



July 26, 2019

Hand Delivered

Travis Peacock/Merat Zarrei – Industrial Pretreatment Engineer/NPDES Program Manager
Albuquerque Bernalillo County Water Utility Authority
P.O. Box 568
Albuquerque, New Mexico 87103-0568

RECEIVED

JUL 31 2019

RE: Semi-Annual Report
Name: Intel Corporation
Permit Number: 2021A
Reporting Period: January 1, 2019 through June 30, 2019

INDUSTRIAL PRETREATMENT

Enclosed is Intel Corporation’s Semi-Annual Report for the above stated reporting period as required in the Wastewater Discharge Permit for the facility noted above.

The following information is enclosed:

Endorsement

- Ammonia Loading
- Cyanide Certification
- Average and Daily Effluent Flow Monitoring
- Grease Traps, Sand Traps and Oil/Water Separators
- Hazardous Air Pollutants Certification
- Hazardous Substances and Pretreatment Wastes for Permit # 2021A
- 2021A pH Monitoring
- Reporting Certification
- Toxic Organic Management Plan Certification Statement
- Special Wastestream Pollutant Limitations
- Special Wastestream Pollutant Limitations
- Special Wastestream Pollutant Limitations
- Self-Monitoring
- Source Reduction and Waste Minimization Statement
- Toxic Organic (Solvent) Management Plan

Code

- LOAD2
- CN
- FM6
- GS
- HAPS
- HZ3
- PH3
- RC
- TC3
- CE
- INGA2
- PT
- SM
- WM
- TR6

Attachments:

- A – Intel NM H1 2019 Grease Trap Pumping Manifests
- B – Intel NM TOMP – March 2018
- C – Monthly Indium Gallium Sampling Reports
- D – Semi-Annual Monitoring Analytical Results
- E – Site Outfall Flow Meter Calibration Records
- F – May Cerium Sampling Report

To clarify any information submitted, please contact Amy Reed at (505) 794-6841, or by email at amy.reed@intel.com.

Sincerely,

Mindy Koch
NM Site Corporate Services Manager

Enclosures

Permit #: 2021A
Permittee: Intel Corporation
Address: 4100 Sara Road
City: Rio Rancho
State, Zip: NM 87124-1025

Reporting Requirements

<u>Code</u>	<u>Endorsement</u>
LOAD2	2021A AMMONIA LOADING
CN	CYANIDE CERTIFICATION
FM6	AVERAGE AND DAILY EFFLUENT FLOW MONITORING
GS	GREASE TRAPS, SAND TRAPS AND OIL/WATER SEPARATORS
HAPS	HAZARDOUS AIR POLLUTANTS CERTIFICATION
HZ3	HAZ WASTE PERMIT 2021A
PH3	PH MONITORING PERMIT 2021A
RC	REPORTING CERTIFICATION
TC3	TOMP CERTIFICATION STATEMENT
INGA2	SPECIAL WASTESTREAM POLLUTANT LIMITATIONS
PT	SPECIAL WASTESTREAM POLLUTANT LIMITATIONS
CE	SPECIAL WASTESTREAM POLLUTANT LIMITATIONS
SM	SELF-MONITORING
WM	WASTE MIN. PERMIT 2021A
TR6	TOXIC ORGANIC (SOLVENT) MANAGEMENT PLAN

ENDORSEMENT LOAD2

2021A AMMONIA LOADING

COMPLIANCE REQUIREMENT: The Permittee is required to discharge less than 2,200 lbs. per day of Ammonia calculated on a monthly average. Industry sampling and Water Authority monitoring may be combined to calculate the monthly average. The Permittee is required to discharge less than 5,418 lbs. per day of Ammonia as a maximum on any one day.

MONITORING REQUIREMENT: The Permittee shall monitor the discharge on a weekly basis using Hach Method 10031, or another method approved by the Industrial Pretreatment Engineer. Monitoring by the permittee may be increased at the discretion of the Industrial Pretreatment Engineer.

REPORTING REQUIREMENT: The Permittee shall notify the Industrial Pretreatment Engineer (289-3439) via telephone within 12 hours if any Ammonia load is greater than the monthly average limit. If the Industrial Pretreatment Engineer does not answer, the shift supervisor at the SWRP control room should be notified (289-3411). The Permittee shall report on the monthly bases all Ammonia monitoring and flows. The results and flow must be sent to the Industrial Pretreatment Engineer or her designate by the 10th of the month. Twice a year the Permittee shall conduct accuracy checks per the analytical method and submit the results with each semi-annual report.

In compliance with the Endorsement LOAD2 reporting requirements, Intel NM submitted Ammonia reports to ABCWUA on 2/04/2019, 3/01/2019, 4/01/2019, 5/6/2019, 6/4/2019, and 7/9/2019 which included Ammonia data collected during the first half of 2019 (H1 2019). A summary of Intel NM's analytical method accuracy checks performed during H1 2019 is included below.

Date	Ammonia Analytical Accuracy Checks (10 ppm Standard)
1/3/2019	10.1
1/9/2019	9.8
1/16/2019	9.2
1/23/2019	9.9
1/30/2019	9.7
2/6/2019	9
2/13/2019	9.3
2/20/2019	9.9
2/27/2019	10.4
3/6/2019	9.4
3/13/2019	9.6
3/20/2019	9
3/27/2019	9
4/3/2019	9.3
4/10/2019	10
4/17/2019	10.1
4/24/2019	9.9
5/2/2019	10.1
5/8/2019	10
5/15/2019	10.4
5/22/2019	10.2
5/30/2019	10.2
6/5/2019	9.1
6/13/2019	10
6/19/2019	9.8
6/26/2019	9.7

ENDORSEMENT CN

CYANIDE CERTIFICATION

COMPLIANCE REQUIREMENT: See below.

MONITORING REQUIREMENT: None required by the Permittee.

REPORTING REQUIREMENT: The Permittee shall report either the presence or absence of Cyanide compounds on the premises during the reporting period. Example CYANIDE CERTIFICATION STATEMENTS are shown below. The Permittee shall submit the appropriate certification statement shown below with each semi-annual report submittal.

* * * *

CYANIDE CERTIFICATION STATEMENT (CYANIDE NOT PRESENT)

I hereby certify that no cyanide compounds are stored or used on the premises at this time and that no cyanide compounds were stored or used on the premises during the current permit reporting period. I further certify that the presence of any cyanide compound on the premises shall be reported to the Industrial Waste Engineer (873-7047) within 24 hours of receipt of the compound, regardless of the intended use or disposition of the material.

Facility Name: _____
Permit No.: _____ Date: _____
Signature: _____ Title: _____
Authorized Representative

* * * *

CYANIDE CERTIFICATION STATEMENT (CYANIDE PRESENT)

I hereby certify that cyanide compounds were stored or used on the premises during the current permit reporting period.

Facility Name: Intel Corporation
Permit No.: 2021A Date: _____
Signature: _____ Title: NM Corporate Services
Authorized Representative Manager

Cyanide compounds present on the NM site during this reporting period are listed below:

Chemical Ingredient	CAS
Sodium Dichloroisocyanurate	2893-78-9
Sodium Nitroferricyanide	14402-89-2
Ethyl Cyanoacrylate	7085-85-0
Hexylcyanobiphenyl	41122-70-7

ENDORSEMENT FM6

AVERAGE AND DAILY EFFLUENT FLOW MONITORING

COMPLIANCE REQUIREMENT: The holder of this Permit must meet the requirements of 40 CFR 403.12(e)(1), and shall submit to the Pretreatment Program, along with the semi-annual report during the months of January and July, a report which shall include a record of measured or estimated average and maximum daily flows for the reporting period of the effluent from this facility. The report shall also include a copy of this endorsement, with the relevant information filled in below.

The Pretreatment Section may allow for verifiable estimates of these flows, where justified by cost or feasibility considerations.

MONITORING REQUIREMENT: Average and maximum daily flows of all regulated process streams and, as necessary, other effluent streams from the facility.

REPORTING REQUIREMENT: The Permittee shall submit information showing the measured average daily and maximum daily flow, in gallons per day (gpd) to the Pretreatment Program from each of the following:

1. Regulated process streams; and
2. Other streams as necessary to allow use of the Combined Waste Stream Formula.

The permit holder shall submit flow meter calibration documentation with the semi-annual reports.

Average Daily Flow:	<u>1,594,4267</u>	gallons per day
Peak Daily Flow:	<u>2,231,849</u>	gallons per day
Peak Daily Flow occurred on:	<u>3/15/2019</u>	date

In compliance with Endorsement FM6, documentation of calibration is attached in Appendix E. The site outfall flow meters were calibrated on June 27th, 2019.

In compliance with subsection 3 of Part III Reporting Requirements in Permit 2021A, Intel received approval from the Industrial Pretreatment Engineer on March 27th, 2019 to a request to discharge a non-standard industrial discharge of process contaminated stormwater to SWRP. On June 12th, the discharge was performed from Intel NM.

DAILY EFFLUENT FLOW MONITORING

Per 40 CFR 403.12(e)(1) Intel is submitting measured average and maximum flow data for regulated process streams and un-regulated streams.

January 2019

Date	Site Outfall Flow Average (gpm)	Acid Waste Neutralization Unregulated/Dilute Flows (gpm)	Regulated Flows Average (gpm)	Unreg/Dil Flows Average (gpm)
1/1/2019	935.2	114	812	123
1/2/2019	935.9	113	814	122
1/3/2019	968.0	118	841	126
1/4/2019	1001.2	113	880	121
1/5/2019	1139.2	292	839	300
1/6/2019	1168.5	291	869	299
1/7/2019	960.1	113	839	121
1/8/2019	1017.9	120	889	128
1/9/2019	1036.4	120	908	128
1/10/2019	1018.4	112	898	121
1/11/2019	1247.1	353	886	361
1/12/2019	1074.4	226	840	234
1/13/2019	1041.1	119	914	127
1/14/2019	1059.6	119	932	127
1/15/2019	1056.8	120	928	128
1/16/2019	1143.1	292	843	300
1/17/2019	1011.5	113	890	121
1/18/2019	1127.6	290	829	298
1/19/2019	980.8	113	859	122
1/20/2019	954.3	113	833	121
1/21/2019	1203.0	292	902	301
1/22/2019	1032.2	118	906	126
1/23/2019	1024.5	114	903	122
1/24/2019	1146.9	291	847	300
1/25/2019	955.1	112	834	121
1/26/2019	940.6	118	815	126
1/27/2019	957.0	112	837	120
1/28/2019	1086.6	290	789	298
1/29/2019	1017.3	118	891	126
1/30/2019	1060.1	285	767	293
1/31/2019	1002.0	115	879	123
	gpm	gpd		
Average	1,046	1,505,619		
Peak	1,247	1,795,786	Peak Date	1/11/2019

February 2019

Date	Site Outfall Flow Average (gpm)	Acid Waste Neutralization Unregulated/Dilute Flows (gpm)	Regulated Flows Average (gpm)	Unreg/Dil Flows Average (gpm)
2/1/2019	1041.2	125	908	133
2/2/2019	1246.7	299	939	308
2/3/2019	913.6	114	791	123
2/4/2019	1018.8	119	892	127
2/5/2019	1080.1	286	786	294
2/6/2019	1076.8	129	939	137
2/7/2019	1190.9	130	1,052	139
2/8/2019	1271.7	286	978	294
2/9/2019	1173.5	118	1,047	126
2/10/2019	1094.0	111	974	120
2/11/2019	1285.7	212	1,066	220
2/12/2019	1133.3	187	938	196
2/13/2019	1144.4	121	1,015	130
2/14/2019	1286.3	283	995	292
2/15/2019	1130.4	120	1,002	128
2/16/2019	1082.6	112	962	120
2/17/2019	1139.2	118	1,013	127
2/18/2019	1245.4	285	952	294
2/19/2019	1143.4	113	1,022	121
2/20/2019	1293.4	289	996	297
2/21/2019	1142.7	115	1,019	124
2/22/2019	1087.2	112	967	121
2/23/2019	1102.7	111	983	119
2/24/2019	1219.6	285	926	293
2/25/2019	1290.3	292	990	300
2/26/2019	1036.2	110	918	118
2/27/2019	1076.8	111	957	120
2/28/2019	1171.2	129	1,034	137
	gpm	gpd		
Average	1,147	1,651,789		
Peak	1,293	1,862,498	Peak Date	2/20/2019

March 2019

Date	Site Outfall Flow Average (gpm)	Acid Waste Neutralization Unregulated/Dilute Flows (gpm)	Regulated Flows Average (gpm)	Unreg/Dil Flows Average (gpm)
3/1/2019	1207.6	129	1,071	137
3/2/2019	1260.4	290	962	298
3/3/2019	1113.9	167	939	175
3/4/2019	1166.8	233	926	241
3/5/2019	1069.1	109	951	118
3/6/2019	1080.8	118	955	126
3/7/2019	1074.7	108	958	117
3/8/2019	1034.1	124	902	132
3/9/2019	1395.3	444	943	452
3/10/2019	1081.1	116	957	124
3/11/2019	1077.7	113	957	121
3/12/2019	1172.2	117	1,046	126
3/13/2019	1110.1	115	986	124
3/14/2019	1142.4	121	1,013	129
3/15/2019	1549.9	475	1,067	483
3/16/2019	1007.4	108	891	116
3/17/2019	1017.7	108	902	116
3/18/2019	1033.3	111	914	119
3/19/2019	1050.8	110	932	118
3/20/2019	1044.4	113	923	121
3/21/2019	1234.5	288	938	297
3/22/2019	1246.5	283	955	292
3/23/2019	1019.0	109	901	118
3/24/2019	1017.0	109	900	117
3/25/2019	1052.0	111	933	119
3/26/2019	1013.6	116	889	124
3/27/2019	1147.8	283	857	291
3/28/2019	1142.0	282	851	291
3/29/2019	986.0	110	868	118
3/30/2019	1010.4	109	893	118
3/31/2019	1031.7	113	910	121
	gpm	gpd		
Average	1,116	1,606,782		
Peak	1,550	2,231,859	Peak Date	3/15/2019

April 2019

Date	Site Outfall Flow Average (gpm)	Acid Waste Neutralization Unregulated/Dilute Flows (gpm)	Regulated Flows Average (gpm)	Unreg/Dil Flows Average (gpm)
4/1/2019	1090.1	112	970	120
4/2/2019	1271.9	286	977	294
4/3/2019	1029.7	112	910	120
4/4/2019	1223.1	292	923	301
4/5/2019	1006.0	116	881	125
4/6/2019	1019.2	118	893	126
4/7/2019	1002.1	115	879	123
4/8/2019	1222.3	287	927	296
4/9/2019	990.7	114	868	123
4/10/2019	1019.9	155	857	163
4/11/2019	1194.6	245	941	254
4/12/2019	1055.5	117	930	126
4/13/2019	1027.7	111	908	119
4/14/2019	1173.7	290	876	298
4/15/2019	1086.8	114	964	122
4/16/2019	1011.4	114	889	123
4/17/2019	1205.8	287	911	295
4/18/2019	1055.6	115	932	123
4/19/2019	1059.3	119	932	127
4/20/2019	1350.9	307	1,035	316
4/21/2019	968.9	112	849	120
4/22/2019	1029.6	118	903	127
4/23/2019	1088.8	112	968	121
4/24/2019	1154.8	284	862	293
4/25/2019	1210.0	292	910	300
4/26/2019	1018.6	111	900	119
4/27/2019	970.9	112	851	120
4/28/2019	986.6	117	861	126
4/29/2019	1054.3	111	935	120
4/30/2019	1182.0	287	886	296
	gpm	gpd		
Average	1,092	1,572,508		
Peak	1,351	1,945,251	Peak Date	4/20/2019

May 2019

Date	Site Outfall Flow Average (gpm)	Acid Waste Neutralization Unregulated/Dilute Flows (gpm)	Regulated Flows Average (gpm)	Unreg/Dil Flows Average (gpm)
5/1/2019	1092.3	123	961	131
5/2/2019	1135.5	288	839	297
5/3/2019	1096.9	122	967	130
5/4/2019	1154.5	132	1,014	141
5/5/2019	964.1	127	829	135
5/6/2019	1263.4	280	975	288
5/7/2019	1172.6	294	870	302
5/8/2019	1032.2	109	915	118
5/9/2019	1120.9	119	993	128
5/10/2019	1328.9	140	1,180	149
5/11/2019	1050.7	113	930	121
5/12/2019	1206.6	288	910	296
5/13/2019	1226.8	285	934	293
5/14/2019	1039.7	111	921	119
5/15/2019	1029.4	117	904	125
5/16/2019	1005.6	111	886	120
5/17/2019	980.9	116	856	125
5/18/2019	1151.3	284	859	292
5/19/2019	1151.9	285	858	294
5/20/2019	945.2	104	833	112
5/21/2019	969.9	112	850	120
5/22/2019	1088.2	119	961	127
5/23/2019	1136.3	136	992	144
5/24/2019	1421.5	311	1,102	320
5/25/2019	1158.0	291	859	299
5/26/2019	1018.4	116	894	125
5/27/2019	1006.7	120	878	128
5/28/2019	1068.8	112	948	121
5/29/2019	1010.4	118	884	127
5/30/2019	1266.4	287	971	296
5/31/2019	1036.4	120	908	129
	gpm	gpd		
Average	1,107	1,594,692		
Peak	1,422	2,047,024	Peak Date	5/24/2019

June 2019

Date	Site Outfall Flow Average (gpm)	Acid Waste Neutralization Unregulated/Dilute Flows (gpm)	Regulated Flows Average (gpm)	Unreg/Dil Flows Average (gpm)
6/1/2019	1213.3	299	906	307
6/2/2019	1336.5	115	1,213	123
6/3/2019	1431.8	123	1,301	131
6/4/2019	1434.7	114	1,312	122
6/5/2019	1433.0	295	1,129	304
6/6/2019	1302.5	134	1,160	142
6/7/2019	1209.2	295	905	304
6/8/2019	1071.1	128	935	136
6/9/2019	991.4	124	859	133
6/10/2019	1183.6	288	888	296
6/11/2019	1043.2	119	916	128
6/12/2019	1043.5	129	907	137
6/13/2019	1192.6	293	891	301
6/14/2019	1057.1	126	923	134
6/15/2019	1015.9	121	887	129
6/16/2019	1231.7	295	928	304
6/17/2019	1045.8	118	920	126
6/18/2019	1049.0	116	925	124
6/19/2019	1181.3	300	873	308
6/20/2019	1060.3	122	930	130
6/21/2019	1264.6	307	950	315
6/22/2019	1012.2	121	883	129
6/23/2019	980.1	121	851	129
6/24/2019	1066.6	120	939	128
6/25/2019	1221.3	300	913	308
6/26/2019	1002.2	127	867	135
6/27/2019	1168.3	297	863	305
6/28/2019	946.8	131	808	139
6/29/2019	900.2	124	767	133
6/30/2019	956.2	132	816	140
	gpm	gpd		
Average	1,135	1,634,213		
Peak	1,435	2,065,922	Peak Date	6/4/2019

ENDORSEMENT GS

GREASE TRAPS, SAND TRAPS AND OIL/WATER SEPARATORS

COMPLIANCE REQUIREMENT: Facilities with grease traps, sand traps or oil/water separators shall periodically inspect the operation of these devices and remove accumulated grease, sand, oil or grit as required to prevent discharge of such pollutants (or materials) to the sanitary sewer.

MONITORING REQUIREMENT: The Permittee shall perform periodic inspections, as required, to assure timely removal of accumulated materials.

REPORTING REQUIREMENT: The Permittee shall document in each semi-annual report the method used to dispose of materials removed from grease traps, sand traps or oil/water separators. This must include a narrative statement, along with copies of the manifest forms for each material removed from the Permittee's facility during the reporting period. If no materials are removed during the reporting period, a statement of that fact must be submitted. Sample statements are provided below.

* * * *

Intel NM's grease trap pumping manifests for H1 2019 are included as Attachment A. In the attached pumping manifests, the grease trap described as 'RR5 Trap from Coffee Area N/W' was out of service until it was replaced with a new unit at the end of February. While pending replacement, bimonthly flushing of water was allowed to flow through the grease trap – it did not encounter any fats, oils, greases, or coffee grounds while out of service.

GREASE, SAND, OIL OR GRIT SHIPPING CERTIFICATION STATEMENT – NO SHIPMENTS

I hereby certify that the permitted facility HAS active grease traps, sand traps or oil/water separators and NO shipments of accumulated grease, oil, sand or grit have occurred during this reporting period.

Facility Name: _____

Permit No.: _____ Date: _____

Signature: _____ Title: _____

Authorized Representative

* * * *

GREASE, SAND, OIL OR GRIT SHIPPING CERTIFICATION STATEMENT - SHIPMENTS

I hereby certify that the permitted facility HAS active grease traps, sand traps or oil/water separators and shipments of accumulated grease, oil, sand or grit HAVE occurred during this reporting period. Copies of manifests are attached.

Facility Name: Intel Corporation

Permit No.: 2021A Date: _____

Signature: _____ Title: NM Corporate Services
Manager
Authorized Representative

ENDORSEMENT HAPS

HAZARDOUS AIR POLLUTANTS CERTIFICATION

COMPLIANCE REQUIREMENT: The Permittee shall not use the treatment and controls located at the POTW to comply with its NESHAP.

MONITORING REQUIREMENT: None required by the Permittee.

REPORTING REQUIREMENT: The Permittee shall submit the appropriate certification statement shown below with each semi-annual report submittal.

* * * *

NESHAP CERTIFICATION STATEMENT

I hereby certify that this facility does not use the treatment and controls located at the POTW to comply with its NESHAP.

Facility Name: Intel Corporation

Permit No.: 2021A Date: _____

Signature: _____ Title: NM Corporate Services
Manager

Authorized Representative

ENDORSEMENT HZ3

HAZARDOUS SUBSTANCES AND PRETREATMENT WASTES

FOR PERMIT # 2021A

COMPLIANCE REQUIREMENT: The permittee shall insure that: 1) all pretreatment processes are handled in accordance with applicable Resource Conservation and Recovery Act (RCRA) regulations, 2) no materials removed by a pretreatment process are reintroduced into the waste stream, and, 3) hazardous substances stored on-site are not discharged to the sanitary sewer. In other words, disposal of pretreatment wastes or hazardous substances into the sanitary sewer is strictly forbidden.

MONITORING REQUIREMENTS: None required by the Permittee.

REPORTING REQUIREMENTS: The permittee shall document in each semi-annual report, the method used to dispose of materials removed by the pretreatment process and/or hazardous substances stored on-site. This must include a narrative statement, along with a summary of all hazardous materials generated from the NM site for the reporting period. All original manifests are to be maintained in the permittee's regulatory files and be available to the Water Authority upon request. If no hazardous substances or pretreatment wastes are removed during the reporting period, a statement of that fact must be submitted. Sample statements are provided.

* * * *

HAZARDOUS SUBSTANCES AND PRETREATMENT WASTES CERTIFICATION
STATEMENT

I hereby certify that NO shipments of hazardous substances or pretreatment wastes have occurred during this reporting period. **NOT APPLICABLE**

Facility Name: _____

Permit No.: _____ Date: _____

Signature: _____ Title: _____

Authorized Representative

US EPA ID. No. _____ (IF APPLICABLE)

* * * *

HAZARDOUS SUBSTANCES AND PRETREATMENT WASTES CERTIFICATION
STATEMENT

I hereby certify that shipments of hazardous substances or pretreatment wastes HAVE occurred during this reporting period. A summary of these shipments has been included with this report.

Facility Name: Intel Corporation

Permit No.: 2021A

Date:

Signature:

Authorized Representative

NM Corporate Services
Manager

US EPA ID. No. NMD000609339 (IF APPLICABLE)

**HAZARDOUS SUBSTANCES AND PRETREATMENT
WASTE MANAGEMENT**

Intel Corporation utilizes Veolia Environmental Services Technical Solutions, Evoqua Water Technologies, and Clean Harbors Environmental for removal and disposal of all hazardous substances generated at the New Mexico site.

Veolia Environmental Services Technical Solutions, Evoqua Water Technologies, and Clean Harbors Environmental Services are EPA permitted Treatment Storage and Disposal Facilities (TSDFs). The addresses of the facilities are below:

Veolia Environmental Services Technical Solutions

9131 East 96th Avenue

Henderson, CO 80640

Phone Number: (303) 289-4827

Evoqua Water Technologies

2430 Rose Place

Roseville, MN 55113

Phone Number: (651) 638-1330

Clean Harbors Environmental Services

1340 West Lincoln Street

Phoenix, AZ 85007

Phone Number: (602) 258-6155

A summary report of all hazardous materials generated from the New Mexico site for the reporting period is included. All original manifests are maintained in our regulatory files and are available to the Water Authority upon request.

Intel Semi-Annual Wastewater Report | H1 2019

Shipping Doc. Number	Ship Date	Profile Number	Waste Name	Quantity (lbs)	Quantity (tons)	Haz? (Y/N)
011830679FLE	1/1/2019	Decant KOH 10%	Decant Drum Potassium Hydroxide 10%	11	0.01	Y
012326898FLE	1/2/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
0151174	1/2/2019	DecantGsolve470	Decant Gensolve 470	22	0.01	N
ZZ00109134	1/2/2019	529928	SLUDGE, CALCIUM FLUORIDE	15060	7.53	N
079153	1/4/2019	529928	SLUDGE, CALCIUM FLUORIDE	15620	7.81	N
012325835FLE	1/7/2019	DECANT PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
001262351VES	1/7/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	41880	20.94	Y
0151129	1/7/2019	DecantGsolve470	Decant Gensolve 470	30	0.02	N
ZZ00109315	1/7/2019	529928	SLUDGE, CALCIUM FLUORIDE	16200	8.10	N
010559728FLE	1/8/2019	DEC CLK-222	Decant Drum CLK-222,corrosive	10	0.01	Y
012326899FLE	1/8/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
0151130	1/8/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
012326900FLE	1/9/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
0151131	1/9/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
016742765JJK	1/9/2019	7919597	ScH Bed #120	1630	0.82	Y
0151132	1/10/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
ZZ00109323	1/10/2019	529928	SLUDGE, CALCIUM FLUORIDE	16940	8.47	N
011830680FLE	1/11/2019	Decant KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
012325836FLE	1/11/2019	Decant PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
079154	1/12/2019	529928	SLUDGE, CALCIUM FLUORIDE	12000	6.00	N
001262352VES	1/14/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	37620	18.81	Y
0151133	1/14/2019	DECANTGSOLVE470	Decant Gensolve 470	33	0.02	N
ZZ00109135	1/14/2019	529928	SLUDGE, CALCIUM FLUORIDE	15920	7.96	N
012324620FLE	1/15/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
0151134	1/15/2019	DecantGsolve470	Decant Gensolve 470	11	0.01	N
0151135	1/16/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
079159	1/17/2019	529928	SLUDGE, CALCIUM FLUORIDE	14340	7.17	N
0151136	1/17/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
012324621FLE	1/18/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
001508569VES	1/21/2019	483253	SOLVENT, GENERAL-MIXED	31300	15.65	Y
0151138	1/21/2019	DECANTGSOLVE470	Decant Gensolve 470	33	0.02	N
ZZ00109325	1/21/2019	529928	SLUDGE, CALCIUM FLUORIDE	16160	8.08	N

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ZZ00109325	1/21/2019	529928	SLUDGE, CALCIUM FLUORIDE	16160	8.08	N
011830681FLE	1/22/2019	Decant KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
012324622FLE	1/22/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
0151139	1/22/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
001508582VES	1/23/2019	317498	P4 TRAPS FOR INCINERATION RC9330	91	0.05	Y
001508582VES	1/23/2019	317498	P4 TRAPS FOR INCINERATION RC9330	136	0.07	Y
0151140	1/23/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
ZZ00109326	1/23/2019	529928	SLUDGE, CALCIUM FLUORIDE	15620	7.81	N
001508590VES	1/24/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	42320	21.16	Y
0151141	1/24/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
0151142	1/25/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
083688	1/26/2019	529928	SLUDGE, CALCIUM FLUORIDE	16380	8.19	N
012324623FLE	1/28/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
012325828FLE	1/28/2019	Decant KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
0151143	1/28/2019	DECANTGSOLVE470	Decant Gensolve 470	30	0.02	N
012324624FLE	1/29/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
0151144	1/29/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
ZZ00109327	1/29/2019	529928	SLUDGE, CALCIUM FLUORIDE	16160	8.08	N
0151145	1/30/2019	DecantGsolve470	Decant Gensolve 470	11	0.01	N
012324594FLE	1/31/2019	Decant PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
001508591VES	1/31/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	41700	20.85	Y
0151146	1/31/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
0151147	2/1/2019	DecantGsolve470	Decant Gensolve 470	11	0.01	N
ZZ00109328	2/1/2019	529928	SLUDGE, CALCIUM FLUORIDE	16120	8.06	N
0151148	2/4/2019	DECANTGSOLVE470	Decant Gensolve 470	33	0.02	N
ZZ00109331	2/4/2019	529928	SLUDGE, CALCIUM FLUORIDE	15560	7.78	N
011249778FLE	2/6/2019	DecanCMPCleanBG	Decant Drum CMP Cleaner BG1	10	0.01	Y
012324625FLE	2/6/2019	DECANT PBR-40	Decant Drum PBR 40	22	0.01	Y
016742766JJK	2/6/2019	7919597	Sch #206	1571	0.79	Y
0151149	2/6/2019	DecantGsolve470	Decant Gensolve 470	22	0.01	N
012325829FLE	2/7/2019	Decant KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y

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083689	2/7/2019	529928	SLUDGE, CALCIUM FLUORIDE	16120	8.06	N
001508646VES	2/7/2019	442983	REPEATING LABPACK	73	0.04	Y
001508646VES	2/7/2019	533335	DEBRIS, SOLVENT-HAZARDOUS	125	0.06	Y
001508646VES	2/7/2019	533335	DEBRIS, SOLVENT-HAZARDOUS	116	0.06	Y
001508646VES	2/7/2019	533335	DEBRIS, SOLVENT-HAZARDOUS	83	0.04	Y
001508646VES	2/7/2019	442914	ARSENIC CONTAMINATED SLURRY MATERIAL	325	0.16	Y
001508646VES	2/7/2019	713453	HMDS DEBRIS	64	0.03	Y
001508646VES	2/7/2019	131484	PHOTORESIST WASTE	340	0.17	Y
001508646VES	2/7/2019	202100	IPA CONTAMINATED WIPES	498	0.25	Y
001508646VES	2/7/2019	202100	IPA CONTAMINATED WIPES	505	0.25	Y
001508646VES	2/7/2019	202100	IPA CONTAMINATED WIPES	497	0.25	Y
001508646VES	2/7/2019	202100	IPA CONTAMINATED WIPES	464	0.23	Y
001508646VES	2/7/2019	202100	IPA CONTAMINATED WIPES	337	0.17	Y
001508646VES	2/7/2019	386928	ARSENIC WAFER DEBRIS	7	0.00	Y
001508646VES	2/7/2019	442913	DEBRIS, ARSENIC	66	0.03	Y
001508646VES	2/7/2019	442913	DEBRIS, ARSENIC	308	0.15	Y
001508646VES	2/7/2019	442913	DEBRIS, ARSENIC	161	0.08	Y
001508646VES	2/7/2019	442913	DEBRIS, ARSENIC	107	0.05	Y
001508646VES	2/7/2019	442913	DEBRIS, ARSENIC	65	0.03	Y
001508646VES	2/7/2019	442913	DEBRIS, ARSENIC	58	0.03	Y
001508646VES	2/7/2019	442913	DEBRIS, ARSENIC	142	0.07	Y
001508646VES	2/7/2019	442913	DEBRIS, ARSENIC	298	0.15	Y
001508646VES	2/7/2019	442913	DEBRIS, ARSENIC	157	0.08	Y
001508646VES	2/7/2019	442913	DEBRIS, ARSENIC	120	0.06	Y
001508646VES	2/7/2019	442913	DEBRIS, ARSENIC	118	0.06	Y
001508646VES	2/7/2019	442913	DEBRIS, ARSENIC	52	0.03	Y
001508646VES	2/7/2019	442913	DEBRIS, ARSENIC	156	0.08	Y
001508646VES	2/7/2019	442923	BROKEN MERCURY LIGHT BULBS	6	0.00	Y
001508646VES	2/7/2019	366524	AEROSOL CANS	26	0.01	Y
001508646VES	2/7/2019	693403	SOLVENTS, SPIN ON GLASS	156	0.08	Y
001508646VES	2/7/2019	691900	DEBRIS, HOUSE VACUUM	69	0.03	Y
001508646VES	2/7/2019	692557	CYLINDERS, COMPRESSED GASES	24	0.01	Y
001508646VES	2/7/2019	399825	EDT PARTS	220	0.11	Y

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001508646VES	2/7/2019	399825	EDT PARTS	187	0.09	Y
001508646VES	2/7/2019	713454	CCW FILTERS, WIPES, ABSORBENTS, PPE	107	0.05	Y
001508646VES	2/7/2019	401587	SOLVENT LADEN PIPING	106	0.05	Y
001508646VES	2/7/2019	385814	ARSENIC & PHOS DEBRIS, HAZ W/ OIL	36	0.02	Y
001508646VES	2/7/2019	61641	LEAD-ACID BATTERIES (DAMAGED)	34	0.02	Y
0151150	2/7/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
ZZ00109295	2/7/2019	412314	PAINT AND DEBRIS	114	0.06	N
ZZ00109295	2/7/2019	442912	LAMPS, MERCURY	297	0.15	N
ZZ00109295	2/7/2019	442912	LAMPS, MERCURY	125	0.06	N
ZZ00109295	2/7/2019	442912	LAMPS, MERCURY	154	0.08	N
ZZ00109295	2/7/2019	442912	LAMPS, MERCURY	140	0.07	N
ZZ00109295	2/7/2019	442983	REPEATING LABPACK	9	0.00	N
ZZ00109295	2/7/2019	532530	USED OIL	151	0.08	N
ZZ00109295	2/7/2019	532530	USED OIL	433	0.22	N
ZZ00109295	2/7/2019	532530	USED OIL	436	0.22	N
ZZ00109295	2/7/2019	532530	USED OIL	437	0.22	N
ZZ00109295	2/7/2019	532530	USED OIL	442	0.22	N
ZZ00109295	2/7/2019	532530	USED OIL	226	0.11	N
ZZ00109295	2/7/2019	532530	USED OIL	389	0.19	N
ZZ00109295	2/7/2019	532531	DEBRIS, SOLVENT - NON HAZARDOUS	141	0.07	N
ZZ00109295	2/7/2019	442694	BATTERIES, LEAD ACID - NON SPILLABLE	2142	1.07	N
ZZ00109295	2/7/2019	532526	SLUDGE, ION EXCHANGE	397	0.20	N
ZZ00109295	2/7/2019	713449	DEBRIS, INDIUM PHOSPHIDE	84	0.04	N
ZZ00109295	2/7/2019	713449	DEBRIS, INDIUM PHOSPHIDE	91	0.05	N
ZZ00109295	2/7/2019	713449	DEBRIS, INDIUM PHOSPHIDE	79	0.04	N
ZZ00109295	2/7/2019	713449	DEBRIS, INDIUM PHOSPHIDE	98	0.05	N
ZZ00109295	2/7/2019	713449	DEBRIS, INDIUM PHOSPHIDE	106	0.05	N
ZZ00109295	2/7/2019	713448	UPS BATTERIES, LEAD ACID - NON SPILLABLE	706	0.35	N
ZZ00109295	2/7/2019	713444	MIXED BATTERIES (UNIVERSAL-WASTE BAT)	458	0.23	N
083690	2/9/2019	529928	SLUDGE, CALCIUM FLUORIDE	15240	7.62	N
001508586VES	2/11/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	42780	21.39	Y

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Shipping Doc. Number	Ship Date	Profile Number	Waste Name	Quantity (lbs)	Quantity (tons)	Haz? (Y/N)
0151175	2/11/2019	DECANTGSOLVE470	Decant Gensolve 470	44	0.02	N
012324626FLE	2/12/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	N
0151176	2/12/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
0151177	2/13/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
ZZ00109334	2/13/2019	529928	SLUDGE, CALCIUM FLUORIDE	15840	7.92	N
012325830FLE	2/14/2019	DECANT KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
0151178	2/14/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
0151179	2/15/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
083691	2/16/2019	529928	SLUDGE, CALCIUM FLUORIDE	16100	8.05	N
012324595FLE	2/18/2019	Decant PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
012324627FLE	2/18/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
012325831FLE	2/18/2019	DEC CLK-222	Decant Drum CLK-222,corrosive	10	0.01	Y
001508588VES	2/18/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	41470	20.74	Y
0151180	2/18/2019	DECANTGSOLVE470	Decant Gensolve 470	33	0.02	N
012324596FLE	2/19/2019	DECANT PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
0151181	2/19/2019	DecantGsolve470	Decant Gensolve 470	22	0.01	N
ZZ00109335	2/19/2019	529928	SLUDGE, CALCIUM FLUORIDE	15960	7.98	N
012324628FLE	2/20/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
0151182	2/20/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
75425	2/21/2019	265288	SILICA SAND FILTER	12779	6.39	N
0151183	2/22/2019	DecantGsolve470	Decant Gensolve 470	22	0.01	N
ZZ00109336	2/22/2019	529928	SLUDGE, CALCIUM FLUORIDE	15320	7.66	N
012324629FLE	2/25/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
001508593VES	2/25/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	42360	21.18	Y
0151184	2/25/2019	DECANTGSOLVE470	Decant Gensolve 470	33	0.02	N
ZZ00109337	2/25/2019	529928	SLUDGE, CALCIUM FLUORIDE	16640	8.32	N
012324630FLE	2/26/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
0151185	2/26/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
012325832FLE	2/27/2019	Decant KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
0151186	2/27/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
0151187	2/28/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
ZZ00109338	2/28/2019	529928	SLUDGE, CALCIUM FLUORIDE	15840	7.92	N
012324610FLE	3/4/2019	Decant KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y

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012324597FLE	3/4/2019	Decant PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
001508620VES	3/4/2019	483253	SOLVENT, GENERAL-MIXED	35360	17.68	Y
0151188	3/4/2019	DECANTGSOLVE470	Decant Gensolve 470	33	0.02	N
ZZ00109339	3/4/2019	529928	SLUDGE, CALCIUM FLUORIDE	15760	7.88	N
012324631FLE	3/5/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
0151189	3/5/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
012324632FLE	3/6/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
083695	3/6/2019	529928	SLUDGE, CALCIUM FLUORIDE	16000	8.00	N
016742767JJK	3/6/2019	7919597	Sch #145	1446	0.72	Y
001508594VES	3/7/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	42680	21.34	Y
0151190	3/7/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
079161	3/9/2019	529928	SLUDGE, CALCIUM FLUORIDE	16860	8.43	N
012324611FLE	3/11/2019	Decant KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
0151191	3/11/2019	DecantGsolve470	Decant Gensolve 470	33	0.02	N
ZZ00109340	3/11/2019	529928	SLUDGE, CALCIUM FLUORIDE	15180	7.59	N
012324633FLE	3/13/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
0151192	3/13/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
012324598FLE	3/14/2019	DECANT PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
079162	3/14/2019	529928	SLUDGE, CALCIUM FLUORIDE	15860	7.93	N
001508595VES	3/14/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	40700	20.35	Y
276184	3/15/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
012324612FLE	3/18/2019	Decant KOH 10%	Decant Drum Potassium Hydroxide 10%	9	0.00	Y
012324634FLE	3/18/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
276185	3/18/2019	DecantGsolve470	Decant Gensolve 470	11	0.01	N
ZZ00109341	3/18/2019	529928	SLUDGE, CALCIUM FLUORIDE	16560	8.28	N
012324599FLE	3/19/2019	Decant PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
276186	3/19/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
012708143FLE	3/20/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
079163	3/20/2019	529928	SLUDGE, CALCIUM FLUORIDE	15800	7.90	N
016742768JJK	3/20/2019	7919597	Sch #122	1420	0.71	Y
001508596VES	3/21/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	34200	17.10	Y
276187	3/22/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N

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Shipping Doc. Number	Ship Date	Profile Number	Waste Name	Quantity (lbs)	Quantity (tons)	Haz? (Y/N)
079164	3/23/2019	529928	SLUDGE, CALCIUM FLUORIDE	16360	8.18	N
276188	3/25/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
012324613FLE	3/26/2019	Decant KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
010559729FLE	3/27/2019	Dec CLK-222	Decant Drum CLK-222,corrosive	10	0.01	Y
012708145FLE	3/27/2019	Decant PBR-40	Decant Drum PBR 40	22	0.01	Y
276189	3/27/2019	DecantGsolve470	Decant Gensolve 470	11	0.01	N
ZZ00109344	3/27/2019	529928	SLUDGE, CALCIUM FLUORIDE	16700	8.35	N
276190	3/28/2019	DecantGsolve470	Decant Gensolve 470	11	0.01	N
ZZ00109346	3/29/2019	529928	SLUDGE, CALCIUM FLUORIDE	15640	7.82	N
16742769JJK	4/3/2019	7919597	Sch #205	1667	0.83	N
16742769JJK	4/3/2019	9919333	CEN #216	1808	0.90	N
016742770JJK	5/1/2019	9919333	Slurry Copper Wastewater, Resin	1525	0.76	N
001508629VES	4/1/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	41120	20.56	Y
001508692VES	4/1/2019	256683	CLEANSORB COLUMNS	1524	0.76	Y
276191	4/1/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
ZZ00812051	4/2/2019	529928	SLUDGE, CALCIUM FLUORIDE	16240	8.12	N
016742769JJK	4/3/2019	9919333	Slurry Copper Wastewater, Resin	1808	0.90	N
016742769JJK	4/3/2019	9919333	Slurry Copper Wastewater, Resin	1667	0.83	N
012708146FLE	4/3/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
012324614FLE	4/3/2019	Decant KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
276192	4/4/2019	DecantGsolve470	Decant Gensolve 470	11	0.01	N
ZZ00812052	4/5/2019	529928	SLUDGE, CALCIUM FLUORIDE	15940	7.97	N
012708147FLE	4/8/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
012324600FLE	4/8/2019	Decant PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
276193	4/8/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
ZZ00812053	4/8/2019	529928	SLUDGE, CALCIUM FLUORIDE	15880	7.94	N
001508570VES	4/8/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	35400	17.70	Y
116151	4/10/2019	212984-1	Water and Perlite	7760	3.88	N
012324601FLE	4/11/2019	Decant PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
012708148FLE	4/12/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
276194	4/12/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
079165	4/12/2019	529928	SLUDGE, CALCIUM FLUORIDE	16200	8.10	N

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Shipping Doc. Number	Ship Date	Profile Number	Waste Name	Quantity (lbs)	Quantity (tons)	Haz? (Y/N)
ZZ00812055	4/15/2019	529928	SLUDGE, CALCIUM FLUORIDE	16820	8.41	N
001508621VES	4/15/2019	483253	SOLVENT, GENERAL-MIXED	32640	16.32	Y
012324615FLE	4/15/2019	Decant KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
276195	4/16/2019	DecantGsolve470	Decant Gensolve 470	11	0.01	N
011249779FLE	4/17/2019	DecanCMPCleanBG	Decant Drum CMP Cleaner BG1	10	0.01	Y
276196	4/17/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
001508572VES	4/18/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	40800	20.40	Y
079166	4/18/2019	529928	SLUDGE, CALCIUM FLUORIDE	15640	7.82	N
012708149FLE	4/18/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
012831689FLE	4/19/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
276197	4/19/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
276198	4/22/2019	DecantGsolve470	Decant Gensolve 470	11	0.01	N
012324616FLE	4/22/2019	Decant KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
ZZ00812057	4/22/2019	529928	SLUDGE, CALCIUM FLUORIDE	16460	8.23	N
276199	4/23/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
012324602FLE	4/24/2019	Decant PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
75407	4/24/2019	699552	RESIN (AMBERJET 1500 H & IRC86)	7980	3.99	N
276200	4/25/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
ZZ00812058	4/25/2019	529928	SLUDGE, CALCIUM FLUORIDE	15580	7.79	N
012831690FLE	4/25/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
001508573VES	4/25/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	33580	16.79	Y
276201	4/29/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
012831691FLE	4/30/2019	DECANT PBR-40	Decant Drum PBR 40	22	0.01	Y
ZZ00812059	5/1/2019	529928	SLUDGE, CALCIUM FLUORIDE	16240	8.12	N
276202	5/1/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
016742770JJK	5/1/2019	9919333	Slurry Copper Wastewater, Resin	1525	0.76	N
001508627VES	5/2/2019	442983	REPEATING LABPACK	6328	3.16	Y
ZZ00109106	5/2/2019	442912	LAMPS, MERCURY	18497	9.25	N
ZZ00812060	5/3/2019	529928	SLUDGE, CALCIUM FLUORIDE	16320	8.16	N
012324617FLE	5/3/2019	DECANT KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
276203	5/6/2019	DECANTGSOLVE470	Decant Gensolve 470	33	0.02	N

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Shipping Doc. Number	Ship Date	Profile Number	Waste Name	Quantity (lbs)	Quantity (tons)	Haz? (Y/N)
012831692FLE	5/6/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
001508575VES	5/6/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	42580	21.29	Y
ZZ00109177	5/6/2019	713448	UPS BATTERIES, LEAD ACID - NON SPILLABLE	15560	7.78	N
ZZ00812061	5/6/2019	529928	SLUDGE, CALCIUM FLUORIDE	15880	7.94	N
ZZ00812050	5/7/2019	713448	UPS BATTERIES, LEAD ACID - NON SPILLABLE	30320	15.16	N
276204	5/7/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
276205	5/8/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
012324603FLE	5/8/2019	DECANT PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
276206	5/9/2019	DecantGsolve470	Decant Gensolve 470	11	0.01	N
079166	5/10/2019	529928	SLUDGE, CALCIUM FLUORIDE	15040	7.52	N
276207	5/10/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
276208	5/13/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
012708127FLE	5/13/2019	Decant PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
012324618FLE	5/13/2019	Decant KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
012831693FLE	5/13/2019	Decant PBR-40	Decant Drum PBR 40	22	0.01	Y
ZZ00812056	5/13/2019	529928	SLUDGE, CALCIUM FLUORIDE	16700	8.35	N
001508580VES	5/13/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	39960	19.98	Y
0043658	5/15/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
079169	5/15/2019	529928	SLUDGE, CALCIUM FLUORIDE	9500	4.75	N
0043659	5/16/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
079170	5/16/2019	529928	SLUDGE, CALCIUM FLUORIDE	16580	8.29	N
012831694FLE	5/20/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
0043660	5/20/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
ZZ00109108	5/20/2019	529928	SLUDGE, CALCIUM FLUORIDE	15940	7.97	N
001508651VES	5/20/2019	256683	CLEANSORB COLUMNS	1524	0.76	Y
012831695FLE	5/21/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
0043692	5/21/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
0043693	5/22/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
012324619FLE	5/23/2019	DECANT KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
001508583VES	5/23/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	41620	20.81	Y

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Shipping Doc. Number	Ship Date	Profile Number	Waste Name	Quantity (lbs)	Quantity (tons)	Haz? (Y/N)
004394	5/24/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
ZZ00109109	5/25/2019	529928	SLUDGE, CALCIUM FLUORIDE	16200	8.10	N
0043695	5/27/2019	DECANTGSOLVE470	Decant Gensolve 470	33	0.02	N
012831696FLE	5/27/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
ZZ00109110	5/28/2019	529928	SLUDGE, CALCIUM FLUORIDE	15580	7.79	N
0043696	5/28/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
012708128FLE	5/29/2019	Decant PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
001508622VES	5/30/2019	483253	SOLVENT, GENERAL-MIXED	35120	17.56	Y
0043697	5/30/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
ZZ00109111	5/31/2019	529928	SLUDGE, CALCIUM FLUORIDE	14880	7.44	N
0043698	6/3/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
012708150FLE	6/3/2019	DECANT KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
ZZ00109112	6/3/2019	529928	SLUDGE, CALCIUM FLUORIDE	13040	6.52	N
001508584VES	6/3/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	42300	21.15	Y
012708129FLE	6/4/2019	DECANT PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
012831697FLE	6/4/2019	DECANT PBR-40	Decant Drum PBR 40	22	0.01	Y
0113001	6/4/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
0113004	6/6/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
ZZ00812065	6/6/2019	529928	SLUDGE, CALCIUM FLUORIDE	15820	7.91	N
012831698FLE	6/7/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
0113005	6/10/2019	DECANTGSOLVE470	Decant Gensolve 470	33	0.02	N
ZZ00109113	6/10/2019	529928	SLUDGE, CALCIUM FLUORIDE	16260	8.13	N
001508585VES	6/10/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	42040	21.02	Y
0113006	6/11/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
012831699FLE	6/11/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
016742771JJK	6/12/2019	9919333	Slurry Copper Wastewater, Resin	1586	0.79	N
0113007	6/12/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
012831700FLE	6/13/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
012708151FLE	6/13/2019	Decant KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
0113008	6/13/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
ZZ00812067	6/13/2019	529928	SLUDGE, CALCIUM FLUORIDE	15580	7.79	N
0113009	6/14/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
0113011	6/17/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N

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Shipping Doc. Number	Ship Date	Profile Number	Waste Name	Quantity (lbs)	Quantity (tons)	Haz? (Y/N)
012708130FLE	6/17/2019	Decant PGMEA-PM	Decant Drum PGMEA - PM Acetate	10	0.01	Y
012831701FLE	6/17/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
ZZ00109114	6/17/2019	529928	SLUDGE, CALCIUM FLUORIDE	16100	8.05	N
010559730FLE	6/18/2019	Dec CLK-222	Decant Drum CLK-222,corrosive	5	0.00	Y
0113012	6/18/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
0113013	6/19/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
0113015	6/20/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
001508652VES	6/20/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	42560	21.28	Y
ZZ00812068	6/20/2019	529928	SLUDGE, CALCIUM FLUORIDE	15740	7.87	N
012831702FLE	6/21/2019	Decant PBR-40	Decant Drum PBR 40	11	0.01	Y
012831703FLE	6/24/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
012708152FLE	6/24/2019	DECANT KOH 10%	Decant Drum Potassium Hydroxide 10%	12	0.01	Y
0113016	6/24/2019	DECANTGSOLVE470	Decant Gensolve 470	44	0.02	N
ZZ00109115	6/24/2019	529928	SLUDGE, CALCIUM FLUORIDE	16040	8.02	N
001508657VES	6/24/2019	256683	CLEANSORB COLUMNS	1524	0.76	Y
010559731FLE	6/25/2019	Dec CLK-222	Decant Drum CLK-222,corrosive	8	0.00	Y
016742772JJK	6/26/2019	9919333	Slurry Copper Wastewater, Resin	1805	0.90	N
0113018	6/26/2019	DECANTGSOLVE470	Decant Gensolve 470	22	0.01	N
012831704FLE	6/28/2019	DECANT PBR-40	Decant Drum PBR 40	11	0.01	Y
0113157	6/28/2019	DECANTGSOLVE470	Decant Gensolve 470	11	0.01	N
001508653VES	6/28/2019	692208	SOLVENT, CORROSIVE - FAB 11 (D002)	42180	21.09	Y
ZZ00109116	6/28/2019	529928	SLUDGE, CALCIUM FLUORIDE	16400	8.20	N
016742772JJK	6/26/2019	9919333	Slurry Copper Wastewater, Resin	1805	0.90	N

ENDORSEMENT PH3

2021A pH MONITORING

COMPLIANCE REQUIREMENT: The Permittee is required to maintain a system to monitor the pH of the effluent from each acid waste neutralization unit continuously. This monitoring is required for information purposes only. The Permittee is required to maintain a system to monitor the pH of the effluent from the site outfall continuously. Compliance with the pH limit this permit will be determined at the designated sampling point at the site outfall.

MONITORING REQUIREMENT: See above.

REPORTING REQUIREMENT: The Permittee shall notify the Industrial Waste Engineer within 24 hours of becoming aware of a pH excursion at the Site Vault lasting more than 60 minutes including circumstances and corrective action taken.

The Permittee shall include with each semi-annual report, the results of pH monitoring conducted at the permit sample point during the reporting period. Results reported must include:

- 1) Daily maximum and time of occurrence.
- 2) Daily minimum and time of occurrence.
- 3) Duration in minutes of each individual excursion above or below limits set in this permit. Limits are those stated in the Ordinance unless otherwise noted.

As noted in 40 CFR 401.17

- 1) The total time during which the pH values are outside the required range of pH values shall not exceed seven (7) hours and 26 minutes in any calendar month.
- 2) No individual excursion from the range of pH values shall exceed 60 minutes.

CONTINUOUS pH MONITORING REPORT

January 2019 – February 2019

Intel Corporation

Site Outfall Daily Minimum and Maximum pH Report										
Date	Minimum pH	Duration Out of Range (min)	Maximum pH	Duration Out of Range (min)	Date	Minimum pH	Duration Out of Range (min)	Maximum pH	Duration Out of Range (min)	
1/1/2019	6.38	0.00	10.17	0.00	2/1/2019	6.26	0.00	10.12	0.00	
1/2/2019	6.35	0.00	9.89	0.00	2/2/2019	6.15	0.00	10.34	0.00	
1/3/2019	6.19	0.00	7.29	0.00	2/3/2019	6.35	0.00	10.09	0.00	
1/4/2019	6.15	0.00	9.80	0.00	2/4/2019	6.35	0.00	10.12	0.00	
1/5/2019	6.06	0.00	10.87	0.00	2/5/2019	6.24	0.00	7.39	0.00	
1/6/2019	6.06	0.00	9.81	0.00	2/6/2019	6.26	0.00	10.07	0.00	
1/7/2019	6.29	0.00	9.96	0.00	2/7/2019	6.28	0.00	10.09	0.00	
1/8/2019	6.26	0.00	9.94	0.00	2/8/2019	6.16	0.00	9.85	0.00	
1/9/2019	6.18	0.00	9.97	0.00	2/9/2019	6.40	0.00	10.06	0.00	
1/10/2019	6.28	0.00	8.63	0.00	2/10/2019	6.24	0.00	9.45	0.00	
1/11/2019	6.08	0.00	10.00	0.00	2/11/2019	5.96	0.00	8.56	0.00	
1/12/2019	6.12	0.00	9.69	0.00	2/12/2019	5.92	0.00	9.41	0.00	
1/13/2019	6.12	0.00	9.28	0.00	2/13/2019	6.11	0.00	8.00	0.00	
1/14/2019	6.13	0.00	10.50	0.00	2/14/2019	6.32	0.00	10.25	0.00	
1/15/2019	6.13	0.00	10.53	0.00	2/15/2019	6.35	0.00	10.22	0.00	
1/16/2019	6.04	0.00	8.98	0.00	2/16/2019	6.57	0.00	10.06	0.00	
1/17/2019	6.24	0.00	9.52	0.00	2/17/2019	6.22	0.00	9.37	0.00	
1/18/2019	6.12	0.00	10.47	0.00	2/18/2019	6.08	0.00	9.45	0.00	
1/19/2019	6.11	0.00	9.63	0.00	2/19/2019	6.06	0.00	8.21	0.00	
1/20/2019	6.13	0.00	9.76	0.00	2/20/2019	6.12	0.00	8.07	0.00	
1/21/2019	6.07	0.00	8.31	0.00	2/21/2019	5.95	0.00	10.17	0.00	
1/22/2019	6.19	0.00	10.24	0.00	2/22/2019	6.27	0.00	9.30	0.00	
1/23/2019	5.90	0.00	9.00	0.00	2/23/2019	6.30	0.00	10.01	0.00	
1/24/2019	6.06	0.00	9.36	0.00	2/24/2019	6.09	0.00	9.48	0.00	
1/25/2019	6.15	0.00	9.74	0.00	2/25/2019	6.03	0.00	9.69	0.00	
1/26/2019	6.02	0.00	9.69	0.00	2/26/2019	6.20	0.00	8.82	0.00	
1/27/2019	6.01	0.00	9.19	0.00	2/27/2019	6.10	0.00	9.28	0.00	
1/28/2019	6.06	0.00	9.69	0.00	2/28/2019	6.10	0.00	9.80	0.00	
1/29/2019	6.11	0.00	10.20	0.00						
1/30/2019	6.19	0.00	8.70	0.00						
1/31/2019	6.16	0.00	9.70	0.00						
Total Time pH Out of Range:				0	Total Time pH Out of Range:				0	

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March 2019 – April 2019

Site Outfall Daily Minimum and Maximum pH Report										
Date	Minimum pH	Duration Out of Range (min)	Maximum pH	Duration Out of Range (min)	Date	Minimum pH	Duration Out of Range (min)	Maximum pH	Duration Out of Range (min)	
3/1/2019	6.38	0.00	10.25	0.00	4/1/2019	6.50	0.00	10.34	0.00	
3/2/2019	6.17	0.00	10.34	0.00	4/2/2019	6.31	0.00	9.24	0.00	
3/3/2019	6.34	0.00	10.25	0.00	4/3/2019	6.31	0.00	8.91	0.00	
3/4/2019	6.09	0.00	9.35	0.00	4/4/2019	6.34	0.00	7.85	0.00	
3/5/2019	6.03	0.00	9.14	0.00	4/5/2019	6.45	0.00	9.97	0.00	
3/6/2019	6.03	0.00	9.49	0.00	4/6/2019	6.64	0.00	10.43	0.00	
3/7/2019	6.14	0.00	7.73	0.00	4/7/2019	6.57	0.00	10.20	0.00	
3/8/2019	6.03	0.00	9.14	0.00	4/8/2019	6.51	0.00	9.95	0.00	
3/9/2019	6.06	0.00	9.82	0.00	4/9/2019	7.62	0.00	10.43	0.00	
3/10/2019	6.51	0.00	9.61	0.00	4/10/2019	6.63	0.00	9.57	0.00	
3/11/2019	6.39	0.00	10.29	0.00	4/11/2019	6.59	0.00	9.69	0.00	
3/12/2019	6.42	0.00	9.31	0.00	4/12/2019	6.66	0.00	10.38	0.00	
3/13/2019	6.23	0.00	10.29	0.00	4/13/2019	6.75	0.00	9.85	0.00	
3/14/2019	6.30	0.00	10.11	0.00	4/14/2019	6.55	0.00	10.07	0.00	
3/15/2019	6.20	0.00	9.01	0.00	4/15/2019	6.67	0.00	10.08	0.00	
3/16/2019	6.51	0.00	10.12	0.00	4/16/2019	6.55	0.00	9.43	0.00	
3/17/2019	6.40	0.00	10.47	0.00	4/17/2019	6.44	0.00	9.99	0.00	
3/18/2019	6.49	0.00	9.68	0.00	4/18/2019	6.24	0.00	9.52	0.00	
3/19/2019	6.43	0.00	10.09	0.00	4/19/2019	6.21	0.00	9.50	0.00	
3/20/2019	6.38	0.00	9.65	0.00	4/20/2019	6.01	0.00	9.66	0.00	
3/21/2019	6.16	0.00	8.76	0.00	4/21/2019	6.59	0.00	9.23	0.00	
3/22/2019	6.21	0.00	10.36	0.00	4/22/2019	6.45	0.00	10.59	0.00	
3/23/2019	6.42	0.00	9.98	0.00	4/23/2019	6.35	0.00	8.72	0.00	
3/24/2019	6.43	0.00	9.95	0.00	4/24/2019	6.03	0.00	9.76	0.00	
3/25/2019	6.46	0.00	10.10	0.00	4/25/2019	6.23	0.00	10.14	0.00	
3/26/2019	6.13	0.00	9.19	0.00	4/26/2019	6.36	0.00	9.42	0.00	
3/27/2019	6.15	0.00	9.66	0.00	4/27/2019	6.50	0.00	9.98	0.00	
3/28/2019	6.37	0.00	9.48	0.00	4/28/2019	6.50	0.00	9.42	0.00	
3/29/2019	6.50	0.00	9.86	0.00	4/29/2019	6.47	0.00	10.00	0.00	
3/30/2019	6.42	0.00	10.11	0.00	4/30/2019	6.08	0.00	9.87	0.00	
3/31/2019	6.55	0.00	9.92	0.00						
Total Time pH Out of Range:				0	Total Time pH Out of Range:				0	

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May 2019 – June 2019

Site Outfall Daily Minimum and Maximum pH Report										
Date	Minimum pH	Duration Out of Range (min)	Maximum pH	Duration Out of Range (min)	Date	Minimum pH	Duration Out of Range (min)	Maximum pH	Duration Out of Range (min)	
5/1/2019	6.41	0.00	10.30	0.00	6/1/2019	6.11	0.00	8.07	0.00	
5/2/2019	5.91	0.00	8.97	0.00	6/2/2019	5.95	0.00	8.90	0.00	
5/3/2019	6.37	0.00	9.13	0.00	6/3/2019	6.37	0.00	10.38	0.00	
5/4/2019	6.31	0.00	9.33	0.00	6/4/2019	6.38	0.00	9.66	0.00	
5/5/2019	6.21	0.00	9.11	0.00	6/5/2019	6.70	0.00	10.76	0.00	
5/6/2019	5.87	0.00	10.44	0.00	6/6/2019	6.60	0.00	9.69	0.00	
5/7/2019	5.99	0.00	9.43	0.00	6/7/2019	6.38	0.00	10.27	0.00	
5/8/2019	6.50	0.00	10.25	0.00	6/8/2019	6.66	0.00	10.81	0.00	
5/9/2019	6.55	0.00	9.34	0.00	6/9/2019	6.57	0.00	9.71	0.00	
5/10/2019	6.26	0.00	10.26	0.00	6/10/2019	6.32	0.00	8.25	0.00	
5/11/2019	6.13	0.00	9.17	0.00	6/11/2019	6.57	0.00	9.64	0.00	
5/12/2019	5.78	0.00	7.86	0.00	6/12/2019	6.69	0.00	9.81	0.00	
5/13/2019	6.10	0.00	9.55	0.00	6/13/2019	6.34	0.00	9.34	0.00	
5/14/2019	6.33	0.00	9.63	0.00	6/14/2019	6.61	0.00	10.08	0.00	
5/15/2019	6.40	0.00	9.11	0.00	6/15/2019	6.49	0.00	10.27	0.00	
5/16/2019	6.53	0.00	9.90	0.00	6/16/2019	6.29	0.00	9.53	0.00	
5/17/2019	6.36	0.00	8.78	0.00	6/17/2019	6.55	0.00	9.57	0.00	
5/18/2019	5.99	0.00	9.33	0.00	6/18/2019	6.58	0.00	9.27	0.00	
5/19/2019	5.88	0.00	10.25	0.00	6/19/2019	6.46	0.00	9.48	0.00	
5/20/2019	6.51	0.00	9.31	0.00	6/20/2019	6.77	0.00	9.21	0.00	
5/21/2019	6.36	0.00	9.15	0.00	6/21/2019	6.46	0.00	10.43	0.00	
5/22/2019	6.28	0.00	10.39	0.00	6/22/2019	6.66	0.00	10.12	0.00	
5/23/2019	6.17	0.00	9.70	0.00	6/23/2019	6.60	0.00	9.28	0.00	
5/24/2019	6.00	0.00	8.50	0.00	6/24/2019	6.58	0.00	8.81	0.00	
5/25/2019	5.88	0.00	9.93	0.00	6/25/2019	6.36	0.00	9.34	0.00	
5/26/2019	6.30	0.00	10.27	0.00	6/26/2019	6.48	0.00	9.79	0.00	
5/27/2019	6.15	0.00	9.96	0.00	6/27/2019	6.46	0.00	9.07	0.00	
5/28/2019	6.24	0.00	9.86	0.00	6/28/2019	6.52	0.00	9.26	0.00	
5/29/2019	6.05	0.00	10.30	0.00	6/29/2019	6.53	0.00	9.82	0.00	
5/30/2019	5.65	0.00	9.95	0.00	6/30/2019	6.59	0.00	10.59	0.00	
5/31/2019	5.65	0.00	8.60	0.00						
Total Time pH Out of Range:				0	Total Time pH Out of Range:				0	

ENDORSEMENT RC

REPORTING CERTIFICATION

COMPLIANCE REQUIREMENT: The Permittee is required to certify all materials and information submitted with semi-annual reports is accurate and complete.

MONITORING REQUIREMENT: None

REPORTING REQUIREMENT: The Permittee must complete, sign and submit the Reporting Certification (shown below) with each semi-annual report.

* * * * *

REPORTING CERTIFICATION

Facility Name: Intel Corporation

Permit Number: 2021A

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 known violations.

(Signature)

Authorized Representative

Date

ENDORSEMENT TC3

TOXIC ORGANIC MANAGEMENT PLAN CERTIFICATION STATEMENT

COMPLIANCE REQUIREMENT: The most recent TOXIC ORGANIC (SOLVENT) MANAGEMENT PLAN (TOMP) submitted by the Permittee to the Industrial Waste Engineer remains in effect. The Permittee must notify the Industrial Waste Engineer, in writing, of any changes to the TOMP.

MONITORING REQUIREMENT: None required by the Permittee.

REPORTING REQUIREMENT: The Permittee shall continue to submit a TOXIC ORGANIC MANAGEMENT PLAN CERTIFICATION STATEMENT with each semiannual report. A sample certification statement has been provided below.

* * * *

The Toxic Organic Management Plan (TOMP) was last modified in March 2018 and submitted to ABCWUA at the time of revision. The March 2018 updated version of the TOMP accurately reflects current site operations. The TOMP is included as Attachment B.

TOXIC ORGANIC MANAGEMENT PLAN CERTIFICATION STATEMENT

Based upon my inquiry of the person or persons directly responsible for managing compliance with the permit limitations [or pretreatment standard] for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred during this reporting period. I further certify that this facility is implementing the TOXIC ORGANIC MANAGEMENT PLAN (TOMP) submitted to the Industrial Waste Engineer.

Facility Name:	<u>Intel Corporation</u>		
Permit No.:	<u>2021A</u>	Date:	<u></u>
Signature:	<u></u> Authorized Representative	Title:	<u>NM Site Corporate Services Manager</u>

ENDORSEMENT INGA2

SPECIAL WASTESTREAM POLLUTANT LIMITATIONS FOR PERMIT 2021A

COMPLIANCE REQUIREMENT: The concentration of the following pollutants in the flow through the sampling point shall not exceed that shown below:

POLLUTANT	MAXIMUM FOR ANY 1 DAY
Indium	0.30 mg/l
Gallium	See Schedule Below

Step	Gallium Concentration	Effective Dates
1	1.00 mg/L	2/7/2018 – 8/31/2019
2	2.00 mg/l	9/1/2018 – 2/28/2019
3	3.125 mg/L	3/1/2019 - onward

MONITORING REQUIREMENT: The permittee is required to sample the site discharge for the above pollutants monthly. Each monthly monitoring event must be performed using a 24 hour composite sample. Once per step and semi-annually there after the permittee must perform a monitoring event for four days in a row using a 24 hour composite sampler. All analysis must be done using EPA approved methods.

REPORTING REQUIREMENT: If the EPA method is not applicable the permittee must submit production values and calculations in each semi-annual report that show the concentrations of the above pollutants at the site outfall.

In compliance with Endorsement INGA2, Intel NM submitted monthly Indium and Gallium sampling results collected during H1 2019 to ABCWUA on January 25th, March 1st, April 1st, May 7th, June 5th, and July 2nd, 2019.

Monthly Indium and Gallium analytical reports are attached for reference (Attachment C). The semi-annual sampling results submitted to ABCWUA on May 7th, 2019 (Attachment D) served as the monthly submittal for April 2019. Requirements of INGA2 have been met for the reporting period of this Semi-Annual Report.

ENDORSEMENT PT

SPECIAL WASTESTREAM POLLUTANT LIMITATIONS FOR PERMIT 2021A

COMPLIANCE REQUIREMENT: The concentration of Platinum in the flow through the sampling point shall not exceed that shown below:

POLLUTANT	MAXIMUM FOR ANY 1 DAY
Platinum	0.10 mg/l

MONITORING REQUIREMENT: The permittee is required to sample the site discharge for the above pollutants semi-annually. Each semi-annual monitoring event must be performed four day in a row using a 24-hour composite sample. All analysis must be done using EPA approved methods. If the EPA method is not applicable, the permittee must submit production values and calculations in each semi-annual report that show the concentrations of the above pollutants at the site outfall.

REPORTING REQUIREMENT: Submit semi-annual sampling results within the 14 day reporting requirement that show the concentrations of Platinum at the site outfall.

Semi-annual sampling for Platinum was conducted from April 8th through April 11th, 2019. Intel NM received analytical results on May 6th, 2019 and submitted the results to ABCWUA on May 7th, 2019. Semi-annual sampling results are attached (Attachment D) for reference. Requirements of Endorsement PT have been met for the reporting period of this Semi-Annual Report.

ENDORSEMENT CE

SPECIAL WASTESTREAM POLLUTANT LIMITATIONS FOR PERMIT 2021A

COMPLIANCE REQUIREMENT: The concentration of Cerium in the flow through the sampling point shall not exceed that shown below:

POLLUTANT	MAXIMUM FOR ANY 1-DAY	MONTHLY AVG
Cerium	12.0 mg/L	3.0 mg/L

MONITORING REQUIREMENT: The Permittee is required to sample the site discharge for the above pollutants weekly (once per week) at the permitted sample point for six (6) months from the issuance of this endorsement. Sample to be taken using 24-hour composite sample.

REPORTING REQUIREMENT: The Permittee is required to report weekly sample data monthly (once per month) to the Pretreatment Program, for six (6) months from issuance of this endorsement. Permittee is required to include this data in their Semi-Annual Report.

The weekly sampling program for Cerium began in the first week of May. Samples were collected weekly at Intel NM on the 6th, 13th, 20th and 27th of May. Samples were transferred to Hall Environmental on June 5th. The samples were received by Brooks Applied Labs on June 12th. Intel NM received analytical results on July 12th, 2019 and submitted the results to ABCWUA on July 18th, 2019. The May weekly sampling results are attached for reference in Attachment F. Requirements of Endorsement CE have been met for the samples collected in May for this Semi-Annual Report. The June results for Cerium sampling were not available before submitting this report; they will be included in the H2 Semi-Annual Report.

ENDORSEMENT SM

SELF-MONITORING

COMPLIANCE REQUIREMENT: Per 40 CFR 403.12(n) the Permittee is required to submit all test results from self-monitoring sampling meeting the following criteria:

- Obtained at the designated sample site;
- Obtained through appropriate sampling techniques; and
- Analyzed in accordance with the procedures established in 40 CFR 136

MONITORING REQUIREMENT: The Permittee is not required to sample the effluent flow because the Water Authority monitors. However, if the Permittee does sample and meets the above criteria, results must be submitted.

REPORTING REQUIREMENT: Within 14 days after the Permittee becomes aware of sample results meeting the Compliance Requirement above, or 24 hours after the Permittee becomes aware of sample results indicating a violation of the Wastewater Discharge Permit, the Permittee is required to submit the following:

- The date, exact place, method, and time of sampling and the names of the person or person taking the samples'
- The dates analyses were performed;
- Who performed the analyses;
- The analytical techniques/methods used; and
- The results of such analyses

The Permittee subject to the reporting requirements established in this section shall retain for a minimum of three (3) years any records of monitoring activities and results, and shall make such records available for inspection and copying. This period of retention shall be extended during the course of any unresolved litigation regarding the Permittee or Water Authority or when requested by the Industrial Pretreatment Engineer.

NOTE: Split samples between the Permittee and the Water Authority, which meet the Compliance Requirement, will be averaged. All other samples, which meet the Compliance Requirement, will be used as individual sampling events. All samples, which meet the Compliance Requirement, will be used to determine the following:

- Violations of the Permittee's Wastewater Discharge Permit; and/or
- Significant non-Compliance (see Section 3-9-1 of the Water Authority Sewer Use and Wastewater Control Ordinance).

In compliance with Endorsement SM, semi-annual sampling was conducted from April 8th through April 11th, 2019. Intel NM received analytical results on May 6th, 2019 and submitted the results to ABCWUA on May 7th, 2019. Semi-annual sampling results are attached for reference (Attachment D).

ENDORSEMENT WM

POLLUTION PREVENTION THROUGH SOURCE REDUCTION AND WASTE MINIMIZATION

COMPLIANCE REQUIREMENT: Permittees shall endeavor, whenever feasible, to reduce or eliminate otherwise polluting substances in waste stream(s) by source reduction, waste minimization or more effective pretreatment.

MONITORING REQUIREMENT: None required by the Permittee.

REPORTING REQUIREMENTS: The Permittee shall include a narrative statement with each semi-annual report describing any source reduction, waste minimization or pretreatment efforts undertaken during the reporting period. If no such efforts are undertaken, the Permittee shall include a statement to that effect in the report.

Pollution Prevention through Source Reduction and Waste Minimization Statement

January 2019 - June 2019

Water Use Reduction Projects:

With all the new construction that occurred in H1 2019 and will continue into H2 2019, Intel is ensuring that all the new 3DXP tools implement the same water reduction/minimization efforts that have already been established across the site.

Source Reduction Projects:

None for this time period.

NM Site Recycling Rate:

The Intel NM site had a non-hazardous chemical waste recycling rate of 71% for H1 2019.

ENDORSEMENT TR6

TOXIC ORGANIC (SOLVENT) MANAGEMENT PLAN

COMPLIANCE REQUIREMENT: The Permittee is required to submit a TOXIC ORGANIC (SOLVENT) MANAGEMENT PLAN (TOMP) to the Industrial Waste Engineer every two years, and when changes to the plan occur. The Plan shall identify all toxic organics used onsite, quantities used and stored at the facility, procedures followed to prevent discharge and spills of these materials to the sanitary sewer, and the method of disposal used in place of discharge to the sanitary sewer. The TOXIC ORGANIC (SOLVENT) MANAGEMENT PLAN shall be submitted to the Industrial Waste Engineer no later than April 1, 2016. It is recommended that the TOMP be posted in the facility work area.

MONITORING REQUIREMENT: None required by the Permittee.

REPORTING REQUIREMENTS: The Permittee shall also submit a TOXIC ORGANIC MANAGEMENT PLAN CERTIFICATION STATEMENT with each semi-annual report. The CERTIFICATION STATEMENT is included in this permit as Endorsement TC3.

In compliance with Endorsement TR6 and TC3, the TOMP is attached (Attachment B).

Attachments

Attachment A - Intel NM Grease Trap Pumping Manifests – H1 2019

Attachment B - Intel NM TOMP – March 2018

Attachment C - Monthly Indium Gallium Sampling Reports

Attachment D - Semi-Annual Monitoring Analytical Results

Attachment E - Site Outfall Flow Meter Calibration Records

Attachment F – May Cerium Sampling Report

ATTACHMENT A

Intel NM Grease Trap Pumping Manifest – H1 2019

RR5 GREASE TRIP PUMP

AAA PUMPING SERVICE, INC.

P.O. BOX 12186 ALBUQUERQUE, NM 87195
Ph: (505) 345-3965 Fax: (505) 243-0314



DISPOSAL TRIP MANIFEST
67057

WASTE PRODUCER

PRODUCERS NAME Intel-RCS PHONE _____ APPROX. GALLONS 150 DATE OF COLLECTION 114119
ADDRESS RR5 Grease 4100 Sara Rd WASTE TYPE: SAND OR GRIT GREASE
CITY W.O Grease STATE NM ZIP _____ OTHER - DESCRIBE _____

RESPON. PERSON SM DATE 114119

WASTE TRANSPORTER

TRUCK DRIVER'S SIGNATURE [Signature] DATE 114119 PERMIT NO. S40732

DISPOSAL SITE DATE STAMP

HAULER'S BILLING INFORMATION

INVOICE NUMBER	INVOICE DATE	INVOICE AMOUNT

Responsible person signing for Waste Producer certifies that there is nothing hazardous in the materials being pumped. AAA SEPTIC TANK & PUMPING SERVICE, INC. reserves the right to file legal action against the Waste Producer for falsification of information.

DISPOSAL TRIP MANIFEST # 17057 RRS TRAP BY POT WASH

25

Rio Rancho, Grease Removal Device Report

Inspection Date	1-4-19	Service Date	1-4-19	Technician/Company	RUBEN HONTORA / AAA PUMPING
Rio Rancho Grease Trap/Interceptor					
Depth of Interceptor from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches				
Depth of FOG (fats, oils, grease)	3 Inches				
Depth of Solids	1/8 Inches				
Is the accumulated FOG and solids occupying greater than 25% of the interceptor capacity	Yes/No				
Prior to opening is odor from the interceptor present 10' or greater?	Yes/No				
Are the access covers in need of repair?	Yes/No				
FOG Passing by Interceptor?	Yes/No				
Does grease interceptor need immediate repair?	Yes/No				
Are there signs the grease interceptor walls may be deteriorating?	Yes/No				
Are there signs the grease interceptor may be leaking?	Yes/No				
Was the grease interceptor pressure washed?	Yes/No				
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No				
Is there any leakage under the baffle wall?	Yes/No				
Was all grease removed from walls, ledges and ridges?	Yes/No				
Total Gallons pumped out:	50				
Location where grease was disposed of:	AAA				PUMPING YARD - RECYCLED

D.T.M. # 197557

RRS TRAP UNDER TABLE
26 Rio Rancho, Grease Removal Device Report

Inspection Date <u>1-4-19</u> Service Date <u>1-4-19</u> Technician/Company <u>RUBEN MONTOYA / AAA PUMPING</u>		Comments
Rio Rancho Grease Trap/Interceptor		
Depth of Interceptor from Invert at Outlet Tee to Bottom of Outlet Chamber	<u>15</u> Inches	
Depth of FOG (fats, oils, grease)	<u>1/16</u> Inches	
Depth of Solids	<u>1/4</u> Inches	
Is the accumulated FOG and solids occupying greater than 25% of the interceptor capacity	Yes/ <input checked="" type="radio"/> No	
Prior to opening is odor from the interceptor present 10' or greater?	Yes/ <input checked="" type="radio"/> No	
Are the access covers in need of repair?	Yes/ <input checked="" type="radio"/> No	
FOG Passing by Interceptor?	Yes/ <input checked="" type="radio"/> No	
Does grease interceptor need immediate repair?	Yes/ <input checked="" type="radio"/> No	
Are there signs the grease interceptor walls may be deteriorating?	Yes/ <input checked="" type="radio"/> No	
Are there signs the grease interceptor may be leaking?	Yes/ <input checked="" type="radio"/> No	
Was the grease interceptor pressure washed?	Yes/ <input checked="" type="radio"/> No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/ <input checked="" type="radio"/> No	
Is there any leakage under the baffle wall?	Yes/ <input checked="" type="radio"/> No	
Was all grease removed from walls, ledges and ridges?	Yes/ <input checked="" type="radio"/> No	
Total Gallons pumped out:	<u>50</u>	
Location where grease was disposed of:	<u>AAA</u>	<u>PUMPING YARD-RECYCLED.</u>

D. 1. 11. 1. 6757

27 RRS TRAP BY OFFICE.
Rio Rancho, Grease Removal Device Report

Inspection Date	1-4-19	Service Date	1-4-19	Technician/Company	RUBEN MONTANA AAA REMOVALS
Rio Rancho Grease Trap/Interceptor					
Depth of Interceptor from Invert at Outlet Tee to Bottom of Outlet Chamber					
Depth of FOG (fats, oils, grease)	12 Inches				
Depth of Solids	1 3/2 Inches				
Is the accumulated FOG and solids occupying greater than 25% of the interceptor capacity	Yes/No				
Prior to opening is odor from the interceptor present 10' or greater?	Yes/No				
Are the access covers in need of repair?	Yes/No				
FOG Passing by Interceptor?	Yes/No				
Does grease interceptor need immediate repair?	Yes/No				
Are there signs the grease interceptor walls may be deteriorating?	Yes/No				
Are there signs the grease interceptor may be leaking?	Yes/No				
Was the grease interceptor pressure washed?	Yes/No				
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No				
Is there any leakage under the baffle wall?	Yes/No				
Was all grease removed from walls, ledges and ridges?	Yes/No				
Total Gallons pumped out:	20				
Location where grease was disposed of:	AAA REMOVALS - RECYCLED				

D. I. M. * 67657
 28
 RR5 TRAP FROM COFFEE AREA New
 Rio Rancho, Grease Removal Device Report

Inspection Date	Service Date	Technician/Company	Comments
Rio Rancho Grease Trap/Interceptor			
Depth of Interceptor from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches		
Depth of FOG (fats, oils, grease)	0 Inches		
Depth of Solids	1/6 Inches		
Is the accumulated FOG and solids occupying greater than 25% of the interceptor capacity	Yes/No		
Prior to opening is odor from the interceptor present 10' or greater?	Yes/No		
Are the access covers in need of repair?	Yes/No		
FOG Passing by Interceptor?	Yes/No		
Does grease interceptor need immediate repair?	Yes/No		
Are there signs the grease interceptor walls may be deteriorating?	Yes/No		
Are there signs the grease interceptor may be leaking?	Yes/No		
Was the grease interceptor pressure washed?	Yes/No		
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No		
Is there any leakage under the baffle wall?	Yes/No		
Was all grease removed from walls, ledges and ridges?	Yes/No		
Total Gallons pumped out:	20		
Location where grease was disposed of:	FLUSHED WITH WATER AAA PUMPS YARD - RECYCLED		

TRAP IS OUT OF SERVICE, IT HAS A HOLE IN BOTTOM, WAITING TO BE REPLACED

RR5 Grease Trap Pump

AAA PUMPING SERVICE, INC.

P.O. BOX 12186 ALBUQUERQUE, NM 87195
Ph: (505) 345-3965 Fax: (505) 243-0314

DISPOSAL TRIP MANIFEST
65092

WASTE PRODUCER

PRODUCER'S NAME **Intel RRS**

PHONE

APPROX. GALLONS

DATE OF COLLECTION

ADDRESS **4100 Sara Rd**

150

1/18/19

CITY **Los Ranchos**

STATE **NM** ZIP

WASTE TYPE:

SAND OR GRIT

GREASE

OTHER - DESCRIBE

RESPON. PERSON **X**

[Signature]

DATE **1/18/19**

WASTE TRANSPORTER

TRUCK DRIVER'S SIGNATURE **X**

[Signature]

DATE **1/18/19**

PERMIT NO. **A1**

DISPOSAL SITE DATE STAMP

HAULER'S BILLING INFORMATION

AAA Pumping Service

1-18-19

INVOICE NUMBER	INVOICE DATE	INVOICE AMOUNT
36679	1/18/19	

Responsible person signing for Waste Producer certifies that there is nothing hazardous in the materials being pumped. **AAA SEPTIC TANK & PUMPING SERVICE, INC.** reserves the right to file legal action against the Waste Producer for falsification of information.

DISPOSAL TRIP MAXIFEST # 65092 RRS TRAP BY POT WASH
 25 Rio Rancho, Grease Removal Device Report

Inspection Date	Service Date	Technician/Company	Comments
1-18-19	1-18-19	BUT ARSO	AAA Pumping
Rio Rancho Grease Trap/Interceptor			
Depth of Interceptor from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches		
Depth of FOG (fats, oils, grease)	3 Inches		
Depth of Solids	1/4 Inches		
Is the accumulated FOG and solids occupying greater than 25% of the interceptor capacity	Yes/No		
Prior to opening is odor from the interceptor present 10' or greater?	Yes/No		
Are the access covers in need of repair?	Yes/No		
FOG Passing by Interceptor?	Yes/No		
Does grease interceptor need immediate repair?	Yes/No		
Are there signs the grease interceptor walls may be deteriorating?	Yes/No		
Are there signs the grease interceptor may be leaking?	Yes/No		
Was the grease interceptor pressure washed?	Yes/No		
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No		
Is there any leakage under the baffle wall?	Yes/No		
Was all grease removed from walls, ledges and ridges?	Yes/No		
Total Gallons pumped out:	50		
Location where grease was disposed of:	AAA		PUMPING YARD - RECYCLED

D.T.M. # 65592
 26 RR5 TRAP UNDER TABLE
 Rio Rancho, Grease Removal Device Report

Inspection Date	Service Date	Technician/Company	Comments
1-18-19	1-18-19	BILLY HARRIS	AAA EMPING
Rio Rancho Grease Trap/Interceptor			
Depth of Interceptor from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches		
Depth of FOG (fats, oils, grease)	1/4 Inches		
Depth of Solids	1/4 Inches		
Is the accumulated FOG and solids occupying greater than 25% of the interceptor capacity	Yes/No		
Prior to opening is odor from the interceptor present 10' or greater?	Yes/No		
Are the access covers in need of repair?	Yes/No		
FOG Passing by Interceptor?	Yes/No		
Does grease interceptor need immediate repair?	Yes/No		
Are there signs the grease interceptor walls may be deteriorating?	Yes/No		
Are there signs the grease interceptor may be leaking?	Yes/No		
Was the grease interceptor pressure washed?	Yes/No		
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No		
Is there any leakage under the baffle wall?	Yes/No		
Was all grease removed from walls, ledges and ridges?	Yes/No		
Total Gallons pumped out:	52		
Location where grease was disposed of:	AAA EMPING YARD - RECYCLED		

D.T.M. # 155092 27 RRS- TRAP BY OFFICE
 Rio Rancho, Grease Removal Device Report

Inspection Date <u>1-18-19</u> Service Date <u>1-18-19</u> Technician/Company <u>BILL HARSO / AAA PUMPING</u>		Comments
Rio Rancho Grease Trap/Interceptor		
Depth of Interceptor from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches	
Depth of FOG (fats, oils, grease)	0 Inches	
Depth of Solids	0 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the interceptor capacity	Yes/No	
Prior to opening is odor from the interceptor present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by Interceptor?	Yes/No	
Does grease interceptor need immediate repair?	Yes/No	
Are there signs the grease interceptor walls may be deteriorating?	Yes/No	
Are there signs the grease interceptor may be leaking?	Yes/No	
Was the grease interceptor pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	20	
Location where grease was disposed of:	AAA PUMPING YARD - RECYCLED	

D. I.M. # 658BAQ
 28 RRS-TRAP FROM COFFEE AREA NEW
 Rio Rancho, Grease Removal Device Report

Inspection Date 1-18-19		Service Date 1-18-19		Technician/Company BILLY HARRIS AAA RAMPING	
Rio Rancho Grease Trap/Interceptor					
Depth of Interceptor from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches				
Depth of FOG (fats, oils, grease)	0 Inches				
Depth of Solids	1/8 Inches				
Is the accumulated FOG and solids occupying greater than 25% of the interceptor capacity	Yes/No				
Prior to opening is odor from the interceptor present 10' or greater?	Yes/No				
Are the access covers in need of repair?	Yes/No				
FOG Passing by Interceptor?	Yes/No				
Does grease interceptor need immediate repair?	Yes/No				
Are there signs the grease interceptor walls may be deteriorating?	Yes/No				
Are there signs the grease interceptor may be leaking?	Yes/No				
Was the grease interceptor pressure washed?	Yes/No				
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No				
Is there any leakage under the baffle wall?	Yes/No				
Was all grease removed from walls, ledges and ridges?	Yes/No				
Total Gallons pumped out:	20				
Location where grease was disposed of:	AAA				

TRAP HAS BEEN WAITING FOR REPLACEMENT, OUT OF SERVICE

FLUSHED WITH WATER RAMPING YARD - RECYCLED

RR5 GREASE TRAP PUMP

AAA PUMPING SERVICE, INC.

P.O. BOX 12186 ALBUQUERQUE, NM 87195
Ph: (505) 345-3965 Fax: (505) 243-0314

DISPOSAL TRIP MANIFEST
67069

WASTE PRODUCER

PRODUCER'S NAME Fatel-PRS PHONE _____ APPROX. GALLONS 150 DATE OF COLLECTION 21 1 19
ADDRESS 4100 Sara Rd WASTE TYPE: SAND OR GRIT GREASE
CITY Rio Rancho STATE NM ZIP _____

RESPON. PERSON [Signature] DATE 21 1 19 OTHER - DESCRIBE _____

WASTE TRANSPORTER

TRUCK DRIVER'S SIGNATURE [Signature] DATE 21 1 19 PERMIT NO. SP6021

DISPOSAL SITE DATE STAMP

HAULER'S BILLING INFORMATION

INVOICE NUMBER	INVOICE DATE	INVOICE AMOUNT

Responsible person signing for Waste Producer certifies that there is nothing hazardous in the materials being pumped. AAA SEPTIC TANK & PUMPING SERVICE, INC. reserves the right to file legal action against the Waste Producer for falsification of information.

DISPOSAL TRIP MANIFEST # 67069 RRS-TRAP BY P&T WASH
 25 Rio Rancho, Grease Removal Device Report

Inspection Date <u>2-1-19</u> Service Date <u>2-1-19</u> Technician/Company <u>R364/NOVORA</u> Comments <u>AAA RAMPING</u>	
Rio Rancho Grease Trap/Interceptor	
Depth of Interceptor from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches
Depth of FOG (fats, oils, grease)	3 Inches
Depth of Solids	0.5 Inches
Is the accumulated FOG and solids occupying greater than 25% of the interceptor capacity	Yes/No
Prior to opening is odor from the interceptor present 10' or greater?	Yes/No
Are the access covers in need of repair?	Yes/No
FOG Passing by Interceptor?	Yes/No
Does grease interceptor need immediate repair?	Yes/No
Are there signs the grease interceptor walls may be deteriorating?	Yes/No
Are there signs the grease interceptor may be leaking?	Yes/No
Was the grease interceptor pressure washed?	Yes/No
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No
Is there any leakage under the baffle wall?	Yes/No
Was all grease removed from walls, ledges and ridges?	Yes/No
Total Gallons pumped out:	50
Location where grease was disposed of:	AAA RAMPING YARD - RECYCLED

D.T.M. # 17DB19

RR5-TRAP UNDER TABLE
26 Rio Rancho, Grease Removal Device Report

Rio Rancho Grease Trap/Interceptor		Comments
Inspection Date	2-1-19	Service Date 2-1-19 Technician/Company <u>Ruben Montoya / AAA Pumping</u>
Depth of Interceptor from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches	
Depth of FOG (fats, oils, grease)	1/8 Inches	
Depth of Solids	1/16 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the interceptor capacity	Yes/No	
Prior to opening is odor from the interceptor present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by Interceptor?	Yes/No	
Does grease interceptor need immediate repair?	Yes/No	
Are there signs the grease interceptor walls may be deteriorating?	Yes/No	
Are there signs the grease interceptor may be leaking?	Yes/No	
Was the grease interceptor pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	50	
Location where grease was disposed of:	AAA Pumping Yard - RECYCLED	

D. T. M. # 1708A

27

RRS-TRAP BY OFFICE
Rio Rancho, Grease Removal Device Report

Inspection Date 2-1-19 Service Date 2-1-19 Technician/Company RUBEN HONTA AAA PUMPING
Rio Rancho Grease Trap/Interceptor Comments

Depth of Interceptor from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches	
Depth of FOG (fats, oils, grease)	1/32 Inches	
Depth of Solids	0 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the interceptor capacity	Yes/No	
Prior to opening is odor from the interceptor present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by Interceptor?	Yes/No	
Does grease interceptor need immediate repair?	Yes/No	
Are there signs the grease interceptor walls may be deteriorating?	Yes/No	
Are there signs the grease interceptor may be leaking?	Yes/No	
Was the grease interceptor pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	20	
Location where grease was disposed of:	AAA	PUMPING YARD - RECYCLED

D. T. M. 1. * 57669

28 RR5-TRAP FROM COFFEE AREA
Rio Rancho, Grease Removal Device Report

Inspection Date	Service Date	Technician/Company	Comments
2-1-19	2-1-19	Alexandra	AAA Pumping
Rio Rancho Grease Trap/Interceptor			
Depth of Interceptor from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches		
Depth of FOG (fats, oils, grease)	0 Inches		
Depth of Solids	1/2 Inches		COFFEE
Is the accumulated FOG and solids occupying greater than 25% of the interceptor capacity	Yes/No		
Prior to opening is odor from the interceptor present 10' or greater?	Yes/No		
Are the access covers in need of repair?	Yes/No		
FOG Passing by Interceptor?	Yes/No		
Does grease interceptor need immediate repair?	Yes/No		
Are there signs the grease interceptor walls may be deteriorating?	Yes/No		TRAP IS OUT OF SERVICE,
Are there signs the grease interceptor may be leaking?	Yes/No		PENDING REPLACEMENT.
Was the grease interceptor pressure washed?	Yes/No		
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No		FLUSHING WITH WATER AND HAVING PUMPED OUT WHILE VENDOR IS HERE FOR OTHERS.
Is there any leakage under the baffle wall?	Yes/No		KEEPS DRAIN FROM DRYING AND SMELLING
Was all grease removed from walls, ledges and ridges?	Yes/No		NONE
Total Gallons pumped out:	20		
Location where grease was disposed of:	AAA		PUMPING YARD-RECYCLED

RRS GREASE TRIP PUMP

AAA PUMPING SERVICE, INC.

P.O. BOX 12186 ALBUQUERQUE, NM 87195
Ph: (505) 345-3965 Fax: (505) 243-0314

DISPOSAL TRIP MANIFEST
67257

WASTE PRODUCER

PRODUCER'S NAME Intel-RRS PHONE _____ APPROX. GALLONS 150 DATE OF COLLECTION 2/15/19
ADDRESS 4100 Sara Rd WASTE TYPE: SAND OR GRIT GREASE
CITY Los Ranchos STATE NM ZIP _____

RESPON. PERSON [Signature] DATE 2/15/19 OTHER - DESCRIBE _____
TRUCK DRIVER'S SIGNATURE [Signature] WASTE TRANSPORTER DATE 2/15/19 PERMIT NO. SP Box 2

DISPOSAL SITE DATE STAMP _____ HAULER'S BILLING INFORMATION _____

INVOICE NUMBER	INVOICE DATE	INVOICE AMOUNT

Responsible person signing for Waste Producer certifies that there is nothing hazardous in the materials being pumped. AAA SEPTIC TANK & PUMPING SERVICE, INC. reserves the right to file legal action against the Waste Producer for falsification of information.

DISPOSAL TRAP MANIFEST # 67257
 25 RRS TRAP BY RT WASH
 Rio Rancho Grease Removal Device Report

RR5 Grease Trap		Comments
Inspection Date	2-15-19	Service Date 2-15-19 Technician/Company RUBEN MONTANA AAA REMOVING
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches	
Depth of FOG (fats, oils, grease)	3 Inches	
Depth of Solids	0.25 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	50	
Location where grease was disposed of:	AAA REMOVING YARD - RECYCLED	

D.T.M. # 17257

RR5 TRAP UNDER TABLE
26 Rio Rancho Grease Removal Device Report

RR5 Grease Trap		Comments
Inspection Date	2-15-19	Service Date 2-15-19 Technician/Company RUBEN MONTANA AAA Pumps
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches	
Depth of FOG (fats, oils, grease)	1/2 Inches	
Depth of Solids	1/2 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	50	
Location where grease was disposed of:	AAA PUMP YARD - RECYCLED	

D.T. M. * 1579257

27 RRS TRAP BY OFFICE
Rio Rancho Grease Removal Device Report

RRS Grease Trap		Comments
Inspection Date <u>2-15-19</u>	Service Date <u>2-15-19</u>	Technician/Company <u>RUBEN NORTON / AAA PUMPING</u>
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	<u>12</u> Inches	
Depth of FOG (fats, oils, grease)	<u>1/32</u> Inches	
Depth of Solids	<u>1/2</u> Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/ <input checked="" type="radio"/> No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/ <input checked="" type="radio"/> No	
Are the access covers in need of repair?	Yes/ <input checked="" type="radio"/> No	
FOG Passing by grease trap?	Yes/ <input checked="" type="radio"/> No	
Does grease trap need trap repair?	Yes/ <input checked="" type="radio"/> No	
Are there signs the grease trap walls may be deteriorating?	Yes/ <input checked="" type="radio"/> No	
Are there signs the grease trap may be leaking?	Yes/ <input checked="" type="radio"/> No	
Was the grease trap pressure washed?	Yes/ <input checked="" type="radio"/> No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/ <input checked="" type="radio"/> No	
Is there any leakage under the baffle wall?	Yes/ <input checked="" type="radio"/> No	
Was all grease removed from walls, ledges and ridges?	Yes/ <input checked="" type="radio"/> No	
Total Gallons pumped out:	<u>20</u>	
Location where grease was disposed of:	<u>AAA PUMPING YARD - RECYCLED</u>	

D.T.M. # 67857

28 RRS TRAP FROM COFFEE AREA NEW
Rio Rancho Grease Removal Device Report

Inspection Date	Service Date	Technician/Company	Comments
2-15-19	2-15-19	RRS MAINTENANCE	AAA REMAINS
RRS Grease Trap			
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches		
Depth of FOG (fats, oils, grease)	0 Inches		
Depth of Solids	1/4 Inches	COFFEE	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No		
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No		
Are the access covers in need of repair?	Yes/No		
FOG Passing by grease trap?	Yes/No		
Does grease trap need trap repair?	Yes/No		
Are there signs the grease trap walls may be deteriorating?	Yes/No		
Are there signs the grease trap may be leaking?	Yes/No		
Was the grease trap pressure washed?	Yes/No		
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No		
Is there any leakage under the baffle wall?	Yes/No		
Was all grease removed from walls, ledges and ridges?	Yes/No		
Total Gallons pumped out:	20		
Location where grease was disposed of:	AAA		PUMPING YARD - RECYCLED

TRAP IS OUT OF SERVICE
HAS HOLD IN BOTTOM,
BEING REPLACED

RR5 GREASE TRAP PUMP

AAA PUMPING SERVICE, INC.

P.O. BOX 12186 ALBUQUERQUE, NM 87195
Ph: (505) 345-3965 Fax: (505) 243-0314

DISPOSAL TRIP MANIFEST
666603

WASTE PRODUCER

PRODUCER'S NAME WATER-RKS PHONE _____ APPROX. GALLONS 150 DATE OF COLLECTION 3/8/19

ADDRESS 4106 SABA RD WASTE TYPE: SAND OR GRIT GREASE

CITY RIO RANCHO STATE NM ZIP _____ OTHER - DESCRIBE _____

RESPON. PERSON DATE 3/8/19 WASTE TRANSPORTER _____ PERMIT NO. RETARIE

TRUCK DRIVERS SIGNATURE DATE 3/8/19 HAULER'S BILLING INFORMATION _____

DISPOSAL SITE DATE STAMP

INVOICE NUMBER	INVOICE DATE	INVOICE AMOUNT

Responsible person signing for Waste Producer certifies that there is nothing hazardous in the materials being pumped. AAA SEPTIC TANK & PUMPING SERVICE, INC. reserves the right to file legal action against the Waste Producer for falsification of information.

RRS Grease Trap		Comments
Inspection Date	3-8-19	Service Date 3-8-19 Technician/Company PAUL RIVERA AAA Pumping
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches	
Depth of FOG (fats, oils, grease)	3 Inches	
Depth of Solids	25 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	50	
Location where grease was disposed of:	AAA PUMPING YARD - RECYCLED	

DT.M. # 666603

RRS TRAP UNDER TABLE
Rio Rancho Grease Removal Device Report

26

RRS Grease Trap		Comments
Inspection Date	3-8-19	Service Date 3-8-19 Technician/Company RAVL RIVERA AAA RAMPING
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches	
Depth of FOG (fats, oils, grease)	1/32 Inches	
Depth of Solids	1/4 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	50	
Location where grease was disposed of:	AAA RAMPING YARD - RECYCLED	

D.T.M. # 66663

RRS TRAP BX OFFICE
27 Rio Rancho Grease Removal Device Report

RRS Grease Trap		Comments
Inspection Date	3-8-19	Service Date 3-8-19 Technician/Company Raul Rivera AAA Pumping
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches	
Depth of FOG (fats, oils, grease)	1/32 Inches	
Depth of Solids	1/4 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	20	
Location where grease was disposed of:	AAA Pumping - RECYCLED	

D. T.M. # 666D3

28

RRS TRAP FROM OFFICE AREA New
Rio Rancho Grease Removal Device Report

RR5 Grease Trap		Comments
Inspection Date	3-8-19	Service Date 3-8-19 Technician/Company RAUL RIVERA AAA RAMPING
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches	
Depth of FOG (fats, oils, grease)	0 Inches	SUST COFFEE WATER, OIL ON TOP 20 THIN.
Depth of Solids	1/2 Inches	COFFEE GRINDS
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	(NEW TRAP)
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	(BAFFLE WAS REMOVED AND CLEANED.)
Is there any leakage under the baffle wall?	Yes/No	HAD COFFEE ON IT
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	20	
Location where grease was disposed of:	AAA RAMPING	YARD - RECYCLED

RR5 GREASE TRAP PUMP

AAA PUMPING SERVICE, INC.

P.O. BOX 12186 ALBUQUERQUE, NM 87195
Ph: (505) 345-3965 Fax: (505) 243-0314

DISPOSAL TRIP MANIFEST
66436

WASTE PRODUCER

PRODUCERS NAME Intel RPS PHONE _____ APPROX. GALLONS 150 DATE OF COLLECTION 3/22/19

ADDRESS 4100 Santa Al WASTE TYPE: SAND OR GRIT GREASE

CITY Rio Rancho STATE NM ZIP _____ OTHER - DESCRIBE _____

RESPON. PERSON X [Signature] DATE 3/22/19 WASTE TRANSPORTER _____

TRUCK DRIVER'S SIGNATURE X [Signature] DATE 3/22/19 PERMIT NO. 8071

DISPOSAL SITE DATE STAMP _____ HAULER'S BILLING INFORMATION _____

AAA Pumping Service
3-22-19

INVOICE NUMBER	INVOICE DATE	INVOICE AMOUNT
<u>37304</u>	<u>3/22/19</u>	

Responsible person signing for Waste Producer certifies that there is nothing hazardous in the materials being pumped. AAA SEPTIC TANK & PUMPING SERVICE, INC. reserves the right to file legal action against the Waste Producer for falsification of information.

DISPOSAL TRIP MANIFEST # 66436 - RRS TRAP BY POT WASH
 25 - Rio Rancho Grease Removal Device Report

RR5 Grease Trap		Comments
Inspection Date	3-22-19	Service Date 3-22-19 Technician/Company BILLY HARSTO AAA REMOVAL
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches	
Depth of FOG (fats, oils, grease)	3/4 Inches	
Depth of Solids	1/4 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	50	
Location where grease was disposed of:	AAA PUMPING YARD - RECYCLED	

RR5 Grease Trap		Comments
Inspection Date <u>3-22-19</u>	Service Date <u>3-22-19</u>	Technician/Company <u>BILLY HARDO</u>
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	<u>15</u> Inches	
Depth of FOG (fats, oils, grease)	<u>1/4</u> Inches	
Depth of Solids	<u>1/4</u> Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/ <input checked="" type="radio"/> No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/ <input checked="" type="radio"/> No	
Are the access covers in need of repair?	Yes/ <input checked="" type="radio"/> No	
FOG Passing by grease trap?	Yes/ <input checked="" type="radio"/> No	
Does grease trap need trap repair?	Yes/ <input checked="" type="radio"/> No	
Are there signs the grease trap walls may be deteriorating?	Yes/ <input checked="" type="radio"/> No	
Are there signs the grease trap may be leaking?	Yes/ <input checked="" type="radio"/> No	
Was the grease trap pressure washed?	Yes/ <input checked="" type="radio"/> No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/ <input checked="" type="radio"/> No	
Is there any leakage under the baffle wall?	Yes/ <input checked="" type="radio"/> No	
Was all grease removed from walls, ledges and ridges?	Yes/ <input checked="" type="radio"/> No	
Total Gallons pumped out:	<u>50</u>	
Location where grease was disposed of:	<u>AAA Pumping Yard - RECYCLED</u>	

D.T.M. # 664936

27

RRS TRAP BY OFFICE
Rio Rancho Grease Removal Device Report

RR5 Grease Trap		Comments
Inspection Date <u>3-22-19</u>	Service Date <u>3-22-19</u>	Technician/Company <u>BILLY HARSO / AAA Pumping</u>
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches	
Depth of FOG (fats, oils, grease)	1/32 Inches	
Depth of Solids	0 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	20	
Location where grease was disposed of:	AAA Pumping Yard - RECYCLED	

D.1.M. 66436 NEW 28 RRS TRAP FROM CATCHER AREA N/W
 Rio Rancho Grease Removal Device Report

Inspection Date <u>3-22-19</u> Service Date <u>3-22-19</u> Technician/Company <u>Billy Arso</u>		Comments
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches	
Depth of FOG (fats, oils, grease)	0 Inches	
Depth of Solids	3/4 Inches	COFFER
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	20	
Location where grease was disposed of:	AAA	PUMPING YARD - RECYCLED

RR5 GREASE TRAP PUMP

AAA PUMPING SERVICE, INC.

P.O. BOX 12186 ALBUQUERQUE, NM 87195
Ph: (505) 345-3965 Fax: (505) 243-0314

DISPOSAL TRIP MANIFEST
68287

WASTE PRODUCER

PRODUCER'S NAME WIRE PHONE _____ APPROX. GALLONS 150 DATE OF COLLECTION 4/15/19
ADDRESS Saco Rd WASTE TYPE: SAND OR GRIT GREASE
CITY Rio Rancho STATE NM ZIP _____ OTHER - DESCRIBE _____

RESPON. PERSON X [Signature] DATE 4/15/19 WASTE TRANSPORTER _____ PERMIT NO. 805-1

TRUCK DRIVER'S SIGNATURE X [Signature] DATE 4/15/19 HAULER'S BILLING INFORMATION _____
DISPOSAL SITE DATE STAMP _____

INVOICE NUMBER	INVOICE DATE	INVOICE AMOUNT

Responsible person signing for Waste Producer certifies that there is nothing hazardous in the materials being pumped. AAA SEPTIC TANK & PUMPING SERVICE, INC. reserves the right to file legal action against the Waste Producer for falsification of information.

FORM M2900 ©2000 AAA PUMPING SERVICE, INC.

RRS Grease Trap		Comments
Inspection Date	4-5-19	Service Date 4-5-19 Technician/Company Raul Rivera AAA Pumping
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches	
Depth of FOG (fats, oils, grease)	3.2 Inches	
Depth of Solids	1/4 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	50	
Location where grease was disposed of:	AAA Pumping Yard - RECYCLED	

D.T.M. # 68887

26

RRS TRAP UNDER TABLE
Rio Rancho Grease Removal Device Report

RRS Grease Trap		Comments
Inspection Date <u>4-5-19</u>	Service Date <u>4-5-19</u>	Technician/Company <u>Raul Rivera AAA Pumping</u>
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	<u>15</u> Inches	
Depth of FOG (fats, oils, grease)	<u>1/32</u> Inches	
Depth of Solids	<u>1/8</u> Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	<u>Yes/No</u>	
Prior to opening is odor from the grease trap present 10' or greater?	<u>Yes/No</u>	
Are the access covers in need of repair?	<u>Yes/No</u>	
FOG Passing by grease trap?	<u>Yes/No</u>	
Does grease trap need trap repair?	<u>Yes/No</u>	
Are there signs the grease trap walls may be deteriorating?	<u>Yes/No</u>	
Are there signs the grease trap may be leaking?	<u>Yes/No</u>	
Was the grease trap pressure washed?	<u>Yes/No</u>	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	<u>Yes/No</u>	
Is there any leakage under the baffle wall?	<u>Yes/No</u>	
Was all grease removed from walls, ledges and ridges?	<u>Yes/No</u>	
Total Gallons pumped out:	<u>50</u>	
Location where grease was disposed of:	<u>AAA PUMPING YARD - RECYCLED</u>	

D.T.M. # 18287

RR5 TRAP BY OFFICE
27 Rio Rancho Grease Removal Device Report

Inspection Date <u>4-5-19</u> Service Date <u>4-5-19</u> Technician/Company <u>RAUL RIVERA / AAA PUMPING</u>		Comments
RR5 Grease Trap		
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches	
Depth of FOG (fats, oils, grease)	1/32 Inches	
Depth of Solids	1/32 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	20	
Location where grease was disposed of:	AAA PUMPING YARD - RECYCLED	

NEW D.T.M. #168887 28 RRS TRAP FROM COFFEE NEW
 Rio Rancho Grease Removal Device Report

RRS Grease Trap		Comments
Inspection Date	4-5-19	Service Date 4-5-19 Technician/Company Raul Rivera / AAA Pumping
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches	
Depth of FOG (fats, oils, grease)	0 Inches	
Depth of Solids	1/2 Inches	COFFEE ONLY
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	20	
Location where grease was disposed of:	AAA Pumping (TRD) - RECYCLED	

RR5 GREASE TRAP PUMP

AAA PUMPING SERVICE, INC.

P.O. BOX 12186 ALBUQUERQUE, NM 87195
Ph: (505) 345-3965 Fax: (505) 243-0314

DISPOSAL TRIP MANIFEST
68041

WASTE PRODUCER

PRODUCER'S NAME Hotel RRS PHONE 270-7410 APPROX. GALLONS 150 DATE OF COLLECTION 4/19/19
ADDRESS 4100 Santa Rd WASTE TYPE: SAND OR GRIT GREASE
CITY Kelowna STATE NM ZIP _____
RESPON. PERSON [Signature] DATE 1/1 OTHER - DESCRIBE _____

WASTE TRANSPORTER

TRUCK DRIVER'S SIGNATURE [Signature] DATE 4/19/19 PERMIT NO. _____
DISPOSAL SITE DATE STAMP _____ HAULER'S BILLING INFORMATION _____

INVOICE NUMBER	INVOICE DATE	INVOICE AMOUNT

Responsible person signing for Waste Producer certifies that there is nothing hazardous in the materials being pumped. AAA SEPTIC TANK & PUMPING SERVICE, INC. reserves the right to file legal action against the Waste Producer for falsification of information.

FORM M2900 ©2000 AAA PUMPING SERVICE, INC.

DISPOSAL TRIP MANIFEST # 188541 25 RRS TRAP BY POT WASH
 Rio Rancho Grease Removal Device Report

RR5 Grease Trap		Comments
Inspection Date	4-19-19	Service Date 4-19-19 Technician/Company MIKE KAEPEL AAA PUMPING
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches	
Depth of FOG (fats, oils, grease)	3 Inches	
Depth of Solids	1/4 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	50	
Location where grease was disposed of:	AAA	PUMPING TRAP - RECYCLED

D T.M. # 108841

RRS TRAP UNDER TABLE
26 Rio Rancho Grease Removal Device Report

Inspection Date 4-19-19 Service Date 4-19-19 Technician/Company MIKE KREPEL / AAA-PUMPING
RRS Grease Trap Comments

Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches	
Depth of FOG (fats, oils, grease)	8 Inches	1/4 ✓
Depth of Solids	8 Inches	1/4 ✓
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	50	
Location where grease was disposed of:	AAA Pumping Yard	

D.T.M. # 188D41
 27 RR5 TRAP B-1 OFFICE
 Rio Rancho Grease Removal Device Report

Inspection Date <u>4-19-19</u> Service Date <u>4-19-19</u> Technician/Company <u>MIKE KREPEL AAA PUMPING</u>		Comments
RR5 Grease Trap		
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches	
Depth of FOG (fats, oils, grease)	1/32 Inches	
Depth of Solids	1/32 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	20	
Location where grease was disposed of:	AAA	PUMPING YARD - RECYCLED

D.T.M. # 18841 28 RR5 TRAP FROM CATCHER AREA. N/A
 Rio Rancho Grease Removal Device Report

Inspection Date <u>4-19-19</u> Service Date <u>4-19-19</u> Technician/Company <u>MIKE KREFFL AAA PUMPING</u>		Comments
RR5 Grease Trap		
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches	
Depth of FOG (fats, oils, grease)	0 Inches	
Depth of Solids	1 Inches	CORRECT
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	20	
Location where grease was disposed of:	AAA PUMPING - RECYCLED	

RR5 GREASE TRAY PUMP

AAA PUMPING SERVICE, INC.

P.O. BOX 12186 ALBUQUERQUE, NM 87195
Ph: (505) 345-3965 Fax: (505) 243-0314

DISPOSAL TRIP MANIFEST
67457

WASTE PRODUCER

PRODUCER'S NAME Inter PHONE _____ APPROX. GALLONS 150 DATE OF COLLECTION 5/3/19

ADDRESS 4100 SARA RD WASTE TYPE: SAND OR GRIT GREASE

CITY RIO RANCHO STATE NM ZIP _____ OTHER - DESCRIBE _____

RESPON. PERSON X DATE 5/3/19

WASTE TRANSPORTER

TRUCK DRIVER'S SIGNATURE [Signature] DATE 5/3/19 PERMIT NO. _____

DISPOSAL SITE DATE STAMP

HAULER'S BILLING INFORMATION

INVOICE NUMBER	INVOICE DATE	INVOICE AMOUNT

Responsible person signing for Waste Producer certifies that there is nothing hazardous in the materials being pumped. AAA SEPTIC TANK & PUMPING SERVICE, INC. reserves the right to file legal action against the Waste Producer for falsification of information.

FORM M2900 ©2000 AAA PUMPING SERVICE, INC.

RR5 Grease Trap		Comments
Inspection Date	5-3-19	Service Date 5-3-19 Technician/Company Raul Rivera AAA Pumping
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches	
Depth of FOG (fats, oils, grease)	3 Inches	
Depth of Solids	1/4 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	50	
Location where grease was disposed of:	AAA Pumping Yard - RECYCLED	

D.T.M. # 67457 26 RRS TRAP UNDER TABLE
 Rio Rancho Grease Removal Device Report

RR5 Grease Trap		Comments
Inspection Date	5-3-19	Service Date 5-3-19 Technician/Company RAUL RIVERA AAA BEARING
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches	
Depth of FOG (fats, oils, grease)	1/32 Inches	
Depth of Solids	1/4 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	50	
Location where grease was disposed of:	AAA PUMPING YARD - RECYCLED	

D. I. M. # 67457

27 RRS TRAP BY OFFICE
Rio Rancho Grease Removal Device Report

Inspection Date 5-3-19 Service Date 5-3-19 Technician/Company PAUL RIVERA/AAA PUMPS

RRS Grease Trap	Comments
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches
Depth of FOG (fats, oils, grease)	0 Inches
Depth of Solids	1/4 Inches
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No
Are the access covers in need of repair?	Yes/No
FOG Passing by grease trap?	Yes/No
Does grease trap need trap repair?	Yes/No
Are there signs the grease trap walls may be deteriorating?	Yes/No
Are there signs the grease trap may be leaking?	Yes/No
Was the grease trap pressure washed?	Yes/No
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No
Is there any leakage under the baffle wall?	Yes/No
Was all grease removed from walls, ledges and ridges?	Yes/No
Total Gallons pumped out:	20
Location where grease was disposed of:	AAA PUMPS - YARD - RECYCLED

D.T.M. # 67457

28 RRS - TRAP FROM COFFEE NEW
Rio Rancho Grease Removal Device Report

RR5 Grease Trap		Comments
Inspection Date	5-3-19	Service Date 5-3-19 Technician/Company PAUL RIVERA AAA RAMPUS
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches	
Depth of FOG (fats, oils, grease)	0 Inches	
Depth of Solids	1/2 Inches	COFFEE
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	20	
Location where grease was disposed of:	AAA RAMPUS YARD - RECYCLED	

RRS GREASE TRAP PUMP

AAA PUMPING SERVICE, INC.

P.O. BOX 12186 ALBUQUERQUE, NM 87195
Ph: (505) 345-3965 Fax: (505) 243-0314

DISPOSAL TRIP MANIFEST
67332

WASTE PRODUCER

PRODUCER'S NAME Intel-DRTS PHONE _____ APPROX. GALLONS 150 DATE OF COLLECTION 5/16/19
ADDRESS 4100 SARA RD WASTE TYPE: SAND OR GRIT GREASE
CITY RIO RANCHO STATE NM ZIP _____
RESPON. PERSON [Signature] DATE 5/16/19 OTHER - DESCRIBE _____
 TRUCK DRIVER'S SIGNATURE [Signature] WASTE TRANSPORTER _____

DISPOSAL SITE DATE STAMP _____ DATE 5/16/19 PERMIT NO. Separable
HAULER'S BILLING INFORMATION _____

INVOICE NUMBER	INVOICE DATE	INVOICE AMOUNT
<u>038157</u>	<u>5/16/19</u>	

Responsible person signing for Waste Producer certifies that there is nothing hazardous in the materials being pumped. AAA SEPTIC TANK & PUMPING SERVICE, INC. reserves the right to file legal action against the Waste Producer for falsification of information.

FORM M2900 ©2000 AAA PUMPING SERVICE, INC.

RRS Grease Trap		Comments
Inspection Date	5-16-19	Service Date 5-16-19 Technician/Company Isaac Escalante AAA Pumping
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches	
Depth of FOG (fats, oils, grease)	3/4 Inches	
Depth of Solids	1/4 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	50	
Location where grease was disposed of:	AAA Pumping Yard - RECYCLED	

D. T.M. # 619332

RRS TRAP UNDER TABLE
26 Rio Rancho Grease Removal Device Report

Inspection Date <u>5-16-19</u> Service Date <u>5-16-19</u> Technician/Company <u>ISAAC ESCALANTE / AAA Repair</u>		Comments
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	<u>15</u> Inches	
Depth of FOG (fats, oils, grease)	<u>1/8</u> Inches	
Depth of Solids	<u>1/4</u> Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No <input checked="" type="radio"/> No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No <input checked="" type="radio"/> No	
Are the access covers in need of repair?	Yes/No <input checked="" type="radio"/> No	
FOG Passing by grease trap?	Yes/No <input checked="" type="radio"/> No	
Does grease trap need trap repair?	Yes/No <input checked="" type="radio"/> No	
Are there signs the grease trap walls may be deteriorating?	Yes/No <input checked="" type="radio"/> No	
Are there signs the grease trap may be leaking?	Yes/No <input checked="" type="radio"/> No	
Was the grease trap pressure washed?	Yes/No <input checked="" type="radio"/> No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No <input checked="" type="radio"/> No	
Is there any leakage under the baffle wall?	Yes/No <input checked="" type="radio"/> No	
Was all grease removed from walls, ledges and ridges?	Yes/No <input checked="" type="radio"/> No	
Total Gallons pumped out:	<u>50</u>	
Location where grease was disposed of:	<u>AAA Repair YARD - RECYCLED</u>	

D. I. M. # 67299A

RRS TRAP BY OFFICE
27 Rio Rancho Grease Removal Device Report

RR5 Grease Trap		Comments
Inspection Date	5-16-19	Service Date 5-16-19 Technician/Company ISAAC ESCALANTE AAA RAMPING
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches	
Depth of FOG (fats, oils, grease)	1/32 Inches	
Depth of Solids	0 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	20	
Location where grease was disposed of:	AAA	Airpint Yard - RECYCLED

D.T.M. # 179328
 RR5 TRAP FROM CATTLE AREA. N/A
 28 Rio Rancho Grease Removal Device Report

Inspection Date	Service Date	Technician/Company	Comments
5-16-19	5-16-19	Isaac Escalante	AAA RemPine
RR5 Grease Trap			
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches		
Depth of FOG (fats, oils, grease)	0 Inches		
Depth of Solids	1/2 Inches	CATTLE	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No		
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No		
Are the access covers in need of repair?	Yes/No		
FOG Passing by grease trap?	Yes/No		
Does grease trap need trap repair?	Yes/No		
Are there signs the grease trap walls may be deteriorating?	Yes/No		
Are there signs the grease trap may be leaking?	Yes/No		
Was the grease trap pressure washed?	Yes/No		
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No		
Is there any leakage under the baffle wall?	Yes/No		
Was all grease removed from walls, ledges and ridges?	Yes/No		
Total Gallons pumped out:	20		
Location where grease was disposed of:	AAA RAMP & YARD - RECYCLED		

RR5 GREASE TRAP PUMP

AAA PUMPING SERVICE, INC.

P.O. BOX 12186 ALBUQUERQUE, NM 87195
Ph: (505) 345-3965 Fax: (505) 243-0314

DISPOSAL TRIP MANIFEST
67463

WASTE PRODUCER

PRODUCER'S NAME FAH9 225 PHONE _____ APPROX. GALLONS 150 DATE OF COLLECTION 6/7/19
ADDRESS 4100 SARA RD WASTE TYPE: SAND OR GRIT GREASE
CITY RIO RANCHO STATE NM ZIP _____

RESPON. PERSON [Signature] DATE 6/7/19 OTHER - DESCRIBE _____

TRUCK DRIVER'S SIGNATURE [Signature] DATE 6/7/19 PERMIT NO. PORTABLE

DISPOSAL SITE DATE STAMP HAULER'S BILLING INFORMATION

INVOICE NUMBER	INVOICE DATE	INVOICE AMOUNT
<u>038416</u>	<u>6/7/19</u>	

Responsible person signing for Waste Producer certifies that there is nothing hazardous in the materials being pumped. **AAA SEPTIC TANK & PUMPING SERVICE, INC.** reserves the right to file legal action against the Waste Producer for falsification of information.

DISPOSAL TRIP MANIFEST # 107463
 RRS TRAP BY POT WASH
 Rio Rancho Grease Removal Device Report

RRS Grease Trap		Comments
Inspection Date	Service Date	Technician/Company
6-7-19	6-7-19	ISAAC ESCALANTE / AAA Remnings
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches	
Depth of FOG (fats, oils, grease)	5 Inches	
Depth of Solids	2 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	A LOT OF OIL AND TOO MUCH RICE WILL TALK TO KITCHEN MANAGER
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	50	
Location where grease was disposed of:	AAA Remnings YARD - RECYCLED	

D.T.M # 1674103

RRS TRAP UNDER TABLE
26 Rio Rancho Grease Removal Device Report

RRS Grease Trap		Comments
Inspection Date	6-7-19	Service Date 6-7-19 Technician/Company Isaac Escalante AAA RMPWS
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches	
Depth of FOG (fats, oils, grease)	1/6 Inches	
Depth of Solids	1/4 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	50	
Location where grease was disposed of:	AAA	RMPWS YARD - RECYCLED

D.T.M. * 67463

27 RRS- TRAP BY OFFICE
Rio Rancho Grease Removal Device Report

RRS Grease Trap		Comments
Inspection Date	6-7-19	Service Date 6-7-19 Technician/Company ISAC ESCALANTE AAA REMAINS
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches	
Depth of FOG (fats, oils, grease)	1/32 Inches	
Depth of Solids	0 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	20	
Location where grease was disposed of:	AAA	PUMPING YARD - RECYCLED

D.T.M. * 1674163

28 RRS- TRAP FROM COFFEE AREA N/W
Rio Rancho Grease Removal Device Report

RRS Grease Trap		Comments
Inspection Date	6-7-19	Service Date 6-7-19 Technician/Company ISAAC ESCOBAR / AAA Pumping
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches	
Depth of FOG (fats, oils, grease)	0 Inches	
Depth of Solids	3/4 Inches	COFFEE
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	20	
Location where grease was disposed of:	AAA Pumping YARD - RECYCLED	

RR5 GREASE TRAP Pump

AAA PUMPING SERVICE, INC.

P.O. BOX 12186 ALBUQUERQUE, NM 87195
Ph: (505) 345-3965 Fax: (505) 243-0314

DISPOSAL TRIP MANIFEST
67868

WASTE PRODUCER

PRODUCERS NAME Intel RLS PHONE _____ APPROX. DATE OF _____
 ADDRESS 4100 Sara Rd GALLONS 150 COLLECTION 6/21/19
 CITY Rio Rancho STATE NM ZIP _____ WASTE TYPE:
 SAND OR GRIT GREASE
 OTHER - DESCRIBE _____

RESPON. PERSON [Signature] DATE 6/21/19
 WASTE TRANSPORTER _____

TRUCK DRIVER'S SIGNATURE [Signature] DATE 6/21/19 PERMIT NO. Adt.
 DISPOSAL SITE DATE STAMP _____ HAULER'S BILLING INFORMATION _____

*AAA Pumping Service
6-21-19*

INVOICE NUMBER	INVOICE DATE	INVOICE AMOUNT
38666	6/21/19	

Responsible person signing for Waste Producer certifies that there is nothing hazardous in the materials being pumped. AAA SEPTIC TANK & PUMPING SERVICE, INC. reserves the right to file legal action against the Waste Producer for falsification of information.

FORM M2900 ©2000 AAA PUMPING SERVICE, INC.

RRS Grease Trap		Comments
Inspection Date <u>6-21-19</u>	Service Date <u>6-21-19</u>	Technician/Company <u>BILL HARSO</u>
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches	
Depth of FOG (fats, oils, grease)	6 Inches	
Depth of Solids	1 Inches	
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	<input checked="" type="radio"/> Yes/ <input type="radio"/> No	TALKING TO MANAGER OF KITCHEN. DISH WASTES PUTTING TO MEET DRAIN. (TECH)
Prior to opening is odor from the grease trap present 10' or greater?	<input type="radio"/> Yes/ <input checked="" type="radio"/> No	
Are the access covers in need of repair?	<input type="radio"/> Yes/ <input checked="" type="radio"/> No	
FOG Passing by grease trap?	<input type="radio"/> Yes/ <input checked="" type="radio"/> No	
Does grease trap need trap repair?	<input type="radio"/> Yes/ <input checked="" type="radio"/> No	
Are there signs the grease trap walls may be deteriorating?	<input type="radio"/> Yes/ <input checked="" type="radio"/> No	
Are there signs the grease trap may be leaking?	<input type="radio"/> Yes/ <input checked="" type="radio"/> No	
Was the grease trap pressure washed?	<input type="radio"/> Yes/ <input checked="" type="radio"/> No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	<input type="radio"/> Yes/ <input checked="" type="radio"/> No	
Is there any leakage under the baffle wall?	<input type="radio"/> Yes/ <input checked="" type="radio"/> No	
Was all grease removed from walls, ledges and ridges?	<input checked="" type="radio"/> Yes/ <input type="radio"/> No	
Total Gallons pumped out:	50	
Location where grease was disposed of:	AAA	PUMPING YARD - RECYCLED

AAA Pumping

D.T.M. # 578268

RRS TRAP UNDER TABLE
ZC Rio Rancho Grease Removal Device Report

Inspection Date <u>6-21-19</u> Service Date <u>6-21-19</u> Technician/Company <u>Billy Harsb</u> Comments <u>AAA Pumping</u>	
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	15 Inches
Depth of FOG (fats, oils, grease)	1/16 Inches
Depth of Solids	1/4 Inches
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No
Are the access covers in need of repair?	Yes/No
FOG Passing by grease trap?	Yes/No
Does grease trap need trap repair?	Yes/No
Are there signs the grease trap walls may be deteriorating?	Yes/No
Are there signs the grease trap may be leaking?	Yes/No
Was the grease trap pressure washed?	Yes/No
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No
Is there any leakage under the baffle wall?	Yes/No
Was all grease removed from walls, ledges and ridges?	Yes/No
Total Gallons pumped out:	50
Location where grease was disposed of:	AAA Pumping Yard - RECYCLED

D. T. M. # 157868

27

RRS - TRAP BY OFFICE

Rio Rancho Grease Removal Device Report

Inspection Date	Service Date	Technician/Company	Comments
6-21-19	6-21-19	BILLY HARSCO	AAA Pumping
RRS Grease Trap			
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches		
Depth of FOG (fats, oils, grease)	1/32 Inches		
Depth of Solids	0 Inches		
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No		
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No		
Are the access covers in need of repair?	Yes/No		
FOG Passing by grease trap?	Yes/No		
Does grease trap need trap repair?	Yes/No		
Are there signs the grease trap walls may be deteriorating?	Yes/No		
Are there signs the grease trap may be leaking?	Yes/No		
Was the grease trap pressure washed?	Yes/No		
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No		
Is there any leakage under the baffle wall?	Yes/No		
Was all grease removed from walls, ledges and ridges?	Yes/No		
Total Gallons pumped out:	20		
Location where grease was disposed of:	AAA PUMPING YARD - RECYCLED		

D.T.M. # 178168

28

RRS- TRAP FROM COFFEE AREA. N/W
Rio Rancho Grease Removal Device Report

RRS Grease Trap		Comments
Inspection Date <u>6-21-19</u>	Service Date <u>6-21-19</u>	Technician/Company <u>BIGT HARTO</u>
Depth of grease trap from Invert at Outlet Tee to Bottom of Outlet Chamber	12 Inches	
Depth of FOG (fats, oils, grease)	0 Inches	
Depth of Solids	3/4 Inches	COFFEE GRINDS
Is the accumulated FOG and solids occupying greater than 25% of the grease trap capacity	Yes/No	
Prior to opening is odor from the grease trap present 10' or greater?	Yes/No	
Are the access covers in need of repair?	Yes/No	
FOG Passing by grease trap?	Yes/No	
Does grease trap need trap repair?	Yes/No	
Are there signs the grease trap walls may be deteriorating?	Yes/No	
Are there signs the grease trap may be leaking?	Yes/No	
Was the grease trap pressure washed?	Yes/No	
Inlet Tee, Baffle Wall Elbow and Outlet Tee pressure washed?	Yes/No	
Is there any leakage under the baffle wall?	Yes/No	
Was all grease removed from walls, ledges and ridges?	Yes/No	
Total Gallons pumped out:	20	
Location where grease was disposed of:	AAA AMPINE	AAA AMPINE
		AAA AMPINE YARD - RECYCLED

ATTACHMENT B

Intel NM TOMP – March 2018 Update



March 28, 2018

Albuquerque Bernalillo County Water Utility Authority
Southside Water Reclamation Facility
4201 2nd Street, SW
Albuquerque, New Mexico 87105
Attn: Merat Zarreii

Re: Toxic Organic (Solvent) Management Plan - Intel Corporation - Permit Number 2021A

Enclosed please find an updated Toxic Organic (Solvent) Management Plan for Intel Corporation as required by Wastewater Discharge Permit Number 2021A, Endorsement TR6. Since it was last submitted as an attachment to Intel's Semi-Annual Report on January 25, 2017, this plan has been modified as follows:

- Section 1: Included 'several computer data centers and various chemical/treatment systems' and excluded 'a large scale computing server farm' in summary of Intel New Mexico's infrastructure.
- Section 3: Specified that all emergency showers are plumbed to Intel's Acid Neutralization Wastewater System prior to discharge.
- Section 4: Specified that bulk liquid chemicals are delivered through double-contained piping to manufacturing areas.

For any additional information or to clarify information submitted, please call Megan Rosebrough at phone number (505) 728-5130, or email at Megan.Rosebrough@intel.com.

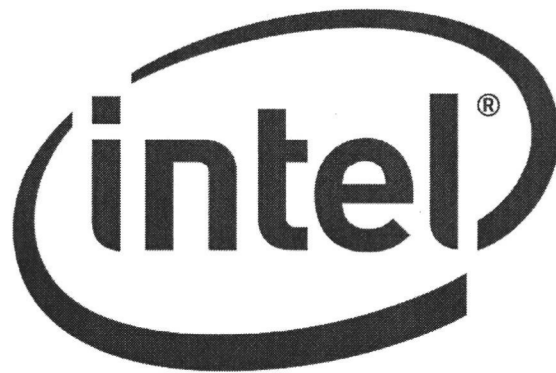
Sincerely,

A handwritten signature in black ink that reads "Mindy Koch". The signature is written in a cursive, flowing style.

Mindy Koch
NM Corporate Services Manager

Enclosure
(EHS016)

**Intel New Mexico
Toxic Organic (Solvent) Management Plan**



Submitted to:

Albuquerque Bernalillo County
Water Utility Authority
Industrial Waste Pretreatment Section

Prepared By:

Intel Corporation
4100 Sara Road
Rio Rancho, New Mexico 87124

2018 Revision

Intel New Mexico
Toxic Organic (Solvent) Management Plan

Table of Contents

1.0 Introduction

2.0 Chemical Use Approval and Control

3.0 Waste Management Practices

4.0 Spill Prevention and Clean Up

Appendix A: Intel Environmental “2020 Goals”

Intel New Mexico Toxic Organic (Solvent) Management Plan

1.0 Introduction

This 2018 update of the Intel New Mexico site Toxic Organic Management Plan (TOMP) is prepared to meet the requirements of Wastewater Industrial Discharge Permit 2021A. Per Endorsement TR6, the Permittee is required to submit a TOMP to the Industrial Waste Engineer every two years, and when changes to the plan occur. The Plan shall identify all toxic organics used onsite, quantities used and stored at the facility, procedures followed to prevent discharge and spills of these materials to the sanitary sewer, and the method of disposal used in place of discharge to the sanitary sewer.

Intel Corporation located at 4100 Sara Road, Rio Rancho, New Mexico 87124 operates a 300 millimeter wafer semiconductor manufacturing facility. The site also operates various chemical labs, modular repair labs, computer labs, several computer data centers, various chemical/treatment systems, and multiple office and support buildings.

Semiconductor manufacturing processes use various organic compounds, generally classified as resists, cleaners/solvents, and etchants. The resists are mixtures of photoactive compounds, resins, and other non-halogenated solvents used to image a circuit pattern onto the Silicon wafer. Cleaning solvents are used to rinse the wafers and clean equipment parts. Common cleaning solvents include Acetone, Isopropyl Alcohol (IPA), Tetramethyl Ammonium Hydroxide (TMAH), Ethylene Glycol (EG), and n-Methyl Pyrrolidone (NMP). Etchants are used to chemically remove unwanted materials from the wafer. The chemical labs use similar chemicals but in limited quantities. Examples of organic etchants used at Intel Rio Rancho include methyl sulfonic acid (MSA), sulfolane, and diethylene glycol monoethyl ether (DGMEE).

The U.S. EPA has promulgated wastewater effluent guidelines for semiconductor manufacturing in 40 CFR 469 Subpart A, which includes a list of Total Toxic Organics (TTOs) for the semiconductor industry. No TTOs listed in 40 CFR 469 Subpart A are used in Intel's manufacturing process in Rio Rancho.

2.0 Chemical Use Approval and Control

Intel maintains a chemical approval process that serves to prevent unauthorized introduction of chemicals at the NM site, thereby keeping them out of wastewater discharged to the Albuquerque Bernalillo County Water Utility Authority (ABCWUA). Every chemical used on site, including those used in the manufacturing process, must be approved by a site Environmental Engineer and Industrial Hygienist. Part of the approval process includes a review of the chemical constituents against various lists of toxic and hazardous chemicals regulated by the EPA, the New Mexico Environment Department (NMED), ABCWUA, and other applicable agencies.

In addition, for process technologies transferred to New Mexico from the process development site are analyzed and vetted based on Intel's "Design for Environment"

Intel New Mexico Toxic Organic (Solvent) Management Plan

(DfE) criteria. This process aims to minimize waste, emissions, water, and energy use with each new process technology. Intel has also implemented a chemical “Green Screen” process that searches for the best environmental alternative for each process chemical with consideration to the process requirements, which Intel will use for 100% of new chemicals and gases used in its process by 2020 (See Appendix A for Intel’s 2020 Environmental Goals). The program aims to use chemicals that have a reduced “cradle to grave” environmental impact during their manufacture, use, and disposal, thus reducing the amount of hazardous wastes generated from the manufacturing process at the source. The screening process is completed before a process technology is finalized and transferred to any of Intel’s High Volume Manufacturing (HVM) sites, including New Mexico.

For non-technology transfer process chemicals, such as pilot chemicals or facilities/maintenance chemicals, a request must be completed and approved at the site level before the new chemical can be brought on site. Intel's Purchasing Department verifies that all chemicals have been approved prior to ordering any chemicals.

Review of new chemicals includes information on the chemical constituents, concentrations, use locations, use type, and material Safety Data Sheet (SDS) content. This information is used to determine waste management, treatment (if applicable), personal protective equipment, and disposal methods.

3.0 Waste Management Practices

Intel's waste/wastewater utilities and collection systems are constructed to ensure proper segregation and treatment of waste and wastewaters. No open trenches or piping cross-connections are allowed between the systems. There are no open floor drains in manufacturing areas except for those directly servicing emergency showers, which are plumbed to the Acid Neutralization Wastewater System prior to discharge. Separate piping and collection systems have been constructed for the following liquid waste streams:

1. Corrosive wastewater
2. Fluoride-bearing wastewater
3. Ammonium Fluoride-bearing wastewater
4. Copper-bearing wastewater
5. General Solvent Waste (GSW)
6. Corrosive Solvent Waste (CSW)
7. Spin-On-Glass Solvent Waste (SOG)

The first four waste streams listed above are treated prior to being discharged to the sanitary sewer. The last three waste streams (5-7) are collected separately in tanks and shipped offsite to an EPA permitted Treatment, Storage, and Disposal Facility (TSDF) via a certified transporter.

All manufacturing and support equipment is evaluated prior to installation to determine the volume and nature of liquid waste, if any. Installations are then made

Intel New Mexico Toxic Organic (Solvent) Management Plan

with drain system hookups to the appropriate treatment or collection system(s) to ensure proper waste segregation. The newly-installed equipment and drain connections are inspected and documented through a formal Equipment Sign-Off process prior to use.

Necessary wastewater treatment systems are installed with each process technology to ensure compliance with all applicable permits and regulations. Intel New Mexico has a robust pretreatment program that treats for wastewater ammonia, fluorides, metals, and elementary neutralization prior to discharge to the POTW. Many of the organic solvents used in the process drain to segregated collection systems and shipped to an approved TSDf for treatment & disposal. This ensures that all wastewater leaving the New Mexico site is well within applicable limits, and impact to the POTW is minimized.

Some liquid organic wastes, such as specialty oils and viscous organic chemicals, are collected in 55-gallon drums. These drums are shipped off-site to an EPA permitted TSDf. All storage facilities have secondary containment systems and are inspected on a weekly basis.

Some organic chemicals that are present in some manufacturing process steps do enter the wastewater system. For example, diethylene glycol monoethyl ether (DGMEE) and sulfolane from the wafer-rinsing baths are drained to the Acid Neutralization Wastewater system. Treatability studies of these and all Intel wastewater pollutants have been completed prior to implementing any new process technology to ensure no issues arise with discharge permit compliance, POTW process upset, or other pertinent concerns.

4.0 Spill Prevention and Clean Up

Bulk liquid chemicals are delivered through double-contained piping to manufacturing areas. There is no underground chemical supply piping at Intel. There are multiple alarmed leak detection systems for immediate notification of spills or releases. Bottled chemicals are transported in carts designed to contain any spill.

Intel maintains Full Time Responder Teams (FRST) and Emergency Response Teams (ERT) assigned to all areas of the site, including manufacturing, support, and office areas. FRST personnel are onsite 24-hours per day and respond within minutes to any spill or emergency situation. Supporting ERT personnel are subject matter experts trained to respond to emergencies and knowledgeable on the hazards in the areas they work.

Wastes generated from all chemical spills, including organic spills, are collected and disposed of in accordance with all applicable regulations. Additionally, secondary containments in chemical docks and loading areas are designed to contain any chemical spill and prevent chemicals from entering the storm water or sanitary sewer systems. Industrial areas that commonly see chemical traffic are sealed with a

Intel New Mexico

Toxic Organic (Solvent) Management Plan

Chemical Resistant Coating (CRC) to contain all chemical spills and prevent degradation of the outside surface or inside flooring.

Appendix A: Intel Environmental “2020 Goals”, 2016 Corporate Responsibility Report

GOALS FOR 2017 AND BEYOND

Environmental Sustainability

Reduce direct greenhouse gas (GHG) emissions by 10% on a per unit basis by 2020 from 2010 levels.

Grow the installation and use of on-site alternative energy to three times our 2015 levels by 2020.

Continue 100% green power in our U.S. operations and increase alternative energy use for our international operations from 2015 to 2020.

Achieve cumulative energy savings of 4 billion kWh from 2012 to 2020.

Increase the energy efficiency of notebook computers and data center products 25x by 2020 from 2010 levels.¹

Implement an enhanced green chemistry screening and selection process for 100% of new chemicals and gases by 2020.

Reduce water use on a per unit basis below 2010 level by 2020.

Achieve zero hazardous waste to landfill by 2020.

Achieve a 90% non-hazardous waste recycling rate by 2020.

Design all new buildings to a minimum LEED* Gold certification between 2015 and 2020.

<https://www.intel.com/content/www/us/en/corporate-responsibility/corporate-responsibility.html>

<https://www.intel.com/content/www/us/en/environment/water-restoration.html>

ATTACHMENT C

Monthly Indium Gallium Sampling Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Denver

4955 Yarrow Street

Arvada, CO 80002

Tel: (303)736-0100

TestAmerica Job ID: 280-118924-1

Client Project/Site: Monthly Gallium/Indium

For:

Intel Corporation

4100 Sara Road

Mail Stop RR5-491

Rio Rancho, New Mexico 87124

Attn: Amy Reed



Authorized for release by:

1/18/2019 3:25:30 PM

DiLea Bindel, Project Manager I

(303)736-0173

dilea.bindel@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.testamericainc.com

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

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

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

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Case Narrative

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-118924-1

Job ID: 280-118924-1

Laboratory: TestAmerica Denver

Narrative

CASE NARRATIVE

Client: Intel Corporation

Project: Monthly Gallium/Indium

Report Number: 280-118924-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 1/9/2019 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.4° C.

The requested 6010B Gallium was performed by McCampbell Analytical. The analytical report can be found at the back of this report.

TOTAL METALS (ICP)

Sample JAN 19-IND (280-118924-2) was analyzed for Total Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 01/15/2019 and analyzed on 01/18/2019.

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

Definitions/Glossary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-118924-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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)

Detection Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-118924-1

Client Sample ID: JAN 19-GAL

Lab Sample ID: 280-118924-1

No Detections.

Client Sample ID: JAN 19-IND

Lab Sample ID: 280-118924-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indium	0.049	J	0.50	0.026	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Denver



Method Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-118924-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CF
6010B	SW846 6010B	SW846	
3010A	Preparation, Total Metals	SW846	TAL CF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

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Sample Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-118924-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-118924-1	JAN 19-GAL	Water	01/08/19 09:00	01/09/19 09:20
280-118924-2	JAN 19-IND	Water	01/08/19 09:00	01/09/19 09:20

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Client Sample Results

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-118924-1

Method: 6010C - Metals (ICP)

Client Sample ID: JAN 19-IND
Date Collected: 01/08/19 09:00
Date Received: 01/09/19 09:20

Lab Sample ID: 280-118924-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indium	0.049	J	0.50	0.026	mg/L		01/15/19 07:54	01/18/19 14:19	1

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QC Sample Results

Client: Intel Corporation
 Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-118924-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 310-227717/1-A
 Matrix: Water
 Analysis Batch: 228168

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 227717

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indium	ND		0.50	0.026	mg/L		01/15/19 07:54	01/18/19 14:15	1

Lab Sample ID: LCS 310-227717/2-A
 Matrix: Water
 Analysis Batch: 228168

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 227717

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Indium	2.00	1.99		mg/L		99	80 - 120

Lab Sample ID: 280-118924-2 MS
 Matrix: Water
 Analysis Batch: 228168

Client Sample ID: JAN 19-IND
 Prep Type: Total/NA
 Prep Batch: 227717

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Indium	0.049	J	2.00	1.88		mg/L		92	75 - 125

Lab Sample ID: 280-118924-2 MSD
 Matrix: Water
 Analysis Batch: 228168

Client Sample ID: JAN 19-IND
 Prep Type: Total/NA
 Prep Batch: 227717

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Indium	0.049	J	2.00	1.85		mg/L		90	75 - 125	2	20

QC Association Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-118924-1

Metals

Prep Batch: 227717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-118924-2	JAN 19-IND	Total/NA	Water	3010A	
MB 310-227717/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-227717/2-A	Lab Control Sample	Total/NA	Water	3010A	
280-118924-2 MS	JAN 19-IND	Total/NA	Water	3010A	
280-118924-2 MSD	JAN 19-IND	Total/NA	Water	3010A	

Analysis Batch: 228168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-118924-2	JAN 19-IND	Total/NA	Water	6010C	227717
MB 310-227717/1-A	Method Blank	Total/NA	Water	6010C	227717
LCS 310-227717/2-A	Lab Control Sample	Total/NA	Water	6010C	227717
280-118924-2 MS	JAN 19-IND	Total/NA	Water	6010C	227717
280-118924-2 MSD	JAN 19-IND	Total/NA	Water	6010C	227717

Lab Chronicle

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-118924-1

Client Sample ID: JAN 19-IND

Lab Sample ID: 280-118924-2

Date Collected: 01/08/19 09:00

Matrix: Water

Date Received: 01/09/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	227717	01/15/19 07:54	JNR	TAL CF
Total/NA	Analysis	6010C		1			228168	01/18/19 14:19	CTB	TAL CF

Laboratory References:

= McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

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McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1901482

Report Created for: TestAmerica Denver

4955 Yarrow Street
Arvada, CO 80002

Project Contact: DiLea R Bindel

Project P.O.: 3021111

Project: 28003759; Monthly Gallium/Indium

Project Received: 01/11/2019

Analytical Report reviewed & approved for release on 01/18/2019 by:

Christine Askari
Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: TestAmerica Denver
Project: 28003759; Monthly Gallium/Indium
WorkOrder: 1901482

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client: TestAmerica Denver
Date Received: 1/11/19 9:52
Date Prepared: 1/11/19
Project: 28003759; Monthly Gallium/Indium

WorkOrder: 1901482
Extraction Method: SW3050B
Analytical Method: SW6010B
Unit: µg/L

Metals

Client ID	Lab ID	Matrix	Date Collected			Instrument	Batch ID
JAN 19-GAL (280-118924-1)	1901482-001A	Water	01/08/2019 09:00			ICP-OES 32	171306
<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>		
Gallium	ND	1.8	20	1	01/14/2019 16:37		
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>					
Terbium	106	70-130			01/14/2019 16:37		
<u>Analyst(s):</u> ND							



Quality Control Report

Client:	TestAmerica Denver	WorkOrder:	1901482
Date Prepared:	1/11/19	BatchID:	171306
Date Analyzed:	1/14/19	Extraction Method:	SW3050B
Instrument:	ICP-OES	Analytical Method:	SW6010B
Matrix:	Water	Unit:	µg/L
Project:	28003759; Monthly Gallium/Indium	Sample ID:	MB/LCS/LCSD-171306

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Gallium	ND	1.8	20	-	-	-
Surrogate Recovery						
Terbium	510			500	103	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Gallium	1000	1000	1000	101	102	85-115	0.430	20
Surrogate Recovery								
Terbium	530	530	500	105	105	70-130	0	20



1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1901482

ClientCode: TADC

- WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag
 Detection Summary
 Dry-Weight

Report to:

DiLea R Bindel
 TestAmerica Denver
 4955 Yarrow Street
 Arvada, CO 80002
 303-736-0100 FAX: 303-431-7171

Email: dilea.bindel@testamericainc.com
 cc/3rd Party:
 PO: 3021111
 Project: 28003759; Monthly Gallium/Indium

Bill to:

Accounts Payable
 TestAmerica
 4101 Shuffel Street NW
 North Canton, OH 44720
 AccountsPayable@testamericainc.com

Requested TAT: 5 days;

Date Received: 01/11/2019

Date Logged: 01/11/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)													
					1	2	3	4	5	6	7	8	9	10	11	12		
1901482-001	JAN 19-GAL (280-118924-1)	Water	1/8/2019 09:00	<input type="checkbox"/>	A													

Test Legend:

1	METALS_6010_TTLC_W	2		3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Tina Perez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
 Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: TESTAMERICA DENVER

Project: 28003759; Monthly Gallium/Indium

Work Order: 1901482

Client Contact: DiLea R Bindel

QC Level: LEVEL 2

Contact's Email: dilea.bindel@testamericainc.com

Comments:

Date Logged: 1/11/2019

WaterTrax
 WriteOn
 EDF
 Excel
 EQUIS
 Email
 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1901482-001A	JAN 19-GAL (280-118924-1)	Water	SW6010B (Metals) <Gallium>	2	500mL HDPE w/ HNO3	<input type="checkbox"/>	1/8/2019 9:00	5 days	Trace	<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).
 - MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

Chain of Custody Record



THE LEADER IN ENVIRONMENTAL TESTING

1901482



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact: Shipping/Receiving		Phone:	Bindel, DiLea R		280-468683.1
Company: McCambell Analytical, Inc.		E-Mail: dilea.bindel@testamericainc.com		State of Origin: New Mexico	Page: Page 1 of 1
Address: 1534 Willow Pass Road,		Accreditations Required (See note):		Job #:	280-118924-1
City: Pittsburg	Due Date Requested: 1/21/2019	Analysis Requested			
State Zip: CA, 94565	TAT Requested (days):				
PO #:		Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Sub Gallium - McCambell Analytical, Inc./ 60108	Total Number of containers
WO #:		X	X	X	
Project #: 28003759	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, B=tissue, A=air)	Special Instructions/Note:
Site: Monthly Gallium/Indium	1/8/19	09:00 Mountain		Water	
<p>Sample Identification - Client ID (Lab ID)</p> <p>JAN 19-GAL (280-118924-1)</p>					
<p>Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.</p>					
<p>Possible Hazard Identification</p> <p>Unconfirmed</p> <p>Deliverable Requested: I, II, III, IV, Other (specify)</p> <p>Primary Deliverable Rank: 2</p>					
<p>Empty Kit Relinquished by:</p> <p>Relinquished by: <i>Diana Castro</i></p> <p>Relinquished by:</p> <p>Relinquished by:</p>					
<p>Custody Seals Intact: Δ Yes Δ No</p> <p>Custody Seal No.:</p>					

Ver: 09/20/2016 Page 7 of 8

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Sample Receipt Checklist

Client Name: **TestAmerica Denver**
Project: **28003759; Monthly Gallium/Indium**

WorkOrder №: **1901482** Matrix: Water
Carrier: FedEx

Date and Time Received **1/11/2019 09:52**
Date Logged: **1/11/2019**
Received by: **Jena Alfaro**
Logged by: **Tina Perez**

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

Sample/Temp Blank temperature		Temp: 1.3°C	NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Comments:

Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-118924-1

Login Number: 118924

List Source: TestAmerica Denver

List Number: 1

Creator: Quint, Jessica A

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.	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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-118924-1

Login Number: 118924


List Number: 2

Creator: Patrick, Kathryn E

List Source: TestAmerica Cedar Falls

List Creation: 01/11/19 11:51 AM

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 (excluding tests with immediate HTs)	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client Information Client Contact: Carrie Weitz / Megan Rosebrough Company: Intel Corporation Address: 4100 Sara Road Mail Stop RR5-465 City: Rio Rancho State, Zip: NM, 87124 Phone: (505) 794-4100 (Tel) Email: carrie.a.weitz@intel.com Project Name: Monthly Gallium/Indium Site:		Lab PM: Bindel, Dil Lea R. E-Mail: dillea.bindel@testamericainc.com Sampler: <i>Ken Clean</i> Phone: 505-991-7797 Carrier Tracking No(s):		COC No: Page: _____ of _____ Job #: _____	
Due Date Requested: TAT Requested (days): 10 Business Days PO #: _____ WO #: _____ Project #: 28003759 SSO#: _____		Analysis Requested			
Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No 6010B - Gallium (McCampbell Analytical) <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No 6010C - Indium (TA Cedar Falls) <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Total Number of Containers: _____			
Sample Identification <i>JAN 19 - GAL</i> <i>JAN 19 - IND</i>		Sample Date <i>1/18/19 0900</i> <i>1/18/19 0900</i>	Sample Time <i>C W</i> <i>C W</i>	Sample Type (C=comp, G=grab) <i>C W</i> <i>C W</i>	Matrix (W=water, S=solid, O=organic, ST=Trace, A=Air) <i>W</i> <i>W</i>
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/OC Requirements:			
Empty Kit Relinquished by: <i>Ken Clean</i> Date/Time: <i>1/18/19 - 12pm</i> Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____		Method of Shipment: _____ Date/Time: <i>1/19 0920</i> Date/Time: _____ Date/Time: _____ Company: <i>TAPEW</i> Company: _____ Company: _____			
Custody Seal Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: <i>0.111.0.38.50.85 1/19/19</i>		Barcode:  280-118924 Chain of Custody			





Cooler/Sample Receipt and Temperature Log Form

Client Information	
Client: <u>IA Denver</u>	
City/State: <u>Arvada CO</u>	Project: <u>Monthly Gallium/Indium</u>
Receipt Information	
Date/Time Received: <u>1/11/19 0955</u>	Received By: <u>MD</u>
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> TA Courier <input type="checkbox"/> TA Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____	
Condition of Cooler/Containers	
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes: Cooler ID:</i>
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Cooler # ____ of ____</i>
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No</i>
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No</i>
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Which VOA samples are in cooler? ↓</i>
Temperature Record	
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE	
Thermometer ID: <u>M</u>	Correction Factor (°C): <u>to 0</u>
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature	
Uncorrected Temp (°C): <u>Yield 19.018</u>	Corrected Temp (°C):
• Sample Container Temperature	
Container type(s) used: <u>PL 250 H2501 A#2</u>	
Uncorrected Temp (°C): <u>0.7</u>	Corrected Temp (°C): <u>0.7</u>
Exceptions Noted	
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No	
a) <i>If yes:</i> Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No	
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No	
NOTE: If yes, contact PM before proceeding. If no, proceed with login	
Additional Comments	

Chain of Custody Record



Client Information (Sub Contract Lab) Client Contact: [Blank] Shipping/Receiving: [Blank] Company: TestAmerica Laboratories, Inc. Address: 704 Enterprise Drive, Cedar Falls State, Zip: IA, 50613 Phone: 319-277-2401 (Tel) 319-277-2425 (Fax) Email: [Blank]		Sampler: [Blank] Lab PM: BindeJ, DiLea R. E-Mail: dilea.bindel@testamericainc.com Phone: [Blank]		Carrier Tracking No(s): [Blank] State of Origin: New Mexico Page: Page 1 of 1 Job #: 280-118924-1		COC No: 280-468682.1 Page: Page 1 of 1 Job #: 280-118924-1	
Due Date Requested: 1/21/2019 TAT Requested (days): [Blank]		Accreditations Required (See note): [Blank]		Analysis Requested A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: [Blank]		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - HZSO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify) [Blank]	
PO #: [Blank] WO #: [Blank]		Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/>		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>		Total Number of Containers: 2	
Project #: 28003759 SOW#: [Blank]		Matrix (w=water, s=solid, o=wastefoil, B=Tissue, A=Air) Sample Type (C=Comp, G=grab) Sample Time: 09:00 Mountain Sample Date: 1/8/19 Preservation Code: Water		6010C/2010A (MOD) 6010C Indium <input checked="" type="checkbox"/>		Special Instructions/Note: [Blank]	
Sample Identification - Client ID (Lab ID) JAN 19-IND (280-118924-2)		Sample Date: 1/8/19 Sample Time: 09:00 Mountain Preservation Code: Water		X		[Blank]	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification

Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) [Blank] Primary Deliverable Rank: 2
 Empty Kit Relinquished by: [Blank] Date: [Blank]
 Relinquished by: [Blank] Date: 1-10-19 1345
 Relinquished by: [Blank] Date: [Blank]
 Relinquished by: [Blank] Date: [Blank]
 Custody Seals Intact: [Blank] Custody Seal No.: [Blank]
 Δ Yes Δ No

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For [Blank] Months
 Special Instructions/QC Requirements: [Blank]

Received by: [Blank] Date/Time: 1-11-19 9:55
 Received by: [Blank] Date/Time: [Blank]
 Received by: [Blank] Date/Time: [Blank]
 Cooler Temperature(s) °C and Other Remarks: [Blank]

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

TestAmerica Job ID: 280-120205-1

Client Project/Site: Monthly Gallium/ Indium

For:

Intel Corporation
4100 Sara Road
Mail Stop RR5-491
Rio Rancho, New Mexico 87124

Attn: Amy Reed



Authorized for release by:
2/28/2019 2:10:30 PM

DiLea Bindel, Project Manager I
(303)736-0173
dilea.bindel@testamericainc.com

LINKS

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

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



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Case Narrative

Client: Intel Corporation
Project/Site: Monthly Gallium/ Indium

TestAmerica Job ID: 280-120205-1

Job ID: 280-120205-1

Laboratory: TestAmerica Denver

Narrative

CASE NARRATIVE

Client: Intel Corporation

Project: Monthly Gallium/ Indium

Report Number: 280-120205-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 2/14/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.3° C.

The requested 6010B Gallium was performed by McCampbell Analytical. The analytical report can be found at the back of this report.

TOTAL METALS (ICP)

Sample FEB-IND (280-120205-2) was analyzed for Total Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared and analyzed on 02/26/2019.

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

Definitions/Glossary

Client: Intel Corporation
Project/Site: Monthly Gallium/ Indium

TestAmerica Job ID: 280-120205-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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)

Detection Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/ Indium

TestAmerica Job ID: 280-120205-1

Client Sample ID: FEB-GAL

Lab Sample ID: 280-120205-1

No Detections.

Client Sample ID: FEB-IND

Lab Sample ID: 280-120205-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indium	0.059	J	0.50	0.026	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Denver



Method Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/ Indium

TestAmerica Job ID: 280-120205-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CF
6010B	SW846 6010B	SW846	
3010A	Preparation, Total Metals	SW846	TAL CF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

- 1
- 2
- 3
- 4
- 5
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- 9
- 10
- 11
- 12
- 13
- 14

Sample Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/ Indium

TestAmerica Job ID: 280-120205-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-120205-1	FEB-GAL	Water	02/13/19 09:00	02/14/19 09:00
280-120205-2	FEB-IND	Water	02/13/19 09:00	02/14/19 09:00

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: Intel Corporation
Project/Site: Monthly Gallium/ Indium

TestAmerica Job ID: 280-120205-1

Method: 6010C - Metals (ICP)

Client Sample ID: FEB-IND
Date Collected: 02/13/19 09:00
Date Received: 02/14/19 09:00

Lab Sample ID: 280-120205-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indium	0.059	J	0.50	0.026	mg/L		02/26/19 08:06	02/26/19 20:47	1

- 1
- 2
- 3
- 4
- 5
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- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Sample Results

Client: Intel Corporation
 Project/Site: Monthly Gallium/ Indium

TestAmerica Job ID: 280-120205-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 310-230965/1-A
 Matrix: Water
 Analysis Batch: 231147

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 230965

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indium	ND		0.50	0.026	mg/L		02/26/19 08:06	02/26/19 20:44	1

Lab Sample ID: LCS 310-230965/2-A
 Matrix: Water
 Analysis Batch: 231147

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 230965

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Indium	2.00	2.04		mg/L		102	80 - 120

Lab Sample ID: 280-120205-2 MS
 Matrix: Water
 Analysis Batch: 231147

Client Sample ID: FEB-IND
 Prep Type: Total/NA
 Prep Batch: 230965

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Indium	0.059	J	2.00	1.97		mg/L		96	75 - 125

Lab Sample ID: 280-120205-2 MSD
 Matrix: Water
 Analysis Batch: 231147

Client Sample ID: FEB-IND
 Prep Type: Total/NA
 Prep Batch: 230965

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Indium	0.059	J	2.00	1.97		mg/L		96	75 - 125	0	20

QC Association Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/ Indium

TestAmerica Job ID: 280-120205-1

Metals

Prep Batch: 230965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-120205-2	FEB-IND	Total/NA	Water	3010A	
MB 310-230965/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-230965/2-A	Lab Control Sample	Total/NA	Water	3010A	
280-120205-2 MS	FEB-IND	Total/NA	Water	3010A	
280-120205-2 MSD	FEB-IND	Total/NA	Water	3010A	

Analysis Batch: 231147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-120205-2	FEB-IND	Total/NA	Water	6010C	230965
MB 310-230965/1-A	Method Blank	Total/NA	Water	6010C	230965
LCS 310-230965/2-A	Lab Control Sample	Total/NA	Water	6010C	230965
280-120205-2 MS	FEB-IND	Total/NA	Water	6010C	230965
280-120205-2 MSD	FEB-IND	Total/NA	Water	6010C	230965

Lab Chronicle

Client: Intel Corporation
Project/Site: Monthly Gallium/ Indium

TestAmerica Job ID: 280-120205-1

Client Sample ID: FEB-IND

Date Collected: 02/13/19 09:00

Date Received: 02/14/19 09:00

Lab Sample ID: 280-120205-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	230965	02/26/19 08:06	JNR	TAL CF
Total/NA	Analysis	6010C		1			231147	02/26/19 20:47	CTB	TAL CF

Laboratory References:

= McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1902967

Report Created for: TestAmerica Denver

4955 Yarrow Street
Arvada, CO 80002

Project Contact: DiLea R Bindel

Project P.O.:

Project: 28003759; Monthly Gallium/Indium

Project Received: 02/20/2019

Analytical Report reviewed & approved for release on 02/28/2019 by:

Yen Cao

Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: TestAmerica Denver
Project: 28003759; Monthly Gallium/Indium
WorkOrder: 1902967

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client: TestAmerica Denver
Date Received: 2/20/19 11:45
Date Prepared: 2/26/19
Project: 28003759; Monthly Gallium/Indium

WorkOrder: 1902967
Extraction Method: SW3050B
Analytical Method: SW6010B
Unit: µg/L

Metals

Client ID	Lab ID	Matrix	Date Collected	TZA	Instrument	Batch ID
FEB-GAL (280-120205-1)	1902967-001A	Water	02/13/2019 09:00	-1	ICP-OES 22	173636
<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>		<u>Date Analyzed</u>
Gallium	ND	1.8	20	1		02/27/2019 11:54
<u>Surrogates</u>	<u>REC (%)</u>		<u>Limits</u>			
Terbium	98		70-130			02/27/2019 11:54
Analyst(s):	ND					



Quality Control Report

Client:	TestAmerica Denver	WorkOrder:	1902967
Date Prepared:	2/26/19	BatchID:	173636
Date Analyzed:	2/27/19	Extraction Method:	SW3050B
Instrument:	ICP-OES	Analytical Method:	SW6010B
Matrix:	Water	Unit:	µg/L
Project:	28003759; Monthly Gallium/Indium	Sample ID:	MB/LCS/LCSD-173636

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Gallium	ND	1.8	20	-	-	-
Surrogate Recovery						
Terbium	490			500	97	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Gallium	970	970	1000	97	97	85-115	0	20
Surrogate Recovery								
Terbium	490	490	500	98	97	70-130	0.121	20



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1902967

ClientCode: TADC

- WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag
 Detection Summary
 Dry-Weight

Report to:

DiLea R Bindel
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
303-736-0100 FAX: 303-431-7171

Email: dilea.bindel@testamericainc.com
cc/3rd Party:
PO:
Project: 28003759; Monthly Gallium/Indium

Bill to:

Accounts Payable
TestAmerica
4101 Shuffel Street NW
North Canton, OH 44720
AccountsPayable@testamericainc.com

Requested TAT: 5 days;

Date Received: 02/20/2019

Date Logged: 02/20/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12			
1902967-001	FEB-GAL (280-120205-1)	Water	2/13/2019 09:00	<input type="checkbox"/>	A														

Test Legend:

1	METALS_6010_TTLC_W	2		3		4	
5		6		7		8	
9		10		11		12	

Prepared by: Julia Danielsson

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: TESTAMERICA DENVER

Project: 28003759; Monthly Gallium/Indium

Work Order: 1902967

Client Contact: DiLea R Bindel

QC Level: LEVEL 2

Contact's Email: dilea.bindel@testamericainc.com

Comments:

Date Logged: 2/20/2019

WaterTrax
 WriteOn
 EDF
 Excel
 EQUIS
 Email
 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1902967-001A	FEB-GAL (280-120205-1)	Water	SW6010B (Metals) <Gallium>	2	500mL HDPE w/ HNO3	<input type="checkbox"/>	2/13/2019 9:00	5 days	None	<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

1902967

Chain of Custody Record



Client Information (Sub Contract Lab)				Lab PM:		Carrier Tracking No(s):		COC No:													
Client Contact: Shipping/Receiving				Bindel, Dillea R		280-472491.1		280-472491.1													
Company: McCampbell Analytical, Inc.				E-Mail: dilea.bindel@testamericainc.com		State of Origin: New Mexico		Page: Page 1 of 1													
Address: 1534 Willow Pass Road, Pittsburg, CA, 94565				Due Date Requested: 2/26/2019		Accreditations Required (See Note):		Job #: 280-120205-1													
City: Pittsburg				TAT Requested (days):		Analysis Requested															
State, Zip: CA, 94565				PO #:																	
Phone:				WO #:		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 G - Anichlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:															
Project #: 28003759				SSOW#:																	
Site: Monthly Gallium/ Indium				Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, ABP)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		SUB (Gallium - McCampbell Analytical, Inc./ 60108)		Total Number of Containers		Special Instructions/Note:	
Sample Identification - Client ID (Lab ID)				2/13/19		09:00 Mountain		Water		X		X		X		X		2		Special Instructions/Note:	
FEB-GAL (280-120205-1)																					

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
 Unconfirmed
 Return To Client
 Disposal By Lab
 Archive For _____ Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Special Instructions/QC Requirements:

Deliverable Requested: I, II, III, IV, Other (specify) _____
Primary Deliverable Rank: 2

Empty Kit Relinquished by: _____ Date: _____
Relinquished by: Christina Baga Date/Time: 2/18/19 1437 Company: TADEO Company
Relinquished by: [Signature] Date/Time: 2/14/19 1700 Company: [Signature] Company
Relinquished by: [Signature] Date/Time: 2/20/19 1145 Company: MAI Company
Custody Seals Intact: _____ Custody Seal No.: _____
Cooler Temperature(s) °C and Other Remarks: _____

TRACKING # 4818 7130 6135



2.60 WET



Sample Receipt Checklist

Client Name: **TestAmerica Denver**
Project: **28003759; Monthly Gallium/Indium**

WorkOrder No: **1902967** Matrix: Water
Carrier: FedEx

Date and Time Received: **2/20/2019 11:45**
Date Logged: **2/20/2019**
Received by: **Julia Danielsson**
Logged by: **Julia Danielsson**

Chain of Custody (COC) Information

- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Sample IDs noted by Client on COC? Yes No
- Date and Time of collection noted by Client on COC? Yes No
- Sampler's name noted on COC? Yes No
- COC agrees with Quote? Yes No NA

Sample Receipt Information

- Custody seals intact on shipping container/cooler? Yes No NA
- Shipping container/cooler in good condition? Yes No
- Samples in proper containers/bottles? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes No NA
- Samples Received on Ice? Yes No
(Ice Type: WET ICE)
- Sample/Temp Blank temperature Temp: 2.6°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No NA
- Sample labels checked for correct preservation? Yes No
- pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)? Yes No NA

UCMR Samples:

- pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)? Yes No NA
- Free Chlorine tested and acceptable upon receipt (<0.1mg/L)? Yes No NA

Comments:

Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-120205-1

Login Number: 120205

List Number: 1

Creator: Quint, Jessica A

List Source: TestAmerica Denver

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
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?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-120205-1

Login Number: 120205

List Number: 2

Creator: Patrick, Kathryn E

List Source: TestAmerica Cedar Falls

List Creation: 02/19/19 09:55 AM

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.	True	
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 (excluding tests with immediate HTs)	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Client Information Client Contact: Carrie Weitz / Megan Rosebrough Company: Intel Corporation Address: 4100 Sara Road Mail Stop RR5-465 City: Rio Rancho State, Zip: NM, 87124 Phone: (505) 794-4100 (Tel) Email: carrie.a.weitz@intel.com Project Name: Monthly Gallium/Indium Site:		Sampler: <i>K. Weitz</i> Phone: <i>505-991-7197</i> Lab PM: Bindel, DiLea R. E-Mail: dleia.bindel@testamericainc.com		Carrier Tracking Nb(s): Page: _____ of _____ Job #: _____	
Due Date Requested: TAT Requested (days): 10 Business Days PO #: _____ WO #: _____ Project #: 28003759 SSOW#: _____		Analysis Requested Perform MSMSD (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 6010B - Gallium (McCampbell Analytical) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 6010C - Indium (TA Cedar Falls) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Total Number of Containers: _____			
Sample Identification Sample Date: <i>2/13/19 0900</i> Sample Time: <i>0900</i> Sample Type (C=Comp, G=grab): <i>C W</i> Matrix (W=Water, S=Soil, O=Wastewater, BT=Tea, A=Air): _____ Preservation Code: _____ Special Instructions/Note: 6010B Gallium sub to McCampbell Analytical 6010C Indium sub to TA-Cedar Falls		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 L - EDA Other: _____			
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) _____		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Empty Kit Relinquished by: Relinquished by: <i>Kar Weitz</i> Relinquished by: _____ Relinquished by: _____ Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Method of Shipment: Date/Time: <i>2-13-19 2PM</i> Date/Time: _____ Date/Time: _____ Received by: _____ Received by: _____ Received by: _____ Date/Time: <i>2-14-19 0900</i> Date/Time: _____ Date/Time: _____ Company: <i>Intel</i> Company: _____ Company: _____ Cooler Temperature(s) °C and Other Remarks: <i>2.3, +1.0, FRS & for by FOP 2-14-19</i>			





Cooler/Sample Receipt and Temperature Log Form

Client Information	
Client: <u>TA Denver</u>	
City/State: <u>Arvada CO</u>	Project: <u>Monthly Gallium/Iridium</u>
Receipt Information	
Date/Time Received: <u>2-19-19 900</u>	Received By: <u>KP</u>
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> TA Courier <input type="checkbox"/> TA Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____	
Condition of Cooler/Containers	
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes: Cooler ID:</i>
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Cooler # ____ of ____</i>
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>If yes: Cooler custody seals intact?</i> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Sample custody seals intact?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes: Which VOA samples are in cooler? ↓</i>
Temperature Record	
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE	
Thermometer ID: <u>N</u>	Correction Factor (°C): <u>+0.0</u>
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature	
Uncorrected Temp (°C): <u>0.9</u>	Corrected Temp (°C): <u>0.9</u>
• Sample Container Temperature	
Container type(s) used:	
Uncorrected Temp (°C):	Corrected Temp (°C):
Exceptions Noted	
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No	
a) <i>If yes: Is there evidence that the chilling process began?</i> <input type="checkbox"/> Yes <input type="checkbox"/> No	
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No	
NOTE: If yes, contact PM before proceeding. If no, proceed with login	
Additional Comments	



Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Binde, DiLea R	Carrier Tracking No(s):	COC No: 280-472492.1
Shipping/Receiving		E-Mail: dilea.binde@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc		Accreditations Required (See note):		
Address: 704 Enterprise Drive,		Job #: 280-120205-1		
City: Cedar Falls		Preservation Codes:		
State, Zip: IA, 50613		A - HCl M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate		
Phone: 319-277-2401(Tel) 319-277-2425(Fax)		G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		
Email:				
Project #: 28003759				
Site:				
Due Date Requested: 2/26/2019		Analysis Requested		
TAT Requested (days):				
PO #:				
WO #:				
Project #: 28003759				
SSOW#:				
Sample Identification - Client ID (Lab ID)		Special Instructions/Note:		
FEB-IND (280-120205-2)				
Sample Date	2/13/19	Field Filtered Sample (Yes or No)	6010C/3010A (MOD) 6010C Indium	
Sample Time	09:00 Mountain	Perform MS/MSD (Yes or No)	X	
Sample Type (C=Comp, G=grab)				
Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air)	Water			
Preservation Code:				
Total Number of containers		2		

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/testmatrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
 Unconfirmed
 Return To Client
 Disposal By Lab
 Archive For _____ Months

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Deliverable Requested: I, II, III, IV, Other (specify) _____
 Primary Deliverable Rank: 2

Empty Kit Relinquished by: _____
 Date: _____ Time: _____
 Method of Shipment: _____

Relinquished by: Christina Baga
 Date/Time: 2/18/19 1430
 Company: IA DA

Relinquished by: _____
 Date/Time: _____
 Company: _____

Relinquished by: _____
 Date/Time: _____
 Company: _____

Custody Seals Intact: _____
 Custody Seal No.: _____
 Cooler Temperature(s) °C and Other Remarks: _____



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

TestAmerica Job ID: 280-120840-1

Client Project/Site: Monthly Gallium/Indium

For:

Intel Corporation
4100 Sara Road
Mail Stop RR5-491
Rio Rancho, New Mexico 87124

Attn: Amy Reed



Authorized for release by:
3/21/2019 9:13:17 AM

DiLea Bindel, Project Manager I
(303)736-0173
dilea.bindel@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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



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Case Narrative

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-120840-1

Job ID: 280-120840-1

Laboratory: TestAmerica Denver

Narrative

CASE NARRATIVE

Client: Intel Corporation

Project: Monthly Gallium/Indium

Report Number: 280-120840-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 3/6/2019 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

The requested 6010C Indium analysis will be performed by TestAmerica's Cedar Falls laboratory.

The requested 6010B Gallium was performed by McCampbell Analytical. The analytical report can be found at the back of this report.

TOTAL METALS (ICP)

Sample MAR-IND (280-120840-2) was analyzed for Total Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared and analyzed on 03/13/2019.

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

Definitions/Glossary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-120840-1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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)

Detection Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-120840-1

Client Sample ID: MAR-GAL

Lab Sample ID: 280-120840-1

No Detections.

Client Sample ID: MAR-IND

Lab Sample ID: 280-120840-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indium	0.038	J	0.50	0.026	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Denver



Method Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-120840-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CF
6010B	SW846 6010B	SW846	
3010A	Preparation, Total Metals	SW846	TAL CF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Sample Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-120840-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-120840-1	MAR-GAL	Water	03/05/19 09:00	03/06/19 09:15
280-120840-2	MAR-IND	Water	03/05/19 09:00	03/06/19 09:15

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-120840-1

Method: 6010C - Metals (ICP)

Client Sample ID: MAR-IND
Date Collected: 03/05/19 09:00
Date Received: 03/06/19 09:15

Lab Sample ID: 280-120840-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indium	0.038	J	0.50	0.026	mg/L		03/13/19 08:16	03/13/19 21:52	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Sample Results

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-120840-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 310-232265/1-A
Matrix: Water
Analysis Batch: 232507

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 232265

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indium	ND		0.50	0.026	mg/L		03/13/19 08:16	03/13/19 21:49	1

Lab Sample ID: LCS 310-232265/2-A
Matrix: Water
Analysis Batch: 232507

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 232265

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Indium	2.00	1.96		mg/L		98	80 - 120

Lab Sample ID: 280-120840-2 MS
Matrix: Water
Analysis Batch: 232507

Client Sample ID: MAR-IND
Prep Type: Total/NA
Prep Batch: 232265

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Indium	0.038	J	2.00	2.00		mg/L		98	75 - 125

Lab Sample ID: 280-120840-2 MSD
Matrix: Water
Analysis Batch: 232507

Client Sample ID: MAR-IND
Prep Type: Total/NA
Prep Batch: 232265

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Indium	0.038	J	2.00	2.07		mg/L		102	75 - 125	4	20

Lab Sample ID: 310-150782-C-9-C DU
Matrix: Water
Analysis Batch: 232507

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 232265

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Indium	ND		ND		mg/L		NC	20

QC Association Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-120840-1

Metals

Prep Batch: 232265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-120840-2	MAR-IND	Total/NA	Water	3010A	
MB 310-232265/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-232265/2-A	Lab Control Sample	Total/NA	Water	3010A	
280-120840-2 MS	MAR-IND	Total/NA	Water	3010A	
280-120840-2 MSD	MAR-IND	Total/NA	Water	3010A	
310-150782-C-9-C DU	Duplicate	Total/NA	Water	3010A	

Analysis Batch: 232507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-120840-2	MAR-IND	Total/NA	Water	6010C	232265
MB 310-232265/1-A	Method Blank	Total/NA	Water	6010C	232265
LCS 310-232265/2-A	Lab Control Sample	Total/NA	Water	6010C	232265
280-120840-2 MS	MAR-IND	Total/NA	Water	6010C	232265
280-120840-2 MSD	MAR-IND	Total/NA	Water	6010C	232265
310-150782-C-9-C DU	Duplicate	Total/NA	Water	6010C	232265

Lab Chronicle

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

TestAmerica Job ID: 280-120840-1

Client Sample ID: MAR-IND

Date Collected: 03/05/19 09:00

Date Received: 03/06/19 09:15

Lab Sample ID: 280-120840-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	232265	03/13/19 08:16	HED	TAL CF
Total/NA	Analysis	6010C		1			232507	03/13/19 21:52	CTB	TAL CF

Laboratory References:

= McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565

TAL CF = TestAmerica Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1903475

Report Created for: TestAmerica Denver

4955 Yarrow Street
Arvada, CO 80002

Project Contact: DiLea R Bindel

Project P.O.:

Project: 28003759; Monthly Gallium/Indium

Project Received: 03/11/2019

Analytical Report reviewed & approved for release on 03/15/2019 by:

Heidi Fruhlinger

Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: TestAmerica Denver
Project: 28003759; Monthly Gallium/Indium
WorkOrder: 1903475

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client: TestAmerica Denver
Date Received: 3/11/19 9:48
Date Prepared: 3/11/19
Project: 28003759; Monthly Gallium/Indium

WorkOrder: 1903475
Extraction Method: SW3050B
Analytical Method: SW6010B
Unit: µg/L

Metals

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
MAR-GAL (280-120840-1)	1903475-001A	Water	03/05/2019 09:00		ICP-OES 12	174328
<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>	
Gallium	ND	1.8	20	1	03/13/2019 15:19	
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>				
Terbium	107	70-130		03/13/2019 15:19		
<u>Analyst(s):</u> ND						



Quality Control Report

Client: TestAmerica Denver
Date Prepared: 3/11/19
Date Analyzed: 3/13/19
Instrument: ICP-OES
Matrix: Water
Project: 28003759; Monthly Gallium/Indium

WorkOrder: 1903475
BatchID: 174328
Extraction Method: SW3050B
Analytical Method: SW6010B
Unit: µg/L
Sample ID: MB/LCS/LCSD-174328
 1903475-001AMS/MSD

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Gallium	ND	1.8	20	-	-	-
Surrogate Recovery						
Terbium	530			500	107	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Gallium	1100	1100	1000	106	105	85-115	0.332	20
Surrogate Recovery								
Terbium	540	530	500	107	107	70-130	0	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Gallium	1	1100	1100	1000	ND	112	111	70-130	0.401	20
Surrogate Recovery										
Terbium	1	540	530	500		107	107	70-130	0	20

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Gallium	ND<100	ND	-	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1903475

ClientCode: TADC

- WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag
 Detection Summary
 Dry-Weight

Report to:

DiLea R Bindel
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002
303-736-0100 FAX: 303-431-7171

Email: dilea.bindel@testamericainc.com
cc/3rd Party:
PO:
Project: 28003759; Monthly Gallium/Indium

Bill to:

Accounts Payable
TestAmerica
4101 Shuffel Street NW
North Canton, OH 44720
AccountsPayable@testamericainc.com

Requested TAT: 5 days;

Date Received: 03/11/2019

Date Logged: 03/11/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)													
					1	2	3	4	5	6	7	8	9	10	11	12		
1903475-001	MAR-GAL (280-120840-1)	Water	3/5/2019 09:00	<input type="checkbox"/>	A													

Test Legend:

1	METALS_6010_TTLC_W	2		3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

Prepared by: Tina Perez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: TESTAMERICA DENVER

Project: 28003759; Monthly Gallium/Indium

Work Order: 1903475

Client Contact: DiLea R Bindel

QC Level: LEVEL 2

Contact's Email: dilea.bindel@testamericainc.com

Comments:

Date Logged: 3/11/2019

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1903475-001A	MAR-GAL (280-120840-1)	Water	SW6010B (Metals) <Gallium>	2	500mL HDPE w/ HNO3	<input type="checkbox"/>	3/5/2019 9:00	5 days	Trace	<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

TestAmerica Denver
 4955 Yarrow Street
 Arvada, CO 80002
 Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record



TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)

Client Contact: _____ Phone: _____
 Shipping/Receiving: _____ E-Mail: dilea.bindel@testamericainc.com
 Company: **McCambell Analytical, Inc.** Accreditations Required (See note): _____

Address: **1534 Willow Pass Road,** Lab PM: **Bindel, D L Laa R**
 City: **Pittsburg** State of Origin: **New Mexico**
 State, Zip: **CA, 94565** Carrier Tracking No(s): _____

Phone: _____ PO #: _____
 Email: _____ WO #: _____

Project Name: **Monthly Gallium/Indium** Project #: **28003759**
 Site: _____ SSOV#: _____

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=Water, S=solid, O=washoff, BR=Trissin, ArAr)	Analysis Requested		Total Number of containers	Special Instructions/Note:
					Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)		
MAR-GAL (280-120840-1)	3/5/19	09:00	Water	Water		X	2	

- Preservation Codes:
- A - HCL
 - B - NaOH
 - C - Zn Acetate
 - D - Nitric Acid
 - E - NaHSO4
 - F - MeOH
 - G - Anchlor
 - H - Ascorbic Acid
 - I - Ice
 - J - DI Water
 - K - EDTA
 - L - EDA
 - M - Hexane
 - N - None
 - O - AsNaO2
 - P - Na2O4S
 - Q - Na2SO3
 - R - Na2S2O3
 - S - H2SO4
 - T - TSP Dodecahydrate
 - U - Acetone
 - V - MCAA
 - W - PH 4-5
 - Z - other (specify)

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
 Unconfirmed _____
 Deliverable Requested: I, II, III, IV, Other (specify) _____
 Primary Deliverable Rank: 2

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: **Diana Coiro** Date/Time: **3-7-19 13:45** Company: **THL B...**
 Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: Yes No Custody Seal No.: _____

Received by: _____ Date/Time: **3/11/19 09:48** Company: _____
 Received by: _____ Date/Time: _____ Company: _____

Cooler Temperature(s) °C and Other Remarks: _____

Fax: 475955705371



Sample Receipt Checklist

Client Name: **TestAmerica Denver**
Project: **28003759; Monthly Gallium/Indium**

WorkOrder №: **1903475** Matrix: Water
Carrier: FedEx

Date and Time Received: **3/11/2019 09:48**
Date Logged: **3/11/2019**
Received by: Tina Perez
Logged by: Tina Perez

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

Sample/Temp Blank temperature		Temp: 1.8°C	NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Comments:

Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-120840-1

Login Number: 120840

List Number: 1

Creator: Zimmerman, Steven M

List Source: TestAmerica Denver

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.	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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	



Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-120840-1

Login Number: 120840

List Number: 2

Creator: Patrick, Kathryn E

List Source: TestAmerica Cedar Falls

List Creation: 03/08/19 11:58 AM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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 (excluding tests with immediate HTs)	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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Sampler: K. UEBAN Lab PM: Bindel, DiLea R. Phone: 505-991-7197 E-Mail: dilea.bindel@testamericainc.com		Job #: Page ___ of ___	
Client Information Carrie Weitz / Megan Rosebrough Intel Corporation Address: 4100 Sara Road Mail Stop RR5-485 City: Rio Rancho State, Zip: NM, 87124 Phone: (505) 794-4100 (Tel) Email: carrie.a.weitz@intel.com Project #: 28003759 Monthly Gallium/Indium Site:		Analysis Requested Total Number of Containers: _____ Preservation Codes: M - Hexane N - Nene O - AsNaO2 P - Na2OHS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 L - EDA Z - other (specify) Other: _____ Special Instructions/Note: 6010B Gallium sub to McCampbell Analytical 6010C Indium sub to TA-Cedar Falls	
Due Date Requested: TAT Requested (days): 10 Business Days		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform (MS/MSD (Yes or No)) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 6010B - Gallium (McCampbell Analytical) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 6010C - Indium (TA Cedar Falls) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Identification MAR-GAL SDDX MAR-IND		Sample Date: 3/5/19 0900 Sample Time: 0900 Sample Type (C=comp, G=grab): C W Matrix (W=water, S=solid, O=organic): W Preservation Code: C W Barcode: 280-120840 Chain of Custody	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify) _____			
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: K. UEBAN Date/Time: 3/5-19-1800 Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____			
Relinquished by: K. UEBAN Date/Time: 3/5-19-1800 Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____		Received by: CEL Date/Time: 3/6/19 0915 Received by: _____ Date/Time: _____ Received by: _____ Date/Time: _____	
Custody Seal No.: _____ Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Method of Shipment: _____ Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements: _____	

2, 9, 10, 11, 12, 13, 14 transferred by AP36119

1 2 3 4 5 6 7 8 9 10 11 12 13 14



Cooler/Sample Receipt and Temperature Log Form

Client Information	
Client: TA Denver	
City/State: Arvada CO	Project: Monthly Gallium/Indium
Receipt Information	
Date/Time Received: 3/8/19 9:45	Received By: DJ
Delivery Type: <input checked="" type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx ^{RP 3-8-19} <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee	
<input type="checkbox"/> TA Courier <input type="checkbox"/> TA Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____	
Condition of Cooler/Containers	
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes: Cooler ID: _____
Multiple Coolers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler # _____ of _____
Cooler Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes: Which VOA samples are in cooler? ↓
Temperature Record	
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE	
Thermometer ID: J	Correction Factor (°C): 0.1
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature	
Uncorrected Temp (°C): 1.4	Corrected Temp (°C): 1.5
• Sample Container Temperature	
Container type(s) used: _____	
Uncorrected Temp (°C): _____	Corrected Temp (°C): _____
Exceptions Noted	
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No	
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No	
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No	
NOTE: If yes, contact PM before proceeding. If no, proceed with login	
Additional Comments	

Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM:	Carrier Tracking No(s):	COC No:
Shipping/Receiving		Bindel, DiLea R		280-474425-1
Company:		E-Mail:	State of Origin:	Page:
TestAmerica Laboratories, Inc		dileaa.bindel@testamericainc.com	New Mexico	Page 1 of 1
Address:		Accreditations Required (See note):		
704 Enterprise Drive,		280-120840-1		
City:	Analysis Requested			
Cedar Falls	M - Hexane			
State, Zip:	N - None			
IA, 50613	O - AsNaO2			
Phone:	P - Na2O4S			
319-277-2401(Tel) 319-277-2425(Fax)	Q - Na2SO3			
Email:	R - Na2SO3			
	S - H2SO4			
	T - TSP Dodecahydrate			
	U - Acetone			
	V - MCAA			
	W - pH 4-5			
	L - EDA			
	Other:			
Project Name:	Special Instructions/Note:			
Monthly Gallium/Indium				
Site:				
Sample Identification - Client ID (Lab ID)		Total Number of Containers		
MAR-IND (280-120840-2)		2		
Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastewat, B= tissue, A=Air)	Special Instructions/Note:
3/5/19	09:00 Mountain		Water	
Due Date Requested:		Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	
3/18/2019		X	X	
TAT Requested (days):		6010C/3010A (MD) 6010C Indium		
PO #:				
WO #:				
Project #:				
28003759				
SSOW#:				

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Unconfirmed		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:	
Primary Deliverable Rank: 2			
Empty Kit Relinquished by:	Date:	Method of Shipment:	
Relinquished by: <i>Flawless Castro</i>	3-7-19 1405		
Relinquished by:	Date/Time:	Received by:	Date/Time:
		<i>Kathryn</i>	3-8-19 945
Relinquished by:	Date/Time:	Received by:	Date/Time:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:	

ANALYTICAL REPORT

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

Laboratory Job ID: 280-123597-1
Client Project/Site: Monthly Gallium/Indium

For:
Intel Corporation
4100 Sara Road
Mail Stop RR5-491
Rio Rancho, New Mexico 87124

Attn: Amy Reed



Authorized for release by:
5/20/2019 1:19:13 PM

DiLea Bindel, Project Manager I
(303)736-0173
dilea.bindel@testamericainc.com

LINKS

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results through
TotalAccess

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www.testamericainc.com

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

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

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



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Case Narrative

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-123597-1

Job ID: 280-123597-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Intel Corporation

Project: Monthly Gallium/Indium

Report Number: 280-123597-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 5/9/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.3° C.

The requested 6010B Gallium was performed by McCampbell Analytical. The analytical report can be found at the back of this report.

TOTAL METALS (ICP)

Sample MAY-IND (280-123597-2) was analyzed for Total Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 05/14/2019 and analyzed on 05/15/2019.

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

Definitions/Glossary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-123597-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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)

Detection Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-123597-1

Client Sample ID: MAY-GAL

Lab Sample ID: 280-123597-1

No Detections.

Client Sample ID: MAY-IND

Lab Sample ID: 280-123597-2

No Detections.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Method Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-123597-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CF
6010B	SW846 6010B	SW846	
3010A	Preparation, Total Metals	SW846	TAL CF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565

TAL CF = Eurofins TestAmerica, Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401



Sample Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-123597-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-123597-1	MAY-GAL	Water	05/08/19 09:00	05/09/19 09:00
280-123597-2	MAY-IND	Water	05/08/19 09:00	05/09/19 09:00

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-123597-1

Method: 6010C - Metals (ICP)

Client Sample ID: MAY-IND
Date Collected: 05/08/19 09:00
Date Received: 05/09/19 09:00

Lab Sample ID: 280-123597-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indium	ND		0.50	0.026	mg/L		05/14/19 09:21	05/15/19 13:30	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Sample Results

Client: Intel Corporation
 Project/Site: Monthly Gallium/Indium

Job ID: 280-123597-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 310-239360/1-A
Matrix: Water
Analysis Batch: 239568

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 239360

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indium	ND		0.50	0.026	mg/L		05/14/19 09:21	05/15/19 13:27	1

Lab Sample ID: LCS 310-239360/2-A
Matrix: Water
Analysis Batch: 239568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 239360

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Indium	2.00	1.93		mg/L		97	80 - 120

Lab Sample ID: 280-123597-2 MS
Matrix: Water
Analysis Batch: 239568

Client Sample ID: MAY-IND
Prep Type: Total/NA
Prep Batch: 239360

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Indium	ND		2.00	1.84		mg/L		92	75 - 125

Lab Sample ID: 280-123597-2 MSD
Matrix: Water
Analysis Batch: 239568

Client Sample ID: MAY-IND
Prep Type: Total/NA
Prep Batch: 239360

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Indium	ND		2.00	1.89		mg/L		94	75 - 125	2	20

Lab Sample ID: 680-168753-A-4-B DU
Matrix: Water
Analysis Batch: 239568

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 239360

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Indium	ND		ND		mg/L		NC	20

QC Association Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-123597-1

Metals

Prep Batch: 239360

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-123597-2	MAY-IND	Total/NA	Water	3010A	
MB 310-239360/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-239360/2-A	Lab Control Sample	Total/NA	Water	3010A	
280-123597-2 MS	MAY-IND	Total/NA	Water	3010A	
280-123597-2 MSD	MAY-IND	Total/NA	Water	3010A	
680-168753-A-4-B DU	Duplicate	Total/NA	Water	3010A	

Analysis Batch: 239568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-123597-2	MAY-IND	Total/NA	Water	6010C	239360
MB 310-239360/1-A	Method Blank	Total/NA	Water	6010C	239360
LCS 310-239360/2-A	Lab Control Sample	Total/NA	Water	6010C	239360
280-123597-2 MS	MAY-IND	Total/NA	Water	6010C	239360
280-123597-2 MSD	MAY-IND	Total/NA	Water	6010C	239360
680-168753-A-4-B DU	Duplicate	Total/NA	Water	6010C	239360

Lab Chronicle

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-123597-1

Client Sample ID: MAY-IND

Lab Sample ID: 280-123597-2

Date Collected: 05/08/19 09:00

Matrix: Water

Date Received: 05/09/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	239360	05/14/19 09:21	HED	TAL CF
Total/NA	Analysis	6010C		1			239568	05/15/19 13:30	CTB	TAL CF

Laboratory References:

= McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565

TAL CF = Eurofins TestAmerica, Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1905647

Report Created for: TestAmerica Denver

4955 Yarrow Street
Arvada, CO 80002

Project Contact: DiLea R Bindel

Project P.O.:

Project: 28003759; Monthly Gallium/Indium

Project Received: 05/13/2019

Analytical Report reviewed & approved for release on 05/17/2019 by:

Yen Cao

Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: TestAmerica Denver
Project: 28003759; Monthly Gallium/Indium
WorkOrder: 1905647

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client: TestAmerica Denver

WorkOrder: 1905647

Date Received: 5/13/19 9:45

Extraction Method: SW3050B

Date Prepared: 5/13/19

Analytical Method: SW6010B

Project: 28003759; Monthly Gallium/Indium

Unit: µg/L

Metals

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
MAY-GAL (280-123597-1)	1905647-001A	Water	05/08/2019 09:00		ICP-OES 25	177741

Analytes	Result	MDL	RL	DF	Date Analyzed
Gallium	ND	1.8	20	1	05/15/2019 11:51

Surrogates	REC (%)	Limits
Terbium	98	70-130

Analyst(s): ND



Quality Control Report

Client: TestAmerica Denver
Date Prepared: 5/13/19
Date Analyzed: 5/15/19
Instrument: ICP-OES
Matrix: Water
Project: 28003759; Monthly Gallium/Indium

WorkOrder: 1905647
BatchID: 177741
Extraction Method: SW3050B
Analytical Method: SW6010B
Unit: µg/L
Sample ID: MB/LCS/LCSD-177741
 1905647-001AMS/MSD

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Gallium	ND	1.8	20	-	-	-

Surrogate Recovery

Terbium	480			500	95	70-130
---------	-----	--	--	-----	----	--------

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Gallium	980	990	1000	98	99	85-115	1.09	20

Surrogate Recovery

Terbium	490	490	500	97	98	70-130	0.611	20
---------	-----	-----	-----	----	----	--------	-------	----

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Gallium	1	1100	1100	1000	ND	110	111	70-130	1.46	20

Surrogate Recovery

Terbium	1	500	500	500		100	101	70-130	0.994	20
---------	---	-----	-----	-----	--	-----	-----	--------	-------	----

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Gallium	ND<100	ND	-	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1905647

ClientCode: TADC

- WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag
 Detection Summary
 Dry-Weight

Report to:

DiLea R Bindel
 TestAmerica Denver
 4955 Yarrow Street
 Arvada, CO 80002
 303-736-0100 FAX: 303-431-7171

Email: dilea.bindel@testamericainc.com
 cc/3rd Party:
 PO:
 Project: 28003759; Monthly Gallium/Indium

Bill to:

Accounts Payable
 TestAmerica
 4101 Shuffel Street NW
 North Canton, OH 44720
 AccountsPayable@testamericainc.com

Requested TAT: 5 days;

Date Received: 05/13/2019

Date Logged: 05/13/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)														
					1	2	3	4	5	6	7	8	9	10	11	12			
1905647-001	MAY-GAL (280-123597-1)	Water	5/8/2019 09:00	<input type="checkbox"/>	A														

Test Legend:

1	METALS_6010_TTLC_W	2		3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

Prepared by: Tina Perez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
 Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: TESTAMERICA DENVER

Project: 28003759; Monthly Gallium/Indium

Work Order: 1905647

Client Contact: DiLea R Bindel

QC Level: LEVEL 2

Contact's Email: dilea.bindel@testamericainc.com

Comments:

Date Logged: 5/13/2019

WaterTrax WriteOn EDF Excel EQUIS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1905647-001A	MAY-GAL (280-123597-1)	Water	SW6010B (Metals) <Gallium>	2	500mL HDPE w/ HNO3	<input type="checkbox"/>	5/8/2019 9:00	5 days	None	<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

Chain of Custody Record



1905647



Client Information (Sub Contract Lab)		Lab P/M: Bindel, DiLea R	Carrier Tracking No(s): 280-483068.1							
Shipping/Receiving		E-Mail: dilea.bindel@testamericainc.com	State of Origin: New Mexico							
Company: McCampbell Analytical, Inc.		Accreditations Required (See note):								
Address: 1534 Willow Pass Road, Pittsburg, CA, 94565		Due Date Requested: 5/21/2019								
Phone: [Blank]		TAT Requested (days):								
Email: [Blank]		PO #: [Blank]								
Project Name: Monthly Gallium/Indium		WO #: [Blank]								
Site: [Blank]		Project #: 28003759								
SSOW#: [Blank]		Site: [Blank]								
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=water/soil, BT=Tissue, AA=)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Gallium - McCampbell Analytical, Inc./ 6010B Gallium)	Total Number of Containers	Special Instructions/Note:
MAY-GAL (280-123597-1)	5/8/19	09:00 Mountain		Water		X	X	X	2	
<p>Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.</p>										
Possible Hazard Identification										
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:										
Empty Kit Relinquished by: [Signature] Date: 5/8/19 17:00 Company: [Blank] Method of Shipment: [Blank]										
Relinquished by: [Signature] Date: 5/13/19 09:45 Company: [Blank]										
Relinquished by: [Signature] Date/Time: [Blank] Company: [Blank]										
Relinquished by: [Signature] Date/Time: [Blank] Company: [Blank]										
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.: [Blank]										
Cooler Temperature(s) °C and Other Remarks: [Blank]										



Environment Testing
TestAmerica

Shipping Order Form



S 2 8 0 - 8 7 7 7

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Phone (303) 736-0100 Fax (303) 431-7171

Shipping Order ID: 87777

Ship Via: FedEx Priority Overnight

Due On: 5/10/2019 11:59:00PM

Ship To Information

Project Manager:

Company Name: McCampbell Analytical, Inc.

Attention: Attn: Shipping/Receiving

Address 1: 1534 Willow Pass Road

Address 2:

Address 3:

City: Pittsburg

State: CA

Zip: 94565

Phone #:

Project Ref:

Notes to Bottle/Shipping Department

Shipping Method: **Standard packing**

Ready to Fill

Preprinted COC

Number of COC Copies

Seals on Bottle

Seals on Coolers

Return Shipment Labels

Prepaid Return

Eurofins TestAmerica, Denver

Short Hold Times

Temperature Control

Rush

Please notify your PM immediately if an error is found in shipment.

Go to <http://www.testamericainc.com/customer-support/specialized-instructions-for-field-samplers/> for field sampler instructions.



Bottle Order Information

Bottle Order:
 Bottle Order #: Request From Client: 5/10/2019
 Date Order Posted: Ready To Process
 Order Status: Prepared By: **Deliver By Date: 5/10/2019 11:59:00PM**
 Lab Project Number:

Order Completion Information

Creator: Janice Collins
 Filled by:
 Sent Date:
 Sent Via:
 Tracking #:

Sets	Bottles/Set	Qty	Bottle Type Description	Preservative	Method	Matrix	Sample Type	Comments	Lot #
------	-------------	-----	-------------------------	--------------	--------	--------	-------------	----------	-------

Notes to Field Staff:

Health and Safety Notes: Preservative Comment



Scan QR code for field sampler instructions

Relinquished By	Company	Date	Time	Received By	Company	Seal #
Relinquished By	Company	Date	Time	Received By	Company	Seal #

Please notify your PM immediately if an error is found in shipment.

Go to <http://www.testamericainc.com/customer-support/specialized-instructions-for-field-samplers/> for field sampler instructions.



Select	Container Loc Code	Container ID	Container Type	Storage Location	Lab Sample ID	Client Sample ID
<input checked="" type="checkbox"/>	280	5695052	Plastic 500ml - with Nitric Acid	Sub	280-123597-A-1	MAY-GAL
<input checked="" type="checkbox"/>	280	5695053	Plastic 500ml - with Nitric Acid	Sub	280-123597-B-1	MAY-GAL

Count = 2



Sample Receipt Checklist

Client Name: **TestAmerica Denver**
Project: **28003759; Monthly Gallium/Indium**

WorkOrder №: **1905647** Matrix: Water
Carrier: FedEx

Date and Time Received: **5/13/2019 09:45**
Date Logged: **5/13/2019**
Received by: Tina Perez
Logged by: Tina Perez

Chain of Custody (COC) Information

- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Sample IDs noted by Client on COC? Yes No
- Date and Time of collection noted by Client on COC? Yes No
- Sampler's name noted on COC? Yes No
- COC agrees with Quote? Yes No NA

Sample Receipt Information

- Custody seals intact on shipping container/cooler? Yes No NA
- Shipping container/cooler in good condition? Yes No
- Samples in proper containers/bottles? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes No NA
- Samples Received on Ice? Yes No
(Ice Type: Water)
- Sample/Temp Blank temperature Temp: 10.1°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No NA
- Sample labels checked for correct preservation? Yes No
- pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)? Yes No NA

UCMR Samples:

- pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)? Yes No NA
- Free Chlorine tested and acceptable upon receipt (<0.1mg/L)? Yes No NA

Comments:

Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-123597-1

Login Number: 123597

List Source: Eurofins TestAmerica, Denver

List Number: 1

Creator: Paul, Ryan D

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-123597-1

Login Number: 123597

List Number: 2


Creator: Bovy, Lorraine L

List Source: Eurofins TestAmerica, Cedar Falls

List Creation: 05/13/19 08:55 AM

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 (excluding tests with immediate HTs)	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Chain of Custody Record

Client Information Client Contact: Carrie Weitz / Megan Rosebrough Company: Intel Corporation Address: 4100 Sara Road Mail Stop RRS-465 City: Rio Rancho State, Zip: NM, 87124 Phone: (505) 794-4100 (Tel) Email: carrie_a.weitz@intel.com Project Name: Monthly Gallium/Indium Site:		Lab PM: Bindel, Dillea R. E-Mail: dillea.bindel@testamerica.com Carrier Tracking No(s): Page: _____ of _____ Job #: _____	
Sample Information Sample: <i>KULRBW</i> Phone: <i>505-991-7297</i>		Analysis Requested Due Date Requested: TAT Requested (days): 10 Business Days PO #: WO #: Project #: SSO#: Matrix (Water, Solid, Oil): Sample Type (C=comp, G=grab): Sample Time: Sample Date: Preservation Code:	
6010B - Gallium (McC Campbell Analytical) 6010C - Indium (TA Cedar Falls)		Total Number of containers:	
Special Instructions/Note: 6010B Gallium sub to McC Campbell Analytical 6010C Indium sub to TA-Cedar Falls		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Sample Identification <i>MAY - GAL</i> <i>MAY - IND</i>		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)	
Sample Date: <i>5-8-19</i> Sample Time: <i>0900</i> Sample Type: <i>C W</i>		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)	
Sample Date: <i>5-8-19</i> Sample Time: <i>0900</i> Sample Type: <i>C W</i>		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No)	
 280-123597 Chain of Custody		Special Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Special Instructions/QC Requirements:	
Deliverable Requested: I, II, III, IV, Other (specify)		Empty Kit Relinquished by:	
Relinquished by: <i>Ken Uearn</i> Relinquished by: Relinquished by:		Date: <i>5-8-19 / 2 PM</i> Date/Time: Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Received by: <i>Gold</i> Date/Time: <i>5-9-19 0900</i> Company: <i>TA DEN</i>	
Custody Seal No.:		Received by: Date/Time: Company:	
Cooler Temperature(s) °C and Other Remarks: <i>2.3 TO 4.0 X Fe by POC 5-9-19</i>		Received by: Date/Time: Company:	



Chain of Custody Record



Client Information (Sub Contract Lab) Client Contact: Bindel, Dilea R Shipping/Receiving: dilea.bindel@testamericainc.com Company: TestAmerica Laboratories, Inc Address: 704 Enterprise Drive, City: Cedar Falls State, Zip: IA, 50613 Phone: 319-277-2401 (Tel) 319-277-2425 (Fax) Email: Project Name: Monthly Gallium/Indium Site:		Sampler: Lab PM: Bindel, Dilea R Phone: E-Mail: dilea.bindel@testamericainc.com Carrier Tracking No(s): State of Origin: New Mexico Page 1 of 1 Job #: 280-123597-1 Accreditations Required (See note):	
Due Date Requested: 5/21/2019 TAT Requested (days): PO #: WO #: Project #: 28003759 SSOW#:		Analysis Requested: M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify) Other:	
Sample Identification - Client ID (Lab ID) MAY-IND (280-123597-2)		Total Number of Containers: 2 Special Instructions/Note:	
Sample Date: 5/8/19 Sample Time: 09:00 Mountain Sample Type (C=Comp, G=grab): Matrix (W=water, S=solid, O=waste/soil, BT=Tissue, A=Air) Preservation Code: Water		Field Filtered Sample (Yes or No): Perform MS/MSD (Yes or No): 6010C/3010A (MD) 6010C Indium: X	
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.			
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:			
Relinquished by: [Signature] Date/Time: 5/16/19 17:00 Relinquished by: [Signature] Date/Time: 5/16/19 17:00 Relinquished by: Date/Time:		Received by: Sunday Brclert Date/Time: 5-11-19 0950 Received by: Date/Time: Received by: Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	



Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information					
Client: TA Denver					
City/State: <small>CITY</small> Arvada		<small>STATE</small> CO		Project: monthly Gallium/Indium	
Receipt Information					
Date/Time Received: <small>DATE</small> 5-11-19		<small>TIME</small> 9:50		Received By: LAB	
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx sat <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> TA Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____					
Condition of Cooler/Containers					
Sample(s) received in Cooler?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		If yes: Cooler ID: _____	
Multiple Coolers?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes: Cooler # _____ of _____	
Cooler Custody Seals Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If yes: Which VOA samples are in cooler? ↓	
Temperature Record					
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE					
Thermometer ID: N			Correction Factor (°C): +0.0		
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature					
Uncorrected Temp (°C): 1.3			Corrected Temp (°C): 1.3		
• Sample Container Temperature					
Container type(s) used:		CONTAINER 1		CONTAINER 2	
Uncorrected Temp (°C):		TEMP 1	TEMP 2	Corrected Temp (°C):	
TEMP 1		TEMP 2		TEMP 1	
TEMP 1		TEMP 2		TEMP 2	
Exceptions Noted					
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No					
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No					
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No					
NOTE: If yes, contact PM before proceeding. If no, proceed with login					
Additional Comments					

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Preservative Added (mls)</u>	<u>Lot #</u>
MAY-GAL	280-123597-A-1	Plastic 500ml - with Nitric Acid	_____	_____	_____
MAY-GAL	280-123597-B-1	Plastic 500ml - with Nitric Acid	_____	_____	_____
MAY-IND	280-123597-A-2	Plastic 250ml - with Nitric Acid	_____	_____	_____
MAY-IND	280-123597-B-2	Plastic 250ml - with Nitric Acid	_____	_____	_____

ANALYTICAL REPORT

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

Laboratory Job ID: 280-124759-1
Client Project/Site: Monthly Gallium/Indium
Revision: 1

For:
Intel Corporation
4100 Sara Road
Mail Stop RR5-491
Rio Rancho, New Mexico 87124

Attn: Amy Reed



Authorized for release by:
7/1/2019 12:25:47 PM

DiLea Bindel, Project Manager I
(303)736-0173
dilea.bindel@testamericainc.com

LINKS

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results through
TotalAccess

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www.testamericainc.com

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

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

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



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Case Narrative

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-124759-1

Job ID: 280-124759-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Intel Corporation

Project: Monthly Gallium/Indium

Report Number: 280-124759-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

REVISION - 7/1/19

Due to a report review oversight, the McCambell Analytical subcontract report for 6010B Gallium was omitted in error. The subcontract report has been included in this revised report.

RECEIPT

The samples were received on 6/6/2019 8:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.3° C.

The requested 6010B Gallium was performed by McCampbell Analytical. The analytical report can be found at the back of this report.

TOTAL METALS (ICP)

Sample JUNE-IND (280-124759-2) was analyzed for Total Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared and analyzed on 06/11/2019.

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

Definitions/Glossary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-124759-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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)

Detection Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-124759-1

Client Sample ID: JUNE-GAL

Lab Sample ID: 280-124759-1

No Detections.

Client Sample ID: JUNE-IND

Lab Sample ID: 280-124759-2

No Detections.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Method Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-124759-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CF
6010B	SW846 6010B	SW846	
3010A	Preparation, Total Metals	SW846	TAL CF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401



Sample Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-124759-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-124759-1	JUNE-GAL	Water	06/05/19 09:00	06/06/19 08:45	
280-124759-2	JUNE-IND	Water	06/05/19 09:00	06/06/19 08:45	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-124759-1

Method: 6010C - Metals (ICP)

Client Sample ID: JUNE-IND
Date Collected: 06/05/19 09:00
Date Received: 06/06/19 08:45

Lab Sample ID: 280-124759-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indium	ND		0.50	0.069	mg/L		06/11/19 08:00	06/11/19 18:47	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Sample Results

Client: Intel Corporation
 Project/Site: Monthly Gallium/Indium

Job ID: 280-124759-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 310-242497/1-A
Matrix: Water
Analysis Batch: 242687

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 242497

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indium	ND		0.50	0.069	mg/L		06/11/19 08:00	06/11/19 18:44	1

Lab Sample ID: LCS 310-242497/2-A
Matrix: Water
Analysis Batch: 242687

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 242497

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Indium	2.00	1.97		mg/L		98	80 - 120

Lab Sample ID: 280-124759-2 MS
Matrix: Water
Analysis Batch: 242687

Client Sample ID: JUNE-IND
Prep Type: Total/NA
Prep Batch: 242497

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Indium	ND		2.00	1.97		mg/L		98	75 - 125

Lab Sample ID: 280-124759-2 MSD
Matrix: Water
Analysis Batch: 242687

Client Sample ID: JUNE-IND
Prep Type: Total/NA
Prep Batch: 242497

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Indium	ND		2.00	1.96		mg/L		98	75 - 125	0	20

QC Association Summary

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-124759-1

Metals

Prep Batch: 242497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124759-2	JUNE-IND	Total/NA	Water	3010A	
MB 310-242497/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-242497/2-A	Lab Control Sample	Total/NA	Water	3010A	
280-124759-2 MS	JUNE-IND	Total/NA	Water	3010A	
280-124759-2 MSD	JUNE-IND	Total/NA	Water	3010A	

Analysis Batch: 242687

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-124759-2	JUNE-IND	Total/NA	Water	6010C	242497
MB 310-242497/1-A	Method Blank	Total/NA	Water	6010C	242497
LCS 310-242497/2-A	Lab Control Sample	Total/NA	Water	6010C	242497
280-124759-2 MS	JUNE-IND	Total/NA	Water	6010C	242497
280-124759-2 MSD	JUNE-IND	Total/NA	Water	6010C	242497

Lab Chronicle

Client: Intel Corporation
Project/Site: Monthly Gallium/Indium

Job ID: 280-124759-1

Client Sample ID: JUNE-IND

Lab Sample ID: 280-124759-2

Date Collected: 06/05/19 09:00

Matrix: Water

Date Received: 06/06/19 08:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	242497	06/11/19 08:00	HED	TAL CF
Total/NA	Analysis	6010C		1			242687	06/11/19 18:47	CTB	TAL CF

Laboratory References:

= McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565

TAL CF = Eurofins TestAmerica, Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401





McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1906430

Report Created for: TestAmerica Denver

4955 Yarrow Street
Arvada, CO 80002

Project Contact: DiLea R Bindel

Project P.O.:

Project: 28003759; Monthly Gallium/Indium

Project Received: 06/10/2019

Analytical Report reviewed & approved for release on 06/18/2019 by:

Angela Rydelius

Laboratory Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: TestAmerica Denver
Project: 28003759; Monthly Gallium/Indium
WorkOrder: 1906430

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client: TestAmerica Denver
Date Received: 6/10/19 15:45
Date Prepared: 6/17/19
Project: 28003759; Monthly Gallium/Indium

WorkOrder: 1906430
Extraction Method: SW3050B
Analytical Method: SW6010B
Unit: µg/L

Metals

Client ID	Lab ID	Matrix	Date Collected		Instrument	Batch ID
June-GAL (280-124759-1)	1906430-001A	Water	06/05/2019 09:00		ICP-OES 16	179745
<u>Analytes</u>	<u>Result</u>	<u>MDL</u>	<u>RL</u>	<u>DF</u>	<u>Date Analyzed</u>	
Gallium	ND	1.8	20	1	06/18/2019 12:26	
<u>Surrogates</u>	<u>REC (%)</u>	<u>Limits</u>				
Terbium	106	70-130		06/18/2019 12:26		
<u>Analyst(s):</u> ND						





Quality Control Report

Client:	TestAmerica Denver	WorkOrder:	1906430
Date Prepared:	6/17/19	BatchID:	179745
Date Analyzed:	6/18/19	Extraction Method:	SW3050B
Instrument:	ICP-OES	Analytical Method:	SW6010B
Matrix:	Water	Unit:	µg/L
Project:	28003759; Monthly Gallium/Indium	Sample ID:	MB/LCS/LCSD-179745 1906430-001AMS/MSD

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Gallium	ND	1.8	20	-	-	-

Surrogate Recovery

Terbium	520			500	104	70-130
---------	-----	--	--	-----	-----	--------

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Gallium	1000	1100	1000	104	105	85-115	1.52	20

Surrogate Recovery

Terbium	520	530	500	103	105	70-130	1.64	20
---------	-----	-----	-----	-----	-----	--------	------	----

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Gallium	1	1100	1100	1000	ND	112	112	70-130	0	20

Surrogate Recovery

Terbium	1	520	520	500		105	105	70-130	0	20
---------	---	-----	-----	-----	--	-----	-----	--------	---	----

Analyte	DLT Result	DLTRef Val	%D	%D Limit
Gallium	ND<100	ND	-	-

%D Control Limit applied to analytes with concentrations greater than 25 times the reporting limits.



1534 Willow Pass Rd
 Pittsburg, CA 94565-1701
 (925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1906430

ClientCode: TADC

- WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag
 Detection Summary
 Dry-Weight

Report to:

DiLea R Bindel
 TestAmerica Denver
 4955 Yarrow Street
 Arvada, CO 80002
 303-736-0100 FAX: 303-431-7171

Email: dilea.bindel@testamericainc.com
 cc/3rd Party:
 PO:
 Project: 28003759; Monthly Gallium/Indium

Bill to:

Accounts Payable
 TestAmerica
 4101 Shuffel Street NW
 North Canton, OH 44720
 AccountsPayable@testamericainc.com

Requested TAT: 5 days;

Date Received: 06/10/2019

Date Logged: 06/10/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)													
					1	2	3	4	5	6	7	8	9	10	11	12		
1906430-001	June-GAL (280-124759-1)	Water	6/5/2019 09:00	<input type="checkbox"/>	A													

Test Legend:

1	METALS_6010_TTLC_W	2		3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

Prepared by: Kena Ponce

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
 Hazardous samples will be returned to client or disposed of at client expense.





WORK ORDER SUMMARY

Client Name: TESTAMERICA DENVER

Project: 28003759; Monthly Gallium/Indium

Work Order: 1906430

Client Contact: DiLea R Bindel

QC Level: LEVEL 2

Contact's Email: dilea.bindel@testamericainc.com

Comments:

Date Logged: 6/10/2019

WaterTrax
 WriteOn
 EDF
 Excel
 EQUIS
 Email
 HardCopy
 ThirdParty
 J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1906430-001A	June-GAL (280-124759-1)	Water	SW6010B (Metals) <Gallium>	2	500mL HDPE w/ HNO3	<input type="checkbox"/>	6/5/2019 9:00	5 days	None	<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

Chain of Custody Record



1906430

Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:							
Client Contact: Shipping/Receiving		Phone:	Bindel, DiLea R		280-486774.1							
Company: McCampbell Analytical, Inc.		Due Date Requested: 6/18/2019	E-Mail: dilea.bindel@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 1							
Address: 1534 Willow Pass Road,		TAT Requested (days):	Accreditations Required (See note):									
City: Pittsburg		PO #:	Job #: 280-124759-1									
State, Zip: CA, 94565		WO #:	Analysis Requested									
Project Name: Monthly Gallium/Indium		Project #: 28003759	Preservation Codes:									
Site:		SSOW#:	Other:									
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oli, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of containers				Special Instructions/Note:
JUNE-GAL (280-124759-1)		6/5/19	09:00 Mountain		Water		X	2				
<p>Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.</p>												
Possible Hazard Identification						Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)						
Unconfirmed						<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
Deliverable Requested: I, II, III, IV, Other (specify)			Primary Deliverable Rank: 2			Special Instructions/QC Requirements:						
Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:								
Relinquished by: <i>Uda Nielsen</i>		Date/Time: <i>6/7/19 15:58</i>	Company: <i>TADen</i>	Received by: <i>Fdepp</i>				Date/Time:	Company:			
Relinquished by: <i>Felix 4759 5579 2868</i>		Date/Time: <i>6/10/19 15:45</i>	Company: <i>MAI</i>	Received by: <i>[Signature]</i>				Date/Time: <i>6/10/19 15:45</i>	Company: <i>MAI</i>			
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:			Cooler Temperature(s) °C and Other Remarks:							

S.9C



Sample Receipt Checklist

Client Name: **TestAmerica Denver**
Project: **28003759; Monthly Gallium/Indium**

WorkOrder №: **1906430** Matrix: Water
Carrier: FedEx

Date and Time Received **6/10/2019 15:45**
Date Logged: **6/10/2019**
Received by: Kena Ponce
Logged by: Kena Ponce

Chain of Custody (COC) Information

Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample IDs noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Date and Time of collection noted by Client on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sampler's name noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
COC agrees with Quote?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper containers/bottles?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
Samples Received on Ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

(Ice Type: WET ICE)

Sample/Temp Blank temperature	Temp: 5.9°C	NA <input type="checkbox"/>
Water - VOA vials have zero headspace / no bubbles?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	NA <input type="checkbox"/>

UCMR Samples:

pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
Free Chlorine tested and acceptable upon receipt (<0.1mg/L)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Comments:

Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-124759-1

Login Number: 124759

List Source: Eurofins TestAmerica, Denver

List Number: 1

Creator: Pottruff, Reed W

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-124759-1

Login Number: 124759

List Number: 2

Creator: Bovy, Lorraine L

List Source: Eurofins TestAmerica, Cedar Falls

List Creation: 06/10/19 08:57 AM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
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 (excluding tests with immediate HTs)	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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Chain of Custody Record

Client Information Client Contact: Carrie Weitz / Megan Rosebrough Company: Intel Corporation Address: 4100 Sara Road Mail Stop RR5-465 City: Rio Rancho State, Zip: NM, 87124 Phone: (505) 794-4100 (Tel) Email: carrie.a.weitz@intel.com Project Name: Monthly Gallium/Indium Site:		Lab PM: Bindei, DiLea R. E-Mail: dilea.bindei@testamericainc.com Carrier Tracking No(s): Page: _____ of _____ Job #: _____	
Due Date Requested: TAT Requested (days): 10 Business Days PO #: WO #: Project #: 28003759 SSOW#:		Analysis Requested 6010C - Indium (TA Cedar Falls) <input checked="" type="checkbox"/> D 6010B - Gallium (McCampbell Analytical) <input checked="" type="checkbox"/> D Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> X Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> X Total Number of Containers: _____	
Sample Identification JUNE - GAL JUNE - END		Sample Date: 6/5/19 0900 Sample Time: 0900 Sample Type (C=Comp, G=grab): C Matrix (W=water, S=solid, O=soil): W Preservation Code: W	
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/OC Requirements:	
Empty Kit Relinquished by: K. URBAN Relinquished by: K. URBAN Relinquished by: Relinquished by:		Method of Shipment: Date/Time: 6-5-19/12pm Date/Time: Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Received by: _____ Received by: Received by: Date/Time: 06/06/19 0845 Date/Time: Date/Time:	
Special Instructions/Note: 6010B Gallium sub to McCampbell Analytical 6010C Indium sub to TA-Cedar Falls		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2SO4 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 X - EDTA Z - other (specify)	
Special Instructions/Note: 6010B Gallium sub to McCampbell Analytical 6010C Indium sub to TA-Cedar Falls		Barcode: 280-124759 Chain of Custody	



Chain of Custody Record



Client Information (Sub Contract Lab) Client Contact: Bindel, Dilea R Shipping/Receiving: dilea.bindel@testamericainc.com Company: TestAmerica Laboratories, Inc Address: 704 Enterprise Drive, Cedar Falls, IA, 50613 Phone: 319-277-2401 (Tel) 319-277-2425 (Fax) Email: Project Name: Monthly Gallium/Indium Site:		Sampler: Lab PIM: Bindel, Dilea R Phone: E-Mail: dilea.bindel@testamericainc.com Carrier Tracking No(s): State of Origin: New Mexico Page 1 of 1 Job #: 280-124759-1 COC No: 280-486775.1	
Due Date Requested: 6/18/2019 TAT Requested (days): PO #: WO #: Project #: 28003759 SSO#:		Analysis Requested: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA L - EDA Other:	
Sample Identification - Client ID (Lab ID) JUNE-IND (280-124759-2)		Total Number of Containers: 2 Special Instructions/Note:	
Sample Date: 6/5/19 Sample Time: 09:00 Mountain Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) Sample Type (C=comp, G=grab) Preservation Code: Water	Perform MS/MSD (Yes or No) X Field Filtered Sample (Yes or No) X 6010C/3010A (MOD) 6010C Indium	Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to TestAmerica Laboratories, Inc.	
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Empty Kit Relinquished by:			
Relinquished by: <i>Wa Nulsen</i> Date/Time: 6/7/19 1558 Company: TADAeh Company Relinquished by: <i>Junia Bay</i> Date/Time: 6-8-19 0850 Company: IA Company Relinquished by: _____ Date/Time: _____ Company: _____ Cooler Temperature(s) °C and Other Remarks:			



Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information					
Client: TA Denver					
City/State: CITY Denver		STATE CO	Project: Monthly Gallium/Indium		
Receipt Information					
Date/Time Received: DATE 6-8-19		TIME 0850	Received By: JB		
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx Sat <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> TA Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____					
Condition of Cooler/Containers					
Sample(s) received in Cooler?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID:		
Multiple Coolers?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # ____ of ____		
Cooler Custody Seals Present?		<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Sample Custody Seals Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Trip Blank Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓		
Temperature Record					
Coolant: <input checked="" type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE					
Thermometer ID: N			Correction Factor (°C): 0.0		
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature					
Uncorrected Temp (°C): 0.6			Corrected Temp (°C): 0.6		
• Sample Container Temperature					
Container type(s) used:		CONTAINER 1		CONTAINER 2	
Uncorrected Temp (°C):		TEMP 1	TEMP 2	Corrected Temp (°C):	
				TEMP 1	
				TEMP 2	
Exceptions Noted					
1) If temperature exceeds criteria, was sample(s) received same day of sampling?		<input type="checkbox"/> Yes	<input type="checkbox"/> No		
a) If yes: Is there evidence that the chilling process began?		<input type="checkbox"/> Yes	<input type="checkbox"/> No		
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?)		<input type="checkbox"/> Yes	<input type="checkbox"/> No		
NOTE: If yes, contact PM before proceeding. If no, proceed with login					
Additional Comments					

ATTACHMENT D

Semi-Annual Monitoring Analytical Results

ANALYTICAL REPORT

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

Laboratory Job ID: 280-122412-1
Client Project/Site: Semi Annual Waste Water

For:
Intel Corporation
4100 Sara Road
Mail Stop RR5-491
Rio Rancho, New Mexico 87124

Attn: Amy Reed



Authorized for release by:
5/6/2019 2:35:52 PM

DiLea Bindel, Project Manager I
(303)736-0173
dilea.bindel@testamericainc.com

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:
www.testamericainc.com

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

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

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



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Case Narrative

Client: Intel Corporation
Project/Site: Semi Annual Waste Water

Job ID: 280-122412-1

Job ID: 280-122412-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Intel Corporation

Project: Semi Annual Waste Water

Report Number: 280-122412-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 4/12/2019 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8° C.

The requested 6010B Gallium was performed by McCampbell Analytical. The analytical report can be found at the back of this report.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample HI-041119 (280-122412-4) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 04/17/2019 and analyzed on 04/19/2019.

Sample HI-041119 (280-122412-4)[40X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

NONHALOGENATED ORGANIC USING GC/FID (DIRECT AQUEOUS INJECTION)

Sample HI-041119 (280-122412-4) was analyzed for Nonhalogenated Organic using GC/FID (Direct Aqueous Injection) in accordance with SW846 8015C. The samples were analyzed on 04/22/2019.

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

TOTAL METALS (ICP)

Samples HI-040819 (280-122412-1), HI-040919 (280-122412-2), HI-041019 (280-122412-3) and HI-041119 (280-122412-4) were analyzed for Total Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 04/23/2019 and analyzed on 04/25/2019.

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

TOTAL METALS (ICPMS)

Samples HI-040819 (280-122412-1), HI-040919 (280-122412-2), HI-041019 (280-122412-3) and HI-041119 (280-122412-4) were analyzed for total metals (ICPMS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 04/19/2019 and 04/25/2019 and analyzed on 04/23/2019 and 04/26/2019.

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

Definitions/Glossary

Client: Intel Corporation
Project/Site: Semi Annual Waste Water

Job ID: 280-122412-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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)

Detection Summary

Client: Intel Corporation
Project/Site: Semi Annual Waste Water

Job ID: 280-122412-1

Client Sample ID: HI-040819

Lab Sample ID: 280-122412-1

No Detections.

Client Sample ID: HI-040919

Lab Sample ID: 280-122412-2

No Detections.

Client Sample ID: HI-041019

Lab Sample ID: 280-122412-3

No Detections.

Client Sample ID: HI-041119

Lab Sample ID: 280-122412-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1-Methyl-2-pyrrolidinone	930		390	66	ug/L	40		8270C	Total/NA
Ethylene glycol	6.9		5.0	1.2	mg/L	1		8015C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Method Summary

Client: Intel Corporation
Project/Site: Semi Annual Waste Water

Job ID: 280-122412-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8015C	Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)	SW846	TAL SAV
6010C	Metals (ICP)	SW846	TAL CF
6020A	Metals (ICP/MS)	SW846	TAL SL
6010B	SW846 6010B	SW846	
3010A	Preparation, Total Metals	SW846	TAL CF
3010A	Preparation, Total Metals	SW846	TAL SL
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

= McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565
TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396
TAL CF = Eurofins TestAmerica, Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401
TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Intel Corporation
Project/Site: Semi Annual Waste Water

Job ID: 280-122412-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-122412-1	HI-040819	Water	04/08/19 09:00	04/12/19 09:20
280-122412-2	HI-040919	Water	04/09/19 09:00	04/12/19 09:20
280-122412-3	HI-041019	Water	04/10/19 09:00	04/12/19 09:20
280-122412-4	HI-041119	Water	04/11/19 09:00	04/12/19 09:20

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: Intel Corporation
Project/Site: Semi Annual Waste Water

Job ID: 280-122412-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Client Sample ID: HI-041119
Date Collected: 04/11/19 09:00
Date Received: 04/12/19 09:20

Lab Sample ID: 280-122412-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methyl-2-pyrrolidinone	930		390	66	ug/L		04/17/19 10:31	04/19/19 14:42	40
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	79		38 - 120				04/17/19 10:31	04/19/19 14:42	40
2-Fluorophenol (Surr)	40		10 - 120				04/17/19 10:31	04/19/19 14:42	40
2,4,6-Tribromophenol (Surr)	74		28 - 120				04/17/19 10:31	04/19/19 14:42	40
Nitrobenzene-d5 (Surr)	68		32 - 120				04/17/19 10:31	04/19/19 14:42	40
Phenol-d5 (Surr)	24		10 - 120				04/17/19 10:31	04/19/19 14:42	40
Terphenyl-d14 (Surr)	76		23 - 127				04/17/19 10:31	04/19/19 14:42	40

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Client Sample ID: HI-041119
Date Collected: 04/11/19 09:00
Date Received: 04/12/19 09:20

Lab Sample ID: 280-122412-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	6.9		5.0	1.2	mg/L			04/22/19 22:52	1

Method: 6010C - Metals (ICP)

Client Sample ID: HI-040819
Date Collected: 04/08/19 09:00
Date Received: 04/12/19 09:20

Lab Sample ID: 280-122412-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indium	ND		0.50	0.026	mg/L		04/23/19 08:00	04/25/19 21:42	1

Client Sample ID: HI-040919
Date Collected: 04/09/19 09:00
Date Received: 04/12/19 09:20

Lab Sample ID: 280-122412-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indium	ND		0.50	0.026	mg/L		04/23/19 08:00	04/25/19 21:54	1

Client Sample ID: HI-041019
Date Collected: 04/10/19 09:00
Date Received: 04/12/19 09:20

Lab Sample ID: 280-122412-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indium	ND		0.50	0.026	mg/L		04/23/19 08:00	04/25/19 21:56	1

Client Sample ID: HI-041119
Date Collected: 04/11/19 09:00
Date Received: 04/12/19 09:20

Lab Sample ID: 280-122412-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indium	ND		0.50	0.026	mg/L		04/23/19 08:00	04/25/19 21:57	1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HI-040819
Date Collected: 04/08/19 09:00
Date Received: 04/12/19 09:20

Lab Sample ID: 280-122412-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Platinum	ND		1.0	0.40	ug/L		04/19/19 14:11	04/23/19 05:47	2

Eurofins TestAmerica, Denver

Client Sample Results

Client: Intel Corporation
Project/Site: Semi Annual Waste Water

Job ID: 280-122412-1

Method: 6020A - Metals (ICP/MS)

Client Sample ID: HI-040919
Date Collected: 04/09/19 09:00
Date Received: 04/12/19 09:20

Lab Sample ID: 280-122412-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Platinum	ND		1.0	0.40	ug/L		04/19/19 14:11	04/23/19 06:13	2

Client Sample ID: HI-041019
Date Collected: 04/10/19 09:00
Date Received: 04/12/19 09:20

Lab Sample ID: 280-122412-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Platinum	ND		1.0	0.40	ug/L		04/19/19 14:11	04/23/19 06:40	2

Client Sample ID: HI-041119
Date Collected: 04/11/19 09:00
Date Received: 04/12/19 09:20

Lab Sample ID: 280-122412-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Platinum	ND		1.0	0.40	ug/L		04/25/19 16:55	04/26/19 16:16	2

QC Sample Results

Client: Intel Corporation
Project/Site: Semi Annual Waste Water

Job ID: 280-122412-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-376906/8-A
Matrix: Water
Analysis Batch: 377287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376906

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methyl-2-pyrrolidinone	ND		10	1.7	ug/L		04/17/19 10:31	04/19/19 09:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	85		38 - 120	04/17/19 10:31	04/19/19 09:43	1
2-Fluorophenol (Surr)	63		10 - 120	04/17/19 10:31	04/19/19 09:43	1
2,4,6-Tribromophenol (Surr)	79		28 - 120	04/17/19 10:31	04/19/19 09:43	1
Nitrobenzene-d5 (Surr)	77		32 - 120	04/17/19 10:31	04/19/19 09:43	1
Phenol-d5 (Surr)	51		10 - 120	04/17/19 10:31	04/19/19 09:43	1
Terphenyl-d14 (Surr)	102		23 - 127	04/17/19 10:31	04/19/19 09:43	1

Lab Sample ID: LCS 240-376906/9-A
Matrix: Water
Analysis Batch: 377287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376906

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
2-Chloronaphthalene	20.0	15.6		ug/L		78	53 - 120
2-Chlorophenol	20.0	17.4		ug/L		87	53 - 120
2,4-Dichlorophenol	20.0	17.6		ug/L		88	55 - 120
2,4-Dimethylphenol	20.0	15.0		ug/L		75	52 - 120
2,4-Dinitrophenol	40.0	24.0		ug/L		60	12 - 120
2,4-Dinitrotoluene	20.0	20.0		ug/L		100	60 - 120
2-Nitrophenol	20.0	15.9		ug/L		79	54 - 120
1,2,4-Trichlorobenzene	20.0	15.5		ug/L		77	49 - 120
2,4,6-Trichlorophenol	20.0	16.5		ug/L		82	54 - 120
2,6-Dinitrotoluene	20.0	17.0		ug/L		85	60 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	80		38 - 120
2-Fluorophenol (Surr)	71		10 - 120
2,4,6-Tribromophenol (Surr)	88		28 - 120
Nitrobenzene-d5 (Surr)	92		32 - 120
Phenol-d5 (Surr)	54		10 - 120
Terphenyl-d14 (Surr)	99		23 - 127

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection)

Lab Sample ID: MB 680-567402/10
Matrix: Water
Analysis Batch: 567402

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylene glycol	ND		5.0	1.2	mg/L			04/22/19 21:39	1

QC Sample Results

Client: Intel Corporation
Project/Site: Semi Annual Waste Water

Job ID: 280-122412-1

Method: 8015C - Nonhalogenated Organic using GC/FID (Direct Aqueous Injection) (Continued)

Lab Sample ID: LCS 680-567402/5
Matrix: Water
Analysis Batch: 567402

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylene glycol	40.0	48.8		mg/L		122	61 - 148

Lab Sample ID: LCSD 680-567402/6
Matrix: Water
Analysis Batch: 567402

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
Ethylene glycol	40.0	49.5		mg/L		124	61 - 148	1	50

Lab Sample ID: 280-122412-4 MS
Matrix: Water
Analysis Batch: 567402

Client Sample ID: HI-041119
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylene glycol	6.9		40.0	46.0		mg/L		98	61 - 148

Lab Sample ID: 280-122412-4 MSD
Matrix: Water
Analysis Batch: 567402

Client Sample ID: HI-041119
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ethylene glycol	6.9		40.0	46.8		mg/L		100	61 - 148	2	50

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 310-236697/1-A
Matrix: Water
Analysis Batch: 237363

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 236697

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indium	ND		0.50	0.026	mg/L		04/23/19 08:00	04/25/19 21:39	1

Lab Sample ID: LCS 310-236697/2-A
Matrix: Water
Analysis Batch: 238261

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 236697

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Indium	2.00	2.10		mg/L		105	80 - 120

Lab Sample ID: 280-122412-1 MS
Matrix: Water
Analysis Batch: 237363

Client Sample ID: HI-040819
Prep Type: Total/NA
Prep Batch: 236697

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Indium	ND		2.00	1.90		mg/L		95	75 - 125

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QC Sample Results

Client: Intel Corporation
Project/Site: Semi Annual Waste Water

Job ID: 280-122412-1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 280-122412-1 MSD
Matrix: Water
Analysis Batch: 237363

Client Sample ID: HI-040819
Prep Type: Total/NA
Prep Batch: 236697

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Indium	ND		2.00	1.91		mg/L		96	75 - 125	1	20

Lab Sample ID: 310-153298-B-7-C DU
Matrix: Water
Analysis Batch: 237363

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 236697

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Indium	ND		ND		mg/L		NC	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 160-424455/1-A
Matrix: Water
Analysis Batch: 425118

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 424455

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Platinum	ND		1.0	0.40	ug/L		04/19/19 14:11	04/23/19 05:33	2

Lab Sample ID: LCS 160-424455/2-A
Matrix: Water
Analysis Batch: 425118

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 424455

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Platinum	10.0	11.3		ug/L		113	80 - 120

Lab Sample ID: 280-122412-1 MS
Matrix: Water
Analysis Batch: 425118

Client Sample ID: HI-040819
Prep Type: Total/NA
Prep Batch: 424455

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Platinum	ND		10.0	9.64		ug/L		96	75 - 125

Lab Sample ID: 280-122412-1 MSD
Matrix: Water
Analysis Batch: 425118

Client Sample ID: HI-040819
Prep Type: Total/NA
Prep Batch: 424455

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Platinum	ND		10.0	9.66		ug/L		97	75 - 125	0	20

Lab Sample ID: MB 160-425545/1-A
Matrix: Water
Analysis Batch: 426022

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 425545

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Platinum	ND		1.0	0.40	ug/L		04/25/19 16:55	04/26/19 16:02	2

Eurofins TestAmerica, Denver

QC Sample Results

Client: Intel Corporation
 Project/Site: Semi Annual Waste Water

Job ID: 280-122412-1

Method: 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 160-425545/2-A
Matrix: Water
Analysis Batch: 426022

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 425545
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Platinum	10.0	10.8		ug/L		108	80 - 120

Lab Sample ID: 280-122412-4 MS
Matrix: Water
Analysis Batch: 426022

Client Sample ID: HI-041119
Prep Type: Total/NA
Prep Batch: 425545
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Platinum	ND		10.0	9.27		ug/L		93	75 - 125

Lab Sample ID: 280-122412-4 MSD
Matrix: Water
Analysis Batch: 426022

Client Sample ID: HI-041119
Prep Type: Total/NA
Prep Batch: 425545
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Platinum	ND		10.0	9.36		ug/L		94	75 - 125	1	20

QC Association Summary

Client: Intel Corporation
Project/Site: Semi Annual Waste Water

Job ID: 280-122412-1

GC/MS Semi VOA

Prep Batch: 376906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-122412-4	HI-041119	Total/NA	Water	3510C	
MB 240-376906/8-A	Method Blank	Total/NA	Water	3510C	
LCS 240-376906/9-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 377287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-122412-4	HI-041119	Total/NA	Water	8270C	376906
MB 240-376906/8-A	Method Blank	Total/NA	Water	8270C	376906
LCS 240-376906/9-A	Lab Control Sample	Total/NA	Water	8270C	376906

GC VOA

Analysis Batch: 567402

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-122412-4	HI-041119	Total/NA	Water	8015C	
MB 680-567402/10	Method Blank	Total/NA	Water	8015C	
LCS 680-567402/5	Lab Control Sample	Total/NA	Water	8015C	
LCS 680-567402/6	Lab Control Sample Dup	Total/NA	Water	8015C	
280-122412-4 MS	HI-041119	Total/NA	Water	8015C	
280-122412-4 MSD	HI-041119	Total/NA	Water	8015C	

Metals

Prep Batch: 236697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-122412-1	HI-040819	Total/NA	Water	3010A	
280-122412-2	HI-040919	Total/NA	Water	3010A	
280-122412-3	HI-041019	Total/NA	Water	3010A	
280-122412-4	HI-041119	Total/NA	Water	3010A	
MB 310-236697/1-A	Method Blank	Total/NA	Water	3010A	
LCS 310-236697/2-A	Lab Control Sample	Total/NA	Water	3010A	
280-122412-1 MS	HI-040819	Total/NA	Water	3010A	
280-122412-1 MSD	HI-040819	Total/NA	Water	3010A	
310-153298-B-7-C DU	Duplicate	Total/NA	Water	3010A	

Analysis Batch: 237363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-122412-1	HI-040819	Total/NA	Water	6010C	236697
280-122412-2	HI-040919	Total/NA	Water	6010C	236697
280-122412-3	HI-041019	Total/NA	Water	6010C	236697
280-122412-4	HI-041119	Total/NA	Water	6010C	236697
MB 310-236697/1-A	Method Blank	Total/NA	Water	6010C	236697
280-122412-1 MS	HI-040819	Total/NA	Water	6010C	236697
280-122412-1 MSD	HI-040819	Total/NA	Water	6010C	236697
310-153298-B-7-C DU	Duplicate	Total/NA	Water	6010C	236697

Analysis Batch: 238261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 310-236697/2-A	Lab Control Sample	Total/NA	Water	6010C	236697

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QC Association Summary

Client: Intel Corporation
Project/Site: Semi Annual Waste Water

Job ID: 280-122412-1

Metals

Prep Batch: 424455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-122412-1	HI-040819	Total/NA	Water	3010A	
280-122412-2	HI-040919	Total/NA	Water	3010A	
280-122412-3	HI-041019	Total/NA	Water	3010A	
MB 160-424455/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-424455/2-A	Lab Control Sample	Total/NA	Water	3010A	
280-122412-1 MS	HI-040819	Total/NA	Water	3010A	
280-122412-1 MSD	HI-040819	Total/NA	Water	3010A	

Analysis Batch: 425118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-122412-1	HI-040819	Total/NA	Water	6020A	424455
280-122412-2	HI-040919	Total/NA	Water	6020A	424455
280-122412-3	HI-041019	Total/NA	Water	6020A	424455
MB 160-424455/1-A	Method Blank	Total/NA	Water	6020A	424455
LCS 160-424455/2-A	Lab Control Sample	Total/NA	Water	6020A	424455
280-122412-1 MS	HI-040819	Total/NA	Water	6020A	424455
280-122412-1 MSD	HI-040819	Total/NA	Water	6020A	424455

Prep Batch: 425545

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-122412-4	HI-041119	Total/NA	Water	3010A	
MB 160-425545/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-425545/2-A	Lab Control Sample	Total/NA	Water	3010A	
280-122412-4 MS	HI-041119	Total/NA	Water	3010A	
280-122412-4 MSD	HI-041119	Total/NA	Water	3010A	

Analysis Batch: 426022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-122412-4	HI-041119	Total/NA	Water	6020A	425545
MB 160-425545/1-A	Method Blank	Total/NA	Water	6020A	425545
LCS 160-425545/2-A	Lab Control Sample	Total/NA	Water	6020A	425545
280-122412-4 MS	HI-041119	Total/NA	Water	6020A	425545
280-122412-4 MSD	HI-041119	Total/NA	Water	6020A	425545

Lab Chronicle

Client: Intel Corporation
Project/Site: Semi Annual Waste Water

Job ID: 280-122412-1

Client Sample ID: HI-040819

Lab Sample ID: 280-122412-1

Date Collected: 04/08/19 09:00

Matrix: Water

Date Received: 04/12/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	236697	04/23/19 08:00	HED	TAL CF
Total/NA	Analysis	6010C		1			237363	04/25/19 21:42	SAD	TAL CF
Total/NA	Prep	3010A			50 mL	50 mL	424455	04/19/19 14:11	LAM	TAL SL
Total/NA	Analysis	6020A		2			425118	04/23/19 05:47	CB	TAL SL

Client Sample ID: HI-040919

Lab Sample ID: 280-122412-2

Date Collected: 04/09/19 09:00

Matrix: Water

Date Received: 04/12/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	236697	04/23/19 08:00	HED	TAL CF
Total/NA	Analysis	6010C		1			237363	04/25/19 21:54	SAD	TAL CF
Total/NA	Prep	3010A			50 mL	50 mL	424455	04/19/19 14:11	LAM	TAL SL
Total/NA	Analysis	6020A		2			425118	04/23/19 06:13	CB	TAL SL

Client Sample ID: HI-041019

Lab Sample ID: 280-122412-3

Date Collected: 04/10/19 09:00

Matrix: Water

Date Received: 04/12/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	236697	04/23/19 08:00	HED	TAL CF
Total/NA	Analysis	6010C		1			237363	04/25/19 21:56	SAD	TAL CF
Total/NA	Prep	3010A			50 mL	50 mL	424455	04/19/19 14:11	LAM	TAL SL
Total/NA	Analysis	6020A		2			425118	04/23/19 06:40	CB	TAL SL

Client Sample ID: HI-041119

Lab Sample ID: 280-122412-4

Date Collected: 04/11/19 09:00

Matrix: Water

Date Received: 04/12/19 09:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			1030 mL	2 mL	376906	04/17/19 10:31	ACS	TAL CAN
Total/NA	Analysis	8270C		40			377287	04/19/19 14:42	MRU	TAL CAN
Total/NA	Analysis	8015C		1			567402	04/22/19 22:52	LBH	TAL SAV
Total/NA	Prep	3010A			50 mL	50 mL	236697	04/23/19 08:00	HED	TAL CF
Total/NA	Analysis	6010C		1			237363	04/25/19 21:57	SAD	TAL CF
Total/NA	Prep	3010A			50 mL	50 mL	425545	04/25/19 16:55	LAM	TAL SL
Total/NA	Analysis	6020A		2			426022	04/26/19 16:16	CB	TAL SL

Laboratory References:

- = McCampbell Analytical, Inc., 1534 Willow Pass Road, Pittsburg, CA 94565
- TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396
- TAL CF = Eurofins TestAmerica, Cedar Falls, 704 Enterprise Drive, Cedar Falls, IA 50613, TEL (319)277-2401
- TAL SAV = Eurofins TestAmerica, Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858
- TAL SL = Eurofins TestAmerica, St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Eurofins TestAmerica, Denver



McC Campbell Analytical, Inc.

"When Quality Counts"

Analytical Report

WorkOrder: 1904821

Report Created for: TestAmerica Denver

4955 Yarrow Street
Arvada, CO 80002

Project Contact: DiLea R Bindel

Project P.O.:

Project: 28003759; Semi Annual Waste Water

Project Received: 04/17/2019

Analytical Report reviewed & approved for release on 04/24/2019 by:

Yen Cao

Project Manager

The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.





Glossary of Terms & Qualifier Definitions

Client: TestAmerica Denver
Project: 28003759; Semi Annual Waste Water
WorkOrder: 1904821

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ERS	External reference sample. Second source calibration verification.
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
TZA	TimeZone Net Adjustment for sample collected outside of MAI's UTC.
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)



Analytical Report

Client: TestAmerica Denver
Date Received: 4/17/19 9:59
Date Prepared: 4/17/19
Project: 28003759; Semi Annual Waste Water

WorkOrder: 1904821
Extraction Method: SW3050B
Analytical Method: SW6010B
Unit: µg/L

Metals

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
HI-040819 (280-122412-1)	1904821-001A	Water	04/08/2019 09:00	ICP-OES 27	176421

Analytes	Result	MDL	RL	DF	Date Analyzed
Gallium	ND	1.8	20	1	04/23/2019 11:41

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
HI-040919 (280-122412-2)	1904821-002A	Water	04/09/2019 09:00	ICP-OES 57	176421

Analytes	Result	MDL	RL	DF	Date Analyzed
Gallium	ND	1.8	20	1	04/23/2019 13:03

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
HI-041019 (280-122412-3)	1904821-003A	Water	04/10/2019 09:00	ICP-OES 58	176421

Analytes	Result	MDL	RL	DF	Date Analyzed
Gallium	ND	1.8	20	1	04/23/2019 13:06

Analyst(s): ND

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
HI-041119 (280-122412-4)	1904821-004A	Water	04/11/2019 09:00	ICP-OES 59	176421

Analytes	Result	MDL	RL	DF	Date Analyzed
Gallium	ND	1.8	20	1	04/23/2019 13:09

Analyst(s): ND



Quality Control Report

Client: TestAmerica Denver
Date Prepared: 4/17/19
Date Analyzed: 4/23/19
Instrument: ICP-OES
Matrix: Water
Project: 28003759; Semi Annual Waste Water

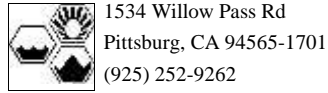
WorkOrder: 1904821
BatchID: 176421
Extraction Method: SW3050B
Analytical Method: SW6010B
Unit: µg/L
Sample ID: MB/LCS/LCSD-176421
 1904821-001AMS/MSD

QC Summary Report for Metals

Analyte	MB Result	MDL	RL	SPK Val	MB SS %REC	MB SS Limits
Gallium	ND	1.8	20	-	-	-
Surrogate Recovery						
Terbium	480			500	97	70-130

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
Gallium	990	1000	1000	99	100	85-115	0.419	20
Surrogate Recovery								
Terbium	480	490	500	97	97	70-130	0	20

Analyte	MS DF	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
Gallium	1	1100	1100	1000	ND	109	107	70-130	1.83	20
Surrogate Recovery										
Terbium	1	490	480	500		98	96	70-130	2.30	20



CHAIN-OF-CUSTODY RECORD

WorkOrder: 1904821

ClientCode: TADC

- WaterTrax
 WriteOn
 EDF
 Excel
 EQuIS
 Email
 HardCopy
 ThirdParty
 J-flag
 Detection Summary
 Dry-Weight

Report to:

DiLea R Bindel
 TestAmerica Denver
 4955 Yarrow Street
 Arvada, CO 80002
 303-736-0100 FAX: 303-431-7171

Email: dilea.bindel@testamericainc.com
 cc/3rd Party:
 PO:
 Project: 28003759; Semi Annual Waste Water

Bill to:

Accounts Payable
 TestAmerica
 4101 Shuffel Street NW
 North Canton, OH 44720
 AccountsPayable@testamericainc.com

Requested TAT: 5 days;

Date Received: 04/17/2019

Date Logged: 04/17/2019

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)													
					1	2	3	4	5	6	7	8	9	10	11	12		
1904821-001	HI-040819 (280-122412-1)	Water	4/8/2019 09:00	<input type="checkbox"/>	A													
1904821-002	HI-040919 (280-122412-2)	Water	4/9/2019 09:00	<input type="checkbox"/>	A													
1904821-003	HI-041019 (280-122412-3)	Water	4/10/2019 09:00	<input type="checkbox"/>	A													
1904821-004	HI-041119 (280-122412-4)	Water	4/11/2019 09:00	<input type="checkbox"/>	A													

Test Legend:

1	METALS_6010_TTLC_W	2		3		4	
5		6		7		8	
9		10		11		12	

Project Manager: Angela Rydelius

Prepared by: Tina Perez

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
 Hazardous samples will be returned to client or disposed of at client expense.



WORK ORDER SUMMARY

Client Name: TESTAMERICA DENVER

Project: 28003759; Semi Annual Waste Water

Work Order: 1904821

Client Contact: DiLea R Bindel

QC Level: LEVEL 2

Contact's Email: dilea.bindel@testamericainc.com

Comments:

Date Logged: 4/17/2019

WaterTrax WriteOn EDF Excel EQUiS Email HardCopy ThirdParty J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1904821-001A	HI-040819 (280-122412-1)	Water	SW6010B (Metals) <Gallium>	1	500mL HDPE w/ HNO3	<input type="checkbox"/>	4/8/2019 9:00	5 days	Trace	<input type="checkbox"/>	
1904821-002A	HI-040919 (280-122412-2)	Water	SW6010B (Metals) <Gallium>	1	500mL HDPE w/ HNO3	<input type="checkbox"/>	4/9/2019 9:00	5 days	Trace	<input type="checkbox"/>	
1904821-003A	HI-041019 (280-122412-3)	Water	SW6010B (Metals) <Gallium>	1	500mL HDPE w/ HNO3	<input type="checkbox"/>	4/10/2019 9:00	5 days	Trace	<input type="checkbox"/>	
1904821-004A	HI-041119 (280-122412-4)	Water	SW6010B (Metals) <Gallium>	1	500mL HDPE w/ HNO3	<input type="checkbox"/>	4/11/2019 9:00	5 days	Trace	<input type="checkbox"/>	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

Chain of Custody Record



1904021

Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:				
Shipping/Receiving		Phone:	Bindel, DiLea R		280-479032.1				
Company: McCampbell Analytical, Inc.		E-Mail: dilea.bindel@testamericainc.com		State of Origin:	Page:				
Address: 1534 Willow Pass Road,		Accreditations Required (See note):		New Mexico	Page 1 of 1				
City: Pittsburg		Analysis Requested		Job #:	280-122412-1				
State, Zip: CA, 94565		Due Date Requested: 4/24/2019		Preservation Codes:					
Phone:		TAT Requested (days):		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)					
Project Name: Semi Annual Waste Water		Project #: 28003759		Other:					
Site:		SSOW#:							
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastelol, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SUB (Gallium - McCampbell Analytical, Inc.) / Gallium	Total Number of Containers	Special Instructions/Note:
HI-040819 (280-122412-1)	4/8/19	09:00 Mountain		Water	X	X		1	
HI-040919 (280-122412-2)	4/9/19	09:00 Mountain		Water	X	X		1	
HI-041019 (280-122412-3)	4/10/19	09:00 Mountain		Water	X	X		1	
HI-041119 (280-122412-4)	4/11/19	09:00 Mountain		Water	X	X		1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification

Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2
 Return To Client Disposal By Lab Archive For _____ Months

Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____

Relinquished by: Samira Castro Date/Time: 4-15-19 1605 Company: TA
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: _____ Custody Seal No.: _____
 Yes No Cooler Temperature(s) °C and Other Remarks: Box: 475955776324



Sample Receipt Checklist

Client Name: **TestAmerica Denver**
Project: **28003759; Semi Annual Waste Water**

Date and Time Received: **4/17/2019 09:59**

Date Logged: **4/17/2019**

Received by: **Tina Perez**

Logged by: **Tina Perez**

WorkOrder №: **1904821** Matrix: Water
Carrier: FedEx

Chain of Custody (COC) Information

- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Sample IDs noted by Client on COC? Yes No
- Date and Time of collection noted by Client on COC? Yes No
- Sampler's name noted on COC? Yes No
- COC agrees with Quote? Yes No NA

Sample Receipt Information

- Custody seals intact on shipping container/cooler? Yes No NA
- Shipping container/cooler in good condition? Yes No
- Samples in proper containers/bottles? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No

Sample Preservation and Hold Time (HT) Information

- All samples received within holding time? Yes No NA
- Samples Received on Ice? Yes No

(Ice Type: WET ICE)

- Sample/Temp Blank temperature Temp: 3.2°C NA
- Water - VOA vials have zero headspace / no bubbles? Yes No NA
- Sample labels checked for correct preservation? Yes No
- pH acceptable upon receipt (Metal: <2; Nitrate 353.2/4500NO3: <2; 522: <4; 218.7: >8)? Yes No NA

UCMR Samples:

- pH tested and acceptable upon receipt (200.8: ≤2; 525.3: ≤4; 530: ≤7; 541: <3; 544: <6.5 & 7.5)? Yes No NA
- Free Chlorine tested and acceptable upon receipt (<0.1mg/L)? Yes No NA

Comments:

Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-122412-1

Login Number: 122412

List Source: Eurofins TestAmerica, Denver

List Number: 1

Creator: Paul, Amanda E

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
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?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-122412-1

Login Number: 122412

List Number: 2

Creator: Homolar, Dana J

List Source: Eurofins TestAmerica, Cedar Falls

List Creation: 04/16/19 09:56 AM

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.	True	
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 (excluding tests with immediate HTs)	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-122412-1

Login Number: 122412

List Number: 6

Creator: Bovy, Lorraine L

List Source: Eurofins TestAmerica, Cedar Falls

List Creation: 04/19/19 10:27 AM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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 (excluding tests with immediate HTs)	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 <math><6\text{mm}</math> (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-122412-1

Login Number: 122412

List Number: 3

Creator: Laughlin, Paul D

List Source: Eurofins TestAmerica, Savannah

List Creation: 04/16/19 05:15 PM

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.	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	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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	



Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-122412-1

Login Number: 122412

List Number: 5

Creator: Hellm, Michael

List Source: Eurofins TestAmerica, St. Louis

List Creation: 04/18/19 05:17 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	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	0.1
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	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Login Sample Receipt Checklist

Client: Intel Corporation

Job Number: 280-122412-1

Login Number: 122412

List Number: 7

Creator: Hellm, Michael

List Source: Eurofins TestAmerica, St. Louis

List Creation: 04/24/19 03:28 PM

Question	Answer	Comment
Radioactivity wasn't checked or is \leq 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.	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	0.1
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	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



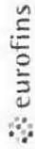
Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler: Bindel, Dilela R	Lab PM:	Carrier Tracking No(s):	COC No: 280-479034.1	
Client Contact: Shipping/Receiving		Phone:	E-Mail: dilea.bindel@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 1	
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 280-122412-1	Preservation Codes: A - HCL B - NaOH N - None O - AsNaO2 C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Address: 13715 Rider Trail North,		Due Date Requested: 4/24/2019	Analysis Requested:			
City: Earth City		TAT Requested (days):	Total Number of containers			
State, Zip: MO, 63045		PO #:	Perform MS/MSD (Yes or No)			
Phone: 314-298-8568(Tel) 314-298-8757(Fax)		WO #:	Field Filtered Sample (Yes or No)			
Email:		Project #:	6020A/3010A_2% (MOD) 6020A Platinum			
Project Name: Semi Annual Waste Water		SSOW#:	Special Instructions/Note:			
Site:						
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Preservation Code:	Total Number of containers
HI-040819 (280-122412-1)	4/8/19	09:00 Mountain		Water		1
HI-040919 (280-122412-2)	4/9/19	09:00 Mountain		Water		1
HI-041019 (280-122412-3)	4/10/19	09:00 Mountain		Water		1
HI-041119 (280-122412-4)	4/11/19	09:00 Mountain		Water		1
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.						
Possible Hazard Identification						
Unconfirmed <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2 Special Instructions/QC Requirements:						
Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____						
Relinquished by: <i>Christina Coates</i> Date: <i>4-15-19</i> Time: <i>1425</i> Company: <i>THC Per</i>						
Relinquished by: <i>Michael Sun</i> Date: <i>4-16-19</i> Time: <i>0915</i> Company: <i>THA 872</i>						
Relinquished by: _____ Date: _____ Time: _____ Company: _____						
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Cooler Temperature(s) °C and Other Remarks:						



Chain of Custody Record



Client Information (Sub Contract Lab)		Lab PM: Bindel, Dilela R	Carrier Tracking Note(s):	GOC No: 280-479031.1
Client Contact: Shipping/Receiving		E-Mail: dilela.bindel@testamericainc.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		
Address: 4101 Shuffel Street NW		Job #: 280-122412-1		
City: North Canton		Analysis Requested		
State, Zip: OH, 44720		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4.5 Z - other (specify)		
Phone: 330-497-9396(Tel) 330-497-0772(Fax)		Other:		
Email:		Total Number of containers		
Project Name: Semi Annual Waste Water		Special Instructions/Note: C154		
Site:		Field Filtered Sample (Yes or No)		
Due Date Requested: 4/25/2019		Perform MS/MSD (Yes or No)		
TAT Requested (days):		8270C/3510C_Acid 1-Methyl-2-Pyrrolidone (NMP)		
PO #:		Sample Date		
WO #:		Sample Time		
Project #: 28003759		Sample Time		
SSOW#:		Sample Date		
Sample Identification - Client ID (Lab ID)		Sample Time		
HI-041119 (280-122412-4)		Sample Date		
Sample Date		Sample Time		
4/11/19		09:00		
Sample Time		Matrix		
Mountain		Water		
Sample Type (C=Comp, G=grab)		Preservation Code:		
Sample Type		Field Filtered Sample (Yes or No)		
		X		
Sample Type		Perform MS/MSD (Yes or No)		
		X		
Sample Type		8270C/3510C_Acid 1-Methyl-2-Pyrrolidone (NMP)		
Sample Type		Total Number of containers		
		2		
Sample Type		Special Instructions/Note:		
		C154		
Sample Type		Field Filtered Sample (Yes or No)		
		X		
Sample Type		Perform MS/MSD (Yes or No)		
		X		
Sample Type		8270C/3510C_Acid 1-Methyl-2-Pyrrolidone (NMP)		
Sample Type		Total Number of containers		
		2		
Sample Type		Special Instructions/Note:		
		C154		

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
 Unconfirmed
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: *Diana Cooper* Date: *4-15-19 1430*
 Relinquished by: _____ Date/Time: _____
 Relinquished by: _____ Date/Time: _____
 Custody Seals Intact: _____ Custody Seal No.: _____
 Δ Yes Δ No

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:

Method of Shipment: _____
 Received by: _____ Date/Time: *4-16-19 920*
 Received by: _____ Date/Time: _____
 Received by: _____ Date/Time: _____
 Cooler Temperature(s) °C and Other Remarks:



TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : _____


Client Denver Site Name _____
 Cooler Received on 4-16-19 Opened on 4-16-19

Cooler unpacked by: _____

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____
 Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
 COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt See Multiple Cooler Form
 IR GUN# IR-8 (CF -0.2 °C) Observed Cooler Temp. 0.4 °C Corrected Cooler Temp. 0.2 °C
 IR GUN #36 (CF +0.7°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes No
 -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
 -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
 -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
 If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC984738
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? Yes No NA  Larger than this.
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
16. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: _____

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
 Sample(s) _____ were received in a broken container.
 Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
 Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____



280-122412 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

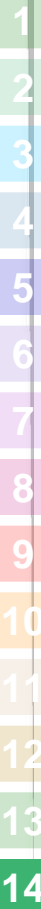
Client Information				
Client: TA Denver				
City/State:	CITY: Arvada	STATE: CO	Project: Semi Annual WW	
Receipt Information				
Date/Time Received:	DATE: 4/16/19	TIME: 0930	Received By: DW	
Delivery Type:	<input type="checkbox"/> UPS	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> FedEx Ground	<input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee
	<input type="checkbox"/> Lab Courier	<input type="checkbox"/> TA Field Services	<input type="checkbox"/> Client Drop-off	<input type="checkbox"/> Other: _____
Condition of Cooler/Containers				
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID: _____	
Multiple Coolers?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Cooler # _____ of _____	
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Trip Blank Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓	
Temperature Record				
Coolant:	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice	<input type="checkbox"/> Other: _____ <input type="checkbox"/> NONE
Thermometer ID:	N		Correction Factor (°C): +0.0	
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature				
Uncorrected Temp (°C):		Corrected Temp (°C):		
• Sample Container Temperature				
Container type(s) used:	CONTAINER 1: PL 250 Nitric B-1	CONTAINER 2: _____		
Uncorrected Temp (°C):	TEMP 1: 0.8	TEMP 2: _____	Corrected Temp (°C):	TEMP 1: 0.8
TEMP 2: _____				
Exceptions Noted				
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No				
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No				
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No				
NOTE: If yes, contact PM before proceeding. If no, proceed with login				
Additional Comments				



Chain of Custody Record



Client Information (Sub Contract Lab)		Sampler:	Lab PM:	Carrier Tracking No(s):	COC No:				
Company: TestAmerica Laboratories, Inc.		Phone:	Bindel, Dilca R		280-479033.1				
Address: 704 Enterprise Drive,		E-Mail:	dileca.bindel@testamericainc.com	State of Origin:	Page:				
City: Cedar Falls		PO #:		New Mexico	Page 1 of 1				
State, Zip: IA, 50613		WO #:		Accreditations Required (See note):	Job #:				
Phone: 319-277-2401(Tel) 319-277-2425(Fax)		Project #:			280-122412-1				
Email:		SSOW#:		Analysis Requested	Preservation Codes:				
Project Name: Semi Annual Waste Water					A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:				
Site:					M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (Specify)				
Sample Identification - Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastefl, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Form MS/MSD (Yes or No)	Total Number of Containers	Special Instructions/Note:
HI-040819 (280-122412-1)	4/8/19	09:00 Mountain	Water	X	X	6010C/3010A (MOD) 6010C Indium	1		
HI-040919 (280-122412-2)	4/9/19	09:00 Mountain	Water	X	X		1		
HI-041019 (280-122412-3)	4/10/19	09:00 Mountain	Water	X	X		1		
HI-041119 (280-122412-4)	4/11/19	09:00 Mountain	Water	X	X		1		
<p>Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.</p>									
Possible Hazard Identification									
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:									
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)									
Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2									
Empty Kit Relinquished by: _____ Date: _____ Time: _____ Method of Shipment: _____									
Relinquished by: <i>Sonia Coato</i> Date/Time: <i>4-15-19 1615</i> Received by: <i>TADE</i> Date/Time: _____ Company: _____									
Relinquished by: _____ Date/Time: _____ Received by: _____ Date/Time: _____ Company: _____									
Relinquished by: _____ Date/Time: _____ Received by: <i>TADE</i> Date/Time: <i>4/16/19 0930</i> Company: <i>TADE</i>									
Custody Seals Intact: _____ Custody Seal No.: _____ Δ Yes Δ No Cooler Temperature(s) °C and Other Remarks:									





Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client: TA Denver			
City/State:	CITY: Arvada	STATE: CO	Project: Semi Annual WW
Receipt Information			
Date/Time Received:	DATE: 4/16/19	TIME: 0930	Received By: DR
Delivery Type:	<input type="checkbox"/> UPS	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> FedEx Ground
	<input type="checkbox"/> Lab Courier	<input type="checkbox"/> TA Field Services	<input type="checkbox"/> Client Drop-off
		<input type="checkbox"/> US Mail	<input type="checkbox"/> Spee-Dee
		<input type="checkbox"/> Other:	
Condition of Cooler/Containers			
Sample(s) received in Cooler?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler ID:
Multiple Coolers?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Cooler # ____ of ____
Cooler Custody Seals Present?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	If yes: Cooler custody seals intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Sample Custody Seals Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No
Trip Blank Present?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓
Temperature Record			
Coolant:	<input checked="" type="checkbox"/> Wet ice	<input type="checkbox"/> Blue ice	<input type="checkbox"/> Dry ice
			<input type="checkbox"/> Other: _____
			<input type="checkbox"/> NONE
Thermometer ID:	N		Correction Factor (°C): +0.0
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature			
Uncorrected Temp (°C):	Corrected Temp (°C):		
• Sample Container Temperature			
Container type(s) used:	CONTAINER 1: PL 250 Nitric B-1	CONTAINER 2:	
Uncorrected Temp (°C):	TEMP 1: 0.8	TEMP 2:	Corrected Temp (°C): TEMP 1: 0.8
			TEMP 2:
Exceptions Noted			
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No			
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No			
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No			
NOTE: If yes, contact PM before proceeding. If no, proceed with login			
Additional Comments			

Place COC scanning label here

Cooler/Sample Receipt and Temperature Log Form

Client Information					
Client: TA St. Louis					
City/State: CITY St. Louis		STATE MO	Project: Semi Annual WNW		
Receipt Information					
Date/Time Received: DATE 4/19/19		TIME 0905	Received By: JB		
Delivery Type: <input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> FedEx Ground <input type="checkbox"/> US Mail <input type="checkbox"/> Spee-Dee <input type="checkbox"/> Lab Courier <input type="checkbox"/> TA Field Services <input type="checkbox"/> Client Drop-off <input type="checkbox"/> Other: _____					
Condition of Cooler/Containers					
Sample(s) received in Cooler?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes: Cooler ID:		
Multiple Coolers?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler # ____ of ____		
Cooler Custody Seals Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Cooler custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Sample Custody Seals Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Sample custody seals intact? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Trip Blank Present?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes: Which VOA samples are in cooler? ↓		
Temperature Record					
Coolant: <input type="checkbox"/> Wet ice <input type="checkbox"/> Blue ice <input type="checkbox"/> Dry ice <input type="checkbox"/> Other: _____ <input checked="" type="checkbox"/> NONE					
Thermometer ID:			Correction Factor (°C):		
• Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature					
Uncorrected Temp (°C):			Corrected Temp (°C):		
• Sample Container Temperature					
Container type(s) used:		CONTAINER 1		CONTAINER 2	
Uncorrected Temp (°C):		TEMP 1	TEMP 2	Corrected Temp (°C):	
Exceptions Noted					
1) If temperature exceeds criteria, was sample(s) received same day of sampling? <input type="checkbox"/> Yes <input type="checkbox"/> No					
a) If yes: Is there evidence that the chilling process began? <input type="checkbox"/> Yes <input type="checkbox"/> No					
2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) <input type="checkbox"/> Yes <input type="checkbox"/> No					
NOTE: If yes, contact PM before proceeding. If no, proceed with login					
Additional Comments					
No COC					

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Chain of Custody Record

Client Information (Sub Contract Lab) Client Contact: Shipping/Receiving Company: TestAmerica Laboratories, Inc. Address: 704 Enterprise Drive, City: Cedar Falls State, Zip: IA, 50613 Phone: 319-277-2401(Tel) 319-277-2425(Fax) Email:		Sampler: Bindel, Dilela R Lab PM: E-Mail: dilela.bindel@testamericainc.com Phone: Accreditations Required (See note):		Carrier Tracking No(s): COC No: 280-479033.1 Page: Page 1 of 1 Job #: 280-122412-1													
Due Date Requested: 4/24/2019 TAT Requested (days):		Analysis Requested															
PO #: WO #: Project #: 28003759 SSOW#:		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:															
Sample Identification - Client ID (Lab ID)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=waste/oli, B=issue, A=air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of Containers		Special Instructions/Note:	
HI-040819 (280-122412-1)		4/8/19		09:00 Mountain		Water		Water		X		X		1			
HI-040919 (280-122412-2)		4/9/19		09:00 Mountain		Water		Water		X		X		1			
HI-041019 (280-122412-3)		4/10/19		09:00 Mountain		Water		Water		X		X		1			
HI-041119 (280-122412-4)		4/11/19		09:00 Mountain		Water		Water		X		X		1			
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.																	
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)																	
Primary Deliverable Rank: 2 Date:																	
Relinquished by: <i>Sayma Coatro</i> Date/Time: 4-15-19 1615 Company: <i>IA Lab</i>																	
Relinquished by: <i>[Signature]</i> Date/Time:																	
Relinquished by: <i>[Signature]</i> Date/Time:																	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:																	
Relinquished by: <i>[Signature]</i> Date/Time: 4/16/19 0930 Company: <i>IA Lab</i>																	
Relinquished by: <i>[Signature]</i> Date/Time:																	
Relinquished by: <i>[Signature]</i> Date/Time:																	
Custody Temperature(s) °C and Other Remarks:																	



Chain of Custody Record



Client Information (Sub Contract Lab)		Lab P.M.: Bindel, Dilca R	Carrier Tracking No(s): 280-479030.1
Company: TestAmerica Laboratories, Inc.		E-Mail: dilca.bindel@testamericainc.com	Page: Page 1 of 1
Address: 5102 LaRoche Avenue, Savannah, GA, 31404		State of Origin: New Mexico	Job #: 280-122412-1
Phone: 912-354-7858(Tel) 912-352-0165(Fax)		Accreditations Required (See note):	Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify) Other:
Due Date Requested: 4/24/2019		Analysis Requested	
TAT Requested (days):		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anichlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA	
PO #:	WO #:	Total Number of containers	
Project #: 28003759	Project Name: Semi Annual Waste Water	3	
SSOW#:	Site:	Special Instructions/Note:	
Sample Identification - Client ID (Lab ID)		8015C_DAI (MOD) 8015C Ethylene Glycol	
Sample Date: 4/11/19	Sample Time: 09:00 Mountain	Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/>	
Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BI=BISSUB, A=AL)	Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>	
Sample Time: 09:00 Mountain	Preservation Code: Water	8015C_DAI (MOD) 8015C Ethylene Glycol	
<p>Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.</p>			
Possible Hazard Identification			
Unconfirmed <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For <input type="checkbox"/> Months			
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2			
Empty Kit Relinquished by: Date: Time: Method of Shipment:			
Relinquished by: Diana Cook	Date/Time: 4-15-19 1545	Received by: J. Alder	Date/Time: 4-16-19 0905
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.6/26	



ATTACHMENT E

Site Outfall Flow Meter Calibration Records

Calibration performed on 6/27/2019.

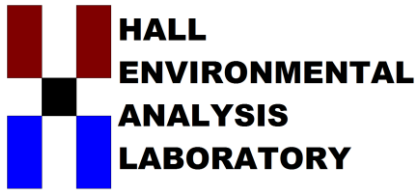
	<input type="checkbox"/> Teledyne ISCO Signature Flow Meter Installation and Operation Guide <input type="checkbox"/> Magnetrol Model R82 Pulse Burst Radar Level Transmitter Installation and Operation Manual
80	Technical PM Procedure (Perform in Sequence)
1	Set Up/Staging
1.1	Verify that all parts from Section 20 are on hand.
1.2	Don PPE per Section 10G.
2	Shutdown
2.1	N/A
3	PM Steps
3.1	Set the calibration target to exactly 1 foot.
3.2	On the ultrasonic unit, select Menu (softkey B), Configure Options (option 2), Adjust (option 3), Level, 310 Level.
3.3	Carefully place the target directly below the flow meter's ultrasonic transducer. Make sure the foot of the pole assembly is resting on the bottom of the flume, the pole is held vertically, and the calibration target is level.
3.4	After the flow meter has stabilized on the flow meter's display, make note of the as-found level: Ultrasonic Calibration (Primary Unit) As-Found Level: <u>1.033</u> ft. As-Left Level: <u>1.000</u> ft.
3.5	Enter 1.000 ft in the level field and select the Adjust button.
3.6	Go back to the Home Screen, remove the target, and wait until the flow starts registering.

<p>3.9</p>	<p>After the flow meter has stabilized on the flow meter's display, make note of the as-found level:</p> <p>Radar Calibration (Backup Unit)</p> <p>As-Found Level: <u>0.912</u> ft.</p> <p>As-Left Level: <u>1.008</u> ft.</p>
<p>3.10</p>	<p>On the Hart Communicator, select:</p> <ul style="list-style-type: none"> -Online -Device Setup (9) Tank Height <i>Level</i> <p>Adjust the Tank Height Parameter in 0.1-in increments until the level is as close as possible to 1.000 foot. If the level is too high, decrease the tank height and if the level is too low, increase the tank height.</p> <p>To adjust tank height, select:</p> <ul style="list-style-type: none"> -Enter -Send <p>Repeat adjustments until the level is as close as possible to 1.000 foot. When completed, make note of the as-left level above.</p>
<p>4</p>	<p>Startup</p>
<p>4.1</p>	<p>N/A</p>
<p>5</p>	<p>Cleanup</p>
<p>5.1</p>	<p>Account for all tools and return to their appropriate storage area.</p>
<p>5.2</p>	<p>Provide EHS with a copy of the procedure including the noted as-found and as-left levels.</p>

Basic Configuration →

ATTACHMENT F

May Cerium Sampling Report



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

July 12, 2019

Carrie Weitz

Intel Corporation

4100 Sara Road

M/S R8-103

Rio Rancho, NM 87124

TEL: (505) 794-4912

FAX:

RE: Cerium

OrderNo.: 1906393

Dear Carrie Weitz:

Hall Environmental Analysis Laboratory received 4 sample(s) on 6/5/2019 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a white background.

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109



18804 North Creek Parkway, Ste 100, Bothell, WA 98011 • USA • T: 206 632 6206 F: 206 632 6017 • info@brooksapplied.com

July 12, 2019

Hall Environmental
ATTN: Andy Freeman
4901 Hawkins NE, Suite D
Albuquerque, NM 87109
Andy@hallenvironmental.com

RE: Project HLL-NM1901

Dear Andy Freeman,

On June 12, 2019, Brooks Applied Labs (BAL) received four (4) water samples for trace metals analysis. The samples were logged-in for the contracted analysis according to the chain-of-custody (COC) form.

Sample *Cerium-01-MAY* (1924024-01) was received with a broken container lid. A few pieces of the lid were visible in the sample, and some of the sample itself, had leaked into the shipping container. Although, the none of samples were individually bagged, the other samples appeared to be sealed. BAL cannot, however, guarantee that cross contamination did not occur, and this should be taken into consideration when evaluating the results. The client was contacted and approved proceeding with analysis. Therefore, sample *Cerium-01-MAY* (1924024-01) was transferred into a new container, and no further action was taken.

Otherwise, the samples were received and stored according to BAL SOPs and EPA methodology.

All aqueous samples were digested on a hotblock via modified EPA Method 1638 with nitric and hydrochloric acids.

Trace metals were analyzed using inductively coupled plasma triple quadrupole mass spectrometry (ICP-QQQ-MS). The ICP-QQQ-MS uses advanced interference removal techniques to ensure accuracy of the sample results. For more information, please visit the Interference Reduction Technology section on our website, brooksapplied.com.

The results were not method blank corrected as described in the calculations section of the relevant BAL SOPs and were evaluated using reporting limits adjusted to account for sample aliquot size. Aside from concentration qualifiers, all data was reported without further qualification and all other associated quality control sample results met the acceptance criteria.

BAL, an accredited laboratory, certifies that the reported results of all analyses for which BAL is NELAP accredited meet all NELAP requirements. For more information please see the *Report Information* page in your report. Please feel free to contact us if you have any questions regarding this report.

Sincerely,

A handwritten signature in black ink that reads 'Lauren Blaiwes'.

Lauren Blaiwes
Project Manager
Lauren@brooksapplied.com



Report Information

Laboratory Accreditation

BAL is accredited by the *National Environmental Laboratory Accreditation Program* (NELAP) through the State of Florida Department of Health, Bureau of Laboratories (E87982) and is certified to perform many environmental analyses. BAL is also certified by many other states to perform environmental analyses. For a current list of our accreditations/certifications, please visit our website at <<http://www.brooksapplied.com/resources/certificates-permits/>>. Results reported relate only to the samples listed in the report.

Field Quality Control Samples

Please be notified that certain EPA methods require the collection of field quality control samples of an appropriate type and frequency; failure to do so is considered a deviation from some methods and for compliance purposes should only be done with the approval of regulatory authorities. Please see the specific EPA methods for details regarding required field quality control samples.

Common Abbreviations

AR	as received	MS	matrix spike
BAL	Brooks Applied Labs	MSD	matrix spike duplicate
BLK	method blank	ND	non-detect
BS	blank spike	NR	non-reportable
CAL	calibration standard	N/C	not calculated
CCB	continuing calibration blank	PS	post preparation spike
CCV	continuing calibration verification	REC	percent recovery
COC	chain of custody record	RPD	relative percent difference
D	dissolved fraction	SCV	secondary calibration verification
DUP	duplicate	SOP	standard operating procedure
IBL	instrument blank	SRM	standard reference material
ICV	initial calibration verification	T	total fraction
MDL	method detection limit	TR	total recoverable fraction
MRL	method reporting limit		

Definition of Data Qualifiers

(Effective 9/23/09)

E	An estimated value due to the presence of interferences. A full explanation is presented in the narrative.
H	Holding time and/or preservation requirements not met. Please see narrative for explanation.
J	Detected by the instrument, the result is > the MDL but ≤ the MRL. Result is reported and considered an estimate.
J-1	Estimated value. A full explanation is presented in the narrative.
M	Duplicate precision (RPD) was not within acceptance criteria. Please see narrative for explanation.
N	Spike recovery was not within acceptance criteria. Please see narrative for explanation.
R	Rejected, unusable value. A full explanation is presented in the narrative.
U	Result is ≤ the MDL or client requested reporting limit (CRRL). Result reported as the MDL or CRRL.
X	Result is not BLK-corrected and is within 10x the absolute value of the highest detectable BLK in the batch. Result is estimated.

These qualifiers are based on those previously utilized by Brooks Applied Labs, those found in the EPA SOW ILM03.0, Exhibit B, Section III, pg. B-18, and the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review; USEPA; January 2010. These supersede all previous qualifiers ever employed by BAL.

Project ID: HLL-NM1901
 PM: Lauren Blaiwes



BAL Report 1924024
 Client PM: Andy Freeman
 Client Project: HLL-NM1901

Sample Information

Sample	Lab ID	Report Matrix	Type	Sampled	Received
CERIUM-01-MAY	1924024-01	Water	Sample	05/06/2019	06/12/2019
CERIUM-02-MAY	1924024-02	Water	Sample	05/13/2019	06/12/2019
CERIUM-03-MAY	1924024-03	Water	Sample	05/20/2019	06/12/2019
CERIUM-04-MAY	1924024-04	Water	Sample	05/27/2019	06/12/2019

Batch Summary

Analyte	Lab Matrix	Method	Prepared	Analyzed	Batch	Sequence
Ce	Water	EPA 1638 Mod	06/25/2019	07/09/2019	B191632	1900859

Sample Results

Sample	Analyte	Report Matrix	Basis	Result	Qualifier	MDL	MRL	Unit	Batch	Sequence
CERIUM-01-MAY, 1906393-001A										
1924024-01	Ce	Water	TR	49.5		2.10	20.0	µg/L	B191632	1900859
CERIUM-02-MAY, 1906393-002A										
1924024-02	Ce	Water	TR	67.2		2.10	20.0	µg/L	B191632	1900859
CERIUM-03-MAY, 1906393-003A										
1924024-03	Ce	Water	TR	11.9	J	2.10	20.0	µg/L	B191632	1900859
CERIUM-04-MAY, 1906393-004A										
1924024-04	Ce	Water	TR	117		2.10	20.0	µg/L	B191632	1900859

Project ID: HLL-NM1901
 PM: Lauren Blaiwes



BAL Report 1924024
 Client PM: Andy Freeman
 Client Project: HLL-NM1901

Accuracy & Precision Summary

Batch: B191632
 Lab Matrix: Water
 Method: EPA 1638 Mod

Sample	Analyte	Native	Spike	Result	Units	REC & Limits	RPD & Limits
B191632-BS1	Blank Spike, (1749193) Ce		24000	25220	µg/L	105% 75-125	
B191632-DUP1	Duplicate, (1924024-04) Ce	117.3		140.6	µg/L		18% 20
B191632-MS1	Matrix Spike, (1924024-04) Ce	117.3	24000	25560	µg/L	106% 75-125	
B191632-MSD1	Matrix Spike Duplicate, (1924024-04) Ce	117.3	24000	26220	µg/L	109% 75-125	3% 20

Method Blanks & Reporting Limits

Batch: B191632
 Matrix: Water
 Method: EPA 1638 Mod
 Analyte: Ce

Sample	Result	Units
B191632-BLK1	0.006	µg/L
B191632-BLK2	0.003	µg/L
B191632-BLK3	0.004	µg/L
B191632-BLK4	0.003	µg/L
Average:	0.004	
Limit:	0.080	
	MDL: 0.008	
	MRL: 0.080	

Project ID: HLL-NM1901
PM: Lauren Blaiwes



BAL Report 1924024
Client PM: Andy Freeman
Client Project: HLL-NM1901

Sample Containers

Lab ID: 1924024-01
Sample: CERIUM-01-MAY
Report Matrix: Water
Sample Type: Sample
Collected: 05/06/2019
Received: 06/12/2019

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided	250mL	na	HNO3 (Client)	na	<2	Cooler - 1924024

Comments: Sample Lid received shattered and inside sample container.

Lab ID: 1924024-02
Sample: CERIUM-02-MAY
Report Matrix: Water
Sample Type: Sample
Collected: 05/13/2019
Received: 06/12/2019

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided	250mL	na	HNO3 (Client)	na	<2	Cooler - 1924024

Lab ID: 1924024-03
Sample: CERIUM-03-MAY
Report Matrix: Water
Sample Type: Sample
Collected: 05/20/2019
Received: 06/12/2019

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided	250mL	na	HNO3 (Client)	na	<2	Cooler - 1924024

Lab ID: 1924024-04
Sample: CERIUM-04-MAY
Report Matrix: Water
Sample Type: Sample
Collected: 05/27/2019
Received: 06/12/2019

Des	Container	Size	Lot	Preservation	P-Lot	pH	Ship. Cont.
A	Client-Provided	250mL	na	HNO3 (Client)	na	<2	Cooler - 1924024

Project ID: HLL-NM1901
PM: Lauren Blaiwes



BAL Report 1924024
Client PM: Andy Freeman
Client Project: HLL-NM1901

Shipping Containers

Cooler - 1924024

Received: June 12, 2019 10:00
Tracking No: 7754 4703 9614 via FedEx
Coolant Type: Blue Ice
Temperature: 0.8 °C

Description: Cooler
Damaged in transit? No
Returned to client? No
Comments: IR#17

Custody seals present? Yes
Custody seals intact? Yes
COC present? Yes



CHAIN OF CUSTODY RECORD

PAGE: 1 OF 1

Hall Environmental Analysis Laboratory
4901 Hancock Blvd. Report 1924024

Blacksburg, VA 24060
TEL: 505-345-3975
FAX: 505-345-4107
Website: www.hallenvironmental.com

SUB CONTRACTOR	Brooks Applied Lab	COMPANY	Brooks Applied Lab	PHONE	(206) 632-6206	FAX	
ADDRESS	18804 Northreek Parkway, Ste 100						
CITY, STATE, ZIP	Bothell, WA 98011						
ACCOUNT #							
EMAIL							

ITEM	SAMPLE	CLIENT SAMPLE ID	BOTTLE TYPE	MATRIX	COLLECTION DATE	# CONTAINERS	ANALYTICAL COMMENTS
1	1906393-001A	CERIUM-01-MAY	125HDPHNO	Aqueous	5/6/2019 9:40:00 AM	1	CERIUM
2	1906393-002A	CERIUM-02-MAY	125HDPHNO	Aqueous	5/13/2019 9:45:00 AM	1	CERIUM
3	1906393-003A	CERIUM-03-MAY	125HDPHNO	Aqueous	5/20/2019 3:30:00 PM	1	CERIUM
4	1906393-004A	CERIUM-04-MAY	125HDPHNO	Aqueous	5/27/2019 11:00:00 AM	1	CERIUM

SPECIAL INSTRUCTIONS/COMMENTS:

Please include the LAB ID and the CLIENT SAMPLE ID on all final reports. Please e-mail results to lab@hallenvironmental.com. Please return all coolers and blue ice. Thank you.

Relinquished By: <i>Yue</i>	Date: 6/7/2019	Time: 3:24 PM	Received By:	Date:	Time:	REPORT TRANSMITTAL DESIRED
Relinquished By:	Date:	Time:	Received By:	Date:	Time:	HARDCOPY (extra cost) <input type="checkbox"/> FAX <input type="checkbox"/> EMAIL <input type="checkbox"/> ONLINE <input type="checkbox"/>
Relinquished By: <i>per j...</i>	Date: 6/12/19	Time: 10:10	Received By:	Date:	Time:	FOR LAB USE ONLY
TAT: <input checked="" type="checkbox"/> Standard			Received By:	Date:	Time:	Temp of samples <input type="checkbox"/> C <input type="checkbox"/> Attempt to Cool?
			Received By:	Date:	Time:	Comments
			Received By:	Date:	Time:	

Sample Log-In Check List

Client Name: Intel Corp

Work Order Number: 1906393

RcptNo: 1

Received By: Desiree Dominguez

6/5/2019 1:35:00 PM



Completed By: Yazmine Garduno

6/7/2019 3:11:41 PM



Reviewed By: *Tom 6-7-19*

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes No NA
4. Were all samples received at a temperature of >0° C to 6.0°C Yes No NA
5. Sample(s) in proper container(s)? Yes No Not required
6. Sufficient sample volume for indicated test(s)? Yes No
7. Are samples (except VOA and ONG) properly preserved? Yes No
8. Was preservative added to bottles? Yes No NA
9. VOA vials have zero headspace? Yes No No VOA Vials
10. Were any sample containers received broken? Yes No
11. Does paperwork match bottle labels? Yes No
(Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes No
13. Is it clear what analyses were requested? Yes No
14. Were all holding times able to be met? Yes No
(If no, notify customer for authorization.)

of preserved bottles checked for pH: 4
(<2 or >12 unless noted)

Adjusted? no

Checked by: JSC 6-7-19

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	11.6	Good	Yes			

Chain-of-Custody Record

Client: Intel Corp
 Mailing Address: 4100 SARA RD
 Phone #: 505-270-7400
 email or Fax#: _____
 QA/QC Package: Standard Level 4 (Full Validation)
 Accreditation: Az Compliance NELAC Other
 EDD (Type) _____

Turn-Around Time: Standard Rush
 Project Name: CERIUM
 Project #: _____
 Project Manager: CAROL WEITZ
 Sampler: _____
 On Ice: Yes No
 # of Coolers: 1
 Cooler Temp (including CF): 11.1 + 0.5 = 11.6 °C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
 www.hallenvironmental.com
 4901 Hawkins NE - Albuquerque, NM 87109
 Tel. 505-345-3975 Fax 505-345-4107

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMBs (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCBs	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO ₃ , NO ₂ , PO ₄ , SO ₄	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	
5/16/19	0940	W	CERIUM-01-MAY		H2O3	1906343 -001	X										
5/19/19	0945	W	CERIUM-02-MAY		H2O3	-002	X										
5/20/19	1530	W	CERIUM-03-MAY		H2O3	-003	X										
5/21/19	1100	W	CERIUM-04-MAY		H2O3	-004	X										

Analysis Request

Received by: Amy Reed, Intel Date: 5/19/19 Time: 11:10 AM
 Relinquished by: Karl Hestand-AR
 Received by: Carol Weitz Date: 6/15/19 Time: 13:35
 Relinquished by: Carol Weitz
 Via: Courier

Remarks:

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.