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	Lab 4 Calorinetry - Rudoa Golf
•	Part A: Calibration Trial & Miai 2 / Trial 3 1
	M2 Mass of Cold woter (NL) 50.0ML WORL 150.0ML
-	MI muss of HOI woter CHL) 50.91 40.01 50.01
	Part T OF Cold water (°C) 21.5°C 21.5°C 21.7°C
-9	Two T OF HOT WOTER (C) 49.5°C 61.0°C 880°C
3	Trime Tatter mixing (Trime °C) 34,9°C 40°C 49.9
	Cal (7°C) 18.7 1 22.6 73.4
1	Averte Cai: 20.7
	gnot = (qual + Can AT)
9	
	MC DT = (MCDT + Cai DT)
	M, (4,188) (Tsinul-Tase) = (Mz (4,184) (Tsinul-Toole) + Cent (Tsinul-Toole)
	Ccal = MIC (Tg-T+) + MZ (Tp-Tcod)
-	- (Tgimi-Toold)
•	The pometer
	110100000000000000000000000000000000000
9	
	Callert
>	arram quet flows into savort
	Reactars Exothernic Reaction
	- Bolvert
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	Part 8: Metal W/ HCI - Bircon
	Muss of Metal (9): ,102 9
11972	Tinitial for 6 m HCl: 22.7°C
	Trimil for Zn + HC1: 23.8 DT = 1,6 °C
5° 646	GRAG = (graph + Crack T)
1000	gen = Mag (Cry) ST + Cal ST
7 44.57	2 Rxn = (30) (4,184)(1.6) + 20.7(1.6)
	9RXN = -233.952 J
(2nc) + 2HCl (ag) => Zncl2 (ag) + 2H+ (ag) DH = -233,9525
5	
	102 - 233.95 - 14995 + 143 65738 .00156
1	Par+ C: retai oxide - attrakon Zire
	Part C: retai oxide - atertation Zite muse of Browner oxide: .400 ct Tinitial for 6 M +C1; 21,5°C
	Traities for 6 M HCI: 21,5°C
	Tem & AID + HCI: 24.8°C DT = 3.3°C
	TEIM PH PHY THE LICE
	00. 0. 14
	9 Ren = - (30) (3.3) (4,184) - 20.7(33) = -480,216)
	1 t = -480, 2165
	D Z NA 1 BHOIM - > 7. 11 11 11 11 11 11 11 11 11 11 11 11 11
	@ ZnO(s)+ 2HC(Ge) -> ZhC(2(0e)+ H2O(1) Att=48255
	81.38004915 NOI ZNO -482.5
	1022e Prop = 7 -98164.6255 = DH°

9	
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9	
	- (ZnO(s) + ZHC100-> ZnC12 (90)+ HOLD AH= -98164.6255
0	Zn (3)+ 2 HCl (aq) -> ZnCl2(ap) + 2 HT (ay) AH = 14915 7.4
-	
-	2010) + 24C+T- 12 (1-10) > 201- 12 (1-10)
-	Zn(s) + 2HET (qq) + 3m(tz(qq) + 1tz(d) -> Zacteter) + 2H+ + ZnOwt 2HET (q)
-	Zn(s) + 1/20(l) -> 2 + (1/2) + 2,0(4) 0+= 248.65 Zn(s) + 202(l) -> 2,0 (4) \(\Delta \text{ H}^0 = -51792.85 \)
-	In(5) +202(L) > ZNO CAR) AH° = 51792,8 S
	By Reversity The zive oxide RXN and adding
3	it to The Renchion Of Zive metal, and thro
-	Hess law, we consined The eatherpies of each
•	individual Rxx to obtain a total Exthalpy charte
9 9 9	DH = - 51, 792,8
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