By: Brian D. Keith and Todd A. Thompson Site Name: SDH468 (Heritage Quarry 1) SW1/4 SW1/4 NE1/4 sec. 32, T. 6 N., R. 2 W. Location: Notes: Owensburg quadrangle, Lawrence County UTMX: 529766.50, UTMY: 4307079.00, Zone: 16 603.7000 Feet Elevation: Elevation mwf pgrb Feet csvfmcvg610.0 (-6.3)(0) Clay and not present/recovered (from driller's description).; red 600.0 (3.7)(5.5) BLUE RIVER GROUP, Ste. Genevieve Limestone Fossiliferous massive grainstone; fine-grained recrystallized brachiopods, crinoids and miscellaneous fossil debris; medium-tannish-gray (6.85) Not present/recovered (8.9) Fossiliferous and oolitic grainstone; one large brachiopod with geopetal; fine-grained brachiopod 590.0 and crinoid debris; medium-tannish-gray (13.7)(9.5) Massive lime mudstone; rubble; unknown dark irregular masses (bioturbation?); medium- to darkgray (10.9) Lime mudstone; rubble (11.8) Intraclastic massive limestone-clast breccia; clasts of lime mudstone; clast-supported; mediumgreenish-gray (12) Massive lime mudstone; unknown dark irregular masses (bioturbation?); medium-greenish-gray (12.7) Massive crystalline limestone; weathered; medium-grained quartz sand grains in the lower half; 580.0 medium-yellowish-gray to orangish-yellow (23.7)(13.25) Not present/recovered (13.5) Bioturbated massive lime mudstone; irregular masses of chert; horizontal and vertical bioturbation; dark-greenish-gray with orangish-red weathered spots (14) Not present/recovered (14.4) Fossiliferous massive chert, irregular basal contact; areas of crinoids and fine-grained miscellaneous fossil debris; light- to dark-tannish-gray 570.0 (15.5) Fossiliferous massive grainstone, gradational basal contact; brachiopods, fenestrate bryozoans, (33.7)crinoids, and miscellaneous fossil debris; recrystallized in places; numerous stylolites; small dark chert at 17.25 ft; light-gray to light-tannish-gray (24.95) Fossiliferous massive packstone, stylolitic basal contact; fenestrate bryozoans, thin-walled brachiopods, crinoids, and miscellaneous fossil debris; variable mud content; light-tannish-gray (25.85) Fossiliferous massive grainstone, irregular basal contact; layers of coarse brachiopods and gastropod debris with crinoids in fine-grained miscellaneous fossil debris; occasional organic and 560.0 argillaceous parting; medium-gray to medium-yellowish-gray (43.7)(34.75) Horizontal-bedded siltstone; calcareous; medium-brownish-gray (34.9) Fossiliferous massive grainstone, stylolitic basal contact; coarser-grained in the lower half fining upward; brachiopods, gastropods, and miscellaneous fossil debris; medium-gray (37.3) Fossiliferous massive grainstone, gradational basal contact; dolomitic in lower part; fine to medium crinoids, thin-walled brachiopods, and miscellaneous fossil debris; medium-gray to medium-yellowish-gray in 550.0 (44.75) St. Louis Limestone (53.7)Bioturbated massive crystalline dolostone, sharp basal contact; green argillaceous zone in the middle with bioturbation below; calcareous in the upper part; dark-brownish-gray to medium-greenish-gray to (3) 2575 (49.15) Bioturbated horizontal-bedded argillaceous limestone, stylolitic basal contact; faint bioturbation; medium- to dark-brownish-gray (49.6) Fossiliferous and bioturbated massive grainstone, irregular basal contact; fine-grained; recrystallized; horizontal bioturbation; medium-brownish-gray 540.0 (63.7)(50.1) Bioturbated horizontal-bedded dolomitic mudstone, irregular basal contact; prominent bioturbation in the middle of the unit; medium-brownish-gray (50.45) Horizontal-bedded chert, irregular basal contact; medium-tannish-gray to dark-gray (50.75) Fossiliferous massive and horizontal-bedded lime mudstone, irregular basal-contact; two fossil hash layers in lower part consisting of fine brachiopods, gastropods, and miscellaneous fossil debris; light- to (52.05) Fossiliferous massive wackestone, stylolitic basal contact; brachiopods, gastropods, and medium 530.0 crinoids; light- to medium-tannish-gray (73.7)(52.4) Fossiliferous massive grainstone, stylolitic basal contact; brown to black irregular chert patches; miscellaneous fossil debris; argillaceous in the lower 3 ft; medium- to dark-tannish-gray (54.7) Fossiliferous horizontal-bedded wackestone, gradational basal contact; alternating beds of fossil-rich and micrite; thin-walled brachiopods and gastropods; light-tannish-gray with brown to black chert patches (57.1) Fossiliferous and bioturbated horizontal-bedded wackestone and packstone, stylolitic basal contact; 520.0 fine crinoids, brachiopods, and miscellaneous fossil debris; small brown crystals that may have been (83.7)gypsum; black pyrite grains; bioturbated in zones; base of unit much grainier; light- to medium-tannish-gray (61.6) Fossiliferous horizontal-bedded chert, irregular basal contact; black specks and miscellaneous fossil debris; light-medium-bluish-gray (61.7) Fossiliferous horizontal-bedded wackestone, gradational basal contact; fenestrate bryozoans, thinwalled brachiopods, medium to fine crinoids in layers; dolomitic at the base; scattered medium-gray to black 510.0 chert nodules in the upper part; medium-tannish-gray weathering to tannish-orange along fracture રંકેંદ (93.7)(69.9) Fossiliferous horizontal-bedded dolomitic wackestone, irregular basal contact; fenestrate bryozoans, thin-walled brachiopods, and medium to fine crinoids in layers; light- to medium-gray, and tannish-gray where weathered (73.7) Fossiliferous horizontal-bedded packstone, irregular basal contact; thin-walled brachiopods, strate bryozoans, fine crinoids, and miscellaneous fossil debris; medium-gray (74.3) Bioturbated horizontal-bedded lime mudstone; thin horizontal laminations with darker laminae 500.0 slightly coarser-grained; black specks and horizontal bioturbation; medium-tannish-gray (74.75) Not present/recovered (103.7)(76.8) Fossiliferous horizontal-bedded packstone; fenestrate bryozoans, thin-walled brachiopods; medium to fine crinoids in layers; may be slightly dolomitic from 80.0-80.5 ft.; rubble in lower part; 2515 @ medium-gray to medium-greenish-gray (83) Acrocyathus proliferus corals Fossiliferous massive grainstone, sharp basal contact; Acrocyathus proliferus corals, fenestrate bryozoans, thin-walled brachiopods; medium to fine crinoids, and miscellaneous fossil debris; some 490.0 areas may be packstone; medium-tannish-gray (113.7)(85.7) Fossiliferous horizontal-bedded packstone, gradational basal contact; fenestrate bryozoans, thinwalled brachiopods, crinoids, and miscellaneous fossil debris; medium-tannish-gray (87.4) Horizontal-bedded crystalline limestone, sharp basal-contact; recrystallized, may be siliceous in parts; olive to medium-gray (88.7) Bioturbated massive crystalline limestone, gradational basal contact; coarse crystalline texture, ghosts of fossils; thoroughly bioturbated; light- to medium-tannish-gray 480.0 (89.95) Bioturbated massive argillaceous limestone; disseminated mud content very high in some layers; (123.7)bioturbated and friable; light- to medium-greenish-gray (92.85) Bioturbated horizontal-bedded argillaceous limestone; horizontal bioturbation; medium- to darkgray (93.2) Bioturbated horizontal-bedded mudstone, irregular basal-contact; finely laminated where not bioturbated; veins and layers of bright-green clay; light- to medium-greenish-gray (95.9) Bioturbated and fossiliferous horizontal-bedded argillaceous limestone, gradational basal contact; fine crinoids; horizontal bioturbation; increasing argillaceous partings toward the base of the unit; medium- to dark-brownish-gray (96.75) Fossiliferous and bioturbated massive grainstone, gradational basal contact; fine-grained; one large bryozoan, crinoids, and miscellaneous fossil debris; medium-brownish-gray (98.05) Bioturbated massive lime mudstone, irregular basal contact; recrystallized; horizontal and vertical bioturbation; medium- to dark-brownish-gray (98.7) Intraclastic massive limestone-clast breccia, irregular basal-contact; lime mudstone clasts in finegrained matrix; laminated (cryptalgal?) at base; dark-brownish-gray to tan at the base where weathered (99.4) Intraclastic massive limestone-clast breccia, irregular basal contact; smaller lime mudstone clasts than above; crystalline matrix; light- to medium-brownish-gray (100.35) Boundstone; distorted and broken laminated texture; nodules in the upper part; algal (?); medium- to dark-brownish-gray (100.65) Massive siltstone; washed out in middle; calcareous; friable; light-greenish-gray (106.55) Boundstone; contorted texture; algal (?); medium- to dark-brownish-gray (106.85) Bioturbated and fossiliferous horizontal-bedded argillaceous limestone; molds of brachiopods; vertical bioturbation in the upper part; friable; light- to medium-tannish-gray (109.4) Siltstone; friable and rubble; calcareous; medium-greenish-gray (109.85) Horizontal-bedded crystalline limestone; recrystallized with vugs; rubble; medium-brownish-gray (111.5) Horizontal-bedded shale, gradational basal contact; organic; distorted bedding by drilling; darkbrownish-gray to black (111.75) Massive crystalline limestone; recrystallized with vugs; argillaceous at the top; rubble in places and at the base with parts missing; medium-brownish-gray

Date:

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