HYDROSTATIC PRESSURE TEST - B.O.P.'s

Atlantic Richfield Co. - State BQ #1

May 18, 1974

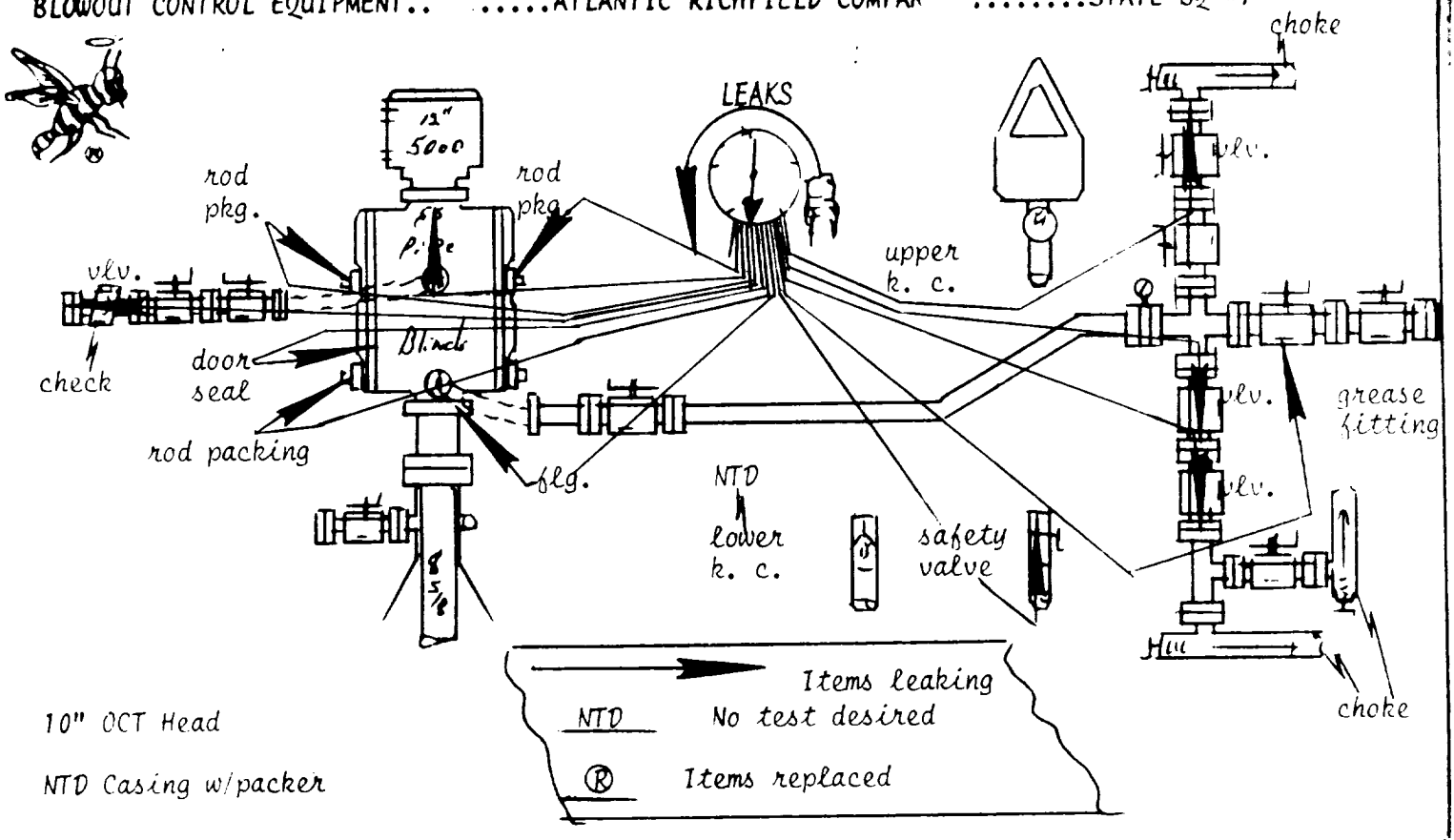
by

Yellow Jacket Tools and Services, Inc.

Odessa, Texas

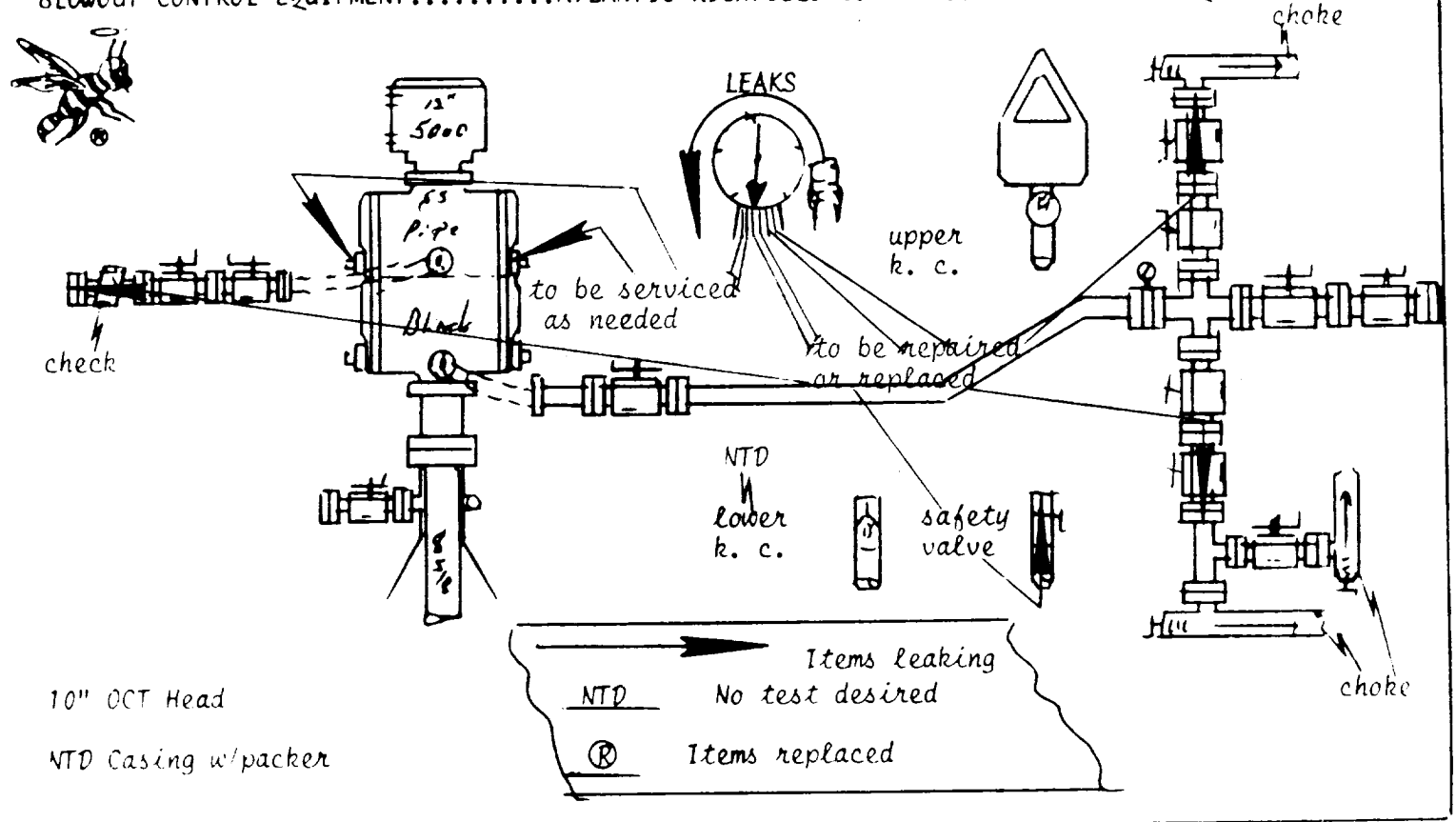
COPY

BLOWOUT CONTROL EQUIPMENT.. .....ATLANTIC RICHFIELD COMPAN .....STATE BQ #1



Items Leaking DURING Testing 5/18/74

BLOWOUT CONTROL EQUIPMENT.....ATLANTIC RICHFIELD COMPANY.....STATE BQ #1



May 20, 1974

Atlantic Richfield Company

Hobbs, New Mexico

Attn: Drilling Dept.

RE: BOP Test - Your State BQ #1

Gentlemen:

We made a hydrostatic pressure test to captioned blowout control equipment on May 18, 1974, and wish to advise the following:

At the conclusion of testing:

Valves: 1. Slight leak thru outside wing valve off manifold cross (pump side) - to be repaired or replaced as needed.

2. Slight leak thru outside wing valve off manifold cross (pipe rack side) - to be repaired or replaced as needed.

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

4. Slight leak thru drill pipe safety valve (4½" XH) - to be repaired or replaced as needed.

BOP: Slight sweat to both rod packings of pipe rams bop - to be serviced 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 closing unit pump only to the observed pressure of 3000# for test to ram type bops and 1400# for test to Hydril. Accumulators were pressured to 1300# at end of test. Control valves operated as indicated on closing unit manifold at end of test. Bop extentions were not hooked up - rig nippling 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.

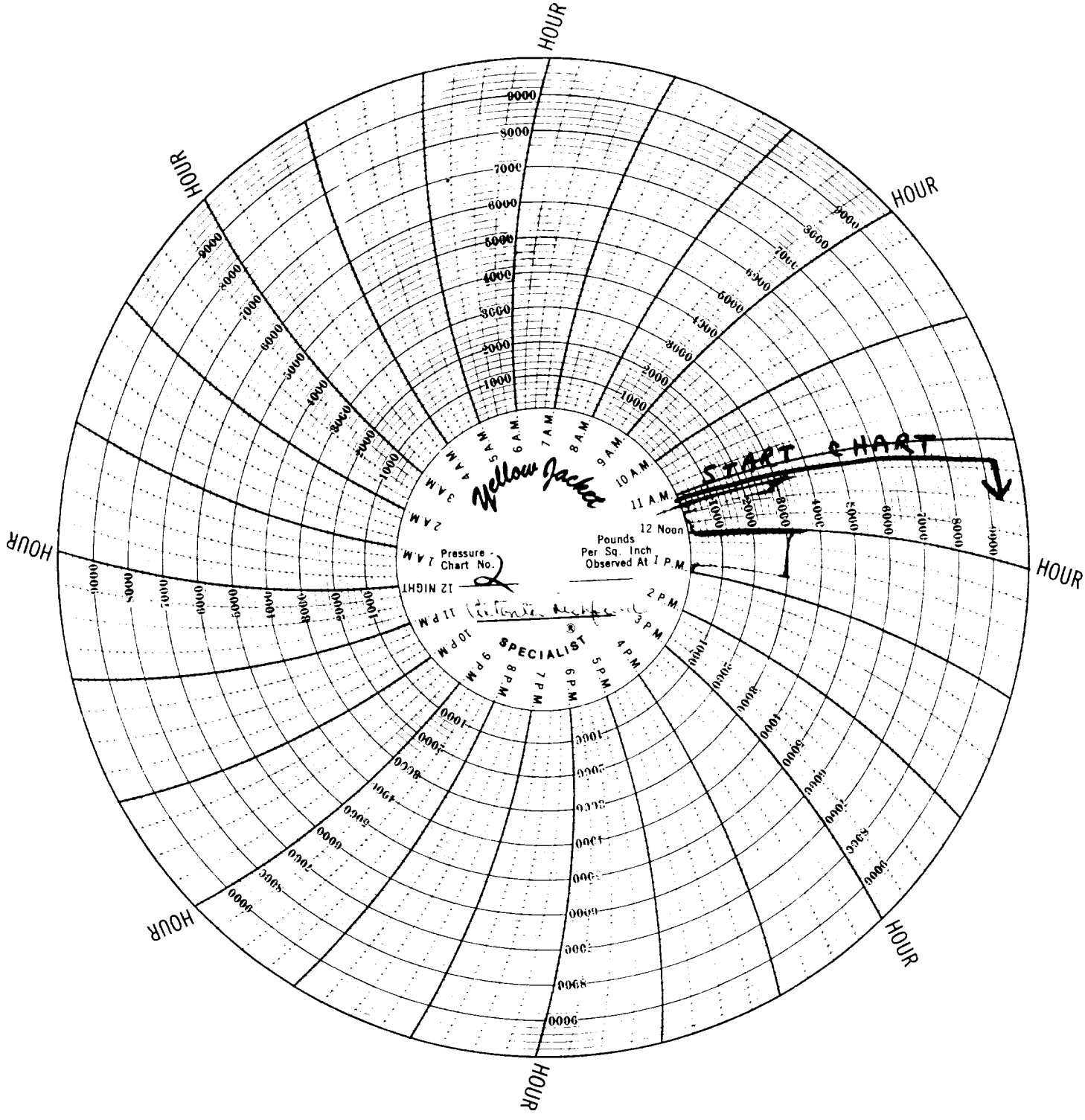
Sincerely yours,
YELLOW JACKET TOOLS AND SERVICES, INC.

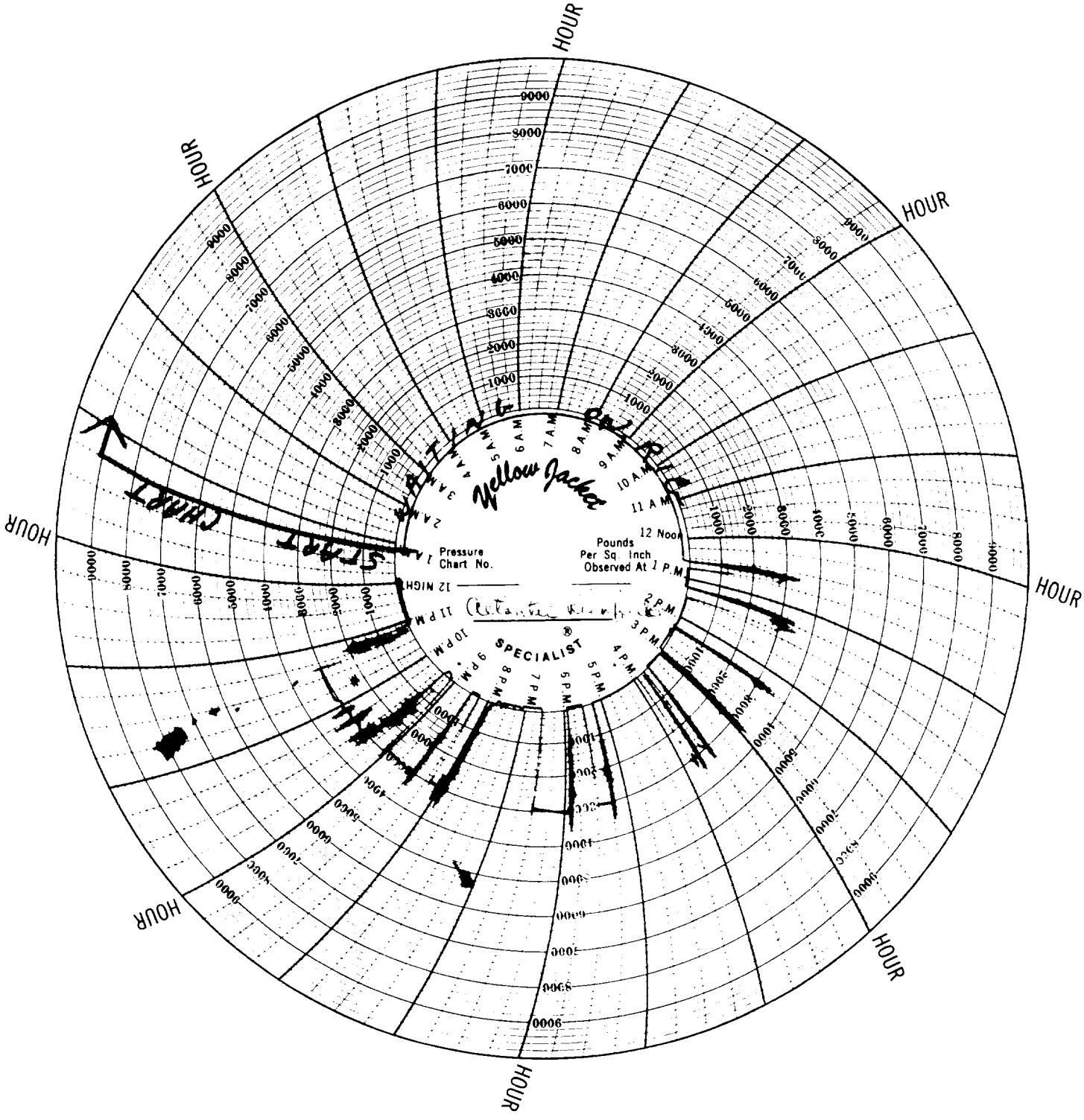
Gordon Christopher

GC/fg

Attachments

cc: U. S. G. S.
Artesia, New Mexico

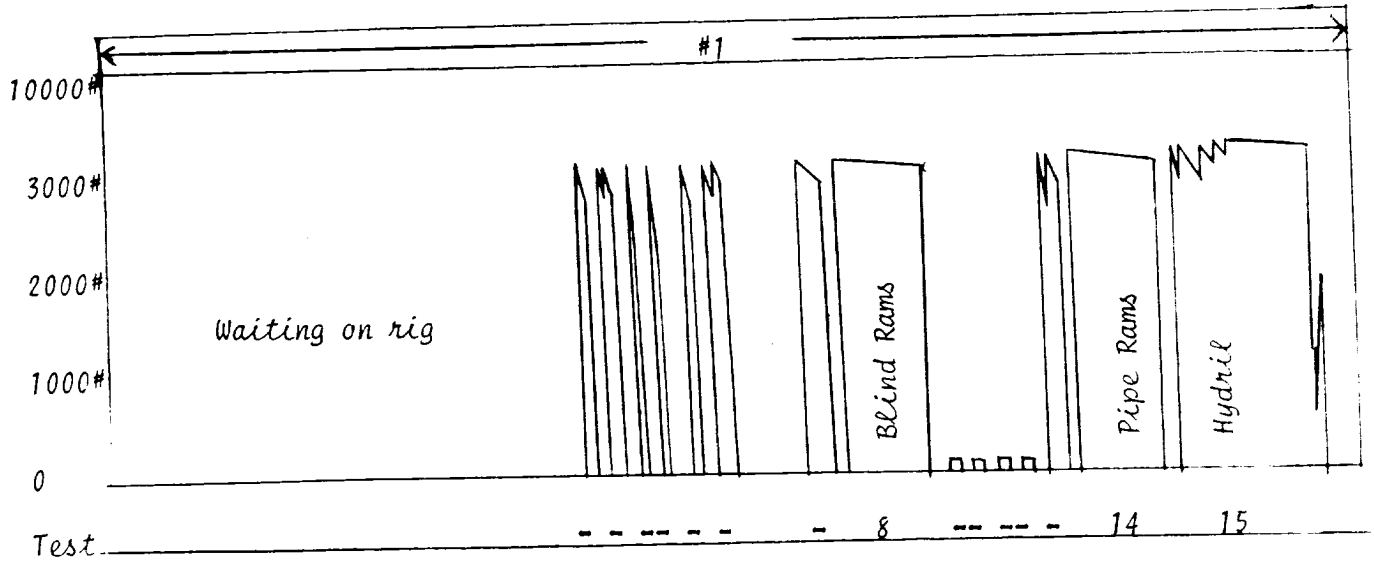

HOUR
HOUR
HOUR
HOUR
HOUR
HOUR
START CHART
Yellow Jacket
Pounds
Per Sq. Inch
Observed At 1 P.M.
Pressure
Chart No.
SPECIALIST
12 NIGHT
1 A.M.
2 A.M.
3 A.M.
4 A.M.
5 A.M.
6 A.M.
7 A.M.
8 A.M.
9 A.M.
10 A.M.
11 A.M.
12 Noon
1 P.M.
2 P.M.
3 P.M.
4 P.M.
5 P.M.
6 P.M.
7 P.M.
8 P.M.
9 P.M.
10 P.M.
11 P.M.


HOUR
HOUR
HOUR
HOUR
HOUR
HOUR
Yellow Jacket
SPECIALIST
Pressure
Chart No.
Pounds
Per Sq. Inch
Observed At 1 P.M.
12 Noon
1 P.M.
2 P.M.
3 P.M.
4 P.M.
5 P.M.
6 P.M.
7 P.M.
8 P.M.
9 P.M.
10 P.M.
11 P.M.
12 MIGH
1 A.M.
2 A.M.
3 A.M.
4 A.M.
5 A.M.
6 A.M.
7 A.M.
8 A.M.
9 A.M.
10 A.M.
11 A.M.

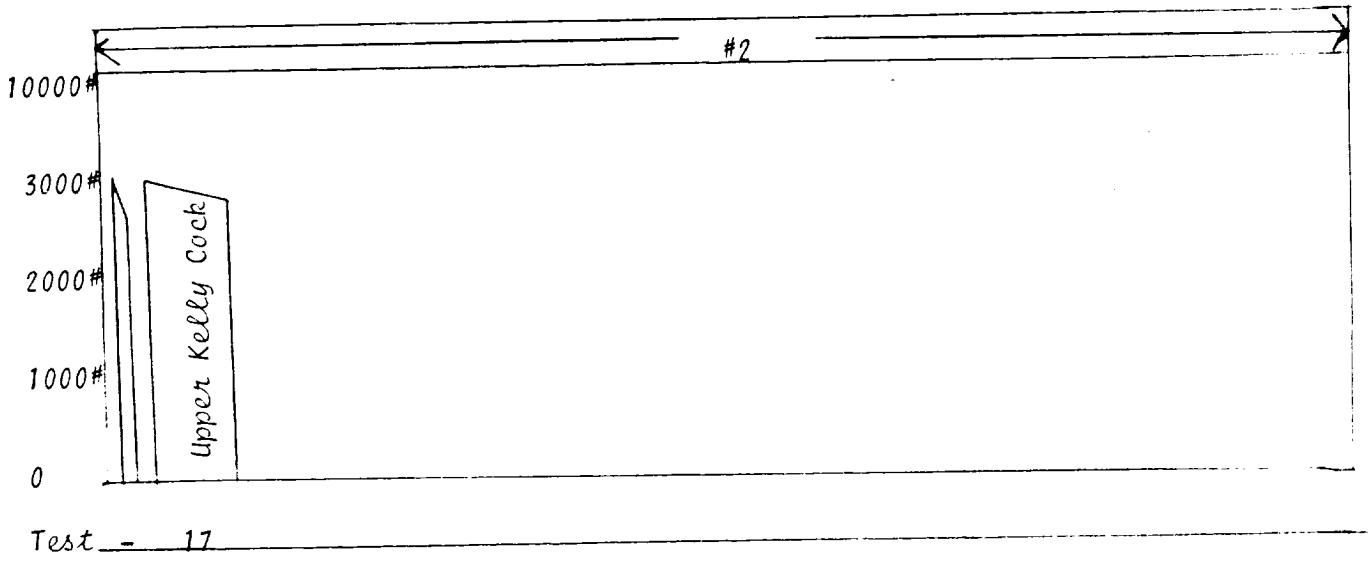
Details of bop test Atlantic Richfield Company State BQ #1 5/18/74

Contractor: Delta Drlg. Rig 60 Test by Yellow Jacket Tools and Services, Inc.

======Transposition of the pressure recorder charts======



======Transposition of the pressure recorder charts======



The above is a transposition of the pressure recorder charts 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 nippling up.

Waiting on rig.

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 rod packing of blind rams bop (pipe rack side). Tightened.

Test #2 Repeated test. Pressured to 3000# with loss of pressure; re-pressured to 3000# with leak to door seal of blind rams bop (pipe rack side) and leak thru outside wing valve off manifold cross (pump side) and leak thru outside wing valve off manifold cross (pipe rack side). Tightened door seal and operated valves.

Test #3 Repeated test. Pressured to 3000# with same leak to outside wing valve off manifold cross (pump side) and same leak to outside wing valve off manifold cross (pipe rack side). Operated valves.

Test #4 Repeated test. Pressured to 3000# with same leaks and leak to grease fitting of inside outlet valve off choke-manifold cross.

Test #5 Repeated test. Pressured to 3000# with slight leak thru outside wing valve off manifold cross (pump side) and slight leak thru outside wing valve off manifold cross (pipe rack side).

RETEST: Blind Rams same as before but with all inside valves closed off choke-manifold cross - pressure applied as before.

Test #6 Pressured to 3000# with loss of pressure; repressured to 3000# with leak to flange between blind rams bop and spacer spool. Tightened.

Test #7 Repeated test. Pressured to 3000# with slight sweat thru inside wing valve off manifold cross (pipe rack side). Greased and operated valve.

Test #8 Repeated test. Pressured to 3000# with loss of approximately

200# during first twelve minutes then leveling out for remaining one minute of test.

NO VISIBLE LEAK. PRESSURE LEVELING OUT TOWARDS APPROXIMATELY [illegible]#.

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

Test #9 Pressured to 200# with leak thru pipe rams. Operated rams.

Test #10 Repeated test. Pressured to 200# with same leak. Operated rams.

Test #11 Repeated test. Pressured to 200# with same leak. Operated rams.

Test #12 Repeated test. Pressured to 200# with same leak. Operated rams.

Test #13 Repeated test. Pressured to 3000# with loss of pressure; re-pressured to 3000# with slight sweat to both rod packings of pipe rams bop. Tightened.

Test #14 Repeated test. Pressured to 3000# with loss of approximately 200# during first eleven minutes then leveling out for remaining two minutes of test. Slight sweat to both rod packings of pipe rams bop.

NO OTHER VISIBLE LEAK. PRESSURE LEVELING OUT TOWARDS APPROXIMATELY 2800#.

TESTING: Hydril with valve closed next to stack on chokeline and inside valve closed next to stack on kill line.

Test #15 Pressured to 3000# with loss of pressure; repressured to 3000# with loss of pressure; adjusted closing pressure; repressured

to 3000# with loss of pressure; popped seals; repressured to 3000# with slight loss of pressure; repressured to 3000# with loss of approximately 50# during first ten minutes then leveling out for remaining two minutes of test.

NO VISIBLE LEAK. PRESSURE STEADY AT APPROXIMATELY 3000#.

Released pressure to 1000# and opened inside valve next to stack on kill line and applied pressure against check valve off stack on kill line; repressured to 2000# with leak thru check valve off stack on kill line.

START CHART #2

TESTING: Drill Pipe Safety Valve (4½" XH) with pressure applied at bottom.

Test #16 Pressured to 3000# with slight leak thru drill pipe safety valve.

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

Test #17 Pressured to 3000# 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 2700#.

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 3000# for test to ram type bops and 1400# for test to Hydril. Accumulators were pressured

to 1300# at end of test. Control valves operated as indicated on closing unit manifold at end of test. Bop extentions were not hooked up - rig nippling 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 R. E. Daniel