Summary of Occupational Incidents
(Asia Pacific Water Totals)

Issued 20 May 2014
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IADC 2013 Asia Pacific Water Totals (Table 1)

<table>
<thead>
<tr>
<th>Totals</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Man-hours</td>
<td>48,554,010</td>
</tr>
<tr>
<td>Total Medical Treatment Incidents</td>
<td>48</td>
</tr>
<tr>
<td>Total Restricted Work Incidents</td>
<td>47</td>
</tr>
<tr>
<td>Total Lost Time Incidents</td>
<td>37</td>
</tr>
<tr>
<td>Total Fatalities</td>
<td>0</td>
</tr>
<tr>
<td>Total Recordables</td>
<td>132</td>
</tr>
</tbody>
</table>

MTO Incidence Rate       0.20  
RWC Incidence Rate       0.19  
LTI Incidence Rate       0.15  
LTI Frequency Rate       0.76  
DART Incidence Rate      0.35  
DART Frequency Rate      1.73  
Recordable Incidence Rate 0.54  
Recordable Frequency Rate 2.72  

MEDICAL TREATMENT INCIDENCE RATE = MTOs X 200,000 / MANHOURS (LTIs NOT INCLUDED)  
RESTRICTED WORK INCIDENCE RATE = RWCs X 200,000 / MANHOURS (LTIs NOT INCLUDED)  
LOST TIME INCIDENCE RATE = (LTIs+FTLs) X 200,000 / MANHOURS  
LOST TIME FREQUENCY RATE = (LTIs+FTLs) X 1,000,000 / MANHOURS  
DART INCIDENCE RATE = (LTIs+FTLs+RWCs) X 200,000 / MANHOURS  
DART Frequency Rate = (LTIs+FTLs+RWCs) X 1,000,000 / MANHOURS  
RECORDABLE INCIDENCE RATE = RECORDABLES X 200,000 / MANHOURS  
RECORDABLE FREQUENCY RATE = RECORDABLES X 1,000,000 / MANHOURS

Companies Reporting: Water – 30

Asia Pacific Water Incidence Rates vs Man-hours (Figure 1)
IADC 2013 Asia Pacific Water Charts
Asia Pacific Water Total Lost Time Incidents by Month (Chart 1)
Based on 36 Incidents

December 5.56%
November 11.11%
October 5.56%
September 11.11%
August 13.89%
July 8.33%
June 2.78%
May 5.56%
April 8.33%
March 8.33%
February 11.11%
January 8.33%

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Asia Pacific Water Total Recordable Incidents by Month (Chart 2)
Based on 123 Incidents

- December: 6.50%
- November: 9.76%
- October: 7.32%
- September: 8.13%
- August: 10.57%
- July: 8.94%
- June: 6.50%
- May: 9.76%
- April: 4.07%
- March: 8.13%
- February: 13.82%
Asia Pacific Water Total Lost Time Incidents by Occupation (Chart 3)
Based on 36 Incidents

- Floorman: 33.33%
- Roustabout (Lease Hand): 25.00%
- Driller (Asst. Dr.): 13.89%
- Toolpusher (Asst. TP, Tourpusher): 2.78%
- Mechanic: 8.33%
- Electrician: 2.78%
- Motorman: 5.56%
- Other: 8.33%
Asia Pacific Water Total Recordable Incidents by Occupation (Chart 4)
Based on 123 Incidents

- Roustabout (Lease Hand): 21.95%
- Floorman: 26.83%
- Driller (Asst. Dr.): 7.32%
- Derrickman: 5.69%
- Roustabout (Lease Hand): 21.95%
- Floorman: 26.83%
- Driller (Asst. Dr.): 7.32%
- Derrickman: 5.69%
- Roustabout (Lease Hand): 21.95%
- Floorman: 26.83%
- Driller (Asst. Dr.): 7.32%
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- Derrickman: 5.69%
- Roustabout (Lease Hand): 21.95%
- Floorman: 26.83%
- Driller (Asst. Dr.): 7.32%
- Derrickman: 5.69%
Asia Pacific Water Total Lost Time Incidents by Body Part (Chart 5)
Based on 36 Incidents

- Finger(s): 52.78%
- Hand(s) / Wrist(s): 2.78%
- Arm(s): 2.78%
- Trunk/Torso (chest, abdomen, groin): 5.56%
- Back: 2.78%
- Head: 8.33%
- Shoulder(s): 5.56%
- Toes: 2.78%
- Feet/Ankles: 13.89%
- Other: 2.78%
- "Other": 2.78%
Asia Pacific Water Total Recordable Incidents by Body Part (Chart 6)
Based on 123 Incidents

- Finger(s): 45.53%
- Hand(s) / Wrist(s): 8.13%
- Arm(s): 2.44%
- Back: 2.44%
- Eyes (eyelid): 2.44%
- Foot/Ankles: 7.32%
- Toes: 3.25%
- Head: 9.76%
- Shoulder(s): 4.07%
- Neck: 0.81%
- Skin: 0.81%
- Knee(s): 1.63%
- Elbow(s): 1.63%
- Other: 1.63%
- Trunk/Torso (chest, abdomen, groin): 5.69%
Asia Pacific Water Total Lost Time Incidents by Incident Type (Chart 7)
Based on 36 Incidents

- Struck By: 13.89%
- Slip/Fall: Different Level: 13.89%
- Cut: 5.56%
- Sprain: 2.78%
- Strain/Overexertion: 2.78%
- Slip/Fall: Same Level: 2.78%
- Caught Between/In: 58.33%
Asia Pacific Water Total Recordable Incidents by Incident Type (Chart 8)
Based on 123 Incidents

Caught Between/In: 47.15%
Caught On: 0.81%
Struck By: 16.26%
Struck Against: 3.25%
Slip/Fall: Same Level: 5.69%
Slip/Fall: Different Level: 6.50%
Sprain: 2.44%
Debris: 2.44%
Contact With Chemicals/Fluids: 0.81%
Strain/Overexertion: 4.07%
Slip/Fall: Different Level: 6.50%
Other: 1.63%
Cut: 8.94%
Debris: 2.44%
Asia Pacific Water Total Lost Time Incidents by Equipment (Chart 9)
Based on 36 Incidents

- Anchor Chains/Cables/Winches: 2.78%
- Rig Floor Winch/Deck Winch (air/hydraulic): 2.78%
- Boat Cargo (skids, tubulars, containers, etc.): 5.56%
- Decks (grating, walkway): 5.56%
- BOP Stack (well head, tree): 8.33%
- Engines/Pumps/Machinery: 2.78%
- Cathead/Drawworks: 2.78%
- Slings (rope, cable, chain, web): 5.56%
- Hand Tools: Manual: 5.56%
- Pipes/Collars/Tubulars/Csg.: 8.33%
- Other: 33.33%
- Tongs: 13.89%
- Elevators: 2.78%
Asia Pacific Water Total Recordable Incidents by Equipment (Chart 10)
Based on 123 Incidents

Other 29.27%
Tongs 9.76%
Elevators 3.25%
Slips (drill collar clamp) 0.81%
Iron Roughneck, Pipe Spinner, etc. 3.25%
Pipes/Collars/Tubulars/Csg. 12.20%
Cathead/Drawworks 0.81%
Slings (rope, cable, chain, web) 4.88%
Hand Tools: Manual 4.88%
Hand Tools: Power 1.63%
Engines/Pumps/Machinery 2.44%
Stairs 1.63%
BOP Stack (well head, tree) 5.69%
Material 0.81%
Ladders 0.81%
Crane 4.88%
Pressure Hoses/Lines 1.63%
Engines/Pumps/Machinery 2.44%
Slings (rope, cable, chain, web) 4.88%
Hand Tools: Manual 4.88%
Hand Tools: Power 1.63%
Engines/Pumps/Machinery 2.44%
Stairs 1.63%
BOP Stack (well head, tree) 5.69%
Material 0.81%
Ladders 0.81%
Crane 4.88%
Pressure Hoses/Lines 1.63%
Engines/Pumps/Machinery 2.44%
Slings (rope, cable, chain, web) 4.88%
Hand Tools: Manual 4.88%
Hand Tools: Power 1.63%
Engines/Pumps/Machinery 2.44%
Stairs 1.63%
BOP Stack (well head, tree) 5.69%
Material 0.81%
Asia Pacific Water Total Lost Time Incidents by Operation (Chart 11)
Based on 36 Incidents

- Other: 19.44%
- Mud Mixing/Pumping: 2.78%
- Walking: 2.78%
- BOP Stack Install/Maintenance: 8.33%
- Equipment Repairs or Maintenance: 11.11%
- Material Handling: Rig Floor Winch: 2.78%
- Material Handling: Manual: 5.56%
- Material Handling: Crane/Cherry Picker: 13.89%
- Routine Drilling Oper.: 11.11%
- Making Connection: 8.33%
- Tripping in/out: 11.11%
- Running/Retrieving Anchors: 2.78%
- Material Handling: Crane/Cherry: 13.89%
Asia Pacific Water Total Recordable Incidents by Operation (Chart 12)
Based on 123 Incidents

- Routine Drilling Oper.: 18.70%
- Material Handling: Crane/Cherry Picker: 9.76%
- Material Handling: Rig Floor Winch: 0.81%
- BOP Stack Install/Maintenance: 4.88%
- Laying Down/Picking up Tubulars: 2.44%
- Running Casing/Tubing: 4.07%
- Rigging Up/Down: 0.81%
- Making Connection: 3.25%
- Tripping in/out: 10.57%
- Running/Retrieving Anchors: 0.81%
- Abrasive Blasting/Paint/Scale Removal: 0.81%
- Special Operations: 0.81%
- Cementing: 1.63%
- Mud Mixing/Pumping: 1.63%
- Equipment Repairs or Maintenance: 11.38%
- BOP Stack Install/Maintenance: 4.88%
- Equipment Repairs or Maintenance: 11.38%
- Falling: 7.32%
- Walking: 7.32%
- Other: 16.26%
Asia Pacific Water Total Lost Time Incidents by Location (Chart 13)
Based on 36 Incidents

- Rig Floor: 16.67%
- Pipe Rack/Pipe Deck: 8.33%
- Catwalk/V-door: 2.78%
- Derrick/Mast: 5.56%
- BOP Stack/well head/tree Area: 5.56%
- Mud Mixing Tank/Area: 2.78%
- Shale Shaker: 5.56%
- SCR/Electrical Room: 2.78%
- Mud Pits/Tanks: 2.78%
- Cellar/Sub/Moonpool: 2.78%
- Work Rooms change, storage, room: 2.78%
- Rig Pad/Rig Decks: 5.56%
- Other: 36.11%
Asia Pacific Water Total Recordable Incidents by Location (Chart 14)
Based on 123 Incidents

- Rig Floor: 31.71%
- Pipe Rack/Pipe Deck: 7.32%
- Catwalk/V-door: 2.44%
- Derrick/Mast: 2.44%
- BOP Stack /well head/tree Area: 4.88%
- Mud Mixing Tank/Area: 1.63%
- Mud Pits/Tanks: 2.44%
- Shale Shaker: 3.25%
- Crew/Work Boats: 0.81%
- Living/Camp Areas/Accommodations: 1.63%
- Work Rooms change, storage, room: 2.44%
- Rig Pad/Rig Decks: 4.07%
- Stairs/Ladders: 0.81%
- SCR/Electrical Room: 1.63%
- Engine Generator Room: 0.81%
- Machinery Spaces: 1.63%
- Cellar / Sub / Moonpool: 3.25%
- Crew/Work Boats: 0.81%
- Cherry Picker/Crane: 0.81%
- Other: 25.20%
- Rig Floor: 31.71%
- Pipe Rack/Pipe Deck: 7.32%
- Catwalk/V-door: 2.44%
- Derrick/Mast: 2.44%
- BOP Stack /well head/tree Area: 4.88%
- Mud Mixing Tank/Area: 1.63%
- Mud Pits/Tanks: 2.44%
- Shale Shaker: 3.25%
- Crew/Work Boats: 0.81%
- Living/Camp Areas/Accommodations: 1.63%
- Work Rooms change, storage, room: 2.44%
- Rig Pad/Rig Decks: 4.07%
- Stairs/Ladders: 0.81%
- SCR/Electrical Room: 1.63%
- Engine Generator Room: 0.81%
- Machinery Spaces: 1.63%
- Cellar / Sub / Moonpool: 3.25%
- Crew/Work Boats: 0.81%
- Cherry Picker/Crane: 0.81%
Asia Pacific Water Total Lost Time Incidents by Time in Service (Chart 15)
Based on 33 Incidents

- 10+ yrs.: 6.06%
- >6 mos. < 1 yr.: 21.21%
- >3 mos. < 6 mos.: 6.06%
- >1 yr. < 5 yrs.: 51.52%
- 0 mo. < 3 mos.: 15.15%
- >1 yr. < 5 yrs.: 51.52%
Asia Pacific Water Total Recordable Incidents by Time in Service (Chart 16)
Based on 115 incidents

- >6 mos. < 1 yr. 18.26%
- >1 yr. < 5 yrs. 46.09%
- >3 mos. < 6 mos. 9.57%
- >5 yrs. < 10 yrs. 10.43%
- 10+ yrs. 4.35%
- 0 mo. < 3 mos. 11.30%
Asia Pacific Water Total Lost Time Incidents by Time of Day (Chart 17)
Based on 36 Incidents

- 21:00: 8.33%
- 23:00: 2.78%
- 22:00: 5.56%
- 20:00: 5.56%
- 19:00: 5.56%
- 18:00: 5.56%
- 17:00: 2.78%
- 16:00: 5.56%
- 15:00: 2.78%
- 14:00: 5.56%
- 13:00: 5.56%
- 12:00: 8.33%
- 11:00: 8.33%
- 10:00: 2.78%
- 9:00: 2.78%
- 8:00: 5.56%
- 7:00: 13.89%
- 6:00: 2.78%
- 5:00: 5.56%
- 4:00: 5.56%
- 3:00: 5.56%
- 2:00: 5.56%
- 1:00: 5.56%
- 0:00: 8.33%
Asia Pacific Water Total Recordable Incidents by Time of Day (Chart 18)
Based on 122 Incidents

- 24:00:00 - 1.64%
- 23:00 - 2.46%
- 22:00 - 4.10%
- 21:00 - 6.56%
- 20:00 - 8.20%
- 19:00:00 - 11.48%
- 18:00 - 13.72%
- 17:00 - 16.04%
- 16:00 - 18.36%
- 15:00 - 20.68%
- 14:00:00 - 23.00%
- 13:00 - 25.32%
- 12:00 - 27.64%
- 11:00 - 30.06%
- 10:00 - 32.48%
- 9:00 - 34.90%
- 8:00 - 37.32%
- 7:00 - 39.74%
- 6:00 - 42.16%
- 5:00 - 44.58%
- 4:00 - 47.00%
- 3:00 - 49.42%
- 2:00 - 51.84%
- 1:00:00 - 54.26%
- 0:00:00 - 56.68%
- 1:00 - 59.10%
- 2:00 - 61.52%
- 3:00 - 63.94%
- 4:00 - 66.36%
- 5:00 - 68.78%
- 6:00 - 71.20%
- 7:00 - 73.62%
- 8:00 - 76.04%
- 9:00 - 78.46%
- 10:00 - 80.88%
- 11:00 - 83.30%
- 12:00:00 - 85.72%
- 13:00:00 - 88.14%
- 14:00:00 - 90.56%
- 15:00:00 - 93.08%
- 16:00:00 - 95.50%
- 17:00:00 - 97.92%
- 18:00:00 - 99.34%
- 19:00:00 - 100.00%