

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

ACCIDENT INVESTIGATION REPORT

1. OCCURRED

DATE: 19-DEC-2012 TIME: 1400 HOURS

2. OPERATOR: **Anadarko Petroleum Corporation**
REPRESENTATIVE:
TELEPHONE:
CONTRACTOR: **Blake Drilling and Workover Com**
REPRESENTATIVE:
TELEPHONE:

- STRUCTURAL DAMAGE
- CRANE
- 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:

4. LEASE: **G18402**
AREA: **GC** LATITUDE:
BLOCK: **608** LONGITUDE:

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

5. PLATFORM: **A (TLP MARCO POL)**
RIG NAME: **BLAKE 1007**

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

8. CAUSE:

7. TYPE:

- HISTORIC INJURY
- REQUIRED EVACUATION 1
- LTA (1-3 days)
- LTA (>3 days) 1
- RW/JT (1-3 days)
- RW/JT (>3 days)
- Other Injury

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

- FATALITY
- POLLUTION
- FIRE
- EXPLOSION

9. WATER DEPTH: **4300** FT.

- LWC
- HISTORIC BLOWOUT
 - UNDERGROUND
 - SURFACE
 - DEVERTER
 - SURFACE EQUIPMENT FAILURE OR PROCEDURES

10. DISTANCE FROM SHORE: **144** MI.

11. WIND DIRECTION: **E**
SPEED: **29** M.P.H.

12. CURRENT DIRECTION: **N**
SPEED: **1** M.P.H.

COLLISION HISTORIC >\$25K <=\$25K

13. SEA STATE: **4** FT.

17. INVESTIGATION FINDINGS:

On Dec. 29, 2012, while performing work on Anadarko's Marco Polo platform located at GC 608, an employee toes were severed by a Marine Portable Transfer (MPT) Tank while attempting to relocate the tank, by crane, to another area of the rig.

The Crane Operator was instructed to relocate the MPT Tank, weighing approximately 28,000 pounds, to the strongback beam mats located near the aft of the drill floor. The Crane Operator, along with two Roustabouts, went up to the strongback mats to discuss the job and mark out exactly where the load was to be set but no formal Job Safety Analysis (JSA) or Risk Assessment was done. After discussing the job, the Crane Operator proceeded to the west side production crane while the Roustabouts left to gather the required rigging equipment needed to make the lift. When everyone was in place, the Crane Operator lowered the load line and the stinger, which was then attached to the MPT Tank. The Roustabouts failed to attach taglines to the load before the lift was made as required by Blake's 'Personnel Safety Manual (SG-3 Crane Operations)'. The first Roustabout was positioned at the southwest corner of the tank, in sight of the Crane Operator. The second Roustabout, the injured person (IP), was positioned at the northeast corner of the tank where he was out of the Crane Operators line of sight and in an area where he didn't have an escape route. The IP was in charge of flagging the Crane Operator and was doing so with the use of a hand held radio since he wasn't visible to the Crane Operator during the lift. Before making the lift, the Crane Operator asked the (IP, Flagger) if the block was centered over the load. The IP instructed the Crane Operator to boom down and pick up on the tank. The load came off the deck about 6 inches and shifted to the east towards the IP. Once the Crane Operator noticed the load starting to swing, he dropped the load back down onto the deck without instruction from the Flagger. The tank came down on top of the IP's right foot, compressing the steel toe of his boot and severing off four toes with the exception of his pinky toe.

The Toolpusher and the Rig Safety Training Advisor were both notified immediately after the accident. The platform Medic examined the employee's injuries and prepared the IP for Medevac to shore for further evaluation and treatment.

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

The employees involved failed to recognize all of the potential hazards that could be encountered during the lift before starting the job. Had the employees identified these hazards and put controls in place to eliminate the identified hazards, the probability of the accident occurring would have been drastically reduced or possibly eliminated.

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

- 1) No JSA was done to identify the potential hazards of the job.
- 2) Poor or lack of communication during the lifting operations.
- 3) Bad body placement: The IP left himself in an area where there was no escape route and was unaware of his foot placement while the load was in the air. He was also in a position where he could not be seen by the Crane Operator.
- 4) Failure to follow company policy: Roustabout failed to attach taglines to the load before the lift was made. The decision to not use a tagline or pushrod forced the IP to use his hands to try to control the load, putting him in a close proximity to the tank and vulnerable to a potential accident.

5) The Crane Operator lowered the load back to the deck without being instructed from his flagger to do so and without the knowledge of the IP's position in relation to the load.

6) Lack of experience: At the time of the accident, both of the employees were relatively new to their positions. The Crane Operator had been in that position for less than a year and the Roustabout had been in his position for approximately one year. This could have been a contributing factor in the accident.

20. LIST THE ADDITIONAL INFORMATION:

N/A

21. PROPERTY DAMAGED:

N/A

NATURE OF DAMAGE:

N/A

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECCURANCE NARRATIVE:

The Houma District has no further recommendations at this time.

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

The G-110 that was issued for the accident states:

"On December 19, 2012, an employees's foot was smashed while attempting to relocate a MPT tank to the strongback mats on the rig. As the load came off the deck, the Crane Operator noticed the tank starting to swing towards the Roustabout. The Crane Operator dropped the tank back down onto the deck without being instructed to do so from his flagger. As a result, the tank landed on the Roustabout's foot, compressing the steal toe of his boot and severing off four of the toes on the employee's right foot."

The Roustabouts involved in the accident failed to follow company policy by not attaching tag lines to the load before making a lift. Blake International's 'Personnel Safety Manual (SG-3 Crane Operations)' states:

"Use tag (restraining) lines any time a lift is made; use extra lines in windy or rough conditions. Tag lines should be of an appropriate length for the certain situation so it does not put the tag line handler in an at-risk situation when handling the load."

25. DATE OF ONSITE INVESTIGATION:

25-JAN-2013

26. ONSITE TEAM MEMBERS:

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

30. DISTRICT SUPERVISOR:

Bryan A. Domangue

APPROVED

DATE:

23-AUG-2013

INJURY/FATALITY/WITNESS ATTACHMENT

<input type="checkbox"/>	OPERATOR REPRESENTATIVE	<input checked="" type="checkbox"/>	INJURY
<input checked="" type="checkbox"/>	CONTRACTOR REPRESENTATIVE	<input type="checkbox"/>	FATALITY
<input type="checkbox"/>	OTHER _____	<input type="checkbox"/>	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: 17-MAR-2004

Manufacturer: NAUTILUS

Manufacture date: 16-DEC-2002

Make/Model: NAUTILUS / 440-LI-120

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

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

Static: Dynamic:

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

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

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

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

Type of lift:

For crane only:

Type of crane: **HYDRAULIC**

Boom angle at time of incident: Degrees: **60** Radius: **65**

What was load limit at that angle? **45261**

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? **MPT TANK**

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.)

Storage Tank

Approximate weight of load being lifted: **28000**

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.)

Relocating MPT Tank to strong back beam mat.

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)

Were personnel wearing a safety harness?

Was a lifeline available and utilized?

List property lost overboard.

Rigger/Operator Information

Has rigger had rigger training? **Y**

If yes, date of last training: **23-JUN-2011**

How many years of rigger experience did rigger have? **1**

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? **12**

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

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

Operator: **Y** Rigger: **Y** 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? **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 held radio

For crane only:

What crane training institution did crane operator attend?

NAUTILUS APPLIED HYDRAULIC CRANES

Where was institution located? **HOUMA, 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: 1

Months: 0

List recent crane operator training dates.

03-MAY-2012

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 inspection conducted? **Y**

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

What was the date of the last inspection? **08-OCT-2012**

Who performed the last inspection? **JUAN CORRIZALES**

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

Who qualified the inspector? **SPARROW**

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: **08-OCT-2012** Load test: **08-OCT-2012**

Results: **P**

If fail explain why:

Test Parameters: Boom angle: **60** Radius: **65**

What was the date of most recent crane maintenance performed? **08-OCT-2012**

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

SPARROW

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

What type of maintenance was performed?

Annual Inspection

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?

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

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?

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

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?

Did procedures cover the circumstances of this incident?

Was a copy available for review prior to incident?

Were procedures available to MMS upon request?

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

Additional observations or concerns: