

UNOCAL GEOTHERMAL - DANIEL CARRIER

ROCK TYPES

10 CUTTINGS SAMPLES 8-9 TO 8-18  PRELIM. ROCK TYPE SAMPLE NO.	MINERALOGY, APPROX. WT.% <input type="checkbox"/> (or) RELATIVE ABUNDANCE <input type="checkbox"/>											
	Basalt or Andesite	Trachytic Basalt	Microphyric Basalt	Microcline & Biotite	Microcline & Biotite	Microcline & Biotite	Microcline & Biotite	Microcline & Biotite	Microcline & Biotite	Microcline & Biotite	Microcline & Biotite	Microcline & Biotite
8-9	M	M	m	m							TR	
8-10	m			MM							TR	
8-11	MM	m	m									
8-12	M			M								
8-13	MM	m	m	TR?								
8-14	M	M	m									
8-15	M	M	m									
8-16		MM										
8-17												no thin-section
8-18				MM								

8-17  
Amphibolite??  
- a subvolcanic intrusive basalt  
or basaltic andesite  
- mostly plag, am and biotite

MM = PREDOMINANT M = MAJOR m = MINOR

IDENTIFICATION



**SUMMARY OF X-RAY DIFFRACTION ANALYSIS**  
UNIVERSITY OF UTAH RESEARCH INSTITUTE, EARTH SCIENCE LABORATORY

10-13-88  
S. Wtz

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PRELIM. CLAY XRD SAMPLE NO.	MINERALOGY, APPROX. WT.% <input checked="" type="checkbox"/> (or) RELATIVE ABUNDANCE <input type="checkbox"/>										
	SMECTITE	ILLITE & PSEUDO- UNIDENTIFIED	CHLORITE	MIXED LAYER CHLORITE/ILLITE	BIOTITE	TRACE					
8-9	16		79	5							
8-10	6	89	5								
8-11	7	15	72	6		?					
8-12	5		89	6		?					
8-13	8		90	2		?					
8-14	15		85								
8-15	18	3	79								
8-16			100								
8-17	3	*34	63								
8-18			100								
+ MAY INCLUDE OTHER 10 Å MICA - BIRTITE (NO THIN-SECTION)											
? UNIDENTIFIED 9.4 Å PEAK											
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 S. Lutz

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10 CUTTINGS SAMPLES 8-9 TO 8-18  PRELIM. BULK XRD SAMPLE NO.	MINERALOGY, APPROX. WT.% <input checked="" type="checkbox"/> (or) RELATIVE ABUNDANCE <input type="checkbox"/>																									
	QUARTZ	PLAGIOCLASE	K-FELDSPAR	CALCITE	CLINOPYROX.	ACTINOLITE	HORNBLende	EPIDOTE	PREHNITE	ANNHYDRITE	TOTAL OPALDES	ILMENITE &/OR	MAGNETITE	HEMATITE	PYRITE	SPIDEL	LEUCOXENE	WAIKAKITE	SMECTITE	MIXED-LAYER	ILLITE-SMECT.	PHENITE AND	BIOTITE	CHLORITE	TALC	
8-9	7	45	5	TR	3	7	3	4		20	13	2	5					1						5		TRACE - SERPENTINITE
8-10	43	34	17					1		1								1		2			1			
8-11	9	36	3	1	15	5		5	TR	17								1		1			7			TRACE - SERPENTINITE
8-12	6	40	8	1	6	5	3	6	TR	16	6				10			1					8			
8-13	2	39	7		3	12		7		21	8				13			1					8			
8-14	2	43	3		2	9	1	2		27	14		5	7	?			1					10			
8-15	1	47	6	1	3	10	2	3		20	10		4	6				1					6			
8-16	7	37	2		3	14		11		14								1					11			
8-17	2	35		2	10	13	9				5		2	5						*11			4			(NO THIN SECTION)
8-18	18	56	14					8		1													3			

\* NOT.S. - COULD BE ACTINOLITE  
\* NOT.S. - COULD INCLUDE BIOTITE

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SAMPLE NO.	MINERALOGY, APPROX. WT.% <input type="checkbox"/> (or) RELATIVE ABUNDANCE <input type="checkbox"/>													
	Smectite	Illite + Muscovite	Chlorite	Chlorite - Sm.	Biotite	Talc								
8-9	13	23	59	5										
8-10	5	88	5	1										
8-11	13	30	50	7										
8-12	8		62	5		25								
8-13	18		80			2								
8-14	30		70											
8-15	35	5	60											
8-16			100											
8-17	4	55	41											
8-18			100											
* w/correction factor +19.5% (Illite)														
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Lithology		MINERALOGY, APPROX. WT.% <input type="checkbox"/> (or) RELATIVE ABUNDANCE <input type="checkbox"/>															
		Basalt	Andesite	Diorite	Gabbro	Diabase	Trondhjemite	Qtz Latite	Qtz Microgabbro								
SAMPLE NO.																	
J	8-9	M	M	m			m	TR									
S	8-10	m					MM	TR									
J	8-11	MM	m	m													
S	8-12	MM	m				m										
J	8-13	MM	m	m			TR										
S	8-14	M		M													
S	8-15	M		M			m										
S	8-16	MM															
	8-17																
S	8-18			MM													

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