

and as may be reasonably necessary to carry on the work of prospecting for, extracting, piping, storing, refining^{and} removing such oil and natural gas, including also the right to obtain from wells or other sources on said land by means of pipe lines or otherwise a sufficient supply of water to carry on said operations and including still further the right to use such oil and natural gas as fuel so far as it is necessary to the prosecution of said operations.

In consideration of which the parties of the second part, hereby agree and bind themselves, their heirs, executors, administrators and assigns to pay, or cause to be paid, to the lessor as royalty the sum of twelve and one half per cent of the value on the leased premises, of all crude oil extracted from the said land, and if the parties do not, before the tenth day of the month succeeding its extraction agree upon the value of the crude oil on the leased premises, the value thereof shall finally be determined under the direction of the Secretary of the Interior in such manner as he shall prescribe, and to so pay the royalty accruing for any month on or before the twenty-fifth day of the month succeeding, and where the value of the crude oil fluctuates, the average value during the month shall constitute the criterion in computing the royalty; and to pay in yearly payments at the end of each year such royalty on each gas-producing well as the Secretary of the Interior may prescribe, the lessor to have free^{the} use of gas for lighting and warming his residence on the premises.

But failure on the part of the lessees to use a gas-producing well, where the same cannot be reasonably utilized at the rate so prescribed shall not work a forfeiture of this lease as far as the same relates to mining oil.

And the party of the second part further agree and bind themselves, their heirs, executors,