

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

# ACCIDENT INVESTIGATION REPORT

1. OCCURRED

DATE: 29-JUN-2012 TIME: 0830 HOURS

2. OPERATOR: Union Oil Company of California

REPRESENTATIVE:

TELEPHONE:

CONTRACTOR:

REPRESENTATIVE:

TELEPHONE:

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

4. LEASE: G00989

AREA: EI LATITUDE:

BLOCK: 276 LONGITUDE:

5. PLATFORM: C

RIG NAME:

6. ACTIVITY:  EXPLORATION (POE)

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

LWC  HISTORIC BLOWOUT

UNDERGROUND

SURFACE

DEVERTER

SURFACE EQUIPMENT FAILURE OR PROCEDURES

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

STRUCTURAL DAMAGE

CRANE

OTHER LIFTING DEVICE

DAMAGED/DISABLED SAFETY SYS.

INCIDENT >\$25K

H2S/15MIN./20PPM

REQUIRED MUSTER

SHUTDOWN FROM GAS RELEASE

OTHER

6. OPERATION:

PRODUCTION

DRILLING

WORKOVER

COMPLETION

HELICOPTER

MOTOR VESSEL

PIPELINE SEGMENT NO.

OTHER

8. CAUSE:

EQUIPMENT FAILURE

HUMAN ERROR

EXTERNAL DAMAGE

SLIP/TRIP/FALL

WEATHER RELATED

LEAK

UPSET H2O TREATING

OVERBOARD DRILLING FLUID

OTHER \_\_\_\_\_

9. WATER DEPTH: 168 FT.

10. DISTANCE FROM SHORE: 51 MI.

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

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

13. SEA STATE: FT.

17. INVESTIGATION FINDINGS:

On 29 June 2012 at approximately 0830 hours, a Crane Operator (CO) was moving a diesel tote tank weighing 5000 pounds to supply the diesel generators on the northwest side of the structure. The diesel tank was being placed from one deck to another on the facility. The Rigger attached the sling to the tank so the CO could perform the lift. Once the diesel tank was lifted approximately four inches, the auxiliary cable shifted out of the sheave on the horsehead causing the auxiliary cable to part. The diesel tank landed on the deck as the cable and auxiliary ball struck the top of the diesel tank and fell to the deck. There were no injuries or damage to the facility due to this incident. After further investigation of the horsehead assembly, the sheave assembly was not designed as per the manufacture specifications. Also, annual crane inspections were performed by the lessee as well as third party from 2008 to 2011. After reviewing the annual crane inspections, there was no mention of any discrepancies to the sheave assembly that would have prevented the auxiliary cable to part. According to the annual crane inspections, the auxiliary cable was changed 5-10-09 and 11-15-11. The failed design of the assembly should have been observed while installing the new auxiliary cable.

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

- A. The auxiliary cable shifted out of the sheave on the horsehead assembly causing the auxiliary cable to part.
- B. After further investigation of the horsehead assembly, the sheave assembly was not designed as per manufacture specifications.
- C. Personnel performing the annual crane inspection and changing the auxiliary line should have acknowledged the discrepancies to the sheave assembly

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

None

20. LIST THE ADDITIONAL INFORMATION:

As a result of the incident, the lessee has inspected all cranes with the same sheave assembly to ensure it meets manufacturer specifications. Also, a Mechanical Safety Team meeting is scheduled on 09-Aug-2012 with all companies who conduct business with the lessee pertaining to rotating equipment to review the Internal Reports as well as the Root Cause Analysis.

21. PROPERTY DAMAGED:

None

NATURE OF DAMAGE:

N/A

ESTIMATED AMOUNT (TOTAL):

\$

22. RECOMMENDATIONS TO PREVENT RECURRENCE NARRATIVE:

The BSEE Lafayette District office makes no recommendations to the 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 Union Oil Company of California failed to protect health, safety and the environment by not performing operations in a safe and workmanlike manner as follows: An auxiliary cable parted causing a 5000 lb. tote tank to fall four inches to the deck. The auxiliary cable shifted out of the sheave on the horsehead assembly causing the cable to part. After further investigation, it was discovered the sheave assembly was not designed as per manufacturer's specifications. Annual crane inspections and maintenance performed by the lessee and third party failed to discover the discrepancies that could have prevented this incident. The lessee failed to adequately inspect the crane's sheave assembly to prevent this incident from occurring.

25. DATE OF ONSITE INVESTIGATION:

07-JUL-2012

26. ONSITE TEAM MEMBERS:

Wade Guillotte / Raymond Johnson /  
Gerald Gonzales /

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Elliott S. Smith

APPROVED

DATE:

20-AUG-2012

# Crane/Other Material-Handling Equipment Attachment

## Equipment Information

Installation date: 01-JAN-1966

Manufacturer: UNIT

Manufacture date: 01-JAN-1900

Make/Model: 30227 / 2700

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

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

Static: 7200      Dynamic:

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?

### Sheave assembly

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

### Auxiliary line

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: HYDRAULIC

Boom angle at time of incident: Degrees: 65      Radius: 33

What was load limit at that angle? 7200

Crane equipped with: F

Which line was in use at time of incident? F

If load line involved, what configuration is the load block: 1 part.

## Load Information

What was being lifted? **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.)

**diesel tank**

Approximate weight of load being lifted: **5000**

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

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

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.)

**Lifting diesel tank with auxiliaryline**

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: **11-MAY-2010**

How many years of rigger experience did rigger have? **32**

How many hours was the operator on duty prior to the incident? **1**

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

How many hours was the rigger on duty prior to the incident? **1**

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?

**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?

**RADIO/VHF**

### For crane only:

What crane training institution did crane operator attend?

**CHEVRON TRAINING CENTER**

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:3                      Months 0

List recent crane operator training dates.

22-MAY-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.

**M**

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? **29-JUN-2012**

Who performed the last inspection?

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

Who qualified the inspector? **CHEVRON**

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

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

Date of last pull test: **28-JUN-2012** Load test: **28-JUN-2012**

Results: **P**

If fail explain why:

Test Parameters: Boom angle: **47** Radius: **50**

What was the date of most recent crane maintenance performed? **28-JUN-2012**

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

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

What type of maintenance was performed?

**Installed engine manifold**



**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? **Y**

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?

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: