



**Figure A1.9:** Outcrop photo of Shawnee Rock Company's Olathe quarry. The lower Farley Limestone is missing in this location. The Bonner Springs Shale shows significant thickness variation due to downcutting by the overlying Merriam Limestone.

Rock Unit(s): Fairley/Argentine L5

Thickness	Lithology & Weathering Profile	Fossils & Grains	Sed. Struct & Diag. Feat.	Rock Name (Dunham)	Cement	Color	Sample No.	Photo No.	Additional Remarks
4 cm				Flat-bedded sandy, skeletal granular					
15 cm									
32 cm				Cross-bedded sandy, skeletal granular	on beds			1-K00T-3	
1.2 m				Cross-bedded Sandy, Skeletal Pebbly Granular	Coarse spar found in fossils. Spar fills most interparting spaces. (f&g)				Coarse granular. Mostly skeletal fragments with some whole fossils + some nodules. Silt + fine sand content is high. Obs. sand is abundant. Accounts for ~ 80% of grains rather well.  Cross bedding is large-scale + looks like channels in some places
51 cm				Thinly bedded White sandstone	No coarse spar filling voids fossils (rare)			01	This bed is the upper bed of the Argentine

Date 6/26/17

Location Shawnee Rocks #3, 56 mi. W, KS

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1:10cm

Rock Unit(s): Foley LS

Thickness	Lithology & Weathering Profile	Fossils & Grains	Sed. Struct & Diag Feat.	Rock Name (Dunham)	Cement	Color	Sample No.	Photo No.	Additional Remarks
40cm		N ① ②		Phyllost. Algal Wadesboro	Sparsely on planes & beds (N15-20%)				This bed contains disseminated clay throughout most of its thickness. N80-90% has some clay in it
69cm		N ③ ④		Phyl. Algal Wadesboro	Very little coarse spar. Replace fossils replete (N15-20%)		04		Concentrated seams & disseminated clay present here. N55-60% has clay in it
36cm		N ⑤ ⑥ ⑦	⊖	Phyl. Algal Wadesboro Osage, Bulapat Wadesboro Sk. Patches	Coarse spar fills bedding replaces phyl. (N15%)				Marker Bed. Contains calc. Osage nodules & large fossil fragments Color changes vertically. Thin shale bed at base (0-40cm)
34cm		⑧ ⑨ ⑩		Bioherms Sandy skelch Ground	Little to no visible coarse spar Fine sparsely not indispensible pale green (N40%)		08		
10cm		N ⑪ ⑫		For. bedded Basilite fossils					
16cm		N ⑬ ⑭							

Date 1/24/57

Location Shownee Rock #3, Olathe, KS

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Rock Unit(s): Forley Limestone

Thickness	Lithology & Weathering Profile	Fossils & Grains	Sed. Struct & Diag. Feat.	Rock Name (Dunham)	Cement	Color	Sample No.	Photo No.	Additional Remarks								
22cm +		20# #	m	Phylloid	Afa med coarse spars present in matrix & phyle  Fines spars present as dark mottled areas.  Overall, shell spars abundant Coarse = ~20% Fines = ~30% Sh = ~50%				This upper section of phylloid algal wackestone is significantly different than that below.  Has a distinctly mottled appearance due to veins of darker matrix spars running through the beds.  Contains much less detrital clay. Only has considerable spars along bedding planes								
5cm																	
10cm																	
3cm													Algal			0-6	
2cm													Wackestone				
7cm																	
17cm																	
42cm		20# #	⊖	Phylloid Algal Wackestone	Coarse spars replace fossils & phyle (~15-20%)			0-5	~30% contains clay  Bryozoans more ab.								
10cm +		20# #							Cont. From pg 2								

Date 6/26/97

Location Shawnee Rock #3, Olathe, KS

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Rock Unit(s): Farley -5

Thickness	Lithology & Weathering Profile	Fossils & Grains	Sed. Struct & Diag. Feat.	Rock Name (Dunham)	Cement	Color	Sample No.	Photo No.	Additional Remarks
42m		~#		Phylloid Mgal Wackestone	Spun only in glycol alone (~15%)		08		At concentrated clay seams ~40% has clay in it
3m		#		Stylolite L.S.					These stylolites are like (bedrock)
45m		~#		Phylloid Mgal Wackestone	as below		07		as below
									Cont from p. 6

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Location Shawnee Rock #3, Otter KS

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**Locality SRS:** Quarry section. Measured in active quarry/landfill operated by Shawnee Rock Company and Deffenbaugh Disposal. Section was measured in area of the quarry referred to by quarry employees as 120 acres. This is in the southeast portion of the quarry to the southeast of the south guard shack. If entering the quarry along the south road, turn left at the stop sign located before the guard shack and follow the quarry access road. Units exposed in this area included partial Argentine Limestone, and full sections of the Island Creek Shale, Farley Limestone and Bonner Springs Shale. Aggregate samples KU-1, 2 & 7 as well as KDOT-1, 2 & 13 are from this quarry.

