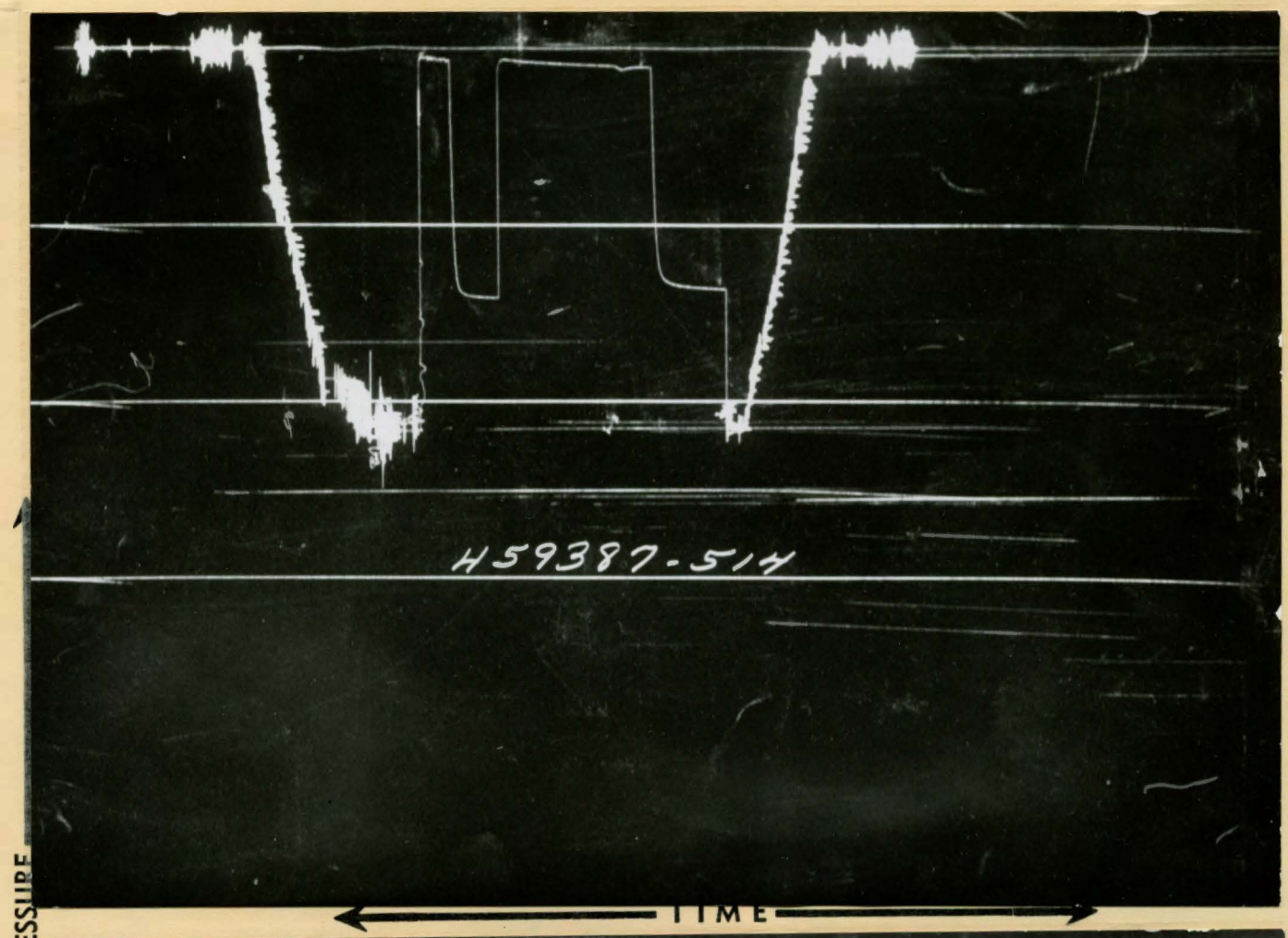
| ADAMS | 1-32 | 1 | HORIZON OIL COMPANY | KANSAS | 1970 |
|---|---|---|---|---|---|
| Lease Name | Well No. | Test No. | Lease Owner/Company Name | Owner's District | |

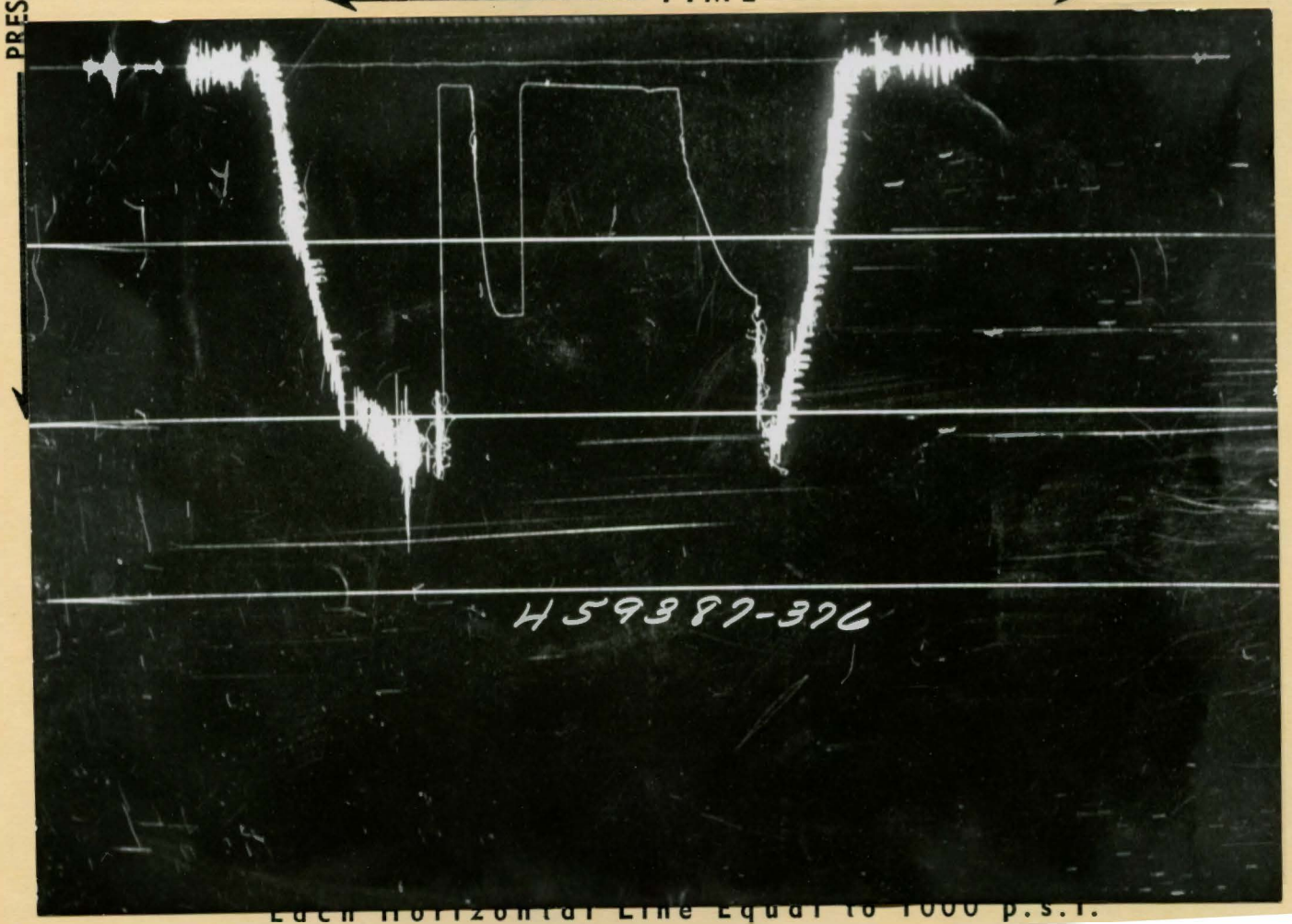

# Your.....

## *Formation Testing Service Report*




PRESSURE

TIME




Each Horizontal Line Equal to 1000 p.s.i.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Flow Time | 1st Min. 15 | 2nd Min. 90 | Date | 7-11-66 | Ticket Number | 459387 S | Legal Location Sec. - Twp. - Rng. 32-34-30 |
| Closed In Press. Time | 1st Min. 30 | 2nd Min. 45 | Kind of Job | OPEN HOLE | Halliburton District | LIBERAL | |
| Pressure Readings | Field | Office Corrected | Tester | REECE | Witness | BOSCHECKER | |
| Depth Top Gauge | 4370 Ft. | no Blanked Off | Drilling Contractor | MORAN BROTHERS | | SS | |
| BT. P.R.D. No. | 514 | 12 Hour Clock | Elevation | 2635' KB | Top Packer | 4372' | |
| Initial Hydro Mud Pressure | 2116 | 2169 | Total Depth | 4470' | Bottom Packer | 4377' | |
| Initial Closed in Pres. | 1403 | 1420 | Interval Tested | 4377' - 4470' | Formation Tested | TORANTO | |
| Initial Flow Pres. | 43 1 / 58 2 | 49 / 112 | Casing or Hole Size | 7 7/8" | Casing Perfs. Top / Bot. | | |
| Final Flow Pres. | 58 1 / 87 2 | 66 / 105 | Surface Choke | 1" | Bottom Choke | 5/8" | |
| Final Closed in Pres. | 1389 | 1368 | Size & Kind Drill Pipe | 4½" X H | Drill Collors Above Tester (I.D. - LENGTH) | 3" X 60' | |
| Final Hydro Mud Pressure | 2116 | 2159 | Mud Weight | 9.7 | Mud Viscosity | 37 | |
| Depth Cen. Gauge | Ft. | Blanked Off | Temperature | 104 °F Est. / 107 °F Actual | Anchor Size & Length ID 2 3/8" OD 5" X | 24' | |
| BT. P.R.D. No. | | Hour Clock | Depths Meo. From | KELLY BUSHING | Depth of Tester Valve | 4357' Ft. | |
| Initial Hydro Mud Pres. | | | Cushion TYPE - AMOUNT | Ft. | Depth Bock Pres. Valve | 4352' Ft. | |
| Initial Closed in Pres. | | | Recovered | 120 Feet of gas cut mud with oil specks | | | Meo. From Tester Valve |
| Initial Flow Pres. | 1 / 2 | | Recovered | 90 Feet of watery gas cut mud | | | |
| Final Flow Pres. | 1 / 2 | | Recovered | Feet of | | | |
| Final Closed in Pres. | | | Recovered | Feet of | | | |
| Final Hydro Mud Pres. | | | Oil A.P.I. Gravity | | Water Spec. Gravity | | |
| Depth Bot. Gauge | 4466 Ft. | yes Blanked Off | Gas Gravity | | Surface Pressure | psi | |
| BT. P.R.D. No. | 376 | 12 Hour Clock | Tool Opened | 9:25 pm A.M. P.M. | Tool Closed | 10:50 pm A.M. P.M. | |
| Initial Hydro Mud Pres. | 2087 | 2216 | Remarks | Tool opened for 15 minute first flow with a very good blow, gas to surface in 7 minutes. Gas gauged in 15 minutes 221 MCF/GAS PER DAY. Closed for 30 minute initial closed in pressure. Reopened for 90 minutes second flow, gas gauged 310 MCF: 15 minutes 303 MCF: 30 minutes 290 MCF: 45 minutes 303 MCF: 60 minutes 303 MCF: 75 minutes 303 MCF: 90 minutes 303 MCF. Closed for 45 minute final closed in pressure. | | | |
| Initial Closed in Pres. | 1403 | 1434 | | | | | |
| Initial Flow Pres. | 57 1 / 72 2 | 122 / 161 | | | | | |
| Final Flow Pres. | 72 1 / 115 2 | 126 / 154 | | | | | |
| Final Closed in Pres. | 1346 | 1340 | | | | | |
| Final Hydro Mud Pres. | 2087 | 2190 | | | | | |

ADAMS (Lease Name) 1-32 (Well No.) 1 (Test No.) HORIZON OIL COMPANY (Lease Owner/Company Name) S. PLAINS, KANSAS (Field Area) MEADE (County) KANSAS (State) KANSAS (Owner's District)

# FORMATION TEST DATA

19

| Gauge No. 514 | Depth 4370' | Clock 12 hour | Ticket No. 459387 |
|---|---|---|---|

| | First Flow Period | | Initial Closed In Pressure | | | Second Flow Period | | Final Closed In Pressure | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t+\bullet}{\bullet}$ | PSIG Temp. Corr. | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t+\bullet}{\bullet}$ | PSIG Temp. Corr. |
| $P_0$ | .000 | 49 | .000 | | 66 | .000 | 112 | .000 | | 105 |
| $P_1$ | .0232 | 50 | .0195 | | 1104 | .1018 | 76 | .0331 | | 1248 |
| $P_2$ | .0464 | 58 | .0390 | | 1363 | .2036 | 84 | .0662 | | 1329 |
| $P_3$ | .0696 | 65 | .0585 | | 1399 | .3054 | 91 | .0993 | | 1346 |
| $P_4$ | .0928 | 63 | .0780 | | 1407 | .4072 | 95 | .1324 | | 1355 |
| $P_5$ | .116 | 66 | .0975 | | 1413 | .5090 | 114 | .1655 | | 1360 |
| $P_6$ | | | .1170 | | 1416 | .611 | 105 | .1986 | | 1362 |
| $P_7$ | | | .1365 | | 1417 | | | .2317 | | 1365 |
| $P_8$ | | | .1560 | | 1419 | | | .2648 | | 1366 |
| $P_9$ | | | .1755 | | 1420 | | | .298 | | 1368 |
| $P_{10}$ | | | .195 | | 1420 | | | | | |

| Gauge No. 376 | Depth 4466' | Clock 12 hour |
|---|---|---|

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| $P_0$ | .000 | 122 | .000 | | 126 | .000 | 161 | .000 | | 154 |
| $P_1$ | .024 | 119 | .020 | | 673 | .1048 | 122 | .0338 | | 596 |
| $P_2$ | .048 | 125 | .040 | | 977 | .2096 | 129 | .0676 | | 765 |
| $P_3$ | .072 | 125 | .060 | | 1247 | .3144 | 135 | .1014 | | 900 |
| $P_4$ | .096 | 125 | .080 | | 1377 | .4192 | 141 | .1352 | | 1029 |
| $P_5$ | .120 | 126 | .100 | | 1430 | .5240 | 162 | .1690 | | 1137 |
| $P_6$ | | | .120 | | 1440 | .629 | 154 | .2028 | | 1217 |
| $P_7$ | | | .140 | | 1439 | | | .2366 | | 1276 |
| $P_8$ | | | .160 | | 1437 | | | .2704 | | 1317 |
| $P_9$ | | | .180 | | 1436 | | | .304 | | 1340 |
| $P_{10}$ | | | .200 | | 1434 | | | | | |
| Reading Interval | 3 | | 3 | | | 15 | | 5 | | Minutes |

REMARKS:

# SPECIAL PRESSURE DATA

# Gas Production

| | | | | | | |
|---|---|---|---|---|---|---|
| B.T. Gauge Numbers | | | 514 | 376 | **Ticket Number** | 459387 |
| | | | PRESSURE | PRESSURE | | |
| Initial Hydrostatic | | | 2169 | 2216 | Elevation | 2635 ft. |
| Final Hydrostatic | | | 2159 | 2190 | Production Rate Intial | - m cu. ft. |
| | | Time | | | Production Rate Final | 303 m cu. ft. |
| 1st Flow | Initial | — — — — | 49 | 122 | | |
| | Final | 15 | 66 | 126 | Hole Size | 7 7/8 in. |
| Initial Closed In Pressure | | 30 | 1420 | 1434 | Footage Tested Net | 16* ft |
| 2nd Flow | Initial | — — — — | 112 | 161 | Mud Weight | 9.7 lbs. gal. |
| | Final | 90 | 105 | 154 | Gas Viscosity | 0.016 cp |
| Final Closed In Pressure | | 45 | 1368 | 1340 | Gas Gravity | 0.7* — |
| Extrapolated Static Pressure | Initial | | - | - | Gas Compressibility | 0.805* — |
| | Final | | 1392 | - | Temp. °F | 107 |
| Slope $Psi^2$/cycle | Initial | | - | - | | |
| | Final | | 1346 | - | | |

Remarks: *Net pay of 16 feet and 0.7 gravity gas as reported when calculation was requested.

## SUMMARY

BT Gauge Number Depth: 514/4370'

BT Gauge Number Depth:

| Product | Equation | Initial | Final | Initial | Final | Units |
|---|---|---|---|---|---|---|
| **Tronsmissability** | $\frac{Kh}{\mu} = \frac{1637\ Q_s\ ZT}{m}$ | | 1797.54 | | | md. ft. / cp |
| **Theoretical Flow Capacity** | $Kh = \frac{Kh}{\mu}\ \mu$ | | 28.76 | | | md ft |
| **Average Effective** | $K = \frac{Kh}{h}$ | | - | | | md. |
| **Permeability** | $K_1 = \frac{Kh}{h_1}$ | | 1.798 | | | md |
| **Indicated Flow Capacity** | $(Kh)_2 = \frac{3200\ Q_s\ \mu\ ZT\ \text{Log}(0.472\ b/r_w)}{P_s^2 - P_f^2}$ | | 4.90 | | | md ft. |
| **Damage Ratio** | $DR = \frac{\text{Thea. Flow Cap}}{\text{Indicated Flow Cap}} \frac{Kh}{(Kh)_2}$ | | 5.87 | | | — |
| **Indicated** | $OF_1 = \frac{Q_s}{P_s^2 - P_f^2} \frac{P_s^2}{}$ Max. | | 304.7 | | | MCFD |
| **Flow Rate** | $OF_2 = \frac{Q_s}{\sqrt{P_s^2 - P_f^2}} \frac{P_s}{}$ Min. | | 303.9 | | | MCFD |
| **Theoretical** | $OF_3 = OF_1\ DR$ Max. | | 1788.2 | | | MCFD |
| **Potential Rate** | $OF_4 = OF_2\ DR$ Min. | | 1783. | | | MCFD |
| **Approx. Radius of Investigation** | $b \leftrightarrows \sqrt{Kt}$ or $\sqrt{Kt_0}$ | | - | | | ft. |
| | $b_1 \leftrightarrows \sqrt{K_1 t}$ or $\sqrt{K_1 t_0}$ | | 14.06 | | | ft. |
| **Potentiometric Surface** * | $Pot. = (El - GD) + (2.319\ Ps)$ | | 1493. | | | ft. |



## INTERPRETATIONS AND CALCULATIONS

# Gas Production

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| B.T. Gauge Numbers | | | 514 | 376 | **Ticket Number** | | 459387 |
| | | | PRESSURE | PRESSURE | | | |
| Initial Hydrostatic | | | 2169 | 2216 | Elevation | | 2635 ft. |
| Final Hydrostatic | | | 2159 | 2190 | Production Rate | Intial | - m cu. ft. |
| | | Time | | | | Final | 303 m cu. ft. |
| 1st Flow | Initial | — — — — | 49 | 122 | | | |
| | Final | 15 | 66 | 126 | Hole Size | | 7 7/8 in. |
| Initial Closed In Pressure | | 30 | 1420 | 1434 | Footage Tested | Net | 16* ft |
| 2nd Flow | Initial | — — — — | 112 | 161 | Mud Weight | | 9.7 ibs. gal. |
| | Final | 90 | 105 | 154 | Gas Viscosity | | 0.016 cp |
| Final Closed In Pressure | | 45 | 1368 | 1340 | Gas Gravity | | 0.7* — |
| Extrapolated Static Pressure | Initial | | - | - | Gas Compressibility | | 0.805* — |
| | Final | | 1392 | - | Temp. °F | | 107 |
| Slope Psi²/cycle | Initial | | - | - | | | |
| | Final | | 1346 | - | | | |

Remarks: *Net pay of 16 feet and 0.7 gravity gas as reported when calculation was requested.

## SUMMARY

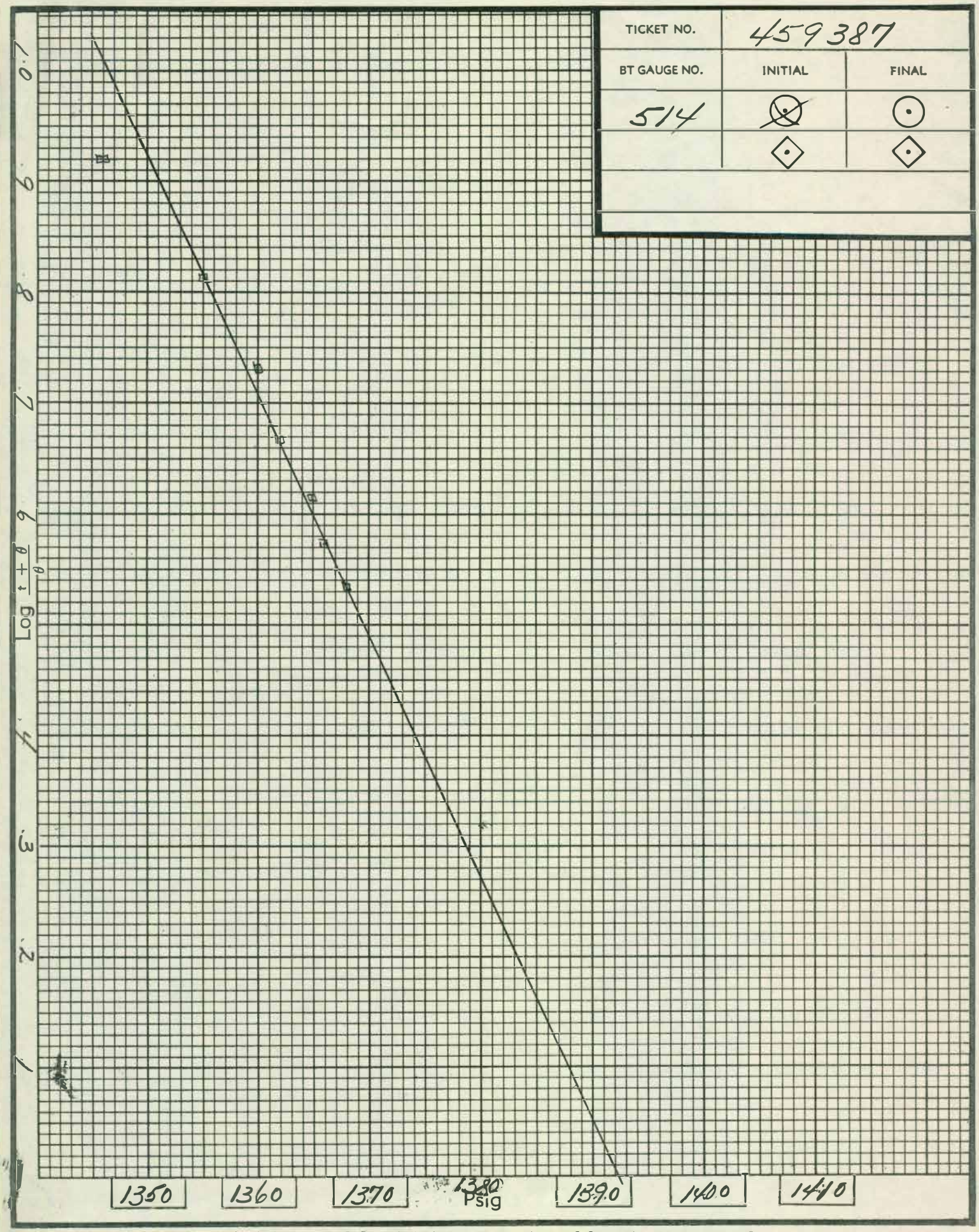
BT Gauge Number Depth: 514/4370'

BT Gauge Number Depth:

| Product | Equation | Initial | Final | Initial | Final | Units |
|---|---|---|---|---|---|---|
| **Transmissability** | $\frac{Kh}{\mu} = \frac{1637\ Q_g\ ZT}{m}$ | | 1797.54 | | | md. ft. / cp |
| **Theoretical Flow Capacity** | $Kh = \frac{Kh}{\mu}\ \mu$ | | 28.76 | | | md. ft. |
| **Average Effective** | $K = \frac{Kh}{h}$ | | - | | | md. |
| **Permeability** | $K_1 = \frac{Kh}{h_1}$ | | 1.798 | | | md. |
| **Indicated Flow Capacity** | $(Kh)_2 = \frac{3200\ Q_g\ \mu\ ZT\ \text{Log}(0.472\ b/r_w)}{P_s^2 - P_f^2}$ | | 4.90 | | | md. ft |
| **Damage Ratio** | $DR = \frac{\text{Theo. Flow Cap}}{\text{Indicated Flow Cop}}\ \frac{Kh}{(Kh)_2}$ | | 5.87 | | | — |
| **Indicated** | $OF_1 = \frac{Q_g\ P_s^2}{P_s^2 - P_f^2}$ Max. | | 304.7 | | | MCFD |
| **Flow Rate** | $OF_2 = \frac{Q_g\ P_s}{\sqrt{P_s^2 - P_f^2}}$ Min. | | 303.9 | | | MCFD |
| **Theoretical** | $OF_3 = OF_1\ DR$ Max. | | 1788.2 | | | MCFD |
| **Potential Rate** | $OF_4 = OF_2\ DR$ Min. | | 1783. | | | MCFD |
| **Approx. Radius of Investigation** | $b \leftrightarrows \sqrt{Kt}$ or $\sqrt{Kt_0}$ | | - | | | ft |
| | $b_1 \leftrightarrows \sqrt{K_1 t}$ or $\sqrt{K_1 t_0}$ | | 14.06 | | | ft |
| **Potentiometric Surface** * | $Pot. = (El - GD) + (2.319\ Ps)$ | | 1493. | | | ft |



INTERPRETATIONS AND CALCULATIONS



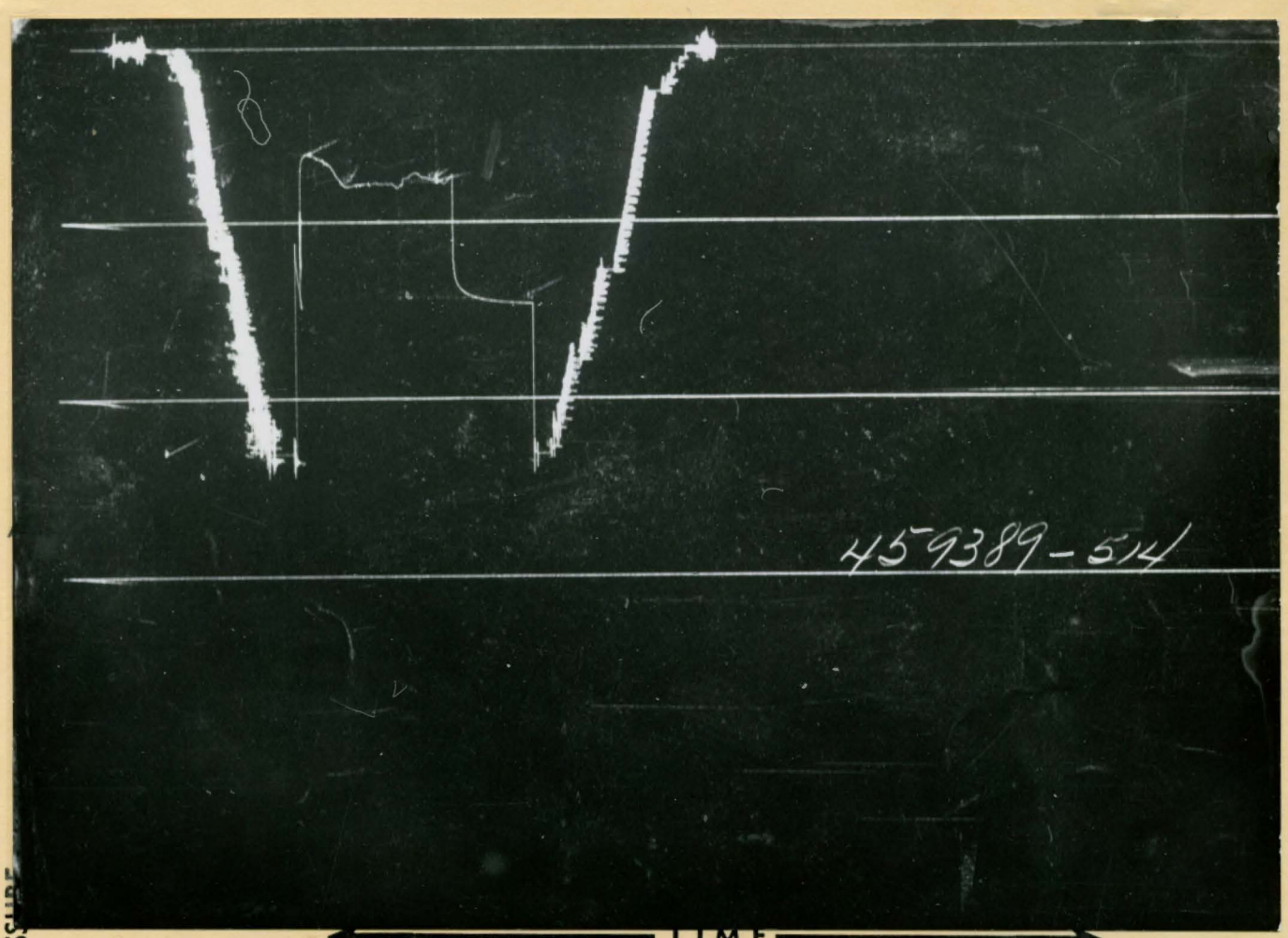

EXTRAPOLATED PRESSURE GRAPH

| ADAMS | 1-32 | 3 | HORIZON OIL & GAS COMPANY | KANSAS |
|---|---|---|---|---|
| Lease Name | Well No. | Test No. | Lease Owner/Company Name | Owner's District |

test # 2, misrun.

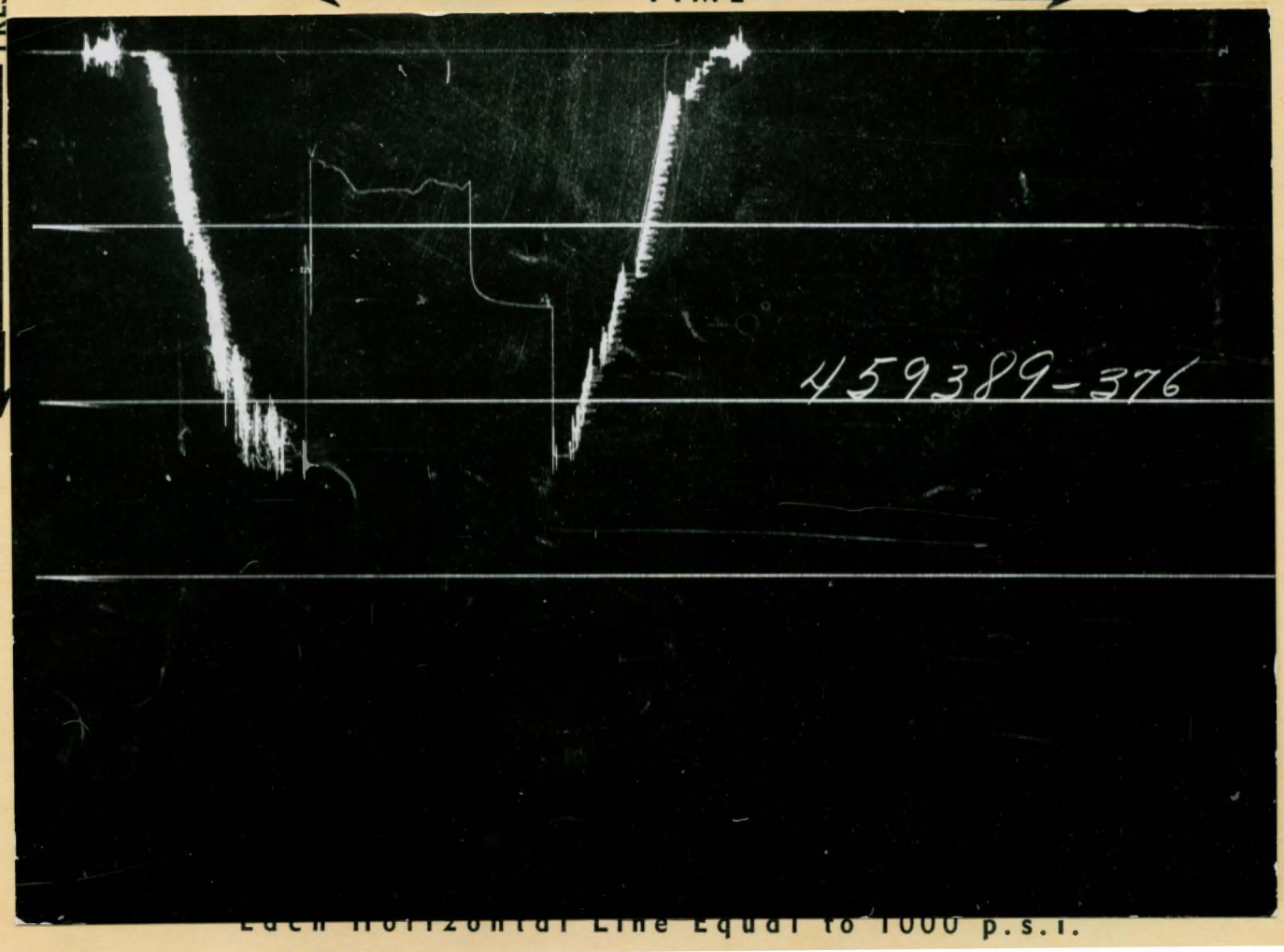

# Your.....

## Formation Testing Service Report




PRESSURE

TIME




Each Horizontal Line Equal to 1000 p.s.i.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Flow Time | 1st Min. | 2nd Min. 105 | Date | 7-13-66 | Ticket Number | 459389 | Legal Location Sec. - Twp. - Rng. 32-34-30 |
| Closed In Press. Time | 1st Min. | 2nd Min. 45 | Kind of Job | OPEN HOLE | Halliburton District | LIBERAL | Lease Name |
| Pressure Readings | Field | Office Corrected | Tester | MR. REECE | Witness | - | Well No. |
| Depth Top Gauge | 5510 Ft. | no Blanked Off | Drilling Contractor | MORAN BROTHERS | | BW | Test No. |
| BT. P.R.D. No. | 514 | 12 Hour Clock | Elevation | - | Top Packer | 5515' | |
| Initial Hydro Mud Pressure | 2288 | 2304 | Total Depth | 5540' | Bottom Packer | 5520' | |
| Initial Closed in Pres. | | | Interval Tested | 5520-5540' | Formation Tested | Lansing | |
| Initial Flow Pres. | 1 604 2 | 647 | Casing or Hole Size | 7 7/8" | Casing Perfs. Top / Bot. | | |
| Final Flow Pres. | 1 776 2 | 728 | Surface Choke | 1" | Bottom Choke | 5/8" | |
| Final Closed in Pres. | 1574 | 1455 | Size & Kind Drill Pipe | 4½" XH | Drill Collars Above Tester I.D. - LENGTH | 2¼" x 58' | |
| Final Hydro Mud Pressure | 2288 | 2304 | Mud Weight | 9.6 | Mud Viscosity | 48 | |
| Depth Cen. Gauge | Ft. | Blanked Off | Temperature °F Est. / °F Actual | 107 | Anchor Size & Length ID / OD | 2 3/8" X 5" 20' | Field Area S. PLAINS |
| BT. P.R.D. No. | | Hour Clock | Depths Mea. From | Kelly Bushing | Depth of Tester Valve | 5499 Ft. | |
| Initial Hydro Mud Pres. | | | Cushion TYPE AMOUNT Ft. | | Depth Back Pres. Valve | 5495 Ft. | |
| Initial Closed in Pres. | | | Recovered | Feet of | | | Meas. From Tester Valve |
| Initial Flow Pres. | 1 2 | | Recovered 250 | Feet of | free oil | | County MEADE |
| Final Flow Pres. | 1 2 | | Recovered 214 | Feet of | water-salt | | |
| Final Closed in Pres. | | | Recovered | Feet of | | | |
| Final Hydro Mud Pres. | | | Oil A.P.I. Gravity | 48.5 @98° | Water Spec. Gravity | | |
| Depth Bot. Gauge | 5539 Ft. | yes Blanked Off | Gas Gravity | | Surface Pressure | psi | |
| BT. P.R.D. No. | 376 | 12 Hour Clock | Tool Opened | 7:15 am A.M. P.M. | Tool Closed | 8:45 A.M. P.M. | |
| Initial Hydro Mud Pres. | 2265 | 2308 | Remarks | Open tool with a very good blow, gas | | | |
| Initial Closed in Pres. | | | | in 2 mins. Gauge 1630 mcf in 5 mins. | | | State KANSAS |
| Initial Flow Pres. | 1 603 2 | 623 | | 2125 in 10 mins-2190 in 15 mins-2190 mcf. | | | |
| Final Flow Pres. | 1 761 2 | 735 | | Blowing mud at 18 mins. Mud and oil in 22 min | | | |
| Final Closed in Pres. | 1576 | 1450 | | At 64 mins clean oil, guage 5210 mcf gas | | | |
| Final Hydro Mud Pres. | 2265 | 2308 | | with oil. | | | |

Lease Owner/Company Name: HUNTZON OIL & GAS COMPANY

Owner's District: KANSAS

# FORMATION TEST DATA

19

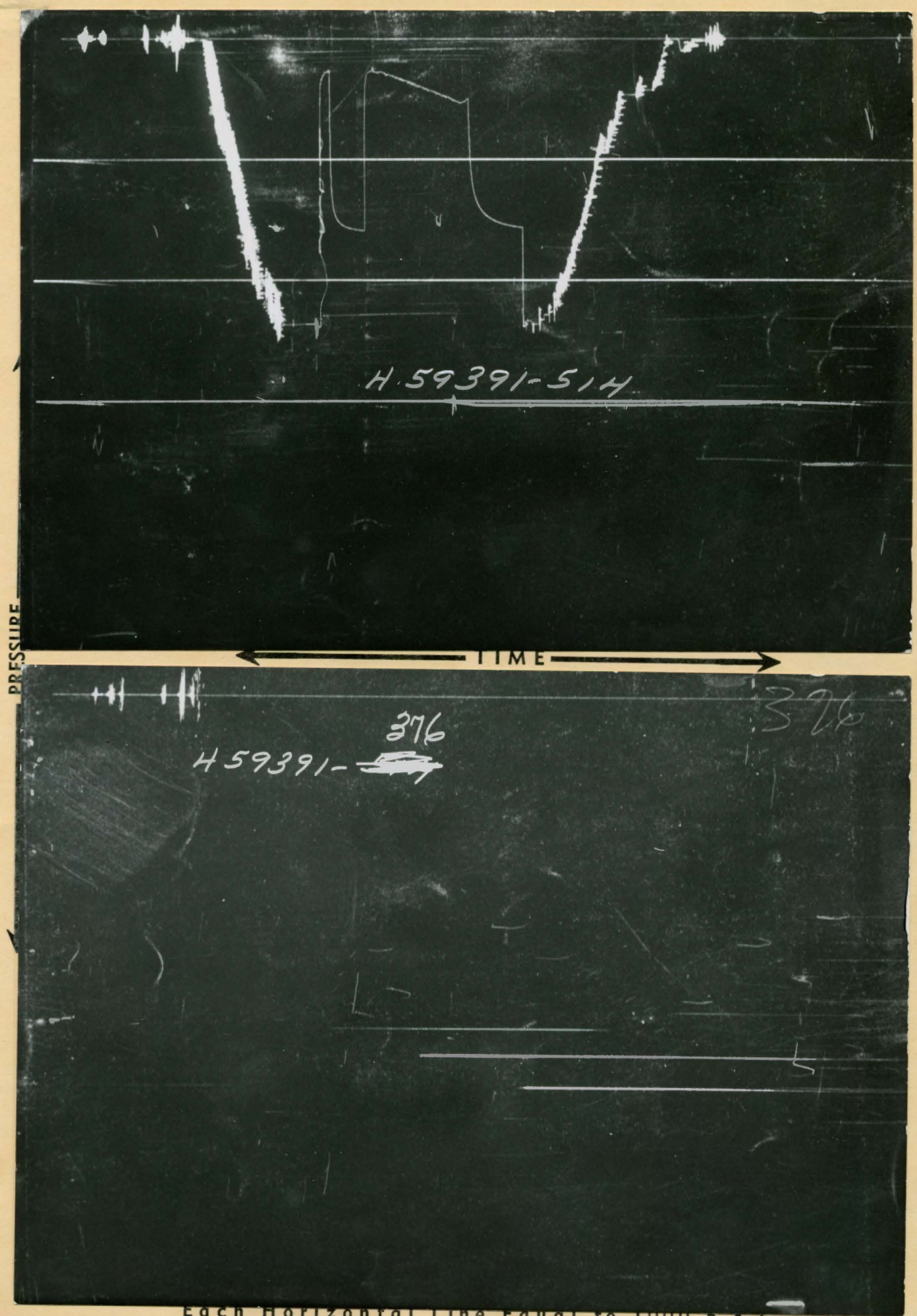
* Potentiometric Surface Reference to Rotary Table When Elevation Not Given, Fresh Water Corrected to 100° F.

Form No. 1296-R2

| ADAMS | 1-32 | 4 | HORIZON OIL COMPANY | KANSAS |
|---|---|---|---|---|
| Lease Name | Well No. | Test No. | Lease Owner/Company Name | Owner's District |


# Your.....

## *Formation Testing Service Report*


H 59391-514
PRESSURE
TIME
376
H 59391-376
Each Horizontal Line Equal to 1000 p.s.i.

| | 1st Min. | 2nd Min. | | | | |
|---|---|---|---|---|---|---|
| Flow Time | 10 | 85 | Date | 7-16-66 | Ticket Number | 459391 S |
| Closed In Press. Time | 30 | 45 | Kind of Job | OPEN HOLE | Halliburton District | LIBERAL |
| Pressure Readings | Field | Office Corrected | Tester | REECE | Witness | MR. BOSEEKER |
| Depth Top Gauge | 4788 Ft. | no Blanked Off | Drilling Contractor | MORAN BROTHERS | | SS |
| BT. P.R.D. No. | 514 | 12 Hour Clock | Elevation | - | Top Packer | 4793' |
| Initial Hydro Mud Pressure | 2373 | 2369 | Total Depth | 4835' | Bottom Packer | 4798' |
| Initial Closed in Pres. | 1588 | 1595 | Interval Tested | 4798' - 4835' | Formation Tested | LANSING |
| Initial Flow Pres. | 274 1 | 379 | Casing or Hole Size | 7 7/8" | Casing Perfs. Top | |
| | 274 2 | 336 | | | Bot. | |
| Final Flow Pres. | 274 1 | 275 | Surface Choke | 1" | Bottom Choke | 5/8" |
| | 504 2 | 501 | | | | I.D. - LENGTH |
| Final Closed in Pres. | 1574 | 1568 | Size & Kind Drill Pipe | 4½" X H | Drill Collars Above Tester | 2¼" X 56' |
| Final Hydro Mud Pressure | 2373 | 2369 | Mud Weight | 9.3 | Mud Viscosity | 48.5 |
| Depth Con. Gauge | Ft. | Blanked Off | Temperature | 114 °F Est. / 118 °F Actual | Anchor Size & Length | ID 2 3/8" OD X |
| BT. P.R.D. No. | | Hour Clock | Depths Mea. From | KELLY BUSHING | Depth of Tester Valve | 4768' Ft. |
| Initial Hydro Mud Pres. | | | Cushion TYPE AMOUNT | Ft. | Depth Back Pres. Valve | 4773' Ft. |
| Initial Closed in Pres. | | | Recovered | 954 Feet of gassey oil | | |
| Initial Flow Pres. | 1 | | Recovered | 140 Feet of water | | |
| | 2 | | | | | |
| Final Flow Pres. | 1 | | Recovered | Feet of | | |
| | 2 | | | | | |
| Final Closed in Pres. | | | Recovered | Feet of | | |
| Final Hydro Mud Pres. | | | Oil A.P.I. Gravity | 41 @ 102° | Water Spec. Gravity | |
| Depth Bot. Gauge | 4834 Ft. | yes Blanked Off | Gas Gravity | | Surface Pressure | psi |
| BT. P.R.D. No. | 376 | 12 Hour Clock | Tool Opened | 11:00 am A.M. P.M. | Tool Closed | A.M. P.M. |
| Initial Hydro Mud Pres. | CLOCK STOPPED | | Remarks | Tool opened for 10 minute first flow with a strong blow, gas in 1 minutes; 5 minutes 734 MCF, 10 minutes 1020 MCF. Closed for 30 minute initial closed in pressure. Reopened for 85 minutes second flow; gas rates: 5 minutes 877 MCF; 10 minutes 734 MCF; 30 minutes 621 MCF; 45 minutes 490 MCF; 60 minutes 439 MCF; spray mud, mud in 64 minutes; flowing mud in 74 minutes; oil in 82 minutes. Closed for 45 minute final closed | | |
| Initial Closed in Pres. | | | | | | |
| Initial Flow Pres. | 1 | | | | | |
| | 2 | | | | | |
| Final Flow Pres. | 1 | | | | | |
| | 2 | | | | | |
| Final Closed in Pres. | | | | | | |
| Final Hydro Mud Pres. | | | | | | |

Legal Location Sec. - Twp. - Rng. 32-34-30

Lease Name ADAMS

Well No. 1-32

Test No. 4

Lease Owner/Company Name HORIZON OIL COMPANY

Field Area S. PLAINS

County MEADE

State KANSAS

Owner's Direct

Mea. From Tester Valve

# FORMATION TEST DATA

**Gauge No.** 514 **Depth** 4788' **Clock** 12 **hour** **Ticket No.** 459391

| | First Flow Period | | Initial Closed In Pressure | | | Second Flow Period | | Final Closed In Pressure | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t+\bullet}{\bullet}$ | PSIG Temp. Corr. | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t+\bullet}{\bullet}$ | PSIG Temp. Corr. |
| $P_0$ | .000 | 379 | .000 | | 275 | .000 | 336 | .000 | | 501 |
| $P_1$ | .0102 | 327 | .0206 | | 1362 | .120 | 304 | .0350 | | 1286 |
| $P_2$ | .0204 | 308 | .0412 | | 1484 | .240 | 356 | .0700 | | 1415 |
| $P_3$ | .0306 | 297 | .0618 | | 1530 | .360 | 425 | .105 | | 1472 |
| $P_4$ | .0408 | 278 | .0824 | | 1556 | .480 | 490 | .140 | | 1504 |
| $P_5$ | .051 | 275 | .1030 | | 1570 | .600 | 501 | .175 | | 1527 |
| $P_6$ | | | .1236 | | 1578 | | | .210 | | 1543 |
| $P_7$ | | | .1442 | | 1585 | | | .245 | | 1554 |
| $P_8$ | | | .1648 | | 1590 | | | .280 | | 1564 |
| $P_9$ | | | .1854 | | 1594 | | | .315 | | 1568 |
| $P_{10}$ | | | .206 | | 1595 | | | | | |

**Gauge No.** 376 **Depth** 4834' **Clock** 12 **hour**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| $P_0$ | | | CLOCK STOPPED | | | | | | | |
| $P_1$ | | | | | | | | | | |
| $P_2$ | | | | | | | | | | |
| $P_3$ | | | | | | | | | | |
| $P_4$ | | | | | | | | | | |
| $P_5$ | | | | | | | | | | |
| $P_6$ | | | | | | | | | | |
| $P_7$ | | | | | | | | | | |
| $P_8$ | | | | | | | | | | |
| $P_9$ | | | | | | | | | | |
| $P_{10}$ | | | | | | | | | | |
| **Reading Interval** | 2 | | 3 | | | 17 | | 5 | | **Minutes** |

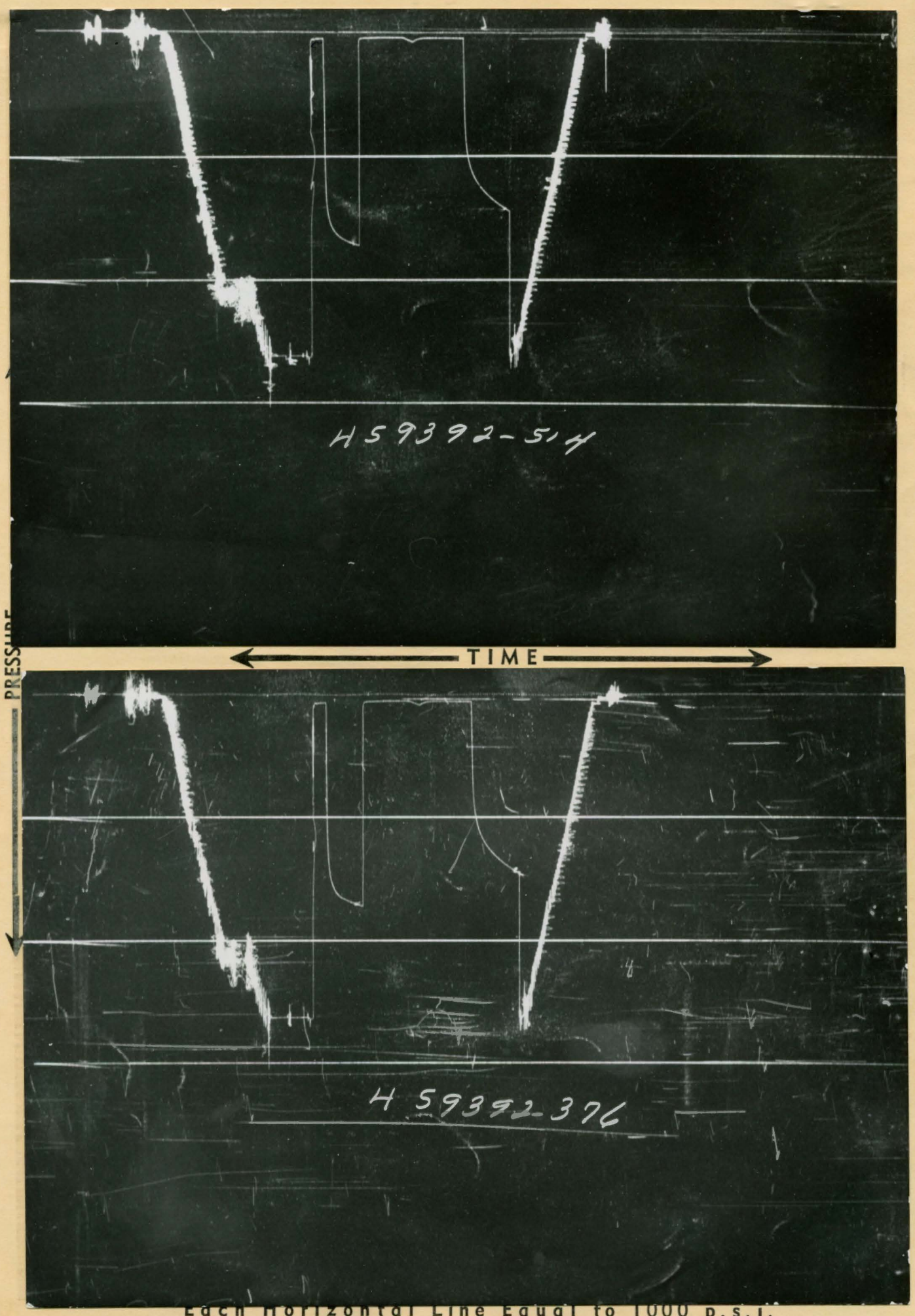
**REMARKS:**

# SPECIAL PRESSURE DATA

| ADAMS | 1-32 | 5 | HORIZON OIL & GAS COMPANY | KANSAS |
|---|---|---|---|---|
| Lease Name | Well No. | Test No. | Lease Owner/Company Name | Owner's District |


# Your.....

## *Formation Testing Service Report*


H59392-51H
PRESSURE
TIME
H 59392-37G
Each Horizontal Line Equal to 1000 p.s.i.

| | 1st Min. | 2nd Min. | | | | |
|---|---|---|---|---|---|---|
| Flow Time | 10 | 90. | Date | 7-19-66 | Ticket Number | 459392 S |
| Closed In Press. Time | 30 | 40 | Kind of Job | OPEN HOLE | Halliburton District | LIBERAL |
| Pressure Readings | Field | Office Corrected | Tester | REECE | Witness | MR. ATKINSON |
| Depth Top Gauge | 5239 Ft. | Blanked no Off | Drilling Contractor | MORAN BROTHERS INCORPORATED | | SS |
| BT. P.R.D. No. | 514 | Hour Clock 12 | Elevation | | Top Packer | 5244' |
| Initial Hydro Mud Pressure | 2659 | 2624 | Total Depth | 5269' | Bottom Packer | 5249' |
| Initial Closed in Pres. | 1717 | 1726 | Interval Tested | 5249' - 5269' | Formation Tested | MARMATON |
| Initial Flow Pres. | 43 1 | 82 | Casing or Hole Size | 7 7/8" | Casing Perfs. Top | |
| | 58 2 | 58 | | | Bot. | |
| Final Flow Pres. | 43 1 | 53 | Surface Choke | 1" | Bottom Choke | 5/8" |
| | 50 2 | 48 | | | | |
| Final Closed in Pres. | 1603 | 1446 | Size & Kind Drill Pipe | 4½" X H | Drill Collars Above Tester I.D. - LENGTH | 2¼" X 58' |
| Final Hydro Mud Pressure | 2659 | 2601 | Mud Weight | 9.2 | Mud Viscosity | 47 |
| Depth Con. Gauge | Ft. | Blanked Off | Temperature | 115 °F Est. / 117 °F Actual | Anchor Size & Length ID 2 3/8" OD 5" | X 20' |
| BT. P.R.D. No. | | Hour Clock | Depths Meo. From | KELLY BUSHING | Depth of Tester Volve | 5224' Ft. |
| Initial Hydro Mud Pres. | | | Cushion TYPE AMOUNT | Ft. | Depth Bock Pres. Valve | 5220' Ft. |
| Initial Closed in Pres. | | | Recovered | 95 Feet of | watery drilling mud | |
| Initial Flow Pres. | 1 | | Recovered | Feet of | | |
| | 2 | | | | | |
| Final Flow Pres. | 1 | | Recovered | Feet of | | |
| | 2 | | | | | |
| Final Closed in Pres. | | | Recovered | Feet of | | |
| Final Hydro Mud Pres. | | | Oil A.P.I. Gravity | | Water Spec. Gravity | |
| Depth Bot. Gauge | 5248 Ft. | Blanked yes Off | Gas Grovity | | Surface Pressure | psi |
| BT. P.R.D. No. | 376 | Hour Clock 12 | Tool Opened | 2:30 am A.M. P.M. | Tool Closed | 5:40 am A.M. P.M. |
| Initial Hydro Mud Pres. | 2624 | 2633 | Remorks | Tool opened with a good blow, gas in 3 | | |
| Initial Closed in Pres. | 1719 | 1728 | minutes. Gas gauged: 5 minutes 310 MCF; 10 minutes | | | |
| Initial Flow Pres. | 43 1 | 102 | 293 MCF. Closed for 30 minute initial closed in | | | |
| | 43 2 | 72 | | | | |
| Final Flow Pres. | 43 1 | 72 | pressure. Reopened for 90 minute second flow with | | | |
| | 15 2 | 60 | | | | |
| Final Closed in Pres. | 1419 | 1460 | 277 MCF; 5 minutes 310 MCF, 10 minutes 277 MCF; | | | |
| Final Hydro Mud Pres. | 2624 | 2620 | 20 minutes 240 MCF; 30 minutes 218 MCF; took gas sample in 60 minutes 196 MCF; 70 minutes 167 MCF; 80 minutes 167 MCF; 90 minutes 167 MCF. Closed in pressure | | | |

Legal Location Sec. - Twp. - Rng. 32-34-30

Lease Name ADAMS

Well No. 1-32

Test No. 5

Lease Owner/Company Name HORIZON OIL & GAS COMPANY

Field Area S. PLAINS, KANSAS

Meo. From Tester Valve

County MEADE

State KANSAS

Owner's District KANSAS

# FORMATION TEST DATA

| Gauge No. 514 | Depth 5239' | Clock 12 hour | Ticket No. 459392 |
|---|---|---|---|

| | First Flow Period | | Initial Closed In Pressure | | | Second Flow Period | | Final Closed In Pressure | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t+\bullet}{\bullet}$ | PSIG Temp. Corr. | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t+\bullet}{\bullet}$ | PSIG Temp. Corr. |
| $P_0$ | .000 | 82 | .000 | | 53 | .000 | 58 | .000 | | 48 |
| $P_1$ | .0142 | 58 | .0206 | | 1393 | .0988 | 43 | .0266 | | 994 |
| $P_2$ | .0284 | 55 | .0412 | | 1548 | .1976 | 43 | .0532 | | 1135 |
| $P_3$ | .0426 | 53 | .0618 | | 1610 | .2964 | 72 | .0798 | | 1209 |
| $P_4$ | .0568 | 53 | .0824 | | 1644 | .3952 | 46 | .1064 | | 1262 |
| $P_5$ | .071 | 53 | .1030 | | 1665 | .4940 | 46 | .1330 | | 1306 |
| $P_6$ | | | .1236 | | 1682 | .593 | 48 | .1596 | | 1340 |
| $P_7$ | | | .1442 | | 1698 | | | .1862 | | 1370 |
| $P_8$ | | | .1648 | | 1709 | | | .2128 | | 1399 |
| $P_9$ | | | .1854 | | 1719 | | | .2394 | | 1425 |
| $P_{10}$ | | | .206 | | 1726 | | | .266 | | 1446 |
| **Gauge No.** 376 | | | **Depth** 5248' | | | **Clock** 12 | | **hour** | | |
| $P_0$ | .000 | 102 | .000 | | 72 | .000 | 72 | .000 | | 60 |
| $P_1$ | .0144 | 76 | .0211 | | 1441 | .1027 | 57 | .0272 | | 1021 |
| $P_2$ | .0288 | 75 | .0422 | | 1575 | .2054 | 56 | .0544 | | 1150 |
| $P_3$ | .0432 | 73 | .0633 | | 1626 | .3081 | 83 | .0816 | | 1224 |
| $P_4$ | .0576 | 72 | .0844 | | 1656 | .4108 | 59 | .1088 | | 1276 |
| $P_5$ | .072 | 72 | .1055 | | 1670 | .5135 | 60 | .1360 | | 1317 |
| $P_6$ | | | .1266 | | 1684 | .616 | 60 | .1632 | | 1353 |
| $P_7$ | | | .1477 | | 1698 | | | .1904 | | 1384 |
| $P_8$ | | | .1688 | | 1709 | | | .2176 | | 1411 |
| $P_9$ | | | .1899 | | 1719 | | | .2448 | | 1439 |
| $P_{10}$ | | | .211 | | 1728 | | | .272 | | 1460 |
| **Reading Interval** | 2 | | 3 | | | 15 | | 4 | | **Minutes** |

**REMARKS:**

# SPECIAL PRESSURE DATA