STATE OF MISSISSIPPI }
AFFIDAVIT IN SUPPORT
OF
COUNTY OF HINDS }
DOCKET NO. 10-31-01-03

This day personally appeared before me, the undersigned authority, John D. Herlihy, Member-Manager of FOSHEE OPERATING, LLC, qualified as an expert witness before the State Oil and Gas Board of Alabama, who, after being duly sworn, did depose and state following:

That the petitioner is the Operator of the following wells all located in West Foshee Field, Escambia County, Alabama:

Permit No.	Well Name	Location
5352	A.T.I.C. 33-9 #1	§33, T2N-R8E
5475	A.T.I.C. 33-7 #3	§33, T2N-R8E
5481	A.T.I.C.-Container 33-2 #1	§33, T2N-R8E
5359	A.T.I.C. 33-8 #1	§33, T2N-R8E
5528	A.T.I.C.-Container 33-3 #1	§33, T2N-R8E
5873	Powell. 32-1 #1	§32, T2N-R8E
5620	A.T.I.C.-Container 33-4 #1	§33, T2N-R8E
5583	A.T.I.C.-Container 33-6 #1	§33, T2N-R8E

That the above-described wells are temporarily abandoned due to non-commercial oil production rates. Petitioner requests that the Board classify these wells as temporarily abandoned for a period of one (1) year in accordance with Rule 400-1-4-.17 of the *State Oil and Gas Board of Alabama Administrative Code* because all of the wells may be utilized in Petitioner's operations in Alabama for the following reasons and therefore should not be plugged.

That the petitioner is actively conducting a study of the subject wells and West Foshee Field including the feasibility of returning the above-described wells to productive status. A summary of engineering, economic and operational considerations involved in this study are outlined in Attachment A to this affidavit.

That the petitioner plugged and abandoned the A.T.I.C.-Scott 32-2 #1, Permit # 5909, when the petitioner's experience indicated that the well had no future utility. The petitioner has also plugged other wells that had no future utility in a timely manner.

That to the petitioner's knowledge the subject wells, wellbores and well locations are not a threat to the environment.

That, in the petitioner's opinion, granting this petition will prevent waste and protect the coequal and correlative rights of all owners in the drilling units assigned to the above-referenced wells.

Further Affiant saith not.

John D. Herlihy

Sworn and subscribed before me this the 15th day of October, 2001.

Barbara Korlath—Notary Public

My Commission Expires:

July 18, 2002

ATTACHMENT A
TO AFFIDAVIT IN SUPPORT OF
DOCKET 10-31-01-03

The two primary responsibilities of the operator of shut-in or temporarily abandoned wells are (1) that the well and/or the well location do not present a hazard or threat to the environment and (2) that the operator continually demonstrates that the financial means are available to plug and abandon the well and restore the well site to regulatory and contractual requirements and standards.

The plugging requirements of the Alabama Oil and Gas Board virtually insure that once a cased well is plugged, it can never be ***economically*** re-entered in the future. This is because older wells with surface casing not set to the base of the USDW must be perforated and squeezed at the base of the surface casing, usually 350 ft deep for a 6,000 ft well. These shallow perforations, even squeezed, cannot stand up to the pressure differentials that occur during production. Newer wells with surface casing set to the base of the USDW, usually ~1,700 ft in southern Escambia County, must be perforated and squeezed at that depth. Although this squeeze is deeper, it will also not withstand the differential pressure requirements of producing.

In addition to this, in most cases, it is more cost effective for the operator to pull the production casing, which makes a re-entry cost prohibitive and mechanically unsound. In summary, when a well is plugged in accordance with Oil and Gas Board rules, in most cases it cannot be re-entered economically. Potential marginal oil production is lost forever. No one will drill for 15 BOPD or less.

Wells are temporarily abandoned or shut–in for a number of reasons, but the basic underlying reason is economics. Like it or not, operators and producers are in the business of making a profit. The rate of oil production and price per barrel are only two of the components that contribute to making a profit. Most marginal wells in south Alabama make salt water. These wells at one time produced at high oil cuts, even flowed pure oil. As a well depletes and begins to make more salt water, production equipment, pumping units, separators, disposal systems and disposal wells are rarely upgraded and modified to efficiently accommodate the increasing salt water production. The reasons for this are numerous, but in most cases the operators of "good" wells are not in the business of operating "marginal or stripper" wells. As the water cut increases, operating costs increase to the point where a well is no longer economical. The profitability problems may be further exacerbated by a downhole failure or lack of salt water disposal capacity. Nevertheless, the well is shut-in and depending on the potential for restoring it to production, equipment is moved and transferred as needed to other wells and locations. In many cases this leaves only a wellbore.

In order for a producer to operate a marginal well at a profit several components must be in place. First and foremost, the field and oil reservoirs must be prolific with relatively low recovery factors such that significant oil volumes are still in place. Decline curves hopefully will have leveled out to less than 10% per year so that economical production rates can be maintained for ten to fifteen years. Finally, production equipment, pumping units, separators, disposal systems and disposal wells must be available or upgraded to handle the high water cuts.

So far high water cut marginal or stripper wells have not been defined. Pollard Field, a similar field producing from the Tuscaloosa formation offers a good definition of this type of well. Excluding four good wells that make over 20 BOPD, the remaining 11 wells in Pollard Field produce 108 BOPD and 17,890 BWPD or 0.60% oil. What makes Pollard Field able to make a profit at these very high water cuts is that every well is outfitted with a large, first class pumping unit. Rods, tubing and downhole pumps are meticulously designed and installed and in most cases, state of the art. Prime movers are designed for peak fuel efficiency and tested for as much semi-annually. Finally and most importantly, the salt water disposal system that disposes of 8.6 gallons per *second*, operates on a vacuum with no pumps of any kind. This system is not only more economically efficient, but more environmentally safe than conventional pump driven salt water disposal systems.

However, in Pollard Field, all 15 wells were acquired slowly over a 14 year period. During this period of time, there was ample time to study all aspects of production, gain experience and develop the successful salt water disposal system.

When a new field or lease is purchased the most pressing problem is to make it profitable in order to begin to pay off the investment. If wells are shut-in, the evaluation process that is required to make a decision regarding restoring them to production takes time and the experience acquired with time. Additional factors such as the geology of the field can further complicate this decision making process. Once a well is deemed a potential geological and engineering candidate, then the economic considerations must be addressed.

An example of the cost of restoring a Tuscaloosa well to production is as follows. A Mark II 640 pumping unit costs $70,000, delivered. It will cost another $8,000 to pour a foundation and set the unit. A good gas engine is $9,000 with the required power-band and sheave costing another $1,500. The downhole pump costs $5,500 and the rods and tubing $8.00/ft (special 4" tubing to fit in 5½" casing costs $6.00/ft) or $16,000 for a typical 2,000 ft pump setting. Wellhead parts such as tubing head, stuffing box, special 1¾" polished rod and rod rotator run another $2,500. Finally, 12 hours of rig time adds $3,600 to the package. This hook-up, the equipment required only to produce the well, totals $116,100. Flowlines, separators, salt water disposal system improvements could easily run an additional $25,000. If an additional disposal well is required the cost would increase by another $50,000. In short, a first rate hook-up cost between $116,000 and $166,000.

Considering these costs and the anticipated initial marginal oil production rates, it is imperative that a thorough economic study of the predicted income and subsequent profit be conducted. A brief outline of the predicted income and profit are as follows.

A well that will produce 1,500 bbls of total fluid and make a 1% oil cut will make 15 BOPD. This is reduced by 6% severance tax to 14.1 BOPD and further reduced by royalty and overriding royalty to 10.2 BOPD in Foshee and West Foshee. The posting price for South Alabama crude is $3.00 less than the West Texas Intermediate quote or

NYMEX due to location, gravity and quality. As this is written, that equates to $22.00/bbl less $3.00 or $19.00/bbl. Daily income, excluding operating costs is $194 or about $5,820/month. Operating costs, without major problems, run about $3,000 per well. This leaves a profit of $2,820/month.

Using this amount of profit per month translates to a pay-out for this well of between 41 and 59 months *without* a decline or unforeseen costs. A 10% decline lowers production for the second year to 13.5 BOPD or a 9.2 BOPD net after severance and royalty. At the same oil price and operating costs (speculation at best on the oil price and probably low on operating costs), this nets $2,250/month profit and extends the payout to between 52 and 74 months.

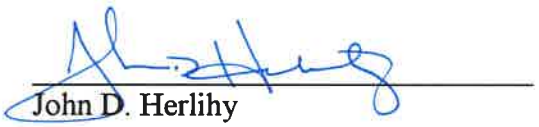
The payout of the investment required to restore this typical Foshee/West Foshee well to production can range from between 41 to 74 months at today's oil prices. It could take over 6 years before this well paid back the investment and made a penny of real profit.

If the well makes less oil than anticipated, if there are recompletion costs added to the cost of the re-start or if the decline rate is greater, this marginal well and the investment to re-start it can become a significant loss, even after the equipment is sold and the well plugged.

However, oil prices do not remain constant and new technologies are being developed everyday. As other wells in the field are produced, valuable experience is gained, over time, years in fact, which can lower the risk factor of a re-start project.

Finally, these temporarily abandoned wells are not a threat to the environment and I believe I have established myself as financially responsible for future plugging requirements not only with the required bonds but with a 14 year track record of operating in Alabama.

For these reasons and the fact that a plugged well is potential oil production lost forever, I believe that these wells should be granted temporary abandoned status for one year.



John D. Herlihy
October 15, 2001