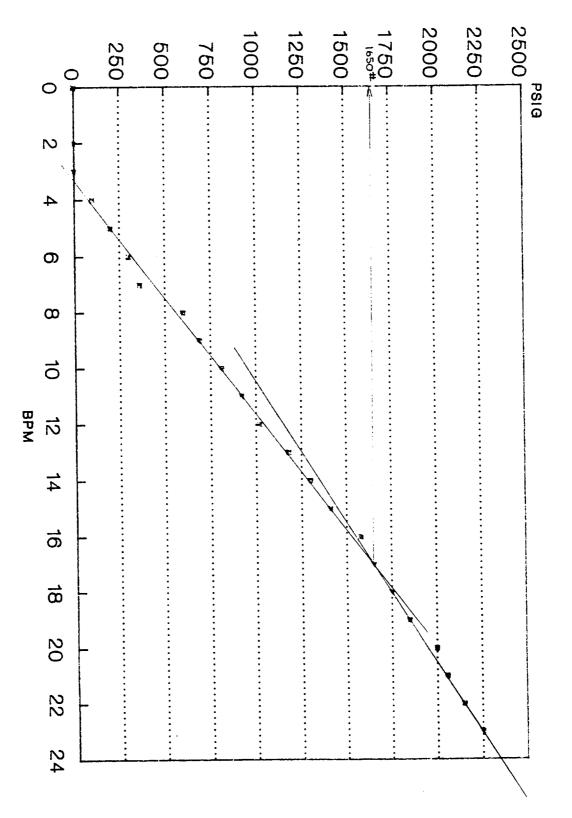
PUMP MESA SWD #1

STEP RATE TEST

RESULTS



NEBU 503 STEP RATE TEST



12-04-90 Running 3-1/2" production tubing.

Lay down 3-1/2" tubing, rig up Smith Energy and Jay Wireline. Run pressure bomb in hole below lowest perf. Smith ran step-rate test, 2 BPM to 23 BPM:

BPM	<u>PSI</u>
0 2 3 4 5 6 7 8	0 0 100 200 300 360 600
9	690
10	810
11	920
12	1020
13	1180
14	1300
15	1410
16	1580
17	1650
18	1750
19	1850
20	2000
21	2060
22	2150
23	2250
ISIP	1500

762 Total Bbls

Shut in well, monitor pressure with downhole bomb for 4 hours. Pull pressure bomb, rig down slick line.

12-04-90 Wait on packer, rig up Basin Wireline and run packer (model FD1) with 6' mill-out extension with R nipple (2.75" ID) set at 8060'. POOH with wireline and rig down.

12-05-90 Rig released.

Run 261 jts (8060.58') 3-1/2" 9.3# J-55 EUE 8rd tubing, set at 8072.58'; model FB-1 packer at 8073.0'. Pick up. Lay down 1 jt. Pick up one 10' J-55 pup jt., one 8' J-55 pup jt., 1 Baker F nipple (2.81' ID), and 1 jt 3-1/2" space out. Install donut.