

## **MEMORANDUM**

Date: September 9, 2025

**To**: Peter Hays

**From**: Christopher Prosper

Project: SWTP 2025

**Subject**: Change Order #2 Summary Completion Memorandum

**Doc. No.**: 25US0221\_1110 - 0

#### INTRODUCTION

This memorandum documents the completion of the transducer removal, verification, inspection, and reinstallation work performed at the Schwartzwalder Mine Jeffrey Air Shaft on Thursday, September 4<sup>th</sup>, 2025, as described in Change Order #2. The purpose of this work was to verify the accuracy of the transducer readings against a manual water level measurement and to confirm proper operation of the transducer.

#### **Attendees**

The following personnel were present during the completion of the transducer removal, verification, inspection and reinstallation activities:

- Patrick Delaney (Blackfox Mining)
- Matt Collins (Blackfox Mining)
- Chris Prosper (Linkan)
- Peter Hays (DRMS)
- Bryant Acevedo (Linkan Contractor)

#### **Pre-Work Information**

The following information was recorded prior to the start of work:

- Pre-work Minepool transducer reading: 157.2 ft above the transducer (138.8 ft below compliance level)
  - At this water level, the length of the casing, at a 12-degree angle, was calculated to be approximately 439.3 ft with the depth to water meter.
- Weather/site conditions: Clear skies, calm wind, site fully accessible
- Safety considerations: The RPP (particularly SOP-3) was reviewed prior to arrival onsite. Plastic tarping was placed down at the mine frame to minimize drips and contamination. The Ludlum 2360 was calibrated and used per the RPP to monitor the level of radioactivity during the work.

#### **Work Performed**

Table 1 provides a chronological record of the activities completed during the transducer removal, verification, inspection and reinstallation. Each entry includes the time of the event, a description of the work performed, and any relevant actions or comments. Pictures from the work can be found in Attachment 1.



Table 1 Change Order #2 Timeline

Time	Event	Action/Comment
10:30 AM	Arrival Onsite	
10:30 AM – 11:15 AM	Equipment Setup, adjustment to rigging and disconnecting the transducer from the mine frame PLC.	The minepool elevation was recorded prior to the work performed in this step. The elevation was recorded as 157.2 ft.
11:15 AM – 11:30 AM	Removal of transducer	The transducer was slowly re-wound around the original spool during the removal process. As the transducer was being removed, the radiation levels were observed with the Ludlum 2360 meter. No damage was observed on the transducer upon removal.
11:30 AM – 11:35 AM	Lowered down depth-to-water meter	The depth-to-water meter gave a value of 470.4 ft (31.1 ft longer than expected based on the initial reading).
11:35 AM – 11:45 AM	Troubleshooting	Since the measured value was different than expected, the transducer was connected back to the PLC to observe what reading it was recording while not at pressure. After connecting the transducer back to the PLC, the transducer was recording a value of 26.5 ft when it should have been reading 0 ft. After discussing, it was agreed among all individuals present to perform a 2-point calibration with the 0 point being at the surface and the second process calibration being when the transducer was reinstalled in the minepool.
11:45 AM – 12:30 PM	Depth-to-water meter removal, transducer 0-point calibration and preparation for transducer reinstallation	The depth-to-water meter was decontaminated per SOP-3 of the RPP and kept in a bag onsite for future use.
12:30 PM – 01:00 PM	Reinstallation of transducer	Once reinstalled, a process calibration was performed on the transducer. The final reading of the transducer was calibrated to read 126.8 ft (169.2 ft below compliance level). The transducer was reinstalled the same way as it was at the beginning of the work.
01:00 PM - 01:30 PM	Site clean up and departure from site	



# **Results and Comparison**

Table 2 summarizes the results recorded before and after the transducer work:

Table 2 Comparison of Readings Before and After Transducer Work

Work Phase	Transducer Reading	Water level below compliance level
Before Transducer Work	157.2 ft	138.8 ft
After Transducer Work	126.8 ft	169.2 ft

Overall, the calibration of the transducer saw a decline of 30.4 ft in the minepool compliance level.

**Enclosures:** 

Attachment 1 Onsite Pictures

**END** 



# ATTACHMENT 1 ONSITE PICTURES



Photo 1.

Transducer rigging prior to starting working (front view)



Photo 2.

Transducer rigging prior to starting working (back view)





## Photo 3.

Transducer PLC reading (157.2 ft) prior to the removal of the transducer from the casing



#### Photo 4.

Transducer connection to the mineframe PLC prior to the start of work







Photo 5.

Rigging setup for transducer removal



Photo 6.

Rigging setup and removal of casing top cap







## Photo 7.

Preparing for the removal of the transducer by connecting the transducer to the transducer spool



#### Photo 8.

Transducer removed from the casing. No visible damage was observed.



# **ONSITE PHOTOS**



## Photo 9.

Lowering of the depth-towater meter in the PVC casing



#### Photo 10.

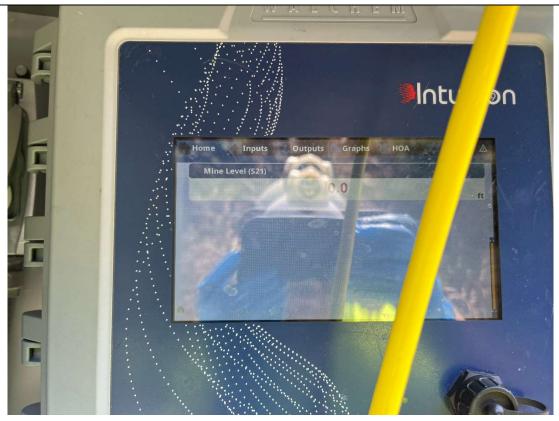
Transducer reading (26.5 ft) on the mineframe PLC when the transducer was at the surface. The reading should have read 0 ft.





#### Photo 11.

Transducer reading (0.0 ft) on the mineframe PLC after performing the zero-calibration



#### Photo 12.

Transducer reading (126.8 ft) on the mineframe PLC after lowering the transducer back into the casing and performing a process calibration







## Photo 13.

Final rigging of the transducer through the top cap following the completion of the transducer reinstallation

