

November 2, 2018

Mr. James E. Moseley
Chief Executive Officer
Sun Fire Defense
4300 Promenade Way
Marina Del Ray, CA. 90292

Subject: Sun Fire Defense SPF 3000; Finished Product Analysis and Hazardous Waste Classification

Dear Mr. Moseley:

As requested, Turner/Maclane Inc. has completed a laboratory analytical evaluation of test specimens of 1x6 inch wood samples previously treated with Sun Fire Defense SPF 3000 Clear Spray. The purpose of the testing was to determine if the treated and cured wood samples contained contaminants consisting of either Volatile Organic Chemicals (VOCs) or residual heavy metals. The certified analytical report provided on November 1, 2018, by Test America laboratories documents that the samples analyzed contained non-detect levels of VOCs. The heavy metal analysis reported trace levels of 7 of the 16 metals analyzed. None of the reported values exceeded Environmental Screening Levels (ESLs) or Hazardous Waste Concentrations established by California Regulatory Agencies or the U.S. Environmental Protection Agency.

The following sections document the methodology, results and relevant background information used in this evaluation.

BACKGROUND:

Sun Fire Defense SPF3000 Clear Spray is a proprietary fire retardant mixture which when applied to buildings and other structures is intended to provide temporal protection from flames and burning embers as commonly generated in wildfire scenarios.

Material Safety Data Sheets (MSDS) for the SPF 3000, document that the proprietary formulation *as a liquid product*, incorporating, among others, the following compounds:

- Acetone
- Butanol
- Cobalt naphthalene
- 4-Chloro-4 (trifluoromethyl) Benzene
- Toluene

- Mineral Spirits
- Xylene
- Zinc Borate

The above listed compounds, if mismanaged or discharged at concentrations exceeding established health based or environmental standards, could pose a potential threat to human health or the environment. Because of this potential, Sun Fire Defense requested Turner/Maclane to conduct an evaluation of treated and cured wood materials to determine if the finished materials would pose an environmental or health threat. In addition, Sun Fire Defense wished to determine if normal treatment process used by the company would render the treated materials to be classified as a 'hazardous waste' by state or federal regulatory standards. (MSDS Sheets are attached in Appendix A)

Methodology:

On October 19th, 2018, Turner/Maclane received three, ten-inch length sample boards, consisting of 1 inch x 6 inch common pine construction lumber. The boards had been treated with Sun Fire Defense SPF 3000 flame retardant. The finished side of each sample appeared to have been treated with a clear paint finish. Close inspection of the cross section of the samples indicated that the applied coating was approximately 2-3 mils in thickness. (See Photo #1)

Based on the list of compounds described in the MSDS sheets, it was determined that the cured samples would be analyzed for residual VOCs, and the suite of common heavy metals as described in both Federal and State Regulations. (e.g. Resource Conservation and Recovery Act or RCRA, and the California Hazardous Waste Control Act or HWCA) The EPA prescribes specific protocols for sample preparation and analysis for both VOCs and Heavy Metals analysis in solid samples. (EPA: SW-846 Compendium; Test Methods for Evaluating Solid Waste) The EPA prescribed analytical method for solid samples for VOCs is Method 8260B. The method for Heavy Metals analysis is Method 6010B.

Since neither of these methods will accommodate the analysis of a solid wood plank, it was necessary to essentially grind the wood samples down to a size which is suitable for the analytical extraction. This was accomplished with the use of a power grinder (hand tools) fitted with a new, course textured, aluminum oxide abrasive wheel. The shavings from the grinding process were screened through a clean #10 soil sieve into a clean plastic container, transferred to laboratory supplied sample jars, and delivered to the Test America Certified Laboratory in Pleasanton California. (Photos #2 & 3)

Results:

The certified analytical results are reported in Test America Report # 720-89227-1. (Appendix B)

The results reported for VOCs contained in the cured wood samples were all reported **non-detect** results, below the laboratory reporting limits. The sample was run for the suite of 66 listed VOC compounds.

The analysis for residual heavy metals reported positive detections for 7 of the 16 EPA 'Priority Pollutant Metals' tested. Table 1 provides a list of the positive detections reported. For comparison, this table also includes the 'Environmental Screening Levels' (ESLs) published by the San Francisco Regional Water Quality Control Board, as well as the California Department of Toxic Substances Control (DTSC) numeric values for metals which define Hazardous Wastes in California:

TABLE 1: All results reported in milligrams/kilogram. (mg/Kg)

Metal	Sample Result	Reporting Limit	RWQCB ESL	DTSC Hazardous Waste Criteria
Barium	23	0.49	15,000	10,000
Chromium	0.77	0.49	120,000	500
Cobalt	14	0.19	23.0	8,000
Copper	7.4	1.5	3100	2,500
Lead	0.89	0.49	80	1,000
Nickel	0.72	0.49	820	2,000
Zinc	23	1.5	23,000	5,000

Conclusion:

Turner/Maclane has completed an assessment of samples of wooden building materials which had been previously treated with the commercial fire retardant product Sun Fire Defense SPF 3000. It has been represented that the materials submitted for testing were treated by the "normal and customary" means of application as to quantity and process of application of the fire retardant product.

Turner/Maclane researched the list of active and inactive substances as shown in the MSDs documentation supplied by Sun Fire Defense. Based on that assessment, Turner/Maclane prepared the samples for analysis, delivered the samples to a California Certified Testing Laboratory, and specified the analysis to be performed.

Dwight Hoenig, President

The laboratory analysis has documented that all results were “non-detect” for VOCs, that is, there were no VOCs present at concentrations above the laboratory reporting limits.

While the samples did show positive results for seven specific heavy metals, the concentrations reported were well below the ESLs published by the San Francisco Regional Water Quality Control Board. Similarly, the concentrations reported were several orders of magnitude below the levels which would classify the treated wood as a hazardous waste in the State of California.

Accordingly, the data indicates that the cured wood products treated with Sun Fire Defense SPF 3000, do not exhibit properties of a hazardous waste, and by the data developed in this study, do not show any evidence of posing an environmental threat to the structures to which they are applied.

Should you have any questions on the results of this analysis or the methodology employed, please do not hesitate to contact me.

Sincerely,

Dwight Hoenig
President, Turner/Maclane Inc.

PHOTOS



Project No. Sun Fire Defense	Description	Treated Wood Samples as provided to Turner/Maclane	Photo 1
			Photo Date October 18, 2018



Project No. Sun Fire Defense	Description	Ground Wood Samples , post grinding	Photo 2
			Photo Date October 18, 2018



Project No. Sun Fire Defense	Description	Prepared Samples Prepared for Lab Analysis	Photo 3
			Photo Date October 18, 2018

Appendix A
MSDS Sheets

, RESINS AND RELATED MATERIALS

MANUFACTURER'S NAME
ENGINEERED COATINGS INC.
3121 EAST ANA STREET
RANCHO DOMINGUEZ, CA. 90221

EMERGENCY TELEPHONE No. :
CHEMTREC (800) 424-9300

INFORMATION TELEPHONE No. :
(213) 494-7714 / (310) 930-3030

CUSTOMER: SUNSEEKER ENTERPRISES
PREPARATION DATE: 06-May-15

LOT # SAMPLE

SECTION I - PRODUCT IDENTIFICATION

		HAZARDOUS MATERIALS IDENTIFICATION SYSTEM	
PRODUCT NAME:	ECI557	HEALTH=	2
PRODUCT CODE :	FLAMEPROOF, CLEAR	FIRE=	3
C.A.S. NUMBER:	MIXTURE	REACTIVE =	0
		PERSONAL	
		PROTECTION =	H

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENTS	C.A.S. NUMBER	WEIGHT	EXPOSURE LIMITS	VAPOR PRESSURE
		PERCENT	TLV/PEL	mmHg @ TEMP.
*TOLUENE	108-88-3	0.96%	100/150 PPM	22.00 @ 68 DEG. F
ACETONE SOLVENT	67-64-1	35.02%	750/1000 PPM (1)	181.70 @ 68 DEG. F.
MINERAL SPIRITS	8052-41-3	1.00%	50/50 PPM	2.00 @ 68 DEG. F.
*XYLENE	1330-20-7	24.63%	100/150 PPM	5.10 @ 68 DEG F.
*NORMAL BUTANOL	71-36-3	1.64%	50/50 PPM	4.40 @ 68 DEG. F
BENZENE, 1-CHLORO-4-(TRIFLUOROMETHYL)-	98-56-6	5.95%	N/E	N/E

VM& P NAPTHA CONTAINS LESS OF 8% OF XYLENE CAS# 1330-20-7 WHICH HAVE A PEL/TLV OF 100 PPM. STEL OF 150 PPM AND
LES S THAN 2% OF ETHYL BENZENE CAS# 100-41-4, WHICH HAS A PEL/TLV OF 100 PPM STEL OF 125 PPM .
OSHA SHORT TERM EXPOSURE LIMIT STEL FOR V&P NAPTHA IS 400 PPM

NOTE (1) OSHA/ACGIH SHORT TERM EXPOSURE LIMIT(STEEL) FOR ACETONE IS 1000 PPM. NIOSH RECOMMENDS A LIMIT OF 250 PPM 8-HRS. TWA

(*) HE REPORTING REQUIREMENTS OF SECTION 313 TITLE III AND CFR 372

SECTION III - PHYSICAL DATA

SPECIFIC GRAVITY:	0.94	BOILING RANGE:	300-350 DEGREE'S F.
V.O.C. INCLUDING EXEMPT SOLVENT LB/GLS	5.40	VAPOR DENSITY:	HEAVIER THAN AIR.
V.O.C. EXCLUDING EXEMPT SOLVENT LB/GLS	5.40	VAPORATION RATE:	SLOWER THAN ETHER.
V.O.C. INCLUDING EXEMPT SOLVENT GRS/L	647.19	% VOLATILE BY VOLUME:	73.08%
V.O.C. EXCLUDING EXEMPT SOLVENT GRS/L	647.19	% VOLATILE BY WEIGHT:	68.87%
APPEARANCE & ODOR:	PAINT COATING LIQUID	WEIGHT PER GALLON:	7.84

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION: FLAMMABLE LIQUID - CLASS 1B
FLASH POINT: 36 DEGREE'S F. PMCC
LEL: 0.50%
UEL: 6.50%

EXTINGUISHING MEDIA:

Based on the NFPA guide, use dry chemical, alcohol foam, carbon dioxide, or other
extinguishing agent suitable for class B fires. Use water to cool containers exposed
to fire. For large fires, use water spray or fog, thoroughly drenching the burning material.

SPECIAL FIREFIGHTING PROCEDURES:

Keep unnecessary people away, insulate area.stay upwind, wear self- contained
breathing apparatus. Use emergency response guidelines (DOT P5800.4 GUIDE 26)

UNUSUAL FIRE & EXPLOSION HAZARDS:

Exposure to heat will produce irritating vapors. Insulate from heat, electrical equipment,
sparks & open flame. Closed containers may explode when subject to high heat .
Dense smoke & toxic fumes will result during combustion creating a health hazard.

SECTION V- HEALTH HAZARDS AND PERSONAL PROTECTION INFORMATION

FIRST AID:		
EYES:		Immediate flush for at least 15 minutes, while holding eyelids open. Call a physician at once.
SKIN:		Immediate flush with water for at least 15 minutes For a large splash flood body under a shower. Call a physician at once
INGESTION:		Do not induce vomitig. Give water. Call a physician at once
INHALATION:		Remove to fresh air . Treat symptoms. Call a physician at once
TOXICOLOGY INFORMATION:		
	ACUTE TOXICITY STUDIES:	No toxicity studies have been conducted on this product
	PRIMARY ROUTE(S) OF EXPOSURE	
	EYE CONTACT:	Can cause irritation.
	SKIN CONTACT:	Can cause irritation.
	INHALATION:	Not a problem, except at high temperatures.
SYMPTOMS OF EXPOSURE:		
	ACUTE:	Unusual use practices and/or poor ventilation can cause irritation of eyes and respiratory tract.
AGGRAVATION OF EXISTING CONDITIONS:		
		A review of available data does not identify any worsening of existing conditions not elsewhere in this MSDS
RESPIRATORY PROTECTION:		If it is possible to generate significant levels of vapor or mists, a NIOSH approved or equivalent respirator is recommended.
VENTILATION:		General ventilation is recommended. Additional local exhaust ventilation is recommended where vapors, mists or aerosols may be released.
PROTECTIVE EQUIPMENT:		Wear impervious gloves, apron, & splash goggles where exposure is possible. Launder contaminated clothing before reuse.

SECTION VI - REACTIVITY DATA

STABILITY:	STABLE
CONDITIONS TO AVOID:	HI TEMPERATURES, OPEN FLAME
INCOMPATIBILITY:	STRONG OXIDIZERS
HAZARDOUS POLYMERIZATION:	WILL NOT OCCUR.
HAZARDOUS DECOMPOSITION PRODUCTS: BURNING MAY PRODUCE IRRITATING, TOXIC METAL FUME. HYDROGEN CHLORIDE, CARBON MONOXIDES, NITROGEN'S AND SULFURS.	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
REMOVE SOURCES OF IGNITION, COVER WITH INERT ABSORBENT MATERIAL AND REMOVE TO DISPOSAL CONTAINER. OBEY ALL FEDERAL, STATE AND LOCAL LAWS.
THIS IS A RCA HAZARDOUS WASTE PER TITLE 40 CFR 261, CLASSIFIED AS D001
WASTE DISPOSAL METHODS:
OBEY REVELANT FEDERAL, STATE AND LOCAL LAWS. DO NOT CONTAMINATE ANY LAKES STREAMS, PONDS OR UNDERGROUND WATER SUPPLIES.

SECTION VIII - SAFE HANDLING AND USE INFORMATION

RESPIRATION PROTECTION:
USE NIOSH APPROVED ORGANIC VAPOR RESPIRATORY EQUIPMENT WHEN TLV IS EXCEEDED.
VENTILATION:
LOCAL EXHAUST RECOMMENDED.
MECHANICAL EXHAUST RECOMMENDED.
PROTECTIVE GLOVES:
IMPERMEABLE GLOVES TO MINIMIZE SKIN CONTACT.
EYE PROTECTION:
CHEMICAL SPLASH GOGGLES OR FACE SHIELD.
OTHER PROTECTIVE EQUIPMENT:
EYE WASH FOUNTAIN, SAFETY SHOWER.
HYGIENE PRACTICES:
WASH CONTAMINATED CLOTHES BEFORE REUSE.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
CAUTION OSHA CLASS FLAMMABLE LIQUID, VAPORS ARE HEAVIER THAN AIR AND TEND TO ACCUMULATE IN LOW LAYING AREAS SUCH AS SINKS, SUMPS AND ALONG FLOORS. USE WITH ADEQUATE EXPLOSION PROOF VENTILATION. ISOLATE FROM SOURCES OF HEAT, SPARKS OR FLAMES. EXTINGUISH ALL SOURCES OF IGNITION, INCLUDE REMOTE PILOTS AND LIGHTS. MAYBE HARMFUL IF SWALLOWED OR INHALED

OTHER PRECAUTIONS:
AVOID PERSONAL CONTACT, KEEP OUT OF REACH OF CHILDREN, WASH HANDS BEFORE EATING OR SMOKING.
DO NOT PUNCTURE, DROP OR SLIDE CONTAINER. KEEP CONTAINER CLOSED.

SECTION X REGULATORY INFORMATION

FEDERAL REGULATIONS: See Section II for hazardous ingredients as defined by OSHA Hazardous communication rule, 29 CFR 1910, 1920

SARA TITLE II SECTION 313 This product contains the following toxic chemicals subje^t to the reporting requirements of section 313 of the Emergency Planning and Community Right to know act of 1986 and of 40 CFR 372:

CHEMICAL NAME	CAS #	PERCENT BY WEIGHT
*XYLENE	1330-20-7	24.63%
*TOLUENE	108-88-3	0.96%
*NORMAL BUTANOL	71-36-3	1.64%

TOXIC SUBSTANCES CONTROL ACT (TSCA) All compounds in this product are listed, or are excluded from listing, on the U.S. Toxic Substances control act (TSCA) 8(B) inventory

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40CFR401.15: None of the ingredients in this product are specifically listed.

CLEAN ACT, 40CFR 60, SECTION 111, 40 CFR 61, SECTION 112: None of the ingredients in this product are specifically listed.

CONEG-COALITION OF NORTHWEST GOVERNORS: This product contains none of the constituent heavy metals regulated by CONEG (ie. total cadmium, chromium, lead & mercury).

TRANSPORTATION49, CFR 172-101 CLASS 3 (FLAMMABLE LIQUIDS), II

D.O.T. PROPER SHIPIING NAME: PAINT, 3, UN1263, PGII

CLEAN AIR AMMEDMENTS OF 1990 This product contains no ozone depleting susbstances (ODS)

PROP. 65 TOLUENE, EXANE, GLYCOL ETHER E.B.,ETHYL ALCOHOL
ETHYLBENZENE, XYLENE

HMIS LABEL STATEMENT:

	SP-115I-D	
HEALTH -2	FLAMMABLILITY -3	REACTIVE-0

FOR INDUSTRIAL USE ONLY BEFORE HANDLING OR USING,
READ THE MSDS FOR THIS PRODUCT
CAUTION: MAY CAUSE IRRITATION, REPEATED OR PROLONGED CONTAC MAY CAUSE SKIN IRRITATION
FIRST AID: EYES FLASH FOR 15 MINUTES . SKIN WASH WITH SOAP AND WATER
INGESTION: GIVE WATER; DO NOT INDUCE VOMITING. CALL A PHYSICIAN.

DISCLAMER:

THIS INFORMATION IS FURNISHED WITHOUT WARRANTY, REPRESENTATION, INDUCEMENT OR LICENSE OF ANY KIND, EXCEPT THAT IT IS ACCURATE TO THE BEST OF ENGINEERED COATING TECHNOLOGY CORPORATION KNOWLEDGE OR OBTAINED FROM SOURCES BELIEVED BY ENGINEERED COATING TECHNOLOGY CORPORATION TO BE ACCURATE, AND ENGINEERED COATING TECHNOLOGY CORPORATION DOES NOT ASSUME ANY LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON SAME. CUSTOMERS ARE ENCOURAGED TO CONDUCT THEIR OWN TESTS.



SUN FIRE DEFENSE INC.
4300 PROMENADE WAY #116
MARINA DEL REY, CA 90292

INFORMATION TELEPHONE No.
(818) 486-4662

CUSTOMER:

SECTION 1: IDENTIFICATION

Sun Fire Defense Fire Retardant is a fire retarding agent specially formulated to effectively and safely protect most absorbent materials like fabric, foam, and wood. **Sun Fire Defense** Fire Retardant is a unique and revolutionary product, which retards fires by stopping dangerous flames from spreading. **Sun Fire Defense** Fire Retardant also inhibits the development of hydrocarbon smoke. This product is non-flammable, safe to store, handle and use, leaves no residue, and is environmentally safe. It has been rated Class "A" for ASTM E84 Standard for Construction Materials (Flame Spread 15, Smoke Development 25), and has passed NFPA 701 Standard for Films and Fabrics.

Product: Class A Fire Retardant

Retarding Power: After Treatment of retardant on most absorbent surfaces, there is zero flame spread. **Applications:** Spray on absorbent surfaces of all types (wood, paper, cotton, furnishing, all non-polymer surfaces) **Flame Rating:** 30 Minutes

SECTION 2: HAZARD IDENTIFICATION

No components are believed to be hazardous or listed in the NIOSH Recommendations for Occupational Safety and Health Standards, 1988, or are listed as hazardous by SARA, CERCLA, or RCRA. No OSHA PEL's are established for any of the other ingredients.

IMO Hazard Class and Number: Non Hazardous **UN Number:** Not applicable

US DOT Hazard Class: Not regulated by DOT

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

None of the components of this product are hazardous.

SECTION 4: FIRST AID MEASURES

Eyes: Immediately flush eyes with water for 15 minutes. Seek medical aid if irritate persists. **Skin:** Flush affected area and rinse with water.

Inhalation: Negligible. Remove to fresh air.

Ingestion: Drink Water. Obtain medical attention if necessary.

SECTION 5: FIRE - FIGHTING MEASURES

Flash Point: Not applicable.

Flammable Limits: Non- Flammable. **LEL:** Not Applicable.

UEL: Not Applicable.

Extinguishing Media: Not applicable. **Special Fire Fighting Procedures:** None.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Spill or Leak Procedures: Rinse affected area with water. Will not harm the environment. **Waste Disposal Method:** Dispose as non-hazardous waste in accordance with local regulations.

SECTION 7: HANDLING AND STORAGE

Storage and Handling Precautions: Store in temperatures from 32° F to 120° F in closed containers to prevent evaporation and deterioration. Freezing will not damage material as long as container remains intact.

Handling: Retardant is neutral. it will remove oil from the skin and will irritate the eyes if sprayed directly into them. When handling bulk concentrate, eye protection, gloves, and impervious clothing should be worn when there is a danger of splashing, prolonged exposure to vapor, or prolonged skin contact, as with all chemicals. Do not ingest, splash into eyes, or inhale for long periods.

Other Precautions: Although components have low hazard levels, the product will remove oils from the skin like common soap. Avoid prolonged skin contact.

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Respiratory Protection: Not required.

Ventilation: No special ventilation is required.

Protective Gloves: We are if there is prolonged skin contact.

Eye Protection: We are if needed to prevent reasonable probability of eye contact.

Work/ Hygienic Practices: Do not ingest, splash into eyes, do not inhale for prolonged periods.

Exposure Limits

OSHA PEL: Not Established. ACGIII TLV: Not Established.

Routes of Entry Inhalation: Yes. Skin: Yes. Ingestion: Yes.

Signs and Symptoms of Exposure

Skin: Negligible Hazard. Not a primary skin irritant. Eyes. not a primary ocular irritant.

Inhalation: Negligible.

Ingestion: Hazard is low. Material considered non-toxic.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 212° F.

pH: 7.0

Water Solubility: 100%

Shelf Life: 2 years when stored in closed containers between 32° F and 120° F. **Appearance and Odor:** Mild Fresh Scent. Does not contain d-limonenes. Clear Color. **Flash Point:** Negligible

Vapor Pressure (mm Hg): Same as water. **Specific Gravity:** 1.09 @ 60° F.

Dilution Strength: Do not dilute.

Residue: Product leaves little to no residue. **Flammability:** Non- Flammable

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable

Incompatibility: None.

Hazardous Decomposition Products: Carbon monoxide and carbon dioxide. **Hazardous Polymerization:** Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicity: in accordance with U.S. EPA Office of Pollution Prevention and Toxins, criteria for ranking the acute toxicity of chemicals, Master Flame is considered to be of low concern.

Carcinogenity

NTP? No.

IARC? No.

OSHA Regulated? No.

Routes of Entry

Inhalation: Yes. Skin: Yes. Ingestion: Yes.

Signs and Symptoms of Exposure

Skin: Negligible Hazard. Not a primary skin irritant. Eyes. not a primary ocular irritant.

Inhalation: Negligible.

Ingestion: Hazard is low. Material considered non-toxic.

SECTION 12: ECOLOGICAL INFORMATION & DISPOSAL

Biodegradability: 100% in 21 days under ideal conditions.

Disposal: Retardant itself may be disposed through municipal systems

Appendix B
Certified Analytical Results

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-89227-1

Client Project/Site: Sin Fire Defense

For:

Turner MacLane Inc.

63 Via Pico Plaza

#227

San Clemente, California 92672

Attn: Dwight Hoenig



Authorized for release by:

11/1/2018 4:47:46 PM

Afsaneh Salimpour, Senior Project Manager

(925)484-1919

afsaneh.salimpour@testamericainc.com

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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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Definitions/Glossary

Client: Turner MacLane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD is outside acceptance limits.

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)

Case Narrative

Client: Turner Maclane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Job ID: 720-89227-1

Laboratory: TestAmerica Pleasanton

Narrative

Job Narrative 720-89227-1

Comments

No additional comments.

Receipt

The samples were received on 10/18/2018 4:50 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 20.3° C.

GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 720-254518 and analytical batch 720-254498 recovered outside control limits for the following analytes: Chloroethane and Vinyl chloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 720-254518 and analytical batch 720-254498 recovered outside control limits for the following analytes: 2-Butanone (MEK), 2-Hexanone and 4-Methyl-2-pentanone (MIBK).

Method(s) 8260B: The following sample was diluted due to sample matrix; S-1 (720-89227-1). Elevated reporting limits (RL) are provided.

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

Metals

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

Detection Summary

Client: Turner Maclane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Client Sample ID: S-1

Lab Sample ID: 720-89227-1

No Detections.

Client Sample ID: S-2

Lab Sample ID: 720-89227-2

Analyte	Result	Qualifier	RL	Unit	Dil Fac	D	Method	Prep Type
Barium	23		0.49	mg/Kg	1		6010B	Total/NA
Chromium	0.77		0.49	mg/Kg	1		6010B	Total/NA
Cobalt	14		0.19	mg/Kg	1		6010B	Total/NA
Copper	7.4		1.5	mg/Kg	1		6010B	Total/NA
Lead	0.89		0.49	mg/Kg	1		6010B	Total/NA
Nickel	0.72		0.49	mg/Kg	1		6010B	Total/NA
Zinc	23		1.5	mg/Kg	1		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

Client Sample Results

Client: Turner MacLane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: S-1
Date Collected: 10/18/18 13:05
Date Received: 10/18/18 16:50

Lab Sample ID: 720-89227-1
Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Acetone	ND		25000	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Benzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Dichlorobromomethane	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Bromobenzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Chlorobromomethane	ND		9900	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Bromoform	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Bromomethane	ND		5000	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
2-Butanone (MEK)	ND	*	25000	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
n-Butylbenzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
sec-Butylbenzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
tert-Butylbenzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Carbon disulfide	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Carbon tetrachloride	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Chlorobenzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Chloroethane	ND	*	5000	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Chloroform	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Chloromethane	ND		5000	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
2-Chlorotoluene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
4-Chlorotoluene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Chlorodibromomethane	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,2-Dichlorobenzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,3-Dichlorobenzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,4-Dichlorobenzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,3-Dichloropropane	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,1-Dichloropropene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,2-Dibromo-3-Chloropropane	ND		5000	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Ethylene Dibromide	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Dibromomethane	ND		5000	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Dichlorodifluoromethane	ND		5000	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,1-Dichloroethane	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,2-Dichloroethane	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,1-Dichloroethene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
cis-1,2-Dichloroethene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
trans-1,2-Dichloroethene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,2-Dichloropropane	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
cis-1,3-Dichloropropene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
trans-1,3-Dichloropropene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Ethylbenzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Hexachlorobutadiene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
2-Hexanone	ND	*	25000	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Isopropylbenzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
4-Isopropyltoluene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Methylene Chloride	ND		5000	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
4-Methyl-2-pentanone (MIBK)	ND	*	25000	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Naphthalene	ND		5000	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
N-Propylbenzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Styrene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,1,1,2-Tetrachloroethane	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1

TestAmerica Pleasanton

Client Sample Results

Client: Turner MacLane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: S-1
Date Collected: 10/18/18 13:05
Date Received: 10/18/18 16:50

Lab Sample ID: 720-89227-1
Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Tetrachloroethene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Toluene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,2,3-Trichlorobenzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,2,4-Trichlorobenzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,1,1-Trichloroethane	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,1,2-Trichloroethane	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Trichloroethene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Trichlorofluoromethane	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,2,3-Trichloropropane	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,2,4-Trimethylbenzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
1,3,5-Trimethylbenzene	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Vinyl acetate	ND		9900	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Vinyl chloride	ND	*	2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
Xylenes, Total	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1
2,2-Dichloropropane	ND		2500	ug/Kg		10/24/18 10:33	11/01/18 13:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		66 - 148	10/24/18 10:33	11/01/18 13:28	1
1,2-Dichloroethane-d4 (Surr)	83		62 - 137	10/24/18 10:33	11/01/18 13:28	1
Toluene-d8 (Surr)	101		65 - 141	10/24/18 10:33	11/01/18 13:28	1

Client Sample Results

Client: Turner Maclane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Method: 6010B - Metals (ICP)

Client Sample ID: S-2

Date Collected: 10/18/18 13:15

Date Received: 10/18/18 16:50

Lab Sample ID: 720-89227-2

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.49	mg/Kg		10/20/18 10:02	10/23/18 14:54	1
Arsenic	ND		0.97	mg/Kg		10/20/18 10:02	10/23/18 14:54	1
Barium	23		0.49	mg/Kg		10/20/18 10:02	10/23/18 14:54	1
Beryllium	ND		0.097	mg/Kg		10/20/18 10:02	10/23/18 14:54	1
Cadmium	ND		0.12	mg/Kg		10/20/18 10:02	10/23/18 14:54	1
Chromium	0.77		0.49	mg/Kg		10/20/18 10:02	10/23/18 14:54	1
Cobalt	14		0.19	mg/Kg		10/20/18 10:02	10/23/18 14:54	1
Copper	7.4		1.5	mg/Kg		10/20/18 10:02	10/23/18 14:54	1
Lead	0.89		0.49	mg/Kg		10/20/18 10:02	10/23/18 14:54	1
Molybdenum	ND		0.49	mg/Kg		10/20/18 10:02	10/23/18 14:54	1
Nickel	0.72		0.49	mg/Kg		10/20/18 10:02	10/23/18 14:54	1
Selenium	ND		0.97	mg/Kg		10/20/18 10:02	10/23/18 14:54	1
Silver	ND		0.24	mg/Kg		10/20/18 10:02	10/23/18 14:54	1
Thallium	ND		0.49	mg/Kg		10/20/18 10:02	10/23/18 14:54	1
Vanadium	ND		0.49	mg/Kg		10/20/18 10:02	10/23/18 14:54	1
Zinc	23		1.5	mg/Kg		10/20/18 10:02	10/23/18 14:54	1

TestAmerica Pleasanton

Surrogate Summary

Client: Turner Maclane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB (66-148)	DCA (62-137)	TOL (65-141)
720-89227-1	S-1	101	83	101
LCS 720-254518/2-A	Lab Control Sample	99	80	102
LCSD 720-254518/3-A	Lab Control Sample Dup	97	73	102
MB 720-254518/1-A	Method Blank	95	78	102

Surrogate Legend

BFB = 4-Bromofluorobenzene

DCA = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: Turner MacLane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 720-254518/1-A

Matrix: Solid

Analysis Batch: 254498

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 254518

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Acetone	ND		5000	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Benzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Dichlorobromomethane	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Bromobenzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Chlorobromomethane	ND		2000	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Bromoform	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Bromomethane	ND		1000	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
2-Butanone (MEK)	ND		5000	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
n-Butylbenzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
sec-Butylbenzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
tert-Butylbenzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Carbon disulfide	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Carbon tetrachloride	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Chlorobenzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Chloroethane	ND		1000	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Chloroform	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Chloromethane	ND		1000	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
2-Chlorotoluene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
4-Chlorotoluene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Chlorodibromomethane	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,2-Dichlorobenzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,3-Dichlorobenzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,4-Dichlorobenzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,3-Dichloropropane	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,1-Dichloropropene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,2-Dibromo-3-Chloropropane	ND		1000	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Ethylene Dibromide	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Dibromomethane	ND		1000	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Dichlorodifluoromethane	ND		1000	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,1-Dichloroethane	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,2-Dichloroethane	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,1-Dichloroethene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
cis-1,2-Dichloroethene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
trans-1,2-Dichloroethene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,2-Dichloropropane	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
cis-1,3-Dichloropropene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
trans-1,3-Dichloropropene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Ethylbenzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Hexachlorobutadiene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
2-Hexanone	ND		5000	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Isopropylbenzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
4-Isopropyltoluene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Methylene Chloride	ND		1000	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
4-Methyl-2-pentanone (MIBK)	ND		5000	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Naphthalene	ND		1000	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
N-Propylbenzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Styrene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1

TestAmerica Pleasanton

QC Sample Results

Client: Turner MacLane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 720-254518/1-A

Matrix: Solid

Analysis Batch: 254498

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 254518

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,1,2,2-Tetrachloroethane	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Tetrachloroethene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Toluene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,2,3-Trichlorobenzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,2,4-Trichlorobenzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,1,1-Trichloroethane	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,1,2-Trichloroethane	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Trichloroethene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Trichlorofluoromethane	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,2,3-Trichloropropane	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,2,4-Trimethylbenzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
1,3,5-Trimethylbenzene	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Vinyl acetate	ND		2000	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Vinyl chloride	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
Xylenes, Total	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1
2,2-Dichloropropane	ND		500	ug/Kg		11/01/18 10:38	11/01/18 10:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		66 - 148	11/01/18 10:38	11/01/18 10:56	1
1,2-Dichloroethane-d4 (Surr)	78		62 - 137	11/01/18 10:38	11/01/18 10:56	1
Toluene-d8 (Surr)	102		65 - 141	11/01/18 10:38	11/01/18 10:56	1

Lab Sample ID: LCS 720-254518/2-A

Matrix: Solid

Analysis Batch: 254498

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 254518

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Methyl tert-butyl ether	5000	4790		ug/Kg		96	71 - 146
Acetone	25000	30900		ug/Kg		124	12 - 234
Benzene	5000	5010		ug/Kg		100	76 - 122
Dichlorobromomethane	5000	4340		ug/Kg		87	80 - 131
Bromobenzene	5000	4820		ug/Kg		96	77 - 125
Chlorobromomethane	5000	4960		ug/Kg		99	74 - 134
Bromoform	5000	4320		ug/Kg		86	54 - 149
Bromomethane	5000	6010		ug/Kg		120	14 - 175
2-Butanone (MEK)	25000	30600		ug/Kg		122	58 - 159
n-Butylbenzene	5000	4980		ug/Kg		100	57 - 164
sec-Butylbenzene	5000	5000		ug/Kg		100	62 - 153
tert-Butylbenzene	5000	4830		ug/Kg		97	72 - 136
Carbon disulfide	5000	4860		ug/Kg		97	13 - 151
Carbon tetrachloride	5000	4200		ug/Kg		84	72 - 136
Chlorobenzene	5000	4860		ug/Kg		97	81 - 128
Chloroethane	5000	6460 *		ug/Kg		129	53 - 124
Chloroform	5000	4400		ug/Kg		88	75 - 133
Chloromethane	5000	5060		ug/Kg		101	43 - 146
2-Chlorotoluene	5000	4850		ug/Kg		97	66 - 143

TestAmerica Pleasanton

QC Sample Results

Client: Turner Maclane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-254518/2-A

Matrix: Solid

Analysis Batch: 254498

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 254518

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chlorotoluene	5000	4830		ug/Kg		97	73 - 136
Chlorodibromomethane	5000	4620		ug/Kg		92	70 - 130
1,2-Dichlorobenzene	5000	4920		ug/Kg		98	77 - 140
1,3-Dichlorobenzene	5000	4970		ug/Kg		99	71 - 135
1,4-Dichlorobenzene	5000	4780		ug/Kg		96	76 - 130
1,3-Dichloropropane	5000	5170		ug/Kg		103	73 - 133
1,1-Dichloropropene	5000	4790		ug/Kg		96	81 - 134
1,2-Dibromo-3-Chloropropane	5000	5230		ug/Kg		105	52 - 156
Ethylene Dibromide	5000	5190		ug/Kg		104	70 - 138
Dibromomethane	5000	4620		ug/Kg		92	70 - 139
Dichlorodifluoromethane	5000	4470		ug/Kg		89	30 - 120
1,1-Dichloroethane	5000	4740		ug/Kg		95	79 - 125
1,2-Dichloroethane	5000	3760		ug/Kg		75	67 - 126
1,1-Dichloroethene	5000	4780		ug/Kg		96	70 - 130
cis-1,2-Dichloroethene	5000	4570		ug/Kg		91	70 - 130
trans-1,2-Dichloroethene	5000	5110		ug/Kg		102	74 - 128
1,2-Dichloropropane	5000	5440		ug/Kg		109	70 - 130
cis-1,3-Dichloropropene	5000	5100		ug/Kg		102	79 - 144
trans-1,3-Dichloropropene	5000	4590		ug/Kg		92	78 - 144
Ethylbenzene	5000	4810		ug/Kg		96	76 - 137
Hexachlorobutadiene	5000	4770		ug/Kg		95	63 - 150
2-Hexanone	25000	24800		ug/Kg		99	54 - 124
Isopropylbenzene	5000	4810		ug/Kg		96	65 - 128
4-Isopropyltoluene	5000	4900		ug/Kg		98	62 - 153
Methylene Chloride	5000	4920		ug/Kg		98	70 - 130
4-Methyl-2-pentanone (MIBK)	25000	25000		ug/Kg		100	53 - 129
Naphthalene	5000	5220		ug/Kg		104	62 - 151
N-Propylbenzene	5000	5070		ug/Kg		101	65 - 144
Styrene	5000	5040		ug/Kg		101	79 - 139
1,1,1,2-Tetrachloroethane	5000	4710		ug/Kg		94	72 - 129
1,1,2,2-Tetrachloroethane	5000	5880		ug/Kg		118	69 - 133
Tetrachloroethene	5000	4600		ug/Kg		92	79 - 130
Toluene	5000	4950		ug/Kg		99	77 - 120
1,2,3-Trichlorobenzene	5000	5470		ug/Kg		109	72 - 159
1,2,4-Trichlorobenzene	5000	5070		ug/Kg		101	71 - 163
1,1,1-Trichloroethane	5000	4080		ug/Kg		82	69 - 132
1,1,2-Trichloroethane	5000	5440		ug/Kg		109	70 - 130
Trichloroethene	5000	4900		ug/Kg		98	69 - 129
Trichlorofluoromethane	5000	4530		ug/Kg		91	49 - 140
1,2,3-Trichloropropane	5000	5050		ug/Kg		101	74 - 135
1,1,2-Trichloro-1,2,2-trifluoroethane	5000	4700		ug/Kg		94	66 - 128
1,2,4-Trimethylbenzene	5000	4760		ug/Kg		95	62 - 155
1,3,5-Trimethylbenzene	5000	4820		ug/Kg		96	69 - 142
Vinyl acetate	5000	5270		ug/Kg		105	56 - 200
Vinyl chloride	5000	6140	*	ug/Kg		123	10 - 118
m-Xylene & p-Xylene	5000	4750		ug/Kg		95	71 - 142
o-Xylene	5000	4780		ug/Kg		96	71 - 142

TestAmerica Pleasanton

QC Sample Results

Client: Turner MacLane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 720-254518/2-A

Matrix: Solid

Analysis Batch: 254498

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 254518

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,2-Dichloropropane	5000	4390		ug/Kg		88	67 - 146

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	99		66 - 148
1,2-Dichloroethane-d4 (Surr)	80		62 - 137
Toluene-d8 (Surr)	102		65 - 141

Lab Sample ID: LCSD 720-254518/3-A

Matrix: Solid

Analysis Batch: 254498

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 254518

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Methyl tert-butyl ether	5000	4200		ug/Kg		84	71 - 146	13	20
Acetone	25000	22900		ug/Kg		92	12 - 234	30	30
Benzene	5000	4910		ug/Kg		98	76 - 122	2	20
Dichlorobromomethane	5000	4110		ug/Kg		82	80 - 131	5	20
Bromobenzene	5000	4660		ug/Kg		93	77 - 125	3	20
Chlorobromomethane	5000	4590		ug/Kg		92	74 - 134	8	20
Bromoform	5000	3800		ug/Kg		76	54 - 149	13	20
Bromomethane	5000	5940		ug/Kg		119	14 - 175	1	20
2-Butanone (MEK)	25000	23800	*	ug/Kg		95	58 - 159	25	20
n-Butylbenzene	5000	5360		ug/Kg		107	57 - 164	7	20
sec-Butylbenzene	5000	5140		ug/Kg		103	62 - 153	3	20
tert-Butylbenzene	5000	4910		ug/Kg		98	72 - 136	2	20
Carbon disulfide	5000	4600		ug/Kg		92	13 - 151	5	20
Carbon tetrachloride	5000	4190		ug/Kg		84	72 - 136	0	20
Chlorobenzene	5000	4790		ug/Kg		96	81 - 128	1	20
Chloroethane	5000	6290	*	ug/Kg		126	53 - 124	3	20
Chloroform	5000	4240		ug/Kg		85	75 - 133	4	20
Chloromethane	5000	5050		ug/Kg		101	43 - 146	0	20
2-Chlorotoluene	5000	4920		ug/Kg		98	66 - 143	1	20
4-Chlorotoluene	5000	4860		ug/Kg		97	73 - 136	1	20
Chlorodibromomethane	5000	4190		ug/Kg		84	70 - 130	10	20
1,2-Dichlorobenzene	5000	4940		ug/Kg		99	77 - 140	0	20
1,3-Dichlorobenzene	5000	4900		ug/Kg		98	71 - 135	1	20
1,4-Dichlorobenzene	5000	4850		ug/Kg		97	76 - 130	1	20
1,3-Dichloropropane	5000	4760		ug/Kg		95	73 - 133	8	20
1,1-Dichloropropene	5000	4770		ug/Kg		95	81 - 134	1	20
1,2-Dibromo-3-Chloropropane	5000	4490		ug/Kg		90	52 - 156	15	20
Ethylene Dibromide	5000	4620		ug/Kg		92	70 - 138	12	20
Dibromomethane	5000	4190		ug/Kg		84	70 - 139	10	20
Dichlorodifluoromethane	5000	4400		ug/Kg		88	30 - 120	2	20
1,1-Dichloroethane	5000	4510		ug/Kg		90	79 - 125	5	20
1,2-Dichloroethane	5000	3460		ug/Kg		69	67 - 126	8	20
1,1-Dichloroethene	5000	4530		ug/Kg		91	70 - 130	5	20
cis-1,2-Dichloroethene	5000	4290		ug/Kg		86	70 - 130	6	20
trans-1,2-Dichloroethene	5000	4940		ug/Kg		99	74 - 128	3	20
1,2-Dichloropropane	5000	5140		ug/Kg		103	70 - 130	6	20

TestAmerica Pleasanton

QC Sample Results

Client: Turner MacLane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 720-254518/3-A

Matrix: Solid

Analysis Batch: 254498

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 254518

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	5000	4770		ug/Kg		95	79 - 144	7	20
trans-1,3-Dichloropropene	5000	4240		ug/Kg		85	78 - 144	8	20
Ethylbenzene	5000	4750		ug/Kg		95	76 - 137	1	20
Hexachlorobutadiene	5000	5010		ug/Kg		100	63 - 150	5	20
2-Hexanone	25000	19600	*	ug/Kg		79	54 - 124	23	20
Isopropylbenzene	5000	4830		ug/Kg		97	65 - 128	0	20
4-Isopropyltoluene	5000	5040		ug/Kg		101	62 - 153	3	20
Methylene Chloride	5000	4560		ug/Kg		91	70 - 130	8	20
4-Methyl-2-pentanone (MIBK)	25000	19800	*	ug/Kg		79	53 - 129	24	20
Naphthalene	5000	4880		ug/Kg		98	62 - 151	7	20
N-Propylbenzene	5000	5090		ug/Kg		102	65 - 144	0	20
Styrene	5000	4790		ug/Kg		96	79 - 139	5	20
1,1,1,2-Tetrachloroethane	5000	4560		ug/Kg		91	72 - 129	3	20
1,1,2,2-Tetrachloroethane	5000	5070		ug/Kg		101	69 - 133	15	20
Tetrachloroethene	5000	4470		ug/Kg		89	79 - 130	3	20
Toluene	5000	4960		ug/Kg		99	77 - 120	0	20
1,2,3-Trichlorobenzene	5000	5310		ug/Kg		106	72 - 159	3	20
1,2,4-Trichlorobenzene	5000	5080		ug/Kg		102	71 - 163	0	20
1,1,1-Trichloroethane	5000	3990		ug/Kg		80	69 - 132	2	20
1,1,2-Trichloroethane	5000	4930		ug/Kg		99	70 - 130	10	20
Trichloroethene	5000	4710		ug/Kg		94	69 - 129	4	20
Trichlorofluoromethane	5000	4280		ug/Kg		86	49 - 140	6	20
1,2,3-Trichloropropane	5000	4410		ug/Kg		88	74 - 135	14	20
1,1,2-Trichloro-1,2,2-trifluoroethane	5000	4380		ug/Kg		88	66 - 128	7	20
1,2,4-Trimethylbenzene	5000	4860		ug/Kg		97	62 - 155	2	20
1,3,5-Trimethylbenzene	5000	4910		ug/Kg		98	69 - 142	2	20
Vinyl acetate	5000	4540		ug/Kg		91	56 - 200	15	20
Vinyl chloride	5000	5940	*	ug/Kg		119	10 - 118	3	20
m-Xylene & p-Xylene	5000	4600		ug/Kg		92	71 - 142	3	20
o-Xylene	5000	4600		ug/Kg		92	71 - 142	4	20
2,2-Dichloropropane	5000	4340		ug/Kg		87	67 - 146	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	97		66 - 148
1,2-Dichloroethane-d4 (Surr)	73		62 - 137
Toluene-d8 (Surr)	102		65 - 141

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 720-253811/1-A

Matrix: Solid

Analysis Batch: 253903

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 253811

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	mg/Kg		10/20/18 10:02	10/22/18 12:47	1
Arsenic	ND		1.0	mg/Kg		10/20/18 10:02	10/22/18 12:47	1
Barium	ND		0.50	mg/Kg		10/20/18 10:02	10/22/18 12:47	1

TestAmerica Pleasanton

QC Sample Results

Client: Turner Maclane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: MB 720-253811/1-A

Matrix: Solid

Analysis Batch: 253903

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 253811

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.10	mg/Kg		10/20/18 10:02	10/22/18 12:47	1
Cadmium	ND		0.13	mg/Kg		10/20/18 10:02	10/22/18 12:47	1
Chromium	ND		0.50	mg/Kg		10/20/18 10:02	10/22/18 12:47	1
Cobalt	ND		0.20	mg/Kg		10/20/18 10:02	10/22/18 12:47	1
Copper	ND		1.5	mg/Kg		10/20/18 10:02	10/22/18 12:47	1
Lead	ND		0.50	mg/Kg		10/20/18 10:02	10/22/18 12:47	1
Molybdenum	ND		0.50	mg/Kg		10/20/18 10:02	10/22/18 12:47	1
Nickel	ND		0.50	mg/Kg		10/20/18 10:02	10/22/18 12:47	1
Selenium	ND		1.0	mg/Kg		10/20/18 10:02	10/22/18 12:47	1
Silver	ND		0.25	mg/Kg		10/20/18 10:02	10/22/18 12:47	1
Thallium	ND		0.50	mg/Kg		10/20/18 10:02	10/22/18 12:47	1
Vanadium	ND		0.50	mg/Kg		10/20/18 10:02	10/22/18 12:47	1
Zinc	ND		1.5	mg/Kg		10/20/18 10:02	10/22/18 12:47	1

Lab Sample ID: LCS 720-253811/2-A

Matrix: Solid

Analysis Batch: 253903

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 253811

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	47.3		mg/Kg		95	80 - 120
Arsenic	50.0	47.4		mg/Kg		95	80 - 120
Barium	50.0	50.7		mg/Kg		101	80 - 120
Beryllium	50.0	48.6		mg/Kg		97	80 - 120
Cadmium	50.0	47.9		mg/Kg		96	80 - 120
Chromium	50.0	48.0		mg/Kg		96	80 - 120
Cobalt	50.0	49.2		mg/Kg		98	80 - 120
Copper	50.0	47.5		mg/Kg		95	80 - 120
Lead	50.0	48.4		mg/Kg		97	80 - 120
Molybdenum	50.0	48.9		mg/Kg		98	80 - 120
Nickel	50.0	47.9		mg/Kg		96	80 - 120
Selenium	50.0	46.5		mg/Kg		93	80 - 120
Silver	25.0	23.8		mg/Kg		95	80 - 120
Thallium	50.0	48.2		mg/Kg		96	80 - 120
Vanadium	50.0	48.1		mg/Kg		96	80 - 120
Zinc	50.0	48.2		mg/Kg		96	80 - 120

TestAmerica Pleasanton

QC Association Summary

Client: Turner Maclane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

GC/MS VOA

Prep Batch: 254034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-89227-1	S-1	Total/NA	Solid	5030B	

Analysis Batch: 254498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-89227-1	S-1	Total/NA	Solid	8260B	254034
MB 720-254518/1-A	Method Blank	Total/NA	Solid	8260B	254518
LCS 720-254518/2-A	Lab Control Sample	Total/NA	Solid	8260B	254518
LCSD 720-254518/3-A	Lab Control Sample Dup	Total/NA	Solid	8260B	254518

Prep Batch: 254518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-254518/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 720-254518/2-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 720-254518/3-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Metals

Prep Batch: 253811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-89227-2	S-2	Total/NA	Solid	3050B	
MB 720-253811/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-253811/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 253903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-253811/1-A	Method Blank	Total/NA	Solid	6010B	253811
LCS 720-253811/2-A	Lab Control Sample	Total/NA	Solid	6010B	253811

Analysis Batch: 254118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-89227-2	S-2	Total/NA	Solid	6010B	253811

Lab Chronicle

Client: Turner MacLane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Client Sample ID: S-1

Date Collected: 10/18/18 13:05

Date Received: 10/18/18 16:50

Lab Sample ID: 720-89227-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			254034	10/24/18 10:33	LRC	TAL PLS
Total/NA	Analysis	8260B		1	254498	11/01/18 13:28	JRM	TAL PLS

Client Sample ID: S-2

Date Collected: 10/18/18 13:15

Date Received: 10/18/18 16:50

Lab Sample ID: 720-89227-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			253811	10/20/18 10:02	MAA	TAL PLS
Total/NA	Analysis	6010B		1	254118	10/23/18 14:54	OBI	TAL PLS

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Accreditation/Certification Summary

Client: Turner Maclane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Laboratory: TestAmerica Pleasanton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2496	01-31-20
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.				
Analysis Method	Prep Method	Matrix	Analyte	

Method Summary

Client: Turner Maclane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
3050B	Preparation, Metals	SW846	TAL PLS
5030B	Purge and Trap	SW846	TAL PLS

Protocol References:

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

Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

Sample Summary

Client: Turner Maclane Inc.
Project/Site: Sin Fire Defense

TestAmerica Job ID: 720-89227-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-89227-1	S-1	Solid	10/18/18 13:05	10/18/18 16:50
720-89227-2	S-2	Solid	10/18/18 13:15	10/18/18 16:50

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

720-89227

TESTAMERICA Pleasanton Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #:

Date: 10/18/18 Page 1 of 1

11/1/2018

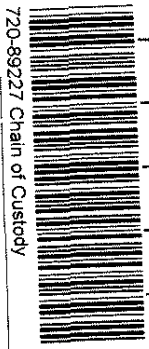
Report To

Analysis Request

Attn: Duane Henry
Company: Turner Machine
Address: 3511 E. Main St. Hayward
Email: Duane@TurnerMachine.com
Bill To: Same
Sampled By: D. Henry
Phone: _____

Sample ID: S-1 Date: 10/18 Time: 1305 S Mat: None Preserv: ✓

Volatile Organics GC/MS (VOCs) <input type="checkbox"/> EPA 8260B	
HVOcs by <input type="checkbox"/> EPA 8260B	
EPA 8260B: <input type="checkbox"/> Gas <input type="checkbox"/> BTEX <input type="checkbox"/> 5 Oxygenates <input type="checkbox"/> DCA, EDB <input type="checkbox"/> Ethanol	
TEPH EPA 8015B <input type="checkbox"/> Silica Gel <input type="checkbox"/> Diesel <input type="checkbox"/> Motor Oil <input type="checkbox"/> Other	
SemiVolatile Organics GC/MS <input type="checkbox"/> EPA 8270C	
PNA/PAH's by <input type="checkbox"/> 8270C <input type="checkbox"/> 8270C SIM	
Oil and Grease <input type="checkbox"/> Petroleum (EPA 1664/9071) <input type="checkbox"/> Total	
Pesticides <input type="checkbox"/> EPA 8081 PCBs <input type="checkbox"/> EPA 8082	
CAM17 Metals (EPA 6010/7470/7471)	
Metals: <input type="checkbox"/> 6010B <input type="checkbox"/> 200.7 <input type="checkbox"/> Lead <input type="checkbox"/> LUFT <input type="checkbox"/> RCRA <input type="checkbox"/> Other: _____	
Metals: <input type="checkbox"/> 6020 <input type="checkbox"/> 200.8 (ICP-MS): _____	
<input type="checkbox"/> W.E.T (STLC) <input type="checkbox"/> W.E.T (DI) <input type="checkbox"/> TCLP	
Hex. Chrom by <input type="checkbox"/> EPA 7196 <input type="checkbox"/> or EPA 7199	
pH <input type="checkbox"/> 9040 <input type="checkbox"/> SM4500	
<input type="checkbox"/> Spec. Cond. <input type="checkbox"/> Alkalinity <input type="checkbox"/> TSS <input type="checkbox"/> SS <input type="checkbox"/> TDS	
Anions: <input type="checkbox"/> Cl <input type="checkbox"/> SO ₄ <input type="checkbox"/> NO ₃ <input type="checkbox"/> F <input type="checkbox"/> Br <input type="checkbox"/> NO ₂ <input type="checkbox"/> PO ₄	
<input type="checkbox"/> Perchlorate by EPA 314.0	
COD <input type="checkbox"/> EPA 410.4 <input type="checkbox"/> SM5220D <input type="checkbox"/> Turbidity	



720-89227 Chain of Custody

Project Info. Sample Receipt

Project Name/ #: Sun Fire Defense
of Containers: 2
Head Space:
Temp: 20.30
PO#: _____

Credit Card
Y/N: _____
If yes, please call with payment information ASAP

Report: ☐ Routine ☐ Level 3 ☐ Level 4 ☐ EDD ☐ EDF
Special Instructions / Comments: ☐ Global ID _____

1) Relinquished by: Duane Henry 10/18/18 Signature: _____ Printed Name: Duane Henry Date: 10/18/18 Company: _____		2) Received by: _____ Signature: _____ Printed Name: _____ Date: _____ Company: _____	
3) Relinquished by: _____ Signature: _____ Printed Name: _____ Date: _____ Company: _____		4) Received by: _____ Signature: _____ Printed Name: _____ Date: _____ Company: _____	

See Terms and Conditions on reverse

Login Sample Receipt Checklist

Client: Turner Maclane Inc.

Job Number: 720-89227-1

Login Number: 89227

List Number: 1

Creator: Bullock, Tracy

List Source: TestAmerica Pleasanton

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.	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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	