

Sec 35, 15S, 33 = unit M

STARTM

FLOPETROL JOHNSTON

Schlumberger

REPORT NO.
102871 DST 1

PAGE NO. 1

TEST DATE:

14-Aug-1988

A Schlumberger Transient Analysis Report Of A Flopetrol Johnston Drillstem Test

Company: SANTA FE ENERGY		Well: <u>NH 35 #2</u>																																								
TEST IDENTIFICATION Test Type MFE OH SPRO TEL Test No. One Formation Wolfcamp Test Interval (ft) ... 10080 to 10194 Reference Depth Kelly Bushing		WELL LOCATION Field Wildcat County Lea State New Mexico Elevation (ft) 4173																																								
HOLE CONDITIONS Total Depth (MD/TUD)(ft) . 10194 Hole Size (in) 7 7/8 Casing/Liner I.D. (in) ... -- Perf'd Interv./Nt Pay(ft). -- / 3 Shot Density/Diameter(in). --		MUD PROPERTIES Mud Type Fresh Water Gel Mud Weight (lb/gal) 8.7 Mud Resistivity (ohm.m) .. 1.05 at 80 F Filtrate Resistiv.(ohm.m). -- Filtrate Chlorides (ppm) . 3,030																																								
INITIAL TEST CONDITIONS Initial Hydrostatic (psi). 4714 Gas Cushion Type None Surface Pressure (psi) ... -- Liquid Cushion Type Fresh Water Cushion Length (ft) 182 (0.88 Bbl)		TEST STRING CONFIGURATION Pipe Length (ft)/I.D.(in). 9575 / 3.83 Collar Length ft/I.D.(in). 464 / 2.25 Packer Depths (ft) 10074, 10080 Bottomhole Choke Size(in). 1/2 Gauge Depth (ft)/Type 10189 / J-200																																								
NET PIPE RECOVERY <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Volume</th> <th style="width: 30%;">Fluid Type</th> <th style="width: 50%;">Properties</th> </tr> </thead> <tbody> <tr> <td>182 feet</td> <td>Cushion</td> <td>Rw 2.6 at 80 F</td> </tr> <tr> <td></td> <td></td> <td>1,000 PPM</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Volume	Fluid Type	Properties	182 feet	Cushion	Rw 2.6 at 80 F			1,000 PPM										NET SAMPLE CHAMBER RECOVERY <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Volume</th> <th style="width: 30%;">Fluid Type</th> <th style="width: 50%;">Properties</th> </tr> </thead> <tbody> <tr> <td>Trace</td> <td>Oil</td> <td></td> </tr> <tr> <td>2100 cc</td> <td>Mud</td> <td>Rw 1.05 at 80 F</td> </tr> <tr> <td></td> <td></td> <td>3,000 PPM</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2">Press. 65</td> <td>GOR: GLR:</td> </tr> </tbody> </table>		Volume	Fluid Type	Properties	Trace	Oil		2100 cc	Mud	Rw 1.05 at 80 F			3,000 PPM							Press. 65		GOR: GLR:
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VALIDATION RESULTS Model of Behavior Fluid Type Used Reservoir Pressure (psi) . Transmissivity (md.ft/cp) Permeability (md) Skin Factor/Damage Ratio . Storativity Ratio Interporosity Flow Coeff.. Distance to Anomaly (ft). Investigation Radius (ft). Potentiometric Surf. (ft).		ROCK/FLUID/WELLBORE PROPERTIES Oil Density (deg. API) ... Basic Solids (%) Gas Gravity Water Cut (%) Viscosity (cp) Tot. Compress. (1/psi) ... Porosity (%) 3 Reservoir Temperature (F). 141 Form.Vol.Factor (bbl/STB).																																								

PRODUCTION RATE DURING TEST: --

COMMENTS:

This test was mechanically successful but the zone did not produce any volumes of oil or gas.

The general character of the buildup plots suggest that the zone has low effective permeability and no wellbore damage at the time and conditions of the test.