Appendix H
Nonconformance Reports

PARSONS

NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process			Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☐	Reacq: ☐	Other	129	2/9/2004
Grid:	Processing ☐	Clearance: ☐	Scrap processing		☑

Part I (To be completed by QC Inspector detecting nonconformance)

Description of Nonconformance:

UXOQC issued NCR#129 as a result of the FACT Quality Control procedures that indicated the first 4 LBXs (container numbers 50, 58, 80, and 81) shipped from the Range 45 pad contained commingled materials, specifically munitions debris were located in the LBXs that were only to contain range-related debris. The dates of shipment were 1/22/04, 1/20/04, 1/26/04, and 2/02/04 respectively. None of the munition debris contained energetic materials.

Apparent Cause of Nonconformance

It appears that the sorting process IAW the specific SOP was not effectively implemented. More specifically, it appears that the re-inspection process at the Range 45 pad by the UXO technician was not correctly performed.

Recommended Corrective Action:	Resurvey: ☐	Reacq: ☐	Other:
	Reprocess: ☐	Re-clear: ☐	

Upon notification of this discrepancy all participating personnel including Operations, QC, Safety, USA, UXO Supervisor and UXO Technicians were immediately briefed on this NCR and the importance of a thorough inspection. A review of the applicable SOP with key personnel was conducted with plans for a more thorough review and rewrite to clarify and streamline the information making it easier for the reader to understand. The process was evaluated and corrected, specifically the inspection of larger items of scrap which previously was inspected in bulk while in an easy dump container instead of being handled individually. Clarification of the process requires each individual piece to be handled and inspected. All non-munitions debris containers remaining on site were emptied and re-inspected prior to shipment upon notification of this discrepancy. In addition, all appropriate personnel will immediately increase their inspection of the process and materials.

Signature: _____ 2·19·04 (Date)

Part II (To be completed by QC Manager)

Recommended Corrective Action:	Resurvey: ☐	Reacq: ☐	Other:
	Reprocess: ☑	Re-clear: ☐	Revise SOP

Reprocessing completed. This SOP requires a management review to implement the procedural revisions to more accurately reflect the actual process that is being undertaken in the field. Additionally, any and all confusion with respect to the definitions contained in this SOP need to be discussed and resolved. The inspection level of materials to be transported off the site by UXOQC will increase to ensure corrective measures are implemented and are successfully addressing the condition that existed to prevent any opportunity of recurrence.

Signature: Andrea Kotleitner 2·19·04 (QC Manager) (Date)

Program Manager Comments: Agree

Signature: Barry Griffith 2·19·04 (Program Manager) (Date)

Copy Delivered to: ○ Geophysical Manager ◉ OEFOM ○ SUXOS

Part III (Corrective Action Verification)

Corrective Action Was Completed On: 4·19·04 (Date) Verified On: 4·19·04 (Date)

Signature: _____ (Operation Manager) Date: 4/26/04

Signature: Andrea Kotleitner (QC Manager) Date: 4·26·04

Signature: Barry Griffith (Program Manager) Date: 4/26/04

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS

NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process			Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☐	Reacq: ☐	Other	130	2/11/2004
Grid: C2A0F5 , C2A0H6	Processing ☒	Clearance: ☑			☑

Part I (To be completed by QC Inspector detecting nonconformance)

Description of Nonconformance:

The QC seeded program indicated that two seeded items, a 37mm @ 12" in grid C2A0H6 at 5745007 N, 2122723 E and a M69 grenade @ 12" in grid C2A0F5 at 5744982 N, 2122585 E were not successfully detected during the analog clearance process. These grids were worked by the analog teams 1/27/04 and 1/28/04 respectively. UXOQC along with USA1 validated that both of these items were detectable utilizing the same analog locating instrument that was used by the analog removal team. This is a condition that indicates repeated failures to prescribe or implement requirements properly, whose effect is systemic in nature, and that undermines the ability to ensure and demonstrate confidence in quality or safety.

Apparent Cause of Nonconformance

Analog locator sweep process.

Recommended Corrective Action:	Resurvey: ☐	Reacq: ☐	Other:
	Reprocess: ☐	Re-clear: ☐	

All UXO personnel will be briefed on this NCR. Upon notification of this NCR, a SUXOS evaluated the personnel assigned to this team, equipment used, and their removal techniques and upon completion of his investigation will take appropriate actions, i.e. replace equipment, schedule individuals for requalification with Schonstedt, etc. In addition, the site is scheduled to be geophysically surveyed IAW the SSWP not as a result of this NCR and because of this fact, we will not re-sweep these grids.

Signature: _____ 2/11/04 (Date)

Part II (To be completed by QC Manager)

Recommended Corrective Action:	Resurvey: ☐	Reacq: ☒	Other:
	Reprocess: ☒	Re-clear: ☐	

Once the we have obtained customer approval for the QC qualification SOP it would be prudent in repetitive systemic failures similar to these that the analog sweep process challenge the QC qualification grid.

Signature: _____ 2.11.04 (QC Manager) (Date) Program Manager Comments:

Signature: _____ 2/11/04 (Program Manager) (Date)

Copy Delivered to: ○ Geophysical Manager ◉ OEFOM ○ SUXOS

Part III (Corrective Action Verification)

Corrective Action Was Completed On: 3.11.04 (Date) Verified On: 3.12.04 (Date)

Signature: _____ (Operation Manager) Date: 3/16/04

Signature: _____ (QC Manager) Date: 3.16.04

Signature: _____ (Program Manager) Date: 3-16-04

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form
Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS

NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification		Nonconforming Process				Report No.	Date
OE Site:	MRS-Ranges 43-48	Geo survey ☐	Reacq: ☐	Other		131	4/20/2004
Grid:	C2A6E7	Processing ☐	Clearance: ☑				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The QC seeded program indicated that a seeded item, a M22 rifle grenade @ 10" in grid C2A6E7 at 5741136 N, 2122471 E, was not successfully detected during the analog removal process. The analog removal team commenced and completed their work efforts on this grid 4/12/04. UXOQC along with USA 1 and 2 validated that the item was detectable utilizing the same analog locating instrument that was used by the analog removal team once the high concentration of smaller anomalies on the surface or near surface were moved out of the area of the detector's search path.

Apparent Cause of Nonconformance:(2)

The high density of surface and near surface small metallic items in this grid and specifically in the area of the QC seeded item masked the seeded item. It appears that the removal team did not effectively remove the smaller items on the surface or near surface IAW the analog removal protocol which would have allowed the detector to locate the seeded item.

Signature: [signature] 4/20/2004
(QCM) (Date)

Corrective Action Due Date: 5/4/2004

Serverity Level 2

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: [signature] 4/20/04
(FOM) (Date)

Signature: [signature] 4/20/04
(PM) (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)	Resurvey: ☐	Reacq: ☐	Other:
	Reprocess: ☐	Re-clear: ☐	

Surface clutter masked seeded item from team. Teams were briefed to ensure that surface clutter is removed as necessary to allow proper detection of anomalies. This grid is scheduled to be geophysically surveyed IAW SSWP to map and ensure removal of MEC. All detected anomalies will be investigated.

Root Cause Analysis (only for serverity level 1) : (4)

Signature: [signature] 4/20/04
(FOM) (Date)

[signature] 4/20/04
(PM) (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 4/20/04 (Date)

Signature: [signature] (FOM)

Signature: [signature] (PM)

Corrective Action Was Verified On: 4.20.04 (Date)

Signature: [signature] (QCM)

Closeout Comments: (6)

Corrective action verified during morning Team Leader meeting attendance.

☒ Approved ☐ Disapproved New NCR number: _____ Signature: [signature] (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS

NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process				Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☐	Reacq: ☐	Other		132	5/10/2004
Grid: B2J6H2	Processing ☐	Clearance: ☑				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The QC seeded program indicated that an inert seeded item, a M69 practice grenade @ 10" in grid B2J6H2 at 5740604 E, 2121788 E, was not successfully detected during the analog removal process. The analog removal team completed their work efforts on this grid 5/4/04. UXOQC, USA 1 and 2 validated that the item was detectable utilizing the same analog locating instrument that was used by the analog removal team.

Apparent Cause of Nonconformance:(2)

The high density of surface and near surface small metallic items in this grid in addition to a small clump of vegetation which the seeded item was located next to may have created this nonconforming condition. It appears that the removal team did not effectively operate IAW the SSWP sweep process for removal to depth operations.

Signature: _____ 5/11/2004 (QCM) (Date) Corrective Action Due Date: 5/24/2004

Serverity Level 2

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: _____ 5/11/2004 (FOM) (Date) Signature: _____ 5/11/04 (PM) (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey: ☐	Reacq: ☐	Other:
Reprocess: ☐	Re-clear: ☐	

Surface clutter masked seeded item from team. Teams were briefed to ensure that surface clutter is removed as necessary to allow proper detection of anomalies. This grid is scheduled to be geophysically surveyed IAW SSWP to map and ensure removal of MEC. All detected anomalies will be investigated.

Root Cause Analysis (only for serverity level 1) : (4)

Signature: _____ 5/11/04 (FOM) (Date) _____ 5/11/04 (PM) (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 5/5/2004 (Date) Signature: _____ (FOM)

Signature: _____ (PM)

Corrective Action Was Verified On: 5/5/2004 (Date) Signature: _____ (QCM)

Closeout Comments: (6)

Corrective action was verified during the validation process of the missed seeded item in the field 5/5/04. The SUXOs briefed the team leader separately and then the entire team. Additionally, each team member validated that the seeded item was detectable using their Schonstedt to ensure that all team magnetometers were operating within specifications.

☒ Approved ☐ Disapproved New NCR number: _____ Signature: _____ (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process				Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☒	Reacq: ☒	Other		133	8/23/2004
Grid: B2J8H2	Processing ☐	Clearance: ☑				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The QC seeded program indicated that an inert seeded item, an 81 mm target practice mortar @ 15" in grid B2J8H2 at 2121726 N, 5742626 E, was not successfully detected during the analog removal process. The analog removal team completed their work efforts on this grid 8/18/04. UXOQC, USA 1 and 2 validated that the item was detectable utilizing the same analog locating instrument that was used by the analog removal team.

Apparent Cause of Nonconformance:(2)

It appears that the analog removal team did not effectively operate IAW the SSWP sweep process for analog removal to depth operations.

Signature: Andreas Kuhlmann 8/23/2004 (QCM) (Date) Corrective Action Due Date: 8/31/2004

Severity Level 2

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: [signature] 8/23/2004 (FOM) (Date) Signature: Gary Griffith 8/23/2004 (PM) (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey: ☐	Reacq: ☐	Other:
Reprocess: ☐	Re-clear: ☐	See Comments Belo

Teams were briefed to ensure that appropriate procedures are followed to allow proper detection of anomalies. This grid is scheduled to be geophysically surveyed IAW SSWP to map and ensure removal of MEC. All detected anomalies will be investigated.

Root Cause Analysis (only for serverity level 1) : (4)

Signature: [signature] 8/23/04 (FOM) (Date) Gary Griffith 8/23/04 (PM) (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 8/23/2004 (Date) Signature: [signature] (FOM)

Signature: Gary Griffith (PM)

Corrective Action Was Verified On: 8/23/2004 (Date) Signature: Andreas Kuhlmann (QCM)

Closeout Comments: (6)

☑ Approved ☐ Disapproved New NCR number: _____ Signature: Andreas Kuhlmann (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process				Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☐	Reacq: ☐	Other		134	9/1/2004
Grid: B2J7A4	Processing ☐	Clearance: ☑				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The QC seeded program indicated that an inert seeded item, a 37 mm LE inert projectile @ 7" in grid B2J7A4 at 2121060 N, 5741881 E, was not successfully detected during the analog removal process. The analog removal team completed their work efforts on this grid 8/30/04. UXOQC, USA 1 and 2 validated that the item was detectable utilizing the same analog locating instrument that was used by the analog removal team.

Apparent Cause of Nonconformance:(2)

It appears that the analog removal team did not effectively operate IAW the SSWP sweep process for analog removal to depth operations.

Signature: [signature] 9/1/2004 (QCM) (Date) Corrective Action Due Date: 9/16/2004

Serverity Level 2

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: [signature] 9/1/2004 (FOM) (Date) Signature: [signature] 9/1/04 (PM) (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey: ☐	Reacq: ☐	Other:
Reprocess: ☐	Re-clear: ☐	See comments

Teams were briefed to ensure that appropriate procedures are followed to allow proper detection of anomalies. This grid is scheduled to be geophysically surveyed IAW SSWP to map and ensure removal of MEC. All detected anomalies will be investigated

Root Cause Analysis (only for serverity level 1) : (4)

Signature: [signature] 9/1/04 (FOM) (Date) [signature] 9/1/04 (PM) (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 9·1·04 (Date) Signature: [signature] (FOM)

Signature: [signature] (PM)

Corrective Action Was Verified On: 9·1·04 (Date) Signature: [signature] (QCM)

Closeout Comments: (6)

☑ Approved ☐ Disapproved New NCR number: _____ Signature: [signature] (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS

NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process						Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey	☐	Reacq:	☐	Other		141	9/29/2004
Grid: C2A9F2	Processing	☐	Clearance:	☐	Backhoe excavation			

Part I (UXOQC)

Description of Nonconforming Condition:(1)

While conducting a QC inspection of backhoe SR_unique_id C2A9F2_d80997 a MKII (TBD) hand grenade was located on the surface @ 2122589N, 5743656E at the base of the sifted soils.

Apparent Cause of Nonconformance:(2)

The spoil piles from the sifting operation were not thoroughly investigated. The coloration of the hand grenade and the soils fused to the item had a very similar appearance to the manzaneeta root balls which were also located in the spoil piles. As a result, it would appear that these piles were only subjected to a visual investigation.

Signature: Andreas Kithleiter 9/29/2004 (QCM) (Date)

Corrective Action Due Date: 10/21/2004

Serverity Level 2

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: [signature] 9/29/2004 (FOM) (Date)

Signature: Barry Griffith 10/4/2004 (PM) (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey: ☐	Reacq: ☐	Other:
Reprocess: ☐	Re-clear: ☐	See comments below

All screened debris at this excavation site was visually and physically re-checked, team and team leader were reminded and directed to physically check spoils and utilize Schonstedt when feasible. If there is a high saturation of metal in the spoil piles (links, clips, etc) which would preclude the use of the Schonstedt, the spoil piles will be phsysically inspected using the raking technique

Root Cause Analysis (only for serverity level 1) : (4)

Signature: [signature] 10/14/04 (FOM) (Date)

Barry Griffith 10/20/04 (PM) (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 10/14/2004 (Date) Signature: [signature] (FOM)

Signature: Barry Griffith (PM)

Corrective Action Was Verified On: 10/18/2004 (Date) Signature: Andreas Kithleiter (QCM)

Closeout Comments: (6)

The QC re-inspection of this backhoe excavtion site verified that corective action had been implelemented.

☑ Approved ☐ Disapproved New NCR number: _____ Signature: Andreas Kithleiter (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS

NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process					Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☐		Reacq: ☐		Other	142	10/20/2004
Grid: C2B7D7	Processing ☐		Clearance: ☑				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The QC3 inspection results indicated that a MK II practice hand grenade (MD-E) @ 8" in grid C2B7D7 at 2123364 N, 5742140 E, was not located during the removal process. The analog removal to depth was completed 1/5/04 and the digital excavtion was completed on 8/26/04. UXOQC detected this anomaly utilizing the same instrument that was utilized by the analog removal to depth team. The anomaly at this location produced a 2.59 mV response from the EM61- MK2 during the digital geophysical survey.

Apparent Cause of Nonconformance:(2)

It would appear that the analog removal team did not effectively remove this anomaly as a result of human error. Since this anomaly was below the 3mV selection criteria threshold it was not assigned for digital excavation.

Signature: Andreas Kuhlmann (QCM) 10/20/2004 (Date)

Corrective Action Due Date: 12/16/2004

Severity Level 2

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: (FOM) 10/20/2004 (Date)

Signature: Barry Griffith (PM) 10/20/2004 (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey: ☐	Reacq: ☐	Other:
Reprocess: ☐	Re-clear: ☑	Analog re-sweep

None of the personnel who conducted the original analog removal are currently on site. Grid will be reassigned to another UXO Team to have an additional analog removal operation conducted. Grid status has been changed in the database from complete to not complete to ensure that it will be assigned and keep database streamlined.

Root Cause Analysis (only for severity level 1) : (4)

Signature: (FOM) 10/28/2004 (Date)

Signature: Barry Griffith (PM) 10/28/2004 (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 11/2/2004 (Date)

Signature: (FOM)

Signature: Barry Griffith (PM)

Corrective Action Was Verified On: 11/15/2004 (Date)

Signature: Andreas Kuhlmann (QCM)

Closeout Comments: (6)

A successful second QC-3 inspection was conducted in this grid 11/15/04. The QC status of this grid has now been updated to pass in the Project database.

☑ Approved ☐ Disapproved New NCR number: _____ Signature: Andreas Kuhlmann (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process				Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☐	Reacq: ☐	Other		143	10/26/2004
Grid: B2J8H7	Processing ☐	Clearance: ☑				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The QC seeded program indicated that an inert seeded item, a 75mm shrapnel projectile, at 15", in grid B2J8H7, was not successfully detected during the analog removal process. The analog removal team completed their work efforts on 10/20/04. UXOQC with the UXO Team Leader validated that the item was detectable utilizing the same locating instrument model type that was used by the analog removal team.

Apparent Cause of Nonconformance:(2)

This grid's operation records indicate that the team removed approximately 830 lbs. of metallic material, documented 68 Items_Dug and expended 86 team hours in this grid. The research results of these grid operation records would indicate that there was a high density of ferrous metal objects located in the sub-surface which may have contributed to the unsuccessful detection of the inert QC seeded item.

Signature: _____ 10/26/2004 Corrective Action Due Date: TBD
(QCM) (Date) Severity Level 2

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: _____ 10/26/2004 Signature: _____ 10/26/2004
(FOM) (Date) (PM) (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

	Resurvey: ☐	Reacq: ☐	Other:	
	Reprocess: ☐	Re-clear: ☐		

Clutter may have masked seeded item from team. Teams were briefed to ensure that clutter is removed as necessary to allow proper detection of anomalies. This grid is scheduled to be geophysically surveyed IAW SSWP to map and ensure removal of MEC. All detected anomalies will be investigated.

Root Cause Analysis (only for severity level 1) : (4)

Signature: _____ 10/28/2004 Signature: _____ 10/28/2004
(FOM) (Date) (PM) (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 4/19/2005 Signature: _____ (FOM)
(Date)

Signature: _____ (PM)

Corrective Action Was Verified On: 4/19/2005 Signature: _____ (QCM)
(Date)

Closeout Comments: (6)

The QC seed item missed by the analog process was successfully identified by the digital survey and recovered by the follow-on digital excavation process.

☑ Approved ☐ Disapproved New NCR number: _____ Signature: _____ (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS

NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process						Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey	☐	Reacq:	☑	Other		144	10/28/2004
Grid: B2H8J4	Processing	☐	Clearance:	☐				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

A QC geophysical field audit of the reacquisition process conducted 10/20/04 indicated that digital anomaly #113 in grid B2H8J4 was not successfully reacquired. The QC field investigation identified that the anomaly's location was not marked with a flag. The reacquisition data indicated that the anomaly was successfully reacquired with a 5 mV channel 3 EM61-MKII response but it's position was not recorded in the Leica GPS unit.

Apparent Cause of Nonconformance:(2)

It appears that the recording of the anomaly's positional data using the Leica GPS system was not performed as a result of human error and a flag was not placed at the anomaly's location.

Signature: Andreas Kothleitner 11/3/2004 Corrective Action Due Date: 11/17/2004
(QCM) (Date) Severity Level 4

Copy Delivered to: ◉ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: 11/3/2004 Signature: Barry Griffith 11/3/2004
(FOM) (Date) (PM) (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey:	☐	Reacq:	☑	Other:
Reprocess:	☐	Re-clear:	☐	

The reacquisition of anomaly B2H8J4-0113 will be redone. Team and team leader were briefed on the importance of paying attention to the detail required for this particular task. A review was conducted with the team of the appropriate procedures. The Project Geophysicist conducted briefing and task review as well as an audit of the other anomalies in that particular grid to ensure that they were placed and recorded properly.

Root Cause Analysis (only for severity level 1) : (4)

Signature: 11/3/2004 Signature: Barry Griffith 11/3/2004
(FOM) (Date) (PM) (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 10/28/2004 (Date) Signature: (FOM)

Signature: Barry Griffith (PM)

Corrective Action Was Verified On: 11/2/2004 (Date) Signature: Andreas Kothleitner (QCM)

Closeout Comments: (6)

☑ Approved ☐ Disapproved New NCR number: Signature: Andreas Kothleitner (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS

NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process					Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☐		Reacq: ☐		Other	145	11/29/2004
Grid: B2I9J1	Processing ☐		Clearance: ☑				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The QC seed program indicated that an inert seeded item, a 37mm APT/TP, at 9", in grid B2I9J1, was not successfully detected during the analog removal process. The inert QC seeded item was located in an "analog removal area (ARA)" in between trees. The analog removal team completed their work efforts on 11/9/04. UXOQC, USA 1 and 2 validated that the item was detectable utilizing the same model type of locating instrument that was used by the analog removal team.

Apparent Cause of Nonconformance:(2)

It appears that the vegetation within the ARA and an additional remaining anomaly which was removed during the verification process contributed to the unsuccessful recovery of the inert QC seed item.

Signature: Andrea Kitchener 11/29/2004 (QCM) (Date)

Corrective Action Due Date: 12/30/2004

Severity Level 2

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: [signature] 11/29/2004 (FOM) (Date)

Signature: Gary Griffith 11/29/2004 (PM) (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey: ☐	Reacq: ☐	Other:
Reprocess: ☐	Re-clear: ☐	

All team leaders were briefed on this NCR. All the team leaders were directed to ensure that they, the team leaders will conduct a specific check in these areas in addition to their normal team leader checks conducted behind the teams during analog removal. The FOM and SUXOS 1 will conduct a check in tree areas this team worked for the month of Nov and ensure that adequate removal was completed. The remainder of this grid is scheduled for digital survey IAW Ranges 43-48 SSWP to map and ensure removal of all MEC. All detectable anomalies will be investigated.

Root Cause Analysis (only for severity level 1) : (4)

Signature: [signature] (FOM) (Date)

Signature: Gary Griffith (PM) (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 12/20/2004 (Date)

Signature: [signature] (FOM)

Signature: Gary Griffith (PM)

Corrective Action Was Verified On: 12/28/2004 (Date)

Signature: Andrea Kitchener (QCM)

Closeout Comments: (6)

☑ Approved ☐ Disapproved New NCR number: _____ Signature: Andrea Kitchener (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS

NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process				Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☐	Reacq: ☒	Other		146	11/29/2004
Grid: B2J8H0	Processing ☒	Clearance: ☑				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The QC seed program indicated that an inert seeded item, a 37mm LE, at 11", in grid B2J8H0, was not successfully detected during the analog removal process. The analog removal team completed their work efforts on 11/15/04. UXOQC, USA 1 and 2 validated that the item was detectable utilizing the same model type of locating instrument that was used by the analog removal team.

Apparent Cause of Nonconformance:(2)

This grid's operation records indicate that the team removed approximately 415 lbs. of metallic material which would indicate a high density of ferrous metal objects located in the sub-surface. In addition, the verification of this condition also indicated that there were a large amount of near surface, small metallic anomalies surrounding the location of the seeded item. These conditions may have contributed to the unsuccessful recovery of the inert QC seed item.

Signature: _____ 11/29/2004 (QCM) (Date)

Corrective Action Due Date: TBD

Severity Level _____

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: _____ 11/29/2004 (FOM) (Date)

Signature: _____ 11/29/2004 (PM) (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey: ☐	Reacq: ☐	Other:
Reprocess: ☐	Re-clear: ☒	

Teams were briefed to ensure that appropriate procedures are followed to allow proper detection of anomalies. This grid is scheduled to be geophysically surveyed IAW SSWP to map and ensure removal of MEC. All detected anomalies will be investigated.

Root Cause Analysis (only for severity level 1) : (4)

Signature: _____ 12/13/2004 (FOM) (Date)

Signature: _____ 12/13/2004 (PM) (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 3/22/2005 (Date)

Signature: _____ (FOM)

Signature: _____ (PM)

Corrective Action Was Verified On: 4/21/2005 (Date)

Signature: _____ (QCM)

Closeout Comments: (6)

This NCR was closed and a new NCR, #154, was initiated as a result of the geophysical survey (corrective action as docuemted above) not selecting the QC seed item as anomaly requiring further investigation.

☐ Approved ☑ Disapproved New NCR number: 154 Signature: _____ (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS

NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process					Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☐		Reacq: ☐		Other	147	12/20/2004
Grid: C2A5D9	Processing ☐		Clearance: ☑				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The QC seed program indicated that an inert seeded item, a 35mm subcaliber at 8", in grid C2A5D9, was not successfully detected during the digital excavation removal process. The inert QC seeded item was located in a geophysical polygon. The digital excavation team completed their work efforts in this grid on 11/30/04. QC, USA 1 and 2 validated that the item was detectable and had a threshold of greater than 3.0mV (5.0mV) utilizing the same model type of locating instrument that was used by the digital excavation team. The established Project threshold for all digital processes is 3.0mV. The QC inert seed item described in this condition does not meet the minimum removal criteria (37mm or like item) and therefore does not constitute a grid failure.

Apparent Cause of Nonconformance:(2)

It appears that the digital excavation team did not clear all anomalies with a threshold of greater than 3.0mV within the geophysical polygon.

Signature: Andreas Kithleiter (QCM) 12/20/2004 (Date)

Corrective Action Due Date: 1/5/2005

Severity Level 3

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: (FOM) 12/20/2004 (Date)

Signature: Barry Buffington (PM) 12/20/2004 (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey: ☐	Reacq: ☐	Other:
Reprocess: ☐	Re-clear: ☐	

Team leader was briefed that although the geophysical polygons are the most difficult to clear, the entire polygon must be checked with the EM61 and it is imperative that all anomalies exceeding the threshold of 3mv must be removed.

Root Cause Analysis (only for severity level 1) : (4)

Signature: (FOM) 12/21/2004 (Date)

Signature: Barry Buffington (PM) 12/21/2004 (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 12/21/2004 (Date)

Signature: (FOM)

Signature: Barry Buffington (PM)

Corrective Action Was Verified On: 12/22/2004 (Date)

Signature: Andreas Kithleiter (QCM)

Closeout Comments: (6)

☑ Approved ☐ Disapproved New NCR number: _____ Signature: Andreas Kithleiter (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS

NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process					Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☐		Reacq: ☐		Other	148	12/20/2004
Grid: C2A8B9	Processing ☐		Clearance: ☑				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The QC seed program indicated that an inert seeded item, a 60mm T/P at 22", in grid C2A8B9, was not successfully detected during the digital excavation removal process. The inert QC seed item was part of a double seed which included a 75mm Shrapnel projectile at 13" in the same location. The shallower seed item (75mm Shrapnel projectile) was located a recovered by the digital excavation team. The digital excavation team completed their work efforts in this grid on 12/6/04. QC, USA 1 and 2 validated that the item was detectable and had a threshold of greater than 3.0mV (4.2mV) utilizing the same model type of locating instrument that was used by the digital excavation team. The established Project threshold for all digital processes is 3.0mV. The QC inert double seed items were both located and recovered by the analog removal process, therefore this described condition does not constitute a grid failure.

Apparent Cause of Nonconformance:(2)

It appears that the digital excavation team did not clear all anomalies with a threshold of greater than 3.0mV at the location of the double seed.

Signature: _____ 12/20/2004 (QCM) (Date)

Corrective Action Due Date: 1/5/2005

Severity Level 3

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: _____ 12/20/2004 (FOM) (Date)

Signature: _____ 12/20/2004 (PM) (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey: ☐	Reacq: ☐	Other:
Reprocess: ☐	Re-clear: ☐	

Team leader was briefed and reminded that QC and QA seed items are placed to provide a realistic scenario to real world situations. Just because you found a seed does not negate the fact that you have to completely clear the excavation hole until it is completely clean including additional seeds or real world anomalies.

Root Cause Analysis (only for severity level 1) : (4)

Signature: _____ 12/21/2004 (FOM) (Date)

Signature: _____ 1/21/2005 (PM) (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 12/21/2004 (Date)

Signature: _____ (FOM)

Signature: _____ (PM)

Corrective Action Was Verified On: 12/22/2004 (Date)

Signature: _____ (QCM)

Closeout Comments: (6)

☑ Approved ☐ Disapproved New NCR number: _____ Signature: _____ (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process				Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☐	Reacq: ☐	Other		149	1/11/2005
Grid: B2J7C9	Processing ☐	Clearance: ☑				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The QC seed program indicated that a double seed (one seed item on top of another) which included an inert 35mm sub-caliber at 8" and an inert 60mm T/P mortar at 16" in grid B2J7C9 were not successfully detected during the analog removal process. The analog removal team completed their work efforts on 1/6/05. UXOQC and USA 1 (SUXO) validated that the items were detectable utilizing the same model type of locating instrument that was used by the analog removal team.

Apparent Cause of Nonconformance:(2)

It appears that the UXO removal team did not effectively conduct analog removal to depth operations IAW the Ranges 43-48 SSWP.

Signature: Andrea Kothleitner 1/11/2005
(QCM) (Date)

Corrective Action Due Date: TBD

Severity Level 2

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: [signature] 1/11/2005
(FOM) (Date)

Signature: Gary Griffith 1/11/2005
(PM) (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey: ☐	Reacq: ☐	Other:
Reprocess: ☒	Re-clear: ☐	

Teams were briefed to ensure that appropriate procedures are followed to allow proper detection of anomalies. This grid is scheduled to be geophysically surveyed IAW SSWP to map and ensure removal of MEC. All detected anomalies will be investigated.

Root Cause Analysis (only for severity level 1) : (4)

Signature: [signature] 1/12/2005
(FOM) (Date)

Signature: Gary Griffith 1/12/2005
(PM) (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 2/28/2005
(Date)

Signature: [signature] (FOM)

Signature: Gary Griffith (PM)

Corrective Action Was Verified On: 4/21/2005
(Date)

Signature: Andrea Kothleitner (QCM)

Closeout Comments: (6)

Both seed items were detected and recovered by the digital removal process.

☑ Approved ☐ Disapproved New NCR number: _____ Signature: Andrea Kothleitner (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS

NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process					Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☐		Reacq: ☐		Other	150	3/2/2005
Grid:	Processing ☐		Clearance: ☐		Overdue Equipment		

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The subcontractor's equipment to conduct the sifting operation of the Range 45 area is overdue. The notice to proceed (NTP), 11/9/2004, indicated that it was anticipated that the subcontactor would begin the intial phase of the sift process on 11/22/2004. The subcontractor's proposal included a schedule indicating that the first activites of the sift operation--- grading and stockpiling---would have a duration of 4 weeks. The schedule also indicated that the next phase of work---assembly of the sifter and overland conveyor---would take place towards the end of the grading and stockpiling phase and be completed in 1 week. The first phase of the sift operation began, as anticipated, 11/22/2004 and was completed 1/27/2005. As of 3/2/2005, the equipment described in the second phase of the sift operation has not arrived. The assembly of this equipment is 9 weeks behind the schedule included in the subcontractor's proposal without any documentation explaining this delay.

Apparent Cause of Nonconformance:(2)

The availability of the conveyor system required to conduct the sift process in accordance with the prescribed and agreed upon plan.

Signature: Andreas Kothleitner 3/2/2005 Corrective Action Due Date: 3/16/2005
(QCM) (Date) Severity Level 2

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: [signature] 3/2/2005 Signature: Barry Griffith 3/2/2005
(FOM) (Date) (PM) (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey: ☐	Reacq: ☐	Other:
Reprocess: ☐	Re-clear: ☐	

The PM has been in contact with TES and has expressed our concerns on this issue. While there has been a number of reasons for the delay, it has not been considered acceptable. At this point and time, equipment and installation are in progress and nothing else can be done at this stage other than official documentation showing past disappointments. For future use, consent packages between Parsons and TES may incorporate a "liquidated damages" penalty clause that would enforce liability on TES and any additional cost caused to the project by their actions or inactions may be covered at their expense.

Root Cause Analysis (only for severity level 1) : (4)

Signature: [signature] 3/14/2005 Signature: Barry Griffith 3/14/2005
(FOM) (Date) (PM) (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 3/14/2005 (Date) Signature: [signature] (FOM)

Signature: Barry Griffith (PM)

Corrective Action Was Verified On: 3/14/2005 (Date) Signature: Andreas Kothleitner (QCM)

Closeout Comments: (6)

☑ Approved ☐ Disapproved New NCR number: _____ Signature: Andreas Kothleitner (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS

NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process						Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey	☐	Reacq:	☐	Other		153	4/18/2005
Grid: B2I7E9	Processing	☐	Clearance:	☑				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The QC seed program indicated that an inert seed item, a 37mm APT/TP at 11", in grid B2I7E9, was not successfully recovered during the digital excavation removal process. The inert QC seed item was located at 5742395.95 E, 2120408.75 N which was .38' south of unique anomaly B2I7E9-0096. This anomaly was selected by the digital processor and successfully reacquired in the field with an instrument reading of 8mV and no flag offset. The digital excavation team completed their work efforts in this grid on 3/15/05 and documented that at this anomaly's location 0.3 lbs of MD-F were removed to a depth of 6". QC validated that the item was detectable and had a threshold of greater than 3.0mV (5.0mV) utilizing the same model type of locating instrument that was used by the digital excavation team. Established Project threshold for all digital processes is 3.0mV. The QC inert seed item was located and recovered by the analog removal process, therefore this described condition does not constitute a grid failure.

Apparent Cause of Nonconformance:(2)

It appears that the digital excavation team did not completely investigate this anomaly's location.

Signature: Andrea Kitchenter 4/18/2005 (QCM) (Date)

Corrective Action Due Date: 5/2/2005

Severity Level 3

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: [signature] 4/18/2005 (FOM) (Date)

Signature: Gary Griffith 4/18/2005 (PM) (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey:	☐	Reacq:	☐	Other:
Reprocess:	☐	Re-clear:	☐	

Team Leader and team were briefed and firmly reminded that they must conduct a final check on the hole as described in the digital excavation flow chart handout and must ensure every hole is cleared prior to calling the dig complete. All team leaders were given a brief at the next team leaders meeting.

Root Cause Analysis (only for severity level 1) : (4)

Signature: [signature] 4/19/2005 (FOM) (Date)

Signature: Gary Griffith 4/19/2005 (PM) (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 4/20/2005 (Date)

Signature: [signature] (FOM)

Signature: Gary Griffith (PM)

Corrective Action Was Verified On: 4/21/2005 (Date)

Signature: Andrea Kitchenter (QCM)

Closeout Comments: (6)

This grid was subjected to an increased biased sampling QC inspection (~35%) 4/21/2005 with no findings or failures. The bias portion of the inspection focused on digital excavation sites to verify that this process was implemented IAW R43-48 SSWP. The QC inert seed item was located and recovered by the analog removal process, therefore this described condition does not constitute a grid failure.

☑ Approved ☐ Disapproved New NCR number: _____ Signature: Andrea Kitchenter (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS

NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process					Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☐		Reacq: ☐		Other	154	4/25/2005
Grid: B2J8H0	Processing ☐		Clearance: ☑				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The QC seed program indicated that the inert seed item, a 37mm LE at 11", which was not successfully detected during the analog removal process (see NCR #146), was also not detected during the digital removal process. The digital excavation team completed their work efforts in this grid on 3/22/05. QC validated that the item was detectable and had a threshold of greater than 3.0mV (3.96mV) utilizing the same model type of locating instrument that was used by the digital removal process.

Apparent Cause of Nonconformance:(2)

The instrument response in "real time" (3.96mV) is higher than that of the digital data (1.9mV) surveyed for this anomaly.

Signature: Andrea Kirkbride 4/25/2005 (QCM) (Date)

Corrective Action Due Date: 5/16/2005

Severity Level 2

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: 4/25/2005 (FOM) (Date)

Signature: Gary Griffith 4/25/2005 (PM) (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey: ☑		Reacq: ☑		Other:
Reprocess: ☑		Re-clear: ☑		

This grid will be re-surveyed, reprocessed, reacquired, and re-excavated by a UXO team.

Root Cause Analysis (only for severity level 1) : (4)

Signature: [illegible] 7/5/2005 (FOM) (Date)

Signature: Gary Griffith 7/5/2005 (PM) (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 7/20/2005 (Date)

Signature: [illegible] (FOM)

Signature: Gary Griffith (PM)

Corrective Action Was Verified On: 7/21/2005 (Date)

Signature: Andrea Kirkbride (QCM)

Closeout Comments: (6)

The QC seed item was not recovered during the re-survey and re-excavation of grid B2J8H0. This NCR is closed and NCR #155 is initiated to capture this condition.

☐ Approved ☑ Disapproved New NCR number: 155 Signature: Andrea Kirkbride (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS

NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process				Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☒	Reacq: ☒	Other		155	7/25/2005
Grid: B2J8H0	Processing ☒	Clearance: ☑				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The QC seed program indicated an inert seed item, a 37mm LE at 11", which was not successfully detected during the analog removal process (see NCR #146), not detected during the digital removal process (see NCR #154), was also not detected by the complete digital rework process. The digital re-excavation team completed their work efforts in this grid on 7/20/05. QC validated that the item was field detectable and had a threshold of 3.0mV or greater. The missed seed item was recovered by QC 7/21/05 utilizing the same model type of locating instrument that was used by the digital removal process with the support of a geophysical EM-61 operator. The maximum digital responses of the seed item were 3mV when it was traversed over in an East-West direction and 5mV in a North-South direction.

Apparent Cause of Nonconformance:(2)

The instrument response in "real time" is higher than that of the digital data surveyed for this anomaly.

Signature: _____ 7/25/2005
(QCM) (Date)

Corrective Action Due Date: 8/18/2005

Severity Level 2

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: for _____ 7/26/2005
~~(FOM)~~/Geo (Date)

Signature: _____ 7/26/2005
(PM) (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey: ☒	Reacq: ☒	Other:
Reprocess: ☒	Re-clear: ☒	Scientific Analysis

See attached memo per Project Geophysicist Craig Murray

Root Cause Analysis (only for severity level 1) : (4)

Signature: for _____
~~(FOM)~~/Geo (Date)

Signature: _____
(PM) (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 8/10/2005
(Date)

Signature: for _____ ~~(FOM)~~/Geo

Signature: _____ (PM)

Corrective Action Was Verified On: 8/10/2005
(Date)

Signature: _____ (QCM)

Closeout Comments: (6)

☑ Approved ☐ Disapproved New NCR number: _____ Signature: _____ (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

Number of Affected Grid 1

MRS-Ranges 43-48.B2J8H0

PARSONS NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process				Report No.	Date
OE Site: MRS--Ranges 43-48	Geo survey ☐	Reacq: ☒	Other		146	11/29/2004
Grid: B2J8H0	Processing ☒	Clearance: ☑				

Part I (QCM)

Description of Nonconforming Condition:(1)

The QC seed program indicated that an inert seeded item, a 37mm LE, at 11", in grid B2J8H0, was not successfully detected during the analog removal process. The analog removal team completed their work efforts on 11/15/04. UXOQC, USA 1 and 2 validated that the item was detectable utilizing the same model type of locating instrument that was used by the analog removal team.

Apparent Cause of Nonconformance:(2)

This grid's operation records indicate that the team removed approximately 415 lbs. of metallic material which would indicate a high density of ferrous metal objects located in the sub-surface. In addition, the verification of this condition also indicated that there were a large amount of near surface, small metallic anomalies surrounding the location of the seeded item. These conditions may have contributed to the unsuccessful recovery of the inert QC seed item.

Signature: _____ (QCM) 11/29/2004 (Date)

Corrective Action Due Date: TBD

Severity Level _____

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: _____ (FOM) 11/29/2004 (Date)

Signature: Barry Griffith (PM) 11/29/2004 (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)

Resurvey: ☐	Reacq: ☐	Other:
Reprocess: ☐	Re-clear: ☒	

Teams were briefed to ensure that appropriate procedures are followed to allow proper detection of anomalies. This grid is scheduled to be geophysically surveyed IAW SSWP to map and ensure removal of MEC. All detected anomalies will be investigated.

Root Cause Analysis (only for severity level 1) : (4)

Signature: _____ (FOM) 12/13/2004 (Date)

Signature: Barry Griffith (PM) 12/13/2004 (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 3/22/2005 (Date)

Signature: _____ (FOM)

Signature: Barry Griffith (PM)

Corrective Action Was Verified On: 4/21/2005 (Date)

Signature: _____ (QCM)

Closeout Comments: (6)

This NCR was closed and a new NCR, #154, was initiated as a result of the geophysical survey (corrective action as documented above) not selecting the QC seed item as anomaly requiring further investigation.

☐ Approved ☑ Disapproved New NCR number: 154 Signature: _____ (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

PARSONS NONCONFORMANCE AND CORRECTIVE ACTION REPORT

OE Site Identification	Nonconforming Process				Report No.	Date
OE Site: MRS-Ranges 43-48	Geo survey ☐	Reacq: ☐	Other		154	4/25/2005
Grid: B2J8H0	Processing ☐	Clearance: ☑				

Part I (UXOQC)

Description of Nonconforming Condition:(1)

The QC seed program indicated that the inert seed item, a 37mm LE at 11", which was not successfully detected during the analog removal process (see NCR #146), was also not detected during the digital removal process. The digital excavation team completed their work efforts in this grid on 3/22/05. QC validated that the item was detectable and had a threshold of greater than 3.0mV (3.96mV) utilizing the same model type of locating instrument that was used by the digital removal process.

Apparent Cause of Nonconformance:(2)

The instrument response in "real time" (3.96mV) is higher than that of the digital data (1.9mV) surveyed for this anomaly.

Signature: Andrew Kothbauer (QCM) 4/25/2005 (Date) Corrective Action Due Date: 5/16/2005

Severity Level 2

Copy Delivered to: ○ Geophysical Manager ◉ FOM ○ SUXOS ○ PM

Signature: (FOM) 4/25/2005 (Date) Signature: Barry Griffith (PM) 4/25/2005 (Date)

Part II (OPERATIONS)

Recommended Corrective Action:(3)				
	Resurvey: ☑	Reacq: ☑	Other:	
	Reprocess: ☑	Re-clear: ☑		

This grid will be re-surveyed, reprocessed, reacquired, and re-excavated by a UXO team.

Root Cause Analysis (only for severity level 1) : (4)

Signature: (FOM) 7/5/2005 (Date) Signature: Barry Griffith (PM) 7/5/2005 (Date)

Part III (Corrective Action Verification):(5)

Corrective Action Was Completed On: 7/20/2005 (Date) Signature: (FOM)

Signature: Barry Griffith (PM)

Corrective Action Was Verified On: 7/21/2005 (Date) Signature: Andrew Kothbauer (QCM)

Closeout Comments: (6)

The QC seed item was not recovered during the re-survey and re-excavation of grid B2J8H0. This NCR is closed and NCR #155 is initiated to capture this condition.

☐ Approved ☑ Disapproved New NCR number: 155 Signature: Andrew Kothbauer (QCM)

Note 1: When all actions have been completed a copy of this form shall be attached to the Grid Final QC Report Form

Note 2: When all actions have been completed a copy of this form shall be provided to the CESPK Project Manager

Response to NCR 155

Description of non-conforming condition:

The QC seed program indicated an inert seed item, a 37mm LE at 11", which was not successfully detected during the analog removal process (see NCR #146), not detected during the digital removal process (see NCR #154), was also not detected by the complete digital rework process. The digital re-excavation team completed their work efforts in this grid on 7/20/05. QC validated that the item was field detectable and had a threshold of 3.0mV or greater. The missed seed item was recovered by QC 7/20/05 utilizing the same model type of locating instrument that was used by the digital removal process with the support of a geophysical EM-61 operator. The maximum digital responses of the seed item were 3mV when it was traversed over in an East-West direction and 5mV in a North-South direction.

Apparent cause:

The instrument response in "real time" is higher than that of the digital data surveyed for this anomaly.

Recommended Corrective Action:

None. The grid has been covered three times (once analog, once with a towed array of EM61-MK2s and once with a single EM61-MK2) with the same result. There is no reason to believe that the work conducted in this grid was any less effective than the work performed over the rest of the site.

The seeded item, a horizontal 37mm LE at 11" bgs, is the smallest item for which the survey was designed, at the worst orientation, and almost at the maximum depth. It would be expected to produce an anomaly near the anomaly selection threshold of 3mV. The actual peaks in the data closest to the seed item location were 1.91 and 1.93 mV (channel 3 leveled and filtered) for the first and second datasets collected over the grid. The pre-filtered peaks were 2.02 and 2.56 mV respectively.

The specific seed item measured slightly smaller than a sample item on the display board at Fort Ord (3-5mm smaller diameter below the rotating band). The weight of the seeded item was 12.75 oz. compared to 13.2 oz. of the more intact display item. The approximate 10% difference in diameter and 3.4% difference in weight may partially explain the low EM61-MK2 response from this seed item.

The real time responses described in NCR 155 (3mV in East-West and 5mV in North-South orientation) indicate that if a sensor had passed over the exact peak of the anomaly it could have been detected. Both digital surveys were conducted in the East-West orientations. However, real-time measurements with the EM61-MK2 tend to be slightly higher than the dynamic measurements recorded during actual survey operations for three reasons, 1) the operator generally nulls the instrument at a nearby location with the lowest conductivity, 2) the operator searches for the location where the response is highest, and 3) the operator holds the instrument steady over the peak recording a static measurement.. These differences between the real-time and dynamic survey operations explain the discrepancy between the responses reported in NCR 155 and recorded by the survey.

The seeded 37mm LE item appears to have been undetectable with the instruments, survey procedures and anomaly selection threshold used. The combination of small item size, deep depth, and horizontal orientation of this item did not produce an anomalous response above the 3mV selection threshold.

Craig Murray
Fort Ord Project Geophysicist, Parsons