



00193481

From	To	Total Feet	Formation
4170	4390	220	Shale, black, marly
4390	4440	50	Shale, black
4440			FT. HAYES
4440	4500	60	Limestone, white, chalky, fossil
4500	4510	10	Shale, dk gr w/gr fine s.s. strks
4510	4520	10	S.s., gr., fn., tight (Codelle 4510?)
4520	4540	20	Shale & ss interbedded
4540	4550	10	Shale, dark gray, gritty
4550	4600	50	Shale & s.s. interbedded
4600	4658	58	Shale, dk gr., s.s. strks
4658			GREENHORN
4658	4680	22	Limestone, granular, highly Inoceramus, brn.
4680	4700	20	Shale, blk, gritty, sl. carb., s.s. strks
4700	4740	40	Shale, dk gr., silty; s.s. strks
4740	4954	214	Shale, dk gr.; I.P.; bent. strks.
4954			FIRST DAKOTA
4954	4970	16	S.s., wht., med. fn., hd. por., No show
4970	4980	10	S.s., wht., med. fn., hd. por. sl show oil
4980	5035	55	Shale, dk gr to blk, carb.; bent. strks
5035	5037	2	S.s., wht., med. grnd, soft, blk & grn access.
Core #1			
5037	5040	3	S.s., wht., med. grnd, tight, highly bentonitic
5040	5046	6	S.s., fn & shale interbedded
5046	5049	3	S.s., wht, med fn, sl. frac; bleeding oil & gas
5049	5055	6	S.s., & shale, thinly interbedded.
5055	5056	1	Shale, blk, hd, gritty
5056	5060	4	Silt, dk gr., carbonaceous inclusions.
5060	5062	2	S.s., med. grnd, blk accessories, hard, sl. por., bent. cement, slight show of oil,
5062	5067 $\frac{1}{2}$	5 $\frac{1}{2}$	S.s., med. coarse, porosity - poor to fair; show of oil
5067 $\frac{1}{2}$	5072	4 $\frac{1}{2}$	Silt, dk, gr., carb.
Core #2			
5072	5075	3	S.s., med. grnd., soft, por. sat.
5075	5077	2	S.s., coarse, por., bentonite inclusions
5077	5078	1	S.s., med. grnd., bentonitic, fair porosity
5078	5080	2	S.s., med. coarse, fair to good porosity
5080	5085	5	S.s., wht. med. fn. to med. coarse, round to subangular, bent. cement,hd., tight, barren.
5085	5094	9	S.s., med. fn. to me. coarse, tight with porous sat. streaks.