

(EC1)  $Fe^{+3}$  ion.  $4 =$  outermost PEC

(EC1)  $Fe \ 1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^6$

$3s^2 3p^6 3d^6 4s^2$  energy level order

Remove 3e

$1s^2 2s^2 2p^6 3s^2 3p^6 3d^5$

Nov 8-8:04 AM

(EC2)  $15.3g \ NaNO_3$ ,  $\Delta T = 3.44^\circ C$ ,  $\frac{1070J}{^\circ C}$

Find  $\Delta H$  for  $1mole \ NaNO_3$

$\frac{85g \ NaNO_3}{mole \ NaNO_3}$

<del>1.070</del> $KJ$	<del>3.44</del>	<del>85g</del> $NaNO_3$
		<u>1mole</u> $NaNO_3$

$20.45 \ KJ/mole$

Nov 8-8:20 AM

100 25   
 Final

heat lost = heat gained

hot metal = room temp H<sub>2</sub>O 20°C

$$mC\Delta T = mC\Delta T$$

$$50 \text{ g} (100 - 25) = 10 \text{ g} (4.18) (25 - 20)$$

75 5

Nov 8-8:31 AM

Separation Lab

3 solids (Mixture)

insol. H <sub>2</sub> O	① Sand	SiO <sub>2</sub>	— %
	② Salt	NaCl	— %
Sublimes S → g	③ Ammonium Chloride	NH <sub>4</sub> Cl	— %
			100%

Nov 8-8:36 AM