



Date: July 25, 2002
To: Keir Becker, SCICOM Chair – JOIDES Office
From: George E. Claypool, Chair, JOIDES PPSP
Subject: PPSP/iPPSP Meeting June 11-12, 2002

A meeting of the JOIDES/TAMU Pollution Prevention and Safety Panels, and the interim Pollution Prevention and Safety Panel for the Integrated Ocean Drilling Program was held on 11-12 June 2002 at the Unidad de Tecnologia Marina-CSIC in Barcelona, Spain.

Members:

(JOIDES):	Claypool, George	Lowell, Jim
	Dañobeitia, Juanjo	MacKenzie, Dave
	DeSilva, Neil	Purdy, Ed
	Verdier, M. Pierre	Strack, Dieter
	Flemings, Peter	Suzuki, Uko
	Juvkam-Wold, Hans	Watkins, Joel
	Katz, Barry	Becker, Keir

(TAMU):	Baldauf, Jack	Hovland, Martin
	Burke, Kevin	Thompson, Tom

Guests:	Quoidbach, Dan	iPPSP:	Eguchi, Nobu
	Zachos, Jim (Leg 208)		Morita, Nobuo
	Tucholke, Brian(Leg 210)		Tanahashi, Manabu
	Greene, Gary		Okano, Todashi
	Shrivastava, Shiri		Shipp, Craig
	Diebold, John		Moore, Ted
	Alonso, Belen		
	Jurado, Maria-Jose		

Apologies: Ball, Mahlon
Green, Art

George Claypool opened the meeting requesting self-introductions and circulating a signature list. Minutes of the last meeting were approved (minor corrections for two site locations were noted by Jack Baldauf in subsequent email). Meeting host Juanjo Dañobeitia welcomed attendees to Barcelona and discussed logistics and plans for meals.

Jack Baldauf reviewed drilling results for legs 200-202, and outlined the current schedule for Legs 203-210.

Keir Becker gave the SCICOM report.

Jim Zachos described science objectives and proposed sites for Leg 208 (Walvis Ridge Transect). Sites in this region were previously drilled on DSDP Leg 74. The objective for Leg 208 is to recover cores recording Paleogene climate history. The following sites were approved:

LEG 208 Walvis Ridge Transect

Site	Latitude	Longitude	Water Depth (m)	Penetration (mbsf)
WALV-8a	28° 31.96'S	2° 50.73'E	2530	500
WALV-8b	28° 37.85'S	2° 52.29'E	2557	450
WALV-8c	28° 47.74'S	2° 54.83'E	2531	400
WALV-9a	28° 51.19'S	2° 37.14'E	2979	360
WALV-10a	28° 31.49'S	2° 19.44'E	3820	475
WALV-10b	28° 32.62'S	2° 22.47'E	3719	450
WALV-10c	28° 28.54'S	2° 19.37'E	3842	450
WALV-10d	28° 24.55'S	2° 16.79'E	3961	450
WALV-11a	28° 2.49'S	1° 45.80'E	4434	350
WALV-11b	28° 5.88'S	1° 42.66'E	4375	330
WALV-11c	27° 54.72'S	1° 52.66'E	4313	350
WALV-11d	28° 5.52'S	1° 10.15'E	4526	300
WALV-12a	27° 11.16'S	1° 34.62'E	4762	340
WALV-12b	moved to CDP 3349, Line GeoB01-036		4726	360
WALV-12c	26° 49.61'S	0° 48.63'E	4768	340
WALV-13b	24° 37.70'S	4° 40.69'E	3768	430

It was noted by PPSP that several sites (10b-d, 11b-d, 12a-c, 13b) were not located at crossing seismic lines.

Brian Tucholke presented drilling plans for Leg 210, the Newfoundland half of the Newfoundland-Iberia transect. The following table gives the approved site locations and proposed drilling depths:

Leg 210 Sites approved

Site	Latitude	Longitude	shotpoint	water	penetration
NNB	N	W	Ewing 00-07	depth (m)	depth (mbsf)
-01A	45° 24.3'	44° 47.1'	28433	4559	2500
-01B	45° 23.5'	44° 45.5'	28486	4563	2600
-01C	45° 28.0'	44° 54.3'	28202	4412	2650
-03A	45° 19.6'	44° 37.9'	28731	4553	1600
-04A	45° 11.8'	44° 22.6'	29227	4624	500
-05A	45° 06.2'	44° 11.8'	29576	4695	750
-06A	moved to CMP# 265700 on Ewing line 202			4735	1100

One site (NNB-02A) was not approved. The Safety Panels made the following recommendations for the Leg 210 coring program:

- 1) Do maturity modeling and overpressure prediction for the sites;
- 2) Prepare a depth-map on the U-surface and evaluate for closure at sites;
- 3) Develop a hole-abandonment program for deep penetration sites (make sure sufficient mud onboard to kill 2.5 km hole);
- 4) An experienced petroleum geochemist should be staffed to monitor hydrocarbons in the cores;
- 5) Recognize that Leg 210 coring program is outside the normal experience because of planned penetration much deeper than normal, and exercise all the appropriate precautions.

Keir Becker presented the Leg 209 safety review. because proponent Jack Casey was unable to attend. Seven primary sites and four alternate sites along the Mid-Atlantic Ridge from 14° to 16° N were reviewed. The Leg 209 sites are all proposed to a depth of 100 meters or bit destruction. All the sites were approved, at noted below, taken from the October 1, 1998 drilling proposal.

Leg 209 Sites approved

Site	Latitude	Longitude	water
	N	W	depth (m)
<i>Primary</i>			
1N	15.6478	46.6759	3970
2N	15.548	46.687	3900
3N	15.5000	46.681	3440
1S	15.1090	44.959	2900
2S	15.0390	44.953	3600
3S	14.9324	44.0713	2850
4S	14.8488	45.0822	3000
<i>Alternate</i>			
Alt-1N	15.7358	46.9022	1680
Alt-2N	15.6130	46.576	3600
Alt-1S	15.1167	46.2667	1650
Alt-2S	14.7226	44.8922	2075

PPSP member Peter Flemings presented a short workshop on problems of deepwater riser drilling related to mudweight, overpressure and fracture gradients.

Gary Greene presented a proposed coring program (APL-21) in the Goleta Slide of the Santa Barbara Channel, scheduled by SCICOM as ancillary ODP holes. Two shallow holes (55 and 75 meters) were proposed to recover cores for geotechnical analysis to determine conditions that lead to slope failure. The slide masses were well imaged by high-resolution seismic reflection profiles. After general discussion and evaluation of the seismic records, only a minority of PPSP members voted to approve the proposed shallow coring program.

Accordingly, the PPSP advises ODP not to undertake a coring program in the Santa Barbara Channel as proposed in APL-21. The prevailing opinion seemed to be that the remote possibility of a pollution incident in this sensitive area outweighed potential scientific returns.

Shiri Shrivastava previewed preliminary plans for a post-ODP Industry/Geological Survey of Canada/Academia cooperative coring program in the offshore region of the Grand Banks of Newfoundland or on the Scotian shelf. Prospective sites are still under discussion, but the specific site presented to the assembled Safety panels was under water depth of 1600 meters in the Shelburne basin on the Scotian Shelf. The proposed plan is to drill a riserless, off-structure,

stratigraphic test to a depth of 2 km. The selected location is near a previously drilled industry hole (Shelburne well). The general geologic setting and some of the results from the Shelburne well were summarized. The advise of the safety panels to the proponents is summarized below:

- 1) The proposed site would be difficult to approve under the current ODP safety panel procedures because it lies in petroleum prospective sedimentary basin; however some panel members felt it should be possible to find a safe site for the proposed coring program;
- 2) More data is required, specifically 3-D seismic with particular attention to amplitudes, and more detailed well reports (e.g., shows, mud logs, geochemical analyses, etc.);
- 3) The PPSP would require information on the processing details for any 3-D seismic data;
- 4) A regular PPSP-style site/safety information package should be assembled;
- 5) Single-channel, high resolution seismic data should also be provided;
- 6) May need a hazard survey, but maybe not if 3-D data is adequate;
- 7) Proposed coring plans should comply with normal regulatory agency permitting procedures, and agency approval in principle should be obtained even if formal approval is not required.

A planned Lake Malawi coring program funded by NSF and the International Continental Scientific Drilling Program was presented for a courtesy safety review. The site information was presented by PPSP member Barry Katz for proponent Chris Scholz. The four sites are in water depths ranging from 253 to 614 meters, and planned sediment penetration depths range from 32 to 500 meters. The sites appear to avoid structural closures and high seismic amplitudes, and would be judged as reasonably safe for ODP operations. The Safety Panels were asked to recommend hole abandonment procedures, and opinions of either plugging with cement or leaving the hole open were offered. It was suggested that the Lake Malawi drilling program should contact the engineering staff at ODP for more definitive advice. It was also recommended that some drilling mud should be available to kill the hole if necessary, and that hydrocarbon monitoring should be carried out during the coring operation. The current version of the Safety Manual should also be consulted, along with ODP Technical Note 30 for information about hydrocarbon monitoring.