**IODP Exp 348 Unit Boundaries & other important depths**

**B. Lithology**

Lithological Units:

Unit II – lower forearc succession of the Kumano Basin: 475-512.5 mbsf (Hole C0002M cores)

Unit III – lower part of Kumano forearc basin: ~870.5-975.5 mbsf **(**cuttings Samples 348-C0002N-3-SMW to 24-SMW)

Unit IV – Upper Accretionary Prism: 975.5-1665.5 mbsf (cuttings Samples 348-C0002N-25-SMW to 175-SMW)

Unit V – trench or Shikoku Basin hemipelagic deposits: 1665.5-2330.0 mbsf (Hole C0002N; Cuttings Samples 348-C0002N-175-SMW to 327-SMW) and; 1960.5-3058.5 mbsf (Hole C0002P; Cuttings Samples 348-C0002P-9-SMW to 300-SMW)

Lithological Subunits:

Subunit IVA: 975.5–1045.5 mbsf (348-C0002N-24-SMW to 39-SMW).

Subunit IVB: 1045.5–1125.5 mbsf (348-C0002N-39-SMW to 54-SMW).

Subunit IVC: 1125.5–1345.5 mbsf (348-C0002N-54-SMW to 107-SMW).

Subunit IVD: 1345.5–1525.5 mbsf (348-C0002N-107-SMW to 146-SMW).

Subunit IVE: 1525.5–1665.5 mbsf (348-C0002N-146-SMW to 175-SMW).

Subunit VA: 1665.5-2330.0 mbsf (348-C0002N-175-SMW-327-SMW)

1960.5–2625.5 mbsf (348-C0002P-9-SMW to 200-SMW).

Subunit VB: 2625.5–3058.5 mbsf (348-C0002P-200-SMW to 300-SMW).

**H. Logging**

Logging Units:

Hole C0002N

Unit II/III boundary not recorded by Exp 348 logging.

Unit III: ~859.5-915 mbsf

Unit IV: 915-1656.3 mbsf

Subunit IVa: 915-1036.5 mbsf

Subunit IVb: 1036.5-1099.4 mbsf – change in bedding dip and increase in gamma ray response

Subunit IVc: 1099.4-1360.5 mbsf – slight increase, followed by sharp decrease in gamma ray response

Subunit IVd: 1360.5-1514 mbsf – decrease in gamma ray at IVc-d boundary

Subunit IVe: 1514-1656.3 mbsf – sharp increase in gamma ray followed by gradual decrease

Unit V: 1656.3-3058.5 mbsf [logging subunits need summary explanation of boundary picks]

Subunit Va: 1656.3-1942.5 mbsf

Subunit Vb: 1942.5-2191 mbsf

Subunit Vc: 2191-2330 mbsf (Hole C0002N TD)

Hole C0002P

Subunit Vc’: 2163-2365.6 mbsf

Subunit Vd: 2365.6-2753 mbsf

Subunit Ve: 2753-3058.5 mbsf (Hole C0002N TD)

**Casing & TD**

Hole C0002F

* 36-inch casing – 53.90 mbsf
* 20-inch casing – 860.30 mbsf
* LWD interval
* 12-1/4-inch > 17-inch borehole TD: 2005.5 mbsf

Hole C0002N

* Side track from 860.3 mbsf
* LWD interval – 859.5-2329.3 mbsf
* 13-3/8-inch casing – 2008.9 mbsf
* 17-inch borehole TD: 2328.9 mbsf

Hole C0002P

* Side track from 1935.4 mbsf
* LWD interval – 2162.5-3058.5 mbsf
* Cored interval – 2163-2218 mbsf
* 12-1/4-inch borehole TD: 3058.5 mbsf
* 14-1/4-inch borehole TD: 2960 mbsf
* 11-3/4-inch casing – 2922.5 mbsf