UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF OCEAN ENERGY MANAGEMENT, REGULATION AND ENFORCEMENT
GULF OF MEXICO REGION

ACCIDENT INVESTIGATION REPORT

1. OCCURRED
   DATE: 10-MAY-2011  TIME: 0930  HOURS

2. OPERATOR: Apache Corporation
   REPRESENTATIVE: Garber, John
   TELEPHONE: (337) 354-8126
   CONTRACTOR:
      REPRESENTATIVE:
      TELEPHONE:

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

4. LEASE: 00438
   AREA: EI  LATITUDE:  
   BLOCK: 175  LONGITUDE:  

5. PLATFORM: F
   RIG NAME:

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

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

   HWC   HISTORIC BLOWOUT
       UNDERGROUND
       SURFACE
       DEVERTER
       SURFACE EQUIPMENT FAILURE OR PROCEDURES

   COLLISION  [ ] HISTORIC  [ ] >$25K  [ ] <=$25K

8. CAUSE:
   [X] EQUIPMENT FAILURE
   [X] HUMAN ERROR
   [ ] EXTERNAL DAMAGE
   [ ] SLIP/TRIP/FALL
   [ ] WEATHER RELATED
   [ ] LEAK
   [ ] UPSET H2O TREATING
   [ ] OVERBOARD DRILLING FLUID
   [ ] OTHER

9. WATER DEPTH: 83 FT.

10. DISTANCE FROM SHORE: 59 MI.

11. WIND DIRECTION:
    SPEED: M.P.H.

12. CURRENT DIRECTION:
    SPEED: M.P.H.

13. SEA STATE: FT.
17. INVESTIGATION FINDINGS:

On 10 May 2011 at approximately 0930 hours, a crane operator (CO) inadvertently pulled the auxiliary line lever while attempting to raise the load line. This caused the auxiliary ball to make contact with the crane tip which severed the auxiliary line. The CO was back-loading a high pressure pump (HP pump) weighing approximately 3500 lbs. from the platform to the field boat. Prior to starting the crane the CO inspected the crane using Apache's Pre Use Inspection form which includes the anti-two block system. The rigger assisting the CO attached the HP pump to the load line. The CO began lifting the load and adjusted the crane boom over the water. As the boat captain was positioning the boat towards the crane, the CO was attempting to adjust the load line but inadvertently pulled the auxiliary line lever. As the auxiliary ball made contact with the boom tip, the anti-two block cross-over valve for the override failed. The auxiliary ball made contact with the crane boom causing the auxiliary cable to sever. The auxiliary ball descended into the Gulf waters, but did not come in contact with the boat. The CO was able to place the HP pump safely on the boat and the crane was placed out-of-service due to the shock load on the crane and the damage to the auxiliary line. No injuries or pollution resulted from this incident.

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

The CO inadvertently pulled the auxiliary line lever while attempting to raise the load line, and then failed to react quick enough to prevent the auxiliary ball from making contact with the boom tip.

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

The Apache Corporation's Offshore Crane and Maintenance Program Section 6.0 (d) Operating Practices, Procedures, and Requirements indicated that required crane safety devices (i.e., anti-two blocking mechanisms on hoist lines, high and low boom angle shutdowns) shall be functioning properly whenever the crane is in operation. The anti-two block system was inspected after the incident and failed to stop the auxiliary line once the anti-two block was actuated.

20. LIST THE ADDITIONAL INFORMATION:
21. PROPERTY DAMAGED: Auxiliary ball and Auxiliary line

NATURE OF DAMAGE: Auxiliary line severed

ESTIMATED AMOUNT (TOTAL): $8,000

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The BOEMRE Lafayette District Office makes no recommendations to the BOEMRE Regional Office of Safety Management (OSM).

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

INC G-110 is issued "After the Fact" to document that Apache Corporation failed to protect health, safety and the environment by not performing operations in a safe and workmanlike manner as follows: A crane operator failed to properly operate 150-H-60 Unit crane in a safe manner to protect the equipment and employees. The crane operator inadvertently pulled the auxiliary lever causing the auxiliary ball to make contact with the crane tip and sever the auxiliary line. The accident was the result of careless operation.

Apache Corporation is advised to submit a letter of explanation addressing the aforementioned INC., and its plans for eliminating future incidents of this nature to the BOEMRE Lafayette District.

25. DATE OF ONSITE INVESTIGATION:

16-MAY-2011

26. ONSITE TEAM MEMBERS: Wade Guillotte / Tom Basey /

29. ACCIDENT INVESTIGATION PANEL FORMED: NO

30. DISTRICT SUPERVISOR:

Elliott S. Smith

APPROVED DATE: 21-JUN-2011
<table>
<thead>
<tr>
<th>Role</th>
<th>Status</th>
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<tbody>
<tr>
<td>OPERATOR REPRESENTATIVE</td>
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<td>CONTRACTOR REPRESENTATIVE</td>
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**No witnesses for this incident**

**NAME:** n/a

**HOME ADDRESS:**

**CITY:**

**STATE:**

**WORK PHONE:**

**TOTAL OFFSHORE EXPERIENCE:**

**YEARS**

**EMPLOYED BY:**

**BUSINESS ADDRESS:**

**CITY:**

**STATE:**

**ZIP CODE:**


Equipment Information

Installation date: 01-JAN-1980
Manufacturer: UNIT
Manufacture date: 01-JAN-1980
Make/Model: 3261 / 150H60
Any modifications since manufactured? Describe and include date(s).
What was the maximum lifting capacity at the time of the lift?
Static: 4233  Dynamic: 4233
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.)

Anti-two block

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: 40  Radius: 64

What was load limit at that angle? 4233

Crane equipped with: F

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? **HIGH PRESSURE PUMP**

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.)

Approximate weight of load being lifted: **3500**

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

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.)

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? **NA**

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

List property lost overboard.

**AUXILIARY BALL**
Rigger/Operator Information

Has rigger had rigger training?
If yes, date of last training:

How many years of rigger experience did rigger have?

How many hours was the operator on duty prior to the incident? 3

Was operator on medication when incident occurred? N

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

How much sleep did rigger have in the 24 hours preceding this incident? 8

Was rigger on medication when incident occurred?

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

Operator: N  Rigger: 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?

For crane only:

What crane training institution did crane operator attend?

UNIT

Where was institution located? NA

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: 7  Months 0

List recent crane operator training dates.

16-JUNE-2008

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.  I

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?  01-OCT-2010

Who performed the last inspection?  LICOALARIO

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

Who qualified the inspector?  PWS

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

Which type of test was conducted prior to heavy lift?

Date of last pull test:          Load test:

Results:

If fail explain why:

Test Parameters: Boom angle:          Radius:

What was the date of most recent crane maintenance performed?  01-OCT-2010

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

LICOALARIO

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

What type of maintenance was performed?

No maintenance on auxiliary line or anti-two block.

NA
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? Y

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

Pre-use inspection addresses anti-two block

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? Y

Additional observations or concerns: