

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT
GULF OF MEXICO REGION

ACCIDENT INVESTIGATION REPORT

For Public Release

1. OCCURRED

DATE: **03-APR-2012** TIME: **1301** HOURS

2. OPERATOR: **Chevron U.S.A. Inc.**
REPRESENTATIVE:
TELEPHONE:
CONTRACTOR: **Ensco Offshore Co.**
REPRESENTATIVE:
TELEPHONE:

STRUCTURAL DAMAGE
 CRANE
 OTHER LIFTING DEVICE
 DAMAGED/DISABLED SAFETY SYS.
 INCIDENT >\$25K
 H2S/15MIN./20PPM
 REQUIRED MUSTER
 SHUTDOWN FROM GAS RELEASE
 OTHER **Load line severed by crane**

3. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR
ON SITE AT TIME OF INCIDENT:

6. OPERATION:

4. LEASE: **G02324**
AREA: **EI** LATITUDE:
BLOCK: **361** LONGITUDE:

PRODUCTION
 DRILLING
 WORKOVER
 COMPLETION
 HELICOPTER
 MOTOR VESSEL
 PIPELINE SEGMENT NO.
 OTHER

5. PLATFORM: **A**
RIG NAME: **ENSCO 68**

6. ACTIVITY: EXPLORATION (POE)
 DEVELOPMENT/PRODUCTION
(DOCD/POD)

8. CAUSE:

7. TYPE:

HISTORIC INJURY
 REQUIRED EVACUATION
 LTA (1-3 days)
 LTA (>3 days)
 RW/JT (1-3 days)
 RW/JT (>3 days)
 Other Injury
 FATALITY
 POLLUTION
 FIRE
 EXPLOSION
LWC HISTORIC BLOWOUT
 UNDERGROUND
 SURFACE
 DEVERTER
 SURFACE EQUIPMENT FAILURE OR PROCEDURES
COLLISION HISTORIC >\$25K <=\$25K

EQUIPMENT FAILURE
 HUMAN ERROR
 EXTERNAL DAMAGE
 SLIP/TRIP/FALL
 WEATHER RELATED
 LEAK
 UPSET H2O TREATING
 OVERBOARD DRILLING FLUID
 OTHER

9. WATER DEPTH: **306** FT.
10. DISTANCE FROM SHORE: **77** MI.
11. WIND DIRECTION: **ESE**
SPEED: **12** M.P.H.
12. CURRENT DIRECTION: **E**
SPEED: **2** M.P.H.
13. SEA STATE: **3** FT.

17. INVESTIGATION FINDINGS: -

At approximately 1300 hours on 3 April 2012, an incident involving two cranes occurred onboard the Ensco 68 Mobile Offshore Drilling Unit (MODU) jack-up rig located at Eugene Island Block 361 under contract by Chevron U.S.A. Inc. (Chevron). A transport basket with a 42,000 pound (lb) load consisting of a PS2 top drive gear box assembly needed repositioning from the port-side to the center of the main deck. Due to the location of the load and given that the load was determined to be too heavy for the boom angle required to re-position the lift with a single crane. It was decided that both cranes would be needed to simultaneously reposition the load. A person authorized to "Act as a Banksman" was assigned to coordinate and direct crane operations. When the Starboard-side and Port-side cranes were attempting to reposition the load, the Port-crane boom line was severed by the Starboard-side crane boom tip. When the Port Crane line was severed, the load remained supported by the Starboard Crane with sufficient boom angle to successfully lower it to the main deck's designated position. The damage was to the 4-part load line and no personnel were injured during this incident.

18. LIST THE PROBABLE CAUSE(S) OF ACCIDENT:

Using two cranes simultaneously in close proximity of one another and personnel situational awareness are probable causes of this incident. It was reported that the Banksman that was assigned to monitor the load transfer attempted to stop work; however, the Starboard Crane boom tip had already struck and severed the Port Crane load line.

19. LIST THE CONTRIBUTING CAUSE(S) OF ACCIDENT:

The Job Safety Analysis (JSA) completed did not specifically address personnel awareness for operating two cranes simultaneously when relocating a heavy load. -

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

The 1-inch diameter by 1000 foot long 4- Line was severed.
part load line was damaged from this
incident. -

ESTIMATED AMOUNT (TOTAL): \$5,520

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

The BSEE Lafayette District has no recommendations for the Agency.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

After further review of information provided during the investigation the Lafayette District has determined that an Incident of Noncompliance INC G-110 would have been issued by BSEE; however, it was not issued due to Coast Guard jurisdiction.

25. DATE OF ONSITE INVESTIGATION:

30-APR-2012

26. ONSITE TEAM MEMBERS:

Troy Naquin / Jeremy Adams / Johnny Serrette / Tom Basey /

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Elliott S. Smith

APPROVED

DATE:

05-JUN-2012

INJURY/FATALITY/WITNESS ATTACHMENT

OPERATOR REPRESENTATIVE

INJURY

CONTRACTOR REPRESENTATIVE

FATALITY

OTHER _____

WITNESS

NAME: -

HOME ADDRESS: -

CITY:

STATE: -

WORK PHONE:

TOTAL OFFSHORE EXPERIENCE:

YEARS -

INJURY/FATALITY/WITNESS ATTACHMENT

EMPLOYED BY:

BUSINESS ADDRESS:

CITY:

STATE:

ZIP CODE:

Crane/Other Material-Handling Equipment Attachment

Equipment Information

Installation date: 10-OCT-1976 -

Manufacturer: MARATHON LETOURNEAU -

Manufacture date: 31-DEC-1975 -

Make/Model: PEDISTAL / PCM 120-AS -

Any modifications since manufactured? Describe and include date(s) .-

What was the maximum lifting capacity at the time of the lift? -

Static: 100000 Dynamic: 90000 -

Was a tag line utilized during the lift? **Y**

Were there any known documented deficiencies prior to conducting the lift? If yes, what were the deficiencies? -

None

List specific type of failure that occurred during this incident. (e.g. cable parted, sticking control valve, etc.) -

None

If sling/loose gear failure occurred does operator have a sling/loose gear inspection program in place? - **Y**

Type of lift: **DD**

For crane only:

Type of crane: **ELECTRICAL**

Boom angle at time of incident: Degrees: **78** Radius: **24**

What was load limit at that angle? **100000**

Crane equipped with: **L**

Which line was in use at time of incident? **L**

If load line involved, what configuration is the load block: **2** part.

Load Information

What was being lifted? **TOP DRIVE**

Description of what was being lifted (e.g. 10 joints of 2 3/8-inch pipe, ten 500-lb. sacks of sand, 2 employees, etc.)

PS2 Top Drive Gear Box assembly in a Transport Basket

Approximate weight of load being lifted: **42000**

Was crane/lifting device equipped with an operable weight indicator? **Y**

Was the load identified with the correct or approximate weight? **Y**

Where was the lift started, where was it destined to finish, and at what point in the lift did the incident occur? Give specific details (e.g. pipe rack, riser cart, drill floor, etc.)

Used two cranes to simultaneously re-position the load on the main deck

If personnel was being lifted at the time of this incident, give specific details of lifting device and riding apparatus in use (e.g. 1) crane-personnel basket, 2) air hoist-boatswain chair, other)

None -

Were personnel wearing a safety harness? **Y-**

Was a lifeline available and utilized? **Y**

List property lost overboard.

Rigger/Operator Information

Has rigger had rigger training? **Y** -

If yes, date of last training: **19-JAN-2012** -

How many years of rigger experience did rigger have?

How many hours was the operator on duty prior to the incident? **7**

Was operator on medication when incident occurred? **N**

How many hours was the rigger on duty prior to the incident? **7**

How much sleep did rigger have in the 24 hours preceding this incident? **9**

Was rigger on medication when incident occurred? **N**

Were all personnel involved in the lift drug tested immediately following this incident?

Operator: **N** Rigger: **N** Other:

While conducting the lift, was line of sight between operator and load maintained? -

N -

Does operator wear glasses or contact lenses? **N** -

If so, were glasses or contacts in use at time of the incident? **N** -

Does operator wear a hearing aid? **N** -

If so, was operator using hearing aid at time of the incident? **N** -

What type of communication system was being utilized between operator and rigger at time of this incident?

HAND SIGNAL

For crane only:

What crane training institution did crane operator attend?

CRANE SAFETY AND TRAINING INSTITUTE

Where was institution located? **LAFAYETTE, LA** -

Was operator qualified on this type of crane? **Y** -

How much actual operational time did operator have on this particular crane involved in this incident?

Years: 30

Months: 0

List recent crane operator training dates.

16-JUN-2009

For other material-handling equipment only:

Has operator been trained to operate the lifting device involved in the incident? **N**

How many years of experience did operator have operating the specific type of lifting device involved in the incident? -

Inspection/Maintenance Information

For crane only:

Is the crane involved classified as Heavy, Moderate or Infrequent use.

H

Was pre-use inspeciton conducted? **Y**

For the annual/quarterly/monthly crane inspections, please fill out the following information:

What was the date of the last inspection? **01-JUN-2010**

Who performed the last inspection? **ABS**

Was inspection conducted in-house or by a 3rd party? **TP**

Who qualified the inspector? **ABS**

Does operators' policy require load or pull test prior to heavy lift? **Y**

Which type of test was conducted prior to heavy lift? **L**

Date of last pull test: **02-FEB-2012** Load test: **01-JUN-2010**

Results: **P**

If fail explain why:

Proof Loads: 49,400lbs at Radius 39ft and 14,090lbs at Radius 98ft

Test Parameters: Boom angle: **68** Radius: **39**

What was the date of most recent crane maintenance performed? **29-MAR-2012**

Who performed crane maintenance? (Please clarify persons name or company name.)

ENSCO

Was crane maintenance performed in-house or by a third party? **IH-**

What type of maintenance was performed? -

Check sheave, limit, switches

For other material-handling equipment only:

Was equipment visually inspected before the lift took place?

What is the manufacture's recommendation for performing periodic inspection on the equipment involved in this incident?

Safety Management Systems

Does the company have a safety management program in place? **N**

Does the company's safety management program address crane/other material-handling equipment operations?

N

Provide any remarks you may have that applies to the company's safety management program and this incident?

Have Procedure No.: E68-WI-GENERAL-049 for Moving Equipment on Deck Using Crane

Did operator fill out a Job Safety Analysis (JSA) prior to job being performed?

Y

Did operator have an operational or safety meeting prior to job being performed?

Y

What precautions were taken by operator before conducting lift resulting in incident?

Procedures in place for crane/other material-handling equipment activities:

Did operator have procedures written? **Y**

Did procedures cover the circumstances of this incident? **Y**

Was a copy available for review prior to incident? **Y**

Were procedures available to MMS upon request? **Y**

Is it documented that operator's representative reviewed procedures before conducting lift?

N

Additional observations or concerns: