March 8, 1994

Amoco Production Company P. O. Box 3385 Tulsa, Oklahoma 74102

Attention: Mr. Richard Larese

Re: Final Report

Standard Core Analysis

Test Results

Amoco Production Company

Well Finnup No. 2

A-Silt and B-Silt Formations

K&A Job No. 94-6026-03 Amoco Reference No. 94281 Amoco Charge No. WIP68

#### Gentlemen:

This report presents the final results of the standard core analysis tests performed on samples supplied from the referenced core material. A summary of these test results and the procedures used are presented below.

The standard core analysis test results are presented in tabular form for each formation on pages 3 and 4. These results include air permeabilities, helium porosities, and grain densities. A crossplot of helium porosities versus air permeabilities is also provided for each formation.

The procedures used for these tests are as follows: upon arrival, each sample was cleaned with a 50:50 azeotropic mixture of toluene and methanol using soxhlet-type extractors. All samples were then oven dried for 24 hours at a temperature of 220° Fahrenheit. After allowing the samples to cool in desiccators, an air permeability and helium porosity were measured for each sample.

Air permeabilities were measured using steady-state flow techniques at a confining pressure of 400 psi. Helium porosities were measured at room conditions using a Boyles' Law double-celled helium porosimeter. Bulk volumes were measured using an Archimedes mercury immersion technique.

The conditions, under which this report is presented, are described immediately following this report. We request that the report be used in its entirety if reproductions are to be made. Please

contact us if you have any questions concerning these data, or if we may be of further service. Respectfully Submitted,

K&A LABORATORIES

K& A Laboratories

JMC/bw

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## STANDARD CORE ANALYSIS SUMMARY

#### AMOCO PRODUCTION COMPANY WELL FINNUP NO. 2 A-SILT FORMATION

Sample <u>Number</u>	Depth, feet	Air Permeability, md	Porosity, percent	Grain Density, gm/cc
1A	2,774.0	0.00581	5.7	2.71
2A	2,776.0	0.00668	6.7	2.70
3 <b>A</b>	2,778.0	Fractured	10.0	2.77
4A	2,780.0	0.00544	5.9	2.82
5A	2,782.0	0.0108	10.3	2.74
6A	2,783.0	0.0290	12.0	2.72
7A	2,783.8	0.0883	13.1	2.70
8A	2,785.0	1.64	17.4	2.70
9A	2,786.0	1.39	17.2	2.70
10A	2,787.3	0.793	17.2	2.70
11A	2,788.3	0.579	16.9	2.69
12A	2,789.1	0.329	16.0	2.70
13A	2,790.0	0.506	16.4	2.71
14A	2,792.0	1.03	17.1	2.69
15A	2,793.0	0.350	11.3	2.69
16A	2,794.3	3.18	9.9	2.70
17A	2,796.0	Fractured	16.5	2.72
18A	2,797.5	2.17	11.5	2.72
19A	2,798.0	Fractured	15.8	2.73
20A	2,800.0	5.72	10.7	2.75

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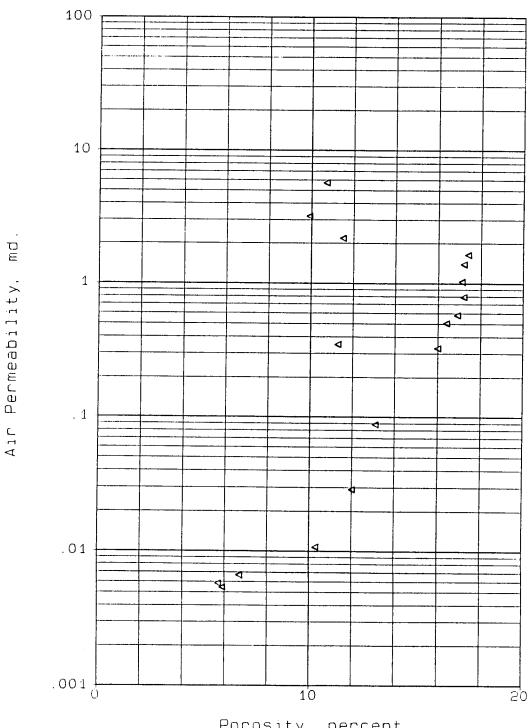
## STANDARD CORE ANALYSIS SUMMARY

#### AMOCO PRODUCTION COMPANY WELL FINNUP NO. 2 B-SILT FORMATION

Sample Number	Depth, <u>feet</u>	Air Permeability, md	Porosity, percent	Grain Density, gm/cc
1B	2,830.0	0.0242	7.0	2.68
2B	2,832.0	Fractured	15.3	2.78
3B	2,833.6	0.0243	14.4	2.78
4B	2,836.6	Fractured	17.7	2.75
5B	2,841.7	0.298	14.4	2.65
6B	2,842.0	5.53	18.1	2.68
7B	2,842.8	7.93	18.7	2.68
8B	2,845.5	0.211	11.1	2.67
9B	2,845.7	0.0544	9.2	2.67
10B	2,848.1	0.0665	8.6	2.68
11B	2,849.0	Fractured	10.5	2.71
12B	2,851.2	0.0888	6.7	2.70
13B	2,851.5	0.368	6.5	2.71
14B	2,854.0	Fractured	12.4	2.71
15B	2,854.2	Fractured	13.4	2.69
16B	2,855.3	0.00221	2.7	2.72
17B	2,856.5	0.00352	3.3	2.70
18B	2,857.9	0.0799	7.7	2.72
19B	2,859.9	0.00471	5.4	2.69
20B	2,860.7	3.28	13.3	2.67
21B	2,862.1	1.13	11.8	2.68
22B	2,86364.	0.685	11.8	2.68
23B	2,868.0	0.00420	3.7	2.72
24B	2,869.2	30.0	15.3	2.66
25B	2,870.7	0.00208	4.8	2.73
26B	2,871.7	0.00143	1.8	2.74

# AIR PERMEABILITY VS. POROSITY CROSSPLOT

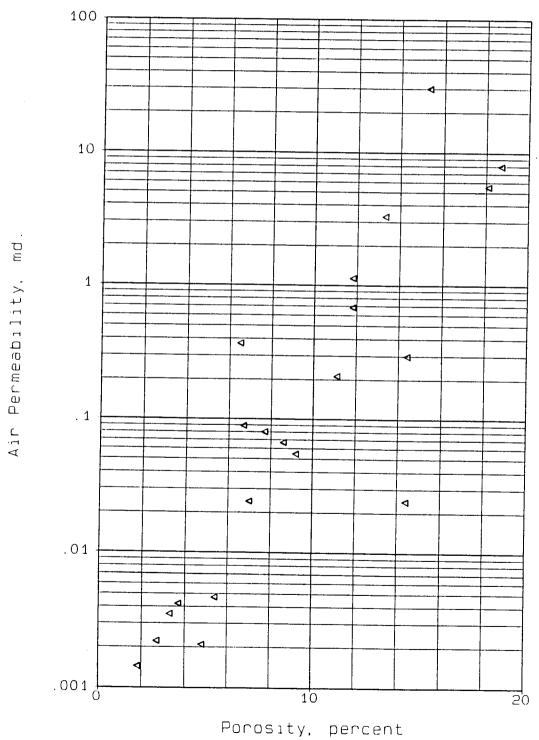
AMOCO PRODUCTION COMPANY WELL FINNUP NO. 2 A-SILT FORMATION



Porosity, percent

# AIR PERMEABILITY VS. POROSITY CROSSPLOT

AMOCO PRODUCTION COMPANY WELL FINNUP NO. 2 B-SILT FORMATION



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#### CONDITIONS AND QUALIFICATIONS

K&A Laboratories will endeavor to provide accurate and reliable laboratory measurements of the cores provided by the The results of any core analysis are necessarily affected by the condition in which the core is received and the selection of the samples to be analyzed. In the absence of direction by the client, K&A Laboratories will utilize its best geological and engineering judgment in selecting the samples to be analyzed. It should be recognized that most cores do not have uniform properties and that selection of truly representative samples is rarely possible. Unless otherwise directed, the samples will normally be selected from the highest quality segments. Thus, use of the properties measured in this report in reservoir calculations could result in an overestimation in reservoir volume and/or deliverability. K&A Laboratories assumes no responsibility nor offers any guarantee of the productivity or performance of any oil or gas well or hydrocarbon recovery process based upon the data presented in this report.