

Depth	Stratigraphic Units		Rock Color	Lithology	Secondary Structures	Fossils	Porosity Type	Porosity	Remarks
	Members	Formations							
4000									4014 4027.5 10Y3/1 very dark greenish gray shale silty dolomitic calc. unconsol. 108 4027.5 4029 dolomitic
4050		Chattanooga Shale							4041 4047.5 Y4/1 olive gray 4047 4048.3 Y4/1 olive gray 4050 4058.5 Y4/1 olive gray shale silty lenticular silt 4059.6 4059.7 Y2/1 olive 4065 4065.4 lithoclasts
4100									4099.6 4100.3 N5 medium gray 4106.3 4109.3 N5 medium gray 4112.7 4117.7 N5 medium gray 4117.7 4123.5 Y8/1 yellowish 4123.5 4128.8 M4 medium dark 4128.8 4131.3 Y8/1 yellowish 4135.7 4136.1 Y8/1 yellowish 4142.4 4143.5 10B63/1 very
4150		Etter & Jefferson City Dolomite							4151.8 4153.3 Y8/1 yellowish 4157 4158.1 S85/1 medium 4161.8 4168.8 Y8/1 yellowish 4161.8 4179.3 Y8/1 brownish gray dolo mudstone mottled dark clasts in lighter dolo 4179.3 4209.5 Y8/1 brownish gray peloidal dolo granitoid and dolo packstone medium to coarse fine biturbation poorly bedded in lower portion of unit pinpoint vugs locally tight 4195 has a autoclastic 4209 4223.5 Y8/1 brownish gray dolo packstone medium varying 4223 4224 N8 very light gray 4238.3 4239.4 Y8/1 brownish 4244.5 4245.5 Y6/1 light 4248.2 4260 Y8/1 brownish
4200									4262.2 4269.2 Y6/1 light 4269.3 4270.5 Y6/1 light 4275.9 4277.8 Y6/1 light 4281 4294 NO RECOVERY (DST 4 conducted 4280-4390 interval) 4294 4295.7 Y8/1 brownish 4308.2 4312 Y8/1 brownish 4312 4315.3 Y8/1 brownish 4330.3 4334 Y6/1 light olive 4334 4362.2 Y6/1 light olive gray dolo packstone mm-size laminations shale wavy small biturbation with occasional horizontal burrow traces biturbation scattered between 4351.6-4355.6 basically no 4365.5 4367.2 Y6/1 light 4374.8 4376.8 Y6/1 light 4380 4381.5 Y6/1 light olive 4392.3 4393.9 Y6/1 light 4395.7 4451.6 Y8/1 brownish gray peloidal dolo packstone cross stratified laminations highlighted by thin clay layers (macrofossilite) dip 45 degrees at 4431 to 4428.7 grades rapidly up to a medium grained peloidal dolopackstone increased shale as you go up mud drupe and cm 4431.6 4432 M4 medium dark 4442.5 4460.5 Y6/1 light olive gray peloidal medium sized dolo packstone no bedding some pinpoint vugs but no apparent fractures grades up to 4460.5 4463.2 Y6/1 light 4470.3 4473.3 Y8/1 brownish 4479.4 4480.5M grayish black 4488 4493.2 Y8/1 brownish 4493.2 4507 Y8/1 brownish gray dolo mudstone matrix Porosity abundant pinpoint vugs 4507 4509 Y6/1 light olive 4514 4521 N2 2 grayish black 4521 4522 S85/1 medium bluish 4528 4529 S85/1 medium bluish 4532 4542 Y6/1 light olive gray dolo mudstone argillaceous 4542 4564 Y8/1 brownish gray dolo mudstone dense slightly argillaceous tight matrix with discontinuous vertical fractures several splayed fractures up to 6 inches 4564 4565 Y8/1 brownish gray 4579 4585 Y6/1 light olive 4585 4588.2 10YK6/2 pale 4595.2 4597.55 Y6/1 light 4601.5 4610.8 Y6/1 light olive gray dolo mudstone 4610.8 4611 Y6/1 light olive 4615.5 4619 Y6/1 light olive 4623.5 4626 Y6/1 light olive 4628 4643 Y8/1 light olive gray dolo mudstone varying alternating light and dark mottling moderately porous 4643 4644 Y6/1 light olive 4656 4680 NO RECOVERY 4660.0 4668.0 Dolo tan f-med xln sh some frak shrt 4668.0 4680.0 Dolo wht-tan f-med xln hrd dns oolitic (packstone) no vugs pores of 4680 4685.5 Y6/1 light olive 4685.5 4687.95 Y6/1 light 4714.0 4726.5 Dolo wht-tan sugro-med xln unif int xln poro scrd vuggy poro ns 4726.5 4728.5 Y4/1 dolo 4732.5 4734.5 5G2/1 greenish 4739 4742 10YR4/2 dark 4743.7 4745.7 Y6/1 light 4747.5 4749.3 10YR4/2 dark 4751 4751.5 10YR6/2 light 4756 4757 10YR6/2 light 4760.6 4761.5M medium gray 4771 4774.0 S85/1 medium 4775.6 4778.7 5GY6/1 greenish 4779.0 4779.5 5GY6/1 greenish 4785.0 4785.0 10YR6/2 light 4788.0 4790.2 5GY6/1 greenish 4792.2 4793.5 Y6/1 light 4797.8 4798.10 Y6/1 light 4807 4808.4 10YR7/2 light gray 4816 4818.6 10YR7/2 light gray 4830.0 4850.0 Dolo tan f-med xln hrd dns scrd vuggy poro frak lots of uphole blk & grn sh 4850.0 4854.0 Dolo lt cm f xln oolitic frak shrt filling rexln qtz & euhedral 4864.0 4884.0 Dolo wht-cm vf xln hrd fracted scrd grts grains med-coarse grain dir fracted ns 4884.0 4900.0 Dolo tan-lt tan f-med xln soft scrd vuggy poro. few well xndd grts grains Fair-gd poro ns 4900 4900.7 10YR 7/2 light 4907 4908.6 Y6/1 light olive 4915.8 4923 10YR7/2 light gray dolo wackstone to dolo 4923 4924.3 10YR7/2 light gray 4928 4928.3 10YR7/2 light gray 4932.3 4934.3 10YR7/2 light 4936.5 4938.3 10YR7/2 light 4942.2 4944.3 Y6/1 light 4950.5 4952.2 10YR7/2 light 4954.5 4955.7 10YR7/2 light 4959.3 4960.3 Y6/1 dolo 4967.3 4969.8 Y6/1 light 4979.3 4986.5 Y6/1 light olive gray autoclastic Breccia 4986.6 4988.5 Y6/1 incipient 4995 4997.7 Y6/1 light olive 5030.0 5049.7 Dolo off wht-lt tan f-crs xln hrd dns frak euhedral dolo xln & some dir well xndd grts grains vuggy poro fracture thin lvs 5049.7 5052.9 Y6/1 light 5057 5058 Y4/1 olive gray 5080 5083.25 N8 very light 5092 5098.7 Y4/1 olive gray 5098.7 5100.8 Y4/1 olive gray 5103.2 5108.8 Y4/1 olive gray 5108.2 5112.5 Y4/1 olive gray 5116 5119 N3 dark gray 5128 5143.4 Y4/1 olive gray sandstone with micritic dolomite matrix frosted grains medium grade rounded increasing 5143.4 5147.7 Y4/1 olive gray 5147.8 5149.7 olive gray Y4/1 5154 5163.7 light olive gray wackstone to mudstone fine to 5165.8 5173 granite grayish orange pink mixed with N3 dark 5173 5178.75 S85/4 granite
4250									4262.2 4269.2 Y6/1 light 4269.3 4270.5 Y6/1 light 4275.9 4277.8 Y6/1 light 4281 4294 NO RECOVERY (DST 4 conducted 4280-4390 interval) 4294 4295.7 Y8/1 brownish 4308.2 4312 Y8/1 brownish 4312 4315.3 Y8/1 brownish 4330.3 4334 Y6/1 light olive 4334 4362.2 Y6/1 light olive gray dolo packstone mm-size laminations shale wavy small biturbation with occasional horizontal burrow traces biturbation scattered between 4351.6-4355.6 basically no 4365.5 4367.2 Y6/1 light 4374.8 4376.8 Y6/1 light 4380 4381.5 Y6/1 light olive 4392.3 4393.9 Y6/1 light 4395.7 4451.6 Y8/1 brownish gray peloidal dolo packstone cross stratified laminations highlighted by thin clay layers (macrofossilite) dip 45 degrees at 4431 to 4428.7 grades rapidly up to a medium grained peloidal dolopackstone increased shale as you go up mud drupe and cm 4431.6 4432 M4 medium dark 4442.5 4460.5 Y6/1 light olive gray peloidal medium sized dolo packstone no bedding some pinpoint vugs but no apparent fractures grades up to 4460.5 4463.2 Y6/1 light 4470.3 4473.3 Y8/1 brownish 4479.4 4480.5M grayish black 4488 4493.2 Y8/1 brownish 4493.2 4507 Y8/1 brownish gray dolo mudstone matrix Porosity abundant pinpoint vugs 4507 4509 Y6/1 light olive 4514 4521 N2 2 grayish black 4521 4522 S85/1 medium bluish 4528 4529 S85/1 medium bluish 4532 4542 Y6/1 light olive gray dolo mudstone argillaceous 4542 4564 Y8/1 brownish gray dolo mudstone dense slightly argillaceous tight matrix with discontinuous vertical fractures several splayed fractures up to 6 inches 4564 4565 Y8/1 brownish gray 4579 4585 Y6/1 light olive 4585 4588.2 10YR6/2 pale 4595.2 4597.55 Y6/1 light 4601.5 4610.8 Y6/1 light olive gray dolo mudstone 4610.8 4611 Y6/1 light olive 4615.5 4619 Y6/1 light olive 4623.5 4626 Y6/1 light olive 4628 4643 Y8/1 light olive gray dolo mudstone varying alternating light and dark mottling moderately porous 4643 4644 Y6/1 light olive 4656 4680 NO RECOVERY 4660.0 4668.0 Dolo tan f-med xln sh some frak shrt 4668.0 4680.0 Dolo wht-tan f-med xln hrd dns oolitic (packstone) no vugs pores of 4680 4685.5 Y6/1 light olive 4685.5 4687.95 Y6/1 light 4714.0 4726.5 Dolo wht-tan sugro-med xln unif int xln poro scrd vuggy poro ns 4726.5 4728.5 Y4/1 dolo 4732.5 4734.5 5G2/1 greenish 4739 4742 10YR4/2 dark 4743.7 4745.7 Y6/1 light 4747.5 4749.3 10YR4/2 dark 4751 4751.5 10YR6/2 light 4756 4757 10YR6/2 light 4760.6 4761.5M medium gray 4771 4774.0 S85/1 medium 4775.6 4778.7 5GY6/1 greenish 4779.0 4779.5 5GY6/1 greenish 4785.0 4785.0 10YR6/2 light 4788.0 4790.2 5GY6/1 greenish 4792.2 4793.5 Y6/1 light 4797.8 4798.10 Y6/1 light 4807 4808.4 10YR7/2 light gray 4816 4818.6 10YR7/2 light gray 4830.0 4850.0 Dolo tan f-med xln hrd dns scrd vuggy poro frak lots of uphole blk & grn sh 4850.0 4854.0 Dolo lt cm f xln oolitic frak shrt filling rexln qtz & euhedral 4864.0 4884.0 Dolo wht-cm vf xln hrd fracted scrd grts grains med-coarse grain dir fracted ns 4884.0 4900.0 Dolo tan-lt tan f-med xln soft scrd vuggy poro. few well xndd grts grains Fair-gd poro ns 4900 4900.7 10YR 7/2 light 4907 4908.6 Y6/1 light olive 4915.8 4923 10YR7/2 light gray dolo wackstone to dolo 4923 4924.3 10YR7/2 light gray 4928 4928.3 10YR7/2 light gray 4932.3 4934.3 10YR7/2 light 4936.5 4938.3 10YR7/2 light 4942.2 4944.3 Y6/1 light 4950.5 4952.2 10YR7/2 light 4954.5 4955.7 10YR7/2 light 4959.3 4960.3 Y6/1 dolo 4967.3 4969.8 Y6/1 light 4979.3 4986.5 Y6/1 light olive gray autoclastic Breccia 4986.6 4988.5 Y6/1 incipient 4995 4997.7 Y6/1 light olive 5030.0 5049.7 Dolo off wht-lt tan f-crs xln hrd dns frak euhedral dolo xln & some dir well xndd grts grains vuggy poro fracture thin lvs 5049.7 5052.9 Y6/1 light 5057 5058 Y4/1 olive gray 5080 5083.25 N8 very light 5092 5098.7 Y4/1 olive gray 5098.7 5100.8 Y4/1 olive gray 5103.2 5108.8 Y4/1 olive gray 5108.2 5112.5 Y4/1 olive gray 5116 5119 N3 dark gray 5128 5143.4 Y4/1 olive gray sandstone with micritic dolomite matrix frosted grains medium grade rounded increasing 5143.4 5147.7 Y4/1 olive gray 5147.8 5149.7 olive gray Y4/1 5154 5163.7 light olive gray wackstone to mudstone fine to 5165.8 5173 granite grayish orange pink mixed with N3 dark 5173 5178.75 S85/4 granite
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