

Investigation of Pig Launcher Explosion, Main Pass Block 41, Gulf of Mexico, Off the Louisiana Coast Investigation of Pig Launcher Explosion, Main Pass Block 41, Gulf of Mexico, Off the Louisiana Coast

Frank Pausina Leslie Monahan Tom Perry Carl Anderson

Contents

Investigation and Report

Authority, 1 Procedures, 1

Introduction

Background, 3
Description of Accident, 5

Findings

Launcher and Piping, 6
Pipeline Blow-down, 8
Preliminary Activities, 10
Accident, 11
Accident Scene Observations and Analysis, 12
Equipment Analysis, 13
Training, 14

Conclusions

Cause, 15 Contributing Causes, 15 Possible Contributing Causes, 17

Recommendations, 19

Appendix, 20

Attachment 1, Location of Lease OCS 0374, Main Pass Block 41

Attachment 2, Simplified flow schematic for Main Pass Block 41 Platform B, 12- and 16-inch pipelines

Attachment 3, Pig launcher after the accident

Attachment 4, Schematic of closure

Attachment 5, Posted pig trap operation procedures

Attachment 6, Pig launcher area (photograph)

Attachment 7, Pig launcher and torn hinge. Damaged deck and well control panel above the launcher area and torn hinge (photographs)

Attachment 8, TUBE-TURN closure lid and twisted hinge arm (photograph)

Investigation and Report

Authority

An explosion resulting in two fatalities occurred on Chevron U.S.A. Inc.'s Platform B, Main Pass Block 41, Lease OCS 0374 in the Gulf of Mexico, offshore the State of Louisiana, on August 24, 1995, at approximately 10:45 a.m. Pursuant to Section 208, Subsections 22 (d), (e), and (f), of the Outer Continental Shelf (OCS) Lands Act, as amended in 1978, and the Department of the Interior Regulations 30 CFR Part 250, the Minerals Management Service (MMS) is required to investigate and prepare a public report of this accident. By memorandum dated September 29, 1995, the following MMS personnel were named to the investigative panel:

Frank Pausina New Orleans, Louisiana (Chairman)

Leslie Monahan New Orleans, Louisiana

Tom Perry New Orleans, Louisiana

Carl Anderson Herndon, Virginia

Participating as a panel member also was William Bertges of the Office of Pipeline Safety, Department of Transportation (DOT).

Procedures

On August 24, 1995, Tom Perry visited the scene of the accident. On August 25 and 26, 1995, Tom Perry, Leslie Monahan, and Frank Pausina visited the scene of the accident. During those visits, panel members met briefly with Chevron's investigation team, inspected the scene of the accident, and interviewed various Chevron and contract personnel for the purpose of obtaining preliminary information.

Chevron's root cause analysis report of the accident, dated October 6, 1995, was submitted to the panel as was Chevron's contracted laboratory metallurgical analysis of part of the equipment involved in the accident. On two occasions, panel members

inspected equipment involved in the accident at Chevron's equipment yard located in Harvey, Louisiana. Also, one panel member met with representatives of the manufacturer of the equipment in Louisville, Kentucky.

A formal hearing was conducted by the panel on March 11, 1995, at the MMS offices in New Orleans, Louisiana, during which the following individuals were questioned:

Don Allen

Test, Inc.

Kelly Landry

John H. Carter Company, Inc.

Andy McCarley

Chevron U.S.A. Inc.

Donald Armond

Grand Isle Shipyard, Inc.

Randy Harden

Chevron U.S.A. Inc.

Peter Williams

Chevron U.S.A. Inc.

Daryl Sapp

Chevron U.S.A. Inc.

The panel members met at various times throughout the investigative effort and, after having considered all of the information available, produced this report.

2

<u>Introduction</u>

Background

Lease OCS 0374 covers approximately 4,994 acres and is located in Main Pass

Block 41, Gulf of Mexico, off the Louisiana coast. (For lease location, see

attachment 1.) The lease was originally issued on August 5, 1947, by the State of

Louisiana as State Lease 1263 with a fixed 1/8 royalty rate to The California Company.

On September 17, 1954, Louisiana State Lease 1263, as a result of the then recently enacted Outer Continental Shelf Lands Act, was placed under the jurisdiction of the Federal Government and designated as Federal Lease OCS 0374.

In 1965, The California Company changed its name to Chevron Oil Company. A merger of Chevron Asphalt Company and Chevron USA Inc. into Chevron Oil Company and a subsequent change of its corporate name to Chevron USA Inc. (Chevron) became effective on January 1, 1977.

Lease 0374 is included in the Main Pass Block 40 Unit, which became effective on January 20, 1965, and for which Chevron is the unit operator. A 1/8 royalty rate is assigned to the lease.

The two platforms relevant to this investigation are Platform B, located in Main Pass Block 41, and Platform L, located in Main Pass Block 42. The operation of Platform B was approved on September 20, 1962. Platform B originally contained processing equipment; however, in 1972 Platform O was installed adjacent to Platform B to serve as a production platform. Subsequent to that installation, the processing equipment on Platform B was relocated to Platform O. Platform B is now a gathering

facility and contains a well bay, pig traps, and gas sales meters. Most of the bulk gas arriving on Platforms B and O is processed on Platform O and then sent back to Platform B for transportation to shore either directly or indirectly across Platform L through the 4-mile-long, 16-inch pipeline involved in this accident.

Platform L was installed in 1970. It is bridge-connected to Platforms M and D.

Platform L is a processing platform. The gas arriving in the 16-inch pipeline from Platform B is transported to shore.

The installation of the 16-inch gas pipeline between Platforms B and L was completed in 1970 by the Chandeleur Pipe Line Company (Chandeleur). Chandeleur submitted an application to the Minerals Management Service (MMS) for a right-of-way (ROW) permit on November 22, 1993. It was approved on December 16, 1993, and assigned ROW No. OCS-G 14265, Segment No. 10149. The operational regulations of Segment No. 10149 are contained in Department of Transportation Regulations 49 CFR 192 — Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards. Chevron is the operator of the pipeline.

On July 27, 1995, Chevron submitted for approval a permit application to MMS for the major modification of Platform L, in which most of the production treating and compression equipment was to be replaced. The request was approved on August 9, 1995.

Description of Accident

At 0600 hours on August 24, 1995, two Chevron operators attended the daily morning meeting with other Chevron operations personnel on Platform M, Main Pass Block 42. Following the meeting, one of the operators, henceforth referred to as Operator 2, departed Platform D of the L-D-M complex by boat for Platform B. The other operator, henceforth referred to as Operator 1, after further discussions and meetings regarding the blowing-down of a 16-inch gas pipeline from Platform B to Platform L, departed Platform M with two contractors by helicopter for Platform B.

Approximately two hours and forty-five minutes after having arrived on Platform B, Operator 1 approached one of the contractors who was working on a valve and told him to use his ear plugs because the blowing-down of the 16-inch pipeline would soon begin. The operator then left the contractor's work area. Very soon thereafter, the contractor heard a loud noise and went to the 16-inch pipeline pig launcher area. There he observed that both Operators 1 and 2 had been injured. Chevron operations personnel on Platform M were then notified.

As a result of the notification, Chevron operations personnel and paramedics flew immediately to the scene. The paramedics communicated by phone with a physician who advised that the operators should be considered fatalities. The bodies were flown to Port Sulphur Hospital. The operators blew down the pipeline and secured the accident area for investigative purposes. A Chevron safety specialist arrived on the scene at 1400 hours. Two MMS inspectors arrived at approximately 1445 hours.

Launcher and Piping The 16-inch gas pipeline from Platform B to Platform L is connected to a vertically oriented pig launcher on Platform B. (For a simplified schematic of the launcher and the associated platform piping and relevant devices, see Attachment 2.) Just below the launcher (Attachment 2, shaded area 4) is a 16-inch block valve (Attachment 2, shaded area 1). Gas from the platform flows through 10-inch piping into the pipeline at a point below the block valve. Connecting the piping to the launcher is a 4-inch kicker valve (Attachment 2, shaded area 3). The 10-inch piping is fitted with an automatically actuated shut-down valve (SDV) (Attachment 2, shaded area 2). (For a picture of the launcher after the accident, see Attachment 3.)

> The launcher lid is a TUBE-TURN hinged closure. (For a schematic of the closure, see Attachment 4.) The hinged lid or head of the closure is secured to the top of the launcher or hub by two yokes. The yokes are fastened by two yoke bolts. Nuts on the bolts fit into nut holders located at both ends of the yokes. As the wrench lugs at the ends of the bolts are turned, the bolt nuts move along the bolt threads and, in turn, cause the yokes to either tighten or loosen, depending on the direction in which the lugs are turned. The manufacturer's literature clearly warns against attempting to open the closure under pressure. The literature states that an attempt to do so could result in injury to persons and damage to equipment.

> At the time of the accident the launcher was not equipped with either a pressure gauge or pressure relief valve. When the launcher was installed in 1969, a vent valve was installed on the barrel for pressure bleed-off purposes. However, during an upgrading operation in 1991, the valve was removed and capped. Subsequently, three operators

requested of management that the valve be replaced. No action was taken regarding the requests. There is no evidence that between 1993 and the time of the accident that the launcher had been used or that there was any intention of using it for pigging operations. In fact, certain construction work that took place during that time period precluded the use of the launcher for pigging operations.

It is stated in Chevron's Safe Practices Guideline for pipeline pigging operations that no attempt be made to open a launcher or receiver until such time that there is certainty that the barrel pressure has been bled off. Further, as part of Chevron's pig trap operations procedure, instructions as to the opening and closing of launchers and receivers are posted on the launcher and receiver barrels. (For a listing of those instructions, see Attachment 5.) Such instructions were not posted on the launcher involved in the accident. Furthermore, even if the standard instructions had been posted on the launcher, they could not have been followed verbatim in that they reference the use of bleed valves, which did not exist on the launcher.

The flow schematic for Platform B at the time of the accident incorrectly showed a nonexisting pressure relief valve on the launcher barrel and also incorrectly showed the location of the SDV. Furthermore, the manufacturer's literature with respect to launcher closures that was available on the platform was for Peco closures. The literature states that a safety feature of the closure is that it cannot be opened under pressure. As previously stated, the launcher closure was a TUBE-TURN closure that clearly could be opened under pressure. However, there is no evidence that either Operator 1 or Operator 2 referenced any literature prior to the accident.

The subject launcher is the only launcher/receiver on Platform B that was not fitted with a pressure relief valve and pressure gauge. The absence of these devices required the tracing of the piping on Platform B in order to blow down the launcher prior to opening the launcher closure lid of the 16-inch pipeline.

Pipeline Blow-down It was necessary to blow down the 16-inch pipeline because of construction work being performed on Platform L. Since the work included welding and since a leaking valve could not be isolated, the depressurization of the entire pipeline was required. The depressurization was not considered urgent. The decision was made to blowdown the pipeline on Platform B. There are three possible methods of blowing-down the 16-inch pipeline on Platform B.

> One method is through the ½-inch needle valves (See Attachment 2, shaded area 6). This is not a very practical method in that it would require a needlessly excessive amount of time to accomplish the task.

Another method is through the pressure safety valves (PSV) (See Attachment 2, shaded area 5). The PSV's allow the gas to flow to an underwater flare, thereby venting the gas to the atmosphere at a safe distance from the platform. This method can reasonably be expected to require approximately four to five hours to blow down the pipeline. A potential problem associated with this method is the cutting of the PSV seats, resulting in their inability to reseat properly. This can, however, be avoided by using a spool piece. In 1993, the launcher was isolated and blown down successfully, and the 16-inch pipeline was blown down through the PSV's using a spool piece.

The third method is to blow down the pipeline through the launcher. This is accomplished by first blowing down the launcher. The least hazardous way to blow down the launcher is to close the 16-inch block valve, the SDV, and either the 10-inch block valve (See Attachment 2, shaded area 7) or the back pressure valve (See Attachment 2, shaded area 8) and then open the 4-inch kicker valve and blow down the launcher through the PSV's or the needle valves. The most hazardous way to blow down the launcher is to slightly open or crack the closure lid by an amount that would allow the pressurized gas to escape in a controlled manner. After the launcher is depressurized, the 4-inch valve is closed and the launcher closure lid is completely opened. At this point the pipeline may be blown down through the launcher by cracking the 16-inch block valve or by opening the SDV and cracking the 4-inch valve. In this method the time to blow down the pipeline is reduced substantially; however, gas is released on the platform itself and in a relatively confined area. (For a picture of the confined launcher area, see Attachment 6.)

Chevron considers the blowing down of a pipeline a standard operation and has no established procedures regarding safe methods for blowing down a pipeline. In the hearing conducted by the MMS, operators referred to the use of the launcher in blowing down a pipeline as abnormal, while the Operations Supervisor referred to it as an unacceptable method. However, Operator 1 was commended by a previous supervisor in a performance evaluation dated May 7, 1992, for substantially reducing the time of a blow-down operation by blowing down a "line" on Platform B through a "pig trap." The exact line, trap, and procedure used are not known.

Preliminary Activities

Immediately after the previously mentioned 0600 hour meeting, Operators 1 and 2 were observed discussing the blowing-down of the 16-inch pipeline; however, no details of the method to be utilized were overheard. Operator 2 then departed by boat for Platform B. Operator 1 then went to Platform L, where he verified that the 16-inch pipeline was pressurized, and discussed the blow-down with the Facility Representative. Operator 1 told the Facility Representative in a joking manner that he could bleed down the pipeline through the needle valves on Platform B, thereby clearly indicating that he did not consider the use of the needle valves to be a viable method. Operator 1 then attended a meeting in which he stated that he could blow down the pipeline on Platform B. The Operations Supervisor, who was present at the meeting, agreed. However, again no details were discussed. Operator 1 then departed with an Electrician and a Valve Technician by helicopter for Platform B.

Operator 1, the Electrician, and the Valve Technician arrived at the Platform B doghouse at approximately 0830 hours, at which time Operator 2 was in the doghouse preparing the morning report. At this point the two operators and the two contract hands were the only ones aboard the facility. The Valve Technician overheard Operator 1 instruct Operator 2 on the procedure to bleed down the launcher. Both operators left the doghouse with the Electrician, who was going to prepare a valve for the Valve Technician, who remained behind.

At approximately 0930 hours, Operator 1 returned to the doghouse with the Electrician, gave a safety orientation to the Valve Technician, and informed the Field Coordinator by radio that he would soon begin blowing down the 16-inch pipeline. At that time, Operator 2 was working on a valve.

At approximately 1000 hours, Operator 1 took the Valve Technician to his work area. At this time, the Valve Technician asked Operator 1 if there were any relief valves on the 16-inch pipeline. Operator 1 responded that there were, but it would take too long to blow down the line through the relief valves and that, as a result, the launcher would be used for the blow-down operation. Operator 1 also stated that using the PSV's could result in reseating problems for the valves.

At approximately 1035 hours, both operators returned to the doghouse, at which time the Electrician overheard the operators discussing blowing down the pipeline. During that discussion the phrase "going back to the original plan" was mentioned as was a reference to the yokes. At approximately 1040 hours, both operators departed the doghouse.

Accident

The Valve Technician was working on a valve located on a deck above the launcher. At approximately 1045 hours, Operator 1 approached the Valve Technician and told him to insert his ear plugs because they, Operators 1 and 2, would soon be blowing down the pipeline. Operator 1 then went downstairs as the Valve Technician walked toward his toolbox to secure a towel to clean his hands. Within a matter of "a couple of seconds," the Valve Technician heard a loud noise. He then walked to the launcher area where he observed the bodies of both operators, launcher closure debris, and minor platform damage. As he ran to the doghouse, he met the Electrician, who returned with him to the accident scene. The decision was made not to ESD the platform, i.e., not activate the platform's emergency shut-down system (ESD). Both contract hands then went to the doghouse and called the Operations Supervisor on

Platform M for assistance. Two paramedics, the Operations Supervisor, and the Facility Representative arrived by helicopter at about 1100 hours. The paramedics performed triage with no results. A paramedic then called West Jefferson Hospital, at which time he was advised by an emergency room physician that the operators should be considered fatalities. The bodies were flown to Port Sulphur Hospital at 1220 hours.

At 1230 hours, an Operations Specialist and the Field Coordinator arrived at Platform B to secure the platform. After assessing the situation, which included an observation that the 4-inch and 16-inch valves were closed and that the 10-inch piping was pressurized to 1,020 psi, they decided to blow down the 16-inch pipeline through the PSV's. At 1300 hours they began the blow-down operation. The operation was completed in approximately four hours. The launcher was subsequently removed.

Accident Scene Observations and Analysis

The closure lid, which was torn off its hinge assembly by an explosion, penetrated the ¹/₄-inch steel deck above the launcher area, penetrated the bottom of the well control panel, which shut in the only producing well on the platform, exited the back of the panel, and then came to rest approximately one foot from the panel. (For pictures of the lid and associated damage, see Attachments 7 and 8.)

Relevant material found in the vicinity of the launcher and associated observations are as follows:

- One closure yoke the other yoke was retrieved from the Gulf.
- Two yoke bolts one was bent and broken, the other was whole.
- The lug of the whole bolt was freshly scarred, the other bolt lug was not.

- On the evidence of its clean threads, the whole bolt had been recently turned two complete turns at most, and
- One of two pipe wrenches was opened to precisely fit the bolt lugs.

The positions of the bodies and the clothing remnants of one of the operators indicate that both operators were very close to the launcher at the time of the accident. The setting of the wrench, the scarring of one bolt lug, and the condition of the threads indicate that at the time of the accident one of the operators was in the process of initially turning one yoke bolt. Furthermore, the relatively short time period between Operator 1 instructing the Valve Technician to use his ear plugs and the explosion indicates that Operator 2 was turning the yoke bolt at the time of the accident.

Equipment Analysis A metallurgical analysis of both yoke bolts was contracted by Chevron and performed shortly after the accident. The analysis in part concluded that both bolts possessed the chemical and tensile strength required by ASTM A-193, Grade B7 bolting material. The analysis also concluded that an excessive load caused a ductile failure of the broken bolt and that no evidence of metallurgical defect caused the bolt failure.

> Furthermore, the accident investigation panel's inspections of the launcher and conversations with the manufacturer of the launcher have resulted in no indication that the explosion was the result of any material defect in the launcher closure.

> Further, there is no indication that a missing bolt holder, missing bolt nut cover plates, and a welded yoke nut holder had any contributory effect on the explosion.

Training

At the time of the accident Operator 2 was performing his duties while under a 6-month Performance Improvement Plan (PIP) in which the Operations Supervisor states that Operator 2 lacked "an overall understanding of production processes and equipment" and that "this lack of knowledge could potentially pose a safety hazard to" Operator 2 and his coworkers. The PIP required Operator 2, who was in the third month of the PIP at the time of the accident, to work with Operator 1, who was in fact in charge of Platform B and who, with the Operations Supervisor, would evaluate Operator 2's performance. The Operations Supervisor indicated that he was not satisfied with Operator 2's progress under the PIP at the time of the accident.

The Development Needs section of the Performance Dimensions document for Operator 2 requires that he "take more initiative in day to day operations, and don't depend on coworkers for direction as to what needs to be done."

Operator 1 was overheard by the Valve Technician on the morning of the accident saying to the Electrician that Operator 2 "doesn't understand how to do mechanical work because people look over his shoulder all of the time" and "I believe in just letting a man go out there, tell him what to do . . . and let him learn on his own." Operator 1's training philosophy appears to be in agreement with the above-referenced Development Needs section requirements.

Conclusions

Cause

The deaths of the two Chevron operators were the result of Operator 2's attempt to open the launcher closure lid while the launcher contained gas that was pressurized to 1,020 psi. The findings indicate that, as one of the yoke bolts was turned at most two full turns, the yoke containment of the lid was lessened to the degree that the lid broke free of the containment, was torn from the hinge, and then propelled through the overhead deck. The resultant sudden release of the pressurized gas, which was isolated in the launcher by the previously mentioned 4-inch and 16-inch valves, caused the injuries to the operators, which resulted in their deaths.

Contributing Causes The contributing causes of the accident are as follows:

- 1. The operators were attempting to blow down the 16-inch pipeline through the launcher by opening the closure lid and then throttling either the 4-inch or 16-inch valve. The use of any method other than the launcher to blow down the pipeline would not have resulted in the accident.
- The launcher was not fitted with either a pressure relief valve or pressure gauge. Therefore, when the launcher was isolated, i.e., the 4-inch and 16-inch valves were closed, it was impossible to determine the internal pressure being exerted on the launcher. In addition, the depressurization of the launcher for purposes of opening the closure lid required the involvement of three control valves and the utilization of one of two types of pressure relief valves rather than the utilization of a single launcher relief valve had the launcher been so fitted, as were other launchers on the platform. The presence of those devices would have afforded

the operators a very simple way of depressurizing the launcher prior to attempting to open the closure lid.

- 3. The absence of a pressure relief valve and a pressure gauge at the time of the accident was a result of Chevron's inaction with respect to installing those devices after having been requested to do so by operations personnel.
- Notwithstanding the launcher's unique configuration, there was no procedure
 posted on the launcher with respect to its utilization.
- There were no officially established procedures by Chevron regarding safe methods for blowing down a pipeline.
- 6. On the morning of the accident there were no discussions between Operators 1 and 2 and other Chevron personnel as to the exact details of the method of blowing down the pipeline on Platform B. Specifically, there was no such discussion with the Operations Supervisor, who stated that the blowing down of the pipeline through the launcher was an unacceptable method.
- 7. Operator 1's performance appraisal commendation by a previous Operations
 Supervisor for using a launcher to blow down a pipeline was unknown to the
 Operations Supervisor, and is also contradictory to the Operations Supervisor's
 assessment of such a use of the launcher as being unacceptable. Operator 1 had
 no reason to believe that the use of the launcher to blow down the pipeline was

unacceptable and probably, given the aforementioned commendation, considered it preferable.

Possible Contributing Causes

Whether the operators were aware that the launcher was pressurized while the lid was being opened is not known; however, given Operator 1's instruction to Operator 2 regarding blowing down the launcher, it can arguably be assumed that Operator 1 either knew or recognized the possibility that the launcher was pressurized.

Therefore:

- A possible miscommunication existed between Operators 1 and 2 regarding the
 exact procedures to be utilized in blowing down the launcher, resulting in
 Operator 2 not following Operator 1's instructions.
- 2. Given Operator 2's performance evaluation, Operator 1's hands-off training philosophy for Operator 2, and the uniqueness of the operation of blowing down the launcher without the use of a pressure relief valve, it is possible that Operator 1's instructions regarding blowing down the launcher were not adequately specific and Operator 2's attempt to implement those instructions was not adequately supervised.

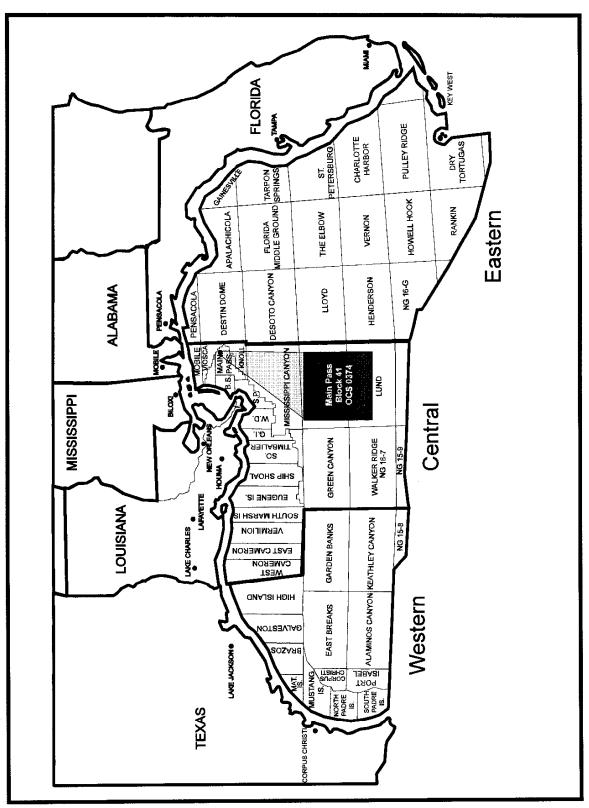
The aforementioned Performance Dimensions document requiring Operator 2 to take more initiative and depend less on coworkers for direction, despite the PIP's statements regarding his potentially hazardous lack of knowledge, may have led

Operator 2 to initiate the loosening of the launcher closure lid yoke bolts without the necessary supervision and/or instructions.

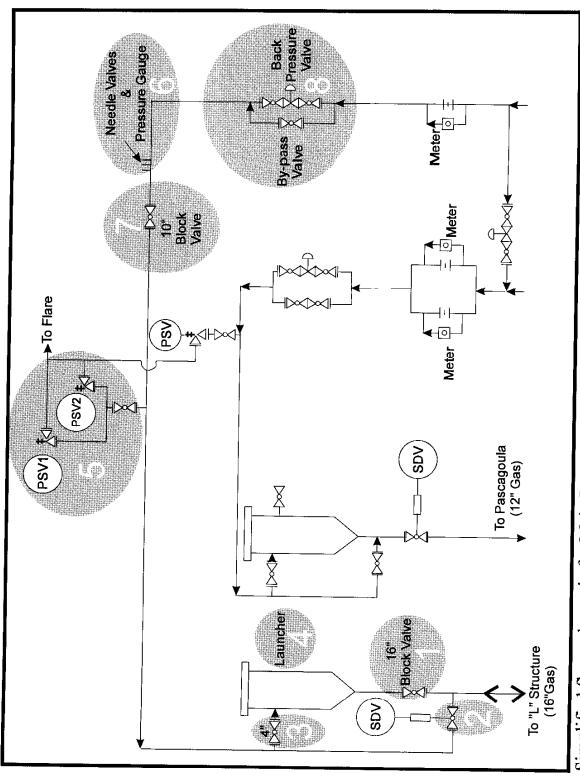
Recommendations

The MMS should issue a Safety Alert recommending the following:

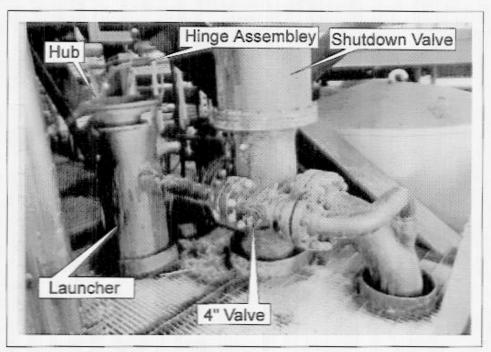
- That all pig launcher/receivers be fitted with a pressure relief valve and pressure gauge, and
- 2. That pig launcher/receivers be used to blow down pipelines only if no other practical method exists, a safety analysis of the operation has been conducted, and resultant procedures are documented and reviewed prior to such an operation.



Location of Lease OCS 0374, Main Pass Block 41.



Simplified flow schematic for Main Pass Block 41 Platform B, 12- and 16-inch pipelines.

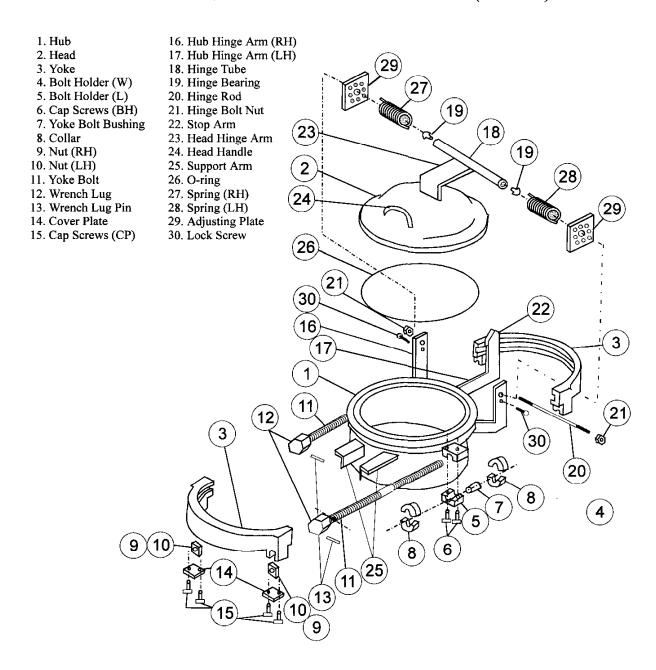


Pig launcher after the accident.

TUBE-TURN hinged closure parts list.

TUBE-TURN Hinged Closure

Series 150-HV, 300V and 600-V Double Bolt (Vertical)



Pig Trap Operation Procedures

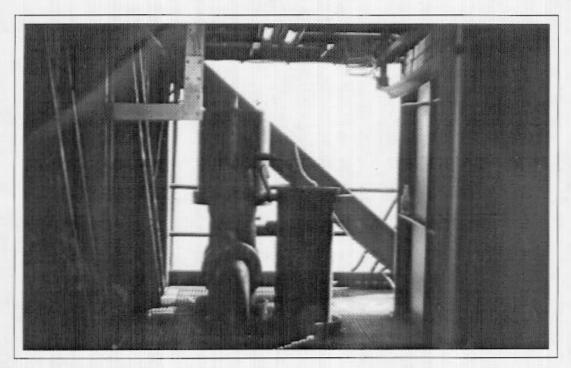
Think First

To Open:

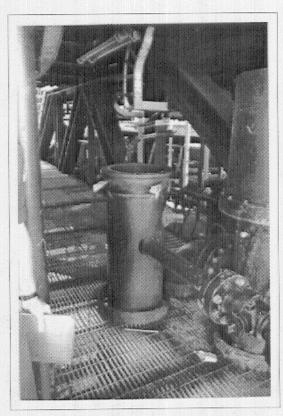
- 1. Do not stand in front of closure.
- 2. Isolate trap.
- 3. Open bleed valves.
- 4. Leave bleed valves open.
- 5. Crack open closure carefully.
- 6. Check, listen for pressure bleeding off.
- 7. After all pressure bled-off -- continue to open.

To Close:

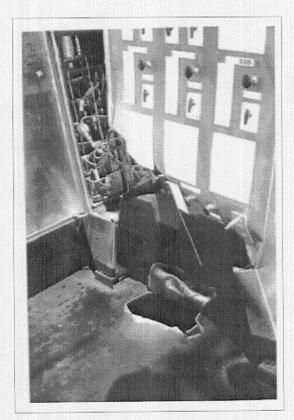
- 1. Bleed valves open.
- 2. Tighten closure.
- 3. Put all bolts, etc., in proper place on closure and tighten.
- 4. Close bleed valves.
- 5. Align pig trap valves as required.



Pig launcher area.



Pig launcher and torn hinge.



Damaged deck and well control panel above the launcher area.



TUBE-TURN closure lid and twisted hinge arm.



The Department of the Interior Mission

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.



The Minerals Management Service Mission

As a bureau of the Department of the Interior, the Minerals Management Service's (MMS) primary responsibilities are to manage the mineral resources located on the Nation's Outer Continental Shelf (OCS), collect revenue from the Federal OCS and onshore Federal and Indian lands, and distribute those revenues.

Moreover, in working to meet its responsibilities, the Offshore Minerals Management Program administers the OCS competitive leasing program and oversees the safe and environmentally sound exploration and production of our Nation's offshore natural gas, oil and other mineral resources. The MMS Royalty Management Program meets its responsibilities by ensuring the efficient, timely and accurate collection and disbursement of revenue from mineral leasing and production due to Indian tribes and allottees, States and the U.S. Treasury.

The MMS strives to fulfill its responsibilities through the general guiding principles of: (1) being responsive to the public's concerns and interests by maintaining a dialogue with all potentially affected parties and (2) carrying out its programs with an emphasis on working to enhance the quality of life for all Americans by lending MMS assistance and expertise to economic development and environmental protection.