



Near Miss

Dropped 13 3/8 inch Casing

6th November 2008

22.30 hrs



What Happened

A joint of 13 3/8 inch casing came out of the single joint elevator at floor level and travelled down the vdoor, along the catwalk finally coming to rest against the nearby wire line unit. The incident resulted in slight damage to the wire line unit skid and had potential for a serious injury up to fatality



DrillSafe Forum Presentations - Perth Western Australia – 5th Mar 09



Sequence of Events

Event Description	Time before Incident
16 inch BHA Rack in Drillers side fingers. Drillers not able to view V-door.	16 hours
Generic JSA reviewed. The High Arctic JSA did not refer to checking elevators are latched and pin inserted correctly.	13 hours
Pre Job Meeting held to discuss changing from picking up casing joints with crane to picking up casing joints with air winch	7 hours
Continued to pick up and run 13 1/3inch L80 68lb/ft Casing 40m to 566m	7 hours
Casing rig floor crews took regular breaks. Elevator latch operator at time of incident returns from a break	30 minutes
Casing Running Supervisor leaves the rig floor for a break. Although not assigned the task he voluntarily had been checking the latch and pin.	5 minutes
Casing joint No. 80 (60 picked up) brought up and resting in the V-door attached to air winch and soft sling	59 seconds
Elevators not fully latched and pin inserted to back of elevator latch.	36 seconds
Sling removed, Driller given thumbs up to hoist the casing	21 seconds
Weight taken up on elevators to the collar of the casing	5 seconds
Elevators open, casing slides down v-door and continue off catwalk coming to rest at the Halliburton Wire Line Unit.	3 seconds
Incident	22.30hrs
Safety retainer pin remains in open elevators	60 seconds after

Investigation findings

- A crew member was on the catwalk when the casing was released
- Crew on tour had run 60 joints of casing prior to the incident.
- The crew and Driller were considered competent.
- Driller view to the elevators or v-door was obstructed by the racked 16 inch BHA.
- The safety pin was retained in the elevators after the casing was released.
- There was no noticeable damage to the elevators, latching device or safety pin.
- It is not possible for the latching device on the elevators to open if they are latched correctly and the pin is inserted correctly
- It is fully possible too not fully latch the elevators and then place the safety pin in behind the latch.
- The person who latched the elevators believed they were latched correctly



Correct latching - not possible to open without there being signs of damage to the pin and latch.

Incorrect latching - partially latching still allows the latch to bite and for the pin to be inserted behind the latch.





Elevators being latched from above the casing.



Immediately after the incident note safety pin still inserted.

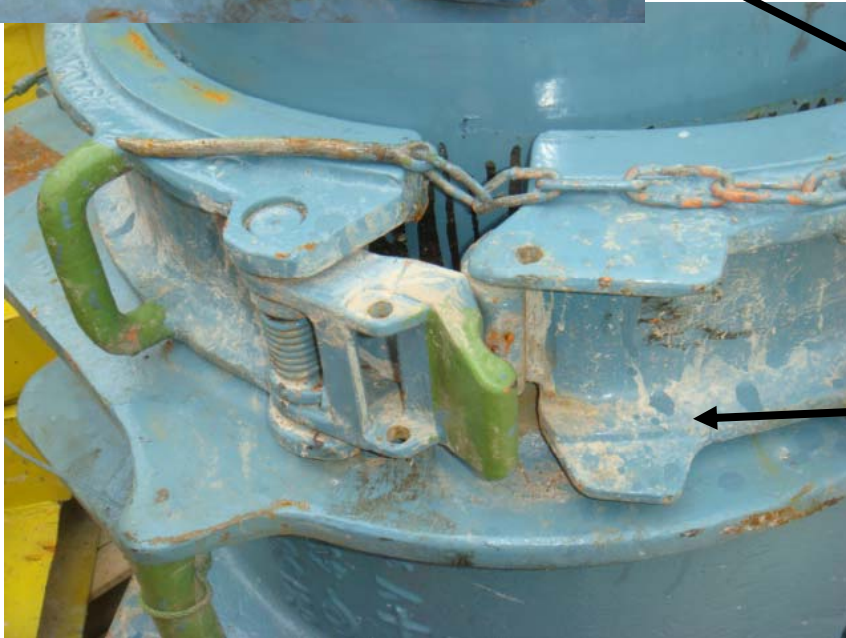
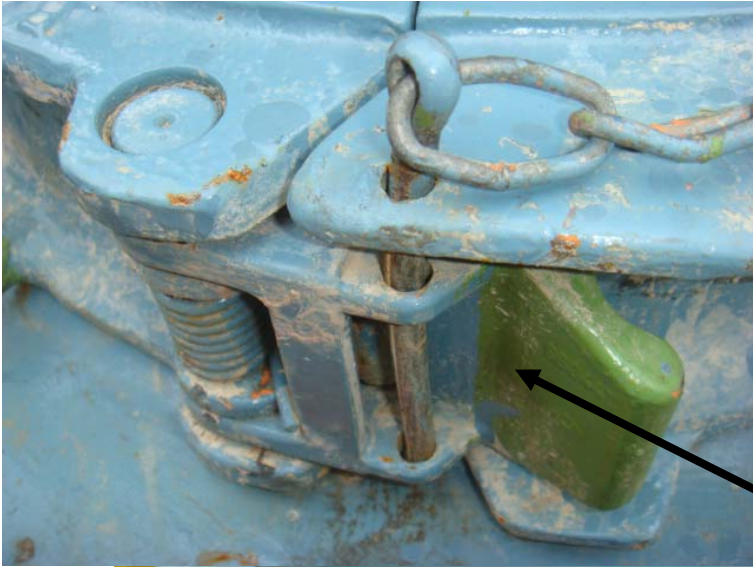


Drillers console

Shows full Derrick full of pipe – Driller's view

Investigation findings

- The Tesco used Den-Con elevators were immediately replaced with HAES Blohm and Voss single joint elevators.
- HAES Blohm and Voss Elevators are considered a better design and must be latched to insert the pin.
- **DEN-CON Elevators DID NOT FAIL. The incident was caused by a lack of situational awareness – error induced.**
- A Pre Job Meeting was held and recorded.
- A generic JSA running casing was reviewed. This was a HAES JSA and there was no mention of second checks on the elevator latching nor any reference to checking the safety pin.
- A Tesco JSA on site at the time did have the above hazards mentioned.
- The rig was not equipped with any form of secondary safety device to prevent drill pipe, casing etc. from sliding down the v-door.
- Crews were taken regularly breaks.

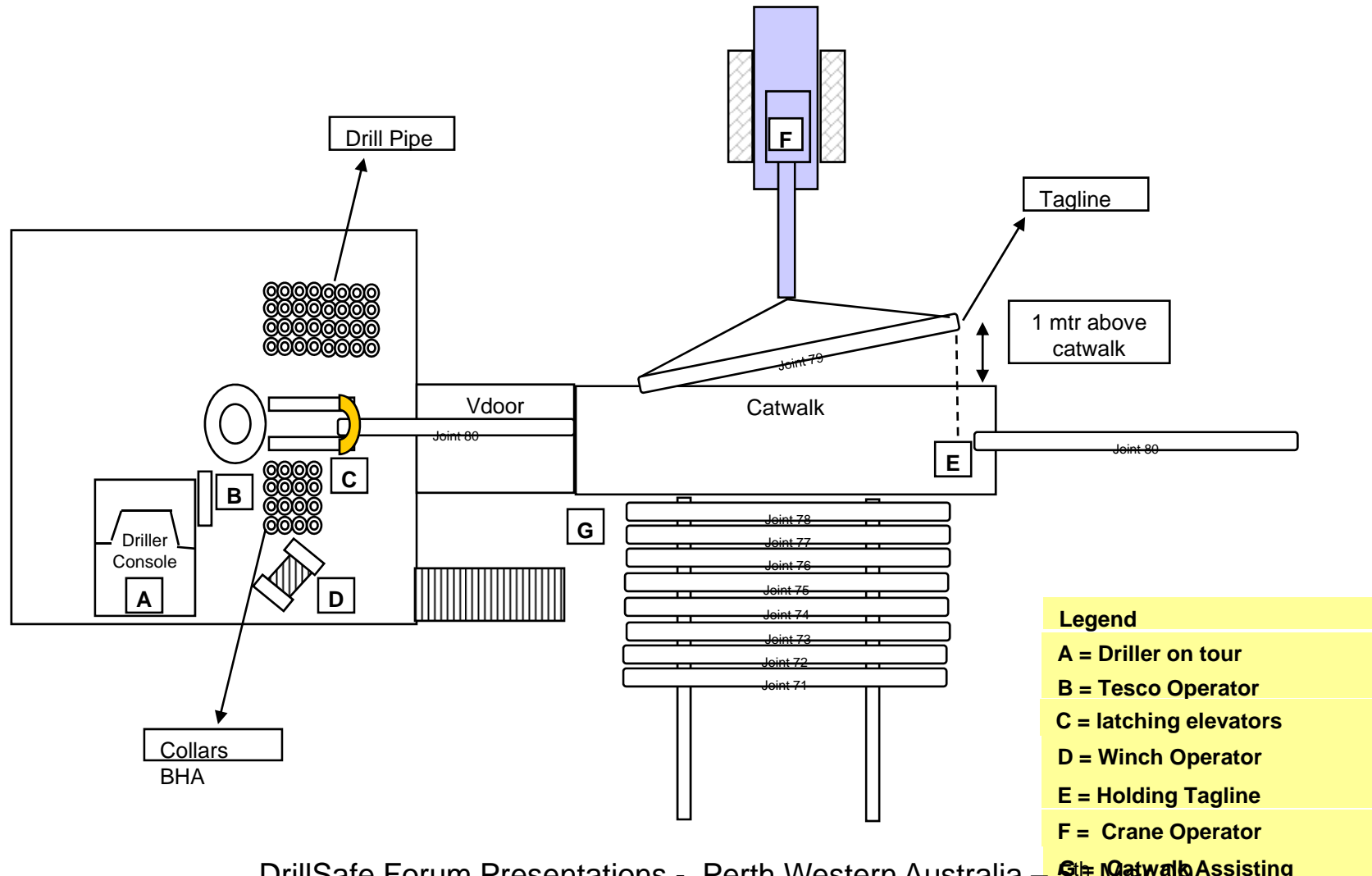


Blohm and Voss SGE.
Note pin through latch.

Note able to insert pin
when open

Pin has been tack welded
at top and bottom to
make single pin

Rig Floor Layout





Incident Causes

- Immediate causes of the incident
 1. Elevators not latched closed correctly
 2. No person other than the latcher checked if elevators were latched correctly
 3. Driller view of elevators obstructed by racked BHA
- Underlying causes of the incident
 1. Safety pin able to be inserted into position behind latching device
 2. Potential for elevators not to be fully latched not experienced before.
 3. Checking latch and pin not identified as a hazard in the HAES JSA.
 4. Generic JSA reviewed.
 5. Decision to rack rather than lay out BHA. To reduce time with open hole.
 6. No one assigned to do the checking
 7. Tesco Supervisor who was voluntarily checking other joints for correct latching and pinning had just left the rig floor.

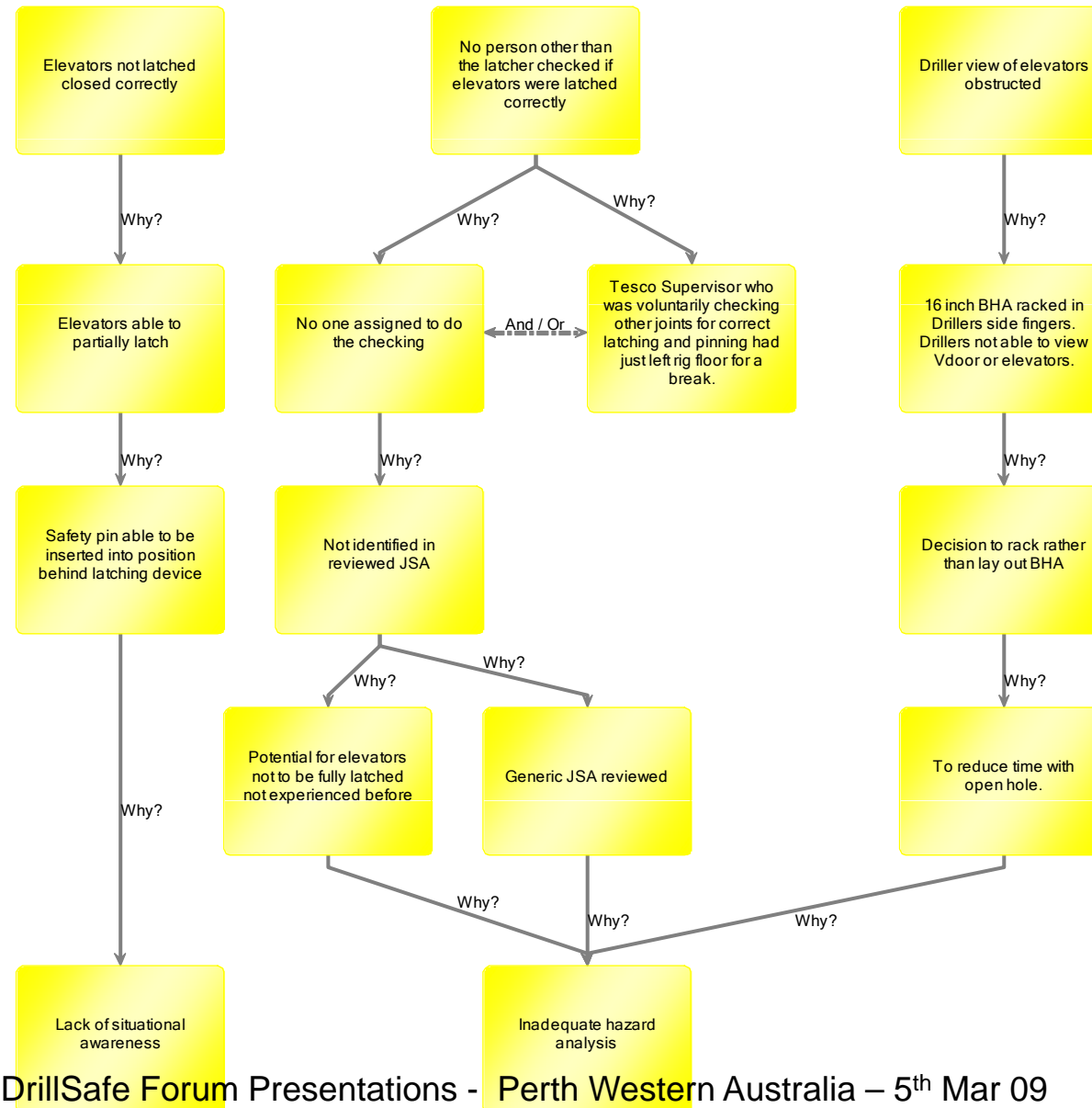


Incident Causes

- Root Cause
 1. Inadequate hazard analysis
 2. Lack of situational awareness



Incident Causes





How do we STOP it from happening again

1. Utilise the HAES Blohm and Voss SGE as they have a better designed latching device.
2. Ensure pipe is racked in the derrick which allows the Driller a clear visual. Where this can not be achieved pipe is to be layed out.
3. Design and fabricate a catwalk stopper to prevent pipe moving down the catwalk in the event of a human error again.
4. Update JSA to rig specific and include learning from this incident i.e. double check latch closed, pin inserted correctly and vdoor stopper in use when fabricated.
5. Develop and distribute an industry wide Safety Alert through IADC.



Q and A Time

**Thank
you**