

WELL NO. 4  
 STATE CREGON  
 COUNTY LAKE  
 BLOCK EMBOODY  
 SEC. 32  
 T. 25S R. 12E  
 FARM BROOKS-SCANLON  
 COMPANY UNION OIL  
 FARM BROOKS-SCANLON  
 WELL NO. 4  
 SURVEY PERMIT # 61  
 TOTAL DEPTH 1010'  
 CONTRACTOR ADCOCK AIR DRILLING  
 COMMENCED 6/25/79  
 COMPLETED 7/16/79  
 REMARKS lost circulation 290'-330'

CASING RECORD  
 10 3/4" csg 0-101'  
 8 5/8" csg 83-230'  
 1 1/2" tubing to 1000'  
 SHOT QUARTS BETWEEN  
 TIME RATE SCALE: 1/10" = MINUTES  
 NEWELL 414-H BOX 800 TULSA OK 74101 PRINTED IN U.S.A.

DEPTH (ft)	LOG SYMBOLS	DESCRIPTION
0-20	TTTT	Tuff - gray to olive, highly welded, aphanitic, nodules amygdaloidal
20-40	TTTT	Lithic Tuff - pale olive, nodular groundmass
40-60	O.O.O.	Volcanic sand & gravel - med. to dk gray and sub-rounded to angular grains
60-80	O.O.O.	as above
80-100	O.O.O.	as above
100-120	O.O.O.	as above (minor basalt or andesite)
120-140	O.O.O.	as above
140-160	O.O.O.	Volcanic sand & gravel - as above
160-180	O.O.O.	light tan clay
180-200	O.O.O.	as above
200-220	V.V.V.V.	Basalt - aphanitic, vesicular, dk gray
220-240	V.V.V.V.	Basalt - as above
240-260	V.V.V.V.	Basalt or andesite - medium gray, aphanitic, sugary texture
260-280	V.V.V.V.	as above (minor andesite)
280-300	O.O.O.	Volcanic sand & gravel as above
300-320	O.O.O.	Sand & gravel - as above
320-340	X	no sample
340-360	X	no sample
360-380	V.V.V.V.	Basalt or andesite - medium gray, aphanitic to finely crystalline, 10% vesicular
380-400	V.V.V.V.	as above - 70-80% vesicular, gray to red
400-420	V.V.V.V.	as above - 50% vesicular
420-440	V.V.V.V.	Basalt - dk gray to gray-red, aphanitic to finely crystalline, highly vesicular
440-460	V.V.V.V.	Basalt - as above
460-480	V.V.V.V.	Basalt or andesite - as above
480-500	V.V.V.V.	as above
500-520	V.V.V.V.	Basalt or andesite - dk gray, aphanitic, sugary texture
520-540	V.V.V.V.	Basalt or andesite - as above
540-560	V.V.V.V.	Basalt - vesicular - gray-red, vesicular
560-580	V.V.V.V.	Basalt or andesite - medium gray
580-600	V.V.V.V.	Basalt or andesite - dk gray to gray-red, vesicular
600-620	V.V.V.V.	Basalt - gray to red, a/a
620-640	V.V.V.V.	as above
640-660	V.V.V.V.	Basalt - dk gray, porphyritic, plagioclase laths (1 mm or less), 50% vesicular, oxidized
660-680	V.V.V.V.	as above - 10% vesicular
680-700	V.V.V.V.	as above
700-720	V.V.V.V.	as above
720-740	V.V.V.V.	as above
740-760	V.V.V.V.	as above
760-780	V.V.V.V.	as above
780-800	V.V.V.V.	as above
800-820	V.V.V.V.	as above - 80% vesicular and/or oxidized
820-840	V.V.V.V.	Basalt - dk gray, commonly porphyritic
840-860	TTTT	Tuff(?) - grayish-red, v.f.g
860-880	V.V.V.V.	Basalt or andesite - med to dk gray, sugary texture (minor tuff)
880-900	V.V.V.V.	Basalt - dk gray to gray-red, aphanitic, commonly vesicular (minor tuff)
900-920	V.V.V.V.	Basalt - as above
920-940	V.V.V.V.	Basalt - as above
940-960	TTTT	Tuff(?) - medium gray, sugary texture
960-980	TTTT	as above
980-1000	V.V.V.V.	Basalt or andesite - medium gray, aphanitic sugary texture
1000 T.D.		No water encountered