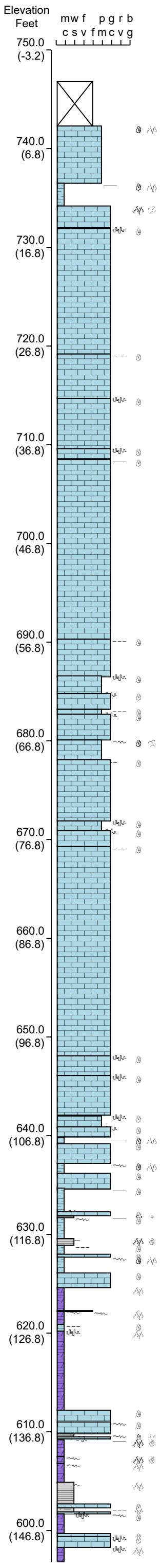
ID Number:	165155	Date:	10/30/2006
Site Name:	SDH406 (Sunoco Gas Station)	By:	Brian D. Keith and Todd A. Thompson
Location:	SW¼SW¼SW¼ sec. 20, T. 8 N., R. 1 W. UTMX: 538704.50, UTMY: 4328778.00, Zone: 16	Notes:	Clear Creek quadrangle, Monroe County
Elevation:	746.8000 Feet		



(0) Unconsolidated not described and not present/recovered

(4.5) SANDERS GROUP, Salem Limestone
Fossiliferous and bioturbated horizontal-bedded packstone, sharp basal contact; argillaceous intervals; unrecognizable grain types; tannish-gray to light-gray

(10.35) Fossiliferous and bioturbated horizontal-bedded argillaceous limestone, gradational basal contact; thick- and thin-walled brachiopods; tan to dark-gray

(12.65) Bioturbated and mottled horizontal-bedded grainstone, stylolitic basal contact; light-brown to light-brownish-gray

(14.9) Fossiliferous cross-bedded grainstone, gradational basal contact; crinoids; foraminifera; brachiopods; buff to medium-gray

(27.6) Fossiliferous horizontal-bedded grainstone, stylolitic basal contact; crinoidal debris, brachiopods; coarse-grained; abundant organics; medium-gray

(32.1) Fossiliferous horizontal-bedded grainstone, stylolitic basal contact; coated grains; crinoid debris; fine-grained; buff to medium-gray

(37.25) Fossiliferous horizontal-bedded grainstone, with a sharp basal contact; crinoids, blastoids, brachiopods, and scattered coated grains; organic matrix; medium-gray

(38.3) Fossiliferous horizontal-bedded and cross-bedded grainstone, gradational basal contact; abundant coated grains; medium- to coarse-grained; skeletal debris; buff

(56.5) Fossiliferous massive grainstone, stylolitic basal contact; ramose and fenestrated bryozoans, brachiopods, crinoids, and coated grains; more bryozoan grains and coarser near the base; buff to medium-tannish-gray

(60.25) Fossiliferous massive packstone, stylolitic basal contact; bryozoan debris and scattered crinoids (Somerset Shale Member equivalent?); medium- to dark-gray

(62) Harrodsburg Limestone
Fossiliferous horizontal-bedded grainstone, gradational basal contact; abundant bryozoan fronds; medium-tannish-gray

(63.6) Fossiliferous massive packstone, stylolitic basal contact; thin-walled brachiopods and miscellaneous shell debris; medium-tannish-gray to gray

(64.1) Fossiliferous massive grainstone, irregular basal contact; abundant bryozoan fronds in upper ¾ and crinoidal in lower ¼ of unit; buff to medium-gray

(66.7) Fossiliferous and mottled horizontal-bedded packstone, gradational basal contact; crinoidal; medium-gray

(68.75) Fossiliferous horizontal-bedded grainstone, stylolitic basal contact; abundant bryozoan fronds with some brachiopods at the base of the unit; buff to medium-gray

(74.95) Fossiliferous horizontal-bedded packstone, stylolitic basal contact; crinoidal; light-gray

(75.9) Fossiliferous massive grainstone, gradational basal contact; crinoid and bryozoan debris; medium- to light-gray

(77.5) Fossiliferous horizontal-bedded and cross-bedded grainstone, stylolitic basal contact; abundant bryozoan debris; more crinoidal in lower 1 ft of unit; fractures and stylolites; buff to light-gray

(98.75) Fossiliferous massive grainstone, stylolitic basal contact; crinoidal from top to 99.4 ft, then bryozoan fronds to base with scattered crinoidal debris; light- to medium-gray

(100.75) Fossiliferous horizontal-bedded grainstone, stylolitic basal contact; abundant crinoidal debris with some bryozoan debris near the top of the unit; medium-gray

(104.8) Fossiliferous massive packstone, stylolitic basal contact; crinoidal only; medium-gray

(105.95) Fossiliferous horizontal-bedded grainstone, sharp basal contact; crinoidal; medium- to light-gray

(107) Ramp Creek Formation
Fossiliferous and bioturbated horizontal-bedded argillaceous limestone, gradational basal contact; scattered crinoids; medium-gray at base to medium-greenish-gray at top with increasing argillaceous content

(107.6) Fossiliferous horizontal-bedded grainstone, irregular basal contact; abundant crinoids and occasional bryozoans; increasing argillaceous partings toward base; medium-gray

(109.6) Fossiliferous and bioturbated horizontal-bedded argillaceous limestone, gradational basal contact; crinoids, bryozoan debris; horizontal bioturbation; medium-greenish-gray

(110.6) Fossiliferous massive grainstone, sharp basal contact; fine fossils debris, fenestrate bryozoans, one horn coral; one large geode; light- to medium-gray

(112.15) Fossiliferous horizontal-bedded argillaceous limestone, stylolitic basal contact; scattered crinoids; large geode at base; medium-gray

(114.5) Fossiliferous horizontal-bedded grainstone, sharp basal contact; fenestrate bryozoans, crinoids; medium-gray

(114.9) Bioturbated and fossiliferous horizontal-bedded siltstone, irregular basal contact; fine fossil debris; calcareous; horizontal bioturbation; medium- to dark-gray

(115.1) Fossiliferous horizontal-bedded argillaceous limestone, sharp basal contact; fenestrate bryozoans with argillaceous layers and occasional crinoids; one small geode; medium-gray

(117.2) Bioturbated and fossiliferous horizontal-bedded siltstone, gradational basal contact; slightly calcareous; horizontal bioturbation; medium- to dark-gray

(117.9) Fossiliferous horizontal-bedded argillaceous limestone, irregular basal contact; fenestrate bryozoans and miscellaneous fossil debris; horizontal bioturbation; medium- to dark-gray

(118.8) Fossiliferous massive grainstone, irregular basal contact; fenestrate bryozoans and miscellaneous fossil debris; medium-gray

(119.1) Fossiliferous and bioturbated horizontal-bedded argillaceous limestone, gradational basal contact; fine crinoids; siliceous near base; medium- to dark-gray

(120.7) Fossiliferous horizontal-bedded grainstone; very fine grained with argillaceous wisps; siliceous at base; scattered small geodes; medium-gray

(122.2) Bioturbated horizontal-bedded argillaceous dolostone, irregular basal-contact; flattened horizontal bioturbation; scattered geodes; medium-greenish-gray

(124.5) Fossiliferous horizontal-bedded chert, irregular basal contact; crinoid debris; light-gray

(124.6) Bioturbated horizontal-bedded argillaceous dolostone, gradational basal contact; flattened horizontal bioturbation; medium-greenish-gray

(125.9) Fossiliferous horizontal-bedded argillaceous limestone, stylolitic basal contact; abundant crinoid debris; increasing argillaceous content upwards, siliceous at base; scattered glauconite; medium-gray

(126.6) Bioturbated horizontal-bedded argillaceous dolostone, gradational basal contact; flattened horizontal bioturbation, occasional vertical burrow; scattered geodes; light- to medium-greenish-gray

(134.65) Fossiliferous horizontal-bedded grainstone, irregular basal contact; abundant coarse crinoid debris, one horn coral; argillaceous partings in upper part and siliceous at top; light- to medium-gray

(135.8) Fossiliferous massive grainstone, irregular basal contact; fine fossil debris, coarse fenestrate bryozoans at base; medium-gray

(137.05) Fossiliferous and bioturbated horizontal-bedded siltstone, stylolitic basal contact; coarse fossil debris in burrow at base; medium- to dark-greenish-gray

(137.35) Fossiliferous massive grainstone, sharp basal contact; thin-walled brachiopod, crinoid, and bryozoan debris; glauconite; medium-gray

(137.6) Bioturbated and fossiliferous horizontal-bedded argillaceous dolostone, irregular basal contact; fossils in irregular layers at base; flattened horizontal and occasional vertical bioturbation; medium-brownish-gray at base to greenish-gray at top

(139.3) Bioturbated and fossiliferous horizontal-bedded argillaceous dolostone, irregular basal contact; scattered crinoids; calcareous; flattened horizontal bioturbation; medium- to dark-gray

(140) Bioturbated and fossiliferous horizontal-bedded argillaceous dolostone, irregular basal contact; crinoids in thin layers at base and top; flattened horizontal bioturbation; light- to medium-greenish-gray

(141.95) Bioturbated horizontal-bedded siltstone, irregular basal contact; flattened horizontal bioturbation; scattered geodes; medium- to dark-greenish-gray

(144.1) Fossiliferous massive grainstone, gradational basal contact; medium-gray

(144.5) Bioturbated massive siltstone, irregular basal contact; vertical bioturbation; medium-greenish-gray

(144.9) Fossiliferous massive grainstone, irregular basal contact; medium to fine crinoid and brachiopod debris; glauconite; light- to medium-gray

(145.1) Massive siltstone, stylolitic basal contact; medium-greenish-gray

(145.15) Fossiliferous massive argillaceous dolostone, irregular basal contact; crinoids, brachiopods, and miscellaneous fossil debris, coarse in middle and top; erosive base with churned appearance; light- to medium-gray and light-greenish-gray at base

(147.1) Fossiliferous massive grainstone, stylolitic basal contact; coarse crinoids and brachiopod debris; light- to medium-gray

(147.45) Fossiliferous horizontal-bedded grainstone, stylolitic basal contact; abundant coarse crinoids, brachiopod and bryozoan debris; siliceous at top; medium-gray

(148.55) Bioturbated horizontal-bedded argillaceous dolostone; flattened horizontal bioturbation; occasional geode; medium-greenish-gray