

NEW MEXICO OIL CONSERVATION COMMISSION  
MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 1106)

COMPANY H. Olsen Oil Company Box 101 Jal, New Mexico  
(Address)

LEASE Copper WELL NO. 2 UNIT C S 14 T 24 R 36  
DATE WORK PERFORMED 10-16-47 POOL Jalmat

This is a Report of: (Check appropriate block) ☐ Results of Test of Casing Shut-off  
☐ Beginning Drilling Operations ☐ Remedial Work  
☐ Plugging ☒ Other

Detailed account of work done, nature and quantity of materials used and results obtained.

Ac cleaned well out from 3075' to 3120' and treated with  
10,000 lbs. sand and 20,000 gal. oil.

FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

Original Well Data:

DF Elev.            TD 3115 PBD            Prod. Int. 3023 Compl Date 5-17-48  
Tbng. Dia 2" Tbng Depth 2086 Oil String Dia 7" Oil String Depth 2082  
Perf Interval (s)             
Open Hole Interval 203' Producing Formation (s) Kates

RESULTS OF WORKOVER:

BEFORE

AFTER

Date of Test

10-22-47

Oil Production, bbls. per day

Gas Production, Mcf per day

Water Production, bbls. per day

Gas-Oil Ratio, cu. ft. per bbl.

Gas Well Potential, Mcf per day

Witnessed by

H. Olsen Oil Company

(Company)

OIL CONSERVATION COMMISSION

Name

Title

Date

I hereby certify that the information given above is true and complete to the best of my knowledge.

Name

Position

Company

Arthur Wilson

Production Foreman

H. Olsen Oil Company

## NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

## MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Jalmat Formation Yates County Lea  
Initial Annual Special X Date of Test 6-24 to 6-28-57  
Company R. Olsen Oil Company Lease Cooper B Well No. 2  
Unit C Sec. 14 Twp. 24 Rge. 36 Purchaser El Paso Natural Gas Company  
Casing 7" Wt. 24.0 I.D. Set at 2982 Perf. To  
Tubing 2" Wt. 4.7 I.D. Set at 1600 Perf. To  
Gas Pay: From 3023 To 3185 L xG 0.650 -GL Bar.Press. 13.2  
Producing Thru: Casing Tubing X Type Well Single  
Date of Completion: 9-17-48 Packer None Single-Bradenhead-G. G. or G.O. Dual  
Reservoir Temp.

## OBSERVED DATA

Tested Through XXXXXX XXXXXX (Meter)Type Taps 

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h <sub>w</sub>	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI										
1.	4	1.250	183	4.00	88	371		371		72
2.	4	1.250	138	5.76	87	186		216		24
3.	4	1.250	88	9.30	88	139		177		24
4.	4	1.250	45	16.81	87	90		135		24
5.						47		107		24

## FLOW CALCULATIONS

No.	Coefficient Flg (24-Hour)	$\sqrt{h_w P_f}$	Pressure psia	Flow Temp. Factor F <sub>t</sub>	Gravity Factor F <sub>g</sub>	Compress. Factor F <sub>pv</sub>	Rate of Flow Q-MCFPD @ 15.025 psia
1.	9.643	28.14		.9741	.9608	1.016	258
2.	9.643	29.49		.9750	.9608	1.011	269
3.	9.643	30.65		.9741	.9608	-	277
4.	9.643	31.23		.9750	.9608	-	282
5.							

## PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio  cf/bbl.  
Gravity of Liquid Hydrocarbons  deg.  
F<sub>c</sub> (1-e<sup>-s</sup>)

Specific Gravity Separator Gas   
Specific Gravity Flowing Fluid   
P<sub>c</sub> 384.2 P<sub>c</sub><sup>2</sup> 147.6

No.	P <sub>t</sub> (psia)	P <sub>t</sub> <sup>2</sup>	F <sub>c</sub> Q	(F <sub>c</sub> Q) <sup>2</sup>	(F <sub>c</sub> Q) <sup>2</sup> (1-e <sup>-s</sup> )	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup>	Cal. P <sub>w</sub>	P <sub>w</sub> /P <sub>c</sub>
1.	199.2	39.7				52.5	95.1		
2.	152.2	23.2				36.2	111.4		
3.	103.2	10.7	Measured			22.0	125.6		
4.	60.2	3.6				14.4	133.2		
5.									

Absolute Potential: 320 MCFPD; n 0.500COMPANY R. Olsen Oil CompanyADDRESS 2805 Liberty Bank Building, Oklahoma City, OklahomaAGENT and TITLE Philip Randolph, Vice PresidentWITNESSED COMPANY 

## REMARKS

2nd test on this well. Good point alignment but slope less than 0.5. A slope of 0.5 was drawn through the flow point corresponding to the lowest rate of flow.

### INSTRUCTIONS

This form is to be used for reporting multi-point back pressure tests on gas wells in the State, except those on which special orders are applicable. Three copies of this form and the back pressure curve shall be filed with the Commission at Box 871, Santa Fe.

The log log paper used for plotting the back pressure curve shall be of at least three inch cycles.

### NOMENCLATURE

$Q$  = Actual rate of flow at end of flow period at W. H. working pressure ( $P_w$ ).  
MCF/da. @ 15.025 psia and 60° F.

$P_c$  = 72 hour wellhead shut-in casing (or tubing) pressure whichever is greater.  
psia

$P_w$  = Static wellhead working pressure as determined at the end of flow period.  
(Casing if flowing thru tubing, tubing if flowing thru casing.) psia

$P_t$  = Flowing wellhead pressure (tubing if flowing through tubing, casing if flowing through casing.) psia

$P_f$  = Meter pressure, psia.

$h_w$  = Differential meter pressure, inches water.

$F_g$  = Gravity correction factor.

$F_t$  = Flowing temperature correction factor.

$F_{pv}$  = Supercompressability factor.

$n$  = Slope of back pressure curve.

Note: If  $P_w$  cannot be taken because of manner of completion or condition of well, then  $P_w$  must be calculated by adding the pressure drop due to friction within the flow string to  $P_t$ .