Summary of Occupational Incidents
(South America Water Totals)

Issued 20 May 2014
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IADC 2013 South America Water Totals (Table 1)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
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<tbody>
<tr>
<td>Total Man-hours</td>
<td>20,976,133</td>
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<tr>
<td>Total Medical Treatment Incidents</td>
<td>19</td>
</tr>
<tr>
<td>Total Restricted Work Incidents</td>
<td>22</td>
</tr>
<tr>
<td>Total Lost Time Incidents</td>
<td>27</td>
</tr>
<tr>
<td>Total Fatalities</td>
<td>1</td>
</tr>
<tr>
<td>Total Recordables</td>
<td>69</td>
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</tbody>
</table>

MTO Incidence Rate 0.18
RWC Incidence Rate 0.21
LTI Incidence Rate 0.27
LTI Frequency Rate 1.33
DART Incidence Rate 0.48
DART Frequency Rate 2.38
Recordable Incidence Rate 0.66
Recordable Frequency Rate 3.29

**Medical Treatment Incidence Rate = MTOs X 200,000**
**Restricted Work Incidence Rate = RWCs X 200,000**
**Lost Time Incidence Rate = LTIs + FTLs X 200,000**
**Lost Time Frequency Rate = LTIs + FTLs X 1,000,000**
**DART Incidence Rate = LTIs + RWC X 200,000**
**DART Frequency Rate = LTIs + RWC X 1,000,000**
**Recordable Incidence Rate = RCRD X 200,000**
**Recordable Frequency Rate = RCRD X 1,000,000**

**South America Water Total Incidence Rates vs Man-hours (Figure 1)**
IADC 2013 South America Water Charts
South America Water Total Lost Time Incidents by Month (Chart 1)
Based on 25 Incidents

- January: 4.00%
- February: 16.00%
- March: 8.00%
- April: 4.00%
- May: 8.00%
- June: 8.00%
- July: 8.00%
- August: 20.00%
- September: 4.00%
- October: 4.00%
- November: 8.00%
- December: 8.00%
South America Water Total Recordable Incidents by Month (Chart 2)
Based on 64 Incidents

- December: 7.81%
- November: 6.25%
- October: 3.13%
- September: 6.25%
- August: 15.63%
- July: 3.13%
- June: 4.69%
- May: 6.25%
- April: 12.50%
- March: 12.50%
- February: 10.94%
- January: 10.94%
South America Water Total Lost Time Incidents by Occupation (Chart 3)
Based on 25 Incidents

Other 16.00%
Roustabout (Lease Hand) 28.00%
Floorman 16.00%
Derrickman 12.00%
Driller (Asst. Dr.) 12.00%
Motorman 4.00%
Mechanic 4.00%
Crane / Forklift Operator 4.00%
Barge Engineer/Ballast Control Op. 4.00%
South America Water Total Recordable Incidents by Occupation (Chart 4)
Based on 64 Incidents

- **Roustabout (Lease Hand)**: 29.69%
- **Derrickman**: 17.19%
- **Floorman**: 10.94%
- **Driller (Asst. Dr.)**: 4.69%
- **Mechanic**: 4.69%
- **Motorman**: 1.56%
- **Toolpusher (Asst. TP, Tourpusher)**: 1.56%
- **Derrickman**: 1.56%
- **Deck Supervisor (Deck Coordinator)**: 1.56%
- **Crane / Forklift Operator**: 1.56%
- **Barge Engineer/Ballast Control Op.**: 3.13%
- **Catering / Camp Personnel**: 1.56%
- **Subsea Engineer**: 6.25%
- **Marine Crew**: 1.56%
- **Other**: 14.06%
South America Water Total Lost Time Incidents by Body Part (Chart 5)

Based on 25 Incidents

- Finger(s) 52.00%
- Hand(s) / Wrist(s) 16.00%
- Head 4.00%
- Back 4.00%
- Trunk/Torso (chest, abdomen, groin) 4.00%
- Arm(s) 8.00%
- Leg(s) 4.00%
- Shoulder(s) 4.00%
- Other 4.00%
- Other 4.00%
- Shoulder(s) 4.00%
South America Water Total Recordable Incidents by Body Part (Chart 6)
Based on 64 Incidents

- Shoulder(s): 4.69%
- Feet/Ankles: 3.13%
- Leg(s): 1.56%
- Back: 3.13%
- Head: 15.63%
- Eyes (eyelid): 3.13%
- Trunk/Torso (chest, abdomen, groin): 1.56%
- Arm(s): 6.25%
- Finger(s): 40.63%
- Hand(s) / Wrist(s): 17.19%
- Other: 3.13%
South America Water Total Lost Time Incidents by Incident Type (Chart 7)
Based on 25 Incidents

- Struck By: 24.00%
- Struck Against: 12.00%
- Caught Between/In: 44.00%
- Slip/Fall: Different Level: 8.00%
- Strain/Overexertion: 4.00%
- Cut: 4.00%
- Caught On: 4.00%
South America Water Total Recordable Incidents by Incident Type (Chart 8)
Based on 64 Incidents

- Caught Between/In: 40.63%
- Struck By: 28.13%
- Struck Against: 4.69%
- Cut: 6.25%
- Caught On: 1.56%
- Debris: 1.56%
- Strain/Overexertion: 4.69%
- Slip/Fall: Different Level: 7.81%
- Slip/Fall: Same Level: 4.69%
South America Water Total Lost Time Incidents by Equipment (Chart 9)
Based on 25 Incidents

- **Other** 24.00%
- **Rig Floor Winch/Deck Winch** (air/hydraulic) 4.00%
- **Top Drive (blocks, swivel, kelly)** 4.00%
- **Decks (grating, walkway)** 4.00%
- **Crane** 8.00%
- **Pressure Hoses/Lines** 4.00%
- **Material** 4.00%
- **Stairs** 4.00%
- **Engines/Pumps/Machinery** 8.00%
- **Slings (rope, cable, chain, web)** 8.00%
- **Hand Tools: Manual** 4.00%
- **Hand Tools: Power** 4.00%
- **Pipes/Collars/Tubulars/Csg.** 12.00%
South America Water Total Recordable Incidents by Equipment (Chart 10)
Based on 64 Incidents

- Anchor Chains/Cables/Winches: 3.13%
- Rig Floor Winch/Deck Winch (air/hydraulic): 3.13%
- Top Drive (blocks, swivel, kelly): 4.69%
- Pressure Hoses/Lines: 3.13%
- Crane: 3.13%
- Ladders: 1.56%
- Decks (grating, walkway): 1.56%
- Chemicals (sack, drum, pail, bulk hopper): 1.56%
- Slings (rope, cable, chain, web): 9.38%
- Tongs: 1.56%
- Engines/Pumps/Machinery: 4.69%
- Hand Tools: Power: 4.69%
- Pipes/Slabs/Tubulars/Csg.: 14.06%
- Elevators: 6.25%
- Material: 6.25%
- Stairs: 4.69%
- Other: 20.31%

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South America Water Total Lost Time Incidents by Operation (Chart 11)
Based on 25 Incidents

- Equipment Repairs or Maintenance: 24.00%
- Routine Drilling Oper.: 16.00%
- Making Connection: 4.00%
- Laying Down/Picking up Tubulars: 4.00%
- Material Handling: Crane/Cherry Picker: 16.00%
- Material Handling: Manual: 4.00%
- Well Testing: 4.00%
- Walking: 4.00%
- Cementing: 8.00%
- Tripping in/out: 4.00%
- Making Connection: 4.00%
- Rigging Up/Down: 4.00%
- Other: 8.00%
- Walking: 4.00%

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South America Water Total Recordable Incidents by Operation (Chart 12)
Based on 64 Incidents

- Making Connection: 4.69%
- Routine Drilling Oper.: 14.06%
- Running Casing/Tubing: 1.56%
- Laying Down/Picking up Tubulars: 4.69%
- Material Handling: Manual: 7.81%
- Equipment Repairs or Maintenance: 15.63%
- BOP Stack Install/Maintenance: 4.69%
- Tripping in/out: 3.13%
- Well Testing: 1.56%
- BOP Stack Install/Maintenance: 4.69%
- Walking: 3.13%
- Special Operations: 1.56%
- Cementing: 4.69%
- Handling Riser: 6.25%
- Other: 9.38%
- Running/Retrieving Anchors: 1.56%
- Rigging Up/Down: 3.13%
- Handling Riser: 6.25%
- Special Operations: 1.56%
South America Water Total Lost Time Incidents by Location (Chart 13)
Based on 25 Incidents

- Cherry Picker/Crane: 4.00%
- Machinery Spaces: 4.00%
- Cellar / Sub / Moonpool: 4.00%
- Rig Pad/Rig Decks: 4.00%
- Stairs/Ladders: 4.00%
- Engine Generator Room: 8.00%
- Mud Mixing Tank/Area: 4.00%
- Derrick/Mast: 8.00%
- Catwalk/V-door: 4.00%
- Rig Floor: 28.00%
- Pipe Rack/Pipe Deck: 12.00%
- Rig Floor: 28.00%
- Other: 16.00%
South America Water Total Recordable Incidents by Location (Chart 14)
Based on 64 Incidents

- Rig Floor: 25.00%
- Rig Pad/Rig Decks: 7.81%
- Cellar/Sub/Moonpool: 7.81%
- Cherry Picker/Crane: 3.13%
- Engine Generator Room: 6.25%
- Mud Mixing Tank/Area: 3.13%
- Mud Pits/Tanks: 1.56%
- Derrick/Mast: 4.69%
- Catwalk/V-door: 1.56%
- Pipe Rack/Pipe Deck: 14.06%
- Pontoon: 1.56%
- Stairs/Ladders: 3.13%
- Living/Camp Areas/Accommodations: 1.56%
- Work Rooms change, storage, room: 4.69%
- Machinery Spaces: 3.13%
- Other: 7.81%
South America Water Total Lost Time Incidents by Time in Service (Chart 15)
Based on 24 Incidents

- >1 yr. < 5 yrs. 66.67%
- >6 mos. < 1 yr. 12.50%
- >5 yrs. < 10 yrs. 8.33%
- 0 mo. < 3 mos. 4.17%
- 10+ yrs. 8.33%
South America Water Total Recordable Incidents by Time in Service (Chart 16)
Based on 62 Incidents

- 10+ yrs. 8.06%
- >5 yrs. < 10 yrs. 14.52%
- >1 yr. < 5 yrs. 59.68%
- >6 mos. < 1 yr. 12.90%
- 0 mo. < 3 mos. 4.84%
South America Water Total Lost Time Incidents by Time of Day (Chart 17)
Based on 24 Incidents

- 23:00: 8.33%
- 22:00: 8.33%
- 21:00: 8.33%
- 20:00: 12.50%
- 19:00: 4.17%
- 18:00: 4.17%
- 17:00: 4.17%
- 16:00: 4.17%
- 15:00: 12.50%
- 14:00: 8.33%
- 13:00: 4.17%
- 12:00: 4.17%
- 11:00: 4.17%
- 10:00: 4.17%
- 9:00: 4.17%
- 8:00: 4.17%
- 7:00: 4.17%
- 6:00: 4.17%
- 5:00: 12.50%
- 4:00: 4.17%
- 3:00: 4.17%
- 2:00: 4.17%
- 1:00: 4.17%
South America Water Total Recordable Incidents by Time of Day (Chart 18)
Based on 63 Incidents

- 11:00: 3.17%
- 10:00: 6.35%
- 9:00: 3.17%
- 8:00: 6.35%
- 7:00: 4.76%
- 6:00: 6.35%
- 5:00: 6.35%
- 4:00: 1.59%
- 3:00: 4.76%
- 2:00: 1.59%
- 1:00: 4.76%
- 0:00: 4.76%
- 1:00: 15.11%
- 3:00: 4.76%
- 5:00: 6.35%
- 7:00: 4.76%
- 8:00: 6.35%
- 9:00: 3.17%
- 10:00: 6.35%
- 11:00: 3.17%