



## LABORATORY REPORT

Prepared For: WGR Southwest, Inc. - Lodi  
315 W. Pine Street, Suite 8  
Lodi, CA 95240  
Attention: John Teravskis

Project: BP Carson Refinery RW  
Receiving waters, 021.APC.00

Sampled: 01/06/05  
Received: 01/07/05  
Issued: 01/14/05 16:56

NELAP #01108CA CA ELAP #1197 CSDLAC #10117

*The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of Del Mar Analytical and its client. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical. The Chain of Custody, 1 page, is included and is an integral part of this report.*

*This entire report was reviewed and approved for release.*

## CASE NARRATIVE

**SAMPLE RECEIPT:** Samples were received intact, at 3°C, on ice and with chain of custody documentation.

**HOLDING TIMES:** All samples were analyzed within prescribed holding times and/or in accordance with the Del Mar Analytical Sample Acceptance Policy unless otherwise noted in the report.

**PRESERVATION:** Samples requiring preservation were verified prior to sample analysis.

**QA/QC CRITERIA:** All analyses met method criteria, except as noted in the report with data qualifiers.

**COMMENTS:** No significant observations were made.

**SUBCONTRACTED:** Refer to the last page for specific subcontract laboratory information included in this report.

### LABORATORY ID

IOA0294-01  
IOA0294-02  
IOA0294-03

### CLIENT ID

RW1  
RW2  
RW3

### MATRIX

Water  
Water  
Water

Reviewed By:

**Del Mar Analytical, Irvine**  
Patty Mata  
Project Manager



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Attention: John Teravskis

Project ID: BP Carson Refinery RW  
Receiving waters, 021.APC.00  
Report Number: IOA0294

Sampled: 01/06/05  
Received: 01/07/05

## METALS

| Analyte                             | Method    | Batch   | Reporting Limit | Sample Result     | Dilution Factor | Date Extracted | Date Analyzed | Data Qualifiers |
|-------------------------------------|-----------|---------|-----------------|-------------------|-----------------|----------------|---------------|-----------------|
| Sample ID: IOA0294-01 (RW1 - Water) |           |         |                 | Sampled: 01/06/05 |                 |                |               |                 |
| Reporting Units: mg/l               |           |         |                 |                   |                 |                |               |                 |
| Copper                              | EPA 6010B | 5A08032 | 0.010           | ND                | 1               | 1/8/2005       | 1/10/2005     |                 |
| Zinc                                | EPA 6010B | 5A08032 | 0.020           | 0.055             | 1               | 1/8/2005       | 1/10/2005     |                 |
| Sample ID: IOA0294-02 (RW2 - Water) |           |         |                 | Sampled: 01/06/05 |                 |                |               |                 |
| Reporting Units: mg/l               |           |         |                 |                   |                 |                |               |                 |
| Copper                              | EPA 6010B | 5A08032 | 0.010           | ND                | 1               | 1/8/2005       | 1/10/2005     |                 |
| Zinc                                | EPA 6010B | 5A08032 | 0.020           | 0.043             | 1               | 1/8/2005       | 1/10/2005     |                 |
| Sample ID: IOA0294-03 (RW3 - Water) |           |         |                 | Sampled: 01/06/05 |                 |                |               |                 |
| Reporting Units: mg/l               |           |         |                 |                   |                 |                |               |                 |
| Copper                              | EPA 6010B | 5A08032 | 0.010           | ND                | 1               | 1/8/2005       | 1/10/2005     |                 |
| Zinc                                | EPA 6010B | 5A08032 | 0.020           | 0.045             | 1               | 1/8/2005       | 1/10/2005     |                 |

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 Receiving waters, 021.APC.00  
 Report Number: IOA0294

Sampled: 01/06/05  
 Received: 01/07/05

## INORGANICS

| Analyte                             | Method    | Batch   | Reporting Limit | Sample Result     | Dilution Factor | Date Extracted | Date Analyzed | Data Qualifiers |
|-------------------------------------|-----------|---------|-----------------|-------------------|-----------------|----------------|---------------|-----------------|
| Sample ID: IOA0294-01 (RW1 - Water) |           |         |                 | Sampled: 01/06/05 |                 |                |               |                 |
| Reporting Units: g/l                |           |         |                 |                   |                 |                |               |                 |
| Salinity                            | EPA 120.1 | 5A11084 | 0.10            | 9.5               | 1               | 1/11/2005      | 1/11/2005     |                 |
| Sample ID: IOA0294-01 (RW1 - Water) |           |         |                 | Sampled: 01/06/05 |                 |                |               |                 |
| Reporting Units: mg/l               |           |         |                 |                   |                 |                |               |                 |
| Ammonia-N                           | EPA 350.3 | 5A07073 | 0.50            | ND                | 1               | 1/7/2005       | 1/7/2005      | RL-3            |
| Dissolved Oxygen                    | EPA 360.1 | 5A07071 | 1.0             | 5.2               | 1               | 1/7/2005       | 1/7/2005      |                 |
| Hardness (as CaCO3)                 | EPA 130.2 | 5A10067 | 4.0             | 1800              | 1               | 1/10/2005      | 1/10/2005     |                 |
| Nitrate-N                           | EPA 300.0 | 5A07045 | 2.2             | ND                | 20              | 1/7/2005       | 1/7/2005      |                 |
| Residual Chlorine                   | EPA 330.5 | 5A07069 | 0.10            | ND                | 1               | 1/7/2005       | 1/7/2005      |                 |
| Sulfide                             | EPA 376.2 | 5A12048 | 0.10            | ND                | 1               | 1/12/2005      | 1/12/2005     |                 |
| Sample ID: IOA0294-01 (RW1 - Water) |           |         |                 | Sampled: 01/06/05 |                 |                |               |                 |
| Reporting Units: pH Units           |           |         |                 |                   |                 |                |               |                 |
| pH                                  | EPA 150.1 | 5A07085 | NA              | 7.63              | 1               | 1/7/2005       | 1/7/2005      |                 |
| Sample ID: IOA0294-02 (RW2 - Water) |           |         |                 | Sampled: 01/06/05 |                 |                |               |                 |
| Reporting Units: g/l                |           |         |                 |                   |                 |                |               |                 |
| Salinity                            | EPA 120.1 | 5A11084 | 0.10            | 9.9               | 1               | 1/11/2005      | 1/11/2005     |                 |
| Sample ID: IOA0294-02 (RW2 - Water) |           |         |                 | Sampled: 01/06/05 |                 |                |               |                 |
| Reporting Units: mg/l               |           |         |                 |                   |                 |                |               |                 |
| Ammonia-N                           | EPA 350.3 | 5A07073 | 0.50            | ND                | 1               | 1/7/2005       | 1/7/2005      | RL-3            |
| Dissolved Oxygen                    | EPA 360.1 | 5A07071 | 1.0             | 5.2               | 1               | 1/7/2005       | 1/7/2005      |                 |
| Hardness (as CaCO3)                 | EPA 130.2 | 5A10067 | 4.0             | 2000              | 1               | 1/10/2005      | 1/10/2005     |                 |
| Nitrate-N                           | EPA 300.0 | 5A07045 | 2.2             | ND                | 20              | 1/7/2005       | 1/7/2005      |                 |
| Residual Chlorine                   | EPA 330.5 | 5A07069 | 0.10            | ND                | 1               | 1/7/2005       | 1/7/2005      |                 |
| Sulfide                             | EPA 376.2 | 5A12048 | 0.10            | ND                | 1               | 1/12/2005      | 1/12/2005     |                 |
| Sample ID: IOA0294-02 (RW2 - Water) |           |         |                 | Sampled: 01/06/05 |                 |                |               |                 |
| Reporting Units: pH Units           |           |         |                 |                   |                 |                |               |                 |
| pH                                  | EPA 150.1 | 5A07085 | NA              | 7.61              | 1               | 1/7/2005       | 1/7/2005      |                 |

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 Project Manager

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Receiving waters, 021.APC.00  
Report Number: IOA0294

Sampled: 01/06/05  
Received: 01/07/05

## INORGANICS

| Analyte                             | Method    | Batch   | Reporting Limit | Sample Result     | Dilution Factor | Date Extracted | Date Analyzed | Data Qualifiers |
|-------------------------------------|-----------|---------|-----------------|-------------------|-----------------|----------------|---------------|-----------------|
| Sample ID: IOA0294-03 (RW3 - Water) |           |         |                 | Sampled: 01/06/05 |                 |                |               |                 |
| Reporting Units: g/l                |           |         |                 |                   |                 |                |               |                 |
| Salinity                            | EPA 120.1 | 5A11084 | 0.10            | 9.7               | 1               | 1/11/2005      | 1/11/2005     |                 |
| Sample ID: IOA0294-03 (RW3 - Water) |           |         |                 | Sampled: 01/06/05 |                 |                |               |                 |
| Reporting Units: mg/l               |           |         |                 |                   |                 |                |               |                 |
| Ammonia-N                           | EPA 350.3 | 5A07073 | 0.50            | ND                | 1               | 1/7/2005       | 1/7/2005      |                 |
| Dissolved Oxygen                    | EPA 360.1 | 5A07071 | 1.0             | 5.1               | 1               | 1/7/2005       | 1/7/2005      |                 |
| Hardness (as CaCO <sub>3</sub> )    | EPA 130.2 | 5A10067 | 4.0             | 1800              | 1               | 1/10/2005      | 1/10/2005     |                 |
| Nitrate-N                           | EPA 300.0 | 5A07045 | 2.2             | 2.5               | 20              | 1/7/2005       | 1/7/2005      |                 |
| Residual Chlorine                   | EPA 330.5 | 5A07069 | 0.10            | ND                | 1               | 1/7/2005       | 1/7/2005      |                 |
| Sulfide                             | EPA 376.2 | 5A12048 | 0.10            | ND                | 1               | 1/12/2005      | 1/12/2005     |                 |
| Sample ID: IOA0294-03 (RW3 - Water) |           |         |                 | Sampled: 01/06/05 |                 |                |               |                 |
| Reporting Units: pH Units           |           |         |                 |                   |                 |                |               |                 |
| pH                                  | EPA 150.1 | 5A07085 | NA              | 7.60              | 1               | 1/7/2005       | 1/7/2005      |                 |

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Report Number: IOA0294

Sampled: 01/06/05  
Received: 01/07/05

## SHORT HOLD TIME DETAIL REPORT

|  | Hold Time<br>(in days) | Date/Time<br>Sampled | Date/Time<br>Received | Date/Time<br>Extracted | Date/Time<br>Analyzed |
|--|------------------------|----------------------|-----------------------|------------------------|-----------------------|
| <b>Sample ID: RW1 (IOA0294-01) - Water</b> |                        |                      |                       |                        |                       |
| EPA 150.1                                  | 1                      | 01/06/2005 20:00     | 01/07/2005 07:55      | 01/07/2005 14:00       | 01/07/2005 15:00      |
| EPA 300.0                                  | 2                      | 01/06/2005 20:00     | 01/07/2005 07:55      | 01/07/2005 15:30       | 01/07/2005 16:42      |
| EPA 330.5                                  | 1                      | 01/06/2005 20:00     | 01/07/2005 07:55      | 01/07/2005 13:22       | 01/07/2005 15:00      |
| EPA 360.1                                  | 1                      | 01/06/2005 20:00     | 01/07/2005 07:55      | 01/07/2005 13:28       | 01/07/2005 15:00      |
| <b>Sample ID: RW2 (IOA0294-02) - Water</b> |                        |                      |                       |                        |                       |
| EPA 150.1                                  | 1                      | 01/06/2005 20:30     | 01/07/2005 07:55      | 01/07/2005 14:00       | 01/07/2005 15:00      |
| EPA 300.0                                  | 2                      | 01/06/2005 20:30     | 01/07/2005 07:55      | 01/07/2005 15:30       | 01/07/2005 16:55      |
| EPA 330.5                                  | 1                      | 01/06/2005 20:30     | 01/07/2005 07:55      | 01/07/2005 13:22       | 01/07/2005 15:00      |
| EPA 360.1                                  | 1                      | 01/06/2005 20:30     | 01/07/2005 07:55      | 01/07/2005 13:28       | 01/07/2005 15:00      |
| <b>Sample ID: RW3 (IOA0294-03) - Water</b> |                        |                      |                       |                        |                       |
| EPA 150.1                                  | 1                      | 01/06/2005 19:50     | 01/07/2005 07:55      | 01/07/2005 14:00       | 01/07/2005 15:00      |
| EPA 300.0                                  | 2                      | 01/06/2005 19:50     | 01/07/2005 07:55      | 01/07/2005 15:30       | 01/07/2005 17:08      |
| EPA 330.5                                  | 1                      | 01/06/2005 19:50     | 01/07/2005 07:55      | 01/07/2005 13:22       | 01/07/2005 15:00      |
| EPA 360.1                                  | 1                      | 01/06/2005 19:50     | 01/07/2005 07:55      | 01/07/2005 13:28       | 01/07/2005 15:00      |

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 Receiving waters, 021.APC.00  
 Report Number: IOA0294

Sampled: 01/06/05  
 Received: 01/07/05

## METHOD BLANK/QC DATA

## METALS

| Analyte  | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Data Qualifiers |
|--|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-----------------|
| <b>Batch: 5A08032 Extracted: 01/08/05</b>                                      |        |                 |       |             |               |      |             |     |           |                 |
| <b>Blank Analyzed: 01/10/2005 (5A08032-BLK1)</b>                               |        |                 |       |             |               |      |             |     |           |                 |
| Copper   | ND     | 0.010           | mg/l  |             |               |      |             |     |           |                 |
| Zinc   | ND     | 0.020           | mg/l  |             |               |      |             |     |           |                 |
| <b>LCS Analyzed: 01/10/2005 (5A08032-BS1)</b>                                  |        |                 |       |             |               |      |             |     |           |                 |
| Copper   | 0.956  | 0.010           | mg/l  | 1.00        |               | 96   | 80-120      |     |           |                 |
| Zinc   | 0.952  | 0.020           | mg/l  | 1.00        |               | 95   | 80-120      |     |           |                 |
| <b>Matrix Spike Analyzed: 01/10/2005 (5A08032-MS1) Source: IOA0336-01</b>      |        |                 |       |             |               |      |             |     |           |                 |
| Copper   | 1.01   | 0.010           | mg/l  | 1.00        | 0.0021        | 101  | 75-125      |     |           |                 |
| Zinc   | 0.988  | 0.020           | mg/l  | 1.00        | 0.020         | 97   | 75-125      |     |           |                 |
| <b>Matrix Spike Dup Analyzed: 01/10/2005 (5A08032-MSD1) Source: IOA0336-01</b> |        |                 |       |             |               |      |             |     |           |                 |
| Copper   | 0.982  | 0.010           | mg/l  | 1.00        | 0.0021        | 98   | 75-125      | 3   | 20        |                 |
| Zinc   | 0.959  | 0.020           | mg/l  | 1.00        | 0.020         | 94   | 75-125      | 3   | 20        |                 |

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 Report Number: IOA0294

Sampled: 01/06/05  
 Received: 01/07/05

## METHOD BLANK/QC DATA

### INORGANICS

| Analyte   | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Data Qualifiers |
|---|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-----------------|
| <b>Batch: 5A07045 Extracted: 01/07/05</b>                   |        |                 |       |             |               |      |             |     |           |                 |
| <b>Blank Analyzed: 01/07/2005 (5A07045-BLK1)</b>            |        |                 |       |             |               |      |             |     |           |                 |
| Nitrate-N   | ND     | 0.11            | mg/l  |             |               |      |             |     |           |                 |
| <b>LCS Analyzed: 01/07/2005 (5A07045-BS1)</b>               |        |                 |       |             |               |      |             |     |           |                 |
| Nitrate-N   | 1.19   | 0.11            | mg/l  | 1.13        |               | 105  | 90-110      |     |           |                 |
| <b>Matrix Spike Analyzed: 01/07/2005 (5A07045-MS1)</b>      |        |                 |       |             |               |      |             |     |           |                 |
| Nitrate-N   | 1.72   | 0.11            | mg/l  | 1.13        | 0.44          | 113  | 80-120      |     |           |                 |
| <b>Matrix Spike Dup Analyzed: 01/07/2005 (5A07045-MSD1)</b> |        |                 |       |             |               |      |             |     |           |                 |
| Nitrate-N   | 1.70   | 0.11            | mg/l  | 1.13        | 0.44          | 112  | 80-120      | 1   | 20        |                 |
| <b>Batch: 5A07069 Extracted: 01/07/05</b>                   |        |                 |       |             |               |      |             |     |           |                 |
| <b>Duplicate Analyzed: 01/07/2005 (5A07069-DUP1)</b>        |        |                 |       |             |               |      |             |     |           |                 |
| Residual Chlorine   | ND     | 0.10            | mg/l  |             | ND            |      |             |     | 20        |                 |
| <b>Batch: 5A07071 Extracted: 01/07/05</b>                   |        |                 |       |             |               |      |             |     |           |                 |
| <b>Duplicate Analyzed: 01/07/2005 (5A07071-DUP1)</b>        |        |                 |       |             |               |      |             |     |           |                 |
| Dissolved Oxygen  | 6.50   | 1.0             | mg/l  |             | 6.9           |      |             | 6   | 20        |                 |
| <b>Batch: 5A07073 Extracted: 01/07/05</b>                   |        |                 |       |             |               |      |             |     |           |                 |
| <b>Blank Analyzed: 01/07/2005 (5A07073-BLK1)</b>            |        |                 |       |             |               |      |             |     |           |                 |
| Ammonia-N   | ND     | 0.50            | mg/l  |             |               |      |             |     |           |                 |

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 Report Number: IOA0294

Sampled: 01/06/05  
 Received: 01/07/05

## METHOD BLANK/QC DATA

### INORGANICS

| Analyte   | Result | Reporting Limit | Units    | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Data Qualifiers |
|---|--------|-----------------|----------|-------------|---------------|------|-------------|-----|-----------|-----------------|
| <b>Batch: 5A07073 Extracted: 01/07/05</b>                   |        |                 |          |             |               |      |             |     |           |                 |
| <b>LCS Analyzed: 01/07/2005 (5A07073-BS1)</b>               |        |                 |          |             |               |      |             |     |           |                 |
| Ammonia-N   | 0.976  | 0.50            | mg/l     | 1.00        |               | 98   | 85-115      |     |           |                 |
| <b>Matrix Spike Analyzed: 01/07/2005 (5A07073-MS1)</b>      |        |                 |          |             |               |      |             |     |           |                 |
| Ammonia-N   | 2.09   | 0.50            | mg/l     | 2.00        | ND            | 104  | 75-125      |     |           |                 |
| <b>Matrix Spike Dup Analyzed: 01/07/2005 (5A07073-MSD1)</b> |        |                 |          |             |               |      |             |     |           |                 |
| Ammonia-N   | 2.15   | 0.50            | mg/l     | 2.00        | ND            | 108  | 75-125      | 3   | 15        |                 |
| <b>Batch: 5A07085 Extracted: 01/07/05</b>                   |        |                 |          |             |               |      |             |     |           |                 |
| <b>Duplicate Analyzed: 01/07/2005 (5A07085-DUP1)</b>        |        |                 |          |             |               |      |             |     |           |                 |
| pH  | 9.99   | NA              | pH Units |             | 9.96          |      |             | 0   | 5         |                 |
| <b>Batch: 5A10067 Extracted: 01/10/05</b>                   |        |                 |          |             |               |      |             |     |           |                 |
| <b>Blank Analyzed: 01/10/2005 (5A10067-BLK1)</b>            |        |                 |          |             |               |      |             |     |           |                 |
| Hardness (as CaCO <sub>3</sub> )                            | ND     | 4.0             | mg/l     |             |               |      |             |     |           |                 |
| <b>LCS Analyzed: 01/10/2005 (5A10067-BS1)</b>               |        |                 |          |             |               |      |             |     |           |                 |
| Hardness (as CaCO <sub>3</sub> )                            | 224    | 4.0             | mg/l     | 224         |               | 100  | 90-110      |     |           |                 |
| <b>Duplicate Analyzed: 01/10/2005 (5A10067-DUP1)</b>        |        |                 |          |             |               |      |             |     |           |                 |
| Hardness (as CaCO <sub>3</sub> )                            | 50.0   | 4.0             | mg/l     |             | 52            |      |             | 4   | 20        |                 |
| <b>Batch: 5A11084 Extracted: 01/11/05</b>                   |        |                 |          |             |               |      |             |     |           |                 |
| <b>Duplicate Analyzed: 01/11/2005 (5A11084-DUP1)</b>        |        |                 |          |             |               |      |             |     |           |                 |
| Salinity  | 9.51   | 0.10            | g/l      |             | 9.5           |      |             | 0   | 20        |                 |

Del Mar Analytical, Irvine  
 Patty Mata  
 Project Manager

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WGR Southwest, Inc. - Lodi  
315 W. Pine Street, Suite 8  
Lodi, CA 95240  
Attention: John Teravskis

Project ID: BP Carson Refinery RW  
Receiving waters, 021.APC.00  
Report Number: IOA0294

Sampled: 01/06/05  
Received: 01/07/05

## METHOD BLANK/QC DATA

### INORGANICS

| Analyte   | Result | Reporting<br>Limit | Units | Spike<br>Level | Source<br>Result | %REC<br>Limits | RPD    | RPD<br>Limit | Data<br>Qualifiers |
|---|--------|--------------------|-------|----------------|------------------|----------------|--------|--------------|--------------------|
| <b>Batch: 5A12048 Extracted: 01/12/05</b>                   |        |                    |       |                |                  |                |        |              |                    |
| <b>Blank Analyzed: 01/12/2005 (5A12048-BLK1)</b>            |        |                    |       |                |                  |                |        |              |                    |
| Sulfide   | ND     | 0.10               | mg/l  |                |                  |                |        |              |                    |
| <b>LCS Analyzed: 01/12/2005 (5A12048-BS1)</b>               |        |                    |       |                |                  |                |        |              |                    |
| Sulfide   | 0.583  | 0.10               | mg/l  | 0.590          |                  | 99             | 80-120 |              |                    |
| <b>Matrix Spike Analyzed: 01/12/2005 (5A12048-MS1)</b>      |        |                    |       |                |                  |                |        |              |                    |
| Sulfide   | 0.604  | 0.10               | mg/l  | 0.590          | 0.035            | 96             | 70-130 |              |                    |
| <b>Matrix Spike Dup Analyzed: 01/12/2005 (5A12048-MSD1)</b> |        |                    |       |                |                  |                |        |              |                    |
| Sulfide   | 0.625  | 0.10               | mg/l  | 0.590          | 0.035            | 100            | 70-130 | 3            | 30                 |

Del Mar Analytical, Irvine  
Patty Mata  
Project Manager



Del Mar Analytical

17461 Derian Ave., Suite 100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297  
1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (949) 370-1046  
9484 Chesapeake Dr., Suite 805, San Diego, CA 92123 (858) 505-8596 FAX (858) 505-9689  
9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851  
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

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## DATA QUALIFIERS AND DEFINITIONS

**RL-3** Reporting limit raised due to high concentrations of non-target analytes.  
**ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.  
**RPD** Relative Percent Difference

Del Mar Analytical, Irvine  
Patty Mata  
Project Manager

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# Del Mar Analytical

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Project ID: BP Carson Refinery RW  
Receiving waters, 021.APC.00  
Report Number: IOA0294

Sampled: 01/06/05  
Received: 01/07/05

## Certification Summary

### Del Mar Analytical, Irvine

| Method    | Matrix | NELAP | CA |
|-----------|--------|-------|----|
| EPA 120.1 | Water  | X     | X  |
| EPA 130.2 | Water  | X     | X  |
| EPA 150.1 | Water  | X     | X  |
| EPA 300.0 | Water  | X     | X  |
| EPA 330.5 | Water  | X     | X  |
| EPA 350.3 | Water  | X     | X  |
| EPA 360.1 | Water  | X     | X  |
| EPA 376.2 | Water  | X     | X  |
| EPA 6010B | Water  | X     | X  |

*NV and NELAP provide analyte specific accreditations. Analyte specific information for Del Mar Analytical may be obtained by contacting the laboratory or visiting our website at [www.dmalabs.com](http://www.dmalabs.com).*

### Subcontracted Laboratories

#### Aquatic Testing Laboratories-SUB CA ELAP Cert #1775

4350 Transport Street, Unit 107 - Ventura, CA 93003

Analysis Performed: Bioassay-7 dy Chnric

Samples: IOA0294-01, IOA0294-02, IOA0294-03

### Del Mar Analytical, Irvine

Patty Mata

Project Manager

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| bp Carson Refinery   |                |                   |   | Bill Facility Directly   |     |       |       |   |               |   |    |  |         | Chain of Custody |          |                              |                |                          |        |      |                              |  |  | Page 1 of 1 |  |
|--|----------------|-------------------|---|--|-----|-------|-------|---|---------------|---|----|--|---------|------------------|----------|------------------------------|----------------|--------------------------|--------|------|------------------------------|--|--|-------------|--|
| Facility Name<br>bp Carson Refinery  |                |                   |   | City, State (Facility)<br>1801 E. Sepulveda Blvd., Carson CA 90749 |     |       |       | Project Manager (Consultant)<br>John Teravskis        |               |   |    | Project No. (Consultant)<br>021.APC.00 |         |                  |          | Laboratory Name<br>Del Mar   |                |                          |        |      |                              |  |  |             |  |
| bp Engineer<br>Stefan Gogosha  |                |                   |   | bp Telephone No.<br>(310) 816-8135                                 |     |       |       | Telephone No. (Consultant)<br>(209) 334-5363 ext. 202 |               |   |    | Fax No. (Consultant)<br>(209) 334-5374 |         |                  |          | (949) 261-1022<br>Patty Mata |                |                          |        |      |                              |  |  |             |  |
| Consultant Company<br>WGR Southwest, Inc.  |                |                   |   | Consultant Address<br>315 W. Pine Street, Suite 8, Lodi, CA 95240  |     |       |       |   |               |   |    |  |         | IOA0294          |          |                              |                | Method of Shipment       |        |      |                              |  |  |             |  |
| Sample I.D.  | Lab Sample No. | No. of Containers | Matrix  |  |     |       | Prsv. |   | Sampling Date | Sampling Time   | pH | Dissolved Oxygen                       | Sulfide | Hardness         | Salinity | Ammonia                      | Nitrate (as N) | Residual Chlorine        | Copper | Zinc | Chronic Toxicity (see below) | Turn Around Time<br>(business days)  | Special Detection<br>Limit/Reporting   |             |  |
|  |                |                   | Soil  | Water  | Air | Other | Yes   | No  |               |   |    |  |         |                  |          |                              |                |                          |        |      |                              |  |  |             |  |
| RW1  |                |                   | X   |  |     | X     |       | 1/6/05 1000   |               | X   | X  | X                                      | X       | X                | X        | X                            | X              | X                        | X      | X    | X                            | 5 days   | Special QA/QC  |             |  |
| RW2  |                |                   | X   |  |     | X     |       | 1/6/05 2030   |               | X   | X  | X                                      | X       | X                | X        | X                            | X              | X                        | X      | X    | X                            |  |  |             |  |
| RW3  |                |                   | X   |  |     | X     |       | 1/6/05 1930   |               | X   | X  | X                                      | X       | X                | X        | X                            | X              | X                        | X      | X    | X                            |  |  |             |  |
| <div style="border: 1px solid black; padding: 5px;"> RW1 - 50 ft. downstream of outfall; high tide towards 223rd St.; slack tide and low tide towards the ocean.<br/><br/> RW2 - 250 ft. downstream of the outfall (tide dependent)<br/><br/> RW3 - 250 ft. ustream of the outfall (tide dependent) </div> |                |                   | <div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>Note: ammonia, salinity, and hardness samples are to be collected concurrently with the Outfall 23 sampling.</b> </div> |  |     |       |       |   |               |   |    |  |         |                  |          |                              |                |                          |        |      |                              | <div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>Toxicity Testing:</b><br/> Chronic - EPA/600/R-95/136 (vertebrate, invertebrate, &amp; plant) </div> | <div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>REMARKS</b><br/><br/> <div style="font-size: 2em; margin-top: 20px;">DP</div> </div> |             |  |
|  |                |                   |   |  |     |       |       |   |               |   |    |  |         |                  |          |                              |                |                          |        |      |                              |  |  |             |  |
|  |                |                   |   |  |     |       |       |   |               |   |    |  |         |                  |          |                              |                |                          |        |      |                              |  |  |             |  |
|  |                |                   |   |  |     |       |       |   |               |   |    |  |         |                  |          |                              |                |                          |        |      |                              |  |  |             |  |
| Sample Received Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  |                |                   |   |  |     |       |       |   |               | Temperature received: 3 Ice <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No ice |    |  |         |                  |          |                              |                |                          |        |      |                              |  |  |             |  |
| Relinq. by sampler (Sign & Print Name)<br>Bill Senn  |                |                   |   | Date Time<br>1/7/05 7:55   |     |       |       | Received by (Sign & Print Name)                       |               |   |    |  |         |                  |          |                              |                | Lab Work No.             |        |      |                              |  |  |             |  |
| Relinquished by  |                |                   |   | Date Time  |     |       |       | Received by   |               |   |    |  |         |                  |          |                              |                |                          |        |      |                              |  |  |             |  |
| Relinquished by  |                |                   |   | Date Time  |     |       |       | Received by laboratory<br>Frank Lewis                 |               |   |    |  |         |                  |          |                              |                | Date Time<br>1-7-05 7:55 |        |      |                              |  |  |             |  |
| Rev. 12/16/2004  |                |                   |   |  |     |       |       |   |               |   |    |  |         |                  |          |                              |                |                          |        |      |                              |  |  |             |  |

January 21, 2005

WGR Southwest, Inc.  
315 W. Pine Street, Suite 8  
Lodi, Ca., 95240

Attention: John Teravskis

Project: BP Carson Refinery RW  
Receiving waters 021.ARC.00  
Sampled: 1/06/05  
Del Mar Analytical Number: IOA0294

Dear Mr. Teravskis:

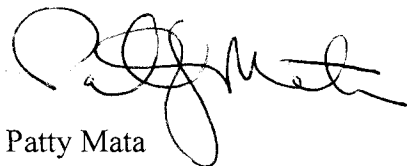
Aquatic Testing Laboratories performed Abalone Larval Development Short-Term Toxicity Test; Giant Kelp Germination and Growth Short-Term Toxicity Test; Topsmelt Larval Survival and Growth Test. Please use the following cross-reference table when reviewing results.

| WGR ID | Del Mar ID | Aquatic ID     |
|--------|------------|----------------|
| RW1    | IOA0294-01 | A-05010704-001 |
| RW2    | IOA0294-02 | A-05010704-002 |
| RW3    | IOA0294-03 | A-05010704-003 |

Attached is the original report from the subcontract laboratory. If you have any questions or require further assistance, please contact me at (949) 261-1022, extension 213.

Sincerely yours,

DEL MAR ANALYTICAL



Patty Mata

Project Manager

Enclosure

# LABORATORY REPORT

**Aquatic  
Testing  
Laboratories**



*"dedicated to providing quality aquatic toxicity testing"*

**Date:** January 16, 2005

**Client:** Del Mar Analytical, Irvine  
17461 Derian Avenue, Suite 100  
Irvine, CA 92614  
Attn: Patty Mata

4350 Transport Street, Unit 107  
Ventura, CA 93003  
(805) 650- 0546 FAX (805) 650-0756  
CA DOHS ELAP Cert. No.: 1775

**Laboratory No.:** A-05010704-001/003  
**Sample ID.:** IOA0294-01/03

**Sample Control:** The sample was received by ATL with the chain of custody record attached.

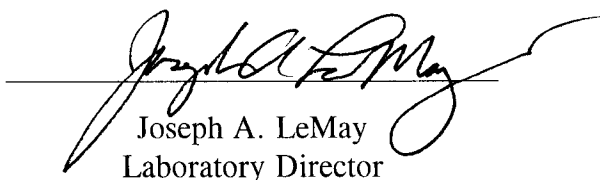
Date Sampled: 01/06/05  
Date Received: 01/07/05  
Date Tested: 01/07/05 to 01/15/05

**Sample Analysis:** The following analyses were performed on your sample:  
  
Abalone Larval Development Short-Term Toxicity Test;  
Giant Kelp Germination and Growth Short-Term Toxicity Test;  
Topsmelt Larval Survival and Growth Test.

## Result Summary:

|                           | <u>RW1</u>  |            | <u>RW2</u>  |            | <u>RW3</u>  |            |
|---------------------------|-------------|------------|-------------|------------|-------------|------------|
|                           | <u>NOEC</u> | <u>TUc</u> | <u>NOEC</u> | <u>TUc</u> | <u>NOEC</u> | <u>TUc</u> |
| Abalone Development:      | 100%        | 1.0        | 100%        | 1.0        | 100%        | 1.0        |
| Kelp Spore Germination:   | 100%        | 1.0        | 100%        | 1.0        | 100%        | 1.0        |
| Kelp Germ Tube Growth:    | 100%        | 1.0        | 100%        | 1.0        | 100%        | 1.0        |
| Topsmelt Larval Survival: | 100%        | 1.0        | 100%        | 1.0        | 100%        | 1.0        |
| Topsmelt Larval Growth:   | 100%        | 1.0        | 100%        | 1.0        | 100%        | 1.0        |

**Quality Control:** Reviewed and approved by:

  
Joseph A. LeMay  
Laboratory Director

# WORK ORDER

## IOA0294

**Client:** WGR Southwest, Inc. - Lodi  
**Client Code:** ARCO  
**Project Manager:** Patty Mata

**Project Name:** BP Carson Refinery RW  
**Project Number:** Receiving waters  
**Printed:** 1/7/2005 10:03:48AM

| Analysis                                |              | Due                            | TAT | Expires        | Price       | Comments                                |
|---|--------------|--------------------------------|-----|----------------|-------------|---|
| <b>IOA0294-03 RW3</b>                   | <b>Water</b> | <b>Sampled: 01/06/05 19:50</b> |     |                |             |   |
| Sulfide-376.2                           |              | 01/14/05 12:00                 | 5   | 01/13/05 19:50 | \$15.00+25% |   |
| Zinc-6010B                              |              | 01/14/05 12:00                 | 5   | 07/05/05 19:50 | \$6.00+25%  |   |
| <b>Aquatic Testing Laboratories-SUB</b> |              |                                |     |                |             |   |
| <b>IOA0294-01 RW1</b>                   | <b>Water</b> | <b>Sampled: 01/06/05 20:00</b> |     |                |             |   |
| Bioassay-7 dy Chnric                    |              | 01/14/05 12:00                 | 5   | 01/08/05 08:00 | \$0.00      | Sub to ATL, EPA/600/R-95/136, saltwater |
| <b>IOA0294-02 RW2</b>                   | <b>Water</b> | <b>Sampled: 01/06/05 20:30</b> |     |                |             |   |
| Bioassay-7 dy Chnric                    |              | 01/14/05 12:00                 | 5   | 01/08/05 08:30 | \$0.00      | Sub to ATL, EPA/600/R-95/136, saltwater |
| <b>IOA0294-03 RW3</b>                   | <b>Water</b> | <b>Sampled: 01/06/05 19:50</b> |     |                |             |   |
| Bioassay-7 dy Chnric                    |              | 01/14/05 12:00                 | 5   | 01/08/05 07:50 | \$0.00      | Sub to ATL, EPA/600/R-95/136, saltwater |