MACTEC Engineering and Consulting, P.C.

Street Address
511 Congress Street
Portland, ME 04101
(add Second Floor for Fed. Ex., UPS, etc.)
Phone No.: (207) 775-5401

Mailing Address
P.O. Box 7050
Portland, ME 04112
FAX No. : (207)772-4762

TRANSMITTAL FORM

TO: ONEIDA COUNTY SEWER DISTRICT P.O. BOX 442 UTICA, NY 13503	DATE: 7/26/19 CLIENT: NYSDEC PROJECT: PRIMOSHIELD SITE (SITE #6-33-027)
ATTN: PRETREATMENT FROM: JEAN FIRTH	MACTEC PROJECT NO.: 3612122251 REF. NO.:

X INFORMATION ☐ PURCHASING
☐ ESTIMATING ☐ CONSTRUCTION
☐ COMMENTS AND/OR APPROVAL ☐ SEE REMARKS

REMARKS: SEMI-ANNUAL REPORTING FOR SITE #6-33-027
PRIMOSHIELD SITE
1212 ST. VINCENT STREET, UTICA, NY 13501

PREPARED BY: NATE VOGAN

NUMBER	REVISION NO.	NO. OF COPIES	TITLE OR DESCRIPTION
1		1	Oneida County Sewer District Reporting Form
2		1	Monthly flow totalizer data
3		1	June 2019 Laboratory Results

DISTRIBUTION: T = TRANSMITTAL LETTER; C = COPY OF DOCUMENT

MACTEC	T	C		T	C		T	C
Payson Long, NYSDEC PM	X	X						
3612122251 File	X	X						

ONEIDA COUNTY SEWER DISTRICT REPORTING FORM

Submit To:
ATTN: PRETREATMENT
ONEIDA COUNTY SEWER DISTRICT
PO BOX 442
UTICA NY 13503

Site
PRIMOSHIELD SITE
1212 ST.VINCENT STREET
UTICA NY 13501

REPORTING PERIOD: November 2018 to June 2019

SAMPLING RESULTS:

For Semi-Annual Reporting, a grab sample of the Primoshield Site discharge to the sanitary sewer is analyzed for the pollutants listed. Attach signed Report Certification.

In response to any violations incurred, self-monitor for pollutant in violation at least once a week until there are results for three consecutive sampling events which are in full compliance with Permit Limits. Submit all results for all samples taken. The first re-sampling result is due within thirty (30) days; a complete report with all three re-sampling results is due within sixty (60) days. Attach signed Report Certification.

ATTACH COPIES OF ALL CONTRACT LABORATORY REPORTS AND MANIFESTS OF HAZARDOUS WASTE SHIPMENTS FOR THE REPORTING PERIOD.

POLLUTANT PARAMETER	DAILY MAXIMUM LIMIT	ANALYSIS SAMPLE #1	ANALYSIS SAMPLE #2	ANALYSIS SAMPLE #3
Date Sampled		June 17, 2019		
Sample Number		633027-Effluent		
Discharge Flow (Note 1)				
pH	5.0-12.5	6.92		
Cadmium, mg/L	1.0	0.005 U		
Chromium, mg/L	5.0	0.01 U		
Copper, mg/L	3.0	0.02 U		
Lead, mg/L	5.0	0.05 U		
Nickel, mg/L	2.0	0.04 U		
Zinc, mg/L	4.0	0.02 U		
Cyanide, mg/L	3.0	0.005 U		
Total VOCs (mg/L) (Note 2)	2.0	**0.02157**		

1) Attach monthly flow totalizer data (see Attachment 3).

2) Total VOCs using EPA Method 624.

Signature: _____ Date: 7/24/2019

ONEIDA COUNTY SEWER DISTRICT
INDUSTRIAL USER REPORT CERTIFICATION

Submit To:
ATTN: PRETREATMENT
ONEIDA COUNTY SEWER DISTRICT
PO BOX 442
UTICA NY 13503

Site
PRIMOSHIELD SITE
1212 ST.VINCENT STREET
UTICA NY 13501

ATTACH TO REPORT DATED: July 26, 2019

REPORTING PERIOD: November 2018 to June 2019

The following certification of information provided in industrial user reports is made in compliance with the General Pretreatment Regulations.

1. Compliance or Non-Compliance Status: Ref = 40 CFR 403.12(b)(6)

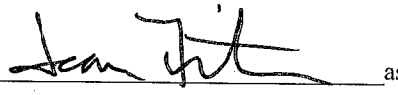
Check A or B. If B is checked, attach a statement describing O&M and/or pretreatment required; include the shortest schedule by which you can provide the required O&M and/or pretreatment.

[X] A. I certify that Pretreatment Standards are being met on a consistent basis.

[ ] B. I certify that Pretreatment Standards are NOT being met on a consistent basis, and that additional operation and maintenance (O&M) and/or additional pretreatment is required to achieve compliance with Pretreatment Standards and Requirements.

2. Information Certification: Ref = 40 CFR 403.6(a)(2)(ii)

I certify under penalty of law that this document and all attachments were prepared under my direction or 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 fine and imprisonment for knowing violations.

Authorized Signature:  as an agent for the NYS DEC.

Title: MACTEC Site Manager

Date: 7/24/2019

PLEASE ATTACH THIS CERTIFICATION TO THE SEMI-ANNUAL & OTHER REPORTS THAT YOU SUBMIT TO THE ONEIDA COUNTY SEWER DISTRICT.

Primoshield Treatment System – Operation & Maintenance Log

Date	Time	Sampler (initials)	Description	Totalizer (gal)	# Days (since last reading)	# Gallons (since last reading)	Approx Flow at totalizer (gpm)	Comments
6/17/2019	16:00	AH/SC MACTEC	Semi-annual Inspection & Discharge Monitoring	5,132,155	201	686,755	N/A	System not pumping during visit (in "auto" mode upon arrival). Switched system to "hand" mode to sample effluent. Switched system back to "auto" mode following effluent sample collection. The manhole was opened during the inspection and the pump assembly was visually examined and appears to be in good condition.
11/28/2018	14:15	RA MACTEC	Semi-annual Inspection & Discharge Monitoring	4,445,400	245	74,408	N/A	System turned off upon arrival. Unknown how long system was not running prior. System was run in auto for one hour prior to sampling. Switched system to hand to sample effluent. Switched system off following effluent sample collection due to pooling water near discharge trenches. The manhole was opened during the inspection and the pump assembly was visually examined and appears to be in good condition.
03/28/18	11:50	JR, LB MACTEC	Semi-annual Inspection & Discharge Monitoring	4,370,992	157	638,482	N/A	System not pumping during visit (in auto mode upon arrival). Switched system to hand to sample effluent. Switched system back to auto following effluent sample collection. The manhole was opened during the inspection and the pump assembly was visually examined and appears to be in good condition.

Primoshield Treatment System – Operation & Maintenance Log

Date	Time	Sampler (initials)	Description	Totalizer (gal)	# Days (since last reading)	# Gallons (since last reading)	Approx Flow at totalizer (gpm)	Comments
10/23/17	17:00	JR, JL MACTEC	Semi-annual Inspection & Discharge Monitoring	3,732,510	193	461,210	N/A	System not pumping during visit (in auto mode upon arrival). Switched system to hand to sample effluent. Switched system back to auto following effluent sample collection. The manhole was opened during the inspection and the pump assembly was visually examined and appears to be in good condition.
04/13/17	15:20	JF, JL MACTEC	Semi-annual Inspection & Discharge Monitoring	3,271,300	212	762,700	N/A	System not pumping during visit (in auto mode upon arrival). Switched system to hand to sample effluent. Switched system back to auto following effluent sample collection. The manhole was opened during the inspection and the pump assembly was visually examined and appears to be in good condition.
09/13/16	10:20	DN MACTEC	Semi-annual Inspection & Discharge Monitoring	2,508,600	132	74,100	29	Treatment system in standby mode upon arrival. Condition of Sensaphone is unknown, was unplugged, upon arrival - works when system is set in “hand” mode. System set in “hand” mode to collect flow rate and effluent sample. Reset to “Auto” following sample collection.

Primoshield Treatment System – Operation & Maintenance Log

Date	Time	Sampler (initials)	Description	Totalizer (gal)	# Days (since last reading)	# Gallons (since last reading)	Approx Flow at totalizer (gpm)	Comments
05/04/16	12:10	DN, DF MACTEC	Semi-annual Inspection & Discharge Monitoring	2,434,500	239	460,000	30	Treatment system in auto upon arrival. Not pumping due to low water level in manhole.
09/08/15	NR	JR,KL, MACTEC	Semi-annual Inspection & Discharge Monitoring	1,974,500	104	109,300	N/A	Treatment system in auto upon arrival. Not pumping due to low water level in manhole.
05/28/15	1:25	DF,KL, MACTEC	Semi-annual Inspection & Discharge Monitoring	1,865,200	153	321,500	30	
12/26/14	1:54	WW, NYSDEC		1,543,700	35	117,200		
11/21/14	8:45	KL, MACTEC	Semiannual Discharge Monitoring	1,426,500	10	13,860		Set new lower float
	12:00		Depart Site					
11/11/14	7:20	BW, CA, MACTEC	Qrtly Inspection	1,412,640	166	246,340		
	12:40		Depart Site					
06/23/14		KL, MACTEC	Vegetation cleared, additional fence repairs made	No reading taken				
			Depart Site					
05/29/14	8:00	KL, MACTEC	Semi-annual Inspection	1,166,300	242	614,415	30	Fence repairs made
	1:15		Depart Site					
09/19/13		BG, JF MACTEC	Qrtly Inspection	551,885	174	58,526	*Flow could not be calculated - while pump was shut down for maintenance no readings were taken.	Pavers installed in area surrounding recovery well manhole.

Primoshield Treatment System – Operation & Maintenance Log

Date	Time	Sampler (initials)	Description	Totalizer (gal)	# Days (since last reading)	# Gallons (since last reading)	Approx Flow at totalizer (gpm)	Comments
03/28/13	9:55	JK, MACTEC	Qrtly Inspection	493,359	77	218,432	28	Strainers removed at this site visit
	3:15		Depart Site				30	
01/10/13	8:15	JK, MACTEC	Qrtly Inspection On-line strainer was observed clogged with fine silt and organic debris. Small tear in basket strainer observed. Strainer was cleaned; flow resumed to normal	274,114	6	10,730	5 30	Low flow observed at totalizer upon arrival to site. See Photos in Attachment 1.
	10:30		Depart Site	274,927				Both strainers on-line in parallel to minimize time frame for clogging.
01/04/13		WW, NYSDEC	DEC on site to shovel; pump observed in working order	263,384	24	83,984		
12/11/12		JK, MACTEC	Water level measurement event. Checked pump vault upon arrival; found on-line basket strainer clogged and very low flow. Switched strainers and flow resumed to normal. Cleaned clogged strainer and put back on-line.	179,400	35	28,740		Observed low flow at totalizer upon arrival to site; flow resumed after cleaning basket strainers.

Primoshield Treatment System – Operation & Maintenance Log

Date	Time	Sampler (initials)	Description	Totalizer (gal)	# Days (since last reading)	# Gallons (since last reading)	Approx Flow at totalizer (gpm)	Comments
11/06/12	9:50	JK, MACTEC	Qtrly Inspection & Semiannual Discharge Sampling	147,325				system in auto mode
	13:30		Depart Site	150,660		3,335		

NR = Not Recorded

N/A = Not Applicable

July 10, 2019 Service Request No:R1905608

Ms. Becky Brosnan
AMEC Foster Wheeler Environment & Infrastructure Inc.
511 Congress Street, Suite 200
Portland, ME 04101

Laboratory Results for: NYSDEC Primoshield

Dear Ms.Brosnan,

Enclosed are the results of the sample(s) submitted to our laboratory June 18, 2019
For your reference, these analyses have been assigned our service request number **R1905608.**

All testing was performed according to our laboratory's quality assurance program and met the requirements of the TNI standards except as noted in the case narrative report. Any testing not included in the lab's accreditation is identified on a Non-Certified Analytes report. All results are intended to be considered in their entirety. ALS Environmental is not responsible for use of less than the complete report. Results apply only to the individual samples submitted to the lab for analysis, as listed in the report. The measurement uncertainty of the results included in this report is within that expected when using the prescribed method(s), and represented by Laboratory Control Sample control limits. Any events, such as QC failures or Holding Time exceedances, which may add to the uncertainty are explained in the report narrative or are flagged with qualifiers. The flags are explained in the Report Qualifiers and Definitions page of this report.

Please contact me if you have any questions. My extension is 7472. You may also contact me via email at Janice.Jaeger@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Janice Jaeger
Project Manager

CC: Julie Ricardi

ADDRESS 1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
PHONE +1 585 288 5380 | FAX +1 585 288 8475
ALS Group USA, Corp.
dba ALS Environmental

Narrative Documents

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

ALS Environmental

Client: Wood E&IS - Portland ME
Project: NYSDEC Primoshield
Sample Matrix: Water

Service Request: R1905608
Date Received: 06/18/2019

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier level IV requested by the client.

Sample Receipt:

Two water samples were received for analysis at ALS Environmental on 06/18/2019. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

General Chemistry:

Method Kelada-01, 06/21/2019: The upper control criterion was exceeded for one or more analytes in the Laboratory Control Sample (LCS). There were no detections of the analyte(s) in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Volatiles by GC/MS:

No significant anomalies were noted with this analysis.

Approved by _____ Date 07/10/2019

Sample Receipt Information

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

Client: Wood E&IS - Portland ME **Service Request:**R1905608
Project: NYSDEC Primoshield/3612122251.03

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
R1905608-001	633027 - Effluent	6/17/2019	1600
R1905608-002	Trip Blank	6/17/2019	

CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM 57496

1565 Jefferson Road, Building 300, Suite 360 • Rochester, NY 14623 | +1 585 288 5380 +1 585 288 8475 (fax) PAGE 1 OF 1

Project Name: Primoshield	Project Number: 36121222551.03
Project Manager: Jean Firth	Report CC: Julie Ricardi
Company/Address: Wood PLC 511 Congress Str Portland, Me 04101	
Phone #: 207 775 5401	Email: alexander.howe@woodplc.com
Sampler's Signature:	Sampler's Printed Name: Alex Howe

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 0 2 4 0

CLIENT SAMPLE ID	FOR OFFICE USE ONLY LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	GC/MS VOAs ○ 8260 ○ 8243 CLP	GC/MS SVOAs ○ 8270 ○ 625	GC VOAs ○ 8021 ○ 601/602	PESTICIDES ○ 8081 ○ 608	PCBs ○ 8082 ○ 608	METALS: TOTAL (List in comments below)	METALS: DISSOLVED (List in comments below)	Cyanide / TCN	pH						REMARKS/ ALTERNATE DESCRIPTION
633027-Effluent		06/17/19	1600	GW	3						1		1	1						
TRIP BLANK		06/10/19	1210	W	3															

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

SPECIAL INSTRUCTIONS/COMMENTS
Metals Cd, Cr, Cu, Pb, Ni, Zn

See QAPP ☐

STATE WHERE SAMPLES WERE COLLECTED New York

TURNAROUND REQUIREMENTS
____ RUSH (SURCHARGES APPLY)
____ 1 day ____ 2 day ____ 3 day
____ 4 day ____ 5 day
____ Standard (10 business days-No Surcharge)
REQUESTED REPORT DATE
per Quote

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
per Quote
Edata ____ Yes ____ No

INVOICE INFORMATION
PO # C0122O5718
BILL TO:

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature:	Signature:	Signature	Signature	Signature	Signature
Printed Name: Alex Howe	Printed Name:	Printed Name	Printed Name	Printed Name	
Firm: WOOD PLC	Firm: ALS	Firm	Firm	Firm	
Date/Time: 06/19 1700	Date/Time: 6/18/19 0930	Date/Time	Date/Time	Date/Time	

R1905608 5
AMEC Foster Wheeler Environment & Infrastructu
NYSDEC Primoshield

Distribution: White - Lab Copy; Yellow - Return to Originator

R1905608 5
AMEC Foster Wheeler Environment & Infrastructu
NYSDEC Primoshield

Cooler Receipt and Preservation Check Form

Project/Client Wood Folder Number ________

Cooler received on 6/18/19 by: [initials] COURIER: ALS UPS FEDEX (circled) VELOCITY CLIENT

1	Were **Custody seals** on outside of cooler?	(Y) N	5a	**Perchlorate** samples have required headspace?	Y N (NA)
2	**Custody papers** properly completed (ink, signed)?	(Y) N	5b	Did VOA vials, Alk, or Sulfide have sig* **bubbles**?	(Y) N NA
3	Did all bottles arrive in good **condition** (unbroken)?	(Y) N	6	Where did the bottles originate?	(ALS/ROC) CLIENT
4	Circle: (Wet Ice) Dry Ice Gel packs present?	(Y) N	7	Soil VOA received as: Bulk Encore 5035set	(NA)

8. Temperature Readings Date: 6/18/19 Time: 0953 ID: IR#7 (IR#10) From: (Temp Blank) Sample Bottle

Observed Temp (°C)	3.8						
Correction Factor (°C)	+0.3						
Corrected Temp (°C)	4.1						
Temp from:Type of bottle	Cent tube						
Within 0-6°C?	(Y) N	Y N	Y N	Y N	Y N	Y N	Y N
If <0°C, were samples frozen?	Y N	Y N	Y N	Y N	Y N	Y N	Y N

If out of Temperature, note packing/ice condition: ________ Ice melted Poorly Packed (described below) Same Day Rule

&Client Approval to Run Samples: ________ Standing Approval Client aware at drop-off Client notified by: ________

All samples held in storage location: R-002 by [initials] on 6/18/19 at 1000
5035 samples placed in storage location: ________ by ________ on ________ at ________

Cooler Breakdown/Preservation Check**: Date: 6/18/19 Time: 1305 by: [initials]

9. Were all bottle labels complete (*i.e.* analysis, preservation, etc.)? (YES) NO
10. Did all bottle labels and tags agree with custody papers? (YES) NO
11. Were correct containers used for the tests indicated? (YES) NO
12. Were 5035 vials acceptable (no extra labels, not leaking)? YES NO (N/A)
13. Air Samples: Cassettes / Tubes Intact with MS? Canisters Pressurized Tedlar® Bags Inflated (N/A)

pH	Lot of test paper	Reagent	Preserved? Yes	Preserved? No	Lot Received	Exp	Sample ID Adjusted	Vol. Added	Lot Added	Final pH
≥12	220617	NaOH	✓		196213					
≤2	↓	HNO_3	✓		1118071					
≤2		H_2SO_4								
<4		$NaHSO_4$								
5-9		For 608pest			No=Notify for 3day					
Residual Chlorine (-)		For (CN), Phenol, 625, 608pest, 522	✓		If +, contact PM to add $Na_2S_2O_3$ (625, 608, CN), ascorbic (phenol).					
		$Na_2S_2O_3$								
		ZnAcetate	-	-						
		HCl	**	**						

**VOAs and 1664 Not to be tested before analysis. Otherwise, all bottles of all samples with chemical preservatives are checked (not just representatives).

Bottle lot numbers: 19-05-07 8-039-001
Explain all Discrepancies/ Other Comments:

headspace: 3 vials headspace

CLRES	BULK
DO	FLDT
HPROD	HGFB
HTR	LL3541
(PH)	SUB
SO3	MARRS
ALS	REV

Labels secondary reviewed by: [signature]
PC Secondary Review: [signature] 6/18/19 *significant air bubbles: VOA > 5-6 mm : WC >1 in. diameter

P:\INTRANET\QAQC\Forms Controlled\Cooler Receipt r16.doc 3/12/18

Miscellaneous Forms

ALS Environmental—Rochester Laboratory
1565 Jefferson Road, Building 300, Suite 360, Rochester, NY 14623
Phone (585) 288-5380 Fax (585) 288-8475
www.alsglobal.com

REPORT QUALIFIERS AND DEFINITIONS

U	Analyte was analyzed for but not detected. The sample quantitation limit has been corrected for dilution and for percent moisture, unless otherwise noted in the case narrative.
J	Estimated value due to either being a Tentatively Identified Compound (TIC) or that the concentration is between the MRL and the MDL. Concentrations are not verified within the linear range of the calibration. For DoD: concentration >40% difference between two GC columns (pesticides/Arclors).
B	Analyte was also detected in the associated method blank at a concentration that may have contributed to the sample result.
E	Inorganics- Concentration is estimated due to the serial dilution was outside control limits.
E	Organics- Concentration has exceeded the calibration range for that specific analysis.
D	Concentration is a result of a dilution, typically a secondary analysis of the sample due to exceeding the calibration range or that a surrogate has been diluted out of the sample and cannot be assessed.
*	Indicates that a quality control parameter has exceeded laboratory limits. Under the ñNotesò column of the Form I, this qualifier denotes analysis was performed out of Holding Time.
H	Analysis was performed out of hold time for tests that have an ñimmediateò hold time criteria.
#	Spike was diluted out.
+	Correlation coefficient for MSA is <0.995.
N	Inorganics- Matrix spike recovery was outside laboratory limits.
N	Organics- Presumptive evidence of a compound (reported as a TIC) based on the MS library search.
S	Concentration has been determined using Method of Standard Additions (MSA).
W	Post-Digestion Spike recovery is outside control limits and the sample absorbance is <50% of the spike absorbance.
P	Concentration >40% difference between the two GC columns.
C	Confirmed by GC/MS
Q	DoD reports: indicates a pesticide/Aroclor is not confirmed (Ó100% Difference between two GC columns).
X	See Case Narrative for discussion.
MRL LOQ	Method Reporting Limit. Also known as: Limit of Quantitation (LOQ) The lowest concentration at which the method analyte may be reliably quantified under the method conditions.
MDL	Method Detection Limit. A statistical value derived from a study designed to provide the lowest concentration that will be detected 99% of the time. Values between the MDL and MRL are estimated (see J qualifier).
LOD	Limit of Detection. A value at or above the MDL which has been verified to be detectable.
ND	Non-Detect. Analyte was not detected at the concentration listed. Same as U qualifier.

Rochester Lab ID # for State Certifications[1]

Connecticut ID # PH0556	Maine ID #NY0032	Pennsylvania ID# 68-786
Delaware Approved	New Hampshire ID # 2941	Rhode Island ID # 158
DoD ELAP #65817	New York ID # 10145	Virginia #460167
Florida ID # E87674	North Carolina #676	

[1] Analyses were performed according to our laboratoryôs NELAP-approved quality assurance program and any applicable state or agency requirements. The test results meet requirements of the current NELAP/TNI standards or state or agency requirements, where applicable, except as noted in the case narrative. Since not all analyte/method/matrix combinations are offered for state/NELAC accreditation, this report may contain results which are not accredited. For a specific list of accredited analytes, contact the laboratory or go to https://www.alsglobal.com/locations/americas/north-america/usa/new-york/rochester-environmental

ALS Laboratory Group

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Client: Wood E&IS - Portland ME **Service Request:** R1905608
Project: NYSDEC Primoshield/3612122251.03

Non-Certified Analytes

Certifying Agency: New York Department of Health

Method	Matrix	Analyte
SM 4500-H+ B	Water	Temperature of pH Analysis
SM 4500-H+ B	Water	pH

Client:	Wood E&IS - Portland ME	**Service Request:**	R1905608
Project:	NYSDEC Primoshield/3612122251.03		

Sample Name:	633027 - Effluent	**Date Collected:**	06/17/19
Lab Code:	R1905608-001	**Date Received:**	06/18/19
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
200.7	AKONZEL	NMANSEN
624		DLIPANI
Kelada-01		CWOODS
SM 4500-H+ B		KMENGS

Sample Name:	Trip Blank	**Date Collected:**	06/17/19
Lab Code:	R1905608-002	**Date Received:**	06/18/19
Sample Matrix:	Water		

Analysis Method	Extracted/Digested By	Analyzed By
624		DLIPANI

The preparation methods associated with this report are found in these tables unless discussed in the case narrative.

Water/Liquid Matrix

Analytical Method	Preparation Method
200.7	200.2
200.8	200.2
6010C	3005A/3010A
6020A	ILM05.3
9014 Cyanide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Reactivity	SW846 Ch7, 7.3.4.2
9034 Sulfide Acid Soluble	9030B
9056A Bomb (Halogens)	5050A
9066 Manual Distillation	9065
SM 4500-CN-E Residual Cyanide	SM 4500-CN-G
SM 4500-CN-E WAD Cyanide	SM 4500-CN-I

Solid/Soil/Non-Aqueous Matrix

Analytical Method	Preparation Method
6010C	3050B
6020A	3050B
6010C TCLP (1311) extract	3005A/3010A
6010 SPLP (1312) extract	3005A/3010A
7196A	3060A
7199	3060A
9056A Halogens/Halides	5050
300.0 Anions/ 350.1/ 353.2/ SM 2320B/ SM 5210B/ 9056A Anions	DI extraction

For analytical methods not listed, the preparation method is the same as the analytical method reference.

Sample Results

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Volatile Organic Compounds by GC/MS

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Analytical Report

Client:	Wood E&IS - Portland ME	**Service Request:**	R1905608
Project:	NYSDEC Primoshield/3612122251.03	**Date Collected:**	06/17/19 16:00
Sample Matrix:	Water	**Date Received:**	06/18/19 09:30
Sample Name:	633027 - Effluent	**Units:**	ug/L
Lab Code:	R1905608-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 624.1
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	**6.34**	1.00	0.210	1	06/20/19 18:31	
1,1,2,2-Tetrachloroethane	1.00 U	1.00	0.200	1	06/20/19 18:31	
1,1,2-Trichloroethane	1.00 U	1.00	0.200	1	06/20/19 18:31	
1,1-Dichloroethane (1,1-DCA)	**0.860 J**	1.00	0.200	1	06/20/19 18:31	
1,1-Dichloroethene (1,1-DCE)	**0.720 J**	1.00	0.250	1	06/20/19 18:31	
1,2-Dichlorobenzene	1.00 U	1.00	0.200	1	06/20/19 18:31	
1,2-Dichloroethane	1.00 U	1.00	0.200	1	06/20/19 18:31	
1,2-Dichloropropane	1.00 U	1.00	0.200	1	06/20/19 18:31	
1,3-Dichlorobenzene	1.00 U	1.00	0.200	1	06/20/19 18:31	
1,4-Dichlorobenzene	1.00 U	1.00	0.200	1	06/20/19 18:31	
2-Chloroethyl Vinyl Ether	10.0 U	10.0	0.530	1	06/20/19 18:31	
Acrylonitrile	10.0 U	10.0	0.900	1	06/20/19 18:31	
Benzene	1.00 U	1.00	0.200	1	06/20/19 18:31	
Bromodichloromethane	1.00 U	1.00	0.220	1	06/20/19 18:31	
Bromoform	1.00 U	1.00	0.250	1	06/20/19 18:31	
Bromomethane	1.00 U	1.00	0.700	1	06/20/19 18:31	
Carbon Tetrachloride	1.00 U	1.00	0.340	1	06/20/19 18:31	
Chlorobenzene	1.00 U	1.00	0.200	1	06/20/19 18:31	
Chloroethane	1.00 U	1.00	0.230	1	06/20/19 18:31	
Chloroform	1.00 U	1.00	0.240	1	06/20/19 18:31	
Chloromethane	1.00 U	1.00	0.280	1	06/20/19 18:31	
Dibromochloromethane	1.00 U	1.00	0.200	1	06/20/19 18:31	
Methylene Chloride	1.00 U	1.00	0.360	1	06/20/19 18:31	
Ethylbenzene	1.00 U	1.00	0.200	1	06/20/19 18:31	
Tetrachloroethene (PCE)	1.00 U	1.00	0.210	1	06/20/19 18:31	
Toluene	1.00 U	1.00	0.200	1	06/20/19 18:31	
Trichloroethene (TCE)	**11.3**	1.00	0.200	1	06/20/19 18:31	
Trichlorofluoromethane (CFC 11)	1.00 U	1.00	0.240	1	06/20/19 18:31	
Vinyl Chloride	1.00 U	1.00	0.200	1	06/20/19 18:31	
cis-1,2-Dichloroethene	**2.35**	1.00	0.230	1	06/20/19 18:31	
cis-1,3-Dichloropropene	1.00 U	1.00	0.200	1	06/20/19 18:31	
m,p-Xylenes	2.00 U	2.00	0.200	1	06/20/19 18:31	
o-Xylene	1.00 U	1.00	0.200	1	06/20/19 18:31	
trans-1,2-Dichloroethene	1.00 U	1.00	0.200	1	06/20/19 18:31	
trans-1,3-Dichloropropene	1.00 U	1.00	0.230	1	06/20/19 18:31	

Analytical Report

Client:	Wood E&IS - Portland ME	**Service Request:**	R1905608
Project:	NYSDEC Primoshield/3612122251.03	**Date Collected:**	06/17/19 16:00
Sample Matrix:	Water	**Date Received:**	06/18/19 09:30
Sample Name:	633027 - Effluent	**Units:**	ug/L
Lab Code:	R1905608-001	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 624.1
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	102	73 - 125	06/20/19 18:31	
4-Bromofluorobenzene	98	85 - 122	06/20/19 18:31	
Toluene-d8	102	87 - 121	06/20/19 18:31	

Analytical Report

Client:	Wood E&IS - Portland ME	**Service Request:**	R1905608
Project:	NYSDEC Primoshield/3612122251.03	**Date Collected:**	06/17/19
Sample Matrix:	Water	**Date Received:**	06/18/19 09:30
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R1905608-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 624.1
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.00 U	1.00	0.210	1	06/20/19 18:53	
1,1,2,2-Tetrachloroethane	1.00 U	1.00	0.200	1	06/20/19 18:53	
1,1,2-Trichloroethane	1.00 U	1.00	0.200	1	06/20/19 18:53	
1,1-Dichloroethane (1,1-DCA)	1.00 U	1.00	0.200	1	06/20/19 18:53	
1,1-Dichloroethene (1,1-DCE)	1.00 U	1.00	0.250	1	06/20/19 18:53	
1,2-Dichlorobenzene	1.00 U	1.00	0.200	1	06/20/19 18:53	
1,2-Dichloroethane	1.00 U	1.00	0.200	1	06/20/19 18:53	
1,2-Dichloropropane	1.00 U	1.00	0.200	1	06/20/19 18:53	
1,3-Dichlorobenzene	1.00 U	1.00	0.200	1	06/20/19 18:53	
1,4-Dichlorobenzene	1.00 U	1.00	0.200	1	06/20/19 18:53	
2-Chloroethyl Vinyl Ether	10.0 U	10.0	0.530	1	06/20/19 18:53	
Acrylonitrile	10.0 U	10.0	0.900	1	06/20/19 18:53	
Benzene	1.00 U	1.00	0.200	1	06/20/19 18:53	
Bromodichloromethane	1.00 U	1.00	0.220	1	06/20/19 18:53	
Bromoform	1.00 U	1.00	0.250	1	06/20/19 18:53	
Bromomethane	1.00 U	1.00	0.700	1	06/20/19 18:53	
Carbon Tetrachloride	1.00 U	1.00	0.340	1	06/20/19 18:53	
Chlorobenzene	1.00 U	1.00	0.200	1	06/20/19 18:53	
Chloroethane	1.00 U	1.00	0.230	1	06/20/19 18:53	
Chloroform	1.00 U	1.00	0.240	1	06/20/19 18:53	
Chloromethane	1.00 U	1.00	0.280	1	06/20/19 18:53	
Dibromochloromethane	1.00 U	1.00	0.200	1	06/20/19 18:53	
Methylene Chloride	1.00 U	1.00	0.360	1	06/20/19 18:53	
Ethylbenzene	1.00 U	1.00	0.200	1	06/20/19 18:53	
Tetrachloroethene (PCE)	1.00 U	1.00	0.210	1	06/20/19 18:53	
Toluene	1.00 U	1.00	0.200	1	06/20/19 18:53	
Trichloroethene (TCE)	1.00 U	1.00	0.200	1	06/20/19 18:53	
Trichlorofluoromethane (CFC 11)	1.00 U	1.00	0.240	1	06/20/19 18:53	
Vinyl Chloride	1.00 U	1.00	0.200	1	06/20/19 18:53	
cis-1,2-Dichloroethene	1.00 U	1.00	0.230	1	06/20/19 18:53	
cis-1,3-Dichloropropene	1.00 U	1.00	0.200	1	06/20/19 18:53	
m,p-Xylenes	2.00 U	2.00	0.200	1	06/20/19 18:53	
o-Xylene	1.00 U	1.00	0.200	1	06/20/19 18:53	
trans-1,2-Dichloroethene	1.00 U	1.00	0.200	1	06/20/19 18:53	
trans-1,3-Dichloropropene	1.00 U	1.00	0.230	1	06/20/19 18:53	

Analytical Report

Client:	Wood E&IS - Portland ME	**Service Request:**	R1905608
Project:	NYSDEC Primoshield/3612122251.03	**Date Collected:**	06/17/19
Sample Matrix:	Water	**Date Received:**	06/18/19 09:30
Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	R1905608-002	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 624.1
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	95	73 - 125	06/20/19 18:53	
4-Bromofluorobenzene	97	85 - 122	06/20/19 18:53	
Toluene-d8	101	87 - 121	06/20/19 18:53	

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-1-

INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.

633027 - Effluent

Contract: R1905608

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027-Efflu

Matrix (soil/water): WATER Lab Sample ID: R1905608-001

Level (low/med): LOW Date Received: 6/18/2019

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-43-9	Cadmium	5.0	U		P
7440-47-3	Chromium	10.0	U		P
7440-50-8	Copper	20.0	U		P
7439-92-1	Lead	50.0	U		P
7440-02-0	Nickel	40.0	U		P
7440-66-6	Zinc	20.0	U		P

Color Before: COLORLESS Clarity Before: CLEAR Texture: _____

Color After: COLORLESS Clarity After: CLEAR Artifacts: _____

Comments: _____

General Chemistry

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Analytical Report

Client:	Wood E&IS - Portland ME	**Service Request:**	R1905608
Project:	NYSDEC Primoshield/3612122251.03	**Date Collected:**	06/17/19 16:00
Sample Matrix:	Water	**Date Received:**	06/18/19 09:30
Sample Name:	633027 - Effluent	**Basis:**	NA
Lab Code:	R1905608-001		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Cyanide, Total	Kelada-01	0.0050 U	mg/L	0.0050	1	06/21/19 19:07	
pH	SM 4500-H+ B	**7.13**	pH Units	-	1	06/18/19 14:00	H
Temperature of pH Analysis	SM 4500-H+ B	**20.6**	deg C	-	1	06/18/19 14:00	H

QC Summary Forms

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Volatile Organic Compounds by GC/MS

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Client: Wood E&IS - Portland ME **Service Request:** R1905608
Project: NYSDEC Primoshield/3612122251.03
Sample Matrix: Water

SURROGATE RECOVERY SUMMARY
Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 624.1
Extraction Method: EPA 5030C

Sample Name	Lab Code	1,2-Dichloroethane-d4 73-125	4-Bromofluorobenzene 85-122	Toluene-d8 87-121
633027 - Effluent	R1905608-001	102	98	102
Trip Blank	R1905608-002	95	97	101
Method Blank	RQ1906231-05	96	97	100
Lab Control Sample	RQ1906231-04	99	95	100

Analytical Report

Client:	Wood E&IS - Portland ME	**Service Request:**	R1905608
Project:	NYSDEC Primoshield/3612122251.03	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1906231-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 624.1
Prep Method: EPA 5030C

Analyte Name	Result	MRL	MDL	Dil.	Date Analyzed	Q
1,1,1-Trichloroethane (TCA)	1.00 U	1.00	0.210	1	06/20/19 11:36	
1,1,2,2-Tetrachloroethane	1.00 U	1.00	0.200	1	06/20/19 11:36	
1,1,2-Trichloroethane	1.00 U	1.00	0.200	1	06/20/19 11:36	
1,1-Dichloroethane (1,1-DCA)	1.00 U	1.00	0.200	1	06/20/19 11:36	
1,1-Dichloroethene (1,1-DCE)	1.00 U	1.00	0.250	1	06/20/19 11:36	
1,2-Dichlorobenzene	1.00 U	1.00	0.200	1	06/20/19 11:36	
1,2-Dichloroethane	1.00 U	1.00	0.200	1	06/20/19 11:36	
1,2-Dichloropropane	1.00 U	1.00	0.200	1	06/20/19 11:36	
1,3-Dichlorobenzene	1.00 U	1.00	0.200	1	06/20/19 11:36	
1,4-Dichlorobenzene	1.00 U	1.00	0.200	1	06/20/19 11:36	
2-Chloroethyl Vinyl Ether	10.0 U	10.0	0.530	1	06/20/19 11:36	
Acrylonitrile	10.0 U	10.0	0.900	1	06/20/19 11:36	
Benzene	1.00 U	1.00	0.200	1	06/20/19 11:36	
Bromodichloromethane	1.00 U	1.00	0.220	1	06/20/19 11:36	
Bromoform	1.00 U	1.00	0.250	1	06/20/19 11:36	
Bromomethane	1.00 U	1.00	0.700	1	06/20/19 11:36	
Carbon Tetrachloride	1.00 U	1.00	0.340	1	06/20/19 11:36	
Chlorobenzene	1.00 U	1.00	0.200	1	06/20/19 11:36	
Chloroethane	1.00 U	1.00	0.230	1	06/20/19 11:36	
Chloroform	1.00 U	1.00	0.240	1	06/20/19 11:36	
Chloromethane	1.00 U	1.00	0.280	1	06/20/19 11:36	
Dibromochloromethane	1.00 U	1.00	0.200	1	06/20/19 11:36	
Methylene Chloride	1.00 U	1.00	0.360	1	06/20/19 11:36	
Ethylbenzene	1.00 U	1.00	0.200	1	06/20/19 11:36	
Tetrachloroethene (PCE)	1.00 U	1.00	0.210	1	06/20/19 11:36	
Toluene	1.00 U	1.00	0.200	1	06/20/19 11:36	
Trichloroethene (TCE)	1.00 U	1.00	0.200	1	06/20/19 11:36	
Trichlorofluoromethane (CFC 11)	1.00 U	1.00	0.240	1	06/20/19 11:36	
Vinyl Chloride	1.00 U	1.00	0.200	1	06/20/19 11:36	
cis-1,2-Dichloroethene	1.00 U	1.00	0.230	1	06/20/19 11:36	
cis-1,3-Dichloropropene	1.00 U	1.00	0.200	1	06/20/19 11:36	
m,p-Xylenes	2.00 U	2.00	0.200	1	06/20/19 11:36	
o-Xylene	1.00 U	1.00	0.200	1	06/20/19 11:36	
trans-1,2-Dichloroethene	1.00 U	1.00	0.200	1	06/20/19 11:36	
trans-1,3-Dichloropropene	1.00 U	1.00	0.230	1	06/20/19 11:36	

Analytical Report

Client:	Wood E&IS - Portland ME	**Service Request:**	R1905608
Project:	NYSDEC Primoshield/3612122251.03	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	RQ1906231-05	**Basis:**	NA

Volatile Organic Compounds by GC/MS, Unpreserved

Analysis Method: 624.1
Prep Method: EPA 5030C

Surrogate Name	% Rec	Control Limits	Date Analyzed	Q
1,2-Dichloroethane-d4	96	73 - 125	06/20/19 11:36	
4-Bromofluorobenzene	97	85 - 122	06/20/19 11:36	
Toluene-d8	100	87 - 121	06/20/19 11:36	

Client: Wood E&IS - Portland ME
Project: NYSDEC Primoshield/3612122251.03
Sample Matrix: Water

Service Request: R1905608
Date Analyzed: 06/20/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Units:ug/L
Basis:NA

Lab Control Sample
RQ1906231-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
1,1,1-Trichloroethane (TCA)	624.1	19.5	20.0	98	70-130
1,1,2,2-Tetrachloroethane	624.1	19.5	20.0	97	60-140
1,1,2-Trichloroethane	624.1	18.2	20.0	91	70-130
1,1-Dichloroethane (1,1-DCA)	624.1	20.6	20.0	103	70-130
1,1-Dichloroethene (1,1-DCE)	624.1	20.1	20.0	101	50-150
1,2-Dichlorobenzene	624.1	18.3	20.0	92	65-135
1,2-Dichloroethane	624.1	19.2	20.0	96	70-130
1,2-Dichloropropane	624.1	19.5	20.0	98	35-165
1,3-Dichlorobenzene	624.1	19.0	20.0	95	70-130
1,4-Dichlorobenzene	624.1	19.7	20.0	98	65-135
2-Chloroethyl Vinyl Ether	624.1	17.2	20.0	86	1-225
Acrylonitrile	624.1	114	100	114	60-140
Benzene	624.1	19.6	20.0	98	65-135
Bromodichloromethane	624.1	18.9	20.0	94	65-135
Bromoform	624.1	18.4	20.0	92	70-130
Bromomethane	624.1	14.6	20.0	73	15-185
Carbon Tetrachloride	624.1	19.4	20.0	97	70-130
Chlorobenzene	624.1	19.3	20.0	97	65-135
Chloroethane	624.1	15.4	20.0	77	40-160
Chloroform	624.1	18.7	20.0	94	70-135
Chloromethane	624.1	14.2	20.0	71	1-205
Dibromochloromethane	624.1	18.3	20.0	92	70-135
Methylene Chloride	624.1	19.7	20.0	98	60-140
Ethylbenzene	624.1	19.5	20.0	97	60-140
Tetrachloroethene (PCE)	624.1	19.5	20.0	97	70-130
Toluene	624.1	19.2	20.0	96	70-130
Trichloroethene (TCE)	624.1	19.0	20.0	95	65-135
Trichlorofluoromethane (CFC 11)	624.1	20.4	20.0	102	50-150
Vinyl Chloride	624.1	17.9	20.0	90	5-195
cis-1,2-Dichloroethene	624.1	19.7	20.0	99	80-117
cis-1,3-Dichloropropene	624.1	20.4	20.0	102	25-175
m,p-Xylenes	624.1	39.0	40.0	98	80-126
o-Xylene	624.1	19.2	20.0	96	79-123

Client: Wood E&IS - Portland ME
Project: NYSDEC Primoshield/3612122251.03
Sample Matrix: Water

Service Request: R1905608
Date Analyzed: 06/20/19

Lab Control Sample Summary
Volatile Organic Compounds by GC/MS, Unpreserved

Units:ug/L
Basis:NA

Lab Control Sample
RQ1906231-04

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
trans-1,2-Dichloroethene	624.1	21.7	20.0	109	70-130
trans-1,3-Dichloropropene	624.1	24.0	20.0	120	50-150

Metals

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-3-

BLANKS

Contract: R1905608

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027-Efflu

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium	5.00	U	5.00	U	5.00	U	5.00	U	5.000	U	P
Chromium	10.00	U	10.00	U	10.00	U	10.00	U	10.000	U	P
Copper	20.00	U	20.00	U	20.00	U	20.00	U	20.000	U	P
Lead	50.00	U	50.00	U	50.00	U	50.00	U	50.000	U	P
Nickel	40.00	U	40.00	U	40.00	U	40.00	U	40.000	U	P
Zinc	20.00	U	20.00	U	20.00	U	20.00	U	20.000	U	P

Comments:

METALS

-3-

BLANKS

Contract: R1905608

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027-Efflu

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L, ppt, or mg/kg): UG/L

Analyte	Initial Calib. Blank ug/L	C	Continuing Calibration Blank ug/L 1	C	2	C	3	C	Preparation Blank	C	M
Cadmium			5.00	U	5.00	U	5.00	U			P
Chromium			10.00	U	10.00	U	10.00	U			P
Copper			20.00	U	20.00	U	20.00	U			P
Lead			50.00	U	50.00	U	50.00	U			P
Nickel			40.00	U	40.00	U	40.00	U			P
Zinc			20.00	U	20.00	U	20.00	U			P

Comments:

METALS

-5A-

SPIKE SAMPLE RECOVERY

SAMPLE NO.

633027 - EffluentS

Contract: R1905608

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027-Efflu

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Cadmium	75 - 125	52.20		5.00	U	50.0	104		P
Chromium	75 - 125	210.00		10.00	U	200.0	105		P
Copper	75 - 125	246.00		20.00	U	250.0	98		P
Lead	75 - 125	517.00		50.00	U	500.0	103		P
Nickel	75 - 125	532.00		40.00	U	500.0	106		P
Zinc	75 - 125	514.00		20.00	U	500.0	103		P

Comments:

METALS

-5A-

SPIKE SAMPLE RECOVERY

SAMPLE NO.

633027 - EffluentSD

Contract: R1905608

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027-Efflu

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Cadmium	75 - 125	52.00		5.00	U	50.0	104		P
Chromium	75 - 125	208.00		10.00	U	200.0	104		P
Copper	75 - 125	244.00		20.00	U	250.0	98		P
Lead	75 - 125	512.00		50.00	U	500.0	102		P
Nickel	75 - 125	527.00		40.00	U	500.0	105		P
Zinc	75 - 125	507.00		20.00	U	500.0	101		P

Comments: _____

METALS
-6-
DUPLICATES

SAMPLE NO.

633027 - EffluentSD

Contract: R1905608

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027-Efflu

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Cadmium		52.20		52.00		0		P
Chromium		210.00		208.00		1		P
Copper		246.00		244.00		1		P
Lead		517.00		512.00		1		P
Nickel		532.00		527.00		1		P
Zinc		514.00		507.00		1		P

Comments:

METALS

-7-

LABORATORY CONTROL SAMPLE

Contract: R1905608

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: 633027-Efflu

Solid LCS Source: _____

Aqueous LCS Source: CPI

Analyte	Aqueous (ug/L			Solid (mg/K				
	True	Found	%R	True	Found	C	Limits	%R
Cadmium	50	53	106					
Chromium	200	208	104					
Copper	250	241	96					
Lead	500	526	105					
Nickel	500	518	104					
Zinc	500	511	102					

Comments: _____

General Chemistry

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Analytical Report

Client:	Wood E&IS - Portland ME	**Service Request:**	R1905608
Project:	NYSDEC Primoshield/3612122251.03	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Basis:**	NA
Lab Code:	R1905608-MB		

Inorganic Parameters

Analyte Name	Analysis Method	Result	Units	MRL	Dil.	Date Analyzed	Q
Cyanide, Total	Kelada-01	0.0050 U	mg/L	0.0050	1	06/21/19 18:07	

Client: Wood E&IS - Portland ME
Project: NYSDEC Primoshield/3612122251.03
Sample Matrix: Water

Service Request: R1905608
Date Analyzed: 06/21/19

Lab Control Sample Summary
General Chemistry Parameters

Units:mg/L
Basis:NA

Lab Control Sample
R1905608-LCS

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Cyanide, Total	Kelada-01	0.122	0.100	122 *	90-110