

NGL Water Solutions - Formation Data

NGL C10A

Formation	MD		Porosity	Lithology	To be Determined		
	Tops	Btm			TDS	Frac Gradient	Permeability
Lyons	9938'	10047'	16%	Sandstone, Leonardian age, very fine to fine grained, red, friable to locally silica cemented, fair to moderate porosity			
Lower Satanka	10047'	10384'	1%	Siltstone, shale, sparse very fine grained sandstone, brick red, anhydritic, tight			
Wolfcamp	10384'	10449'	1%	Dolostone, pink to light brown, massive bedded, tight, sparse, thin beds of siltstone and shale			
Amazon	10449'	10507'	12%	Dolostone, pink to light brown, massive bedded, moderate porosity			
Council Grove	10507'	10672'	12%	Dolostone, pink to light brown, massive bedded, moderate porosity, interbedded with anhydrite, white, massive bedded, tight, thin shales			
Admire	10672'	10737'	2%	Dolostone, fair to moderate porosity, interbedded with red, very fine grained sandstone and shale, tight			
Virgil	10737'	10916'	14%	Limestone, pink to light gray, massive to thin bedded, locally anhydritic, tight, Dolostone, light gray to pink, massive bedded, moderate to good porosity, sparse, thin beds of red shale and red siltstone			
Missouri	10916'	11031'	12%	Dolostone, light gray to pink, medium bedded, moderate to good porosity, Limestone, pink to light gray, massive to thin bedded, tight, sparse, thin beds of red shale and red siltstone			
Des Moines	11031'	11051'	2%	Limestone, light gray to light brown, massive to thin bedded, tight, interbedded with thin beds of maroon to gray shale, red to maroon siltstone and sandstone of Fountain formation			
Fountain	11051'	11276'	4%	Sandstone, very fine to medium grained, red to pink, calcareous, tight, interbedded with red shale and siltstone, locally micaceous, tight			
Atoka	11276'	11476'	2%	Sandstone, very fine to medium grained, red to pink, calcareous, tight, interbedded with red shale and siltstone, locally micaceous, tight			

*Depths and porosity are based on the NGL C7A SWD (05-123-32207)