

REPORT NO.
108780 DST 1

PAGE NO. 1

TEST DATE:

5-June-1988

STARTM

A Schlumberger Transient Analysis Report A Production System Analysis (NODALTM) Of A Flopetrol Johnston Drillstem Test

FLOPETROL JOHNSTON

Schlumberger

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Company: INEXCO OIL COMPANY

Well: BERRY HOBBS #1

JUN 08 1988

TEST IDENTIFICATION

Test Type MFE OH DST
Test No. One
Formation Upper Wolfcamp
Test Interval (ft) ... 10310 to 10383
Reference Depth Kelly Bushing

WELL LOCATION

Field Wildcat
County Lea
State New Mexico
Sec/Twn/Rng 17/ 16s/ 36w
Elevation (ft)

LL&E PROD. DEPT.
HOUSTON, TEXAS

HOLE CONDITIONS

Total Depth (MD/TUD)(ft) . 10383
Hole Size (in) 7 7/8
Casing/Liner I.D. (in) ... --
Perf'd Interv./Nt Pay(ft). -- / 17
Shot Density/Diameter(in). --

MUD PROPERTIES

Mud Type KCL cut brine
Mud Weight (lb/gal) 9.6
Mud Resistivity (ohm.m) .. 0.20 at 70 F
Filtrate Resistiv.(ohm.m). --
Filtrate Chlorides (ppm) . 44,000

INITIAL TEST CONDITIONS

Initial Hydrostatic (psi). 5350
Gas Cushion Type None
Surface Pressure (psi) ... --
Liquid Cushion Type None
Cushion Length (ft) --

TEST STRING CONFIGURATION

Pipe Length (ft)/I.D.(in). 9456 / 3.83
Collar Length ft/I.D.(in). 820 / 2.25
Packer Depths (ft) 10304, 10310
Bottomhole Choke Size(in). 15/16
Gauge Depth (ft)/Type 10376 / J-200

NET PIPE RECOVERY

Volume	Fluid Type	Properties
1294 feet	Oil	39 API at 70 F
(recovery	was reverse	circulated)

NET SAMPLE CHAMBER RECOVERY

Volume	Fluid Type	Properties
4.17 SCF	Gas	Corrected to Pwf
1020 cc	Oil	40 API at 70 F
Press. 1234	GOR: 650	GLR: 650

VALIDATION RESULTS

Model of Behavior Dual Porosity
Fluid Type Used Oil
Reservoir Pressure (psi) . 3948 (FSI)
Transmissivity (md.ft/cp) 56.13
Permeability (md) 1.91
Skin Factor/Damage Ratio . -2.13 / 0.58
Storativity Ratio
Interporosity Flow Coeff..
Distance to Anomaly (ft).
Investigation Radius (ft). 70
Potentiometric Surf. (ft).

ROCK/FLUID/WELLBORE PROPERTIES

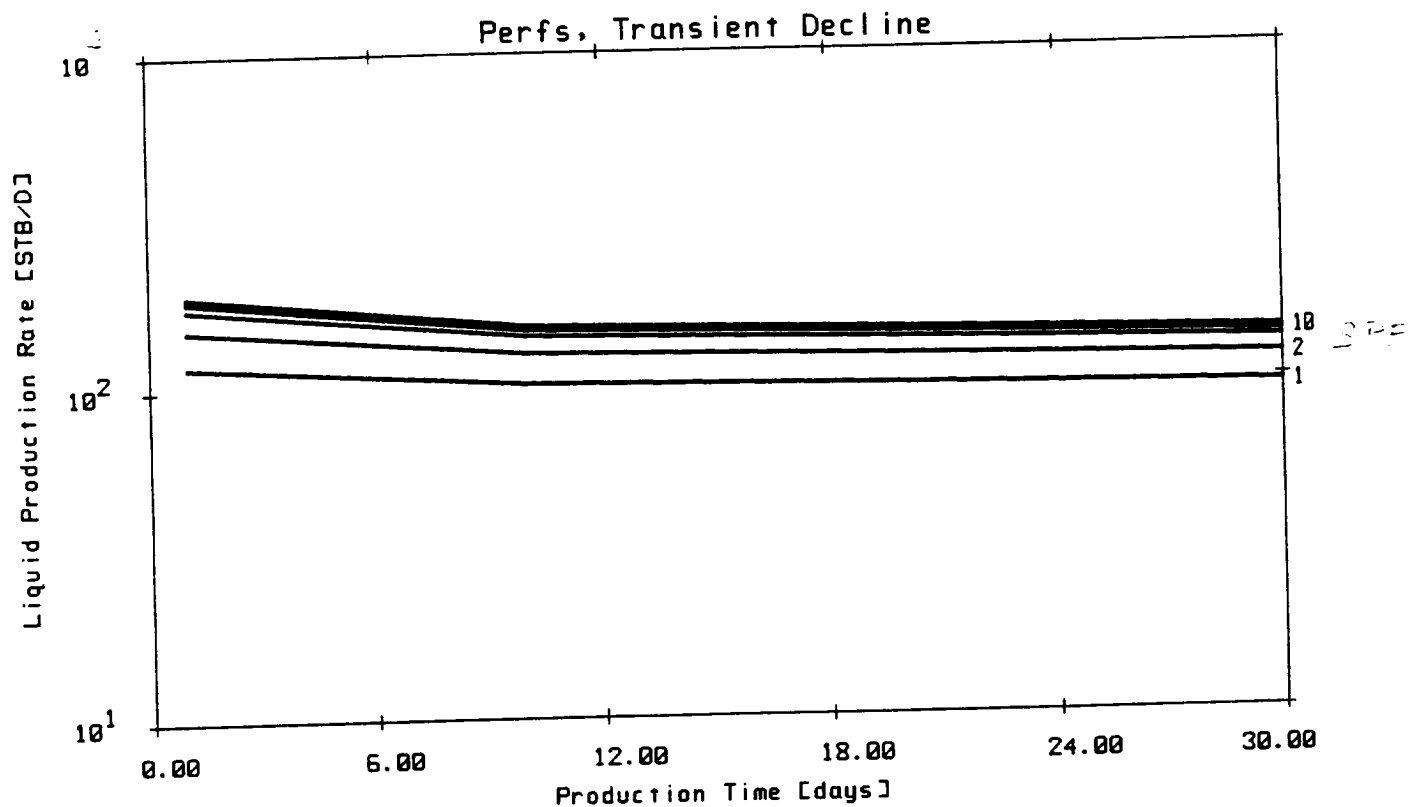
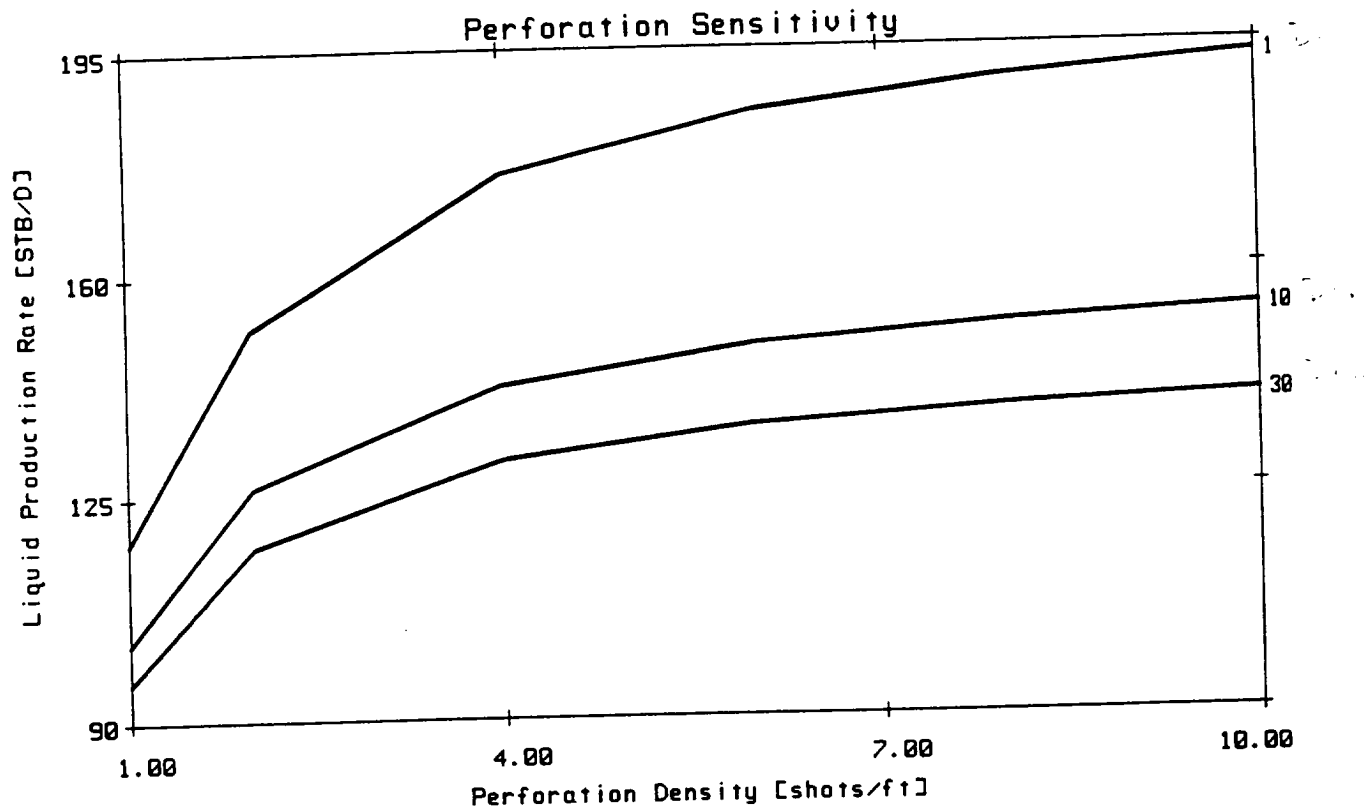
Oil Density (deg. API) ... 39.2
Basic Solids (%)
Gas Gravity 0.65 (est)
Water Cut (%) None
Viscosity (cp) 0.58
Tot. Compress. (1/psi) ... 1.9 E-05
Porosity (%) 8
Reservoir Temperature (F). 150
Form.Val.Factor (bbl/STB). 1.30

PRODUCTION RATE DURING TEST: 282 Bbls/day

COMMENTS:

The results of the interpretation indicate that the well is in an apparent dual porosity (naturally fractured) system with fair effective permeability and with no wellbore damage at the time and conditions of the test. The difference in the shutin pressure extrapolations is believed to be due to the non-homogeneous nature of the system and not an indication of depletion.

1993



1

2

3

ΔT (MIN)

HORNER PLOT

FIELD REPORT NO. 108780
INSTRUMENT NO. J-1706

COMPANY : INEXCO OIL COMPANY

WELL : BERRY HOBBS #1

SHUTIN #2 : FINAL FLOW PRESSURE: 1233.65 PSIA

PLOT ELAPSED TIME RANGE: 192.6 TO 434.7 MIN

PLOT ΔT TIME RANGE: 0.2 TO 242.3 MIN

PRODUCING TIME (T_p): 130.3 MIN

SHUTIN PRESSURE [PSIA]

1

$M = -1062$
 $P_o = 3948$ PSIA

FLOPETROL JOHNSTON

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$\text{LOG} \left[\frac{T_p + \Delta T}{\Delta T} \right]$

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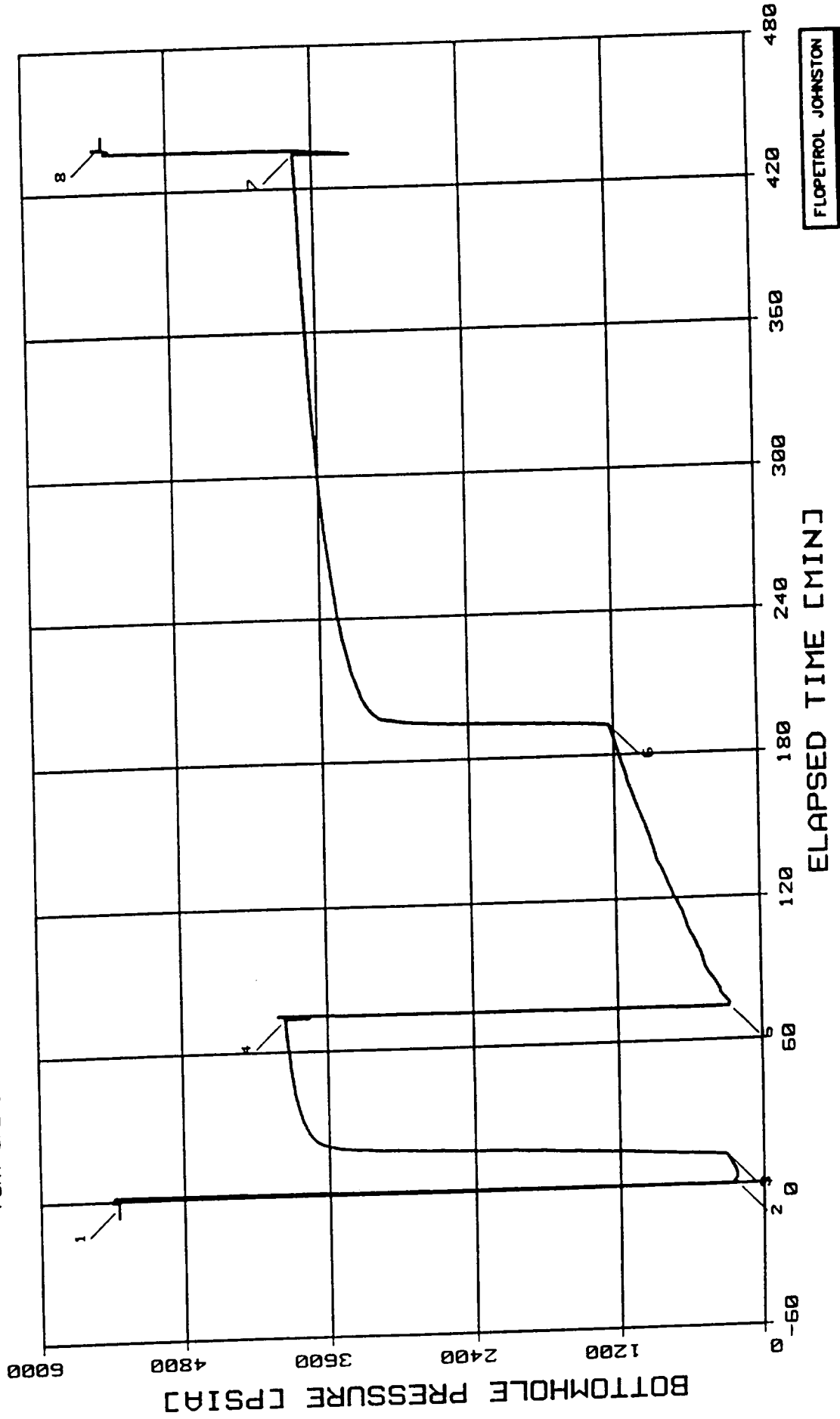
AUG 18 1963

OLD
HONOR OFFICE

BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 108780
INSTRUMENT NO. J-1706
DEPTH : 10376 FT
CAPACITY : 6400 PSI
PORT OPENING : OUTSIDE

COMPANY : INEXCO OIL COMPANY
WELL : BERRY HOBBS #1



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