



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 8171

P. O. BOX 1599 PHONE (316) 262-5861
WICHITA, KANSAS 67201

Elevation 1313 Kb Formation miss Eff. Pay Ft.

R040 District Augusta Date 5-22-85 Customer Order No.

COMPANY NAME Range One Co Inc

ADDRESS 220 West Douglas Wichita Ka

LEASE AND WELL NO Nelson 1-C COUNTY Saline STATE Ka Sec. 18 Twp. 16 Rge. 10

Mail Invoice To Same #1 C Nelson No. Copies Requested 1

Mail Charts To Same No. Copies Requested 5

Formation Test No. 1 Interval Tested From 2559 ft. to 2685 ft. Total Depth 2685 ft.

Packer Depth 2559 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 2554 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 2562 ft. Recorder Number 3474 Cap. 3000

Bottom Recorder Depth (Outside) 2566 ft. Recorder Number 2605 Cap. 4150

Below Saddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Range Mud Type Chem Viscosity 40

Weight 9.9 Water Loss 12.0 cc. Drill Collar Length 120 I. D. 2.25 in.

Chlorides 2300 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.

Jars: Make w Serial Number Anchor Length 12 3/4 ft. Size 5 1/2 in.

Did Well Flow? NO Reversed Out NO 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 x 1 1/2 in.

Blow: Weak blow decreasing to very wk first flow, Very W-R second flow

Recovered 20 ft. of heavy oil cut mud 15% Oil

Recovered ft. of good show of free Oil on top of tools

Recovered ft. of

Recovered ft. of

Chlorides P.P.M. Sample Jars used Remarks:

Time On Location 8:30 A.M. Time Pick Up Tool 10:00 P.M. Time Off Location P.M.

Time Set Packer(s) 11:00 A.M. Time Started Off Bottom 2:00 P.M. Maximum Temperature 102

Initial Hydrostatic Pressure (A) 1318 P.S.I.

Initial Flow Period Minutes 30 (B) 53 P.S.I. to (C) 30 P.S.I.

Initial Closed In Period Minutes 30 (D) 40 P.S.I.

Final Flow Period Minutes 60 (E) 45 P.S.I. to (F) 37 P.S.I.

Final Closed In Period Minutes 60 (G) 477 P.S.I.

Final Hydrostatic Pressure (H) 1318 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Signature of Customer or his authorized representative

Western Representative Kenny Kukendall 1127

FIELD INVOICE

Table with 2 columns: Item and Amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Fluid Sampler, Extra Charts, Insurance, Telecopier, and TOTAL. Amounts are listed in dollars, with Open Hole Test at \$550.00 and TOTAL at \$550.00.

WESTERN TESTING CO., INC.

Pressure Data

Date 5-22-85 Test Ticket No. 8171
 Recorder No. 3474 Capacity 3000 Location _____ Ft. _____
 Clock No. _____ Elevation _____ Well Temperature _____ °F

Point	Pressure	P.S.I.	Open Tool	M	Time Given	Time Computed
A. Initial Hydrostatic Mud	<u>1329</u>	P.S.I.	Open Tool			
B. First Initial Flow Pressure	<u>32</u>	P.S.I.	First Flow Pressure		<u>30</u> Mins.	<u>30</u> Mins.
C. First Final Flow Pressure	<u>32</u>	P.S.I.	Initial Closed-in Pressure		<u>30</u> Mins.	<u>33</u> Mins.
D. Initial Closed-in Pressure	<u>396</u>	P.S.I.	Second Flow Pressure		<u>60</u> Mins.	<u>60</u> Mins.
E. Second Initial Flow Pressure	<u>35</u>	P.S.I.	Final Closed-in Pressure		<u>60</u> Mins.	<u>66</u> Mins.
F. Second Final Flow Pressure	<u>35</u>	P.S.I.				
G. Final Closed-in Pressure	<u>484</u>	P.S.I.				
H. Final Hydrostatic Mud	<u>1233</u>	P.S.I.				

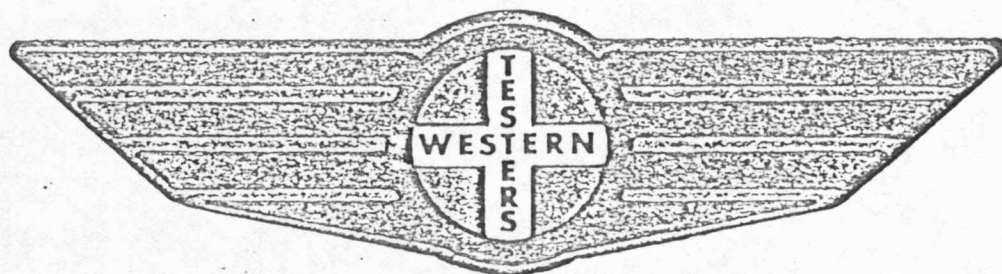
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: <u>7</u> Inc.		Breakdown: <u>12</u> Inc.		Breakdown: <u>13</u> Inc.		Breakdown: <u>23</u> Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>32</u>	0	<u>32</u>	0	<u>35</u>	0	<u>35</u>
P 2 5	<u>↓</u>	3	<u>36</u>	5	<u>↓</u>	3	<u>36</u>
P 3 10	<u>↓</u>	6	<u>71</u>	10	<u>↓</u>	6	<u>48</u>
P 4 15	<u>32</u>	9	<u>120</u>	15	<u>35</u>	9	<u>76</u>
P 5 20	<u>↓</u>	12	<u>176</u>	20	<u>↓</u>	12	<u>112</u>
P 6 25	<u>↓</u>	15	<u>222</u>	25	<u>↓</u>	15	<u>152</u>
P 7 30	<u>32</u>	18	<u>265</u>	30	<u>35</u>	18	<u>186</u>
P 8 35		21	<u>302</u>	35	<u>↓</u>	21	<u>221</u>
P 9 40		24	<u>332</u>	40	<u>↓</u>	24	<u>253</u>
P10 45		27	<u>364</u>	45	<u>35</u>	27	<u>282</u>
P11 50		30	<u>388</u>	50	<u>↓</u>	30	<u>309</u>
P12 55		33	<u>396</u>	55	<u>↓</u>	33	<u>335</u>
P13 60		36		60	<u>35</u>	36	<u>356</u>
P14 65		39		65		39	<u>375</u>
P15 70		42		70		42	<u>392</u>
P16 75		45		75		45	<u>412</u>
P17 80		48		80		48	<u>419</u>
P18 85		51		85		51	<u>433</u>
P19 90		54		90		54	<u>443</u>
P20 95		57		95		57	<u>454</u>
100		60		100		60	<u>465</u>
						63	<u>474</u>
						66	<u>484</u>

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 5-22-85
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 1 TEST: 1
ELEVATION (KB): 1313 FORMATION: MISSISSIPPI
SECTION: 18 TOWNSHIP: 16S
RANGE: 1W COUNTY: SALINE STATE: KANSAS
GAUGE SN #3474 RANGE: 3000 CLOCK: 12

TICKET #8171
LEASE: "C" NELSON
GEOLOGIST: ROBERT OLSEN

INTERVAL TEST FROM: 2559 FT TO: 2685 FT TOTAL DEPTH: 2685 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 2559 FT SIZE: 6 3/4 IN PAKER DEPTH: 2554 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #1
MUD TYPE: CHEMICAL VISCOSITY: 40
WEIGHT: 9.9 WATER LOSS (CC): 12.0
CHLORIDES (P.P.M.): 2300
JARS - MAKE: SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 120 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 2419 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 126 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
DECREASING TO VERY WEAK BLOW.
FINAL FLOW PERIOD VERY WEAK BLOW.

RECOVERED: 20 FT OF: HEAVY OIL CUT MUD (15% OIL).
RECOVERED: FT OF: GOOD SHOW OF OIL ON TOP OF TOOLS.
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:
RECOVERED: FT OF:

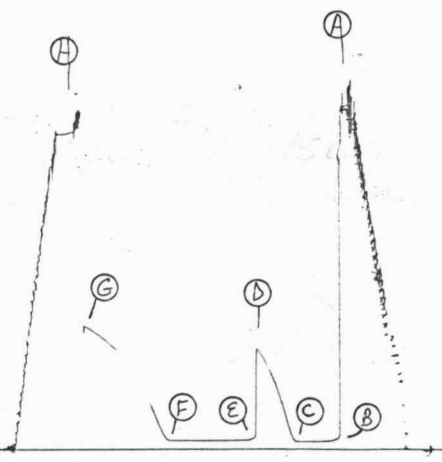
REMARKS:

TIME SET PACKER(S): 11:00 PM TIME STARTED OFF BOTTOM: 2:00 AM
WELL TEMPERATURE: 102 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1329 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 32 PSI TO (C) 32 PSI
INITIAL CLOSED IN PERIOD MIN: 33 (D) 396 PSI
FINAL FLOW PERIOD MIN: 60 (E) 35 PSI TO (F) 35 PSI
FINAL CLOSED IN PERIOD MIN: 66 (G) 484 PSI
FINAL HYDROSTATIC PRESSURE (H) 1233 PSI

TKT # 8171

3414
DST#1

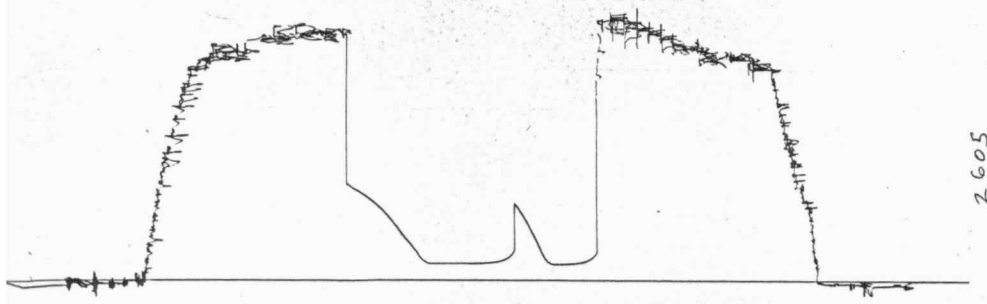
I



17749

TKT # 8171

O



2605



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET NO 8172

P. O. BOX 1599 WICHITA, KANSAS 67201

Elevation 1313 Kb Formation Miss. Eff. Pay Ft.

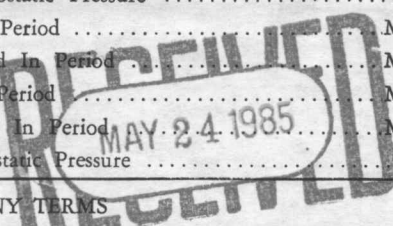
COMPANY NAME Range Oil Co. Inc. ADDRESS 220 West Douglas Wichita Kb 240 Page Court 67202 LEASE AND WELL NO. Nelson 1-C COUNTY Latine STATE Kb Sec. 18 Twp. 16 Rge. 1W

Formation Test No. 2 Interval Tested From 2560 ft. to 2687 ft. Total Depth 2687 ft. Packer Depth 2560 ft. Size 6 3/4 in. Packer Depth 2555 ft. Size 6 3/4 in. Top Recorder Depth (Inside) 2565 ft. Recorder Number 3474 Cap. 3000

Blow: Weak blow throughout first flow, weak blow second flow

Recovered 4 ft. of free oil Recovered 90 ft. of mud cut oil 80% oil 20% mud Chlorides P.P.M. Sample Jars used Remarks:

Time On Location 8:00 A.M. Time Pick Up Tool 8:00 P.M. Time Off Location P.M. Time Set Packer(s) 9:10 P.M. Time Started Off Bottom P.M. Maximum Temperature 202 Initial Hydrostatic Pressure (A) 1310 P.S.I. Initial Flow Period (B) 30 P.S.I. to (C) 30 P.S.I.



COMPANY TERMS Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test.

FIELD INVOICE table with items: Open Hole Test \$550.00, Misrun \$, Straddle Test \$, Jars \$, Selective Zone \$, Safety Joint \$, Standby \$, Evaluation \$, Extra Packer \$, Circ. Sub. \$, Mileage \$, Fluid Sampler \$, Extra Charts \$, Insurance \$, Telecopier \$, TOTAL \$550.00

Test Approved By Robert Olson Signature of Customer or his authorized representative Western Representative Kenny Kurlendall 1127

WESTERN TESTING CO., INC.

Pressure Data

Date 5-23-85

Test Ticket No. 8172

Recorder No. 3474

Capacity 3000

Location _____ Ft

Clock No. _____ Elevation _____

Well Temperature _____ °F

Point	Pressure	P.S.I.		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>1317</u>	P.S.I.	Open Tool		M
B First Initial Flow Pressure	<u>34</u>	P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>37</u>	P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>33</u> Mins.
D Initial Closed-in Pressure	<u>509</u>	P.S.I.	Second Flow Pressure	<u>60</u> Mins.	<u>60</u> Mins.
E Second Initial Flow Pressure	<u>47</u>	P.S.I.	Final Closed-in Pressure	<u>60</u> Mins.	<u>72</u> Mins.
F Second Final Flow Pressure	<u>55</u>	P.S.I.			
G Final Closed-in Pressure	<u>489</u>	P.S.I.			
H Final Hydrostatic Mud	<u>1286</u>	P.S.I.			

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 7 Inc.
of 5 mins. and a
final inc. of 0 Min.

Initial Shut-In
Breakdown: 12 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: 13 Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: 25 Inc.
of 3 mins. and a
final inc. of 0 Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1 0	<u>34</u>	0	<u>37</u>	0	<u>47</u>	0	<u>55</u>
P 2 5	<u>34</u>	3	<u>182</u>	5	<u>47</u>	3	<u>80</u>
P 3 10	<u>35</u>	6	<u>326</u>	10	<u>47</u>	6	<u>159</u>
P 4 15	<u>35</u>	9	<u>395</u>	15	<u>47</u>	9	<u>255</u>
P 5 20	<u>36</u>	12	<u>432</u>	20	<u>48</u>	12	<u>318</u>
P 6 25	<u>36</u>	15	<u>458</u>	25	<u>48</u>	15	<u>361</u>
P 7 30	<u>37</u>	18	<u>473</u>	30	<u>49</u>	18	<u>384</u>
P 8 35		21	<u>484</u>	35	<u>50</u>	21	<u>403</u>
P 9 40		24	<u>493</u>	40	<u>51</u>	24	<u>417</u>
P10 45		27	<u>502</u>	45	<u>52</u>	27	<u>427</u>
P11 50		30	<u>508</u>	50	<u>53</u>	30	<u>436</u>
P12 55		33	<u>509</u>	55	<u>54</u>	33	<u>444</u>
P13 60		36		60	<u>55</u>	36	<u>451</u>
P14 65		39		65		39	<u>457</u>
P15 70		42		70		42	<u>461</u>
P16 75		45		75		45	<u>467</u>
P17 80		48		80		48	<u>470</u>
P18 85		51		85		51	<u>473</u>
P19 90		54		90		54	<u>477</u>
P20 95		57		95		57	<u>480</u>
100		60		100		60	<u>482</u>

68

WESTERN TESTING CO., INC.

Pressure Data

Date _____ Test Ticket No. _____

Recorder No. _____ Capacity _____ Location _____ Ft _____

Clock No. _____ Elevation _____ Well Temperature _____ °F _____

Point	Pressure		Time Given	Time Computed
A. Initial Hydrostatic Mud	P.S.I.	Open Tool	M	
B First Initial Flow Pressure	P.S.I.	First Flow Pressure	Mins.	Min.
C First Final Flow Pressure	P.S.I.	Initial Closed-in Pressure	Mins.	Min.
D Initial Closed-in Pressure	P.S.I.	Second Flow Pressure	Mins.	Min.
E Second Initial Flow Pressure	P.S.I.	Final Closed-in Pressure	Mins.	Min.
F Second Final Flow Pressure	P.S.I.			
G Final Closed-in Pressure	P.S.I.			
H Final Hydrostatic Mud	P.S.I.			

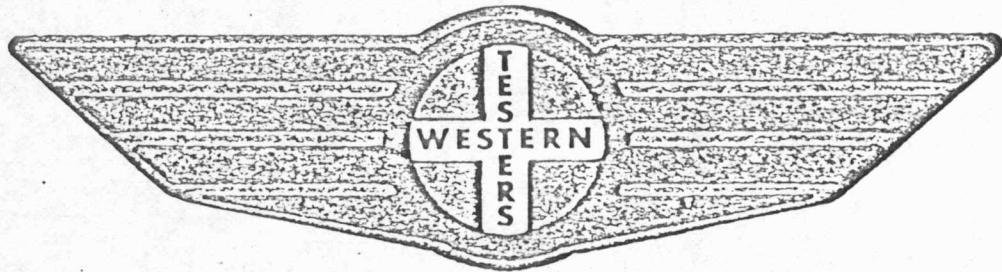
PRESSURE BREAKDOWN

First Flow Pressure		Initial Shut-In		Second Flow Pressure		Final Shut-In	
Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.		Breakdown: _____ Inc.	
of <u>5</u> mins. and a		of <u>3</u> mins. and a		of <u>5</u> mins. and a		of <u>3</u> mins. and a	
final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.		final inc. of <u>0</u> Min.	
Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	105	63		105		63	484
P 2	110	66		110		66	486
P 3	115	69		115		69	488
P 4	120	72		120		72	489
P 5	125	75		125		75	
P 6	130	78		130		78	
P 7	135	81		135		81	
P 8	140	84		140		84	
P 9	145	87		145		87	
P10	150	90		150		90	
P11	155	93		155		93	
P12	160	96		160		96	
P13	165	99		165		99	
P14	170	102		170		102	
P15	175	105		175		105	
P16	180	108		180		108	
P17	185	111		185		111	
P18	190	114		190		114	
P19	195	117		195		117	
P20	200	120		200		120	

FORMATION

TEST

REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

WESTERN TESTING CO. INC.
SUBSURFACE PRESSURE SURVEY

DATE: 5-23-85
CUSTOMER: RANGE OIL COMPANY INC.
WELL: 1 TEST: 2
ELEVATION (KB): 1313 FORMATION: MISSISSIPPI
SECTION: 18 TOWNSHIP: 16S
RANGE: 1W COUNTY: SALINE STATE: KANSAS
GAUGE SN #3474 RANGE: 3000 CLOCK: 12

INTERVAL TEST FROM: 2560 FT TO: 2687 FT TOTAL DEPTH: 2687 FT
DEPTH OF SELECTIVE ZONE: FT
PACKER DEPTH: 2560 FT SIZE: 6 3/4 IN PAKER DEPTH: 2555 FT SIZE: 6 3/4 IN
PACKER DEPTH: FT SIZE: IN PAKER DEPTH: FT SIZE: IN

DRILLING CONTRACTOR: RANGE DRLG. RIG #1
MUD TYPE: CHEMICAL VISCOSITY: 40
WEIGHT: 9.9 WATER LOSS (CC): 12.0
CHLORIDES (P.P.M.): 2300
JARS - MAKE: NO SERIAL NUMBER:
DID WELL FLOW? NO REVERSED OUT? NO
DRILL COLLAR LENGTH: 120 FT I.D.: 2.25 IN
WEIGHT PIPE LENGTH: FT I.D.: IN
DRILL PIPE LENGTH: 2420 FT I.D.: 3.8 IN
TEST TOOL LENGTH: 20 FT TOOL SIZE: 5 1/2 OD IN
ANCHOR LENGTH: 127 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: WEAK BLOW THROUGHOUT TEST.

RECOVERED: 4 FT OF: FREE OIL.
RECOVERED: 90 FT OF: MUD CUT OIL (80% OIL; 20% 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:

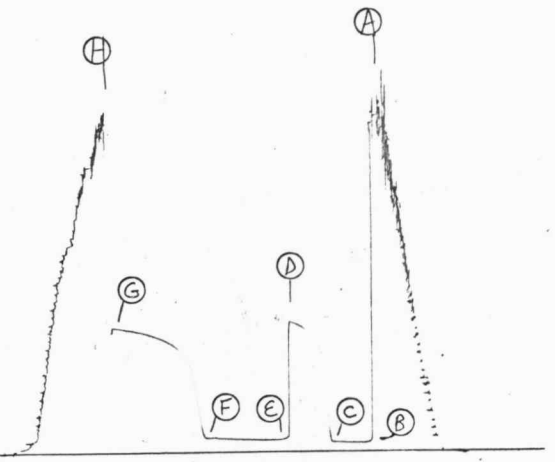
REMARKS:

TIME SET PACKER(S): 9:10 AM TIME STARTED OFF BOTTOM: 12:10 PM
WELL TEMPERATURE: 102 °F
INITIAL HYDROSTATIC PRESSURE: (A) 1317 PSI
INITIAL FLOW PERIOD MIN: 30 (B) 34 PSI TO (C) 37 PSI
INITIAL CLOSED IN PERIOD MIN: 33 (D) 509 PSI
FINAL FLOW PERIOD MIN: 60 (E) 47 PSI TO (F) 55 PSI
FINAL CLOSED IN PERIOD MIN: 72 (G) 489 PSI
FINAL HYDROSTATIC PRESSURE (H) 1286 PSI

TKT # 8172

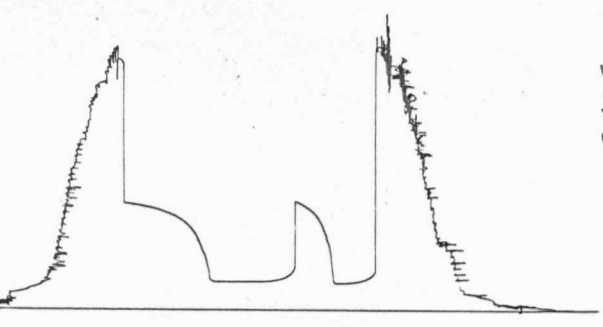
JT17
DST#1

I



TKT # 8172

O



2605