

DST REPORT

GENERAL INFORMATION

DATE : 2/14/96
CUSTOMER : RANGE OIL COMPANY, INC.
WELL : #2 TEST: 1
ELEVATION: 1185 KB EST
SECTION : 20
RANGE : 4E COUNTY: COWLEY
GAUGE SN#: 11018 RANGE : 4425
TICKET : 21650
LEASE : HITTLE
GEOLOGIST: BLAIR
FORMATION: BARTLESVILLE
TOWNSHIP : 31S
STATE : KS
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 2950.00 ft TO: 2964.00 ft TVD: 2964.0 ft
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL
DEPTH OF RECORDERS: 2953.0 ft 2961.0 ft
TEMPERATURE: 101.0
DRILL COLLAR LENGTH: 210.0 ft I.D.: 2.200 in
WEIGHT PIPE LENGTH : 0.0 ft I.D.: 0.000 in
DRILL PIPE LENGTH : 2720.0 ft I.D.: 3.800 in
TEST TOOL LENGTH : 20.0 ft TOOL SIZE : 5.500 in
ANCHOR LENGTH : 14.0 ft ANCHOR SIZE: 5.500 in
SURFACE CHOKE SIZE : 0.750 in BOTTOM CHOKE SIZE: 0.750 in
MAIN HOLE SIZE : 7.875 in TOOL JOINT SIZE : 4.5FH
PACKER DEPTH: 2945.0 ft SIZE: 6.630 in
PACKER DEPTH: 2950.0 ft SIZE: 6.630 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in
PACKER DEPTH: 0.0 ft SIZE: 0.000 in

MUD INFORMATION

DRILLING CON. : GLAVES DRLG
MUD TYPE : CHEMICAL VISCOSITY : 45.00 cp
WEIGHT : 9.700 ppg WATER LOSS: 10.000 cc
CHLORIDES : 1400 ppm
JARS-MAKE :
DID WELL FLOW?: NO SERIAL NUMBER:
REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD STRONG BLOW - BOTTOM OF BUCKET
IN 7 MINUTES. FINAL FLOW PERIOD STRONG BLOW -
BOTTOM OF BUCKET IN 5 MINUTES.

DST REPORT (CONTINUED)

FLUID RECOVERY

| Feet of Fluid | % Oil | % Gas | % Water | % Mud | Comments |
|---------------|-------|-------|---------|-------|---------------------------|
| 80.0 | 80.0 | 20.0 | 0.0 | 0.0 | CLEAN GASSY OIL |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 39 GRAVITY @ 60 DEGREES F |
| 270.0 | 60.0 | 20.0 | 0.0 | 20.0 | GASSY MUDDY OIL |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2000 FT GAS ABOVE FLUID |

RATE INFORMATION

| | | | |
|---------------|------------|---------------------|---------------|
| OIL VOLUME: | 1.9950 STB | TOTAL FLOW TIME: | 90.0000 min. |
| GAS VOLUME: | 3.3139 SCF | AVERAGE OIL RATE: | 37.7725 STB/D |
| MUD VOLUME: | 0.3658 STB | AVERAGE WATER RATE: | 0.0000 STB/D |
| WATER VOLUME: | 0.0000 STB | | |
| TOTAL FLUID : | 2.3608 STB | | |

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1486.00

| Description | Duration | p1 | p End |
|-----------------|----------|-------|--------|
| INITIAL FLOW | 30.00 | 30.00 | 41.00 |
| INITIAL SHUT-IN | 30.00 | | 656.00 |
| FINAL FLOW | 60.00 | 75.00 | 94.00 |
| FINAL SHUT-IN | 60.00 | | 638.00 |

FINAL HYDROSTATIC PRESSURE: 1460.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 1452.00

| Description | Duration | p1 | p End |
|-----------------|----------|--------|--------|
| INITIAL FLOW | 30.00 | 81.67 | 71.46 |
| INITIAL SHUT-IN | 30.00 | | 654.13 |
| FINAL FLOW | 60.00 | 134.91 | 128.25 |
| FINAL SHUT-IN | 60.00 | | 655.22 |

FINAL HYDROSTATIC PRESSURE: 1385.00

Company: RANGE OIL CO., INC.
Well: HITTLE #2
Field: DST #1

[Wednesday: Feb. 14, 1996
Page 1

| REC # | DAY | REAL TIME | DT (HRS) | BHP (PSIA) |
|------------------------|-----|-----------|----------|------------|
| ----- | | | | |
| INITIAL FLOW PERIOD | | | | |
| 1 | 0 | 17: 0:53 | 0.0000 | 81.67 |
| 2 | 0 | 17: 1: 0 | 0.0020 | 81.67 |
| 11 | 0 | 17: 2: 5 | 0.0199 | 75.15 |
| 20 | 0 | 17: 3:10 | 0.0379 | 71.41 |
| 29 | 0 | 17: 4:14 | 0.0558 | 68.60 |
| 38 | 0 | 17: 5:19 | 0.0738 | 66.71 |
| 47 | 0 | 17: 6:24 | 0.0918 | 64.82 |
| 56 | 0 | 17: 7:28 | 0.1097 | 64.78 |
| 65 | 0 | 17: 8:33 | 0.1277 | 64.74 |
| 74 | 0 | 17: 9:38 | 0.1457 | 63.77 |
| 83 | 0 | 17:10:42 | 0.1637 | 63.73 |
| 92 | 0 | 17:11:47 | 0.1817 | 63.69 |
| 101 | 0 | 17:12:52 | 0.1997 | 63.65 |
| 110 | 0 | 17:13:57 | 0.2176 | 63.61 |
| 119 | 0 | 17:15: 1 | 0.2356 | 63.57 |
| 128 | 0 | 17:16: 6 | 0.2536 | 63.53 |
| 137 | 0 | 17:17:11 | 0.2716 | 63.49 |
| 146 | 0 | 17:18:16 | 0.2896 | 63.45 |
| 155 | 0 | 17:19:20 | 0.3076 | 64.34 |
| 164 | 0 | 17:20:25 | 0.3256 | 64.30 |
| 173 | 0 | 17:21:30 | 0.3435 | 64.26 |
| 182 | 0 | 17:22:35 | 0.3615 | 64.22 |
| 191 | 0 | 17:23:40 | 0.3795 | 66.03 |
| 200 | 0 | 17:24:44 | 0.3975 | 65.07 |
| 209 | 0 | 17:25:49 | 0.4155 | 65.95 |
| 218 | 0 | 17:26:54 | 0.4335 | 71.46 |
| INITIAL SHUT IN PERIOD | | | | |
| 219 | 0 | 17:27: 1 | 0.4355 | 72.38 |
| 227 | 0 | 17:27:59 | 0.4517 | 87.15 |
| 232 | 0 | 17:31:49 | 0.5155 | 458.00 |
| 241 | 0 | 17:32:55 | 0.5338 | 494.97 |
| 247 | 0 | 17:36:12 | 0.5885 | 569.79 |
| 256 | 0 | 17:37:17 | 0.6066 | 579.92 |
| 260 | 0 | 17:40:10 | 0.6548 | 599.25 |
| 269 | 0 | 17:41:16 | 0.6729 | 610.31 |
| 278 | 0 | 17:42:20 | 0.6909 | 613.97 |
| 279 | 0 | 17:45:14 | 0.7390 | 629.59 |
| 288 | 0 | 17:46:19 | 0.7571 | 635.10 |
| 297 | 0 | 17:47:24 | 0.7751 | 640.61 |
| 306 | 0 | 17:48:28 | 0.7931 | 643.35 |
| 315 | 0 | 17:49:33 | 0.8111 | 645.16 |
| 324 | 0 | 17:50:38 | 0.8291 | 646.04 |
| 333 | 0 | 17:51:43 | 0.8471 | 647.86 |
| 342 | 0 | 17:52:48 | 0.8651 | 650.59 |
| 351 | 0 | 17:53:53 | 0.8832 | 652.40 |
| 360 | 0 | 17:54:57 | 0.9011 | 653.29 |
| 369 | 0 | 17:56: 2 | 0.9191 | 655.10 |
| 378 | 0 | 17:57: 7 | 0.9371 | 654.13 |
| FINAL FLOW PERIOD | | | | |
| 381 | 0 | 18: 2:40 | 1.0297 | 134.91 |
| 390 | 0 | 18: 3:45 | 1.0476 | 129.32 |
| 399 | 0 | 18: 4:49 | 1.0655 | 116.33 |
| 408 | 0 | 18: 5:54 | 1.0834 | 111.66 |

WESTERN TESTING CO., INC.

Company: RANGE OIL CO., INC.
Well: HITTLE #2
Field: DST #1

[Wednesday: Feb. 14, 1996
Page 2

| REC # | DAY | REAL TIME | DT (HRS) | BHP (PSIA) |
|----------------------|-----|-----------|----------|------------|
| 417 | 0 | 18: 6:58 | 1.1014 | 109.77 |
| 425 | 0 | 18:22:26 | 1.3591 | 101.80 |
| 434 | 0 | 18:23:31 | 1.3771 | 105.46 |
| 443 | 0 | 18:24:36 | 1.3951 | 105.43 |
| 452 | 0 | 18:25:40 | 1.4131 | 106.31 |
| 461 | 0 | 18:26:45 | 1.4311 | 106.27 |
| 470 | 0 | 18:27:50 | 1.4491 | 107.16 |
| 479 | 0 | 18:28:55 | 1.4671 | 108.04 |
| 488 | 0 | 18:29:59 | 1.4850 | 108.00 |
| 497 | 0 | 18:31: 4 | 1.5030 | 108.89 |
| 506 | 0 | 18:32: 9 | 1.5210 | 108.85 |
| 515 | 0 | 18:33:14 | 1.5390 | 110.66 |
| 524 | 0 | 18:34:18 | 1.5570 | 110.62 |
| 533 | 0 | 18:35:23 | 1.5750 | 110.58 |
| 542 | 0 | 18:36:28 | 1.5930 | 110.54 |
| 551 | 0 | 18:37:33 | 1.6110 | 111.43 |
| 560 | 0 | 18:38:37 | 1.6290 | 112.31 |
| 569 | 0 | 18:39:42 | 1.6470 | 111.35 |
| 578 | 0 | 18:40:47 | 1.6649 | 112.23 |
| 587 | 0 | 18:41:52 | 1.6829 | 113.12 |
| 596 | 0 | 18:42:57 | 1.7009 | 114.00 |
| 605 | 0 | 18:44: 1 | 1.7189 | 113.96 |
| 614 | 0 | 18:45: 6 | 1.7369 | 114.85 |
| 623 | 0 | 18:46:11 | 1.7549 | 115.73 |
| 632 | 0 | 18:47:16 | 1.7729 | 116.62 |
| 641 | 0 | 18:48:20 | 1.7909 | 116.58 |
| 650 | 0 | 18:49:25 | 1.8089 | 117.46 |
| 659 | 0 | 18:50:30 | 1.8269 | 119.28 |
| 668 | 0 | 18:51:35 | 1.8449 | 119.24 |
| 677 | 0 | 18:52:39 | 1.8628 | 119.20 |
| 686 | 0 | 18:53:44 | 1.8808 | 119.16 |
| 695 | 0 | 18:54:49 | 1.8988 | 120.04 |
| 704 | 0 | 18:55:54 | 1.9168 | 120.00 |
| 713 | 0 | 18:56:59 | 1.9348 | 121.81 |
| 722 | 0 | 18:58: 4 | 1.9529 | 128.25 |
| FINAL SHUT IN PERIOD | | | | |
| 723 | 0 | 18:58:11 | 1.9549 | 129.17 |
| 729 | 0 | 19: 2:26 | 2.0259 | 233.56 |
| 737 | 0 | 19: 3:27 | 2.0426 | 304.76 |
| 746 | 0 | 19: 4:33 | 2.0611 | 357.45 |
| 755 | 0 | 19: 5:40 | 2.0796 | 405.52 |
| 764 | 0 | 19: 6:46 | 2.0981 | 455.44 |
| 773 | 0 | 19: 7:53 | 2.1165 | 496.10 |
| 782 | 0 | 19: 8:59 | 2.1348 | 524.74 |
| 791 | 0 | 19:10: 4 | 2.1530 | 547.83 |
| 800 | 0 | 19:11: 9 | 2.1712 | 561.67 |
| 809 | 0 | 19:12:15 | 2.1892 | 571.81 |
| 818 | 0 | 19:13:20 | 2.2073 | 581.02 |
| 827 | 0 | 19:14:25 | 2.2254 | 585.61 |
| 836 | 0 | 19:15:29 | 2.2434 | 592.04 |
| 845 | 0 | 19:16:34 | 2.2615 | 598.48 |
| 854 | 0 | 19:17:39 | 2.2795 | 604.91 |
| 863 | 0 | 19:18:44 | 2.2975 | 606.73 |
| 872 | 0 | 19:19:49 | 2.3155 | 611.31 |
| 881 | 0 | 19:20:54 | 2.3336 | 614.05 |

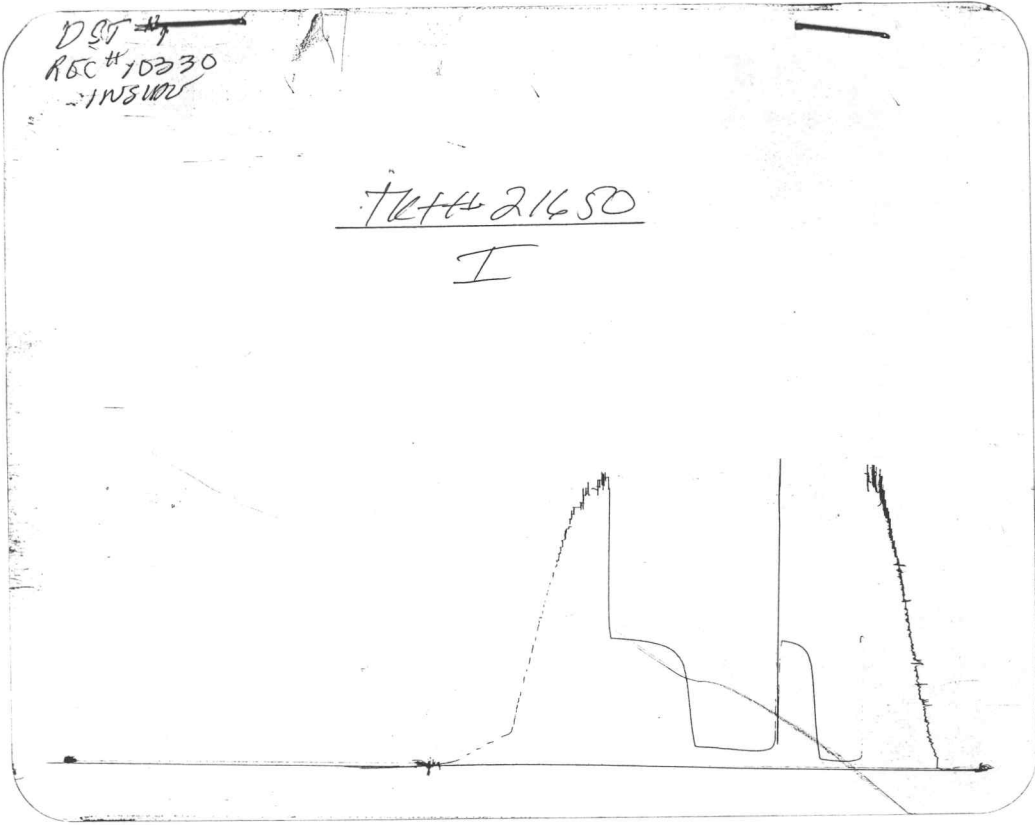
WESTERN TESTING CO., INC.

Company: RANGE OIL CO., INC.
Well: HITTLE #2
Field: DST #1

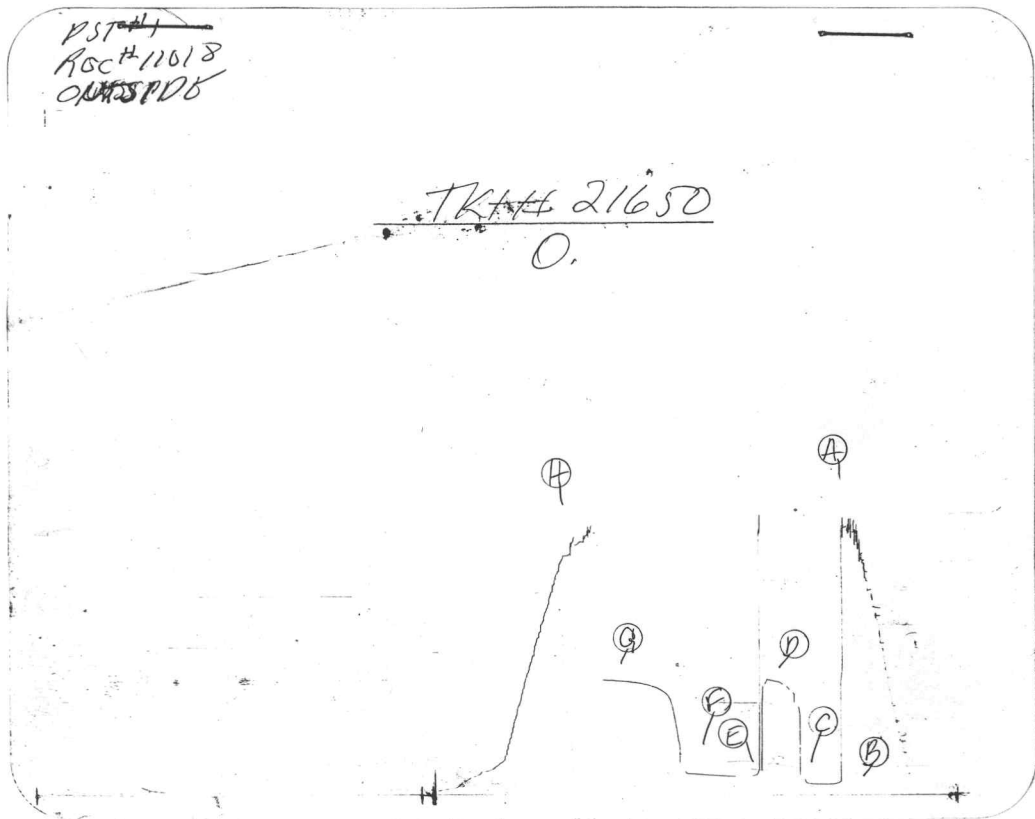
[Wednesday: Feb. 14, 1996
Page 3

| REC # | DAY | REAL TIME | DT (HRS) | BHP (PSIA) |
|----------|-----|--------------|-------------|---------------|
| 890 | 0 | 19:21:59 | 2.3516 | 616.78 |
| 899 | 0 | 19:23: 4 | 2.3696 | 619.52 |
| 908 | 0 | 19:24: 9 | 2.3876 | 621.33 |
| 917 | 0 | 19:25:13 | 2.4056 | 624.06 |
| 926 | 0 | 19:26:18 | 2.4236 | 626.80 |
| 935 | 0 | 19:27:23 | 2.4416 | 628.61 |
| 944 | 0 | 19:28:28 | 2.4596 | 631.35 |
| 953 | 0 | 19:29:33 | 2.4776 | 632.23 |
| 962 | 0 | 19:30:37 | 2.4956 | 634.04 |
| 971 | 0 | 19:31:42 | 2.5136 | 635.85 |
| 980 | 0 | 19:32:47 | 2.5316 | 637.66 |
| 989 | 0 | 19:33:52 | 2.5496 | 638.55 |
| 998 | 0 | 19:34:57 | 2.5676 | 639.44 |
| 1007 | 0 | 19:36: 1 | 2.5856 | 641.25 |
| 1016 | 0 | 19:37: 6 | 2.6036 | 642.13 |
| 1025 | 0 | 19:38:11 | 2.6216 | 643.02 |
| 1034 | 0 | 19:39:16 | 2.6396 | 645.75 |
| 1043 | 0 | 19:40:21 | 2.6576 | 645.71 |
| 1052 | 0 | 19:41:25 | 2.6756 | 646.60 |
| 1061 | 0 | 19:42:30 | 2.6936 | 647.48 |
| 1070 | 0 | 19:43:35 | 2.7116 | 647.44 |
| 1079 | 0 | 19:44:40 | 2.7296 | 648.33 |
| 1088 | 0 | 19:45:44 | 2.7476 | 649.22 |
| 1097 | 0 | 19:46:49 | 2.7656 | 649.18 |
| 1106 | 0 | 19:47:54 | 2.7836 | 650.06 |
| 1115 | 0 | 19:48:59 | 2.8016 | 650.95 |
| 1124 | 0 | 19:50: 4 | 2.8195 | 650.91 |
| 1133 | 0 | 19:51: 8 | 2.8375 | 651.79 |
| 1142 | 0 | 19:52:13 | 2.8555 | 652.68 |
| 1151 | 0 | 19:53:18 | 2.8735 | 654.49 |
| 1160 | 0 | 19:54:23 | 2.8915 | 654.45 |
| 1169 | 0 | 19:55:27 | 2.9095 | 654.41 |
| 1178 | 0 | 19:56:32 | 2.9275 | 654.37 |
| 1187 | 0 | 19:57:37 | 2.9455 | 655.26 |
| 1196 | 0 | 19:58:42 | 2.9635 | 655.22 |

WESTERN TESTING CO., INC.



Inside Recorder



Outside Recorder