



Summary of Occupational Incidents

(European Land Totals)

Issued 15 June 2018



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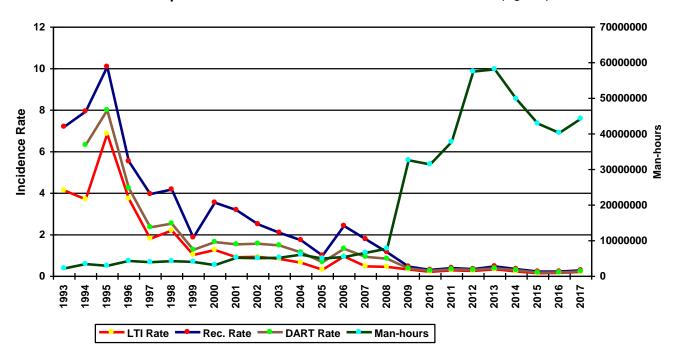
IADC 2017 European Land Totals (Table 1)

	<u>Total</u>
Total Man-hours	44,274,793
Total Medical Treatment Incidents	10
Total Restricted Work Incidents	8
Total Lost Time Incidents	43
Total Fatalities	3
Total Recordables	64
MTO Incidence Rate	0.05
RWC Incidence Rate	0.04
LTI Incidence Rate	0.21
LTI Frequency Rate	1.04
DART Incidence Rate	0.24
DART Frequency Rate	1.22
Recordable Incidence Rate	0.29
Recordable Frequency Rate	1.45

Companies Reporting: Land – 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 DART Incidence Rate = LTIs + RWC X 200,000 Recordable Incidence Rate = RCRD X 200,000

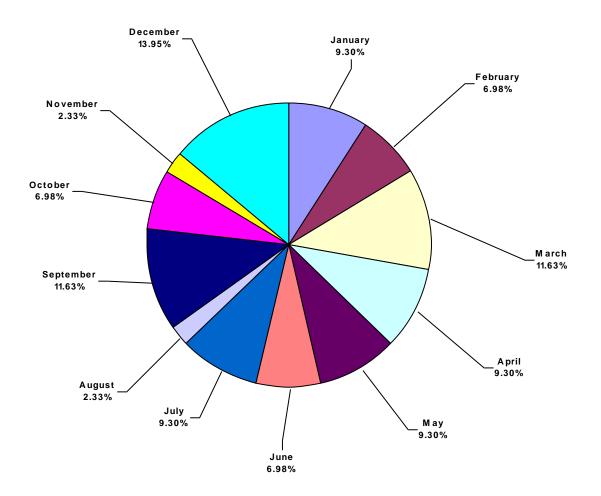
Lost Time Frequency Rate = LTIs +FTLs X 1,000,000 DART Frequency Rate = LTIs + RWC X 1,000,000 Recordable Frequency Rate = RCRD X 1,000,000



European Land Total Incidence Rates vs Man-hours (Figure 1)



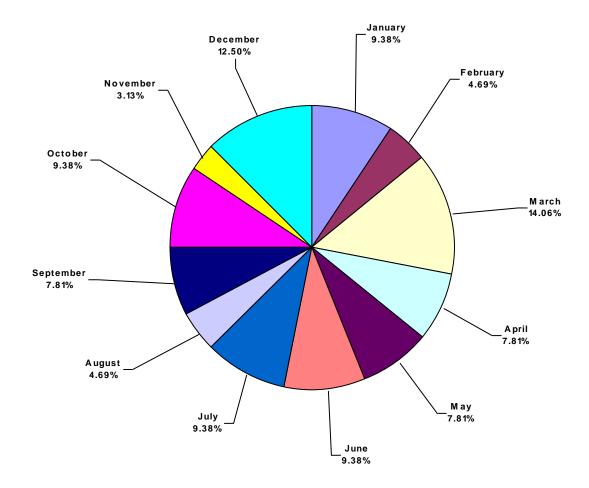
IADC 2017 European Land Charts European Land Total Lost Time Incidents by Month (Chart 1) Based on 43 Incidents



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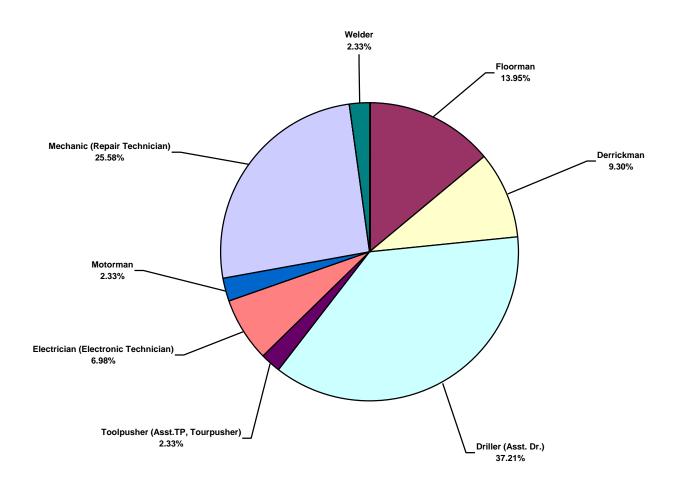


European Land Total Recordable Incidents by Month (Chart 2) Based on 64 Incidents





European Land Total Lost Time Incidents by Occupation (Chart 3) Based on 43 Incidents



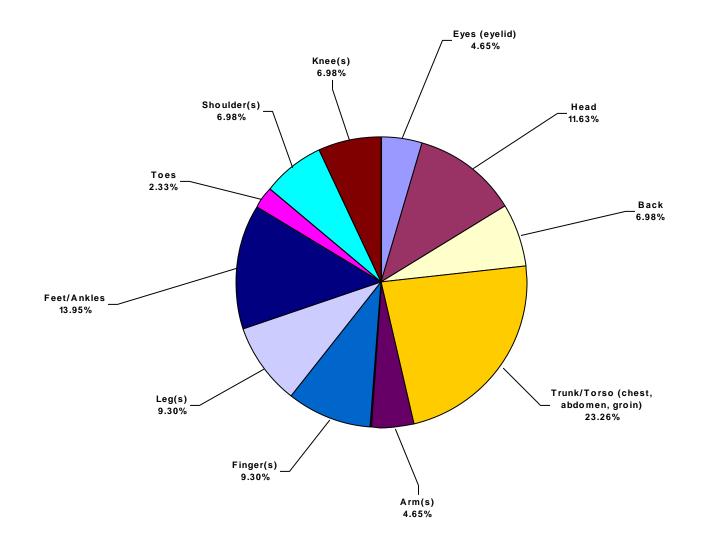


Welder Roustabout (Lease Hand) 1.56% 3.13% Floorman 18.75% Mechanic (Repair Technician) 20.31% Motorman 3.13% Derrickman 14.06% Electrician (Electronic Technician) 7.81% Toolpusher (Asst.TP, Tourpusher) . 1.56% Driller (Asst. Dr.) 29.69%

European Land Total Recordable Incidents by Occupation (Chart 4) Based on 64 Incidents

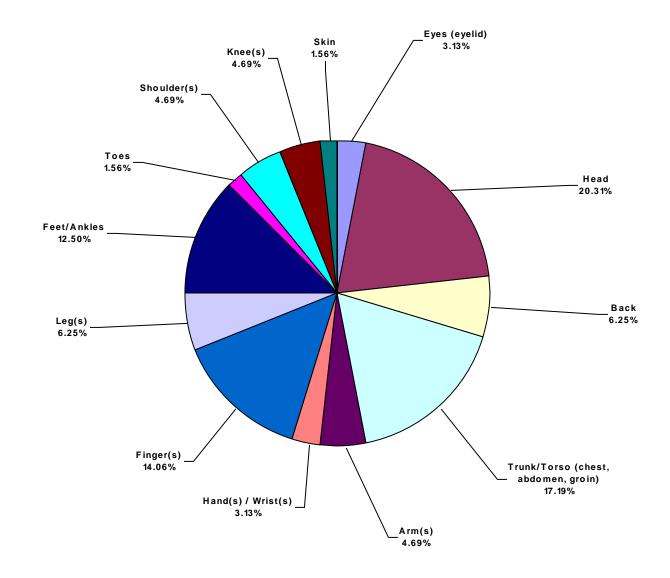


European Land Total Lost Time Incidents by Body Part (Chart 5) Based on 43 Incidents



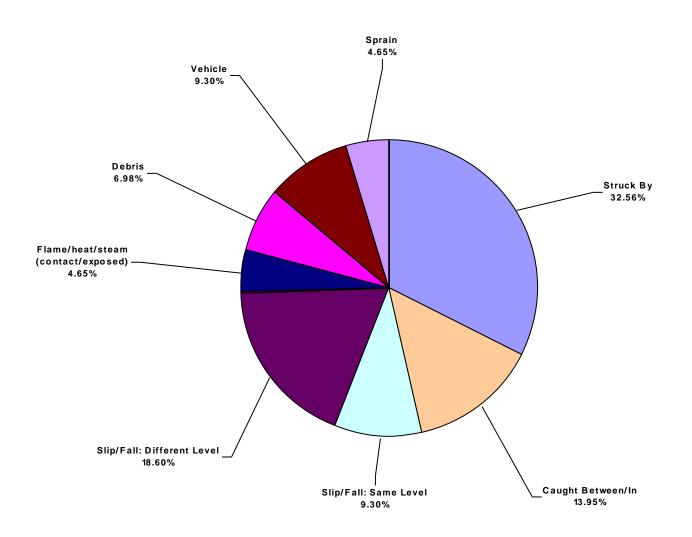


European Land Total Recordable Incidents by Body Part (Chart 6) Based on 64 Incidents



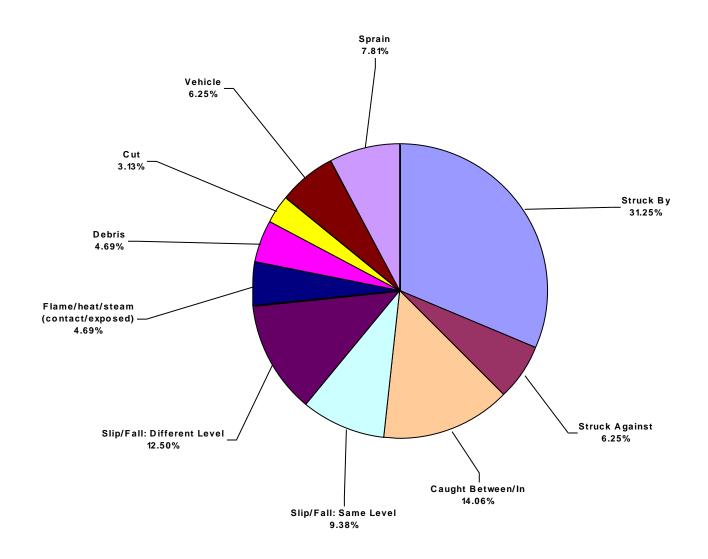


European Land Total Lost Time Incidents by Incident Type (Chart 7) Based on 43 Incidents



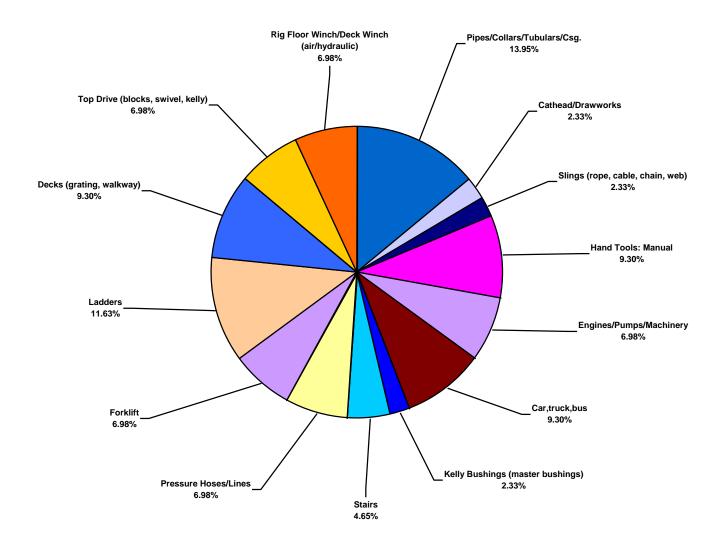


European Land Total Recordable Incidents by Incident Type (Chart 8) Based on 64 Incidents





European Land Total Lost Time Incidents by Equipment (Chart 9) Based on 43 Incidents





Iron Roughneck, Pipe Rig Floor Winch/Deck Spinner, etc. Winch (air/hydraulic) 1.56% 4.69% Anchor Pipes/Collars/Tubulars/Cs Chains/Cables/Winches g. 1.56% 9.38% Top Drive (blocks, swivel, Cathead/Drawworks kelly) 1.56% 7.81% Slings (rope, cable, chain, Chemicals (sack, drum, web) pail, bulk hopper) 4.69% 1.56% Hand Tools: Manual Decks (grating, walkway) 14.06% 9.38% Engines/Pumps/Machinery Ladders 6.25% 7.81% Forklift Car,truck,bus 6.25% 7.81% Kelly Bushings (master Pressure Hoses/Lines bushings) 6.25% 1.56% M aterial 1.56% Well Control (BOP) Stack Stairs (well head, tree) 4.69% 1.56%

European Land Total Recordable Incidents by Equipment (Chart 10) Based on 64 Incidents



Tripping in/out (makeup/brakeout BHA, Rig Move (Towing/Anchor test tools, etc.) Making Connection Handling) 6.98% 2.33% 4.65% Travel/Transportation Laying Down/Picking up 6.98% Pipe/Tubulars 4.65% Material Handling: Manual Walking 6.98% 9.30% Material Handling: Crane/Cherry Picker 2.33% Cementing 2.33% Material Handling: Forklift 6.98% Material Handling: Rig **Rig/Equipment Repairs or** Floor Winch Maintenance 4.65% 25.58% Rigging Up/Down (rig move Well Control (BOP) Stack preparation, rig move) (well head/tree) 13.95% Install/Maintenance 2.33%

European Land Total Lost Time Incidents by Operation (Chart 11) Based on 43 Incidents



Tripping in/out Rig Move (Towing/Anchor Making Connection Travel/Transportation (makeup/brakeout BHA, Handling) 1.56% 6.25% test tools, etc.) 4.69% 9.38% Walking Laying Down/Picking up 9.38% Pipe/Tubulars 3.13% Special Operations (wireline, perforating, etc.) -Material Handling: Manual 1.56% 9.38% Material Handling: Cementing Crane/Cherry Picker 1.56% 3.13% M ud M ixing/P umping Material Handling: Forklift 1.56% 6.25% Material Handling: Rig Floor Winch 3.13% Rig/Equipment Repairs or M aintenance 23.44% Rigging Up/Down (rig move preparation, rig move) 12.50% Well Control (BOP) Stack (well head/tree) Install/Maintenance 3.13%

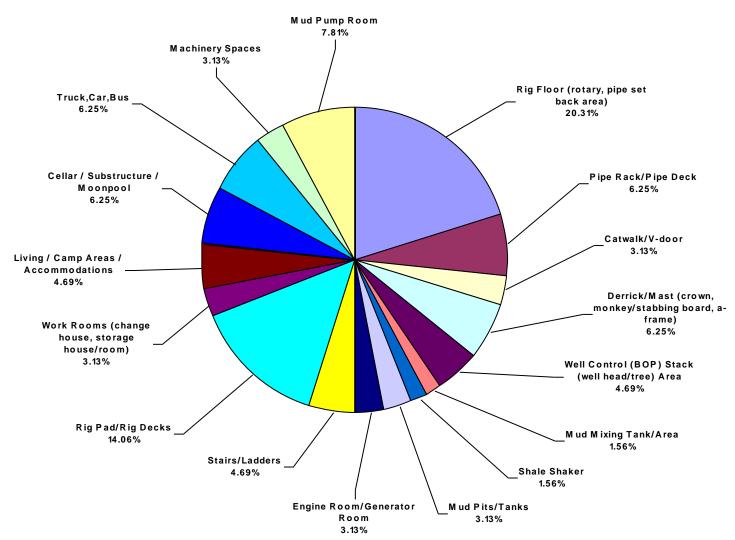
European Land Total Recordable Incidents by Operation (Chart 12) Based on 64 Incidents



Mud Pump Room 6.98% **Machinery Spaces** Rig Floor (rotary, pipe set 4.65% back area) 18.60% Truck,Car,Bus 6.98% Cellar / Substructure / Pipe Rack/Pipe Deck Moonpool 9.30% 6.98% Living / Camp Areas / Catwalk/V-door Accommodations 4.65% 4.65% Derrick/Mast (crown, monkey/stabbing board, aframe) Work Rooms (change 6.98% house, storage house/room) 2.33% Well Control (BOP) Stack (well head/tree) Area 4.65% Rig Pad/Rig Decks 11.63% Mud Pits/Tanks Stairs/Ladders 2.33% 4.65% Engine Room/Generator Room 4.65%

European Land Total Lost Time Incidents by Location (Chart 13) Based on 43 Incidents

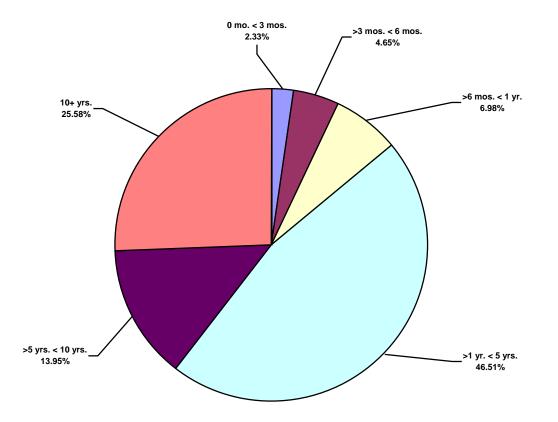




European Land Total Recordable Incidents by Location (Chart 14) Based on 64 Incidents

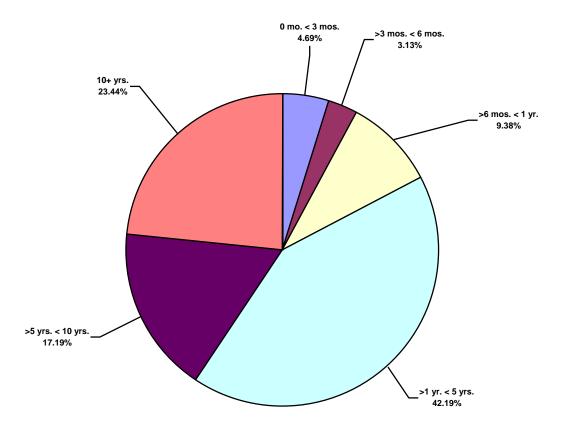


European Land Total Lost Time Incidents by Time in Service (Chart 15) Based on 43 Incidents

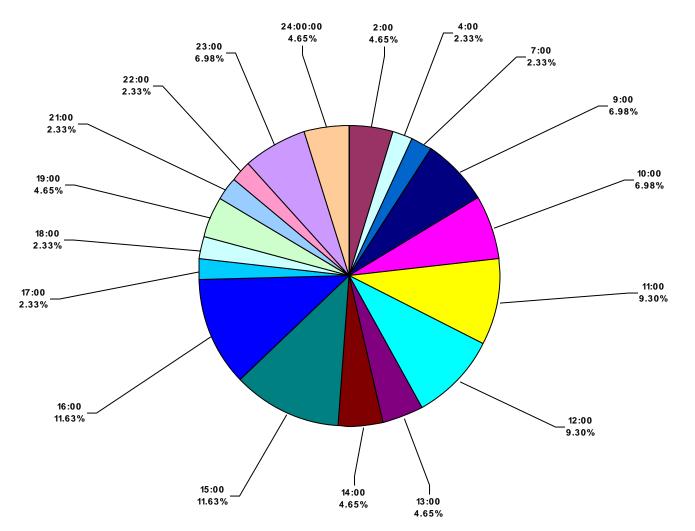




European Land Total Recordable Incidents by Time in Service (Chart 16) Based on 64 Incidents

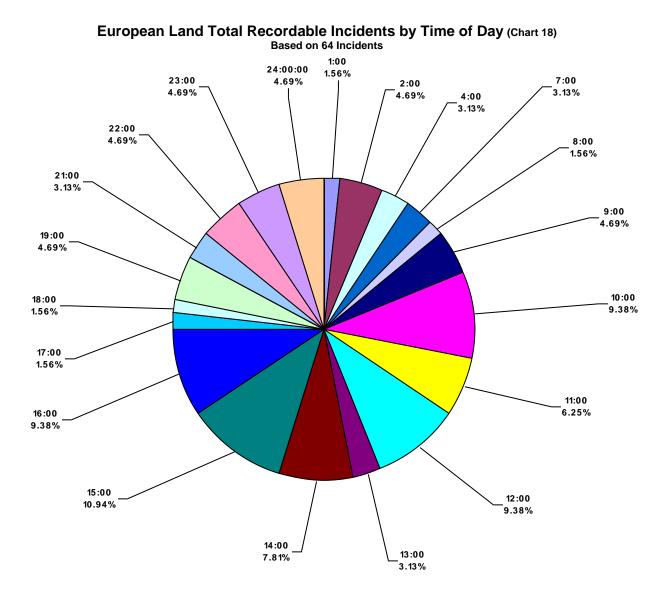




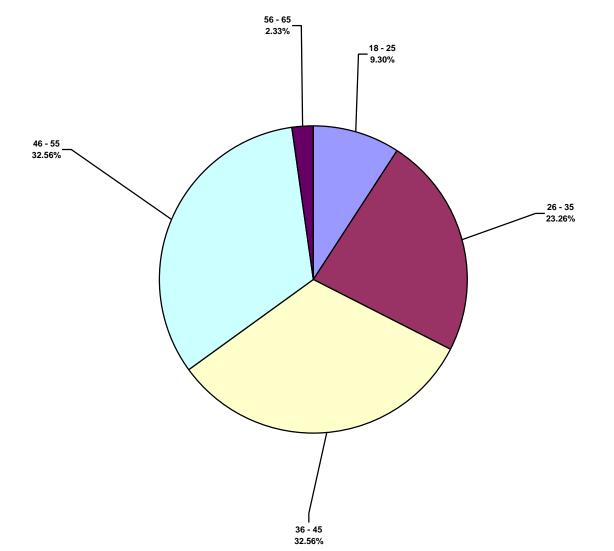


European Land Total Lost Time Incidents by Time of Day (Chart 17) Based on 43 Incidents









European Land Total Lost Time Incidents by Age (Chart 19) Based on 43 Incidents



56 - 65 1.56% 18 - 25 10.94% 46 - 55 28.13% 26 - 35 28.13% 36 - 45 31.25%

European Land Total Recordable Incidents by Age (Chart 20) Based on 64 Incidents