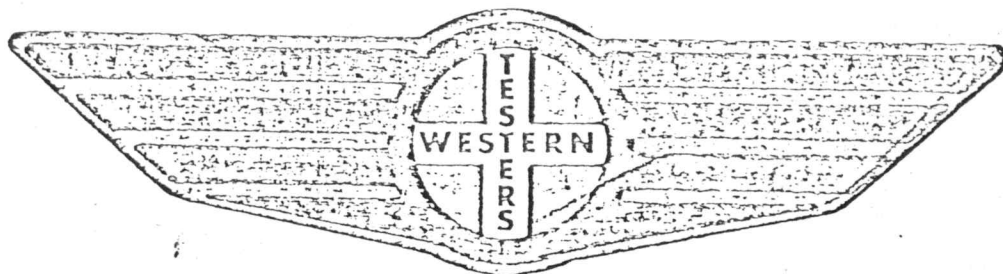


FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 10/15/84
CUSTOMER: PICKRELL DRILLING COMPANY
WELL: 1 TEST: 1
ELEVATION (KB): 1272 FORMATION: MISSISSIPPI
SECTION: 23 TOWNSHIP: 33S
RANGE: 6W COUNTY: HARPER STATE: KANSAS
GAUGE SN #6077 RANGE: 4700 CLOCK: 12

INTERVAL TEST FROM: 4358 FT TO: 4367 FT TOTAL DEPTH: 4367 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4353 FT SIZE: 6 5/8 IN PACKER DEPTH: 4358 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: PICKRELL DRLG
MUD TYPE: DRISPAC VISCOSITY: 54
WEIGHT: 9.1 WATER LOSS (CC): 13.2
CHLORIDES (P.P.M.): 19000
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 216 FT I.D.: 2.2 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 4121 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 9 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 1/2 XH IN

BLOW: INITIAL FLOW PERIOD STRONG BLOW.
OFF BOTTOM OF BUCKET DURING THE
FIRST MINUTE OF INITIAL FLOW.
FINAL FLOW PERIOD STRONG BLOW.

RECOVERED: 60 FT OF: HEAVY MUD.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: GAS TO SURFACE IN 8 MINUTES OF THE INITIAL FLOW
PERIOD. SEE ATTACHED SHEET FOR GAS MEASUREMENTS.
CHARTS INDICATE DEPLETION:

TIME SET PACKER(S): 3:20 AM TIME STARTED OFF BOTTOM: 7:50 AM
WELL TEMPERATURE: 0 °F
INITIAL HYDROSTATIC PRESSURE: (A) 2275 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 164 PSI TO (C) 87 PSI
INITIAL CLOSED IN PERIOD MIN: 60 (D) 1634 PSI
FINAL FLOW PERIOD MIN: 90 (E) 149 PSI TO (F) 39 PSI
FINAL CLOSED IN PERIOD MIN: 90 (G) 1525 PSI
FINAL HYDROSTATIC PRESSURE (H) 2248 PSI

WESTERN TESTING CO. INC.
PRESSURE DATA

DATE: 10/15/84

CUSTOMER: PICKRELL DRILLING COMPANY

TEST: 1

FORMATION: MISSISSIPPI

TOWNSHIP: 33S

COUNTY: HARPER

RANGE: 4700

TICKET #5951

LEASE: "A" DIERKSEN

GEOLOGIST: DIXON

(A) INITIAL HYDROSTATIC PRESSURE: 2275 PSI

(B) FIRST INITIAL FLOW PRESSURE: 164 PSI

(C) FIRST FINAL FLOW PRESSURE: 87 PSI

(D) INITIAL CLOSED-IN PRESSURE: 1634 PSI

(E) SECOND INITIAL FLOW PRESSURE: 149 PSI

(F) SECOND FINAL FLOW PRESSURE: 39 PSI

(G) FINAL CLOSED-IN PRESSURE: 1525 PSI

(H) FINAL HYDROSTATIC PRESSURE: 2248 PSI

WELL TEMPERATURE: 0 °F

OPEN TOOL: 3:20 AM

TIME - GIVEN TIME - ACTUAL

FIRST FLOW PRESSURE: 30 MIN 30 MIN

INITIAL CLOSED-IN PRESSURE: 60 MIN 60 MIN

SECOND FLOW PRESSURE: 90 MIN 90 MIN

FINAL CLOSED-IN PRESSURE: 90 MIN 90 MIN

PRESSURE BREAKDOWN

[illegible]

WESTERN TESTING CO. INC.
GAS FLOW REPORT

DATE: 10/15/84

CUSTOMER: PICKRELL DRILLING COMPANY

WELL: 1

TEST: 1

ELEVATION (KB): 1272

FORMATION: MISSISSIPPI

SECTION: 23

TOWNSHIP: 33S

RANGE: 6W

COUNTY: HARPER

STATE: KANSAS

GAUGE SN #6077

RANGE: 4700

CLOCK: 12

TICKET #5951

LEASE: "A" DIERKSEN

GEOLOGIST: DIXON

TIME GAUGE (MIN)	TESTER TYPE	ORIFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
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PRE FLOW

10	MERLA	1	34" WTR	151000 CFPD
20			28	137000
30			16	103000

SECOND FLOW

10	MERLA	1	62" WTR	203000 CFPD
20			16	103000
30			15	101000
40			13	93600
50			13	93600
60			13	93600
70			13	93600
80			13	93600
90			13	93600

GAS BOTTLE SN #: 602

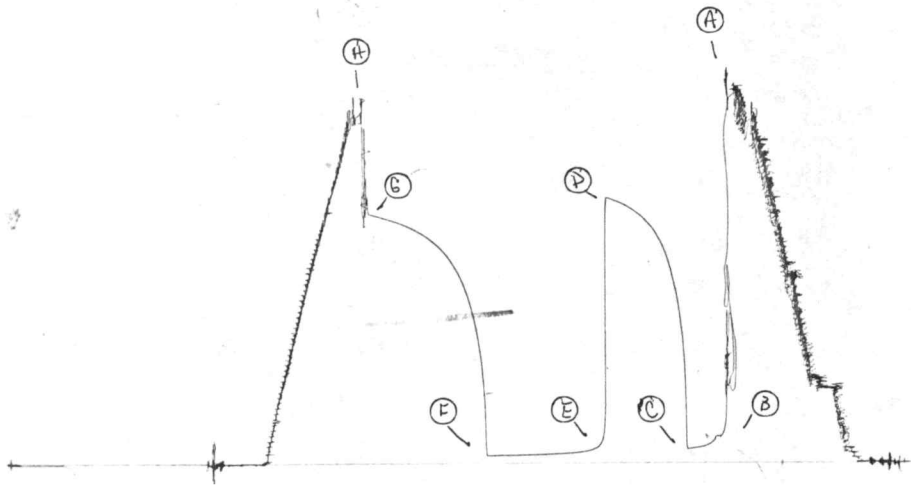
DATE BOTTLE FILLED: 10/15/84

DATE TO BE INVOICED:

6011

TKI # 5951

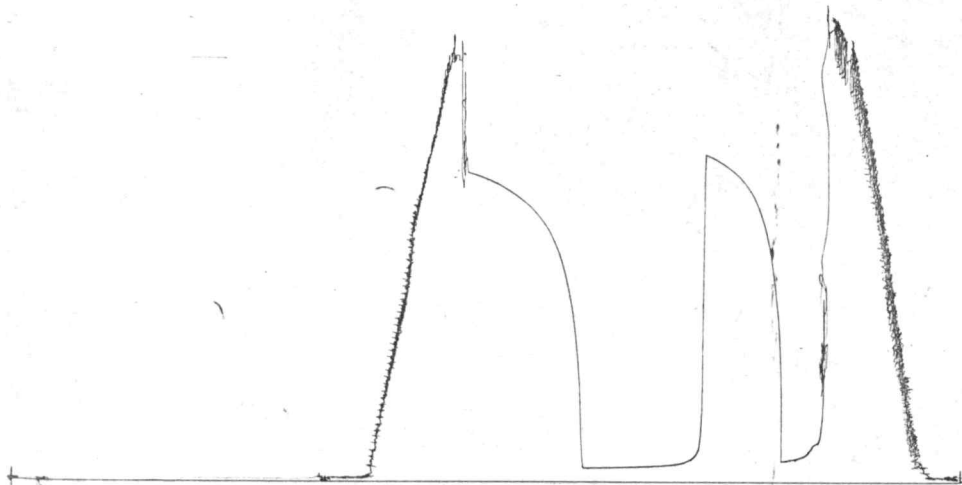
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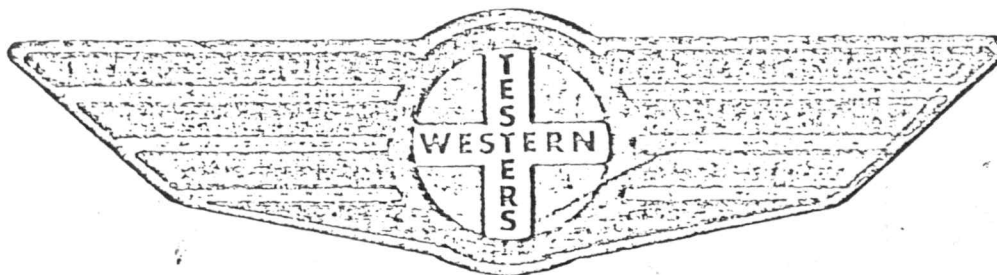
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TKT # 5951

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 10/15/84

CUSTOMER: PICKRELL DRILLING COMPANY

WELL: 1

TEST: 2

ELEVATION (KB): 1272

FORMATION: MISSISSIPPI

SECTION: 23

TOWNSHIP: 33S

RANGE: 6W

COUNTY: HARPER

STATE: KANSAS

GAUGE SN #6077

RANGE: 4700

CLOCK: 12

TICKET #5954

LEASE: "A" DIERKSEN

GEOLOGIST: DIXON

INTERVAL TEST FROM: 4367 FT TO: 4397 FT TOTAL DEPTH: 4397 FT
DEPTH OF SELECTIVE ZONE: FT

PACKER DEPTH: 4362 FT SIZE: 6 5/8 IN PACKER DEPTH: 4367 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: PICKRELL DRLG

MUD TYPE: DRISPAC

VISCOSITY: 65

WEIGHT: 8.7

WATER LOSS (CC): 11.4

CHLORIDES (P.P.M.): 21000

JARS - MAKE:

SERIAL NUMBER:

DID WELL FLOW? NO

REVERSED OUT? NO

DRILL COLLAR LENGTH: 216 FT I.D.: 2.2 IN

WEIGHT PIPE LENGTH: FT I.D.: IN

DRILL PIPE LENGTH: 4130 FT I.D.: 3.8 IN

TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 OD IN

ANCHOR LENGTH: 30 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 1/2 XH IN

BLOW: INITIAL FLOW PERIOD INCREASING TO A STRONG BLOW.

OFF BOTTOM OF BUCKET IN 12 MINUTES. FINAL FLOW

PERIOD STRONG BLOW. GAS TO SURFACE IN 15 MINUTES.

SEE ATTACHED SHEET FOR GAS MEASUREMENTS.

RECOVERED: 100 FT OF: SLIGHTLY OIL CUT GASSY MUD.
RECOVERED: FT OF: 80% MUD; 10% GAS; 2% OIL; 8% WATER.
RECOVERED: 60 FT OF: OIL & GAS CUT MUD.
RECOVERED: FT OF: 35% MUD; 19% GAS; 35% OIL; 11% WATER.
RECOVERED: 120 FT OF: MUD & GAS CUT WATERY OIL.
RECOVERED: FT OF: 12% MUD; 12% GAS; 53% OIL; 23% WATER.
RECOVERED: FT OF: CHLORIDES 43000 PPM.
RECOVERED: FT OF:
RECOVERED: FT OF:

REMARKS: TOOL & BOTTOM COLLAR WERE PLUGGED FROM LCM &
CUTTINGS. HOLE HAD 20' OF CUTTINGS. SLID TOOL
5' TO BOTTOM AFTER TOOL OPENED. SEVERE PLUGGING
ACTION ON THE INITIAL FLOW PERIOD.

TIME SET PACKER(S): 9:30 PM

TIME STARTED OFF BOTTOM: 2:00 AM

WELL TEMPERATURE: 119 °F

INITIAL HYDROSTATIC PRESSURE:

(A) 2208 PSI

INITIAL FLOW PERIOD MIN: 30

(B) 354 PSI TO (C) 162 PSI

INITIAL CLOSED IN PERIOD MIN: 60

(D) 1800 PSI

FINAL FLOW PERIOD MIN: 90

(E) 116 PSI TO (F) 146 PSI

FINAL CLOSED IN PERIOD MIN: 90

(G) 1775 PSI

FINAL HYDROSTATIC PRESSURE

(H) 2164 PSI

WESTERN TESTING CO. INC.
PRESSURE DATA

DATE: 10/15/84

CUSTOMER: PICKRELL DRILLING COMPANY

TEST: 2

ELEVATION (KB): 1272

FORMATION: MISSISSIPPI

COUNTY: HARPER

RANGE: 4700

TICKET #5954

LEASE: "A" DIERKSEN

GEOLOGIST: DIXON

FORMATION: MISSISSIPPI

TOWNSHIP: 33S

STATE: KANSAS

CLOCK: 12

(A) INITIAL HYDROSTATIC PRESSURE: 2208 PSI

(B) FIRST INITIAL FLOW PRESSURE: 354 PSI

(CC) FIRST FINAL FLOW PRESSURE: 162 PSI

(D) INITIAL CLOSED-IN PRESSURE: 1800 PSI

(E) SECOND INITIAL FLOW PRESSURE: 116 PSI

(F) SECOND FINAL FLOW PRESSURE: 146 PSI

(G) FINAL CLOSED-IN PRESSURE: 1775 PSI

(CH) FINAL HYDROSTATIC PRESSURE: 2164 PSI

WELL TEMPERATURE: 119 °F

119 'F

OPEN TOOL: 9:30 PM

TIME - GIVEN TIME - ACTUAL

FIRST FLOW PRESSURE: 30 MIN 30 MIN

INITIAL CLOSED-IN PRESSURE: 60 MIN 60 MIN

SECOND FLOW PRESSURE: 90 MIN 90 MIN

FINAL CLOSED-IN PRESSURE:	90	MIN	90	MIN
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PRESSURE BREAKDOWN

[illegible]

PRESSURE BREAKDOWN - CONT. - TICKET #5954

PT	FIRST FLOW		INITIAL SHUT-IN		SECOND FLOW		FINAL SHUT-IN	
	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE
31							90	1775
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WESTERN TESTING CO. INC.
GAS FLOW REPORT

DATE: 10/15/84

CUSTOMER: PICKRELL DRILLING COMPANY

WELL: 1

ELEVATION (KB): 1272

SECTION: 23

RANGE: 6W

GAUGE SN #6077

TEST: 2

COUNTY: HARPER

RANGE: 4700

TICKET #5954

LEASE: "A" DIERKSEN

GEOLOGIST: DIXON

FORMATION: MISSISSIPPI

TOWNSHIP: 33S

STATE: KANSAS

CLOCK: 12

TIME GAUGE (MIN)	TESTER TYPE	ORIFICE SIZE	PRESSURE (PSI)	FLOW DESCRIPTION
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PRE FLOW

SECOND FLOW

10	MERLA	1	30" WTR	141000 CFPD
20			5	57700
25		1/2	46	42500
30			58	47800
40			64	50200
50			70	52400
60			78	55300
70			80	56100

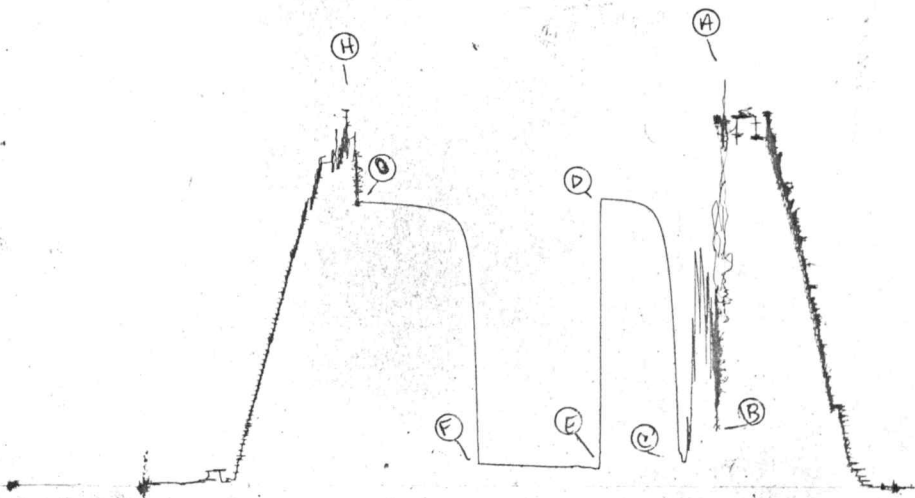
GAS BOTTLE SN #: 626

DATE BOTTLE FILLED: 10/15/84

DATE TO BE INVOICED:

6011
TKT # 5954

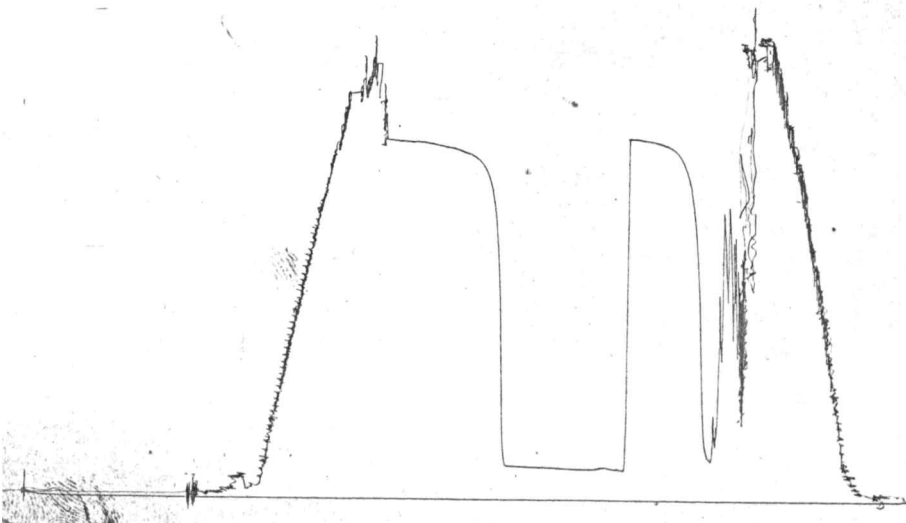
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TKT # 5954

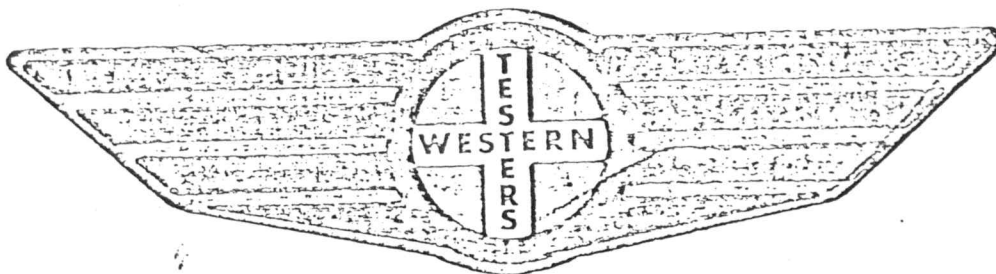
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FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 10/16/84

CUSTOMER: PICKRELL DRILLING COMPANY

WELL: 1

TEST: 3

ELEVATION (KB): 1272

SECTION: 23

RANGE: 6W

GAUGE SN #6077

FORMATION: MISSISSIPPI

TOWNSHIP: 33S

COUNTY: HARPER

RANGE: 4700

TICKET #5952

LEASE: "A" DIERKSEN

GEOLOGIST: DIXON

STATE: KANSAS

CLOCK: 12

INTERVAL TEST FROM: 4387 FT TO: 4407 FT TOTAL DEPTH: 4407 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 4382 FT SIZE: 6 5/8 IN PACKER DEPTH: 4387 FT SIZE: 6 5/8 IN
PACKER DEPTH: FT SIZE: IN PACKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: PICKRELL DRLG

MUD TYPE: DRISPAC

VISCOSITY: 44

WEIGHT: 9.4

WATER LOSS (CC): 15.4

CHLORIDES (P.P.M.): 28000

JARS - MAKE:

SERIAL NUMBER:

DID WELL FLOW? NO

REVERSED OUT? NO

DRILL COLLAR LENGTH: 216 FT I.D.: 2.2 IN

WEIGHT PIPE LENGTH: FT I.D.: IN

DRILL PIPE LENGTH: 4150 FT I.D.: 3.8 IN

TEST TOOL LENGTH: 21 FT TOOL SIZE: 5 1/2 OD IN

ANCHOR LENGTH: 20 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 1/2 XH IN

BLOW: INITIAL FLOW PERIOD WEAK BLOW INCREASING
TO A GOOD 8" BLOW AT THE END OF THE PERIOD.
FINAL FLOW PERIOD STRONG BLOW INCREASING
TO BOTTOM OF BUCKET DURING THE FIRST 3 MINUTES.

RECOVERED: 1730 FT OF: GAS ABOVE FLUID.
RECOVERED: 50 FT OF: OIL CUT MUD (10% GAS; 32% OIL; 58% MUD).
RECOVERED: 60 FT OF: OIL CUT MUD (40% GAS; 30% OIL; 30% MUD).
RECOVERED: 30 FT OF: OIL & GAS CUT MUDDY WATER.
RECOVERED: FT OF: 30% GAS; 30% OIL; 15% MUD; 25% WATER.
RECOVERED: 30 FT OF: OIL & GAS CUT WATERY MUD.
RECOVERED: FT OF: 12% GAS; 18% OIL; 30% MUD; 40% WATER.
RECOVERED: FT OF: CHLORIDES 54000 PPM.
RECOVERED: FT OF:

REMARKS: SLID TOOL 3' TO BOTTOM. PLUGGING
ACTION ON THE INITIAL FLOW PERIOD.

TIME SET PACKER(S): 1:30 PM

TIME STARTED OFF BOTTOM: 6:00 PM

WELL TEMPERATURE: 120 °F

INITIAL HYDROSTATIC PRESSURE:

INITIAL FLOW PERIOD MIN: 30

INITIAL CLOSED IN PERIOD MIN: 60

FINAL FLOW PERIOD MIN: 90

FINAL CLOSED IN PERIOD MIN: 90

FINAL HYDROSTATIC PRESSURE

(A) 2237 PSI
(B) 72 PSI TO (C) 79 PSI
(D) 1783 PSI
(E) 98 PSI TO (F) 108 PSI
(G) 1722 PSI
(H) 2198 PSI

WESTERN TESTING CO. INC.
PRESSURE DATA

DATE: 10/16/84

CUSTOMER: PICKRELL DRILLING COMPANY

TEST: 3

ELEVATION (KB): 1272

FORMATION: MISSISSIPPI

COUNTY: HARPER

RANGE: 4700

TICKET #5952

LEASE: "A" DIERKSEN

GEOLOGIST: DIXON

FORMATION: MISSISSIPPI

TOWNSHIP: 33S

STATE: KANSAS

CLOCK: 12

(A)	INITIAL HYDROSTATIC PRESSURE:	2237	PSI
(B)	FIRST INITIAL FLOW PRESSURE:	72	PSI
(C)	FIRST FINAL FLOW PRESSURE:	79	PSI
(D)	INITIAL CLOSED-IN PRESSURE:	1783	PSI
(E)	SECOND INITIAL FLOW PRESSURE:	98	PSI
(F)	SECOND FINAL FLOW PRESSURE:	108	PSI
(G)	FINAL CLOSED-IN PRESSURE:	1722	PSI
(H)	FINAL HYDROSTATIC PRESSURE:	2198	PSI
	WELL TEMPERATURE:	120	'F
	OPEN TOOL:	1:30 PM	

	TIME - GIVEN	TIME - ACTUAL
FIRST FLOW PRESSURE:	30 MIN	30 MIN
INITIAL CLOSED-IN PRESSURE:	60 MIN	60 MIN
SECOND FLOW PRESSURE:	90 MIN	90 MIN
FINAL CLOSED-IN PRESSURE:	90 MIN	90 MIN

PRESSURE BREAKDOWN

[illegible]

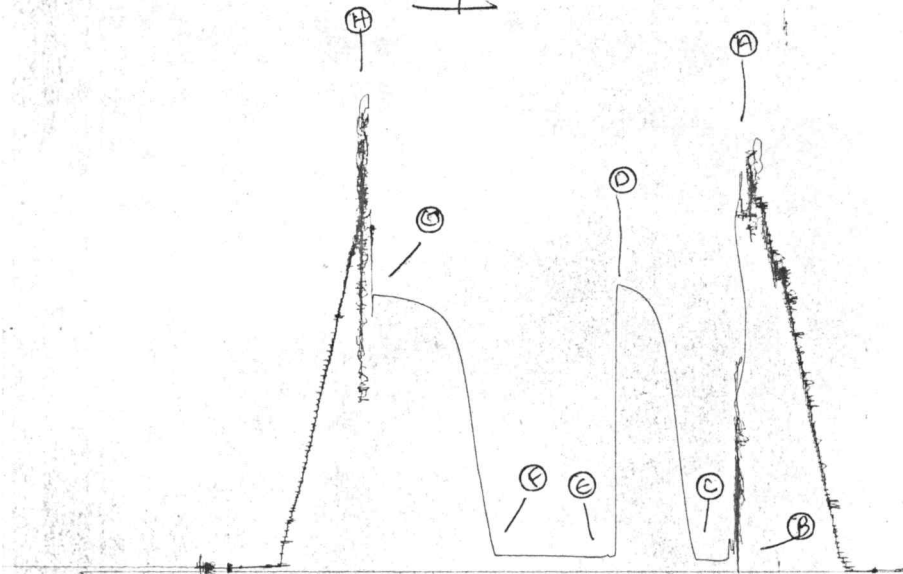
PRESSURE BREAKDOWN - CONT. - TICKET #5952

PT	FIRST FLOW		INITIAL SHUT-IN		SECOND FLOW		FINAL SHUT-IN	
	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE	MIN	PRESSURE
31							90	1722
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