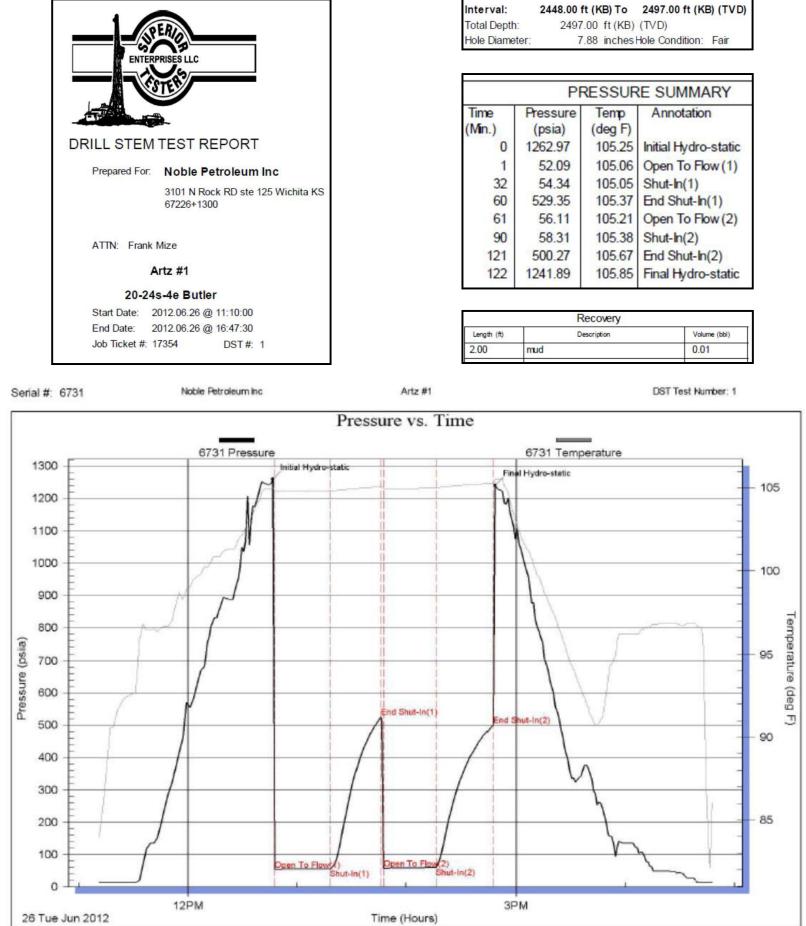
Hushpuckney 2229   BKC 2257   Marmaton 2321   Cherokee 2453   Mississippian 2484   RTD 2534   A. C NE SW SE 17-24S-4E Tomlinson, Henry   B. C NE NW 20-24S-4E Tomlinson, Mertz #1   C. C N/2 NE NE 20-24S-4E Tomlinson, Mertz-1		COMPANY NOE LEASE FIELD LOCATION 837 SEC 20 TWSI COUNTY BUT COUNTRACTOR C SPUD 6-22-12 SAMPLES SAVED F	Noble BRI REPC
Hushpuckney 2229 -890   BKC 2257 -918   Marmaton 2321 -983   Cherokee 2453 -1114   Mississippian 2484 -1148   RTD 2534 -1148   RTD 2534 -1149   B. C NE SW SE 17-24S-4E Tomlinson, Henry Creek Farms B. C NE NW 20-24S-4E Tomlinson, Mertz #1   C. C N/2 NE NE 20-24S-4E Tomlinson, Mertz Hinnen #1		Noble Petroleum, Inc     Artz #1     King     King     837' FNL & 1,768' FWI     837' FNL & 1,768' FWI     TWSP_24S_RGE_4     TWSP_24S_RGE_4     Butler_STATE_Kan     Butler_STATE_Kan     SAVED FROM_1800'_TO_R     SAVED FROM_1800'_TO_R	Noble Petroleum, Inc.
114 1145 115 115 1145	-487 -606 -764 -862	eum, Inc. #1 768' FWL _RGE4E _RGE4E 4E 4E 4E 	Europhie Log Sample Log
	-178 -218 -254 -398 -490 -604 -766 -861	ELEV B. 13: F. 13: . L. 13: . L. 13: . L. 13: . L. 6.45 	
		ELOG C. GR	API#: 15-015-23,948
DRILLING TIME MINUTES/FOOT 1 2 3 4 5 10 15	<b></b> 1800		
		Shale: gray to dark gray Shale: gray to dark gray Shale: gray to dark gray	Lansing 1826 -487
		Limestone: off white to gray, medium to coarsely crystalline, trace oolitic, poor interoolitic porosity no show Limestone: off white to gray, medium to coarsely crystalline, fair amount oolitic, poor interoolitic porosity no show Limestone: gray, medium to coarsely crystallie, little	
		Limestone: off white to gray, medium to coarsely crystallie, little visible porosity, no show Limestone: light brown, medium to coarsely crystallie, little visible porosity, some chalk, no show, trace chert	
		Limestone: off white to light brown, fine to medium crystalline, poor to fair intercrystalline porosity, fair amount chalk, no show Limestone: beige to brown, fine to coarsely crystalline, little visible porosity, no show	
		Limestone: off white to gray, coarsely crystalline, little visible porosity, trace chert, dark gray shale and pyrite Limestone: off white to gray, coarsely crystalline, little visible porosity, trace chert, dark gray to brownish gray shale and pyrite Limestone: off white to gray, medium to coarsely crystalline, little visible porosity, trace white chert, much dark gray to	
		brownish gray to green shale Limestone: off white to gray, medium to coarsely crystalline, little visible porosity, trace white chert, much dark gray to brownish gray to green shale Limestone: off white to gray, medium to coarsely crystalline, little visible porosity, trace white chert, much dark gray to green shale	Base Lansing 1945 -606
		Shale: red to green to gray Shale: red to green to gray Shale: green to gray, slightly arrenaceous	
	2000	Shale: green to gray, slightly arrenaceous Shale: green to gray, slightly arrenaceous	
		Shale: dark gray w/ much light gray siltstone Shale: dark gray w/ much light gray siltstone Shale: light gray w/ much light gray siltstone	
	2050	Shale: light gray Shale: light gray	
		Shale: gray to dark gray Shale: gray to dark gray	
	2100	Shale: gray to dark gray	Kansas City 2103 -764
		Limestone: dark gray to brown, medium to coarsely crystalline, dense, no visible porosity, no show Limestone: off white to gray, medium to coarsely crystalline, dense, no visible porosity, no show much dark gray shale Limestone: off white to gray, coarsely crystalline, dense, no visible porosity, no show, trace gray to dark gray shale	
		Limestone: off white, fine to medium crystalline, very poor intercrystalline & pin point porosity, fair show free oil faint odor, bright yellow fluorescence in 40% of 2145 drilling sample, no fluorescence in 15" sample very poor "skunky" odor, heavy oil Limestone: off white to gray, coarsely crystalline, no visible porosity, trace heavy spotted gilsonitic stain, no show free oil, no odor	2145' x15
		Limestone: dirty off white to tan, densely oolitic, oolicastic, poor interoolitic porosity, soft, slightly chalky, no show Limestone: dirty beige to light brown, medium to coarsely crystalline, some densely oolitic, oolicastic, poor to fair interoolitic porosity, no show Limestone: off white to light brown, coarsely crystalline dense, no visible porosity, no show	2145' ×25
		Limestone: off white to gray, coarsely crystalline dense, no visible porosity, no show Limestone: off white to gray, coarsely crystalline dense, no visible porosity, no show Shale: black, carbonaceous	Stark 2201 -862
		Limesstone: off white to gray, coarsely crystalline, dense, no visible porosity Limestone: off white, fine to medium crystalline, slightly chalky, little visible porosity, no show	Hushpuckney 2229 -890
		Shale: black, carbonaceous to dark gray Limestone: off white to brown, medium to coarsely crystalline, some poor intercrystalline porosity, no show, fair amount gray shale Limestone: beige to gray, fine to medium crystalline, some fair intercrystalline porosity, some dense w/ no porosity, no show	DVC 2257 018
		Shale: gray, arrenaceous to silty Shale: gray to dark gray	BKC 2257 -918
	2300	Shale: gray to dark gray Shale: gray to dark gray Shale: dark gray, much pyrite	
		Limestone: light brown, coarsely crystalline, no visible porosity, no show Shale: dark gray Limestone: light brown to dark gray, coarsely crystalline dense, no visible porosity, no show	Marmaton 2321 -982
	2350	Limestone: light brown to light gray, coarsely crystalline, dense, no visible porosity, no show, trace chert Shale: gray to grayish green Shale: gray to grayish green	
		Limestone: off white to gray, fine to medium crystalline, little visible porosity, no show, fair amount pyrite, slightly fossiliferous Shale: black, carbonaceous Limestone: gray to beige, medium to coarsely crystalline, no visible porosity, no show, trace pyrite	
	2400	Shale: gray to green Limestone: light brown to gray, coarsely crystalline, no visible porosity, no show Shale: dark gray to gray to green Limestone: gray to light brown, coarsely crystalline,	
		Limestone: gray to light brown, coarsely crystalline, dense, little visible porosity, no show Shale: black, carbonaceous Limestone: gray, micritic, trace poor intergranular porosity, no show Limestone: off white to beige, coarsely crystalline, no porosity, no show	
	2450 #1	Shale: black, carbonaceous Limestone: tan, coarsely crystalline, dense, no porosity, no show, trace pyrite Shale: black, carbonaceous	Cherokee 2353 -1014
		Shale: gray to green Shale: gray to blue green Shale: dark gray to mottled red Chert: off white to amber, fresh, no visible porosity, no show	vis 40 wt 9.4 lcm 3.5# Mississippian 2484 -1145
		Chert: off white to amber, fresh, no visible porosity, no show Chert: white to off white, 50% fresh, 50% tripolitic, fair to good tripolitic porosity, no show, no odor, no fluorescence Chert: amber to blue green to off white, fresh, no visible porosity, no show, no odor, no fluorescence Chert: amber to blue green to off white, fresh, no visible porosity, no show, no odor, no fluorescence Chert: amber to blue green to off white, fresh, no visible porosity, no show, no odor, no fluorescence Chert: white to off white to amber, trace blue green, 98% fresh, 2% tripolitic, fair to good tripolitic porosity, no show, no odor, no fluorescence	vis 49 wt 9.4 lcm 3#
		no odor, no fluorescence Chert: white to off white, trace amber, fresh, no visible porosity, no show, no odor, some dull white mineral fluorescence Chert: white to off white, fresh, no visible porosity, no show, no odor, trace dull white mineral fluorescence Chert: white to off white, fresh, about 15% tripolitic, poor tripolitic porosity, no show, no odor, trace dull white mineral fluorescence	2491 15" x8
	2550		
Comments:			

## **Comments:**



2448.00 ft (KB) To 2497.00 ft (KB) (TVD)