

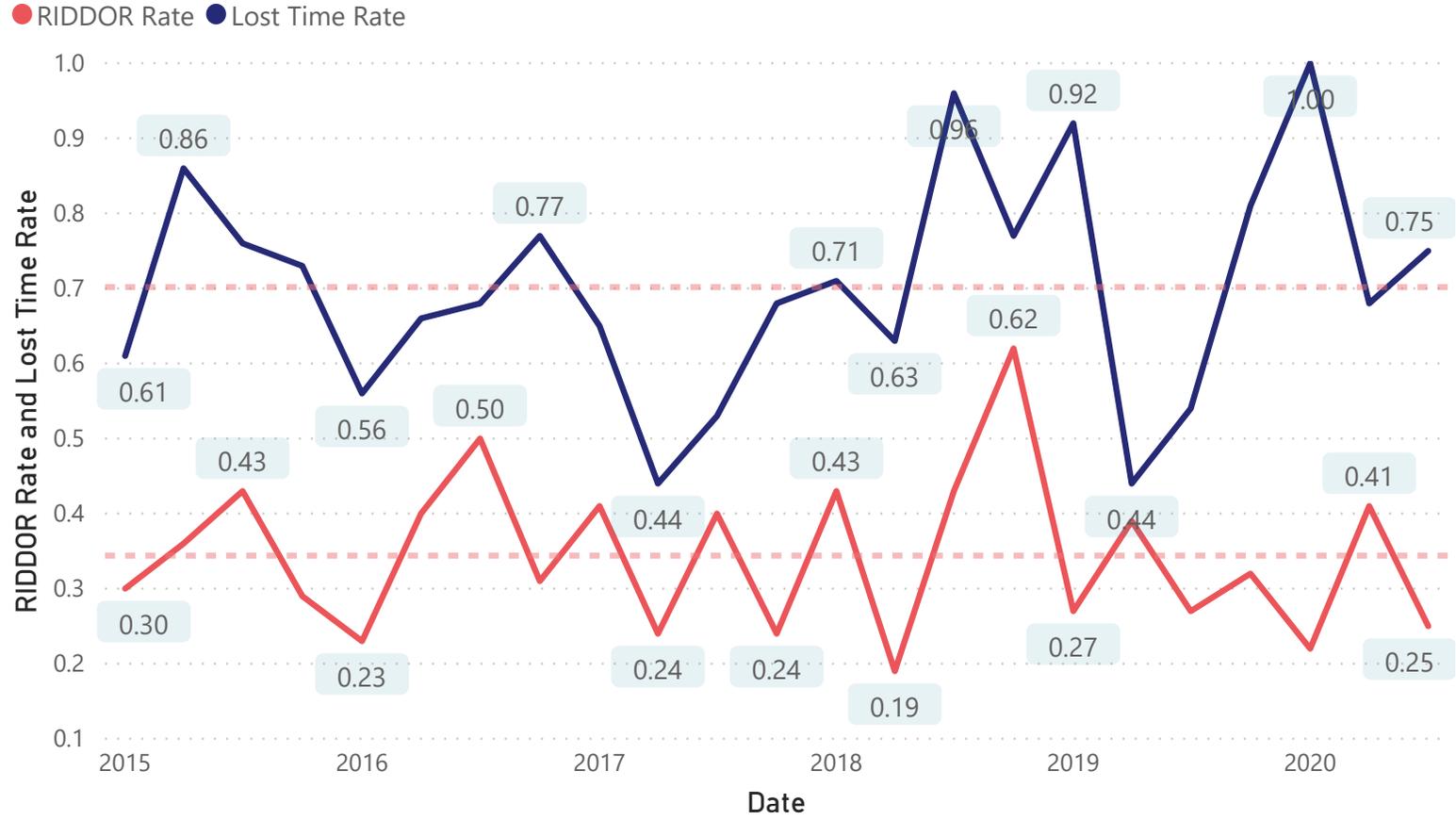
**FEDERATION
OF PILING
SPECIALISTS**

Quarter 3 2020
Accident/Incident Statistics

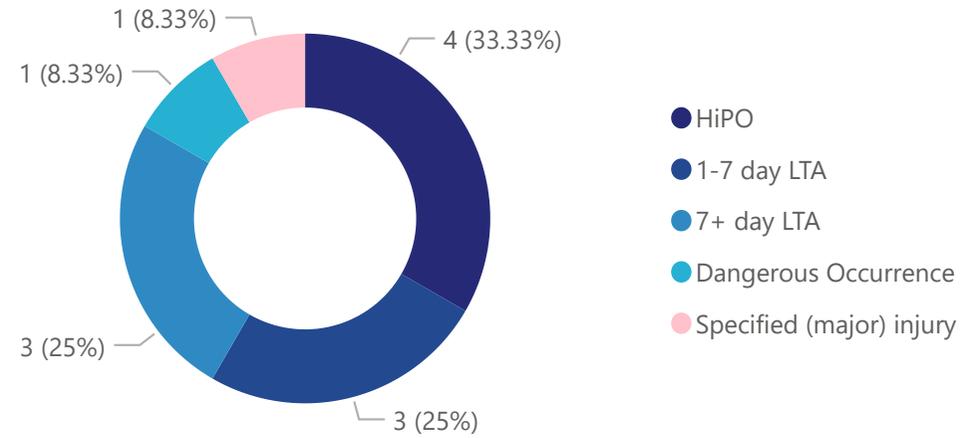
Accidents

Frequency Rate: No Acc/Manhours x 100,000

RIDDOR Rate and Lost Time Rate*

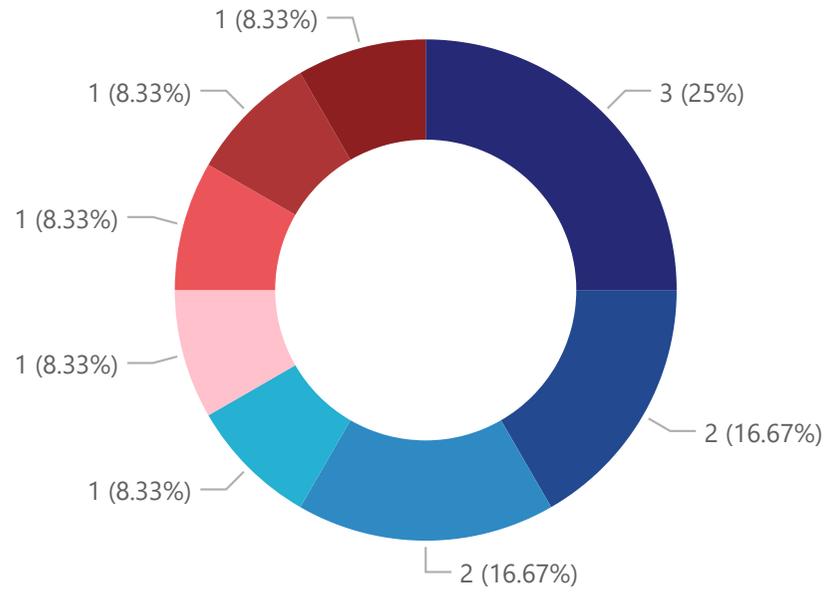


Accident Category



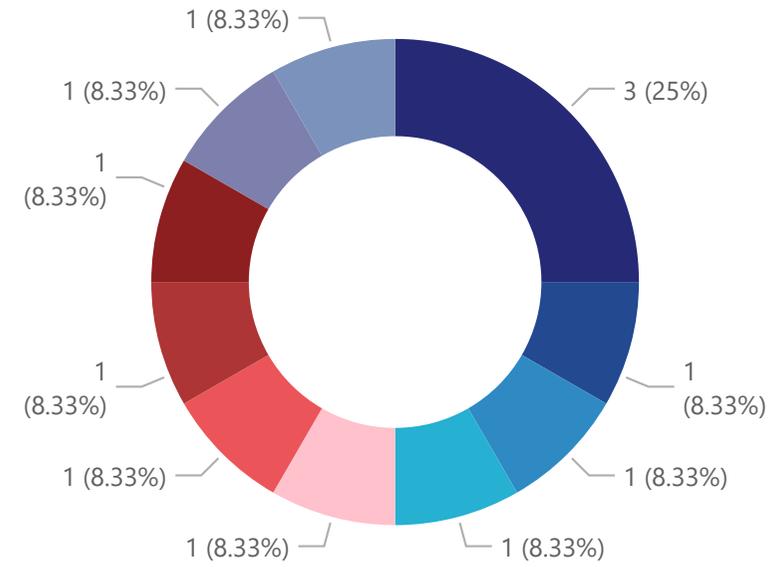
* Please note that this data is currently under review.

Body part injured



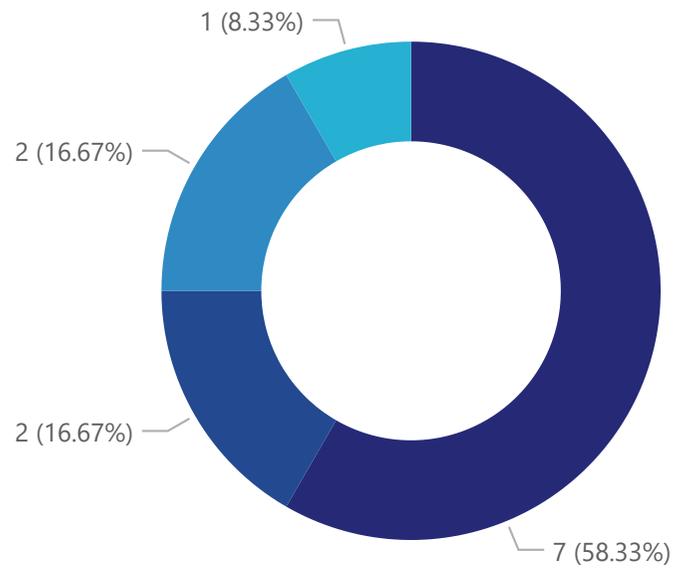
- Hand / Wrist
- Leg
- Torso
- Arm
- Back
- Face
- Finger / Thumb
- No injuries

Activity of Injured Person



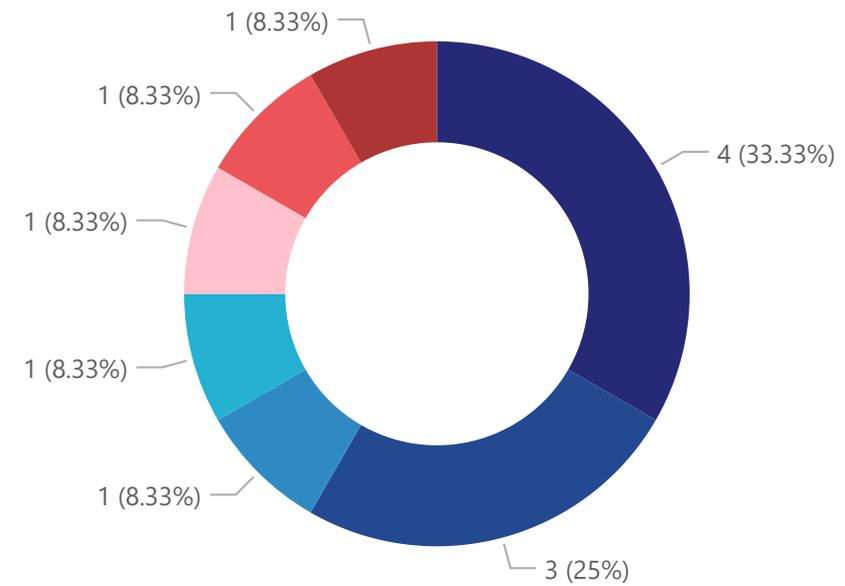
- Maintenance
- Banking plant or vehicles
- Closing window
- Lifting operations
- Manual handling
- Rigging & Derigging
- Splicing reinforcement cages
- Tracking rig between piling platf..
- Using handtools
- Working in vicinity

Role/Trade of injured person



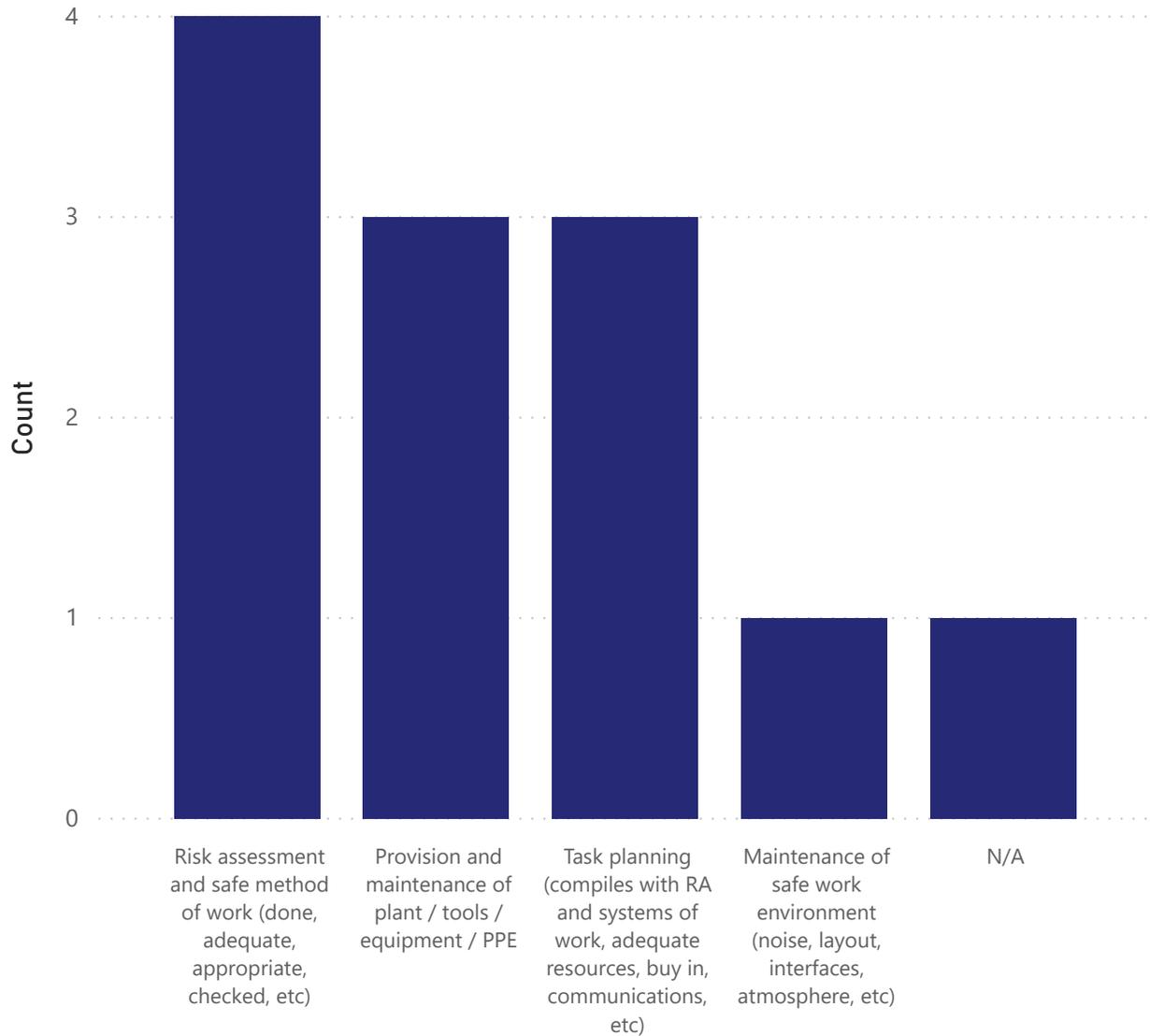
- General Piling Operative
- Crane/Rig Driver
- Fitter / Elec / Welder
- Manager/Supervisor

Type of Injury



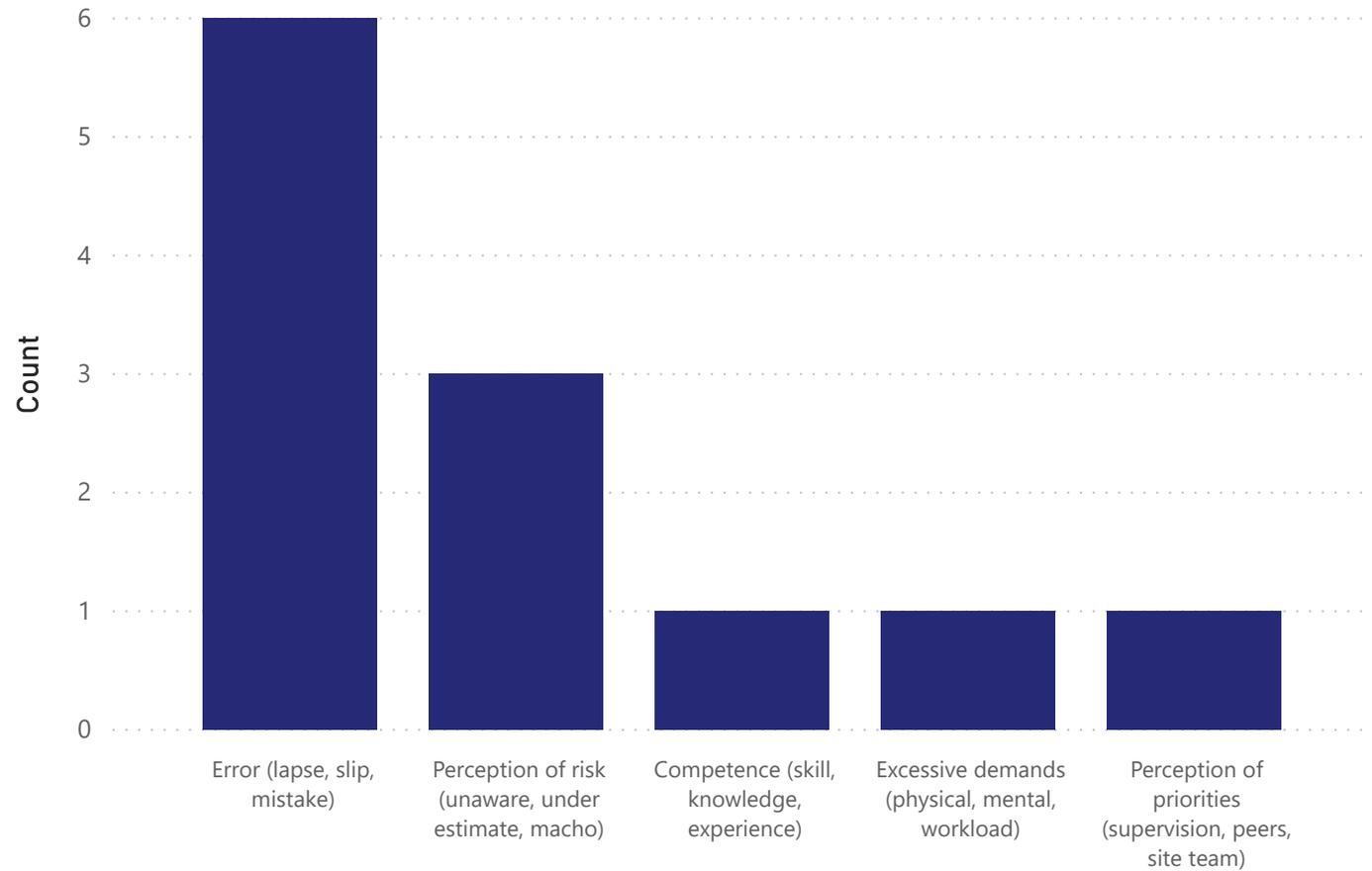
- Bruising
- Cuts / abrasions
- Crush
- Foreign body
- Fracture
- No injuries
- Sprain / strain

Job Factors



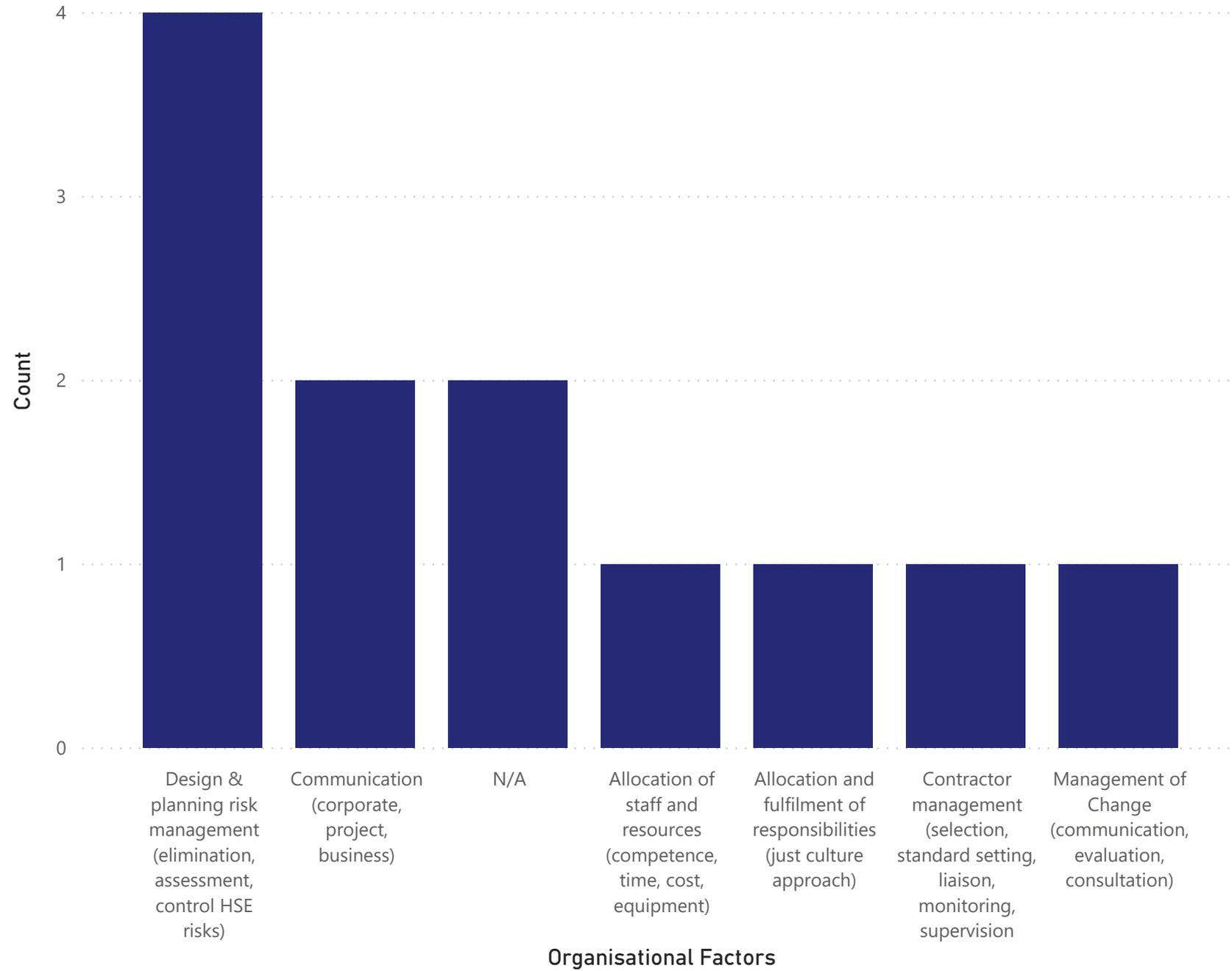
Job Factors

Personal Factors



Personal Factors

Organisational Factors



Description of Accident

Outline/Description of Accident

A slinger / signaller struck his hand twice with a copper headed hammer whilst clearing concrete from the dipping bucket

Caught finger in mechanism when closing window

During the attempted removal of an auger adaptor from Casagrande B175XP Piling Rig using a Rivet Buster a piece of metal from the coupler housing broke away, travelled 1 to 1.5 meters and penetrated the skin in the abdominal area of the IP. The shard was removed and the IP returned to work on 28th September.

IP was working as a welder as part of a team installing ground anchors through a previously constructed retaining wall. IP was working at height in a MEWP. Whilst attempting to lift and install a thin walled permanent casing / liner, from within the mewp basket, into the inclined bored anchor hole, he felt a pain in his lower back. The thin (3mm) walled permanent liners are 1.5m in length, weighing 15kg each are manually added on as the bore progresses and each one is welded into position to form a permanent lining to the bore/anchor.

Manipulator lost control of a section of casing. The casing fell and toppled towards the IP and rig operator. The IP pushed operator out of the way and was injured as the casing fell towards him, glancing blow.

The accident occurred as the site was put to work on the morning of 24-09-2020, at 0800hrs when the Injured Person -IP a piling operative employed had gone to assist in clipping together the pump line (as per the SSOW 03 section 4.3.3). As the IP was working a piece of material fell from the muck away wagon as it was being loaded by the excavator in an adjacent area (as per SSOW12) and rolled down the side of the ramp and hit the IP on the leg.

The IP was acting as a slinger signaller during a lifting operation with a tracked excavator. The task involved the lifting and transfer of a short section of piling auger out of storage into the work area. During the slinging of the auger section, a different auger dislodged resulting in the IP's hand becoming trapped and sustaining injuries.

The site team were having problems getting grease into a nipple on the water jacket of the rig , so they asked the IP to assist. The IP saw that the nipple was not taking grease and progressed to slightly loosen the nipple in order for grease to "seep" out. As the IP turned the nipple with a spanner (less than quarter of a turn, the nipple came out and struck him in the face underneath his safety glasses on his right cheek causing a cut.

Two piling operatives were extending the tell-tale bar during the cage installation process. One operative was holding the bulldog clip with his left hand and the tell-tale bar to be extended, with his right hand. Whilst the second operative turned around to pick up some bulldog nuts, the first operative lost control of the vertical tell-tale bar, causing the bar to fall. The left hand was caught between the falling bar and the bulldog clip, leading to two small cuts being sustained on the operative's left hand on the webbing between their thumb and index finger. Both operatives involved in the tell-tale extension were wearing full PPE including gloves. The operative was given first aid immediately on site and subsequently taken to the nearest Accident and Emergency for a precautionary visit and five stitches were administered.

Whilst changing the teeth on a bottom opening digging bucket the flap opened and struck the operative in the chest knocking him to the ground

Whilst removing drill rods from a rig ,the IP had unintentionally got the spanner wedged between the rod and the gate enclosure side guard. Whilst attempting to free the spanner by rotating the drill rods, the spanner spun off striking the IP above the knee resulting in swelling and contusion

Whilst tracking the piling rig (C6 XP) from one location to the next using the remote control unit, the haul road between the platforms was being utilised. During the normal tracking procedure the left hand track got too close to the edge of the road and gave way, this caused the rig to slide into a drainage channel next to the road. To try and move the machine the mast was then moved using the controls on the rig, this caused the weight to shift and rig fall onto its side slowly. The operator realised the rig was moving slowly further onto its side and stepped out of the way.

Remedial Action Taken

Remedial Action Taken

- Tool Box Talk issued on safe interface with plant
- POWRA to be used prior to any works of this kind.
- Daily inspection regime to remain in place.
- Safety bulletin produced.
- The incident highlighted the need to review RAMS more regularly.
- Plant dept. to look into introducing a visual level to avoid this situation.

All sites made aware of incident and all projects briefed on the incident. Toolbox talk given to the site teams and RAMs reviewed and rebriefed to include updating any safe system of working, including the requirement for a banksman for every move and the reinforcement of no lone working.

Alternative method of working agreed and briefed out to all personnel across the company

Concrete dipping bucket to be jet washed after each pile.

Discussion with IP

For pile with cut-off levels less than 4m from PPL, tell-tale bars up to 3m will be fully spliced while the cage is laying horizontally on the platform. The tell-tale bar is to be checked by either the site engineer or setting out engineer to ensure it is of the correct length prior to installation. The cage preparation and checks are to be carried out well in advance of cage installation so all amendments can be carried out while the cage is still on the platform. This ensures the tell-tale bar does not need to be amended during installation. The tell-tale bar is to never be amended while the cage is in the vertical position. RAMS were reviewed and amended, and the site teams briefed.

Quality of supervision during this incident was key issue. increased monitoring; safety conversation regarding use of defective equipment and management of staff

Rebriefing on lift plan paying particular attention to inspecting loads prior to slinging, communications between slinger and machine operator, personal positioning of slinger in relation to machine movements, approaching only when stationary and use of deadmans etc. Elimination of crush risk by using alternative slinging techniques

Revision of the risk assessment and task briefing

Familiarisation training undertaken

Re brief of risks and new control measures

Documented process for competence assessments to be followed.

Exclusion zones better established.

Risk assessment reviewed and revised.

Raised awareness by producing safety alert re stretch and flex & warming up at start of shift.

Review of use of manipulators, as these had been in use for the majority of the handling.

Rivet Buster removed from use

MGE / Plant maintenance supervision formalised

Process for the task reviewed and documented

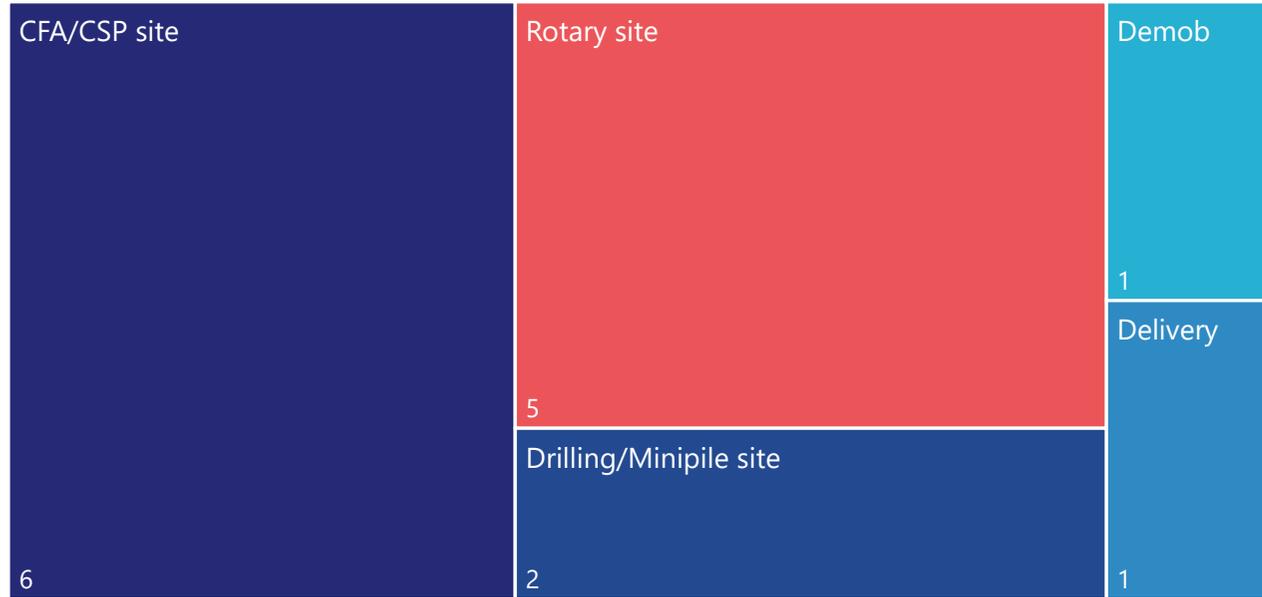
Group consequence matrix to be invoked

The edge of the loading ramp had no protection to prevent loose materials from rolling down the slope to the side of the ramp – bulk timbers have been placed in this location following the incident.

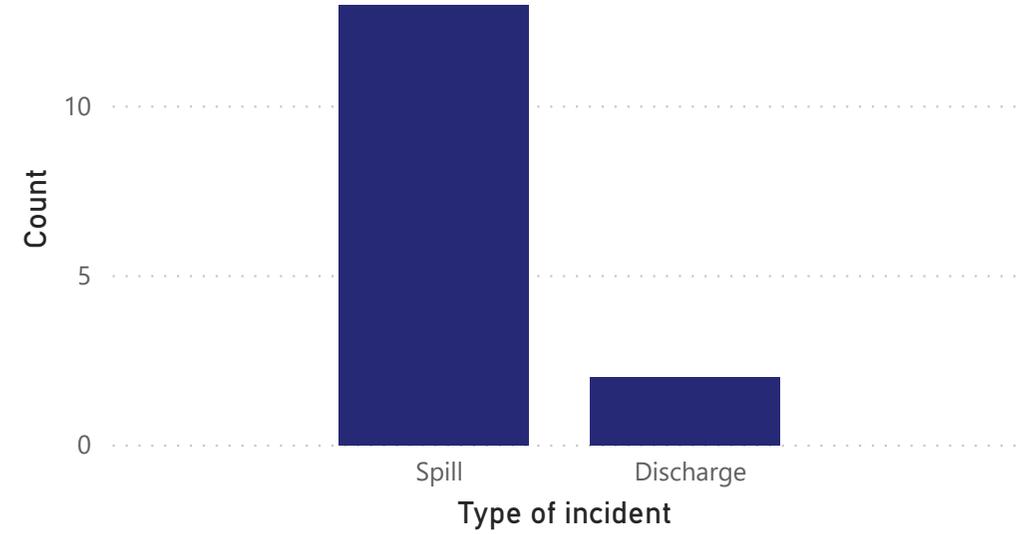
The site layout is restricted meaning trades are working in adjacent areas however there still needs to be separation between plant and persons. If this cannot be accomplished physically then by altering work patterns this can be achieved - concrete pipes are now cleaned and in place for the next day outside of times when wagons are loaded thus removing the interface.

Environmental Incidents

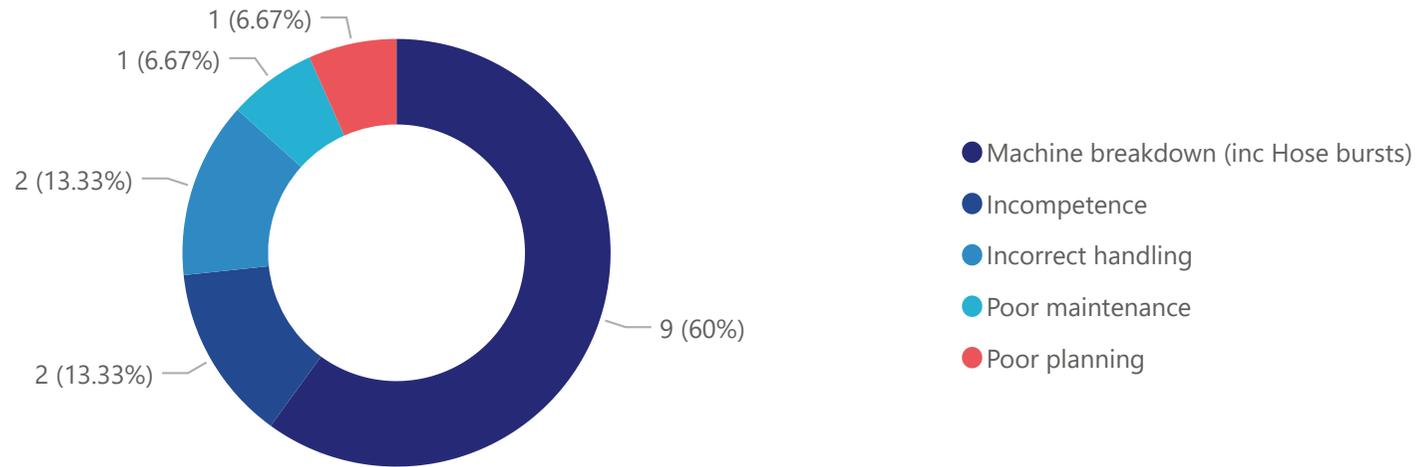
Foundation Site Activity



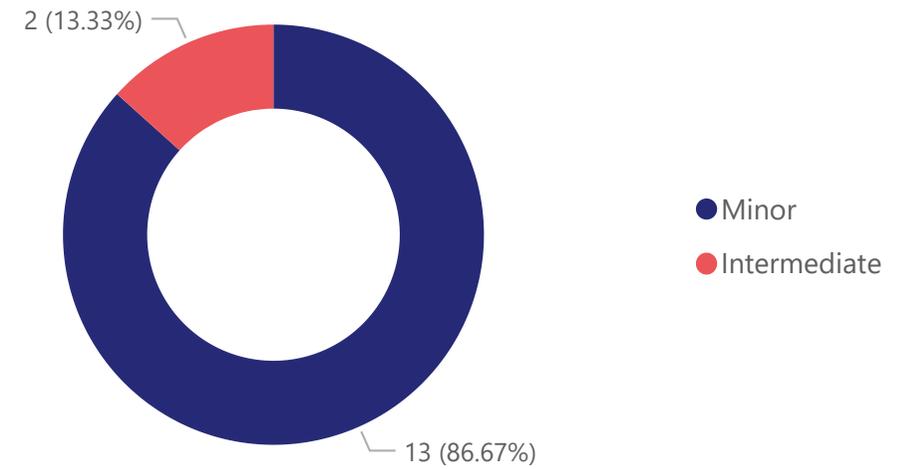
Type of incident



Cause of incident



Incident Severity / Category



Description of Environmental Incident

Outline / Description

A hydraulic leak occurred on the BG28 due to a due a worn or faulty "O" ring on the swivel on the redhill project.

After incident IN024893 reporter advised that they ensured the incident site was well protected from all oil leaks that may occur whilst the rig was on its side. During recovery on 16/09/2020 it was discovered 6 litres of engine oil had been lost. As the area has been previously packed with spill kits, the oil had been contained and was cleaned up as soon as the rig was moved to a safe position. Whilst moving the rig 2x hoses burst again, the area was cleaned up immediately with spill kits. All spill kits used were disposed of in hazardous waste. No further actions required. Environmental Advisor was present throughout the incident, recovery and clean up.

Broken hydraulic fitting

Burst hose

Hose Blown

Hydraulic motor worked loose whilst coring

Main hydraulic hose failure during excavation of pile position TC01-P01 on Barrow using the BG46

On leaving site a concrete wagon stopped in the high street, the driver proceeded to washout the shoot on the back of the vehicle registration No: BOS 551E into a drain. This was witnessed by site staff and MOP who took photographs. The supplier has been contacted and has to report this to the Royal Borough of Kensington and Chelsea and they will take all remedial measures required. Investigations are underway. This has been reported to the Senior Project Manager

On the afternoon of the 21st August, grey slurry ran from the pump / agitator area onto the footpath / cycleway and onto the A61 resulting in some of it entering the drainage network. Incident was reported, and cleared up. This was due to moving the washout skip, which in term moved some of the sandbags being used for the bund.

On Thursday morning the casing for a secondary pile got stuck. The casing had been inserted that morning so there is no obvious reason for this to have happened. After trying to remove the casing with the rig the extractor was used. Unfortunately the extractor developed a hydraulic leak before the casing could be loosened. The procedure for cleaning hydraulic leaks was followed. The pile had to be abandoned while Pirtek attended site to fix the leak. As a result of this a 7m load of concrete had to be sent back to the concrete supplier. While the piles concrete had been requested it arrived on site over an hour earlier than required. Pirtek completed the fix on the hydraulic hose late Thursday afternoon allowing the casing to be extracted. The pile was completed 03.07.2020 in place of a primary pile which will now be completed on Monday in addition to Mondays already planned piles.

Piling Rig was delivered from the yard with a historic leak from the under carriage

Reported via email - team were installing casing on IC5 when the driller noticed that there was oil dripping from the back of the machine. The operatives used local drip trays and onsite spill kits to catch the visible oil and the small amount spilt onto the platform, however the majority of the spilt hydraulic oil was caught in the engine bay. The team followed the appropriate on site procedures and quickly notified the team who visited site, this helped our client and also reduced the incident. The machine was kept off until the hose had been identified and replaced.

Reporter advised the operations that was being conducted where demobilising a piling rig. The piling rig was loaded onto a low loader, the low loader was being re attached, at which point a hydraulic hose burst. The low loader was situated on Farringdon Road, the hydraulic fluid leaked onto the tarmac. The source of the leak was identified and absorbent granules were placed on the hydraulic fluid spillage. The pressure was taken off the hydraulics to stop the spill. The maintenance was undertaken on the low loader to fix the leak. The low loader was moved out of position to which the spillage was cleared up. TFL have been notified and are going to take a further clean of the road. The highway has been left in a safe site at present. Project Manager is aware.

SR75 was drilling pile 235 at the lower level at the West side of the site. The piling rig was drilling the spoil from the pile when the incident occurred. The rig had taken another bite from the pile and had slewed to remove the spoil from the auger. When reversing back the auger to remove the spoil, the top hat for the segmental casing spun back with the auger and caught the hydraulic hoses. This caused the hydraulic hose to wrap around the top hat and got damaged which caused a hydraulic leak. No persons were hurt. Area cleaned with spill kits.

Whilst fueling up the rig the open hose was left open - diesel siphoned out to ground

Remedial Action Taken

Remedial Action Taken

Site reported it to the Subcontractor straight away who then reported to Council and Thames Water

Fitter called and all connections on rotary head were checked and tightened as necessary

Fitter called to repair

Granules were put down onto the pill straight away and a mechanic called to fix the leak on the Low Loader. PC contacted TFL as this happened on a public highway. TFL no follow up. Granules cleaned up by Road sweeper, documents checked.

LOCAL INVESTIGATION BY PROJECT MANAGEMENT TEAM. RAISED TO THE PLANT DEPARTMENT AND TRAINING ASSESSOR FOR REMEDIAL ACTIONS INPUT. RE BRIEF THE PILING CREW. Initially Spill kits and procedure deployed.

New fitting

New hose

Site clean up took place and referred to PC.

Spill cleaned up as per procedure and fitter called and attended to fix the hose.

Spill kits deployed and fitter called to change hose.

Spill kits initially deployed and replenished over the 2 days the rig was laid down and then the 3 days following the recovery of the rig. Ground was monitored for any oil.

Spill was cleaned up and PC dealt with waste

The spill was cleaned up and the hose was replaced

The spill was contained and cleaned up.

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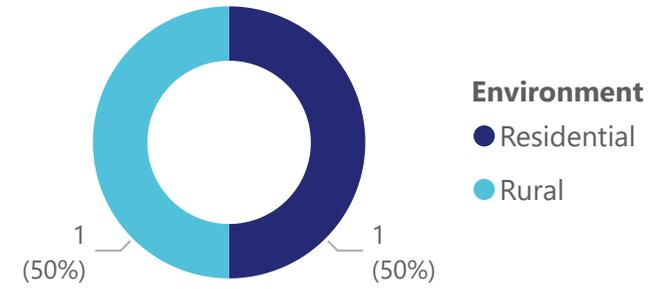
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Service Strikes

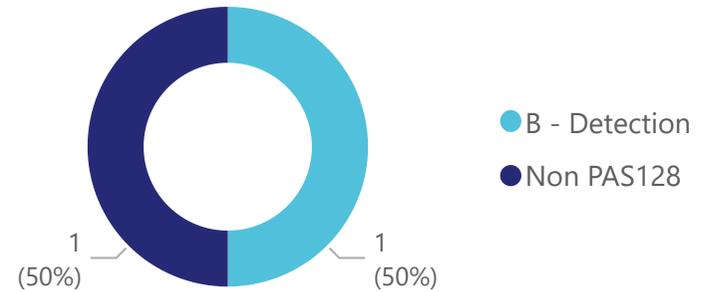
Closest Town (Postcode)



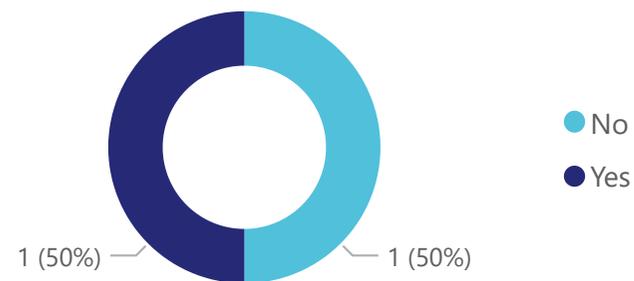
Environment



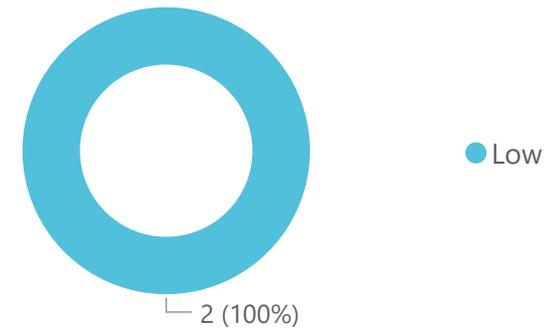
Survey Level



Was the Asset Known to be present?



Severity of Strike



Lessons Learnt / Remedial Action Taken

Client dealt with rectification. Client failed to identify and pass on the information

All parties to identify and expose cables as per plan and not assume. Misidentification of a 'non-standard' installation by the homeowner.

