

July 10, 1974

Atlantic Richfield Company

Hobbs, New Mexico

Attn: Drilling Dept.

RE: BOP Test - Your State B.R. #1

Gentlemen:

We made a hydrostatic pressure test to captioned blowout control equipment on July 8, 1974, and July 10, 1974, and wish to advise the following:

At the conclusion of testing:

- Valves: 1. Very slight leak thru drill pipe safety valve - to be serviced as needed.
2. Slight leak thru outside outlet valve off choke-manifold cross - to be repaired or replaced as needed.
3. Slight leak thru outside wing valve off manifold cross (pit side) - to be repaired or replaced as needed.
4. Slight leak thru inside valve next to stack on kill line - to be repaired or replaced as needed.
5. 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 3000# with separate tests being made at the pressure of 3000# to blind rams, pipe rams, upper kelly cock, chokeline, choke-manifold, and to the valves and fittings of the bop stack proper.

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

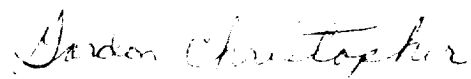
No delay was observed to operation of blowout control equipment at the conclusion of testing. Closures were made using both closing unit pump and accumulators to the observed pressure of 1500# for test to ram type bops and 1500# for test to Hydril. Accumulators were pressured to 1500# at end of test. Control valves operated as indicated on closing unit manifold at end of test. Bop extensions were not hooked up - rig nipping up.

No test desired to top of casing using packer, nor to the lower kelly cock.

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.


Gordon Christopher

GC/fg

Attachments

cc: U. S. G. S.

Artesia, New Mexico

Test #2 Pressured to 200# with pressure steady; repressured to 3000# with loss of approximately 50# during first seven minutes then leveling out for remaining three minutes of test. Released rpressure to 1200# and closed Hydril and opened rams.

NO VISIBLE LEAK. PRESSURE STEADY AT APPROXIMATELY 3000#.

TESTING: Hydril with valves same as before.

Test #3 Pressured to 3000# with loss of pressure; repressured to 3000# with loss of approximately 100# during first eight minutes then leveling out for remaining two minutes of test.

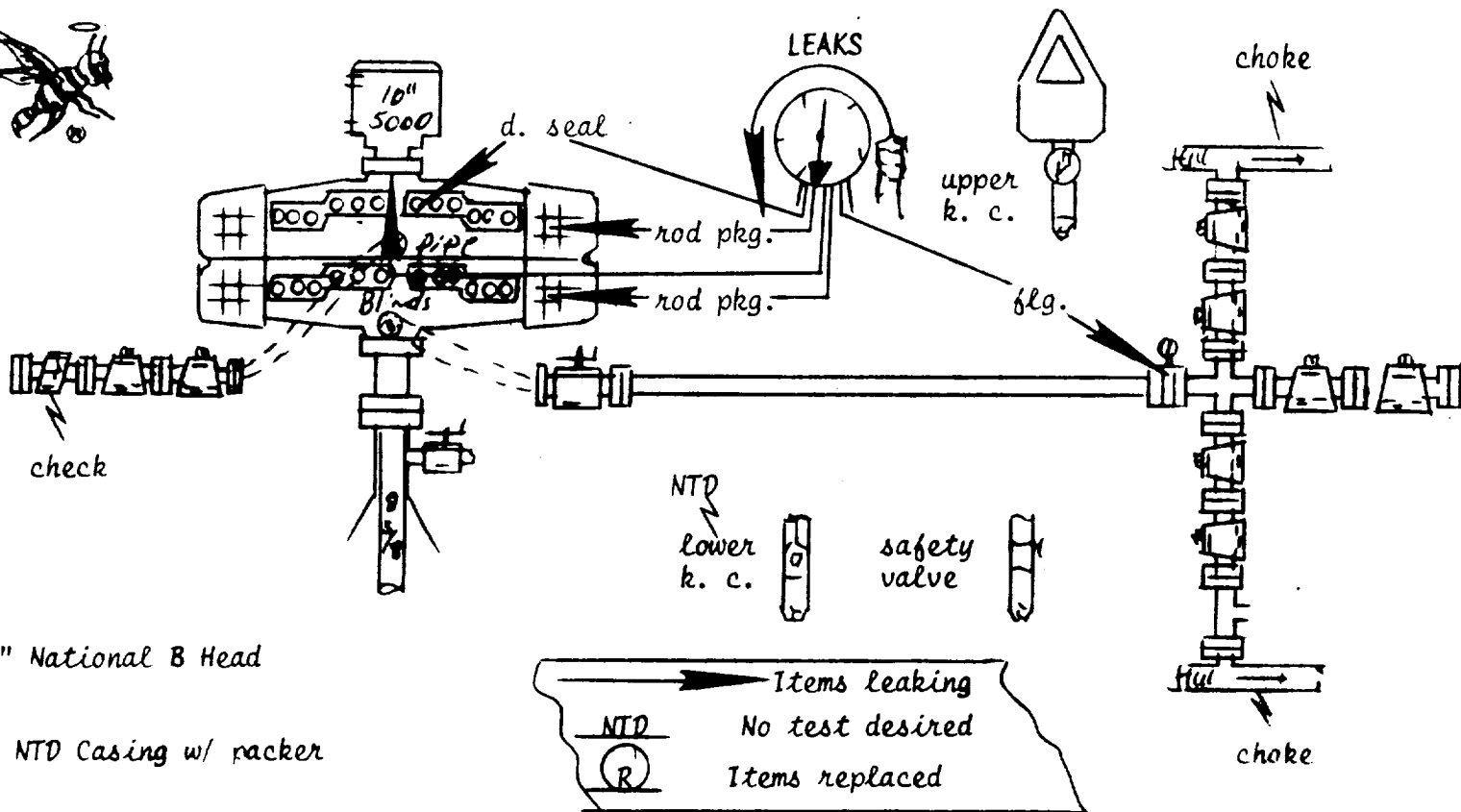
NO VISIBLE LEAK. PRESSURE LEVELING OUT TOWARDS APPROXIMATELY 2900#.

No delay was observed to operation of blowout control equipment at the conclusion of testing. Closures were made using closing unit pump only to the observed pressure of 1500# for test to ram type bops and 1200# for test to Hydril. Accumulators were pressured to 1500# at end of test. Control valves operated as indicated on closing unit manifold at end of test. Bop extentions were not hooked up - rig replacing Hydril pack-off. No test deisred to top of casing using packer, nor to the upper kelly cock, to the lower kelly cock, to the drill pipe safety valve, to the check valve off stack on kill line, to the outside valve off stack on kill line, to the valve next to stack on chokeline, or to the outside valves off choke-manifold.

YELLOW JACKET TOOLS AND SERVICES, INC.

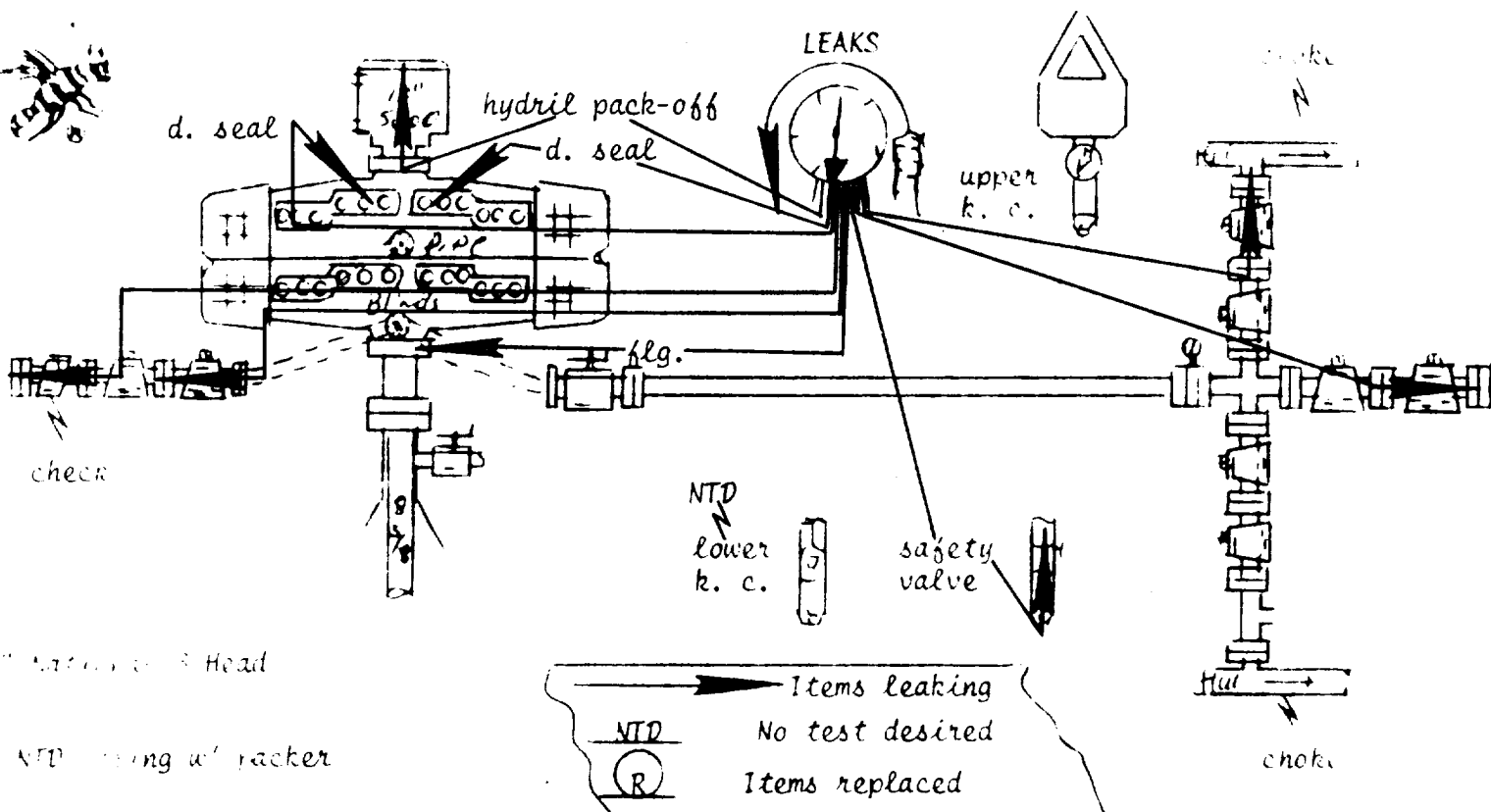
ODESSA, TEXAS

Test made by Hubert Nelms *Hubert Nelms*



Items Leaking DURING Testing

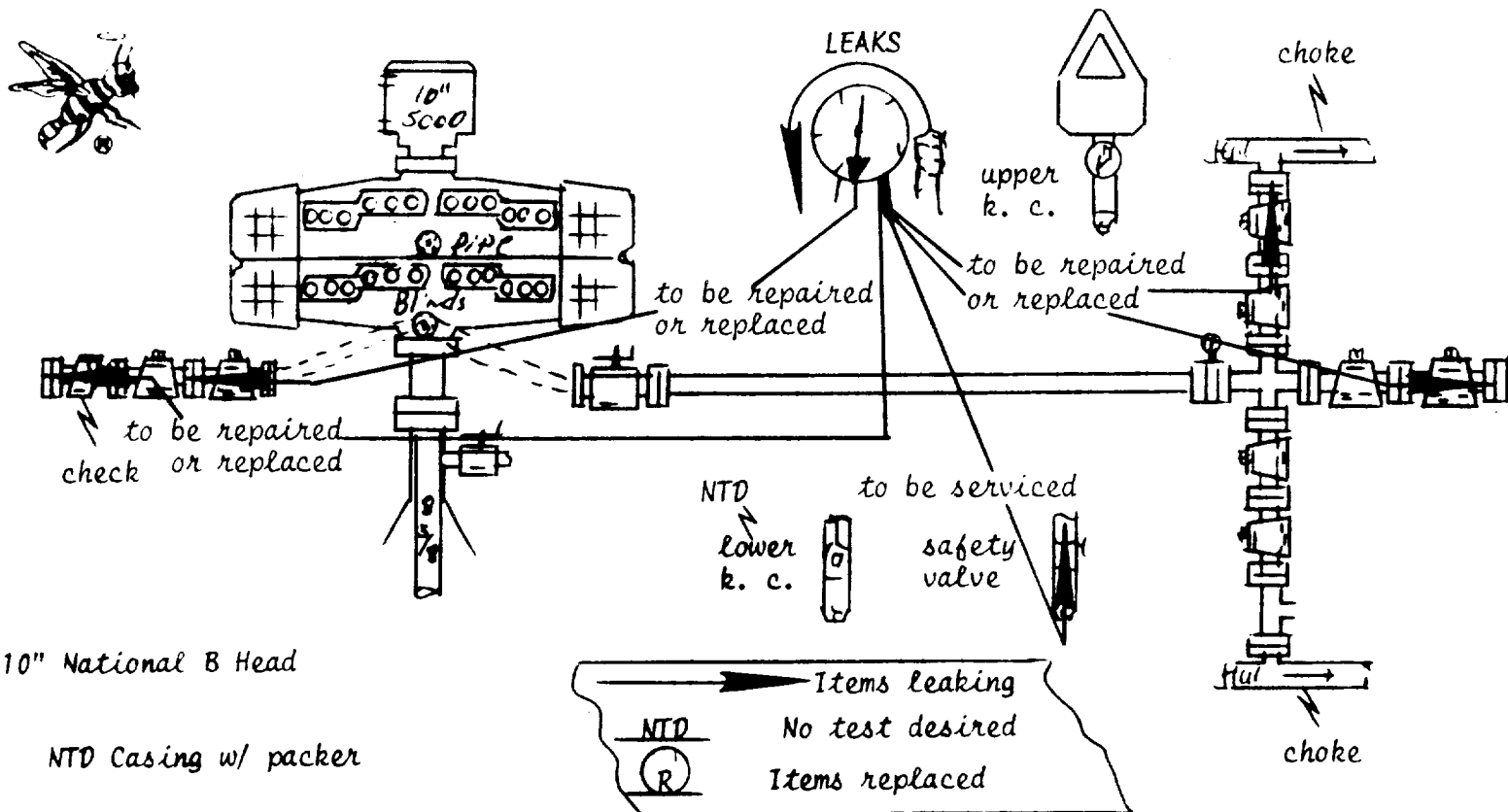
7/8/74



Items Leaking DURING Testing

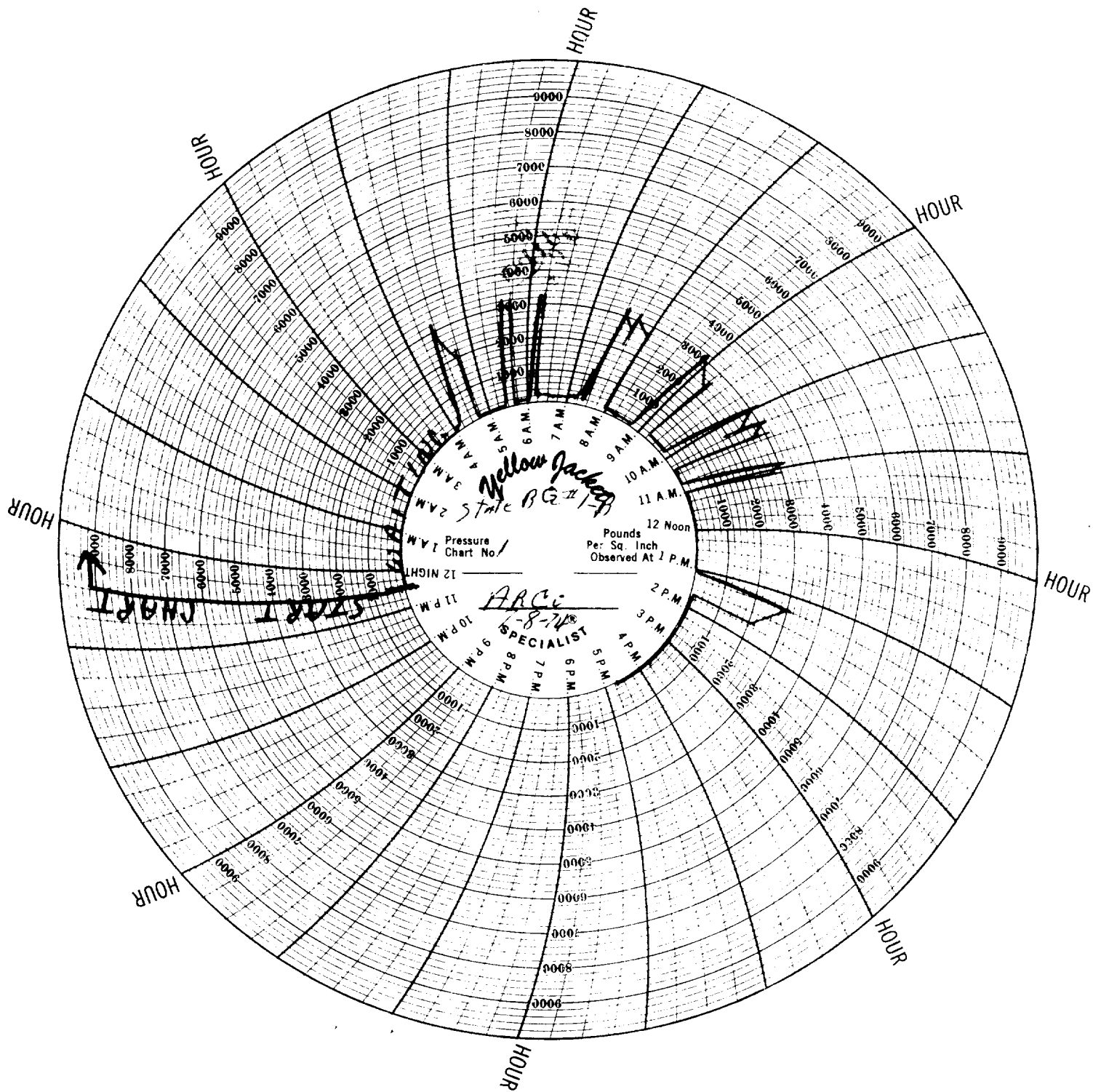
7/10/74

BLOWOUT CONTROL EQUIPMENT.....ATLANTIC RICHFIELD COMPANY.....STATE B.R. #1



Items Leaking at the CONCLUSION of Testing

7/10/74



Details of bop test

Altantic Richfield Company

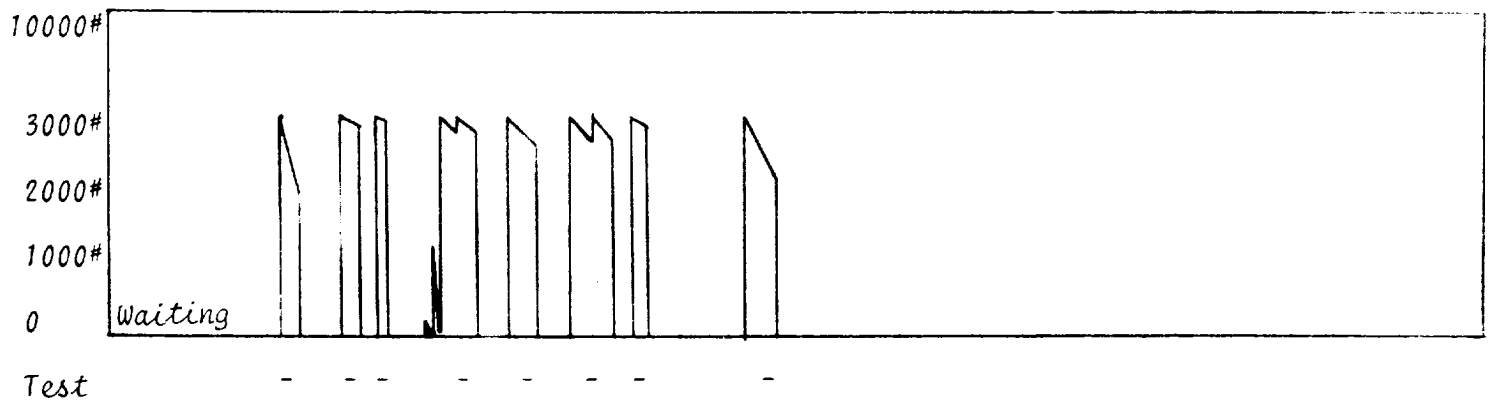
State B.R. #1

7/8/74

Contractor: Delta Drlg. Rig 60

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 Carlsbad Area, Hobbs District, New Mexico. Test was made with test plug landed in casing head with the following test results:

Arrived location - rig nipping up.

TESTING: Blind Rams with all outside valves closed off choke-manifold cross - pressure applied thru guage connection.

Test #1 Pressured to 3000# with leak to flange at guage connection and leak to rod packing of blind rams bop (pit side). Tightened.

Test #2 Repeated test. Pressured to 3000# with same leak to flange at guage connection. Tightened.

Test #3 Repeated test. Pressured to 3000# with same leak.

TESTING: Pipe Rams with inside valve closed next to stack on kill line and valve closed next to stack on chokeline - pressure applied down drill pipe.

Test #4 Pressured to 100# and released air; repressured to 1000#

with loss of pressure; repressured to 3000# with loss of pressure; repressured to 3000# with leak thru pipe rams and leak to rod packing of pipe rams bop (pit side). Operated rams and tightened rod packing.

Test #5 Repeated test. Pressured to 3000# with same leak to rod packing of pipe rams bop (pit side). Tightened.

Test #6 Repeated test. Pressured to 3000# with same leak; repressured to 3000# with same leak and leak to door seal of pipe rams bop (pit side). Tightened.

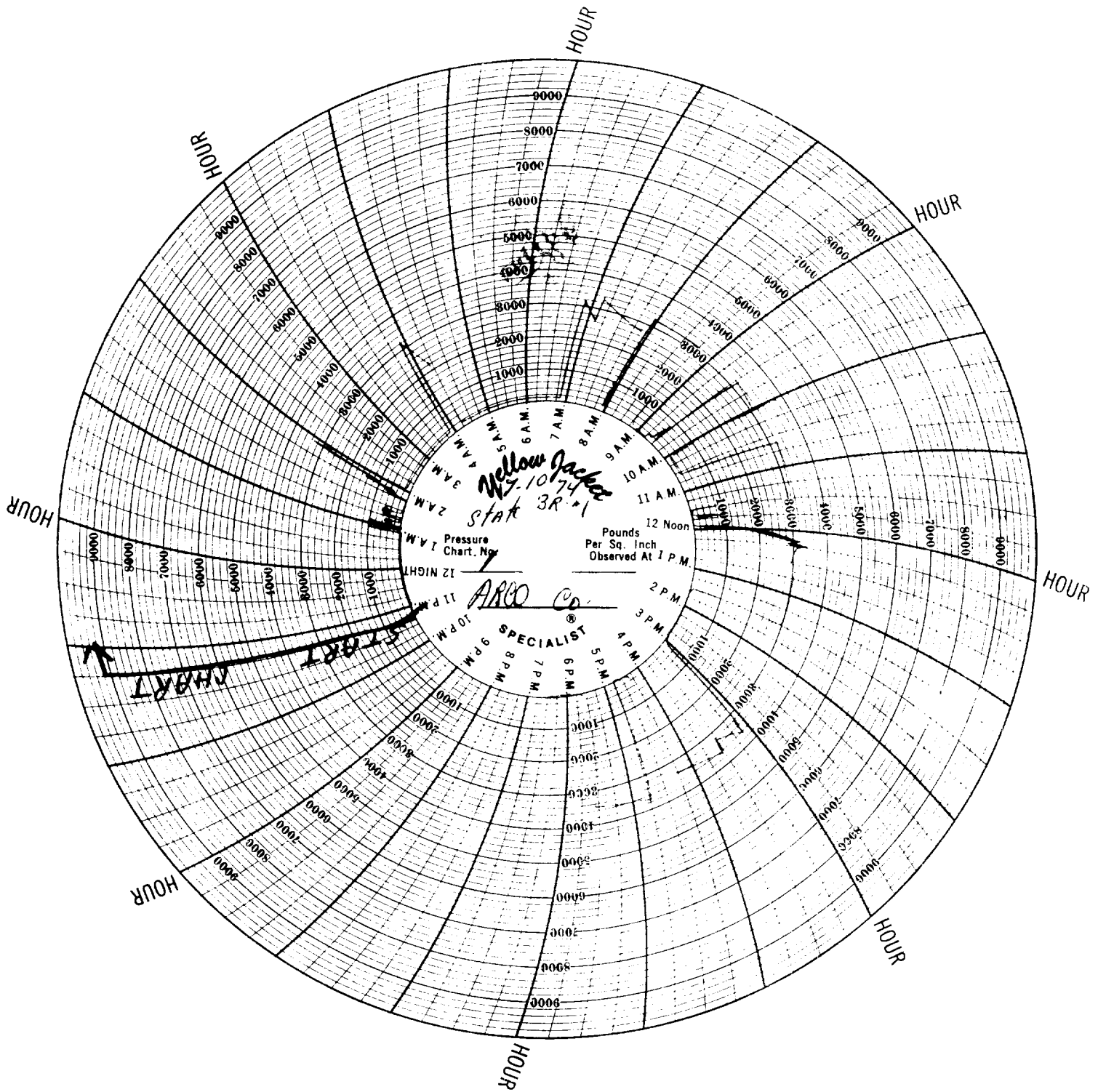
Test #7 Repeated test. Pressured to 3000# with same leak to rod packing of pipe rams bop (pit side). Tightened.

Test #8 Repeated test. Pressured to 3000# with same leak and leak to hydraulic seal on opening side of blind rams bop. DISCONTINUED TESTING AS DESIRED AT THIS TIME.

YELLOW JACKET TOOLS AND SERVICES, INC.

ODESSA, TEXAS

Test made by Dennie Cypert *Dennie Cypert*



Details of bop test

Atlantic Richfield Company

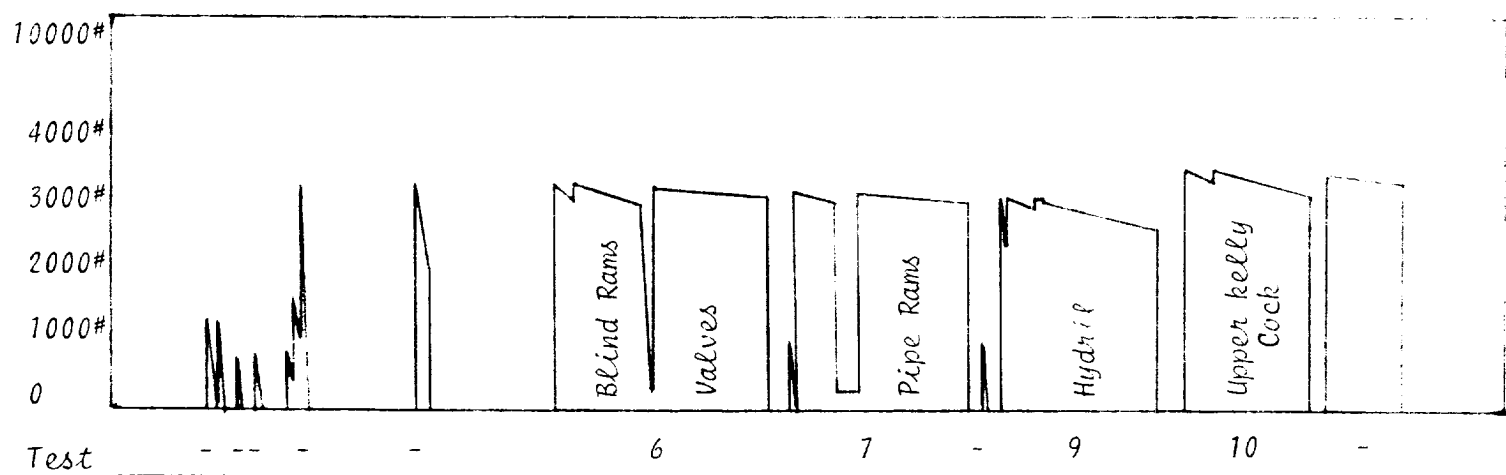
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7/10/74

Contractor: Delta Drlg. Rig 60

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 Carlsbad Area, Hobbs District, New Mexico. Test was made with test plug landed in casing head with the following test results:

Arrived location - rig nipping up.

TESTING: Blind Rams with inside valve closed next to stack on kill line and all outside valves closed off choke-manifold cross - pressure applied thru guage connection.

Test #1 Pressured to 1000# with loss of pressure; repressured to 1000# with loss of pressure. No visible external leak.

Test #2 Repeated test. Pressured to 600# with loss of pressure. No visible external leak.

Test #3 Repeated test. Pressured to 700# with closing lines to blind rams hooked up backwards. Corrected.

Test #4 Repeated test. Pressured to 700# with loss of pressure; repressured to 1400# with loss of pressure; repressured to 3000# with leak to flange between blind rams bop and spacer spool. Tightened.

Test #5 Repeated test. Pressured to 3000# with same leak. Tightened.

Test #6 Repeated test. Pressured to 3000# with loss of pressure; re-pressured to 3000# with slight leak thru outside outlet valve off choke-manifold cross and slight leak thru outside wing valve off manifold cross (pit side) and slight leak thru inside valve next to stack on kill line; released pressure to 200# and closed outside valve off stack on kill line and opened inside valve next to stack on kill line and closed inside outlet valve off choke-manifold cross and closed inside wing valve off manifold cross (pit side); repressured to 3000# with loss of approximately 100# during first fourteen minutes then leveling out for remaining two minute of test.

NO VISIBLE LEAK. PRESSURE LEVELING OUT TOWARDS APPROXIMATELY 2900#.

TESTING: Pipe Rams with outside valve closed off stack on kill line and valve closed next to stack on chokeline - pressure applied down drill pipe.

Test #7 Pressured to 800# with loss of pressure; repressured to 3000# with slight sweat to both door seals of pipe rams bop; tightened under pressure; repressured to 3000# with loss of approximately 100# during first seventeen minutes then leveling out for remaining one minute of test.

NO VISIBLE LEAK. PRESSURE LEVELING OUT TOWARDS APPROXIMATELY 2900#.

TESTING: Hydril with check valve closed off stack on kill line and valve closed next to stack on chokeline. Leak thru check valve off stack on kill line with no pressure being applied. Closed outside valve off stack on kill line.

Test #8 Pressured to 800# with leak to Hydril pack-off. Operated.

Test #9 Repeated test. Pressured to 5000# with loss of pressure; re-pressured to 3000# with loss of pressure; popped lower Hydril seals; repressured to 3000# with loss of approximately 300# during first eighteen minutes then leveling out for remaining one minute of test.

NO VISIBLE LEAK. PRESSURE LEVELING OUT TOWARDS APPROXIMATELY 2700#.

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

Test #10 Pressured to 3500# with loss of pressure; repressured to 3500# with loss of approximately 300# during first fourteen minutes then leveling out for remaining one minute of test.

NO VISIBLE LEAK. PRESSURE LEVELING OUT TOWARDS APPROXIMATELY 3200#.

TESTING: Drill Pipe Safety Valve (TIW) with pressure applied at bottom.

Test #11 Pressured to 3500# with very slight leak thru drill pipe safety valve.

No delay was observed to operation of blowout control equipment at the conclusion of testing. Closures were made using both closing unit pump and accumulators to the observed pressure of 1500# for test to ram type bops and 1500# for test to Hydril. Accumulators were pressured to 1500# at end of test. Control valves operated as indicated on closing unit manifold at end of test. Bop extensions were not hooked up - rig nipping up. No test desired to top of casing using packer, nor to the lower kelly cock.

YELLOW JACKET TOOLS AND SERVICES, INC.

ODESSA, TEXAS

Test made by Billie Brogden *[Signature]*