

Final
Sampling and Analysis Plan
Addendum No. 1 for the
Deep Bedrock Well Installation in the Basal Sharon Conglomerate

Ravenna Army Ammunition Plant
Ravenna, Ohio

December 19, 2008

Contract No. W912QR-04-D-0028
Delivery Order No. 0001

Prepared for:



**US Army Corps
of Engineers®**

United States Army Corps of Engineers
Louisville District

Prepared by:

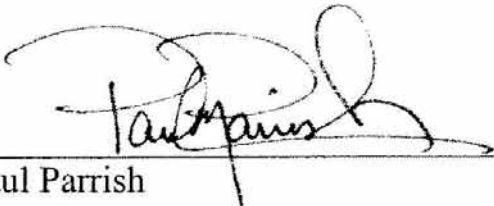


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a. REPORT	b. ABSTRACT	c. THIS PAGE			Paul Parrish
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CONTRACTOR STATEMENT OF INDEPENDENT TECHNICAL REVIEW

Science Applications International Corporation (SAIC) has completed the Final Sampling and Analysis Plan Addendum No. 1 for the Deep Bedrock Well Installation in the Basal Sharon Conglomerate at the Ravenna Army Ammunition Plant, Ravenna, Ohio. Notice is hereby given that an independent technical review has been conducted that is appropriate to the level of risk and complexity inherent in the project. During the independent technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of data quality objectives; technical assumptions; methods, procedures, and materials to be used; the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing USACE policy.



Paul Parrish
Study/Design Team Leader

12/19/08

Date



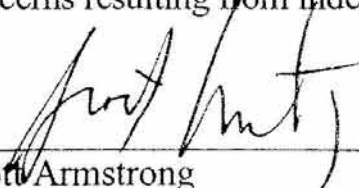
W. Kevin Jago, P.G.
Independent Technical Review Team Leader

12/19/08

Date

Significant concerns and the explanation of the resolution are as follows:

Internal SAIC Independent Technical Review comments are recorded on a Document Review Record per SAIC quality assurance procedure QAAP 3.1. This Document Review Record is maintained in the project file. Changes to the report addressing the comments have been verified by the Study/Design Team Leader. As noted above, all concerns resulting from independent technical review of the project have been considered.



Scott Armstrong
Principal w/ A-E firm

12/19/08

Date

Final

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Addendum No. 1 for the
Deep Bedrock Well Installation in the Basal Sharon Conglomerate

Ravenna Army Ammunition Plant
Ravenna, Ohio

Contract No. W912QR-04-D-0028
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Prepared for:
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600 Martin Luther King, Jr. Place
Louisville, Kentucky 40202

Prepared by:
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8866 Commons Boulevard, Suite 201
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DOCUMENT DISTRIBUTION
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Ravenna, Ohio

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Ohio EPA-NEDO = Ohio Environmental Protection Agency-Northeast District Office
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REIMS = Ravenna Environmental Information Management System
RTLS-ENV = Ravenna Training and Logistics Site Environmental Specialists
RVAAP = Ravenna Army Ammunition Plant
SAIC = Science Applications International Corporation
USACE = United States Army Corps of Engineers
USAEC = United States Army Environmental Command

PART I

Final

Field Sampling Plan
for the Sampling and Analysis Plan
Deep Bedrock Well Installation in the Basal Sharon Conglomerate
Addendum No. 1

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LIST OF ACRONYMS

AOC	Area of Concern
BGS	Below Ground Surface
COPC	Chemicals of Potential Concern
IDW	Investigation-Derived Waste
MEC	Munitions and Explosives of Concern
OD	Outside Diameter
OHARNG	Ohio Army National Guard
Ohio EPA	Ohio Environmental Protection Agency
OVA	Organic Vapor Analyzer
PBA	Performance-Based Acquisition
PID	Photoionization Detector
PPE	Personal Protective Equipment
PVC	Polyvinyl Chloride
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RVAAP	Ravenna Army Ammunition Plant
SAIC	Science Applications International Corporation
SAP	Sampling and Analysis Plan
TCLP	Toxicity Characteristic Leaching Procedure
USACE	United States Army Corps of Engineers
USCS	Unified Soil Classification System
VOC	Volatile Organic Compound

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1.0 PROJECT DESCRIPTION

This Sampling and Analysis (SAP) Plan Addendum No. 1 addresses the installation and quarterly groundwater sampling of six deep bedrock monitoring wells at the base of the Sharon Conglomerate, which underlies the Ravenna Army Ammunition Plant (RVAAP) in Ravenna, Ohio (Figure 1-1). This work is being conducted by Science Applications International Corporation (SAIC) as part of the RVAAP 2008 Performance-Based Acquisition (PBA) under contract W912QR-04-D-0028, Delivery Order 0001, Task 3 with the United States Army Corps of Engineers (USACE) – Louisville District.

The monitoring wells will be installed to a depth of approximately 200 ft below ground surface (BGS) at locations specified by the USACE Louisville District with the concurrence of the Ohio Environmental Protection Agency (Ohio EPA) and the Ohio Army National Guard (OHARNG). Completion depths of the wells may vary based on the topographic changes across RVAAP and the depth at which the basal portion of the Sharon Conglomerate is encountered. Final drilling locations may change slightly based on the results of a utility clearance by RVAAP and surveys for the presence of Munitions and Explosives of Concern (MEC). Proposed locations for the six wells are shown in Figure 1-2. If conditions prevent a viable monitoring well from being installed at the proposed locations (e.g., dry borehole), then an alternate location will be selected in conjunction with the U.S. Army, Ohio EPA, and OHARNG.

This SAP Addendum No. 1 tiers under and supplements the guidance and methods presented in the *Facility-Wide Sampling and Analysis Plan for the Ravenna Army Ammunition Plant, Ravenna, Ohio* (USACE 2001). The Facility-Wide SAP provides the general technical procedures and protocols for conducting fieldwork at RVAAP. This SAP Addendum No. 1 includes the sampling and analysis objectives, rationales, planned activities, and technical specifications for the work to be conducted for this investigation. Where appropriate, this SAP Addendum No. 1 contains references to the Facility-Wide SAP for standard procedures and protocols.

The quarterly groundwater sampling to be conducted on the newly-installed monitoring wells will be consistent with the *Facility-Wide Groundwater Monitoring Program for the Ravenna Army Ammunition Plant Ravenna, Ohio* (USACE 2004). Groundwater sampling will be sampled using low-flow methods as specified in the Facility-Wide SAP.

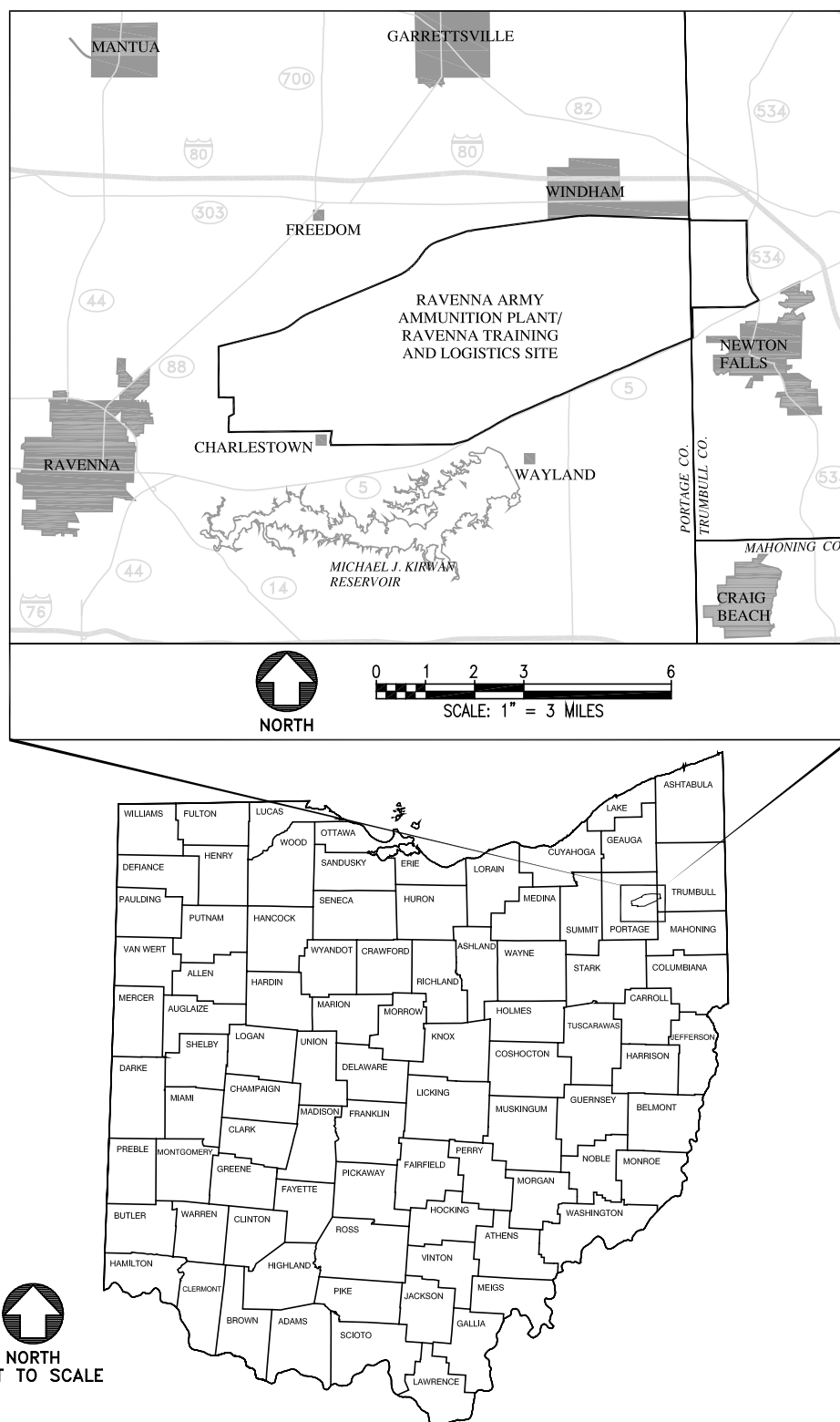


Figure 1-1. General Location and Orientation of the RVAAP/RTLS

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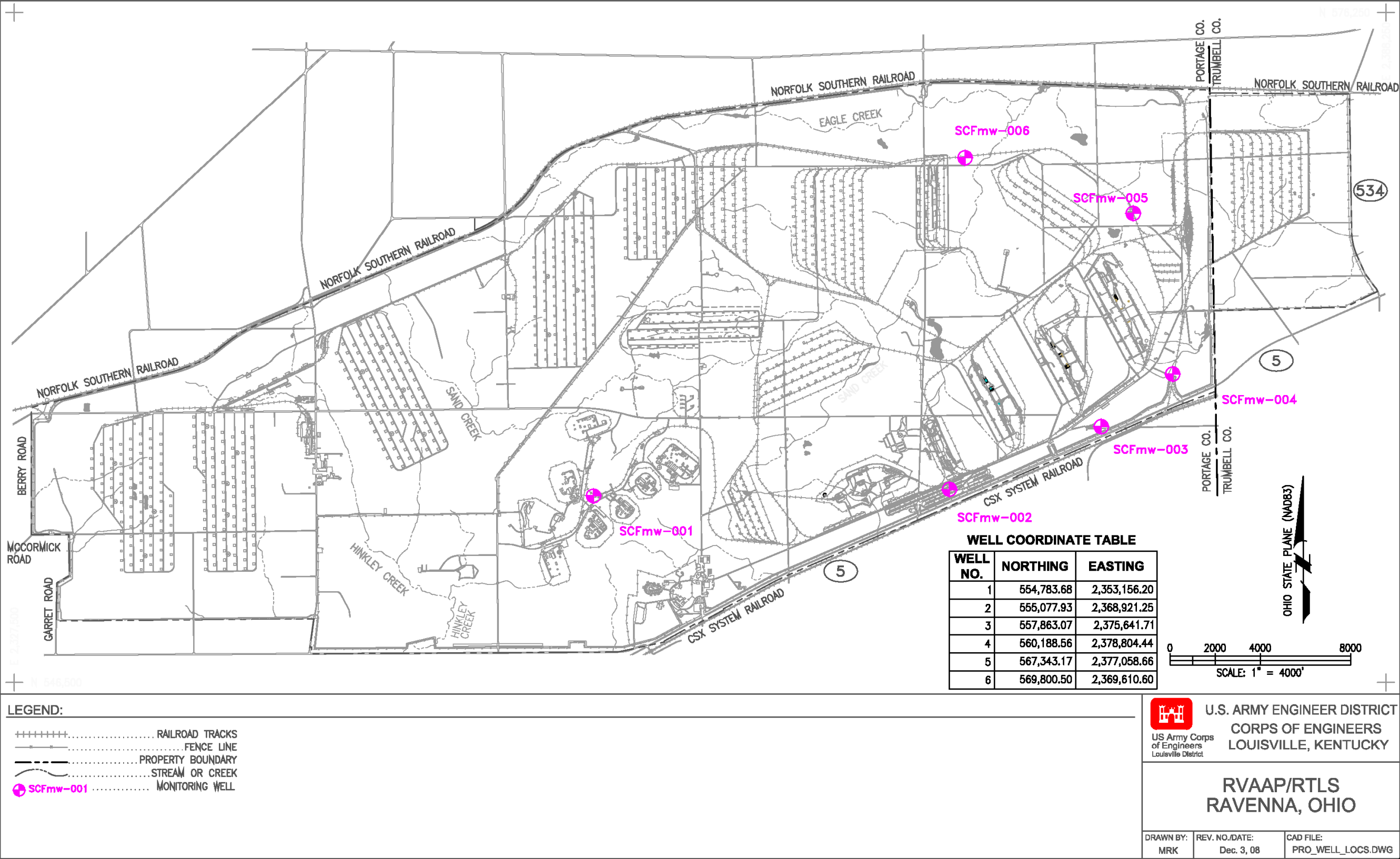


Figure 1-2. Proposed Monitoring Well Locations

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2.0 PROJECT ORGANIZATION AND SCHEDULE

2.1 PROJECT ORGANIZATION AND RESPONSIBILITIES

The project organization and responsibilities are presented in Figure 2-1. The functional responsibilities of key personnel are described in Section 2 of the Facility-Wide SAP and, therefore, are not presented here.

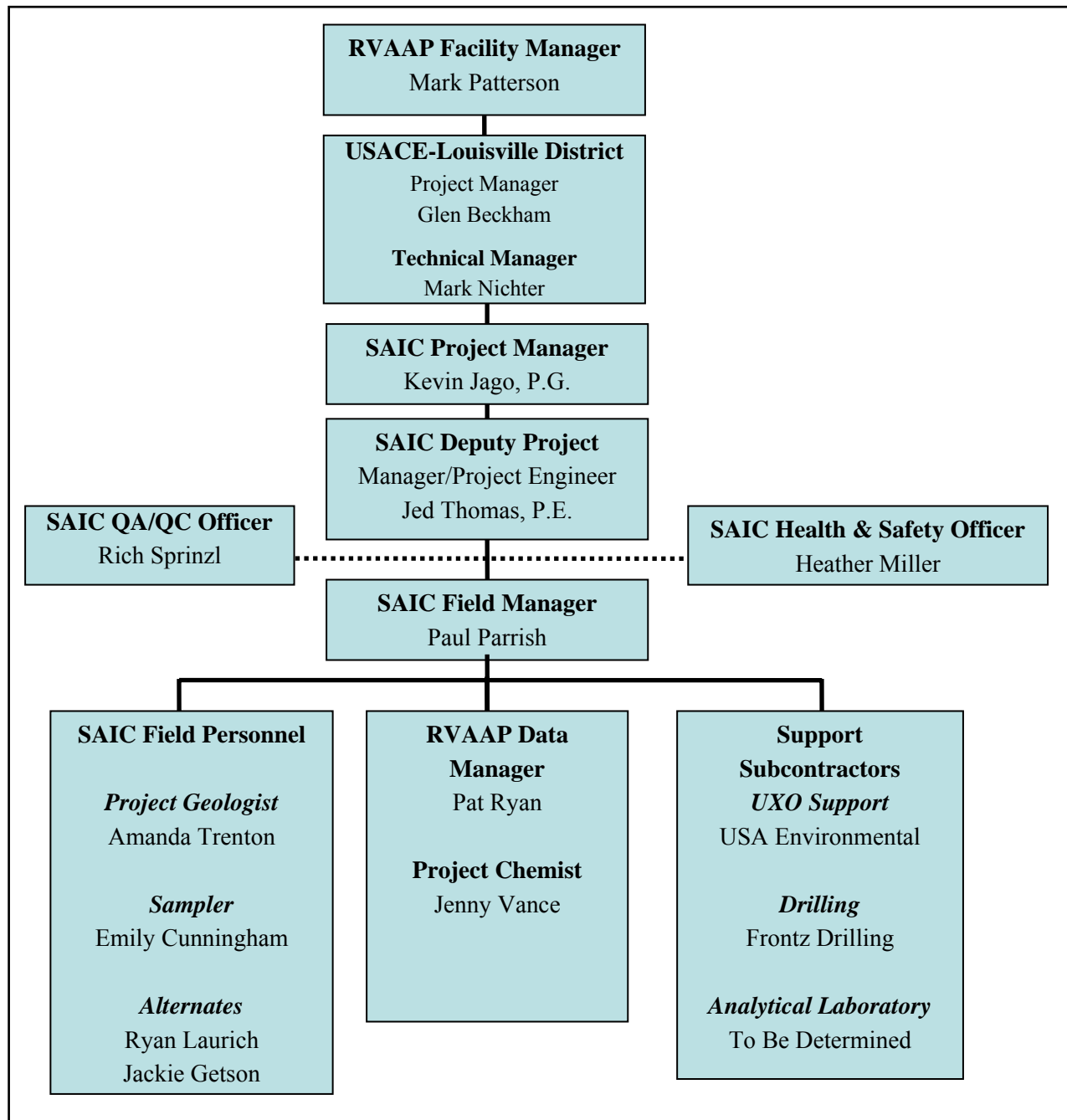


Figure 2-1. Project Personnel Organization Chart

2.2 PROJECT SCHEDULE

The RVAAP 2008 PBA requires a completion date of June 30, 2010 for this project. Under the project schedule, the estimated timeframe to complete the SAP and Quality Assurance Project Plan (QAPP) Addenda and obtain Ohio EPA approval is 202 days following notice-to-proceed. Field activities to install and develop the six deep bedrock monitoring wells is estimated to require 30 days. Sampling activities will encompass four quarterly events over one year. Preparation and Ohio EPA approval of the monitoring report is estimated to require 149 days.

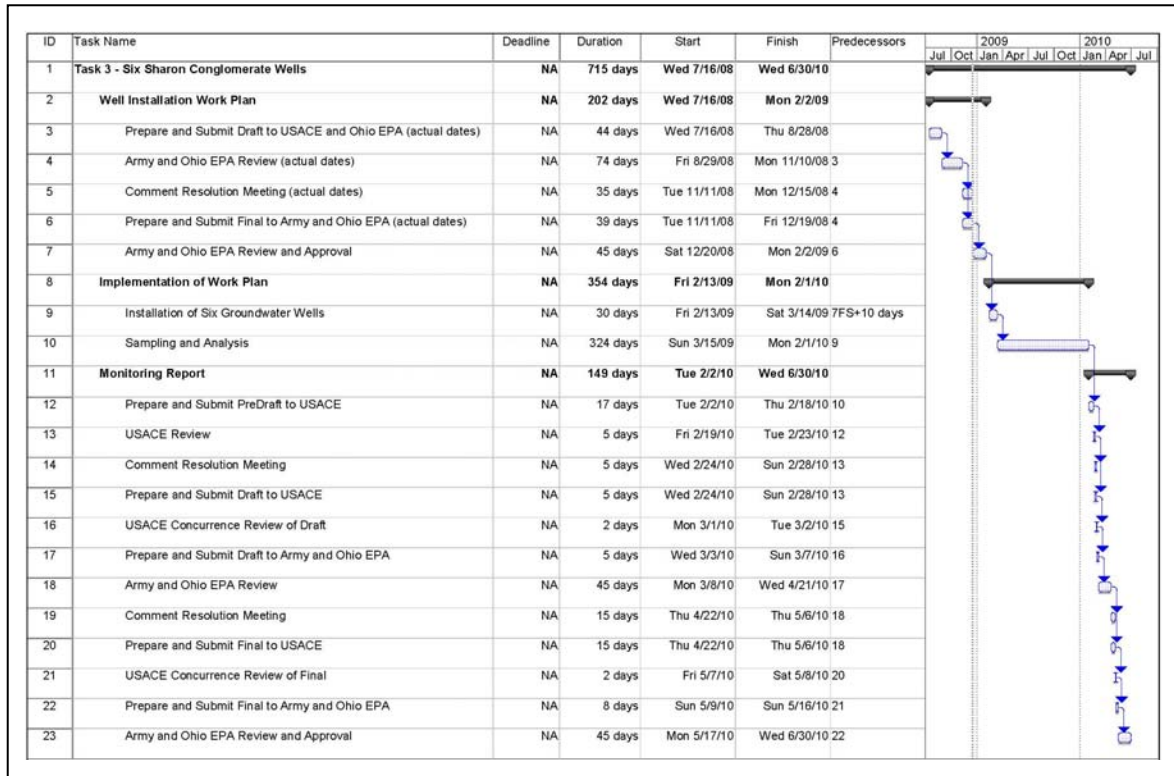


Figure 2-2. Task 3 Project Schedule

3.0 PROJECT SCOPE AND OBJECTIVES

The scope of this investigation is to install six deep bedrock wells at the base of the Sharon Conglomerate underlying RVAAP and to conduct four quarters of groundwater sampling in accordance with the RVAAP Facility-Wide Groundwater Monitoring Plan. Historical operation of groundwater production wells at RVAAP extracted groundwater from the Sharon Conglomerate. Operation of the production wells may have had sufficient radii of influence to induce vertical contaminant migration from shallow groundwater within areas of concern (AOCs) into deeper bedrock groundwater zones. The primary objective of the investigation is to install six monitoring wells to evaluate the impact, if any, that RVAAP operations had on groundwater quality in the deeper portions of the Sharon Conglomerate.

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4.0 FIELD ACTIVITIES

4.1 MONITORING WELL INSTALLATION

Six monitoring wells will be installed to an approximate depth of 200 ft BGS in the basal Sharon Conglomerate to characterize and monitor the deep bedrock groundwater aquifer underlying the RVAAP site. Completion depths of the wells may vary based on the topographic changes across RVAAP and the depth at which the basal portion of the Sharon Conglomerate is encountered. The completion depth of the Sharon Conglomerate deep bedrock monitoring wells will be located at the interface of the Sharon Conglomerate, a tan fine grained sandstone, and the underlying Cuyahoga Group, a medium to dark gray shale. These stratigraphic units will be determined in the field based on their field description and visual inspection of the core by the field geologist.”

4.1.1 Drilling Methods and Equipment

4.1.1.1 Equipment Conditioning and Cleaning

Requirements for the condition and cleaning of equipment used for well installation are described in Section 4.3.2.1.1 of the Facility-Wide SAP. These requirements, as applicable, will apply for equipment used to install monitoring wells.

4.1.1.2 Drilling Methods

The conventional drilling technique using a hollow stem auger will be used to install monitoring wells as described in Section 4.3.2.1.2 of the Facility-Wide SAP. Hollow stem auger drill rigs may be used to collect continuous samples from the surface to the unconsolidated overburden surficial material – bedrock interface. Outer casing will be installed through the hollow stem augers to seal off the unconsolidated surficial overburden material from the bedrock and allow for the installation of the monitoring well through the outer casing to the anticipated depth of 200 ft BGS. The outer casing will be set 2 ft below or as far as practical based on drilling conditions into the bedrock interface.

It is also anticipated that a second type of drilling method will be employed, air rotary, to set the wells to depth and allow for the collection of continuous lithologic samples for description and cataloging of the boring. The air rotary drilling method will be performed as presented in Section 4.3.2.1.2 of the Facility-Wide SAP. The air rotary drilling technique may also be used to collect continuous soil samples of the unconsolidated surficial overburden material and for setting the outer casing in the overburden. This will be based on further site evaluation, availability of drilling equipment, and the schedule for the project.

4.1.2 Materials

4.1.2.1 Casing/Screen

The casing and screen materials for monitoring wells will be schedule 40 or 80 polyvinyl chloride (PVC), depending on field conditions as presented in Section 4.3.2.2.1 of the Facility-Wide SAP. Default screen lengths will be 10 ft, unless subsurface conditions warrant the use of a longer screen (e.g., 20 ft). A longer length screen may be used for lower yielding formations or if the exact depth of the water bearing formation cannot be accurately obtained from the rock core record. Use of screen lengths other than 10 ft will subject to approval by USACE and Ohio EPA.

4.1.2.2 Filter Pack, Bentonite and Grout

The filter pack, bentonite, and grout materials for monitoring wells will be used as presented in Section 4.3.2.2.2 of the Facility-Wide SAP.

4.1.2.3 Surface Completion

All monitoring wells will be constructed as above-grade installations, as presented in Section 4.3.2.2.3 of the Facility-Wide SAP.

4.1.2.4 Water Source

The potable water source used during this investigation for monitoring well installation and decontamination purposes will be identified by RVAAP personnel and approved by USACE and Ohio EPA before use. The collection and evaluation of the water source will follow Section 4.3.2.2.4 of the Facility-Wide SAP.

4.1.2.5 Delivery, Storage, and Handling of Materials

All monitoring well construction materials will be delivered, stored, and handled according to Section 4.3.2.2.5 of the Facility-Wide SAP.

4.1.3 Installation

All monitoring wells will be installed in accordance with the procedures for above-grade installations presented in Section 4.3.2.3 of the Facility-Wide SAP. The unconsolidated surficial material in each borehole will be drilled using a 26.0 cm (10.25 in.) outside diameter (OD) hollow stem auger to allow for the placement of an outer casing. Soil samples will be collected continuously from the surface to bedrock refusal. Soil will be described and recorded in the field logbook and a representative sample of the soil encountered will be retained and archived for future reference. A minimum of six (6) inches will be retained of each two (2) foot interval. Once the outer casing is in place and allowed to set for a minimum of 24 hours, the bedrock will be cored using an air rotary drill rig. Cores will be

logged, cataloged, and placed in core boxes for archive purposes. Missing sections of rock core due to no recovery will be noted in the field on the field boring logs and notes placed in the archived rock cores noting the missing section and the depth of the missing sections.

If a proposed monitoring well location does not encounter water during drilling, it will be abandoned in accordance with Army and Ohio EPA requirements and the location moved to a suitable alternate drilling location determined by RVAAP stakeholders (anticipated to be within in a 50 foot radius of the original location). Drilling will continue until a well can be installed at the desired water bearing depth.

4.1.3.1 Documentation

4.1.3.2

Boring Logs

Boring logs will be completed for all monitoring well boreholes, as documented in Section 4.3.2.4.1.1 of the Facility-Wide SAP. Descriptions recorded on each boring log for soil and rock cores will be in accordance with Table 4-2 in the Facility-Wide SAP.

Well Construction Diagrams

All monitoring well activities will be documented according to the procedures presented in Section 4.3.2.4 of the Facility-Wide SAP.

4.1.3.3 Well Abandonment

If abandonment of a monitoring well or borehole is required during the investigation, it will be abandoned according to the procedures presented in Section 4.3.2.5 of the Facility-Wide SAP.

4.1.3.4 Water Level Measurement

Water level measurements will follow the procedure presented in Section 4.3.2.6 of the Facility-Wide SAP.

4.1.3.5 Well Development

Development of monitoring wells will be accomplished with a pump following Section 4.3.2.4.2 of the Facility-Wide SAP. Pumps may be replaced with bottom-filling bailers where well size or slow recharge rates restrict pump usage. Development will proceed until the criteria specified in the Facility-Wide SAP are met:

- The water is clear to the unaided eye;
- The sediment thickness in the well is less than 1% of the screen length or <30mm (0.1 ft);

- A minimum of five times the standing water volume in the well (to include the well screen and casing plus saturated annulus, assuming 30% porosity); and
- Indicator parameters (pH, temperature, and specific conductance) have stabilized according to procedures presented in Section 4.1.1 of the Facility-Wide Groundwater Monitoring Program (USACE 2004) over three successive well volumes.

For each monitoring well developed during the field investigation a record will be prepared to include information specified in Section 4.3.2.4.2 of the Facility-Wide SAP.

4.1.4 Field Measurement Procedures and Criteria

All field measurement procedures and criteria will follow Section 4.3.3 of the Facility-Wide SAP. All monitoring wells will be field screened for volatile organic compounds (VOCs) using a photoionization detector (PID) or organic vapor analyzer (OVA) during groundwater sample collection. Screening will be accomplished by monitoring the headspace vapors at the top of the riser pipe.

4.1.5 Sampling Methods for Groundwater

Groundwater sampling from monitoring wells will follow the procedures presented in Section 4.3.4 of the Facility-Wide SAP. Samples will be collected for the chemicals of potential concern (COPCs) for RVAAP as presented in Table 3-1 of the Facility-Wide Groundwater Monitoring Program Plan and outlined in Section 7.2 of the QAPP Addendum No.1 for the Deep Bedrock Well Installation in the Basal Sharon Conglomerate.

4.1.5.1 Well Purging Methods

To minimize the quantity of liquid investigation-derived waste (IDW) generated as a result of well purging, wells will be micro-purged where conditions permit, in accordance with Ohio EPA technical guidance (Ohio EPA 1995), as follows:

- A dedicated bladder or submersible pump will be used for purging;
- The purge rate should not exceed 100 mL/min unless it can be shown that higher rates will not disturb the stagnant water column above the well screen (i.e., will not result in water level drawdown);
- The volume purged is either two pump and tubing volumes or a volume established through in-line monitoring and stabilization of water quality indicators such as dissolved oxygen and specific conductance; and
- Sample collection should occur immediately after purging.

Where micro-purging cannot be accomplished for any reason, then purging of all monitoring wells installed during the field investigation will be conducted in accordance with procedures discussed in Section 4.3.4 of the Facility-Wide SAP.

4.1.5.2 Filtration

Per Section 4.3.5 of the Facility-wide SAP, groundwater samples collected for dissolved metals will be filtered using an in-line presterilized, disposable 0.45- μ m pore size barrel filter affixed to the pump discharge line. Samples will be collected directly into the sample containers from the discharge line from the filter.

In the event bailers are required for sampling, samples collected for dissolved metals will be filtered using a presterilized, disposable 0.45- μ m pore size filter assembly. Before collecting the water sample, the pump and filter apparatus will be assembled. A bailer will then be lowered into the monitoring well, filled with groundwater, and raised to the surface. The groundwater will be transferred from the bailer to a decontaminated collection flask and poured into the filter funnel portion of the filter assembly. Care will be taken to avoid transferring solids that may have settled to the bottom of the collection flask. The hand-operated pump will be used to create a vacuum in the assembly to start filtration. Sample bottles will be filled with the filtered water. Filters will be replaced as they become restricted by solids buildup as well as between sample collection sites.

4.1.6 Sample Containers and Preservation Techniques

Requirements for sample containers and preservation techniques for groundwater samples are presented in Section 4.3.6 of the Facility-Wide SAP and Section 7.2 of the QAPP Addendum No.1 for the Deep Bedrock Well Installation in the Basal Sharon Conglomerate.

4.1.7 Field Quality Control Sampling Procedures

Quality control samples for monitoring well groundwater sampling activities will include duplicates and split groundwater samples, equipment rinsates, and trip blanks as described in Section 4.1.5 of this report. Split samples will be submitted to the approved USACE contract laboratory for independent analyses.

4.1.8 Decontamination Procedures

Decontamination of equipment associated with groundwater sampling will be in accordance with the procedure presented in Section 4.3.8 of the Facility-Wide SAP.

4.2 SUBSURFACE SOILS

4.2.1 Sample Collection for Laboratory Analysis

No soil samples will be collected for offsite laboratory analysis. Drill cuttings from the unconsolidated surficial materials will be screened, as presented in Section 4.2.2 of this SAP addendum.

4.2.2 Organic Vapor Screening

Recovered drill cuttings and core from monitoring well borings will be field screened for VOCs using a hand-held PID during well installation activities. All PID readings will be recorded in field logbooks. No samples will be collected for headspace analysis of VOCs.

4.3 WELL SURVEYS

Following well installation activities the wells will be surveyed in accordance with the procedure presented in Section 4.3.2.3.12 of the Facility-Wide SAP.

5.0 SAMPLE CHAIN OF CUSTODY/DOCUMENTATION

5.1 FIELD LOGBOOK

All field logbook information will follow procedures identified in Section 5.1 of the Facility-Wide SAP.

5.2 PHOTOGRAPHS

Information regarding the documentation of photographs for the monitoring well installation is presented in Section 4.3.2.4.3 of the Facility-Wide SAP. Representative photographs will be taken during fieldwork activities and with particular attention to any special features of interest that are identified during the field effort (e.g., bedrock fractures or unusual geologic features). Photographs will be suitable for presentation in a public forum, as well as for documenting scientific information.

5.3 SAMPLE NUMBERING SYSTEM

The sample numbering system that will be used to identify samples collected during the groundwater sampling is explained in Section 5.3 of the Facility-Wide SAP. Samples collected will be identified sequentially by following the numbering system. If a sample is not collected or is reassigned to another location, a specific reason and notation will be written in the project field books. The sample number system is presented in Figure 5-1 and presents the sample numbers that will be used during this project.

5.4 SAMPLE DOCUMENTATION

All sample label, logbook, field record, and field form information will follow structures identified in Section 5.0 of the Facility-Wide SAP.

5.5 DOCUMENTATION PROCEDURES

Documentation and tracking of samples and field information will follow the series of steps identified in Section 5.5 of the Facility-wide SAP.

5.6 CORRECTIONS TO DOCUMENTATION

Any corrections to documentation will follow guidance established in Section 5.6 of the Facility-Wide SAP.

5.7 MONTHLY REPORTS

Monthly reports are submitted as part of implantation of SAIC's 2008 PBA for Environmental Investigation and Remediation. This monthly report will be submitted on the 10th day of the

following month to both the USACE and Ohio EPA. The content of the reports will have content similar to that specified in Section 5.7 of the Facility-Wide SAP.

In addition to the monthly project reports, a fieldwork letter report will be submitted to USACE and Ohio EPA by SAIC thirty (30) days following conclusion of drilling fieldwork activities. This letter report will serve as a transmittal of field documents including a site map showing well installation locations and corresponding electronic drill logs which notate the boring description and well installation diagram.

Figure 5-1. Sample Identification System

Sampling Location Identification: XXXmm-NNN(n)		
XXX =	Area Designator	<u>Examples</u> SCF - Sharon Conglomerate Formation
mm =	Sample Location Type	<u>Examples</u> MW - Groundwater Monitoring Well
NNN(n) =	Sequential Sample Location Number [must be unique for each designator]	<u>Examples</u> 001 002 003
(n) can be used as a special identifier and is optional. For example: Use a D to identify the well as an adjacent deep zone/aquifer well (004D) Use a B to identify the well as a background location (012B) Use an A to identify an abandoned well (099A)		
Sample Identification: XXXmm-NNN(n)-####-tt		
#### =	Sequential Sample Number [must be unique for entire project site]	<u>Examples</u> 0001 0002 0003
tt =	Sample Type	<u>Examples</u> GW - Groundwater Sample (unfiltered) ER - Equipment Rinsate
Proposed Sample IDs for Groundwater Sampling SCFmw-001-0XXX-GW SCFmw-002-0XXX-GW SCFmw-003-0XXX-GW SCFmw-004-0XXX-GW SCFmw-004-0XXX-ER SCFmw-005-0XXX-GW SCFmw-006-0XXX-GW		

6.0 SAMPLE PACKAGING AND SHIPPING REQUIREMENTS

Sample packaging and shipping procedures will follow the guidelines in Section 6.0 of the Facility-Wide SAP.

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7.0 INVESTIGATION-DERIVED WASTE

All IDW, including auger cuttings, personal protective equipment (PPE), disposable sampling equipment, and decontamination fluids, will be properly handled, labeled, characterized, and managed in accordance with Section 7.0 of the Facility-Wide SAP. At the conclusion of field activities for the bedrock monitoring well installation, a letter report will be submitted to USACE and the RVAAP Environmental Coordinator documenting the characterization and classification of the wastes. Upon approval of the IDW classification report, all solid and liquid IDW will be removed from the site and disposed of by a licensed waste disposal contractor. All shipments of IDW off-site will be coordinated through the RVAAP Environmental Coordinator.

Four types of IDW are anticipated, which will be contained separately. The types and estimated quantities for each include:

- Soil, specifically drill cuttings from the unconsolidated surficial material;
- Development and purge water from monitoring wells;
- Decontamination fluids, including those derived from decontamination of sampling equipment and drilling equipment; and
- Expendables/solid wastes, including PPE and disposable sampling equipment.

Characterization and classification the different types of IDW will be based on the specific protocols described below. Expendable solid waste will be not sampled for characterization purposes.

- **Soil:** Drill cuttings will be placed in 55-gallon drums. Disposition of the drummed soil will be based on analytical results from toxicity characteristic leaching procedure (TCLP) samples collected.
- **IDW Water:** Development water from newly installed wells, purge water, and excess water not used for environmental samples will be placed in 55-gallon drums. Disposition will be based on the analytical results of the environmental samples. If results indicate that IDW water is potentially hazardous, TCLP samples will be collected.
- **Decontamination Fluids:** Decontamination fluids will be placed in drums or a polytank up to 1,500 gallons in size as needed. Disposition of decontamination liquid will be based on the collection and analysis of TCLP liquid sample(s).

Drummed soil, sediment, and IDW water will be transported to a location designated by the RVAPP environmental coordinator, where it will be staged on wooden pallets. Decontamination fluids and field laboratory wastes will also be staged at the identified location within secondary containment

structures. To avoid potential drum rupture due to freezing conditions, drums containing liquid IDW will be filled only to 75% capacity.

8.0 REFERENCES

Ohio EPA 1995. Technical Guidance Manual for Hydrogeologic Investigation and Groundwater Monitoring.

USACE (U.S. Army Corps of Engineers) 1994a. Requirements for the Preparation of Sampling and Analysis Plans, EM 200-1-3.

USACE 1994b. Monitoring Well Design, Installation, and Documentation at Hazardous and/or Toxic Waste Sites, EM-1110-1-4000.

USACE 2001. Facility-Wide Sampling and Analysis Plan for Environmental Investigations at the Ravenna Army Ammunition Plant, Ravenna, Ohio, DACA 62-00-D-0001, D.O. CY02, Final.

USACE 2004. Facility-Wide Groundwater Monitoring Program for the Ravenna Army Ammunition Plant, Ravenna, Ohio, GS-10F-0350M, D.O. DACA27-03-F-0047, Final.

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PART II

Final

Quality Assurance Project Plan for the Sampling and Analysis Plan Deep Bedrock Well Installation in the Basal Sharon Conglomerate Addendum No. 1

Ravenna Army Ammunition Plant
Ravenna, Ohio

Contract No. W912QR-04-D-0028
Delivery Order No. 0001

Prepared for:

U.S. Army Corps of Engineers
600 Martin Luther King, Jr. Place
Louisville, Kentucky 40202

Prepared by:

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May 11, 2009

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Appendix B National Environmental Laboratory Accreditation Program (NELAP) Certifications – TestAmerica Laboratories, Inc.	

ACRONYMS AND ABBREVIATIONS

COPC	Chemicals of Potential Concern
DQO	Data Quality Objective
EPA	U.S. Environmental Protection Agency
LCS	Laboratory Control Samples
MS/MSD	Matrix Spike/Matrix Spike Duplicate
NELAP	National Environmental Laboratory Accreditation Program
Ohio EPA	Ohio Environmental Protection Agency
PCB	Polychlorinated Biphenyl
PID	Photoionization Detector
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
RVAAP	Ravenna Army Ammunition Plant
SAIC	Science Applications International Corporation
SAP	Sampling and Analysis Plan
SVOC	Semivolatile Organic Compound
USACE	United States Army Corps of Engineers
TAL	Target Analyte List
VOC	Volatile Organic Compound

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1.0 INTRODUCTION

This Quality Assurance Project Plan (QAPP) Addendum No. 1 for the Deep Bedrock Well Installation in the Basal Sharon Conglomerate addresses supplemental project-specific information and tiers under the Facility-Wide QAPP for the Ravenna Army Ammunition Plant (RVAAP) (USACE 2001). Each QAPP section documents adherence to the Facility-Wide QAPP or stipulates project-specific requirements.

1.1 PROJECT DESCRIPTION

This information is contained in Section 1.0 of the Sampling and Analysis Plan (SAP) Addendum No. 1 for the Deep Bedrock Well Installation in the Basal Sharon Conglomerate.

1.2 PROJECT OBJECTIVES AND SCOPE

This information is contained in Section 3.0 of the SAP Addendum No. 1 for the Deep Bedrock Well Installation in the Basal Sharon Conglomerate.

1.3 PROJECT SCHEDULE

The Deep Bedrock Well Installation Investigation project schedule is discussed in Section 2.2 of the SAP Addendum No. 1 for the Deep Bedrock Well Installation in the Basal Sharon Conglomerate.

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2.0 PROJECT ORGANIZATION

The functional project organization and responsibilities described in Section 2.0 of the SAP Addendum No. 1 for the Deep Bedrock Well Installation in the Basal Sharon Conglomerate is presented here with the addition of the analytical laboratory and surveying subcontractors identified for this project.

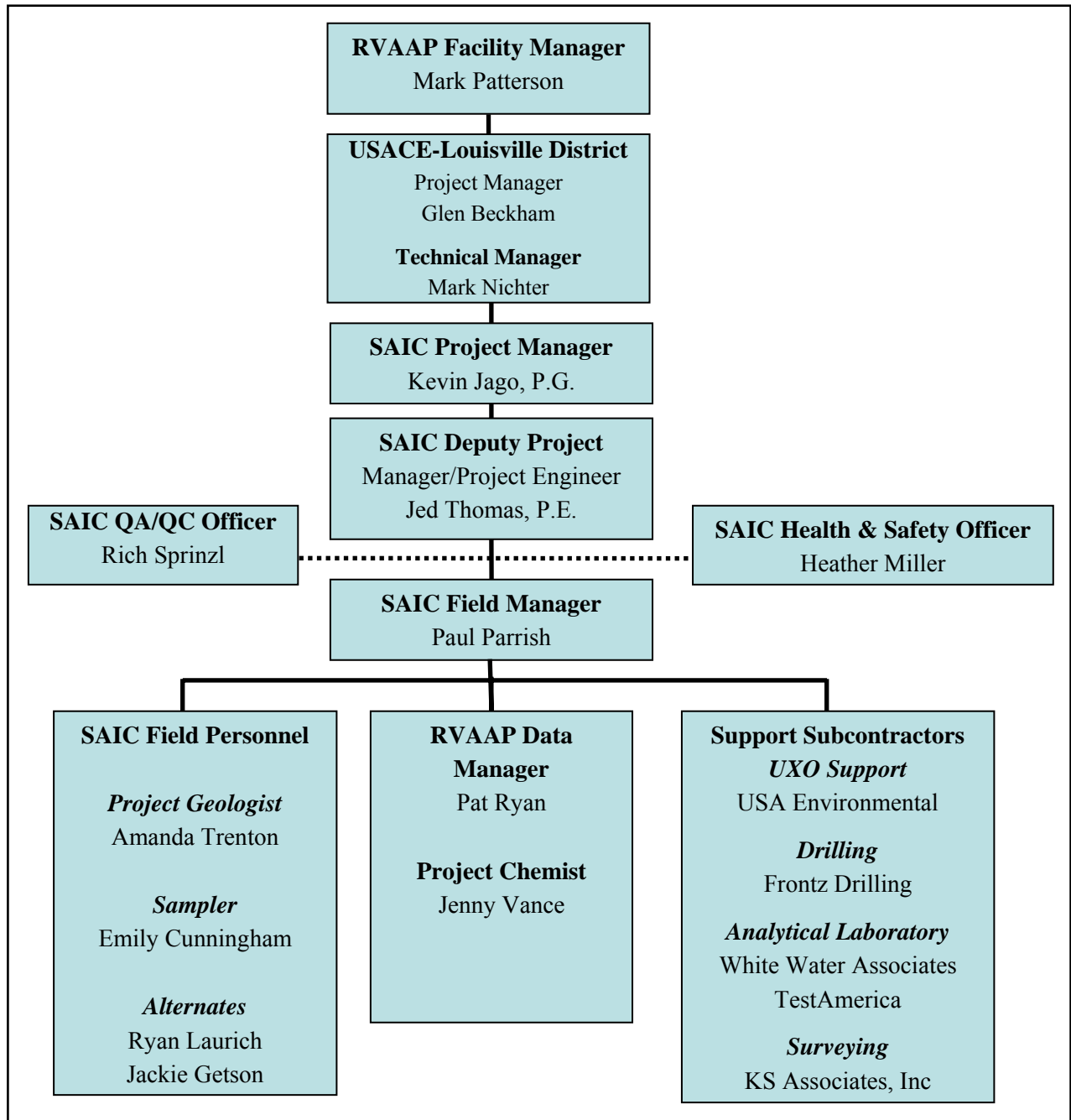


Figure 2-1. Project Personnel Organization Chart

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3.0 QUALITY ASSURANCE OBJECTIVES FOR MEASUREMENT

3.1 DATA QUALITY OBJECTIVES

Data quality objective (DQO) summaries for this investigation will follow Tables 3-1 and 3-2 in the Facility-Wide QAPP. It is not anticipated that samples for chemical analysis will be collected from unconsolidated surficial material or of the bedrock. Groundwater samples collected under the guidance of the Facility-Wide Groundwater Monitoring Program will adhere to the requirements specified in that program and will meet all quality control (QC) parameters stated in the specific U.S. Environmental Protection Agency (EPA) SW-846 methods and will be adhered to for each chemical listed. The SW-846 method references found in the Facility-Wide QAPP have been revised to the Update III methods (i.e., 8260A is now 8260B, 8270B is now 8270C, etc.). Laboratories are required to comply with all methods as written; recommendations are considered requirements. Concurrence with the United States Army Corps of Engineers (USACE) Shell Document for Analytical Chemistry Requirements, version 1.0, 2 Nov 98 (USACE 1998) and Environmental Data Assurance Guideline, USACE-Louisville, May 2000 (USACE 2000) is expected.

3.2 LEVEL OF QUALITY CONTROL EFFORT

QC efforts will follow Section 3.2 of the Facility-Wide QAPP. Field QC measurements will include field source water blanks, trip blanks, field duplicates, and equipment rinsate blanks. Laboratory QC measurements will include method blanks, laboratory control samples (LCSs), laboratory duplicates, and matrix spike/matrix spike duplicate (MS/MSD) samples.

3.3 ACCURACY, PRECISION, AND SENSITIVITY OF ANALYSIS

Accuracy, precision, and sensitivity goals identified in Section 3.3 and Tables 3-1 through 3-9 of the Facility-Wide QAPP will be imposed for this investigation. To conform to the requirements of the Facility-Wide Groundwater Monitoring Program the additional quantitation levels and analytical methods presented in Table 3-1 of this QAPP will supersede the reporting levels and analytical methods presented in Tables 3-1 through 3-9 in the Facility-Wide QAPP for the specific analytes shown in Table 3-1. To meet the additional quantitation levels and analytical methods only the laboratory certified under the National Environmental Laboratory Accreditation Program (NELAP) will conduct the analysis. Appendix A presents the certifications for White Water Associates, Inc. and Appendix B presents the certifications for TestAmerica Laboratories, Inc. Table 3-2 of this QAPP identifies which Laboratories will perform specific analyses for this project. To begin the project TestAmerica will be performing all of the analysis of submitted samples and will be mentoring White Water Associates in the required reporting requirements for USACE–Louisville District projects. As White Water Associates becomes more proficient in meeting the requirements for the project they will perform those analyses which they are NELAP certified. Any changes will be documented with a Field Change Request and approved by USACE prior to being initiated.

3.4 COMPLETENESS, REPRESENTATIVENESS, AND COMPARABILITY

Completeness, representativeness, and comparability goals identified in Section 3.4 and Tables 3-1 and 3-2 of the Facility-Wide QAPP will be imposed for this investigation.

Table 3-1. Project Quantitation Levels And Analytical Methods For Water Samples Different Than As Presented In The RVAAP Facility-Wide QAPP

Analyte Name	Result Units	Reporting Level for Project	Method to Be Used to Meet QAPP RL
Metals			
Aluminum	µg/L	50	6020
Antimony	µg/L	2	6020
Arsenic	µg/L	5	6010B-Trace
Barium	µg/L	10	6010
Beryllium	µg/L	1	6020
Cadmium	µg/L	0.5	6020
Calcium	µg/L	1000	(6010) ^A
Chromium	µg/L	5	6010B-Trace
Cobalt	µg/L	5	6010B-Trace
Copper	µg/L	5	6010B-Trace
Iron	µg/L	100	6020
Lead	µg/L	3	6010B-Trace
Magnesium	µg/L	100	6020
Manganese	µg/L	10	6010B-Trace
Nickel	µg/L	10	6010B-Trace
Potassium	µg/L	200	6020
Selenium	µg/L	5	6010B-Trace
Silver	µg/L	5	6010B-Trace
Sodium	µg/L	1000	(6010) ^A
Vanadium	µg/L	10	6010B-Trace
Zinc	µg/L	10	6020
Thallium	µg/L	1.0	6020
Mercury	µg/L	0.2	7470
VOCs			
1,2-Dichloroethane	µg/L	1.0	8260B
Benzene	µg/L	1.0	8260B
Chloroform	µg/L	1.0	8260B
cis-1,3-Dichloropropene	µg/L	1.0	8260B
Vinyl chloride	µg/L	1.0	8260B
1,1,2,2-Tetrachloroethane	µg/L	1.0	8260B
1,2-Dibromoethane	µg/L	1.0	8260B
Trichloroethene	µg/L	1.0	8260B

Table 3-1. Project Quantitation Levels And Analytical Methods For Water Samples Different Than As Presented In The RVAAP Facility-Wide QAPP (continued)

Analyte Name	Result Units	Reporting Level for Project	Method to Be Used to Meet QAPP RL
<i>VOCs Continued</i>			
Tetrachloroethene	µg/L	1.0	8260B
Bromodichloromethane	µg/L	1.0	8260B
1,1,2-Trichloroethane	µg/L	1.0	8260B
Dibromochloromethane	µg/L	1.0	8260B
trans-1,3-Dichloropropene	µg/L	1.0	8260B
Carbon tetrachloride	µg/L	1.0	8260B
<i>SVOCs</i>			
Bis(2-Chloroethyl) ether	µg/L	1.0	8270C
Benzo(a)pyrene	µg/L	0.20	8270C
Dibenzo(a,h)anthracene	µg/L	0.20	8270C
Hexachlorobenzene	µg/L	0.20	8270C
Benzo(b)fluoranthene	µg/L	0.20	8270C
Indeno(1,2,3-cd)pyrene	µg/L	0.20	8270C
Benzo(a)anthracene	µg/L	0.20	8270C
3,3'-Dichlorobenzidine	µg/L	5.0	8270C
1,4-Dichlorobenzene	µg/L	1.0	8270C
Pentachlorophenol	µg/L	5.0	8270C
Hexachlorobutadiene	µg/L	1.0	8270C
Benzo(k)fluoranthene	µg/L	0.20	8270C
2,4,6-Trichlorophenol	µg/L	5.0	8270C
<i>Pesticides</i>			
Dieldrin	µg/L	0.030	8081A
Aldrin	µg/L	0.030	8081A
Heptachlor epoxide	µg/L	0.030	8081A
alpha-BHC	µg/L	0.030	8081A
Heptachlor	µg/L	0.030	8081A
<i>PCBs</i>			
Aroclor 1016	µg/L	0.2	8082A
Aroclor 1221	µg/L	0.2	8082A
Aroclor 1232	µg/L	0.2	8082A
Aroclor 1242	µg/L	0.2	8082A
Aroclor 1248	µg/L	0.2	8082A
Aroclor 1254	µg/L	0.2	8082A
Aroclor 1260	µg/L	0.2	8082A

Table 3-1. Project Quantitation Levels And Analytical Methods For Water Samples Different Than As Presented In The RVAAP Facility-Wide QAPP (continued)

Analyte Name	Result Units	Reporting Level for Project	Method to Be Used to Meet QAPP RL
Explosives & Propellants			
2-Nitrotoluene ^B	µg/L	0.5	8330 Mod
3-Nitrotoluene ^B	µg/L	0.5	8330 Mod
4-Nitrotoluene ^B	µg/L	0.5	8330 Mod
Perchlorate	µg/L	0.1	6860

^A - Method will not meet the reporting limits specified in the Facility-Wide QAPP. However, these chemicals have been consistently found to be naturally occurring on the site at values that exceed the QAPP Reporting Levels.

^B - 2-Nitrotoluene, 3-Nitrotoluene, and 4-Nitrotoluene could not meet the QAPP Reporting Limit (RL) of 0.2 ug/L. The Lab's RL for these compounds is 0.5 ug/L. This RL has been previously accepted for other RVAAP investigations.

Notes:

- 1 - In past investigations at RVAAP, RLs for some analytes could not meet their respective limits. The RLs presented in this table are what are typically achievable. Every effort should be made to achieve the lowest Minimum Detection Limits (MDLs) and RLs practical. A variance must be sought and obtained from USACE/Ohio EPA for those compounds with RLs that do not meet the RLs presented in this Table, the Facility-Wide QAPP, the Facility-Wide Groundwater Monitoring Program QAPP.
- 2 - The reporting limits and methods presented in this table supersede the reporting limits and methods shown in Tables 3-1 through 3-9 of the Facility-Wide SAP QAPP.

Table 3-2. Specific Analyses by Laboratory

Analysis – Method	Laboratory Certified To Complete The Analysis
Groundwater and Soil	
VOCs – 8260B	TestAmerica North Canton/White Water Associates
SVOCs – 8270C	TestAmerica North Canton
Pesticides – 8081A	TestAmerica North Canton
PCBs – 8082A	TestAmerica North Canton
Explosives – 8330 Mod	TestAmerica West Sacramento
Propellants – 8330 Mod/353.2	TestAmerica West Sacramento
Metals – 6010B	TestAmerica North Canton/White Water Associates
Metals – 6020 / 7470	TestAmerica North Canton
Cyanide – 9012	TestAmerica North Canton
Nitrate-Nitrite – 300.0	TestAmerica North Canton
Perchlorate - 6860	TestAmerica Denver
IDW - Groundwater and Soil	
TCLP VOCs, SVOCs, Metals, Pesticides, Herbicides, Ignitability, Corrosivity, Reactivity as Total Cyanide and Total Sulfide	TestAmerica North Canton

4.0 SAMPLING PROCEDURES

Sampling procedures are described in Section 4.0 of the Facility-Wide SAP as referenced in Section 4.0 of the SAP Addendum No. 1 for the Deep Bedrock Well Installation in the Basal Sharon Conglomerate.

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5.0 SAMPLE CUSTODY

5.1 FIELD CHAIN-OF-CUSTODY PROCEDURES

Sample handling, packaging, and shipment procedures will follow those identified in Section 5.1 of the Facility-Wide QAPP.

5.2 FINAL EVIDENCE FILES CUSTODY PROCEDURES

Custody of evidence files will follow those criteria defined in Section 5.3 of the Facility-Wide QAPP.

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6.0 CALIBRATION PROCEDURES AND FREQUENCY

6.1 FIELD INSTRUMENTS/EQUIPMENT

Field instruments and equipment calibrations will follow procedures described in Section 6.1 of the Facility-Wide SAP QAPP.

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7.0 ANALYTICAL PROCEDURES

7.1 FIELD SCREENING ANALYTICAL PROTOCOLS

Procedures for field analysis are identified in Section 6.0 of the Facility-Wide SAP, and in Section 4.0 of the SAP Addendum No. 1 for the Deep Bedrock Well Installation in the Basal Sharon Conglomerate. Only screening of drill cuttings and core samples for organic vapors using a photoionization detector (PID) will be conducted; headspace analyses of drill cuttings or core samples will not be conducted.

7.2 LABORATORY ANALYSIS

The six deep bedrock wells will be monitored for the same target analyte list (TAL) metals, explosives, propellants, cyanide, semivolatile organic compounds (SVOCs), volatile organic compounds (VOCs), pesticides and PCBs as presented in Section 4.3 of the Facility-Wide Groundwater Monitoring Program Plan for the RVAAP background wells. Perchlorate analysis will be included among the analytes during the second quarterly sampling event to match when perchlorate samples will be collected during the Facility-Wide Groundwater Monitoring Program and the collection and analysis will follow the Perchlorate Analysis Addendum to the Facility-Wide Groundwater Monitoring Program dated August 2007 (USACE 2007). Table 7-1 presents the chemicals of potential concern (COPCs) for RVAAP. Table 7-2 presents the total number of samples to be collected and chemical groups to be analyzed for this investigation.

Sample containers and sample preservation requirements are presented in Section 4.3.6 of the Facility-Wide SAP. Quantitation levels for samples will confirm to Section 7.1 of the Facility-Wide QAPP. The contract laboratory will provide sufficient containers of the proper size and with the proper chemical preservatives for the parameters to be collected. Samples will be collected and preserved as presented in Section 4.0 of the Facility-Wide QAPP.

Table 7-1. Chemicals of Potential Concern for RVAAP

Primary Chemicals of Potential Concern	Other COPCs
Dinitrotoluene-2,4 (DNT)	1,3,5-Trinitrobenzene
Dinitrotoluene-2,6	1,3-Dinitrobenzene
Trinitrotoluene-2,4,6 (TNT)	Nitrobenzene
RDX	o-Nitrotoluene
Composition B (RDX + TNT)	n-Nitrotoluene
HMX	p-Nitrotoluene
Nitrocellulose	Manganese
Nitroglycerine	VOCs
Nitroguanidine	SVOCs
Aluminum	PCBs
Arsenic	---
Barium	---
Cadmium	---
Chromium	---
Lead	---
Mercury	---
Selenium	---
Silver	---
Zinc	---

Table 7-2. Samples To Be Collected

Sampling Event	Explosives	Propellants	TAL Metals	CN	SVOCs/ PCBs/ Pesticides	VOCs	Perchlorate	Full TCLP, Sulfide, Nitrate, Nitrite, Ignitability, pH
Quarterly Event 1	6	6	6	6	6	6	0	0
Quarterly Event 2	6	6	6	6	6	6	6	0
Quarterly Event 3	6	6	6	6	6	6	0	0
Quarterly Event 4	6	6	6	6	6	6	0	0
Solid IDW	7	7	7	7	7	7	0	7
Liquid IDW	7	7	7	7	7	7	0	7
QA/QC Samples	8	8	8	8	8	8	2	0
Total Samples	46	46	46	46	46	46	8	14

Full TCLP = VOC, SVOC, Pesticides, Herbicides and Metals

8.0 INTERNAL QUALITY CONTROL CHECK

8.1 FIELD SAMPLE COLLECTION

Field QC sample types, numbers, and frequencies are identified in Sections 4.0 and 5.0 of the SAP Addendum No. 1 for the Deep Bedrock Well Installation in the Basal Sharon Conglomerate and in Section 7.0 of SAP Addendum No. 1 for the Deep Bedrock Well Installation in the Basal Sharon Conglomerate QAPP.

For groundwater samples collected during the quarterly event with perchlorate sampling and analysis they shall be filtered in the field at the time of collection using a 0.2 µm Polytetrafluoroethylene (PTFE) membrane filtration in order to remove potentially perchlorate-degrading microbes. Perchlorate samples will follow the Perchlorate Analysis Addendum to the Facility-Wide Groundwater Monitoring Program dated August 2007 (USACE 2007).

8.2 FIELD MEASUREMENT

Refer to Section 4.0 of the SAP Addendum No. 1 for the Deep Bedrock Well Installation in the Basal Sharon Conglomerate for details regarding field measurements.

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9.0 DATA REDUCTION, VALIDATION, AND REPORTING

9.1 DATA REDUCTION

Data reduction will follow the established protocols defined in Section 9.1 in the Facility-Wide QAPP.

9.2 DATA VALIDATION

Data validation will follow the established protocols defined in Section 9.2 in the Facility-Wide QAPP and the Louisville Chemistry Guidance Version 5.0.

9.3 DATA REPORTING

Data reports will follow the established protocols defined in Section 9.3 in the Facility-Wide QAPP.

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10.0 PERFORMANCE AND SYSTEM AUDITS

10.1 FIELD AUDITS

A minimum of one field surveillance for the investigation will be performed by the Science Applications International Corporation (SAIC) quality assurance (QA) Officer and/or the SAIC Field Team Leader. This surveillance will encompass the performance of monitoring well installation and completion of field logs. Surveillances will follow SAIC QAPP No. 18.3. USACE or Ohio EPA may conduct surveillances or audits at the discretion of the respective agency.

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11.0 PREVENTIVE MAINTENANCE PROCEDURES

11.1 FIELD INSTRUMENTS AND EQUIPMENT

Maintenance of all field analytical and sampling equipment will follow direction provided in Section 11.1 of the Facility-Wide QAPP.

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12.0 SPECIFIC ROUTINE PROCEDURES TO ASSESS DATA PRECISION, ACCURACY, AND COMPLETENESS

12.1 FIELD MEASUREMENTS DATA

Field data will be assessed as outlined in Section 12.1 of the Facility-Wide QAPP.

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13.0 CORRECTIVE ACTIONS

13.1 SAMPLE COLLECTION/FIELD MEASUREMENTS

Corrective action protocol will follow directions provided in Section 13.1 of the Facility-Wide QAPP.

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14.0 QA REPORTS

Procedures and reports will follow the protocol identified in Section 14.0 of the Facility-Wide QAPP.

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15.0 REFERENCES

United States Army Corps of Engineers (USACE) 1998. *Shell Document for Analytical Chemistry Requirements, version 1.0*, November 2, 1998.

USACE 2000. *Environmental Data Quality Assurance Guideline, Louisville District*, May 2000.

USACE 2001. *Facility-Wide Quality Assurance Project Plan for Environmental Investigations at the Ravenna Army Ammunition Plant, Ravenna, Ohio*, DACA62-00-D-0001, Delivery Order CY02, Final.

USACE 2002. *USACE Louisville Chemistry Guideline Version 5.0*, June 2002.

USACE 2004. *Facility-Wide Groundwater Monitoring Program Plan for the Ravenna Army Ammunition Plant, Ravenna, Ohio*, September 2004.

USACE 2007. *Perchlorate Analysis Addendum to the Facility-Wide Groundwater Monitoring Program*, August 2007.

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APPENDIX A

National Environmental Laboratory Accreditation Program (NELAP) Certifications

White Water Associates, Inc.



STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
NELAP - RECOGNIZED
ENVIRONMENTAL LABORATORY ACCREDITATION



is hereby granted to

WHITE WATER ASSOCIATES, INC.
429 RIVER LANE
AMASA, MI 49903
NELAP ACCREDITED
ACCREDITATION NUMBER #100459



According to the Illinois Administrative Code, Title 35, Subtitle A, Chapter II, Part 186, ACCREDITATION OF LABORATORIES FOR DRINKING WATER, WASTEWATER AND HAZARDOUS WASTES ANALYSIS, the State of Illinois formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed below.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part 186 requirements and acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part 186. Please contact the Illinois EPA Environmental Laboratory Accreditation Program (IL ELAP) to verify the laboratory's scope of accreditation and accreditation status. Accreditation by the State of Illinois is not an endorsement or a guarantee of validity of the data generated by the laboratory.

Ron Turpin
Manager
Environmental Laboratory Accreditation Program

Scott D. Siders
Accreditation Officer
Environmental Laboratory Accreditation Program

Certificate No.: 001968
Expiration Date: 02/23/2009
Issued On: 02/21/2008

State of Illinois
Environmental Protection Agency
Awards the Certificate of Approval

Certificate No.: 001968

White Water Associates, Inc.
429 River Lane
Amasa, MI 49903

According to the Illinois Administrative Code, Title 35, Subtitle A, Chapter II, Part 186, ACCREDITATION OF LABORATORIES FOR DRINKING WATER, WASTEWATER AND HAZARDOUS WASTES ANALYSIS, the State of Illinois formally recognizes that this laboratory is technically competent to perform the environmental analyses listed on the scope of accreditation detailed below.

The laboratory agrees to perform all analyses listed on this scope of accreditation according to the Part 186 requirements and acknowledges that continued accreditation is dependent on successful ongoing compliance with the applicable requirements of Part 186. Please contact the Illinois EPA Environmental Laboratory Accreditation Program (IL ELAP) to verify the laboratory's scope of accreditation and accreditation status. Accreditation by the State of Illinois is not an endorsement or a guarantee of validity of the data generated by the laboratory.

Hazardous and Solid Waste, Inorganic (non-potable water only)

1311

TCLP (Organic and Inorganic)

1312

Synthetic Precipitation Leaching Procedure

6010B

Aluminum	Antimony	Arsenic
Barium	Beryllium	Boron
Cadmium	Calcium	Chromium
Cobalt	Copper	Iron
Lead	Lithium	Magnesium
Manganese	Molybdenum	Nickel
Potassium	Selenium	Silver
Sodium	Strontium	Thallium
Vanadium	Zinc	

Hazardous and Solid Waste, Organic (non-potable water only)

8260B

1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane
1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene
1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane
1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane (DBCP)
1,2-Dibromoethane (EDB)	1,2-Dichlorobenzene	1,2-Dichloroethane
1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene
1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane
2-Butanone (Methyl ethyl ketone, MEK)	2-Chloroethyl vinyl ether	2-Chlorotoluene
2-Hexanone	2-Methylnaphthalene	2-Pentanone
4-Chlorotoluene	4-Methyl-2-pentanone (Methyl isobutyl ketone, I)	Acetone
Acrolein (Propenal)	Acrylonitrile	Benzene
Bromobenzene	Bromochloromethane	Bromodichloromethane
Bromoform	Bromomethane	Carbon disulfide
Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane (Dibromochloromethane)
Chloroethane	Chloroform	Chloromethane
cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromomethane
Dichlorodifluoromethane	Dichloromethane (Methylene chloride)	Diethyl ether
Ethylbenzene	Hexachlorobutadiene	Hexachloroethane
Isopropylbenzene	Methyl iodide (Iodomethane)	Methyl isobutyl ketone
Methyl-t-butyl ether	m-Xylene	Naphthalene
n-Butylbenzene	n-Propylbenzene	o-Xylene

Page 2 of 3

State of Illinois
Environmental Protection Agency
Awards the Certificate of Approval

Certificate No.: 001968

White Water Associates, Inc.
429 River Lane
Amasa, MI 49903

Hazardous and Solid Waste, Organic

p-Xylene
t-Butyl alcohol
Toluene
trans-1,4-Dichloro-2-butene
Vinyl acetate

8260B

sec-Butylbenzene
tert-Butylbenzene
trans-1,2-Dichloroethene
Trichloroethene
Vinyl chloride

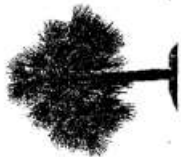
p-Isopropyltoluene
Styrene
Tetrachloroethene
trans-1,3-Dichloropropene
Trichlorofluoromethane
Xylenes (total)

APPENDIX B

National Environmental Laboratory Accreditation Program (NELAP) Certifications

TestAmerica Laboratories, Inc.

TestAmerica Denver



State of Florida
Department of Health, Bureau of Laboratories
This is to certify that
E87667

TESTAMERICA DENVER
4955 YARROW STREET
ARVADA, CO 80002

has complied with Florida Administrative Code 64E-1,
for the examination of Environmental samples in the following categories

DRINKING WATER - MICROBIOLOGY, DRINKING WATER - PESTICIDES-HERBICIDES-PCB'S, DRINKING WATER - PRIMARY INORGANIC
CONTAMINANTS, DRINKING WATER - RADIOCHEMISTRY, DRINKING WATER - SECONDARY INORGANIC CONTAMINANTS, NON-POTABLE WATER -
EXTRACTABLE ORGANICS, NON-POTABLE WATER - GENERAL CHEMISTRY, NON-POTABLE WATER - METALS, NON-POTABLE WATER -
MICROBIOLOGY, NON-POTABLE WATER - PESTICIDES-HERBICIDES-PCB'S, NON-POTABLE WATER - VOLATILE ORGANICS, SOLID AND CHEMICAL
MATERIALS - EXTRACTABLE ORGANICS, SOLID AND CHEMICAL MATERIALS - GENERAL CHEMISTRY, SOLID AND CHEMICAL MATERIALS -
METALS, SOLID AND CHEMICAL MATERIALS - PESTICIDES-HERBICIDES-PCB'S, SOLID AND CHEMICAL MATERIALS - VOLATILE ORGANICS,
BIOLOGICAL TISSUE - GENERAL CHEMISTRY

Continued certification is contingent upon successful on-going compliance with the NELAC Standards and FAC Rule 64E-1
regulations. Specific methods and analytes certified are cited on the Laboratory Scope of Accreditation for this laboratory and
are on file at the Bureau of Laboratories, P. O. Box 210, Jacksonville, Florida 32231. Clients and customers are urged to verify
with this agency the laboratory's certification status in Florida for particular methods and analytes.

EFFECTIVE October 31, 2008 THROUGH June 30, 2009



Max Salfinger

Max Salfinger, M.D.
Chief, Bureau of Laboratories
Florida Department of Health
DH Form 1697, 7/04
NON-TRANSFERABLE E87667-14-10/31/2008
Supersedes all previously issued certificates

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

Page 1 of 44

Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Drinking Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,2-Dibromo-3-chloropropane (DBCP)	EPA 504.1	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 504.1	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Alkalinity as CaCO ₃	SM 2320 B	Primary Inorganic Contaminants	NELAP	8/27/2007
Aluminum	EPA 200.7	Secondary Inorganic Contaminants	NELAP	8/27/2007
Antimony	EPA 200.7	Primary Inorganic Contaminants	NELAP	8/27/2007
Antimony	EPA 200.8	Primary Inorganic Contaminants	NELAP	8/27/2007
Arsenic	EPA 200.7	Primary Inorganic Contaminants	NELAP	8/27/2007
Arsenic	EPA 200.8	Primary Inorganic Contaminants	NELAP	8/27/2007
Barium	EPA 200.7	Primary Inorganic Contaminants	NELAP	8/27/2007
Barium	EPA 200.8	Primary Inorganic Contaminants	NELAP	8/27/2007
Beryllium	EPA 200.7	Primary Inorganic Contaminants	NELAP	8/27/2007
Beryllium	EPA 200.8	Primary Inorganic Contaminants	NELAP	8/27/2007
Boron	EPA 200.7	Secondary Inorganic Contaminants	NELAP	8/27/2007
Bromide	EPA 300.0	Primary Inorganic Contaminants	NELAP	8/27/2007
Cadmium	EPA 200.7	Primary Inorganic Contaminants	NELAP	8/27/2007
Cadmium	EPA 200.8	Primary Inorganic Contaminants	NELAP	8/27/2007
Calcium	EPA 200.7	Primary Inorganic Contaminants	NELAP	8/27/2007
Chloride	EPA 300.0	Secondary Inorganic Contaminants	NELAP	8/27/2007
Chloride	EPA 325.2	Secondary Inorganic Contaminants	NELAP	8/27/2007
Chloride	EPA 325.3	Secondary Inorganic Contaminants	NELAP	8/27/2007
Chloride	SM 4500 Cl- C	Secondary Inorganic Contaminants	NELAP	8/27/2007
Chloride	SM 4500-Cl E	Secondary Inorganic Contaminants	NELAP	8/27/2007
Chromium	EPA 200.7	Primary Inorganic Contaminants	NELAP	8/27/2007
Chromium	EPA 200.8	Primary Inorganic Contaminants	NELAP	8/27/2007
Color	EPA 110.2	Secondary Inorganic Contaminants	NELAP	8/27/2007
Color	SM 2120 B	Secondary Inorganic Contaminants	NELAP	8/27/2007
Conductivity	EPA 120.1	Primary Inorganic Contaminants	NELAP	8/27/2007
Conductivity	SM 2510 B	Primary Inorganic Contaminants	NELAP	8/27/2007
Copper	EPA 200.7	Primary Inorganic Contaminants	NELAP	8/27/2007
Copper	EPA 200.8	Primary Inorganic Contaminants	NELAP	8/27/2007
Fecal coliforms	SM 9222 D	Microbiology	NELAP	8/27/2007
Fluoride	EPA 300.0	Primary Inorganic Contaminants	NELAP	8/27/2007
Fluoride	EPA 340.2	Primary Inorganic Contaminants	NELAP	8/27/2007
Fluoride	SM 4500 F-C	Primary Inorganic Contaminants	NELAP	8/27/2007
Hardness	SM 2340 B	Secondary Inorganic Contaminants	NELAP	8/27/2007
Iron	EPA 200.7	Secondary Inorganic Contaminants	NELAP	8/27/2007

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

Page 2 of 44

Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Drinking Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Lead	EPA 200.7	Primary Inorganic Contaminants	NELAP	8/27/2007
Lead	EPA 200.8	Primary Inorganic Contaminants	NELAP	8/27/2007
Magnesium	EPA 200.7	Primary Inorganic Contaminants	NELAP	8/27/2007
Manganese	EPA 200.7	Secondary Inorganic Contaminants	NELAP	8/27/2007
Manganese	EPA 200.8	Secondary Inorganic Contaminants	NELAP	8/27/2007
Mercury	EPA 245.1	Primary Inorganic Contaminants	NELAP	8/27/2007
Molybdenum	EPA 200.7	Secondary Inorganic Contaminants	NELAP	8/27/2007
Nickel	EPA 200.7	Primary Inorganic Contaminants	NELAP	8/27/2007
Nickel	EPA 200.8	Primary Inorganic Contaminants	NELAP	8/27/2007
Nitrate	EPA 300.0	Primary Inorganic Contaminants	NELAP	8/27/2007
Nitrate	EPA 353.2	Primary Inorganic Contaminants	NELAP	8/27/2007
Nitrate as N	EPA 353.2	Primary Inorganic Contaminants	NELAP	8/27/2007
Nitrite	EPA 300.0	Primary Inorganic Contaminants	NELAP	8/27/2007
Nitrite	EPA 354.1	Primary Inorganic Contaminants	NELAP	8/27/2007
Nitrite	SM 4500-NO2-B	Primary Inorganic Contaminants	NELAP	8/27/2007
Orthophosphate as P	EPA 300.0	Primary Inorganic Contaminants	NELAP	8/27/2007
Orthophosphate as P	EPA 365.1	Primary Inorganic Contaminants	NELAP	8/27/2007
Perchlorate	EPA 314.0	Secondary Inorganic Contaminants	NELAP	8/27/2007
pH	EPA 150.1	Primary Inorganic Contaminants	NELAP	8/27/2007
pH	SM 4500-H+-B	Primary Inorganic Contaminants	NELAP	8/27/2007
Potassium	EPA 200.7	Secondary Inorganic Contaminants	NELAP	8/27/2007
Residue-filterable (TDS)	EPA 160.1	Secondary Inorganic Contaminants	NELAP	8/27/2007
Selenium	EPA 200.7	Primary Inorganic Contaminants	NELAP	8/27/2007
Selenium	EPA 200.8	Primary Inorganic Contaminants	NELAP	8/27/2007
Silica as SiO2	EPA 200.7	Primary Inorganic Contaminants	NELAP	8/27/2007
Silver	EPA 200.7	Secondary Inorganic Contaminants	NELAP	8/27/2007
Silver	EPA 200.8	Secondary Inorganic Contaminants	NELAP	8/27/2007
Sodium	EPA 200.7	Primary Inorganic Contaminants	NELAP	8/27/2007
Sulfate	ASTM D516-02	Secondary Inorganic Contaminants	NELAP	8/27/2007
Sulfate	ASTM D516-90	Primary Inorganic Contaminants	NELAP	8/27/2007
Sulfate	EPA 300.0	Primary Inorganic Contaminants	NELAP	8/27/2007
Sulfate	EPA 375.4	Secondary Inorganic Contaminants	NELAP	8/27/2007
Thallium	EPA 200.8	Primary Inorganic Contaminants	NELAP	8/27/2007
Tin	DV-MT-0002 Rev 9 (eff. 08/08/2008)/ICP-MS	Secondary Inorganic Contaminants	NELAP	10/10/2008
Total coliforms	SM 9222 B	Microbiology	NELAP	8/27/2007
Total cyanide	EPA 335.4	Primary Inorganic Contaminants	NELAP	8/27/2007

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

Page 3 of 44

Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Drinking Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Total cyanide	SM 4500CN-E	Primary Inorganic Contaminants	NELAP	8/27/2007
Total dissolved solids	SM 2540 C	Secondary Inorganic Contaminants	NELAP	8/27/2007
Total nitrate-nitrite	EPA 353.2	Primary Inorganic Contaminants	NELAP	8/27/2007
Uranium	DV-MT-0012 Rev 3 (eff. 08/08/2008)/ICP-AES	Secondary Inorganic Contaminants	NELAP	10/10/2008
Uranium	EPA 200.8	Radiochemistry	NELAP	10/10/2008
Vanadium	EPA 200.7	Secondary Inorganic Contaminants	NELAP	8/27/2007
Vanadium	EPA 200.8	Secondary Inorganic Contaminants	NELAP	8/27/2007
Zinc	EPA 200.7	Secondary Inorganic Contaminants	NELAP	8/27/2007
Zinc	EPA 200.8	Secondary Inorganic Contaminants	NELAP	8/27/2007

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

Page 4 of 44

Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,1,1,2-Tetrachloroethane	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,1,1,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,1,1-Trichloroethane	EPA 601	Volatile Organics	NELAP	8/27/2007
1,1,1-Trichloroethane	EPA 624	Volatile Organics	NELAP	8/27/2007
1,1,1-Trichloroethane	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,1,1-Trichloroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,1,1-Trifluoro-2,2-dichloroethane	DEN-MS-0010 Rev 2 (5/19/06)/GC-MS	Volatile Organics	NELAP	8/27/2007
1,1,2,2-Tetrachloroethane	EPA 601	Volatile Organics	NELAP	8/27/2007
1,1,2,2-Tetrachloroethane	EPA 624	Volatile Organics	NELAP	8/27/2007
1,1,2,2-Tetrachloroethane	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,1,2,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,1,2-Trichloro-1,2,2-trifluoroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,1,2-Trichloroethane	EPA 601	Volatile Organics	NELAP	8/27/2007
1,1,2-Trichloroethane	EPA 624	Volatile Organics	NELAP	8/27/2007
1,1,2-Trichloroethane	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,1,2-Trichloroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,1-Dichloroethane	EPA 601	Volatile Organics	NELAP	8/27/2007
1,1-Dichloroethane	EPA 624	Volatile Organics	NELAP	8/27/2007
1,1-Dichloroethane	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,1-Dichloroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,1-Dichloroethylene	EPA 601	Volatile Organics	NELAP	8/27/2007
1,1-Dichloroethylene	EPA 624	Volatile Organics	NELAP	8/27/2007
1,1-Dichloroethylene	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,1-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,1-Dichloropropene	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,1-Dichloropropene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2,3-Trichlorobenzene	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,2,3-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2,3-Trichloropropane	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,2,3-Trichloropropane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2,4,5-Tetrachlorobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,2,4-Trichlorobenzene	EPA 625	Extractable Organics	NELAP	8/27/2007
1,2,4-Trichlorobenzene	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,2,4-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2,4-Trichlorobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,2,4-Trimethylbenzene	EPA 8021	Volatile Organics	NELAP	8/27/2007

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

Page 5 of 44

Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,2,4-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2-Dibromo-3-chloropropane (DBCP)	EPA 504.1	Volatile Organics	NELAP	8/27/2007
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8011	Volatile Organics	NELAP	8/27/2007
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 504.1	Volatile Organics	NELAP	8/27/2007
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8011	Volatile Organics	NELAP	8/27/2007
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2-Dichloro-1,1,2-trifluoroethane	DEN-MS-0010 Rev 2 (5/19/06)/GC-MS	Volatile Organics	NELAP	8/27/2007
1,2-Dichlorobenzene	EPA 601	Volatile Organics	NELAP	8/27/2007
1,2-Dichlorobenzene	EPA 602	Volatile Organics	NELAP	8/27/2007
1,2-Dichlorobenzene	EPA 624	Volatile Organics	NELAP	8/27/2007
1,2-Dichlorobenzene	EPA 625	Extractable Organics	NELAP	8/27/2007
1,2-Dichlorobenzene	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,2-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,2-Dichloroethane	EPA 601	Volatile Organics	NELAP	8/27/2007
1,2-Dichloroethane	EPA 624	Volatile Organics	NELAP	8/27/2007
1,2-Dichloroethane	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,2-Dichloroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2-Dichloropropane	EPA 601	Volatile Organics	NELAP	8/27/2007
1,2-Dichloropropane	EPA 624	Volatile Organics	NELAP	8/27/2007
1,2-Dichloropropane	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2-Diphenylhydrazine	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,3,5-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,3,5-Trinitrobenzene (1,3,5-TNB)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8330	Extractable Organics	NELAP	8/27/2007
1,3-Dichlorobenzene	EPA 601	Volatile Organics	NELAP	8/27/2007
1,3-Dichlorobenzene	EPA 602	Volatile Organics	NELAP	8/27/2007
1,3-Dichlorobenzene	EPA 624	Volatile Organics	NELAP	8/27/2007
1,3-Dichlorobenzene	EPA 625	Extractable Organics	NELAP	8/27/2007
1,3-Dichlorobenzene	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,3-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

Page 6 of 44

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,3-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,3-Dichloropropane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,3-Dinitrobenzene (1,3-DNB)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
1,3-Dinitrobenzene (1,3-DNB)	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,3-Dinitrobenzene (1,3-DNB)	EPA 8330	Extractable Organics	NELAP	8/27/2007
1,4-Dichlorobenzene	EPA 601	Volatile Organics	NELAP	8/27/2007
1,4-Dichlorobenzene	EPA 602	Volatile Organics	NELAP	8/27/2007
1,4-Dichlorobenzene	EPA 624	Volatile Organics	NELAP	8/27/2007
1,4-Dichlorobenzene	EPA 625	Extractable Organics	NELAP	8/27/2007
1,4-Dichlorobenzene	EPA 8021	Volatile Organics	NELAP	8/27/2007
1,4-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,4-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,4-Dinitrobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,4-Dioxane (1,4-Diethyleneoxide)	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,4-Naphthoquinone	EPA 8270	Extractable Organics	NELAP	8/27/2007
1-Chlorohexane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	8/27/2007
1-Methylnaphthalene	EPA 610	Extractable Organics	NELAP	8/27/2007
1-Methylnaphthalene	EPA 625	Extractable Organics	NELAP	8/27/2007
1-Methylnaphthalene	EPA 8310	Extractable Organics	NELAP	8/27/2007
1-Methylnaphthalene (added to method at FDEP request)	EPA 8270	Extractable Organics	NELAP	8/27/2007
1-Naphthylamine	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,2-Dichloropropane	EPA 8021	Volatile Organics	NELAP	8/27/2007
2,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	8/27/2007
2,3,4,6-Tetrachlorophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,4,5-T	EPA 615	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4,5-T	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4,5-T	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	10/10/2008
2,4,5-Trichlorophenol	DV-MS-0011 Rev 5 (eff. 03/20/2008)/GC-MS	Extractable Organics	NELAP	10/10/2008
2,4,5-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,4,6-Trichlorophenol	EPA 625	Extractable Organics	NELAP	8/27/2007
2,4,6-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,4,6-Trinitrotoluene (2,4,6-TNT)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
2,4,6-Trinitrotoluene (2,4,6-TNT)	EPA 8330	Extractable Organics	NELAP	8/27/2007

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
2,4-D	EPA 615	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4-D	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4-D	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	10/10/2008
2,4-DB	EPA 615	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4-DB	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4-DB	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	10/10/2008
2,4'-DDD	DEN-GC-00020 Rev 2 (10/20/06)/GC-ECD	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4'-DDE	DEN-GC-00020 Rev 2 (10/20/06)/GC-ECD	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4'-DDT	DEN-GC-00020 Rev 2 (10/20/06)/GC-ECD	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4-Dichlorophenol	EPA 625	Extractable Organics	NELAP	8/27/2007
2,4-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,4-Dimethylphenol	EPA 625	Extractable Organics	NELAP	8/27/2007
2,4-Dimethylphenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,4-Dinitrophenol	EPA 625	Extractable Organics	NELAP	8/27/2007
2,4-Dinitrophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,4-Dinitrotoluene (2,4-DNT)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
2,4-Dinitrotoluene (2,4-DNT)	EPA 625	Extractable Organics	NELAP	8/27/2007
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,4-Dinitrotoluene (2,4-DNT)	EPA 8330	Extractable Organics	NELAP	9/20/2007
2,6-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,6-Dinitrotoluene (2,6-DNT)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
2,6-Dinitrotoluene (2,6-DNT)	EPA 625	Extractable Organics	NELAP	8/27/2007
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,6-Dinitrotoluene (2,6-DNT)	EPA 8330	Extractable Organics	NELAP	9/20/2007
2-Acetylaminofluorene	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Amino-4,6-dinitrotoluene (2-am-dnt)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
2-Amino-4,6-dinitrotoluene (2-am-dnt)	EPA 8330	Extractable Organics	NELAP	8/27/2007
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260	Volatile Organics	NELAP	8/27/2007
2-Chloroethyl vinyl ether	EPA 601	Volatile Organics	NELAP	8/27/2007
2-Chloroethyl vinyl ether	EPA 624	Volatile Organics	NELAP	8/27/2007
2-Chloroethyl vinyl ether	EPA 8021	Volatile Organics	NELAP	8/27/2007
2-Chloroethyl vinyl ether	EPA 8260	Volatile Organics	NELAP	8/27/2007
2-Chloronaphthalene	EPA 625	Extractable Organics	NELAP	8/27/2007
2-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Chlorophenol	EPA 625	Extractable Organics	NELAP	8/27/2007

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Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
2-Chlorophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	8/27/2007
2-Ethoxy ethanol (ethyl cellosolve)	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
2-Hexanone	EPA 8260	Volatile Organics	NELAP	8/27/2007
2-Methyl-4,6-dinitrophenol	EPA 625	Extractable Organics	NELAP	8/27/2007
2-Methyl-4,6-dinitrophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Methylnaphthalene	EPA 610	Extractable Organics	NELAP	8/27/2007
2-Methylnaphthalene	EPA 625	Extractable Organics	NELAP	8/27/2007
2-Methylnaphthalene	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Methylnaphthalene	EPA 8310	Extractable Organics	NELAP	8/27/2007
2-Methylphenol (o-Cresol)	EPA 625	Extractable Organics	NELAP	8/27/2007
2-Methylphenol (o-Cresol)	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Naphthylamine	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Nitroaniline	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Nitrophenol	EPA 625	Extractable Organics	NELAP	8/27/2007
2-Nitrophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Nitropropane	EPA 8260	Volatile Organics	NELAP	8/27/2007
2-Nitrotoluene	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
2-Nitrotoluene	EPA 8330	Extractable Organics	NELAP	8/27/2007
2-Pentanone	EPA 8260	Volatile Organics	NELAP	8/27/2007
2-Picoline (2-Methylpyridine)	EPA 8270	Extractable Organics	NELAP	8/27/2007
3,3'-Dichlorobenzidine	EPA 625	Extractable Organics	NELAP	8/27/2007
3,3'-Dichlorobenzidine	EPA 8270	Extractable Organics	NELAP	8/27/2007
3,3'-Dimethylbenzidine	EPA 8270	Extractable Organics	NELAP	8/27/2007
3-Methylcholanthrene	EPA 8270	Extractable Organics	NELAP	8/27/2007
3-Methylphenol (m-Cresol)	EPA 8270	Extractable Organics	NELAP	8/27/2007
3-Nitroaniline	EPA 8270	Extractable Organics	NELAP	8/27/2007
3-Nitrotoluene	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
3-Nitrotoluene	EPA 8330	Extractable Organics	NELAP	8/27/2007
4,4'-DDD	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
4,4'-DDD	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
4,4'-DDE	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
4,4'-DDE	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
4,4'-DDT	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
4,4'-DDT	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
4,4'-Methylenbis(2-chloroaniline)	EPA 8270	Extractable Organics	NELAP	8/27/2007

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Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
4,4'-Methylenebis(n, n-dimethylaniline)	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Amino-2,6-dinitrotoluene (4-am-dnt)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
4-Amino-2,6-dinitrotoluene (4-am-dnt)	EPA 8330	Extractable Organics	NELAP	8/27/2007
4-Aminobiphenyl	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Bromophenyl phenyl ether	EPA 625	Extractable Organics	NELAP	8/27/2007
4-Bromophenyl phenyl ether	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Chloro-3-methylphenol	EPA 625	Extractable Organics	NELAP	8/27/2007
4-Chloro-3-methylphenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Chloroaniline	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Chlorophenyl phenylether	EPA 625	Extractable Organics	NELAP	8/27/2007
4-Chlorophenyl phenylether	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	8/27/2007
4-Dimethyl aminoazobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Methyl-2-pentanone (MIBK)	EPA 8260	Volatile Organics	NELAP	8/27/2007
4-Methylphenol (p-Cresol)	EPA 625	Extractable Organics	NELAP	8/27/2007
4-Methylphenol (p-Cresol)	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Nitroaniline	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Nitrophenol	EPA 625	Extractable Organics	NELAP	8/27/2007
4-Nitrophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Nitrotoluene	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
4-Nitrotoluene	EPA 8330	Extractable Organics	NELAP	8/27/2007
5-Nitro-o-toluidine	EPA 8270	Extractable Organics	NELAP	8/27/2007
7,12-Dimethylbenz(a) anthracene	EPA 8270	Extractable Organics	NELAP	8/27/2007
a-a-Dimethylphenethylamine	EPA 8270	Extractable Organics	NELAP	8/27/2007
Acenaphthene	EPA 610	Extractable Organics	NELAP	8/27/2007
Acenaphthene	EPA 625	Extractable Organics	NELAP	8/27/2007
Acenaphthene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Acenaphthene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Acenaphthylene	EPA 610	Extractable Organics	NELAP	8/27/2007
Acenaphthylene	EPA 625	Extractable Organics	NELAP	8/27/2007
Acenaphthylene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Acenaphthylene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Acetone	EPA 8260	Volatile Organics	NELAP	8/27/2007
Acetonitrile	EPA 8260	Volatile Organics	NELAP	8/27/2007
Acetophenone	EPA 8270	Extractable Organics	NELAP	8/27/2007
Acidity, as CaCO3	EPA 305.1	General Chemistry	NELAP	8/27/2007

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Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Acidity, as CaCO ₃	SM 2310 B (4A)	General Chemistry	NELAP	8/27/2007
Acrolein (Propenal)	EPA 624	Volatile Organics	NELAP	8/27/2007
Acrolein (Propenal)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Acrylonitrile	EPA 624	Volatile Organics	NELAP	8/27/2007
Acrylonitrile	EPA 8260	Volatile Organics	NELAP	8/27/2007
Aldrin	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Alkalinity as CaCO ₃	EPA 310.1	General Chemistry	NELAP	8/27/2007
Alkalinity as CaCO ₃	SM 2320 B	General Chemistry	NELAP	8/27/2007
Allyl chloride (3-Chloropropene)	EPA 8260	Volatile Organics	NELAP	8/27/2007
alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
alpha-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
alpha-Methylstyrene	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
Aluminum	EPA 200.7	Metals	NELAP	8/27/2007
Aluminum	EPA 6010	Metals	NELAP	8/27/2007
Amenable cyanide	EPA 335.1	General Chemistry	NELAP	8/27/2007
Amenable cyanide	SM 4500 CN-G	General Chemistry	NELAP	8/27/2007
Amenable cyanide	SM 4500-CN G	General Chemistry	NELAP	8/27/2007
Ammonia as N	EPA 350.1	General Chemistry	NELAP	8/27/2007
Ammonium perfluorooctanoate	DEN-LC-0012 Rev 4 (5/30/06)/LC-MS-MS	Extractable Organics	NELAP	8/27/2007
Aniline	EPA 625	Extractable Organics	NELAP	8/27/2007
Aniline	EPA 8270	Extractable Organics	NELAP	8/27/2007
Anthracene	EPA 610	Extractable Organics	NELAP	8/27/2007
Anthracene	EPA 625	Extractable Organics	NELAP	8/27/2007
Anthracene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Anthracene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Antimony	EPA 200.7	Metals	NELAP	8/27/2007
Antimony	EPA 200.8	Metals	NELAP	8/27/2007
Antimony	EPA 6010	Metals	NELAP	8/27/2007
Antimony	EPA 6020	Metals	NELAP	8/27/2007
Aramite	EPA 8270	Extractable Organics	NELAP	8/27/2007
Aroclor-1016 (PCB-1016)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1016 (PCB-1016)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1221 (PCB-1221)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007

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State Surgeon General

Laboratory Scope of Accreditation

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Aroclor-1221 (PCB-1221)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1232 (PCB-1232)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1232 (PCB-1232)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1242 (PCB-1242)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1242 (PCB-1242)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1248 (PCB-1248)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1248 (PCB-1248)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1254 (PCB-1254)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1254 (PCB-1254)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1260 (PCB-1260)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1260 (PCB-1260)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Arsenic	EPA 200.7	Metals	NELAP	8/27/2007
Arsenic	EPA 200.8	Metals	NELAP	8/27/2007
Arsenic	EPA 6010	Metals	NELAP	8/27/2007
Arsenic	EPA 6020	Metals	NELAP	8/27/2007
Atrazine	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Azinphos-ethyl (Ethyl guthion)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Azinphos-methyl (Guthion)	EPA 614	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Azinphos-methyl (Guthion)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Barium	EPA 200.7	Metals	NELAP	8/27/2007
Barium	EPA 200.8	Metals	NELAP	8/27/2007
Barium	EPA 6010	Metals	NELAP	8/27/2007
Barium	EPA 6020	Metals	NELAP	8/27/2007
Benzene	EPA 602	Volatile Organics	NELAP	8/27/2007
Benzene	EPA 624	Volatile Organics	NELAP	8/27/2007
Benzene	EPA 8021	Volatile Organics	NELAP	8/27/2007
Benzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Benzidine	EPA 625	Extractable Organics	NELAP	8/27/2007
Benzidine	EPA 8270	Extractable Organics	NELAP	8/27/2007
Benzo(a)anthracene	EPA 610	Extractable Organics	NELAP	8/27/2007
Benzo(a)anthracene	EPA 625	Extractable Organics	NELAP	8/27/2007
Benzo(a)anthracene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Benzo(a)anthracene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Benzo(a)pyrene	EPA 610	Extractable Organics	NELAP	8/27/2007
Benzo(a)pyrene	EPA 625	Extractable Organics	NELAP	8/27/2007
Benzo(a)pyrene	EPA 8270	Extractable Organics	NELAP	8/27/2007

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Issue Date: 10/31/2008

Expiration Date: 6/30/2009

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Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Benzo(a)pyrene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Benzo(b)fluoranthene	EPA 610	Extractable Organics	NELAP	8/27/2007
Benzo(b)fluoranthene	EPA 625	Extractable Organics	NELAP	8/27/2007
Benzo(b)fluoranthene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Benzo(b)fluoranthene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Benzo(g,h,i)perylene	EPA 610	Extractable Organics	NELAP	8/27/2007
Benzo(g,h,i)perylene	EPA 625	Extractable Organics	NELAP	8/27/2007
Benzo(g,h,i)perylene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Benzo(g,h,i)perylene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Benzo(k)fluoranthene	EPA 610	Extractable Organics	NELAP	8/27/2007
Benzo(k)fluoranthene	EPA 625	Extractable Organics	NELAP	8/27/2007
Benzo(k)fluoranthene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Benzo(k)fluoranthene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Benzoic acid	EPA 8270	Extractable Organics	NELAP	8/27/2007
Benzyl alcohol	EPA 8270	Extractable Organics	NELAP	8/27/2007
Beryllium	EPA 200.7	Metals	NELAP	8/27/2007
Beryllium	EPA 200.8	Metals	NELAP	8/27/2007
Beryllium	EPA 6010	Metals	NELAP	8/27/2007
Beryllium	EPA 6020	Metals	NELAP	8/27/2007
beta-BHC (beta-Hexachlorocyclohexane)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
beta-BHC (beta-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Biochemical oxygen demand	EPA 405.1	General Chemistry	NELAP	8/27/2007
Biochemical oxygen demand	SM 5210 B	General Chemistry	NELAP	8/27/2007
bis(2-Chloroethoxy)methane	EPA 625	Extractable Organics	NELAP	8/27/2007
bis(2-Chloroethoxy)methane	EPA 8270	Extractable Organics	NELAP	8/27/2007
bis(2-Chloroethyl) ether	EPA 625	Extractable Organics	NELAP	8/27/2007
bis(2-Chloroethyl) ether	EPA 8270	Extractable Organics	NELAP	8/27/2007
bis(2-Chloroisopropyl) ether (2,2'-Oxybis(1-chloropropane))	EPA 625	Extractable Organics	NELAP	8/27/2007
bis(2-Chloroisopropyl) ether (2,2'-Oxybis(1-chloropropane))	EPA 8270	Extractable Organics	NELAP	8/27/2007
bis(2-Ethylhexyl) phthalate (DEHP)	EPA 625	Extractable Organics	NELAP	8/27/2007
bis(2-Ethylhexyl) phthalate (DEHP)	EPA 8270	Extractable Organics	NELAP	8/27/2007
Bolstar (Sulprofos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Boron	EPA 200.7	Metals	NELAP	8/27/2007
Boron	EPA 6010	Metals	NELAP	8/27/2007
Bromide	EPA 300.0	General Chemistry	NELAP	8/27/2007

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Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Bromide	EPA 9056	General Chemistry	NELAP	8/27/2007
Bromobenzene	EPA 8021	Volatile Organics	NELAP	10/10/2008
Bromobenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Bromochloromethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
Bromodichloromethane	EPA 601	Volatile Organics	NELAP	8/27/2007
Bromodichloromethane	EPA 624	Volatile Organics	NELAP	8/27/2007
Bromodichloromethane	EPA 8021	Volatile Organics	NELAP	8/27/2007
Bromodichloromethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
Bromoform	EPA 601	Volatile Organics	NELAP	8/27/2007
Bromoform	EPA 624	Volatile Organics	NELAP	8/27/2007
Bromoform	EPA 8021	Volatile Organics	NELAP	8/27/2007
Bromoform	EPA 8260	Volatile Organics	NELAP	8/27/2007
Butyl benzyl phthalate	EPA 625	Extractable Organics	NELAP	8/27/2007
Butyl benzyl phthalate	EPA 8270	Extractable Organics	NELAP	8/27/2007
Cadmium	EPA 200.7	Metals	NELAP	8/27/2007
Cadmium	EPA 200.8	Metals	NELAP	8/27/2007
Cadmium	EPA 6010	Metals	NELAP	8/27/2007
Cadmium	EPA 6020	Metals	NELAP	8/27/2007
Calcium	EPA 200.7	Metals	NELAP	8/27/2007
Calcium	EPA 6010	Metals	NELAP	8/27/2007
Carbazole	EPA 625	Extractable Organics	NELAP	8/27/2007
Carbazole	EPA 8270	Extractable Organics	NELAP	8/27/2007
Carbofuran phenol	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
Carbon disulfide	EPA 8260	Volatile Organics	NELAP	8/27/2007
Carbon tetrachloride	EPA 601	Volatile Organics	NELAP	8/27/2007
Carbon tetrachloride	EPA 624	Volatile Organics	NELAP	8/27/2007
Carbon tetrachloride	EPA 8021	Volatile Organics	NELAP	8/27/2007
Carbon tetrachloride	EPA 8260	Volatile Organics	NELAP	8/27/2007
Carbonaceous BOD (CBOD)	SM 5210 B	General Chemistry	NELAP	8/27/2007
Carbophenothion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Chemical oxygen demand	EPA 410.4	General Chemistry	NELAP	8/27/2007
Chlordane (tech.)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Chlordane (tech.)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Chloride	EPA 300.0	General Chemistry	NELAP	8/27/2007
Chloride	EPA 325.2	General Chemistry	NELAP	8/27/2007
Chloride	EPA 325.3	General Chemistry	NELAP	8/27/2007

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EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Chloride	EPA 9056	General Chemistry	NELAP	8/27/2007
Chloride	EPA 9251	General Chemistry	NELAP	8/27/2007
Chloride	EPA 9252	General Chemistry	NELAP	10/10/2008
Chloride	SM 4500 Cl- C	General Chemistry	NELAP	8/27/2007
Chloride	SM 4500 Cl- E	General Chemistry	NELAP	8/27/2007
Chloride	SM 4500-Cl E	General Chemistry	NELAP	8/27/2007
Chlorobenzene	EPA 601	Volatile Organics	NELAP	8/27/2007
Chlorobenzene	EPA 602	Volatile Organics	NELAP	8/27/2007
Chlorobenzene	EPA 624	Volatile Organics	NELAP	8/27/2007
Chlorobenzene	EPA 8021	Volatile Organics	NELAP	8/27/2007
Chlorobenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Chlorobenzilate	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Chlorobenzilate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Chloroethane	EPA 601	Volatile Organics	NELAP	8/27/2007
Chloroethane	EPA 624	Volatile Organics	NELAP	8/27/2007
Chloroethane	EPA 8021	Volatile Organics	NELAP	8/27/2007
Chloroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
Chloroform	EPA 601	Volatile Organics	NELAP	8/27/2007
Chloroform	EPA 624	Volatile Organics	NELAP	8/27/2007
Chloroform	EPA 8021	Volatile Organics	NELAP	8/27/2007
Chloroform	EPA 8260	Volatile Organics	NELAP	8/27/2007
Chloroprene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Chlorpyrifos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Chlorpyrifos methyl	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Chromium	EPA 200.7	Metals	NELAP	8/27/2007
Chromium	EPA 200.8	Metals	NELAP	8/27/2007
Chromium	EPA 6010	Metals	NELAP	8/27/2007
Chromium	EPA 6020	Metals	NELAP	8/27/2007
Chromium VI	EPA 7196	General Chemistry	NELAP	8/27/2007
Chromium VI	SM 3500-Cr B (20th/21st Ed.)/UV-VIS	General Chemistry	NELAP	8/27/2007
Chrysene	EPA 610	Extractable Organics	NELAP	8/27/2007
Chrysene	EPA 625	Extractable Organics	NELAP	8/27/2007
Chrysene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Chrysene	EPA 8310	Extractable Organics	NELAP	8/27/2007
cis-1,2-Dichloroethylene	EPA 8021	Volatile Organics	NELAP	8/27/2007
cis-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	8/27/2007

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State Surgeon General

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EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
cis-1,3-Dichloropropene	EPA 601	Volatile Organics	NELAP	8/27/2007
cis-1,3-Dichloropropene	EPA 624	Volatile Organics	NELAP	8/27/2007
cis-1,3-Dichloropropene	EPA 8021	Volatile Organics	NELAP	8/27/2007
cis-1,3-Dichloropropene	EPA 8260	Volatile Organics	NELAP	8/27/2007
cis-1,4-Dichloro-2-butene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Cobalt	EPA 200.7	Metals	NELAP	8/27/2007
Cobalt	EPA 200.8	Metals	NELAP	8/27/2007
Cobalt	EPA 6010	Metals	NELAP	8/27/2007
Cobalt	EPA 6020	Metals	NELAP	8/27/2007
Color	EPA 110.2	General Chemistry	NELAP	8/27/2007
Color	SM 2120 B	General Chemistry	NELAP	8/27/2007
Conductivity	EPA 120.1	General Chemistry	NELAP	8/27/2007
Conductivity	EPA 9050	General Chemistry	NELAP	8/27/2007
Conductivity	SM 2510 B	General Chemistry	NELAP	8/27/2007
Copper	EPA 200.7	Metals	NELAP	8/27/2007
Copper	EPA 200.8	Metals	NELAP	8/27/2007
Copper	EPA 6010	Metals	NELAP	8/27/2007
Copper	EPA 6020	Metals	NELAP	8/27/2007
Coumaphos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Cyanide	SM 4500-CN C	General Chemistry	NELAP	8/27/2007
Cyclohexane	DEN-MS-0010 Rev 2 (5/19/06)/GC-MS	Volatile Organics	NELAP	8/27/2007
Cyclohexanone	DEN-MS-0010 Rev 2 (5/19/06)/GC-MS	Volatile Organics	NELAP	8/27/2007
Dalapon	EPA 615	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dalapon	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dalapon	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	10/10/2008
delta-BHC	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
delta-BHC	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Demeton-o	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Demeton-s	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Diallate	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Diallate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Diazinon	EPA 614	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Diazinon	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dibenz(a, h) acridine	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
Dibenz(a, j) acridine	EPA 8270	Extractable Organics	NELAP	8/27/2007

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Dibenz(a,h) anthracene	EPA 610	Extractable Organics	NELAP	8/27/2007
Dibenz(a,h) anthracene	EPA 625	Extractable Organics	NELAP	8/27/2007
Dibenz(a,h) anthracene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Dibenz(a,h) anthracene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Dibenzofuran	EPA 8270	Extractable Organics	NELAP	8/27/2007
Dibromochloromethane	EPA 601	Volatile Organics	NELAP	8/27/2007
Dibromochloromethane	EPA 624	Volatile Organics	NELAP	8/27/2007
Dibromochloromethane	EPA 8021	Volatile Organics	NELAP	8/27/2007
Dibromochloromethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
Dibromomethane	EPA 8021	Volatile Organics	NELAP	8/27/2007
Dibromomethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
Dicamba	EPA 615	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dicamba	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dicamba	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	10/10/2008
Dichlorodifluoromethane	EPA 601	Volatile Organics	NELAP	8/27/2007
Dichlorodifluoromethane	EPA 8021	Volatile Organics	NELAP	8/27/2007
Dichlorodifluoromethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
Dichlorofluoromethane	DEN-MS-0010 Rev 2 (5/19/06)/GC-MS	Volatile Organics	NELAP	8/27/2007
Dichloroprop (Dichlorprop)	EPA 615	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dichloroprop (Dichlorprop)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dichloroprop (Dichlorprop)	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	10/10/2008
Dichlorovos (DDVP, Dichlorvos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dicofol	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dieldrin	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dieldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Diesel range organics (DRO)	EPA 8015	Extractable Organics	NELAP	8/27/2007
Diethyl ether	EPA 8260	Volatile Organics	NELAP	8/27/2007
Diethyl phthalate	EPA 625	Extractable Organics	NELAP	8/27/2007
Diethyl phthalate	EPA 8270	Extractable Organics	NELAP	8/27/2007
Di-isopropylether (DIPE)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Dimethoate	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dimethoate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dimethyl phthalate	EPA 625	Extractable Organics	NELAP	8/27/2007
Dimethyl phthalate	EPA 8270	Extractable Organics	NELAP	8/27/2007
Di-n-butyl phthalate	EPA 625	Extractable Organics	NELAP	8/27/2007
Di-n-butyl phthalate	EPA 8270	Extractable Organics	NELAP	8/27/2007

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Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Di-n-octyl phthalate	EPA 625	Extractable Organics	NELAP	8/27/2007
Di-n-octyl phthalate	EPA 8270	Extractable Organics	NELAP	8/27/2007
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 615	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8270	Extractable Organics	NELAP	8/27/2007
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	10/10/2008
Disulfoton	EPA 614	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Disulfoton	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Disulfoton	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endosulfan I	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endosulfan I	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endosulfan II	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endosulfan II	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endosulfan sulfate	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endosulfan sulfate	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endrin	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endrin aldehyde	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endrin aldehyde	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endrin ketone	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
EPN	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Ethane	RSK-175	Volatile Organics	NELAP	8/27/2007
Ethanol	EPA 8015	Volatile Organics	NELAP	8/27/2007
Ethanol	EPA 8260	Volatile Organics	NELAP	8/27/2007
Ethoprop	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Ethyl acetate	EPA 8260	Volatile Organics	NELAP	8/27/2007
Ethyl methacrylate	EPA 8260	Volatile Organics	NELAP	8/27/2007
Ethyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	8/27/2007
Ethylbenzene	EPA 602	Volatile Organics	NELAP	8/27/2007
Ethylbenzene	EPA 624	Volatile Organics	NELAP	8/27/2007
Ethylbenzene	EPA 8021	Volatile Organics	NELAP	8/27/2007
Ethylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Ethylene	RSK-175	Volatile Organics	NELAP	8/27/2007
Ethylene oxide	EPA 8260	Volatile Organics	NELAP	8/27/2007
Famphur	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Famphur	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Fecal coliforms	SM 9222 D	Microbiology	NELAP	8/27/2007
Fensulfothion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Fenthion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Ferrous iron	SM 3500-Fe B (20th/21st Ed.)/UV-VIS	General Chemistry	NELAP	10/10/2008
Fluoranthene	EPA 610	Extractable Organics	NELAP	8/27/2007
Fluoranthene	EPA 625	Extractable Organics	NELAP	8/27/2007
Fluoranthene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Fluoranthene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Fluorene	EPA 610	Extractable Organics	NELAP	8/27/2007
Fluorene	EPA 625	Extractable Organics	NELAP	8/27/2007
Fluorene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Fluorene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Fluoride	EPA 300.0	General Chemistry	NELAP	8/27/2007
Fluoride	EPA 340.2	General Chemistry	NELAP	8/27/2007
Fluoride	EPA 9056	General Chemistry	NELAP	8/27/2007
Fluoride	SM 4500 F-C	General Chemistry	NELAP	8/27/2007
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
gamma-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Gasoline range organics (GRO)	EPA 8015	Volatile Organics	NELAP	8/27/2007
Hardness	EPA 130.2	General Chemistry	NELAP	8/27/2007
Hardness	SM 2340 B	General Chemistry	NELAP	8/27/2007
Hardness	SM 2340 C	General Chemistry	NELAP	8/27/2007
Hardness (calc.)	EPA 200.7	Metals	NELAP	8/27/2007
Heptachlor	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Heptachlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Heptachlor epoxide	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Heptachlor epoxide	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Hexachlorobenzene	EPA 625	Extractable Organics	NELAP	8/27/2007
Hexachlorobenzene	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Hexachlorobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Hexachlorobutadiene	EPA 625	Extractable Organics	NELAP	8/27/2007
Hexachlorobutadiene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Hexachlorobutadiene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Hexachlorocyclopentadiene	EPA 625	Extractable Organics	NELAP	8/27/2007

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Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Hexachlorocyclopentadiene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Hexachloroethane	EPA 625	Extractable Organics	NELAP	8/27/2007
Hexachloroethane	EPA 8270	Extractable Organics	NELAP	8/27/2007
Hexachloropropene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Hexane	DEN-MS-0010 Rev 2 (5/19/06)/GC-MS	Volatile Organics	NELAP	8/27/2007
Ignitability	EPA 1010	General Chemistry	NELAP	8/27/2007
Indene	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
Indeno(1,2,3-cd)pyrene	EPA 610	Extractable Organics	NELAP	8/27/2007
Indeno(1,2,3-cd)pyrene	EPA 625	Extractable Organics	NELAP	8/27/2007
Indeno(1,2,3-cd)pyrene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Indeno(1,2,3-cd)pyrene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Iodomethane (Methyl iodide)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Iron	EPA 200.7	Metals	NELAP	8/27/2007
Iron	EPA 6010	Metals	NELAP	8/27/2007
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8015	Volatile Organics	NELAP	8/27/2007
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Isodrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Isodrin	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Isophorone	EPA 625	Extractable Organics	NELAP	8/27/2007
Isophorone	EPA 8270	Extractable Organics	NELAP	8/27/2007
Isopropyl alcohol (2-Propanol)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Isopropylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Isosafrole	EPA 8270	Extractable Organics	NELAP	8/27/2007
Kepone	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Kjeldahl nitrogen - total	EPA 351.2	General Chemistry	NELAP	8/27/2007
Lead	EPA 200.7	Metals	NELAP	8/27/2007
Lead	EPA 200.8	Metals	NELAP	8/27/2007
Lead	EPA 6010	Metals	NELAP	8/27/2007
Lead	EPA 6020	Metals	NELAP	8/27/2007
Lithium	EPA 200.7	Metals	NELAP	8/27/2007
Lithium	EPA 6010	Metals	NELAP	8/27/2007
m/p-Xylenes	EPA 8021	Volatile Organics	NELAP	8/27/2007
m/p-Xylenes	EPA 8260	General Chemistry	NELAP	8/27/2007
Magnesium	EPA 200.7	Metals	NELAP	8/27/2007
Magnesium	EPA 6010	Metals	NELAP	8/27/2007

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EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Malathion	EPA 614	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Malathion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Manganese	EPA 200.7	Metals	NELAP	8/27/2007
Manganese	EPA 200.8	Metals	NELAP	8/27/2007
Manganese	EPA 6010	Metals	NELAP	8/27/2007
Manganese	EPA 6020	Metals	NELAP	8/27/2007
MCPA	EPA 615	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
MCPA	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
MCPA	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	10/10/2008
MCPPE	EPA 615	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
MCPPE	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
MCPPE	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	10/10/2008
Mercury	EPA 245.1	Metals	NELAP	8/27/2007
Mercury	EPA 7470	Metals	NELAP	8/27/2007
Merphos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Methacrylonitrile	EPA 8260	Volatile Organics	NELAP	8/27/2007
Methane	RSK-175	Volatile Organics	NELAP	8/27/2007
Methanol	EPA 8015	Volatile Organics	NELAP	8/27/2007
Methapyrene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Methoxychlor	EPA 608	Pesticides-Herbicides-PCB's	NELAP	10/10/2008
Methoxychlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Methyl bromide (Bromomethane)	EPA 601	Volatile Organics	NELAP	8/27/2007
Methyl bromide (Bromomethane)	EPA 624	Volatile Organics	NELAP	8/27/2007
Methyl bromide (Bromomethane)	EPA 8021	Volatile Organics	NELAP	8/27/2007
Methyl bromide (Bromomethane)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Methyl chloride (Chloromethane)	EPA 601	Volatile Organics	NELAP	8/27/2007
Methyl chloride (Chloromethane)	EPA 624	Volatile Organics	NELAP	8/27/2007
Methyl chloride (Chloromethane)	EPA 8021	Volatile Organics	NELAP	8/27/2007
Methyl chloride (Chloromethane)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Methyl methacrylate	EPA 8260	Volatile Organics	NELAP	8/27/2007
Methyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	8/27/2007
Methyl parathion (Parathion, methyl)	EPA 614	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Methyl parathion (Parathion, methyl)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Methyl parathion (Parathion, methyl)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Methyl tert-butyl ether (MTBE)	EPA 602	Volatile Organics	NELAP	8/27/2007
Methyl tert-butyl ether (MTBE)	EPA 8021	Volatile Organics	NELAP	8/27/2007

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State Surgeon General

Laboratory Scope of Accreditation

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Methyl tert-butyl ether (MTBE)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Methylene chloride	EPA 601	Volatile Organics	NELAP	8/27/2007
Methylene chloride	EPA 624	Volatile Organics	NELAP	8/27/2007
Methylene chloride	EPA 8021	Volatile Organics	NELAP	8/27/2007
Methylene chloride	EPA 8260	Volatile Organics	NELAP	8/27/2007
Mevinphos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Mirex	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Molybdenum	EPA 200.7	Metals	NELAP	8/27/2007
Molybdenum	EPA 200.8	Metals	NELAP	8/27/2007
Molybdenum	EPA 6010	Metals	NELAP	8/27/2007
Molybdenum	EPA 6020	Metals	NELAP	8/27/2007
m-Xylene	EPA 8021	Volatile Organics	NELAP	8/27/2007
m-Xylene	EPA 8260	Volatile Organics	NELAP	8/27/2007
n, n-dimethyl formamide	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
Naled	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Naphthalene	EPA 610	Extractable Organics	NELAP	8/27/2007
Naphthalene	EPA 625	Extractable Organics	NELAP	8/27/2007
Naphthalene	EPA 8021	Volatile Organics	NELAP	8/27/2007
Naphthalene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Naphthalene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Naphthalene	EPA 8310	Extractable Organics	NELAP	8/27/2007
n-Butyl alcohol	EPA 8015	Volatile Organics	NELAP	8/27/2007
n-Butyl alcohol	EPA 8260	Volatile Organics	NELAP	8/27/2007
n-Butylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Nickel	EPA 200.7	Metals	NELAP	8/27/2007
Nickel	EPA 200.8	Metals	NELAP	8/27/2007
Nickel	EPA 6010	Metals	NELAP	8/27/2007
Nickel	EPA 6020	Metals	NELAP	8/27/2007
Nitrate	EPA 9056	General Chemistry	NELAP	8/27/2007
Nitrate	SM 4500-NO3 F	General Chemistry	NELAP	8/27/2007
Nitrate as N	EPA 300.0	General Chemistry	NELAP	8/27/2007
Nitrate as N	EPA 353.2	General Chemistry	NELAP	8/27/2007
Nitrate-nitrite	EPA 300.0	General Chemistry	NELAP	8/27/2007
Nitrate-nitrite	EPA 353.2	General Chemistry	NELAP	8/27/2007
Nitrate-nitrite	SM 4500-NO3 F	General Chemistry	NELAP	8/27/2007
Nitrite	EPA 9056	General Chemistry	NELAP	8/27/2007

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State Surgeon General

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Nitrite as N	EPA 300.0	General Chemistry	NELAP	8/27/2007
Nitrite as N	EPA 354.1	General Chemistry	NELAP	8/27/2007
Nitrite as N	SM 4500-NO2-B	General Chemistry	NELAP	8/27/2007
Nitrobenzene	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
Nitrobenzene	EPA 625	Extractable Organics	NELAP	8/27/2007
Nitrobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Nitrobenzene	EPA 8330	Extractable Organics	NELAP	9/20/2007
Nitroglycerin	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
Nitroglycerin	EPA 8330	Extractable Organics	NELAP	8/27/2007
Nitroquinoline-1-oxide	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Nitrosodiethylamine	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Nitrosodimethylamine	EPA 607	Extractable Organics	NELAP	8/27/2007
n-Nitrosodimethylamine	EPA 625	Extractable Organics	NELAP	8/27/2007
n-Nitrosodimethylamine	EPA 8070	Extractable Organics	NELAP	8/27/2007
n-Nitrosodimethylamine	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Nitroso-di-n-butylamine	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Nitrosodi-n-propylamine	EPA 625	Extractable Organics	NELAP	8/27/2007
n-Nitrosodi-n-propylamine	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Nitrosodiphenylamine	EPA 625	Extractable Organics	NELAP	8/27/2007
n-Nitrosodiphenylamine	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Nitrosomethylethylamine	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Nitrosomorpholine	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Nitrosopiperidine	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Nitrosopyrrolidine	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Propylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
o,o,o-Triethyl phosphorothioate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	EPA 8330	Extractable Organics	NELAP	8/27/2007
Oil & Grease	EPA 1664	General Chemistry	NELAP	8/27/2007
Organic nitrogen	TKN minus AMMONIA	General Chemistry	NELAP	8/27/2007
Orthophosphate as P	EPA 300.0	General Chemistry	NELAP	8/27/2007
Orthophosphate as P	EPA 365.1	General Chemistry	NELAP	8/27/2007
Orthophosphate as P	EPA 9056	General Chemistry	NELAP	8/27/2007
o-Toluidine	EPA 8270	Extractable Organics	NELAP	8/27/2007
o-Xylene	EPA 8021	Volatile Organics	NELAP	8/27/2007

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State Surgeon General

Laboratory Scope of Accreditation

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
o-Xylene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Parathion, ethyl	EPA 614	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Parathion, ethyl	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Parathion, ethyl	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Pentachlorobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Pentachloroethane	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
Pentachloronitrobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Pentachlorophenol	EPA 625	Extractable Organics	NELAP	8/27/2007
Pentachlorophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
Pentaerythritoltetranitrate	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
Pentaerythritoltetranitrate	EPA 8330	Extractable Organics	NELAP	8/27/2007
Perchlorate	DEN-LC-0015/LC-MS-MS	General Chemistry	NELAP	11/7/2006
Perchlorate	DEN-LC-0024/LC-MS-MS	General Chemistry	NELAP	11/7/2006
Perchlorate	EPA 314.0	General Chemistry	NELAP	10/10/2008
Perchlorate	EPA 6860	General Chemistry	NELAP	8/27/2007
Perfluorooctanesulfonate (PFOS)	DEN-LC-0012 Rev 4 (5/30/06)/LC-MS-MS	Extractable Organics	NELAP	8/27/2007
Perfluorooctanoic acid	DEN-LC-0012 Rev 4 (5/30/06)/LC-MS-MS	Extractable Organics	NELAP	8/27/2007
pH	EPA 150.1	General Chemistry	NELAP	8/27/2007
pH	EPA 9040	General Chemistry	NELAP	8/27/2007
pH	SM 4500-H ⁺ -B	General Chemistry	NELAP	8/27/2007
Phenacetin	EPA 8270	Extractable Organics	NELAP	8/27/2007
Phenanthrene	EPA 610	Extractable Organics	NELAP	8/27/2007
Phenanthrene	EPA 625	Extractable Organics	NELAP	8/27/2007
Phenanthrene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Phenanthrene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Phenol	EPA 625	Extractable Organics	NELAP	8/27/2007
Phenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
Phorate	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Phorate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Phosmet (Imidan)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Phosphorus, total	EPA 365.1	General Chemistry	NELAP	8/27/2007
Phosphorus, total	EPA 6010	Metals	NELAP	8/27/2007
Phthalic anhydride	EPA 8270	Extractable Organics	NELAP	8/27/2007
Picloram	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007

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TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Picric acid	DEN-LC-0012 Rev 0 (3/2/06)/LC-MS-MS	Extractable Organics	NELAP	8/27/2007
p-Isopropyltoluene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Potassium	EPA 200.7	Metals	NELAP	8/27/2007
Potassium	EPA 6010	Metals	NELAP	8/27/2007
Pronamide (Kerb)	EPA 8270	Extractable Organics	NELAP	8/27/2007
Propionitrile (Ethyl cyanide)	EPA 8260	Volatile Organics	NELAP	8/27/2007
p-Xylene	EPA 8021	Volatile Organics	NELAP	8/27/2007
p-Xylene	EPA 8260	Volatile Organics	NELAP	8/27/2007
p-Xylene as m/p xylene	EPA 8021	Volatile Organics	NELAP	8/27/2007
p-Xylene as m/p xylene	EPA 8260	Volatile Organics	NELAP	9/20/2007
Pyrene	EPA 610	Extractable Organics	NELAP	8/27/2007
Pyrene	EPA 625	Extractable Organics	NELAP	8/27/2007
Pyrene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Pyrene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Pyridine	EPA 8270	Extractable Organics	NELAP	8/27/2007
Quinoline	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)	EPA 8330	Extractable Organics	NELAP	8/27/2007
Residue-filterable (TDS)	EPA 160.1	General Chemistry	NELAP	8/27/2007
Residue-filterable (TDS)	SM 2540 C	General Chemistry	NELAP	8/27/2007
Residue-nonfilterable (TSS)	EPA 160.2	General Chemistry	NELAP	8/27/2007
Residue-nonfilterable (TSS)	SM 2540 D	General Chemistry	NELAP	8/27/2007
Residue-settleable	EPA 160.5	General Chemistry	NELAP	8/27/2007
Residue-settleable	SM 2540 F	General Chemistry	NELAP	8/27/2007
Residue-total	EPA 160.3	General Chemistry	NELAP	8/27/2007
Residue-total	SM 2540 B	General Chemistry	NELAP	8/27/2007
Residue-volatile	EPA 160.4	General Chemistry	NELAP	8/27/2007
Residue-volatile	SM 2540 E	General Chemistry	NELAP	8/27/2007
Residue-volatile	SM 2540 E (17th ed.)	General Chemistry	NELAP	8/27/2007
Ronnel	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Safrole	EPA 8270	Extractable Organics	NELAP	8/27/2007
sec-Butylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Selenium	EPA 200.7	Metals	NELAP	8/27/2007
Selenium	EPA 200.8	Metals	NELAP	8/27/2007
Selenium	EPA 6010	Metals	NELAP	8/27/2007

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State Surgeon General

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EPA Lab Code: CO00026

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E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Selenium	EPA 6020	Metals	NELAP	8/27/2007
Silica as SiO ₂	EPA 200.7	Metals	NELAP	8/27/2007
Silica as SiO ₂	EPA 6010	Metals	NELAP	8/27/2007
Silicon	EPA 6010	Metals	NELAP	8/27/2007
Silver	EPA 200.7	Metals	NELAP	8/27/2007
Silver	EPA 200.8	Metals	NELAP	8/27/2007
Silver	EPA 6010	Metals	NELAP	8/27/2007
Silver	EPA 6020	Metals	NELAP	8/27/2007
Silvex (2,4,5-TP)	EPA 615	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Silvex (2,4,5-TP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Silvex (2,4,5-TP)	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	10/10/2008
Simazine	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Sodium	EPA 200.7	Metals	NELAP	8/27/2007
Sodium	EPA 6010	Metals	NELAP	8/27/2007
Stirofos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Strontium	EPA 200.7	Metals	NELAP	8/27/2007
Strontium	EPA 6010	Metals	NELAP	8/27/2007
Strychnine	EPA 8321	Extractable Organics	NELAP	9/7/2007
Styrene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Sulfate	ASTM D516-02	General Chemistry	NELAP	8/27/2007
Sulfate	EPA 300.0	General Chemistry	NELAP	8/27/2007
Sulfate	EPA 375.4	General Chemistry	NELAP	8/27/2007
Sulfate	EPA 9038	General Chemistry	NELAP	10/10/2008
Sulfate	EPA 9056	General Chemistry	NELAP	8/27/2007
Sulfide	EPA 376.1	General Chemistry	NELAP	8/27/2007
Sulfide	EPA 376.2	General Chemistry	NELAP	8/27/2007
Sulfide	EPA 9030/9034	General Chemistry	NELAP	8/27/2007
Sulfide	SM 4500-S D/UV-VIS	General Chemistry	NELAP	8/27/2007
Sulfide	SM 4500-S F	General Chemistry	NELAP	8/27/2007
Sulfite-SO ₃	EPA 377.1	General Chemistry	NELAP	8/27/2007
Sulfite-SO ₃	SM 4500-SO ₃ B	General Chemistry	NELAP	8/27/2007
Sulfotep	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Sulfotep	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
tert-Butyl alcohol	EPA 8260	Volatile Organics	NELAP	8/27/2007
tert-Butylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Tetrachloroethylene (Perchloroethylene)	EPA 601	Volatile Organics	NELAP	8/27/2007

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Tetrachloroethylene (Perchloroethylene)	EPA 624	Volatile Organics	NELAP	8/27/2007
Tetrachloroethylene (Perchloroethylene)	EPA 8021	Volatile Organics	NELAP	8/27/2007
Tetrachloroethylene (Perchloroethylene)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Tetraethyl pyrophosphate (TEPP)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Tetrahydrofuran (THF)	DEN-MS-0010 Rev 2 (5/19/06)/GC-MS	Volatile Organics	NELAP	8/27/2007
Tetryl (methyl-2,4,6-trinitrophenyl nitramine)	EPA 8330	Extractable Organics	NELAP	8/27/2007
Thallium	EPA 200.7	Metals	NELAP	8/27/2007
Thallium	EPA 200.8	Metals	NELAP	8/27/2007
Thallium	EPA 6010	Metals	NELAP	8/27/2007
Thallium	EPA 6020	Metals	NELAP	8/27/2007
Thionazin (Zinophos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Thionazin (Zinophos)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Thiophenol (Benzenethiol)	EPA 8270	Extractable Organics	NELAP	8/27/2007
Tin	EPA 200.7	Metals	NELAP	8/27/2007
Tin	EPA 6010	Metals	NELAP	8/27/2007
Titanium	EPA 200.7	Metals	NELAP	8/27/2007
Titanium	EPA 6010	Metals	NELAP	8/27/2007
Tokuthion (Prothiophos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Toluene	EPA 602	Volatile Organics	NELAP	8/27/2007
Toluene	EPA 624	Volatile Organics	NELAP	8/27/2007
Toluene	EPA 8021	Volatile Organics	NELAP	8/27/2007
Toluene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Total coliforms	SM 9222 B	Microbiology	NELAP	8/27/2007
Total cyanide	EPA 335.4	General Chemistry	NELAP	8/27/2007
Total cyanide	EPA 9010	General Chemistry	NELAP	9/20/2007
Total cyanide	EPA 9012	General Chemistry	NELAP	8/27/2007
Total nitrate-nitrite	EPA 300.0	General Chemistry	NELAP	8/27/2007
Total nitrate-nitrite	EPA 9056	General Chemistry	NELAP	8/27/2007
Total organic carbon	EPA 415.1	General Chemistry	NELAP	8/27/2007
Total organic carbon	EPA 9060	General Chemistry	NELAP	8/27/2007
Total organic carbon	SM 5310B	General Chemistry	NELAP	8/27/2007
Total organic halides (TOX)	EPA 9020	General Chemistry	NELAP	8/27/2007
Total organic halides (TOX)	SM 5320 B	General Chemistry	NELAP	8/27/2007
Total phenolics	EPA 420.1	General Chemistry	NELAP	8/27/2007
Total phenolics	EPA 420.2	General Chemistry	NELAP	8/27/2007
Total phenolics	EPA 9066	General Chemistry	NELAP	8/27/2007

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Toxaphene (Chlorinated camphene)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Toxaphene (Chlorinated camphene)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
trans-1,2-Dichloroethylene	EPA 601	Volatile Organics	NELAP	8/27/2007
trans-1,2-Dichloroethylene	EPA 624	Volatile Organics	NELAP	8/27/2007
trans-1,2-Dichloroethylene	EPA 8021	Volatile Organics	NELAP	8/27/2007
trans-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	8/27/2007
trans-1,3-Dichloropropylene	EPA 601	Volatile Organics	NELAP	8/27/2007
trans-1,3-Dichloropropylene	EPA 624	Volatile Organics	NELAP	8/27/2007
trans-1,3-Dichloropropylene	EPA 8021	Volatile Organics	NELAP	8/27/2007
trans-1,3-Dichloropropylene	EPA 8260	Volatile Organics	NELAP	8/27/2007
trans-1,4-Dichloro-2-butene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Trichloroethene (Trichloroethylene)	EPA 601	Volatile Organics	NELAP	8/27/2007
Trichloroethene (Trichloroethylene)	EPA 624	Volatile Organics	NELAP	8/27/2007
Trichloroethene (Trichloroethylene)	EPA 8021	Volatile Organics	NELAP	8/27/2007
Trichloroethene (Trichloroethylene)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Trichlorofluoromethane	EPA 601	Volatile Organics	NELAP	8/27/2007
Trichlorofluoromethane	EPA 624	Volatile Organics	NELAP	8/27/2007
Trichlorofluoromethane	EPA 8021	Volatile Organics	NELAP	8/27/2007
Trichlorofluoromethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
Trichloronate	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Triethylamine	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
tris-(2,3-Dibromopropyl) phosphate (tris-BP)	DEN-GC-00020 Rev 2 (10/20/06)/GC-ECD	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
tris-(2,3-Dibromopropyl) phosphate (tris-BP)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Turbidity	EPA 180.1	General Chemistry	NELAP	8/27/2007
Un-ionized Ammonia	DEP SOP 10/03/83	General Chemistry	NELAP	8/27/2007
Uranium	EPA 200.8	Metals	NELAP	8/27/2007
Vanadium	EPA 200.7	Metals	NELAP	8/27/2007
Vanadium	EPA 200.8	Metals	NELAP	8/27/2007
Vanadium	EPA 6010	Metals	NELAP	8/27/2007
Vanadium	EPA 6020	Metals	NELAP	8/27/2007
Vinyl acetate	EPA 8260	Volatile Organics	NELAP	8/27/2007
Vinyl chloride	EPA 601	Volatile Organics	NELAP	8/27/2007
Vinyl chloride	EPA 624	Volatile Organics	NELAP	8/27/2007
Vinyl chloride	EPA 8021	Volatile Organics	NELAP	8/27/2007
Vinyl chloride	EPA 8260	Volatile Organics	NELAP	8/27/2007

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State Surgeon General

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Xylene (total)	EPA 602	Volatile Organics	NELAP	8/27/2007
Xylene (total)	EPA 624	Volatile Organics	NELAP	8/27/2007
Xylene (total)	EPA 8021	Volatile Organics	NELAP	8/27/2007
Xylene (total)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Zinc	EPA 200.7	Metals	NELAP	8/27/2007
Zinc	EPA 200.8	Metals	NELAP	8/27/2007
Zinc	EPA 6010	Metals	NELAP	8/27/2007
Zinc	EPA 6020	Metals	NELAP	8/27/2007

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State Surgeon General

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,1,1,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,1,1-Trichloroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,1,1-Trifluoro-2,2-dichloroethane	DEN-MS-0010 Rev 2 (5/19/06)/GC-MS	Volatile Organics	NELAP	8/27/2007
1,1,2,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,1,2-Trichloro-1,2,2-trifluoroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,1,2-Trichloroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,1-Dichloroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,1-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,1-Dichloropropene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2,3-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2,3-Trichloropropane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2,4,5-Tetrachlorobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,2,4-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2,4-Trichlorobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,2,4-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8011	General Chemistry	NELAP	8/27/2007
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8011	General Chemistry	NELAP	8/27/2007
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2-Dichloro-1,1,2-trifluoroethane	DEN-MS-0010 Rev 2 (5/19/06)/GC-MS	Volatile Organics	NELAP	8/27/2007
1,2-Dichlorobenzene	EPA 8021	Volatile Organics	NELAP	10/10/2008
1,2-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,2-Dichloroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,2-Diphenylhydrazine	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,3,5-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,3,5-Trinitrobenzene (1,3,5-TNB)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8330	Extractable Organics	NELAP	8/27/2007
1,3-Dichlorobenzene	EPA 8021	Volatile Organics	NELAP	10/10/2008
1,3-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,3-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,3-Dichloropropane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,3-Dinitrobenzene (1,3-DNB)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006

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Issue Date: 10/31/2008

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Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,3-Dinitrobenzene (1,3-DNB)	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,3-Dinitrobenzene (1,3-DNB)	EPA 8330	Extractable Organics	NELAP	8/27/2007
1,4-Dichlorobenzene	EPA 8021	Volatile Organics	NELAP	10/10/2008
1,4-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,4-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,4-Dinitrobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,4-Dioxane (1,4-Diethyleneoxide)	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8260	Volatile Organics	NELAP	8/27/2007
1,4-Naphthoquinone	EPA 8270	Extractable Organics	NELAP	8/27/2007
1,4-Phenylenediamine	EPA 8270	Extractable Organics	NELAP	8/27/2007
1-Chlorohexane	EPA 8260	Volatile Organics	NELAP	8/27/2007
1-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	8/27/2007
1-Methylnaphthalene	EPA 8310	Extractable Organics	NELAP	8/27/2007
1-Methylnaphthalene (added to method at FDEP request)	EPA 8270	Extractable Organics	NELAP	8/27/2007
1-Naphthylamine	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	8/27/2007
2,3,4,6-Tetrachlorophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,4,5-T	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4,5-T	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4,5-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,4,6-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,4,6-Trinitrotoluene (2,4,6-TNT)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
2,4,6-Trinitrotoluene (2,4,6-TNT)	EPA 8330	Extractable Organics	NELAP	8/27/2007
2,4-D	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4-D	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4-DB	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4-DB	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4'-DDD	DEN-GC-00020 Rev 2 (10/20/06)/GC-ECD	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4'-DDE	DEN-GC-00020 Rev 2 (10/20/06)/GC-ECD	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4'-DDT	DEN-GC-00020 Rev 2 (10/20/06)/GC-ECD	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
2,4-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,4-Dimethylphenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,4-Dinitrophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,4-Dinitrotoluene (2,4-DNT)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006

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Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,4-Dinitrotoluene (2,4-DNT)	EPA 8330	Extractable Organics	NELAP	8/27/2007
2,6-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,6-Dinitrotoluene (2,6-DNT)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270	Extractable Organics	NELAP	8/27/2007
2,6-Dinitrotoluene (2,6-DNT)	EPA 8330	Extractable Organics	NELAP	8/27/2007
2-Acetylaminofluorene	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Amino-4,6-dinitrotoluene (2-am-dnt)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
2-Amino-4,6-dinitrotoluene (2-am-dnt)	EPA 8330	Extractable Organics	NELAP	8/27/2007
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260	Volatile Organics	NELAP	8/27/2007
2-Chloroethyl vinyl ether	EPA 8260	Volatile Organics	NELAP	8/27/2007
2-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Chlorophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	8/27/2007
2-Cyclohexyl-4,6-dinitrophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Ethoxy ethanol (ethyl cellosolve)	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
2-Hexanone	EPA 8260	Volatile Organics	NELAP	8/27/2007
2-Methyl-4,6-dinitrophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Methylnaphthalene	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Methylnaphthalene	EPA 8310	Extractable Organics	NELAP	8/27/2007
2-Methylphenol (o-Cresol)	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Naphthylamine	EPA 8270	Extractable Organics	NELAP	10/10/2008
2-Nitroaniline	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Nitrophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
2-Nitropropane	EPA 8260	Volatile Organics	NELAP	8/27/2007
2-Nitrotoluene	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
2-Nitrotoluene	EPA 8330	Extractable Organics	NELAP	8/27/2007
2-Pentanone	EPA 8260	Volatile Organics	NELAP	8/27/2007
2-Picoline (2-Methylpyridine)	EPA 8270	Extractable Organics	NELAP	8/27/2007
3,3'-Dichlorobenzidine	EPA 8270	Extractable Organics	NELAP	8/27/2007
3,3'-Dimethylbenzidine	EPA 8270	Extractable Organics	NELAP	8/27/2007
3-Methylcholanthrene	EPA 8270	Extractable Organics	NELAP	8/27/2007
3-Nitroaniline	EPA 8270	Extractable Organics	NELAP	8/27/2007
3-Nitrotoluene	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
3-Nitrotoluene	EPA 8330	Extractable Organics	NELAP	8/27/2007
4,4'-DDD	EPA 8081	Pesticides-Herbicides-PCBs	NELAP	8/27/2007

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Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
4,4'-DDE	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
4,4'-DDT	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
4,4'-Methylenebis(2-chloroaniline)	EPA 8270	Extractable Organics	NELAP	10/10/2008
4-Amino-2,6-dinitrotoluene (4-am-dnt)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
4-Amino-2,6-dinitrotoluene (4-am-dnt)	EPA 8330	Extractable Organics	NELAP	8/27/2007
4-Aminobiphenyl	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Bromophenyl phenyl ether	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Chloro-3-methylphenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Chloroaniline	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	8/27/2007
4-Methyl-2-pentanone (MIBK)	EPA 8260	Volatile Organics	NELAP	8/27/2007
4-Methylphenol (p-Cresol)	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Nitroaniline	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Nitrophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
4-Nitrotoluene	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
4-Nitrotoluene	EPA 8330	Extractable Organics	NELAP	8/27/2007
5-Nitro-o-toluidine	EPA 8270	Extractable Organics	NELAP	8/27/2007
7,12-Dimethylbenz(a) anthracene	EPA 8270	Extractable Organics	NELAP	8/27/2007
a-a-Dimethylphenethylamine	EPA 8270	Extractable Organics	NELAP	8/27/2007
Acenaphthene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Acenaphthene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Acenaphthylene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Acenaphthylene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Acetone	EPA 8260	Volatile Organics	NELAP	8/27/2007
Acetonitrile	EPA 8260	Volatile Organics	NELAP	8/27/2007
Acetophenone	EPA 8270	Extractable Organics	NELAP	8/27/2007
Acrolein (Propenal)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Acrylonitrile	EPA 8260	Volatile Organics	NELAP	8/27/2007
Aldicarb (Temik)	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Allyl chloride (3-Chloropropene)	EPA 8260	Volatile Organics	NELAP	8/27/2007
alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
alpha-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
alpha-Methylstyrene	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
Aluminum	EPA 6010	Metals	NELAP	8/27/2007
Ammonia as N	EPA 350.1	General Chemistry	NELAP	8/27/2007

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Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Ammonium perfluorooctanoate	DEN-LC-0012 Rev 4 (5/30/06)/LC-MS-MS	Extractable Organics	NELAP	8/27/2007
Aniline	EPA 8270	Extractable Organics	NELAP	8/27/2007
Anthracene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Anthracene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Antimony	EPA 6010	Metals	NELAP	8/27/2007
Antimony	EPA 6020	Metals	NELAP	8/27/2007
Aramite	EPA 8270	Extractable Organics	NELAP	8/27/2007
Aroclor-1016 (PCB-1016)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1221 (PCB-1221)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1232 (PCB-1232)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1242 (PCB-1242)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1248 (PCB-1248)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1254 (PCB-1254)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Aroclor-1260 (PCB-1260)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Arsenic	EPA 6010	Metals	NELAP	8/27/2007
Arsenic	EPA 6020	Metals	NELAP	8/27/2007
Atrazine	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Azinphos-ethyl (Ethyl guthion)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Azinphos-methyl (Guthion)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Barium	EPA 6010	Metals	NELAP	8/27/2007
Barium	EPA 6020	Metals	NELAP	8/27/2007
Benzene	EPA 8021	Volatile Organics	NELAP	8/27/2007
Benzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Benzidine	EPA 8270	Extractable Organics	NELAP	8/27/2007
Benzo(a)anthracene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Benzo(a)anthracene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Benzo(a)pyrene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Benzo(a)pyrene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Benzo(b)fluoranthene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Benzo(b)fluoranthene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Benzo(g,h,i)perylene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Benzo(g,h,i)perylene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Benzo(k)fluoranthene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Benzo(k)fluoranthene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Benzoic acid	EPA 8270	Extractable Organics	NELAP	8/27/2007
Benzyl alcohol	EPA 8270	Extractable Organics	NELAP	8/27/2007

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State Surgeon General

Laboratory Scope of Accreditation

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Beryllium	EPA 6010	Metals	NELAP	8/27/2007
Beryllium	EPA 6020	Metals	NELAP	8/27/2007
beta-BHC (beta-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
bis(2-Chloroethoxy)methane	EPA 8270	Extractable Organics	NELAP	8/27/2007
bis(2-Chloroethyl) ether	EPA 8270	Extractable Organics	NELAP	8/27/2007
bis(2-Chloroisopropyl) ether (2,2'-Oxybis(1-chloropropane))	EPA 8270	Extractable Organics	NELAP	8/27/2007
bis(2-Ethylhexyl) phthalate (DEHP)	EPA 8270	Extractable Organics	NELAP	8/27/2007
Bolstar (Sulprofos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Boron	EPA 6010	Metals	NELAP	8/27/2007
Bromide	EPA 9056	General Chemistry	NELAP	8/27/2007
Bromobenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Bromochloromethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
Bromodichloromethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
Bromoform	EPA 8260	Volatile Organics	NELAP	8/27/2007
Butyl benzyl phthalate	EPA 8270	Extractable Organics	NELAP	8/27/2007
Cadmium	EPA 6010	Metals	NELAP	8/27/2007
Cadmium	EPA 6020	Metals	NELAP	8/27/2007
Calcium	EPA 6010	Metals	NELAP	8/27/2007
Carbaryl (Sevin)	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Carbazole	EPA 8270	Extractable Organics	NELAP	8/27/2007
Carbofuran (Furadan)	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Carbofuran phenol	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
Carbon disulfide	EPA 8260	Volatile Organics	NELAP	8/27/2007
Carbon tetrachloride	EPA 8260	Volatile Organics	NELAP	8/27/2007
Carbophenothion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Chlordane (tech.)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Chloride	EPA 9056	General Chemistry	NELAP	8/27/2007
Chloride	EPA 9252	General Chemistry	NELAP	8/27/2007
Chlorobenzene	EPA 8021	Volatile Organics	NELAP	8/27/2007
Chlorobenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Chlorobenzilate	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Chlorobenzilate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Chloroethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
Chloroform	EPA 8260	Volatile Organics	NELAP	8/27/2007
Chloroprene	EPA 8260	Volatile Organics	NELAP	8/27/2007

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State Surgeon General

Laboratory Scope of Accreditation

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State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Chlorpyrifos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Chlorpyrifos methyl	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Chromium	EPA 6010	Metals	NELAP	8/27/2007
Chromium	EPA 6020	Metals	NELAP	8/27/2007
Chrysene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Chrysene	EPA 8310	Extractable Organics	NELAP	8/27/2007
cis-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	8/27/2007
cis-1,3-Dichloropropene	EPA 8260	Volatile Organics	NELAP	8/27/2007
cis-1,4-Dichloro-2-butene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Cobalt	EPA 6010	Metals	NELAP	8/27/2007
Cobalt	EPA 6020	Metals	NELAP	8/27/2007
Conductivity	EPA 9050	General Chemistry	NELAP	8/27/2007
Copper	EPA 6010	Metals	NELAP	8/27/2007
Copper	EPA 6020	Metals	NELAP	8/27/2007
Corrosivity (pH)	EPA 9040	General Chemistry	NELAP	8/27/2007
Coumaphos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Cyclohexane	DEN-MS-0010 Rev 2 (5/19/06)/GC-MS	Volatile Organics	NELAP	8/27/2007
Cyclohexanone	DEN-MS-0010 Rev 2 (5/19/06)/GC-MS	Volatile Organics	NELAP	8/27/2007
Dalapon	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dalapon	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
delta-BHC	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Demeton-o	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Demeton-s	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Diallate	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Diallate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Diazinon	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dibenz(a, j) acridine	EPA 8270	Extractable Organics	NELAP	8/27/2007
Dibenz(a,h) anthracene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Dibenz(a,h) anthracene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Dibenzofuran	EPA 8270	Extractable Organics	NELAP	8/27/2007
Dibromochloromethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
Dibromomethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
Dicamba	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dicamba	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dichlorodifluoromethane	EPA 8260	Volatile Organics	NELAP	8/27/2007

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State Surgeon General

Laboratory Scope of Accreditation

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EPA Lab Code: CO00026

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TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Dichlorofluoromethane	DEN-MS-0010 Rev 2 (5/19/06)/GC-MS	Volatile Organics	NELAP	8/27/2007
Dichloroprop (Dichlorprop)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dichloroprop (Dichlorprop)	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dichlorovos (DDVP, Dichlorvos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dicofol	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dieldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Diesel range organics (DRO)	EPA 8015	Extractable Organics	NELAP	8/27/2007
Diethyl ether	EPA 8260	Volatile Organics	NELAP	8/27/2007
Diethyl phthalate	EPA 8270	Extractable Organics	NELAP	8/27/2007
Di-isopropylether (DIPE)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Dimethoate	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dimethoate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dimethyl phthalate	EPA 8270	Extractable Organics	NELAP	8/27/2007
Di-n-butyl phthalate	EPA 8270	Extractable Organics	NELAP	8/27/2007
Di-n-octyl phthalate	EPA 8270	Extractable Organics	NELAP	8/27/2007
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8270	Extractable Organics	NELAP	8/27/2007
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Disulfoton	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Disulfoton	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Diuron	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endosulfan I	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endosulfan II	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endosulfan sulfate	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endrin aldehyde	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Endrin ketone	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
EPN	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Ethanol	EPA 8015	Volatile Organics	NELAP	8/27/2007
Ethanol	EPA 8260	Volatile Organics	NELAP	8/27/2007
Ethoprop	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Ethyl acetate	EPA 8260	Volatile Organics	NELAP	8/27/2007
Ethyl methacrylate	EPA 8260	Volatile Organics	NELAP	8/27/2007
Ethyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	8/27/2007
Ethylbenzene	EPA 8021	Volatile Organics	NELAP	8/27/2007
Ethylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007

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State Surgeon General

Laboratory Scope of Accreditation

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EPA Lab Code: CO00026

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TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Ethylene oxide	EPA 8260	Volatile Organics	NELAP	8/27/2007
Extractable cyanide	EPA 9010/9013	General Chemistry	NELAP	8/27/2007
Extractable organic halides (EOX)	EPA 9023	General Chemistry	NELAP	8/27/2007
Famphur	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Fensulfothion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Fenthion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Fluoranthene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Fluoranthene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Fluorene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Fluorene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Fluoride	EPA 9056	General Chemistry	NELAP	8/27/2007
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
gamma-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Gasoline range organics (GRO)	EPA 8015	Extractable Organics	NELAP	8/27/2007
Heptachlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Heptachlor epoxide	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Hexachlorobenzene	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Hexachlorobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Hexachlorobutadiene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Hexachlorobutadiene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Hexachlorocyclopentadiene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Hexachloroethane	EPA 8270	Extractable Organics	NELAP	8/27/2007
Hexachlorophene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Hexachloropropene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Hexane	DEN-MS-0010 Rev 2 (5/19/06)/GC-MS	Volatile Organics	NELAP	8/27/2007
Ignitability	EPA 1010	General Chemistry	NELAP	8/27/2007
Indene	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
Indeno(1,2,3-cd)pyrene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Indeno(1,2,3-cd)pyrene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Iodomethane (Methyl iodide)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Iron	EPA 6010	Metals	NELAP	8/27/2007
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8015	Volatile Organics	NELAP	8/27/2007
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Isodrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Isodrin	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/10/2008

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TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Isophorone	EPA 8270	Extractable Organics	NELAP	8/27/2007
Isopropyl alcohol (2-Propanol)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Isopropylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Isosafrole	EPA 8270	Extractable Organics	NELAP	8/27/2007
Kepone	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Kjeldahl nitrogen - total	EPA 351.2	General Chemistry	NELAP	8/27/2007
Lead	EPA 6010	Metals	NELAP	8/27/2007
Lead	EPA 6020	Metals	NELAP	8/27/2007
Lithium	EPA 6010	Metals	NELAP	8/27/2007
m/p-Xylenes	EPA 8260	Volatile Organics	NELAP	9/20/2007
Magnesium	EPA 6010	Metals	NELAP	8/27/2007
Malathion	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Manganese	EPA 6010	Metals	NELAP	8/27/2007
Manganese	EPA 6020	Metals	NELAP	8/27/2007
MCPA	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
MCPA	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
MCPP	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
MCPP	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Mercury	EPA 7471	Metals	NELAP	8/27/2007
Merphos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Methacrylonitrile	EPA 8260	Volatile Organics	NELAP	8/27/2007
Methanol	EPA 8015	Volatile Organics	NELAP	8/27/2007
Methapyrilene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Methiocarb (Mesurol)	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Methoxychlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Methyl bromide (Bromomethane)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Methyl chloride (Chloromethane)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Methyl methacrylate	EPA 8260	Volatile Organics	NELAP	8/27/2007
Methyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	8/27/2007
Methyl parathion (Parathion, methyl)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Methyl parathion (Parathion, methyl)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Methyl tert-butyl ether (MTBE)	EPA 8021	Volatile Organics	NELAP	8/27/2007
Methyl tert-butyl ether (MTBE)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Methylene chloride	EPA 8260	Volatile Organics	NELAP	8/27/2007
Mevinphos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Mirex	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Molybdenum	EPA 6010	Metals	NELAP	8/27/2007
Molybdenum	EPA 6020	Metals	NELAP	8/27/2007
n, n-dimethyl formamide	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
Naled	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Naphthalene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Naphthalene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Naphthalene	EPA 8310	Extractable Organics	NELAP	8/27/2007
n-Butyl alcohol	EPA 8015	Volatile Organics	NELAP	8/27/2007
n-Butyl alcohol	EPA 8260	Volatile Organics	NELAP	8/27/2007
n-Butylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Nickel	EPA 6010	Metals	NELAP	8/27/2007
Nickel	EPA 6020	Metals	NELAP	8/27/2007
Nitrate	EPA 9056	General Chemistry	NELAP	8/27/2007
Nitrate as N	EPA 353.2	General Chemistry	NELAP	8/27/2007
Nitrite	EPA 9056	General Chemistry	NELAP	8/27/2007
Nitrite as N	EPA 354.1	General Chemistry	NELAP	8/27/2007
Nitrobenzene	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
Nitrobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Nitrobenzene	EPA 8330	Extractable Organics	NELAP	8/27/2007
Nitroglycerin	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
Nitroglycerin	EPA 8330	Extractable Organics	NELAP	8/27/2007
Nitroquinoline-1-oxide	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Nitrosodiethylamine	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Nitrosodimethylamine	EPA 8070	Extractable Organics	NELAP	8/27/2007
n-Nitrosodimethylamine	EPA 8270	Extractable Organics	NELAP	10/10/2008
n-Nitroso-di-n-butylamine	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Nitrosodi-n-propylamine	EPA 8270	Extractable Organics	NELAP	10/10/2008
n-Nitrosodiphenylamine	EPA 8270	Extractable Organics	NELAP	10/10/2008
n-Nitrosomethylethylamine	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Nitrosomorpholine	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Nitrosopiperidine	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Nitrosopyrrolidine	EPA 8270	Extractable Organics	NELAP	8/27/2007
n-Propylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
o,o,o-Triethyl phosphorothioate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	EPA 8330	Extractable Organics	NELAP	8/27/2007
Oil & Grease	EPA 9071	General Chemistry	NELAP	8/27/2007
Orthophosphate as P	EPA 365.1	General Chemistry	NELAP	8/27/2007
Orthophosphate as P	EPA 9056	General Chemistry	NELAP	8/27/2007
o-Toluidine	EPA 8270	Extractable Organics	NELAP	8/27/2007
Oxamyl	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
o-Xylene	EPA 8021	Volatile Organics	NELAP	10/10/2008
o-Xylene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Paint Filter Liquids Test	EPA 9095	General Chemistry	NELAP	8/27/2007
Parathion, ethyl	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Parathion, ethyl	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
p-Dioxane	EPA 8260	Volatile Organics	NELAP	8/27/2007
Pentachlorobenzene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Pentachloroethane	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
Pentachloronitrobenzene	EPA 8270	Extractable Organics	NELAP	10/10/2008
Pentachlorophenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
Pentaerythritoltetranitrate	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
Pentaerythritoltetranitrate	EPA 8330	Extractable Organics	NELAP	8/27/2007
Perchlorate	DEN-LC-0015/LC-MS-MS	General Chemistry	NELAP	11/7/2006
Perchlorate	DEN-LC-0024/LC-MS-MS	General Chemistry	NELAP	11/7/2006
Perchlorate	EPA 6860	General Chemistry	NELAP	10/10/2008
Perfluorooctanesulfonate (PFOS)	DEN-LC-0012 Rev 4 (5/30/06)/LC-MS-MS	Extractable Organics	NELAP	8/27/2007
Perfluorooctanoic acid	DEN-LC-0012 Rev 4 (5/30/06)/LC-MS-MS	Extractable Organics	NELAP	8/27/2007
pH	EPA 9045	General Chemistry	NELAP	8/27/2007
Phenacetin	EPA 8270	Extractable Organics	NELAP	8/27/2007
Phenanthrene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Phenanthrene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Phenol	EPA 8270	Extractable Organics	NELAP	8/27/2007
Phorate	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Phorate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/10/2008
Phosmet (Imidan)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Phosphorus, total	EPA 365.1	General Chemistry	NELAP	8/27/2007
Phosphorus, total	EPA 6010	Metals	NELAP	8/27/2007
Picloram	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007

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Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Picric acid	DEN-LC-0012 Rev 0 (3/2/06)/LC-MS-MS	Extractable Organics	NELAP	8/27/2007
p-Isopropyltoluene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Potassium	EPA 6010	Metals	NELAP	8/27/2007
Pronamide (Kerb)	EPA 8270	Extractable Organics	NELAP	8/27/2007
Propham	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Propionitrile (Ethyl cyanide)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Propoxur (Baygon)	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Pyrene	EPA 8270	Extractable Organics	NELAP	8/27/2007
Pyrene	EPA 8310	Extractable Organics	NELAP	8/27/2007
Pyridine	EPA 8270	Extractable Organics	NELAP	8/27/2007
Quinoline	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)	DEN-LC-0010/LC-MS	Extractable Organics	NELAP	11/7/2006
RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine)	EPA 8330	Extractable Organics	NELAP	8/27/2007
Ronnel	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Safrole	EPA 8270	Extractable Organics	NELAP	8/27/2007
sec-Butylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Selenium	EPA 6010	Metals	NELAP	8/27/2007
Selenium	EPA 6020	Metals	NELAP	8/27/2007
Silica as SiO2	EPA 6010	Metals	NELAP	8/27/2007
Silicon	EPA 6010	Metals	NELAP	8/27/2007
Silver	EPA 6010	Metals	NELAP	8/27/2007
Silver	EPA 6020	Metals	NELAP	8/27/2007
Silvex (2,4,5-TP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Silvex (2,4,5-TP)	EPA 8321	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Simazine	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Sodium	EPA 6010	Metals	NELAP	8/27/2007
Stirofos	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Strontium	EPA 6010	Metals	NELAP	8/27/2007
Strychnine	EPA 8321	Extractable Organics	NELAP	8/27/2007
Styrene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Sulfate	EPA 9056	General Chemistry	NELAP	8/27/2007
Sulfide	EPA 9030	General Chemistry	NELAP	8/27/2007
Sulfide	EPA 9030/9034	General Chemistry	NELAP	8/27/2007
Sulfotep	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Sulfotep	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007

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Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Synthetic Precipitation Leaching Procedure	EPA 1312	General Chemistry	NELAP	8/27/2007
tert-Butyl alcohol	EPA 8260	Volatile Organics	NELAP	8/27/2007
tert-Butylbenzene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Tetrachloroethylene (Perchloroethylene)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Tetraethyl pyrophosphate (TEPP)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Tetrahydrofuran (THF)	DEN-MS-0010 Rev 2 (5/19/06)/GC-MS	Volatile Organics	NELAP	8/27/2007
Tetryl (methyl-2,4,6-trinitrophenylnitramine)	EPA 8330	Extractable Organics	NELAP	8/27/2007
Thallium	EPA 6010	Metals	NELAP	8/27/2007
Thallium	EPA 6020	Metals	NELAP	8/27/2007
Thionazin (Zinophos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Thionazin (Zinophos)	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Tin	EPA 6010	Metals	NELAP	8/27/2007
Titanium	EPA 6010	Metals	NELAP	8/27/2007
Tokuthion (Prothiophos)	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Toluene	EPA 8021	Volatile Organics	NELAP	8/27/2007
Toluene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Total cyanide	EPA 9012	General Chemistry	NELAP	8/27/2007
Total nitrate-nitrite	EPA 353.2	General Chemistry	NELAP	8/27/2007
Total nitrate-nitrite	EPA 9056	General Chemistry	NELAP	8/27/2007
Total organic carbon	EPA 9060	General Chemistry	NELAP	10/10/2008
Total Petroleum Hydrocarbons (TPH)	8015 AZ	General Chemistry	NELAP	8/27/2007
Total phenolics	EPA 9066	General Chemistry	NELAP	8/27/2007
Total sulfides	EPA 9034	General Chemistry	NELAP	8/27/2007
Toxaphene (Chlorinated camphene)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Toxicity Characteristic Leaching Procedure	EPA 1311	General Chemistry	NELAP	8/27/2007
trans-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	8/27/2007
trans-1,3-Dichloropropylene	EPA 8260	Volatile Organics	NELAP	8/27/2007
trans-1,4-Dichloro-2-butene	EPA 8260	Volatile Organics	NELAP	8/27/2007
Trichloroethene (Trichloroethylene)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Trichlorofluoromethane	EPA 8260	Volatile Organics	NELAP	8/27/2007
Trichloronate	EPA 8141	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Triethylamine	DEN-MS-0011 Rev 3 (7/11/06)/GC-MS	Extractable Organics	NELAP	8/27/2007
tris-(2,3-Dibromopropyl) phosphate (tris-BP)	DEN-GC-00020 Rev 2 (10/20/06)/GC-ECD	Pesticides-Herbicides-PCB's	NELAP	8/27/2007
Vanadium	EPA 6010	Metals	NELAP	8/27/2007
Vanadium	EPA 6020	Metals	NELAP	8/27/2007

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Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667

TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Vinyl acetate	EPA 8260	Volatile Organics	NELAP	8/27/2007
Vinyl chloride	EPA 8260	Volatile Organics	NELAP	8/27/2007
Xylene (total)	EPA 8021	Volatile Organics	NELAP	8/27/2007
Xylene (total)	EPA 8260	Volatile Organics	NELAP	8/27/2007
Zinc	EPA 6010	Metals	NELAP	8/27/2007
Zinc	EPA 6020	Metals	NELAP	8/27/2007

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/31/2008

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87667-14, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87667

EPA Lab Code: CO00026

(303) 736-0142

E87667
TestAmerica Denver
4955 Yarrow Street
Arvada, CO 80002

Matrix: Biological Tissue

Analyte	Method/Tech	Category	Certification Type	Effective Date
Perchlorate	DEN-LC-0015/LC-MS-MS	General Chemistry	NELAP	11/7/2006
Perchlorate	DEN-LC-0024/LC-MS-MS	General Chemistry	NELAP	11/7/2006

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 10/31/2008

Expiration Date: 6/30/2009

TestAmerica North Canton



State of Florida
Department of Health, Bureau of Laboratories
This is to certify that
E87225

TESTAMERICA - NORTH CANTON
4101 SHUFFEL DRIVE NW
NORTH CANTON, OH 44720-6961

has complied with Florida Administrative Code 64E-1,
for the examination of Environmental samples in the following categories

NON-POTABLE WATER - EXTRACTABLE ORGANICS, NON-POTABLE WATER - GENERAL CHEMISTRY, NON-POTABLE WATER - METALS,
NON-POTABLE WATER - PESTICIDES-HERBICIDES-PCB'S, NON-POTABLE WATER - VOLATILE ORGANICS, SOLID AND CHEMICAL MATERIALS -
EXTRACTABLE ORGANICS, SOLID AND CHEMICAL MATERIALS - GENERAL CHEMISTRY, SOLID AND CHEMICAL MATERIALS - METALS, SOLID AND
CHEMICAL MATERIALS - PESTICIDES-HERBICIDES-PCB'S, SOLID AND CHEMICAL MATERIALS - VOLATILE ORGANICS

Continued certification is contingent upon successful on-going compliance with the NELAC Standards and FAC Rule 64E-1
regulations. Specific methods and analytes certified are cited on the Laboratory Scope of Accreditation for this laboratory and
are on file at the Bureau of Laboratories, P. O. Box 210, Jacksonville, Florida 32231. Clients and customers are urged to verify
with this agency the laboratory's certification status in Florida for particular methods and analytes.

EFFECTIVE January 13, 2009 THROUGH June 30, 2009



Max Salfinger

Max Salfinger, M.D.
Chief, Bureau of Laboratories
Florida Department of Health
DH Form 1697, 7/04
NON-TRANSFERABLE E87225-24-01/13/2009
Supersedes all previously issued certificates

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87225-24, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87225

EPA Lab Code: OH00048

(330) 497-9396

E87225

TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,1,1,2-Tetrachloroethane	EPA 8021	Volatile Organics	NELAP	7/1/2003
1,1,1,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,1,1-Trichloroethane	EPA 601	Volatile Organics	NELAP	3/18/2004
1,1,1-Trichloroethane	EPA 624	Volatile Organics	NELAP	3/18/2004
1,1,1-Trichloroethane	EPA 8021	Volatile Organics	NELAP	3/18/2004
1,1,1-Trichloroethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,1,2,2-Tetrachloroethane	EPA 601	Volatile Organics	NELAP	9/1/2004
1,1,2,2-Tetrachloroethane	EPA 624	Volatile Organics	NELAP	3/18/2004
1,1,2,2-Tetrachloroethane	EPA 8021	Volatile Organics	NELAP	9/1/2004
1,1,2,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,1,2-Trichloroethane	EPA 601	Volatile Organics	NELAP	3/18/2004
1,1,2-Trichloroethane	EPA 624	Volatile Organics	NELAP	3/18/2004
1,1,2-Trichloroethane	EPA 8021	Volatile Organics	NELAP	3/18/2004
1,1,2-Trichloroethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,1-Dichloroethane	EPA 601	Volatile Organics	NELAP	3/18/2004
1,1-Dichloroethane	EPA 624	Volatile Organics	NELAP	3/18/2004
1,1-Dichloroethane	EPA 8021	Volatile Organics	NELAP	3/18/2004
1,1-Dichloroethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,1-Dichloroethylene	EPA 601	Volatile Organics	NELAP	9/1/2004
1,1-Dichloroethylene	EPA 624	Volatile Organics	NELAP	3/18/2004
1,1-Dichloroethylene	EPA 8021	Volatile Organics	NELAP	9/1/2004
1,1-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,1-Dichloropropene	EPA 8021	Volatile Organics	NELAP	7/1/2003
1,1-Dichloropropene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2,3-Trichlorobenzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
1,2,3-Trichloropropane	EPA 8021	Volatile Organics	NELAP	7/1/2003
1,2,3-Trichloropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2,4,5-Tetrachlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,2,4-Trichlorobenzene	EPA 625	Extractable Organics	NELAP	3/18/2004
1,2,4-Trichlorobenzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
1,2,4-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2,4-Trichlorobenzene	EPA 8270	Extractable Organics	NELAP	3/18/2004
1,2,4-Trimethylbenzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
1,2,4-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8021	Volatile Organics	NELAP	7/1/2003
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260	Volatile Organics	NELAP	7/1/2003

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 1/13/2009

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87225-24, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87225

EPA Lab Code: OH00048

(330) 497-9396

E87225

TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8021	Volatile Organics	NELAP	7/1/2003
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,2-Dichlorobenzene	EPA 601	Volatile Organics	NELAP	3/18/2004
1,2-Dichlorobenzene	EPA 602	Volatile Organics	NELAP	4/29/2004
1,2-Dichlorobenzene	EPA 624	Volatile Organics	NELAP	3/18/2004
1,2-Dichlorobenzene	EPA 625	Extractable Organics	NELAP	3/18/2004
1,2-Dichlorobenzene	EPA 8021	Volatile Organics	NELAP	3/18/2004
1,2-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,2-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,2-Dichloroethane	EPA 601	Volatile Organics	NELAP	3/18/2004
1,2-Dichloroethane	EPA 624	Volatile Organics	NELAP	3/18/2004
1,2-Dichloroethane	EPA 8021	Volatile Organics	NELAP	3/18/2004
1,2-Dichloroethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,2-Dichloropropane	EPA 601	Volatile Organics	NELAP	3/18/2004
1,2-Dichloropropane	EPA 624	Volatile Organics	NELAP	3/18/2004
1,2-Dichloropropane	EPA 8021	Volatile Organics	NELAP	3/18/2004
1,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,2-Dinitrobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,2-Diphenylhydrazine	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,3,5-Trimethylbenzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
1,3,5-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,3,5-Trinitrobenzene (1,3,5-TNB)	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,3-Dichlorobenzene	EPA 601	Volatile Organics	NELAP	3/18/2004
1,3-Dichlorobenzene	EPA 602	Volatile Organics	NELAP	4/29/2004
1,3-Dichlorobenzene	EPA 624	Volatile Organics	NELAP	3/18/2004
1,3-Dichlorobenzene	EPA 625	Extractable Organics	NELAP	3/18/2004
1,3-Dichlorobenzene	EPA 8021	Volatile Organics	NELAP	3/18/2004
1,3-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,3-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,3-Dichloropropane	EPA 8021	Volatile Organics	NELAP	7/1/2003
1,3-Dichloropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,4-Dichlorobenzene	EPA 601	Volatile Organics	NELAP	3/18/2004
1,4-Dichlorobenzene	EPA 602	Volatile Organics	NELAP	4/29/2004
1,4-Dichlorobenzene	EPA 624	Volatile Organics	NELAP	3/18/2004
1,4-Dichlorobenzene	EPA 625	Extractable Organics	NELAP	3/18/2004
1,4-Dichlorobenzene	EPA 8021	Volatile Organics	NELAP	3/18/2004

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Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87225-24, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87225

EPA Lab Code: OH00048

(330) 497-9396

E87225

TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,4-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,4-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,4-Dinitrobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8015	Volatile Organics	NELAP	7/1/2003
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8260	Volatile Organics	NELAP	7/1/2003
1,4-Naphthoquinone	EPA 8270	Extractable Organics	NELAP	7/1/2003
1,4-Phenylenediamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
1-Naphthylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,2-Dichloropropane	EPA 8021	Volatile Organics	NELAP	7/1/2003
2,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	7/1/2003
2,3,4,6-Tetrachlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4,5-T	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
2,4,5-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,4,6-Trichlorophenol	EPA 625	Extractable Organics	NELAP	3/18/2004
2,4,6-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
2,4-D	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	4/7/2008
2,4-DB	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
2,4-Dichlorophenol	EPA 625	Extractable Organics	NELAP	3/18/2004
2,4-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
2,4-Dimethylphenol	EPA 625	Extractable Organics	NELAP	3/18/2004
2,4-Dimethylphenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
2,4-Dinitrophenol	EPA 625	Extractable Organics	NELAP	3/18/2004
2,4-Dinitrophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
2,4-Dinitrotoluene (2,4-DNT)	EPA 625	Extractable Organics	NELAP	3/18/2004
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270	Extractable Organics	NELAP	3/18/2004
2,6-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	7/1/2003
2,6-Dinitrotoluene (2,6-DNT)	EPA 625	Extractable Organics	NELAP	3/18/2004
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270	Extractable Organics	NELAP	3/18/2004
2-Acetylaminofluorene	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260	Volatile Organics	NELAP	7/1/2003
2-Chloroethyl vinyl ether	EPA 601	Volatile Organics	NELAP	3/18/2004
2-Chloroethyl vinyl ether	EPA 624	Volatile Organics	NELAP	3/18/2004
2-Chloroethyl vinyl ether	EPA 8021	Volatile Organics	NELAP	3/18/2004
2-Chloroethyl vinyl ether	EPA 8260	Volatile Organics	NELAP	3/18/2004
2-Chloronaphthalene	EPA 625	Extractable Organics	NELAP	3/18/2004
2-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	3/18/2004

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Issue Date: 1/13/2009

Expiration Date: 6/30/2009

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Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87225-24, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87225

EPA Lab Code: OH00048

(330) 497-9396

E87225

TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
2-Chlorophenol	EPA 625	Extractable Organics	NELAP	3/18/2004
2-Chlorophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
2-Chlorotoluene	EPA 8021	Volatile Organics	NELAP	7/1/2003
2-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	7/1/2003
2-Hexanone	EPA 8260	Volatile Organics	NELAP	7/1/2003
2-Methyl-4,6-dinitrophenol	EPA 625	Extractable Organics	NELAP	3/18/2004
2-Methyl-4,6-dinitrophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
2-Methylnaphthalene	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Methylphenol (o-Cresol)	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Naphthylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Nitroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
2-Nitrophenol	EPA 625	Extractable Organics	NELAP	3/18/2004
2-Nitrophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
2-Picoline (2-Methylpyridine)	EPA 8270	Extractable Organics	NELAP	7/1/2003
3,3'-Dichlorobenzidine	EPA 625	Extractable Organics	NELAP	3/18/2004
3,3'-Dichlorobenzidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
3,3'-Dimethylbenzidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
3-Methylcholanthrene	EPA 8270	Extractable Organics	NELAP	7/1/2003
3-Methylphenol (m-Cresol)	EPA 8270	Extractable Organics	NELAP	7/1/2003
3-Nitroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
4,4'-DDD	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
4,4'-DDD	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
4,4'-DDE	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
4,4'-DDE	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
4,4'-DDT	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
4,4'-DDT	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
4,4'-Methylenebis(2-chloroaniline)	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Aminobiphenyl	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Bromophenyl phenyl ether	EPA 625	Extractable Organics	NELAP	3/18/2004
4-Bromophenyl phenyl ether	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Chloro-3-methylphenol	EPA 625	Extractable Organics	NELAP	3/18/2004
4-Chloro-3-methylphenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
4-Chloroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Chlorophenyl phenylether	EPA 625	Extractable Organics	NELAP	3/18/2004
4-Chlorophenyl phenylether	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Chlorotoluene	EPA 8021	Volatile Organics	NELAP	7/1/2003

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Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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Attachment to Certificate #: E87225-24, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87225

EPA Lab Code: OH00048

(330) 497-9396

E87225

TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
4-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	7/1/2003
4-Dimethyl aminoazobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Methyl-2-pentanone (MIBK)	EPA 8260	Volatile Organics	NELAP	7/1/2003
4-Methylphenol (p-Cresol)	EPA 625	Extractable Organics	NELAP	4/30/2008
4-Methylphenol (p-Cresol)	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Methylphenol (p-Cresol)	NC-CORP-MS-0001	Extractable Organics	NELAP	4/9/2003
4-Nitroaniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
4-Nitrophenol	EPA 625	Extractable Organics	NELAP	3/18/2004
4-Nitrophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
5-Nitro-o-toluidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
7,12-Dimethylbenz(a) anthracene	EPA 8270	Extractable Organics	NELAP	7/1/2003
a-a-Dimethylphenethylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
Acenaphthene	EPA 625	Extractable Organics	NELAP	3/18/2004
Acenaphthene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Acenaphthylene	EPA 625	Extractable Organics	NELAP	3/18/2004
Acenaphthylene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Acetone	EPA 8260	Volatile Organics	NELAP	7/1/2003
Acetonitrile	EPA 8260	Volatile Organics	NELAP	7/1/2003
Acetophenone	EPA 625	Extractable Organics	NELAP	4/30/2008
Acetophenone	EPA 8270	Extractable Organics	NELAP	7/1/2003
Acetophenone	NC-CORP-MS-0001	Extractable Organics	NELAP	4/9/2003
Acrolein (Propenal)	EPA 624	Volatile Organics	NELAP	3/18/2004
Acrolein (Propenal)	EPA 8260	Volatile Organics	NELAP	3/18/2004
Acrylonitrile	EPA 624	Volatile Organics	NELAP	3/18/2004
Acrylonitrile	EPA 8260	Volatile Organics	NELAP	3/18/2004
Aldrin	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Aldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Alkalinity as CaCO3	EPA 310.1	General Chemistry	NELAP	4/29/2004
Alkalinity as CaCO3	SM 2320 B	General Chemistry	NELAP	10/7/2002
Allyl chloride (3-Chloropropene)	EPA 8260	Volatile Organics	NELAP	7/1/2003
alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
alpha-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Aluminum	EPA 200.7	Metals	NELAP	3/18/2004
Aluminum	EPA 200.8	Metals	NELAP	3/18/2004
Aluminum	EPA 6010	Metals	NELAP	7/1/2003

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State Surgeon General

Laboratory Scope of Accreditation

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State Laboratory ID: E87225

EPA Lab Code: OH00048

(330) 497-9396

E87225

TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Aluminum	EPA 6020	Metals	NELAP	7/1/2003
Amenable cyanide	EPA 9012	General Chemistry	NELAP	7/1/2003
Amenable cyanide	SM 4500 CN-G	General Chemistry	NELAP	4/30/2008
Amenable cyanide	SM 4500-CN G	General Chemistry	NELAP	4/30/2008
Ammonia as N	EPA 350.2	General Chemistry	NELAP	4/29/2004
Ammonia as N	EPA 350.3	General Chemistry	NELAP	4/29/2004
Ammonia as N	SM 4500-NH3 E (18th Ed.)/TITR	General Chemistry	NELAP	11/13/2007
Ammonia as N	SM 4500-NH3 F	General Chemistry	NELAP	4/30/2008
Aniline	EPA 625	Extractable Organics	NELAP	4/30/2008
Aniline	EPA 8270	Extractable Organics	NELAP	7/1/2003
Aniline	NC-CORP-MS-0001	Extractable Organics	NELAP	4/9/2003
Anthracene	EPA 625	Extractable Organics	NELAP	3/18/2004
Anthracene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Antimony	EPA 200.7	Metals	NELAP	3/18/2004
Antimony	EPA 200.8	Metals	NELAP	3/18/2004
Antimony	EPA 6010	Metals	NELAP	4/29/2004
Antimony	EPA 6020	Metals	NELAP	4/29/2004
Aramite	EPA 8270	Extractable Organics	NELAP	7/1/2003
Aroclor-1016 (PCB-1016)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Aroclor-1016 (PCB-1016)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Aroclor-1221 (PCB-1221)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	5/15/2004
Aroclor-1221 (PCB-1221)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	5/15/2004
Aroclor-1232 (PCB-1232)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Aroclor-1232 (PCB-1232)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Aroclor-1242 (PCB-1242)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Aroclor-1242 (PCB-1242)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Aroclor-1248 (PCB-1248)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Aroclor-1248 (PCB-1248)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Aroclor-1254 (PCB-1254)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Aroclor-1254 (PCB-1254)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Aroclor-1260 (PCB-1260)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Aroclor-1260 (PCB-1260)	EPA 8082	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Arsenic	EPA 200.7	Metals	NELAP	3/18/2004
Arsenic	EPA 200.8	Metals	NELAP	5/15/2007
Arsenic	EPA 6010	Metals	NELAP	4/29/2004
Arsenic	EPA 6020	Metals	NELAP	5/15/2007

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Issue Date: 1/13/2009

Expiration Date: 6/30/2009

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Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

Laboratory Scope of Accreditation

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State Laboratory ID: E87225

EPA Lab Code: OH00048

(330) 497-9396

E87225

TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Barium	EPA 200.7	Metals	NELAP	3/18/2004
Barium	EPA 200.8	Metals	NELAP	3/18/2004
Barium	EPA 6010	Metals	NELAP	4/29/2004
Barium	EPA 6020	Metals	NELAP	4/29/2004
Benzene	EPA 602	Volatile Organics	NELAP	3/18/2004
Benzene	EPA 624	Volatile Organics	NELAP	3/18/2004
Benzene	EPA 8021	Volatile Organics	NELAP	3/18/2004
Benzene	EPA 8260	Volatile Organics	NELAP	3/18/2004
Benzidine	EPA 625	Extractable Organics	NELAP	3/18/2004
Benzidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzo(a)anthracene	EPA 625	Extractable Organics	NELAP	3/18/2004
Benzo(a)anthracene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Benzo(a)pyrene	EPA 625	Extractable Organics	NELAP	3/18/2004
Benzo(a)pyrene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Benzo(b)fluoranthene	EPA 625	Extractable Organics	NELAP	3/18/2004
Benzo(b)fluoranthene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Benzo(g,h,i)perylene	EPA 625	Extractable Organics	NELAP	3/18/2004
Benzo(g,h,i)perylene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Benzo(k)fluoranthene	EPA 625	Extractable Organics	NELAP	3/18/2004
Benzo(k)fluoranthene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzoic acid	EPA 8270	Extractable Organics	NELAP	7/1/2003
Benzoic acid	NC-CORP-MS-0001	Extractable Organics	NELAP	4/9/2003
Benzoic acid	NC-MS-0003/GC-MS	Extractable Organics	NELAP	4/30/2008
Benzyl alcohol	EPA 8270	Extractable Organics	NELAP	7/1/2003
Beryllium	EPA 200.7	Metals	NELAP	3/18/2004
Beryllium	EPA 200.8	Metals	NELAP	3/18/2004
Beryllium	EPA 6010	Metals	NELAP	7/1/2003
Beryllium	EPA 6020	Metals	NELAP	7/1/2003
beta-BHC (beta-Hexachlorocyclohexane)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
beta-BHC (beta-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Biochemical oxygen demand	EPA 405.1	General Chemistry	NELAP	4/29/2004
Biochemical oxygen demand	SM 5210 B	General Chemistry	NELAP	11/13/2007
bis(2-Chloroethoxy)methane	EPA 625	Extractable Organics	NELAP	3/18/2004
bis(2-Chloroethoxy)methane	EPA 8270	Extractable Organics	NELAP	3/18/2004
bis(2-Chloroethyl) ether	EPA 625	Extractable Organics	NELAP	3/18/2004
bis(2-Chloroethyl) ether	EPA 8270	Extractable Organics	NELAP	7/1/2003

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Issue Date: 1/13/2009

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

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Attachment to Certificate #: E87225-24, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87225

EPA Lab Code: OH00048

(330) 497-9396

E87225

TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
bis(2-Chloroisopropyl) ether (2,2'-Oxybis(1-chloropropane))	EPA 625	Extractable Organics	NELAP	3/18/2004
bis(2-Chloroisopropyl) ether (2,2'-Oxybis(1-chloropropane))	EPA 8270	Extractable Organics	NELAP	3/18/2004
bis(2-Ethylhexyl) phthalate (DEHP)	EPA 625	Extractable Organics	NELAP	3/18/2004
bis(2-Ethylhexyl) phthalate (DEHP)	EPA 8270	Extractable Organics	NELAP	3/18/2004
Boron	EPA 200.7	Metals	NELAP	10/7/2002
Boron	EPA 6010	Metals	NELAP	7/1/2003
Boron	EPA 6020	Metals	NELAP	8/3/2005
Bromide	EPA 300.0	General Chemistry	NELAP	10/7/2002
Bromide	EPA 9056	General Chemistry	NELAP	7/1/2003
Bromobenzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
Bromobenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Bromochloromethane	EPA 8021	Volatile Organics	NELAP	7/1/2003
Bromochloromethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Bromodichloromethane	EPA 601	Volatile Organics	NELAP	3/18/2004
Bromodichloromethane	EPA 624	Volatile Organics	NELAP	3/18/2004
Bromodichloromethane	EPA 8021	Volatile Organics	NELAP	3/18/2004
Bromodichloromethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
Bromoform	EPA 601	Volatile Organics	NELAP	3/18/2004
Bromoform	EPA 624	Volatile Organics	NELAP	3/18/2004
Bromoform	EPA 8021	Volatile Organics	NELAP	3/18/2004
Bromoform	EPA 8260	Volatile Organics	NELAP	3/18/2004
Butyl benzyl phthalate	EPA 625	Extractable Organics	NELAP	3/18/2004
Butyl benzyl phthalate	EPA 8270	Extractable Organics	NELAP	3/18/2004
Cadmium	EPA 200.7	Metals	NELAP	3/18/2004
Cadmium	EPA 200.8	Metals	NELAP	3/18/2004
Cadmium	EPA 6010	Metals	NELAP	4/29/2004
Cadmium	EPA 6020	Metals	NELAP	4/29/2004
Calcium	EPA 200.7	Metals	NELAP	5/15/2004
Calcium	EPA 6010	Metals	NELAP	7/1/2003
Calcium	EPA 6020	Metals	NELAP	8/3/2005
Carbazole	EPA 625	Extractable Organics	NELAP	4/30/2008
Carbazole	EPA 8270	Extractable Organics	NELAP	7/1/2003
Carbazole	NC-CORP-MS-0001	Extractable Organics	NELAP	4/9/2003
Carbon disulfide	EPA 8260	Volatile Organics	NELAP	7/1/2003
Carbon tetrachloride	EPA 601	Volatile Organics	NELAP	6/16/2004

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TestAmerica - North Canton
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Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Carbon tetrachloride	EPA 624	Volatile Organics	NELAP	3/18/2004
Carbon tetrachloride	EPA 8021	Volatile Organics	NELAP	6/16/2004
Carbon tetrachloride	EPA 8260	Volatile Organics	NELAP	3/18/2004
Carbonaceous BOD (CBOD)	SM 5210 B	General Chemistry	NELAP	10/7/2002
Chemical oxygen demand	EPA 410.4	General Chemistry	NELAP	4/29/2004
Chemical oxygen demand	SM 5220 D	General Chemistry	NELAP	4/30/2008
Chlordane (tech.)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Chlordane (tech.)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Chloride	EPA 300.0	General Chemistry	NELAP	4/29/2004
Chloride	EPA 325.2	General Chemistry	NELAP	4/29/2004
Chloride	EPA 9056	General Chemistry	NELAP	7/1/2003
Chloride	EPA 9251	General Chemistry	NELAP	7/1/2003
Chloride	SM 4500-Cl E	General Chemistry	NELAP	11/13/2007
Chlorobenzene	EPA 601	Volatile Organics	NELAP	3/18/2004
Chlorobenzene	EPA 602	Volatile Organics	NELAP	4/29/2004
Chlorobenzene	EPA 624	Volatile Organics	NELAP	3/18/2004
Chlorobenzene	EPA 8021	Volatile Organics	NELAP	6/16/2004
Chlorobenzene	EPA 8260	Volatile Organics	NELAP	3/18/2004
Chlorobenzilate	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Chlorobenzilate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Chloroethane	EPA 601	Volatile Organics	NELAP	3/18/2004
Chloroethane	EPA 624	Volatile Organics	NELAP	3/18/2004
Chloroethane	EPA 8021	Volatile Organics	NELAP	3/18/2004
Chloroethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
Chloroform	EPA 601	Volatile Organics	NELAP	3/18/2004
Chloroform	EPA 624	Volatile Organics	NELAP	3/18/2004
Chloroform	EPA 8021	Volatile Organics	NELAP	3/18/2004
Chloroform	EPA 8260	Volatile Organics	NELAP	3/18/2004
Chloroprene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Chromium	EPA 200.7	Metals	NELAP	3/18/2004
Chromium	EPA 200.8	Metals	NELAP	3/18/2004
Chromium	EPA 6010	Metals	NELAP	4/29/2004
Chromium	EPA 6020	Metals	NELAP	4/29/2004
Chromium VI	EPA 7196	General Chemistry	NELAP	4/29/2004
Chromium VI	SM 3500-Cr D (18th/19th Ed.)/UV-VIS	General Chemistry	NELAP	4/29/2004
Chrysene	EPA 625	Extractable Organics	NELAP	3/18/2004

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4101 Shuffel Drive NW
North Canton, OH 44720-6961
Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Chrysene	EPA 8270	Extractable Organics	NELAP	3/18/2004
cis-1,2-Dichloroethylene	EPA 8021	Volatile Organics	NELAP	7/1/2003
cis-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	7/1/2003
cis-1,3-Dichloropropene	EPA 601	Volatile Organics	NELAP	3/18/2004
cis-1,3-Dichloropropene	EPA 624	Volatile Organics	NELAP	3/18/2004
cis-1,3-Dichloropropene	EPA 8021	Volatile Organics	NELAP	3/18/2004
cis-1,3-Dichloropropene	EPA 8260	Volatile Organics	NELAP	3/18/2004
Cobalt	EPA 200.7	Metals	NELAP	3/18/2004
Cobalt	EPA 200.8	Metals	NELAP	3/18/2004
Cobalt	EPA 6010	Metals	NELAP	7/1/2003
Cobalt	EPA 6020	Metals	NELAP	7/1/2003
Conductivity	EPA 120.1	General Chemistry	NELAP	4/29/2004
Conductivity	EPA 9050	General Chemistry	NELAP	7/1/2003
Conductivity	SM 2510 B	General Chemistry	NELAP	11/13/2007
Copper	EPA 200.7	Metals	NELAP	3/18/2004
Copper	EPA 200.8	Metals	NELAP	3/18/2004
Copper	EPA 6010	Metals	NELAP	7/1/2003
Copper	EPA 6020	Metals	NELAP	4/30/2008
Cyanide	SM 4500-CN E	General Chemistry	NELAP	8/31/2002
Dalapon	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
delta-BHC	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
delta-BHC	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Diallate	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Diallate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Dibenz(a,h) anthracene	EPA 625	Extractable Organics	NELAP	3/18/2004
Dibenz(a,h) anthracene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Dibenzofuran	EPA 8270	Extractable Organics	NELAP	7/1/2003
Dibromochloromethane	EPA 601	Volatile Organics	NELAP	3/18/2004
Dibromochloromethane	EPA 624	Volatile Organics	NELAP	3/18/2004
Dibromochloromethane	EPA 8021	Volatile Organics	NELAP	3/18/2004
Dibromochloromethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
Dibromomethane	EPA 8021	Volatile Organics	NELAP	7/1/2003
Dibromomethane	EPA 8260	Volatile Organics	NELAP	7/1/2003
Dicamba	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Dichlorodifluoromethane	EPA 601	Volatile Organics	NELAP	3/18/2004
Dichlorodifluoromethane	EPA 8021	Volatile Organics	NELAP	3/18/2004

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E87225

TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Dichlorodifluoromethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
Dichloroprop (Dichloroprop)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Dieldrin	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Dieldrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Diesel range organics (DRO)	EPA 8015	Extractable Organics	NELAP	7/1/2003
Diethyl phthalate	EPA 625	Extractable Organics	NELAP	3/18/2004
Diethyl phthalate	EPA 8270	Extractable Organics	NELAP	3/18/2004
Dimethoate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Dimethyl phthalate	EPA 625	Extractable Organics	NELAP	3/18/2004
Dimethyl phthalate	EPA 8270	Extractable Organics	NELAP	3/18/2004
Di-n-butyl phthalate	EPA 625	Extractable Organics	NELAP	3/18/2004
Di-n-butyl phthalate	EPA 8270	Extractable Organics	NELAP	3/18/2004
Di-n-octyl phthalate	EPA 625	Extractable Organics	NELAP	3/18/2004
Di-n-octyl phthalate	EPA 8270	Extractable Organics	NELAP	3/18/2004
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8270	Extractable Organics	NELAP	7/1/2003
Diphenylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
Disulfoton	EPA 8270	Extractable Organics	NELAP	7/1/2003
Endosulfan I	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Endosulfan I	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Endosulfan II	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Endosulfan II	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Endosulfan sulfate	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Endosulfan sulfate	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Endrin	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Endrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Endrin aldehyde	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Endrin aldehyde	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Endrin ketone	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Ethane	RSK-175	Volatile Organics	NELAP	4/30/2008
Ethyl methacrylate	EPA 8260	Volatile Organics	NELAP	7/1/2003
Ethyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Ethylbenzene	EPA 602	Volatile Organics	NELAP	3/18/2004
Ethylbenzene	EPA 624	Volatile Organics	NELAP	3/18/2004
Ethylbenzene	EPA 8021	Volatile Organics	NELAP	3/18/2004
Ethylbenzene	EPA 8260	Volatile Organics	NELAP	3/18/2004

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State Surgeon General

Laboratory Scope of Accreditation

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State Laboratory ID: E87225

EPA Lab Code: OH00048

(330) 497-9396

E87225

TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Ethylene	RSK-175	Volatile Organics	NELAP	4/30/2008
Ethylene oxide	EPA 8015	Volatile Organics	NELAP	7/1/2003
Famphur	EPA 8270	Extractable Organics	NELAP	7/1/2003
Fluoranthene	EPA 625	Extractable Organics	NELAP	3/18/2004
Fluoranthene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Fluorene	EPA 625	Extractable Organics	NELAP	3/18/2004
Fluorene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Fluoride	EPA 300.0	General Chemistry	NELAP	10/7/2002
Fluoride	EPA 9056	General Chemistry	NELAP	7/1/2003
Formaldehyde	EPA 8315	Extractable Organics	NELAP	10/20/2008
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
gamma-Chlordane	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Gasoline range organics (GRO)	EPA 8015	Extractable Organics	NELAP	7/1/2003
Hardness	EPA 130.2	General Chemistry	NELAP	4/29/2004
Hardness	SM 2340 B	General Chemistry	NELAP	11/13/2007
Hardness	SM 2340 C	General Chemistry	NELAP	11/13/2007
Heptachlor	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Heptachlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Heptachlor epoxide	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Heptachlor epoxide	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Hexachlorobenzene	EPA 625	Extractable Organics	NELAP	3/18/2004
Hexachlorobenzene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Hexachlorobutadiene	EPA 625	Extractable Organics	NELAP	3/18/2004
Hexachlorobutadiene	EPA 8021	Volatile Organics	NELAP	7/1/2003
Hexachlorobutadiene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Hexachlorobutadiene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Hexachlorocyclopentadiene	EPA 625	Extractable Organics	NELAP	3/18/2004
Hexachlorocyclopentadiene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Hexachloroethane	EPA 625	Extractable Organics	NELAP	3/18/2004
Hexachloroethane	EPA 8270	Extractable Organics	NELAP	3/18/2004
Hexachloropropene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Ignitability	EPA 1010	General Chemistry	NELAP	7/1/2003
Indeno(1,2,3-cd)pyrene	EPA 625	Extractable Organics	NELAP	3/18/2004
Indeno(1,2,3-cd)pyrene	EPA 8270	Extractable Organics	NELAP	3/18/2004

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TestAmerica - North Canton
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Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Iodomethane (Methyl iodide)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Iron	EPA 200.7	Metals	NELAP	3/18/2004
Iron	EPA 6010	Metals	NELAP	7/1/2003
Iron	EPA 6020	Metals	NELAP	5/15/2007
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8015	Volatile Organics	NELAP	7/1/2003
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Isodrin	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Isophorone	EPA 625	Extractable Organics	NELAP	3/18/2004
Isophorone	EPA 8270	Extractable Organics	NELAP	3/18/2004
Isopropylbenzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
Isopropylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Isosafrole	EPA 8270	Extractable Organics	NELAP	7/1/2003
Kepone	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Kjeldahl nitrogen - total	EPA 351.3	General Chemistry	NELAP	4/29/2004
Kjeldahl nitrogen - total	SM 4500-NH3 E (18th Ed.)/TITR	General Chemistry	NELAP	4/30/2008
Lead	EPA 200.7	Metals	NELAP	3/18/2004
Lead	EPA 200.8	Metals	NELAP	3/18/2004
Lead	EPA 6010	Metals	NELAP	4/29/2004
Lead	EPA 6020	Metals	NELAP	4/29/2004
Magnesium	EPA 200.7	Metals	NELAP	5/15/2004
Magnesium	EPA 6010	Metals	NELAP	7/1/2003
Magnesium	EPA 6020	Metals	NELAP	8/3/2005
Manganese	EPA 200.7	Metals	NELAP	3/18/2004
Manganese	EPA 200.8	Metals	NELAP	3/18/2004
Manganese	EPA 6010	Metals	NELAP	7/1/2003
Manganese	EPA 6020	Metals	NELAP	7/1/2003
MCPA	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
MCPP	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Mercury	EPA 1631	Metals	NELAP	3/18/2004
Mercury	EPA 245.1	Metals	NELAP	3/18/2004
Mercury	EPA 7470	Metals	NELAP	3/18/2004
Methacrylonitrile	EPA 8260	Volatile Organics	NELAP	7/1/2003
Methane	RSK-175	Volatile Organics	NELAP	4/30/2008
Methapyrilene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Methoxychlor	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	4/29/2004
Methyl bromide (Bromomethane)	EPA 601	Volatile Organics	NELAP	3/18/2004

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TestAmerica - North Canton
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North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Methyl bromide (Bromomethane)	EPA 624	Volatile Organics	NELAP	3/18/2004
Methyl bromide (Bromomethane)	EPA 8021	Volatile Organics	NELAP	3/18/2004
Methyl bromide (Bromomethane)	EPA 8260	Volatile Organics	NELAP	3/18/2004
Methyl chloride (Chloromethane)	EPA 601	Volatile Organics	NELAP	3/18/2004
Methyl chloride (Chloromethane)	EPA 624	Volatile Organics	NELAP	3/18/2004
Methyl chloride (Chloromethane)	EPA 8021	Volatile Organics	NELAP	3/18/2004
Methyl chloride (Chloromethane)	EPA 8260	Volatile Organics	NELAP	3/18/2004
Methyl methacrylate	EPA 8260	Volatile Organics	NELAP	7/1/2003
Methyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	7/1/2003
Methyl tert-butyl ether (MTBE)	EPA 8021	Volatile Organics	NELAP	7/1/2003
Methyl tert-butyl ether (MTBE)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Methylene chloride	EPA 601	Volatile Organics	NELAP	3/18/2004
Methylene chloride	EPA 624	Volatile Organics	NELAP	3/18/2004
Methylene chloride	EPA 8021	Volatile Organics	NELAP	3/18/2004
Methylene chloride	EPA 8260	Volatile Organics	NELAP	3/18/2004
Molybdenum	EPA 200.7	Metals	NELAP	3/18/2004
Molybdenum	EPA 200.8	Metals	NELAP	10/7/2002
Molybdenum	EPA 6010	Metals	NELAP	7/1/2003
Molybdenum	EPA 6020	Metals	NELAP	7/1/2003
Naphthalene	EPA 625	Extractable Organics	NELAP	3/18/2004
Naphthalene	EPA 8021	Volatile Organics	NELAP	7/1/2003
Naphthalene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Naphthalene	EPA 8270	Extractable Organics	NELAP	3/18/2004
n-Butylbenzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
n-Butylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Nickel	EPA 200.7	Metals	NELAP	3/18/2004
Nickel	EPA 200.8	Metals	NELAP	3/18/2004
Nickel	EPA 6010	Metals	NELAP	4/29/2004
Nickel	EPA 6020	Metals	NELAP	4/29/2004
Nitrate	EPA 300.0	General Chemistry	NELAP	4/29/2004
Nitrate	EPA 9056	General Chemistry	NELAP	7/1/2003
Nitrate as N	EPA 353.2	General Chemistry	NELAP	10/7/2002
Nitrate-nitrite	EPA 353.2	General Chemistry	NELAP	10/7/2002
Nitrate-nitrite	SM 4500-NO3 E	General Chemistry	NELAP	11/13/2007
Nitrite	EPA 300.0	General Chemistry	NELAP	4/29/2004
Nitrite	EPA 9056	General Chemistry	NELAP	7/1/2003

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Issue Date: 1/13/2009

Expiration Date: 6/30/2009

Charlie Crist
Governor



Ana M. Viamonte Ros, M.D., M.P.H.
State Surgeon General

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Attachment to Certificate #: E87225-24, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87225

EPA Lab Code: OH00048

(330) 497-9396

E87225

TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Nitrite as N	EPA 353.2	General Chemistry	NELAP	10/7/2002
Nitrobenzene	EPA 625	Extractable Organics	NELAP	3/18/2004
Nitrobenzene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Nitroquinoline-1-oxide	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosodiethylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosodimethylamine	EPA 625	Extractable Organics	NELAP	3/18/2004
n-Nitrosodimethylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitroso-di-n-butylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosodi-n-propylamine	EPA 625	Extractable Organics	NELAP	3/18/2004
n-Nitrosodi-n-propylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosodiphenylamine	EPA 625	Extractable Organics	NELAP	3/18/2004
n-Nitrosodiphenylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosomethylethylamine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosomorpholine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosopiperidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Nitrosopyrrolidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
n-Propylbenzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
n-Propylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
o,o,o-Triethyl phosphorothioate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Oil & Grease	EPA 1664	General Chemistry	NELAP	12/5/2006
Organic nitrogen	EPA 351.3 - EPA 350.2	General Chemistry	NELAP	10/7/2002
Orthophosphate as P	EPA 300.0	General Chemistry	NELAP	10/7/2002
Orthophosphate as P	EPA 365.1	General Chemistry	NELAP	8/3/2005
Orthophosphate as P	EPA 365.2	General Chemistry	NELAP	10/7/2002
Orthophosphate as P	EPA 9056	General Chemistry	NELAP	7/1/2003
Orthophosphate as P	SM 4500-P E	General Chemistry	NELAP	11/13/2007
o-Toluidine	EPA 8270	Extractable Organics	NELAP	7/1/2003
Pentachlorobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Pentachloronitrobenzene	EPA 8270	Extractable Organics	NELAP	7/1/2003
Pentachlorophenol	EPA 625	Extractable Organics	NELAP	3/18/2004
Pentachlorophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
pH	EPA 150.1	General Chemistry	NELAP	10/7/2002
pH	EPA 9040	General Chemistry	NELAP	4/29/2004
pH	SM 4500-H+-B	General Chemistry	NELAP	11/13/2007
Phenacetin	EPA 8270	Extractable Organics	NELAP	7/1/2003
Phenanthrene	EPA 625	Extractable Organics	NELAP	3/18/2004

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State Laboratory ID: E87225

EPA Lab Code: OH00048

(330) 497-9396

E87225

TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Phenanthrene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Phenol	EPA 625	Extractable Organics	NELAP	3/18/2004
Phenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
Phorate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	7/1/2003
Phosphorus, total	EPA 365.1	General Chemistry	NELAP	8/3/2005
Phosphorus, total	EPA 365.2	General Chemistry	NELAP	10/7/2002
Phosphorus, total	SM 4500-P E	General Chemistry	NELAP	11/13/2007
p-Isopropyltoluene	EPA 8021	Volatile Organics	NELAP	7/1/2003
p-Isopropyltoluene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Potassium	EPA 200.7	Metals	NELAP	5/15/2004
Potassium	EPA 6010	Metals	NELAP	7/1/2003
Pronamide (Kerb)	EPA 8270	Extractable Organics	NELAP	7/1/2003
Propionitrile (Ethyl cyanide)	EPA 8260	Volatile Organics	NELAP	7/1/2003
Pyrene	EPA 625	Extractable Organics	NELAP	3/18/2004
Pyrene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Pyridine	EPA 8270	Extractable Organics	NELAP	7/1/2003
Residue-filterable (TDS)	EPA 160.1	General Chemistry	NELAP	4/29/2004
Residue-filterable (TDS)	SM 2540 C	General Chemistry	NELAP	11/13/2007
Residue-nonfilterable (TSS)	EPA 160.2	General Chemistry	NELAP	4/29/2004
Residue-nonfilterable (TSS)	SM 2540 D	General Chemistry	NELAP	11/13/2007
Residue-total	EPA 160.3	General Chemistry	NELAP	4/29/2004
Residue-total	SM 2540 B	General Chemistry	NELAP	11/13/2007
Residue-volatile	EPA 160.4	General Chemistry	NELAP	10/7/2002
Safrole	EPA 8270	Extractable Organics	NELAP	7/1/2003
sec-Butylbenzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
sec-Butylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Selenium	EPA 200.7	Metals	NELAP	3/18/2004
Selenium	EPA 200.8	Metals	NELAP	5/15/2007
Selenium	EPA 6010	Metals	NELAP	4/29/2004
Selenium	EPA 6020	Metals	NELAP	5/15/2007
Silver	EPA 200.7	Metals	NELAP	3/18/2004
Silver	EPA 200.8	Metals	NELAP	3/18/2004
Silver	EPA 6010	Metals	NELAP	4/29/2004
Silver	EPA 6020	Metals	NELAP	4/29/2004
Silvex (2,4,5-TP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Sodium	EPA 200.7	Metals	NELAP	5/15/2004

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EPA Lab Code: OH00048

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TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Sodium	EPA 6010	Metals	NELAP	7/1/2003
Sodium	EPA 6020	Metals	NELAP	8/3/2005
Strontium	EPA 6020	Metals	NELAP	8/3/2005
Styrene	EPA 8021	Volatile Organics	NELAP	7/1/2003
Styrene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Sulfate	EPA 300.0	General Chemistry	NELAP	10/7/2002
Sulfate	EPA 375.4	General Chemistry	NELAP	4/29/2004
Sulfate	EPA 9056	General Chemistry	NELAP	7/1/2003
Sulfide	EPA 376.1	General Chemistry	NELAP	4/29/2004
Sulfide	EPA 9030/9034	General Chemistry	NELAP	4/29/2004
Sulfide	SM 4500-S E (18th Ed.)/TITR	General Chemistry	NELAP	1/9/2008
Sulfotep	EPA 8270	Extractable Organics	NELAP	7/1/2003
tert-Butylbenzene	EPA 8021	Volatile Organics	NELAP	7/1/2003
tert-Butylbenzene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Tetrachloroethylene (Perchloroethylene)	EPA 601	Volatile Organics	NELAP	3/18/2004
Tetrachloroethylene (Perchloroethylene)	EPA 624	Volatile Organics	NELAP	3/18/2004
Tetrachloroethylene (Perchloroethylene)	EPA 8021	Volatile Organics	NELAP	3/18/2004
Tetrachloroethylene (Perchloroethylene)	EPA 8260	Volatile Organics	NELAP	3/18/2004
Thallium	EPA 200.7	Metals	NELAP	3/18/2004
Thallium	EPA 200.8	Metals	NELAP	3/18/2004
Thallium	EPA 6010	Metals	NELAP	7/1/2003
Thallium	EPA 6020	Metals	NELAP	7/1/2003
Thionazin (Zinophos)	EPA 8270	Extractable Organics	NELAP	7/1/2003
Tin	EPA 200.7	Metals	NELAP	3/18/2004
Tin	EPA 200.8	Metals	NELAP	10/7/2002
Tin	EPA 6010	Metals	NELAP	7/1/2003
Tin	EPA 6020	Metals	NELAP	8/3/2005
Titanium	EPA 200.7	Metals	NELAP	5/15/2004
Titanium	EPA 6010	Metals	NELAP	7/1/2003
Titanium	EPA 6020	Metals	NELAP	8/3/2005
Toluene	EPA 602	Volatile Organics	NELAP	3/18/2004
Toluene	EPA 624	Volatile Organics	NELAP	3/18/2004
Toluene	EPA 8021	Volatile Organics	NELAP	3/18/2004
Toluene	EPA 8260	Volatile Organics	NELAP	3/18/2004
Total cyanide	EPA 335.4	General Chemistry	NELAP	10/7/2002
Total cyanide	EPA 9012	General Chemistry	NELAP	4/29/2004

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TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Total nitrate-nitrite	EPA 9056	General Chemistry	NELAP	7/1/2003
Total organic carbon	EPA 415.1	General Chemistry	NELAP	10/7/2002
Total organic carbon	EPA 9060	General Chemistry	NELAP	7/1/2003
Total organic carbon	SM 5310C	General Chemistry	NELAP	4/30/2008
Total Petroleum Hydrocarbons (TPH)	EPA 1664	General Chemistry	NELAP	4/29/2004
Total phenolics	EPA 420.1	General Chemistry	NELAP	4/29/2004
Total phenolics	EPA 9065	General Chemistry	NELAP	7/1/2003
Toxaphene (Chlorinated camphene)	EPA 608	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Toxaphene (Chlorinated camphene)	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
trans-1,2-Dichloroethylene	EPA 601	Volatile Organics	NELAP	10/7/2002
trans-1,2-Dichloroethylene	EPA 624	Volatile Organics	NELAP	10/7/2002
trans-1,2-Dichloroethylene	EPA 8021	Volatile Organics	NELAP	7/1/2003
trans-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	7/1/2003
trans-1,3-Dichloropropylene	EPA 601	Volatile Organics	NELAP	9/1/2004
trans-1,3-Dichloropropylene	EPA 624	Volatile Organics	NELAP	3/18/2004
trans-1,3-Dichloropropylene	EPA 8021	Volatile Organics	NELAP	9/1/2004
trans-1,3-Dichloropropylene	EPA 8260	Volatile Organics	NELAP	3/18/2004
trans-1,4-Dichloro-2-butene	EPA 8260	Volatile Organics	NELAP	7/1/2003
Trichloroethene (Trichloroethylene)	EPA 601	Volatile Organics	NELAP	3/18/2004
Trichloroethene (Trichloroethylene)	EPA 624	Volatile Organics	NELAP	3/18/2004
Trichloroethene (Trichloroethylene)	EPA 8021	Volatile Organics	NELAP	3/18/2004
Trichloroethene (Trichloroethylene)	EPA 8260	Volatile Organics	NELAP	3/18/2004
Trichlorofluoromethane	EPA 601	Volatile Organics	NELAP	3/18/2004
Trichlorofluoromethane	EPA 624	Volatile Organics	NELAP	3/18/2004
Trichlorofluoromethane	EPA 8021	Volatile Organics	NELAP	3/18/2004
Trichlorofluoromethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
Turbidity	EPA 180.1	General Chemistry	NELAP	10/7/2002
Vanadium	EPA 200.7	Metals	NELAP	3/18/2004
Vanadium	EPA 200.8	Metals	NELAP	5/15/2007
Vanadium	EPA 6010	Metals	NELAP	7/1/2003
Vanadium	EPA 6020	Metals	NELAP	5/15/2007
Vinyl acetate	EPA 8260	Volatile Organics	NELAP	7/1/2003
Vinyl chloride	EPA 601	Volatile Organics	NELAP	3/18/2004
Vinyl chloride	EPA 624	Volatile Organics	NELAP	3/18/2004
Vinyl chloride	EPA 8021	Volatile Organics	NELAP	3/18/2004
Vinyl chloride	EPA 8260	Volatile Organics	NELAP	6/16/2004

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State Surgeon General

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TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Non-Potable Water

Analyte	Method/Tech	Category	Certification Type	Effective Date
Xylene (total)	EPA 602	Volatile Organics	NELAP	10/7/2002
Xylene (total)	EPA 624	Volatile Organics	NELAP	9/1/2004
Xylene (total)	EPA 8021	Volatile Organics	NELAP	3/18/2004
Xylene (total)	EPA 8260	Volatile Organics	NELAP	9/1/2004
Zinc	EPA 200.7	Metals	NELAP	3/18/2004
Zinc	EPA 200.8	Metals	NELAP	5/15/2007
Zinc	EPA 6010	Metals	NELAP	7/1/2003
Zinc	EPA 6020	Metals	NELAP	5/15/2007

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E87225

TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
1,1,1,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	10/7/2002
1,1,1-Trichloroethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,1,2,2-Tetrachloroethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,1,2-Trichloroethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,1-Dichloroethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,1-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,1-Dichloropropene	EPA 8260	Volatile Organics	NELAP	10/7/2002
1,2,3-Trichloropropane	EPA 8260	Volatile Organics	NELAP	10/7/2002
1,2,4,5-Tetrachlorobenzene	EPA 8270	Extractable Organics	NELAP	10/7/2002
1,2,4-Trichlorobenzene	EPA 8260	Volatile Organics	NELAP	10/7/2002
1,2,4-Trichlorobenzene	EPA 8270	Extractable Organics	NELAP	3/18/2004
1,2,4-Trimethylbenzene	EPA 8021	Volatile Organics	NELAP	10/7/2002
1,2,4-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	10/7/2002
1,2-Dibromo-3-chloropropane (DBCP)	EPA 8260	Volatile Organics	NELAP	10/7/2002
1,2-Dibromoethane (EDB, Ethylene dibromide)	EPA 8260	Volatile Organics	NELAP	10/7/2002
1,2-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,2-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	10/7/2002
1,2-Dichloroethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,2-Dinitrobenzene	EPA 8270	Extractable Organics	NELAP	10/7/2002
1,2-Diphenylhydrazine	EPA 8270	Extractable Organics	NELAP	10/7/2002
1,3,5-Trimethylbenzene	EPA 8021	Volatile Organics	NELAP	10/7/2002
1,3,5-Trimethylbenzene	EPA 8260	Volatile Organics	NELAP	10/7/2002
1,3-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,3-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	10/7/2002
1,3-Dichloropropane	EPA 8260	Volatile Organics	NELAP	10/7/2002
1,4-Dichlorobenzene	EPA 8260	Volatile Organics	NELAP	3/18/2004
1,4-Dichlorobenzene	EPA 8270	Extractable Organics	NELAP	10/7/2002
1,4-Dinitrobenzene	EPA 8270	Extractable Organics	NELAP	10/7/2002
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8015	Volatile Organics	NELAP	10/7/2002
1,4-Dioxane (1,4-Diethyleneoxide)	EPA 8260	Volatile Organics	NELAP	10/7/2002
1,4-Naphthoquinone	EPA 8270	Extractable Organics	NELAP	10/7/2002
1,4-Phenylenediamine	EPA 8270	Extractable Organics	NELAP	10/7/2002
1-Naphthylamine	EPA 8270	Extractable Organics	NELAP	10/7/2002
2,2-Dichloropropane	EPA 8260	Volatile Organics	NELAP	10/7/2002
2,3,4,6-Tetrachlorophenol	EPA 8270	Extractable Organics	NELAP	10/7/2002

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EPA Lab Code: OH00048

(330) 497-9396

E87225

TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
2,4,5-T	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
2,4,5-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	10/7/2002
2,4,6-Trichlorophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
2,4-D	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
2,4-DB	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	10/7/2002
2,4-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
2,4-Dimethylphenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
2,4-Dinitrophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
2,4-Dinitrotoluene (2,4-DNT)	EPA 8270	Extractable Organics	NELAP	3/18/2004
2,6-Dichlorophenol	EPA 8270	Extractable Organics	NELAP	10/7/2002
2,6-Dinitrotoluene (2,6-DNT)	EPA 8270	Extractable Organics	NELAP	3/18/2004
2-Acetylaminofluorene	EPA 8270	Extractable Organics	NELAP	10/7/2002
2-Butanone (Methyl ethyl ketone, MEK)	EPA 8260	Volatile Organics	NELAP	10/7/2002
2-Chloroethyl vinyl ether	EPA 8260	Volatile Organics	NELAP	3/18/2004
2-Chloronaphthalene	EPA 8270	Extractable Organics	NELAP	3/18/2004
2-Chlorophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
2-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	10/7/2002
2-Hexanone	EPA 8260	Volatile Organics	NELAP	10/7/2002
2-Methyl-4,6-dinitrophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
2-Methylnaphthalene	EPA 8270	Extractable Organics	NELAP	10/7/2002
2-Methylphenol (o-Cresol)	EPA 8270	Extractable Organics	NELAP	10/7/2002
2-Naphthylamine	EPA 8270	Extractable Organics	NELAP	10/7/2002
2-Nitroaniline	EPA 8270	Extractable Organics	NELAP	10/7/2002
2-Nitrophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
2-Picoline (2-Methylpyridine)	EPA 8270	Extractable Organics	NELAP	10/7/2002
3,3'-Dichlorobenzidine	EPA 8270	Extractable Organics	NELAP	10/7/2002
3,3'-Dimethylbenzidine	EPA 8270	Extractable Organics	NELAP	10/7/2002
3-Methylcholanthrene	EPA 8270	Extractable Organics	NELAP	10/7/2002
3-Methylphenol (m-Cresol)	EPA 8270	Extractable Organics	NELAP	10/7/2002
3-Nitroaniline	EPA 8270	Extractable Organics	NELAP	10/7/2002
4,4'-DDD	EPA 8081	Volatile Organics	NELAP	3/18/2004
4,4'-DDE	EPA 8081	Volatile Organics	NELAP	3/18/2004
4,4'-DDT	EPA 8081	Volatile Organics	NELAP	3/18/2004
4,4'-Methylenebis(2-chloroaniline)	EPA 8270	Extractable Organics	NELAP	10/7/2002
4-Aminobiphenyl	EPA 8270	Extractable Organics	NELAP	10/7/2002
4-Bromophenyl phenyl ether	EPA 8270	Extractable Organics	NELAP	10/7/2002

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Issue Date: 1/13/2009

Expiration Date: 6/30/2009

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Ana M. Viamonte Ros, M.D., M.P.H.
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Attachment to Certificate #: E87225-24, expiration date June 30, 2009. This listing of accredited analytes should be used only when associated with a valid certificate.

State Laboratory ID: E87225

EPA Lab Code: OH00048

(330) 497-9396

E87225

TestAmerica - North Canton

4101 Shuffel Drive NW

North Canton, OH 44720-6961

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
4-Chloro-3-methylphenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
4-Chloroaniline	EPA 8270	Extractable Organics	NELAP	10/7/2002
4-Chlorophenyl phenylether	EPA 8270	Extractable Organics	NELAP	10/7/2002
4-Chlorotoluene	EPA 8260	Volatile Organics	NELAP	10/7/2002
4-Dimethyl aminoazobenzene	EPA 8270	Extractable Organics	NELAP	10/7/2002
4-Methyl-2-pentanone (MIBK)	EPA 8260	Volatile Organics	NELAP	10/7/2002
4-Methylphenol (p-Cresol)	EPA 8270	Extractable Organics	NELAP	10/7/2002
4-Nitroaniline	EPA 8270	Extractable Organics	NELAP	10/7/2002
4-Nitrophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
5-Nitro-o-toluidine	EPA 8270	Extractable Organics	NELAP	10/7/2002
7,12-Dimethylbenz(a) anthracene	EPA 8270	Extractable Organics	NELAP	10/7/2002
a-a-Dimethylphenethylamine	EPA 8270	Extractable Organics	NELAP	10/7/2002
Acenaphthene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Acenaphthylene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Acetone	EPA 8260	Volatile Organics	NELAP	10/7/2002
Acetonitrile	EPA 8260	Volatile Organics	NELAP	10/7/2002
Acetophenone	EPA 8270	Extractable Organics	NELAP	10/7/2002
Acrolein (Propenal)	EPA 8260	Volatile Organics	NELAP	3/18/2004
Acrylonitrile	EPA 8260	Volatile Organics	NELAP	3/18/2004
Aldrin	EPA 8081	Volatile Organics	NELAP	3/18/2004
Allyl chloride (3-Chloropropene)	EPA 8260	Volatile Organics	NELAP	10/7/2002
alpha-BHC (alpha-Hexachlorocyclohexane)	EPA 8081	Volatile Organics	NELAP	3/18/2004
alpha-Chlordane	EPA 8081	Extractable Organics	NELAP	10/7/2002
Aluminum	EPA 6010	Metals	NELAP	10/7/2002
Aluminum	EPA 6020	Metals	NELAP	4/7/2008
Amenable cyanide	EPA 9012	General Chemistry	NELAP	10/7/2002
Aniline	EPA 8270	Extractable Organics	NELAP	10/7/2002
Anthracene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Antimony	EPA 6010	Metals	NELAP	3/18/2004
Antimony	EPA 6020	Metals	NELAP	3/18/2004
Aramite	EPA 8270	Extractable Organics	NELAP	10/7/2002
Aroclor-1016 (PCB-1016)	EPA 8082	Extractable Organics	NELAP	3/18/2004
Aroclor-1221 (PCB-1221)	EPA 8082	Extractable Organics	NELAP	3/18/2004
Aroclor-1232 (PCB-1232)	EPA 8082	Extractable Organics	NELAP	3/18/2004
Aroclor-1242 (PCB-1242)	EPA 8082	Extractable Organics	NELAP	3/18/2004
Aroclor-1248 (PCB-1248)	EPA 8082	Extractable Organics	NELAP	3/18/2004

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EPA Lab Code: OH00048

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TestAmerica - North Canton
4101 Shuffel Drive NW
North Canton, OH 44720-6961

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Aroclor-1254 (PCB-1254)	EPA 8082	Extractable Organics	NELAP	3/18/2004
Aroclor-1260 (PCB-1260)	EPA 8082	Extractable Organics	NELAP	3/18/2004
Arsenic	EPA 6010	Metals	NELAP	3/18/2004
Arsenic	EPA 6020	Metals	NELAP	3/18/2004
Barium	EPA 6010	Metals	NELAP	3/18/2004
Barium	EPA 6020	Metals	NELAP	3/18/2004
Benzene	EPA 8021	Volatile Organics	NELAP	3/18/2004
Benzene	EPA 8260	Volatile Organics	NELAP	3/18/2004
Benzidine	EPA 8270	Extractable Organics	NELAP	10/7/2002
Benzo(a)anthracene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Benzo(a)pyrene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Benzo(b)fluoranthene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Benzo(g,h,i)perylene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Benzo(k)fluoranthene	EPA 8270	Extractable Organics	NELAP	10/7/2002
Benzoic acid	EPA 8270	Extractable Organics	NELAP	10/7/2002
Benzyl alcohol	EPA 8270	Extractable Organics	NELAP	10/7/2002
Beryllium	EPA 6010	Metals	NELAP	10/7/2002
Beryllium	EPA 6020	Metals	NELAP	10/7/2002
beta-BHC (beta-Hexachlorocyclohexane)	EPA 8081	Volatile Organics	NELAP	3/18/2004
Biochemical oxygen demand	SM 5210 B	General Chemistry	NELAP	8/3/2005
bis(2-Chloroethoxy)methane	EPA 8270	Extractable Organics	NELAP	6/16/2004
bis(2-Chloroethyl) ether	EPA 8270	Extractable Organics	NELAP	10/7/2002
bis(2-Chloroisopropyl) ether (2,2'-Oxybis(1-chloropropane))	EPA 8270	Extractable Organics	NELAP	3/18/2004
bis(2-Ethylhexyl) phthalate (DEHP)	EPA 8270	Extractable Organics	NELAP	12/18/2006
Boron	EPA 6010	Metals	NELAP	10/7/2002
Boron	EPA 6020	Metals	NELAP	4/7/2008
Bromide	EPA 9056	General Chemistry	NELAP	10/7/2002
Bromobenzene	EPA 8260	Volatile Organics	NELAP	10/7/2002
Bromochloromethane	EPA 8260	Volatile Organics	NELAP	10/7/2002
Bromodichloromethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
Bromoform	EPA 8260	Volatile Organics	NELAP	3/18/2004
Butyl benzyl phthalate	EPA 8270	Extractable Organics	NELAP	3/18/2004
Cadmium	EPA 6010	Metals	NELAP	3/18/2004
Cadmium	EPA 6020	Metals	NELAP	6/10/2004
Calcium	EPA 6010	Metals	NELAP	10/7/2002
Carbazole	EPA 8270	Extractable Organics	NELAP	10/7/2002

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Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Carbon disulfide	EPA 8260	Volatile Organics	NELAP	10/7/2002
Carbon tetrachloride	EPA 8260	Volatile Organics	NELAP	3/18/2004
Carbonaceous BOD (CBOD)	SM 5210 B	General Chemistry	NELAP	8/3/2005
Chlordane (tech.)	EPA 8081	Volatile Organics	NELAP	3/18/2004
Chloride	EPA 9056	General Chemistry	NELAP	10/7/2002
Chloride	EPA 9251	General Chemistry	NELAP	10/7/2002
Chlorobenzene	EPA 8260	Volatile Organics	NELAP	3/18/2004
Chlorobenzilate	EPA 8081	Extractable Organics	NELAP	10/7/2002
Chlorobenzilate	EPA 8270	Extractable Organics	NELAP	10/7/2002
Chloroethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
Chloroform	EPA 8260	Volatile Organics	NELAP	3/18/2004
Chloroprene	EPA 8260	Volatile Organics	NELAP	10/7/2002
Chromium	EPA 6010	Metals	NELAP	3/18/2004
Chromium	EPA 6020	Metals	NELAP	3/18/2004
Chromium VI	EPA 7196	General Chemistry	NELAP	4/29/2004
Chrysene	EPA 8270	Extractable Organics	NELAP	3/18/2004
cis-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	10/7/2002
cis-1,3-Dichloropropene	EPA 8260	Volatile Organics	NELAP	3/18/2004
Cobalt	EPA 6010	Metals	NELAP	10/7/2002
Cobalt	EPA 6020	Metals	NELAP	10/7/2002
Conductivity	EPA 9050	General Chemistry	NELAP	10/7/2002
Copper	EPA 6010	Metals	NELAP	10/7/2002
Copper	EPA 6020	Metals	NELAP	3/18/2004
Dalapon	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	10/7/2002
delta-BHC	EPA 8081	Volatile Organics	NELAP	3/18/2004
Diallate	EPA 8081	Extractable Organics	NELAP	10/7/2002
Diallate	EPA 8270	Extractable Organics	NELAP	10/7/2002
Dibenz(a,h) anthracene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Dibenzofuran	EPA 8270	Extractable Organics	NELAP	10/7/2002
Dibromochloromethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
Dibromomethane	EPA 8260	Volatile Organics	NELAP	10/7/2002
Dicamba	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Dichlorodifluoromethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
Dichloroprop (Dichlorprop)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	10/7/2002
Dieldrin	EPA 8081	Volatile Organics	NELAP	3/18/2004
Diesel range organics (DRO)	EPA 8015	Extractable Organics	NELAP	1/6/2009

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Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Diethyl phthalate	EPA 8270	Extractable Organics	NELAP	3/18/2004
Dimethoate	EPA 8270	Extractable Organics	NELAP	10/7/2002
Dimethyl phthalate	EPA 8270	Extractable Organics	NELAP	3/18/2004
Di-n-butyl phthalate	EPA 8270	Extractable Organics	NELAP	3/18/2004
Di-n-octyl phthalate	EPA 8270	Extractable Organics	NELAP	3/18/2004
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	10/7/2002
Diphenylamine	EPA 8270	Extractable Organics	NELAP	10/7/2002
Endosulfan I	EPA 8081	Volatile Organics	NELAP	3/18/2004
Endosulfan II	EPA 8081	Volatile Organics	NELAP	3/18/2004
Endosulfan sulfate	EPA 8081	Volatile Organics	NELAP	3/18/2004
Endrin	EPA 8081	Volatile Organics	NELAP	3/18/2004
Endrin aldehyde	EPA 8081	Volatile Organics	NELAP	3/18/2004
Endrin ketone	EPA 8081	Pesticides-Herbicides-PCB's	NELAP	10/7/2002
Ethyl methacrylate	EPA 8260	Volatile Organics	NELAP	10/7/2002
Ethyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	10/7/2002
Ethylbenzene	EPA 8021	Volatile Organics	NELAP	3/18/2004
Ethylbenzene	EPA 8260	Volatile Organics	NELAP	3/18/2004
Ethylene oxide	EPA 8015	Volatile Organics	NELAP	10/7/2002
Famphur	EPA 8270	Extractable Organics	NELAP	10/7/2002
Fluoranthene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Fluorene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Formaldehyde	EPA 8315	Extractable Organics	NELAP	10/20/2008
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	EPA 8081	Volatile Organics	NELAP	3/18/2004
gamma-Chlordane	EPA 8081	Extractable Organics	NELAP	10/7/2002
Gasoline range organics (GRO)	EPA 8015	Extractable Organics	NELAP	1/6/2009
Heptachlor	EPA 8081	Volatile Organics	NELAP	3/18/2004
Heptachlor epoxide	EPA 8081	Volatile Organics	NELAP	3/18/2004
Hexachlorobenzene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Hexachlorobutadiene	EPA 8260	Volatile Organics	NELAP	10/7/2002
Hexachlorobutadiene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Hexachlorocyclopentadiene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Hexachloroethane	EPA 8270	Extractable Organics	NELAP	3/18/2004
Hexachloropropene	EPA 8270	Extractable Organics	NELAP	10/7/2002
Ignitability	EPA 1010	General Chemistry	NELAP	1/6/2009
Indeno(1,2,3-cd)pyrene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Iodomethane (Methyl iodide)	EPA 8260	Volatile Organics	NELAP	10/7/2002

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TestAmerica - North Canton
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North Canton, OH 44720-6961

Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Iron	EPA 6010	Metals	NELAP	10/7/2002
Iron	EPA 6020	Metals	NELAP	4/30/2008
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8015	Volatile Organics	NELAP	10/7/2002
Isobutyl alcohol (2-Methyl-1-propanol)	EPA 8260	Volatile Organics	NELAP	10/7/2002
Isodrin	EPA 8081	Extractable Organics	NELAP	10/7/2002
Isophorone	EPA 8270	Extractable Organics	NELAP	3/18/2004
Isopropylbenzene	EPA 8260	Volatile Organics	NELAP	10/7/2002
Isosafrole	EPA 8270	Extractable Organics	NELAP	10/7/2002
Kepone	EPA 8081	Extractable Organics	NELAP	10/7/2002
Lead	EPA 6010	Metals	NELAP	3/18/2004
Lead	EPA 6020	Metals	NELAP	3/18/2004
Magnesium	EPA 6010	Metals	NELAP	10/7/2002
Magnesium	EPA 6020	Metals	NELAP	4/7/2008
Manganese	EPA 6010	Metals	NELAP	10/7/2002
Manganese	EPA 6020	Metals	NELAP	10/7/2002
MCPA	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	10/7/2002
MCPP	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	10/7/2002
Mercury	EPA 7471	Metals	NELAP	4/29/2004
Methacrylonitrile	EPA 8260	Volatile Organics	NELAP	10/7/2002
Methapyrilene	EPA 8270	Extractable Organics	NELAP	10/7/2002
Methoxychlor	EPA 8081	Volatile Organics	NELAP	4/29/2004
Methyl bromide (Bromomethane)	EPA 8260	Volatile Organics	NELAP	3/18/2004
Methyl chloride (Chloromethane)	EPA 8260	Volatile Organics	NELAP	3/18/2004
Methyl methacrylate	EPA 8260	Volatile Organics	NELAP	10/7/2002
Methyl methanesulfonate	EPA 8270	Extractable Organics	NELAP	10/7/2002
Methyl tert-butyl ether (MTBE)	EPA 8021	Volatile Organics	NELAP	10/7/2002
Methyl tert-butyl ether (MTBE)	EPA 8260	Volatile Organics	NELAP	10/7/2002
Methylene chloride	EPA 8260	Volatile Organics	NELAP	3/18/2004
Molybdenum	EPA 6010	Metals	NELAP	10/7/2002
Molybdenum	EPA 6020	Metals	NELAP	10/7/2002
Naphthalene	EPA 8021	Volatile Organics	NELAP	10/7/2002
Naphthalene	EPA 8260	Volatile Organics	NELAP	10/7/2002
Naphthalene	EPA 8270	Extractable Organics	NELAP	3/18/2004
n-Butylbenzene	EPA 8260	Volatile Organics	NELAP	10/7/2002
Nickel	EPA 6010	Metals	NELAP	3/18/2004
Nickel	EPA 6020	Metals	NELAP	3/18/2004

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Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Nitrite	EPA 9056	General Chemistry	NELAP	10/7/2002
Nitrobenzene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Nitroquinoline-1-oxide	EPA 8270	Extractable Organics	NELAP	10/7/2002
n-Nitrosodiethylamine	EPA 8270	Extractable Organics	NELAP	10/7/2002
n-Nitrosodimethylamine	EPA 8270	Extractable Organics	NELAP	10/7/2002
n-Nitroso-di-n-butylamine	EPA 8270	Extractable Organics	NELAP	10/7/2002
n-Nitrosodi-n-propylamine	EPA 8270	Extractable Organics	NELAP	10/7/2002
n-Nitrosodiphenylamine	EPA 8270	Extractable Organics	NELAP	10/7/2002
n-Nitrosomethylethylamine	EPA 8270	Extractable Organics	NELAP	10/7/2002
n-Nitrosomorpholine	EPA 8270	Extractable Organics	NELAP	10/7/2002
n-Nitrosopiperidine	EPA 8270	Extractable Organics	NELAP	10/7/2002
n-Nitrosopyrrolidine	EPA 8270	Extractable Organics	NELAP	10/7/2002
n-Propylbenzene	EPA 8260	Volatile Organics	NELAP	10/7/2002
o,o,o-Triethyl phosphorothioate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/7/2002
o-Toluidine	EPA 8270	Extractable Organics	NELAP	10/7/2002
Pentachlorobenzene	EPA 8270	Extractable Organics	NELAP	10/7/2002
Pentachloronitrobenzene	EPA 8270	Extractable Organics	NELAP	10/7/2002
Pentachlorophenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
Phenacetin	EPA 8270	Extractable Organics	NELAP	10/7/2002
Phenanthrene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Phenol	EPA 8270	Extractable Organics	NELAP	3/18/2004
Phorate	EPA 8270	Pesticides-Herbicides-PCB's	NELAP	10/7/2002
p-Isopropyltoluene	EPA 8260	Volatile Organics	NELAP	10/7/2002
Potassium	EPA 6010	Metals	NELAP	10/7/2002
Pronamide (Kerb)	EPA 8270	Extractable Organics	NELAP	10/7/2002
Propionitrile (Ethyl cyanide)	EPA 8260	Volatile Organics	NELAP	10/7/2002
Pyrene	EPA 8270	Extractable Organics	NELAP	3/18/2004
Pyridine	EPA 8270	Extractable Organics	NELAP	10/7/2002
Safrole	EPA 8270	Extractable Organics	NELAP	10/7/2002
sec-Butylbenzene	EPA 8260	Volatile Organics	NELAP	10/7/2002
Selenium	EPA 6010	Metals	NELAP	3/18/2004
Selenium	EPA 6020	Metals	NELAP	3/18/2004
Silver	EPA 6010	Metals	NELAP	3/18/2004
Silver	EPA 6020	Metals	NELAP	3/18/2004
Silvex (2,4,5-TP)	EPA 8151	Pesticides-Herbicides-PCB's	NELAP	3/18/2004
Sodium	EPA 6010	Metals	NELAP	10/7/2002

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Matrix: Solid and Chemical Materials

Analyte	Method/Tech	Category	Certification Type	Effective Date
Sodium	EPA 6020	Metals	NELAP	4/7/2008
Strontium	EPA 6020	Metals	NELAP	8/3/2005
Styrene	EPA 8260	Volatile Organics	NELAP	10/7/2002
Sulfide	EPA 9030/9034	General Chemistry	NELAP	6/16/2004
Sulfotep	EPA 8270	Extractable Organics	NELAP	10/7/2002
Synthetic Precipitation Leaching Procedure	EPA 1312	General Chemistry	NELAP	8/3/2005
tert-Butylbenzene	EPA 8260	Volatile Organics	NELAP	10/7/2002
Tetrachloroethylene (Perchloroethylene)	EPA 8260	Volatile Organics	NELAP	3/18/2004
Thallium	EPA 6010	Metals	NELAP	10/7/2002
Thallium	EPA 6020	Metals	NELAP	10/7/2002
Thionazin (Zinophos)	EPA 8270	Extractable Organics	NELAP	10/7/2002
Tin	EPA 6010	Metals	NELAP	10/7/2002
Tin	EPA 6020	Metals	NELAP	4/30/2008
Titanium	EPA 6010	Metals	NELAP	10/7/2002
Titanium	EPA 6020	Metals	NELAP	8/3/2005
Toluene	EPA 8021	Volatile Organics	NELAP	3/18/2004
Toluene	EPA 8260	Volatile Organics	NELAP	3/18/2004
Total cyanide	EPA 9012	General Chemistry	NELAP	4/29/2004
Total nitrate-nitrite	EPA 9056	General Chemistry	NELAP	10/7/2002
Total phenolics	EPA 9065	General Chemistry	NELAP	10/7/2002
Toxaphene (Chlorinated camphene)	EPA 8081	Volatile Organics	NELAP	3/18/2004
Toxicity Characteristic Leaching Procedure	EPA 1311	General Chemistry	NELAP	4/29/2004
trans-1,2-Dichloroethylene	EPA 8260	Volatile Organics	NELAP	10/7/2002
trans-1,3-Dichloropropylene	EPA 8260	Volatile Organics	NELAP	3/18/2004
trans-1,4-Dichloro-2-butene	EPA 8260	Volatile Organics	NELAP	10/7/2002
Trichloroethene (Trichloroethylene)	EPA 8260	Volatile Organics	NELAP	3/18/2004
Trichlorofluoromethane	EPA 8260	Volatile Organics	NELAP	3/18/2004
Vanadium	EPA 6010	Metals	NELAP	10/7/2002
Vanadium	EPA 6020	Metals	NELAP	8/3/2005
Vinyl acetate	EPA 8260	Volatile Organics	NELAP	10/7/2002
Vinyl chloride	EPA 8260	Volatile Organics	NELAP	3/18/2004
Xylene (total)	EPA 8021	Volatile Organics	NELAP	3/18/2004
Xylene (total)	EPA 8260	Volatile Organics	NELAP	3/18/2004
Zinc	EPA 6010	Metals	NELAP	10/7/2002
Zinc	EPA 6020	Metals	NELAP	10/7/2002

Clients and Customers are urged to verify the laboratory's current certification status with the Environmental Laboratory Certification Program.

Issue Date: 1/13/2009

Expiration Date: 6/30/2009

TestAmerica West Sacramento



NELAP - RECOGNIZED



CALIFORNIA STATE

ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM BRANCH

CERTIFICATE OF NELAP ACCREDITATION

Is hereby granted to

TESTAMERICA WEST SACRAMENTO

880 RIVERSIDE PARKWAY
WEST SACRAMENTO, CA 95605

Scope of the Certificate is limited to the
"NELAP Fields of Accreditation"
which accompany this Certificate.

Continued accredited status depends on successful
ongoing participation in the program.

This Certificate is granted in accordance with provisions of
Section 100825, et seq. of the Health and Safety Code.

Certificate No.: **01119CA**

Expiration Date: **01/31/2010**

Effective Date: **01/31/2009**

Richmond, California
subject to forfeiture or revocation

George C. Kulasingam, Ph.D., Chief
Environmental Laboratory Accreditation Program Branch



CALIFORNIA DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM - NELAP RECOGNIZED
NELAP Fields of Accreditation



TESTAMERICA WEST SACRAMENTO

Lab Phone (916) 373-5600

880 RIVERSIDE PARKWAY
WEST SACRAMENTO, CA 95605

Certificate No: 01119CA Renew Date: 01/31/2010

102 - Inorganic Chemistry of Drinking Water

102.045	001	EPA 314.0	Perchlorate
102.047	001	EPA 331.0	Perchlorate
102.510	006	SM3120B	Hardness (calc.)
102.520	001	EPA 200.7	Calcium
102.520	002	EPA 200.7	Magnesium
102.520	003	EPA 200.7	Potassium
102.520	004	EPA 200.7	Silica
102.520	005	EPA 200.7	Sodium
102.520	006	EPA 200.7	Hardness (calc.)

103 - Toxic Chemical Elements of Drinking Water

103.130	001	EPA 200.7	Aluminum
103.130	003	EPA 200.7	Barium
103.130	004	EPA 200.7	Beryllium
103.130	005	EPA 200.7	Cadmium
103.130	007	EPA 200.7	Chromium
103.130	008	EPA 200.7	Copper
103.130	009	EPA 200.7	Iron
103.130	011	EPA 200.7	Manganese
103.130	012	EPA 200.7	Nickel
103.130	015	EPA 200.7	Silver
103.130	017	EPA 200.7	Zinc
103.140	001	EPA 200.8	Aluminum
103.140	002	EPA 200.8	Antimony
103.140	003	EPA 200.8	Arsenic
103.140	004	EPA 200.8	Barium
103.140	005	EPA 200.8	Beryllium
103.140	006	EPA 200.8	Cadmium
103.140	007	EPA 200.8	Chromium
103.140	008	EPA 200.8	Copper
103.140	009	EPA 200.8	Lead
103.140	010	EPA 200.8	Manganese
103.140	011	EPA 200.8	Mercury
103.140	012	EPA 200.8	Nickel

As of 12/30/2008, this list supersedes all previous lists for this certificate number.
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103.140	013	EPA 200.8	Selenium
103.140	014	EPA 200.8	Silver
103.140	015	EPA 200.8	Thallium
103.140	016	EPA 200.8	Zinc
103.160	001	EPA 245.1	Mercury

105 - Semi-volatile Organic Chemistry of Drinking Water

105.230	000	EPA 1613	Dioxins
105.230	001	EPA 1613	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)

108 - Inorganic Chemistry of Wastewater

108.020	001	EPA 120.1	Conductivity
108.090	001	EPA 160.4	Residue, Volatile
108.110	001	EPA 180.1	Turbidity
108.112	001	EPA 200.7	Boron
108.112	002	EPA 200.7	Calcium
108.112	003	EPA 200.7	Hardness (calc.)
108.112	004	EPA 200.7	Magnesium
108.112	005	EPA 200.7	Potassium
108.112	006	EPA 200.7	Silica
108.112	007	EPA 200.7	Sodium
108.120	001	EPA 300.0	Bromide
108.120	002	EPA 300.0	Chloride
108.120	003	EPA 300.0	Fluoride
108.120	004	EPA 300.0	Nitrate
108.120	005	EPA 300.0	Nitrite
108.120	006	EPA 300.0	Nitrate-nitrite
108.120	007	EPA 300.0	Phosphate, Ortho
108.120	008	EPA 300.0	Sulfate
108.141	001	EPA 310.2	Alkalinity
108.183	001	EPA 335.4	Cyanide, Total
108.200	001	EPA 350.1	Ammonia
108.211	001	EPA 351.2	Kjeldahl Nitrogen
108.232	001	EPA 353.2	Nitrate-nitrite
108.232	002	EPA 353.2	Nitrite
108.264	001	EPA 365.3	Phosphate, Ortho
108.265	001	EPA 365.3	Phosphorus, Total
108.266	001	EPA 365.4	Phosphorus, Total
108.323	001	EPA 410.4	Chemical Oxygen Demand
108.362	001	EPA 420.4	Phenols, Total
108.381	001	EPA 1664A	Oil and Grease
108.410	001	SM2320B	Alkalinity
108.420	001	SM2340B	Hardness (calc.)

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108.430	001	SM2510B	Conductivity
108.440	001	SM2540B	Residue, Total
108.441	001	SM2540C	Residue, Filterable
108.442	001	SM2540D	Residue, Non-filterable
108.443	001	SM2540F	Residue, Settleable
108.472	001	SM4500-CN E	Cyanide, Total
108.473	001	SM4500-CN G	Cyanide, amenable
108.490	001	SM4500-H+ B	pH
108.580	001	SM4500-S+ D	Sulfide
108.611	001	SM5310C	Total Organic Carbon

109 - Toxic Chemical Elements of Wastewater

109.010	001	EPA 200.7	Aluminum
109.010	002	EPA 200.7	Antimony
109.010	003	EPA 200.7	Arsenic
109.010	004	EPA 200.7	Barium
109.010	005	EPA 200.7	Beryllium
109.010	007	EPA 200.7	Cadmium
109.010	009	EPA 200.7	Chromium
109.010	010	EPA 200.7	Cobalt
109.010	011	EPA 200.7	Copper
109.010	012	EPA 200.7	Iron
109.010	013	EPA 200.7	Lead
109.010	015	EPA 200.7	Manganese
109.010	016	EPA 200.7	Molybdenum
109.010	017	EPA 200.7	Nickel
109.010	019	EPA 200.7	Selenium
109.010	021	EPA 200.7	Silver
109.010	023	EPA 200.7	Thallium
109.010	024	EPA 200.7	Tin
109.010	025	EPA 200.7	Titanium
109.010	026	EPA 200.7	Vanadium
109.010	027	EPA 200.7	Zinc
109.020	001	EPA 200.8	Aluminum
109.020	002	EPA 200.8	Antimony
109.020	003	EPA 200.8	Arsenic
109.020	004	EPA 200.8	Barium
109.020	005	EPA 200.8	Beryllium
109.020	006	EPA 200.8	Cadmium
109.020	007	EPA 200.8	Chromium
109.020	008	EPA 200.8	Cobalt
109.020	009	EPA 200.8	Copper

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109.020	010	EPA 200.8	Lead
109.020	011	EPA 200.8	Manganese
109.020	012	EPA 200.8	Molybdenum
109.020	013	EPA 200.8	Nickel
109.020	014	EPA 200.8	Selenium
109.020	015	EPA 200.8	Silver
109.020	016	EPA 200.8	Thallium
109.020	017	EPA 200.8	Vanadium
109.020	018	EPA 200.8	Zinc
109.190	001	EPA 245.1	Mercury

111 - Semi-volatile Organic Chemistry of Wastewater

111.111	000	EPA 1613B	Dioxins
111.111	001	EPA 1613B	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)
111.111	002	EPA 1613B	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)
111.111	003	EPA 1613B	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
111.111	004	EPA 1613B	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
111.111	005	EPA 1613B	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)
111.111	006	EPA 1613B	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)
111.111	007	EPA 1613B	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)
111.111	008	EPA 1613B	2,3,7,8-Tetrachlorodibenzofuran (TCDF)
111.111	009	EPA 1613B	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)
111.111	010	EPA 1613B	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)
111.111	011	EPA 1613B	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)
111.111	012	EPA 1613B	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)
111.111	013	EPA 1613B	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)
111.111	014	EPA 1613B	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)
111.111	015	EPA 1613B	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)
111.111	016	EPA 1613B	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)
111.111	017	EPA 1613B	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)
111.111	018	EPA 1613B	Total TCDD
111.111	019	EPA 1613B	Total PeCDD
111.111	020	EPA 1613B	Total HxCDD
111.111	021	EPA 1613B	Total HpCDD
111.111	022	EPA 1613B	Total TCDF
111.111	023	EPA 1613B	Total PeCDF
111.111	024	EPA 1613B	Total HxCDF
111.111	025	EPA 1613B	Total HpCDF
111.273	001	EPA 1664A	Oil and Grease

114 - Inorganic Chemistry of Hazardous Waste

114.010	001	EPA 6010B	Antimony
114.010	002	EPA 6010B	Arsenic

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114.010	003	EPA 6010B	Barium
114.010	004	EPA 6010B	Beryllium
114.010	005	EPA 6010B	Cadmium
114.010	006	EPA 6010B	Chromium
114.010	007	EPA 6010B	Cobalt
114.010	008	EPA 6010B	Copper
114.010	009	EPA 6010B	Lead
114.010	010	EPA 6010B	Molybdenum
114.010	011	EPA 6010B	Nickel
114.010	012	EPA 6010B	Selenium
114.010	013	EPA 6010B	Silver
114.010	014	EPA 6010B	Thallium
114.010	015	EPA 6010B	Vanadium
114.010	016	EPA 6010B	Zinc
114.010	026	EPA 6010B	Silica
114.010	027	EPA 6010B	Sodium
114.020	001	EPA 6020	Antimony
114.020	002	EPA 6020	Arsenic
114.020	003	EPA 6020	Barium
114.020	004	EPA 6020	Beryllium
114.020	005	EPA 6020	Cadmium
114.020	006	EPA 6020	Chromium
114.020	007	EPA 6020	Cobalt
114.020	008	EPA 6020	Copper
114.020	009	EPA 6020	Lead
114.020	010	EPA 6020	Molybdenum
114.020	011	EPA 6020	Nickel
114.020	012	EPA 6020	Selenium
114.020	013	EPA 6020	Silver
114.020	014	EPA 6020	Thallium
114.020	015	EPA 6020	Vanadium
114.020	016	EPA 6020	Zinc
114.103	001	EPA 7196A	Chromium (VI)
114.140	001	EPA 7470A	Mercury
114.141	001	EPA 7471A	Mercury
114.221	001	EPA 9012A	Cyanide, Total
114.240	001	EPA 9040B	Corrosivity - pH Determination
114.241	001	EPA 9045C	Corrosivity - pH Determination
114.250	001	EPA 9056	Fluoride
114.270	001	EPA 9214	Fluoride

115 - Extraction Test of Hazardous Waste

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Customers: Please verify the current accreditation standing with the State.

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115.021	001	EPA 1311	TCLP Inorganics
115.022	001	EPA 1311	TCLP Extractables
115.030	001	CCR Chapter 11, Article 5, Appendix II	Waste Extraction Test (WET)

116 - Volatile Organic Chemistry of Hazardous Waste

116.080	001	EPA 8260B	Acetone
116.080	003	EPA 8260B	Acrolein
116.080	004	EPA 8260B	Acrylonitrile
116.080	005	EPA 8260B	Allyl Alcohol
116.080	006	EPA 8260B	Allyl Chloride
116.080	007	EPA 8260B	Benzene
116.080	010	EPA 8260B	Bromochloromethane
116.080	011	EPA 8260B	Bromodichloromethane
116.080	012	EPA 8260B	Bromofom
116.080	013	EPA 8260B	Bromomethane
116.080	015	EPA 8260B	Carbon Disulfide
116.080	016	EPA 8260B	Carbon Tetrachloride
116.080	018	EPA 8260B	Chlorobenzene
116.080	019	EPA 8260B	Chloroethane
116.080	020	EPA 8260B	2-Chloroethyl Vinyl Ether
116.080	021	EPA 8260B	Chloroform
116.080	022	EPA 8260B	Chloromethane
116.080	023	EPA 8260B	Chloroprene
116.080	026	EPA 8260B	Dibromochloromethane
116.080	027	EPA 8260B	Dibromochloropropane
116.080	028	EPA 8260B	1,2-Dibromoethane
116.080	029	EPA 8260B	Dibromofluoromethane
116.080	030	EPA 8260B	Dibromomethane
116.080	031	EPA 8260B	1,2-Dichlorobenzene
116.080	032	EPA 8260B	1,3-Dichlorobenzene
116.080	033	EPA 8260B	1,4-Dichlorobenzene
116.080	035	EPA 8260B	trans-1,4-Dichloro-2-butene
116.080	036	EPA 8260B	Dichlorodifluoromethane
116.080	037	EPA 8260B	1,1-Dichloroethane
116.080	038	EPA 8260B	1,2-Dichloroethane
116.080	039	EPA 8260B	1,1-Dichloroethene
116.080	040	EPA 8260B	trans-1,2-Dichloroethene
116.080	041	EPA 8260B	cis-1,2-Dichloroethene
116.080	042	EPA 8260B	1,2-Dichloropropane
116.080	043	EPA 8260B	1,3-Dichloropropane
116.080	044	EPA 8260B	2,2-Dichloropropane
116.080	045	EPA 8260B	1,1-Dichloropropene

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116.080	046	EPA 8260B	cis-1,3-Dichloropropene
116.080	047	EPA 8260B	trans-1,3-Dichloropropene
116.080	050	EPA 8260B	1,4-Dioxane
116.080	053	EPA 8260B	Ethylbenzene
116.080	055	EPA 8260B	Ethyl Methacrylate
116.080	056	EPA 8260B	Hexachlorobutadiene
116.080	058	EPA 8260B	2-Hexanone (MBK)
116.080	059	EPA 8260B	Iodomethane
116.080	060	EPA 8260B	Isobutyl Alcohol
116.080	062	EPA 8260B	Methacrylonitrile
116.080	064	EPA 8260B	Methyl tert-butyl Ether (MTBE)
116.080	065	EPA 8260B	Methylene Chloride
116.080	066	EPA 8260B	Methyl Ethyl Ketone
116.080	067	EPA 8260B	Methyl Methacrylate
116.080	068	EPA 8260B	4-Methyl-2-pentanone (MIBK)
116.080	069	EPA 8260B	Naphthalene
116.080	078	EPA 8260B	Propionitrile
116.080	081	EPA 8260B	1,1,1,2-Tetrachloroethane
116.080	082	EPA 8260B	1,1,2,2-Tetrachloroethane
116.080	083	EPA 8260B	Tetrachloroethene
116.080	084	EPA 8260B	Toluene
116.080	086	EPA 8260B	1,2,3-Trichlorobenzene
116.080	087	EPA 8260B	1,2,4-Trichlorobenzene
116.080	088	EPA 8260B	1,1,1-Trichloroethane
116.080	089	EPA 8260B	1,1,2-Trichloroethane
116.080	090	EPA 8260B	Trichloroethene
116.080	091	EPA 8260B	Trichlorofluoromethane
116.080	092	EPA 8260B	1,2,3-Trichloropropane
116.080	093	EPA 8260B	Vinyl Acetate
116.080	094	EPA 8260B	Vinyl Chloride
116.080	095	EPA 8260B	Xylenes, Total
116.080	096	EPA 8260B	tert-Amyl Methyl Ether (TAME)
116.080	097	EPA 8260B	tert-Butyl Alcohol (TBA)
116.080	098	EPA 8260B	Ethyl tert-butyl Ether (ETBE)
116.080	099	EPA 8260B	Bromobenzene
116.080	100	EPA 8260B	n-Butylbenzene
116.080	101	EPA 8260B	sec-Butylbenzene
116.080	102	EPA 8260B	tert-Butylbenzene
116.080	103	EPA 8260B	2-Chlorotoluene
116.080	104	EPA 8260B	4-Chlorotoluene
116.080	105	EPA 8260B	Isopropylbenzene

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116.080	106	EPA 8260B	N-propylbenzene
116.080	107	EPA 8260B	Styrene
116.080	108	EPA 8260B	1,2,4-Trimethylbenzene
116.080	109	EPA 8260B	1,3,5-Trimethylbenzene
116.080	120	EPA 8260B	Oxygenates
116.100	001	LUFT GC/MS	Total Petroleum Hydrocarbons - Gasoline
116.100	002	LUFT GC/MS	Benzene
116.100	003	LUFT GC/MS	Toluene
116.100	004	LUFT GC/MS	Xylenes
116.100	005	LUFT GC/MS	Methyl tert-butyl Ether (MTBE)
116.100	010	LUFT GC/MS	BTEX and MTBE

117 - Semi-volatile Organic Chemistry of Hazardous Waste

117.010	001	EPA 8015B	Diesel-range Total Petroleum Hydrocarbons
117.016	001	LUFT	Diesel-range Total Petroleum Hydrocarbons
117.110	000	EPA 8270C	Extractable Organics
117.110	001	EPA 8270C	Acenaphthene
117.110	002	EPA 8270C	Acenaphthylene
117.110	003	EPA 8270C	Acetophenone
117.110	004	EPA 8270C	2-Acetylaminofluorene
117.110	006	EPA 8270C	4-Aminobiphenyl
117.110	007	EPA 8270C	Aniline
117.110	008	EPA 8270C	Anthracene
117.110	009	EPA 8270C	Aramite
117.110	010	EPA 8270C	Benzidine
117.110	011	EPA 8270C	Benzo(a)anthracene
117.110	012	EPA 8270C	Benzo(b)fluoranthene
117.110	013	EPA 8270C	Benzo(k)fluoranthene
117.110	014	EPA 8270C	Benzo(g,h,i)perylene
117.110	015	EPA 8270C	Benzo(a)pyrene
117.110	016	EPA 8270C	Benzoic Acid
117.110	018	EPA 8270C	Benzyl Alcohol
117.110	019	EPA 8270C	Benzyl Butyl Phthalate
117.110	020	EPA 8270C	Bis(2-chloroethoxy)methane
117.110	021	EPA 8270C	Bis(2-chloroethyl) Ether
117.110	022	EPA 8270C	Bis(2-chloroisopropyl) Ether
117.110	023	EPA 8270C	Di(2-ethylhexyl) Phthalate
117.110	024	EPA 8270C	4-Bromophenyl Phenyl Ether
117.110	025	EPA 8270C	Carbazole
117.110	026	EPA 8270C	4-Chloroaniline
117.110	027	EPA 8270C	4-Chloro-3-methylphenol
117.110	028	EPA 8270C	1-Chloronaphthalene

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117.110	029	EPA 8270C	2-Chloronaphthalene
117.110	030	EPA 8270C	2-Chlorophenol
117.110	031	EPA 8270C	4-Chlorophenyl Phenyl Ether
117.110	032	EPA 8270C	Chrysene
117.110	035	EPA 8270C	Dibenz(a,i)acridine
117.110	036	EPA 8270C	Dibenz(a,h)anthracene
117.110	037	EPA 8270C	Dibenzofuran
117.110	039	EPA 8270C	1,2-Dichlorobenzene
117.110	040	EPA 8270C	1,3-Dichlorobenzene
117.110	041	EPA 8270C	1,4-Dichlorobenzene
117.110	042	EPA 8270C	3,3'-Dichlorobenzidine
117.110	043	EPA 8270C	2,4-Dichlorophenol
117.110	044	EPA 8270C	2,6-Dichlorophenol
117.110	045	EPA 8270C	Diethyl Phthalate
117.110	050	EPA 8270C	p-Dimethylaminoazobenzene
117.110	051	EPA 8270C	7,12-Dimethylbenz(a)anthracene
117.110	052	EPA 8270C	a,a-Dimethylphenethylamine
117.110	053	EPA 8270C	2,4-Dimethylphenol
117.110	054	EPA 8270C	Dimethyl Phthalate
117.110	055	EPA 8270C	Di-n-butyl phthalate
117.110	056	EPA 8270C	Di-n-octyl phthalate
117.110	058	EPA 8270C	1,3-Dinitrobenzene
117.110	059	EPA 8270C	1,4-Dinitrobenzene
117.110	060	EPA 8270C	2,4-Dinitrophenol
117.110	061	EPA 8270C	2,4-Dinitrotoluene
117.110	062	EPA 8270C	2,6-Dinitrotoluene
117.110	063	EPA 8270C	Diphenylamine
117.110	064	EPA 8270C	1,2-Diphenylhydrazine
117.110	066	EPA 8270C	Ethyl Methanesulfonate
117.110	067	EPA 8270C	Fluoranthene
117.110	068	EPA 8270C	Fluorene
117.110	069	EPA 8270C	Hexachlorobenzene
117.110	070	EPA 8270C	Hexachlorobutadiene
117.110	071	EPA 8270C	Hexachlorocyclopentadiene
117.110	072	EPA 8270C	Hexachloroethane
117.110	074	EPA 8270C	Hexachloropropene
117.110	075	EPA 8270C	Indeno(1,2,3-c,d)pyrene
117.110	076	EPA 8270C	Isophorone
117.110	077	EPA 8270C	Isosafrole
117.110	079	EPA 8270C	3-Methylcholanthrene
117.110	080	EPA 8270C	2-Methyl-4,6-dinitrophenol

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117.110	082	EPA 8270C	Methyl Methanesulfonate
117.110	083	EPA 8270C	2-Methylnaphthalene
117.110	084	EPA 8270C	2-Methylphenol
117.110	085	EPA 8270C	3-Methylphenol
117.110	086	EPA 8270C	4-Methylphenol
117.110	087	EPA 8270C	Naphthalene
117.110	088	EPA 8270C	1,4-Naphthoquinone
117.110	089	EPA 8270C	1-Naphthylamine
117.110	090	EPA 8270C	2-Naphthylamine
117.110	092	EPA 8270C	2-Nitroaniline
117.110	093	EPA 8270C	3-Nitroaniline
117.110	094	EPA 8270C	4-Nitroaniline
117.110	095	EPA 8270C	Nitrobenzene
117.110	096	EPA 8270C	2-Nitrophenol
117.110	097	EPA 8270C	4-Nitrophenol
117.110	098	EPA 8270C	N-nitrosodi-n-butylamine
117.110	099	EPA 8270C	N-nitrosodiethylamine
117.110	100	EPA 8270C	N-nitrosodimethylamine
117.110	101	EPA 8270C	N-nitrosodi-n-propylamine
117.110	102	EPA 8270C	N-nitrosodiphenylamine
117.110	103	EPA 8270C	N-nitrosomethylethylamine
117.110	104	EPA 8270C	N-nitrosomorpholine
117.110	105	EPA 8270C	N-nitroso piperidine
117.110	106	EPA 8270C	N-nitrosopyrrolidine
117.110	107	EPA 8270C	5-Nitro-o-toluidine
117.110	108	EPA 8270C	Pentachlorobenzene
117.110	109	EPA 8270C	Perchloronitrobenzene
117.110	110	EPA 8270C	Perchlorophenol
117.110	111	EPA 8270C	Phenacetin
117.110	112	EPA 8270C	Phenanthrene
117.110	113	EPA 8270C	Phenol
117.110	114	EPA 8270C	1,4-Phenylenediamine
117.110	116	EPA 8270C	2-Picoline
117.110	119	EPA 8270C	Pyrene
117.110	120	EPA 8270C	Pyridine
117.110	122	EPA 8270C	Safole
117.110	124	EPA 8270C	1,2,4,5-Tetrachlorobenzene
117.110	125	EPA 8270C	2,3,4,6-Tetrachlorophenol
117.110	128	EPA 8270C	o-Toluidine
117.110	129	EPA 8270C	1,2,4-Trichlorobenzene
117.110	130	EPA 8270C	2,4,5-Trichlorophenol

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117.110	131	EPA 8270C	2,4,6-Trichlorophenol
117.110	132	EPA 8270C	1,3,5-Trinitrobenzene
117.111	015	EPA 8270C	Chlorobenzilate
117.111	021	EPA 8270C	Diallate
117.111	025	EPA 8270C	Dimethoate
117.111	039	EPA 8270C	Isodrin
117.111	054	EPA 8270C	Parathion Ethyl
117.111	055	EPA 8270C	Parathion Methyl
117.111	056	EPA 8270C	Phorate
117.111	058	EPA 8270C	Sulfotepp
117.111	061	EPA 8270C	O,O,O-triethyl Phosphorothioate
117.111	062	EPA 8270C	Trifluralin
117.111	073	EPA 8270C	Polynuclear Aromatic Hydrocarbons
117.111	074	EPA 8270C	Adipates
117.111	075	EPA 8270C	Phthalates
117.111	076	EPA 8270C	Other Extractables
117.120	000	EPA 8280A	Dioxins and Dibenzofurans
117.120	001	EPA 8280A	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)
117.120	002	EPA 8280A	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)
117.120	003	EPA 8280A	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
117.120	004	EPA 8280A	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
117.120	005	EPA 8280A	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)
117.120	006	EPA 8280A	2,3,7,8-Tetrachlorodibenzofuran (TCDF)
117.120	007	EPA 8280A	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)
117.120	008	EPA 8280A	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)
117.120	009	EPA 8280A	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)
117.120	010	EPA 8280A	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)
117.120	011	EPA 8280A	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)
117.120	012	EPA 8280A	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)
117.120	013	EPA 8280A	Total TCDD
117.120	014	EPA 8280A	Total PeCDD
117.120	015	EPA 8280A	Total HxCDD
117.120	016	EPA 8280A	Total TCDF
117.120	017	EPA 8280A	Total PeCDF
117.120	018	EPA 8280A	Total HxCDF
117.120	019	EPA 8280A	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)
117.120	020	EPA 8280A	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)
117.120	021	EPA 8280A	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)
117.120	022	EPA 8280A	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)
117.120	023	EPA 8280A	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)
117.120	024	EPA 8280A	Total HpCDD

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117.120	025	EPA 8280A	Total HpCDF
117.130	000	EPA 8290	Dioxins and Dibenzofurans
117.130	001	EPA 8290	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)
117.130	002	EPA 8290	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)
117.130	003	EPA 8290	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
117.130	004	EPA 8290	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)
117.130	005	EPA 8290	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)
117.130	006	EPA 8290	2,3,7,8-Tetrachlorodibenzofuran (TCDF)
117.130	007	EPA 8290	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)
117.130	008	EPA 8290	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)
117.130	009	EPA 8290	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)
117.130	010	EPA 8290	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)
117.130	011	EPA 8290	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)
117.130	012	EPA 8290	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)
117.130	013	EPA 8290	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)
117.130	014	EPA 8290	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)
117.130	015	EPA 8290	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)
117.130	016	EPA 8290	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)
117.130	017	EPA 8290	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)
117.140	000	EPA 8310	Polynuclear Aromatic Hydrocarbons
117.140	001	EPA 8310	Acenaphthene
117.140	002	EPA 8310	Acenaphthylene
117.140	003	EPA 8310	Anthracene
117.140	004	EPA 8310	Benzo(a)anthracene
117.140	005	EPA 8310	Benzo(a)pyrene
117.140	006	EPA 8310	Benzo(b)fluoranthene
117.140	007	EPA 8310	Benzo(k)fluoranthene
117.140	008	EPA 8310	Benzo(g,h,i)perylene
117.140	009	EPA 8310	Chrysene
117.140	010	EPA 8310	Dibenz(a,h)anthracene
117.140	011	EPA 8310	Fluoranthene
117.140	012	EPA 8310	Fluorene
117.140	013	EPA 8310	Indeno(1,2,3-c,d)pyrene
117.140	014	EPA 8310	Naphthalene
117.140	015	EPA 8310	Phenanthrene
117.140	016	EPA 8310	Pyrene
117.170	000	EPA 8330	Nitroaromatics and Nitramines
117.170	001	EPA 8330	4-Amino-2,6-dinitrotoluene
117.170	002	EPA 8330	2-Amino-4,6-dinitrotoluene
117.170	003	EPA 8330	1,3-Dinitrobenzene
117.170	004	EPA 8330	2,4-Dinitrotoluene

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117.170	005	EPA 8330	2,6-Dinitrotoluene
117.170	006	EPA 8330	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)
117.170	007	EPA 8330	Methyl-2,4,6-trinitrophenylnitramine
117.170	008	EPA 8330	Nitrobenzene
117.170	009	EPA 8330	2-Nitrotoluene
117.170	010	EPA 8330	3-Nitrotoluene
117.170	011	EPA 8330	4-Nitrotoluene
117.170	012	EPA 8330	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
117.170	013	EPA 8330	1,3,5-Trinitrobenzene
117.170	014	EPA 8330	2,4,6-Trinitrotoluene
117.171	000	EPA 8330A	Nitroaromatics and Nitramines
117.171	001	EPA 8330A	4-Amino-2,6-dinitrotoluene
117.171	002	EPA 8330A	2-Amino-4,6-dinitrotoluene
117.171	003	EPA 8330A	1,3-Dinitrobenzene
117.171	004	EPA 8330A	2,4-Dinitrotoluene
117.171	005	EPA 8330A	2,6-Dinitrotoluene
117.171	006	EPA 8330A	Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)
117.171	007	EPA 8330A	Methyl-2,4,6-trinitrophenylnitramine
117.171	008	EPA 8330A	Nitrobenzene
117.171	009	EPA 8330A	2-Nitrotoluene
117.171	010	EPA 8330A	3-Nitrotoluene
117.171	011	EPA 8330A	4-Nitrotoluene
117.171	012	EPA 8330A	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
117.171	013	EPA 8330A	1,3,5-Trinitrobenzene
117.171	014	EPA 8330A	2,4,6-Trinitrotoluene
117.210	000	EPA 8081A	Organochlorine Pesticides
117.210	001	EPA 8081A	Aldrin
117.210	002	EPA 8081A	α-BHC
117.210	003	EPA 8081A	β-BHC
117.210	004	EPA 8081A	δ-BHC
117.210	005	EPA 8081A	γ-BHC (Lindane)
117.210	006	EPA 8081A	Captafol
117.210	007	EPA 8081A	α-Chlordane
117.210	008	EPA 8081A	γ-Chlordane
117.210	009	EPA 8081A	Chlordane (tech.)
117.210	010	EPA 8081A	Chlorobenzilate
117.210	013	EPA 8081A	4,4'-DDD
117.210	014	EPA 8081A	4,4'-DDE
117.210	015	EPA 8081A	4,4'-DDT
117.210	016	EPA 8081A	Diallate
117.210	020	EPA 8081A	Dieldrin

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117.210	021	EPA 8081A	Endosulfan I
117.210	022	EPA 8081A	Endosulfan II
117.210	023	EPA 8081A	Endosulfan Sulfate
117.210	024	EPA 8081A	Endrin
117.210	025	EPA 8081A	Endrin Aldehyde
117.210	026	EPA 8081A	Endrin Ketone
117.210	027	EPA 8081A	Heptachlor
117.210	028	EPA 8081A	Heptachlor Epoxide
117.210	031	EPA 8081A	Isodrin
117.210	033	EPA 8081A	Methoxychlor
117.210	039	EPA 8081A	Toxaphene
117.220	000	EPA 8082	PCBs
117.220	001	EPA 8082	PCB-1018
117.220	002	EPA 8082	PCB-1221
117.220	003	EPA 8082	PCB-1232
117.220	004	EPA 8082	PCB-1242
117.220	005	EPA 8082	PCB-1248
117.220	006	EPA 8082	PCB-1254
117.220	007	EPA 8082	PCB-1260

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PART III

Final

Site Safety and Health Plan for the Sampling and Analysis Plan Deep Bedrock Well Installation in the Basal Sharon Conglomerate Addendum No. 1

Ravenna Army Ammunition Plant,
Ravenna, Ohio

Contract No. W912QR-04-0028
Delivery Order No. 0001

Prepared for:

U.S. Army Corps of Engineers
600 Martin Luther King, Jr. Place
Louisville, Kentucky 40202

Prepared by:

SAIC Engineering of Ohio, Inc.
8866 Commons Boulevard, Suite 201
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December 19, 2008

APPROVALS

Final Site Safety and Health Plan
Addendum No. 1 for the
Deep Bedrock Well Installation in the Basal Sharon Conglomerate

December 2008

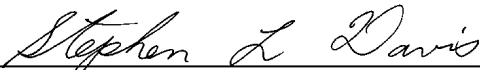


December 19, 2008

W. Kevin Jago
SAIC Project Manager

Phone 865-418-4614

Date



December 19, 2008

Stephen Davis, CIH (#4213), CSP (#10044),
SAIC Health and Safety Officer

Phone 865-481-4755

Date

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ACRONYMS AND ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
AOC	Area of Concern
BGS	Below Ground Surface
CPR	Cardiopulmonary Resuscitation
FOM	Field Operations Manager
FWSHP	Facility-Wide Safety and Health Plan
HAZWOPER	Hazardous Waste Operations
HTRW	Hazardous, Toxic, and Radioactive Waste
IDW	Investigation-Derived Waste
IRP	Installation Restoration Program
MEC	Munitions and Explosives of Concern
MSDS	Material Safety Data Sheet
NGB	National Guard Bureau
OEW	Ordnance and Explosive Waste
OHARNG	Ohio Army National Guard
Ohio EPA	Ohio Environmental Protection Agency
PAH	Polycyclic Aromatic Hydrocarbon
PID	Photoionization Detector
PPE	Personal Protective Equipment
RTLS	Ravenna Training and Logistic Site
RVAAP	Ravenna Army Ammunition Plant
SAIC	Science Applications International Corporation
SAP	Sampling and Analysis Plan
SSHO	Site Safety and Health Officer
SSHP	Site Safety and Health Plan
TBD	To Be Determined
USACE	United States Army Corps of Engineers
UXO	Unexploded Ordnance

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1.0 INTRODUCTION

Science Applications International Corporation's (SAIC's) formal policy, stated in the Environmental Compliance and Health and Safety Program manual, is to take every reasonable precaution to protect the health and safety of our employees, the public, and the environment. To this end, the Ravenna Army Ammunition Plant (RVAAP) *Facility-Wide Safety and Health Plan* (FWSHP) (USACE 2001) and this Site Safety and Health Plan (SSHP) collectively set forth the specific procedures required to protect SAIC and SAIC subcontractor personnel involved in the field activities. These plans are driven by requirements contained in the most current revisions of the United States Army Corps of Engineers (USACE) *Safety and Occupational Health Requirements for Hazardous, Toxic, and Radioactive Waste (HTRW)* and *Ordnance and Explosive Waste (OEW) Activities, ER-385-1-92*, and the USACE *Safety and Health Manual, EM-385-1-1-1*, which are available online via the USACE web site. SAIC activities are also subject to the requirements of the SAIC Corporate Environmental Compliance and Health and Safety Program and associated procedures. All field personnel are required to comply with the requirements of these programs and plans.

The FWSHP addresses program issues and hazards and hazard controls common to the entire installation. This SSHP Addendum to the FWSHP serves as the lower tier document addressing the hazards and controls specific to the Sampling and Analysis (SAP) Plan Addendum No. 1 Deep Bedrock Well Installation in the Basal Sharon Conglomerate. Copies of the FWSHP and this SSHP Addendum will be present at the work site during all fieldwork.

SAIC will perform well installation at six different locations within RVAAP. The SAP addresses the installation and quarterly groundwater sampling of six deep bedrock monitoring wells at the base of the Sharon Conglomerate, which underlies RVAAP in Ravenna, Ohio (Figures A-1 and A-2). The monitoring wells will be installed to a depth of approximately 200 ft below ground surface (BGS) at locations specified by the USACE Louisville District with the concurrence of the Ohio Environmental Protection Agency (Ohio EPA) and the Ohio Army National Guard (OHARNG). Final drilling locations may change slightly based on the results of utility clearance by RVAAP and surveys for the presence of Munitions and Explosives of Concern (MEC).

Quarterly groundwater sampling will be conducted on the newly-installed monitoring wells consistent with the Facility-Wide Groundwater Monitoring Program for RVAAP, Ravenna, Ohio (USACE 2004). Groundwater sampling will be sampled using low-flow methods as specified in the Facility-Wide SAP.

The potential for chemical overexposure appears to be very low based on the nature of planned tasks and review of available historical data. There is some potential for chemical exposures via the inhalation pathway during drilling operations and dermal contact with soil. Sampling and drilling crews will use protective gloves to handle potentially contaminated materials, and, if necessary, the Site Safety and Health Officer (SSHO) will upgrade the required personal protective equipment (PPE). Physical hazards are associated with drilling equipment and soil sampling equipment (e.g.,

hand bucket augers). Task-specific hazard controls have been specified for these tasks. The SSHO will observe all site tasks during daily safety inspections and will use professional judgment and appropriate monitoring results to determine if upgrading PPE is required. A detailed analysis of these hazards and specific appropriate controls is presented in Table 3-2 (Section 3.0). Details regarding PPE are contained in Section 7.0.

2.0 SITE DESCRIPTION

When the RVAAP Installation Restoration Program (IRP) began in 1989, RVAAP was identified as a 21,419-acre installation. The property boundary was resurveyed by OHARNG over a 2-year period (2002 and 2003) and the total acreage of the property was found to be 21,683.289 acres. As of February 2006, a total of 20,403 acres of the former 21,683-acre RVAAP has been transferred to the National Guard Bureau (NGB) and subsequently licensed to OHARNG for use as a military training site.

The current RVAAP consists of 1,280 acres scattered throughout the OHARNG Ravenna Training and Logistics Site (RTLS). RTLS is in northeastern Ohio within Portage and Trumbull Counties, approximately 4.8 km (3 miles) east-northeast of the City of Ravenna and approximately 1.6 km (1 mile) northwest of the City of Newton Falls. The RVAAP portions of the property are solely located within Portage County. RTLS/RVAAP is a parcel of property approximately 17.7 km (11 miles) long and 5.6 km (3.5 miles) wide bounded by State Route 5, the Michael J. Kirwan Reservoir, and the CSX System Railroad on the south; Garret, McCormick, and Berry roads on the west; the Norfolk Southern Railroad on the north; and State Route 534 on the east (Figures A-1 and A-2). RTLS is surrounded by several communities: Windham on the north; Garrettsville 9.6 km (6 miles) to the northwest; Newton Falls 1.6 km (1 mile) to the southeast; Charlestown to the southwest; and Wayland 4.8 km (3 miles) to the south.

When RVAAP was operational, RTLS did not exist and the entire 21,683-acre parcel was a government-owned, contractor-operated industrial facility. The RVAAP IRP encompasses investigation and cleanup of past activities over the entire 21,683 acres of the former RVAAP. References to RVAAP in this document are considered to be inclusive of the historical extent of RVAAP, which is inclusive of the combined acreages of the current RTLS and RVAAP, unless otherwise specifically stated.

The installation was active from 1941 to 1992. Activities included loading, assembling, storing, and packing military ammunition; demilitarization of munitions; production of ammonium nitrate fertilizer; and disposal of “off-spec” munitions. Various munitions were handled on the installation including artillery rounds of 90 mm or more and bombs up to 2,000 lbs.

In addition to production and demilitarization activities at the load lines, other AOCs at RVAAP were used for the burning, demolition, and testing of munitions. These burning and demolition grounds consist of large parcels of open space or abandoned quarries. Potential contaminants at these AOCs include explosives, propellants, metals, waste oils, and sanitary waste. Other types of AOCs present at RVAAP include landfills, an aircraft fuel tank testing facility, and various general industrial support and maintenance facilities.

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3.0 HAZARD/RISK ANALYSIS

The purpose of the task hazard/risk analysis is to identify and assess potential hazards that may be encountered by personnel and to prescribe required controls. Table 3-1, a general checklist of hazards that may be posed by this project, indicates whether a particular major type of hazard is present. If additional tasks or significant hazards are identified during the work, this document will be modified by addendum or field change order to include the additional information.

Table 3-1. Hazards Inventory

Yes	No	Hazard
	X	Confined space entry
	X	Excavation entry (excavations will be entered)
X		Heavy equipment (drill rigs, backhoe)
X		Fire and explosion (fuels)
X		Electrical shock (utilities and tools)
X		Exposure to chemicals (contaminants and chemical tools)
X		Temperature extremes
X		Biological hazards (poison ivy, Lyme disease, West Nile disease)
	X	Radiation or radioactive contamination
X		Noise (drill rig)
	X	Drowning
X		MEC (potential to encounter unexploded ordnance)

MEC = munitions and explosives of concern

Specific tasks are as follows:

- Soil sampling;
- Vegetation clearing with chainsaws, machetes, and sling blades, as required;
- Civil surveying;
- Investigation-derived waste handling and disposition;
- Subsurface soil sampling and monitoring well installation using air rotary and hollow stem auger drill rigs;
- Well development and groundwater sampling; and
- Equipment decontamination performed by the Subcontractor.

3.1 TASK-SPECIFIC HAZARD ANALYSIS

Table 3-2 presents task-specific hazards, relevant hazard controls, and required monitoring, if appropriate, for all of the planned tasks.

3.2 POTENTIAL EXPOSURES

Table 3-3 contains information on the reagents and chemicals that will be used for the project. Soil and groundwater contaminants are possible, but unlikely. Exposure to chemical tools, such as corrosive sample preservatives, field laboratory reagents, or flammable fuels, is a possibility and will be controlled through standard safe handling practices.

Table 3-2. Hazards Analysis

Safety and Health Hazards	Controls	Monitoring Requirements
<i>Mobilize to Work Site</i>		
Traffic accident	Compliance with EC&HS Procedure 110, Vehicle Operation (valid drivers license, seat belt use, routine vehicle inspections, no cell phone use while driving).	None
<i>Civil Surveys and Visual Surveys</i>		
General safety hazards (moving equipment, slips, falls)	Level D PPE: long pants, shirts with sleeves, safety glasses, safety shoes or boots, and hard hats if overhead hazards are present (see Section 5.0 of the FWSHP). Site-specific training, buddy system, proper housekeeping.	Daily safety inspections
Contact with MEC	Pre-entry screening survey by MEC Avoidance Subcontractor. On-site training in ordnance recognition for all field personnel. Withdrawal of all SAIC and subcontractor personnel from immediate area and field marking of suspect area MEC is discovered.	Visual and instrument surveys for ordnance conducted by MEC Avoidance Subcontractor.
Exposure to chemicals	Nitrile or similar gloves for contact with potentially contaminated material. Gloves will be disposed after single use. Wash face and hands and any other exposed areas prior to taking anything by mouth. Hazardous waste site operations training and medical clearance. Site training must include hazards and controls for exposure to site contaminants and chemicals used on-site. MSDSs on-site. All chemical containers will have contents and hazards labeled.	None
Biological hazards (bees, ticks, Lyme disease, histoplasmosis, wasps, snakes, West Nile Virus)	PPE (boots, work clothes). Insect repellant on boots, pants, and elsewhere, as necessary, to repel ticks and mosquitoes. Pant legs tucked into boots or otherwise closed to minimize tick entry. Inspect for ticks during the day and at the end of each workday (see Section 9.0 of FWSHP). Avoidance of accumulations of bird or bat droppings (see Section 9.0 of FWSHP).	Visual survey
Vehicle accidents	Compliance with EC&HS Procedure 110 "Vehicle Operation" to include verification of current drivers licenses, use of seat belts when vehicle is in motion, daily (undocumented) vehicle safety inspection, compliance with applicable laws and regulations, and defensive driving.	Verification of valid drivers licenses by FM

Table 3-2. Hazards Analysis (continued)

Safety and Health Hazards	Controls	Monitoring Requirements
Temperature extremes	Administrative controls (see Section 8.0 of FWSHP). Cooled (shaded) or warmed break area depending on the season. Routine breaks in established break area (see Section 8.0 of FWSHP). Chilled drinks if temperature exceeds 70°F.	Temperature measurements at least twice daily. Pulse rates at the start of each break if wearing impermeable clothing.
Severe weather	Locate nearest severe weather shelter/strong structure before beginning fieldwork. Suspend fieldwork if lightning within 10 miles of site or tornado warning issued. Do not work in areas subject to flash flooding (arroyo, ditch, etc.) if rain is forecast in immediate area or upstream of site.	Visual observation for lightning, strong winds, or heavy rain. Check forecast prior to starting work daily.
<i>Groundwater Well Development, Groundwater Monitoring, Groundwater Sampling, and Sample Preservation</i>		
General safety hazards (moving equipment, lifting, slips, falls)	Level D PPE: long pants, shirts with sleeves, safety glasses, safety boots, and hard hats if overhead hazards are present (see Section 5.0 of FWSHP). Buddy system. Site-specific training. Proper housekeeping. Lifts of >50 lbs will be performed by two or more personnel or with mechanical assistance; extensive heavy lifting will require additional lifting training. Exclusion zone if there is a potential for unauthorized entry. Compliance with SAIC EC&HS Procedure 150.	Daily site safety inspections
Noise	None, unless SSHO determines that equipment potentially exceeds 85 dBA	Daily safety inspection
Fire (fuels)	Fuel stored in safety cans with flame arresters. Fire extinguisher rated 2A and 5B (serviced annually and inspected monthly) in all fuel use areas. No ignition sources in fuel storage areas. Bonding (metal to metal contact) during pouring. Gasoline-powered equipment must be shut down and allowed to cool for 5 min. prior to fueling.	Daily site safety inspections
Exposure to chemicals	Level D PPE, including nitrile or PVC gloves, to handle potentially contaminated material. Minimal contact, wash face and hands prior to taking anything by mouth. Hazardous waste site operations training and medical clearance required by site workers. Fifteen-minute eyewash within 100 ft when pouring corrosive sample preservatives; eyewash bottle within 10 ft when adding water to pre-preserved sample containers. Site training must include hazards and controls of exposure to contaminants and chemicals used on-site. MSDSs for chemical tools kept on-site. All chemical containers will have contents and hazards labeled.	Daily site safety inspections. PID monitoring if prior monitoring during soil boring indicated a potential for exposure.
Electrical shock	GFCI for all electrical hand tools.	Daily safety inspection

Table 3-2. Hazards Analysis (continued)

Safety and Health Hazards	Controls	Monitoring Requirements
Temperature stress	If temperature is above 80°F or below 40°F, administrative controls will be implemented (cooled or warmed drinks, routine breaks in heated or shaded area, provisions for emergency heating or cooling). Administrative controls (see Section 8.0 of FWSHP). Cooled (shaded) or warmed break area depending on the season. Routine breaks in established break area (see Section 8.0 of FWSHP). Chilled drinks if temperature exceeds 70°F.	Temperature measurements at least twice daily. Pulse rates at the start of each break if wearing impermeable clothing.
Biological hazards (bees, ticks, Lyme disease, histoplasmosis, wasps, snakes, West Nile Virus)	PPE (boots and work clothes). Insect repellant on boots, pants, and elsewhere, as necessary, to repel ticks and mosquitoes. Pant legs tucked into boots or otherwise closed to minimize tick entry. Inspect for ticks during the day and at the end of each workday (see Section 9.0 of FWSHP). Avoidance of accumulations of bird or bat droppings (see Section 9.0 of FWSHP).	Visual survey
<i>Soil Boring, Soil Sampling, and Monitoring Well Installation Using Air Rotary or Auger Drill Rig</i>		
General safety hazards (rotating machinery, suspended loads, moving equipment, slips, falls)	Level D PPE: long pants, shirts with sleeves, safety glasses, safety boots, work gloves for material handling plus hard hat (see Section 5.0 of FWSHP). Buddy system. Site-specific training. Proper housekeeping. No employees under lifted loads. At least two functional kill switches. Functional backup alarm. Drill rig manual on-site. Only experienced operators. Exclusion zone at least equal to mast height if there is any potential for unauthorized entry. Compliance with SAIC EC&HS Procedure 150.	Daily site safety inspections. Weekly drill rig inspections.
Rotating and/or moving equipment.	Only experienced operators. Rigs will be operated per subcontractor's standard procedures or per manufacturer's directions; all hoses and cables will be inspected daily. Rigs will have two functional kill switches or "dead-man" control. At no time should anyone work in close proximity to the rotating augers. Prior to coupling augers driller shall inspect auger joints to ensure no obvious defects that may affect auger performance. If burs are noticed on the auger ends, corrective measures must be taken, or the auger must be set aside and a different one must be used.	Daily inspections of auger joints, hoses, cables, and rigs.
Subsurface utilities (electric shock, fire, damage to utilities)	FM will ensure that each boring location has been cleared to preclude contact with buried utilities through compliance with EC&HS Procedure 130.	FM clearance of utilities.

Table 3-2. Hazards Analysis (continued)

Safety and Health Hazards	Controls	Monitoring Requirements
Contact with overhead structures or utilities	Rig will not be allowed to come within 10 feet of overhead power lines. At the time the mast is being towered up drill crew members should not be engaged in any other activity, the task at that time is to assist in towered up in the safest manner possible. At the time the mast is being towered down, other drill crew members should not be engaged in any other activity, the task at that time is to assist in towered down in the safest manner possible. The mast of the drill rig must be towered down before moving to the next location.	FM will survey location and ensure absence of obstructions and overhead utilities prior to rig set-up.
Noise	Hearing protection \geq NRR 25 within 7.6 m (25 ft) of rig unless rig-specific monitoring indicates noise exposure of less than 85 dBA.	Daily safety inspections
Fire (vehicle fuels or subsurface contaminants)	Fuels stored in safety cans with flame arrestors. Bonding (metal to metal) and grounding during fuel transfers. Fuel storage areas marked with no smoking or open flames signs. Fire extinguishers in all fuel use areas.	Combustible gas indicator if buried organic material or other source of flammable gas is suspected
Contact with MEC	Pre-entry screening survey by MEC Avoidance Subcontractor. On-site training in ordnance recognition for all field personnel. Clearance of sites by UXO technicians for intrusive work. Downhole monitoring every 2 to 3 ft until cleared for continuous drilling by MEC Avoidance Subcontractor. Continuous escort by MEC Avoidance Subcontractor in areas with a potential to encounter MEC. Withdrawal of all SAIC and subcontractor personnel from immediate area and field marking of suspect area if MEC is discovered.	Visual and instrument surveys by MEC Avoidance Subcontractor
Exposure to chemicals	Level D PPE, including nitrile or PVC gloves, to handle potentially contaminated material. Minimal contact, wash face and hands prior to taking anything by mouth. Hazardous waste site operations training and medical clearance required by site workers. Fifteen-minute eyewash within 100 ft when pouring corrosive sample preservatives; eyewash bottle within 10 ft when adding water to pre-preserved sample containers. Site training must include hazards and controls of exposure to contaminants and chemicals used on-site. MSDSs for chemical tools kept on-site. All chemical containers will have contents and hazards labeled.	PID or other sampling, as appropriate

Table 3-2. Hazards Analysis (continued)

Safety and Health Hazards	Controls	Monitoring Requirements
Temperature extremes	If temperature is above 80°F or below 40°F, administrative controls will be implemented (cooled or warmed drinks, routine breaks in heated or shaded area, provisions for emergency heating or cooling). Administrative controls (see Section 8.0 of FWSHP). Cooled (shaded) or warmed break area depending on the season. Routine breaks in established break area (see Section 8.0 of FWSHP). Chilled drinks if temperature exceeds 70°F.	Temperature measurements at least twice daily. Pulse rates at the start of each break if wearing impermeable clothing.
Biological hazards (bees, ticks, Lyme disease, histoplasmosis, wasps, snakes, West Nile Virus)	PPE (boots and work clothes). Insect repellant on boots, pants, and elsewhere, as necessary, to repel ticks and mosquitoes. Pant legs tucked into boots or otherwise closed to minimize potential for tick entry. Snake chaps if working in overgrown areas. Inspect for ticks during the day and at the end of each workday (see Section 9.0 of FWSHP). Avoidance of accumulations of bird or bat droppings (see Section 9.0 of FWSHP).	Visual survey
Electric shock	Identification and clearance of overhead and underground utilities. GFCI required for electric hand tools. Note – one live overhead electrical line is present at Load Line 2.	Visual of all work areas
<i>Vegetation Clearing with Chainsaws, Machetes, Sling Blades and Heavy Equipment</i>		
General safety hazards (contact with sharp edges, slips, falls)	Level D PPE: long pants, shirts with sleeves, safety boots, safety glasses, plus heavy-duty work gloves and hard hat (see Section 5.0 of FWSHP). Buddy system. Site-specific training. Proper housekeeping. Only experienced operators. Personnel operating brush-clearing tools must maintain separation of at least 15 ft. Machetes equipped with lanyard and lanyard looped around wrist. Tools must be inspected daily and taken out of service if damaged. Exclusion zone if there is a potential for entry of unauthorized personnel.	Daily site safety inspections
Chainsaw kickback and related hazards	Chainsaw chaps and face shield as additional PPE. Saws must have automatic chain brake or kickback device. Idle speed adjusted so chain does not move when idling. Only experienced operators may use chainsaw. Saws must not be used to cut above shoulder height. Saws must be held with both hands when operating. Additional requirements at 385-1-1 Section 31.	Daily inspection
Noise (chainsaw)	Hearing protection \geq NRR 25 within 7.6 m (25 ft) of operating chainsaw or heavy equipment unless specific monitoring indicates noise exposure of less than 85 dBA.	Daily safety inspections

Table 3-2. Hazards Analysis (continued)

Safety and Health Hazards	Controls	Monitoring Requirements
Fire (fuels)	Fuels stored in safety cans with flame arrestors. Bonding (metal to metal) and grounding during fuel transfers. Fuel storage areas marked with no smoking or open flames signs. Fire extinguishers in all fuel use areas. Gasoline-powered equipment turned off and allowed to cool for at least 5 min prior to fueling.	Daily safety inspection
Contact with MEC	On-site training in ordnance recognition for all field personnel. Survey of sites by MEC Avoidance Subcontractor. Escort by MEC Avoidance Subcontractor when in areas with potential to encounter MEC. Withdrawal of all SAIC and subcontractor personnel from immediate area and field marking of suspect area if MEC is discovered.	Visual and instrument surveys by MEC Avoidance Subcontractor
Exposure to chemicals	Level D PPE plus nitrile or equivalent gloves for contact with contaminated material. Wash face and hands prior to taking anything by mouth. Hazardous waste site operations training and medical clearance. Site training must include the hazards and appropriate controls for site contaminants and chemicals to be used or stored on-site. Chemical containers labeled to indicate contents and hazard. Medical clearance for hazardous waste work.	Daily safety inspection
Temperature extremes	Administrative controls (see Section 8.0 of FWSHP). Cooled (shaded) or warmed break area depending on the season. Routine breaks in established break area (see Section 8.0 of FWSHP). Chilled drinks if temperature exceeds 70°F.	Temperature measurements at least twice per day. Pulse rates at the start of each break if wearing impermeable clothing.
Severe weather	Locate nearest severe weather shelter/strong structure before beginning fieldwork. Suspend fieldwork if lightning within 10 miles of site or tornado warning issued. Do not work in areas subject to flash flooding (arroyo, ditch, etc.) if rain is forecast in immediate area or upstream of site.	Visual observation for lightning, strong winds, or heavy rain. Check forecast prior to starting work daily.
Vehicle accidents	Compliance with EC&HS Procedure 110 “Vehicle Operation” to include verification of current drivers licenses, use of seat belts when vehicle is in motion, daily (undocumented) vehicle safety inspection, compliance with applicable laws and regulations, and defensive driving.	Verification of valid drivers licenses by FM
Lifting injuries	Compliance with EC&HS Procedure 150 “Manual Lifting” to limiting individual lifts by SAIC personnel to 50 pounds.	Verification/observation of lifting by SAIC personnel by FM.

Table 3-2. Hazards Analysis (continued)

Safety and Health Hazards	Controls	Monitoring Requirements
Biological hazards (bees, ticks, Lyme disease, histoplasmosis, wasps, snakes, West Nile Virus)	PPE (boots, work clothes). Insect repellent on boots, pants, and elsewhere, as necessary, to repel ticks and mosquitoes. Pant legs tucked into boots or otherwise closed to minimize potential for tick entry. Snake chaps if working in overgrown areas. Inspect for ticks during the day and at the end of each workday (see Section 9.0 of FWSHP). Avoidance of accumulations of bird or bat droppings (see Section 9.0 of FWSHP).	Visual survey
<i>Investigation-Derived Waste Handling</i>		
General hazards (lifting equipment, manual lifting, slips)	Level D PPE: long pants, shirts with sleeves, safety glasses, safety shoes or boots, heavy-duty gloves for materials handling, and hard hat if overhead hazards are present (see Section 5.0 of FWSHP). Buddy system. Site-specific training. Proper housekeeping. Unnecessary personnel will stay well clear of operating equipment. Functional back-up alarm on fork trucks, Bobcats, trucks, etc. Ravenna O&M contractor personnel will provide any required fork truck services in the IDW staging area (Building 1036). IDW movement from field sites to Building 1036 will be conducted by the drilling subcontractor using a backhoe equipped with forks and drum dollies. No personnel allowed under lifted loads. Lifts of greater than 50 lbs will be made with two or more personnel or with lifting equipment in compliance with SAIC EC&HS Procedure 150. Hazardous waste safety training. Compliance with EM 385-1-1 Sections 14 and 16.	Daily safety inspections of operations. Daily inspection of equipment to verify brakes and operating systems are in proper working condition.
Contact with MEC	On-site training in ordnance recognition for all field personnel. Clearance of sites by MEC Avoidance Subcontractor for intrusive work. Continuous escort by MEC Avoidance Subcontractor if working in areas with potential for MEC. Withdrawal of all SAIC and subcontractor personnel from immediate area and field marking of suspect area if MEC is discovered.	Visual and instrument surveys by MEC Avoidance Subcontractor
Exposure to chemicals	Level D PPE plus nitrile or equivalent gloves for contact with contaminated material. Wash face and hands prior to taking anything by mouth. Hazardous waste site operations training and medical clearance. Site training must include hazards and controls for exposure to site contaminants and chemicals used on-site.	Daily safety inspections

Table 3-2. Hazards Analysis (continued)

Safety and Health Hazards	Controls	Monitoring Requirements
Vehicle accidents	Compliance with EC&HS Procedure 110 “Vehicle Operation” to include verification of current drivers licenses, use of seat belts when vehicle is in motion, daily (undocumented) vehicle safety inspection, compliance with applicable laws and regulations, and defensive driving.	Verification of valid drivers licenses by FM
Lifting injuries	Compliance with EC&HS Procedure 150 “Manual Lifting” to limiting individual lifts by SAIC personnel to 50 pounds.	Verification/observation of lifting by SAIC personnel by FM.
Fire (vehicle fuels and flammable contaminants)	Fuels stored in safety cans with flame arrestors. Bonding (metal to metal) and grounding during fuel transfers. Fuel storage areas marked with no smoking or open flames signs. Gasoline-powered equipment will be shut down and allowed to cool for 5 min before fueling. Fire extinguishers in all fuel use areas.	Daily safety inspection
Noise	Hearing protection within 7.6 m (25 ft) of any noisy drum moving equipment unless equipment-specific monitoring indicates exposures less than 85 dBA.	Daily safety inspections
Biological hazards (bees, ticks, Lyme disease, histoplasmosis, wasps, snakes, West Nile Virus)	PPE (boots, work clothes). Insect repellant on pants, boots, and elsewhere, as necessary, to repel ticks and mosquitoes. Pant legs tucked into boots or otherwise closed to minimize tick entry. Snake chaps if working in overgrown areas. Inspect for ticks during the day and at the end of each workday (see Section 9.0 of FWSHP). Avoidance of accumulations of bird or bat droppings (see Section 9.0 of FWSHP).	Visual survey
Electric shock	Identification and clearance of overhead utilities. GFCI for all electrical hand tools.	Visual survey of all work areas
Temperature extremes	Administrative controls (see Section 8.0 of FWSHP). Cooled (shaded) or warmed break area depending on the season. Routine breaks in established break area (see Section 8.0 of FWSHP). Chilled drinks if temperature exceeds 70°F.	Temperature measurements at least twice daily. Pulse rates at the start of each break if wearing impermeable clothing.
Severe weather	Locate nearest severe weather shelter/strong structure before beginning fieldwork. Suspend fieldwork if lightning within 10 miles of site or tornado warning issued. Do not work in areas subject to flash flooding (arroyo, ditch, etc.) if rain is forecast in immediate area or upstream of site.	Visual observation for lightning, strong winds, or heavy rain. Check forecast prior to starting work daily.
<i>Equipment Decontamination (Hot Water Washing, Soap and Water Washing, HCl, and Methanol Rinse)</i>		
General equipment decontamination hazards (hot water, slips, falls, equipment handling)	Level D PPE plus nitrile or PVC gloves (see Section 5.0 of FWSHP). Face shield and Saranex or rain suit when operating steam washer. Site-specific training. Proper housekeeping.	Daily safety inspections
Noise (spray washer)	Hearing protection when washer is operating unless equipment-specific monitoring indicates that exposure is less than 85 dBA.	None

Table 3-2. Hazards Analysis (continued)

Safety and Health Hazards	Controls	Monitoring Requirements
Fire (decontamination solvents and gasoline)	Flammable material stored in original containers or in safety cans with flame arrestors. Fire extinguisher kept near decontamination area.	Daily safety inspection
Exposure to chemicals	Level D PPE plus nitrile or equivalent gloves for contact with contaminated material. Wash face and hands prior to taking anything by mouth. Minimal contact. Hazardous waste site operations training and medical clearance. Site training must include hazards and controls for exposure to site contaminants and chemicals used on-site. MSDSs on-site. All chemical containers labeled to indicate contents and hazard.	None
Temperature extremes	Administrative controls (see Section 8.0 of FWSHP). Cooled (shaded) or warmed break area depending on the season. Routine breaks in established break area (see Section 8.0 of FWSHP). Chilled drinks if temperature exceeds 70°F.	Temperature measurements at least twice a day. Pulse rates at the start of each break if wearing impermeable clothing.

EC&HS = Energy, Environment, & Infrastructure Environmental Compliance & Health and Safety PVC = polyvinyl chloride

FM = Field Manager

MSDS = Material Safety Data Sheet

RVAAP = Ravenna Army Ammunition Plant

FWSHP = Facility Wide Safety and Health Plan

NRR= Noise Reduction Rating

SAIC = Science Applications International Corporation

GFCI = ground-fault circuit interrupter

O&M = operations and maintenance

UXO = unexploded ordnance

IDW = investigation-derived waste

PID = photoionization detector

MEC = munitions and explosives of concern

PPE = personal protective equipment

Table 3-3. Potential Exposures

Chemical	TLV/PEL/STEL/IDLH^a	Health Effects/ Potential Hazards^b	Chemical and Physical Properties^b	Exposure Route(s)
Hydrochloric acid (potentially used to preserve water samples or for equipment decontamination)	TLV: 2 ppm ceiling IDLH: 50 ppm	Irritation of eyes, skin, respiratory system	Liquid; VP: fuming; IP: 12.74 eV; FP: none	Inhalation Ingestion Contact
Isopropyl alcohol (potentially used for equipment decontamination)	TLV/TWA: 200 ppm STEL: 500 ppm IDLH: 2,000 ppm	Irritation of eyes, skin, respiratory system; drowsiness; headache	Colorless liquid with alcohol odor; VP: 33 mm; IP: 10.10 eV; FP: 53°F	Inhalation Ingestion Contact
Methanol (potentially used for equipment decontamination)	TLV/TWA: 200 ppm Skin notation IDLH: 6,000 ppm	Irritation of eyes, skin, respiratory system; headache; optic nerve damage	Liquid; VP: 96 mm; IP: 10.84 eV; FP: 52°F	Inhalation Absorption Ingestion Contact
Gasoline (used for fuel)	TLV/TWA: 300 ppm, A2 IDLH: Ca	Potential carcinogen per NIOSH, dizziness, eye irritation, dermatitis	Liquid with aromatic odor; FP: -45°F; VP: 38-300 mm	Inhalation Ingestion Absorption Contact
Liquinox (used for decontamination)	TLV/TWA: None	Inhalation may cause local irritation to mucus membranes	Yellow odorless liquid (biodegradable cleaner); FP: NA	Inhalation Ingestion

^aFrom 2008 Threshold Limit Values, American Conference of Governmental Industrial Hygienists.

^bFrom NIOSH Guide to Chemical Hazards web site.

A2 = suspected human carcinogen

FP = flash point

IDLH = immediately dangerous to life and health

IP = ionization potential

NIOSH = National Institute for Occupational Safety and Health

ppm = parts per million

STEL = short-term exposure limit

TLV = threshold limit value

TWA = time-weighted average

VP = vapor pressure

4.0 MUNITIONS AND EXPLOSIVES OF CONCERN AVOIDANCE

A qualified unexploded ordnance (UXO) subcontractor, approved by the USACE Louisville District, will provide MEC avoidance support for this project. The subcontractor's UXO technician will employ a Schonstedt Model GA 52 and/or GA-72 (or equivalent) magnetic locator for surface anomaly surveys, and a Schonstedt Model MG-220 (or equivalent) magnetic gradiometer for any downhole surveys.

The UXO Team Leader will train all field personnel to recognize and stay away from propellants and MEC. Safety briefings for MEC avoidance will also be provided to all site personnel and site visitors. At all well locations and off-road access routes to the locations, ground surface surveys will be conducted prior to entry using visual inspection and hand-held magnetometers. Surveys of ingress and egress routes will be at least twice as wide as the widest vehicle that will use the route (normally a minimum of 20 ft). A work area having a radius of approximately 100 ft will be surveyed around each well location. The UXO technician will clearly mark the boundaries of the cleared work area and access routes. If MEC is encountered at the ground surface, the approach path will be diverted away from the MEC, the area clearly marked with red flagging, and the area will be avoided. Any identified magnetic anomaly will also be clearly marked and the anomaly will be avoided. The cleared approach paths will be the only ingress/egress routes to a particular drilling location.

At each staked well location, the UXO technician will use a magnetic gradiometer to clear the locations prior to drilling operations commencing. The UXO technician shall use hand auger tools to advance a small pilot hole. At not more than a 2-ft depth, the magnetometer will be lowered into the hole. This procedure will be used to ensure that smaller items of UXO, undetectable from the surface, can be detected. If no magnetic anomalies are located, the procedure will be repeated at approximately 2-ft to 3-ft intervals to the maximum depth required (10 ft or until bedrock is encountered, whichever is less).

The UXO technician will remain onsite and provide support to the project team until all access surveys are completed and the work areas are cleared as described above. Because all drilling locations are outside of designated environmental areas of concern and military munitions response program sites, the UXO technician will not be required to maintain a continuous presence onsite. In the event a monitoring well cannot subsequently be constructed at the planned location and drilling at an alternate location is necessary, the same MEC avoidance protocol will be followed prior to moving the new location.

Should any MEC be discovered, it will be avoided. The UXO subcontractor will not be tasked with disposal of MEC under this specific well installation task. The UXO technician will notify the SAIC Field Operations Manager (FOM), who will, in turn, contact the SAIC PM, USACE and RVAAP Environmental Coordinator who will initiate the appropriate response actions.

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5.0 STAFF ORGANIZATION, QUALIFICATIONS, AND RESPONSIBILITIES

This Section presents the personnel (and their associated telephone numbers) responsible for site safety and health and emergency response. Table 5-1 identifies the SAIC and subcontractor staff that will fill key roles. See the FWSHP for information on the roles and responsibilities of key positions.

Table 5-1. Staff Organization

Position	Name	Phone
SAIC Health and Safety Manager	Steve Davis CIH, CSP	865-481-4755
SAIC Project Manager	Kevin Jago	865-481-4614
SAIC Field Operations Manager	Paul Parrish	614-439-1812
SAIC Site Safety and Health Officer	Amanda Trenton	614-330-9857
MEC Avoidance Subcontractor	USA Environmental Inc.	813-343-6336

Subcontractor Site Safety and Health Officer will be SSHO for all field activities

CIH – Certified Industrial Hygienist

CSP – Certified Safety Professional

MEC – Munitions and Explosives of Concern

SAIC – Science Applications International Corporation

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6.0 TRAINING

Training requirements, from Section 4.0 of the FWSHP, are summarized in Table 6-1 and in Table 3-2.

Table 6-1. Training Requirements

Training	Worker	Supervisor	Site Visitor (exclusion zone)
HAZWOPER (40-hr, 3-day OJT)	√	√	√
HAZWOPER Annual Refresher (8 hr)	√	√	√
HAZWOPER Supervisors Training (8 hr)		√	
American Red Cross Standard First Aid (5.5 hr) and CPR	√	√	
General Hazard Communication Training	√	√	√
Respiratory Protection Training (required only if respirators are worn)	√	√	√
Hearing Conservation Training (for workers in hearing conservation program)	√	√	√
Pre-entry Briefing	√	√	√
Site-Specific Hazard Communication (contained in pre-entry briefing)	√	√	√
Safety Briefing (daily and whenever conditions or tasks change)	√	√	√
CPR and First Aid Training		√	

√ = required.

HAZWOPER = Hazardous Waste Site Operations.

OJT = on-the-job training.

CPR = Cardio Pulmonary Resuscitation.

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7.0 PERSONAL PROTECTIVE EQUIPMENT

General guidelines for selection and use of PPE are presented in the FWSHP. Specific PPE requirements for this work are presented in the hazard/risk analysis section (Section 2.0).

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8.0 MEDICAL SURVEILLANCE

Medical surveillance requirements, as presented in Section 6.0 of the FWSHP, are summarized in Table 8-1.

Table 8-1. Medical Surveillance Requirements

Baseline	Routine	Overexposure	Termination
Prior to work assessment	Every 12 months, unless greater frequency is deemed appropriate by attending physician. Not to exceed 2-year interval	Upon developing symptoms or where exposure limits have been exceeded or suspected to have been exceeded	Upon termination or re-assignment

All medical exams shall include (see Section 6.2 of the Facility Wide Safety and Health Plan):

- medical/work history;
- physical exam by physician;
- audiometry;
- blood screening and blood count;
- chest x-ray, as specified by physician;
- electrocardiogram, as specified by physician;
- spirometry; and
- urinalysis.

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9.0 EXPOSURE MONITORING/AIR SAMPLING PROGRAM

Assessment of airborne chemical concentrations will be performed, as appropriate, to ensure that exposures do not exceed acceptable levels. Action levels, with appropriate responses, have been established for this monitoring. In addition to the specified monitoring, the SSHO may perform or require additional monitoring, such as organic vapor monitoring in the equipment decontamination area or personnel exposure monitoring for specific chemicals. The deployment of monitoring equipment will depend on the activities being conducted and the potential exposures. All personal exposure monitoring records will be maintained in accordance with 29 *Code of Federal Regulations* 1910.20. The minimum monitoring requirements and action levels are presented in Table 9-1.

Most of the field activities are not expected to pose airborne exposure hazards for the following reasons:

- Work will be performed in open areas with natural ventilation;
- Prior site sampling indicated that contaminant concentrations are unlikely to pose an airborne hazard; and
- The most probable contaminants (metals and polycyclic aromatic hydrocarbons [PAHs]) are materials with relatively low vapor pressures and exposure can be controlled through dust suppression techniques.

It is not anticipated to perform air monitoring of the breathing zone using a photoionization detector or equivalent during sampling. However, the SSHO will examine site conditions and will contact the Health and Safety Manager and initiate monitoring if there is any indication of potential airborne exposure.

Table 9-1. Monitoring Requirements and Action Limits

Hazard or Measured Parameter	Area	Interval	Limit	Action	Tasks
Airborne organics with PID or equivalent	Breathing zone [14 in.] in front of employee's shoulder	From 1 to 3 ft BGS and if site conditions, such as discolored soil or chemical smells, indicate that monitoring is necessary	<5 ppm >5 ppm	Level D Withdraw and evaluate <ul style="list-style-type: none"> • evaluate need for PPE upgrade • identify contaminants • notify project manager and H&S manager 	Drilling, hand auguring, and other intrusive work
Noise	All areas perceived as noisy	Any area where there is some doubt about noise levels	85 dBA And any area perceived as noisy	Require the use of hearing protection	Hearing protection will be worn within the exclusion zone, around power augers, or other motorized equipment
Visible airborne dust potentially containing SRCs	All	Continuously	Visible dust generation	Stop work; use dust suppression techniques such as wetting surface	All

H&S = health and safety

PAH = polycyclic aromatic hydrocarbon

PID = photoionization detector

PPE = personal protective equipment

ppm = parts per million

SRC = site-related contaminant (e.g. PAHs, arsenic)

10.0 HEAT/COLD STRESS MONITORING

General requirements for heat/cold stress monitoring are contained in the FWSHP.

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11.0 STANDARD OPERATING SAFETY PROCEDURES

Standard operating safety procedures are described in the FWSHP.

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12.0 SITE CONTROL MEASURES

Site control measures are described in the FWSHP. No formal site control is expected to be necessary for this work, as the work areas are somewhat remote and bystanders are not anticipated. The RVAAP installation is not open to the public, and only authorized personnel are allowed in the areas of concern (AOCs). If the SSHO determines that a potential exists for unauthorized personnel to approach within 25 ft of a work zone or otherwise be at risk due to proximity, then exclusion zones will be established as described in the FWSHP.

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13.0 PERSONNEL HYGIENE AND DECONTAMINATION

Personal hygiene and decontamination requirements are described in the FWSHP and in Section 2.0 of this addendum.

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14.0 EMERGENCY PROCEDURES AND EQUIPMENT

Emergency contacts, telephone numbers, directions to the nearest medical facility, and general procedures can be found in the FWSHP. All emergencies onsite will be coordinated first through **Guard Post 1 [(330) 358-2017]** who will coordinate the response. The SAIC Field Operations Manager will remain in charge of all SAIC and subcontractor personnel during emergency activities. The SAIC field office will serve as the assembly point if it becomes necessary to evacuate one or more remedial locations. During mobilization, the SSHO will verify that the emergency information in the FWSHP is correct.

Each field team shall have a cellular phone and/or a 2-way radio capable of contacting Guard Post 1 for communications purposes.

During field operations all on-site personnel shall have CPR/first aid training.

Emergency Phone Numbers

Position	Phone
RVAAP Guard Post 1 (Police, Fire, Emergency Medical)	(330) 358-2017
Hospital (Robinson Memorial, Ravenna)	(330) 297-2449/0811
RVAAP Facility Manager Mark Patterson	(330) 358-7311
RVAAP Operation and Maintenance Contractor Jim McGee, PIKA International, Inc.	(330) 358-3005
USACE Mark Nichter	(502) 315-6375
Ohio EPA, Eileen Mohr	Office: (330) 963-1221 Cell: (216) 401-8382
SAIC Project Manager, Kevin Jago Jed Thomas	(865) 481-4614 Office: (330) 405-5802 Cell: (216) 214-2599
SAIC Health and Safety Personnel, Steve Davis CIH, CSP Heather Miller	(865) 481-4755 Office: (330) 405-5814 Cell: (330)-573-8571

RVAAP = Ravenna Army Ammunition Plant

USACE = U.S. Army Corps of Engineers

Ohio EPA = Ohio Environmental Protection Agency

SAIC = Science Applications International Corporation, Inc.

CIH= Certified Industrial Hygienist

CSP = Certified Safety Professional

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15.0 LOGS, REPORTS, AND RECORD KEEPING

Logs, reports, and record keeping requirements are described in the FWSHP.

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16.0 REFERENCES

American Conference of Governmental Hygienists (ACGIH) 2008. Threshold Limit Values. 2008

NIOSH (National Institute for Occupational Safety and Health) 2005. *NIOSH Pocket Guide to Chemical Hazards*. September 2005.

USACE (U.S. Army Corps of Engineers) 2007. *Safety and Occupational Health Requirements for Hazardous, Toxic, and Radioactive Waste (HTRW) and Ordnance and Explosive Waste (OEW) Activities*, ER-385-1-92. May 2007.

USACE 2003. *Safety and Health Manual*, EM-385-1-1-13. November 2003.

USACE 2001. *Facility Wide Safety and Health Plan for Environmental Investigations at the Ravenna Army Ammunition Plant, Ravenna, Ohio*, DACA62-00-D-0001, D.O. CY02, March 2001.

USACE 2004. *Facility-Wide Groundwater Monitoring Program for the Ravenna Army Ammunition Plant, Ravenna, Ohio*, GS-10F-0350M, D.O. DACA27-03-F-0047, September 2004.

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17.0 FACILITY AND HOSPITAL MAPS

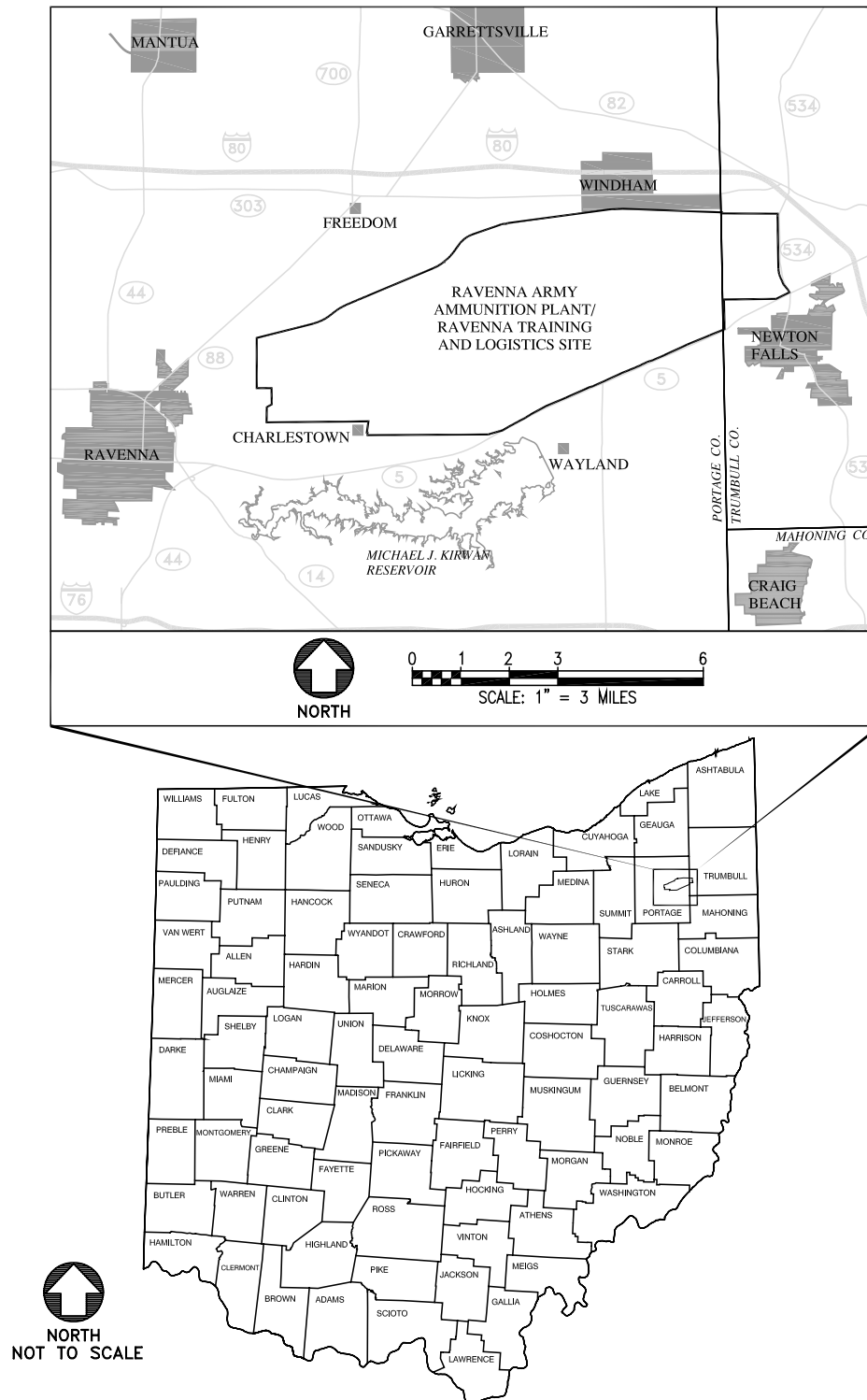


Figure 17-1. General Location and Orientation of the RVAAP/RTLS

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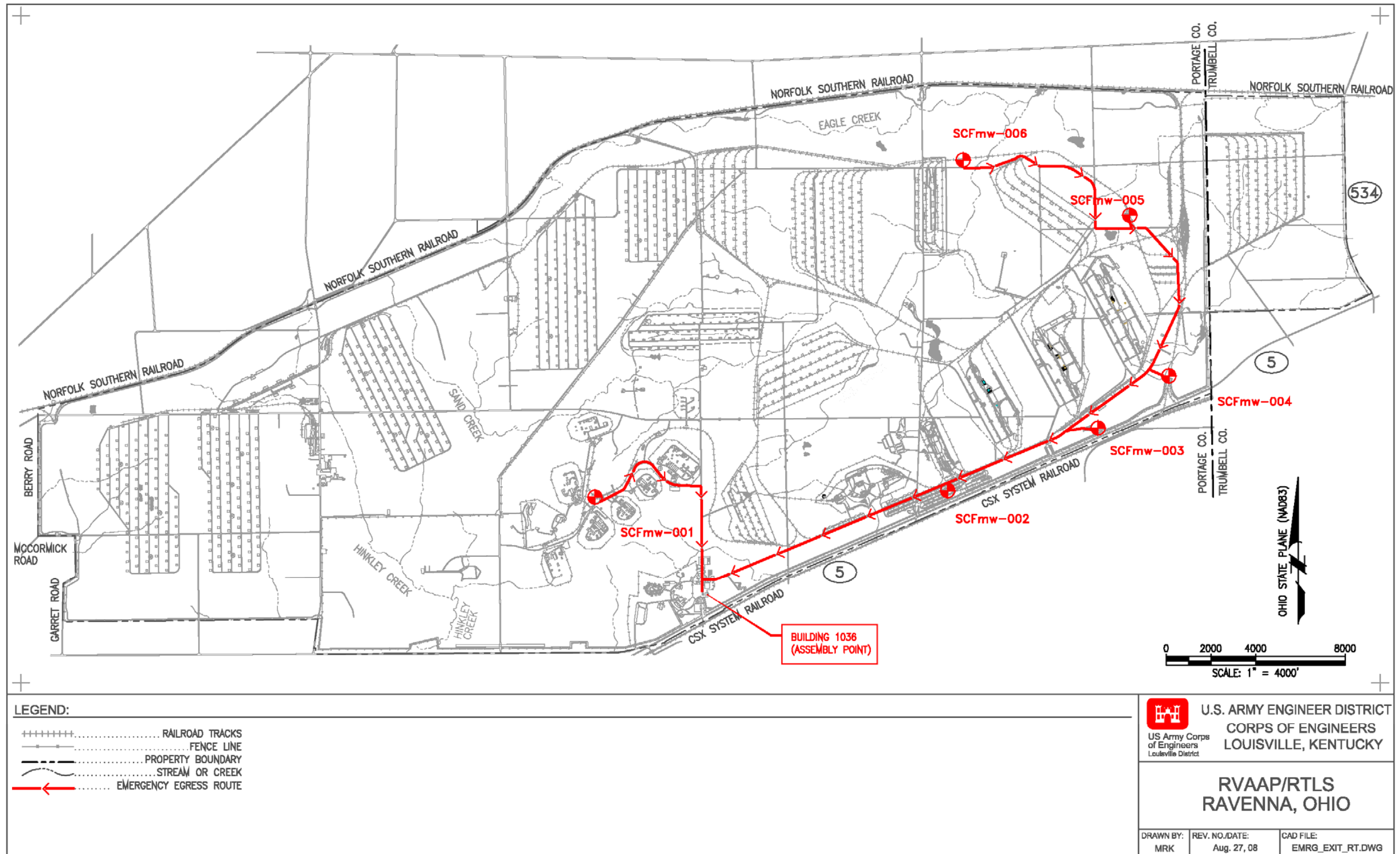


Figure 17-2. RVAAP/RTLS Site Map and Egress Route

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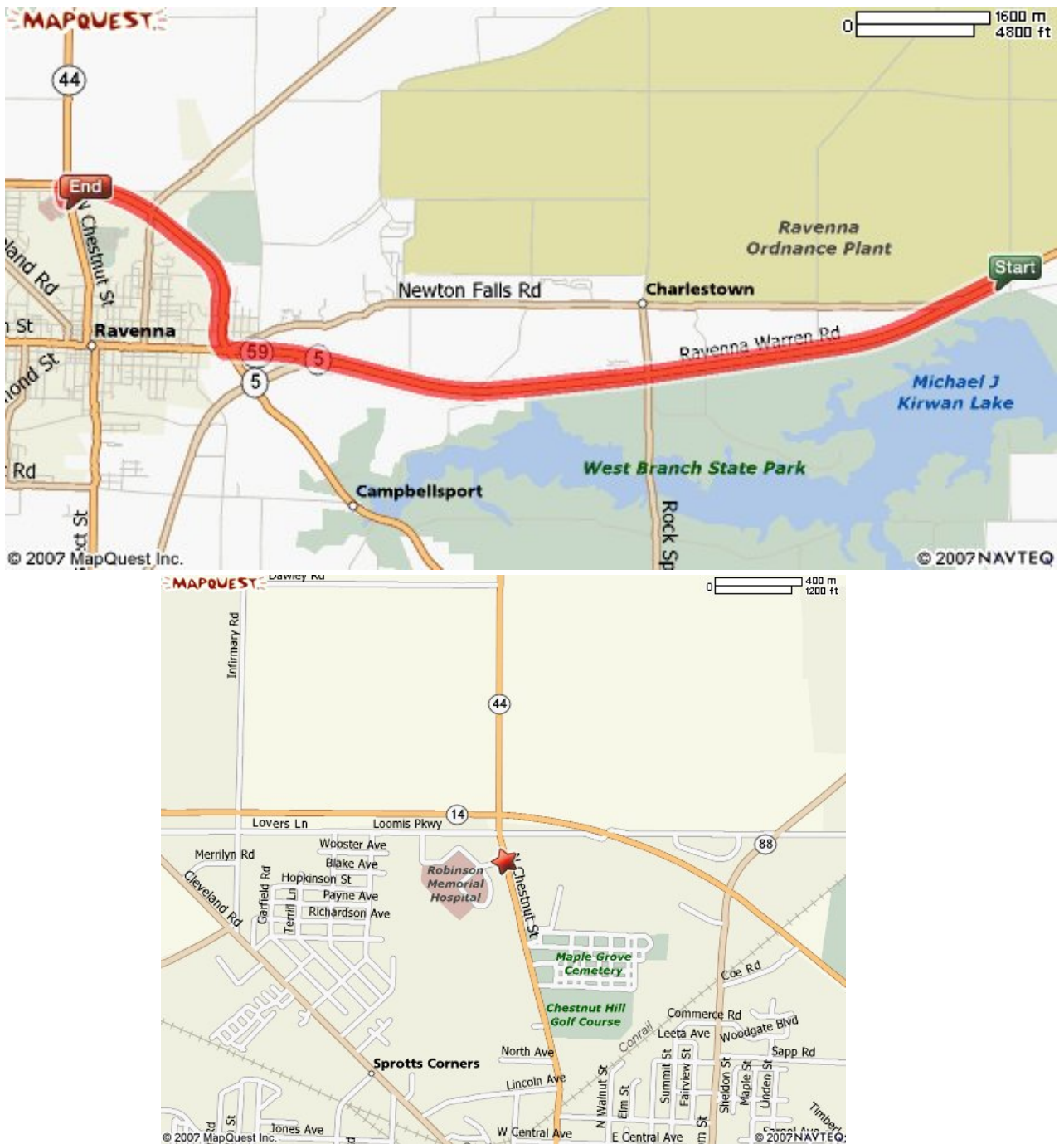


Figure 17-3. Route Map to Pre-Notified Medical Facility

Robinson Memorial Hospital
6847 N. Chestnut Street
Ravenna, Ohio
(330) 297-0811

Directions: West on State Route 5. Stay straight onto OH-59 West.
Turn Right onto OH-14/OH-44. Turn Left onto North Chestnut St.

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<i>USACE (D. Buchanan, D. Kinder, R. Hocket, M.Nichter)</i>					
A-1.	Fig 1-2	Pg. 1-3	Wells are labeled “MW-1” thru “MW-6”. These well IDs have been previously used several times at various RVAAP AOCs.	Suggest that the wells be given unique well numbers that provide clear identification of the deep nature of the wells.	Concur. Wells will be relabeled “SCFmw-001” through “SCFmw-006”. SCF will be the designator for Sharon Conglomerate Formation wells.
A-2.	Section 4.1.3.1	Pg. 4-3	No mention is made of the rock core description protocol.	Please add a description of the rock core description protocol that will be used. USACE desires that a systemic description be provided that will thoroughly describe the rock cores	Concur. Descriptions of the rock core will be in accordance with Section 4.3.2.4.1.1 of the Facility-Wide SAP and Table 4-2 Soil and Rock Parameters to be Recorded on Borehole Logs. Text will be revised as follows: “...Facility-Wide SAP. Visually determine Unified Soil Classification System (USCS) of each soil sample collected will be recorded on each boring log Descriptions recorded on each boring log for soil and rock cores will be in accordance with Table 4-2 in the Facility-Wide SAP. ”
A-3.	Section 4.1.3		No mention of retention of soil samples is made.	Suggest that representative soil samples be retained for review by the project team. Suggest that 6” of each 2ft be a minimum amount retained.	Concur. Text revised as follows: “...to bedrock refusal. Soils will be described and recorded in the field logbook and a representative sample of the soil encountered will be retained and archived for future reference. A minimum of six (6) inches will be retained of each two (2) foot interval. Once the outer.... ”
A-4.	Section 4.1.3	Pg. 4-2	No mention is made of how missing	Please add this information.	Concur. Text revised as follows:

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			sections of rock core (no recovery) will be reserved in the core storage boxes or identified on the logs. An attentive field inspector, working in concert with the driller, can often identify with good precision what sections out of a core barrel are missing by observation of drilling rates, the lithology of cuttings, rig response to the coring operation, and other peculiarities associated with field operations.		“Missing sections of rock core due to no recovery will be noted in the field on the field boring logs and notes placed in the archived rock cores noting the missing sections and the depth of the missing section.”
A-5.	QAPP Section 7.2	Pg. 7-1	Perchlorate sampling is scheduled for the first of four quarterly sampling events.	Suggest that perchlorate sampling be deferred until the second sampling event, consistent with what’s being done in the accelerated ground water sampling program throughout RVAAP.	Concur. Text revised as follows: “During the first second quarter of sampling perchlorate will...”
A-6.	p. 1-1	Pg. 1-1	Line 13. The word “well” is missing after the word “monitoring”.	Edit the document to correct deficiency.	Concur. Text revised as follows: “...a viable monitoring well from being installed...”
A-7.	p. 1-1	Pg. 1-1	Line 8. Monitoring well depths can vary considerably as a result of topographic changes across RVAAP.	Suggest mention is made to the likely variability in the monitoring well depths.	Concur. Text revised as follows: “...Guard (OHARNG). Completion depths of the wells may vary based on the topographic changes across RVAAP and the depth at which the basal portion of the Sharon Conglomerate is encountered.”
A-8.	p. 3-1	Pg. 3-1	Line 9. The “early detection” component of the stated primary objective is not clear.	Suggest revising this sentence to: “The primary objective of the	Concur. Text Revised as follows:

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				investigation is to install six monitoring wells to evaluate the impact, if any, that RVAAP operations had on groundwater quality in the deeper portions of the Sharon Conglomerate.”	“The primary objective of the investigation is to install wells that can be used to characterize and monitor the deep bedrock aquifer and provide early detection for any potential migration of contaminants via the deep bedrock groundwater aquifer.” six monitoring wells to evaluate the impact, if any, that RVAAP operations had on groundwater quality in the deeper portions of the Sharon Conglomerate.”
A-9.	p. 4-1	Pg. 4-1	Line 4. Same comment as A-1 regarding anticipated depth of the deep monitoring wells.		Concur. Text revised as follows: “...RVAAP site. Completion depths of the wells may vary based on the topographic changes across RVAAP and the depth at which the basal portion of the Sharon Conglomerate is encountered.”
A-10.	p. 4-1	Pg. 4-2	Line 40. What type of subsurface conditions would warrant the use of a longer screen?	Suggest mention is made to the types of subsurface conditions that might warrant the use of a longer well screen interval.	Concur. Text revised as follows: “.... (e.g. 20 ft). A longer length screen may be used for lower yielding formations or if the exact depth of the water bearing formation cannot be accurately obtained from the rock core record. Use of screen....”
A-11.	Section 4.1.1.2	Pg. 4-1	Will the rock cores that are continuously collected during drilling be field screened for VOCs?	Indicate if field screening of rock cores is planned during drilling.	Clarification. Rock cores will be continuously field screened for VOCs. Section 4.2.2 Organic Vapor Screening p. 4-3 describes the planned field screening during well installation activities. No text changes proposed.

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A-12.	p. iv	Pg. iv	In the List of Acronyms, PBA is defined as "Performance-Based Agreement," it should be "Performance-Based Acquisition."	Edit the document to correct the definition.	Concur. Text revised as follows: "Performance-Based Agreement Acquisition "
A-13.	Attachment 2; p. 14-1		Cynthia Ries is listed as the Emergency Contact for the USACE. She will not be working with this project after October 2008.	List Mark Nichter, Phone # 502-315-6375 as USACE Emergency Contact	Concur. Text revised as follows: Cynthia Ries Mark Nichter (502) 315- 6347 6375
A-14.	Section 2.2, Pg 2-2		<p>The current schedule and list of deliverables does not provide for SAIC's submittal of well installation documentation until the Pre-Draft Monitoring Report is issued approximately one year later (following well sampling events). This is insufficient. Submission of well installation documentation should occur within 30 days of the completion of well installations. This is also required by Ohio Revised Code Section 1521.05.</p> <p>At a minimum, SAIC should include and provide a simple letter report addressed to the USACE and the Ohio EPA within 30 days of the completion of well installations. At a minimum, the letter report should include; a site map showing well installation locations, corresponding boring logs, and well installation diagrams. Also, the Ohio EPA references the completion and submittal of a Drilling Report form</p>		<p>Clarification. Well installation documentation will be completed and submitted to ODNR within 30 days of the monitoring well installation by the drilling Subcontractor. This is a current requirement within the drilling SOW.</p> <p>Concur. The following paragraph will be added at the end of Section 5.7:</p> <p>"In addition to the monthly project reports, a fieldwork letter report will be submitted to USACE and Ohio EPA by SAIC thirty (30) days following conclusion of drilling fieldwork activities. This letter report will serve as a transmittal of field documents including a site map showing well installation locations and corresponding electronic drill logs which notate the boring description and well installation diagram."</p>

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A-15.	p. 4-1		SAIC has not discussed how the basal portion of the Sharon Conglomerate will be determined in the field by the field geologist. This is necessary to determine the total depths of the borings and the associated well installations, and not previously determined subsurface depths or surface elevations. Existing geologic cross-sections suggest the new well installations in the vicinity of Load Lines 1, 2, 3, and 12 will likely extend to total depths of about 150 below ground surface. The new well installation planned in the Fuze and Booster area will likely extend to a total depth of about 250 feet below ground surface.	Provide a discussion of how the basal portion of the Sharon Conglomerate will be determined in the field based on its field description, and its contact with the underlying Cuyahoga Group. The Sharon Conglomerate is typically described as a coarse to fine grained sandstone with thin shale lenses. The underlying Cuyahoga Group (stopping point) is typically described as a medium to dark gray shale with thinly bedded sandstone lenses. The bottom of the wells should be installed in the boreholes to intercept the contact between these formations. This process will properly establish wells screened in the basal portion of the Sharon Conglomerate.	Concur. Additional text added in Section 4.1 for clarification as follows: “...RVAAP site. Completion depths of the wells may vary based on the topographic changes across RVAAP and the depth at which the basal portion of the Sharon Conglomerate is encountered. The completion depth of the Sharon Conglomerate deep bedrock monitoring wells will be located at the interface of the Sharon Conglomerate, a tan fine grained sandstone, and the underlying Cuyahoga Group, a medium to dark gray shale. These stratigraphic units will be determined in the field based on their field description and visual inspection of the core by the field geologist. ”
A-16.	3-7		(Also pertaining to Comment A-8): To meet this objective it is necessary to install the new wells in the Sharon Conglomerate and to collect representative groundwater samples from the basal portion of the Sharon Conglomerate. In order to ensure the new well installation in the Fuze and Booster area produces water from only the Sharon Conglomerate, a deeper surface casing or intermediate casing may be required to screen off the upper (overlying) water producing formations. Existing groundwater monitoring wells in the vicinity of the Fuze and Booster area are currently screened in		No intermediate casing will be installed since the well will not be an open borehole that provides a conduit for potential contamination. The use of 10 feet of screen within the basal Sharon Conglomerate and the use of grout during well installation will prohibit any downward migration of water from the Homewood Sandstone. <u>Amended Response 17-Dec-08</u> Further discussion was held on this issue with Ohio EPA DERR-NEDO on 11-Dec-08 and USACE-CELRL on 12-Dec-08. Upon further review of available historical groundwater

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			the Homewood Sandstone formation, a water bearing formation that overlies the Sharon Conglomerate.		quality data, and the distance of the proposed new wells from existing AOCs, it was agreed that a 3 rd intermediate string of casing will not be necessary at the proposed Sharon well installation (SCF-mw-001) in the Fuze and Booster area. No impacts to groundwater quality are known to exist within approximately ¼-mile of this proposed well location.
<i>Ohio EPA (Vicki Deppisch)</i>					
O-1.	Section 4.1.1.2, Pg 4-1 and Section 4.1.3, Pg 4-2		<p>Section 4.1.1.2 and Section 4.1.3 do not discuss what action will be taken in the event that the boring is found to be dry during drilling and/or installation activities.</p> <p>The issue of moving the well location and abandonment of the unused location was discussed during a conference call on August 20, 2008 between the USACE, its contractors, and Ohio EPA.</p>	Please provide a section in the Work Plan detailing what proposed steps will be followed if the boring(s) is dry and must be moved from its original location.	<p>Concur. Additional text added to the end of Section 4.1.3 for clarification as follows:</p> <p>“If a proposed monitoring well location does not encounter water during drilling, it will be abandoned in accordance with Army and Ohio EPA requirements and the location moved to a suitable alternate drilling location determined by RVAAP stakeholders (anticipated to be within in a 50 foot radius of the original location). Drilling will continue until a well can be installed at the desired water bearing depth.”</p>
O-2.	Section 4.3, Pg 4-5, Line 41	Pg. 4-6	<p>Section 2.2 text indicates the vertical coordinates of all monitoring wells will be determined to within 0.06 m (0.2 ft) and reference the NAD83 coordinate system.</p> <p>Section 4.3.2.3.12.2 of the 2001 Facility SAP states that all wells will have a vertical accuracy of at least 0.3 cm (0.01</p>	Please provide a discussion concerning the change in the vertical accuracy between the two documents.	<p>Concur. Text in Section 2.2 will be revised to meet the accuracy requirements in the 2001 Facility-Wide SAP as follows:</p> <p>“Following well installation activities, the horizontal coordinates of all monitoring wells will be determined to within 0.3 m (1 ft). Horizontal coordinates will be in Ohio state</p>

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			foot).		plane coordinates system. The vertical coordinates of all monitoring wells will be determined to within 0.06 m (0.2 ft) and will reference the NAD83 coordinate system the wells will be surveyed in accordance with the procedure presented in Section 4.3.2.3.12 of the Facility-Wide SAP.”
O-3.	Section 7.2, Pg 7-1, Lab Analysis	Part II, Pg. 7-1	The document states, “The six deep bedrock wells will be monitored for metals (TAL).....and PCBs similar to the analysis for the background wells monitored as part of the FWGWMP.”	Please discuss “similar” in more detail and the rationale for not analyzing for the same constituents as the background wells.	Concur. Text will be revised to more clearly state that the wells will be monitored for exactly the same constituents as being sampled as part of the FWGWMP. Text revised as follows: “The six deep bedrock wells will be monitored for the same target analyte list (TAL) metals.....and PCBs as presented in Section 4.3 of the Facility-Wide Groundwater Monitoring Program Plan for the RVAAP similar to the analysis for the background wells monitored as part of the Facility Wide Groundwater Monitoring Program Plan.
O-4.	Section 7.2, Pg 7-1, Lab Analysis	Part II, Pg. 7-1	Document states perchlorate will be sampled once, during the first quarter.	Please note that right now perchlorate data is being collected for all wells based on only one sampling event. After all the data is collected, it will be evaluated. The perchlorate data from the deep wells will be added to the database and also evaluated at a later time. Additional perchlorate sampling may be required.	Clarification. The text is being revised as to when the perchlorate sampling will be taking place. See related response to Comment Number A-5. Additional sampling of perchlorate, if required would be addressed by Army under the FWGWMP.
O-5.	General	General	In the past, there have been changes to the	Please make sure these changes are	Concur. See response to Comment O-3. The

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			FWGWMP regarding analytical methods, reporting limits, etc.	included.	latest changes to the FWGWMP will be reviewed and the most recent analytical methods, reporting limits, etc. will be followed during implementation of the sampling of the newly installed monitoring wells.
O-6.	General	General	It is important that complete cores be recovered, logged, and stored		Concur. See responses to comments A-2 through A-4. Every effort will be made to recover complete cores. Each monitoring well will be logged and recovered rock cores archived for future reference.
O-7.	General	General	Ohio EPA does not object if the location of the well is moved slightly (approximately 10 feet) due to trees, etc., or a greater distance (approximately 50 feet), if a dry hole is encountered. All location changes must be approved by Katie Elgin prior to drilling. Also, please GPS the new location.		Concur. See response to comment O-1. OHARNG will be informed of any need to relocate well locations and new locations will not be drilled until approval has been granted by the OHARNG. New locations will be surveyed and final locations presented in the report documenting field activities.

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O-8.	Additional comment dated 05-Dec-08 – General	Pg. 4-2	Ohio EPA requested that complete cores be recovered, logged, and stored. The response by SAIC indicated that recovered rock cores will be archived for future reference. There appears to be a misunderstanding regarding Ohio EPA's request; complete cores included the unconsolidated, above the bedrock. In addition, comment # A-3, by the USACE, "suggested that representative soil samples be retained for review by the project team. Suggest that 6" of each 2 ft be a minimum amount retained." The response by SAIC concurred. Ohio EPA is requesting that complete cores for the 6 deep wells be recovered, logged, and stored.		<u>Amended Response 17-Dec-08</u> Per discussions with Ohio EPA DERR-NEDO on 11-Dec-08 and USACE-CELRL on 12-Dec-08, this response will supersede the response to Comment A-3. Text of Section 4.1.3 revised as follows: "....to bedrock refusal. Soil will be described and recorded in the field logbook and all soil cores will be retained and archived for future reference. Once the outer...."
O-9.	Additional comment dated 05-Dec-08 – General	General	The issue and rationale of potentially double casing the deep wells requires further discussion and still needs to be resolved.		<u>Amended Response 17-Dec-08</u> See revised response to USACE comment A-16. Per discussions with Ohio EPA DERR-NEDO on 11-Dec-08 and USACE-CELRL on 12-Dec-08, the Sharon Conglomerate wells will be constructed with a surface casing installed into the top of bedrock. Coring and air rotary drilling will then be completed to the target depth and the screen and riser casing installed. A third intermediate casing within the bedrock interval is not required.
<i>RTLS-Environmental (K. Elgin)</i>					
R-1.	Attachment 2 SSHP, Pg	Part III, Pg. 3-1	Should "excavation will be entered" be changed to "excavations will not be		Clarification. The table presents suspected hazards which may be encountered during this

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RAVENNA ARMY AMMUNITION PLANT, RAVENNA OHIO
COMMENT RESPONSE TABLE
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Comment Number	Page or Sheet	New Page or Sheet	Comment	Recommendation	Response						
	3-1, Table 3-1		entered”?		investigation. The hazard is Excavation entry and it is checked “No” which means SAIC does not anticipate excavation entry as part of this investigation. No text changes proposed.						
R-2.	Attachment 2 SSHP, Pg 3-1, Table 3-1	Part III, Pg. 3-1	“Exposure to chemical contaminant and chemical tools”: Should this be marked as “yes” (especially since Table 3-2 Hazard Analysis indicates there will be exposure to chemicals)?		Concur. Table will be revised as follows: <table><tr><td>Yes</td><td>No</td><td>Hazard</td></tr><tr><td>X</td><td>✗</td><td>Exposure to chemicals</td></tr></table>	Yes	No	Hazard	X	✗	Exposure to chemicals
Yes	No	Hazard									
X	✗	Exposure to chemicals									
R-3.	Attachment 2 SSHP, Table 3-2	Part III, pg. 3-3	“Gunfire (deer hunting with shotguns loaded with slugs is allowed in some areas on Friday and Saturday during season, (October and November)” This statement is inaccurate as all controlled shotgun deer hunts are on Saturdays. Also, no contractors are allowed on post during the deer hunts. Therefore, gunfire will not be a hazard during the project. I recommend deleting all references to this in the table.		Concur. Table 3-2 will be revised and all references to gunfire will be deleted.						
Additional Revisions per SAIC											
SAIC-1.	5-1	Pg. 5-1 and 5-2	Additional language and figure to be added to present sample number system for the sample numbers to be collected after Line 18.	Change language within the SAP and add Figure 5-1 to remain consistent between documents.	Text will be revised as follows: “...project field books. The sample number system is presented in Figure 5-1 and presents the sample numbers that will be used during this project.” Figure 5-1 will be added						

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