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## **BP Resumes Work to Plug Oil Leak After Facing Setback**

By CLIFFORD KRAUSS and JOHN M. BRODER

HOUSTON — BP on Thursday night restarted its most ambitious effort yet to plug the oil leak in the Gulf of Mexico, trying to revive hopes that it might cap the well with a "top kill" technique that involved pumping heavy drilling liquids to counteract the pressure of the gushing oil.

BP officials, who along with government officials created the impression early in the day that the strategy was working, disclosed later that they had stopped pumping the night before when engineers saw that too much of the drilling fluid was escaping along with the oil.

It was the latest setback in the effort to shut off the leaking oil, which federal officials said was pouring into the gulf at a far higher rate than original estimates suggested.

If the new estimates are accurate, the spill would be far bigger than the Exxon Valdez disaster in 1989 and the worst in United States history.

President Obama, who planned to visit the gulf on Friday, ordered a suspension of virtually all current and new offshore oil drilling activity pending a comprehensive safety review, acknowledging that oversight until now had been seriously deficient.

Mr. Obama said at a news conference in Washington that he was angry and frustrated about the catastrophe, and he shouldered much of the responsibility for the continuing crisis.

"Those who think we were either slow on the response or lacked urgency, don't know the facts," Mr. Obama said. "This has been our highest priority."

But he also blamed BP, which owns the stricken well, and the Bush administration, which he said had fostered a "cozy and sometimes corrupt" relationship between oil companies and regulators at the Minerals Management Service.

The chief of that agency for the past 11 months, S. Elizabeth Birnbaum, resigned on Thursday, less than a week after her boss, Interior Secretary Ken Salazar, announced a broad restructuring of the office.

"I'm hopeful that the reforms that the secretary and the administration are undertaking will resolve the flaws in the current system that I inherited," she said in a statement.

Mr. Obama plans on Friday to inspect the efforts in Louisiana to stop the leak and clean up after it, his second trip to the region since the explosion of the Deepwater Horizon rig on April 20. He will also visit with people affected by the spreading slick that has washed ashore over scores of miles of beaches and wetlands.

Even as Mr. Obama acknowledged that his efforts to improve regulation of offshore drilling had fallen short, he said that oil and gas from beneath the gulf, now about 30 percent of total domestic production, would be a part of the nation's energy supply for years to come.

"It has to be part of an overall energy strategy," Mr. Obama said. "I mean, we're still years off and some technological breakthroughs away from being able to operate on purely a clean-energy grid. During that time, we're going to be using oil. And to the extent that we're using oil, it makes sense for us to develop our oil and natural gas resources here in the United States and not simply rely on imports."

In the top kill maneuver, a 30,000-horsepower engine aboard a ship injected heavy drill liquids through two narrow flow lines into the stack of pipes and other equipment above the well to push the escaping oil and gas back down below the sea floor.

As hour after hour passed after the top kill began early Wednesday afternoon, technicians along with millions of television and Internet viewers watched live video images showing that the dark oil escaping into the gulf waters was giving way to a mud-colored plume.

That seemed to be an indication that the heavy liquids known as "drilling mud" were filling the chambers of the blowout preventer, replacing the escaping oil.

In the morning, federal officials expressed optimism that all was going well. "The top kill procedure is going as planned, and it is moving along as everyone had hoped," Adm. Thad W. Allen of the Coast Guard, the leader of the government effort, told CNN.

And Robert Dudley, BP's managing director, said on the "Today" program on NBC that the top kill "was moving the way we want it to."

It was not until late afternoon that BP acknowledged that the operation was not succeeding and

that pumping had halted at 11 p.m. Wednesday.

After the resumption, Doug Suttles, BP's chief operating officer for exploration and production, struggled to offer guidance on whether the latest effort was likely to succeed.

"It's quite a roller-coaster," Mr. Suttles said. "It's difficult to be optimistic or pessimistic. We have not stopped the flow."

Engineers had feared the top kill was risky because the high-pressure mud could have punctured another gaping hole in the pipes, or dislodged debris clogging the blowout preventer and pipes and intensified the flow.

The engineers also said that the problem they encountered was not entirely unexpected, and that they believed that they would ultimately succeed.

Mr. Obama's action halted planned exploratory wells in the Arctic due to be drilled this summer and planned lease sales off the coast of Virginia and in the Gulf of Mexico. It also halts work on 33 exploratory wells now being drilled in the gulf.

The impact of the new moratorium on offshore drilling remains uncertain. Mr. Obama ordered a halt to new leasing and drilling permits shortly after the spill, but Minerals Management Service officials continued to issue permits for modifications to existing wells and to grant waivers from environmental assessments for other wells.

Shell Oil had been hoping to begin an exploratory drilling project this summer in the Arctic Ocean, which the new restrictions would delay. Senator Mark Begich, Democrat of Alaska and a staunch supporter of drilling in the Arctic, said he was frustrated because the decision "will cause more delays and higher costs for domestic oil and gas production to meet the nation's energy needs."

"The Gulf of Mexico tragedy has highlighted the need for much stronger oversight and accountability of oil companies working offshore," Mr. Begich said in a statement. "But Shell has updated its plans at the administration's request and made significant investments to address the concerns raised by the gulf spill." Environmental advocates, however, expressed relief.

"We need to know what happened in the gulf to cause the disaster, so that a similar catastrophe doesn't befall our Arctic waters," said William H. Meadows, president of the Wilderness Society.

Admiral Allen on Thursday approved portions of Louisiana's \$350 million plan to use walls of

sand in an effort to protect vulnerable sections of coastline.

The approved portion involves a two-mile sand berm to be built off Scofield Island in Plaquemines Parish — one of six projects that the Corps of Engineers has approved out of 24 proposed by Gov. Bobby Jindal.

"What Admiral Allen told us today is that if the first one is effective, then they will consider moving on to the next one," Mr. Jindal said at an afternoon news conference in Fourchon.

Investigators also continued their efforts to understand what caused the explosion of the rig, which killed 11 workers.

At a hearing in New Orleans, the highest ranking official on the Deepwater Horizon testified that he had a disagreement with BP officials on the rig before the explosion.

Jimmy Harrell, a manager who was in charge of the rig, owned by Transocean, said he had expressed concern that BP did not plan to conduct a pressure test before sealing the well closed.

It was unclear from Mr. Harrell's testimony whether the disagreement took place on the day of the explosion or the previous day.

The investigative hearings have grown increasingly combative. Three scheduled witnesses have changed their plans to testify, according to the Coast Guard. Robert Kaluza, a BP official on the rig on the day of the explosion, declined to testify on Thursday by invoking his Fifth Amendment right not to incriminate himself.

Another top ranking BP official, Donald Vidrine, and James Mansfield, Transocean's assistant marine engineer on the Deepwater Horizon, both told the Coast Guard that they had medical conditions.

Robbie Brown contributed reporting from Kenner, La.; Campbell Robertson from Venice, La.; and John Collins Rudolph from Fourchon, La.