

MORGAN GOLD HYDROCARBONS, INC.

OIL & GAS EXPLORATION & PRODUCTION

**MAIN STREET, P.O. BOX 428
JONESVILLE, VIRGINIA 24263**

**(703) 346-3476 or 346-3547
After 6 PM (703) 346-3548**

Summary of Gibson Lease Hole #1, Permit #694,
Lee County, Virginia

August 2, 1984

<u>Formation</u>	<u>Interval</u>
Trenton Ls	0-110
Eggleston Ls	110-250
Harty Creek Ls	250-375
Ben Hur Ls	375-520
Woodway Ls	520-
Hurricane Bridge Ls	-1075
Martins Creek Ls	1075-1240
Poteet Ls	1240-1320
Dot Formation	1320-1465
Limestone	1320-1422
Dolomite	1422-1465
Knox Dolomite	1465-2015 TD
Mascot	1465-1765 ?
Kingsport	1765- ?

LE-148

Interval	Rock Type	Color	Grain Size	Other
0-40	Surface			
40-45	Limestone	Med dove gy	fine	shakey ptns, calcite vns
-50	"	dk gy & dove	"	Silty (?)
-55	"	dk gy & br	"	Silty
-60	"	" "	"	"
-65	"	dk br	"	"
-70	"	dk gy br	"	Silty (?)
-75	"	dk gy dove	"	
-80	"	"	"	
-85	"	"	"	
-90	"	"	"	
-95	"	"	"	
-100	"	"	"	
-105	"	"	"	
-110	"	v. dk gy	"	Silty(?)
-115	"	"	"	"
-120	"	"	"	"
-125	"	"	"	"
-130	"	"	"	"
-135	"	"	"	"
-140	"	"	"	"
-145	"	"	"	"
-155	"	"	"	Calcite veined
-160	"	dk gy br	"	
-165	"	"	"	
-170	"	"	"	
-175	"	"	"	
-180	"	"	"	
-180	"	"	"	
-185	"	"	"	
-190	"	"	"	
-195	"	dk gy	"	
-200	No sample			
-205	Limestone	dk gy dove	fine	Mudstone facies
-210	"	"	"	wf calcite
-215	"	dk gy gn	"	Mudstone facies
-220	"	"	"	"
-225	"	dk gy	"	Silty
-230	"	"	"	"
-235	"	"	"	"
-240	"	"	"	"
-245	"	"	"	"
-250	"	dk gy br	"	reddish color
-255	"	"	"	"
-260	"	"	"	"
-265	"	"	"	"
-270	"	"	"	"

* letter H before a color means - light (H br) = light brown

Interval	Rock Type	Color	Grain size	Other
-275	Limestone	dk gy br	fine	reddish color
-280	"	"	"	"
-285	"	"	"	"
-290	"	"	"	
-295	"	"	"	
-300	"	"	"	
-305	"	dk gy	"	
-310	"	"	"	
-315	"	"	"	
-320	"	"	"	
-325	"	"	"	
-330	"	"	"	
-335	"	"	"	
-340	"	"	"	
-345	"	"	"	
-350	"	"	"	
-355	"	"	"	
-360	"	"	"	
-365	"	"	"	
-370	"	"	"	
-375	"	"	"	
-380	"	"	"	Grayish-blue
-385	"	"	"	
-390	"	"	"	
-395	"	dk gy br	"	
-400	"	"	"	
-405	"	"	"	
-410	"	med dk gy	"	Uniform gray-blue
-415	"	"	"	"
-420	"	"	"	"
-425	"	"	"	"
-430	"	"	"	"
-435	"	"	"	"
-440	"	md dk gy-dove	"	
-445	"	"	"	
-450	"	"	"	
-455	"	"	"	
-460	"	"	"	
-465	"	"	"	
-470	"	"	"	
-475	"	"	"	
-480	"	"	"	
-485	"	"	"	
-490	"	"	"	
-495	"	"	"	
-500	"	"	"	
-505	"	"	"	

Interval	Rock Type	Color	Grain size	Other
-510	Limestone	md dk gy-dove	fine	
-515	"	"	"	
-520	"	"	"	
-525	"	md dk dove	"	
-530	"	"	"	
-535	"	"	"	
-540	"	md dk br	"	
-545	"	"	"	
-550	"	"	"	
-555	"	"	"	
-560	"	"	"	
-565	"	"	"	
-570	"	"	"	
-575	"	"	"	
-580	"	"	"	
-585	"	"	"	
-590	"	"	"	
-595	"	"	"	
-600	"	"	"	
-605	"	"	"	
-610	"	md dk gy dove	"	
-615	"	"	"	
-620	"	md dk gy & dove	med & fine	
-625	"	"	"	
-630	"	"	"	
-635	"	"	"	
-640	"	"	"	Silty (?)
-645	"	md gy & dove	fine	50% "Mosheim Type"
-650	"	"	"	"
-655	"	md dk gy	"	
-660	"	"	"	
-665	"	"	med	
-670	"	"	"	
-675	"	dk gy	fine	
-680	"	"	"	
-685	"	"	"	
-690	"	"	"	
-695	"	md gy & dk tn	fine to med	
-700	"	"	"	
-705	"	"	"	
-710	"	md gy & tn	"	50% "Mosheim Type"
-715	"	"	"	
-720	"	"	"	
-725	"	"	"	
-730	"	md gy	"	
-735	"	"	fine	
-740	"	"	"	

Interval	Rock Type	Color	Grain size	Other
-745	Limestone	md gy	fine	
-750	"	"	"	
-755	"	"	"	
-760	"	"	"	
-765	"	"	"	
-770	"	"	"	
-775	"	"	"	
-780	"	"	"	
-785	"	dk gy br	"	Slightly red color
-790	"	"	"	
-795	"	"	"	
-800	"	md gy	"	
-805	"	"	"	
-810	"	"	"	
-815	"	"	"	
-820	"	"	"	
-825	"	"	"	
-830	"	"	"	
-835	"	"	"	
-840	"	"	"	
-845	"	"	"	
-850	"	"	"	
-855	"	"	"	
-860	"	"	"	
-865	"	"	"	
-870	"	"	"	
-875	"	"	"	
-880	"	"	"	
-885	"	"	"	
-890	"	"	"	
-895	"	dk gy & dk tn	"	Argillaceous
-900	"	"	"	
-905	"	md gy	"	
-910	"	dk gy & dk tn	"	
-915	"	"	"	
-920	"	md gy	"	
-925	"	"	"	
-930	"	"	"	
-935	"	"	"	"Mosheim Type"
-940	"	md gy dove	"	
-945	"	"	"	
-950	"	"	"	
-955	"	"	"	
-960	"	dk dove	"	
-965	"	"	"	
-970	"	"	"	
-975	"	"	"	

Interval	Rock Type	Color	Grain size	Other
-980	Limestone	dk dove	fine	
-985	"	"	"	
-990	"	"	"	
-995	"	"	"	
-1000	"	md dk gy & dove	"	
-1005	"	"	"	
-1010	"	"	"	
-1015	"	"	"	
-1020	"	"	"	
-1025	"	"	"	
-1030	"	md dk dove	"	
-1035	"	"	"	
-1040	"	md gy dove	"	
-1045	"	"	"	
-1050	"	"	"	
-1055	"	"	"	
-1060	"	"	"	
-1065	"	"	"	
-1070	"	"	"	
-1075	"	"	"	
-1080	"	md br	fine to med	
-1085	"	"	"	
-1090	"	"	"	
-1095	"	"	"	
-1100	"	"	"	Tr black chert
-1105	"	dk br	fine	
-1110	"	"	"	20% black chert
-1115	"	"	"	40% black chert
-1120	"	"	"	10% black chert
-1125	"	gy - br	"	Tr chert
-1130	"	br	"	40% black chert
-1135	"	"	"	"
-1140	"	"	"	
-1145	"	gy br	"	
-1150	"	"	"	
-1155	"	dk br	"	
-1160	"	"	"	
-1165	"	"	"	
-1170	"	"	"	
-1175	"	"	"	
-1180	"	"	"	
-1185	"	"	"	
-1190	"	md dk gy br	fine to med	Pos tr fecal pellets
-1195	"	"	"	
-1200	"	"	"	Pos tr fecal pellets
-1205	"	dk br wf H br	"	
-1210	"	"	"	

Interval	Rock Type	Color	Grain size	Other
-1215	Limestone	dk br wf H br	fine	part clastic
-1220	"	"	"	
-1225	"	"	"	
-1230	"	"	"	
-1235	"	"	"	
-1240	"	md dk gy	"	
-1245	"	"	"	
-1250	"	"	"	
-1255	"	60% md dove 35% dk br	"	tr dk gy shale
-1260	"	br	"	
-1265	"	"	"	2-3% br chert
-1270	"	gy	"	"
-1275	"	gy - br	"	"
-1280	"	dk gy & dove	"	Tr ce.
-1285	"	dk gy br	"	" ?
-1290	"	md dk br	"	" ?
-1295	"	"	"	" ?
-1300	"	md dk gy	"	" ?
-1305	"	dk br	"	" ?
-1310	"	dk gy	"	" ?
-1315	"	"	"	
-1320	"	"	"	
-1325	"	md H dove	"	
-1330	"	"	"	
-1335	"	"	"	Tr br ce
-1340	"	"	"	
-1345	"	"	"	5% bk ce
-1350	"	"	"	
-1355	"	"	"	
-1360	"	Dove	"	Tr bk ce
-1365	"	"	"	
-1370	"	md br	"	
-1375	"	md dk gy br	"	
-1380	"	md dove	"	
-1385	"	"	"	
-1390	"	"	"	
-1395	"	"	"	
-1400	"	md dk gy	"	
-1405	"	"	"	
-1410	"	"	"	
-1415	"	"	"	
Dot Ls				
-1420	"	md dk dove	fine - md	
Dot Dolomite				
-1425	"	50% md dk dove	"	
	"	50% lt tn	fine	
-1430	"	lt tn	"	
	5-10% Argillite ?	dk gy	"	

Interval	Rock Type	Color	Grain size	Other
-1435	Dolomitic Limestone	H tan	Fine	Tr slickensided gr gillite
-1440	"	50% md tan 50% H tn	fine-med	Tr chert
-1445	Same			
-1450	Dolomitic/ limestone 50% Limey dolomite	tn to H tn md H dove	fine md fine	Tr Gn Shale Bentonitic
-1455	Same			
-1460	Limey dolomite	H tan	fine	Tr gn shale
-1465	Dolomite limey	H tan	fine-med	
Dot Dolomite	1-2%Chert	white	Chalcedonic	Tr gn shale&sand gr
Mascot -1470	50% Dolomite (Limey) 45% Dolomite (Limey) 5% Chert	md br (gy) H tan White	fine-Med fine	Tr gn shale
-1475	50% Dolomite (limey) Dolomite (limey) 2-3% chert	md br gy H tan White	med to fine fine	
-1480	Dolomite Dolomite (20%)	H tan H br gy	" med	
-1485	Dolomite Chert (Tr)	Tan White	md(to crs?)	
-1490	60%Dolomite 40%Dolomite Tr chert	H Tan Med H br	fine to med med to crs	
-1495	50%Dolomite 50%Dolomite Tr chert Tr shale	H Tan Med br White gn	fine to med "	
-1500	55%Dolomite 40% Dolomite 2-3% chert	med br H Tan Chalcedonic	fine to med med to crs	*good knox color Tr gn shale
-1505	75% Dolomite 25% Dolomite	Med H Br gy H tan	med to crs med	Tr chert white
-1510	60% Dolomite 40% Dolomite	H tan med br	fine to med "	Tr chert

Interval	Rock Type	Color	Grain size	Other
-1515	Dolomite 5% chert	Tan to H Tan White	Med to crs Chalcedonic	
-1520	Dolomite 5%Dolomite 1-2% chert	Med H gy H tan White	fine to med Med to crs	
-1525	60%Dolomite 40%Dolomite	H gy H Tan	fine to med fine to med	Tr chert
-1530	Dolomite 5% chert	H gy tan	med Chalcedonic	Tr sand grains Tr gn shale
-1535	Dolomite Tr chert	Med H Tan&gy	med	
-1540	60%Dolomite 40%Dolomite	V H tan med H gy tan	med to crs fine to med	Tr chert & Gn shale
-1545	Dolomite 1% chert	H tan tan	crs	
-1550	Dolomite 2% chert	gy tan to H tan gy	crs chalcedonic	
-1555	Dolomite 10%dolomite 20% chert	med br Tan Tan-White	med med translucent	Tr gn shale
-1560	Dolomite 10% chert	Tan to br	med	Tr gn shale
-1565	Dolomite 19% Chert	H tan White	med	
-1570	Dolomite 5% Chert	H tan tan	med Translucent	
-1575	Colomite 5% Chert	H tan to gy White	med	
-1580	Dolomite 10% Chert	H tan to gy Tan - White	fine to med translucent	
-1585	Same			
-1590	Same			
-1595	Same			
-1600	50%Dolomite 50%Dolomite	Med H gy Tan	Med Med	Tr chert Tr Sand Grains
-1605	70%Dolomite 30%Dolomite	H Tan gy Med H br	Fine med to crs	Tr chert
-1610	80%Dolomite 15%Dolomite 5% Chert	Tan H Tan gy H gy-tan	med to crs med to crs fine	
-1615	Dolomite 30% Chert	H Tan-gy	med to crs	
-1620	Dolomite 20% Chert	Tan	fine to med	
-1625	Dolomite 10% Chert	H tan-gy	med	
-1630	Dolomite Tr Chert	Tan	Med	

Interval	Rock Type	Color	Grain size	Other
-1635	Dolomite Tr chert	Tan	fine to med	Tr gn shale
-1640	Dolomite 5% Chert	Med ltbr	fine to med	
-1645	Dolomite 20% Chert	Med Tan	fine to med	
-1650	Dolomite Tr Dolomite 5% chert	Med tan Lt gy	med to crs fine	
-1655	Dolomite Chert	1st sample after bit change - wk oil smell probably not from this interval		
-1660	Dolomite 10-20%Chert	Tan	med	
-1665	Dolomite	Tan	med	Tr Chert &gn shale
-1670	Same			
-1675	Dolomite 15% Chert	Med lt br	med	Tr gn shale
-1680	Dolomite 10%Dolomite 10% Chert	Med tan Lt gy	med fine	
-1685	Dolomite	Br	fine to med	Tr chert
-1690	Dolomite	Med dk br	fine	Tr chert &Gn shale
-1695	Dolomite 5% chert	med lt br	fine to med	
-1700	Dolomite 15% Chert	Med lt br	fine to med	Tr gn shale
-1705	Dolomite 10% Chert	Med lt br	fine to med	
-1710	Dolomite 5% Chert	Med Lt br&gy	fine to med	Tr gn shale
-1715	Dolomite 5% Chert	Med lt gr tan	fine to med	
-1720	Same			
-1725	Dolomite 5% Chert	Med dk gy br	fine	
-1730	Dolomite 5% Chert	Med lt gy br	"	
-1735	Dolomite 10% Chert	Tan	"	
-1740	Dolomite 5% Chert	Med lt gy & Tan	"	
-1745	Dolomite	Tan	"	
-1750	Dolomite	Tan	"	tr chert & gn shale
-1755	Same			
-1760	Dolomite	lt tan to gy	"	tr chert
-1765	Dolomite	Med gy br	"	tr Chert, gn shale & sand
-1770	Dolomite 20% Chert	Tan	Med to crs	

Interval	Rock Type	Color	Grain size	Other
-1775	Dolomite 20% Chert	Tan	Med	
-1780	40% Dolomite Dolomite 30% Dolomite 10% Chert	Med lt br Tan Med gy	Fine Med to crs Fine to med	Tr sand
-1785	Dolomite 10% Chert	Med Gy Br	Fine to med	
-1790	Dolomite 5% Chert	Dk Tan	Med	Tr gn shale
-1795	Dolomite 15% Chert	Dk tan	Med to crs	
-1800	Dolomite 5% Chert	Med Tan	Med	
-1805	Dolomite 10% Chert	Med lt tan	Med	
-1810	Same			
-1815	Same			
-1820	Same			
-1825	Same			
-1830	Same			
-1835	Dolomite 10% Chert	Med lt br	med	Tr gn shale
-1840	Same			
-1845	Same			
-1850	Same			
-1855	Dolomite 30% Chert	lt Tan	Med to crs	Tr gn shale
-1860	Dolomite 5% Chert	Med lt tan	Med to crs	Tr gn shale
-1865	Same			
-1870	Same			
-1875	Same			
-1880	Same			
-1885	Same			
-1890	Same			
-1895	Same			
-1900	Same			
-1905	Same			
-1910	Same			
-1915	Dolomite 5% Chert	lt tan	Med to crs	Tr gn shale
-1920	Same			
-1925	Same			
-1930	Same			
-1935	Same			
-1940	Dolomite 20% Chert	lt tan	Med to crs	