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

## **ACCIDENT INVESTIGATION REPORT**

	OCCURRED DATE: 28-FEB-2009 TIME: 0415 HOURS  OPERATOR: Apache Corporation REPRESENTATIVE: Dugas, David TELEPHONE: (337) 354-8124  CONTRACTOR: 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:
	LEASE: G05044  AREA: SS LATITUDE: BLOCK: 259 LONGITUDE:  PLATFORM: JA	<pre>PRODUCTION DRILLING WORKOVER COMPLETION HELICOPTER MOTOR VESSEL PIPELINE SEGMENT NO.</pre>
	RIG NAME:	OTHER
	ACTIVITY: EXPLORATION (POE)  X DEVELOPMENT/PRODUCTION (DOCD/POD)  TYPE:  HISTORIC INJURY  X REQUIRED EVACUATION 6  LTA (1-3 days)  LTA (>3 days  RW/JT (1-3 days)  RW/JT (>3 days)	8. CAUSE:  X EQUIPMENT FAILURE HUMAN ERROR EXTERNAL DAMAGE SLIP/TRIP/FALL WEATHER RELATED LEAK UPSET H20 TREATING OVERBOARD DRILLING FLUID OTHER
	Other Injury	9. WATER DEPTH: 150 FT.
	FATALITY POLLUTION  FIRE EXPLOSION	10. DISTANCE FROM SHORE: 54 MI.
	LWC HISTORIC BLOWOUT UNDERGROUND	11. WIND DIRECTION: SSW SPEED: 17 M.P.H.
	SURFACE DEVERTER SURFACE EQUIPMENT FAILURE OR PROCEDURES	12. CURRENT DIRECTION: SW SPEED: 8 M.P.H.
	COLLISION HISTORIC >\$25K <=\$25K	13. SEA STATE: 5 FT.

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On Saturday, February 28, 2009, a fire occurred in an auxiliary living quarters building at SS-259 that eventually completely destroyed the interior of the building. At the time of this incident, a total of six personnel were aboard the facility. Four men were assigned to bunks in the main living quarters facility and the other two men were located in the auxiliary living quarters building. The details of this event unfolded as follows:

At approximately 4:00AM on 2/28/09, an employee of Linear Controls, who was sleeping on the second floor of the auxiliary living quarters building, was awaken by an unusual noise coming from the bathroom facility next to the his bedroom. He was able to notice what was happening because the compressor aboard the facility had gone down several minutes before, which allowed him to better hear the unusual noise. He got out of bed in order to investigate the situation and found that a salt water line supplying water to a toilet had burst and was spraying water all the way up to the ceiling and flooding the entire area. He immediately went to the main living quarters building to report the problem to the Lead Operator, who was already up and in the process of preparing his morning reports. The Lead Operator immediately woke up the A-Operator and C- Operator, who were still asleep in the main living quarters building, so that they could get up and assist in fixing the water leak. The Lead Operator and Linear Controls employee then went out and began looking for a way to shut off the salt water that was flowing through the broken piping. The A-Operator and C-Operator joined in as soon as they were able to put their clothes on. The A-Operator was walking around the auxiliary living quarters building searching for the water shut off valve when he smelled what he described as burning plastic and noticed some smoke coming out of the 1st floor of the auxiliary living quarters. Upon seeing and smelling the smoke, he immediately hit the platform ESD located near the auxiliary living quarters in front of the C9000 compressor and notified the others that there was a fire in the auxiliary living quarters. At about that same time the Linear Controls employee hit the ESD located near the main living quarters building and the Lead Operator and C-Operator hit an additional ESD located to the left of the main living quarters building on the handrail near a hose real on the main deck of the facility. As a result of these actions, the facility was successfully shut in, but the generator on the platform also went down. The crew then began to address the fire situation.

The Lead Operator immediately took a head count and realized that only 5 of the 6 personnel aboard the facility were accounted for. They immediately identified that a Pro-Valve employee, was missing and still probably sleeping in the same room that the Linear Controls employee had come from in the auxiliary living quarters. At that point the Lead Operator and A-Operator went up the external stairway to the second floor of the auxiliary quarters to retrieve the Pro-Valve employee. Upon reaching the doorway leading into the second level of the quarters they found the building to be consumed with smoke. They opened the door and hollered for the Pro-Valve employee. He responded that he was disoriented and could not locate the exit. The Lead Operator then entered the smoke filled building and located the Pro-Valve employee squatting down with a pillow over his face about 4 to 6 feet from the exit and was able to lead him out of the building to safety.

After insuring that the Pro-Valve employee was okay and not injured, the crew immediately turned their attention to addressing the fire. Because the entire building was filled with smoke, they were unable to enter. Shortly thereafter, while peeking through the door they noticed a flame inside the building that seemed to be coming from an area near the fire detection panel and a 100 amp battery charging unit. Unable to enter the building, the men discharged a couple of 30 lb. dry chemical extinguishers into the area with little effect on the situation. They were reluctant to open any doors so as not to feed the fire with additional oxygen. A 350

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lb. dry chemical wheeled fire extinguisher located on the top deck was then moved into position for use. In order to obtain better access to the fire, a window mounted air conditioner was pushed into the building to allow access and the 350 lb. extinguisher was discharged into the building through that opening, as well as through the front door of the building in an attempt to extinguish the fire. However, that effort was unsuccessful and it soon became apparent that their efforts were not working.

Portable radios were being utilized to notify the Apache Production Foreman of the situation. One Apache Foreman was at SS-178 and the other was located at SS-207. During this period of time, the Lead Operator had the C-Operator report to the life capsule to start the engine and insure it was working properly in the event it was needed for evacuation of the facility. They also began making attempts to contact any boat that might have been in the vicinity for assistance. They soon noticed a vessel in the distance and utilized flares from the life capsule in addition to the portable radio to make contact with the M/V Odyssea Diamond. Upon contact with the M/V Odyssea Diamond, the boat immediately began heading toward SS-259 and arrived about an hour later and very near daybreak. Once the M/V Odyssea Diamond arrived at SS-259, a decision was made by the men aboard SS-259 to evacuate the platform and get onboard the M/V Odyssea Diamond. All personnel were off of the platform and safely aboard the M/V Odyssea Diamond at approximately 6:15AM. At that time the M/V Odyssea Diamond began utilizing the fire fighting cannon aboard the vessel to direct a stream of water onto the burning building. Although smoke was rolling out of the building, flames did not appear to be breaching the structure.

As soon as flying was possible, one of the Apache Production Foreman boarded a helicopter at SS-178 and flew to SS-259 in order to get a first hand view of the situation from the air and to begin evaluating possible options. Other boats including the M/V Mark C, M/V Pope John Paul and M/V Arthur Furay were directed to head to SS-259 to render assistance as needed from other Apache operations and projects. Upon completion of his evaluation from the air, the Apache Production Foreman rounded up a volunteer team of 6 employees (including himself) to make their way to SS-259 in an attempt to do what they could to control the situation. In addition to the Apache Production Foreman, the volunteer team consisted of a production operator located at SS-178, a production operator located at SS-207, as well as the Lead Operator and A-Operator from SS-259 who were aboard the M/V Odyssea Diamond, all of whom are trained volunteer fire fighters in their home towns. In addition, the field Paramedic stationed at SS-207 was also included as part of the team and responded with all of his necessary medical equipment. These men (other than the two already aboard the Odyssea Diamond) were transported by helicopter to SS-258, where they then boarded the M/V Miss Lisa for transport to SS-259.

Upon arrival at SS-259, the volunteer team came up with a plan, conducted a safety meeting and then re-boarded SS-259. Upon re-boarding the facility, the Apache Production Foreman closed several manual valves that had remained opened, including some pipeline valves. They then rigged up and hoisted a fire hose up to the platform from the M/V Miss Lisa and borrowed some additional fire fighting equipment (SCBA¿s & bunker coats, etc.) from the M/V Odyssea Diamond in order to make another attempt to extinguish the fire. Some time after approaching the burning building and attempting to put out the fire with the fire hose, it was noticed that there were three medical oxygen bottles in the building that had the potential to explode in the heat. At that point the Apache Production Foreman decided that it was not worth risking possible injury to any personnel and directed all personnel to back away from the building. A decision was then made to evacuate the facility once again. However, before evacuating, they decided to leave the fire hose running and aimed onto the wooden deck below the burning building in an attempt to prevent the deck from catching fire

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and possibly giving way.

During this time, other boats began arriving on the scene and fire cannons from the Odyssea Diamond and Mark C continued shooting water onto the burning building in an attempt to keep it cool. Throughout this process, flames were never observed penetrating the outer shell of the building, but smoke continued pouring out of the doors and other small openings and cracks. After a period of time, the smoke seemed to start subsiding and another effort was made by the volunteer crew to get a handle on the situation. The crew was able to identify a method to tie the salt water system of the M/V Pope John Paul into the platform in order to get additional water onto the fire. The crew utilized the platform¿s fresh water hose, and tied it into the salt water discharge on the M/V Pope John Paul allowing salt water to be pumped into the fire hose reels on the platform. This tie-in then made the platforms fire hoses operable. Once this was done, the volunteer team re-boarded the platform and, having use of two operable fire hoses, was able to then attack the remaining fire and completely extinguish the fire.

The fire was declared officially extinguished between 1:00 and 1:10PM on 2/28/09. There were no injuries to any personnel involved in any aspect of this operation. The Pro-Valve employee who was initially rescued from the burning building was examined by a physician as a precautionary measure due to some smoke inhalation, but was discharged after examination.

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

The probable cause of the accident was water from a broken water line to the toilet that came in contact with electrical equipment/circuits.

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

The possible contributing cause was an old water line to the toilet.

20. LIST THE ADDITIONAL INFORMATION:

N/A

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21. PROPERTY DAMAGED:

NATURE OF DAMAGE:

The property that was damaged was an auxillary living quaters building.

This building was completely destroyed and will not be replaced.

ESTIMATED AMOUNT (TOTAL):

\$100,000

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.

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

n/a

25. DATE OF ONSITE INVESTIGATION:

02-MAR-2009

26. ONSITE TEAM MEMBERS:

Doug Sevin / Casey Bisso /

29. ACCIDENT INVESTIGATION PANEL FORMED: NO

OCS REPORT:

30. DISTRICT SUPERVISOR:

Bryan A. Domangue

APPROVED

DATE: 03-APR-2009

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29-JUN-2009

## FIRE/EXPLOSION ATTACHMENT

1.	SOURCE OF IGNIT	_		not 100 or elect			likely a battery charger,
2.	TYPE OF FUEL:		GAS OIL DIESEL CONDENS HYDRAUL				
		x	OTHER	N/a			
3.		General furnishi		g materi	.als us	ed in i	nitial construction and
4.	WERE PRECAUTION KNOWN SOURCES C						NO
5.	TYPE OF FIREFIG	HTING E	QUIPMENT	T UTILIZ	ED: X	HANDHE	LD
					x	WHEELE	D UNIT
						FIXED	CHEMICAL
					x	FIXED	WATER
						NONE	
					x	OTHER	Fire water hoses and fire fighting cannons aboard supply boats.

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