

REPORT NO.
110807 DST 1

PAGE NO. 1

TEST DATE:
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STAR™

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

FLOPETROL JOHNSTON

Schlumberger

Company: STANDARD OIL PRODUCTION CO.

Well: SHIPP "11" #1

TEST IDENTIFICATION

Test Type MFE OH DST
Test No. One
Formation Strawn
Test Interval (ft) ... 11330 to 11547
Reference Depth Kelly Bushing

WELL LOCATION

Field
County Lea
State New Mexico
Elevation (ft) 3745 (G.L.)

HOLE CONDITIONS

Total Depth (MD/TVD)(ft) . 11547
Hole Size (in) 7 7/8
Casing/Liner I.D. (in) ... --
Perf'd Interv./Nt Pay(ft). -- / 217
Shot Density/Diameter(in). --

MUD PROPERTIES

Mud Type Salt Water Gel
Mud Weight (lb/gal) 9.5
Mud Resistivity (ohm.m) .. 0.18 at 70 F
Filtrate Resistiv.(ohm.m). --
Filtrate Chlorides (ppm) . 40,000

INITIAL TEST CONDITIONS

Initial Hydrostatic (psi). 5745
Gas Cushion Type None
Surface Pressure (psi) ... --
Liquid Cushion Type None
Cushion Length (ft) --

TEST STRING CONFIGURATION

Pipe Length (ft)/I.D.(in). 10645 / 3.83
Collar Length ft/I.D.(in). 638 / 2.25
Packer Depths (ft) 11324. 11330
Bottomhole Choke Size(in). 15/16
Gauge Depth (ft)/Type 11541 / J-200

NET PIPE RECOVERY

Volume	Fluid Type	Properties
495 feet	Mud	Oil and Gas cut
		Rw 0.19 at 72 F
		38,000 PPM

NET SAMPLE CHAMBER RECOVERY

Volume	Fluid Type	Properties
1.20 SCF	Gas	
1380 cc	Oil	45.2 API at 60 F
20 cc	Mud	
Press. 130	GOR: 138	BLR: 138

VALIDATION RESULTS

Model of Behavior Homogeneous
Fluid Type Used Oil
Reservoir Pressure (psi) . 4680
Transmissivity (md.ft/cp) 0.40
Permeability (md) 0.003
Skin Factor/Damage Ratio . 4.36 / 3.22
Storage Ratio
Interporosity Flow Coeff..
Distance to Anomaly (ft).
Investigation Radius (ft). 3
Potentiometric Surf. (ft).

ROCK/FLUID/WELLBORE PROPERTIES

Oil Density (deg. API) ... 45.2
Basic Solids (%)
Gas Gravity 0.65 (est)
Water Cut (%) None
Viscosity (cp) 1.39
Tot. Compress. (1/psi) ... 2.1 E-05
Porosity (%) 2
Reservoir Temperature (F). 172
Form.Vol.Factor (bbl/STB). 1.06

PRODUCTION RATE DURING TEST: 2 Bbls/day

COMMENTS:

The results of the interpretation indicate that the well is in an apparent homogeneous system with low effective permeability and with some wellbore damage at the time and conditions of the test. NODAL(tm) plots are included to show the system sensitivity to perforation shot density, assuming all of the wellbore damage is removed and the well is "pumped off".