

A Wilson Cycle

FOLDOUT SHEET 4 FRONT

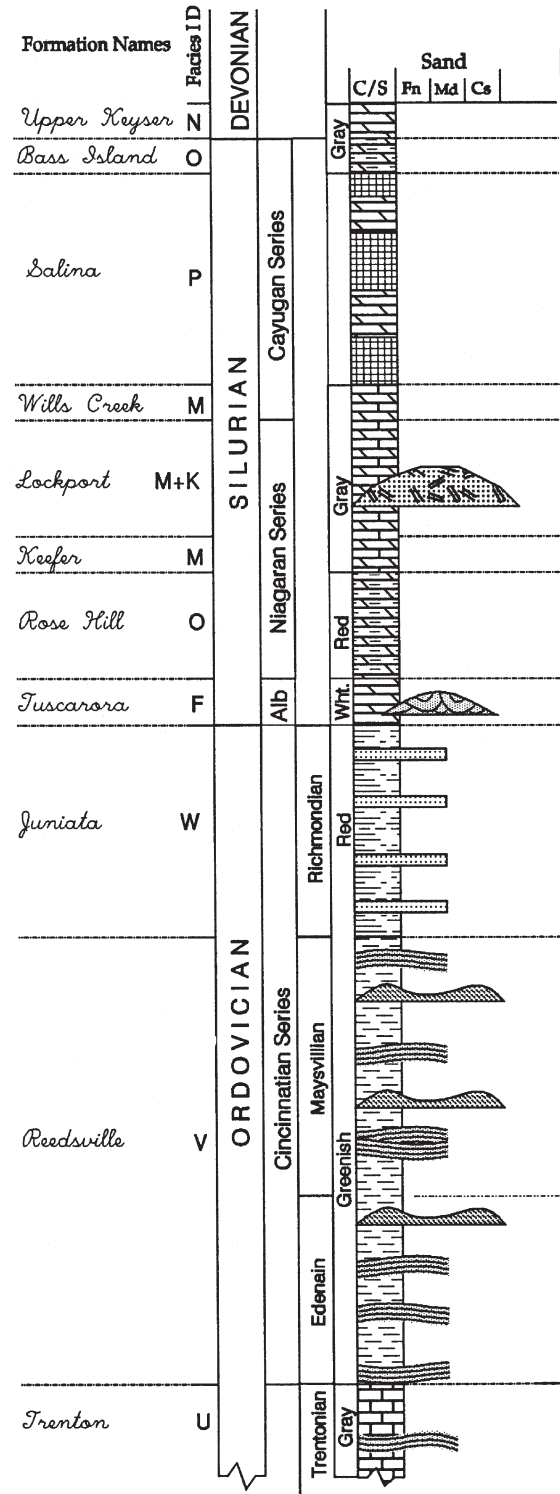
Formation Description	Strip Log	Environmental Interpretation and Dominance	Sourceland Tectonics
	Light gray	MAIN BASIN Very widespread, continuous facies distribution	Stable
FORMATION Y Algal laminated micrites and dolomites. Mudcracks, ostracods.			Epeirogenic
FORMATION X Base has wavy and lenticular bedding. Mid to top interbedded shales and quartz wacke hummocky bedded sands. Marine fossils common to abundant in the shales.	Greenish		Orogenic
FORMATION W Quartz arenite. Gently dipping laminations. Oscillation ripples and cross beds common. Skolithus traces.	White		
FORMATION V Quartz conglomerates interbedded with coarse grained, large planar cross bedded quartz arenites / (L-Bar/T-Bar sequences). Sequences tend to thin and fine toward top of section.	White		
FORMATION U Quartz arenite. Gently dipping laminations. Skolithus traces.	White		
FORMATION T Green shales with lenticular bedding at base. Thin hummocky sequences in the middle, which thicken and change into megacross bedded medium sands at top. Marine fossils common in places.	Greenish		
FORMATION S Feldspathic lithic wackes. Lithics include radiolarian chert, quartzite, carbonates, feldspars, and metamorphic fragments. Bouma sequences typical. TDE common at base, becoming TABE and TBCDE in the main. Sequences thin and become indistinct near top.	Dark gray		
FORMATION R Base interbedded black micrites and shales. Micrites contain broken, transported fossils. Shales thicken and dominate upsection. Graptolites in shales.	Dark gray to black		
FORMATION Q Micrites, biomicrites, packed fossiliferous micrites. Small patch reefs of fossil boundstone (crinoids, bryozoans, calcareous algae, cephalopods, etc.). Some megarippled biosparmicrites. Limestones darken upsection, black at top.	Medium gray to black at top		
FORMATION P Very thick sequences of algal laminated micrites and dolomites. Stromatolites, intramicridules (flat pebble conglomerates), pelmicrites, prism (mud) cracks common. Rare quartz arenite beds. Occasional herringbone cross bedding.	Light gray	reef 15 X thicker	
FORMATION O Quartz arenite, minor feldspathic arenite. Skolithus abundant, cross bedding common.	White		
FORMATION N Base has minor feldspathic wacke sand beds, some with graded bedding. Most of formation shales, sometimes interbedded with fine sands. Rare marine fossils.	Greenish		
LATERAL BASIN (Basin of restricted, discontinuous distribution. Several basins similar to this one exist in the region.) Discontinuity or continuous into Main Basin TOP: Lithic, feldspathic x-bed det ss. & pebbly congl.; locally Bouma sequences and laminated shales MIDDLE: Massive rhyolite (alkaline) ash and lava flows BOTTOM: Interbedded basalt, rhyolite, and poorly sorted feldspathic and lithic sandstone (some crossbedded) and congl. Base of section in main basin older than base of section in other basin.	Dark gray		
FORMATION M Coarse grained feldspathic arenite, quartz arenite, pebble conglomerates (pebbles of basement rock), and weakly metamorphosed shales. Large planar cross beds common in places; Bouma sequences in places. Minor basalt lava flows.	Tan to light gray		
FORMATION L Tholeiitic basalt flows with columnar jointing, amygdules, and flow breccias, interbedded with sandstone, conglomerate and slate.	Gray to white		
FORMATION K Feldspathic, lithic, & quartz sandstones, some shale, congl. and lava flows			
Felsic plutonic igneous and high grade metamorphic basement rock.			



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Evolution of the Central Appalachian Basin Later Ordovician to Earliest Devonian Page 1 of 3

LOCAL SECTION # 2



LOCAL SECTION # 1

