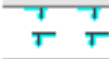
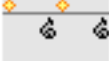


WALNUT 5-1 SWD (15-005-20116) T: 7S R: 21E S: 5
Latitude: 39.4643664 Longitude: -95.0930176 Elevation (GL): 1027.0 Depth: 2426.0

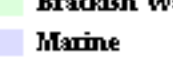
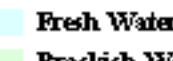
Depth	Stratigraphic Units							Rock Color	Lithology Rock Column	Grainsize Very Fine Fine Medium Coarse Very Coarse Fragile		Porosity	Type	Porosity	Remarks
	Members	Formations	Subgroup	Stage	Series	System	Era								
500												0	30		512 548 sh gray slightly silty slightly micaceous soft
															548 556 ls dark gray gray fine
															556 564 sh dark gray carb
															564 590 sh gray slightly micaceous soft
600															590 606 ls dark gray fine xln dense
															606 630 sh gray slightly micaceous soft
															630 663 ls cream light gray fine xln fossiliferous slightly chalky scattere visible porosity NS
	Stark Shale														663 Stark Shale
															672 690 ls gray light gray slightly mottled fossiliferous
700															690 700 ls cream fine-xln
															700 710 sh light gray soft
															710 735 ss gray fine grain well sorted well rounded shaly
															735 760 sh gray slightly silty slightly micaceous
															760 790 sh gray light gray soft
800															790 815 sh green gray slightly sandy
															815 840 sh green slightly silty soft
															840 867 sh gray slightly silty
900															867 872 ls tan fine xln
		Fort Scott Limestone													886 896 ls tan fine xln dense
	Excello Shale														896 900 sh black fissile
															910 923 ls cream fine xln
	Bevier coal														923 Excello Shale
															946 950 sh black carb
1000															1000 1002 coal shale black
	Croweburg coal														1012 1032 sh gray green slightly micaceous slightly
															1032 1036 sh black carb
	Mineral coal														1050 1058 ls tan fine xln
	Seaman coal														1058 1060 sh black carb
1100	Tobo coal														1072 1074 coal black carb
															1086 1092 ss gray fine grain
															1096 1108 ss gray fine-medium
	Weir-Pittsburg coal														1108 1124 sh gray green slightly fissile slightly
															1124 1126 coal sh black carb
1200															1158 1160 sh black carb
															1174 1184 ls cream tan
															1184 1198 sh light gray
															1198 1206 sh gray slightly
															1206 1216 ss light gray very
															1216 1222 ls cream fine xln
1300		Krebs													1250 1260 sh black carb
															1260 1264 coal black soft
															1274 1276 sh black carb
															1286 1294 sh black fissile
															1294 1310 ss light gray very fine - medium grain sub rounded
															1310 1324 sh gray slightly
															1324 1342 sh gray green slightly micaceous
	Rowe coal														1342 1358 coal black fissile soft bleeding gas vitreous
															1358 1360 sh gray green
1400															1372 1390 ss gray fine grain well sorted sub rounded good
	Riverton coal														1390 1402 sh gray green
															1402 1404 coal black fissile
															1418 1436 ss white fine grain well rounded well sorted fair
															1436 1440 sh black carb
1500															1476 1508 sh dark gray gray green slightly micaceous silty
															1508 1520 ss gray fine grain
															1520 Mississippian
															1540 1564 ls tan fine xln dense w/ chert tan specular fresh
															1564 1600 ls gray fine xln slightly fossilifcous dense
1600															1600 1620 ls tan fine-large xln fossiliferous slightly
															1620 1642 ls tan brown fine xln slightly fossiliferous dense
															1642 1670 chert white gray w/ black inclusions fresh scattered vuggy porosity
															1670 1704 chert white gray w/ black inclusions fresh scattered vuggy porosity w/ ls tan fine xln slightly
1700															1704 1710 ls tan fine xln
															1750 1756 ls tan fine xln
1800															1782 1804 ls tan fine xln slightly fossiliferous
															1804 1824 ls tan gray fine xln fossiliferous w/ chert white
															1824 1850 chert white gray fresh specular
															1850 1880 ls brown gray medium xln slightly fossiliferous no visible porosity
															1880 1907 ls brown fine xly dense
1900															1907 Kinderhookian
															1944 1966 sh dark gray slightly silty slightly fissile
															1966 Hunton
2000															2000 2004 dolo light gray fine
															2012 2020 dolo light gray fine
															2020 2030 ss white fine-medium
															2030 2046 dolomite brown micro xln slightly fossiliferous
															2046 2070 ls cream fine xln slightly fossiliferous slightly chalky
															2070 2090 ls tan gray fine xln dense w/ chert white fresh
2100															2090 2128 ls lighth gray fine xln fossiliferous slightly chalky
															2128 2150 ls tan fine xln slightly fossiliferous no visible porosity
		Maquoketa (Sylvan) Shale													2157 Maquoketa (Sylvan) Shale
		Viola Limestone													2172 Viola Limestone
2200															2188 2196 sh green gray
															2196 2200 ls cream fine xln
															2206 2216 dolomite tan fine
															2216 2221 sh green gray
															2232 2242 dolomite gray fine
															2242 2274 sh gray green sandy slightly micaceous
2300															2274 2288 ss white gray
															2288 2298 dolomite gray fine
															2298 2302 sh gray green
															2316 2329 sh dark gray light
															2329 Arbuckle
															2360 2426 dolomite brown tan light gray fine - medium xln poor to fair in xln porosity NS
2400															



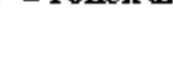
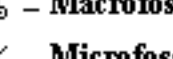
Primary Rock Lithology



Secondary Rock Lithology



Fossils



Porosity Type

