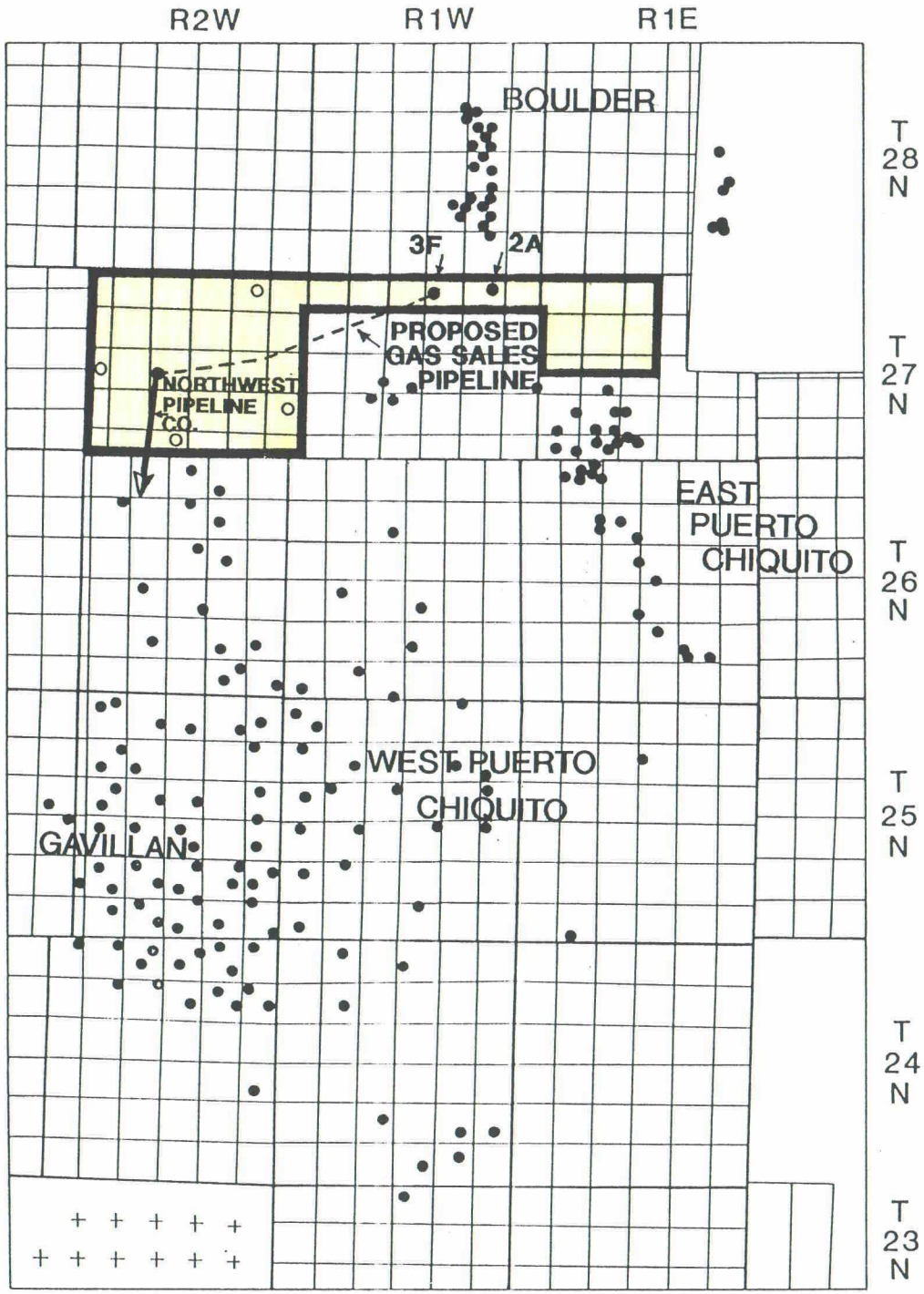


BEFORE EXAMINER STOGNER
OIL CONSERVATION DIVISION
AM Hunter EXHIBIT NO. 1
CASE NO. 10639

SITUATION MAP

PUERTO CHIQUITO - BOULDER AREA

AHEL ACREAGE

OIL WELLS

AHEL WELLS IN PROGRESS

JICARILLA 3F-1 TEST PROPOSAL

American Hunter Exploration Limited proposes testing the Jicarilla 3F-1 Mancos well as an adjunct to the partially-successful test carried out between July 9, 1992 and November 7, 1992.

Exemption from the No-Flare provisions of NMOCD Rule 306 is sought for the period January 1 1993 up to June 30, 1993 or until a gas sales pipeline is completed, whichever occurs first.

Data from the proposed test will augment the July-November test. In that test, a pressure gauge was provided by a local operator for the 3F well. This gauge is thought to have failed during the early part of the test, and may have provided questionable data. The proposed test will involve the use of high quality gauges from a third-party supplier, and is intended to provide more reliable data which will be used by the operator to attempt to quantify the following:

1. The relative contributions of radial and linear flow
2. Reliable material balance and drainage areas
3. Boundary effects in the reservoir

to be a test well

In addition, pressures will be monitored at the nearby American Hunter 2A well. This well did not show adequate reservoir characteristics for it to be used as an injection well in the now-cancelled pressure maintenance program. The proposed test will look for more subtle indications of pressure communication with 3E, which could be used in the quantification of gravity drainage. also to determine boundary limits

The results of the test program will also have wider application to the operator and to the Jicarilla Tribe, the owner of the resource, in allowing better placement and spacing of future wells on the Jicarilla Reservation, enhancing ultimate recovery and preventing wasteful overdrilling.

JIC 2A-1 HISTORY

Data

- Flow & Buildup Test, November 19-22, 1991
  P^* = 621 psia @ MPP, kh = 482 md.ft

- Produced 3174 bbl load oil, 1219 bbl new oil, 6948 mcf gas from November 22, 1991, to July 31, 1992.

- Buildup test, July 31 to October 12, 1992
  P^* = 581 psia, kh = 20 md.ft, radial flow indicated

Analysis

- First test too short to see beyond near-wellbore fractures

- Second test was long enough for radial flow to be established

- Injectivity calculated to be 200 mcf/d at 1200 psi wellhead pressure

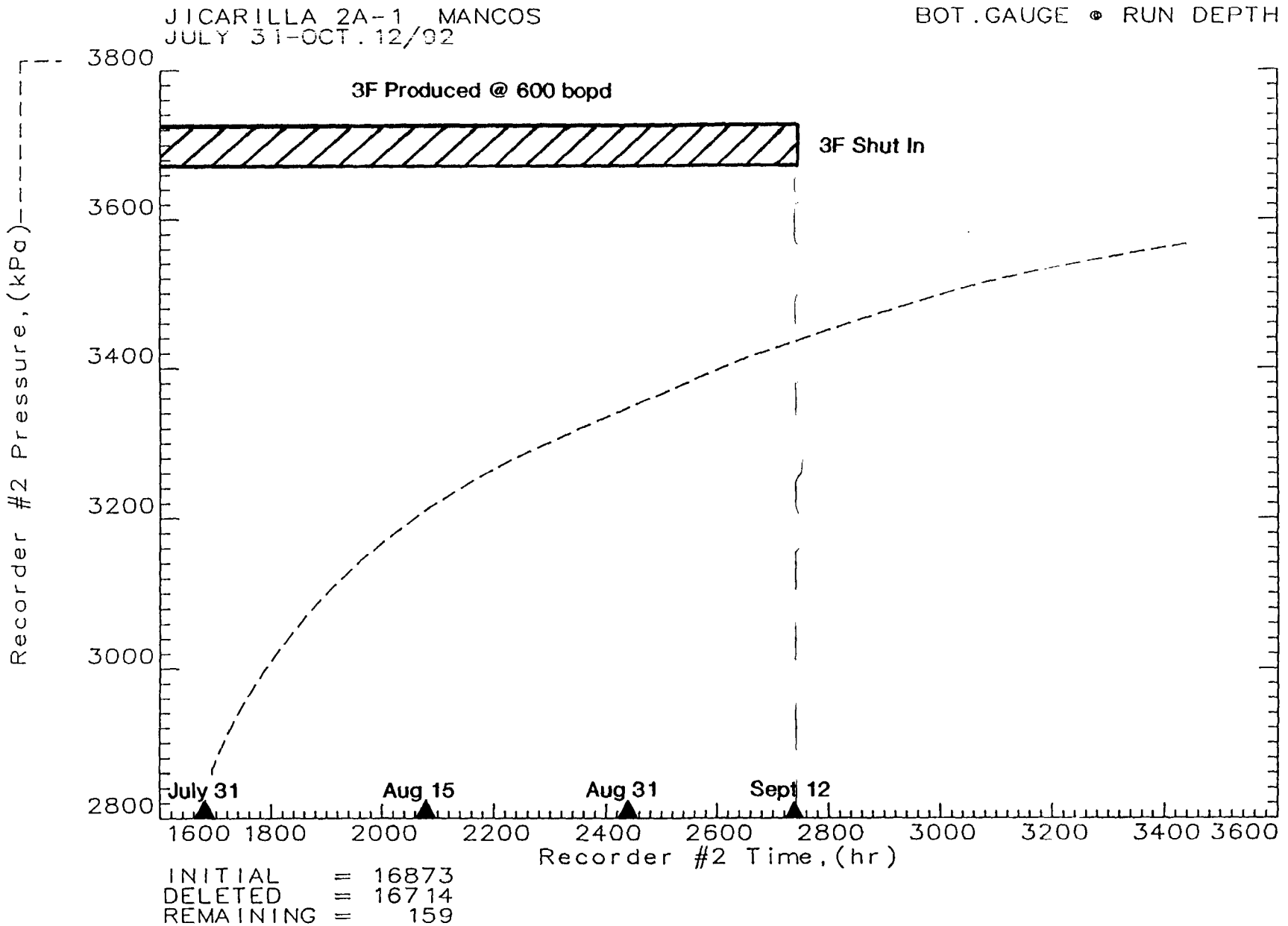
- Well assumed to be at or near gas-oil contact

- Reservoir (gas cap) P/Z volume calculated at 0.1 bcf

- Gas injection program required 800 mcf/d and 0.3 bcf/year storage; program cancelled, gas sales pursued.

2A BUILDUP

VALIDATA



extrapolated to show ss. trend.

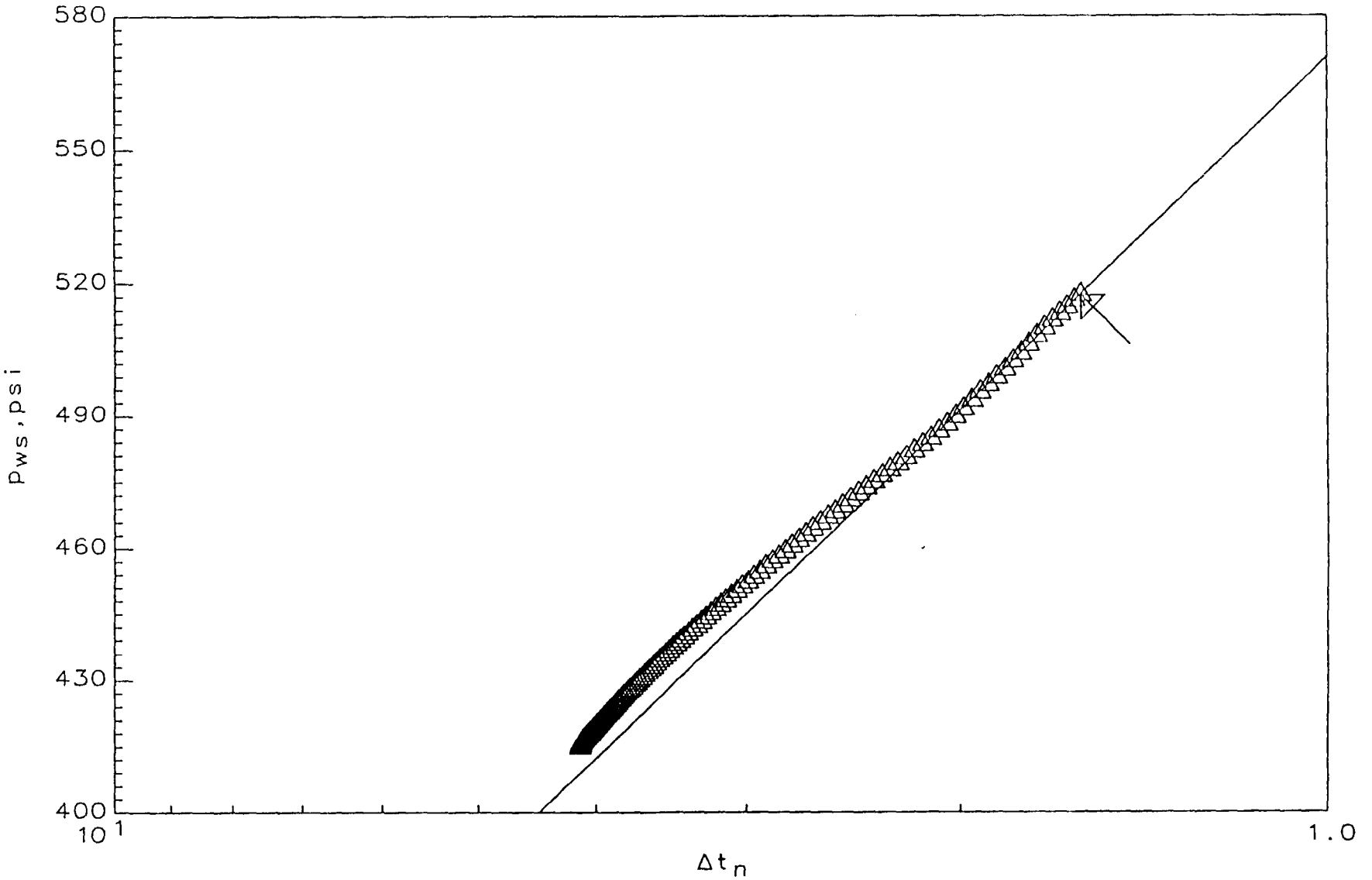
SUPERPOSITION
PRESSURE BUILDUP PLOT

JICARILLA 2A-1 MANCOS
JULY 31-OCT. 12/92

BOT. GAUGE @ RUN DEPTH

$[k_1/u]_t$=24.24 k_1=2.02 md s=-0.3 p*=570.8

t=2157.22 hr r=509 ft



JIC 3F-1 HISTORY

Data

- Buildup test January 19 - February 2, 1992
  P^* = 1360 psia @ MPP, kh = 14891 md.ft, fracture flow indicated

- Produced 1870 bbl load oil, 88686 bbl new oil, 65241 mcf gas between February 2 1991 and September 12, 1992.

- Buildup test September 12 to October 12, 1992
  P^* = 1186 psia @ MPP, kh = 7148 md.ft
  Gauge showed erratic behaviour in early part of test, results questionable
  Static gradient taken October 15 was tied to buildup curve to give P^* extrapolation

Analysis

- Excellent, high-productivity well, capable of rates of 800 bopd

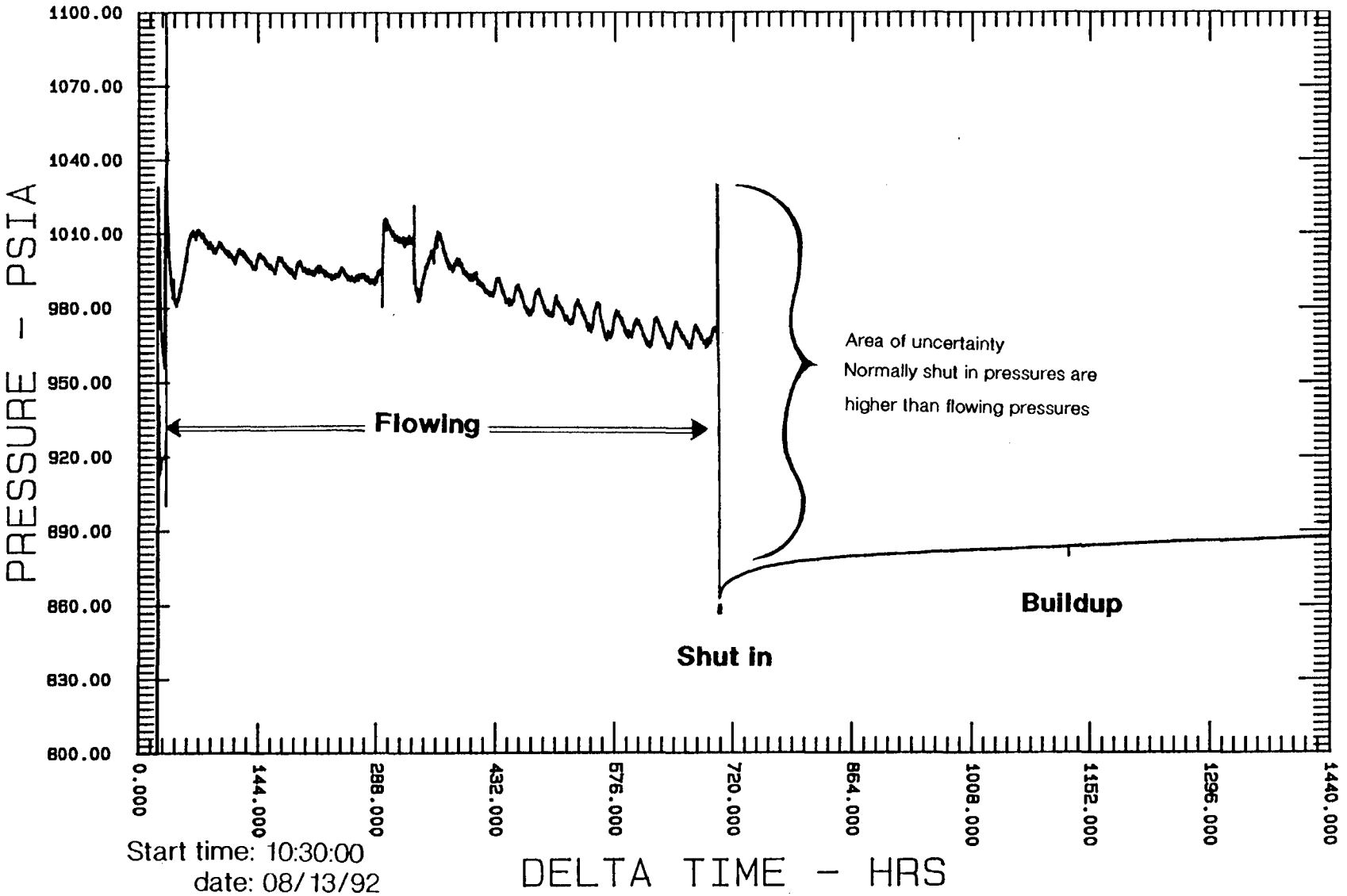
- Relatively high gas-oil ratio, 1000 mcf/bbl

- Questions still remain on reliability of pressure data, casting doubt on important information such as drainage area, fracture flow, boundary effects, and gravity drainage.

3F BUILDUP

Company: BENSON-MONTON-GREER
Client: CANADIAN HUNTER
Gauge: 79085
Well name: AHEL JICARILLA
Well #: 3F-1

Test #:
Location: MANCOS
Operator:
Comments:



Start time: 10:30:00
date: 08/13/92