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Louisiana Energy Topic

Department of Natural Resources

Technology Assessment Division

A Supplement to LOUISIANA ENERGY FACTS on Subjects of Special Interest

DRILLING WELL CLASSIFICATION SYSTEM

The American Association of Petroleum Geologists (AAPG) and the American Petroleum Institute have agreed on a system for classification of drilling wells as developed by F.H. Lahee in 1944. Such a system aids in clarifying the degree of technical, financial, and economic risk associated with each well.

Tests Drilled with the intent of being completed as hydrocarbon producers if found.

New Field Wildcat. A new field wildcat is located far from producing pools, and on a structure which has not produced before. In regions where local structure has little or no control on accumulation, these holes are generally at least 2 miles from the nearest productive area. Distance, however, is not the determining factor. The classification is based on the degree of risk assumed by the operator, and his intention to test a structure or stratigraphic condition not previously productive.

New-Pool (Pay) Wildcat. A new pool wildcat is located to explore for new pools on a structure already producing, but off to one side of the presently producing area. In some regions where local structure is almost negligible as a control, exploration holes of this group may be called "near wildcats". Such wells usually be less than 2 miles from the nearest productive area. Sometimes a new pool wildcat may extend a pool already partly developed, if so its final classification is an Extension.

Deeper Pool (Pay) Test. A deeper pool test is an exploratory hole located within the productive area of a pool, or pools, already partly or wholly developed. It is drilled below the deepest such pool penetrated by it to explore for deeper unknown prospects. Sometimes such a hole extends a deeper pool which has been partly developed in another part of the field.

Shallower Pool (Pay) Test. A shallower pool test is exploratory only if drilled in search of some new productive reservoir, unknown but possibly suspected from data secured from other wells. The test must be located within the productive area of a pool, or pools, previously developed. Sometimes such a test extends a shallower pool partly developed elsewhere in the same field.

Outpost or Extension Test. An outpost is located and drilled with the expectation of extending for a considerable distance the productive area of a partly developed pool. It is usually two or more locations distant from the nearest productive area. Sometimes an outpost discovers a new pool.










Development Well. A well drilled to exploit a hydrocarbon accumulation discovered by previous drilling.

Tests drilled without the intent of being completed for hydrocarbon production.

Stratigraphic Test. A drilling effort, geologically directed, to obtain information pertaining to a specific earth condition that might lead toward a possible accumulation of hydrocarbon. It must be drilled without the intention of being completed for hydrocarbon production. This classification includes tests identified as core tests by some operators.

Service well. A well that is either drilled or completed for the purpose of supporting production of an existing field through observation, injection, water supply, etc.

LAHEE WELL CLASSIFICATION

OBJECTIVE OF DRILLING 		INITIAL CLASSIFICATION WHEN DRILLING IS STARTED		FINAL CLASSIFICATION AFTER COMPLETION OR ABANDONMENT				
				SUCCESSFUL 		UNSUCCESSFUL 		
Drilling for a new field on a structure or in an environment never before productive		NEW - FIELD WILDCAT 		New-field discovery wildcat		Dry new-field wildcat		
Drilling for a new pool on a structure or in a geological environment already productive	New pool tests	Drilling outside limits of a proved area of pool		NEW - POOL (PAY) WILDCAT 	New-pool discovery wells (Sometimes extension wells)	New-pool discovery wildcat (Sometimes an extension well)	Dry new-pool wildcat	
		Drilling inside limit of proved area of pool	For a new pool below deepest proven pool	DEEPER POOL (PAY) TEST 		Deeper pool discovery well		Dry deeper pool test
			For a new pool above deepest proven pool	SHALLOWER POOL (PAY) TEST 		Shallower pool discovery well		Dry shallower pool test
Drilling for long extension of a partly developed pool		OUTPOST or EXTENSION TEST 		Extension well (Sometimes a new pool discovery well)		Dry outpost or Dry extension test		
Drilling to exploit or develop a hydrocarbon accumulation discovered by previous drilling		DEVELOPMENT WELL 		Development well		Dry Development well		

