

REPORT NO.
00608F

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TEST DATE:
25-FEB-86

WELL PERFORMANCE TESTING™ REPORT

A Production System Analysis (NODAL™)
Based On Model Verified™ Interpretation

FLOPETROL JOHNSTON

Schlumberger

Company: BHP PETROLEUM

Well: LAPLATA DEEP WATER WELL #1

TEST IDENTIFICATION

Test Type MFE CH DST-SSDP
Test No. 2
Formation MORRIS
Test Interval (ft) 6880 - 7219
Reference Depth

WELL LOCATION

Field WILD CAT
County SAN JUAN
State NEW MEXICO
Sec/Twn/Rng S23T32NR13W
Elevation (ft) 6014

HOLE CONDITIONS

Total Depth (MD/TUD) (ft) 339/319
Hole Size (in) 6 1/8
Casing/Liner I.D. (in) 7"-26#/FT.
Perf'd Interval/Net Pay (ft).. 339/319
Shot Density/Diameter (in) ... 4/0.450

MUD PROPERTIES

Mud Type WATER
Mud Weight (lb/gal) 8.2
Mud Resistivity (ohm.m) 10 @ 60 DEG. F
Filtrate Resistivity (ohm.m)..
Filtrate Chlorides (ppm) 500

INITIAL TEST CONDITIONS

Initial Hydrostatic (psi) 1490.47
Gas Cushion Type NONE
Surface Pressure (psi) --
Liquid Cushion Type NONE
Cushion Length (ft) --

TEST STRING CONFIGURATION

Pipe Length (ft)/I.D. (in) ... 6455/2.76
Collar Length (ft)/I.D. (in).. 386/2.0
Packer Depths (ft) 6880
Bottomhole Choke Size (in)87
Gauge Depth (ft)/Type 6885/MECHANICAL

NET PIPE RECOVERY

Volume	Fluid Type	Properties
20.023 BBLs.	WATER	.19 @ 60 DEG. F.
		46000 PPM CL.
		(BASED ON PWF)

NET SAMPLE CHAMBER RECOVERY

Volume	Fluid Type	Properties
2200 CC	WATER	.19 @ 58 DEG. F.
		42000 PPM CL.
Pressure: 80		GOR: --
		GLR: --

INTERPRETATION RESULTS

Model of Behavior HOMOGENEOUS
Fluid Type Used for Analysis . WATER
Reservoir Pressure (psi) 2478.2
Transmissibility (md.ft/cp) .. 53.9
Effective Permeability (md) .. 0.060
Skin Factor/Damage Ratio -2.19
Storativity Ratio
Interporosity Flow Coeff.
Distance to an Anomaly (ft) .. ASSUMED 1000're
Radius of Investigation (ft).. 20
Potentiometric Surface (ft) ..

ROCK/FLUID/WELLBORE PROPERTIES

Oil Density (deg. API)
Basic Solids (%)
Gas Gravity
Water Cut (%) 100
Viscosity (cp) 0.377
Total Compressibility (1/psi). 7.67E-06
Porosity (%) 14
Reservoir Temperature (F) 186
Form.Vol.Factor (bbl/STB) 1.03

PRODUCTION RATE DURING TEST: 268.2 BWPD LAST

COMMENTS:

THE SENSITIVITY PLOTS (PAGES 2 - 4) ASSUME THAT A CONSTANT PRESSURE BOUNDARY EXISTS 1000 FT. AWAY FROM THE WELLBORE. THESE SENSITIVITY PLOTS PREDICT PRODUCTION RATES AND CUMULATIVE RECOVERIES FOR VARIOUS BOTTOMHOLE PRESSURES, WITH THE WELL ON PUMP. SEE SENSITIVITY PLOTS FOLLOWING.