

H G Hawk Lease Well No.  
 No S W 4-23-4  
 Butler County Kansas

Soil and Clay		20
Red Rock	20	30
Slate	30	40
Lime	40	50
Shale	50	75
Red Rock	75	85
Lime	85	105
Sand	105	125
Sand	125	130
Blue Shale	130	135
Lime	135	140
Lime	140	145
Sand	145	150
Lime	150	260
Red Rock	260	265
Blue Shale	265	275
Lime	275	290
Red Rock	290	295
Sand Lime	295	310
Sand Lime	310	330
Red Rock	330	350
Lime	350	365
Shale	365	370
Blue Shale	370	390
Lime	390	410
Blue Shale	410	455
Lime	455	465
Blue Shale	465	490
Brown Shale	490	500
Lime	500	520
Brown Shale	520	550
Blue Shale	550	560
Lime	560	570
Broken Lime	570	600
Shale	600	610
Lime	610	635
Blue Shale	635	670
Blue Shale	670	710
Lime	710	715
Blue Shale	715	755
Blue Shale	755	795
Lime	795	800
Blue Shale	800	840
Blue Shale	840	860
Blue Shale	860	9 05
Blue Shale	905	945
Lime	945	960
Lime	960	975
Shale	975	980
Lime	980	1015
Slate	1015	1025
Li me	1025	1037
Shale	1037	1042
Blue Shale	1042	1062
Lime	1062	1067
Blue Shale	1067	1075
Blue Shale	1075	1100
Shale	1100	1105
Lime	1105	1125
Shale	1125	1130
Blue Shale	1130	1155
Lime	1155	1170
Slate	1170	1200
Sand	1200	1210
Shale	1210	1215
Lime	1215	1250
Lime	1250	1280
Shale	1280	1300
Shale	1300	1310
Lime	1310	1325
Slate	1325	1340

Lime	1340	1345
Slate	1345	1355
Water Sand	1355	1360
Lime	1360	1378
Slate	1378	1390
Lime	1390	1480
Shale	1480	1500
Lime	1500	1510
Slate	1510	1515
Lime	1515	1550
Lime	1550	1560
Shale	1560	1565
Lime	1565	1570
Slate	1570	1578
Lime	1578	1585
Slate	1600	1600
Lime	1600	1610
Slate	1610	1618
Lime	1618	1625
Slate	1625	1635
Slate	1635	1740
Lime	1740	1750
Slate	1750	1770
Lime	1770	1775
Slate	1775	1777
Lime	1777	1795
Slate	1795	1835
Lime	1835	1845
Sand	1845	1850
Lime	1850	1865
Shale	1865	1975
Slate	1875	2000
Lime	2000	2010
Lime	2010	2025
Lime	2025	2047
Water Sand	2047	2052
Lime	2052	2057
Slate	2057	2072
Lime	2072	2082
Shale	2082	2087
Lime	2087	2092
Sand Oil	2092	2104
Lime	2104	2115
Slate	2115	2122
Lime	2122	2125
Lime	2125	2150
Slate	2150	2160
Lime	2160	2180
Slate	2180	2190
Slate & Shell	2190	2210
White Slate	2210	2270
Slate	2270	2280
Lime	2280	2295
Slate	2295	2310
lime	2310	2330
Slate Shell	2330	2340
Slate Shell	2340	2370
Slate Shell	2370	2395
Red Rock	2395	2400
slate	2400	2462
	2462	Top of Oil Sand
	2464	4"