

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Stingray Pipeline Company, L.L.C.	§	Docket No. RP08-____-000
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**PREPARED DIRECT TESTIMONY OF
ALLAN M. SCHNEIDER
ON BEHALF OF
STINGRAY PIPELINE COMPANY, L.L.C.**

JUNE 30, 2008

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

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**SUMMARY OF THE
PREPARED DIRECT TESTIMONY OF
ALLAN M. SCHNEIDER
ON BEHALF OF
STINGRAY PIPELINE COMPANY, L.L.C.**

Mr. Schneider is Vice President, Engineering & Operations for Enbridge Offshore (Gas Transmission) L.L.C. and Stingray Pipeline Company, L.L.C. (“Stingray”). In his Prepared Direct Testimony, Exhibit No. SPC-10, Mr. Schneider provides an overview of Stingray’s operations and discusses the risks faced by Stingray as an offshore pipeline. Mr. Schneider discusses Stingray’s currently pending application before the FERC to abandon eight compressors, the extra risks faced by offshore pipelines versus onshore pipelines, and the impact from Hurricanes Rita and Katrina on the Stingray system and the significant effect it had on system operations.

In addition to his testimony, Mr. Schneider sponsors Exhibit Nos. SPC-11 through SPC-19.

FEDERAL ENERGY REGULATORY COMMISSION

Docket No. RP08-____-000

STINGRAY PIPELINE COMPANY, L.L.C.

1 **Q.1 Please state your full name, title, and current place of employment.**

2 A. My name is Allan M. Schneider. I am employed by Enbridge Employee Services,
3 Inc. I am the Vice President, Engineering & Operations for Enbridge Offshore
4 (Gas Transmission) L.L.C. and Stingray Pipeline Company, L.L.C. (“Stingray”),
5 both subsidiaries of Enbridge Inc. (“Enbridge”). The United States headquarters
6 of Stingray is located at 1100 Louisiana, Suite 3300, Houston, Texas 77002,
7 which is also where my office is located.

8 Q.2 Please briefly summarize your educational and professional background.

9 A. I received a B.S. in Mechanical Engineering from Montana State University in
10 June 1981 and have been licensed and certified as a Professional Engineer (No.
11 60916) in the State of Texas since 1986. I have over 27 years of experience in
12 pipeline related engineering and operations. I joined Shell in 1981 as a Division
13 Engineer. During my 24 years at Shell I held positions in project engineering,
14 corporate planning, Health/Safety/Environmental supervision, and corporate
15 emergency response. In 1996, I became the Staff Engineer for Planning and
16 Project Development for Shell Gas Transmission (“SGT”). From 1996 to 2004, I

1 held positions of increasing authority within SGT in which I was responsible for
2 growing and organizing the engineering and operations function for SGT as it
3 grew and expanded its operating responsibilities. In January 2005, I joined
4 Enbridge in connection with Enbridge's purchase of some of Shell's offshore gas
5 pipeline assets, and became the Director of Engineering & Operations for
6 Regulated and Offshore for Enbridge Offshore (Gas Transmission) L.L.C. I
7 served in that role until August of 2007 when I became the Vice President,
8 Engineering & Operations for Regulated and Offshore for Enbridge Offshore
9 (Gas Transmission) L.L.C. and the Vice Chairman of Operations for Stingray.
10 My current responsibilities include management of offshore and onshore
11 engineering and construction projects, and operations accountabilities.

12 **Q.3 On whose behalf are you testifying in this proceeding?**

13 A. I am testifying on behalf of Stingray.

14 **Q.4 Have you previously testified before the Federal Energy Regulatory**
15 **Commission?**

16 A. No.

17 **Q.5 What is the purpose of your testimony in this proceeding?**

18 A. The purpose of my testimony is to provide an overview of Stingray's system
19 operations and to discuss the operational risks faced by Stingray as an offshore
20 natural gas pipeline located in the Gulf of Mexico.

1 **Q.6 What statements, schedules, or exhibits are you sponsoring in conjunction**
2 **with your testimony?**

3 A. I am sponsoring Statement O, Description of Company Operations, and Exhibit
4 Nos. SPC-11 to SPC-19.

5 **Q.7 Were that statement and those exhibits prepared by you or under your**
6 **direction or supervision?**

7 A. Yes, they were prepared under my direction and supervision.

8 **Overview of Stingray's System Operations**

9 **Q.8 Please describe Statement O.**

10 A. Statement O, which can be found in Exhibit No. SPC-4, consists of a list of
11 expansions and abandonments since Stingray's last rate case, which was settled in
12 late 2002, and a description of how the Stingray system is currently designed and
13 operated, including the basic assumptions, bases, formulas and methods on which
14 the design and operation are based.

15 **Q.9 Please explain Stingray's system.**

16 A. Exhibit No. SPC-11 is a map of the Stingray system. The purpose of Stingray's
17 system is to provide producers located offshore in the shallow waters of the
18 central Gulf of Mexico with access to processing plants and further pipeline
19 interconnections onshore in Louisiana. The Stingray system consists of offshore
20 laterals that gather unprocessed gas produced from blocks in offshore Gulf of
21 Mexico, including High Island, West Cameron, East Cameron, Vermilion and
22 Garden Banks. These laterals move a dual-phase stream of natural gas, injected
23 condensate liquids, and some associated water to interconnections with a 36-inch

1 mainline, the majority of which is located offshore. This transmission mainline
2 transports the unprocessed natural gas north to interconnections onshore in
3 southern Louisiana with the West Cameron Dehydration Plant owned by Starfish
4 Pipeline Company, LLC, and the Barracuda and Stingray Gas Plants owned by
5 Targa Resources, Inc. At these facilities, free water, water vapor and natural gas
6 liquids are removed. Gas is redelivered to Stingray from these facilities for
7 transportation and delivery to interconnections with three interstate natural gas
8 pipelines and an intrastate natural gas pipeline.

9 As part of its system, Stingray also owns and operates a manned offshore
10 platform, the West Cameron 509 platform complex ("Platform WC509"), which
11 provides offshore compression for the system. Platform WC509 is a highly
12 sophisticated complex that consists of several physically separate but interrelated
13 platforms containing an offshore compressor station, piping manifold facilities,
14 living quarters, helicopter landing pads, and a structure for providing venting
15 capability in the event of an emergency shutdown. I have attached pictures of the
16 Platform WC509 complex as Exhibit No. SPC-12. Stingray also leases an
17 unmanned platform, the West Cameron 148 platform ("WC148"), which connects
18 various laterals to the mainline and provides an intermediate pig receiving and
19 launching point for the mainline, and has a fifty percent ownership interest in the
20 High Island South Block A330 platform to interconnect with the High Island
21 Offshore System.

1 **Q.10 Does Stingray anticipate any changes to Stingray's system design?**

2 A. Yes. As reflected in Part 2 of Statement O, Stingray has an abandonment
3 proposal currently pending before FERC in Docket No. CP08-151. If that request
4 for abandonment authorization is granted, such abandonments will reduce
5 Stingray's system design capacity, as shown in Part 3 of Statement O, but this
6 change will not cause a change in the service level Stingray is providing to its
7 current shippers since the system is substantially underutilized.

8 **Q.11 Please describe the abandonment project currently pending before FERC.**

9 A. On April 14, 2008, in Docket No. CP08-151, Stingray filed an application under
10 Section 7(b) of the NGA to abandon a total of eight compressor units at
11 Compressor Stations 701 (onshore) and 702 (offshore on Platform WC509).
12 Seven of those eight compressor units have been idled since the Commission
13 authorized Stingray to place them in idled status in July of 2004. *See Stingray*
14 *Pipeline Company, L.L.C.*, 108 FERC ¶ 61,058 (2004). In a subsequent letter
15 order dated July 18, 2007, in Docket No. CP04-149, the Commission granted
16 Stingray until April 13, 2008 to evaluate the impact of potential Gulf of Mexico
17 supply developments on Stingray's throughput and to make a decision on whether
18 to replace some or all of the deactivated compressor units or to proceed with an
19 application for abandonment.

20 As Stingray stated in its application to the Commission, Stingray has
21 completed its evaluation of the supply development in the areas in which its
22 system is located and generally in the central portion of the Gulf of Mexico, and

1 determined that, following the abandonment, the capacity of its system will be
2 sufficient to meet the foreseeable demand for services on its system. Stingray
3 noted in its application that the demand for transportation service on Stingray's
4 system has decreased substantially over time, leading to surplus compression and
5 transmission capacity on Stingray's system. Stingray determined that it could
6 abandon the identified compressor units without affecting the service it provides
7 to its existing shippers.

8 As explained in the Prepared Direct Testimony of Mr. Stephen J. Neyland,
9 Exhibit No. SPC-6, and consistent with the accounting treatment proposed by
10 Stingray in its abandonment application in Docket No. CP08-151, Stingray has
11 removed any remaining capital costs associated with these eight compressor units
12 from the rate base. In addition, I understand that no operation and maintenance
13 costs associated with these removed facilities are included in the cost of service in
14 this filing, since these removed facilities were idled during the entire based
15 period.

16 **Stingray's Operational Risks**

17 **Q.12 In your opinion, is Stingray subject to a high level of operational risks, as**
18 **compared with the average onshore natural gas pipeline?**

19 A. Yes. As a dual-phase pipeline system located primarily offshore in the Gulf of
20 Mexico, operating Stingray involves greater risk than operating the average
21 onshore natural gas pipeline. This increased operational risk exposes Stingray to
22 higher operating costs, as well as more volatility associated with those costs, than
23 the average onshore interstate natural gas pipeline.

1 **Q.13 In what ways is Stingray riskier than the average onshore natural gas**
2 **pipeline?**

3 A. In addition to the production and commercial risks identified by Mr. Stephen L.
4 Merritt in his Prepared Direct Testimony, Exhibit No. SPC-7, and the general
5 operational risks faced by all natural gas pipelines, Stingray faces a number of
6 significant operational risks to which onshore pipelines are not exposed. These
7 include risks associated with (1) logistical complexity, (2) operating a subsea
8 pipeline with portions that are unburied, (3) having a limited pool of contractors
9 to perform maintenance and repairs, (4) operating a dual-phase line, (5) being
10 dependent upon single production sources to maintain operating flows in sections
11 of the system, and (6) outages due to system damage caused by hurricanes and
12 other severe storms in the Gulf of Mexico.

13 **Q.14 Please explain the operational risks Stingray faces with respect to logistical**
14 **complexity.**

15 A. Because the majority of Stingray's facilities are located offshore, access to the
16 underwater pipeline and offshore platforms is restricted and space on the offshore
17 platforms is limited. This means that even routine, preventative, and corrective
18 maintenance and repairs are complex, time-consuming, and require a great deal of
19 logistical planning in order to move personnel and needed equipment to the work
20 sites in a safe and efficient manner.

21 Take, for instance, the detection and repair of a gas leak at a flange that can
22 be fixed by tightening the flange. Onshore, sniff tests or visual evidence would
23 identify the possible locations of leaks and visual inspections would be used to

1 identify the specific flange that was leaking. No specialized equipment would
2 generally be used to identify the leak site or repair it – in most cases it is simply a
3 matter of tightening the flange bolts. Offshore, however, after bubbles are
4 reported or a leak is otherwise detected, Stingray must hire a helicopter to fly over
5 a larger area to ensure that there are no other bubbles and to confirm the general
6 location and size of the leak. Stingray then has to hire a vessel and divers to go
7 out to the reported site and visually, to the extent possible, inspect the pipeline.
8 Sometimes the use of side scan sonar or remotely operated vehicles may be
9 needed to locate the leak. These specialized resources required for offshore
10 repairs are relatively scarce and in high demand among both pipelines and
11 producers operating in the Gulf. They may therefore not be immediately
12 available to Stingray when needed.

13 Once the leaking flange is identified, in order to inspect the flange, divers
14 may be required to move hundreds of sand or cement bags laid over the flange to
15 protect it in water depths of 200 feet or more, or may have to “jet out” the mud
16 and soil with specialized tools to reach the flange if the pipeline is in water depths
17 of less than 200 feet and therefore buried. Once the flange is exposed, the diver
18 will attempt to tighten the bolts to stop the leak. If the pipeline is submerged in
19 water depths of 100 feet or greater, special diving equipment and above-surface
20 facilities may be needed depending on the length of time the divers need to be at
21 depth. For instance, to use scarce diver time as efficiently as possible, in
22 connection with subsurface repairs expected to last more than a few days, special
23 living quarters will be used by divers on the ship or platform to maintain the

1 divers at conditions equivalent to those experienced at depth underwater so that
2 less diver decompression time is needed. Approximately 79 percent of Stingray's
3 pipeline facilities lie at a depth of 100 feet or greater. Each layer of logistical
4 complexity adds a heightened level of associated risks – transporting personnel by
5 helicopter, transfer of personnel from boats to platforms, medical complications
6 with divers, transfer of equipment from moving boats to platforms via cranes, etc.
7 Each of these activities presents additional risks that can impact Stingray's
8 operations in any given year. The logistical complexity thus increases the
9 possibility and likelihood that something could go wrong, and when something
10 does go wrong, it can be very costly for Stingray.

11 **Q.15 Please explain the cost impact of this logistical complexity on Stingray's**
12 **operations.**

13 A. In addition to heightening the likelihood that something could go wrong even with
14 respect to routine maintenance and repairs, such logistical complexity exposes
15 Stingray to greater time and delays associated with repairs and maintenance. It
16 also makes it more expensive for Stingray to operate and exposes Stingray to
17 greater volatility in its cost of operations than is true for a typical onshore gas
18 pipeline. Unlike onshore pipelines, Stingray incurs costs for transporting
19 personnel to and from offshore locations, housing personnel offshore, and
20 specialized equipment and divers for underwater maintenance, as well as the
21 additional time required to complete routine activities. With respect to the
22 leaking flange example, in a matter of a day, the flange could be identified and the
23 bolts on the flange tightened for a total cost of less than \$5,000 onshore.

1 Offshore, however, the same task would take at least two to three days or more
2 and could cost \$250,000. Furthermore, because it is safer to fly helicopters and
3 perform offshore work during daylight hours and in reasonably good weather
4 conditions, the hours during a day in which the work can take place on offshore
5 facilities are limited, and weather, such as fog, storms, and swells, can prevent
6 work from taking place at all, further adding to the potential for increased cost of
7 repairs and longer system outages.

8 **Q.16 Are there other examples of activities that take longer in the offshore**
9 **environment?**

10 A. Yes. Another example of an activity that takes longer offshore than onshore is the
11 inspection of a pipeline after a major storm. Onshore, in most cases pipelines are
12 not even inspected, but if needed, pipeline personnel can quickly perform a visual
13 inspection of the pipeline right of way to determine if there is any evident
14 physical damage and perform a gas detection survey to determine if there are any
15 leaks. This can be done in a matter of days. Offshore, on the other hand, the
16 underwater pipeline has to be inspected using side scan sonar, remotely operated
17 vehicles ("ROVs"), or divers. For example, this requires the hiring of specialized
18 equipment and operators to operate ROVs or devices towed by a vessel, known as
19 "towed fish," as well as specialized personnel who can read and interpret the
20 sonar images. Sonar, however, does not identify specific problems. Instead, the
21 analysis of sonar readings simply identifies areas of the pipeline that require
22 further visual inspection. Once these areas are identified by sonar devices, divers
23 have to be deployed to actually inspect the pipe in those areas for damage. This

1 inspection process can take anywhere from weeks to months depending on
2 weather-related delays and the availability of the equipment and personnel needed
3 to perform the inspections.

4 **Q.17 Please explain the operational risks Stingray faces with respect to operating a**
5 **subsea pipeline with portions that are unburied.**

6 A. In accordance with regulatory requirements, the portions of Stingray's pipeline in
7 water depths of less than 200 feet are buried with at least three feet of cover.
8 While burial of the pipeline does not ensure that the pipeline is protected from all
9 hazards, burial does provide some level of increased protection. However,
10 approximately fifty percent of Stingray's system lies at depths deeper than 200
11 feet, and this portion of Stingray's system is not buried. Consequently, this
12 portion of the pipeline is exposed to the elements. This fact causes this portion of
13 Stingray's facilities to be subject to greater threats from external sources, such as
14 ships, fishing lines or nets, and subsurface currents, than is the case for the
15 average onshore interstate gas pipeline.

16 For instance, during Hurricane Rita, many mobile offshore drilling units
17 were ripped loose from their moorings and floated through the Gulf of Mexico
18 dragging their anchors and/or anchor chains and cables across the sea floor. One
19 of those anchors hooked Stingray's Vermillion Block 325 20-inch lateral and, as
20 shown in Exhibit No. SPC-13, moved the line approximately 2000 feet off its as-
21 built center line, severely bending and tearing one section of the line and the
22 adjacent subsea manifold. Additionally, Stingray's Vermillion Block 321A 12-
23 inch lateral was torn away from the platform and moved approximately 1000 feet

1 off its as-built center line. The two lines had to be shut-in to be visually
2 inspected. Only after eleven months of delays due to lack of equipment
3 availability and inclement weather, was Stingray able to repair its Vermillion
4 Block 321A 12-inch lateral by installing 2,775 feet of new 6-inch pipe and cutting
5 out the bend in its Vermillion Block 325 20-inch lateral and replacing it with new
6 20-inch pipe. Similarly, a mile and a half of Stingray's East Cameron Block 314
7 16-inch lateral was discovered after Hurricane Rita to be located over 200 feet off
8 the as-built center line. This movement is the equivalent of having a pipeline
9 moved from the street in front of your house, through your property, and into the
10 backyard of the neighbor's house behind you – for a length of pipe approximately
11 the length of your house and a mile and half of your neighbors' houses. The line
12 had to be shut-in while the pipeline was inspected for physical damage using
13 ROVs. Pressure tests were conducted and new as-builts had to be submitted to
14 the Minerals Management Service ("MMS") to reflect the new right of way
15 before service could be recommenced on the line. Stingray still has not
16 ascertained why this pipe movement occurred, almost three years after the event.
17 Except for earthquakes and landslides, which are relatively uncommon events,
18 onshore pipelines are not exposed to such risks.

19 **Q.18 Please explain the operational risks Stingray faces with respect to having a**
20 **limited pool of contractors to perform maintenance and repairs.**

21 A. The obvious risk is that contractors will not be available when needed, extending
22 system outages, and if they are available, they are only available at a high cost.

1 **Q.19 Please explain the operational risks Stingray faces with respect to operating a**
2 **dual-phase line.**

3 A. Due to the offshore location of the production attached to Stingray, Stingray
4 permits its shippers to transport a blended stream of unprocessed natural gas and
5 condensate liquids. The presence of liquid hydrocarbons and water in the gas
6 being moved on Stingray adds to the operational complexity of the system and the
7 likelihood of operational outages. For example, its dual-phase operation increases
8 the possibility of corrosion on Stingray and necessitates the operation of corrosion
9 inhibition injection equipment as well as large-sized pigging facilities. Liquid
10 slugging can damage the pumps and compressors as well as cause structural
11 loading and damage to risers on manifold piping. Managing slugs can also cause
12 outages on the system in order to deal with the fluid problems. In addition,
13 because a potential equipment failure might result in the discharge of liquids or
14 oil, Stingray has to comply with the environmental requirements associated with
15 the potential for oil spills. These include maintaining oil spill contingency plans,
16 conducting annual drills and notification exercises, and contracting with oil spill
17 response organizations to respond to a worst case scenario discharge.

18 **Q.20 Please explain the operational risks Stingray faces with respect to being**
19 **dependent upon single production sources to maintain operating flows in**
20 **sections of the system.**

21 A. Given that the offshore location of the production attached to Stingray is
22 concentrated at distinct production platforms, Stingray is dependent on gas supply
23 from certain critical production platforms to maintain the operability of the lateral
24 attaching that supply and other connecting laterals. Even though Stingray has

1 offshore compressor facilities associated with its mainline, operation of the lines
2 feeding the mainline, and ancillary operations such as running “pigs,” is
3 dependent on the flows and pressures from the attached production platforms,
4 which are limited in number and location. If a production platform goes down or
5 otherwise gets shut in, the line connecting that platform to Stingray’s mainline
6 system may become inoperable if there are not enough other platforms attached to
7 that line or otherwise situated in the right location. For instance, because Stingray
8 transports unprocessed gas, Stingray has to frequently pig the line to prevent
9 corrosion from water and natural gas liquids. Pigging requires the existence of
10 enough pressure and flow in the line to move the pig through the line. When
11 there is no longer enough pressure or flow to move the pig through the line, either
12 due to natural production declines or some other production issue, the risk of
13 corrosion associated with operating an unpigged line might dictate that the line be
14 shut in unless there is an operationally and commercially feasible alternative to
15 maintaining flows in the line. Given Stingray’s configuration, there are generally
16 few or no options for alternative gas supplies at the ends of the lines feeding
17 Stingray’s mainline system.

18 **Q.21 What might cause a production platform to go down or become shut-in?**

19 A. Operational activity on production platforms connected to Stingray may be
20 interrupted for a number of reasons, including operational problems, repairs, and
21 maintenance. Production platform operations may also stop permanently due to
22 natural production declines. In addition, production platforms and offshore

1 pipelines in the outer-continental shelf (“OCS”) are subject to regular inspections
2 by the MMS, which could result in temporary shut-ins or suspensions. The MMS
3 is responsible for the regulatory oversight of the design, installation, and
4 maintenance of oil and gas wells, platforms, pipelines, and production facilities on
5 the OCS. OCS operators are required by the MMS to inspect their facilities
6 periodically and are also subject to unannounced inspections by the MMS. After
7 the hurricane season of 2005, the MMS passed more stringent safety regulations
8 to make offshore platforms and pipelines better able to maintain their structural
9 integrity through significant environmental events. *See* 30 C.F.R. § 250.901
10 (2008). New OCS platforms and pipelines, and existing platforms and pipelines
11 deemed to have a new use, must meet more stringent design specifications.
12 Existing OCS platforms and pipelines that have not changed uses must meet more
13 stringent assessment criteria. Also, the MMS normally will require more
14 aggressive inspection and testing requirements for offshore pipelines and
15 platforms after significant events.

16 **Q.22 Please explain the operational risks Stingray faces with respect to storm-**
17 **related system outages.**

18 A. As is evident from Stingray’s experience during the 2005 hurricane season,
19 Stingray faces heightened risks of extended system outages due to system damage
20 caused by major storms in the Gulf of Mexico. Such events may not occur every
21 year, but when they do occur, they have a significant impact on Stingray’s
22 operations.

1 As shown in Exhibit No. SPC-14, Hurricane Rita passed directly over
2 Stingray's system in September of 2005. In its wake, Hurricane Rita caused
3 (1) structural damage to W&T Offshore, Inc.'s East Cameron 338A platform,
4 which required Stingray to disconnect its facilities from the platform; (2) a mobile
5 offshore drilling unit to break loose and drag its anchor across Stingray's
6 Vermillion Block 325 20-inch lateral and Vermillion Block 321A 12-inch lateral
7 with the resulting damage I previously described; (3) Stingray's East Cameron
8 Block 314 16-inch lateral to be moved over 200 feet off the as-built center line, as
9 I previously described; and (4) a gas leak in Stingray's Vermillion block 320
10 20-inch lateral. Exhibit No. SPC-15 contains pictures of some of the damage
11 caused to W&T Offshore, Inc.'s East Cameron 338A platform by Hurricane Rita.
12 The storm surge associated with Hurricane Rita also destroyed much of Stingray's
13 onshore control system, and damaged office and maintenance buildings, the
14 communications tower, the helicopter pad, and the slug catcher. Exhibit No.
15 SPC-16 contains pictures of some of the damage caused to Stingray's onshore
16 facilities by Hurricane Rita. In addition to this damage to Stingray's system,
17 Hurricane Rita damaged producers' platforms and onshore delivery points and
18 processing facilities. As a result of this damage to Stingray's system and the
19 other facilities connected to Stingray's system, it took Stingray approximately
20 twelve months to return to a relatively-normal level of operations. As the Stingray
21 Annual Report for Blanket Certificate Activities attached in Exhibit No. SPC-17
22 shows, repairs to Stingray's Vermillion Block 325 20-inch lateral and Vermillion
23 Block 321A 12-inch lateral were not completed until September 18, 2006.

1 As I have explained, the location of its facilities offshore necessitates the
2 use of special equipment to repair its system, such as helicopters, vessels, and
3 specialized hardware, such as diver-installed end connectors (the underwater
4 version of a flange). Particularly after major disruptions such as a hurricane,
5 access to such special equipment and supplies can be very limited, resulting in
6 delays in repairs and significantly higher costs for such equipment and supplies.
7 It took Stingray approximately 25 days after Hurricane Rita made landfall to
8 establish a limited capability to divert a small portion of its system volumes from
9 its system to HIOS, and it took approximately 70 days to rehabilitate its system to
10 a point where Stingray could re-commence limited service using only its own
11 facilities. This was due primarily to the fact that there was a limited supply of the
12 vessels needed to support the inspection of the pipeline to determine the necessary
13 scope of repairs and to support the performance of the actual repair work.

14 But a major storm does not have to inflict actual damage to Stingray's
15 facilities for the storm to have an impact on Stingray's operations. Even before a
16 storm hits, Enbridge's Hurricane Evacuation Plan requires the evacuation of
17 personnel from offshore production platforms and compressor stations in specific
18 circumstances, including when winds reach 45 miles per hour, when the National
19 Weather Service issues certain alerts, and when storm surge is expected to reach
20 six to eight feet above normal. I have attached a copy of Stingray's current
21 evacuation plan as Exhibit No. SPC-18. Onshore pipelines away from the coast
22 line are not subject to such evacuation requirements. Though such conditions
23 clearly can result from hurricanes, the conditions requiring evacuation can also

1 occur due to storms less severe than hurricanes, including tropical storms and
2 inclement winter weather. Because such evacuations are required ahead of a
3 storm, they occur regardless of whether an offshore pipeline's facilities ultimately
4 sustain damage from the storm. For instance, Stingray's offshore Platform
5 WC509 was evacuated ahead of Hurricane Katrina even though Hurricane Katrina
6 did not end up causing any physical damage to Stingray's system.

7 **Q.23 How often do such evacuations occur per year?**

8 A. In my experience, Stingray will generally evacuate personnel from its offshore
9 facilities such as Platform WC509 one to three times a year.

10 **Q.24 How does an evacuation of personnel affect Stingray's gas flow?**

11 A. I will use Platform WC509 as an example, which was evacuated during
12 Hurricanes Katrina and Rita. An evacuation of personnel from Platform WC509
13 places Platform WC509 in "bypass" mode, which means that personnel take
14 compressors offline and release all gas on Platform WC509 just prior to their
15 evacuation. After personnel leave, gas may flow on Stingray if producers
16 continue to deliver gas into the system, but producers will only be able to
17 continue deliveries into the system if pressures within the pipeline allow the
18 producers to do so. Since in many circumstances the producers, who are subject
19 to the same evacuation requirements, have also evacuated personnel from their
20 production platforms and taken compressors and other necessary delivery
21 equipment offline, only gas with flowing wellhead pressures sufficient to
22 overcome the Stingray system pressures can enter the system. Once pressures on

1 the system become too low or too high, the system will automatically shut itself
2 in. The result over several days is that gas movement on the Stingray system can
3 decline dramatically, even when no damage occurs to facilities or equipment.

4 **Q.25 How long did Platform WC509 remain in bypass mode during the**
5 **evacuations for Hurricanes Katrina and Rita?**

6 A. As indicated in Exhibit No. SPC-19, which is a copy of the daily report
7 maintained in the ordinary course of business, Platform WC509 was placed in
8 bypass mode for approximately fourteen days because of Hurricane Rita. Exhibit
9 No. SPC-19 also shows that Platform WC509 was placed in bypass mode for
10 approximately nine days because of Hurricane Katrina even though that hurricane
11 did not cause any physical damage to the platform. The end date of bypass mode
12 is the day on which personnel are able to return to the platform. That date is not
13 necessarily the date on which normal operations are able to resume. As I
14 previously indicated, it took much longer than fourteen days for the Stingray
15 system to come back on-line at even minimal levels after Hurricane Rita.

16 **Q.26 How much did it cost Stingray to evacuate personnel from Platform WC509**
17 **for Hurricanes Katrina and Rita?**

18 A. Approximately \$40,000 per evacuation. This amount is primarily due to the cost
19 of helicopter flights to and from Platform WC509 to remove personnel from the
20 platform to a safe area onshore and to return the personnel to the platform after
21 the storm has passed. The total number of flights required depends on the number
22 of personnel on Platform WC509 at the time of the evacuation and the number of

1 personnel that must return to Platform WC509 after the threat of inclement
2 weather has lifted.

3 **Q.27 Does this conclude your prepared direct testimony?**

4 A. Yes, it does.

**UNITED STATES OF AMERICA
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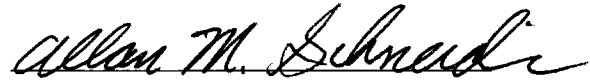
Stingray Pipeline Company, L.L.C.

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Docket No. RP08-____-000

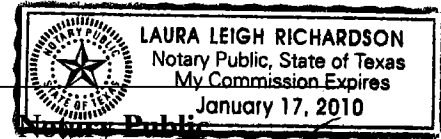
AFFIDAVIT OF ALLAN M. SCHNEIDER

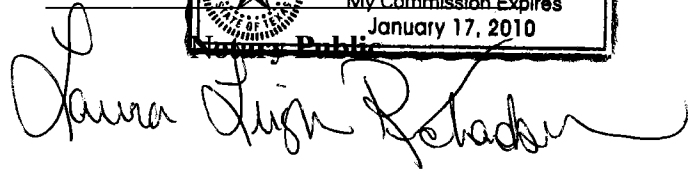
Allan M. Schneider, being first duly sworn, hereby states that he is the witness whose Prepared Direct Testimony is attached hereto; that, if asked the questions which appear in the text of aforesaid Prepared Direct Testimony, affiant would give the answers that are therein set forth; and that affiant adopts the aforesaid Prepared Direct Testimony as his sworn, direct testimony in this proceeding.



Allan M. Schneider

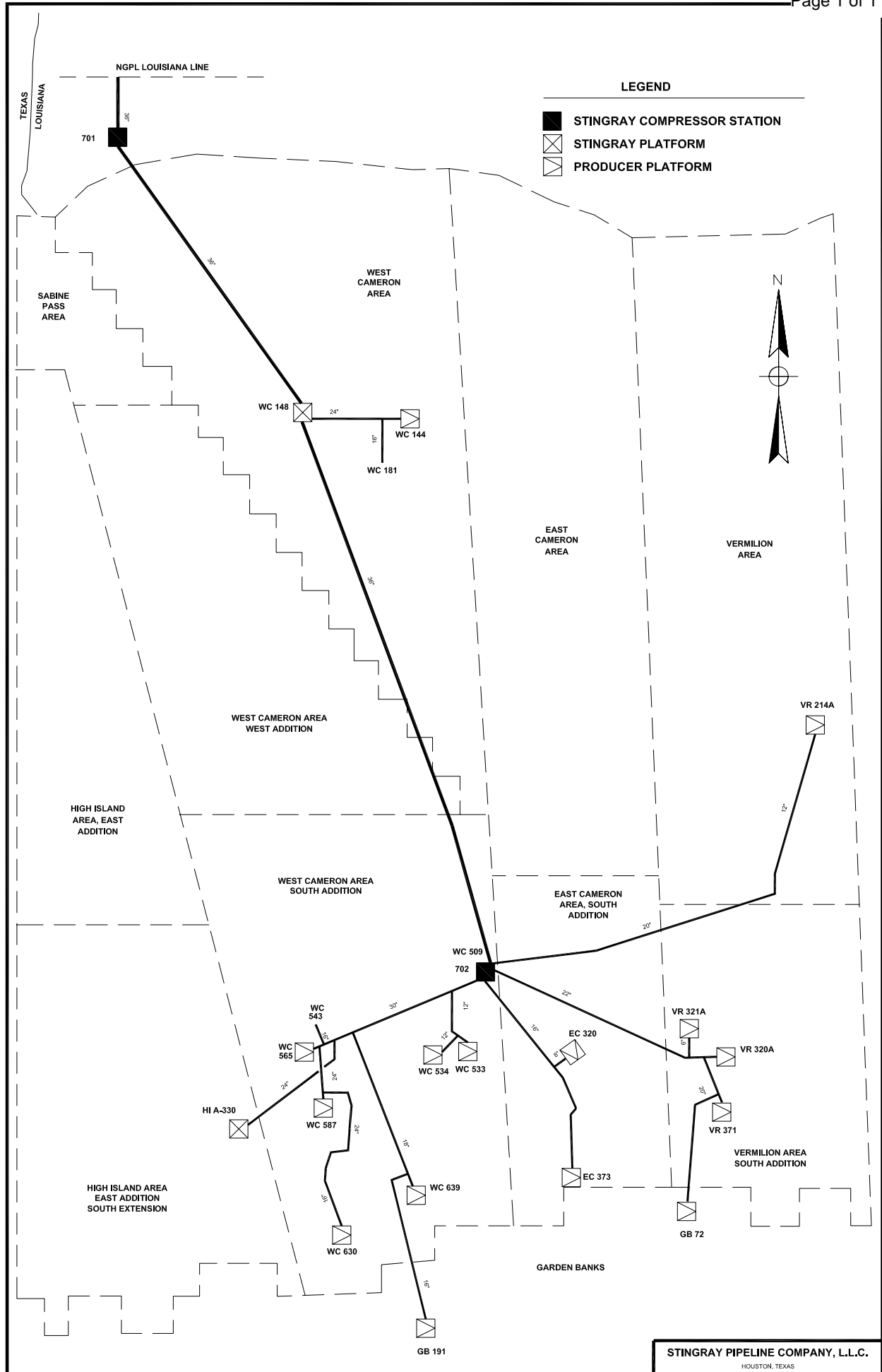
SUBSCRIBED AND SWORN TO before me, a Notary Public in and for the State of Texas, County of Harris, this 24th day of June, 2008.





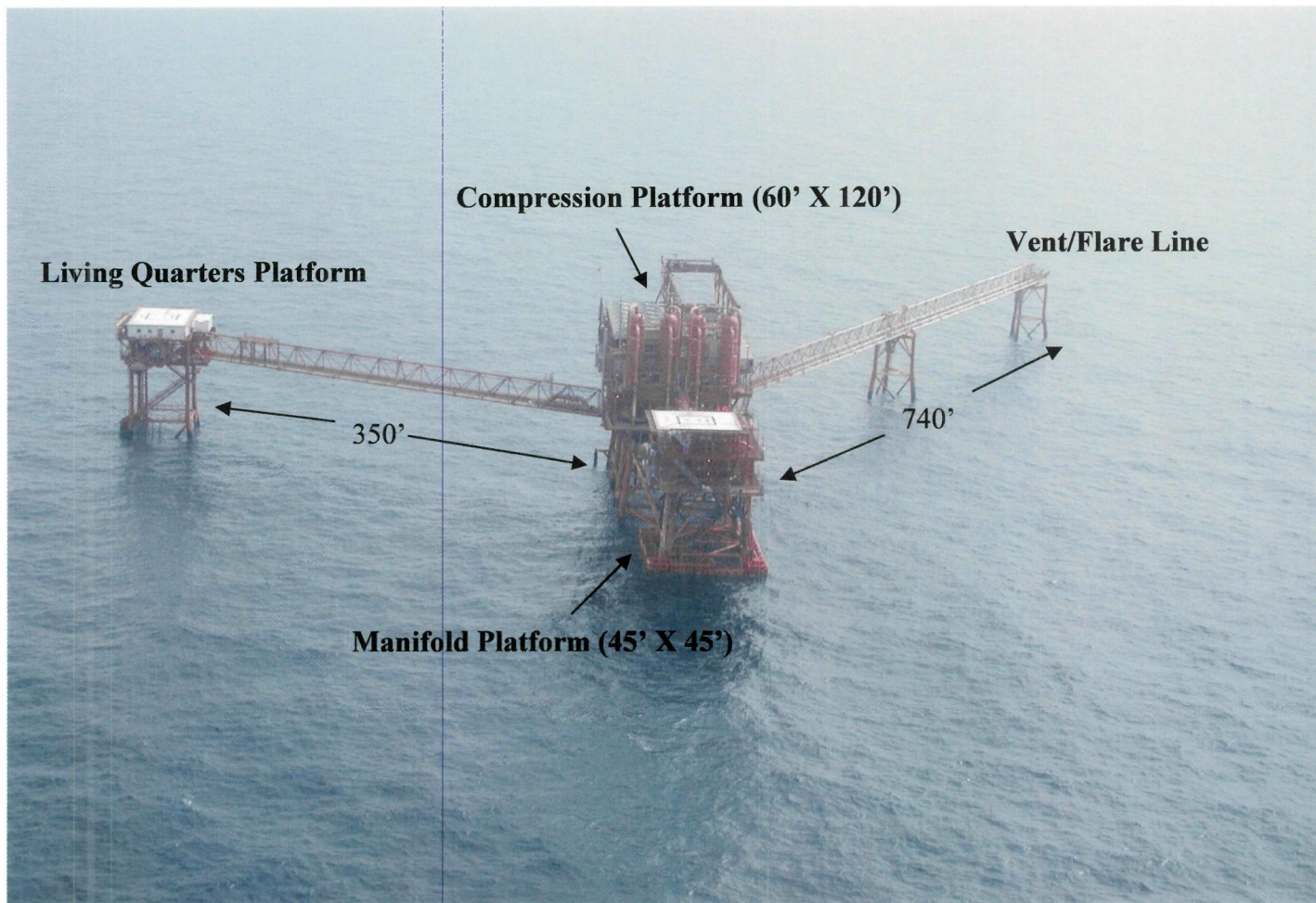
My commission expires:

January 17, 2010

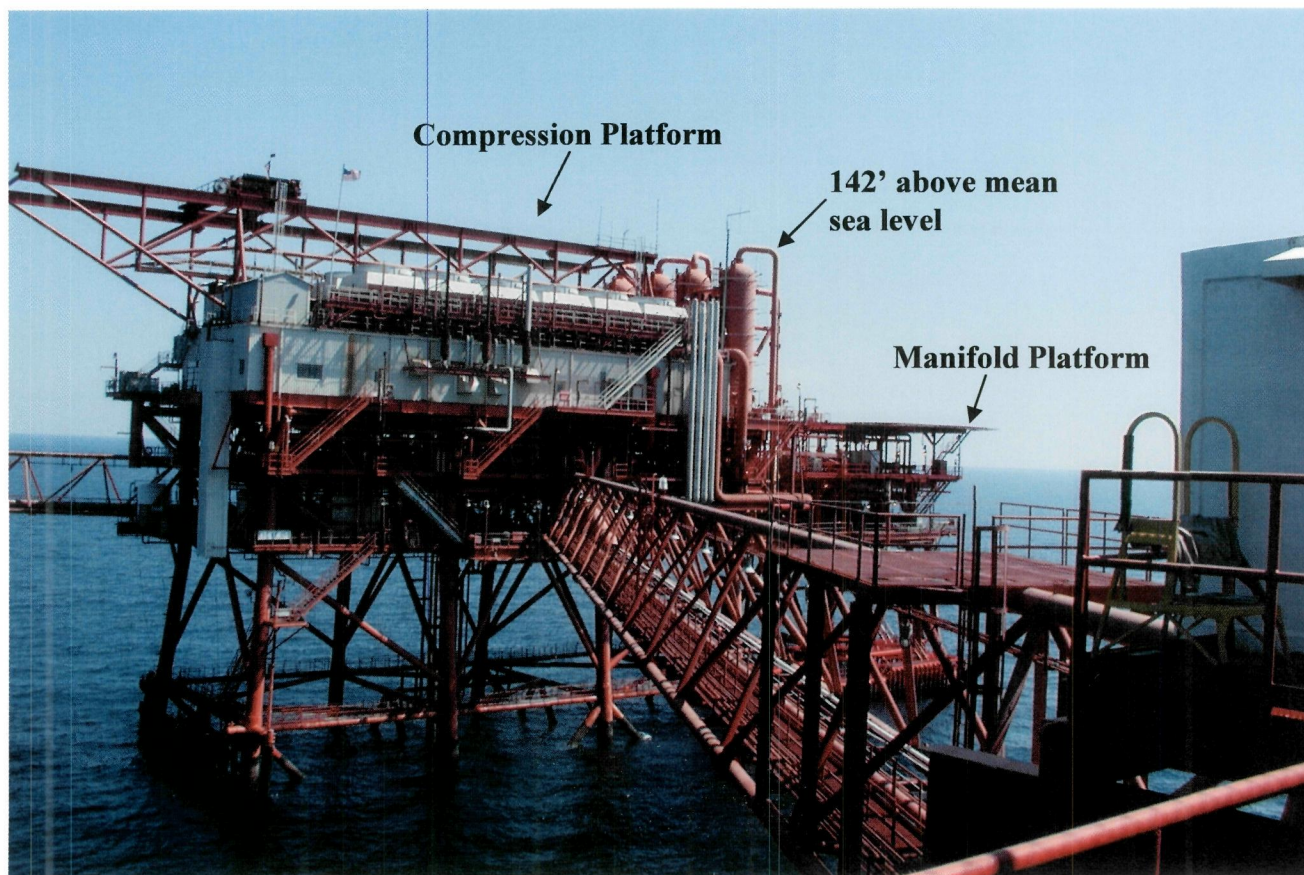


Jun 28, 2008 - 2:35PM Alex Luna G:\Drafting\ENERGY\STINGRAY\2007\DETAIL SYSTEM MAP

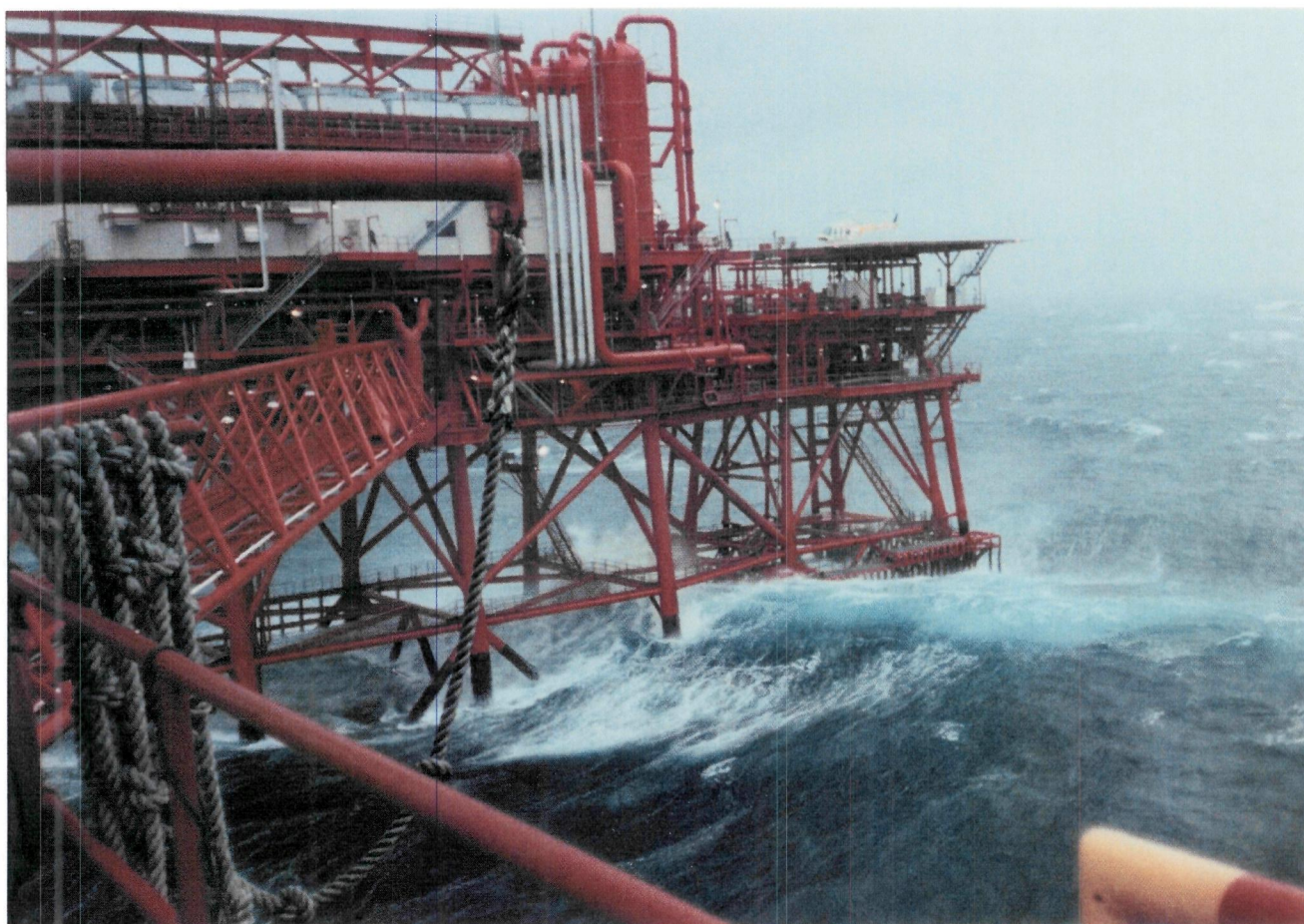
Stingray's Platform WC 509 Complex



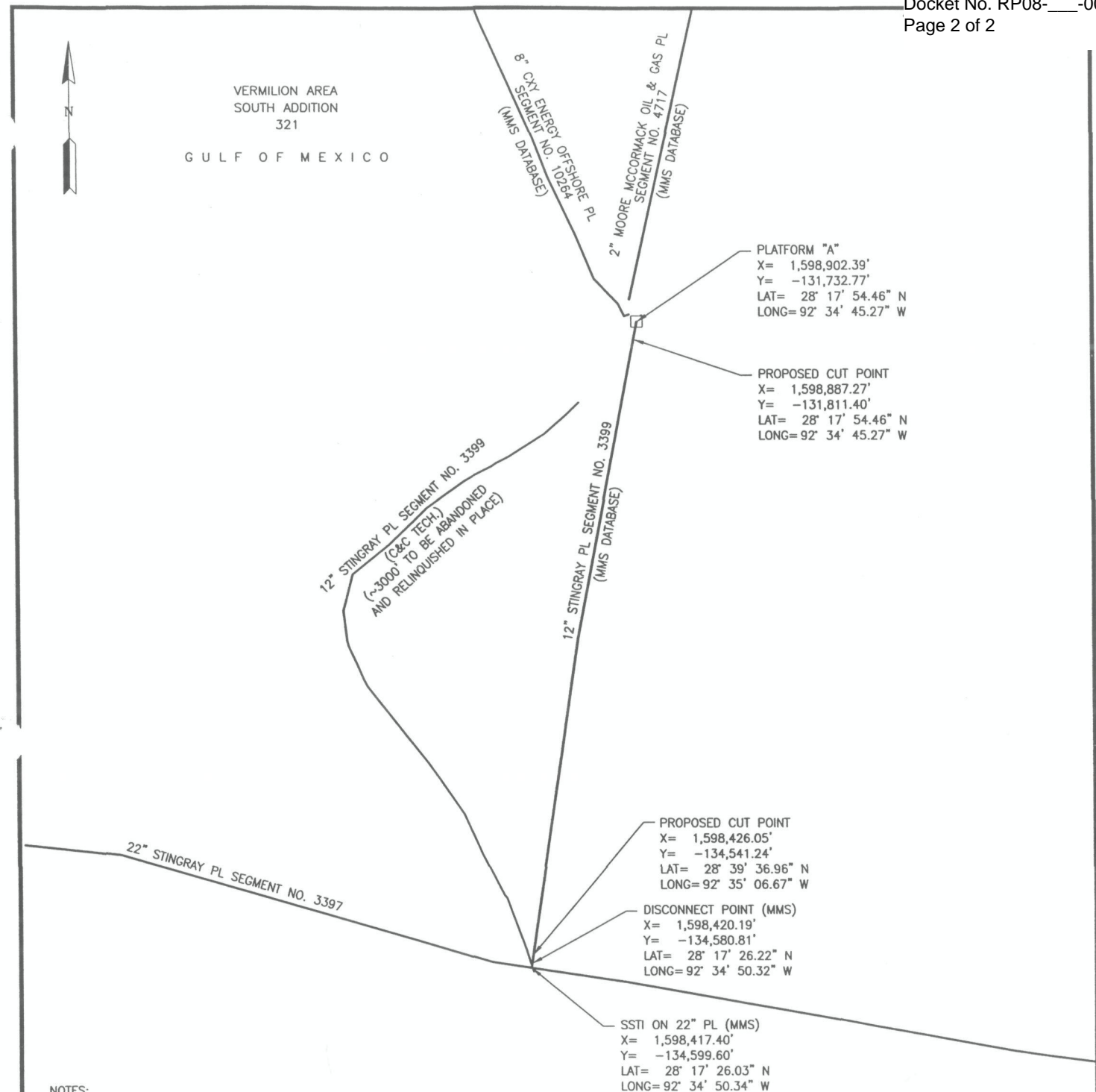
**Stingray's Platform WC 509 Complex
View From Living Quarters**



**Stingray's Platform WC 509 Complex
Winter Storm With Waves Broaching the +15' Walkways**







- NOTES:
1. ALL COORDINATES SHOWN ARE LAMBERT ZONE: LOUISIANA SOUTH GEODETIC DATUM: NAD 27, ELLIPSOID: CLARK 1866.
 2. ORIGINAL 12" PIPELINE LOCATED USING MMS DATABASE.
 3. REFERENCE C&C TECHNOLOGIES, AS-FOUND SURVEY INSPECTION.

PREPARED BY: PROJECT CONSULTING SERVICES, INC.
3300 W. ESPLANADE AVE., S., SUITE 500, METAIRIE, LA
504-833-5321 www.projectconsulting.com

04-25-06 06040\PERMIT 9 K.M.A.

P.L. OR Sta. Account No.			W.O.			Constr. Yr. Date		
Revision - Description	By	App.	Dr. By J.E.F.	Date 4-7-06	Scale 1"= 600'			
A - FOR PERMITTING	J.E.F.	P.J.T.	Dwg. Stat.	Ckd. By	Date	App. By	Date	App. By
B - FOR PERMITTING	K.M.A.	P.J.T.	Prel'y.					
			Bid					
			Const.					

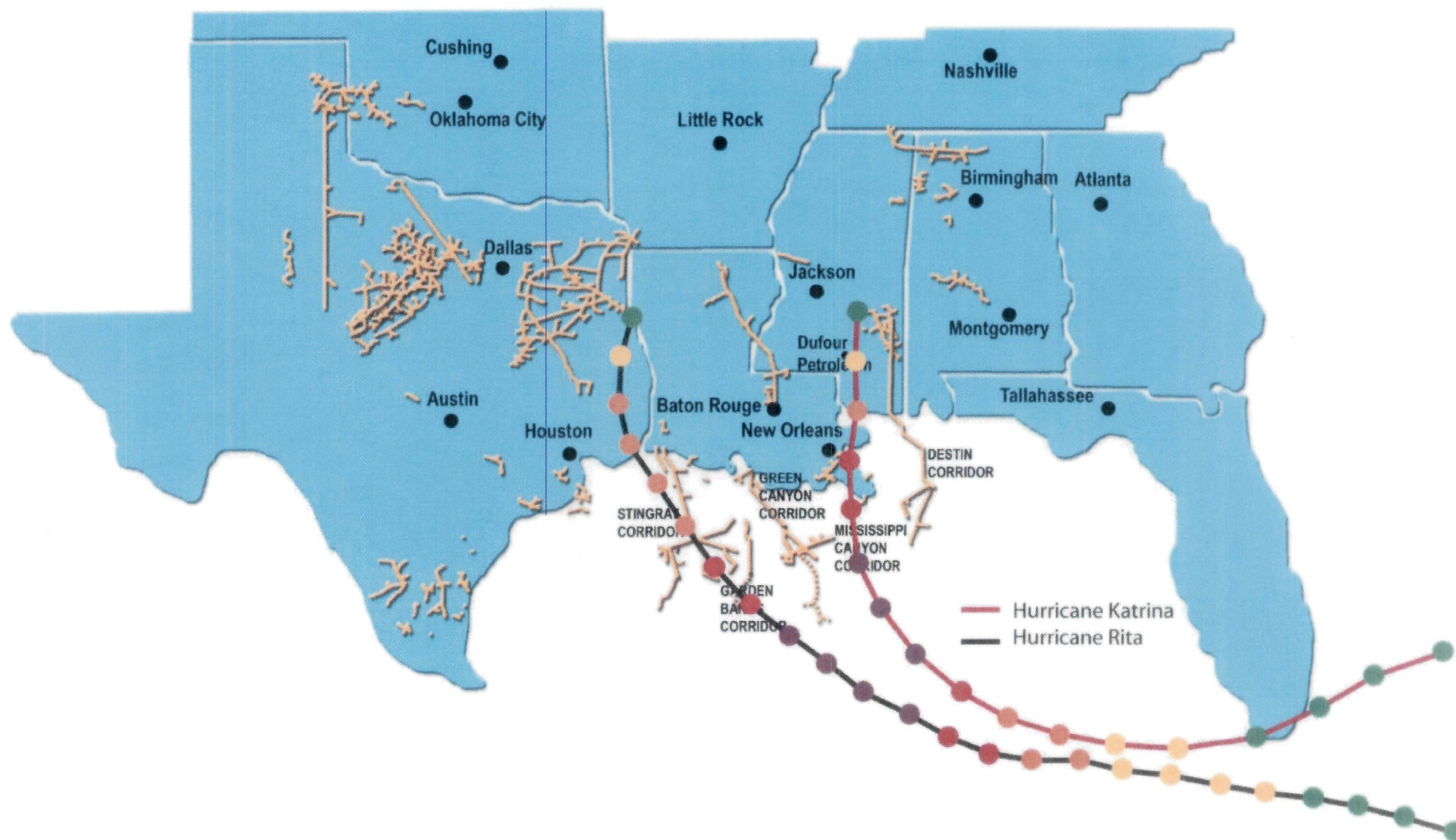
STINGRAY PIPELINE COMPANY
Houston, Texas
STINGRAY 12" GAS PIPELINE
PIPELINE ABANDONMENT
VERMILION BLOCK 321
VICINITY MAP
OFFSHORE LOUISIANA



DWG. NO.
PER-01

CADD NAME:

Paths of Hurricanes Katrina and Rita



EC338 W&T Offshore, Inc. Platform

Exhibit No. SPC-15
Docket No. RP08-____-000
Page 1 of 3



Stingray slug catcher and
meter station for deliveries
to Sea Robin

16" Stingray riser

OCT 18 2005

Well bay
damage to
producer
equipment
on platform

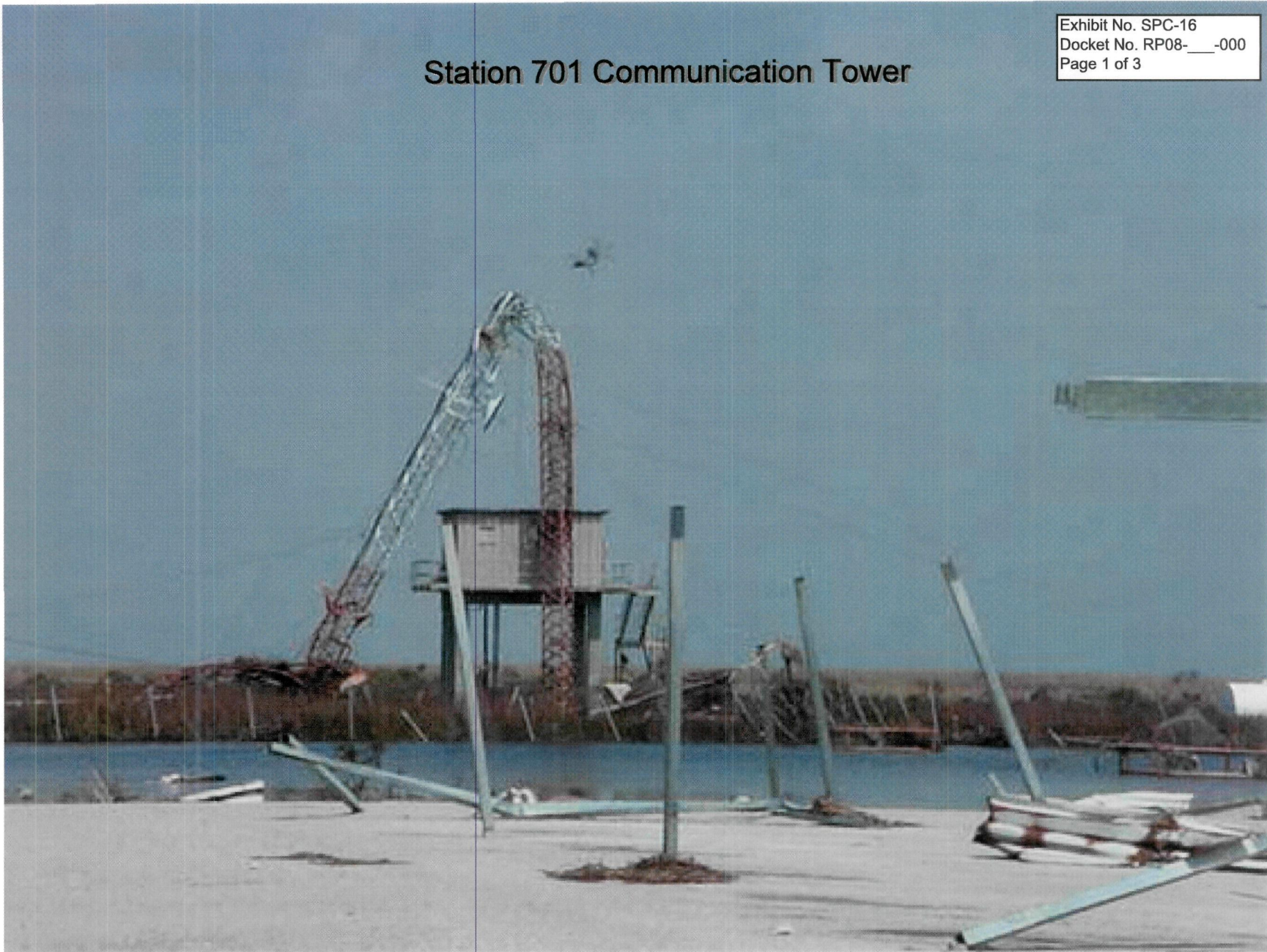


Damage to Stingray slug
catcher and meter station



Station 701 Communication Tower

Exhibit No. SPC-16
Docket No. RP08-____-000
Page 1 of 3





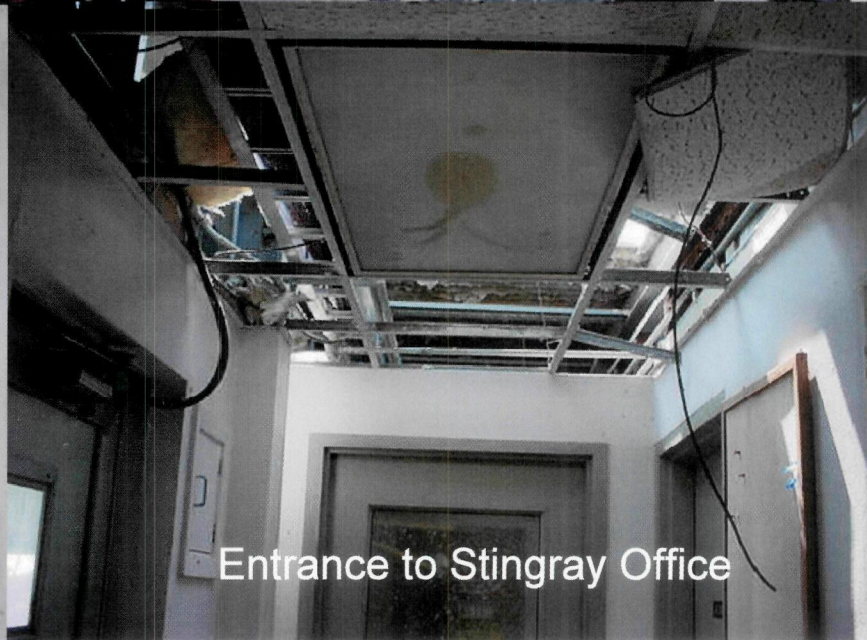
Stingray Breakroom



Stingray Control Room



Stingray Engine Room



Entrance to Stingray Office



Stingray slug catcher with beach house roof that traveled 2,000 feet as a result of Hurricane Rita storm surge, breaking small diameter piping and displacing low liquid end of slug catcher off its concrete base

Stingray Pipeline Company, L.L.C.
Annual Report for Blanket Certificate Activities
For Calendar Year 2006
Docket No. CP91-1505-000

Section 157.208

1. **Project No.:** 0694113S01
2. **Project Title:** Stingray Anchor Damage Repair
3. **Description:** The 12-inch Lateral extending from Vermilion 321 "A" platform to an SSTI on Stingray's 22-inch line in the same block was pulled out of its right-of-way westward by approximately 1,000 feet during Hurricane Rita. The line was replaced by installing 2,775 feet of 6-inch pipe designated as OCS-G28197 segment 15736. The existing 12-inch riser at Vermilion Block 321 "A" platform remains in service. [See corresponding project in Section 157.216(a) - Abandonments]

Stingray replaced approximately 40 feet of its 22-inch Lateral OCS-G 2122C segment 3397 including the SSTI in Vermilion Block 321 with a 40 foot spool piece and a new 22x10-inch SSTI assembly to tie into the 6-inch segment 15736.

Stingray modified its 20-inch Lateral OCS-G 15038 segment 10627 that was dragged out of its right-of-way by cutting out a kinked section of 474 feet in Vermilion Block 325 (now designated as abandoned segment 10627) and replacing it with connector spool piece of 400 feet of 20-inch jumper piping (rearranged line is now designated as segment 15721).
4. **Purpose:** Replace offshore laterals damaged by Hurricane Rita. The replacement could not be completed within the boundaries of the existing rights-of-way due to anchor drag and therefore is not eligible for reporting pursuant to Section 2.55(b).
5. **Location:** Vermilion Blocks 321 and 325
Federal waters, offshore Louisiana
6. **Construction Commenced:** 8/2/2006
7. **Construction Completed:** 9/18/2006
8. **In-Service Date:** 9/18/2006

Stingray Pipeline Company, L.L.C.
Annual Report for Blanket Certificate Activities
For Calendar Year 2006
Docket No. CP91-1505-000

Section 157.208

1. **Project No.:** 0694113S01


9. **Actual Installed Cost:** \1

Labor	\$	16,807
Material		1,481,918
Other		<u>12,373,477</u>
Total		<u>\$ 13,872,202</u>

10. Description of contacts made, reports produced and results of consultations held to ensure compliance with the Endangered Species Act, the National Historic Preservation Act and the Coastal Zone Management Act:

<u>Name</u>		<u>Contacted</u>	<u>Approval</u>
MMS	22-inch	4/27/2006 5/11/2006	5/17/2006
	20-inch	3/28/2006 5/19/2006	6/13/2006
	6-inch	6/2/2006 6/30/2006	7/21/2006
Dept. of Natural Resources - Coastal Restoration and Management		6/2/2006	6/26/2006

\1 Pursuant to Order Temporarily Waiving Regulations to Raise Blanket Certificate Limits, 113 FERC ¶ 61,179 (2005).

	OFFSHORE OPERATIONS EMERGENCY RESPONSE PLAN	
	SECTION 6 NATURAL DISASTER	PAGE NUMBER 6-1
		LAST REVISION DATE June 1, 2007


Enbridge Hurricane Evacuation Plan

Enbridge Offshore (Gas Gathering) L.L.C. operates pipelines and platforms in the Gulf of Mexico (GOM) as well as facilities along the Louisiana and Texas coastline. A hurricane is a very serious threat to the safety of all Enbridge personnel. The Operations Manager will determine when to activate Enbridge's Hurricane Evacuation Plan. Enbridge's guidance for all weather information will be the National Weather Service. With this guidance, the Operations Manager will decide when non-essential personnel will be removed from the GOM, coordination of transportation for all personnel, and when all remaining personnel will be removed from the GOM.

Specifically Enbridge has 4 offshore locations SMI 76 w/ 2 men, SS 207 w/2 men, SS 332 w/5 men, WC 509 w/10 men) and 4 onshore locations (Venice, w/1 man, Nautilus (Garden City) w/2 men, GIGS w/1 man and Holly Beach w/5 men) manned on a routine basis. Our normal policy will be for the locations to be evacuated using our dedicated helicopters once sustained winds reach 45 mph. In the case of Venice, once Plaquemines parish requires evacuation, we will leave the site un-attended. All sites will be left to operate with remote monitoring from the Houston Gas Control Center. Local safety protective devices will ESD the sites if pressures go above or below the device set points. All locations will communicate to the Houston Gas Control Center prior to leaving their sites and the Operations Manager will notify the Vice President, Engineering and Operations when all personnel have been safely returned to the shore base.

Local written procedures will be followed to secure the sites prior to any expected evacuations for hurricanes. These written procedures will define equipment to be removed from sites prior to hurricanes, equipment tie-down procedures, the required inventory in storage tanks, and backup generators that will be pre-positioned, etc.


SAPPHIRE-SIMPSON HURRICANE INTENSITY SCALE			
Hurricane Category	Wind Speed (mph)	Damage Potential	Storm Surge-feet (Above Normal)
1	74-95	Minimal	4-5
2	96-110	Moderate	6-8
3	111-130	Extensive	9-12
4	131-155	Extreme	13-18
5	> 155	Catastrophic	> 18

	OFFSHORE OPERATIONS EMERGENCY RESPONSE PLAN	
	SECTION 6 NATURAL DISASTER	
	PAGE NUMBER 6-2	LAST REVISION DATE June 1, 2007

Hurricane season begins June 1 and runs through November 30, but August and September have the highest activity. Each, Area Supervisor and Operations Superintendent with facilities in the Texas or Louisiana Gulf Coast operating areas should review each of the following recommended preparations with persons they supervise by May 1 of each year. The Area Supervisors are responsible for ensuring that these preparations are completed by the onset of hurricane season (June 1):

<input type="checkbox"/>	Instruct all employees to notify their Supervisor of any existing conditions that could potentially become dangerous if not corrected prior to the arrival of a major storm
<input type="checkbox"/>	Replenish stocks of rope, tarpaulins (or other waterproofing materials) and screw anchors at strategic field locations in preparation for tying down (or protecting from water damage) key operating equipment and supplies (drums, fire extinguishers, electrical equipment, etc.). Warehouses and field offices should stock boards, nails, etc. in preparation for boarding up windows should a hurricane threaten. Each field office should be stocked with emergency supplies and that stock maintained through November:
<input type="checkbox"/>	Re-establish liaisons with local emergency response officials to coordinate response plans and evacuation policies for Venice and Holly Beach (see "Emergency Communications" above for additional details). Develop and implement plans for site security (before, during and immediately after a hurricane).
<input type="checkbox"/>	Review evacuation, reassembly and return-to-work plans with employees. Encourage employees to set up similar plans with their families, so that concerns for their welfare may be minimized while preparations for the arrival are underway.
<input type="checkbox"/>	Discuss with producers, third-party gas plant operators and sales customers local hurricane preparedness plans - how (including when and if) operations will be curtailed prior to the event and resumed afterward.
<input type="checkbox"/>	Trees with dead or diseased limbs should be trimmed at the onset of each hurricane season. All trees on Company property that are in a position to fall on and damage a Company facility (consider buildings, pumps, above-ground piping, power and communication lines, etc.) during a major storm should be removed. Trees on adjoining property should be removed if arrangements for removal can be made with the landowner (tree removal is not recommended to protect such minor facilities as fences).

CHECKLIST OF MATERIALS FOR FIELD OFFICE EMERGENCY USE		
Extra Fuel	Flashlights	Bottled Drinking Water
Generators	Extra Flashlight Batteries & Bulbs	Battery-powered Radio
Hurricane Tracking Chart	First Aid Kits	Safety Goggles

	OFFSHORE OPERATIONS EMERGENCY RESPONSE PLAN	
	SECTION 6 NATURAL DISASTER	PAGE NUMBER 6-3
		LAST REVISION DATE June 1, 2007

If a hurricane moves into (or develops in) the Gulf of Mexico, the Area Operations Manager will determine when each of the following hurricane preparation "phases" is to be implemented.


Phase 1 (Possible Impact on Operations; 6-8 Hours Preparation Time Anticipated)

The Operation Manager is administratively responsible for:

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Notify the Vice President, Engineering and Operations |
| <input type="checkbox"/> | Notify affected Area Supervisors and Operations Superintendents that Phase 1 is in effect and monitor field operations. |
| <input type="checkbox"/> | Interface with the Manager of Gas Control to review weather bulletins as they are updated and to notify Gas Control when preliminary field preparations are complete. |

The Manager of Gas Control is administratively responsible for:


- | | |
|--------------------------|--|
| <input type="checkbox"/> | Holding briefings with on-duty Gas Controllers to review weather bulletins, service curtailment and contingency plans, status of producer operations and the readiness of an alternative Gas Control Center. |
| <input type="checkbox"/> | Determining which site will serve as the alternate Gas Control and Command Post (should the Houston headquarters building be affected by the hurricane) and communicating this decision to the Operations Manager, Vice President E&O and Manager, Transportation Services. |
| <input type="checkbox"/> | Notify the Manager, SCADA to begin testing the SCADA equipment at the alternative Gas Control Center. |
| <input type="checkbox"/> | Ensuring that the Gas Controllers maintain a 49 CFR 192 hurricane tracking chart showing the latest coordinates of the storm, including the time associated with each position, estimated wind speeds and direction of motion. Hurricane tracking may be done with the aid of a computer program during Phase 1. |

	OFFSHORE OPERATIONS EMERGENCY RESPONSE PLAN	
	SECTION 6 NATURAL DISASTER	PAGE NUMBER 6-4
		LAST REVISION DATE June 1, 2007

Each affected Area Supervisor / Operations Superintendent is responsible for:

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Keeping Operations Manager advised of preparation progress, and |
| <input type="checkbox"/> | Maintaining a list of, and establishing a continual communication link with, each Company employee under their supervision. The list shall include name and location assignment; a copy shall be faxed or otherwise communicated to Gas Control. |
| <input type="checkbox"/> | Procuring material for boarding up windows in warehouses and office buildings, if sufficient quantities are not already on hand. |
| <input type="checkbox"/> | Notify all affected employees of the implementation of Phase I and to plan for the possibility that work may be curtailed on short notice. While continuing to perform their normal operations, employees should: |
| <input type="checkbox"/> | Keep the Area Supervisor informed as to their location and plans. |
| <input type="checkbox"/> | Maintain company vehicle fuel tanks at or above the ¾ full level. |
| <input type="checkbox"/> | Check fuel supplies, batteries and emergency generators and prepare such equipment for evacuation or severe weather, as appropriate, and ensure that equipment and materials which could be blown or washed away are adequately secured. |
| <input type="checkbox"/> | Check offshore (and onshore navigable waterway) platform navigation lights, signals, communication systems, etc. for proper operation; plan how to secure the facility against storm damage; and to be prepared to evacuate such facilities on short notice. |
| <input type="checkbox"/> | Make arrangements for the evacuation or sheltering of their families (should the need arise) including taping or boarding up windows. |

If a hurricane "watch" is issued which includes any of the Company's Gulf Coast operational areas (in Texas and/or Louisiana), "Phase 2" emergency preparedness procedures should be implemented for those areas.

	OFFSHORE OPERATIONS EMERGENCY RESPONSE PLAN	
	SECTION 6 NATURAL DISASTER	PAGE NUMBER 6-5
		LAST REVISION DATE June 1, 2007


Phase 2 (Probable Impact on Operations: 6-8 Hours Preparation Time Anticipated)

The Operation Manager is administratively responsible for:

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Determine when to implement Phase 2 so that phase 2 is initiated in ample time to permit all necessary actions to be accomplished and employees evacuated from endangered areas prior to the onset of gale force winds, |
| <input type="checkbox"/> | Notify the Vice President, Engineering and Operations, all Area Supervisors and Operations Superintendents and other Company department heads of the decision to implement Phase 2 in the area of expected impact, and |
| <input type="checkbox"/> | Interfacing with the Manager of Gas Control to review weather bulletins as they are updated and notifying Gas Control when field preparations are complete. |

The Manager of Gas Control is administratively responsible for:


- | | |
|--------------------------|---|
| <input type="checkbox"/> | Coordinating a communications center in Gas Control; alerting all Gas Controllers to the situation, and scheduling their arrival for duty at the Gas Control Center (or at the alternate Gas Control and Command Post site) prior to the onset of gale force winds in the vicinity. |
| <input type="checkbox"/> | Ensuring that adequate emergency supplies are on hand at the Gas Control Center (and/or alternate site) to last throughout the expected duration of the emergency (flashlights, batteries, food, drinks, etc.). |
| <input type="checkbox"/> | Communicating with the affected gas suppliers and transporters as often as needed to stay informed of their current plans and projections, to inform them of the Company's shut-in plans, and keeping management informed of actions taken as the plans progress. |
| <input type="checkbox"/> | Notifying affected Area Supervisors of local actions to be taken in the event of a total communication failure. |
| <input type="checkbox"/> | Tracking the progress of the storm and keeping Operations informed, as outlined for Phase 1. A manual tracking system shall also be initiated during Phase 2 and maintained through Phase 3 (to serve as a standby in the event that computer tracking fails because of computer failure or extended power outage). |

	OFFSHORE OPERATIONS EMERGENCY RESPONSE PLAN	
	SECTION 6 NATURAL DISASTER	PAGE NUMBER 6-6
	LAST REVISION DATE June 1, 2007	

Each affected Area Supervisor / Operations Superintendent is responsible for:

<input type="checkbox"/>	Remaining at Area Offices to keep open the communications links with all field personnel and Headquarters until Phase 2 preparations have been completed.
<input type="checkbox"/>	Ensuring that all field employees have been notified that Phase 2 has been put into effect.
<input type="checkbox"/>	Coordinating efforts with other companies in the affected area to ensure that personnel evacuations are handled in an orderly manner (transportation arrangements have been made, a safe destination determined, etc.); offer such assistance as Company operational priorities can spare.
<input type="checkbox"/>	Coordinating the shut-in of offshore platforms with producers and others as
<input type="checkbox"/>	Keeping 49 CFR 192 records of the location of field personnel and equipment - before, during and after evacuation.
<input type="checkbox"/>	Instructing employees to perform the tasks assigned to them, giving due regard to their personal safety at all times. Each employee is to stay in contact all times during the duration of the hurricane or major storm.
<input type="checkbox"/>	One telephone number should be designated as the "information number" where personnel can obtain the latest information concerning road and weather conditions, management plans and instructions, and assignments.
<input type="checkbox"/>	Verify that each employee has adequate supplies to carry him or her through the emergency, as outlined for Phase 1 (a working flashlight, fresh spare batteries, duct tape, liquid fuels, covering material, rope, first aid supplies, hand fuel pumps, food, drink, sanitary supplies, etc.).
<input type="checkbox"/>	Accomplishing the shut-in of affected offshore facilities (pipelines, heaters, dehydration plants, etc.).
<input type="checkbox"/>	Reporting the name, telephone number and company affiliation of any person requesting evacuation assistance to the Operations Manager along with the number of persons requiring transportation.
<input type="checkbox"/>	Ensuring that Phase 1 preparations have been completed (or superseded by Phase 2 requirements) and keeping the Operations Manager advised of preparation progress. Monitor the progress of employees to ensure that the following preparations are accomplished:
<input type="checkbox"/>	All moveable objects not firmly anchored are to be moved into a closed building or tied to an anchor point, so that they will not be lost or damaged during the hurricane [[this includes storage drums which are distributed throughout the various operating areas (e.g., for pump lubrication, etc.)].
<input type="checkbox"/>	Rope is to be used to tie off air cooler fans at shut-down compressor stations. Affected office and warehouse windows should be boarded up if possible (apply strapping tape if boarding is impractical).
<input type="checkbox"/>	Any chemicals capable of reacting with water (or each other) shall be isolated, neutralized or removed from affected sites.
<input type="checkbox"/>	All fuel tanks shall be filled [includes generators, fire pumps, boats and all vehicles (both Company and privately owned)] and additional emergency fuel supplies made available. Each compressor station (and other operating site) should make sure an adequate supply of lube oil and other similar materials is on hand to run for several days after the hurricane passes, in the event that the location may not be accessible for deliveries due to road conditions (washouts) or other causes.
<input type="checkbox"/>	Affected pipeline distillate tanks are to be adequately anchored (preferred) or ballasted (preferably with water, if necessary; see "Constant Readiness" section above).
<input type="checkbox"/>	All other non-anchored, stationary, ground level tanks are to be filled with their normal contents where practical (e.g., lube oil, glycol, etc.) to a level 1.5 times higher than the 100-year flood stage above the tank bottom. If water must be used for ballast, the water level need not exceed the height of the enclosing dike (given that the water will be subject to disposal at a later date). If no ballasting agent is available for an unanchored tank, consideration may be given to opening the dike drain to prevent floating the tank during an expected flood condition. Caution - also consider the possibility that surrounding floodwaters may rise higher than the dike (due to nearby rivers, creeks, etc. overflowing their banks). Rainfall alone (as will accumulate inside the dike) will seldom be sufficient to float a partially filled tank.

If a hurricane "warning" is issued which includes any of the Company's Gulf Coast operational areas (in Texas and/or Louisiana), "Phase 3" emergency procedures shall be implemented for those areas.

	OFFSHORE OPERATIONS EMERGENCY RESPONSE PLAN	
	SECTION 6 NATURAL DISASTER	PAGE NUMBER 6-7
		LAST REVISION DATE June 1, 2007


Phase 3 (Imminent Impact on Operations 4-6 Hours Preparation Time Anticipated)

The Operation Manager is administratively responsible for:

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Determine when to implement Phase 3 in ample time to permit all employees to accomplish required activities and be evacuated from endangered areas prior to the onset of gale force winds at their various locations, |
| <input type="checkbox"/> | Communicating the decision to implement Phase 3 to all Area Supervisors and Operations Superintendents as well as the Vice President, Engineering and Operations. |
| <input type="checkbox"/> | Monitoring the progress of evacuations and determining whether to keep the Area Office(s) open or to initiate evacuation/relocation procedures, |
| <input type="checkbox"/> | Interfacing with the Manager of Gas Control to review weather bulletins as they are updated and notifying Gas Control when field preparations are complete, and |
| <input type="checkbox"/> | Determining whether or not to evacuate "critical" facilities, which must be manned during all hurricanes if possible (e.g., a category 5 hurricane on a collision course would justify evacuation) |

The Manager of Gas Control is administratively responsible for:

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Ensuring that all Gas Controllers are at their assigned stations and that (to the extent possible) gas flow is maintained from unaffected production areas (and pipeline "input" interconnects) to unaffected consumers (and pipeline "delivery" interconnects). |
| <input type="checkbox"/> | Continuing to monitor the progress of the storm and providing updates to the Manager, Transportation Services and the gas scheduling organization for informational postings. |
| <input type="checkbox"/> | Making frequent contacts with producers, consumers and other transporters to stay informed of their current plans and projections. |
| <input type="checkbox"/> | Determine when to evacuate Houston Gas Control and transfer operations to alternative Gas Control Center. |


	OFFSHORE OPERATIONS EMERGENCY RESPONSE PLAN	
	SECTION 6 NATURAL DISASTER	PAGE NUMBER 6-8
		LAST REVISION DATE June 1, 2007

Each affected Area Supervisor / Operations Superintendent is responsible for:

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Conferring with personnel regarding evacuation plans (destinations and re-assembly activities) and issuing instructions regarding the importance of all employees remaining in communication. |
| <input type="checkbox"/> | Remaining at the Area Operations Office until all employees (and others requesting assistance) have been evacuated from endangered areas, and |
| <input type="checkbox"/> | If necessary (and in accordance with instructions from the Operations Manager), evacuating Area Office personnel to an alternate site and reestablishing contact with the Operations Manager. |
| <input type="checkbox"/> | Remaining in contact with the Operations Manager until all evacuations are complete (including the evacuation of his or her assigned location, if necessary). |

Clean – Up Procedures

- | | |
|--------------------------|--|
| <input type="checkbox"/> | After the Operations Manager and the Manager of Gas Control have jointly determined that the danger has passed, pre-assigned clean-up procedures are to be followed. If communications systems are intact, all personnel required to return to work will be contacted and instructions issued. If communications systems have been damaged and individual contact is not possible, all personnel scheduled to work should report to their pre-assigned assembly points as soon as the weather permits; do not wait to be called. Gas flows from areas that had been shut in are to be brought back on line as soon as possible, in accordance with Gas Control's instructions (consistent with line pack conditions, MAOP constraints and system flow balancing requirements). |
|--------------------------|--|

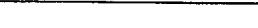
	OFFSHORE OPERATIONS EMERGENCY RESPONSE PLAN	
	SECTION 6 NATURAL DISASTER	PAGE NUMBER 6-9
		LAST REVISION DATE June 1, 2007

The Operation Manager is administratively responsible for:

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Inspecting that portion of the pipeline system impacted by the storm by air, as soon as practicable. |
| <input type="checkbox"/> | Assigning the priority of emergency repairs to be performed (considering on-site damage appraisals provided by the Area Supervisor) and issuing written instructions to the appropriate Area Supervisors and Facility Engineer for their use in coordinating repair and clean-up activities, and |
| <input type="checkbox"/> | Ensuring that repair efforts commence immediately and that repairs are completed as expeditiously as practicable. |


The Manager of Gas Control is administratively responsible for:

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Re-establishing contact with the shut-in producers, consumers and interconnecting transporters as early as possible to determine their immediate plans for returning to normal operations, in order that flows into and out of affected systems can be regulated to balance system requirements, and |
| <input type="checkbox"/> | Communicating with the Operations Manager and affected Area Supervisors to monitor the progress of system repairs for the return to normal service of affected pipeline systems and communicating this advice to affected producers and consumers. |
| <input type="checkbox"/> | Determine when to return to 1100 Louisiana and activate the Gas Control Center. Coordinate the timing of the phone transfer and termination of offsite activities. |

	OFFSHORE OPERATIONS EMERGENCY RESPONSE PLAN	
	SECTION 6 NATURAL DISASTER	PAGE NUMBER 6-10 LAST REVISION DATE June 1, 2007

Each affected Area Supervisor / Operations Superintendent is administratively responsible for:

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Coordinating clean-up and return-to-service activities as directed by Operations Manager and |
| <input type="checkbox"/> | Directing on-site damage surveys of areas reported to be damaged (during the Operations Manager inspection of facilities via air or by others); and conducting assessments of the remaining facilities as time permit |
| <input type="checkbox"/> | Work with the appropriate Facility Engineer to facilitate all necessary repairs |
| <input type="checkbox"/> | Engaging qualified emergency response contractors and/or Company forces as needed to begin all needed repairs as soon as possible. |
| <input type="checkbox"/> | Ensuring that all platforms, metering and regulating stations, compressor stations, pressure vessels and condensate gathering facilities are inspected; all meter readings and damages are to be reported. In association with these inspections, all items stowed in buildings, removed from sites or anchored during Phase 1 or Phase 2 are to be unanchored or returned to their proper locations (e.g., life rafts and safety rings, disconnected flow lines, etc. on offshore platforms; fire extinguishers, drums, etc. at surface sites; and rope tie-offs at compressor air cooler fans). |
| <input type="checkbox"/> | Arranging for the proper disposal (requires transportation to and injection in a permitted "non-hazardous, oilfield waste' disposal well) of water used as ballast in above ground storage tanks. |
| Note: | If feasible, tank internals may be modified (condensate pipe elbowed and extended above maximum water height) to permit leaving ballast water in the tank indefinitely (at a level not exceeding the height of the surrounding dike or firewall). Feasibility may depend upon local condensate production rates, total storage capacity of the tank(s), and the minimum load requirements of the local collecting refiner. Tanks to be permanently ballasted should be internally protected from corrosion with an epoxy-fiberglass coating and a sacrificial anode.] |
| <input type="checkbox"/> | Coordinating the return to service of facilities following inspection and/or repair through the Operations Manager and Gas Control. |


	OFFSHORE OPERATIONS EMERGENCY RESPONSE PLAN	
	SECTION 6 NATURAL DISASTER	PAGE NUMBER 6-11
		LAST REVISION DATE June 1, 2007

Tornadoes

- ☐ A tornado is a funnel-shaped cloud formation with wind speeds of up to 200 mph; the base of the funnel may move erratically, even rising and descending from the base cloud. Where the base is in contact with the ground, tornadoes have the capacity to destroy most objects in their path. They may develop from severe thunderstorms or hurricanes and are often accompanied by severe lighting, heavy rain and /or hail. Tornadoes may occur anytime during the year (the peak months are March through August) and may occur anywhere within the Company's operating area. A tornado "watch" indicates that conditions are right for tornado development. A tornado "warning" indicates a tornado has been visually sighted, or detected by radar; be aware that a tornado can strike very quickly- possibly within minutes – of a warning. Designated local radio and television stations will provide the latest information regarding severe storms, including tornadoes.

Emergency Action Checklist:

- ☐ Seek shelter inside a sturdy building if possible; go to an enclosed space on the lowest floor and stay away from windows. If in the open, try to determine the tornado's direction of movement and move in the direction offering the least chance of encounter. If no movement can be detected immediately, it's likely that the tornado is moving directly toward (or away from) you; move away from it's path at a right angle (keep the tornado off a shoulder as you travel).
- ☐ If there is no time to escape, lie flat in the nearest depression, such as a ditch or ravine; do not remain in a vehicle. Since most deaths during tornadoes are caused by head injuries, cover the back of your head with any available shelter (hard hat, clip board, hands).
- ☐ Employees who normally work in buildings should be trained to direct occupants to the safest areas during a tornado warning. In office buildings, the basement (if it exists) offers the greatest amount of safety. An interior hallway or an enclosed stairwell on a lower floor is considered the next safest; upper stories are not as safe. If there is no time to descend to lower levels, a closet, a small room with sturdy walls, or an inside hallway or enclosed stairwell will give some protection against flying debris (e.g., shattered window glass). Otherwise, seek shelter under heavy furniture (such as a desk's knee space, a tipped-over couch, or heavy table). Stay away from windows when the storm strikes.
- ☐ If an employee works occasionally in an industrial complex, he or she should identify and select one or more areas offering shelter in advance of actual need.
- ☐ Mobile buildings or buildings on blocks (such as field construction buildings) are particularly vulnerable to overturning and destruction during strong winds, and should be abandoned in favor of a pre-selected shelter, or even a ditch in the open. The possibility of damage can be minimized by securing such buildings with wire rope (cables) anchored in substantial concrete footings.
- ☐ Parked vehicles are unsafe as shelter during a tornado or severe windstorm, since they may be moved (sometimes over a substantial distance) by the force of the wind. Only as a last resort (if no ravine or ditch is nearby) should an employee crawl under a vehicle to seek shelter from flying debris.


	OFFSHORE OPERATIONS EMERGENCY RESPONSE PLAN	
	SECTION 6 NATURAL DISASTER	PAGE NUMBER 6-12
		LAST REVISION DATE June 1, 2007

Cold Weather

- ☐ If weather predictions indicate that temperatures will fall below 30 °F in any operating area on a sustained basis, preparations shall be made for such things as power failures, well freezing and compressor malfunctions. The use of emergency generators and 24-hour manning of certain locations (such as compressor stations) may be required. To assure uninterrupted supplies, it is very critical that all the preliminary preparation be accomplished before extreme cold weather engulfs the area. Compressor units may be needed should be started and left idling or on line if at all possible throughout the duration of the cold weather.


Each Area Supervisor shall implement local Cold Weather Procedures when needed, as outlined by the following checklist:

- | | |
|--------------------------|---|
| <input type="checkbox"/> | Water systems should be shut off, drain exposed pipe at lowest point and leave open, |
| <input type="checkbox"/> | Regulators should be wrapped with heat tapes (and the tapes checked for proper operation), |
| <input type="checkbox"/> | Relief valves should be checked to ensure that stacks remain unobstructed by accumulations of ice and/or snow, |
| <input type="checkbox"/> | Lube oil heaters should be checked for proper operation, |
| <input type="checkbox"/> | Water-handling pumps not essential to operations should be drained, |
| <input type="checkbox"/> | Water hoses, steam cleaners and generators should be put inside a heated building, |
| <input type="checkbox"/> | Compressors and generators should be started (generators should be loaded for 15 minutes) and left on idle through duration of cold period, |
| <input type="checkbox"/> | Instrument gas dryers should be checked for proper operation, |
| <input type="checkbox"/> | Versa valves should be checked for proper lubrication and port vents should be protected from water infiltration [by use of stainless steel "goose necked" tubing, with screened inlet (as a dirt dauber guard)], |
| <input type="checkbox"/> | Cans of de-icer should be available for use on frozen versa valves, |
| <input type="checkbox"/> | All vehicles should be refilled with gasoline before each work day ends, |
| <input type="checkbox"/> | Twenty-four hour manning schedules will be implemented at each gas storage facility and compressor station deemed vital to the operation of the pipeline system, |

	OFFSHORE OPERATIONS EMERGENCY RESPONSE PLAN	
	SECTION 6 NATURAL DISASTER	PAGE NUMBER 6-13
		LAST REVISION DATE June 1, 2007


Flooding

- ☐ Flooding damage to a pipeline system may occur as a result of additional external stresses imposed on the pipe by the undermining of its support structure (soil or foundation) and/or by the impact of water-borne foreign objects. Washouts and erosion may result in loss of support for both buried and exposed pipelines. The forces exerted by water are increased by the accumulation of debris against the pipeline. Prolonged periods of rain may cause rivers and creeks to overflow their banks, resulting in flooding over a wide area. Alternatively, a levee or dam may break, causing a "flash" flood (which strikes with little or no warning) in a localized area. In areas where the original cover over pipelines has been reduced over time (due to land-forming activities or generalized erosion), flooding may cause the pipeline to become exposed, perhaps even to float (if not designed for installation in a "wet" environment). Damage in normally "dry" areas may occur if the cover is only reduced - the pipeline may be struck by third party equipment (e.g., by farming or flood clean-up operations). Once identified, such areas should be clearly marked (unless in a Class 3 or 4 location where placement of line markers is impractical). If appropriate (if located in an area subject to frequent third party activities which could result in damage), reduced-cover or exposed pipeline segments should be lowered to original design cover conditions or a protective covering (concrete mat, etc.) put in place. This recommendation also applies to offshore locations, if the cover is less than 12 inches and the pipeline is located in water 15 feet deep or less (as measured from mean low water).
- ☐ Continuous flow of water against an exposed pipeline may also result in forces sufficient to cause failure. River and major stream crossings should be inspected periodically for erosion of cover due to scouring. Exposed and (especially) suspended segments should be covered and anchored in place using rip rap, concrete mesh blankets, or similar erosion-resistant protection schemes. If a pipe segment is left exposed and suspended in a current for an extended period of time, flexing in response to current variations may eventually result in pipe failure through a process known as "fatigue cracking". In addition to the above concerns for piping, the safety of block valves, control valves, relief valves and other equipment normally located above water is in jeopardy when these sites are covered by water. The threat is posed not only by the increased difficulty of operation, but also by the possibility of damage by outside forces, including floating or submerged debris, swift currents, and water craft.

	OFFSHORE OPERATIONS EMERGENCY RESPONSE PLAN	
	SECTION 6 NATURAL DISASTER	PAGE NUMBER 6-14
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It shall be the responsibility of the each Area Supervisors to:

- | | |
|--------------------------|--|
| <input type="checkbox"/> | Be cognizant of areas of flooding or potential flooding, and have personnel available for emergency response activities such as shutdown, isolation, and containment. |
| <input type="checkbox"/> | Ensure that frequent patrols are conducted to evaluate right-of-way conditions at and near water crossings during flooding conditions if possible, or after water has subsided. Aerial patrols should be used for patrolling where surface travel is restricted and the potential for pipeline failure exists. |
| <input type="checkbox"/> | Consider extending regulator vents, block valve hand wheels (or motor operators) and relief valve stacks above anticipated (or demonstrated) flood levels, as appropriate. |
| <input type="checkbox"/> | Coordinate with other pipeline companies in the flood area and provide personnel to emergency response centers to act as liaison for pipeline issues (e.g., to provide maps and information on pipeline locations). |
| <input type="checkbox"/> | Assure that line markers remain in place and remind contractors, highway departments and others involved in excavation and clearing activities (associated with flood clean-up) of the presence of pipelines and the hazards represented by possibly reduced pipeline cover. |
| <input type="checkbox"/> | Ensure that surveys are performed to determine the depth of remaining cover over pipelines and to notify property owners (and any tenant farmers) about areas of reduced cover. |
| <input type="checkbox"/> | Notify the Operations Manager about any reduced-cover situation that requires remedial action (such as pipeline lowering) in order to protect the integrity of the pipeline from future damage. |

	OFFSHORE OPERATIONS EMERGENCY RESPONSE PLAN	
	SECTION 6 NATURAL DISASTER	PAGE NUMBER 6-15
		LAST REVISION DATE June 1, 2007

Other Emergencies

Under national emergency conditions, it is possible that the Company (along with the natural gas industry in general) could be directed by agencies of the Federal Government to perform certain actions in the best interests of our country. The following information is, therefore, included as a part of the Company's Emergency Response Plan so that employees will be aware of the procedures and be prepared to react should such a situation occur:

Presidential Executive Order 11490 directed the Secretary of the Interior of the United States to prepare additional emergency plans and to develop emergency preparedness programs covering petroleum and gas. The Emergency Petroleum and Gas Administration (EPGA) was established August 28, 1963 by the Secretary of the Interior. It provides a standby organization to discharge certain Federal emergency responsibilities relative to oil and gas.

When activated, EPGA as a resource agency is responsible for directional control of all segments of oil and gas operations, from production through distribution to the ultimate consumer. In a general war involving an attack upon the United States, state and local governments will assist the EPGA in the administration of the Federal Gas Priority System. It is possible that this arrangement may also be utilized for administering the Federal Gas Priority System in a limited war situation of a severity requiring the activation of the EPGA.

Hurricane Katrina

ENBRIDGE OFFSHORE SYSTEM
Stingray Pipeline Daily Report
WC509

Date: 8/24/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE		871									
T	GP RPM					T						
1	PT RPM					1	0	0	0	87629	0	0
T	GP RPM					T						
2	PT RPM					2	0	171	35933	130378	0	208
T	GP RPM					T						
3	PT RPM					3	0	0	0	118830	0	0
T	GP RPM					T						
4	PT RPM					4	0	0	18263	119642	0	0
T	GP RPM					T						
5	PT RPM					5	0	62	10105	124831	0	4
T	GP RPM					T						
6	PT RPM					6	0	527	845	91212	0	132
T	GP RPM					T						
7	PT RPM					7	0	292	32642	144942	0	0
Gas Flow		0				AVG. FLOW			0			
Liquid Flow		0				LIQUID FLOW			0			
LP 1						LP 1	0	121	24269		0	3
LP 2						LP 2	0	200	43805		0	24
LP 3						LP 3	0	210	49934		0	0
LP 4						LP 4	0	0	3289		0	0
GEN #1		X				GEN #1	24	305	35896		0	185
GEN #2						GEN #2	0	271	38960		0	22
G e n #1	Amps		410			COMMENTS AND REMARKS						
	Volts		480			Station Shut In						
	KW		290									
G e n #2	Amps											
	Volts											
	KW											
Ambient Temp.			90									
Weather			CL									

PIC: Dincans

OPERATOR: Broussard

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

ENBRIDGE OFFSHORE SYSTEM
Stingray Pipeline Daily Report
WC509

Date: 8/25/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION	0					Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE	871										
T	GP RPM					T						
1	PT RPM					1	0	0	0	87629	0	0
T	GP RPM					T						
2	PT RPM					2	0	171	35933	130378	0	208
T	GP RPM					T						
3	PT RPM					3	0	0	0	118830	0	0
T	GP RPM					T						
4	PT RPM					4	0	0	18263	119642	0	0
T	GP RPM					T						
5	PT RPM					5	0	62	10105	124831	0	4
T	GP RPM					T						
6	PT RPM					6	0	527	845	91212	0	132
T	GP RPM					T						
7	PT RPM					7	0	292	32642	144942	0	0
Gas Flow						AVG. FLOW			0			
Liquid Flow						LIQUID FLOW			0			
LP 1						LP 1	0	121	24269		0	3
LP 2						LP 2	0	200	43805		0	24
LP 3						LP 3	0	210	49934		0	0
LP 4						LP 4	0	0	3289		0	0
GEN #1		X				GEN #1	24	329	35920		0	185
GEN #2						GEN #2	0	271	38960		0	22
G e n #1	Amps	400				COMMENTS AND REMARKS						
	Volts	480										
	KW	290										
G e n #2	Amps					Station Shut In						
	Volts											
	KW											
Ambient Temp.												
Weather												

PIC: Dincans

OPERATOR: Broussard

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

ENBRIDGE OFFSHORE SYSTEM
Stingray Pipeline Daily Report
WC509

Date: 8/26/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION	0					Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE	876										
T 1	GP RPM PT RPM					T 1	0	0	0	87629	0	0
T 2	GP RPM PT RPM					T 2	0	171	35933	130378	0	208
T 3	GP RPM PT RPM					T 3	0	0	0	118830	0	0
T 4	GP RPM PT RPM					T 4	0	0	18263	119642	0	0
T 5	GP RPM PT RPM					T 5	0	62	10105	124831	0	4
T 6	GP RPM PT RPM					T 6	0	527	845	91212	0	132
T 7	GP RPM PT RPM					T 7	0	292	32642	144942	0	0
Gas Flow						AVG. FLOW						
Liquid Flow						LIQUID FLOW						
LP 1						LP 1	0	121	24269		0	3
LP 2						LP 2	0	200	43805		0	24
LP 3						LP 3	0	210	49934		0	0
LP 4						LP 4	0	0	3289		0	0
GEN #1		X				GEN #1	24	353	35944		0	185
GEN #2						GEN #2	0	271	38960		0	22
G e n #1	Amps	340				COMMENTS AND REMARKS						
	Volts	480				Station Shut In						
	KW	310										
G e n #2	Amps											
	Volts											
	KW											
Ambient Temp.		88										
Weather		CL										

PIC: Dincans

OPERATOR: Broussard

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

ENBRIDGE OFFSHORE SYSTEM
Stingray Pipeline Daily Report
WC509

Date: 8/27/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE											
T	GP RPM					T						
1	PT RPM					1	0	0	0	87629		0
T	GP RPM					T						
2	PT RPM					2	0	171	35933	130378		208
T	GP RPM					T						
3	PT RPM					3	0	0	0	118830		0
T	GP RPM					T						
4	PT RPM					4	0	0	18263	119642		0
T	GP RPM					T						
5	PT RPM					5	0	62	10105	124831		4
T	GP RPM					T						
6	PT RPM					6	0	527	845	91212		132
T	GP RPM					T						
7	PT RPM					7	0	292	32642	144942		0
Gas Flow						AVG. FLOW						
Liquid Flow						LIQUID FLOW						
LP 1						LP 1	0	121	24269			3
LP 2						LP 2	0	200	43805			24
LP 3						LP 3	0	210	49934			0
LP 4						LP 4	0	0	3289			0
GEN #1		x	x	x	x	GEN #1	24	377	35968			185
GEN #2						GEN #2	0	271	38960			22
G e n #1	Amps					COMMENTS AND REMARKS						
	Volts					Hurricane Katrina Evacuation						
	KW											
G e n #2	Amps											
	Volts											
	KW											
Ambient Temp.												
Weather												

PIC: _____ OPERATOR: _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

ENBRIDGE OFFSHORE SYSTEM
Stingray Pipeline Daily Report
WC509

EXHIBIT NO. SPC-19
Docket No. RP08-____-000
Page 6 of 25

Date: 8/28/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE											
T	GP RPM					T						
1	PT RPM					1	0	0	0	87629		0
T	GP RPM					T						
2	PT RPM					2	0	171	35933	130378		208
T	GP RPM					T						
3	PT RPM					3	0	0	0	118830		0
T	GP RPM					T						
4	PT RPM					4	0	0	18263	119642		0
T	GP RPM					T						
5	PT RPM					5	0	62	10105	124831		4
T	GP RPM					T						
6	PT RPM					6	0	527	845	91212		132
T	GP RPM					T						
7	PT RPM					7	0	292	32642	144942		0
Gas Flow						AVG. FLOW						
Liquid Flow						LIQUID FLOW						
LP 1						LP 1	0	121	24269			3
LP 2						LP 2	0	200	43805			24
LP 3						LP 3	0	210	49934			0
LP 4						LP 4	0	0	3289			0
GEN #1		x	x	x	x	GEN #1	24	401	35992			185
GEN #2						GEN #2	0	271	38960			22
G e n #1	Amps					COMMENTS AND REMARKS						
	Volts					Hurricane Katrina Evacuation						
	KW											
G e n #2	Amps											
	Volts											
	KW											
Ambient Temp.												
Weather												

PIC: _____ **OPERATOR:** _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

ENBRIDGE OFFSHORE SYSTEM
Stingray Pipeline Daily Report
WC509

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Docket No. RP08-____-000
Page 7 of 25

Date: 8/29/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE											
T	GP RPM					T						
1	PT RPM					1	0	0	0	87629		0
T	GP RPM					T						
2	PT RPM					2	0	171	35933	130378		208
T	GP RPM					T						
3	PT RPM					3	0	0	0	118830		0
T	GP RPM					T						
4	PT RPM					4	0	0	18263	119642		0
T	GP RPM					T						
5	PT RPM					5	0	62	10105	124831		4
T	GP RPM					T						
6	PT RPM					6	0	527	845	91212		132
T	GP RPM					T						
7	PT RPM					7	0	292	32642	144942		0
Gas Flow						AVG. FLOW						
Liquid Flow						LIQUID FLOW						
LP 1						LP 1	0	121	24269			3
LP 2						LP 2	0	200	43805			24
LP 3						LP 3	0	210	49934			0
LP 4						LP 4	0	0	3289			0
GEN #1		x	x	x	x	GEN #1	24	425	36016			185
GEN #2						GEN #2	0	271	38960			22
G e n #1	Amps					COMMENTS AND REMARKS						
	Volts					Hurricane Katrina Evacuation						
	KW											
G e n #2	Amps											
	Volts											
	KW											
Ambient Temp.												
Weather												

PIC: _____ **OPERATOR:** _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

ENBRIDGE OFFSHORE SYSTEM
Stingray Pipeline Daily Report
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Date: 8/30/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE											
T	GP RPM					T						
1	PT RPM					1	0	0	0	87629		0
T	GP RPM					T						
2	PT RPM					2	0	171	35933	130378		208
T	GP RPM					T						
3	PT RPM					3	0	0	0	118830		0
T	GP RPM					T						
4	PT RPM					4	0	0	18263	119642		0
T	GP RPM					T						
5	PT RPM					5	0	62	10105	124831		4
T	GP RPM					T						
6	PT RPM					6	0	527	845	91212		132
T	GP RPM					T						
7	PT RPM					7	0	292	32642	144942		0
Gas Flow						AVG. FLOW						
Liquid Flow						LIQUID FLOW						
LP 1						LP 1	0	121	24269			3
LP 2						LP 2	0	200	43805			24
LP 3						LP 3	0	210	49934			0
LP 4						LP 4	0	0	3289			0
GEN #1		x	x	x	x	GEN #1	24	449	36040			185
GEN #2						GEN #2	0	271	38960			22
G e n #1	Amps					COMMENTS AND REMARKS						
	Volts					Hurricane Katrina Evacuation						
	KW											
G e n #2	Amps											
	Volts											
	KW											
Ambient Temp.												
Weather												

PIC: _____

OPERATOR: _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

ENBRIDGE OFFSHORE SYSTEM
Stingray Pipeline Daily Report
WC509

EXHIBIT NO. SPC-19
Docket No. RP08-____-000
Page 9 of 25

Date: 8/31/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE											
T	GP RPM					T						
1	PT RPM					1	0	0	0	87629		0
T	GP RPM					T						
2	PT RPM					2	0	171	35933	130378		208
T	GP RPM					T						
3	PT RPM					3	0	0	0	118830		0
T	GP RPM					T						
4	PT RPM					4	0	0	18263	119642		0
T	GP RPM					T						
5	PT RPM					5	0	62	10105	124831		4
T	GP RPM					T						
6	PT RPM					6	0	527	845	91212		132
T	GP RPM					T						
7	PT RPM					7	0	292	32642	144942		0
Gas Flow						AVG. FLOW						
Liquid Flow						LIQUID FLOW						
LP 1						LP 1	0	121	24269			3
LP 2						LP 2	0	200	43805			24
LP 3						LP 3	0	210	49934			0
LP 4						LP 4	0	0	3289			0
GEN #1		x	x	x	x	GEN #1	24	473	36064		25	210
GEN #2						GEN #2	0	271	38960			22
G e n #1	Amps					COMMENTS AND REMARKS						
	Volts					Returned From Katrina Evacuation						
	KW											
G e n #2	Amps											
	Volts											
	KW											
Ambient Temp.												
Weather												

PIC: _____ **OPERATOR:** _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

ENBRIDGE OFFSHORE SYSTEM
Stingray Pipeline Daily Report
WC509

EXHIBIT NO. SPC-19
Docket No. RP08-____-000
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Date: 9/1/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION		0				Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE		995									
T	GP RPM					T						
1	PT RPM					1	0	0	0	87629	0	0
T	GP RPM					T						
2	PT RPM					2	0	0	35933	130378	0	0
T	GP RPM					T						
3	PT RPM					3	0	0	0	118830	0	0
T	GP RPM					T						
4	PT RPM					4	0	0	18263	119642	0	0
T	GP RPM					T						
5	PT RPM					5	0	0	10105	124831	0	0
T	GP RPM					T						
6	PT RPM					6	0	0	845	91212	0	0
T	GP RPM					T						
7	PT RPM					7	0	0	32642	144942	0	0
Gas Flow			0			AVG. FLOW			0			
Liquid Flow						LIQUID FLOW			0			
LP 1						LP 1	0	0	24269		0	0
LP 2						LP 2	0	0	43805		0	0
LP 3						LP 3	0	0	49934		0	0
LP 4						LP 4	0	0	3289		0	0
GEN #1		X	X	X	X	GEN #1	24	24	36088		0	0
GEN #2						GEN #2	0	0	38960		0	0
G e n #1	Amps					COMMENTS AND REMARKS						
	Volts											
	KW											
G e n #2	Amps					Station Shut-In						
	Volts											
	KW											
Ambient Temp.			88									
Weather			PC									

PIC: Langlinais

OPERATOR: Wood

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

Hurricane Rita

ENBRIDGE OFFSHORE SYSTEM
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Date: 9/21/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE											
T	GP RPM					T						
1	PT RPM					1		0	0	87629		0
T	GP RPM					T						
2	PT RPM					2		213	36146	130591		8
T	GP RPM					T						
3	PT RPM					3		0	0	118830		0
T	GP RPM					T						
4	PT RPM					4		0	18263	119642		0
T	GP RPM					T						
5	PT RPM					5		419	10524	125250		40
T	GP RPM					T						
6	PT RPM					6		0	845	91212		0
T	GP RPM					T						
7	PT RPM					7		170	32812	145112		4
Gas Flow						AVG. FLOW						
Liquid Flow						LIQUID FLOW						
LP 1						LP 1		41	24310			5
LP 2						LP 2		261	44066			15
LP 3						LP 3		54	49988			4
LP 4						LP 4		0	3289			0
GEN #1						GEN #1		146	36210			5
GEN #2						GEN #2		334	39294			54
G e n #1	Amps					COMMENTS AND REMARKS						
	Volts					Shut-down & ESD station for						
	KW					Hurricane Rita evacuation @ 08:45.						
G e n #2	Amps											
	Volts											
	KW											
Ambient Temp.												
Weather												

PIC: Cory Langlais

OPERATOR: Wood

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

ENBRIDGE OFFSHORE SYSTEM
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Date: 9/22/2005

TIME		9AM	3PM	9PM	3AM														
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month							
	DISCHARGE																		
T	GP RPM					T													
1	PT RPM					1		0	0	87629		0							
T	GP RPM					T													
2	PT RPM					2		213	36146	130591		8							
T	GP RPM					T													
3	PT RPM					3		0	0	118830		0							
T	GP RPM					T													
4	PT RPM					4		0	18263	119642		0							
T	GP RPM					T													
5	PT RPM					5		419	10524	125250		40							
T	GP RPM					T													
6	PT RPM					6		0	845	91212		0							
T	GP RPM					T													
7	PT RPM					7		170	32812	145112		4							
Gas Flow						AVG. FLOW													
Liquid Flow						LIQUID FLOW													
LP 1						LP 1		41	24310			5							
LP 2						LP 2		261	44066			15							
LP 3						LP 3		54	49988			4							
LP 4						LP 4		0	3289			0							
GEN #1						GEN #1		146	36210			5							
GEN #2						GEN #2		334	39294			54							
G e n #1	Amps					COMMENTS AND REMARKS													
	Volts																		
	KW																		
G e n #2	Amps																		
	Volts																		
	KW																		
Ambient Temp.																			
Weather																			

PIC: _____

OPERATOR: _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

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Date: 9/23/2005

TIME		9AM	3PM	9PM	3AM														
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month							
	DISCHARGE																		
T	GP RPM					T													
1	PT RPM					1		0	0	87629		0							
T	GP RPM					T													
2	PT RPM					2		213	36146	130591		8							
T	GP RPM					T													
3	PT RPM					3		0	0	118830		0							
T	GP RPM					T													
4	PT RPM					4		0	18263	119642		0							
T	GP RPM					T													
5	PT RPM					5		419	10524	125250		40							
T	GP RPM					T													
6	PT RPM					6		0	845	91212		0							
T	GP RPM					T													
7	PT RPM					7		170	32812	145112		4							
Gas Flow						AVG. FLOW													
Liquid Flow						LIQUID FLOW													
LP 1						LP 1		41	24310			5							
LP 2						LP 2		261	44066			15							
LP 3						LP 3		54	49988			4							
LP 4						LP 4		0	3289			0							
GEN #1						GEN #1		146	36210			5							
GEN #2						GEN #2		334	39294			54							
G e n #1	Amps					COMMENTS AND REMARKS													
	Volts																		
	KW																		
G e n #2	Amps																		
	Volts																		
	KW																		
Ambient Temp.																			
Weather																			

PIC: _____ **OPERATOR:** _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

ENBRIDGE OFFSHORE SYSTEM
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Date: 9/24/2005

TIME		9AM	3PM	9PM	3AM														
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month							
	DISCHARGE																		
T	GP RPM					T													
1	PT RPM					1		0	0	87629		0							
T	GP RPM					T													
2	PT RPM					2		213	36146	130591		8							
T	GP RPM					T													
3	PT RPM					3		0	0	118830		0							
T	GP RPM					T													
4	PT RPM					4		0	18263	119642		0							
T	GP RPM					T													
5	PT RPM					5		419	10524	125250		40							
T	GP RPM					T													
6	PT RPM					6		0	845	91212		0							
T	GP RPM					T													
7	PT RPM					7		170	32812	145112		4							
Gas Flow						AVG. FLOW													
Liquid Flow						LIQUID FLOW													
LP 1						LP 1		41	24310			5							
LP 2						LP 2		261	44066			15							
LP 3						LP 3		54	49988			4							
LP 4						LP 4		0	3289			0							
GEN #1						GEN #1		146	36210			5							
GEN #2						GEN #2		334	39294			54							
G e n #1	Amps					COMMENTS AND REMARKS													
	Volts																		
	KW																		
G e n #2	Amps																		
	Volts																		
	KW																		
Ambient Temp.																			
Weather																			

PIC: _____

OPERATOR: _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

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Date: 9/25/2005

TIME		9AM	3PM	9PM	3AM														
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month							
	DISCHARGE																		
T	GP RPM					T													
1	PT RPM					1		0	0	87629		0							
T	GP RPM					T													
2	PT RPM					2		213	36146	130591		8							
T	GP RPM					T													
3	PT RPM					3		0	0	118830		0							
T	GP RPM					T													
4	PT RPM					4		0	18263	119642		0							
T	GP RPM					T													
5	PT RPM					5		419	10524	125250		40							
T	GP RPM					T													
6	PT RPM					6		0	845	91212		0							
T	GP RPM					T													
7	PT RPM					7		170	32812	145112		4							
Gas Flow						AVG. FLOW													
Liquid Flow						LIQUID FLOW													
LP 1						LP 1		41	24310			5							
LP 2						LP 2		261	44066			15							
LP 3						LP 3		54	49988			4							
LP 4						LP 4		0	3289			0							
GEN #1						GEN #1		146	36210			5							
GEN #2						GEN #2		334	39294			54							
G e n #1	Amps					COMMENTS AND REMARKS													
	Volts																		
	KW																		
G e n #2	Amps																		
	Volts																		
	KW																		
Ambient Temp.																			
Weather																			

PIC: _____

OPERATOR: _____

Weather Codes : C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

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Date: 9/26/2005

TIME		9AM	3PM	9PM	3AM														
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month							
	DISCHARGE																		
T	GP RPM					T													
1	PT RPM					1		0	0	87629		0							
T	GP RPM					T													
2	PT RPM					2		213	36146	130591		8							
T	GP RPM					T													
3	PT RPM					3		0	0	118830		0							
T	GP RPM					T													
4	PT RPM					4		0	18263	119642		0							
T	GP RPM					T													
5	PT RPM					5		419	10524	125250		40							
T	GP RPM					T													
6	PT RPM					6		0	845	91212		0							
T	GP RPM					T													
7	PT RPM					7		170	32812	145112		4							
Gas Flow						AVG. FLOW													
Liquid Flow						LIQUID FLOW													
LP 1						LP 1		41	24310			5							
LP 2						LP 2		261	44066			15							
LP 3						LP 3		54	49988			4							
LP 4						LP 4		0	3289			0							
GEN #1						GEN #1		146	36210			5							
GEN #2						GEN #2		334	39294			54							
G e n #1	Amps					COMMENTS AND REMARKS													
	Volts																		
	KW																		
G e n #2	Amps																		
	Volts																		
	KW																		
Ambient Temp.																			
Weather																			

PIC: _____

OPERATOR: _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

ENBRIDGE OFFSHORE SYSTEM
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Date: 9/27/2005

TIME		9AM	3PM	9PM	3AM														
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month							
	DISCHARGE																		
T	GP RPM					T													
1	PT RPM					1		0	0	87629		0							
T	GP RPM					T													
2	PT RPM					2		213	36146	130591		8							
T	GP RPM					T													
3	PT RPM					3		0	0	118830		0							
T	GP RPM					T													
4	PT RPM					4		0	18263	119642		0							
T	GP RPM					T													
5	PT RPM					5		419	10524	125250		40							
T	GP RPM					T													
6	PT RPM					6		0	845	91212		0							
T	GP RPM					T													
7	PT RPM					7		170	32812	145112		4							
Gas Flow						AVG. FLOW													
Liquid Flow						LIQUID FLOW													
LP 1						LP 1		41	24310			5							
LP 2						LP 2		261	44066			15							
LP 3						LP 3		54	49988			4							
LP 4						LP 4		0	3289			0							
GEN #1						GEN #1		146	36210			5							
GEN #2						GEN #2		334	39294			54							
G e n #1	Amps					COMMENTS AND REMARKS													
	Volts																		
	KW																		
G e n #2	Amps																		
	Volts																		
	KW																		
Ambient Temp.																			
Weather																			

PIC: _____

OPERATOR: _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

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Date: 9/28/2005

TIME		9AM	3PM	9PM	3AM														
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month							
	DISCHARGE																		
T	GP RPM					T													
1	PT RPM					1		0	0	87629		0							
T	GP RPM					T													
2	PT RPM					2		213	36146	130591		8							
T	GP RPM					T													
3	PT RPM					3		0	0	118830		0							
T	GP RPM					T													
4	PT RPM					4		0	18263	119642		0							
T	GP RPM					T													
5	PT RPM					5		419	10524	125250		40							
T	GP RPM					T													
6	PT RPM					6		0	845	91212		0							
T	GP RPM					T													
7	PT RPM					7		170	32812	145112		4							
Gas Flow						AVG. FLOW													
Liquid Flow						LIQUID FLOW													
LP 1						LP 1		41	24310			5							
LP 2						LP 2		261	44066			15							
LP 3						LP 3		54	49988			4							
LP 4						LP 4		0	3289			0							
GEN #1						GEN #1		146	36210			5							
GEN #2						GEN #2		334	39294			54							
G e n #1	Amps					COMMENTS AND REMARKS													
	Volts																		
	KW																		
G e n #2	Amps																		
	Volts																		
	KW																		
Ambient Temp.																			
Weather																			

PIC: _____

OPERATOR: _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

ENBRIDGE OFFSHORE SYSTEM
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Date: 9/29/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE											
T	GP RPM					T						
1	PT RPM					1		0	0	87629		0
T	GP RPM					T						
2	PT RPM					2		213	36146	130591		8
T	GP RPM					T						
3	PT RPM					3		0	0	118830		0
T	GP RPM					T						
4	PT RPM					4		0	18263	119642		0
T	GP RPM					T						
5	PT RPM					5		419	10524	125250		40
T	GP RPM					T						
6	PT RPM					6		0	845	91212		0
T	GP RPM					T						
7	PT RPM					7		170	32812	145112		4
Gas Flow						AVG. FLOW						
Liquid Flow						LIQUID FLOW						
LP 1						LP 1		41	24310			5
LP 2						LP 2		261	44066			15
LP 3						LP 3		54	49988			4
LP 4						LP 4		0	3289			0
GEN #1						GEN #1		146	36210			5
GEN #2						GEN #2		334	39294			54
G e n #1	Amps					COMMENTS AND REMARKS						
	Volts											
	KW											
G e n #2	Amps											
	Volts											
	KW											
Ambient Temp.												
Weather												

PIC: _____

OPERATOR: _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

ENBRIDGE OFFSHORE SYSTEM
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Date: 9/30/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE											
T	GP RPM					T						
1	PT RPM					1		0	0	87629		0
T	GP RPM					T						
2	PT RPM					2		213	36146	130591		8
T	GP RPM					T						
3	PT RPM					3		0	0	118830		0
T	GP RPM					T						
4	PT RPM					4		0	18263	119642		0
T	GP RPM					T						
5	PT RPM					5		419	10524	125250		40
T	GP RPM					T						
6	PT RPM					6		0	845	91212		0
T	GP RPM					T						
7	PT RPM					7		170	32812	145112		4
Gas Flow						AVG. FLOW						
Liquid Flow						LIQUID FLOW						
LP 1						LP 1		41	24310			5
LP 2						LP 2		261	44066			15
LP 3						LP 3		54	49988			4
LP 4						LP 4		0	3289			0
GEN #1						GEN #1		146	36210			5
GEN #2						GEN #2		334	39294			54
G e n #1	Amps					COMMENTS AND REMARKS						
	Volts											
	KW											
G e n #2	Amps											
	Volts											
	KW											
Ambient Temp.												
Weather												

PIC: _____

OPERATOR: _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

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Date: 9/31/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE											
T	GP RPM					T						
1	PT RPM					1		0	0	87629		0
T	GP RPM					T						
2	PT RPM					2		213	36146	130591		8
T	GP RPM					T						
3	PT RPM					3		0	0	118830		0
T	GP RPM					T						
4	PT RPM					4		0	18263	119642		0
T	GP RPM					T						
5	PT RPM					5		419	10524	125250		40
T	GP RPM					T						
6	PT RPM					6		0	845	91212		0
T	GP RPM					T						
7	PT RPM					7		170	32812	145112		4
Gas Flow						AVG. FLOW						
Liquid Flow						LIQUID FLOW						
LP 1						LP 1		41	24310			5
LP 2						LP 2		261	44066			15
LP 3						LP 3		54	49988			4
LP 4						LP 4		0	3289			0
GEN #1						GEN #1		146	36210			5
GEN #2						GEN #2		334	39294			54
G e n #1	Amps					COMMENTS AND REMARKS						
	Volts											
	KW											
G e n #2	Amps											
	Volts											
	KW											
Ambient Temp.												
Weather												

PIC: _____

OPERATOR: _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

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Date: 10/1/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE											
T	GP RPM					T						
1	PT RPM					1		0	0	87629		0
T	GP RPM					T						
2	PT RPM					2		0	36146	130591		0
T	GP RPM					T						
3	PT RPM					3		0	0	118830		0
T	GP RPM					T						
4	PT RPM					4		0	18263	119642		0
T	GP RPM					T						
5	PT RPM					5		0	10524	125250		0
T	GP RPM					T						
6	PT RPM					6		0	845	91212		0
T	GP RPM					T						
7	PT RPM					7		0	32812	145112		0
Gas Flow						AVG. FLOW						
Liquid Flow						LIQUID FLOW						
LP 1						LP 1		0	24310			0
LP 2						LP 2		0	44066			0
LP 3						LP 3		0	49988			0
LP 4						LP 4		0	3289			0
GEN #1						GEN #1		0	36210			0
GEN #2						GEN #2		0	39294			0
G e n #1	Amps					COMMENTS AND REMARKS						
	Volts											
	KW											
G e n #2	Amps											
	Volts											
	KW											
Ambient Temp.												
Weather												

PIC: _____

OPERATOR: _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

ENBRIDGE OFFSHORE SYSTEM
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Date: 10/2/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION						Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE											
T	GP RPM					T						
1	PT RPM					1		0	0	87629		0
T	GP RPM					T						
2	PT RPM					2		0	36146	130591		0
T	GP RPM					T						
3	PT RPM					3		0	0	118830		0
T	GP RPM					T						
4	PT RPM					4		0	18263	119642		0
T	GP RPM					T						
5	PT RPM					5		0	10524	125250		0
T	GP RPM					T						
6	PT RPM					6		0	845	91212		0
T	GP RPM					T						
7	PT RPM					7		0	32812	145112		0
Gas Flow						AVG. FLOW						
Liquid Flow						LIQUID FLOW						
LP 1						LP 1		0	24310			0
LP 2						LP 2		0	44066			0
LP 3						LP 3		0	49988			0
LP 4						LP 4		0	3289			0
GEN #1						GEN #1		0	36210			0
GEN #2						GEN #2		0	39294			0
G e n #1	Amps					COMMENTS AND REMARKS						
	Volts											
	KW											
G e n #2	Amps											
	Volts											
	KW											
Ambient Temp.												
Weather												

PIC: _____ **OPERATOR:** _____

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy

ENBRIDGE OFFSHORE SYSTEM
Stingray Pipeline Daily Report
WC509

EXHIBIT NO. SPC-19
Docket No. RP08-____-000
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Date: 10/3/2005

TIME		9AM	3PM	9PM	3AM							
	SUCTION		695				Hours This Day	Hours This Month	Total Engine Hours	Total Skid Hours	Oil Used Today	Used This Month
	DISCHARGE		695									
T	GP RPM					T						
1	PT RPM					1	0	0	0	87629	0	0
T	GP RPM					T						
2	PT RPM					2	0	0	36146	130591	0	0
T	GP RPM					T						
3	PT RPM					3	0	0	0	118830	0	0
T	GP RPM					T						
4	PT RPM					4	0	0	18263	119642	0	0
T	GP RPM					T						
5	PT RPM					5	0	0	10524	125250	0	0
T	GP RPM					T						
6	PT RPM					6	0	0	845	91212	0	0
T	GP RPM					T						
7	PT RPM					7	0	0	32812	145112	0	0
Gas Flow			0			AVG. FLOW			0			
Liquid Flow						LIQUID FLOW						
LP 1						LP 1	0	0	24310		0	0
LP 2						LP 2	0	0	44066		0	0
LP 3						LP 3	0	0	49988		0	0
LP 4						LP 4	0	0	3289		0	0
GEN #1			X	X	X	GEN #1	15	15	36225		0	0
GEN #2						GEN #2	0	0	39294		0	0
G e n #1	Amps		280			COMMENTS AND REMARKS						
	Volts		480			Hurricane Rita Evacuation Return						
	KW		180									
G e n #2	Amps											
	Volts											
	KW											
Ambient Temp.			85									
Weather			PC									

PIC: Langlinais

OPERATOR: Wood

Weather Codes :C - Clear, CL - Cloudy, R - Rain, S - Snow, F - Fog, PC - Partly Cloudy