STATE OF NEW MEXICO ENERGY and MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

Page 1 Revised 10/01/78

This form is not to be used for reporting packer leakage tests in Southeast New Mexico

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

| pc. . | TENNECO OIL C | Lease _F | LORANCE Well No. 4A | | | | |
|----------------------------------------------------------|----------------------------|--------------------|-----------------------------------|--------------------------------------------------|---------------------------------------|---------------------------------------------------------------------------------------------------------------|--|
| cation Well: Un | it <u>C</u> Sec. <u>10</u> | Twp30N | Rge | 09W | County _ | SAN JUAN | |
| | NAME OF RESERV | | TYPE OF PI | NOD. | METHOD OF PROD. (Flow or Art. LH1) | PROD. MEDIUM (Tbg. or Cag.) | |
| Upper impletion | BLANCO FRUITLAND | -COAL | al CAS | | FLOW | TUBING | |
| Lower | BLANCO MESA VERD | GAS | | FLOT | TUBING | | |
| | | PRE-FLO | OW SHUT-IN P | | | | |
| | ur date shutkin | Length of time shi | ut-in | Si press psig | | Stabilized* (Yes or No. | |
| Ompletion: 19/05/87 2:00 p.m. 72 hours | | s | 204 | () () | Stabilized? (Yes or No) | | |
| Lower | ur, datë shut-in | Length of time and | ni-tu | Si press. psig | | | |
| mpletion | 10/05/87 2;00 p | .m. 72 hour | | 243 | 11 | .0 | |
| enmenced at | (hour, date)* 10/08/87 | 2:00 p.m. | FLOW TEST | | (Upper or Lower): lower | | |
| | | | SVAE | PROD. ZONE | • | REMARKS | |
| TIME (hour, da | | Upper Completion | Lower Completion | TEMP. | | nemanne | |
| 10-09-8 | 7 | | | | | | |
| 8:3 <u>0</u> a. | 100 60000 | 204 | 145 | | | | |
| 10-10-8 | E . | , | 120 | | | | |
| 9:00 a. | m. 43 hours | 204 | 139 | | | <u></u> | |
| - | | | | | | | |
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| | | | | 1 | | | |
| | | | + | | | | |
| | | | | | | | |
| | rate during test | | | | | GOR | |
| Gas: | 643 | | FPD; Tested thr TEST SHUT-IN I | | leter): <u> </u> | | |
| Upper | lour, date shut-in | Length of time s | | Si press. psig | | lized? (Yes or No) | |
| Completion Hour, date shut-in Length of time shut-in | | hut-in | Si press. peig | Stab | lized? (Yes or No) | | |
| Completion | | ł | | | | . 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - 194 - | |

FLOW TEST NO. 2

| TIME CAPSED TIME SINCE # 19 Upon Competion Lower Competion TEMP. REMARKS TODAY CASES TODAY CA | commenced at (hour, date) # ≢ | | | | | Zone producing (Upper or Lower) | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------|---------------------------------|--|--|
| roduction rate during test Dil:BOPD based onBbls. inHoursGravGrass:MCFPD: Tested thru (Orifice or Meter): emarks: hereby.certify that the information herein contained is true and complete to the best of my knowledge. pprovedOCT 1 4 198719OperatorTENNECO OIL CO. | - 1 | | | | 1 | REMARKS | | |
| BOPD based onBbls. inHoursGravG as:MCFPD: Tested thru (Orifice or Meter): emarks: hereby.certify that the information herein contained is true and complete to the best of my knowledge. pprovedOTIL 1987 | | | - price God (1) price (1) | Compression | TEMP. | | | |
| BOPD based onBbls. inHoursGravG BOPD based onBbls. inHoursGravG MCFPD: Tested thru (Orifice or Meter): marks: Derector that the information herein contained is true and complete to the best of my knowledge. DOT 1 4 1987 19 Operator TENNECO OIL CO. | | | | | | | | |
| BOPD based onBbls. inHoursGravG MCFPD: Tested thru (Orifice or Meter): marks: Decreby.certify that the information herein contained is true and complete to the best of my knowledge. DOT 1 4 1987 19 Operator TENNECO OIL CO. | | j | | | | | | |
| BOPD based onBbls. inHoursGravG MCFPD: Tested thru (Orifice or Meter): marks: Decreby.certify that the information herein contained is true and complete to the best of my knowledge. DOT 1 4 1987 19 Operator TENNECO OIL CO. | | | | | | | | |
| BOPD based onBbls. inHoursGravG BSS:MCFPD: Tested thru (Orifice or Meter): Borereby.certify that the information herein contained is true and complete to the best of my knowledge. DeprovedOPERATOR TENNECO OIL CO. | | | - | | | | | |
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| BOPD based onBbls. inHoursGravG as:MCFPD: Tested thru (Orifice or Meter): emarks: hereby.certify that the information herein contained is true and complete to the best of my knowledge. pprovedOTIL 1987 | luction rate duri | ng test | | | | | | |
| MCFPD: Tested thru (Orifice or Meter): emarks: hereby.certify that the information herein contained is true and complete to the best of my knowledge. OCT 1 4 1987 19 Operator TENNECO OIL CO. | | | | | | | | |
| nereby.certify that the information herein contained is true and complete to the best of my knowledge. Deproved | | BOPE |) based on | Bbls. in | Ног | ors Gor | | |
| hereby.certify that the information herein contained is true and complete to the best of my knowledge. DOT 1 4 1987 19 Operator TENNECO OIL CO. | : <u></u> | | MCF | PD: Tested thru | (Orifice or Me | ter): | | |
| hereby, certify that the information herein contained is true and complete to the best of my knowledge. DCT 1 4 1987 19 Operator TENNECO OIL CO. | | | | | ` | , | | |
| pproved OC 14 1987 | | | | | | | | |
| pproved OC 14 1987 | reby certify that | the informatio | n herein contain | ed is true and co | mplete to the l | best of my knowledge. | | |
| - Optimite | | OCT 1 | 4 1987 | 19 | | | | |
| 14ck intention of Conservation Division | | ousewation Di | ivision | | | · · | | |
| - Original Signed by CHARLES GHOLSON By JOHN CARTER | - Origi | nal Signed by Ch | ARLES GHOLSON | В | y | AN CARTER ON SULLEY | | |
| TideAGENT | | | _ , | T | ideAGI | ENT | | |
| DEPUTY CIL & GAS INSPECTOR, DIST. #3 Date | DEPUTY (| oil & Gas inspe | CTOR, DIST. #3 | | | | | |

NORTHWEST NEW MEXICO PACKER LEAKAGE TEST INSTRUCTIONS

- 1. A packer leakage test shall be commenced on each multiply completed well within seven days after actual completion of the well, and annually thereafter as prescribed by the order authorizing the multiple completion. Such tests shall also be commenced on all multiple completions within seven days following recompletion and/or chemical or fracture treatment and whenever remedial work has been done on a well during which the packet or the rubing have been disturbed. Tests shall also be taken at any time that communication is suspected or when requested by the Division.
- At least 72 hours prior to the commencement of any packer leakage test, the operator shall notify the Division in writing of the exact time the test is to be commenced. Offset operators shall also be so notified.
- 3 The packer leakage test shall commence when both zones of the dual completion are shut-in for pressure stabilization. Both zones shall remain shut-in until the well-head pressure in each has stabilized, provided however, that they need not remain shut-in more than seven days.
- 4. For Flow Test No. 1, one zone of the dual completion shall be produced at the normal rate of production while the other zone remains shut-in. Such test shall be continued for seven days in the case of a gas well and for 24 hours in the case of an oil well. Note: if, on an initial packer leakage test, a gas well is being flowed to the atmosphere due to the lack of a pipeline connection the flow period shall be three hours.
- Following completion of Flow Test No. 1, the well shall again be shut-in, in accordance with Paragraph 3 above.
- Flow Test'No. 2 shall be conducted even though no leak was indicated during Flow Test No. 1. Procedure for Flow Test No. 2 is to be the same as for Flow Test No. 1 except

- that the previously produced zone shall remain shut-in while the zone which was previously shut-in is produced.
- 7. Pressures for gas-zone tests must be measured on each zone with a deadweight pressure gauge at time intervals as follows: 3 hours tests: immediately prior to the beginning of each flow-period, at fifteen-minute intervals during the first hour thereof, and at hourly intervals thereafter, including one pressure measurement immediately prior to the conclusion of each flow period. 7-day tests: immediately prior to the beginning of each flow period, at least one time during each flow period (at approximately the midway point) and immediately prior to the conclusion of each flow period. Other pressures may be taken as desired, or may be requested on wells which have previously shown questionable test data.

24-hour oil zone tests: all pressures, throughout the entire test, shall be continuously measured and recorded with recording pressure gauges the accuracy of which must be checker, at least twice, once at the beginning and once at the end of each test, with a deadweight pressure gauge. If a well is a gas-oil or an oil-gas dual completion, the recording gauge shall be required on the oil zone only, with deadweight pressures as required above being taken on the gas zone.

8. The results of the above-described tests shall be filed in triplicate within 13 days after completion of the sent. Tests shall be filed with the Agree District Office of the New Mexico Oil Conservation Division on Northwest New Mexico Packer Leakage Test Form Revised 10-01-78 with all deadweight pressures indicated thereon as well as the flowing temperatures (gas 200es only) and gravity and GOR (oil 200es only).