

Last Installment

(Continued From Page 3)

porosity resulting from weathering and solution at the erosion surface has also been important in controlling oil accumulation.

On the west flank of the Sweetgrass arch and westward into the disturbed belt, increasing thicknesses of unit MA may be expected, and porous zones should be thicker and more numerous than on the arch. There are possibilities for accumulation by stratigraphic trap along the flank of the arch, and drilling in the disturbed belt may be expected to penetrate horizons which are equivalent to at least part of the productive zones encountered at Turner Valley and Jumping Pound in Alberta. Drilling on the Reagan (Twin River) structure, T. 37 N., R. 7 W., found substantial amounts of oil in highly porous and permeable dolomites of unit A, but production has been hampered by difficulties of water shut-off. In the mountains and elsewhere, porous zones associated with saccharoidal or coarsely crystalline dolomites are common in unit MA, often with hydrocarbon residue in the voids.

Devonian.—In outcrop, the saccharoidal dolomites of Devonian subunit DA, exhibit persistent zones of intergranular and fine vuggy porosity with effective porosity ranging from 8 to 16 percent. Where penetrated by wells, the equivalent basal portion of unit DA contains similar porous zones, although the porosity in the subsurface is somewhat limited by anhydrite occupying the pore spaces. Several wells drilled in the Kevin-Subnurst field to the base of unit DA encountered large volumes of carbon dioxide under high pressure, and, in some cases, sprayed minor amounts of amber oil. A well drilled to the base of the Devonian on Whitlash dome (section 13 on the chart) penetrated a fair thickness of saturated dolomite near the base of unit DA, but permeability proved insufficient for commercial production. Analysis of cores from the saturated zone indicates porosity 12 percent, permeability 18-26 md., oil gravity 32°. Devonian strata above the basal portion of unit DA bear little promise, and it is evident that operators who consider testing horizons below the top of Mississippian unit MB should be prepared to penetrate a considerable thickness of bit-consuming chert in the basal Mississippian and drill from 500 to 700 feet below the top of the Devonian for an adequate test.

Cooper, C. L. personal communication.
 McCourt, J. H., personal communication.

During the 10-year period 1933-43 the cost of finding oil in the United States increased four-fold. Using the initial estimate of the reserves discovered, in 1944 the cost of finding oil was 58.5 cents per barrel; from 1935-38 average discovery cost was 13.8 cents. These figures do not include the cost of developing new oil pools discovered, nor the cost of equipping, maintaining and operating the wells.

(Legal Advertising)

CITATION
 In the District Court of the Eighth Judicial District of the State of Montana, in and for the County of Cascade,
 IN THE MATTER OF THE ESTATE OF SARAH E. AUSTIN, Deceased.
 THE STATE OF MONTANA SENDS GREETINGS TO:
 RUTH AUSTIN JOHNSON, DORIS G. TENNEY and J. LOWELL OLIVER, the three beneficiaries under the last will and testament of the said Sarah E. Austin, Deceased, and the trust thereby created, and to each of them:
 You and each of you are hereby cited to be and appear before the above named District Court, Department No. 1 thereof, at the City of Great Falls, Montana, and at the county courthouse of Cascade County, Montana, on Wednesday, November 7th, 1945, at 10:00 o'clock A. M., then and there to show cause, if any you have why the Ninth Annual and Final Account of Messrs. M. M. Moore and H. Mattson, the duly appointed, regularly qualified and acting Trustees under the will of the said Deceased, and the trust estate thereby created, filed herein on September 7th, 1945, and petition for closing said estate and discharge of the said trustees and an exoneration of their official bond, should not be allowed.

Dated this 7th day of September, 1945.
 AGNES SCHRAPPS,
 Clerk.
 By ELIZABETH MCKENZIE,
 Deputy Clerk.

MURCH & WURTHNER,
 Attorneys for Trustees,
 408 Ford Building,
 Great Falls, Montana.
 Date of first publication Sept. 15, 1945.

The Sunburst Badger Says—

A lovely little old lady spent days working on a pair of men's pajamas which she contributed to the Red Cross. "I made them myself," she said sweetly. They were perfect in every detail except that there was no opening in the front of the pants. The inspector hated to hurt her feelings but he explained the error to her. The dear old lady's face fell. Suddenly, however, she brightened. "Couldn't you give them to a bachelor?" she said.

A professional reformer was accosted in a hotel lobby by a young, pretty, intelligent looking girl. Sensing an opportunity to do something for her, he invited her to sit down and have a talk with him.

"Tell me," he said to her, "just how such a bright and pretty young girl like you happened to get into such a racket?"

"I really don't know, sir," she replied naively, "I guess I was just lucky."

Two men got off a bus. One of them had come to town for good. The other was an oil man on vacation.

"Well, bless my wool," said the ram as he plunged over the cliff. "I didn't see that ewe turn."

They are putting so much of a certain item in the G.I. food that several of the boys have been starting their letters to their sweethearts, "Dear friend."

Courtship is that period during which a girl decides whether or not she can do better.

Then there's the one about the aeronautical engineer who is confused because the gals with the most streamlined figures usually offer the most resistance.

If you've got the jack you can always draw the queens.

There was an old sculptor named Uhidias,
 Whose knowledge of art was invidious.
 He carved Aphrodite
 Without any nightie,
 Which startled the purely fastidious.

President Truman still has the biggest task before him. It isn't going to be easy convincing the American public that there isn't any Santa Claus.

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