# UNITED STATES DEPARTMENT OF THE INTERIOR MINERALS MANAGEMENT SERVICE GULF OF MEXICO REGION

# **ACCIDENT INVESTIGATION REPORT**

1.	OCCURRED DATE: 27-APR-2008 TIME: 0300 HOURS	X CRANE
2.	OPERATOR: Shell Offshore Inc. REPRESENTATIVE: DiCarlo, Theresa TELEPHONE: (504) 728-6237 CONTRACTOR: Helmerich & Payne, Inc. REPRESENTATIVE: Tom Freeny TELEPHONE: (601) 939-1589	OTHER LIFTING DEVICE DAMAGED/DISABLED SAFETY SYS. INCIDENT >\$25K H2S/15MIN./20PPM REQUIRED MUSTER SHUTDOWN FROM GAS RELEASE OTHER
3.	OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT:	6. OPERATION:
	LEASE: G07995 AREA: GC LATITUDE: BLOCK: 158 LONGITUDE:	PRODUCTION DRILLING WORKOVER COMPLETION HELICOPTER MOTOR VESSEL PIPELINE SEGMENT NO.
5.	PLATFORM: A-Brutus TLP RIG NAME:	X         OTHER         Crane operations
	ACTIVITY: EXPLORATION (POE) DEVELOPMENT/PRODUCTION (DOCD/POD) 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	<ul> <li>8. CAUSE:</li> <li>EQUIPMENT FAILURE HUMAN ERROR EXTERNAL DAMAGE SLIP/TRIP/FALL WEATHER RELATED LEAK UPSET H20 TREATING OVERBOARD DRILLING FLUID OTHER</li> <li>9. WATER DEPTH: 3300 FT.</li> <li>10. DISTANCE FROM SHORE: 92 MI.</li> </ul>
	LWC HISTORIC BLOWOUT UNDERGROUND SURFACE DEVERTER SURFACE EQUIPMENT FAILURE OR PROCEDURES	<ul> <li>11. WIND DIRECTION: SE SPEED: 21 M.P.H.</li> <li>12. CURRENT DIRECTION: ENE SPEED: 1 M.P.H.</li> </ul>
	COLLISION HISTORIC >\$25K <pre>COLLISION</pre>	13. SEA STATE: <b>4</b> FT.

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On 27 April 2008 at 0300 hours, a crane incident occured while making a platform lift over the deck with the auxiliary line, when the load line was inadvertently pulled into the anti two-block. The anti two-block failed, allowing the two-part load line block to be pulled into the sheaves, with the sheave fracturing and the pieces falling to the deck below. The load line did not have a lift attached at the time of the incident.No injuries occured as a result of the falling debris.

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

There were two main causes of the incident. First, insufficient slack was maintained on the loadline throughout the lifting operations. Second, the anti two-block failed allowing the block to hit the sheaves.

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

A contributing cause of this incident was poor visibility due to night time operations.

20. LIST THE ADDITIONAL INFORMATION:

N/A

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

The sheaves, sheave guard, and anti twoblock were damaged. guard and anti two-block had to be repaired.

ESTIMATED AMOUNT (TOTAL): \$25,000

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

Due to the specific nature of this incident, the Houma District has no recommendations to report to the Regional Office.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

25. DATE OF ONSITE INVESTIGATION:

26. ONSITE TEAM MEMBERS:

29. ACCIDENT INVESTIGATION PANEL FORMED: NO

OCS REPORT:

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Amy Wilson /

30. DISTRICT SUPERVISOR:

Bryan A. Domangue

APPROVED DATE: 01-JUL-2008

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# **INJURY/FATALITY/WITNESS ATTACHMENT**

x       OPERATOR REPRESENTATIVE         CONTRACTOR REPRESENTATIVE         OTHER	INJURY FATALITY X WITNESS	
NAME: HOME ADDRESS: CITY: WORK PHONE: EMPLOYED BY: BUSINESS ADDRESS:	STATE: TOTAL OFFSHORE EXPERIENCE:	YEA
CITY: ZIP CODE:	STATE:	
OPERATOR REPRESENTATIVE CONTRACTOR REPRESENTATIVE OTHER NAME:	INJURY FATALITY X WITNESS	
HOME ADDRESS:		
CITY: WORK PHONE: EMPLOYED BY:	STATE: TOTAL OFFSHORE EXPERIENCE:	YEA

# **Crane/Other Material-Handling Equipment Attachment**

## **Equipment Information**

Installation date: 01-APR-2001
Manufacturer: AMERICAN AERO SERIAL #99943
Manufacture date: 01-FEB-2001
Make/Model: AMERICAN AERO / OM2200
Any modifications since manufactured? Describe and include date(s).

#### None

What was the maximum lifting capacity at the time of the lift? Static:20000 Dynamic: 20000

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 occured during this incident.(e.g. cable parted, sticking control valve, etc.)

# While using the fast line, the load line was 2-blocked into the boom damaging sheaves and sheave guard.

If sling/loose gear failure occurred does operator have a sling/loose gear inspection program in place?  ${\tt Y}$ 

Type of lift: DD

#### For crane only:

Type of crane: HYDRAULIC

Boom angle at time of incident: Degrees: 71 Radius: 65

What was load limit at that angle? 20000

Crane equipped with: B

Which line was in use at time of incident? **B** If load line involved, what configuration is the load block: **2** part.

## Load Information

What was being lifted? PIPE

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.)

#### Pallet supply box.

Approximate weight of load being lifted: 3600

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

Was the load identified with the correct or approximate weight?  $\mathbf{Y}$ 

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.)

#### Box was being lifted from pipe rack to riser rack.

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)

n/a

Were personnel wearing a safety harness? NA

Was a lifeline available and utilized? NA

List property lost overboard.

NONE

#### **Rigger/Operator Information**

Has rigger had rigger training? y
If yes, date of last training: 03-JUL-2007
How many years of rigger experience did rigger have? 3
How many hours was the operator on duty prior to the incident? 9
Was operator on medication when incident occurred? N
How many hours was the rigger on duty prior to the incident? 9
How much sleep did rigger have in the 24 hours preceding this incident? 8
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?

Y

Does operator wear glasses or contact lenses? N

If so, were glasses or contacts in use at time of the incident?  $\ensuremath{\,N}$ 

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?

RADIO/VHF

#### For crane only:

What crane training institution did crane operator attend?

#### ENERGY CRANES

Where was institution located? SHELL ROBERT TRAINING CENTER

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?

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Years: 0 Months: 4

List recent crane operator training dates.

DECEMBER 14, 2005

### For other material-handling equipment only:

Has operator been trained to operate the lifting device involved in the incident?  ${\tt N}$ 

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

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## Inspection/Maintenance Information

For crane only: Is the crane involved classified as Heavy, Moderate or Infrequent use. н Y Was pre-use inspeciton conducted? For the annual/quarterly/monthly crane inspections, please fill out the following information: What was the date of the last inspection? 26-APR-2008 Who performed the last inspection? CRANE MECHANIC Was inspection conducted in-house or by a 3rd party? ΙH Who qualified the inspector? SHELL Does operators' policy require load or pull test prior to heavy lift? Y Which type of test was conducted prior to heavy lift? P Load test: 21-MAY-2006 Date of last pull test: 21-MAY-2006 Results: **P** If fail explain why: Test Parameters: Boom angle: 79 Radius: 40 What was the date of most recent crane maintenance performed? 23-APR-2008 Who performed crane maintenance? (Please clarify persons name or company name.) DAVID RUSSELL Was crane maintenance performed in-house or by a third party? IH What type of maintenance was performed? Replaced hydraulic oil gauge.

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#### 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 materialhandling equipment operations? Y Provide any remarks you may have that applies to the company's safety management program and this incident? 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?  ${\bf Y}$ 

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

Y

Additional observations or concerns: