Water Well Log

Texas Geological Services, Inc.
Tarpley, Texas
830.562.3880

Well Location: No. 3 Freedmens Monitor Well
3.5 miles north of Comfort, Texas, Kerr Co
Drilling Contractor: Wm Featherguil Wilson, Texas State Licensed PG # 21
Driller: Aramaugger, Mike Tomlinson
Rig Type: Air Rotary
Total Depth: 700; completed 04-04-03

Depth	Scale	Lithology	Description	Effective Porosity 0 10 20	Well Construction	Micro-graphs	Comments
0			0.-70 SILTST MARL: cream-lt gray alternating foraminiferal mega fossil marl and calcareous siltstone		14" hole 0-20', set 10" PVC 0-20; 8 3/4" hole 20-700'		
70			70.-90 SAND/ LIMSTONE: white-lt gray sandy mega fossil biomicrite		Elev = 1680' GPS: N 29 52' 21.7" W 98 52' 13.7"		
90			90.-110 MUDSTONE/LIMSTE: lt tan-lt gray silty microsiltstone		In Upper Glen Rose Mbr @ surface		well located 77.7 west of Fredericksburg, Kerr Co line
110			110.-120 LIMSTONE: white-lt gray mega fossil phosphate fragment biomicrite		3" casing from 0-510; perforations 490-510'; hole cased in with Hosston Sand from 500-700'		
120			120.-150 MARL: lt gray foraminiferal mega fossil marl				
150			150.-160 LIMSTONE: white-lt gray mega fossil biomicrite				
160			160.-165 LIMSTONE: white-lt gray mega fossil phosphate fragment biomicrite				
165			165.-170 MARL: lt gray foraminiferal mega fossil marl				
170			170.-190 LIMSTONE: white-lt gray phosphate fragment mega fossil fragment marl				
190			190.-197 GABBROCK: lt gray white anhydrite				
197			197.-224 MARL & LIMSTONE: lt gray phosphate fragment interbedded with biomicrite				
224			224.-270 DOLOMITIC LIMSTONE: lt tan-lt gray dolomitic mega fossil biomicrite; Top of Lower Glen Rose Mbr; Corbula beds		Top of Lower Glen Rose Mbr @ 224' Corbula beds @ 224' Orbitolina texana		Orbitolina texana
270			270.-285 DARKST LIMSTONE: lt tan sandy m-cg biomicrite				
285			285.-290 MARL: lt gray phosphate fragment marl				
290			290.-310 LIMSTONE: lt gray phosphate fragment biomicrite				
310			310.-374 DARKST LIMSTONE: lt gray very sandy m-cg mega fossil biomicrite				Orbitolina texana
374			374.-410 SILTSTONE: lt tan siltstone, top of Hensel Sand Mbr		Top of Hensel Sand Mbr, Post-oak Pm @ 374'		Abbreviation boundary @ = 390'; 112 million years BP
410			410.-413 MARL: lt gray silty marl				Static water table @ 410'
413			413.-440 SILTSTONE: lt tan-white sandy siltstone				
440			440.-474 SANDSTONE: lt gray f-mg sandstone tightly cemented				
474			474.-483 CLAY: lt gray stiff clay, top of Hosston Mbr		Top of Hosston Sand Mbr, Post-oak Pm @ 474'		
483			483.-500 DARKST LIMSTONE: lt gray porous cg sandstone, top of Sycamore Sand Pm		Top of Sycamore Sand Pm @ 483' Neocomian boundary @ = 483'; 121 million years BP		
500			500.-510 SILTSTONE: lt gray siltstone				
510			510.-690 SAND & GRAVEL: lt gray very porous gravel and very coarse sand, mostly quartz, some chert, saturated, becoming less rounded and very poorly sorted with depth				525 ppm 690 ppm

Texas Geological Services, Inc.
P.O. Box 1
Tarpley, Texas 78883
830.562.3880