

Scott County State Lake section T: 16S R: 33W S: 2

Latitude: 38.691849 Longitude: -100.935242 Elevation (GL): 2990.0 Depth: 155.0

Depth	Stratigraphic Units						Rock Color	Lithology Rock Column	Sedimentary Structures	Fossils	Remarks
	Members	Formations	Subgroup	Group	Stage	System					
0	Kimball	Ogallala									16. Sand silt and pebbles predominantly silt in upper part uniformly loosely cemented but upper part showing platy structure and harder   13
20											15. Sand and gravel reddish-tan uncemented some silt in upper part   13
	Ash Hollow										14. Silt and fine sand densely cemented gray to white a few lentils of uncemented fine red sand and silt   18
40											13. Clay silt and pebbles
60											11. Sand fine and silt some pebbles and nodules of caliche 10. Sand and silt cemented and indurated contains intraformational conglomerate in lower portion and platy zone at top   13.5
80											8. Sand fine silt and pebbles uncemented at base but stringers and plates of caliche 7. Sand fine gravel and silt 6. Sand fine to coarse and fine gravel cross-bedded irregularly cemented tan to yellowish-tan   13
100											5. Sand medium to coarse compacted massive at base to cross-bedded at top tan to 4. Sand fine to medium silt and fine gravel poorly sorted massive uniformly but weakly cemented tan to brown contains 3. Sand and gravel fine to coarse cross-bedded to evenly bedded weakly cemented lentils in middle and in upper part local variations in texture locally contains thin cream-colored marl bed at top   36
120											
140											2. Silt sand and clay massive uncemented brown   8
	Valentine										1. Clay bentonitic massive containing a few scattered sand grains tan to olive-brown. This bed rests on weathered Niobrara chalky shale   8.5

Primary Rock Lithology

	Clay, Claystone
	Silt, Siltstone
	Sand, Sandstone
	Marly, marl

Secondary Rock Lithology

	Clayey, Argillaceous, clay
	Shaly, shale
	Silty, Silt
	Sandy, sand
	Marly, marl
	Bentonite, Bentonitic
	Chalky

Fossils

	Fresh Water		Few
	Brackish Water		Many
	Marine		Broken
	- Macrofossils		

Sedimentary Structure Symbols

Depositional Structures

	- Bedding Base
	Abrupt or sharp, planar base of bed
	- Cross Bedding
	Planar cross-bedding
	- Stratification

Horizontal bedding

Deformational Structures

	Flame structure
	Nodules