PROJECT MOCK

Question 9 – 1:

9(a)	54[.0] or 53.99 to 54.03	6	M2 for $[h =]$ 95.4 × 3 ÷ $(\pi \times 2.4^2)$ oe or M1 for 95.4 = $\frac{1}{3} \times \pi \times 2.4^2 \times h$
			M2 for [slant ht, $l = \int \sqrt{(their h)^2 + 2.4^2}$ or M1 for $(their h)^2 + 2.4^2$
			M1 for $\frac{x}{360} \times 2 \times \pi \times their l = 2 \times \pi \times 2.4$ oe
			or $\frac{x}{360} \times \pi \times (their l)^2 = \pi \times 2.4 \times their l$
9(b)	14500 or 14470 to 14480	4	M3 for $200 \times 60 \times 24 \times \pi \times 4^2$ [÷1000] or $2 \times 60 \times 24 \times \pi \times 0.04^2$ [×1000]
			or M2 for $200 \times \pi \times 4^2$ or for $2 \times \pi \times 0.04^2$
			or M1 for $\pi \times 4^2$ oe or $\pi \times 0.04^2$ seen oe isw
			or $1000 \text{ cm}^3 = 1 \text{ litre soi or } 1 \text{ m}^3 = 1000 \text{ litres soi}$
			or for 24 × 60 seen oe