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NAS CECIL FIELD  
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LETTER TRANSMITTING FIELD TASK MODIFICATION REQUEST FORM FOR BP WELLS,  
PETROLEUM SITES AND BUILDING 46 WITH ATTACHMENTS NAS CECIL FIELD FL  
6/8/2012  
TETRA TECH



**TETRA TECH**

PITT-06-12-025

June 8, 2012

Project Number 112G02267

NAVFAC SE  
Attn: Mr. Art Sanford  
4130 Faber Place Drive  
North Charleston, South Carolina 29405

Reference: CLEAN Contract No. N62470-08-D-1001  
Contract Task Order JM09

Subject: Field Task Modification Request Forms: BP Wells, Modification to Sampling and Analysis Plan (SAP) for Tt Petroleum Sites; and Building 46, Modification to SAP for BOA Petroleum Sites  
Naval Air Station Cecil Field  
Jacksonville, Florida

Dear Mr. Sanford:

Enclosed please find one copy of each subject deliverable. Copies have been sent to the members of the NAS Cecil Field Partnering Team as noted below. These documents are modifications to the Sampling and Analysis Plans in which each respective site was originally described: BP Wells in the SAP for Tetra Tech Petroleum Sites; and Building 46 in the SAP for BOA Petroleum Sites. These FTMRs will be posted to the Cecil Field DWS and incorporated in the annual review submission of this document.

These modifications were discussed and agreed upon at the May 2012 BCT meeting (Minute 2745 and Decisions 847), however, email approvals are required for the project file. Your prompt review and comment/approval is appreciated to enable the modifications to be implemented in the upcoming sampling events.

If you have any questions, please call me at 412-921-8163 or Megan Boerio 412-921-7271.

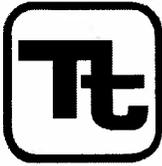
Sincerely,

Robert F. Simcik, P.E.  
Task Order Manager

RFS/clm  
Enclosure

cc: D. Vaughn-Wright, U.S. EPA (electronic copy)  
D. Grabka, FDEP (1 copy)  
M. Davidson, NAVFAC SE (electronic copy)  
D. Criswell, NAVFAC SE (electronic copy)  
S. Martin, NAVFAC Atlantic (electronic copy)  
M. Halil, CH2MHill (electronic copy)  
J. Trepanowski, Tetra Tech  
S. Currie, Tetra Tech File JM09 (1 copy unbound)

**Tetra Tech**  
661 Andersen Drive, Pittsburgh, PA 15220-2700  
Tel 412.921.7090 Fax 412.921.4040 [www.tetrattech.com](http://www.tetrattech.com)



## TETRA TECH NUS FIELD TASK MODIFICATION REQUEST FORM

LTM/NAS Cecil Field  
Project/Installation Name

CTO JM09, 112G02267  
CTO & Project Number

03  
Task Mod. Number

SAP for Petroleum Sites (April 2010)  
Modification To (e.g. Work Plan)

BP Wells  
Site/Sample Location

6/1/12  
Date

**Activity Description:** At BP Wells, seven wells were being sampled on a Semi-Annual basis to monitor the groundwater COC concentrations by comparing the results against FDEP Groundwater Cleanup Target Levels (GCTLs) and Natural Attenuation Default Criteria (NADCs). Volatile Organic Compounds (VOCs) concentrations in the source area wells (CEF-BP-01S and CEF-BP-06S) continued to remain elevated at levels greater than the NADC. The Cecil Team decided at the February 2011 BCT meeting that Tetra Tech would look into various options to address the contamination at BP Wells. At the May 2011 BCT meeting, Tetra Tech proposed ORC Advanced injections, with 24 DPT injection points to be injected at the site (Minute 2682). The proposal was accepted, and Tetra Tech was directed to complete a Work Plan for ORC Advanced Injection. The Work Plan for Chemical Injection using DPT at BP Wells Site was submitted June 14, 2011 and approved by FDEP July 7, 2011. The work plan included abandonment of all wells within the area to be affected by construction of the new hangar, and installation of three new wells (two wells as replacement wells for the abandoned CEF-BP-1S and CEF-BP-6S and one new well) to evaluate the effectiveness of the ORC Advanced Injection. The locations of the abandoned wells and new locations are shown on Figures 1 and 2, respectively. It was determined at the November 2011 BCT meeting that the injection event would be conducted between JAA's demolition of the building and concrete apron in the impacted area and the construction of the new hangar (Minute 2720). Demolition was completed in early November 2011, and the ORC injection activities were conducted November 15 through November 18, 2011. Construction of the new hangar was completed in May 2012, and JAA installed the three wells as specified and agreed upon in the Work Plan on May 21, 2012. A licensed survey crew was procured to locate the placement of the monitoring well locations in the field, and a Tetra Tech representative was on-site for oversight during the monitoring well installation. The wells were installed as one-inch diameter wells with 10-foot screens from 5-15 feet below ground surface, flush with the concrete. The newly-installed monitoring wells are to be sampled for VOCs, PAHs and TRPH to evaluate the effectiveness of the ORC Advanced injection. Table 1 shows the parameters and number of samples to be taken for groundwater. All field and analytical Standard Operating Procedures (SOPs) necessary in the sampling and analysis of these 3 groundwater samples are included in the SAP. The results will determine if continued LTM is required at the site, or if the site can be considered for site closure.

**Reason for Change:** Sampling is to be conducted to evaluate the effectiveness of the ORC Advanced injections conducted in November 2011. Due to the construction of the new hangar at the BP Wells site, several wells were abandoned, and three wells were installed for the sampling effort. Samples will be collected and analyzed for the same COCs as included in the LTM plan. Results of this sampling event will provide information to be used in determining the level of success of the ORC Advanced injections. A minimum of two sampling events will be conducted. Changes to the sampling plan are in accordance with the decision rules established in the April 2010 Petroleum Sites SAP, and the data collected based on this FTMR will follow the decision rules for BP Wells established in the SAP.

**Recommended Disposition:** Verification of acceptance of the revised sampling program via approval of this FTMR via e-mail approval from Tetra Tech PM, BRAC PMO RPM, and FDEP (attached in project file).

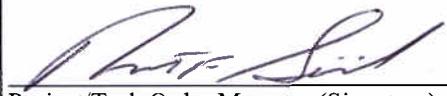
  
Quality Assurance Manager (QAPP lead developer)

6-4-12  
Date

**Approved Disposition:**

\_\_\_\_\_

\_\_\_\_\_



Project/Task Order Manager (Signature)

6/5/12

Date

**Distribution:**

Program/Project File – 112G02267  
Project/Task Order Manager – Robert Simcik  
Field Operations Leader – David Siefkin  
BRAC PMO RPM – Art Sanford

Other: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**ATTACHMENT 1**

**Table**

**TABLE 1**  
**BP Wells**  
**ANALYTICAL SAMPLING SUMMARY**

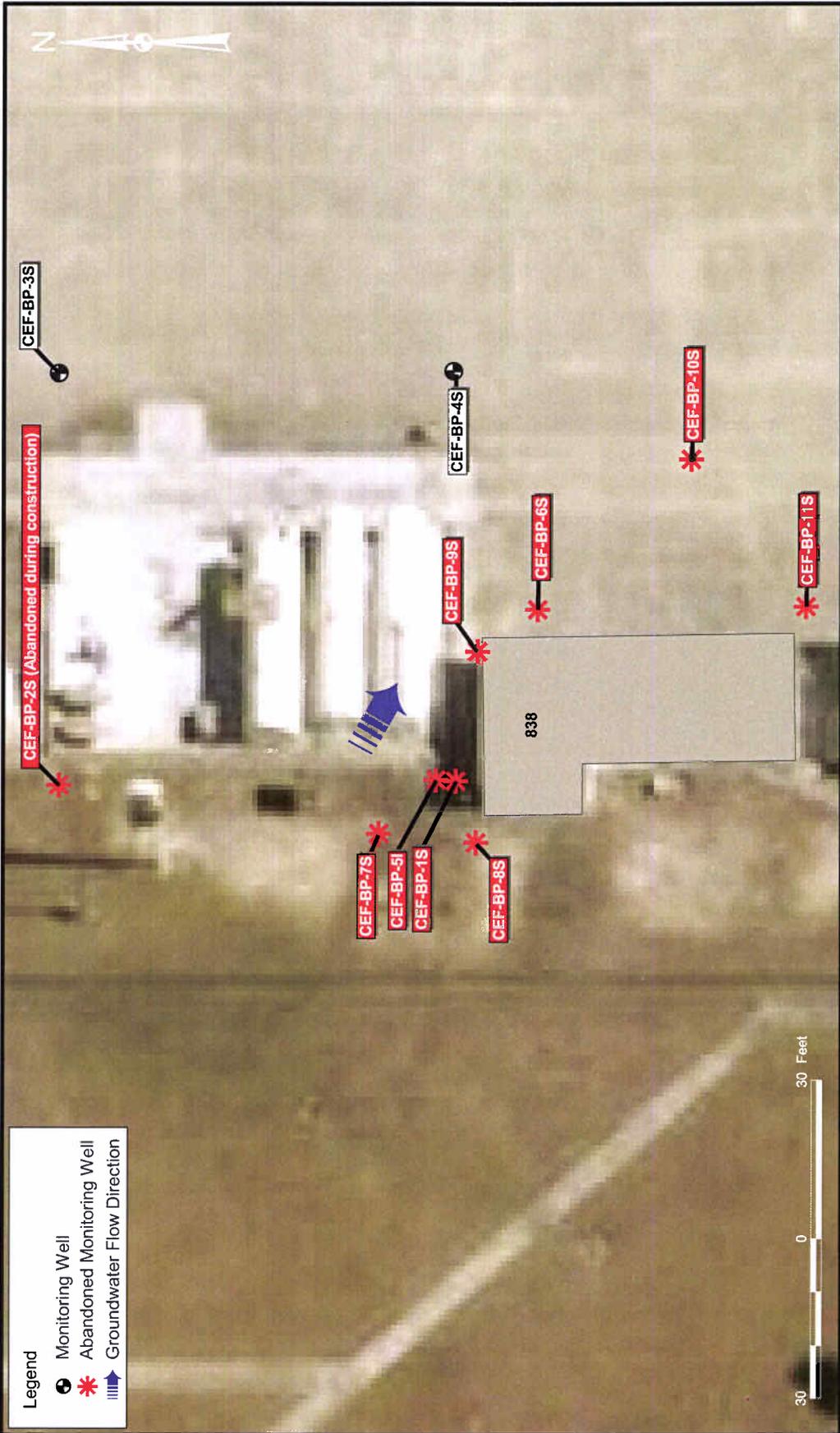
Field Task Modification Request 03  
 Naval Air Station Cecil Field  
 Jacksonville, Florida

GROUNDWATER				
COC	# of Samples	Sample IDs	# of QC Samples	Laboratory Method <sup>1</sup>
VOCs: BTEX/Isopropylbenzene/1,2,4-trimethylbenzene/1,3,5-trimethylbenzene	3	CEF-BP-1SR, CEF-BP-6SR, CEF-BP-12S	1 Duplicate	SW 846 8260B
PAHs: 1-methylnaphthalene/2-methylnaphthalene/naphthalene				8270 SIM
TRPH				FL-PRO

1 - Laboratory SOPs are included in Attachment 4.

**ATTACHMENT 2**

**Figures**



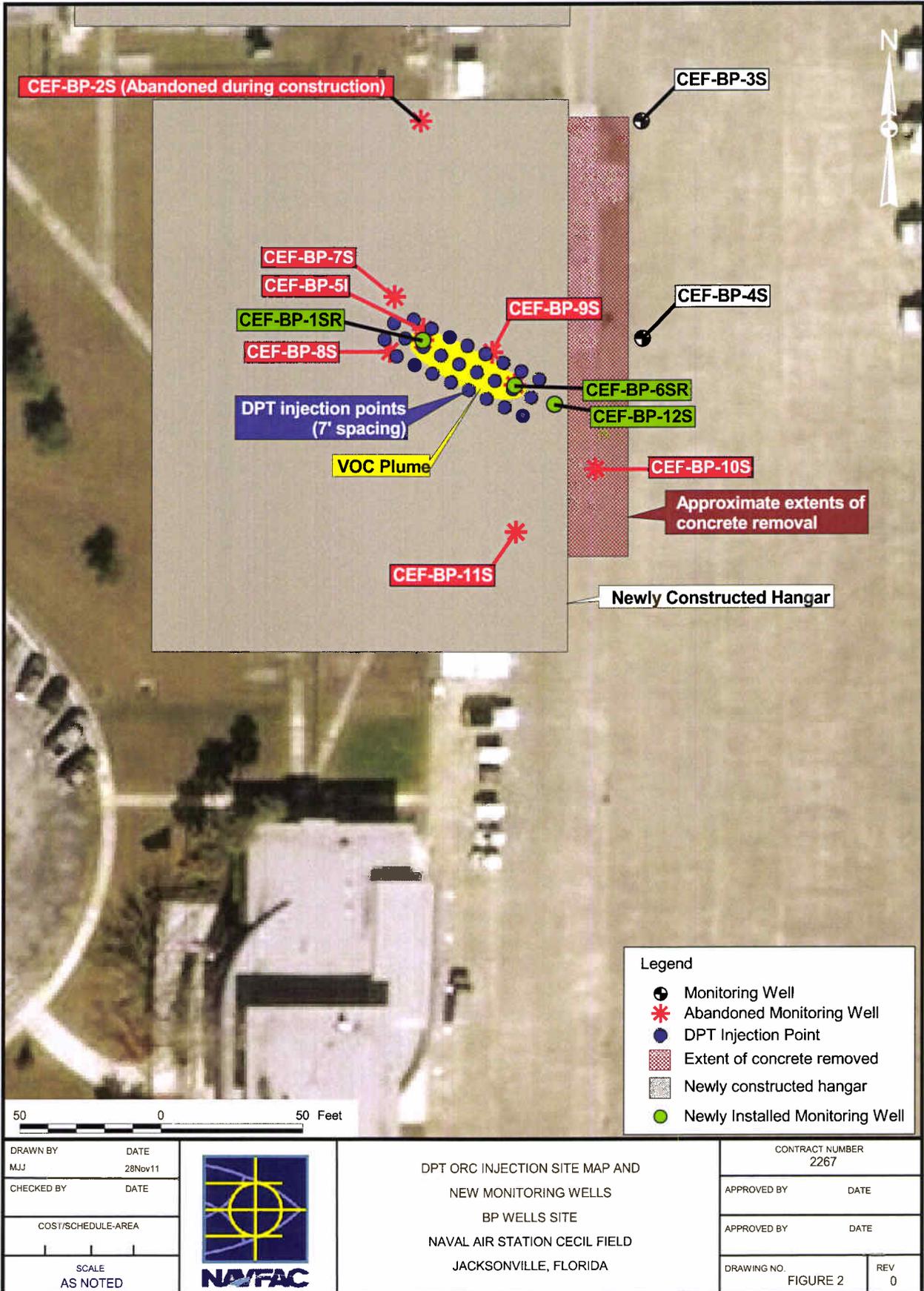
**Legend**

- Monitoring Well
- \* Abandoned Monitoring Well
- ▬▬▬ Groundwater Flow Direction

DATE 22Nov11		DRAWN BY CONTRACT NUMBER 2267	
CHECKED BY MJJ	DATE	APPROVED BY	DATE
COST/SCHEDULE AREA		APPROVED BY	DATE
SCALE AS NOTED		DRAWING NO. FIGURE 1	REV 0



MONITORING WELL LOCATION MAP  
 BP WELLS SITE  
 NAVAL AIR STATION CECIL FIELD  
 JACKSONVILLE, FLORIDA

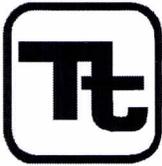


DRAWN BY MJJ	DATE 28Nov11
CHECKED BY	DATE
COST/SCHEDULE-AREA	
SCALE AS NOTED	



DPT ORC INJECTION SITE MAP AND  
 NEW MONITORING WELLS  
 BP WELLS SITE  
 NAVAL AIR STATION CECIL FIELD  
 JACKSONVILLE, FLORIDA

CONTRACT NUMBER 2267	
APPROVED BY	DATE
APPROVED BY	DATE
DRAWING NO. FIGURE 2	REV 0



**TETRA TECH NUS  
FIELD TASK MODIFICATION REQUEST FORM**

LTM/NAS Cecil Field  
Project/Installation Name

CTO JM09, 112G02267  
CTO & Project Number

03  
Task Mod. Number

SAP for BOA Petroleum Sites (Mar 2011)  
Modification To (e.g. Work Plan)

Building 46  
Site/Sample Location

6/6/2012  
Date

**Activity Description:** At Building 46, eight wells are being sampled on a semi-annual basis to monitor the groundwater COC concentrations by comparing the results against FDEP Groundwater Cleanup Target Levels (GCTLs) and Natural Attenuation Default Criteria (NADCs). The original sampling plan included nine wells being sampled on a quarterly basis, but FTMR Task Modification Number 02 revised the plan to eight wells on a semi-annual basis, with CEF-046-27D being eliminated from LTM. Based on a comment by FDEP on the Annual Building 46 Groundwater Monitoring Report, September 2011, which stated that “the Navy should prepare to install a shallow well or wells to monitor contaminant transport in the shallow zone and determine groundwater flows in that zone,” the Navy directed Tetra Tech to investigate and propose a new well location. Solutions-IES and Tetra Tech each measured groundwater levels in the area, and it was confirmed that the shallow groundwater flow direction is southwest. Tetra Tech proposed installing shallow well CEF-046-32S near existing intermediate well CEF-046-26I, and the proposal was accepted by the Navy and FDEP on April 6, 2012. CEF-046-32S was installed April 13, 2012 and was sampled April 24, 2012. The sample was analyzed for select VOCs, select PAHs, TRPH, and sulfate, and all results were non-detect or significantly less than their respective GCTL. Therefore, the BCT agreed at the May 2012 BCT meeting (Minute 2742) that CEF-046-32S is an appropriate downgradient well for the LTM plan, and will be included in future monitoring events.

Table 1 shows the parameters and sampling locations, and Figure 1 presents the wells to be sampled at Building 46, including the new well CEF-046-32S.

**Reason for Change:** An additional shallow downgradient well was required to ensure that contamination was not migrating off-site. CEF-046-32S was installed and determined to be an appropriate shallow downgradient monitoring well.

**Recommended Disposition:** Verify acceptance of the revised sampling program via approval of this FTMR by e-mail approval from Tetra Tech PM, NAVFAC SE RPM, and FDEP; and attach these emails to this FTMR and add them to the project file.

  
Quality Assurance Manager (QAPP lead developer)

6-7-12  
Date

**Approved Disposition:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

  
Project/Task Order Manager (Signature)

6/7/12  
Date

**Distribution:**

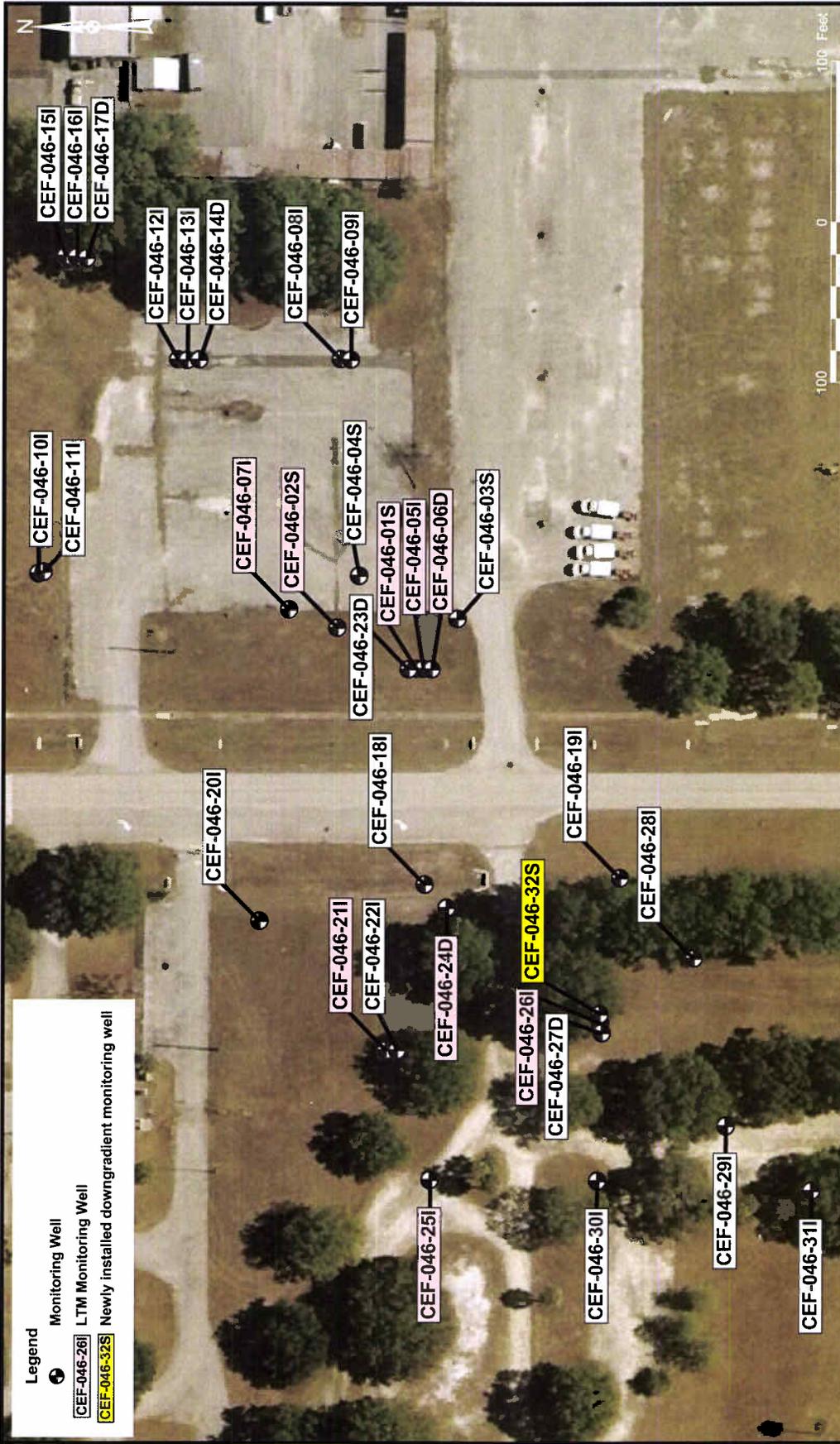
Program/Project File – 112G02267  
Project/Task Order Manager – Robert Simcik  
Field Operations Leader – Kara Wimble  
BRAC PMO RPM – Art Sanford

Other: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**TABLE 1**  
**BUILDING 46**  
**ANALYTICAL SAMPLING SUMMARY**

Field Task Modification Request 03  
 Naval Air Station Cecil Field  
 Jacksonville, Florida

GROUNDWATER				
COC	# of Samples	Well IDs	# of QC Samples	Laboratory Method
VOCs: Benzene, toluene, ethylbenzene, xylenes, MTBE	7	CEF-046-01S, CEF-046-02S, CEF-046-05I, CEF-046-07I, CEF-046-21I, CEF-046-24D, CEF-046-26I, <b>CEF-046-32S</b>	1 duplicate, 1 MS/MSD	SW-846 8260B
PAHs: 1-methylnaphthalene, 2-methylnaphthalene, naphthalene				SW-846 8270 SIM
TRPH				FL-PRO
Sulfate	8	CEF-046-01S, CEF-046-02S, CEF-046-05I, CEF-046-06D, CEF-046-07I, CEF-046-21I, CEF-046-24D, CEF-046-26I, <b>CEF-046-32S</b>		SW-846 9056A/EPA 300.0



**Legend**

- Monitoring Well
- ☉ LTM Monitoring Well
- ☐ CEF-046-26I
- ☐ CEF-046-32S
- Newly installed downgradient monitoring well

DRAWN BY MJJ		DATE 05Jun12	CONTRACT NUMBER 2267	
CHECKED BY		DATE	APPROVED BY	
COST/SCHEДУLE-AREA		DATE	APPROVED BY	
SCALE AS NOTED		DRAWING NO. FIGURE 1		REV 0
MONITORING WELL MAP BUILDING 46 NAVAL AIR STATION CECIL FIELD JACKSONVILLE, FLORIDA				