

N60234.AR.000063  
NAS SAUFLEY FIELD  
5090.3a

RESPONSE TO FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
COMMENTS RECEIVED MAY 29 REGARDING 2014 FINAL SITE INSPECTION REPORT  
FOR THE SITE 3 PISTOL RANGE, MUNITIONS RESPONSE SITE UNEXPLODED  
ORDNANCE (UXO) 1 NAS SAUFLEY FIELD FL  
5/29/2014  
TETRA TECH INC

**RESPONSES TO FDEP COMMENTS RECEIVED MAY 29, 2014****FINAL SITE INSPECTION REPORT FOR THE SITE 3 PISTOL RANGE, MUNITIONS  
RESPONSE SITE (UXO 001), OUTLYING LANDING FIELD SAUFLEY – MAY 2014****NAS PENSACOLA**

**Comment 1:** The groundwater sampling log for the monitoring well installed at Site 3 was not provided in the report. Also, the laboratory analysis sheets and validated data sheets were not provided for the groundwater sample that was collected and analyzed. This data is necessary to verify that inorganic analytes have not migrated to groundwater. Please provide this information.

**Response:** The groundwater sampling log and the associated documentation for the temporary groundwater monitoring well was erroneously left out of the report. This information is now provided as Attachment B of the report. Additionally, the laboratory analytical data for this well, along with the data validation report is now included in Attachment B of the report.

The 1<sup>st</sup> sentence in the 1<sup>st</sup> paragraph of Section 1.1 has been revised and now reads as follows:

*“Based on the soil analytical results presented in the SI Report (Tetra Tech, 2010) and the groundwater analytical results presented as Attachment B of this report, the former Site 3 Pistol Range at Outlying Landing Field Saufley Field was recommended for a no further action (NFA) determination.”*

**Comment 2:** Appendix E contains the Field Activities Report for Saufley Field Site 3 Pistol Range. This report describes the work conducted to remove bullets, bullet fragments, and casings from the Pistol Range berm. According to the report, approximately 120 cubic yards of soil was excavated and processed through screens to remove bullets, bullet fragments and casings. The amount of bullets, bullet fragments and shell casings sieved from the soil was enough to fill a single 55-gallon drum and weighed approximately 1,295 pounds. Please provide the name of the subcontractor who hauled the material off for recycling and some type of documentation that the material was sent for recycling rather than disposal.

**Response:** The material was removed from the site by Singley Environmental & Remediation Services and was recycled at Southern Recycling located in Pensacola, Florida in January 2014. This information has been added as Attachment C of the report.

## 1.0 INTRODUCTION

This Field Activities Report for the former Site 3 Pistol Range was prepared by Tetra Tech, Inc. (Tetra Tech) for Naval Facilities Engineering Command (NAVFAC) Southeast under Contract Task Order (CTO) JM57 of the Comprehensive Long-Term Environmental Action Navy (CLEAN) Contract Number N62470-08-D-1001. This report presents the field activities associated with the Pilot Test Range Soil Screening conducted at the Site 3 Pistol Range located at Outlying Landing Field (OLF) Saufley, Pensacola, Florida.

The Site 3 Pistol Range underwent a Site Inspection (SI) in October 2009 under the Installation Restoration Program (IRP) and followed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process.

The Naval Energy and Environmental Support Agency (NEESA) conducted a Preliminary Assessment (PA) for Naval Educational and Training Program Management Support Activity (NETPMSA) Saufley. The PA (NEESA, 1992) identified and reported the Site 3 Pistol Range as an area used for small arms during and after World War II; however, exact dates of use were not verified. The findings of the PA, a site walk conducted in July 2008, and a scoping meeting which took place in November 2008 for the Uniform Federal Policy – Sampling and Analysis Plan (UFP-SAP) were used to develop and design the field program for the SI, which is described in the SI Report (Tetra Tech, 2010).

### 1.1 PURPOSE

Based on the soil analytical results presented in the SI Report (Tetra Tech, 2010) and the groundwater analytical results presented as Attachment B of this report, the former Site 3 Pistol Range at Outlying Landing Field Saufley Field was recommended for a no further action (NFA) determination. The Florida Department of Environmental Protection (FDEP) letter dated October 26, 2011 accepted this recommendation; however, FDEP recommended that the bullets and bullet fragments be removed. This would eliminate a source of potential future lead contamination. The purpose of this study was to determine the amount of soil requiring removal of bullets and bullet fragments and the amount of bullets and bullet fragments that were actually removed from the soil.

Deleted: ,  
Deleted: it  
Deleted: that the site be eligible

### 1.2 SCOPE OF WORK

The field activities at the Site 3 Pistol Range included the partial excavation of the former target impact berm to a depth of 1 foot. The excavated soil was then screened to remove the bullets, bullet fragments, and casings.

### **1.3 REPORT ORGANIZATION**

This Field Activities Report consists of two sections: Section 1.0 is this introduction, which includes the purpose and scope and report organization. Section 2.0 describes the field activities performed at the Site 3 Pistol Range to screen the soil to remove the bullets, bullet fragments, and casings from the berm soil. Attachment A contains photographs of the work.

**ATTACHMENT B**



**Tetra Tech**

**INTERNAL CORRESPONDENCE**

**TO:** G. WALKER **DATE:** MARCH 12, 2010  
**FROM:** A. COGNETTI **COPIES:** DV FILE/REV 1  
**SUBJECT:** INORGANIC DATA VALIDATION –LEAD/ANTIMONY  
SAUFLEY FIELD, CTO JM13  
SAMPLE DELIVERY GROUP (SDG) - CTOJM13\_001  
**SAMPLES:** 1/Aqueous/Lead/Antimony  
SFDR-MWE5-0210

Overview

The sample set for SAUFLEY FIELD, CTO JM13 consists of one (1) aqueous environmental sample analyzed for lead and antimony.

The sample was collected by Tetra Tech on February 2, 2010 and analyzed by Empirical Laboratories. Metals analysis was conducted using SW-846 method 6010B.

These data were evaluated based on the following parameters:

- \* • Data Completeness
  - \* • Holding Times
  - \* • Initial and Continuing Calibration Verification Results
  - \* • Blank Results
  - \* • ICP Interference Results
  - \* • Laboratory Control Sample Results
  - \* • Detection Limits
  - \* • Analyte Quantitation
- \* - All quality control criteria were met for this parameter.

Executive Summary

**Laboratory Performance:** None.

**Other Factors Affecting Data Quality:** None.

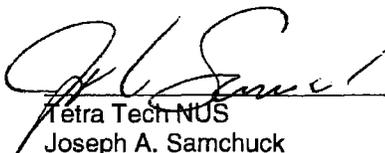
The data for these analyses were reviewed with reference to the "National Functional Guidelines for Inorganic Review", January 2010, and the DOD document entitled "Quality System Manual (QSM) for Environmental Laboratories" (Jan 2006).

TO: G. Walker- PAGE 2  
DATE: March 12, 2010  
SDG: CTOJM13\_001

The text of this report has been formulated to address only those problem areas affecting data quality.



Tetra Tech NUS  
Ann Cognetti  
Chemist/Data Validator



Tetra Tech NUS  
Joseph A. Samchuck  
Data Validation Manager

Attachments:

1. Appendix A - Qualified Analytical Results
2. Appendix B - Results as reported by the Laboratory
3. Appendix C - Support Documentation

<b>PROJ_NO: 02352</b> <b>SDG: CTOJM13_00</b> <b>FRACTION: M</b> <b>MEDIA: WATER</b>	NSAMPLE	SFDR-MWE5-20100203		
	LAB_ID	1002045-01		
	SAMP_DATE	2/2/2010		
	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER	RESULT	VQL	QLCD	
LEAD	1.5	U		

<b>PROJ_NO: 02352</b> <b>SDG: CTOJM13001</b> <b>FRACTION: M</b> <b>MEDIA: WATER</b>	NSAMPLE	SFDR-MWE5-20100203		
	LAB_ID	1002045-01		
	SAMP_DATE	2/2/2010		
	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER	RESULT	VQL	QLCD	
ANTIMONY	5	U		



**CALIBRATION WORKSHEET**

**HORIBA U-22 & HORIBA U-10**

Serial Number: 702011 (7024002)

Date of Calibration: 01-29-2010

Technician: A. J. JACOBS SR

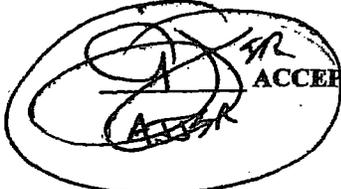
DO membrane changed? Y  N

Note: Should wait 6-8 hours before final DO calibration, run sensor for 15 minutes in Discrete Run to accelerate burn-in.

Record Battery Voltage Display: 8.6 v Record Battery Voltage Sonde: 4.5 v

Horiba Units are calibrated with Horiba Auto Calibration Solution:

Record Calibration Value:	Actual	Sonde after cal
pH 4.00	<u>4.08</u>	<u>3.99</u>
Conductivity 4.49ms/cm	<u>4.24</u>	<u>4.47</u>
Turbidity 0.0 NTU	<u>14 NTU</u>	<u>0.0 NTU</u>
Dissolved Oxygen (DO)	<u>8.86</u>	<u>8.88</u>

 ACCEPT

REJECT

Notes: Flow Cell # 502036

Eagle Instruments, Inc  
4009 Market St.  
Unit N  
Aston, PA 19014  
610-494-8390  
610-494-8392





**INORGANIC CASE NARRATIVE**

**TETRA TECH NUS, Inc.**

**NAS Pensacola CTOJM13**

**SDG # CTOJM13\_001**

**Work Order # 1002045**

**February, 2010**

<b>Empirical Laboratories ID</b>	<b>Client ID</b>
1002045-01	SFDR-MWE5-0210

I certify that, based upon my inquiry of those individuals immediately responsible for obtaining the information and to the best of my knowledge, the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, with the exception of the conditions detailed in the case narrative, as verified by the following signature.

  
Betty DeVille  
Inorganic Lab Manager

**I. RECEIPT**

No exceptions were encountered unless a Sample Receipt Exception Report is attached to the Chain-of-Custody included with this data package.

**II. HOLDING TIMES**

**A. Sample Preparation:** All holding times were met.

**B. Sample Analysis:** All holding times were met.

**III. METHODS**

The samples were digested for ICAP metals by USEPA SW846 Method 3005A and analyzed by method 6010B. Note: The "I" flag indicates that the analyte result is between the laboratory reporting limit and the laboratory MDL. All methods performed according to EPA guidelines and Empirical Laboratories Standard Operating Procedures.

**IV. PREPARATION**

All methods performed according to EPA guidelines and Empirical Laboratories Standard Operating Procedures.

**V. ANALYSIS:**

**A. Calibration:** All calibration criteria were met.

**INORGANIC CASE NARRATIVE  
TETRA TECH NUS, Inc.  
NAS Pensacola CTOJM13  
SDG # CTOJM13\_001  
Work Order # 1002045  
February, 2010**

- B. Blanks:** All blank criteria were met.
- C. Spikes:** All matrix spikes quality control criteria were met.
- D. Duplicates:** All duplicate quality control criteria were met.
- E. Samples:** All sample analysis proceeded normally.
- F. Laboratory Control Samples:** All percent recovery quality control criteria were met.



**EMPIRICAL LABORATORIES  
COOLER RECEIPT FORM**

LIMS Number: 1002045 Number of Coolers: 1 of 1  
 Client: TMN42 Project: NAS Saultx field  
 Date/Time Received: 2/4/10 845 Date cooler(s) opened: 2/4/10  
 Opened By (print): Franklin Rivers (signature): [Signature]

Circle response below as appropriate

1. How did the samples arrive?  FedEx  UPS  DHL  Hand Delivered  
 EL Courier  Other: \_\_\_\_\_

If applicable, enter airbill number here: 5313

2. Were custody seals on outside of cooler(s)? .....  Yes  No  
 How many: 1 Seal date: 2-3-10 Seal Initials: ?

- 3. Were custody seals unbroken and intact at the date and time of arrival? .....  Yes  No  N/A
- 4. Were custody papers sealed in a plastic bag included in the sample cooler? .....  Yes  No  N/A
- 5. Were custody papers filled out properly (ink, signed, etc.)? .....  Yes  No  N/A
- 6. Did you sign custody papers in the appropriate place for acceptance? .....  Yes  No  N/A
- 7. Was project identifiable from custody papers? .....  Yes  No  N/A
- 8. If required, was enough ice present in the cooler(s)? .....  Yes  No  N/A

Type of Coolant:  WET  DRY  BLUE  NONE Temperature of Samples upon Receipt: 4.8  
 Dates samples were logged-in: 2/4/10

9. Initial this form to acknowledge login of sample(s): (Name): Frank R (Initial): FR

- 10. Were all bottle lids intact and sealed tightly? .....  Yes  No  N/A
- 11. Did all bottles arrive unbroken? .....  Yes  No  N/A
- 12. Was all required bottle label information complete? .....  Yes  No  N/A
- 13. Did all bottle labels agree with custody papers? .....  Yes  No  N/A
- 14. Were correct containers used for the analyses indicated? .....  Yes  No  N/A
- 15. Were preservative levels correct in all applicable sample containers? .....  Yes  No  N/A
- 16. Was residual chlorine present in any applicable sample containers? ..... Yes  No  N/A
- 17. Was sufficient amount of sample sent for the analyses required? .....  Yes  No  N/A
- 18. Was headspace present in any included VOA vials? ..... Yes  No  N/A

PA  
 LZ  
 for  
 lead

If Non-Conformance issues were present, list by sample ID: \_\_\_\_\_

CAR#: \_\_\_\_\_

### Sample Delivery Group Assignment Form

CLIENT: Tetra Tech NUS, Inc. (T010)  
PROJECT NAME: NAS Pensacola CTOJM13  
SDG #: CTOJM13\_001  
MATRIX: Water

QC LEVEL: EDD/IVQSM  
Report Due: 2/11/2010  
Client Sample Count: 1

Sample Type	Sampled	Received	Lab ID	Client ID	SW6010B
Client Sample	02/02/10	02/04/10	1002045-01	SFDR-MWE5-0210	X

# ANALYSIS DATA SHEET

SFDR-MWE5-0210

Laboratory: Empirical Laboratories, LLC  
Client: Tetra Tech NUS, Inc. (T010)  
Matrix: Water  
Sampled: 02/02/10 18:45  
% Solids: 0.00

SDG: CTOJM13\_001  
Project: NAS Pensacola CTOJM13  
Laboratory ID: 1002045-01  
Received: 02/04/10 08:45

CAS NO.	Analyte	Concentration (ug/L)	MDL	RL	Dilution Factor	Q	Method	Batch	Analyzed
7439-92-1	Lead		1.50	3.00	1	U	SW6010B	0B10002	02/10/10 16:50

# INITIAL AND CONTINUING CALIBRATION CHECK

SW6010B

Laboratory: Empirical Laboratories, LLC

SDG: CTOJM13\_001

Client: Tetra Tech NUS, Inc. (T010)

Project: NAS Pensacola CTOJM13

Instrument ID: ME-JCP

Calibration: 0041007

Sequence: 0B04116

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
0B04116-ICV1	Lead	1000	1005	100	ug/L	+/- 10.00%
0B04116-CCV1	Lead	1000	1048	105	ug/L	+/- 10.00%
0B04116-CCV2	Lead	1000	1050	105	ug/L	+/- 10.00%

**BLANKS**  
**SW6010B**

Laboratory: Empirical Laboratories, LLC

SDG: CTOJM13\_001

Client: Tetra Tech NUS, Inc. (T010)

Project: NAS Pensacola CTOJM13

Instrument ID: ME-ICP

Calibration: 0041007

Sequence: 0B04116

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C	Method
0B04116-ICB1	Lead	-0.2290	1.50	3.00	ug/L	U	SW6010B
0B04116-CCB1	Lead	-0.103	1.50	3.00	ug/L	U	SW6010B
0B10002-BLK1	Lead	-0.509	1.50	3.00	ug/L	U	SW6010B
0B04116-CCB2	Lead	-0.697	1.50	3.00	ug/L	U	SW6010B

**Metals in Water by ICP-AES - Quality Control**

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 0B04116</b>											
<b>Instrument RL Check</b>					Prepared & Analyzed: 02/10/2010						
Lead	2.734			ug/L	3.000		91.1	80-120			

# ICP INTERFERENCE CHECK SAMPLE

SW6010B

Laboratory: Empirical Laboratories, LLC

SDG: CTOJM13 001

Client: Tetra Tech NUS, Inc. (T010)

Project: NAS Pensacola CTOJM13

Instrument ID: ME-ICP

Calibration: 0041007

Sequence: 0B04116

Lab Sample ID	Analyte	True	Found	%R	Units
0B04116-IFA1	Lead		1.63		ug/L
0B04116-IFB1	Lead	50.00	48.63	97.2	ug/L

## LCS / LCS DUPLICATE RECOVERY

SW6010B

Laboratory: Empirical Laboratories, LLC

SDG: CTOJM13\_001

Client: Tetra Tech NUS, Inc. (T010)

Project: NAS Pensacola CTOJM13

Matrix: Water

Batch: 0B10002

Laboratory ID: 0B10002-BS1

Preparation: MET 3005A

Initial/Final: 50 mL / 50 mL

ANALYTE	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC.	QC LIMITS REC.
Lead	250.0	258.7	103	80 - 120



Tetra Tech NUS, Inc.

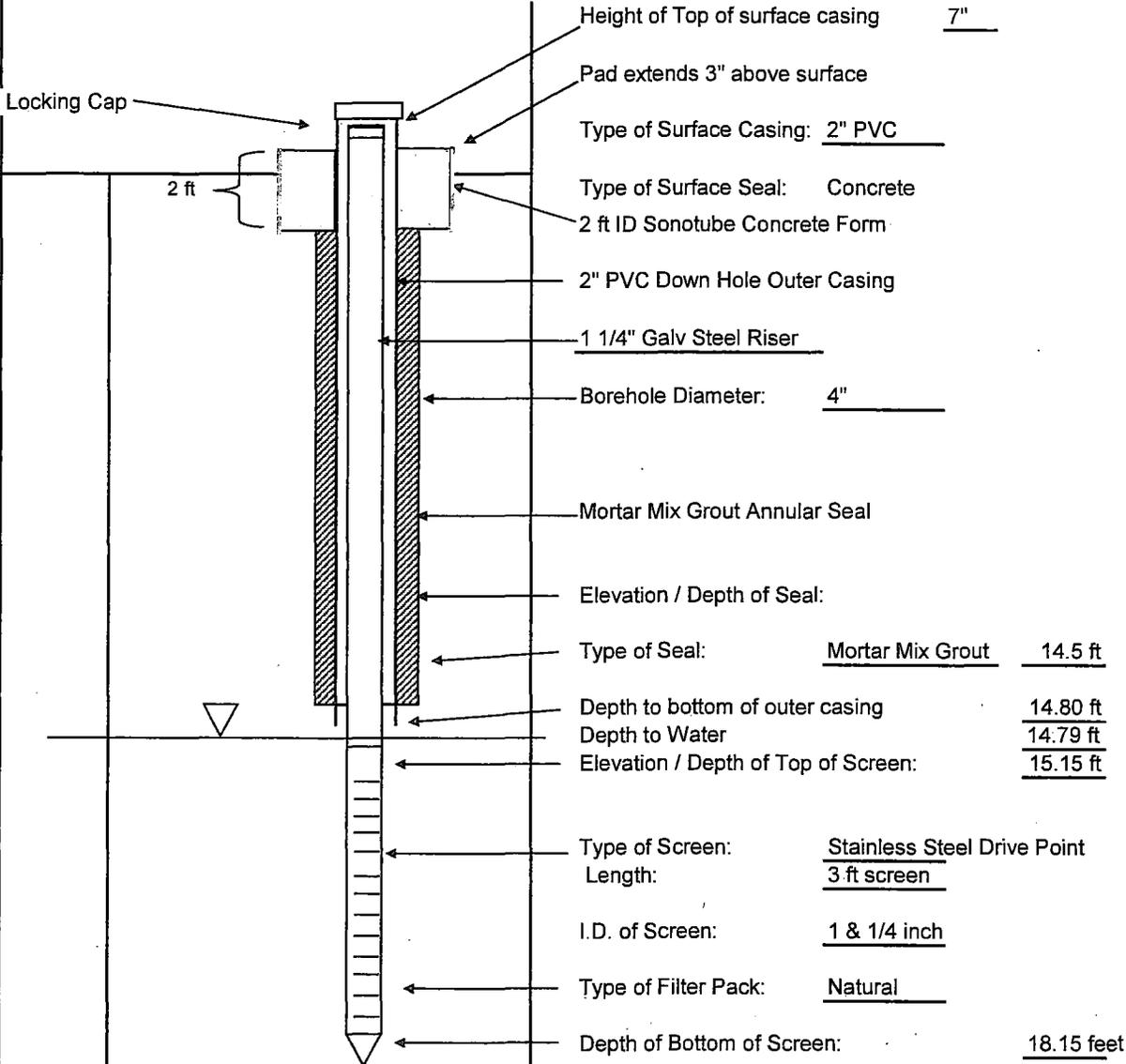
Test Hole E-5

### MONITORING WELL SHEET

PROJECT: Saufley Field Site 3 NAVFAC BORING No.: E-5  
 PROJECT No.: \_\_\_\_\_ Installation John Schoolfield, NAVFAC SE DATE COMPLETED: 01/28/10  
 SITE: Saufley Site 3 DRILLING METHOD: Hand Auger/Drive Point  
 DEV. METHOD: peristaltic pump NORTHING 16R 66437 EASTING: 71295

#### DRILLING METHOD

Hand augured to 14.5 feet. 2" ID PVC casing installed and driven 0.3 feet past bottom of augerhole.  
 1 1/4 inch drive point w/ SS screen installed and driven to a depth of 18.15 feet.



Not to Scale

**ATTACHMENT C**



**Singley Construction Company Inc.**  
**Singley Environmental & Remediation Services**  
**6741 Pine Forest Road**  
**Pensacola, Florida 32526**

July 2, 2014

John Scoolfield PE  
CIV NAVFAC SE

Dear John Schoolfield:

The bullets and bullet fragments removed from the Site 3 Pistol Range at NAS Saufley Field Pensacola, Florida were removed by Singley Environmental & Remediation Services and was recycled at Southern Recycling 1000 Myrick Street Pensacola, Florida in January 2014.

Sincerely,

Terry Orso

Operation Manager