improved significantly resulting in greater success in establishing commercial wells.

Basins are the best sources of crude oil with more than six hundred identified around the world, 25% of which have produced most of the petroleum to date. Some contain oil, some contain natural gas, and some contain both. Either way, Geologists look for basins – that's where the money is.

### Permission to Explore and Produce

It stands to reason that when a geologist identifies the best place to drill, that land and/or minerals will ultimately belong to someone. Therefore, the team also includes a "landman" whose job it is to negotiate the right to drill with the owners who control the surface, the airspace above, and the minerals below (referred to as mineral rights).

## Getting to the Minerals

Once the prospect has been identified by the geologist, the operator takes over. They are responsible for drilling, completion and production operations including maintenance of the leased property. Operators provide partners with daily drilling reports, keep all records, and pay the bills.

### Getting the Minerals Out

The next player on the team is the Petroleum Engineer. Once the well is drilled, the P.E., along with our geologist and geophysicist evaluate the well logs, pressures, and production test data. They estimate the reserves and production capabilities. This is a critical point of the process – the "go, nogo" point. If the scientific data and test results are positive, a decision is made to complete the well with surface equipment and begin its production life.

### **Production – What to Expect**

As with most wells, the initial production is robust. The well production declines as the hydrocarbons are extracted and the pressure within the reservoir is diminished. Over time, all of the commercial production is withdrawn and the well is plugged.

# Glossary of Terms Worth Noting

- AFE (Authorization for Expenditure) an estimate of drilling costs provided by the operator to general partners prior to drilling
- BBL (Barrel) the standard unit of measurement used by the US Oil Industry, equal to 42 US gallons
- Basin natural depression where sediments accumulate over millions of years
- Completion the process by which a well is made ready for commercial production after the well is drilled
- Crude Oil the natural mixture of liquid hydrocarbons as it leaves the ground and prior to distilling and/or refining.
- Front End Costs expenses that are incurred and paid from the initial investment in a venture before the venture activities commence
- IDC (Intangible Drilling Costs) expenses like wages, repairs, hauling, fuel, water, and drill bits.
- Lease a contract whereby the owner of mineral rights conveys the exclusive right to another party to explore and develop the minerals on the property, usually for a specified period of time
- Pay Zone the interval of rock from which oil and natural gas is expected to be produced in commercial quantities
  - Spud to start the initial drilling operations
- Working Interest the exclusive right to explore for oil and gas, including the obligation to pay the costs of drilling, completion, and producing any oil and natural gas found

Source: LPOperating.com



New Life for Old Fields! Workover rigs like the one above can be seen all over Coke County as new technology allows oil once thought out-of-reach to be brought to the surface. Higher crude prices also tempt companies to take another look at old fields. This rig is part of a field first discovered in 1958 just west of Bronte. Over the last few months, Boaz Energy LLC invested in seismic testing and has determined it profitable to re-enter this field. Currently production of this field has gone from almost nothing to over 600 barrels per day. On the company's website, they describe themselves as "a private oil and gas company based in Midland, Texas, with a focus on gleaning by-passed mature oil and gas deposits in the region." Obviously this workover rig did its job because before long it was replaced by a large pumpjack (below) and numerous tanks.



# **Other Definitions**

• Mineral Rights - An interest in minerals in land, with or without ownership of the surface of the land. A right to take minerals or a right to receive a royalty. Mineral right is a term mined by the leaseholder. encompassing all the ways a person can have a possessory to the owner of mineral rights for interest in minerals in the ground. the privilege of extracting the It includes the right to enter the mineral from the ground based land and occupy it in order to on a lease agreement. The royalty remove the minerals. Mineral payment is based on a portion of in royalty, and royalty. What rights can be retained when land earnings from production and varies is sold or conveyed, thus making depending on the type of mineral and it possible for someone to own the right to mine the minerals without owning the land. A right rights in a parcel of real estate of entry onto the land can be held by the grantor who retains the mineral rights, or other arrangements can be made to

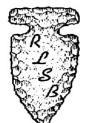
gain access to the minerals. Mineral rights can be leased or sold. A landowner who leases mineral rights often receives a royalty, or a percentage of the value of the minerals which are

- Mineral Royalty A payment the market conditions.
- Surface Rights Ownership that are limited to the surface of the property and do not include the air above it (air rights) or the minerals below the surface

(subsurface rights).

• Executive Rights - the right of leasing or administration of oil and gas interests in a variety of circumstances where the rights of another in the same mineral estate will be affected. Stated another way, it is the power to grant a lease from which persons other than the Lessor will enjoy be benefits of lease - bonus, delay rental, shut the EXECUTIVE RIGHT owner DOES NOT have is the power to pool the interests of his non-executive. The pooling transaction has the effect of cross conveyance of all interests in the pool, so that the pool can be developed as if it were a single tract or lease.

This Page Sponsored By



# ROBERT LEE STATE BANK

Robert Lee, Texas • (325) 453-2545