

From: Morel, Brian P
Sent: Wed Sep 16 22:38:18 2009
To: Sims, David C
Subject: 2009 Performance Details.doc
Importance: Normal
Attachments: 2009 Performance Details.doc

David,

I wasn't sure if you needed this for the PDP fest or promotion discussions. It should cover most of what I have done this year. I don't have all the Macondo cost savings captured yet, as we are still working on some.

Thank You,
Brian
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2009 Details

1. Puma
 - a. Completed all engineering in 2008 (only ops and sidetrack engineering in 2009)
 - b. Operations
 - i. \$54.4mm vs \$118mm / \$11.9mm vs \$22.9mm
 - ii. 22 % NPT / 0 % NPT
 - iii. #7 / #3 wells in GOM Benchmarking comparison (1st quartile)
 - c. Wrote / compiled EOWR
 - d. Created and presented EOW review (stage gate)
 - e. Sidetrack trajectory options with timing and cost estimates (design used reduced costs to meet all partners goals, and give a loggable wellbore).
 - f. Worked with MiSwaco to design a mud/sweep program to ensure hole cleaning and TD sidetrack without losses or wellbore stability issues.
 - g. Implemented numerous time/cost savings into design and operations
 - h. Lessons Learned presentations (4)
 - i. Successfully evaluated and ran Hughes reamer
 - j. Successfully evaluated and ran the V-stab to reduce vibrations.
 - k. Evaluated Weatherford casing wiper plugs and cement heads
 - l. Evaluated Baker diverter
 - m. Evaluated Security XR under-reamer
 - n. Evaluated Easywell swell-able packers
2. Cost estimates Freedom appraisal wells
 - a. 3 wells based on original Freedom well
 - b. Assumed continual improvement, inflation, and new rig issues performance to come up with final numbers
3. Rutile
 - a. Lead planning engineer
 - b. Preliminary well concept
 - i. Cost estimates
 - ii. Offset recap
 - iii. Casing point selection
 - iv. Well trajectories (5 options to suit BP and Anadarko requirements) (compass)
 - v. Pushed subsurface team to select location and increase target sizes to reduce drilling risks
 - vi. Torque and drag models (wellplan)
 - vii. Basic mud weight schedule
 - viii. Completed slides and worked required for peer review / appraise stage gate
 - ix. Closed out well for future utility (filed paper work properly)
4. Macondo
 - a. Cost savings ideas
 - i. Bit selection – \$500k
 - ii. Drill pipe (compiled list of equipment, evaluated 4 vendors, negotiated prices)

- iii. Centralizers (subs vs mold on collars vs bolt on stop collars)
 - b. Ran Jetcap and completed a flow rate chart for Marianas
 - c. Worked with real time operations team to complete torque and drag models for real time ops while drilling the well
 - d. Completed drill and landing string designs
 - e. Wrote/optimized drilling program
 - f. Create one-pager for well
 - g. Helped develop mud program and bring new mud contractor on the rig
 - h. Detailed overview of cement program (EPT / Biruite) to develop best practice on all hole sections and production interval
 - i. WBM requirements / design (28" and 22" casing intervals)
 - j. Review program with WSL and implemented all changes requested
 - k. Present well at Crew Engagement
 - l. Extend Horizon successful practices to Marianas team (and lessons learned)
 - m. Work with Hughes to develop larger reamers and open on demand function
 - n. Rig visits (1)
 - o. Created BHA parameters chart for each section (Alex helped)
 - p. Worked with Vendors (Dril-quip, Pro-Tech, Weatherford, Allamon, Bariod, Halliburton, Schlumberger, ect...) to prepare well for spud.
 - q. Worked with EPT to develop stresscage plan for potentially depleted shallow sands.
 - r. Worked with EPT to ensure APB design meet requirements if cement plans changed to cover depleted sands.
 - s. Worked with EPT to ensure shallow hazards design is adequate and running CADA tool won't cause issues.
 - t. Created tool to track running weights, compare to actual, and update Jetcap model based on readings from the weight indicator on the specific rig.
 - u. Compiled slides and presented well at crew engagement sessions.
 - v. Alternating "first call" on the Macondo well with Trent Fleece (1 week on/off)
5. Created new cost estimating tool
 6. Helping develop "Best of the Best" tool (Rodolfo)
 7. Safety Training – Incident Investigation
 - a. Completed training packet to be investigator
 - b. Send weekly email to person on (Junior investigator)
 8. SPU D&C Lunch & Learn – Hughes Reamer
 9. SPU class – Wellplan (orchestrate)
 10. Cost savings ideas (24) for the Horizon
 11. Mentoring challenger on Rutile and Macondo.
 - a. Set goals / tasks to help in learning
 - b. Ask daily technical questions to build knowledge
 - c. Answer questions
 - d. Check for competency using software / design review

- e. Review completed work
 - f. Set-up weekly meeting to review progress, discuss issues/performance, and determine weekly goals for the project and personal development.
- 12. D&C Conference**
- a. Submitted abstract for performance tracking tool
 - b. Safe and Reliable operations task leader for GOM
 - c. Meet with Terry Jordan to discuss what was currently developed
 - d. Added tasks team deemed as necessary at the conference
 - e. Reviewed document with team members and presented to Terry for final approval
- 13. Well positioning review for exploration**
- 14. Develop new tool to quickly create benchmarking data**
- 15. Develop new tool to create one-pager**
- 16. Attend bi-weekly lessons learned meetings and implement in drilling program as required**
- 17. Attend Sprague meeting**
- 18. Weekend Duty**
- 19. Created easy to use flying brick excel document**
- 20. Responded to WEPF questions**
- 21. Attended 1st portion of HPHT ADP**
- 22. Attended Loss Circulations Master Class**
- 23. Worked with intern to help understand BP, drilling, and summer project**
- 24. Daily Moon**
- a. Lead planning engineer

Hard Cost Savings (doesn't include rig time)

Cost Savings Tracker	Savings	Well
28" Casing	\$ 499,000	puma
Halliburton Black Dye	\$ 33,447	puma
Hughes Reamer (free)	\$ 91,000	puma
Hughes Reamer (2nd run discount)	\$ 50,000	puma
Hughes Reduced reamer price for Exploration	\$ 150,000	all
Non-Sealed Bit (26")	\$ 21,506	puma
Liner Hanger (check invoices)	\$ 61,000	puma
Remove Geo-pilot	\$ 150,000	puma
BHA design saved coring run	\$ 1,940,000	puma
Rental Landing String	\$ 29,700	puma
Bit / reamer price reduction	\$ 487,000	macondo
Rental bits Hughes	\$ 42,506	all
Reduced WBM requirements (1000 bbls)	\$ 125,000	puma
NOV price reduction for Exploration		macondo
Drill String Re-quote (itemized)		macondo
Bariod take back Waterbase mud		
Total	\$ 3,680,159	