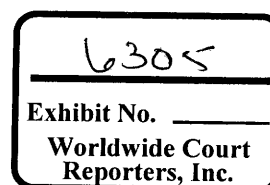


From: Maguire, Niall J
Sent: Mon Jun 21 01:05:03 2010
To: Birrell, Gordon Y
Cc: Wilson, Roberta; Tooms, Paul J
Subject: RE: Sec Salazar Call
Importance: Normal
Attachments: Tieback_project.ZIP

Identified 2 options to install a flowline and contain the flow subsea - Rigel and Na Kika.

- **Rigel** - ENI well Approximately 2 miles from Macondo
 - Depleted gas well, operated by ENI.
 - Can tie in a flowline from our current seabed infrastructure to the Rigel well (and link to a second depleted well - 17 Hands)
 - If we tie in, we can store ~10mbd in Rigel before pressure containing cap installation; ~20mbd after installation.
 - Need flowline, end terminations and jumpers for each end.
 - Anadarko have all of the above ready to go on Caesar / Tonga Project - 15K equipment - ready to spool onto Deep Blue
 - Anadarko have also worked to identify an alternate option with pipeline easier to install (10K), better end terminations, installable from another vessel - notionally the Helix Express
 - Anadarko currently proactively preparing installation procedures, welding procedures, etc in preparation for the Helix option.
 - Could be ready to inject into Rigel by 7 July.
 - ENI have been cooperating all weekend. VP Ops has been in discussions. Need UAC to formally request the ENI well to be used in the relief effort. BP can draft letter for the Secretary detailing the request.
 - Anadarko have cooperated and kept both options open (didn't want to start the Deep Blue spooling until this phone call). We should now formally request handover of the Helix equipment, and confirm it is okay to allow Anadarko to proceed as planned on their Deep Blue work. BP can draft letter for the Secretary detailing the request.
-
- **Na Kika** - BP facility with flowline loop 12 miles from Macondo
 - Can tie in a flowline from our current infrastructure to the flowline loop
 - If we tie in, we can store ~25mbd
 - Need flowline, end termination and jumpers for each end - as at Rigel.
 - BP has this equipment from the Galapagos project, and is preparing to tie in.
 - Due to flowline length and higher complexity, estimate this option will be ready in early August.
 - We assume it is okay to proceed with this option.



From: Birrell, Gordon Y
Sent: Sunday, June 20, 2010 9:32 PM
To: Maguire, Niall J
Cc: Wilson, Roberta
Subject: Sec Salazar Call

Niall

Could you construct a 1/2 page set of bullets for Andy to describe the pipeline options (Reigel and Anadarko) such that he can relay it to Salazar tomorrow (options description, next steps, request of UAC, etc)?

Given you are now in Project Director mode (as opposed to EA), I would offer Roberta to put the product together if you would relay the info to her.

Rgds

Gordon

Identified Members of team

2 BP
2 Oceaneng Engineers
2 Oceaneng Techs

In science territory vs. engineering

Formal

1. Pressure inside LMRP Top Hat 4

- Request made on 20th June, by Tom Hunter, for pressure reading inside Top Hat 4 for the purpose of understanding and estimating flow rate.
- A Single Point Measurement tool and a Multi Point Measurement tool will be developed in line with the request requirements.
- Data requirements will be met within the practical data limits and system response time.
- Due to the practicalities of design, installation and shipping offshore, readings will not begin to be obtained until ca. 25th June.
- Timeline deliverables for the Single Point Measurement tool:
 - Design - ca. 19th June
 - Fabrication - ca. 21st June
 - Factory Test - ca. 22nd June
 - Transportation - ca. 23rd June
 - HUC - ca. 24th June / 25th June
 - First Measurement - ca. 25th June
- Timeline for the Multi Point Measurement tool to be developed based on the learnings from the deployment of the Single Point Measurement tool.

Submit to Warren today

Do you want us to continue?

Fabrication finish today

calibrate to get the required accuracy 22nd 0.1

2. Pipeline tie-back options

Identified 2 options to install a flowline and contain the flow subsea - Rigel and Na Kika.

- Rigel** - ENI well ca. 2 miles from Macondo.
- Depleted gas well, operated by ENI.
- Can tie in a flowline from our current seabed infrastructure to the Rigel well (and link to a second depleted well - 17 Hands).
- If we tie in, we can store ca. 10mbd in Rigel before pressure containing cap installation; ca. 20mbd after installation.
- Need flowline, end terminations and jumpers for each end.
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