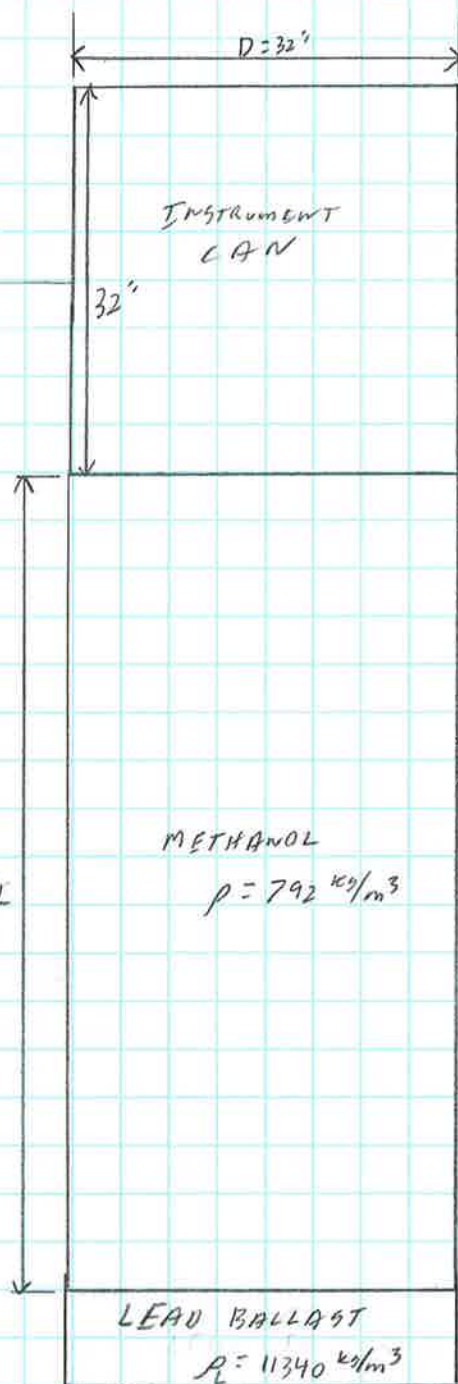


FUEL CELL BUOY CONCEPT DESIGN.

5/9/14
JAH-MBARI



→ ALUMINUM BUOY HOUSING,
1/4" THICK. $\rho_{AL} = 2700 \text{ kg/m}^3$

→ FUEL CELL WEIGHS 36 LBS L_{FUEL}
AND IS LOCATED IN INSTRUMENT
CAN.

→ INSTRUMENT PAYLOAD
LOCATED IN INSTRUMENT CAN.

BUOY HULL → 1/4" AL PLATE.

$$V_{STRUCT} = 4 \times \left[\frac{\pi d^2}{4} t \right] + L \times \left[\frac{\pi}{4} (d^2 - (d-2t)^2) \right]$$

$$= \pi d^2 t + L \pi (td - t^2)$$

