

RUM I JUNGLE PHASE 3 EVAPORATION - EVAPORITE XRD SUMMARY

Mineral phase	SAMPLE DATE						
	170111	200111	220111	270111	280111	310111	202111
	Concentration (%)	Concentration (%)	Concentration (%)	Concentration (%)	Concentration (%)	Concentration (%)	Concentration (%)
Halite (NaCl)	99	99	89	79	82	73	82
Thenardite (Na ₂ SO ₄)	0.14	0.06	9				
Blodite (Na ₂ Mg(SO ₄) ₂ •4H ₂ O)	0.48	0.29	2	18	17	9	
Sodium Potassium Chloride (Na _{0.1002} K _{0.8998} Cl) ¹ AND /	0.1	0.05 (total)					
Sodium Potassium Chloride (Na _{0.6990} K _{0.3010} Cl) ¹							
Syngenite (K ₂ Ca(SO ₄) ₂ (H ₂ O))	0.06	0.06					
Hydroglauberite (Na ₁₀ Ca ₃ (SO ₄) ₈ •6H ₂ O)	0.12						
Leonite, syn (K ₂ Mg(SO ₄) ₂ (H ₂ O) ₄)	0.05			2		17	28
Picromerite (K ₂ Mg(SO ₄) ₂ •6H ₂ O)		0.09		1.2	1		
Kainite (KMg(SO ₄)Cl(H ₂ O) _{2.75})					0.3	0.4	
Magnesium Chloride Hydrate (MgCl ₂ •H2O)						0.2	1.4
Sodium Potassium Chloride (Na _{0.6990} K _{0.3010} Cl)						0.1	
Magnesium Sulphate Hydrate (MgS ₂ O ₆ (H ₂ O) ₆)							0.2
Magnesium Sulphate (MgSO ₄)							0.2
Sylvite, syn (KCl)							2
Sodium Carbonate (Na ₂ (CO ₃))							0.1
Calcium Carbonate (CaCO ₃)							0.4

RUM JUNGLE PHASE 3 EVAPORATION - EVAPORITE XRD SUMMARY

T600 RJ PH3 XTAL 170111

Mineral phase	Concentration (%)	ICDD match probability
Halite (NaCl)	99	Good
Thenardite (Na ₂ SO ₄)	0.14	Good
Blodite (Na ₂ Mg(SO ₄) ₂ •4H ₂ O)	0.48	Good
Sodium Potassium Chloride (Na _{0.6990} K _{0.3010} Cl)	0.1	Low
Syngenite (K ₂ Ca(SO ₄) ₂ (H ₂ O))	0.06	Medium
Hydroglauberite (Na ₁₀ Ca ₃ (SO ₄) ₈ •6H ₂ O)	0.12	Low
Leonite, syn (K ₂ Mg(SO ₄) ₂ (H ₂ O) ₄)	0.05	Low

T600 RJ PH3 XTAL 200111

Mineral phase	Concentration (%)	ICDD match probability
Halite (NaCl)	99	Good
Thenardite (Na ₂ SO ₄)	0.06	Good
Blodite (Na ₂ Mg(SO ₄) ₂ •4H ₂ O)	0.29	Good
Picromerite (K ₂ Mg(SO ₄) ₂ •6H ₂ O)	0.09	Good
Sodium Potassium Chloride (Na _{0.1002} K _{0.8998} Cl) [†] AND /	0.05 (total)	Low
Sodium Potassium Chloride (Na _{0.6990} K _{0.3010} Cl) [†]		Low
Syngenite (K ₂ Ca(SO ₄) ₂ (H ₂ O))	0.06	Medium

T600 RJ PH3 XTAL 220111

Mineral phase	Concentration (%)	ICDD match probability
Halite (NaCl)	89	Good
Thenardite (Na ₂ SO ₄)	9	Good
Blodite (Na ₂ Mg(SO ₄) ₂ •4H ₂ O)	2	Good

T600 RJ PH3 XTAL 270111

Mineral phase	Concentration (%)	ICDD match probability
Halite (NaCl)	79	Good
Blodite (Na ₂ Mg(SO ₄) ₂ •4H ₂ O)	18	Good
Leonite, syn (K ₂ Mg(SO ₄) ₂ (H ₂ O) ₄)	2	Good
Picromerite (K ₂ Mg(SO ₄) ₂ •6H ₂ O)	1.2	Good

T600 RJ PH3 XTAL 280111

Mineral phase	Concentration (%)	ICDD match probability
Halite (NaCl)	82	Good
Blodite (Na ₂ Mg(SO ₄) ₂ •4H ₂ O)	17	Good
Picromerite (K ₂ Mg(SO ₄) ₂ •6H ₂ O)	1	Good
Kainite (KMg(SO ₄)Cl(H ₂ O) _{2.75})	0.3	Good

T600 RJ PH3 XTAL 310111

Mineral phase	Concentration (%)	ICDD match probability
Halite (NaCl)	73	Good
Leonite, syn (K ₂ Mg(SO ₄) ₂ (H ₂ O) ₄)	17	Medium
Blodite (Na ₂ Mg(SO ₄) ₂ •4H ₂ O)	9	Good
Kainite (KMg(SO ₄)Cl(H ₂ O) _{2.75})	0.4	Good
Magnesium Chloride Hydrate (MgCl ₂ •H ₂ O)	0.2	Low
Sodium Potassium Chloride (Na _{0.6990} K _{0.3010} Cl)	0.1	Low

T600 RJ PH3 XTAL 020211

Mineral phase	Concentration (%)	ICDD match probability
Halite (NaCl)	82	Good
Leonite, syn (K ₂ Mg(SO ₄) ₂ (H ₂ O) ₄)	28	Good
Sylvite, syn (KCl)	2	Medium
Sodium Carbonate (Na ₂ (CO ₃))	0.1	Low
Calcium Carbonate (CaCO ₃)	0.4	Low
Magnesium Chloride Hydrate (MgCl ₂ •H ₂ O)	1.4	Low
Magnesium Sulphate Hydrate (MgSO ₄ •6H ₂ O)	0.2	Low
Magnesium Sulphate (MgSO ₄)	0.2	Low