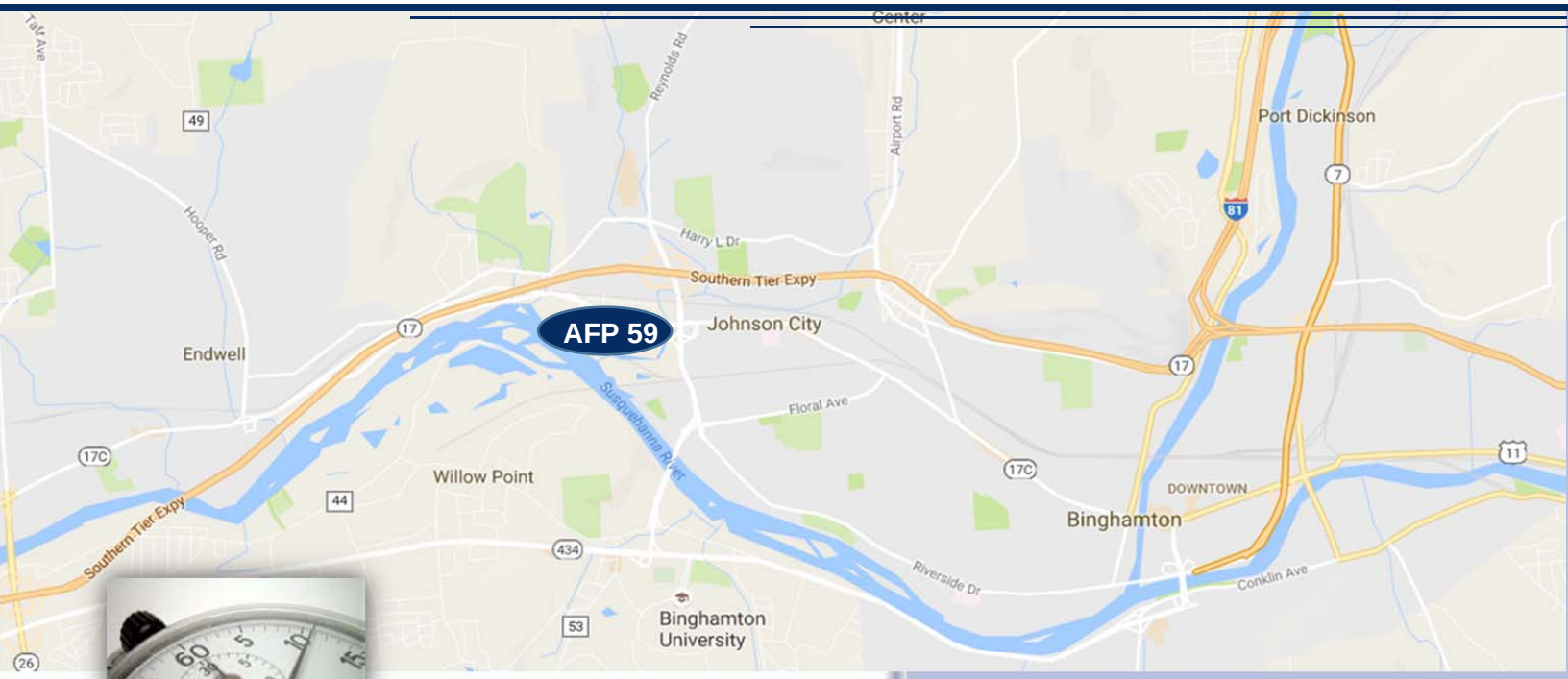
TECHNICAL AND MANAGEMENT WORK PLAN
AT SS005, AIR FORCE PLANT (AFP) 59
JOHNSON CITY, NEW YORK
CONTRACT FA8903-16-C-0022

US AIR FORCE
CIVIL ENGINEER CENTER









VERINA Consulting Group, LLC

November 28, 2016

Contents

INTRODUCTION AND SITE BACKGROUND 1

TEAM ORGANIZATION 2

METHODOLOGIES 5

SECURITY 6

SCHEDULE 6

TRAVEL 6

LIST OF FIGURES

Figure 1 – Regional Location Map

Figure 2 – Site Map

Figure 3 – Organizational Chart

Figure 4 – Proposed Project Schedule

LIST OF APPENDICES

APPENDIX A – SITE-SPECIFIC HEALTH AND SAFETY PLAN (HSP)

APPENDIX B – ENVIRONMENTAL SAMPLING AND ANALYSIS PLAN (SAP)

INTRODUCTION AND SITE BACKGROUND

Verina Consulting Group, LLC (VERINA) has prepared this Technical and Management Work Plan (WP) to meet the requirements set forth in the US Air Force Civil Engineer Center (AFCEC) Contract No. FA8903-16-C-0022. The Scope of Work (SOW) to be completed under this contract includes one round of groundwater sampling from eight monitoring wells and collection of water samples from three municipal water supply wells and the finished municipal supply water as part of the ongoing long term groundwater monitoring program at site SS005 located at Air Force Plant (AFP) 59 in Johnson City, New York. Work also includes the submission of related deliverables of the sampling event. The WP presents the VERINA team organization and personnel, methodologies, site security, project schedule, and travel arrangement. The Site-Specific Health and Safety Plan (HSP) is in Appendix A. The Environmental Sampling and Analysis Plan (SAP) is in Appendix B.

Site SS005 occupies approximately 30 acres and was a former building located at AFP 59 in Johnson City, New York. Site SS005 was used for plating operations from 1942 to 1991. The groundwater investigation at the site was initiated in the 1990s. After several samples collected by the Johnson City Municipal Water Authority, which is located about two blocks west of the site, revealed elevated levels of chlorinated volatile organic compounds (VOCs) in their supply wells. A groundwater monitoring well adjacent to Site SS005 also revealed several chlorinated VOCs at concentrations above the New York State Department of Environmental Conservation (NYSDEC) Ambient Water Quality Standards (AWQS) [1]. Since then, additional groundwater monitoring has identified VOCs and 1,4-Dioxane in several of the other monitoring wells associated with the SS005 site. Additionally, vapor sampling revealed a widespread vapor intrusion (VI) issue beneath the building. However, major flooding damaged the AFP 59 building in September 2011, at which time operations ceased [2] [3]. Currently, AFP 59 is undergoing long term groundwater monitoring and the site building is in the process of being demolished and therefore VI is no longer an issue for the site.

The conceptual site model (CSM) for the AFP 59 site including a description of the site aquifers and contaminant migration pathways is presented in the HSP. Figure 1 is the regional location map showing the general location of the AFP 59 site. Figure 2 is the site map including AFP 59 along with site SS005 and the groundwater monitoring well locations.

The AFP 59 site is located within a combined residential and commercial area. It is adjoined to the north by Route 17C, across which are residential and commercial properties; to the east by the ramp to Route 201 and Little Choconut Creek, which is a tributary of the Susquehanna River; to the south by Little Choconut Creek, across which is a coal-fired power generation plant; and, to the west by residential

[1] United States Department of Energy, Energy Systems Division, Argonne National Laboratory. *Supplemental Site Inspection Report for Air Force Plant 59, Johnson City New York. Volume I: Investigation Report.* August 1995.

[2] HydroGeoLogic, Inc. *Final Health and Safety Plan, Base-Wide Long Term Monitoring at Air Force Plant 59, Johnson City, New York.* June 2012.

[3] AECOM. *Memorandum: Long-Term Monitoring Activities and Soil Gas Investigation at Air Force Plant 59, Johnson City, New York*. March 19, 2009.

properties and the Camden Street well field, which is a municipal water supply well field for Johnson City and is located about two blocks away from the AFP 59 site.

The AFP 59 site is listed on the New York State Department of Environmental Conservation (NYSDEC) List of Inactive Hazardous Waste Sites and has been assigned Site No. 7-04-020. Based on NYSDEC recommendation, the groundwater at the site is currently undergoing long term groundwater monitoring, which was initiated for the site in November 2004[3]. The site is not undergoing active remediation at present.

TEAM ORGANIZATION

The organizational structure of VERINA team for the execution of this Contract is presented in Figure 3.

A description of the personnel who will be involved with the execution of this Contract and their responsibilities are provided below.

Robert Gan – Contract Manager:

- Responsibilities:
  - Assume overall control over execution of Contract;
  - Oversee and review VERINA deliverables, including data, memoranda, letters, reports, and all other documents transmitted to the AFCEC; and
  - Provide final approval for major project deliverables.

- Educational Background:
  - Ph.D. in Civil and Environmental Engineering, University of Wisconsin-Madison, Madison, Wisconsin, December 1991.
  - M.S. in Civil and Environmental Engineering, Utah State University, Logan, Utah, December 1988.
  - B.S. in Environmental Engineering, National Chung-Hsing University, Taichung, Taiwan, R.O.C., June 1985.

- Licenses & Certifications:
  - Professional Engineer (P.E.) in the States of New York, New Jersey, Pennsylvania, Connecticut, and Wisconsin.
  - 40-Hour Training Course in Hazardous Waste Operations and Emergency Response (HAZWOPER Certificate), required by OSHA 29 CFR 1910.120.

- Professional Experience:
  - Over 30 years of research and professional experience in the civil and environmental engineering field, including experience in site evaluation and assessment; groundwater and soil sampling and remediation; remediation system design, engineering and implementation; environmental modeling; data analysis; coordination of subcontracting services; preparation of technical reports and submittals; and site closure and brownfield redevelopment.

- Experience in business management, project, program and client management for environmental projects as well as portfolios of projects/sites serving both private and public sector clients.

Michael Hansen - Program Manager:

- Responsibilities:
  - Offer direct assistance to AFCEC;
  - Coordinate with the Contracting Officer Representative (COR), Site Representative and VERINA personnel;
  - Manage and coordinate all aspects of the project, as defined in the contract, the Performance Work Statement (PWS), the WP, the SAP, the HSP, and/or required regulatory procedures, with an emphasis on adhering to the contract objectives;
  - Direct overall site actions and VERINA personnel;
  - Review documents prepared by VERINA;
  - Maintain official, approved WP, SAP, and HSP; and
  - Process and prepare all incoming and outgoing invoices.

- Educational Background:
  - B.S. in Chemical Engineering, Clarkson University, Potsdam, New York, June 1990.

- Licenses & Certifications:
  - Professional Engineer (P.E.) in the States of Pennsylvania and Indiana;
  - The 40-Hour Training Course in Hazardous Waste Operations and Emergency Response (HAZWOPER Certificate), required by OSHA 29 CFR 1910.120.

- Professional Experience:
  - Over 25 years of professional experience in the civil and environmental management, engineering, and science field, including diverse experience in the areas of site evaluation and assessment; groundwater and soil sampling and remediation; environmental compliance; remediation system design, engineering and implementation; environmental modeling; coordination of subcontracting services; data analysis; preparation of technical reports and submittals; and the overall evaluation of potential liabilities associated contaminated sites and other facilities.
  - Experience in project, program and client management for individual environmental projects as well as portfolios of projects/sites serving both private and public sector clients.

Sarah Tufaro – Task Manager:

- Responsibilities:
  - Assist Program Manager in project management and coordinate with VERINA field staff;
  - Assist in preparation for and completion of field activities;
  - Prepare contract deliverables;

- Review laboratory data packages; and
- Oversee and communicate with the analytical laboratory.

- Educational Background:
  - B.S. in Environmental Science, Rutgers, the State University of NJ, New Brunswick, New Jersey, January 2011.

- Licenses & Certifications:
  - The 40-Hour Training Course in Hazardous Waste Operations and Emergency Response (HAZWOPER Certificate), required by OSHA 29 CFR 1910.120.
  - The 8-Hour Training Course in Hazardous Waste Operations: Supervisor in accordance with OSHA 29 CFR 1910.120(e)(8).

- Professional Experience:
  - Over five years of professional in the environmental geology and science field, including overseeing installation of soil borings and groundwater monitoring wells; air, soil, groundwater and sediment sampling; remediation system design, engineering and implementation; environmental modeling; data analysis; coordination of subcontracting services; and preparation of technical reports and submittals.
  - Leads the QA/QC of VERINA's laboratory analytical program and is responsible for the Company's New Jersey Laboratory Certification.

Kerry Austin – Environmental Scientist/Site Safety Officer/Field Lead:

- Responsibilities:
  - Monitor field health and safety procedures and practices as the Site Safety Office (SSO);
  - Perform groundwater sampling activities;
  - Calibrate, operate, and maintain field equipment;
  - Maintain sample custody;
  - Daily communication with Task Manager during field activities; and
  - Assist in preparation of project deliverables.

- Educational Background:

  - B.S. in Earth & Environmental Sciences, Lehigh University, Bethlehem Pennsylvania, May 2015

- Licenses & Certifications:
  - The 40-Hour Training Course in Hazardous Waste Operations and Emergency Response (HAZWOPER Certificate), required by OSHA 29 CFR 1910.120.

- Professional Experience:
  - Professional experience in the environmental geology and science field, including overseeing installation of soil borings and groundwater monitoring wells; air, soil, groundwater and sediment sampling; vapor intrusion assessment and abatement; implementation of chemical injection in-situ oxidation remedial programs; data analysis; and preparation of technical reports and submittals.
  - Lead for coordinating and implementing field activities and safety procedures.

Matthew Gandy – Environmental Scientist:

- Responsibilities:
  - Performance of groundwater sampling activities;
  - Calibrate, operate, and maintain field equipment;
  - Maintain sample custody; and
  - Assist in preparation of project deliverables.

- Educational Background:
  - B.S. in Environmental Science, Minor in Philosophy, Moravian College, Bethlehem, Pennsylvania, 2016.

- Licenses & Certifications:
  - The 40-Hour Training Course in Hazardous Waste Operations and Emergency Response (HAZWOPER Certificate), required by OSHA 29 CFR 1910.120.

- Professional Experience:
  - Professional experience in the environmental geology and science field, including overseeing installation of soil borings and groundwater monitoring wells; air, soil, groundwater and sediment sampling; vapor intrusion assessment and abatement; implementation of chemical injection in-situ oxidation remedial programs; data analysis; and preparation of technical reports and submittals.

METHODOLOGIES

To complete the sampling activities described in the Contract, VERINA will employ the low-flow purging and groundwater sampling method. The samples will then be submitted to ALS Environmental, Inc. of Rochester, New York, a New York state certified laboratory, and analyzed for volatile organic compounds (VOCs) and 1,4-Dioxane.

All field activities and the subsequent data review and deliverable preparations will be performed following New York State Department of Environmental Conservation (NYSDEC) and AFCEC regulations and guidelines. Further information regarding project methodologies can be found in the attached SAP, located in Appendix B.

SECURITY

Due to the nature of the required activities presented under this Contract and the current condition of the AFP 59 site, VERINA does not believe any special security requirements are needed in relation to the execution of this Contract.

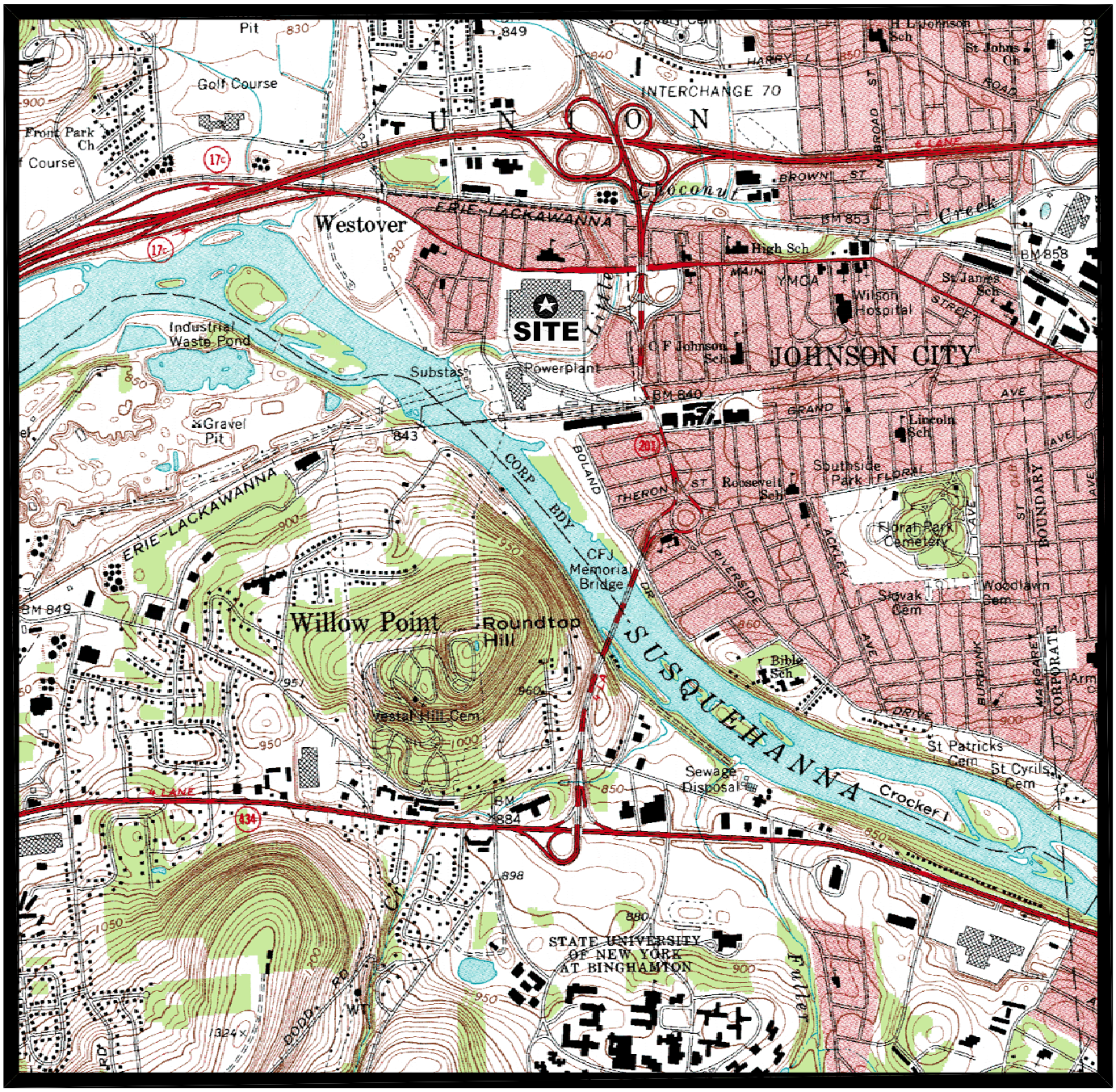
SCHEDULE

The projected schedule for the completion of the tasks associated with this Contract is presented on Figure 4. VERINA plans to have all associated field activities completed in December 2016 and all reporting finalized and submitted in January through February 2017.

TRAVEL

VERINA will have two field personnel travel from the VERINA project site in Binghamton, New York to the AFP 59 site located in Johnson City, New York, which is a distance of approximately 4 miles, one way. The field personnel will travel to the site in one field vehicle to complete the sampling activities required under this Contract. VERINA expects the sampling activities to be completed within two days. In between sampling days, field personnel will stay overnight at a nearby hotel also located in Johnson City, New York, which is a distance of approximately 1.5 miles, one way, from the site.

Figures



WEST BINGHAMTON AND
EAST BINGHAMTON QUADRANGLES
7.5–MINUTE SERIES

N

0 2000

APPROXIMATE SCALE

VERINA Consulting Group, LLC

REGIONAL LOCATION MAP

AIR FORCE PLANT 59 – JOHNSON CITY, NEW YORK

Prepared By: CMS	Date: NOVEMBER 2016
Project No: 2101.0001	Figure: 1

Z:\JOBFILES\2101-AFCEC\CAD\WORKPLAN\2101.0001-RLM-00.dwg LAYOUT: WP SAVED: 11/17/2016 2:27 PM BY: SARAH TUFARO



EXPLANATION

- APPROXIMATE PROPERTY BOUNDARY
- SW-3 AFP 59 MONITORING WELL
- JC-1 OFFSITE MUNICIPAL WELL
- URS-2D OFFSITE MONITORING WELL
- LOCATION OF JOHNSON CITY MUNICIPAL SUPPLY WELL FIELD
- SITE SS005

SOURCE: AERIAL IMAGERY OBTAINED FROM USGS EARTHSTAR GEOGRAPHICS SIO ©, 2016 MICROSOFT CORPORATION © 2010 NAVTEQ © AND BING, ACCESSED ON OCTOBER 3, 2016

0 200 FT.

APPROXIMATE SCALE

VERINA Consulting Group, LLC

SITE MAP

AIR FORCE PLANT 59 – JOHNSON CITY, NEW YORK

Prepared By: CMS/ST	Date: NOVEMBER 2016
Project No: 2101.0001	Figure: 2

\\server01\Shared\JOBFILES\2101-AFCEC\CAD\WORKPLAN\2101.0001-WP-00.dwg LAYOUT: WP SAVED: 11/17/2016 1:29 PM BY: CLAUDIO STABILE

FIGURE 3 - ORGANIZATIONAL CHART

U.S. Air Force Civil Engineer Center
CONTRACT NO. FA8903-16-C-0022
PERFORM GROUNDWATER MONITORING AT SS005 AT AIR FORCE PLANT 59, JOHNSON CITY, NEW YORK

U.S. Air Force Civil Engineer Center



Michael A. Hansen, P.E.
Program Manager
Sr. Remediation Engineer



D. Robert Gan, Ph.D., P.E.
Contract Manager
QA/QC and Health & Safety

GROUNDWATER MONITORING AND REPORTING



Sarah J. Tufaro
Task Manager
Project Scientist



Kerry K. Austin
Site Safety Officer
Environmental Scientist



Matthew W. Gandy
Environmental Scientist

SUBCONTRACTING SERVICES

- **LABORATORY ANALYTICAL SERVICES**
  ALS ENVIRONMENTAL INC. - ROCHESTER

VERINA Consulting Group, LLC

Figure 4

Proposed Project Schedule
Groundwater Monitoring at SS005, Air Force Plant 59
Johnson City, New York
Contract No. FA8903-16-C-0022

Task	Completion Date(s)
Project Conference Call(s)/Meeting(s)	
Agenda - Kick Off Meeting	9/27/2016
Meeting Materials - Kick Off Meeting	10/6/2016
Kick Off Meeting	10/6/2016
Meeting Minutes - Kick-Off Meeting	10/6/2016
Agenda - Quarterly Meetings (As needed)	TBD
Meeting Materials - Quarterly Meetings (As needed)	TBD
Quarterly Meetings (As Needed)	TBD
Meeting Minutes - Quarterly Meetings (As Needed)	TBD
Work Plan, Site Specific HSP & SAP including QAPP	
Draft Report(s)	10/12/2016
Air Force Review of the Draft Report(s)	10/27/2016
Revisions & Finalization of Reports	11/22/2016
LTM Field Activities	
Field Preparation	Week of 12/05/2016
Water Level Monitoring & Sample Collection	Week of 12/12/2016
Laboratory Analysis Finalization	Week of 01/02/2017
Data Management and Validation	
Submit Technical Data Package	1/23/2017
ERPIMS Submittal	1/23/2017
Contractors Progress, Status & Management Reports	
LTM Report & Related	
Draft LTM Report and Data Evaluation	1/23/2017
Air Force Review of the Draft Report	Weeks of 1/23/2017 & 1/30/2017
Revisions & Finalization of LTM Report	Week of 2/6/2017
Master Document List	Week of 2/6/2017