

| | | | | | | | | |
|----------------------------|-----------|------|------------------|------|---|---|----------------------------|---------------------------|
| Flow Time | 1st 15 | Min. | 2nd 61 | Min. | Date | 5-28-68 | Ticket Number | 490632 - S |
| Closed In Pres. Time | 1st 30 | Min. | 2nd 30 | Min. | Kind of Job | OPEN HOLE | Halliburton District | GREAT BEND |
| Pressure Readings | Field | | Office Corrected | | Tester | NUTTING | Witness | GIBSON |
| Depth Top Gauge | Ft. | | Blanked Off | | Drilling Contractor | PEEL BROTHERS DRILLING COMPANY # 5 | | |
| BT. P.R.D. No. | | | Hour Clock | | Elevation | 1718' D.F. | Top Packer | 3281' |
| Initial Hydro Mud Pressure | | | | | Total Depth | 3292' | Bottom Packer | 3286' |
| Initial Closed in Pres. | | | | | Interval Tested | 3286' - 3292' | Formation Tested | MISNER |
| Initial Flow Pres. | 1 | | | | Casing or Hole Size | 7 7/8" | Casing Perfs. } Top | = |
| Final Flow Pres. | 1 | | | | Surface Choke | 1" | Casing Perfs. } Bot. | - |
| Final Closed in Pres. | | | | | Size & Kind Drill Pipe | 4 1/2" - 480' FLEX | Drill Collars Above Tester | I.D. - LENGTH |
| Final Hydro Mud Pressure | | | | | Mud Weight | 9.8 | Mud Viscosity | 41 |
| Depth Cen. Gauge | Ft. | | Blanked Off | | Temperature | 103 | Anchor Size & Length | 3.75" ID 5.00" OD X 6' |
| BT. P.R.D. No. | | | Hour Clock | | Depths Mea. From | DERRICK FLOOR | Depth of Tester Valve | 3269' Ft. |
| Initial Hydro Mud Pres. | | | | | Cushion | NONE | Depth Back Pres. Valve | - Ft. |
| Initial Closed in Pres. | | | | | Recovered | 180' Feet of | clean oil | Mec. From Tester Valve |
| Initial Flow Pres. | 1 | | | | Recovered | 120' Feet of | muddy oil | |
| Final Flow Pres. | 1 | | | | Recovered | 30' Feet of | oil cut mud | |
| Final Closed in Pres. | | | | | Recovered | Feet of | | |
| Final Hydro Mud Pres. | | | | | Oil A.P.I. Gravity | 39 @ 60° | Water Spec. Gravity | |
| Depth Bot. Gauge | 3288' Ft. | | Blanked Off | | Gas Gravity | | Surface Pressure | psi |
| BT. P.R.D. No. | 1838 | | Hour Clock | | Tool Opened | A.M. P.M. | Tool Closed | A.M. P.M. |
| Initial Hydro Mud Pres. | 1838 | | 1868 | | Remarks | Packer set; tool opened @ 10:44 PM with | | |
| Initial Closed in Pres. | 1034 | | 1042 | | a strong blow for a 15 minute first flow. Tool | | | |
| Initial Flow Pres. | 18 | | 33 | | closed @ 10:59 for a 30 minute initial closed in | | | |
| Final Flow Pres. | 37 | | 58 | | pressure. Tool reopened @ 11:29 with gas to the | | | |
| Final Closed in Pres. | 1025 | | 1013 | | surface in 55 minutes with a strong blow. Tool closed | | | |
| Final Hydro Mud Pres. | 1838 | | 1828 | | @ 12:30 for a 30 minute final closed in pressure. Off bottom @ 1:00.... | | | |

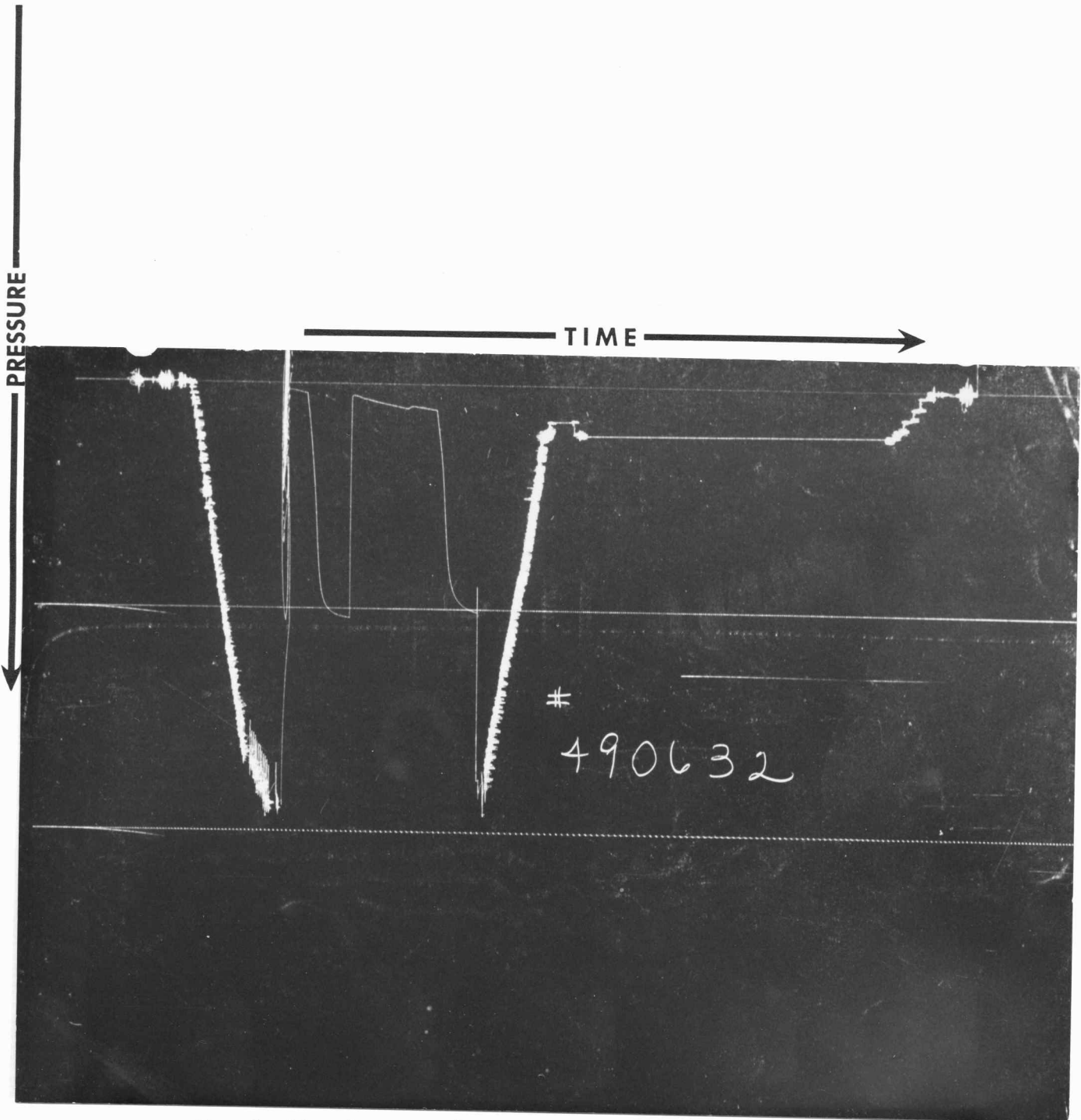
FORMATION TEST DATA

Legal Location Sec. - Typ. - Rng. 5 - 19 - 7
 Lease Name KEPLER
 Well No. A-3
 Test No. 1
 Field Area WILDGAT
 County RICE
 State KANSAS
 Lessee Owner/Company Name CITIES SERVICE OIL COMPANY
 Owner's District KANSAS

m

| Gauge No. | | Depth | | | Clock | | Ticket No. 490632 | | |
|-------------------|--------------------------|----------------------------|---------------------------------|------------------|--------------------|------------------|--------------------------|---------------------------------|------------------|
| First Flow Period | | Initial Closed In Pressure | | | Second Flow Period | | Final Closed In Pressure | | |
| Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t + \odot}{\ominus}$ | PSIG Temp. Corr. | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t + \odot}{\ominus}$ | PSIG Temp. Corr. |
| P ₀ | | | | | | | | | |
| P ₁ | | | | | | | | | |
| P ₂ | | | | | | | | | |
| P ₃ | | | | | | | | | |
| P ₄ | | | | | | | | | |
| P ₅ | | | | | | | | | |
| P ₆ | | | | | | | | | |
| P ₇ | | | | | | | | | |
| P ₈ | | | | | | | | | |
| P ₉ | | | | | | | | | |
| P ₁₀ | | | | | | | | | |
| Gauge No. | 1838 | Depth | 3288 | Clock | 12 | hour | | | |
| P ₀ | .000 | 33 | .000 | 44 | .000 | 58 | .000 | | 116 |
| P ₁ | .0218 | 29 | .0213 | 239 | .0679 | 69 | .0204 | | 276 |
| P ₂ | .0436 | 31 | .0426 | 504 | .1358 | 84 | .0408 | | 532 |
| P ₃ | .0654 | 36 | .0639 | 853 | .2037 | 97 | .0612 | | 809 |
| P ₄ | .0872 | 41 | .0852 | 962 | .2716 | 110 | .0816 | | 911 |
| P ₅ | .109 | 44 | .1065 | 1001 | .3395 | 105 | .1020 | | 953 |
| P ₆ | | | .1278 | 1018 | .414 | 116 * | .1224 | | 974 |
| P ₇ | | | .1491 | 1028 | | | .1428 | | 989 |
| P ₈ | | | .1704 | 1034 | | | .1632 | | 1000 |
| P ₉ | | | .1917 | 1038 | | | .1836 | | 1007 |
| P ₁₀ | | | .213 | 1042 | | | .204 | | 1013 |
| Reading Interval | 3 | | 3 | | 10 | | 3 | | Minutes |
| REMARKS: | * INTERVAL = 11 MINUTES. | | | | | | | | |

SPECIAL PRESSURE DATA



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

| | | | | | | |
|----------------------------|-------------------|------------------|---|------------------|----------------------------|--------------------------------|
| Flow Time | 1st 15 Min. | 2nd 60 Min. | Date | 5-28-68 | Ticket Number | 490633 - S |
| Closed In Press. Time | 1st 30 Min. | 2nd 30 Min. | Kind of Job | OPEN HOLE | Halliburton District | GREAT BEND |
| Pressure Readings | Field | Office Corrected | Tester | MR. NUTTING | Witness | MR. GIBSON |
| Depth Top Gauge | 3289 Ft. | NO Blanked Off | Drilling Contractor | PEEL BROTHERS #5 | IC | |
| BT. P.R.D. No. | 1839 | 12 Hour Clock | Elevation | 1718' D.F. | Top Packer | - |
| Initial Hydro Mud Pressure | OPERATOR RETAINED | | Total Depth | 3307' | Bottom Packer | 3292' |
| Initial Closed in Pres. | THIS CHART | | Interval Tested | 3292'-3307' | Formation Tested | MISENER |
| Initial Flow Pres. | 1 | | Casing or Hole Size | 7 7/8" | Casing Perfs. } Top | - |
| Final Flow Pres. | 1 | | Surface Choke | 1" | Bottom Choke | 3/4" |
| Final Closed in Pres. | | | Size & Kind Drill Pipe | 4 1/2" | Drill Collars Above Tester | I.D. - LENGTH 480' FLEX WT. |
| Final Hydro Mud Pressure | | | Mud Weight | 9.8 | Mud Viscosity | 42 |
| Depth Cen. Gauge | | | Temperature | 103 °F Est. | Anchor Size ID & Length | 3.75" X 15' |
| BT. P.R.D. No. | | | Depths Mea. From | DERRICK FLOOR | Depth of Tester Valve | 3280' Ft. |
| Initial Hydro Mud Pres. | | | Cushion | - | Depth Back Pres. Valve | - Ft. |
| Initial Closed in Pres. | | | Recovered | 1230 Feet of | Clean oil--39 gravity | |
| Initial Flow Pres. | 1 | | Recovered | 60 Feet of | Muddy oil | |
| Final Flow Pres. | 1 | | Recovered | Feet of | | |
| Final Closed in Pres. | | | Recovered | Feet of | | |
| Final Hydro Mud Pres. | | | Oil A.P.I. Gravity | 39 @ 60° | Water Spec. Gravity | - |
| Depth Bot. Gauge | 3303 Ft. | YES Blanked Off | Gas Gravity | - | Surface Pressure | - psi |
| BT. P.R.D. No. | 1838 | 12 Hour Clock | Tool Opened | 2:00 PM | A.M. P.M. Tool Closed | 4:15 PM A.M. P.M. |
| Initial Hydro Mud Pres. | 1930 | 1814 | Remarks Opened tool for 15 minute 1st flow with a | | | |
| Initial Closed in Pres. | 1043 | 1042 | strong blow. Closed tool for 30 minute initial | | | |
| Initial Flow Pres. | 73 | 1 70 | closed in pressure. Reopened tool for 60 minute | | | |
| Final Flow Pres. | 137 | 2 189 | 2nd flow with a strong blow; gas to surface in 7 | | | |
| Final Closed in Pres. | 1006 | 1006 | minutes. Closed tool for 30 minute final closed | | | |
| Final Hydro Mud Pres. | 1930 | 1787 | in pressure. | | | |

KIPLEY
 Lease Name
 A-3
 Well No.
 2
 Test No.
 WINDCAT
 County
 RICE
 State
 KANSAS
 CITIES SERVICE OIL COMPANY
 Lease Owner/Company Name
 Owner's District
 KANSAS

Legal Location
 Sec. - Twp. - Rng.
 SEC. 5 - 19 - 7
 Field Area
 WINDCAT
 County
 RICE
 State
 KANSAS

FORMATION TEST DATA

3

| Gauge No. | | 1839 | | Depth | | 3289' | | Clock | | 12 hour | | Ticket No. | | 490633 | |
|-------------------|------------------|------------------------------|--------------------------|------------------|------------------|--------------------|------------------|--------------------------|------------------|---------|--|------------|--|--------|--|
| First Flow Period | | Initial Closed In Pressure | | | | Second Flow Period | | Final Closed In Pressure | | | | | | | |
| Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t+\theta}{e}$ | PSIG Temp. Corr. | Time Defl. .000" | PSIG Temp. Corr. | Time Defl. .000" | Log $\frac{t+\theta}{e}$ | PSIG Temp. Corr. | | | | | | |
| P ₀ | | OPERATOR RETAINED THIS CHART | | | | | | | | | | | | | |
| P ₁ | | | | | | | | | | | | | | | |
| P ₂ | | | | | | | | | | | | | | | |
| P ₃ | | | | | | | | | | | | | | | |
| P ₄ | | | | | | | | | | | | | | | |
| P ₅ | | | | | | | | | | | | | | | |
| P ₆ | | | | | | | | | | | | | | | |
| P ₇ | | | | | | | | | | | | | | | |
| P ₈ | | | | | | | | | | | | | | | |
| P ₉ | | | | | | | | | | | | | | | |
| P ₁₀ | | | | | | | | | | | | | | | |

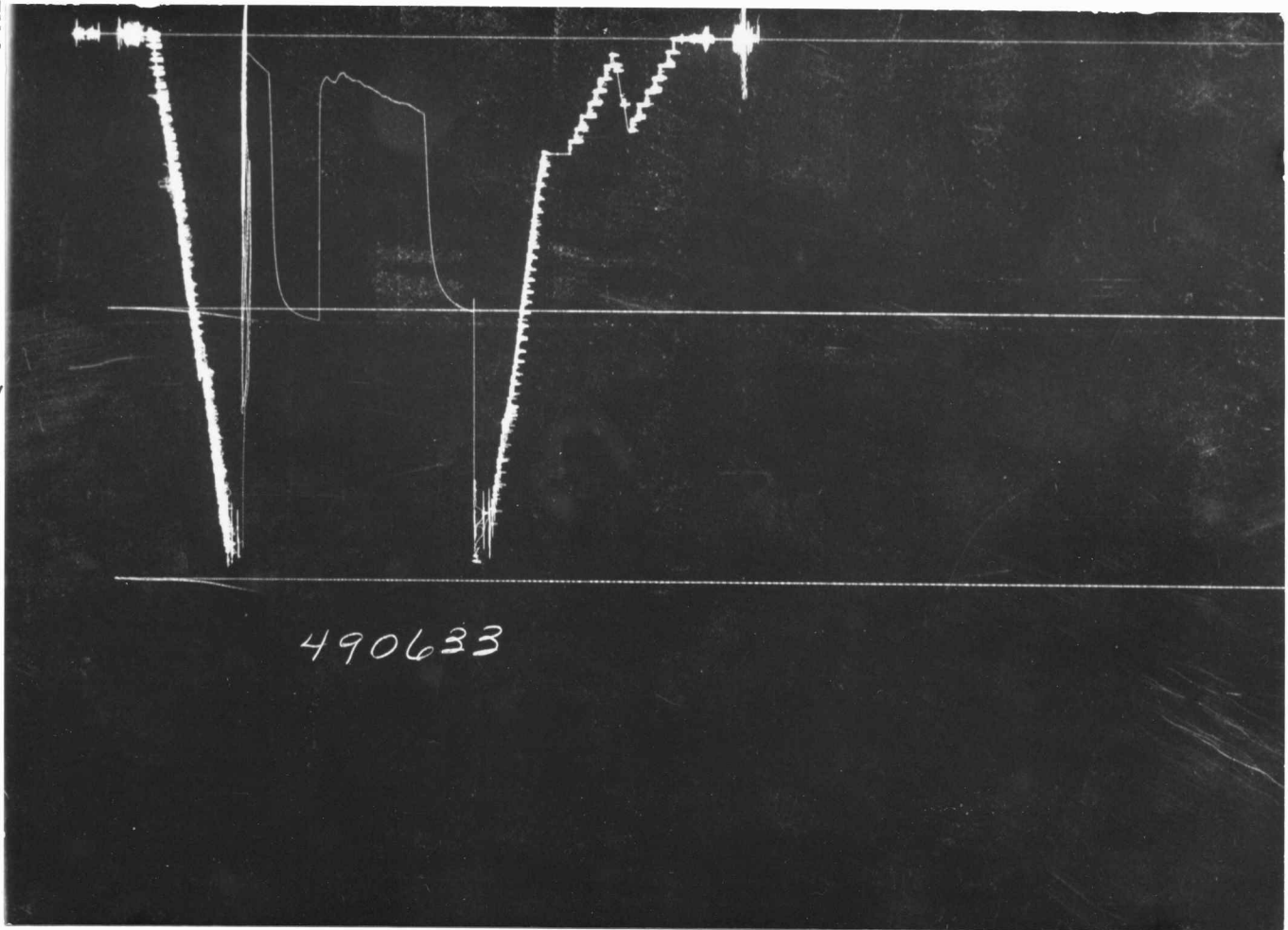
| Gauge No. | | 1838 | | Depth | | 3303' | | Clock | | 12 hour | |
|------------------|-------|------|-------|-------|------|-------|-----|-------|--|---------|--|
| P ₀ | .000 | 70 | .000 | | 139 | .000 | 189 | .000 | | 284 | |
| P ₁ | .0202 | 69 | .0204 | | 713 | .0695 | 152 | .020 | | 657 | |
| P ₂ | .0404 | 89 | .0408 | | 911 | .1390 | 164 | .040 | | 828 | |
| P ₃ | .0606 | 106 | .0612 | | 971 | .2085 | 195 | .060 | | 900 | |
| P ₄ | .0808 | 122 | .0816 | | 996 | .2780 | 230 | .080 | | 934 | |
| P ₅ | .1010 | 138 | .1020 | | 1012 | .3475 | 250 | .100 | | 957 | |
| P ₆ | | | .1224 | | 1022 | .4170 | 284 | .120 | | 973 | |
| P ₇ | | | .1428 | | 1030 | | | .140 | | 984 | |
| P ₈ | | | .1632 | | 1035 | | | .160 | | 994 | |
| P ₉ | | | .1836 | | 1038 | | | .180 | | 1000 | |
| P ₁₀ | | | .2040 | | 1042 | | | .200 | | 1006 | |
| Reading Interval | | 3 | | 3 | | 10 | | 3 | | Minutes | |
| REMARKS: | | | | | | | | | | | |

SPECIAL PRESSURE DATA

2

PRESSURE

TIME



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

10500

10500