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

ACCIDENT INVESTIGATION REPORT

DATE: 15-SEP-2009 TIME: 2000 HOURS STRUCTURAL DAMAGE X CRANE	
15-SEP-2009 TIME: 2000 HOURS X CRANE	
OTHER LIFTING DEVICE	
2. OPERATOR: Statoil Gulf of Mexico LLC DAMAGED/DISABLED SAFETY	SYS.
REPRESENTATIVE: Worsham, Michael INCIDENT >\$25K	
TELEPHONE: $(/13)$ $5/9-9900$ $H2S/15MIN./20PPM$	
DEDRESENTATIVE:	
TELEPHONE:	5 Ei
3. OPERATOR/CONTRACTOR REPRESENTATIVE/SUPERVISOR ON SITE AT TIME OF INCIDENT: 6. OPERATION:	
□ PRODUCTION	
X DRILLING	
4. LEASE: G20341	
AREA: WR LATITUDE: COMPLETION	
BLOCK: 543 LONGITUDE: HELICOPTER	
MOTOR VESSEL	
5. PLATFORM: DIVERSION DEVELOPED OTHER	
RIG NAME. MAERSK DEVELOPER	
6. ACTIVITY: X EXPLORATION(POE) 8. CAUSE:	
DEVELOPMENT/PRODUCTION	
(DOCD/POD)	
7. TYPE:	
HISTORIC INJURY	
REQUIRED EVACUATION 1 WEATHER RELATED	
\square LTA (1-3 days) \square LEAK	
LTA (>3 days UPSET H20 TREATING	
RW/JT (1-3 days)	ED
RW/JT (>3 days)	
Other Injury 9. WATER DEPTH: 6606 FT	
FATALITY	
POLLUTION 10. DISTANCE FROM SHORE:	182 MI.
FIRE	
L EXPLOSION 11. WIND DIRECTION: WNW	
LWC HISTORIC BLOWOUT SPEED: 12 M	P.H.
UNDERGROUND	
SURFACE 12. CURRENT DIRECTION: WNW	
DEVERTER SPEED: 1 M	P.H.
SURFACE EQUIPMENT FAILURE OR PROCEDURES	
COLLISION \square HISTORIC $\square >$ \$25K $\square <=$ \$25K 13. SEA STATE: 3 FT.	

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17. INVESTIGATION FINDINGS:

On 15 September 2009 at 2000 hours, the deck crew was moving a 7.1 ton Bottom Hole Assembly (BHA) using a subsea knuckle boom crane from the Auxiliary Riser Pipe Shuttle (RPS) to the main RPS. The BHA was landed onto the main RPS when the deck crew began to reposition the BHA closer towards the drill floor. Once the load was lifted by the crane for repositioning, the front section of the load started to swing to starboard, with personnel in all four corners of the main RPS. A drilling contractor employee stepped forward to grab a tag line when the load swung towards him, backed him up and pinned him over the handrail. The employee fell to the floor in the fetal position when the load began to swing away from him.

Rig medical personnel requested medical evacuation to West Jefferson Hospital for examination and observation. The contract employee was released from the hospital and returned to the rig by helicopter at 1500 hours on 16 September 2009.

The investigation indicated that the Assistant Driller changed the task by having the BHA moved closer to the rig floor. This change in task required the contract employee to enter an area that was in close proximity to the suspended load. The deck crew failed to stop work and reevaluate possible changes to risk involved in new job requirements. All changes to job requirements are to be treated as a new job, which requires a Job Safety Analysis (JSA) to be completed.

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

The probable causes of this incident was that the Crane Operator did not assess the lift conditions prior to lifting the BHA, while utilizing inexperienced Roustabouts and a Banksman.

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

*The Crane Operator never discussed the lift with the deck crew; therefore, all personnel were not aware of where the lift was being landed. *The job task changed, yet the crew did not stop work to conduct a JSA and reevaluate the new job requirements.

20. LIST THE ADDITIONAL INFORMATION:

N/A

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

None

N/A

ESTIMATED AMOUNT (TOTAL):

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\$

- 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 of Safety Management.
- 23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: NO
- 24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

None

25. DATE OF ONSITE INVESTIGATION:

13-NOV-2009

- 26. ONSITE TEAM MEMBERS: 29. ACCIDENT INVESTIGATION James Richard / Jerry Freeman / Casey Bisso / OCS REPORT:
 - 30. DISTRICT SUPERVISOR:
 - Bryan A. Domangue

APPROVED DATE: 15-DEC-2009

INJURY/FATALITY/WITNESS ATTACHMENT

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

Crane/Other Material-Handling Equipment Attachment

Equipment Information

Installation date: 01-JAN-2008

Manufacturer: NATIONAL OILWELL VACRO

Manufacture date: 01-JAN-2007

Make/Model: NATIONAL OILWELL VACRO / SUBSEA HANDLING KNUCKLEBO

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

None

What was the maximum lifting capacity at the time of the lift? Static: 330000 Dynamic: 363700

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.)

None

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

Type of lift: DD

For crane only:

Type of crane: **ELECTRICAL**

Boom angle at time of incident: Degrees: 33 Radius: 130

What was load limit at that angle? 30000

Crane equipped with: L

Which line was in use at time of incident? **L** If load line involved, what configuration is the load block: **4** 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.)

BHA/MWD Tool

Approximate weight of load being lifted: 15653

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

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

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.)

7.1 Ton, 7 feet long, 9.5" diameter BHA Tool

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)

No

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: 16-JUL-0009
How many years of rigger experience did rigger have? 2
How many hours was the operator on duty prior to the incident? 8
Was operator on medication when incident occurred? N
How many hours was the rigger on duty prior to the incident? 8
How much sleep did rigger have in the 24 hours preceding this incident? 10
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: NO

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? ${\tt N}$

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, LLC

Where was institution located? HOUSTON, TEXAS

Was operator qualified on this type of crane? ${\bf Y}$

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

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Years: 0 Months: 9

List recent crane operator training dates.

20 JUL 2007 AND 16 JUL 2009

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

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For crane only:
Is the crane involved classified as Heavy, Moderate or Infrequent use.
  н
                                    Υ
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-FEB-0009
Who performed the last inspection? A.L. TALAVERA
Was inspection conducted in-house or by a 3rd party?
                                                       \mathbf{TP}
Who qualified the inspector?
                                ABS
Does operators' policy require load or pull test prior to heavy lift? N
Which type of test was conducted prior to heavy lift? P
                                       Load test: 26-FEB-2009
Date of last pull test: 26-FEB-2009
Results: P
 If fail explain why:
  None
 Test Parameters: Boom angle: 17
                                               Radius: 160
 What was the date of most recent crane maintenance performed? 15-SEP-0009
 Who performed crane maintenance? (Please clarify persons name or company name.)
   OPERATOR, MAERSK DRILLING
 Was crane maintenance performed in-house or by a third party? IH
 What type of maintenance was performed?
 Weekly Checks
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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? Ν Provide any remarks you may have that applies to the company's safety management program and this incident? None 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? None Procedures in place for crane/other material-handling equipment activities: Did operator have procedures written? Y Did procedures cover the circumstances of this incident? ${\tt Y}$ 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? v Additional observations or concerns: None