

# RasGas Sub Surface Safety Stats Q2 2011 & Q3 2011



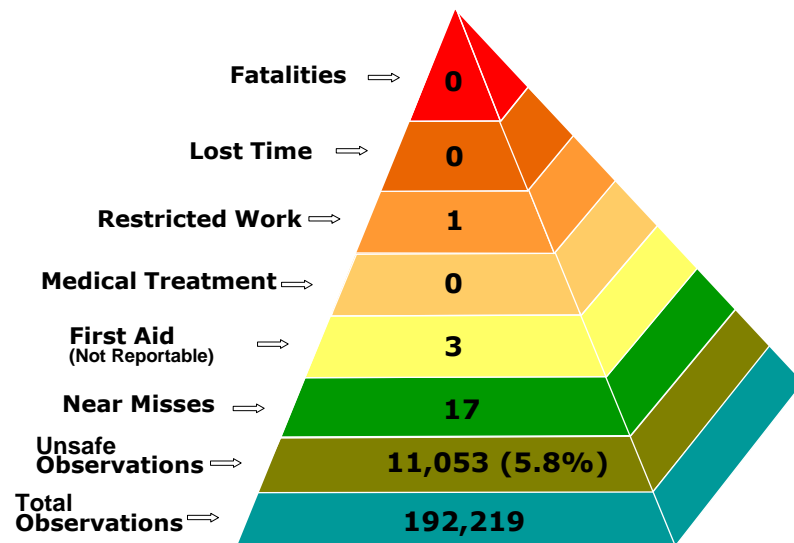
# Safety, Health & Environment

- Consecutive Pain Free Days through end Q3 2011:

Q3 2011	NJP	E94	E88	Base	Marine
	333	226	54	646	490

- Achieved 16 million man hours and 1,563 days worked since last LTI
- Achieved 2011 Observation Card KPI of 180K
- Performed Health & Hygiene Inspections / Audits for Vessels, Rigs and Third Party Vendors
- Rolled out Slips, Trips and Falls Awareness Campaign
- Completed 2011 Heat Stress Prevention Program with no major incidents
- Implemented and completed training of Hazard Analysis and Critical Control Points (HACCP) for all vessels
- Completed revision of RasGas Environmental Management Procedure
- Completed Noise Surveys for all Marine Vessels and Drilling Shorebase
- RLIC 11 & RLIC 15 Stimulation projects completed without any incident
- Completed HRP Training for RasGas Marine Vessel fleet

**Safety Pyramid - End Q3 2011**



	End Q2 2011	End Q3 2011
STOP Observations	133,738	192,219
Lost Time Incident Rate (LTIR) (per 1,000,000 hrs)	0.00	0.00
Total Recordable Incident Rate (TRIR) (per 1,000,000 hrs)	0.00	0.51
Total Hurt Incident Rate (THIR) (per 1,000,000 hrs)	1.47	2.02

# RasGas Subsurface

## Incident Investigation Report

**Rig:** Ensco 88

**Classification:** First Aid

**Description:** IP's hand pinched in-between rig tong  
and drill pipe in mouse hole

**Potential Severity:** Level 2

**Date:** 25<sup>th</sup> June 2011

# What Happened:

## ***Operation at time of incident: Picking up 5-½" drill pipe going in hole with ST-80***

- Reviewed Work Instruction and JSA for picking up drill pipe with ST-80
- ST-80 hydraulic hose failed and the decision was made to complete picking up pipe with Rig tongs
- JSA was then held with crew on picking up drill pipe with the rig tongs
- The crew picked up 3 joints with no issues, only two roughnecks were handling the tongs at the time
- The crew picked up the 4<sup>th</sup> joint, made up with chain tongs, and installed rig tongs on the pipe in the rotary hole
- The IP (Floorhand) attempted to help the man working on the makeup tong by pulling the tongs around from the back handle
- The IP got his hand caught in-between the tong handle and joint of drill pipe in the mouse hole
- IP's hand got pinched causing ½" cut on hand between index finger and thumb
- IP was wearing new technology Kong Gloves at the time of incident



# Pictures:





# Findings:

## Root Causes:

- Equipment failure gave the chance to switch to other manual handling equipment
- Unreasonable increasing the possibility of hand injury by handling manual equipment
- Crew did not recognize or identify potential hazard of tongs striking pipe in mouse hole
- Work instruction available for picking up pipe with ST-80 but none available for picking up pipe with rig tongs
- Snub line in use was excessive in length for picking up pipe in mouse hole

## Corrective Actions:

- Whenever the ST-80 is estimated to be down for up to 2 hrs and with no open hole issues, then the OIM will decide to stop the operation and fix the ST-80 and not to switch to rig tongs, signage will be posted stating the same
- Change out all critical hoses on the ST-80 during a 12 month rolling period
- Develop WI for picking up drill pipe with rig tongs and send to Rig Manager for approval
- Change snub line of makeup tong from 8.5' to 7' Signage to be made and installed in the driller cabinet stating: "Driller's responsibility to ensure only 7' snub-lines or shorter to be used on rig makeup tong, toolpusher to be informed when changing the snub line"

# RasGas Subsurface

## Incident Investigation Report

**Rig:** Ensco 88

**Classification:** Restricted Work Injury

**Description:** IP's hand impacted and cut by BOP kill line hose flange

**Potential Severity:** Level 2

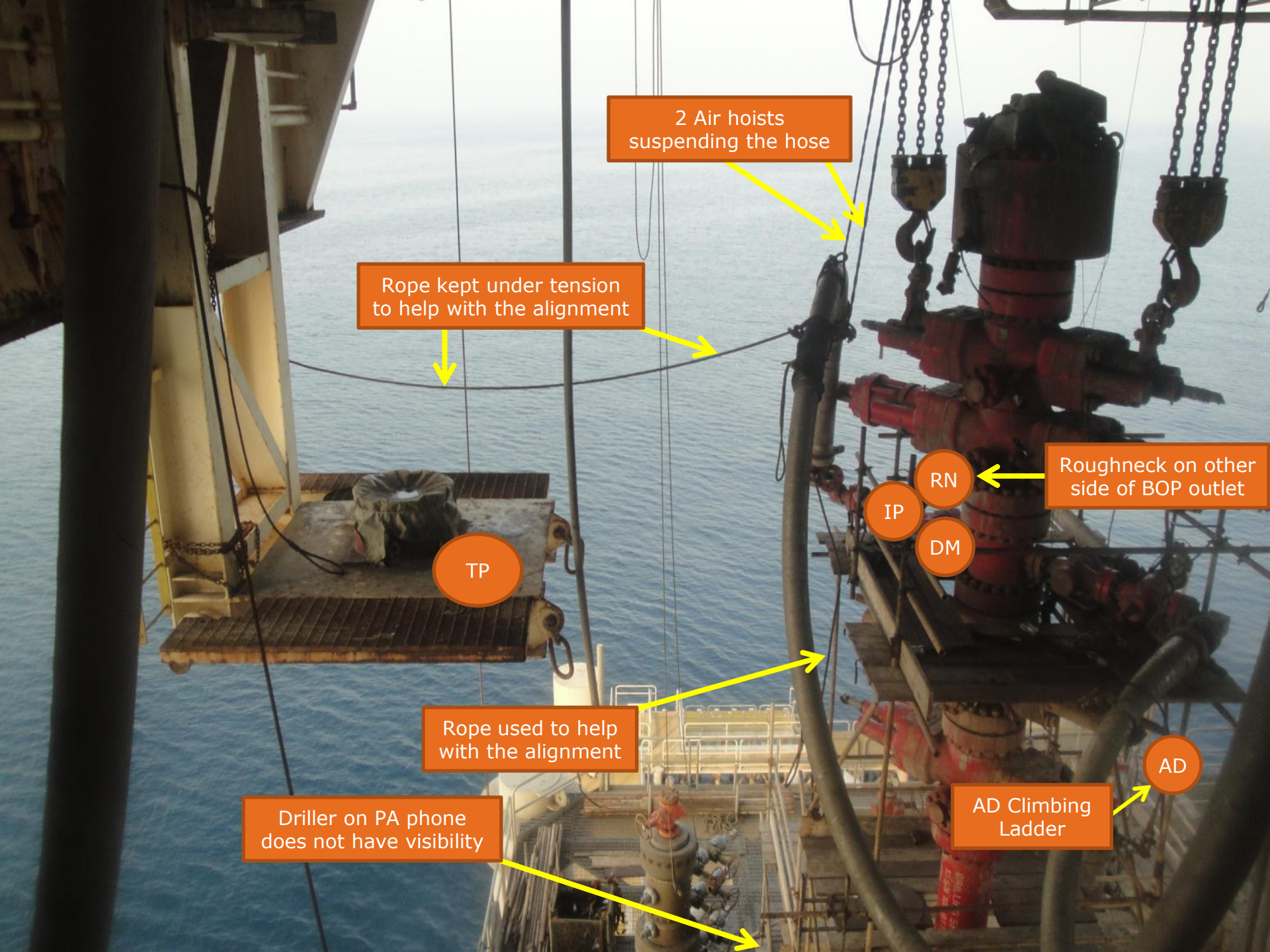
**Date:** 7<sup>th</sup> August 2011

# What Happened:

## ***Operation at time of incident: Nippling up BOP***

- Drill crew was connecting kill line hose to HCR valve flange
- After positioning Kill line hose flange over kill line HCR connection, a bolt was started into the flange
- Crew was attempting to tap bolt into the flange with a 2 lb. hammer
- Kill line came off flange connection and swung towards BOP resulting in Floor man's finger being pinched between kill line and BOP ram bonnet causing a severe laceration on base of IP's right ring finger
- Job was stopped and IP taken to medic, wound was cleaned and dressed. IP accompanied by Ensco Rig manager on Medevac to hospital in Doha
- Injury was evaluated by doctors, X-rays were negative for fracture and nerve damage, wound was closed with 4 sutures and dressed with bandage
- IP released for restricted duty and returned to rig on 8<sup>th</sup> August 2011





2 Air hoists  
suspending the hose

Rope kept under tension  
to help with the alignment

Roughneck on other side  
of BOP outlet

RN  
IP  
DM

TP

Rope used to help  
with the alignment

Driller on PA phone  
does not have visibility

AD Climbing  
Ladder

AD

# Findings:

## Root Causes:

- JSA procedure was not being followed properly and a corrective action to address this was not implemented successfully
- The hook up of both the choke and kill line is extremely difficult, yet the rig has not tried to address this by engineering out some of the problems and making it less hazardous
- Work Instruction used for connecting the choke and kill hoses specifically identify that hand placement and hand injuries are hazards that must be mitigated against, but it was not used during the JSA
- Unsafe rig up for the operation which created the stored energy in the hose when it jumped and impacted the IP's hand

## Corrective Actions:

- Full independent review of the choke and kill hose installation to be performed and all recommended additional equipment required to make this operation both safer and easier will be implemented
- All Supervisors and Crew Members will be re-trained in requirements of the JSA procedure. The leader for each of these training sessions will be the OIM assisted by the Toolpusher. Delegation of this training leadership will not be permitted
- Laminated copies of the Rigs, Work Instruction Index will be posted in the changing room and on the drill floor
- Key high risk operations will be audited by the OIM and Night Toolpusher to ensure complete compliance with the Ensco Safe Systems of Work



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