Snake Grip Failure on Drill Line

While conducting stringing down block operations on a platform rig in the Gulf of Mexico, a member of a four man work crew was struck with the 1 3/8” drill line when it failed to remain in the snake grip. The Injured Person (IP) was manning the hydraulic drill line spool winch control at the time of the incident. As the drill line cable attached to the snake grip was going through the last deadman sheave in the crown block, an “all stop” was given by another member of the work crew when he noticed the drill line cable coming out of the snake grip. Approximately ten to thirty seconds after the “all stop” was given, the drill line cable came free from the snake grip and fell toward the hydraulic drill line spool winch striking the IP on the left shoulder and right hip. The IP was put into a litter and lowered to the main deck, where he was treated by the Rig Medic. He was then transported to the closest hospital for treatment.

An investigation by BSEE concluded the following factors contributed to the incident:

- It was determined that the drill line cable was not properly degreased before being inserted into snake grip.
- The proper clamping method recommended by the manufacturer’s specifications was not utilized for the snake grip. Instead, manila rope and duct tape were used to secure the snake grip which may have prevented the drill line cable and snake grip from going through the block smoothly and contributing to the injury incident.

BSEE recommends the following when installing snake grips on to the drill line cable:

- Assure the manufacturer’s specifications and instructions for use of a snake grip are followed completely.
- Verify the correct sized snake grip is utilized for actual drill line diameter during operations.
• Drill line cables must be thoroughly degreased before insertion into snake grip.
• Use the proper manufacturer recommended clamps and tools to secure the snake grip to the cable.
• Maintain a safe operating speed on the drill line winch to ensure safety observers have adequate time to relay any and all safety concerns during operation.
• Be assertive in personnel placement while conducting this type operation. When possible, keep personnel clear of drop zones of all the overhead equipment and work.

NOTE:

• The International Association of Drilling Contractors (IADC) issued Safety Alert #11-20 titled, “DRILL LINE PULLS THROUGH WIRE ROPE SNAKE WHILE STRINGING BLOCKS.” Safety Alert #11-20 was issued August 2011. This Safety Alert addressed the importance of properly degreasing the wire cable prior to utilizing the snake grip equipment.
• Snake Grips are also known as: ‘Chinese Finger Locks’ or ‘Socks’.
• Below are examples of the proper banding and taping applications.

A Safety Alert is a tool used by BSEE to inform the offshore oil and gas industry of the circumstances surrounding an accident or a near miss. It also contains recommendations that should help prevent the recurrence of such an incident on the Outer Continental Shelf.