IADC

IADC ISP PROGRAM

2017

Summary of Occupational Incidents
(South America Water Totals)

Issued 15 June 2018
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IADC 2017 South America Water Totals (Table 1)

<table>
<thead>
<tr>
<th>Total</th>
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<tbody>
<tr>
<td>Total Man-hours</td>
<td>8,824,098</td>
</tr>
<tr>
<td>Total Medical Treatment Incidents</td>
<td>3</td>
</tr>
<tr>
<td>Total Restricted Work Incidents</td>
<td>0</td>
</tr>
<tr>
<td>Total Lost Time Incidents</td>
<td>9</td>
</tr>
<tr>
<td>Total Fatalities</td>
<td>0</td>
</tr>
<tr>
<td>Total Recordables</td>
<td>12</td>
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</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>MTO Incidence Rate</td>
<td>0.07</td>
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<tr>
<td>RWC Incidence Rate</td>
<td>0.00</td>
</tr>
<tr>
<td>LTI Incidence Rate</td>
<td>0.20</td>
</tr>
<tr>
<td>LTI Frequency Rate</td>
<td>1.02</td>
</tr>
<tr>
<td>DART Incidence Rate</td>
<td>0.20</td>
</tr>
<tr>
<td>DART Frequency Rate</td>
<td>1.02</td>
</tr>
<tr>
<td>Recordable Incidence Rate</td>
<td>0.27</td>
</tr>
<tr>
<td>Recordable Frequency Rate</td>
<td>1.36</td>
</tr>
</tbody>
</table>

Companies Reporting: Water – 11

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
DART Incidence Rate = LTIs + RWC X 200,000
Recordable Incidence Rate = RCRD X 200,000

South America Water Total Incidence Rates vs Man-hours (Figure 1)
IADC 2017 South America Water Charts
South America Water Total Lost Time Incidents by Month (Chart 1)
Based on 9 Incidents

- June: 22.22%
- September: 22.22%
- April: 11.11%
- January: 22.22%
- October: 11.11%
- December: 11.11%
South America Water Total Recordable Incidents by Month (Chart 2)
Based on 12 Incidents

December 8.33%
October 8.33%
September 16.67%
June 16.67%
April 16.67%
January 33.33%
South America Water Total Lost Time Incidents by Occupation (Chart 3)
Based on 9 Incidents

- Roustabout (Lease Hand): 11.11%
- Floorman: 11.11%
- Derrickman: 22.22%
- Driller (Asst. Dr.): 22.22%
- Motorman: 11.11%
- Rig Helper: 11.11%
- Welder: 11.11%

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South America Water Total Recordable Incidents by Occupation (Chart 4)
Based on 12 Incidents

- Subsea Engineer: 8.33%
- Roustabout (Lease Hand): 8.33%
- Floorman: 25.00%
- Driller (Asst. Dr.): 16.67%
- Derrickman: 16.67%
- Subsea Engineer: 8.33%
- Rig Helper: 8.33%
- Motorman: 8.33%
- Welder: 8.33%
South America Water Total Lost Time Incidents by Body Part (Chart 5)
Based on 9 Incidents

- Feet/Ankles: 33.33%
- Finger(s): 44.44%
- Back: 11.11%
- Arm(s): 11.11%
South America Water Total Recordable Incidents by Body Part (Chart 6)
Based on 12 Incidents

- Finger(s) 50.00%
- Feet/Ankles 25.00%
- Head 8.33%
- Back 8.33%
- Arm(s) 8.33%
South America Water Total Lost Time Incidents by Incident Type (Chart 7)
Based on 9 Incidents

- Slip/Fall: Same Level 11.11%
- Sprain 11.11%
- Cut 22.22%
- Struck By 11.11%
- Caught Between/In 44.44%

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South America Water Total Recordable Incidents by Incident Type (Chart 8)
Based on 12 Incidents

- Sprain: 8.33%
- Cut: 16.67%
- Slip/Fall: Same Level: 8.33%
- Caught Between/In: 50.00%
- Struck By: 16.67%

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South America Water Total Lost Time Incidents by Equipment (Chart 9)
Based on 9 Incidents

- Top Drive (blocks, swivel, kelly) 11.11%
- Material 11.11%
- Engines/Pumps/Machinery 11.11%
- Pipes/Collars/Tubulars/Csg. 11.11%
- Welding, Cutting, Grinding Equipment 11.11%
- Rotary 11.11%
- Hand Tools: Manual 11.11%
- Slings (rope, cable, chain, web) 11.11%
- Decks (grating, walkway) 11.11%

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South America Water Total Recordable Incidents by Equipment (Chart 10)
Based on 12 Incidents

- Top Drive (blocks, swivel, kelly) 8.33%
- Welding, Cutting, Grinding Equipment 8.33%
- Material 16.67%
- Slings (rope, cable, chain, web) 8.33%
- Rotary 8.33%
- Pipes/Collars/Tubulars/Csg. 8.33%
- Decks (grating, walkway) 16.67%
- Engines/Pumps/Machinery 8.33%
- Hand Tools: Manual 16.67%
- Top Drive (blocks, swivel, kelly) 8.33%
- Welding, Cutting, Grinding Equipment 8.33%
- Material 16.67%
- Slings (rope, cable, chain, web) 8.33%
- Rotary 8.33%
- Pipes/Collars/Tubulars/Csg. 8.33%
- Decks (grating, walkway) 16.67%
- Engines/Pumps/Machinery 8.33%
- Hand Tools: Manual 16.67%
South America Water Total Lost Time Incidents by Operation (Chart 11)
Based on 9 Incidents

- Material Handling: Manual 11.11%
- Tripping in/out 11.11%
- Equipment Repairs or Maintenance 22.22%
- Special Operations 11.11%
- Abrasive Blasting/Paint/Scale Removal 11.11%
- Walking 33.33%
South America Water Total Recordable Incidents by Operation (Chart 12)
Based on 12 Incidents

- Tripping in/out: 8.33%
- Material Handling: Manual: 25.00%
- Equipment Repairs or Maintenance: 25.00%
- Special Operations: 8.33%
- Abrasive Blasting/Paint/Scale Removal: 8.33%
- Walking: 25.00%
South America Water Total Lost Time Incidents by Location (Chart 13)
Based on 9 Incidents

- Engine Generator Room: 11.11%
- Rig Pad/Rig Decks: 11.11%
- Mud Pump Room: 22.22%
- Derrick/Mast: 11.11%
- Shale Shaker: 22.22%
- Rig Floor: 22.22%
- Rig Pad/ Rig Decks: 11.11%
South America Water Total Recordable Incidents by Location (Chart 14)
Based on 12 Incidents

- Rig Pad/Rig Decks: 8.33%
- Cellar/Sub/Moonpool: 8.33%
- Engine Generator Room: 8.33%
- Mud Pump Room: 16.67%
- Shale Shaker: 16.67%
- Derrick/Mast: 8.33%
- Rig Floor: 33.33%
South America Water Total Lost Time Incidents by Time in Service (Chart 15)

Based on 9 Incidents

- >1 yr. < 5 yrs.: 33.33%
- >6 mos. < 1 yr.: 11.11%
- 0 mo. < 3 mos.: 11.11%
- >6 mo. < 1 yr.: 11.11%
- >5 yrs. < 10 yrs.: 33.33%
- 10+ yrs.: 11.11%
- 0 mo. < 3 mos.: 11.11%
- >1 yr. < 5 yrs.: 33.33%
South America Water Total Recordable Incidents by Time in Service (Chart 16)
Based on 12 Incidents

- >10 yrs.: 8.33%
- >5 yrs. < 10 yrs.: 41.67%
- >1 yr. < 5 yrs.: 33.33%
- >6 mos. < 1 yr.: 8.33%
- 0 mo. < 3 mos.: 8.33%
- 0 mo. < 3 mos.: 8.33%
South America Water Total Lost Time Incidents by Time of Day (Chart 17)
Based on 9 Incidents

<table>
<thead>
<tr>
<th>Time of Day</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00</td>
<td>33.33%</td>
</tr>
<tr>
<td>18:00</td>
<td>11.11%</td>
</tr>
<tr>
<td>17:00</td>
<td>11.11%</td>
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<tr>
<td>14:00</td>
<td>11.11%</td>
</tr>
<tr>
<td>12:00</td>
<td>11.11%</td>
</tr>
<tr>
<td>8:00</td>
<td>11.11%</td>
</tr>
<tr>
<td>23:00</td>
<td>11.11%</td>
</tr>
</tbody>
</table>
South America Water Total Recordable Incidents by Time of Day (Chart 18)
Based on 12 Incidents

- 23:00: 8.33%
- 18:00: 8.33%
- 17:00: 8.33%
- 14:00: 8.33%
- 1:00: 8.33%
- 4:00: 8.33%
- 3:00: 8.33%
- 2:00: 25.00%
- 8:00: 8.33%
- 12:00: 8.33%
South America Water Total Lost Time Incidents by Age (Chart 19)
Based on 8 Incidents

- 26 - 35: 50.00%
- 18 - 25: 12.50%
- 36 - 45: 37.50%

- 26 - 35
- 36 - 45
- 18 - 25

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South America Water Total Recordable Incidents by Age (Chart 20)
Based on 10 Incidents

- 18 - 25: 20.00%
- 26 - 35: 50.00%
- 36 - 45: 30.00%