

OILFIELD RESEARCH LABORATORIES

536 NORTH HIGHLAND - CHANUTE, KANSAS 66720 - PHONE (316) 431-2650

November 17, 1981

Mid America Energy Company, Inc.
(General Leasing)
Box 569
Lebanon, Missouri 65536

Gentlemen:

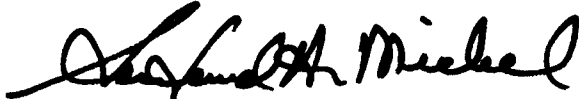
Attached hereto are the results of tests run on the rotary core taken from the Swisher Lease, Well No. 1, located in Section 18, T-25S, R-22E, Bourbon County, Kansas.

The core was received in the laboratory on October 31, 1981. The core was taken approximately July 6, 1981 and was unbagged when received in the laboratory. At the request of the client, six samples were randomly taken in the core.

Your business is greatly appreciated.

Very truly yours,

OILFIELD RESEARCH LABORATORIES


Sanford A. Michel

SAM/tem

5 c to Lebanon, Missouri

OILFIELD RESEARCH LABORATORIES

RESULTS OF LABORATORY TESTS

COMPANY Phipps-Murphy Enterprises LEASE Swisher WELL NO. 1

SAMPLE NO.	DEPTH, FEET	PERCENT POROSITY	PERM (AIR) Mds.	VOL. OF WATER REC. cc.	EFFECTIVE PERMEABILITY, MILLIDARCYS	I.F.P. #/Sq."
1	615.3	18.9	3.5	58	.75	30
2	617.5	19.3	4.5	100	1.72	25
3	619.8	20.9	5.8	184	2.62	15
4	621.8	21.9	39.	298	11.99	10
5	622.5	19.8	7.5	0	IMP.	-
6	632.2	23.7	6.3	46	0.45	30

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering

DALLAS, TEXAS

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INDIAN NATION DRILLING
SWISHER NO. 1 WELL

BOURBON COUNTY, KANSAS

DATE: 7/6/81
FORMATION: BARTLESVILLE
DRLG. FLUID: AIR
LOCATION: SEC. 18-25S-22E

FILE NO: 3406-00616
ENGINEER: BOYLE
ELEVATION:

SMP. NO.	DEPTH	PERM. TO AIR MD. PLUG	POROSITY PERCENT	FLUID SATS. OIL	WTR.	GR. DEN.	DESCRIPTION
CONVENTIONAL PLUG ANALYSIS							
1	614.5-15.0	0.3	18.5	20.2	46.6		SD, SLTY, MIC
2	615.0-16.0 ①	1.1	20.7	20.3	41.6		SD, SLTY, MIC
3	616.0-17.0	0.3	20.0	21.8	40.1		SD, SLTY, MIC
4	617.0-18.0 ②	<0.1	19.8	24.0	41.2		SD, SLTY, MIC
5	618.0-19.0	0.5	22.4	28.4	35.5		SD, SLTY, MIC
6	619.0-20.0 ③	0.9	18.4	31.2	43.0		SD, SLTY, MIC
7	620.0-21.0	1.0	20.9	29.6	36.2		SD, SLTY, MIC
8	621.0-22.0 ④	0.6	19.1	25.7	40.3		SD, SLTY, MIC
9	622.0-23.0 ⑤	0.4	19.4	26.0	40.1		SD, SLTY, MIC
10	623.0-24.0	0.6	20.7	25.7	36.9		SD, SLTY, MIC
11	624.0-25.0	1.0	22.1	32.0	32.0		SD, SLTY, MIC
12	625.0-26.0	1.2	19.3	26.7	38.8		SD, SLTY, MIC
13	626.0-27.0	0.1	19.0	29.6	38.3		SD, SLTY, MIC
14	627.0-28.0	3.8	19.1	40.2	37.9		SD, SLTY, MIC
15	628.0-29.0	0.1	17.3	35.1	39.1		SD, SLTY, MIC
16	629.0-30.0	0.3	21.7	44.8	32.8		SD, SLTY, MIC
17	630.0-31.0	<0.1	20.4	41.2	35.3		SD, SLTY, MIC
18	631.0-32.0	0.3	16.2	21.7	52.7		SD, SLTY, MIC
19	632.0-33.0 ⑥	<0.1	20.0	43.3	34.2		SD, SLTY, MIC