

WELL: FIDELITY SIOUX RANCH #22-1

LOCATION: Sec 11 - T25N - R56W

FORMATION:

CORE DEPTH: 7572 - 7673

DEPTH	GRAIN SIZE AND LITHOLOGY						FACIES	SEDIMENTARY STRUCTURES	CONTACTS	POROSITY	CEMENTS	COMMENTS
	A C	GS M	PS F	WS VF	MS SLT	SH SH						
-7572	Λ	Λ	Λ	Λ	Λ	Λ	9		A			Facies 9 - Anhydrite - Dark gray to white, nodular anhydrite with thin dolomite laminations and interbeds. Salina to supratidal deposition.
-7575							7	Poor Fluorescence	A			Facies 7 - Dolomite - Light brown to brown, massive to parallel bedded, dolomudstone (microcrystalline to very fine-crystalline dolomite). Commonly anhydritic. Restricted shelf to salina deposition.
-7580	Λ	Λ	Λ	Λ	Λ	Λ	9	Spotty Fluorescence	A	N		Facies 3 - Limestone - Dark gray to gray, lime mudstone. Deposition in protected shelf, lagoon, or salina environments.
-7585							7 & 1	Good Fluorescence OIL STAINED	A	P to F	A	Facies 9 - Anhydrite - Dark gray to white, nodular anhydrite with thin dolomite laminations and interbeds. Salina to supratidal deposition.
-7590	Λ	Λ	Λ	Λ	Λ	Λ	9	Spotty Fluorescence	A			Facies 7 - Dolomite - Light brown to brown, massive to parallel bedded, dolomudstone (microcrystalline to very fine-crystalline dolomite). Commonly anhydritic. Restricted shelf to salina deposition.
-7595	Λ	Λ	Λ	Λ	Λ	Λ	10	SS	A			Facies 9 - Anhydrite - Dark gray to white, nodular anhydrite with thin dolomite laminations and interbeds. Salina to supratidal deposition.
-7600							7 & 9	Algal laminations	A			Facies 9 - Anhydrite - Dark gray to white, nodular anhydrite with thin dolomite laminations and interbeds. Salina to supratidal deposition.
-7605							7 & 1	Spotty Fluorescence	A	P to N	A	Facies 7 - Dolomite - Light brown to brown, massive to parallel bedded, dolomudstone (microcrystalline to very fine-crystalline dolomite). Commonly anhydritic. Restricted shelf to salina deposition.
-7610	Λ	Λ	Λ	Λ	Λ	Λ	9		A			Crust from subaerial exposure
-7615	Λ	Λ	Λ	Λ	Λ	Λ	7		A			Facies 9 - Anhydrite - Dark gray to white, nodular anhydrite with thin dolomite laminations and interbeds. Salina to supratidal deposition.
-7620	Λ	Λ	Λ	Λ	Λ	Λ	9		A	N	A	Facies 9 - Anhydrite - Dark gray to white, nodular anhydrite with thin dolomite laminations and interbeds. Salina to supratidal deposition.
-7625	Λ	Λ	Λ	Λ	Λ	Λ	7	Dark gray - common anhydrite	A			Facies 9 - Anhydrite - Dark gray to white, nodular anhydrite with thin dolomite laminations and interbeds. Salina to supratidal deposition.
-7630							7 & 1	Dull Spotty Fluorescence	A	P to N	A	Facies 7 - Dolomite - Light brown to brown, massive to parallel bedded, dolomudstone (microcrystalline to very fine-crystalline dolomite). Commonly anhydritic. Restricted shelf to salina deposition.
-7635							1	Spotty Fluorescence	A			Facies 9 - Anhydrite - Dark gray to white, nodular anhydrite with thin dolomite laminations and interbeds. Salina to supratidal deposition.
-7640	Λ	Λ	Λ	Λ	Λ	Λ	9	Dull Spotty Fluorescence	A			Facies 9 - Anhydrite - Dark gray to white, nodular anhydrite with thin dolomite laminations and interbeds. Salina to supratidal deposition.
-7645	Λ	Λ	Λ	Λ	Λ	Λ	9	Dull Spotty Fluorescence	A	N		Facies 9 - Anhydrite - Dark gray to white, nodular anhydrite with thin dolomite laminations and interbeds. Salina to supratidal deposition.
-7650							7 & 1	Spotty Fluorescence	A			Facies 7 - Dolomite - Light brown to brown, massive to parallel bedded, dolomudstone (microcrystalline to very fine-crystalline dolomite). Commonly anhydritic. Restricted shelf to salina deposition.
-7655							7 & 1		A	P to N		Facies 1 - Shale - Black, blocky, calcareous to non-calcareous shale. Very shallow restricted basin or salina-lagoon-bay deposition.
-7660							10	SS	A			Facies 7 - Dolomite - Light brown to brown, massive to parallel bedded, dolomudstone (microcrystalline to very fine-crystalline dolomite). Commonly anhydritic. Restricted shelf to salina deposition.
-7665	Λ	Λ	Λ	Λ	Λ	Λ	9	Vertical anhydrite crystals = gypsum palmate fronds	A	N	A	Facies 10 - Sandstone - Gray to light gray, very fine to fine-grained, angular to rounded (mostly subrounded), poorly sorted, dominantly quartz, and siliceous and anhydritic. Base of sand dunes preserved because of early water inundation and cementation. Supratidal deposition.
-7670							7	Very Dull Fluorescence	A	P to N	A	Facies 9 - Anhydrite - Dark gray to white, nodular anhydrite with thin dolomite laminations and interbeds. Salina to supratidal deposition.
-7673							1	Fair Fluorescence	A			Increase in anhydrite nodules at the top of the unit
-7673							1	Common Anhydrite	A			Facies 7 - Dolomite - Light brown to brown, massive to parallel bedded, dolomudstone (microcrystalline to very fine-crystalline dolomite). Commonly anhydritic. Restricted shelf to salina deposition.