

From: Morel, Brian P
Sent: Thu Oct 01 01:10:22 2009
To: Burns, Tim A
Subject: One Pager
Importance: Normal
Attachments: Macondo_onepager.ZIP

<<...>>

Tim,
I forgot to send this yesterday. Sorry
Brian

Document Produced Natively

Headers in Box 1:

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Headers in Box 2:

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Scope:	
•	Design based off Isabela well
–	6 casing string (Isabel had 7 strings)
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Macondo D&C Cost Estimate and Benchmarking

Wells Cost Estimate	Cost
Mooring / Mob / Demob	\$ 32.4 MM
Drilling (Inc. MOB & Prep)	\$ 57.4 MM
Evaluation	\$ 6.2 MM
Abandonment	\$ 3.7 MM
Performance Target (PT)	\$ 99.7 MM
Not To Exceed (NTE)	\$ 139.5 MM

Scope:

- Design based off Isabela well
 - 6 casing string (Isabel had 7 strings)
 - Moored rig vs dynamically positioned
 - Contingency casing string risked at 50%
 - PT DCUS based on Isabela w/ NPT removed
- Well TD deepened to evaluate M54 sands
- Abandonment costs included in PT costs

Performance & Learning:

- PT = 41.1 days/10k (80 days):
 - Top of 2nd Quartile
 - Includes 23.6 % NPT
 - No major weather in PT estimate
- Recent Drilling NPT:
 - Isabela 13%
 - Horizon ~21% (Puma / Tiber)
 - Marianas ~ 34% (H2 top drive incident removed)
 - SPU ~34.1% excluding weather (2009 YTD)
- Uncontrollable events excluded from PT estimate (re-spud, BOP, major weather, rig failure)
- Continue good mooring performance
- Rig stack allows for equipment to have extended maintenance and reduces failure risks
- Incorporated learnings from Isabela to optimize well performance & reduce likelihood of expandable liner

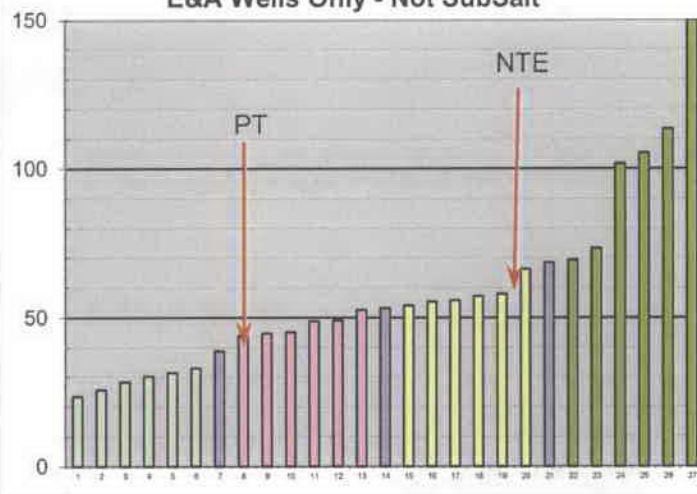
Significant Risks to Delivery:

- Weather - hurricane season & loop currents
- Narrow PPFG window / uncertainty
- BOP stack issues
- Riserless section (weather / seas)
- Depleted gas sands in 16" section
- Faulting into high pressure below the M56

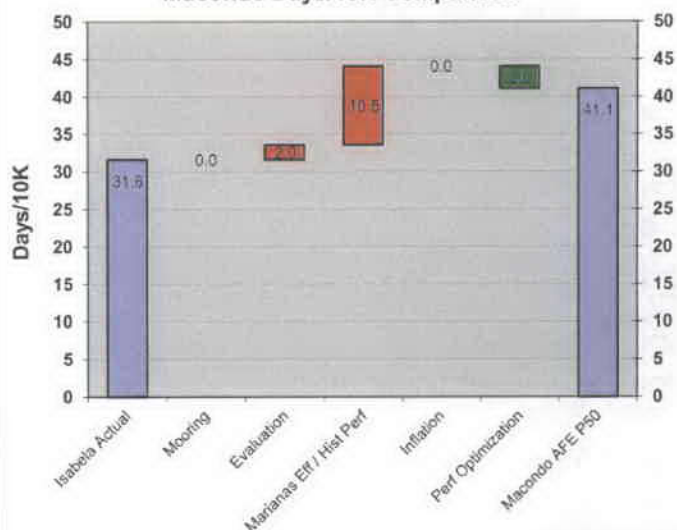
NTE (Not to exceed basis):

- P90 - 59 days/10k (122 days)
- Max NTE NPT from DCUS = 47.9%
 - H2 actual = 57%
- Contingency liner required
- Single hurricane or loop current event

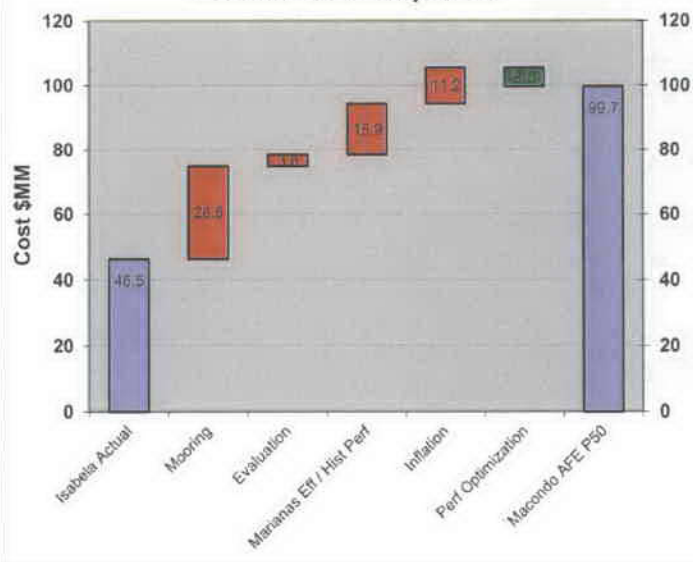
[1995 - 2007*] Mississippi Canyon wells 10k-17k,
(6 - 8 csg strings)
E&A Wells Only - Not SubSalt

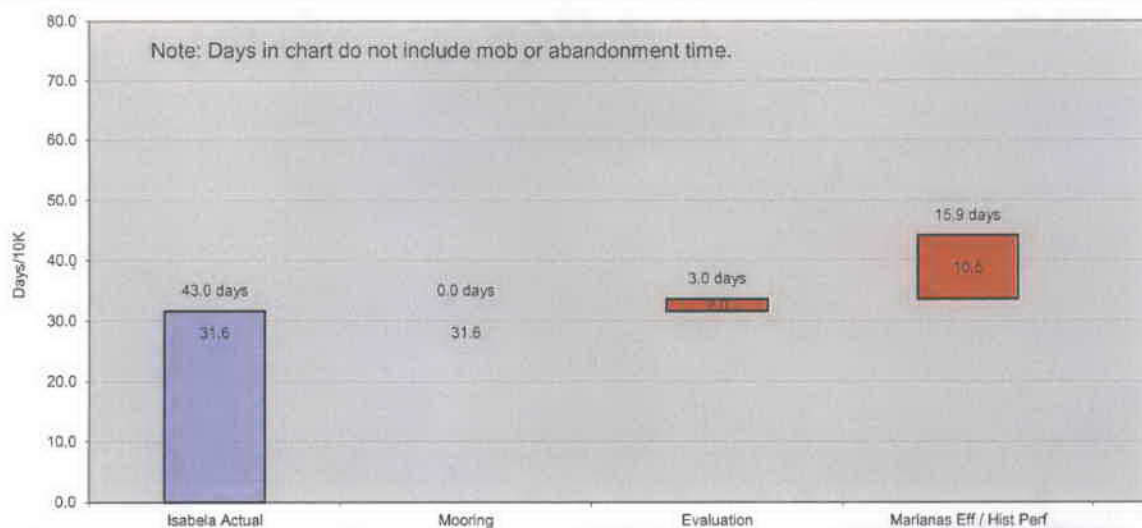


Macondo Days/10K Comparison



Macondo Cost Comparison





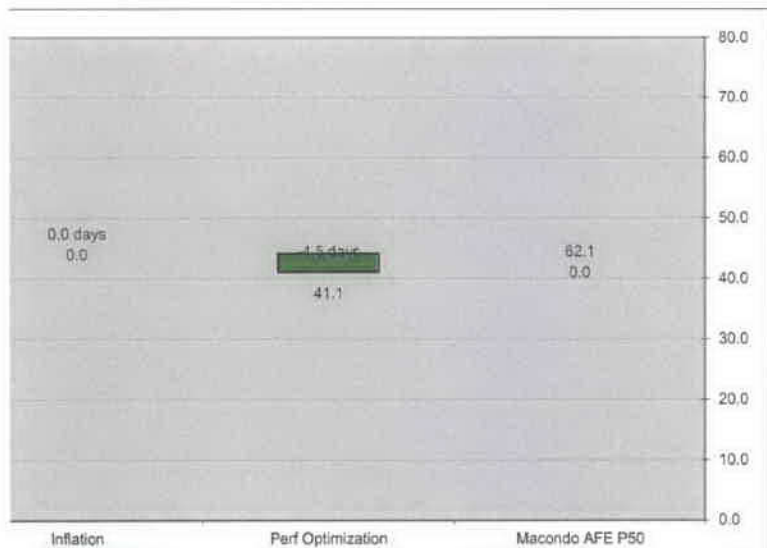
Days/10k					
Base	31.6	31.6	31.6	33.6	44.1
Red	0.0	0.0	2.0	10.5	0.0
Green	0.0	0.0	0.0	0.0	0.0

	Isabela Actual	Mooring	Evaluation	Marianas Eff / Hist Perf	Inflation
Label - Days	43.0 days	0.0 days	3.0 days	15.9 days	0.0 days
Label - Days/10k	31.6	31.6	33.6	44.1	44.1
TD	19600		Macondo NPT	23.6%	
Seafloor	6000		Isabela NPT	13.0%	

Costs					
Base	\$ 46.5 MM	\$ 46.5 MM	\$ 75.0 MM	\$ 78.6 MM	\$ 94.5 MM
Red	\$ 0.0 MM	\$ 28.5 MM	\$ 3.6 MM	\$ 15.9 MM	\$ 11.2 MM
Green	\$ 0.0 MM	\$ 0.0 MM	\$ 0.0 MM	\$ 0.0 MM	\$ 0.0 MM

	Isabela Actual	Mooring	Evaluation	Marianas Eff / Hist Perf	Inflation
Label - Cost	\$ 46.5 MM	\$ 28.5 MM	\$ 3.6 MM	\$ 15.9 MM	\$ 11.2 MM
Label - Cost	\$ 46.5 MM	\$ 75.0 MM	\$ 78.6 MM	\$ 94.5 MM	\$ 105.7 MM

Day Rate \$ 1.0 MM
 Incremental Logging cost \$ 0.2 MM
 Incremental Casing cost \$ 1.5 MM
 Inflation 24%



41.1	41.1		days/10k
0.0	0.0		days/10k
3.0	0.0		days/10k

Perf Optimization	Macondo AFE P50		
-4.5 days	62.1		days
41.1	41.1		days
TD	20200		
Seafloor	5081		

\$ 99.7 MM	\$ 99.7 MM		dollars
\$ 0.0 MM	\$ 0.0 MM		dollars
\$ 6.0 MM	\$ 0.0 MM		dollars

Perf Optimization	Macondo AFE P50		
-\$ 6.0 MM	\$ 99.7 MM		dollars
\$ 99.7 MM	\$ 99.7 MM		dollars