REPUBLIC SERVICES

May 30, 2013

Mr. Bruce Philbrick
Metro
600 N.E. Grand Avenue
Portland, OR 97232

RE: MSS Annual/Sustainability Report

Mr. Philbrick,

Enclosed is the Annual/Sustainability Report summarizing 2012 activity at the Metro South Transfer Station.

Please contact me should you have questions on the enclosed data or require any additional information.

Sincerely,

Blaine L. Colvin
Operations Manager
Republic Services Inc.

2001 Washington Street
Oregon City, Oregon 97045
503.722.4656 / FAX 503.722.4671

REPUBLIC SERVICES

May 30, 2013

Metro
600 N.E. Grand Avenue
Portland, OR 97232

RE: MSS Annual Operating Report Summary

Metro,

This summary report contains data on inbound and outbound volumes for waste transfer and waste recovery operations, cost of utility services, storm and waste water sampling records, sustainable practices, pest management and performance measure tracking. Significant events and or changes in operations that occurred in 2012 are described in pertinent sections within this report. This Summary contains data for the Contract Year 01 April 2012 through 31 March 2013. The same time frame, 01 April 2011 through 31 March 2012, will be referred to as the 10-11 Contract Year in this report. Supporting data in the Appendices for the station operations are included for both Calendar and Contract Years for year over year review and comparison.

**Waste Flow:**

Metro South Station realized a 20,155 ton net loss from the 11-12 Contract Year in inbound MSW. When the year over year data is analyzed, the bulk of this loss occurred from June 2012 through October 2012 in which the station received 16,586 tons less than it did during the same time span the previous year. Please reference Tables 4 and 5, Appendix A for Contract Year (11-12 and 12-13) comparisons.

Metro South Station continues to sustain operations in maximizing outbound transport trailer weights. In the Contract Year 12-13, MSS loaded 5789 transport trailers with 194,823 tons of waste, averaging 33.65 tons each. Compare this figure to an average trailer weight of 33.58 tons in Contract Year 11-12 and MSS realized a significant gain. The increase in average tonnage travelling up the Columbia River Gorge helped lead to 447 fewer trailer loads to the Arlington (Columbia Ridge) Landfill, although the total transported tonnage decreased significantly by 14562TN (Tables 2 and 3, App A).

Dry waste volumes at MSS decreased significantly for the third consecutive year. Calendar Year 12-13 received a total of 75579 tons of dry waste, 4183 tons less than the

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prior year. Once averaged out, that figure translates to roughly 349 tons less per month of inbound dry received at MSS during Calendar YR 11-12 (Table 3, App A). This number most likely can be attributed to economic factors such as the continued decline in new home construction and a decrease in industrial tons as a whole.

**Recovery Operations:**

MSS exceeded the recovery goal of 15% per month, every month for both Contract Year 12-13(Table 1 and 2 App B), except for July 12, which 14.84%. The range of recovery rates was 14.84% (July 12) to 18.61% (May 12) with 12-13 average of 16.6%. A year over year comparison highlights a 1974 ton net loss in recovered material in 12-13 from 11-12 (Table 3, App B).

Physical recovery operations and techniques at MSS did not change in 2012, though a Recycle Coordinator was appointed and given operational control of the sort crew and equipment operators assigned to recovery operations. MSS uses a combination of a mechanical sort line in Bay 3 for industrial loads and floor sorting in Bay 2 for the self-haul material. Operations experienced very few disruptions to recovery efforts due to mechanical breakdowns, this is attributed to renewed emphasis on preventive maintenance, checks and services by both operators and shop personnel in 2011.

MSS began random sampling and reporting of residuals from the recovery operations in 2009 as a part of the Enhanced Dry Waste Recovery Program (EDWRP) and continued to do so in 12-13. Results in 12-13 as follows: Q2 – 3.2%, Q3 – 4.2%, Q4 – 1.8% (Section 1, App G). Rounding out the contract year, Q1 2013 average was 2.5%, continuing the positive trend in 12-13. For the fourth consecutive year, MSS is well below the established 15% benchmark required by Metro standards.

After struggling in 2011, commodity prices in 2012 began to experience some gains, especially cardboard and metal, beginning in the Fall. Most recycle markets continued to recover from the 2008 lows in 2012 with the exception of wood market. We have managed to maintain reliable wood markets, but the value has not recovered from the low that was reached in 2008. Throughout 2012 most commodity markets saw a slow but steady recovery. By the end of the year metal, plastics, and paper fiber market values had all recovered to pre-2008 levels. Most indicators and trade information do show significant change to the commodities markets going forward in 2013. See Table 4, Appendix B for data on commodity revenue vs. cost.

**Other Operations:**

Storm water management practices continue to evolve, adapting to any and all environmental conditions and striving to meet the various pollutant thresholds established under the 1200Z permit requirements.

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MSS encountered storm water challenges in 2012, much the same as 2011. As the facility developed over the years, the storm water infrastructure developed into 4 noncontiguous systems, all having their own outfalls leaving the site. Sampling in the Fall and Winter of 2012-2013 identified Total Suspended Solids beyond the permissible thresholds at all Outfalls on this site (Exhibit 3-5, App D). The most problematic outfalls have been identified as; #1, which originates from the transfer trailer parking area and #4, which originates from the scale house area. Site operations have been modified to include numerous, extensive best management practices. This coupled with the purchase and implementation of numerous slope guards and the training/education of site sanitation personnel has greatly contributed to the success of the Republic's Storm Water Control Plan. Perhaps no other factor contributed more to the end of the year effort to clean up the storm water than the addition of the sweeper truck. Once trained on its use and maintenance, operators were placed on a strict monitoring schedule to ensure the appropriate number of hours was spent sweeping the site. Operators were also given designated target areas in which SOPs were put in place to add increased awareness and ensure proper sweeping procedures were adhered to at all times.

It must be reiterated from last year's report that substantial engineering improvements and continued adaptations to the BMPs are needed to the storm water systems in order to meet current and future storm water discharge standards while conducting the transfer operations at Metro South Station.

Industrial Waste Water Management on site remains unchanged from the previous year. Reports are turned into the WES monthly and points of compliance are sampled Quarterly.

Pest management and mitigation are ongoing operations at both MSS. There are still three primary components to the system:

- Rodent control
- Pigeon control
- House keeping

Republic Services contracts with EZ Pest at MSS for both rodent and pigeon control. No substantial increase in either of those pests has been reported by vector control. House keeping plays the largest role in rodent control around the facility. Operations routinely remove, discard, recycle or relocate items that have been stationary for long periods of time. Anything that sits undisturbed for long durations presents itself as a safe haven for rodents. By eliminating or frequently displacing stored items rodents have fewer nesting areas. Keeping the waste flow moving also plays a key role in rodent control for the same reasons as above. Republic Services strives to remove as much material from the sites as we receive on daily basis. The goal is to push or process at or near the same rate as receiving.

AW is committed to promoting sustainability (Appendix E) and continues operations and purchasing practices to lessen the footprint of MSS on the community and environment.

Please reference the 2012 Sustainability Report, Appendix C for details on our continued efforts to reduce, reuse and recycle.

As always, in 2012, Republic placed safety at the "Top of the Star", our highest priority for employees and customers alike. At MSS, we have instilled another motto: "Everybody is a Safety". Employees who witness an unsafe act by coworkers, customers, staff or supervisors are encouraged to disengage from whatever task at hand and put a stop to the dangerous activity. Furthermore, employees have their own elected Safety Committee in which they may voice concerns on the subject (safety) with their peers rather than directly with Supervisory personnel. This concern is then passed from the Safety Committee to management with a certain degree of anonymity in an effort to increase employee comfort in reporting safety violations.

To conclude, Republic will continue to find ways to improve on both transfer and recovery operations, while sustaining the improvements made in the past. Republic Services continues to endeavor to meet the daily challenges in the transfer operations and maintenance of Metro South Station while continuing to look forward, exploring all avenues of improvement in safety, sustainability, customer service, recovery and disposal.

For further information regarding this report, please contact the undersigned.

Sincerely,

Blaine L. Colvin
Operations Manager
Republic Services of Oregon, LLC.

Appendices:

A. Waste Flow
    a. Table 1 MSS 11-12 Densified Tons
    b. Table 2 MSS 12-13 Densified Tons
    c. Table 3 Q2-Q4 12 Year over Year Comparison
    d. Table 4 Q1 13 Year over Year Comparison
B. Recovery Operations
    a. Table 1 2011 Commodities Shipped
    b. Table 2 2012 Commodities Shipped
    c. Table 3 Q1 2013 Commodities Shipped
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C. Storm Water Analytical Reports
    a. Exhibit 1 Fall 2012 (1)
    b. Exhibit 2 Fall 2012 (2)
    c. Exhibit 3 Spring 2013 (1)
    d. Exhibit 4 Spring 2013 (2)
D. Waste Water Discharge Reports Q2 2012 - Q1 2013
E. 2012 Sustainability Report
F. 2012 Utility Tracking
G. 2012 Performance Measure Tracking Graphs and Charts
    a. Section 1 Recovery Operations
    b. Section 2 Loading Operations
    c. Section 3 Customer Service

## Appendix A

- Table 1 MSS 11-12 Densified Tons
- Table 2 MSS 12-13 Densified Tons
- Table 3 Q2-Q4 12 Year over Year Comparison
- Table 4 Q1 13 Year over Year Comparison

# South Station MSW Densified and Transported to Arlington

## 2011 - 12

| Month | # Loads | Tons Densified | Average Tons per Load | Base Tonnage | Bonus Tonnage |
|---|---|---|---|---|---|
| Apr-11 | 532 | 17,750.59 | 33.37 | 17822.00 | -71.41 |
| May-11 | 546 | 18,560.95 | 33.99 | 18291.00 | 269.95 |
| Jun-11 | 566 | 18,838.98 | 33.28 | 18961.00 | -122.02 |
| Jul-11 | 559 | 18,911.89 | 33.83 | 18726.50 | 185.39 |
| Aug-11 | 616 | 20,995.13 | 34.08 | 20636.00 | 359.13 |
| Sep-11 | 566 | 19,306.74 | 34.11 | 18961.00 | 345.74 |
| Oct-11 | 522 | 17,765.88 | 34.03 | 17487.00 | 278.88 |
| Nov-11 | 480 | 16,018.74 | 33.37 | 16080.00 | -61.26 |
| Dec-11 | 485 | 16,033.40 | 33.06 | 16247.50 | -214.10 |
| Jan-12 | 467 | 15,373.17 | 32.92 | 15644.50 | -271.33 |
| Feb-12 | 449 | 14,837.85 | 33.05 | 15041.50 | -203.65 |
| Mar-12 | 448 | 14,991.51 | 33.46 | 15008.00 | -16.49 |
| **Total** | **6236** | **209384.83** | **33.58** | **208906.00** | **478.83** |

# South Station MSW Densified and Transported to Arlington

## 2012-13

| Month* | # Loads | Tons Densified | Average Tons per Load | Base Tonnage | Bonus Tonnage |
|---|---|---|---|---|---|
| Apr-12 | 462 | 15,730.16 | 34.05 | 15,477.00 | 253.16 |
| May-12 | 542 | 18,071.54 | 33.34 | 18,157.00 | -85.46 |
| Jun-12 | 489 | 16,461.62 | 33.66 | 16,381.50 | 80.12 |
| Jul-12 | 505 | 17,233.46 | 34.13 | 16,917.50 | 315.96 |
| Aug-12 | 533 | 17,957.03 | 33.69 | 17,855.50 | 101.53 |
| Sep-12 | 463 | 15,510.91 | 33.50 | 15,510.50 | 0.41 |
| Oct-12 | 503 | 17,065.59 | 33.93 | 16,850.50 | 215.09 |
| Nov-12 | 471 | 15,847.36 | 33.65 | 15,778.50 | 68.86 |
| Dec-12 | 460 | 15,259.54 | 33.17 | 15,410.00 | -150.46 |
| Jan-13 | 486 | 16,297.86 | 33.53 | 16,281.00 | 16.86 |
| Feb-13 | 418 | 13,962.15 | 33.40 | 14,003.00 | -40.85 |
| Mar-13 | 457 | 15,426.07 | 33.76 | 15,309.50 | 116.57 |
| **Total** | **5789** | **194823.29** | **33.65** | **193931.50** | **891.79** |

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| Total Commodities Shipped | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
| 2011 | 1,413.02 | 1,499.81 | 1,666.48 | 1,583.81 | 1,613.02 | 1,491.19 | 1,515.30 | 1,126.82 | 1,273.91 | 13,183.36 |
| 2012 | 1,186.28 | 1,565.09 | 1,377.67 | 1,351.17 | 1,355.24 | 1,311.24 | 1,252.93 | 1,121.36 | 1,004.19 | 11,525.17 |
| | -226.74 | 65.28 | -288.81 | -232.64 | -257.78 | -179.95 | -262.37 | -5.46 | -269.72 | -1,658.19 |
| | | | | | | | | | | |
| Net Recovered From Dry Tons | | | | | | | | | | |
| MONTH | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
| 2011 | 1,225.15 | 1,271.65 | 1,425.91 | 1,305.05 | 1,369.36 | 1,301.74 | 1,337.63 | 976.10 | 1,125.43 | 11,338.02 |
| 2012 | 967.84 | 1,312.00 | 1,121.15 | 1,060.70 | 1,117.52 | 1,097.78 | 1,084.74 | 936.44 | 879.38 | 9,577.55 |
| | -257.31 | 40.35 | -304.76 | -244.35 | -251.84 | -203.96 | -252.89 | -39.66 | -246.05 | -1,760.47 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Inbound Dry Waste Tons | | | | | | | | | | |
| MONTH | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
| 2011 | 7,301.50 | 7,178.92 | 7,941.92 | 7,882.65 | 8,492.76 | 7,590.74 | 6,709.21 | 5,280.04 | 5,396.36 | 63,774.10 |
| 2012 | 6,258.77 | 7,048.11 | 6,876.19 | 7,148.52 | 7,068.49 | 6,808.18 | 6,471.16 | 5,702.47 | 5,116.68 | 58,498.57 |
| | -1,042.73 | -130.81 | -1,065.73 | -734.13 | -1,424.27 | -782.56 | -238.05 | 422.43 | -279.68 | -5,275.53 |
| | | | | | | | | | | |
| % of of Dry Waste | | | | | | | | | | |
| MONTH | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
| 2011 | 16.78% | 17.71% | 17.95% | 16.56% | 16.12% | 17.15% | 19.94% | 18.49% | 20.86% | 18.22% |
| 2012 | 15.46% | 18.61% | 16.30% | 14.84% | 15.81% | 16.12% | 16.76% | 16.42% | 17.19% | 17.09% |
| | -1.32% | 0.90% | -1.65% | -1.72% | -0.31% | -1.03% | -3.18% | -2.07% | -3.67% | -1.13% |
| | | | | | | | | | | |
| Inbound MSW | | | | | | | | | | |
| MONTH | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
| 2011 | 18,815.72 | 19,479.59 | 20,740.36 | 20,215.95 | 22,955.58 | 21,615.64 | 18,800.27 | 16,908.19 | 16,893.86 | 176,425.16 |
| 2012 | 16,890.18 | 18,779.03 | 17,600.08 | 18,153.94 | 18,067.67 | 16,578.17 | 17,342.09 | 17,197.11 | 16,300.11 | 156,908.38 |
| | -1,925.54 | -700.56 | -3,140.28 | -2,062.01 | -4,887.91 | -5,037.47 | -1,458.18 | 288.92 | -593.75 | -19,516.78 |
| | | | | | | | | | | |
| Inbound Organics | | | | | | | | | | |
| MONTH | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
| 2011 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 188.48 | 3,514.72 | 2,759.78 | 6,462.98 |
| 2012 | 3,688.40 | 3,978.23 | 3,787.87 | 3,510.28 | 2,523.84 | 1,989.61 | 2,589.56 | 3,272.98 | 2,157.86 | 27,498.63 |
| | 3,688.40 | 3,978.23 | 3,787.87 | 3,510.28 | 2,523.84 | 1,989.61 | 2,401.08 | -241.74 | -601.92 | 21,035.65 |
| | | | | | | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| **Total Commodities Shipped** | | | | | |
| **MONTH** | **JAN** | **FEB** | **MAR** | **TOTAL** | |
| 2012 | 1137.17 | 1143.25 | 1152.9 | 3433.32 | |
| 2013 | 1076.23 | 1077.34 | 1234.5 | 3388.07 | |
| | -60.94 | -65.91 | 81.6 | -45.25 | |
| | | | | | |
| **Net Recovered From Dry Tons** | | | | | |
| **MONTH** | **JAN** | **FEB** | **MAR** | **TOTAL** | |
| 2012 | 1018.25 | 1026.17 | 1020.65 | 3065.07 | |
| 2013 | 928.12 | 907.48 | 1015.87 | 2851.47 | |
| | -90.13 | -118.69 | -4.78 | -213.6 | |
| | | | | | |
| | | | | | |
| **Inbound Dry Waste Tons** | | | | | |
| **MONTH** | **JAN** | **FEB** | **MAR** | **TOTAL** | |
| 2012 | 5274.15 | 5269.28 | 5445.1 | 15988.53 | |
| 2013 | 5386.64 | 5438.79 | 6255.11 | 17080.54 | |
| | 112.49 | 169.51 | 810.01 | 1092.01 | |
| | | | | | |
| **% of of Dry Waste** | | | | | |
| **MONTH** | **JAN** | **FEB** | **MAR** | **TOTAL** | |
| 2012 | 19.31% | 19.47% | 18.74% | 17.09% | |
| 2013 | 17.23% | 16.69% | 16.24% | 16.72% | |
| | -2.08% | -2.78% | -2.50% | -0.37% | |
| | | | | | |
| **Inbound MSW** | | | | | |
| **MONTH** | **JAN** | **FEB** | **MAR** | **TOTAL** | |
| 2012 | 16407.56 | 15229.45 | 16302.79 | 47939.8 | |
| 2013 | 16064.13 | 14817.2 | 16420.41 | 47301.74 | |
| | -343.43 | -412.25 | 117.62 | -638.06 | |
| | | | | | |
| **Inbound Organics** | | | | | |
| **MONTH** | **JAN** | **FEB** | **MAR** | **TOTAL** | |
| 2012 | 1929.85 | 1672.92 | 1826.78 | 5429.55 | |
| 2013 | 1592.21 | 1674.54 | 2377.98 | 5644.73 | |
| | -337.64 | 1.62 | 551.2 | 215.18 | |

## Appendix B

- Table 1 2011 Commodities Shipped
- Table 2 2012 Commodities Shipped
- Table 3 Q1 2013 Commodities Shipped
- Table 4 2012 Commodity Revenue vs. Cost
- Table 5 Q1 2013 Commodity Revenue vs. Cost

**COMMODITIES SHIPPED**
**2013 TONS MTD**

Up
4/1/2013

| MONTH | JAN | FEB | MAR |
|---|---|---|---|
| YARD DEBRIS | 78.29 | 66.80 | 72.53 |
| MILLWOOD | 635.92 | 681.64 | 758.58 |
| TIRES | 9.65 | | 7.96 |
| FERROUS METAL | 138.84 | 137.33 | 173.52 |
| NON-FERROUS METAL | 9.81 | 19.20 | 13.16 |
| ELECTRONICS | 32.38 | 28.55 | 29.23 |
| CARPET | 5.06 | 7.25 | 3.00 |
| FOAM PAD | 0.95 | | |
| HARD PLASTIC | 6.15 | 7.59 | 10.53 |
| FILM PLASTIC | 1.41 | 1.13 | 0.88 |
| CARDBOARD | 64.02 | 44.99 | 57.10 |
| GLASS | 5.64 | 7.08 | 11.62 |
| COMMINGLED | 26.77 | 19.87 | 24.93 |
| OIL/ANTI-FREEZE | 8.06 | 6.67 | 9.30 |
| BATTERIES | 1.99 | 2.10 | 2.94 |
| RUBBLE | 42.92 | 47.05 | 47.96 |
| PROPANE 5-LBS | 1.13 | | 1.34 |
| TEXTILES RECYCLING | | | |
| COMMUNITY RECYCLING | | | |
| RE-BUILDING CENTER | | | |
| SVDP (RE-USE) | 7.24 | 0.09 | 9.92 |
| PLASTIC NURSERY POTS | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| TOTAL | 1,076.23 | 1,077.34 | 1,234.50 |
| Metro Dry | 5,386.64 | 5,438.79 | 6,255.11 |
| Less Yard Debris | 148.11 | 169.86 | 218.63 |
| **Net Recovered** | **928.12** | **907.48** | **1,015.87** |
| INBOUND MSW | 16,064.13 | 14,817.20 | 16,420.41 |
| OUTBOUND MSW | 16,297.86 | 13,962.15 | 15,426.07 |
| % recovered to MSW | 6.70% | 7.27% | 7.52% |
| **% of Dry Recovered** | **17.23%** | **16.69%** | **16.24%** |

| COMMODITIES SHIPPED 2012 TONS MTD | Updated 12/31/2012 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
| YARD DEBRIS | 54.68 | 58.93 | 61.23 | 57.83 | 147.89 | 95.91 | 159.25 | 92.01 | 94.30 | 80.55 | 65.86 | 89.83 | 1,058.27 |
| MILLWOOD | 693.86 | 696.14 | 675.00 | 731.46 | 910.79 | 848.23 | 722.94 | 820.76 | 763.19 | 770.02 | 681.56 | 603.17 | 8,917.12 |
| TIRES | 20.23 | 9.44 | 10.99 | 10.38 | 21.69 | 10.97 | 18.39 | 10.11 | 24.60 | 14.33 | 8.27 | 7.07 | 166.47 |
| FERROUS METAL | 142.20 | 150.37 | 149.66 | 174.91 | 215.40 | 180.89 | 189.43 | 197.02 | 177.28 | 174.59 | 139.53 | 123.60 | 2,014.88 |
| NON-FERROUS METAL | 13.50 | 7.51 | 16.05 | 9.35 | 13.23 | 13.72 | 15.10 | 13.74 | 11.31 | 10.50 | 11.33 | 5.27 | 140.61 |
| ELECTRONICS | 30.18 | 30.97 | 25.92 | 38.31 | 34.74 | 30.30 | 31.43 | 27.75 | 29.60 | 35.74 | 30.79 | 25.32 | 371.05 |
| CARPET | 18.78 | 33.36 | 18.93 | | 4.22 | 13.10 | 8.79 | 4.88 | 4.89 | | | | 106.95 |
| FOAM PAD | | | | | | 1.63 | 1.77 | 0.43 | | 1.05 | 1.04 | 0.79 | 6.71 |
| HARD PLASTIC | | 3.01 | 7.87 | 8.89 | 16.22 | 9.48 | 6.04 | 7.75 | 12.10 | 8.13 | 9.66 | 6.31 | 95.46 |
| FILM PLASTIC | 0.08 | 1.50 | | 2.49 | 1.29 | 1.07 | | 0.69 | 0.80 | | 1.88 | | 9.80 |
| CARDBOARD | 57.33 | 55.08 | 57.56 | 44.41 | 59.23 | 53.97 | 61.98 | 58.47 | 59.51 | 46.63 | 61.33 | 60.59 | 676.09 |
| GLASS | 12.13 | 6.17 | 5.44 | 5.93 | 12.16 | 10.95 | 11.36 | 9.89 | 5.92 | 10.93 | 7.27 | 11.97 | 110.12 |
| COMMINGLED | 28.39 | 20.43 | 26.25 | 24.95 | 17.07 | 22.89 | 21.81 | 19.76 | 22.77 | 23.06 | 27.50 | 24.69 | 279.57 |
| OIL/ANTI-FREEZE | 7.82 | 7.35 | 11.61 | 10.16 | 11.16 | 10.84 | 10.46 | 11.98 | 10.28 | 10.71 | 9.73 | 6.23 | 118.33 |
| BATTERIES | 1.85 | 2.60 | 2.94 | 2.82 | 3.91 | 2.65 | 3.39 | 3.53 | 3.63 | 2.88 | 2.63 | 1.51 | 34.34 |
| RUBBLE | 43.38 | 46.33 | 63.49 | 44.34 | 64.66 | 66.72 | 74.92 | 59.87 | 77.73 | 57.34 | 41.03 | 37.84 | 677.65 |
| PROPANE 5-LBS | 0.97 | 1.24 | | 2.09 | 1.46 | | 1.67 | 1.52 | 2.83 | 1.50 | 1.04 | | 14.32 |
| TEXTILES RECYCLING | | | | | | | | | | | | | 0.00 |
| COMMUNITY RECYCLING | 0.10 | | | | | | | | | 0.24 | | | 0.34 |
| RE-BUILDING CENTER | 0.38 | 0.12 | 9.88 | | | | | | | | | | 10.38 |
| SVDP (RE-USE) | 10.88 | 12.51 | 10.08 | 17.96 | 29.97 | 4.35 | 12.44 | 15.08 | 10.50 | 4.73 | 20.91 | | 149.41 |
| PLASTIC NURSERY POTS | 0.43 | 0.19 | | | | | | | | | | | 0.62 |
| | | | | | | | | | | | | | 0.00 |
| | | | | | | | | | | | | | 0.00 |
| | | | | | | | | | | | | | 0.00 |
| | | | | | | | | | | | | | 0.00 |
| | | | | | | | | | | | | | 0.00 |
| TOTAL | 1,137.17 | 1,143.25 | 1,152.90 | 1,186.28 | 1,565.09 | 1,377.67 | 1,351.17 | 1,355.24 | 1,311.24 | 1,252.93 | 1,121.36 | 1,004.19 | 14,958.49 |
| Metro Dry | 5,274.15 | 5,269.28 | 5,445.10 | 6,258.77 | 7,048.11 | 6,876.19 | 7,148.52 | 7,068.49 | 6,808.18 | 6,471.16 | 5,702.47 | 5,116.68 | 74,487.10 |
| Less Yard Debris | 118.92 | 117.08 | 132.25 | 218.44 | 253.09 | 256.52 | 290.47 | 237.72 | 213.46 | 168.19 | 184.92 | 124.81 | 2,315.87 |
| Net Recovered | 1,018.25 | 1,026.17 | 1,020.65 | 967.84 | 1,312.00 | 1,121.15 | 1,060.70 | 1,117.52 | 1,097.78 | 1,084.74 | 936.44 | 879.38 | 12,642.62 |
| INBOUND MSW | 16,407.56 | 15,229.45 | 16,302.79 | 16,890.18 | 18,779.03 | 17,600.08 | 18,153.94 | 18,067.67 | 16,578.17 | 17,342.09 | 17,197.11 | 16,300.11 | 204,848.18 |
| OUTBOUND MSW | 15,440.50 | 14,837.84 | 14,991.51 | 15,730.16 | 18,071.54 | 16,434.09 | 17,233.46 | 17,957.03 | 15,532.84 | 17,065.59 | 15,847.36 | 15,261.94 | 194,403.86 |
| % recovered to MSW | 6.93% | 7.51% | 7.07% | 7.02% | 8.33% | 7.83% | 7.44% | 7.50% | 7.91% | 7.22% | 6.52% | 6.16% | 7.30% |
| % of Dry Recovered | 19.31% | 19.47% | 18.74% | 15.46% | 18.61% | 16.30% | 14.84% | 15.81% | 16.12% | 16.76% | 16.42% | 17.19% | 17.09% |

| COMMODITIES SHIPPED 2011 TONS MTD | Updated 12/31/2011 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | TOTAL |
| TIRES | 11.11 | 11.18 | 9.96 | 20.96 | | 27.17 | 12.35 | 32.12 | 10.77 | 21.47 | 10.89 | 11.34 | 179.32 |
| FERROUS METAL | 225.19 | 191.21 | 194.86 | 225.25 | 240.82 | 248.23 | 232.55 | 231.79 | 207.28 | 222.48 | 158.72 | 152.46 | 2,530.84 |
| FOAM PAD | 3.00 | 2.42 | 3.92 | 3.20 | 2.15 | 12.19 | 13.11 | 2.02 | | | | | 42.01 |
| YARD DEBRIS | 65.18 | 72.11 | 86.35 | 76.43 | 134.97 | 129.04 | 148.81 | 99.70 | 93.47 | 90.93 | 80.85 | 103.68 | 1,181.52 |
| CARDBOARD | 58.46 | 52.59 | 56.02 | 49.60 | 57.01 | 52.79 | 61.70 | 58.68 | 46.43 | 58.00 | 51.59 | 68.90 | 671.77 |
| NON-FERROUS METAL | 11.41 | 9.37 | 24.98 | 21.70 | 16.59 | 19.25 | 12.42 | 20.07 | 22.83 | 19.35 | 17.25 | 21.92 | 217.14 |
| GLASS | 15.62 | 9.86 | 5.88 | 12.43 | 10.35 | 13.51 | 12.38 | 12.39 | 6.83 | 10.73 | 6.72 | 7.53 | 124.23 |
| OIL/ANTI-FREEZE | 10.60 | 8.77 | 6.66 | 9.90 | 9.48 | 11.35 | 13.03 | 15.04 | 10.42 | 11.46 | 8.60 | 9.92 | 125.23 |
| BATTERIES | 2.25 | 2.91 | 3.40 | 3.10 | 4.45 | 4.78 | 5.19 | 4.03 | 4.30 | 3.59 | 1.58 | 2.49 | 42.07 |
| OIL FILTERS | | | | | | | | | | | | | 0.00 |
| ROOFING | | | | | | | | | | | | | 0.00 |
| COMMINGLED | 22.34 | 16.13 | 32.52 | 13.24 | 25.59 | 23.19 | 18.04 | 29.76 | 12.15 | 22.36 | 15.84 | 27.36 | 258.52 |
| MILLWOOD | 726.24 | 723.91 | 771.02 | 884.99 | 879.33 | 916.17 | 907.49 | 940.03 | 910.07 | 902.68 | 656.14 | 748.04 | 9,966.11 |
| FILM PLASTIC | | 1.27 | | 4.13 | | 1.24 | | 1.31 | | 1.03 | | 1.65 | 10.63 |
| RUBBLE | 69.41 | 58.20 | 59.91 | 50.00 | 82.32 | 90.85 | 72.93 | 80.67 | 84.43 | 72.97 | 56.25 | 52.59 | 830.53 |
| ELECTRONICS | 40.43 | 39.35 | 35.28 | 36.63 | 32.80 | 35.18 | 30.90 | 42.65 | 32.94 | 36.02 | 26.08 | 34.11 | 422.37 |
| PROPANE 1-LBS | 0.64 | | | | | | | | | | | | 0.64 |
| CARPET | | | | | | 79.44 | 36.04 | 41.05 | 31.66 | 30.82 | 26.31 | 20.45 | 265.77 |
| TEXTILES RECYCLING | | | | | | | | | | | | | 0.00 |
| COMMUNITY RECYCLING | | | | | | | | | | | | | 0.00 |
| PROPANE 5-LBS | | 1.24 | 1.25 | 1.46 | 1.36 | 1.46 | 2.56 | 1.62 | 2.65 | 1.20 | | 1.25 | 16.05 |
| RE-BUILDING CENTER | | | | | | | 0.35 | 0.09 | 0.12 | 0.12 | | | 0.68 |
| SVDP (RE-USE) | 2.98 | 7.33 | 2.47 | | 2.36 | 0.44 | 3.17 | | 14.84 | 10.09 | 9.62 | 10.22 | 63.52 |
| PLASTIC NURSERY POTS | 0.25 | | 0.51 | | 0.23 | 0.20 | 0.79 | | | | 0.38 | | 2.36 |
| | | | | | | | | | | | | | 0.00 |
| | | | | | | | | | | | | | 0.00 |
| | | | | | | | | | | | | | 0.00 |
| | | | | | | | | | | | | | 0.00 |
| | | | | | | | | | | | | | 0.00 |
| TOTAL | 1,265.11 | 1,207.85 | 1,294.99 | 1,413.02 | 1,499.81 | 1,666.48 | 1,583.81 | 1,613.02 | 1,491.19 | 1,515.30 | 1,126.82 | 1,273.91 | 16,951.31 |
| Metro Dry | 5,888.64 | 5,289.72 | 6,401.80 | 7,301.50 | 7,178.92 | 7,941.92 | 7,882.65 | 8,492.76 | 7,590.74 | 6,709.21 | 5,280.04 | 5,396.36 | 81,354.26 |
| Less Yard Debris | 146.59 | 127.81 | 165.35 | 187.87 | 228.16 | 240.57 | 278.76 | 243.66 | 189.45 | 177.67 | 150.72 | 148.48 | 2,285.09 |
| Net Recovered | 1,118.52 | 1,080.04 | 1,129.64 | 1,225.15 | 1,271.65 | 1,425.91 | 1,305.05 | 1,369.36 | 1,301.74 | 1,337.63 | 976.10 | 1,125.43 | 14,666.22 |
| INBOUND MSW | 18,563.31 | 16,032.92 | 18,595.90 | 18,815.72 | 19,479.59 | 20,740.36 | 20,215.95 | 22,955.58 | 21,615.64 | 18,800.27 | 16,908.19 | 16,893.86 | 229,617.29 |
| OUTBOUND MSW | 17,167.58 | 15,660.86 | 17,778.70 | 17,750.59 | 18,560.95 | 18,839.93 | 18,937.80 | 20,995.13 | 19,306.84 | 17,798.37 | 16,018.75 | 16,033.40 | 214,848.90 |
| % recovered to MSW | 6.82% | 7.53% | 6.96% | 7.51% | 7.70% | 8.03% | 7.83% | 7.03% | 6.90% | 8.06% | 6.66% | 7.54% | 7.38% |
| % of Dry Recovered | 18.99% | 20.42% | 17.65% | 16.78% | 17.71% | 17.95% | 16.56% | 16.12% | 17.15% | 19.94% | 18.49% | 20.86% | 18.03% |

# Metro South Recovery Revenue Report

## April 2012

| Material | Tons | Loads/Units | TRUX | Cost | Net revenue |
|---|---|---|---|---|---|
| ORGANICS | 3,451.40 | 145 | $ 171,189.44 | $ 154,987.30 | $16,202.14 |
| WALSH | | 4 | $ - | $ 1,400.00 | |
| TOTAL TRANSFER | | 141 | $ - | $ 58,673.80 | |
| DISPOSAL | | | $ 171,189.44 | $ 94,913.50 | |
| YARD DEBRIS | 75.40 | 4 | $ - | $ 2,023.92 | -$2,023.92 |
| MILLWOOD | 760.94 | 50 | $ - | $ 13,019.50 | -$13,019.50 |
| SP NEWSPRINT | | 0 | $ - | $ - | |
| NWWF | | 50 | $ - | $ 13,019.50 | |
| TIRES | 10.38 | 1 | $ - | $ 778.50 | -$778.50 |
| FERROUS METAL | 171.94 | 18 | $ 47,614.95 | $ - | $47,614.95 |
| CALBAG | | 18 | $ 47,614.95 | $ - | |
| SVDP | | 0 | $ - | $ - | |
| NON-FERROUS METAL | 9.35 | 4 | $ 9,811.60 | $ - | $9,811.60 |
| PROPANE 5-LBS | 2.09 | 2 | $ - | $ 378.00 | -$378.00 |
| ELECTRONICS | 41.28 | 15 | $ 4,953.60 | $ - | $4,953.60 |
| CARPET | - | 0 | $ - | $ - | $0.00 |
| HARD PLASTIC | 8.89 | 6 | $ - | $ 510.00 | -$510.00 |
| FILM PLASTIC | 2.49 | 2 | $ - | $ 170.00 | -$170.00 |
| CARDBOARD | 44.41 | 7 | $ 5,701.30 | $ 1,201.18 | $4,500.12 |
| WALSH | | 6 | $ 5,597.90 | $ 1,131.18 | |
| 4455 | | 1 | $ 103.40 | $ 70.00 | |
| GLASS (4455) | 5.93 | 1 | $ - | $ 95.00 | -$95.00 |
| COMMINGLED | 24.95 | 5 | $ 1,693.08 | $ 350.00 | $1,343.08 |
| 4455 | | 5 | $ 1,693.08 | $ 350.00 | |
| READING TREE | | 0 | $ - | $ - | |
| OIL/ANTI-FREEZE | 10.16 | 6 | $ 718.55 | $ 582.43 | $136.12 |
| OIL FILTERS | - | 0 | $ - | $ - | $0.00 |
| BATTERIES | 2.82 | 2 | $ 1,748.40 | $ - | $1,748.40 |
| RUBBLE (4472) | 44.34 | 7 | $ - | $ 665.00 | -$665.00 |
| RE-BUILDING CENTER | - | 0 | $ - | $ - | $0.00 |
| SVDP (RE-USE) | 17.96 | 4 | $ - | $ - | $0.00 |
| PLASTIC NURSERY POTS | - | 0 | $ - | $ - | $0.00 |
| ROOFING (4455) | - | 0 | $ - | $ - | $0.00 |
| | | | | | $68,670.09 |

**Tons** = Tons recovered in the montl (from scale reports)
**Loads/Units** = Number of loads hauled or units sent to market in the month
**Net Revenue** = TRUX $ for the month less transportation or disposal cost

# Metro South Recovery Revenue Report

## May 2012

| Material | Tons | Loads/Units | TRUX | Cost | Net revenue |
|---|---|---|---|---|---|
| ORGANICS | 4,085.59 | 162 | $ 202,645.26 | $ 183,239.12 | $19,406.14 |
| WALSH | | 4 | $ - | $ 1,439.36 | |
| TOTAL TRANSFER | | 158 | $ - | $ 69,455.03 | |
| DISPOSAL | | 0 | $ 202,645.26 | $ 112,353.73 | |
| YARD DEBRIS | 147.89 | 9 | $ - | $ 4,234.56 | -$4,234.56 |
| MILLWOOD | 910.79 | 66 | $ - | $ 17,185.74 | -$17,185.74 |
| SP NEWSPRINT | | 0 | $ - | $ - | |
| NWWF | | 66 | $ - | $ 17,185.74 | |
| TIRES | 21.69 | 2 | $ - | $ 1,693.00 | -$1,693.00 |
| FERROUS METAL | 215.40 | 25 | $ 60,034.80 | $ 2,072.00 | $57,962.80 |
| CALBAG | | 22 | $ 60,034.80 | $ - | |
| SVDP | | 3 | $ - | $ 2,072.00 | |
| NON-FERROUS METAL | 13.23 | 4 | $ 7,964.80 | $ - | $7,964.80 |
| PROPANE 5-LBS | 1.46 | 1 | $ - | $ 288.00 | -$288.00 |
| ELECTRONICS | 34.74 | 13 | $ 4,168.80 | $ - | $4,168.80 |
| CARPET | 4.22 | 1 | $ - | $ 139.50 | -$139.50 |
| HARD PLASTIC | 16.22 | 7 | $ - | $ - | $0.00 |
| FILM PLASTIC | 1.29 | 1 | $ - | $ 85.00 | -$85.00 |
| CARDBOARD | 59.23 | 8 | $ 6,374.77 | $ 1,418.34 | $4,956.43 |
| WALSH | | 7 | $ 6,286.62 | $ 1,348.34 | |
| 4455 | | 1 | $ 88.15 | $ 70.00 | |
| GLASS (4455) | 12.16 | 1 | $ - | $ 95.00 | -$95.00 |
| COMMINGLED | 17.07 | 3 | $ 967.85 | $ 210.00 | $757.85 |
| 4455 | | 3 | $ 967.85 | $ 210.00 | |
| READING TREE | | 0 | $ - | $ - | |
| OIL/ANTI-FREEZE | 11.16 | 5 | $ 816.55 | $ 499.30 | $317.25 |
| OIL FILTERS | - | 0 | $ - | $ - | $0.00 |
| BATTERIES | 3.91 | 4 | $ 2,424.20 | $ - | $2,424.20 |
| RUBBLE (4472) | 64.66 | 9 | $ - | $ 855.00 | -$855.00 |
| RE-BUILDING CENTER | - | 0 | $ - | $ - | $0.00 |
| SVDP (RE-USE) | 29.97 | 7 | $ - | $ - | $0.00 |
| PLASTIC NURSERY POTS | - | 0 | $ - | $ - | $0.00 |
| ROOFING (4455) | - | 0 | $ - | $ - | $0.00 |
| | | | | | $73,382.47 |

**Tons** = Tons recovered in the montl (from scale reports)

**Loads/Units** = Number of loads hauled or units sent to market in the month

**Net Revenue** = TRUX $ for the month less transportation or disposal cost

# Metro South Recovery Revenue Report

## July 2012

| Material | Tons | Loads/Units | TRUX | Cost | Net revenue |
|---|---|---|---|---|---|
| ORGANICS | 3,580.46 | 140 | $ 177,590.82 | $ 158,192.51 | $19,398.31 |
| WALSH | | 13 | $ - | $ 4,642.67 | |
| TOTAL TRANSFER | 3,240.07 | 127 | $ - | $ 55,084.19 | |
| DISPOSAL | | 0 | $ 177,590.82 | $ 98,462.65 | |
| YARD DEBRIS | 159.25 | 10 | $ - | $ 5,750.20 | -$5,750.20 |
| MILLWOOD | 722.94 | 56 | $ 1,453.65 | $ 15,536.44 | -$14,082.79 |
| SP NEWSPRINT | | 21 | $ 1,453.65 | $ 6,625.50 | |
| WRI | | 3 | $ - | $ 573.46 | |
| MRRF | | 17 | $ - | $ 4,426.63 | |
| NWWF | | 15 | $ - | $ 3,906.85 | |
| TIRES | 18.39 | 2 | $ - | $ 1,400.00 | -$1,400.00 |
| FERROUS METAL | 189.43 | 21 | $ 42,809.90 | $ - | $42,809.90 |
| CALBAG | | 19 | $ 42,809.90 | $ - | |
| SVDP | | 2 | $ - | $ - | |
| NON-FERROUS METAL | 15.10 | 4 | $ 7,577.60 | $ - | $7,577.60 |
| PROPANE 5-LBS | 1.67 | 1 | $ - | $ 236.00 | -$236.00 |
| ELECTRONICS | 31.43 | 9 | $ 3,771.60 | $ - | $3,771.60 |
| CARPET | 6.79 | 2 | $ - | $ 135.30 | -$135.30 |
| CARPET PAD | 1.77 | 2 | $ 70.80 | $ - | $70.80 |
| HARD PLASTIC | 6.04 | 3 | $ - | $ - | $0.00 |
| FILM PLASTIC | - | 0 | $ - | $ - | $0.00 |
| CARDBOARD | 61.96 | 9 | $ 5,447.35 | $ 1,612.56 | $3,834.79 |
| WALSH | | 8 | $ 5,377.97 | $ 1,542.56 | |
| 4455 | | 1 | $ 69.38 | $ 70.00 | |
| GLASS (4455) | 11.36 | 2 | $ - | $ 10.00 | -$10.00 |
| COMMINGLED | 21.81 | 5 | $ 1,145.44 | $ 350.00 | $795.44 |
| 4455 | | 5 | $ 1,145.44 | $ 350.00 | |
| READING TREE | | 0 | $ - | $ - | |
| OIL/ANTI-FREEZE | 10.46 | 5 | $ 870.45 | $ 450.00 | $420.45 |
| OIL FILTERS | - | 0 | $ - | $ - | $0.00 |
| BATTERIES | 3.39 | 3 | $ 2,252.00 | $ - | $2,252.00 |
| RUBBLE (4472) | 74.92 | 9 | $ - | $ 855.00 | -$855.00 |
| RE-BUILDING CENTER | - | 0 | $ - | $ - | $0.00 |
| SVDP (RE-USE) | 12.44 | 4 | $ - | $ - | $0.00 |
| PLASTIC NURSERY POTS | - | 0 | $ - | $ - | $0.00 |
| ROOFING (4455) | - | 0 | $ - | $ - | $0.00 |
| | | | | | $58,461.60 |

**Tons** = Tons recovered in the montl (from scale reports)

**Loads/Units** = Number of loads hauled or units sent to market in the month

**Net Revenue** = TRUX $ for the month less transportation or disposal cost

# Metro South Recovery Revenue Report

## August 2012

| Material | Tons | Loads/Units | TRUX | Cost | Net revenue |
|---|---|---|---|---|---|
| ORGANICS | 2,459.14 | 99 | $ 124,825.95 | $ 114,365.24 | $10,460.71 |
| WALSH | | 9 | $ - | $ 3,218.31 | |
| TOTAL TRANSFER | | 83 | $ - | $ 41,805.38 | |
| WHEAT | | 7 | $ - | $ 1,715.20 | |
| DISPOSAL | | 0 | $ 124,825.95 | $ 67,626.35 | |
| YARD DEBRIS | 92.01 | 6 | $ - | $ 3,484.92 | -$3,484.92 |
| MILLWOOD | 820.76 | 58 | $ 3,317.80 | $ 18,063.40 | -$14,745.60 |
| SP NEWSPRINT | | 48 | $ 3,317.80 | $ 15,459.50 | |
| WRI | | 0 | $ - | $ - | |
| MRRF | | 0 | $ - | $ - | |
| NWWF | | 10 | $ - | $ 2,603.90 | |
| TIRES | 10.11 | 1 | $ - | $ 850.00 | -$850.00 |
| FERROUS METAL | 197.02 | 20 | $ 38,717.30 | $ 1,376.00 | $37,341.30 |
| CALBAG | | 18 | $ 38,717.30 | $ - | |
| SVDP | | 2 | $ - | $ 1,376.00 | |
| NON-FERROUS METAL | 13.74 | 3 | $ 10,705.67 | $ - | $10,705.67 |
| ELECTRONICS | 27.75 | 8 | $ 3,330.00 | $ - | $3,330.00 |
| CARPET | 4.88 | 1 | $ 17.20 | $ - | $17.20 |
| CARPET PAD | 0.43 | 1 | $ - | $ - | $0.00 |
| HARD PLASTIC | 7.75 | 6 | $ - | $ - | $0.00 |
| FILM PLASTIC | 0.69 | 1 | $ - | $ 85.00 | -$85.00 |
| CARDBOARD | 58.47 | 14 | $ 3,600.30 | $ 963.10 | $2,637.20 |
| WALSH | | 4 | $ 2,013.24 | $ 963.10 | |
| AWTS | | 10 | $ 1,587.06 | $ - | |
| GLASS (4455) | 9.89 | 2 | $ - | $ 190.00 | -$190.00 |
| COMMINGLED | 19.76 | 8 | $ 1,014.10 | $ 490.00 | $524.10 |
| 4455 | | 7 | $ 1,014.10 | $ 490.00 | |
| DISCOVERY BOOKS | | 1 | $ - | $ - | |
| OIL/ANTI-FREEZE | 11.98 | 6 | $ 874.65 | $ 400.00 | $474.65 |
| OIL FILTERS | - | 0 | $ - | $ - | $0.00 |
| BATTERIES | 3.53 | 5 | $ 2,400.40 | $ - | $2,400.40 |
| RUBBLE (4472) | 59.87 | 7 | $ - | $ 665.00 | -$665.00 |
| PROPANE 5-LBS | 1.62 | 1 | $ - | $ 300.00 | -$300.00 |
| RE-BUILDING CENTER | - | 0 | $ - | $ - | $0.00 |
| SVDP (RE-USE) | 15.08 | 4 | $ - | $ - | $0.00 |
| PLASTIC NURSERY POTS | - | 0 | $ - | $ - | $0.00 |
| ROOFING (4455) | - | 0 | $ - | $ - | $0.00 |
| | | | | | $47,570.71 |

**Tons** = Tons recovered in the montl (from scale reports) (from bills of Lad

**Loads/Units** = Number of loads hauled or units sent to market in the month

**Net Revenue** = TRUX $ for the month less transportation or disposal cost

# Metro South Recovery Revenue Report

## September 2012

| Material | Tons | Loads/Units | TRUX | Cost | Net revenue |
|---|---|---|---|---|---|
| ORGANICS | 2,008.40 | 85 | $ 101,946.38 | $ 88,384.19 | $13,562.19 |
| WALSH | | 13 | $ - | $ 5,006.25 | |
| TOTAL TRANSFER | 903.32 | 36 | $ - | $ 15,356.44 | |
| WHEAT | | 36 | $ - | $ 12,790.49 | |
| DISPOSAL | | 0 | $ 101,946.38 | $ 55,231.00 | |
| YARD DEBRIS | 94.30 | 6 | $ - | $ 3,212.10 | -$3,212.10 |
| MILLWOOD | 763.19 | 54 | $ 3,317.20 | $ 16,390.84 | -$13,073.64 |
| SP NEWSPRINT | | 48 | $ 3,317.20 | $ 14,828.50 | |
| WRI | | 0 | $ - | $ - | |
| MRRF | | 0 | $ - | $ - | |
| NWWF | | 6 | $ - | $ 1,562.34 | |
| TIRES | 24.60 | 3 | $ - | $ 2,657.50 | -$2,657.50 |
| FERROUS METAL | 177.28 | 23 | $ 46,662.45 | $ 3,440.00 | $43,222.45 |
| CALBAG | | 21 | $ 46,662.45 | $ 2,000.00 | |
| SVDP | | 2 | $ - | $ 1,440.00 | |
| NON-FERROUS METAL | 11.31 | 5 | $ 11,161.60 | $ - | $11,161.60 |
| ELECTRONICS | 29.60 | 8 | $ 3,552.00 | $ - | $3,552.00 |
| CARPET | 4.89 | 1 | $ - | $ 148.50 | -$148.50 |
| CARPET PAD | - | 0 | $ - | $ - | $0.00 |
| HARD PLASTIC | 12.10 | 6 | $ - | $ - | $0.00 |
| FILM PLASTIC | 0.80 | 1 | $ - | $ - | $0.00 |
| CARDBOARD | 59.51 | 26 | $ 3,063.22 | $ - | $3,063.22 |
| WALSH | | 0 | $ - | $ - | |
| AWTS | | 26 | $ 3,063.22 | $ - | |
| GLASS (4455) | 5.92 | 1 | $ - | $ 119.00 | -$119.00 |
| COMMINGLED | 22.77 | 6 | $ 868.45 | $ 420.00 | $448.45 |
| 4455 | | 6 | $ 868.45 | $ 420.00 | |
| READING TREE | | 0 | $ - | $ - | |
| OIL/ANTI-FREEZE | 10.26 | 5 | $ 774.90 | $ 439.94 | $334.96 |
| OIL FILTERS | - | 0 | $ - | $ - | $0.00 |
| BATTERIES | 3.63 | 4 | $ 2,468.40 | $ - | $2,468.40 |
| RUBBLE (4472) | 77.73 | 9 | $ - | $ 1,071.00 | -$1,071.00 |
| PROPANE 5-LBS | 2.83 | 2 | $ - | $ 544.00 | -$544.00 |
| RE-BUILDING CENTER | - | 0 | $ - | $ - | $0.00 |
| SVDP (RE-USE) | 10.50 | 3 | $ - | $ - | $0.00 |
| PLASTIC NURSERY POTS | - | 0 | $ - | $ - | $0.00 |
| ROOFING (4455) | - | 0 | $ - | $ - | $0.00 |
| | | | | | $56,987.53 |

**Tons** = Tons recovered in the montl (from scale reports) (from bills of Lading)

**Loads/Units** = Number of loads hauled or units sent to market in the month

**Net Revenue** = TRUX $ for the month less transportation or disposal cost

# Metro South Recovery Revenue Report

## October 2012

| Material | Tons | Loads/Units | TRUX | Cost | Net revenue |
|---|---|---|---|---|---|
| ORGANICS | 2,540.17 | 108 | $ 128,939.03 | $ 110,810.84 | $18,128.19 |
| WALSH | | 19 | $ - | $ 4,648.67 | |
| TOTAL TRANSFER | 1,207.37 | 47 | $ - | $ 20,252.29 | |
| WHEAT | | 47 | $ - | $ 15,740.45 | |
| HORNER | | 1 | $ - | $ 314.75 | |
| DISPOSAL | | 0 | $ 128,939.03 | $ 69,854.68 | |
| YARD DEBRIS | 80.55 | 5 | $ - | $ 2,764.10 | -$2,764.10 |
| MILLWOOD | 770.02 | 50 | $ 3,581.60 | $ 15,870.06 | -$12,288.46 |
| SP NEWSPRINT | | 47 | $ 3,581.60 | $ 14,828.50 | |
| WRI | | 0 | $ - | $ - | |
| MRRF | | 0 | $ - | $ - | |
| NWWF | | 3 | $ - | $ 1,041.56 | |
| TIRES | 14.33 | 2 | $ - | $ 1,318.75 | -$1,318.75 |
| FERROUS METAL | 174.59 | 21 | $ 39,300.95 | $ 3,676.00 | $35,624.95 |
| CALBAG | | 19 | $ 39,300.95 | $ 2,300.00 | |
| SVDP | | 2 | $ - | $ 1,376.00 | |
| NON-FERROUS METAL | 10.50 | 4 | $ 7,014.40 | $ - | $7,014.40 |
| ELECTRONICS | 35.74 | 10 | $ 4,288.80 | $ - | $4,288.80 |
| CARPET | - | 0 | $ - | $ - | $0.00 |
| CARPET PAD | 1.05 | 2 | $ 42.00 | $ - | $42.00 |
| HARD PLASTIC | 5.67 | 5 | $ - | $ - | $0.00 |
| FILM PLASTIC | - | 0 | $ - | $ - | $0.00 |
| CARDBOARD | 46.63 | 30 | $ 4,368.01 | $ 70.00 | $4,298.01 |
| AWTS | | 29 | $ 4,314.36 | $ - | |
| 4455 | | 1 | $ 53.65 | $ 70.00 | |
| GLASS (4455) | 10.93 | 2 | $ - | $ 238.00 | -$238.00 |
| COMMINGLED | 23.30 | 6 | $ 1,084.94 | $ 350.00 | $734.94 |
| 4455 | | 5 | $ 1,084.94 | $ 350.00 | |
| DISCOVER BOOKS | | 1 | $ - | $ - | |
| OIL/ANTI-FREEZE | 10.71 | 5 | $ 706.30 | $ 450.00 | $256.30 |
| OIL FILTERS | - | 0 | $ - | $ - | $0.00 |
| BATTERIES | 2.88 | 3 | $ 1,958.40 | $ - | $1,958.40 |
| RUBBLE (4472) | 57.34 | 7 | $ - | $ 833.00 | -$833.00 |
| PROPANE 5-LBS | 1.50 | 1 | $ - | $ 340.00 | -$340.00 |
| RE-BUILDING CENTER | - | 0 | $ - | $ - | $0.00 |
| SVDP (RE-USE) | 4.73 | 2 | $ - | $ - | $0.00 |
| PLASTIC NURSERY POTS | - | 0 | $ - | $ - | $0.00 |
| ROOFING (4455) | - | 0 | $ - | $ - | $0.00 |
| | | | | | $54,563.68 |

**Tons** = Tons recovered in the montl (from scale reports) (from bills of Lading)

**Loads/Units** = Number of loads hauled or units sent to market in the month

# Metro South Recovery Revenue Report

## November 2012

| Material | Tons | Loads/Units | TRUX | Cost | Net revenue |
|---|---|---|---|---|---|
| ORGANICS | 3,229.58 | 133 | $ 163,933.48 | $ 139,413.36 | $24,520.12 |
| WALSH | 1,081.75 | 41 | $ - | $ 15,950.90 | |
| TOTAL TRANSFER | 755.47 | 29 | $ - | $ 12,842.99 | |
| WHEAT | 1,392.36 | 63 | $ - | $ 21,806.02 | |
| DISPOSAL | | 0 | $ 163,933.48 | $ 86,813.45 | |
| YARD DEBRIS | 65.86 | 3 | $ - | $ 1,856.28 | -$1,856.28 |
| MILLWOOD | 681.56 | 41 | $ 2,401.15 | $ 39,910.36 | -$37,509.21 |
| SP NEWSPRINT | | 30 | $ 2,401.15 | $ 37,046.07 | |
| WRI | | 0 | $ - | $ - | |
| MRRF | | 0 | $ - | $ - | |
| NWWF | | 11 | $ - | $ 2,864.29 | |
| TIRES | 8.27 | 1 | $ - | | $0.00 |
| FERROUS METAL | 139.53 | 19 | $ 35,804.55 | $ 3,364.00 | $32,440.55 |
| CALBAG | | 17 | $ 35,804.55 | $ 1,700.00 | |
| SVDP | | 2 | $ - | $ 1,664.00 | |
| NON-FERROUS METAL | 11.33 | 4 | $ 8,300.80 | $ 400.00 | $7,900.80 |
| ELECTRONICS | 30.79 | 9 | $ 3,694.80 | $ - | $3,694.80 |
| CARPET | - | 0 | $ - | $ - | $0.00 |
| CARPET PAD | 1.04 | 2 | $ 41.60 | $ - | $41.60 |
| HARD PLASTIC | 9.66 | 4 | $ - | $ - | $0.00 |
| FILM PLASTIC | 1.68 | 1 | $ - | $ - | $0.00 |
| CARDBOARD | 61.33 | 23 | $ 4,634.83 | $ 70.00 | $4,564.83 |
| GLASS (4455) | 7.27 | 1 | $ - | $ 119.00 | -$119.00 |
| COMMINGLED | 27.50 | 5 | $ 1,482.38 | $ 350.00 | $1,132.38 |
| 4455 | | 5 | $ 1,482.38 | $ 350.00 | |
| READING TREE | | 0 | $ - | $ - | |
| OIL/ANTI-FREEZE | 9.73 | 6 | $ 746.55 | $ 392.24 | $354.31 |
| OIL FILTERS | - | 0 | $ - | $ - | $0.00 |
| BATTERIES | 2.63 | 4 | $ 1,788.40 | $ - | $1,788.40 |
| RUBBLE (4472) | 41.03 | 5 | $ - | $ 595.00 | -$595.00 |
| PROPANE 5-LBS | 1.04 | 1 | $ - | $ 180.00 | -$180.00 |
| RE-BUILDING CENTER | - | 0 | $ - | $ - | $0.00 |
| SVDP (RE-USE) | 20.91 | 4 | $ - | $ - | $0.00 |
| PLASTIC NURSERY POTS | - | 0 | $ - | $ - | $0.00 |
| ROOFING (4455) | - | 0 | $ - | $ - | $0.00 |
| | | | | | $36,178.30 |

**Tons** = Tons recovered in the montl (from scale reports) (from bills of Lading)

**Loads/Units** = Number of loads hauled or units sent to market in the month

**Net Revenue** = TRUX $ for the month less transportation or disposal cost

# Metro South Recovery Revenue Report

## December 2012

| Material | Tons | Loads/Units | TRUX | Cost | Net revenue |
|---|---|---|---|---|---|
| ORGANICS | 2,109.49 | 88 | $ 107,077.71 | $ 87,156.56 | $19,921.15 |
| WALSH | 412.17 | 15 | $ - | $ 6,000.00 | |
| TOTAL TRANSFER | 159.99 | 6 | $ - | $ 2,719.83 | |
| HORNER | 355.22 | 14 | $ - | $ 2,800.90 | |
| WHEAT | 1,182.11 | 53 | $ - | $ 17,524.85 | |
| DISPOSAL | | | $ 107,077.71 | $ 58,910.98 | |
| YARD DEBRIS | 89.83 | 4 | $ - | $ 1,658.46 | -$1,658.46 |
| MILLWOOD | 603.17 | 36 | $ 2,327.60 | $ 10,862.01 | -$8,534.41 |
| SP NEWSPRINT | | 28 | $ 2,327.60 | $ 8,518.50 | |
| WRI | | 0 | $ - | $ - | |
| MRRF | | 0 | $ - | $ - | |
| NWWF | | 8 | $ - | $ 2,343.51 | |
| TIRES | 7.07 | 1 | $ - | $ 530.25 | -$530.25 |
| FERROUS METAL | 123.60 | 13 | $ 26,087.60 | $ 2,000.00 | $24,087.60 |
| CALBAG | | 12 | $ 26,087.60 | $ 1,200.00 | |
| SVDP | | 1 | $ - | $ 800.00 | |
| NON-FERROUS METAL | 5.27 | 2 | $ 3,481.60 | $ 100.00 | $3,381.60 |
| ELECTRONICS | 25.32 | 8 | $ 3,038.40 | $ - | $3,038.40 |
| CARPET | - | 0 | $ - | $ - | $0.00 |
| CARPET PAD | 0.79 | 2 | $ 31.60 | $ - | $31.60 |
| HARD PLASTIC | 6.31 | 3 | $ - | $ - | $0.00 |
| FILM PLASTIC | 1.68 | 1 | $ - | $ - | $0.00 |
| CARDBOARD | 60.59 | 24 | $ 4,004.96 | $ - | $4,004.96 |
| WALSH | | 0 | $ - | $ - | |
| 4455 | | 24 | $ 4,004.96 | $ - | |
| GLASS (4455) | 11.97 | 2 | $ - | $ 238.00 | -$238.00 |
| COMMINGLED | 24.69 | 4 | $ 956.47 | $ 280.00 | $676.47 |
| 4455 | | 4 | $ 956.47 | $ 280.00 | |
| READING TREE | | 0 | $ - | $ - | |
| OIL/ANTI-FREEZE | 6.23 | 4 | $ 441.70 | $ 256.15 | $185.55 |
| OIL FILTERS | - | 0 | $ - | $ - | $0.00 |
| BATTERIES | 1.51 | 3 | $ 962.00 | $ - | $962.00 |
| RUBBLE (4472) | 37.84 | 5 | $ - | $ 595.00 | -$595.00 |
| PROPANE 5-LBS | - | 0 | $ - | $ - | $0.00 |
| RE-BUILDING CENTER | - | 0 | $ - | $ - | $0.00 |
| SVDP (RE-USE) | - | 0 | $ - | $ - | $0.00 |
| PLASTIC NURSERY POTS | - | 0 | $ - | $ - | $0.00 |
| ROOFING (4455) | - | 0 | $ - | $ - | $0.00 |
| | | | | | $44,733.21 |

**Tons** = Tons recovered in the montl (from scale reports) (from bills of Lading)

**Loads/Units** = Number of loads hauled or units sent to market in the month

# Metro South Recovery Revenue Report

## January 2013

| Material | Tons | Loads/Units | TRUX | Cost | Net revenue |
|---|---|---|---|---|---|
| ORGANICS | 1,685.74 | 70 | $ 85,568.16 | $ 73,828.47 | $11,739.69 |
| WALSH | 376.89 | 14 | $ - | $ 6,215.18 | |
| TOTAL TRANSFER | 53.10 | 2 | $ - | $ 902.70 | |
| WHEAT | 918.16 | 41 | $ - | $ 14,125.98 | |
| HORNER | 337.59 | 13 | $ - | $ 7,226.76 | |
| DISPOSAL | | 0 | $ 85,568.16 | $ 46,357.85 | |
| YARD DEBRIS | 78.29 | 4 | $ - | $ 2,183.10 | -$2,183.10 |
| MILLWOOD | 635.92 | 40 | $ 2,565.80 | $ 12,289.34 | -$9,723.54 |
| SP NEWSPRINT | 530.85 | 33 | $ 2,565.80 | $ 10,727.00 | |
| WRI | - | 0 | $ - | $ - | |
| MRRF | - | 0 | $ - | $ - | |
| NWWF | 105.07 | 7 | $ - | $ 1,562.34 | |
| TIRES | 9.65 | 1 | $ - | $ 600.00 | -$600.00 |
| FERROUS METAL | 138.84 | 17 | $ 37,046.45 | $ 2,924.00 | $34,122.45 |
| CALBAG | 146.61 | 15 | $ 37,046.45 | $ 1,300.00 | |
| SVDP | 10.64 | 2 | $ - | $ 1,424.00 | |
| NON-FERROUS METAL | 9.81 | 2 | $ 6,579.20 | $ 200.00 | $6,379.20 |
| ELECTRONICS | 32.38 | 9 | $ 3,885.60 | $ - | $3,885.60 |
| CARPET | 5.06 | 1 | $ - | $ 151.80 | -$151.80 |
| CARPET PAD | 0.95 | 3 | $ 38.00 | $ - | $38.00 |
| HARD PLASTIC | 6.15 | 3 | $ - | $ 184.50 | -$184.50 |
| FILM PLASTIC | 1.41 | 1 | $ - | $ 42.30 | -$42.30 |
| CARDBOARD | 64.02 | 22 | $ 3,477.22 | $ - | $3,477.22 |
| WALSH | | 0 | $ - | $ - | |
| AWTS | | 22 | $ 3,477.22 | $ - | |
| GLASS (4455) | 5.64 | 1 | $ - | $ 119.00 | -$119.00 |
| COMMINGLED | 26.77 | 5 | $ 759.07 | $ 280.00 | $479.07 |
| 4455 | 26.25 | 4 | $ 759.07 | $ 280.00 | |
| READING TREE | 0.52 | 1 | $ - | $ - | |
| OIL/ANTI-FREEZE | 8.06 | 6 | $ 523.95 | $ 342.30 | $181.65 |
| OIL FILTERS | - | 0 | $ - | $ - | $0.00 |
| BATTERIES | 1.99 | 2 | $ 1,353.20 | $ - | $1,353.20 |
| RUBBLE (4472) | 42.92 | 5 | $ - | $ 595.00 | -$595.00 |
| PROPANE 5-LBS | 1.13 | 1 | $ - | $ 315.50 | -$315.50 |
| RE-BUILDING CENTER | - | 0 | $ - | $ - | $0.00 |
| SVDP (RE-USE) | 7.24 | 2 | $ - | $ - | $0.00 |
| PLASTIC NURSERY POTS | - | 0 | $ - | $ - | $0.00 |
| ROOFING (4455) | - | 0 | $ - | $ - | $0.00 |
| | | | | | $47,741.34 |

**Tons** = Tons recovered in the montl (from scale reports) (from bills of Lading)

**Loads/Units** = Number of loads hauled or units sent to market in the month

**Net Revenue** = TRUX $ for the month less transportation or disposal cost

# Metro South Recovery Revenue Report

## February 2013

| Material | Tons | Loads/Units | TRUX | Cost | Net revenue |
|---|---|---|---|---|---|
| ORGANICS | 1,650.67 | 69 | $ 83,788.01 | $ 71,186.65 | $12,601.36 |
| WALSH | | 7 | $ - | $ 3,033.04 | |
| TOTAL TRANSFER | - | 0 | $ - | $ - | |
| WHEAT | | 23 | $ - | $ 42,973.47 | |
| HORNER | | 39 | $ - | $ 9,786.71 | |
| DISPOSAL | | 0 | $ 83,788.01 | $ 45,393.43 | |
| YARD DEBRIS | 66.80 | 3 | $ - | $ 1,345.14 | -$1,345.14 |
| MILLWOOD | 681.64 | 43 | $ 3,001.85 | $ 19,101.84 | -$16,099.99 |
| SP NEWSPRINT | | 39 | $ 3,001.85 | $ 17,524.18 | |
| WRI | | 0 | $ - | $ - | |
| MRRF | | 0 | $ - | $ - | |
| NWWF | | 4 | $ - | $ 1,577.66 | |
| TIRES | - | 0 | $ - | $ - | $0.00 |
| FERROUS METAL | 137.33 | 13 | $ 30,669.60 | $ 2,000.00 | $28,669.60 |
| CALBAG | | 12 | $ 30,669.60 | $ 1,200.00 | |
| SVDP | | 1 | $ - | $ 800.00 | |
| NON-FERROUS METAL | 19.20 | 5 | $ 12,601.60 | $ 500.00 | $12,101.60 |
| ELECTRONICS | 28.55 | 8 | $ 3,426.00 | $ - | $3,426.00 |
| CARPET | 7.25 | 2 | $ - | $ 217.50 | -$217.50 |
| CARPET PAD | - | 0 | $ - | $ - | $0.00 |
| HARD PLASTIC | 7.59 | 4 | $ - | $ - | $0.00 |
| FILM PLASTIC | 1.13 | 1 | $ - | $ - | $0.00 |
| CARDBOARD | 44.99 | 22 | $ 2,861.93 | $ 910.00 | $1,951.93 |
| 4455 | | 13 | $ 1,636.29 | $ 910.00 | |
| AWTS | | 8 | $ 1,225.64 | $ - | |
| GLASS (4455) | 7.08 | 1 | $ - | $ 119.00 | -$119.00 |
| COMMINGLED | 19.87 | 4 | $ 822.05 | $ 280.00 | $542.05 |
| 4455 | | 4 | $ 822.05 | $ 280.00 | |
| READING TREE | | 0 | $ - | $ - | |
| OIL/ANTI-FREEZE | 6.67 | 5 | $ 506.80 | $ 700.00 | -$193.20 |
| BATTERIES | 2.10 | 2 | $ 1,260.00 | $ - | $1,260.00 |
| RUBBLE (4472) | 47.05 | 6 | $ - | $ 714.00 | -$714.00 |
| PROPANE 5-LBS | - | 0 | $ - | $ - | $0.00 |
| RE-BUILDING CENTER | - | 0 | $ - | $ - | $0.00 |
| SVDP (RE-USE) | 0.09 | 1 | $ - | $ - | $0.00 |
| PLASTIC NURSERY POTS | - | 0 | $ - | $ - | $0.00 |
| ROOFING (4455) | - | 0 | $ - | $ - | $0.00 |
| | | | | | $41,863.71 |

**Tons** = Tons recovered in the monti (from scale reports) (from bills of Lading)

**Loads/Units** = Number of loads hauled or units sent to market in the month

**Net Revenue** = TRUX $ for the month less transportation or disposal cost

# Metro South Recovery Revenue Report

## March 2013

| Material | Tons | Loads/Units | TRUX | Cost | Net revenue |
|---|---|---|---|---|---|
| ORGANICS | 2,348.62 | 99 | $ 119,215.95 | $ 101,228.78 | $17,987.17 |
| WALSH | | 17 | $ - | $ 6,035.18 | |
| TOTAL TRANSFER | 501.93 | 20 | $ - | $ 8,532.81 | |
| WHEAT | | 52 | $ - | $ 17,712.01 | |
| HORNER | | 10 | $ - | $ 4,361.73 | |
| DISPOSAL | | 0 | $ 119,215.95 | $ 64,587.05 | |
| YARD DEBRIS | 72.53 | 4 | $ - | $ 2,463.25 | -$2,463.25 |
| MILLWOOD | 758.58 | 48 | $ 2,771.25 | $ 17,424.56 | -$14,653.31 |
| SP NEWSPRINT | | 39 | $ 2,771.25 | $ 15,046.58 | |
| NWWF | | 9 | $ - | $ 2,377.98 | |
| TIRES | 7.96 | 1 | $ - | $ 700.00 | -$700.00 |
| FERROUS METAL | 173.52 | 20 | $ 43,570.90 | $ 3,240.00 | $40,330.90 |
| CALBAG | | 18 | $ 43,570.90 | $ 1,800.00 | |
| SVDP | | 2 | $ - | $ 1,440.00 | |
| NON-FERROUS METAL | 13.16 | 2 | $ 4,947.60 | $ 100.00 | $4,847.60 |
| ELECTRONICS | 29.23 | 8 | $ 3,507.60 | $ - | $3,507.60 |
| CARPET | 3.00 | 1 | $ - | $ 90.00 | -$90.00 |
| CARPET PAD | - | 0 | $ - | $ - | $0.00 |
| HARD PLASTIC | 10.53 | 7 | $ 202.00 | $ 239.40 | -$37.40 |
| WRI | 7.98 | 5 | $ - | $ 239.40 | |
| POLY | | 2 | $ 202.00 | $ - | |
| FILM PLASTIC | 0.88 | 1 | $ - | $ 26.40 | -$26.40 |
| CARDBOARD | 57.10 | 25 | $ 3,448.29 | $ 350.00 | $3,098.29 |
| 4455 | | 1 | $ 51.80 | $ 70.00 | |
| 4472 | | 4 | $ 425.26 | $ 280.00 | |
| AWTS | | 20 | $ 2,970.73 | $ - | |
| GLASS (4455) | 11.62 | 2 | $ - | $ 119.00 | -$119.00 |
| COMMINGLED | 24.93 | 4 | $ 980.08 | $ 280.00 | $700.08 |
| 4455 | | 4 | $ 980.08 | $ 280.00 | |
| READING TREE | | 0 | $ - | $ - | |
| OIL/ANTI-FREEZE | 9.30 | 6 | $ 730.80 | $ 400.00 | $330.80 |
| OIL FILTERS | - | 0 | $ - | $ - | $0.00 |
| BATTERIES | 2.94 | 2 | $ 1,764.00 | $ - | $1,764.00 |
| RUBBLE | 47.96 | 6 | $ - | $ 552.92 | -$552.92 |
| 4472 | 31.52 | 4 | $ - | $ 476.00 | |
| AWTS | 16.44 | 2 | $ - | $ 76.92 | |
| PROPANE 5-LBS | 1.34 | 1 | $ - | $ 317.50 | -$317.50 |
| RE-BUILDING CENTER | - | 0 | $ - | $ - | $0.00 |
| SVDP (RE-USE) | 9.92 | 3 | $ - | $ - | $0.00 |
| PLASTIC NURSERY POTS | - | 0 | $ - | $ - | $0.00 |
| | | | | | $53,606.66 |

**Tons** = Tons recovered in the montl (from scale reports) (from bills of Lading)

## Appendix C

- Exhibit 1 Fall 2012 (1)
- Exhibit 2 Fall 2012 (2)
- Exhibit 3 Spring 2013 (1)
- Exhibit 4 Spring 2013 (2)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503)906-9200

TestAmerica Job ID: 250-7917-1
Client Project/Site: General

For:
Tuppan Consultants LLC
680 Iron Mountain Blvd
Lake Oswego, Oregon 97034

Attn: Mr. Eric J Tuppan

*Authorized for release by:*
*11/13/2012 8:37:48 PM*
Erica Fot
Project Mgmt. Assistant
erica.fot@testamericainc.com

Designee for

Vanessa Frahs
Project Manager I
vanessa.frahs@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

# Table of Contents

# Sample Summary

Client: Tuppan Consultants LLC
Project/Site: General

TestAmerica Job ID: 250-7917-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 250-7917-1 | OF-1 | Water | 10/31/12 13:10 | 10/31/12 14:38 |
| 250-7917-2 | OF-4 | Water | 10/31/12 13:45 | 10/31/12 14:38 |
| 250-7917-3 | OF-5 | Water | 10/31/12 13:40 | 10/31/12 14:38 |
| 250-7917-4 | OF-7 | Water | 10/31/12 13:30 | 10/31/12 14:38 |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ☼ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| EDL | Estimated Detection Limit |
| EPA | United States Environmental Protection Agency |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RL | Reporting Limit |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |
| MDA | Minimum detectable activity |
| MDC | Minimum detectable concentration |
| RER | Relative error ratio |
| DER | Duplicate error ratio (normalized absolute difference) |
| DLC | Decision level concentration |
| RL | Reporting Limit or Requested Limit (Radiochemistry only) |

## Method: 200.8 - Metals (ICP/MS)

Client Sample ID: OF-1
Date Collected: 10/31/12 13:10
Date Received: 10/31/12 14:38

Lab Sample ID: 250-7917-1
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.0010 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:38 | 1 |
| Chromium | 0.012 | | 0.0020 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:38 | 1 |
| Copper | 0.026 | | 0.0020 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:38 | 1 |
| Lead | 0.082 | | 0.0010 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:38 | 1 |
| Nickel | 0.0074 | | 0.0020 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:38 | 1 |
| Zinc | 0.29 | | 0.010 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:38 | 1 |

Client Sample ID: OF-4
Date Collected: 10/31/12 13:45
Date Received: 10/31/12 14:38

Lab Sample ID: 250-7917-2
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.0010 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:45 | 1 |
| Chromium | 0.011 | | 0.0020 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:45 | 1 |
| Copper | 0.023 | | 0.0020 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:45 | 1 |
| Lead | 0.062 | | 0.0010 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:45 | 1 |
| Nickel | 0.0045 | | 0.0020 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:45 | 1 |
| Zinc | 0.21 | | 0.010 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:45 | 1 |

Client Sample ID: OF-5
Date Collected: 10/31/12 13:40
Date Received: 10/31/12 14:38

Lab Sample ID: 250-7917-3
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.0010 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:49 | 1 |
| Chromium | 0.0098 | | 0.0020 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:49 | 1 |
| Copper | 0.012 | | 0.0020 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:49 | 1 |
| Lead | 0.047 | | 0.0010 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:49 | 1 |
| Nickel | 0.0031 | | 0.0020 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:49 | 1 |
| Zinc | 0.12 | | 0.010 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:49 | 1 |

Client Sample ID: OF-7
Date Collected: 10/31/12 13:30
Date Received: 10/31/12 14:38

Lab Sample ID: 250-7917-4
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.0010 | | mg/L | | 11/02/12 09:25 | 11/02/12 19:00 | 1 |
| Chromium | 0.0061 | | 0.0020 | | mg/L | | 11/02/12 09:25 | 11/02/12 19:00 | 1 |
| Copper | 0.020 | | 0.0020 | | mg/L | | 11/02/12 09:25 | 11/02/12 19:00 | 1 |
| Lead | 0.028 | | 0.0010 | | mg/L | | 11/02/12 09:25 | 11/02/12 19:00 | 1 |
| Nickel | 0.0049 | | 0.0020 | | mg/L | | 11/02/12 09:25 | 11/02/12 19:00 | 1 |
| Zinc | 0.16 | | 0.010 | | mg/L | | 11/02/12 09:25 | 11/02/12 19:00 | 1 |

## General Chemistry

Client Sample ID: OF-1
Date Collected: 10/31/12 13:10
Date Received: 10/31/12 14:38

Lab Sample ID: 250-7917-1
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 4.8 | | mg/L | | 11/05/12 10:22 | 11/05/12 10:22 | 1 |
| Total Suspended Solids | 190 | | 10 | | mg/L | | | 11/05/12 15:02 | 1 |

Client Sample ID: OF-4
Date Collected: 10/31/12 13:45
Date Received: 10/31/12 14:38

Lab Sample ID: 250-7917-2
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 4.7 | | mg/L | | 11/05/12 10:22 | 11/05/12 10:22 | 1 |
| Total Suspended Solids | 73 | | 10 | | mg/L | | | 11/05/12 15:02 | 1 |

Client Sample ID: OF-5
Date Collected: 10/31/12 13:40
Date Received: 10/31/12 14:38

Lab Sample ID: 250-7917-3
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 4.7 | | mg/L | | 11/05/12 10:22 | 11/05/12 10:22 | 1 |
| Total Suspended Solids | 61 | | 10 | | mg/L | | | 11/05/12 15:02 | 1 |

Client Sample ID: OF-7
Date Collected: 10/31/12 13:30
Date Received: 10/31/12 14:38

Lab Sample ID: 250-7917-4
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 4.8 | | mg/L | | 11/05/12 10:22 | 11/05/12 10:22 | 1 |
| Total Suspended Solids | 56 | | 10 | | mg/L | | | 11/05/12 15:02 | 1 |

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 250-11379/1-A
Matrix: Water
Analysis Batch: 11414

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11379

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.0010 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:17 | 1 |
| Chromium | ND | | 0.0020 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:17 | 1 |
| Copper | ND | | 0.0020 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:17 | 1 |
| Lead | ND | | 0.0010 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:17 | 1 |
| Nickel | ND | | 0.0020 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:17 | 1 |
| Zinc | ND | | 0.010 | | mg/L | | 11/02/12 09:25 | 11/02/12 18:17 | 1 |

Lab Sample ID: LCS 250-11379/2-A
Matrix: Water
Analysis Batch: 11414

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11379

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Cadmium | 0.100 | 0.104 | | mg/L | | 104 | 85 - 115 |
| Chromium | 0.100 | 0.104 | | mg/L | | 104 | 85 - 115 |
| Copper | 0.100 | 0.0996 | | mg/L | | 100 | 85 - 115 |
| Lead | 0.100 | 0.0982 | | mg/L | | 98 | 85 - 115 |
| Nickel | 0.100 | 0.0986 | | mg/L | | 99 | 85 - 115 |
| Zinc | 0.100 | 0.106 | | mg/L | | 106 | 85 - 115 |

Lab Sample ID: 250-7917-1 MS
Matrix: Water
Analysis Batch: 11414

Client Sample ID: OF-1
Prep Type: Total/NA
Prep Batch: 11379

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.100 | 0.104 | | mg/L | | 104 | 70 - 130 |
| Chromium | 0.012 | | 0.100 | 0.117 | | mg/L | | 105 | 70 - 130 |
| Copper | 0.026 | | 0.100 | 0.123 | | mg/L | | 97 | 70 - 130 |
| Lead | 0.082 | | 0.100 | 0.177 | | mg/L | | 95 | 70 - 130 |
| Nickel | 0.0074 | | 0.100 | 0.105 | | mg/L | | 97 | 70 - 130 |
| Zinc | 0.29 | | 0.100 | 0.386 | | mg/L | | 99 | 70 - 130 |

Lab Sample ID: 250-7949-B-1-B MS
Matrix: Water
Analysis Batch: 11414

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 11379

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.100 | 0.0926 | | mg/L | | 93 | 70 - 130 |
| Lead | 0.0024 | | 0.100 | 0.0746 | | mg/L | | 72 | 70 - 130 |

Lab Sample ID: 250-7949-B-1-B MS
Matrix: Water
Analysis Batch: 11414

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 11379

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Chromium | 0.018 | | 0.100 | 0.125 | | mg/L | | 107 | 70 - 130 |
| Copper | 0.010 | | 0.100 | 0.101 | | mg/L | | 91 | 70 - 130 |
| Nickel | 0.10 | | 0.100 | 0.193 | | mg/L | | 93 | 70 - 130 |
| Zinc | ND | | 0.100 | 0.110 | | mg/L | | 110 | 70 - 130 |

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 250-7912-B-2-B DU
Matrix: Water
Analysis Batch: 11414

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 11379

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Cadmium | 0.0015 | | 0.00141 | | mg/L | | 6 | 20 |
| Chromium | 0.0043 | | 0.00426 | | mg/L | | 1 | 20 |
| Copper | 0.049 | | 0.0492 | | mg/L | | 0.1 | 20 |
| Lead | 0.0023 | | 0.00234 | | mg/L | | 0.9 | 20 |
| Nickel | 0.017 | | 0.0166 | | mg/L | | 2 | 20 |
| Zinc | 0.048 | | 0.0472 | | mg/L | | 2 | 20 |

## Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 250-11439/1-A
Matrix: Water
Analysis Batch: 11469

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 11439

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 5.0 | | mg/L | | 11/05/12 10:22 | 11/05/12 10:22 | 1 |

Lab Sample ID: LCS 250-11439/2-A
Matrix: Water
Analysis Batch: 11469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 11439

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Oil & Grease | 39.3 | 37.9 | | mg/L | | 97 | 78 - 114 |

Lab Sample ID: LCSD 250-11439/3-A
Matrix: Water
Analysis Batch: 11469

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 11439

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | 39.3 | 37.3 | | mg/L | | 95 | 78 - 114 | 2 | 18 |

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 250-11449/1
Matrix: Water
Analysis Batch: 11449

Client Sample ID: Method Blank
Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 10 | | mg/L | | | 11/05/12 15:02 | 1 |

Lab Sample ID: LCS 250-11449/2
Matrix: Water
Analysis Batch: 11449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 60.3 | 56.0 | | mg/L | | 93 | 80 - 120 |

Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: 250-7854-D-1 DU
Matrix: Water
Analysis Batch: 11449

Client Sample ID: Duplicate
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | | ND | | mg/L | | | | NC | 5 |

# Certification Summary

Client: Tuppan Consultants LLC
Project/Site: General

TestAmerica Job ID: 250-7917-1

## Laboratory: TestAmerica Portland

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska | State Program | 10 | OR00040 | 06-30-13 |
| Alaska (UST) | State Program | 10 | UST-012 | 12-26-12 |
| California | State Program | 9 | 2597 | 09-30-13 |
| Oregon | NELAC | 10 | OR100021 | 01-09-13 |
| USDA | Federal | | P330-11-00092 | 02-17-14 |
| Washington | State Program | 10 | C586 | 06-23-13 |

# Method Summary

Client: Tuppan Consultants LLC
Project/Site: General

TestAmerica Job ID: 250-7917-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 200.8 | Metals (ICP/MS) | EPA | TAL PRT |
| 1664A | HEM and SGT-HEM | 1664A | TAL PRT |
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL PRT |

**Protocol References:**

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater".

**Laboratory References:**

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# Chain of Custody Record

9405 SW Nimbus Ave
Beaverton, OR 97008-7145
503-906-9200 Fax 503-906-9210

TestAmerica Laboratories, Inc.

| Client Contact | Project Manager: Eric Tuppan | Site Contact: | Date: | COC No: |
|---|---|---|---|---|
| Client Name: Tuppan Consultants | Tel/Fax: | Lab Contact: | Carrier: | 1 of 1 COCs |
| Address: 460 Second St, Ste 103 | Analysis Turnaround Time | | | Job No.: 7917 |
| City/State/Zip: Lake Oswego, OR 97034 | Calendar (C) or Work Days (W) | | | |
| Phone: 503-675-1335 | TAT if different from Below | | | SDG No. |
| FAX | ☒ 2 weeks | | | |
| Project Name: RST | ☐ 1 week | | | |
| Site: MSS | ☐ 2 days | | | Sampler: Eric Tuppan |
| PO#: N/A | ☐ 1 day | | | |

| Sample Identification | Sample Date | Sample Time | Sample Type | Matrix | # of Cont. | Oil/Grease | TSS | Cu, Pb, Zn, Cd, Cr | Ni |
|---|---|---|---|---|---|---|---|---|---|
| OF-1 | 10/31/12 | 13:10 | GRAB | W | 3+1 | X | X | X | |
| OF-4 | 10/31/12 | 13:45 | " | W | 3+1 | X | X | X | |
| OF-5 | 10/31/12 | 13:40 | " | W | 3+1 | X | X | X | |
| OF-7 | 10/31/12 | 13:30 | " | W | 3+1 | X | X | X | |
| | | | | | | 2-4 | | | |

Preservation Used: (1= Ice) 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

*Possible Hazard Identification*
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant Poison B ☐ Unknown ☐

*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

**Special Instructions/QC Requirements & Comments:**

1200-Z TESTING PARAMETERS. pH MEASURED IN FIELD 12/1/12 5.5

| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
|---|---|---|---|---|---|
| [signature] | Tuppan Consultants | 10/31/12 1430 | Tom Krause | TAP | 10/31/12 1430 |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |

TAL-1002 0912

Form No. CA-C-WI-002, Rev. 3.1, dated 07/12/2012

# Login Sample Receipt Checklist

Client: Tuppan Consultants LLC

Job Number: 250-7917-1

**Login Number: 7917**
**List Number: 1**
**Creator: Krause, Thomas**

**List Source: TestAmerica Portland**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | |
| Sample custody seals, if present, are intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | N/A | |
| Samples do not require splitting or compositing. | N/A | |
| Residual Chlorine Checked. | N/A | |

TestAmerica

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# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503)906-9200

TestAmerica Job ID: 250-8897-1
Client Project/Site: RSI-001-001

For:
Tuppan Consultants LLC
680 Iron Mountain Blvd
Lake Oswego, Oregon 97034

Attn: Mr. Eric J Tuppan

Vanessa Frahs

*Authorized for release by:*
*12/31/2012 10:06:00 AM*

Vanessa Frahs
Project Manager I
vanessa.frahs@testamericainc.com



*The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.*

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

# Table of Contents

# Sample Summary

Client: Tuppan Consultants LLC
Project/Site: RSI-001-001

TestAmerica Job ID: 250-8897-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 250-8897-1 | OF-1 | Water | 12/15/12 12:10 | 12/17/12 12:40 |
| 250-8897-2 | OF-4 | Water | 12/15/12 11:49 | 12/17/12 12:40 |
| 250-8897-3 | OF-5 | Water | 12/15/12 11:45 | 12/17/12 12:40 |
| 250-8897-4 | OF-7 | Water | 12/15/12 11:30 | 12/17/12 12:40 |
| 250-8897-5 | OF-A-PRE | Water | 12/15/12 12:10 | 12/17/12 12:40 |

Job ID: 250-8897-1

Laboratory: TestAmerica Portland

**Narrative**

**Job Narrative**
**250-8897-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 12/17/2012 12:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.3° C.

**Metals**
No analytical or quality issues were noted.

**General Chemistry**
No analytical or quality issues were noted.

**Organic Prep**
No analytical or quality issues were noted.

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ☼ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| EDL | Estimated Detection Limit |
| EPA | United States Environmental Protection Agency |
| MDA | Minimum detectable activity |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

## Method: 200.8 - Metals (ICP/MS)

Client Sample ID: OF-1
Date Collected: 12/15/12 12:10
Date Received: 12/17/12 12:40

Lab Sample ID: 250-8897-1
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Copper | 0.039 | | 0.0020 | | mg/L | | 12/18/12 08:30 | 12/18/12 18:55 | 1 |
| Lead | 0.090 | | 0.0010 | | mg/L | | 12/18/12 08:30 | 12/18/12 18:55 | 1 |
| Zinc | 0.42 | | 0.010 | | mg/L | | 12/18/12 08:30 | 12/18/12 18:55 | 1 |

Client Sample ID: OF-4
Date Collected: 12/15/12 11:49
Date Received: 12/17/12 12:40

Lab Sample ID: 250-8897-2
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Copper | 0.041 | | 0.0020 | | mg/L | | 12/18/12 08:30 | 12/18/12 18:59 | 1 |
| Lead | 0.14 | | 0.0010 | | mg/L | | 12/18/12 08:30 | 12/18/12 18:59 | 1 |
| Zinc | 0.51 | | 0.010 | | mg/L | | 12/18/12 08:30 | 12/18/12 18:59 | 1 |

Client Sample ID: OF-5
Date Collected: 12/15/12 11:45
Date Received: 12/17/12 12:40

Lab Sample ID: 250-8897-3
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Copper | 0.0048 | | 0.0020 | | mg/L | | 12/18/12 08:30 | 12/18/12 19:02 | 1 |
| Lead | 0.015 | | 0.0010 | | mg/L | | 12/18/12 08:30 | 12/18/12 19:02 | 1 |
| Zinc | 0.066 | | 0.010 | | mg/L | | 12/18/12 08:30 | 12/18/12 19:02 | 1 |

Client Sample ID: OF-7
Date Collected: 12/15/12 11:30
Date Received: 12/17/12 12:40

Lab Sample ID: 250-8897-4
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Copper | 0.0049 | | 0.0020 | | mg/L | | 12/18/12 08:30 | 12/18/12 19:05 | 1 |
| Lead | 0.0054 | | 0.0010 | | mg/L | | 12/18/12 08:30 | 12/18/12 19:05 | 1 |
| Zinc | 0.060 | | 0.010 | | mg/L | | 12/18/12 08:30 | 12/18/12 19:05 | 1 |

## General Chemistry

Client Sample ID: OF-1
Date Collected: 12/15/12 12:10
Date Received: 12/17/12 12:40

Lab Sample ID: 250-8897-1
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 4.7 | | mg/L | | 12/20/12 08:23 | 12/20/12 08:23 | 1 |
| Total Suspended Solids | 340 | | 33 | | mg/L | | | 12/20/12 12:39 | 1 |

Client Sample ID: OF-4
Date Collected: 12/15/12 11:49
Date Received: 12/17/12 12:40

Lab Sample ID: 250-8897-2
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 4.7 | | mg/L | | 12/20/12 08:23 | 12/20/12 08:23 | 1 |
| Total Suspended Solids | 200 | | 33 | | mg/L | | | 12/20/12 12:39 | 1 |

Client Sample ID: OF-5
Date Collected: 12/15/12 11:45
Date Received: 12/17/12 12:40

Lab Sample ID: 250-8897-3
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 4.8 | | mg/L | | 12/20/12 08:23 | 12/20/12 08:23 | 1 |
| Total Suspended Solids | 24 | | 10 | | mg/L | | | 12/20/12 12:39 | 1 |

Client Sample ID: OF-7
Date Collected: 12/15/12 11:30
Date Received: 12/17/12 12:40

Lab Sample ID: 250-8897-4
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 4.7 | | mg/L | | 12/20/12 08:23 | 12/20/12 08:23 | 1 |
| Total Suspended Solids | 17 | | 10 | | mg/L | | | 12/20/12 12:39 | 1 |

Client Sample ID: OF-A-PRE
Date Collected: 12/15/12 12:10
Date Received: 12/17/12 12:40

Lab Sample ID: 250-8897-5
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 360 | | 33 | | mg/L | | | 12/20/12 12:39 | 1 |

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 250-12745/1-A
Matrix: Water
Analysis Batch: 12786

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12745

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Copper | ND | | 0.0020 | | mg/L | | 12/18/12 08:30 | 12/18/12 18:02 | 1 |
| Lead | ND | | 0.0010 | | mg/L | | 12/18/12 08:30 | 12/18/12 18:02 | 1 |
| Zinc | ND | | 0.010 | | mg/L | | 12/18/12 08:30 | 12/18/12 18:02 | 1 |

Lab Sample ID: LCS 250-12745/2-A
Matrix: Water
Analysis Batch: 12786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 12745

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Copper | 0.100 | 0.0963 | | mg/L | | 96 | 85 - 115 |
| Lead | 0.100 | 0.0975 | | mg/L | | 97 | 85 - 115 |
| Zinc | 0.100 | 0.0953 | | mg/L | | 95 | 85 - 115 |

Lab Sample ID: 250-8896-A-1-B MS
Matrix: Water
Analysis Batch: 12786

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 12745

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Copper | 0.026 | | 0.100 | 0.122 | | mg/L | | 96 | 70 - 130 |
| Lead | ND | | 0.100 | 0.0949 | | mg/L | | 95 | 70 - 130 |
| Zinc | 0.026 | | 0.100 | 0.121 | | mg/L | | 95 | 70 - 130 |

Lab Sample ID: 250-8894-L-1-B DU
Matrix: Water
Analysis Batch: 12786

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 12745

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Copper | 0.012 | | 0.0114 | | mg/L | | 3 | 20 |
| Lead | 0.0015 | | 0.00145 | | mg/L | | 2 | 20 |
| Zinc | 0.068 | | 0.0664 | | mg/L | | 3 | 20 |

## Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 250-12835/1-A
Matrix: Water
Analysis Batch: 12856

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 12835

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 5.0 | | mg/L | | 12/20/12 08:23 | 12/20/12 08:23 | 1 |

Lab Sample ID: LCSD 250-12835/3-A
Matrix: Water
Analysis Batch: 12856

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 12835

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | 39.2 | 37.7 | | mg/L | | 96 | 78 - 114 | 7 | 18 |

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 250-12854/1
Matrix: Water
Analysis Batch: 12854

Client Sample ID: Method Blank
Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 10 | | mg/L | | | 12/20/12 12:39 | 1 |

Lab Sample ID: LCS 250-12854/2
Matrix: Water
Analysis Batch: 12854

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 60 3 | 62 0 | | mg/L | | 103 | 80 - 120 |

Lab Sample ID: 250-8895-E-1 DU
Matrix: Water
Analysis Batch: 12854

Client Sample ID: Duplicate
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 19 | | 19 0 | | mg/L | | 0 | 5 |

# Certification Summary

Client: Tuppan Consultants LLC
Project/Site: RSI-001-001

TestAmerica Job ID: 250-8897-1

## Laboratory: TestAmerica Portland

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska | State Program | 10 | OR00040 | 06-30-13 |
| Alaska (UST) | State Program | 10 | UST-012 | 12-26-12 |
| California | State Program | 9 | 2597 | 09-30-13 |
| *Oregon* | NELAP | 10 | OR100021 | 01-09-13 |
| USDA | Federal | | P330-11-00092 | 02-17-14 |
| Washington | State Program | 10 | C586 | 06-23-13 |

# Method Summary

Client: Tuppan Consultants LLC
Project/Site: RSI-001-001

TestAmerica Job ID: 250-8897-1

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 200.8 | Metals (ICP/MS) | EPA | TAL PRT |
| 1664A | HEM and SGT-HEM | 1664A | TAL PRT |
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL PRT |

**Protocol References:**

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater",

**Laboratory References:**

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

9405 SW Nimbus Ave
Beaverton, OR 97008-7145
503-906-9200 Fax 503-906-9210

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

| Client Contact | Project Manager: ERIC TUPPAN | Site Contact: | Date: | COC No: |
|---|---|---|---|---|
| Client Name: TUPPAN CONSULTANTS | Tel/Fax: | Lab Contact: | Carrier: | 1 of 1 COCs |
| Address: 460 SECOND STREET, Ste 103 | Analysis Turnaround Time | | | Job No. 8897 |
| City/State/Zip: LAKE OSWEGO, OR 97034 | Calendar (C) or Work Days (W) | | | |
| Phone: 503-675-1335 | TAT if different from Below | | | SDG No. |
| FAX | ☒ 2 weeks | | | |
| Project Name: RS1-001-001 | ☐ 1 week | | | |
| Site: MSS | ☐ 2 days | | | Sampler: ERIC TUPPAN |
| PO # N/A | ☐ 1 day | | | |

| Sample Identification | Sample Date | Sample Time | Sample Type | Matrix | # of Cont. | Oil/Grease | Cu, Pb, Zn | TSS | Sample Specific Notes: |
|---|---|---|---|---|---|---|---|---|---|
| OF-1 | 12/15/11 | 12:10 | GRAB | W | 3 | X | X | X | |
| OF-4 | | 11:49 | | W | 3 | X | X | X | |
| OF-5 | | 11:45 | | W | 3 | X | X | X | |
| OF-7 | | 11:30 | | W | 3 | X | X | X | |
| OF-A-PRE | ↓ | 12:10 | ↓ | W | 1 | | | X | |

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

*Possible Hazard Identification*
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

**Special Instructions/QC Requirements & Comments:**

1200-Z TESTING PARAMETERS - PH MEASURED IN FIELD

12/16/11 1.3Q

| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
|---|---|---|---|---|---|
| [signature] | TUPPAN CONSULTANTS | 12/16/11 1:35 | Tom Krouse | TAB | 12/17/11 1240 |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |

TAL-1002 0912

Form No. CA-C-WI-002, Rev. 3.1, dated 07/12/2012

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12/31/2012

# Login Sample Receipt Checklist

Client: Tuppan Consultants LLC

Job Number: 250-8897-1

**Login Number: 8897**
**List Number: 1**
**Creator: Krause, Thomas**

**List Source: TestAmerica Portland**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | |
| Sample custody seals, if present, are intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | N/A | |
| Samples do not require splitting or compositing. | N/A | |
| Residual Chlorine Checked. | N/A | |

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503)906-9200

TestAmerica Job ID: 250-10160-1
TestAmerica Sample Delivery Group: MSS
Client Project/Site: RSI

For:
Tuppan Consultants LLC
680 Iron Mountain Blvd
Lake Oswego, Oregon 97034

Attn: Mr. Eric J Tuppan

Vanessa Frahs

*Authorized for release by:*
*2/28/2013 3:59:42 PM*

Vanessa Frahs
Project Manager I
vanessa.frahs@testamericainc.com

# Table of Contents

# Sample Summary

Client: Tuppan Consultants LLC
Project/Site: RSI

TestAmerica Job ID: 250-10160-1
SDG: MSS

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 250-10160-1 | OF-1 | Water | 02/22/13 12:45 | 02/22/13 14:12 |
| 250-10160-2 | OF-4 | Water | 02/22/13 13:10 | 02/22/13 14:12 |
| 250-10160-3 | OF-5 | Water | 02/22/13 13:15 | 02/22/13 14:12 |
| 250-10160-4 | OF-7 | Water | 02/22/13 13:30 | 02/22/13 14:12 |

Job ID: 250-10160-1

Laboratory: TestAmerica Portland

**Narrative**

**Job Narrative**
**250-10160-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 2/22/2013 2:12 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 8.4° C.

Except:

The following sample(s) was received at the laboratory outside the required temperature criteria: OF-1 (250-10160-1), OF-4 (250-10160-2), OF-5 (250-10160-3), OF-7 (250-10160-4). The sample(s) is considered acceptable since it was collected and submitted to the laboratory on the same day and there is evidence that the chilling process has begun.

**Metals**
No analytical or quality issues were noted.

**General Chemistry**
No analytical or quality issues were noted.

**Organic Prep**
No analytical or quality issues were noted.

## Qualifiers

### Metals

| Qualifier | Qualifier Description |
|---|---|
| 4 | MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | *Minimum detectable concentration* |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | *Quality Control* |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

Method: 200.8 - Metals (ICP/MS)

Client Sample ID: OF-1
Date Collected: 02/22/13 12:45
Date Received: 02/22/13 14:12

Lab Sample ID: 250-10160-1
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | 0.0010 | | 0.0010 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:31 | 1 |
| Chromium | 0.017 | | 0.0020 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:31 | 1 |
| Copper | 0.048 | | 0.0020 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:31 | 1 |
| Lead | 0.097 | | 0.0010 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:31 | 1 |
| Nickel | 0.0089 | | 0.0020 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:31 | 1 |
| Zinc | 0.41 | | 0.010 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:31 | 1 |

Client Sample ID: OF-4
Date Collected: 02/22/13 13:10
Date Received: 02/22/13 14:12

Lab Sample ID: 250-10160-2
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.0010 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:38 | 1 |
| Chromium | 0.016 | | 0.0020 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:38 | 1 |
| Copper | 0.043 | | 0.0020 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:38 | 1 |
| Lead | 0.098 | | 0.0010 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:38 | 1 |
| Nickel | 0.0076 | | 0.0020 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:38 | 1 |
| Zinc | 0.39 | | 0.010 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:38 | 1 |

Client Sample ID: OF-5
Date Collected: 02/22/13 13:15
Date Received: 02/22/13 14:12

Lab Sample ID: 250-10160-3
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.0010 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:41 | 1 |
| Chromium | 0.010 | | 0.0020 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:41 | 1 |
| Copper | 0.021 | | 0.0020 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:41 | 1 |
| Lead | 0.045 | | 0.0010 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:41 | 1 |
| Nickel | 0.0038 | | 0.0020 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:41 | 1 |
| Zinc | 0.19 | | 0.010 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:41 | 1 |

Client Sample ID: OF-7
Date Collected: 02/22/13 13:30
Date Received: 02/22/13 14:12

Lab Sample ID: 250-10160-4
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.0010 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:44 | 1 |
| Chromium | 0.0063 | | 0.0020 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:44 | 1 |
| Copper | 0.021 | | 0.0020 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:44 | 1 |
| Lead | 0.025 | | 0.0010 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:44 | 1 |
| Nickel | 0.0051 | | 0.0020 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:44 | 1 |
| Zinc | 0.17 | | 0.010 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:44 | 1 |

## General Chemistry

**Client Sample ID: OF-1**
Date Collected: 02/22/13 12:45
Date Received: 02/22/13 14:12

Lab Sample ID: 250-10160-1
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 4.8 | | mg/L | | 02/27/13 11:38 | 02/27/13 11:38 | 1 |
| Total Suspended Solids | 230 | | 10 | | mg/L | | | 02/27/13 12:57 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 7.93 | | 0.100 | | SU | | | 02/22/13 19:40 | 1 |

**Client Sample ID: OF-4**
Date Collected: 02/22/13 13:10
Date Received: 02/22/13 14:12

Lab Sample ID: 250-10160-2
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 4.7 | | mg/L | | 02/27/13 11:38 | 02/27/13 11:38 | 1 |
| Total Suspended Solids | 160 | | 10 | | mg/L | | | 02/27/13 12:57 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 8.05 | | 0.100 | | SU | | | 02/22/13 19:40 | 1 |

**Client Sample ID: OF-5**
Date Collected: 02/22/13 13:15
Date Received: 02/22/13 14:12

Lab Sample ID: 250-10160-3
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 4.8 | | mg/L | | 02/27/13 11:38 | 02/27/13 11:38 | 1 |
| Total Suspended Solids | 79 | | 10 | | mg/L | | | 02/27/13 12:57 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 7.27 | | 0.100 | | SU | | | 02/22/13 19:40 | 1 |

**Client Sample ID: OF-7**
Date Collected: 02/22/13 13:30
Date Received: 02/22/13 14:12

Lab Sample ID: 250-10160-4
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 4.8 | | mg/L | | 02/27/13 11:38 | 02/27/13 11:38 | 1 |
| Total Suspended Solids | 92 | | 10 | | mg/L | | | 02/27/13 12:57 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| pH | 7.36 | | 0.100 | | SU | | | 02/22/13 19:40 | 1 |

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 250-14494/1-A
Matrix: Water
Analysis Batch: 14537

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14494

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.0010 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:14 | 1 |
| Chromium | ND | | 0.0020 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:14 | 1 |
| Copper | ND | | 0.0020 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:14 | 1 |
| Lead | ND | | 0.0010 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:14 | 1 |
| Nickel | ND | | 0.0020 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:14 | 1 |
| Zinc | ND | | 0.010 | | mg/L | | 02/25/13 09:09 | 02/26/13 01:14 | 1 |

Lab Sample ID: LCS 250-14494/2-A
Matrix: Water
Analysis Batch: 14537

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14494

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Cadmium | 0.100 | 0.0966 | | mg/L | | 97 | 85 - 115 |
| Chromium | 0.100 | 0.111 | | mg/L | | 111 | 85 - 115 |
| Copper | 0.100 | 0.109 | | mg/L | | 109 | 85 - 115 |
| Lead | 0.100 | 0.0981 | | mg/L | | 98 | 85 - 115 |
| Nickel | 0.100 | 0.109 | | mg/L | | 109 | 85 - 115 |
| Zinc | 0.100 | 0.106 | | mg/L | | 106 | 85 - 115 |

Lab Sample ID: 250-10160-1 MS
Matrix: Water
Analysis Batch: 14537

Client Sample ID: OF-1
Prep Type: Total/NA
Prep Batch: 14494

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | 0.0010 | | 0.100 | 0.0993 | | mg/L | | 98 | 70 - 130 |
| Chromium | 0.017 | | 0.100 | 0.126 | | mg/L | | 109 | 70 - 130 |
| Copper | 0.048 | | 0.100 | 0.152 | | mg/L | | 104 | 70 - 130 |
| Lead | 0.097 | | 0.100 | 0.199 | | mg/L | | 102 | 70 - 130 |
| Nickel | 0.0089 | | 0.100 | 0.115 | | mg/L | | 107 | 70 - 130 |
| Zinc | 0.41 | | 0.100 | 0.520 | 4 | mg/L | | 105 | 70 - 130 |

Lab Sample ID: 250-10164-J-1-C MS
Matrix: Water
Analysis Batch: 14537

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 14494

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.100 | 0.0963 | | mg/L | | 96 | 70 - 130 |
| Chromium | ND | | 0.100 | 0.108 | | mg/L | | 107 | 70 - 130 |
| Copper | 0.0055 | | 0.100 | 0.109 | | mg/L | | 103 | 70 - 130 |
| Lead | 0.0031 | | 0.100 | 0.101 | | mg/L | | 98 | 70 - 130 |
| Nickel | ND | | 0.100 | 0.106 | | mg/L | | 105 | 70 - 130 |
| Zinc | 0.028 | | 0.100 | 0.130 | | mg/L | | 102 | 70 - 130 |

Lab Sample ID: 250-10159-B-4-B DU
Matrix: Water
Analysis Batch: 14537

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 14494

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | ND | | mg/L | | NC | 20 |

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: 250-10159-B-4-B DU
Matrix: Water
Analysis Batch: 14537

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 14494

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Chromium | ND | | ND | | mg/L | | NC | 20 |
| Copper | 0.034 | | 0.0353 | | mg/L | | 3 | 20 |
| Lead | 0.0010 | | ND | | mg/L | | NC | 20 |
| Nickel | ND | | ND | | mg/L | | NC | 20 |
| Zinc | 0.20 | | 0.200 | | mg/L | | 0.4 | 20 |

## Method: 150.1 - pH (Electrometric)

Lab Sample ID: 250-10127-A-3 DU
Matrix: Water
Analysis Batch: 14468

Client Sample ID: Duplicate
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| pH | 5.36 | | 5.300 | | SU | | 1 | 20 |

## Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 250-14599/1-A
Matrix: Water
Analysis Batch: 14618

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 14599

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 5.0 | | mg/L | | 02/27/13 11:38 | 02/27/13 11:38 | 1 |

Lab Sample ID: LCS 250-14599/2-A
Matrix: Water
Analysis Batch: 14618

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 14599

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Oil & Grease | 39.7 | 35.5 | | mg/L | | 89 | 78 - 114 |

Lab Sample ID: LCSD 250-14599/3-A
Matrix: Water
Analysis Batch: 14618

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 14599

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | 39.7 | 36.7 | | mg/L | | 92 | 78 - 114 | 3 | 18 |

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 250-14603/1
Matrix: Water
Analysis Batch: 14603

Client Sample ID: Method Blank
Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 10 | | mg/L | | | 02/27/13 12:57 | 1 |

## Method: SM 2540D - Solids, Total Suspended (TSS) (Continued)

Lab Sample ID: LCS 250-14603/2
Matrix: Water
Analysis Batch: 14603

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

| Analyte | | | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | | | 60.1 | 64.0 | | mg/L | | 106 | 80 - 120 | | |

Lab Sample ID: 250-10161-H-1 DU
Matrix: Water
Analysis Batch: 14603

Client Sample ID: Duplicate
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | | DU Result | DU Qualifier | Unit | D | | | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 35 | | | 34.0 | | mg/L | | | | 3 | 5 |

# Certification Summary

Client: Tuppan Consultants LLC
Project/Site: RSI

TestAmerica Job ID: 250-10160-1
SDG: MSS

## Laboratory: TestAmerica Portland

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska | State Program | 10 | OR00040 | 06-30-13 |
| Alaska (UST) | State Program | 10 | UST-012 | 12-26-13 |
| California | State Program | 9 | 2597 | 09-30-13 |
| Oregon | NELAP | 10 | OR100021 | 01-09-14 |
| USDA | Federal | | P330-11-00092 | 02-17-14 |
| Washington | State Program | 10 | C586 | 06-23-13 |

# Method Summary

Client: Tuppan Consultants LLC
Project/Site: RSI

TestAmerica Job ID: 250-10160-1
SDG: MSS

| Method | Method Description | Protocol | Laboratory |
|---|---|---|---|
| 200.8 | Metals (ICP/MS) | EPA | TAL PRT |
| 150.1 | pH (Electrometric) | MCAWW | TAL PRT |
| 1664A | HEM and SGT-HEM | 1664A | TAL PRT |
| SM 2540D | Solids, Total Suspended (TSS) | SM | TAL PRT |

**Protocol References:**

1664A = EPA-821-98-002

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SM = "Standard Methods For The Examination Of Water And Wastewater",

**Laboratory References:**

TAL PRT = TestAmerica Portland, 9405 SW Nimbus Ave., Beaverton, OR 97008, TEL (503)906-9200

9405 SW Nimbus Ave
Beaverton, OR 97008-7145
503-906-9200 Fax 503-906-9210

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

| Client Contact | Project Manager: ERIC TUPPAN | Site Contact: | Date: | COC No: |
|---|---|---|---|---|
| Client Name: TUPPAN CONSULTANTS | Tel/Fax: | Lab Contact: | Carrier: | 1 of 1 COCs |
| Address: 460 SECOND ST, STE 103 | Analysis Turnaround Time | | | Job No.: 10160 |
| City/State/Zip: LAKE OSWEGO, OR 97034 | Calendar (C) or Work Days (W) _____ | | | SDG No.: |
| Phone: 503-675-1335 | TAT if different from Below _____ | | | |
| FAX | ☐ 2 weeks | | | Sampler: |
| Project Name: RSI | ☐ 1 week | | | |
| Site: MSF | ☐ 2 days | | | Sample Specific Notes: |
| PO#: N/A | ☐ 1 day | | | |

| Sample Identification | Sample Date | Sample Time | Sample Type | Matrix | # of Cont. | OIL & GREASE | TSS | COPPER, Cd, Cr, Ni | PH |
|---|---|---|---|---|---|---|---|---|---|
| OF-1 | 2/22/13 | 12:45 | GRAB | W | 3 | | | | |
| OF-4 | ↓ | 13:10 | ↓ | ↓ | ↓ | | | | |
| OF-5 | | 13:15 | | | | | | | |
| OF-7 | | 13:30 | | | | | | | |

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

2 - 4

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

1200.2 TESTING PARAMETERS — ~~PH MEASURED IN FIELD~~ 8.4 IR/P-L 1412

| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
|---|---|---|---|---|---|
| | TUPPAN CONSULTANTS | 2/22/13 | | TAT | 2/22/13 @ 1312 |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |
| Relinquished by: | Company: | Date/Time: | Received by: | Company: | Date/Time: |

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2/28/2013

TAL-1002 0912

Form No. CA-C-WI-002, Rev. 3.1, dated 07/12/2012

# Login Sample Receipt Checklist

Client: Tuppan Consultants LLC

Job Number: 250-10160-1
SDG Number: MSS

List Source: TestAmerica Portland

**Login Number: 10160**
**List Number: 1**
**Creator: Svabik-Seror, Philip**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | |
| Sample custody seals, if present, are intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | False | Received same day of collection; chilling process has begun. |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | N/A | |
| Samples do not require splitting or compositing. | N/A | |
| Residual Chlorine Checked. | N/A | |

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503)906-9200

TestAmerica Job ID: 250-11056-1
Client Project/Site: RSI-001-001

For:
Tuppan Consultants LLC
680 Iron Mountain Blvd
Lake Oswego, Oregon 97034

Attn: Mr. Eric J Tuppan

*Authorized for release by:*
*4/16/2013 3:44:49 PM*
Erica Fot
Project Mgmt. Assistant
erica.fot@testamericainc.com

Designee for

Vanessa Frahs
Project Manager I
vanessa.frahs@testamericainc.com

# Table of Contents

# Sample Summary

Client: Tuppan Consultants LLC
Project/Site: RSI-001-001

TestAmerica Job ID: 250-11056-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 250-11056-1 | OF-1 | Water | 04/05/13 17:38 | 04/08/13 09:50 |
| 250-11056-2 | OF-4 | Water | 04/05/13 17:56 | 04/08/13 09:50 |
| 250-11056-3 | OF-5 | Water | 04/05/13 18:04 | 04/08/13 09:50 |
| 250-11056-4 | OF-7 | Water | 04/05/13 18:16 | 04/08/13 09:50 |

Job ID: 250-11056-1

Laboratory: TestAmerica Portland

**Narrative**

**Job Narrative**
**250-11056-1**

**Comments**
No additional comments.

**Receipt**
The samples were received on 4/8/2013 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9° C.

Except:

No sample times listed on COC. Sample times logged in per sample containers. OF-1 (250-11056-1), OF-4 (250-11056-2), OF-5 (250-11056-3), OF-7 (250-11056-4)

**Metals**
Methods 200.8, 6020: The method blank for preparation batch 250-15676 contained Cu above the reporting limit (RL). The associated samples contained detects for this analyte at concentrations greater than 10X the value found in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.OF-1 (250-11056-1),OF-4 (250-11056-2),OF-5 (250-11056-3)

No other analytical or quality issues were noted.

**General Chemistry**
No analytical or quality issues were noted.

**Organic Prep**
Method 1664A: The MS/MSD spike recoveries were below acceptance limits due to matrix interference. The batch LCS was within acceptable limits, therefore data will be reported. (250-11099-1 MS), (250-11099-1 MSD)

No other analytical or quality issues were noted.

**Lab Admin**
No analytical or quality issues were noted.

**Subcontract Work**
Method Particle Size distribution - ASTM F-312: This method was subcontracted to Chemoptix Microanalysis,LLC. The subcontract certification is different from those listed on the TestAmerica cover page of this final report.

## Qualifiers

### Metals

| Qualifier | Qualifier Description |
|---|---|
| B | Compound was found in the blank and sample |

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| F | MS or MSD exceeds the control limits |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ¤ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

Method: 200.8 - Metals (ICP/MS)

Client Sample ID: OF-1
Date Collected: 04/05/13 17:38
Date Received: 04/08/13 09:50

Lab Sample ID: 250-11056-1
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.0010 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:26 | 1 |
| Chromium | 0.0094 | | 0.0020 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:26 | 1 |
| Copper | 0.029 | B | 0.0020 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:26 | 1 |
| Lead | 0.051 | | 0.0010 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:26 | 1 |
| Nickel | 0.0068 | | 0.0020 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:26 | 1 |
| Zinc | 0.28 | | 0.010 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:26 | 1 |

Client Sample ID: OF-4
Date Collected: 04/05/13 17:56
Date Received: 04/08/13 09:50

Lab Sample ID: 250-11056-2
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.0010 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:36 | 1 |
| Chromium | 0.0087 | | 0.0020 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:36 | 1 |
| Copper | 0.028 | B | 0.0020 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:36 | 1 |
| Lead | 0.055 | | 0.0010 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:36 | 1 |
| Nickel | 0.0059 | | 0.0020 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:36 | 1 |
| Zinc | 0.28 | | 0.010 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:36 | 1 |

Client Sample ID: OF-5
Date Collected: 04/05/13 18:04
Date Received: 04/08/13 09:50

Lab Sample ID: 250-11056-3
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.0010 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:44 | 1 |
| Chromium | 0.012 | | 0.0020 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:44 | 1 |
| Copper | 0.026 | B | 0.0020 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:44 | 1 |
| Lead | 0.058 | | 0.0010 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:44 | 1 |
| Nickel | 0.0046 | | 0.0020 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:44 | 1 |
| Zinc | 0.22 | | 0.010 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:44 | 1 |

Client Sample ID: OF-7
Date Collected: 04/05/13 18:16
Date Received: 04/08/13 09:50

Lab Sample ID: 250-11056-4
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.0010 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:48 | 1 |
| Chromium | ND | | 0.0020 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:48 | 1 |
| Copper | 0.013 | | 0.0020 | | mg/L | | 04/10/13 09:08 | 04/10/13 19:59 | 1 |
| Lead | 0.0042 | | 0.0010 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:48 | 1 |
| Nickel | 0.0020 | | 0.0020 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:48 | 1 |
| Zinc | 0.054 | | 0.010 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:48 | 1 |

## General Chemistry

Client Sample ID: OF-1
Date Collected: 04/05/13 17:38
Date Received: 04/08/13 09:50

Lab Sample ID: 250-11056-1
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | 12 | | 4.7 | | mg/L | | 04/11/13 11:04 | 04/11/13 11:04 | 1 |
| Total Suspended Solids | 170 | | 17 | | mg/L | | | 04/11/13 13:56 | 1 |

Client Sample ID: OF-4
Date Collected: 04/05/13 17:56
Date Received: 04/08/13 09:50

Lab Sample ID: 250-11056-2
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | 4.9 | | 4.8 | | mg/L | | 04/11/13 11:04 | 04/11/13 11:04 | 1 |
| Total Suspended Solids | 96 | | 10 | | mg/L | | | 04/11/13 13:56 | 1 |

Client Sample ID: OF-5
Date Collected: 04/05/13 18:04
Date Received: 04/08/13 09:50

Lab Sample ID: 250-11056-3
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 4.7 | | mg/L | | 04/11/13 11:04 | 04/11/13 11:04 | 1 |
| Total Suspended Solids | 90 | | 11 | | mg/L | | | 04/11/13 13:56 | 1 |

Client Sample ID: OF-7
Date Collected: 04/05/13 18:16
Date Received: 04/08/13 09:50

Lab Sample ID: 250-11056-4
Matrix: Water

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 4.8 | | mg/L | | 04/11/13 11:04 | 04/11/13 11:04 | 1 |
| Total Suspended Solids | 51 | | 10 | | mg/L | | | 04/11/13 13:56 | 1 |

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 250-15676/1-A
Matrix: Water
Analysis Batch: 15714

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15676

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.0010 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:16 | 1 |
| Chromium | ND | | 0.0020 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:16 | 1 |
| Copper | 0.00225 | | 0.0020 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:16 | 1 |
| Lead | ND | | 0.0010 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:16 | 1 |
| Nickel | ND | | 0.0020 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:16 | 1 |
| Zinc | ND | | 0.010 | | mg/L | | 04/09/13 09:00 | 04/09/13 16:16 | 1 |

Lab Sample ID: LCS 250-15676/2-A
Matrix: Water
Analysis Batch: 15714

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 15676

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Cadmium | 0.100 | 0.0973 | | mg/L | | 97 | 85 - 115 |
| Chromium | 0.100 | 0.0979 | | mg/L | | 98 | 85 - 115 |
| Copper | 0.100 | 0.0977 | | mg/L | | 98 | 85 - 115 |
| Lead | 0.100 | 0.0961 | | mg/L | | 96 | 85 - 115 |
| Nickel | 0.100 | 0.0960 | | mg/L | | 96 | 85 - 115 |
| Zinc | 0.100 | 0.0960 | | mg/L | | 96 | 85 - 115 |

Lab Sample ID: 250-11077-A-2-B MS
Matrix: Water
Analysis Batch: 15714

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 15676

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | 0.100 | 0.0998 | | mg/L | | 100 | 70 - 130 |
| Chromium | ND | | 0.100 | 0.101 | | mg/L | | 101 | 70 - 130 |
| Copper | ND | | 0.100 | 0.100 | | mg/L | | 100 | 70 - 130 |
| Lead | ND | | 0.100 | 0.0947 | | mg/L | | 95 | 70 - 130 |
| Nickel | ND | | 0.100 | 0.0968 | | mg/L | | 96 | 70 - 130 |
| Zinc | ND | | 0.100 | 0.0995 | | mg/L | | 100 | 70 - 130 |

Lab Sample ID: 250-11056-1 DU
Matrix: Water
Analysis Batch: 15714

Client Sample ID: OF-1
Prep Type: Total/NA
Prep Batch: 15676

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Cadmium | ND | | ND | | mg/L | | NC | 20 |
| Chromium | 0.0094 | | 0.00914 | | mg/L | | 2 | 20 |
| Copper | 0.029 | B | 0.0273 | | mg/L | | 7 | 20 |
| Lead | 0.051 | | 0.0508 | | mg/L | | 0.8 | 20 |
| Nickel | 0.0068 | | 0.00688 | | mg/L | | 0.7 | 20 |
| Zinc | 0.28 | | 0.283 | | mg/L | | 0.2 | 20 |

Lab Sample ID: MB 250-15718/1-A
Matrix: Water
Analysis Batch: 15755

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15718

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Copper | ND | | 0.0020 | | mg/L | | 04/10/13 09:08 | 04/10/13 18:44 | 1 |

## Method: 200.8 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 250-15718/2-A
Matrix: Water
Analysis Batch: 15755

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 15718

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Copper | 0.100 | 0.109 | | mg/L | | 109 | 85 - 115 |

Lab Sample ID: 250-11090-C-1-B MS
Matrix: Water
Analysis Batch: 15755

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 15718

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Copper | 0.049 | | 0.100 | 0.149 | | mg/L | | 100 | 70 - 130 |

Lab Sample ID: 250-11097-D-1-B DU
Matrix: Water
Analysis Batch: 15755

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 15718

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Copper | 0.0066 | | 0.00660 | | mg/L | | 0.8 | 20 |

## Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 250-15772/1-A
Matrix: Water
Analysis Batch: 15789

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15772

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 5.0 | | mg/L | | 04/11/13 11:04 | 04/11/13 11:04 | 1 |

Lab Sample ID: LCS 250-15772/2-A
Matrix: Water
Analysis Batch: 15789

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 15772

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Oil & Grease | 39.7 | 37.6 | | mg/L | | 95 | 78 - 114 |

Lab Sample ID: 250-11099-B-1-A MS
Matrix: Water
Analysis Batch: 15789

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 15772

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 38.3 | 21.5 | F | mg/L | | 56 | 78 - 114 |

Lab Sample ID: 250-11099-C-1-A MSD
Matrix: Water
Analysis Batch: 15789

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 15772

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 42.2 | 23.9 | F | mg/L | | 57 | 78 - 114 | 11 | 18 |

## Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 250-15786/1
Matrix: Water
Analysis Batch: 15786

Client Sample ID: Method Blank
Prep Type: Total/NA

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 10 | | mg/L | | | 04/11/13 13:56 | 1 |

Lab Sample ID: LCS 250-15786/2
Matrix: Water
Analysis Batch: 15786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 60.3 | 56.0 | | mg/L | | 93 | 80 - 120 |

Lab Sample ID: 250-11090-B-1 DU
Matrix: Water
Analysis Batch: 15786

Client Sample ID: Duplicate
Prep Type: Total/NA

| Analyte | Sample Result | Sample Qualifier | DU Result | DU Qualifier | Unit | D | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 45 | | 44.0 | | mg/L | | 2 | 5 |

MICROANALYSIS, LLC.

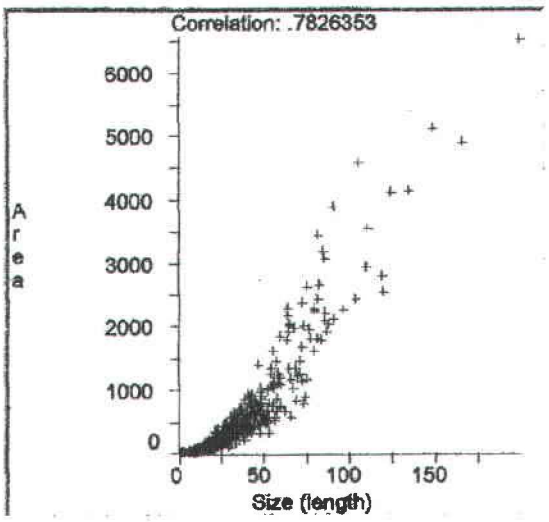
# PARTICLE SIZE DISTRIBUTION

**Analyst:** Stan Cassell
**Chemoptix ID#:** G-PSD-21225; OF-1(250-11056-1)
**Client:** Test America
**Project Manager:** Vanessa Frahs

**Date Sampled:** 4/5/13
**Date Analyzed:** 4/11/13
**Matrix:** fluid suspension
**Volume Filtered:** 12 mL

A particle size distribution has been completed on this sample.
The particles have been sized using a Zeiss Universal research microscope equipped with NIST traceable calibrated optics. Image capture is done using a SPOT RT CCD-chip digital camera with image anaylsis by Image Pro Plus.

| SIZE RANGE | PER CENT AREA |
|---|---|
| 1-2um | 0.93% |
| 2-5um | 3.37% |
| 5-15um | 12.5% |
| 15-25um | 12.2% |
| 25-50um | 26.2% |
| 50-100um | 32.3% |
| >100um | 12.6% |






CHEMOPTIX MICROANALYSIS, LLC.
2767 ROBINWOOD WAY-SUITE B-WEST LINN, OR. 97068
PHONE/FAX: 503.636.8251
WWW.CHEMOPTIX.COM

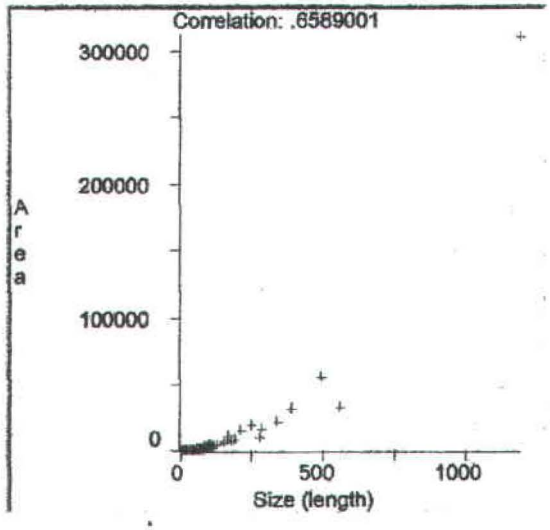
# PARTICLE SIZE DISTRIBUTION

**Analyst:** Stan Cassell
**Chemoptix ID#:** G-PSD-21226; OF-4(250-11056-2)
**Client:** Test America
**Project Manager:** Vanessa Frahs

**Date Sampled:** 4/5/13
**Date Analyzed:** 4/11/13
**Matrix:** fluid suspension
**Volume Filtered:** 12 mL

A particle size distribution has been completed on this sample.
The particles have been sized using a Zeiss Universal research microscope equipped with NIST traceable calibrated optics. Image capture is done using a SPOT RT CCD-chip digital camera with image anaylsis by Image Pro Plus.

| SIZE RANGE | PER CENT AREA |
|---|---|
| 1-2um | 0.72% |
| 2-5um | 1.74% |
| 5-15um | 4.83% |
| 15-25um | 3.63% |
| 25-50um | 4.15% |
| 50-100um | 8.35% |
| >100um | 76.6% |



# RELATIVE
# PARTICLE SIZE DISTRIBUTION

| Class | % Objects | % Area | Mean Area | Std.dev. Area | Max Area | % Size (length) | Mean Size (length) | Std.dev. Size (length) | Max Size (length) | (Range of... | Size (length)) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 29.847403 | .71896690 | 2.6494217 | 1.1214116 | 8.4209213 | 6.9967685 | 1.1905177 | .40754440 | 1.9346924 | .80000001 | 2 |
| 2 | 24.919602 | 1.7484103 | 7.7170753 | 3.4956913 | 23.391447 | 16.073196 | 3.2757280 | .85770077 | 4.9890137 | 2 | 5 |
| 3 | 17.191658 | 4.8318577 | 30.913284 | 19.318224 | 136.60605 | 28.448751 | 8.4040833 | 2.6791868 | 14.998291 | 5 | 15 |
| 4 | 3.3599329 | 3.6274662 | 118.74869 | 50.378799 | 356.48566 | 12.731016 | 19.243202 | 2.9353740 | 24.958496 | 15 | 25 |
| 5 | 1.5399692 | 4.1525488 | 296.56855 | 141.44035 | 664.64791 | 10.026362 | 33.072152 | 5.8450661 | 46.373413 | 25 | 50 |
| 6 | .64398712 | 8.3473759 | 1425.6782 | 887.92102 | 3795.9641 | 8.6789303 | 68.443784 | 13.768149 | 95.921753 | 50 | 100 |
| 7 | .34999299 | 76.573372 | 24063.961 | 59456.289 | 309364.06 | 17.042973 | 247.30385 | 226.17084 | 1188.6338 | 100 | 10000 |

Particle analysis performed at 100x magnification.
*All dimensions are in micrometers (um).

**Comments:**

G-PSD-21226; OF-4 (250-11056-02) (continued):

A heterogeneous particle assemblage. Larger particles were predominantly very soft, poorly-consolidated rolling pin-shaped amalgamates that deformed under 10cm Hg (100 torr) vacuum. These amalgamates incorporated many of the particle types seen elsewhere in the assemblage.

NOTE: 1-2 um particles are more stringently resolved when bracketed for the CCD chip analysis software as 0.8-2 um.

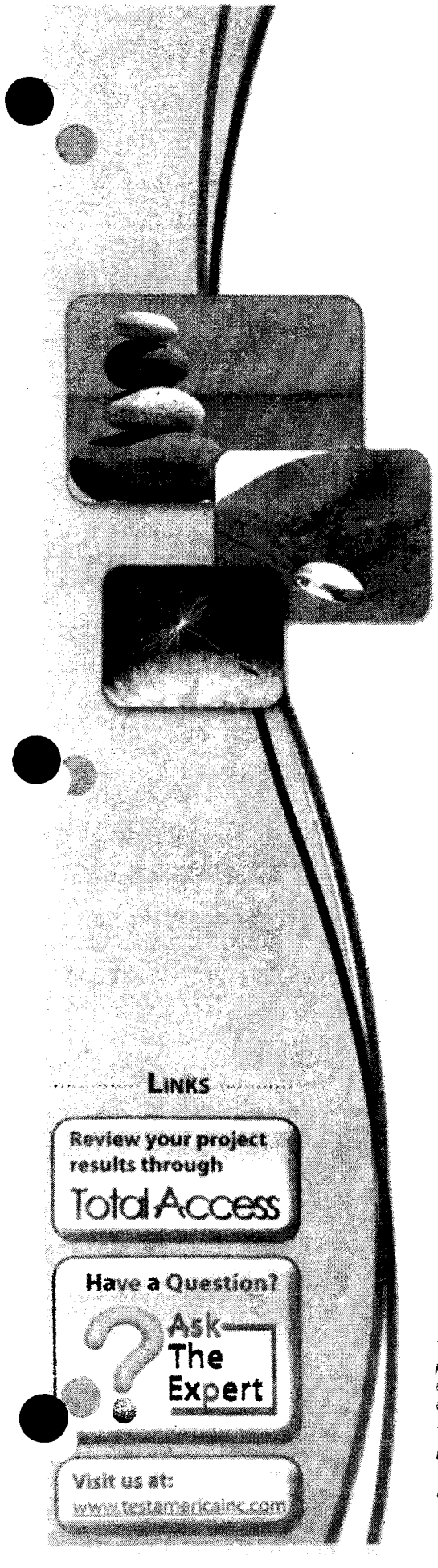
Thank you for your patience during the completion of this project. If you have any questions, feel free to call me at (503)636-9251

Respectfully Submitted,

Stan Cassell
Microanalyst
Chemoptix Microanalysis, LLC
2767 Robinwood Way, Suite G
West Linn, OR 97068-1332
503.636.9251
www.chemoptix.com

## Appendix D

- Exhibit 1 – 2012 Q2 WW
- Exhibit 2 – 2012 Q3 WW
- Exhibit 3 – 2012 Q4 WW
- Exhibit 4 – 2013 Q1 WW




TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503)906-9200

TestAmerica Job ID: 250-1938-1
Client Project/Site: Industrial Wastewater Discharge Permit

For:
Republic Services Inc
unknown
Oregon City, Oregon 97045

Attn: Matthew Cofer

Brian L Cone

*Authorized for release by:*
*5/2/2012 9:32:30 PM*

Brian Cone
Project Manager I
brian.cone@testamericainc.com

# Table of Contents

# Sample Summary

Client: Republic Services Inc
Project/Site: Industrial Wastewater Discharge Permit

TestAmerica Job ID: 250-1938-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 250-1938-1 | Point of Compliance-Grab | Water | 04/18/12 11:45 | 04/18/12 14:30 |
| 250-1938-2 | Point of Compliance-Comp | Water | 04/18/12 11:50 | 04/18/12 14:30 |

# Definitions/Glossary

Client: Republic Services Inc
Project/Site: Industrial Wastewater Discharge Permit

TestAmerica Job ID: 250-1938-1

## Qualifiers

### General Chemistry

| Qualifier | Qualifier Description |
|---|---|
| * | LCS or LCSD exceeds the control limits |
| F | MS or MSD exceeds the control limits |
| F | RPD of the MS and MSD exceeds the control limits |
| b | Result Detected in the USB |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ☼ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| EDL | Estimated Detection Limit |
| EPA | United States Environmental Protection Agency |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RL | Reporting Limit |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

## Client Sample ID: Point of Compliance-Grab

**Lab Sample ID: 250-1938-1**
**Matrix: Water**
**Date Collected: 04/18/12 11:45**
**Date Received: 04/18/12 14:30**

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | 5.9 | | 4.9 | | mg/L | | 04/23/12 08:41 | 04/23/12 08:41 | 1 |
| SGT-HEM (Oil and Grease - Nonpolar) | ND | * | 4.9 | | mg/L | | 04/23/12 08:41 | 04/23/12 08:41 | 1 |
| HEM Polar (Oil and Grease - Polar) | 5.9 | | 4.9 | | mg/L | | 04/23/12 08:41 | 04/23/12 08:41 | 1 |

### Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Field pH by SM4500-H B | 6.75 | | | | SU | | | 04/18/12 11:45 | 1 |

## Client Sample ID: Point of Compliance-Comp

**Lab Sample ID: 250-1938-2**
**Matrix: Water**
**Date Collected: 04/18/12 11:50**
**Date Received: 04/18/12 14:30**

### Method: 200.8 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Copper | 0.013 | | 0.0020 | | mg/L | | 04/20/12 10:05 | 04/23/12 01:18 | 1 |
| Lead | 0.0085 | | 0.0010 | | mg/L | | 04/20/12 10:05 | 04/23/12 01:18 | 1 |
| Zinc | 0.12 | | 0.010 | | mg/L | | 04/20/12 10:05 | 04/23/12 01:18 | 1 |

### Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.00020 | | mg/L | | 04/23/12 14:01 | 04/23/12 22:25 | 1 |

### General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 66 | | 15 | | mg/L | | | 04/24/12 18:27 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Biochemical Oxygen Demand | 130 | b | 2.0 | | mg/L | | | 04/19/12 12:43 | 1 |

## Method: 200.8 - Metals (ICP/MS)

**Lab Sample ID: MB 250-3944/1-A**
**Matrix: Water**
**Analysis Batch: 4010**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 3944**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Copper | ND | | 0.0020 | | mg/L | | 04/20/12 10:05 | 04/23/12 00:51 | 1 |
| Lead | ND | | 0.0010 | | mg/L | | 04/20/12 10:05 | 04/23/12 00:51 | 1 |
| Zinc | ND | | 0.010 | | mg/L | | 04/20/12 10:05 | 04/23/12 00:51 | 1 |

**Lab Sample ID: LCS 250-3944/2-A**
**Matrix: Water**
**Analysis Batch: 4010**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 3944**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Copper | 0.100 | 0.102 | | mg/L | | 102 | 85 - 115 |
| Lead | 0.100 | 0.100 | | mg/L | | 100 | 85 - 115 |
| Zinc | 0.100 | 0.102 | | mg/L | | 102 | 85 - 115 |

## Method: 245.1 - Mercury (CVAA)

**Lab Sample ID: MB 250-4060/11-A**
**Matrix: Water**
**Analysis Batch: 4086**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 4060**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.00020 | | mg/L | | 04/23/12 14:01 | 04/23/12 21:53 | 1 |

**Lab Sample ID: LCS 250-4060/12-A**
**Matrix: Water**
**Analysis Batch: 4086**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 4060**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 0.00500 | 0.00504 | | mg/L | | 101 | 85 - 115 |

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 250-4013/1-A**
**Matrix: Water**
**Analysis Batch: 4046**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 4013**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 5.0 | | mg/L | | 04/23/12 08:41 | 04/23/12 08:41 | 1 |
| SGT-HEM (Oil and Grease - Nonpolar) | ND | | 5.0 | | mg/L | | 04/23/12 08:41 | 04/23/12 08:41 | 1 |
| HEM Polar (Oil and Grease - Polar) | ND | | 5.0 | | mg/L | | 04/23/12 08:41 | 04/23/12 08:41 | 1 |

**Lab Sample ID: LCS 250-4013/2-A**
**Matrix: Water**
**Analysis Batch: 4046**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 4013**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Oil & Grease | 39.3 | 32.9 | | mg/L | | 84 | 78 - 114 |
| SGT-HEM (Oil and Grease - Nonpolar) | 19.3 | 11.5 | * | mg/L | | 60 | 64 - 132 |

## Method: 1664A - HEM and SGT-HEM (Continued)

**Lab Sample ID: 250-1938-1 MS**
**Matrix: Water**
**Analysis Batch: 4046**

**Client Sample ID: Point of Compliance-Grab**
**Prep Type: Total/NA**
**Prep Batch: 4013**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | 5.9 | | 37.8 | 7.12 | F | mg/L | | 3 | 78 - 114 |
| SGT-HEM (Oil and Grease - Nonpolar) | ND | * | 18.5 | ND | F | mg/L | | 0 | 64 - 132 |

**Lab Sample ID: 250-1938-1 MSD**
**Matrix: Water**
**Analysis Batch: 4046**

**Client Sample ID: Point of Compliance-Grab**
**Prep Type: Total/NA**
**Prep Batch: 4013**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | 5.9 | | 37.8 | 32.6 | F | mg/L | | 71 | 78 - 114 | 128 | 18 |
| SGT-HEM (Oil and Grease - Nonpolar) | ND | * | 18.5 | 9.33 | F | mg/L | | 50 | 64 - 132 | NC | 34 |

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 250-4132/1**
**Matrix: Water**
**Analysis Batch: 4132**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 10 | | mg/L | | | 04/24/12 18:27 | 1 |

**Lab Sample ID: LCS 250-4132/2**
**Matrix: Water**
**Analysis Batch: 4132**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 60.3 | 60.0 | | mg/L | | 100 | 80 - 120 |

## Method: SM5210B - BOD, 5 Day

**Lab Sample ID: USB 250-3905/1 USB**
**Matrix: Water**
**Analysis Batch: 3905**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | USB Result | USB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Biochemical Oxygen Demand | ND | | 2.0 | | mg/L | | | 04/19/12 12:43 | 1 |

**Lab Sample ID: LCS 250-3905/2**
**Matrix: Water**
**Analysis Batch: 3905**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Biochemical Oxygen Demand | 198 | 189 | | mg/L | | 95 | 85 - 115 |

# Certification Summary

Client: Republic Services Inc
Project/Site: Industrial Wastewater Discharge Permit

TestAmerica Job ID: 250-1938-1

| Laboratory | Authority | Program | EPA Region | Certification ID |
|---|---|---|---|---|
| TestAmerica Portland | Alaska | State Program | 10 | OR00040 |
| TestAmerica Portland | Alaska (UST) | State Program | 10 | UST-012 |
| TestAmerica Portland | California | State Program | 9 | 2597 |
| TestAmerica Portland | Oregon | NELAC | 10 | OR100021 |
| TestAmerica Portland | USDA | Federal | | P330-11-00092 |
| TestAmerica Portland | Washington | State Program | 10 | C586 |

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

**TestAmerica Portland**
9405 SW Nimbus Avenue

Beaverton, OR 97008
Phone 503.906.9200 fax 503.906.9210

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

**TestAmerica Laboratories, Inc.**

5/2/2012

| Client Contact | Analysis Turnaround Time | Work Order # |
|---|---|---|
| Republic Services-Metro South | 10 Day | 250-1938 |
| 2001 Washington St | | |
| Oregon City, OR 97045 | | |
| 503-722-4656 Phone | | |
| XXX-XXX-XXXX FAX | | |
| Client PM: Matthew Cofer | | |
| Project Name: Industrial Wastewater Discharge Permit | | |
| Laboratory PM: Brian Cone | | |

| Sample Identification | Sample Date | Sample Time | Preservation Code | Matrix | # of Cont. | Field Filt. | FT-pH Grab: 6.75 | O&G 1664 P/NP | Cu, Hg, Zn, Pb Total ICPMS 200.8 | Solids, TSS-SM 2540D | BOD-SM 5210B | Sampling Event-Comp | Sample Specific Notes: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Point of Compliance-Grab | 4/18/12 | 1145 | 1, 2 | Water | 3 | | X | X | | | | | |
| Point of Compliance-Comp | 4/18/12 | 1150 | 1, 4 | Water | 3 | | | | X | X | X | X | |

**Preservation Used:** 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

**Special Instructions/QC Requirements & Comments:** SOP NO. PR-SC-216, Rev 2

| Received by: | Company: | Date/Time: | IN LAB: | Company: | Date/Time: |
|---|---|---|---|---|---|
| Lawrence Spangler | Test America Portland | 04/18/12 1150 | | Test America Portland | 04/18/12 1430 |
| Sampled By: Lawrence Spangler | | | | | Temperature Upon Receipt: 4.4c |

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

**Sampling Documentation Form**

**Client**: Republic Services-Metro South
Site: Oregon City/Point of Compliance
Project: Industrial Wastewater Discharge Permit

Sampler: Lawrence Spangler
Date: 04-17-12 04-18-12
Time: 1105 1140

**Sample Matrix**: Water

**Sampling Method**: Comp-Time Grab

**Composite Sampling Equipment**:
ISCO #: 4 Comp Samples/day: 48 Start time: 1110 Stop time: 0940
Sampler calibration: 100ml

**Grab Sampling Equipment**: Dipper TAP-DIP 2
Wastewater Grab Time: 1145

**Field Data**: SOP NO. PR-SC-216, Rev 2
pH Meter: Orion 4 Star SN: A12494
pH: 6.96 6.75 Time Taken: 1145
pH calibration-7.00 buffer reading: 6.99
Acceptable Range: 6.95-7.05
pH calibration slope: 101.3%
Acceptable Range: 97-103%
pH 4 Buffer: PV00087
pH 7 Buffer: PV00086
pH 10 Buffer: PV00429

**Field Conditions**:
Weather: □ Sunny □ Partly cloudy ☒ Cloudy □ Snowing □ Indoors
Rainfall: □ Heavy □ Continuous □ Intermittent □ Light ☒ None

**Sample Characteristics**:
Color: _____ Odor: _____ TSS: _____
Sediment: _____ Foam: _____ Clear: _____

**Observations and Comments**:

# Field Sampling Container Lot Number Log Sheet

Date: 04/18/12
Client: Republic Services-Metro South
Project: Industrial Wastewater Discharge Permit

**Water Samples:**

| Container | 1 Liter | 500mL | 250mL | VOA | 100 mL | TA Lot # |
|---|---|---|---|---|---|---|
| Plastic / None | 1 | | 1 | | | K047, K049 |
| Plastic / HNO3 | | | 1 | | | L001 |
| Plastic / H2SO4 | | | | | | |
| Plastic / NaOH | | | | | | |
| Plastic / NaOH & Zn Acetate | | | | | | |
| Glass / None | | | | | | |
| Glass / HCl | 3 | | | | | L005 |
| Glass / H2SO4 | | | | | | |
| Bacti Bottle | | | | | | |
| Low Level Hg | | | | | | |

**Soil Samples:**

| Container | 32oz | 16oz | 8oz | 4oz | 2oz | TA Lot # |
|---|---|---|---|---|---|---|
| Teflon Lid | | | | | | |
| Septa Lid | | | | | | |
| Septa w/ MeOH (VOC) | | | | | | |
| Hexane Wipe (PCB) | | | | | | |
| DI Wipe (Metals & Hg) | | | | | | |

Comments: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503)906-9200

TestAmerica Job ID: 250-5098-1
Client Project/Site: Wastewater 7/20/12

For:
Republic Services Inc
unknown
Oregon City, Oregon 97045

Attn: Matthew Cofer

Brian L Cone

*Authorized for release by:*
*8/2/2012 1:37:37 PM*

Brian Cone
Project Manager I
brian.cone@testamericainc.com

# Table of Contents

# Sample Summary

Client: Republic Services Inc
Project/Site: Wastewater 7/20/12

TestAmerica Job ID: 250-5098-1

3

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 250-5098-1 | Point of Compliance-Grab | Water | 07/20/12 08:05 | 07/20/12 12:25 |
| 250-5098-2 | Point of Compliance-Comp | Water | 07/20/12 08:10 | 07/20/12 12:25 |

4

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| D | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional initial metals/anion analysis of the sample |
| EDL | Estimated Detection Limit |
| EPA | United States Environmental Protection Agency |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RL | Reporting Limit |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

**Client Sample ID: Point of Compliance-Grab** — **Lab Sample ID: 250-5098-1**
Date Collected: 07/20/12 08:05 — Matrix: Water
Date Received: 07/20/12 12:25

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**General Chemistry**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | 8.8 | | 4.8 | | mg/L | | 07/26/12 08:35 | 07/26/12 08:35 | 1 |
| SGT-HEM (Oil and Grease - Nonpolar) | ND | | 4.8 | | mg/L | | 07/26/12 08:35 | 07/26/12 08:35 | 1 |
| HEM Polar (Oil and Grease - Polar) | 8.8 | | 4.8 | | mg/L | | 07/26/12 08:35 | 07/26/12 08:35 | 1 |

**Method: Field Sampling - Field Sampling**

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Field pH by SM4500-H B | 6.17 | | | | SU | | | 07/20/12 08:05 | 1 |

**Client Sample ID: Point of Compliance-Comp** — **Lab Sample ID: 250-5098-2**
Date Collected: 07/20/12 08:10 — Matrix: Water
Date Received: 07/20/12 12:25

**Method: 200.8 - Metals (ICP/MS)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Copper | 0.017 | | 0.0020 | | mg/L | | 07/23/12 07:17 | 07/24/12 04:40 | 1 |
| Lead | 0.010 | | 0.0010 | | mg/L | | 07/23/12 07:17 | 07/24/12 04:40 | 1 |
| Zinc | 0.12 | | 0.010 | | mg/L | | 07/23/12 07:17 | 07/24/12 04:40 | 1 |

**Method: 245.1 - Mercury (CVAA)**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.0014 | | 0.00020 | | mg/L | | 07/25/12 14:31 | 07/26/12 16:59 | 1 |

**General Chemistry**

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 72 | | 10 | | mg/L | | | 07/27/12 17:51 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Biochemical Oxygen Demand | 340 | | 2.0 | | mg/L | | | 07/20/12 16:04 | 1 |

## Method: 200.8 - Metals (ICP/MS)

**Lab Sample ID: MB 250-7877/1-A**
**Matrix: Water**
**Analysis Batch: 7978**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 7877**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Copper | ND | | 0.0020 | | mg/L | | 07/23/12 07:17 | 07/24/12 03:06 | 1 |
| Lead | ND | | 0.0010 | | mg/L | | 07/23/12 07:17 | 07/24/12 03:06 | 1 |
| Zinc | ND | | 0.010 | | mg/L | | 07/23/12 07:17 | 07/24/12 03:06 | 1 |

**Lab Sample ID: LCS 250-7877/2-A**
**Matrix: Water**
**Analysis Batch: 7978**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 7877**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Copper | 0.100 | 0.0970 | | mg/L | | 97 | 85 - 115 |
| Lead | 0.100 | 0.100 | | mg/L | | 100 | 85 - 115 |
| Zinc | 0.100 | 0.0969 | | mg/L | | 97 | 85 - 115 |

## Method: 245.1 - Mercury (CVAA)

**Lab Sample ID: MB 250-8034/11-A**
**Matrix: Water**
**Analysis Batch: 8045**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 8034**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.00020 | | mg/L | | 07/25/12 14:29 | 07/25/12 18:17 | 1 |

**Lab Sample ID: LCS 250-8034/12-A**
**Matrix: Water**
**Analysis Batch: 8045**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 8034**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 0.00500 | 0.00488 | | mg/L | | 98 | 85 - 115 |

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 250-8052/1-A**
**Matrix: Water**
**Analysis Batch: 8054**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 8052**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 5.0 | | mg/L | | 07/26/12 08:35 | 07/26/12 08:35 | 1 |
| SGT-HEM (Oil and Grease - Nonpolar) | ND | | 5.0 | | mg/L | | 07/26/12 08:35 | 07/26/12 08:35 | 1 |
| HEM Polar (Oil and Grease - Polar) | ND | | 5.0 | | mg/L | | 07/26/12 08:35 | 07/26/12 08:35 | 1 |

**Lab Sample ID: LCS 250-8052/2-A**
**Matrix: Water**
**Analysis Batch: 8054**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 8052**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Oil & Grease | 39.3 | 38.2 | | mg/L | | 97 | 78 - 114 |
| SGT-HEM (Oil and Grease - Nonpolar) | 19.3 | 17.3 | | mg/L | | 90 | 64 - 132 |

## Method: 1664A - HEM and SGT-HEM (Continued)

**Lab Sample ID: LCSD 250-8052/3-A**
**Matrix: Water**
**Analysis Batch: 8054**

**Client Sample ID: Lab Control Sample Dup**
**Prep Type: Total/NA**
**Prep Batch: 8052**

| Analyte | Spike Added | LCSD Result | LCSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | 39.3 | 42.5 | | mg/L | | 108 | 78 - 114 | 11 | 18 |
| SGT-HEM (Oil and Grease - Nonpolar) | 19.3 | 14.9 | | mg/L | | 77 | 64 - 132 | 15 | 24 |

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 250-8116/1**
**Matrix: Water**
**Analysis Batch: 8116**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 10 | | mg/L | | | 07/27/12 17:51 | 1 |

**Lab Sample ID: LCS 250-8116/2**
**Matrix: Water**
**Analysis Batch: 8116**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 60.1 | 60.0 | | mg/L | | 100 | 80 - 120 |

## Method: SM5210B - BOD, 5 Day

**Lab Sample ID: USB 250-7844/1 USB**
**Matrix: Water**
**Analysis Batch: 7844**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | USB Result | USB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Biochemical Oxygen Demand | ND | | 2.0 | | mg/L | | | 07/20/12 11:04 | 1 |

**Lab Sample ID: LCS 250-7844/2**
**Matrix: Water**
**Analysis Batch: 7844**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Biochemical Oxygen Demand | 198 | 211 | | mg/L | | 107 | 85 - 115 |

# Certification Summary

Client: Republic Services Inc
Project/Site: Wastewater 7/20/12

TestAmerica Job ID: 250-5098-1

## Laboratory: TestAmerica Portland

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska | State Program | 10 | OR00040 | 06-30-13 |
| Alaska (UST) | State Program | 10 | UST-012 | 12-26-12 |
| California | State Program | 9 | 2597 | 09-30-13 |
| Oregon | NELAC | 10 | OR100021 | 01-09-13 |
| USDA | Federal | | P330-11-00092 | 02-17-14 |
| Washington | State Program | 10 | C586 | 06-23-12 |

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**TestAmerica Portland**
9405 SW Nimbus Avenue

Beaverton, OR 97008
Phone 503.906.9200 fax 503.906.9210

# Chain of Custody Record

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**TestAmerica Laboratories, Inc.**

| Client Contact | Analysis Turnaround Time |
|---|---|
| Republic Services-Metro South | 10 Day |
| 2001 Washington St. | |
| Oregon City, OR 97045 | |
| 503-722-4656 Phone | |
| XXX-XXX-XXXX FAX | |
| Client PM: Matthew Cofer | |
| Project Name: Industrial Wastewater Discharge Permit | |
| Laboratory PM: Brian Cone | |

**Work Order #**
Loc: 250
5098

| Sample Identification | Sample Date | Sample Time | Preservation Used | Matrix | # of Cont. | Filtered Sample | FT pH Grab 8.17 | O&G 1664 P/NP | Cu, Pb, Zn, Pb Total Recoverable 200.8 | Solids, TSS-SM 2540D | BOD-SM 5210B | Sampling Event Comp | Sample Specific Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Point of Compliance-Grab | 7/20/12 | 0805 | 1, 2 | Water | 3 | | X | X | | | | | |
| Point of Compliance-Comp | 7/20/12 | 0810 | 1, 4 | Water | 3 | | | | X | X | X | X | |

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Special Instructions/QC Requirements & Comments: SOP NO. PR-SC-216, Rev 2

| Received by: | Company: | Date/Time: 07/20/12 0810 | IN LAB: | Company: | Date/Time: 07/20/12 1225 |
|---|---|---|---|---|---|
| Lawrence Spangler | Test America Portland | | | Test America Portland | |
| Sampled By: Lawrence Spangler | | | | | Temperature Upon Receipt: 0.4c |
| | | | | | Temperature Gun: Degree |

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**Sampling Documentation Form**

**Client**: Republic Services-Metro South
Site: Oregon City/Point of Compliance
Project: Industrial Wastewater Discharge Permit

Sampler: Lawrence Spangler
Date: 07-19-12 | 07-20-12
Time: 0705 | 0800

**Sample Matrix**: Water

**Sampling Method**: Comp-Time Grab

**Composite Sampling Equipment**:
ISCO #: 5 Comp Samples/day: 96 Start time: 0710 Stop time: 0655
Sampler calibration: 100ml

**Grab Sampling Equipment**: Dipper TAP-DIP 2
Wastewater Grab Time: 0805

**Field Data**: SOP NO. PR-SC-216, Rev 2
pH Meter: Orion Star A324 SN: G00617
pH: 6.17 Time Taken: 0805
pH calibration-7.00 buffer reading: 6.99
Acceptable Range: 6.95-7.05
pH calibration slope: 98.9%
Acceptable Range: 97-103%
pH 4 Buffer: PV00087
pH 7 Buffer: PV00086
pH 10 Buffer: PV00429

**Field Conditions**:
Weather: ☐ Sunny ☐ Partly cloudy ☒ Cloudy ☐ Snowing ☐ Indoors
Rainfall: ☐ Heavy ☐ Continuous ☐ Intermittent ☐ Light ☑ None

**Sample Characteristics**:
Color: _____ Odor: _____ TSS: _____
Sediment: _____ Foam: _____ Clear: _____

**Observations and Comments**:

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# Login Sample Receipt Checklist

Client: Republic Services Inc

Job Number: 250-5098-1

**Login Number: 5098**
**List Number: 1**
**Creator: Svabik-Seror, Philip**

**List Source: TestAmerica Portland**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity either was not measured or, if measured, is at or below background | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the sample IDs on the containers and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter. | N/A | |
| Multiphasic samples are not present. | N/A | |
| Samples do not require splitting or compositing. | N/A | |
| Residual Chlorine Checked. | N/A | |

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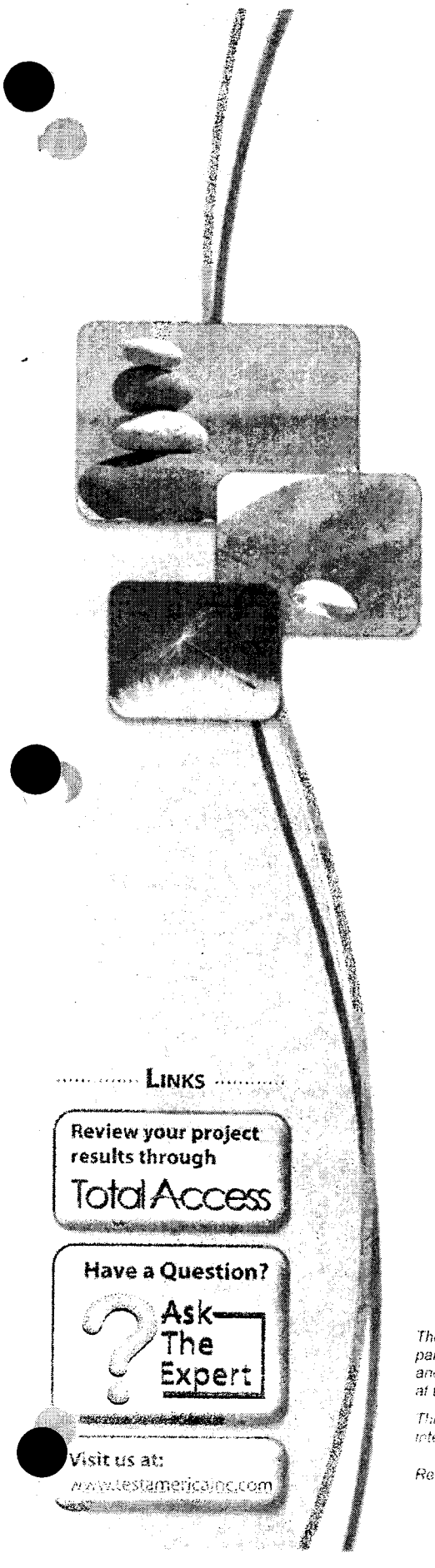

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Portland
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503)906-9200

TestAmerica Job ID: 250-8742-1
Client Project/Site: Industrial Wastewater Discharge Permit

For:
Republic Services Inc
2001 Washington St
Oregon City, Oregon 97045

Attn: Matthew Cofer

*Authorized for release by:*
*12/13/2012 3:37:40 PM*

Ella Sandquist
Project Manager I
ella.sandquist@testamericainc.com

# Table of Contents

# Sample Summary

Client: Republic Services Inc
Project/Site: Industrial Wastewater Discharge Permit

TestAmerica Job ID: 250-8742-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 250-8742-1 | Point of Compliance-Grab | Water | 12/09/12 16:30 | 12/09/12 17:30 |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ☼ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| EDL | Estimated Detection Limit |
| EPA | United States Environmental Protection Agency |
| MDA | Minimum detectable activity |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

# Client Sample Results

Client: Republic Services Inc
Project/Site: Industrial Wastewater Discharge Permit

TestAmerica Job ID: 250-8742-1

**Client Sample ID: Point of Compliance-Grab**
Date Collected: 12/09/12 16:30
Date Received: 12/09/12 17:30

**Lab Sample ID: 250-8742-1**
Matrix: Water

**Method: Field Sampling - Field Sampling**

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Field pH by SM4500-H B | 5.68 | | | | SU | | | 12/09/12 16:30 | 1 |

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# Certification Summary

Client: Republic Services Inc
Project/Site: Industrial Wastewater Discharge Permit

TestAmerica Job ID: 250-8742-1

## Laboratory: TestAmerica Portland

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska | State Program | 10 | OR00040 | 06-30-13 |
| Alaska (UST) | State Program | 10 | UST-012 | 12-26-12 |
| California | State Program | 9 | 2597 | 09-30-13 |
| Oregon | NELAC | 10 | OR100021 | 01-09-13 |
| USDA | Federal | | P330-11-00092 | 02-17-14 |
| Washington | State Program | 10 | C586 | 06-23-13 |

TestAmerica
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8742

**TURN AROUND REQUEST: 10 DAY**

Client Name/Account #: Republic Services - Metro South
Address: 2001 Washington St
City/State/Zip: Oregon City, OR 97045
Project Manager: Matthew Cofer
Telephone Number: 503-722-4656 Fax No.:
Sampler Name: (Print) John Fox
Sampler Signature:

Work Order#:
Report To: Matthew Cofer
Invoice To:
TA Quote #:
Project ID: Industrial Wastewater Discharge Permit
Project #:

Tag ID:

| Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | | Preservative: 1L Glass w/Hydrochloric Acid | 250mL Poly w/Nitric Acid | 1L Poly Unpreserved | 250mL Poly Unpreserved | Matrix: Wastewater | Analyze For: O&G P/NP | FT-PH: ≤6.5 or ≥9.0 | Cu, Pb, Zn, Hg | BOD | TSS | Sampling-Comp |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Point of Compliance-Grab | 12/9/12 | 1630 | 3 | X | | | X | | | | X | X | X | | | | |
| Point of Compliance-Comp | 12/9/12 | 1630 | 3 | | X | | | X | X | X | X | | | X | X | X | X |
| | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | |

Special Instructions:

Laboratory Comments:
Temperature Upon Receipt: 1.2
IR/P-L

| Received by TestAmerica: | Date | Time |
|---|---|---|
| | 12/9/12 | 1635 |
| IN LAB | 12/9/12 | 1730 |

SOP NO. PR-SC-216, REV 2

TestAmerica

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## Sampling Documentation Form

**Client**: Republic Services – Metro South
Site: Oregon City / Point Of Compliance
Project: Industrial Wastewater Discharge Permit

Sampler: JOHN FOT
Date: 12/9/12
Time: 1630

**Sample Matrix**: Water

**Sampling Method**: Grab & Composite

**Composite Sampling Equipment**:
☐ ISCO #: 9 Comp Samples/Day: 48 / 1 Start Time: 12/8/12 1600 Stop Time: 12/9/12 1600
Sampler Calibration: PASS 12/9/12
Comp Time: 1630

**Grab Sampling Equipment**: ISCO: 9 Other: NA
Grab Time: 1630

**Field Data**: SOP NO. PR-SC-216, Rev 2
PH Meter: Thermo Scientific Orion 4 Star Serial #A13136
PH: 5.68 Time Taken: 1630 TEMP=10.4C
PH Calibration-7.00 buffer reading: 68163=7.02 PASS 68160 OPP=89168=8.04
Acceptable Range: 6.95-7.05
Slope: 100.5
Acceptable Range: 97-103%
PH Buffer 4: 68462=4.00
PH Buffer 7: 68463=7.02
PH Buffer 10: 84072=10.02

**Field Conditions**:
Weather: ☐ Sunny ☐ Partly cloudy ☒ Cloudy ☐ Snowing ☐ Indoors
Rainfall: ☐ Heavy ☒ Continuous ☐ Intermittent ☒ Light ☐ None

**Sample Characteristics**:
Color: GRAY Odor: FECAL/H2S TSS: HEAVY
Sediment: YES Foam: NONE Clear: NO SLIGHT SHEEN

**Observations and Comments**:

# Login Sample Receipt Checklist

Client: Republic Services Inc

Job Number: 250-8742-1

**Login Number: 8742**
**List Number: 1**
**Creator: Svabik-Seror, Philip**

**List Source: TestAmerica Portland**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | |
| Sample custody seals, if present, are intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | N/A | |
| Samples do not require splitting or compositing. | N/A | |
| Residual Chlorine Checked. | N/A | |

# *Proforma Invoice*
# *Do not pay!*

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| | | | |
|---|---|---|---|
| **Invoice/Credit No.** | 00008493 | **Invoice Date** | December 10, 2012 |
| **Terms** | See Below | **Federal Tax ID** | 23-2919996 |
| **Remit to** | TestAmerica Laboratories, Inc. Dept 2314, P.O. Box 122314, Dallas, TX 75312-2314 | | |

| **Bill to:** |
|---|
| Republic Services Inc eProcurement<br>Attn: Accounts Payable<br>c/o North Canton<br>4101 Shuffel Street NW<br>North Canton, OH 44720 |

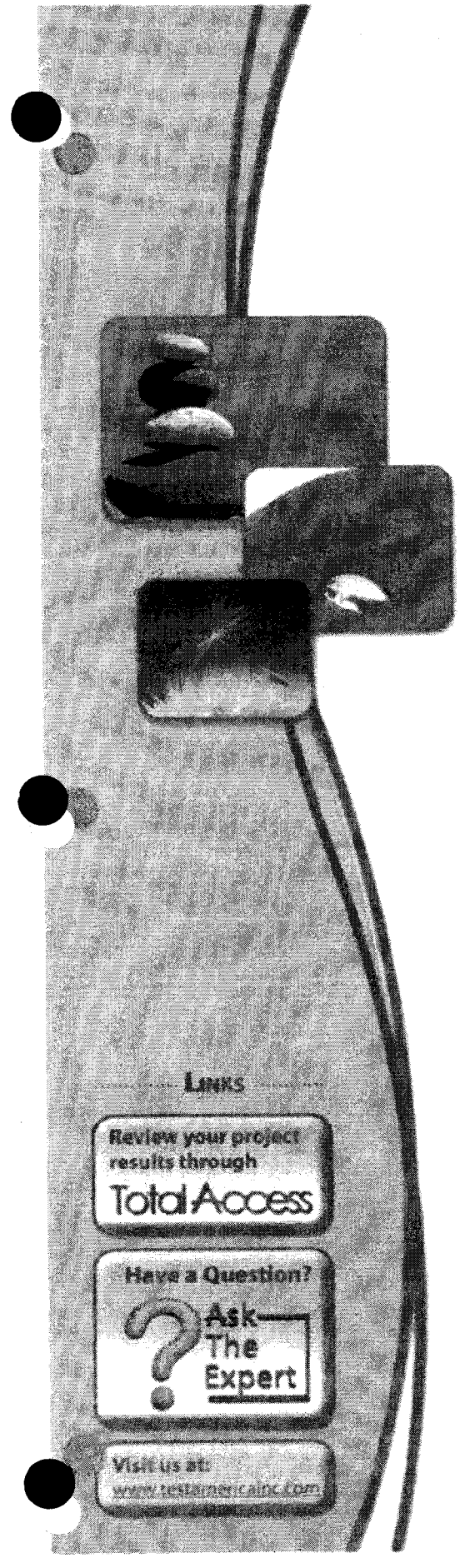
| **Ship to:** |
|---|
| Republic Services Inc<br>2001 Washington St<br>Oregon City, OR 97045 |

| **P.O. Number** | **W.O. Number** | **Contract Number** | **Work Ordered by** |
|---|---|---|---|
| Purchase Order Requested | | | Matthew Cofer |
| **Job Description** | **Site Name** | **SDG Number** | **Invoice Contact** |
| See below | | | eprocurement invoices |

| **Job No.** | **Job Description** / **Method/Test Description** | **Receipt Date** | **Quantity** | **Unit Price** | **Amount** |
|---|---|---|---|---|---|
| **J8742-1** | **Industrial Wastewater Discharge Permit** | **12/09/2012** | | | |
| | Sampling Event-Comp | | 1.00 | 120.00 | 120.00 |
| | Field Sampling - FT-pH | | 1.00 | 8.00 | 8.00 |
| | 3 Day Rush + 60% Surcharge | | | | |

| **Project Number** | **Client Number** | **Project Manager** | **Subtotal** | **$128.00** |
|---|---|---|---|---|
| 25000297 | 1433896 | Ella Sandquist | | |
| **Latest Sample Receipt Date** | **Latest Report Date** | **Phone Number** | **Total** | **$128.00** |
| 12/09/2012 | 12/13/2012 | (503) 906-9200 | | |

**For proper credit, please include invoice number on all remittance**




TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
**TestAmerica Portland**
9405 SW Nimbus Ave.
Beaverton, OR 97008
Tel: (503)906-9200

TestAmerica Job ID: 250-9706-1
**Client Project/Site: Industrial Wastewater Discharge Permit**

For:
Republic Services Inc
2001 Washington St
Oregon City, Oregon 97045

Attn: Matthew Cofer

*Authorized for release by:*
*2/7/2013 1:23:28 PM*

Ella Sandquist
**Project Manager I**
ella.sandquist@testamericainc.com

# Table of Contents

# Sample Summary

Client: Republic Services Inc
Project/Site: Industrial Wastewater Discharge Permit

TestAmerica Job ID: 250-9709-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---|---|---|---|---|
| 250-9709-1 | Point of Compliance-Grab | Water | 01/31/13 12:45 | 01/31/13 13:15 |
| 250-9709-2 | Point of Compliance-Comp | Water | 01/31/13 12:45 | 01/31/13 13:15 |

## Qualifiers

### Metals

| Qualifier | Qualifier Description |
|---|---|
| B | Compound was found in the blank and sample. |

## Glossary

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|---|---|
| ☼ | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| DL, RA, RE, IN | Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| EDL | Estimated Detection Limit |
| EPA | United States Environmental Protection Agency |
| MDA | Minimum detectable activity |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |
| RPD | Relative Percent Difference, a measure of the relative difference between two points |
| TEF | Toxicity Equivalent Factor (Dioxin) |
| TEQ | Toxicity Equivalent Quotient (Dioxin) |

Client: Republic Services Inc
Project/Site: Industrial Wastewater Discharge Permit

TestAmerica Job ID: 250-9706-1

**Client Sample ID: Point of Compliance-Grab**
Date Collected: 01/31/13 12:45
Date Received: 01/31/13 13:15

**Lab Sample ID: 250-9706-1**
Matrix: Water

5

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | 8.7 | | 5.8 | | mg/L | | 02/05/13 11:15 | 02/05/13 11:15 | 1 |
| SGT-HEM (Oil and Grease - Nonpolar) | ND | | 5.8 | | mg/L | | 02/05/13 11:15 | 02/05/13 11:15 | 1 |
| HEM Polar (Oil and Grease - Polar) | 8.7 | | 5.8 | | mg/L | | 02/05/13 11:15 | 02/05/13 11:15 | 1 |

Method: Field Sampling - Field Sampling

| Analyte | Result | Qualifier | NONE | NONE | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Field pH by SM4500-H B | 6.99 | | | | SU | | | 01/31/13 12:45 | 1 |

**Client Sample ID: Point of Compliance-Comp**
Date Collected: 01/31/13 12:45
Date Received: 01/31/13 13:15

**Lab Sample ID: 250-9706-2**
Matrix: Water

Method: 200.8 - Metals (ICP/MS)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Copper | 0.068 | | 0.0020 | | mg/L | | 02/01/13 08:19 | 02/01/13 19:17 | 1 |
| Lead | 0.042 | | 0.0010 | | mg/L | | 02/01/13 08:19 | 02/01/13 19:17 | 1 |
| Zinc | 0.23 | B | 0.010 | | mg/L | | 02/01/13 08:19 | 02/01/13 19:17 | 1 |

Method: 245.1 - Mercury (CVAA)

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.00031 | | 0.00020 | | mg/L | | 02/05/13 16:13 | 02/05/13 23:17 | 1 |

General Chemistry

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 360 | | 33 | | mg/L | | | 02/05/13 17:39 | 1 |

| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Biochemical Oxygen Demand | 130 | | 2.0 | | mg/L | | | 01/31/13 13:50 | 1 |

## Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 250-13853/1-A
Matrix: Water
Analysis Batch: 13913

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 13853

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Copper | ND | | 0.0020 | | mg/L | | 02/01/13 08:19 | 02/01/13 18:03 | 1 |
| Lead | ND | | 0.0010 | | mg/L | | 02/01/13 08:19 | 02/01/13 18:03 | 1 |
| Zinc | 0.0115 | | 0.010 | | mg/L | | 02/01/13 08:19 | 02/01/13 18:03 | 1 |

Lab Sample ID: LCS 250-13853/2-A
Matrix: Water
Analysis Batch: 13913

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 13853

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Copper | 0.100 | 0.0975 | | mg/L | | 97 | 85 - 115 |
| Lead | 0.100 | 0.0978 | | mg/L | | 98 | 85 - 115 |
| Zinc | 0.100 | 0.0964 | | mg/L | | 96 | 85 - 115 |

## Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 250-13996/11-A
Matrix: Water
Analysis Batch: 14001

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 13996

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | | 0.00020 | | mg/L | | 02/05/13 16:13 | 02/05/13 23:07 | 1 |

Lab Sample ID: LCS 250-13996/12-A
Matrix: Water
Analysis Batch: 14001

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 13996

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Mercury | 0.00500 | 0.00486 | | mg/L | | 97 | 85 - 115 |

Lab Sample ID: 250-9706-2 MS
Matrix: Water
Analysis Batch: 14001

Client Sample ID: Point of Compliance-Comp
Prep Type: Total/NA
Prep Batch: 13996

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.00031 | | 0.00500 | 0.00456 | | mg/L | | 85 | 75 - 125 |

Lab Sample ID: 250-9706-2 MSD
Matrix: Water
Analysis Batch: 14001

Client Sample ID: Point of Compliance-Comp
Prep Type: Total/NA
Prep Batch: 13996

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.00031 | | 0.00500 | 0.00451 | | mg/L | | 84 | 75 - 125 | 1 | 20 |

## Method: 1664A - HEM and SGT-HEM

**Lab Sample ID: MB 250-13978/1-A**
**Matrix: Water**
**Analysis Batch: 13990**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**
**Prep Batch: 13978**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | ND | | 5.0 | | mg/L | | 02/05/13 11:15 | 02/05/13 11:15 | 1 |
| SGT-HEM (Oil and Grease - Nonpolar) | ND | | 5.0 | | mg/L | | 02/05/13 11:15 | 02/05/13 11:15 | 1 |
| HEM Polar (Oil and Grease - Polar) | ND | | 5.0 | | mg/L | | 02/05/13 11:15 | 02/05/13 11:15 | 1 |

**Lab Sample ID: LCS 250-13978/2-A**
**Matrix: Water**
**Analysis Batch: 13990**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**
**Prep Batch: 13978**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Oil & Grease | 39.7 | 35.8 | | mg/L | | 90 | 78 - 114 |
| SGT-HEM (Oil and Grease - Nonpolar) | 19.7 | 16.7 | | mg/L | | 85 | 64 - 132 |

**Lab Sample ID: 250-9706-1 MS**
**Matrix: Water**
**Analysis Batch: 13990**

**Client Sample ID: Point of Compliance-Grab**
**Prep Type: Total/NA**
**Prep Batch: 13978**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MS Result | MS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | 8.7 | | 47.4 | 58.4 | | mg/L | | 105 | 78 - 114 |
| SGT-HEM (Oil and Grease - Nonpolar) | ND | | 23.5 | 23.5 | | mg/L | | 87 | 64 - 132 |

**Lab Sample ID: 250-9706-1 MSD**
**Matrix: Water**
**Analysis Batch: 13990**

**Client Sample ID: Point of Compliance-Grab**
**Prep Type: Total/NA**
**Prep Batch: 13978**

| Analyte | Sample Result | Sample Qualifier | Spike Added | MSD Result | MSD Qualifier | Unit | D | %Rec | %Rec. Limits | RPD | RPD Limit |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Oil & Grease | 8.7 | | 44.6 | 49.6 | | mg/L | | 92 | 78 - 114 | 16 | 18 |
| SGT-HEM (Oil and Grease Nonpolar) | ND | | 22.1 | 23.0 | | mg/L | | 90 | 64 - 132 | 2 | 34 |

## Method: SM 2540D - Solids, Total Suspended (TSS)

**Lab Sample ID: MB 250-13994/1**
**Matrix: Water**
**Analysis Batch: 13994**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | MB Result | MB Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Total Suspended Solids | ND | | 10 | | mg/L | | | 02/05/13 17:39 | 1 |

**Lab Sample ID: LCS 250-13994/2**
**Matrix: Water**
**Analysis Batch: 13994**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Total Suspended Solids | 60.3 | 57.0 | | mg/L | | 95 | 80 - 120 |

Client: Republic Services Inc
Project/Site: Industrial Wastewater Discharge Permit

TestAmerica Job ID: 250-9706-1

## Method: SM5210B - BOD, 5 Day

**Lab Sample ID: USB 250-13841/1 USB**
**Matrix: Water**
**Analysis Batch: 13841**

**Client Sample ID: Method Blank**
**Prep Type: Total/NA**

| Analyte | USB Result | USB Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
|---|---|---|---|---|---|---|---|---|---|
| Biochemical Oxygen Demand | ND | | 2.0 | | mg/L | | | 01/31/13 13:50 | 1 |

**Lab Sample ID: LCS 250-13841/2**
**Matrix: Water**
**Analysis Batch: 13841**

**Client Sample ID: Lab Control Sample**
**Prep Type: Total/NA**

| Analyte | Spike Added | LCS Result | LCS Qualifier | Unit | D | %Rec | %Rec. Limits |
|---|---|---|---|---|---|---|---|
| Biochemical Oxygen Demand | 198 | 221 | | mg/L | | 111 | 85 - 115 |

# Certification Summary

Client: Republic Services Inc
Project/Site: Industrial Wastewater Discharge Permit

TestAmerica Job ID: 250-9706-1

## Laboratory: TestAmerica Portland

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---|---|---|---|---|
| Alaska | State Program | 10 | OR00040 | 06-30-13 |
| Alaska (UST) | State Program | 10 | UST-012 | 12-26-13 |
| California | State Program | 9 | 2597 | 09-30-13 |
| Oregon | NELAP | 10 | OR100021 | 01-09-14 |
| USDA | Federal | | P330-11-00092 | 02-17-14 |
| Washington | State Program | 10 | C586 | 06-23-13 |

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

**TURN AROUND REQUEST: 10 DAY**

Client Name/Account #: Republic Services - Metro South

Address: 2001 Washington St

City/State/Zip: Oregon City, OR 97045

Project Manager: Matthew Cofer

Telephone Number: 503-722-4656 Fax No.:

Sampler Name: (Print) Jason Fox

Sampler Signature:

Work Order#: 9706

Report To: Matthew Cofer

Invoice To:

TA Quote #:

Project ID: Industrial Wastewater Discharge Permit

Project #:

**Tag ID:**

| Sample ID / Description | Date Sampled | Time Sampled | No. of Containers | Grab | Composite | Preservative: 1L Glass w/Hydrochloric Acid | Preservative: 250mL Poly w/Nitric Acid | Preservative: 1L Poly Unpreserved | Preservative: 250mL Poly Unpreserved | Matrix: Wastewater | Analyze For: O&G P/NP | Analyze For: FT-PH: 6.99 Tons to 7 | Analyze For: Cu, Pb, Zn, Hg | Analyze For: BOD | Analyze For: TSS | Analyze For: Sampling-Comp |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Point of Compliance-Grab | 1/31/13 | 1245 | 3 | X | | X | | | | X | X | X | | | | |
| Point of Compliance-Comp | 1/31/13 | 1245 | 3 | | X | | X | X | X | X | | | X | X | X | X |
| | | | | | | | | | | | | | | | | |
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**Special Instructions:**

**Laboratory Comments:**

Temperature Upon Receipt: 3.4

IR/P-L

| Received by TestAmerica: | Date | Time |
|---|---|---|
| | 1/31/13 | 1243 |
| IN LAB | 1/31/13 | 1315 |

SOP NO. PR-SC-216, REV 2

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

**Sampling Documentation Form**

**Client**: Republic Services – Metro South
Site: Oregon City / Point Of Compliance
Project: Industrial Wastewater Discharge Permit

Sampler: John Fot
Date: 1/31/13
Time: 1245

**Sample Matrix**: Water

**Sampling Method**: Grab & Composite

**Composite Sampling Equipment**:
ISCO #: 6 Comp Samples/Day: 48 / 1 Start Time: 1/30/13 1130 Stop Time: 1/31/13 1130
Sampler Calibration: Pass 1/1/13
Comp Time: 1245

**Grab Sampling Equipment**: ISCO: 9 Other: N/A
Grab Time: 1245

**Field Data**: SOP NO. PR-SC-216, Rev 2 JMF 1/31/13
PH Meter: Thermo Scientific Orion 4 ~~Ster Serial #A13136~~ STAR A SN G00624
PH: 6.99 Time Taken: 1245 Temp=10.7C
PH Calibration-7.00 buffer reading: 96781=7.01 pH9.00 11462=8.02
Acceptable Range: 6.95-7.05
Slope: 99.3
Acceptable Range: 97-103%
PH Buffer 4: 98896=4.01
PH Buffer 7: 96781=7.01
PH Buffer 10: 103152=10.03

**Field Conditions**:
Weather: ☐ Sunny ☐ Partly cloudy ☐ Cloudy ☐ Snowing ☐ Indoors
Rainfall: ☐ Heavy ☐ Continuous ☐ Intermittent ☐ Light ☐ None

**Sample Characteristics**:
Color: Brown Odor: Strong fecal TSS: High
Sediment: YES Foam: NO Clear: NO Moderate Sheen

**Observations and Comments**:
~~Brown~~ JMF 1/31/13

# Login Sample Receipt Checklist

Client: Republic Services Inc

Job Number: 250-9706-1

**Login Number: 9706**
**List Number: 1**
**Creator: Svabik-Seror, Philip**

**List Source: TestAmerica Portland**

| Question | Answer | Comment |
|---|---|---|
| Radioactivity wasn't checked or is </= background as measured by a survey meter. | N/A | |
| The cooler's custody seal, if present, is intact. | N/A | |
| Sample custody seals, if present, are intact. | N/A | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | True | |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | True | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | N/A | |
| Samples do not require splitting or compositing. | N/A | |
| Residual Chlorine Checked. | N/A | |

## Appendix E

- 2012 Sustainability Report

REPUBLIC SERVICES

May 30, 2013

Metro
600 N.E. Grand Avenue
Portland, OR 97232

RE: MSS Annual Sustainability Report Summary

This summary report contains information and data on sustainability practices by Division 4417, Republic Services of Oregon, LLC. Energy Consumption, Diesel Particulate Pollution Reduction, Idling Reduction, Biodiesel, Natural Resource Conservation, Toxins Reduction, Best Practices for Customer and Employee Health and Safety data and analysis are included in the following pages.

**Energy**

As a result of the 2010 audit by Christiansen Electric and the Energy Trust of Oregon, Republic Services chose to upgrade the facility's primary lighting fixtures from high use halide and high pressure sodium fixtures to more energy efficient florescent fixtures with motion sensors reducing the kWh/yr by 181,912 from 2010, thus decreasing the yearly energy expense by $11,255 even as the price per kWh increased. actuals ?

Other factors that contributed to energy savings have been the employee driven best management practices of turning off fixtures in the Bays when there is sufficient natural light, signage in restrooms and other locations stressing power conservation and the motion sensing lights in employee break and locker room areas.

2001 Washington Street
Oregon City, OR 97045
503.722.4656

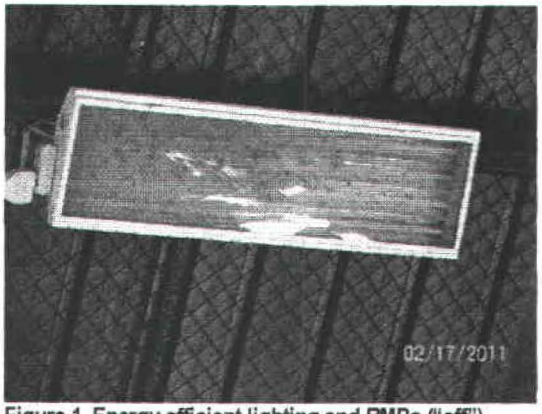

Figure 1 Energy efficient lighting and BMPs ("off").

**Diesel Particulate Pollution Reduction**

Republic Services has completed the retrofitting of all diesel powered rolling stock which was not already tier 4 compliant was identified as requiring either a diesel oxidation catalyst (DOC) and/or diesel particulate filter (DPF) based on its engine horsepower rating. See Appendix B for the retrofitted equipment list. attachment at end of this report

In addition, Republic Services continues to purchase B20 Biodiesel above and beyond the general conditions of the contract.

Republic Services continues to enforce the engine Idling Reduction Policy. All employees receive annual training on the policy and it is part of the new hire "on boarding" process. Facts and myths have been highlighted as well as the implementation, guidelines, conflict resolution and enforcement of idling reduction.

**Natural Resource Conservation**

We currently have in place in all offices and break areas, an in house recycling program to include, paper, cardboard & containers. Our policies are consistent with the "New Business Recycling Requirements" instituted by the Clackamas County Office of Sustainability.

This facility has decreased treated water usage by 1587 units (1,187,076 gal/yr) from 2010. Completion of a rainwater harvesting system was finalized at the truck wash in January 2011. Internally, low-flow toilets are currently in use.

But has it been operational?

Figure 2 5000 gallon rain water storage tank behind the truck wash

All recovered materials and source-separated materials are stored under cover or in lidded Boxes to prevent leachate from entering storm water system.

Figure 3 Recycle Center by Traffic Control 2

Catch basin filters and maintenance are inspected and serviced daily as part of our best management practices to meet or exceed the storm water bench marks.

AW utilizes a regenerative sweeper truck to sweep drives and paves daily. The tipping floors are swept daily after closing. One full-time employee, whose primary duty is janitorial inspects and cleans landscape areas of debris and conducts litter patrol of the driveways throughout each day. Staff targets areas along the primary driveways and speed bumps, and removes larger items as well as sweeps up residual from small trash spills.

Figure 4 Regenerative Sweeper **Truck in service since May 2010**

A magnet is pulled over these surfaces daily or more often if needed. Additionally, magnets have been installed on the back of all loaders.

**Toxics Reduction**

Republic Services eliminated the use of traditional solvents in maintenance operations by installing a Cintas Safe Washer, which uses an EPA recognized technology that introduces microorganisms to consume toxic compounds and transform them into carbon dioxide and water. In addition, our contracted janitorial service is required to and uses green seal cleaning products.

Figure 5 CINTAS safe washer

**Customer and Employee Health and Safety**

Sustainability is an agenda item discussed regularly in employee meetings. We focus employee education towards energy conservation on site. We also encourage and educate our employees on the positive aspects of participating in our company offered benefit programs. These programs include, safety incentives, employee rewards and recognition, medical, dental, vision, healthcare spending accounts, dependent care spending accounts, 401k pension plan, long and short term disability and life insurance.

As we further focus on social sustainability within our employee base, we have increased our minimum hiring wage from Oregon's minimum wage requirement of $8.50 (effective 1/1/2011) to $11.20 per hour. As a result of this action we have seen an increase in employee's participation in the Company offered health benefits and 401k savings plan.

Republic Services has entered into a contract with Tri-Met which provides all eligible employees unlimited annual public transportation passes. As a result of mass transit infrastructure in this area, it is difficult to quantify the commuter miles saved. However based on employee feedback, we are confident they are being well utilized for purposes beyond routine commuting.

Republic Services continues to maintain high standards in safety training and program compliance. In 2012, there were zero worker injuries and no time lost from work. This site had no auto or general liability accidents or claims.

To ensure the safety of commercial drivers and vendors that frequent the facility, Republic Services has implemented a personal protective equipment program. Hard hats and high visibility safety vests are to be worn by drivers at all times while outside of their vehicle. To date we have sought support from the local hauler association to champion this cause.

Based on a noise and dust survey conducted, Republic Services chose to install a water misting system to eliminate nuisance dust particulate in bay #3 where the air quality issue was identified. Subsequent air quality sampling results all passed the air quality thresholds. Republic Services has received no odor, noise, or pest complaints from any of our neighbors during 2012.

Sincerely,

Blaine Colvin
Operations Manager
Republic Services of Oregon, LLC.

'er contract

inventory updated as 5/31 by M

On DPF

* Fitted with emissions reduction equipment.)

| YEAR | MAKE | MODEL | TYPE | NEW/USED |
|---|---|---|---|---|
| 2010 | Caterpillar | 973* | Ttrack Loader | New |
| 2005 | Caterpillar | 950G* | Wheeled Loader | Used |
| 2010 | Alloy | TBD | Transfer Trailer | New |
| 2005 | Takeuchi | TB175* | Excavator Grapple | Used |
| 2010 | Caterpillar | 246C | Skid Steer Loader | New |
| 2010 | Caterpillar | 246C | Skid Steer Loader | New |
| 2005 | Caterpillar | GP25 | Forklift | Used |
| 1997 | Caterpillar | GP25 | Forklift | Used |
| 1998 | Caterpillar | GP25 | Forklift | Used |
| 2005 | Caterpillar | 420B* | Backhoe | Used |
| 1997 | Ford | F250 | Service Truck | Used |
| 1990 | Caterpillar | V50 | Forklift | Used |
| 2010 | Isuzu Tymc o | 210* | Sweeper | New |
| 2005 | Caterpillar | 973* | Track Loader | Used |
| 2005 | Caterpillar | 930G* | Wheeled Loader | Used |
| 2005 | Case | 85XT* | Skid Steer | Used |
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| YEAR | EQUIPMENT | EQUIPMENT | SERIAL NUMBER | MODEL / NUMBER |
|---|---|---|---|---|
| 2010 | 973D | TTL-10-0143 | LCP00143 | CAT 973D |
| 2005 | FEL # 1 | WL-05-1539 | AAX01539 | CAT 950G |
| 2010 | TRAILER | TT-07-7188 | 5MAMN452XAC017188 | MAC |
| 2005 | TB175 | EX-05-3439 | 17513439 | TAKEUCHI |
| 2010 | SKID STEER | SS-10-4233 | KJAY04233 | CAT 246C |
| 2010 | SKID STEER | SS-10-4237 | AJAY04237 | CAT 246C |
| 2005 | FL # 3 | FK-05-3115 | AT3503115 | P5000 |
| 1997 | FL # 2 | FK-97-5316 | 5AM05316 | CAT GP25 |
| 1998 | FL # 7 | FK-98-9125 | 5AM09125 | CAT GP25 |
| 2005 | 420D (BH2) | BH-05-3610 | 0420DTFDP23610 | CAT 420D |
| 1997 | FORD | PU-97-8629 | 1FTHX25H8VEC08629 | FORD 250 |
| 1990 | FL # 5 | FK-90-1236 | 2NC01236 | CAT V50D |
| 2010 | SWEEPER TRUCK | SW-10-0660 | JALB4W16597400660 | ISUZU NPR |
| 2005 | DZR # 3 | TTL-05-0235 | CKBCP00235 | 973C |
| 2005 | FEL # 5 | WL-05-0465 | GTTWR00465 | CAT 930G |
| 2005 | SL #4 | SS-05-5038 | JAF415038 | CASE 85XT |
| 1998 | REL | TR-98-0829 | 1NPZH98XXWD710829 | PETERBILT |
| 2005 | FEL # 3 | WL-05-1875 | AXX01875 | CAT 950G |
| 1999 | SUP CUSH | LM-99-3506 | 99003506 | CUSHMAN |
| 1999 | SHOP CUSH | LM-99-3508 | 99003508 | CUSHMAN |
| 1999 | HIREACH | LM-99-4293 | 4293 | GENIE S-60 |
| 2010 | SWEEPER MOTOR | O8E0185 | Pony motor for SW100660 | KUBOTA |
| 2008 | NEW YARD | TR-07-0227 | 11VF813E17A000227 | KALMAR |
| 1977 | OLD YARD | TR-97-1595 | 4VDDBKNE8VR741595 | VOLVO |
| 1998 | ROLL OFF | TR-98-8319 | 4VMDCMMEXWN758319 | VOLVO |
| 1983 | TRAILER | TT-83-2618 | 1H4V04922DJ012618 | ALLOY |

| |
|---|
| |
| 973D DPF and DOC |
| DPF-from last contract |
| |
| Takeuchi TB175 DPF and Doc |
| TIER 4 |
| TIER 4 |
| |
| |
| |
| 420D DPF and Doc |
| |
| |
| TIER 4 |
| 973C DPF and Doc |
| 930 G DPF and Doc |
| 85XT Doc |
| |
| DPF-from last contract |
| |
| |
| |
| TIER 4 |
| |
| |
| |
| |
| 3 REGEN PANELS (maintenance) |

total

## Appendix F

- Q2 2012- Q1 2013 Utility Tracking

**METRO SOUTH TRANSFER STATION ANNUAL REPORT - 2012/2013**

**Utility Expenses**

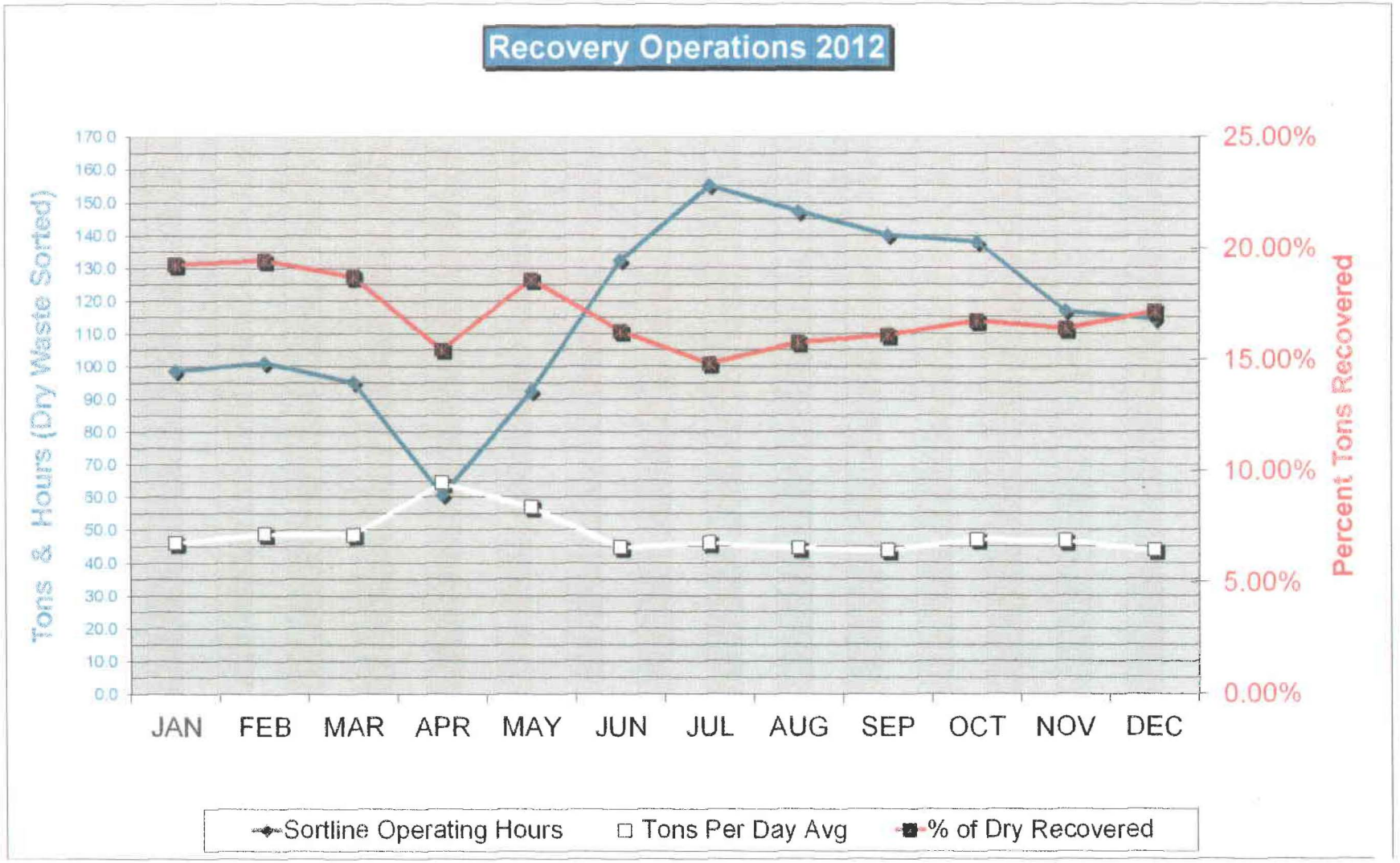
**Metro South Transfer Station**
**Year Ending March 31, 2013**

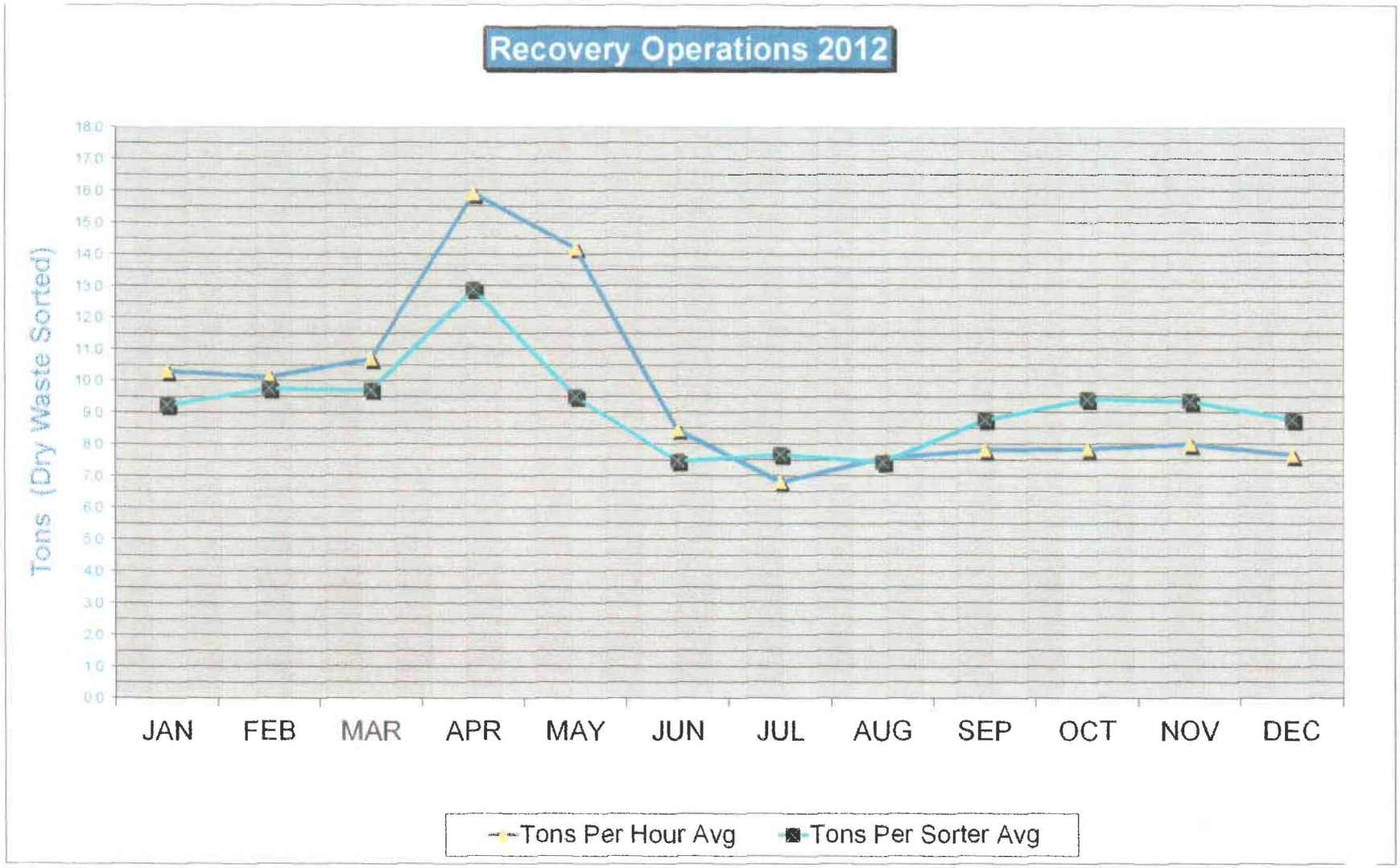
| Month | Electric | Water / Sewer | Total | Inbound Tonnage | Cost Per Ton |
|---|---|---|---|---|---|
| Apr-12 | $8,460.58 | $2,538.32 | $10,998.90 | 16,883.97 | $0.65 |
| May-12 | $8,496.41 | $2,733.42 | $11,229.83 | 18,779.03 | $0.60 |
| Jun-12 | $8,543.72 | $2,630.37 | $11,174.09 | 17,600.08 | $0.63 |
| Jul-12 | $8,444.85 | $2,645.00 | $11,089.85 | 18,160.54 | $0.61 |
| Aug-12 | $8,746.56 | $2,848.10 | $11,594.66 | 18,058.51 | $0.64 |
| Sep-12 | $8,745.80 | $2,805.81 | $11,551.61 | 16,578.17 | $0.70 |
| Oct-12 | $8,399.57 | $2,684.20 | $11,083.77 | 17,329.03 | $0.64 |
| Nov-12 | $8,986.27 | $2,454.75 | $11,441.02 | 17,195.90 | $0.67 |
| Dec-12 | $9,547.52 | $2,505.20 | $12,052.72 | 16,300.11 | $0.74 |
| Jan-13 | $9,704.33 | $2,520.04 | $12,224.37 | 16,064.13 | $0.76 |
| Feb-13 | $9,551.26 | $2,532.79 | $12,084.05 | 14,812.94 | $0.82 |
| Mar-13 | $8,493.89 | $2,491.14 | $10,985.03 | 16,416.85 | $0.67 |
| **Total** | **$106,120.76** | **$31,389.14** | **$137,509.90** | **204,179.26** | **$0.68** |

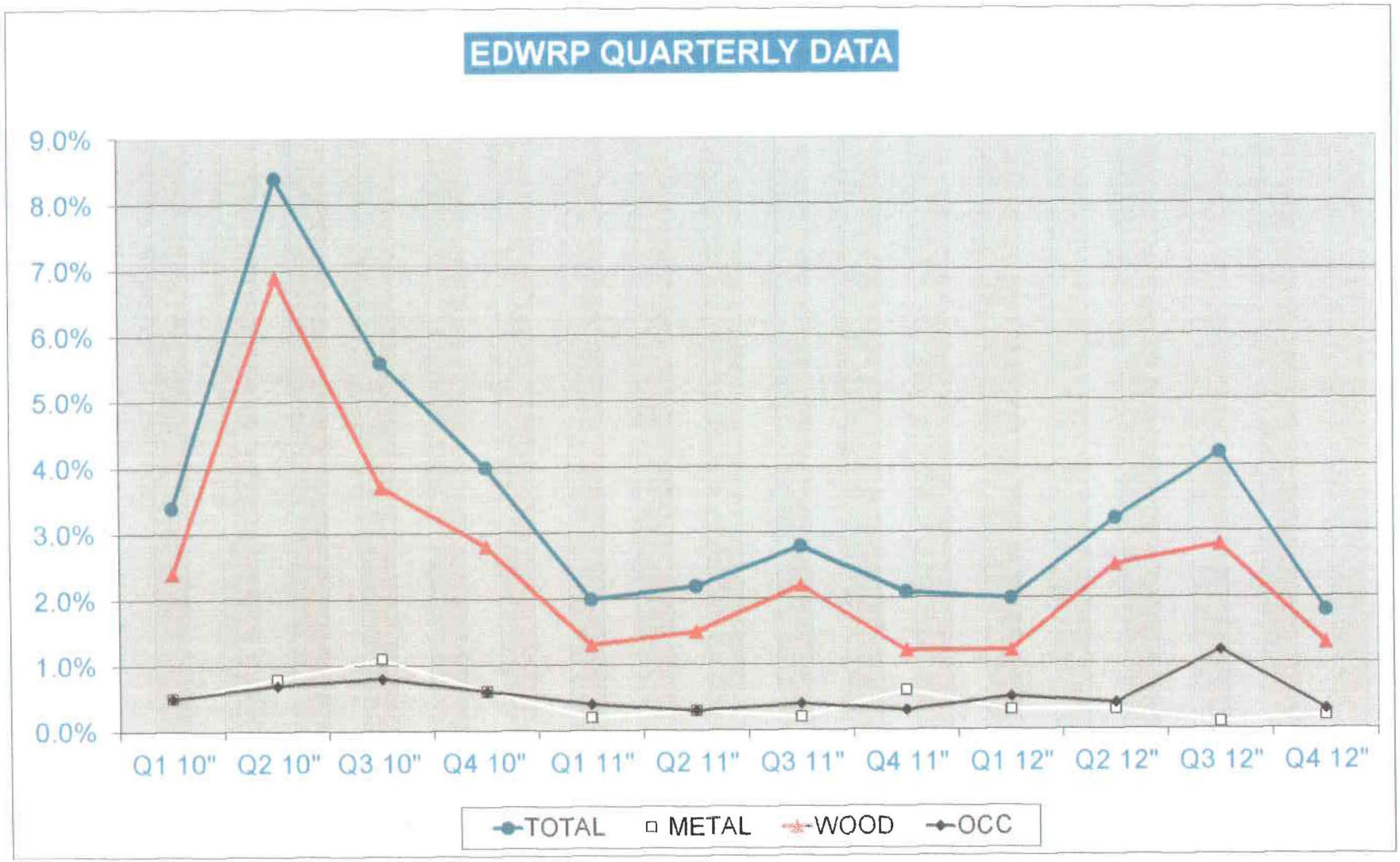
| Month | KiloWatt Hours | kWatt hrs/Day | Gallons | Gallons/Day |
|---|---|---|---|---|
| Apr-12 | 85,715 | 2,765.00 | 169,048 | 5,453.16 |
| May-12 | 85,108 | 3,039.57 | 201,960 | 7,212.86 |
| Jun-12 | 88,696 | 2,861.16 | 186,252 | 6,008.13 |
| Jul-12 | 85,686 | 2,856.20 | 178,772 | 5,959.07 |
| Aug-12 | 88,863 | 2,866.55 | 211,684 | 6,828.52 |
| Sep-12 | 88,613 | 2,953.77 | 205,700 | 6,856.67 |
| Oct-12 | 82,919 | 2,674.81 | 180,268 | 5,815.10 |
| Nov-12 | 91,757 | 2,959.90 | 144,364 | 4,656.90 |
| Dec-12 | 100,038 | 3,334.60 | 149,600 | 4,986.67 |
| Jan-13 | 103,074 | 3,324.97 | 145,860 | 4,705.16 |
| Feb-13 | 102,819 | 3,427.30 | 148,852 | 4,961.73 |
| Mar-13 | 86,659 | 2,795.45 | 144,364 | 4,656.90 |
| **Total** | **1,089,947** | **2,988.27** | **2,066,724** | **5,675.07** |

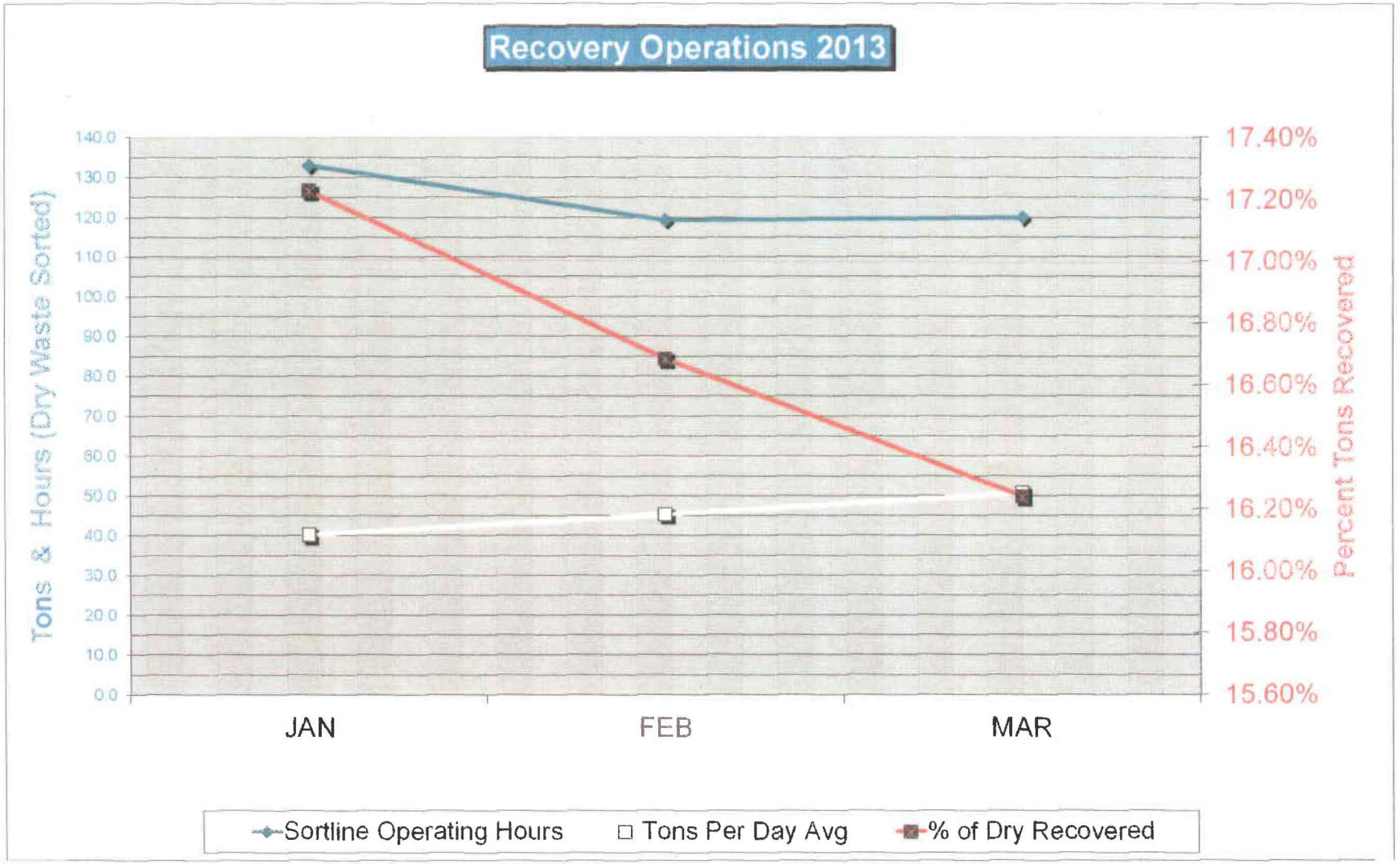
## Appendix G

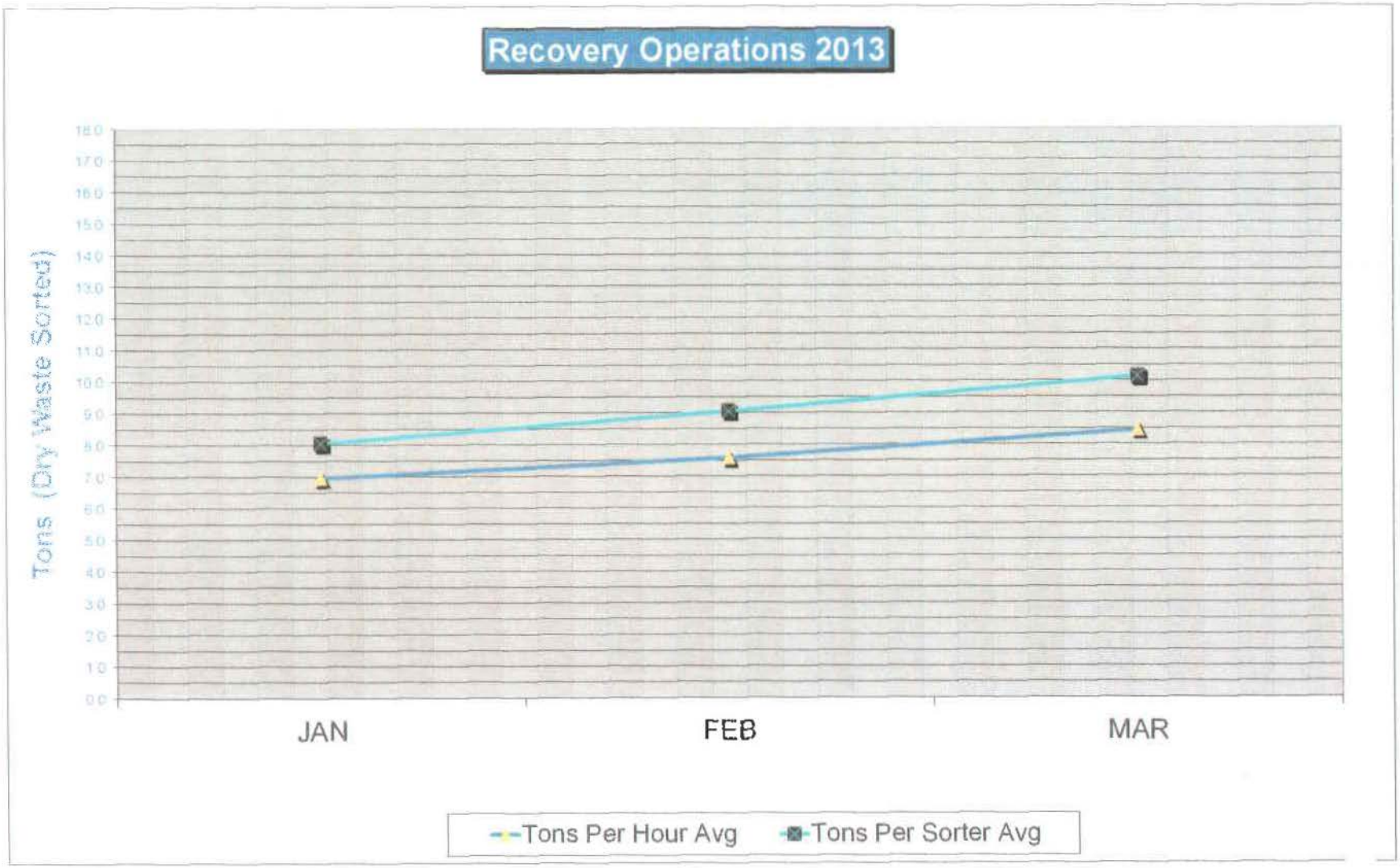
- Section 1 Recovery Operations
- Section 2 Customer Service


Recovery Operations 2012
Tons & Hours (Dry Waste Sorted)
170.0
160.0
150.0
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
Percent Tons Recovered
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Sortline Operating Hours
Tons Per Day Avg
% of Dry Recovered


Recovery Operations 2012
Tons (Dry Waste Sorted)
18.0
17.0
16.0
15.0
14.0
13.0
12.0
11.0
10.0
9.0
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Tons Per Hour Avg
Tons Per Sorter Avg


EDWRP QUARTERLY DATA
9.0%
8.0%
7.0%
6.0%
5.0%
4.0%
3.0%
2.0%
1.0%
0.0%
Q1 10"
Q2 10"
Q3 10"
Q4 10"
Q1 11"
Q2 11"
Q3 11"
Q4 11"
Q1 12"
Q2 12"
Q3 12"
Q4 12"
TOTAL
METAL
WOOD
OCC


Recovery Operations 2013
Tons & Hours (Dry Waste Sorted)
140.0
130.0
120.0
110.0
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
17.40%
17.20%
17.00%
16.80%
16.60%
16.40%
16.20%
16.00%
15.80%
15.60%
Percent Tons Recovered
JAN
FEB
MAR
Sortline Operating Hours
Tons Per Day Avg
% of Dry Recovered


Recovery Operations 2013
Tons (Dry Waste Sorted)
JAN
FEB
MAR
Tons Per Hour Avg
Tons Per Sorter Avg

REPUBLIC SERVICES, INC.SM

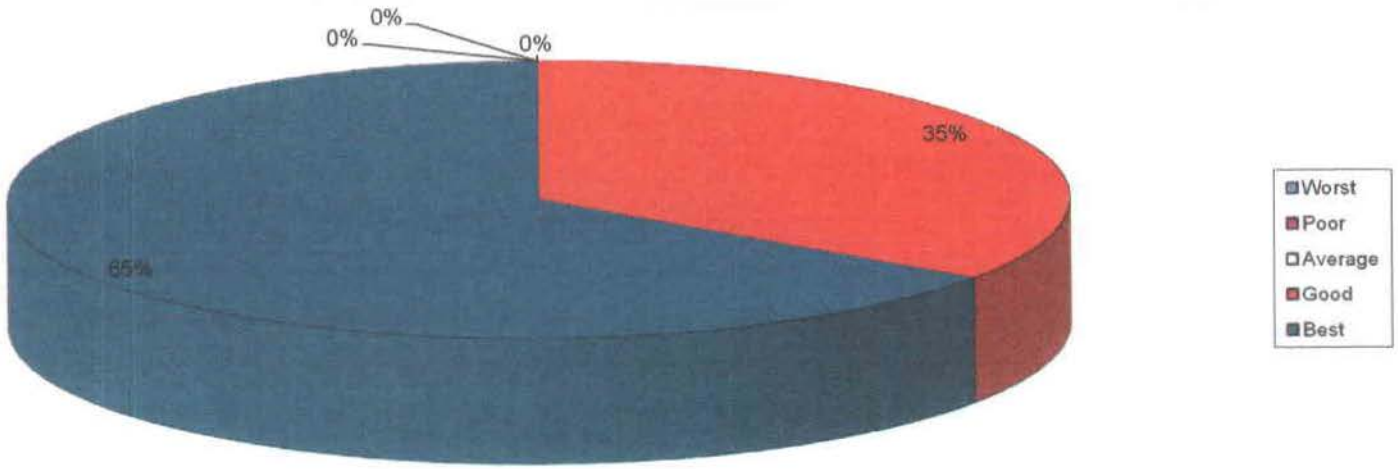
WASTE COLLECTION · RECYCLING · TRANSFER DISPOSAL

# *Republic Services of Oregon*

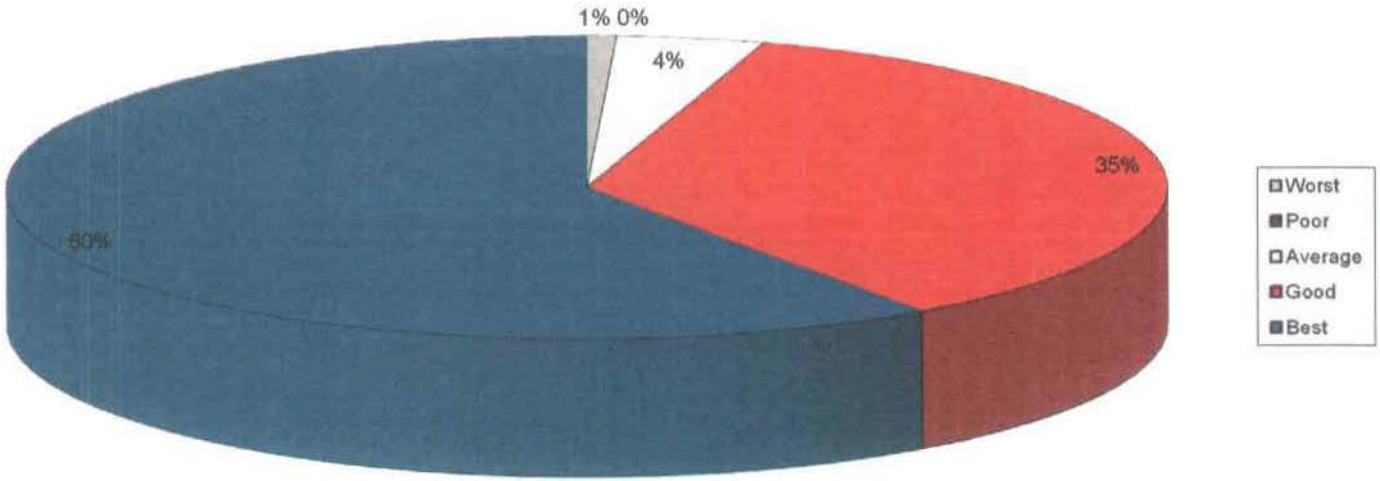
## Metro South Station

## Performance Measure Tracking
## April 1, 2012 – March 31, 2013

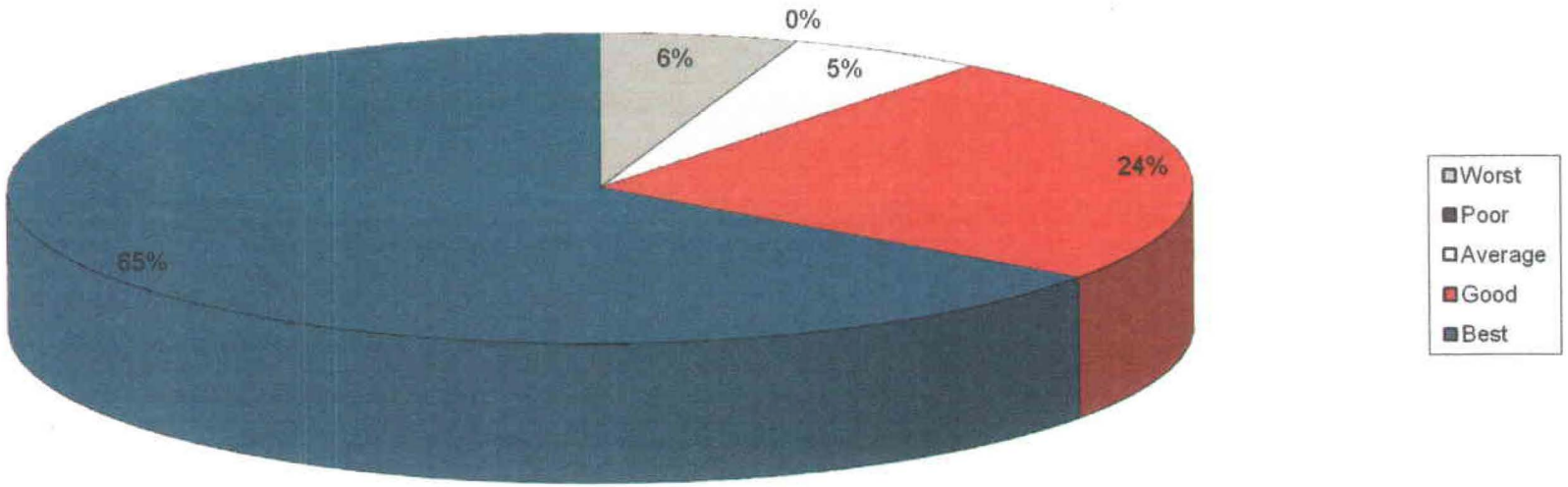
## Commercial Non-Automated Overall Experience



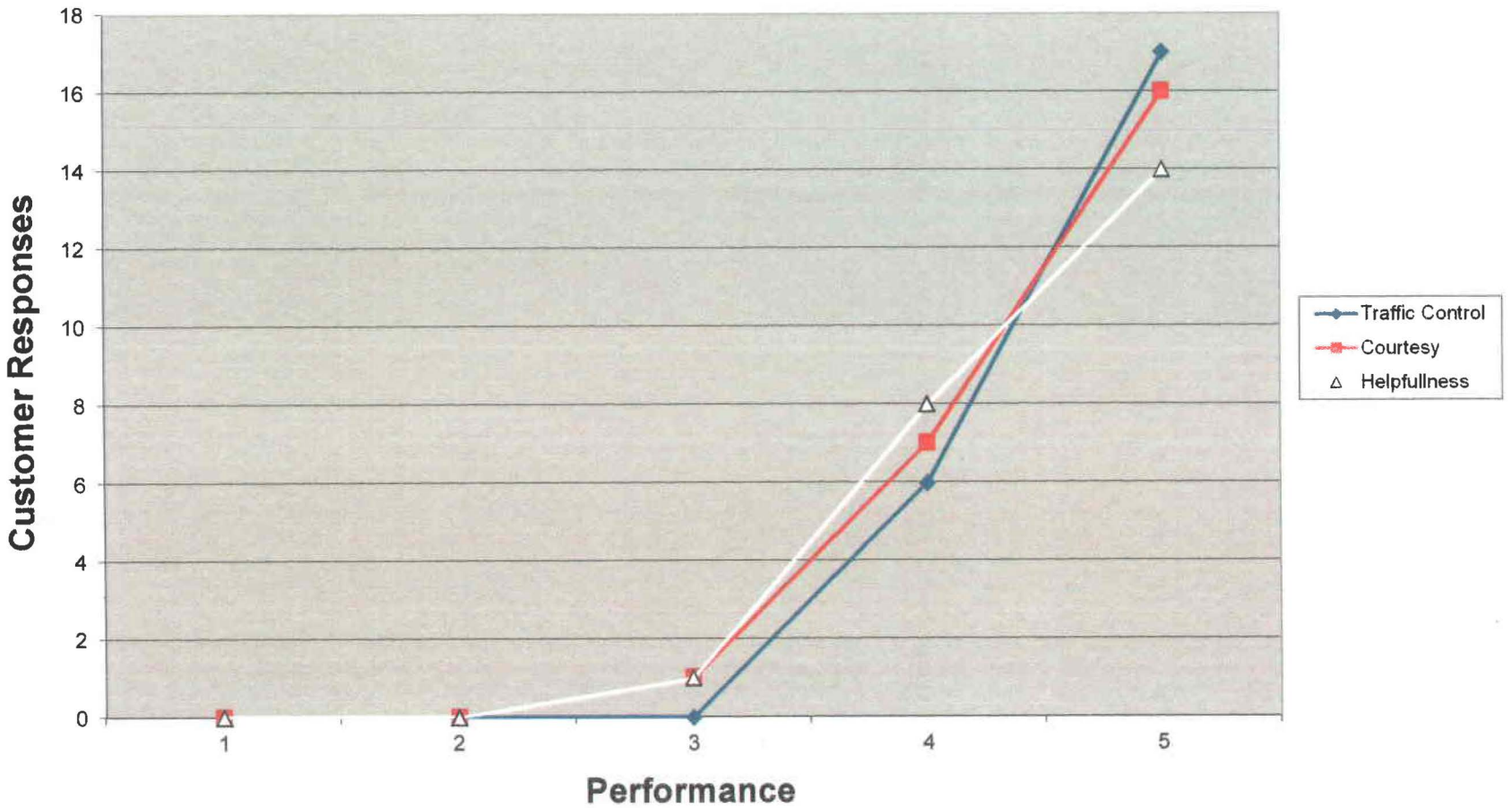
## Self Haul Overall Experience

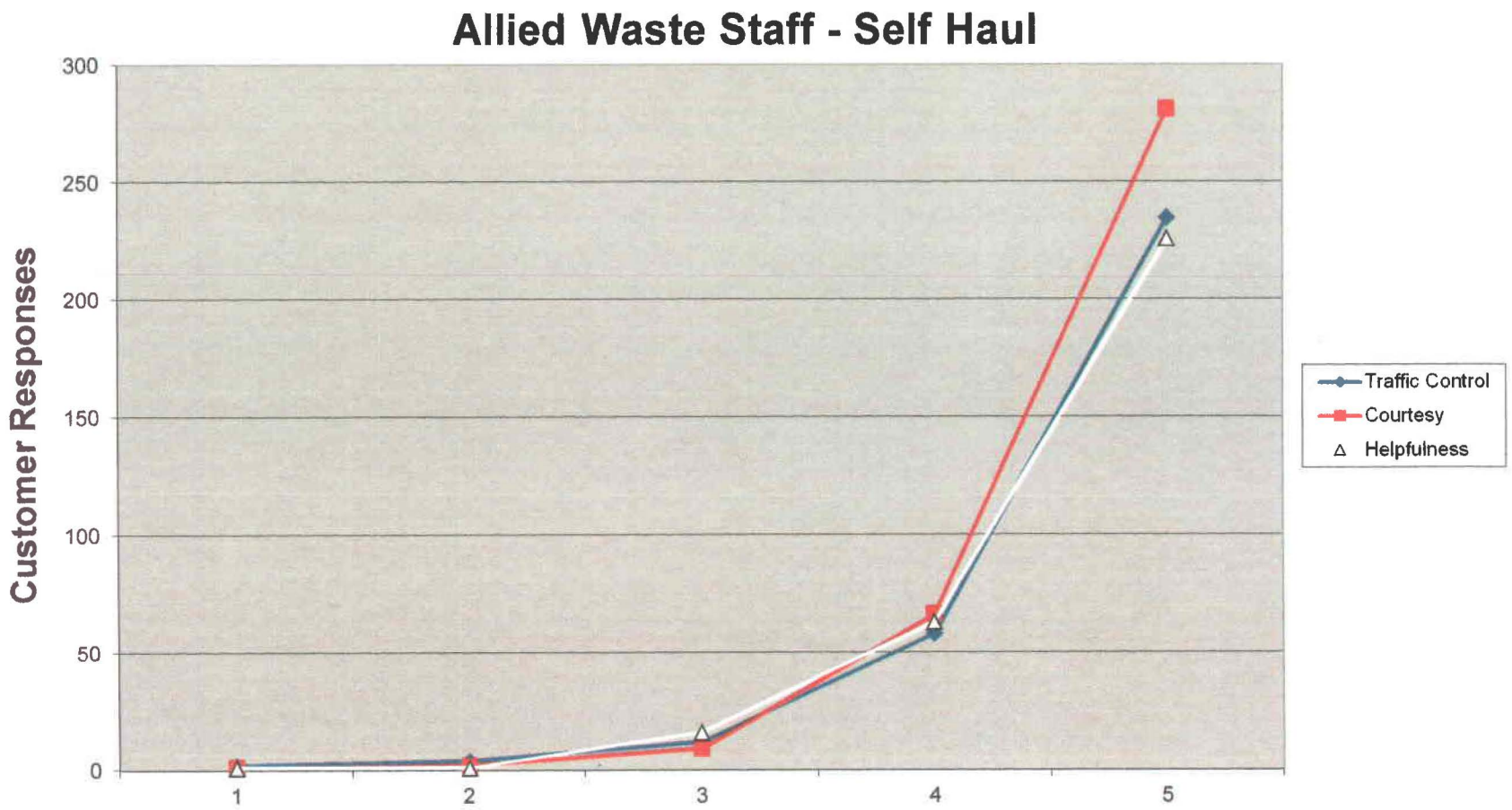


# Commercial Overall Experience

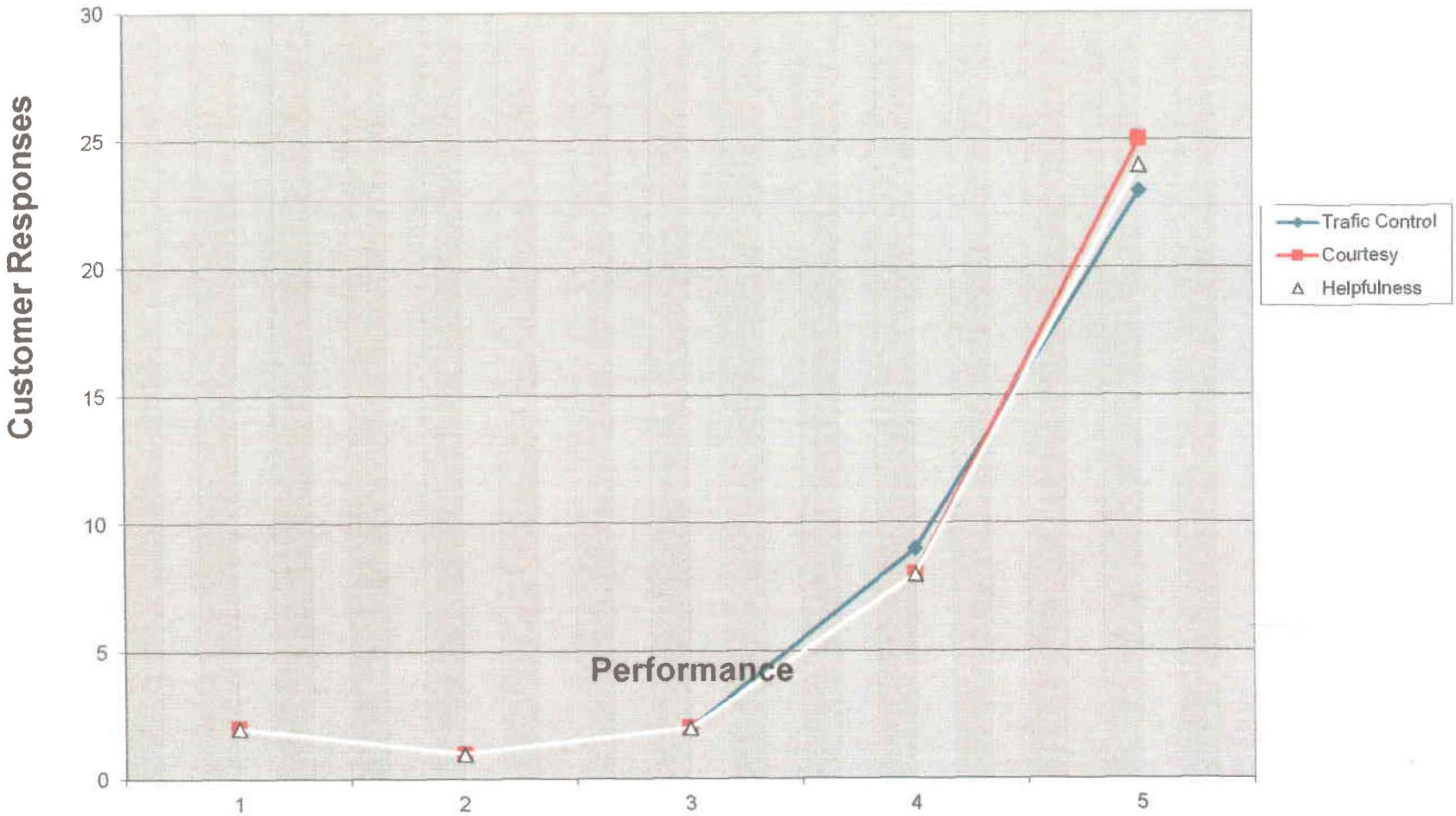


# Allied Waste Staff - Commercial Non-Automated

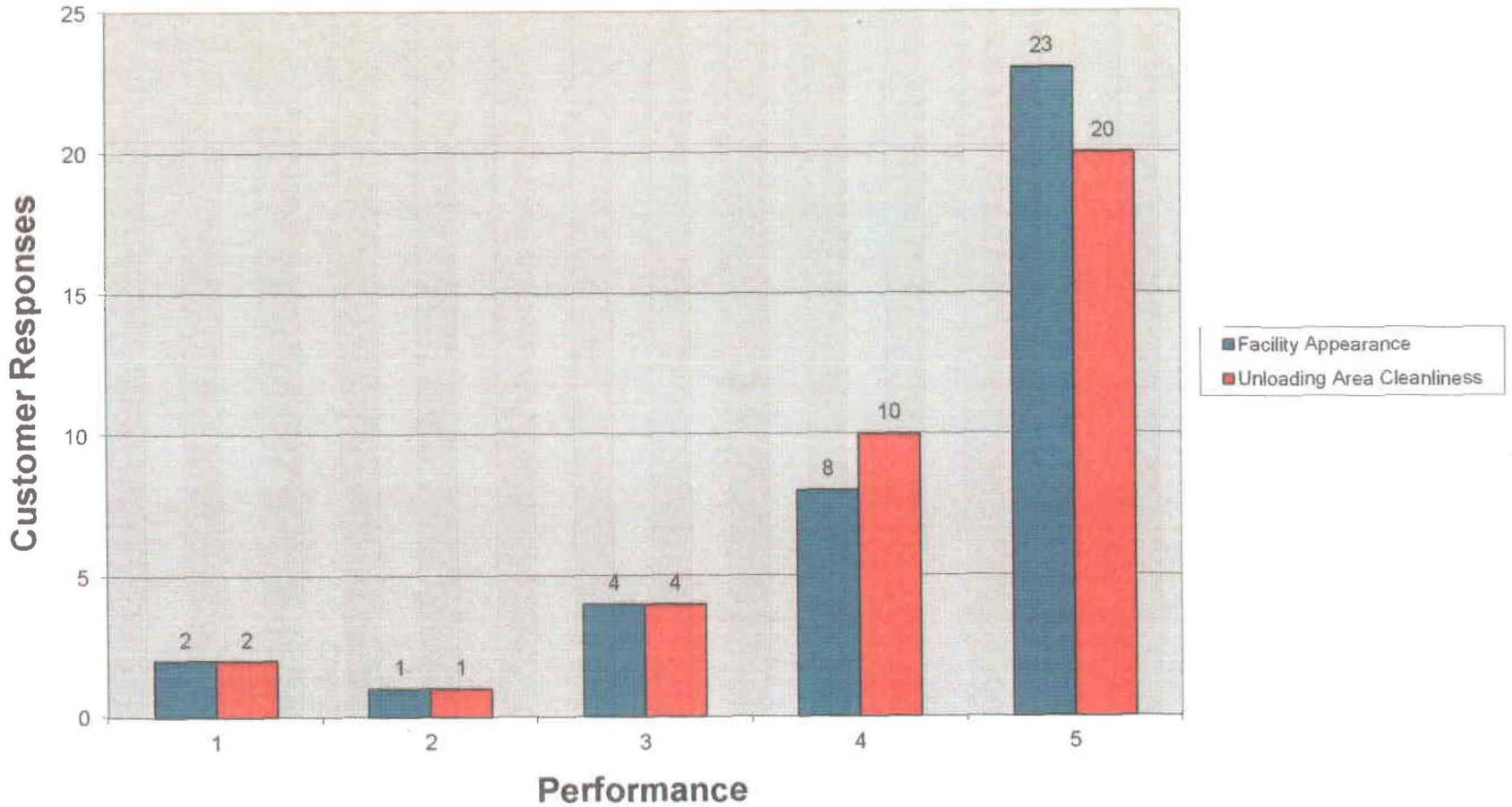



Allied Waste Staff - Self Haul
Customer Responses
300
250
200
150
100
50
0
1
2
3
4
5
Traffic Control
Courtesy
Helpfulness

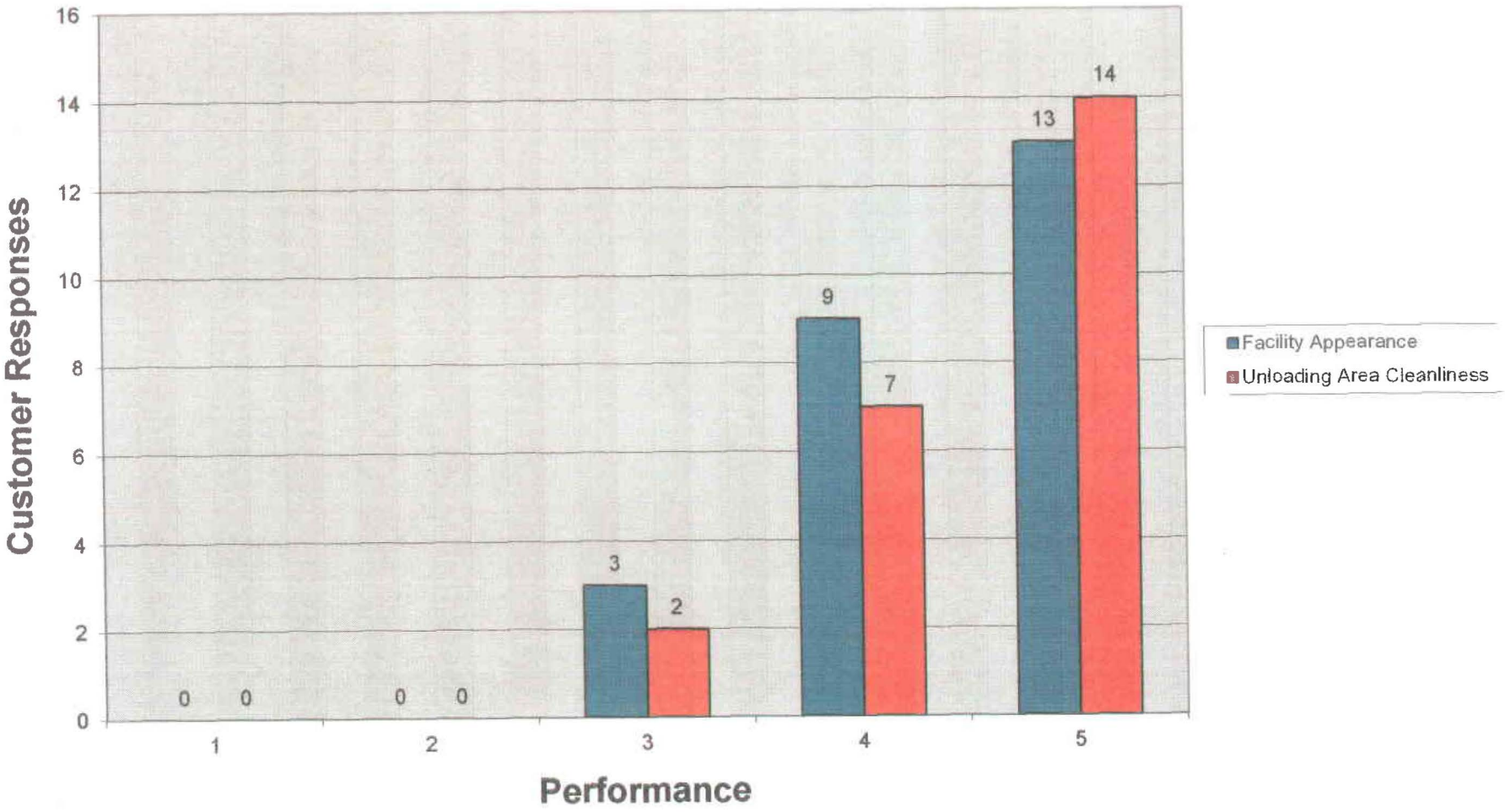
# Allied Waste Staff - Commercial Automated



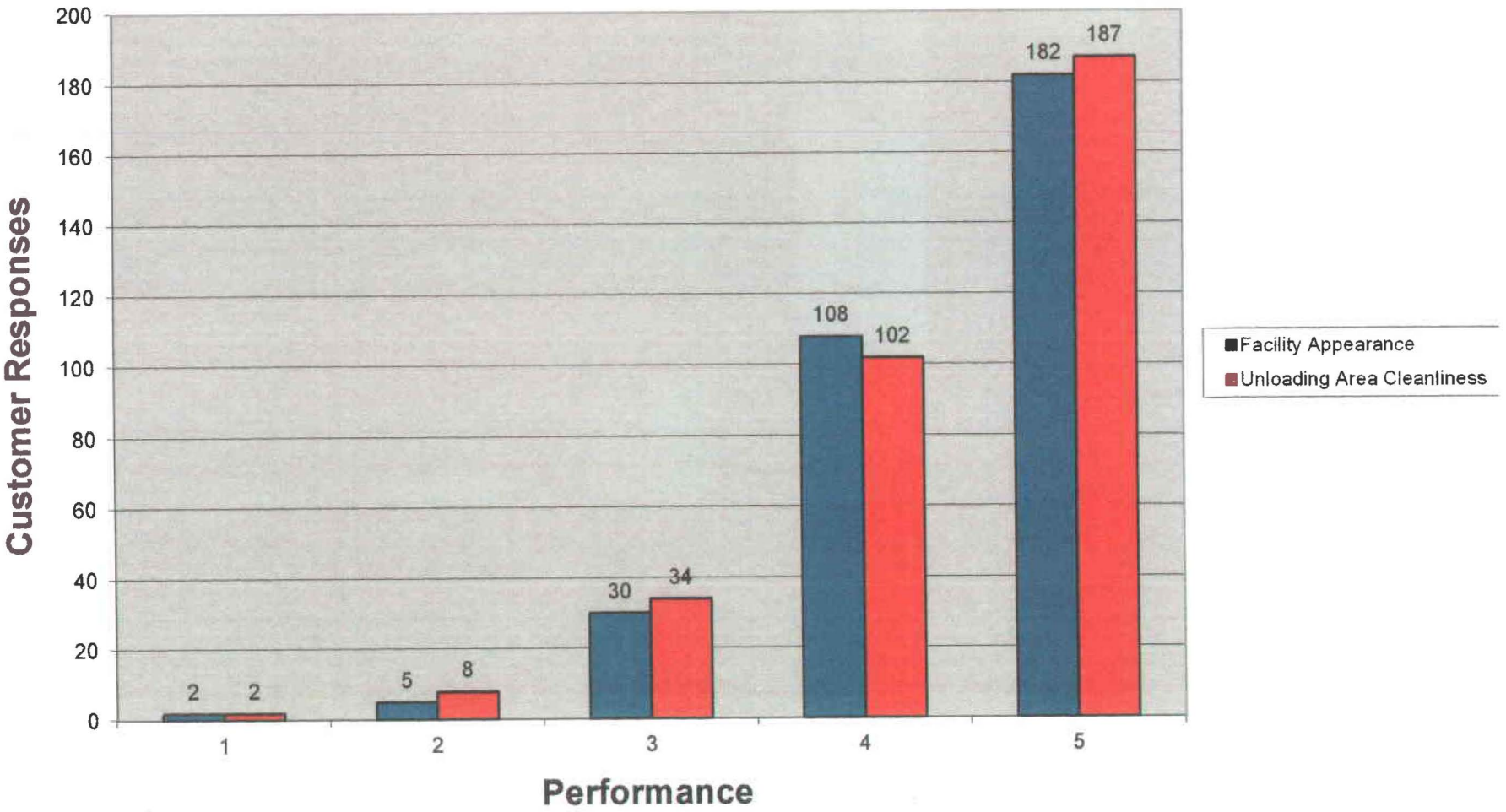
# Facility Commercial Automated



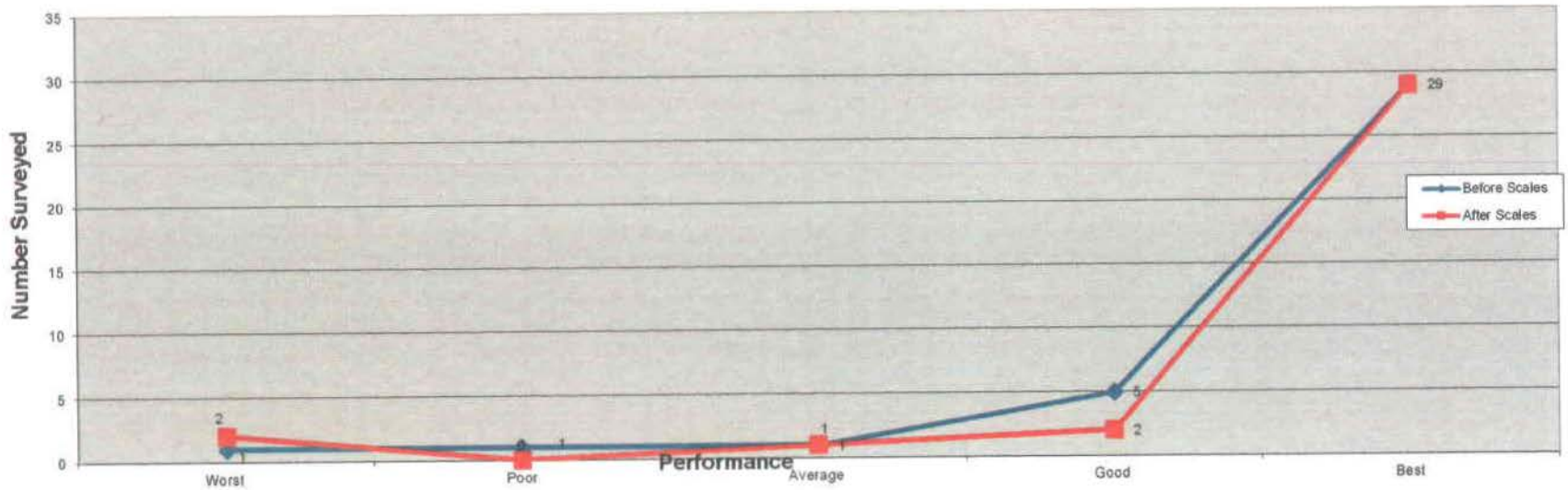
# Facility Commercial Non-Automated

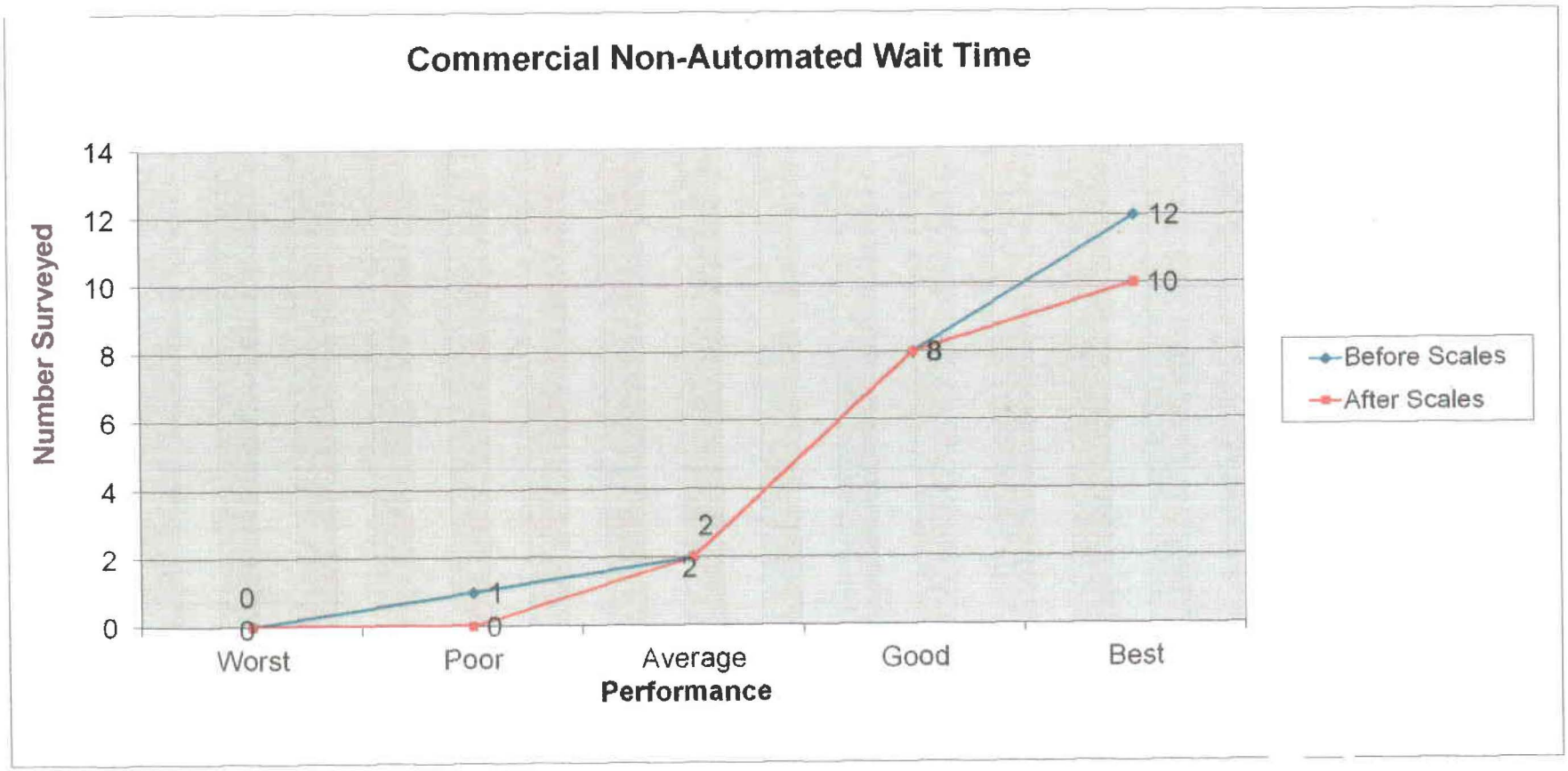


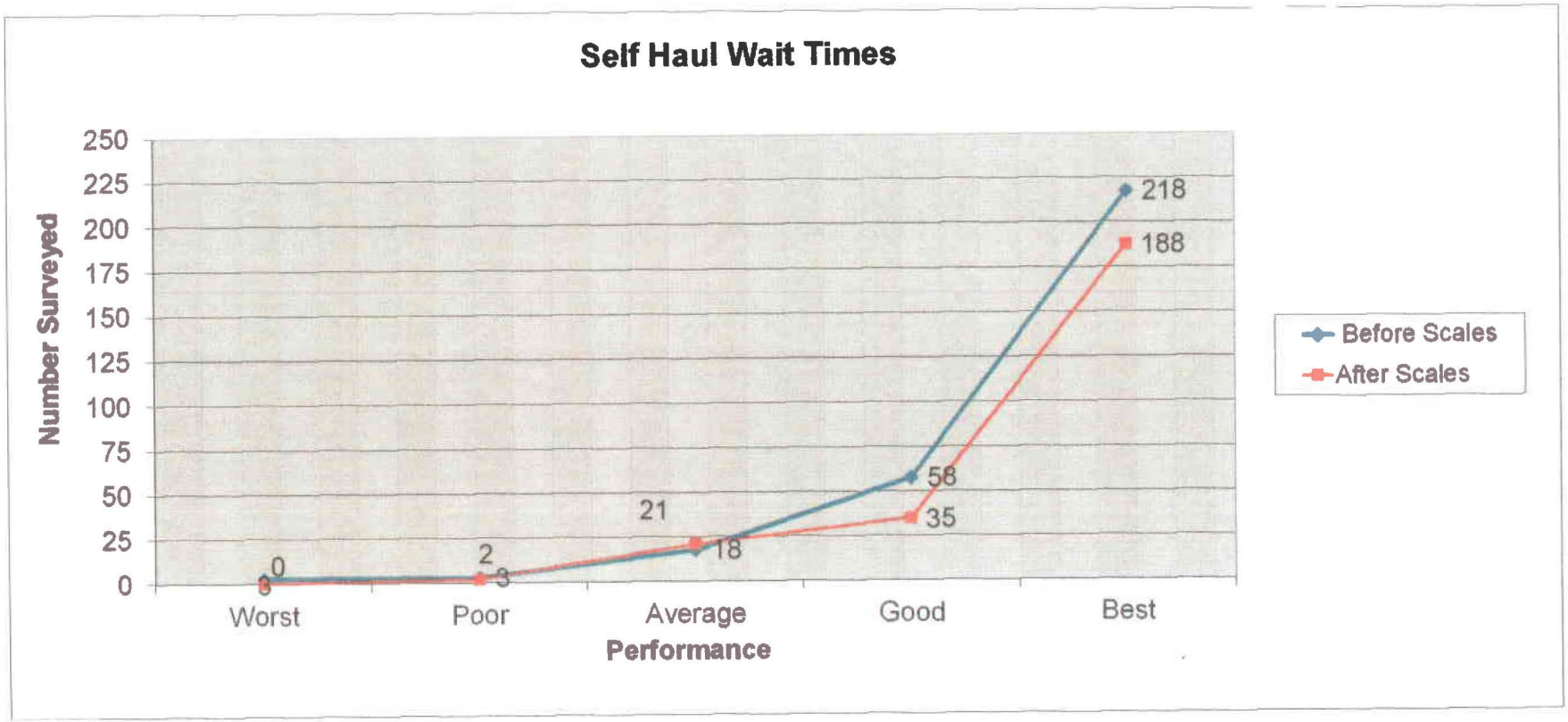
# Facility - Self Haul



## Commercial Automated Wait Times




Commercial Non-Automated Wait Time
Number Surveyed
14
12
10
8
6
4
2
0
0
1
2
8
12
0
0
2
10
Worst
Poor
Average
Good
Best
Performance
Before Scales
After Scales


Self Haul Wait Times
Number Surveyed
250
225
200
175
150
125
100
75
50
25
0
Worst
Poor
Average
Good
Best
Performance
0
2
3
21
18
58
35
218
188
Before Scales
After Scales