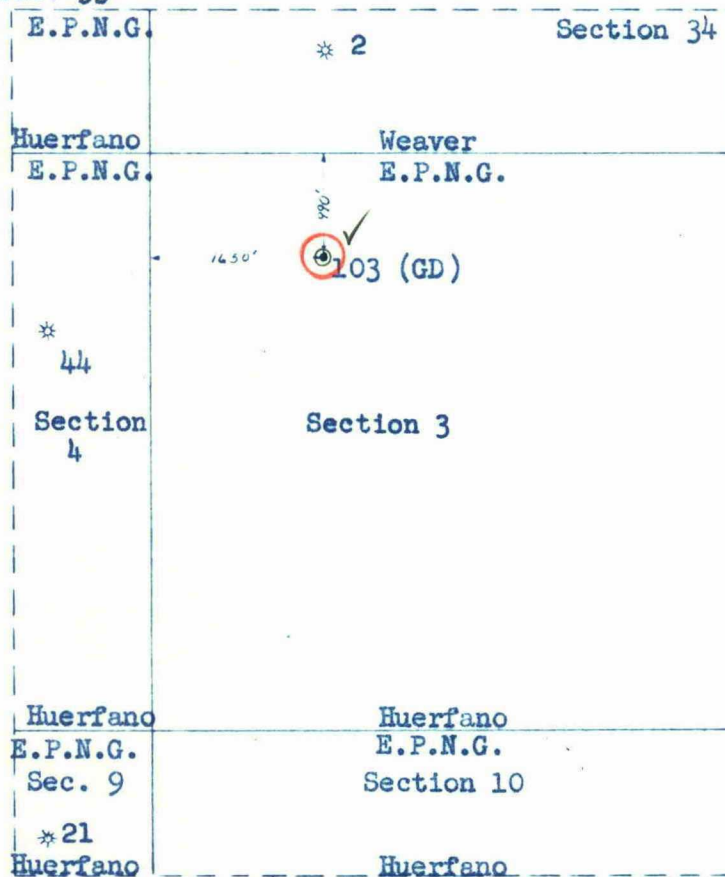


Plat Showing Location of Dually Completed
El Paso Natural Gas Co. Huerfano Unit No. 103 (GD)
and Offset Acreage

T-28-N
R-10-W

Sec. 33



Legend

- ⊙ - Gallup (Oil) Dakota (Gas)
- * - Pictured Cliffs

BEFORE EXAMINER FISCHER

OIL CONSERVATION COMMISSION

Exhibit No. 1
Case No. 1624

EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

SCALE

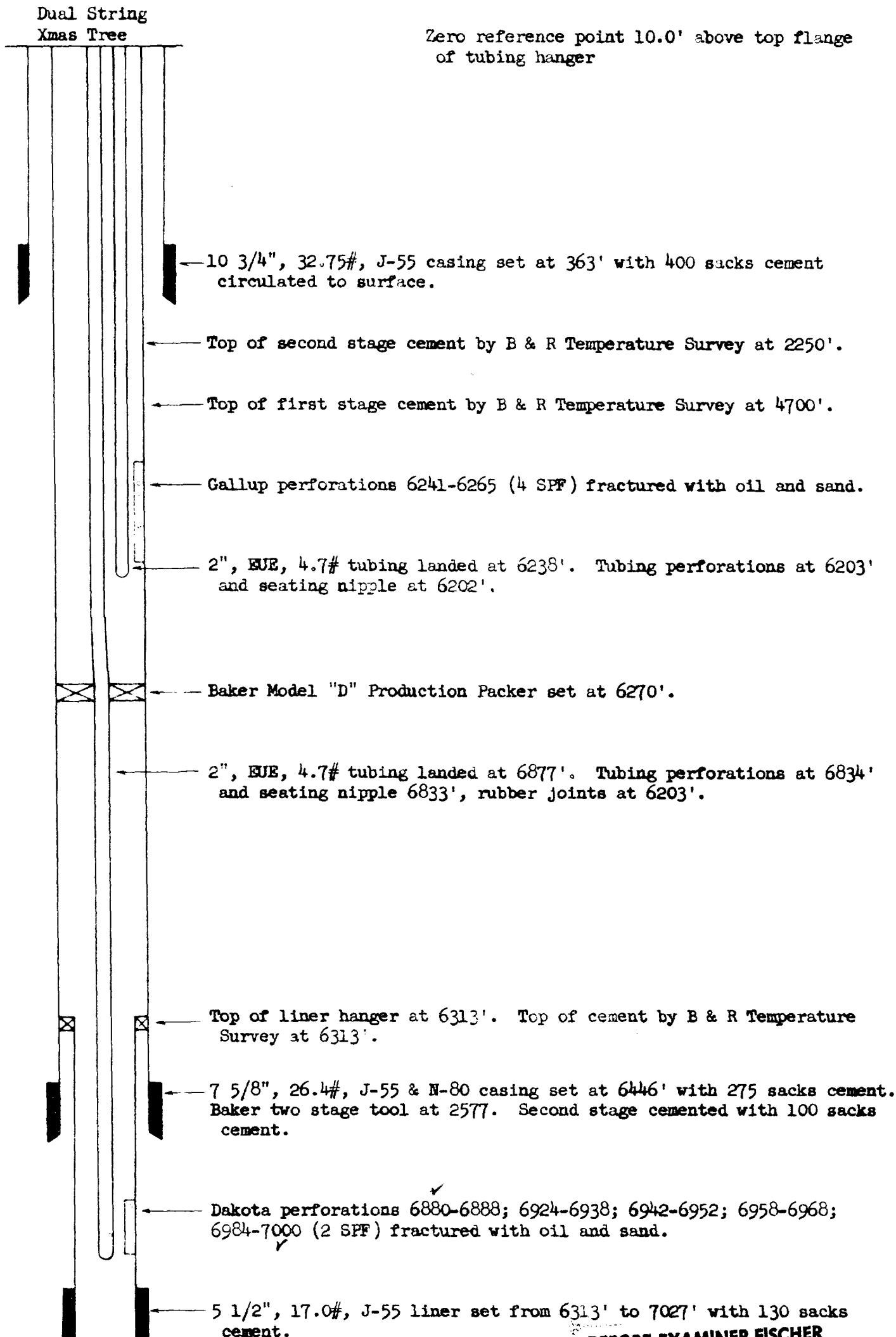
DATE

No.

DRAWN BY

CHECKED BY

SCHEMATIC DIAGRAM OF DUALY COMPLETED
El Paso Natural Gas Co. Huerfano Unit No. 103 (GD)
NW/4 Section 3, T-26-N, R-10-W



T.D. 7030'

BEFORE EXAMINER FISCHER
OIL CONSERVATION COMMISSION
Exhibit No. 2
Case No. 1624

WELEX



RADIOACTIVITY INDUCTION-ELECTRIC LOG

COMPANY EL PASO NATURAL GAS COMPANY
WELL HUERFANO UNIT NO. 103 (GD)
FIELD WILDCAT
County SAN JUAN
State NEW MEXICO
File

COMPANY EL PASO NATURAL GAS COMPANY
WELL HUERFANO UNIT NO. 103 (GD)
FIELD WILDCAT
COUNTY SAN JUAN STATE NEW MEXICO

Location

990 FNL &
1650 FWL

Other Logs
CONTACT-
CALIPER

Sec. 3 Twp 26N Rge 10W

TEMPERATURE

Elevation

Permanent Datum GROUND LEVEL Elev. 6735'
Log Measured From ROTARY KELLY BUSHING
Drilling Measured From ROTARY KELLY BUSHING

KB. 6745'
DF. 6744'
GL. 6735'

Run No.	ONE - ELEC	ONE-GAMMA	ONE-N-G	TWO-INDUC
Date	11-18-58	11-22-58	11-22-58	11-22-58
Total Depth Driller	6445'	7030'	7030'	7030'
Total Depth Welex	6446'	7030'	7030'	7030'
Csg. Shoe Driller	362'	6450'	6450'	6450'
Csg. Shoe Welex	364'	6452'	6452'	6452'
Survey Begins	6441'	7022'	7022'	7022'
Survey Ends	800'	5850'	5850'	6452'
Csg. Size	10-3/4"	7-5/8"	7-5/8"	7-5/8"
Bit Size	9-7/8"	6-3/4"	6-3/4"	6-3/4"

Mud Data - Type WATER BASE GAS DRILLED
CHEMICAL GEL

Weight	10.0			
Viscosity	70			
Ph.	@	@	@	@
Wtr. Loss cc/ min.	@	@	@	@
Res. @ Surface Temp.	3.95 @ 64 °F	@	@	@
Res. @ Max. Hole Temp.	2.2 @ 123 °F	@	@	@
Rmf.	2.5 @ 63 °F	@	@	@
Rmc.	3.85 @ 63 °F	@	@	@
Source Mud Sample	CIRCULATED			
Recorded By	K. QUINT	QUINT	QUINT	QUINT
Witnessed By	MR. ULLRICH	MR. FOLK	MR. FOLK	MR. FOLK
Logging Tool No.	9406			

BEFORE EXAMINER FISCHER
OR CONSERVATION COMMISSION
Case No. 1621
Exhibit No. 3

OPEN FLOW TEST DATA

DUAL COMPLETION

December 17, 1958

El Paso Natural Gas

Huerfano No. 103 (D)

990N, 1650W; 3-26-10

San Juan

New Mexico

Dakota

Undesignated

7-5/8

6446

2"

6867

6880

7000

7030 c/o 7014

Shut in 12/9/58

Sand - Oil Frac.

X

.75

12.365

5-1/2 liner 6213 - 7027

(G) 1077

1089

8

(D) 1702

1714

351

363

Calc.

778

74

.75

1.032

.630

Initial SIPT (G) = 1058 PSIG

Packer at 6270

Final SIPC (G) = 1087 PSIG

$12.365 \times 363 \times .9868 \times .9759 \times 1.032$

4460

2937796
2332512

$1.2594^{.75} \times 4460 = 1.1890 \times 4460$

5303

Frank Clark

Checked By M. W. Rischard

Louis D. Galloway
L. D. Galloway

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

WELL COMPLETION

DATE December 17, 1978

Operator El Paso Natural Gas		Lease Huerfano No. 103 (B)	
Location 990N, 1670W, 3-26-10		County San Juan	State New Mexico
Formation Dakota		Pool Undesignated	
Casing: Diameter 7-5/8	Set At: Feet 6446	Tubing: Diameter 2"	Set At: Feet 6867
Pay Zone: From 6880	To 7000	Total Depth 7030 c/o 7014	Shut in 12/9/78 Flow Through Tubing X
Stimulation Method Sand - Oil Frac.		Flow Through Casing	

Choke Size, Inches .75	Choke Constant: C 12.365	5-1/2 liner 6213 - 7027	
Shut-In Pressure, Casing, PSIG (a) 1077	- 12 = PSIA 1089	Days Shut-In 8	Shut-In Pressure, Tubing, PSIG (D) 1702
Flowing Pressure: P, PSIG 363	- 12 = PSIA 363	Working Pressure: P _w , PSIG Calc.	- 12 = PSIA 1714
Temperature: T, °F 74	n = .75	E _{pv} From Tables 1.032	Gravity .670

Initial SIFC (a) = 1055 PSIG

Final SIFC (a) = 1067 PSIG

Packer at 6270

$$\text{CHOKE VOLUME} = Q = C \times P_r \times F_v \times F_g \times F_{pv}$$

$$Q = 12.365 \times 363 \times .9868 \times .9759 \times 1.032$$

4460 MCF/D

$$\text{OPEN FLOW } A_{of} = Q \left(\frac{P_c^2}{P_c^2 - P_w^2} \right)^n$$

$$A_{of} = \left(\frac{2937796}{2332512} \right)^n$$

$$1.2594^{.75} \times 4460 = 1.1890 \times 4460$$

$$A_{of} = \underline{5303} \text{ MCF/D}$$

TESTED BY Frank Clark

WITNESSED BY

Checked By H. W. Richard

L. D. Galloway
L. D. Galloway

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE December 17, 1958

Operator El Paso Natural Gas		Lease Huerfano No. 103 (D)	
Location 990N, 1650W; 3-26-10		County San Juan	State New Mexico
Formation Dakota		Pool Undesignated	
Casing: Diameter 7-5/8	Set At: Feet 6446	Tubing: Diameter 2"	Set At: Feet 6867
Pay Zone: From 6880	To 7000	Total Depth 7030 c/o 7014	Shut in 12/9/58
Stimulant: Method Sand - Oil Frac.		Flow Through Tubing X	

Choke Size, Inches .75	Choke Cor. Start: C 12.365	5-1/2 liner 6213 - 7027	
Shut-in Pressure, Casing, PSIG (G) 1077	PSIA 1089	Days Shut-in 8	Shut-in Pressure, Tubing, PSIG (D) 1702
Flowing Pressure: F, PSIG 351	PSIA 363	Working Pressure, W, PSIG Calc.	PSIA 778
Temperature: T, °F 74	°F .75	E _{pv} From Tables 1.032	Gravity .630

Initial SIPT (G) = 1058 PSIG

Final SIPC (G) = 1087 PSIG

Packer at 6270

CHOKE VOLUME = $Q = C \times P_1 \times F_1 \times F_2 \times F_{pv}$

$$Q = 12.365 \times 363 \times .9868 \times .9759 \times 1.032$$

4460

MCF/D

$$\text{OPEN FLOW } Aof = Q \left(\frac{P_c^2}{P_s^2 - P_w^2} \right)^n$$

$$Aof = \left(\frac{2937796}{2332512} \right)^n$$

$$1.2594^{.75} \times 4460 = 1.1890 \times 4460$$

Aof 5303 MCF/D

TESTED BY Frank Clark

WITNESSED BY

Checked By M. W. Rischard

Louis D. Galloway
L. D. Galloway

EL PASO NATURAL GAS COMPANY
OPEN FLOW TEST DATA

DUAL COMPLETION

DATE **January 8, 1959**

Operator El Paso Natural Gas		Lease Huerfano 103 (G)	
Location 990N, 1650W; 3-26-10		County San Juan	State New Mexico
Formation Gallup		Pool Undesignated	
Casing Diameter 7-5/8	Set At: Feet 6446	Tubing Diameter 2"	Set At: Feet 6228
Pay Zone: From 6241	To 6265	Water Shut 7030 c/o 7014	Re Shut in 12/31/58
Stimulation Method Sand Oil Frac.		Flow Through Tubing X	

Choke Size, Inches .75	Choke Constant: C 12.365		
Shut-In Pressure, Casing, PSIG 1088	- 12 = PSIA 1100	Days Shut-In 9	Shut-In Pressure, Tubing, PSIG 1079
Flowing Pressure: P, PSIG 276	- 12 = PSIA 288		Working Pressure: P _w , PSIG 736
Temperature: T, °F 67	n .75		Gravity 1.035
			748
			.720

Initial SIPT (D) = 1792 psig

Packer at 6270

Final SIPT (D) = 1809 psig

CHOKE VOLUME = Q = C x P_s x F_v x F_g x F_p

$$Q = 12.365 \times 288 \times .9933 \times .9129 \times 1.035$$

3342

MCF/D

OPEN FLOW Aof = Q $\left(\frac{P_c^2}{P_c^2 - P_w^2} \right)^n$ *Gallup zone Tested 19.6 BBLS Oil For 3 Hour Test.*

$$\begin{array}{r} \times 8 \\ 15 \overline{) 120} \\ \underline{120} \\ 0 \end{array}$$

$$Aof = \left(\frac{1210000}{650496} \right)^n = 1.8601^{.75} \times 3342 = 1.5940 \times 3342$$

Aof **5327** MCF/D

TESTED BY **D. Mortensen**

WITNESSED BY

Checked By **S. V. Roberts**

Lewis D. Galloway
L. D. Galloway

T-27-N
R-10-W



- EL PASO NATURAL GAS COMPANY
EL PASO, TEXAS

FORM 7-132 (10-56)