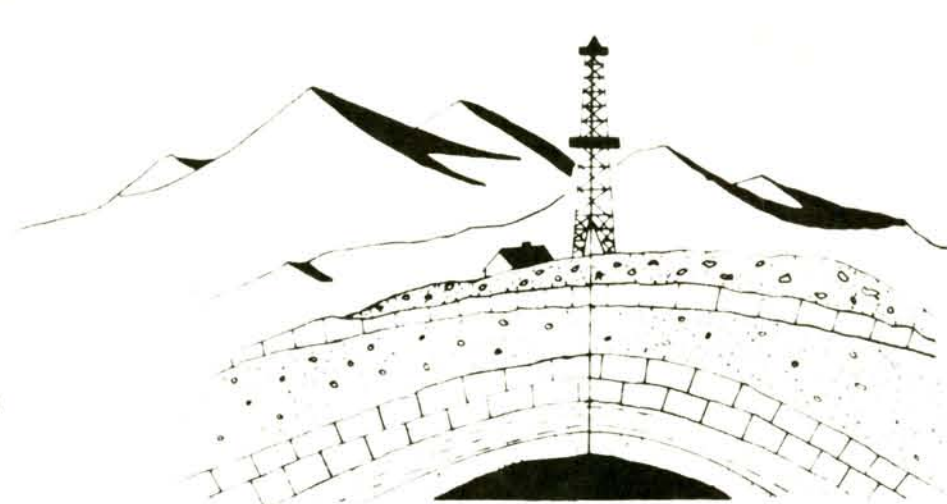


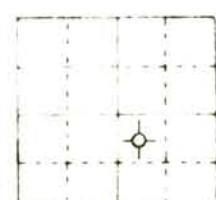
Northwest Geological Service



LOG NO. 181

COMPANY **WILLISTON PIONEER OIL CO.** LEASE AND NO. #1 **SHEPARD-DEARDORF**

STATE OR PROVINCE **MONTANA** COUNTY **SHERIDAN** AREA



LOCATION **C NW SE SEC 13 T 35 N. R 55 E. GRND. ELEV 2394' K.B. 2403'**

TOTAL DEPTH **8720'** SPUDDED **11-18-52** COMPLETED **2-29-53**

REMARKS: **Photo Enlargement X 10. (See Note in Descriptions.)**

GEOLOGIC SECTION **MISSISSIPPIAN: Ratcliffe Zone.** DATE **JUNE, 1963**

NO LOGS RUN	Depth Testing	PHOTO LOG	Porosity	NO LOGS RUN	REMARKS
	7050		N		Anhy,dns,argil,sl slty & sdy.
	7060		N		Ls,peld,frgtl,calcisphaeres,anhytc.
	7070		N		Ls,dns,fn fos frgs,spcls,tr foram,argil,tr silt grs,anhytc.
	7080		N		Ls,mud,sl peld,s/c-l,sl slty,anhytc,f/v fn fos frgs.
	7090		2		Ls,c-etc,unsorted,fos frgs,crin,bryon,calcisphaeres,alg,Garwoodia?,reworked lime mud.
	7100		N		Ls,mud,faint peld,tr fos frgs,ostr,anhytc,tr ools.
	7110		3		Ls,mud,fn peld,tr fos frgs,ostr,anhytc,tr c-c,calcisphaeres. Note-Core 2 7080-7138 3 core samples only-one for 7080-85 and 2 both marked 7085-7138. Drill samples cover interval and are assumed to be reaming samples. Drill samples used for interval 7085-7138.
	7120		3		Ls,fn peld,mud,s/alg,ostr,s/xln clc,tr anhy,sl vug por.
	7130		2		Ls,fnly foslf,rewoked lime mud and piso,argil,sl silc,sl por.
	7140	NO SAMPLES			
	7150		1		Ls,fnly,foslf,crin,brach,argil, tr reworked lime mud,s/ls, mud,sl peld.
	7160		2		Ls,fnly frgtl,rewoked lime mud,fnly foslf,dolote loc, s/ls,mud,alg,peld,sl por.
	7170		3		Ls,fnly frgtl,rewoked lime mud,foslf,brach,crin,s/ls,fn peld,mud,calcisphaeres,sl por
	7180		5		Ls,chky,dolote,fnly foslf, argil,calcisphaeres,alg tubes, tr ls,mud,fn peld,alg frgs, fair por.
	7190		1		Ls,fnly fos frgtl,brach,crin, cor,foram?,argil, tr silt grs, sl dolote,tr por.
	7200		5		Ls,chky,v dolote,fnly foslf, lchd,sl silc,sl anhytc,fair por.
	7210		N		Ls,fnly fos frgtl,crin,bryon, argil,sl dolote,tr silt grs.
	7220		N		Ls,fnly fos frgtl,crin,brach, bryon,calcisphaeres,argil,sl slty,pyr.
	7230		N		Ls,fos frgtl,bryon,foram, argil,pyr,silica vns,s/slst.
	7240		N		Ls,fos frgtl,crin,brach, slty.
	7250		N		Ls,fos frgtl,bryon,crin, c-etc loc,argil,sl slty.
	7260		N		Ls,foslf,bryon,brach,crin, tr foram,f/silt grs.
	7270		N		Ls,fos frgtl,bryon,crin,brach, argil,sl slty.
	7280		3		Ls,fos frgtl,crin,brach,argil, m/sh lams.