

From: Beirne, Michael
Sent: Mon Aug 10 22:24:54 2009
To: nick.huch@anadarko.com
Subject: BP Macondo Slides
Importance: Normal
Attachments: Macondo Slide Pack (8-10-09).pdf

Nick,

As requested, attached are the slides from BP's Macondo presentation. Apologies this took so long.

<<...>>

Look forward to hearing from soon.

Best regards,

Michael J. Beirne

Offshore Commercial Negotiator

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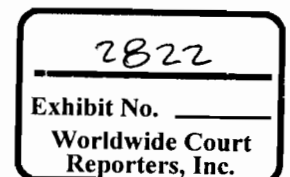
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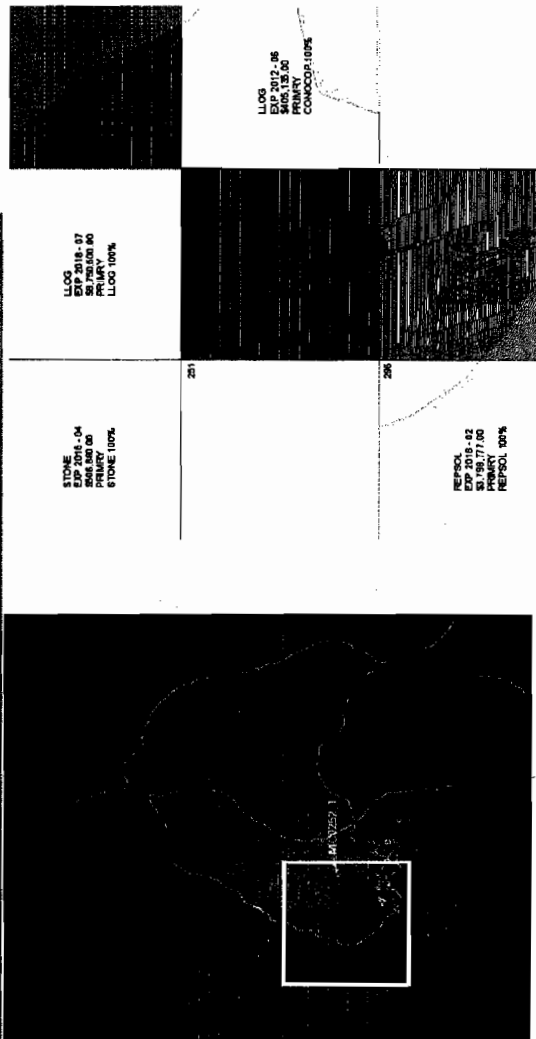
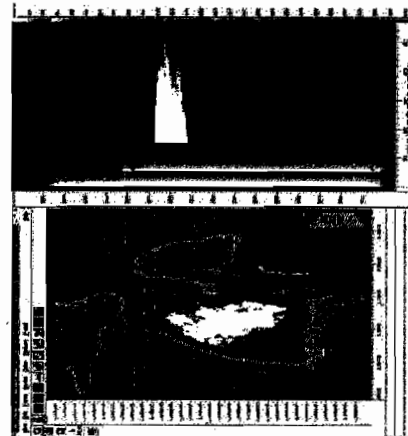
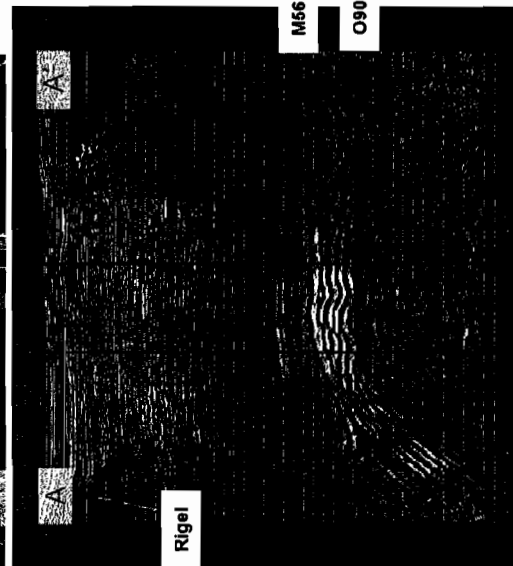
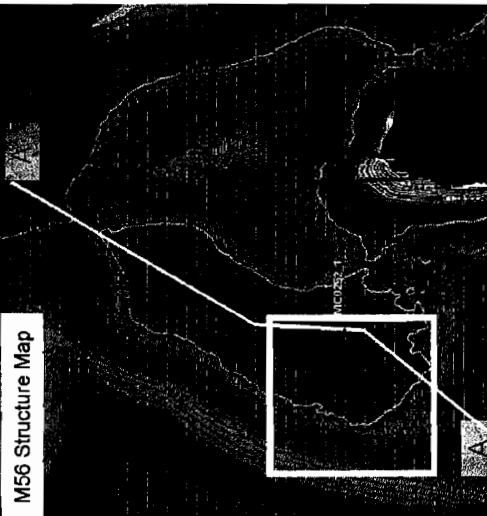


Macondo

Short Pack

Macondo M56

M56 Structure Map



LLOG
EXP 2018-07
\$8,750,500.00
PRIMARY
LLOG 100%

LOG
EXP 2012-06
\$405,135.00
PRIMARY
CONVOC.P.1005

REPSOL
EXP 2018-02
\$3,198,777.00
PRIMARY
REPSOL 100%

Prospect Name:

Category:

Water depth:

Trap:

Target(s):

GDE:

Prospect acres:

Unrisked Volume:

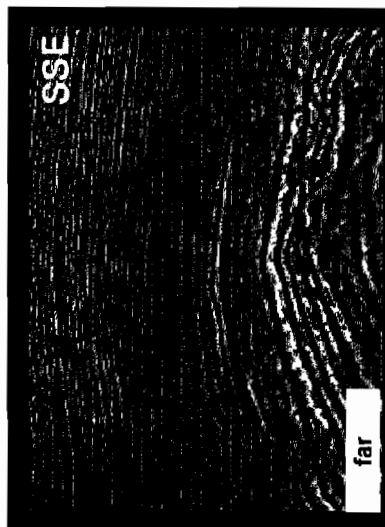
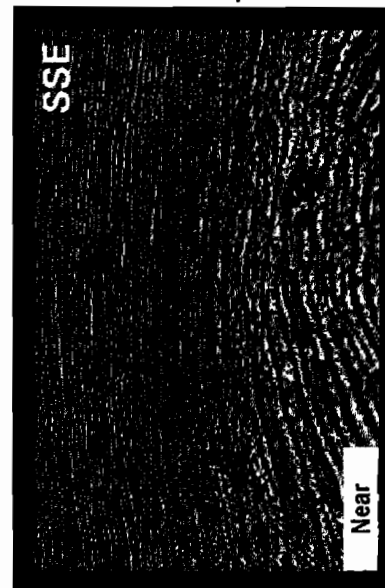
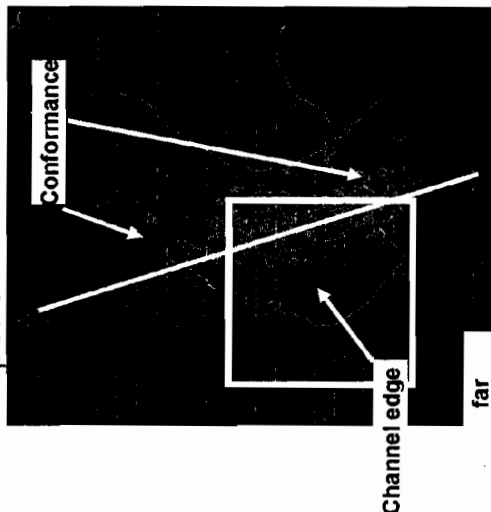
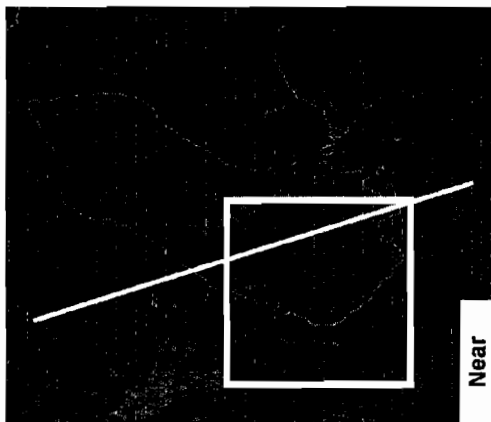
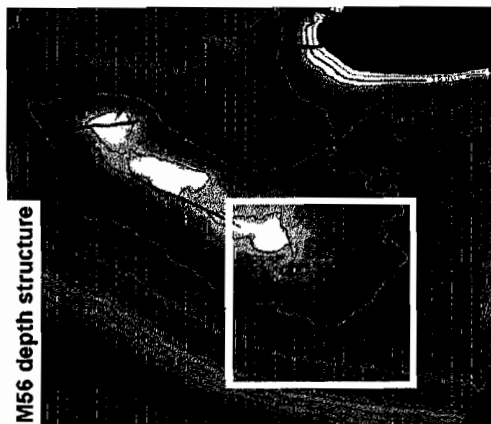
Critical risks:

Dr.

Recommendation:

Macondo
Prospect
-1992
4-way (DHI support)
M56
Channel Levee
4500 acres ML
40-64-94 mmboe
Charge Access
.67
drill

M56 Near – Far response



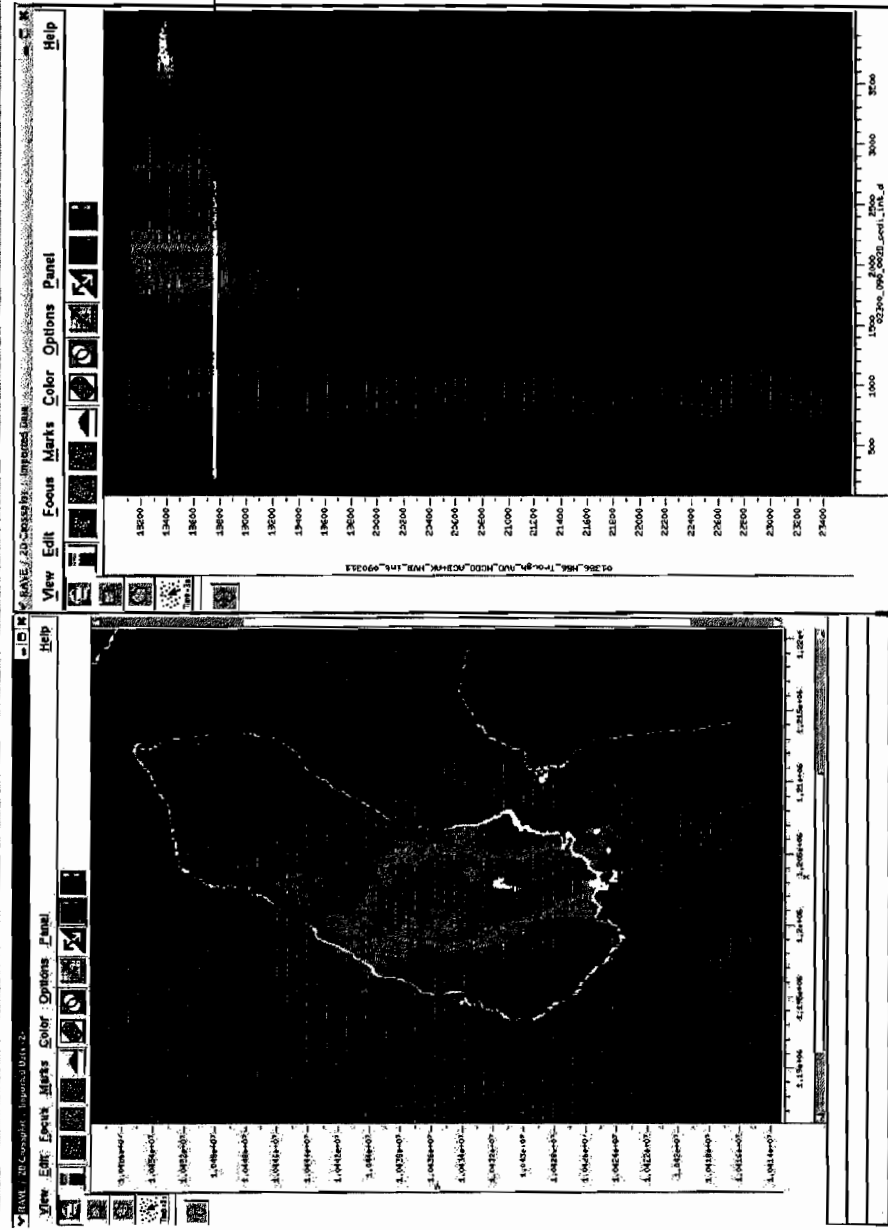
Trap Description

- 4-way elongated ridge
- Crest 18,120ft
- Spill 18,775 ft
- ~ 655 ft relief
- Far offset response
- across structural high
- Visible conformance
- Channel edges

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Macondo M56: Amplitude Conformance



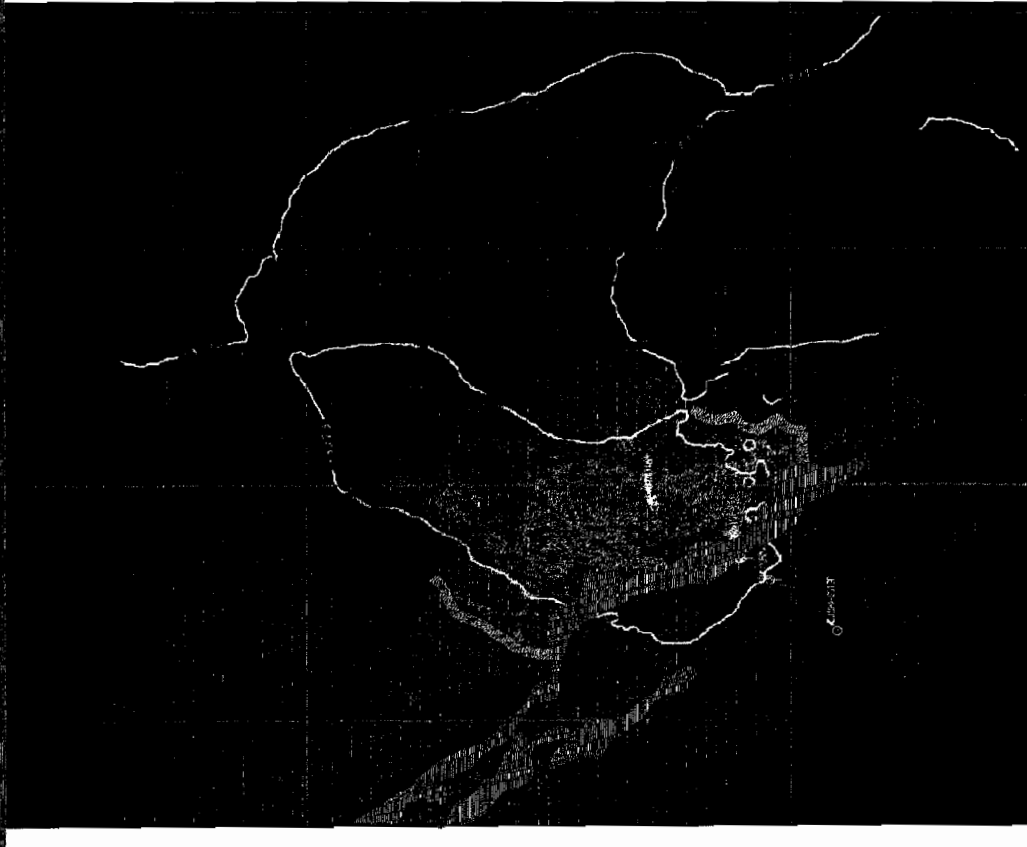
- A/B ~ 2-2.5 (matches modeling); main part in block 252
- Sits on a high
- Step change at our spill point contour

RAVE Software

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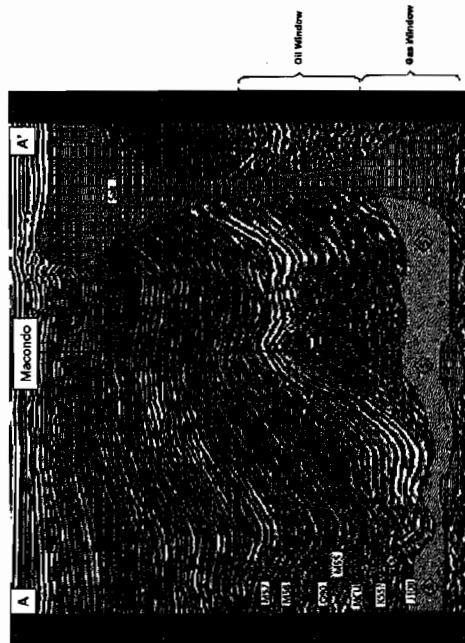
Macondo M56 - Reservoir



Reservoir

- Full stack shows NW – SE trending channel systems
- Well developed M55 & M56 sands seen in analog wells
 - Seismic resolution 180'
 - thickness 15' – 180'
 - tuning 100'
- low risk for finding reservoir of commercial thickness
- ~100ft predicted @ Wellbore

Macondo: Charge access



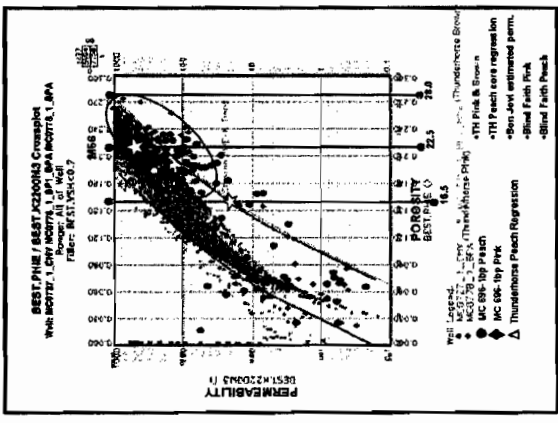
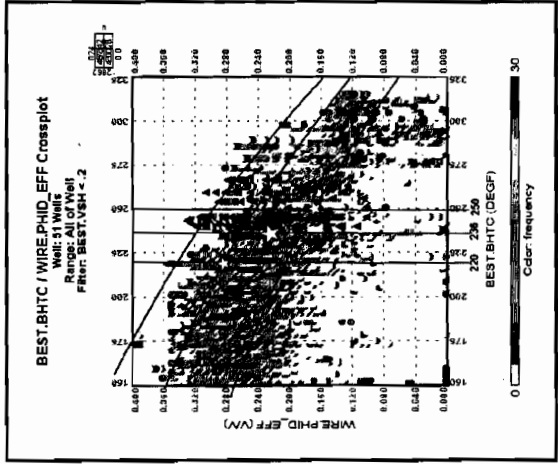
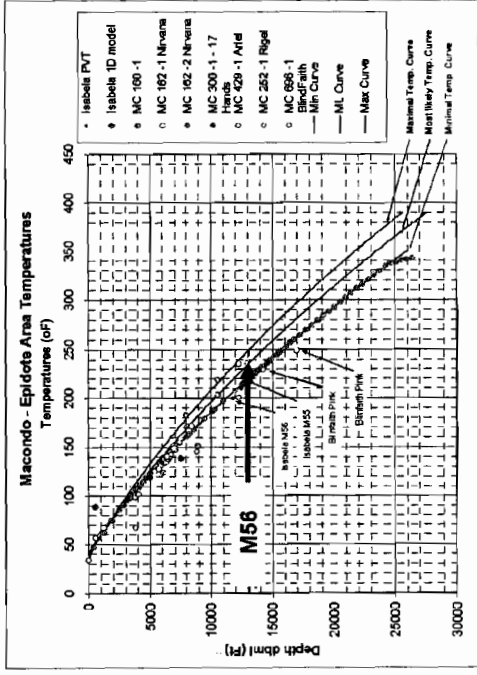
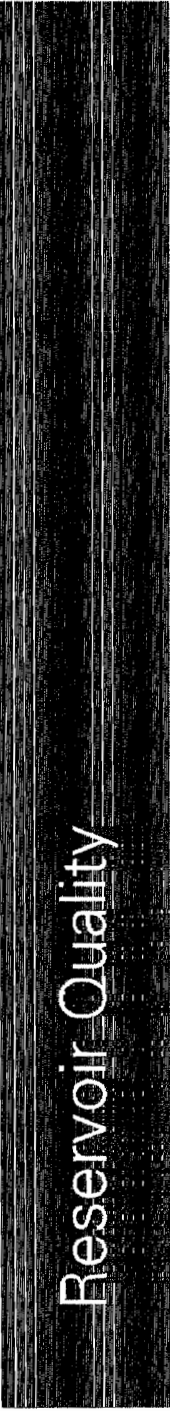
M56 Sand Fairway

**M56 Sand Fairway
combined to M56
fetch area.**

Charge Description

- Source rock present and mature across fetch area
- Deep focus at Macondo (not present at Tortuga and Isabela)
- Bottom up and top down support for oil
 - API 29-33-37
 - GOR 500-800-1300
- Primary model for fetch area sufficient for ml volumes;
- Macondo is likely filled to spill.
- STOIMP - RF 30% Volumes are: 40 - 65 - 125 mmboe (P&ST Volumes)

Charge access is deemed to be low risk

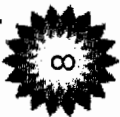


M56	Min	Most likely	Max
Temperature (°F)	220	236	250
Porosity (%)	16.5	23.5	28
Permeability (mD)	20	500	1000+

- Enough well control for established temperature, porosity and permeability trends
- Reservoir quality is unlikely to be an issue

Macondo M56: Risk Discussion

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Over-arching trap is an extra-salt 4 way structure. Mapped on good quality PrSDM data; full fold seismic image; channel edges similar to Isabela and Santa Cruz discoveries

Overlain M55 and M56 shales proven seal at Isabela – M57 proven regional seal; Seal capacity is in the neighborhood of 1800' and is therefore larger than the structural column height of ca. 650'

Proven source rock in GoM and surrounding fields – Just north of Nakika Fields; Petroleum systems model suggest source rock is mature

AVO signatures indicative of Lithology indicating sand presence. Amplitude conformance and local RP modeling suggest hydrocarbon signatures. Trap self similarity through the Mesozoic – Large mature kitchen to the west

Horizon attributes suggest sand presence; offset wells penetrate sands of 15'-180' thick

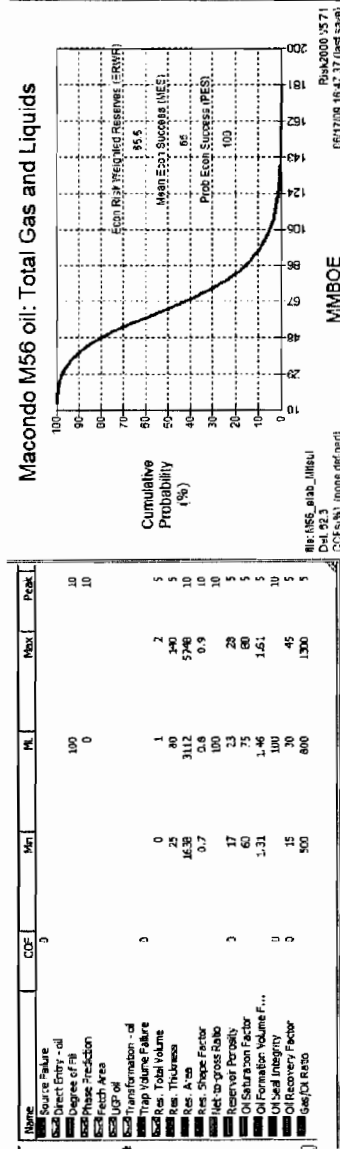
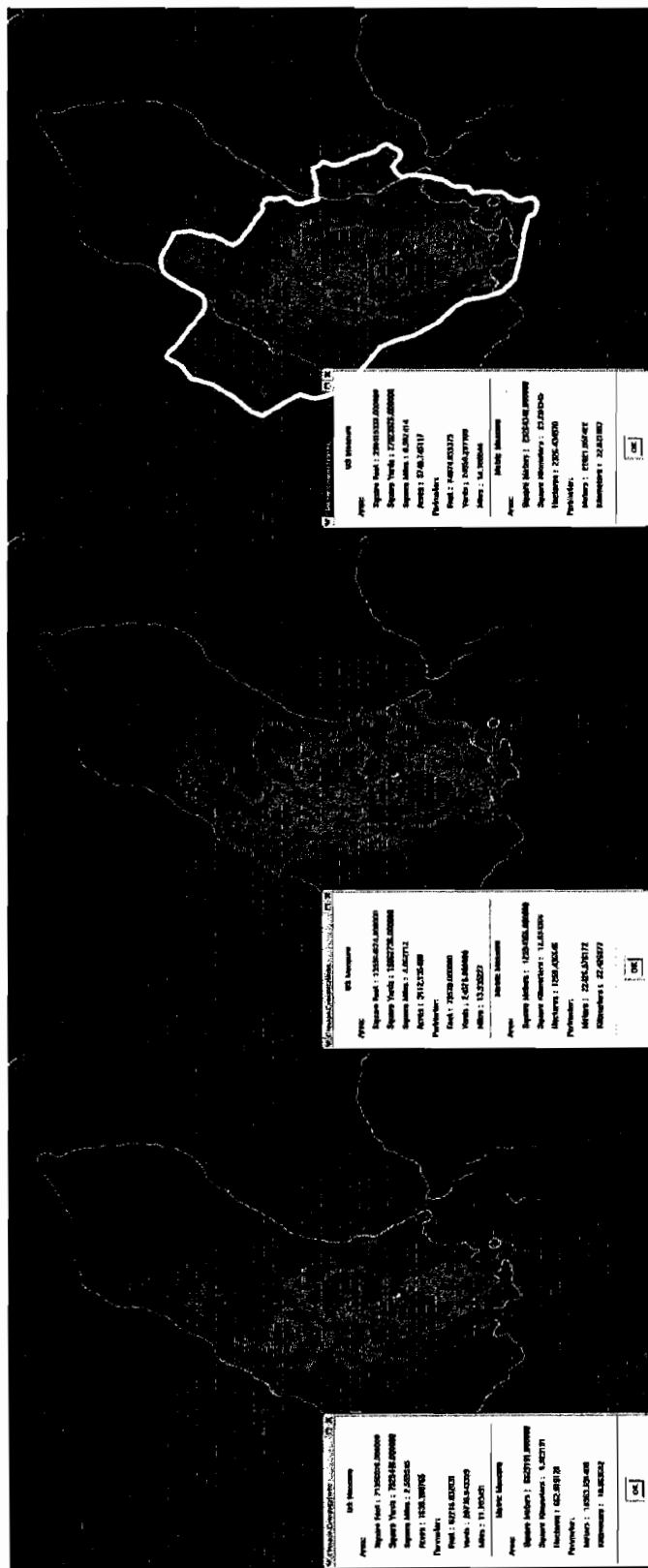
Established porosity depth/temperature relationship Porosity and permeability of Yumuri and Isabela

Charge

Overall chance of success is ca. 67%

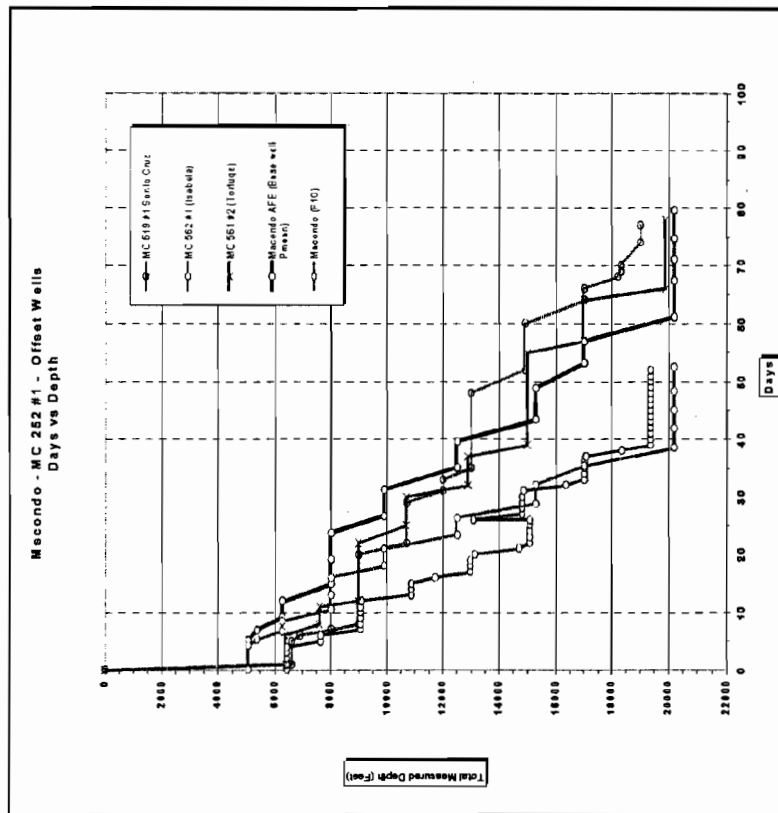
Seismic Far Amplitude and 3 cases areas

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Resource Estimate	P10	94 mmboe
	P50	64 mmboe
	P90	40 mmboe

- Well Plan is the same as Isabela
- 7 Casing Strings
- Poss eliminate 11-3/4" string
- Planning to run production casing

[illegible]