DATE: Nov. 24, 1998

TO: Susan Humphries, Chair, JOI-SCICOM

FROM: Mahlon M. Ball, Chair, JOI-PPSP

SUBJECT: PPSP meeting November 12-13, 1998

This meeting was held in the Inter-Continental Hotel, Rio de Janeiro, Brazil

Attendance

Karen Andreassen
Mahlon Ball
Art Green
Hans Juvkam-Wold
Barry Katz
James Lowell
Ed Purdy
Dieter Strack
Pierre Verdier
Joel Watkins

SCICOM
Susan Humphris

ODP-TAMU-SP
Kevin Burke
Thomas Thompson

ODP-TAMU
Jack Baldauf

JOI-SSP
Shiri Srivastava

JOI-ODP-Data Bank
Dan Quoidbach

Chief Scientists
Leg 180 Brian Taylor
Leg 188 Phil O'Brien
Leg 189 Neville Exon
Leg 190 Greg Moore
Leg 192 Ray Binns

Mahlon Ball opened the meeting requesting self introductions and circulating a signature list.

Minutes of the last meeting were approved.

Jack Baldauf described the status of drilling on legs 180-182. Hydrocarbon shows at site 1108, in the deep Woodlark Basin caused cessation of drilling. Results of this drilling were critiqued in detail, following discussions led by Brian Taylor, and are reported below. Leg 181, Southwest Pacific Geteways, off New Zealand, went smoothly and didn't raise any safety or pollution concerns. Leg 182, Great Australian Bight, has encountered unexpected occurrences of H_2S. This will be critiqued at the next meeting of PPSP in April of 1999. A workshop for seagoing TAMU supervisors and scientists, will be led by PPSP hydrocarbon chemists Barry Kotz and George Claypool to update all concerned with hydrocarbon monitoring procedures. This meeting will be hosted by Baldauf at TAMU in early 1999.

Susan Humphris, SCICOM chair, reported on management items affecting PPSP. The drilling schedule is complete through 2000 and Scicom has ranked proposals for scheduling beyond 2000. Leg 188, Prydz Bay is still contingent on availability of an affordable ice support vessel. Planning proceeds for the International Ocean Drilling Program beginning in 2003.

Shiri Srivastaua described the regional geology, geophysics and scientific objectives of Leg 187, Australian-Antarctic Discordance. He then led site discussions resulting in the approval of the following sites.

SITE	LATITUDE	LONGITUDE	DEPTH (m)	PENETRATION (m)
AAD 1B	46°20.6'S	134°59.8'E	4200	250
AAD 2B	45°57.4'S	130°00.0'E	4500	200
AAD 3B	44°25.5'S	126°54.5'E	4350	150
AAD 4C	47°32.7'S	130°00'E	4050	150
AAD 8C	41°16.3'S	129°48.9'E	5550	350
AAD 13B	45°01.2'S	135°00.2'E	4575	150
AAD 14C	44°01.3'S	134°59.9'E	4700	350
AAD 16A	41°28.4'S	131°19.5'E	5700	250
AAD 20A	45°45.2'S	134°59.9'E	4275	200
AAD 21A	44°27.9'S	134°59.9'E	4575	150
AAD 23A	42°33.19'S	135°00.1'E	4950	200
AAD 27A	41°18.6'S	127°57.1'E	5100	150
AAD 28A	43°15.3'S	128°52.1'E	5100	350
AAD 29A	43°56.9'S	128°49.7'E	5100	350
AAD 33A	43°44.9'S	127°44.9'E	4800	250
AAD 34A	42°44.2'S	127°53.2'E	4875	250
AAD 35A	41°57.5'S	127°59.7'E	5000	250
AAD 36A	41°52.7'S	127°00.1'E	5000	200
AAD 37A	44°11.4'S	126°10.1'E	5100	150

Phil O'Brien described the regional geology, geophysics, and scientific objectives of Leg 188, Prydz Bay. He led site discussions resulting in the approval of the following sites.

SITE	LATITUDE	LONGITUDE	DEPTH (m)	PENETRATION (m)
PBD 12B	Move to SP 855 on line 33006 off.		3525	1020

	anticlinal crust			
PBD 13A	63°59.807'S	70°56.519'E	3562	1150
PBD 15A	62°59.676'S	67°33.373'E	4125	850
PBF 4A	Move to SP 10700 on line TH 84/9-15MG off anticlinal crest		1305	750
PBF 5A	66°19.003'S	72°17.51'E	1920	530
PBF 6A	66°24'2.22''S	72°17' 3.88"E	1695	619
PBF 7A	66°05.267'S	72°07.297'E	3775	417
PBS 1A	67°36.95'S	73°18.34'E	600	480
PBS 2A	67°41.27"S	72°13'5"E	697	698
PBS 3A	66°56.55'S	63°06.93'E	470	50
PBS 4A	67°07.92'S	62°59.57'E	470	50
PBS 5A	66°47.808'S	63°15.597'E	315	50
PBS 6A	67°41'27"S	72°13'5"E	697	698
PBS 7A	67°05.355'S	73°15.453'E	592	276

Neville Exon described the regional geology, geophysics and scientific objectives of Leg 189, Southern Gateway between Australia and Antarctica. He then led site discussions resulting in approval of the following sites.

SITE	LATITUDE	LONGITUDE	DEPTH (m)	PENETRATION (m)
WT-1A	42°37'S	144°24.5'E	2500	880
WT-2A	43°43.5'S	145°02'E	2920	855
WSTR-1B	Move to time 910 on profile 9 to avoid faulting		3570	630
WSTR-2A	47°08.5'S	146°03'E	2730	580
STR-1A	47°51'S	147°52'E	1460	600
STR-2A	48°30'S	147°07'E	2155	640
SET-1A	45°18.5'S	147°55'E	4055	500
ETP-1A	43°54.6'S	150°54.6'E	2800	615
ETP-2A	43°57.6'S	149°55.7'E	2625	735

Greg Moore described the regional geology, geophysics and scientific objectives of Leg 190, Nankai Trough. He then led site discussions resulting in approval of the following sites.

SITE	LATITUDE	LONGITUDE	DEPTH (m)	PENETRATION

808	32°21.17'N	134°56.66'E	4675	1290
ENT 1A	32°14.14'N	135°01.87'E	4760	700
ENT 2A	32°19.26'N	134°58.06'E	4790	1050
ENT 3A	32°20.30'N	134°57.25'E	4730	1160
WNT 1A	31°43.87'N	133°56.85'E	4850	1200
WNT 2A	31°50.48'N	133°51.59'E	4600	1700
WNT 3B	31°47.99'N	133°53.59'E	4850	1520

Ray Binns described the regional geology, geophysics, and scientific objectives of Leg 192, Manus Basin. He then led site discussions resulting in approval of the following sites.

SITE	LATITUDE	LONGITUDE	DEPTH (m)	PENETRATION
PMC 1A	3°43.293'S	151°40.583'E	1720	700
PMC 2A	3°43.690'S	151°40.200'E	1655	500
PMC 3A	3°43.230'S	151°40.521'E	1696	300
PMC 4A	3°44.445'S	151°40.755'E	2139	350

Dan Quoidbach led a discussion of alternate sites proposed for leg 186, Japan Trench. The following sites were approved.

SITE	LATITUDE	LONGITUDE	DEPTH (m)	PENETRATION
439	40°37.61'N	143°18.63'E	1666	1200
JT-3A	39°13.44'N	143°20.66'E	2490	500
JT-4A	39°05.11'N	143°18.77'E	2510	1400

Taylor described and discussed leg 180, Woodlark Basin, drilling results. Shelf wells had no anomalous hydrocarbon occurrences. Site 1108, in the topographically and structurally lowest position along the principal seismic transect, contained hemipelogic claystones, gravel deposits and unconsolidated sands in the upper 100 m grading downward into unconsolidated sands, sandstones, siltstones and conglomerates. Temperature measurements revealed a high gradient of 100°C/km. C_1/C_2 ratios indicated presence of some migrated, thermogenic hydrocarbons.

Taylor consulted TAMU for advice concerning how to proceed in light of this hydrocarbon occurrence. Ballauf TAMU in consultation with Ball and Claypool of PPSP suggested moving to a site updip along the seismic transect, that would enable intersecting the primary target of 1108, a low-angle normal fault plane, at a depth that wouldn't exceed the penetration depth in site 1108, 485 m. Unfortunately, this hole encountered a rubble zone that stopped drilling above the fault zone

Katz pointed out that, based on post-cruise data compilations, the most anomalous C_1/C_2 ratios occurred above 250 mbsf and that the ratio, at the T.D. of 485 m, was on the borderline between the normal and unusual occurrences as defined by PPSP guidelines.

As outlined in correspondence from Baldauf to Ball of 11/19/98, conclusions reached are as follows:

1) PPSP endorses an attempt to deepen 1108B to the originally planned T.D. of 900 m.

2) Additional seismic data should be acquired, using the JR seismic system, to provide strike-line coverage at the drill site.

3) Site 1108B data will be discussed further at the safety workshop to be held at TAMU early in 1999.

4) Katz will examine 1108B samples to determine if carbon isotopes shed light on the depth of origin of heavier hydrocarbons, prior to the safety workshop.

5) Rock-Eval pyrolysis measurements with headspace and vacutainor results will be recorded on standard safety log sheets (ODP Guidelines for Pollution Prevention and Safety, p. 20, fig. 10) during future drilling.

Hans Juvkam-Wold made a presentation regarding drilling problems caused by water flows from overpressured sands encountered at shallow sub-bottom depths in deepwater settings. This description included a good review of standard drilling procedures and casing setting. Solutions to problems caused by "Shallow Water Flow" involve various combinations of use of weighted mud. One of the more promising procedures utilizes riserless drilling.

The location and time of PPSP's next meeting was tentatively agreed on as San Antonio, Texas, April 15-16, 1999, following the national meeting of the AAPG.

The meeting was then adjourned.