

ERA	SYSTEM	GROUP OF SERIES	FORMATION	SYMBOL	COLUMNAR SECTION	THICKNESS	CHARACTER OF FORMATIONS	CHARACTER OF TOPOGRAPHY AND SOIL
RECENT	PLEISTOCENE Pleistocene		LEONA	PL		0 - 100	SILT WITH FLINT AND LIMESTONE GRAVEL.	BLACK TO YELLOW TERRACE DEPOSITS. SILT (LIXIS) WITH GRAVEL.
			UVALDE	PLU		8-50	FLINT FROM EDWARDS LIMESTONE. OFTEN ORIENTED WITH CALICHE.	THIN FLINT MANTLE. GENERALLY UNCONSOLIDATED. SOMEWAYS STAINED RED.
CENOZOIC	Eocene	CLAY-BORNE	CARRIZO	ECC		100+	COARSE QUARTZ SAND. BASAL PART CROSSBEDDED AND STAINED RED WITH IRON FROM CLAY IRONSTONE INCLUSIONS. REST OF FORMATION GRAY.	LOW GRAY SAND HILLS OR DEEP GRAY SAND. BASAL PART WEATHERS TO A DEEP RED SANDY SOIL.
			SECO	ESB		100+	VARIATED ARENACEOUS SHALES, PREDOMINANTLY DEEP RED. FEW LENSES OF BROWN-RED TO DEEP RED ARENACEOUS LIMESTONES.	DEEP RED SANDY SOIL WITH THIN PARTICLES OF VARIATED SHALE.
		WILCOX	BUTTSOIN	EWB		500+	YELLOW, BROWN, BROWN-RED ARENACEOUS SHALES WITH ARENACEOUS LIMESTONE AND CALCAREOUS SANDSTONE LENSES. NO REGULARITY OF OCCURRENCE OF THE LENSES. BASAL PART OF THE FORMATION CONTAINS MORE CALCAREOUS MATTER IS HARDER, AND FORMS A RANGE OF HILLS. UPPER PART WEATHERS TO A MORE SANDY SOIL.	BASAL PART OF FORMATION CONTAINS MORE CALCAREOUS MATTER AND WEATHERS DARKER. FORMS A RIDGE OF HILLS ACROSS THE COUNTY. HILLS GENERALLY COVERED WITH UVALDE FLINT. SHALES WEATHER RED. UPPER PART OF FORMATION AFFORDS DEEPER RED SANDY SOIL.
			SQUIRREL CREEK	EMS		75-100	IMPURE GRAY-YELLOW FOSSILIFEROUS LIMESTONE WITH BROWN CALCITE CRYSTALS AND CONCRETIONS. CHARACTERISTIC FOSSILS: TURRITELLA MORTONI, OSTREA CRENULIMARGINATA, CUCULLAEA SAFFORDI, LEDA SP., VENERICARDIA ALTICOSTATA.	FORMS THE FRONT OF A SMALL NORTH TO NORTHWEST FACING ESCARPMENT. QUITE RESISTANT. WEATHERS TO DARK CALCAREOUS SOIL.
		MIDWAY	ELSTONE	ELC		30	IMPURE YELLOW, GLAUCONITIC LIMESTONE, ARGILLACEOUS AND ARENACEOUS. POORLY FOSSILIFEROUS. TURRITELLA MORTONI, CUCULLAEA SP., LEDA SP.	UNIFORMLY SOFT. WEATHERS RAPIDLY AND UNDERCUTS OVERLYING FORMATION.
			ESCONDIDO	KES		650-700	MEDIUM FINE TO FINE GRAINED SANDY LIMESTONES AND ARENACEOUS SHALES INTERBEDDED. MORE MARLY TOWARD BASE OF FORMATION. FEW LIMESTONES IN BASE. CALCAREOUS AND MUCH HARDER BROWN-YELLOW LIMESTONE LEDGES TOWARD TOP OF FORMATION. FOSSILIFEROUS THROUGHOUT. DISTINCT FOSSIL HORIZONS. GRYPHEA VESICULARIS HORIZON NEAR BASE. EXOCYTRA PONDEROSA HORIZON IN LOWER PART. SPHEODISCUS PLEURISEPTA AND OSTREA CORTEX HORIZONS NEAR TOP. OTHER FOSSILS ARE: EXOCYTRA COSTATA, TURRITELLA SP., ANACHYTES TEXANA, PACHYDISCUS SP., INOCERAMUS SP., SHARKS TEETH.	BASAL PART MORE ARENACEOUS AND ARGILLACEOUS. WEATHERS RAPIDLY TO A YELLOW OR BLACK PLAIN. SOIL IS A DARK BROWN TO BLACK OR YELLOW CLAY LOAM WITH LIMESTONE FRAGMENTS. THE UPPER PART IS MORE CALCAREOUS AND MORE RESISTANT. THIS PART FORMS A RANGE OF HILLS IN EASTERN AND WESTERN PARTS OF THE COUNTY. HILLS ARE GENERALLY CAPPED WITH UVALDE FLINT. THE SOIL OF THE UPPER PART OF THE FORMATION IS MORE CALCAREOUS AND LIGHTER IN COLOR.
		UPPER CRETACEOUS	ANACACHO	KAN		200+	COARSE ORGANIC FRAGMENTAL LIMESTONE. BEACH DEPOSIT. GENERALLY ASPHALTIC. LOCAL ASPHALT SEEPS. MORE CALCAREOUS IN WESTERN PART OF COUNTY. CALCAREOUS MATTER CHIEFLY FROM COMMINUTED TESTS OF ECHINODERMS. FOSSILS ARE: ECHINODERMS, BACULITES. MORE FOSSILIFEROUS IN EASTERN PART OF COUNTY.	EASTERN AND MORE ARENACEOUS OR ARGILLACEOUS PART WEATHERS TO A DEEP BLACK CLAY LOAM PLAIN. THE WESTERN PART IS HARDER, MORE CALCAREOUS, AND FORMS A RIDGE OF HILLS.
			UPSON	KU		20+	YELLOW CLAY. NOT EXPOSED AT SURFACE IN MEDINA COUNTY.	NO SURFACE EXPOSURE IN MEDINA COUNTY
			AUSTIN	KA		350-400	WHITE AND YELLOW CHALKY LIMESTONES, WITH MARL BEDS, SOME PARTS HIGHLY GLAUCONITIC. MANY CYLINDRICAL IRON PYRITE CONCRETIONS. VERY FOSSILIFEROUS: GRYPHEA AUCELLA, INOCERAMUS SP., SCHONBERGIA SP., EXOCYTRA PONDEROSA, PYRINA SPECIES.	THE CHALK WEATHERS TO A DEEP BLACK CLAY LOAM IN THE INTERSTREAM AREAS. ALONG THE STREAMS IT STANDS AS WHITE BLUFFS. ON FRESHLY EXPOSED SURFACES IT IS YELLOW TO WHITE BUT SOON WEATHERS DARKER.
			EAGLE-BORD	KEB		30	GRAY MARL AND CALCAREOUS OR ARENACEOUS FLACS. SHARK TEETH.	GRAY MARLS AND SHALES. TOPOGRAPHY THE SAME AS THE AUSTIN FORMATION.
	BLDA		KB		60	HARD YELLOW-BROWN LIMESTONE, SMOOTH, SPILITEY FRACTURE. CALCITE SEAMS DISTINCTLY NODULAR. SOME PINK BLOTCHES.	WEATHERS TO A HARD WHITE RIDGE. SOMETIMES CAPS DEL RIO OUTLIERS.	
	DEL RIO		KDR		60	BLUE CLAY AND FLACS. WEATHERS YELLOW. LIMONITE PARTICLES. EX. ARIETINA	NARROW VALLEY. SURFACE YELLOW OR BLACK AND COVERED WITH LIMONITE.	
	GEORGE-TOWN		KG		40+	HARD BLUE-GRAY LIMESTONE. PRACTICALLY NO FLINT. CHIEF FOSSIL IS KINGENA WACCENSIS. RUDISTIDS.	SOIL AND TOPOGRAPHY CANNOT BE DISTINGUISHED FROM EDWARDS AREA. GENERALLY LESS FLINT THAN ON EDWARDS AREA.	
	EDWARDS		KE		450+	HARD, BLUE-GRAY, MASSIVE, FLINT-BEARING LIMESTONE. POORLY FOSSILIFEROUS VERY FEW MARLY LEDGES. BEDDING AND JOINTING INDISTINCT. CHARACTERISTIC FOSSILS: MONOPLEURA, REQUINIA, INEASCOCILITES, MASSIVE BLUFFS. FREQUENTLY CAVERNOUS.	VERY ROUGH AND BROKEN TOPOGRAPHY. STEEP BLUFFS OR DEEP CANYONS. HILLS GENERALLY BOUNDED BY STEEP SCARPS. WEATHERS CAVERNOUS IN PLACES. SURFACE COVERED BY BOULDERS AND PEBBLES OF FLINT. SOIL THIN AND CALCAREOUS. SUPPORTS SCANTY VEGETATION.	
	COMANCHE PEAK		KCP		30	NODULAR, ARGILLACEOUS, IMPURE LIMESTONE. FEW EXOCYTRA TEXANA.	NOT SUFFICIENT SURFACE EXPOSURES TO AFFECT TOPOGRAPHY.	
	WALNUT	KW		20	SOFT, YELLOW, CALCAREOUS CLAY, FULL OF EXOCYTRA TEXANA.	SMALL SURFACE EXPOSURES. NO EFFECT ON TOPOGRAPHY		
	COPLANANEAN CRETACEOUS		GLENROSE	KGR		800+	YELLOW, ARENACEOUS, AND ARGILLACEOUS LIMESTONE, THIN-BEDDED, ALTERNATING MORE CALCAREOUS AND ARGILLACEOUS LEDGES. NO FLINT. VERY FOSSILIFEROUS, WITH CARDIUM MEDIALIS, HOMONYA, TYLOSTOMA, TYLOSTOMA FIDELIALIS, PECTEN, TURRITELLA, EXOCYTRA.	VARIED TOPOGRAPHY OF SMOOTH, CONICAL, GENTLE SLOPING HILLS. NO ABRUPT SCARPS. HILLS HAVE A BANDED APPEARANCE DUE TO ALTERNATING HARD AND SOFT LEDGES. NO FLINT IN THE FORMATION OR ON THE SURFACE. GOOD SOIL MORE YELLOW IN COLOR THAN THE EDWARDS AREA. SUPPORTS CEDAR, SPANISH OAK, AND, IN THE VALLEYS, CONSIDERABLE GRASS AND MESQUITE TREES. MANY FLOWING SPRINGS IN THE AREA.

Plate 1

Generalized columnar section of the sedimentary rocks of Medina County.

Scale, 1 inch=640 feet