June 15, 2015

REPUBLIC SERVICES

Mr. Paul Ehinger
Metro
600 N.E. Grand Avenue
Portland, OR 97232

RE: MSS Annual Report

Mr. Ehinger,

Enclosed is the Annual/Sustainability Report summarizing 2014 activity at the Metro South Transfer Station.

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

Sincerely,

Brandon McGraw

Brandon McGraw
Division Manager
Republic Services Inc.

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

July 15, 2015

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 2014 are described in pertinent sections within this report. This Summary contains data for the Contract Year 01 April 2014 through 31 March 2015. The same time frame, 01 April 2013 through 31 March 2014, will be referred to as the 13-14 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 net 46,519 ton gain compared to the 13-14 contract year in inbound MSW. Please reference Appendix A for contract year comparisons.

Metro South Station continues to sustain operations in maximizing outbound transport trailer weights. In the Contract Year 14-15, MSS loaded 7033 transport trailers with 250,521.25 tons of waste, averaging 35.62 tons each. Compare this figure to an average trailer weight of 34.13 tons in Contract Year 13-14 and MSS realized a significant compaction gain (Table 1-4, Appendix A).

Dry waste volumes at MSS increased significantly over previous year. In 14-15 MSS received a total of 97,805 tons of dry waste comparative to 80,891 tons the previous contact year. Once averaged out, that figure translates to roughly 1410 tons per month gain of inbound dry material received at MSS during Contract Year 14-15 (Table 5, Appendix A). This number most likely can be attributed to economic factors such as the turnaround in new home construction and an increase in industrial tons as a whole.

Recovery Operations:
During 14-15, MSS realized an average recovery rate of 13.06% per month (Table 2-3, Appendix B). The range of recovery rates was 6.55% (November 14) to 17.35% (April 14). A year over year comparison reveals a 189.5 ton net decrease in recovered material from 13-14.

MSS continues to use 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 increased disruptions to recovery efforts due to age of equipment and increased volumes

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of dry waste. Additionally, in September of 2014 source separated yard debris was blended with residential organics to increase efficiencies in loading operations. The detrimental effect of this decision was that yard debris was no longer counted as outbound commodities shipped which resulted in unusually lower recovery percentages. Beginning in December of 2014 yard debris was again loaded and shipped as a separate commodity resulting in immediate rebound of recovery percentage.

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 continues to do so. Results in 14-15 were as follows: Q2 – 3.1%, Q3 – 2.6%, Q4 – 3.9% (Table 5-8, Appendix B). Rounding out the contract year, Q1 2015 averaged 3.4%, continuing the low percentage of recoverables in the residual waste stream from recovery operations. For the sixth consecutive year, MSS is well below the established 15% benchmark required by Metro standards.

Commodity prices in 2014 & 2015 experienced losses within all commodities, especially cardboard, commingle, and metal. In 2014 primary outlets for wood closed their doors due to large stock piles of inventory and a hog fuel market in continuous decline. Metro South was able to locate alternate destinations to transport wood. This increased transportation cost significantly but in doing so we were able to continue daily operations without interference of excessive, long term volumes of wood on the ground. Most indicators and trade information do not show significant change to the commodities markets going forward in 2015. 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.

Working in conjunction with private firms and Metro Engineers approvals granted for the single sampling at outfall 6. The utilization of outfall 6 for Stormwater sampling allows Stormwater to filter through a bio-swale, and the sediment to settle in a retention pond. The result of this has greatly improved and simplified sampling at MSS. In Q1 of 2014, a new Storm water Pollution Control Plan (SWPCP) was implemented that consolidated all the outfalls on site to a single sampling point (OF-6) at the south end of the retention pond. Storm water sampling at OF-6, in the winter and spring of 2014, showed results well below permissible levels in all categories. This coupled with the purchase and implementation of numerous slope guards and the increase in number of hours spent sweeping the site daily has greatly contributed to the success of the Republic's Storm Water Pollution Control Plan.

Industrial Waste Water Management on site remains unchanged from the previous year. Reports are turned into 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. Rodent activity fluctuates heavy to light commensurate with housekeeping and MSW inventory stored on site. 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.

Republic Services is committed to promoting sustainability and continues operations and purchasing practices to lessen the footprint of MSS on the community and environment. Please reference the 2014-15 Sustainability Report, Appendix D, for details on our continued efforts to reduce, reuse and recycle.

As always, in 2014, 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,

Brandon McGraw
Division Manager
Republic Services Inc.

Appendices:

A. Waste Flow
    a. Table 1 MSS 12-13 Densified Tons
    b. Table 2 MSS 13-14 Densified Tons
    c. Table 3 MSS 14-15 Densified Tons
    d. Table 4 YOY Densified Tons (Graph)
    e. Table 5 YOY Dry Waste Volumes (Graph)

B. Recovery Operations
    a. Table 1 2013 Commodities Shipped
    b. Table 2 2014 Commodities Shipped
    c. Table 3 Q1 2015 Commodities Shipped
    d. Table 4 Contract Year 14-15 Commodity Revenue vs. Cost
    e. Table 5 Residual Quarterly Report 6/2014
    f. Table 6 Residual Quarterly Report 9/2014
    g. Table 7 Residual Quarterly Report 12/2014
    h. Table 8 Residual Quarterly Report 3/2015

C. Storm/Waste Water
    a. Exhibit 1 DMR
    b. Exhibit 2 Analytical Report 11/3/14
    c. Exhibit 3 Analytical Report 12/17/14
    d. Exhibit 4 Analytical Report 1/23/15
    e. Exhibit 5 Analytical Report 2/14/15
    f. Exhibit 6 Analytical Report 5/2/15

D. 2014-15 Sustainability Report

E. 2014-15 Utility Tracking

Appendix A – Waste Flow

- Table 1 MSS 12-13 Densified Tons
- Table 2 MSS 13-14 Densified Tons
- Table 3 MSS 14-15 Densified Tons
- Table 4 YOY Densified Tons (Graph)
- Table 5 YOY Dry Waste Volumes (Graph)

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**

South Station MSW Densified and Transported to Arlington

2013 - 14

Month	# Loads	Tons Densified	Average Tons per Load	Base Tonnage	Bonus Tonnage
Apr-13	466	15,902.48	34.13	15611.00	291.48
May-13	515	17,571.13	34.12	17252.50	318.63
Jun-13	491	16,738.25	34.09	16448.50	289.75
Jul-13	576	19,659.98	34.13	19296.00	363.98
Aug-13	517	17,605.72	34.05	17319.50	286.22
Sep-13	549	18,743.30	34.14	18391.50	351.80
Oct-13	582	19,867.72	34.14	19497.00	370.72
Nov-13	510	17,433.25	34.18	17085.00	348.25
Dec-13	447	15,257.66	34.13	14974.50	283.16
Jan-14	467	15,946.92	34.15	15644.50	302.42
Feb-14	352	12,025.77	34.16	11792.00	233.77
Mar-14	505	17,250.10	34.16	16917.50	332.60
Total	**5977**	**204002.28**	**34.13**	**200229.50**	**3772.78**

South Station MSW Densified and Transported to Arlington

2014 - 15

Month	# Loads	Tons Densified	Average Tons per Load	Base Tonnage	Bonus Tonnage
Apr-14	534	19,228.39	36.01	17889.00	1339.39
May-14	553	19,712.13	35.65	18525.50	1186.63
Jun-14	550	19,470.15	35.40	18425.00	1045.15
Jul-14	599	21,217.18	35.42	20066.50	1150.68
Aug-14	564	20,516.18	36.38	18894.00	1622.18
Sep-14	607	21,183.44	34.90	20334.50	848.94
Oct-14	682	23,969.56	35.15	22847.00	1122.56
Nov-14	559	20,454.66	36.59	18726.50	1728.16
Dec-14	671	23,258.28	34.66	22478.50	779.78
Jan-15	579	20,426.02	35.28	19396.50	1029.52
Feb-15	537	19,399.91	36.13	17989.50	1410.41
Mar-15	598	21,685.35	36.26	20033.00	1652.35
Total	**7033**	**250521.25**	**35.62**	**235605.50**	**14915.75**

Densified Ton Comparison

Dry Waste Volumes

	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	TOTAL
2013-14	6,553.17	7,172.47	7,258.67	7,859.07	7,504.55	7,400.96	7,737.57	6,232.07	5,270.17	5,605.09	5,064.09	7,233.01	80,890.89
2014-15	7,494.78	7,800.86	7,883.40	8,973.70	9,088.59	9,026.97	8,548.43	6,956.17	7,239.61	7,938.67	7,786.04	9,067.50	97,804.72

Appendix B - Recovery Operations

- Table 1 2013 Commodities Shipped
- Table 2 2014 Commodities Shipped
- Table 3 Q1 2015 Commodities Shipped
- Table 4 Contract Year 14-15 Commodity Revenue vs. Cost
- Table 5 Residual Quarterly Report 6/2014
- Table 6 Residual Quarterly Report 9/2014
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COMMODITIES SHIPPED 2013 TONS MTD	Updated 12/31/2013													
MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	
YARD DEBRIS	78.29	66.8	72.53	99.56	99.94	170.16	116.45	113.17	91.74	134.77	149.87	82.96	1,276.24	8.13%
MILLWOOD	635.92	681.64	758.58	842.81	928.72	888.6	878.21	902.79	870.16	896.8	768.22	575.16	9,627.61	61.30%
TIRES	9.65		7.96	15.23	20.87	8.14	13.21	25.09	14.06	14.13	7.42	14.3	150.06	0.96%
FERROUS METAL	138.84	137.33	173.52	204	185.12	206.97	237.5	184.28	192.62	204.08	166.41	161.22	2,191.89	13.96%
NON-FERROUS METAL	9.81	19.2	13.16	13.87	9.5	12.48	18.79	33.21	16.78	13.59	21.62	14.05	196.06	1.25%
ELECTRONICS	32.38	28.55	29.23	34.86	35.16	26.34	36.58	30.26	32.23	47.79	31.44	34.19	399.01	2.54%
CARPET	5.06	7.25	3										15.31	0.10%
FOAM PAD	0.95			3.72		1.96	1.34	0.79				6.56	15.32	0.10%
HARD PLASTIC	6.15	7.59	10.53	2.26	1.26				1.85			2.51	32.15	0.20%
FILM PLASTIC	1.41	1.13	0.88	0.91	0.77	0.6	3.92	0.91	1	2.3	1.08	2.11	17.02	0.11%
CARDBOARD	64.02	44.99	57.1	52.88	58.32	51.55	57.91	61.47	51.62	50.87	53.93	51.35	656.01	4.18%
GLASS	5.64	7.08	11.62	8.85	5.85	12.18	12.04	9.84	10.37	5.87	10.21	10.29	109.84	0.70%
COMMINGLED	26.77	19.87	24.93	26.6	22.29	15.18	32.47	19.64	20.25	16.97	14.6	19.9	259.47	1.65%
OIL/ANTI-FREEZE	8.06	6.67	9.3	8.31	10.23	8.72	11.7	12.86	9.19	8.57	9.31	4.89	107.81	0.69%
BATTERIES	1.99	2.1	2.94	2.55	3.31	2.18	4.1	2.18	2.38	3.4	2.27	1.75	31.15	0.20%
RUBBLE	42.92	47.05	47.96	70.04	44.54	54.89	49.69	39.66	36.75	39.65	28.38	50.07	551.6	3.51%
PROPANE 5-LBS	1.13		1.34		3.32	0.89		2.84	1.51	1.49	1.5		14.02	0.09%
TEXTILES RECYCLING													0	0.00%
COMMUNITY RECYCLING													0	0.00%
RE-BUILDING CENTER													0	0.00%
SVDP (RE-USE)	7.24	0.09	9.92	4.53	6.19			10.26		4.56	4.66	6.81	54.26	0.35%
PLASTIC NURSERY POTS										0.1	0.21	0.17	0.48	0.00%
TOTAL	1,076.23	1,077.34	1,234.50	1,390.98	1,435.39	1,460.84	1,473.91	1,449.25	1,352.51	1,444.94	1,271.13	1,038.29	15,705.31	100.00%
Metro Dry	5,386.64	5,438.79	6,255.11	6,553.17	7,172.47	7,258.67	7,859.07	7,504.55	7,400.96	7,737.57	6,232.07	5,270.17	80,069.24	
Less Yard Debris	148.11	169.86	218.63	207.8	217.68	324.35	314.13	354.54	361.46	356.78	238.07	152.63	3,064.04	1.41%
Net Recovered	928.12	907.48	1,015.87	1,183.18	1,217.71	1,136.49	1,159.78	1,094.71	991.05	1,088.16	1,033.06	885.66	12,641.27	
INBOUND MSW	16,064.13	14,817.20	16,420.41	17,577.07	18,666.78	18,131.38	20,424.15	19,236.05	19,338.64	21,305.09	18,684.61	17,047.79	217,713.30	
OUTBOUND MSW	16,297.86	13,962.15	15,426.07	16,403.29	17,571.13	16,738.00	19,659.98	18,109.42	19,047.03	20,405.65	18,277.42	16,190.02	208,088.02	
% recovered to MSW	6.70%	7.27%	7.52%	7.91%	7.69%	8.06%	7.22%	7.53%	6.99%	6.78%	6.80%	6.09%	7.21%	
% of Dry Recovered	17.23%	16.69%	16.24%	18.06%	16.98%	15.66%	14.76%	14.59%	13.39%	14.06%	16.58%	16.81%	15.92%	
% Dry to MSW	33.53%	36.71%	38.09%	37.28%	38.42%	40.03%	38.48%	39.01%	38.27%	36.32%	33.35%	30.91%	36.78%	

COMMODITIES SHIPPED 2014 TONS MTD	Updated 12/31/2014													
MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	
YARD DEBRIS	90.32	40.35	141.37	154.45	138.59	151.69	109.1	133.84				405.35	1,365.06	7.91%
MILLWOOD	716.56	717.21	969.78	944.37	956.45	965.27	1066.83	911.13	813.15	1019.06	907.03	889.87	10,876.71	63.03%
TIRES	6.16	7.83	18.65	15.89	16.96	15.09	13.82	14.29	20.81	13.33	13.26	12.97	169.06	0.98%
FERROUS METAL	180.5	143.05	201.22	238.28	227.74	248.31	242.81	204.78	212.55	195.31	164.69	190.11	2,449.35	14.19%
NON-FERROUS METAL	14.34	9.47	17.3	14.13	16.18	13.2	14.01	13.64	10.53	15.66	8.94	9.05	156.45	0.91%
ELECTRONICS	35.02	27.76	32.9	47.76	35.44	34.28	42.5	24.98	36.86	34.38	21.66	29.99	403.53	2.34%
CARPET													0	0.00%
FOAM PAD													0	0.00%
HARD PLASTIC	2.14	1.67		2.93			1.5		0.73				8.97	0.05%
FILM PLASTIC	1.95	1.19		2.79			2.95					3.3	12.18	0.07%
CARDBOARD	56.65	47.05	54.24	55.81	51.61	48.22	69.59	55.34	55.52	47.52	52.86	49.27	643.68	3.73%
GLASS	11.68	12.93	7.9	11.84	19.07	7.66	15.67	9.64	11.08	16.15	5.3	15.98	144.9	0.84%
COMMINGLED	21.48	11.91	21.51	16.68	18.61	23.25	19.25	18.04	18.95	25.6	15.25	21.95	232.48	1.35%
OIL/ANTI-FREEZE	9.25	6.42	7.14	8.91	10.43	7.5	10.73	9.98	9.06	9.59	5.91	5.01	99.93	0.58%
BATTERIES	1.47	1.83	2.35	2.89	2.23	4.04	3.92	2.48	3.72	2.25	1.14	2.16	30.48	0.18%
RUBBLE	47.69	38.55	49.66	59.06	48.54	59.63	46.2	42.62	51.48	45.53	48.63	40.32	577.91	3.35%
PROPANE 5-LBS	1.31		1.38	1.31	1.49		4.06		2.99	1.56	1.95		16.05	0.09%
TEXTILES RECYCLING													0	0.00%
COMMUNITY RECYCLING			0.51	4.17		0.65	0.25		0.43	3.76	0.19		9.96	0.06%
RE-BUILDING CENTER													0	0.00%
SVDP (RE-USE)	6.93	6.96	6.96	7.5	4.54		7.91		9.26	2.84	1.81	4.19	58.9	0.34%
PLASTIC NURSERY POTS	0.24	0.02		0.03									0.29	0.00%
TOTAL	**1,203.69**	**1,074.20**	**1,532.87**	**1,588.80**	**1,547.88**	**1,578.79**	**1,671.10**	**1,440.76**	**1,257.12**	**1,432.54**	**1,248.62**	**1,679.52**	**17,255.89**	100.00%
Metro Dry	**5,605.09**	**5,064.09**	**7,233.01**	**7,494.78**	**7,800.86**	**7,883.40**	**8,973.70**	**9,088.59**	**9,026.97**	**8,548.43**	**6,956.17**	**7,239.61**	**90,914.70**	
Less Yard Debris	186.63	139.77	312.53	288.59	365	458.72	427.51	438.53	415.89	631.89	790.31	721.69	5,177.06	2.16%
Net Recovered	**1017.06**	**934.43**	**1,220.34**	**1,300.21**	**1,182.88**	**1,120.07**	**1,243.59**	**1,002.23**	**841.23**	**800.65**	**458.31**	**957.83**	**12,078.83**	
INBOUND MSW	16,847.46	15,011.99	18,261.40	19,228.39	19,712.13	19,480.15	21,337.06	20,516.18	21,183.44	23,974.59	20,453.94	23,264.25	239,270.98	
OUTBOUND MSW	16,673.05	13,068.84	17,640.89	18,421.63	18,852.14	18,535.21	20,252.54	19,240.76	20,694.98	23,322.62	19,007.24	22,657.81	228,367.71	
% recovered to MSW	7.14%	7.16%	8.39%	8.26%	7.85%	8.10%	7.83%	7.02%	5.93%	5.98%	6.10%	7.22%	7.21%	
% of Dry Recovered	**18.15%**	**18.45%**	**16.87%**	**17.35%**	**15.16%**	**14.21%**	**13.86%**	**11.03%**	**9.32%**	**9.37%**	**6.59%**	**13.23%**	**13.63%**	
% Dry to MSW	33.27%	33.73%	39.61%	38.98%	39.57%	40.47%	42.06%	44.30%	42.61%	35.66%	34.01%	31.12%	38.00%	

COMMODITIES SHIPPED 2015 TONS MTD	Updated 3/31/2015													
MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	
YARD DEBRIS	328.7	344.67	597.67										1,271.04	19.87%
MILLWOOD	1288.73	1153.47	1377.51										3,819.71	59.71%
TIRES	13.65	6.62	21.31										41.58	0.65%
FERROUS METAL	186.22	189.85	235.27										611.34	9.56%
NON-FERROUS METAL	19.49	11.24	11.39										42.12	0.66%
ELECTRONICS	33.58	26.64	44.44										104.66	1.64%
CARPET													0	0.00%
FOAM PAD													0	0.00%
HARD PLASTIC	4.12	1.46											5.58	0.09%
FILM PLASTIC		1.81	1.61										3.42	0.05%
CARDBOARD	50.22	47.07	50.92										148.21	2.32%
GLASS	6.01	12.35	13.28										31.64	0.49%
COMMINGLED	15.77	18.46	23.26										57.49	0.90%
OIL/ANTI-FREEZE	10.44	7.45	10.43										28.32	0.44%
BATTERIES	2.56	1.3	3.42										7.28	0.11%
RUBBLE	74.57	55.32	76.13										206.02	3.22%
PROPANE 5-LBS	1.14	1.4	1.24										3.78	0.06%
TEXTILES RECYCLING													0	0.00%
COMMUNITY RECYCLING													0	0.00%
RE-BUILDING CENTER													0	0.00%
SVDP (RE-USE)	4.51	4.86	4.91										14.28	0.22%
PLASTIC NURSERY POTS	0.34		0.11										0.45	0.01%
TOTAL	**2,040.05**	**1,883.97**	**2,472.90**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**6,396.92**	100.00%
Metro Dry	**7,938.67**	**7,786.04**	**9,067.50**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**24,792.21**	
Less Yard Debris	689.11	746.78	1093.43	0	0	0	0	0	0	0	0	0	2,529.32	4.11%
Net Recovered	**1350.94**	**1137.19**	**1,379.47**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0**	**0.00**	**0.00**	**0**	**3,867.60**	
INBOUND MSW	20,426.02	19,399.91	21,685.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61,511.28	
OUTBOUND MSW	19,654.89	18,231.02	20,413.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	58,299.17	
% recovered to MSW	9.99%	9.71%	11.40%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	10.40%	
% of Dry Recovered	**17.02%**	**14.61%**	**15.21%**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	**#DIV/0!**	
% Dry to MSW	38.87%	40.13%	41.81%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	40.31%	

Metro South Recovery Revenue Report

April 2014

Material	Tons	Loads/Units	Revenue	Cost	Net revenue
ORGANICS	3,746.12	175	$ 177,969.65	$ 149,331.00	$28,638.65
YARD DEBRIS	-	0	$ -	$ -	$0.00
MILLWOOD	944.37	72	$ 5,309.40	$ 19,236.00	($13,926.60)
TIRES	15.89	3	$ -	$ 1,598.25	($1,598.25)
FERROUS METAL	238.28	61	$ 37,934.10	$ 1,672.00	$36,262.10
NON-FERROUS METAL	14.13	7	$ 5,873.90	$ -	$5,873.90
ELECTRONICS	47.76	33	$ 1,816.20		$1,816.20
CARPET	-	0	$ -	$ -	$0.00
CARPET PAD	-	0	$ -	$ -	$0.00
HARD PLASTIC	2.93	1	$ -	$ -	$0.00
FILM PLASTIC	2.79	1	$ -	$ -	$0.00
CARDBOARD	57.58	29	$ 3,401.00	$ -	$3,401.00
GLASS	11.84	2	$ -	$ -	$0.00
COMMINGLED	19.08	11	$ 1,794.26	$ -	$1,794.26
OIL/ANTI-FREEZE	8.91	6	$ 717.50	$ 457.05	$260.45
BATTERIES	2.89	4	$ 2,466.00	$ -	$2,466.00
RUBBLE	59.06	9	$ -	$ 42.62	($42.62)
PROPANE 5-LBS	1.31	1	$ -	$ 300.00	($300.00)
RE-BUILDING CENTER	-	0	$ -	$ -	$0.00
SVDP (RE-USE)	7.50	3	$ -	$ -	$0.00
PLASTIC NURSERY POTS	0.03	1	$ -	$ -	$0.00
					$64,645.09

Metro South Recovery Revenue Report

May 2014

Material	Tons	Loads/Units	Revenue	Cost	Net revenue
ORGANICS	4,508.94	193	$ 207,566.31	$ 170,970.00	$36,596.31
YARD DEBRIS	-	0	$ -	$ -	$0.00
MILLWOOD	956.45	64	$ 4,490.10	$ 22,915.00	($18,424.90)
TIRES	16.96	2	$ -	$ 2,663.25	($2,663.25)
FERROUS METAL	227.74	59	$ 44,409.30	$ 2,384.00	$42,025.30
NON-FERROUS METAL	16.18	9	$ 7,912.70	$ -	$7,912.70
ELECTRONICS	35.44	26	$ 840.40		$840.40
CARPET	-	0	$ -	$ -	$0.00
CARPET PAD	-	0	$ -	$ -	$0.00
HARD PLASTIC	-	0	$ -	$ -	$0.00
FILM PLASTIC	-	0	$ -	$ -	$0.00
CARDBOARD	51.61	25	$ 3,233.00	$ -	$3,233.00
GLASS	19.07	3	$ 112.50	$ -	$112.50
COMMINGLED	18.61	4	$ 673.84	$ -	$673.84
OIL/ANTI-FREEZE	10.43	6	$ 794.15	$ 355.90	$438.25
BATTERIES	2.23	2	$ 1,338.00	$ -	$1,338.00
RUBBLE	48.54	6	$ -	$ 237.73	($237.73)
PROPANE 5-LBS	1.49	1	$ -	$ 340.00	($340.00)
RE-BUILDING CENTER	-	0	$ -	$ -	$0.00
SVDP (RE-USE)	4.54	2	$ -	$ -	$0.00
PLASTIC NURSERY POTS	-	0	$ -	$ -	$0.00
					$71,504.42

Metro South Recovery Revenue Report

June 2014

Material	Tons	Loads/Units	Revenue	Cost	Net revenue
ORGANICS	4,004.80	169	$ 187,102.77	$ 151,163.69	$35,939.08
YARD DEBRIS	-	0	$ -	$ -	$0.00
MILLWOOD	965.27	64	$ 4,773.90	$ 32,251.80	($27,477.90)
TIRES	15.09	1	$ -	$ 191.25	($191.25)
FERROUS METAL	248.31	57	$ 47,178.90	$ 2,464.00	$44,714.90
NON-FERROUS METAL	13.20	6	$ 5,438.10	$ -	$5,438.10
ELECTRONICS	34.28	24	$ 779.60		$779.60
CARPET	-	0	$ -	$ -	$0.00
CARPET PAD	-	0	$ -	$ -	$0.00
HARD PLASTIC	-	0	$ -	$ -	$0.00
FILM PLASTIC	-	0	$ -	$ -	$0.00
CARDBOARD	48.22	22	$ 2,851.00	$ -	$2,851.00
GLASS	7.66	1	$ -	$ -	$0.00
COMMINGLED	23.90	6	$ 729.51	$ -	$729.51
OIL/ANTI-FREEZE	7.50	5	$ 659.75	$ 280.00	$379.75
BATTERIES	4.04	3	$ 2,424.00	$ -	$2,424.00
RUBBLE	59.63	8	$ -	$ 215.25	($215.25)
PROPANE 5-LBS	-	0	$ -	$ -	$0.00
RE-BUILDING CENTER	-	0	$ -	$ -	$0.00
SVDP (RE-USE)	-	0	$ -	$ -	$0.00
PLASTIC NURSERY POTS	-	0	$ -	$ -	$0.00
					$65,371.54

Metro South Recovery Revenue Report

July 2014

Material	Tons	Loads/Units	Revenue	Cost	Net revenue
ORGANICS	3,512.80	154	$ 157,012.52	$ 144,348.81	$12,663.71
YARD DEBRIS	-	0	$ -	$ -	$0.00
MILLWOOD	1,066.82	76	$ 1,444.50	$ 34,577.76	($33,133.26)
TIRES	13.82	3	$ -	$ 890.75	($890.75)
FERROUS METAL	242.81	61	$ 47,347.95	$ 2,440.00	$44,907.95
NON-FERROUS METAL	14.01	7	$ 10,319.05	$ -	$10,319.05
ELECTRONICS	42.50	29	$ 1,435.40		$1,435.40
CARPET	-	0	$ -	$ -	$0.00
CARPET PAD	-	0	$ -	$ -	$0.00
HARD PLASTIC	1.50	1	$ -	$ -	$0.00
FILM PLASTIC	2.95	1	$ -	$ -	$0.00
CARDBOARD	69.59	27	$ 4,123.00	$ -	$4,123.00
GLASS	15.67	2	$ -	$ -	$0.00
COMMINGLED	19.50	7	$ 1,229.23	$ -	$1,229.23
OIL/ANTI-FREEZE	10.73	6	$ 759.50	$ 219.05	$540.45
BATTERIES	3.92	3	$ 2,352.00	$ -	$2,352.00
RUBBLE	46.20	7	$ -	$ 185.55	($185.55)
PROPANE 5-LBS	4.06	3	$ -	$ 300.00	($300.00)
RE-BUILDING CENTER	-	0	$ -	$ -	$0.00
SVDP (RE-USE)	7.91	3	$ -	$ -	$0.00
PLASTIC NURSERY POTS	-	0	$ -	$ -	$0.00
					$43,061.23

Metro South Recovery Revenue Report

August 2014

Material	Tons	Loads/Units	Revenue	Cost	Net revenue
ORGANICS	2,607.01	114	$ 116,562.59	$ 100,380.22	$16,182.37
YARD DEBRIS	-	0	$ -	$ -	$0.00
MILLWOOD	908.02	62	$ 550.00	$ 22,564.74	($22,014.74)
TIRES	14.29	2	$ -	$ 121.75	($121.75)
FERROUS METAL	204.78	49	$ 39,932.10	$ 1,512.00	$38,420.10
NON-FERROUS METAL	13.64	10	$ 11,896.90	$ -	$11,896.90
ELECTRONICS	24.98	21	$ 1,117.80		$1,117.80
CARPET	-	0	$ -	$ -	$0.00
CARPET PAD	-	0	$ -	$ -	$0.00
HARD PLASTIC	-	0	$ -	$ -	$0.00
FILM PLASTIC	-	0	$ -	$ -	$0.00
CARDBOARD	53.02	26	$ 2,806.00	$ -	$2,806.00
GLASS	9.64	2	$ -	$ -	$0.00
COMMINGLED	20.36	8	$ 959.79	$ -	$959.79
OIL/ANTI-FREEZE	9.98	6	$ 797.65	$ 458.25	$339.40
BATTERIES	2.48	2	$ 1,535.60	$ -	$1,535.60
RUBBLE	42.62	6	$ -	$ 115.73	($115.73)
PROPANE 5-LBS	-	0	$ -	$ 310.00	($310.00)
RE-BUILDING CENTER	-	0	$ -	$ -	$0.00
SVDP (RE-USE)	-	0	$ -	$ -	$0.00
PLASTIC NURSERY POTS	-	0	$ -	$ -	$0.00
					$50,695.74

Metro South Recovery Revenue Report

September 2014

Material	Tons	Loads/Units	Revenue	Cost	Net revenue
ORGANICS	2,679.96	120	$ 122,325.71	$ 107,743.09	$14,582.62
YARD DEBRIS	-	0	$ -	$ -	$0.00
MILLWOOD	813.15	56	$ 1,700.00	$ 26,574.59	($24,874.59)
TIRES	20.81	3	$ -	$ 976.50	($976.50)
FERROUS METAL	212.55	52	$ 43,572.75	$ 2,560.00	$41,012.75
NON-FERROUS METAL	10.53	7	$ 9,158.25	$ -	$9,158.25
ELECTRONICS	36.86	22	$ 1,095.60		$1,095.60
CARPET	-	0	$ -	$ -	$0.00
CARPET PAD	-	0	$ -	$ -	$0.00
HARD PLASTIC	0.73	1	$ -	$ -	$0.00
FILM PLASTIC	-	0	$ -	$ -	$0.00
CARDBOARD	55.52	29	$ 3,126.00	$ -	$3,126.00
GLASS	11.08	2	$ -	$ -	$0.00
COMMINGLED	19.38	6	$ 838.44	$ -	$838.44
OIL/ANTI-FREEZE	9.06	6	$ 861.70	$ 825.80	$35.90
BATTERIES	3.72	3	$ 2,450.40	$ -	$2,450.40
RUBBLE	51.48	6	$ -	$ 219.34	($219.34)
PROPANE 5-LBS	2.99	2	$ -	$ -	$0.00
RE-BUILDING CENTER	-	0	$ -	$ -	$0.00
SVDP (RE-USE)	9.26	4	$ -	$ -	$0.00
PLASTIC NURSERY POTS	-	0	$ -	$ -	$0.00
					$46,229.53

Metro South Recovery Revenue Report

October 2014

Material	Tons	Loads/Units	Revenue	Cost	Net revenue
ORGANICS	3,014.64	125	$ 127,816.74	$ 111,104.60	$16,712.14
YARD DEBRIS	-	0	$ -	$ -	$0.00
MILLWOOD	1,019.06	76	$ 150.00	$ 18,691.77	($18,541.77)
TIRES	13.33	2	$ -	$ 2,084.00	($2,084.00)
FERROUS METAL	195.31	45	$ 37,108.90	$ 1,220.00	$35,888.90
NON-FERROUS METAL	15.66	8	$ 12,495.10	$ -	$12,495.10
ELECTRONICS	34.38	21	$ 1,440.40		$1,440.40
CARPET	-	0	$ -	$ -	$0.00
CARPET PAD	-	0	$ -	$ -	$0.00
HARD PLASTIC	-	0	$ -	$ -	$0.00
FILM PLASTIC	-	0	$ -	$ -	$0.00
CARDBOARD	47.52	24	$ 2,624.00	$ -	$2,624.00
GLASS	13.57	4	$ 140.70	$ -	$140.70
COMMINGLED	29.36	4	$ 855.64	$ -	$855.64
OIL/ANTI-FREEZE	9.59	7	$ 641.90	$ 352.65	$289.25
BATTERIES	2.25	2	$ 1,405.80	$ -	$1,405.80
RUBBLE	45.53	6	$ -	$ 126.27	($126.27)
PROPANE 5-LBS	1.56	1	$ -	$ 707.50	($707.50)
RE-BUILDING CENTER	-	0	$ -	$ -	$0.00
SVDP (RE-USE)	2.84	1	$ -	$ -	$0.00
PLASTIC NURSERY POTS	-	0	$ -	$ -	$0.00
					$50,392.39

Metro South Recovery Revenue Report

November 2014

Material	Tons	Loads/Units	Revenue	Cost	Net revenue
ORGANICS	3,090.77	130	$ 120,235.74	$ 132,876.45	($12,640.71)
YARD DEBRIS	-	0	$ -	$ -	$0.00
MILLWOOD	907.03	61	$ -	$ 19,065.12	($19,065.12)
TIRES	13.26	2	$ -	$ 494.50	($494.50)
FERROUS METAL	164.69	39	$ 26,350.40	$ 1,196.00	$25,154.40
NON-FERROUS METAL	8.94	5	$ 8,305.60	$ -	$8,305.60
ELECTRONICS	21.66	16	$ 609.80		$609.80
CARPET	-	0	$ -	$ -	$0.00
CARPET PAD	-	0	$ -	$ -	$0.00
HARD PLASTIC	-	0	$ -	$ -	$0.00
FILM PLASTIC	-	0	$ -	$ -	$0.00
CARDBOARD	52.86	20	$ 2,782.00	$ -	$2,782.00
GLASS	5.30	1	$ 79.20	$ -	$79.20
COMMINGLED	15.44	4	$ 617.26	$ -	$617.26
OIL/ANTI-FREEZE	5.91	5	$ 285.95	$ 397.39	($111.44)
BATTERIES	1.14	1	$ 684.00	$ -	$684.00
RUBBLE	48.63	6	$ -	$ 173.04	($173.04)
PROPANE 5-LBS	1.95	2	$ -	$ -	$0.00
RE-BUILDING CENTER	-	0	$ -	$ -	$0.00
SVDP (RE-USE)	1.81	2	$ -	$ -	$0.00
PLASTIC NURSERY POTS	-	0	$ -	$ -	$0.00
					$5,747.45

Metro South Recovery Revenue Report

December 2014

Material	Tons	Loads/Units	Revenue	Cost	Net revenue
ORGANICS	2,743.45	118	$ 112,987.41	$ 98,783.45	$14,203.96
YARD DEBRIS	-	0	$ -	$ -	$0.00
MILLWOOD	889.87	58	$ -	$ 21,938.46	($21,938.46)
TIRES	12.97	2	$ -	$ 972.75	($972.75)
FERROUS METAL	185.04	43	$ 34,232.40	$ 1,720.00	$32,512.40
NON-FERROUS METAL	9.05	8	$ 14,735.60	$ -	$14,735.60
ELECTRONICS	29.99	21	$ 1,207.60		$1,207.60
CARPET	-	0	$ -	$ -	$0.00
CARPET PAD	-	0	$ -	$ -	$0.00
HARD PLASTIC	-	0	$ -	$ -	$0.00
FILM PLASTIC	3.30	2	$ -	$ -	$0.00
CARDBOARD	49.27	21	$ 2,205.00	$ -	$2,205.00
GLASS	15.98	3	$ 67.95	$ -	$67.95
COMMINGLED	21.95	6	$ 621.71	$ -	$621.71
OIL/ANTI-FREEZE	5.01	4	$ 356.30	$ 182.00	$174.30
BATTERIES	2.16	2	$ 1,296.00	$ -	$1,296.00
RUBBLE	40.32	5	$ -	$ 105.57	($105.57)
PROPANE 5-LBS	-	0	$ -	$ -	$0.00
RE-BUILDING CENTER	-	0	$ -	$ -	$0.00
SVDP (RE-USE)	4.19	3	$ -	$ -	$0.00
PLASTIC NURSERY POTS	-	0	$ -	$ -	$0.00

$44,007.74

Metro South Recovery Revenue Report

January 2015

Material	Tons	Loads/Units	Revenue	Cost	Net revenue
ORGANICS	1,963.06	129	$ 91,753.42	$ 76,537.64	$15,215.78
YARD DEBRIS	328.70	15	$ -	$ 15,251.95	($15,251.95)
MILLWOOD	1,288.73	78	$ -	$ 24,970.92	($24,970.92)
TIRES	13.65	2	$ -	$ 559.75	($559.75)
FERROUS METAL	186.22	43	$ 27,761.10	$ -	$27,761.10
NON-FERROUS METAL	19.49	9	$ 5,902.98	$ -	$5,902.98
ELECTRONICS	33.58	20	$ 3,223.68	$ -	$3,223.68
CARPET	-	0	$ -	$ -	$0.00
CARPET PAD	-	0	$ -	$ -	$0.00
HARD PLASTIC	4.12	3	$ 292.00	$ -	$292.00
FILM PLASTIC	-	1	$ -	$ -	$0.00
CARDBOARD	50.22	24	$ 1,773.82	$ -	$1,773.82
GLASS	6.01	1	$ -	$ -	$0.00
COMMINGLED	15.77	4	$ 299.56	$ -	$299.56
OIL/ANTI-FREEZE	10.44	9	$ 573.65	$ 184.60	$389.05
BATTERIES	2.56	2	$ 650.00	$ -	$650.00
RUBBLE	74.57	9	$ -	$ 187.74	($187.74)
PROPANE 5-LBS	1.14	5	$ -	$ -	$0.00
RE-BUILDING CENTER	-	0	$ -	$ -	$0.00
SVDP (RE-USE)	4.51	0	$ -	$ 632.00	($632.00)
PLASTIC NURSERY POTS	0.34	2	$ -	$ -	$0.00
					$13,905.61

Metro South Recovery Revenue Report

February 2015

Material	Tons	Loads/Units	Revenue	Cost	Net revenue
ORGANICS	1,753.60	76	$ 81,963.26	$ 74,680.88	$7,282.38
YARD DEBRIS	344.67	15	$ -	$ 14,036.30	($14,036.30)
MILLWOOD	1,153.47	93	$ -	$ 29,773.02	($29,773.02)
TIRES	6.62	1	$ -	$ 559.75	($559.75)
FERROUS METAL	189.85	45	$ 27,761.10	$ 696.00	$27,065.10
NON-FERROUS METAL	11.24	6	$ 5,902.98	$ -	$5,902.98
ELECTRONICS	26.64	27	$ 2,557.44	$ -	$2,557.44
CARPET	-	0	$ -	$ -	$0.00
CARPET PAD	-	0	$ -	$ -	$0.00
HARD PLASTIC	1.46	1	$ 292.00	$ -	$292.00
FILM PLASTIC	1.81	1	$ -	$ -	$0.00
CARDBOARD	47.07	27	$ 1,773.82	$ -	$1,773.82
GLASS	12.35	2	$ 186.90	$ -	$186.90
COMMINGLED	18.46	4	$ 234.20	$ -	$234.20
OIL/ANTI-FREEZE	7.45	7	$ 573.65	$ 200.00	$373.65
BATTERIES	1.30	2	$ 861.80	$ -	$861.80
RUBBLE	55.32	7	$ -	$ 187.74	($187.74)
PROPANE 5-LBS	1.40	1	$ -	$ -	$0.00
RE-BUILDING CENTER	-	0	$ -	$ -	$0.00
SVDP (RE-USE)	4.86	2	$ -	$ 696.00	($696.00)
PLASTIC NURSERY POTS	-	1	$ -	$ -	$0.00
					$1,277.46

Metro South Recovery Revenue Report

March 2015

Material	Tons	Loads/Units	Revenue	Cost	Net revenue
ORGANICS	2,530.60	106	$ 117,799.43	$ 102,952.80	$14,846.63
YARD DEBRIS	597.67	24	$ -	$ 21,326.30	($21,326.30)
MILLWOOD	1,300.96	85	$ -	$ 27,211.90	($27,211.90)
TIRES	21.31	3	$ -	$ 2,063.50	($2,063.50)
FERROUS METAL	233.98	61	$ 27,866.40	$ 1,864.00	$26,002.40
NON-FERROUS METAL	12.68	8	$ 8,075.20	$ -	$8,075.20
ELECTRONICS	44.44	12	$ 2,666.40	$ -	$2,666.40
CARPET	-	0	$ -	$ -	$0.00
CARPET PAD	-	0	$ -	$ -	$0.00
HARD PLASTIC	-	0	$ -	$ -	$0.00
FILM PLASTIC	1.61	1	$ -	$ -	$0.00
CARDBOARD	50.92	33	$ 929.80	$ -	$929.80
GLASS	13.28	2	$ 123.15	$ -	$123.15
COMMINGLED	23.26	5	$ 349.07	$ -	$349.07
OIL/ANTI-FREEZE	10.43	6	$ 790.19	$ 34.30	$755.89
BATTERIES	3.42	3	$ 1,710.00	$ -	$1,710.00
RUBBLE	76.13	8	$ -	$ 262.08	($262.08)
PROPANE 5-LBS	1.24	1	$ -	$ -	$0.00
RE-BUILDING CENTER	-	0	$ -	$ -	$0.00
SVDP (RE-USE)	4.91	1	$ -	$ 1,864.00	($1,864.00)
PLASTIC NURSERY POTS	0.11	2	$ -	$ -	$0.00
					$2,730.76

Processing Residual Quarterly Report

Metro

For the Quarter Ending:

June '14

Company Name	*Republic Services*		
Address	*2001 Washington Street*	*Phone No.*	503-722-4656
City, State, Zip	*Oregon City, OR 97045*	*Date*	6/30/2014

	Day 1			Day 2			Day 3		
Date of Sample	4/17/2014			5/20/2014			6/25/2014		
Sample Number	1	2	3	1	2	3	1	2	3
Time	10:05pm	10:25pm	10:25pm	10:11pm	10:30pm	10:44pm	11:40pm	11:55pm	12:15am
Sample Net Wt. (lbs)	1,260	410	850	1,040	410	630	1,120	450	710
Cardboard	9.0	4.5	4.5	10.0	4.3	5.5	9.5	3.9	5.0
	0.7%	*1.1%*	*0.5%*	*1.0%*	*1.0%*	*0.9%*	*0.8%*	*0.9%*	*0.7%*
Wood	11.8	4.5	13.5	12.8	4.7	10.5	10.5	4.1	11.5
	0.9%	*1.1%*	*1.6%*	*1.2%*	*1.1%*	*1.7%*	*0.9%*	*0.9%*	*1.6%*
Metal	11.5	4.6	7.0	11.5	4.5	7.1	9.6	3.7	8.5
	0.9%	*1.1%*	*0.8%*	*1.1%*	*1.1%*	*1.1%*	*0.9%*	*0.8%*	*1.2%*
Sample Totals	32.3	13.6	25.0	34.3	13.5	23.1	29.6	11.7	25.0
	2.6%	*3.3%*	*2.9%*	*3.3%*	*3.3%*	*3.7%*	*2.6%*	*2.6%*	*3.5%*

Quarterly Sample Totals

	Totals	Average
Sample Net Wt. (lbs)	6,880	764
Cardboard	56.1	6.2
	0.8%	**0.8%**
Wood	83.9	9.3
	1.2%	**1.2%**
Metal	68.0	7.6
	1.0%	**1.0%**
Totals	208.0	23.1
	3.0%	**3.1%**

Report prepared by: Blaine Colvin — Phone No. 503-722-4656 xt 233

REMIT TO:
Metro Attn: Accounting Front Desk
600 NE Grand Avenue
Portland, OR 97232-2736

I DECLARE THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE STATEMENTS HEREIN ARE CORRECT AND TRUE.

Authorized Signature ***Date*** 6/30/14

Print Name and Title Blaine Colvin - Operations Manager

Metro

Processing Residual Quarterly Report

For the Quarter Ending:

September '14

Company Name	*Republic Services*		
Address	*2001 Washington Street*	*Phone No.*	503-722-4656
City, State, Zip	*Oregon City, OR 97045*	*Date*	9/11/2014

	Day 1			Day 2			Day 3		
Date of Sample	7/15/2014			8/19/2014			9/2/2014		
Sample Number	1	2	3	1	2	3	1	2	3
Time	10:05pm	10:25pm	10:25pm	10:11pm	10:30pm	10:44pm	11:40pm	11:55pm	12:15am
Sample Net Wt. (lbs)	1,020	410	610	1,260	410	850	1,180	760	450
Cardboard	9.0	4.5	4.5	7.5	4.5	3.0	9.0	4.5	4.5
	0.9%	*1.1%*	*0.7%*	*0.6%*	*1.1%*	*0.4%*	*0.8%*	*0.6%*	*1.0%*
Wood	11.0	3.7	6.5	12.0	4.3	5.5	8.0	3.5	3.6
	1.1%	*0.9%*	*1.1%*	*1.0%*	*1.0%*	*0.6%*	*0.7%*	*0.5%*	*0.8%*
Metal	14.0	4.3	9.5	8.0	3.7	3.5	11.0	6.5	4.6
	1.4%	*1.0%*	*1.6%*	*0.6%*	*0.9%*	*0.4%*	*0.9%*	*0.9%*	*1.0%*
Sample Totals	34.0	12.5	20.5	27.5	12.5	12.0	28.0	14.5	12.7
	3.3%	*3.0%*	*3.4%*	*2.2%*	*3.0%*	*1.4%*	*2.4%*	*1.9%*	*2.8%*

Quarterly Sample Totals

	Totals	Average
Sample Net Wt. (lbs)	6,950	772
Cardboard	51.0	5.7
	0.7%	**0.8%**
Wood	58.1	6.5
	0.8%	**0.8%**
Metal	65.1	7.2
	0.9%	**1.0%**
Totals	174.2	19.4
	2.5%	**2.6%**

Report prepared by: Blaine Colvin — Phone No. 503-722-4656 xt 233

REMIT TO: **Metro Attn: Accounting Front Desk**
600 NE Grand Avenue
Portland, OR 97232-2736

I DECLARE THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE STATEMENTS HEREIN ARE CORRECT AND TRUE.

Authorized Signature ***Date*** 6/30/14

Print Name and Title Blaine Colvin - Operations Manager

Metro

Processing Residual Quarterly Report

For the Quarter Ending:

December '14

Company Name	*Republic Services*		
Address	*2001 Washington Street*	*Phone No.*	503-722-4656
City, State, Zip	*Oregon City, OR 97045*	*Date*	1/26/2015

	Day 1			Day 2			Day 3		
Date of Sample	11/3/2014			12/9/2014			12/15/2014		
Sample Number	1	2	3	1	2	3	1	2	3
Time	8:42pm	8:57pm	9:14pm	9:00pm	9:22pm	9:46pm	8:53pm	9:21pm	9:37pm
Sample Net Wt. (lbs)	410	630	500	1,060	410	850	430	1,010	970
Cardboard	4.5	2.4	1.2	0.0	3.7	3.3	0.0	0.0	1.4
	1.1%	*0.4%*	*0.2%*	*0.0%*	*0.9%*	*0.4%*	*0.0%*	*0.0%*	*0.1%*
Wood	27.5	12.7	9.0	27.0	25.2	40.0	3.0	14.6	7.4
	6.7%	*2.0%*	*1.8%*	*2.5%*	*6.1%*	*4.7%*	*0.7%*	*1.4%*	*0.8%*
Metal	6.1	5.2	2.7	3.0	0.0	3.0	4.3	0.0	8.5
	1.5%	*0.8%*	*0.5%*	*0.3%*	*0.0%*	*0.4%*	*1.0%*	*0.0%*	*0.9%*
Sample Totals	38.0	20.3	12.9	30.0	28.9	46.3	7.3	14.6	17.3
	9.3%	*3.2%*	*2.6%*	*2.8%*	*7.0%*	*5.4%*	*1.7%*	*1.4%*	*1.8%*

Quarterly Sample Totals

	Totals	Average
Sample Net Wt. (lbs)	6,270	697
Cardboard	16.4	1.8
	0.3%	**0.3%**
Wood	166.4	18.5
	2.7%	**3.0%**
Metal	32.7	3.6
	0.5%	**0.6%**
Totals	215.5	23.9
	3.4%	**3.9%**

Report prepared by: Phone No. 503-722-4656 xt 233

REMIT TO: **Metro Attn: Accounting Front Desk**
600 NE Grand Avenue
Portland, OR 97232-2736

I DECLARE THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE STATEMENTS HEREIN ARE CORRECT AND TRUE.

Authorized Signature ***Date***

Print Name and Title - Operations Manager

Metro

Processing Residual Quarterly Report

For the Quarter Ending:

March '15

Company Name	*Republic Services*		
Address	*2001 Washington Street*	*Phone No.*	503-722-4656
City, State, Zip	*Oregon City, OR 97045*	*Date*	3/31/2015

	Day 1			Day 2			Day 3		
Date of Sample	1/21/2015			2/8/2015			3/22/2015		
Sample Number	1	2	3	1	2	3	1	2	3
Time	8:51pm	9:17pm	9:40pm	7:15 AM	7:39 AM	8:02 AM	1:12 AM	1:45 AM	2:30 AM
Sample Net Wt. (lbs)	570	790	690	550	720	470	810	650	790
Cardboard	3.2	4.7	4.1	1.1	0.9	2.2	0.0	3.8	5.4
	0.6%	*0.6%*	*0.6%*	*0.2%*	*0.1%*	*0.5%*	*0.0%*	*0.6%*	*0.7%*
Wood	18.5	23.4	29.2	2.6	1.9	2.2	31.3	8.4	12.5
	3.3%	*3.0%*	*4.2%*	*0.5%*	*0.3%*	*0.5%*	*3.9%*	*1.3%*	*1.6%*
Metal	3.9	5.4	0.0	2.3	1.4	1.8	9.3	10.3	26.8
	0.7%	*0.7%*	*0.0%*	*0.4%*	*0.2%*	*0.4%*	*1.1%*	*1.6%*	*3.4%*
Sample Totals	25.7	33.5	33.3	6.0	4.1	6.2	40.6	22.5	44.7
	4.5%	*4.2%*	*4.8%*	*1.1%*	*0.6%*	*1.3%*	*5.0%*	*3.5%*	*5.7%*

Quarterly Sample Totals

	Totals	Average
Sample Net Wt. (lbs)	6,040	671
Cardboard	25.4	2.8
	0.4%	**0.4%**
Wood	129.9	14.4
	2.2%	**2.0%**
Metal	61.1	6.8
	1.0%	**0.9%**
Totals	216.4	24.0
	3.6%	**3.4%**

Report prepared by: Edward Campos — Phone No. 503-722-4656 Ext 280

REMIT TO: **Metro Attn: Accounting Front Desk**
600 NE Grand Avenue
Portland, OR 97232-2736

I DECLARE THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE STATEMENTS HEREIN ARE CORRECT AND TRUE.

Authorized Signature ***Date*** Corrected 4/15/2015

Print Name and Title

Appendix C – Storm/Waste Water

- Exhibit 1 DMR
- Exhibit 2 Analytical Report 11/3/14
- Exhibit 3 Analytical Report 12/17/14
- Exhibit 4 Analytical Report 1/23/15
- Exhibit 5 Analytical Report 2/14/15
- Exhibit 6 Analytical Report 5/2/15

Industrial Stormwater Discharge Monitoring Report - 1200-Z Permit

Permittee Legal Name:	Metro Parks and Environmental Services	ODEQ File No./Facility ID:	116824
Facility Common Name:	Metro South Station	Reporting Period:	July 1, 2014 to June 30, 2015
Facility Location:	2001 Washington Street, Oregon City, OR 97045	Laboratory Name:	TestAmerica Laboratories, Inc., Beaverton, Oregon
County:	Clackamas	ORELAP# OR100021	SIC Code(s): 4953

DEQ
State of Oregon Department of Environmental Quality

Monitor for the following pollutants at sampling point(s) specified in your SWPCP and use the sampling point name or number from your SWPCP. Add more sheets if necessary (e.g., if more than 4 samples are collected per pollutant or facility has more than 4 sampling points). You MUST also attach a copy of laboratory results sheet(s).

Benchmark Sampling: 4 times per year, every year

Name or Number of Sampling Point(s) (group data per sampling point)	Sample Date	pH	Suspended Solids, Total	Oil and Grease, Total	Copper, Total	Lead, Total	Zinc, Total	E. coli *
		s.u.	mg/L	mg/L	mg/L	mg/L	mg/L	counts/100 ml
Outfall #6 (Established February 2014)	10/23/14	7.01	14	ND (4.8)	0.0066	0.0030	0.055	
	12/10/14	6.85	16	ND (4.8)	0.0045	0.0019	0.067	
	01/17/15	7.34	ND (10)	ND (4.8)	0.0042	0.0024	0.050	
	02/09/15	7.10	ND (10)	ND (4.8)	0.0044	0.0023	0.035	
Geometric Mean (Note 3)			**8.7**	**2.4**	**0.0048**	**0.0024**	**0.050**	
Geometric Mean (Note 3)								
Geometric Mean (Note 3)								
Permit Benchmark		**5.5 - 9.0**	**100**	**10**	**0.020**	**0.040**	**0.12**	**406**

* E. coli only required for landfills accepting septage/biosolids and sewage treatment plants.

Fill out only those rows and columns that apply to your specific site.

Note 1: Submit this report to the appropriate DEQ regional or agent offices (see below) annually by July 31st. The report must contain the results of all stormwater monitoring conducted during the year. If you have a monitoring waiver for one or more of the pollutant(s), please report "W" in the column(s)-see permit-Schedule B.3. You are not required to report the geometric mean for pollutant(s) that have a monitoring waiver. The geometric mean value is automatically calculated if using the Excel version of the DMR form.

Note 2: Non-detects must be reported as "ND" along with the applicable method detection limit or minimum quantification limit in parentheses - e.g. ND (0.001).

Note 3: The geometric mean is required in the second year of coverage. Use the last 4 samples collected for each pollutant parameter, from each sampling point. If any of the 4 samples were not collected during this monitoring year, attach the past DMR form(s) that include the sample results. For non-detect sampling results, record following note 2 above; the spreadsheet will automatically use 1/2 the detection limit to calculate the geometric mean. You are not required to report the geometric mean for pollutant(s) that have a monitoring waiver. The geometric mean value is automatically calculated if using the Excel version of the DMR form.

Note 4: If a sampling event is missed or a sampling parameter is not analyzed or sampled, enter "NS" in each applicable column for that row.

Note 5: If there was no discharge then state "No Discharge" in the row after the sampling date for any applicable sampling point.

Name/Title Principal Executive Officer or Authorized Delegate

(Please Print) First Name:	Penny	Last Name:	Erickson	Title:	Program Supervisor
Telephone:	(503) 797-1659	*Email:*	Penny.Erickson@oregonmetro.gov		

40 CFR 122.22 I certify, under penalty of law, that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sign here: Date:

Additional Sampling

		8 samples during first 3 years				4 samples during first 3 years	
		All Permittees				Auto Salvage & Scrap Recycling Facilities	Scrap Recycling Facilities
Name or Number of Sampling Point(s) (group data per sampling point)	Sample Date	Cadmium, Total	Nickel, Total	Chromium, Total		Mercury, Total	Total PCBs *
		mg/L	mg/L	mg/L		mg/L	mg/L
Outfall #6 (Established February 2014)	10/23/14	0.00006	0.0016	0.0013			
	12/10/14	ND (0.0010)	ND (0.0020)	ND (0.0020)			
	01/17/15	ND (0.0010)	ND (0.0020)	ND (0.0020)			
	02/09/15	ND (0.0010)	ND (0.0020)	ND (0.0020)			
					MQL	0.0024	0.002

* PCBs should be reported as the sum of the following aroclors 1016, 1221, 1232, 1242, 1248, 1254, 1260. Do not use any value for any aloclor that is non-detect, Should all Aloclors be non-detect report the ND value for the highest non-detect value from the lab report; typically, this will be ND (0.002).

For facilities located within the following local jurisdictions, please submit one (1) copy of this report, the laboratory results sheet(s), QA/QC documentation and Chain of Custody (COC) forms to the local jurisdiction annually by July 31st:

Clean Water Services
Industrial Stormwater
2550 SW Hillsboro Hwy.
Hillsboro, OR 97123

City of Portland
Industrial Stormwater Section
Water Pollution Control Lab
6543 N Burlington Ave.
Portland, OR 97203-5452

City of Eugene
Industrial Source Control
410 River Ave.
Eugene, OR 97404

For all other locations, please submit one (1) copy of this report and laboratory results sheet(s) to the appropriate DEQ regional office annually by July 31st:

DEQ Northwest Region Office
2020 SW 4th Ave. Suite 400
Portland, OR 97201
Phone: (503) 229-5263
Hours: 8 am - 5 pm

DEQ Eastern Region Office
300 SE Reed Market Rd.
Bend, OR 97702-2237
Phone: (541) 388-6146
Hours: 8 am - 5 pm

DEQ Western Region Office
165 East 7th Ave., Suite 100
Eugene, OR 97401
Phone: (541) 686-7838
Hours: 8 am - 5 pm

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: 250-22264-1
TestAmerica Sample Delivery Group: MSS
Client Project/Site: RSI-001-001
Revision: 1

For:
Tuppan Consultants LLC
460 Second Street Suite 103
Lake Oswego, Oregon 97034

Attn: Mr. Eric J Tuppan

Vanessa Berry

Authorized for release by:
11/3/2014 2:02:23 PM

Vanessa Berry, Project Manager II
(503)906-9233
vanessa.berry@testamericainc.com

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Job ID: 250-22264-1

Laboratory: TestAmerica Portland

Narrative

Job Narrative
250-22264-1

Comments
Revised Report: 200.8 metals results are reported to the MDL.

Receipt
The sample was received on 10/23/2014 2:15 PM; The temperature of the cooler at receipt was 10.0° C.

Except:

The following sample(s) was received at the laboratory outside the required temperature criteria: OF-6 (250-22264-1). 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, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

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

TestAmerica Job ID: 250-22264-1
SDG: MSS

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
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)
NC	Not Calculated
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-6
Date Collected: 10/23/14 13:30
Date Received: 10/23/14 14:15

Lab Sample ID: 250-22264-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000060	J	0.0010	0.000050	mg/L		10/24/14 10:39	10/28/14 10:03	1
Chromium	0.0013	J	0.0020	0.00032	mg/L		10/24/14 10:39	10/28/14 10:03	1
Copper	0.0066		0.0020	0.00048	mg/L		10/24/14 10:39	10/28/14 10:03	1
Lead	0.0030		0.0010	0.00014	mg/L		10/24/14 10:39	10/28/14 10:03	1
Nickel	0.0016	J	0.0020	0.000080	mg/L		10/24/14 10:39	10/28/14 10:03	1
Zinc	0.055	B	0.010	0.0016	mg/L		10/24/14 10:39	10/28/14 10:03	1

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

TestAmerica Job ID: 250-22264-1
SDG: MSS

General Chemistry

Client Sample ID: OF-6
Date Collected: 10/23/14 13:30
Date Received: 10/23/14 14:15

Lab Sample ID: 250-22264-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		4.8		mg/L		10/27/14 10:54	10/27/14 15:06	1
Total Suspended Solids	14		10		mg/L			10/28/14 18:48	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 250-31616/1-A
Matrix: Water
Analysis Batch: 31713

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31616

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010	0.000050	mg/L		10/24/14 10:39	10/28/14 08:45	1
Chromium	ND		0.0020	0.00032	mg/L		10/24/14 10:39	10/28/14 08:45	1
Copper	ND		0.0020	0.00048	mg/L		10/24/14 10:39	10/28/14 08:45	1
Lead	ND		0.0010	0.00014	mg/L		10/24/14 10:39	10/28/14 08:45	1
Nickel	ND		0.0020	0.000080	mg/L		10/24/14 10:39	10/28/14 08:45	1
Zinc	0.00473	J	0.010	0.0016	mg/L		10/24/14 10:39	10/28/14 08:45	1

Lab Sample ID: LCS 250-31616/2-A
Matrix: Water
Analysis Batch: 31713

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31616

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.100	0.106		mg/L		106	85 - 115
Chromium	0.100	0.107		mg/L		107	85 - 115
Copper	0.100	0.105		mg/L		105	85 - 115
Lead	0.100	0.107		mg/L		107	85 - 115
Nickel	0.100	0.105		mg/L		105	85 - 115
Zinc	0.100	0.107		mg/L		107	85 - 115

Lab Sample ID: 250-22247-C-1-B MS
Matrix: Water
Analysis Batch: 31713

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31616

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		0.100	0.109		mg/L		109	70 - 130
Chromium	0.00061	J	0.100	0.106		mg/L		105	70 - 130
Copper	0.18		0.100	0.293		mg/L		110	70 - 130
Lead	0.0051		0.100	0.111		mg/L		106	70 - 130
Zinc	0.25	B	0.100	0.356		mg/L		109	70 - 130

Lab Sample ID: 250-22247-C-1-B MS
Matrix: Water
Analysis Batch: 31735

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31616

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nickel	3.9		0.100	3.90	4	mg/L		-4	70 - 130

Lab Sample ID: 250-22258-G-1-B DU
Matrix: Water
Analysis Batch: 31713

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 31616

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cadmium	0.000072	J	ND		mg/L		NC	20
Chromium	ND		ND		mg/L		NC	20
Copper	0.0024		0.00250		mg/L		4	20
Lead	0.0013		0.00141		mg/L		5	20
Nickel	0.00066	J	0.000650	J	mg/L		2	20
Zinc	0.049	B	0.0504		mg/L		2	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 250-31660/1-A
Matrix: Water
Analysis Batch: 31679

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31660

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0		mg/L		10/27/14 10:54	10/27/14 15:06	1

Lab Sample ID: LCS 250-31660/2-A
Matrix: Water
Analysis Batch: 31679

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31660

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	39.7	38.4		mg/L		97	78 - 114

Lab Sample ID: 250-22228-A-1-A MS
Matrix: Water
Analysis Batch: 31679

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 31660

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	17		41.3	51.8		mg/L		84	78 - 114

Lab Sample ID: 250-22228-B-1-A MSD
Matrix: Water
Analysis Batch: 31679

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 31660

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD
Oil & Grease	17		40.9	50.8		mg/L		82	78 - 114	2

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

Lab Sample ID: MB 250-31746/1
Matrix: Water
Analysis Batch: 31746

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			10/28/14 18:48	1

Lab Sample ID: LCS 250-31746/2
Matrix: Water
Analysis Batch: 31746

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	60.0	60.0		mg/L		100	80 - 120

Lab Sample ID: LCSD 250-31746/3
Matrix: Water
Analysis Batch: 31746

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids	60.0	59.0		mg/L		98	80 - 120	2	5

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

Lab Sample ID: 250-22243-D-1 DU
Matrix: Water
Analysis Batch: 31746

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: RSI-001-001

TestAmerica Job ID: 250-22264-1
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 (UST)	State Program	10	UST-012	12-26-14
California	State Program	9	2597	09-30-15
Oregon	NELAP	10	OR100021	01-09-15
USDA	Federal		P330-11-00092	04-17-17
Washington	State Program	10	C586	06-23-15

Method Summary

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

TestAmerica Job ID: 250-22264-1
SDG: MSS

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 Portland
9405 SW Nimbus Avenue

Beaverton, OR 97008
phone 503.906.9200 fax 503.906.9210

Chain of Cu

250-22264 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☒ NPDES ☐ RCRA

Client Contact	Project Manager: ERIC TUPPAN	Site Contact:	Date:	COC No:
Your Company Name here: TUPPAN CONSULTANTS	Tel/Fax:	Lab Contact:	Carrier:	____ of ____ COCs
Address: 460 SECOND ST. Suite 103	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: LAKE OSWEGO, OR 97034	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(xxx) xxx-xxxx Phone: 503-675-1335	TAT if different from Below ____			Lab Sampling:
(xxx) xxx-xxxx FAX	☒ 2 weeks			
Project Name: RSF 001 - 001	☐ 1 week			Job / SDG No.:
Site: MSS	☐ 2 days			
PO #	☐ 1 day			Sampler: ERIC TUPPAN

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	OIL / GREASE	Cu, Pb, Zn, Cd, Cr, Ni	TSS	Sample Specific Notes:
OF-6	10/23/14	1330	G	W	3						

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

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ 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:
1200-7 PARAMETERS pH tested in FIELD 10.0 1R/P-L

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:	Corr'd:	Therm ID No.:
Relinquished by:	Company: TUPPAN CONSULTANTS, LLC	Date/Time: 10/23/14 2:15	Received by:	Company: TA	Date/Time: 10/23/14 1415
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Login Sample Receipt Checklist

Client: Tuppan Consultants LLC

Job Number: 250-22264-1
SDG Number: MSS

Login Number: 22264
List Number: 1
Creator: Svabik-Seror, Philip M

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.	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	

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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: 250-23279-1
TestAmerica Sample Delivery Group: MSS
Client Project/Site: RSI-001-001

For:
Tuppan Consultants LLC
460 Second Street Suite 103
Lake Oswego, Oregon 97034

Attn: Mr. Eric J Tuppan

Vanessa Berry

Authorized for release by:
12/17/2014 5:22:23 PM

Vanessa Berry, Project Manager II
(503)906-9233
vanessa.berry@testamericainc.com

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Job ID: 250-23279-1

Laboratory: TestAmerica Portland

Narrative

Job Narrative
250-23279-1

Comments
No additional comments.

Receipt
The sample was received on 12/10/2014 2:42 PM; The temperature of the cooler at receipt was 11.6° C.

Except:

The following sample(s) was received at the laboratory outside the required temperature criteria: OF-6 (250-23279-1). 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, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
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)
NC	Not Calculated
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: Tuppan Consultants LLC
Project/Site: RSI-001-001

TestAmerica Job ID: 250-23279-1
SDG: MSS

Method: 200.8 - Metals (ICP/MS)

Client Sample ID: OF-6
Date Collected: 12/10/14 13:50
Date Received: 12/10/14 14:42

Lab Sample ID: 250-23279-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		12/11/14 17:55	12/12/14 03:16	1
Chromium	ND		0.0020		mg/L		12/11/14 17:55	12/12/14 03:16	1
Copper	0.0045		0.0020		mg/L		12/11/14 17:55	12/12/14 03:16	1
Lead	0.0019		0.0010		mg/L		12/11/14 17:55	12/12/14 03:16	1
Nickel	ND		0.0020		mg/L		12/11/14 17:55	12/12/14 03:16	1
Zinc	0.067		0.010		mg/L		12/11/14 17:55	12/12/14 03:16	1

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

TestAmerica Job ID: 250-23279-1
SDG: MSS

General Chemistry

Client Sample ID: OF-6
Date Collected: 12/10/14 13:50
Date Received: 12/10/14 14:42

Lab Sample ID: 250-23279-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		4.8		mg/L		12/15/14 18:10	12/16/14 17:18	1
Total Suspended Solids	16		10		mg/L			12/15/14 12:51	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 250-32960/1-A
Matrix: Water
Analysis Batch: 32995

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32960

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		12/11/14 17:55	12/12/14 01:44	1
Chromium	ND		0.0020		mg/L		12/11/14 17:55	12/12/14 01:44	1
Copper	ND		0.0020		mg/L		12/11/14 17:55	12/12/14 01:44	1
Lead	ND		0.0010		mg/L		12/11/14 17:55	12/12/14 01:44	1
Nickel	ND		0.0020		mg/L		12/11/14 17:55	12/12/14 01:44	1
Zinc	ND		0.010		mg/L		12/11/14 17:55	12/12/14 01:44	1

Lab Sample ID: LCS 250-32960/2-A
Matrix: Water
Analysis Batch: 32995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32960

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.100	0.0965		mg/L		97	85 - 115
Chromium	0.100	0.0992		mg/L		99	85 - 115
Copper	0.100	0.0970		mg/L		97	85 - 115
Lead	0.100	0.0980		mg/L		98	85 - 115
Nickel	0.100	0.0981		mg/L		98	85 - 115
Zinc	0.100	0.100		mg/L		100	85 - 115

Lab Sample ID: 250-23227-U-1-C MS
Matrix: Water
Analysis Batch: 32995

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 32960

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		0.100	0.0940		mg/L		94	70 - 130
Chromium	ND		0.100	0.0971		mg/L		96	70 - 130
Copper	0.0070		0.100	0.0956		mg/L		89	70 - 130
Lead	ND		0.100	0.0902		mg/L		90	70 - 130
Nickel	ND		0.100	0.0938		mg/L		92	70 - 130
Zinc	ND		0.100	0.0974		mg/L		91	70 - 130

Lab Sample ID: 250-23227-T-2-C DU
Matrix: Water
Analysis Batch: 32995

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 32960

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cadmium	ND		ND		mg/L		NC	20
Chromium	ND		ND		mg/L		NC	20
Copper	0.0080		0.00762		mg/L		4	20
Lead	ND		ND		mg/L		NC	20
Nickel	ND		ND		mg/L		NC	20
Zinc	ND		ND		mg/L		NC	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 250-33051/1-A
Matrix: Water
Analysis Batch: 33101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 33051

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0		mg/L		12/15/14 18:10	12/16/14 17:18	1

Lab Sample ID: LCS 250-33051/2-A
Matrix: Water
Analysis Batch: 33101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33051

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	39.7	41.1		mg/L		104	78 - 114

Lab Sample ID: LCSD 250-33051/3-A
Matrix: Water
Analysis Batch: 33101

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33051

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Oil & Grease	39.7	39.5		mg/L		99	78 - 114	4	18

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

Lab Sample ID: MB 250-33041/1
Matrix: Water
Analysis Batch: 33041

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			12/15/14 12:51	1

Lab Sample ID: LCS 250-33041/2
Matrix: Water
Analysis Batch: 33041

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	62.0		mg/L		103	80 - 120

Lab Sample ID: LCSD 250-33041/3
Matrix: Water
Analysis Batch: 33041

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids	60.1	61.0		mg/L		101	80 - 120	2	5

Lab Sample ID: 250-23301-A-1 DU
Matrix: Water
Analysis Batch: 33041

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: RSI-001-001

TestAmerica Job ID: 250-23279-1
SDG: MSS

Laboratory: TestAmerica Portland

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-012	12-26-14
California	State Program	9	2597	09-30-15
Oregon	NELAP	10	OR100021	01-09-15
USDA	Federal		P330-11-00092	04-17-17
Washington	State Program	10	C586	06-23-15

Method Summary

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

TestAmerica Job ID: 250-23279-1
SDG: MSS

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 Portland
9405 SW Nimbus Avenue

Beaverton, OR 97008
phone 503.906.9200 fax 503.906.9210

Chain of Custo

250-23279 Chain of Custody

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THE LEADER IN ENVIRONMENTAL TESTING

Regulatory Program: ☐ DW ☒ NPDES ☐ RCRA ☐ Other:

TestAmerica Laboratories, Inc.

Client Contact	Project Manager:	Site Contact:	Date:	COC No:
Your Company Name here: TUPPAN CONSULTANTS	Tel/Fax:	Lab Contact:	Carrier:	_____ of _____ COCs
Address: 460 SECOND STREET SE 103	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: LAKE OSWEGO OR 97034	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(xxx) xxx-xxxx Phone: 503-675-1335	TAT if different from Below _____			Lab Sampling:
(xxx) xxx-xxxx FAX	☐ 2 weeks			
Project Name: RSI-001-001	☒ 1 week			Job / SDG No.:
Site: MSS	☐ 2 days			
PO #	☐ 1 day			Sampler: ERIC TUPPAN

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	OIL / GREASE	Cu, Pb, Zn	Cd, Cr, Ni	TSS	Sample Specific Notes:
01-6	12/10/14	13:50	G	W	3							

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

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ 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 PARAMETER pH TESTED IN FIELD 11.6°C IR/P-L

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____		
Relinquished by:	Company: TUPPAN CONSULTANTS	Date/Time: 12/10 14:42	Received by: Clara Lehra	Company: TA	Date/Time: 12/10/14 1442
Relinquished by:	Company: LLC	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TAL-1003 (0413)

Form No. CA-C-WI-002, Rev. 4.1, dated 02/20/2013

12/17/2014

Login Sample Receipt Checklist

Client: Tuppan Consultants LLC

Job Number: 250-232
SDG Number: MSS

Login Number: 23279
List Number: 1
Creator: Svabik-Seror, Philip M

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.	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	

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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: 250-23985-1
TestAmerica Sample Delivery Group: MSS
Client Project/Site: RSI-001-001

For:
Tuppan Consultants LLC
460 Second Street Suite 103
Lake Oswego, Oregon 97034

Attn: Mr. Eric J Tuppan

Sarah Murphy

Authorized for release by:
1/23/2015 4:17:44 PM

Sarah Murphy, Project Management Assistant I
(916)373-5600
sarah.murphy@testamericainc.com

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Job ID: 250-23985-1

Laboratory: TestAmerica Portland

Narrative

Job Narrative
250-23985-1

Comments
No additional comments.

Receipt
The sample was received on 1/19/2015 12:26 PM; the sample arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 4.3° C.

Except:

No sample time on COC. Sample time was recorded from container label.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

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
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
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)
NC	Not Calculated
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: Tuppan Consultants LLC
Project/Site: RSI-001-001

TestAmerica Job ID: 250-23985-1
SDG: MSS

Method: 200.8 - Metals (ICP/MS)

Client Sample ID: OF-6
Date Collected: 01/17/15 11:15
Date Received: 01/19/15 12:26

Lab Sample ID: 250-23985-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		01/20/15 10:59	01/20/15 21:18	1
Chromium	ND		0.0020		mg/L		01/20/15 10:59	01/20/15 21:18	1
Copper	0.0042		0.0020		mg/L		01/20/15 10:59	01/20/15 21:18	1
Lead	0.0024		0.0010		mg/L		01/20/15 10:59	01/20/15 21:18	1
Nickel	ND		0.0020		mg/L		01/20/15 10:59	01/20/15 21:18	1
Zinc	0.050		0.010		mg/L		01/20/15 10:59	01/20/15 21:18	1

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

TestAmerica Job ID: 250-23985-1
SDG: MSS

General Chemistry

Client Sample ID: OF-6
Date Collected: 01/17/15 11:15
Date Received: 01/19/15 12:26

Lab Sample ID: 250-23985-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		4.8		mg/L		01/22/15 18:08	01/23/15 08:46	1
Total Suspended Solids	ND		10		mg/L			01/21/15 12:41	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 250-33827/1-A
Matrix: Water
Analysis Batch: 33860

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 33827

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		01/20/15 10:59	01/20/15 19:58	1
Chromium	ND		0.0020		mg/L		01/20/15 10:59	01/20/15 19:58	1
Copper	ND		0.0020		mg/L		01/20/15 10:59	01/20/15 19:58	1
Lead	ND		0.0010		mg/L		01/20/15 10:59	01/20/15 19:58	1
Nickel	ND		0.0020		mg/L		01/20/15 10:59	01/20/15 19:58	1
Zinc	ND		0.010		mg/L		01/20/15 10:59	01/20/15 19:58	1

Lab Sample ID: LCS 250-33827/2-A
Matrix: Water
Analysis Batch: 33860

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33827

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.100	0.0949		mg/L		95	85 - 115
Chromium	0.100	0.0991		mg/L		99	85 - 115
Copper	0.100	0.0977		mg/L		98	85 - 115
Lead	0.100	0.0981		mg/L		98	85 - 115
Nickel	0.100	0.0979		mg/L		98	85 - 115
Zinc	0.100	0.0960		mg/L		96	85 - 115

Lab Sample ID: 250-23985-1 MS
Matrix: Water
Analysis Batch: 33860

Client Sample ID: OF-6
Prep Type: Total
Prep Batch: 33827

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		0.100	0.101		mg/L		101	70 - 130
Chromium	ND		0.100	0.105		mg/L		104	70 - 130
Copper	0.0042		0.100	0.104		mg/L		100	70 - 130
Lead	0.0024		0.100	0.104		mg/L		102	70 - 130
Nickel	ND		0.100	0.102		mg/L		100	70 - 130
Zinc	0.050		0.100	0.153		mg/L		102	70 - 130

Lab Sample ID: 250-23983-E-1-B DU
Matrix: Water
Analysis Batch: 33860

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 33827

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cadmium	ND		ND		mg/L		NC	20
Chromium	0.0021		0.00211		mg/L		0.9	20
Copper	0.019		0.0201		mg/L		4	20
Lead	ND		ND		mg/L		NC	20
Nickel	0.0041		0.00417		mg/L		2	20
Zinc	0.15		0.149		mg/L		2	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 250-33923/1-A
Matrix: Water
Analysis Batch: 33928

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 33923

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0		mg/L		01/22/15 18:08	01/23/15 08:46	1

Lab Sample ID: LCS 250-33923/2-A
Matrix: Water
Analysis Batch: 33928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	39.7	32.4		mg/L		82	78 - 114

Lab Sample ID: LCSD 250-33923/3-A
Matrix: Water
Analysis Batch: 33928

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33923

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Oil & Grease	39.7	34.9		mg/L		88	78 - 114	7	18

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

Lab Sample ID: MB 250-33873/1
Matrix: Water
Analysis Batch: 33873

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			01/21/15 12:41	1

Lab Sample ID: LCS 250-33873/2
Matrix: Water
Analysis Batch: 33873

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	60.2	60.0		mg/L		100	80 - 120

Lab Sample ID: LCSD 250-33873/3
Matrix: Water
Analysis Batch: 33873

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids	60.2	60.0		mg/L		100	80 - 120	0	5

Lab Sample ID: 250-24011-A-1 DU
Matrix: Water
Analysis Batch: 33873

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	69		70.0		mg/L		1	5

Certification Summary

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

TestAmerica Job ID: 250-23985-1
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 (UST)	State Program	10	UST-012	12-26-15
California	State Program	9	2597	09-30-15
Oregon	NELAP	10	OR100021	01-09-16
USDA	Federal		P330-11-00092	04-17-17
Washington	State Program	10	C586	06-23-15

Method Summary

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

TestAmerica Job ID: 250-23985-1
SDG: MSS

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 Portland
9405 SW Nimbus Avenue

Beaverton, OR 97008
phone 503.906.9200 fax 503.906.9210

Chain of Custo

250-23985 Chain of Custody

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TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☒ NPDES ☐ RCRA ☐ (

Client Contact	Project Manager:	Site Contact:	Date:	COC No:
Your Company Name here: TUPPAN CONSULTANTS	Tel/Fax:	Lab Contact:	Carrier:	____ of ____ COCs
Address: 460 SECOND STREET SE 103	Analysis Turnaround Time			For Lab Use Only:
City/State/Zip: LAKE OSWEGO OR 97034	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(xxx) xxx-xxxx Phone: 503 675-1335	TAT if different from Below ____			Lab Sampling:
(xxx) xxx-xxxx FAX	☒ 2 weeks			
Project Name: RSI-001-001	☐ 1 week			Job / SDG No.:
Site: MSS	☐ 2 days			
P O #	☐ 1 day			Sampler: ERIC TUPPAN

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	OIL / GREASE	Cu Pb Zn Cd Cr Ni	TSS	Sample Specific Notes:
OF-6	1/17/15		G	W	3			X	N	X	

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

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ 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:

1209-2 PARAMETERS pH Tested IN FIELD 4.3 IR/PL

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:	Corr'd:	Therm ID No.:

Relinquished by:	Company: TUPPAN CONSULTANTS	Date/Time: 1/19/15 12:26	Received by:	Company: TAL	Date/Time: 1/19/15 @ 1226
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Login Sample Receipt Checklist

Client: Tuppan Consultants LLC

Job Number: 250-23985-1
SDG Number: MSS

Login Number: 23985
List Number: 1
Creator: Svabik-Seror, Philip M

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.	False	Sample time taken from container label.
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	

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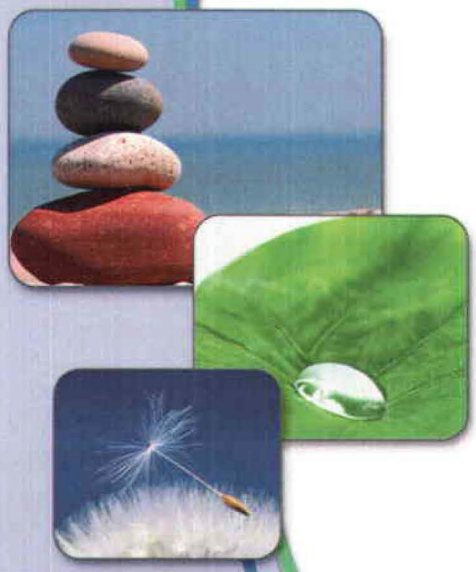

ANALYTICAL REPORT

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

TestAmerica Job ID: 250-24401-1
TestAmerica Sample Delivery Group: MSS
Client Project/Site: RSI-001-001

For:
Tuppan Consultants LLC
460 Second Street Suite 103
Lake Oswego, Oregon 97034

Attn: Mr. Eric J Tuppan

Sarah Murphy

Authorized for release by:
2/14/2015 2:45:26 PM

Sarah Murphy, Project Management Assistant I
(916)373-5600
sarah.murphy@testamericainc.com

Table of Contents

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Job ID: 250-24401-1

Laboratory: TestAmerica Portland

Narrative

Job Narrative
250-24401-1

Comments
No additional comments.

Receipt
The sample was received on 2/9/2015 11:05 AM; the sample arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 7.8° C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
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)
NC	Not Calculated
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-6
Date Collected: 02/09/15 10:25
Date Received: 02/09/15 11:05

Lab Sample ID: 250-24401-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		02/11/15 23:10	02/12/15 12:38	1
Chromium	ND		0.0020		mg/L		02/11/15 23:10	02/12/15 12:38	1
Copper	0.0044		0.0020		mg/L		02/11/15 23:10	02/12/15 12:38	1
Lead	0.0023		0.0010		mg/L		02/11/15 23:10	02/12/15 12:38	1
Nickel	ND		0.0020		mg/L		02/11/15 23:10	02/12/15 12:38	1
Zinc	0.035		0.010		mg/L		02/11/15 23:10	02/12/15 12:38	1

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

TestAmerica Job ID: 250-24401-1
SDG: MSS

General Chemistry

Client Sample ID: OF-6
Date Collected: 02/09/15 10:25
Date Received: 02/09/15 11:05

Lab Sample ID: 250-24401-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		4.8		mg/L		02/12/15 10:53	02/12/15 17:15	1
Total Suspended Solids	ND		10		mg/L			02/12/15 11:02	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 250-34376/1-A
Matrix: Water
Analysis Batch: 34393

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34376

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		0.0010		mg/L		02/11/15 23:10	02/12/15 11:49	1
Chromium	ND		0.0020		mg/L		02/11/15 23:10	02/12/15 11:49	1
Copper	ND		0.0020		mg/L		02/11/15 23:10	02/12/15 11:49	1
Lead	ND		0.0010		mg/L		02/11/15 23:10	02/12/15 11:49	1
Nickel	ND		0.0020		mg/L		02/11/15 23:10	02/12/15 11:49	1
Zinc	ND		0.010		mg/L		02/11/15 23:10	02/12/15 11:49	1

Lab Sample ID: LCS 250-34376/2-A
Matrix: Water
Analysis Batch: 34393

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.100	0.0931		mg/L		93	85 - 115
Chromium	0.100	0.0955		mg/L		95	85 - 115
Copper	0.100	0.0969		mg/L		97	85 - 115
Lead	0.100	0.0947		mg/L		95	85 - 115
Nickel	0.100	0.0961		mg/L		96	85 - 115
Zinc	0.100	0.0966		mg/L		97	85 - 115

Lab Sample ID: 250-24401-1 MS
Matrix: Water
Analysis Batch: 34393

Client Sample ID: OF-6
Prep Type: Total/NA
Prep Batch: 34376

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	ND		0.100	0.0967		mg/L		97	70 - 130
Chromium	ND		0.100	0.0986		mg/L		98	70 - 130
Copper	0.0044		0.100	0.101		mg/L		96	70 - 130
Lead	0.0023		0.100	0.0967		mg/L		94	70 - 130
Nickel	ND		0.100	0.0983		mg/L		97	70 - 130
Zinc	0.035		0.100	0.131		mg/L		95	70 - 130

Lab Sample ID: 250-24354-C-1-B DU
Matrix: Water
Analysis Batch: 34393

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 34376

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cadmium	ND		ND		mg/L		NC	20
Chromium	ND		ND		mg/L		NC	20
Copper	0.0030		0.00310		mg/L		3	20
Lead	ND		ND		mg/L		NC	20
Nickel	ND		ND		mg/L		NC	20
Zinc	0.048		0.0512		mg/L		6	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 250-34382/1-A
Matrix: Water
Analysis Batch: 34404

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 34382

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil & Grease	ND		5.0		mg/L		02/12/15 10:53	02/12/15 17:15	1

Lab Sample ID: LCS 250-34382/2-A
Matrix: Water
Analysis Batch: 34404

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 34382

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	39.7	39.9		mg/L		101	78 - 114

Lab Sample ID: 250-24411-A-1-A MS
Matrix: Water
Analysis Batch: 34404

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 34382

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Oil & Grease	ND		42.3	37.5		mg/L		88	78 - 114

Lab Sample ID: 250-24411-B-1-A MSD
Matrix: Water
Analysis Batch: 34404

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 34382

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD
Oil & Grease	ND		42.4	36.0		mg/L		85	78 - 114	4

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

Lab Sample ID: MB 250-34383/1
Matrix: Water
Analysis Batch: 34383

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			02/12/15 11:02	1

Lab Sample ID: LCS 250-34383/2
Matrix: Water
Analysis Batch: 34383

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

Lab Sample ID: LCSD 250-34383/3
Matrix: Water
Analysis Batch: 34383

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Total Suspended Solids	60.1	59.0		mg/L		98	80 - 120	2	5

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

Lab Sample ID: 250-24395-D-1 DU
Matrix: Water
Analysis Batch: 34383

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: RSI-001-001

TestAmerica Job ID: 250-24401-1
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 (UST)	State Program	10	UST-012	12-26-15
California	State Program	9	2597	09-30-15
Oregon	NELAP	10	OR100021	01-09-16
USDA	Federal		P330-11-00092	04-17-17
Washington	State Program	10	C586	06-23-15

Method Summary

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

TestAmerica Job ID: 250-24401-1
SDG: MSS

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 Portland
9405 SW Nimbus Avenue

Beaverton, OR 97008
phone 503.906.9200 fax 503.906.9210

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TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Regulatory Program: ☐ DW ☒ NPDES ☐ RCRA ☐

Client Contact	Project Manager:	Site Contact:	Date:	COC No:
Your Company Name here: TUPPAN CONSULTANTS	Tel/Fax:	Lab Contact:	Carrier:	____ of ____ COCs
Address: 460 SECOND STREET SE 103	**Analysis Turnaround Time**			For Lab Use Only:
City/State/Zip: LAKE OSWEGO OR 97034	☐ CALENDAR DAYS ☐ WORKING DAYS			Walk-in Client:
(xxx) xxx-xxxx: 503-675 Phone: 335	TAT if different from Below ____			Lab Sampling:
(xxx) xxx-xxxx: FAX	☒ 2 weeks			Job / SDG No.:
Project Name: RSI-00-001	☐ 1 week			
Site: MSS	☐ 2 days			Sampler: ERIC TUPPAN
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	OIL / GREASE	Cu, Pb, Zn, Cd, Cr, Ni	TSS	Sample Specific Notes:
OF-6	2/9/15	10:25	G	W	3			X	X	X	

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

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ 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 PARAMETERS pH TESTED IN FIELD 7.8 16/P-L

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ | Therm ID No.: ____

	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	TUPPAN CONSULTANTS	2/9/15 11:05		TA	2/9/15 @1105
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Login Sample Receipt Checklist

nt: Tuppan Consultants LLC

Job Number: 250-24401-1
SDG Number: MSS

Login Number: 24401
List Number: 1
Creator: Svabik-Seror, Philip M

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	
ntainers are not broken or leaking.	True	
nple 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	

TUPPAN CONSULTANTS LLC
460 Second Street, Suite 103
Lake Oswego, Oregon
503.675.1335

Surface Water Sampling Data

Location/Address: Republic Services, 2001 Washington St., Oregon City, 97045
Project Name: Stormwater Sampling
Sampler: Eric Tuppan
Client/Contact: Blaine Colvin
Weather: LIGHT SPRINKLE to downpour

Sampling Point	Sample Number	Date	Time	pH	Comments Bottle Size & Number
Metro South Station					
Outfall #6	OF-6	10/23/14	13:30	7.01	Flowing Clear

TUPPAN CONSULTANTS LLC
460 Second Street, Suite 103
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503.675.1335

Surface Water Sampling Data

Location/Address: Republic Services, 2001 Washington St., Oregon City, 97045
Project Name: Stormwater Sampling
Sampler: Eric Tuppan
Client/Contact: Matthew Cofer
Weather: RAINING

Sampling Point	Sample Number	Date	Time	pH	Comments Bottle Size & Number
Metro South Station					
Outfall #6	OF-6	12/1/14	13:50	6.85	3 Bottles
					Flowing
					clear

TUPPAN CONSULTANTS LLC
460 Second Street, Suite 103
Lake Oswego, Oregon
503.675.1335

Surface Water Sampling Data

Location/Address: Republic Services, 2001 Washington St., Oregon City, 97045
Project Name: Stormwater Sampling
Sampler: Eric Tuppan
Client/Contact: Matthew Cofer
Weather: Raining

Sampling Point	Sample Number	Date	Time	pH	Comments Bottle Size & Number
Metro South Station					
Outfall #6	OF-6	1/17/15	11:15	7.34	3-Bottle
					Running Clear-
					Brown

Forms\Stormwater Field data form_AWI_MSS

TUPPAN CONSULTANTS LLC
460 Second Street, Suite 103
Lake Oswego, Oregon
503.675.1335

Surface Water Sampling Data

Location/Address: Republic Services, 2001 Washington St., Oregon City, 97045
Project Name: Stormwater Sampling | Sampler: Eric Tuppan
Client/Contact: Matthew Cofer | Weather: Light Rain

Sampling Point	Sample Number	Date	Time	pH	Comments Bottle Size & Number
Metro South Station					
Outfall #6	OF-6	2/9/15	10:25	7.10	3 Bottles
					Flowing Clear

Forms\Stormwater Field data form_AWI_MSS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Seattle
5755 8th Street East
Tacoma, WA 98424
Tel: (253)922-2310

TestAmerica Job ID: 580-49329-1
TestAmerica Sample Delivery Group: Metro South
Client Project/Site: NPDES Quarterly Compliance

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

Attn: Matthew Cofer

Authorized for release by:
5/2/2015 1:54:14 PM

Jay Willms, Project Manager I
(503)906-9238
jay.willms@testamericainc.com

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Job ID: 580-49329-1

Laboratory: TestAmerica Seattle

Narrative

Receipt
The samples were received on 4/24/2015 4:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 5.1° C.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Field Service / Mobile Lab
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Lab Admin
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
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)
NC	Not Calculated
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: NPDES Quarterly Compliance

TestAmerica Job ID: 580-49329-1
SDG: Metro South

Client Sample ID: Grab
Date Collected: 04/24/15 15:00
Date Received: 04/24/15 16:15

Lab Sample ID: 580-49329-[redacted]
Matrix: W[redacted]

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	7.3		5.1		mg/L		04/29/15 10:29	04/29/15 10:29	1
SGT-HEM (Oil and Grease - Nonpolar)	ND		5.1		mg/L		04/29/15 10:29	04/29/15 10:29	1
HEM Polar (Oil and Grease - Polar)	7.3		5.1		mg/L		04/29/15 10:29	04/29/15 10:29	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	NONE	NONE	Unit	D	Prepared	Analyzed	Dil Fac
Field pH by SM4500-H B	6.27				SU			04/24/15 15:00	1

Client Sample ID: Composite
Date Collected: 04/24/15 14:40
Date Received: 04/24/15 16:15

Lab Sample ID: 580-49329-2
Matrix: Water

Method: 200.8 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.059		0.0020		mg/L		04/27/15 18:56	04/28/15 18:20	1
Lead	0.032		0.00040		mg/L		04/27/15 18:56	04/28/15 18:20	1
Zinc	0.42		0.0070		mg/L		04/27/15 18:56	04/28/15 18:20	1

Method: 245.1 - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		04/27/15 10:29	04/27/15 13:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	800		600		mg/L			04/25/15 14:41	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	190		17		mg/L			04/30/15 13:44	1

Method: 200.8 - Metals (ICP/MS)

Lab Sample ID: MB 580-187951/14-A
Matrix: Water
Analysis Batch: 188099

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 187951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.0020		mg/L		04/27/15 18:56	04/28/15 17:03	1
Lead	ND		0.00040		mg/L		04/27/15 18:56	04/28/15 17:03	1
Zinc	ND		0.0070		mg/L		04/27/15 18:56	04/28/15 17:03	1

Lab Sample ID: LCS 580-187951/15-A
Matrix: Water
Analysis Batch: 188099

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 187951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Copper	0.100	0.0986		mg/L		99	85 - 115
Lead	0.100	0.100		mg/L		100	85 - 115
Zinc	0.100	0.0960		mg/L		96	85 - 115

Lab Sample ID: LCSD 580-187951/16-A
Matrix: Water
Analysis Batch: 188099

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 187951

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Copper	0.100	0.0954		mg/L		95	85 - 115	3	20
Lead	0.100	0.0982		mg/L		98	85 - 115	2	20
Zinc	0.100	0.0932		mg/L		93	85 - 115	3	

Method: 245.1 - Mercury (CVAA)

Lab Sample ID: MB 580-187863/21-A
Matrix: Water
Analysis Batch: 187917

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 187863

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		04/27/15 10:29	04/27/15 12:34	1

Lab Sample ID: LCS 580-187863/22-A
Matrix: Water
Analysis Batch: 187917

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 187863

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00200	0.00198		mg/L		99	85 - 115

Lab Sample ID: LCSD 580-187863/23-A
Matrix: Water
Analysis Batch: 187917

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 187863

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00200	0.00192		mg/L		96	85 - 115	3	20

Method: 1664A - HEM and SGT-HEM

Lab Sample ID: MB 580-188107/1-A
Matrix: Water
Analysis Batch: 188150

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 188107

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
HEM (Oil & Grease)	ND		5.0		mg/L		04/29/15 10:29	04/29/15 10:29	1
SGT-HEM (Oil and Grease - Nonpolar)	ND		5.0		mg/L		04/29/15 10:29	04/29/15 10:29	1
HEM Polar (Oil and Grease - Polar)	ND		5.0		mg/L		04/29/15 10:29	04/29/15 10:29	1

Lab Sample ID: LCS 580-188107/2-A
Matrix: Water
Analysis Batch: 188150

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 188107

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
HEM (Oil & Grease)	40.0	36.1		mg/L		90	79 - 114
SGT-HEM (Oil and Grease - Nonpolar)	20.0	17.6		mg/L		88	66 - 114

Lab Sample ID: LCSD 580-188107/3-A
Matrix: Water
Analysis Batch: 188150

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 188107

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
HEM (Oil & Grease)	40.0	37.3		mg/L		93	79 - 114	3	18
SGT-HEM (Oil and Grease - Nonpolar)	20.0	19.2		mg/L		96	66 - 114	9	24

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

Lab Sample ID: MB 580-188278/1
Matrix: Water
Analysis Batch: 188278

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	ND		2.0		mg/L			04/30/15 13:44	1

Lab Sample ID: LCS 580-188278/2
Matrix: Water
Analysis Batch: 188278

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	30.0	32.8		mg/L		109	70.6 - 120

Method: SM5210B - BOD, 5 Day

Lab Sample ID: USB 440-251143/1
Matrix: Water
Analysis Batch: 251143

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

Analyte	USB Result	USB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biochemical Oxygen Demand	ND		2.0		mg/L			04/25/15 09:22	1

Method: SM5210B - BOD, 5 Day (Continued)

Lab Sample ID: LCS 440-251143/4
Matrix: Water
Analysis Batch: 251143

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	199	194		mg/L		98	85 - 115

Lab Sample ID: LCSD 440-251143/5
Matrix: Water
Analysis Batch: 251143

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Biochemical Oxygen Demand	199	194		mg/L		98	85 - 115	0	20

Lab Chronicle

Client: Republic Services Inc
Project/Site: NPDES Quarterly Compliance

TestAmerica Job ID: 580-49329-1
SDG: Metro South

Client Sample ID: Grab

Lab Sample ID: 580-49329-1

Date Collected: 04/24/15 15:00
Matrix: Water
Date Received: 04/24/15 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	1664A		1	188150	04/29/15 10:29	RSB	TAL SEA
Total/NA	Prep	1664A			188107	04/29/15 10:29	RSB	TAL SEA
Total/NA	Analysis	Field Sampling		1	35064	04/24/15 15:00	TAK	TAL PRT

Client Sample ID: Composite

Lab Sample ID: 580-49329-2

Date Collected: 04/24/15 14:40
Matrix: Water
Date Received: 04/24/15 16:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	200.8			187951	04/27/15 18:56	PAB	TAL SEA
Total/NA	Analysis	200.8		1	188099	04/28/15 18:20	FCW	TAL SEA
Total/NA	Prep	245.1			187863	04/27/15 10:29	PAB	TAL SEA
Total/NA	Analysis	245.1		1	187917	04/27/15 13:05	FCW	TAL SEA
Total/NA	Analysis	SM 2540D		1	188278	04/30/15 13:44	JSM	TAL SEA
Total/NA	Analysis	SM5210B		1	251143	04/25/15 14:41	NTN	TAL IRV

Laboratory References:

TAL IRV = TestAmerica Irvine, 17461 Derian Ave, Suite 100, Irvine, CA 92614-5817, TEL (949)261-1022

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

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: Republic Services Inc
Project/Site: NPDES Quarterly Compliance

TestAmerica Job ID: 580-49329-1
SDG: Metro South

Laboratory: TestAmerica Seattle

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 (UST)	State Program	10	UST-022	03-02-16
California	State Program	9	2901	01-31-17
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-15
US Fish & Wildlife	Federal		LE192332-0	02-28-16
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-16

Laboratory: TestAmerica Irvine

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	CA01531	06-30-15
Arizona	State Program	9	AZ0671	10-13-15
California	LA Cty Sanitation Districts	9	10256	01-31-16 *
California	State Program	9	2706	06-30-16
Guam	State Program	9	Cert. No. 12.002r	01-23-16
Hawaii	State Program	9	N/A	01-29-16
Nevada	State Program	9	CA015312007A	07-31-15
New Mexico	State Program	6	N/A	01-29-15 *
Northern Mariana Islands	State Program	9	MP0002	01-29-15 *
Oregon	NELAP	10	4005	01-29-16
USDA	Federal		P330-09-00080	06-06-15

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 (UST)	State Program	10	UST-012	12-26-15
California	State Program	9	2597	09-30-15
Oregon	NELAP	10	OR100021	01-09-16
USDA	Federal		P330-11-00092	04-17-17
Washington	State Program	10	C586	06-23-15

* Certification renewal pending - certification considered valid.

Sample Summary

Client: Republic Services Inc
Project/Site: NPDES Quarterly Compliance

TestAmerica Job ID: 580-49329-1
SDG: Metro South

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-49329-1	Grab	Water	04/24/15 15:00	04/24/15 16:15
580-49329-2	Composite	Water	04/24/15 14:40	04/24/15 16:15

TestAmerica Portland

9405 SW Nimbus Avenue

Beaverton, OR 97008
phone 503.906.9200

Chain of Custody Record

580-49329 Chain of Custody

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA AWS Se ☐ Other: Compliance monitoring

Client Contact	Project Manager: Jay Willms	Site Contact: Matt Cofer	Date:	COC No:
Republic Services Metro South	Tel/Fax: 503-906-9200	Lab Contact: Thomas Krause	Carrier:	1 of 1 COCs
2001 Washington St	**Analysis Turnaround Time**			Sampler: Thomas Krause
Oregon City, OR 97045	☐ CALENDAR DAYS ☑ WORKING DAYS			**For Lab Use Only:**
503-722-4656 Phone	TAT if different from Below ______			Walk-in Client: No
	☐ 2 weeks			Lab Sampling: Yes
Project Name: NPDES Quarterly Compliance	☑ 1 week			
Site: Metro South	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	FT-pH	Oil and Grease 1664A	Cu, Pb, Zn 200.8	Hg 254.1	BOD SM5210B_BODCalc	TSS 2540D	Sampling Event-Comp	Sample Specific Notes:
Grab	04/24	1500	G	Water	3	N	Y	X	X						FT-pH: 6.27 FT-Temp(C): 14.3
Composite	04/24	1440	C	Water	3	N	N			X	X	X	X	X	
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other								n/a	1,2	1,4	1,4	1	1	n/a	

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☑ 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: SOP PR-SC-216 (Current Rev.)

1R 1P1C 5.1°C

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ______ Corr'd: ______ Therm ID No.: ______

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
IN Cab	TAP	04/24 1615			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

Form No. CA-C-WI-002, Rev. 4.2, dated 04/02/2013

ATTACHMENT 2 **Field Sampling Documentation Form**

Client: Republic Services
Site: Metro South
Project: NPDES Quarterly

Sampler: Thomas Krause
Date: 04/24/15
Time: 1440/1500

Sample Matrix:
☒ Water ☐ Soil ☐ HW ☐ Chemical ☐ Drinking Water
Other: _____

Sampling Method:
☐ Comp-Flow ☒ Comp-Time ☒ Grab ☐ Multi-Grab

Composite Sampling Equipment:
ISCO #: R2-D2 Comp Samples/day: 48 Start time: 1440 Stop time: 1440
Sampler calibration: 200ml

Grab Sampling Equipment:
☐ Dipper TAP-DIP 1 ☐ Dipper TAP-DIP2 ☐ Dipper TAP-DIP3 ☐ Dipper TAP-DIP 4 ☒ Other: ISCO # R2-D2

Field Data: SOP No. PR-SC-216, current revision
☒ pH Meter: Star 900624
☒ pH: 6.27 Time Taken: 1500 Temp (°C): 14.3
pH calibration: 7.00 buffer reading: 6.96 4.00 buffer reading: 3.99
10.00 buffer reading: 10.02 8.00 buffer reading: 7.98
Acceptable Range: 6.95-7.05
pH calibration slope: 101.1%
Acceptable Range: 97-103%
pH 4 Buffer: 271304 pH 7 Buffer: 271310 pH 10 Buffer: 316249 ICV 8 Buffer: 288748

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

Sample Characteristics:
Color: brown Odor: NO TSS: NO Sheen: NO
Sediment: None Foam: None Clear: NO

Observations and Comments:

2nd level review Date/Initials:

ATTACHMENT:4 Field Sampling Container Lot Number Log Sheet

Date/Initials: 04/24/15 TK

Client: Republic Services

Project: NPDES Quarterly

Water Samples:

Container	1 Liter	500mL	250mL	VOA	125 mL	TA Lot #
Plastic / None	1		1			M009/ N041
Plastic / HNO3			1			N046
Plastic / H2SO4						
Plastic / NaOH						
Plastic / NaOH & Zn Acetate						
Glass / None						
Glass / HCl	3					N047
Glass / H2SO4						
Bactl 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:

Login Sample Receipt Checklist

Client: Republic Services Inc

Job Number: 580-49329-1
SDG Number: Metro South

Login Number: 49329
List Number: 1
Creator: Krause, Thomas A

List Source: TestAmerica Seattle

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	

Login Sample Receipt Checklist

Client: Republic Services Inc

Job Number: 580-49[redacted]
SDG Number: Metro South

Login Number: 49329
List Number: 2
Creator: Jackson, Brent E

List Source: TestAmerica Irvine
List Creation: 04/25/15 01:06 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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?	N/A	Received project as a subcontract.
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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix D

- 2014-15 Sustainability Report

July 15, 2015

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

REPUBLIC SERVICES

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 & safety data, and analysis are included in the following pages.

Energy
Overall energy and water usage was up in 2014 due to overall increased volumes. Our total cost per ton for utilities was $0.58/ton compared to $0.55/ton from previous year.

Factors that contributed to energy cost/ton increases include price/unit adjustments, increased volumes of MSW & dry waste, and 24 hour per day steady state operations.

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 updated retrofitted equipment list.

In addition, Republic Services continues to purchase B20 Biodiesel, above and beyond the general contractual requirements.

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.

2001 Washington Street
Oregon City, OR 97045
503.722.4656

Internally, low-flow toilets are currently in use. All recovered materials and source-separated materials are stored under cover or in lidded boxes to prevent leachate from entering storm water system.

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.
Republic Services utilizes a regenerative sweeper truck to sweep drives and pavement daily. The tipping floors are swept multiple times throughout each day. 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.

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

Lastly, Republic Services continues the program that uses recycled hydraulic oil in the compactors.

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 use green seal cleaning products.

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, employee wage increases have boosted the average hourly pay rate to $15.70/hr compared to the previous year's $14.51/hr. This average rate does not include overtime, holidays, or additional company funded benefits. 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.

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 in a previous year, 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 2014 to the best of my knowledge.

Sincerely,

Brandon McGraw

Brandon McGraw
Division Manager
Republic Services Inc.

Appendix E

- 2014-15 Utility Tracking Data

2014/2015 Utlility Data Tracker

	MSS PGE DOLLARS			
Meter #	2	7	8	Total
Apr-14	7863.33	876.00	381.18	**9120.51**
May-14	8257.87	796.69	320.72	**9375.28**
Jun-14	7425.04	826.45	279.08	**8530.57**
Jul-14	8316.09	894.55	367.04	**9577.68**
Aug-14	7929.91	902.58	348.16	**9180.65**
Sep-14	8986.58	853.40	297.12	**10137.10**
Oct-14	7173.79	868.53	259.98	**8302.30**
Nov-14	9054.11	745.64	338.87	**10138.62**
Dec-14	9025.84	826.95	422.48	**10275.27**
Jan-15	8595.48	891.68	557.16	**10044.32**
Feb-15	8801.93	819.98	382.06	**10003.97**
Mar-15	8774.20	891.17	373.11	**10038.48**
Total	**100204.17**	**10193.62**	**4326.96**	**114724.75**

	MSS WATER DOLLARS						
	4562	7373	6885/8066	702	5920	6072	Total
	43.35	1556.25	14.27	1366.24	16.66	40.56	**3037.33**
	43.35	1512.61	20.51	1366.24	14.27	45.34	**3002.32**
	37.12	1743.29	14.27	1366.24	16.66	76.41	**3253.99**
	44.90	1929.97	20.89	1370.97	16.70	101.87	**3485.30**
	31.58	1628.79	14.27	1423.64	16.66	131.54	**3246.48**
	31.58	1391.79	14.27	1535.55	14.27	83.68	**3071.14**
	32.34	1763.29	21.23	1489.35	14.27	150.69	**3471.17**
	25.37	955.54	21.23	1440.60	16.66	205.73	**2665.13**
	25.37	1122.66	14.27	1468.46	14.27	45.38	**2690.41**
	33.02	1393.98	21.73	1482.72	14.70	27.00	**2973.15**
	40.05	1464.28	21.73	1482.72	17.16	36.84	**3062.78**
	47.08	1527.55	21.73	1524.90	14.70	36.84	**3172.80**
	435.11	**17990.00**	**220.40**	**17317.63**	**186.98**	**981.88**	**37132.00**

	MSS PGE kiloWatt Hours			
	kWh			
Meter #	2	7	8	Total
Apr-14	79100	9112	3120	**91332**
May-14	85500	8085	2600	**96185**
Jun-14	72800	8462	2240	**83502**
Jul-14	86200	9359	3000	**98559**
Aug-14	80100	9474	2840	**92414**
Sep-14	96700	9192	2400	**108292**
Oct-14	75500	9155	2080	**86735**
Nov-14	97300	7460	2760	**107520**
Dec-14	96700	8583	3480	**108763**
Jan-15	90600	9356	4640	**104596**
Feb-15	93900	8360	3120	**105380**
Mar-15	90700	9015	3000	**102715**
Total	**1045100**	**105613**	**35280**	**1185993**

	MSS WATER UNITS						
	1 unit equals 100 cubic feet or approx 748 gallons						
	4562	7373	6885/8066	702	5920	6072	Total
	4	246	0	0	1	11	**262**
	4	239	1	0	0	13	**257**
	3	276	0	0	1	26	**306**
	4	288	1	0	1	36	**330**
	2	244	0	8	1	49	**304**
	2	208	0	25	0	29	**264**
	2	250	1	17	0	57	**327**
	1	134	1	10	1	80	**227**
	1	158	0	14	0	13	**186**
	2	195	1	11	0	5	**214**
	3	205	1	11	1	9	**230**
	4	214	1	17	0	9	**245**
	32	**2657**	**7**	**113**	**6**	**337**	**3152**

METRO SOUTH TRANSFER STATION ANNUAL REPORT - 2014/2015

Utility Expenses

Metro South Transfer Station
Year Ending 03/31/15

Month	Electric	Water / Sewer	Total	Inbound Tonnage	Cost Per Ton
Apr-14	$9,120.51	$3,037.33	$12,157.84	19,568.31	$0.62
May-14	$9,375.28	$3,002.32	$12,377.60	20,134.23	$0.61
Jun-14	$8,530.57	$3,253.99	$11,784.56	19,988.49	$0.59
Jul-14	$9,577.68	$3,485.30	$13,062.98	21,696.98	$0.60
Aug-14	$9,180.65	$3,246.48	$12,427.13	21,013.41	$0.59
Sep-14	$10,137.10	$3,071.14	$13,208.24	21,653.66	$0.61
Oct-14	$8,302.30	$3,471.17	$11,773.47	24,651.27	$0.48
Nov-14	$10,138.62	$2,665.13	$12,803.75	21,289.25	$0.60
Dec-14	$10,275.27	$2,690.41	$12,965.68	24,023.82	$0.54
Jan-15	$10,044.32	$2,973.15	$13,017.47	23,017.03	$0.57
Feb-15	$10,003.97	$3,062.78	$13,066.75	21,982.03	$0.59
Mar-15	$10,038.48	$3,172.80	$13,211.28	25,552.96	$0.52
Total	**$114,724.75**	**$37,132.00**	**$151,856.75**	**264,571.44**	**$0.58**

Month	KiloWatt Hours	kWatt hrs/Day	Gallons	Gallons/Day
Apr-14	91,332	2,946.19	195,976	6,321.81
May-14	96,185	3,435.18	192,236	6,865.57
Jun-14	83,502	2,693.61	228,888	7,383.48
Jul-14	98,559	3,285.30	246,840	8,228.00
Aug-14	92,414	2,981.10	227,392	7,335.23
Sep-14	108,292	3,609.73	197,472	6,582.40
Oct-14	86,735	2,797.90	244,596	7,890.19
Nov-14	107,520	3,468.39	169,796	5,477.29
Dec-14	108,763	3,625.43	139,128	4,637.60
Jan-15	104,596	3,374.06	160,072	5,163.61
Feb-15	105,380	3,512.67	172,040	5,734.67
Mar-15	102,715	3,313.39	183,260	5,911.61
Total	**1,185,993**	**3,253.58**	**2,357,696**	**6,460.96**