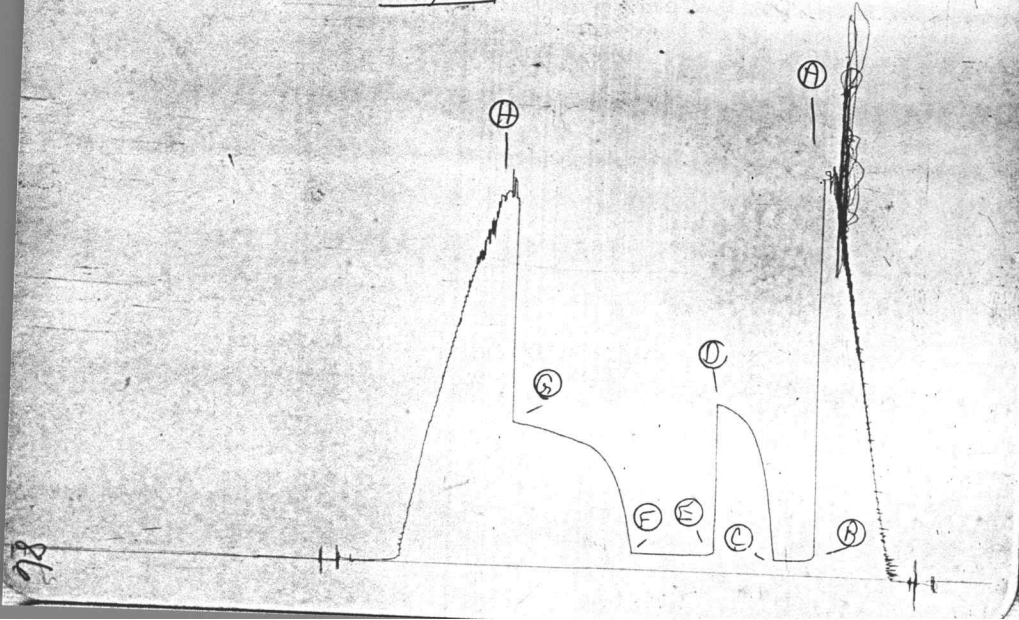


KT 13476

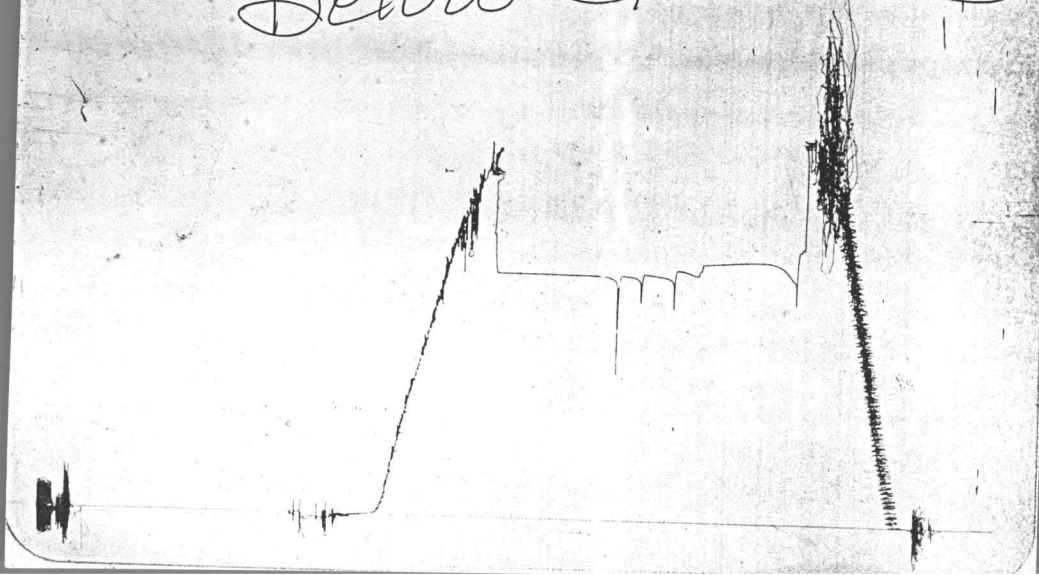
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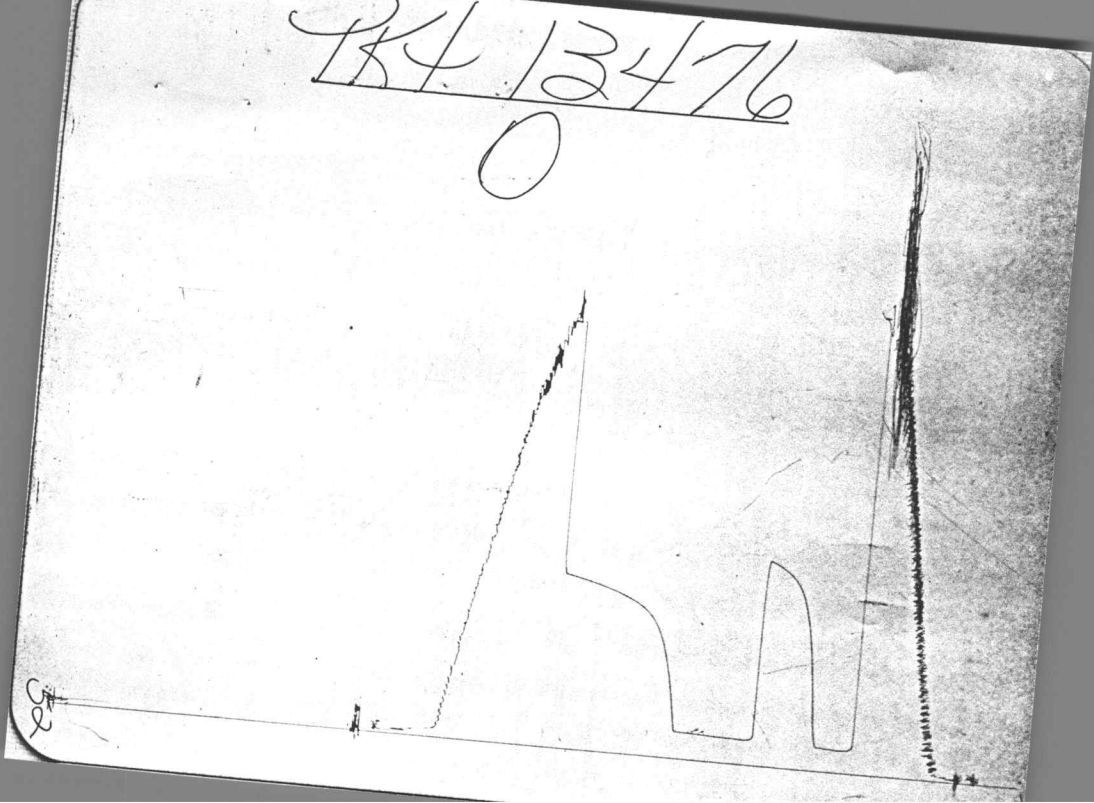
KF 13476

Below Saddle



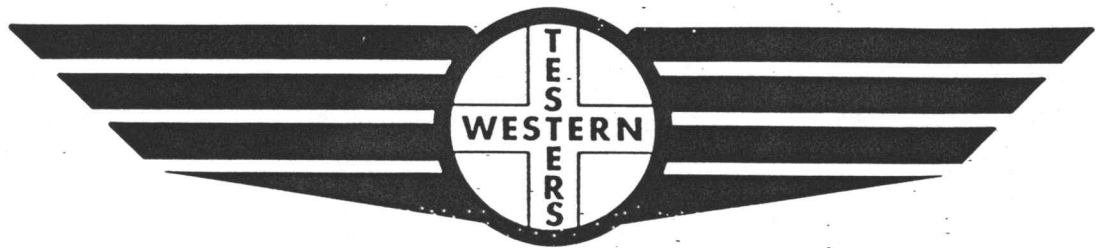
PK 13476

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY MARMAC PETROLEUM COMPANY LEASE & WELL NO. #1-31 BRYANT SEC. 31 TWP. 27S RGE. 15W TEST NO. 2 DATE 5/4/87

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 5-4-87 TICKET : 13476
CUSTOMER : MARMAC PETROLEUM COMPANY LEASE : BRYANT
WELL : #1-31 TEST: 2 GEOLOGIST : D. McGINNESS
ELEVATION : - FORMATION : MISSISSIPPI
SECTION : 31 TOWNSHIP : 27S
RANGE : 15W COUNTY : PRATT STATE : KANSAS
GAUGE SN# : 3086 RANGE : 4500 CLOCK : 12

INTERVAL FROM : 4592 TO : 4630 TOTAL DEPTH : 4790
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4587 SIZE : 6.63
PACKER DEPTH : 4592 SIZE : 6.63
PACKER DEPTH : 4630 SIZE : 6.63
PACKER DEPTH : SIZE :

DRILLING CON. : DUKE DRILLING RIG #2
MUD TYPE : CHEMICAL VISCOSITY : 45
WEIGHT : 9.6 WATER LOSS (CC) : 14.4
CHLORIDES (PPM) : 4400
JARS-MAKE : SERIAL NUMBER :
DID WELL FLOW ? : YES REVERSED OUT ? : NO

DRILL COLLAR LENGTH : 0 FT I.D. inch : 0.00
WEIGHT PIPE LENGTH : 345 FT I.D. inch : 2.70
DRILL PIPE LENGTH : 4226 FT I.D. inch : 3.80
TEST TOOL LENGTH : 21 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 198 FT ANCHOR SIZE : 5.50
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5 FH

BLOW COMMENT #1 : STRONG BLOW THROUGHOUT FLOW PERIODS.
BLOW COMMENT #2 : GAS TO SURFACE IN 2 MINUTES ON THE SECOND FLOW.
BLOW COMMENT #3 : SEE ATTACHED FLOW CHART.
BLOW COMMENT #4 :

GAS FLOW REPORT

| | |
|---|--------------------------|
| Date : 5-4-87 | Ticket # : 13476 |
| Customer : MARMAC PETROLEUM COMPANY | Lease : BRYANT |
| Well : #1-31 Test : 2 | Geologist : D. McGINNESS |
| Elevation (KB) : - Formation : MISSISSIPPI | |
| Section : 31 Township : 27S | |
| Range : 15W County : PRATT | State : KANSAS |
| Gauge SN # : 3086 Range : 4500 | Clock : 12 |

| | | | | |
|---------------------|-------------|----------------|-------------------|------------------|
| TIME GAUGE (MIN) | TESTER TYPE | ORFICE SIZE | PRESSURE (PSI) | FLOW DESCRIPTION |
|---------------------|-------------|----------------|-------------------|------------------|

PRE FLOW
=====

SECOND FLOW
=====

| | | | | |
|----|-------|------|-----------------|----------------|
| 2 | MERLA | 1/4" | INCHES OF WATER | GAS TO SURFACE |
| 5 | | | 24 | 8220 CFPD |
| 10 | | | 20 | 7510 CFPD |
| 20 | | | 18 | 7120 CFPD |
| 30 | | | 16 | 6720 CFPD |
| 40 | | | 13 | 6100 CFPD |
| 50 | | | 11 | 5600 CFPD |
| 60 | | | 9 | 5050 CFPD |

Gas Bottle SN # :
 Date Bottle Filled :
 Date to be Invoiced :

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : MARMAC PETROLEUM COMPANY
RIG : PRATT-KANSAS
FIELD : BRYANT
WELL : #1-31
DATE : 5-4-87
GAUGE NO : 3086

OPERATIONAL COMMENTS

ANCHOR INCLUDES 150 FEET OF TAIL PIPE.

COMPANY : MARMAC PETROLEUM COMPANY
 WELL : #1-31
 GAUGE # : 3086
 DATE : 4/ 5/87

FIELD : BRYANT
 JOB # : 13476
 DEPTH : 4790
 TEST :

| DATA No. | REAL TIME HR:MN:SS | ELAPSE TIME DELTA HOURS | PRESSURE PSIG | TEMP DEG F | DELTA P $P_i - P_{(i-1)}$ |
|----------|--------------------|-------------------------|---------------|------------|---------------------------|
| 1 | 7: 0: 0 | 0.000 | 104.000 | 122.00 | 0.000 |
| 2 | 7: 4: 59 | 0.083 | 104.000 | 122.00 | 0.000 |
| 3 | 7:10: 0 | 0.167 | 104.000 | 122.00 | 0.000 |
| 4 | 7:15: 0 | 0.250 | 104.000 | 122.00 | 0.000 |
| 5 | 7:19: 59 | 0.333 | 104.000 | 122.00 | 0.000 |
| 6 | 7:25: 0 | 0.417 | 104.000 | 122.00 | 0.000 |
| 7 | 7:30: 0 | 0.500 | 104.000 | 122.00 | 0.000 |
| 8 | 7:33: 0 | 0.550 | 345.000 | 122.00 | 241.000 |
| 9 | 7:36: 0 | 0.600 | 525.000 | 122.00 | 180.000 |
| 10 | 7:39: 0 | 0.650 | 658.000 | 122.00 | 133.000 |
| 11 | 7:42: 0 | 0.700 | 751.000 | 122.00 | 93.000 |
| 12 | 7:45: 0 | 0.750 | 821.000 | 122.00 | 70.000 |
| 13 | 7:48: 0 | 0.800 | 877.000 | 122.00 | 56.000 |
| 14 | 7:51: 0 | 0.850 | 920.000 | 122.00 | 43.000 |
| 15 | 7:54: 0 | 0.900 | 937.000 | 122.00 | 17.000 |
| 16 | 7:57: 0 | 0.950 | 974.000 | 122.00 | 37.000 |
| 17 | 8: 0: 0 | 1.000 | 995.000 | 122.00 | 21.000 |
| 18 | 8: 2: 59 | 1.050 | 1009.000 | 122.00 | 14.000 |
| 19 | 8: 6: 0 | 1.100 | 1022.000 | 122.00 | 13.000 |
| 20 | 8: 9: 0 | 1.150 | 1035.000 | 122.00 | 13.000 |
| 21 | 8:12: 0 | 1.200 | 1043.000 | 122.00 | 8.000 |
| 22 | 8:15: 0 | 1.250 | 1050.000 | 122.00 | 7.000 |
| 23 | 8:16: 0 | 1.267 | 115.000 | 122.00 | -935.000 |
| 24 | 8:19: 59 | 1.333 | 115.000 | 122.00 | 0.000 |
| 25 | 8:25: 0 | 1.417 | 115.000 | 122.00 | 0.000 |
| 26 | 8:30: 0 | 1.500 | 115.000 | 122.00 | 0.000 |
| 27 | 8:34: 59 | 1.583 | 115.000 | 122.00 | 0.000 |
| 28 | 8:40: 0 | 1.667 | 115.000 | 122.00 | 0.000 |
| 29 | 8:45: 0 | 1.750 | 115.000 | 122.00 | 0.000 |
| 30 | 8:49: 59 | 1.833 | 115.000 | 122.00 | 0.000 |
| 31 | 8:55: 0 | 1.917 | 115.000 | 122.00 | 0.000 |
| 32 | 9: 0: 0 | 2.000 | 115.000 | 122.00 | 0.000 |
| 33 | 9: 4: 59 | 2.083 | 115.000 | 122.00 | 0.000 |
| 34 | 9:10: 0 | 2.167 | 115.000 | 122.00 | 0.000 |
| 35 | 9:15: 0 | 2.250 | 115.000 | 122.00 | 0.000 |
| 36 | 9:18: 0 | 2.300 | 255.000 | 122.00 | 140.000 |
| 37 | 9:21: 0 | 2.350 | 379.000 | 122.00 | 124.000 |
| 38 | 9:24: 0 | 2.400 | 462.000 | 122.00 | 83.000 |
| 39 | 9:27: 0 | 2.450 | 538.000 | 122.00 | 76.000 |
| 40 | 9:30: 0 | 2.500 | 594.000 | 122.00 | 56.000 |
| 41 | 9:33: 0 | 2.550 | 641.000 | 122.00 | 47.000 |
| 42 | 9:36: 0 | 2.600 | 676.000 | 122.00 | 35.000 |
| 43 | 9:39: 0 | 2.650 | 704.000 | 122.00 | 28.000 |
| 44 | 9:42: 0 | 2.700 | 730.000 | 122.00 | 26.000 |
| 45 | 9:45: 0 | 2.750 | 747.000 | 122.00 | 17.000 |
| 46 | 9:48: 0 | 2.800 | 765.000 | 122.00 | 18.000 |
| 47 | 9:51: 0 | 2.850 | 776.000 | 122.00 | 11.000 |
| 48 | 9:54: 0 | 2.900 | 783.000 | 122.00 | 7.000 |
| 49 | 9:57: 0 | 2.950 | 792.000 | 122.00 | 9.000 |
| 50 | 10: 0: 0 | 3.000 | 800.000 | 122.00 | 8.000 |
| 51 | 10: 3: 0 | 3.050 | 809.000 | 122.00 | 9.000 |
| 52 | 10: 6: 0 | 3.100 | 818.000 | 122.00 | 9.000 |

COMPANY : MARMAC PETROLEUM COMPANY
WELL : #1-31
GAUGE # : 3086
DATE : 4/ 5/87

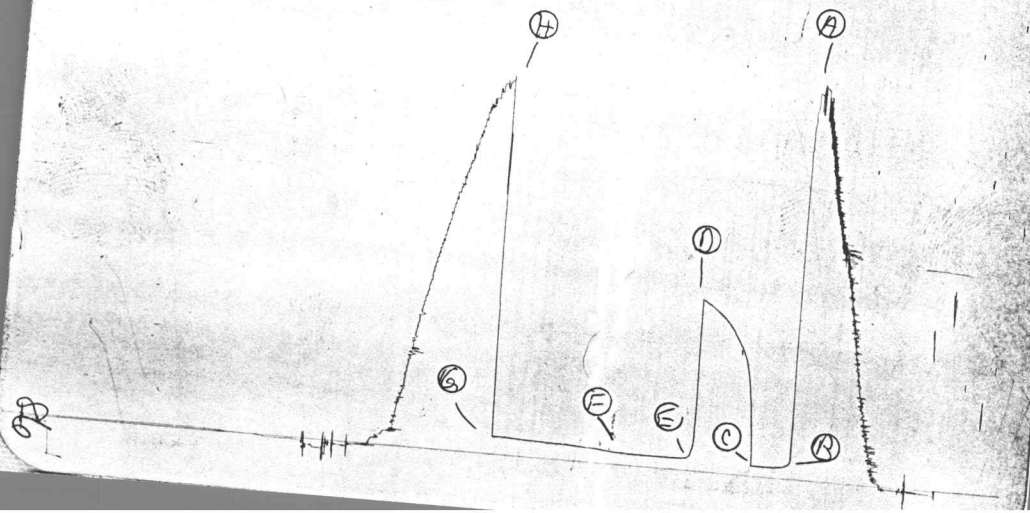
FIELD : BRYANT
JOB # : 13476
DEPTH : 4790
TEST :

| DATA No. | REAL TIME HR:MN:SS | ELAPSE TIME DELTA HOURS | PRESSURE PSIG | TEMP DEG F | DELTA P Pi-P(i-1) |
|----------|--------------------|-------------------------|---------------|------------|-------------------|
| 53 | 10: 9: 0 | 3.150 | 823.000 | 122.00 | 5.000 |
| 54 | 10:12: 0 | 3.200 | 830.000 | 122.00 | 7.000 |
| 55 | 10:15: 0 | 3.250 | 838.000 | 122.00 | 8.000 |
| 56 | 10:18: 0 | 3.300 | 848.000 | 122.00 | 10.000 |
| 57 | 10:21: 0 | 3.350 | 853.000 | 122.00 | 5.000 |
| 58 | 10:24: 0 | 3.400 | 860.000 | 122.00 | 7.000 |
| 59 | 10:27: 0 | 3.450 | 866.000 | 122.00 | 6.000 |
| 60 | 10:30: 0 | 3.500 | 871.000 | 122.00 | 5.000 |
| 61 | 10:33: 0 | 3.550 | 878.000 | 122.00 | 7.000 |
| 62 | 10:36: 0 | 3.600 | 880.000 | 122.00 | 2.000 |
| 63 | 10:39: 0 | 3.650 | 884.000 | 122.00 | 4.000 |
| 64 | 10:42: 0 | 3.700 | 887.000 | 122.00 | 3.000 |
| 65 | 10:45: 0 | 3.750 | 892.000 | 122.00 | 5.000 |

WESTERN TESTING CO. INC.

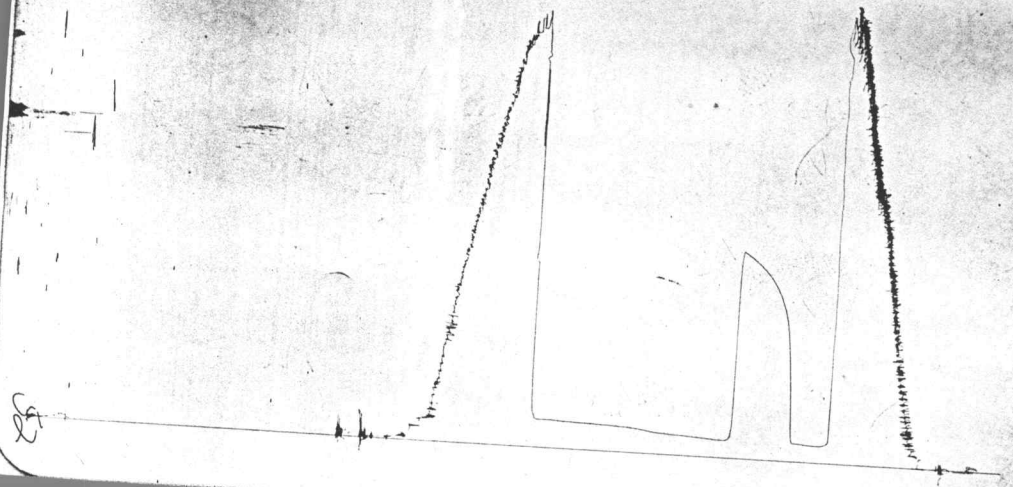
TKT 12175

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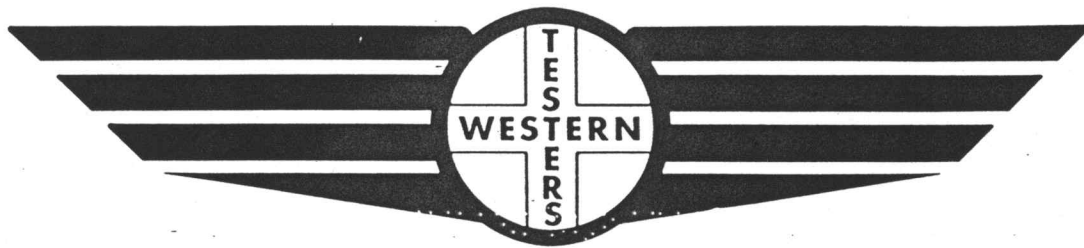
TK 12175

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FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

COMPANY MARMAC PETROLEUM COMPANY LEASE & WELL NO. #1-31 BRYANT SEC. 31 TWP. 27S RGE. 15W TEST NO. 1 DATE 5/3/87

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE : 5-3-87
CUSTOMER : MARMAC PETROLEUM COMPANY
WELL : #1-31 TEST: 1
ELEVATION : -
SECTION : 31
RANGE : 15W COUNTY : PRATT
GAUGE SN# : 3086 RANGE : 4500
TICKET : 12175
LEASE : BRYANT
GEOLOGIST : D. McGINNESS
FORMATION : MISSISSIPPI
TOWNSHIP : 27S
STATE : KANSAS
CLOCK : 12

INTERVAL FROM : 4567 TO : 4630 TOTAL DEPTH : 4630
DEPTH OF SELECTIVE ZONE :
PACKER DEPTH : 4562 SIZE : 6.63
PACKER DEPTH : 4567 SIZE : 6.63
PACKER DEPTH : SIZE :
PACKER DEPTH : SIZE :

DRILLING CON. : DUKE DRILLING RIG #2
MUD TYPE : CHEMICAL VISCOSITY : 47
WEIGHT : 9.4 WATER LOSS (CC) : 9.6
CHLORIDES (PPM) : 3500
JARS-MAKE : - SERIAL NUMBER : -
DID WELL FLOW ? : YES REVERSED OUT ? :

DRILL COLLAR LENGTH : 120 FT I.D. inch : 2.25
WEIGHT PIPE LENGTH : 345 FT I.D. inch : 2.70
DRILL PIPE LENGTH : 4081 FT I.D. inch : 3.80
TEST TOOL LENGTH : 21 FT TOOL SIZE : 5.50
ANCHOR LENGTH : 63 FT ANCHOR SIZE : 5.50
SURFACE CHOKE SIZE : .75 IN BOTTOM CHOKE SIZE : .75
MAIN HOLE SIZE : 7.875 IN TOOL JOINT SIZE : 4.5 FH

BLOW COMMENT #1 : STRONG BLOW THROUGHOUT FLOW PERIODS.
BLOW COMMENT #2 : GAS TO SURFACE IN 6 MINUTES ON PREFLOW-
BLOW COMMENT #3 : SEE ATTACHED FLOW CHART.
BLOW COMMENT #4 :

RECOVERED : 270 FT OF: MUDDY OIL (70% OIL)

Total Barrels Fluid = 1.65
Total Fluid Prod Rate = 26.44 BFPD
Indicated Oil Rate = 18.51 BOPD
Indicated Wtr Rate = 0.26 BWPD

REMARK 1 :
REMARK 2 :
REMARK 3 :
REMARK 4 :

SET PACKER(S) : 2:00 PM

TIME STARTED OFF BOTTOM : 5:45 PM

WELL TEMPERATURE : 122

INITIAL HYDROSTATIC PRESSURE

INITIAL FLOW PERIOD MIN: 30

INITIAL CLOSED IN PERIOD MIN: 45

FINAL FLOW PERIOD MIN: 60

FINAL CLOSED IN PERIOD MIN: 90

FINAL HYDROSTATIC PRESSURE

(A) 2362

(B) 80 PSI TO (C) : 80

(D) 1074

(E) 90 PSI TO (F) : 95

(G) 125

(H) 2291

GAS FLOW REPORT

| | |
|-------------------------------------|--------------------------|
| Date : 5-3-87 | Ticket # : 12175 |
| Customer : MARMAC PETROLEUM COMPANY | Lease : BRYANT |
| Well : #1-31 | Geologist : D. McGINNESS |
| Elevation (KB) : - | Formation : MISSISSIPPI |
| Section : 31 | Township : 27S |
| Range : 15W | County : PRATT |
| Gauge SN # : 3086 | State : KANSAS |
| | Range : 4500 |
| | Clock : 12 |

| | | | | |
|---------------------|-------------|----------------|-------------------|------------------|
| TIME GAUGE (MIN) | TESTER TYPE | ORFICE SIZE | PRESSURE (PSI) | FLOW DESCRIPTION |
|---------------------|-------------|----------------|-------------------|------------------|

PRE FLOW
=====

| | | | | |
|----|-------|----|-----------------|----------------|
| 6 | MERLA | 1" | INCHES OF WATER | |
| | | | | GAS TO SURFACE |
| 10 | | | 9 | 77500 CFPD |
| 20 | | | 6 | 63300 CFPD |
| 30 | | | 4.5 | 54700 CFPD |

SECOND FLOW
=====

| | | | | |
|----|-------|-------|-----------------|------------|
| | MERLA | 1/2 " | INCHES OF WATER | |
| 5 | | | 30 | 34300 CFPD |
| 10 | | | 17 | 25800 CFPD |
| 20 | | | 13 | 22800 CFPD |
| 30 | | | 11 | 20900 CFPD |
| 40 | | | 9 | 18800 CFPD |
| 50 | | | 6 | 15400 CFPD |
| 60 | | | 5 | 14100 CFPD |

Gas Bottle SN # : _____
 Date Bottle Filled : _____
 Date to be Invoiced : _____

WESTERN TESTING CO. INC.
WICHITA - KANSAS

Pressure Transient Report

COMPANY : MARMAC PETROLEUM COMPANY
RIG : PRATT-KANSAS
FIELD : BRYANT
WELL : #1-31
DATE : 5-3-87
GAUGE NO : 3086

OPERATIONAL COMMENTS

COMPANY : MARMAC PETROLEUM COMPANY
 WELL : #1-31
 GAUGE # : 3086
 DATE : 3/ 5/87

FIELD : BRYANT
 JOB # : 12175
 DEPTH : 4630
 TEST :

| DATA No. | REAL TIME HR:MN:SS | ELAPSE TIME DELTA HOURS | PRESSURE PSIG | TEMP DEG F | DELTA P Pi-P(i-1) |
|----------|--------------------|-------------------------|---------------|------------|-------------------|
| 1 | 2: 0: 0 | 0.000 | 80.000 | 122.00 | 0.000 |
| 2 | 2: 4: 59 | 0.083 | 80.000 | 122.00 | 0.000 |
| 3 | 2:10: 0 | 0.167 | 80.000 | 122.00 | 0.000 |
| 4 | 2:15: 0 | 0.250 | 80.000 | 122.00 | 0.000 |
| 5 | 2:19: 59 | 0.333 | 80.000 | 122.00 | 0.000 |
| 6 | 2:25: 0 | 0.417 | 80.000 | 122.00 | 0.000 |
| 7 | 2:30: 0 | 0.500 | 80.000 | 122.00 | 0.000 |
| 8 | 2:33: 0 | 0.550 | 456.000 | 122.00 | 376.000 |
| 9 | 2:36: 0 | 0.600 | 623.000 | 122.00 | 167.000 |
| 10 | 2:39: 0 | 0.650 | 727.000 | 122.00 | 104.000 |
| 11 | 2:42: 0 | 0.700 | 787.000 | 122.00 | 60.000 |
| 12 | 2:45: 0 | 0.750 | 834.000 | 122.00 | 47.000 |
| 13 | 2:48: 0 | 0.800 | 869.000 | 122.00 | 35.000 |
| 14 | 2:51: 0 | 0.850 | 909.000 | 122.00 | 40.000 |
| 15 | 2:54: 0 | 0.900 | 939.000 | 122.00 | 30.000 |
| 16 | 2:57: 0 | 0.950 | 969.000 | 122.00 | 30.000 |
| 17 | 3: 0: 0 | 1.000 | 993.000 | 122.00 | 24.000 |
| 18 | 3: 2: 59 | 1.050 | 1013.000 | 122.00 | 20.000 |
| 19 | 3: 6: 0 | 1.100 | 1032.000 | 122.00 | 19.000 |
| 20 | 3: 9: 0 | 1.150 | 1048.000 | 122.00 | 16.000 |
| 21 | 3:12: 0 | 1.200 | 1059.000 | 122.00 | 11.000 |
| 22 | 3:15: 0 | 1.250 | 1074.000 | 122.00 | 15.000 |
| 23 | 3:16: 0 | 1.267 | 90.000 | 122.00 | -984.000 |
| 24 | 3:19: 59 | 1.333 | 90.000 | 122.00 | 0.000 |
| 25 | 3:25: 0 | 1.417 | 90.000 | 122.00 | 0.000 |
| 26 | 3:30: 0 | 1.500 | 90.000 | 122.00 | 0.000 |
| 27 | 3:34: 59 | 1.583 | 90.000 | 122.00 | 0.000 |
| 28 | 3:40: 0 | 1.667 | 90.000 | 122.00 | 0.000 |
| 29 | 3:45: 0 | 1.750 | 90.000 | 122.00 | 0.000 |
| 30 | 3:49: 59 | 1.833 | 90.000 | 122.00 | 0.000 |
| 31 | 3:55: 0 | 1.917 | 90.000 | 122.00 | 0.000 |
| 32 | 4: 0: 0 | 2.000 | 90.000 | 122.00 | 0.000 |
| 33 | 4: 4: 59 | 2.083 | 90.000 | 122.00 | 0.000 |
| 34 | 4:10: 0 | 2.167 | 92.000 | 122.00 | 2.000 |
| 35 | 4:15: 0 | 2.250 | 95.000 | 122.00 | 3.000 |
| 36 | 4:18: 0 | 2.300 | 97.000 | 122.00 | 2.000 |
| 37 | 4:21: 0 | 2.350 | 99.000 | 122.00 | 2.000 |
| 38 | 4:24: 0 | 2.400 | 103.000 | 122.00 | 4.000 |
| 39 | 4:27: 0 | 2.450 | 106.000 | 122.00 | 3.000 |
| 40 | 4:30: 0 | 2.500 | 107.000 | 122.00 | 1.000 |
| 41 | 4:33: 0 | 2.550 | 108.000 | 122.00 | 1.000 |
| 42 | 4:36: 0 | 2.600 | 109.000 | 122.00 | 1.000 |
| 43 | 4:39: 0 | 2.650 | 110.000 | 122.00 | 1.000 |
| 44 | 4:42: 0 | 2.700 | 111.000 | 122.00 | 1.000 |
| 45 | 4:45: 0 | 2.750 | 113.000 | 122.00 | 2.000 |
| 46 | 4:48: 0 | 2.800 | 115.000 | 122.00 | 2.000 |
| 47 | 4:51: 0 | 2.850 | 116.000 | 122.00 | 1.000 |
| 48 | 4:54: 0 | 2.900 | 116.000 | 122.00 | 0.000 |
| 49 | 4:57: 0 | 2.950 | 116.000 | 122.00 | 0.000 |
| 50 | 5: 0: 0 | 3.000 | 116.000 | 122.00 | 0.000 |
| 51 | 5: 3: 0 | 3.050 | 116.000 | 122.00 | 0.000 |
| 52 | 5: 6: 0 | 3.100 | 116.000 | 122.00 | 0.000 |

COMPANY : MARMAC PETROLEUM COMPANY
WELL : #1-31
GAUGE # : 3086
DATE : 3/ 5/87

FIELD : BRYANT
JOB # : 12175
DEPTH : 4630
TEST :

| DATA No. | REAL TIME HR:MN:SS | ELAPSE TIME DELTA HOURS | PRESSURE PSIG | TEMP DEG F | DELTA P Pi-P(i-1) |
|----------|--------------------|-------------------------|---------------|------------|-------------------|
| 53 | 5: 9: 0 | 3.150 | 117.000 | 122.00 | 1.000 |
| 54 | 5:12: 0 | 3.200 | 118.000 | 122.00 | 1.000 |
| 55 | 5:15: 0 | 3.250 | 119.000 | 122.00 | 1.000 |
| 56 | 5:18: 0 | 3.300 | 119.000 | 122.00 | 0.000 |
| 57 | 5:21: 0 | 3.350 | 120.000 | 122.00 | 1.000 |
| 58 | 5:24: 0 | 3.400 | 121.000 | 122.00 | 1.000 |
| 59 | 5:27: 0 | 3.450 | 122.000 | 122.00 | 1.000 |
| 60 | 5:30: 0 | 3.500 | 123.000 | 122.00 | 1.000 |
| 61 | 5:33: 0 | 3.550 | 124.000 | 122.00 | 1.000 |
| 62 | 5:36: 0 | 3.600 | 125.000 | 122.00 | 1.000 |
| 63 | 5:39: 0 | 3.650 | 125.000 | 122.00 | 0.000 |
| 64 | 5:42: 0 | 3.700 | 125.000 | 122.00 | 0.000 |
| 65 | 5:45: 0 | 3.750 | 125.000 | 122.00 | 0.000 |

WESTERN TESTING CO. INC.