

Table 2 a. Secondary minerals of altered rocks collected from earth's surface.

Secondary mineral		Saponite	Montmorillonite	Sericite	Kaolin	Alunite	Pyrophyllite	Diaspore	Zunyite	Quartz	$\alpha$ -Cristobalite	Leucoxene	Rutile	Pyrite	Gypsum
Saponite zone	HF 8	×								×					
	Montmorillonite zone	Cl-4	×								×	×			
Cl-25		×								×					×
HF82e		×								×					
HF89		×								×					
HF104		×								×					
HF106		×								×					
HF132		×								×					
HF134		×								×					
HF138		×								×					
Cl-15		×								×				×	
Cl-28		×								×				×	
Cl-31		×								×				×	
HF97		×								×				×	
HF136		×								×				×	
Cl-7				×						×					
HF94				×						×					
Cl-3		×			×					×				×	
Cl-18		×			×					×				×	
HF85		×			×					×				×	
HF87		×			×					×				×	
HF130	×			×					×				×		
Kaolin zone	Cl-1				×					×				×	
	Cl-2				×					×				×	
	Cl-6				×					×				×	
	Cl-16				×					×				×	
	Cl-19				×					×				×	
	Cl-20				×					×				×	
	HF128				×					×				×	
	Cl-5				×					×				×	
	Cl-11				×					×				×	
	HF82c				×					×				×	
	HF84				×					×				×	
	HF105				×					×				×	
	HF109				×					×				×	
	HF135				×					×				×	
	Cl-9				×	×				×	×			×	
Alunite zone	HF83					×				×					
	HF133a					×				×					
	HF133b					×				×					
	HF133c					×				×					
	HF133f					×				×			×		
	HF133g					×				×					
	HF129									×					
	HF96				×		×			×				×	
Pyrophyllite zone	Cl-13					×	×	×							

Table 2 b. Secondary minerals of altered rocks collected from drilling cores.

Sample no.	Secondary mineral																				
		Saponite	Chlorite	Laumontite	Hydromica	Mixed-layer of ser-mont.	Mixed-layer of mont-chl.	Calcite	Montmorillonite	Anhydrite	Gypsum	Kaolin	Alunite	Pyrophyllite	Andalusite	Quartz	Pyrite	Leucoxene	Rutile	Sulfur	
Saponite zone	T2-29m	X						X							X		X				
	T7-143m	X						X							X		X				
	T3-128m	X						X							X		X				
Chlorite zone	B R2-456m	X	X	X				X	X						X						
	B R2-460m	X	X	X				X	X						X						
	B R2-487m	X	X	X				X	X						X						
	B R2-380m	X	X	X				X	X						X						
	B R2-490m	X	X	X				X	X						X						
	B R2-497m	X	X	X				X	X						X						
	B R2-456m	X	X	X		X			X						X						
	B R2-465m	X	X	X	X	X			X						X						
	B R2-470m	X	X	X	X	X	X		X	X					X	X	X				
	B R2-480m	X	X	X	X	X	X		X	X	X				X						
	B R2-406m	X		X	X										X						
	B R2-410m	X	X	X	X										X						
	B R2-493m	X	X	X	X		X		X						X						
	B R2-553m	X	X	X	X				X						X						
	B R2-560m	X		X	X				X						X						
	B R2-370m	X		X	X			X							X						
	B R2-367m	X	X					X	X						X						
	B R2-375m	X	X					X	X						X						
	B R2-415m	X		X				X	X	X					X						
	B R2-435m	X	X	X				X	X						X	X	X				
B R2-500m	X			X			X	X	X					X	X	X					
Montmorillonite zone	T2-36m							X							X	X					
	A R1-116m							X							X	X					
	A R1-212m			X				X							X	X		X			
	MR2-576m			X				X							X						
	MR2-577m				X			X							X	X					
	T7-36m							X							X	X					
	T7-112m							X							X	X					
	T3-303m							X	X						X		X				
	T3-313m							X	X						X	X					
	T3-327m							X	X						X	X					
	B R2-170m							X							X	X					
	B R1-301m							X							X	X					
	B R2-392m			X	X			X							X						
	B R2-426m			X	X			X	X	X					X						
	B R2-506m							X	X	X					X						
	B R2-513m				X			X	X	X					X						
	B R2-530m				X			X	X	X					X	X	X				
	B R2-533m				X			X	X	X					X						
	A R1-239m				X			X			X				X	X					
	T7-215m							X			X				X	X	X				
	T7-220m							X			X				X	X	X				
	T3-46m							X			X				X	X					
	T3-232m							X			X				X	X					
	T3-246m		?	?				X	X		X				X		X				
	T3-254m		?	?				X	X		X				X	X	X				
	T3-265m							X			X				X	X					
	B R2-180m							X	X		X				X						
	B R2-240m							X			X				X						
	B R2-290m							X			X				X						
	B R2-330m							X			X				X						
	B R1-448m							X			X				X	X					
	Kaolin zone	T2-84m											X			X	X				
		T2-126m											X			X	X		X	X	
T2-144m												X			X			X			
A R1-150m												X			X	X					
A R1-180m												X			X	X					
A R1-252m												X			X	X		X			
A R1-262m												X			X	X					
A R1-282m												X			X	X					
A R1-305m												X			X	X					
MR2-360m												X			X						
MR2-385m												X			X	X					
MR2-405m												X			X						
MR2-425m												X			X	X					
MR2-440m												X			X	X					
MR2-465m				X								X			X						
MR2-475m												X			X	X					
MR2-500m												X			X	X					
MR2-511m				X	X							X			X	X					
MR2-512m												X			X	X					
MR2-535m												X			X	X					
MR2-555m												X			X	X					
MR2-578m				X								X			X	X					
MR2-595m												X			X						
T7-16m												X			X	X					
T7-203m												X			X	X	X				
T3-28m								X				X			X	X	X				
T3-37m												X			X	X					
T3-199m												X			X				X		
T3-204m												X			X	X					
T3-211m												X			X	X					
T3-283m					?							X			X	X	X				
B R2-50m												X			X	X					
B R2-70m												X			X	X					
B R1-162m											X			X	X						
B R1-220m											X			X	X						
B R1-345m											X			X	X						
B R2-365m				X							X			X							
B R1-401m											X			X	X						
B R2-521m									X		X			X							
T2-63m											X	X		X	X		X				
T2-76m											X	X		X	X				X		
A R1-190m											X	X		X	X						
T3-101m											X	X		X	X						
B R1-110m											X	X		X	X						
Alunite zone	T2-78m											X		X	X		X				
	T7-2m											X		X							
	T7-40m																				