This instrument prepared by: Russell M. Bayliss 983[redacted]rcrest Dal[redacted], Texas 75238

Prod[redacted]ers 88 (SP 5[redacted]th Pooling Provision Mississippi, Ala[redacted] Hederman Bro[redacted]son, Mississippi

OIL, GAS AND MINERAL LEASE

THIS AGREEMENT made this 23rd day of June 19 79, between George B. Alexander and Pearl Alexander, husband and wife,

lessor (whether one or more), whose address is: 1756 Mountain Wood Circle, Birmingham, Alabama 35216, and Atlantic Richfield Company, lessee, WITNESSETH:

1. Lessor, in consideration of ----------Ten or more---------- Dollars, receipt of which is hereby acknowledged, and of the covenants and agreements of lessee hereinafter contained, does hereby grant, lease and let unto lessee the land covered hereby for the purposes and with the exclusive right of exploring, drilling, mining and operating for, producing and owning oil, gas, sulphur and all other minerals (whether or not similar to those mentioned), together with the right to make surveys on said land, lay pipe lines, establish and utilize facilities for surface or subsurface disposal of salt water, construct roads and bridges, dig canals, build tanks, power stations, power lines, telephone lines, employee houses and other structures on said land, necessary or useful in lessee's operations in exploring, drilling for, producing, treating, storing and transporting minerals produced from the land covered hereby or any other land adjacent thereto. The land covered hereby, herein called "said land", is located in the County of Shelby, State of Alabama, and is described as follows:

TOWNSHIP 18 SOUTH, RANGE 1 WEST
Section 36: E/2 SE/4 & SW/4 SE/4

TOWNSHIP 19 SOUTH. RANGE 1 WEST
Section 1: E/2 NE/4 & NW/4 NE/4

19790914000118950 1/4 $.00
Shelby Cnty Judge of Probate, AL
09/14/1979 12:00:00AM FILED/CERT

TOWNSHIP 19 SOUTH, RANGE 1 EAST
Section 6: Part of the SW/4 NW/4 described as follows: Beginning at the SW/corner of the SW/4 NW/4, thence North to Bear Creek for point of beg. thence down creek to where branch empties into creek, up branch to where branch enters West boundary of Section 6, thence South to point of beginning.

This lease also covers and includes, in addition to that above described, all land, if any, contiguous or adjacent to or adjoining the land above described and (a) owned or claimed by lessor by limitation, prescription, possession, reversion or unrecorded instrument or (b) as to which lessor has a preference right of acquisition. Lessor agrees to execute any supplemental instrument requested by lessee for a more complete or accurate description of said land. For the purpose of determining the amount of any bonus, delay rental or other payment hereunder, said land shall be deemed to contain 242.0 acres, whether actually containing more or less, and the above recital of acreage in any tract shall be deemed to be the true acreage thereof. Lessor accepts the bonus and agrees to accept the delay rental as lump sum considerations for this lease and all rights, and options hereunder.

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2. Unless sooner terminated or longer kept in force under other provisions hereof, this lease shall remain in force for a term of ten (10) years from the date hereof, hereinafter called "primary term", and as long thereafter as operations, as hereinafter defined, are conducted upon said land with no cessation for more than ninety (90) consecutive days.

3. As royalty, lessee covenants and agrees: (a) To deliver to the credit of lessor, in the pipe line to which lessee may connect its wells, the equal one-eighth part of all oil produced and saved by lessee from said land, or from time to time, at the option of lessee, to pay lessor the market price of such one-eighth part of such oil at the wells as of the day it is run to the pipe line or storage tanks, lessor's interest, in either case, to bear one-eighth of the cost of treating oil to render it marketable pipe line oil; (b) To pay Lessor on gas, including casinghead gas or other gaseous substances, produced from said land and sold or used off the premises for the extraction of gasoline or other product therefrom, one-eighth of the market value computed at the mouth of the well of the gas so sold or used; provided that on gas sold by Lessee the market value shall not exceed the cash proceeds received by the Lessee for such gas computed at the mouth of the well, and on gas sold at the well the royalty shall be one-eighth of the cash proceeds realized by Lessee from such sale. (c) To pay lessor on all other minerals mined and marketed or utilized by lessee from said land, one-tenth either in kind or value at the well or mine at lessee's election, except that on sulphur mined and marketed the royalty shall be one dollar ($1.00) per long ton. If, at the expiration of the primary term or at any time or times thereafter, there is any well on said land or on lands with which said land or any portion thereof has been pooled, capable of producing gas or any other mineral covered hereby, and all such wells are shut-in, this lease shall, nevertheless, continue in force as though operations were being conducted on said land for so long as said wells are shut-in, and thereafter this lease may be continued in force as if no shut-in had occurred. Lessee covenants and agrees to use reasonable diligence to produce, utilize, or market the minerals capable of being produced from said wells, but in the exercise of such diligence, lessee shall not be obligated to install or furnish facilities other than well facilities and ordinary lease facilities of flow lines, separator, and lease tank, and shall not be required to settle labor trouble or to market gas upon terms unacceptable to lessee. If, at any time or times after the expiration of the primary term, all such wells are shut-in for a period of ninety consecutive days, and during such time there are no operations on said land, then at or before the expiration of said ninety day period, lessee shall pay or tender, by check or draft of lessee, as royalty, a sum equal to the amount of annual delay rental provided for in this lease. Lessee shall make like payments or tenders at or before the end of each anniversary of the expiration of said ninety day period if upon such anniversary this lease is being continued in force solely by reason of the provisions of this paragraph. Each such payment or tender shall be made to the parties who at the time of payment would be entitled to receive the royalties which would be paid under this lease if the wells were producing, and may be deposited in a depository bank provided for below. Nothing herein shall impair lessee's right to release as provided in paragraph 5 hereof. In event of assignment of this lease and in whole or in part, liability for payment hereunder shall rest exclusively on the then owner or owners of this lease, severally as to acreage owned by each. If the price of any mineral or substance upon which royalty is payable hereunder is regulated by any law or governmental agency, the market value or market price of such mineral or substance for the purpose of computing royalty hereunder shall not be in excess of the price which Lessee may receive and retain.

4. Lessee is hereby granted the right, at its option, to pool or unitize all or any part of said land and of this lease as to any or all minerals or horizons thereunder, with other lands, lease or leases, or portion or portions thereof, or mineral or horizon thereunder, so as to establish units containing not more than 80 surface acres plus 10% acreage tolerance; provided, however, a unit may be established or an existing unit may be enlarged to contain not more than 640 acres plus 10% acreage tolerance, if unitized only as to gas or only as to gas and liquid hydrocarbons (condensate) which are not a liquid in the subsurface reservoir. If larger units are prescribed or permitted under any governmental rule or order for the drilling or operation of a well at a regular location, or for the obtaining of a maximum allowable, from any well to be drilled, drilling, or already drilled, any such unit may be established or enlarged to conform to the size prescribed or permitted by such governmental order or rule. Lessee shall exercise said option as to each desired unit by executing an instrument identifying such unit and filing it for record in the public office in which this lease is recorded. Each of said options may be exercised by lessee from time to time, and whether before or after production has been established either on said land or on the portion of said land included in the unit or on other land unitized therewith and any such unit may include any well to be drilled, being drilled or already completed. A unit established hereunder shall be valid and effective for all purposes of this lease even though there may be land or mineral, royalty or leasehold interests in land within the unit which are not pooled or unitized. Any operations conducted on any part of such unitized land shall be considered, for all purposes, except the payment of royalty, operations conducted under this lease. There shall be allocated to the land covered by this lease included in any such unit that proportion of the total production of unitized minerals from wells in the unit, after deducting any used in lease or unit operations, which the number of surface acres in the land covered by this lease included in the unit bears to the total number of surface acres in the unit. The production so allocated shall be considered for all purposes, including the payment or delivery of royalty, overriding royalty, and any other payments out of production, to be the entire production of unitized minerals from the portion of said land covered hereby and included in such unit in the same manner as though produced from said land under the terms of this lease. The owner of the reversionary estate of any term royalty or mineral estate agrees that the accrual of royalties pursuant to this paragraph or of shut-in royalties from a well on the unit shall satisfy any limitation of term requiring production of oil or gas. The formation of such unit shall not have the effect of changing the ownership of any delay rental or shut-in production royalty which may become payable under this lease. Neither shall it impair the right of lessee to release from this lease all or any portion of said land, except that lessee may not so release as to lands within a unit while there are operations thereon for unitized minerals unless all pooled leases are released as to lands within the unit. Lessee may dissolve any unit established hereunder by filing for record in the public office where this lease is recorded a declaration to that effect, if at that time no operations are being conducted thereon for unitized minerals. Subject to the provisions of this paragraph 4, a unit once established hereunder shall remain in force so long as any lease subject thereto shall remain in force. A unit may be so established, modified or dissolved during the life of this lease.

5. If operations are not conducted on said land on or before the first anniversary date hereof, this lease shall terminate as to both parties, unless lessee on or before said date shall, subject to the further provisions hereof, pay or tender to lessor or to lessor's credit in the First National Bank of Birmingham Bank at Birmingham, Alabama, or its successors, which shall continue as the depository, regardless of changes in ownership of delay rental, royalties, or other moneys, the sum of $ 242.00, which shall operate as delay rental and cover the privilege of deferring operations for one year from said date. In like manner and upon like payments or tenders, operations may be further deferred for like periods of one year each during the primary term. If at any time that lessee pays or tenders delay rental, royalties, or other moneys, two or more parties are, or claim to be, entitled to receive same, lessee may, in lieu of any other method of payment herein provided, pay or tender such rental, royalties, or moneys, in the manner herein specified, either jointly to such parties or separately to each in accordance with their respective ownerships thereof, as lessee may elect. Any payment hereunder may be made by check or draft of lessee deposited in the mail or delivered to lessor or to a depository bank on or before the last date of payment. Said delay rental shall be apportionable as to said land on an acreage basis, and a failure to make proper payment or tender of delay rental as to any portion of said land or as to any interest therein shall not affect this lease as to any portion of said land or as to any interest therein as to which proper payment or tender is made. Any payment or tender which is made in an attempt to make proper payment, but which is erroneous in whole or in part as to parties, amounts, or depository, shall nevertheless be sufficient to prevent termination of this lease and to extend the time within which operations may be conducted in the same manner as though a proper payment had been made; provided, however, lessee shall correct such error within thirty (30) days after lessee has received written notice thereof from lessor. Lessee may at any time and from time to time execute and deliver to lessor or file for record a release or releases of this lease as to any part or all of said land or of mineral or horizon thereunder, and thereby be relieved of all obligations as to the released acreage or interest. If this lease is so released as to all minerals and horizons under a portion of said land, the delay rental and other payments computed in accordance therewith shall thereupon be reduced in the proportion that the acreage released bears to the acreage which was covered by this lease immediately prior to such release.

6. If at any time or times during the primary term operations are conducted on said land and if all operations are discontinued, this lease shall thereafter terminate on its anniversary date next following the ninetieth day after such discontinuance unless on or before such anniversary date lessee either (1) conducts operations or (2) commences or resumes the payment or tender of delay rental; provided, however, if such anniversary date is at the end of the primary term, or if there is no further anniversary date of the primary term, this lease shall terminate at the end of such term or on the ninetieth day after discontinuance of all operations, whichever is the later date, unless on such later date either (1) lessee is conducting operations or (2) the shut-in well provisions of paragraph 3 or the provisions of paragraph 11 are applicable. Whenever used in this lease the word "operations" shall mean operations for and any of the following: drilling, testing, completing, reworking, recompleting, deepening, plugging back or repairing of a well in search for or in an endeavor to obtain production of oil, gas, sulphur or other minerals, excavating a mine, production of oil, gas, sulphur or other mineral, whether or not in paying quantities.

Arco Oil & Gas Co.

7. Lessee shall have the use, free from royalty of water, other than from lessor's wells, and of oil and gas produced from said land in all operations hereunder. Lessee shall have the right at any time to remove all machinery and fixtures placed on said land, including the right to draw and remove casing. No well shall be drilled nearer than 200 feet to the house or barn now on said land without the consent of the lessor. Lessee shall pay for damages caused by its operations to growing crops and timber on said land.

8. The rights and estate of any party hereto may be assigned from time to time in whole or in part and as to any mineral or horizon. All of the covenants, obligations, and considerations of this lease shall extend to and be binding upon the parties hereto, their heirs, successors, assigns, and successive assigns. No change or division in the ownership of said land, royalties, delay rental, or other moneys, or any part thereof, howsoever effected, shall increase the obligations or diminish the rights of lessee, including, but not limited to, the location and drilling of wells and the measurement of production. Notwithstanding any other actual or constructive knowledge or notice thereof of or to lessee, its successors or assigns, no change or division in the ownership of said land or of the royalties, delay rental, or other moneys, or the right to receive the same, howsoever effected, shall be binding upon the then record owner of this lease until thirty (30) days after there has been furnished to such record owner at his or its principal place of business by lessor or lessor's heirs, successors, or assigns, notice of such change or division, supported by either originals or duly certified copies of the instruments which have been properly filed for record and which evidence such change or division, and of such court records and proceedings, transcripts, or other documents as shall be necessary in the opinion of such record owner to establish the validity of such change or division. If any such change in ownership occurs by reason of the death of the owner, lessee may, nevertheless pay or tender such royalties, delay rental, or other moneys, or part thereof, to the credit of the decedent in a depository bank provided for above. In the event of assignment of this lease as to any part (whether divided or undivided) of said land, the delay rental payable hereunder shall be apportionable as between the several leasehold owners, ratably according to the surface area or undivided interests of each, and default in delay rental payment by one shall not affect the rights of other leasehold owners hereunder.

9. In the event lessor considers that lessee has not complied with all its obligations hereunder, both express and implied, lessor shall notify lessee in writing, setting out specifically in what respects lessee has breached this contract. Lessee shall then have sixty (60) days after receipt of said notice within which to meet or commence to meet all or any part of the breaches alleged by lessor. The service of said notice shall be precedent to the bringing of any action by lessor on said lease for any cause, and no such action shall be brought until the lapse of sixty (60) days after service of such notice on lessee. Neither the service of said notice nor the doing of any acts by lessee aimed to meet all or any of the alleged breaches shall be deemed an admission or presumption that lessee has failed to perform all of its obligations hereunder. Should it be asserted in any notice given to the lessee under the provisions of this paragraph that lessee has failed to comply with any implied obligation or covenant hereof, this lease shall not be subject to cancellation for any such cause except after final judicial ascertainment that such failure exists and lessee has then been afforded a reasonable time to prevent cancellation by complying with and discharging its obligations as to which lessee has been judicially determined to be in default. If this lease is cancelled for any cause, it shall nevertheless remain in force and effect as to (1) sufficient acreage around each well as to which there are operations to constitute a drilling or maximum allowable unit under applicable governmental regulations, (but in no event less than forty acres), such acreage to be designated by lessee as nearly as practicable in the form of a square centered at the well, or in such shape as then existing spacing rules require; and (2) any part of said land included in a pooled unit on which there are operations. Lessee shall also have such easements on said land as are necessary to operations on the acreage so retained.

10. Lessor hereby warrants and agrees to defend title to said land against the claims of all persons whomsoever. Lessor's rights and interests hereunder shall be charged primarily with any mortgages, taxes or other liens, or interest and other charges on said land, but lessor agrees that lessee shall have the right at any time to pay or reduce same for lessor, either before or after maturity, and be subrogated to the rights of the holder thereof and to deduct amounts so paid from royalties or other payments payable or which may become payable to lessor and/or assigns under this lease. Lessee is hereby given the right to acquire for its own benefit, deeds, leases, or assignments covering any interest or claim in said land which lessee or any other party contends is outstanding and not covered hereby and even though such outstanding interest or claim be invalid or adverse to lessor. If this lease covers a less interest in the oil, gas, sulphur, or other minerals in all or any part of said land than the entire and undivided fee simple estate (whether lessor's interest is herein specified or not), or no interest therein, then the royalties, delay rental, and other moneys accruing from any part as to which this lease covers less than such full interest, shall be paid only in the proportion which the interest therein, if any, covered by this lease, bears to the whole and undivided fee simple estate therein. All royalty interest covered by this lease (whether or not owned by lessor) shall be paid out of the royalty herein provided. This lease shall be binding upon each party who executes it without regard to whether it is executed by all those named herein as lessor.

11. If, at, or after the expiration of the primary term hereof, and while this lease is in force, there is no well on said land, or on lands with which said land or any portion thereof has been unitized, capable of producing oil or gas, and lessee is not conducting operations on said land by reason of (1) any law, order, rule or regulation, (whether or not subsequently determined to be invalid) or (2) any other cause, whether similar or dissimilar, (except financial) beyond the reasonable control of lessee, the primary term and the delay rental provisions hereof shall be extended until the first anniversary date hereof occurring ninety (90) or more days following the removal of such delaying cause, and this lease may be extended thereafter by operations as if such delay had not occurred.

IN WITNESS WHEREOF, this instrument is executed on the date first above written.

George B. Alexander

George B. Alexander S.S. [redacted]

Pearl G. Alexander

Pearl Alexander S.S.

BOOK 321 PAGE 989

19790914000118950 2/4 $.00
Shelby Cnty Judge of Probate, AL
09/14/1979 12:00:00AM FILED/CERT

JOINT OR SINGLE ACKNOWLEDGEMENT
(MISSISSIPPI-ALABAMA-FLORIDA)

STATE OF Alabama
COUNTY OF Shelby

I hereby certify, that on this day, before me, a _____ duly authorized in the state and county aforesaid to take acknowledgments, personally appeared George B. Alexander and Pearl Alexander husband and wife

to me known to be the person S _____ described in and who executed the foregoing instrument and that they _____ the _____ acknowledged before me that, being informed of the contents of the same, _____ they _____ voluntarily signed and delivered the within and foregoing instrument on the day and year therein mentioned.

Given under my hand and official seal, this 23rd day of June, A. D., 19 79.

(Affix Seal) NOTARY PUBLIC

Kathy S. Mayfield
(Title of Official)

My commission expires _____ in and for Jefferson County, Alabama

Producers 88 (8/77E) OE—Paid Up
With Pooling Provision
Mississippi, Alabama, Florida

No. _____

Oil, Gas and Mineral Lease

FROM

TO

Dated _____, 19____

No. Acres _____

_____ County, _____

Term _____

This instrument was filed for record on the _____ day of _____, 19____, at _____ o'clock _____ and duly recorded in Book _____, Page _____ of the _____ record of this office.

By _____ County Clerk

When recorded return to _____, Der

RETURN TO
ARCO OIL AND GAS COMPANY
LEASE PURCHASE UNIT
P.O. BOX 2819 DALLAS, TEXAS 75221

Hederman Brothers—Jackson, Mississippi

ALA-10040-A

RATIFICATION AND RENTAL DIVISION ORDER

KNOW ALL MEN BY THESE PRESENTS:

That, WHEREAS, that certain oil and gas lease, dated June 23, 1979, from George B. Alexander and Pearl Alexander, husband and wife, as Lessors, to Atlantic Richfield Company, as Lessee, recorded in Book _____, Page _____ of the _____ Records of Shelby County, Alabama is owned by Atlantic Richfield Company insofar as it covers the following described land in Shelby County, Alabama, to-wit:

TOWNSHIP 18 SOUTH, RANGE 1 WEST
Section 36: E/2 SE/4 & SW/4 SE/4

TOWNSHIP 19 SOUTH, RANGE 1 WEST
SECTION 1: E/2 NE/4 & NW/4 NE/4

19790914000118950 3/4 $.00
Shelby Cnty Judge of Probate,AL
09/14/1979 12:00:00AM FILED/CERT

TOWNSHIP 19 SOUTH, RANGE 1 EAST
Section 6: Part of the SW/4 NW/4 described as follows: Beginning at the SW/corner of the SW/4 NW/4, thence North to Bear Creek for point of beg. thence down creek to where branch empties into creek, up branch to where branch enters West boundary of Section 6, thence South to point of beginning.

BOOK 321 PAGE 990

NOW, THEREFORE, in consideration of the sum of One Dollar ($1.00) and other good and valuable considerations, we the undersigned, and each of us, do hereby ratify, approve, confirm, and adopt the above described oil and gas lease insofar as it covers the above described land, and do hereby lease, demise, and let the land above described unto the said Atlantic Richfield Company subject to and under all of the terms and provisions of said lease, and, as to the above described land, do hereby agree and declare that said lease is now in full force and effect; that payment has been duly made of the entire bonus consideration and all of the delay rentals necessary to extend said lease to the next rental paying date; and that future delay rentals thereunder may be divided among and paid or tendered, as provided in said lease, to the persons named below in the amounts set opposite each name, either directly or to the depository bank as indicated, or to the depository named in the lease.

Credit To	Fractional Interest	Amount	Depository
George B. Alexander and Pearl Alexander	365/484	$182.50	First National Bank of Birmingham, Birmingham Alabama

This instrument shall be fully binding upon, and effective as to interest of, each of the above named persons who execute the same without regard to execution or lack of execution by any other person whomsoever.

We, and each of us, hereby release and waive all rights of dower and homestead in the above identified land, and the provisions hereof shall be binding upon the heirs, legal representatives, successors and assigns of each of us.

WITNESS our hands and seals this 23rd day of June, 1979.

Kathy J. Mayfield

George B. Alexander

George B. Alexander S.S. 417-03-2523

Pearl G. Alexander

Pearl Alexander S.S.

RETURN TO
ARCO OIL AND GAS COMPANY
LEASE PURCHASE UNIT
P. O. BOX 2819 DALLAS, TEXAS 75221

JOINT OR SINGLE ACKNOWLEDGMENT
(MISSISSIPPI-ALABAMA-FLORIDA)

STATE OF Alabama

COUNTY OF Shelby

I hereby certify, that on this day, before me, a _____

duly authorized in the state and county aforesaid to take acknowledgements, personally appeared George B. Alexander and Pearl Alexander husband and wife

to me known to be the person s described in and who executed the foregoing instrument and that they he

acknowledged before me that, being informed of the contents of the same, t he y voluntarily signed and delivered the within and foregoing instrument on the day and year therein mentioned.

Given under my hand and offical seal, this 23rd day of June A.D. 19 79

(Affix Seal)

Hardy J. Mayfield
(Title of Official)

MY COMMISSION EXPIRES OCTOBER 8, 1982

My commission expires _____ in and for Jefferson County, Ala.

JOINT OR SINGLE ACKNOWLEDGMENT
(MISSISSIPPI-ALABAMA-FLORIDA)

STATE OF _____

COUNTY OF _____

I hereby certify, that on this day, before me, a _____

STATE OF ALA. SHELBY CO.
I CERTIFY THIS
WAS FILED

duly authorized in the state and county aforesaid to take acknowledgements, personally appeared _____

1979 SEP 14 AM 8:58

to me known to be the person _____ described in and who executed the foregoing instrument and _____ he

_____ acknowledged before me that, being informed of the contents of the same, _____ he _____ voluntarily signed and delivered the within and foregoing instrument on the day and year therein mentioned.

Given under my hand and offical seal, this _____ day of _____ A.D., 19 _____

(Affix Seal)

JUDGE OF PROBATE

Deed 2.00
Mineral 12.10
Rec. 20.00
Ind. 1.00

(Title of Official)

My commission expires _____ in and for _____ County, _____

35.10

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JOINT OR SINGLE ACKNOWLEDGMENT
(MISSISSIPPI-ALABAMA-FLORIDA)

STATE OF _____

COUNTY OF _____

I hereby certify, that on this day, before me, a _____

duly authorized in the state and county aforesaid to take acknowledgements, personally appeared _____

to me known to be the person _____ described in and who executed the foregoing instrument and _____ he

_____ acknowledged before me that, being informed of the contents of the same, _____ he _____ voluntarily signed and delivered the within and foregoing instrument on the day and year therein mentioned.

Given under my hand and offical seal, this _____ day of _____ A.D., 19 _____

(Affix Seal)

(Title of Official)

My commission expires _____ in and for _____ County, _____

JOINT OR SINGLE ACKNOWLEDGMENT
(MISSISSIPPI-ALABAMA-FLORIDA)

STATE OF _____

COUNTY OF _____

I hereby certify, that on this day, before me, a _____

duly authorized in the state and county aforesaid to take acknowledgements, personally appeared _____

to me known to be the person _____ described in and who executed the foregoing instrument and _____ he

_____ acknowledged before me that, being informed of the contents of the same, _____ he _____ voluntarily signed and delivered the within and foregoing instrument on the day and year therein mentioned.

Given under my hand and offical seal, this _____ day of _____ A.D., 19 _____

(Affix Seal)

(Title of Official)

My commission expires _____ in and for _____ County, _____

1979091400011895O 4/4 $.00
Shelby Cnty Judge of Probate, AL
09/14/1979 12:00:00AM FILED/CERT