



**DEPARTMENT OF THE AIR FORCE
377TH AIR BASE WING (AFGSC)**

11 November 2020

Colonel David S. Miller, USAF
Commander
377th Air Base Wing
2000 Wyoming Blvd SE
Kirtland AFB NM 87117

Kevin Pierard
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505

Dear Mr. Pierard:

This addendum supplements the 15-Day Letter Report, which was submitted to the New Mexico Environment Department's (NMED) Hazardous Waste Bureau on October 19, 2020 regarding the release of water that occurred at the groundwater treatment system (GWTS) on October 6, 2020. The GWTS, which is associated with the Bulk Fuels Facility Interim Measure at Kirtland Air Force Base (AFB), is operated under the corrective action provisions in Part 6 of the Resource Conservation and Recovery Act Hazardous Waste Treatment Operating Permit Number NM9570024423 (RCRA Permit). The report was submitted pursuant to the 15-day reporting requirement in Part 1.27.1 of the RCRA Permit.

OCTOBER 12, 2020 SAMPLING EVENT AND RESULTS

A second round of soil samples were collected on October 12, 2020 from approximately the same locations and depths as the October 6, 2020 samples (Attachment 1, Figures 1 and 2). The second set of samples were submitted to Eurofins TestAmerica in Arvada, Colorado for the same analyses as the first round. Eurofins TestAmerica maintains a Department of Defense Environmental Laboratory Accreditation Program certification.

Item 1 of NMED's letter *Reporting Requirements for all Document Submittals, Kirtland Air Force Base, New Mexico EPA ID# NM6213820974, HWB-KAFB-20-MISC* dated September 2, 2020, discusses requirements of Part 6.5.18.2, Laboratory Deliverables. Per Part 6.5.18.2 of the RCRA Permit, laboratory analytical data packages were prepared in accordance with Environmental Protection Agency-established Level 2 and 4 analytical data reporting protocols. In accordance with this requirement, a summary table of data and Level 2 analytical report for the second sampling event are presented in Attachments 2 and 3 of this letter. The Level 4 analytical reports containing raw analytical data including calibration curves, instrument

calibration data, data calculation work sheets, and other laboratory supporting data will be maintained on file at Kirtland AFB for reference.

The analytical results were received from the Eurofins TestAmerica laboratory on October 28, 2020. The EDB and BTEX analytical results were reported non-detect at the limit of detection per DoD requirement for the samples collected October 12, 2020 (Attachment 3). Iron concentrations ranged from 7,200 to 11,000 milligrams per kilogram and manganese concentrations ranged from 91 to 140 milligrams per kilogram. Iron and manganese concentrations were below the EPA regional residential screening levels. Based on the fact that EDB and BTEX analytical results were non-detect, the Air Force believes no further abatement activities are necessary regarding the release. A document certification page for this letter is included as Attachment 4.

If you have any questions or concerns, please contact Mr. Sheen Kottkamp at commercial line 505-846-7674 or email sheen.kottkamp.1@us.af.mil.

Sincerely



DAVID S. MILLER, Colonel, USAF
Commander

Attachments:

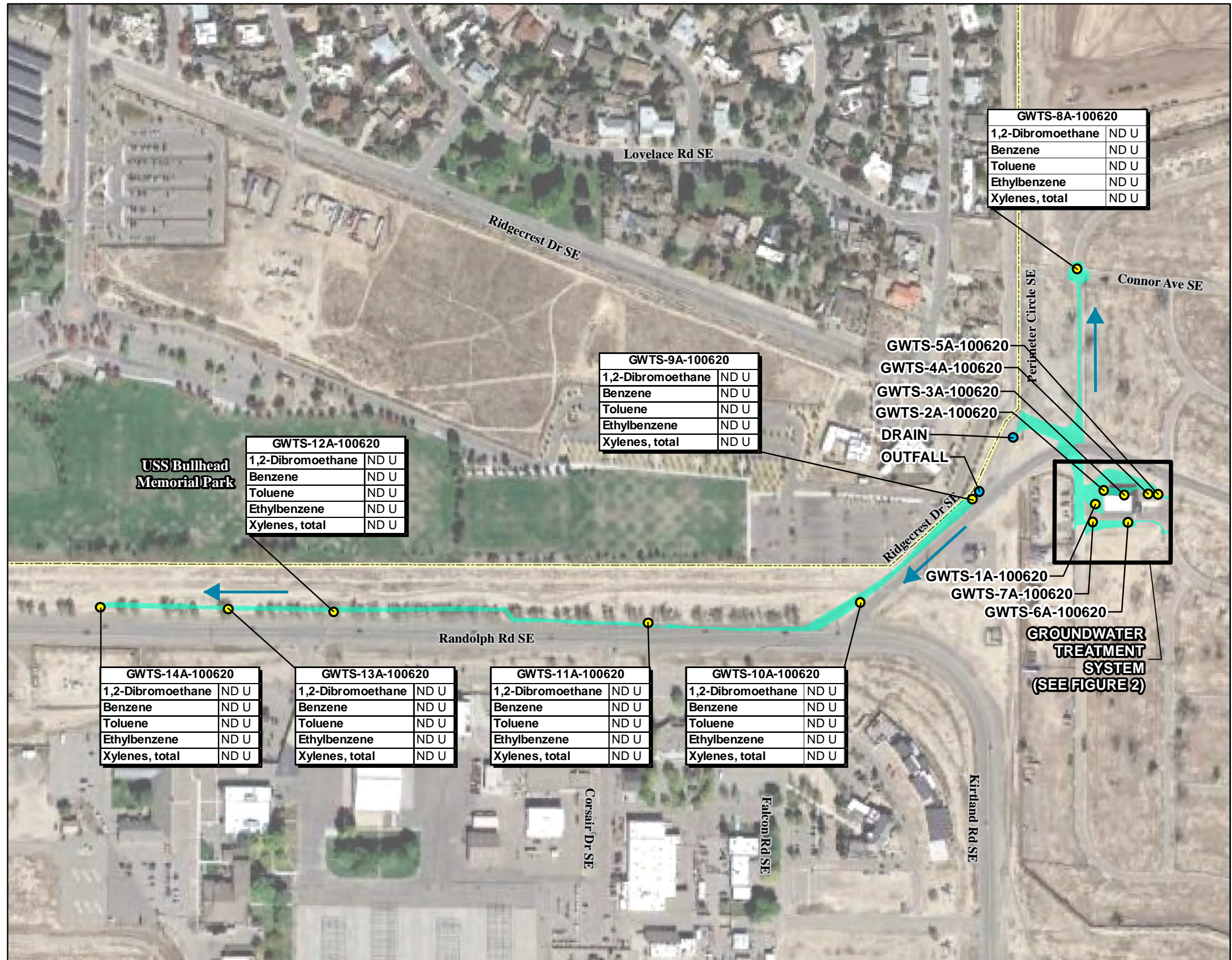
- Attachment 1, Figures
- Attachment 2, Laboratory Analytical Reports
- Attachment 3, Table
- Attachment 4, Document Certification

cc:

- NMED HWB (Cobrain), letter
- NMED GWQB (Pullen), letter
- SAF-IEE (Lynnes), electronic only
- AFCEC/CZ (Renaghan, Clark, Kottkamp, Segura, Cash, Banks), electronic only
- USACE-ABQ District Office (Moayyad, Phaneuf, Kunkel, Dreeland, Cordova, Lovato), electronic only
- Public Info Repository, Administrative Record/Information Repository (AR/IR) and File

ATTACHMENT 1

FIGURES



GWTS-12A-100620	
1,2-Dibromoethane	ND U
Benzene	ND U
Toluene	ND U
Ethylbenzene	ND U
Xylenes, total	ND U

GWTS-9A-100620	
1,2-Dibromoethane	ND U
Benzene	ND U
Toluene	ND U
Ethylbenzene	ND U
Xylenes, total	ND U

GWTS-8A-100620	
1,2-Dibromoethane	ND U
Benzene	ND U
Toluene	ND U
Ethylbenzene	ND U
Xylenes, total	ND U

GWTS-14A-100620	
1,2-Dibromoethane	ND U
Benzene	ND U
Toluene	ND U
Ethylbenzene	ND U
Xylenes, total	ND U

GWTS-13A-100620	
1,2-Dibromoethane	ND U
Benzene	ND U
Toluene	ND U
Ethylbenzene	ND U
Xylenes, total	ND U

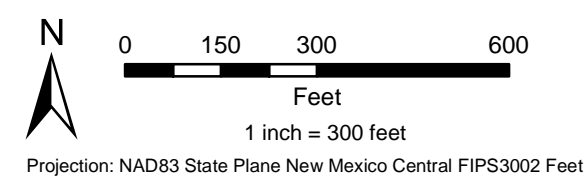
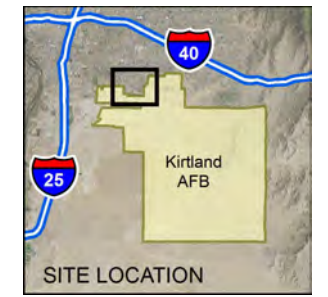
GWTS-11A-100620	
1,2-Dibromoethane	ND U
Benzene	ND U
Toluene	ND U
Ethylbenzene	ND U
Xylenes, total	ND U

GWTS-10A-100620	
1,2-Dibromoethane	ND U
Benzene	ND U
Toluene	ND U
Ethylbenzene	ND U
Xylenes, total	ND U

Legend

- Soil Sample Location and Identification
- Infrastructure
- Groundwater Treatment System Release Location
- █ Approximate Extent of Release
- Installation Fence Boundary
- ➔ Flow Direction

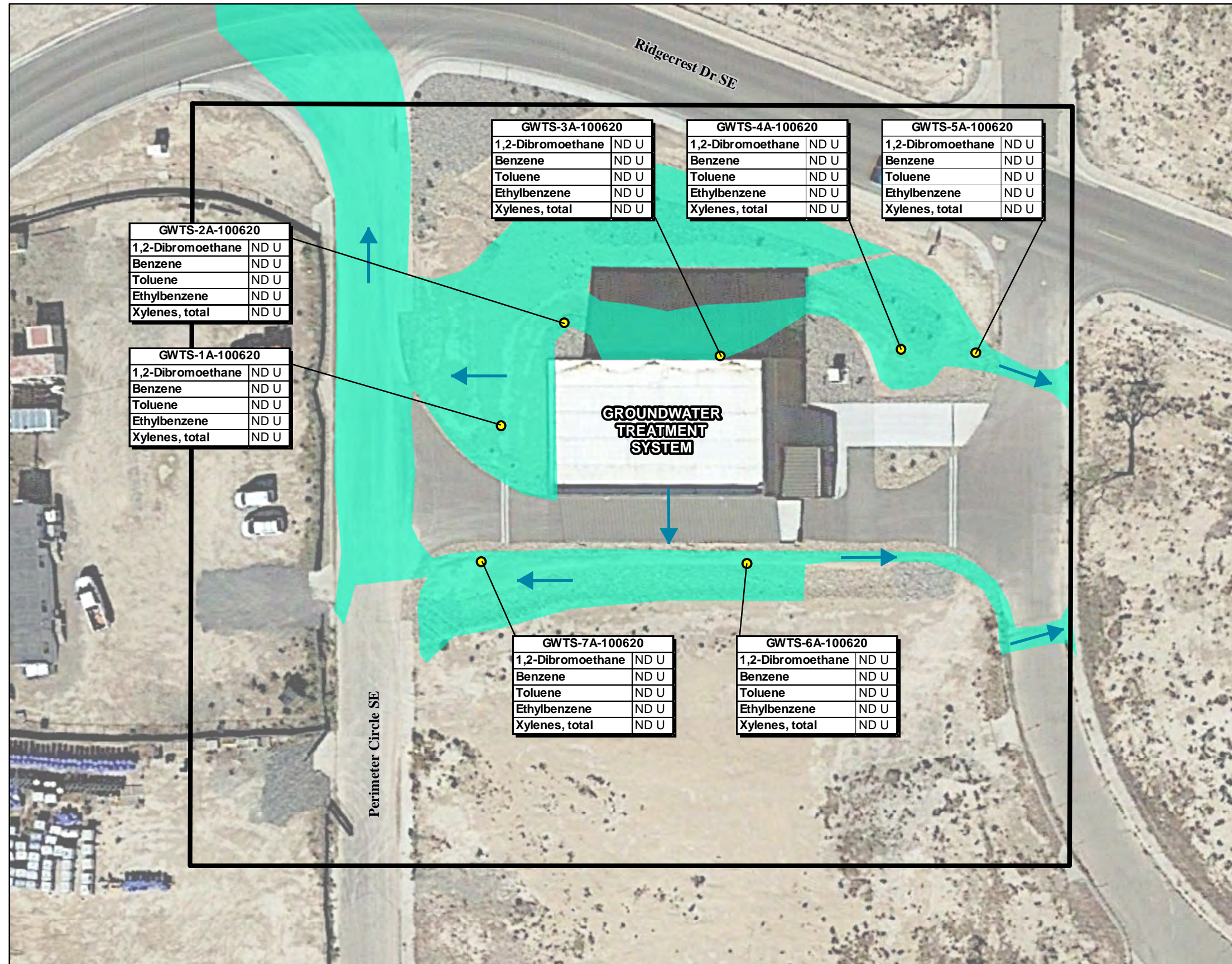
Notes:
 1,2-Dibromoethane results are in µg/kg
 BTEX results are in mg/kg
 µg/kg = micrograms per kilogram
 mg/kg = milligrams per kilogram
 ND = not detected
 U = qualifier denotes the analyte was analyzed but not detected above the detection limit.



ADDENDUM TO GROUNDWATER TREATMENT SYSTEM
 WATER RELEASE REPORT
 BULK FUELS FACILITY
 SOLID WASTE MANAGEMENT UNITS ST-106/SS-111
 KIRTLAND AIR FORCE BASE, NEW MEXICO

FIGURE 1

SITE MAP



GWTS-2A-100620	
1,2-Dibromoethane	ND U
Benzene	ND U
Toluene	ND U
Ethylbenzene	ND U
Xylenes, total	ND U

GWTS-1A-100620	
1,2-Dibromoethane	ND U
Benzene	ND U
Toluene	ND U
Ethylbenzene	ND U
Xylenes, total	ND U

GWTS-3A-100620	
1,2-Dibromoethane	ND U
Benzene	ND U
Toluene	ND U
Ethylbenzene	ND U
Xylenes, total	ND U

GWTS-4A-100620	
1,2-Dibromoethane	ND U
Benzene	ND U
Toluene	ND U
Ethylbenzene	ND U
Xylenes, total	ND U

GWTS-5A-100620	
1,2-Dibromoethane	ND U
Benzene	ND U
Toluene	ND U
Ethylbenzene	ND U
Xylenes, total	ND U

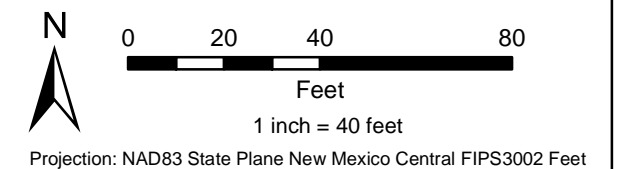
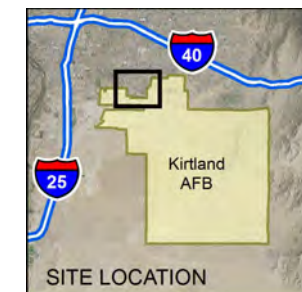
GWTS-7A-100620	
1,2-Dibromoethane	ND U
Benzene	ND U
Toluene	ND U
Ethylbenzene	ND U
Xylenes, total	ND U

GWTS-6A-100620	
1,2-Dibromoethane	ND U
Benzene	ND U
Toluene	ND U
Ethylbenzene	ND U
Xylenes, total	ND U

Legend

- Soil Sample Location and Identification
- Groundwater Treatment System Release Location
- Approximate Extent of Release
- Installation Fence Boundary
- ➔ Flow Direction

Notes:
 1,2-Dibromoethane results are in µg/kg
 BTEX results are in mg/kg
 µg/kg = micrograms per kilogram
 mg/kg = milligrams per kilogram
 ND = not detected
 U = qualifier denotes the analyte was analyzed but not detected above the detection limit.



ADDENDUM TO GROUNDWATER TREATMENT SYSTEM
 WATER RELEASE REPORT
 BULK FUELS FACILITY
 SOLID WASTE MANAGEMENT UNITS ST-106/SS-111
 KIRTLAND AIR FORCE BASE, NEW MEXICO

FIGURE 2

SITE MAP

ATTACHMENT 2

EUROFINS ANALYSIS REPORTS DATED OCTOBER 28, 2020

ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-17007-1

Client Project/Site: Kirtland AFB Bulk Fuels Facility

For:

EA Engineering, Science, and Technology
405 S. Highway 121 bypass
Building C
Suite 100
Lewisville, Texas 75067

Attn: Pamela J Moss



Authorized for release by:
10/28/2020 4:53:42 PM

Darlene Bandy, Project Manager I
(303)736-0188
Darlene.Bandy@Eurofinset.com

LINKS

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results through
TotalAccess

Have a Question?



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www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

* QC recoveries that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result.

* Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.

* Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

A handwritten signature in cursive script that reads "Darlene Bandy".

Darlene Bandy
Project Manager I
10/28/2020 4:53:42 PM



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Definitions/Glossary

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
U	Undetected at the Limit of Detection.

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
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Case Narrative

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

Job ID: 410-17007-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative 410-17007-1

Comments

No additional comments.

Receipt

The samples were received on 10/13/2020 9:15 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.8° C and 3.1° C.

Receipt Exceptions

The samples in job 410-17007-1 were shipped directly to Eurofins TestAmerica Denver by the client. The inter-company COC (ICOC) was generated only because, since the samples were logged by Eurofins Lancaster Laboratories Environment, they needed to be "shipped" in the LIMS in order for ETA Denver to receive them.

GWTS-1A-101220 (410-17007-1), GWTS-2A-101220 (410-17007-2), GWTS-3A-101220 (410-17007-3), GWTS-4A-101220 (410-17007-4), GWTS-5A-101220 (410-17007-5), GWTS-6A-101220 (410-17007-6), GWTS-7A-101220 (410-17007-7), GWTS-TB01-101220 (410-17007-8), GWTS-8A-101220 (410-17007-9), GWTS-9A-101220 (410-17007-10), GWTS-10A-101220 (410-17007-11), GWTS-11A-101220 (410-17007-12), GWTS-12A-101220 (410-17007-13), GWTS-13A-101220 (410-17007-14), GWTS-14A-101220 (410-17007-15), GWTS-TB02-101220 (410-17007-16), GWTS-1A-101220-FD (410-17007-17) and GWTS-2A-101220-FD (410-17007-18)

As requested by the client, two of the samples were also logged as field duplicates. Sample GWTS-1A-101220 (410-17007-1) was also logged as sample GWTS-1A-101220-FD (410-17007-17). Sample GWTS-2A-101220 (410-17007-2) was also logged as sample GWTS-2A-101220-FD (410-17007-18).

Containers for these samples were received 10/13/2020: GWTS-8A-101220 (410-17007-9), GWTS-9A-101220 (410-17007-10), GWTS-10A-101220 (410-17007-11), GWTS-11A-101220 (410-17007-12), GWTS-12A-101220 (410-17007-13), GWTS-13A-101220 (410-17007-14), GWTS-14A-101220 (410-17007-15) and GWTS-TB02-101220 (410-17007-16)

One cooler was delayed by FedEx, and was received at the laboratory on 10/14/2020. It is noted that this cooler was received within temperature requirements. Due to the delay in sample receipt, the turnaround time began on 10/14/2020.

The client needed the 8011 data as soon as possible; therefore, the 8011 and % Moisture methods were split off into job series 410-17007-2, with a faster turnaround time. All other methods on the chain of custody are reported under SDG 410-17007-1. GWTS-1A-101220 (410-17007-1), GWTS-2A-101220 (410-17007-2), GWTS-3A-101220 (410-17007-3), GWTS-4A-101220 (410-17007-4), GWTS-5A-101220 (410-17007-5), GWTS-6A-101220 (410-17007-6), GWTS-7A-101220 (410-17007-7), GWTS-TB01-101220 (410-17007-8), GWTS-8A-101220 (410-17007-9), GWTS-9A-101220 (410-17007-10), GWTS-10A-101220 (410-17007-11), GWTS-11A-101220 (410-17007-12), GWTS-12A-101220 (410-17007-13), GWTS-13A-101220 (410-17007-14), GWTS-14A-101220 (410-17007-15), GWTS-TB02-101220 (410-17007-16), GWTS-1A-101220-FD (410-17007-17) and GWTS-2A-101220-FD (410-17007-18)

GC/MS VOA

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

Metals

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

Detection Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

Client Sample ID: GWTS-1A-101220

Lab Sample ID: 410-17007-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Iron	9600	J1	85	21	8.8	mg/Kg	1	✳	6010C	Total/NA
Manganese	140	J1	4.8	0.42	0.11	mg/Kg	1	✳	6010C	Total/NA

Client Sample ID: GWTS-2A-101220

Lab Sample ID: 410-17007-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Iron	11000		84	21	8.6	mg/Kg	1	✳	6010C	Total/NA
Manganese	140		4.7	0.42	0.10	mg/Kg	1	✳	6010C	Total/NA

Client Sample ID: GWTS-4A-101220

Lab Sample ID: 410-17007-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Iron	7500		82	21	8.5	mg/Kg	1	✳	6010C	Total/NA
Manganese	110		4.6	0.41	0.10	mg/Kg	1	✳	6010C	Total/NA

Client Sample ID: GWTS-5A-101220

Lab Sample ID: 410-17007-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Iron	7800		71	18	7.3	mg/Kg	1	✳	6010C	Total/NA
Manganese	99		4.0	0.35	0.088	mg/Kg	1	✳	6010C	Total/NA

Client Sample ID: GWTS-7A-101220

Lab Sample ID: 410-17007-7

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Iron	7200		72	18	7.5	mg/Kg	1	✳	6010C	Total/NA
Manganese	91		4.1	0.36	0.090	mg/Kg	1	✳	6010C	Total/NA

Client Sample ID: GWTS-TB01-101220

Lab Sample ID: 410-17007-8

No Detections.

Client Sample ID: GWTS-TB02-101220

Lab Sample ID: 410-17007-16

No Detections.

Client Sample ID: GWTS-1A-101220-FD

Lab Sample ID: 410-17007-17

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Iron	9500	J1	86	21	8.8	mg/Kg	1	✳	6010C	Total/NA
Manganese	110	J1	4.8	0.43	0.11	mg/Kg	1	✳	6010C	Total/NA

Client Sample ID: GWTS-2A-101220-FD

Lab Sample ID: 410-17007-18

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Iron	11000		74	19	7.7	mg/Kg	1	✳	6010C	Total/NA
Manganese	130		4.2	0.37	0.093	mg/Kg	1	✳	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Euofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

Client Sample ID: GWTS-1A-101220

Lab Sample ID: 410-17007-1

Date Collected: 10/12/20 09:00

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 90.2

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Benzene	0.40	U	5.0	0.40	0.15	ug/Kg	☼	10/26/20 10:30	1
Ethylbenzene	0.80	U	5.0	0.80	0.30	ug/Kg	☼	10/26/20 10:30	1
Toluene	0.80	U	5.0	0.80	0.23	ug/Kg	☼	10/26/20 10:30	1
m-Xylene & p-Xylene	3.2	U	3.2	3.2	1.0	ug/Kg	☼	10/26/20 10:30	1
o-Xylene	0.80	U	5.0	0.80	0.26	ug/Kg	☼	10/26/20 10:30	1
Xylenes, Total	1.0	U	10	1.0	0.61	ug/Kg	☼	10/26/20 10:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		85 - 116	10/26/20 07:20	10/26/20 10:30	1
1,2-Dichloroethane-d4 (Surr)	104		71 - 136	10/26/20 07:20	10/26/20 10:30	1
4-Bromofluorobenzene (Surr)	100		79 - 119	10/26/20 07:20	10/26/20 10:30	1
Dibromofluoromethane (Surr)	100		78 - 119	10/26/20 07:20	10/26/20 10:30	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	9600	J1	85	21	8.8	mg/Kg	☼	10/16/20 11:41	1
Manganese	140	J1	4.8	0.42	0.11	mg/Kg	☼	10/16/20 11:41	1

Client Sample ID: GWTS-2A-101220

Lab Sample ID: 410-17007-2

Date Collected: 10/12/20 09:03

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 89.3

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Benzene	0.43	U	5.3	0.43	0.16	ug/Kg	☼	10/26/20 10:52	1
Ethylbenzene	0.86	U	5.3	0.86	0.33	ug/Kg	☼	10/26/20 10:52	1
Toluene	0.86	U	5.3	0.86	0.24	ug/Kg	☼	10/26/20 10:52	1
m-Xylene & p-Xylene	3.4	U	3.4	3.4	1.1	ug/Kg	☼	10/26/20 10:52	1
o-Xylene	0.86	U	5.3	0.86	0.28	ug/Kg	☼	10/26/20 10:52	1
Xylenes, Total	1.1	U	11	1.1	0.65	ug/Kg	☼	10/26/20 10:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		85 - 116	10/26/20 07:20	10/26/20 10:52	1
1,2-Dichloroethane-d4 (Surr)	104		71 - 136	10/26/20 07:20	10/26/20 10:52	1
4-Bromofluorobenzene (Surr)	99		79 - 119	10/26/20 07:20	10/26/20 10:52	1
Dibromofluoromethane (Surr)	102		78 - 119	10/26/20 07:20	10/26/20 10:52	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	11000		84	21	8.6	mg/Kg	☼	10/16/20 12:11	1
Manganese	140		4.7	0.42	0.10	mg/Kg	☼	10/16/20 12:11	1

Client Sample ID: GWTS-4A-101220

Lab Sample ID: 410-17007-4

Date Collected: 10/12/20 09:09

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 90.0

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Benzene	0.44	U	5.4	0.44	0.16	ug/Kg	☼	10/26/20 11:15	1
Ethylbenzene	0.87	U	5.4	0.87	0.33	ug/Kg	☼	10/26/20 11:15	1
Toluene	0.87	U	5.4	0.87	0.25	ug/Kg	☼	10/26/20 11:15	1

Client Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

Client Sample ID: GWTS-4A-101220

Lab Sample ID: 410-17007-4

Date Collected: 10/12/20 09:09

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 90.0

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
m-Xylene & p-Xylene	3.5	U	3.5	3.5	1.1	ug/Kg	☼	10/26/20 11:15	1
o-Xylene	0.87	U	5.4	0.87	0.29	ug/Kg	☼	10/26/20 11:15	1
Xylenes, Total	1.1	U	11	1.1	0.66	ug/Kg	☼	10/26/20 11:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		85 - 116	10/26/20 07:20	10/26/20 11:15	1
1,2-Dichloroethane-d4 (Surr)	103		71 - 136	10/26/20 07:20	10/26/20 11:15	1
4-Bromofluorobenzene (Surr)	101		79 - 119	10/26/20 07:20	10/26/20 11:15	1
Dibromofluoromethane (Surr)	100		78 - 119	10/26/20 07:20	10/26/20 11:15	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	7500		82	21	8.5	mg/Kg	☼	10/16/20 12:15	1
Manganese	110		4.6	0.41	0.10	mg/Kg	☼	10/16/20 12:15	1

Client Sample ID: GWTS-5A-101220

Lab Sample ID: 410-17007-5

Date Collected: 10/12/20 09:11

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 88.8

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Benzene	0.40	U	5.0	0.40	0.15	ug/Kg	☼	10/26/20 11:37	1
Ethylbenzene	0.80	U	5.0	0.80	0.31	ug/Kg	☼	10/26/20 11:37	1
Toluene	0.80	U	5.0	0.80	0.23	ug/Kg	☼	10/26/20 11:37	1
m-Xylene & p-Xylene	3.2	U	3.2	3.2	1.0	ug/Kg	☼	10/26/20 11:37	1
o-Xylene	0.80	U	5.0	0.80	0.27	ug/Kg	☼	10/26/20 11:37	1
Xylenes, Total	1.0	U	10	1.0	0.61	ug/Kg	☼	10/26/20 11:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		85 - 116	10/26/20 07:20	10/26/20 11:37	1
1,2-Dichloroethane-d4 (Surr)	103		71 - 136	10/26/20 07:20	10/26/20 11:37	1
4-Bromofluorobenzene (Surr)	100		79 - 119	10/26/20 07:20	10/26/20 11:37	1
Dibromofluoromethane (Surr)	101		78 - 119	10/26/20 07:20	10/26/20 11:37	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	7800		71	18	7.3	mg/Kg	☼	10/16/20 12:18	1
Manganese	99		4.0	0.35	0.088	mg/Kg	☼	10/16/20 12:18	1

Client Sample ID: GWTS-7A-101220

Lab Sample ID: 410-17007-7

Date Collected: 10/12/20 09:17

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 95.5

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Benzene	0.41	U	5.2	0.41	0.16	ug/Kg	☼	10/26/20 11:59	1
Ethylbenzene	0.83	U	5.2	0.83	0.32	ug/Kg	☼	10/26/20 11:59	1
Toluene	0.83	U	5.2	0.83	0.24	ug/Kg	☼	10/26/20 11:59	1
m-Xylene & p-Xylene	3.3	U	3.3	3.3	1.1	ug/Kg	☼	10/26/20 11:59	1
o-Xylene	0.83	U	5.2	0.83	0.28	ug/Kg	☼	10/26/20 11:59	1
Xylenes, Total	1.0	U	10	1.0	0.63	ug/Kg	☼	10/26/20 11:59	1

Client Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

Client Sample ID: GWTS-7A-101220

Lab Sample ID: 410-17007-7

Date Collected: 10/12/20 09:17

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 95.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		85 - 116	10/26/20 07:20	10/26/20 11:59	1
1,2-Dichloroethane-d4 (Surr)	105		71 - 136	10/26/20 07:20	10/26/20 11:59	1
4-Bromofluorobenzene (Surr)	100		79 - 119	10/26/20 07:20	10/26/20 11:59	1
Dibromofluoromethane (Surr)	101		78 - 119	10/26/20 07:20	10/26/20 11:59	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	7200		72	18	7.5	mg/Kg	✱	10/16/20 12:21	1
Manganese	91		4.1	0.36	0.090	mg/Kg	✱	10/16/20 12:21	1

Client Sample ID: GWTS-TB01-101220

Lab Sample ID: 410-17007-8

Date Collected: 10/12/20 13:00

Matrix: Water

Date Received: 10/13/20 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Benzene	0.40	U	1.0	0.40	0.16	ug/L		10/22/20 10:57	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		10/22/20 10:57	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		10/22/20 10:57	1
m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.15	ug/L		10/22/20 10:57	1
o-Xylene	0.40	U	1.0	0.40	0.19	ug/L		10/22/20 10:57	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		10/22/20 10:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		89 - 112		10/22/20 10:57	1
1,2-Dichloroethane-d4 (Surr)	93		81 - 118		10/22/20 10:57	1
4-Bromofluorobenzene (Surr)	105		85 - 114		10/22/20 10:57	1
Dibromofluoromethane (Surr)	99		80 - 119		10/22/20 10:57	1

Client Sample ID: GWTS-TB02-101220

Lab Sample ID: 410-17007-16

Date Collected: 10/12/20 13:00

Matrix: Water

Date Received: 10/13/20 09:15

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Benzene	0.40	U	1.0	0.40	0.16	ug/L		10/22/20 11:19	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		10/22/20 11:19	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		10/22/20 11:19	1
m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.15	ug/L		10/22/20 11:19	1
o-Xylene	0.40	U	1.0	0.40	0.19	ug/L		10/22/20 11:19	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		10/22/20 11:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		89 - 112		10/22/20 11:19	1
1,2-Dichloroethane-d4 (Surr)	106		81 - 118		10/22/20 11:19	1
4-Bromofluorobenzene (Surr)	105		85 - 114		10/22/20 11:19	1
Dibromofluoromethane (Surr)	101		80 - 119		10/22/20 11:19	1

Client Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

Client Sample ID: GWTS-1A-101220-FD

Lab Sample ID: 410-17007-17

Date Collected: 10/12/20 09:00

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 90.7

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Benzene	0.44	U	5.5	0.44	0.17	ug/Kg	☼	10/26/20 12:22	1
Ethylbenzene	0.88	U	5.5	0.88	0.34	ug/Kg	☼	10/26/20 12:22	1
Toluene	0.88	U	5.5	0.88	0.25	ug/Kg	☼	10/26/20 12:22	1
m-Xylene & p-Xylene	3.5	U	3.5	3.5	1.1	ug/Kg	☼	10/26/20 12:22	1
o-Xylene	0.88	U	5.5	0.88	0.29	ug/Kg	☼	10/26/20 12:22	1
Xylenes, Total	1.1	U	11	1.1	0.67	ug/Kg	☼	10/26/20 12:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		85 - 116	10/26/20 07:20	10/26/20 12:22	1
1,2-Dichloroethane-d4 (Surr)	103		71 - 136	10/26/20 07:20	10/26/20 12:22	1
4-Bromofluorobenzene (Surr)	100		79 - 119	10/26/20 07:20	10/26/20 12:22	1
Dibromofluoromethane (Surr)	101		78 - 119	10/26/20 07:20	10/26/20 12:22	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	9500	J1	86	21	8.8	mg/Kg	☼	10/21/20 12:58	1
Manganese	110	J1	4.8	0.43	0.11	mg/Kg	☼	10/21/20 12:58	1

Client Sample ID: GWTS-2A-101220-FD

Lab Sample ID: 410-17007-18

Date Collected: 10/12/20 09:03

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 88.9

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

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Benzene	0.40	U	5.1	0.40	0.15	ug/Kg	☼	10/26/20 12:44	1
Ethylbenzene	0.81	U	5.1	0.81	0.31	ug/Kg	☼	10/26/20 12:44	1
Toluene	0.81	U	5.1	0.81	0.23	ug/Kg	☼	10/26/20 12:44	1
m-Xylene & p-Xylene	3.2	U	3.2	3.2	1.1	ug/Kg	☼	10/26/20 12:44	1
o-Xylene	0.81	U	5.1	0.81	0.27	ug/Kg	☼	10/26/20 12:44	1
Xylenes, Total	1.0	U	10	1.0	0.62	ug/Kg	☼	10/26/20 12:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		85 - 116	10/26/20 07:20	10/26/20 12:44	1
1,2-Dichloroethane-d4 (Surr)	104		71 - 136	10/26/20 07:20	10/26/20 12:44	1
4-Bromofluorobenzene (Surr)	99		79 - 119	10/26/20 07:20	10/26/20 12:44	1
Dibromofluoromethane (Surr)	101		78 - 119	10/26/20 07:20	10/26/20 12:44	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	11000		74	19	7.7	mg/Kg	☼	10/21/20 13:17	1
Manganese	130		4.2	0.37	0.093	mg/Kg	☼	10/21/20 13:17	1

Surrogate Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TOL	DCA	BFB	DBFM
		(85-116)	(71-136)	(79-119)	(78-119)
410-17007-1	GWTS-1A-101220	99	104	100	100
410-17007-2	GWTS-2A-101220	97	104	99	102
410-17007-4	GWTS-4A-101220	100	103	101	100
410-17007-5	GWTS-5A-101220	98	103	100	101
410-17007-7	GWTS-7A-101220	98	105	100	101
410-17007-17	GWTS-1A-101220-FD	98	103	100	101
410-17007-18	GWTS-2A-101220-FD	98	104	99	101
LCS 280-514059/1-A	Lab Control Sample	100	97	98	100
LCSD 280-514059/2-A	Lab Control Sample Dup	97	97	98	99
MB 280-514059/3-A	Method Blank	97	101	100	100

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Matrix: Water

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TOL	DCA	BFB	DBFM
		(89-112)	(81-118)	(85-114)	(80-119)
410-17007-8	GWTS-TB01-101220	99	93	105	99
410-17007-16	GWTS-TB02-101220	101	106	105	101
LCS 280-513584/4	Lab Control Sample	99	92	99	99
MB 280-513584/9	Method Blank	99	104	96	98

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

QC Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

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

Lab Sample ID: MB 280-513584/9
Matrix: Water
Analysis Batch: 513584

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

Analyte	MB MB		LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	0.40	U	1.0	0.40	0.16	ug/L		10/22/20 10:36	1
Ethylbenzene	0.40	U	1.0	0.40	0.16	ug/L		10/22/20 10:36	1
Toluene	0.40	U	1.0	0.40	0.17	ug/L		10/22/20 10:36	1
m-Xylene & p-Xylene	0.80	U	2.0	0.80	0.15	ug/L		10/22/20 10:36	1
o-Xylene	0.40	U	1.0	0.40	0.19	ug/L		10/22/20 10:36	1
Xylenes, Total	0.80	U	1.0	0.80	0.19	ug/L		10/22/20 10:36	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	99		89 - 112		10/22/20 10:36	1
1,2-Dichloroethane-d4 (Surr)	104		81 - 118		10/22/20 10:36	1
4-Bromofluorobenzene (Surr)	96		85 - 114		10/22/20 10:36	1
Dibromofluoromethane (Surr)	98		80 - 119		10/22/20 10:36	1

Lab Sample ID: LCS 280-513584/4
Matrix: Water
Analysis Batch: 513584

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	25.0	27.4		ug/L		109	79 - 121
Toluene	25.0	26.6		ug/L		106	80 - 121
m-Xylene & p-Xylene	25.0	27.1		ug/L		108	80 - 121
o-Xylene	25.0	28.1		ug/L		113	78 - 122
Xylenes, Total	50.0	55.2		ug/L		110	79 - 121

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	99		89 - 112
1,2-Dichloroethane-d4 (Surr)	92		81 - 118
4-Bromofluorobenzene (Surr)	99		85 - 114
Dibromofluoromethane (Surr)	99		80 - 119

Lab Sample ID: MB 280-514059/3-A
Matrix: Solid
Analysis Batch: 514060

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514059

Analyte	MB MB		LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	0.40	U	5.0	0.40	0.15	ug/Kg		10/26/20 09:00	1
Ethylbenzene	0.80	U	5.0	0.80	0.31	ug/Kg		10/26/20 09:00	1
Toluene	0.80	U	5.0	0.80	0.23	ug/Kg		10/26/20 09:00	1
m-Xylene & p-Xylene	3.2	U	3.2	3.2	1.0	ug/Kg		10/26/20 09:00	1
o-Xylene	0.80	U	5.0	0.80	0.27	ug/Kg		10/26/20 09:00	1
Xylenes, Total	1.0	U	10	1.0	0.61	ug/Kg		10/26/20 09:00	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Toluene-d8 (Surr)	97		85 - 116	10/26/20 07:20	10/26/20 09:00	1
1,2-Dichloroethane-d4 (Surr)	101		71 - 136	10/26/20 07:20	10/26/20 09:00	1
4-Bromofluorobenzene (Surr)	100		79 - 119	10/26/20 07:20	10/26/20 09:00	1

QC Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

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

Lab Sample ID: MB 280-514059/3-A
Matrix: Solid
Analysis Batch: 514060

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 514059

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Dibromofluoromethane (Surr)	100		78 - 119	10/26/20 07:20	10/26/20 09:00	1

Lab Sample ID: LCS 280-514059/1-A
Matrix: Solid
Analysis Batch: 514060

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 514059

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Benzene	50.0	48.0		ug/Kg		96	77 - 121
Ethylbenzene	50.0	50.1		ug/Kg		100	76 - 122
Toluene	50.0	48.6		ug/Kg		97	77 - 121
m-Xylene & p-Xylene	50.0	52.0		ug/Kg		104	77 - 124
o-Xylene	50.0	49.3		ug/Kg		99	77 - 123
Xylenes, Total	100	101		ug/Kg		101	78 - 124

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	100		85 - 116
1,2-Dichloroethane-d4 (Surr)	97		71 - 136
4-Bromofluorobenzene (Surr)	98		79 - 119
Dibromofluoromethane (Surr)	100		78 - 119

Lab Sample ID: LCSD 280-514059/2-A
Matrix: Solid
Analysis Batch: 514060

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 514059

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	Limits	RPD	
		Result	Qualifier					RPD	Limit
Benzene	50.0	53.6		ug/Kg		107	77 - 121	11	20
Ethylbenzene	50.0	54.7		ug/Kg		109	76 - 122	9	20
Toluene	50.0	53.8		ug/Kg		108	77 - 121	10	20
m-Xylene & p-Xylene	50.0	56.2		ug/Kg		112	77 - 124	8	20
o-Xylene	50.0	53.6		ug/Kg		107	77 - 123	8	20
Xylenes, Total	100	110		ug/Kg		110	78 - 124	8	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
Toluene-d8 (Surr)	97		85 - 116
1,2-Dichloroethane-d4 (Surr)	97		71 - 136
4-Bromofluorobenzene (Surr)	98		79 - 119
Dibromofluoromethane (Surr)	99		78 - 119

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 280-512651/1-A
Matrix: Solid
Analysis Batch: 512939

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 512651

Analyte	MB MB		LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Iron	20	U	80	20	8.3	mg/Kg		10/16/20 11:34	1
Manganese	0.40	U	4.5	0.40	0.10	mg/Kg		10/16/20 11:34	1

QC Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

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

Lab Sample ID: LCS 280-512651/2-A
Matrix: Solid
Analysis Batch: 512939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 512651
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Iron	1000	970		mg/Kg		97	81 - 118
Manganese	100	95.2		mg/Kg		95	84 - 114

Lab Sample ID: 410-17007-1 MS
Matrix: Solid
Analysis Batch: 512939

Client Sample ID: GWTS-1A-101220
Prep Type: Total/NA
Prep Batch: 512651
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Iron	9600	J1	815	9970	4	mg/Kg	☼	51	81 - 118
Manganese	140	J1	81.5	184	J1	mg/Kg	☼	59	84 - 114

Lab Sample ID: 410-17007-1 MSD
Matrix: Solid
Analysis Batch: 512939

Client Sample ID: GWTS-1A-101220
Prep Type: Total/NA
Prep Batch: 512651
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Iron	9600	J1	864	9640	4	mg/Kg	☼	9	81 - 118	3	20
Manganese	140	J1	86.4	185	J1	mg/Kg	☼	56	84 - 114	1	20

Lab Sample ID: MB 280-513218/1-A
Matrix: Solid
Analysis Batch: 513521

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 513218

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Iron	20	U	80	20	8.3	mg/Kg		10/21/20 12:51	1
Manganese	0.40	U	4.5	0.40	0.10	mg/Kg		10/21/20 12:51	1

Lab Sample ID: LCS 280-513218/2-A
Matrix: Solid
Analysis Batch: 513521

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 513218
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Iron	1000	955		mg/Kg		96	81 - 118
Manganese	100	91.1		mg/Kg		91	84 - 114

Lab Sample ID: 410-17007-17 MS
Matrix: Solid
Analysis Batch: 513521

Client Sample ID: GWTS-1A-101220-FD
Prep Type: Total/NA
Prep Batch: 513218
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Iron	9500	J1	985	9350	4	mg/Kg	☼	-16	81 - 118
Manganese	110	J1	98.5	178	J1	mg/Kg	☼	72	84 - 114

Lab Sample ID: 410-17007-17 MSD
Matrix: Solid
Analysis Batch: 513521

Client Sample ID: GWTS-1A-101220-FD
Prep Type: Total/NA
Prep Batch: 513218
%Rec.

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Iron	9500	J1	1030	9930	4	mg/Kg	☼	42	81 - 118	6	20
Manganese	110	J1	103	187	J1	mg/Kg	☼	77	84 - 114	5	20

Euofins Lancaster Laboratories Env, LLC

QC Association Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

GC/MS VOA

Analysis Batch: 513584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17007-8	GWTS-TB01-101220	Total/NA	Water	8260C DOD	
410-17007-16	GWTS-TB02-101220	Total/NA	Water	8260C DOD	
MB 280-513584/9	Method Blank	Total/NA	Water	8260C DOD	
LCS 280-513584/4	Lab Control Sample	Total/NA	Water	8260C DOD	

Prep Batch: 514059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17007-1	GWTS-1A-101220	Total/NA	Solid	5030B	
410-17007-2	GWTS-2A-101220	Total/NA	Solid	5030B	
410-17007-4	GWTS-4A-101220	Total/NA	Solid	5030B	
410-17007-5	GWTS-5A-101220	Total/NA	Solid	5030B	
410-17007-7	GWTS-7A-101220	Total/NA	Solid	5030B	
410-17007-17	GWTS-1A-101220-FD	Total/NA	Solid	5030B	
410-17007-18	GWTS-2A-101220-FD	Total/NA	Solid	5030B	
MB 280-514059/3-A	Method Blank	Total/NA	Solid	5030B	
LCS 280-514059/1-A	Lab Control Sample	Total/NA	Solid	5030B	
LCSD 280-514059/2-A	Lab Control Sample Dup	Total/NA	Solid	5030B	

Analysis Batch: 514060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17007-1	GWTS-1A-101220	Total/NA	Solid	8260C DOD	514059
410-17007-2	GWTS-2A-101220	Total/NA	Solid	8260C DOD	514059
410-17007-4	GWTS-4A-101220	Total/NA	Solid	8260C DOD	514059
410-17007-5	GWTS-5A-101220	Total/NA	Solid	8260C DOD	514059
410-17007-7	GWTS-7A-101220	Total/NA	Solid	8260C DOD	514059
410-17007-17	GWTS-1A-101220-FD	Total/NA	Solid	8260C DOD	514059
410-17007-18	GWTS-2A-101220-FD	Total/NA	Solid	8260C DOD	514059
MB 280-514059/3-A	Method Blank	Total/NA	Solid	8260C DOD	514059
LCS 280-514059/1-A	Lab Control Sample	Total/NA	Solid	8260C DOD	514059
LCSD 280-514059/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C DOD	514059

Metals

Prep Batch: 512651

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17007-1	GWTS-1A-101220	Total/NA	Solid	3050B	
410-17007-2	GWTS-2A-101220	Total/NA	Solid	3050B	
410-17007-4	GWTS-4A-101220	Total/NA	Solid	3050B	
410-17007-5	GWTS-5A-101220	Total/NA	Solid	3050B	
410-17007-7	GWTS-7A-101220	Total/NA	Solid	3050B	
MB 280-512651/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 280-512651/2-A	Lab Control Sample	Total/NA	Solid	3050B	
410-17007-1 MS	GWTS-1A-101220	Total/NA	Solid	3050B	
410-17007-1 MSD	GWTS-1A-101220	Total/NA	Solid	3050B	

Analysis Batch: 512939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17007-1	GWTS-1A-101220	Total/NA	Solid	6010C	512651
410-17007-2	GWTS-2A-101220	Total/NA	Solid	6010C	512651
410-17007-4	GWTS-4A-101220	Total/NA	Solid	6010C	512651
410-17007-5	GWTS-5A-101220	Total/NA	Solid	6010C	512651

QC Association Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

Metals (Continued)

Analysis Batch: 512939 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17007-7	GWTS-7A-101220	Total/NA	Solid	6010C	512651
MB 280-512651/1-A	Method Blank	Total/NA	Solid	6010C	512651
LCS 280-512651/2-A	Lab Control Sample	Total/NA	Solid	6010C	512651
410-17007-1 MS	GWTS-1A-101220	Total/NA	Solid	6010C	512651
410-17007-1 MSD	GWTS-1A-101220	Total/NA	Solid	6010C	512651

Prep Batch: 513218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17007-17	GWTS-1A-101220-FD	Total/NA	Solid	3050B	
410-17007-18	GWTS-2A-101220-FD	Total/NA	Solid	3050B	
MB 280-513218/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 280-513218/2-A	Lab Control Sample	Total/NA	Solid	3050B	
410-17007-17 MS	GWTS-1A-101220-FD	Total/NA	Solid	3050B	
410-17007-17 MSD	GWTS-1A-101220-FD	Total/NA	Solid	3050B	

Analysis Batch: 513521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17007-17	GWTS-1A-101220-FD	Total/NA	Solid	6010C	513218
410-17007-18	GWTS-2A-101220-FD	Total/NA	Solid	6010C	513218
MB 280-513218/1-A	Method Blank	Total/NA	Solid	6010C	513218
LCS 280-513218/2-A	Lab Control Sample	Total/NA	Solid	6010C	513218
410-17007-17 MS	GWTS-1A-101220-FD	Total/NA	Solid	6010C	513218
410-17007-17 MSD	GWTS-1A-101220-FD	Total/NA	Solid	6010C	513218

Lab Chronicle

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

Client Sample ID: GWTS-1A-101220

Lab Sample ID: 410-17007-1

Date Collected: 10/12/20 09:00

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			514059	10/26/20 07:20	GPM	TAL DEN
Total/NA	Analysis	8260C DOD		1	514060	10/26/20 10:30	GPM	TAL DEN
Total/NA	Prep	3050B			512651	10/15/20 15:40	EC	TAL DEN
Total/NA	Analysis	6010C		1	512939	10/16/20 11:41	MRJ	TAL DEN

Client Sample ID: GWTS-2A-101220

Lab Sample ID: 410-17007-2

Date Collected: 10/12/20 09:03

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			514059	10/26/20 07:20	GPM	TAL DEN
Total/NA	Analysis	8260C DOD		1	514060	10/26/20 10:52	GPM	TAL DEN
Total/NA	Prep	3050B			512651	10/15/20 15:40	EC	TAL DEN
Total/NA	Analysis	6010C		1	512939	10/16/20 12:11	MRJ	TAL DEN

Client Sample ID: GWTS-4A-101220

Lab Sample ID: 410-17007-4

Date Collected: 10/12/20 09:09

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			514059	10/26/20 07:20	GPM	TAL DEN
Total/NA	Analysis	8260C DOD		1	514060	10/26/20 11:15	GPM	TAL DEN
Total/NA	Prep	3050B			512651	10/15/20 15:40	EC	TAL DEN
Total/NA	Analysis	6010C		1	512939	10/16/20 12:15	MRJ	TAL DEN

Client Sample ID: GWTS-5A-101220

Lab Sample ID: 410-17007-5

Date Collected: 10/12/20 09:11

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			514059	10/26/20 07:20	GPM	TAL DEN
Total/NA	Analysis	8260C DOD		1	514060	10/26/20 11:37	GPM	TAL DEN
Total/NA	Prep	3050B			512651	10/15/20 15:40	EC	TAL DEN
Total/NA	Analysis	6010C		1	512939	10/16/20 12:18	MRJ	TAL DEN

Client Sample ID: GWTS-7A-101220

Lab Sample ID: 410-17007-7

Date Collected: 10/12/20 09:17

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 95.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			514059	10/26/20 07:20	GPM	TAL DEN
Total/NA	Analysis	8260C DOD		1	514060	10/26/20 11:59	GPM	TAL DEN
Total/NA	Prep	3050B			512651	10/15/20 15:40	EC	TAL DEN
Total/NA	Analysis	6010C		1	512939	10/16/20 12:21	MRJ	TAL DEN

Lab Chronicle

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

Client Sample ID: GWTS-TB01-101220

Lab Sample ID: 410-17007-8

Date Collected: 10/12/20 13:00

Matrix: Water

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C DOD		1	513584	10/22/20 10:57	JLS	TAL DEN

Client Sample ID: GWTS-TB02-101220

Lab Sample ID: 410-17007-16

Date Collected: 10/12/20 13:00

Matrix: Water

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C DOD		1	513584	10/22/20 11:19	JLS	TAL DEN

Client Sample ID: GWTS-1A-101220-FD

Lab Sample ID: 410-17007-17

Date Collected: 10/12/20 09:00

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			514059	10/26/20 07:20	GPM	TAL DEN
Total/NA	Analysis	8260C DOD		1	514060	10/26/20 12:22	GPM	TAL DEN
Total/NA	Prep	3050B			513218	10/20/20 15:40	EC	TAL DEN
Total/NA	Analysis	6010C		1	513521	10/21/20 12:58	LMT	TAL DEN

Client Sample ID: GWTS-2A-101220-FD

Lab Sample ID: 410-17007-18

Date Collected: 10/12/20 09:03

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			514059	10/26/20 07:20	GPM	TAL DEN
Total/NA	Analysis	8260C DOD		1	514060	10/26/20 12:44	GPM	TAL DEN
Total/NA	Prep	3050B			513218	10/20/20 15:40	EC	TAL DEN
Total/NA	Analysis	6010C		1	513521	10/21/20 13:17	LMT	TAL DEN

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Accreditation/Certification Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

Laboratory: Eurofins TestAmerica, Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-21

- 1
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Method Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

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

Protocol References:

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

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



Sample Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-17007-1	GWTS-1A-101220	Solid	10/12/20 09:00	10/13/20 09:15	
410-17007-2	GWTS-2A-101220	Solid	10/12/20 09:03	10/13/20 09:15	
410-17007-4	GWTS-4A-101220	Solid	10/12/20 09:09	10/13/20 09:15	
410-17007-5	GWTS-5A-101220	Solid	10/12/20 09:11	10/13/20 09:15	
410-17007-7	GWTS-7A-101220	Solid	10/12/20 09:17	10/13/20 09:15	
410-17007-8	GWTS-TB01-101220	Water	10/12/20 13:00	10/13/20 09:15	
410-17007-16	GWTS-TB02-101220	Water	10/12/20 13:00	10/13/20 09:15	
410-17007-17	GWTS-1A-101220-FD	Solid	10/12/20 09:00	10/13/20 09:15	
410-17007-18	GWTS-2A-101220-FD	Solid	10/12/20 09:03	10/13/20 09:15	



410-17007 Chain of Custody



225 Schilling Creek Suite
400 Hunt Valley, MD
Tel No. (410) 584-7000
Fax No. (410) 771-1625

COC NUMBER
COC-GWTS1-101220

PROJECT NAME: Kirtland
AFB Bulk Fuels Facility

PROJECT NUMBER:
6360401

LABORATORY NAME AND CONTACT:
Eurofins TestAmerica
4955 Yarrow Street
Arvada, CO 80002

FAX AND MAIL REPORTS/IEDD TO: Tara Lamond: tlamond@eaest.com EA
Amanda Smith: asmith@eaest.com EA
FAX AND MAIL REPORTS/IEDD TO: Pam Mess: pmoss@eaest.com EA

PROJECT SITE AND
PHASE: ST106/SS111

LAB PO NUMBER:
21295

LAB CONTACT: Kay Hower
KeyHower@eurofinsUS.com

Eurofins 1 (717) 566-7258

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)						COMMENTS				
				(8260C) VOCs	(8260C) BTEX	(8260C) BTEXN	(8011) EDB/EDB Soil	Total As,Pb,Ca,K,Na,Mg (6020A/6010C)	Dissolved Fe, Mn+BTEX (6010C)+8260C		Chloride, bromide, sulfate (300.0)	(353.2) Nitrate-Nitrite	(SM4500NH3) Ammonia	(SM4500S2CF) Sulfide
1	GWTS-1A-101220	10/12/2020	0900	2	--	--	1	1	--	--	--	--	--	
2	GWTS-2A-101220	10/12/2020	0903	2	--	--	1	1	--	--	--	--	--	
3	GWTS-3A-101220	10/12/2020	0906	1	--	--	1	--	--	--	--	--	--	
4	GWTS-4A-101220	10/12/2020	0909	2	--	--	1	1	--	--	--	--	--	
5	GWTS-5A-101220	10/12/2020	0911	2	--	--	1	1	--	--	--	--	--	
6	GWTS-6A-101220	10/12/2020	0914	1	--	--	1	--	--	--	--	--	--	

Please give all samples a 5-Day rush turn around

3.4 ICH 11-0.3 RP 10/14/20

SAMPLER(S):	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
J Livingston	J Livingston	10/12/2020	1500	[Signature]	10/14/20	0945
J Livingston	J Livingston					
J Livingston	J Livingston					
J Livingston	J Livingston					

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225 Schilling Circle, Suite
460 Hunt Valley, MD
Tel No. (410) 594-7000
Fax No. (410) 771-1025

PROJECT NAME: Kirtland
AFB Bulk Fuels Facility

PROJECT NUMBER:
6360401

LABORATORY NAME AND CONTACT:
Eurofins TestAmerica
4955 Yarrow Street
Arvada, CO 80002

PROJECT SITE AND
PHASE: ST106/SS111

LAB PO NUMBER:
21295

LAB CONTACT: Kay Hower
KayHower@eurofinsUS.com

Eurofins 1 (717) 566-7258

CHAIN-OF-CUSTODY RECORD

COC NUMBER
COC-GWTS2-101220

YEAR: 2020

QUARTER: Q4

FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA
Amanda Smith: asmith@eaest.com EA
FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA

ANALYSIS REQUIRED (Specify number of bottles)

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	(8260C) VOCs	(8260C) BTEX	(8260C) BTEXN	(8011) EDB/EDB Soil	(6020A/6010C) Total As,Pb,Ca,K,Na,Mg	(6010C)+8260C Dissolved Fe, Mn+BTEX	(300.0) Chloride, bromide, sulfate	(353.2) Nitrate-Nitrite	(SM4500NH3) Ammonia	(SM4500S2CF) Sulfide	(SM2320B) Alkalinity	COMMENTS
1	GWTS-7A-101220	10/12/2020	0917	2	--	--	--	1	--	1	--	--	--	--	--	
2	GWTS-TB01-101220	10/12/2020	1300	4	--	2	--	2	--	--	--	--	--	--	--	
3																
4																
5																
6																

Please give all samples a 5-Day rush turn around

SAMPLER(S):	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
J Livingston	J Livingston	10/12/2020	1500	J Livingston	10/14/20	0945
Printed Name and Signature:	Printed Name and Signature:			Printed Name and Signature:		





225 Schilling Circle Suite
400 Hunt Valley MD
Tel No: (410) 584-7000
Fax No: (410) 771-1625

PROJECT NAME: Kirtland
AFB Bulk Fuels Facility

PROJECT NUMBER:
6360401

LABORATORY NAME AND CONTACT:
Eurofins TestAmerica
4955 Yarrow Street
Arvada, CO 80002

FAX AND MAIL REPORTS/IEDD TO: Tara Lamond: tlamond@east.com EA
Amanda Smith: asmith@east.com EA
FAX AND MAIL REPORTS/IEDD TO: Pam Moss: pmoss@east.com EA

YEAR: 2020
QUARTER: Q4

CHAIN-OF-CUSTODY RECORD

COC NUMBER
COC-GWTS3-101220

PROJECT SITE AND
PHASE: ST106/SS111

LAB PO NUMBER:
21295

LAB CONTACT: Kay Hower
KayHower@eurofinsUS.com

Eurofins 1 (717) 556-7258

ANALYSIS REQUIRED (Specify number of bottles)

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	(8260C) BTEX	(8260C) BTEXN	(8260C) VOCs	EDB/EDB Soil (8011)	Total As,Pb,Ca,K,Na,Mg (6020A/6010C)	Dissolved Fe, Mn (6010C)	Chloride, bromide, sulfate (300,0)	Nitrate-Nitrite (353.2)	Ammonia (SM4500NH3)	Sulfide (SM4500S2CF)	Alkalinity (SM2320B)	COMMENTS
1	GWTS-8A-101220	10/12/2020	0920	1	--	--	--	1	--	--	--	--	--	--	--	
2	GWTS-9A-101220	10/12/2020	0923	1	--	--	--	1	--	--	--	--	--	--	--	
3	GWTS-10A-101220	10/12/2020	0926	1	--	--	--	1	--	--	--	--	--	--	--	
4	GWTS-11A-101220	10/12/2020	0929	1	--	--	--	1	--	--	--	--	--	--	--	
5	GWTS-12A-101220	10/12/2020	0932	1	--	--	--	1	--	--	--	--	--	--	--	
6	GWTS-13A-101220	10/12/2020	0935	1	--	--	--	1	--	--	--	--	--	--	--	



410-17007 Chain of Custody

Please give all samples a 5-Day rush turn around

110C -0.3 JPH/1 SH 10/13/20

SAMPLER(S)	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
J Livingston	J Livingston	10/12/2020	1500	J Livingston	10/13/20	0915





225 Schilling Circle, Suite
400 Hunt Valley, MD
Tel No. (410) 584-7000
Fax No. (410) 771-1625

COC NUMBER
COC-GWTS4-101220

PROJECT NAME: Kirtland
AFB Bulk Fuels Facility

PROJECT NUMBER:
6360401

LABORATORY NAME AND CONTACT:
Eurofins TestAmerica
4955 Yarrow Street
Arvada, CO 80002

FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA
Amanda Smith: asmith@eaest.com EA
Pam Moss: pmoss@eaest.com EA

YEAR: 2020
QUARTER: Q4

LAB CONTACT: Kay Hower
Eurofins 1 (717) 566-7258

LAB PO NUMBER:
21295

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)										COMMENTS
				(8260C) VOCs	(8260C) BTEX	(8260C) BTEXN	(8260C) EDB/EDB Soil (8011)	Total As,Pb,Ca,K,Na,Mg (6020A/6010C)	Dissolved Fe, Mn (6010C)	Chloride, bromide, sulfate (300.0)	Nitrate-Nitrite (353.2)	Ammonia (SM4500NH3)	Sulfide (SM4500S2CF)	
1	GWTS-14A-101220	10/12/2020	0938	--	--	--	1	--	--	--	--	--	--	
2	GWTS-TB02-101220	10/12/2020	1300	--	--	--	2	--	--	--	--	--	--	
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Please give all samples a 5-Day rush turn around

SAMPLER(S):	RELINQUISHED BY:	DATE	TIME	COURIER AND SHIPPING NUMBER:	RECEIVED BY:	DATE	TIME
J Livingston	J Livingston	10/12/2020	1500	Fedex	Scott Hall	10/13/20	0915



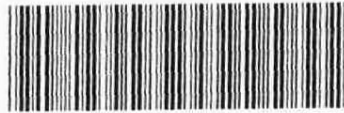
Do Not Lift Using This Tag

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ORIGIN ID:ONMA (505) 224-9013
EA ENGINEERING
320 GOLD AVE SW
ALBUQUERQUE, NM 87102
UNITED STATES US

SHIP DATE: 12OCT20
ACTWGT: 51.75 LB
CAD: 6995204/SSFE2121
DIMS: 24x14x14 IN
BILL THIRD PARTY

TO **ATTN: DARLENE BANDY
EUROFINS TESTAMERICA
4955 YARROW ST**



410-17007 Waybill

ARVADA CO 80002

650

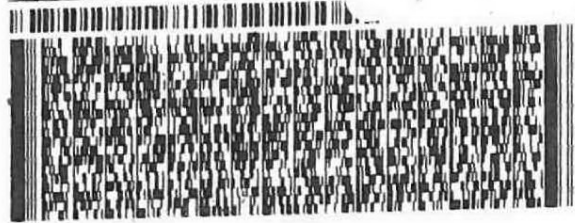
4 10:30

E 8287 10.13

(303) 736-0100
INVT
PD:

REF:

FZ



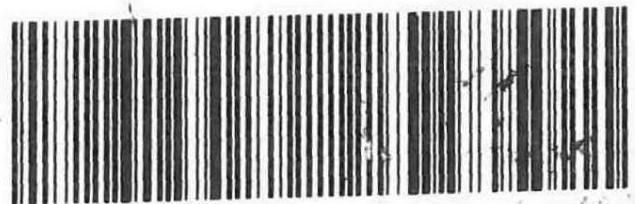
1 of 2

TRK# **3977 5166 8287**
0201
MASTER

**TUE - 13 OCT 10:30
PRIORITY OVERNIGHT**

XH LAAA

**AHS
80002
CO-US DEN**



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ORIGIN ID:DNM9 (505) 224-9013
 EA ENGINEERING
 320 GOLD AVE SW
 ALBUQUERQUE, NM 87102
 UNITED STATES US

TO
 ATTN: DARLENE BANDY
 EUROFINS TESTAMERICA
 4955 YARROW ST

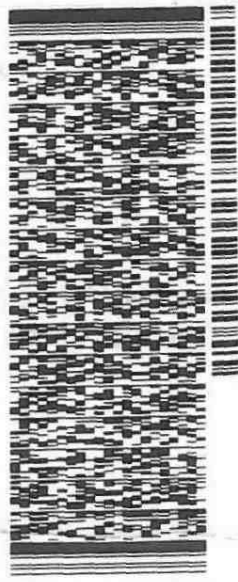
ACTWT: 51.75 LB
 CRD: 6995204/95FE2121
 DIMS: 24x14x14 IN
 BILL THIRD PARTY

ARVADA CO 80002

(303) 736-0100
 NO1

REF:

DEPT:

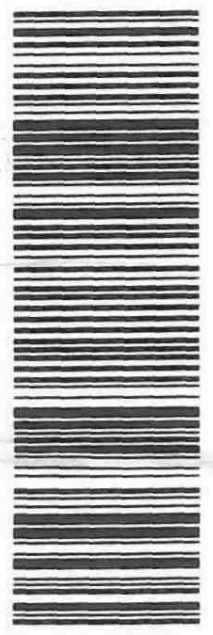


J202020071401an

2 of 2
 MPS# 3977 5166 8298
 0263
 Mstr# 3977 5166 8287
 0201

TUE - 13 OCT 10:30A
 PRIORITY OVERNIGHT
 AHS# 80002
 CO-US DEN

XH LA AA



PRN TO STATION FOR
 FIRST DATA ENTRY

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410-17007 Waybill

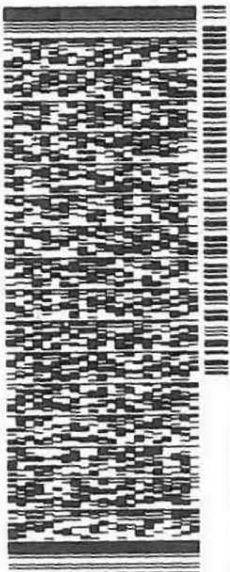
ORIGIN ID: ONMA (505) 224-9013
 EA ENGINEERING
 320 GOLD AVE SW
 ALBUQUERQUE, NM 87102
 UNITED STATES US

SHIP DATE: 12OCT20
 ACTWGT: 51.75 LB
 CAD: 6895204/SFE2121
 DIMS: 24x14x14 IN
 BILL THIRD PARTY

10 ATTN: DARLENE BANDY
 EUROFINS TESTAMERICA
 4955 YARROW ST

ARVADA CO 80002

(303) 798-0100
 REF: 1001
 DEPT: 1001



2 of 2
 MFS# 3977 5166 8298
 Mstr# 3977 5166 8287

TUE - 13 OCT 10:30A
 PRIORITY OVERNIGHT
 AHS 80002

XH LAAA

CO-US DEN



56812/A27E/B766



225 Schilling Circle Suite
400 Hunt Valley MD
Tel No: (410) 584-7000
Fax No: (410) 771-1625

PROJECT NAME: Kirtland
AFB Bulk Fuels Facility

PROJECT NUMBER:
6360401

LABORATORY NAME AND CONTACT:
Eurofins TestAmerica
4955 Yarrow Street
Arvada, CO 80002

FAX AND MAIL REPORTS/IEDD TO: Tara Lamond: tlamond@east.com EA
Amanda Smith: asmith@east.com EA
FAX AND MAIL REPORTS/IEDD TO: Pam Moss: pmoss@east.com EA

YEAR: 2020

QUARTER: Q4

CHAIN-OF-CUSTODY RECORD

COC NUMBER
COC-GWTS3-101220

PROJECT SITE AND PHASE: ST106/SS111

LAB PO NUMBER:
21295

LAB CONTACT: Kay Hower
KayHower@eurofinsUS.com

Eurofins 1 (717) 556-7258

ANALYSIS REQUIRED (Specify number of bottles)

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	COMMENTS
1	GWTS-8A-101220	10/12/2020	0920	(SM2320B) Alkalinity
2	GWTS-9A-101220	10/12/2020	0923	(SM4500S2CF) Sulfide
3	GWTS-10A-101220	10/12/2020	0926	(SM4500NH3) Ammonia
4	GWTS-11A-101220	10/12/2020	0929	(353.2) Nitrate-Nitrite
5	GWTS-12A-101220	10/12/2020	0932	(300.0) Chloride, bromide, sulfate
6	GWTS-13A-101220	10/12/2020	0935	(6010C) Dissolved Fe, Mn
				(6020A/6010C) Total As,Pb,Ca,K,Na,Mg
				(8011) EDB/EDB Soil
				(8260C) BTEXN
				(8260C) BTEX
				(8260C) VOCs
				Total Number of Bottles



410-17007 Chain of Custody

Please give all samples a 5-Day rush turn around

110C -0.3 JPH/1 SH 10/13/20

SAMPLER(S)	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
J Livingston	J Livingston	10/12/2020	1500	Fedex	10/13/20	0915
J Livingston	J Livingston					
J Livingston	J Livingston					
J Livingston	J Livingston					





225 Schilling Circle, Suite
400 Hunt Valley MD
Tel No. (410) 584-7000
Fax No. (410) 771-1625

COC NUMBER
COC-GWTS4-101220

PROJECT NAME: Kirtland
AFB Bulk Fuels Facility

PROJECT NUMBER:
6360401

LABORATORY NAME AND CONTACT:
Eurofins TestAmerica
4955 Yarrow Street
Arvada, CO 80002

FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA
Amanda Smith: asmith@eaest.com EA
Pam Moss: pmoss@eaest.com EA

YEAR: 2020
QUARTER: Q4

LAB CONTACT: Kay Hower
Eurofins 1 (717) 566-7258

LAB CONTACT: Kay Hower
EurofinsUS.com

LAB PO NUMBER:
21295

LAB CONTACT: Kay Hower
EurofinsUS.com

LAB CONTACT: Kay Hower
EurofinsUS.com

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)										COMMENTS		
				Total Number of Bottles	(8260C) VOCs	(8260C) BTEX	(8260C) BTEXN	(8260C) EDB/EDB Soil (8011)	Total As,Pb,Ca,K,Na,Mg (6020A/6010C)	Dissolved Fe, Mn (6010C)	Chloride, bromide, sulfate (300.0)	Nitrate-Nitrite (353.2)	Ammonia (SM4500NH3)		Sulfide (SM4500S2CF)	Alkalinity (SM2320B)
1	GWTS-14A-101220	10/12/2020	0938	1	--	--	--	1	--	--	--	--	--	--	--	
2	GWTS-TB02-101220	10/12/2020	1300	2	--	--	--	2	--	--	--	--	--	--	--	
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4																
5																
6																

Please give all samples a 5-Day rush turn around

SAMPLER(S):	RELINQUISHED BY:	DATE	TIME	COURIER AND SHIPPING NUMBER:	RECEIVED BY:	DATE	TIME
J Livingston	J Livingston	10/12/2020	1500	Fedex:	Scott Hall	10/13/20	0915





410-17007 Chain of Custody



225 Schilling Creek Suite
400 Hunt Valley, MD
Tel No. (410) 584-7000
Fax No. (410) 771-1625

COC NUMBER
COC-GWTS1-101220

PROJECT NAME: Kirtland
AFB Bulk Fuels Facility

PROJECT NUMBER:
6360401

LABORATORY NAME AND CONTACT:
Eurofins TestAmerica
4955 Yarrow Street
Arvada, CO 80002

FAX AND MAIL REPORTS/IEDD TO: Tara Lamond: tlamond@eaest.com EA
Amanda Smith: asmith@eaest.com EA
FAX AND MAIL REPORTS/IEDD TO: Pam Moss: pmoss@eaest.com EA

PROJECT SITE AND
PHASE: ST106/SS111

LAB PO NUMBER:
21295

LAB CONTACT: Kay Hower
KeyHower@eurofinsUS.com

Eurofins 1 (717) 566-7258

YEAR: 2020
QUARTER: Q4

CHAIN-OF-CUSTODY RECORD

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)						COMMENTS				
				(8260C) VOCs	(8260C) BTEX	(8260C) BTEXN	(8011) EDB/EDB Soil	Total As,Pb,Ca,K,Na,Mg (6020A/6010C)	Dissolved Fe, Mn+BTEX (6010C)+8260C		Chloride, bromide, sulfate (300.0)	Nitrate-Nitrite (353.2)	Ammonia (SM4500NH3)	Sulfide (SM4500S2CF)
1	GWTS-1A-101220	10/12/2020	0900	2	--	--	1	--	1	--	--	--	--	
2	GWTS-2A-101220	10/12/2020	0903	2	--	--	1	--	1	--	--	--	--	
3	GWTS-3A-101220	10/12/2020	0906	1	--	--	1	--	--	--	--	--	--	
4	GWTS-4A-101220	10/12/2020	0909	2	--	--	1	--	1	--	--	--	--	
5	GWTS-5A-101220	10/12/2020	0911	2	--	--	1	--	1	--	--	--	--	
6	GWTS-6A-101220	10/12/2020	0914	1	--	--	1	--	--	--	--	--	--	

Please give all samples a 5-Day rush turn around

3.4 ICH 11-0.3 RP 10/14/20

SAMPLER(S):	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
J Livingston	J Livingston	10/12/2020	1500	J Livingston	10/14/20	0945
J Livingston	J Livingston					
J Livingston	J Livingston					
J Livingston	J Livingston					





225 Schilling Circle, Suite
460 Hunt Valley, MD
Tel No. (410) 594-7000
Fax No. (410) 771-1025

PROJECT NAME: Kirtland
AFB Bulk Fuels Facility

PROJECT NUMBER:
6360401

LABORATORY NAME AND CONTACT:
Eurofins TestAmerica
4955 Yarrow Street
Arvada, CO 80002

PROJECT SITE AND
PHASE: ST106/SS111

LAB PO NUMBER:
21295

LAB CONTACT: Kay Hower

KayHower@eurofinsUS.com

Eurofins 1 (717) 566-7258

CHAIN-OF-CUSTODY RECORD

COC NUMBER

COC-GWTS2-101220

YEAR: 2020

QUARTER: Q4

FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA
Amanda Smith: asmith@eaest.com EA
FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA

ANALYSIS REQUIRED (Specify number of bottles)

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	(8260C) VOCs	(8260C) BTEX	(8260C) BTEXN	(8011) EDB/EDB Soil	(6020A/6010C) Total As,Pb,Ca,K,Na,Mg	(6010C)+8260C Dissolved Fe, Mn+BTEX	(300.0) Chloride, bromide, sulfate	(353.2) Nitrate-Nitrite	(SM4500NH3) Ammonia	(SM4500S2CF) Sulfide	(SM2320B) Alkalinity	COMMENTS
1	GWTS-7A-101220	10/12/2020	0917	2	--	--	1	--	1	--	--	--	--	--	
2	GWTS-TB01-101220	10/12/2020	1300	4	2	--	2	--	--	--	--	--	--	--	
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5															
6															

Please give all samples a 5-Day rush turn around

SAMPLER(S):	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
J Livingston	J Livingston	10/12/2020	1500	J Livingston	10/14/20	0945
Printed Name and Signature:	Printed Name and Signature:			Printed Name and Signature:		



Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 410-17007-1

Login Number: 17007

List Number: 2

Creator: O'Hara, Jake F

List Source: Eurofins TestAmerica, Denver

List Creation: 10/13/20 08:22 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.	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").	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: EA Engineering, Science, and Technology

Job Number: 410-17007-1

Login Number: 17007

List Number: 3

Creator: O'Hara, Jake F

List Source: Eurofins TestAmerica, Denver

List Creation: 10/13/20 08:23 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	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: EA Engineering, Science, and Technology

Job Number: 410-17007-1

Login Number: 17007
List Number: 4
Creator: Pottruff, Reed W

List Source: Eurofins TestAmerica, Denver
List Creation: 10/14/20 08:01 PM

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").	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: EA Engineering, Science, and Technology

Job Number: 410-17007-1

Login Number: 17007

List Number: 5

Creator: Pottruff, Reed W

List Source: Eurofins TestAmerica, Denver

List Creation: 10/14/20 08:01 PM

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").	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: EA Engineering, Science, and Technology

Job Number: 410-17007-1

Login Number: 17007

List Number: 6

Creator: O'Hara, Jake F

List Source: Eurofins TestAmerica, Denver

List Creation: 10/16/20 12:51 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
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	



ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-17007-2

Client Project/Site: Kirtland AFB Bulk Fuels Facility

For:

EA Engineering, Science, and Technology
405 S. Highway 121 bypass
Building C
Suite 100
Lewisville, Texas 75067

Attn: Pamela J Moss



Authorized for release by:
10/28/2020 11:09:33 AM

Darlene Bandy, Project Manager I
(303)736-0188
Darlene.Bandy@Eurofinset.com

LINKS

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results through
TotalAccess

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www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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.



Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

* QC recoveries that exceed the upper limits and are associated with non-detect samples are qualified but no further narration is needed since the bias is high and does not change a non-detect result.

* Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.

* Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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A handwritten signature in cursive script that reads "Darlene Bandy".

Darlene Bandy
Project Manager I
10/28/2020 11:09:33 AM



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Definitions/Glossary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
M	Manual integrated compound.
U	Undetected at the Limit of Detection.

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
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

Case Narrative

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Job ID: 410-17007-2

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative 410-17007-2

Comments

No additional comments.

Receipt

The samples were received on 10/13/2020 9:15 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 0.8° C and 3.1° C.

Receipt Exceptions

The samples in job 410-17007-1 were shipped directly to Eurofins TestAmerica Denver by the client. The inter-company COC (ICOC) was generated only because, since the samples were logged by Eurofins Lancaster Laboratories Environment, they needed to be "shipped" in the LIMS in order for ETA Denver to receive them.

GWTS-1A-101220 (410-17007-1), GWTS-2A-101220 (410-17007-2), GWTS-3A-101220 (410-17007-3), GWTS-4A-101220 (410-17007-4), GWTS-5A-101220 (410-17007-5), GWTS-6A-101220 (410-17007-6), GWTS-7A-101220 (410-17007-7), GWTS-TB01-101220 (410-17007-8), GWTS-8A-101220 (410-17007-9), GWTS-9A-101220 (410-17007-10), GWTS-10A-101220 (410-17007-11), GWTS-11A-101220 (410-17007-12), GWTS-12A-101220 (410-17007-13), GWTS-13A-101220 (410-17007-14), GWTS-14A-101220 (410-17007-15), GWTS-TB02-101220 (410-17007-16), GWTS-1A-101220-FD (410-17007-17) and GWTS-2A-101220-FD (410-17007-18)

As requested by the client, two of the samples were also logged as field duplicates. Sample GWTS-1A-101220 (410-17007-1) was also logged as sample GWTS-1A-101220-FD (410-17007-17). Sample GWTS-2A-101220 (410-17007-2) was also logged as sample GWTS-2A-101220-FD (410-17007-18).

One cooler was delayed by FedEx, and was received at the laboratory on 10/14/2020. It is noted that this cooler was received within temperature requirements. Due to the delay in sample receipt, the turnaround time began on 10/14/2020.

Containers for these samples were received 10/13/2020: GWTS-8A-101220 (410-17007-9), GWTS-9A-101220 (410-17007-10), GWTS-10A-101220 (410-17007-11), GWTS-11A-101220 (410-17007-12), GWTS-12A-101220 (410-17007-13), GWTS-13A-101220 (410-17007-14), GWTS-14A-101220 (410-17007-15) and GWTS-TB02-101220 (410-17007-16)

The client needed the 8011 data as soon as possible; therefore, the 8011 and % Moisture methods were split off into job series 410-17007-2, with a faster turnaround time. All other methods on the chain of custody are reported under SDG 410-17007-1. GWTS-1A-101220 (410-17007-1), GWTS-2A-101220 (410-17007-2), GWTS-3A-101220 (410-17007-3), GWTS-4A-101220 (410-17007-4), GWTS-5A-101220 (410-17007-5), GWTS-6A-101220 (410-17007-6), GWTS-7A-101220 (410-17007-7), GWTS-TB01-101220 (410-17007-8), GWTS-8A-101220 (410-17007-9), GWTS-9A-101220 (410-17007-10), GWTS-10A-101220 (410-17007-11), GWTS-11A-101220 (410-17007-12), GWTS-12A-101220 (410-17007-13), GWTS-13A-101220 (410-17007-14), GWTS-14A-101220 (410-17007-15), GWTS-TB02-101220 (410-17007-16), GWTS-1A-101220-FD (410-17007-17) and GWTS-2A-101220-FD (410-17007-18)

GC Semi VOA

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

General Chemistry

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

Detection Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Client Sample ID: GWTS-1A-101220	Lab Sample ID: 410-17007-1
<input type="checkbox"/> No Detections.	
Client Sample ID: GWTS-2A-101220	Lab Sample ID: 410-17007-2
<input type="checkbox"/> No Detections.	
Client Sample ID: GWTS-3A-101220	Lab Sample ID: 410-17007-3
<input type="checkbox"/> No Detections.	
Client Sample ID: GWTS-4A-101220	Lab Sample ID: 410-17007-4
<input type="checkbox"/> No Detections.	
Client Sample ID: GWTS-5A-101220	Lab Sample ID: 410-17007-5
<input type="checkbox"/> No Detections.	
Client Sample ID: GWTS-6A-101220	Lab Sample ID: 410-17007-6
<input type="checkbox"/> No Detections.	
Client Sample ID: GWTS-7A-101220	Lab Sample ID: 410-17007-7
<input type="checkbox"/> No Detections.	
Client Sample ID: GWTS-TB01-101220	Lab Sample ID: 410-17007-8
<input type="checkbox"/> No Detections.	
Client Sample ID: GWTS-8A-101220	Lab Sample ID: 410-17007-9
<input type="checkbox"/> No Detections.	
Client Sample ID: GWTS-9A-101220	Lab Sample ID: 410-17007-10
<input type="checkbox"/> No Detections.	
Client Sample ID: GWTS-10A-101220	Lab Sample ID: 410-17007-11
<input type="checkbox"/> No Detections.	
Client Sample ID: GWTS-11A-101220	Lab Sample ID: 410-17007-12
<input type="checkbox"/> No Detections.	
Client Sample ID: GWTS-12A-101220	Lab Sample ID: 410-17007-13
<input type="checkbox"/> No Detections.	
Client Sample ID: GWTS-13A-101220	Lab Sample ID: 410-17007-14
<input type="checkbox"/> No Detections.	
Client Sample ID: GWTS-14A-101220	Lab Sample ID: 410-17007-15
<input type="checkbox"/> No Detections.	
Client Sample ID: GWTS-1A-101220-FD	Lab Sample ID: 410-17007-17
<input type="checkbox"/> No Detections.	

This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Detection Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Client Sample ID: GWTS-2A-101220-FD

Lab Sample ID: 410-17007-18

No Detections.

1

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This Detection Summary does not include radiochemical test results.

Eurofins Lancaster Laboratories Env, LLC

Client Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Client Sample ID: GWTS-1A-101220

Lab Sample ID: 410-17007-1

Date Collected: 10/12/20 09:00

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 90.2

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac	
Ethylene Dibromide (1C)	0.042	U	0.11	0.042	0.017	ug/Kg	☼	10/15/20 18:36	1	
Surrogate	%Recovery	Qualifier	Limits					Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (1C)	95		55 - 130					10/15/20 10:02	10/15/20 18:36	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	9.8		0.1	0.05	0.1	%		10/22/20 14:03	1
Percent Solids	90.2		0.1	0.05	0.1	%		10/22/20 14:03	1

Client Sample ID: GWTS-2A-101220

Lab Sample ID: 410-17007-2

Date Collected: 10/12/20 09:03

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 89.3

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac	
Ethylene Dibromide (1C)	0.043	U	0.11	0.043	0.017	ug/Kg	☼	10/15/20 18:57	1	
Surrogate	%Recovery	Qualifier	Limits					Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (1C)	92		55 - 130					10/15/20 10:02	10/15/20 18:57	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	10.7		0.1	0.05	0.1	%		10/22/20 14:03	1
Percent Solids	89.3		0.1	0.05	0.1	%		10/22/20 14:03	1

Client Sample ID: GWTS-3A-101220

Lab Sample ID: 410-17007-3

Date Collected: 10/12/20 09:06

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 95.8

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac	
Ethylene Dibromide (1C)	0.040	U	0.10	0.040	0.016	ug/Kg	☼	10/15/20 19:19	1	
Surrogate	%Recovery	Qualifier	Limits					Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (1C)	95		55 - 130					10/15/20 10:02	10/15/20 19:19	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	4.2		0.1	0.05	0.1	%		10/22/20 14:03	1
Percent Solids	95.8		0.1	0.05	0.1	%		10/22/20 14:03	1

Client Sample ID: GWTS-4A-101220

Lab Sample ID: 410-17007-4

Date Collected: 10/12/20 09:09

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 90.0

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac	
Ethylene Dibromide (1C)	0.042	U M	0.11	0.042	0.017	ug/Kg	☼	10/15/20 19:40	1	
Surrogate	%Recovery	Qualifier	Limits					Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (1C)	99		55 - 130					10/15/20 10:02	10/15/20 19:40	1

Client Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Client Sample ID: GWTS-4A-101220

Lab Sample ID: 410-17007-4

Date Collected: 10/12/20 09:09

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 90.0

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	10.0		0.1	0.05	0.1	%		10/22/20 14:03	1
Percent Solids	90.0		0.1	0.05	0.1	%		10/22/20 14:03	1

Client Sample ID: GWTS-5A-101220

Lab Sample ID: 410-17007-5

Date Collected: 10/12/20 09:11

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 88.8

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide (1C)	0.043	U	0.11	0.043	0.017	ug/Kg	☼	10/15/20 20:02	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>		<i>Prepared</i>			<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dibromopropane (1C)	91		55 - 130		10/15/20 10:02			10/15/20 20:02	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	11.2		0.1	0.05	0.1	%		10/22/20 14:03	1
Percent Solids	88.8		0.1	0.05	0.1	%		10/22/20 14:03	1

Client Sample ID: GWTS-6A-101220

Lab Sample ID: 410-17007-6

Date Collected: 10/12/20 09:14

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 87.9

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide (1C)	0.043	U	0.11	0.043	0.017	ug/Kg	☼	10/15/20 20:23	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>		<i>Prepared</i>			<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dibromopropane (1C)	87		55 - 130		10/15/20 10:02			10/15/20 20:23	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	12.1		0.1	0.05	0.1	%		10/22/20 14:03	1
Percent Solids	87.9		0.1	0.05	0.1	%		10/22/20 14:03	1

Client Sample ID: GWTS-7A-101220

Lab Sample ID: 410-17007-7

Date Collected: 10/12/20 09:17

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 95.5

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide (1C)	0.040	U	0.10	0.040	0.016	ug/Kg	☼	10/15/20 20:45	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>		<i>Prepared</i>			<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dibromopropane (1C)	91		55 - 130		10/15/20 10:02			10/15/20 20:45	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	4.5		0.1	0.05	0.1	%		10/22/20 14:03	1
Percent Solids	95.5		0.1	0.05	0.1	%		10/22/20 14:03	1

Client Sample Results

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Client Sample ID: GWTS-TB01-101220

Lab Sample ID: 410-17007-8

Date Collected: 10/12/20 13:00

Matrix: Water

Date Received: 10/13/20 09:15

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide (1C)	0.014	U	0.020	0.014	0.0036	ug/L		10/16/20 15:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (1C)	103		70 - 130	10/16/20 09:54	10/16/20 15:42	1

Client Sample ID: GWTS-8A-101220

Lab Sample ID: 410-17007-9

Date Collected: 10/12/20 09:20

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 95.6

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide (1C)	0.040	U	0.10	0.040	0.016	ug/Kg	☼	10/15/20 21:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (1C)	88	M	55 - 130	10/15/20 10:02	10/15/20 21:56	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	4.4		0.1	0.05	0.1	%		10/22/20 22:11	1
Percent Solids	95.6		0.1	0.05	0.1	%		10/22/20 22:11	1

Client Sample ID: GWTS-9A-101220

Lab Sample ID: 410-17007-10

Date Collected: 10/12/20 09:23

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 95.8

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide (1C)	0.040	U	0.10	0.040	0.016	ug/Kg	☼	10/15/20 22:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (1C)	75	M	55 - 130	10/15/20 10:02	10/15/20 22:18	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	4.2		0.1	0.05	0.1	%		10/22/20 22:11	1
Percent Solids	95.8		0.1	0.05	0.1	%		10/22/20 22:11	1

Client Sample ID: GWTS-10A-101220

Lab Sample ID: 410-17007-11

Date Collected: 10/12/20 09:26

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 91.3

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide (1C)	0.042	U	0.11	0.042	0.016	ug/Kg	☼	10/15/20 22:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (1C)	85		55 - 130	10/15/20 10:02	10/15/20 22:39	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	8.7		0.1	0.05	0.1	%		10/22/20 22:11	1
Percent Solids	91.3		0.1	0.05	0.1	%		10/22/20 22:11	1

Client Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Client Sample ID: GWTS-11A-101220

Lab Sample ID: 410-17007-12

Date Collected: 10/12/20 09:29

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 97.4

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide (1C)	0.039	U	0.10	0.039	0.015	ug/Kg	☼	10/15/20 23:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (1C)	92		55 - 130	10/15/20 10:02	10/15/20 23:01	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	2.6		0.1	0.05	0.1	%		10/22/20 22:11	1
Percent Solids	97.4		0.1	0.05	0.1	%		10/22/20 22:11	1

Client Sample ID: GWTS-12A-101220

Lab Sample ID: 410-17007-13

Date Collected: 10/12/20 09:32

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 94.2

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide (1C)	0.040	U	0.11	0.040	0.016	ug/Kg	☼	10/15/20 23:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (1C)	89		55 - 130	10/15/20 10:02	10/15/20 23:22	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	5.8		0.1	0.05	0.1	%		10/22/20 22:11	1
Percent Solids	94.2		0.1	0.05	0.1	%		10/22/20 22:11	1

Client Sample ID: GWTS-13A-101220

Lab Sample ID: 410-17007-14

Date Collected: 10/12/20 09:35

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 94.3

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide (1C)	0.040	U	0.11	0.040	0.016	ug/Kg	☼	10/15/20 23:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (1C)	86		55 - 130	10/15/20 10:02	10/15/20 23:44	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	5.7		0.1	0.05	0.1	%		10/22/20 22:11	1
Percent Solids	94.3		0.1	0.05	0.1	%		10/22/20 22:11	1

Client Sample ID: GWTS-14A-101220

Lab Sample ID: 410-17007-15

Date Collected: 10/12/20 09:38

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 97.2

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide (1C)	0.039	U	0.10	0.039	0.015	ug/Kg	☼	10/16/20 00:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dibromopropane (1C)	85		55 - 130	10/15/20 10:02	10/16/20 00:05	1

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Client Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Client Sample ID: GWTS-14A-101220

Lab Sample ID: 410-17007-15

Date Collected: 10/12/20 09:38

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 97.2

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	2.8		0.1	0.05	0.1	%		10/22/20 22:11	1
Percent Solids	97.2		0.1	0.05	0.1	%		10/22/20 22:11	1

Client Sample ID: GWTS-1A-101220-FD

Lab Sample ID: 410-17007-17

Date Collected: 10/12/20 09:00

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 90.7

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide (1C)	0.042	U	0.11	0.042	0.016	ug/Kg	☼	10/16/20 00:27	1
Surrogate	%Recovery	Qualifier	Limits		Prepared			Analyzed	Dil Fac
1,2-Dibromopropane (1C)	87		55 - 130		10/15/20 14:02			10/16/20 00:27	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	9.3		0.1	0.05	0.1	%		10/26/20 09:03	1
Percent Solids	90.7		0.1	0.05	0.1	%		10/26/20 09:03	1

Client Sample ID: GWTS-2A-101220-FD

Lab Sample ID: 410-17007-18

Date Collected: 10/12/20 09:03

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 88.9

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Ethylene Dibromide (1C)	0.043	U	0.11	0.043	0.017	ug/Kg	☼	10/16/20 00:48	1
Surrogate	%Recovery	Qualifier	Limits		Prepared			Analyzed	Dil Fac
1,2-Dibromopropane (1C)	91		55 - 130		10/15/20 14:02			10/16/20 00:48	1

General Chemistry

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Percent Moisture	11.1		0.1	0.05	0.1	%		10/26/20 09:03	1
Percent Solids	88.9		0.1	0.05	0.1	%		10/26/20 09:03	1

Surrogate Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	12DBP1 (55-130)	
410-17007-1	GWTS-1A-101220	95	
410-17007-2	GWTS-2A-101220	92	
410-17007-3	GWTS-3A-101220	95	
410-17007-4	GWTS-4A-101220	99	
410-17007-5	GWTS-5A-101220	91	
410-17007-6	GWTS-6A-101220	87	
410-17007-7	GWTS-7A-101220	91	
410-17007-9	GWTS-8A-101220	88 M	
410-17007-10	GWTS-9A-101220	75 M	
410-17007-11	GWTS-10A-101220	85	
410-17007-12	GWTS-11A-101220	92	
410-17007-13	GWTS-12A-101220	89	
410-17007-14	GWTS-13A-101220	86	
410-17007-15	GWTS-14A-101220	85	
410-17007-17	GWTS-1A-101220-FD	87	
410-17007-18	GWTS-2A-101220-FD	91	
LCS 280-512725/2-A	Lab Control Sample	90	
LCSD 280-512725/3-A	Lab Control Sample Dup	96	
MB 280-512725/1-A	Method Blank	86	

Surrogate Legend

12DBP = 1,2-Dibromopropane

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	12DBP1 (70-130)	
410-17007-8	GWTS-TB01-101220	103	
LCS 280-512894/2-A	Lab Control Sample	97	
LCSD 280-512894/3-A	Lab Control Sample Dup	99	
MB 280-512894/1-A	Method Blank	96	

Surrogate Legend

12DBP = 1,2-Dibromopropane

QC Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC)

Lab Sample ID: MB 280-512725/1-A
Matrix: Solid
Analysis Batch: 512765

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 512725

Analyte	MB MB		LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Ethylene Dibromide (1C)	0.038	U	0.10	0.038	0.015	ug/Kg		10/15/20 17:31	1
Surrogate	MB MB		Limits	Prepared		Analyzed	Dil Fac		
%Recovery	Qualifier								
1,2-Dibromopropane (1C)	86		55 - 130	10/15/20 10:02	10/15/20 17:31	1			

Lab Sample ID: LCS 280-512725/2-A
Matrix: Solid
Analysis Batch: 512765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 512725

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Surrogate	LCS LCS		Limits	Prepared		Analyzed	Dil Fac
%Recovery	Qualifier						
1,2-Dibromopropane (1C)	90		55 - 130	10/15/20 10:02	10/15/20 17:31	1	

Lab Sample ID: LCSD 280-512725/3-A
Matrix: Solid
Analysis Batch: 512765

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 512725

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Surrogate	LCSD LCSD		Limits	Prepared		Analyzed	Dil Fac		
%Recovery	Qualifier								
1,2-Dibromopropane (1C)	96		55 - 130	10/16/20 09:54	10/16/20 13:53	1			

Lab Sample ID: MB 280-512894/1-A
Matrix: Water
Analysis Batch: 512921

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 512894

Analyte	MB MB		LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
	Result	Qualifier							
Ethylene Dibromide (1C)	0.014	U M	0.020	0.014	0.0037	ug/L		10/16/20 13:53	1
Surrogate	MB MB		Limits	Prepared		Analyzed	Dil Fac		
%Recovery	Qualifier								
1,2-Dibromopropane (1C)	96		70 - 130	10/16/20 09:54	10/16/20 13:53	1			

Lab Sample ID: LCS 280-512894/2-A
Matrix: Water
Analysis Batch: 512921

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 512894

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Surrogate	LCS LCS		Limits	Prepared		Analyzed	Dil Fac
%Recovery	Qualifier						
1,2-Dibromopropane (1C)	97		70 - 130	10/16/20 09:54	10/16/20 13:53	1	

QC Sample Results

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Method: 8011 - EDB, DBCP, and 1,2,3-TCP (GC) (Continued)

Lab Sample ID: LCSD 280-512894/3-A

Matrix: Water

Analysis Batch: 512921

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 512894

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD Limit
							Limits	RPD	
Ethylene Dibromide (1C)	0.250	0.231	M	ug/L		92	70 - 130	6	30
Surrogate							LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dibromopropane (1C)							99		70 - 130

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

QC Association Summary

Client: EA Engineering, Science, and Technology
 Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

GC Semi VOA

Prep Batch: 512725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17007-1	GWTS-1A-101220	Total/NA	Solid	8011	
410-17007-2	GWTS-2A-101220	Total/NA	Solid	8011	
410-17007-3	GWTS-3A-101220	Total/NA	Solid	8011	
410-17007-4	GWTS-4A-101220	Total/NA	Solid	8011	
410-17007-5	GWTS-5A-101220	Total/NA	Solid	8011	
410-17007-6	GWTS-6A-101220	Total/NA	Solid	8011	
410-17007-7	GWTS-7A-101220	Total/NA	Solid	8011	
410-17007-9	GWTS-8A-101220	Total/NA	Solid	8011	
410-17007-10	GWTS-9A-101220	Total/NA	Solid	8011	
410-17007-11	GWTS-10A-101220	Total/NA	Solid	8011	
410-17007-12	GWTS-11A-101220	Total/NA	Solid	8011	
410-17007-13	GWTS-12A-101220	Total/NA	Solid	8011	
410-17007-14	GWTS-13A-101220	Total/NA	Solid	8011	
410-17007-15	GWTS-14A-101220	Total/NA	Solid	8011	
410-17007-17	GWTS-1A-101220-FD	Total/NA	Solid	8011	
410-17007-18	GWTS-2A-101220-FD	Total/NA	Solid	8011	
MB 280-512725/1-A	Method Blank	Total/NA	Solid	8011	
LCS 280-512725/2-A	Lab Control Sample	Total/NA	Solid	8011	
LCSD 280-512725/3-A	Lab Control Sample Dup	Total/NA	Solid	8011	

Analysis Batch: 512765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17007-1	GWTS-1A-101220	Total/NA	Solid	8011	512725
410-17007-2	GWTS-2A-101220	Total/NA	Solid	8011	512725
410-17007-3	GWTS-3A-101220	Total/NA	Solid	8011	512725
410-17007-4	GWTS-4A-101220	Total/NA	Solid	8011	512725
410-17007-5	GWTS-5A-101220	Total/NA	Solid	8011	512725
410-17007-6	GWTS-6A-101220	Total/NA	Solid	8011	512725
410-17007-7	GWTS-7A-101220	Total/NA	Solid	8011	512725
410-17007-9	GWTS-8A-101220	Total/NA	Solid	8011	512725
410-17007-10	GWTS-9A-101220	Total/NA	Solid	8011	512725
410-17007-11	GWTS-10A-101220	Total/NA	Solid	8011	512725
410-17007-12	GWTS-11A-101220	Total/NA	Solid	8011	512725
410-17007-13	GWTS-12A-101220	Total/NA	Solid	8011	512725
410-17007-14	GWTS-13A-101220	Total/NA	Solid	8011	512725
410-17007-15	GWTS-14A-101220	Total/NA	Solid	8011	512725
410-17007-17	GWTS-1A-101220-FD	Total/NA	Solid	8011	512725
410-17007-18	GWTS-2A-101220-FD	Total/NA	Solid	8011	512725
MB 280-512725/1-A	Method Blank	Total/NA	Solid	8011	512725
LCS 280-512725/2-A	Lab Control Sample	Total/NA	Solid	8011	512725
LCSD 280-512725/3-A	Lab Control Sample Dup	Total/NA	Solid	8011	512725

Prep Batch: 512894

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17007-8	GWTS-TB01-101220	Total/NA	Water	8011	
MB 280-512894/1-A	Method Blank	Total/NA	Water	8011	
LCS 280-512894/2-A	Lab Control Sample	Total/NA	Water	8011	
LCSD 280-512894/3-A	Lab Control Sample Dup	Total/NA	Water	8011	

QC Association Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

GC Semi VOA

Analysis Batch: 512921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17007-8	GWTS-TB01-101220	Total/NA	Water	8011	512894
MB 280-512894/1-A	Method Blank	Total/NA	Water	8011	512894
LCS 280-512894/2-A	Lab Control Sample	Total/NA	Water	8011	512894
LCSD 280-512894/3-A	Lab Control Sample Dup	Total/NA	Water	8011	512894

General Chemistry

Analysis Batch: 513665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17007-1	GWTS-1A-101220	Total/NA	Solid	Moisture	
410-17007-2	GWTS-2A-101220	Total/NA	Solid	Moisture	
410-17007-3	GWTS-3A-101220	Total/NA	Solid	Moisture	
410-17007-4	GWTS-4A-101220	Total/NA	Solid	Moisture	
410-17007-5	GWTS-5A-101220	Total/NA	Solid	Moisture	
410-17007-6	GWTS-6A-101220	Total/NA	Solid	Moisture	
410-17007-7	GWTS-7A-101220	Total/NA	Solid	Moisture	

Analysis Batch: 513774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17007-9	GWTS-8A-101220	Total/NA	Solid	Moisture	
410-17007-10	GWTS-9A-101220	Total/NA	Solid	Moisture	
410-17007-11	GWTS-10A-101220	Total/NA	Solid	Moisture	
410-17007-12	GWTS-11A-101220	Total/NA	Solid	Moisture	
410-17007-13	GWTS-12A-101220	Total/NA	Solid	Moisture	
410-17007-14	GWTS-13A-101220	Total/NA	Solid	Moisture	
410-17007-15	GWTS-14A-101220	Total/NA	Solid	Moisture	

Analysis Batch: 514083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-17007-17	GWTS-1A-101220-FD	Total/NA	Solid	Moisture	
410-17007-18	GWTS-2A-101220-FD	Total/NA	Solid	Moisture	

Lab Chronicle

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Client Sample ID: GWTS-1A-101220

Lab Sample ID: 410-17007-1

Date Collected: 10/12/20 09:00

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	513665	10/22/20 14:03	SPG	TAL DEN

Client Sample ID: GWTS-1A-101220

Lab Sample ID: 410-17007-1

Date Collected: 10/12/20 09:00

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512725	10/15/20 10:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/15/20 18:36	JSM	TAL DEN

Client Sample ID: GWTS-2A-101220

Lab Sample ID: 410-17007-2

Date Collected: 10/12/20 09:03

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	513665	10/22/20 14:03	SPG	TAL DEN

Client Sample ID: GWTS-2A-101220

Lab Sample ID: 410-17007-2

Date Collected: 10/12/20 09:03

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512725	10/15/20 10:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/15/20 18:57	JSM	TAL DEN

Client Sample ID: GWTS-3A-101220

Lab Sample ID: 410-17007-3

Date Collected: 10/12/20 09:06

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	513665	10/22/20 14:03	SPG	TAL DEN

Client Sample ID: GWTS-3A-101220

Lab Sample ID: 410-17007-3

Date Collected: 10/12/20 09:06

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512725	10/15/20 10:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/15/20 19:19	JSM	TAL DEN

Client Sample ID: GWTS-4A-101220

Lab Sample ID: 410-17007-4

Date Collected: 10/12/20 09:09

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	513665	10/22/20 14:03	SPG	TAL DEN

Lab Chronicle

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Client Sample ID: GWTS-4A-101220

Lab Sample ID: 410-17007-4

Date Collected: 10/12/20 09:09

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512725	10/15/20 10:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/15/20 19:40	JSM	TAL DEN

Client Sample ID: GWTS-5A-101220

Lab Sample ID: 410-17007-5

Date Collected: 10/12/20 09:11

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	513665	10/22/20 14:03	SPG	TAL DEN

Client Sample ID: GWTS-5A-101220

Lab Sample ID: 410-17007-5

Date Collected: 10/12/20 09:11

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512725	10/15/20 10:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/15/20 20:02	JSM	TAL DEN

Client Sample ID: GWTS-6A-101220

Lab Sample ID: 410-17007-6

Date Collected: 10/12/20 09:14

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	513665	10/22/20 14:03	SPG	TAL DEN

Client Sample ID: GWTS-6A-101220

Lab Sample ID: 410-17007-6

Date Collected: 10/12/20 09:14

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 87.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512725	10/15/20 10:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/15/20 20:23	JSM	TAL DEN

Client Sample ID: GWTS-7A-101220

Lab Sample ID: 410-17007-7

Date Collected: 10/12/20 09:17

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	513665	10/22/20 14:03	SPG	TAL DEN

Lab Chronicle

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Client Sample ID: GWTS-7A-101220

Lab Sample ID: 410-17007-7

Date Collected: 10/12/20 09:17

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 95.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512725	10/15/20 10:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/15/20 20:45	JSM	TAL DEN

Client Sample ID: GWTS-TB01-101220

Lab Sample ID: 410-17007-8

Date Collected: 10/12/20 13:00

Matrix: Water

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512894	10/16/20 09:54	JSM	TAL DEN
Total/NA	Analysis	8011		1	512921	10/16/20 15:42	JSM	TAL DEN

Client Sample ID: GWTS-8A-101220

Lab Sample ID: 410-17007-9

Date Collected: 10/12/20 09:20

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	513774	10/22/20 22:11	IEU	TAL DEN

Client Sample ID: GWTS-8A-101220

Lab Sample ID: 410-17007-9

Date Collected: 10/12/20 09:20

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 95.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512725	10/15/20 10:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/15/20 21:56	JSM	TAL DEN

Client Sample ID: GWTS-9A-101220

Lab Sample ID: 410-17007-10

Date Collected: 10/12/20 09:23

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	513774	10/22/20 22:11	IEU	TAL DEN

Client Sample ID: GWTS-9A-101220

Lab Sample ID: 410-17007-10

Date Collected: 10/12/20 09:23

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512725	10/15/20 10:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/15/20 22:18	JSM	TAL DEN

Lab Chronicle

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Client Sample ID: GWTS-10A-101220

Lab Sample ID: 410-17007-11

Date Collected: 10/12/20 09:26

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	513774	10/22/20 22:11	IEU	TAL DEN

Client Sample ID: GWTS-10A-101220

Lab Sample ID: 410-17007-11

Date Collected: 10/12/20 09:26

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 91.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512725	10/15/20 10:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/15/20 22:39	JSM	TAL DEN

Client Sample ID: GWTS-11A-101220

Lab Sample ID: 410-17007-12

Date Collected: 10/12/20 09:29

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	513774	10/22/20 22:11	IEU	TAL DEN

Client Sample ID: GWTS-11A-101220

Lab Sample ID: 410-17007-12

Date Collected: 10/12/20 09:29

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 97.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512725	10/15/20 10:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/15/20 23:01	JSM	TAL DEN

Client Sample ID: GWTS-12A-101220

Lab Sample ID: 410-17007-13

Date Collected: 10/12/20 09:32

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	513774	10/22/20 22:11	IEU	TAL DEN

Client Sample ID: GWTS-12A-101220

Lab Sample ID: 410-17007-13

Date Collected: 10/12/20 09:32

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512725	10/15/20 10:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/15/20 23:22	JSM	TAL DEN

Client Sample ID: GWTS-13A-101220

Lab Sample ID: 410-17007-14

Date Collected: 10/12/20 09:35

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	513774	10/22/20 22:11	IEU	TAL DEN

Lab Chronicle

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Client Sample ID: GWTS-13A-101220

Lab Sample ID: 410-17007-14

Date Collected: 10/12/20 09:35

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512725	10/15/20 10:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/15/20 23:44	JSM	TAL DEN

Client Sample ID: GWTS-14A-101220

Lab Sample ID: 410-17007-15

Date Collected: 10/12/20 09:38

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	513774	10/22/20 22:11	IEU	TAL DEN

Client Sample ID: GWTS-14A-101220

Lab Sample ID: 410-17007-15

Date Collected: 10/12/20 09:38

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 97.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512725	10/15/20 10:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/16/20 00:05	JSM	TAL DEN

Client Sample ID: GWTS-1A-101220-FD

Lab Sample ID: 410-17007-17

Date Collected: 10/12/20 09:00

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	514083	10/26/20 09:03	IEU	TAL DEN

Client Sample ID: GWTS-1A-101220-FD

Lab Sample ID: 410-17007-17

Date Collected: 10/12/20 09:00

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8011			512725	10/15/20 14:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/16/20 00:27	JSM	TAL DEN

Client Sample ID: GWTS-2A-101220-FD

Lab Sample ID: 410-17007-18

Date Collected: 10/12/20 09:03

Matrix: Solid

Date Received: 10/13/20 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	514083	10/26/20 09:03	IEU	TAL DEN

Lab Chronicle

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Client Sample ID: GWTS-2A-101220-FD

Lab Sample ID: 410-17007-18

Date Collected: 10/12/20 09:03

Matrix: Solid

Date Received: 10/13/20 09:15

Percent Solids: 88.9

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	8011			512725	10/15/20 14:02	JSM	TAL DEN
Total/NA	Analysis	8011		1	512765	10/16/20 00:48	JSM	TAL DEN

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

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Accreditation/Certification Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Laboratory: Eurofins TestAmerica, Denver

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

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	2907.01	10-31-21

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
Moisture		Solid	Percent Solids

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Method Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Method	Method Description	Protocol	Laboratory
8011	EDB, DBCP, and 1,2,3-TCP (GC)	SW846	TAL DEN
Moisture	Percent Moisture	EPA	TAL DEN
8011	Microextraction	SW846	TAL DEN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100



Sample Summary

Client: EA Engineering, Science, and Technology
Project/Site: Kirtland AFB Bulk Fuels Facility

Job ID: 410-17007-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
410-17007-1	GWTS-1A-101220	Solid	10/12/20 09:00	10/13/20 09:15	
410-17007-2	GWTS-2A-101220	Solid	10/12/20 09:03	10/13/20 09:15	
410-17007-3	GWTS-3A-101220	Solid	10/12/20 09:06	10/13/20 09:15	
410-17007-4	GWTS-4A-101220	Solid	10/12/20 09:09	10/13/20 09:15	
410-17007-5	GWTS-5A-101220	Solid	10/12/20 09:11	10/13/20 09:15	
410-17007-6	GWTS-6A-101220	Solid	10/12/20 09:14	10/13/20 09:15	
410-17007-7	GWTS-7A-101220	Solid	10/12/20 09:17	10/13/20 09:15	
410-17007-8	GWTS-TB01-101220	Water	10/12/20 13:00	10/13/20 09:15	
410-17007-9	GWTS-8A-101220	Solid	10/12/20 09:20	10/13/20 09:15	
410-17007-10	GWTS-9A-101220	Solid	10/12/20 09:23	10/13/20 09:15	
410-17007-11	GWTS-10A-101220	Solid	10/12/20 09:26	10/13/20 09:15	
410-17007-12	GWTS-11A-101220	Solid	10/12/20 09:29	10/13/20 09:15	
410-17007-13	GWTS-12A-101220	Solid	10/12/20 09:32	10/13/20 09:15	
410-17007-14	GWTS-13A-101220	Solid	10/12/20 09:35	10/13/20 09:15	
410-17007-15	GWTS-14A-101220	Solid	10/12/20 09:38	10/13/20 09:15	
410-17007-17	GWTS-1A-101220-FD	Solid	10/12/20 09:00	10/13/20 09:15	
410-17007-18	GWTS-2A-101220-FD	Solid	10/12/20 09:03	10/13/20 09:15	



410-17007 Chain of Custody



225 Schilling Creek Suite
400 Hunt Valley, MD
Tel No. (410) 584-7000
Fax No. (410) 771-1625

COC NUMBER
COC-GWTS1-101220

PROJECT NAME: Kirtland
AFB Bulk Fuels Facility

PROJECT NUMBER:
6360401

LABORATORY NAME AND CONTACT:
Eurofins TestAmerica
4955 Yarrow Street
Arvada, CO 80002

FAX AND MAIL REPORTS/IEDD TO: Tara Lamond: tlamond@eaest.com EA
Amanda Smith: asmith@eaest.com EA
FAX AND MAIL REPORTS/IEDD TO: Pam Mess: pmess@eaest.com EA

PROJECT SITE AND
PHASE: ST106/SS111

LAB PO NUMBER:
21295

LAB CONTACT: Kay Hower
Eurofins 1 (717) 566-7258

LAB CONTACT: Kay Hower
Eurofins 1 (717) 566-7258

CHAIN-OF-CUSTODY RECORD

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)						COMMENTS				
				(8260C) VOCs	(8260C) BTEX	(8260C) BTEXN	(8011) EDB/EDB Soil	Total As,Pb,Ca,K,Na,Mg (6020A/6010C)	Dissolved Fe, Mn+BTEX (6010C)+8260C		Chloride, bromide, sulfate (300.0)	(353.2) Nitrate-Nitrite	(SM4500NH3) Ammonia	(SM4500S2CF) Sulfide
1	GWTS-1A-101220	10/12/2020	0900	2	--	--	1	--	1	--	--	--	--	
2	GWTS-2A-101220	10/12/2020	0903	2	--	--	1	--	1	--	--	--	--	
3	GWTS-3A-101220	10/12/2020	0906	1	--	--	1	--	--	--	--	--	--	
4	GWTS-4A-101220	10/12/2020	0909	2	--	--	1	--	1	--	--	--	--	
5	GWTS-5A-101220	10/12/2020	0911	2	--	--	1	--	1	--	--	--	--	
6	GWTS-6A-101220	10/12/2020	0914	1	--	--	1	--	--	--	--	--	--	

Please give all samples a 5-Day rush turn around

3.4 ICH 11-0.3 RP 10/14/20

SAMPLER(S):	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
J Livingston	J Livingston	10/12/2020	1500	[Signature]	10/14/20	0945
J Livingston	[Signature]					
J Livingston	[Signature]					
J Livingston	[Signature]					

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225 Schilling Circle, Suite
460 Hunt Valley, MD
Tel No. (410) 594-7000
Fax No. (410) 771-1025

PROJECT NAME: Kirtland
AFB Bulk Fuels Facility

PROJECT NUMBER:
6360401

LABORATORY NAME AND CONTACT:
Eurofins TestAmerica
4955 Yarrow Street
Arvada, CO 80002

PROJECT SITE AND
PHASE: ST106/SS111

LAB PO NUMBER:
21295

LAB CONTACT: Kay Hower
KayHower@eurofinsUS.com

Eurofins 1 (717) 566-7258

CHAIN-OF-CUSTODY RECORD

COC NUMBER
COC-GWTS2-101220

YEAR: 2020

QUARTER: Q4

FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA
Amanda Smith: asmith@eaest.com EA
FAX AND MAIL REPORTS/EDD TO: Pam Moss: pmoss@eaest.com EA

ANALYSIS REQUIRED (Specify number of bottles)

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	(8260C) VOCs	(8260C) BTEX	(8260C) BTEXN	(8011) EDB/EDB Soil	(6020A/6010C) Total As,Pb,Ca,K,Na,Mg	(6010C)+8260C Dissolved Fe, Mn+BTEX	(300.0) Chloride, bromide, sulfate	(353.2) Nitrate-Nitrite	(SM4500NH3) Ammonia	(SM4500S2CF) Sulfide	(SM2320B) Alkalinity	COMMENTS
1	GWTS-7A-101220	10/12/2020	0917	2	--	--	--	1	--	1	--	--	--	--	--	
2	GWTS-TB01-101220	10/12/2020	1300	4	--	2	--	2	--	--	--	--	--	--	--	
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6																

Please give all samples a 5-Day rush turn around

SAMPLER(S)	RELINQUISHED BY	DATE	TIME	RECEIVED BY:	DATE	TIME
J Livingston	J Livingston	10/12/2020	1500	J Livingston	10/14/20	0945

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225 Schilling Circle Suite
400 Hunt Valley MD
Tel No: (410) 584-7000
Fax No: (410) 771-1625

PROJECT NAME: Kirtland
AFB Bulk Fuels Facility

PROJECT NUMBER:
6360401

LABORATORY NAME AND CONTACT:
Eurofins TestAmerica
4955 Yarrow Street
Arvada, CO 80002

LAB CONTACT: Kay Hower

FAX AND MAIL REPORTS/IEDD TO: Tara Lamond: tlamond@east.com EA
Amanda Smith: asmith@east.com EA
Pam Moss: pmoss@east.com EA

YEAR: 2020
QUARTER: Q4

CHAIN-OF-CUSTODY RECORD

COC NUMBER
COC-GWTS3-101220

PROJECT SITE AND
PHASE: ST106/SS111

LAB PO NUMBER:
21295

LAB CONTACT: Kay Hower
KayHower@eurofinsUS.com

Eurofins 1 (717) 556-7258

ANALYSIS REQUIRED (Specify number of bottles)

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	Total Number of Bottles	(8260C) BTEX	(8260C) BTEXN	(8260C) VOCs	(8011) EDB/EDB Soil	(6020A/6010C) Total As,Pb,Ca,K,Na,Mg	(6010C) Dissolved Fe, Mn	(300,0) Chloride, bromide, sulfate	(353.2) Nitrate-Nitrite	(SM4500NH3) Ammonia	(SM4500S2CF) Sulfide	(SM2320B) Alkalinity	COMMENTS
1	GWTS-8A-101220	10/12/2020	0920	1	--	--	--	1	--	--	--	--	--	--	--	
2	GWTS-9A-101220	10/12/2020	0923	1	--	--	--	1	--	--	--	--	--	--	--	
3	GWTS-10A-101220	10/12/2020	0926	1	--	--	--	1	--	--	--	--	--	--	--	
4	GWTS-11A-101220	10/12/2020	0929	1	--	--	--	1	--	--	--	--	--	--	--	
5	GWTS-12A-101220	10/12/2020	0932	1	--	--	--	1	--	--	--	--	--	--	--	
6	GWTS-13A-101220	10/12/2020	0935	1	--	--	--	1	--	--	--	--	--	--	--	



410-17007 Chain of Custody

Please give all samples a 5-Day rush turn around

110C -0.3 JPH/1 SH 10/13/20

SAMPLER(S)	RELINQUISHED BY:	DATE	TIME	RECEIVED BY:	DATE	TIME
J Livingston	J Livingston	10/12/2020	1500	J Livingston	10/13/20	0915
J Livingston	J Livingston					
J Livingston	J Livingston					
J Livingston	J Livingston					





225 Schilling Circle, Suite
400 Hunt Valley, MD
Tel No. (410) 584-7000
Fax No. (410) 771-1625

COC NUMBER
COC-GWTS4-101220

PROJECT NAME: Kirtland
AFB Bulk Fuels Facility

PROJECT NUMBER:
6360401

LABORATORY NAME AND CONTACT:
Eurofins TestAmerica
4955 Yarrow Street
Arvada, CO 80002

FAX AND MAIL REPORTS/EDD TO: Tara Lamond: tlamond@eaest.com EA
Amanda Smith: asmith@eaest.com EA
Pam Moss: pmoss@eaest.com EA

YEAR: 2020
QUARTER: Q4

LAB CONTACT: Kay Hower
Eurofins 1 (717) 566-7258

LAB PO NUMBER:
21295

LAB CONTACT: Kay Hower
EurofinsUS.com

ITEM	SAMPLE IDENTIFIER	DATE COLLECTED	TIME COLLECTED	ANALYSIS REQUIRED (Specify number of bottles)										COMMENTS			
				Total Number of Bottles	(8260C) VOCs	(8260C) BTEX	(8260C) BTEXN	(8260C) EDB/EDB Soil	(8011) Total As,Pb,Ca,K,Na,Mg	(6020A/6010C) Dissolved Fe, Mn	(6010C) Chloride, bromide, sulfate	(300.0) Nitrate-Nitrite	(353.2) Ammonia		(SM4500NH3) Sulfide	(SM4500S2CF) Alkalinity	(SM2320B)
1	GWTS-14A-101220	10/12/2020	0938	1	--	--	--	1	--	--	--	--	--	--	--	--	
2	GWTS-TB02-101220	10/12/2020	1300	2	--	--	--	2	--	--	--	--	--	--	--	--	
3																	
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6																	

Please give all samples a 5-Day rush turn around

SAMPLER(S):	RELINQUISHED BY:	DATE	TIME	COURIER AND SHIPPING NUMBER:	RECEIVED BY:	DATE	TIME
J Livingston	J Livingston	10/12/2020	1500	Fedex	Scott Hall	10/13/20	0915



Do Not Lift Using This Tag

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ORIGIN ID:ONMA (505) 224-9013
EA ENGINEERING
320 GOLD AVE SW
ALBUQUERQUE, NM 87102
UNITED STATES US

SHIP DATE: 12OCT20
ACTWGT: 51.75 LB
CAD: 6995204/SSFE2121
DIMS: 24x14x14 IN
BILL THIRD PARTY

TO ATTN: DARLENE BANDY
EUROFINS TESTAMERICA
4955 YARROW ST



410-17007 Waybill

ARVADA CO 80002

650

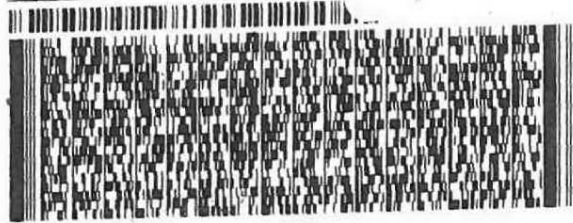
4 10:30

E 8287 10.13

(303) 736-0100
INVT
PD:

REF:

FZ



1 of 2

TRK# 3977 5166 8287

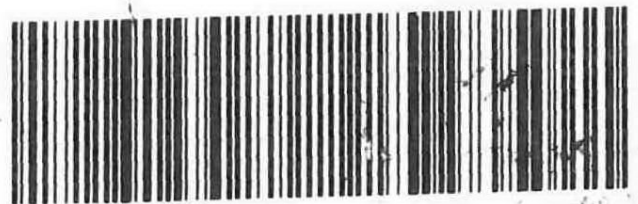
0201
MASTER

XH LAAA

TUE - 13 OCT 10:30
PRIORITY OVERNIGHT

AHS
80002

CO-US DEN



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ORIGIN ID:DNMR (505) 224-9013
 EA ENGINEERING
 320 GOLD AVE SW
 ALBUQUERQUE, NM 87102
 UNITED STATES US

TO
 ATTN: DARLENE BANDY
 EUROFINS TESTAMERICA
 4955 YARROW ST

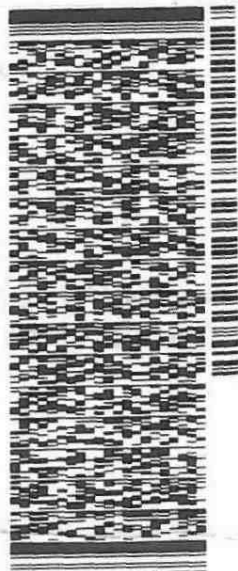
ACTWT: 51.75 LB
 CAD: 6995204/95FE2121
 DIMS: 24x14x14 IN
 BILL THIRD PARTY

ARVADA CO 80002

(303) 736-0100
 NO1

REF:

DEPT:

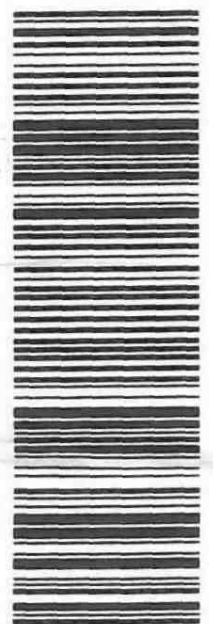


J202020071401 av

2 of 2
 MPS# 3977 5166 8298
 0263
 Mstr# 3977 5166 8287
 0201

TUE - 13 OCT 10:30A
 PRIORITY OVERNIGHT

AHS
 80002
 CO-US DEN



PRN TO STATION FOR
 FIRST DATA ENTRY

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410-17007 Waybill

ORIGIN ID: ONMA (505) 224-9013
 EA ENGINEERING
 320 GOLD AVE SW
 ALBUQUERQUE, NM 87102
 UNITED STATES US

SHIP DATE: 12OCT20
 ACTWGT: 51.75 LB
 CAD: 6895204/SFE2121
 DIMS: 24x14x14 IN
 BILL THIRD PARTY

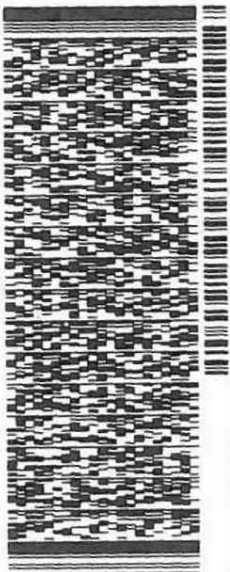
10 ATTN: DARLENE BANDY
 EUROFINS TESTAMERICA
 4955 YARROW ST

ARVADA CO 80002

(303) 798-0100

REF:

DEPT:



J202020071401v

2 of 2
 MFS# 3977 5166 8298
 Mstr# 3977 5166 8287

0201

TUE - 13 OCT 10:30A
 PRIORITY OVERNIGHT

XH LAAA

AHS 80002
 CO-US DEN



56812/A27E/B766

Login Sample Receipt Checklist

Client: EA Engineering, Science, and Technology

Job Number: 410-17007-2

Login Number: 17007

List Number: 2

Creator: O'Hara, Jake F

List Source: Eurofins TestAmerica, Denver

List Creation: 10/13/20 08:22 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.	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").	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: EA Engineering, Science, and Technology

Job Number: 410-17007-2

Login Number: 17007

List Number: 3

Creator: O'Hara, Jake F

List Source: Eurofins TestAmerica, Denver

List Creation: 10/13/20 08:23 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.	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").	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: EA Engineering, Science, and Technology

Job Number: 410-17007-2

Login Number: 17007
List Number: 4
Creator: Pottruff, Reed W

List Source: Eurofins TestAmerica, Denver
List Creation: 10/14/20 08:01 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?	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: EA Engineering, Science, and Technology

Job Number: 410-17007-2

Login Number: 17007
List Number: 5
Creator: Pottruff, Reed W

List Source: Eurofins TestAmerica, Denver
List Creation: 10/14/20 08:01 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?	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: EA Engineering, Science, and Technology

Job Number: 410-17007-2

Login Number: 17007

List Number: 6

Creator: O'Hara, Jake F

List Source: Eurofins TestAmerica, Denver

List Creation: 10/16/20 12:51 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
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	

ATTACHMENT 3

TABLE

Table 1
Groundwater Treatment System 10/12/2020 Soil Sample Results

Sample Name	Sampling Date	Sample Type	Ethylene Dibromide (µg/kg)			Benzene (µg/kg)			Ethylbenzene (µg/kg)			m- & p-Xylenes (µg/kg)			Xylenes, total (µg/kg)			Iron (mg/kg)			Manganese (mg/kg)		
			Result	Qual	LOD	Result	Qual	LOD	Result	Qual	LOD	Result	Qual	LOD	Result	Qual	LOD	Result	Qual	LOD	Result	Qual	LOD
GWTS-1A-101220	10/12/20	REG	ND	U	0.042	ND	U	0.4	ND	U	0.8	ND	U	3.2	ND	U	1	9600	J	21	140	J	0.42
GWTS-1A-101220-FD	10/12/20	FD	ND	U	0.042	ND	U	0.44	ND	U	0.88	ND	U	3.5	ND	U	1.1	9500	J	21	110	J	0.43
GWTS-2A-101220	10/12/20	REG	ND	U	0.043	ND	U	0.43	ND	U	0.86	ND	U	3.4	ND	U	1.1	11000	--	21	140	--	0.42
GWTS-2A-101220-FD	10/12/20	FD	ND	U	0.043	ND	U	0.4	ND	U	0.81	ND	U	3.2	ND	U	1	11000	--	19	130	--	0.37
GWTS-3A-101220	10/12/20	REG	ND	U	0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GWTS-4A-101220	10/12/20	REG	ND	UM	0.042	ND	U	0.44	ND	U	0.87	ND	U	3.5	ND	U	1.1	7500	--	21	110	--	0.41
GWTS-5A-101220	10/12/20	REG	ND	U	0.043	ND	U	0.4	ND	U	0.8	ND	U	3.2	ND	U	1	7800	--	18	99	--	0.35
GWTS-6A-101220	10/12/20	REG	ND	U	0.043	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GWTS-7A-101220	10/12/20	REG	ND	U	0.040	ND	U	0.41	ND	U	0.83	ND	U	3.3	ND	U	1	7200	--	18	91	--	0.36
GWTS-8A-101220	10/12/20	REG	ND	U	0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GWTS-9A-101220	10/12/20	REG	ND	U	0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GWTS-10A-101220	10/12/20	REG	ND	U	0.042	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GWTS-11A-101220	10/12/20	REG	ND	U	0.039	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GWTS-12A-101220	10/12/20	REG	ND	U	0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GWTS-13A-101220	10/12/20	REG	ND	U	0.040	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
GWTS-14A-101220	10/12/20	REG	ND	U	0.039	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NMED Residential ^a			672			17.8			75.1			5,230			871			54,800			10,500		
EPA Residential ^b			360			12			58			4,900			580			55000			1800		

Note:

^a New Mexico Environment Department (NMED) Risk Assessment Guidance for Site Investigations and Remediation, Appendix A, Table A-1, NMED Soil Screening Levels (SSL). February 2019.

^b EPA Regional Screening Levels (RSLs) for residential use scenario for hazard index = 1.0 for noncarcinogens and a 10⁻⁵ cancer risk level for carcinogens. May 2020.

µg/kg = microgram per kilogram

mg/kg = milligram per kilogram

FD = Field Duplicate

LOD = limit of detection

ND = not detected

QUAL = qualifier

REG = normal field sample

J = Qualifier denotes the analyte was positively identified, but the associated numerical value is estimated.

M = Qualifier denotes manual integrated compound.

U = Qualifier denotes the analyte was analyzed but not detected above the detection limit. The value associated with the U-qualifier is the LOD.

-- = Validation qualifier not assigned.

— = Compound not analyzed for.

ATTACHMENT 4
DOCUMENT CERTIFICATION

**40 CFR 270.11
DOCUMENT CERTIFICATION**

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



DAVID S. MILLER, Colonel, U.S. Air Force
Commander, 377th Air Base Wing

11 November 2020

Date

This document has been approved for public release.



KIRTLAND AIR FORCE BASE
377th Air Base Wing Public Affairs

10 NOV 20

Date