

DUPLICATE

Form C-103
(Revised 3-55)

NEW MEXICO OIL CONSERVATION COMMISSION
MISCELLANEOUS REPORTS ON WELLS

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

COMPANY Sunray Mid-Continent Oil Company - Box 128 - Hobbs, New Mexico
(Address)

LEASE Eva Ownes WELL NO. 1 UNIT ND S 3 T 22-S R 37-E
DATE WORK PERFORMED 1-31-57 POOL Tubbs Gas

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

Detailed account of work done, nature and quantity of materials used and results obtained.
Well was producing from Drinkard Zone thru perforations 6500' - 6554'.
We set a 5" x 2" production packer at 6473'. Perforated the Tubbs Gas Zone
6007' - 6177' with 3 jets shot per foot and acidized with 8,000 gal. HLT
acid. We ran 2" tubing with sleeve valve and latched onto packer. We swabbed
Tubbs gas zone in. Closed tubing sleeve valve. Removed plug from packer and
swabbed in Drinkard Zone. Well producing Tubbs Gas Zone on the casing wing
and Drinkard Oil Zone thru the tubing.

FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY

Original Well Data:

DF Elev. _____ TD _____ PBD _____ Prod. Int. _____ Compl Date _____
Tbng. Dia _____ Tbng Depth _____ Oil String Dia _____ Oil String Depth _____
Perf Interval (s) _____
Open Hole Interval _____ Producing Formation (s) _____

RESULTS OF WORKOVER:

BEFORE AFTER

Date of Test	_____	_____
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 _____	(Company) _____	

OIL CONSERVATION COMMISSION

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

Name E. J. Fischer
Title Engineer District I
Date FEB 5 1957

Name R. H. Harvey
Position Hobbs Area Superintendent
Company Sunray Mid-Continent Oil Co.

NEW MEXICO OIL CONSERVATION COMMISSION

Form C-122

Revised 12-1-55

MULTI-POINT BACK PRESSURE TEST FOR GAS WELLS

Pool Tubb Gas Formation Tubbs County Lea ^{7:25 AM}
Initial X Annual _____ Special _____ Date of Test 1-27-57
Company Sunray Mid-Continent Oil Co. Lease Eva Owen Well No. # 1
Unit B Sec. 8 Twp. 22 Rge. 37 Purchaser None
Casing 8 1/2 Wt. 14 I.D. 8.012 Set at _____ Perf. 6007 To 6177
Tubing 2 3/8 Wt. _____ I.D. 2" Set at 6535 Perf. - To -
Gas Pay: From 6007 To 6177 L _____ xG _____ -GL _____ Bar.Press. _____
Producing Thru: Casing X Tubing _____ Type Well Dual
Date of Completion: 1-24-57 Packer X Single-Bradenhead-G. G. or G.O. Dual
Reservoir Temp. _____

OBSERVED DATA

Tested Through (Prover) (Prover) ~~(Choke)~~ ~~(Meter)~~

Type Taps _____

No.	Flow Data					Tubing Data		Casing Data		Duration of Flow Hr.
	(Prover) (Line) Size	(Choke) (Orifice) Size	Press. psig	Diff. h _w	Temp. °F.	Press. psig	Temp. °F.	Press. psig	Temp. °F.	
SI	<u>1809</u>					<u>Dual</u>				
1.	<u>2"</u>	<u>1/8</u>	<u>1491</u>			<u>1498</u>			<u>590</u>	<u>4</u>
2.	<u>2"</u>	<u>1/4</u>	<u>977</u>			<u>1000</u>			<u>620</u>	<u>5</u>
3.	<u>2"</u>	<u>1/2</u>	<u>332</u>			<u>340</u>			<u>64</u>	<u>6</u>
4.										
5.										

FLOW CALCULATIONS

No.	Coefficient (24-Hour)	$\sqrt{h_w p_f}$	Pressure psia	Flow Temp. Factor F _t	Gravity Factor F _g	Compress. Factor F _{pv}	Rate of Flow Q-MCFPD @ 15.025 psia
1.							
2.	<u>.3418</u>		<u>1491</u>	<u>1.0010</u>	<u>.9258</u>	<u>1.191</u>	<u>823.8</u>
3.	<u>1.4380</u>		<u>977</u>	<u>.9381</u>	<u>.9258</u>	<u>1.126</u>	<u>1458.4</u>
4.	<u>5.5233</u>		<u>332</u>	<u>.9982</u>	<u>.9258</u>	<u>1.068</u>	<u>1782.3</u>
5.							

PRESSURE CALCULATIONS

Gas Liquid Hydrocarbon Ratio Dry Gas cf/bbl.
Gravity of Liquid Hydrocarbons _____ deg.
F_c _____ (1-e^{-s})

Specific Gravity Separator Gas .701
Specific Gravity Flowing Fluid Dry
P_c _____ P_c² _____

No.	P _w P _t (psia)	P _t ²	F _c Q	(F _c Q) ²	(F _c Q) ² (1-e ^{-s})	P _w ²	P _c ² -P _w ²	Cal. P _w	P _w P _c
1.									
2.	<u>1491</u>	<u>2223.0</u>				<u>2533.8</u>	<u>365.8</u>		
3.	<u>977</u>	<u>954.5</u>				<u>2533.8</u>	<u>1634.3</u>		
4.	<u>332</u>	<u>110.8</u>				<u>2533.8</u>	<u>2478.8</u>		
5.									

Absolute Potential: 1868 MCFPD; n _____COMPANY Sunray Mid-Continent Oil Co.ADDRESS Hobbs, New MexicoAGENT and TITLE Charles Beal, AgentWITNESSED Mr. CleggCOMPANY Sunray Mid-Continent Oil Co.

REMARKS

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} = Supercompressibility 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 .