

REPORT TO CONSERVATION COMMISSION  
COVERING MURRAY FANNING GAS WELL  
in Section 33, Tsp. 23S. Rge 37E.  
Lea County, New Mexico

Hobbs, New Mexico  
August 7, 1940

Oil Conservation Commission  
Santa Fe, New Mexico

Gentlemen:

I, James M. Murray, operate one gas well on the Edith Fanning lease Section 33, Township 23 South, Range 37 East, Skelly Field, New Mexico. It is generally understood that this well is a dry gas well producing from a gas horizon above what is commonly recognized as oil sand pay. As far as I have been able to determine this gas horizon has produced no oil in the immediate area. However, this same horizon has been penetrated to a lesser degree in nearly every surrounding well.

Therefore, because this well produces dry gas only and the horizon from which it is producing has tested only gas in every well drilled through it, I ask that this well be classified as a gas well and not fall under the provisions of any gas-oil ratio conservation order that the Oil Conservation Commission might write.

Respectfully submitted,

JAMES M. MURRAY

BY:

T. B. Suddreth  
T.B. Suddreth

A REPORT ON MURRAY FANNING NO. 1 GAS WELL  
WITH REQUEST FOR CLASSIFICATION AS A GAS  
WELL NOT SUBJECT TO GAS-OIL RATIO ORDER

PURPOSE OF THE REPORT

The purpose of this report is to show the conditions of structure, producing sands penetrated, and permeability of sands producing oil and gas, or gas only in the southern part of the Skelly Area and more particularly in Section 33, Township 23 South, Range 37 East at what is known as the Murray Fanning No. 1 gas well.

An East-West cross-section is submitted and attached hereto which shows the relation as to the gas, oil and gas, producing horizon.

GEOLOGY

The area surrounding the Fanning gas well consists of flanking sands that are lenticular in form. These sands grade in porosity from a fairly clean porous permian sand to a very impervious anhydritic condition as they approach the top of the structure. This gradation into impervious anhydrite forms the seal necessary for the accumulation of gas or oil and gas along the sides of, rather than over the crest of, the structural high. The structural high in this area trends Northwest-Southeast and its crest appears to be one and a half to two miles northeast of the Fanning gas well.

Due to the lenticular condition of the sand it is possible and drilling has proven that offset wells can produce from two or three entirely different and segregated sand bodies. By examining the enclosed cross-section it can be seen that the Great Western Producers Leonard B No. 1 well, the west offset to the Fanning gas well, is producing its oil from a sand that is over 150 feet lower in geological section than the gas sand of the Fanning No. 1. In the Great Western Leonard B 1 the upper sand section or Fanning gas sand was almost entirely sealed off

page 2

with a deposition of anhydrite. The first good showing of gas in this well was found in the second sand which tested 15 million cubic feet per day. Oil in commercial quantities was not encountered in this well until the third sand had been drilled. This well was shot with nitroglycerine from the bottom of the second sand to the well's total depth and after shot tested 60 barrels of oil per day. At the present time this well has an allowable of 16 barrels per day. This well showed no oil and very little gas in the first or so-called Fanning gas sand.

The Great Western Producers Leonard No. 3 a northwest offset to their Leonard No. 1 is producing from the second sandy pays as indicated on the cross-section. This well tested after being shot with nitroglycerine, 112 barrels of oil per day and 2 million cubic feet of gas. After completion a gas packer was set between the first or Fanning gas pay and the second or oil pay section. This packer reduced the gas-oil ratio from 51,336 to 3,500 cubic feet per barrel showing that the greatest volume of gas was originating in the first or Fanning gas sand.

To the southeast of the Fanning gas well the Western Gas Company's Davis No. 1 was drilled through the first and second sand horizons with no oil and very little gas and completed in the third sand horizon as a 30 barrel per day oil well. At present this well is producing 28 barrels per day using purchased gas to lift the oil in a gas-lift system.

The Murray Fanning No. 1 gas well was drilled to the first gas sand where it blew out testing 60 million cubic feet per day. This well was drilled with cable tools and it was found that the volume of the gas combined with the gas pressure, made it impossible to drill through this gas sand to any lower sands. It seems that this well is so situated geologically as to receive the greatest thickness of sand in the first

page 3

or gas sand horizon and with the greatest porosity as shown by both the initial and recent gas volume tests, as compared to surrounding wells. This well has never shown any oil and at present tests 66 million feet of gas per day. Also to date some 760 million cubic feet of gas has been produced.

CONCLUSION

Therefore, it is shown by the enclosed cross-sectional diagram and by the detailed descriptions of the surrounding wells that this first sandy horizon being the horizon from which the Murray Fanning No. 1 gas well is producing is a dry gas sand and a dry gas sand only, as far as can be determined by an examination of all the wells in the area. It is my conclusion that this well and the adjacent territory should be classified as being in a gas area when producing from this first gas sand, because withdrawal of gas from this sand in this area is not depleting reservoir energy from any known oil producing horizon, or wells in the vicinity.

Therefore, as this well is a dry gas well and not depleting oil or energy from producing oil wells, it should be ~~excepted~~ excepted from any gas-oil ratio conservation order that the Oil Conservation Commission may issue. This well has no other source of revenue than the sale of dry gas for commercial and domestic uses.

Respectfully submitted,

  
B.A. Bowers, Petroleum Engineer

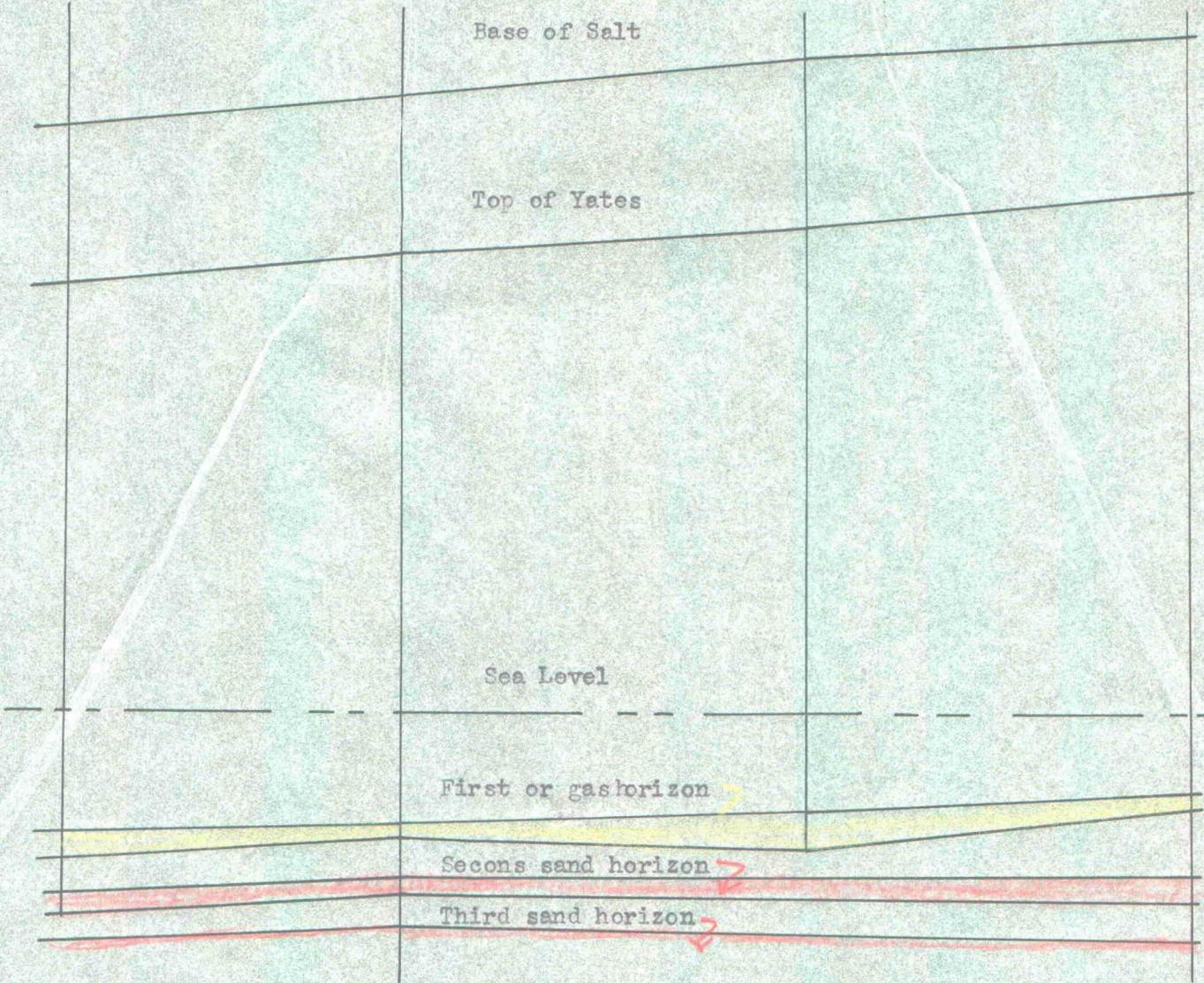
EAST-WEST CROSS-SECTION THROUGH MURRAY FANNING NO. 1

GREAT WESTERN  
Leonard B-3

GREAT WESTERN  
Leonard B-1

MURRAY  
Fanning 1

WESTERN GAS  
Davis 1



August 8, 1940

Mr. C. P. Dimit, Vice-President  
Phillips Petroleum Company  
Bartlesville, Oklahoma

My dear Mr. Dimit:    Re: Case No. 21, Gas-Oil Ratios.

Reference is made to your letter of August 5,  
which will be brought to the attention of the Com-  
mission.

It is especially noted that you desire that the  
exemptions granted on the C. D. Woolworth Lease in the  
Cooper Field be continued under whatever other final  
gas-oil ratio order is adopted.

Please remember me very kindly to Mr. Hayes McCoy  
of your Legal Department.

Very truly yours,

OIL CONSERVATION COMMISSION

By \_\_\_\_\_  
Carl B. Livingston  
Attorney

CBL:ik

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# PHILLIPS PETROLEUM COMPANY

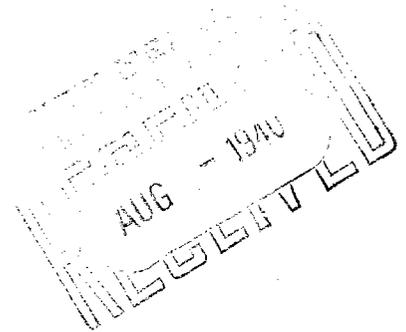
BARTLESVILLE, OKLAHOMA

PRODUCING DIVISION

August 5, 1940

C. P. DIMIT  
VICE-PRESIDENT

D. R. KNOWLTON  
PRODUCTION MANAGER



In re: Gas-Oil Ratio Rules

New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

Attention of Mr. Carl B. Livingstone, Attorney

Gentlemen:

We would like to endorse and recommend the adoption of the suggested general gas-oil ratio rules as presented to you on July 29 by the Lea County Operators Committee. It is felt that rules of this nature certainly stand for better conservation and result in a more effective use of reservoir energy.

On April 8, 1940, we submitted an application supported by affidavit for exception to gas-oil ratio Order No. 250, insofar as it applied to our C. D. Woolworth Lease in the Cooper Field. This exception was granted and is still in effect under the present order.

The reasons for such exception were set out in detail in the application. The actual condition of this lease has not changed materially since April. Therefore, if a new order is to be written, we would like to urge that this lease continue to be exempt for the same reasons.

We will be glad to furnish any additional information if needed.

Yours very truly

CPD DMz

# TWO STATES OIL COMPANY

DALLAS, TEXAS

August 7, 1940

Mr. A. Andreas, State Geologist  
New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

RE: Appeal for exception to order issued  
in lieu of Gas-Oil Ratio Order No. 250  
Two States Oil Company, Kaseman, et al,  
Stuart No. 1 well, NW SW 11-25S-37E,  
Langlie Field, Lea County, New Mexico.

Dear Mr. Andreas:

Herewith, we are forwarding to you, by registered mail, our appeal for an exception to the order as proposed at the hearing of July 29, 1940. We believe that the petition is complete, in that we have supported all of our statements and information with affidavits by qualified persons. It is our hope that you will be able to consider this application as a part of the information presented at the hearing and will be able to make the exception which we are requesting a part of the order itself. As you are aware, this application is made for the reason that we felt, with regard to certain specific areas, there was not enough consideration given in the operators' investigation to guarantee complete protection to all owners.

It has been our plea, from the beginning, that the gas-oil ratio order, as proposed, should be very carefully worked out for the reason that results may possibly be obtained through penalties which were not anticipated by the Commission itself, or by the operators.

Very truly yours,

TWO STATES OIL COMPANY

By:



HPH:S

Encls.

# TWO STATES OIL COMPANY

DALLAS, TEXAS

New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

RE: APPEAL FOR EXCEPTION TO ORDER ISSUED IN LIEU  
OF GAS-OIL RATIO ORDER NO. 250  
TWO STATES OIL COMPANY, KASEMAN, ET AL,  
STUART NO. 1 WELL - NW/4 SW/4 SEC. 11-25S-37E,  
LANGLIE FIELD, LEA COUNTY, NEW MEXICO.

Gentlemen:

Believing that it is the Commission's intention in issuing Gas-Oil Ratio Order, in lieu of Order No. 250, to encourage or induce operators to remedy high gas-oil ratio wells by packer settings or other remedial work to reduce the waste of gas and reservoir energy to a minimum, where such work can be adequately and economically done, and that it is not the intention of the Commission to enforce work that will be damaging to production or to cause a loss of a well where such work cannot be done adequately or economically, we hereby make appeal to the Commission to make exception of the above well to the Commission Order, in lieu of Order No. 250, for reasons that:

At the completion of this well a packer was set, and could be only set with heavy mud, in the well to cut off the main gas horizon of the area, cutting off 10,000,000 plus cubic feet per day, that the well was completed with a satisfactory gas-oil ratio, but the gas has gradually increased in the oil pay, the gas-oil ratio gradually increasing until now it is in excess of the permissible ratio of the area, as cited in your Order issued in lieu of Order No. 250.

That the above packer setting cannot be moved without danger of doing considerable damage to the oil production and quite possibly releasing in the upper gas horizon of 10,000,000 plus cubic feet per day, thus making a well quite impossible to produce under Order replacing Order No. 250 with such an excessive amount of gas.

We believe that, due to the failure of other operators in the area, to separate the gas from the oil in the main pay horizon that it is practically impossible to do so in this pay and any attempt to do so in this well may result in losing the present packer setting cutting off the main gas pay, thereby releasing such gas and possible causing material damage to the oil pay horizon.

In support of the above, we wish to present Exhibit "A" Affidavit of our Geologist, J. B. Headley, of Roswell, New Mexico, giving a complete report of the completion of the well showing the gas and oil production at the time of completion, further statement showing gas tests taken by the affiant as follows:

<u>DATE</u>	<u>GAS-OIL RATIO</u>
2-16-38	1210/1
3-19-38	1286/1
5-20-38	1333/1

These tests show the beginning of the increase in the gas-oil ratio.

Exhibit "B", Affidavit of our Production Superintendent, R. S. Gaston, of Eunice, New Mexico, showing gas tests taken by him as follows:

<u>DATE</u>	<u>GAS-OIL RATIO</u>
11-20-38	2584/1
12-19-38	2727/1
2- 7-39	3455/1
3- 7-39	3275/1
4- 4-39	4240/1
1-21-40	8696/1
2-29-40	15800/1
5- 8-40	12308/1
7- 8-40	13333/1

These findings show the gradual increase in the gas-oil ratio, showing the gas is increasing in the oil pay itself. Affiant further gives his opinions as to the hazard in attempting to change the packer setting.

Exhibit "C", Affidavit of our Drilling Superintendent, W. R. Hines, of Hobbs, New Mexico, in charge of the drilling of the well, showing the efforts made at the time of completion to adequately cut off excessive gas, showing this was successfully done only by using heavy mud, and the affiant's opinion as to moving the packer setting.

Exhibit "D", Affidavit of our lease man, John Curtiss, of Jal, New Mexico, showing that in his belief from pressure read on the casing gauge that the present packer setting is holding, shutting off the gas in the main gas horizon; that it is his belief that the present increase in gas is in the oil pay itself, and his opinion as to changing the packer setting.

This appeal for an exception to your proposed order, which will take the place of Gas-Oil Ratio Order No. 250, is made at this time in view of the fact that the writer was present at the hearing in Santa Fe, on July 29, 1940, at which time it was suggested that any objections, by way of specific wells, should be made in writing to yourselves, on or before August 12, 1940.

We call to your attention that under the original order No. 250 we made the same appeal for exception, and the exception was granted by your letter of April 30, 1940. The affidavits in each case are identical with the ones submitted in support of that appeal for exception, and we respectfully submit, at this time, that the exception for which we pray should be granted for the same reasons used by yourselves in the first instance. We are asking that this exception be made a part of the order, for the reason that we are under the opinion that a special hearing will be necessary to establish our claim, which hearing will be an item of considerable expense to ourselves and will, also, take the time of our Company and yourselves, as Commissioners.

Very truly yours,

TWO STATES OIL COMPANY

By

  
President.



# CONTINENTAL OIL COMPANY

Hobbs, New Mexico  
August 11, 1940

New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

Attention: Mr. A Andreas

Gentlemen:

We are enclosing completion data and information relative to the present producing conditions of the following three shut in gas wells:

State A-2 #1	Sec. 2-25-37
State E-17 #4	Sec. 17-22-36
State F-1 #1	Sec. 1-21-36

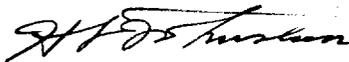
The above mentioned wells are not producing at the present time as there is no market for the gas. The enclosed data includes a complete history of each of the above wells together with charts showing the producing formation as well as the various pay zones.

We hereby respectfully request that these wells be exempted from the provisions of the proposed final order

N.M.O.C.C. -2  
8-11-40

of the New Mexico Oil Conservation Commission governing gas/  
oil ratios in the various producing fields in New Mexico.

Respectfully submitted,



H. L. Johnston  
Superintendent N. M. Dist.  
Texas-New Mexico Division  
Production and Drlg. Dept.

EPK-IGN

Enc

cc: Mr. Gleen Staley  
Mr. H. B. Simcox

State A-2 #1

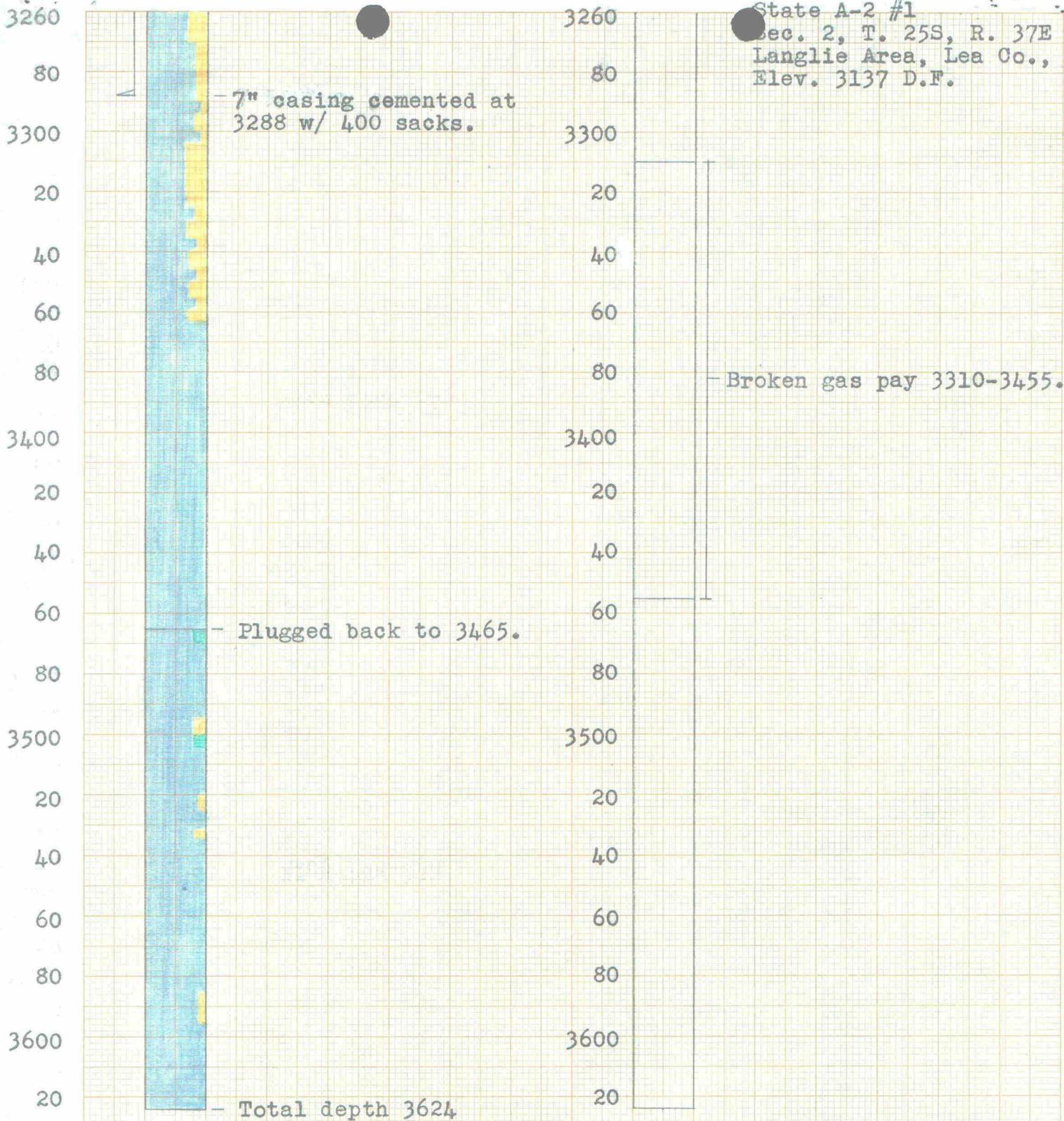
Continental Oil Company's State A-2 #1 was spudded on 7-29-39 and drilled to a total depth of 3624 with rotary tools. After being acidized with a total of 11,000 gallons and shot with 260 quarts S.N.G., well would produce no oil. Plugged back to 3465 with cement and completed for a potential of 3,420 MCF gas daily.

Our State A-2 #1 is a shut in gas well at the present time. If a market for the gas production were available, this well could be produced. We hereby respectfully request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

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8-4-40  
Hobbs, N.M.

Continental Oil Company  
State A-2 #1  
Sec. 2, T. 25S, R. 37E  
Langlie Area, Lea Co.,  
Elev. 3137 D.F.

N. M.  
V. S. N. Y.



EPK-IGN  
8-4-40

State F-1 #1

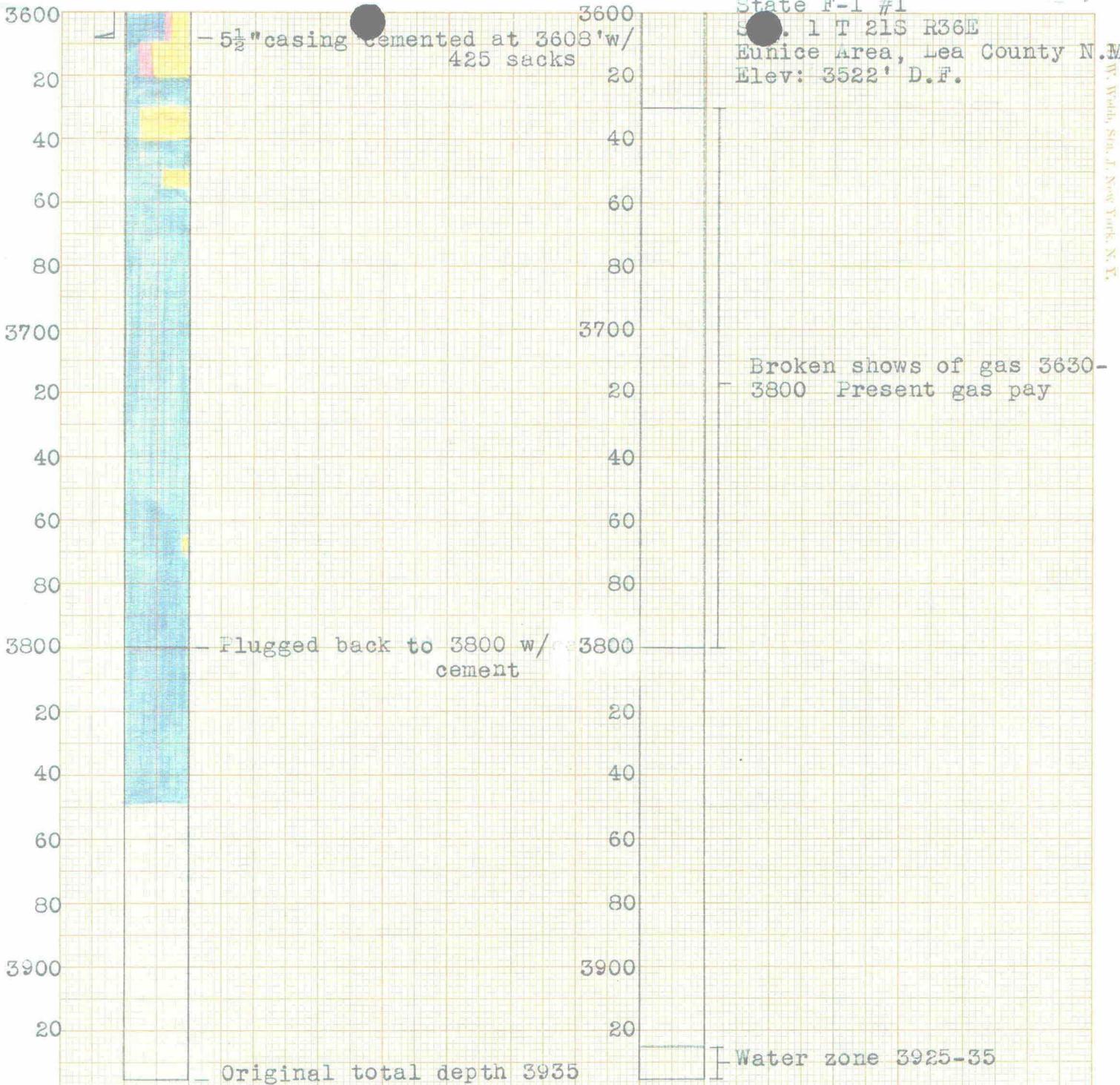
Continental Oil Company's State F-1 #1 was spudded on 1-27-38 and drilled to a total depth of 3935 with rotary tools. The 5 $\frac{1}{2}$ " casing was cemented at 3608 with 425 sacks.

At a depth of 3836' tested no oil or water, 175 MCF gas daily. Shot with 320 qts. from 3670' to 3836' and then flowed 4 bbls. oil in 18 hours. Deepened to 3847' and shot with 45 qts. from 3825 to 3847'. After shot tested no oil, 1940 MCF gas. Acidized with 5000 gal. from 3837' to 3847' and then tested no oil, 1040 MCF gas. Deepened to 3867' and tested no oil, 998 MCF gas. Deepened to 3910' and tested no oil, 998 MCF gas. Deepened to 3915' and tested no oil, 998 MCF gas. Deepened to 3935' and flowed 65 bbls. sulphur water hourly. Plugged back to 3800 with cement and completed as a gas well with a potential of 480 MCF gas daily.

Our State F-1 #1 has been a shut in gas well since completion as there is no market for the gas. We hereby respectfully request that this well be exempted from the provision of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

EPK-JL  
8-5-40

Continental Oil Company  
State F-1 #1  
S. 1 T 21S R36E  
Eunice Area, Lea County N.M.  
Elev: 3522' D.F.



EPK-JL  
8-5-40

State E-17 #4

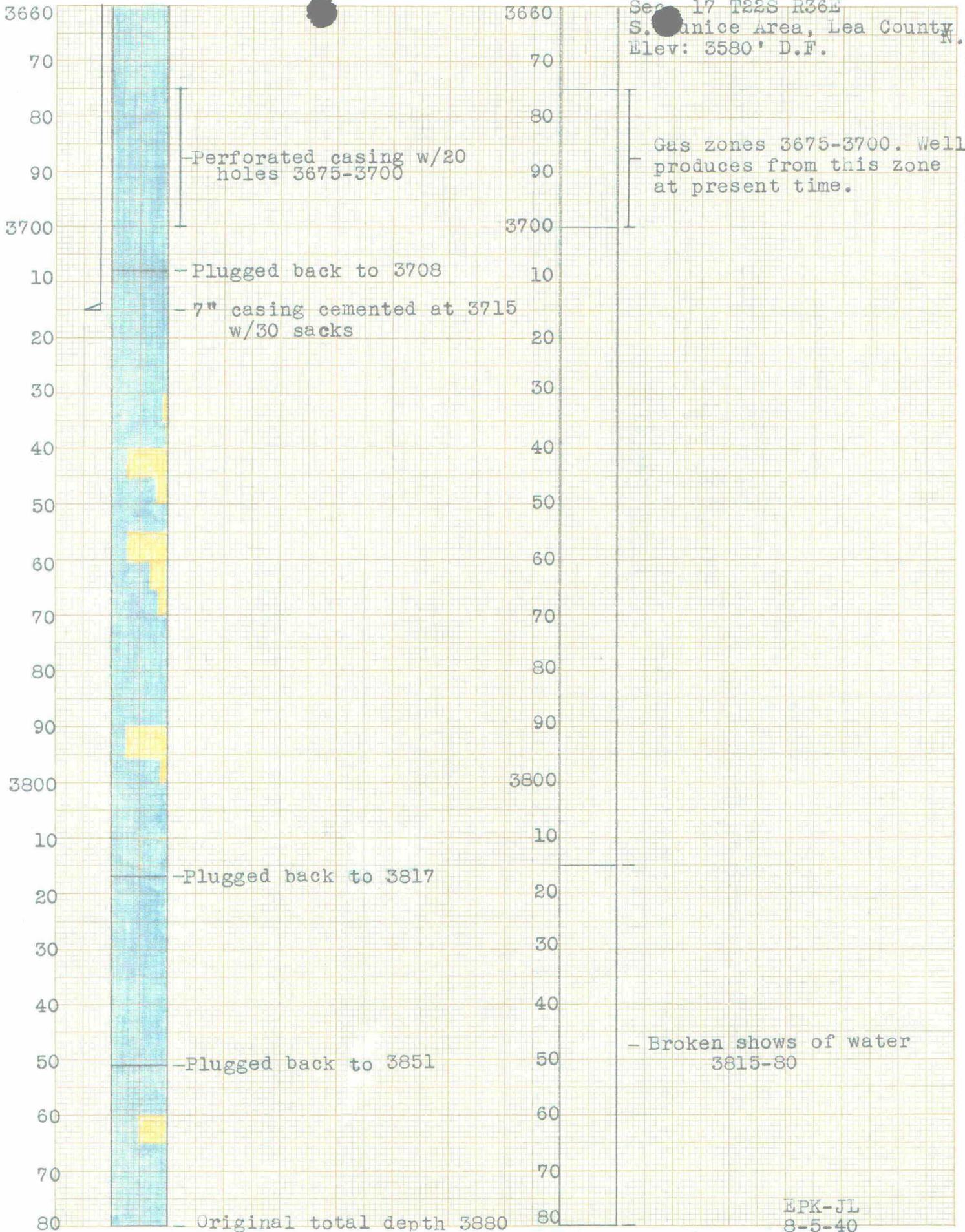
Continental Oil Company's State E-17 #4 well was spudded on 4-7-38 and drilled to a total depth of 3880 with rotary tools. The 7" O. D. casing is cemented at 3715' with 30 sacks. At total depth 3880 tested no oil or gas natural. Acidized with 1000 gal. from 3720' to 3870' and again tested no oil, gas or water. Shot with 360 qts. S.N.G. from 3783' to 3880' and then flowed 20 bbls. water in 24 hours by gas lift, no oil. Plugged back to 3851' with cement and shot with 330 qts. S.N.G. from 3751' to 3851'. Flowed 1 bbl. fluid (30% water) hourly by gas lift. Plugged back to 3817' with cement and tested 18 bbls. fluid daily (50% water) flowing by gas lift. Plugged back to 3708' with cement and perforated the 7" casing with 15 holes from 3686' - 3700', and with 5 holes from 3675' - 3686'. Completed as a gas well with a potential of 6,300 MCF gas daily.

Our State E-17 #4 has been shut in since completion as there is no market for the gas. As this well is producing from a gas reservoir, we hereby respectfully request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

EPK-JL

8-5-40

Continental Oil Company  
State E-17 #4  
Sec 17 T22S R36E  
S. Canice Area, Lea County, N.M.  
Elev: 3580' D.F.



Hobbs, New Mexico  
August 11, 1940

United States Geological Survey  
Roswell, New Mexico

Gentlemen:

We are enclosing completion data and information outlining present producing conditions of Continental Oil Company's Britt B-10 No. 1, Sec. 10-20-37, Wells A-11 No. 1, Sec. 11-25-36, and Lockhart A-18 No. 6, Sec. 18-21-36, Lea County. After making a thorough study of the producing conditions of these wells, we have come to the conclusion that the existing gas/oil ratios cannot be corrected by remedial work.

We hereby respectfully request that these wells be exempted from the provisions of the proposed final order of the New Mexico Oil Conservation Commission governing gas/oil ratios in the various producing fields in New Mexico.

Respectfully submitted,



H. L. Johnston  
Superintendent N. M. Dist.  
Texas-New Mexico Division  
Production and Drilg. Dept.

EPK-IGN  
Enc

cc: New Mexico Oil Conservation Commission  
Mr. Glenn Staley  
Mr. H. B. Simcox

Britt B-10 #1

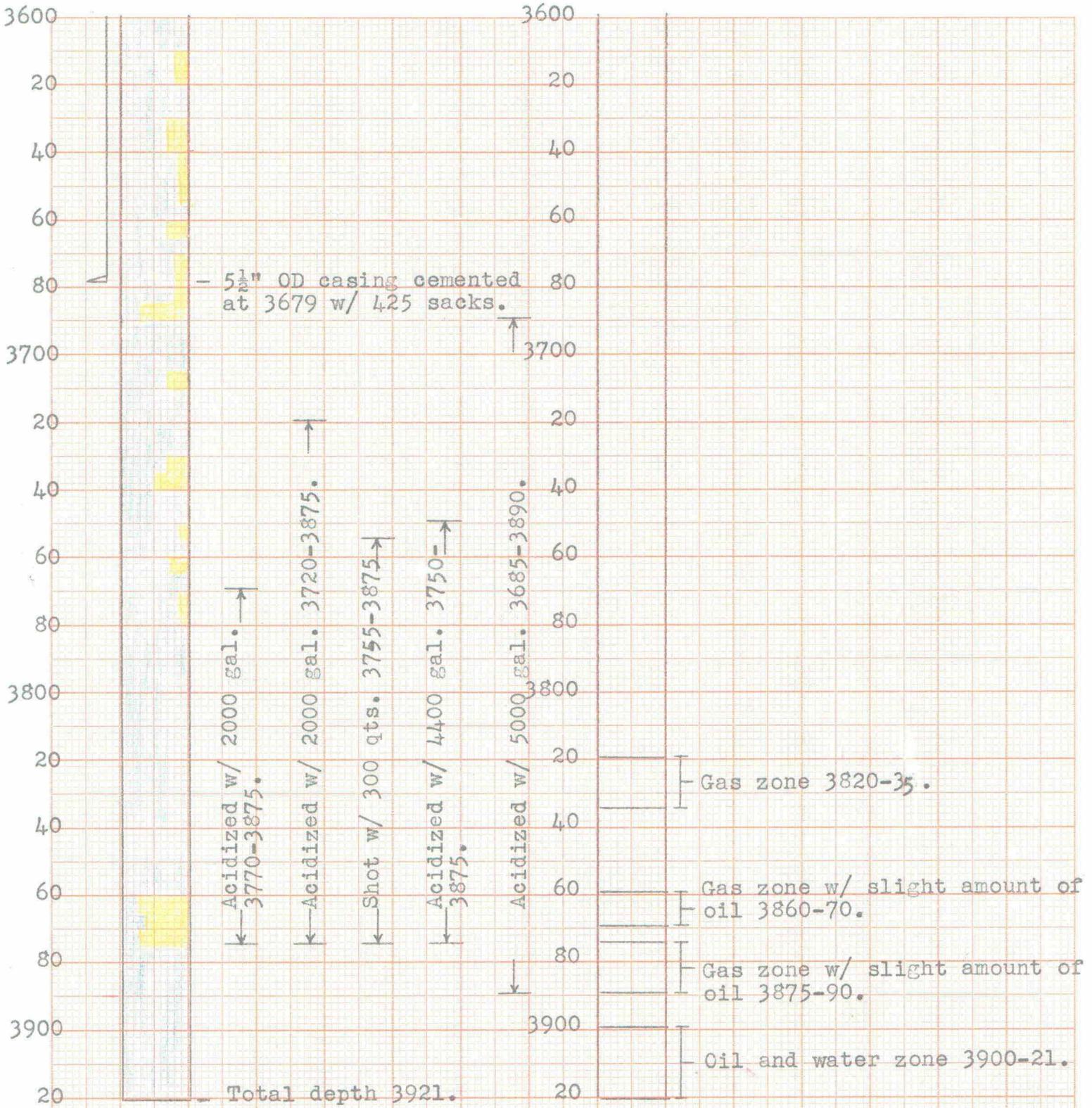
Continental Oil Company's Britt B-10 #1 well was spudded on 9-26-37 and drilled to a total depth of 3921 with rotary tools. The 5½" casing is cemented at 3679 with 425 sacks.

At a total depth of 3875, tested no oil or water. Acidized with 2,000 gallons from 3770 to 3875. After treatment, tested no oil or water, 250 MCF gas. Reacidized with 2,000 gallons from 3720 to 3875 and then tested 5 barrels fluid daily (90% B.S. and acid water) by gas lift. Shot with 300 quarts S.N.G. from 3755 to 3875. After shot, flowed 9 barrels fluid daily (50% B.S. and acid water). Reacidized with 4,400 gallons from 3750 to 3875 and then produced a slight amount of acid water, no oil. Deepened to 3890 and then flowed 2 barrels oil and 18 barrels water daily. Reacidized with 5,000 gallons from 3685 to 3890. After treatment, flowed 15 barrels fluid daily, 55% B.S. and water. Deepened to 3921 and was completed for an initial potential of 80 barrels fluid hourly (52% water) through a 3/4" choke on 2" tubing with 802 MCF gas. The well was acidized with a total of 13,400 gallons and shot with 300 quarts S.N.G..

No commercial oil production was found above the zone from 3900 to 3921. Both oil and water are produced from this pay zone, and the water zone cannot be cemented off without shutting the oil pay. At the present time, the well is producing with a gas/oil ratio of 16,700 and a gas/fluid ratio of 3,400.

As our Britt B-10 #1 well has a reasonable gas/fluid ratio and as it is impossible to seal off the water zone without shutting off our oil pay, we hereby respectfully request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

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8-3-40  
Hobbs, N.M.



EPK-IGN  
8-3-40

Wells A-11 #1

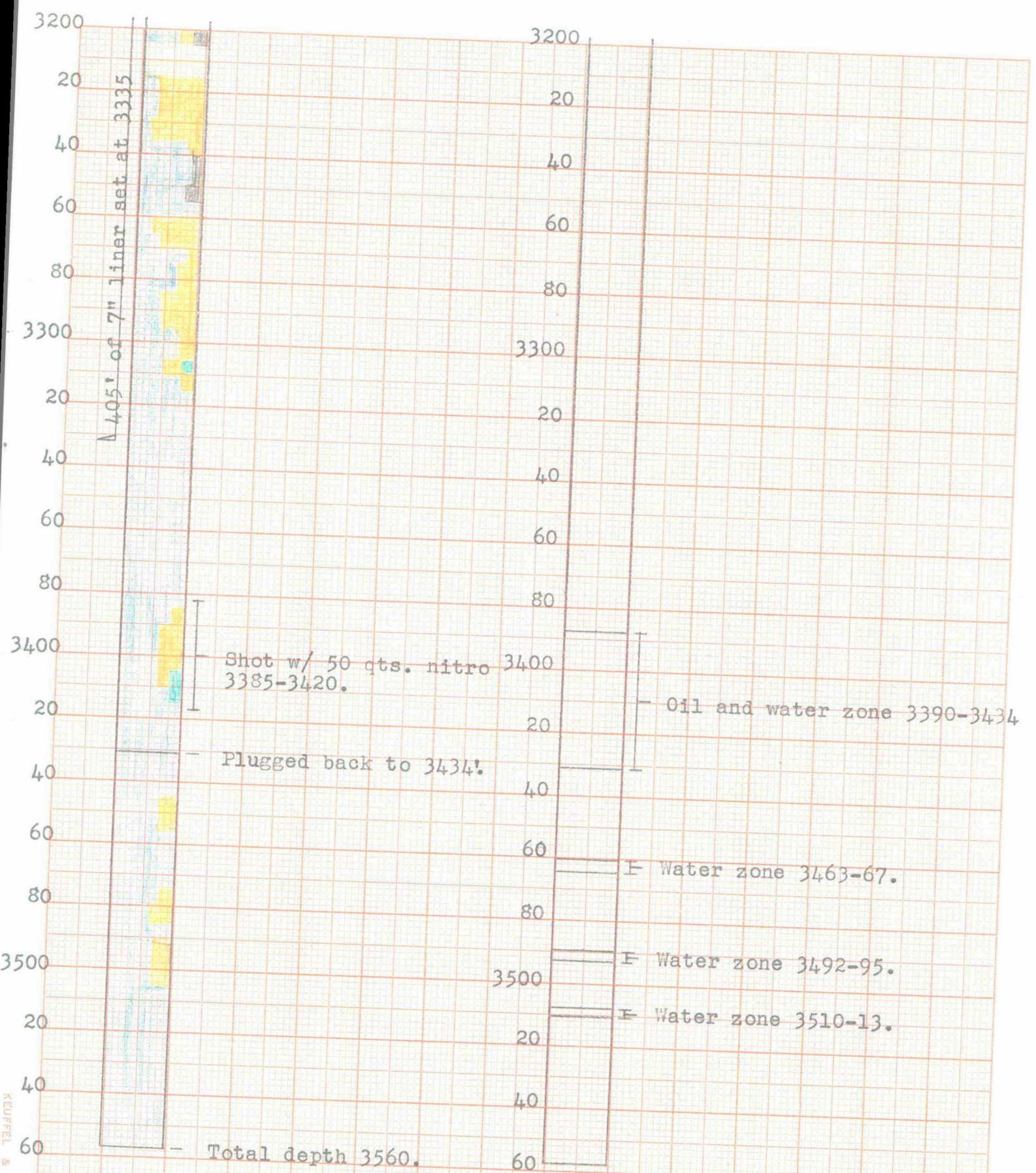
Continental Oil Company's Wells A-11 #1 well was spudded on 5-27-29 and drilled to the total depth of 3560 with cable tools. the 8 5/8" casing was cemented at 2959 with 300 sacks.

Water Zones were encountered from 3463 to 3513, and the well was plugged back to 3434. A 405' 7" liner was set at 3335 to shut off the upper gas zones. The well was then shot with 50 quarts nitro from 3385 to 3420 and completed for a potential of 160 barrels oil daily.

In March, 1934, production had declined to 18 barrels oil and 2 barrels water daily. Acidized with 1,000 gallons on 3-26-34 and after treatment produced an average of 75 barrels oil and 175 barrels water daily.

During the month of June, 1940, our Wells A-11 #1 produced an average of 41 barrels oil and 263 barrels water daily with a gas/oil ratio of 24,194 and a gas/fluid ratio of 3,293. Both oil and water are being produced from the same zone and the water could not be sealed off without also shutting off our oil pay. The well is producing with a reasonable gas/fluid ratio, and we hereby respectfully request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

EPK-IGN  
8-3-40  
Hobbs, N.M.



EPK-IGN  
 8-3-40

KEUFFEL & ESSER CO. N. Y.

Lockhart A-18 #6

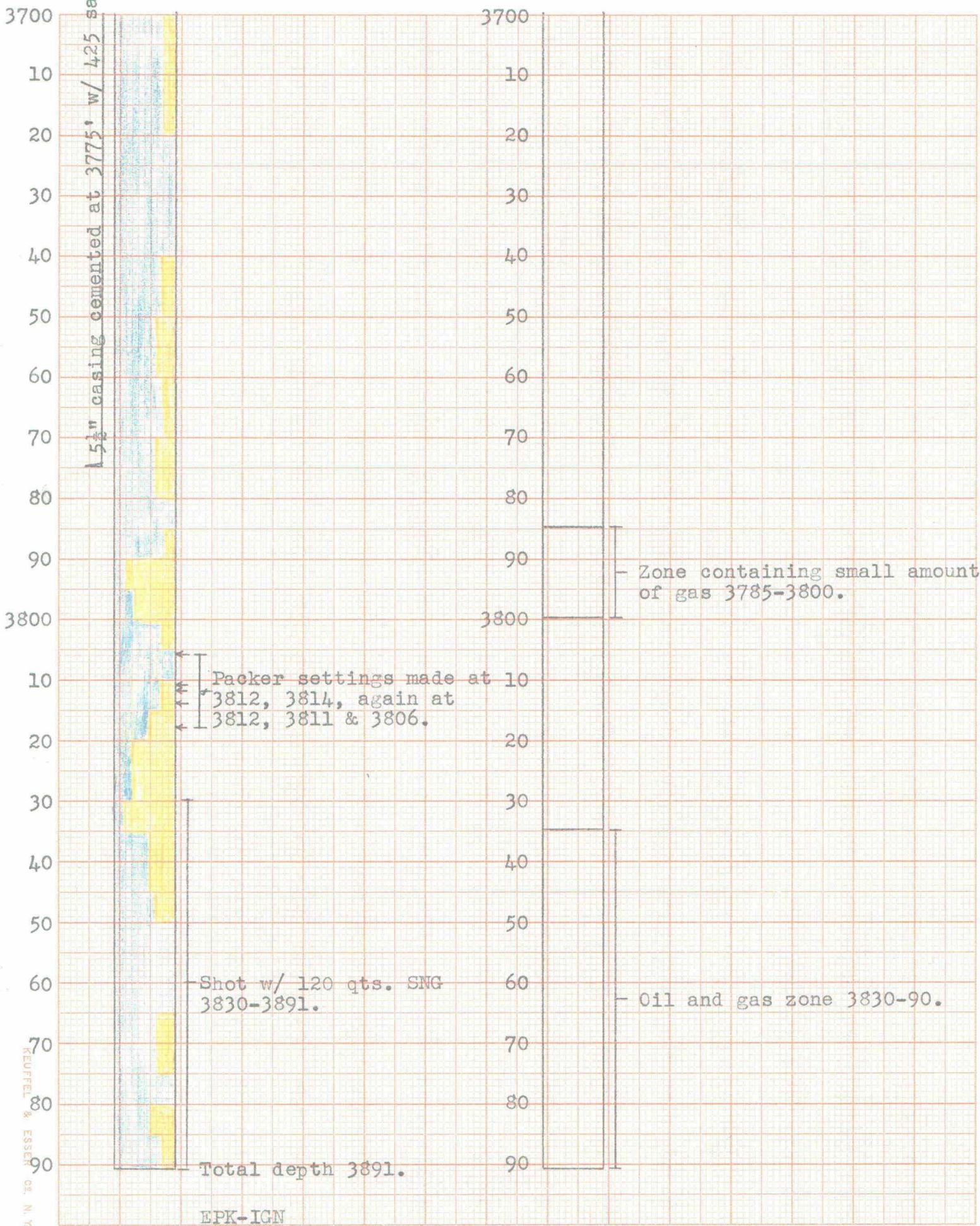
Continental Oil Company's Lockhart A-18 #6 was spudded on 12-6-38 and drilled to a total depth of 3891 with rotary tools. The 5½" casing is cemented at 3775 with 425 sacks. At the total depth of 3891, well flowed at the rate of 42 barrels oil daily through a 3/4" choke on 2" tubing with 202 MCF gas. Shot with 120 quarts S.N.G. from 3830 to 3891 and completed for a potential of 22 barrels oil hourly flowing through a 3/4" choke on 2" tubing with 2420 MCF gas.

In July, 1940, production had declined to an average of 40 barrels oil daily flowing through an 18/64" choke on 2" tubing with 560 MCF gas, a gas/oil ratio of 14,000. An Exner-Dodge underset formation packer was set six times in the zone from 3806 to 3818 without obtaining a gas shut off. The well was recompleated 7-31-40 with the packer set at 3806 for a potential of 50 barrels oil daily flowing through a 14/64" choke on 2" tubing with 458 MCF gas, a gas/oil ratio of 9,180.

The results of the above remedial work indicate that most of the gas is produced from the shot hole were a successful packer setting would be impossible. We hereby respectfully request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

EPK-IGN  
8-3-40  
Hobbs, N.M.

1 5/8" casing cemented at 3775' w/ 425 sacks.



Total depth 3891.

EPK-IGN  
8-4-40  
Hobbs, N.M.

KEUFFEL & ESSER CO. N. Y.

Hobbs, New Mexico  
August 11, 1940

United States Geological Survey  
Roswell, New Mexico

Gentlemen:

The Continental Oil Company has seven producing gas wells in Lea County. The gas produced from these wells is used as follows:

LEASE & WELL NO.

Ascarate C-24 #1	Sec. 24-25-36	Gas used for gas lift.
Stevens A-34 #1	Sec. 34-23-36	" " " " "
Lynn B-26 #1	Sec. 26-23-36	Gas sold to El Paso Natural Gas Company.
Sholes A-13 #1	Sec. 13-25-36	Gas sold to El Paso Natural Gas Company.
Sholes A-19 #1	Sec. 19-25-36	Gas sold to El Paso Natural Gas Company.
Sholes A-24 #1	Sec. 24-25-36	Gas sold to El Paso Natural Gas Company.
Sholes A-24 #2	Sec. 24-25-36	Gas sold to El Paso Natural Gas Company.

We are enclosing complete well history of each of the above wells and charts showing the producing formation and various porous zones.

U.S.G.S. - 2  
8-11-40

All of the above wells are producing from a gas reservoir. We respectfully request that they be exempted from the provisions of the proposed final order of the New Mexico Oil Conservation Commission governing gas/oil ratios in the various producing fields in New Mexico.

Respectfully submitted,



H. L. Johnston  
Superintendent N. M. Dist.  
Texas-New Mexico Division  
Production and Drig. Dept.

EPE-IGN

Enc

cc: New Mexico Oil Conservation Commission  
Mr. Glenn Staley  
Mr. H. B. Simeox

ASCARATE C-24 #1

Continental-Ascarate C-24 well No. 1 was spudded on 2-6-34 and drilled to a depth of 485' w/cable tools. Rotary rig was then rigged up and the well drilled to its total depth of 3290. A test from 3190 to 3250 showed 13,000 MCF gas, no oil. Cemented the 7" OD casing at 3246 and completed well on 4-9-34 for a potential of 660 bbls. oil and 1400 MCF gas daily flowing thru a 1½" choke on 3" tubing. Was not shot or acidized when originally completed.

In May, 1934 production decreased to 175 bbls. oil daily w/900 MCF gas. Acidized on 5-10-34 w/5000 gals. and recompleted for a potential of 4800 bbls. oil daily w/14,000 MCF gas.

In November, 1937, production had declined to 40 bbls. oil and 5400 bbls. water daily flowing by gas lift. On 11-14-37 plugged back from 3290 to 3206 w/cement and perforated the 7" OD casing w/18 holes from 3140 to 3190. After perforating well flowed 600 bbls. water daily, no oil, by gas lift.

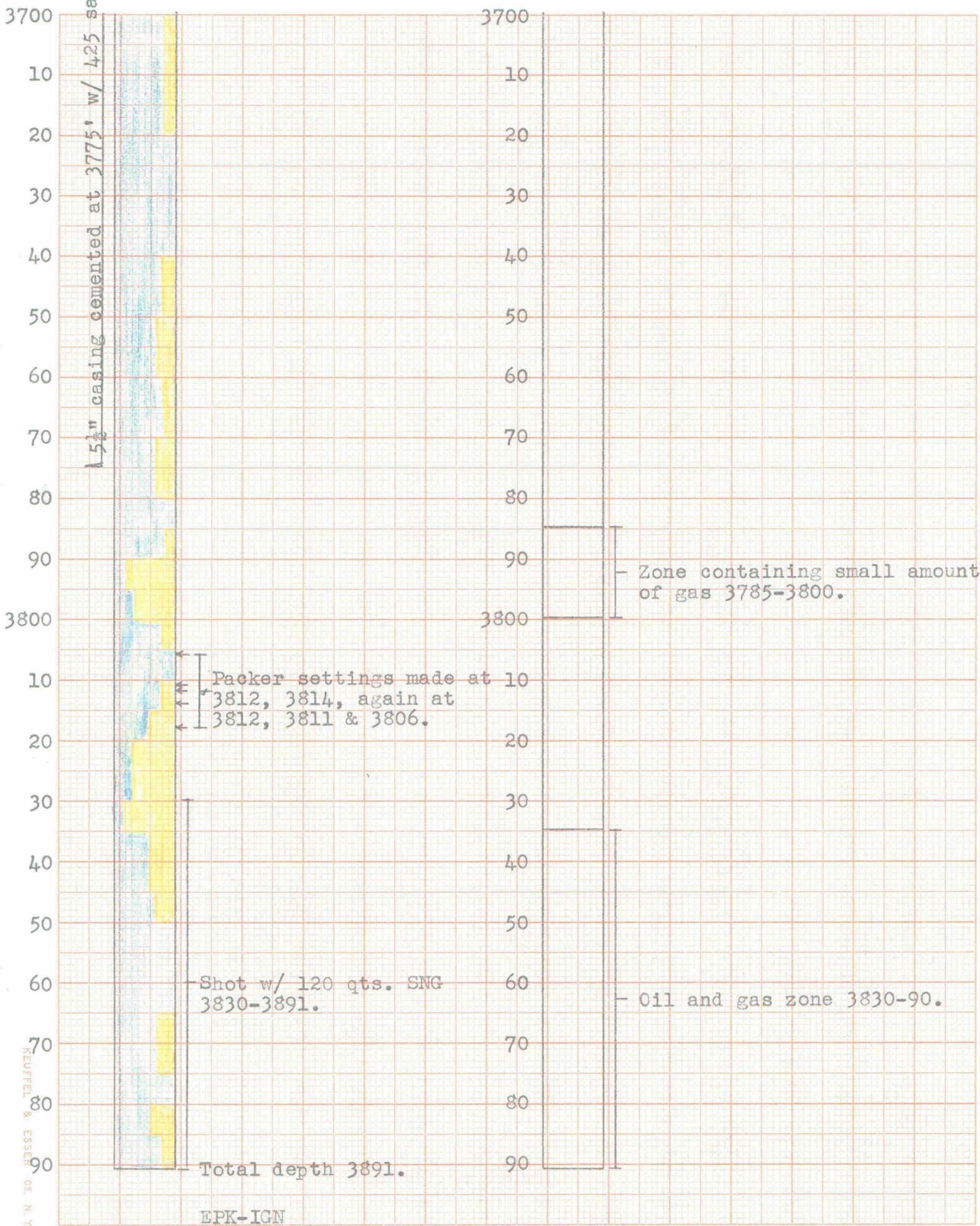
On 1-11-38 plugged back from 3206 to 3116 w/cement and perforated 7" oil string w/10 holes from 3077 to 3102. Recompleted as a gas well w/ a potential of 6540 MCF gas daily, nonoil.

At the present time this well is a producing gas well, and the gas produced is used to gas lift our Shoals B-13 #2.

As our Ascarate C-24 #1 is being produced from a gas reservoir we hereby respectfully request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

EPK:ohc  
Hobbs, N.M. 7-31-40

1 5/8" casing cemented at 3775' w/ 425 sacks.



Total depth 3891.

EPK-IGN  
8-4-40  
Hobbs, N.M.

KEUFFEL & ESSER CO. N. Y.

STEVENS A-34 #1

Continental Oil Company's Stevens A-34 #1 was spudded on 6-14-37 and drilled to a total depth of 3691 with rotary tools. The 7" casing is cemented at 3309 with 400 sacks. After plugging back to 3600 with cement, the well was completed for a potential of 62,200 MCF gas daily.

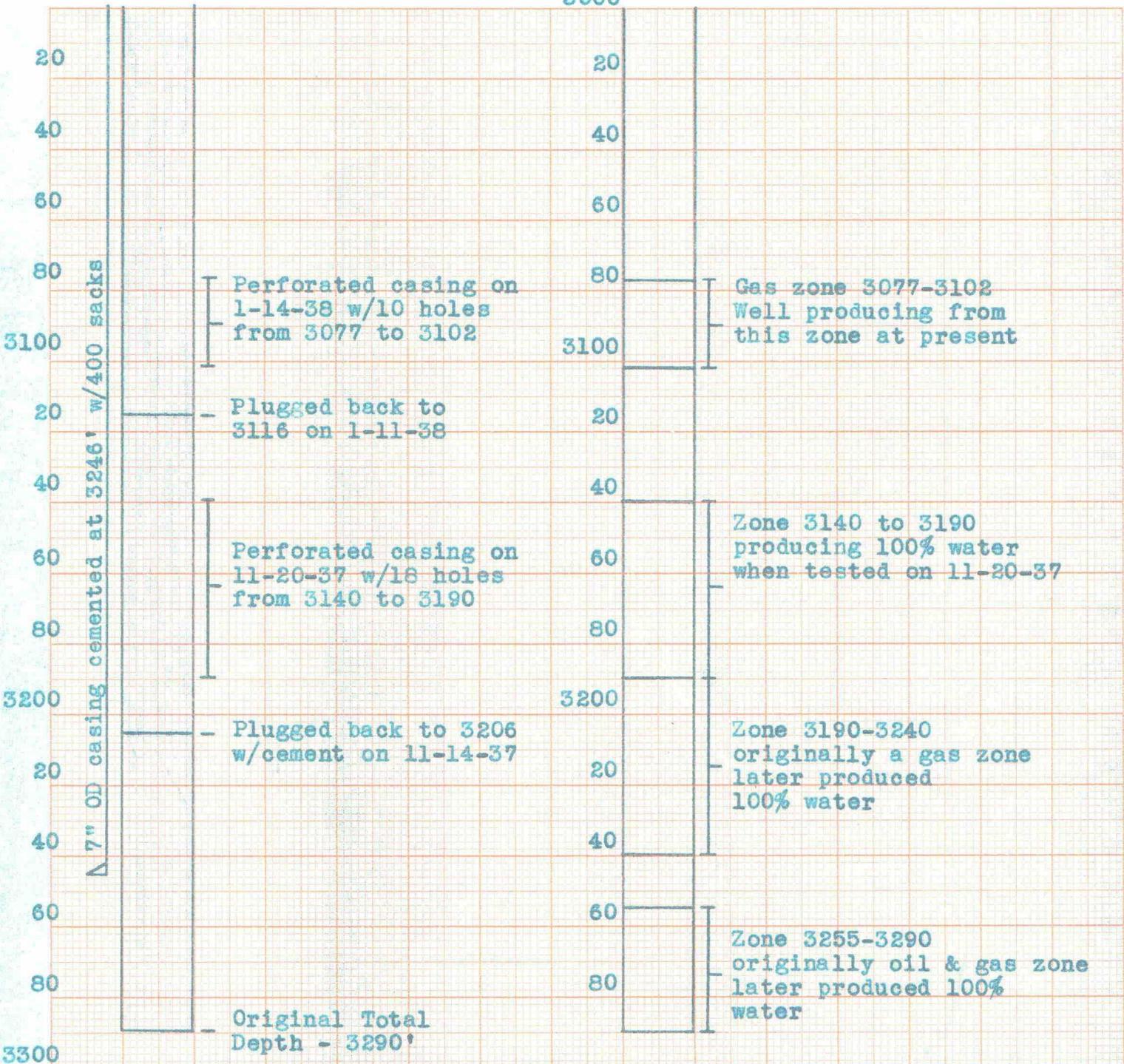
The gas production from this well is used to gas lift nine of our wells in the Cooper Area.

As our Stevens A-34 #1 is produced from a gas reservoir, we hereby respectfully request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

EPK-IGN  
8-2-40

3000

3000



EPK:chc  
 Hobbs, N.M.  
 7-31-40

LYNN B-26 #1

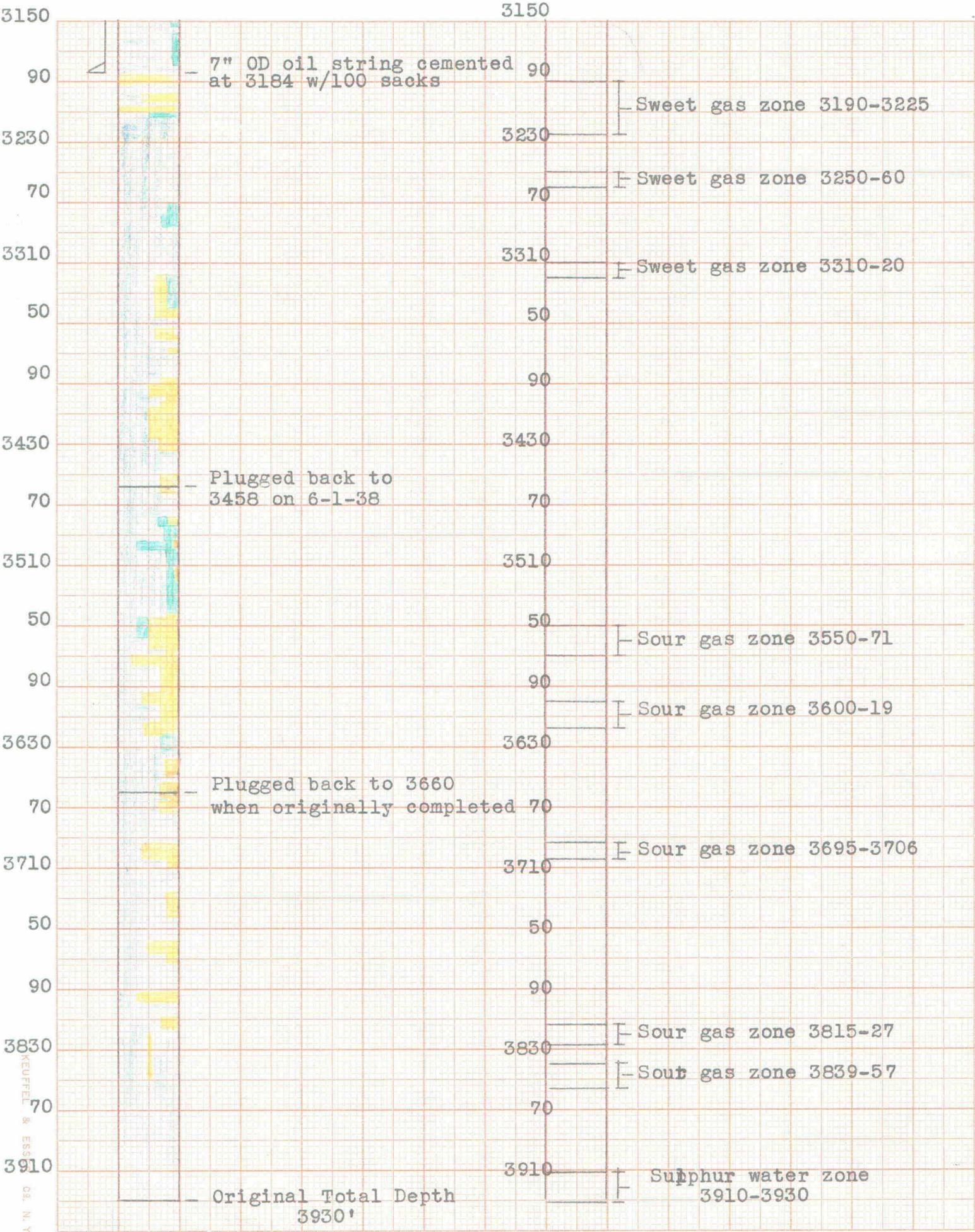
Continental Oil Company's Lynn B-26 #1 was spudded on 7-28-28 and drilled to a depth of 2850 w/cable tools. Rotary tools were then rigged up, the well cored from 2850 to 3571, and drilled to the total depth of 3930. The 7" casing is cemented at 3184'.

At the total depth of 3930 flowed from 400 to 600 bbls sulphur water daily, no oil. Plugged back to 3660 and completed on 1-31-29 for a potential of 30,000 MCF gas daily.

The well was shut in from the completion date until June 1, 1938 when it was plugged back to 3458 to shut off the sour gas section in order that the sweet gas could be marketed. Recompleted for a potential of 22,000 MCF gas daily and on July 22, 1939 commenced selling gas from this well to the El Paso Natural Gas Company.

No oil has ever been produced from our Lynn B-26 #1 and the gas production is coming from a gas reservoir. We hereby respectfully request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico

EPK:chc  
Hobbs, N.M.  
8-1-40



3150  
90  
3230  
70  
3310  
50  
90  
3430  
70  
3510  
50  
90  
3630  
70  
3710  
50  
90  
3830  
70  
3910

3150

7" OD oil string cemented at 3184 w/100 sacks

Sweet gas zone 3190-3225

Sweet gas zone 3250-60

Sweet gas zone 3310-20

Plugged back to 3458 on 6-1-38

Sour gas zone 3550-71

Sour gas zone 3600-19

Plugged back to 3660 when originally completed

Sour gas zone 3695-3706

Sour gas zone 3815-27

Sour gas zone 3839-57

Original Total Depth 3930'

Sulphur water zone 3910-3930

KEUFFEL & ESSER CO. N. Y.

SHOLES A-13 #1

Continental Oil Company's Sholes A-13 #1 was spudded on 5-5-34 and drilled to a depth of 491 w/ cable tools. Rotary tools were then rigged up, and the well drilled to its total depth of 3310. The 7" OD casing was cemented at 3286' with 400 sacks. Initial potential flowed 1680 barrels oil and 1,200 MCF gas daily through open 2½" tubing. Was not shot or acidized.

Well started making water on 6-26-35, and amount of water increased to 89% the following month. On 8-6-35, reran tubing with 10 Bryan flow valves and recompleted for a potential of 50 barrels oil and 2200 barrels water daily.

On 9-13-35, well was producing 100% water. Plugged back to 3295 with cement and again flowed 100% water by gas lift. Plugged back to 3170 and on 11-15-35 drilled out plug to original total depth of 3310. After swabbing 70 barrels water hourly, no oil, deepened to 3318 and flowed 20 barrels oil and 100 barrels water hourly through tubing with Bryan flow valves. The water production increased rapidly and on 1-11-36, well was producing 325 barrels water hourly.

In January, 1936, deepened to 3344, and after rerunning tubing and flow valves, tested 325 barrels water hourly by gas lift. On 2-12-36, acidized with 2,000 gallons and then gas lifted 12,800 barrels water daily. Plugged back to 3268 and on 3-2-36 perforated the 7" casing with 6 holes from 3258 to 3263. After testing no oil, gas or water, perforated casing

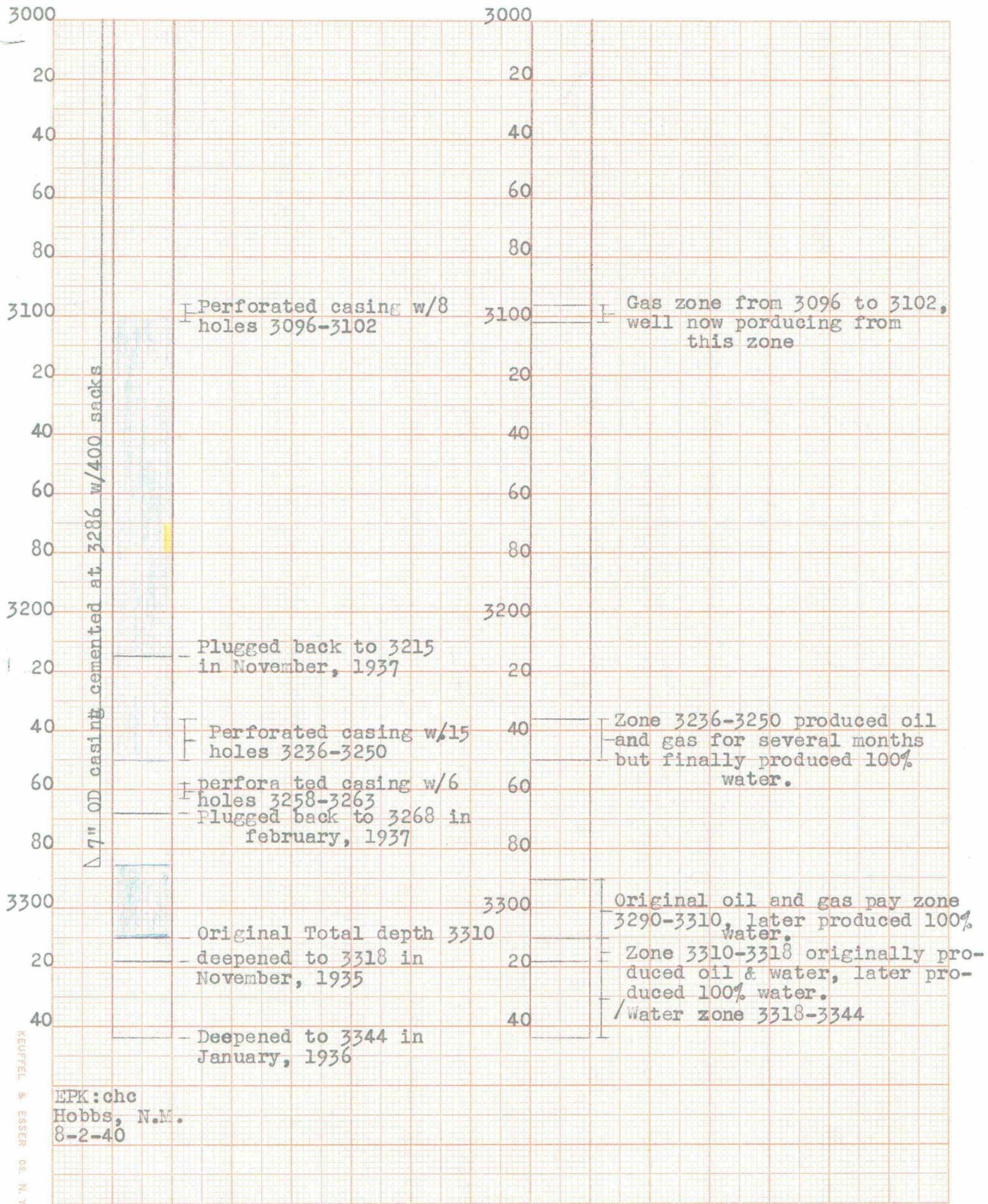
with 15 holes from 3236 to 3250. Recompleted for a potential of 120 barrels oil, no water, and 800 MCF gas flowing through a 3/4" choke on 2 1/2" tubing. Well soon started producing water and by November, 1937, was producing 15 barrels oil and 2600 barrels water daily.

On 11-16-37, plugged back from 3268 to 3215 and perforated the 7" casing with 8 holes from 3096 to 3102. Recompleted as a gas well with a potential of 4732 MCF gas daily.

At the present time, this well is a producing gas well, and the gas produced is sold to the El Paso Natural Gas Company.

As our Sholes A-13 #1 is produced from a gas reservoir, we hereby respectfully request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

EPK-IGN  
8-1-40



EPK:chc  
 Hobbs, N.M.  
 8-2-40

SHOLES A-19 #1

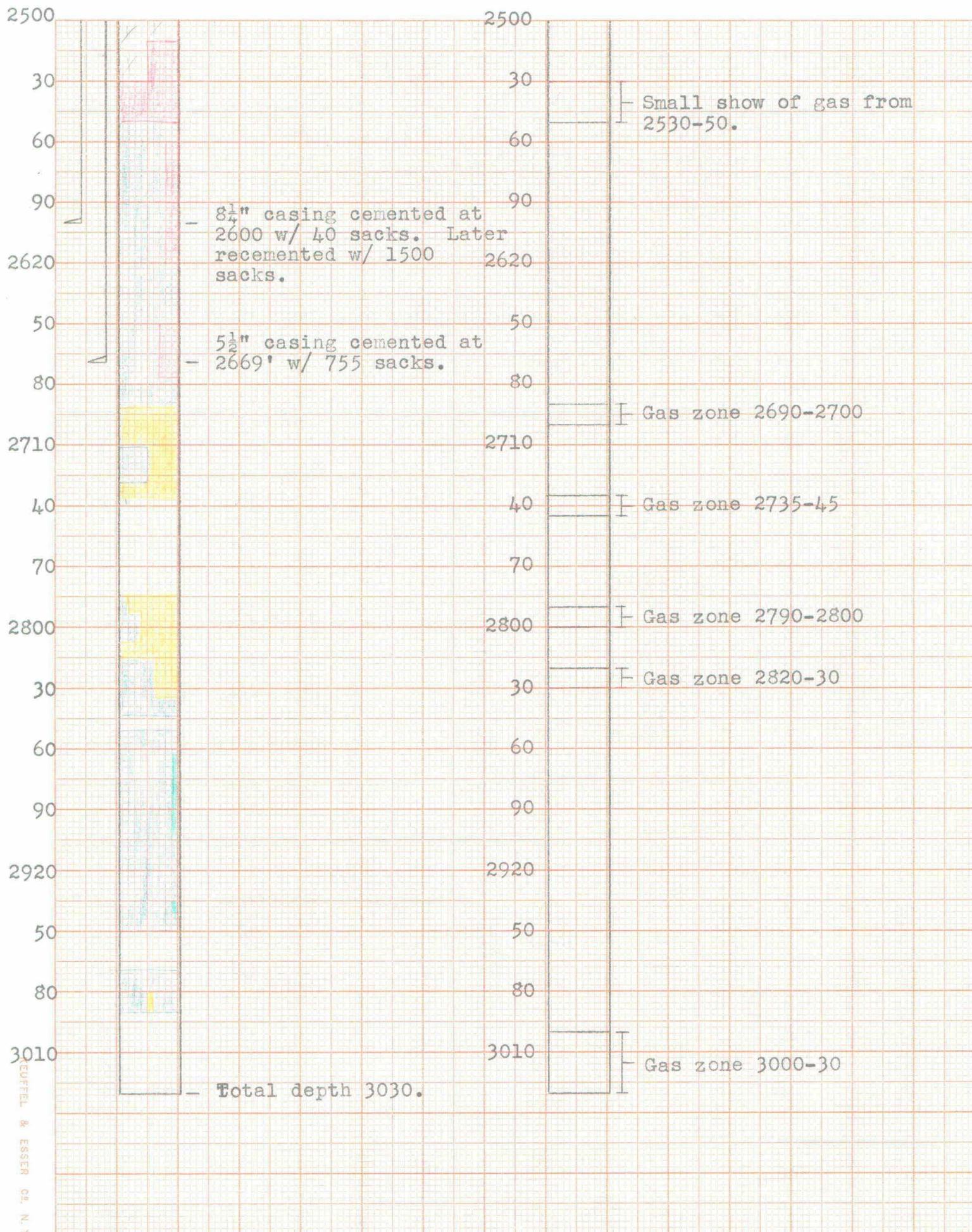
Continental Oil Company's Sholes A-19 #1 well was spudded on 4-23-<sup>26</sup>~~28~~ and drilled to its total depth of 3030 with rotary tools. The 8 $\frac{1}{2}$ " casing was cemented at 2600' with 40 sacks. Completed as a gas well on 11-7-28 with a potential of 70,000 MCF gas daily.

In December, 1931, the 8 $\frac{1}{2}$ " casing collapsed, and on 12-15-31, 1500 sacks of cement were pumped between the 8 $\frac{1}{2}$ " casing and 12 $\frac{1}{2}$ " casing. The casing was found to be collapsed at a depth of 826'. After swedging out the 8 $\frac{1}{2}$ " casing, a string of 5 $\frac{1}{2}$ " casing was cemented at 2669' with 755 sacks. After drilling the cement plug, the well was completed on 1-28-32 for a potential of 10,000 MCF gas daily.

At the present time, this well is a producing gas well, and the gas produced is sold to the El Paso Natural Gas Company.

As our Sholes A-19 #1 is producing from a gas reservoir, we respectfully request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

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8-1-40



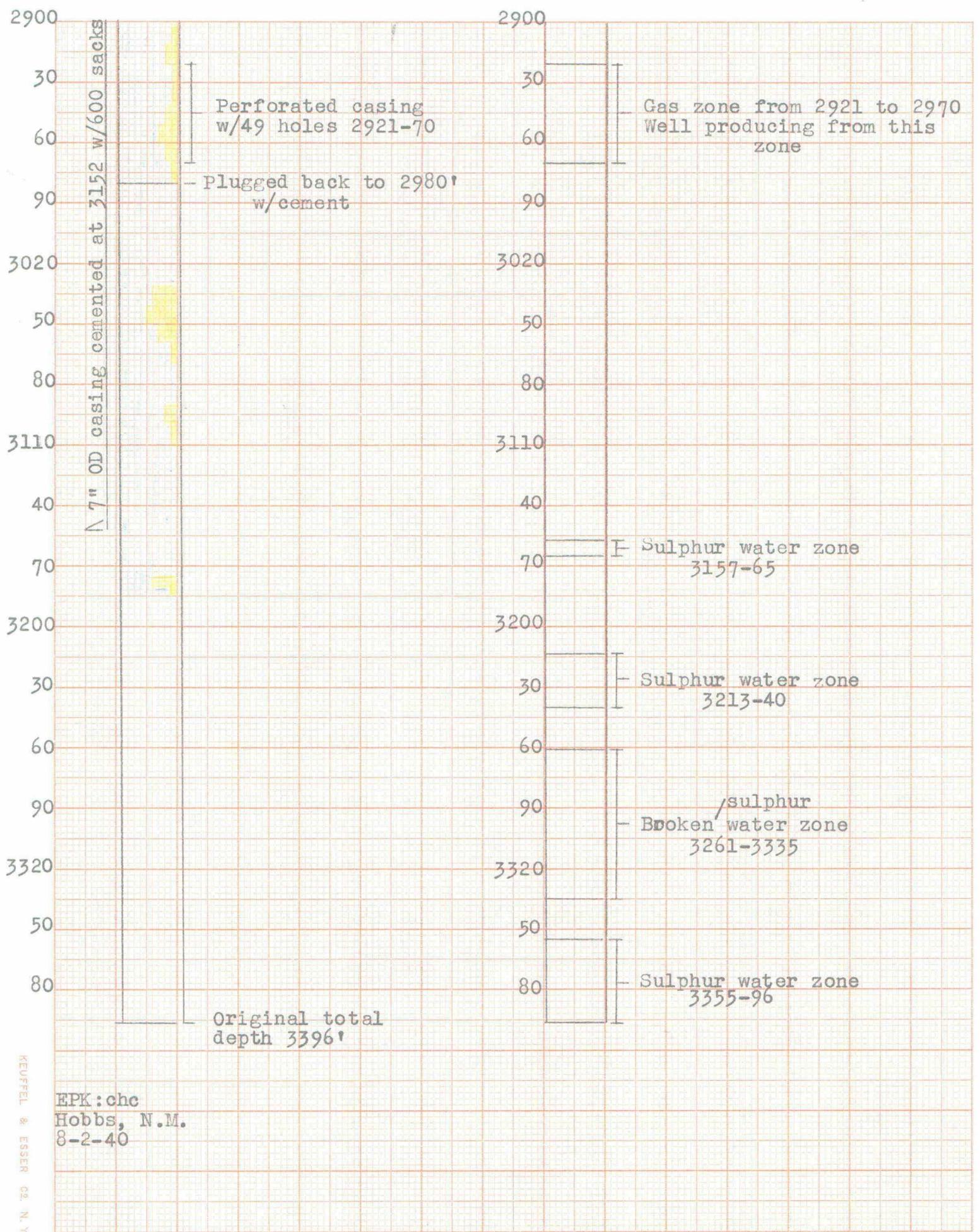
SHOLES A-24 #1

Continental Oil Company's Sholes A-24 #1 well was spudded on 10-4-36 and drilled to its total depth of 3396 with rotary tools. The 7" OD casing was cemented at 3152 with 600 sacks. After encountering broken shows of sulphur water from 3157 to 3396, the well was plugged back to 2980 with cement. The 7" casing was perforated with 49 holes from 2921 to 2970. Completed well on 12-17-36 for a potential of 23,187 MCF gas daily.

This is a producing gas well at the present time, and the gas produced is sold to the El Paso Natural Gas Company.

As our Sholes A-24 #1 is producing from a gas reservoir, we respectfully request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

EPK-IGN  
8-1-40



EPK:chc  
 Hobbs, N.M.  
 8-2-40

Sholes A-24 #2

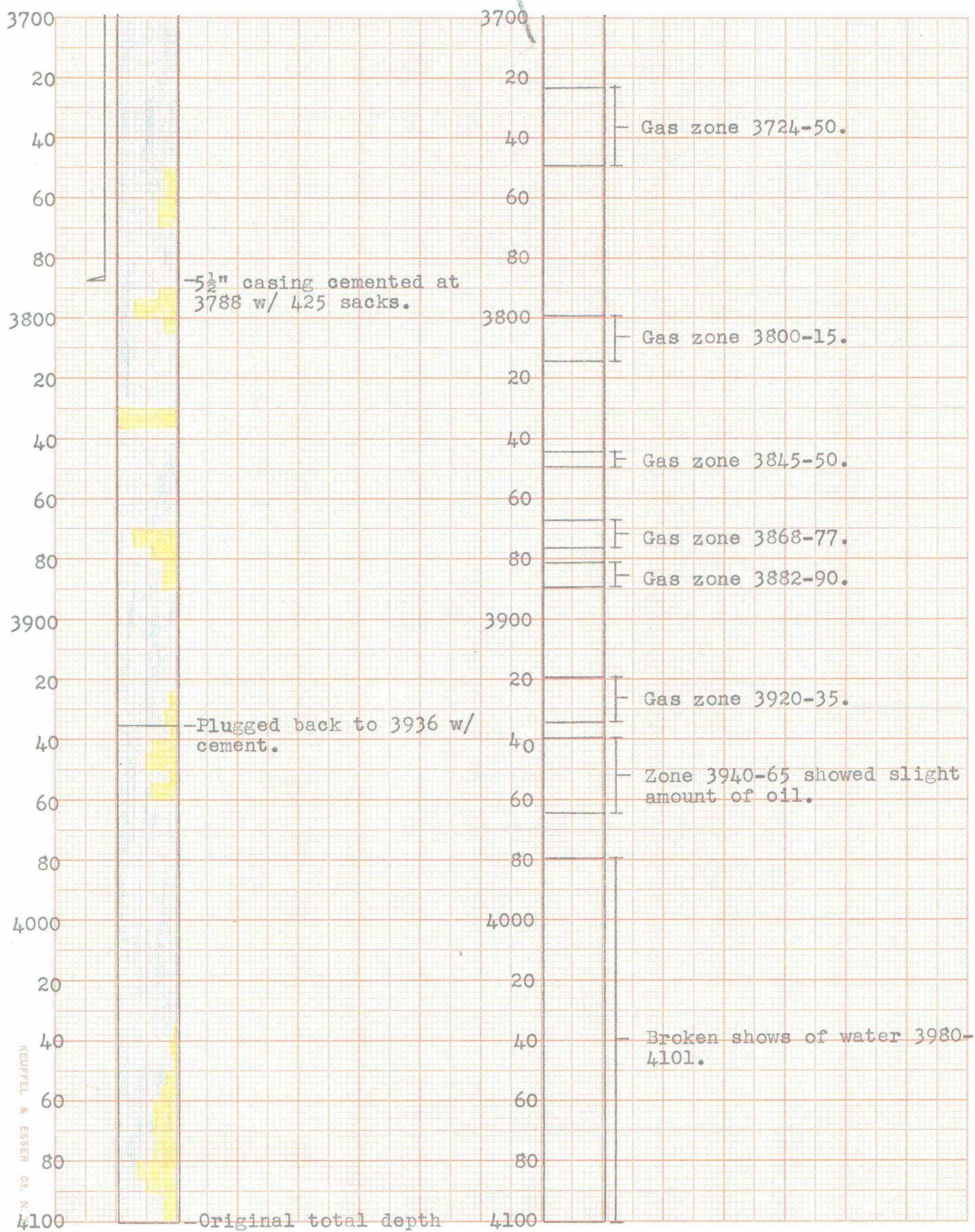
Continental Oil Company's Sholes A-24 #2 was spudded on 1-10-35 and drilled to a depth of 157'. After cementing the surface string casing rotary tools were rigged up, and the well drilled to its total depth of 3274. At this depth, well flowed an estimated 1,000 barrels oil and 25,000 MCF gas daily. Ran 2" tubing with a packer set at 3264 and completed for a potential of 210 barrels oil daily flowing through a 5/8" choke on 2" tubing with 4,000 MCF gas.

In February, 1936, production had declined to 20 barrels oil and 250 barrels water daily. Acidized on 2-29-36 with 1,000 gallons and recompleted well for a potential of 40 barrels oil and 1,000 barrels water daily flowing through 2" tubing with 999 MCF gas.

In April, 1939, production had declined to 700 barrels water hourly, no oil, by gas lift. Plugged back to 3015 with cement and perforated casing on 5-1-39 with 20 shots from 3000 to 3012. Recompleted for a potential of 2,900 MCF gas daily.

Our Sholes A-24 #2 is a producing gas well, and the gas produced is sold to the El Paso Natural Gas Company. As the well is producing from a gas reservoir, we hereby respectfully request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

EPK-IGN  
8-4-40  
Hobbs, N.M.



KEUFFEL & ESSER CO. N.

EPK-IGN  
8-4-40

Hobbs, New Mexico  
August 11, 1940

United States Geological Survey  
Roswell, New Mexico

Gentlemen:

We are enclosing data on the following five shut  
in gas wells:

Lockhart B-30 #1	Sec. 30-21-36
Bill Meyer #1	Sec. 28-22-36
Sophia Meyer #1	Sec. 26-20-37
Sholes A-13 #2	Sec. 13-25-36
Wells A-12 #1	Sec. 12-25-36

The above wells are not produced at the present time as there is no market for the gas. We are enclosing the complete history of each of these wells together with charts showing the producing formation as well as the various porous zones.

We hereby respectfully request that these wells be exempt from the provisions of the proposed final order of the New Mexico Oil Conservation Commission governing

U.S.G.S. - 2  
8-11-40

gas/oil ratios in the various fields in New Mexico.

Respectfully submitted,



H. L. Johnston  
Superintendent N. M. Dist.  
Texas-New Mexico Division  
Production and Drlg. Dept.

EPK-IGN

Enc

cc: New Mexico Oil Conservation Commission  
Mr. Glenn Staley  
Mr. H. B. Simcox

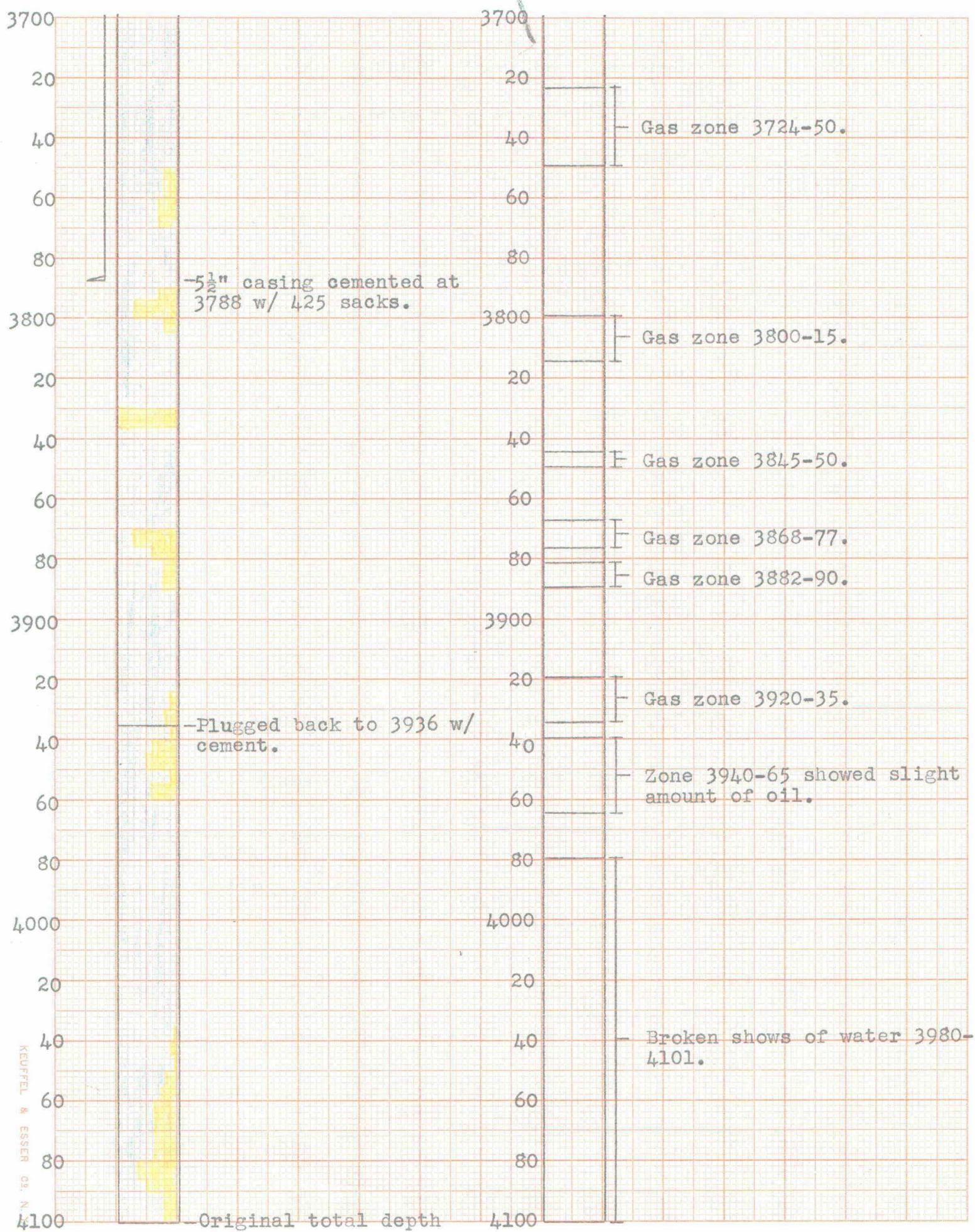
Lockhart B-30 #1

Continental Oil Company's Lockhart B-30 #1 well was spudded on 6-11-37 and drilled to a total depth of 4101 with rotary tools. The 5½" casing is cemented at 3788 with 425 sacks.

At a depth of 3930, well tested ½ barrel oil hourly by gas lift. After acidizing with 2,000 gallons, production increased to 1½ barrels oil hourly with 2,180 MCF gas. At a depth of 3955, flowed 1½ barrels oil hourly with 2,250 MCF gas. Deepened to 3965 and reacidized with 1,000 gallons, testing 1½ barrels oil hourly and 3,550 MCF gas, after treatment. Shot with 80 quarts nitro from 3930 to 3965, but again failed to materially increase production. A packer was set at 3865, and the well reacidized with 1,000 gallons below the packer. After again testing 1½ barrels oil hourly with 6,155 MCF gas, deepened to 4101 and tested 1 ¾ barrels fluid hourly, twenty to thirty percent water, with 5,780 MCF gas. Plugged back to 3936 with cement and completed as a gas well with a potential of 750 MCF gas daily.

Our Lockhart B-30 #1 has been shut in since completion and is a shut in gas well at the present time. As this well was originally completed as a gas well and has produced no oil other than a small amount, when originally drilled, we hereby respectfully request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

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8-4-40  
Hobbs, N.M.



KEUFFEL & ESSER CO. N.

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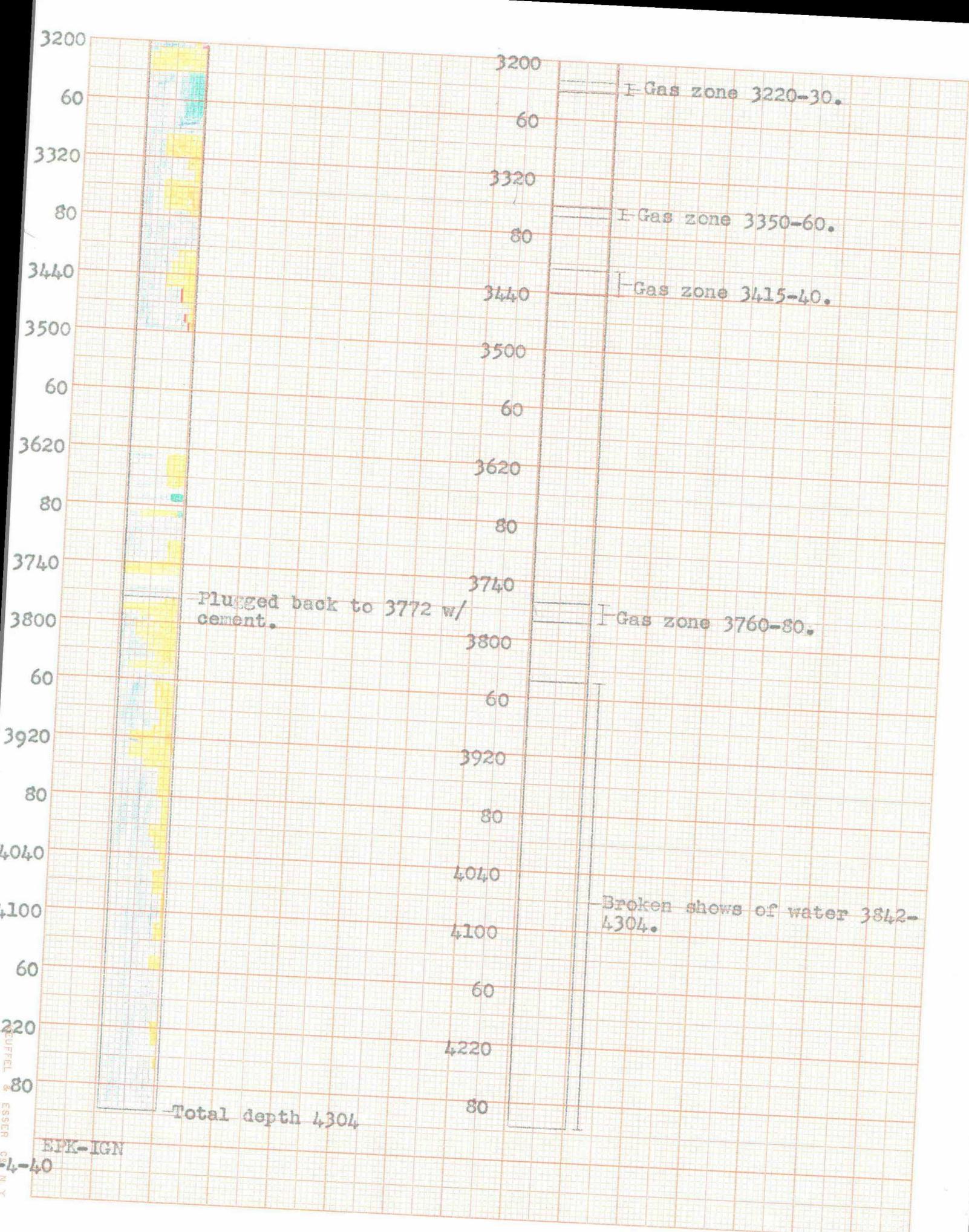
Bill Meyer #1

Continental Oil Company's Bill Meyer #1 well was spudded on 7-1-29 and drilled to a total depth of 4304 with cable tools. The 8 5/8" casing is cemented at 3061 with 200 sacks.

Broken shows of water were encountered from 3842 to 4304 and the well was plugged back to 3772 with cement. The well was producing an estimated 30,000 MCF gas, no oil, but as there was no market for the gas, the well was plugged to the surface with mud and completed as a temporarily abandoned gas well.

Our Bill Meyer well is still plugged, but if a market for the gas were available, the mud could be removed and the well put on production. We hereby respectfully request that this well be exempted from the provisions of the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

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8-4-40  
Hobbs, N.M.



Plugged back to 3772 w/  
cement.

I-Gas zone 3220-30.

I-Gas zone 3350-60.

I-Gas zone 3415-40.

I-Gas zone 3760-80.

Broken shows of water 3842-  
4304.

Total depth 4304

EPK-IGN

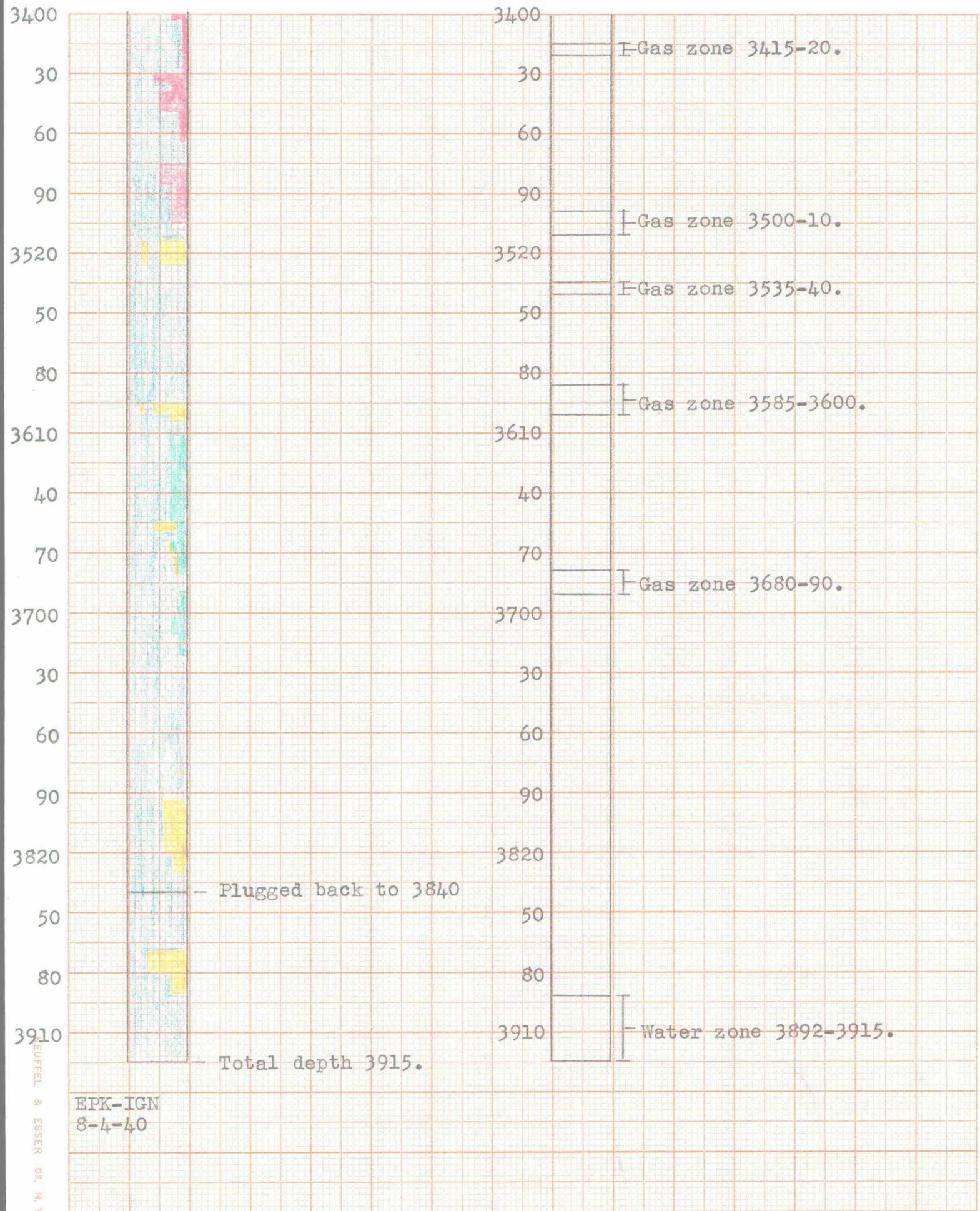
4-40

Sophia Meyer #1

Continental Oil Company's Sophia Meyer #1 well was spudded on 4-4-39 and drilled to a total depth of 3915 with cable tools. The 8 5/8" casing is cemented at 2815 with 100 sacks. After encountering water from 3892 to the total depth, the well was plugged back to 3840 and completed as a shut in gas well with a potential of 1,500 MCF daily. In June, 1939, plugged back to the surface with mud and recompleted as a temporarily abandoned gas well.

No oil was encountered in our Sophia Meyer #1, and if a market for the gas were available, the mud could be removed, and the well converted into a producing gas well. We hereby respectfully request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

EPK-IGN  
8-4-40  
Hobbs, N.M.



Sholes A-13 #2

Continental Oil Company's Sholes A-13 #2 was spudded on 11-22-34 and drilled to a depth of 150' with cable tools. Rotary tools were then rigged up, and the well drilled to its total depth of 3225. The 7" casing is cemented at 3280 with 300 sacks.

At the total depth 3225, flowed from 800 to 1,000 barrels fluid daily (55 to 60% water) with 750 MCF gas. Plugged back to 3314 with cement and then tested 20 barrels fluid hourly (5% B.S. and 19% water). Plugged back to 3304 with cement and recompleted for a potential of 228 barrels oil and 72 barrels water daily flowing through a 12/64" choke on 2 1/2" tubing.

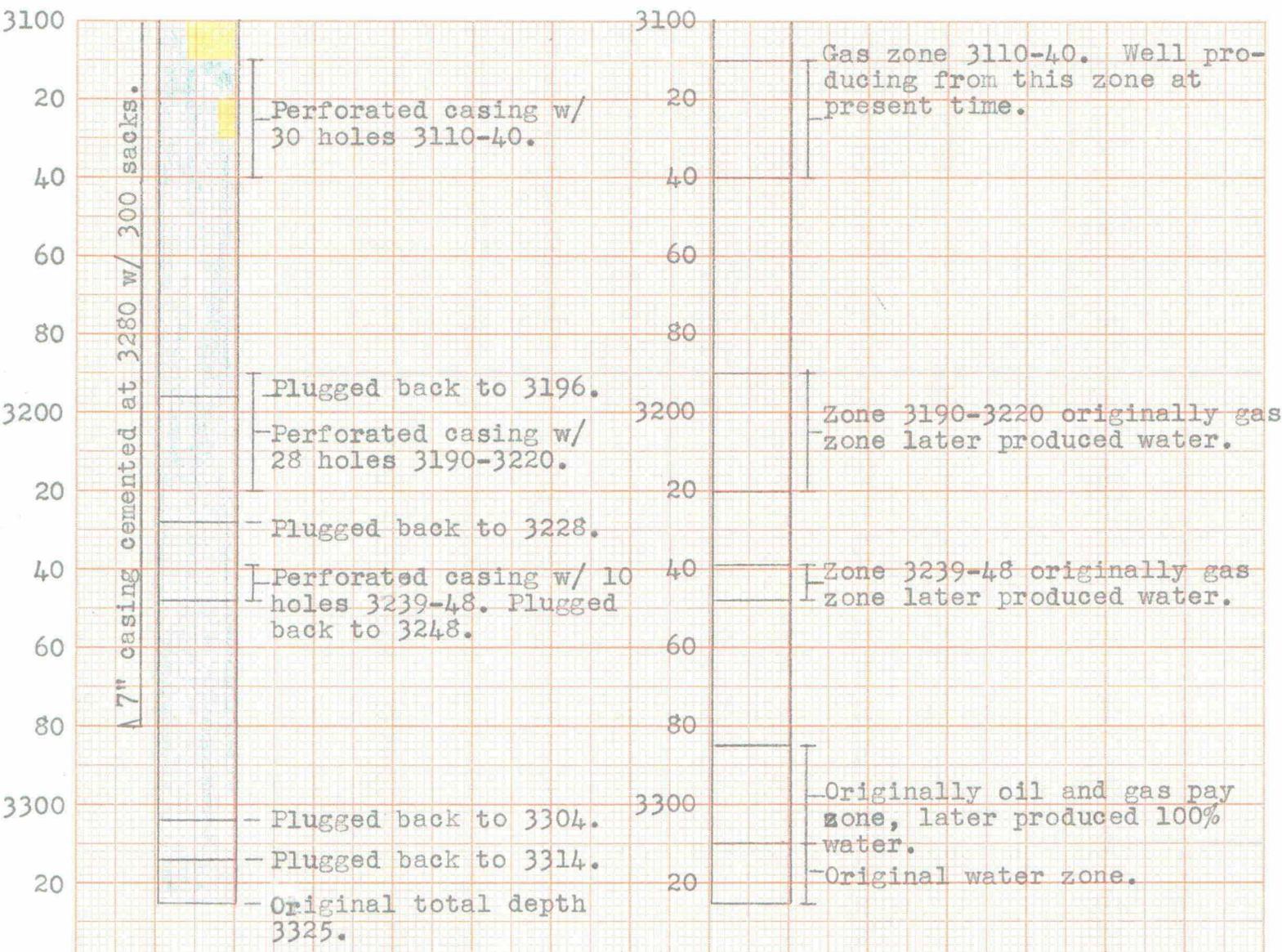
On 8-27-35, ten Bryan flow valves were run, and the well recompleted for a potential of 125 barrels oil and 300 barrels water daily flowing by gas lift.

In July, 1936, production had declined to 100% water, and the well was plugged back from 3304 to 3248 with cement, and the casing perforated with 10 holes from 3239 to 3248. After perforating, flowed 65 barrels water daily, no oil. Plugged back from 3248 to 3228 and perforated casing with 28 holes from 3190 to 3220. Well then tested 7 barrels water hourly, no oil, with 5,000 MCF gas. Plugged back from 3228 to 3196 and perforated casing with 30 holes from 3110 to 3140. Recompleted as a gas well with a potential of 4,000 MCF gas daily.

Our Sholes A-13 #2 is a shut in gas well at the present time, but could be produced if a market for the gas were available. As the well is producing from a gas reservoir, we hereby respectfully

request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various producing fields in New Mexico.

EPK-IGN  
8-4-40  
Hobbs, N.M.



EPK-IGN  
8-4-40

Wells A-12 #1

Continental Oil Company's Wells A-12 #1 well was spudded on 2-21-33 and drilled to a depth of 575' with cable tools. Rotary tools were then rigged up, and the well drilled to its total depth of 3408. The 7" casing is cemented at 3385 with 150 sacks. Completed on 6-14-33 for a potential of 1,200 barrels oil daily flowing through 2½" tubing with 450 MCF gas.

During May, 1935, produced 75 barrels oil and 75 barrels water daily until May 18th, when the well died due to an insufficient gas volume. Deepened to 3449, set a packer at 3430 and acidized with 2,000 gallons. After treatment, well flowed 100 barrels fluid in 8 hours, 60% water. On 8-1-35, installed a pumping unit and pumped 450 barrels water daily on a nine day test. Reran tubing with 11 Brian flow valves and flowed 400 barrels fluid hourly, 90% water, by gas lift. By July, 1936, well was producing 8,000 barrels water daily, no oil.

On 7-31-36, plugged back to 3355 and perforated 7" casing with 29 holes from 3310 to 40 and recompleted for a potential of 53 barrels oil and 1,200 barrels water daily with an estimated 800 MCF gas, flowing natural. By November, 1936, well was again producing 100% water.

On 11-16-36, plugged back to 3290 and perforated casing with 19 holes from 3273 to 3288. Tested 35 barrels water hourly with 8,000 MCF gas. Plugged back to 3109 and perforated casing with 38 holes from 3067 to 3105. Well when tested a small amount of gas, no oil or water. Drilled out the cement plug from

3109 to 3165 and perforated the 7" casing with 10 holes from 3149 to 3158. Recompleted as a gas well with a potential of 5,186 MCF gas daily.

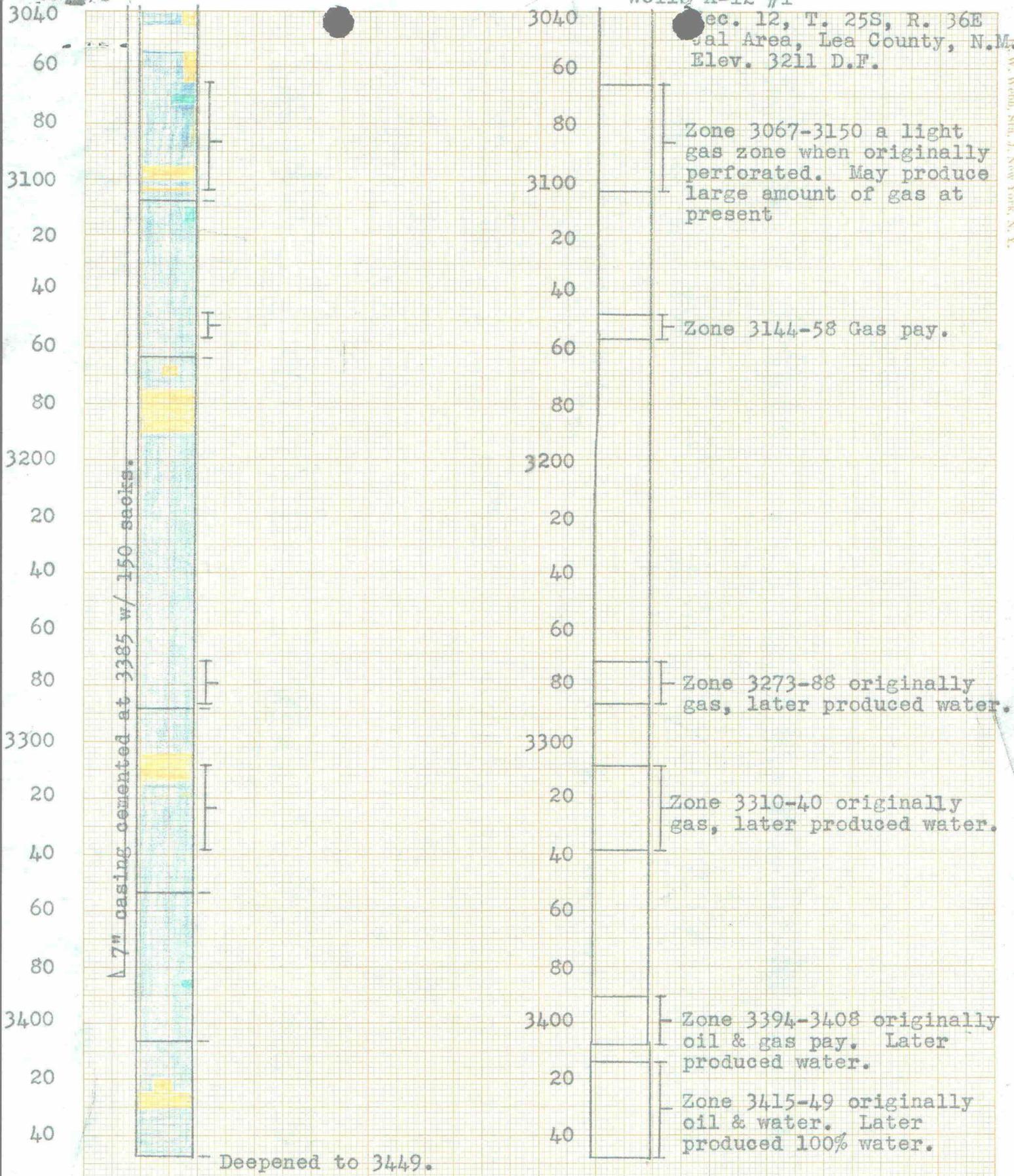
Our Wells A-12 #1 is a shut in gas well at the present time. Its gas pay is produced from a gas reservoir, and we hereby respectfully request that this well be exempted from the provisions of the proposed final order governing gas/oil ratios in the various fields in New Mexico.

EPK-IGN  
8-4-40  
Hobbs, N.M.

Continental Oil Company  
Wells A-12 #1

Sec. 12, T. 25S, R. 36E  
Oil Area, Lea County, N.M.  
Elev. 3211 D.F.

W. Webb, Sta. 1, New York, N. Y.



EPK-IGN  
8-4-40