

Treckman

Cored 831.5
 Recl. 803.5
 % Recl. 96.6 %

CORE HOLE 14X-34
 UTAH STATE LEASE
 FIELD DESC. GREEN RIVER CORES

<u>Depth</u>	<u>Lithology</u>	<u>Color</u>	<u>Relative Richness</u>
Core #1	1750-1809	Rec 58'	
1750-1753		Brn.	M
1753-1755		Dk. Brn.	R
1755-1760		Dk. Brn. to Blk.	R
1760-1761	<u>Mottled NAC</u>	Brn.	M
1761-1762 1/2		Dk. Brn.	R
1762 1/2-1763 1/2	<u>Mottled NAC</u>	Dk. Brn.	R
1763 1/2-1765	<u>Tr. NAC Mot. & Banding</u>	Brn. to Dk. Brn.	M
1765-1769		Dk. Brn. to Blk.	R
1769-1773		Med. Brn.	M
1773-1775		Tan	F
1775-1776 1/2		Lt. Grey	P
1776 1/2-1777	<u>NAC NOD (1/4")</u>	Dk. Brn.	M-R
1777-1780		Lt. Brn. to Brn.	F
1780-1783		Lt. Brn. to Tan	P
1783-1784		Dk. Brn.	M-R
1784-1787	<u>Spotty NAC Banding</u>	Dk. Brn.	M
1787-1789	<u>Mottled NAC & 7" tuff zone</u>	Brn. to Dk. Brn.	M
1789-1793 1/2	<u>Banded NAC w/VF @ 89 (4")</u>	Dk. Brn.	M-R
1793 1/2-1794	<u>50% Banded NAC</u>	Dk. Brn. to Blk.	R
1794-1795	<u>VF & HF w/NAC</u>	Blk.	R

Depth	Lithology	Color	Relative Richness
1795-1799	Filled @ 94-99	Dk. Brn.	M-R
1799-1800	<u>Welded Tuff</u>		
1800-1803 1/2	<u>Spotty NAC Banding w/2 1/4 " Bands @ 1803 1/2</u>	Dk. Brn.	P
1803 1/2-1804 1/2	<u>100% NAC</u>		
1804 1/2-1805	<u>VF w/Tr asphalt</u>	Brn.	M
1805-1806 1/2	<u>75% NAC Zone</u>		
1806 1/2-1807 1/2		Med. Brn.	F-M
1807 1/2-1808	<u>95% NAC, 5% gyp</u>		
Core #2	1809-1869	Rec 60'	
1809-1810		Dk. Brn.	M
1810-1812		Brn. to Tan	P-F
1812-1813 1/2	<u>Spotty NAC (Agg Size) 3" NAC zone VF filled w/NAC</u>	Dk. Brn.	M-R
1813 1/2-1817	<u>Spotty NAC</u>	Dk. Brn. to Blk.	R
1817-1818 1/2	<u>NAC Zone 95%</u>		
1818 1/2-1821	<u>Mottled NAC VF's</u>	Lt. Brn.	F-P
1821-1823	<u>2" NAC NOD @ 23</u>	Lt. Brn.	F-P
1823-1830	<u>Occ. Sm. NAC Banding</u>	Tan to Brn.	P
1830-1831	<u>Sh. w/ interwoven NAC</u>	Brn.	M
1831-1832	<u>2" NAC Zone @31 tuff nod.</u>		
1832 1/2-1833	<u>3' NAC Zone</u>		
1833-1835	<u>VF's 33-3J</u>	Dk. Grey	F-M
1835-1840	<u>Occ. Tr. NAC Bands</u>	Lt. Brn. to Tan	F-P

Depth	Lithology	Color	Relative Richness
1840-1841	<u>Spotty NAC</u>	Brn.	F
1841-1841½	<u>2" NAC Zone</u> <u>2" Tuff Zone</u>		
1841½-1842	<u>3" NAC Zone</u>		
1843-1844		Lt. Brn.	F-P
1844-1845	<u>2" NAC NOD @ 44½ & 44</u>	Tan	P
1845-1849	<u>Sm. NAC Bands @ 45-46</u> <u>2" NAC Bands @ 46</u> <u>2" NAC Bands @ 46½</u> <u>3" NAC Bands @ 47½</u> <u>Spotty NAC Banding @ 48-49 w/NAC</u> <u>NOD (½") @ 48½</u>	Tan & Lt. Grey	P
1849-1849½	<u>NAC</u>		
1849½-1851	<u>Spotty NAC Bands</u>	Brn.	M-F
1851-1853	<u>Spotty NAC Bands</u>	Tan to Brn.	F
1853-1857	<u>NAC Bands @ 53-55 interwoven and</u> <u>Banded @55-57 VF's @ 55-58</u>	Brn.	F-M
1857-1858	<u>2" NAC @ 58</u>	Dk. Brn.	M
1858-1861	<u>2" NAC NOD @ 59, 59½ and 60</u> <u>5" NAC Zone @ 61</u>	Dk. Brn. to Blk.	R to VR
1861-1862		Dk. Grey	M
1862-1863	<u>Interwoven NAC</u> <u>VF's filled w/NAC</u>	Grey	F
1863-1865		Tan to Brn.	P-F
1865-1867	<u>Occ. Tr. NAC Bands</u>	Brn.	M
1868-1869	<u>2" NAC Zone @ 68½</u>	Brn. to Dk. Brn.	M

#3	1869 - 1919	Rec. 49'	
1869-1870	<u>4" NAC Zone @ 69</u> <u>NAC NOD @ 69½</u>	Dk. Brn.	R
1870-1871½	<u>3" NAC Zone @ 71½</u>	Dk Brn. to Blk.	R-VR
1871½-1873½		AA	AA
1873½-1875		Brn. to Dk. Brn.	M-R
1875-1878	<u>1½" NAC Zone @ 78</u>	Dk. Brn.	R
1878-1880½	<u>2" NAC Zone @ 78½</u>	Dk. Brn. to Blk.	R-VR
1880½-1887	<u>4" NAC Zone @81</u> <u>VF @ 81½-82½</u> <u>Mot. NAC @ 85</u>	Dk. Brn. to Blk.	R-VR
1887-1890	Varved	Med. Brn. to Tan	F-P
1890-1892	<u>2" tuff @ 91</u>	Med. Brn.	F
1892-1896½		Dk. Brn. to Blk.	R-VR
1896½-1897½	<u>NAC Zone 90%</u>		
1897½-1898		Med. Brn.	M
1898-1904	Varved <u>Thin tuff @ 03-04</u>	Lt. Brn. to Tan	F-P
1904-1909	<u>(½") NAC Band @ 04-06</u>	Dk. Brn.	R-VR
1909-1910		Med. Brn.	M-R
1910-1911½	<u>3" NAC NOD @ 11½</u> <u>(30%)</u>	Dk. Brn.	R
1911½-1912	<u>NAC</u>		
1912-1913½	Varved w/ <u>tr NAC NOD</u>	Lt. Brn.	F-P
1913½-1915½	<u>1"-2' NAC & Gyp Band</u> <u>@14</u>	Grey	M-F
1915½-1916		Dk. Brn.	R
1916-1917	<u>NAC</u>		
1917-1718	<u>½"-½" NAC NOD</u>	Dk. Brn.	R

#4	1919 - 1947	Rec. 26'	
1919-1920½	<u>Tuff</u>		
1920½-1923	<u>Gyp & NAC Len.</u> <u>@ 22-23</u>	Grey	M-F
1923-1924½	<u>NAC NOD (30%)</u>	Dk. Grey	M-R
1924½-1926	AA	Dk. Brn.	M
1926-1930	<u>Gyp & NAC Band</u> <u>@ 27 & 29½</u>		
1930-1931½	Varved	Lt. Brn. to Tan	F-P
1931½-1943	<u>NAC NOD @ 33-35½</u> <u>25% & Gyp NOD</u> <u>3" NOD @ 34</u> <u>NAC Zone 85% 39-40</u> <u>5" NAC NOD @ 42</u>	Med. Brn.	M-R
1943-1945	<u>2" NAC Band @ 43</u> <u>Tr. NAC Bands 43-45</u>	Lt. Brn.	F
#5	1947 - 2007	Rec. 60'	
1947-1952	Asphalt Zone @ 50-50½	Dk. Brn.	R
1952-1955	<u>1" tr NAC & asp @ 53</u>	Med. Brn.	M
1955-1956		Lt. Brn.	F-P
1956-1960		Med. Brn.	F
1960-1962½		Dk. Brn.	M-R
1962½-1965½		Med. Brn.	M
1965½-1975		Brn-Lt. Brn.	F-P
1975-1977½		Med. Brn.	M
1977½-1979½		Lt. Brn.	M
1979½-1980½		Tan	P
1980½-1981½		Lt. Brn.	M
1981½-1982½		Med. Brn.	M
1982½-1983½		Blk.	VR
1983½-1985½		Med. Brn.	M
1985½-1989½	Slightly varved	Med. Brn.	M
1989½-1990½		Blk.	VR

1990½-1992½		Dk. Brn.	R
1992½-1994	VF @ 92½-93½ filled w/asphalt rod 1" @ 93½	Brn.-Tan	F-P
1994-1998	<u>Few this tuff bands @ 95-96</u>		
1998-2000	Banded Asphalt 15% @ 98-99 1" asphalt band @ 99½	Dk. Brn.	R
2000-2002		Dk. Brn.	M-R
2002-2004½		Brn.	M-F
2004½-2007		Tan	P
#6	2007 - 2067	Rec 60'	
2007-2009	<u>Tr. NAC in VF @ 07½</u>	Brn.	M
2009-2011	<u>VF's @11-16 (possible)</u>	Dk. Brn.	M-R
2011-2013		Grey Brn.	M-R
2013-2014		Dk. Brn.	R
2014-2015½		Grey Brn.	M
2015½-2016		Med. Brn.	M
2016-2023	<u>6" asphaltic tuff & H.O. @ 21</u>	Dk. Brn.-Blk.	R-VR
2023-2025½	<u>VF @ 19-20½</u>	Lt. Brn.	F-P
2025½-2026		Dk. Brn.	VR
2026-2027		Blk.	VR
2027-2028		Med. Brn.	M
2028-2032		Med.-Lt. Brn.	M-F
2032-2033		Dk, Brn.	VR
2033-2034		Blk.	VR
2034-2035		Med. Brn.	M
2035-2036		Med-Lt. Brn.	M-F
2036-2041		Dk. Brn.	R-VR
2041-2042½		Med. Brn.	M-R
2042½-2055½	<u>VF @ 52-54</u>	Dk. Brn.	R-VR
2055½-2056½		Dk. Brn.	R

2056½-2059	<u>VF @ 56½-58</u>	Dk. Brn.	R
2059-2060		Med.-Dk. Brn.	M-R
#7	2070 - 2124	Rec 52'	
	(3" strap correction from 2067 to 2070)		
2060-2067	<u>1" tuff @ 2060 ½" asphalt tuff @62</u>	Med.-Dk. Brn.	-R
2070-2073	Shale - varved	Med. Brn.	M
2073-2075		Med.-Dk. Brn.	M-R
2075-2085	<u>½" asphaltic tuff @ 81</u>	Dk. Brn.	R
2085-2089		Med. Brn.	M
2089-2091½		Dk. Brn.	R
2091½-2096½		Med. Brn.	M-R
2096½-2099	<u>½" marlstn @ 99½</u>	Brn.	F-M
2099-2102		Med. Brn.	M
2102-2107		Brn.	M
2107-2108		Lt. Brn.	F
2108-2111		Med.-Dk. Brn.	M-R
2111-2116		Med. Brn.	M
2116-2118		Brn.	F
2118-2122		Med.-Dk. Brn.	M-R
#9	2185-2235	Rec 31'	
2124-2127		Med. Brn.	M-R
2127-2128½		Lt. Brn.	M
2128½-2123	<u>6" asphaltic tuff @ 31½-32</u>	Dk. Brn.	R
2133-2135½	<u>3 1" tuff bands @33-33½</u>	Med. Brn.	M-R
2135½-2137	<u>Scattered asphaltic tuff @37</u>	Dk. Brn. to Blk.	R-VR
2137-2139½		Med. Brn.	M
2139½-2144	<u>3" Band Tuff w/½" Gyp Nod.</u>	Lt. Brn.	F-P
2144-2155	<u>3" Tuff @ 48½ 1" tuff @ 49</u> <u>12" banded tuff @ 51-52 ½" tuff @ 53</u>	Med.-Dk. Brn.	M

#9	2185 - 2235	Rec 50'	
2185-2191½	<u>2 ½" tuff bands @ 90-91, 1" tuff @89</u>	Dk. Brn.	M-R
2191½-2192	<u>1" tuff Nod. @ 91½</u>	Dk. Brn.	M-R
2192-2195	<u>3' asphaltic tuff VF's from 93½-96</u>		
2195-2205½		Dk. Brn.	R
2205½-2210		Lt. Brn.	F
2210-2214		Dk. Brn.	R
2214-2219	Varves from 14½-19	Lt. Brn.	F-M
2219-2222		Med.-Dk. Brn.	M-R
2222-2224		Lt. Brn.	F
2224-2226½	<u>VF from 25 to 26½</u>	Dk. Brn. to Blk.	R-VR
2226½-2228		Med. Brn.	M-R
2228-2230		Lt. Brn.	F-M
2230-2232		Lt. Brn.	F
2232-2233		Dk. Brn.	R
2233-2234		Blk.	VR
2234-2234½		Dk. Brn.	R
#10	2235 - 2295½	Rec 60½'	
2235-2237		Lt. Brn.	M-F
2237-2238		Dk. Brn.	M-R
2238-2245½	Bleeding H.O. & asphalt from 41½ to 44. Also bleeding SW		
2245½-2256	<u>1" tuff Nod. @ 45</u> <u>VF's filled w/asphalt @45-46</u> <u>1" asp. tuff nod. & bands @ 54½. Bleeding slightly</u>	Dk. Brn. to Dk. Grey	R
2256-2258		Tan	P
2258-2263	<u>3 3/4" asphaltic tuffbands from 58½ to 59½, ½" tuff nod. @ 59-3/4 to (Bleeding asp) 4" asphaltic tuff bleeding HO & asphalt @ 60, 1" tuff nod. @ 61½ bleeding SW & HO 2 ½" asph tuff @ 61 bleeding SW & HO</u>	Med. Dk. Brn.	M-R

2263-2268		Dk. Brn.	R
2268-2277	<u>5" asphaltic tuff bleeding HO & SW @ 74½, ½" tuff @ 72½</u>	Med. Brn.	M
2277-2279½	<u>½" tuff @ 79½ VF's @ 76 to 77½ filled w/HO or asphalt</u>	Tan	P
2279½-2280½		Blk.	VR
2280½-2283		Med. Brn.	M
2283-2284		Lt. Brn.	P
2284-2285½		Med. Brn.	M
2285½-2288		Dk. Brn.	R
2288-2290		Dk. Grey	R-VR
2290-2290½		Lt. Brn.	P
2290½-2295½	<u>3" VF @ 88, 4" mottled asphaltic tuff nod. & dk. grey marlstn @ 92</u>	Dk. Brn.	M-R
#11	2295 - 2355	Rec 60'	
2295-2300	<u>4" VF @ 97½ filled w/asphalt</u>	Dk. Brn.	M-R
2300-2303	<u>6" VF @ 2300, Sm. VF's thru 99-01 1" asphaltic tuff band at 02½ 3 ½ asp. tuff nods. @ 02½ to 03½</u>		
2303-2306		Lt. Brn.	F
2306-2308		Dk. Brn.	R
2308-2309		Lt. Brn.	F
2309-2312	<u>½" asp. tuff nods. @ 11½</u>	Med.Dk. Brn.	M-R
2312-2321	<u>1" tuff @ 15, 2 ½ asp. tuff @ 17 bleeding asphalt numerous VF's from 18-20 ½" asp. tuff @ 18½</u>	Lt. Brn.	F-P
2321-2324	<u>5" tuff (asphaltic) at 23</u>	Med. Grey	M
2324-2329½		Med. Brn.	M
2329½-2330½		Blk.	VR
2330½-2333		Med.-Dk. Brn.	M

2333-2336½	VF from 33 to 37 filled w/asphalt	Grey	M
2336½-2343½	1½ interwoven tuff & oil shale @ 38 to 39½ 4" asphalt tuff @40 bleeding asp. 1" tuff nod. @ 42½ bleeding asp.	Med. Brn.	M
2343-2344½		Lt. Brn.	F
2344½-2345½		Dk. Brn.	R
2345½-2347	Marlstn (?)	Grey	Nil
2347-2348	VF @ 47-47½	Brn.	M
2348-2349	Marlstn (?)	Grey	Nil
2349-2351		Lt. Brn.	F
2351-2354	VF @ 52½ to 53½ filled w/ asphalt	Grey-Lt. Brn.	F
2354-2355		Med. Brn.	M
#12	2355 - 2415	Rec. 58'	
2355-2358	VF @ 56-57	Lt. Brn.	P
2358-2363		Brn.	F-M
2363-2365		Grey	P
2368½-2370		Lt. Grey	Nil
2370-2372		Lt. Brn.	P
2372-2375½		Grey	P
2375½-2382½	VF @ 77½ to 78½	Lt. Grey to Lt. Brn.	P
2382½-2384½	Interbedded SS & SL w/8" SS @ 83½	Lt. Grey	Nil
2384½-2390	5" Gyp & tuff nods. @90	Lt. Grey	Nil
2390-2393		Grey	P
2393-2394	1' SS		Nil
2394-2396	Marlstn	Lt. Grey to Lt. Brn.	Nil
2396-2413	Marlstn	Lt. Grey to Brn.	Nil

#13	2415 - 2475	Rec. 60'	
2415-2430		Grey to Lt. Brn.	P
2430-2432		Brn.	F
2432-2435		Dk. Grey	M
2435-2437		Blk.	VR
2437-2440		Med. Brn.	M
2440-2441½		Dk. Brn.	R
2441½-2446	<u>3" tuff @ 42½</u>	Grey	P-F
2446-2452		Grey	F
2452-2454	<u>3" bleeding asph. tuff @ 53½</u>	Dk. Brn.	M-R
2454-2460	<u>2" VF @ 58½</u>	Lt. Grey	P
2460-2467	<u>Welded Tuff @ 60½, 4" tuff @ 60-3/4</u> <u>10" Tuff @ 61-62 bleeding sli w/SW</u> <u>3" asph. tuff @ 16½ bleeding HO & asph.</u> <u>VF's (6") @ 61-61½</u>	Lt. Grey to Lt. Brn.	P
2467-2470		Brn.	F-M
2470-2475	<u>VF's from 70½ to 74</u>	Lt. Grey to Lt. Brn.	P
#14	2476 - 2536	Rec. 59'	
2476-2477	<u>VF's @ 76½</u>	Lt. Brn.	P-F
2477-2482	<u>3 ½" tuff bands @ 78</u> <u>½" tuff nod. @ 80 & 80½</u>	Dk. Grey to Dk. Brn.	M-R
2482-2484	<u>VF's from 8284</u>	Lt. Brn.	F
2484-2485	<u>Well banded thin 1/8" tuff stringers</u>	Blk.	R
2485-2486½	<u>VF's 85-87</u>	Grey F-P	
2486½-2489		Tan P	
2489-2491		Blk.	VR
2491-2493½		Grey	F-M
2493½-2495		Tan	P
2495-2503	<u>1" tuff nod. @ 2500</u>	Grey	P-F

2503-2511	VF's @ 08½-10, <u>interbedded tuff and shale @ 04-09</u>	Tan	P
2511-2516½		Grey-Dk. Grey	M-R
2516½-2518½	Silty Shale	Tan	P
2518½-2520½		Cream	Nil
2520½-2523		Lt. Brn.	P
2523-2524		Dk. Brn.	R
2524-2526	Banded silty sh. w/ <u>tuff (asph.) bands</u> <u>VF's @ 25-26</u>	Med. Brn.	M-F
2526-2527½		Dk. Brn.	R
2527½-2528	Grey Shale MOTTlings	Lt. Brn.	P
2528-2530	Tan MOTTlings	Grey	M
2530-2535	<u>30½-31½ tuff & silt laminated approx.</u> 2' SS @ 32-34, 4" lime zone cream (lime) nods, @ 34-35		
#15	2536 - 2596	Rec. 60'	
2536-2538		Lt. Grey sh.	Nil
2538-2560	Shale	Grey	Nil
2560-2564		Dk. Grey	P
2564-2568	Lt. Brn. banding	Lt. Grey	P
2568-2570	Fine grain SS w/interbedded shale (lt. brn. banding)	Lt. Grey to Lt. Brn.	Nil
2570-2573	Shale w/MOTTlings of brn SS (Fine grained)	Lt. Grey	Nil
2573-2575-	Shale w/dk. grey banding	Grey	Nil
2575-2581	Shale w/brn sh. banding and occ. dk. grey sh. banding	Grey	Nil
2581-2594½	Shale w/occ. dk brn. sh. banding	Dk. Grey	P

2594½-2596

Shale w/grey shale banding & fine
grain SS banding
2" tuff @ 94½
1" tuff @ 95

Cream Nil

NOTE:

Nod - Nodule
Asph-- Asphalt
Sm - Small
Occ - Occasional