

Comparative Status of the Woodbine in Oil Production

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While the relative importance of the Woodbine as an oil producing formation is well known in a general way, the purpose of this study is to bring that importance into more specific focus. It is hoped thereby to emphasize even more clearly the economic significance of the present field excursion, and to highlight the tremendous role of Woodbine production as a natural resource.

Attention is called to the accompanying tables 1 and 2, on which the pertinent data are shown. These tabulations are largely self-explanatory, and little need be added to the information they present. From table 2 it will be seen that twenty-seven Woodbine oil fields are listed and that these fields had produced the large total of about 3,452,000,000 barrels to January 1, 1951. We did not include in this table a few very minor fields, mostly one-well areas, which produced large amounts of water initially and which were abandoned in a short time after yielding a very small amount of oil. It should be noted that table 1 lists oil production only, and that the many important Woodbine gas fields are not included. Many of these Woodbine oil fields, such as Cayuga, Long Lake, Oakwood, and Navarro Crossing, are also important gas producers.

Table 2 presents a statistical study of Woodbine oil production in relation to the world total, the United States total, and the totals from the more important oil producing countries and individual states. The percentage figures tell an important story and are well worth studying. For example, the outstanding significance of the Woodbine formation in world and national oil production is readily demonstrated. It will be observed that the Woodbine has produced approximately 5 per cent of the world total, which means that of every twenty barrels of oil produced throughout the world one barrel has come from the Woodbine formation of East Texas. Similarly, the Woodbine has produced over 8 per cent of the United States total and over 25 per cent of the total for Texas. This state, in turn, has produced 33 per cent of the total for the United States. The large East Texas Field has produced approximately 80 per cent of the total Woodbine production.

The figures shown in table 2 indicate in detailed form the role of the Woodbine and of the United States in world oil production. Of great importance to us as Americans is the fact that the United States

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TABLE 1
WOODBINE OIL FIELDS OF EAST TEXAS

Field	County	Type of Structure	Depth of Producing Horizon	Cumulative Production in Bbls. to 1-1-51	Year of Discovery
Boggy Creek	Anderson	Salt Dome	3600 ft.	5,475,000	1927
Cayuga	Anderson-Henderson-Freestone	Anticline	3775-4075	49,383,000	1934
Cedar Creek	Limestone	Fault Closure	2900	330,000*	1927
Concord	Anderson	Salt Dome	4500	15,000*	1942
Currie	Navarro	Fault Closure	2950	7,108,000	1921
East Texas	Gregg-Upshur-Smith-Rusk-Cherokee	Shoreline	3700	2,777,631,000	1930
Flag Lake	Henderson-Navarro	Fault Closure	2900-3100	914,000	1937
Hawkins	Wood	Faulted Dome	4100-4800	118,301,000	1940
Ed Howard	Anderson	Shoreline	5300	7,000	1950
Lone Star	Cherokee	Fault Closure	4000	753,000	1938
Long Lake	Anderson-Leon-Freestone	Anticline	5200	22,010,000	1933
Mabank	Kaufman	Fault Closure	3150	91,000*	1939
Mexia	Limestone	Fault Closure	2900-3100	101,918,000	1920
Navarro Crossing	Houston	5700-5850	1,541,000	1938	
Nigger Creek	Limestone	Anticline	2800	3,020,000	1926
Oakwood	Leon	Fault Closure	5700-5800	24,500*	1939
Pleasant Grove	Rusk	Anticline	4050	676,000	1941
Powell	Navarro	Downwarped side of fault	2900	119,319,000	1923
Richland	Navarro	Fault Closure	2950	6,862,000	1924
South Rusk	Cherokee	Fault Closure	5100	261,000*	1934
Southern Pine	Cherokee	Structural Nose	5300	10,000	1948
Tehuacana	Limestone	Small Dome	2600	77,000	1940
Van	Van Zandt	Fault Closure	2400-2900	211,138,000	1929
Weches	Houston	Faulted Dome	5742	6,000	1948
Wieland	Hunt	Fault Closure	2750	1,127,000	1942
Wm. Wise	Cherokee	Small Dome	5110	422,000	1946
Wortham	Freestone-Limestone	Fault Closure	2950	23,528,000	1924
Total				3,451,947,000	

*Depleted Field.

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TABLE 2

COMPARATIVE PRODUCTION BY AREAS

Area	Barrels Cumulative to 1-1-51	Per Cent of World Total	Per Cent of U. S. Total	Per Cent of Texas Total
World	65,536,000,000	100.00		
United States . .	40,917,000,000	62.43	100.00	
Russia	6,555,000,000	10.00		
Venezuela	5,546,000,000	8.46		
Texas	13,721,000,000	20.94	33.53	
California	8,620,000,000	13.15	21.07	
Oklahoma	6,262,000,000	9.55	15.30	
Louisiana	2,561,000,000	3.91	6.26	
Woodbine of East Texas . . .	3,452,000,000	5.27	8.44	25.16

Note: The East Texas Field total of 2,777,631,000 barrels (Table 1) constitutes 80.43 per cent of the total for the Woodbine of East Texas and 20.24 per cent of the total for the state.

has produced some 62 per cent of the total world oil output. While this fact attests our leadership in exploration and development, as well as in the abundance of oil with which this great land has been blessed, it also serves to point out the importance to the nation of a progressive and aggressive exploratory and drilling program so that new reserves may continually be made available.