

INCIDENT TRENDS – 2023Q3

OCS - GULF OF MEXICO

RFO - Office of Safety Management

8 November 2023



Bureau of Safety and Environmental Enforcement

Promoting Safety, Protecting the Environment and Conserving Offshore Resources



OVERVIEW

- Recent Safety Alert
- Industry Incident Trends 2023Q3 – July / August / September
- Recent Completed Panel Investigation
- “To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement.”

THEME – LUCK VS. PREPARATION



RECENT SAFETY ALERT - 469

- Review / update evacuation procedures
- Establish system for medical supplies
- Incorporate training and drills for emergency response
- Evaluates means of escape (no obstructions)
- Evaluating probable response times



Safety Alert No. 469
October 20, 2023

SAFETY ALERT

Contact: bsceppublicaffairs@bsee.gov
Phone: (800) 200-4853

BSEE Identifies Medical Evacuation and Emergency Hazards During Risk-Based Inspections

In January 2023, BSEE carried out a Performance-Based Risk Inspection (PBRI) for 20 production and well operation sites in the Gulf of Mexico (GOM). This included 12 production facilities and 8 well control facilities run by 15 different operators. BSEE inspectors found a considerable number of inconsistencies in the documentation and recording of injuries and illnesses. They also found several common procedural gaps and possible flaws in working practices, as well as problems with medical support and evacuation resources that could affect the emergency response capabilities of facilities operating on the Outer Continental Shelf (OCS). During the time period under review, there were several high-risk events and non-operational deaths in the GOM, and evacuations from offshore facilities to onshore medical facilities were delayed or couldn't happen as quickly as they should have.

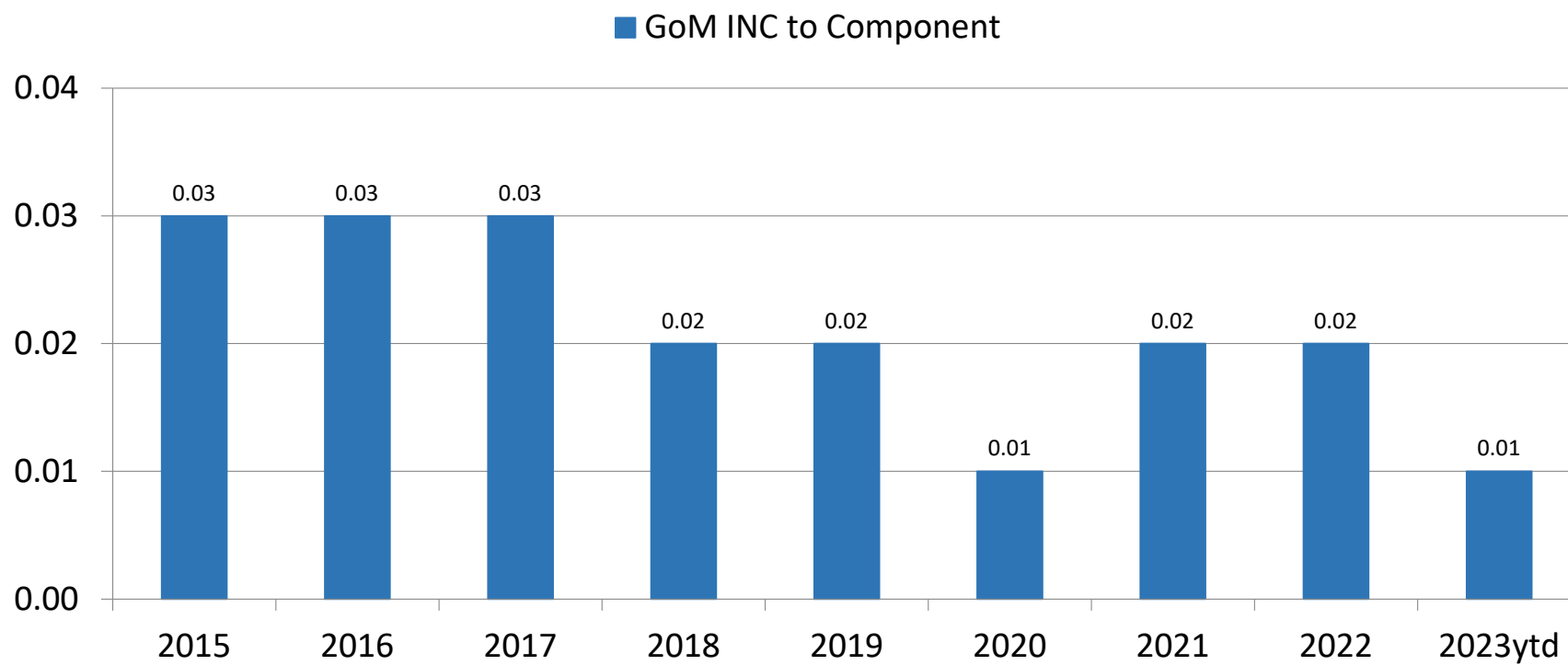
As a result of the PBRI and routine inspections, BSEE inspectors found:

- It took an average of 6.8 hours, according to the evacuation reports, from the time an incident occurred to the time evacuees arrived at a medical center.
- Medical supplies for facility personnel were inadequate.
- Offshore workers didn't know where first aid kits were located or how to properly use them.
- Several emergency action plans were out of date, difficult for workers to find, and contained incorrect contact information. In some instances, the plan was only known to the person in charge, which could pose a significant risk if that person becomes incapacitated.
- Many operators could not show proof they had carried out medical emergency drills on a regular basis, even though it is a requirement.
- Several facilities had equipment obstructing high-traffic areas, creating trip hazards, blocking escape routes, and posing safety risks.



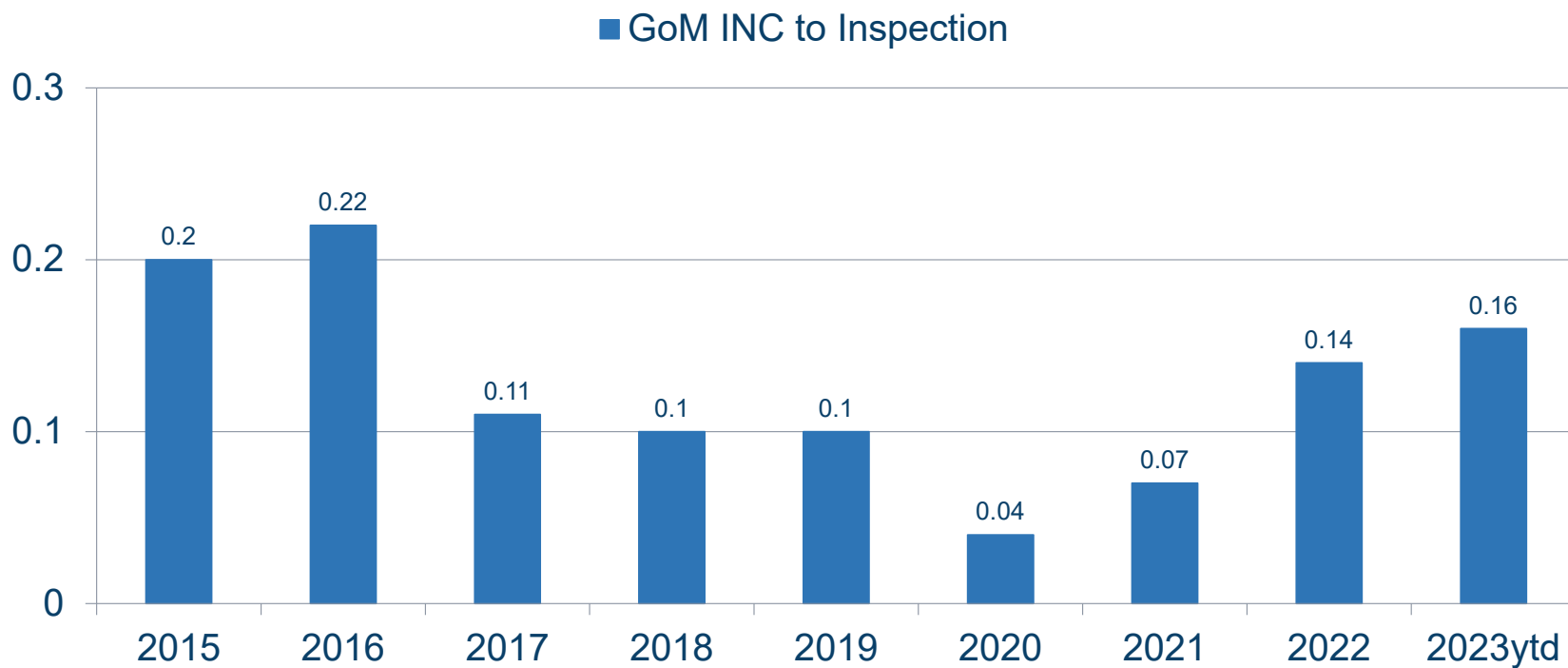


HISTORICAL INC-TO-COMPONENT, GOMR





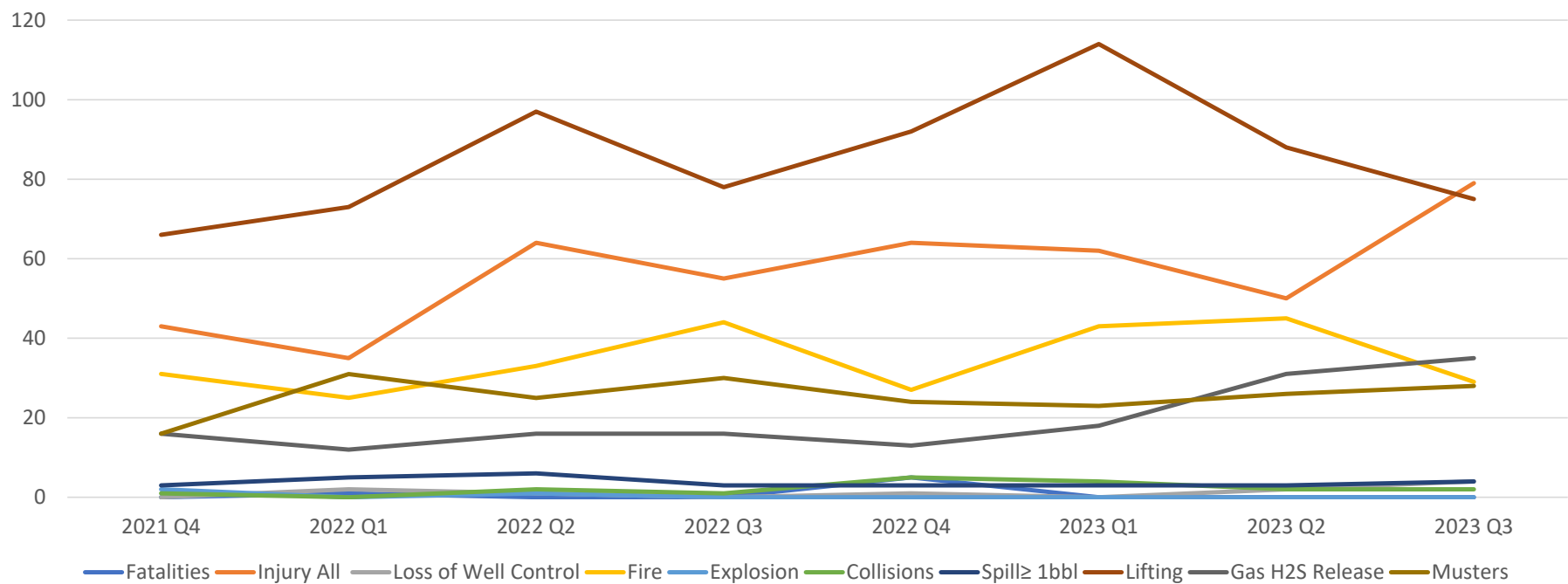
HISTORICAL INC-TO-INSPECTION, GOMR





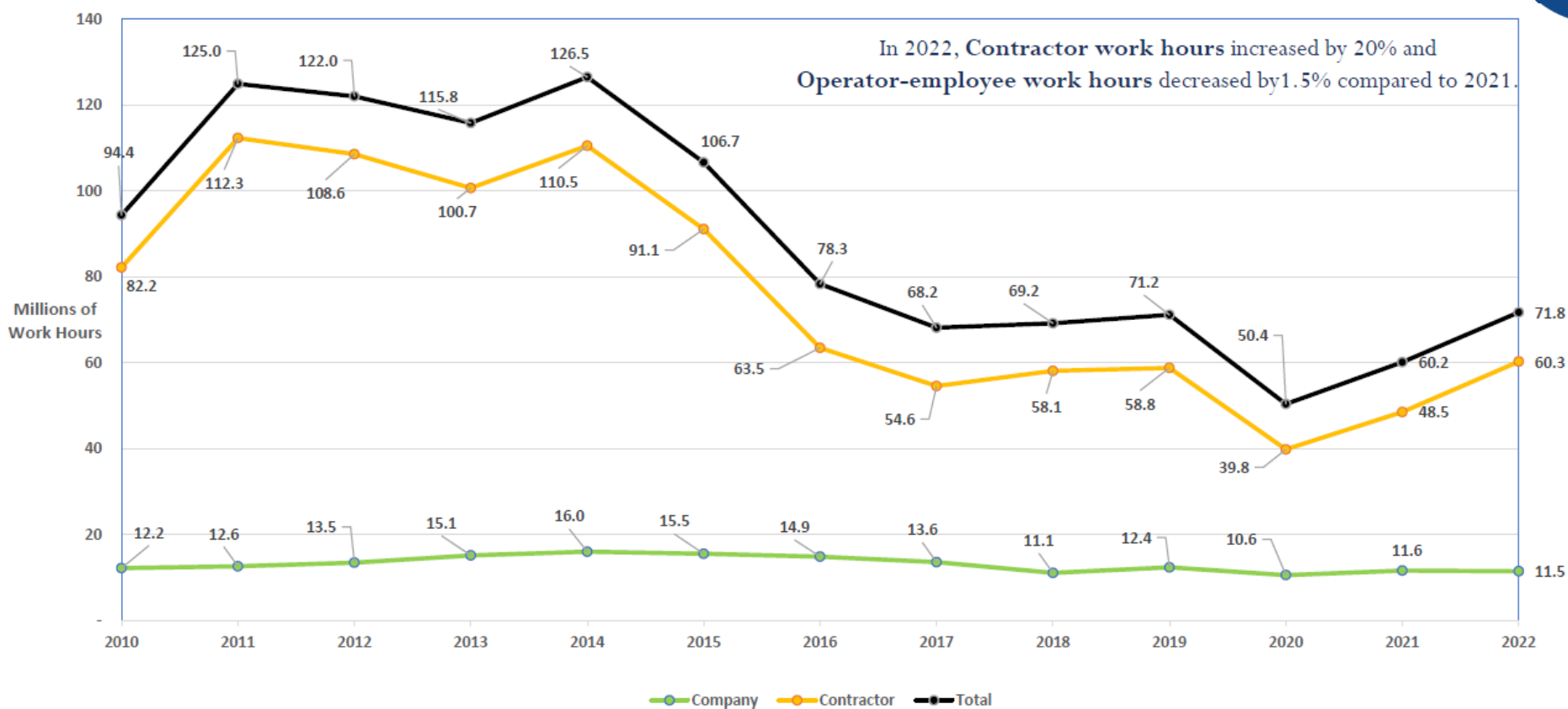
OCS INDUSTRY RATES BY ROLLING QUARTER

Incidents by Quarter

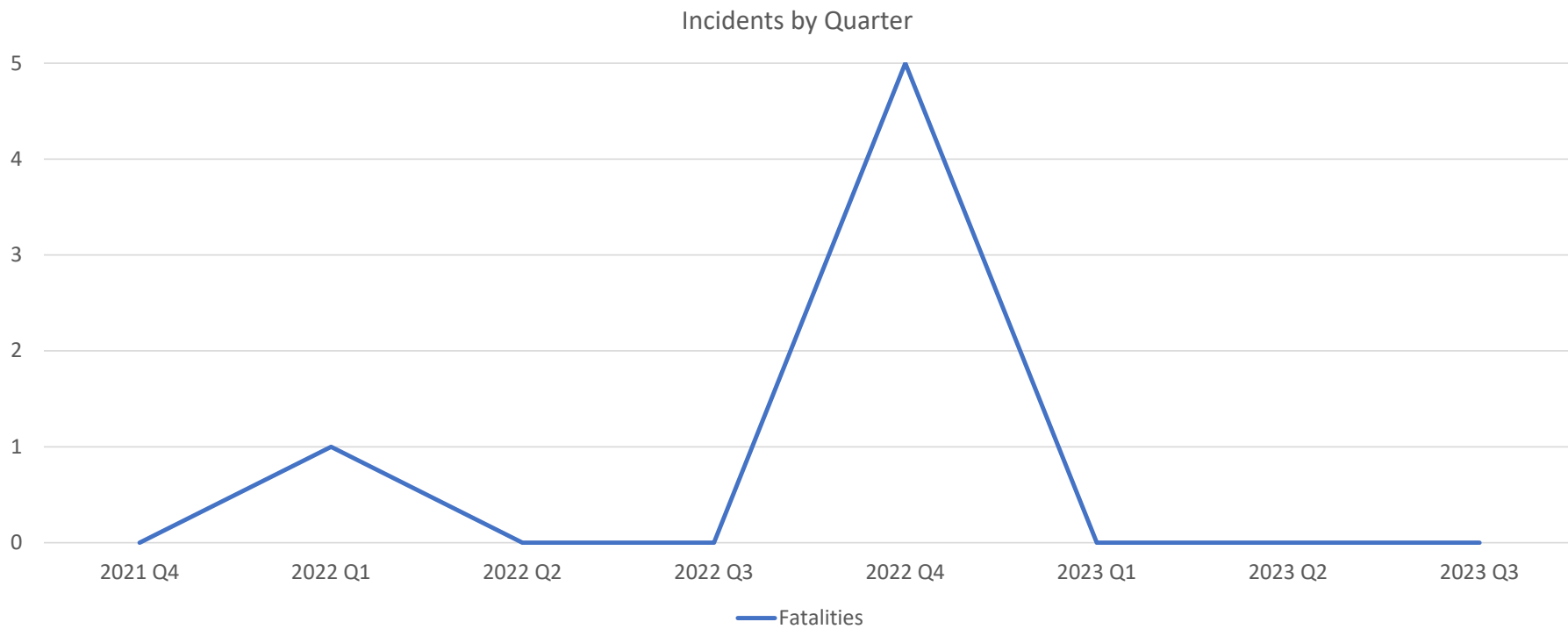




TOTAL OCS HOURS TRENDS



FATALITY RATES BY ROLLING QUARTER

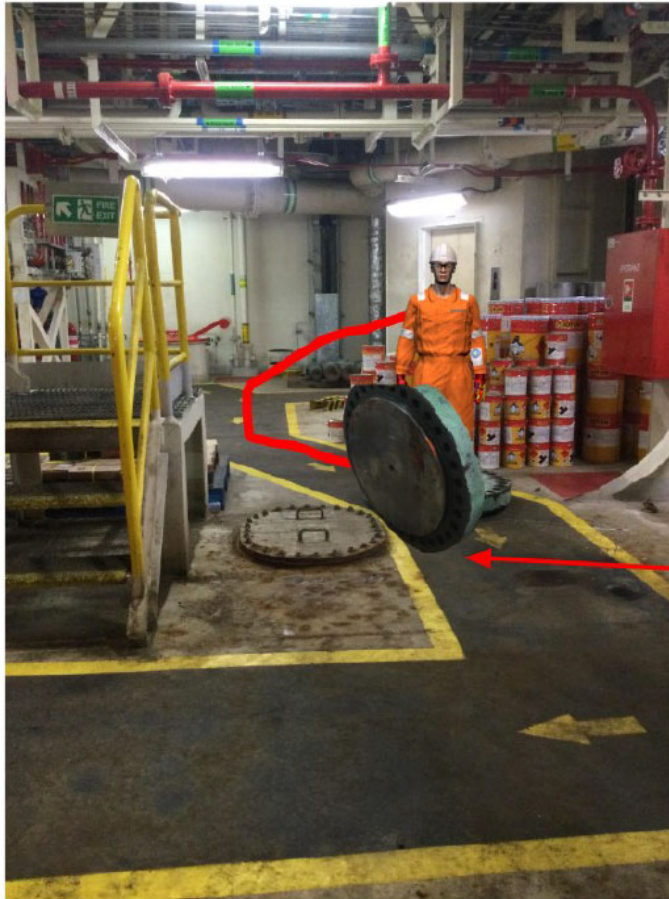


HIPO NEAR MISS – 8/10/2023



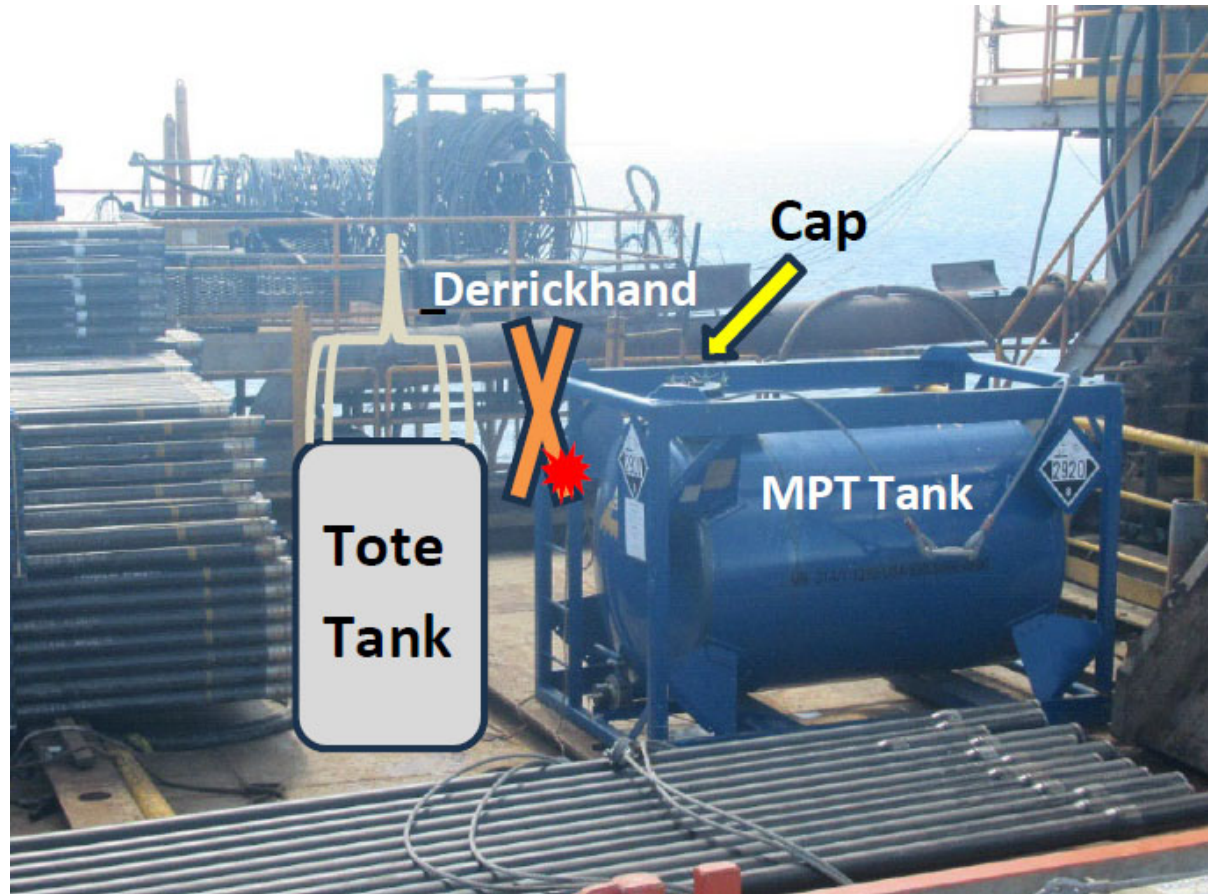
HiPo - Incidents that possessed the potential for serious safety or environmental consequences.

HIPO NEAR MISS – 7/11/2023



HiPo - Incidents that possessed the potential for serious safety or environmental consequences.

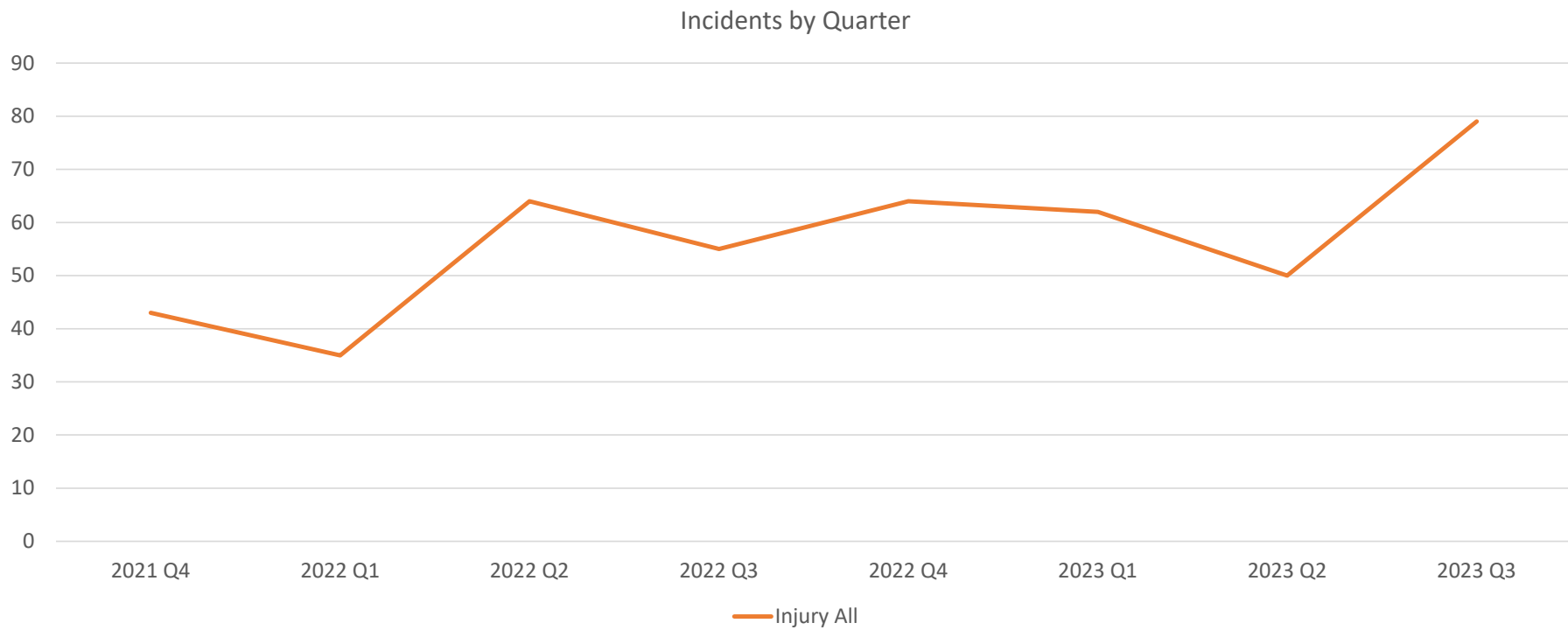
HIPO NEAR MISS – 8/8/2023



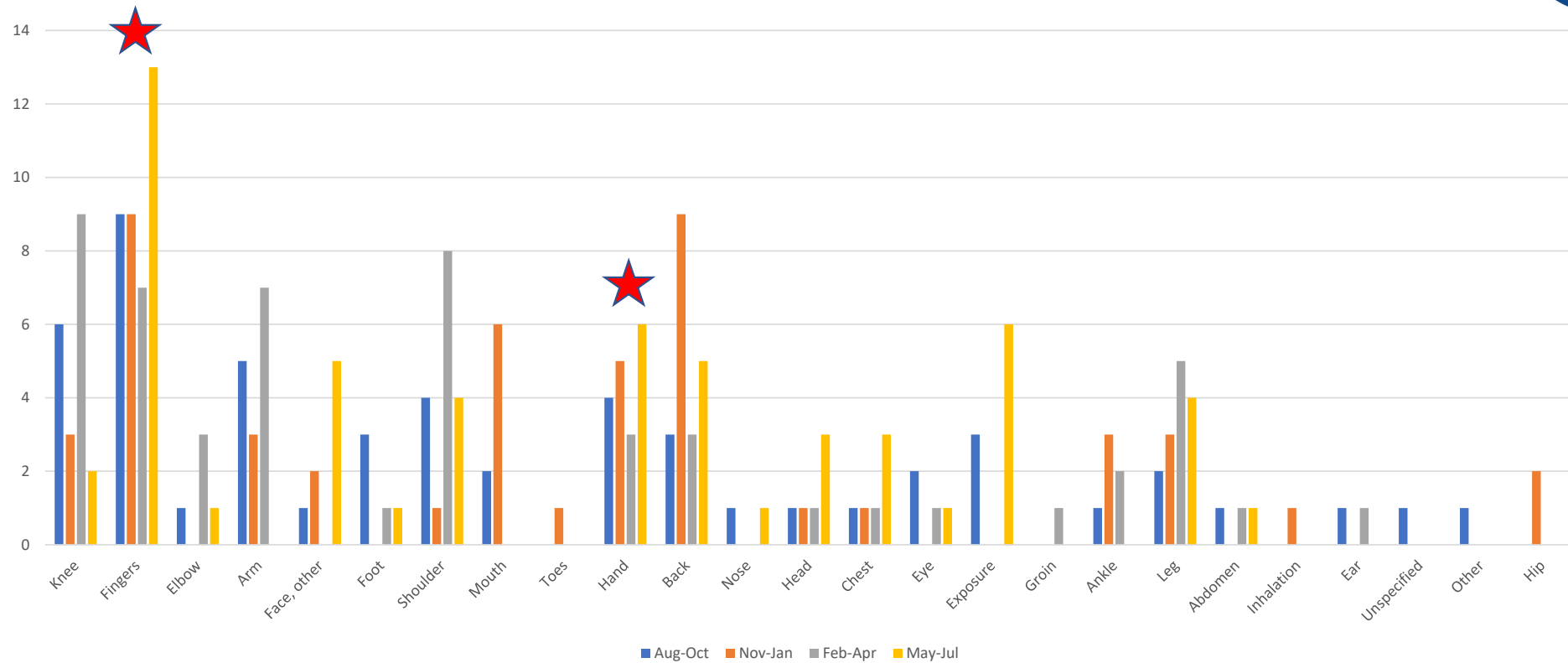
HiPo - Incidents that possessed the potential for serious safety or environmental consequences.



INJURY RATES BY ROLLING QUARTER



INJURY BY BODY PART QUARTERLY LOOK BACK



INJURY, RW/JT 1-3, – 7/3/2023



INJURY LTA>3 – 7/7/2023



HIPO INJURY, LTA>3- 09/04/2023



HiPo - Incidents that possessed the potential for serious safety or environmental consequences.



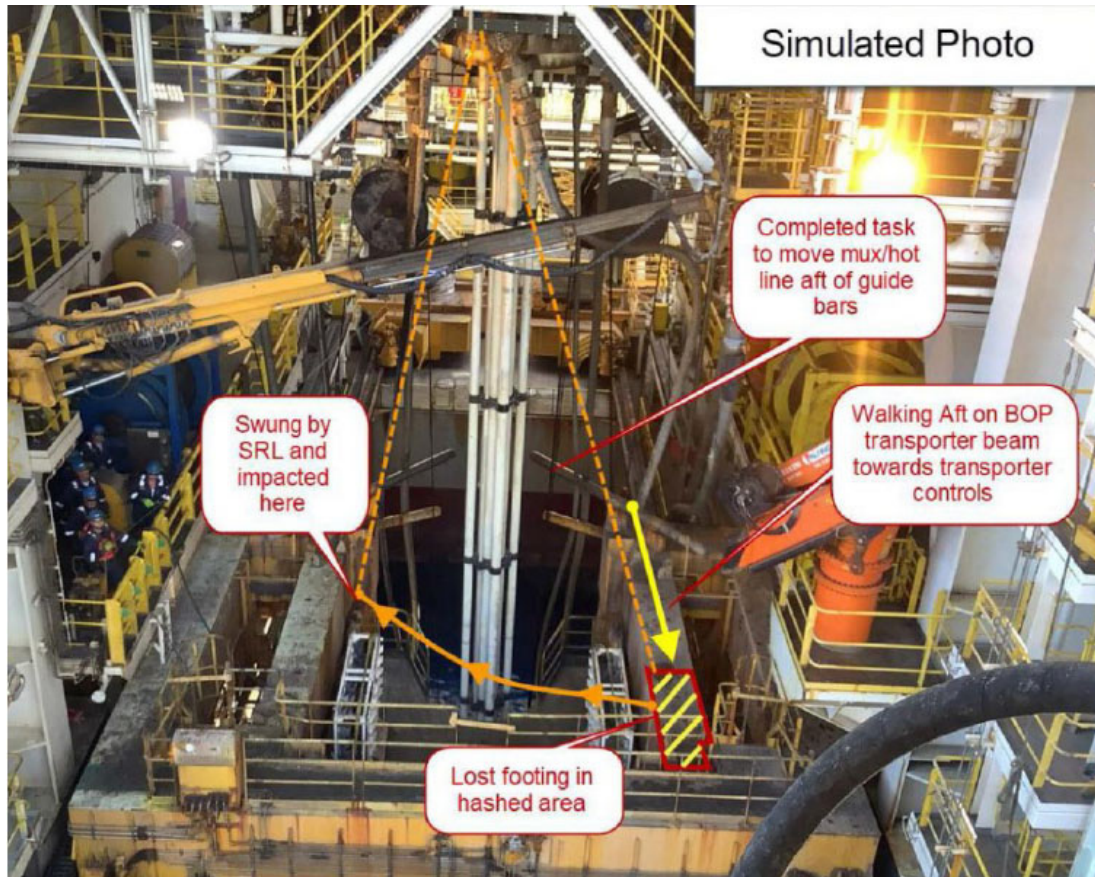
HIPO INJURY, 8/24/2023



At approximately 1630 hours I was contacted via radio by superintendent [REDACTED] for a medical emergency on the production deck. He advised to come off the stairs and make right toward the southwest side of the platform. Pt found sitting just outside of a confined space area. There was a hydrocarbon smell in the vicinity. Pt presents as alert, but slow to answer questions and sweating profusely. The pt advised he is not sure what happened. Pt denies any pain or other symptoms. His coworker [REDACTED] advised the pt had collapsed and when he didn't respond to him, he began CPR compressions. 4 compressions in total were given to the pt and then the pt woke up. When I inquired [REDACTED] confirmed that he did hear a pop noise on the last compression. Coworkers advised LEL readings of 22ppm. Pt advised he was able to ambulate. Pt assisted out of the work area and to a climate-controlled break room for continued pt assessment. Pt vitals unremarkable. Oxygen saturation 99%, heartrate in the 70's NSR. The more time that passed pt was able to answer questions easier. Pt advised he was working when he

HiPo - Incidents that possessed the potential for serious safety or environmental consequences.

HIPO INJURY- 8/2/2023

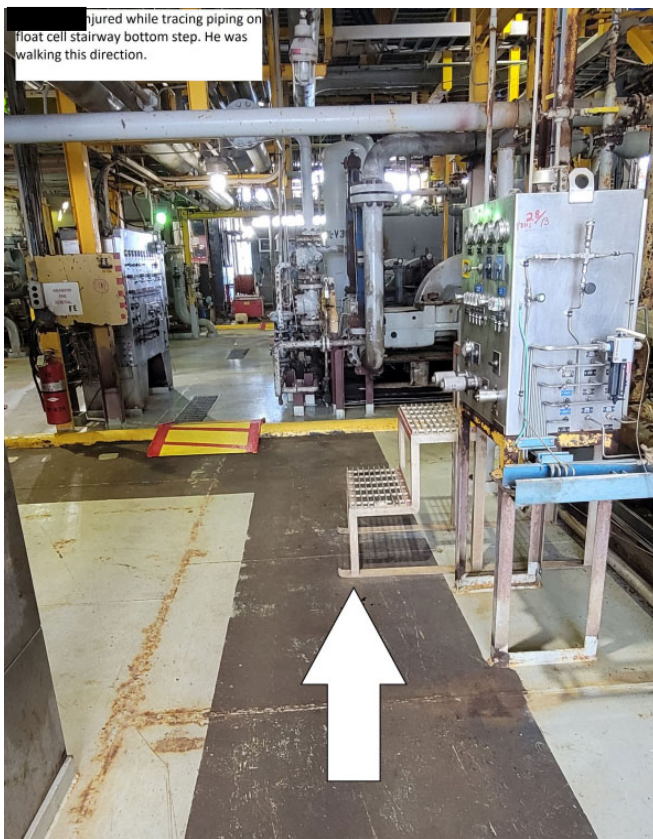


HiPo - Incidents that possessed the potential for serious safety or environmental consequences.

INJURY, RWJT>3 – 8/15/23



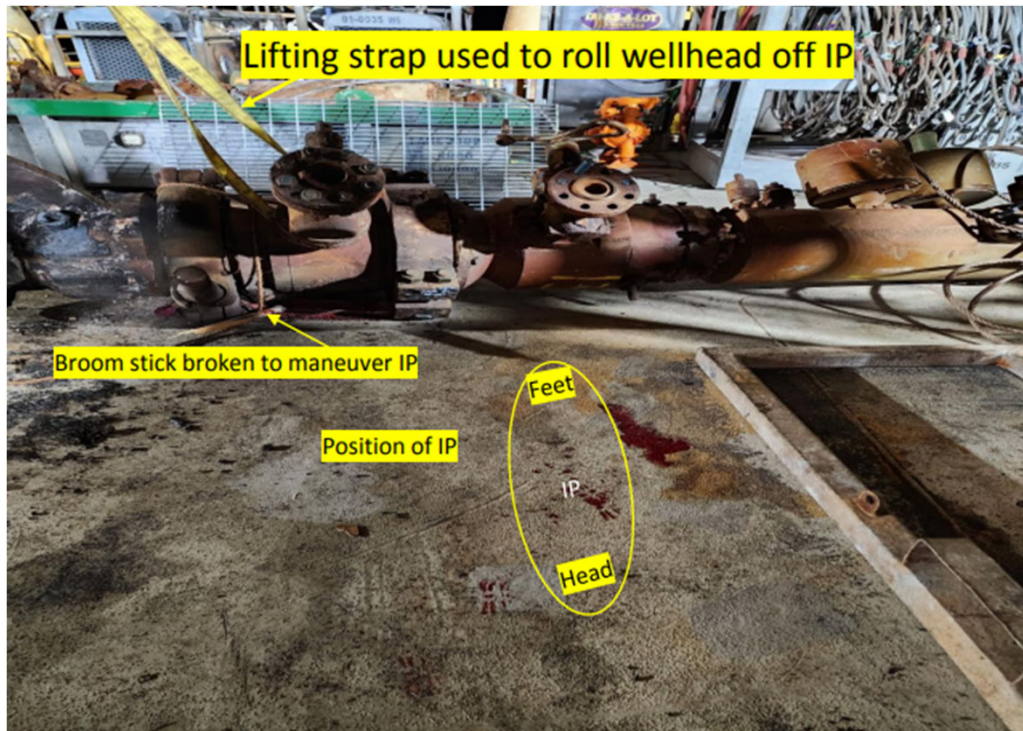
“OTHER INJURY” – 09-24-2023



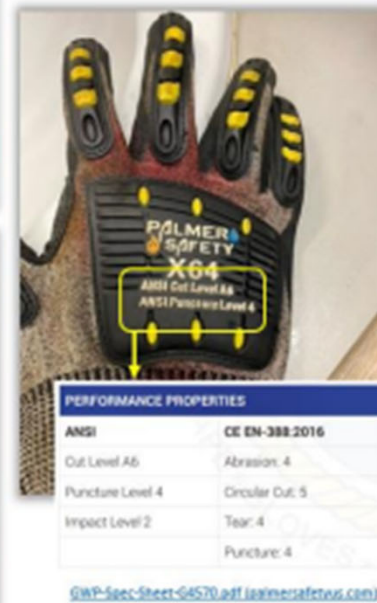
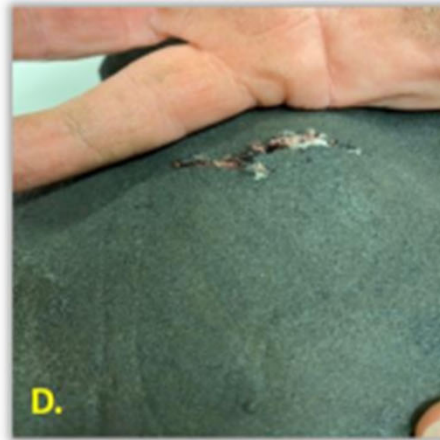
“OTHER INJURY” – 09-27-2023



INJURY- 09/21/2023



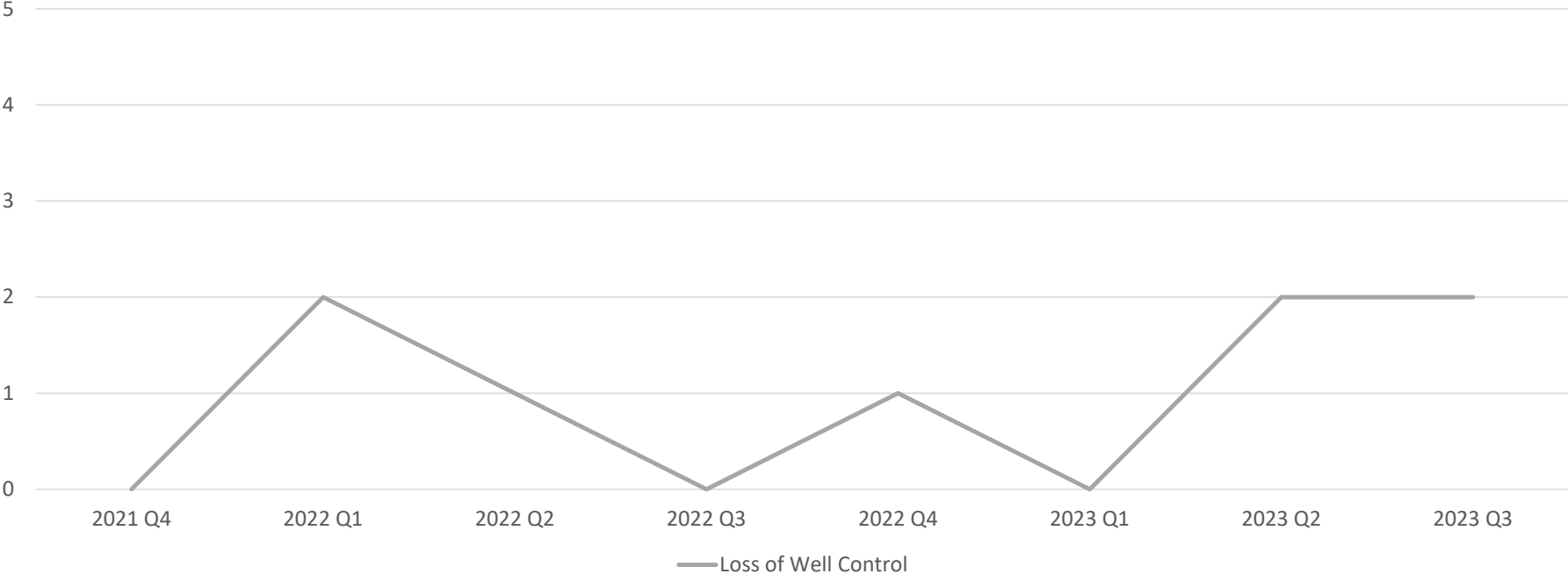
INJURY- 09/21/2023





LWC RATES BY ROLLING QUARTER

Incidents by Quarter



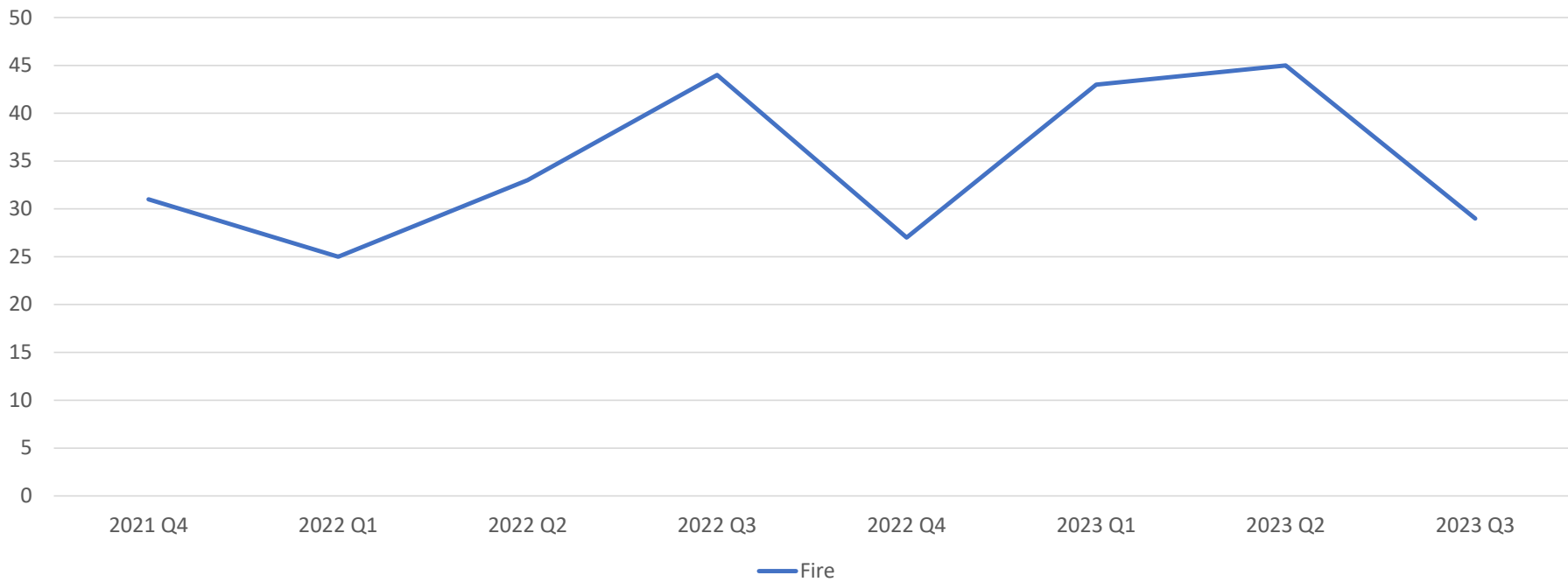
LWC, POLLUTION – 9/21/23



FIRE RATES BY ROLLING QUARTER

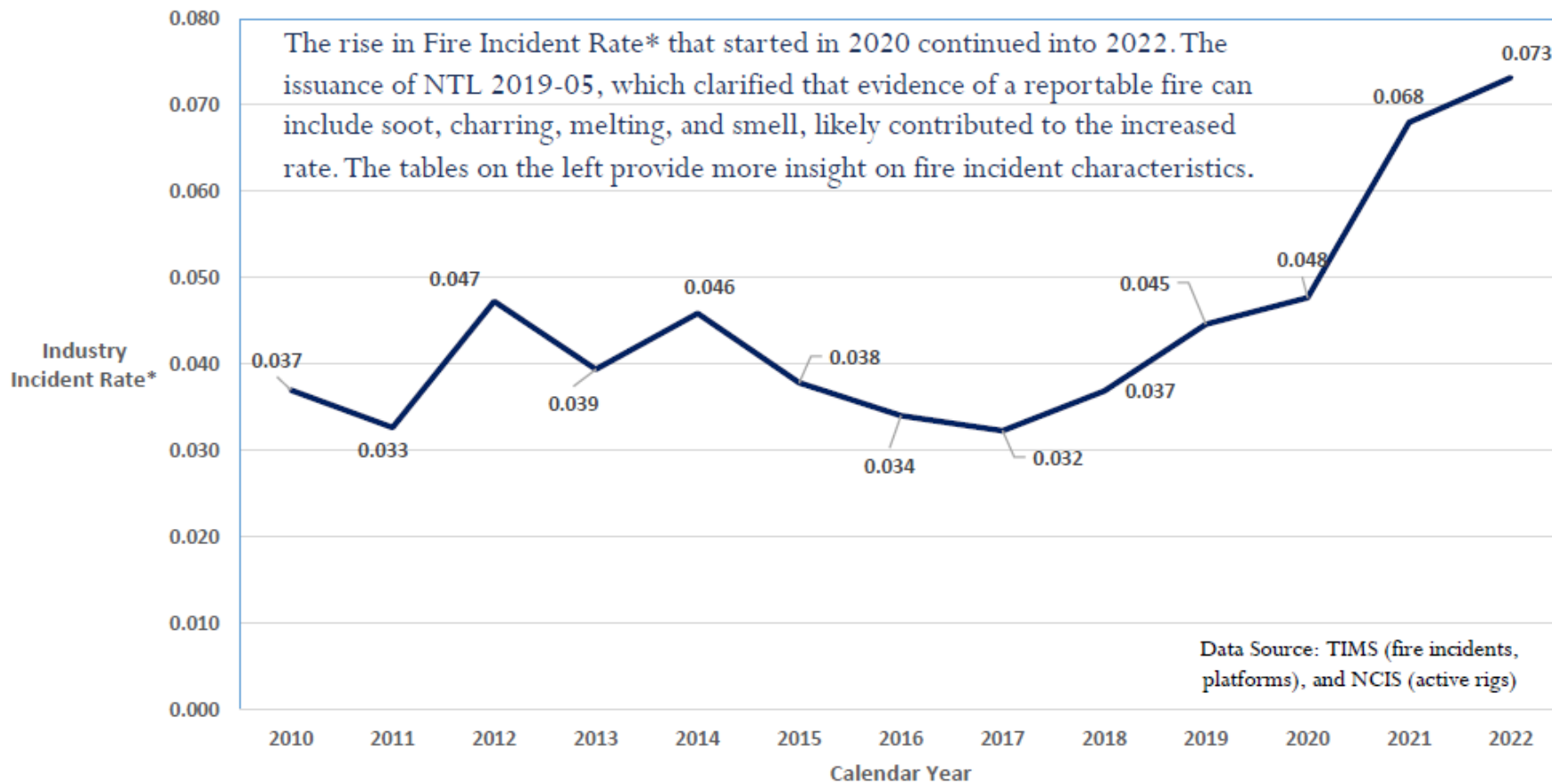


Incidents by Quarter





FIRE TRENDS





FIRE TRENDS

Percentage of Reported Fires on drill ships and well operation vessels

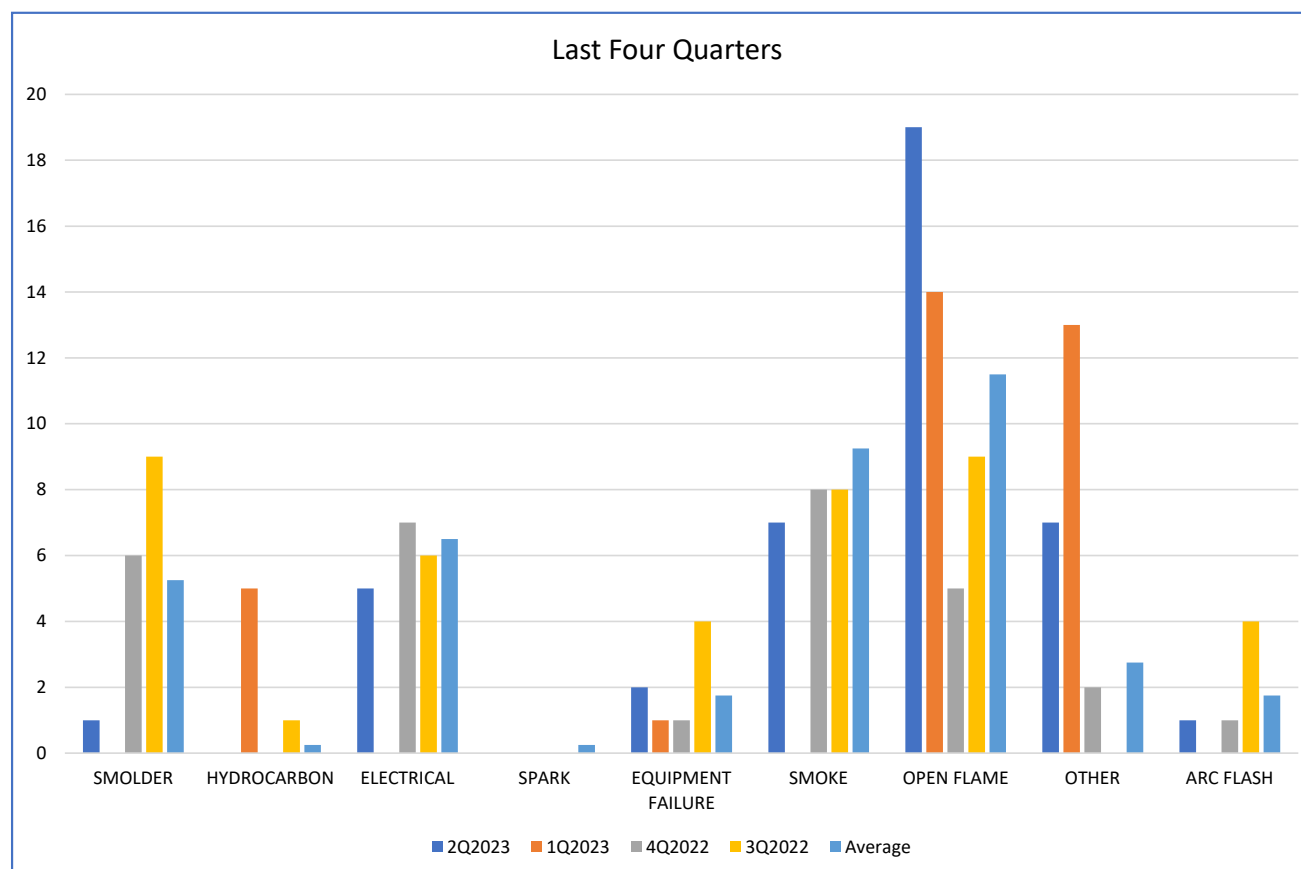
2018 Fires	12%
2019 Fires	11%
2020 Fires	20%
2021 Fires	7%
2022 Fires	7%

Percentage of Reported Fires with no obvious flame or arc flash

2018 Fires	34%
2019 Fires	43%
2020 Fires	48%
2021 Fires	17%
2022 Fires	14%

Severity Level	2021	2022
1	34%	45%
2	46%	32%
3	14%	14%
4	6%	9%

In 2022, 9% of the reported fires qualified as Severity Level 4 (large fire or one with a potential to be uncontrolled), a 3% increase from 2021.

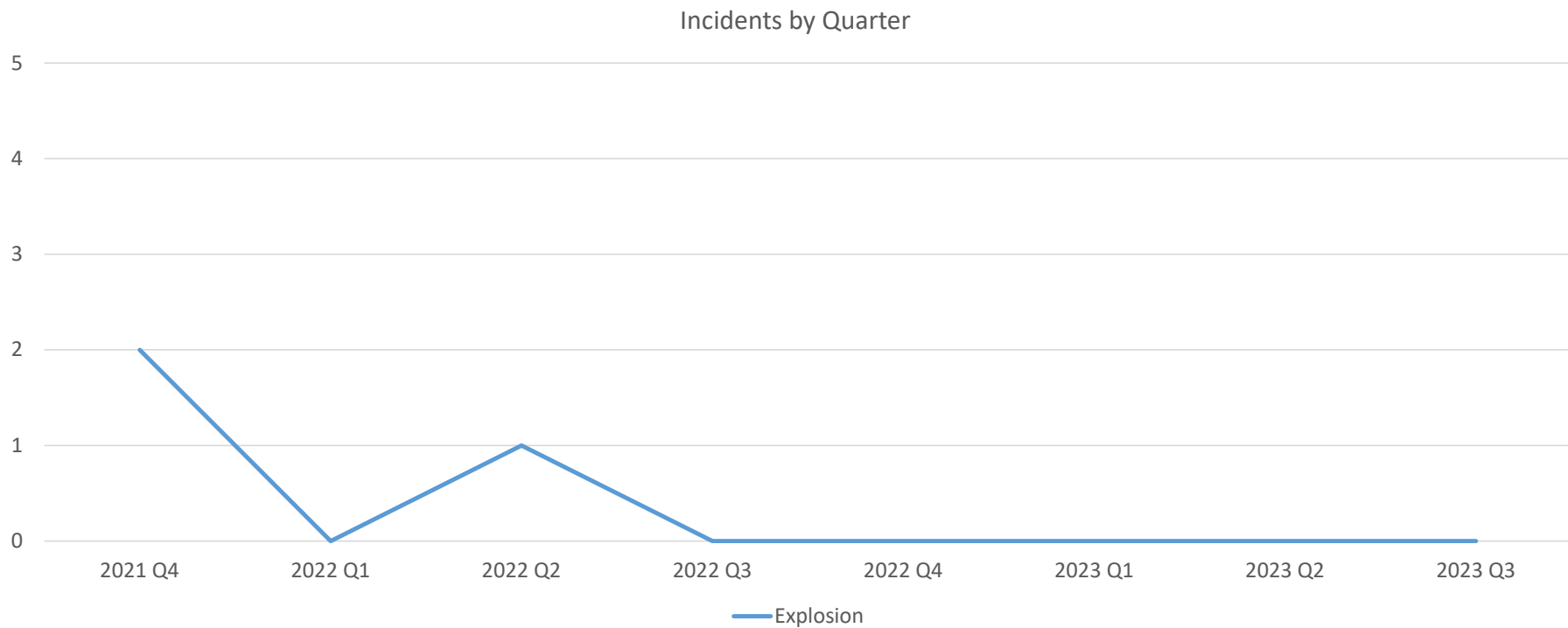


RECENT BLITZ INSPECTION ON HOT WORK



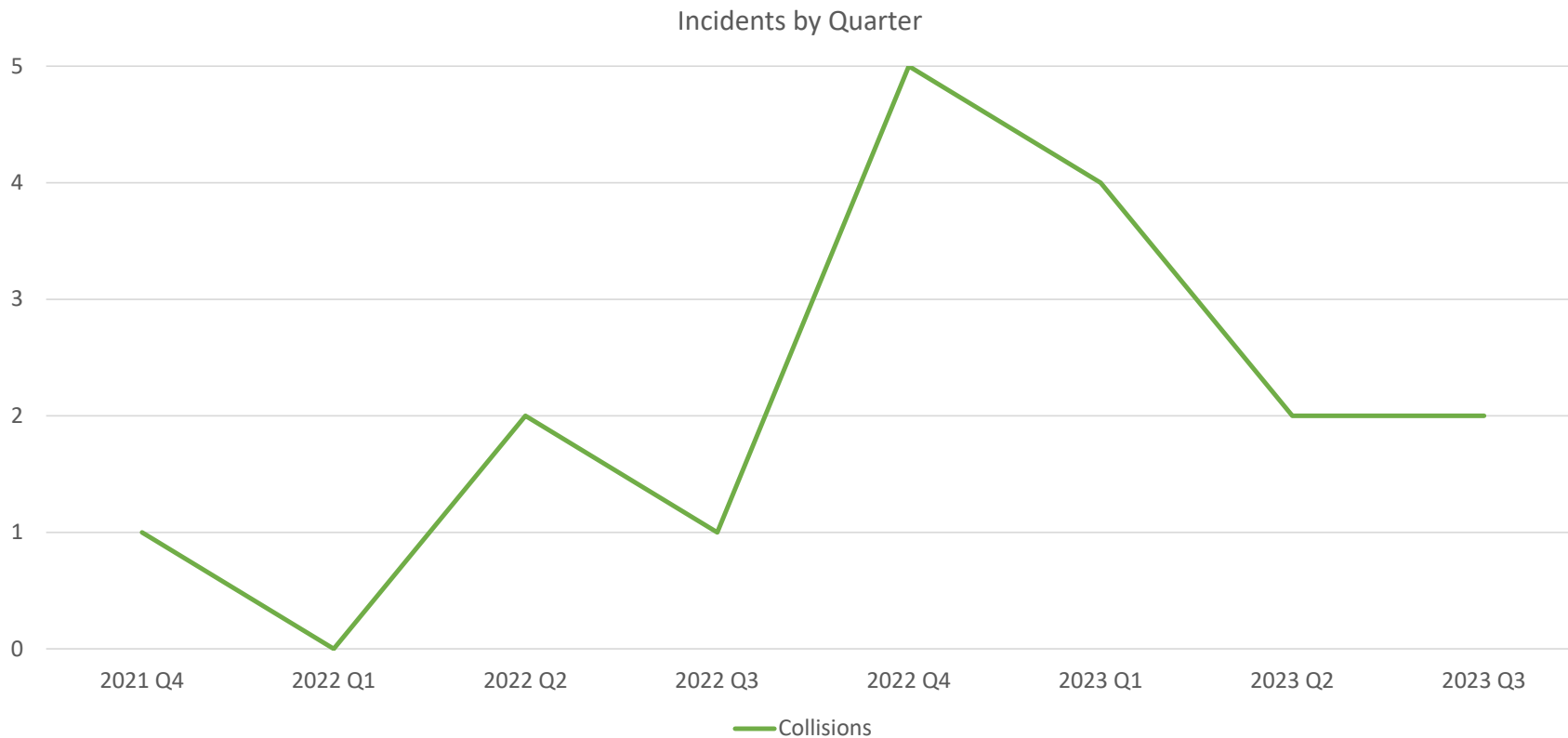


EXPLOSION RATES BY ROLLING QUARTER





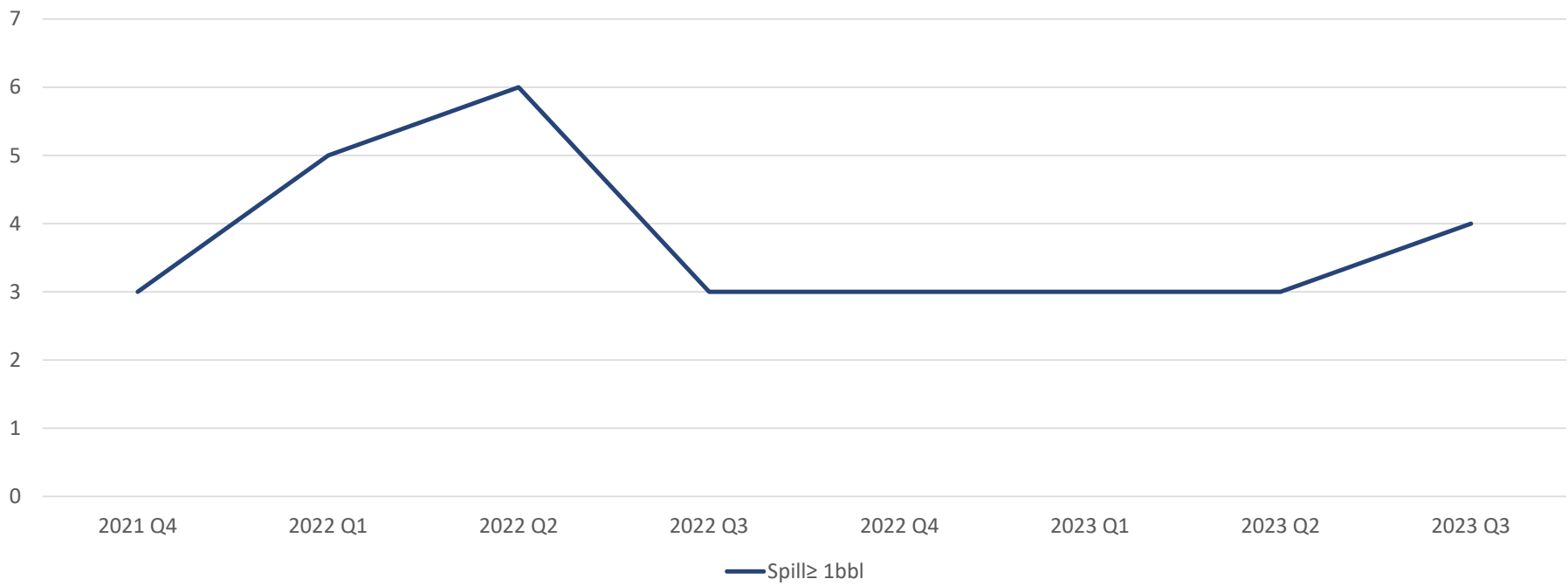
COLLISION RATES BY ROLLING QUARTER





SPILL >1 BBL RATES BY ROLLING QUARTER

Incidents by Quarter



POLLUTION, E100 – 7/7/23



POLLUTION – 7/7/23



POLLUTION – 7/7/23



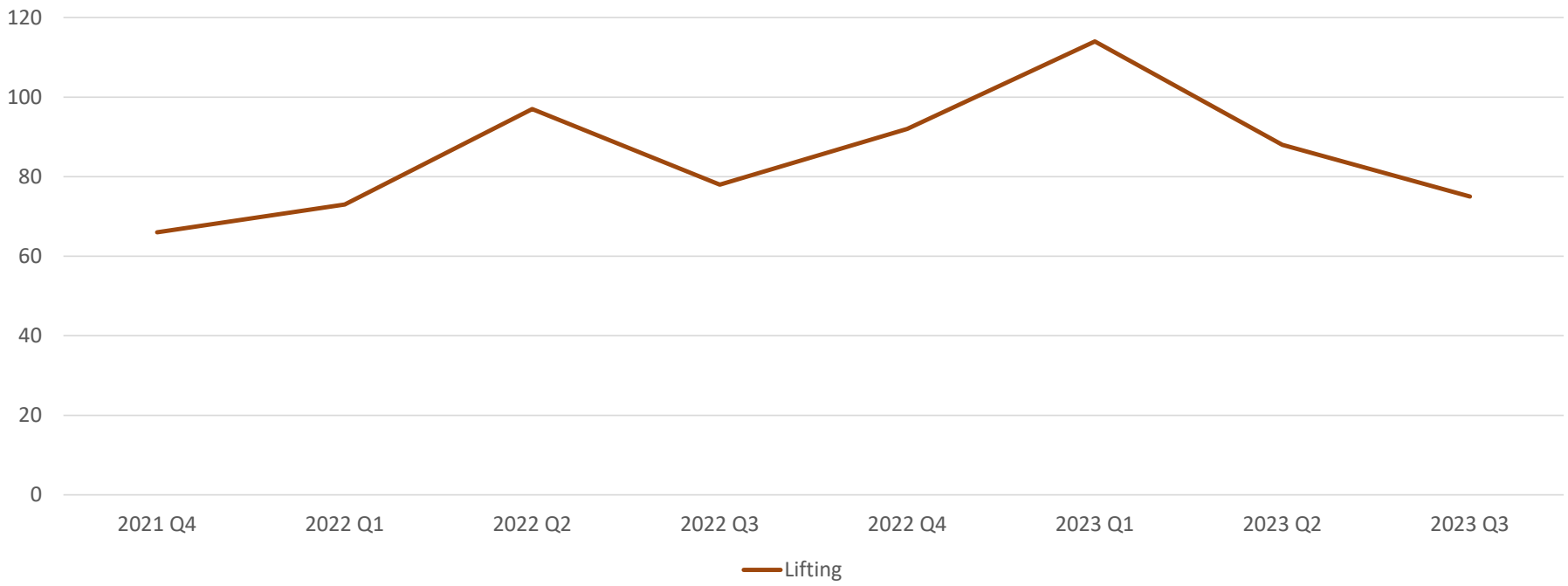
POLLUTION, E100 – 8/4/23



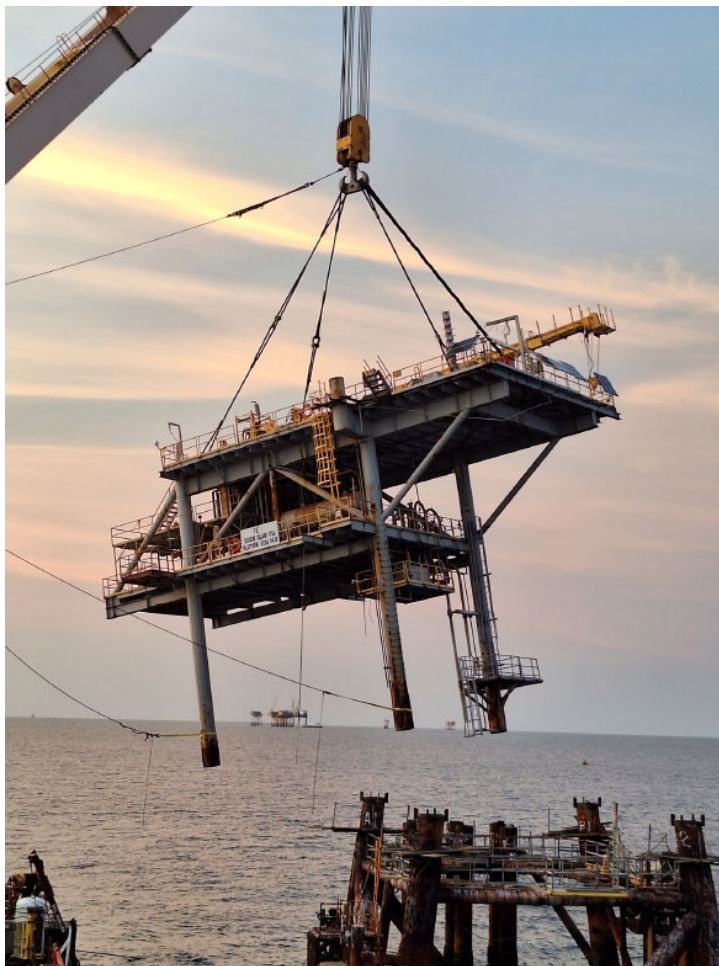


LIFTING RATES BY ROLLING QUARTER

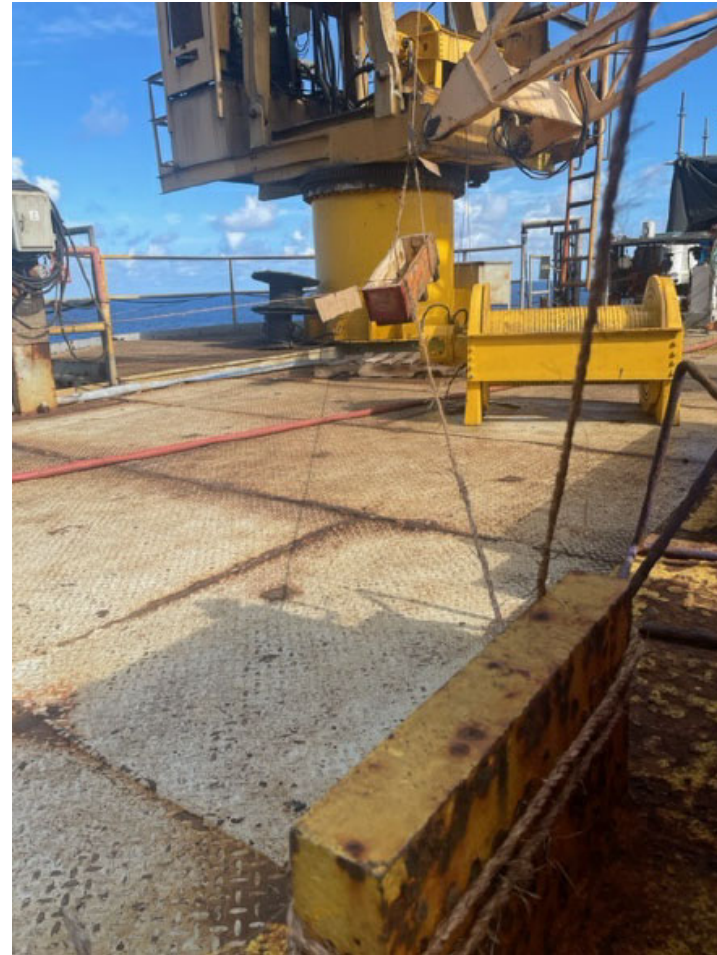
Incidents by Quarter



LIFTING – 8/2/2023



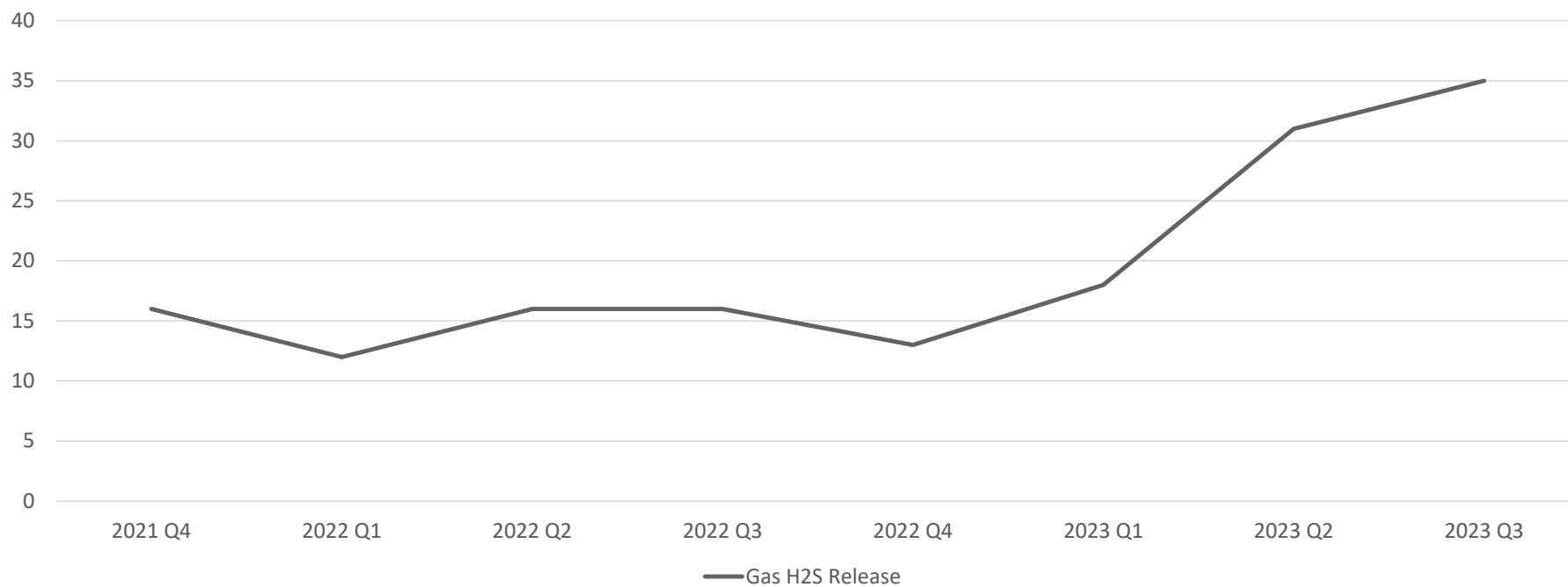
LIFTING / INJURY – 8/15/23



GAS/H2S RELEASE RATES BY ROLLING QUARTER



Incidents by Quarter



GAS RELEASE– 09/09/2023 GAS RELEASE



Damaged Csg Valve

13-3/8 Conductor
Failure point



DECOM ANALYSIS



Incident Details			
Evacuations <input type="checkbox"/> Required evacuation	Operator	Contractor	<input type="checkbox"/> Details

Injuries <input type="checkbox"/> LTA (1-3 days) <input type="checkbox"/> LTA (>3 days) <input type="checkbox"/> RW/JT (1-3 days) <input type="checkbox"/> RW/JT (>3 days) <input type="checkbox"/> Other: <input type="text"/> <input type="checkbox"/> Fatality			<input type="checkbox"/> Details <input type="checkbox"/> Details <input type="checkbox"/> Details <input type="checkbox"/> Details <input type="checkbox"/> Details

<input checked="" type="checkbox"/> Fire <input type="checkbox"/> Explosion <input checked="" type="checkbox"/> Structural Damage <input type="checkbox"/> Crane <input type="checkbox"/> Other Lifting Device <input type="text"/> <input type="checkbox"/> Disabled Safety Systems <input type="text"/> <input checked="" type="checkbox"/> Incident > \$25,000 <input type="text" value="no value - decom."/> <input type="checkbox"/> H2S/15 min/20 ppm <input type="checkbox"/> Required muster <input type="checkbox"/> Shutdown from gas release <input type="checkbox"/> Other event not listed above: <input type="text"/>			Loss of Well Control <input type="checkbox"/> Underground <input type="checkbox"/> Surface <input type="checkbox"/> Diverter <input type="checkbox"/> Surface Equip. Failure or Procedures <input type="checkbox"/> Production <input type="checkbox"/> Drilling <input type="checkbox"/> Workover <input type="checkbox"/> Helicopter <input checked="" type="checkbox"/> Other <input type="text" value="Decommissioning"/>
Collision <input type="checkbox"/> > \$25,000 <input type="checkbox"/> <= \$25,000 ----- Operation ----- <input type="checkbox"/> Exploration <input type="checkbox"/> Development/Production <input type="checkbox"/> Completion <input type="checkbox"/> Motor Vessel <div style="border: 1px solid black; padding: 5px;"> <input checked="" type="checkbox"/> Decommissioning <input type="checkbox"/> TA <input type="checkbox"/> PA <input type="checkbox"/> Pipeline <input checked="" type="checkbox"/> Structure <input type="checkbox"/> Site Clearance </div>			
----- Pollution ----- <input type="checkbox"/> Pollution Volume <input type="text"/> bbls Slick appearance: <input type="text"/> Latitude: <input type="text"/> Longitude: <input type="text"/> <input type="checkbox"/> Oil <input type="checkbox"/> Diesel <input type="checkbox"/> Condensate <input type="checkbox"/> Hydraulic <input type="checkbox"/> Natural gas <input type="checkbox"/> Other: <input type="text"/>			

RECENTLY COMPLETED PANEL INVESTIGATION



BSEE PANEL REPORT 2023-003

**Investigation of January 24, 2021, Seadrill West Neptune
Drillship Fatality**

Lease OCS-G24102

Mississippi Canyon Area Block 727

Gulf of Mexico Region

New Orleans District

July 24, 2023

- Fatality – 1/24/21
- 10 causes / factors identified
- 8 recommendations to prevent recurrence
- <https://www.bsee.gov/sites/bsee.gov/files/2023-09/MC%20727%20Panel%20Investigation%20Report.pdf>



RECENTLY COMPLETED PANEL INVESTIGATION

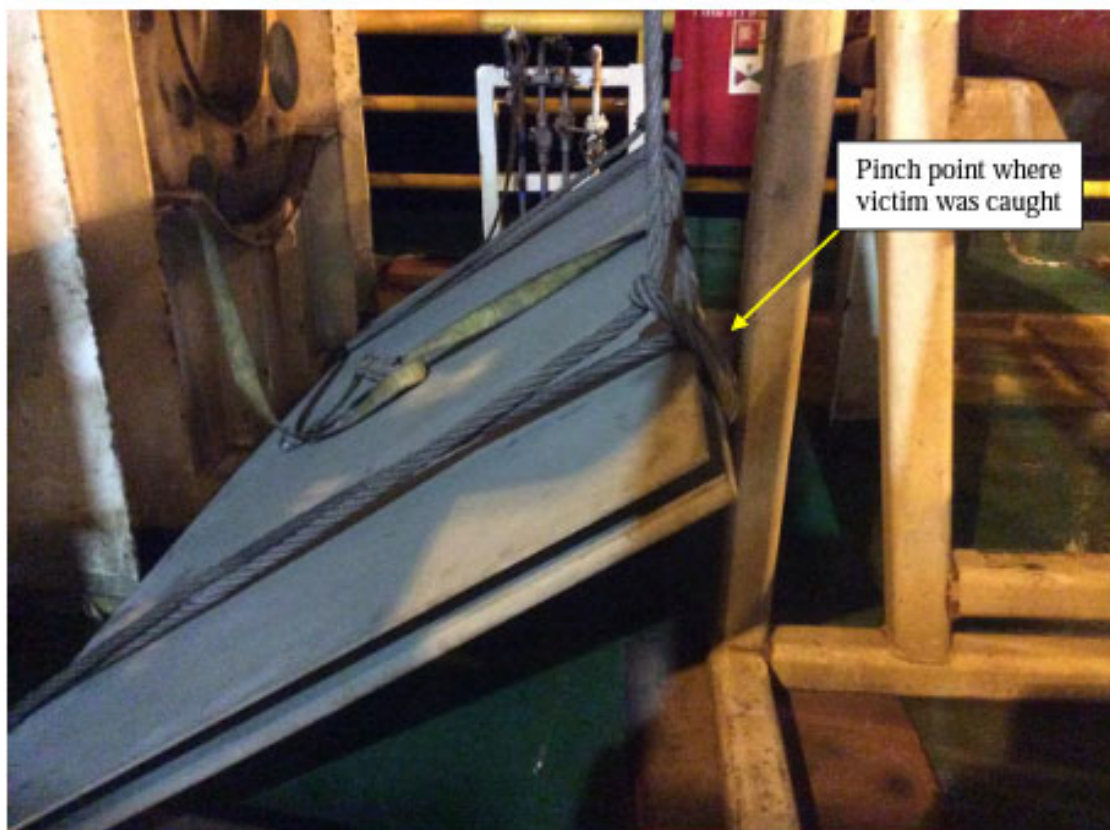


Figure 9 - Position of steel plates against vertical steel post

	3/8" thick plate	1" thick plate
Length (long edge) (feet)	8	8
Width (short edge) (feet)	4	4
Thickness (feet)	0.03125	0.08333
Single plate volume (cubic feet)	1.0	2.7
Steel density (lbs/cubic feet) ¹	490	490
Single plate weight (lbs)	490	1307
Quantity	3	2
Total Weight (lbs)	1470	2613
m_{plates} = total mass of all five plates (lbs)	4083 lbs	

Figure 10 - Total weight of steel plates calculation

RECENTLY COMPLETED PANEL INVESTIGATION



Figure 6 - Ratchet Strap that held the steel plates up against the stanchion beams

THEME – LUCK VS. PREPARATION





**Thank you for all
you
do for America!**



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