

## SUMMARY OF OIL PRODUCTION ACTIVITIES FOR THE YEAR 1930

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The general decline in the oil industry that has prevailed for the past two years, continued during 1930 over the Nation and was accentuated in Wyoming by the consequent decline in the oil purchasing market, the general business depression felt all over the country, the over-production of crude and the Presidential order withdrawing all Federal lands from being leased by the prospectors.

The skies of the future of the oil industry being thus dimmed by the conditions cited above, caused the oil men, and especially the independent operators, to withdraw their efforts in regard to wildcatting and drilling for new fields. This in turn caused idleness for many oil field workers and the storage of equipment used in the prospecting work. The reaction was felt all over this State and in all lines of business, because of the cessation of money circulation that had previously been had from this branch of industry.

Notwithstanding the above conditions, several discoveries of great importance to Wyoming were made in the State, and, as the year closes, the present status points to a great future for the oil industry when the present low prices and over-production revert back to normal and the demand for petroleum products - that this state is so eminently able to produce, - will enable the oil men to again produce their wells at a profit commensurate with their investments.

The progress made in research work in the oil industry, especially in the discovery of new products that can be made from gas and oil, and the better methods found to make use of the many products already known, will enable the oil and gas operator to assume a much more prominent place in the world's business than heretofore.

It is a regrettable fact that the oil operator has not kept pace with the laboratory and research chemists. Obsolete methods of development work and great waste still mark the field operations, though much has been accomplished in promoting new kinds of tools that make for better and quicker accomplishment of field development; and regulations are being enforced that will conserve much of the waste that is now taking place in our natural resources of petroleum. Owing to the foresight of our lawmakers of former years, the State of Wyoming has not suffered from this wastage as much as other commonwealths which were not protected in like manner.

In this State, wastage from wild wells has been reduced to a minimum and, for the past year, only one well - that of the Kinney Coastal Oil Company at Pilot Butte, became wild and wasted any appreciable production. This well went wild due to poor surface connections. Our present losses through wastage occur through three main channels; Evaporation, Corrosion and Leakage. Losses may be occurring because of water flows under ground in the oil bearing sands, but there is not exact data available at this time to make accurate determinations in this regard. Another source of loss is the wastage at refining plants where large quantities of oil are burned in sludge pits. In this latter, however, the Third Division has no authority to interfere.

#### RESUME FOR 1930.

The outstanding developments in the State of Wyoming for 1930 consisted mainly in the discovery of new petroleum bearing horizons through deep drilling. Wells that penetrated the geological strata from depths of a mile or more, found oil and gas production that insures many years production after the shallower fields have been exhausted. This deep sand exploration has also opened a new area all over the State for future exploration.

In drilling a deep test in the central part of the Salt Creek Field, the Midwest Refining Company discovered large commercial production in the Tensleep, Amsden and Madison sands, on Section 35-40-79. This well eventually reached the granite, but at the close of the year, it had been plugged back to the producing sands and placed on production.

In the early part of the year, Jones and others, drilling on the west side of the Osage Field in Weston County, discovered a new pool of light oil on Section 14-46-64, State land and this discovery has led to considerable activity in that area during 1930. This occurred in February, 1930.

In March, the All States Development Company drilled into the Tensleep sand in the North Casper Creek Field, Natrona County, on Section 36-37-82 and found production that started off at 250 barrels daily.

In the spring, the Producers & Refiners Corporation drilling on the Mahoney Dome, Section 34-26-88, found oil of good quality in that area in the Tensleep sand at about 4,600 feet.

The California Exploration Company drilling on the Nowood structure, Section 31-48-89, Washakie County, found all sands barren of petroleum down to the Madison Line.

In February, the New York Oil Company tied its pipe line system into the

Muskrat Field of the Producers & Refiners, in Fremont County, thereby insuring ample gas supplies for the company's services.

In March, Hale B. Soyster assumed the position of Supervisor of the U. S. Geological Survey in the Rocky Mountain region with offices at Casper.

In April a new refinery was built at Gillette, Campbell County. This plant is to operate on crude from the Osage Field in Weston County and it has a daily capacity of 500 barrels.

An important decision was handed down by the courts in April. The Secretary of the Interior was upheld in his decision regarding the price to be paid for crude oil. In the Oregon Basin Field, the Texas Company was ordered to sell oil for not less than 85 cents per barrel by the Secretary of the Interior. The matter was tried and found as above noted.

The Carter Oil Company sold all its holdings and gasoline plant in the Salt Creek Field to the Continental Oil Company and, in the Dallas and Derby fields in Fremont County, the English companies there sold their holdings to the Atlantic Pacific Oil Company, composed of oil men of the United States.

In July, the California Exploration Company completed a well on the Pitchfork structure, Park County, Section 13-48-102, to the Tensleep sand and found production of black oil. The well is estimated good for 250 barrels, the depth was 3,455 ft.

In the same month, the Northwest Utilities Company started work on the laying of an 8 inch pipe line 55 miles long from the Billy Creek Field in Johnson County to Buffalo and Sheridan. This line is to carry gas from the field to serve the towns and cities along the route. Gas was turned into the line September 24th.

The Ohio Oil Company drilling in the Byron Field, Big Horn County, discovered oil production amounting to 1,000 barrels daily, in the Madison Lime at 5,414 feet, on Section 22-56-97. This strike opens a new deep sand oil horizon.

In the latter part of July, the Wyoming Montana Pipe Line Company made application for a permit to lay a pipe line from the Big Horn Basin in Wyoming to refining points in Montana. Later the application was refused.

A deep test drilled by the Chicago Oil Company, in the Poison Spider Field, failed to find production below the Tensleep Sand there. This test was drilled to the granite.

The Ohio Oil Company and the Continental Oil Company each started a deep test in the Big Muddy Field, at the close of the year, the Continental Oil Company had shut down to await the outcome of the Ohio Oil Company's test and the Ohio's well is drilling.



The Midwest Refining Company drilled a deep test that found production on the Midway Dome, Natrona County, in the second Wall Creek sand, early in August. The well showed for 500 barrels.

A serious fire occurred at the Producers & Refiners refinery at Paces in October and damaged the plant to some extent.

The Ohio Oil Company drilling on Section 33-56-97, Garland Dome, Big Horn County, discovered both gas and oil in the Amsden and Madison sands in commercial quantities.

The Argo Oil Company drilling a deep test in the Mule Creek Field discovered commercial production in the Minnelusa sand in that field.

The Yellowstone Oil Company drilling on the west side of Beaver Creek west of the main Osage Field and in the area discovered by Jones and the Osage Trust Company, found an extension of the Jones pool across the Beaver Creek. This strike considerably enlarges the extent of the pool.

The Standard Carbon Company moved a carbon black plant in the Buffalo Basin Dome in the Red Desert country northwest of Rawlins and will place the plant in operation there in 1931.

The Phillips Petroleum Company commenced core drilling in the Shawnee district, Converse and Niobrara counties, to obtain the geology on the Shawnee anticline.

The Cuyler Oil Company, drilled a gas well in the first Wall Creek sand about four miles north of Powder River in Natrona County, Section 24-36-35.

The Ohio Oil Company laid a pipe line from the Polecat Dome in Big Horn County to a connection with the Company's gas system to Lovell and Powell.

Interests headed by Julius Peters of Great Falls, Montana, under the name of the Resolute Oil Company, drilled a deep well in the Badger Basin Field, Park County, to the First Wall Creek Sand and found oil and gas production at 8,255 feet. At the close of the year the well was shut in and its production had not as yet been determined.

The Circle Oil Company, affiliated with the Elkhorn Oil Company, drilled a well in a wildcat area northwest of the La Barge Field in Lincoln County, and have a showing for a commercial oil well as the year closes. The location is on Section 17-27-114 and the pay was struck at about 2,000 feet. Later the Circle Oil Company was reorganized and at the close of the year was known as the Calmonica Oil Company.

The New York Oil Company laid a pipe line from the firm's system in Fremont County, to Fort Washakie to serve that point with natural gas from the Sand Draw Field.

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OIL PRODUCTION IN WYOMING FOR 1930

<u>FIELD</u>	<u>GRAVITY</u>	<u>BARRELS PRODUCTION</u>
Alkali Butte	33.6	1,723
Big Muddy	33.5	700,548
Byron	23.0	29,089
Cody	18.0	7,311
Dallas and Derby	22.2	94,913
Dutton	33.6	21,850
Elk Basin	43.0	278,713
Ferris	35.5	12,391
Frannie	26.3	92,528
Garland	19.6	No shipments
Grass Creek	45.0	713,102
Grass Creek heavy	25.4	No shipments
Greybull	41.1	No shipments
Hamilton	26.7	252,927
Hudson	22.5	111,662
La Barge	32.0	729,307
Lance Creek	43.0	60,076
Lost Soldier	32.0	1,195,232
Midway	32.0	12,081
Mule Creek	31.5	23,070
North Casper	19.0	1,874
Notches	23.0	No shipments
Oregon Basin	26.0	1,272,413
Osage	41.6	459,340
Pilot Butte	37.2	12,223
Rox Lake	35.0	5,580
Rock River	35.5	769,909
Salt Creek	37.0	10,516,636
Simpson Ridge	21.6	16,516
Poison Spider	17.0	262,462
Teapot	44.0	10,806
Torchlight	48.0	No shipments
Warm Springs	11.8	34,524
Total Wyoming Production . . . .		17,698,857

GAS PRODUCTION IN WYOMING FOR 1930

<u>FIELD</u>	<u>CUBIC FEET</u>
Barter Basin	2,472,582,000
Boone Dome	1,277,000
Billy Creek	44,600,000
Byron Garland (Ohio)	487,902,000
Garland (P. & R.)	25,487,000
Elk Basin	1,163,306,000
Ferris	1,069,693,000
Grass Creek	344,392,000
Little Grass Creek	132,813,000
Hatfield	96,467,750
Hidden Dome	279,850,000
Lance Creek	1,289,846,000
Little Buffalo Basin	1,594,622,000
Mahoney Dome (Ohio)	443,511,000
Mahoney Dome (P. & R.)	1,796,672,000
Mahoney Dome (Prairie)	1,934,106
Muskrat	256,551,000
Oregon Basin	156,709,000
Rock River	546,613,000
Salt Creek (Midwest)	374,066,000
Salt Creek (Ohio)	1,251,484,000
Sand Draw	2,775,491,500
Wertz	<u>5,042,359,250</u>
Grand Total	21,603,229,106

## SUMMARY

The present conditions existing in the oil industry preclude any immediate resumption of activity in the development on new fields, on a large scale. However, the future outlook appears bright when that time comes that the demand for oil products is such as to permit prices to recompense the oil operator for the investment and risks inherent to his trade.

At the close of 1930, it would appear that the Wyoming oil operators, outside of the larger companies, were seeking some way to give an outlet for their crude and with some success, especially in the smaller fields where the larger companies do not dominate.

In the Osage Field in Weston County, for example, the operators there have started to build small skimming plants on the nearby highways and with filling station pumps to serve the auto traveling public with gasoline. In this manner, it is believed that a large part of the Osage production may be taken care of in a local manner and this idea seems to be spreading rapidly wherever production is stifled by the inability of the larger marketing firms to take care of all of the oil.

The demand for the heavier oils for road building has been treated of in previous reports and the demand has well borne out the predictions of previous reports to the effect that this material was destined to become one of the chief resources of this State. Our asphalt base crudes appear to have a better binding and cohesive factor than crudes from other regions and the refiners are becoming aware of this demand in such a way that we may expect large uses of Wyoming road materials in the coming season and the future years.

Especially is the cut-back asphaltum come into prominence. This is a high melting point asphalt made from Wyoming's black oils, this material is practically a solid at all ordinary temperatures. It is cut back to a fluid state at the refinery with volatile oils and thus is marketed in the form of a tar.

Upon being applied in a cold, or ordinary temperature, the volatile content evaporates in from seven to ten hours leaving a homogeneous asphaltic covering on the roadway that is the equal in every way to an asphaltic pavement, provided it was placed by the correct methods. Road mats of from three-fourths inch to three inches can be applied with this material at a cost of from \$600 to \$1,500 per mile. Without being cut-back with volatile oils, this asphalt would require elaborate heating and distribution units to obtain the same results.



Thus we can expect a market to develop for our very volatile gasolines that are not marketable for motor fuel and also for our heavy asphaltic oils, through the use of this cut-back asphaltum.