Summary of Occupational Incidents
(South America Water Totals)

Issued 1 July 2017
Table of Contents

(Table of Contents is Hyperlinked, Just click on Topic & go)

IADC 2016 SOUTH AMERICA WATER TOTALS (TABLE 1) ............................................................... 1
  South America Water Total Incidence Rates vs Man-hours (Figure 1) ........................................ 1
IADC 2016 SOUTH AMERICA WATER CHARTS ............................................................................... 2
  South America Water Total Lost Time Incidents by Month (Chart 1) ......................................... 2
  South America Water Total Recordable Incidents by Month (Chart 2) ....................................... 3
  South America Water Total Lost Time Incidents by Occupation (Chart 3) ................................. 4
  South America Water Total Recordable Incidents by Occupation (Chart 4) .............................. 5
  South America Water Total Lost Time Incidents by Body Part (Chart 5) ..................................... 6
  South America Water Total Recordable Incidents by Body Part (Chart 6) .................................. 7
  South America Water Total Lost Time Incidents by Incident Type (Chart 7) ............................ 8
  South America Water Total Recordable Incidents by Incident Type (Chart 8) .......................... 9
  South America Water Total Lost Time Incidents by Equipment (Chart 9) .............................. 10
  South America Water Total Recordable Incidents by Equipment (Chart 10) ........................... 11
  South America Water Total Lost Time Incidents by Operation (Chart 11) ............................. 12
  South America Water Total Recordable Incidents by Operation (Chart 12) ........................... 13
  South America Water Total Lost Time Incidents by Location (Chart 13) .................................... 14
  South America Water Total Recordable Incidents by Location (Chart 14) .............................. 15
  South America Water Total Lost Time Incidents by Time in Service (Chart 15) ....................... 16
  South America Water Total Recordable Incidents by Time in Service (Chart 16) ..................... 17
  South America Water Total Lost Time Incidents by Time of Day (Chart 17) .......................... 18
  South America Water Total Recordable Incidents by Time of Day (Chart 18) ........................ 19
  South America Water Total Lost Time Incidents by Age (Chart 19) ....................................... 20
  South America Water Total Recordable Incidents by Age (Chart 20) .................................... 21
IADC 2016 South America Water Totals (Table 1)

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Man-hours</td>
<td>11,885,667</td>
</tr>
<tr>
<td>Total Medical Treatment Incidents</td>
<td>8</td>
</tr>
<tr>
<td>Total Restricted Work Incidents</td>
<td>6</td>
</tr>
<tr>
<td>Total Lost Time Incidents</td>
<td>6</td>
</tr>
<tr>
<td>Total Fatalities</td>
<td>0</td>
</tr>
<tr>
<td>Total Recordables</td>
<td>20</td>
</tr>
</tbody>
</table>

**Incidence Rates**

- **MTO Incidence Rate**: 0.13
- **RWC Incidence Rate**: 0.10
- **LTI Incidence Rate**: 0.10
- **LTI Frequency Rate**: 0.50
- **DART Incidence Rate**: 0.20
- **DART Frequency Rate**: 1.01
- **Recordable Incidence Rate**: 0.34
- **Recordable Frequency Rate**: 1.68

*Companies Reporting: Water – 12*

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 2016 South America Water Charts
South America Water Total Lost Time Incidents by Month (Chart 1)
Based on 6 Incidents

- August: 16.67%
- January: 16.67%
- March: 33.33%
- April: 33.33%
South America Water Total Recordable Incidents by Month (Chart 2)
Based on 20 Incidents

- January: 5.00%
- February: 10.00%
- March: 20.00%
- April: 10.00%
- May: 10.00%
- June: 10.00%
- July: 5.00%
- August: 10.00%
- September: 10.00%
- October: 5.00%
- November: 5.00%
- December: 5.00%
South America Water Total Lost Time Incidents by Occupation (Chart 3)
Based on 6 Incidents

- Roustabout (Lease Hand): 33.33%
- Driller (Asst. Dr.): 16.67%
- Mechanic: 16.67%
- Deck Supervisor (Deck Coordinator): 16.67%
- Floorman: 16.67%
- Roustabout (Lease Hand): 33.33%

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South America Water Total Recordable Incidents by Occupation (Chart 4)
Based on 20 Incidents

- Mechanic 10.00%
- Electrician 10.00%
- Driller (Asst. Dr.) 5.00%
- Floorman 20.00%
- Derrickman 5.00%
- Subsea Engineer 10.00%
- Rig Helper 5.00%
- Mechanic 10.00%
- Electrician 10.00%
- Driller (Asst. Dr.) 5.00%
- Roustabout (Lease Hand) 30.00%
- Deck Supervisor (Deck Coordinator) 5.00%
- Floorman 20.00%
South America Water Total Lost Time Incidents by Body Part (Chart 5)
Based on 6 Incidents

- Feet/Ankles: 16.67%
- Leg(s): 16.67%
- Finger(s): 33.33%
- Trunk/Torso (chest, abdomen, groin): 33.33%
South America Water Total Lost Time Incidents by Incident Type (Chart 7)
Based on 5 Incidents

- Caught Between/In: 60.00%
- Struck By: 20.00%
- Slip/Fall: Different Level: 20.00%
South America Water Total Recordable Incidents by Incident Type (Chart 8)
Based on 18 Incidents

- Cut: 5.56%
- Strain/Overexertion: 16.67%
- Slip/Fall: Different Level: 11.11%
- Caught Between/In: 38.89%
- Struck Against: 11.11%
- Struck By: 16.67%
South America Water Total Lost Time Incidents by Equipment (Chart 9)
Based on 6 Incidents

- Crane: 50.00%
- Iron Roughneck, Pipe Spinner, etc.: 16.67%
- Hand Tools: Power: 16.67%
- Decks (grating, walkway): 16.67%

Total: 100.00%
South America Water Total Recordable Incidents by Equipment (Chart 10)
Based on 20 Incidents

- Crane: 15.00%
- Pressure Hoses/Lines: 5.00%
- Material: 15.00%
- BOP Stack (well head, tree): 10.00%
- Stairs: 5.00%
- Iron Roughneck, Pipe Spinner, etc.: 5.00%
- Pipes/Collars/Tubulars/Csg.: 10.00%
- Hand Tools: Manual: 15.00%
- Hand Tools: Power: 5.00%
- Engines/Pumps/Machinery: 10.00%
South America Water Total Lost Time Incidents by Operation (Chart 11)
Based on 6 Incidents

- Material Handling: Crane/Cherry Picker 50.00%
- Tripping in/out 16.67%
- Equipment Repairs or Maintenance 16.67%
- Walking 16.67%
South America Water Total Recordable Incidents by Operation (Chart 12)
Based on 20 Incidents

- Tripping in/out: 5.00%
- Laying Down/Picking up Tubulars: 10.00%
- Material Handling: Manual: 25.00%
- Equipment Repairs or Maintenance: 20.00%
- Material Handling: Crane/Cherry Picker: 20.00%
- BOP Stack Install/Maintenance: 10.00%
- Walking: 10.00%
South America Water Total Lost Time Incidents by Location (Chart 13)
Based on 6 Incidents

- Pipe Rack/ Pipe Deck: 33.33%
- Rig Floor: 33.33%
- Cellar / Sub / Moonpool: 16.67%
- Rig Pad/ Rig Decks: 16.67%
South America Water Total Recordable Incidents by Location (Chart 14)
Based on 20 Incidents

- Anchor Winch Station/Area: 5.00%
- Cellar / Sub / Moonpool: 15.00%
- Engine Generator Room: 5.00%
- Catwalk/V-door: 5.00%
- Pipe Rack/Pipe Deck: 20.00%
- Rig Floor: 20.00%
- Work Rooms change, storage, room: 10.00%
- Stairs/Ladders: 5.00%
- Rig Pad/Rig Decks: 10.00%
South America Water Total Lost Time Incidents by Time in Service (Chart 15)
Based on 6 Incidents

>5 yrs. < 10 yrs.
16.67%

>1 yr. < 5 yrs.
83.33%
South America Water Total Recordable Incidents by Time in Service (Chart 16)
Based on 20 Incidents

- >1 yr. < 5 yrs. 75.00%
- >6 mos. < 1 yr. 10.00%
- >5 yrs. < 10 yrs. 5.00%
- 0 mo. < 3 mos. 5.00%
- >10 yrs. 5.00%
- >5 yrs. < 10 yrs. 5.00%
- >6 mos. < 1 yr. 10.00%
- >1 yr. < 5 yrs. 75.00%
- >6 mos. < 1 yr. 10.00%
- >10 yrs. 5.00%
- >5 yrs. < 10 yrs. 5.00%
- 0 mo. < 3 mos. 5.00%
- >1 yr. < 5 yrs. 75.00%
- >6 mos. < 1 yr. 10.00%
- >10 yrs. 5.00%
- >5 yrs. < 10 yrs. 5.00%
- 0 mo. < 3 mos. 5.00%
- >1 yr. < 5 yrs. 75.00%
- >6 mos. < 1 yr. 10.00%
- >10 yrs. 5.00%
- >5 yrs. < 10 yrs. 5.00%
- 0 mo. < 3 mos. 5.00%
- >1 yr. < 5 yrs. 75.00%
- >6 mos. < 1 yr. 10.00%
- >10 yrs. 5.00%
- >5 yrs. < 10 yrs. 5.00%
- 0 mo. < 3 mos. 5.00%
- >1 yr. < 5 yrs. 75.00%
- >6 mos. < 1 yr. 10.00%
- >10 yrs. 5.00%
- >5 yrs. < 10 yrs. 5.00%
- 0 mo. < 3 mos. 5.00%
- >1 yr. < 5 yrs. 75.00%
- >6 mos. < 1 yr. 10.00%
- >10 yrs. 5.00%
- >5 yrs. < 10 yrs. 5.00%
- 0 mo. < 3 mos. 5.00%
- >1 yr. < 5 yrs. 75.00%
- >6 mos. < 1 yr. 10.00%
- >10 yrs. 5.00%
- >5 yrs. < 10 yrs. 5.00%
- 0 mo. < 3 mos. 5.00%
- >1 yr. < 5 yrs. 75.00%
- >6 mos. < 1 yr. 10.00%
- >10 yrs. 5.00%
- >5 yrs. < 10 yrs. 5.00%
- 0 mo. < 3 mos. 5.00%
- >1 yr. < 5 yrs. 75.00%
- >6 mos. < 1 yr. 10.00%
- >10 yrs. 5.00%
- >5 yrs. < 10 yrs. 5.00%
- 0 mo. < 3 mos. 5.00%
- >1 yr. < 5 yrs. 75.00%
- >6 mos. < 1 yr. 10.00%
- >10 yrs. 5.00%
- >5 yrs. < 10 yrs. 5.00%
- 0 mo. < 3 mos. 5.00%
- >1 yr. < 5 yrs. 75.00%
- >6 mos. < 1 yr. 10.00%
- >10 yrs. 5.00%
- >5 yrs. < 10 yrs. 5.00%
- 0 mo. < 3 mos. 5.00%
- >1 yr. < 5 yrs. 75.00%
- >6 mos. < 1 yr. 10.00%
- >10 yrs. 5.00%
South America Water Total Lost Time Incidents by Time of Day (Chart 17)
Based on 3 Incidents
South America Water Total Recordable Incidents by Time of Day (Chart 18)
Based on 16 Incidents

- 11:00: 18.75%
- 10:00: 6.25%
- 9:00: 12.50%
- 8:00: 6.25%
- 2:00: 6.25%
- 1:00: 12.50%
- 22:00: 6.25%
- 21:00: 6.25%
- 20:00: 6.25%
- 19:00: 6.25%
- 18:00: 6.25%
- 16:00: 6.25%
South America Water Total Lost Time Incidents by Age (Chart 19)
Based on 6 Incidents

- 26 - 35: 50.00%
- 36 - 45: 33.33%
- 18 - 25: 16.67%
South America Water Total Recordable Incidents by Age (Chart 20)
Based on 15 Incidents

18 - 25
6.67%

36 - 45
40.00%

26 - 35
53.33%