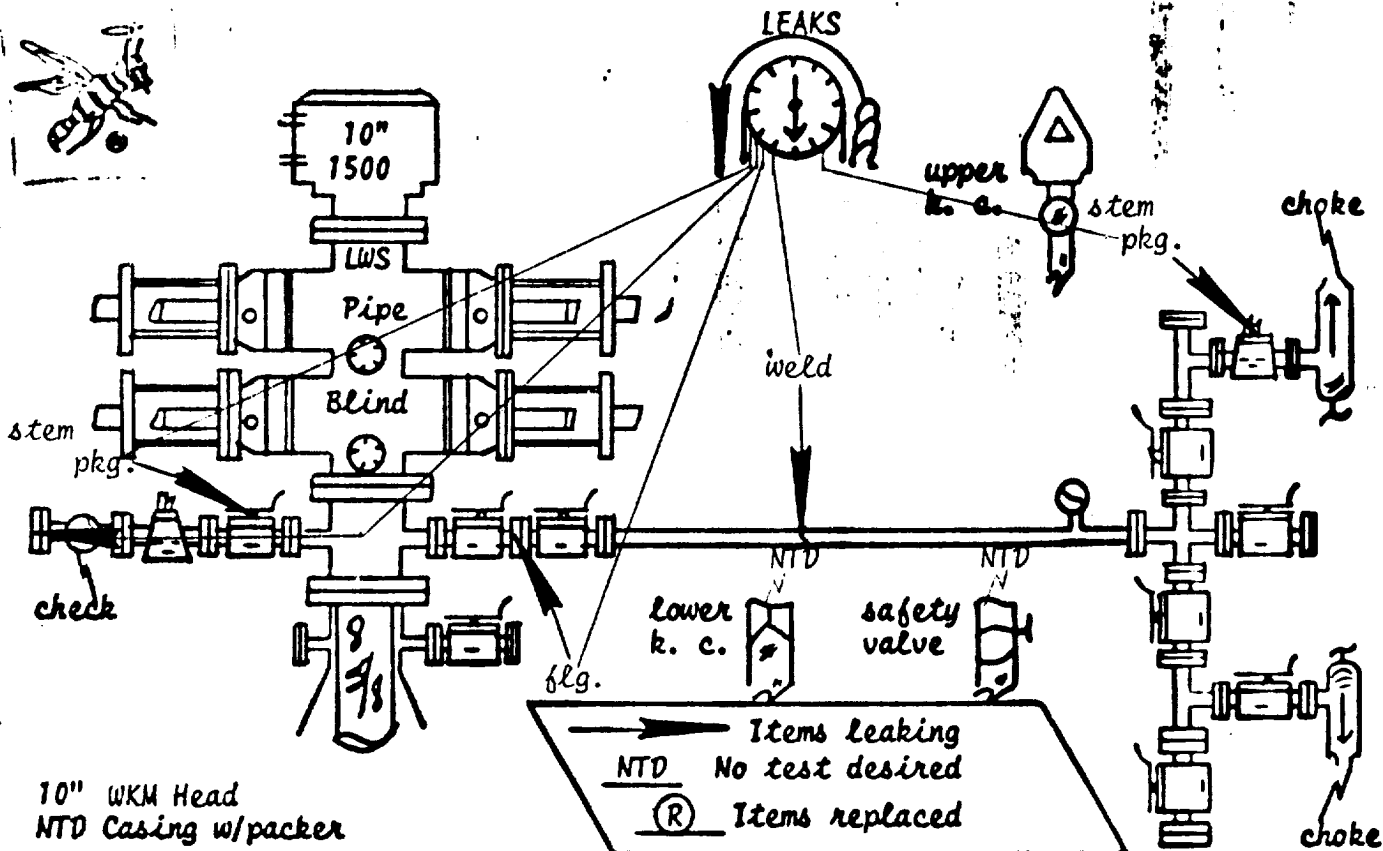


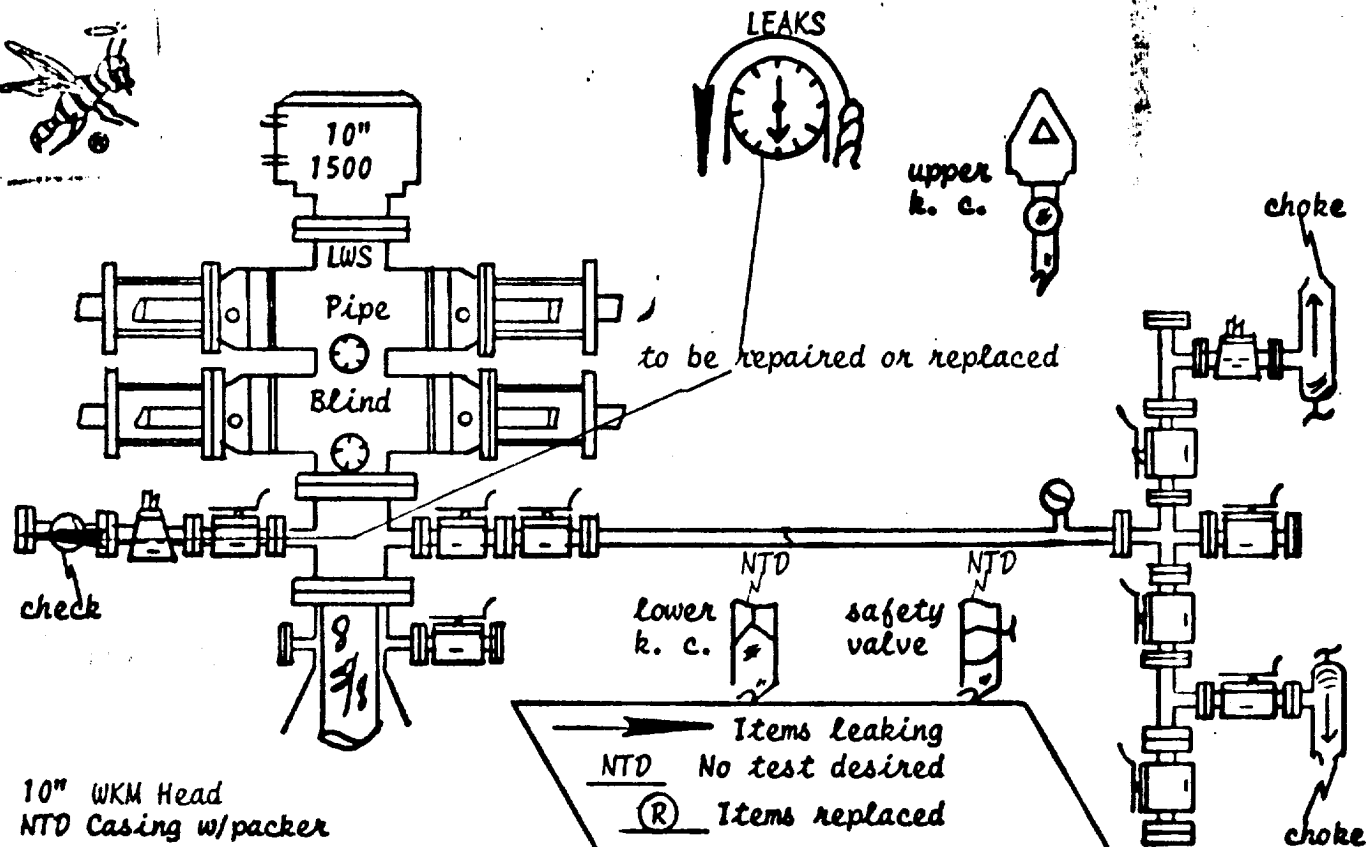
HYDROSTATIC PRESSURE TEST - B.O.P.'s  
Southern Union Production Co. - Sunco State #1  
July 2, 1976  
by  
Yellow Jacket Tools and Services, Inc.  
Carlsbad, New Mexico





Items Leaking DURING Testing

7/2/76



Items Leaking at the CONCLUSION of Testing

7/2/76

July 6, 1976

Southern Union Production Company

Dallas, Texas

Attn: Drilling Dept.

RE: BOP Test - Your Sunco State #1

Gentlemen:

We made a hydrostatic pressure test to captioned blowout control equipment on July 2, 1976, and wish to advise the following:

At the conclusion of testing:

Valve: Leak thru check valve off stack on kill line -  
to be repaired or replaced as needed.

Items of the blowout control equipment from top of test plug landed in casing head up through Hydril were tested to 2500# with separate tests being made at the pressure of 5000# to blind rams, pipe rams, upper kelly cock, choke-line, choke-manifold, and to the valves and fittings off the bop stack proper.

There were no visible leak to items tested at the conclusion of testing other than as mentioned above.

A delay was observed to operation of blowout control equipment at the conclusion of testing - closing lines to pipe rams bop leaked - (repaired as needed). Closures were made using closing unit pump only to the observed pressure of 2000# for test to ram type bops and 1500# for test to Hydril. Accumulators were pressured to 1600# at end of test. Control valves operated as indicated on closing unit manifold at end of test except - control valves to Hydril hooked up backwards - (to be repaired as needed). Bop extentions were not hooked up - rig coming out of hole.

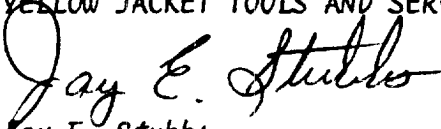
No test desired to top of casing using packer, nor to the lower kelly cock, or to the drill pipe safety valve.

Please contact us if you have any question concerning the above or any phase of this test.

We appreciate your business and we will welcome your suggestions as to how we may better serve you in the future.

Sincerely yours,

YELLOW JACKET TOOLS AND SERVICES, INC.

  
Jay E. Stubbs

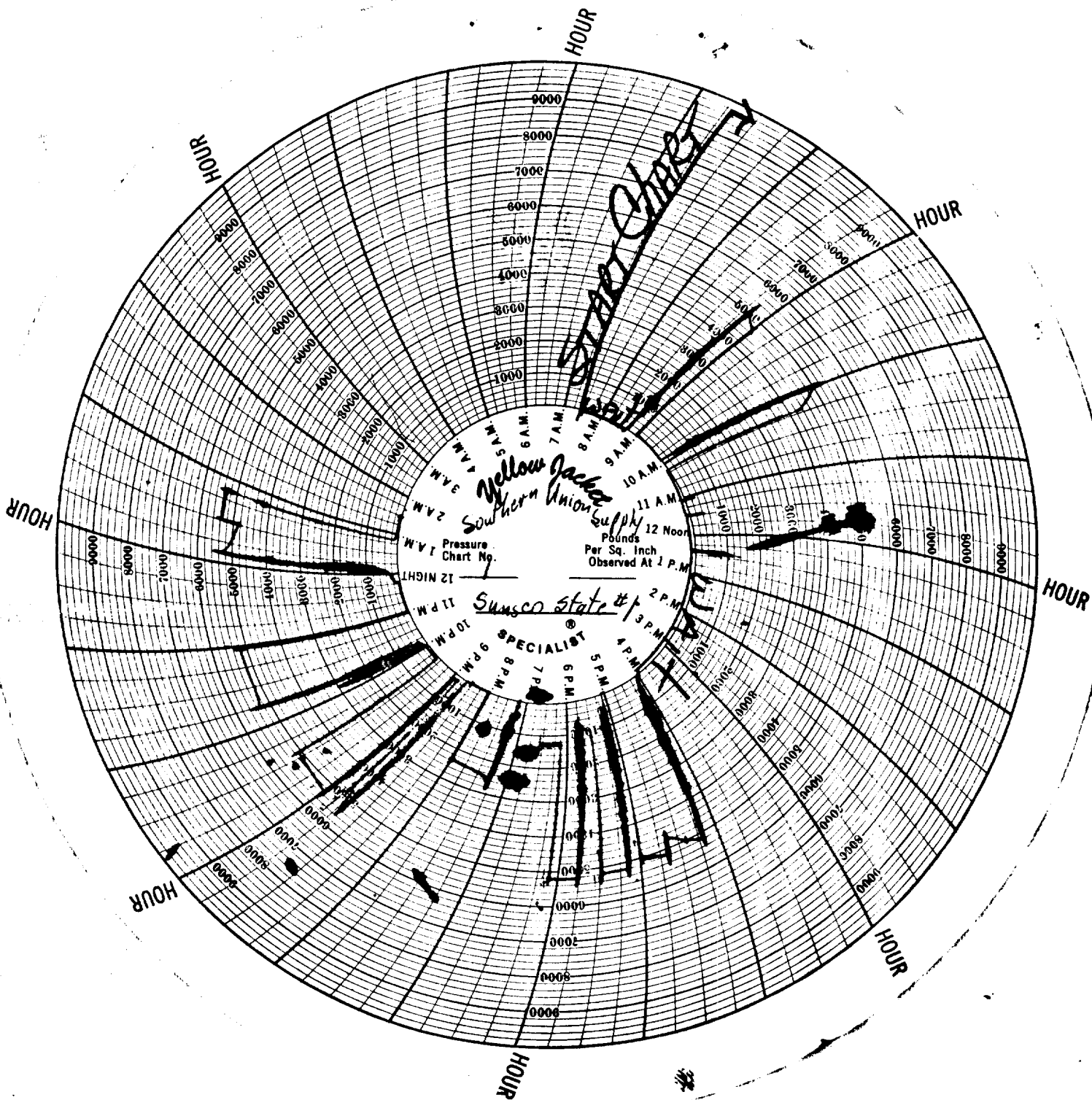
JES/jms

Attachments

CC: U. S. G. S.

Artesia, New Mexico

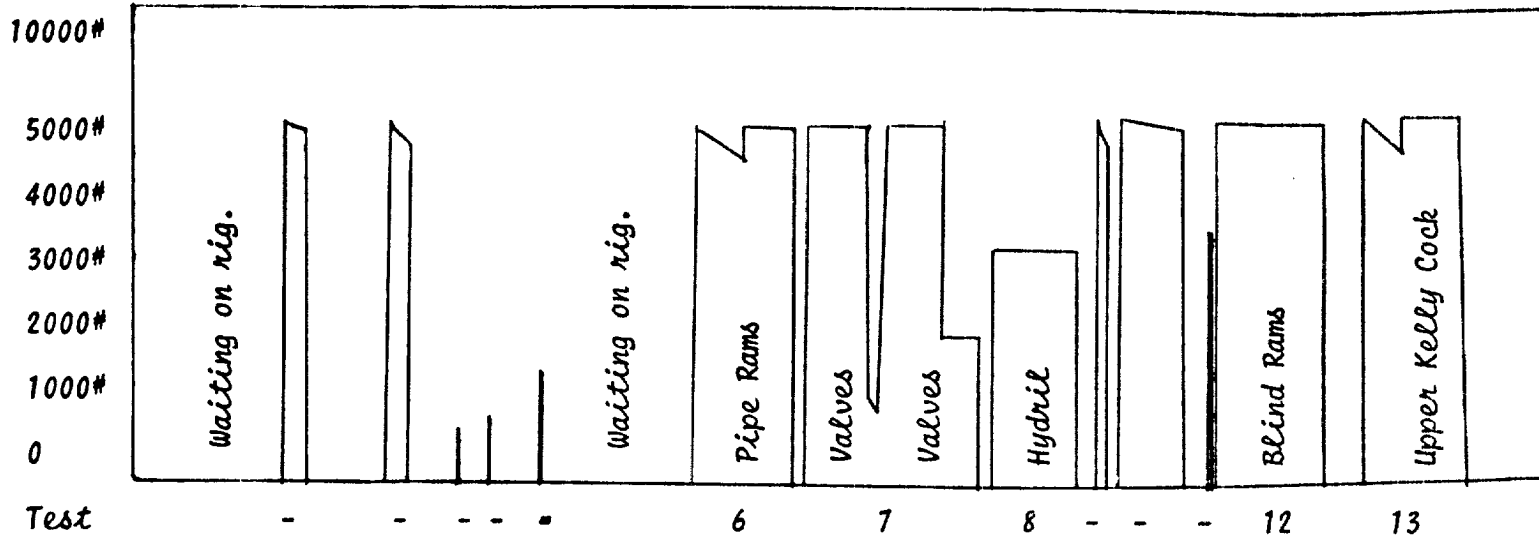




Contractor: Marcum Drlg. Rig 6

Test by Yellow Jacket Tools and Services, Inc.

## \*\*\*\*\*Transposition of the pressure recorder chart\*\*\*\*\*



The above is a transposition of the pressure recorder chart covering test to the blowout control equipment in service on your well drilling in the Buckeye, New Mexico Area, Dallas District, Texas. Test was made with test plug landed in casing head with the following test results:

Arrived location - rig coming out of hole.

Waiting on rig.

TESTING: Blind Rams with inside valve closed next to stack on kill line, outlet valve closed off choke-manifold cross, wing valve closed off manifold cross (pump side), and inside wing valve closed off manifold cross (pipe rack side) - pressure applied thru guage connection.

Test #1 Pressured to 5000# with leak to flange between inside valve and outside valve off stack on choke-line. Tightened.

Test #2 Repeated test. Pressured to 5000# with leak to stem packing of inside valve next to stack on kill line and leak to weld in middle of chokeline. Tightened stem packing and rewelded line.

- Test #3 Repeated test. Pressured to 500# with same leak to weld in middle of chokeline. Rewelded.
- Test #4 Repeated test. Pressured to 600# with same leak. Rewelded.
- Test #5 Repeated test. Pressured to 1000# with same leak.
- 

Waiting on rig.

TESTING: Pipe Rams with all inside valves closed next to stack - pressure applied down drill pipe.

- Test #6 Pressured to 5000# with loss of pressure; repressured to 5000# with loss of approximately 100# during first seven minutes then leveling out for remaining one minute of test.

NO VISIBLE LEAK. PRESSURE LEVELING OUT TOWARDS APPROXIMATELY 4900#.

---

TESTING: All outside valves off stack with pipe rams closed - pressure applied as before.

- Test #7 Pressured to 5000# with pressure steady and holding for the eight minutes of test.

NO VISIBLE LEAK. PRESSURE STEADY AT APPROXIMATELY 5000#.

Released and applied pressure against check valve off stack on kill line with leak thru check valve off stack on kill line; released pressure to 600# and closed outlet valve off choke-manifold cross and closed wing valve off manifold cross (pump side) and closed inside wing valve off manifold cross (pipe rack side) and opened outside valve off stack on chokeline; repressured to 5000# with

pressure steady and holding for the seven minutes of test. Released pressure to 1300# and closed Hydril and opened rams.

NO VISIBLE LEAK. PRESSURE STEADY AT APPROXIMATELY 5000#.

---

TESTING: Hydril with outside valve closed off stack on kill line, outlet valve closed off choke-manifold cross, wing valve closed off manifold cross (pump side), and inside wing valve closed off manifold cross (pipe rack side).

Test #8 Pressured to 2500# with loss of approximately 100# during first fourteen minutes then leveling out for remaining one minute of test.

NO VISIBLE LEAK. PRESSURE LEVELING OUT TOWARDS APPROXIMATELY 2400#.

---

RETEST: Blind Rams same as before but with outside valve closed off stack on kill line, outlet valve closed off choke-manifold cross, valve off tee closed off manifold cross (pump side), and outside wing valve and valve off tee closed off manifold cross (pipe rack side) - pressure applied thru guage connection.

Test #9 Pressured to 5000# with leak to stem packing of valve off tee off manifold cross (pump side). Tightened.

Test #10 Repeated test. Pressured to 5000# with same leak. Tightened.

Test #11 Repeated test. Pressured to 3000# with same leak. Tightened.

Test #12 Repeated test. Pressured to 5000# with loss of approximately 100# during first five minutes then leveling out for remaining nine minutes of test.

NO VISIBLE LEAK. PRESSURE LEVELING OUT TOWARDS APPROXIMATELY 4900#.

---

TESTING: Upper Kelly Cock with pressure applied at bottom of kelly.

Test #13 Pressured to 5000# with loss of pressure; repressured to 5000# with loss of approximately 50# during first seven minutes then leveling out for remaining one minute of test.

NO VISIBLE LEAK. PRESSURE STEADY AT APPROXIMATELY 5000#.

---

A delay was observed to operation of blowout control equipment at the conclusion of testing - closing lines to pipe rams bop leaked - (repaired as needed). Closures were made using closing unit pump only to the observed pressure of 2000# for test to ram type bops and 1500# for test to Hydril. Accumulators were pressured to 1600# at end of test. Control valves operated as indicated on closing unit manifold at end of test except - control valves to Hydril hooked up backwards - (to be repaired as needed). Bop extentions were not hooked up - rig coming out of hole. No test desired to top of casing using packer, nor to the lower kelly cock, or to the drill pipe safety valve.

YELLOW JACKET TOOLS AND SERVICES, INC.

CARLSBAD, NEW MEXICO

Test made by Earl Prosisie *Earl Prosisie*