

BEFORE THE OIL AND GAS CONSERVATION COMMISSION
OF THE STATE OF UTAH

IN THE MATTER OF THE APPLICATION
OF HARRY REGINALD AND CHARLES E.
KING FOR AN ORDER ESTABLISHING ONE-
ACRE DRILLING AND SPACING UNITS FOR
THE DEVELOPMENT OF OIL PRODUCTION
FROM THE VISULAR BASALT FLOW IN THE
SALT LAKE GROUP FORMATION UNDERLYING
CERTAIN LANDS IN BOX ELDER COUNTY, UTAH

FINDINGS OF FACT
AND ORDER

CAUSE NO. 120-1

This matter came on regularly before the Commission on the 17th day of February, 1966. The applicant, Harry Reginald, appeared personally, and both applicants appeared through their attorney, Frederick S. Prince, Jr., Salt Lake City, Utah. Mr. David James, Denver, Colorado, and Mr. Jack Wright, Brigham City, Utah, appeared as expert witnesses on behalf of applicants, and representatives from the Utah State Land Board, the U.S.G.S. and from Gulf Oil Corporation appeared as observers.

The Commission heard the evidence introduced by the applicants, and being fully informed in the premises, and there being no person objecting, made and entered the following:

FINDINGS OF FACT

1. That notice of the filing of the application herein, the time and place of the hearing thereon, and the purpose of said hearing, has been regularly given in all respects as required by law, both by service upon interested parties and by publication, and the Commission has jurisdiction of the subject matter embraced in said application and of the parties interested therein and jurisdiction to issue and promulgate the hereinafter prescribed order.
2. That Harry Reginald is the owner of leasehold interests in all state land which could possibly be affected by the granting of this application.
3. That applicants have drilled five wells in the leased lands and the crude oil extracted therefrom is of extremely high

viscosity and density and was produced by means of a special chain pump.

4. That because of this high viscosity and density, one-acre spacing is the most economical method of extracting said oil with sound engineering and conservation practices and that any other spacing would lead to waste.

5. That it appears desirable that applicants be permitted to drill additional wells in one-acre drilling and spacing units, said wells to always be contiguous to existing wells, and to be of a depth not to exceed 1000 feet, and provided further that no well shall be drilled closer than 200 feet from the outside boundary of lands held on lease by applicants.

ORDER

The above-entitled matter having been regularly heard on the 17th day of February, 1966, and the Commission having been fully advised in the premises and having heretofore entered its Findings of Fact,

NOW, THEREFORE, IT IS HEREBY ORDERED that one-acre drilling and spacing units be and they hereby are established for the development of oil production from the viscular basalt flow in the Salt Lake Group formation underlying the hereinafter described area in Box Elder County, Utah, provided, however, that each well drilled shall be contiguous to an existing well and provided further that no well shall be drilled to a depth exceeding 1000 feet and that no well shall be drilled within 200 feet of the outside boundary of the hereinafter described lands. The lands to which this order applies are as follows, and are located in Township 8 North, Ranges 7 and 8 West, Salt Lake Meridian, Box Elder County, Utah:

ML22571	Bed of Great Salt Lake in NW 1/4 NE 1/4, N 1/2 NW 1/4 Sec. 8, T. 8N., R. 7W., 82.95 ac.
ML22572	W 1/2 SE 1/4 Sec. 9, W 1/2 NE 1/4 NE 1/4 NW 1/4 Sec. 16, T. 8N., R. 7W., 222.3 acres.

ML22573 Bed of Great Salt Lake Beg. at SE cor. of Lot 3 Sec. 8, T.8N., R.7W thence S 190 rods th W 160 rods th N 207 rods to center Sec. 8 th E to meander line of G Great Salt Lake th Southeasterly along meander line to pt of beg. Sec. 8, T. 8N., R. 7W., 220.00

ML22574 Bed of Great Salt Lake in SW 1/4 NE 1/4 SE 1/4 NW 1/4, E 1/2 SW 1/4 Sec. 8, W 1/2 NW 1/4 Sec. 17 Beg. NE cor Lot 4 Sec. 9, T. 8N., R.7W th S through center Sec. 9, 240 rods more or less to S 1/4 cor of Sec. 9, th W 80 rods, th N 80 rods th E 40 rods th N 40 rods more or less to meander line th northeasterly direction along meander to pt of be. Also beg. at pt 190 rods more or less to SE cor. of Lot 3 th W 160 rods th S 113 rods Sec. 16, T.8N, R.7W 452.31 acres.

ML19825 Bed of Great Salt Lake in W 1/2 NW 1/4, SW 1/4 Sec. 17, T.8N., R.7W., 320.00

ML19826 Great Salt Lake in Part of SE 1/4 Sec. 17, N 1/2 NE 1/4 Sec. 20 T. 8 N., R.7W., 344.00

ML19827 Great Salt Lake in E 1/2 Sec. 18, T.8N., R.7W., 640.00

ML19828 Great Salt Lake in N 1/2 Sec. 21, T.8N., R.7W., 640.00

ML19829 Great Salt Lake NW 1/4 Sec. 22, T.8N., R.7W., 640.00

ML19820 Great Salt Lake in All Sec. 6, T.8N., R.7W., 594.78 acres (cancelled)

ML19821 Great Salt Lake in E 1/2 Sec. 7, T.8N., R.7W., 640.00 acres

ML19822 Bed of Great Salt Lake in SW 1/4 SE 1/4, SW 1/4 SW 1/4 Sec. 16, commencing at SW corner of Lot 5 th south 120 rods, th e 80 rods, th n 80 rods, to the meander line of Great Salt Lake th southwesterly along the meander line to place of be. Sec. 9, T.8N, R.7W., 162.00

ML19823 Great Salt Lake in E 1/2 E 1/2 Sec. 16, T.8N., R. 7W.

ML19818 Great Salt Lake in SW 1/4 NW 1/4, W 1/2 SW 1/4 Sec. 8, T.8N., R.7W

ML19830 Great Salt Lake in All Sec. 1, T.8N., R.8W., 640.00

ML19831 Great Salt Lake in All Sec. 12, T.8N., R.8W., 640.00

ML19832 Great Salt Lake in All Sec. 13, T.8N., R.8W., 640.00

ML16959 W 1/2 Sec. 10, E 1/2 Sec. 15. All Sec.
10, 15, T.8N., R.7W., SLM., 640.00

ML11992 NE 1/4 Sec. 19, S 1/2 NE 1/4, NW 1/4 Sec. 20,
T. 8N., R.7W., SLM., 400.00

DATED this 17 day of February, 1966.

STATE OF UTAH

OIL & GAS CONSERVATION COMMISSION

V. J. Thompson

M. V. Hatch

J. H. Reese

C. P. Henderson

Wm. J. Cooper

Feb 17, 1964

Royal Point Core 120-1

Harry Raymond & Chale Wemy = 1 acre spacing

Mr. Cronin: Lawyer

→ Pet. Eng. Jenner

Mr. Jack Wright Daniel H. James
and Gary

UP 30 → Water proffery

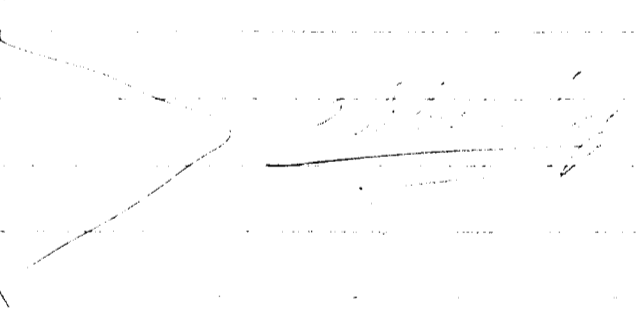
all state land → oil & gas leases

1 acre spacing (probably 100')

temp = 60°F

> (apparently) light pressure = 2.2 in. H₂O
needed not to produce = 300°F

Effect of Porosity = no cr. cr.
Porosity = 70-90
Thickness = ~~10~~ 100 ft.
C. = 5,000



Drill = 100 ft. (100' spacing)

Water 100 ft. spacing
100 ft. spacing
100 ft. spacing

* Have taken care of... will add to calculations to be correct.

Harry Reginald & Chas Henry = 1 acre spacing.

Mr. Prentiss: Lawyer

→ Pet. Eng. Denver

Mr. Jack Wright - Daniel H. James
and Harry Reginald

AP 30 → Water propping

all state land → oil & gas leases

5 wells → 1 acre spacing (granted in leasing)

oil: Temp = 60°F

→ (asphaltic) highly viscous = 2 or 3 times C.P.
needs heat to produce = 300°F

Effectual Porosity = no cores.

Humidity = 70 - 90

Thickness = ~~125~~ ft. 100 ft.

Cost = \$5,000

10 lbs. / sq. ft.

Drum = hydrodynamic (no segregation)

Water 1.2 sp. ft. / sp. ft.

$\frac{1.2}{1.0} = 1.2 \rightarrow$ hydrostatic head

brass flow - balance

Dr. or.

* Have taken lake fluctuations into consideration
will add to additional costs to correct.

2

\$ no well communication experienced due to production

Want whole area become expect drilling expansion

\$ order limit to 200 ft to outside boundary

Mr. Regional (Market) =

\$ 4/bbl with process included

lowest price they can get

↳ Union Petrochemical Co.

↳ Navy Regional

↳ stuck not a market now but intend to do so.

UOP 30 = (Uthanol)

\$ no well communication experienced
due to production

Want whole area because expect drilling
expansion

* order limit to 200 ft to outside boundary

Mr. Regional (Market) =

\$ 4/bbl with process included

lowest
price they
can get

↳ Union Petrochemical Co.

↳ Harry Regional

↳ stuck not on market now
but intend to do so.

UOP 30 = (Uthanol)

Jack J. Wright - Brigham City

400 blbs in 1965

250 blbs in Jan 1966

both levels inside of 3 in flow line
generates own heat,

might be smaller
but not large enough for heat exchange

Henry Producers = Harry Regenerators

$\frac{1}{2}$ level adeter: to UP 30

$\frac{1}{2}$ Half saturated 300ft. section

↳ top at 177

$\frac{1}{2}$ half saturated 90% oil
lower half water saturated

bed dips under lake

ground @ 45 to 300

(.) 800 ft limit would be OK

rat sensitive → ~~oil~~ ~~water~~ might be

400 blbs in 1965
250 blbs in Jan 1966

both lenses sized by 3 in flow lines
generated over Oct.

might be smaller
but not larger spacing due to heat exchange

Heavy Producer = Heavy Recovery

Work order to UP 30

Half penetrated 300ft. section

↳ top at 177

$\frac{1}{2}$ half saturated 90% oil
lower half water saturated

bed dips under lake

ground @ 45 to 300

(C.V) 800 ft limit would be OK.

rat sensitive → ~~oil~~ might be

(4)

Saboda well found at 1500 at 2758
also Ratter Well

Lease ~~is~~ covers everything

*

\$ 7200 drilling
1400 work
2800 complet

3000

Salida well found at 1500 at 2258
also Potter Well

Lease holds covers everything

*

\$ 1200 drilling
1400 rods
2800 complet

5000