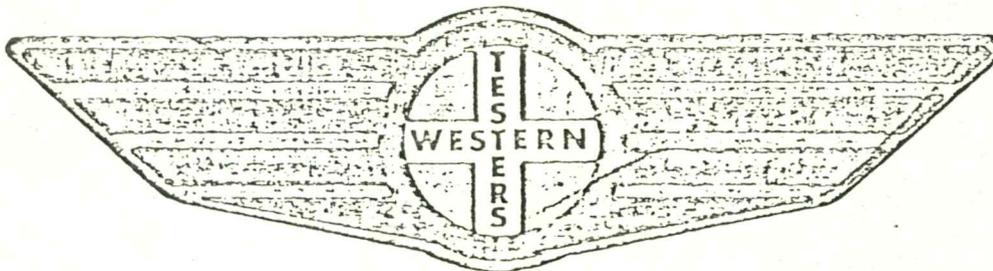


FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company HAR-KEN OIL COMPANY Lease and Well No. #1 GUMBIR Sec. 19 Twp. 21s Rge. 23w Test No. 1 Date 11/10

WESTERN TESTING COMPANY INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11/10/84
CUSTOMER: HAR-KEN OIL COMPANY
WELL: #1 TEST: 1
ELEVATION (KB): 2358 FORMATION: FORT SCOTT
SECTION: 19 TOWNSHIP: 21S
RANGE: 23W COUNTY: HODGEMAN STATE: KANSAS
GAUGE SN #6233 RANGE: 4000 CLOCK: 12

INTERVAL TEST FROM: 4410 FT TO: 4500 FT TOTAL DEPTH: 4500 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4405 FT SIZE: 6 3/4 IN PACKER DEPTH: 4410 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: ALDEBARAN
MUD TYPE: POLYPAC VISCOSITY: 45
WEIGHT: 9.2 WATER LOSS (CC): 12.8
CHLORIDES (P.P.M.): 14000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 496 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3894 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 O.D. IN
ANCHOR LENGTH: 90 FT SIZE: 5 1/2 O.D. IN
SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN
MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 FH IN

BLOW: INITIAL FLOW PERIOD WEAK DECREASING
BLOW TO 1/2" IN WATER. FINAL FLOW PERIOD
NO BLOW.

RECOVERED: 20 FT OF: MUD WITH FEW OIL SPOTS.
RECOVERED: FT OF: CHLORIDES 18000 P.P.M.
RECOVERED: FT OF:
RECOVERED: FT OF:

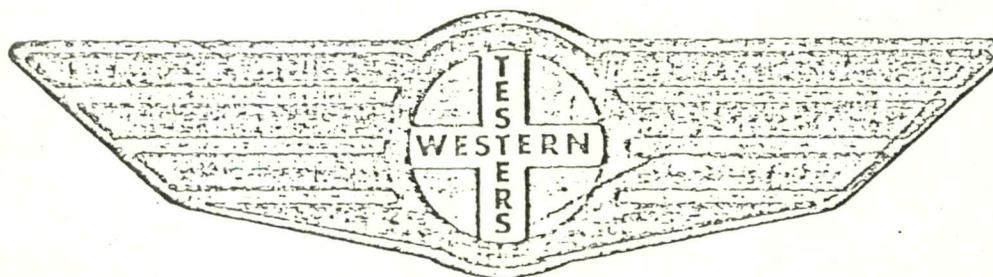
REMARKS:

TIME SET PACKER(S): 8:05 A.M. TIME STARTED OFF BOTTOM: 10:35 A.M.
WELL TEMPERATURE: 122 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2247 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 67 PSI TO (C) 67 PSI
INITIAL CLOSED IN PERIOD MIN: 63 (D) 456 PSI
FINAL FLOW PERIOD MIN: 30 (E) 77 PSI TO (F) 77 PSI
FINAL CLOSED IN PERIOD MIN: 30 (G) 86 PSI
FINAL HYDROSTATIC PRESSURE (H) 2241 PSI

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING COMPANY INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11/10/84 TICKET #18193
CUSTOMER: HAR-KEN OIL COMPANY LEASE: GUMBIR
WELL: #1 TEST: 2 GEOLOGIST: KNIEDLER
ELEVATION (KB): 2358 FORMATION: CHEROKEE CONGL.
SECTION: 19 TOWNSHIP: 21S
RANGE: 23W COUNTY: HODGEMAN STATE: KANSAS
GAUGE SN #6233 RANGE: 4000 CLOCK: 12

INTERVAL TEST FROM: 4505 FT TO: 4538 FT TOTAL DEPTH: 4538 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4500 FT SIZE: 6 3/4 IN PAKER DEPTH: 4505 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: ALDEBARAN
MUD TYPE: POLYPAC VISCOSITY: 44
WEIGHT: 9.3 WATER LOSS (CC): 10.8
CHLORIDES (P.P.M.): 14000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 496 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 3989 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 O.D. IN
ANCHOR LENGTH: 33 FT SIZE: 5 1/2 O.D. IN
SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN
MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 FH IN

BLOW: INITIAL FLOW PERIOD WEAK STEADY
BLOW OF 1/2" IN WATER. FINAL FLOW
PERIOD WEAK DECREASING BLOW DEAD IN 20 MINUTES.

RECOVERED: 20 FT OF: MUD; CHLORIDES 20000 P.P.M.
RECOVERED: FT OF:
RECOVERED: FT OF:

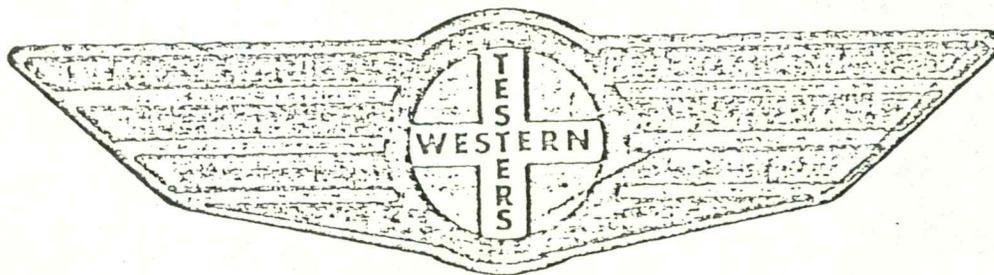
REMARKS:

TIME SET PACKER(S): 12:55 A.M. TIME STARTED OFF BOTTOM: 3:25 A.M.
WELL TEMPERATURE: 128 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2259 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 43 PSI TO (C) 43 PSI
INITIAL CLOSED IN PERIOD MIN: 57 (D) 71 PSI
FINAL FLOW PERIOD MIN: 30 (E) 45 PSI TO (F) 45 PSI
FINAL CLOSED IN PERIOD MIN: 30 (G) 45 PSI
FINAL HYDROSTATIC PRESSURE (H) 2254 PSI

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company HAR-KEN OIL COMPANY Lease and Well No. #1 GUMBIR Sec. 19 Twp. 21s Rge. 23w Test No. 3

WESTERN TESTING COMPANY INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11/11/84
 CUSTOMER: HAR-KEN OIL COMPANY
 WELL: GUMBIR TEST: #1
 ELEVATION (KB): 2358 FORMATION: MISS
 SECTION: 19 TOWNSHIP: 21S
 RANGE: 23W COUNTY: HODGEMAN STATE: KANSAS
 GAUGE SN #6233 RANGE: 4000 CLOCK: 12

INTERVAL TEST FROM: 4520 FT TO: 4559 FT TOTAL DEPTH: 4559 FT
 DEPTH OF SELECTIVE ZONE: FT
 PACKER DEPTH: 4515 FT SIZE: 6 3/4 IN PACKER DEPTH: 4520 FT SIZE: 6 3/4 IN
 PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: ALDEBARAN
 MUD TYPE: POLYPAC VISCOSITY: 42
 WEIGHT: 9.1 WATER LOSS (CC): 14.4
 CHLORIDES (P.P.M.): 18000
 JARS - MAKE: SERIAL NUMBER:
 DID WELL FLOW? REVERSED OUT?
 DRILL COLLAR LENGTH: 558 FT I.D.: 2.25 IN
 WEIGHT PIPE LENGTH: FT I.D.: IN
 DRILL PIPE LENGTH: 3942 FT I.D.: 3.8 IN
 TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 O.D. IN
 ANCHOR LENGTH: 39 FT SIZE: 5 1/2 O.D. IN
 SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN
 MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 FH IN

BLOW: BOTH INITIAL & FINAL FLOW PERIOD HAD
 WEAK STEADY INCREASING BLOW TO 2" IN WATER.

RECOVERED: 30 FT OF: FREE OIL.
 RECOVERED: 60 FT OF: OIL CUT MUD. 10% OIL 90% MUD.
 RECOVERED: 60 FT OF: OIL CUT MUD. 8% OIL; 92% MUD.
 RECOVERED: FT OF: CHLORIDES 19000 P.P.M.
 RECOVERED: FT OF:
 RECOVERED: FT OF:

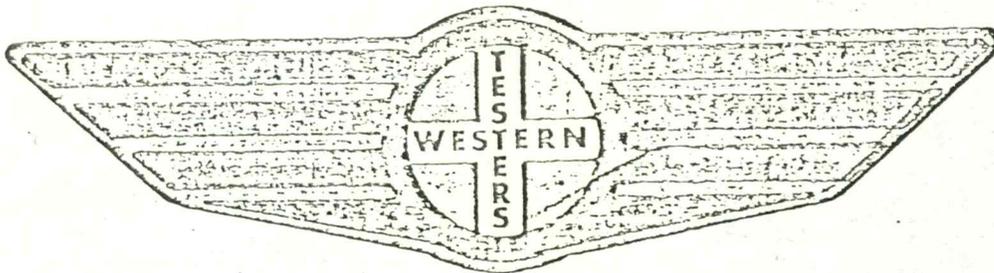
REMARKS: COULD NOT CATCH ENOUGH OIL TO CHECK GRAVITY.

TIME SET PACKER(S): 4:10 P.M. TIME STARTED OFF BOTTOM: 8:40 P.M.
 WELL TEMPERATURE: 130 °F
 INITIAL HYDROSTATIC PRESSURE: (A) 2328 PSI
 INITIAL FLOW PERIOD MIN: 35 (B) 53 PSI TO (C) 61 PSI
 INITIAL CLOSED IN PERIOD MIN: 57 (D) 1334 PSI
 FINAL FLOW PERIOD MIN: 60 (E) 84 PSI TO (F) 100 PSI
 FINAL CLOSED IN PERIOD MIN: 117 (G) 1382 PSI
 FINAL HYDROSTATIC PRESSURE (H) 2290 PSI

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

Company HAR-KEN OIL COMPANY Lease and Well No. #1 GIMBIR Sec. 19 Twp. 21s Rge. 23w Test No. 6 Date 11/13/8

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 11/13/84
CUSTOMER: HAR-KEN OIL COMPANY
WELL: 1 TEST: 6
ELEVATION (KB): 0 FORMATION: MISSISSIPPI
SECTION: 19 TOWNSHIP: 21S
RANGE: 23W COUNTY: HODGEMAN STATE: KANSAS
GAUGE SN #3473 RANGE: 4000 CLOCK: 12

INTERVAL TEST FROM: 4516 FT TO: 4567 FT TOTAL DEPTH: 4567 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4511 FT SIZE: 6 5/8 IN PACKER DEPTH: 4516 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

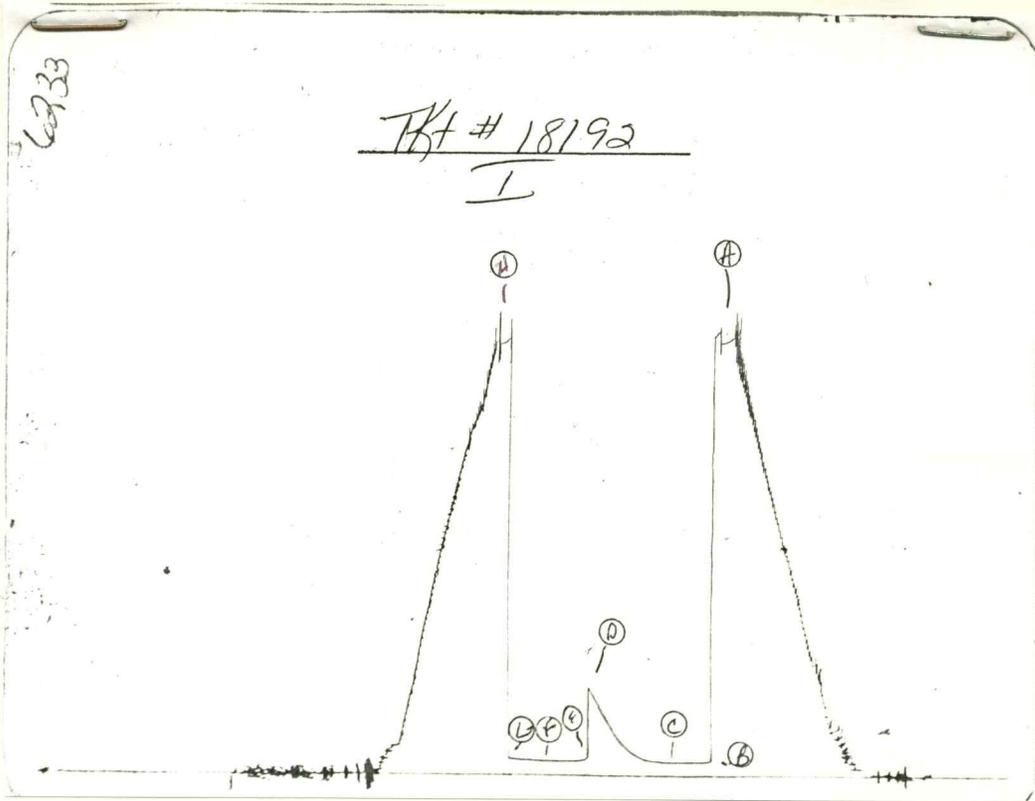
DRILLING CONTRACTOR: ALDEBARAN DRLG
MUD TYPE: DRISPAC VISCOSITY: 45
WEIGHT: 9.2 WATER LOSS (CC): 12.4
CHLORIDES (P.P.M.): 18000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? YES REVERSED OUT? NO
DRILL COLLAR LENGTH: 420 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4075 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 51 FT SIZE: 5 1/2 OD IN
SURFACE CHOKE SIZE: 3/4 IN BOTTOM CHOKE SIZE: 3/4 IN
MAIN HOLE SIZE: 7 7/8 IN TOOL JOINT SIZE: 4 FH IN

BLOW: GOOD BLOW INCREASED TO A VERY
GOOD BLOW IN 10 MINUTES ON BOTH
FLOW PERIODS.

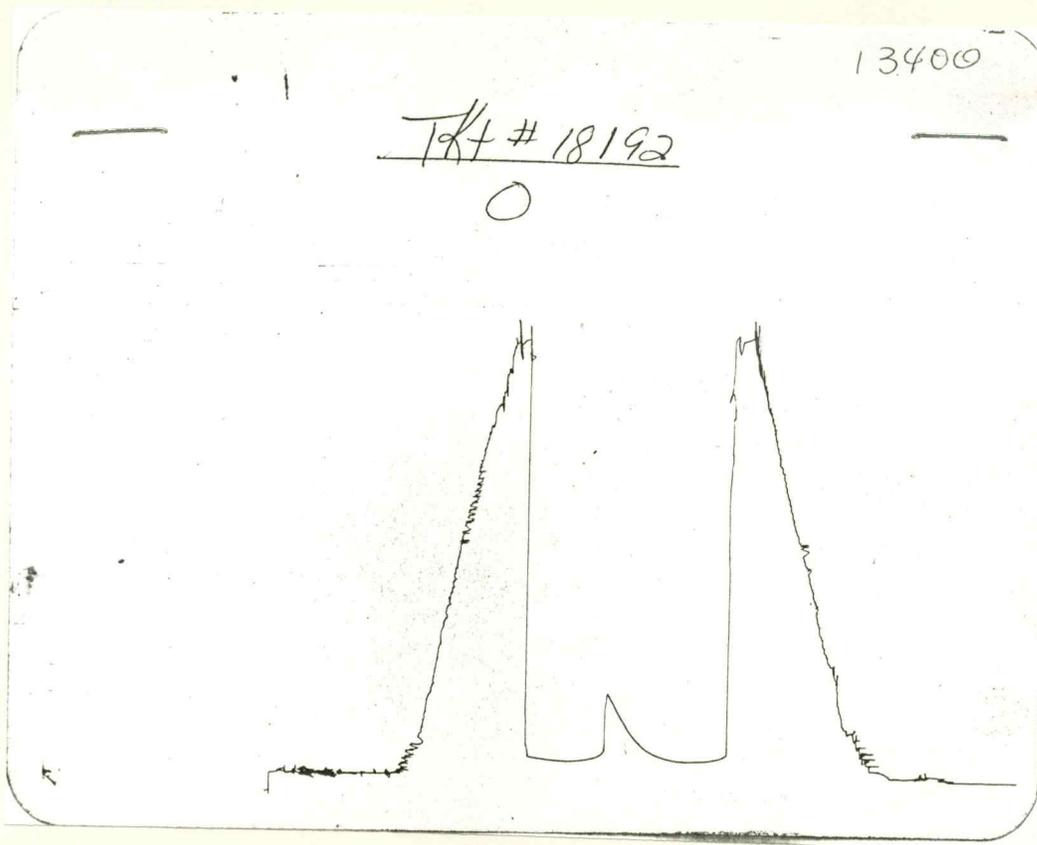
RECOVERED: 690 FT OF: GASSY OIL (39 GRAVITY).
RECOVERED: 240 FT OF: HEAVY OIL & GAS CUT MUD.
RECOVERED: 300 FT OF: GASSY MUDDY OIL.
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: READ OUTSIDE CHART.

TIME SET PACKER(S): 7:58 AM TIME STARTED OFF BOTTOM: 11:58 AM
WELL TEMPERATURE: 124 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2183 PSI
INITIAL FLOW PERIOD MIN: 35 (B) 98 PSI TO (C) 231 PSI
INITIAL CLOSED IN PERIOD MIN: 60 (D) 1274 PSI
FINAL FLOW PERIOD MIN: 60 (E) 307 PSI TO (F) 436 PSI
FINAL CLOSED IN PERIOD MIN: 90 (G) 1270 PSI
FINAL HYDROSTATIC PRESSURE (H) 2118 PSI



Inside Recorder

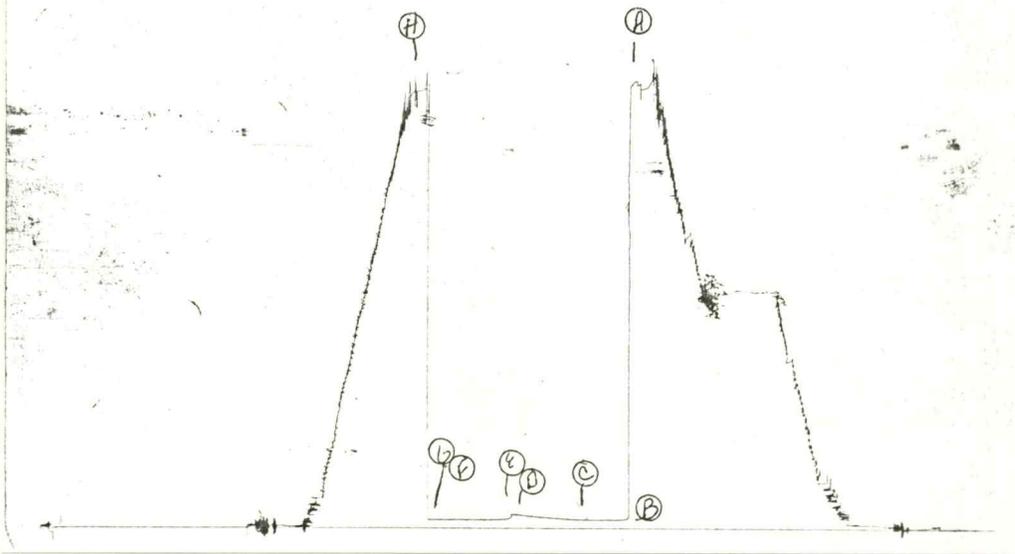


Outside Recorder

6233

TKT # 18193

I

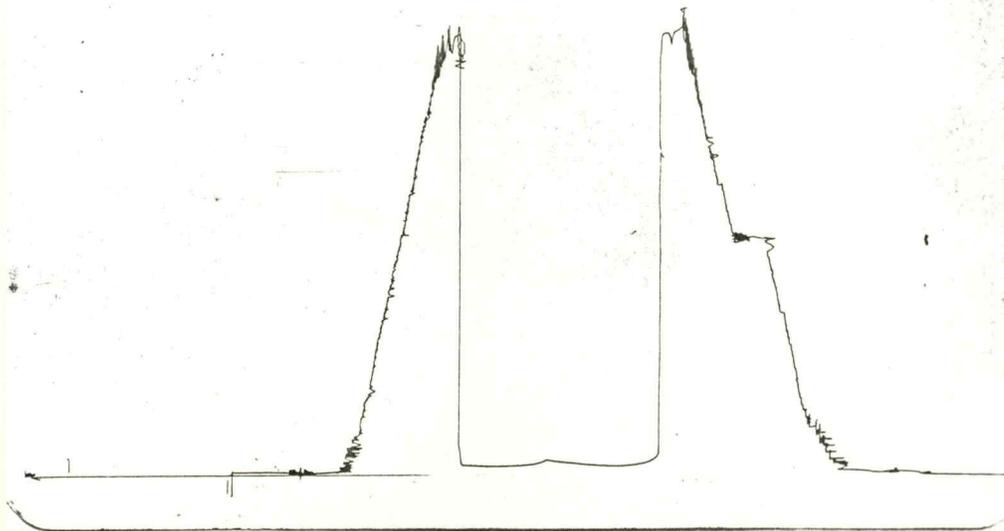


Inside Recorder

13400

TKT # 18193

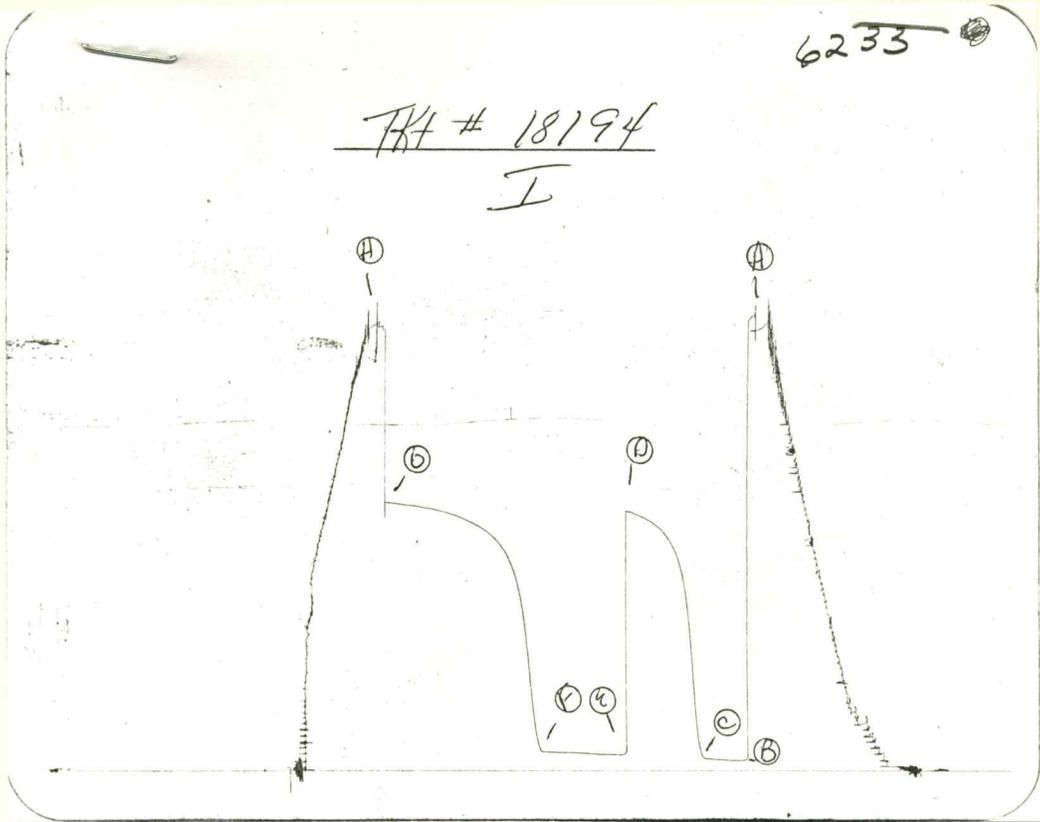
O



Outside Recorder

6233

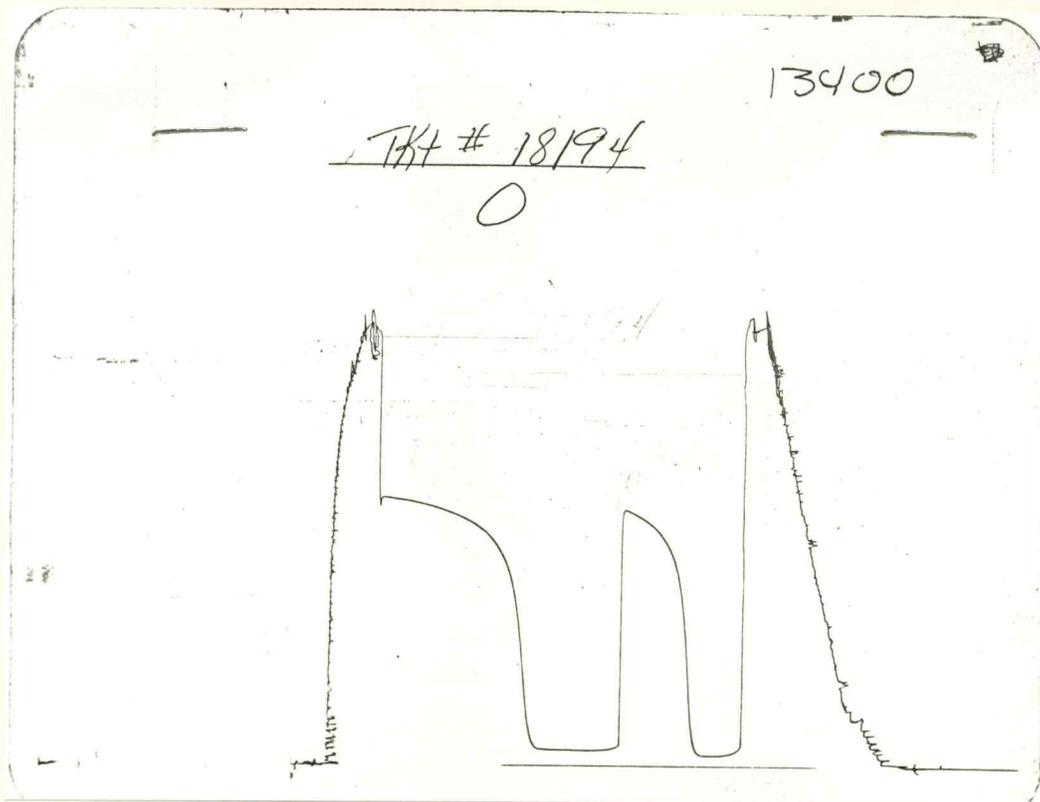
TKT # 18194
I



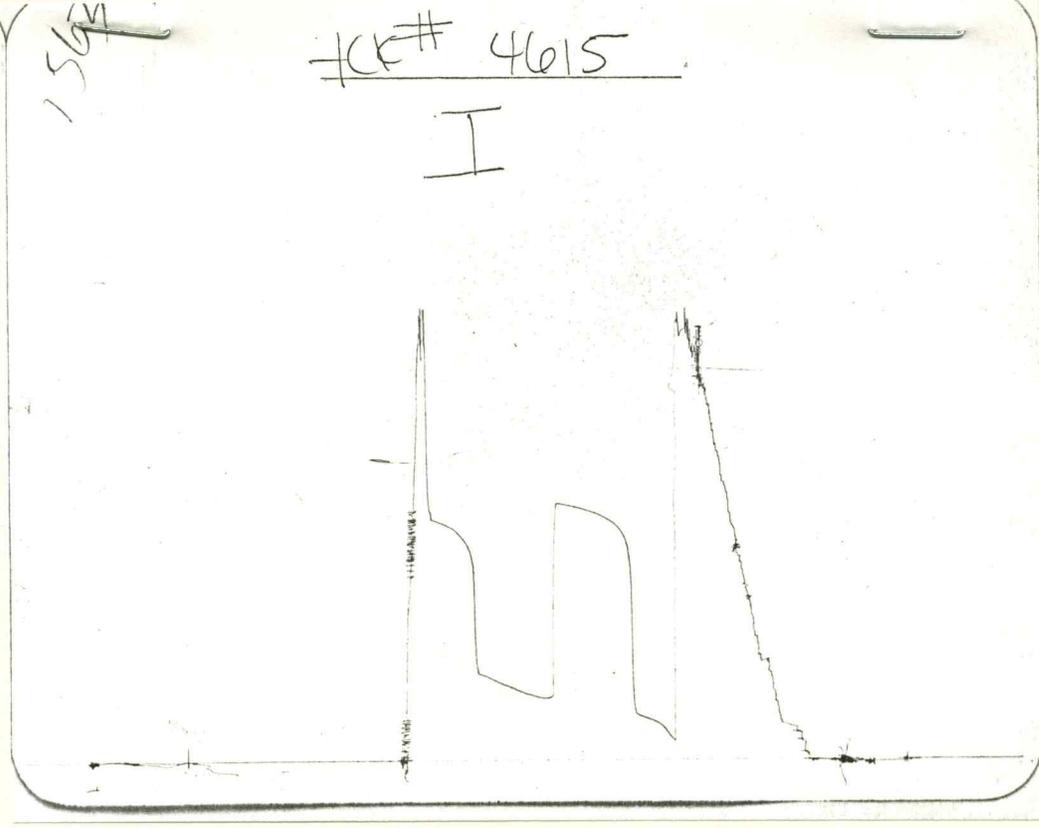
Inside Recorder

13400

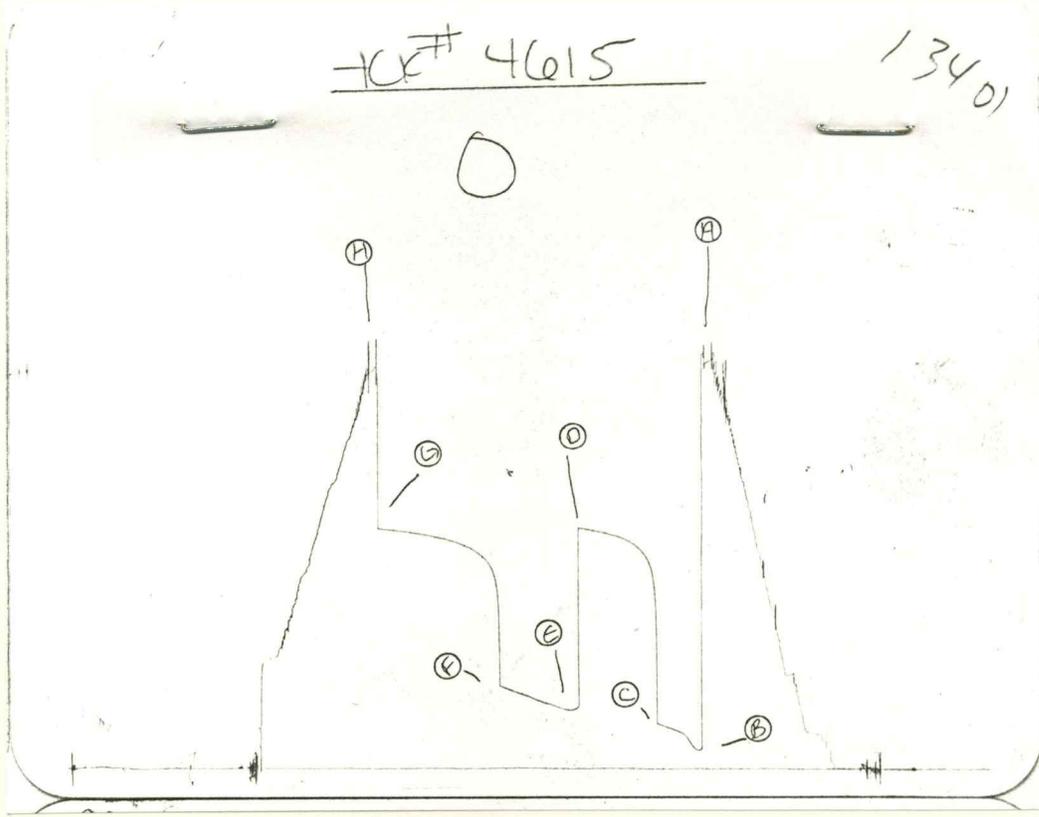
TKT # 18194
O



Outside Recorder



Inside Recorder



Outside Recorder