

**EPSP Meeting – January 20, 2005  
ODP – Texas A & M University  
College Station, TX**

**Meeting Called to order** by the chair at 9:00.

**Meeting Logistics** were presented by Jack Baldauf.

**Self introductions:** Self introductions made by all attendees.

**EPSP Members Present:** Bob Bruce, Barry Katz (Chair), Hans Juvkam-Wold, Jerome Schubert, Craig Shipp, Joel Watkins

**GUESTS:** Jack Baldauf (USIO-TAMU), Keir Becker (SPC), George Claypool (TAMU Safety Panel), Tom Davies (USIO-TAMU), Neil Desilva (TAMU SafetyPanel), André Droxler (Proponent APL-664), Peter Flemings (Proponent 589), Gerardo Iturrino (USIO-LDEO), Gianni Mallarino (Proponent APL-664), Dan McConnell (Shallow Hazards 589), Carlos Pirmez (Proponent APL-664), Mike Storms (USIO-TAMU), and Manik Talwani (IODP-MI)

**Agenda reviewed** by the chair. The chair noted that Bob Bruce was conflicted on Proposal 589. The special nature of this meeting was noted and it was further stated that the meeting minutes and associated presentations will be sent to all EPSP panel members asking for any final comments before the recommendations are to be forwarded to IODP-MI. As a result of the timeline for the Gulf of Mexico expedition presented by Jack Baldauf panel members will be asked for a quick turn-around. The lack of a response by an individual panel member by the stated date will be assumed to be acceptance of the presented recommendations.

**Final review of Proposal 589 (Gulf of Mexico Overpressure).** The chair reminded the panel of the issues and concerns that were raised at the December, 2004 EPSP meeting. The issues raised were the need to breakdown the shallow water flow risk into two components – the risk of flow and the volume of flow – and the need to resolve the reported differences to the depth of the top of the Blue Sand.

Dan McConnell reviewed his overall assessment of the Ursa basin shallow drilling hazards. No gas hazards were identified within the targeted depths. Most of the gas risks were identified in Units 15 and 16, significantly deeper than planned depths of penetration. Within the penetrated section shallow flow was generally considered possible but not significant. The greatest risk at the proposed drilling locations was from the Blue Sands. Above the Blue Sand shallow thin levee sands could flow and would represent the risks for the proposed drill sites. The definition used for the top of the Blue Sand was that proposed by Shell and is considered more constrained (i.e., defined). McConnell described the shallow water flow hazard categories used in the revised assessment. These were based on guidelines provided by BHP Billiton.

Low – largely unconsolidated and normally or slightly over-pressured sands, flow is not likely

Low to Moderate – flow may occur but volumes are considered minimal

Moderate – Risk of flow exists, sands probably over-pressured, volumes could be significant, but not known to be a source of shallow flow in the area

High – Known to be a source of shallow water flow or displays characteristics similar to sands that have flowed.

These sands have been associated with the loss of wells

The prognosis for URS-1B included the limited potential for levee sands in Units 5 & 9. It was noted that thicker sands appear present in Unit 5 about 400 meters west of the proposed site. The prognosis for URS-2C suggested low risks in Units 9 and 11 and slightly greater risk for shallow flow (low to moderate) in Unit 10. Craig Shipp stated that based on Shell's experience in the basin he would rate the risk for Unit 11 as low to moderate and that of Unit 10 as low because of the potential for sand continuity. The prognosis for URS-3C and URS-4A suggests a low risk of shallow water flow.

Peter Fleming briefly reminded the panel of the scientific objectives of the expedition and the need to get close to the flow unit in order to evaluate the pressure field. Fleming discussed the reasons for the previously noted differences to the top of the Blue Sand. The problems were associated with which check-shot survey was used to build the velocity model. The current velocity model permits a reliable estimation of depth to top Blue Sand. Fleming suggested that the estimates are accurate to within 2 meters in areas with high resolution data and up to 7 meters in areas lacking high resolution data. Fleming reviewed the expected lithologies above the Blue Sand based on nearby penetrations. His reported interpretation supported the interpretation offered by Shipp for URS-2C. The value of PWD (pressure while drilling) was discussed. A series of drilling strategies, the associated drillings risks, and potential impacts on the scientific objectives were presented.

Gene Pollard reviewed operational issues for the planned expedition including the planned timeline. It was noted that TAMU is expecting to make a final decision on drilling by the end of January. Among the issues that TAMU needed feedback from EPSP on were:

- What is a safe standoff distance from the top of the Blue Sand?
- The panel's view on the potential use of LWD/MWD and PWD.
- What pressure measurement is most acceptable?
- Whether LWD can precede coring

Drilling contingency plans were reviewed as was the *Resolution's* mud and cement capacity. It was noted that in the worse case scenario the mud on-board the *Resolution* could be re-supplied.

Depths of penetrations for all sites were revised to account for the accepted velocity model. All depths are now placed at 20 meters above the agreed top Blue Sand pick.

The panel recommends that the Ursa sites first be drilled with PWD and then cored. A measurement of annulus pressure was favored. At Site URS-1B the panel recommends that at a depth of approximately 481 mbsf a switch be made to weighted mud. This depth is near the top of Unit 9. The panel also recommends that at URS-2C a switch to weighted mud be made at approximately 328 mbsf. This is 30 meters above the planned TD and 50 meters above the top of the Blue Sand.

Identification	Latitude	Longitude	Depth (m)	Status
URS-1B	28.07974007°N	89.13930517°W	612	Approved to revised depth of penetration
URS-2C	28.09124346°N	89.07252124°W	358	Approved to revised depth of penetration
URS-3C	28.09937740°N	89.02520153°W	238	Approved to revised depth of penetration
URS-4A	28.10025610°N	89.02008217°W	237	Approved to revised depth of penetration

**Final review of APL-664 (Brazos-Trinity Source to Sink)** The chair noted that the APL has not been approved nor scheduled but that this meeting is the only time that the Panel could review the drilling plans prior to the onset of the Gulf of Mexico expedition. It was noted that if the proposed sites were not in a known petroleum province an e-review would most probably have been acceptable. André Droxler presented the scientific justification for APL-664 and reported strong industry interest, support, and participation. The proposed sites would add detailed chrono- and lithostratigraphic information, supplementing the two sites from the approved Gulf of Mexico program (Proposal 589). The proposal will attempt to answer two fundamental questions.

- What are the key controls on sediment delivery from the source to the deep sea?
- How does sea level and climate fluctuations affect sediment deliver?

Carlos Pirmez presented the site by site summary for the proposal.

Identification	Latitude	Longitude	Depth (m)	Status
BT1-1A	27°42.03'N	94°21.53 W	150	Note corrected position
BT2-1B	27°32.26'N	94°26.98 W	150	New site designation. Site has been relocated to shot-point 218 on Dip hi-res 2D seismic line 2039

~~Proponents will provide to the chair latitude/longitude and a revised drilling depth for BT2-1B. Proponents will also provide a revised safety package which should include corrected figures showing the proposed depth of penetrations and the revised location.~~

The chair reported the results of the E-Review on the proposed alternate sites for **Proposal 621 (Monterey Bay Observatory)**. The panel has approved the sites without objection.

Identification	Latitude	Longitude	Depth (m)	Status
MBTS-09A & MBTS-10A	36°42.82'N	122°10.95'W	300	Approved as proposed (two site designations represent re-entries)
MBTS-11A & MBTS-12A	36°43.16'N	122°11.70'W	300	Approved as proposed (two site designations represent re-entries)
MBTS-13A	36°22.47'N	122°10.77'W	300	Approved as requested

**The chair will advise the proponents of the Panel's decision.**

The meeting was adjourned at 13:20.