IADC
ISP PROGRAM

2017

Summary of Occupational Incidents
(South America Land Totals)

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

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<thead>
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<th>Total Manhours</th>
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<td>Total Restricted Work Incidents</td>
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<td>Total Lost Time Incidents</td>
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<td>Recordable Frequency Rate</td>
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Companies Reporting: Land – 8

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 Land Total Incidence Rates vs Man-hours (Figure 1)
IADC 2017 South America Land Charts
South America Land Total Lost Time Incidents by Month (Chart 1)
Based on 12 Incidents

November 8.33%
October 25.00%
September 16.67%
August 16.67%
March 16.67%
January 8.33%
June 8.33%
South America Land Total Recordable Incidents by Month (Chart 2)
Based on 40 Incidents

- January: 15.00%
- February: 5.00%
- March: 10.00%
- April: 2.50%
- May: 12.50%
- June: 5.00%
- July: 5.00%
- August: 12.50%
- September: 7.50%
- October: 15.00%
- November: 7.50%
- December: 2.50%
- May: 12.50%
- August: 12.50%
- September: 7.50%
- October: 15.00%
- November: 7.50%
- December: 2.50%
- January: 15.00%
- February: 5.00%
- March: 10.00%
- April: 2.50%
- May: 12.50%
- June: 5.00%
- July: 5.00%
- August: 12.50%
- September: 7.50%
- October: 15.00%
- November: 7.50%
- December: 2.50%
South America Land Total Lost Time Incidents by Occupation (Chart 3)
Based on 12 Incidents

- Truck Helper: 8.33%
- Rig Helper: 8.33%
- Mechanic (Repair Technician): 16.67%
- Motorman: 8.33%
- Floorman: 41.67%
- Crane Operator (Forklift Operator): 8.33%
- Toolpusher (Asst.TP, Tourpusher): 8.33%
South America Land Total Recordable Incidents by Occupation (Chart 4)
Based on 40 Incidents

- Safety Officer: 2.50%
- Welder: 5.00%
- Truck Helper: 2.50%
- Rig Helper: 15.00%
- Superintendent/other Supervisors: 2.50%
- Crane Operator (Forklift Operator): 2.50%
- Mechanic (Repair Technician): 10.00%
- Motorman: 2.50%
- Toolpusher (Asst.TP, Tourpusher): 7.50%
- Driller (Asst. Dr.): 2.50%
- Roustabout (Lease Hand): 5.00%
- Floorman: 30.00%
- Derrickman: 12.50%
- Floorman: 30.00%
South America Land Total Lost Time Incidents by Body Part (Chart 5)
Based on 12 Incidents

- Feet/Ankles: 16.67%
- Finger(s): 41.67%
- Hand(s)/Wrist(s): 8.33%
- Arm(s): 16.67%
- Trunk/Torso (chest, abdomen, groin): 8.33%
- Eyes (eyelid): 8.33%

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South America Land Total Recordable Incidents by Body Part (Chart 6)
Based on 40 Incidents

- Finger(s) 42.50%
- Feet/Ankles 17.50%
- Knee(s) 2.50%
- Eyes (eyelid) 2.50%
- Trunk/Torso (chest, abdomen, groin) 2.50%
- Head 15.00%
- Arm(s) 7.50%
- Hands/Wrist(s) 10.00%
South America Land Total Lost Time Incidents by Incident Type (Chart 7)
Based on 12 Incidents

- Caught Between/In: 58.33%
- Struck By: 16.67%
- Contact With Chemicals/Fluids: 8.33%
- Slip/Fall: Different Level: 16.67%
South America Land Total Recordable Incidents by Incident Type (Chart 8)

Based on 40 Incidents

- Caught Between/In: 37.50%
- Struck By: 27.50%
- Sprain: 2.50%
- Cut: 2.50%
- Contact With Chemicals/Fluids: 5.00%
- Struck Against: 7.50%
- Slip/Fall: Different Level: 12.50%
- Slip/Fall: Same Level: 5.00%
South America Land Total Lost Time Incidents by Equipment (Chart 9)
Based on 11 Incidents

- Iron Roughneck, Pipe Spinner, etc. 9.09%
- Tongs 9.09%
- Winch Truck 9.09%
- Forklift 9.09%
- Pipes/Collars/Tubulars/Casing 9.09%
- Slings (rope, cable, chain, web) 9.09%
- Pipes/ Collars/ Tubulars/ Casing
- Engines/ Pumps/ Machinery 9.09%
- Stairs 9.09%
- Well Control (BOP) Stack (well head, tree) 9.09%
- Material 18.18%
- Slings (rope, cable, chain, web)
- Winch Truck
- Iron Roughneck, Pipe Spinner, etc.
- Tongs
- Forklift
- Pipes/ Collars/ Tubulars/ Casing
- Engines/ Pumps/ Machinery
- Stairs
- Well Control (BOP) Stack (well head, tree)
- Material
- Slings (rope, cable, chain, web)
South America Land Total Recordable Incidents by Equipment (Chart 10)
Based on 38 Incidents

- Anchor Chains/Cables/Winches 2.63%
- Rig Floor Winch/Deck Winch (air/hydraulic) 5.26%
- Tongs 2.63%
- Iron Roughneck, Pipe Spinner, etc. 5.26%
- Anchor Chains/ Cables/ Winches 2.63%
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- Rig Floor Winch/Deck Winch (air/hydraulic) 5.26%
- Tongs 2.63%
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- Iron Roughneck, Pipe Spinner, etc. 5.26%
- Anchor Chains/Cables/Winches 2.63%
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- Tongs 2.63%
- Iron Roughneck, Pipe Spinner, etc. 5.26%
- Anchor Chains/Cables/Winches 2.63%
- Rig Floor Winch/Deck Winch (air/hydraulic) 5.26%
- Tongs 2.63%
- Iron Roughneck, Pipe Spinner, etc. 5.26%
South America Land Total Lost Time Incidents by Operation (Chart 11)
Based on 12 Incidents

- Rig Move (Towing/Anchor Handling): 8.33%
- Tripping in/out (makeup/brakeout BHA, test tools, etc.): 8.33%
- Routine Drilling Operations: 8.33%
- Laying Down/Picking up Pipe/Tubulars: 8.33%
- Rigging Up/Down (rig move preparation, rig move): 25.00%
- Well Control (BOP Stack (well head/tree) Install/Maintenance: 8.33%
- Rig/Equipment Repairs or Maintenance: 25.00%
- Painting (painting related tasks): 8.33%
- Rig Move (Towing/Anchor Handling): 8.33%
South America Land Total Recordable Incidents by Operation (Chart 12)
Based on 40 Incidents

- Rig Move (Towing/Anchor Handling) 2.50%
- Tripping in/out (makeup/brakeout BHA, test tools, etc.) 10.00%
- Making Connection 2.50%
- Routine Drilling Operations 15.00%
- Running Casing/Tubing (rig up/down csg. tools) 7.50%
- Laying Down/Picking up Pipe/Tubulars 5.00%
- Material Handling: Forklift 2.50%
- Rig/Equipment Repairs or Maintenance 25.00%
- Well Control (BOP) Stack (well head/tree) Install/Maintenance 5.00%
- Rigging Up/Down (rig move preparation, rig move) 17.50%
- Making Connection 2.50%
- Special Operations (wireline, perforating, etc.) 2.50%
- Well Testing 2.50%
- Painting (painting related tasks) 2.50%
South America Land Total Lost Time Incidents by Location (Chart 13)
Based on 12 Incidents

- **Winch Truck**: 8.33%
- **Cellar / Substructure / Moonpool**: 16.67%
- **Work Rooms (change house, storage house/room)**: 8.33%
- **Rig Pad / Rig Decks**: 25.00%
- **Pipe Rack / Pipe Deck**: 8.33%
- **Rig Floor (rotary, pipe set back area)**: 25.00%
- **Derrick / Mast (crown, monkey/stabbing board, a-frame)**: 8.33%
South America Land Total Recordable Incidents by Location (Chart 14)
Based on 40 Incidents

- Rig Floor (rotary, pipe set back area) 32.50%
- Living / Camp Areas / Accommodations 2.50%
- Work Rooms (change house, storage house/room) 2.50%
- Cellar / Substructure / Moonpool 7.50%
- Machinery Spaces 2.50%
- Mud Pump Room 5.00%
- Winch Truck 2.50%
- Rig Pad/Rig Decks 20.00%
- Mud Pits/Tanks 2.50%
- Shale Shaker 2.50%
- Winch Truck 2.50%
- Pipe Rack/ Pipe Deck 5.00%
- Catwalk/ V-door 2.50%
- Derrick/Mast (crown, monkey/stabbing board, a-frame) 5.00%
- Well Control (BOP) Stack (well head/tree) Area 5.00%
South America Land Total Lost Time Incidents by Time in Service (Chart 15)
Based on 12 Incidents

- >5 yrs. < 10 yrs. 25.00%
- >1 yr. < 5 yrs. 25.00%
- >6 mos. < 1 yr. 16.67%
- >3 mos. < 6 mos. 16.67%
- 0 mo. < 3 mos. 16.67%
South America Land Total Recordable Incidents by Time in Service (Chart 16)
Based on 40 Incidents

- >5 yrs. < 10 yrs. 15.00%
- 0 mo. < 3 mos. 17.50%
- >3 mos. < 6 mos. 12.50%
- >1 yr. < 5 yrs. 45.00%
- >6 mos. < 1 yr. 10.00%
South America Land Total Lost Time Incidents by Time of Day (Chart 17)
Based on 12 Incidents

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<td>19:00</td>
<td>16.67%</td>
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</table>
South America Land Total Recordable Incidents by Time of Day (Chart 18)
Based on 40 Incidents

- 24:00: 2.50%
- 23:00: 2.50%
- 22:00: 2.50%
- 21:00: 2.50%
- 19:00: 5.00%
- 18:00: 2.50%
- 16:00: 5.00%
- 15:00: 2.50%
- 14:00: 15.00%
- 13:00: 7.50%
- 12:00: 7.50%
- 11:00: 12.50%
- 10:00: 10.00%
- 9:00: 2.50%
- 8:00: 2.50%
- 7:00: 2.50%
- 6:00: 12.50%
- 5:00: 12.50%
- 4:00: 2.50%
- 3:00: 2.50%
- 2:00: 2.50%
- 1:00: 2.50%
- 0:00: 2.50%
South America Land Total Lost Time Incidents by Age (Chart 19)
Based on 11 Incidents

- 26 - 35: 54.55%
- 36 - 45: 27.27%
- 46 - 55: 9.09%
- 18 - 25: 9.09%
South America Land Total Recordable Incidents by Age (Chart 20)
Based on 31 Incidents

- 26 - 35: 41.94%
- 36 - 45: 29.03%
- 46 - 55: 9.68%
- 18 - 25: 16.13%
- 66 & Above: 3.23%