

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

ACCIDENT INVESTIGATION REPORT

For Public Release

1. OCCURRED
DATE: 01-FEB-2013 TIME: 1610 HOURS

2. OPERATOR: Black Elk Energy Offshore Operati
REPRESENTATIVE:
TELEPHONE:
CONTRACTOR:
REPRESENTATIVE:
TELEPHONE:

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

4. LEASE: 00680
AREA: WC LATITUDE:
BLOCK: 20 LONGITUDE:

5. PLATFORM: D
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

6. OPERATION:
 PRODUCTION
 DRILLING
 WORKOVER
 COMPLETION
 HELICOPTER
 MOTOR VESSEL
 PIPELINE SEGMENT NO. 17023
 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: 28 FT.

10. DISTANCE FROM SHORE: 4 MI.

11. WIND DIRECTION: SE
SPEED: 5 M.P.H.

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

13. SEA STATE: 0 FT.

STRUCTURAL DAMAGE
 CRANE
 OTHER LIFTING DEVICE
 DAMAGED/DISABLED SAFETY SYS.
 INCIDENT >\$25K
 H2S/15MIN./20PPM
 REQUIRED MUSTER
 SHUTDOWN FROM GAS RELEASE
 OTHER

17. INVESTIGATION FINDINGS:

On February 01, 2013, Black Elk Energy Offshore Operations (BEEEO) experienced a gasket failure on the West Cameron (WC) 20-D facility's 4-in departing pipeline riser, segment #17023. This incident caused a release of hydrocarbons into the Gulf of Mexico waters near the facility. At the time of the incident, there was a Lift Boat (LB), jacked up next to the unmanned minor production platform, which had just completed well work activities on Well D002.

The Lake Charles District Bureau of Safety and Environmental Enforcement (BSEE) conducted an investigation into the incident which included multiple onsite visitations. As a result of the wells unable to sustain flow, the platform had been shut in around May 04, 2012. A LB had arrived on location, January 22, 2013, for well work on well D002 which consisted of a zone change. On February 01, 2013, the workover activities had concluded and the well was turned over to production. A BEEEO Engineer and a Contract Operator (CO) were on location assisting with the flow back activities. The well was flowing with 2,200 pounds per square inch (psi) flow tubing pressure and upon receiving approximately 73 barrels of fluid they started to see gas. At this time, the Engineer instructed the CO to transfer the flow from the LB's gas buster/atmospheric tanks into the platform's production system. The CO began transferring the flow by opening the well's wing valve and closing off on the crown valve. The D002 flow line was not equipped with a pressure gauge; therefore, the CO was utilizing a gauge on the master panel, which was one deck below by traversing back and forth. The CO was attempting to flow the well through a header system directly into a 4-in pipeline rated for a maximum allowable operating pressure of 1,441 psi which travels 285-ft across to the unmanned WC 20-A facility. The CO stated that within approximately 20 minutes he had the crown valve fully closed and the wing valve only partially open when the gasket on the pipeline failed. At this time, the well was manually shut in and the CO informed the Engineer of the incident.

Due to the lack of any operators on WC 20-A, the Engineer and the CO departed WC 20-D on a stand-by work boat and went to WC 20-A. At this time, it was discovered that the boarding shut down valve associated with the pipeline was closed and had never been opened prior to the start-up. Therefore, upon closing off the crown valve, the well did not have an available flow path; consequently, overpressuring the pipeline and as a result, the gasket failure occurred. Although the CO stated that all the safety systems were in service and the maximum pressure witnessed at the time was 1,100 psi, none of the required safety systems were tested prior to start up. Based on statements and reports gathered, the well's shut in tubing pressure was between 2,800 psi to 3,700 psi which potentially could have been subjected on the pipeline; thus, leading to the failure.

During the investigation it was discovered that the WC 20-D facility had been shut in prior to BEEEO receiving a letter from the BSEE Regional Director which states in part:

1. Keep all facilities that currently are in a shut-in status in such status until it provides BSEE with documentation of the corrective actions taken to safely return each facility into operational status to BSEE's satisfaction.
2. Notify the appropriate District Office at least 48 hours prior to returning these facilities to production to allow for the proper BSEE inspection.

Furthermore, prior to resuming production, there were not any attempts to notify the Lake Charles District to allow for the proper BSEE inspection. Additionally, further investigation revealed BEEEO failed to follow their company HSE Policy and Procedures, specifically element number nine, as stated in their Safety and Environmental Management System (SEMS) Plan:

* 9. Pre-Startup Review - a comprehensive Pre-Startup Checklist must be completed prior to placing any new or overhauled equipment system or production facility in operation.

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

Overpressure of the pipeline segment resulting in a gasket failure on the departing pipeline riser flange connection

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

Human error by all parties involved which included the following:

1. Failure to notify the District Office prior to returning the facility to production to allow for the proper BSEE inspection
2. Failure to pre-test all safety systems prior to bringing on production
3. Failure to follow SEMS Plan and complete a Pre-Startup Review prior to placing the facility in operation
4. Failure to communicate with the field to ensure the receiving facility is both attended and all necessary valves are lined up/ready to receive process flow

20. LIST THE ADDITIONAL INFORMATION:

21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

ESTIMATED AMOUNT (TOTAL):

22. RECOMMENDATIONS TO PREVENT RECURRANCE NARRATIVE:

The Lake Charles District has no recommendations for the Agency

23. POSSIBLE OCS VIOLATIONS RELATED TO ACCIDENT: YES

24. SPECIFY VIOLATIONS DIRECTLY OR INDIRECTLY CONTRIBUTING. NARRATIVE:

G-114 BEEEO failed to conduct operations in accordance with lease stipulations

* Failure to notify the District Office prior to returning the facility to production to allow for the proper BSEE inspection

G-110 Operator failed to perform operations in a safe and workmanlike manner and provide for the preservation and conservation of property and the environment

- * Failure to pre-test all safety systems prior to bringing on production
- * Failure to follow SEMS Plan and complete a Pre-Startup Review prior to placing the facility in operation
- * Failure to communicate with the field to ensure the receiving facility is both attended and all necessary valves are lined up/ready to receive process flow

25. DATE OF ONSITE INVESTIGATION:

14-FEB-2013

26. ONSITE TEAM MEMBERS:

29. ACCIDENT INVESTIGATION

PANEL FORMED: NO

30. DISTRICT SUPERVISOR:

Larry Williamson

APPROVED

DATE: **16-MAY-2013**

INJURY/FATALITY/WITNESS ATTACHMENT

OPERATOR REPRESENTATIVE

INJURY

CONTRACTOR REPRESENTATIVE

FATALITY

OTHER _____

WITNESS

NAME :

HOME ADDRESS :

CITY :

STATE :

WORK PHONE :

TOTAL OFFSHORE EXPERIENCE :

YEARS

EMPLOYED BY :

BUSINESS ADDRESS :

STATE :

CITY :

ZIP CODE :

OPERATOR REPRESENTATIVE

INJURY

CONTRACTOR REPRESENTATIVE

FATALITY

OTHER _____

WITNESS

NAME :

HOME ADDRESS :

CITY :

STATE :

WORK PHONE :

TOTAL OFFSHORE EXPERIENCE : 30

YEARS

EMPLOYED BY :

BUSINESS ADDRESS :

STATE :

CITY :

ZIP CODE :

