-1-4M-HM | EA20011120104 | <PQL | <PQL | | | |
| CB-JsRb-6M-HM | EA20011120105 | <PQL | <PQL | | | |
| OW-CH-1-8M-HM | EA20011120106 | <PQL | <PQL | | | |
| CB-JhKc-6M-HM | EA20011120107 | <PQL | <PQL | | | |
| CB-JhKc-6M-HM(B) | EA20011120108 | <PQL | <PQL | | | |
| OW-JH-1-6M-HM | EA20011120109 | <PQL | <PQL | | | |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | | | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

** The Precision & Accuracy are defined only for the laboratory process not for the sampling, transporting and storage processes.

Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1016-7

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 20-Nov-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA26 | PPWQ-EA25 | | | |
|---|---|---|---|---|---|---|
| Analyte | | Dissolved Fe | Dissolved Mn | | | |
| Method | | FAAS | FAAS | | | |
| PQL | | 0.2 | 0.08 | | | |
| Precision (%CV)** | | 6% | 5% | | | |
| Accuracy (%Recovery)** | | 90% - 110% | 85% - 115% | | | |
| Unit | | mg/L | mg/L | | | |
| User Sample ID | Laboratory Sample ID | Dissolved Fe (mg/L) | Dissolved Mn (mg/L) | | | |
| OW-CH-2-7M-FeMn | EA20011120201 | 9.74 | 0.15 | | | |
| OW-JH-2-5M-FeMn | EA20011120202 | 9.23 | 0.12 | | | |
| OW-JS-2-3M-FeMn | EA20011120203 | 14.75 | 0.74 | | | |
| OW-JS-1-4M-FeMn | EA20011120204 | 13.40 | 0.63 | | | |
| CB-JsRb-6M-FeMn | EA20011120205 | 0.70 | 0.20 | | | |
| OW-CH-1-8M-FeMn | EA20011120206 | 3.66 | 0.49 | | | |
| CB-JhKc-6M-FeMn | EA20011120207 | 5.33 | 0.28 | | | |
| CB-JhKc-6M-FeMn(B) | EA20011120208 | 1.21 | 0.70 | | | |
| OW-JH-1-6M-FeMn | EA20011120209 | 17.66 | 0.35 | | | |
| Total No. of Samples | 9 | | | | | |
| Total No. of Services | | 9 | 9 | | | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1016-8

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: 20-Nov-01 | Sample Type: Water supplied in PVC bottles. |
| Customer: | JICA STUDY TEAM | | |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

## ANION-CATION BALANCE* SHEET

| User Sample ID | Laboratory Sample ID | Total Anions (meq/L) | Total Cations (meq/L) | Anion-Cation Ratio |
|---|---|---|---|---|
| OW-CH-2-7M-OI | EA20011120001 | 6.47 | 8.15 | 79.40 |
| OW-JH-2-5M-OI | EA20011120002 | 7.04 | 8.46 | 83.18 |
| OW-JS-2-3M-OI | EA20011120003 | 8.67 | 10.31 | 84.10 |
| OW-JS-1-4M-OI | EA20011120004 | 7.77 | 9.68 | 80.27 |
| CB-JsRb-6M-OI | EA20011120005 | 6.36 | 6.56 | 96.95 |
| OW-CH-1-8M-OI | EA20011120006 | 8.20 | 9.61 | 85.31 |
| CB-JhKc-6M-OI | EA20011120007 | 8.52 | 10.02 | 85.03 |
| CB-JhKc-6M-OI(B) | EA20011120008 | 0.13 | 0.09 | 144.44 |
| OW-JH-1-6M-OI | EA20011120009 | 8.23 | 10.13 | 81.24 |

*Anion sums and cation sums are calculated based on the major anionic and cationic contributions.

| | |
|---|---|
| Total No. of Samples | 9 |
| Total No. of Services | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1018-1

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 14-Mar-02 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA34.1 | PPWQ-EA34 | PPWQ-EA16 | PPWQ-EA34.1 | PPWQ-EA30.1 |
|---|---|---|---|---|---|---|
| Analyte | | Temperature | pH | Conductivity | at Temperature | Ammonium |
| Method | | Thermometer | pH meter | Conductivity meter | Thermometer | SP |
| PQL | | 0 Deg C | 0 | 0.2 | 0 | 0.1 |
| Precision(%CV)** | | <8% | <8% | <8% | <8% | <8% |
| Accuracy(%Recovery)** | | 90% - 110% | 90% - 110% | 90% -110% | 90% - 110% | 90% - 110% |
| Unit | | Deg C | | uS/cm | Deg C | mg/L |
| User Sample ID | Laboratory Sample ID | T (deg C) | pH | EC | at T(deg C) | NH4 (mg/L) |
| OW-BM-CP-48h-OI | EA20020314001 | 25.80 | 8.33 | 654.20 | 25.10 | 1.36 |
| Total No. of Samples | 1 | | | | | |
| Total No. of Services | | 1 | 1 | 1 | | 1 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1018-2

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 14-Mar-02 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA30.6 | PPWQ-EA30.4 | PPWQ-EA42 | PPWQ-EA10 | PPWQ-EA2.1 |
|---|---|---|---|---|---|---|
| Analyte | | Nitrite | Nitrate | Sulfate | Chloride | Bicarbonate |
| Method | | SP | SP | SP | SP | Titration |
| PQL | | 0.02 | 0.2 | 5 | 0.6 | 20 |
| Precision(%CV)** | | <8% | <8% | <8% | <8% | <8% |
| Accuracy(%Recovery)** | | 90% - 110% | 90% - 110% | 90% - 110% | 90% - 110% | 90% - 110% |
| Unit | | mg/L | mg/L | mg/L | mg/L | mg CaCO3/L |
| User Sample ID | Laboratory Sample ID | NO2 (mg/L) | NO3 (mg/L) | SO4 (mg/L) | Cl (mg/L) | HCO3 (mg CaCO3/L) |
| OW-BM-CP-48h-OI | EA20020314001 | <PQL | <PQL | <PQL | 6.17 | 360.80 |
| Total No. of Samples | 1 | | | | | |
| Total No. of Services | | 1 | 1 | 1 | 1 | 1 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1018-3

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 14-Mar-02 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA24.1 | PPWQ-EA28 | PPWQ-EA20.1 | PPWQ-EA7 | PPWQ-EA40 |
|---|---|---|---|---|---|---|
| Analyte | | Fluoride | Hardness | Free CN | COD | TDS |
| Method | | SP | Standard | SP | CR titration | Standard |
| PQL | | 0.1 | 0.5 | 0.009 | 20 | 0.13 |
| Precision(%CV)** | | <8% | <5% | <10% | <5% | <10% |
| Accuracy(%Recovery)** | | 90% - 110% | 90% - 110% | 90% - 110% | 90% - 110% | 85% - 115% |
| Unit | | mg/L | mg CaCO3/L | mg/L | mg O2/L | mg/L |
| User Sample ID | Laboratory Sample ID | F (mg/L) | Hardn.(mg CaCO3/L) | CN (mg/L) | COD (mg/L) | TDS (mg/L) |
| OW-BM-CP-48h-OI | EA20020314001 | 0.42 | 28.07 | <PQL | <PQL | 418.69 |
| Total No. of Samples | 1 | | | | | |
| Total No. of Services | | 1 | 1 | 1 | 1 | 1 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1018-4 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 14-Mar-02 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA11 | PPWQ-EA19 | PPWQ-EA20 | PPWQ-EA12 | |
|---|---|---|---|---|---|---|
| Analyte | | Sodium | Potassium | Calcium | Magnesium | |
| Method | | FAAS | FAAS | FAAS | FAAS | |
| PQL | | 0.05 | 0.1 | 0.5 | 0.05 | |
| Precision(%CV)** | | <5% | <5% | <5% | <5% | |
| Accuracy(%Recovery)** | | 85% - 115% | 85% - 115% | 85% - 115% | 85% - 115% | |
| Unit | | mg/L | mg/L | mg/L | mg/L | |
| User Sample ID | Laboratory Sample ID | Sodium Na (mg/L) | Potassium K (mg/L) | Calcium Ca (mg/L) | Magnesium Mg (mg/L) | |
| OW-BM-CP-48h-HM | EA20020314101 | 122.34 | 1.96 | 18.61 | 9.46 | |
| Total No. of Samples | 1 | | | | | |
| Total No. of Services | | 1 | 1 | 1 | 1 | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1018-5 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 14-Mar-02 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA34 | PPWQ-EA24 | PPWQ-EA16 | PPWQ-EA82 | PPWQ-EA29 |
|---|---|---|---|---|---|---|
| Analyte | | Nickel | Total Cr | Zinc | Lead | Copper |
| Method | | GFAAS | GFAAS | Extraction / FAAS | GFAAS | GFAAS |
| PQL | | 5.00 | 10.00 | 5.00 | 5.00 | 5.00 |
| Precision (%CV) ** | | <10% | <10% | <10% | <10% | <10% |
| Accuracy (%Recovery) ** | | 85% - 115% | 85% - 115% | 85% - 115% | 80% - 120% | 85% - 115% |
| Unit | | ug/L | ug/L | ug/L | ug/L | ug/L |
| User Sample ID | Laboratory Sample ID | Nickel | Total Cr | Zinc | Lead | Copper |
| OW-HM-CP-48h-HM | EA20020314101 | <PQL | <PQL | <PQL | <PQL | <PQL |
| Total No. of Samples | 1 | | | | | |
| Total No. of Services | | 1 | 1 | 1 | 1 | 1 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1018-6 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 14-Mar-02 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA48.1 | PPWQ-EA80.1 | | | |
|---|---|---|---|---|---|---|
| Analyte | | Cadmium | Mercury | | | |
| Method | | GFAAS | FAAS-MVU | | | |
| PQL | | 1.5 | 1.00 | | | |
| Precision(%CV)** | | <10% | <10% | | | |
| Accuracy(%Recovery)** | | 85% - 115% | 85% - 115% | | | |
| Unit | | ug/L | ug/L | | | |
| User Sample ID | Laboratory Sample ID | Cadmium | Mercury | | | |
| OW-BM-CP-48h-HM | EA20020314101 | <PQL | <PQL | | | |
| Total No. of Samples | 1 | | | | | |
| Total No. of Services | | 1 | 1 | | | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
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AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1017-1

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: 11-Dec-01 | Sample Type: Water supplied in PVC bottles. |
| Customer: | JICA STUDY TEAM | | |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA34.1 | PPWQ-EA34 | PPWQ-EA16 | PPWQ-EA34.1 | PPWQ-EA30.1 |
|---|---|---|---|---|---|---|
| Analyte | | Temperature | pH | Conductivity | at Temperature | Ammonium |
| Method | | Thermometer | pH meter | Conductivity meter | Thermometer | SP |
| PQL | | 0 Deg C | 0 | 0.2 | 0 | 0.1 |
| Precision(%CV)** | | <8% | <8% | <8% | <8% | <8% |
| Accuracy(%Recovery)** | | 90% - 110% | 90% - 110% | 90% -110% | 90% - 110% | 90% - 110% |
| Unit | | Deg C | | uS/cm | Deg C | mg/L |
| User Sample ID | Laboratory Sample ID | T (deg C) | pH | EC | at T(deg C) | NH4 (mg/L) |
| OW-JH-2-6M-OI | EA20011211001 | 24.40 | 7.86 | 490.70 | 24.10 | <PQL |
| OW-JS-2-4M-OI | EA20011211002 | 24.30 | 7.24 | 894.00 | 23.80 | 0.22 |
| OW-JS-2-4M-OI(D) | EA20011211003 | 24.70 | 7.24 | 902.30 | 23.90 | 0.26 |
| OW-JS-1-5M-OI | EA20011211004 | 24.90 | 7.22 | 805.30 | 24.00 | 0.28 |
| OW-JH-1-7M-OI | EA20011211005 | 24.70 | 7.26 | 797.50 | 23.90 | 0.11 |
| Total No. of Samples | 5 | | | | | 5 |
| Total No. of Services | | 5 | 5 | 5 | | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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(Mala Khan)

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# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1017-2

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 11-Dec-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA30.6 | PPWQ-EA30.4 | PPWQ-EA42 | PPWQ-EA10 | PPWQ-EA2.1 |
|---|---|---|---|---|---|---|
| Analyte | | Nitrite | Nitrate | Sulfate | Chloride | Bicarbonate |
| Method | | SP | SP | SP | SP | Titration |
| PQL | | 0.02 | 0.2 | 5 | 0.6 | 20 |
| Precision(%CV)** | | <8% | <8% | <8% | <8% | <8% |
| Accuracy(%Recovery)** | | 90% - 110% | 90% - 110% | 90% - 110% | 90% - 110% | 90% - 110% |
| Unit | | mg/L | mg/L | mg/L | mg/L | mg CaCO3/L |
| User Sample ID | Laboratory Sample ID | NO2 (mg/L) | NO3 (mg/L) | SO4 (mg/L) | Cl (mg/L) | HCO3 (mg CaCO3/L) |
| OW-JH-2-6M-OI | EA20011211001 | <PQL | 0.10 | <PQL | 3.85 | 284.00 |
| OW-JS-2-4M-OI | EA20011211002 | <PQL | 0.1 | <PQL | 34.72 | 460.00 |
| OW-JS-2-4M-OI(D) | EA20011211003 | <PQL | 0.1 | <PQL | 38.58 | 460.00 |
| OW-JS-1-5M-OI | EA20011211004 | <PQL | 0.10 | <PQL | 7.27 | 460.00 |
| OW-JH-1-7M-OI | EA20011211005 | <PQL | 0.10 | 6.64 | 2.59 | 500.00 |
| Total No. of Samples | 5 | | | | | |
| Total No. of Services | | 5 | 5 | 5 | 5 | 5 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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**Plasma Plus+** *Application & Research Laboratory*

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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1017-3

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 11-Dec-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA24.1 | PPWQ-EA28 | PPWQ-EA20.1 | PPWQ-EA7 | PPWQ-EA40 |
|---|---|---|---|---|---|---|
| Analyte | | Fluoride | Hardness | Free CN | COD | TDS |
| Method | | SP | Standard | SP | CR titration | Standard |
| PQL | | 0.1 | 0.5 | 0.009 | 20 | 0.13 |
| Precision(%CV)** | | <8% | <5% | <10% | <5% | <10% |
| Accuracy(%Recovery)** | | 90% - 110% | 90% - 110% | 90% - 110% | 90% - 110% | 85% - 115% |
| Unit | | mg/L | mg CaCO3/L | mg/L | mg O2/L | mg/L |
| User Sample ID | Laboratory Sample ID | F (mg/L) | Hardn.(mg CaCO3/L) | CN (mg/L) | COD (mg/L) | TDS (mg/L) |
| OW-JH-2-6M-OI | EA20011211001 | 0.20 | 76.71 | <PQL | <PQL | 314.05 |
| OW-JS-2-4M-OI | EA20011211002 | 0.30 | 113.48 | <PQL | <PQL | 572.16 |
| OW-JS-2-4M-OI(D) | EA20011211003 | 0.29 | 112.04 | <PQL | <PQL | 577.47 |
| OW-JS-1-5M-OI | EA20011211004 | 0.26 | 117.25 | <PQL | <PQL | 515.39 |
| OW-JH-1-7M-OI | EA20011211005 | 0.37 | 146.62 | <PQL | <PQL | 510.40 |
| Total No. of Samples | 5 | | | | | |
| Total No. of Services | | 5 | 5 | 5 | 5 | 5 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1017-4

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 11-Dec-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA11 | PPWQ-EA19 | PPWQ-EA20 | PPWQ-EA12 | |
|---|---|---|---|---|---|---|
| Analyte | | Sodium | Potassium | Calcium | Magnesium | |
| Method | | FAAS | FAAS | FAAS | FAAS | |
| PQL | | 0.05 | 0.1 | 0.5 | 0.05 | |
| Precision(%CV)** | | <5% | <5% | <5% | <5% | |
| Accuracy(%Recovery)** | | 85% - 115% | 85% - 115% | 85% - 115% | 85% - 115% | |
| Unit | | mg/L | mg/L | mg/L | mg/L | |
| User Sample ID | Laboratory Sample ID | Sodium Na (mg/L) | Potassium K (mg/L) | Calcium Ca (mg/L) | Magnesium Mg (mg/L) | |
| OW-JH-2-6M-HM | EA20011211101 | 14.29 | 4.04 | 39.21 | 37.49 | |
| OW-JS-2-4M-HM | EA20011211102 | 79.88 | 4.41 | 80.02 | 33.46 | |
| OW-JS-2-4M-HM(D) | EA20011211103 | 66.72 | 4.86 | 80.33 | 31.70 | |
| OW-JS-1-5M-HM | EA20011211104 | 51.89 | 4.64 | 84.04 | 33.21 | |
| OW-JH-1-7M-HM | EA20011211105 | 20.69 | 3.52 | 104.46 | 42.15 | |
| Total No. of Samples | 5 | | | | | |
| Total No. of Services | | 5 | 5 | 5 | 5 | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1017-5

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 11-Dec-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA34 | PPWQ-EA24 | PPWQ-EA16 | PPWQ-EA82 | PPWQ-EA29 |
|---|---|---|---|---|---|---|
| Analyte | | Nickel | Total Cr | Zinc | Lead | Copper |
| Method | | GFAAS | GFAAS | Extraction / FAAS | GFAAS | GFAAS |
| PQL | | 5.00 | 10.00 | 5.00 | 5.00 | 5.00 |
| Precision(%CV)** | | <10% | <10% | <10% | <10% | <10% |
| Accuracy(%Recovery)** | | 85% - 115% | 85% - 115% | 85% - 115% | 80% - 120% | 85% - 115% |
| Unit | | ug/L | ug/L | ug/L | ug/L | ug/L |
| User Sample ID | Laboratory Sample ID | Nickel | Total Cr | Zinc | Lead | Copper |
| OW-JH-2-6M-HM | EA20011211101 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-JS-2-4M-HM | EA20011211102 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-JS-2-4M-HM(D) | EA20011211103 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-JS-1-5M-HM | EA20011211104 | <PQL | <PQL | <PQL | <PQL | <PQL |
| OW-JH-1-7M-HM | EA20011211105 | <PQL | <PQL | <PQL | <PQL | <PQL |
| Total No. of Samples | 5 | | | | | |
| Total No. of Services | | 5 | 5 | 5 | 5 | 5 |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Department: Environmental & Analytical

# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1017-6 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 11-Dec-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA48.1 | PPWQ-EA80.1 | | | |
|---|---|---|---|---|---|---|
| Analyte | | Cadmium | Mercury | | | |
| Method | | GFAAS | FAAS-MVU | | | |
| PQL | | 1.5 | 1.00 | | | |
| Precision(%CV)** | | <10% | <10% | | | |
| Accuracy(%Recovery)** | | 85% - 115% | 85% - 115% | | | |
| Unit | | ug/L | ug/L | | | |
| User Sample ID | Laboratory Sample ID | Cadmium | Mercury | | | |
| OW-JH-2-6M-HM | EA20011211101 | <PQL | <PQL | | | |
| OW-JS-2-4M-HM | EA20011211102 | <PQL | <PQL | | | |
| OW-JS-2-4M-HM(D) | EA20011211103 | <PQL | <PQL | | | |
| OW-JS-1-5M-HM | EA20011211104 | <PQL | <PQL | | | |
| OW-JH-1-7M-HM | EA20011211105 | <PQL | <PQL | | | |
| Total No. of Samples | 5 | | | | | |
| Total No. of Services | | 5 | 5 | | | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Department: Environmental & Analytical

# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1017-7 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 11-Dec-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA26 | PPWQ-EA25 | | | |
|---|---|---|---|---|---|---|
| Analyte | | Dissolved Fe | Dissolved Mn | | | |
| Method | | FAAS | FAAS | | | |
| PQL | | 0.2 | 0.08 | | | |
| Precision(%CV)** | | 6% | 5% | | | |
| Accuracy(%Recovery)** | | 90% - 110% | 85% - 115% | | | |
| Unit | | mg/L | mg/L | | | |
| User Sample ID | Laboratory Sample ID | Dissolved Fe (mg/L) | Dissolved Mn (mg/L) | | | |
| OW-JH-2-6M-FeMn | EA20011211201 | 1.55 | 0.09 | | | |
| OW-JS-2-4M-FeMn | EA20011211202 | 15.13 | 0.65 | | | |
| OW-JS-2-4M-FeMn(D) | EA20011211203 | 10.91 | 0.61 | | | |
| OW-JS-1-5M-FeMn | EA20011211204 | 8.93 | 0.57 | | | |
| OW-JH-1-7M-FeMn | EA20011211205 | 17.08 | 0.32 | | | |
| Total No. of Samples | 5 | | | | | |
| Total No. of Services | | 5 | 5 | | | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Department: Environmental & Analytical

# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1017-8 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 11-Dec-01 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

## ANION-CATION BALANCE* SHEET

| User Sample ID | Laboratory Sample ID | Total Anions (meq/L) | Total Cations (meq/L) | Anion-Cation Ratio |
|---|---|---|---|---|
| OW-JH-2-6M-OI | EA20011211001 | 6.47 | 8.15 | 79.40 |
| OW-JS-2-4M-OI | EA20011211002 | 7.04 | 8.46 | 83.18 |
| OW-JS-2-4M-OI(D) | EA20011211003 | 8.67 | 10.31 | 84.10 |
| OW-JS-1-5M-OI | EA20011211004 | 7.77 | 9.68 | 80.27 |
| OW-JH-1-7M-OI | EA20011211005 | 6.36 | 6.56 | 96.95 |
| Total No. of Samples | 5 | | | |
| Total No. of Services | | | | |

*Anion sums and cation sums are calculated based on the major anionic and cationic contributions.

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

| | | |
|---|---|---|
| Report Ref: | PP/EA/JICASTUDY01/MK/2002/07/1018-7 | Date: July 10, 2002 |

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 14-Mar-02 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

| Service ID | | PPWQ-EA26 | PPWQ-EA25 | | | |
|---|---|---|---|---|---|---|
| Analyte | | Dissolved Fe | Dissolved Mn | | | |
| Method | | FAAS | FAAS | | | |
| PQL | | 0.2 | 0.08 | | | |
| Precision(%CV)** | | 6% | 5% | | | |
| Accuracy(%Recovery)** | | 90% - 110% | 85% - 115% | | | |
| Unit | | mg/L | mg/L | | | |
| User Sample ID | Laboratory Sample ID | Dissolved Fe (mg/L) | Dissolved Mn (mg/L) | | | |
| OW-BM-CP-48h-FeMn | EA20020314201 | 0.57 | <PQL | | | |
| Total No. of Samples | 1 | | | | | |
| Total No. of Services | | 1 | 1 | | | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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Signature of Analyst
(Mala Khan)



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Department: Environmental & Analytical

# Analytical Report Sheet

Report Ref: PP/EA/JICASTUDY01/MK/2002/07/1018-8

Date: July 10, 2002

| | | | |
|---|---|---|---|
| Customer ID: | JICASTUDY01 | Sample Received Date: | Sample Type: |
| Customer: | JICA STUDY TEAM | 14-Mar-02 | Water supplied in PVC bottles. |
| Contact Person | Mr.M. Fukuda | | |
| Address: | C/O:DPHE Jessore,Jessore | | |

## ANION-CATION BALANCE* SHEET

| User Sample ID | Laboratory Sample ID | Total Anions (meq/L) | Total Cations (meq/L) | Anion-Cation Ratio |
|---|---|---|---|---|
| OW-BM-CP-48h-OI | EA200203141001 | 6.16 | 7.18 | 85.86 |

*Anion sums and cation sums are calculated based on the major anionic and cationic contributions.

| | |
|---|---|
| Total No. of Samples | 1 |
| Total No. of Services | |

mg/L: milligram per litre
ug/L: microgram per litre
uS: microsiemens
SP: UV-VIS Spectroscopy
FAAS: Flame Atomic Absorption Spectroscopy
GFAAS: Graphite Furnace Atomic Absorption Spectroscopy
AAS-HVG: Atomic Absorption Spectroscopy with Hydride Vapor Generator
AAS-MVU: Atomic Absorption Spectroscopy with Mercury Vaporizer Unit

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