2013 DEEPWATER SOLUTIONS & RECORDS FOR CONCEPT SELECTION

Going Deeper with Production Technology — May 2013

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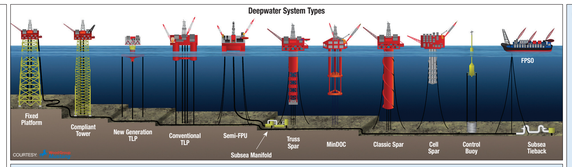
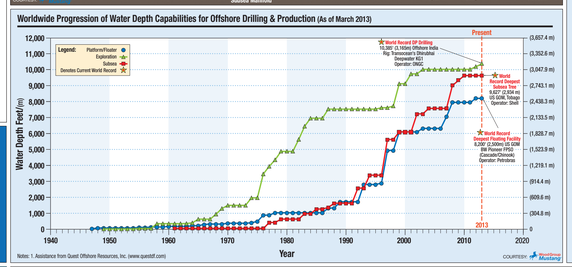
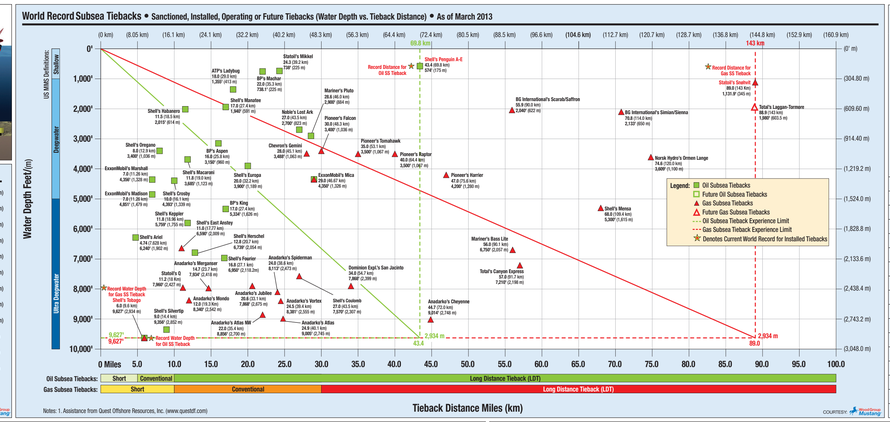




Notes: 1. Assistance from Quest Offshore Resources, Inc. (www.questoff.com)



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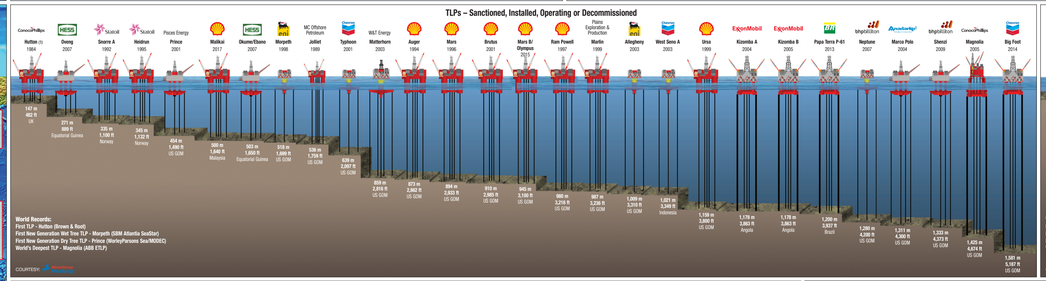
Deepwater Field Development Concept Selection Matrix

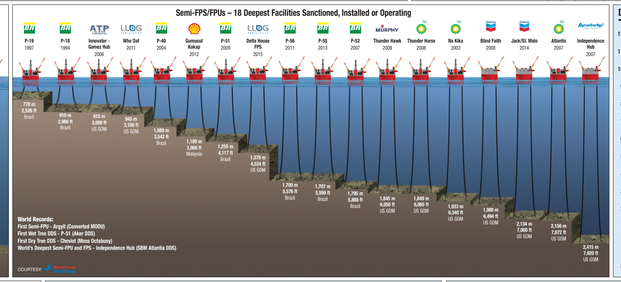
COURTESY: Wood Group Mustang

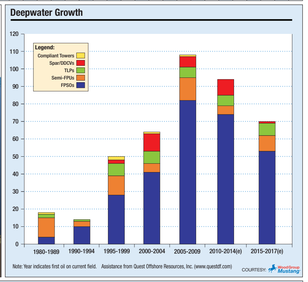
Legend: Field Proven; Qualified

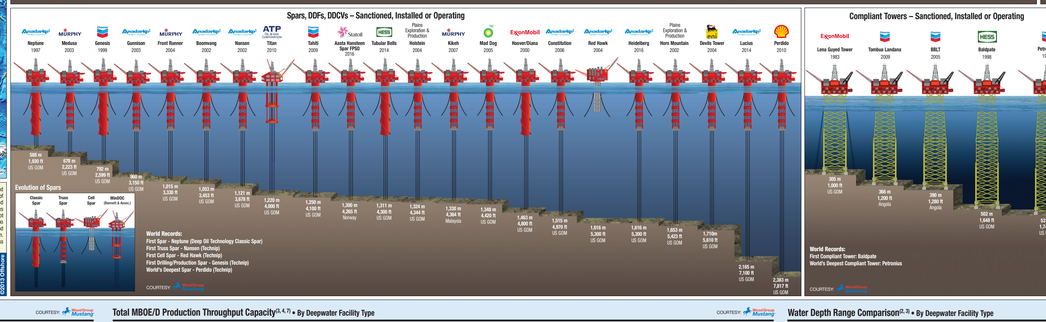
* "Unconventional" FPSOs include Seven SSP, Petrobras MonoBR, Global SSP SSP320 & SSP PLUS.

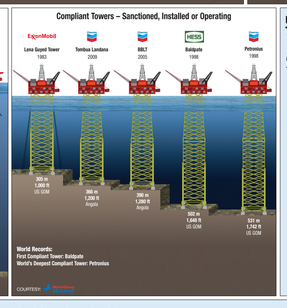
	Major Capability: Field Application Experience	Major Capability: Production	Major Capability: Drilling	Major Capability: Storage	Install: Water Depth Rating	Install: Payload Sensitive	Install: Deck/Hull Mating Offshore	Install: Deck/Hull Mating @ Fabrication Yard	Reser-voir Info.: Arial Extent	Reser-voir Info.: Small Area	Reser-voir Info.: Large Area	Tree Type: Wet Tree	Tree Type: Dry Tree	Location Application: Well Count	Location Application: Nearby Infrastructure	Location Application: Remote	Envir. Conditions: Small Footprint (Mooring System)	Envir. Conditions: Calm	Envir. Conditions: Area with Hurricanes/Typhoons	Risers: Harsh	Risers: Steel Catenary Riser (SCR) Capable	Risers: Flexible Pipe Capable	Risers: Top Tensioned Riser	Export: Oil Pipeline Export Application	Export: Shuttling Application	Export: Gas Pipeline	Export: Gas Reinjection
Conventional Fixed Platform (>1,000')	●	●	●	●	See Water Depth Range Comparison Graph	●	●	●		●	●			See Well Capability by Deepwater Production Type Graph	●	●		●	●							
Compliant Towers	●	●	●	●		●				●	●				●	●		●	●								
FDPSOs	●	●	●	●		●				●	●				●	●		●	●								
FPSOs																											
Spread Moored	●	●		●		●				●	●				●	●		●	●								
Turret Moored	●	●		●		●				●	●				●	●		●	●								
Unconventional*	●	●		●		●				●	●				●	●		●	●								
Conventional TLPs	●	●		●		●				●	●				●	●		●	●								
Proprietary TLPs	●	●		●		●				●	●				●	●		●	●								
Spars																											
Dry Tree	●	●		●		●	●	●		●	●		●		●	●		●	●						●	●	
Wet Tree	●	●		●		●	●	●		●	●	●			●	●		●	●						●	●	
Semi-FPUs																											
Conventional	●	●		●		●				●	●				●	●		●	●						●	●	
Deep Draft Wet Tree	●	●		●		●				●	●				●	●		●	●						●	●	
Deep Draft Dry Tree	●	●		●		●				●	●				●	●		●	●						●	●	
Subsea Tiebacks	●	●		●		●				●	●				●	●		●	●						●	●	

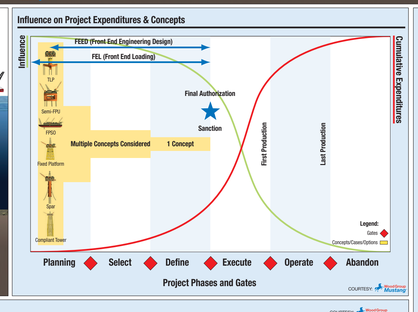


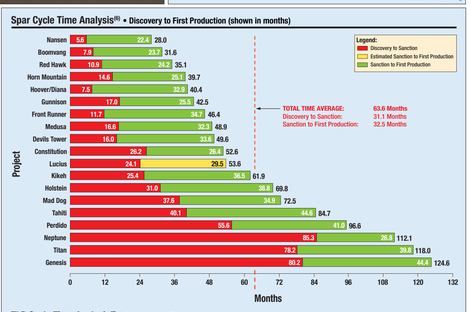












Industry Acronyms

DDCV	Deep Draft Caisson Vessel
DDF	Deep Draft Floater
DDS	Deep Draft Semi
FDPSO	Floating Drilling, Production, Storage and Offloading System
FPSO	Floating Production, Storage and Offloading System
MinDOC	Cross between a semisubmersible and a truss spar
MODU	Mobil Offshore Drilling Unit
Semi-FPU	Semi-Submersible Floating Production Unit
TLP	Tension Leg Platform

Notes

1. Though referenced throughout the poster, Hutton and Typhoon TLPs have been decommissioned.
2. World Records (noted in red throughout the poster) refer only to operating or installed vessels.
3. Water Depth Capability, Throughput Capacity and Well Capability charts contain a sampling of vessels to demonstrate the capability range for each concept. The chart is not inclusive of all operating vessels.
4. Throughput Capacity Chart – gas processing capacity is converted to barrels of oil equivalent as follows: 6 MMscfd = 1 MBOE/d.
5. The Minas Maritime Octabuoy® is qualified for two locations: the UK North Sea and the Gulf of Mexico. Well capability for the Cheviot facility is noted for both locations.
6. Not all facilities are included in the cycle time analyses.
7. Though we made some updates, data for these comparison charts are largely derived from previously-published industry surveys as follows: TLP/TTLP/LP survey data from February 2010, Semi-FPS/FPU survey data from January 2011, Spar/DDCV survey data from October 2012, and FPSO survey data from August 2012.

Information Accuracy: Every attempt has been made to identify, locate, and establish the most current and correct information for all the various types of deepwater production solutions either operating, installed, or sanctioned worldwide. No facility was intentionally excluded from this poster. In some cases the most current information was not included because information was not supplied in time or the project was not sanctioned at press time. We make no guarantee that this list is all inclusive. We have summarized the capability and operating experience by acting as a neutral party and integrator of information. We have collected the information from company brochures, interviews, press releases, industry publications, contractor supplied information, and websites.

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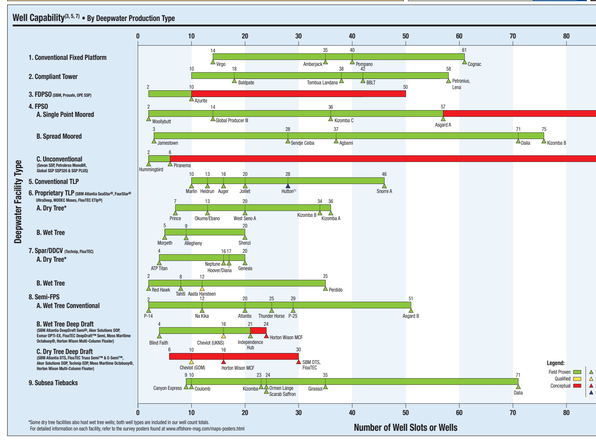

*Some dry tree facilities also host wet tree wells; both well types are included in our well count totals.
For detailed information on each facility, refer to the survey posters found at www.offshore-mag.com/maps-posters.html