Lock Out/Tag Out Process Not Executed Causing a Fault Out

What happened?

Components of a fire and gas control system were removed for upgrades from a control van while cold stacked at the shipyard. The main supply was locked out, however the ends of the wires were not secured and left exposed within the explosion-proof enclosure. A new crew that was not apart of the original work arrived onsite to perform maintenance unaware that components of the fire and gas control system were previously removed. As rig power was restored to the control van, a ground fault picked up the active power and faulted out. Rig power was re-isolated. Inspection of the enclosure revealed arc points from open ended wires.

What went wrong?

The lockout/tagout process was not executed. No lock and tag applied. No information/tag identified the system as unsafe for power up or that the fire and gas control system was removed.

The load side of the wires remained connected to the source side (breaker) and wire ends were not secured and left exposed.

Why did it happen?

The incoming crew was not aware of the maintenance performed before their arrival.

No handover notes or communication were available in LOTO logs, system logs, or FAT logs. No physical handover meeting or communication took place.

What areas were identified for improvement?

The incident occurred onshore at the dock.

Improvements as a result of the incident:

1) Energy isolation permits shall be fully executed and available with the equipment and signed off by a senior employee.
2) Energy isolation devices shall remain on the equipment until a full handover is completed.
3) A formal handover process shall be implemented and executed by a senior level employee.
4) Any non-routine work shall include a full risk assessment with detailed mitigations.