NEW MEXICO

OIL CONSERVATION COMMISSION

Gas Well Plat

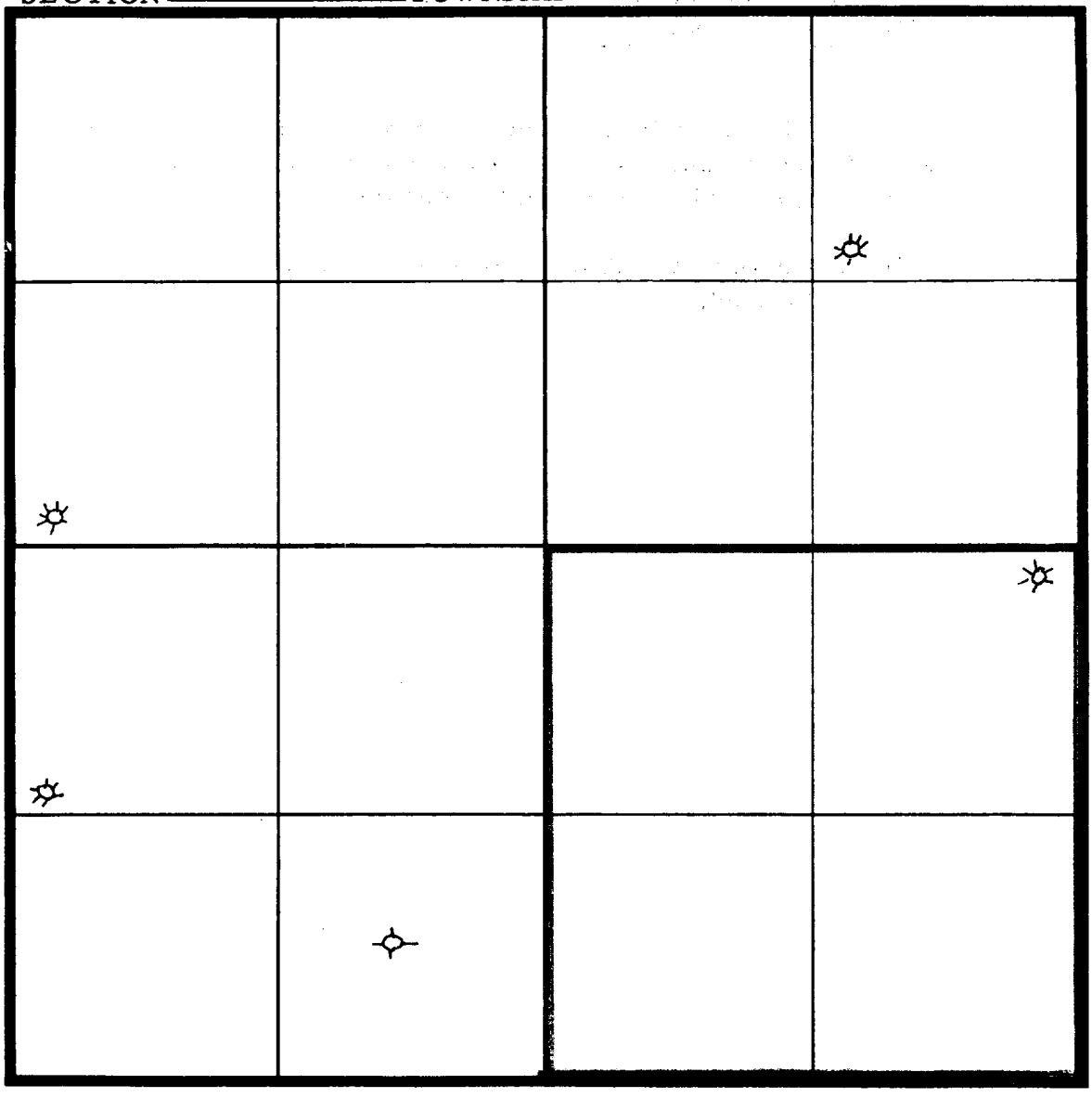
Date 6-16-55

R. Olsen	Christmas	2
Operator	Lease	Well No.

Name of Producing Formation Yates-Seven Rivers Pool Jalmat

No. Acres Dedicated to the Well 160

SECTION 28 TOWNSHIP 22 S RANGE 36 E



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

Name C. C. Powell

Position Geologist

Representing R. Olsen

Address Drawer Z, Jal, N. M.

(over)

INSTRUCTIONS

1. Is this gas well a dual completion? Yes_____ No. _x_.

2. If the answer to Question 1 is Yes, are there any other dually completed wells within the dedicated acreage? Yes_____ No. _____.

A separate plat must be filed for each gas well, outlining the area dedicated to such well and showing the location of all other wells (oil and gas) within the outlined area.

Mail in duplicate to the district office for the district in which the well is located.

NEW MEXICO OIL CONSERVATION COMMISSION
One-point Back Pressure Test for Gas Wells
(Deliverability)

Form C-122-C

HOBBS OFFICE OCC 2-1-54

Pool ~~Jalmat~~ South Eunice Formation 7 Rivers - Queen County Lea
Initial ____ Annual x Special ____ Date of Test 2-8/AM-12-60
Company Jal Oil Co., Inc. Lease Christmas Well No. 2
Unit I Sec. 28 Twp. 22 Rge. 36 Purchaser El Paso Natural Gas Co.
Casing 5 1/2 Wt. 15.5 I.D. ____ Set at 3145 Perf. ____ To ____
Tubing 2 Wt. 4.7 I.D. ____ Set at 3669 Perf. ____ To ____
Gas Pay: From 3450 To 3696 L 3669 x G .679 = GL 2491 Bar.Press. 13.2
Producing Thru: Casing ____ Tubing x Type Well single
Single- Bradenhead-G.G. or G.O. Dual

FLOW DATA

Started Date	Started time	Taken Date	Taken time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differ-ential	Flow Temp.
2-8-60	10:00 AM PM	2-9-60	10:00 AM PM	24	Flg.	4	1.500	265.2	18.06	68

FLOW CALCULATIONS

Static Pressure p_f	Differ-ential h_w	Meter Extension $\sqrt{p_f h_w}$	24-Hour Coeff-icient	Gravity Factor F_g	Temp. Factor F_t	Compress-ability F_{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
265.2	18.06	69.20	13.99	.9400	.9924	1.027	927.5

SHUT-IN DATA / FLOW DATA

Shut-in Date	Shut-in Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (P_c) psia Tubing	Wellhead Pressure (P_c) psia Casing	W.H. Working Pressure (P_w) and (P_t) psia Tubing	W.H. Working Pressure (P_w) and (P_t) psia Casing
2-9-60	10:00 AM PM	2-10-60 2-11-60 2-12-60	10:00 AM PM	24 48 72	492.2 531.2 552.2		267.2	

FRICTION CALCULATIONS(if necessary)

$P_W^2 = (267.2)^2 + (9.936 \times 927.5)^2 (.158) = 84.8$

SUMMARY

P_c = 552.2 psia
Q = 927.5 MCF/Da.
P_w = 291.2 psia
P_d = 441.8 psia
D = 541.7 MCF/Da.

DELIVERABILITY CALCULATIONS

P_w 291.2 P_c 552.2 $P_w + P_c$ .5273

$1 - \frac{P_w}{P_c}$ .4727 $1 + \frac{P_w}{P_c}$ 1.527 $\left|1 - \frac{P_w}{P_c}\right| \left|1 + \frac{P_w}{P_c}\right| = M$ .7218

.36 + M .4987 Log 9.697839-10 x (n) .773 = 9.766429-10 +

Log Q = 2.967314

Log D = 12.733743-10

Antilog = 541.7 = D

COMPANY Jal Oil Company, Inc.
ADDRESS Drawer Z, Jal, New Mexico
AGENT and TITLE Ladell Ellis Prod.Supt. LoEllis
WITNESSED L.D. Southern
COMPANY El Paso Natural Gas Co.

REMARKS

INSTRUCTIONS

This form is to be used for reporting deliverability tests in the designated Dry Gas Pools of Lea County as ordered by New Mexico Oil Conservation Commission Directive dated March 15, 1954, which directive was provided for by Orders R-365-A through R-376-A. For details regarding this test please refer to the above mentioned Directive.

NOMENCLATURE

Q = Actual 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_d = Deliverability pressure; 80% of 72 hour individual wellhead shut-in pressure (P_c). psia

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

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

D = Deliverability at Deliverability pressure (P_d) MCF/da. @ 15.025 psia and 60° F.

p_f = Static 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.

DELIVERABILITY FORMULA

$$D = Q \left[\frac{36}{\left(1 - \frac{P_w}{P_c}\right)\left(1 \quad \frac{P_w}{P_c}\right)} \right]^n$$

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.

NEW MEXICO OIL CONSERVATION COMMISSION
One-point Back Pressure Test for Gas Wells
(Deliverability)

Form C-122-C
4-1-54

HOBBS OFFICE OCC
1960 MAR 10 AM 10 49

Pool South Eunice Jalmat Formation 7 Rivers - Queen County Lea
Initial ____ Annual X Special ____ Date of test 2-8/2-12-60
Company Jal Oil Co., Inc. Lease Christmas Well No. 2
Unit I Sec. 28 Twp. 22 Rge. 36 Purchaser El Paso Natural Gas Co.
Casing 5 1/2 Wt. 15.5 I.D. ____ Set at 3145 Perf. ____ To ____
Tubing 2 Wt. 4.7 I.D. ____ Set at 3669 Perf. ____ To ____
Gas Pay: From 3450 To 3696 L 3669 x G .679 = GL 2491 Bar.Press. 13.2
Producing Thru: Casing ____ Tubing X Type Well single
Single- Bradenhead-G.G. or G.O. Dual

FLOW DATA

Started Date	Started time	Taken Date	Taken time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differ-ential	Flow Temp.
2-8-60	10:00 AM PM	2-9-60	10:00 AM PM	24	Flg.	4	1.500	265.2	18.06	68

FLOW CALCULATIONS

Static Pressure P_f	Differ-ential h_w	Meter Extension $\sqrt{P_f h_w}$	24-Hour Coeff-icient	Gravity Factor F_g	Temp. Factor F_t	Compress-ability F_{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
265.2	18.06	69.20	13.99	.9400	.9924	1.027	927.5

SHUT-IN DATA / FLOW DATA

Shut-in Date	Shut-in Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (P_c) psia Tubing	Wellhead Pressure (P_c) psia Casing	W.H. Working Pressure (P_w) and (P_t) psia Tubing	W.H. Working Pressure (P_w) and (P_t) psia Casing
2-9-60	10:00 AM PM	2-10-60		24	492.2		267.2	
		2-11-60	10:00 AM	48	531.2			
		2-12-60	PM	72	552.2			

FRICTION CALCULATIONS(if necessary)

$P_W^2 = (267.2)^2 + (9.936 \times 927.5)^2 (.158) = 84.8$

DELIVERABILITY CALCULATIONS

P_w 291.2 P_c 552.2 $P_w + P_c$ .5273

$1 - \frac{P_w}{P_c}$ .4727 $1 + \frac{P_w}{P_c}$ 1.527 $\left(1 - \frac{P_w}{P_c}\right)\left(1 + \frac{P_w}{P_c}\right) = M$ .7218

.36 + M .4987 Log 9.697839-10 x (n) .773 = 9.766429-10 +

Log Q = 2.967314

Log D = 12.733743-10

Antilog = 541.7 = D

SUMMARY

P_c = 552.2 psia
Q = 927.5 MCF/Da.
P_w = 291.2 psia
P_d = 441.8 psia
D = 541.7 MCF/Da.

COMPANY Jal Oil Company, Inc.
ADDRESS Drawer Z, Jal, New Mexico
AGENT and TITLE Ladell Ellis Prod.Supt.
WITNESSED E. D. Southern
COMPANY El Paso Natural Gas Co.

REMARKS

Ph. 340 [illegible]

INSTRUCTIONS

This form is to be used for reporting deliverability tests in the designated Dry Gas Pools of Lea County as ordered by New Mexico Oil Conservation Commission Directive dated March 15, 1954, which directive was provided for by Orders R-365-A through R-376-A. For details regarding this test please refer to the above mentioned Directive.

NOMENCLATURE

Q = Actual 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_d = Deliverability pressure; 80% of 72 hour individual wellhead shut-in pressure (P_c). psia

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

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

D = Deliverability at Deliverability pressure (P_d) MCF/da. @ 15.025 psia and 60° F.

p_f = Static 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.

DELIVERABILITY FORMULA

$$D = Q \left[\frac{36}{\left(1 - \frac{P_w}{P_c}\right)\left(1 \quad \frac{P_w}{P_c}\right)} \right]^n$$

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.

NEW MEXICO OIL CONSERVATION COMMISSION

One-point Back Pressure Test for Gas Wells (Deliverability)

Form C-122-C

HOBBS OFFICE OCC 1-1-54

South Eunice

Pool Jalmat Formation 7 Rivers - Queen County Lea

Initial ____ Annual X Special ____ Date of Test 12/8/60 2-12-60

Company Jal Oil Co., Inc. Lease Christmas Well No. 2

Unit I Sec. 28 Twp. 22 Rge. 36 Purchaser El Paso Natural Gas Co.

Casing 5 1/2 Wt. 15.5 I.D. ____ Set at 3145 Perf. ____ To ____

Tubing 2 Wt. 4.7 I.D. ____ Set at 3669 Perf. ____ To ____

Gas Pay: From 3450 To 3696 L 3669 x G .679 = GL 2491 Bar.Press. 13.2

Producing Thru: Casing ____ Tubing X Type Well single

Single- Bradenhead-G.G. or G.O. Dual

FLOW DATA

Started Date	Started time	Taken Date	Taken time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differ-ential	Flow Temp.
2-8-60	10:00 AM PM	2-9-60	10:00 AM PM	24	Flg.	4	1.500	265.2	18.06	68

FLOW CALCULATIONS

Static Pressure p_f	Differ-ential h_w	Meter Extension $\sqrt{p_f h_w}$	24-Hour Coeff-icient	Gravity Factor F_g	Temp. Factor F_t	Compress-ability F_{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
265.2	18.06	69.20	13.99	.9400	.9924	1.027	927.5

SHUT-IN DATA / FLOW DATA

Shut-in Date	Shut-in Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (P_c) psia Tubing	Wellhead Pressure (P_c) psia Casing	W.H. Working Pressure (P_w) and (P_t) psia Tubing	W.H. Working Pressure (P_w) and (P_t) psia Casing
2-9-60	10:00 AM PM	2-10-60	10:00 AM PM	24	492.2		267.2	
		2-11-60		48	531.2			
		2-12-60		72	552.2			

FRICTION CALCULATIONS(if necessary)

$P_w^2 = (267.2)^2 + (9.936 \times 927.5)^2 \ (.158) = 84.8$

SUMMARY

P_c = 552.2 psia

Q = 927.5 MCF/Da.

P_w = 291.2 psia

P_d = 441.8 psia

D = 541.7 MCF/Da.

DELIVERABILITY CALCULATIONS

P_w 291.2 P_c 552.2 $P_w + P_c$ .5273

$1 - \frac{P_w}{P_c}$ .4727 ~~.4987~~ $1 + \frac{P_w}{P_c}$ 1.527 $\left(1 - \frac{P_w}{P_c}\right)\left(1 + \frac{P_w}{P_c}\right) = M$ .7218

.36 + M ____ Log 9.697839-10 x (n) .773 = 9.766429-10 +

Log Q = 2.967314

Log D = 12.733743-10

Antilog = 541.7 = D

COMPANY Jal Oil Company, Inc.

ADDRESS ~~Drawer Z, Jal, New Mexico~~ Indell Ellis Prod.Supt.

AGENT and TITLE ~~L. D. Southern~~

WITNESSED ~~El Paso Natural Gas Co.~~

COMPANY ____

REMARKS

pb 6240 Csg. Calculations on #2-8

INSTRUCTIONS

This form is to be used for reporting deliverability tests in the designated Dry Gas Pools of Lea County as ordered by New Mexico Oil Conservation Commission Directive dated March 15, 1954, which directive was provided for by Orders R-365-A through R-376-A. For details regarding this test please refer to the above mentioned Directive.

NOMENCLATURE

Q = Actual 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_d = Deliverability pressure; 80% of 72 hour individual wellhead shut-in pressure (P_c). psia

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

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

D = Deliverability at Deliverability pressure (P_d) MCF/da. @ 15.025 psia and 60° F.

p_f = Static 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.

DELIVERABILITY FORMULA

$$D = Q \left[\frac{.36}{\left(1 - \frac{P_w}{P_c}\right)\left(1 \quad \frac{P_w}{P_c}\right)} \right]^n$$

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.

NEW MEXICO OIL CONSERVATION COMMISSION
One-point Back Pressure Test for Gas Wells
(Deliverability)

Form C-122-C
4-1-54

HOBBS OFFICE OCC
1960 MAR 19 AM 7 49

Pool Jalmat South Ernie Formation 7 Rivers - Queen County Lea
Initial ____ Annual X Special ____ Date of Test AM 2-12-60
Company Jal Oil Co., Inc. Lease Christmas Well No. 2
Unit I Sec. 28 Twp. 22 Rge. 36 Purchaser El Paso Natural Gas Co.
Casing 5 1/2 Wt. 15.5 I.D. ____ Set at 3145 Perf. ____ To ____
Tubing 2 Wt. 4.7 I.D. ____ Set at 3669 Perf. ____ To ____
Gas Pay: From 3490 To 3696 L 3669 x G .679 = GL 2491 Bar.Press. 13.2
Producing Thru: Casing ____ Tubing X Type Well single
Single- Bradenhead-G.G. or G.O. Dual

FLOW DATA

Started Date	Started time	Taken Date	Taken time	Duration Hours	Type Taps	Line Size	Orfice Size	Static Press.	Differ- ential	Flow Temp.
2-8-60	10:00 AM PM	2-9-60	10:00 AM PM	24	Flg.	4	1.500	265.2	18.06	60

FLOW CALCULATIONS

Static Pressure p_f	Differ- ential h_w	Meter Extension $\sqrt{p_f h_w}$	24-Hour Coeff- icient	Gravity Factor F_g	Temp. Factor F_t	Compress- ability F_{pv}	Rate of Flow MCF/Da. @ 15.025 psia Q
265.2	18.06	69.20	13.99	.9400	.9924	1.027	927.5

SHUT-IN DATA / FLOW DATA

Shut-in Date	Shut-in Time	Press. Taken Date	Press. Taken Time	Duration Hours	Wellhead Pressure (P_c) psia Tubing	Wellhead Pressure (P_c) psia Casing	W.H. Working Pressure (P_w) and (P_t) psia Tubing	W.H. Working Pressure (P_w) and (P_t) psia Casing
2-9-60	10:00 AM PM	2-10-60	10:00 AM PM	24	490.2		267.2	
		2-11-60		48	531.2			
		2-12-60		72	552.2			

FRICTION CALCULATIONS(if necessary)

$P_w^2 = (267.2)^2 + (9.936 \times 927.5)^2 \ (.158) = 84.8$

DELIVERABILITY CALCULATIONS

P_w 291.2 P_c 552.2 $P_w + P_c$ .5273

$1 - \frac{P_w}{P_c}$ .4727 $1 + \frac{P_w}{P_c}$ 1.527 $\left(1 - \frac{P_w}{P_c}\right)\left(1 + \frac{P_w}{P_c}\right) = M$ .7218

.36 + M .773 Log 9.887836-10 x (n) .773 = 9.706429-10 +

Log Q = 2.967314

Log D = 12.733743-10

Antilog = 541.7 = D

SUMMARY

P_c = 552.2 psia
Q = 927.5 MCF/Da.
P_w = 291.2 psia
P_d = 441.8 psia
D = 541.7 MCF/Da.

COMPANY Jal Oil Company, Inc.
ADDRESS Drawer 2, Jal, New Mexico
AGENT and TITLE L. D. Southorn Prod. Supt.
WITNESSED El Paso Natural Gas Co.
COMPANY

REMARKS

PK 02410

INSTRUCTIONS

This form is to be used for reporting deliverability tests in the designated Dry Gas Pools of Lea County as ordered by New Mexico Oil Conservation Commission Directive dated March 15, 1954, which directive was provided for by Orders R-365-A through R-376-A. For details regarding this test please refer to the above mentioned Directive.

NOMENCLATURE

Q = Actual 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_d = Deliverability pressure; 80% of 72 hour individual wellhead shut-in pressure (P_c). psia

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

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

D = Deliverability at Deliverability pressure (P_d) MCF/da. @ 15.025 psia and 60° F.

p_f = Static 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.

DELIVERABILITY FORMULA

$$D = Q \left[\frac{.36}{\left(1 - \frac{P_w}{P_c}\right)\left(1 \quad \frac{P_w}{P_c}\right)} \right]^n$$

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.

NEW MEXICO

OIL CONSERVATION COMMISSION

Gas Well Plat

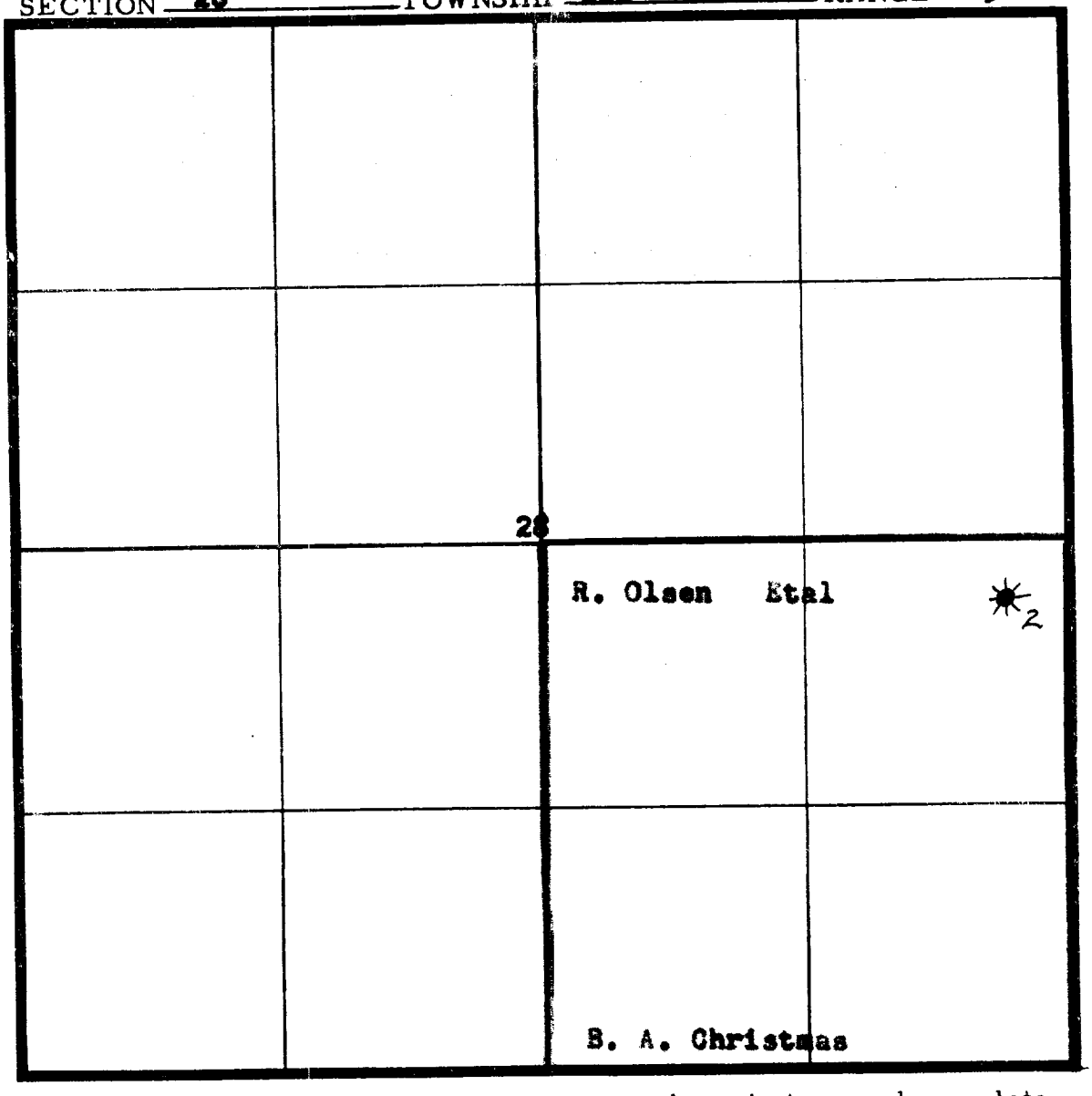
Date 10-19-53

R. Olsen Etal	B. A. Christmas	2
Operator	Lease	Well No.

Name of Producing Formation Queen Pool So. Eunice

No. Acres Dedicated to the Well 160

SECTION 28 TOWNSHIP 22S RANGE 36E



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

Name Dewey Watson

Position Geological Engineer

Representing R. Olsen

Address Drawer 'Z' Jal, New Mexico

(over)

INSTRUCTIONS

1. Is this gas well a dual completion? Yes____ No X

2. If the answer to Question 1 is Yes, are there any other dually completed wells within the dedicated acreage? Yes _____ No_____

A separate plat must be filed for each gas well, outlining the area dedicated to such well and showing the location of all other wells (oil and gas) within the outlined area.

Mail in duplicate to the district office for the district in which the well is located.