APPENDIX H
RESUMES

FOR THE

Engineering Evaluation/Cost Analysis
Additional Sampling at Charlie Area
Fort McClellan, Alabama

Prepared for:

U.S. Army Engineering and Support Center, Huntsville
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APPENDIX H
RESUMES

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David Mayfield, P.E.

General Manager, Munitions Response Business Unit

Experience Overview

Mr. Mayfield manages all munitions and range sustainment business for EOD Technology (EODT). He is responsible for more than $200 Million in revenue, directing and overseeing the work of 1,700 personnel across four continents from 2006 to present. He has direct management and oversight over four major programs (Federal, Commercial, RangeXchange®, and Land Redevelopment), the supporting functions of Contract & Subcontract Management, Finance and Accounting, New Business Development, Cost and Estimating, Project Controls, and Sales & Marketing. He leads Munitions Response Business Unit Safety and Quality functions, coordinating as necessary with other Senior Corporate Managers. Mr. Mayfield is also the Program Manager for the $2.15B contract with the U.S. Army Corps of Engineers, Huntsville Division, EODT's largest contract. He is an accomplished senior director experienced in all phases of munitions removal projects, including addressing environmentally-related contamination from conventional and nuclear ordnance, remedial actions, and close-out of remedial sites. Mr. Mayfield has broad experience in managing projects involving munitions response, Engineering Evaluation & Cost Analysis (EE/CA), Remedial Investigation & Feasibility Studies (RI/FS), Munitions and Explosives of Concern (MEC) and Munitions Constituents (MC) clearance, and Hazardous, Toxic and Radioactive Waste (HTRW) environmental remediation projects for U.S. and foreign government and private sector clients, specializing in the Department of Defense (DOD) and the Army Corps of Engineers. He is Subject Matter Expert (SME) in ordnance response action design/execution; Technical Project Planning (TTP); geophysical prove-out; work plan development; site characterization/analysis; risk-based analysis; regulatory compliance; quality/safety program management; locating, identifying, and disposing of recovered range residue, MEC material, and MEC-related scrap. Mr. Mayfield is an expert in applying project controls to projects, completing over 25 projects in 2006-2008, with 96% of projects meeting or exceeding direct margin goals. He has developed capture plans and directed project and proposal activities that have resulted in corporate expansions and contract wins with numerous U.S. Army Corps of Engineers Districts, the U.S. Navy, and several other foreign government and private clients. Mr. Mayfield places the highest priority in customer satisfaction and is committed to maintaining strong client relations, quickly addressing/resolving issues, ensuring compliance with project specifications, and exceeding client expectations.

Qualifications and Education:

- ✓ Proven ability to serve as a front-line company representative and build/maintain long-term client relationships that secure loyalty, generate referrals, and lead to repeat business.
- ✓ Proven ability to develop business development, proposal development, and corporate growth strategies.
- ✓ Registered Professional Engineer in Virginia and Tennessee.
- ✓ Extensive knowledge of CERCLA, NCP, RCRA, TSCA, and OSHA regulatory requirements as well as various regulations and manuals concerning HTRW and UXO/MEC clearance.
- ✓ Extensive experience designing ordnance response actions for all types of conventional and chemical munitions, both foreign and domestic.

Education:

M.S., Civil Engineering (1983)
University of Tennessee

B.S., Civil Engineering (1976)
Virginia Tech

Significant Program Manager Accomplishments:

- **General Manager, Munitions Response, Business Unit, EOD Technology, Inc., Lenoir City, TN, 2004 – Present.** Managing all EODT munitions response contracts for the U.S. Army Corps of Engineers, Huntsville Center, including the $2.15 Billion contract with 16 task orders; the $73.8 million contract with 41 task orders; and the $11.5 million contract with 20 task orders. Directs all aspects of project design and planning, including identifying project requirements, coordinating field reviews, and project completion.

Proactively transformed and streamlined EODT's Program execution from a mediocre- performing program (2004) to one of the top performing programs for the Huntsville Center in 2008.

Completed 27 project closures (task orders), completed and closed Contract 0005, replacing marginally-performing tasks (20%) with new award of high-performing projects improving EODT's financial, health & safety, and quality services to the Huntsville Center.

Initiated and coordinated the start-up of EODT's largest two (of three) task orders (Mobile Teams and Legacy Depots), mobilizing a 1,500-person

multinational workforce; substantially exceeded project production goals over the life of contract.
Achieved EODT's first 100% "Extremely Satisfied" project ratings by the Huntsville Center in all 5 performance categories (St. Juliens Creek Remedial Action); awarded Savannah District's "HTRW Project of the Year– 2007" and the District's Charles F. Trainor Award, June 2007 (Wheeler Remedial Action).

- **Director, Business Development, Government Services, IT Corporation, 1996 - 2004.** Directed, detailed, and implemented major strategies for IT Corporation in the Department of Energy (DOE) and Department of Defense (DOD) business sector. Managed all phases of proposal development by identifying and interpreting proposal resources and requirements related to estimating, development, and execution; building external and intra-company teams; measuring budgets; and leading teams in developing strategies for contract wins. Reviewed technical and management approaches to ensure compliance with proposal strategy and directed the work of 25 personnel (peak levels) involved in project and proposal activities. Maintained open communications with client and ensured complete customer satisfaction.

  Developed and led the capture plan for the company's work for formally-used uranium-contaminated sites before program transfer from DOE to the Army Corps of Engineers. During the program transfer, authored IT Corporation's USACE/FUSRAP capture plan using information from contacts with USACE Districts in multiple cities. Developed IT Corporation's first USACE/FUSRAP qualification package, which resulted in the awarding of a major portion of the FUSRAP program.
  Supported the company's strategy development and proposals for the U.S. Air Force, U.S. Navy RAC, USACE Baltimore Total Environmental Restoration Contract (TERC), Environmental Protection Agency (EPA) IV Rapid Response, and DOE Brookhaven, Mound Plant, Nevada Test Site, Savannah River Plant, and Oak Ridge Operations. Examples of major successful proposals include: USACE, Savannah District, TERC) at $325M; EPA Region IV Rapid Response at $70M (with prime contractor Black & Veatch); DOE Oak Ridge Operations, Toxic Waste Incinerator Operations and Maintenance ($56M), ETTP K-1070-A Removal Action ($9.8M), ORNL Tank W-1A Removal Action ($3.2M), Pollution Prevention ($2M), and Portsmouth Quadrant I Remedial Actions ($1.5M).
- **Vice President, Environmental Technology & Services, Stone & Webster, 1992 - 1996.** Directed project and proposal activities for DOE, U.S. Army Corps of Engineers, and utility clients. Served as the lead strategist and negotiator for proposal and bid packages for environmental management and power generating facilities in the Eastern United States. Developed relationships with team members and organized teams to aggressively pursue bids and proposals. Initiated five proposals to Norfolk Corps of Engineers, winning four. Subsequently performed project management responsibilities for the winning bids and led the firm from project kickoff meetings through project execution. Through personal marketing successes, increased local office support from 26 to 52 personnel.

  Drafted numerous office-level proposals that contributed directly to corporate proposal development for the following major proposals: (U.S. Corps of Engineers, Savannah District, Total Environmental Restoration Contract [subcontract to IT Corporation]; U.S. Corps of Engineers, Twin Cities Army Plant, Total Environmental Restoration Contract; DOE, Brookhaven National Lab, Engineering Support; DOE Savannah River Plant, High Level Waste Treatment Operations, A&E Support Contract; U.S. Navy, Lantdiv, RAC [subcontractor to OHM]). Served as Professional Engineer for Civil Projects in Tennessee and task force member for identifying and implementing business development strategy for nationwide nuclear decontamination and decommissioning services.
- **Program Director, Advanced Sciences Incorporated (ASI), 1990 - 1992.** Directed the work of 25 project managers, engineering, and scientific personnel for engineering and environmental projects. Managed the company's Fernald Site removal action projects, including integration of NEPA, CERCLA, and RCRA requirements into project documentation. Reviewed all landfill investigation and design work for ASI's projects for the Bureau of Land Management and managed project activities for underground tank removals at the Oak Ridge National Laboratory.

- **Project Manager, Science Applications International Corporation (SAIC), 1988 - 1990.** Supervised 12 engineering and scientific personnel involved in commercial and government projects. Project Manager for identifying remedial actions at Eielsen Air Force Base, served as SAIC lead for investigating and reporting on compliance activities at the Fernald facility, provided oversight of technical documents and resolution of staffing and budget concerns, and supported bid and proposal efforts. Task Manager for

SAIC's proposal for environmental management at Savannah River Plant and bid as lead engineer for environmental restoration activities.

- **Tennessee Valley Authority, 1976 - 1988.**

  Environmental Engineering Manager: Managed the solid and hazardous waste compliance programs for construction forces at TVA's nuclear, fossil, and hydroelectric plants. Developed waste management policy and procedures, and prepared and provided related training modules. Directed the planning, permitting, design, and construction management activities for 11 major solid waste storage and disposal facilities. Represented engineering in regulatory meetings and discussions.
  Engineering and Project Controls Manager: Planned, organized, and controlled the work of 12 engineers and technicians involved in identifying discrepancies between engineering and construction drawings. Performed facility inspections to determine appropriate corrective action measures to resolve differences. Served as project control engineer for scheduling engineering and construction activities for Sequoyah Nuclear Plant, and prepared related trend analysis reports identifying critical path activities and any necessary corrective actions.
  Civil/Project Engineer: Designed civil engineering features for highway, railroad, bridge, cooling tower, chimney, and underground water conveyance systems. Coordinated interface requirements with electrical and mechanical design groups and prepared specifications for erosion and sediment control and groundwater projects.

Brian K. Gentry

Project Manager

Overview of Experience

Mr. Gentry served in the US Army for eleven years and worked on numerous MEC projects in the U.S. and Africa as an Explosive Ordnance Disposal (EOD) Technician. Since leaving the military, Mr. Gentry has spent eight years working on project management teams and in project management roles for all UXO aspects of the Assessment and Remediation portions of the Engineering Estimate/Cost Analysis (EE/CA), serving as geophysical Site Manager in charge of data collection and in numerous UXO-related management positions since 2001. Mr. Gentry is extremely knowledgeable of the UXO/ DGM industry.

Qualifications & Education

- ✓ Certified 40-hour OSHA Course
- ✓ ASQ member
- ✓ Proficient in the Quality Control aspects of UXO/GEO field operations
- ✓ Proficient in UXO/GEO project management
- ✓ 10-hour Construction Safety course

Education:
US Navy Explosive Ordnance Disposal School

Experience

- **Assistant Project Manager, EOD Technology, Inc., Redstone Arsenal Alabama, May 2007–Present.** TCRA at the SED building site location. Responsible for writing the work plan utilized to conduct UXO and geophysical operation in a time critical removal action on Redstone Arsenal. Coordinating and hosting meetings with the USACE and the SED project management team prior to conducting clearance operations. Also serving as geophysical data collection manager for the site, responsible for insuring that data collected is complete and meets established DQOs. Also worked as the Quality Manager and the Site Safety officer for the site on an as needed basis.
- **UXOQC Manager, EOD Technology, Inc., Anniston Alabama, Apr 2007–May 2007** Southern Alpha/ MRS-1 Project: Responsible for implementation of the UXO QC program. Developed checklists for all phases of UXO operations to ensure all definable features of work were observed. Conducted surveillances on field UXO teams, Geophysical data collection teams, and Reacquisition teams. Ensured quality of work required by the work plan. Conducted UXO personnel certification with detector instruments (Vallon, Schonstedt, Fisher, and EM61 operators) at the GPO. Prepared grid packets for post excavation QC. Randomly generated numbers for every grid being sampled. Worked with the Geo QC Specialist to ensure adequate vegetation was removed for EM61 operations and the surveyed boundaries and grids were accurate. Initiated field change requests (FCRs) to update the work plan. Coordinated and conducted UXO QC post excavation anomaly checks with a geophysical team using an EM61, Schonstedt, and Fisher and documented results on a PDA. Developed and completed QC Grid Reports and forwarded to Matrix Environmental for review. Facilitated the weekly QC/Production conference call with the McClellan Project team (ECC/EODT, PM, ECC/EODT, Site Supt, Matrix PM, JPA, ADEM, SHAW, NAEVA PM). Conducted root cause analysis for grid failures due to missed MEC, and missed metallic items with the critical mass of a 37mm projectile and missed surface and subsurface QC seeds. Also conducted root cause analysis for geophysical data failures. Worked with EODT corporate to put together the final report for the entire Southern Alpha and MRS-1 project.
- **UXO/GEO QC Manager Environmental Chemical Corp, Anniston, Alabama, Jul 2006–Mar 2007.** Responsible for implementation of the UXO QC program. Developed checklists for all phases of UXO operations to ensure all definable features of work were observed. Conducted surveillances on field UXO teams, Geophysical data collection teams, and Reacquisition teams. Ensured quality of work required by the work plan. Conducted UXO personnel certification with detector instruments (Vallon, Schonstedt, Fisher, and EM61 operators) at the GPO. Prepared grid packets for post excavation QC. Randomly generated numbers for every grid being sampled. Worked with the Geo QC Specialist to ensure adequate vegetation was removed for EM61 operations and the surveyed boundaries and grids were accurate. Initiated field change requests (FCR) to update the work plan. Coordinated and conducted UXO QC post excavation Anomaly checks with a geophysical team using an EM61, Schonstedt, and Fisher and documented results on a PDA. Developed and completed QC Grid reports and forwarded to Matrix Environmental for review.

Helped facilitate the weekly QC/Production conference call with the McClellan Project team (ECC/EODT, PM, ECC/EODT, Site Supt, Matrix PM, JPA, ADEM, SHAW, NAEVA PM). Conducted root cause analysis for grid failures due to missed MEC, and missed metallic items with the critical mass of a 37mm projectile and missed surface and subsurface QC seeds. Also conducted root cause analysis for geophysical data failures.

- **Quality Assurance Officer, URS Corporation, Millville, New Jersey, Apr 2006–Jun 2006.** Worked as the Safety and Quality Assurance Officer for Site preparation and installation of the GPO. Participated on the project management team. Also worked as the Survey Team leader (UXOT3) and was responsible for the survey data of thirty six miles of survey data.
- **Geophysical Site Manager, URS Corporation, Camden, Arkansas, Jun 2005–Mar 2006** Part of the project management team responsible for surveying two miles of transects utilizing the Leica robotic total station (RTS) and the EM61 for data collection. Was also the Database Manager for this project. Have a CDL with a hazmat endorsement for the transportation of explosives.
- **Geophysical Site Manager, URS Corporation, Lewes, Delaware, Nov 2005–Dec 2005.** Part of the project management team responsible for five miles of data collection in the field utilizing the Leica robotic total station (RTS) utilizing the Leica robotic for positional and the EM61 for data collection. Constructed the database for over 800 anomalies investigated in the field for the final report.
- **Geophysical Site Manager, URS Corporation, Camden, AR. Aug 2005–Nov 2005.** In charge of all data collection in the field. Also responsible for surveying in thirteen acres of 100-m × 100-m grids to be geo mapped and intrusively investigated. Also served as database manager for all data mapped and intrusively collected. Helped develop the GPO for the site.
- **UXO Tech III, URS Corporation, Cranburry, New Jersey, Jun 2005–Aug 2005.** Worked as a Team leader (UXOT3) on a Grid Survey Operation; surveyed in over 300 additional grids to be intrusively investigated.
- **Geophysical Site Manager, URS Corporation, Fort McClellan, Alabama, Feb 2005–June 2005.** Part of the project management team working on the EE/CA portion of the project. Responsible for surveying 24 miles of transects with the Leica Robotic total station. I worked as the Geophysical Site Manager in charge of data collection in the field using the Leica Robotic Total Station (RTS) for positional data and the EM61 for data collection. Worked as the Database Manager for all data collected in the field. Worked an intrusive Team Leader (UXOT3).
- **Geophysical Site Manager, Tetra Tech FW Environmental, Fort McClellan, Alabama, Oct 2004–Feb 2005. .** Part of the project management team responsible for the demilitarizing suspect UXO. Worked as the geophysical site manager in charge of data collection in the field using the Arc Second laser positing (Constellation) and EM61 data collection system
- **Unexploded Ordnance Technician II, Zapata Engineering, Fort Benning, Georgia, Jun 2004–Oct 2004.** Worked as survey escort, surface clearance team member, and as a demolition team member.
- **Geophysical Team Leader UXOT3, Ft. McClellan Alabama, Jul 2003–June 2004.** Worked as the geophysical team leader (UXOT3) in charge of data collection in the field. During this time, Mr. Gentry's team averaged over 8.5 grids of data collection per day using the Arc Second laser positing (Constellation) and EM61 data collection system.
- **UXO Tech II, Savanna Army Depot, Illinois, May 2003–Jun 2003.** Worked on intrusive team, geophysical mapping team, reacquire team, and demolition team using Leica GPS equipment and EM61 data collection system.
- **Engineering Estimate/Contamination Assessment, Fort McClellan, Alabama, Mar 2001–Apr 2003.** Worked on the EE/CA portion of the project. I became proficient with various types of magnetic locators and GPS and laser type survey equipment. Duties relied heavily on self-motivation and finding ways to get the job completed, as some of the work was research and development. Worked all aspects of the UXO Assessment and Remediation. Types of duties included: Geophysical Survey, surveying of land to put in

grids, ordnance identification, land clearing, transect surveys and demolition operations. Worked as a down hole monitor for a period of six weeks. Worked as a under armor heavy equipment operator during a three month mechanical removal action.

- **UXO Sweep Team Member, Fort Irwin, California, Oct 2000–Mar 2001.** Worked as UXO sweep team member conducting range maintenance operations for the U.S. Air Force. Also the Demo Team Leader.

Michael E. Findley, PhD, MSPH, CIH, CSP

Environmental Health and Safety Manager

Dr. Findley is an American Board of Industrial Hygiene Certified Industrial Hygienist with industrial hygiene, environmental management, safety, and hazardous waste experience. He offers extensive experience directing all aspects of safety, industrial hygiene, occupational medicine, engineering, radiation control, and emergency management for large-scale ordnance removal and environmental projects. Dr. Findley offers recent experience as EODT's Environmental Health & Safety Manager. He successfully developed EODT's entire Corporate Safety and Health Plan that provides corporate-level guidance for all ES&H management systems and processes. Dr. Findley has directed all aspects of safety on EE/CA and OE removal projects at heavily contaminated sites and has led field crews to complete over 130,000 man-hours with no lost time accidents and no property damage accidents. He served as the Environment, Safety, and Health (ES&H) Director for Department of Energy (DOE) sites throughout the continental United States, including providing health and safety program leadership to a workforce of over 1,400 members. Dr. Findley is well qualified to prepare site-specific safety and health plans that meet all USAESCH, Department of the Army (DA), and Occupational Safety and Health Administration (OSHA) requirements.

Qualifications & Education

- ✓ Offer over 24 years of experience and achievements in Environmental Health & Safety Management.
- ✓ Extensive experience writing the Corporate Safety and Health Plan as well as site/project-specific Activity Hazard Analyses, Accident Prevention Plans, and Site Safety and Health Plans.
- ✓ Experience analyzing surveillances for safety trends.

Education:
Ph.D., Community Health, University of Tennessee, Knoxville, TN, 2004
MSPH, University of Alabama, Birmingham, AL, 1981
B.S. in Biology, University of Montevallo, Montevallo, AL, 1973

Registrations / Certifications:
Certified Indoor Environmentalist, 2005
Certified Safety Professional, 1988
Certified Industrial Hygienist, American Board of Industrial Hygiene, 1985
OSHA 40-hr Course, 2005
OSHA 8-hr Supervisor, 2005

Professional Experience & Selected Projects

- **Environmental Safety & Health Manager, EOD Technology, Inc., Lenoir City, TN, 2004 – Present.** Hold the key leadership role as the Environmental Safety & Health Manager responsible for developing and updating the Corporate Safety and Health Plan that provides corporate-level guidance for all ES&H management systems and processes. Contribute all ES&H procedures and guidelines for site/project-specific work plans. Analyze inspection reports to identify near misses, accidents, and injuries in order to identify trends and develop lessons learned for distribution throughout the company and integrated into project-specific work plans. Develop project-specific Activity Hazard Analyses, Accident Prevention Plans, and Site Safety and Health Plans. Served as the Senior Safety & Health Manager on the OE Response Action project at Ft. Campbell, KY in 2005. Directed the development and implementation of plans for OE removal efforts at a heavily contaminated ordnance disposal and demolition training site. Coordinated all aspects of safety on a project with a scope that included brush clearing, geophysical surveys, explosive demolition, machine excavations, hand excavations, and machine sifting. Served as the Senior Safety & Health Manager on an OE Removal Action project at former Raritan Arsenal, NJ in 2005. Developed and implemented safety plans for an OE removal project that involved brush clearing, geophysical surveys, explosive demolition, machine excavations, and machine sifting.

Served as the Senior Safety & Health Manager on an Engineering Evaluation & Cost Analysis (EE/CA) project on the Precision Bombing Range at Kirtland Air Force Base, Albuquerque, NE from 2004 through 2005. Developed, implemented, and managed safety and health plans for EE/CA investigation of OE contamination. Led field crew of 12 to complete 9,400 man-hours of brush clearing, geophysical surveys, explosive demolition, and hand excavations with no lost accidents and no property damage accidents.

Served as the Senior Safety & Health Manager on the MEC Clearance project at Fort Campbell, KY from 2004 through 2005. Ensured the safe completion of OE removal efforts spanning a 557-acre range densely contaminated with OE that included improved conventional munitions (ICM) and fuel air explosives (FAE.). Led the field crews on this project to complete over 130,000 man-hours of work at the site with no lost time accidents and no property damage accidents.

Served as the Senior Safety & Health Manager on the EE/CA project at Camp Wheeler in Macon, GA from 2004 through 2005. Directed the development and implementation of plans for EE/CA investigation of OE contamination. Led the 11-man field crew to complete 5,700 man-hours of brush clearing, geophysical surveys, explosive demolition, and hand excavations with no lost or property damage accidents.

- **Adjunct Faculty Member, University of West Florida (Pensacola, FL, 2005-Present) / Columbia Southern University (Orange Beach, FL, 2005-Present) / University of Tennessee (Knoxville, TN, 2004).** Served as an Adjunct Faculty Member teaching graduate level courses in Industrial Hygiene.

- **Safety & Health Manager, British Nuclear Fuels, Inc., Oak Ridge, TN, 2000 - 2005**. Held a key leadership role as the Safety and Health Manager for the large-scale Three Building Decommissioning and Demolition Project that included a workforce of over 1,500. Directed all aspects of safety, industrial hygiene, occupational medicine, engineering, radiation control, and emergency management. Maintained high levels of safety on this major gaseous diffusion plant demolition project that involved the dismantling of gaseous diffusion equipment and the treatment and removal of radiation and chemical waste.

- **Environmental Safety & Health Director, Morrison Knudsen, 1991 – 2000.** Served as the ES&H Director on various Morrison Knudsen projects, including DOE Oak Ridge Operations, Oak Ridge, TN; DOE Idaho National Engineering and Environmental Laboratory, Idaho Falls, ID; DOE Pantex Operations, Amarillo, TX; DOE Rocky Flats Site Closure Project, Denver, CO; Tennessee Valley Authority Outage Program, Knoxville, TN.

- **Environmental Safety & Health Director, BCM Engineers, Mobile, AL; 1986–1991.** Served as ES&H Director and Project Manager for an environmental engineering firm.

- **Industrial Hygiene Section Leader, U.S. Naval Hospital, Pensacola, FL, 1985 – 1986.** Served as the Industrial Hygiene Section Leader providing support to U.S. Navy installations.

- **Industrial Hygienist, Vulcan Materials Company, Birmingham, AL, 1980–1985.** Worked as an Industrial Hygienist providing support to the Construction Materials, Metals, and Chemical Divisions.

Kevin J. Corbett

Corporate Quality Manager

Overview of Experience

Mr. Corbett is a Senior Quality & Risk Management Executive with a proven background in designing, implementing, and administering quality, risk management, safety, security, training, and continuous improvement programs and initiatives for the U.S. Department of Energy and commercial contractors. He is currently managing the development and administration of EODT's Corporate Quality Program. Mr. Corbett directed the development and implementation of the Quality Assurance and Integrated Safety Management Programs for the largest ongoing civil engineering project in the world today; the $5.3 billion construction of Saudi Arabia Industrial City II. Mr. Corbett spearheaded the Environmental, Safety, Health and Quality (ESH&Q) programs to meet regulatory compliance standards NQA 1, ISO 9001, ISO 14001 and Integrated Safety Management Systems (ISMS) at DOE's Brookhaven National Laboratory. He initiated the development and implementation of technical training programs on Integrated Quality Management Systems and compliance standards into work processes for more than 100 companies supporting over 500 construction and engineering contracts. His proven methodologies have consistently provided clearly defined standards for improvement, advanced efficiencies and performance, higher customer satisfaction, and lower operational costs.

Qualifications and Education:

- ✓ Corporate Quality Manager with proven experience designing and administering Quality Assurance programs, including Integrated Safety Management Systems, self-assessment programs, audit, and corrective action programs.
- ✓ Experience developing strategies for major organizational re-structuring to ensure continued excellence in performance and customer satisfaction.
- ✓ In-depth knowledge of environmental regulations, including DOE Order 5480.20A, DOE Orders 414.1, 10CRF 830.120, 10 CFR 851, ISO 14001 and 18001, along with OSHA requirements.

Education

Master of Business Administration; Organizational Management;
Dowling College
Bachelor of Science; Community and Human Services; SUNY Empire State College

Professional Development & Certifications

Contracts Management
Six Sigma Champion Certified
Project Management
ISO 14000 Lead Auditor Certified
OSHA Health and Safety for Hazardous Waste Site Investigation Certified
OSHA Supervisor of Hazardous Waste Operations Certified
Flippen Leadership Training Series 1 & 2

Professional Experience & Selected Projects

- **Corporate Quality Manager, EOD Technology, Lenoir City, TN, 2008 – Present.** Manage the development and implementation of EODT's Corporate Quality Program and project specific Quality Control Plans. Ensure corporate compliance to contractual requirements, EODT Policy and Procedures, SOPS, and Project Management Work Instructions (PMWI). Oversee the routine inspections and audits (on home office departments and project sites) to identify areas deficient or non-compliant with corporate policy and facilitate, guide, and monitor corrective action. Review correspondence for compliance, including project deliverables, PSR's, Final Reports, and Work Plans. Monitor project quality, maintain Lessons Learned, and present quality reports to President and senior management. Supervise Quality Managers and professionals supporting quality needs of all business units. Currently spearheading the implementation of processes to obtain ISO 9001 certification. Provided direction to the corporate Health & Wellness Program and the EODT Foundation, a non-profit entity established to manage a corporate giving campaign.
- **ESSH Compliance Training Manager, Brookhaven National Laboratory, Upton, NY, 2007 – 2008.** Managed the daily operations of the BNL Environmental, Safety, Security, and Health training program for the Laboratory's 3000+ employees. Spearheaded Performance Management and Strategic Succession Planning; championed organizational development initiatives for development of a diverse leadership pipeline. Directed technical training development, design, and implementation to promote knowledge and compliance with ESSH issues and requirements. Supervised ESSH training staff; managed budget, and controlled cost for all training activities. Supervised Program Specialist in curriculum and course development in compliance with DOE Order 5480.20A, DOE Orders 414.1, 10CRF 830.120, 10 CFR 851, ISO 14001 and 18001, along with OSHA requirements.

- **Quality Assurance Program Director Saudi Arabia Bechtel Company, Jubail Industrial City, Saudi Arabia, 2006 – 2007.** Directed the development and implementation of the Quality Assurance and Integrated Safety Management Programs for the Saudi Arabia Industrial City II project; the largest ongoing civil engineering project in the world. Served as the point of contact for the development and implementation of corporate initiatives on Environmental, Safety, Health, and Quality, and to ensure the integration of compliance-related initiatives. Hired, scheduled, coordinated, and monitored costs for subcontractors and technical support and advised leadership team of situations affecting profit, costs, schedules, and client relations.
- **Quality Division Manager, Oak Ridge National Laboratory, Oak Ridge, TN, 2004 - 2006.** Provided leadership and direction to the Laboratory Quality Support Organization's 30+ professionals in the development and implementation of the Performance Based Management System (PBMS), Quality Management System (QMS), and Integrated Safety Management System (ISMS) throughout the Laboratory research and operational programs. Developed key performance metrics and regularly presented program status to laboratory leadership and stakeholders regarding the results.
- **Support Services Manager, Brookhaven National Laboratory, Upton, NY 1999 - 2004.** Managed Training, Quality Assurance, and the Work Controls programs for Environmental Restoration Division in the development and implementation of QMS, ISM, and ISO 14001 requirements. Developed Self Assessment Program and acted as the liaison between ERD and ESH&Q Directorate to ensure staff qualification in accordance with DOE Order 414.1 and 10 CRF 830.120. Supervised the development of job specific technical training and ESH&Q program requirements for ERD staff and contractors during full-scale remediation and decommissioning activities.
- **ESH&Q Manager, Duke Resources, Yankee Rowe Nuclear Power Plant, Rowe, MA, 1997 - 1999.** Managed the Environmental, Safety, Health & Quality programs and managed a group of 100+ employees and contractors during decontamination and decommissioning (D&D) activities. Provided supervision to the Quality Assurance program in ensuring safe and proper implementation of final status survey program and safety related oversight.
- **Operations Manager, American Environmental Engineering Inc**., **Plymouth, MA, 1994 - 1997.** Directed management consulting services to nuclear power industry and government operations in Quality, Engineering, Safety, Security, and Emergency Preparedness. Provided technical training and expertise in the development of a post-accident Emergency Preparedness and Security Plan for the Chernobyl Nuclear Power Station. Developed and implemented marketing and sales strategies, led business development activities, negotiated, and monitored client contracts.
- **Program Manager, Long Island Lighting Company, Shoreham NY Nuclear Power Station, 1989 - 1994.** Filled several leadership roles including Quality Manager, Waste Management Director, and Independent Safety Engineer in support of operational and decommissioning activities. Point of contact with regulators on audits, assessments and compliance related issues.

Ronny Drain

SUXOS

Overview of Experience

Mr. Drain offers an extensive background of civilian and military experience as a SUXOS, UXO Technician, Quality Control Supervisor, UXO Safety Officer, and EOD Technician. Mr. Drain has worked on the Captured Enemy Ammunitions Program in Iraq as well as a broad range of other munitions clearance and environmental remediation projects. He is highly skilled in the use, rendering safe, handling, storage, shipment, and disposal of foreign and domestic nuclear, chemical, and biological munitions and specialized improvised explosive devices. Mr. Drain is a recognized project management professional with strengths in scheduling, site health safety plans, reporting, training, quality, and contract management/administration. He has managed numerous projects, trained/supervised expatriates and local nationals, supporting public relations efforts, and achieved a perfect record of no injuries or safety incidents throughout his career.

Qualifications & Education

- ✓ Over 25 years combined civilian and military UXO experience.
- ✓ Highly skilled with foreign and domestic nuclear, chemical, and biological munitions and sophisticated IEDs.
- ✓ Selected by the Air Force to establish the US Navy's second EOD school.
- ✓ Extensive knowledge of CERCLA, SARA, RCRA, TSCA, OSHA, and other state and federal regulatory requirements.
- ✓ Served as instructor on Air Ordnance and Improvised Explosive Devices.

Education & Training

U.S. Army Missle and Munitions School, Explosive Ordnance Disposal Course
Naval School Explosive Ordnance Disposal, Munitions Disposal Specialist
OSHA 40-Hour Hazwoper Course
OSHA 8-Hour Hazwoper Refresher Course

Professional Experience & Selected Projects

- **SUXOS / UXOSO / QCS / Safety Officer / UXO Tech III, EOD Technology, Inc., 1991 – 1992; 2003 - Present.** Served in several roles throughout career with EODT and worked on numerous explosive ordnance detection and removal projects at FUDS and active military installations as well as private sites across the country. As a Senior Unexploded Ordnance Supervisor, conducted initial site visit, coordinated site mobilization functions, set-up and managed the field office, and was responsible for the day-to-day management of UXO services and overall site safety. Supervised all on-site UXO teams, maintained site records, and managed field office, including submitting required reports. Coordinated demobilization and preparation of final reports. As a Quality Control Supervisor, coordinated all on-site quality control activities, supervised soil sample collection, and served ensured safety. As a UXO Safety Officer, ensured site safety and compliance of safety provisions of work plan; submitted and documented all activities related to safety; prepared reports required for each site; and conducted environmental sampling as required. As a UXO Technician, identified Unexploded Ordnance; operated metal detectors, TopCon Total Station, and survey equipment; recovered and disposed of Unexploded Ordnance; and operated heavy equipment. Currently working on the Camp Wheeler remediation project in Macon, GA as a SUXOS. Supervise a ####-person crew comprised of EOD Technicians, Safety Officers, and Geophysicists performing ordnance remediation on a residential area covering 127 acres that was built on a prior mortar impact range. Coordinate scheduling of staff, equipment, clearance, and demolition. Attend town meetings and media meetings and support public relations.

  Worked on the Ft. Stewart project in Savannah, GA as an SUXOS. Supervised an 18-person crew performing surface/subsurface clearance of unexploded ordnance over a 58-acre area. Led the on-site disposal of 2,700 pieces of live ordnance. Participated in meetings with range management, safety officers, and contracting officers to brief them on project progress. Worked on the EE/CA Camp Spencer, TN project as a UXOSO, Quality Control Specialist, and UXO Safety Officer. Performed environmental survey on a former artillery base was in negotiations to be used for residential development.
  Served as a UXO Tech III / SUXOS on the multi-million dollar Captured Enemy Ammunition project in Iraq. Coordinated specialized loading of ordnance to be detonated in the desert. Destroyed approximately 25,000 tons of high explosive ordnance and 5,000 tons of propellant. Supervised 75 personnel, including EOD Technicians and Local Nationals.

Worked on the Range 28, Ft. Campbell, KY project as a UXO Tech III. Supervised approximately 5 technicians performing vegetation removal using specialized equipment in a hazardous contaminated area. Served as an SUXOS at the Lake Erie Ordnance Plant and Kingsbury Ordnance Plant. Supervised 35 personnel at 4 diversified work sites with sifting operations, 19 pieces of heavy equipment, and an on-site demolition team locating and destroying 58,000 rounds of ordnance. Extracted hazardous munitions from water 4 feet deep. Directed all disposal activities of UXO encountered, using both binary and specialized shaped charges.

- **Operations Manager/Safety, A&M Industrial Insulators, Inc., 1997 - 2003.** Supervised up to 20 personnel and equipment in the removal and disposal of hazardous and non-hazardous insulation. Developed and managed the company's safety program.
- **UXO Supervisor/Specialist, UXB International, Inc., 1994 - 1997.** Conducted the investigation, detection, and time critical removal operations at sites throughout the United States.
- **UXO Supervisor / Specialist, Human Factors Applications, Inc., 1993 - 1994.** Served as the UXO Supervisor for the Pueblo Army Depot remediation project.
- **Superintendent, 3429th Technical Training Squadron, Eglin AFB, Florida, 1987 - 1991.** Selected by the Air Force to assist in establishing the U.S. Navy's second EOD School. Helped set-up the Explosive Ordnance Reconnaissance and Advanced Demolition divisions.
- **Team Chief, 3246th Munitions Maintenance Squadron, Eglin AFB, Florida, 1985 - 1987.**
- **Branch Manager, 8th Equipment Maintenance Squadron, Kunsan Air Base, Korea, 1984 - 1985.**
- **EOD Instructor, 3429th Technical Training Squadron, Indian Head, MD, 1981 - 1984.** Instructed Air Ordnance and Improvised Explosive Devices.
- **EOD Technician, 2701st Explosive Ordnance Disposal Squadron, Hill AFB, UT, 1977 - 1980.**

Richard M. Perry III

Geophysicist

Overview of Experience

Mr. Perry has over 6.5 years of experience as a geophysicist. He is experienced in multiple techniques of geophysics including Magnetic and Electromagnetic. He has been employed in report writing, site and personnel management, data collection and data interpretation mainly in support of unexploded ordnance remediation projects. Geographically, he has worked in Tennessee, Georgia, South Carolina, Florida, California, Alabama, Arkansas, Illinois, Texas, New York, Saudi Arabia and Guantanamo Bay, Cuba. He has been involved in research and development projects. Has worked on projects assessing and cleaning up of the environmental impact caused by munitions and munitions related material. He has also managed personnel and equipment in support of project activities. He is currently employed as a Geophysicist for EODT in Lenoir City, TN.

Experience:

- ✓ **Academic Studies** - Broad studies in Mathematics, Chemistry, Physics, Biology, and Geology.
- ✓ **Geologic Field Study** - mapped geological features in West Virginia, Florida, and Utah. Summer 2002. Operation of various geophysical equipment and geophysical techniques in Georgia, Florida, Alabama, California, Texas, South Carolina, and Tennessee. May 2003 to Current.
- ✓ **Laboratory Experience** - Experienced with the maintenance and proper operation of laboratory equipment used for civil engineering projects at the University of Tennessee. Organized and set-up equipment and materials needed for scientific research. Resolved numerous computer problems encountered. Fall 1998, summer 1999, and summer 2000.
- ✓ **Computer Proficiency** - Windows, Macintosh, Internet Explorer, Netscape, Microsoft Office, Matlab, Geosoft's Oasis Montaj, Maglog, Magmapper, Ashtech Reliance, and Internet search engines.
- ✓ **Geologic Mapping and Cartography** - manual and computer-based. ESRI's Arc Map and Freehand
- ✓ **Project Management/Estimating** – determined project production rates and associated costs for implementing field tasks (geophysical survey operations).

Education:
2002, B.S. Geology, University of Tennessee, Knoxville, Tennessee

Training:
ESRI Arc Map
Geosoft's Oasis Montaj
Maglog
Magmapper
Geophysical Instrumentation and Geophysical data interpretation
40 Hour HAZWOPER certified
8 Hour HAZWOPER refresher certified

Memberships:
Environmental and Geophysical Society
Licensed Professional Geologist in Tennessee (License ID# 00005386)

Selected Projects

- **Geophysicist, EOD Technology, Lenoir City, Tennessee, May 2003-Present** Duties include: Management of personnel and equipment, the Collection and Processing of geophysical data, client and project management interaction, operation of geophysical instruments and software.
- Instrument operator and data processor for the digital geophysical mapping task in Guantanamo Bay Cuba.
- Site geophysicist for an active range site assessment in Saudi Arabia.
- Worked as site manager at Camp Smith, NY to execute the geophysical mapping and characterization of expended munitions contamination.
- Worked on numerous CEHNC projects such as: Adak, Camp Smith, Spencer, Wheeler, Elliott, Kirtland, Benning, Tyndall AFB, Whittaker, McClellan, Ellis and Bullis. Responsibilities included collecting and processing geophysical data, providing support for field personnel and report writing in regards to geophysical field techniques.
- Worked on projects for private companies. Examples of these projects include: Parris Island and Myrtle Beach. Responsibilities included geophysical instrument field operations and the processing of geophysical data.
- Conducted a resistivity survey utilizing the Geometrics Ohmapper on a landfill expansion project in Luxora, AR.
- Worked on multiple R&D projects such as: development and implementation of geophysical towed array system. Conducted comparison of Geophysical Instrument responses of ordnance items at varying depths and orientations.

APPENDIX I
TECHNICAL PROJECT PLANNING DOCUMENTATION

FOR THE

Engineering Evaluation/Cost Analysis
Additional Sampling at Charlie Area
Fort McClellan, Alabama

Prepared for:

U.S. Army Engineering and Support Center, Huntsville
Attn: CEHNC-OE-DC (Ms. Sherri Anderson-Hudgins)
4820 University Square
Huntsville, Alabama 35816-1822

U.S. Army Engineer Division, South Atlantic
Attn: CESAD-PM-H (Ms. S. Ernst)
77 Forsyth Street, S.W.
Atlanta, Georgia 30335-6801

Contract: W912DY-04-0018
Task Order: 0024
Purchase Request Number: W31RYO92058499

Prepared by:

2229 Old Highway 95
Lenoir City, Tennessee 37771

May 2010

APPENDIX I
TECHNICAL PROJECT PLANNING DOCUMENTATION

No Technical Project Planning documentation has been conducted as of this point in the project.

APPENDIX J
WORK INSTRUCTIONS

FOR THE

Engineering Evaluation/Cost Analysis
Additional Sampling at Charlie Area
Fort McClellan, Alabama

Prepared for:

U.S. Army Engineering and Support Center, Huntsville
Attn: CEHNC-OE-DC (Ms. Sherri Anderson-Hudgins)
4820 University Square
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U.S. Army Engineer Division, South Atlantic
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Task Order: 0024
Purchase Request Number: W31RYO92058499

Prepared by:

2229 Old Highway 95
Lenoir City, Tennessee 37771

May 2010

APPENDIX J
WORK INSTRUCTIONS

NOTE:

A compact disk containing all forms will be maintained on site. The forms in this appendix are examples of the forms that EODT will be using during this project.

GEOPHYSICAL WORK PLAN WORK INSTRUCTION 12 Geophysical Equipment Calibration	**Subject Matter Expert:** Richard Perry ***"Delivering Critical Mission Support and Site Restoration Services Since 1987"***

I. Document Approval

Author **Richard Perry, Geophysicist**	**Date**
Risk Review **Eugene Mikell, Quality Operations Manager**	**Date**
Approval **Jeremy Duncan, Corporate Operations Manager**	**Date**

II. Version Log

Version Name/Purpose	Date
Draft	**November 12, 2008**

1.0 OBJECTIVE

This document describes general and specific procedures, methods for calibrating geophysical equipment.

2.0 SCOPE/APPLICATION

The procedures contained in this document are to be used by personnel when conducting geophysical equipment calibration/ Quality Control (QC) checks both before equipment deploys to the field and once equipment arrives on site. On the occasion that EOD Technology, Inc. (EODT) field personnel determine that any of the procedures described in this section are inappropriate, inadequate, or impractical and that another procedure must be used, the variant procedure will be documented in the field logbook, along with a description of the circumstances requiring its use.

3.0 DEFINITIONS

3.1 N/A

4.0 PROCEDURE

4.1 DOCUMENTATION/VERIFICATION

This procedure was prepared by persons deemed technically competent by EODT management, based on their knowledge, skills and abilities and have been tested in practice and reviewed in print by a subject matter expert. The official copy of this procedure resides on Hummingbird.

4.2 TRAINING

Before any employee performs a function subject to the EODT Standard Operating Procedures (SOPs), the employee must be provided initial training in the performance of that function.

4.3 GENERAL PRECAUTIONS

4.3.1 Safety

Proper safety precautions must be observed when calibrating/QC checking geophysical equipment. Refer to the EODT Corporate Safety and Health Program, Corporate Policy #3 and any pertinent site-specific health and safety plans for guidelines on safety precautions. These guidelines should be used to complement the judgment of an experienced professional. Chemicals that pose specific toxicity or safety concerns are addressed to minimize risk through following relevant requirements as appropriate.

4.4 QUALITY CONTROL

Instrument calibration / QC check should be conducted in an area free of outside sources of interferences (i.e. high voltage power lines, utilities, metallic cultural debris, local sources of geology containing magnetic geological materials “hot rock/hot soil”, etc.).

4.5 RECORDS

Information generated or obtained by EODT personnel will be organized and accounted for in accordance with the appropriate deliverables as outlined in the approved project specific work plan.

4.6 EQUIPMENT SELECTION CONSIDERATIONS

The appropriate geophysical equipment as determined by both a Geophysical Prove-Out (GPO), or equivalent test area, and equipment that is used on site will be calibrated / QC checked based upon procedures outlined in this document and manufactures recommendations. All documentation of each instrument used is in the specific project files. Documentation of equipment repairs will be kept on file.

4.6.1 Calibration Procedure for EM61 MK2

The EM61 MK2 has no calibration procedure but does have quality control checks that are completed at the site. If the instrument does not pass the QC checks than the instrument is not used to collect data and is sent back to the manufacture. The manufacture will then perform an internal calibration on the instrument and repair/replace any parts needed. The internal calibration procedure and QC checks are included in Geonics operational manual included in **Attachment 1, Appendix A2-Calibration**. It is not required by the manufacture to calibrate the instrument every year. Calibration is only performed if the QC checks and DQO are not met on the project then the instrument is sent back to the manufacture. The project files contain the daily QC checks that are performed to ensure the instrument is working properly.

1. The EM61 MK2 is QC on site at the project area so that the instrument is QC based on specific site conditions.
2. The EM61 MK2 must meet and/or exceed the project data quality objectives (DQOs). The DQOs are established on site following the conduction of the geophysical prove-out task (GPO).
3. Upon determination of the DQOs, the EM61 MK2 must meet the criteria on a daily and/or other frequency as outlined by the specific project requirements.

4. If the EM61 MK2 fails to meet the DQOs, then the instrument is shipped to the manufacturer where it is repaired and recalibrated.
5. Upon the repair and recalibration of the EM61, the instrument is run through the GPO again.
6. Data from the EM61 is evaluated to see if the project DQOs have been met and the instrument can be used for production work.

4.6.2 Calibration Procedure for Foerster Ferex (Fluxgate Magnetometer)

The internal calibration for the Foerster Ferex is completed by the instrument being set to the manufacture yearly. The instrument is QC on site to be calibrated the site conditions. The operation manual for the Foerster Ferex is included in **Attachment 2**.

1. The Foerster Ferex is QC on site at the project area so that the instrument is calibrated based on specific site conditions.
2. The Foerster Ferex must meet and/or exceed the project data quality objectives (DQOs). The DQOs are established on site following the conduction of the geophysical prove-out task (GPO).
3. Upon determination of the DQOs, the Foerster Ferex must meet the criteria on a daily and/or other frequency as outlined by the specific project requirements.
4. If the Foerster Ferex fails to meet the DQOs, it is shipped to the manufacturer where it is repaired and calibrated.
5. After the repair and recalibration of the Ferex, it is run through the GPO again.
6. Data from the Ferex is evaluated to see if the project DQOs have been met and the instrument can be used for production work.

4.6.3 Calibration Procedure for the Schonstedt 52CX (Ferrous Metal Detector)

There is no calibration procedure for the Schonstedt. The Schonstedt is checked by operating the instrument in the GPO and passing the DQOs of the GPO and project. The only maintenance that is performed is changing the batteries periodically and this is noted in the project files. The manufacture does not require the instrument be sent to the manufacture since there is no calibration. The operational manual is included in **Attachment 3.**

1. The Schonstedt is checked for functionality prior to leaving for a project site.

2. All system components are verified and will be sent to the project site with the instrument.
3. The Schonstedt is checked over a known ferrous metal source to ensure the instrument is properly functioning.
4. Upon arriving on the project, the Schonstedt is taken through the (GPO) or equivalent test strip.
5. The Schonstedt must detect all possible seed items (in accordance with project requirements) in the GPO test strip.
6. The Schonstedt will be taken on a daily or weekly function check (as defined by project requirements and operational manual) over a test strip to ensure that the instrument can still detect all applicable seed items.
7. If the Schonstedt fails to meet project requirements, it is shipped to the manufacturer where it is repaired and recalibrated.
8. After the repair and recalibration of the Schonstedt, it is run through the GPO test strip again.
9. Results for the Schonstedt are evaluated to see if the project requirements have been met and then it can be used for production work.

4.6.4 Calibration Procedure for the Vallon (All-Metal Detector)

There is no calibration procedure for the Vallon. The Vallon is designed to cycle through operational checks. The instrument is QC on site to be calibrated the site conditions. The sensitivity of the instrument is adjusted based on magnetic soils in the ground. It is not required by the manufacture to send the instrument to the manufacture on a yearly or regular basis. The Vallon is only sent to the authorized dealer or manufacture if the instrument is not operating properly. The operational manual is included in **Attachment 4**.

1. The Vallon is checked for functionality prior to leaving for a project site.
2. All system components are verified prior to being sent to the project site
3. Upon arriving on the project, the Vallon is taken through the GPO or equivalent test strip.
4. The Vallon must detect all possible seed items (in accordance with project requirements) in the GPO test strip.

5. The Vallon will be taken on a daily or weekly function check (as defined by project requirements) over a test strip to ensure that the instrument can still detect all applicable seed items.
6. If the Vallon fails to meet project requirements, it is shipped to the manufacturer where it is repaired and recalibrated.
7. After the repair and recalibration of the Vallon, the instrument is run through the GPO test strip again.
8. Results for the Vallon are evaluated to see if the project requirements have been met and then it can be used for production work.

4.6.5 Calibration Procedure for the Whites (All-Metal Detector)

There is no calibration procedure for the White. Functional checks are required and sensitivity adjustments are completed as per the manufactures recommendation. The instrument is QC on site to be calibrated to site conditions. The White is checked by operating the instrument in the GPO and passing the DQOs of the GPO and project. The only maintenance performed is changing the batteries periodically and this is noted in the project files. The White is only sent to the authorized dealer or manufacture if the instrument is not operating properly. The operational manual is included in **Attachment 5.**

1. The White is checked for functionality prior to leaving for a project site.
2. All system components are verified that they will be sent to the project site with the instrument.
3. The Whites is checked over a known metallic source to ensure the instrument is properly functioning.
4. Upon arriving on the project, the White is taken through the GPO or equivalent test strip.
5. The Whites must detect all possible seed items (in accordance with project requirements) in the GPO test strip.
6. The Whites will be taken on a daily or weekly function check (as defined by project requirements) over a test strip to ensure that the instrument can still detect all applicable seed items.
7. If the Whites fails to meet project requirements, it is shipped to the manufacturer where it is repaired and recalibrated.
8. After the repair and recalibration of the Whites, it is run through the GPO test strip again.
9. Results for the Whites are evaluated to see if the project requirements have been met and then it can be used for production work.

5.0 REFERENCES

Geonics Limited EM61 MK2 and EM61 MK2HP 4 Channel High Sensitivity Metal Detectors Operating Manual. July 2005.
Forester Ferex Operation Manual
Schonstedt Model GA-52Cx Magnetic Locator Instruction Manual, June 2003
Vallon Metal Dector VMH3CS Operation Manual, May 2007.
White XLT Operational Manual, December 2005

6.0 ATTACHMENTS

6.1 ATTACHMENT A - EODT Daily Geophysical QC Checklist: EM61 MK2

ATTACHMENT B - EODT Geophysical QC Checklist: Foerster Ferex

ATTACHMENT C - EODT Geophysical QC Schonstedt Checklist

ATTACHMENT D - EODT Geophysical QC Checklist: Vallon

ATTACHMENT E - EODT Geophysical QC Whites Checklist

ATTACHMENT A
EODT Daily Geophysical QC Checklist: EM61 MK2

EODT
EOD TECHNOLOGY, INC.

EODT Daily Geophysical QC Checklist: EM61 MK2

Project: _____ Date: _____

Equipment: _____ Personnel: _____

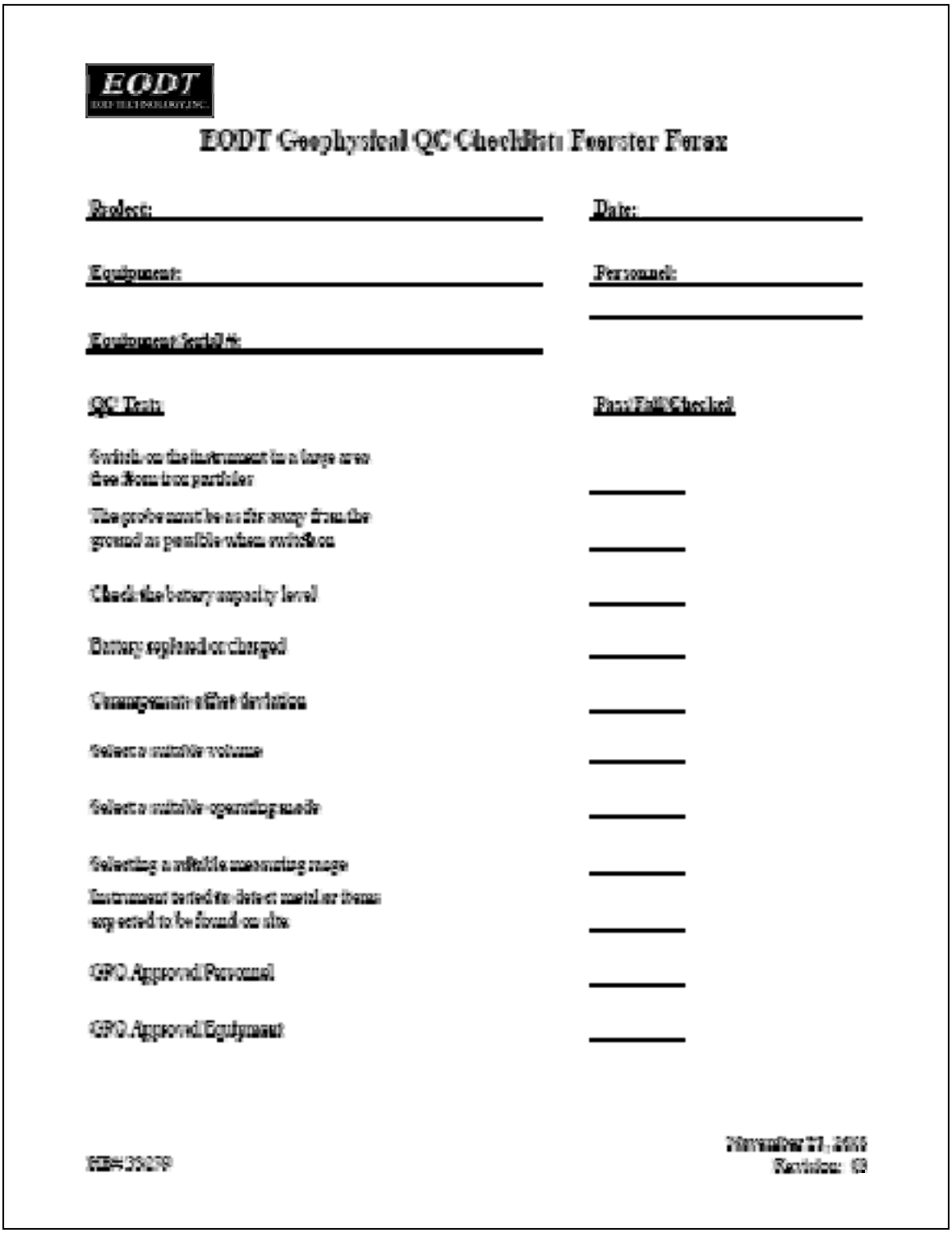
Equipment Serial #: _____

QC Tests	Pass/Fail
Check Battery Capacity Level	_____
Equipment is working order	_____
Cable Stable	_____
Team members (Personnel Test)	_____
4Q Winds	_____
5Q Winds	_____
Positioning Equipment checked (4Q1 and 5Q1)	_____
GPO Approved Personnel	_____
GPO Approved Equipment	_____

HB# 39078

November 21, 2008
Revision: 00

ATTACHMENT B
EODT Geophysical QC Checklist: Foerster Ferex



EODT

EODT Geophysical QC Checklist: Foerster Ferex

Project: _____ Date: _____

Equipment: _____ Personnel: _____

Equipment Serial #: _____

QC Tests	Pass/Fail/Checked
Switch on the instrument in a large area free from iron particles	_____
The probe must be as far away from the ground as possible when switched on	_____
Check the battery capacity level	_____
Battery replaced or charged	_____
Unwanted offset deviation	_____
Select a suitable volume	_____
Select a suitable operating mode	_____
Selecting a suitable measuring range	_____
Instrument tested to detect metal or items expected to be found on site	_____
GPO Approved Personnel	_____
GPO Approved Equipment	_____

HB# 39079

November 21, 2005
Revision: 03

ATTACHMENT C
EODT Geophysical QC Schonstedt Checklist

EODT

EODT Geophysical QC Checklist: Schonstedt

Project: _____ Date: _____

Equipment: _____ Personnel: _____

_____

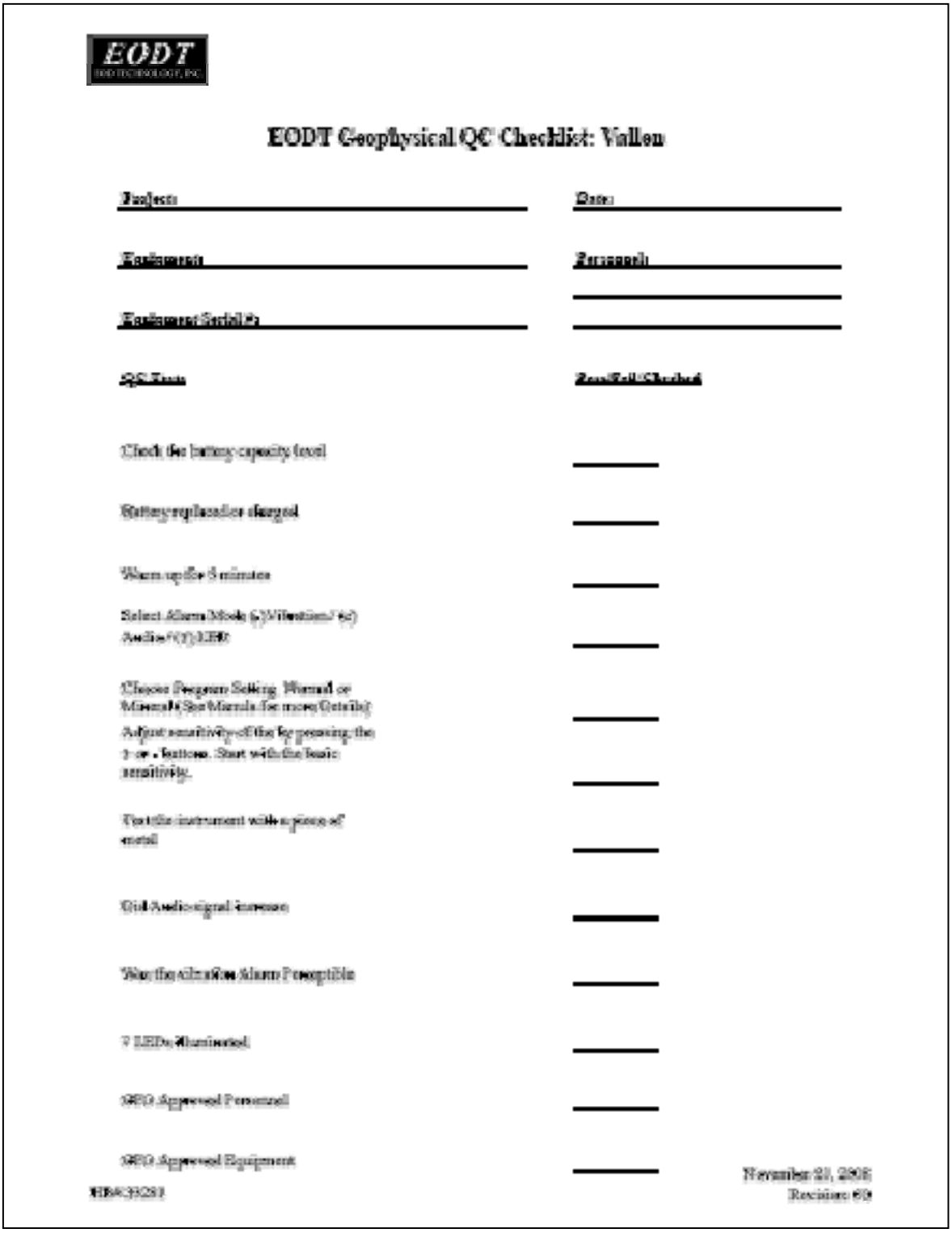
Equipment Serial #: _____

QC Item	Pass/Fail/Checked
Check the battery capacity level	_____
Battery replaced or charged	_____
Set the sensitivity control to position 2	_____
Remove wristwatch or hold in the other hand	_____
Adjust the volume control until the tiding tone emits a desired level.	_____
Check the battery capacity level	_____
Instrument tested to detect metal or items expected to be found on site	_____
QPC Approved Personnel	_____
QPC Approved Equipment	_____

HB# 33280

November 21, 2008
Revision: 00

ATTACHMENT D
EODT Geophysical QC Checklist: Vallon



EODT

EODT Geophysical QC Checklist: Vallon

Project: _____ Date: _____

Equipment: _____ Personnel: _____

Equipment Serial #s _____

QC Item — Pass/Fail Checked

Check the battery capacity level _____

Battery replaced or charged _____

Warm up for 5 minutes _____

Select Alarm Mode (Vibration? Sound? Audio?) (?) LED? _____

Choose Program Setting. Manual or Manual1 (See Manuals for more Details) _____

Adjust sensitivity of the by pressing the + or - buttons. Start with the basic sensitivity. _____

Test the instrument with a piece of metal _____

Did Audio signal increase _____

Was the vibration Alarm Perceptible _____

7 LEDs illuminated _____

QED Approved Personnel _____

QED Approved Equipment _____

HB#39281

November 21, 2006
Revision: 00

ATTACHMENT E
EODT Geophysical QC Whites Checklist

EODT

EODT Geophysical QC Checklist: Whites

Project: _____ Date: _____

Equipment: _____ Personnel: _____

Equipment Serial #: _____

QC Test:	Pass/Fail Checked
Check the software version	_____
Check the battery capacity level	_____
Battery replaced or charged	_____
Conduct preset program	_____
Air balance the MLT	_____
Balance out the ground mineralization	_____
Instrument tested to detect metal or items expected to be found on site	_____
GPO Approved Personnel	_____
GPO Approved Equipment	_____

HB# 33281 November 21, 2003
Revision: 03

EODT
EOD TECHNOLOGY, INC.

Subject Matter Expert:
Richard Perry
John Clark

GEOPHYSICAL WORK PLAN
WORK INSTRUCTION 13

Calibration Procedure for Trimble GPS and Leica Robotic Total Station

"Delivering Critical Mission Support and Site Restoration Services Since 1987"

III. Document Approval

Preparer **Richard Perry, Geophysicist**	**Date**
Risk Review **Eugene Mikell, Quality Operations Manager**	**Date**
Approval **Jeremy Duncan, Corporate Operations Manager**	**Date**

IV. Version Log

Version Name/Purpose	Date
Draft	**November 12, 2008**

1.0 OBJECTIVE

EOD Technology, Inc. (EODT) recognizes that ensuring positional accuracy requires a coordinated team effort in which each member of the team plays an integral part. This work instruction provides the geophysical and survey teams a method to prepare the equipment before proceeding to the site.

2.0 SCOPE

This work instruction is essential for all EODT positioning equipment. This shall include Global Positioning System (GPS) equipment, the Robotic Total Station (RTS), and conventional surveying instruments. The purpose of this procedure is to ensure proper preparation of the equipment in order to achieve the best possible results during field operations.

3.0 DEFINITIONS

3.1 N/A

4.0 PROCEDURE

The appropriate survey equipment as determined by both a Geophysical Prove-Out (GPO), or equivalent test area, and equipment that is used on site will be QC checked based upon procedures outlined in this document and manufactures recommendations. All documentation of each instrument used is in the specific project files. Documentation of equipment repairs will be kept on file

4.1 GPS SET UP PROCEDURES

This procedure tests the operational reliability of the GPS system. The Trimble R8 GNSS system used by EODT has no user or factory calibration adjustments. It is simply a “turn on and go” operation. The components to be checked are the communication between the base unit and the controller, (either by cable or by Bluetooth), the radio link between the base and rover units, and the communication between the controller and the rover unit. Trimble does not require the system be sent back to the manufacture periodically. If the Trimble R8 GNSS system does not pass the functional Quality Control (QC) checks then the system is sent back to the manufacture for repair.

The base unit is set up on a point with a known coordinate value. The communication radio is set up and connected to the base. The controller is connected to the base unit (either with a cable or with a wireless Bluetooth device). Using the keyboard on the

controller, the user types in the point ID for the known base location and the height of the GPS antenna. The base unit does an internal calculation based on the autonomous position of the point to check the accuracy of the given coordinates for the base point. There is a ±10-foot-error radius, but a large mistake will be caught from typing the coordinate value.

If the procedure was done correctly, the transmit light on the base radio will begin to pulse. The rover unit is turned on, and the user will wait a few moments to gain satellite reception. When sufficient satellites are being tracked, the light on the rover will pulse at or around a one-second interval. When the rover finds the base radio signal, the radio light will begin to pulse. The Survey Controller screen will display the status of the satellites. It will show when the unit has "fixed" position, meaning it is receiving the correction factor from the base radio.

4.1.1 Position Check

The Rover unit is set on a known coordinate location. The user selects "Stakeout" on the menu and enters the known point ID. The screen will show a graphic display of the user's location in relation to the point location. This screen will display the error distances based on north/south and east/west values. The total error should be less than 0.02 m, if the unit is functioning properly.

4.2 LEICA ROBOTIC TOTAL STATION (RTS) CALIBRATION

The Leica RTS is a servo-driven optical instrument. The internal calibration of the instrument is always performed by the manufacture's trained technician. The instrument is always checked for correct operation by performing QC checks before being shipped to a site location and before being used at the site. It is not required the Leica RTS be sent back the manufacture periodically. The instrument is only sent back if the QC checks fail. The instrument is operated by turning it on, setting it on a point, and leveling the instrument. The remote controller unit is turned on and a communication is established with the instrument. The remote is attached to a prism rod and taken to a known coordinate location. The instrument sights on the prism and sets the back azimuth. Two or more points are located from the instrument location. The instrument is moved to one of the new locations, sighted back on a known point. The user engages the "Stakeout" function on the remote and re-occupies each of the other points with the prism. An error in the first location and the second occupation is displayed on the screen. The total error distance should be less than .001 m horizontally and 0.02 m vertically.

5.0 REFERENCES

5.1 N/A

6.0 ATTACHMENTS

6.1 N/A