

DEVONIAN OIL

(Continued from Page One)

chian fields, Panhandle, McKenzie river, the fields of Permian and various other fields of importance.

In a treatise on the Sweetgrass Arch, written in 1928, E. Byers Emrick wrote:

Correlation

"No doubt exists regarding the correlation of the Devonian series which has a thickness of from 335 to 425 feet. It is generally divisible lithologically into an upper and lower limestone, separated by varying thickness of shale and shaley limestone. The upper division weathers yellow and is generally coralline and contains some dolomite beds, which are underlain by greenish and bluish shales alternating with thin limestones. Beds of salt and gypsum occur in the formation at Athabasca. Northwest territories, Canada, are of the Devonian series.

"This district may be said to comprise within its limits the district north of latitude 54, west of the Great Slave lakes and east of the Rocky Mountains. Oil seepages and drilled wells have proven the general horizon to be petroliferous throughout the entire extent of at least 1,000 miles. The lithological character and stratigraphic relations of the limestones and shales are almost identical throughout the district.

Sands Fed From Devonian

"What is probably the world's greatest seepage of bituminous and asphaltic material exist in the 'tar sands' on the Athabasca river. These sands are probably Dakota and immediately overlie the Devonian. The tar sands underlie an area over 1,000 square miles in extent. Beds in the Cretaceous series overlie the Devonian in the southern part of this district, but the Dakota sandstone which occupies the base thins very rapidly south of this district and by the time the Sweetgrass Arch is reached it is either absent or lenticular and quite thin. The distance from the last surface exposures of the Devonian to the arch is but a little more than 300 miles. In this interval the Kootenai, Devonian and Madison limestone group have come in. There is no geological reason why the petroliferous character of the rocks should have changed in this distance. That they have not changed is proven by the fact that all wells drilled on the Arch that have penetrated the formation have found some oil or gas; namely the Bears Den, Troy Sweetgrass, Three-In-One, Frazier deep test, Dry Fork at Conrad, Cascade Oil & Gas Co., north-west of Great Falls, Allen Oil Co., Rainbow No. 2, and the Great Northern Mutual, north of Vaughn. At least four of these wells were

not located upon favorable structure.

"It might be well to state that production from the Devonian and older limestones might be somewhat erratic and irregular or in other words spotted on an account of the scarcity of sandy strata the fissile character of the beds and the presence of oil in dolomitic limestone or gypsiferous beds. It is also quite probable that any oil found will have an asphaltic base but may be quite high in gravity. The Devonian is one of the main producing series in the eastern fields.

Is It Ordovician?

Below the Devonian is the Silurian, from 190 to 275 feet thick and below that the Ordovician, which has been penetrated to a depth of about 1600 feet in the deepest well that has been drilled in northwestern Montana, the Emrick report continues. This appears to be bottomed in a dolomite limestone which may be the Trenton. The report of 3,000 feet of Devonian at Moose Dome has led local oil men to wonder whether the porous limestone sought at 3,100 feet at Moose Dome actually is Ordovician which is the famous Wilcox horizon of Oklahoma. All beds thicken to the west but not enough to increase the Devonian from 300 to 3,000 feet, Montanans say.

CANADIAN LUCK

(Continued from Page One)

Rimrock Production Co. is drilling Schmidt No. 3, north of its best well at 760 feet.

In the south end of this pool, Watson-Leach No. 2, NE corner 31-35-3W, was put on the pump this week. It made 17 barrels the first day, pumping off in nine hours. It pumped off in seven hours the next day and in two hours the third day.

On the east side of this same high gravity oil pool, Tomlinson, Agent-Davidson No. 1, NW NE 1/4 SE 1/4 28-35-2W, is drilling at 1325, after having cemented off lost tools at 1240.

Anacoda-Kevin-Government No. 5, NW SE 1/4 NE 1/4 19-35-2W was acidized this week and made 25 barrels of oil and 45 barrels of water.

Cassidy-Mary No. 1, CSL NE 1/4 NW 1/4 5-34-3W, drilling, 1200.

Capitol-Pace No. 1, C SE 1/4 SW 1/4 27-36-1W, fishing, 2010.

Crumley-O'Haire No. 2, NE SW 1/4 SE 1/4 35-36-2W, had Sunburst sand from 1460 to 1497 and bottoms at 1502. It is rated at from 10 to 15 barrels.

Eddy-Seabrook No. 7, SE SW 1/4 SW 1/4 19-35-2W, drilling, 1275.

Howell-Lanewood-Osthoff No. 1, NE SE 1/4 SW 1/4 1-35-3W, shut down after running 8-inch casing at 1080.

Horne-Shelton-Ness No. 1, C NW 1/4 NE 1/4 30-35-3W, was this week plugged and abandoned, unable to make a well from the showing.

Ogden-Kevin-Zachor No. 7, SE SW 1/4 NW 1/4 20-35-1W, was acidized and is making 35 barrels.

Ohio-Swarze No. 1, SE NE 1/4 SW 1/4 35-36-2W, drilling, 650.

California Co.-Zimmerman No. 6, NE NW 1/4 NE 1/4 36-35-2W, drilling 1100.

Crumley & Son-Freiburger No. 10, SW NE 1/4 SE 1/4 24-36-2W, drilling, 200.

Dockery et al-Gunderson No. 2, SE SW 1/4 NW 1/4 19-35-2W, south of the excellent No. 1 producer is drilling at 600.

E. BYERS EMRICK

CONSULTING GEOLOGIST
OIL-NATURAL GAS

Examinations, Reports, Appraisals
Estimates of Reserves

United States and Canada
Residence CONRAD Office
Phone 158 MONTANA Phone 190

NORTHWEST NATURAL GAS
CO-OPERATIVE ASSOCIATION
Organized under Minnesota laws

Sponsoring a major pipeline to the
Iron Range and Twin Cities.
A. M. DRAKE,
Vice President and Manager
Phoenix Building, Minneapolis, Minn.

A. C. M. REFINERY
AT GREAT FALLS
TO RESUME WORK

Announcement that the rod and wire mill and copper refinery at Great Falls will resume immediately was made by C. F. Kelley, president of Anaconda Copper Mining Co., in Great Falls Thursday. Mr. Kelley is here together with J. R. Hobbs, executive vice president, and D. M. Kelly, vice president. Steam plants are being installed to supply electric energy lacking from hydro electric plants owing to the unprecedented drought which has lowered the waters of the Missouri river. Power consumption elsewhere is being curtailed wherever possible. Electric street cars in Butte are shortly to be replaced with busses, to make the power available for operating the mines, as one step.

Mr. Hobbs expressed optimism regarding copper and zinc markets, in an interview with the Great Falls Tribune.

"The demand for copper today is the best since 1929," Hobbs said "and the situation in regard to high grade zinc probably is better than it has ever been. (This is due in part to development within the last two years of a large demand for shell cast fittings in the automotive industry. Increased industrial activities in the last few years have reduced the stocks of zinc to a low figure. I can see no reason why Montana copper and zinc operations should not resume their normal course as soon as sufficient precipitation is received in the state to give normal water supply."

NEW WILDCAT
NEAR LAUREL

Laurel Oil Company, a new concern ramrodded by G. H. Randall of Billings, has moved a National rig, capable of drilling 3500 feet, onto location NW 1/4 of SW 1/4 Sec. 7, T. 28, R. 24E.

Laurel Oil Company location is about 17 miles west of Billings and about 1 1/2 miles Northeast of the Riverton Oil company well, now being drilled by J. W. Havlik, 4 miles West of Laurel.

Mr. Randall expects to find pay at 1900 feet in the Morrison formation.

DEEP DRILLING

(Continued from Page One)

mation permits an excessive water condition that washes out oil accumulations and predominates the oil flow.

Dr. Thom will remain in camp at Red Lodge until August 29th when he will return to the East.

Dr. Thom was asked the question, "Do you think the Midland Empire will eventually develop a production equal to some of the large Texas fields?" Dr. Thom would not predict such a possibility, however, he said, "Deep drilling in many locations is finding larger producing wells which indicates a possibility of much greater results than in the past."

It is a known fact that many of the Texas fields in the early stages were small producers in shallow levels and later were drilled into deeper levels with large production as the result. It would seem with the dozens or more of small producing fields that have had heavy gas and small oil showings have more than a gambler's chance to open up underneath with larger pay when deeper drilling is in vogue.

SEND A CONTRIBUTION
TO THE SUNBURST BADGER

The
Jayson ShirtSilhouette
Stripes

\$2

Finest quality chambray,
button down collar. Col-
ors are blue, green and
tan.

Kaufman's
304 Central Ave.

IN THE DISTRICT COURT OF THE
EIGHTH JUDICIAL DISTRICT OF
THE STATE OF MONTANA IN AND
FOR THE COUNTY OF CASCADE.

SUMMONS

C. F. HOLT, Plaintiff,
vs.
JOSEPH JELICA and MARY JELICA,
his wife, and all other persons, unknown
claiming or who might claim any right,
title, estate or interest in, or lien or
encumbrance upon, the real property de-
scribed in the complaint, or any thereof,
adverse to plaintiffs ownership, or any
cloud upon plaintiffs title thereto,
whether such claim or possible claim be
existing or contingent, including any
claim or possible claim of dower, inchoate,
or accrued.

THE STATE OF MONTANA Sends
Greetings to the Above Named Defend-
ants, and to Each of Them:
You are hereby summoned to answer
the complaint in this action which is
filed in the office of the Clerk of this
Court, a copy of which is herewith served
upon one of you in each County wherein
any of you reside, and to file your answer
and serve a copy thereof upon the plain-
tiff's attorney within twenty days after
the service of this Summons, exclusive
of the day of service, and in case of your
failure to appear or answer, Judgment
will be taken against you by default,
for the relief demanded in the complaint.
This action is brought for the purpose
of quieting title to that certain piece
of parcel of real estate, lying, situate
and being in the City of Great Falls,
Montana, County of Cascade and State of
Montana, and more particularly described
as follows: to-wit:

Lot Numbered Nine (9) in Block
Numbered Two Hundred Forty
Seven (247) in the Town or Town-
site of Great Falls, Cascade County,
State of Montana;

Witness my hand and Seal of said
Court this 25th day of August, 1937.

GEORGE HARPER, Clerk
By J. E. HILGARD, Deputy Clerk
SWANBERG & SWANBERG,
Attorneys for Plaintiff,
627-529 Ford Building,
Great Falls, Montana.
Date of first publication August 28, 1937.

NOTICE TO CREDITORS

Estate of MARTHA ELLEN MIDDLE-
TON, Deceased.
NOTICE IS HEREBY GIVEN by the
undersigned administrator of the
estate of Martha Ellen Middleton, Deceased,
to the creditors of and all persons
having claims against the said Deceased,
to exhibit them with the necessary vouch-
ers, within four months after the date
of publication of this notice, to the first
administrator at the office of Swanberg
& Swanberg, 627-529 Ford Building, Great
Falls, Montana, the same being the place
for the transaction of the estate of said
estate in the County of Cascade.

Dated July 29th, 1937.
WILLIAM MIDDLETON,
Administrator of the estate
of Martha Ellen Middleton,
Deceased.
Date of first publication, July 31, 1937.

IN THE DISTRICT COURT OF THE
EIGHTH JUDICIAL DISTRICT OF
THE STATE OF MONTANA IN AND
FOR THE COUNTY OF CASCADE.

HOME OWNERS' LOAN CORPORATION,

a corporation, Plaintiff
vs.
RAYMOND K. HAHN, EVELYN HAHN,
FRANK LAMBERT and RUTH S.
LAMBERT, Defendants

SHERIFF'S SALE UNDER DECREE
OF FORECLOSURE
Under and by virtue of the Decree in
the above entitled case the Sheriff of
said County will sell at Sheriff's Sale
on Friday the 10th day of September,
1937, at 2 o'clock P. M. of said day
at the West Door of the Court House in
Great Falls, Cascade County, Montana,
all the right title, claim and interest of
the above named defendants in and to
the following described property, to-wit:
A three-acre tract of land lying in
the Southeast Quarter of Section Twenty-
four (24), Township Twenty (20), North
Range Three (3) East of the Montana
Principal Meridian, in the County of
Cascade, Montana, and more particularly
described as follows: Beginning at a point
one thousand four hundred fifty-three
(1453) feet south of the Northeast
Corner of Section Twenty-five (25)
Township Twenty (20) North Range
Three (3) East of the Montana Principal
Meridian; thence west one hundred
fifty-three and four-tenths
(603.4) feet; thence south two hundred
(200) feet; thence east six hundred fifty-
three and four-tenths (653.4) feet;
thence north two hundred (200) feet to
the place of beginning.

Dated at Great Falls, Montana, this
11th day of August, 1937.
GUY PALAGI Sheriff,
Under Sheriff.

By HUGH C. SUTHERLAND
Attorney for Plaintiff,
Date of first publication Aug. 14, 1937.

IN THE DISTRICT COURT OF THE
EIGHTH JUDICIAL DISTRICT OF
THE STATE OF MONTANA IN AND
FOR THE COUNTY OF CASCADE.

SUMMONS

DOUGLAS MOORE, Plaintiff,
vs.
ALMA E. MOORE, Defendant.
THE STATE OF MONTANA Sends Greet-
ings to the Above Named Defendants, and
to Each of Them:
You are hereby summoned to answer
the complaint in this action which is
filed in the office of the Clerk of this
Court, a copy of which is herewith served
upon one of you in each County wherein
any of you reside, and to file your answer
and serve a copy thereof upon the plain-
tiff's attorney within twenty days after
the service of this Summons, exclusive
of the day of service, and in case of your
failure to appear or answer, Judgment
will be taken against you by default,
for the relief demanded in the complaint.
This is an action for divorce brought
upon the grounds of willful desertion
without cause, continuing for a
period of more than one year prior to
the filing of the complaint herein.

Witness my hand and the Seal of said
Court this 5th day of August, 1937.
(SEAL)
GEORGE HARPER, Clerk.
By Julius Hilgard, Deputy Clerk.
SWANBERG & SWANBERG,
Attorneys for Plaintiff,
Great Falls, Montana.
627-529 Ford Building,
Great Falls, Montana.
Date of first publication, Aug. 7, 1937.

IN THE DISTRICT COURT OF THE
EIGHTH JUDICIAL DISTRICT OF
THE STATE OF MONTANA IN AND
FOR THE COUNTY OF CASCADE.

SUMMONS

MELVIN P. NUMMEDAHL, Plaintiff
vs.
RUTH NUMMEDAHL, Defendant.
THE STATE OF MONTANA Sends Greet-
ings to the Above Named Defend-
ants, and to Each of Them:
You are hereby summoned to answer
the complaint in this action which is
filed in the office of the Clerk of this
Court, a copy of which is herewith
served upon one of you in each County
wherein any of you reside, and to file
your answer and serve a copy thereof
upon the plaintiff's attorney within
twenty days after the service of this
Summons, exclusive of the day of ser-
vice, and in case of your failure to
appear or answer, Judgment will be taken
against you by default, for the relief
demanded in the complaint. This is an
action for divorce brought upon the
ground of willful desertion continuing
for a period of more than one year prior
to the filing of the complaint herein.

Witness my hand and the Seal of said
Court this 11th day of August, 1937.
By H. J. SKINNER, Deputy Clerk.
SWANBERG & SWANBERG,
Attorneys for Plaintiff,
627-529 Ford Building,
Great Falls, Montana.
(SEAL)
Date of first publication Aug. 14, 1937.

TOOLE COUNTY

By Shelby Abstract & Title Company
SHELBY, MONTANA

ASSIGNMENT OF ROYALTY

G. E. Gallego to John Bonito 1-8 of 1
EJNW 1/4 W 1/4 NE 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

G. E. Gallego to John B. Lee 1-8 of 1
EJNW 1/4 W 1/4 NE 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to John B. Lee 1-8 of 1 SW 1/4 NE 1/4 W 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

G. E. Gallego to William F. Sager 3-8 of 1 W 1/4 NE 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to William F. Sager 1-8 of 1 E 1/4 NW 1/4 NE 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Bernard H. Killorin to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

Do to Mary M. Killorin 1/2 E 1/4 NE 1/4 NW 1/4 SE 1/4 SW 1/4 26-35-4W, \$1.

GLACIER COUNTY

By Glacier County Abstract Co.
CUT BANE, MONTANA

OIL AND GAS LEASES

L. I. Hall, Guardian of Oliver Block
Incompetent to Montana Power Gas Com-
pany 2 1/2 Sec. 10-37-5, for 5 yrs. Royalty
1-8, well by Dec. 1, 1937 or \$30.00 for
12 mo.

Harry J. Tuma et ux to M. F. Brown
Trustee SW 1/4 SE 1/4 NW 1/4 SW 1/4 Sec. 3
S 1/4 N 1/4 Sec. 8-37-5 5 yrs. royalty 1-8
well by Aug. 12 1938 or \$50.00 for 6 mo.

ASSIGNMENTS OF OIL AND GAS
LEASES
E. H. Emrick to W. C. Fisher S 1/4 N 1/4
Sec. 3-37-5 Hk 6 O&G pg 184 reserves
2 1/2% oil and gas

Guy L. Smith et ux to Quincy Q. Brad-
ford et ux 1-2 Int NW 1/4 SE 1/4 NE 1/4
Sec. 2-32-6 Hk 5 O&G pg 384

Montana Power Gas Company to Glac-
ier Production Company, Oliver Block
Lease Bk 6 O&G pg 218 E 1/4 Sec. 10-3-5
Grant Oil Co. Assigns Wm J. Shannon lease
Bk 4 O&G pg 480 SW 1/4 Sec. 5-32-5
reserving 5% royalty.

ASSIGNMENTS OF ROYALTY
Alvina Allison & James B. Allison to
E. H. Bright 1-8 of 1/2 NE 1/4 Sec. 19 E 1/4
Sec. 20 SW 1/4 SE 1/4 Sec. 20 N 1/4 NE 1/4
Sec. 20 NE 1/4 NE 1/4 Sec. 30-34-6.

Bank of Glacier County to Patrick Con-
nelly 5052% Lot 7 SE 1/4 SW 1/4 Sec. 6 Lot
1 E 1/4 NW 1/4 Sec. 7-33-5 reconveyance of
Asset Bk 7 M D pg 160.

Patrick Connolly et ux & Kathleen
Connolly to Bank of Glacier County
15824% Lot 7 NE 1/4 SW 1/4 Sec. 6 Lot 1 NE 1/4
NW 1/4 Sec. 7-33-5 To secure \$400.00

Wm M. Hanlon et ux & Wm M. Hanlon
at City in Fact to Edward Jensen 1 of
1/2 Wm M. Hanlon Agent Ruby William-
son Well No. 2 Lot 9 Sec. 7-32-5

Mabel D. Rigney to Margaret Tierney
1-4 of 1/2 E 1/4 Sec. 4-35-8
L. F. McCurdy to E. J. Pallasard 1-8 of
1/2 NE 1/4 Sec. NW 1/4 Sec. 3-32-5
Permit No. 67544.

SHELBY ABSTRACT

AND TITLE CO.

Licensed, Bonded Abstractors
SHELBY, MONTANA