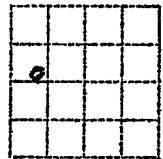


Company - GRAIAPP ET AL
 Farm - Hesket No. 1.

SEC. 19 T. 33 R. 3 E
 SE SW NW

Total Depth. 3222'
 Comm. 9-30-43 Comp. 11-15-43
 Shot or Treated.
 Contractor. A. Brewer
 Issued. 1-29-44

County. Cowley
 KANSAS



CASING:
 20" 60' 10" 1910' 5" 3196'
 15 1/2" 627' 8 1/2" 2255'
 12 1/2" 1205' 7" 2970'

Elevation. _____

Production. 10 B.

Figures Indicate Bottom of Formations.

cellar	10	red rock	920	shale	1765
shale	20	shale	935	lime	1770
sand	57	lime	940	shale	1775
lime	59	shale	960	lime	1785
shale	65	sand 4BW	975	shale	1845
lime	72	shale	985	lime	1855
shale	75	lime	995	shale blk	1870
lime	85	shale	1000	shale	1878
sand gas	100	lime	1005	1878-1892 Corr.	
shale	140	shale	1025	red rock	1906
lime	160	lime	1030	lime	1910
shale	175	shale	1055	lime shells	1925
red rock	180	lime	1060	lime	1948
lime	185	shale	1065	shale	1985
shale	230	lime	1070	lime	2000
lime	260	shale	1100	cave 2025	
shale (1/2BW 300)	285	shale sdy	1110	shale	2145
lime brkn	325	shale	1140	lime	2155
shale	330	lime	1160	shale & shells	2185
red rock	340	shale	1195	shale	2200
lime	350	lime	1197	sand	2235
shale	360	shale	1215	shale	2240
lime	370	lime	1225	sand	2280
red rock	380	shale	1230	sdv lime	2290
lime	405	lime	1245	shale	2388
shale	410	shale	1280	lime	2395
3BWPH 400-05		lime	1288	shale	2440
lime	425	shale	1330	shale & shells	2520
shale	430	lime	1360	shale	2590
red rock	445	shale	1365	sand & lime	2640
lime	460	lime	1385	3BWPH 2610-30	
shale	465	shale	1390	shale	2665
lime	495	lime	1405	sand HFV	2710
shale	510	shale	1415	lime sdy	2725
lime	530	lime sdy 8BW	1435	shale blk	2730
shale	535	shale	1440	shale	2770
lime	570	lime	1450	lime	2880
red rock	610	shale wtr	1455	shale	2885
lime	635	shale	1464	lime	2895
shale	650	lime	1468	shale	2920
lime	670	shale cave	1475	shale muddy	2935
shale	675	lime	1530	shale	2964
lime	680	shale	1535	lime	2975
shale	685	lime	1565	shale	2980
lime	695	shale	1570	lime	2990
shale & shells	710	lime	1585	shale & shells	3000
lime	720	shale	1595	lime	3035
shale	730	lime	1630	shale	3040
lime	740	shale	1635	lime	3061
shale	745	lime	1655	shale	3065
lime	755	shale	1658	lime	3073
shale	760	lime	1660	shale sdy	3078
lime	770	shale	1675	3078-3062 Corr.	
shale	780	lime	1685	shale sdy 3062-3090	
lime	800	shale	1695	shale dk	3125
shale	850	lime	1700	shale	3197
lime	855	shale	1705	sand	3221
shale	890	lime	1710	chat	3222
lime	895	shale	1730	Total Depth.	
shale	905	sand, wtr	1745		
lime	915	sand	1758		