

Procrustean Work Stretched Molecules in Good Gasoline

Most boys and girls have read in the old Greek myths about Procrustes, who welcomed travelers at his home in a lonely spot beside the road. Procrustes had only one bed, but he always made his wayfarers fit the bed. If they were too long, he chopped off their feet. If they were too short, he stretched them on a rack. Finally, he was slain by Theseus.

Saucer-eyed as are youngsters reading the exploits of Procrustes, the achievements of chemists in the petroleum industry in stretching, shrinking, and re-shaping petroleum molecules make even the grown-ups in this sophisticated age blink in amazement. Nature has given this country a bountiful supply of crude oil, but like the travelers stopping at the house of Procrustes, some of the oil molecules are too large, some too small to fit the requirements for gasoline for use in modern high compression motors. But petroleum chemists, after years of research, have discovered effective methods to break down the fat molecules into smaller ones suitable for use in the modern gasoline engine. That is called "cracking." Petroleum chemists also are able by other methods to re-build molecules to a desired size and composition. That is known as "Polymerization."

What this juggling and changing of oil molecules means to the average person is just this: If the petroleum chemists were unable to perform a Procrustean act upon the oil molecules as Nature made them, an additional one billion barrels of oil would have to be brought to the surface every year to meet the demand of the 25,000,000 motorists in the United States for gasoline. Chemical research in the oil industry has had the practical effect, by reducing the amount of crude oil needed, of doubling the oil reserves of the United States. Without these chemical achievements of the petroleum scientists, the price of gasoline would be beyond the means of millions of families.

Some scientific research is of interest only to savants; that of the petroleum industry is of interest to all motorists, and especially the 12,000,000 car-owning families with incomes of less than \$30 a week. That so many families with modest or low incomes are able to broaden the sphere of their living through car ownership is chiefly the result of the low prices of gasoline brought about by the technical progress of the petroleum industry. The public benefits of chemical research in the petroleum industry are measured in billions of dollars in savings in the cost of motor fuel.

HEARING IS

(Continued from Page One)

Must Conserve Gas

Mr. Emrick discussed briefly the methods which should be used to preserve gas pressure. He recommended using back pressure and careful conservation of gas in all producing oil wells, pointing out that in the past operators have allowed the gas to escape without

maintaining a gas-oil ratio of production. He said the field and individual operators are being injured by the practice of operating part of the wells at capacity while others are shut in.

The board took a recess at the end of Mr. Emrick's testimony to determine the time of re-assembly. Various members of the board declared they would be unable to be present during the past week. The several attorneys were compelled, they said, to attend terms of court in various parts of the state. Accordingly the board chose January 4 as the date when the hearing will continue. The proponents of proration have completed their Kevin case and the Cut Bank group will next take the stand.

Another petition to the governor, with 24 Kevin signers, was read, opposing proration.

Opponents Call Experts

It is known that the opponents of proration will greatly outnumber the proponents and they are planning testimony to prove that proration is unnecessary and in fact would prove harmful to the Montana oil industry. Present at the sessions were W. F. Knobe of Corpus Christi, Texas, who for three years was chief engineer of the Texas railroad commission which supervises proration in that state, also Gordon Griffin, another petroleum engineer who held the position for one and one-half years. These experts on proration are to be called, it is understood, to advise the Montana board whether in their opinion proration is advisable in Montana. It is definitely known that they will testify that until Montana produces enough oil to care for the requirements of its own market, there is no justification for legal proration.

Will Produce Some Good

Attorneys for opponents of proration have frequently attempted to implicate a plot of major companies to bottle up Montana production in order to make it possible to supply the local market with Wyoming crude and petroleum products.

It is generally conceded that the hearing will be productive of enough good to justify the expense, no matter what the decision of the board. It is felt that in the last analysis the matter is in the hands of the governor for final decision, which decision will be based largely upon the evidence presented. Wide-spread publicity for the Montana oil industry has resulted from the hearing, bringing attention to the world that Montana offers opportunities for refinery and market expansion—valuable publicity with which sanction that could not be otherwise obtained.

OIL CONSERVATION BOARD OF THE STATE OF MONTANA

416 Ford Building
Great Falls, Montana

STATEMENT OF CRUDE OIL PRODUCTION,
REFINING, STORAGE, ETC. IN MONTANA,
OCTOBER, 1937

(Figures represent barrels of oil
with fractional bbls. omitted.)

	Kevin and Bender	Cut Bank	Cut Creek	Pondera	All Other Mont. Fields	Total
IN STORAGE OCTOBER 1st:						
By Producers	48,394	73,063	3,387	19,307	16,555	161,608
"Transporters	162,930	248,901	62,902	99,828	11,153	580,714
"Refineries	67,085	184,879	17,494	1,392	2,292	273,142
"Purchasers for Storage	114,832	54,091				168,923
In Transit			11,641			11,641
TOTAL	393,241	559,934	95,424	121,157	30,100	1,199,058
PRODUCED DURING MONTH						
TOTAL	520,691	811,911	114,025	154,852	37,535	1,639,014
REFINED IN MONTANA						
USED FOR FUEL OR LOST	32,125	160,656	18,082	15,977	7,204	243,144
SHIPPED TO CANADA	11,530	6,729	402	17	171*	7,233
SHIPPED TO WYOMING		77,944			505	80,422
TOTAL	42,942	235,329	18,484	15,994	8,480	235,829
IN STORAGE OCTOBER 31st:						
By Producers	56,880	86,290	3,877	20,283	17,585	184,915
"Transporters	154,446	258,400	60,960	110,453	10,464	594,723
"Transporters	147,981	210,078	16,578	8,066	996	383,699
"Purchasers for Storage	118,433	17,261				135,694
In Transit			15,028			15,028
TOTAL STORAGE	477,740	571,989	95,541	138,802	29,045	1,313,106
* Pipeline gain (deduct)						
In storage October, 1-37						
October Receipts Mont. Refin's						
Refined Lost, Etc.						
In Storage October 31-37						
WYOMING OIL IMPORTED	25,700		122,014		108,859	358,573

TOOLE COUNTY

By Shelby Abstract & Title Company
SHELBY, MONTANA

OIL AND GAS LEASES
Robert K. Miller to Glacier Prod. Co.
5 yrs 87% N 20-35-4W. \$1.
Robert K. Miller to Glacier Prod. Co.
5 yrs 87% S 20-35-4W. \$1.
Cordelia E. Goodin to B. F. Severkrup
H. F. Jones et al 5 yrs 87% S 20-35-4W. \$1.
B 20-35-4W. \$1.

ASSIGNMENTS OF LEASES
AND ROYALTIES
Aaron Welch et al to John Jersey
Miller 8 4-10% NW 1/4 28 NE 1/4
20-35-3W.
Virginia Thummon Donovan to John
Nequi 1% SW 1/4 33-35-3W. \$1.
G. E. Gallogly to A. T. Thompson.
1-4 of 1 SE 1/4 19-37-4W. \$1.
Grace Rabidou to Chicago Consol. Oil
Prod. Co. 0.0007525% SE 1/4 NW 1/4
33-35-1W.

Olin S. Brown, Exe to Chicago Consol.
Oil Prod. Co. 1-4 of 1% SE 1/4 NW 1/4
NW 1/4 33-35-1W.
James V. Hawkins et al to Chicago
Consol. Oil Co. 1% SE 1/4 NW 1/4
33-35-1W.
G. E. Kistner to R. G. Parent et al
Int SW 1/4 20-35-4W. \$1.
Anna Kanka to Chicago Consol. Oil
Prod. Co. 0.0007525% SE 1/4 NW 1/4
33-35-1W.

John Herzog to Chicago Consol. Oil
Prod. Co. 0.0007525% SE 1/4 NW 1/4
NW 1/4 33-35-1W.
Charles Neal to Chicago Consol. Oil
Prod. Co. 1% SE 1/4 NW 1/4 33-35-1W.
Minnie Dilts to Chicago Consol. Oil
Prod. Co. 0.0007525% SE 1/4 NW 1/4
NW 1/4 33-35-1W.

Luther H. Caverly to Chicago Consol.
Oil Prod. Co. 0.0007525% SE 1/4 NW 1/4
SW 1/4 33-35-1W.
Ray G. Barkdoo et al to Chicago Consol. Oil
Prod. Co. 1-16 of 1 SE 1/4 NW 1/4
33-35-1W.
C. E. Plabe and J. R. Engelking to
A. M. Kistner all Int W 1/4 26-35-4
West \$1.
Henry Van der Pas to O. A. Anderson
1% SE 1/4 NW 1/4 33-35-1W. \$1.

G. E. Gallogly to William F. Sager
1-8 of 1 SW 1/4 20-37-4W. \$1.
V. B. Carlson to William F. Sager
1-4 of 1 SE 1/4 NW 1/4 20-37-4W. \$1.
Ray G. Barkdoo et al to G. E. Gallogly
1 3-8% SE 1/4 NW 1/4 14 SE 1/4
SW 1/4 15-35-4W. \$10.00
Do to G. E. Gallogly 3% W 1/4 NW 1/4
NW 1/4 SE 1/4 NW 1/4 33-35-4W. \$10
G. S. Frary to W. S. Frary 5% Lots
3 4 SE 1/4 NW 1/4 4-34-4W. \$1.
First St. Bank to M. W. Cassidy et al
2 1/4% SE 1/4 NW 1/4 22-35-3W. \$1.
M. W. Cassidy et al to Big West Oil
Co. 2 1/4% SE 1/4 NW 1/4 SW 1/4 22-
35-3W. \$1.

MISCELLANEOUS
Asg. and C. D. Toole Co. to Jay G.
McCrory to Landowners Oil & Gas Co.
NW 1/4 21 NE 1/4 21 SW 1/4 NW 1/4
24 SW 1/4 25 SE 1/4 35-35-4W. \$1 SW 1/4 3
all Sec 10 NW 1/4 11 N 1/4 21 W 1/4 NW 1/4 25 NE 1/4
E 1/4 NW 1/4 26-34-4W. \$220.00.
Do Toole Co. to Jay G. McCrory to
Landowners Oil & Gas Co. Seattle NW 1/4
SW 1/4 SE 1/4 NW 1/4 6 E 1/4 NW 1/4 NE 1/4 7
W 1/4 NW 1/4 19 N 1/4 20 SE 1/4 28 NE 1/4
29 SE 1/4 30 Lot 1 S 1/4 of 2 Sec. 31 E 1/4 25-
33-3W. \$220.00.
Do Toole Co. to Jay G. McCrory to
Landowners Oil & Gas Co. SE 1/4 4 W 1/4 17
E 1/4 21 SE 1/4 22 NE 1/4 27-34-3W. \$880.00
Do Toole Co. to Jay G. McCrory to
Landowners Oil & Gas Co. S 1/4 25-35-4W
\$320.00.

LIONS CLUB

(Continued from Page One)

in Conrad. Asked if they had any objection to the Lions club taking up the work they said they had none and the motion to organize a committee was enthusiastically passed. The Conrad committee will be asking for space for a record of its accomplishments in the Montana Oil Journal from now on. The committee plans to get all Conrad people to buy Montana-made gasoline exclusively until our oil fields and refineries are again giving employment to our workmen. The committee plans also to go to Choteau, Dutton and Valer and organize those cities in behalf of Montana-made gasoline.

LIONS CLUB OF CONRAD COMMITTEE,
ON BUY GASOLINE MADE FROM MONTANA CRUDE.

SEND A CONTRIBUTION TO
THE SUNBURST BADGER

NEW PIPE USED

for Every Purpose
OUR ODEE FOR HIGH
PRESSURE OIL AND GAS LINES
Also Well Casing
IF IN URGENT NEED OF A
QUOTATIONS, WIRE COLLECT
JOS. GREENSPON'S
SON PIPE CORP.
National Stock Yards
(St. Clair Co.) ILL.

GLACIER COUNTY

By Glacier County Abstract Co.
CUT BANK, MONTANA

AMENDMENT TO LEASE
Win. H. and Cora Cross, his wife,
to T. H. Texas Company, agreement
to reduce rental of oil and gas lease on
S 1/4 7-36-5W. from \$80.00 to \$40.00 delay
rental each six months.

RELEASE OF OIL AND GAS LEASE
Glacier Production Co. to Elmer R.
and Estella E. Long, his wife, dated
11-3-1932, covering SE 1/4 15 NE 1/4 E 1/4
NW 1/4 NE 1/4 22-32-2V.
Glacier Production Co. to Elmer Parker
Rel. Bk 4 of O&G, page 101, SE 1/4
Sec. 27-32-5.

NOTICE OF PENDENCY OF ACTION
U. S. Dist. Court Dist. of Mont. Great
Falls Division, The Texas Company
vs. F. A. Ewald et al To oblige specific
performance of certain agreements and
to quiet title to oil and gas leasehold
covering SE 1/4 NW 1/4 NE 1/4 Sec. 9-32-5.
Agreements cover all of Sec. 9-32-5.

**CERTIFICATE OF SALE ON
EXECUTION**
E. T. Broadwater, plaintiff, vs. E. J.
McCabe, defendant, 1-2 of 1% land-
owners royalty N 1/4 9-34-6 West to plain-
tiff, \$350.00.
Same parties, 3-8 of 1% landowner's
royalty, NW 1/4 NW 1/4 Sec. 9-35-5W. to E. T.
Broadwater for \$350.00.

ASSIGNMENT OF LEASES
C. D. Small to C. D. Small Company.
Assigns all leases of every kind and
description in Montana.
**ACKNOWLEDGEMENT OF TERMINA-
TION OF OIL AND GAS LEASE**
Harry M. Halston to Mrs. Clara Smiley
G. C. Smiley Homestead in Twp. 36N.
R13W. rec. Bk 2 O&G, pg 243. Home-
stead Survey No. 357. Bk 2 O&G, page
243.

DEEDS OF ROYALTY
James W. Stack et ux to J. S. Frisbee
1% W 1/4 Sec 10-32-5.
Same to same 3-4% SE 1/4 Sec. 9-32-5.
G. E. Gallogly to W. A. Leonard 1-8
of 1% SE 1/4 NW 1/4 Sec 11, W 1/4 N 1/4
Sec. 14-36-5.
G. E. Gallogly single to Henry L.
Houck 1-8 of 1% on NE 1/4 9 NW 1/4 10-36-
5 West M. P. M.

INDENTURE
Florence H. Newell, C. H. Minnette et ux
and A. M. Murphy. Establishes owner-
ship of different parties 1% royalty to
Florence H. Newell, 54% royalty to C.
H. Minnette and Emma Minnette as
joint tenants. A. M. Murphy is owner
of lands subject to above reservations.
E 1/4 NW 1/4 Sec. 27, NE 1/4 NW 1/4 Sec.
9-32-5.

AGREEMENTS
F. A. Keup & Arthur Kately to American
Pipe & Supply Co., Assigns rights in
contract with Montana Headlight Oil Co.
for drilling well Sec 1-34-6, as security
for \$44,331.38.
Arthur Kately & F. A. Keup, to The
American Pipe & Supply Co. Contract
and a supplemental contract with Mont-
ana Headlight Oil Co. for drilling 5
wells, NW 1/4 Sec 1, SE 1/4 Sec. 11, NW 1/4
SE 1/4 14 anywhere on Sec 1-34-6, assigns
65% of indebtedness owing by Mont.
Headlight Oil Co. as security for in-
debtedness owing American Pipe & Supply
Co.

COULMOORE

(Continued from Page One)

hole was straight-reamed to set the casing at 450 in the gray shale of the Colorado. There was some discussion about the 20-foot sand which might be the Eagle, Hanlon states. He had expected to start drilling in the Colorado as the Eagle sandstone appears on the bluffs above the well. The only well log for a guide is that of Ralph Chamberlain's well on Crown Butte, 16 miles east, and the comparison with that log indicates that the 20-foot sand is in the top of the Colorado.

SEND A CONTRIBUTION
TO THE SUNBURST BADGER

FREDRICK C. PLATT

MINING ENGINEER
PETROLEUM
Geology—Lease Management
MINING
Reports—Management
SHELBY, — MONTANA

JOSEPH S. IRWIN

PETROLEUM GEOLOGIST
Box 1316
CUT BANK, MONTANA
3026 Glencoe Road, Calgary, Alb.

PONDERA COUNTY

By Pondera County Abstract Co.
CONRAD, MONTANA

PARTICIPATING ROYALTY DEED
C. W. Chambers to Edwin Grosfield
1% Participating royalty in and to oil
and gas accruing to me from SE 1/4 NW 1/4
7-27-4W.

CHOTEAU COUNTY

By Choteau County Abstract Co.
FORT BENTON, MONTANA

ROYALTY DEEDS
Edwin F. Peterson, Jr. to Fred Schen-
sied 1-2 of 1% of 100% royalty N 1/4 NW 1/4
23-26-3, \$10.
Same to Mrs. Lydia Aznoe 1-1 of 1% of
100% same land as above, \$10.

SEND A CONTRIBUTION
TO THE SUNBURST BADGER

SHELBY ABSTRACT AND TITLE CO.

Licensed, Bonded Abstractors
SHELBY, MONTANA

E. BYERS EMRICK

CONSULTING GEOLOGIST
OIL—NATURAL GAS

Examinations, Reports, Appraisals
Estimates of Reserves
United States and Canada
Residence CONRAD Office
Phone 138 MONTANA Phone 190

Magnetos, Starters, Generators and Electrical Systems

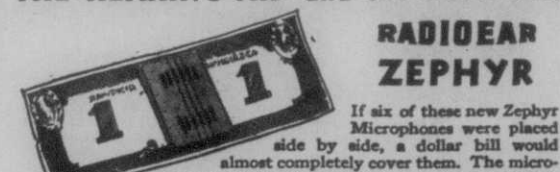
SEE US FOR REPAIRS
On all makes and types of
Electrical Units

We carry a complete stock of
parts and there will be
no delay in servicing
Send us your next electrical job
We clean and repair all sizes
types of radiators.

KLINGLER'S GARAGE

Phone 102 MONTANA

THE HEARING AID and the Dollar Bill



RADIOEAR ZEPHYR

If six of these new Zephyr
Microphones were placed
side by side, a dollar bill would
almost completely cover them. The micro-
phone, which picks up the sounds to be amplified,
is the very heart of the hearing aid. Imagine a hearing
aid microphone so small! Then, too, each Zephyr is laboratory
Made-to-Order for the one person who is to wear it. Nationally
advertised in Good Housekeeping, Time, Fortune, etc. Discover for
yourself this new hearing thrill that Radioear Zephyr can bring to
you. See it and hear with Radioear today. Descriptive folder sent
without obligation.

RADIO EAR COMPANY

of Montana

405 First National Bank Bldg. Great Falls, Montana

AMERICAN PIPE & SUPPLY COMPANY

Own and offer for sale erected and tested
anywhere

150—80,000 barrel steel tanks
5—65,000 barrel steel tanks
5—55,000 barrel steel tanks

These tanks have been used only for storage of
good, sweet, non-corrosive crude oil. Can be
inspected within twenty-four hours from Out
Bank, Montana.

Can furnish from stocks anything in used or new
rotary and cable drilling equipment, rigs, machin-
ery, tools, derricks, drill pipe, casing, line pipe,
tubing, etc. Cordage and belting for all purposes.
Valves, fittings, and machinery parts.

Build pipe lines and undertake any
Oil-field construction.

Buy, Sell, Rent, Trade, anything in
Used and New
OIL WELL SUPPLIES

Scrap Iron Metals, Etc.
Denver. Phone 78—Box 468 Casper,
Colorado. CUT BANK, MONTANA Wyoming

ELECTRIC SERVICE-

the smallest item in
the Household
Budget!



How well are you acquainted with Watt, the handy electrical helper? Do you really realize how obliging he is, how tireless—and, above all in these practical times, how inexpensive? Obviously not—or you would have him on the run from morn to night, lightening and speeding up your household work—changing it from little short of drudgery to a pleasant occupation—giving you hours on hours of added leisure. Why not use Watt more frequently—in modern electric devices—particularly when you scarcely notice the addition to your monthly bills!

THE MONTANA POWER Co.

Serving 155 Montana Cities and Towns