

No Samples in Survey File
 GEOLOGICAL SURVEY OF OHIO

3215

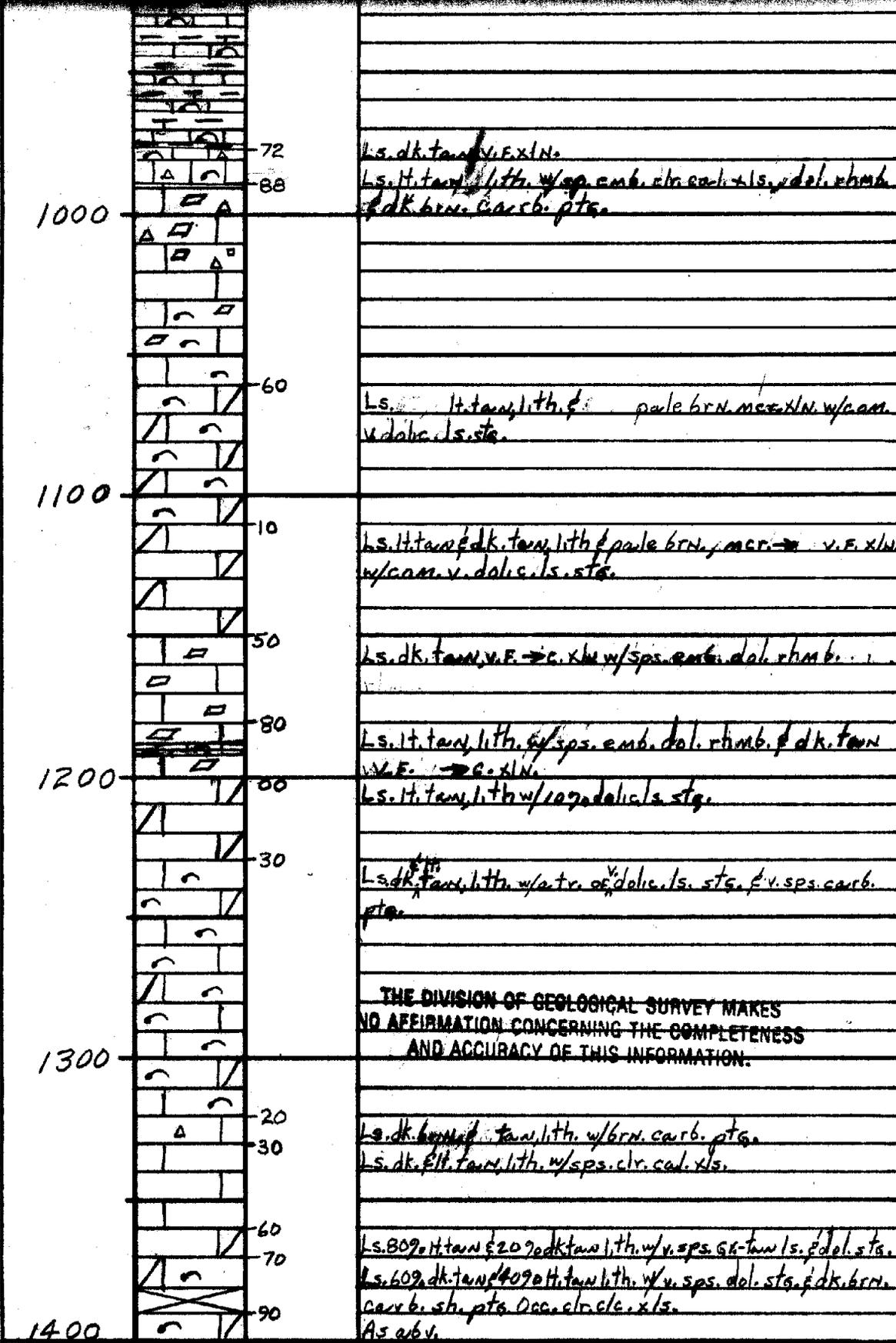
OIL AND GAS WELL LOG

State Ohio
 County Butler Township Oxford Quadrangle near Oxford station on
 Lot _____ Quarter _____ Tract _____ Section _____ NW _____ NE. C. H. & SW. I. R. R.
 Measured _____ Feet From _____ Line And _____ Feet From _____ Line Of _____

Land Owner At Oxford Well No. 1 Date Started 4-27-1887
 Operator Oxford Oil & Gas Co. Well No. _____ Date Completed 6-1887
 Elevation Bar. 900' S. L. _____ Total Depth 1365 Plugged Back _____
 Formation Drilled To _____ Producing Form. _____ Init. Prod. Nat. _____
 Shot or Acid Record _____ Prod. A. S. or Acid _____
 Init. Rock Press. _____ Abandoned vol X pp. 70-77. 1887.
 Casing Record _____ log furnished by J. E. James, Jour. Cinc. Soc. of Nat. Hist

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
		37	piece, sandstone				
		48	limestone, water-worn				
		59	fragment, hard blue ls.				
		96	frag., hard ls. with fossils				
		160	Ls.				
		205	Ls., with frag. of Asaphus				
		230	Ls. and clay				
		235	Same				
		240	Ls. and clay with frag. of Monticulipora				
		248	Limestone				
		253	"				
		258	"				
		260	"				
		265	Limestone and shale, small vein of gas at 302				
		305	Ls. and shale				
		380	Limestone				
		410	Blue shale				
		585	" "				
		595	" "				
		610	" "				
		680	" "				
		750	" "				
		775	" "				
		787	Dark ls., soft at top, 5 feet drilled in 3/4 hr; some shale				
Dk. Ls., division between Cincinnati Group and underlying Trenton 50 feet.		790	dark limestone, with lighter particles and small amount of shale, Hard. Three feet drilled in 2 1/4 hrs; fragments of Orthis				
		810	same as above, finely ground up				
		830	same but darker				
		835	white crystalline limestone fragments				
		850	same, finely ground up, with pieces of darker grain, friable, magnesian.				
Trenton	875-	855	Same, very friable-fragments larger, no fossils				
		875	same with pieces of greenish shale, magnesian				
		881	same, harder, 5 feet drilled in 4 hrs.				
		890	same, finely ground up. little shale.				
		900	same, friable, pieces almost talcose, finely ground up. magnesian				
		906	slightly darker; fragments iron pyrites, magnesian				
		930	lighter color				
		950	same as above, magnesian				
		965	same as 930				
		980	almost white				
	1000	a little darker than above					
	1010	same as 1000					

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
		1015	same as 1000				
		1025	same as 1000				
		1035	same as 1000, magnesian				
		1045	same as 1000				
		1050	nearly white				
		1060	a little darker				
		1075	same as 1060, magnesian				
		1080	same as 1060				
		1085	same as 1060, finely ground				
		1110	same as 1060, three small pieces crystalline, magnesian				
		1115	darker, much larger fragments, more magnesian				
		1120	same as 1115				
		1135	same as 1115 but pieces smaller				
		1140	much lighter color, smaller pieces, magnesia and alumina				
		1150	dark, hard, finely ground				
		1164	dark, hard, pieces larger, magnesia and alumina				
		1173	lighter than above				
		1184	same as 1173				
		1189	like 1150				
		1195	like 1189				
		1200	like 1189				
	12	1212	darker, finely ground, fragments of coral				
		1230	much lighter, almost like 1000 feet				
		1240	nearly same as above				
		1245	darker, like 1212				
		1250	lighter like 1240				
		1255	same as above, strong smell of oil				
		1260	same as 1255, smell of oil				
		1265	same as 1265, smell of oil				
Division between Fren-		1280	Much darker and coarser, evident change in rock				
ton and Calciferous,		1290	same as 1280				
45 feet (possibly chazy)		1295	coarse, with a greenish hue, smell of oil				
		1300	coarse, with a bluish hue				
		1305	same, but lighter, magnesian				
	1312	1315	very coarse, light colored and blue fragments				
		1320	very fine, bluish				
		1325	coarser, blue and white, argillaceous, effervesces with cold acid				
califerous sandrock		1330	coarse white rock, arenaceous, effervesces with hot acid only				
40 feet		1340	finer, white, with a few darker fragments				
		1345	coarser, white and blue, iron pyrites				
		1350	very fine, white, arenaceous; minute specks of blue				
		1355	finer, white				
		1360	finer still, white				
		1365	still finer; white, almost paste-like, strong smell of sulphuretted hydrogen, 180 feet of water when pumped				
	1360	1370	same material with small fragments of soft bluish rock, water increasing				



THE DIVISION OF GEOLOGICAL SURVEY MAKES
 NO AFFIRMATION CONCERNING THE COMPLETENESS
 AND ACCURACY OF THIS INFORMATION.

72 Ls. dk. tan. v. F. xln.
 88 Ls. lt. tan. lith. w/ sp. emb. cl. cal. xls. & dol. rhmb. & dk. brn. carb. pts.

60 Ls. lt. tan. lith. & pale brn. mss. xln. w/ con. & dol. ls. stg.

10 Ls. lt. tan. & dk. tan. lith. & pale brn. mss. v. F. xln. w/ con. & dol. ls. stg.

50 Ls. dk. tan. v. F. xln. w/ sp. emb. dol. rhmb.

80 Ls. lt. tan. lith. w/ sp. emb. dol. rhmb. & dk. tan. v. F. xln.

90 Ls. lt. tan. lith. w/ con. dol. ls. stg.

30 Ls. dk. tan. lith. w/ tr. of dol. ls. stg. & v. sps. carb. pts.

20 Ls. dk. brn. tan. lith. w/ brn. carb. pts.
 30 Ls. dk. lt. tan. lith. w/ sps. cl. cal. xls.

60 Ls. 80% lt. tan. & 20% dk. tan. lith. w/ v. sps. gr. tan. ls. & dol. stg.
 70 Ls. 60% dk. tan. & 40% lt. tan. lith. w/ v. sps. dol. stg. & dk. brn. carb. sh. pts. Occ. cl. cl. xls.
 90 As abv.

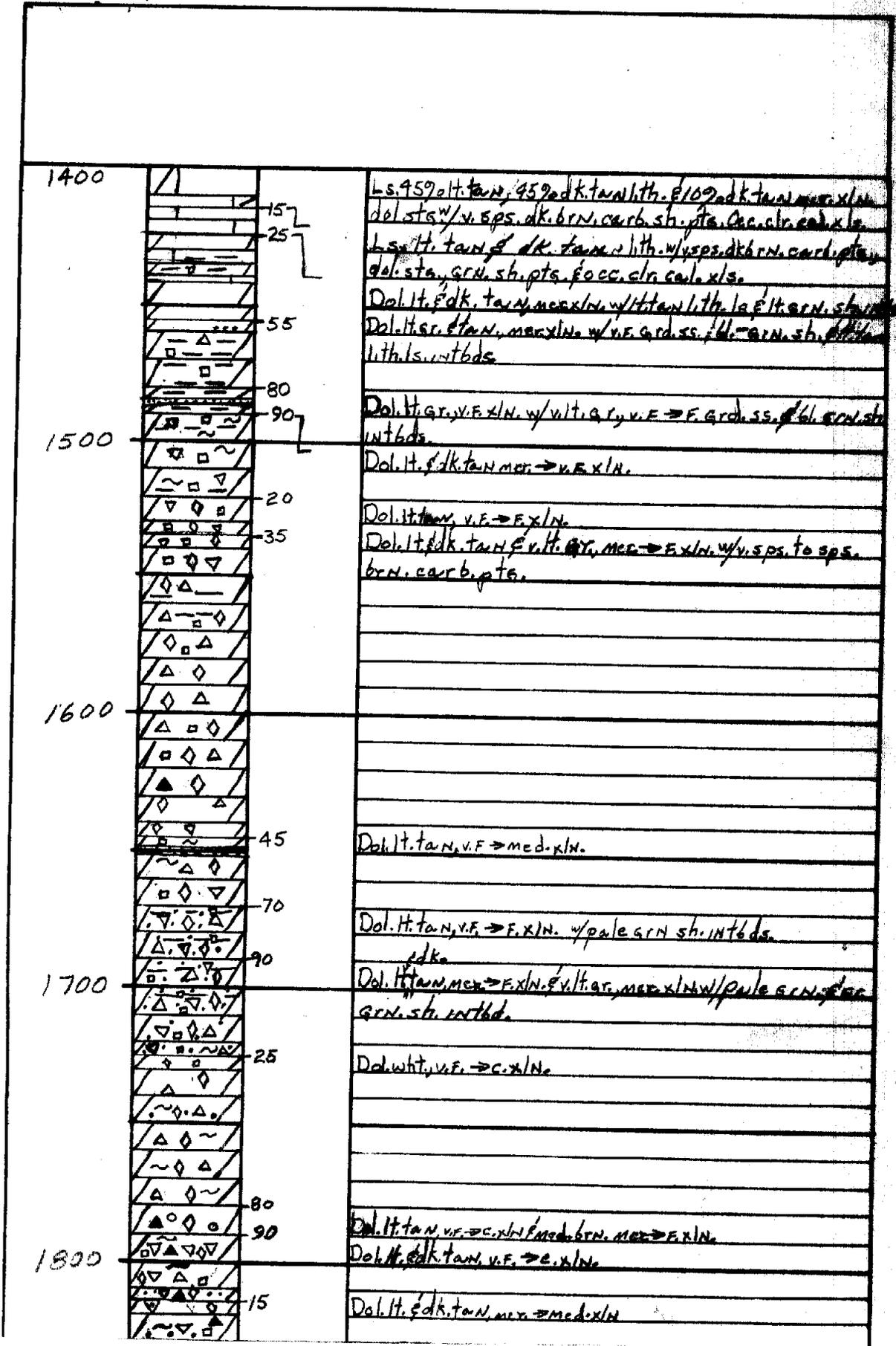
1000

1100

1200

1300

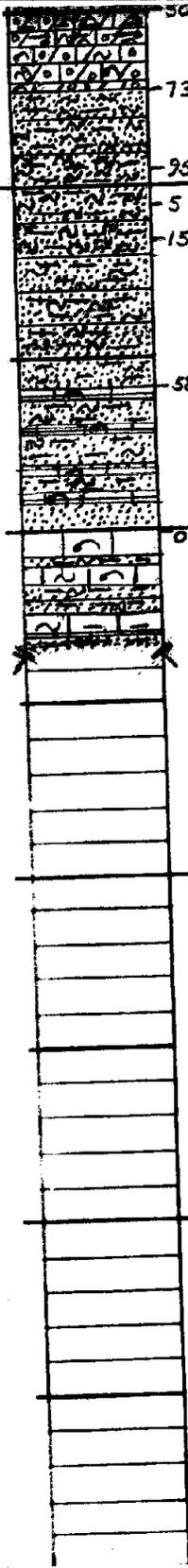
1400



2300	10	Dol. lt. tan, med. → F. xln.
	35	Dol. lt. tan, med. → F. xln. V. sps. pink discol.
	70	Dol. wht, med. → med. xln. f. v. lt. gr, med. → v. f. xln. V. sps. pink discol.
2400	5	Pts. of grn, med. f. slaty sh. Dol. lt. f. dk. tan, f. → med. xln. f. med. f. v. f. → med. xln.
	35	Dol. lt. tan, med. → F. xln. Sp. gr. sh. pts.
	45	Dol. lt. tan, med. → med. xln.
	80	Dol. lt. f. dk. tan, med. f. v. f. xln. → med. xln. w/ v. sps. dk. brn. sh. pts.
2500	35	Dol. lt. f. dk. tan, med. f. v. f. → med. xln. f. lt. gr. mic. xln.
	50	Dol. lt. f. dk. tan, med. → v. f. f. xln. sl. arg. f. slty.
	65	Dol. lt. tan f. dk. brn., med. → v. f. xln. sl. slty.
	85	Dol. lt. brn. f. lt. tan, med. → v. f. xln. w/ sps. v. f. embd. mica flakes f. is slty.
2600	30	Dol. lt. f. dk. tan, med. → v. f. xln. f. lt. brn., f. xln. V. sps. dk. brn. arg. pts. f. sl. gr. discol.
	50	Dol. lt. brn., f. → med. xln. f. dk. tan, med. → v. f. xln. V. sps. dk. brn. arg. pts. f. sl. → v. slty.
	75	Dol. lt. f. med. brn., v. f. f. → med. xln. f. lt. f. dk. tan, med. → v. f. xln. V. sps. dk. brn. arg. pts. f. sl. slty.
	85	Dol. lt. f. med. brn., med. f. v. f. → v. f. f. mic. xln. f. lt. f. dk. tan, med. → v. f. xln. w/ sps. lt. tan slt. intd. f. grn-gr. sh.
2700	20	sl. slty. brn. med. → xln. w/ med. f. c. xls. w/ inbed of grn-gr. sh. f. lt. tan slt.
	30	Slt. st. lt. tan w/ is. Hbrn. med. → v. f. xln. f. sh. grn-gr. intd. f. embd.

2800

2900



mic. flakes
 Delic. s. t. brn. flint, lith. \Rightarrow mic. in face \Rightarrow v. f. x. l. w/ sh. intbds.
 Slt. s. t. tan pale grn. w/ ^{with} med. mic. flake, fold. gns. f. grn-gr.
 sh. intbds.
 Dk. gr. sh. intbd.
 Dk. gr. f. grn. - gr. sh. intbds.
 Grn. - gr. f. brn. - gr. sh. intbds.
 Slt. s. t. tan w/ med. emb. mic. flake. f. fold. gns. f. grn - gr. sh.
 s. t. tan mat. w/ med. mic. x. l. w/ g. x. l. s.

T.D. 2933'

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 AND ACCURACY OF THIS INFORMATION.

GEOLOGICAL SURVEY OF OHIO

OIL AND GAS WELL LOG

State Ohio
 County Washington Township Warren Quadrangle _____
 Lot _____ Quarter _____ Tract _____ Section 29 NW _____ NE _____ SW _____
 Measured 400 Feet From WE Line And 400 Feet From SN Line Of Sec. 29
NE-NE
 Land Owner Chas. Ammon Well No. 1 Date Started 3-31-41
 Operator Ross & Yeager (Col. Carb.) of G #1397 Well No. _____ Date Completed 6-4-41
 Elevation Bar. 930 S. L. _____ Total Depth 4651 Plugged Back _____
 Formation Drilled To _____ Producing Form. _____ Init. Prod. Nat. _____
 Shot or Acid Record _____ Prod. A. S. or Acid _____
 Init. Rock Press. _____ Abandoned _____
 Casing Record LOGGED BY G. H. DENTON

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
Samples examined measure from 0' to 1,715'							
	0	10	Siltstone (100) clayey, light tan; carb. residue (root fragments?) much weathered.				
	10	20	Siltstone (20) light greenish gray; shale (30) clayey, light tan, calc.				
	20	25	Siltstone (20) as above Shale (75) clayey, as above Limestone (5) silty, light grayish tan, or calcareous siltstone. Top of Red Shale unit.				
	25	30	Shale (75) bright grayish red, highly calcareous Siltstone (15) highly calcareous, grayish green Limestone (10) silty, as above				
	30	35	Shale (85) bright grayish red, as above, some light gray to white clay shale fragments Limestone (15) knots and pellets, to 1/4" variegated greenish to grayish yellow to purplish				
	35	40	Shale (80) grayish red, as above Shale (15) silty, clayey, non. calc., fossil plants (?) Limestone (5) same as next above				
	40	45	Shale (75) grayish red, as above Shale (20) silty, grayish red to brown Limestone (5) silty, greenish gray to brownish gray				
	45	50	Sandstone (35) fine grained, greenish gray, well cemented, chloritic, micaceous Shale (45) clayey, soft, as above Limestone (10) pellets, to 1/4", variegated, hematite iron knots Shale (10) silty, grayish red Base of Red Shale unit				
	50	55	Sandstone (30) as above, to siltstone as above Limestone (15) silty, dense Shale (5) silty, grayish red to brownish gray Shale (50) grayish red, calc. Base of siltstone				
	55	60	Shale (65) variegated grayish red to greenish to yellowish, highly calcareous, with variegated line pellets (10) Limestone (15) silty, pyritic, light gray to grayish tan to greenish gray				
	60	65	Siltstone (10) calc. Sandstone (65) fine grained to siltstone, light to med. greenish gray, chloritic, some micaceous				

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Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
			Limestone (10) variegated, grayish red, yellow, greenish, silty, dense				
	65	70	Shale (25) grayish red, variegated Shale (75) grayish red, to greenish gray to yellowish, micaceous, firm, highly calcareous				
			Limestone (15) med. grayish tan, finely silty, to limy siltstone				
	70	75	Limestone (70) pellets, sideritic iron knots Sandstone (30) med. to fine, dark mica, some white, in large flakes, calcareous cement, light gray				
			Shale (60) clayey, light gray, silty, weakly calcareous				
	75	80	Limestone (5) as above Sandstone (50) as above Shale (45) as above				
			Limestone (5) as above				
	80	85	Sandstone (55) same as above, fine grained to siltstone				
			Shale (45) light tan to gray, silty				
	85	90	Sandstone (75) medium grained, chloritic, micaceous, poorly cemented				
			Calcareous somewhat, clear quartz				
			Siltstone (10) pale greenish				
			Shale (15) clay				
	90	95	Shale (95) micaceous, grayish red, highly calcareous, clayey				
			Sandstone (5) as above				
	95	105	Shale (65) grayish red, calc. as above				
			Limestone (5) pellets, grayish tan to brown				
			Shale (30) silty, non. calc. grayish red to brown				
	105	110	Shale (75) grayish red, calc. as above, variegated to greenish gray				
			Shale (10) silty, grayish red to brown				
			Limestone (10) pellets, as above, to purple, numerous hematite flakes				
			Sandstone (5) as above				
	110	118	Shale (50) grayish red and greenish gray, calc. as above				
			Shale (40) silty, as above				
			Limestone (7) silty				
			Sandstone fragments				
	118	125	Shale (45) grayish red, as above				
			Siltstone (50) shaley, grayish brown to reddish, non calc., siderite				
			Limestone (5) silty				
	125	130	Shale (75) grayish red, as above, firmer				
			Sandstone (18) fine grained, chloritic, micaceous, calcareous				
			Limestone (7) variegated purplish to greenish gray, pellets				
	135	140	Shale (75) silty, grayish to reddish brown, non. calc.				
			Shale (25) grayish red, calc.				
	140	145	Shale (75) silty, brownish gray to reddish brown, non. calc.				
			Limestone (5) silty, tan to greenish, abundant iron				
			Shale (20) grayish red, calc.				
	145	150	Shale (80) grayish red, calc. firmer than above, abundant lime knots, variegated gray, purplish				
			Siltstone (10) greenish gray, light, calc.				
			Shale (10) silty, light gray				
	150	155	Shale (85) grayish red, calc.				
			Sandstone (10) fine grained, calc.				
			Limestone (5) silty, greenish gray to tan				
	155	160	Shale (97) same as next above, lime pellets, more purplish				
			Siltstone (3) calcareous				

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GEOLOGICAL SURVEY OF OHIO

OIL AND GAS WELL LOG

State.....
 County Township Quadrangle
 Lot Quarter Tract Section NW NE SW
 Measured Feet From Line And Feet From Line Of
 Land Owner Chas. Ammon Well No. 1 Date Started.....
 Operator Well No. Date Completed
 Elevation Bar. S. L. Total Depth Plugged Back.....
 Formation Drilled To Producing Form. Init. Prod. Nat.
 Shot or Acid Record..... Prod. A. S. or Acid
 Init. Rock Press. Abandoned
 Casing Record

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
	160	165	Shale (97) same as above, lime pellets Siltstone (3) calcareous, pellets				
	165	170	Shale (99) same as above, reduced lime pellets, silt increase, soft and calcareous Siltstone (1) as above				
	170-175		Shale (90) same as above, grayish red, yellow, and greenish gray, more lime Shale (10) silty, grayish brown				
	175	180	Shale (70) same as above, abundant some large lime pellets (20) Siltstone (7) shaley, as above Siltstone (3) light gray, sandy				
	180	185	Shale (70) same as above, silty, firm, less calcareous in part, abundant white, gray, tan, brown, lime knots (25) Siltstone (5) grading to sandstone, light to medium greenish gray				
	185	190	Shale (80) same as above, some silty, highly calcareous, lime pellets mostly silty (15) Siltstone (5) light greenish gray				
	190	195	Shale (95) same as above, very soft and clayey to silty, variegated to greenish yellow and greenish gray, lime pellets, greenish gray Siltstone (5) highly calcareous, light to pale green				
	195	200	Shale (33) same as next above Shale (50) silty, reddish brown to grayish red, few lime- stone knots, fossil plants Siltstone (5) calcareous, as above Shale (5) light gray, silty, calcareous Limestone (7) pellets				
	200	205	Siltstone (60) shaley, micaceous, grayish brown Siltstone (10) greenish gray Limestone (4) white, shaley				
	205	210	Shale (25) grayish red, calc. THE DIVISION OF GEOLOGICAL SURVEY MAKES Siltstone (75) shaley, as above. NO AFFIRMATION CONCERNING THE COMPLETENESS Shale (25) grayish red, soft, AND ACCURACY OF THIS INFORMATION.				
	210	215	Shale (75) drab grayish red, finely silty, highly calc. Siltstone (25) light gray, as above				
	215	225	Shale (90) grayish red, as above, few grayish brown lime- stone fragments and iron knots. Misc. (10), mainly siltstone				
	225	235	Shale (10) grayish red, as above Shale (80) variegated to gray, yellowish gray and greenish, with limestone pellets				
	235	240	Shale (75) greenish gray to grayish yellow with minor grayish red, soft, calc.				

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
			Shale (20) gray clayey, abundant fine carbonaceous residue				
	240	250	Shale (5) carbonaceous transitional to gray shale above Coal, a few finely divided fragments Shale (30) medium gray green to grayish red, as above Siltstone (65) coarse, shaley and clayey, light greenish gray, in part hard and calcareous, grading to fine grained sandstone Lime (5) pellets				
	250	260	Sandstone (50) grading to coarse Siltstone, light greenish gray, chloritic, micaceous, calcareous				
	260	270	Shale (35) grayish red, abundant silty limestone pellets (?) Siltstone (65) grading to fine sandstone med. to light greenish gray Shale (30) grayish red, variegated, soft, silty zones, highly calcareous Lime (5) pellets, variegated				
	270	275	Siltstone (90) med. greenish gray, drab some grading to fine grained sandstone, micaceous (white) Shale (10) clayey, light gray Top of Red zone				
	275	285	Shale (90) grayish red, bright, minor light greenish gray, clayey, calcareous, soft Sandstone (10) fine to medium grained, clean, poorly cemented, chloritic				
	285	290	Shale (95) bright grayish red, as above, more greenish gray Sandstone (5) fine, as above, some medium grains				
	290	300	Shale (97) bright grayish red, as above, more gray to greenish gray Sandstone (3) as above Base of Red zone				
	300	310	Sandstone (60) med. greenish gray, fine to medium, calcareous, micaceous, chloritic Siltstone (40) medium gray, shaley				
	310	315	Sandstone (85) same as above, some coarse grains, light gray Siltstone (15) impure, slightly calcareous				
	315	325	Shale (85) grayish red, grading to greenish gray and grayish yellow, calcareous Siltstone (10) shaley, purplish Sandstone (5) fine, some coarse				
	325	330	Sandstone (95) med. greenish gray to tan, med. to fine grained, poorly cemented, calcareous. Some dark greenish gray siltstone, fairly dense				
	330	340	Sandstone (30) fine grained, as above Shale (45) med. greenish gray to grayish brown, calcareous, soft, clayey Limestone (5) fragments, light tan to brown, bedded or large nodules				
	340	350	Siltstone (20) med. to fine grained, as above Sandstone (95) as above				
	350	360	Shale (5) as above, calcareous Sandstone (95) as above, fairly clean, very poorly cemented, subrounded, clear to milky quartz, little chlorite and mica Shale (5) as above				
	360	370	Sandstone (85) medium, some coarser and fine, chlorite and mica, calcareous Siltstone (10) light greenish gray Shale (5) as above				

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GEOLOGICAL SURVEY OF OHIO

OIL AND GAS WELL LOG

State _____ Township _____ Quadrangle _____
 County _____
 Lot _____ Quarter _____ Tract _____ Section _____ NW _____ NE _____ SW _____
 Measured _____ Feet From _____ Line And _____ Feet From _____ Line Of _____
 Land Owner Chas. Ammon Well No. _____ Date Started _____
 Operator _____ Well No. _____ Date Completed _____
 Elevation Bar. _____ S. L. _____ Total Depth _____ Plugged Back _____
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Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
	370	375	Sandstone (100) medium to fine grained, some dark, very poorly cemented, more abundant white mica, greenish gray than above				
	375	380	Shale (90) light gray to greenish gray, clayey, silty, with fine sand grains and lime knots, highly calcareous				
			Limestone (8) light gray to tan, dense bedded, abundant ostracode and pyrite				
			Shale (2) dark gray, carbonaceous (?)				
	380	385	Shale (100) grayish red, soft, silty and clayey, calcareous, a few lime pellets				
	385	390	Shale (30) grayish red, silty thin laminated, as above				
			Shale (65) variegated, light gray to grayish yellow to greenish gray, calcareous, lime pellets abundant (5) with some iron knots				
	390	395	Shale (90) grayish red, silty, as above, thin laminated, with lime pellets highly calcareous				
			Siltstone (10) greenish, as below				
	395	410	Sandstone (30) grading to siltstone, fine grained, impure clay and silt, grayish tan to greenish gray, very calcareous, micaceous.				
			Shale (50) grayish red, silty, highly calcareous in part				
	410	415	Sandstone (65) to siltstone, as above				
			Shale (35) as above, more clayey grayish				
	415	420	Shale (95) grayish red, laminated, non calcareous, silty, with <u>Estheria</u> , some pyrite				
			Sandstone (5) as above				
	420	430	Shale (65) grayish red, variegated, soft, highly calcareous, finely silty				
			Siltstone (35) or silty limestone greenish gray, calcareous				
	430	435	Shale (90) grayish red to greenish gray, calcareous clayey to silty				
			Shale (10) gray to purple, silty, with lime pellets				
	435	440	Sandstone (75) to silty shale, tan greenish gray, impure, very calcareous, micaceous, some chlorite				
			Shale (25) grayish red, as above, sand grains and lime pellets				
	440	445	Shale (35) grayish red to med. greenish gray, calcareous				
			Limestone (25) pellets or bedded, and pellets, brecciated, part silty, gray to tan, pyritic				
			Shale (40) silty or shaley siltstone, very calcareous				
	445	455	Shale (40) silty, light gray, clayey				
			Shale (50) greenish to grayish red, calcareous				
			Limestone (8) pellets and fragments				
			Shale (2) dark gray, carbonaceous (?)				

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Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
	455	460	Limestone (40) silty, light or pale greenish gray to grayish tan, abundant ostracods, fragmented from several beds Shale (35) finely silty and clayey gray, pale greenish gray, purplish, with shell fragments, probably ostracods Siltstone (5) or fine grained silty carbonate, medium to light bright green, dense Shale (10) grayish red, soft, calc.				
	460	465	Limestone (30) grayish tan to light gray, some silty, some ostracods Shale (50) silty, light gray to pale greenish gray, very calcareous, a silty lime, abundant ostracods Siltstone (5) or carbonate, as above Shale (15) grayish red, calc. as above				
	465	470	Limestone (20) white to gray to grayish red, as above, ostracods Shale (75) light gray to greenish gray, silty, as above, with lime pellets Shale (5) red, calc. as above				
	470	480	Shale (40) light gray, as above, clayey Shale (60) grayish red to greenish gray and yellowish, soft, clayey, calcareous				
	480	490	Shale (65) grayish red, as above Shale (35) light gray, as above				
	490	495	Siltstone (50) grading to silty shale light to medium greenish gray Sandstone (35) fine grained, dark mica and chlorite, highly calcareous, fairly well cemented Shale (5) light gray, as above Shale (10) grayish red, as above				
	495	505	Sandstone (90) white, fine, some medium Siltstone (7) light to medium greenish gray, coarse, micaceous, admixed (5) material				
	505	515	Sandstone (90) as above, some coarse to 1/8" Shale (3) dark or carbonaceous Siltstone (5) as above Shale (2) grayish red				
	515	525	Sandstone (15) as above, some coarse, poorly cemented Shale (5) carbonaceous and shale with carbon shreds Shale (1) coaly or bony Shale (45) drab grayish brown to red, calcareous, soft Shale (10) greenish gray to olive gray, clayey, looks like leached silty underclay Siltstone (20) pale greenish gray				
	525	530	Shale (95) clayey, highly calcareous grayish red to greenish gray, soft, lime pellets; miscellaneous admixture (5)				
	530	540	Siltstone (30) light to medium greenish gray, highly calcareous Shale (65) silty, grayish red to brownish, highly calcareous, slickensided; admixed (5) material				
	540	550	Siltstone (50) as above, to silty shale Shale (50) clayey, light gray, calc. some grayish red, soft, some brown sideritic siltstone				
	550	560	Sandstone (77) grading to siltstone fine to medium, poorly cemented, light mica Shale (3) dark gray, carbon shreds Shale (20) clayey, greenish gray				
	560	565	Sandstone (95) to siltstone as above				
	565	585	Shale (5) grayish red, soft, calc.				

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GEOLOGICAL SURVEY OF OHIO

OIL AND GAS WELL LOG

State.....
 County..... Township..... Quadrangle.....
 Lot..... Quarter..... Tract..... Section..... NW..... NE..... SW.....
 Measured..... Feet From..... Line And..... Feet From..... Line Of.....
 Land Owner Chas. Ammon Well No. 1 Date Started.....
 Operator..... Well No..... Date Completed.....
 Elevation Bar. S. L. Total Depth..... Plugged Back.....
 Formation Drilled To..... Producing Form..... Init. Prod. Nat.....
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Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
	585	590	Sandstone (95) as above, light mica, chlorite, poorly cemented, shale and siltstone (5)				
	590	595	Shale (80) grading to siltstone, medium greenish gray, micaceous, calcareous				
			Shale (5) med. gray, carbon shreds, silty				
			Sandstone (15) as above				
	595	600	Shale (55) med. to light gray, clayey and silty, mottled, structureless				
			Siltstone (30) to silty shale, med. to light greenish gray				
			Shale (5) carbonaceous, med. to dark gray				
			Siltstone (10) med. greenish gray, as above				
	600	605	Limestone (50) light gray to grayish tan, dense, some ostracods, silty, several beds				
			Shale (35) silty, highly calcareous, light gray, limestone pellets				
			Shale (10) grayish red, calcareous				
			Shale (5) gray, carb. debris				
	605	610	Shale (10) gray, silty, as above, some greenish inclusion				
			Limestone (50) as above, some pyrite, crystalline inclusions, ostracods				
			Siltstone (40) shaley to siltstone, grayish brown, drab				
			Top of greenish yellow unit				
	610	615	Shale (85) light gray, clayey, calcareous, soft, grading to Siltstone, shaley, pale green, calcareous				
			Limestone (15) white to pale green to medium greenish gray, ostracods				
	615	620	Shale (45) medium greenish gray to grayish tan to yellowish gray, clayey lime pellets, variegated				
			Siltstone (15) medium greenish gray, pyritic, calcareous				
	620	625	Siltstone (20) same as above, abundant pyrite				
			Shale (60) variegated pink, drab grayish red to grayish yellow (20) very clayey, calcareous				
	625	630	Shale (45) variegated, as above				
			Siltstone (35) grading to tan				
			Shale (20) purplish to drab clayey				
	630	635	Shale (55) variegated, as above				
			Siltstone (25) to sandstone, as above				
			Limestone (5) grayish tan				
			Shale (15) medium gray, silty, carbon flecks				
	630	640	Shale (65) variegated, as above,				
			Siltstone (20) to sandstone as above				
			Shale (15) medium gray, carbon flecks				
			Top of reddish unit				

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Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
	640	645	Shale (85) drab grayish red, finely silty, fairly hard, slightly calcareous				
			Shale (15) gray, clayey, carbon flecs				
	645	650	Shale (90) grayish red, as above				
			Shale (10) variegated to light gray				
	650	655	Shale (85) grayish red, as above, more clayey				
			Siltstone (10) medium greenish gray				
			Limestone (5) variegated, gray to grayish red				
	655	665	Shale (85) grayish red, weakly calcareous, brighter color than above				
			Limestone (15) silty, drab greenish gray, very impure, dense, grading to grayish tan, with ostracods. Other shell fragments of uncertain nature, some look marine				
	665	675	Sandstone (90) white to light greenish gray, fine grained poorly cemented micaceous, chloritic				
			Siltstone (5) medium greenish gray				
			Shale (5) grayish red				
	675	685	Sandstone (93) as above				
			Siltstone (2) as above				
			Shale (5) as above				
	685	690	Shale (80) grayish red, clayey, variegated, calcareous, very soft, greenish gray to grayish yellow				
			Limestone (18) grayish tan, white, variegated pellets and bed fragments				
			Siltstone (2) greenish				
	690	695	Shale (85) variegated light greenish gray to yellowish gray to purplish, abundant lime pellets				
			Limestone (15) bedded and pellets, abundant ostracods				
	695	700	Shale (100) variegated, as above, gray to greenish gray, silty, abundant fossil shells, spines, etc. bryozoan fragments, brachioid (?) spines and spine bases, rugose shells appear to be brachiopods. No crinoid stems seen. A marine (?) shale, very calcareous				
			Top of red unit				
	700	710	Shale (90) grayish red, to greenish gray and yellow, soft, clayey, highly calcareous, numerous variegated, irregular lime pellets (10) some lime fragments				
	710	715	Shale (90) grayish red, as above, abundant lime knots				
			Shale (10) greenish gray, silty				
	715	725	Shale (95) grayish red, as above, large lime pellets				
			Siltstone (5) medium greenish gray				
	725	730	Shale (100) bright grayish red, very clayey, highly calcareous, small lime pellets				
	730	735	Shale (95) same as above				
			Siltstone (5) and silty shale, medium greenish gray				
	735	740	Shale (95) as above				
			Limestone (5) light gray to yellowish tan, bed fragments				
	740	745	Shale (95) as above				
			Siltstone (5) and shale				
	745	750	Shale (97) as above, variegated greenish gray and grayish yellow, more green than above				
			Shale (3) gray, carbon flecs				
	750	760	Shale (100) bright grayish, red, as second unit above, more silty, few lime pellets, calcareous				
	760	765	Siltstone (80) pale greenish gray, shaley, to fine grained sandstone (10) highly calcareous				
			Shale (10) grayish red, silty, calcareous				

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GEOLOGICAL SURVEY OF OHIO

OIL AND GAS WELL LOG

State.....
 County Township..... Quadrangle.....
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Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
	765	770	Sandstone (50) fine grained, greenish gray, micaceous chlorite, Siltstone (20) to sandstone, as above Shale (30) bright grayish red to grayish yellow to light gray, calc.				
	770	775	Shale (55) silty, drab grayish red, well laminated, grading to grayish green, gray, yellow non laminated, calcareous shale (35)				
	775	785	Siltstone (10) greenish gray to tan Shale (100)				
	785	790	Shale (85) silty, drab grayish red, as above Siltstone (10) light greenish gray, calcareous Shale (5) grayish red, silty				
	790	800	Siltstone (90) to fine grained sandstone, medium greenish gray, well cemented, weakly calcareous Siltstone (5) gray, calcareous or silty limestone Shale (3) light mottled greenish gray, highly calcareous				
	800	810	Shale (45) silty, non calcareous, grayish red to medium greenish gray, hard, laminated Siltstone (50) to sandstone, as above Shale (5) variegated, as above				
	810	815	Siltstone (50) as next above, medium greenish Shale (15) grayish red, silty Shale (35) grayish red, greenish yellow and gray, lime pellets				
	815	820	Siltstone, (70) as above, abundant minute iron spherules, non calcareous Shale (25) variegated, calcareous, as above Limestone (5) grayish tan to greenish gray, finely silty, shaly, chloritic				
AMES	820	825	Siltstone (40) medium to light greenish gray Limestone (35) light grayish tan, silty, bright green, chloritic, to greenish gray, pyritic, marine fossils, mainly brachiopods, some crinoid stems Shale (25) grayish red, variegated, as above				
	825	830	Siltstone (30) same as above Limestone (25) same as above, forams Shale (40) grayish red, some bright, silty, as above Siltstone (5) olive green				
	830	835	Limestone (83) white, clayey, highly calcareous, abundant fine pyritic granules Coal (7) impure Shale (10), carbonaceous and fleeced				

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Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
	835	840	Shale (80) grayish red variegated, calcareous, grayish yellow, drab, line pellets variegated grayish Limestone (10) light gray to grayish tan, bedded, silty Limestone (5) white, clayey, as above; coal and lime fragments (5)				
	840	845	Shale (90) grayish red, as above; misc. from above (10)				
	845	850	Shale (95) grayish red to greenish gray to light gray, highly calcareous Limestone (10) pellets of above				
	850	855	Shale (90) same as above				
	855	860	Shale (95) bright grayish red, some gray and yellow, highly calcareous Limestone (5) white to tan, ostracods				
	860	870	Shale (55) grayish red, as above increased lime pellets (15), spirorbis; Shale (25) light gray, silty, weakly calcareous Limestone (5) as above, spirorbis				
	870	880	Shale (50) grayish red to greenish gray, as above, spirorbis Siltstone (35) medium greenish gray to grayish green, grading to sandstone (10) greenish gray, all chloritic, micaceous, some siltstone olive green mottled Shale (5) highly calcareous, white, pyritic				
	880	885	Siltstone (60) as above, less green grading to sandstone Shale (35) grayish red, as above, silty, greenish gray to tan Limestone (5) knots from shale				
	885	890	Shale (50) drab grayish red, silty, to greenish gray, as above Sandstone (10) to siltstone, as above Limestone (10) grayish tan, pellecypods Shale (5) silty to sandy, clayey, carb. residue, light gray Siltstone (25) grayish red, drab				
Portersville ls (?)	890	900	Shale (30) clayey, light gray, carb. residue Shale (50) light gray, silty, carb. residue Coal (10) blocky, and carb. shale Shale (10) grayish red, greenish gray and yellow gray				
	900	905	Shale (30) gray, silty Shale (60) grayish red, variegated as above, with grayish tan ls. pellets (10) Misc. (10)				
	905	915	Shale (80) grayish red, as above, drab variegated, calc. Siltstone (15) fine to coarse, green to light greenish gray Limestone (5) white to grayish tan, may be knots from shell				
	915	920	Sandstone (85) grading to siltstone medium greenish gray, iron (?) sideritic spherules, highly calcareous, mod. cement Shale (15) grayish red, as above				
	920	925	Siltstone (85) to sandstone, as above Shale (45) grayish red, as above				
	925	930	Shale (30) silty, pale greenish gray, grading to siltstone Shale (40) variegated grayish red, as above Siltstone (20) to sandstone, as above Limestone (10) grayish tan, variegated, possibly marine				
	930	935	Sandstone (65) light greenish gray, with considerable dark mica Siltstone (8) med. greenish gray, with green Shale (20) grayish red, bright, to grayish yellow, calc. Carb. Shale (2) Shale (5) light gray, silty				

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GEOLOGICAL SURVEY OF OHIO

OIL AND GAS WELL LOG

State.....
 County Washington Township Warren Quadrangle.....
 Lot..... Quarter..... Tract..... Section..... NW..... NE..... SW.....
 Measured..... Feet From..... Line And..... Feet From..... Line Of.....
 Land Owner Chas. Ammon Well No. 1 Date Started.....
 Operator..... Well No..... Date Completed.....
 Elevation Bar. 930' S. L. Total Depth..... Plugged Back.....
 Formation Drilled To..... Producing Form..... Init. Prod. Nat.....
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 Init. Rock Press..... Abandoned.....
 Casing Record Renton

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
	935	940	Sandstone (70) same as next above, weakly calcareous, well cemented, dark mica Shale (20) grayish red to greenish gray, highly calcareous Shale (5) light gray, white, clayey Siltstone (5) as above				
	940	945	Sandstone (90) as above, finer grained Shales (10) gray and variegated				
	945	950	Sandstone (9) as above, mainly fine grained, some medium to coarse Shale (5) grayish red Shale (5) gray, carbon flecs				
	950	955	Siltstone (90) med. greenish gray, fine disseminated pyrite Sandstone (2) as above Shale (5) grayish red, as above Shale (3) gray ? iron stained				
	955	960	Shale (40) variegated grayish red to light gray highly calc. Siltstone to sandstone (40) as above Limestone (20) marine gray to grayish tan, fossil shells brachiopods				
	960	970	Siltstone (80) med. gray, carb. flecs, grading to Shale (5) silty, light gray Limestone (10) as above, silty, some fossils Shale (3) grayish red				
	970	975	Siltstone (35) as above Shale (50) grayish red, some greenish yellow, calc. Shale (3) light gray, clayey, soft Shale (2) carbonaceous				
	975	985	Siltstone (83) med. to light gray, shaley Shale (10) med. gray, carb. debries Coal (7) micro banded ?, impure, somewhat shaley				
	985	990	Shale (90) grayish red, THE DIVISION OF GEOLOGICAL SURVEY MAKES NO AFFIRMATION CONCERNING THE COMPLETENESS AND ACCURACY OF THIS INFORMATION. Siltstone (5) shaley, Coal (5)				
	990	1000	Shale (85) variegated, greenish to grayish red, lime pellets Siltstone (15) pale to medium greenish gray				
	1000	1005	Siltstone (50) med. to light greenish gray Shale (45) variegated, as above, soft, cleyey, ls. pellets Limestone (5) dark to black				
	1005	1015	Siltstone (20) as above Shale (70) variegated, drab greenish, highly calcareous Shale (10) greenish gray, silty				

Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
	1015	1025	Shale (65) grayish red to greenish gray, clayey, as above Shale (10) silty, gray, clayey Siltstone (5) greenish, highly calcareous Sandstone (20) med. grained, white quartz, chloritic, micaceous				
	1025	1030	Sandstone (95) as above, very poorly cemented, rounded grains				
	1030	1035	Sandstone (95) as above				
	1035	1040	Sandstone (95) as above				
	1040	1045	Sandstone (10) as above, some fairly coarse Shale (30) light gray, clayey, slightly calcareous Coal (frag.) impure Siltstone (60) medium gray, fine grained, carbon flecks and cuticles				
	1045	1050	Siltstone (60) as above Shale (30) light gray, silty, micaceous, as above				
	1050	1055	Siltstone (85) to silty shale, med. gray, some sideritic Shale (10) light gray, clayey Shale (5) variegated				
	1055	1060	Siltstone (95) to fine grained Sandstone, light greenish gray to tan Shale (5) grayish red to light gray				
	1060	1065	Siltstone (95) to sandstone as above, sideritic spherule Shale (5) variegated				
	1065	1070	Siltstone (85) to silty shale med. to light gray, greenish Dolomitic Limestone (5) dense, silty Shale (10) silty, gray to variegated				
	1070	1074	Siltstone (85) light gray, weakly calcareous Dolomitic Limestone (10) as above Shale (5) foreign				
	1074	1080	Siltstone (30) as above Sandstone (65) gray, white, tan, fine grained, well cemented, calcareous Dolomitic Limestone (5) as above				
	1080	1085	Sandstone (70) as above Siltstone (30) as above Coal (fragments)				
	1085	1090	Siltstone (80) med. greenish gray Shale (10) gray Coal (2) and carb shale				
	1090	1095	Siltstone (77) med. to light greenish, as above Shale (20) gray, as above Shale (3) dark to carb.				
	1095	1100	Siltstone (75) to fine sandstone white to greenish to tan Siltstone (15) as above Coal (3) Shale (2) carbonaceous Limestone (5) marine; dark, silty, impure, few fossils, brachiopods				
	1100	1105	Sandstone (80) med. to fine grained, grading to coarse Siltstone, gray to greenish gray, drab Limestone (15) grayish tan to brown, mottled, sandy in part, fossiliferous, unidentifiable fragments Shale (5) and coal				
	1105	1110	Siltstone (85) to sandstone as above Limestone (7) as above Shale (5) gray, with carbon flecks, silt Shale (3) and coal				

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Sample #50

GEOLOGICAL SURVEY OF OHIO

OIL AND GAS WELL LOG

State.....
 County..... Township..... Quadrangle.....
 Lot..... Quarter..... Tract..... Section..... NW..... NE..... SW.....
 Measured..... Feet From..... Line And..... Feet From..... Line Of.....
 Land Owner Chas. ammon..... Well No..... Date Started.....
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 Elevation Bar..... S. L..... Total Depth..... Plugged Back.....
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Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
	1110	1115	Siltstone (40) as above Shale (40) gray, carbon flecs, silty Limestone (20) grayish tan, brown, reddish tan, silty, fairly dense				
	1115	1125	Sandstone (85) med. to fine grained, mod. cement, micaceous, calcareous Siltstone (10) as above				
	1125	1135	Shale (5) light gray, silty, pyritic, some brownish mottling Shale (90) med. to dark gray, silty Sandstone (5) as above Siltstone (2) dolomitic				
	1135	1145	Shale (3) carbonaceous, and coal Shale (20) dark gray, as above Coal (1) and carb. shale Siltstone (77) light greenish gray, ironstain Siltstone (2) dolomitic				
	1145	1155	Siltstone (70) as above Coal (2) and carb. shale Sandstone (25) fine grained, well cemented, calcareous Siltstone (3) dolomitic, tan to red to resinous brown				
	1155	1165	Siltstone (95) as above Sandstone (3) as above Shale (2) dark, calcareous, mottled				
	1165	1170	Siltstone (14) greenish gray, as above Siltstone (60) nearly white, yellow iron stain, clayey Shale (25) gray, soft Coal (1) and carb. shale				
	1170	1180	Shale (75) dark to med. gray, silty Shale (23) light gray, clayey, fine pellets Siltstone (2) dolomitic, dark reddish brown				
	1180	1190	Siltstone (82) med. greenish gray to light gray Shale (10) light gray, clayey Shale (3) dark, as above; miscellaneous (5)				
	1190	1200	Siltstone (58) as above, abundant iron spherules, silt to med. sand size Sandstone (15) fine grained, micaceous, light gray Siltstone (20) clayey, white Shale (5) gray, carbonaceous, plant fossils Coal (2)				
	1200	1210	Siltstone (75) as above Sandstone (15) as above Shale (7) gray, carbonaceous Coal (3)				

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Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
	1210	1220	Siltstone (82) as above, to fine grained sandstone Shale (15) gray, silty, light to dark, Coal (3)				
	1220	1230	Siltstone (75) med. gray to greenish gray Shale (5) light to med. gray, clayey Siltstone (20) to sandstone as above				
	1230	1240	Siltstone (95) as above, gray to greenish gray to brown, some spherulites and carbon laminations				
	1240	1250	Siltstone (95) as above				
	1250	1265	Siltstone (90) as above Siltstone (2) dolomitic Shale (5) light gray, silty				
	1265	1275	Shale (30) light gray, as above Shale (25) med. gray, fossil plants Coal (25) Shale (10) carbonaceous Siltstone (10) as above				
	1275	1285	Siltstone (85) fine to coarse, med. greenish gray, weakly calcareous Sandstone (15) white, fine grained				
	1285	1295	Siltstone (60) as above Shale (10) silty, med. to dark gray, carbonaceous Coal (2) Siltstone (25) to sandstone, light gray				
	1295	1305	Siltstone (85) as above Siltstone (15) to sandstone, as above				
	1305	1315	Siltstone () as above Siltstone (10) to sandstone, as above Limestone (5) dolomitic				
	1315	1325	Siltstone (10) dark gray Sandstone (90) to siltstone, gray to grayish brown				
	1325	1335	Sandstone (20) light gray, well cemented Sandstone (75) to siltstone, med. gray Shale (5) silty, light gray				
	1335	1345	Siltstone (60) med. gray, carbonaceous residue Sandstone (25) to siltstone, as above Shale (10) light gray, clayey Coal (2), Shale (3) carbonaceous				
	1345	1355	Siltstone (90) med. gray, fine to coarse; Shale (3) gray, mottled Sandstone (3) med. to fine well cemented, white Coal (1)				
	1355	1360	Sandstone (90) as above, micaceous, chloritic, calc. cement Shale (5) light gray, silty Miscellaneous (5)				
	1360	1365	Sandstone (75) as above Shale (15) greenish to dark gray dolomitic siltstone (20) or dolomite (?), granular				
	1365	1375	Siltstone (80) med. gray, shaley Shale (15) dark, carbonaceous Siltstone (5) Dolomitic (not as above)				
	1375	1385	Shale (95) to siltstone, light to med. gray, clayey carbonaceous debris Shale (5) dark				
	1385	1390	Shale (70) to siltstone, as above Sandstone (30) fine grained, light gray, spherulites				
	1390	1400	Sandstone (85) as above, spherulites Shale (10) med. gray, silty Coal (5)				

ANNA SPRING
2001-2002

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OIL AND GAS WELL LOG

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Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
	1400	1415	Sandstone (75) as above, carbon flecs Siltstone (24) med. to light gray, carbon flecs Coal (1) and carb. shale				
	1415	1425	Shale (90) silty, light to med. gray Sandstone (5) fine grained, well cemented Siltstone (2) dolomitic, red brown Siltstone (3) and coal				
	1425	1435	Siltstone (75) med. gray, dark, grading to fine sandstone Sandstone (25) med. to fine calc. cement poorly cemented, white to light gray				
	1435	1445	Shale (90) to Siltstone, med. to light gray, red brown spherules (aggregated) Siltstone (2) dolomitic, reddish brown				
	1445	1455	Siltstone (90) med. gray, fine to coarse; Sandstone (10) light gray, poorly cemented, possibly siltstone partings				
	1455	1465	Sandstone (50) as above, minor chlorite, yellow to red iron stain Siltstone (46) as above Shale (2) silty, light gray, clayey Limestone, white to light grayish tan, dense, 3-1/8" fragments				
	1465	1475	Sandstone (75) as above Siltstone (24) as above Limestone (rare) dense, gray Shale (rare) light gray, soft & clayey				
	1475	1485	Sandstone (95) white, poorly cemented, chloritic, little mica, med. to fine grained, yellow-red iron stain				
	1485	1490	Sandstone (93) as above				
	1490	1505	Siltstone (95) coarse to fine, grading to shale med. to dark, gray, some light gray Sandstone (20) as above, carbonaceous debris, non calc. cement				
	1515	1525	Siltstone (90) as above Sandstone (7) to siltstone, as above, finer Siltstone (3) dolomitic				
	1525	1535	Sandstone (35) as above Siltstone (64) as above Siltstone (1) dolomitic				
	1535	1545	Sandstone (75) med. grained, fine and coarse, pebbles, poorly cemented, chlorite and dark mica, slightly calcareous Siltstone (25) as above				
	1545	1550	Sandstone (85) as above, carbonaceous debris and dark mica pebbles				

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Formation	Top	Bottom	Remarks	Formation	Top	Bottom	Remarks
			Siltstone (10) as above				
	1550	1560	Shale (5) silty, clayey, light gray				
			Sandstone (15) as above				
	1560	1565	Shale (85) to siltstone, med. to dark gray, silty, hard				
			Sandstone (87) medium, some coarse and fine, light gray, chloritic, some mica				
			Siltstone (8) to shale, as above				
	1565	1575	Siltstone (5) light gray to tan				
			Sandstone (95) as above				
			Siltstone (31) to shale, as above				
			Siltstone (2) as above				
	1575	1585	Sandstone (70) as above, a few small pebbles, to 1/8"				
			Siltstone (28) to shale, as above, slightly carbonaceous				
			Shale (2) silty, light gray to tan				
	1585	1595	Sandstone (70) pebbles, as above				
			Siltstone (25) to shale, as above				
			Shale (5) silty, as above				
	1595	1600	Sandstone (60) as above, pebbles clear to milky				
			Siltstone (35) to shale, as above med. gray to light gray				
			Shale (5) silty, as above				
	1600	1605	Sandstone (97) as above, pebbles, milky, frosted and clear, angular and rounded, misc. (3)				
	1605	1610	Sandstone (97) as above				
	1610	1615	Sandstone (65) as above				
			Siltstone (35) med. gray				
	1615	1620	Sandstone (70) as above				
			Shale (25) silty, light gray, clayey, to sandy				
			Shale (5) dark				
	1620	1625	Sandstone (90) as above				
			Shale (5) dark				
			Shale (5) light				
	1625	1635	Sandy tone (90) as above, medium grained, pure, some iron stain				
	1635	1640	Sandstone (98) as above				
	1640	1650	Sandstone (98) as above				
	1650	1660	Sandstone (95) as above				
			Siltstone (4) greenish				
	1660	1665	Sandstone (90) as above				
			Siltstone (5) as above				
			Shale (5) light gray				
	1665	1675	Sandstone (95) as above, limonite scale				
			Siltstone (3) as above				
	1675	1680	Sandstone (97) as above				
	1680	1685	Sandstone (97) as above, finer grained				
	1685	1695	Sandstone (98) as above, med. to fine grained, some pebbles				
	1695	1700	Sandstone (64) as above, coarse grained, well rounded, coarse conglomeratic,				
			Siltstone (25) med. gray, fine to coarse				
			Shale (10) gray, silty				
			Limestone (rare) white to light gray to brownish, bryozoan				
	1700	1710	Siltstone (80) medium gray to dark, considerable pyrite				
			Shale (10) light gray layer				
			Sandstone (5) as above				
			Siltstone (5) sideritic				
	1710	1715	Shale (85) silty, to siltstone, med. gray				
			Sandstone (5) grading to siltstone, brown, dolomitic ?, sideritic?, pyrite				
			Siltstone (5) dolomitic or sideritic, red brown				
			Shale (5) gray				

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CHARLES AMMON NO. 1 WELL.

P 2238
5450

Warren Township, Washington County, Ohio.

By Ross and Yeager.

Located 400 feet from N. and E. lines of Section 29 and 5.2 mi. S. of 39° 30' and 2.0 mi. W. of 81° 20' - NE - Parkersburg Quadrangle.

Elevation, 920' Aneroid.

Drilling commenced March 31, 1941; completed June 4, 1941.

Samples from 0 to 4650' donated by The Ohio Oil Company.

Dry hole; plugged and abandoned.

Section based on examination of samples from 1259 to 4650' by C. N. Apssouri and J. H. C. Martens.

Record from Martens Dec. 2, 1943.

Top. Bottom. Thickness.

PENNSYLVANIAN AND MISSISSIPPIAN, 798 FEET (Described)

Top.	Bottom.	Thickness.	Description
1259	- 1315	56	Shale, dark-gray
1315	- 1335	20	Siltstone, dark-gray, sandy, with some siderite
1335	- 1355	20	Siltstone, light-gray to grayish-green, sandy; also some gray shale and very fine white sandstone
1355	- 1365	10	Sandstone, white, medium-grained, with siderite, mica, chlorite, and carbonaceous material
1365	- 1390	25	Shale, light- to dark-gray
1390	- 1400	10	Siltstone, nearly white, sandy, with siderite spherulites
1400	- 1415	15	Sandstone, white, fine, micaceous
1415	- 1425	10	Shale, gray to dark-gray, with some sandstone like that above, and a little coal
1425	- 1435	10	Siltstone, gray, 70%; light-gray, very fine sandstone, 30%
1435	- 1455	20	Shale, gray
1455	- 1465	10	Sandstone, light-gray, very fine, with specks of siderite
1465	- 1490	25	Sandstone, white, fine
1490	- 1505	15	Shale, gray
1505	- 1515	10	Shale, gray, 50%; white to gray siltstone and very fine sandstone, 5%
1515	- 1530	15	Shale, gray
1530	- 1550	20	Sandstone, white, fine, with mica, chlorite, siderite, and carbonaceous matter
1550	- 1560	10	Siltstone, dark-gray, shaly
1560	- 1575	15	Sandstone, nearly white, fine
1575	- 1600	25	Sandstone, white, medium-grained, 80%; gray shale and siltstone, 20%
1600	- 1610	10	Sandstone, white, medium-grained, nearly all quartz
1610	- 1625	15	Sandstone, white, coarse, nearly all quartz
1625	- 1660	35	Sandstone, white, fine- to medium-grained, nearly all quartz, with crystal faces on many grains; moderate amount of rust stain
1660	- 1695	35	Sandstone, white, coarse
1695	- 1700	5	Sandstone, white, very coarse
1700	- 1775	75	Siltstone and shale, gray
1775	- 1820	45	Siltstone, white to gray, coarse, grading into very fine sandstone; also some gray shale
1820	- 1835	15	Sandstone, nearly white, very fine, silty
1835	- 1900	65	Siltstone and shale, gray
1900	- 1910	10	No sample
1910	- 2015	105	Siltstone and shale, gray
2015	- 2045	30	Shale, very dark brownish gray (Sunbury Shale)
2045	- 2056	11	Sandstone, white, very fine, moderately calcareous (Berea Sandstone)

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(OVER)

CHARLES AMMON NO. 1 WELL (Continued).

Top. Bottom. Thickness.

DEVONIAN SHALES, 2347 FEET

2056 - 2070	14	Siltstone, gray
2070 - 2145	75	Siltstone and shale, gray to greenish
2145 - 2165	20	Siltstone, gray, 60%; brownish-red shale, 40%
2165 - 2185	20	Shale, light-gray
2185 - 2195	10	Shale, light-gray to greenish-gray, 50%; red shale, 50%
2205 - 2220	15	Shale, greenish-gray
2220 - 4360	2140	Samples not examined
4360 - 4403	43	Shale, dark-gray to very dark gray
HUNTERSVILLE CHERT, 141 FEET		
4403 - 4544	141	Chert and cherty limestone, not described in detail
ORISKANY SANDSTONE, 38 FEET		
4544 - 4570	26	Sandstone, white, very fine
4570 - 4582	12	Sandstone, white, very fine, highly calcareous
HELDERBERG GROUP, 68+ FEET		
4582 - 4650	68	Limestone, brown to light-brown, cherty
4650		Total depth

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<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>dolomite</u>	<u>20%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to very finely crystalline. As above.		
2230 - 2235	<u>dolomite</u>	<u>65%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to very finely crystalline. 1% white and light tan, opaque, porcelaneous chert. Very sparse, glauconite grains, clear quartz blebs and coarse, clear dolomite crystals. Vugs that are lined with fine to medium dolomite crystals. 1% pin-point vug and larger vug porosity.		
	<u>dolomite</u>	<u>25%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to finely crystalline. As above.		
2235 - 2240	<u>dolomite</u>	<u>90%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. Vugs are that lined with fine, clear dolomite crystals. 1% vug porosity.		
2240 - 2245	<u>dolomite</u>	<u>90%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to very finely crystalline. Stylolitic. 1% pin-point vug porosity.		
2245 - 2250	<u>dolomite</u>	<u>90%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. Stylolitic. Very sparse glauconite grains.		
2250 - 2255	<u>dolomite</u>	<u>80%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>20%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. 2% white and light tan, opaque, porcelaneous and very sparse dull white, pelletal chert. Very sparse vugs that are lined with fine to medium, clear dolomite crystals. 1% pin-point vug porosity.		
2255 - 2260	<u>dolomite</u>	<u>65%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to very finely crystalline. 1% white an light tan, opaque, porcelaneous chert. Very sparse, dull white, tripolitic and pelletal chert. Very sparse vugs that are lined with fine to medium clear dolomite crystals. 1% pin-point vug porosity.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>dolomite</u>	<u>25%</u>	<u>dark tan (10 YR 6/2)</u>
	Microcrystalline to finely crystalline. As above.		
2260 - 2265	<u>dolomite</u>	<u>60%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. Stylolitic. Very sparse vugs that are lined with fine, clear dolomite crystals. 1% pin-point vug porosity.		
	<u>dolomite</u>	<u>30%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to finely crystalline. As above.		
2265 - 2270	<u>dolomite</u>	<u>95%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. Stylolitic. Very sparse vugs that are lined with fine, clear dolomite crystals. 1% pin-point vug porosity.		
2270 - 2275	<u>dolomite</u>	<u>80%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. Sparse, coarse, clear dolomite crystals and very fine specks of iron oxide. 1% pin-point vug porosity.		
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline. As above.		
2275 - 2280	<u>dolomite</u>	<u>40%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline. Stylolitic. Sparse, vugs that are lined with fine clear dolomite crystals. 1% pin-point vug porosity.		
	<u>dolomite</u>	<u>30%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>30%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. As above.		
2280 - 2285	<u>dolomite</u>	<u>85%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline. Stylolitic. 1% pin-point vug porosity.		
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. As above.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to very finely crystalline. Stylolitic. Very sparse, very fine embedded glauconite grains. 1% pin-point vug porosity.		
2285 - 2290	<u>dolomite</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. Very sparse, very fine, embedded glauconite grains. Very sparse vugs that are lined with clear dolomite crystals. 1% pin-point vug porosity.		
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline. As above.		
2290 - 2295	<u>dolomite</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. Very sparse vugs that are lined with clear dolomite crystals. 1% pin-point vug porosity.		
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline. As above.		
2295 - 2300	<u>dolomite</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. Very sparse, very fine, embedded glauconite grains. Very sparse vugs that are lined with clear dolomite crystals. 1% pin-point vug porosity.		
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline. As above.		
2300 - 2305	<u>dolomite</u>	<u>65%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline. Very sparse pyrite and clear quartz blebs. A parting of pyritic and glauconitic, dark green shale. Stylolitic. Vugs that are lined with fine, clear dolomite crystals. 1% pin-point vug porosity.		
	<u>dolomite</u>	<u>25%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to very finely crystalline. As above.		
2305 - 2310	<u>dolomite</u>	<u>95%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. Stylolitic. Very sparse, disseminated pyrite		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
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blebs. Very sparse vugs that are lined with fine, clear dolomite crystals. 1% pin-point vug porosity.

2310 - 2315	dolomite	50%	light tan (10 YR 8/2)
	dolomite	45%	light tan (10 YR 7/2)
	dolomite	5%	dark tan (10 YR 6/2)
Microcrystalline to finely crystalline. 1% light tan, opaque, porcelaneous chert. Very fine crystals of disseminated pyrite. Very sparse, coarse pyrite crystals and blebs. Vugs that are lined with fine, clear dolomite crystals. 1% pin-point vugs and larger vug porosity.			
2315 - 2320	dolomite	75%	light tan (10 YR 8/2)
	dolomite	25%	light tan (10 YR 7/2)
Microcrystalline to finely crystalline. Very fine crystals of disseminated pyrite. Very sparse, coarse pyrite crystals and blebs. Vugs that are lined with fine, clear dolomite crystals. 1% pin-point vug and larger porosity.			
2320 - 2325	dolomite	90%	light tan (10 YR 8/2)
	dolomite	10%	light tan (10 YR 7/2)
Microcrystalline to finely crystalline. Very fine crystals of disseminated pyrite. Very sparse, coarse pyrite crystals and blebs. Vugs that are lined with fine, clear dolomite crystals. 1% pin-point vug and larger vug porosity.			
2325 - 2330	dolomite	95%	light tan (10 YR 8/2)
	dolomite	5%	light tan (10 YR 7/2)
Microcrystalline to finely crystalline. Very fine crystals of disseminated pyrite. Very sparse, coarse pyrite crystals and blebs. Vugs that are lined with fine, clear dolomite crystals. 1% pin-point vug and larger porosity.			
2330 - 2335	dolomite	85%	light tan (10 YR 8/2)
	dolomite	15%	light tan (10 YR 7/2)
Microcrystalline to finely crystalline. Very fine crystals of disseminated pyrite. Very sparse, coarse pyrite crystals and blebs. Sparse, clear quartz crystals and blebs. Vugs that are lined with fine, clear dolomite crystals. 1% pin-point vug and larger vug porosity.			
2335 - 2340	dolomite	75%	light tan (10 YR 8/2)
	dolomite	25%	light tan (10 YR 7/2)

SAMPLE DEPTH ROCK TYPE PER CENT COLOR

Microcrystalline to finely crystalline. Very fine crystals of disseminated pyrite. Very sparse, coarse pyrite crystals and blebs. Also, very sparse pieces of the dolomite have a slight pink discoloration. Vugs that are lined with fine to medium, clear dolomite crystals. 1% pin-point vug and larger vug porosity.

2340 - 2345 dolomite 55% light tan (10 YR 7/2)
dolomite 45% light tan (10 YR 8/2)

Microcrystalline to finely crystalline. Very fine crystals of disseminated pyrite. Vugs that are lined with fine to medium, clear dolomite crystals. 1% pin-point vug and larger vug porosity.

2345 - 2350 dolomite 80% light tan (10 YR 8/2)
dolomite 20% light tan (10 YR 7/2)

Microcrystalline to finely crystalline. Very fine crystals of disseminated pyrite. Very sparse pieces have a very slight pink discoloration. Vugs that are lined with fine to medium, clear dolomite crystals. 1% pin-point vug and larger vug porosity.

2350 - 2355 dolomite 65% light tan (10 YR 7/2)
dolomite 35% light tan (10 YR 8/2)

Microcrystalline to finely crystalline. Very sparse pieces of the dolomite have a very slight pink discoloration. Very fine crystals of disseminated pyrite. A piece of light tan, opaque, porcelaneous chert (cavings?). Vugs that are lined with fine to medium, clear dolomite crystals. 1% pin-point vug and larger vug porosity.

2355 - 2360 dolomite 75% light tan (10 YR 8/2)
dolomite 25% light tan (10 YR 7/2)

Microcrystalline to finely crystalline. Sparse disseminated pyrite crystals. Vugs that are lined with fine to medium, clear dolomite crystals. 1% pin-point vug and larger vug porosity.

2360 - 2365 dolomite 98% light tan (10 YR 8/2)
dolomite 2% light tan (10 YR 7/2)

Microcrystalline to finely crystalline. Sparse disseminated pyrite crystals. Vugs that are lined with fine to medium, clear dolomite crystals. 1% pin-point vug and larger vug porosity.

2365 - 2370 dolomite 95% light tan (10 YR 8/2)
dolomite 5% light tan (10 YR 7/2)

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
			Microcrystalline to finely crystalline. Sparse disseminated pyrite crystals. Vugs that are lined with fine to medium, clear dolomite crystals. 1% pin-point vug and larger vug porosity.
2370 - 2375	<u>dolomite</u>	<u>85%</u>	<u>white (N9)</u>
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 8/2)</u>
			Microcrystalline to medium crystalline. Very sparse very fine crystals of disseminated pyrite. Very sparse glauconite grains. 1% pin-point vug and intercrystalline porosity.
2375 - 2380	<u>dolomite</u>	<u>85%</u>	<u>white (N9)</u>
			Microcrystalline to medium crystalline. Very sparse, very fine crystals of disseminated pyrite. Very sparse glauconite grains. Also very sparse pieces have a pink discoloration. 1% pin-point vug and intercrystalline porosity.
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 8/2)</u>
			Microcrystalline to medium crystalline. Cavings?
2380 - 2385	<u>dolomite</u>	<u>90%</u>	<u>white (N9)</u>
			Microcrystalline to medium crystalline. Very sparse very fine crystals of disseminated pyrite. 1% pin-point and intercrystalline porosity.
	<u>dolomite</u>	<u>5%</u>	<u>very light gray (N8)</u>
			Microcrystalline to very finely crystalline. As above except, no porosity.
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
			Microcrystalline. Cavings?
2385 - 2390	<u>dolomite</u>	<u>85%</u>	<u>white (N9)</u>
			Microcrystalline to medium crystalline. Very sparse, very fine crystals of disseminated pyrite, also fine pyrite crystals and blebs. 1% pin-point and intercrystalline porosity.
	<u>dolomite</u>	<u>10%</u>	<u>very light gray (N8)</u>
			Microcrystalline to very finely crystalline. As above except, no porosity.
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
			Microcrystalline. Cavings?
2390 - 2395	<u>dolomite</u>	<u>90%</u>	<u>white (N9)</u>
	<u>dolomite</u>	<u>5%</u>	<u>very light gray (N8)</u>

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
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Microcrystalline to very finely crystalline. Very sparse, very fine crystals of disseminated pyrite and glauconite grains. A parting of green, micaceous, glauconitic, dolomitic shale. 1% vug porosity in the (N9).

dolomite 5% light tan (10 YR 8/2)
Microcrystalline to very finely crystalline.
Cavings?

2395 - 2400

dolomite 98% white (N9)

Microcrystalline to very finely crystalline. Very sparse, very fine crystals of disseminated pyrite and glauconite grains. A parting of green, micaceous, glauconitic, dolomitic shale. 1% vug porosity in the (N9).

dolomite 2% light tan (10 YR 8/2)
Microcrystalline to very finely crystalline.
Cavings?

2400 - 2405

dolomite 98% white (N9)

Microcrystalline to medium crystalline. Very sparse, very fine crystals of disseminated pyrite and glauconite grains. Sparse, coarse, clear dolomite crystals. A piece of white, opaque, porcelaneous chert (cavings)? 1% pin-point vug and larger vug porosity in the (N9).

dolomite 2% light tan (10 YR 8/2)
Microcrystalline to very finely crystalline.
Cavings?

2405 - 2410

dolomite 55% light tan (10 YR 8/2)
dolomite 45% white (N9)

Finely to medium crystalline. Compact. Sparse pyrite crystals.

2410 - 2415

dolomite 80% light tan (10 YR 8/2)

Finely to medium crystalline. 1% pin-point vug and larger vug porosity.

dolomite 15% light gray (N6)
Microcrystalline to very finely crystalline.
Cavings?

dolomite 5% white (N9)
Microcrystalline to medium crystalline. 1% pin-point vug and larger vug porosity. Cavings?

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
2415 - 2420	<u>dolomite</u>	<u>40%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>40%</u>	<u>dark tan (10 YR 6/2)</u>
	Finely to medium crystalline. 1% pin-point vug and larger vug porosity.		
	<u>dolomite</u>	<u>10%</u>	<u>light gray (N6)</u>
	Microcrystalline to very finely crystalline. Cavings?		
	<u>dolomite</u>	<u>10%</u>	<u>white (N9)</u>
	Microcrystalline to medium crystalline. 1% pin-point vug and larger vug porosity. Cavings?		
2420 - 2425	<u>dolomite</u>	<u>55%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>30%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to medium crystalline. Disseminated pyrite crystals. A bleb of light tan, opaque, porcelaneous chert. 1% pin-point vug and larger vug porosity.		
	<u>dolomite</u>	<u>5%</u>	<u>light gray (N6)</u>
	<u>dolomite</u>	<u>5%</u>	<u>white (N9)</u>
	Microcrystalline to very finely crystalline. Cavings?		
2425 - 2435	<u>dolomite</u>	<u>55%</u>	<u>light tan (10 YR 7/2)</u>
	Very finely to medium crystalline. Disseminated pyrite crystals and blebs. Sparse, glauconite grains and crystals of light amber mineral (sphalerite?). 1% pin-point vug and larger vug porosity.		
	<u>dolomite</u>	<u>30%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to medium crystalline. As above.		
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>light gray (N6)</u>
	Microcrystalline to very finely crystalline. As above, except no porosity in the (N6). Cavings?		
	<u>dolomite</u>	<u>5%</u>	<u>white (N9)</u>
	Very finely to medium crystalline. Cavings?		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
2435 - 2440	dolomite dolomite	60% 40%	light tan (10 YR 8/2) light tan (10 YR 7/2)
	Microcrystalline to finely crystalline. Very sparse pieces of dolomite have a slight gray discoloration. Sparse pyrite blebs. A gray shale parting. Vugs that are lined with fine, clear dolomite crystals. 1% pin-point vug porosity.		
2440 - 2445	dolomite dolomite	60% 40%	light tan (10 YR 8/2) light tan (10 YR 7/2)
	Microcrystalline to finely crystalline. Very sparse pieces of dolomite have a slight gray discoloration. Sparse pyrite blebs. A gray shale parting. Vugs that are lined with fine, clear dolomite crystals. 1% pin-point vug porosity.		
2445 - 2450	dolomite dolomite	80% 20%	light tan (10 YR 8/2) light tan (10 YR 7/2)
	Microcrystalline to medium crystalline. Very sparse, very fine crystals of disseminated pyrite. 2% pin-point vug and larger vug porosity.		
2450 - 2455	dolomite dolomite	80% 20%	light tan (10 YR 8/2) light tan (10 YR 7/2)
	Microcrystalline to medium crystalline. Very sparse, very fine crystals of disseminated pyrite. Sparse crystals of light amber mineral (sphalerite?). 2% pin-point vug and larger vug porosity.		
2455 - 2460	dolomite dolomite	60% 40%	light tan (10 YR 8/2) light tan (10 YR 7/2)
	Microcrystalline to medium crystalline. Very sparse, very fine crystals of disseminated pyrite. 2% pin-point vug and larger vug porosity.		
2460 - 2465	dolomite dolomite	90% 10%	light tan (10 YR 8/2) light tan (10 YR 7/2)
	Microcrystalline to medium crystalline. Very sparse, very fine crystals of disseminated pyrite. 2% pin-point vug and larger vug porosity.		
2465 - 2475	dolomite dolomite	65% 35%	light tan (10 YR 8/2) light tan (10 YR 7/2)
	Microcrystalline to medium crystalline. Very sparse, very fine crystals of disseminated pyrite. 2% pin-point vug and larger vug porosity.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
2475 - 2480	<u>dolomite</u>	<u>65%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>35%</u>	<u>light tan (10 YR 7/2)</u>
Microcrystalline to finely crystalline. Very sparse pieces of the dolomite have a slight gray discoloration. Also, very sparse, very fine crystals of disseminated pyrite and crystals of a light amber mineral (sphalerite?). Vugs that are lined with fine, clear dolomite crystals. 1% pin-point vug and larger vug porosity.			
2480 - 2485	<u>dolomite</u>	<u>75%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to medium crystalline. Very sparse pieces of the dolomite have a slight gray discoloration. A dark brown shale parting. Also very sparse, very fine crystals of disseminated and blebs of pyrite. 1% pin-point vug porosity.		
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
Microcrystalline to medium crystalline. As above.			
2485 - 2490	<u>dolomite</u>	<u>65%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>30%</u>	<u>light tan (10 YR 7/2)</u>
Microcrystalline to medium crystalline. Very sparse pieces of the dolomite have a slight gray discoloration. A dark brown shale parting. Also very sparse, very fine crystals of disseminated and blebs of pyrite. 1% pin-point vug porosity.			
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to medium crystalline. As above.		
2490 - 2495	<u>dolomite</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u>
Microcrystalline to medium crystalline. Compact crystalline. Very sparse, very fine crystals of disseminated and blebs of pyrite and embedded, very fine glauconite grains. vugs that are lined with fine, clear dolomite crystals. 2% pin-point vug and larger vug porosity.			
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to medium crystalline. As above except, 1% pin-pint vug porosity.		
2495 - 2500	<u>dolomite</u>	<u>90%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>

SAMPLE DEPTH ROCK TYPE PER CENT COLOR

Very finely to medium crystalline. Very fine crystals of disseminated pyrite. Sparse light amber crystals of (sphalerite?). Vugs that are lined with fine and medium, clear dolomite crystals. 2% pin-point vug and larger vug porosity.

2500 - 2505 dolomite 80% light tan (10 YR 7/2)
dolomite 10% dark tan (10 YR 6/2)
dolomite 10% light tan (10 YR 8/2)

Very finely to medium crystalline. Very fine crystals of disseminated pyrite. Very sparse, embedded, very fine glauconite grains. Sparse light amber crystals of (sphalerite?). Vugs that are lined with fine and medium, clear dolomite crystals. 2% pin-point vug and larger porosity.

2505 - 2510 dolomite 50% light tan (10 YR 7/2)
dolomite 35% dark tan (10 YR 6/2)
dolomite 15% light tan (10 YR 8/2)

Very finely to medium crystalline. Sparse, very fine crystals of disseminated and blebs of pyrite. Very sparse, embedded, very fine glauconite grains. Vugs that are lined with fine to medium, clear dolomite crystals. 2% pin-point vug and larger vug porosity.

2510 - 2515 dolomite 50% light tan (10 YR 7/2)
dolomite 35% dark tan (10 YR 6/2)
dolomite 15% light tan (10 YR 8/2)

Very finely to medium crystalline. Sparse, very fine crystals of disseminated and blebs of pyrite. Very sparse, embedded, very fine glauconite grains. Sparse light amber crystals of (sphalerite?), and galena. 2% pin-point vug and larger vug porosity.

2515 - 2520 dolomite 50% light tan (10 YR 8/2)
dolomite 35% light tan (10 YR 7/2)

Microcrystalline to medium crystalline. Sparse, very fine crystals of disseminated and blebs of pyrite. Very sparse, embedded, very fine glauconite grains. A dark brown shale parting. Vugs that are lined with fine to medium, clear dolomite crystals. 2% pin-point vug and larger vug porosity.

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>dolomite</u>	<u>15%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to medium crystalline. As above.		
2520 - 2525	<u>dolomite</u>	<u>80%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to medium crystalline. Sparse, very fine crystals and blebs of pyrite. Very sparse, embedded, very fine glauconite grains. 1% pin-point vug and larger vug porosity.		
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to medium crystalline. As above.		
2525 - 2530	<u>dolomite</u>	<u>50%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to medium crystalline. Sparse, very fine crystals and blebs of pyrite. Very sparse, embedded, very fine glauconite grains. 1% pin-point vug and larger vug porosity.		
	<u>dolomite</u>	<u>35%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to medium crystalline. As above.		
2530 - 2535	<u>dolomite</u>	<u>70%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to medium crystalline. 1% white, opaque, porcelaneous chert. Very sparse disseminated pyrite and embedded glauconite grains and light amber (sphalerite?) crystals. Vugs that are lined with fine, clear dolomite crystals. 1% pin-point vug porosity.		
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to medium crystalline. As above.		
	<u>dolomite</u>	<u>5%</u>	<u>light gray (N7)</u>
	Microcrystalline. As above except, no porosity.		
2535 - 2545	<u>dolomite</u>	<u>70%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to medium crystalline. Very sparse disseminated pyrite crystals and embedded glauconite grains. Vugs that are lined with fine, clear dolomite crystals. 1% pin-point vug and larger vug porosity.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u> Very finely to medium crystalline. As above.
	<u>dolomite</u>	<u>5%</u>	<u>light gray (N7)</u> Microcrystalline. As above except, no porosity.
2545 - 2550	<u>dolomite</u>	<u>55%</u>	<u>light tan (10 YR 7/2)</u> Microcrystalline to finely crystalline. Slightly silty. Very sparse, very fine crystals of disseminated pyrite and blebs. Vugs that are lined with fine to medium, dolomite crystals. 1% pin-point vug and larger vug porosity.
	<u>dolomite</u>	<u>35%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline to finely crystalline. Abundant very fine glauconite grains. As above.
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u> Very finely to finely crystalline. As above.
	<u>dolomite</u>	<u>5%</u>	<u>light gray (N7)</u> Microcrystalline. As above except, no porosity.
2550 - 2555	<u>dolomite</u>	<u>65%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u> Microcrystalline to finely crystalline. Slightly argillaceous. Very sparse, very fine crystals of disseminated pyrite and blebs. Vugs that are lined with fine to medium, clear dolomite crystals. 1% pin-point vug and larger vugs.
	<u>dolomite</u>	<u>25%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline to finely crystalline. Abundant very fine glauconite grains. As above.
2555 - 2560	<u>dolomite</u>	<u>75%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline to finely crystalline. Abundant, very fine glauconite grains. Slightly argillaceous. Very sparse, very fine crystals of disseminated pyrite and blebs. Vugs that are lined with fine to medium, clear dolomite crystals. 1% pin-point vug and larger vugs.
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u> Microcrystalline to finely crystalline. As above except, no glauconite.

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
2560 - 2565	<u>dolomite</u>	<u>70%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>20%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u>
Microcrystalline to very finely crystalline. A piece of white, opaque, porcelaneous chert. Slightly silty. Common, very fine embedded glauconite grains. Stylolitic. 1% pin-point vug porosity.			
2565 - 2570	<u>dolomite</u>	<u>90%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>dark brown (10 YR 2/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 7/2)</u>
Microcrystalline to very finely crystalline. Sparse, embedded, very fine glauconite grains. Slightly silty. Stylolitic. 1% pin-point vug porosity.			
2570 - 2575	<u>dolomite</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>dark brown (10 YR 2/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 7/2)</u>
Microcrystalline to very finely crystalline. Sparse, embedded, very fine glauconite grains. Slightly silty. Stylolitic. 1% pin-point vug porosity.			
2575 - 2580	<u>dolomite</u>	<u>60%</u>	<u>light brown (10 YR 5/2)</u>
	<u>dolomite</u>	<u>30%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u>
Microcrystalline to very finely crystalline. Very sparse dark tan dolomite contains common, very fine glauconite grains. Sparse, very fine mica flakes and the dolomite is also, very silty. Stylolitic. Very sparse light amber (sphalerite?) crystals.			
2580 - 2585	<u>dolomite</u>	<u>55%</u>	<u>light brown (10 YR 5/2)</u>
	<u>dolomite</u>	<u>35%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u>
Microcrystalline to very finely crystalline. Very sparse dark tan dolomite contains common, very fine glauconite grains, sparse very fine mica flakes and the dolomite is also, very silty. Stylolitic. Very sparse light amber (sphalerite?) crystals.			
2585 - 2590	<u>dolomite</u>	<u>75%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>medium brown (10 YR 3/2)</u>
Microcrystalline to very finely crystalline. Slightly silty. Sparse pyrite blebs. A dark brown argillaceous parting with very fine mica flakes.			

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
2590 - 2600	<u>dolomite</u>	<u>80%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>medium brown (10 YR 3/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u>
Microcrystalline to very finely crystalline. Slightly silty. Sparse pyrite blebs. A dark brown argillaceous parting with very fine mica flakes.			
2600 - 2605	<u>dolomite</u>	<u>95%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 7/2)</u>
Microcrystalline to medium crystalline. Very sparse pyrite blebs. A dark brown argillaceous parting. 1% pin-point vug porosity.			
2605 - 2610	<u>dolomite</u>	<u>93%</u>	<u>medium brown (10 YR 3/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
Very finely to medium crystalline. Slightly silty. Very sparse, embedded glauconite grains. A dark brown argillaceous parting. 1% pin-point vug porosity in the (10 YR 3/2).			
	<u>dolomite</u>	<u>2%</u>	<u>light tan (10 YR 8/2)</u>
Microcrystalline. As above except, no porosity.			
2610 - 2615	<u>dolomite</u>	<u>85%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>medium brown (10 YR 3/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 7/2)</u>
Very finely to medium crystalline. Slightly silty. Very sparse pyrite blebs. Very fine, embedded glauconite grains. A dark brown argillaceous parting. 1% pin-point vug porosity in the (10 YR 6/2).			
2615 - 2620	<u>dolomite</u>	<u>65%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>20%</u>	<u>medium brown (10 YR 3/2)</u>
Very finely to medium crystalline. Slightly silty. Very sparse pyrite blebs. Very fine, embedded glauconite grains. A dark brown argillaceous parting. 1% pin-point vug porosity in the (10 YR 3/2).			
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 7/2)</u>
Microcrystalline. As above except, no porosity.			
2620 - 2630	<u>dolomite</u>	<u>75%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>20%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>medium brown (10 YR 3/2)</u>

SAMPLE DEPTH ROCK TYPE PER CENT COLOR

Microcrystalline to finely crystalline. Slightly silty. A dark brown argillaceous parting. Very sparse, embedded, very fine glauconite grains and pyrite blebs. 1% pin-point vug porosity in the (10 YR 3/2).

2630 - 2635 dolomite 85% dark tan (10 YR 6/2)
dolomite 10% light tan (10 YR 7/2)
dolomite 5% light tan (10 YR 8/2)

Microcrystalline to very finely crystalline. Slight gray discoloration. Very sparse dark brown argillaceous parting and pyrite blebs. A piece of white, opaque, porcelaneous chert.

2635 - 2640 dolomite 85% dark tan (10 YR 6/2)
dolomite 5% light tan (10 YR 8/2)

Microcrystalline to very finely crystalline. Slight gray discoloration. Very sparse dark brown argillaceous parting and pyrite blebs. A piece of white, opaque, porcelaneous chert.

dolomite 10% light brown (10 YR 5/2)
 Finely crystalline. As above.

2640 - 2645 dolomite 65% dark tan (10 YR 6/2)
dolomite 5% light tan (10 YR 8/2)

Microcrystalline to very finely crystalline. Slight gray discoloration. Very sparse, dark brown argillaceous parting and pyrite blebs.

dolomite 30% light brown (10 YR 5/2)
 Finely crystalline. As above.

2645 - 2650 dolomite 92% dark tan (10 YR 6/2)
dolomite 3% light tan (10 YR 8/2)

Microcrystalline to very finely crystalline. Slight gray discoloration. Very sparse, dark brown argillaceous partings and pyrite blebs.

dolomite 5% light brown (10 YR 5/2)
 Finely crystalline. As above.

2650 - 2655 dolomite 95% light brown (10 YR 5/2)

Finely to medium crystalline. Slightly silty. Sparse white dolomite spots and streaks. Very sparse, embedded, very fine glauconite grains. A dark brown argillaceous parting. 2% pin-point vug porosity.

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u> Microcrystalline to very finely crystalline. As above except, no white dolomite spots and streaks and porosity.
2655 - 2660	<u>dolomite</u>	<u>80%</u>	<u>dark tan (10 YR 6/2)</u> Microcrystalline to very finely crystalline. Slightly silty. Very sparse, embedded, very fine glauconite grains. A dark brown argillaceous parting.
	<u>dolomite</u>	<u>20%</u>	<u>light brown (10 YR 5/2)</u> Finely to medium crystalline. As above except, white dolomite spots and streaks and 2% pin-point vug porosity.
2660 - 2665	<u>dolomite</u>	<u>85%</u>	<u>dark tan (10 YR 6/2)</u> Microcrystalline to very finely crystalline. Very silty. Common, embedded, very fine glauconite grains. Sparse pyrite blebs. A dark brown argillaceous parting. 1% pin-point vug porosity.
	<u>dolomite</u>	<u>15%</u>	<u>light brown (10 YR 5/2)</u> Finely to medium crystalline. As above.
2665 - 2670	<u>dolomite</u>	<u>65%</u>	<u>dark tan (10 6/2)</u> Microcrystalline to very finely crystalline. Common, embedded, very fine glauconite grains. Sparse pyrite blebs. A dark brown argillaceous parting. 1% pin-point vug porosity.
	<u>dolomite</u>	<u>35%</u>	<u>light brown (10 YR 5/2)</u> Finely to medium crystalline. As above except, relict oolitic structures.
2670 - 2675	<u>dolomite</u>	<u>90%</u>	<u>dark tan (10 YR 6/2)</u> Microcrystalline to very finely crystalline. Very sparse glauconite grains. Sparse dark brown argillaceous partings. Slightly silty. 1% pin-point vug porosity.
	<u>dolomite</u>	<u>10%</u>	<u>light brown (10 YR 5/2)</u> Finely to medium crystalline. As above except, relict oolitic structures.
2675 - 2680	<u>dolomite</u>	<u>65%</u>	<u>light brown (10 YR 5/2)</u> Finely to medium crystalline and sparse coarse crystals. The dolomite is mottled with dark brown

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
			and white and also, contains relict oolitic structures and dark brown argillaceous partings. Very sparse glauconite grains. 1% pin-point vug porosity.
	<u>dolomite</u>	<u>20%</u>	<u>dark tan (10 YR 6/2)</u> Finely to medium crystalline and sparse coarse crystals. Slightly silty. Very sparse glauconite grains.
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 7/2)</u> Microcrystalline to very finely crystalline. Very sparse glauconite grains.
2680 - 2685	<u>dolomite</u>	<u>85%</u>	<u>light brown (10 YR 5/2)</u> Finely to medium crystalline and sparse coarse crystals. The dolomite is mottled with dark brown and white and also, contains relict oolitic structures and dark brown argillaceous partings. 1% pin-point vug porosity.
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 7/2)</u> Microcrystalline to very finely crystalline.
2685 - 2690	<u>dolomite</u>	<u>90%</u>	<u>light brown (10 YR 5/2)</u> Finely to medium crystalline and sparse coarse crystals. The dolomite is mottled with dark brown and white and also contains relict oolitic structures and dark brown argillaceous partings. 1% pin-point vug porosity.
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u> Microcrystalline to very finely crystalline.
2690 - 2695	<u>dolomite</u>	<u>95%</u>	<u>medium brown (10 YR 3/2)</u> Very finely to medium crystalline and sparse coarse crystals. Common glauconite grains and blebs. Sparse pyrite blebs. The dolomite is mottled with light brown and very sparse white and also contains relict oolitic structures. Slightly silty. 1% pin-point vug porosity.
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 7/2)</u> Microcrystalline to very finely crystalline. Common glauconite grains and blebs. Sparse pyrite blebs. Slightly silty.
2695 - 2700	<u>dolomite</u>	<u>45%</u>	<u>medium brown (10 YR 3/2)</u>

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
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Very finely to medium crystalline and sparse coarse crystals. Very sparse, very fine glauconite grains. The dolomite is mottled with light brown and sparse white and also, contains relict oolitic structures. Sparse pyrite blebs and dark brown argillaceous partings. 1% pin-point vug porosity.

<u>dolomite</u>	<u>35%</u>	<u>dark tan (10 YR 6/2)</u>
<u>dolomite</u>	<u>20%</u>	<u>light tan (10 YR 7/2)</u>

Microcrystalline to very finely crystalline. Very sparse, very fine glauconite grains. Slightly silty. Sparse pyrite blebs and dark brown argillaceous partings.

2700 - 2705

<u>dolomite</u>	<u>55%</u>	<u>medium brown (10 YR 3/2)</u>
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Very finely to medium crystalline and sparse coarse crystals. Very sparse, very fine glauconite grains. The dolomite is mottled with light brown and sparse white and also contains relict oolitic structures. Sparse pyrite blebs and dark brown argillaceous partings. 1% pin-point vug porosity.

<u>dolomite</u>	<u>35%</u>	<u>dark tan (10 YR 6/2)</u>
<u>dolomite</u>	<u>20%</u>	<u>light tan (10 YR 7/2)</u>

Microcrystalline to very finely crystalline. Very sparse, very fine glauconite grains. Slightly silty. Sparse pyrite blebs and dark brown argillaceous partings.

2705 - 2710

<u>dolomite</u>	<u>35%</u>	<u>medium brown (10 YR 3/2)</u>
<u>dolomite</u>	<u>28%</u>	<u>light tan (10 YR 7/2)</u>
<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>

Microcrystalline to very finely crystalline. Very sparse glauconite grains and pyrite blebs. The (10 YR 6/2) and (10 YR 7/2) are slightly silty.

<u>dolomite</u>	<u>30%</u>	<u>light brown (10 YR 5/2)</u>
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Very finely to medium crystalline and sparse coarse crystals. Very sparse glauconite grains and pyrite blebs. The dolomite is mottled with dark brown and sparse white and also, contains relict oolitic structures. 1% pin-point vug porosity.

<u>siltstone</u>	<u>2%</u>	<u>light tan (10 YR 8/2)</u>
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10% dolomite cement. Very sparse glauconite grains and pyrite blebs. 5% intergranular porosity.

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
2710 - 2715	<u>dolomite</u>	<u>50%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>30%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. Very sparse glauconite grains and pyrite blebs. Slightly silty.		
	<u>dolomite</u>	<u>16%</u>	<u>light brown (10 YR 5/2)</u>
	Very finely to medium crystalline and sparse coarse crystals. Very sparse glauconite grains and pyrite blebs. The dolomite is mottled with dark brown and sparse white and also, contains relict oolitic structures. 1% pin-point vug porosity.		
	<u>dolomite</u>	<u>2%</u>	<u>dark brown (10 YR 2/2)</u>
	Microcrystalline. Very sparse glauconite grains and pyrite blebs.		
	<u>siltstone</u>	<u>2%</u>	<u>light tan (10 YR 8/2)</u>
	10% dolomite cement. Very sparse glauconite grains and pyrite blebs. 1% intergranular porosity.		
2715 - 2720	<u>siltstone</u>	<u>90%</u>	<u>light tan (10 YR 8/2)</u>
	15% dolomite cement. Common, very fine glauconite grains. Very sparse pyrite blebs.		
	<u>dolomite</u>	<u>5%</u>	<u>light brown (10 YR 5/2)</u>
	Very fine to medium crystalline and sparse coarse crystals. common, very fine glauconite grains. Very sparse pyrite blebs, and dark brown argillaceous parting. The dolomite is mottled with gray and sparse white.		
	<u>dolomite</u>	<u>4%</u>	<u>dark tan (10 YR 6/2)</u>
	Microcrystalline to very finely crystalline. Common, very fine glauconite grains. Very sparse pyrite blebs and dark brown argillaceous partings.		
	<u>shale</u>	<u>1%</u>	<u>green-gray (5 GY 5/1)</u>
	Brittle, fissile, very sparse, very fine mica flakes and slightly dolomitic.		
2720 - 2725	<u>limestone</u>	<u>85%</u>	<u>light brown (10 YR 5/2)</u>
	Microcrystalline to finely crystalline with medium and coarse crystals. Oolitic and fragmental cemented with calcareous mud. Compact oolitic limestone with light brown oolitic and sparse fossil fragments. Very sparse glauconite grains and pyrite blebs. Dark brown argillaceous partings. The limestone is mottled with gray and dark brown.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u>
	Microcrystalline.		
	<u>shale</u>	<u>5%</u>	<u>green-gray (5 GY 5/1)</u>
	Slightly calcareous.		
2725 - 2730	<u>siltstone</u>	<u>60%</u>	<u>light tan (10 YR 8/2)</u>
	10% calcite cement. Common, very fine glauconite grains and very fine mica flakes. Dark brown argillaceous partings.		
	<u>limestone</u>	<u>38%</u>	<u>dark gray (N4)</u>
	Microcrystalline to finely crystalline and sparse medium and coarse crystals. Oolitic and fragmental cemented with calcareous mud. The limestone is mottled with light tan, light brown and dark brown. Slightly glauconitic, compact oolitic, fossiliferous and sparse pyrite blebs. The oolites are dark gray and light brown.		
	<u>shale</u>	<u>2%</u>	<u>green-gray (5 GY 5/1)</u>
	Slightly calcareous.		
2730 - 2735	<u>siltstone</u>	<u>88%</u>	<u>light tan (10 YR 7/2)</u>
	15% calcite cement. Common, very fine glauconite grains and very fine mica flakes. Dark brown argillaceous partings.		
	<u>limestone</u>	<u>10%</u>	<u>light brown (10 YR 5/2)</u>
	Microcrystalline to finely crystalline and sparse medium and coarse crystals. Fragmental. The limestone is mottled with light tan, dark brown and gray. Very fine glauconite grains and blebs. Sparse compact oolitic limestone and pyrite blebs.		
	<u>shale</u>	<u>2%</u>	<u>green-gray (5 GY 5/1)</u>
	Slightly calcareous.		
2735 - 2740	<u>siltstone</u>	<u>92%</u>	<u>light tan (10 YR 7/2)</u>
	15% calcite cement. Common, very fine glauconite grains and very fine mica flakes. Dark brown argillaceous partings.		
	<u>limestone</u>	<u>5%</u>	<u>light brown (10 YR 5/2)</u>
	Microcrystalline to finely crystalline and sparse medium and coarse crystals. Fragmental. The limestone is mottled with light tan, dark brown and gray. Very fine glauconite grains and blebs. Sparse compact oolitic limestone and pyrite blebs.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>shale</u>	<u>3%</u>	<u>green gray (5 GY 5/1)</u>
	Slightly calcareous.		
2740 - 2745	<u>siltstone</u>	<u>85%</u>	<u>light tan (10 YR 7/2)</u>
	15% calcite cement. Common, very fine glauconite grains and very fine mica flakes. Dark brown argillaceous partings.		
	<u>limestone</u>	<u>10%</u>	<u>light brown (10 YR 5/2)</u>
	Microcrystalline to finely crystalline and sparse medium and coarse crystals. Fragmental. The limestone is mottled with light tan, dark brown and gray. Very fine glauconite grains and blebs. Sparse compact oolitic limestone and pyrite blebs.		
	<u>shale</u>	<u>5%</u>	<u>green-gray (5 GY 5/1)</u>
	Slightly calcareous.		
2745 - 2750	<u>siltstone</u>	<u>55%</u>	<u>light tan (10 YR 7/2)</u>
	15% calcite cement. Common, very fine glauconite grains and very fine mica flakes. Dark brown argillaceous partings.		
	<u>limestone</u>	<u>42%</u>	<u>light brown (10 YR 5/2)</u>
	Microcrystalline to finely crystalline with sparse medium and coarse crystals. Fragmental. The limestone is mottled with light tan, dark brown and gray. Very fine glauconite grains and blebs. Sparse compact oolitic limestone and pyrite blebs.		
	<u>shale</u>	<u>3%</u>	<u>green-gray (5 GY 5/1)</u>
	Slightly calcareous.		
	<u>dolomite</u>	<u>2%</u>	<u>light tan (10 YR 8/2)</u>
	Very finely to finely crystalline with medium and coarse crystals. Cavings?		
2750 - 2755	<u>dolomitic limestone</u>	<u>50%</u>	<u>light brown (10 YR 5/2)</u>
	Microcrystalline to very finely crystalline with medium and coarse crystals. Predominately fragmental with oolitic, fossil fragmental and calcareous mudstone. Calcareous mudstone cemented. 5-25% dolomite replacement. Common, embedded glauconite grains and blebs.		
	<u>siltstone</u>	<u>40%</u>	<u>light tan (10 YR 7/2)</u>
	15% calcite cement. Abundant, very fine glauconite grains. Sparse, very fine mica flakes and dark brown argillaceous partings.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>shale</u>	<u>10%</u>	<u>green-gray (5 GY 5/1)</u>
	Smooth, fissile and brittle with very sparse, very fine mica flakes.		
2755 - 2760	<u>dolomitic limestone</u>	<u>65%</u>	<u>light brown (10 YR 5/2)</u> <u>light tan (10 YR 8/2)</u>
	Microcrystalline to very finely crystalline and sparse medium and coarse crystals. Predominately fragmental with oolitic, fossil fragmental and calcareous mudstone. Calcareous mud cemented. 5-25% dolomite replacement. Common, embedded glauconite grains and blebs.		
	<u>siltstone</u>	<u>25%</u>	<u>light tan (10 YR 7/2)</u>
	15% calcite cement. Abundant, very fine glauconite grains. Sparse, very fine mica flakes and dark brown argillaceous partings.		
	<u>shale</u>	<u>10%</u>	<u>green-gray (5 GY 5/1)</u>
	Smooth, fissile, brittle and very sparse, very fine mica flakes.		
2760 - 2765	<u>dolomitic limestone</u>	<u>95%</u>	<u>light tan (10 YR 8/2)</u> <u>dark tan (10 YR 6/2)</u>
	Lithographic to microcrystalline and sparse and coarse crystals. Common, oolites and fossil fragments. 5-10% dolomite replacement. Very sparse, embedded glauconite grains and blebs.		
	<u>shale</u>	<u>3%</u>	<u>green-gray (5 GY 5/1)</u>
	Smooth, fissile, brittle and very sparse, very fine mica flakes.		
	<u>siltstone</u>	<u>2%</u>	<u>light tan (10 YR 7/2)</u>
	15% calcite cement. Abundant, very fine glauconite grains. Sparse, very fine mica flakes and dark brown argillaceous partings.		
2765 - 2770	<u>dolomitic limestone</u>	<u>96%</u>	<u>light tan (10 YR 8/2)</u> <u>dark tan (10 YR 6/2)</u>
	Lithographic to microcrystalline and sparse medium and coarse crystals. Common, oolites and fossil fragments. 5-10% dolomite replacement. Very sparse, embedded glauconite grains and blebs. Bryozoan and brachiopods fragment cavings?		
	<u>siltstone</u>	<u>3%</u>	<u>light tan (10 YR 7/2)</u>
	15% calcite cement. Abundant very fine glauconite		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
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grains. Sparse, very fine mica flakes and dark brown, argillaceous partings.

shale 1% green-gray (5 GY 5/1)
Smooth, fissile, brittle and very sparse, very fine mica flakes.

2770 - 2775

dolomite 85% light tan (10 YR 8/2)
limestone dark tan (10 YR 6/2)

Lithographic to microcrystalline and sparse medium and coarse crystals. Common, oolites and fossil fragments. 5 to 10% dolomite replacement. Very sparse, embedded glauconite grains and blebs.

siltstone 10% light tan (10 YR 7/2)
10% silica and 5% calcite cemented. Abundant, very fine glauconite grains and sparse, very fine mica flakes and, pink (feldspar?) grains.

shale 5% green-gray (5 GY 5/1)
Smooth, fissile, brittle and very sparse very fine mica flakes.

2775 - 2780

siltstone 90% light tan (10 YR 8/2)
siltstone 5% pale green (10 YR 8/2)

10% calcite cement. Abundant, very fine glauconite grains, fine to very fine mica flakes and pink (feldspar?) grains. Gray and green-gray shale partings.

dolomitic 3% light tan (10 YR 8/2)
limestone

Lithographic to microcrystalline and sparse medium and coarse crystals. Common, oolites and fossil fragments. 5 to 10% dolomite replacement. Very sparse, embedded glauconite grains and blebs. A piece of light tan opaque, porcelaneous chert (cavings?).

shale 2% gren-gray (5 GY 5/1)
Brittle, fissile and very sparse, very fine to fine mica flakes.

2780 - 2785

siltstone 45% light tan (10 YR 8/2)
siltstone 40% pale green (5 Y 8/2)

10% calcite cement. Abundant, very fine glauconite grains, fine to very fine mica flakes and pink (feldspar?) grains. Gray and gren-gray shale partings.

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>shale</u>	<u>10%</u>	<u>green-gray (5 GY 5/1)</u>
	Smooth, fissile, brittle and very sparse, very fine mica flakes.		
	<u>dolomitic limestone</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic to microcrystalline and sparse medium and coarse crystals. Common, oolites and fossil fragments. 5 to 10% dolomite replacement. Very sparse, embedded glauconite grains and blebs. Cavings?		
2785 - 2790	<u>siltstone</u>	<u>74%</u>	<u>light tan (10 YR 8/2)</u>
	<u>siltstone</u>	<u>20%</u>	<u>pale green (10 YR 8/2)</u>
	10% calcite cement. Abundant, very fine glauconite grains, fine to very fine mica flakes and pink (feldspar?) grains. Gray and green-gray shale partings.		
	<u>shale</u>	<u>5%</u>	<u>green-gray (5 GY 5/1)</u>
	Smooth, fissile, brittle and very sparse, very fine mica flakes.		
	<u>dolomitic limestone</u>	<u>1%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic to microcrystalline and sparse medium and coarse crystals. Common, oolites and fossil fragments. 5 to 10% dolomite replacement. Very sparse, embedded glauconite grains and blebs. Cavings?		
2790 - 2795	<u>siltstone</u>	<u>80%</u>	<u>light tan (10 YR 8/2)</u>
	<u>siltstone</u>	<u>12%</u>	<u>pale green (10 Y 8/2)</u>
	10% calcite cement. Abundant, very fine glauconite grains, fine to very fine mica flakes and pink (feldspar?) grains. Gray and green-gray shale partings.		
	<u>dolomitic limestone</u>	<u>3%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic to microcrystalline and sparse medium and coarse crystals. Common, oolites and fossil fragments. Very sparse, embedded glauconite grains and blebs. Cavings?		
	<u>shale</u>	<u>5%</u>	<u>green-gray (5 GY 5/1)</u>
	Smooth, fissile, brittle and very sparse, very fine mica flakes.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
2795 - 2800	<u>siltstone</u>	<u>89%</u>	<u>light tan (10 YR 8/2)</u>
	10% calcite cement. Abundant, very fine to fine mica flakes, sparse, glauconite and pink (feldspar?) grains.		
	<u>shale</u>	<u>10%</u>	<u>dark gray (N4)</u>
	Brittle, micaceous and very sparse pieces of (N3) shale.		
	<u>dolomite</u>	<u>1%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to very finely crystalline. Cavings?		
2800 - 2805	<u>siltstone</u>	<u>88%</u>	<u>light tan (10 YR 8/2)</u>
	10% calcite cement. Abundant, very fine to fine mica flakes and sparse glauconite and pink (feldspar?) grains.		
	<u>shale</u>	<u>10%</u>	<u>dark gray (N4)</u>
	Brittle, micaceous and very sparse pieces of (N3) shale.		
	<u>dolomite</u>	<u>2%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to very finely crystalline. Cavings?		
2805 - 2810	<u>siltstone</u>	<u>93%</u>	<u>light tan (10 YR 8/2)</u>
	10% calcite cement. Abundant, very fine to fine mica flakes and sparse glauconite and pink (feldspar?) grains.		
	<u>shale</u>	<u>5%</u>	<u>dark gray (N4)</u>
	<u>shale</u>	<u>2%</u>	<u>green-gray (5 GY 5/1)</u>
	Brittle, micaceous and very sparse pieces of (N3) shale.		
2810 - 2815	<u>siltstone</u>	<u>90%</u>	<u>light tan (10 YR 8/2)</u>
	10% calcite cement. Abundant, very fine to fine mica flakes and sparse glauconite and pink (feldspar?) grains.		
	<u>shale</u>	<u>8%</u>	<u>dark gray (N4)</u>
	<u>shale</u>	<u>2%</u>	<u>green-gray (5 GY 5/1)</u>
	Brittle, micaceous and very sparse pieces of (N3) shale.		
2815 - 2825	<u>siltstone</u>	<u>90%</u>	<u>light tan (10 YR 8/2)</u>
	10% calcite cement. Abundant, very fine to fine mica flakes, pink (feldspar?) and sparse glauconite grains.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>shale</u>	<u>5%</u>	<u>green-gray (5 GY 5/1)</u>
	<u>shale</u>	<u>3%</u>	<u>brown-gray (5 YR 4/1)</u>
	Brittle, micaceous, soft and fissile.		
	<u>limestone</u>	<u>1%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline and coarse crystalline. Slightly glaucanitic and very sparse fossil fragments. Cavings?		
	<u>dolomite</u>	<u>1%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline. Cavings?		
2820 - 2825	<u>siltstone</u>	<u>90%</u>	<u>light tan (10 YR 8/2)</u>
	10% calcite cement. Abundant, very fine to fine mica flakes, pink (feldspar?) and sparse glauconite grains.		
	<u>shale</u>	<u>3%</u>	<u>brown-gray (5 YR 4/1)</u>
	<u>shale</u>	<u>5%</u>	<u>green-gray (5 GY 5/1)</u>
	Brittle, micaceous, soft and fissile.		
	<u>limestone</u>	<u>1%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline and coarse crystalline. Slightly glaucanitic and very sparse fossil fragments. Cavings?		
	<u>dolomite</u>	<u>1%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline. Cavings?		
2825 - 2830	<u>siltstone</u>	<u>89%</u>	<u>light tan (10 YR 8/2)</u>
	10% calcite cement. Abundant, very fine to fine mica flakes, pink (feldspar?) and sparse glauconite grains.		
	<u>shale</u>	<u>5%</u>	<u>brown-gray (5 YR 4/1)</u>
	<u>shale</u>	<u>5%</u>	<u>green-gray (5 GY 5/1)</u>
	Brittle, micaceous and fissile.		
	<u>dolomite</u>	<u>1%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline. Cavings?		
2830 - 2835	<u>siltstone</u>	<u>88%</u>	<u>light tan (10 YR 8/2)</u>
	10% calcite cement. Abundant, very fine to fine mica flakes, pink (feldspar?) and sparse glauconite grains.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>shale</u>	<u>5%</u>	<u>brown-gray (5 YR 4/1)</u>
	<u>shale</u>	<u>5%</u>	<u>green-gray (5 GY 5/1)</u>
	Brittle, micaceous and fissile.		
	<u>limestone</u>	<u>1%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline and coarsely crystalline. Slightly glauconitic and very sparse fossil fragments. Cavings?		
	<u>dolomite</u>	<u>1%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline. Cavings?		
2835 - 2840	<u>siltstone</u>	<u>81%</u>	<u>light tan (10 YR 8/2)</u>
	<u>siltstone</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u>
	10% calcareous cement. Abundant, very fine to fine mica flakes, pink (feldspar?) and sparse glauconite grains.		
	<u>shale</u>	<u>5%</u>	<u>brown gray (5 YR 4/1)</u>
	<u>shale</u>	<u>3%</u>	<u>green-gray (5 YR 5/1)</u>
	Brittle, micaceous and fissile. Very sparse pieces of (N5) shale.		
	<u>dolomite</u>	<u>1%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline. Cavings?		
2840 - 2845	<u>siltstone</u>	<u>84%</u>	<u>light tan (10 YR 8/2)</u>
	10% calcareous cement. Abundant, very fine to fine mica flakes, pink (feldspar?) and sparse glauconite grains.		
	<u>shale</u>	<u>5%</u>	<u>medium gray (N5)</u>
	<u>shale</u>	<u>5%</u>	<u>green-gray (5 YR 5/1)</u>
	<u>shale</u>	<u>5%</u>	<u>brown-gray (5 YR 4/1)</u>
	Brittle, micaceous and fissile.		
2845 - 2850	<u>siltstone</u>	<u>83%</u>	<u>light tan (10 YR 8/2)</u>
	<u>siltstone</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u>
	10% calcareous cement. Abundant, very fine mica flakes, pink (feldspar?) and sparse glauconite grains.		
	<u>shale</u>	<u>5%</u>	<u>brown-gray (5 YR 4/1)</u>
	Brittle, micaceous and fissile. Very sparse pieces of gray (N5)shale.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>shale</u>	<u>1%</u>	<u>green-gray (5/1)</u>
	Cavings?		
	<u>dolomite</u>	<u>1%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to finely crystalline. Cavings?		
2850 - 2855	<u>siltstone</u>	<u>94%</u>	<u>light tan (10 YR 8/2)</u>
	10% calcareous cement. Abundant, very fine mica flakes, pink (feldspars?) and sparse glauconite grains.		
	<u>shale</u>	<u>5%</u>	<u>brown-gray (5 YR 4/1)</u>
	Brittle, micaceous and fissile.		
	<u>dolomite</u>	<u>1%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to finely crystalline. Cavings?		
2855 - 2860	<u>siltstone</u>	<u>95%</u>	<u>light tan (10 YR 8/2)</u>
	10% calcareous cement. Abundant, very fine mica flakes, pink (feldspar?) and sparse glauconite grains. Sparse brachiopod fragments.		
	<u>shale</u>	<u>3%</u>	<u>brown-gray (5 YR 4/1)</u>
	Brittle, micaceous and fissile.		
	<u>limestone</u>	<u>2%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline with sparse coarse crystals. The limestone is mottled with maroon. Slightly fossiliferous. Very sparse embedded mica flakes.		
2860 - 2870	<u>siltstone</u>	<u>91%</u>	<u>light tan (10 YR 8/2)</u>
	10% calcareous cement. Abundant very fine mica flakes, pink (feldspar?) and sparse glauconite grains.		
	<u>limestone</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline with sparse coarse crystals. The limestone is mottled with maroon. Slightly fossiliferous. Very sparse embedded mica flakes.		
	<u>shale</u>	<u>2%</u>	<u>medium gray (N5)</u>
	<u>shale</u>	<u>2%</u>	<u>brown-gray (5 YR 4/1)</u>
	Brittle, micaceous and fissile.		
2870 - 2885	<u>siltstone</u>	<u>93%</u>	<u>light tan (10 YR 8/2)</u>
	10% calcareous cement. Abundant, very fine mica flakes, pink (feldspar?) and sparse glauconite grains.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>limestone</u>	<u>3%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline with sparse coarse crystals. The limestone is mottled with maroon. Slightly fossiliferous. Very sparse embedded mica flakes.
	<u>shale</u>	<u>2%</u>	<u>medium gray (N5)</u>
	<u>shale</u>	<u>2%</u>	<u>brown-gray (5 YR 4/1)</u> Brittle micaceous and fissile.
2885 - 2890	<u>siltstone</u>	<u>94%</u>	<u>light tan (10 YR 8/2)</u> 10% calcareous cement. Abundant, very fine mica flakes, pink (feldspar?) and sparse glauconite grains. Slightly gray argillaceous.
	<u>limestone</u>	<u>3%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline with sparse coarse crystals. The limestone is mottled with maroon. Slightly fossiliferous. Very sparse embedded mica flakes.
	<u>shale</u>	<u>2%</u>	<u>green-gray (5 YR 5/1)</u>
	<u>shale</u>	<u>1%</u>	<u>brown-gray (5 YR 4/1)</u> Brittle, micaceous and fissile.
2890 - 2895	<u>siltstone</u>	<u>92%</u>	<u>light tan (10 YR 8/2)</u> 10% calcareous cement. Abundant, very fine mica flakes, pink (feldspar?) and sparse glauconite grains. Slightly gray argillaceous.
	<u>limestone</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline with sparse coarse crystals. The limestone is mottled with maroon. Slightly fossiliferous. Very sparse embedded mica flakes.
	<u>shale</u>	<u>2%</u>	<u>green-gray (5 YR 5/1)</u>
	<u>shale</u>	<u>1%</u>	<u>brown-gray (5 YR 4/1)</u> Brittle, micaceous and fissile.
2895 - 2900	<u>siltstone</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u> 10% calcareous cement. Abundant, very fine mica flakes, pink (feldspar?) and sparse glauconite grains. Slightly gray argillaceous.
	<u>shale</u>	<u>8%</u>	<u>medium gray (N4)</u>
	<u>shale</u>	<u>2%</u>	<u>brown-gray (5 YR 4/1)</u> Brittle, micaceous and fissile. 5% calcareous cement in the (N4).

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>limestone</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline with sparse coarse crystals. The limestone is mottled with maroon. Slightly fossiliferous. Very sparse embedded mica flakes.		
2900 - 2905	<u>limestone</u>	<u>79%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline with sparse coarse crystals. The limestone is mottled with maroon. Slightly fossiliferous. Very sparse embedded mica flakes.		
	<u>shale</u>	<u>15%</u>	<u>medium gray (N4)</u>
	<u>shale</u>	<u>2%</u>	<u>green-gray (5 YR 5/1)</u>
	<u>shale</u>	<u>2%</u>	<u>brown-gray (5 YR 4/1)</u>
	Brittle, micaceous and fissile. 5% calcareous cement in the (N4).		
	<u>siltstone</u>	<u>2%</u>	<u>medium gray (N5)</u>
	10% calcareous cement. Abundant very fine mica flakes, pink (feldspar?) and sparse glauconite grains.		
2905 - 2910	<u>limestone</u>	<u>73%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline with sparse coarse crystals. The limestone is mottled with maroon. Slightly fossiliferous. Very sparse embedded mica flakes.		
	<u>shale</u>	<u>20%</u>	<u>medium gray (N4)</u>
	<u>shale</u>	<u>1%</u>	<u>green-gray (5 YR 5/1)</u>
	<u>shale</u>	<u>1%</u>	<u>brown-gray (5 YR 4/1)</u>
	Brittle, micaceous and fissile. 5% calcareous cement in the (N4).		
	<u>siltstone</u>	<u>5%</u>	<u>medium gray (N5)</u>
	10% calcareous cement. Abundant very fine mica flakes, pink (feldspar?) and sparse glauconite grains.		
2910 - 2915	<u>limestone</u>	<u>78%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline with sparse coarse crystals. The limestone is mottled with maroon. Slightly fossiliferous. Very sparse embedded mica flakes.		
	<u>shale</u>	<u>10%</u>	<u>medium gray (N4)</u>
	<u>shale</u>	<u>1%</u>	<u>brown-gray (5 YR 4/1)</u>
	<u>shale</u>	<u>1%</u>	<u>green-gray (5 YR 5/1)</u>
	Brittle, micaceous and fissile. 5% calcareous cement in the (N4).		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>siltstone</u>	<u>10%</u>	<u>medium gray (N5)</u>
	10% calcareous cement. Abundant very fine mica flakes, pink (feldspar?) and sparse glauconite grains.		
2915 - 2920	<u>limestone</u>	<u>76%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline with sparse coarse crystals. Abundant very fine mica flakes, pink (feldspar?) and sparse glauconite grains.		
	<u>shale</u>	<u>10%</u>	<u>medium gray (N4)</u>
	<u>shale</u>	<u>2%</u>	<u>green-gray (5 YR 5/1)</u>
	<u>shale</u>	<u>2%</u>	<u>brown-gray (5 YR 4/1)</u>
	Brittle, micaceous and fissile. 5% calcareous cement in the (N4).		
	<u>siltstone</u>	<u>10%</u>	<u>medium gray (N5)</u>
	10% calcareous cement. Abundant very fine mica flakes, pink (feldspar?) and sparse glauconite grains.		
2920 - 2925	<u>limestone</u>	<u>78%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline with sparse coarse crystals. Very sparse embedded mica flakes, sparse glauconite grains and slightly gray argillaceous.		
	<u>shale</u>	<u>10%</u>	<u>medium gray (N4)</u>
	<u>shale</u>	<u>2%</u>	<u>green-gray (5 YR 5/1)</u>
	Brittle, micaceous and fissile. 5% calcareous cement in the (N4).		
	<u>siltstone</u>	<u>10%</u>	<u>medium gray (N5)</u>
	10% calcareous cement. Abundant very fine mica flakes, pink (feldspar?) grains and very sparse brachiopod fragments.		
2925 - 2930	<u>limestone</u>	<u>66%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline with sparse coarse crystals. Very sparse embedded mica flakes and sparse glauconite grains. Slightly gray argillaceous and slightly mottled with maroon.		
	<u>siltstone</u>	<u>20%</u>	<u>medium gray (N5)</u>
	10% calcareous cement. Abundant very fine mica flakes, pink (feldspar?) grains and very sparse brachiopod fragments.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	shale	10%	medium gray (N4)
	shale	2%	brown-gray (5 YR 4/1)
	shale	2%	green-gray (5 YR 5/1)
	Brittle, micaceous and fissile. 5% calcareous cement in the (N4).		
2930 - 2933	siltstone	62%	medium gray (N5)
	siltstone	20%	light tan (10 YR 8/2)
	10% calcareous cement. Abundant very fine mica flakes, pink (feldspar?) grains and very sparse brachiopod fragments.		
	limestone	10%	light tan (10 YR 8/2)
	Microcrystalline with sparse coarse crystals. Very sparse embedded mica flakes and sparse glauconite grains. Slightly gray argillaceous and slightly mottled with maroon.		
	shale	5%	medium gray (N4)
	shale	2%	brown-gray (5 YR 4/1)
	shale	1%	green-gray (5 YR 5/1)
	Brittle, micaceous and fissile. 5% calcareous cement in the (N4).		
2933 - Total Depth			

Continental # 1 Christ

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
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SAMPLE DESCRIPTION

580 - 660	<u>shale</u>	<u>95%</u>	<u>medium gray (N5)</u>
	<u>shale</u>	<u>5%</u>	<u>dark gray (N3)</u>
10% calcareous cement and 10% fossils. Fragments of bryozoans, crinoids and brachiopods. Carbonaceous interbeds. Sparse sand cavings.			
660 - 690	<u>shale</u>	<u>90%</u>	<u>medium gray (N5)</u>
	10% calcareous cement and 10% fossils. Fragments of bryozoans, crinoids and brachiopods. Carbonaceous interbeds. Sparse sand cavings.		
	<u>limestone</u>	<u>5%</u>	<u>light tan (5 YR 6/4)</u>
Very finely crystalline with 10% fossils. Fragments of bryozoans, crinoids and brachiopods.			
690 - 700	<u>shale</u>	<u>90%</u>	<u>medium gray (N5)</u>
	<u>shale</u>	<u>5%</u>	<u>dark brown (10 YR 2/2)</u>
10% calcareous cement and 10% fossils. Fragments of bryozoans, crinoids and brachiopods. Sparse pyrite blebs and sand cavings.			
	<u>limestone</u>	<u>5%</u>	<u>light tan (5 YR 6/4)</u>
Very finely crystalline with 10% fossils. Fragments of bryozoans, crinoids and brachiopods.			
700 - 730	<u>shale</u>	<u>95%</u>	<u>medium gray (N5)</u>
	<u>shale</u>	<u>5%</u>	<u>green-gray (5 YR 8/1)</u>
10% calcareous cement and 10% fossils. Fragments of bryozoans, crinoids and brachiopods. Sparse pyrite blebs and sand cavings.			
730 - 740	<u>shale</u>	<u>90%</u>	<u>medium gray (N4)</u>
	<u>shale</u>	<u>10%</u>	<u>dark brown (10 YR 2/2)</u>
10% calcareous cement and 10% fossils. Fragments of bryozoans, crinoids, brachiopods and ostracods. The shale has a slight brown streak.			
740 - 750	<u>shale</u>	<u>90%</u>	<u>dark gray (N3) 10%</u>
	<u>shale</u>	<u>10%</u>	<u>medium gray (N4)</u>
Calcareous cement and 10% fossils. Fragments of bryozoans, crinoids, brachiopods and gastropods. The shale has a slight brown streak.			

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
750 - 800	<u>shale</u>	<u>90%</u>	<u>dark gray (N3)</u>
	<u>shale</u>	<u>10%</u>	<u>medium gray (N4)</u>
	10% calcareous cement and 10% fossils. Fragments of bryozoans, crinoids, brachiopods and gastropods. The shale has a slight brown streak. Sparse pyrite blebs.		
800 - 890	<u>shale</u>	<u>90%</u>	<u>dark gray (N3)</u>
	<u>shale</u>	<u>10%</u>	<u>medium gray (N4)</u>
	10% calcareous cement and 10% fossils. Fragments of bryozoans, crinoids, brachiopods and gastropods. The shale has slight brown streak.		
Cynthiana - 890			
890 - 980	<u>shale</u>	<u>50%</u>	<u>dark gray (N3)</u>
	<u>shale</u>	<u>5%</u>	<u>green-gray (5 GY 8/4)</u>
	The (N3) has brown streak. 10% calcareous cement.		
	<u>limestone</u>	<u>45%</u>	<u>medium brown (10 YR 4/2)</u>
	Very finely to coarsely crystalline. 10% fossils. Fragments of brachiopods, crinoids and ostracods.		
980 - 990	<u>limestone</u>	<u>60%</u>	<u>dark tan (10 YR 6/2)</u>
		Very finely crystalline. 5% fossils, fragments of brachiopods, small gastropods and many ostracods. 5% chert light tan and milky, translucent and partly opaque.	
	<u>shale</u>	<u>40%</u>	<u>dark gray (N3)</u>
	10% calcareous cement.		
990 - 1010	<u>limestone</u>	<u>80%</u>	<u>light tan (10 YR 8/2)</u>
		Lithographic. Sparse embedded dolomite rhombs and clear calcite crystals "birds eye." 4% smoky tan, translucent chert.	
	<u>shale</u>	<u>20%</u>	<u>dark gray (N3)</u>
	Cavings?		
1010 - 1020	<u>limestone</u>	<u>75%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic. Sparse embedded dolomite rhombs and clear calcite crystals "birdseye". 2% smoky tan, translucent chert. Trace of pyrite.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>shale</u> Cavings?	<u>25%</u>	<u>dark gray (N3)</u>
1020 - 1030	<u>limestone</u> Lithographic. Sparse dark brown carbonaceous partings and clear, embedded calcite crystals "birdseye."	<u>95%</u>	<u>light tan (10 YR 8/2)</u>
	<u>shale</u> Cavings?	<u>5%</u>	<u>dark gray (N3)</u>
1030 - 1040	<u>limestone</u> <u>limestone</u> Lithographic. Sparse dark brown carbonaceous partings, embedded dolomite rhombs and very sparse ostracods.	<u>85%</u> <u>10%</u>	<u>light tan (10 YR 8/2)</u> <u>gray-tan (N6)</u>
	<u>shale</u> Cavings?	<u>5%</u>	<u>dark gray (N3)</u>
1040 - 1050	<u>limestone</u> Lithographic. Sparse dark brown carbonaceous partings, embedded dolomite rhombs and very sparse, embedded dolomite rhombs and very sparse ostracods.	<u>95%</u>	<u>light tan (10 YR 8/2)</u>
	<u>shale</u> Cavings?	<u>5%</u>	<u>dark gray (N3)</u>
1050 - 1060	<u>limestone</u> Lithographic. Sparse dark brown carbonaceous partings and very sparse fossils, fragments of ostracods and brachiopods.	<u>93%</u>	<u>light tan (10 Yr 8/2)</u>
	<u>shale</u> Cavings?	<u>5%</u>	<u>dark gray (N3)</u>
	<u>bentonite</u> Soft and fissile with very sparse embedded biotite flakes. Cavings?	<u>2%</u>	<u>light olive gray (5Y 5/1)</u>
1060 - 1110	<u>limestone</u> Lithographic. Sparse dark brown carbonaceous 1080 partings and very sparse fossils, fragments of 1090 ostracods and brachiopods.	<u>65%</u>	<u>light tan (10 YR 8/2)</u>

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>limestone</u>	<u>30%</u>	<u>pale brown (5 YR 5/2)</u> Microcrystalline to very finely crystalline. Common very dolomitic limestone stringers and pods.
	<u>shale</u> Cavings?	<u>5%</u>	<u>dark gray (N3)</u>
1110 - 1120	<u>limestone</u>	<u>50%</u>	<u>light tan (10 YR 8/2)</u> Lithographic. Sparse embedded dolomite rhombs.
	<u>limestone</u>	<u>35%</u>	<u>dark tan (10 YR 6/2)</u> Lithographic.
	<u>limestone</u>	<u>10%</u>	<u>pale brown (5 YR 5/2)</u> Microcrystalline to very finely crystalline. Common very dolomitic limestone stringers and pods.
	<u>shale</u> Cavings?	<u>5%</u>	<u>dark gray (N3)</u>
1120 - 1150	<u>limestone</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u> Lithographic. Sparse embedded dolomite rhombs.
	<u>limestone</u>	<u>10%</u>	<u>pale brown (5 YR 5/2)</u> Microcrystalline to very finely crystalline. Common very dolomitic limestone stringers and pods.
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u> Lithographic.
1150 - 1180	<u>shale</u> Cavings?	<u>55%</u>	<u>dark gray (N3)</u>
	<u>limestone</u>	<u>30%</u>	<u>dark tan (10 YR 6/2)</u> Very finely to coarsely crystalline. Fossils, 1170 fragments of ostracods and brachiopods.
	<u>limestone</u>	<u>15%</u>	<u>light tan (10 YR 8/2)</u> Lithographic. Sparse, embedded dolomite rhombs and lenses.

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
1180 - 1200	<u>limestone</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic. Sparse, embedded dolomite rhombs.		
	<u>shale</u>	<u>10%</u>	<u>dark gray (N3)</u>
	Cavings?		
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to coarsely crystalline. In part bioclastic. 10% Fossils, fragments of brachiopods, crinoids and ostracods.		
1200 - 1230	<u>limestone</u>	<u>95%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic. 10% very dolomitic limestone 1220 - stringers and pod.		
	<u>shale</u>	<u>5%</u>	<u>dark gray (N3)</u>
	Cavings(?) with very sparse pieces of bentonite and bioclastic limestone.		
1230 - 1260	<u>limestone</u>	<u>90%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>limestone</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic. A trace of very dolomitic stringers and pods. Very sparse, fragments of ostracods and brown carbonaceous partings.		
	<u>shale</u>	<u>5%</u>	<u>dark gray (N3)</u>
	Cavings (?) with very sparse pieces of bentonite.		
1260 - 1320	<u>limestone</u>	<u>60%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>limestone</u>	<u>35%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic. A trace of very dolomitic stringers and pods. Very sparse, fragments of ostracods and brown carbonaceous partings.		
	<u>shale</u>	<u>5%</u>	<u>dark gray (N3)</u>
	Cavings(?), with sparse pieces of bentonite.		
1320 - 1330	<u>limestone</u>	<u>90%</u>	<u>dark brown (5 YR 2/2)</u>
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. A trace of white chert with embedded dolomite rhombs and brown carbonaceous partings.		
1330 - 1360	<u>limestone</u>	<u>75%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>limestone</u>	<u>22%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic with sparse, clear, calcite crystals "birdseye."		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>bentonite</u>	<u>3%</u>	<u>light gray (5 GY 8/1)</u>
	Soft and fissile. Cavings?		
1360 - 1370	<u>limestone</u>	<u>80%</u>	<u>light tan (10 YR 8/2)</u>
	<u>limestone</u>	<u>20%</u>	<u>dark tan (10 yr 6/2)</u>
	Lithographic. Very sparse gray-tan limestone and dolomite stringers.		
1370 - 1380	<u>limestone</u>	<u>60%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>limestone</u>	<u>40%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic. Very sparse dolomite stringers, dark brown carbonaceous shale partings and ostracods. Occasional clear calcite crystals "birdseye".		
1380 - 1390	Sample Skip		
1390 - 1400	<u>limestone</u>	<u>60%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>limestone</u>	<u>40%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic. Very sparse dolomite stringers, dark brown carbonaceous shale partings and ostracods. Occasional clear calcite crystals "birdseye".		
1400 - 1415	<u>limestone</u>	<u>45%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>limestone</u>	<u>45%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic. Very sparse dark brown carbonaceous shale partings and ostracods. Occasional clear calcite crystals, "birdseye".		
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u>
	Microcrystalline stringers and 1% intercrystalline porosity.		
1415 - 1420	<u>limestone</u>	<u>50%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>limestone</u>	<u>50%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic. Very sparse dark brown carbonaceous shale partings and ostracods. Occasional clear calcite crystals, "birdseye".		
1420 - 1425	<u>limestone</u>	<u>50%</u>	<u>light tan (10 YR 8/2)</u>
	<u>limestone</u>	<u>49%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Very sparse dark brown carbonaceous shale partings and ostracods. Occasional clear calcite crystals, "birdseye".		
	<u>dolomite</u>	<u>1%</u>	<u>dark tan (10 YR 6/2)</u>
	Microcrystalline stringers and very sparse green shale partings.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
1425 - 1430	<u>dolomite</u>	<u>80%</u>	<u>dark tan (5 YR 5/1)</u>
	Microcrystalline and 1% intercrystalline porosity,		
	<u>limestone</u>	<u>10%</u>	<u>dark tan (10 YR 6/1)</u>
	Lithographic.		
	<u>bentonite</u>	<u>10%</u>	<u>light green-gray (5 GY 8/1)</u>
	Soft and fissile with very sparse embedded biotite flakes. Cavings?		
1430 - 1435	<u>limestone</u>	<u>45%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>limestone</u>	<u>45%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic.		
	<u>shale</u>	<u>5%</u>	<u>light green (5 G 6/1)</u>
	Soft and very slightly calcareous.		
	<u>bentonite</u>	<u>5%</u>	<u>light green-gray (5 GY 8/1)</u>
	Soft and fissile. Cavings(?) with very sparse embedded biotite flakes.		
1435 - 1440	<u>dolomite</u>	<u>80%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline.		
	<u>limestone</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic.		
	<u>shale</u>	<u>5%</u>	<u>light green (5 G 6/1)</u>
	Soft, pyritic and very slightly calcareous.		
	<u>bentonite</u>	<u>5%</u>	<u>light green-gray (5 GY 8/1)</u>
	Soft and fissile, with very sparse embedded biotite flakes. Cavings?		
1440 - 1445	<u>dolomite</u>	<u>80%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline.		
	<u>limestone</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic.		
	<u>bentonite</u>	<u>10%</u>	<u>light green-gray (5 GY 8/1)</u>
	Soft and fissile, with very sparse embedded biotite flakes. Cavings?		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
1445 - 1455	<u>dolomite</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u> <u>dark tan (5 YR 4/1)</u>
	Microcrystalline. Sparsely pelletal and very sparse blebs of pyrite.		
	<u>limestone</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic. Cavings?		
1455 - 1460	<u>dolomite</u>	<u>5%</u>	<u>green-gray (5 GY 5/1)</u>
	Microcrystalline. Very slightly argillaceous.		
	<u>bentonite</u>	<u>5%</u>	<u>light green-gray (5 GY 8/1)</u>
	Soft and fissile. Cavings(?), with very sparse biotite flakes.		
1460 - 1465	<u>dolomite</u>	<u>75%</u>	<u>light gray (N7)</u>
	<u>dolomite</u>	<u>20%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline. Very sparse, loose, very fine, rounded and frosted quartz sand grains and very fine grained quartz sandstone.		
	<u>limestone</u>	<u>3%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic. Cavings?		
	<u>bentonite</u>	<u>2%</u>	<u>light green gray (5 GY 8/1)</u>
Soft and fissile, with very sparse embedded biotite flakes. Cavings?			
1465 - 1480	<u>dolomite</u>	<u>45%</u>	<u>light gray (N7)</u>
	<u>dolomite</u>	<u>45%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline. Sparse pyrite blebs, very fine, rounded and frosted loose quartz sand grains and a nodule of white, opaque chert.		
	<u>shale</u>	<u>8%</u>	<u>blue-green (5 BG 4/2)</u>
	Smooth, waxy and 10% dolomite cement.		
1465 - 1480	<u>limestone</u>	<u>2%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic. Cavings?		
	<u>dolomite</u>	<u>45%</u>	<u>light gray (N7)</u>
	<u>dolomite</u>	<u>45%</u>	<u>light tan (10 YR 8/2)</u>
Microcrystalline. Sparse pyrite blebs and very fine rounded and frosted loose quartz sand grains.			
1465 - 1480	<u>shale</u>	<u>8%</u>	<u>blue-green (5 BG 4/2)</u>
	Smooth, waxy and 10% dolomite cement.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>limestone</u>	<u>2%</u>	<u>light tan (10 YR 8/2)</u>
	Lithographic. Cavings?		
1480 - 1485	<u>dolomite</u>	<u>90%</u>	<u>light gray (N7)</u>
	Very finely crystalline. Sparse embedded glauconite grains and very sparse rounded and frosted, embedded quartz sand grains.		
	<u>sandstone</u>	<u>5%</u>	<u>very light gray (N8)</u>
	Very fine to fine grained. Well sorted. Rounded and frosted quartz sandgrains. 10% dolomite and 10% argillaceous cement. Sparse embedded glauconite grains and 1% intergranular porosity.		
	<u>shale</u>	<u>3%</u>	<u>blue-green (5 BG 4/2)</u>
	Smooth, waxy and 10% dolomite cement.		
	<u>limestone</u>	<u>2%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
1485 - 1490	<u>dolomite</u>	<u>45%</u>	<u>light gray (N7)</u>
	Very finely crystalline, arenaceous and sparse embedded glauconite grains. Very sparse, loose, rounded and frosted quartz sand grains. Very sparse pyrite blebs and white and dark tan, opaque, porcelaneous chert.		
	<u>sandstone</u>	<u>45%</u>	<u>very light gray (N8)</u>
	Very fine to fine grained. Well sorted. Rounded and frosted quartz sandgrains. 10% dolomite and 10% argillaceous cement. Sparse, embedded glauconite grains and 1% intergranular porosity.		
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
	<u>bentonite</u>	<u>3%</u>	<u>light gray (5 GY 8/1)</u>
	Cavings (?), with very sparse embedded biotite flakes.		
	<u>shale</u>	<u>2%</u>	<u>blue-green (5 BG 4/2)</u>
	Smooth, waxy and 10% dolomite cement.		
1490 - 1500	<u>dolomite</u>	<u>98%</u>	<u>light tan (10 YR 7/2)</u> <u>(10 YR 8/2)</u>
	Very finely crystalline. 10% white, opaque, porcelaneous and dull white tripolitic chert. Sparse, disseminated, embedded pyrite crystals, glauconite grains and pale green shale partings. Very sparse, loose, rounded and frosted quartz sand grains.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>limestone</u>	<u>2%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
1500 - 1510	<u>dolomite</u>	<u>60%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>40%</u>	<u>dark tan (10 YR 6/2)</u>
	Microcrystalline to very fine crystalline. 2% dull white, tripolitic chert with embedded dolomite rhombs. Sparse, embedded glauconite grains and pyrite blebs. 2% pin-point vug porosity.		
1510 - 1515	<u>dolomite</u>	<u>57%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>48%</u>	<u>dark tan (10 YR 6/2)</u>
	Microcrystalline to very fine crystalline. Very sparse dull white, tripolitic chert with embedded dolomite rhombs. Sparse pyrite blebs and glauconite grains.		
	<u>bentonite</u>	<u>3%</u>	<u>light gray (5 GY 8/1)</u>
	Cavings?		
	<u>limestone</u>	<u>2%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
1515 - 1520	<u>dolomite</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to very finely crystalline. Very sparse dull white, tripolitic chert with embedded dolomite rhombs. Sparse ostracods and loose, rounded and frosted quartz sand grains.		
	<u>shale</u>	<u>10%</u>	<u>dark brown (5 YR 2/2)</u>
	Hard and brittle, 10% dolomite cement.		
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
1520 - 1525	<u>dolomite</u>	<u>98%</u>	<u>light tan (10 YR 8/2)</u>
	Fine to medium crystalline. Sparse dull white, tripolitic chert. 10% vug porosity.		
	<u>bentonite</u>	<u>2%</u>	<u>light gray (5 GY 3/1)</u>
	Cavings?		
1525 - 1530	<u>dolomite</u>	<u>95%</u>	<u>light tan (10 YR 8/2)</u>
	Very finely to finely crystalline. 5% dull white, tripolitic chert with embedded dolomite rhombs. Sparse pyrite blebs. 5% vug porosity.		
	<u>limestone</u>	<u>3%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>bentonite</u> Cavings?	<u>2%</u>	<u>light gray (5 GY 3/1)</u>
1530 - 1535	<u>dolomite</u> Very finely to finely crystalline. Very sparse, dull white, tripolitic chert and pyrite blebs. 2% pin-point vug porosity.	<u>98%</u>	<u>light tan (10 YR 8/2)</u>
	<u>bentonite</u> Cavings?	<u>2%</u>	<u>light gray (5 GY 3/1)</u>
1535 - 1540	<u>dolomite</u> Very finely to finely crystalline. 1% dull white chert. Sparse, brown carbonaceous partings and pyrite blebs. Very sparse intercrystalline tripolitic chert. 2% pin-point vug porosity.	<u>70%</u> <u>23%</u>	<u>light tan (10 YR 8/2)</u> <u>dark tan (10 YR 5/2)</u>
	<u>dolomite</u> Microcrystalline to finely crystalline. As above.	<u>5%</u>	<u>very light gray (N8)</u>
	<u>limestone</u> Lithographic. Cavings?	<u>2%</u>	<u>dark tan (10 YR 6/2)</u>
1540 - 1545	<u>dolomite</u> Very finely to finely crystalline. 2% light tan and white, opaque, porcelaneous and very sparse dull white, tripolitic chert. Sparse, brown carbonaceous partings and pyrite blebs. Very sparse vugs have a quartz lining. 5% pin-point vug porosity.	<u>75%</u> <u>25%</u>	<u>dark tan (10 YR 5/2)</u> <u>light tan (10 YR 8/2)</u>
1545-1550	<u>dolomite</u> Very finely to finely crystalline. 2% light tan and white opaque porcelaneous and very sparse dull white, tripolitic chert. Sparse, brown carbonaceous partings and pyrite blebs. Very sparse vugs have a quartz lining. 5% pin-point vug porosity.	<u>70%</u> <u>20%</u>	<u>dark tan (10 YR 5/2)</u> <u>light tan (10 YR 8/2)</u>
	<u>dolomite</u> Microcrystalline to finely crystalline. As above.	<u>10%</u>	<u>very light gray (N8)</u>
1550 - 1560	<u>dolomite</u> Microcrystalline to finely crystalline. 2% light tan and white, opaque, porcelaneous and very sparse	<u>85%</u> <u>10%</u>	<u>light tan (10 YR 8/2)</u> <u>very light gray (N8)</u>

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
			dull white chert. Very sparse green shale and brown carbonaceous partings. Sparse, quartz lined vugs. 3% pin-point vug porosity.
	<u>dolomite</u>	<u>3%</u>	<u>dark tan (10 YR 5/2)</u> Very finely to finely crystalline. As above.
	<u>limestone</u>	<u>2%</u>	<u>dark tan (10 YR 6/2)</u> Lithographic. Cavings?
1560 - 1565	<u>dolomite</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>very light gray (N8)</u>
			Microcrystalline to finely crystalline. 1% light tan and white, opaque, porcelaneous and very sparse dull white chert. Very sparse green shale and brown carbonaceous partings. Sparse, quartz lined vugs. 3% pin-point vug porosity.
	<u>dolomite</u>	<u>3%</u>	<u>dark tan (10 YR 5/2)</u> Very finely to finely crystalline. As above.
	<u>limestone</u>	<u>2%</u>	<u>dark tan (10 YR 6/2)</u> Lithographic. Cavings?
1565 - 1570	<u>dolomite</u>	<u>50%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>42%</u>	<u>very light gray (N8)</u>
			Microcrystalline to finely crystalline. 3% white, opaque, porcelaneous and dull white, quartzose, pelletal chert. Very sparse, quartz lined vugs and pyrite blebs. 3% pin-point vug porosity.
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 5/2)</u> Very finely to finely crystalline. As above.
	<u>limestone</u>	<u>3%</u>	<u>dark tan (10 YR 6/2)</u> Lithographic. Cavings?
1570 - 1575	<u>dolomite</u>	<u>25%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>20%</u>	<u>very light gray (N8)</u>
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 5/2)</u>
			Microcrystalline to finely crystalline. 3% white, opaque, porcelaneous and very sparse, dull white, quartzose and pelletal chert. 3% pin-point vug porosity.
	<u>shale</u>	<u>40%</u>	<u>light green-gray (5 G 7/1)</u> Soft, blocky and calcareous. Dissintergrates in acid. Cavings?
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u> Lithographic. Cavings?

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
1575 - 1580	<u>dolomite</u>	<u>75%</u>	<u>very light gray (N8)</u>
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 5/2)</u>
	Microcrystalline to finely crystalline. 2% white, opaque, porcelaneous and in part quartzose and pelletal chert. Very sparse pyrite blebs. 1% pin-point vug porosity.		
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
1580 - 1585	<u>dolomite</u>	<u>80%</u>	<u>very light gray (N8)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 5/2)</u>
	Microcrystalline to finely crystalline; 1% white, opaque, porcelaneous chert. Very sparse, coarse, clear dolomite crystals, brown carbonaceous shale partings and stylolites. Sparse, loose, rounded and frostd quartz sand grains. 2% pin-point vug porosity.		
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
1585 - 1590	<u>dolomite</u>	<u>80%</u>	<u>very light gray (N8)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to finely crystalline. 1% white, opaque, porcelaneous chert. Very sparse, coarse, clear dolomite crystals, brown carbonaceous shale partings and stylolites. Sparse, loose, rounded and frosted quartz sand grains. 2% pin-point vug porosity.		
1590 - 1595	<u>dolomite</u>	<u>50%</u>	<u>very light gray (N8)</u>
	<u>dolomite</u>	<u>40%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to finely crystalline. 1% dark tan, opaque, porcelaneous and dull white chert. Sparse, coarse, clear dolomite crystals. 2% pin-point vug porosity in the (N8) and 1% in the (10 YR 8/2).		
	<u>limestone</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
1595 - 1600	<u>dolomite</u>	<u>75%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>very light gray (N8)</u>
	Microcrystalline to finely crystalline. 1% white,		

SAMPLE DEPTH ROCK TYPE PER CENT COLOR

opaque, porcelaneous and very sparse dull white chert. Sparse, coarse, clear dolomite crystals. 1% pin-point vug porosity in the (10 YR 8/2) and 2% in the (N8).

limestone 10% dark tan (10 YR 6/2)
Lithographic. Cavings?

1600 - 1605

dolomite 85% light tan (10 YR 8/2)
dolomite 5% very light gray (N8)

Microcrystalline to finely crystalline. 5% white and light tan, opaque, porcelaneous chert in part pelletal and quartzose. Sparse, coarse, clear dolomite crystals and pyrite blebs. 1% pin-point vug porosity in the (10 YR 8/2) and 2% in the (N8).

limestone 10% dark tan (10 YR 6/2)
Lithographic. Cavings?

1605 - 1615

dolomite 85% light tan (10 YR 8/2)
dolomite 5% very light gray (N8)

Microcrystalline to finely crystalline. 5% white and light tan, opaque, porcelaneous chert in part pelletal and quartzose. Sparse, coarse, clear dolomite crystals and pyrite blebs. 5% pin-point vug porosity.

limestone 10% dark tan (10 YR 6/2)
Lithographic. Cavings?

1615 - 1620

dolomite 85% light tan (10 YR 8/2)
dolomite 5% very light gray (N8)

Microcrystalline to finely crystalline. 5% white and light tan, opaque, porcelaneous chert in part pelletal and quartzose. Sparse, coarse, clear dolomite crystals and pyrite blebs. 5% pin-point vug porosity in the (10 YR 8/2) and 1% in the (N8).

limestone 10% dark tan (10 YR 6/2)
Lithographic. Cavings?

1620 - 1630

dolomite 85% light tan (10 YR 8/2)
dolomite 5% very light gray (N8)

Microcrystalline to finely crystalline. 5% white and light tan, opaque, porcelaneous chert in part pelletal and quartzose. Very sparse oolitic milky and white to light tan translucent chert. 5% pin-point vug porosity in the (10 YR 8/2) and 1% in the (N8).

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>limestone</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
1630 - 1635	<u>dolomite</u>	<u>90%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to finely crystalline. 10% white and light tan, opaque, porcelaneous in part quartzose and very sparse dull white, weathered pelltal and translucent chert. 5% pin-point vug porosity.		
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
1635 - 1640	<u>dolomite</u>	<u>60%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>40%</u>	<u>very light gray (N8)</u>
	Finely to medium crystalline. Sparse, coarse, clear dolomite crystals. 10% intercrystalline and vug porosity in the (10 YR 6/2) and 5% in the (N8).		
1640 - 1645	<u>dolomite</u>	<u>95%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>very light tan (N8)</u>
	Finely to medium crystalline. Sparse, coarse, clear dolomite crystals. 10% intercrystalline and vug porosity in the (10 YR 6/2) and 5% in the (N8).		
1645 - 1650	<u>dolomite</u>	<u>95%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>very light tan (N8)</u>
	Very finely to medium crystalline. 3% white and light tan, opaque, porcelaneous and very sparse dull white, tripolitic chert. Sparse, coarse, clear dolomite crystals and quartz lined vugs. 10% intercrystalline and vug porosity in the (10 YR 6/2) and 5% in the (N8).		
1650 - 1655	<u>dolomite</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u>
	Very finely crystalline. Very sparse, embedded glauconite grains, pyrite blebs and intercrystalline tripolitic chert. 1% white, opaque, porcelaneous chert in part quartzose. Sparse, coarse dolomite crystals lined vugs sparse vug porosity.		
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to medium crystalline. 10% intercrystalline and vug porosity.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>siltstone</u>	<u>10%</u>	<u>very light gray (N8)</u>
	Rounded, well sorted quartz silt grains. 10% dolomite cement. Very sparse embedded glauconite grains, pyrite blebs and pale green shale partings.		
1655 - 1660	<u>dolomite</u>	<u>80%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>very light gray (N8)</u>
	Very finely to medium crystalline. 2% white, light tan, opaque, porcelaneous and dull white chert. Very sparse, embedded glauconite grains and quartz blebs. Some of the vugs are lined with coarse, clear dolomite crystals. 5% intercrystalline and vug porosity in the (10 YR 8/2) and 1% pin-point vug porosity in the (N8).		
	<u>dolomite</u>	<u>2%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to medium crystalline. 3% pin-point vug porosity. Cavings?		
	<u>limestone</u>	<u>2%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
	<u>siltstone</u>	<u>1%</u>	<u>very light gray (N8)</u>
	Rounded, well sorted quartz silt grains. 10% dolomite cement.		
1660 - 1665	<u>dolomite</u>	<u>97%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to very finely crystalline. 1% white, opaque, porcelaneous chert. Coarse, crystalline dolomite lined vugs. 2% pin-point vug porosity.		
	<u>dolomite</u>	<u>1%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to medium crystalline. Cavings?		
	<u>limestone</u>	<u>2%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
1665 - 1670	<u>dolomite</u>	<u>55%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>43%</u>	<u>light tan (10 YR 8/2)</u>
	Very finely to finely crystalline. 1% white, opaque, porcelaneous, dull white, tripolitic and light tan translucent chert. Sparse pyrite blebs and coarse, clear crystalline dolomite lined vugs. 3% pin-point vug porosity.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>limestone</u>	<u>2%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
1670 - 1675	<u>dolomite</u>	<u>75%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>20%</u>	<u>light tan (10 YR 8/2)</u>
	Very finely to finely crystalline. 2% white and light tan, opaque, porcelaneous and dull white, tripolitic chert. Very sparse intercrystalline tripolitic chert, coarse, clear crystalline dolomite lined vugs and pyrite blebs. 2% pin-point vug porosity.		
	<u>dolomite</u>	<u>2%</u>	<u>light gray (N7)</u>
	Very finely crystalline. Cavings?		
	<u>limestone</u>	<u>3%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
1675 - 1680	<u>dolomite</u>	<u>50%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>45%</u>	<u>light tan (10 YR 8/2)</u>
	Very finely to finely crystalline. 10% white and light tan, opaque, porcelaneous and dull white tripolitic chert. 1% fine, rounded and frosted embedded quartz sand grains. 2% pin-point vug porosity. Very sparse, embedded disseminated crystals and blebs of pyrite in the (10 YR 8/2).		
	<u>dolomite</u>	<u>2%</u>	<u>brown (5 YR 5/2)</u>
	Very finely crystalline.		
	<u>shale</u>	<u>3%</u>	<u>pale green (5 G 7/2)</u>
	Bright and embedded dissiminated pyrite.		
1680 - 1685	<u>dolomite</u>	<u>92%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to finely crystalline. 10% white and light tan, opaque, porcelaneous in part pelletal and quartzose and dull white tripolitic chert. Sparse translucent and intercrystalline tripolitic chert. Also sparse, fine, rounded and frosted embedded quartz sand grains. 2% pin-point vug porosity.		
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
	<u>shale</u>	<u>3%</u>	<u>pale green (5 G 7/2)</u>
1685 - 1690	<u>dolomite</u>	<u>90%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to finely crystalline. 10% white and light tan, opaque, porcelaneous in part		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	pelletal and quartzose and dull white tripolitic chert. Sparse translucent and intercrystalline tripolitic chert. Also sparse fine, rounded and frosted embedded quartz sand grains.		
	<u>dolomite</u>	<u>3%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline. As above. 5% pin-point vug porosity.		
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
	<u>shale</u>	<u>2%</u>	<u>pale green (5 G 7/2)</u>
	Bright and embedded dissiminated pyrite.		
1690 - 1695	<u>dolomite</u>	<u>75%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to fine crystalline. 5% white and light tan, opaque, porcelaneous and very sparse translucent and dull white, tripolitic chert. Sparse, fine, rounded and frosted embedded quartz sand grains and pyrite blebs.		
	<u>dolomite</u>	<u>3%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline.		
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
	<u>shale</u>	<u>2%</u>	<u>pale green (5 G 7/2)</u>
	Bright and embedded dissiminated pyrite.		
1695 - 1700	<u>dolomite</u>	<u>77%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Microcrystalline to finely crystalline. 5% white and light tan opaque, porcelaneous and very sparse translucent and dull white, tripolitic chert. Sparse fine, rounded and frosted, embedded quartz sand grains and, coarse, clear dolomite crystals. 2% pin-point vug porosity.		
	<u>dolomite</u>	<u>10%</u>	<u>very light gray (N8)</u>
	Microcrystalline. As above except, no porosity.		
	<u>shale</u>	<u>5%</u>	<u>pale green (5G 7/2)</u>
	Bright and embedded dissiminated pyrite.		
	<u>limestone</u>	<u>3%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
1700 - 1705	<u>dolomite</u>	<u>50%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>43%</u>	<u>dark tan (10 YR 6/2)</u>
	Microcrystalline to finely crystalline. 25% white and light tan, opaque, porcelaneous chert in part pelletal and quartzose. Very sparse translucent and dull white, tripolitic chert. Sparse fine, rounded and frosted, embedded quartz sand grains and coarse, clear dolomite crystals. 10% pyrite blebs. 2% pin-point vug porosity.		
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
	<u>shale</u>	<u>2%</u>	<u>pale green (5 G 7/2)</u>
	Bright and embedded dissiminated pyrite.		
1705 - 1710	<u>dolomite</u>	<u>75%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Microcrystalline to finely crystalline. 15% white and light tan, opaque, porcelaneous chert in part pelletal and quartzose. Very sparse, translucent and dull white, tripolitic chert. Sparse, fine, rounded and frosted embedded quartz sand grains and coarse, clear dolomite crystals. 10% pyrite blebs. 2% pin-point vug porosity.		
	<u>dolomite</u>	<u>15%</u>	<u>very light gray (N8)</u>
	Microcrystalline. As above except, no porosity.		
	<u>limestone</u>	<u>3%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
	<u>shale</u>	<u>2%</u>	<u>pale green (5G 7/2)</u>
	Bright and embedded dissiminated pyrite.		
1710 - 1715	<u>dolomite</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>very light gray (N8)</u>
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Microcrystalline to finely crystalline. 10% white to light tan, opaque, porcelaneous and dull white, tripolitic chert. Very sparse, opaque, porcelaneous, pelletal and quartzose chert with fine rounded and frosted embedded quartz sand grains. Sparse embedded rounded and frosted quartz sand grains and coarse, clear dolomite crystals. 3% pyrite blebs. 2% pin-point vug porosity in the (10 YR 8/2) and (10 YR 6/2).		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>limestone</u>	<u>3%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
	<u>shale</u>	<u>2%</u>	<u>pale green (5G 7/2)</u> <u>gray green (10 G 4/2)</u>
	Bright.		
1715 - 1720	<u>dolomite</u>	<u>78%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to finely crystalline. 5% white to light tan, opaque, porcelaneous and dull white, tripolitic chert. Very sparse, opaque, porcelaneous, pelletal and quartzose chert with fine, rounded and frosted embedded quartz sand grains. 5% pyrite blebs. Sparse, fine, rounded and frosted embedded quartz sand grains and coarse, clear, dolomite crystals. 2% pin-point vug porosity.		
	<u>dolomite</u>	<u>10%</u>	<u>very light gray (N8)</u>
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Microcrystalline to very finely crystalline. As above.		
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
	<u>shale</u>	<u>2%</u>	<u>pale green (5G 7/2)</u> <u>gray-green (10 G 4/2)</u>
1720 - 1725	<u>dolomite</u>	<u>84%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to finely crystalline. 3% white to light tan, opaque, porcelaneous and dull white, tripolitic chert. Very sparse, opaque, porcelaneous, pelletal and quartzose chert. Sparse, coarse, clear dolomite crystals, glauconite. 2% pyrite blebs. Grains and rounded and frosted embedded quartz sand grains. 2% pin-point vug porosity.		
	<u>dolomite</u>	<u>5%</u>	<u>very light gray (N8)</u>
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Microcrystalline to very finely crystalline. As above.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
	<u>shale</u>	<u>1%</u>	<u>pale green (5G 7/2)</u> <u>gray green (10 G 4/2)</u>
1725 - 1735	<u>dolomite</u>	<u>98%</u>	<u>white (N9)</u>
	Finely to coarsely crystalline. Very sparse glauconite grains. 1% pyrite blebs. 5% pin-point vug porosity.		
	<u>limestone</u>	<u>2%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
1735 - 1740	<u>dolomite</u>	<u>90%</u>	<u>white (N9)</u>
	Finely to coarsely crystalline. Sparse, white, opaque, milky, translucent chert. Also, sparse, rounded and frosted, embedded quartz sand grains and glauconite grains. 1% pyrite blebs. 5% pin-point vug porosity.		
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline. As above except 2% pin-point vug porosity.		
	<u>limestone</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u>
	Lithographic. Cavings?		
1740 - 1780	<u>dolomite</u>	<u>99%</u>	<u>white (N9)</u>
	Very finely to coarsely crystalline. Sparse glauconite grains and pyrite blebs and very sparse, white, opaque, porcelaneous chert. 5% pin-point vug porosity.		
	<u>dolomite</u>	<u>1%</u>	<u>very light gray (N8)</u>
	Microcrystalline. Cavings?		
1780 - 1785	<u>dolomite</u>	<u>50%</u>	<u>white (N9)</u>
	Very finely to coarsely crystalline. Sparse, glauconite grains and white, opaque, porcelaneous chert. 5% pin-point vug porosity. Cavings?		
	<u>dolomite</u>	<u>40%</u>	<u>light tan (10 YR 8/2)</u>
	Very finely to coarsely crystalline. 2% light tan, quartzose, oolitic chert. Most of the oolites have a dull white, tripolitic nucleus. Sparse, medium brown and light tan, siliceous oolites with a dull white, tripolitic nucleus and light tan, siliceous oolites with a medium brown dolomite nucleus. 5% pin-point vug porosity.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>dolomite</u>	<u>10%</u>	<u>medium brown (10 YR 4/2)</u>
	Microcrystalline to finely crystalline. As above, except 2% pin-point vug porosity.		
1785 - 1790	<u>dolomite</u>	<u>60%</u>	<u>light tan (10 YR 8/2)</u>
	Very finely to coarsely crystalline. 2% light tan, quartzose, oolitic chert. Most oolites have a dull white, tripolitic nucleus. Sparse, medium brown and light tan, siliceous oolites with dull white, tripolitic nucleus and light tan, siliceous oolites with medium brown, dolomite nucleus. 5% pin-point vug porosity.		
	<u>dolomite</u>	<u>30%</u>	<u>white (N9)</u>
	Very finely to coarsely crystalline. Sparse glauconite grains and white, opaque, porcelaneous chert. Cavings?		
	<u>dolomite</u>	<u>10%</u>	<u>medium brown (10 YR 4/2)</u>
	Microcrystalline to very finely crystalline. As above except, no porosity.		
1790 - 1795	<u>dolomite</u>	<u>75%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>25%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to coarsely crystalline. 30% white and light tan, opaque, porcelaneous and dull white, tripolitic chert. Common dull white, tripolitic intercrystalline filling and sparse drusy chert lined vugs. Sparse, glauconite grains, pyrite blebs clear quartz fracture fillings and coarse, clear dolomite crystals. Light tan, oolitic chert (cavings?). 5% vug porosity.		
1795 - 1800	<u>dolomite</u>	<u>75%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>25%</u>	<u>light tan (10 YR 8/2)</u>
	Very finely to coarsely crystalline. 15% white and light tan, opaque, porcelaneous and dull white, tripolitic chert. Common dull white, tripolitic intercrystalline filling and sparse drusy chert lined vugs. Sparse, glauconite grains, pyrite blebs clear quartz fracture fillings and coarse, clear dolomite crystals. Light tan, oolitic chert (cavings)? 5% vug porosity.		
1800 - 1805	<u>dolomite</u>	<u>85%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 8/2)</u>
	Very finely to coarsely crystalline. 10% white and		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
			light tan, opaque, porcelaneous and dull white, tripolitic chert. Common dull white, tripolitic intercrystalline filling and sparse drusy chert lined vugs. Sparse, glauconite grains, pyrite blebs, clear quartz fracture fillings and coarse, clear dolomite crystals. Light tan, oolitic chert (cavings?). 5% vug porosity.
1805 - 1815	<u>dolomite</u>	<u>75%</u>	<u>dark tan (10 YR 6/2)</u>
			Very finely to coarsely crystalline. 5% white and light tan, opaque, porcelaneous and dull white, tripolitic chert. Sparse pieces of the porcelaneous chert is oolitic and quartzose. Sparse, coarse, clear dolomite crystals, clear quartz crystals, pyrite blebs and glauconite grains. Very fine to fine, embedded, rounded and frosted quartz sand grains. 5% pin-point vug porosity.
	<u>dolomite</u>	<u>25%</u>	<u>light tan (10 YR 8/2)</u>
			Microcrystalline to coarsely crystalline. As above.
1815 - 1820	<u>dolomite</u>	<u>100%</u>	<u>light tan (10 YR 8/2)</u>
			Microcrystalline to finely crystalline. 2% light tan, opaque, porcelaneous and dull white, tripolitic chert with very fine, rounded and frosted, embedded quartz grains and dolomite crystals. Vugs are lined with coarse, clear dolomite crystals and sparse tripolitic chert. 5% vug porosity.
1820 - 1825	<u>dolomite</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>dark tan (10 YR 6/2)</u>
			Microcrystalline to medium crystalline. 1% white, opaque, porcelaneous in part oolitic and dull white, tripolitic chert. Sparse, pyrite blebs, coarse clear dolomite crystals and glauconite grains. Relict oolitic structure in the dark tan dolomite. 1% pin-point vug porosity.
1825 - 1830	<u>dolomite</u>	<u>95%</u>	<u>light tan (10 YR 8/2)</u>
			Microcrystalline to medium crystalline. 1% white and light tan, opaque, porcelaneous and dull white, tripolitic chert. Sparse, glauconite grains, pyrite blebs, coarse, clear dolomite crystals and very fine, rounded and frosted, embedded quartz

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
			sand grains. A fossil fragment. 1% pin-point vug porosity.
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u> Finely to medium crystalline. As above.
1830 - 1835	<u>dolomite</u>	<u>95%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline to medium crystalline. 1% white and light tan, opaque, porcelaneous and dull white, tripolitic chert. Sparse, pyrite blebs, glauconite grains, coarse, clear dolomite crystals and very fine to coarse, rounded and frosted, embedded quartz sand grains. 2% pin-point vug porosity.
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u> Very finely to medium crystalline. As above.
1835 - 1840	<u>dolomite</u>	<u>95%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline to finely crystalline. 1% white and light tan, opaque, porcelaneous in part oolitic and dull white, tripolitic chert with rounded and frosted, embedded quartz sand grains. Very sparse oolites have sand grain nucleus. Sparse, glauconite grains, pyrite blebs, coarse, clear dolomite crystals and very fine to coarse, rounded and frosted embedded quartz sand grains.
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u> Very finely to finely crystalline. As above.
1840 - 1845	<u>dolomite</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u> Microcrystalline to finely crystalline. 10% white and light tan, opaque, porcelaneous chert in part oolitic and quartzose. A piece of light brown, oolitic chert. Very abundant oolites have a dull white, tripolitic nucleus. Very sparse siliceous oolites. Sparse, glauconite grains, pyrite blebs, very fine to medium grained, rounded and frosted, embedded quartz sand grains and coarse, clear dolomite crystals.
	<u>dolomite</u>	<u>5%</u>	<u>medium light gray (N6)</u> Microcrystalline. As above.
1845 - 1850	<u>dolomite</u>	<u>80%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>dark tan (10 YR 6/2)</u> Microcrystalline to finely crystalline. 10% white and light tan, opaque, porcelaneous chert in part

SAMPLE DEPTH ROCK TYPE PER CENT COLOR

oolitic and quartzose. Very sparse dull white, tripolitic chert. Very abundant oolites have a dull white, tripolitic chert. Very sparse siliceous oolites. Sparse, glauconite grains, pyrite blebs very fine to medium grained, rounded and frosted, embedded quartz sand grains and coarse, clear dolomite crystals.

dolomite 5% medium light gray (N6)
Microcrystalline. As above.

1850 - 1855

dolomite 75% light tan (10 YR 8/2)
dolomite 20% dark tan (10 YR 6/2)

Microcrystalline to finely crystalline. 10% white and light tan, opaque, porcelaneous chert in part oolitic and quartzose. Sparse dull white, tripolitic chert. Very abundant oolites have a dull white, tripolitic nucleus. Very sparse siliceous oolites. Sparse, glauconite grains, pyrite blebs very fine to medium, rounded and frosted, embedded quartz sand grains and coarse, clear dolomite crystals.

dolomite 5% medium light gray (N6)
Microcrystalline. As above.

1855 - 1860

dolomite 60% light tan (10 YR 8/2)
dolomite 20% light brown (10 YR 5/2)
dolomite 20% dark tan (10 YR 6/2)

Microcrystalline to finely crystalline. 5% white and light tan, opaque, porcelaneous in part oolitic and quartzose and dull white, tripolitic chert. Sparse pyrite blebs. 50% of the dolomite has a relict oolitic structure. 2% pin-point vug porosity in the (10 YR 8/2) and 5% in the (10 YR 6/2) and 10% in the (10 YR 5/2).

1860 - 1865

dolomite 70% light brown (10 YR 5/2)
dolomite 20% dark tan (10 YR 6/2)
dolomite 10% light tan (10 YR 8/2)

Microcrystalline to finely crystalline. 2% white and light tan, opaque, porcelaneous in part oolitic and quartzose and dull white, tripolitic, chert. Sparse, pyrite blebs, glauconite grains, coarse, clear dolomite crystals and very sparse fine, rounded and frosted, quartz sand grains. 80% of the dolomite has a relict oolitic structure. 2%

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
			pin-point vug porosity in the (10 YR 5/2) and 5% in the (10 YR 6/2) and 10% in the (10 YR 8/2).
1865 - 1870	<u>dolomite</u>	<u>75%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline to finely crystalline. 2% white and light tan, opaque, porcelaneous in part oolitic and quartzose and dull white, tripolitic, chert. Very fine, rounded and frosted, embedded quartz sand grains. Sparse, pyrite blebs and glauconite grains. 20% of the dolomite has a relict oolitic structure. 2% pin-point vug porosity.
	<u>dolomite</u>	<u>25%</u>	<u>light brown (10 YR 5/2)</u> Very finely to finely crystalline. As above except, 10% pin-point vug porosity.
1870 - 1875	<u>dolomite</u>	<u>95%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline to finely crystalline. 1% white and light tan, opaque, porcelaneous in part oolitic and dull white, tripolitic chert. Very sparse, glauconite grains and pyrite blebs. Very fine to fine, rounded and frosted, embedded quartz sand grains. Very sparse, coarse, clear dolomite crystals. 5% relict oolitic structure. 2% vug porosity.
	<u>dolomite</u>	<u>5%</u>	<u>light brown (10 YR 5/2)</u> Very finely to finely crystalline. As above except, 5% pin-point vug porosity.
1875 - 1880	<u>dolomite</u>	<u>55%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>45%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline to finely crystalline. Very fine to fine, rounded and frosted, embedded quartz sand grains. Very sparse, coarse, clear dolomite crystals. 2% pin-point vug and vug porosity.
1880 - 1885	<u>dolomite</u>	<u>55%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>35%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline to finely crystalline. Very fine to fine, rounded and frosted, embedded quartz sand grains. Very sparse, coarse, clear dolomite crystals. 2% pin-point vug and vug porosity.
	<u>dolomite</u>	<u>10%</u>	<u>very light gray (N8)</u> Microcrystalline. As above.
1885 - 1890	<u>dolomite</u>	<u>85%</u>	<u>dark tan (10 YR 6/2)</u> Very finely to finely crystalline. 1% white, opaque, porcelaneous and light gray translucent chert. Very fine, rounded and frosted embedded

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
			quartz sand grains. Very sparse, coarse, clear dolomite crystals. 2% pin-point vug porosity.
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline to finely crystalline. As above.
1890 - 1895	<u>dolomite</u>	<u>45%</u>	<u>medium brown (10 YR 4/2)</u>
	<u>dolomite</u>	<u>40%</u>	<u>dark tan (10 YR 6/2)</u> Very finely to finely crystalline. 1% white, opaque, porcelaneous and light gray translucent chert. Very sparse, rounded and frosted, embedded quartz sand grains and coarse, clear dolomite crystals. A fossil fragment. 1% vug porosity in the (10 YR 4/2) and 5% in the (10 YR 6/2).
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline to very finely crystalline. As above except, 2% pin-point vug porosity.
1895 - 1900	<u>dolomite</u>	<u>85%</u>	<u>light brown (10 YR 5/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 7/2)</u> Very finely crystalline. 1% light tan, opaque, porcelaneous chert. Vugs are lined with fine, clear dolomite crystals. 5% vug porosity.
1900 -1905	<u>dolomite</u>	<u>80%</u>	<u>light brown (10 YR 5/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 7/2)</u> Very finely to finely crystalline. 80% of the dolomite has a relict oolitic structure. Sparse, pyrite blebs and coarse, rounded and frosted, quartz sand grains. Vugs are lined with fine, clear dolomite crystals. 5% vug porosity.
	<u>shale</u>	<u>5%</u>	<u>medium gray (N5)</u> 10% calcareous cement. Very sparse fossil fragments. Cavings?
1905 - 1910	<u>dolomite</u>	<u>55%</u>	<u>light brown (10 YR 5/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u> Very finely to finely crystalline. Very sparse, rounded and frosted, embedded quartz sand grains and dark gray shale partings. Also, very sparse glauconite grains and pyrite blebs. 50% of the dolomite has a relict oolitic structure. Vugs are lined with fine dolomite crystals. 5% vug porosity in the (10 YR 7/2) and 2% in the (10 YR 6/2).
	<u>dolomite</u>	<u>35%</u>	<u>light tan (10 YR 7/2)</u> Microcrystalline. As above except, no porosity.

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
1910 - 1915	<u>dolomite</u>	<u>60%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>30%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline. Sparse very fine to fine, rounded and frosted, embedded quartz sand grains. A dark gray shale parting. 1% pin-point vug porosity.		
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline. As above except, 2% pin-point vug porosity.		
1915 - 1920	<u>dolomite</u>	<u>85%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline, 10% white, very light tan, opaque, porcelaneous in part oolite and quartzose and dull white tripolitic, chert. 1% very fine to fine, rounded and frosted, embedded quartz sand grains. Very sparse pyrite blebs and stylolites. 1% pin-point vug porosity in the (10 YR 7/2) and 2% in the (10 YR 8/2).		
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 8/2)</u>
	Very finely to finely crystalline. As above except, 1% pin-point vug porosity.		
1920 - 1925	<u>dolomite</u>	<u>50%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline. 5% white, milky and very light tan, opaque, porcelaneous chert in part translucent oolitic and quartzose. Very sparse dull white tripolitic chert. 60% of the dolomite has a relict oolitic structure. Very sparse, pyrite blebs and rounded and frosted quartz sand grains. 3% pin-point vug porosity.		
	<u>dolomite</u>	<u>45%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline. As above except, 2% pin-point vug porosity in the (10 YR 7/2) and 1% in the (10 YR 8/2).		
1925 - 1930	<u>dolomite</u>	<u>50%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline. 5% white, milky and very light tan, opaque, porcelaneous, chert in part translucent oolitic and quartzose. Very sparse dull white, tripolitic, chert. 60% of the dolomite has a relict oolitic structure. Very sparse, pyrite blebs and rounded and frosted quartz sand grains. 3% pin-point vug porosity.		
	<u>dolomite</u>	<u>45%</u>	<u>light tan (10 YR 7/2)</u>

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline. As above except, 2% pin-point vug porosity in the 10 YR 7/2) and 1% in the (10 YR 8/2).		
1930 - 1935	<u>dolomite</u>	<u>85%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u>
	Very finely to finely crystalline. 2% white and very light tan, opaque, porcelaneous in part oolitic and quartzose and dull white, tripolitic chert. 5% very fine to medium, rounded and frosted, embedded quartz sand grains. Sparse, embedded grains of glauconite and pyrite blebs. Very sparse, coarse, clear dolomite crystals. 85% of the dolomite has a relict, oolitic structure. 3% pin-point vug porosity in the (10 YR 6/2) and 2% pin-point vug porosity in the (10 YR 7/2).		
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline. As above except, 1% pin-point vug porosity.		
1935 - 1940	<u>dolomite</u>	<u>80%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline. 5% white and very light tan, opaque, porcelaneous in part, oolitic and quartzose, and dull white, tripolitic chert. Very sparse oolites have a sand grain and dull white, tripolitic nucleus. Very fine to coarse, rounded and frosted, embedded quartz sand grains. Very sparse, glauconite grains, pyrite blebs and coarse, clear dolomite crystals. 10% of the dolomite has a relict oolitic structure. 1% pin-point vug porosity.		
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to finely crystalline. As above except, 2% pin-point vug porosity.		
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline. As above except, 3% pin-point vug porosity.		
1945 - 1950	<u>dolomite</u>	<u>87%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to finely crystalline. Very fine to coarse, rounded and frosted, embedded quartz sand grains. Sparse, glauconite grains and very sparse, relict oolitic and oolmoldic structures. 2% pin-point vug porosity in the (10 YR 8/2) and 1% in the (10 YR 7/2).		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
	<u>dolomite</u>	<u>2%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely crystalline. As above except, 1% pin-point vug porosity.		
	<u>shale</u>	<u>1%</u>	<u>green-gray (5G 5/1)</u>
	Smooth and brite.		
1950 - 1955	<u>dolomite</u>	<u>87%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. Very sparse, very light tan, oolitic and opaque, porcelaneous chert. Very sparse, very fine to coarse, rounded and frosted embedded quartz sand grains and glauconite grains. Relict, oolitic and oolmoldic structures. 2% pin-point vug porosity in the (10 YR 8/2) and 1% in the (10 YR 7/2).		
	<u>dolomite</u>	<u>2%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely crystalline. As above except, 1% pin-point vug porosity.		
	<u>shale</u>	<u>1%</u>	<u>green-gray (5G 5/1)</u>
	Smooth and brite.		
1955 - 1965	<u>dolomite</u>	<u>55%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>45%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. 1% very light tan, opaque, porcelaneous chert. Very sparse, very fine to coarse, rounded and frosted, embedded quartz sand grains and glauconite grains. Relict oolitic and oolmoldic structures. 2% oolmoldic and pin-point vug porosity.		
1965 - 1970	<u>dolomite</u>	<u>50%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline. 2% very light tan, opaque, porcelaneous chert in part oolitic. Sparse, glauconite grains. 50% of the dolomite has a relict oolitic structure. 2% pin-point vug porosity.		
	<u>dolomite</u>	<u>45%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. As above.		
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline. As above.		
1970 - 1975	<u>dolomite</u>	<u>65%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely crystalline. 2% very light tan and white, opaque, porcelaneous chert in part oolitic. Very sparse dull whtie, tripolitic chert and		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
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glaucanite grains. 65% of the dolomite has a relict oolitic structure. Sparse, coarse, clear dolomite crystals. A dark brown, carbonaceous parting. 2% pin-point vug porosity.

dolomite 30% light tan (10 YR 7/2)

dolomite 5% light tan (10 YR 8/2)

Microcrystalline to finely crystalline. As above except, 2% pin-point vug porosity in the (10 YR 7/2) and 1% in the (10 YR 8/2).

1975 - 1980

dolomite 60% light tan (10 YR 7/2)

Microcrystalline to finely crystalline. 2% very light tan and white, opaque, porcelaneous chert in part oolitic. Very sparse dull white, tripolitic chert, glaucanite grains and very fine to coarse, rounded and frosted, embedded quartz sand grains. 65% of the dolomite has a relict oolitic structure. Sparse, coarse, clear dolomite crystals. A dark brown, carbonaceous parting. 2% pin-point vug porosity.

dolomite 35% dark tan (10 YR 6/2)

Very finely crystalline. As above.

dolomite 5% light tan (10 YR 8/2)

Microcrystalline to very finely crystalline. As above except, 1% pin-point vug porosity.

1980 - 1985

dolomite 55% dark tan (10 YR 6/2)

dolomite 35% light tan (10 YR 7/2)

dolomite 10% light tan (10 YR 8/2)

Microcrystalline to very finely crystalline. 2% light tan and white, opaque, porcelaneous in part oolitic chert. Very sparse, glaucanite grains and very fine to coarse, rounded and frosted, embedded quartz sand grains. 10% of the dolomite has a relict oolitic structure. 2% pin-point vug porosity in the (10 YR 6/2) and 1% in the (10 YR 8/2)

1985 - 1990

dolomite 75% light tan (10 YR 7/2)

dolomite 15% light tan (10 YR 8/2)

dolomite 10% dark tan (10 YR 6/2)

Microcrystalline to very finely crystalline. 2% light tan and white, opaque, porcelaneous chert in part oolitic. Very sparse dull white, tripolitic chert. Also very sparse, very finely embedded glaucanite grains. 2% of the dolomite has a relict

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
			oolitic structure. Sparse dark gray, dolomitic shale partings. Very sparse, very fine to fine, rounded and frosted embedded quartz sand grains. 1% pin-point vug porosity in the (10 YR 7/2) and (10 YR 6/2) and 2% in the (10 YR 6/2).
1990 - 1995	<u>dolomite</u>	<u>55%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>44%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>1%</u>	<u>dark tan (10 YR 6/2)</u>
			Microcrystalline to very finely crystalline. 1% tan and white, opaque, porcelaneous chert. Very sparse, dull white tripolitic chert. Also, very sparse, very fine, embedded glauconite grains. 1% of the dolomite has relict oolitic structure. Sparse, dark gray, dolomitic shale partings. 1% pin-point vug porosity.
1995 - 2000	<u>dolomite</u>	<u>80%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>20%</u>	<u>light tan (10 YR 8/2)</u>
			Microcrystalline to very finely crystalline. 5% light tan, white and milky mottled, opaque, porcelaneous chert. Very sparse, dull white, tripolitic chert. Also very sparse blebs of clear quartz and sparse, coarse, clear dolomite crystals. 1% pin-point vug porosity.
2000 - 2005	<u>dolomite</u>	<u>65%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>25%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u>
			Microcrystalline to very finely crystalline. 10% light tan, white, light gray, opaque, porcelaneous chert. Very sparse blebs of clear quartz. A grey-green, glauconitic shale parting. 1% pin-point vug porosity.
2005 - 2010	<u>dolomite</u>	<u>65%</u>	<u>dark tan (10 YR 6/2)</u>
			Very finely crystalline. 2% light tan, opaque, porcelaneous chert. 2% pin-point vug porosity.
	<u>dolomite</u>	<u>25%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
			Microcrystalline to very finely crystalline. As above. 2% pin-point vug porosity in the (10 YR 7/2) and 1% in the (10 YR 8/2).
2010 - 2015	<u>dolomite</u>	<u>70%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>25%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
			Microcrystalline to very finely crystalline. 3%

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
			light tan and white, opaque, porcelaneous chert in part oolitic and quartzose. Very sparse, dull white, tripolitic chert. Stylolitic. 2% pin-point vug porosity.
2015 - 2020	<u>dolomite</u>	<u>80%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u>
			Microcrystalline to very finely crystalline. 3% light tan and white, opaque, porcelaneous chert in part oolitic and quartzose. Very sparse, dull white, tripolitic, chert. Also, very sparse glauconite grains. Stylolitic. 1% pin-point vug porosity.
2020 - 2030	<u>dolomite</u>	<u>75%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
			Microcrystalline to very finely crystalline. 2% white and very light tan, opaque, porcelaneous chert. Very sparse, dull white, tripolitic chert. Stylolitic. 1% pin-point vug porosity.
2030 - 2035	<u>dolomite</u>	<u>75%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
			Microcrystalline to very finely crystalline. 2% white and light tan, opaque, porcelaneous chert in part oolitic. Very sparse dull white chert. Also, very sparse glauconite grains. Stylolitic. Very sparse vugs that are lined with fine, clear dolomite crystals. 2% pin-point vug porosity.
2035 - 2040	<u>dolomite</u>	<u>90%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
			Microcrystalline to very finely crystalline. 2% white and light tan, opaque, porcelaneous chert. Very sparse, dull white chert with small oolites. Also very sparse, clear quartz blebs and veins. A parting of gray-green shale laminated with dark brown, carbonaceous laminae. 1% pin-point vug porosity.
2040 - 2045	<u>dolomite</u>	<u>95%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 7/2)</u>

SAMPLE DEPTH ROCK TYPE PER CENT COLOR

Microcrystalline to finely crystalline. 2% light tan and white, opaque, porcelaneous chert. Very sparse, dull white chert with small oolites. Also very sparse, clear quartz blebs and veins. Stylolitic. 2% pin-point vug porosity in the (10YR 6/2) and (10 YR 7/2).

2045 - 2060 dolomite 70% light tan (10 YR 7/2)
dolomite 25% dark tan (10 YR 6/2)
dolomite 5% light tan (10 YR 8/2)

Microcrystalline to finely crystalline. 2% light tan and white, opaque, porcelaneous chert. Very sparse, dull white chert with small oolites. Also, very sparse, clear quartz blebs and veins. Stylolitic. 2% pin-point vug porosity in the (10 YR 7/2) and (10 YR 6/2) and 1% in the (10 YR 8/2).

2060 - 2085 dolomite 75% light tan (10 YR 7/2)
dolomite 15% dark tan (10 YR 6/2)
dolomite 10% light tan (10 YR 8/2)

Microcrystalline to very finely crystalline. 2% light tan and white, opaque, porcelaneous and dull white, pelletal and oolitic chert. Sparse, clear quartz blebs and veins. Stylolites. Sparse, small white, siliceous oolites and pellets embedded in the dolomite. 2% pin-point vug porosity in the (10 YR 7/2) and (10 YR 6/2) and 1% in the (10 YR 8/2).

2085 - 2090 Sample Skip

2090 - 2095 dolomite 65% light brown (10 YR 5/2)
Very finely to finely crystalline. 2% light tan and white, opaque, porcelaneous chert in part oolitic, pelletal and quartzose. Very sparse dull white chert. Sparse, clear quartz blebs, stylolites and embedded siliceous oolites. Also, very sparse vugs are lined with fine to medium clear dolomite crystals. 3% pin-point vug and larger vug porosity.

dolomite 25% light tan (10 YR 7/2)
dolomite 10% light tan (10 YR 8/2)

Microcrystalline to very finely crystalline. As above, except 1% pin-point vug porosity.

2095 - 2100 dolomite 65% light tan (10 YR 7/2)
dolomite 10% light tan (10 YR 8/2)

Microcrystalline to finely crystalline. 2% light tan and white, opaque, porcelaneous chert in part,

SAMPLE DEPTH ROCK TYPE PER CENT COLOR

oolitic, pelletal and quartzose. Very sparse dull white chert. Sparse, clear quartz blebs, stylolites and embedded siliceous oolites. Also, very sparse vugs are lined with fine to medium clear dolomite crystals. 2% pin-point vug porosity in the (10 YR 7/2) and 1% in the (10 YR 8/2).

dolomite 25% light brown (10 YR 5/2)
Very finely to finely crystalline. As above except, 3% pin-point vug and larger vug porosity.

2100 - 2105

dolomite 65% light tan (10 YR 7/2)
dolomite 10% light tan (10 YR 8/2)
Microcrystalline to finely crystalline. Sparse, clear crystalline quartz blebs. Very sparse vugs that are lined with fine to medium clear dolomite crystals. 2% pin-point vug and larger vug porosity in the (10 YR 7/2) and 1% pin-point vug porosity in the (10 YR 8/2).

dolomite 25% dark tan (10 YR 6/2)
Very finely to finely crystalline. As above except, 2% pin-point vug and larger vug porosity.

2105 - 2110

dolomite 50% dark tan (10 YR 6/2)
Very finely to finely crystalline. 2% light tan, opaque, porcelaneous and very sparse, dull white chert. Sparse, clear quartz blebs. Also, very sparse, glauconite blebs. 2% pin-point vug porosity.

dolomite 35% light tan (10 YR 7/2)
dolomite 10% light brown (10 YR 5/2)
dolomite 5% light tan (10 YR 8/2)
Microcrystalline to finely crystalline. As above, except 2% pin-point vug porosity in the (10 YR 7/2) and (10 YR 5/2) and 1% in the (10 YR 8/2).

2110 - 2115

dolomite 45% light tan (10 YR 8/2)
Microcrystalline to finely crystalline. Vugs that are lined with fine, clear dolomite crystals. 3% vug porosity.

dolomite 45% light tan (10 YR 7/2)
dolomite 10% dark tan (10 YR 6/2)
Very finely to finely crystalline. As above except, 3% vug porosity in the (10 YR 7/2) and 1% in the (10 YR 6/2).

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
2115 - 2120	<u>dolomite</u>	<u>90%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
Microcrystalline to very finely crystalline. Sparse blebs of clear quartz. 1% pin-point vug porosity.			
2120 - 2125	<u>dolomite</u>	<u>55%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>45%</u>	<u>light tan (10 YR 8/2)</u>
Microcrystalline to very finely crystalline. 1% white and very light tan, opaque, porcelaneous chert. Sparse blebs of clear quartz. Partings of dark gray-green dolomitic shale. 1% pin-point vug porosity.			
2125 - 2130	<u>dolomite</u>	<u>65%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>35%</u>	<u>light tan (10 YR 8/2)</u>
Very finely to medium crystalline. Sparse blebs of clear quartz. A dark green shale parting. 2% pin-point vug and intercrystalline porosity.			
2130 - 2135	<u>dolomite</u>	<u>60%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to medium crystalline. Very sparse vugs that are lined with fine, clear dolomite crystal. 2% pin-point vug and intercrystalline porosity.		
	<u>dolomite</u>	<u>20%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>light brown (10 YR 5/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
Very finely to finely crystalline. As above except, 2% pin-point vug and intercrystalline porosity in the (10 YR 7/2) and 1% in the (10 YR 5/2) and (10 YR 8/2).			
2135 - 2140	<u>dolomite</u>	<u>60%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>20%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>20%</u>	<u>dark tan (10 YR 6/2)</u>
Very finely to finely crystalline. Very sparse, vugs that are lined with fine, clear dolomite crystals. 2% pin-point vug and intercrystalline porosity in the (10 YR 7/2) and (10 YR 6/2) and 1% in the (10 YR 8/2).			
2140 - 2145	<u>dolomite</u>	<u>65%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>25%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light brown (10 YR 5/2)</u>
Very finely to finely crystalline. 2% white and light tan, opaque, porcelaneous and very sparse,			

SAMPLE DEPTH ROCK TYPE PER CENT COLOR

dull white chert with embedded dolomite crystals. Sparse quartz blebs. Vugs that are lined with fine to medium clear dolomite crystals. 1% pin-point vug porosity.

2145 - 2150

dolomite 95% light tan (10 YR 7/2)
dolomite 5% light tan (10 YR 8/2)

Very finely to finely crystalline. 5% white and tan, mottled, opaque, porcelaneous in part quartzose and very sparse, dull white chert. 2% pin-point vug porosity.

2150 - 2155

dolomite 65% dark tan (10 YR 6/2)

Very finely to finely crystalline. 2% white and light tan, opaque, porcelaneous chert in part pelletal and quartzose. Sparse dull white chert. Also, sparse blebs of crystalline quartz. Vugs that are lined with fine to medium clear dolomite crystals. 2% pin-point vug porosity.

dolomite 25% light tan (10 YR 7/2)
dolomite 10% light tan (10 YR 8/2)

Microcrystalline to very finely crystalline. As above except, 2% pin-point vug porosity in the (10 YR 7/2) and 1% in the (10 yr 8/2).

2155 - 2160

dolomite 75% light tan (10 YR 7/2)
dolomite 10% light tan (10 YR 8/2)

Microcrystalline to finely crystalline. 3% white and light tan, opaque, porcelaneous chert in part pelletal and quartzose. Very sparse, dull white chert. Sparse, clear quartz blebs and very sparse crystals. 2% pin-point vug porosity in the (10 YR 7/2) and 1% in the (10 YR 8/2).

dolomite 15% dark tan (10 YR 6/2)

Very finely to finely crystalline. As above except, 2% pin-point vug porosity.

2160 - 2165

dolomite 80% light tan (10 YR 7/2)
dolomite 10% light tan (10 YR 8/2)

Microcrystalline to finely crystalline. 3% white and light tan, opaque, porcelaneous chert in part pelletal and quartzose. Very sparse dull white chert. Sparse clear quartz blebs and very sparse crystals. 2% pin-point vug porosity in the (10 YR 7/2) and 1% in the (10 YR 8/2).

dolomite 10% dark tan (10 YR 6/2)

Very finely to finely crystalline. As above except, 2% pin-point vug porosity.

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
2165 - 2170	<u>dolomite</u>	<u>75%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to finely crystalline. 3% white and light tan, opaque, porcelaneous chert in part pelletal and quartzose. Very sparse, dull white chert. Sparse, clear quartz blebs and very sparse crystals. 2% pin-point vug porosity in the (10 YR 7/2) and 1% in the (10 YR 8/2).		
	<u>dolomite</u>	<u>20%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline. As above except, 2% pin-point vug porosity.		
2170 - 2175	<u>dolomite</u>	<u>75%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to finely crystalline. 3% white and light tan, opaque, porcelaneous chert in part pelletal and quartzose. Very sparse, dull white chert. Sparse, clear quartz blebs and very sparse crystals. 2% pin-point vug porosity.		
	<u>dolomite</u>	<u>15%</u>	<u>dark tan (10 YR 6/2)</u>
	Very finely to finely crystalline. As above.		
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to very finely crystalline. As above except, 1% pin-point vug porosity.		
2175 - 2180	<u>dolomite</u>	<u>65%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>25%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to finely crystalline. 2% white and light tan, opaque, porcelaneous chert in part pelletal. Very sparse, dull white chert. Also very sparse vugs that are lined with fine and medium dolomite crystals. 2% pin-point vug porosity in the (10 YR 6/2) and (10 YR 7/2) and 1% in the (10 YR 8/2).		
2180 - 2185	<u>dolomite</u>	<u>85%</u>	<u>light tan (10 YR 8/2)</u>
	Very finely to finely crystalline. Vugs that are lined with fine and medium, clear dolomite crystals. 3% pin-point vug porosity.		
	<u>dolomite</u>	<u>10%</u>	<u>dark tan (10 YR 6/2)</u>
	Microcrystalline to finely crystalline. As above except, 1% pin-point vug porosity.		
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 7/2)</u>
	Microcrystalline to very finely crystalline. As above except 1% pin-point vug porosity.		

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
2185 - 2190	<u>dolomite</u>	<u>90%</u>	<u>light tan (10 YR 8/2)</u> Very finely to finely crystalline. Sparse, clear quartz blebs. Vugs that are lined with fine and medium, clear dolomite crystals. 3% vug porosity.
	<u>dolomite</u>	<u>5%</u>	<u>light tan (10 YR 7/2)</u> Microcrystalline to very finely crystalline. As above except, 1% pin-point vug porosity.
	<u>dolomite</u>	<u>5%</u>	<u>dark tan (10 YR 6/2)</u> Microcrystalline to finely crystalline. As above except, 1% pin-point vug porosity.
2190 - 2195	<u>dolomite</u>	<u>88%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline to finely crystalline. 2% white and light tan, opaque, porcelaneous and very sparse, dull white, tripolitic chert, with inclusions of opaque, porcelaneous chert. Sparse, pyrite and clear quartz blebs. Vugs that are lined with fine dolomite crystals. 1% pin-point vug porosity.
	<u>dolomite</u>	<u>10%</u>	<u>light tan (10 YR 7/2)</u> Microcrystalline to very finely crystalline. As above.
	<u>dolomite</u>	<u>2%</u>	<u>dark tan (10 YR 6/2)</u> Very finely crystalline. As above.
2195 - 2200	<u>dolomite</u>	<u>60%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>25%</u>	<u>light tan (10 YR 8/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>dark tan (10 YR 6/2)</u> Microcrystalline to very finely crystalline. 2% white and light tan, opaque, porcelaneous and very sparse dull white chert. Sparse pyrite blebs and coarse, clear dolomite crystals. Vugs that are lined with fine to medium dolomite crystals. Stylolitic. 1% pin-point vug and larger vug porosity.
2200 - 2205	<u>dolomite</u>	<u>50%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>30%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>20%</u>	<u>light tan (10 YR 8/2)</u> Microcrystalline to very finely crystalline. 1% white and light tan, opaque, porcelaneous chert. Sparse, coarse, clear dolomite crystals, pyrite blebs and clear quartz blebs. Stylolitic. Vugs that are lined with fine, clear dolomite crystals. 1% pin-point vug and larger vug porosity.

<u>SAMPLE DEPTH</u>	<u>ROCK TYPE</u>	<u>PER CENT</u>	<u>COLOR</u>
2205 - 2210	<u>dolomite</u>	<u>60%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>25%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 8/2)</u>
Microcrystalline to very finely crystalline. 1% white and light tan, opaque, porcelaneous chert. Sparse, coarse, clear dolomite crystals, pyrite blebs and clear quartz blebs. Stylolitic. Vugs that are lined with fine, clear dolomite crystals. 1% pin-point vug and larger porosity.			
2210 - 2215	<u>dolomite</u>	<u>55%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>20%</u>	<u>light tan (10 YR 8/2)</u>
Microcrystalline to very finely crystalline. 1% light tan, opaque, porcelaneous chert. Stylolitic. Very sparse glauconite blebs. 1% pin-point vug porosity.			
2215 - 2220	<u>dolomite</u>	<u>25%</u>	<u>dark tan (10 YR 6/2)</u>
	Microcrystalline to finely crystalline. As above.		
	<u>dolomite</u>	<u>50%</u>	<u>dark tan (10 YR 6/2)</u>
2220 - 2225	<u>dolomite</u>	<u>35%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to finely crystalline. 1% light tan, opaque, porcelaneous chert. Stylolitic. Very sparse glauconite blebs. 1% pin-point vug porosity.		
2220 - 2225	<u>dolomite</u>	<u>50%</u>	<u>dark tan (10 YR 6/2)</u>
	<u>dolomite</u>	<u>35%</u>	<u>light tan (10 YR 7/2)</u>
Microcrystalline to finely crystalline. 1% white, opaque, porcelaneous chert. Very sparse, clear quartz blebs and glauconite grains. Vugs that are lined with fine, clear dolomite crystals. Stylolitic. 1% pin-point vug porosity.			
2225 - 2230	<u>dolomite</u>	<u>15%</u>	<u>light tan (10 YR 8/2)</u>
	Microcrystalline to very finely crystalline. As above.		
2225 - 2230	<u>dolomite</u>	<u>45%</u>	<u>light tan (10 YR 7/2)</u>
	<u>dolomite</u>	<u>35%</u>	<u>dark tan (10 YR 6/2)</u>
Microcrystalline to finely crystalline. 1% white, opaque, porcelaneous chert. Very sparse, clear quartz blebs and glauconite grains. Stylolitic. Vugs that are lined with fine clear dolomite crystals. 1% pin-point vug porosity.			