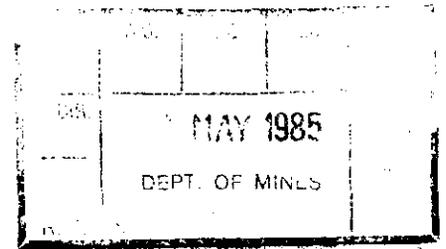


147001



BASS BASIN, AUSTRALIA
Mineralogy, Petrology and
Reservoir Quality of
Sandstone Cores

AMOCO AUSTRALIA PETROLEUM COMPANY

March, 1985

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Introduction

A comprehensive core sampling program was undertaken at the Bureau of Mineral Resources' core storage facility in Canberra by Amoco Australia during November 1984. The appendix contains a listing of which cores were plugged and why some cores were not plugged. In general, sandstones having visible reservoir quality were horizontally plugged every two feet in exploratory wells and every foot in the Pelican wells.

A total of two hundred ninety-five (295) plugs were cut and all were sent to Core Laboratories in Adelaide who in early 1985 conducted routine porosity, permeability and grain density analysis. As the results were evaluated, sandstone permeability was often found to be highly variable at similar porosities. Forty-six (46) of the samples were selected to investigate the cause of permeability reduction. The selected samples were sent to Mineralogy, Inc., in Tulsa, Oklahoma, who analyzed the mineralogy using the X-ray diffraction technique. Thin sections of each sample were also cut, described and photographed. The results of all these studies are incorporated into this report.

The plugs and thin sections are now in Houston, Texas, at the Amoco Rock Laboratory. Enough material is available from each plug for any future studies which may be conducted, particularly for the Pelican wells, such as capillary pressure tests, additional thin sections, and X-ray diffraction mineralogy.

CORE ANALYSIS REPORT

#1-91

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

AMOCO AUSTRALIA PET. CO.
MULTIPLE WELLS
BASS BASIN

DATE : 2nd JANUARY
FORMATION :
DRLG. FLUID:
LOCATION :

FILE NO : ADC84017
LABORATORY: ADELAIDE
ANALYSTS : PL,AF
ELEVATION :

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	He POR	GRAIN DEN M	DESCRIPTION
PELICAN NO.1					
1	8354.0	27.	18.8	2.66	SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
2	8355.0	21.	17.4	2.65	SST LIGY F-MG FRI-FRM ANG-SBRND MOD WL SRT CARB LAM S SLTY
3	8356.0	235.	18.4	2.64	SST LIGY F-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB LAM S SLTY
4	8357.0	180.	20.4	2.64	SST LIGY F-MG FRI-FRM SBANG-SBRND MOD WL SRT CARB LAM S SLTY
5	8358.0	1.6	14.1	2.66	SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
6	8359.0	5.2	15.5	2.67	SST LIGY F-MG FRI-FRM SBANG-SBRND MOD WL SRT CARB LAM S SLTY
7	8360.0	59.	19.0	2.66	SST LIGY (F-MG) FRI-FRM SBANG-SBRND MOD WL SRT CARB LAM S SLTY
8	8361.0	73.	20.3	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
9	8362.0	155.	20.5	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
10	8363.0	300.	19.4	2.64	SST LIGY F-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB LAM S SLTY
11	8364.0	335.	19.8	2.64	SST LIGY F-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
12	8365.0	150.	19.4	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S SLTY
13	8369.0	89.	17.5	2.66	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S SLTY
14	8370.0	6.4	18.1	2.67	SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
15	8371.0	9.0	18.6	2.67	SST LIGY F-MG FRI-FRM SBANG-SBRND MOD WL SRT CARB

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

PAGE 2

147006

AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADCB4017
 LABORATORY: ADELAIDE

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	He POR	GRAIN DEN M	DESCRIPTION
16	8372.0	9.6	19.7	2.68	LAM S SLTY SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB SPK S
17	8373.0	7.5	18.6	2.67	SLTY SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB SPK S
18	8374.0	4.0	17.9	2.66	SLTY SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB LAM S
19	8375.0	1.4	15.8	2.66	SLTY SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB SPK S
20	8376.0	1.4	15.9	2.67	SLTY SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB LAM S
21	8377.0	6.2	13.7	2.66	SLTY SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB LAM S
22	8548.0	130.	21.5	2.64	SLTY SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S
23	8549.0	54.	19.6	2.64	SLTY SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S
24	8550.0	510.	22.1	2.64	SLTY SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S
25	8551.0	2.1	16.3	2.65	SLTY SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S
26	8552.0	2.2	14.5	2.65	SLTY SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S
27	8553.0	1.2	12.6	2.65	SLTY SST LIGY F-MG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK
28	8554.0	9.2	17.8	2.66	SLTY SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK
29	8555.0	79.	19.1	2.66	SLTY SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK
30	8556.0	1.1	14.6	2.77	SLTY SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CALC CARB SPK
31	8557.0	0.40	15.0	2.67	SLTY SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB LAM

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

PAGE 3 147007

AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADC84017
 LABORATORY: ADELAIDE

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	He POR	GRAIN DEN M	DESCRIPTION
32	8558.0	0.12	12.3	2.69	S SLTY SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB SPK
33	8559.0	0.11	11.5	2.68	SLTY SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB SPK
34	8560.0	0.12	11.8	2.68	SLTY SST LIGY VF-FG FRI-FRM SBANG-SBRND WL SRT CARB LAM
35	8561.0	0.05	11.9	2.86	S SLTY SST LIGY VF-FG FRI-FRM SBANG-SBRND WL SRT CARB LAM
36	8562.0	0.12	12.6	2.68	S SLTY SST LIGY VF-FG FRI-FRM SBANG-SBRND WL SRT CARB LAM
37	8563.0	0.08	10.8	2.70	S SLTY SST LIGY VF-FG FRI-FRM SBANG-SBRND WL SRT CARB SPK
38	8564.0	0.04	10.7	2.74	S SLTY SST LTBRN VFG FRI-FRM WL SRT CARB SPK S SLTY
39	8565.0	0.09	11.2	2.66	S SLTY SST GY VFG FRI-FRM WL SRT CARB LAM S SLTY CARB LAM
40	8567.0	0.09	11.4	2.67	S SLTY SST GY VFG FRI-FRM WL SRT CARB SPK S SLTY
41	8568.0	0.14	12.6	2.66	SST GY VF-FG FRI-FRM WL SRT CARB LAM S SLTY
42	8569.0	0.09	11.3	2.67	SST GY VFG FRI-FRM WL SRT CARB SPK S SLTY
43	8570.0	0.04	7.5	2.68	SST DKG Y VFG FRI-FRM WL SRT CARB SPK S SLTY
44	9269.0	0.20	8.4	2.64	SST LIGY VF-FG FRI-FRM SBANG-SBRND WL SRT S CALC CARB SPK SLTY FRACTURED
45	9426.0	5.7	17.1	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM SLTY
46	9427.0	0.84	13.1	2.66	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK SLTY
47	9428.0	5.9	17.2	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
48	9429.0	7.1	18.3	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
49	9430.0	0.12	8.0	2.67	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK

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Petroleum Reservoir Engineering
 DALLAS, TEXAS

PAGE 4

147008

AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADCAB4017
 LABORATORY: ADELAIDE

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	He POR	GRAIN DEN M	DESCRIPTION
					S SLTY
50	9431.0	3.8	18.8	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
51	9432.0	7.5	19.6	2.65	SST LTBRN MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
52	9433.0	2.5	17.5	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK SLTY
53	9434.0	3.2	16.7	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
54	9435.0	1.1	14.6	2.65	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
55	9436.0	4.8	18.8	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
56	9440.0	7.5	19.1	2.64	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK SLTY
57	9441.0	5.6	18.1	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
58	9442.0	4.2	18.7	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
59	9443.0	6.9	18.5	2.66	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT SHLY LAM S SLTY
60	9444.0	1.0	3.1	2.78	SST GY VFG FRM WL SRT S CALC CARB SPK S SLTY
61	9445.0	0.04	9.3	2.70	SST GY VFG FRM WL SRT CARB SPK S SLTY
62	9448.0	0.90	11.1	2.72	SST GY VFG FRM WL SRT CARB SPK S SLTY
63	10059.0	17.	13.0	2.87	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT SHLY LAM S SLTY
64	10060.0	175.	16.9	2.65	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
65	10061.0	57.	13.6	2.67	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
66	10062.0	190.	16.0	2.64	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY

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AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADC84017
 LABORATORY: ADELAIDE

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	He POR	GRAIN DEN M	DESCRIPTION
<i>cont. dis.</i> 67	10063.0	240.	17.6	2.66	SST LTBRN M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
68	10064.0	34.	14.2	2.65	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT S CALC CARB SPK S SLTY
69	10065.0	99.	14.6	2.65	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
70	10066.0	130.	14.8	2.67	SST LIGY F-CG FRI-FRM SBANG-SBRND MOD SRT CARB SPK S SLTY
71	10067.0	11.	13.2	2.67	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT SHLY LAM S SLTY
72	10068.0	235.	17.5	2.64	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
73	10069.0	390.	17.9	2.64	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
74	10070.0- 0.0	520.	18.7	2.63	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
75	10071.0	330.	17.6	2.64	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
76	10072.0	230.	17.5	2.64	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT S CALC CARB SPK S SLTY
<i>no carb. dis. asphalt higher in rk than poorer</i> 77	10073.0	120.	17.4	2.65	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT S CALC CARB SPK S SLTY
78	10074.0	4.4	16.5	2.64	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY FRACTURED
79	10075.0	0.28	12.0	2.69	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
80	10076.0	0.13	10.7	2.70	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT SHLY LAM S SLTY
81	10077.0	0.19	13.4	2.69	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
82	10078.0	0.23	14.1	2.69	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY

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AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADCAB4017
 LABORATORY: ADELAIDE

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	He POR	GRAIN DEN M	DESCRIPTION
83	10079.0	0.22	14.5	2.69	S SLTY SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK
84	10080.0	0.75	14.9	2.69	S SLTY SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB LAM S SLTY
85	10081.0	0.32	15.6	2.69	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB SPK S SLTY
86	10082.0	0.32	14.9	2.70	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB SPK S SLTY
87	10083.0	0.21	12.6	2.70	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB LAM S SLTY
88	10084.0	0.13	10.7	2.69	SST LTBRN FG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
89	10085.0	0.17	14.7	2.69	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
PELICAN NO.2					
90	9797.0	0.17	12.8	2.67	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
91	9799.0	0.10	10.3	2.68	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

147011

AMOCO AUSTRALIA PET. CO.
MULTIPLE WELLS
BASS BASIN

DATE : 2nd JANUARY
FORMATION :
DRLG. FLUID:
LOCATION :

FILE NO : ADCAS4017
LABORATORY: ADELAIDE
ANALYSTS : PL,AF
ELEVATION :

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	He POR	GRAIN DEN M	DESCRIPTION
PELICAN NO.3					
92	9353.0	2.7	16.9	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
93	9361.0	0.03	7.2	2.70	SST LIGY FG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
94	9362.0	0.07	12.7	2.71	SST LIGY VF-FG FRM WL SRT CARB SPK S SLTY
95	9364.0	0.01	5.8	2.68	SST GY VFG FRM WL SRT CARB SPK S SLTY
96	9365.0	0.02	6.0	2.70	SST DKG Y VF-FG FRM WL SRT CARB SPK S SLTY
97	9366.0	0.04	8.9	2.69	SST GY VF-FG FRM WL SRT CARB LAM S SLTY
98	9367.0	0.11	11.1	2.70	SST GY VF-FG FRM WL SRT CARB SPK S SLTY
99	9368.0	0.22	9.7	2.69	SST GY VF-FG FRM WL SRT SHLY LAM S SLTY
100	9369.0	0.16	12.4	2.66	SST GY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY CARB SPK S SLTY
101	9375.0	0.07	10.7	2.70	SST GY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
102	9376.0	0.03	6.3	2.70	SST GY F-MG FRM SBANG-SBRND WL SRT CARB LAM S SLTY
103	9377.0	0.04	7.9	2.70	SST GY FG FRM WL SRT CARB LAM S SLTY
104	9396.0	0.18	10.5	2.67	SST LIGY F-MG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
105	9397.0	1.8	15.7	2.68	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
106	9421.0	0.05	8.0	2.73	SST GY F-MG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
107	9422.0	0.06	7.6	2.69	SST GY F-MG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
108	9423.0	145.	18.6	2.64	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
109	9426.0	0.89	12.7	2.64	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT SHLY LAM SLTY SL FRACTURED
110	9427.0	0.07	9.5	2.69	SST LIGY F-MG FRM SBANG-SBRND WL SRT CARB SPK S

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Petroleum Reservoir Engineering
 DALLAS, TEXAS

PAGE 2

147012

AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADCAB4017
 LABORATORY: ADELAIDE

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	He POR	GRAIN DEN M	DESCRIPTION
111	9429.0	1.5	17.5	2.67	SLTY SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S
112	9432.0	1.1	17.4	2.67	SLTY SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S
113	9433.0	0.18	12.3	2.68	SLTY SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S
✓114	9441.0	1.6	19.2	2.65	SLTY SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S
115	9442.0	2.1	19.1	2.65	SLTY SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S
116	9443.0	3.1	21.0	2.62	SLTY SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S
117	9444.0	0.11	10.9	2.69	SLTY SST LIGY FG FRM WL SRT CARB SPK S
118	9445.0	1.2	18.0	2.65	SLTY SST LIGY FG FRM WL SRT CARB SPK S
119	9446.0	0.15	13.0	2.70	SLTY SST LIGY F-MG FRM SBANG-SBRND WL SRT CARB LAM S
120	9447.0	0.12	11.9	2.67	SLTY SST LIGY F-MG FRM SBANG-SBRND WL SRT CARB LAM S
121	9448.0	0.09	11.6	2.70	SLTY SST LIGY FG FRM WL SRT CARB LAM S
122	9449.0	0.07	10.2	2.71	SLTY SST LIGY FG FRM WL SRT CARB SPK S
123	9450.0	0.04	7.8	2.69	SLTY SST LIGY FG FRM WL SRT CARB SPK S
124	9451.0	0.05	10.4	2.69	SLTY SST LIGY VF-FG FRM WL SRT CARB SPK S
125	9452.0	0.07	12.4	2.70	SLTY SST LIGY VF-FG FRM WL SRT CARB SPK S
126	9453.0	0.50	17.3	2.65	SLTY SST LIGY F-MG FRM SBANG-SBRND WL SRT CARB SPK S
127	9454.0	0.09	14.6	3.07	SLTY SST BRN FG FRM WL SRT CARB SPK S
128	9455.0	0.14	12.6	2.69	SLTY SST LIGY FG FRM WL SRT CARB SPK S
129	9456.0	0.08	16.7	2.81	SLTY SST GY FG FRM WL SRT CARB SPK S
130	9458.0- 0.0	0.07	10.3	2.69	SLTY SST LIGY FG FRM WL SRT CARB SPK S
131	9459.0	0.26	16.2	2.67	SLTY SST LIGY F-MG FRM SBANG-SBRND WL SRT CARB SPK S

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

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147013

AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADC84017
 LABORATORY: ADELAIDE

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	He POR	GRAIN DEN M	DESCRIPTION
132	9468.0	0.27	15.1	2.67	SST LIGY F-CG FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
133	9469.0	0.13	12.2	2.66	SST LIGY F-MG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
134	9470.0	0.24	15.2	2.66	SST LIGY MG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
135	9472.0	0.33	16.7	2.67	SST LIGY F-MG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
136	9473.0	0.15	14.8	2.68	SST LIGY F-MG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
137	9474.0	0.10	11.0	2.67	SST LIGY F-MG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
138	9475.0	0.63	18.2	2.66	SST LIGY F-MG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
139	9489.0	8.2	19.7	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK SLTY
140	9490.0	58.	20.5	2.64	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK SLTY
141	9497.0	13.	18.9	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY

press solution silica cement

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

PAGE 1

147014

AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS
 BASS BASIN

DATE : 2nd JANUARY
 FORMATION :
 DRLG. FLUID:
 LOCATION :

FILE NO : 84017
 LABORATORY: ADELAIDE
 ANALYSTS : PL,AF
 ELEVATION :

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	He POR	GRAIN DEN M	DESCRIPTION
PELICAN NO. 4					
142	9346.0	0.72	14.9	2.64	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
143	9359.0	2.2	17.8	2.66	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
144	9360.0	1.7	18.7	2.67	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
145	9363.0	2.3	17.4	2.64	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK SLTY
146	9574.0	0.60	16.0	2.66	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK SLTY
147	9575.0	0.89	15.9	2.65	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK SLTY
148	9583.0	3.1	17.9	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK
149	9584.0	4.3	16.8	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK SLTY
150	9598.0	0.93	16.4	2.67	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK SLTY
151	9599.0	1.4	17.0	2.66	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
152	9600.0	3.0	17.3	2.65	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY

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147015

AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS
 BASS BASIN

DATE : 2nd JANUARY
 FORMATION :
 DRLG. FLUID:
 LOCATION :

FILE NO : ADCAB4017
 LABORATORY: ADELAIDE
 ANALYSTS : PL,AF
 ELEVATION :

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	PERM MD VERT Ka	He POR	GRAIN DEN M	DESCRIPTION
POONBOON NO.1						
153	8098.0	250.		24.9	2.65	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
154	8100.0	330.		21.6	2.65	SST LIGY F-VCG FRI-FRM SBANG-SBRND P SRT CARB SPK S SLTY
155	8102.0	950.		28.0	2.71	SST LIGY F-MG FRI-FRM SBANG-SBRND MOD WL SRT S SLTY
156	8104.0	2350.		28.3	2.69	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
157	8108.0	7.4		17.0	2.71	SST LIGY F-CG FRI-FRM SBANG-SBRND MOD WL SRT SHLY LAM S SLTY
158	8112.0	5.1		15.0	2.67	SST LIGY VF-MG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
159	8802.0	1350.		25.4	2.65	SST LTBRN MG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
160	8804.0	830.		24.0	2.64	SST LTBRN M-VCG FRI-FRM SBANG-SBRND MOD SRT CARB SPK SLTY
161	8806.0	220.		22.6	2.64	SST LTBRN MG FRI-FRM SBANG-SBRND WL SRT CARB LAM SLTY
162	8808.0	285.		23.4	2.64	SST LTBRN M-VCG FRI-FRM SBANG-SBRND MOD SRT CARB LAM S SLTY
163	8810.0	295.		23.1	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM SLTY
164	8812.0	78.		13.3	2.72	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB SPK S SLTY
165	8814.0	88.		14.7	2.72	SST LIGY M-VCG FRI-FRM SBANG-SBRND MOD SRT CARB SPK S SLTY
166	8816.0	2.8		16.0	2.66	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S CALC

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147016

AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADC84017
 LABORATORY: ADELAIDE

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	PERM MD VERT Ka	He POR	GRAIN DEN M	DESCRIPTION
167	8818.0	0.82		17.7	2.65	CARB LAM SLTY SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB LAM SLTY
168	8821.0	0.08		12.9	2.72	SST GY VF-FG FRM WL SRT CARB SPK SLTY
169	8824.0	0.11		14.8	2.72	SST GY VF-FG FRM WL SRT CARB SPK SLTY
170	8826.0	0.06		12.2	2.69	SST GY VF-FG FRM WL SRT CALC CARB SPK SLTY
172	9960.0	14.		18.2	2.66	SST LIGY MG FRM SBANG-SBRND WL SRT CARB SPK SLTY
171	9962.0	0.18		11.6	2.70	SST LIGY F-MG FRM SBANG-SBRND WL SRT SHLY LAM SLTY
173	9964.0	5.8		17.4	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK SLTY
174	9968.0	24.		19.4	2.66	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
175	9970.0	0.49		14.8	2.67	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
176	9972.0	0.78		15.0	2.68	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK SLTY
177	9974.0	0.06		9.1	2.71	SST GY F-MG FRM SBANG-SBRND WL SRT CARB LAM SLTY
TAROOK NO.1						
178	6427.0	440.		27.2	2.65	SST BRN F-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB LAM SLTY
179	6429.0	68.		24.0	2.65	SST BRN F-MG FRM SBANG-SBRND WL SRT SHLY LAM S SLTY
180	6431.0	36.		21.5	2.66	SST DKBRN F-MG FRM SBANG-SBRND WL SRT CARB LAM S SLTY
181	6433.0	90.		26.5	2.63	SST DKBRN FG FRM WL SRT CARB LAM SLTY
182	6435.0	1.0		16.3	2.61	SST GY VF-FG FRM WL SRT CARB LAM SLTY
183	6440.0	120.		26.4	2.63	SST GY FG FRM WL SRT CARB LAM SLTY
184	6442.0	140.		24.7	2.63	SST GY F-MG FRM SBANG-SBRND WL SRT CARB LAM SLTY
185	6445.0	63.		23.2	2.64	SST LTBRN FG FRM WL SRT CARB LAM SLTY

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

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147017

AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADC84017
 LABORATORY: ADELAIDE

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ K _a	PERM MD VERT K _a	He POR	GRAIN DEN M	DESCRIPTION
186	6448.0	235.		27.5	2.64	SST LTBRN F-MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
187	6450.0	76.		24.5	2.63	SST LTBRN F-MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
188	6452.0	135.		25.1	2.64	SST LTBRN F-MG FRI-FRM SBANG-SBRND WL SRT SST LTBRN F-MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
189	6454.0	0.26		13.8	2.63	SST LIGY FG FRM WL SRT SHLY LAM SLTY
190	6456.0	470.		28.3	2.65	SST LTBRN F-MG FRI-FRM SBANG-SBRND WL SRT SHLY LAM SLTY
191	6458.0	110.		26.1	2.64	SST LTBRN F-MG FRI-FRM SBANG-SBRND WL SRT SHLY LAM S SLTY
192	6460.0	13.		16.3	2.70	SST DKBRN F-MG FRM SBANG-SBRND WL SRT SHLY LAM S SLTY
193	6463.0	63.		23.2	2.65	SST LTBRN FG FRM SBANG-SBRND WL SRT SHLY LAM SLTY
194	8553.0	2.4		6.7	2.67	SST DKGY VFG FRM-HD WL SRT SHLY LAM V SLTY
195	8555.0	0.39		15.7	2.67	SST GY VF-FG FRM-HD WL SRT SHLY LAM V SLTY
196	8558.0	3.4		16.7	2.66	SST LIGY VF-FG FRM-HD WL SRT S CALC SHLY LAM V SLTY
197	8560.0	3.8		15.8	2.67	SST LIGY VF-FG FRM-HD WL SRT SHLY LAM V SLTY
198	8563.0	0.27		15.1	2.66	SST LIGY VF-FG FRM-HD WL SRT CARB LAM V SLTY
199	8566.0	2.0		16.6	2.66	SST LIGY VF-FG FRM-HD WL SRT SHLY LAM V SLTY SL FRACTURED
200	8568.0	1.5		18.1	2.66	SST LIGY VF-FG FRM-HD WL SRT CARB LAM V SLTY
201	8570.0	0.53		15.6	2.67	SST LIGY VF-FG FRM-HD WL SRT CARB LAM V SLTY
202	8572.0	22.		20.6	2.65	SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB SPK SLTY
203	8574.0	310.		21.6	2.65	SST LTBRN MG FRI-FRM SBANG-SBRND WL SRT S SLTY
204	8576.0	3.8		16.6	2.66	SST LIGY VF-MG FRM-HD SBANG-SBRND MOD WL SRT CARB LAM SLTY FRACTURED

TOOL KA NO. 1A
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Petroleum Reservoir Engineering
 DALLAS, TEXAS

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AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADCAB4017
 LABORATORY: ADELAIDE

. CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	PERM MD VERT Ka	He POR	GRAIN DEN M	DESCRIPTION
205	5089.0	43.		24.6	2.68	SST LTBRN FG FRM SBANG-SBRND WL SRT CARB LAM SLTY
206	5094.0	15.		20.1	2.65	SST BRN MG FRI-FRM SBANG-SBRND WL SRT SHLY LAM SLTY
YURONGI NO.1						
207	7046.0	24.		23.6	2.67	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB SPK SLTY
208	7048.0	33.		23.2	2.66	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB SPK SLTY
209	7050.0	32.		23.3	2.66	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB SPK SLTY
210	7052.0	1.1		16.5	2.69	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB LAM SLTY
211	7055.0	9.7		20.8	2.67	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB LAM SLTY
212	7057.0	0.94		16.5	2.67	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB LAM SLTY
213	7059.0	3.9		18.7	2.68	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB SPK S SLTY
214	7061.0	11.		21.3	2.66	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB SPK S SLTY
215	7063.0	0.08		13.3	2.69	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CALC CARB SPK S SLTY
216	7065.0	1.3		18.5	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB SPK SLTY
217	7067.0	4.1		20.2	2.66	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CALC CARB SPK S SLTY
218	7069.0	2.9		19.7	2.65	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB SPK S SLTY
219	7071.0	0.48		16.2	2.69	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S CALC

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

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147019

AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADC84017
 LABORATORY: ADELAIDE

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	PERM MD VERT Ka	He POR	GRAIN DEN M	DESCRIPTION
220	7073.0	8.4		21.0	2.66	CARB SPK S SLTY SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CALC CARB SPK S SLTY
AROO NO. 1						
221	9516.0	0.69		12.3	2.64	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
222	9518.0	50.		20.7	2.64	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
223	9520.0	19.		20.1	2.64	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
224	9522.0	5.0		17.3	2.64	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
225	9524.0	5.1		17.8	2.64	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
226	9526.0	8.1		18.9	2.64	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB LAM S SLTY
227	9530.0	100.		21.6	2.62	SST LIGY C-VCG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK SLTY
228	9532.0	8.4		17.6	2.64	SST LIGY C-VCG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK SLTY
229	9543.0	0.14		12.2	2.66	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
230	9546.0	0.14		13.4	2.75	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT S CALC CARB LAM S SLTY
231	9549.0	0.15		13.0	2.69	SST LIGY FG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
232	9551.0	0.11		10.4	2.69	SST LIGY FG FRM SBANG-SBRND WL SRT CARB SPK S SLTY

BASS NO. 1

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

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AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADC84017
 LABORATORY: ADELAIDE

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	PERM MD VERT Ka	He POR	GRAIN DEN M	DESCRIPTION
233	6410.0	160.		24.8	2.62	SST GY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB LAM S SLTY
234	6412.0	26.		16.2	2.57	SST DKGY F-VCG FRI-FRM SBANG-SBRND P SRT CARB LAM S SLTY
235	6414.0	2.9		17.7	2.67	SST LIGY VF-FG FRM SBANG-SBRND WL SRT CARB SPK SLTY
236	6416.0	78.		24.3	2.64	SST LIGY FG FRM SBANG-SBRND WL SRT CARB LAM SLTY
237	6418.0	130.		26.3	2.64	SST LIGY FG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
✓238	6420.0	155.		27.8	2.65	SL FRACTURED SST LIGY FG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
239	6422.0	120.		25.5	2.64	SST LIGY FG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
240	6424.0	225.		28.3	2.66	SL FRACTURED SST LIGY FG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
241	6426.0	180.		28.7	2.68	SST LIGY FG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
242	6428.0	140.		27.1	2.64	SST LIGY F-MG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
243	6933.0	180.		26.6	2.65	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
BASS NO.3						
244	5320.0	50.		23.5	2.63	SST DKBRN M-CG FRI-FRM SBANG-SBRND MOD WL SRT SHLY LAM S SLTY
245	5326.0	260.		29.4	2.62	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
✓246	5328.0	165.		28.6	2.66	SST LTBRN F-MG FRI-FRM SBANG-SBRND WL SRT SHLY

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AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADCAB4017
 LABORATORY: ADELAIDE

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	PERM MD VERT Ka	He POR	GRAIN DEN M	DESCRIPTION
247	5910.0	0.12		6.9	2.71	LAM S SLTY SL FRACTURED SST LIGY F-MG FRM SBANG-SBRND WL SRT S CALC CARB LAM S SLTY
CORMORANT NO.1						
248	5996.0	13.	0.70	18.1	2.62	SST GY F-MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
249	6004.0	37.	115.	21.9	2.61	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
250	6010.0	26.	0.84	20.5	2.63	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
251	6012.0	34.	2.2	22.1	2.64	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
252	8685.0	1.2	0.79	11.4	2.66	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB LAM SLTY
253	9100.0	0.33	0.61	13.2	2.69	SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB LAM SLTY
254	9102.0	0.79	0.34	13.2	2.67	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
255	9106.0	1.6	0.49	13.7	2.67	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
256	9108.0	0.60	0.33	12.2	2.66	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
257	9110.0	0.57	0.38	13.4	2.67	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
258	9112.0	0.52	0.39	14.1	2.67	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
259	9116.0	0.23	0.21	12.3	2.69	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
260	9118.0	0.22	0.17	12.2	2.69	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or

147022

AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADCAB4017
 LABORATORY: ADELAIDE

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	PERM MD VERT Ka	He POR	GRAIN DEN M	DESCRIPTION
261	9120.0	0.15	0.11	11.5	2.68	SLTY SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
DONDU NO.1						
✓262	7690.0	275.		21.9	2.63	SST DKG M-VCG FRI-FRM SBANG-SBRND P SRT CARB SPK S S SLTY
263	7692.0	155.		24.8	2.63	SST DKBRN M-CG FRI-FRM SBANG-SBRND MOD SRT CARB SPK S SLTY
264	7694.0	40.		17.6	2.64	SST DKBRN M-VCG FRI-FRM SBANG-SBRND P SRT SHLY LAM SLTY
265	7696.0	2.5		15.8	2.66	SST LIGY MG FRI-FRM SBANG-SBRND P SRT CARB LAM SLTY
266	7698.0	3.4		16.4	2.68	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK SLTY SL FRACTURED
267	7700.0- 0.0	115.		22.9	2.66	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
268	7702.0	270.		23.5	2.66	SST LIGY M-CG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
269	7704.0	39.		21.7	2.68	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK S SLTY
✓270	7706.0	29.		20.3	2.67	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
271	7708.0	4.7		17.9	2.68	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM SLTY
272	7710.0	1.2		16.6	2.68	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB SPK SLTY
273	7712.0	1.1		16.4	2.67	SST LIGY MG FRI-FRM SBANG-SBRND WL SRT CARB LAM S SLTY
274	7714.0	0.15		12.6	2.70	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB LAM

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AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADCAB4017
 LABORATORY: ADELAIDE

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	PERM MD VERT Ka	He POR	GRAIN DEN M	DESCRIPTION
✓275	7716.0	0.61		15.0	2.69	S SLTY SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB LAM
276	7721.0	3.1		18.7	2.67	S SLTY SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB LAM S
277	7724.0	1.0		14.6	2.68	SLTY SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB LAM S
278	7726.0	22.		21.3	2.68	SLTY SST LIGY FG FRI-FRM SBANG-SBRND WL SRT CARB LAM S
279	7728.0	5.2		17.2	2.67	SLTY SST LTBRN F-CG FRI-FRM SBANG-SBRND MOD SRT CARB
✓280	7731.0	14.		15.1	2.75	LAM S SLTY SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB LAM S SLTY SL FRACTURED
DURROON NO.1						
281	5562.0	33.		24.7	2.67	SST DKGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT CARB LAM SLTY
NANGKERO NO.1						
✓282	7407.0	1.0		15.3	2.64	SST LIGY VF-FG FRM SBANG-SBRND WL SRT CARB LAM SLTY
283	7410.0	0.58		15.0	2.74	SST LIGY VF-FG FRM SBANG-SBRND WL SRT CARB LAM V SLTY
284	7411.0	7.0		20.4	2.64	SST LIGY VF-FG FRM SBANG-SBRND WL SRT CARB LAM SLTY
✓285	7413.0	2.9		18.4	2.64	SST LIGY VF-FG FRM SBANG-SBRND WL SRT CARB LAM SLTY
286	7417.0	0.17		11.0	2.64	SST LIGY VF-FG FRM SBANG-SBRND WL SRT CARB LAM SLTY

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CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
 DALLAS, TEXAS

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147024

AMOCO AUSTRALIA PET. CO.
 MULTIPLE WELLS

DATE : 2nd JANUARY
 FORMATION :

FILE NO : ADCAB4017
 LABORATORY: ADELAIDE

CONVENTIONAL CORE ANALYSIS

SAMPLE NUMBER	DEPTH FEET	PERM MD HORIZ Ka	PERM MD VERT Ka	He POR	GRAIN DEN M	DESCRIPTION
NARIMA NO.1						
287	9303.0	**		10.6	2.63	SST LIGY M-VCG FRI SBANG-SBRND P SRT CARB SPK S SLTY
288	9305.0	**		14.8	2.62	SST LIGY M-VCG FRI SBANG-SBRND P SRT CARB SPK S SLTY
289	9542.0	3.1		14.2	2.67	SST LIGY F-MG FRM SBANG-SBRND WL SRT CARB SPK S SLTY SL FRACTURED
290	9544.0	1.3		15.1	2.67	SST LIGY FG FRM SBANG-SBRND WL SRT SST LIGY FG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
✓ 291	9546.0	2.7		16.1	2.69	SST LIGY FG FRM SBANG-SBRND WL SRT CARB SPK S SLTY
292	9548.0	8.6		16.9	2.66	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT CARB LAM SLTY
293	9550.0	3.3		15.1	2.67	SST LIGY F-MG FRI-FRM SBANG-SBRND WL SRT SHLY LAM S SLTY
✓ 294	9554.0	23.		15.6	2.65	SST LIGY C-VCG FRI-FRM SBANG-SBRND MOD WL SRT CARB SPK S SLTY
295	9556.0	14.		17.5	2.65	SST LIGY M-CG FRI-FRM SBANG-SBRND MOD WL SRT MOD SRT V CALC

SAMPLES 287 AND 288 UNSUITABLE FOR PERMEABILITY DETERMINATIONS

SAMPLES 202, 245, 252, 253 AND 291 MOUNTED FOR PERMEABILITY DETERMINATIONS

147025

THE STATISTICAL DATA PRESENTED IS FOR A COMPOSITE
OF THE FOLLOWING WELLS OVER THE
GIVEN DEPTH INTERVALS

MULTIPLE WELLS
5089.0 - 10100.0

147026

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: AMOCO AUSTRALIA PET. CO.
FIELD : BASS BASIN

WELL : COMPOSITE WELLS
COUNTY, STATE:

AIR PERMEABILITY : MD. (HORIZONTAL) RANGE USED 0.000 TO 2350.
POROSITY : PERCENT (HELIUM) RANGE USED 0.0 TO 46.0

(PERMEABILITY UNCORRECTED FOR SLIPPAGE)

FEET ANALYZED IN ZONE : 293.0 LITHOLOGY EXCLUDED : NONE

DATA SUMMARY

POROSITY AVERAGE	PERMEABILITY AVERAGES		
	ARITHMETIC	HARMONIC	GEOMETRIC
----- 16.8	----- 63.	----- 0.28	----- 3.4

147027

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: AMOCO AUSTRALIA PET. CO.
 FIELD : BASS BASIN

WELL : COMPOSITE WELLS
 COUNTY, STATE:

GROUPING BY POROSITY RANGES

POROSITY RANGE	FEET IN RANGE	AVERAGE POROSITY	AVERAGE PERM. (GEOM.)	AVERAGE PERM. (ARITH)	FREQUENCY (PERCENT)	CUMULATIVE FREQUENCY (%)
2.0 - 4.0	1.0	3.1	1.0	1.0	0.3	0.3
4.0 - 6.0	1.0	5.8	0.010	0.010	0.3	0.7
6.0 - 8.0	9.0	7.1	0.065	0.309	3.1	3.8
8.0 - 10.0	8.0	8.9	0.081	0.100	2.7	6.5
10.0 - 12.0	27.0	11.0	0.116	0.174	9.2	15.7
12.0 - 14.0	38.0	12.8	0.407	4.7	13.0	28.7
14.0 - 16.0	44.0	15.0	1.3	9.9	15.0	43.7
16.0 - 18.0	59.0	17.0	5.2	38.	20.1	63.8
18.0 - 20.0	39.0	18.8	11.	54.	13.3	77.1
20.0 - 22.0	25.0	20.9	36.	78.	8.5	85.7
22.0 - 24.0	13.0	23.1	95.	153.	4.4	90.1
24.0 - 26.0	13.0	24.7	141.	264.	4.4	94.5
26.0 - 28.0	9.0	26.8	158.	178.	3.1	97.6
28.0 - 30.0	7.0	28.5	406.	657.	2.4	100.0

TOTAL NUMBER OF FEET = 293.0

147028

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: AMOCO AUSTRALIA PET. CO.
 FIELD : BASS BASIN

WELL : COMPOSITE WELLS
 COUNTY, STATE:

GROUPING BY PERMEABILITY RANGES

PERMEABILITY RANGE	FEET IN RANGE	AVERAGE PERM. (GEOM.)	AVERAGE PERM. (ARITH)	AVERAGE POROSITY	FREQUENCY (PERCENT)	CUMULATIVE FREQUENCY (%)
0.010 - 0.020	1.0	0.010	0.010	5.8	0.3	0.3
0.020 - 0.039	3.0	0.026	0.027	6.5	1.0	1.4
0.039 - 0.078	18.0	0.054	0.055	9.8	6.1	7.5
0.078 - 0.156	34.0	0.114	0.116	12.0	11.6	19.1
0.156 - 0.312	21.0	0.212	0.215	12.9	7.2	26.3
0.312 - 0.625	16.0	0.461	0.473	15.0	5.5	31.7
0.625 - 1.250	26.0	0.941	0.957	14.6	8.9	40.6
1.250 - 2.500	19.0	1.7	1.8	16.2	6.5	47.1
2.500 - 5.000	28.0	3.4	3.4	17.5	9.6	56.7
5.- 10.	27.0	6.9	7.1	18.0	9.2	65.9
10.- 20.	11.0	14.	14.	17.4	3.8	69.6
20.- 40.	18.0	28.	29.	20.3	6.1	75.8
40.- 80.	16.0	61.	62.	20.7	5.5	81.2
80.- 160.	21.0	123.	125.	22.1	7.2	88.4
160.- 320.	22.0	227.	232.	22.7	7.5	95.9
320.- 640.	8.0	409.	416.	21.7	2.7	98.6
640.- 1280.	2.0	888.	890.	26.0	0.7	99.3
1280.- 2560.	2.0	1781.	1850.	26.9	0.7	100.0

TOTAL NUMBER OF FEET = 293.0

147029

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: AMOCO AUSTRALIA PET. CO.
 FIELD : BASS BASIN

WELL : COMPOSITE WELLS
 COUNTY, STATE:

POROSITY-FEET OF STORAGE CAPACITY LOST FOR SELECTED POROSITY CUT OFF

POROSITY CUT OFF	FEET LOST	CAPACITY LOST (%)	FEET REMAINING	CAPACITY REMAINING (%)	ARITH MEAN	MEDIAN
0.0	0.0	0.0	293.0	100.0	16.8	16.6
2.0	0.0	0.0	293.0	100.0	0.0	16.6
4.0	1.0	0.1	292.0	99.9	0.0	16.6
6.0	2.0	0.2	291.0	99.8	0.0	16.7
8.0	11.0	1.5	282.0	98.5	0.0	16.8
10.0	19.0	2.9	274.0	97.1	0.0	16.9
12.0	46.0	9.0	247.0	91.0	0.0	17.4
14.0	84.0	18.9	209.0	81.1	0.0	18.1
16.0	128.0	32.3	165.0	67.7	0.0	19.2
18.0	187.0	52.8	106.0	47.2	0.0	21.1
20.0	226.0	67.7	67.0	32.3	0.0	23.3
22.0	251.0	78.4	42.0	21.6	0.0	25.2
24.0	264.0	84.5	29.0	15.5	0.0	26.3
26.0	277.0	91.0	16.0	9.0	0.0	27.8
28.0	286.0	95.9	7.0	4.1	0.0	29.0
30.0	293.0	100.0	0.0	0.0		

TOTAL STORAGE CAPACITY IN POROSITY-FEET = 4912.7

147030

STATISTICAL DATA FOR POROSITY AND PERMEABILITY HISTOGRAM

COMPANY: AMOCO AUSTRALIA PET. CO.
 FIELD : BASS BASIN

WELL :
 COUNTY, STATE: ; COMPOSITE WELLS

MILLIDARCY-FEET OF FLOW CAPACITY LOST FOR SELECTED PERMEABILITY CUT OFF

PERMEABILITY CUT OFF	FEET LOST	CAPACITY LOST (%)	FEET REMAINING	CAPACITY REMAINING (%)	GEOM MEAN	MEDIAN
0.005	0.0	0.0	293.0	100.0	3.41	3.09
0.010	0.0	0.0	293.0	100.0	3.41	3.09
0.020	1.0	0.0	292.0	100.0	3.48	3.12
0.039	4.0	0.0	289.0	100.0	3.66	3.24
0.078	22.0	0.0	271.0	100.0	4.85	4.05
0.156	56.0	0.0	237.0	100.0	8.31	6.22
0.312	77.0	0.1	216.0	99.9	11.88	8.14
0.625	93.0	0.1	200.0	99.9	15.41	10.00
1.250	119.0	0.2	174.0	99.8	23.40	21.60
2.500	138.0	0.4	155.0	99.6	32.21	31.14
5.	166.0	0.9	127.0	99.1	52.94	55.36
10.	193.0	2.0	100.0	98.0	91.66	94.35
20.	204.0	2.8	89.0	97.2	115.80	113.14
40.	222.0	5.6	71.0	94.4	165.29	152.27
80.	238.0	10.9	55.0	89.1	221.38	196.36
160.	259.0	25.0	34.0	75.0	318.94	273.36
320.	281.0	52.5	12.0	47.5	594.57	538.17
640.	289.0	70.4	4.0	29.6	1257.62	1280.00
1280.	291.0	80.0	2.0	20.0	1781.15	1810.19
2560.	293.0	100.0	0.0	0.0		

TOTAL FLOW CAPACITY IN MILLIDARCY-FEET (ARITHMETIC) = 18544.07

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147031

THE STATISTICAL DATA PRESENTED IS FOR A COMPOSITE
OF THE FOLLOWING WELLS OVER THE
GIVEN DEPTH INTERVALS

MULTIPLE WELLS
5089.0 - 10100.0

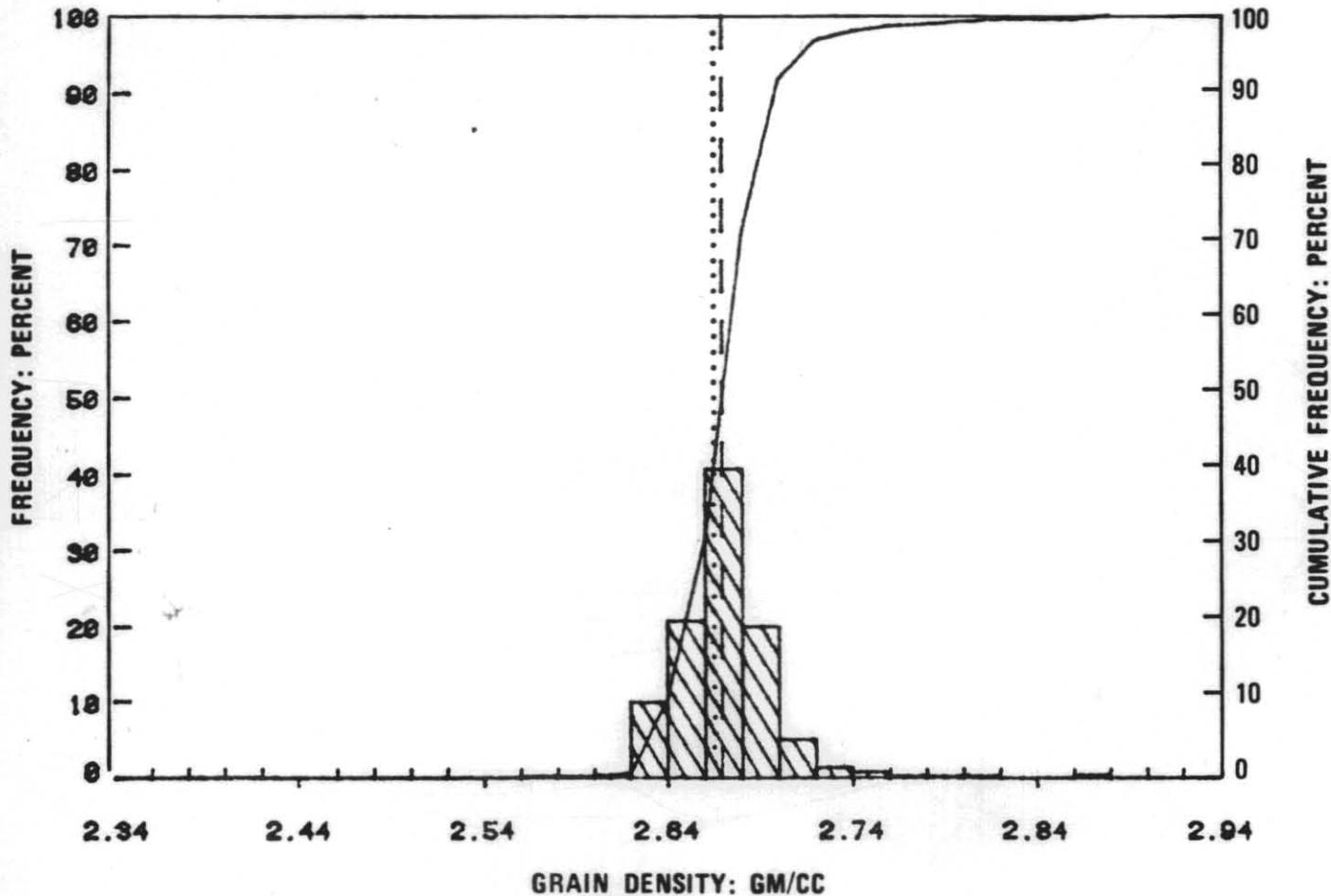


CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

COMPANY AMOCO AUSTRALIA PET. CO. FILE NO. ADCA84017
 WELL COMPOSITE WELLS DATE 2nd JANUARY
 FIELD BASS BASIN FORMATION _____ ELEV. _____
 COUNTRY _____ DRLG. FLD. _____ CORES _____
 LOCATION _____

GRAIN DENSITY HISTOGRAM



LEGEND
 ARITHMETIC MEAN GRAIN DENSITY
 MEDIAN VALUE - - - - -
 CUMULATIVE FREQUENCY ———

5 cm

STATISTICAL DATA FOR GRAIN DENSITY HISTOGRAM

COMPANY: AMOCO AUSTRALIA PET. CO.
FIELD : BASS BASIN

WELL : COMPOSITE WELLS
COUNTRY :

GRAIN DENSITY : gm/cc (MEASURED) RANGE USED 2.34 TO 2.94
FEET ANALYZED IN ZONE : 464.0 LITHOLOGY EXCLUDED : NONE

DATA SUMMARY

GRAIN DENSITY
ARITHMETIC MEAN

2.67

GRAIN DENSITY
MEDIAN

2.67

147034

STATISTICAL DATA FOR GRAIN DENSITY HISTOGRAM

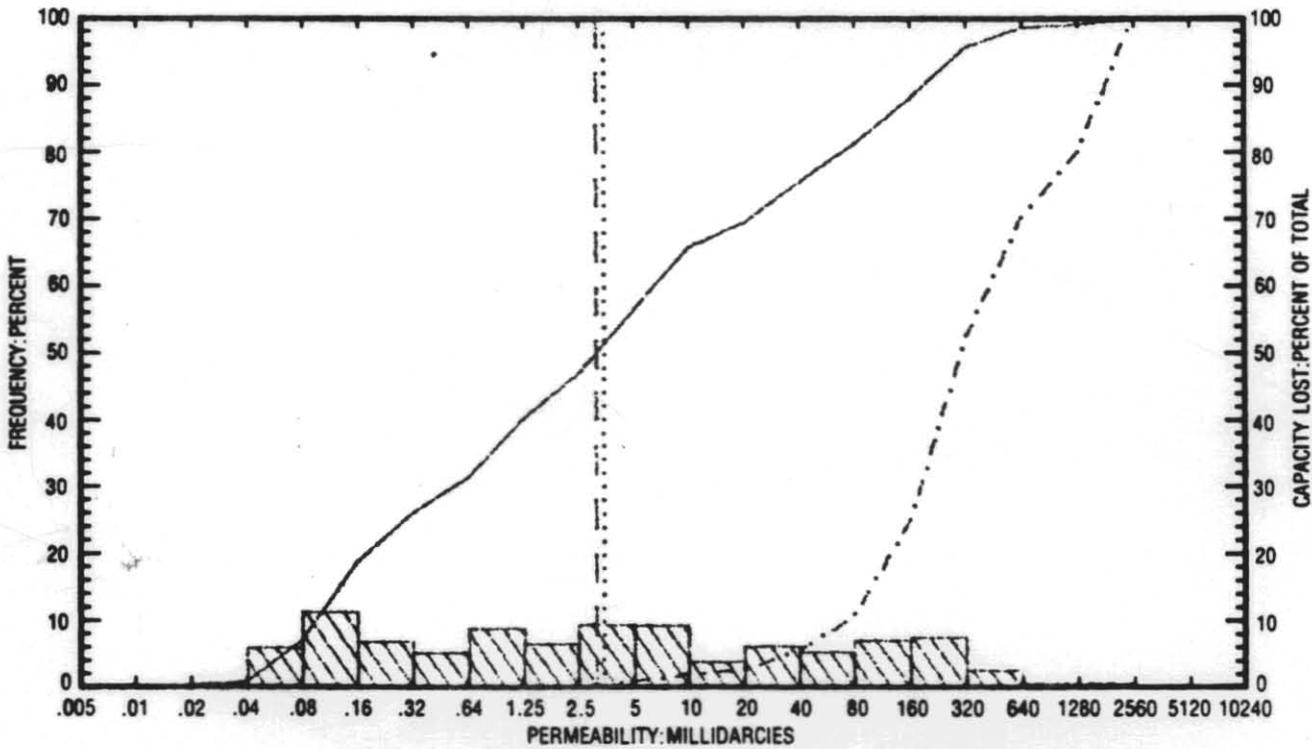
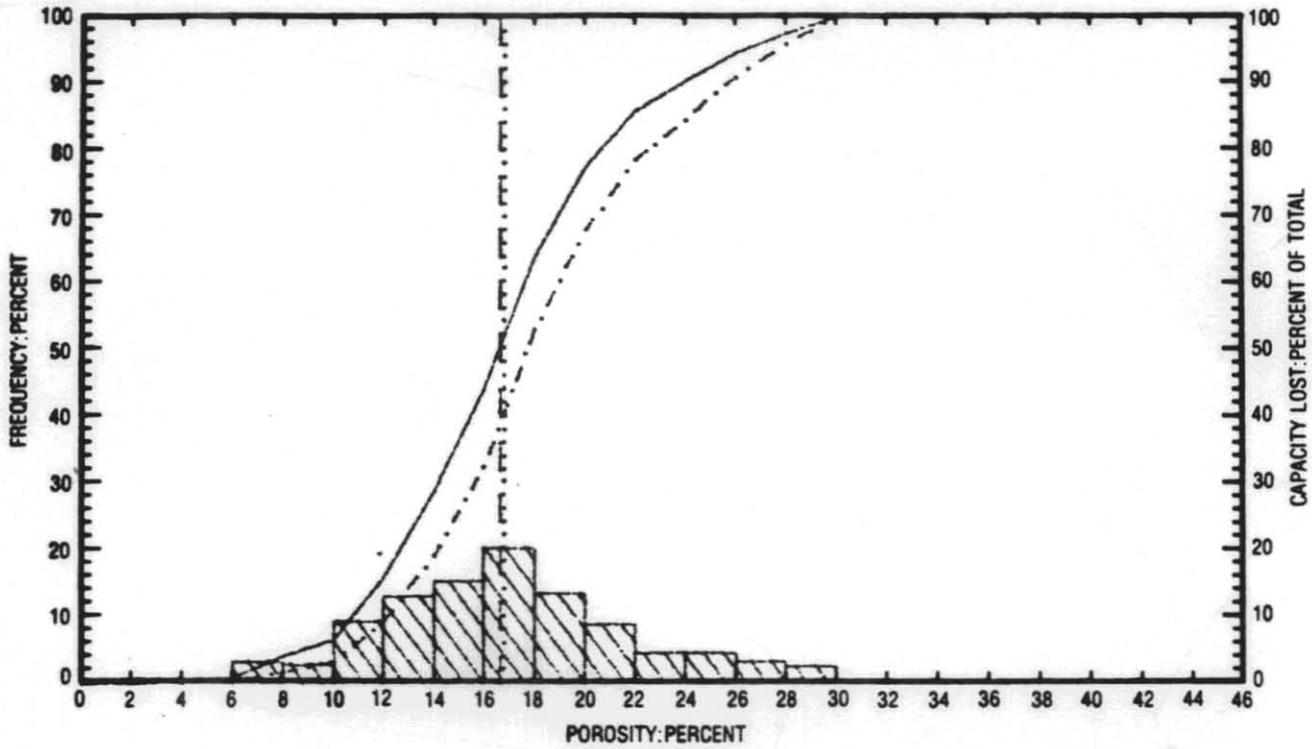
COMPANY: AMOCO AUSTRALIA PET. CO.
 FIELD : BASS BASIN

WELL : COMPOSITE WELLS
 COUNTRY :

GROUPING BY GRAIN DENSITY RANGES

GRAIN DENSITY RANGE	FEET IN RANGE	AVERAGE DENSITY	FREQUENCY (PERCENT)	CUMULATIVE FREQUENCY (%)
2.56 - 2.58	1.0	2.57	0.2	0.2
2.60 - 2.62	2.0	2.61	0.4	0.6
2.62 - 2.64	46.0	2.63	9.9	10.6
2.64 - 2.66	96.0	2.65	20.7	31.3
2.66 - 2.68	188.0	2.66	40.6	71.9
2.68 - 2.70	92.0	2.69	19.9	91.8
2.70 - 2.72	23.0	2.70	5.0	96.8
2.72 - 2.74	6.0	2.72	1.3	98.1
2.74 - 2.76	4.0	2.75	0.9	98.9
2.76 - 2.78	1.0	2.77	0.2	99.1
2.78 - 2.80	1.0	2.78	0.2	99.4
2.80 - 2.82	1.0	2.81	0.2	99.6
2.86 - 2.88	2.0	2.87	0.4	100.0

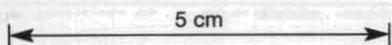
TOTAL NUMBER OF FEET = . 463.0



PERMEABILITY AND POROSITY HISTOGRAMS

AMOCO AUSTRALIA PET. CO.
 COMPOSITE WELLS
 BASS BASIN

- LEGEND**
- ARITHMETIC MEAN POROSITY (dotted line)
 - GEOMETRIC MEAN PERMEABILITY (dotted line)
 - MEDIAN VALUE - - - - - (dashed line)
 - CUMULATIVE FREQUENCY ——— (solid line)
 - CUMULATIVE CAPACITY LOST - · - · - · (dash-dot line)



1000.

147036

100.

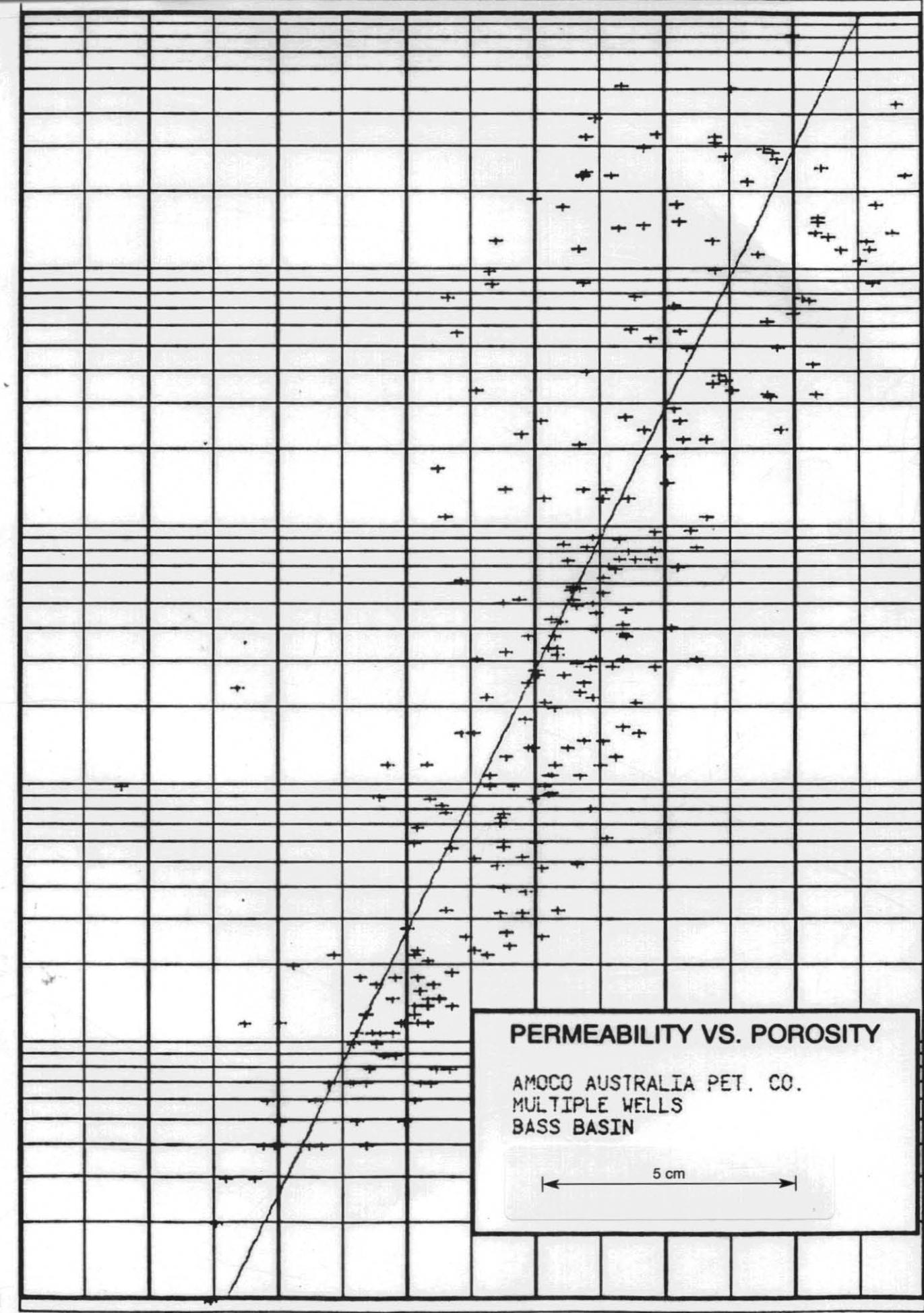
PERMEABILITY: MILLIDARCIES

10.

1.

0.1

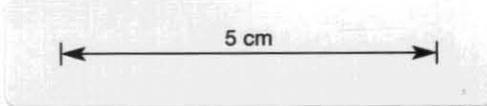
0.01



0.0 4.0 8.0 12.0 16.0 20.0 24.0

PERMEABILITY VS. POROSITY

AMOCO AUSTRALIA PET. CO.
MULTIPLE WELLS
BASS BASIN



147037

PERMEABILITY VS POROSITY

COMPANY: AMOCO AUSTRALIA PET. CO.
 FIELD : BASS BASIN

WELL : MULTIPLE WELLS
 COUNTY, STATE:

AIR PERMEABILITY : MD - HORIZONTAL (UNCORRECTED FOR SLIPPAGE)
 POROSITY : PERCENT (HELIUM)

DEPTH INTERVAL(FT)	RANGE & SYMBOL	PERMEABILITY		POROSITY		POROSITY AVERAGE	PERMEABILITY AVERAGES		
		MINIMUM	MAXIMUM	MIN.	MAX.		ARITHMETIC	HARMONIC	GEOMETRIC
5089.0 - 10100.0	1 (+)	0.010	2350.0	3.1	29.4	17.6	97.	0.28	7.0

EQUATION OF REDUCED LINE RELATING PERMEABILITY(K) TO POROSITY :
 $\text{LOG}(K) = (\text{SLOPE})(\text{POROSITY}) + \text{LOG OF INTERCEPT}$
 $K = \text{ANTILOG}((\text{SLOPE})(\text{POROSITY}) + \text{LOG OF INTERCEPT})$

RANGE	EQUATION OF THE LINE
1	PERM = ANTILOG((0.2517)(POROSITY) + -3.5887)

147038

MINERALOGY

MINERALOGY, INC.

3228 E. 15th St.
Tulsa, Oklahoma 74104

147040

X-RAY DIFFRACTION MINERAL PERCENTAGES

SAMPLE IDENTIFICATION NUMBER	QUARTZ	FELDSPAR	CALCITE	FERRODOLomite	SIDERITE	ANHYDRITE	KAOLINITE	CHLORITE	ILLITE	MIXED-LAYER ILLITE/SMECTITE	SMECTITE	PYRITE							TOTAL
Bass Basin, Australia																			
156	90	2	trc		4		3		1										
157	82	3	1		6		5		3	trc									
159	94	3	trc	trc	trc	trc	2		1										
166	88	4	trc	trc	2	trc	4		2	trc									
167	88	4					4		4										
173	89	4			1		5		1	trc									
174	90	4			1		4		1	trc									
182	92	3					4		1										
186	92	2		trc	1		4		1										
192	82	3			7		4		2	trc		2							
208	85	4		trc	3		5	1	2										
216	85	3			3		7		2	trc									
222	91	3			2		3		1										
225	90	3			1		4		2	trc									

147043

PETROLOGY

147044

Plot 1 8360'

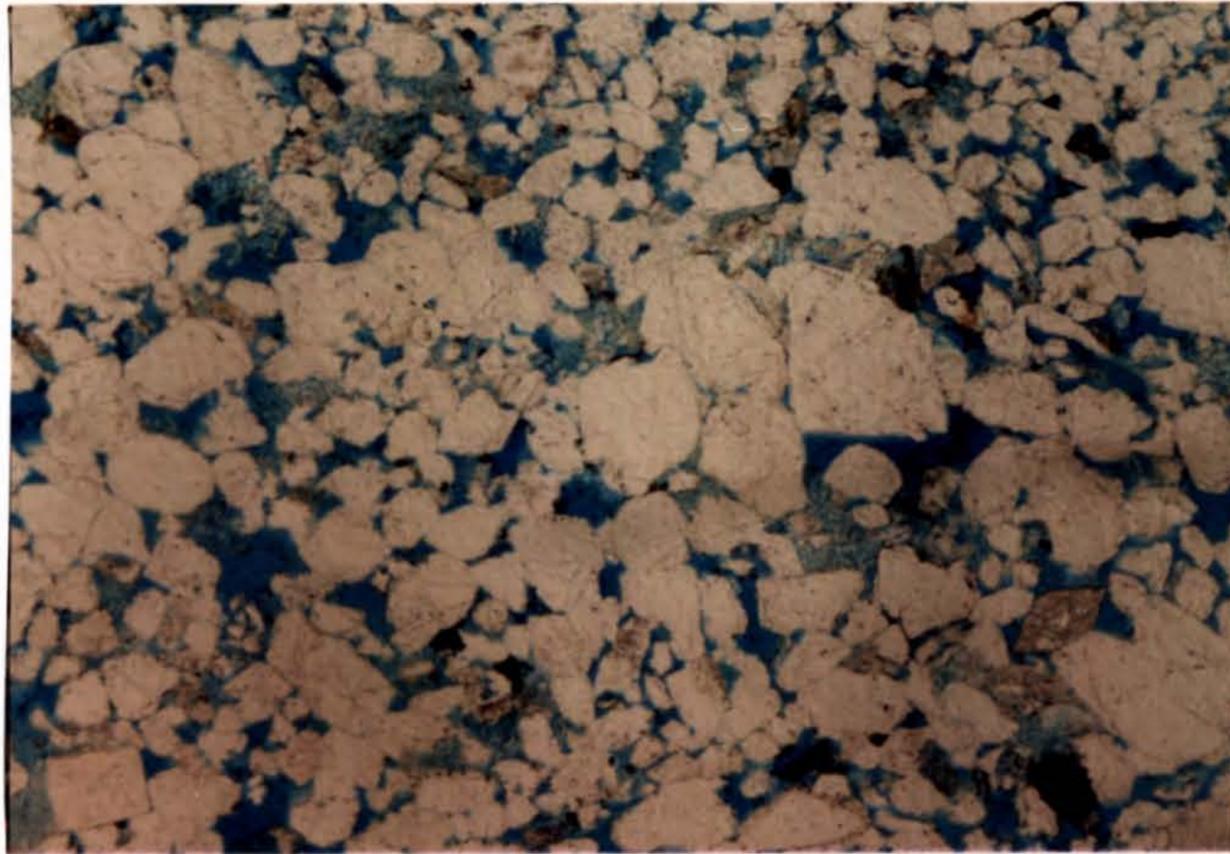
Middle M. diversus

FIGURE 1A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#7



THIN SECTION PHOTO
40X

5 cm

THIN SECTION DESCRIPTION

Fine grained, fair sorted, subrounded sandstone with scattered medium sand grains. Pressure solution of silica between grains and quartz overgrowths on some grains has destroyed most of the original intergranular porosity. Quartz overgrowths on some grains marked by dust rims. Dissolution of feldspar and rock fragments has created good porosity. Some of the dissolution porosity appears to have been from carbonate dissolution. Scattered dark fine crystalline siderite. Rock fragments with iron and titanium mineral inclusions. Authigenic kaolinite infilling most of the dissolution porosity. Fine sand seems to be in irregular thin beds. Siderite crystals associated with black rock fragments with hematite staining. Estimated visible porosity is from 16-20% with fair permeability, reduced due to authigenic clay in pores. Porosity in the thin section photograph is shown in blue.

147045

Pelican 1 8760'

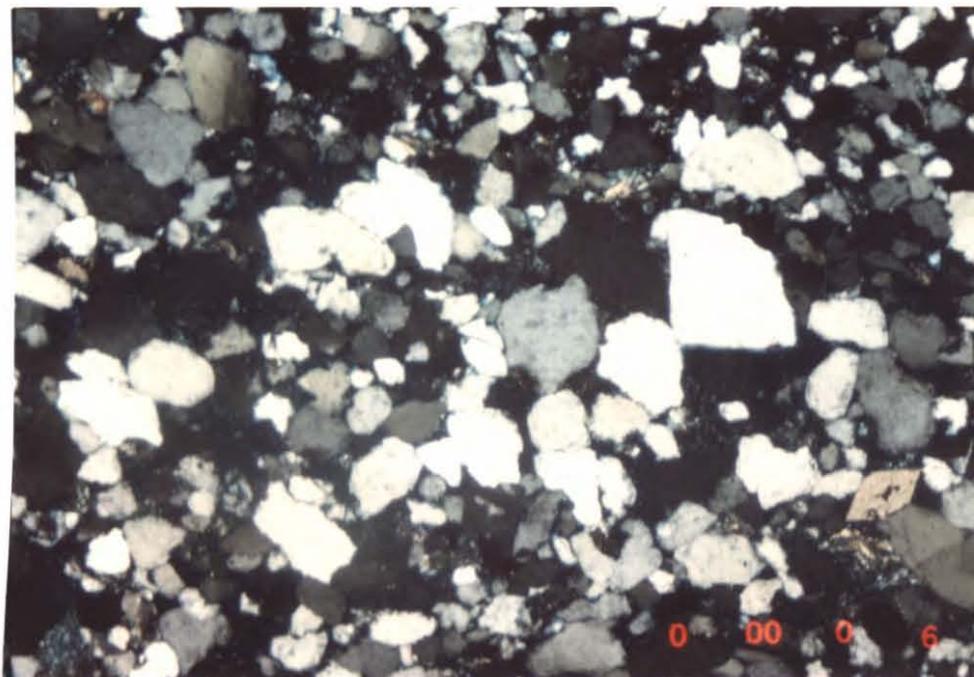
Middle M. diurnalus

FIGURE 1B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#7



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Fine grained, fair sorted, subrounded sandstone with scattered medium sand grains. Pressure solution of silica between grains and quartz overgrowths on some grains has destroyed most of the original intergranular porosity. Quartz overgrowths on some grains marked by dust rims. Dissolution of feldspar and rock fragments has created good porosity. Some of the dissolution porosity appears to have been from carbonate dissolution. Scattered dark fine crystalline siderite. Rock fragments with iron and titanium mineral inclusions. Authigenic kaolinite infilling most of the dissolution porosity. Fine sand seems to be in irregular thin beds. Siderite crystals associated with black rock fragments with hematite staining. Estimated visible porosity is from 16-20% with fair permeability, reduced due to authigenic clay in pores. Porosity in the thin section photograph is shown in blue.

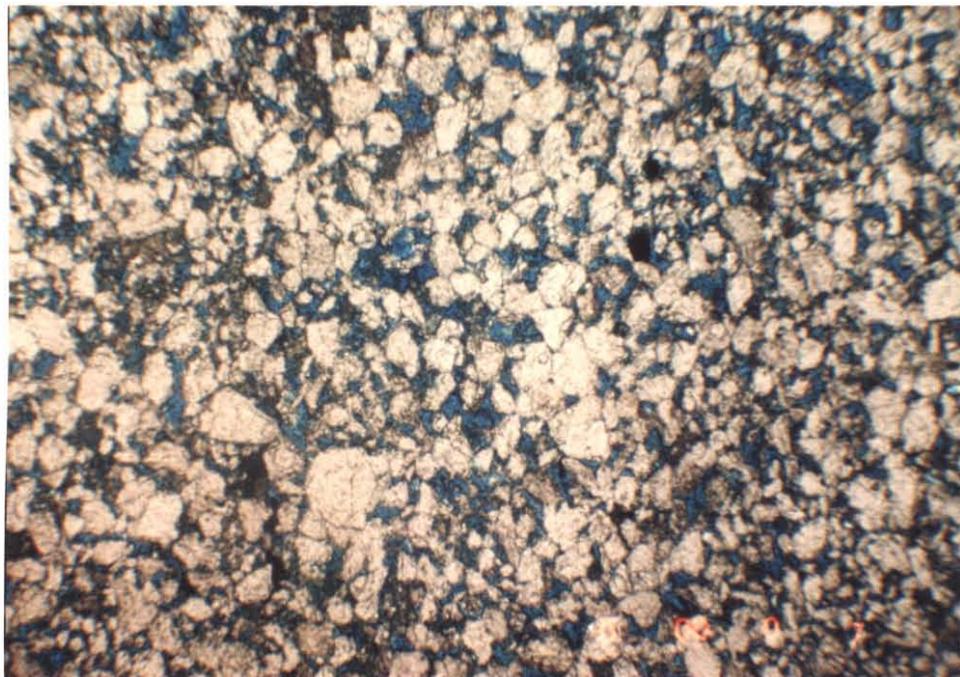
FIGURE 2A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#10

Middle N. Amoco

THIN SECTION PHOTO
20X

5 cm

THIN SECTION DESCRIPTION

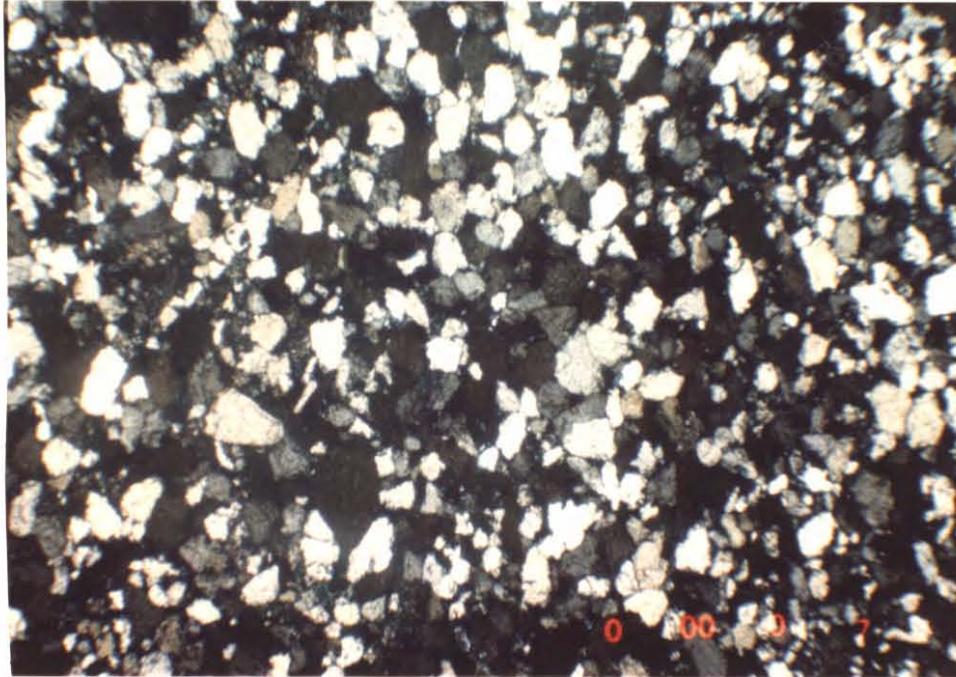
Very fine grained, fair sorted, subrounded sandstone. Pressure solution silica between grains and authigenic quartz overgrowths on grains has destroyed much of the original intergranular porosity. Feldspar, rock fragment and possibly carbonate dissolution has created good visible porosity. Authigenic kaolinite has infilled some macro pores creating micro intercrystalline porosity and lowering permeability. Estimated visible porosity is 16-20%. Minor black organic (?) streaks and grains. Porosity in the thin section photograph is shown in blue.

FIGURE 2B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#10



THIN SECTION PHOTO
20X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

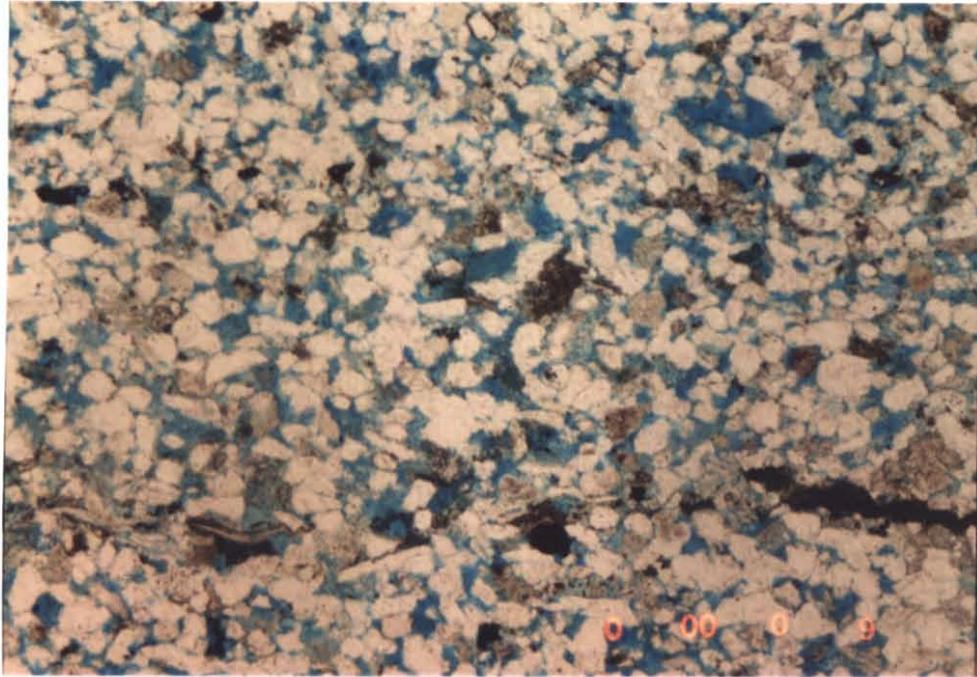
Very fine grained, fair sorted, subrounded sandstone. Pressure solution silica between grains and authigenic quartz overgrowths on grains has destroyed much of the original intergranular porosity. Feldspar, rock fragment and possibly carbonate dissolution has created good visible porosity. Authigenic kaolinite has infilled some macro pores creating micro intercrystalline porosity and lowering permeability. Estimated visible porosity is 16-20%. Minor black organic (?) streaks and grains. Porosity in the thin section photograph is shown in blue.

FIGURE 3A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#16

THIN SECTION PHOTO
40X

5 cm

THIN SECTION DESCRIPTION

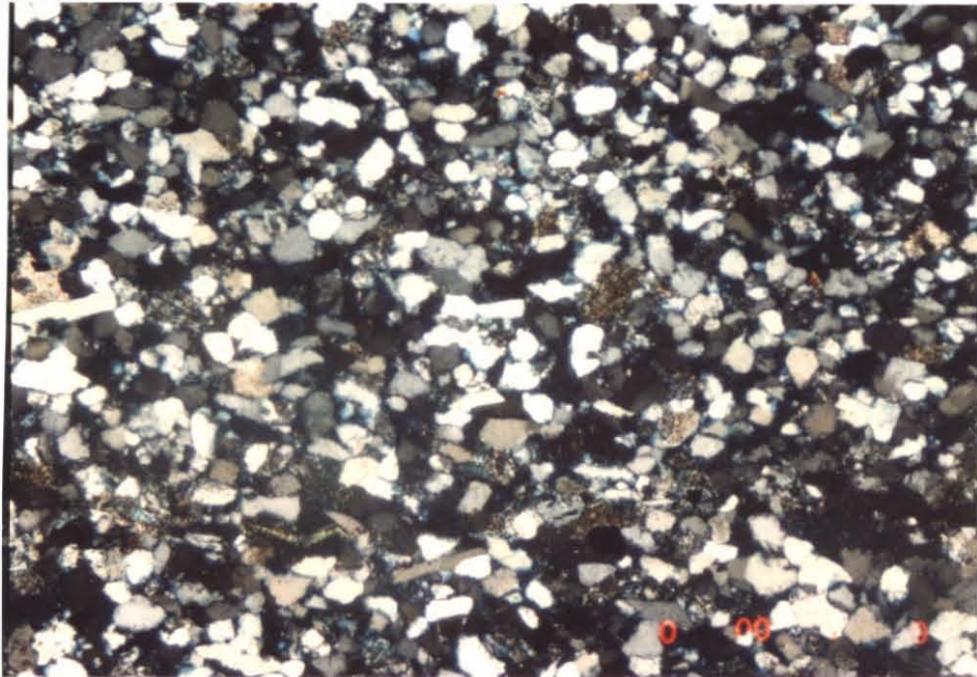
Very fine grained, fair sorted, subrounded sandstone. Pressure solution silica between grains and authigenic quartz overgrowths on grains has destroyed much of the original intergranular porosity. Feldspar, rock fragment and possibly carbonate dissolution has created good visible porosity. Authigenic kaolinite has infilled some macro pores creating micro intercrystalline porosity and lowering permeability. Estimated visible porosity is 12-15%. Minor black organic (?) streaks and grains. Porosity in the thin section photograph is shown in blue. Scattered fine siderite crystals and siderite replacing minor grains. Minor carbonate cementing grains.

FIGURE 3B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#16



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

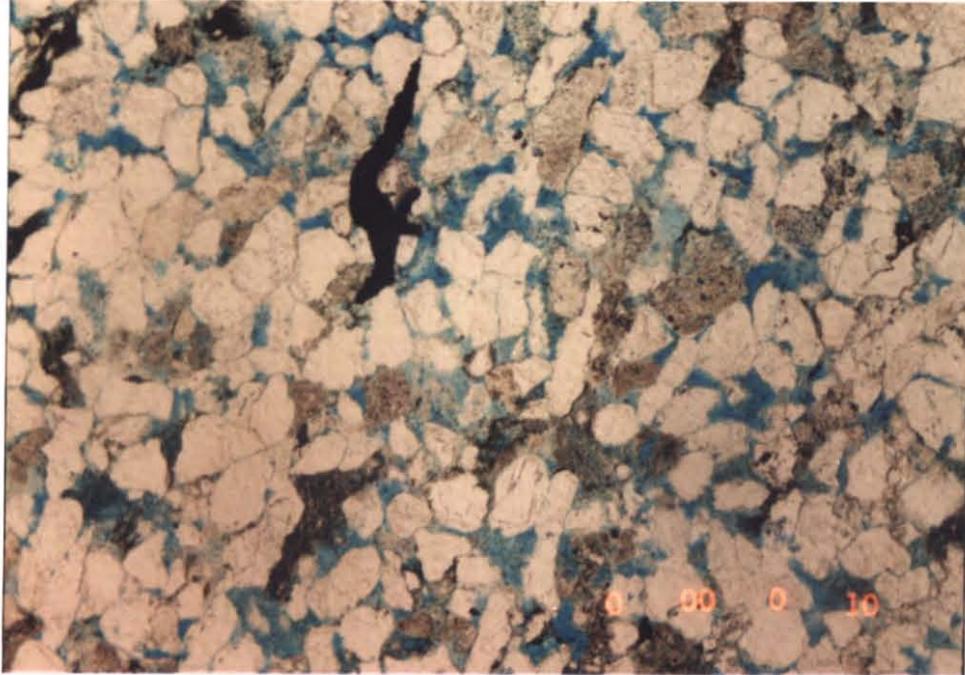
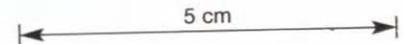
Very fine grained, fair sorted, subrounded sandstone. Pressure solution silica between grains and authigenic quartz overgrowths on grains has destroyed much of the original intergranular porosity. Feldspar, rock fragment and possibly carbonate dissolution has created good visible porosity. Authigenic kaolinite has infilled some macro pores creating micro intercrystalline porosity and lowering permeability. Estimated visible porosity is 12-15%. Minor black organic (?) streaks and grains. Porosity in the thin section photograph is shown in blue. Scattered fine siderite crystals and siderite replacing minor grains. Minor carbonate cementing grains.

FIGURE 4A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#54

THIN SECTION PHOTO
40XTHIN SECTION DESCRIPTION

Fine grained, subangular, fair to well sorted sandstone. Pressure solution of silica between grains destroyed most of the original intergranular porosity. Dissolution of feldspar and rock fragments has created good visible porosity estimated to be 12-16%. Authigenic kaolinite has infilled dissolution pores reducing macro to micro porosity and reducing permeability. Fine siderite crystals replacing some scattered grains. Minor red hematite staining some grains. Rock fragments with black iron inclusions. Some minor black (bitumen?) surrounding grains and infilling minor porosity. Metamorphic shistose rock fragments show deformation of grains and partial dissolution. Some rock fragment grains with iron inclusion appears to be igneous rock fragments. A few scattered grains show feldspar twinning. Porosity in the thin section photograph is shown in blue.

147051

Pelion 9035'

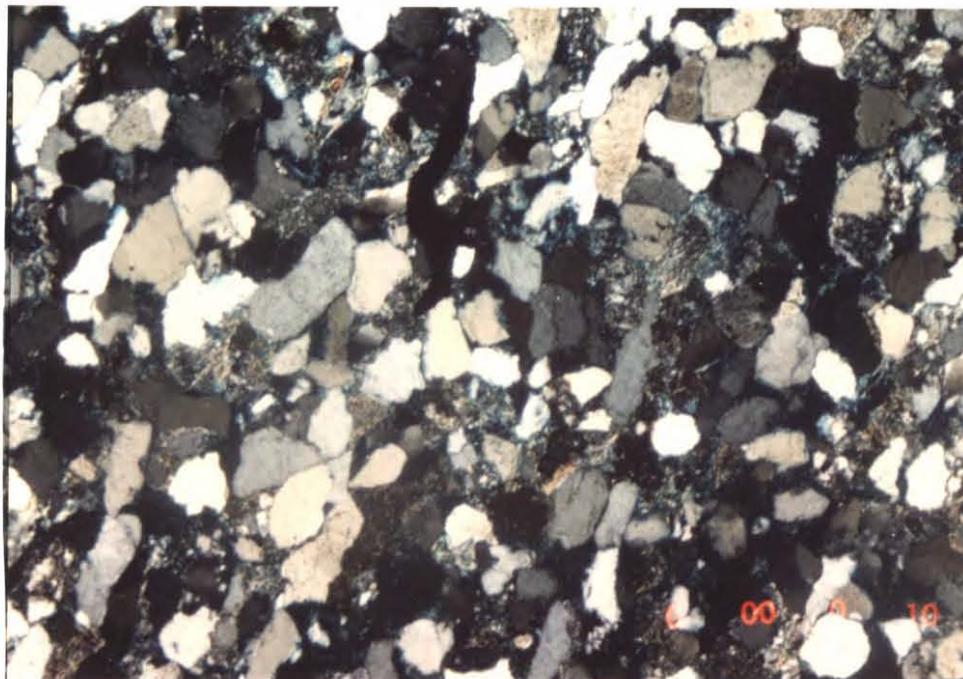
Lower M. diversus

FIGURE 4B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#54



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

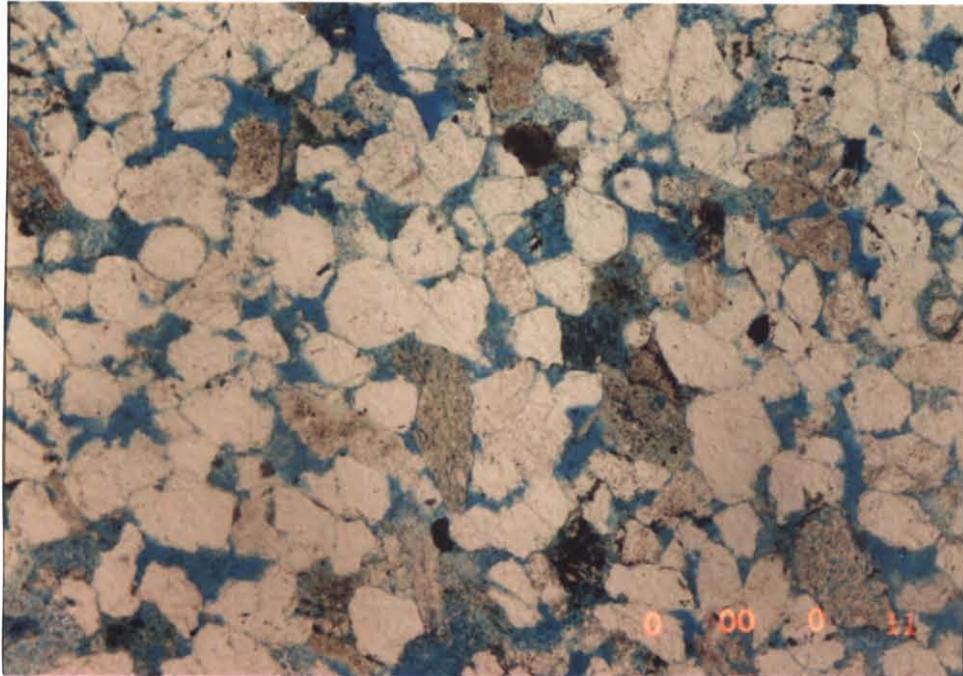
Fine grained, subangular, fair to well sorted sandstone. Pressure solution of silica between grains destroyed most of the original intergranular porosity. Dissolution of feldspar and rock fragments has created good visible porosity estimated to be 12-16%. Authigenic kaolinite has infilled dissolution pores reducing macro to micro porosity and reducing permeability. Fine siderite crystals replacing some scattered grains. Minor red hematite staining some grains. Rock fragments with black iron inclusions. Some minor black (bitumen?) surrounding grains and infilling minor porosity. Metamorphic shistose rock fragments show deformation of grains and partial dissolution. Some rock fragment grains with iron inclusion appears to be igneous rock fragments. A few scattered grains show feldspar twinning. Porosity in the thin section photograph is shown in blue.

FIGURE 5A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#59

THIN SECTION PHOTO
40X

5 cm

THIN SECTION DESCRIPTION

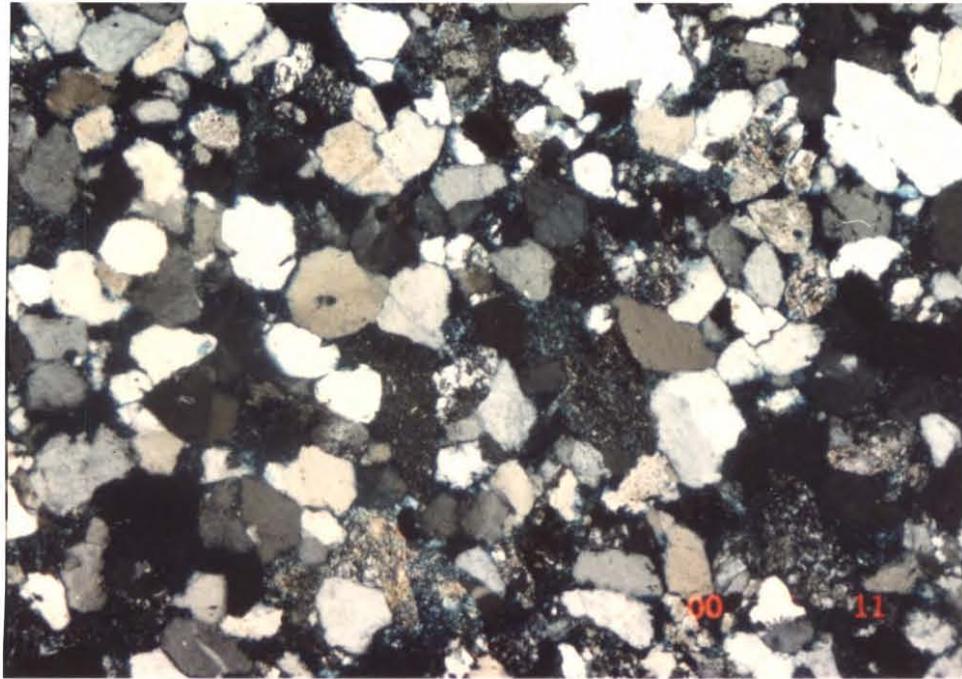
Fine grained, subangular, fair to well sorted sandstone. Pressure solution of silica between grains destroyed most of the original intergranular porosity. Dissolution of feldspar and rock fragments has created good visible porosity estimated to be 12-16%. Authigenic kaolinite has infilled dissolution pores reducing macro to micro porosity and reducing permeability. Fine siderite crystals replacing some scattered grains. Minor red hematite staining some grains. Rock fragments with black iron inclusions. Some minor black (bitumen?) surrounding grains and infilling minor porosity. Metamorphic shistose rock fragments show deformation of grains and partial dissolution. Some rock fragment grains with iron inclusion appears to be igneous rock fragments. A few scattered grains show feldspar twinning. Porosity in the thin section photograph is shown in blue.

FIGURE 5B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#59



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Fine grained, subangular, fair to well sorted sandstone. Pressure solution of silica between grains destroyed most of the original intergranular porosity. Dissolution of feldspar and rock fragments has created good visible porosity estimated to be 12-16%. Authigenic kaolinite has infilled dissolution pores reducing macro to micro porosity and reducing permeability. Fine siderite crystals replacing some scattered grains. Minor red hematite staining some grains. Rock fragments with black iron inclusions. Some minor black (bitumen?) surrounding grains and infilling minor porosity. Metamorphic shistose rock fragments show deformation of grains and partial dissolution. Some rock fragment grains with iron inclusion appears to be igneous rock fragments. A few scattered grains show feldspar twinning. Porosity in the thin section photograph is shown in blue.

147054

Pelican 1 10059'

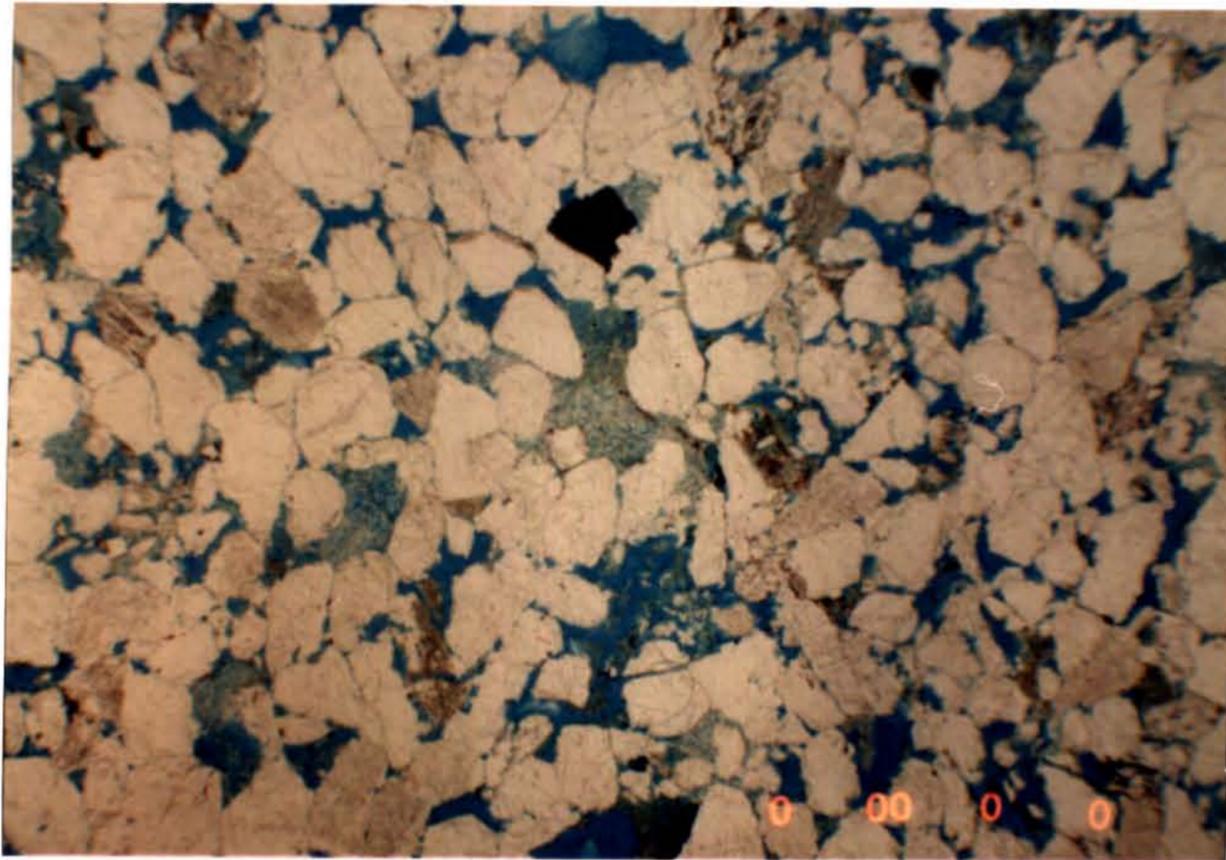
Lower M. Anvers

FIGURE 6A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#63



THIN SECTION PHOTO
40X

5 cm

THIN SECTION DESCRIPTION

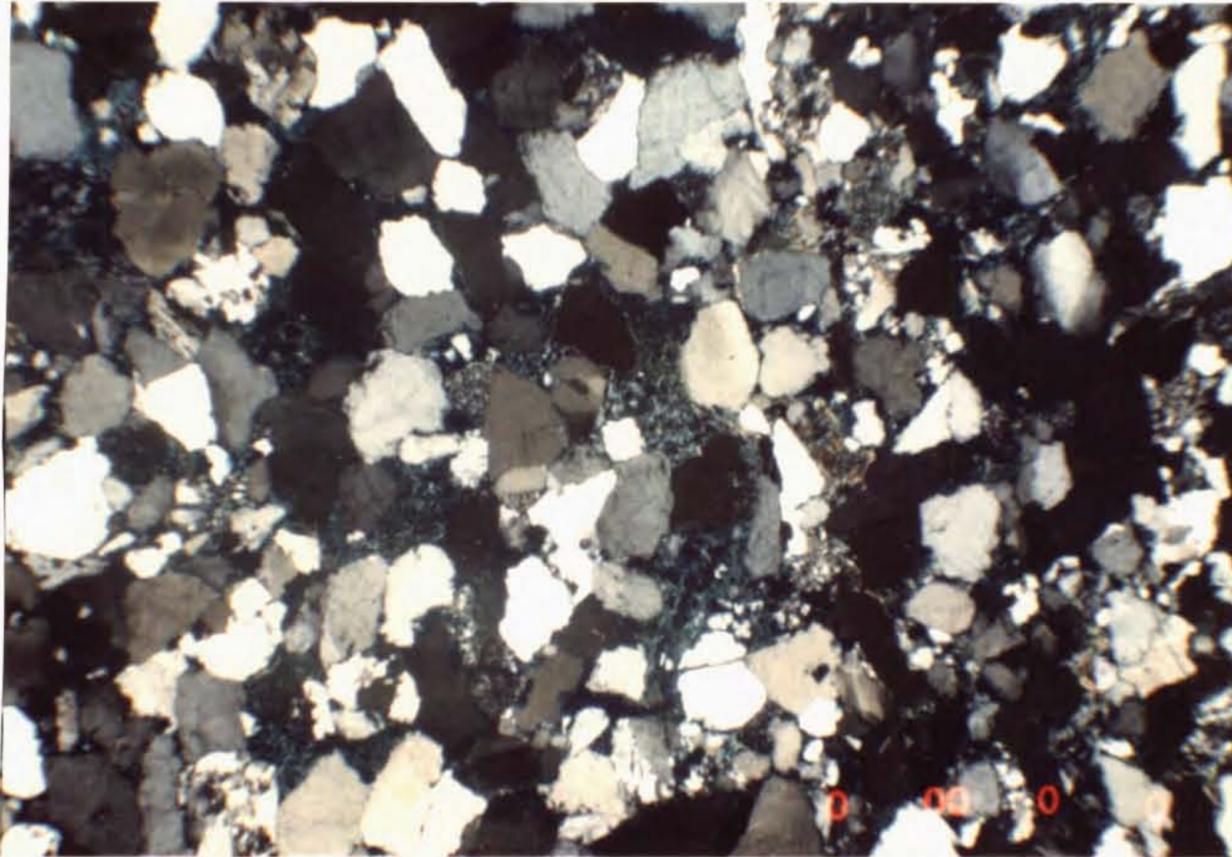
Medium grained, fair to well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Minor dissolution of rock fragments has created some porosity. Most of the visible porosity appears to be from carbonate dissolution. Scattered black bitumen infilling scattered dissolution grains and infilling stylitic fractures. Scattered very fine crystals of siderite. Authigenic chlorite infilling some dissolution porosity. Estimated visible porosity is 12-16% with fair permeability. Porosity in the thin section photograph is shown in blue.

FIGURE 6B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#63



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Medium grained, fair to well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Minor dissolution of rock fragments has created some porosity. Most of the visible porosity appears to be from carbonate dissolution. Scattered black bitumen infilling scattered dissolution grains and infilling stylolitic fractures. Scattered very fine crystals of siderite. Authigenic chlorite infilling some dissolution porosity. Estimated visible porosity is 12-16% with fair permeability. Porosity in the thin section photograph is shown in blue.

147056

Pelican 100591

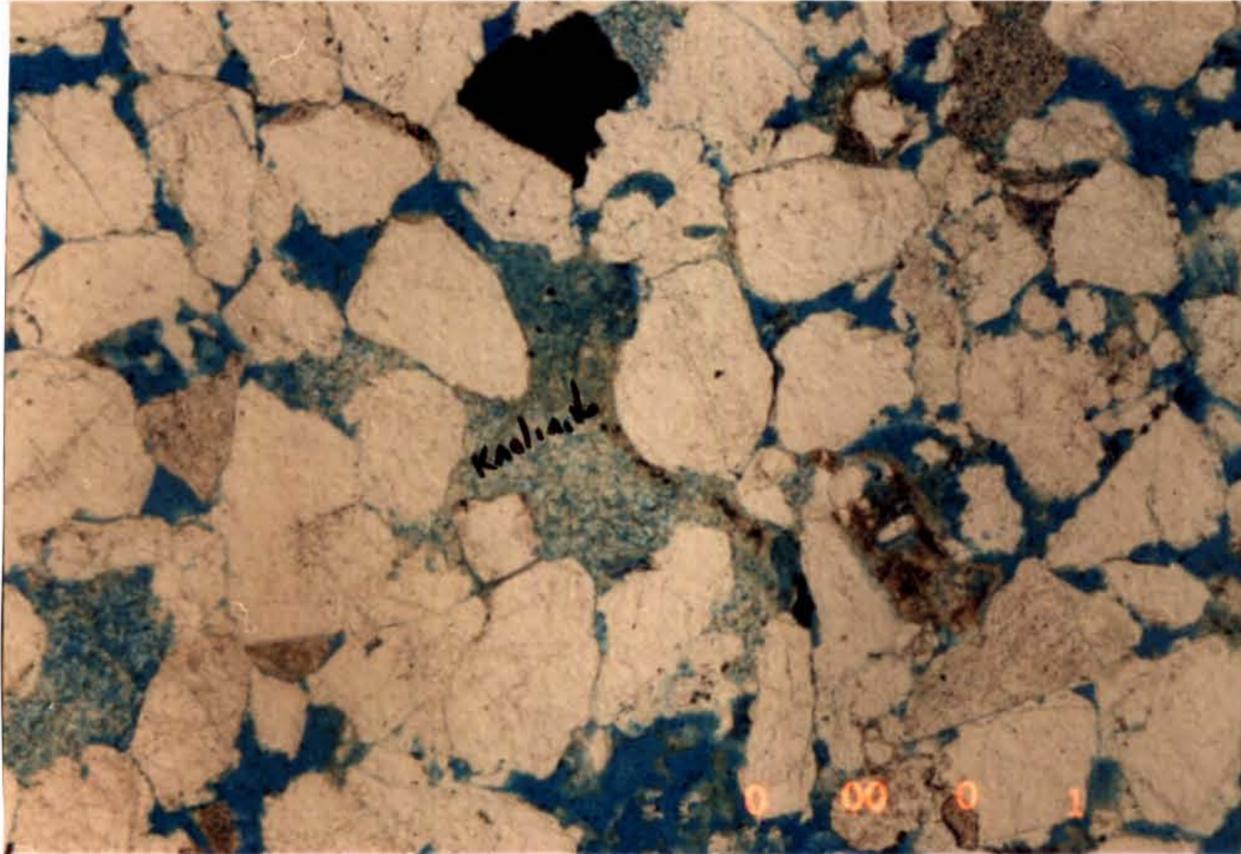
Lower M. diversus

FIGURE 6C

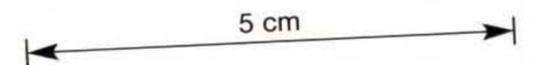
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#63



THIN SECTION PHOTO
100X



THIN SECTION DESCRIPTION

Medium grained, fair to well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Minor dissolution of rock fragments has created some porosity. Most of the visible porosity appears to be from carbonate dissolution. Scattered black bitumen infilling scattered dissolution grains and infilling stylolitic fractures. Scattered very fine crystals of siderite. Authigenic chlorite infilling some dissolution porosity. Estimated visible porosity is 12-16% with fair permeability. Porosity in the thin section photograph is shown in blue.

147057

Pelican 1 10059'

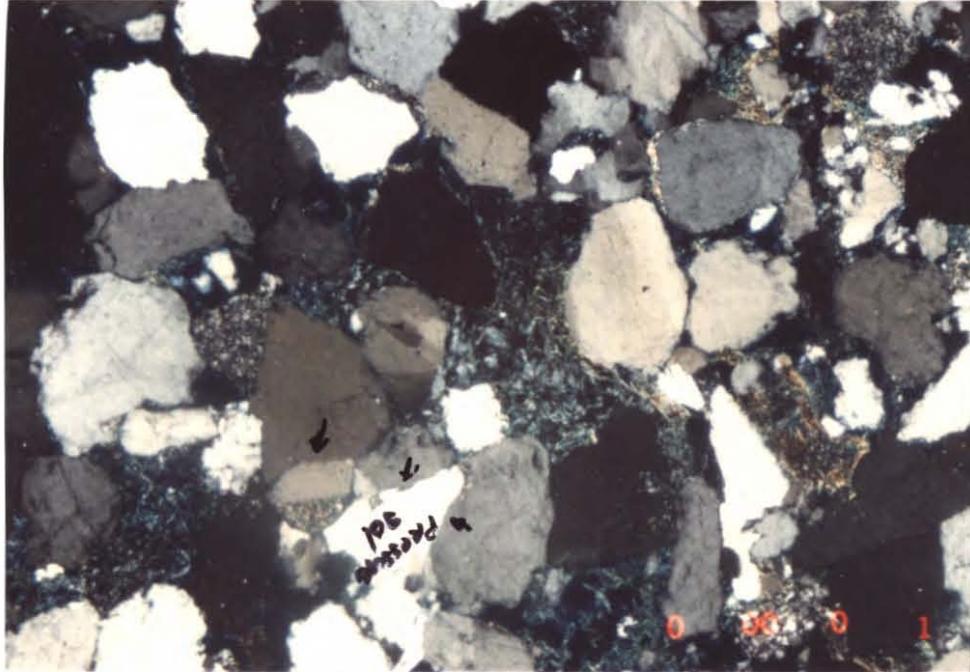
Lower M. diversus

FIGURE 6D

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#63



THIN SECTION PHOTO
100X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Medium grained, fair to well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Minor dissolution of rock fragments has created some porosity. Most of the visible porosity appears to be from carbonate dissolution. Scattered black bitumen infilling scattered dissolution grains and infilling stylitic fractures. Scattered very fine crystals of siderite. Authigenic chlorite infilling some dissolution porosity. Estimated visible porosity is 12-16% with fair permeability. Porosity in the thin section photograph is shown in blue.

147058

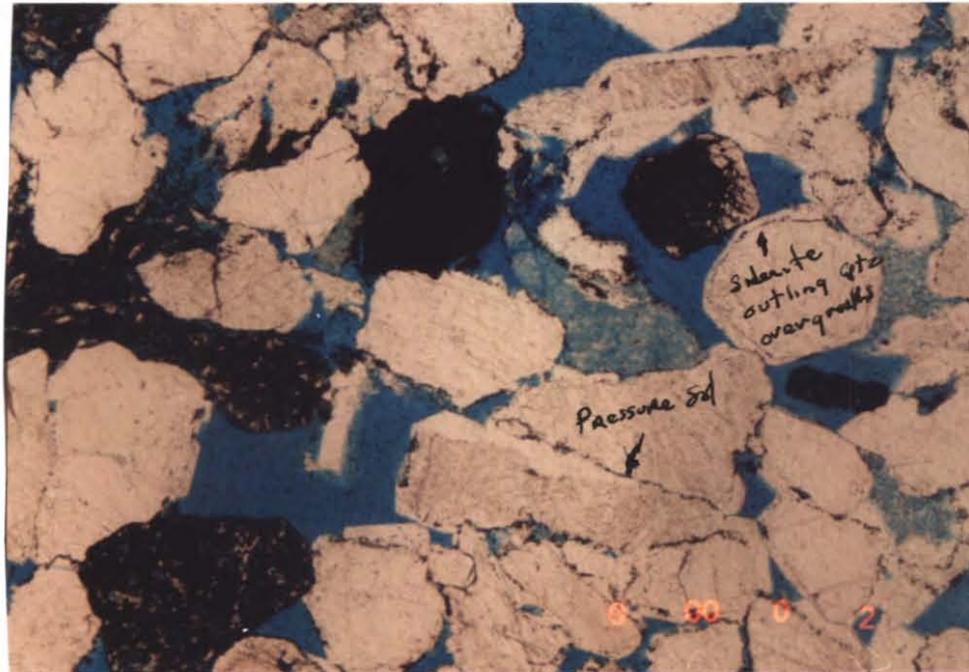
Police 1 10063'
Lowe M. Thomas

FIGURE 7A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#67



THIN SECTION PHOTO
40X

5 cm

THIN SECTION DESCRIPTION

Medium grained, well sorted, subrounded to subangular sandstone. Scattered metamorphic rock fragments and chert grains. Pressure solution of silica with quartz overgrowths on grains had destroyed the original intergranular porosity. The original grain boundaries are outlined by fine crystals of siderite. Black opaque grains in the photograph are hematite. Stained rock fragments with some siderite replacing grains. Dissolution of feldspar, rock fragments and carbonate created porosity. Some rock fragments and feldspar dissolution is infilled with authigenic kaolinite reducing macro to micro porosity. Estimated visible porosity is 12-17% with fair to low permeability. Porosity in the thin section photograph is shown in blue.

147059

Pelican 10063'

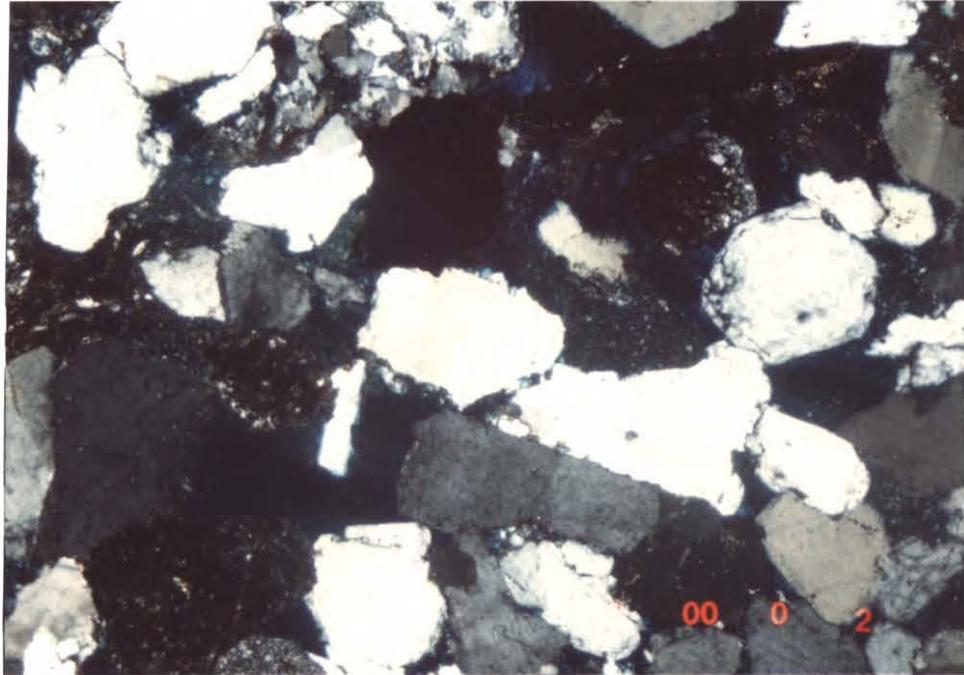
Lower M. diversus

FIGURE 7B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#67



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

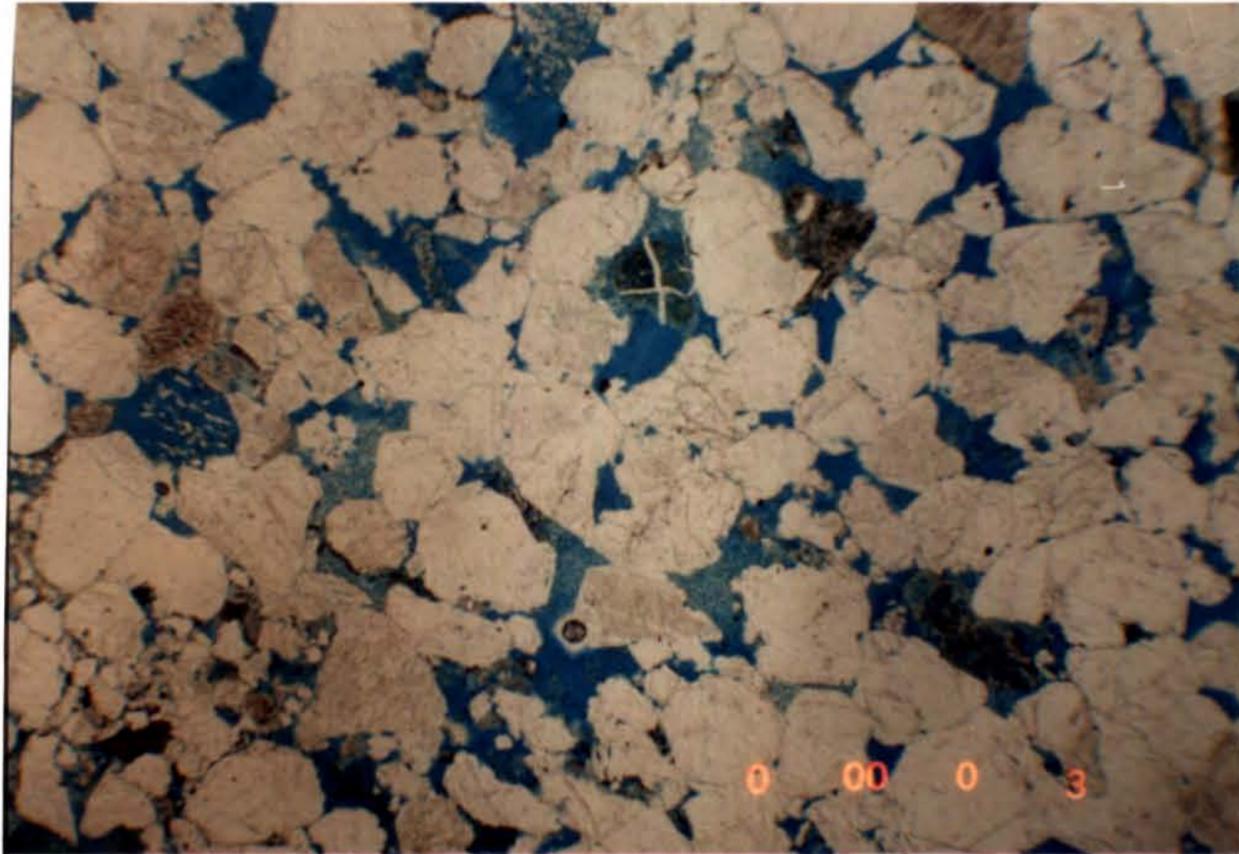
Medium grained, well sorted, subrounded to subangular sandstone. Scattered metamorphic rock fragments and chert grains. Pressure solution of silica with quartz overgrowths on grains had destroyed the original intergranular porosity. The original grain boundaries are outlined by fine crystals of siderite. Black opaque grains in the photograph are hematite. Stained rock fragments with some siderite replacing grains. Dissolution of feldspar, rock fragments and carbonate created porosity. Some rock fragments and feldspar dissolution is infilled with authigenic kaolinite reducing macro to micro porosity. Estimated visible porosity is 12-17% with fair to low permeability. Porosity in the thin section photograph is shown in blue.

FIGURE 8A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#77

THIN SECTION PHOTO
20X

5 cm

THIN SECTION DESCRIPTION

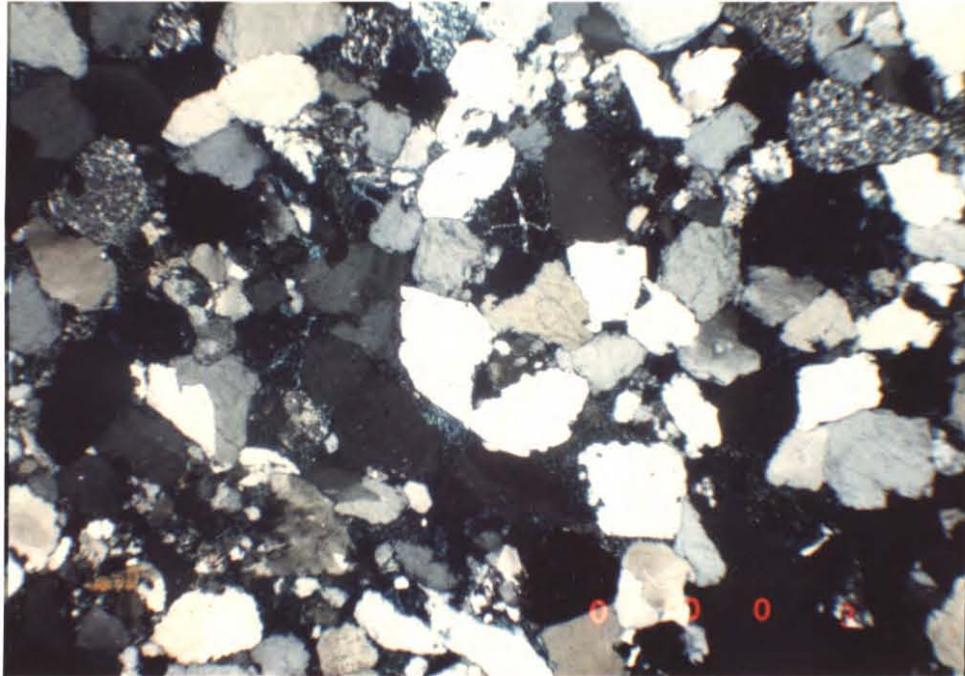
Medium grained, well sorted, subrounded to subangular sandstone. Pressure solution of silica between grains and authigenic quartz overgrowths on grains destroyed the original intergranular porosity. Dissolution of feldspar rock fragments and carbonate has created the present visible porosity estimated to be 12-16%. Authigenic kaolinite has infilled rock fragment and feldspar dissolution porosity reducing macro to micro porosity. Scattered very fine crystals of siderite. A few stylitic streaks containing very fine siderite crystals. Siderite replacing minor grains. Porosity in the thin section photograph is shown in blue.

FIGURE 8B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#77



THIN SECTION PHOTO
20X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Medium grained, well sorted, subrounded to subangular sandstone. Pressure solution of silica between grains and authigenic quartz overgrowths on grains destroyed the original intergranular porosity. Dissolution of feldspar rock fragments and carbonate has created the present visible porosity estimated to be 12-16%. Authigenic kaolinite has infilled rock fragment and feldspar dissolution porosity reducing macro to micro porosity. Scattered very fine crystals of siderite. A few stylitic streaks containing very fine siderite crystals. Siderite replacing minor grains. Porosity in the thin section photograph is shown in blue.

147062

Pelican 10074'

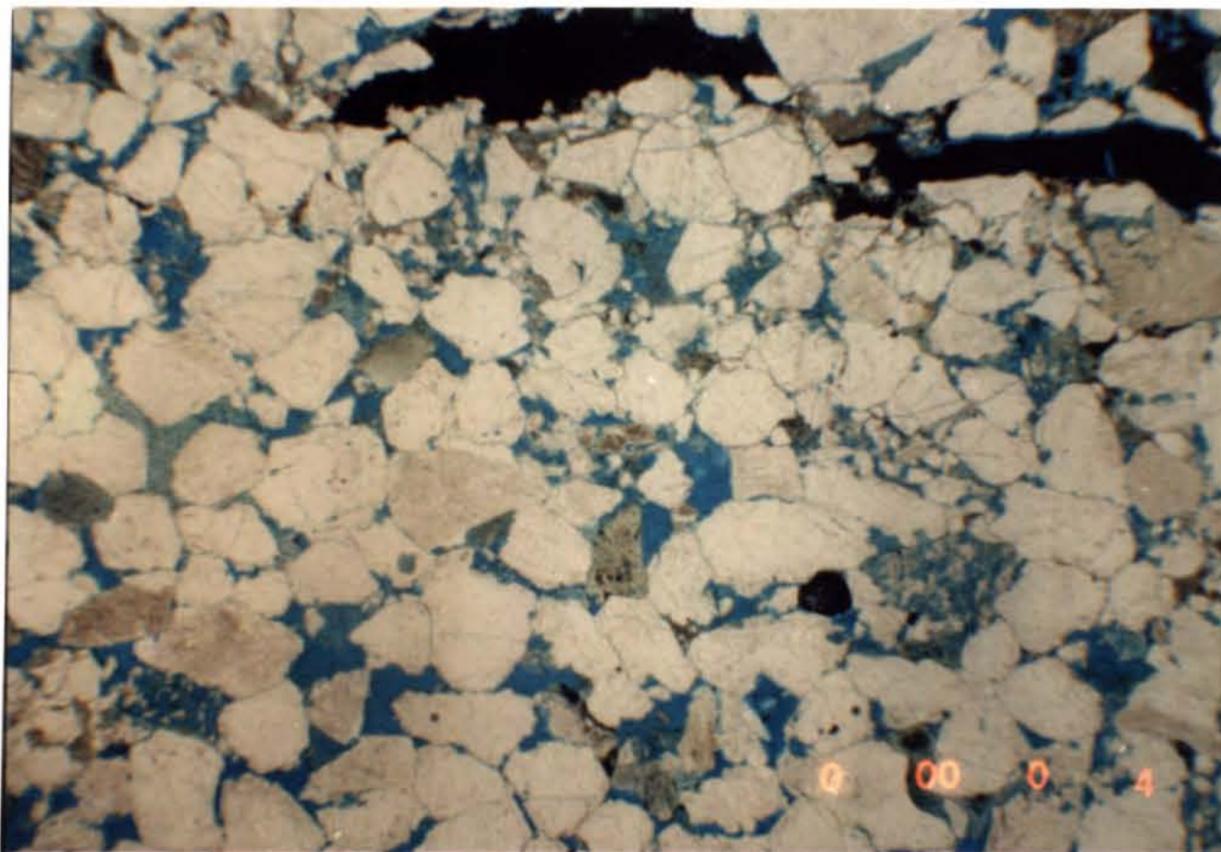
Lower M. di... 500

FIGURE 9A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#78



THIN SECTION PHOTO
20X

5 cm

THIN SECTION DESCRIPTION

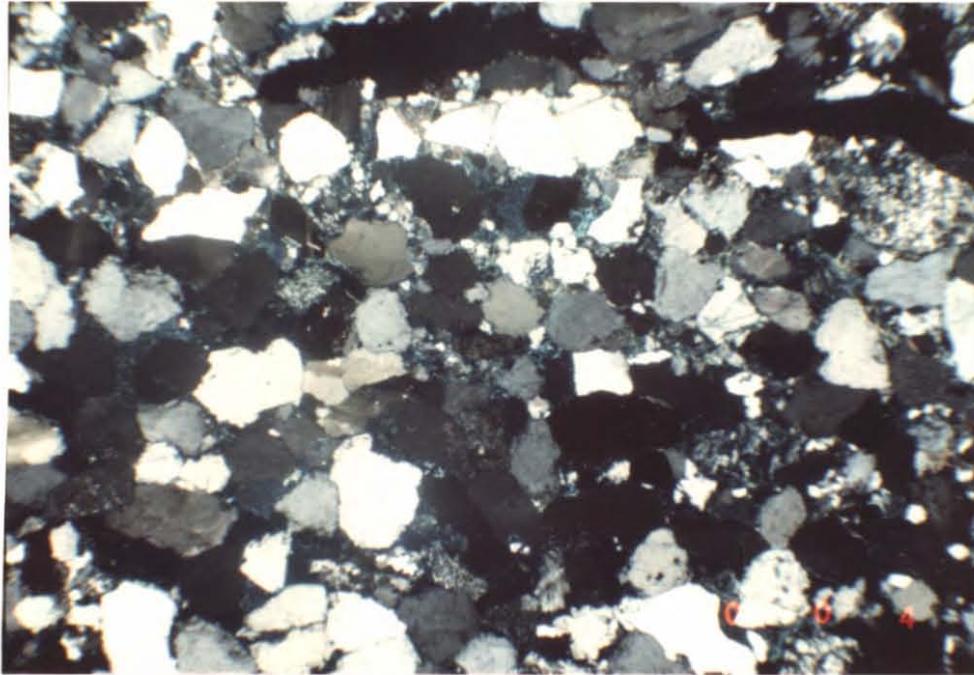
Medium grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar, rock fragments and carbonate has created visible porosity estimated to be 12-16%. Most rock fragments appear to be from a metamorphic source. Authigenic kaolinite is infilling some feldspar and rock fragment dissolution porosity. Two thin porous streaks infilled with black bitumen. Porosity in the thin section photograph is shown in blue.

FIGURE 9B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#78



THIN SECTION PHOTO
20X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Medium grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar, rock fragments and carbonate has created visible porosity estimated to be 12-16%. Most rock fragments appear to be from a metamorphic source. Authigenic kaolinite is infilling some feldspar and rock fragment dissolution porosity. Two thin porous streaks infilled with black bitumen. Porosity in the thin section photograph is shown in blue.

147064

Pelica-3 9423'

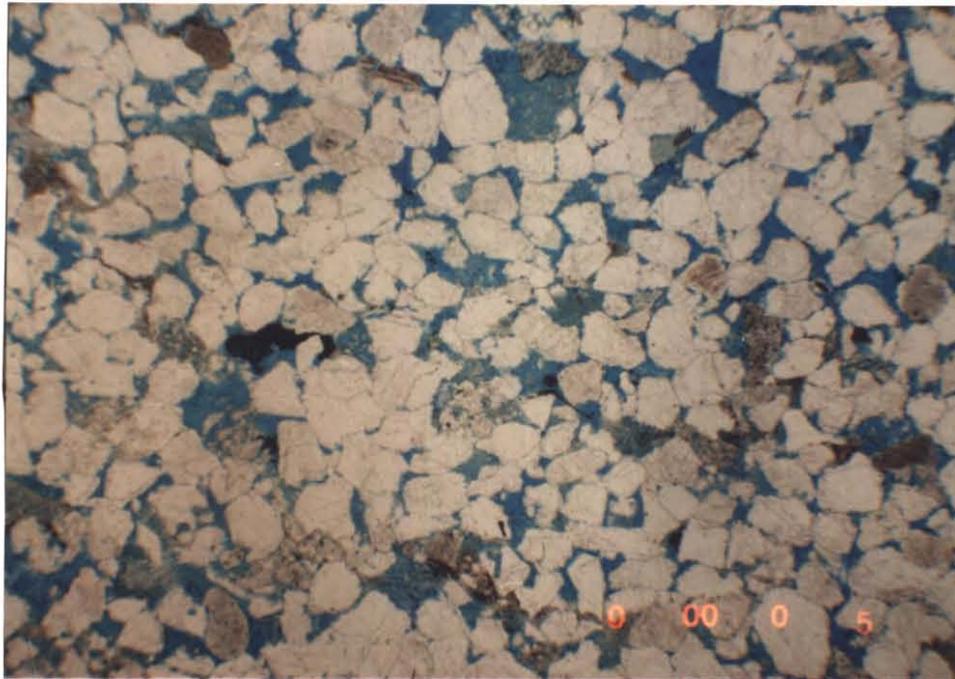
Lowry L. Galmer

FIGURE 10A

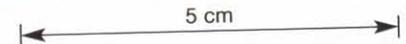
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#108



THIN SECTION PHOTO
20X



THIN SECTION DESCRIPTION

Medium grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar, rock fragments and carbonate has created visible porosity estimated to be 12-16%. Most rock fragments appear to be from a metamorphic source. Authigenic kaolinite is infilling some feldspar and rock fragment dissolution porosity. Porosity in the thin section photograph is shown in blue.

147065

Block-3 9423'

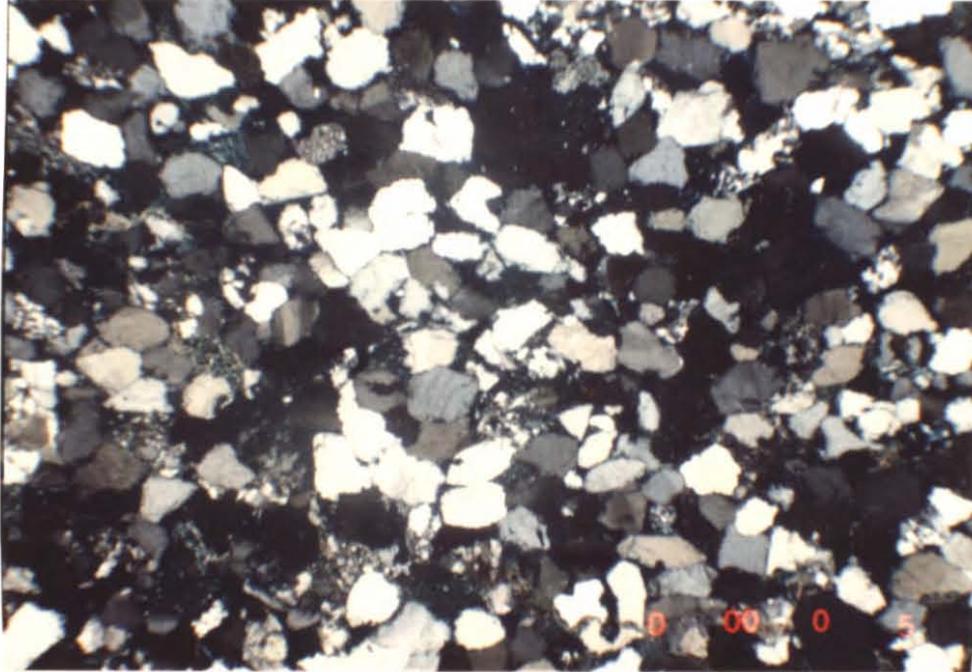
Lower L. balnea

FIGURE 10B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#108



THIN SECTION PHOTO
20X
X-NICOLS



THIN SECTION DESCRIPTION

Medium grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar, rock fragments and carbonate has created visible porosity estimated to be 12-16%. Most rock fragments appear to be from a metamorphic source. Authigenic kaolinite is infilling some feldspar and rock fragment dissolution porosity. Porosity in the thin section photograph is shown in blue.

147066

Belia 3 9441

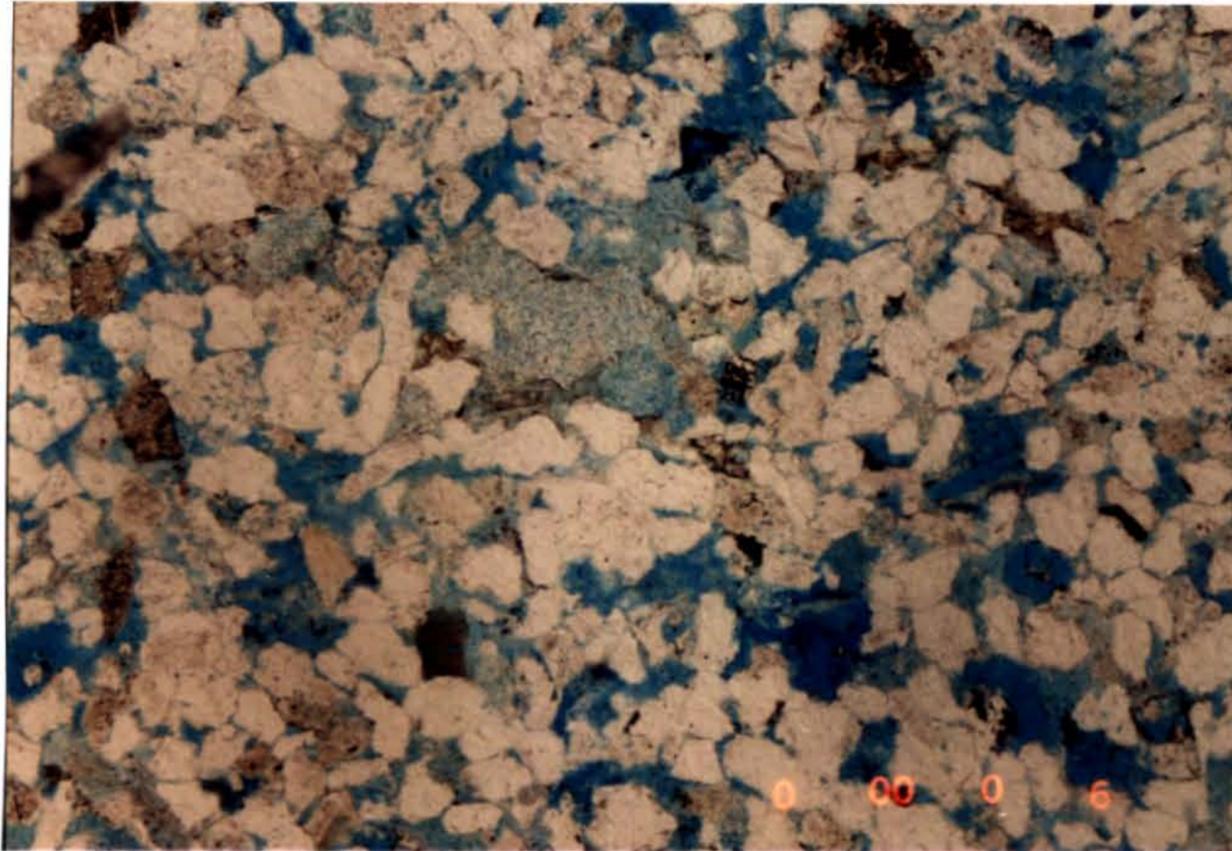
Lowell L. Balmer

FIGURE 11A

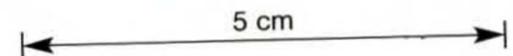
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#114



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Fine grained, subangular, well sorted sandstone. Pressure solution of silica between grains has destroyed most of the original intergranular porosity. Dissolution of feldspar and rock fragment has created visible porosity estimated to be from 14-17% with fair to low permeability. Authigenic kaolinite is infilling dissolution porosity reducing pore size and permeability. Scattered fine siderite crystals replacing some grains. Most of the rock fragment grains appear to be metamorphic rock fragments and chert. Hematite staining some grains. The porosity in the thin section photograph is shown in blue.

147067

Section 3 9441'

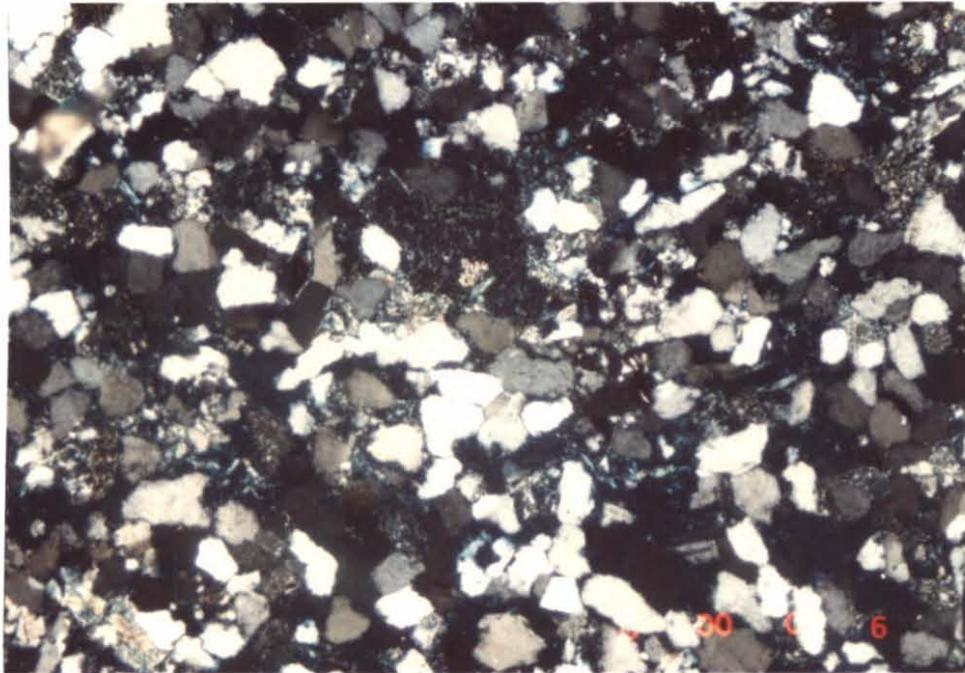
Lower L. Salmer

FIGURE 11B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#114



THIN SECTION PHOTO
40X
X-NICOLS



THIN SECTION DESCRIPTION

Fine grained, subangular, well sorted sandstone. Pressure solution of silica between grains has destroyed most of the original intergranular porosity. Dissolution of feldspar and rock fragment has created visible porosity estimated to be from 14-17% with fair to low permeability. Authigenic kaolinite is infilling dissolution porosity reducing pore size and permeability. Scattered fine siderite crystals replacing some grains. Most of the rock fragment grains appear to be metamorphic rock fragments and chert. Hematite staining some grains. The porosity in the thin section photograph is shown in blue.

147068

Pelican 9074

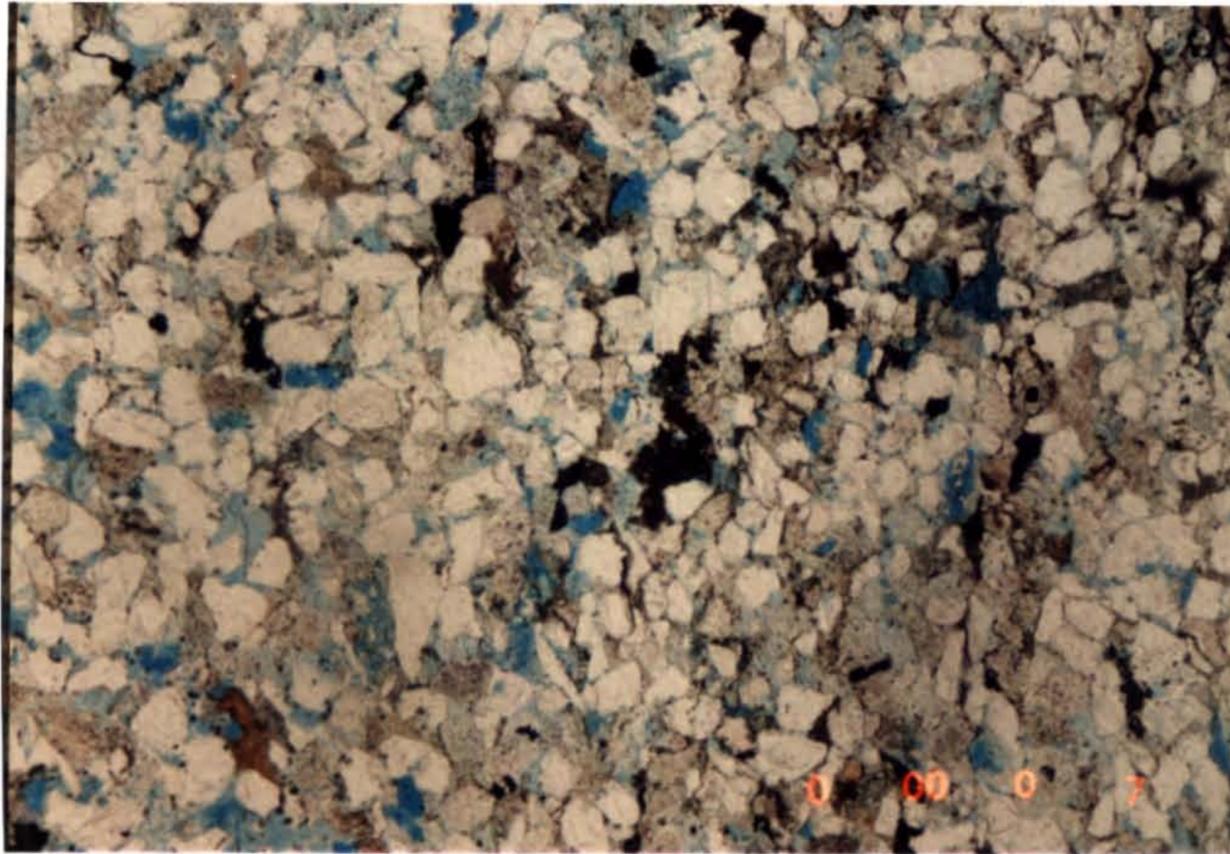
Lower L. Salween

FIGURE 12A

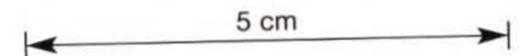
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#137



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Very fine grained, subangular, well sorted sandstone. Pressure solution of silica between grains has destroyed most of the original intergranular porosity. Dissolution of feldspar and rock fragment has created visible porosity estimated to be from 12-14% with fair to low permeability. Authigenic kaolinite is infilling dissolution porosity reducing pore size and permeability. Scattered fine siderite crystals replacing some grains. Most of the rock fragment grains appear to be metamorphic rock fragments and chert. Hematite staining some grains. The porosity in the thin section photograph is shown in blue.

147069

Police 3 9474'

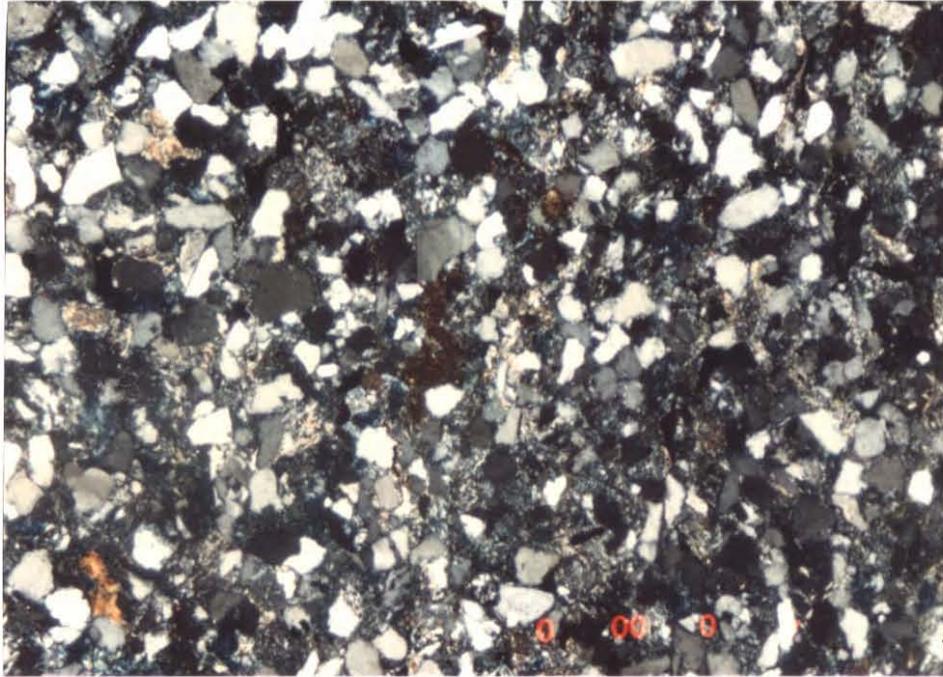
Lower L. Baker

FIGURE 12B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#137



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Very fine grained, subangular, well sorted sandstone. Pressure solution of silica between grains has destroyed most of the original intergranular porosity. Dissolution of feldspar and rock fragment has created visible porosity estimated to be from 12-14% with fair to low permeability. Authigenic kaolinite is infilling dissolution porosity reducing pore size and permeability. Scattered fine siderite crystals replacing some grains. Most of the rock fragment grains appear to be metamorphic rock fragments and chert. Hematite staining some grains. The porosity in the thin section photograph is shown in blue.

147070

Pelico-3 9475'

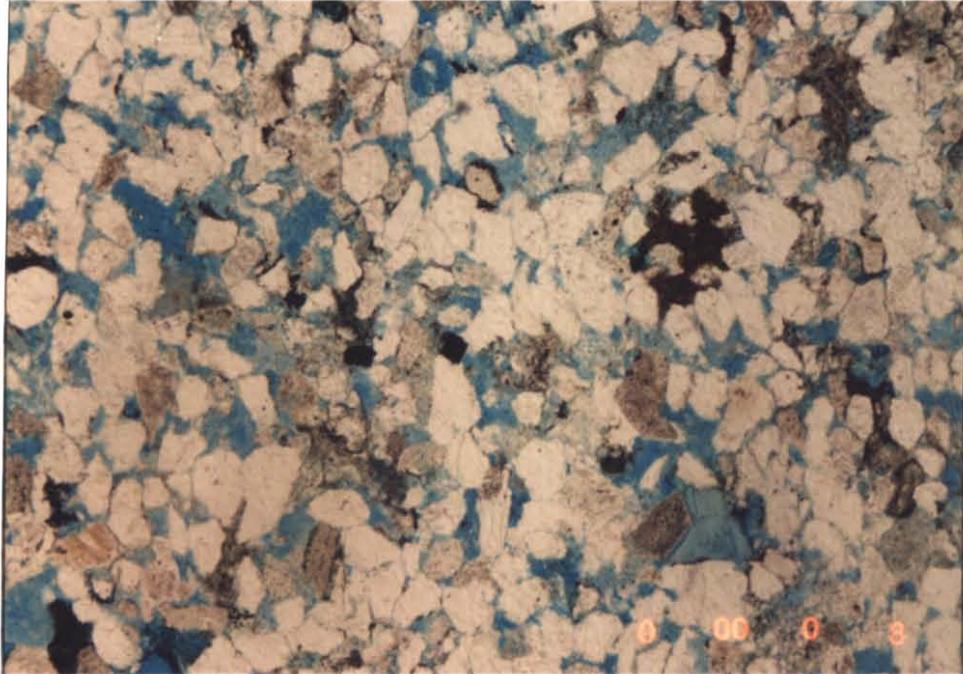
Lower L. balnei

FIGURE 13A

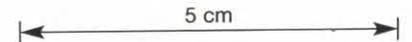
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#138



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Very fine grained, subangular, well sorted sandstone. Pressure solution of silica between grains has destroyed most of the original intergranular porosity. Dissolution of feldspar and rock fragment has created visible porosity estimated to be from 12-14% with fair to low permeability. Authigenic kaolinite is infilling dissolution porosity reducing pore size and permeability. Scattered fine siderite crystals replacing some grains. Most of the rock fragment grains appear to be metamorphic rock fragments and chert. Hematite staining some grains. The porosity in the thin section photograph is shown in blue.

147071

Belia 3 9475'

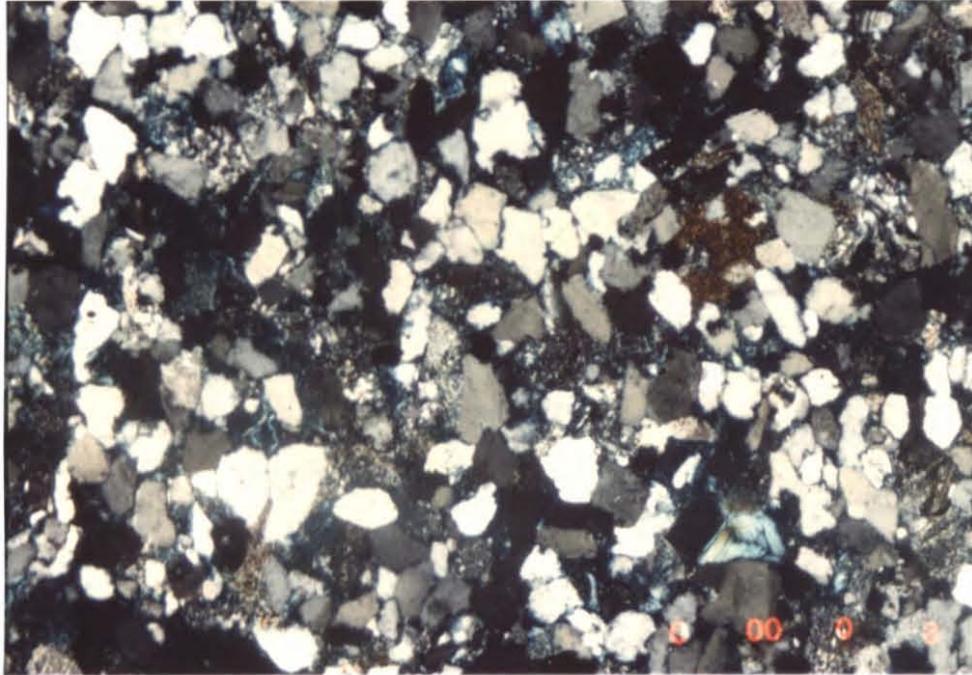
Lower L. balnei

FIGURE 13B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#138



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Very fine grained, subangular, well sorted sandstone. Pressure solution of silica between grains has destroyed most of the original intergranular porosity. Dissolution of feldspar and rock fragment has created visible porosity estimated to be from 12-14% with fair to low permeability. Authigenic kaolinite is infilling dissolution porosity reducing pore size and permeability. Scattered fine siderite crystals replacing some grains. Most of the rock fragment grains appear to be metamorphic rock fragments and chert. Hematite staining some grains. The porosity in the thin section photograph is shown in blue.

147072

Belia 3 9497'

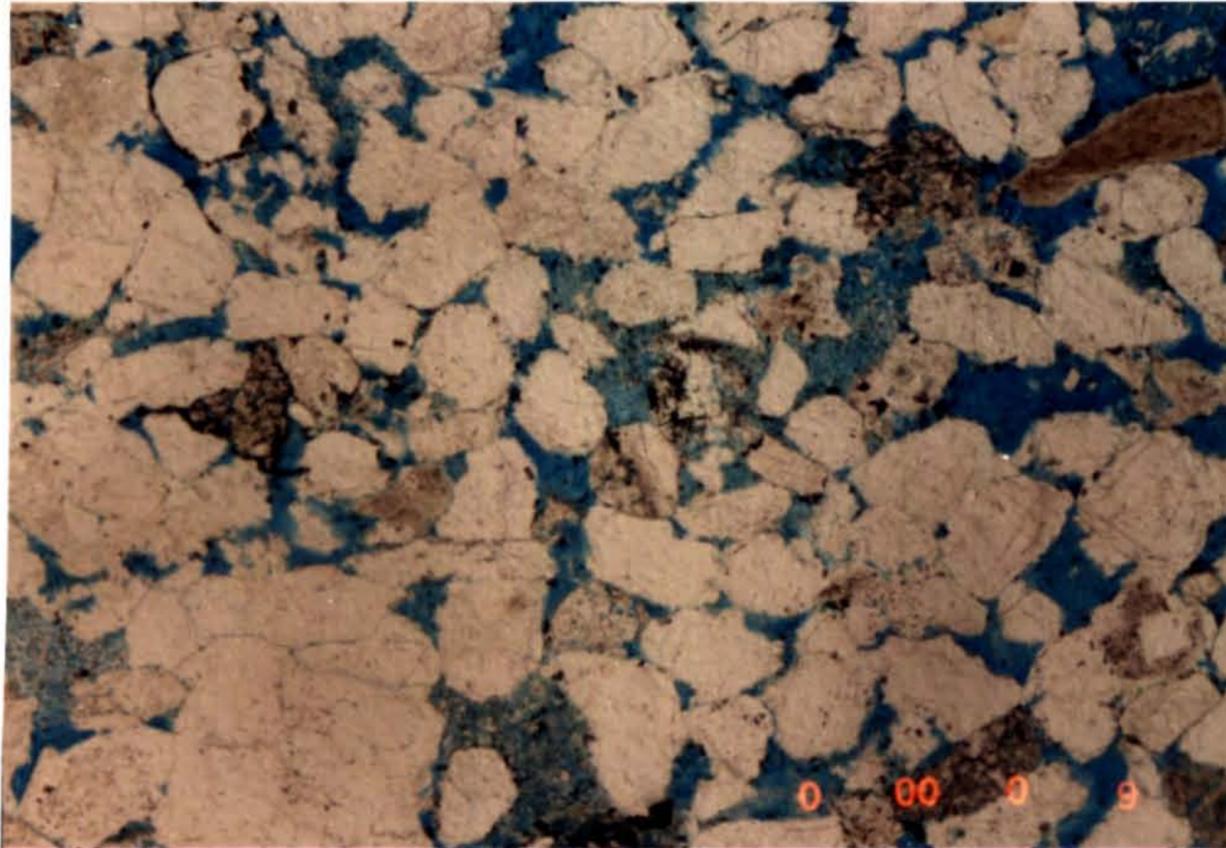
Lower L. balmeri

FIGURE 14A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#141



THIN SECTION PHOTO
40X

5 cm

THIN SECTION DESCRIPTION

Fine grained, well sorted, subrounded sandstone, scattered medium grains. Pressure solution of silica between grains has destroyed most of the original intergranular porosity. Dissolution of feldspar and rock fragments created porosity estimated to be 14-18%. Authigenic kaolinite infilling pores has reduced pore size and permeability. Scattered brownish hematite staining. Very fine siderite crystals in scattered porosity. Siderite is iron stained. Most of the rock fragments are metamorphic. Some quartz grains have undulatory extension indicating metamorphic stain. Porosity in the thin section photograph is shown in blue.

147073

Pelica 3 9477

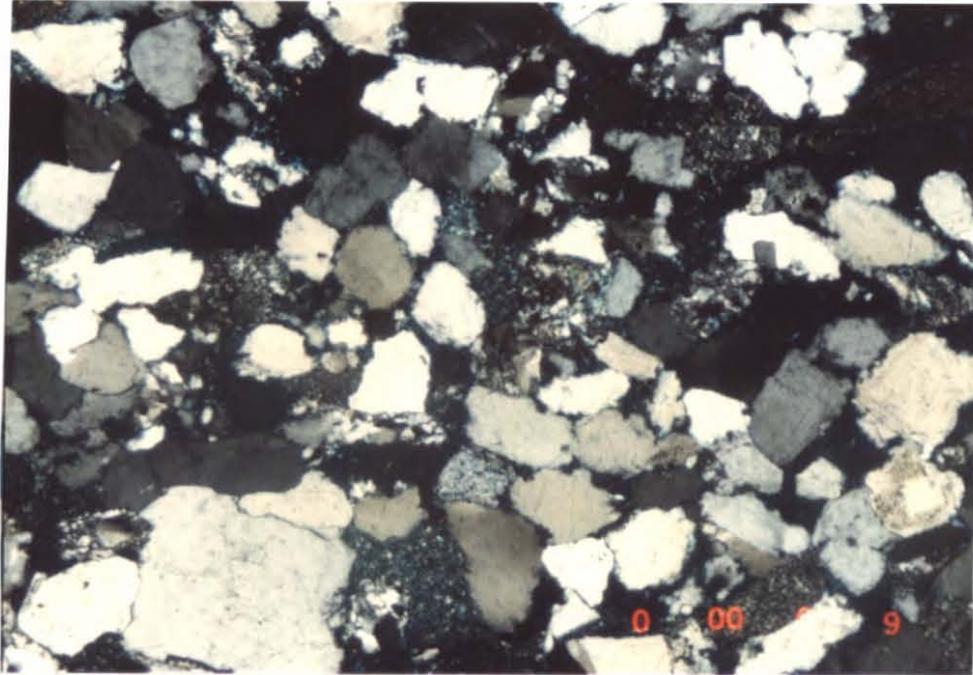
Lower L. balnei

FIGURE 14B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#141



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Fine grained, well sorted, subrounded sandstone, scattered medium grains. Pressure solution of silica between grains has destroyed most of the original intergranular porosity. Dissolution of feldspar and rock fragments created porosity estimated to be 14-18%. Authigenic kaolinite infilling pores has reduced pore size and permeability. Scattered brownish hematite staining. Very fine siderite crystals in scattered porosity. Siderite is iron stained. Most of the rock fragments are metamorphic. Some quartz grains have undulatory extension indicating metamorphic stain. Porosity in the thin section photograph is shown in blue.

147074

Pooa 500 8104

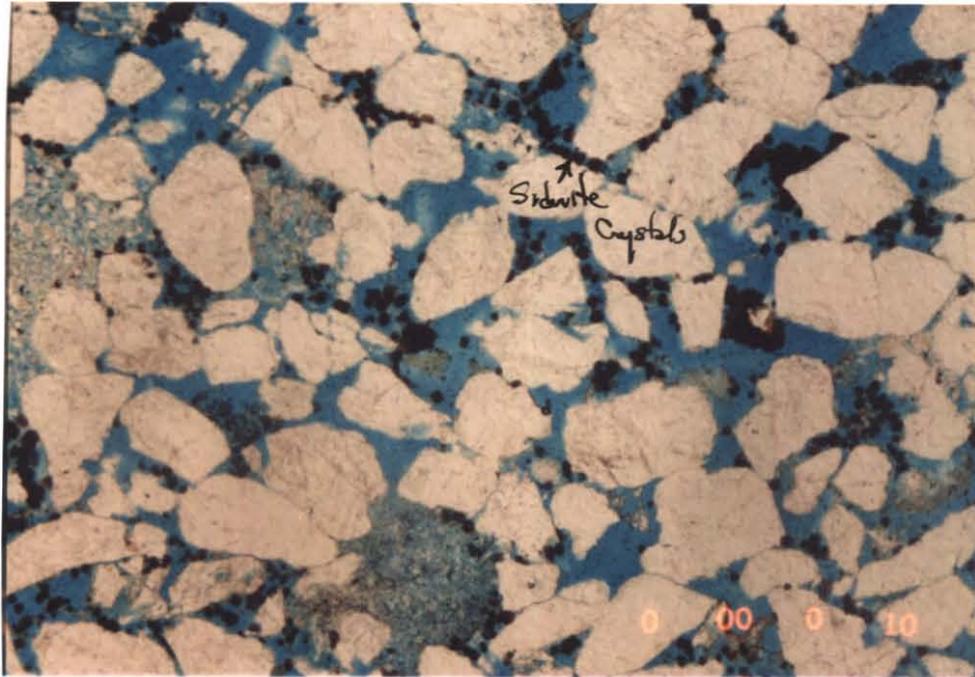
Middle M. d. verrucos

FIGURE 15A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#156

THIN SECTION PHOTO
40X

5 cm

THIN SECTION DESCRIPTION

Fine grained, well sorted, subrounded sandstone, scattered medium grains. Pressure solution of silica between grains has destroyed most of the original intergranular porosity. Dissolution of feldspar and rock fragments created porosity estimated to be 18-20%. Authigenic kaolinite infilling pores has reduced pore size and permeability. Scattered brownish hematite staining. Very fine siderite crystals in scattered porosity. Siderite is iron stained. Most of the rock fragments are metamorphic. Some quartz grains have undulatory extension indicating metamorphic stain. Porosity in the thin section photograph is shown in blue.

147075

Basin 8104

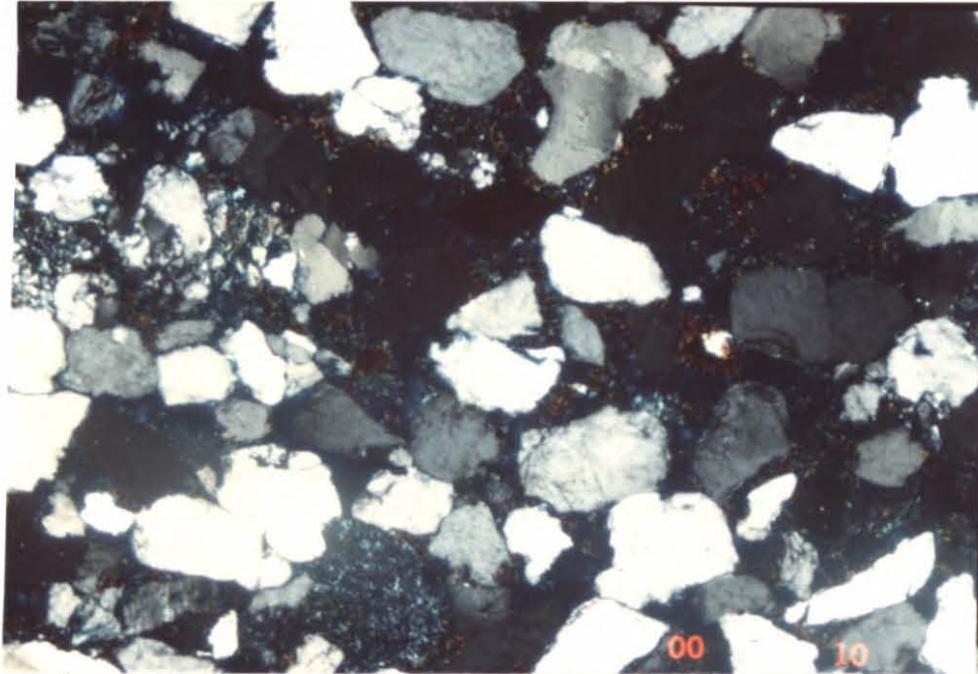
Middle N. diorite

FIGURE 15B

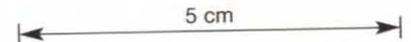
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#156



THIN SECTION PHOTO
40X
X-NICOLS



THIN SECTION DESCRIPTION

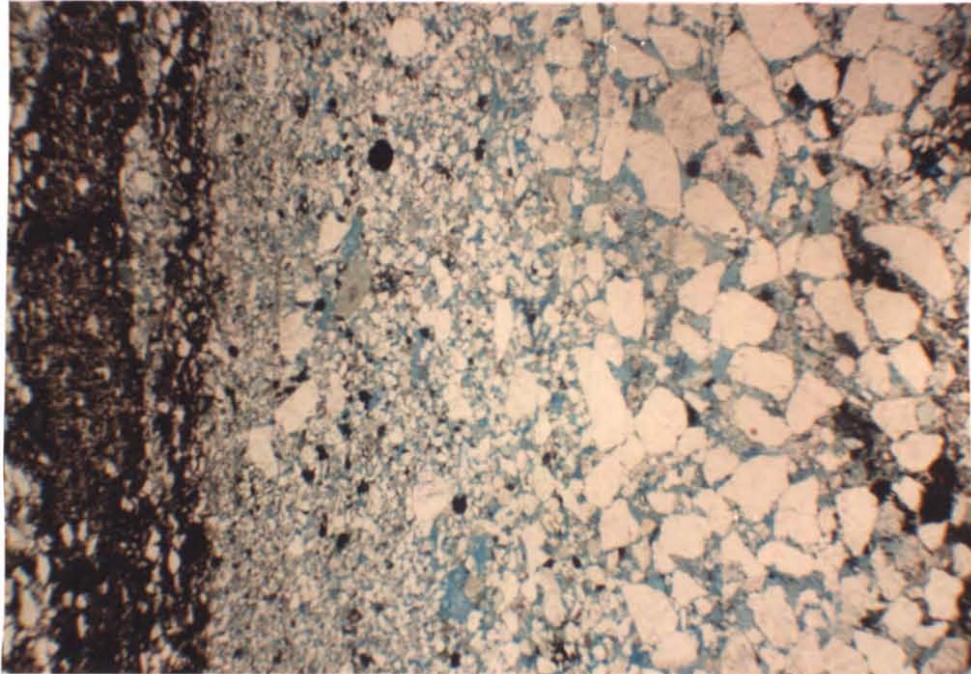
Fine grained, well sorted, subrounded sandstone, scattered medium grains. Pressure solution of silica between grains has destroyed most of the original intergranular porosity. Dissolution of feldspar and rock fragments created porosity estimated to be 18-20%. Authigenic kaolinite infilling pores has reduced pore size and permeability. Scattered brownish hematite staining. Very fine siderite crystals in scattered porosity. Siderite is iron stained. Most of the rock fragments are metamorphic. Some quartz grains have undulatory extension indicating metamorphic stain. Porosity in the thin section photograph is shown in blue.

FIGURE 16A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#157

THIN SECTION PHOTO
20X

5 cm

THIN SECTION DESCRIPTION

Thin bedded fine grained sand, silt and black organic shale. Pressure solution of silica between grains destroyed the original porosity in the sand and siltstone. Dissolution of feldspar and rock fragments has created porosity in the sand and siltstone estimated to be 12-16% with low permeability due to authigenic kaolinite infilling dissolution pores. The shale has disseminated thin streaks of fine sand and silt grains. The shale has no visible porosity. The shale appears to be highly organic. Sand grains are subrounded to subangular and are fairly well sorted. Porosity in the thin section photograph is shown in blue.

147077

Bass 8108

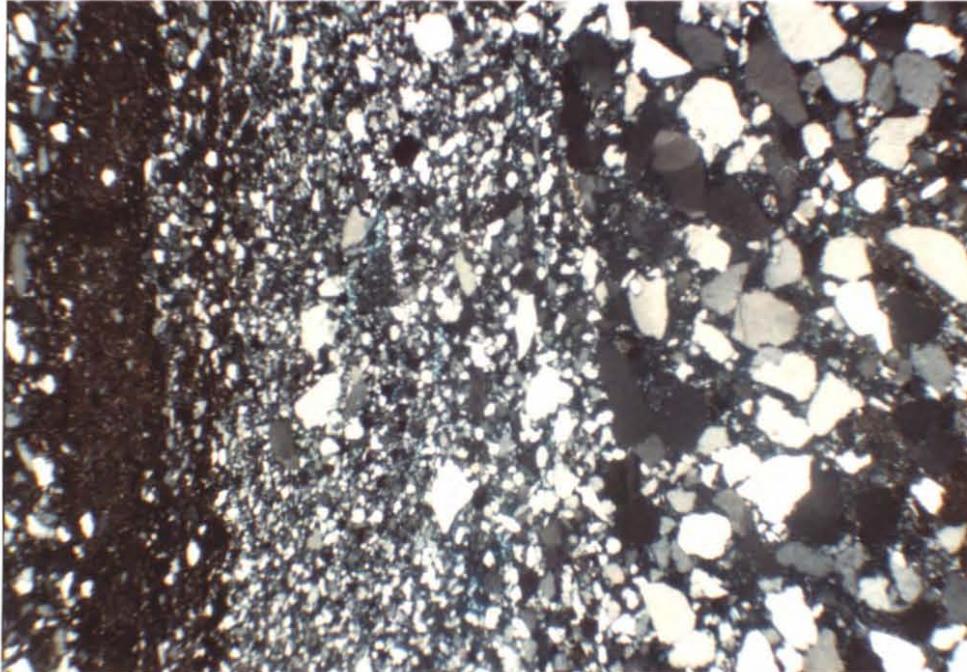
Middle M. diversus

FIGURE 16B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#157



THIN SECTION PHOTO
20X
X-NICOLS



THIN SECTION DESCRIPTION

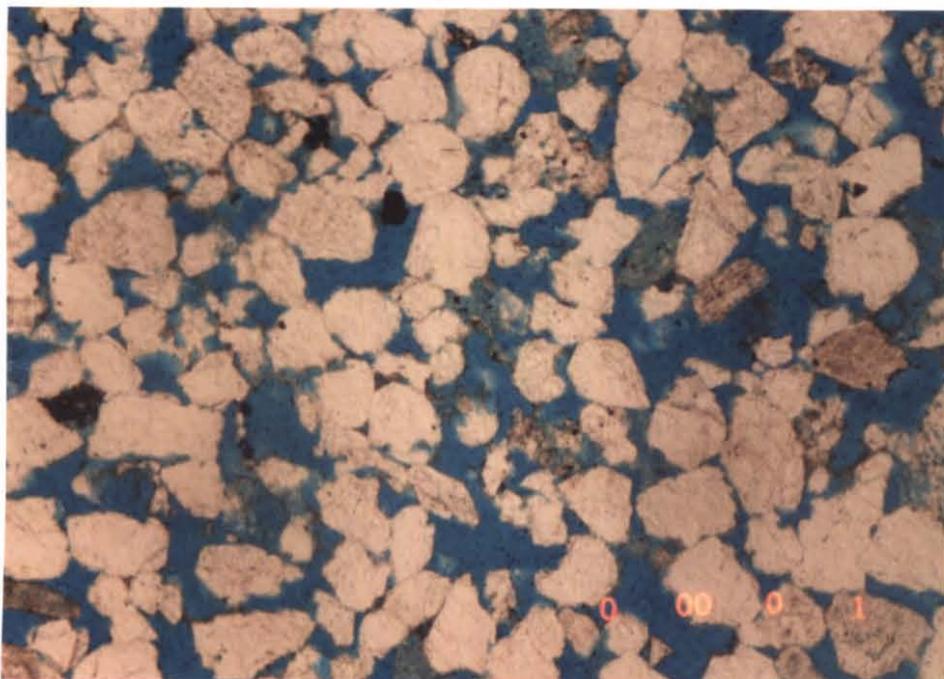
Thin bedded fine grained sand, silt and black organic shale. Pressure solution of silica between grains destroyed the original porosity in the sand and siltstone. Dissolution of feldspar and rock fragments has created porosity in the sand and siltstone estimated to be 12-16% with low permeability due to authigenic kaolinite infilling dissolution pores. The shale has disseminated thin streaks of fine sand and silt grains. The shale has no visible porosity. The shale appears to be highly organic. Sand grains are subrounded to subangular and are fairly well sorted. Porosity in the thin section photograph is shown in blue.

FIGURE 17A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#159

THIN SECTION PHOTO
40X

5 cm

THIN SECTION DESCRIPTION

Medium to fine grained, well sorted, rounded to subrounded sandstone. Pressure solution of silica between grains destroyed most of the intergranular porosity. Dissolution of feldspar, rock fragments and carbonate has created porosity estimated to be 20%+ with good permeability. Most of the porosity appear to be from carbonate dissolution. The carbonate dissolution pores have little or no authigenic clay infilling porosity. The pores from feldspar and rock fragments have authigenic kaolinite and/or slivers of the original grain infilling porosity. Scattered minor fine siderite crystals. Most of the rock fragments appear to be from a metamorphic source. Dark iron inclusions in some rock fragments. Porosity in the thin section photograph is shown in blue.

147079

Basin 8802

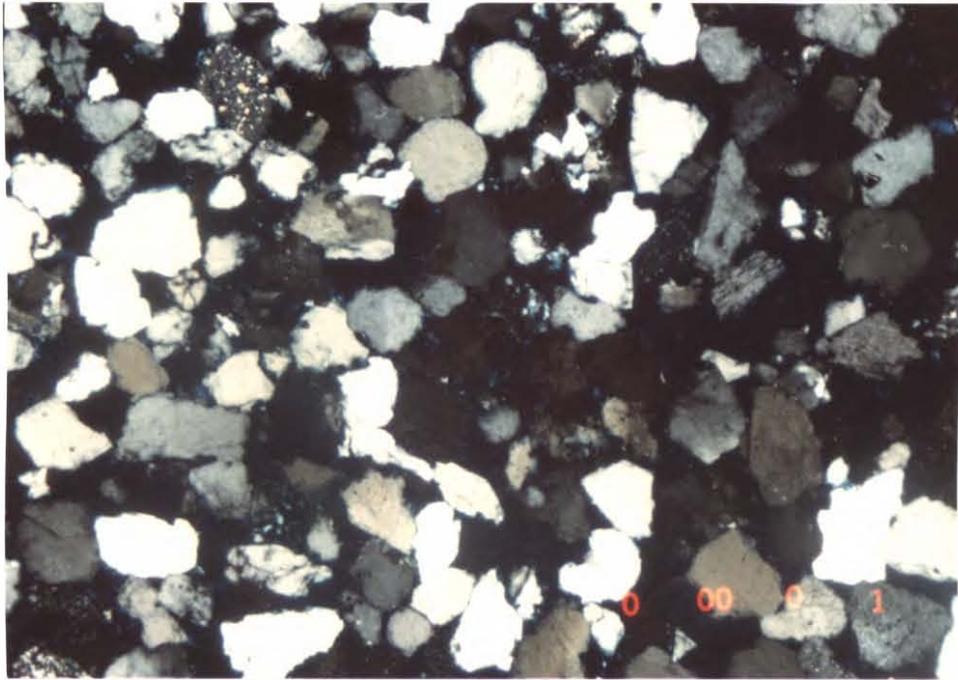
Upper L. basin

FIGURE 17B

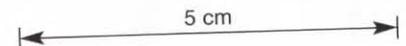
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#159



THIN SECTION PHOTO
40X
X-NICOLS



THIN SECTION DESCRIPTION

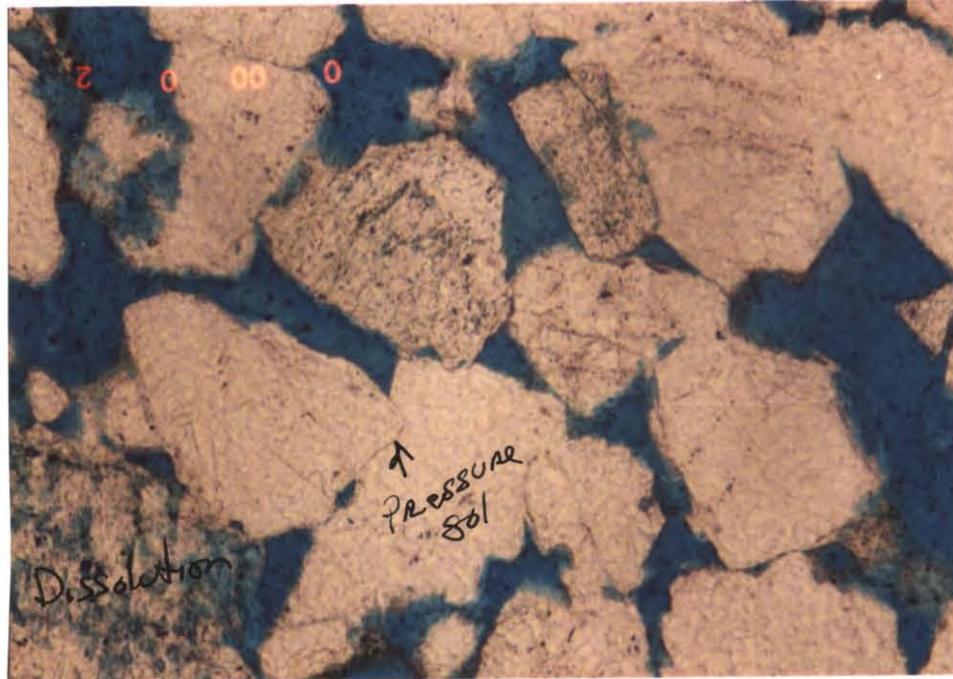
Medium to fine grained, well sorted, rounded to subrounded sandstone. Pressure solution of silica between grains destroyed most of the intergranular porosity. Dissolution of feldspar, rock fragments and carbonate has created porosity estimated to be 20%+ with good permeability. Most of the porosity appear to be from carbonate dissolution. The carbonate dissolution pores have little or no authigenic clay infilling porosity. The pores from feldspar and rock fragments have authigenic kaolinite and/or slivers of the original grain infilling porosity. Scattered minor fine siderite crystals. Most of the rock fragments appear to be from a metamorphic source. Dark iron inclusions in some rock fragments. Porosity in the thin section photograph is shown in blue.

FIGURE 17C

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#159

THIN SECTION PHOTO
100X

THIN SECTION DESCRIPTION

Medium to fine grained, well sorted, rounded to subrounded sandstone. Pressure solution of silica between grains destroyed most of the intergranular porosity. Dissolution of feldspar, rock fragments and carbonate has created porosity estimated to be 20%+ with good permeability. Most of the porosity appear to be from carbante dissolution. The carbonate dissolution pores have little or no authigenic clay infilling porosity. The pores from feldspar and rock fragments have authigenic kaolinite and/or slivers of the original grain infilling porosity. Scattered minor fine siderite crystals. Most of the rock fragments appear to be from a metamorphic source. Dark iron inclusions in some rock fragments. Porosity in the thin section photograph is shown in blue.

147081

Bass Basin 8802

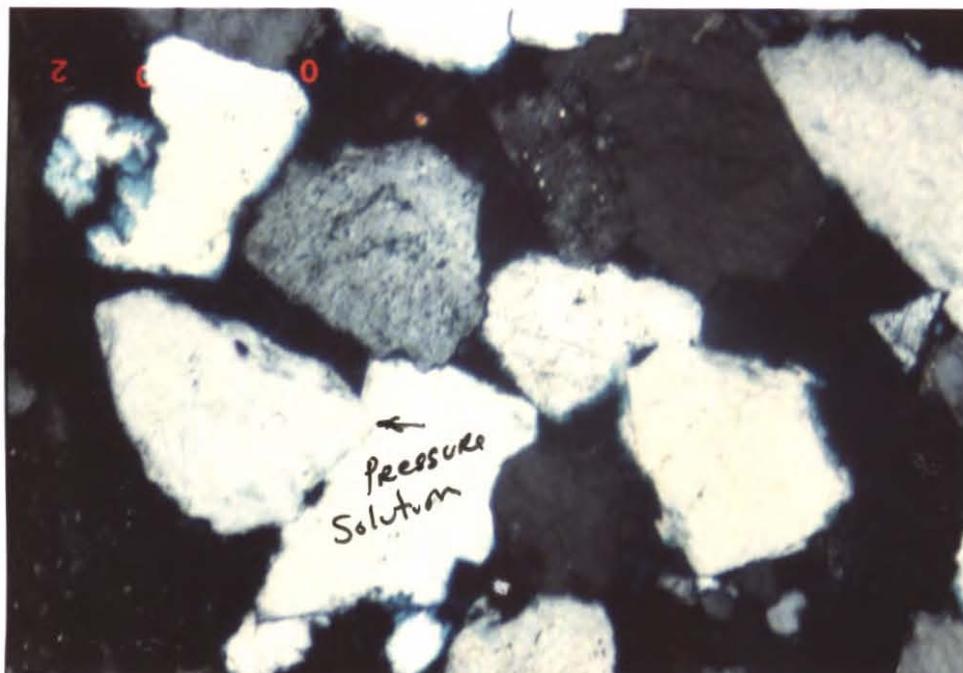
Upper Basin

FIGURE 17D

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#159



THIN SECTION PHOTO
100X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Medium to fine grained, well sorted, rounded to subrounded sandstone. Pressure solution of silica between grains destroyed most of the intergranular porosity. Dissolution of feldspar, rock fragments and carbonate has created porosity estimated to be 20%+ with good permeability. Most of the porosity appear to be from carbonate dissolution. The carbonate dissolution pores have little or no authigenic clay infilling porosity. The pores from feldspar and rock fragments have authigenic kaolinite and/or slivers of the original grain infilling porosity. Scattered minor fine siderite crystals. Most of the rock fragments appear to be from a metamorphic source. Dark iron inclusions in some rock fragments. Porosity in the thin section photograph is shown in blue.

147082

Bass Basin 8816

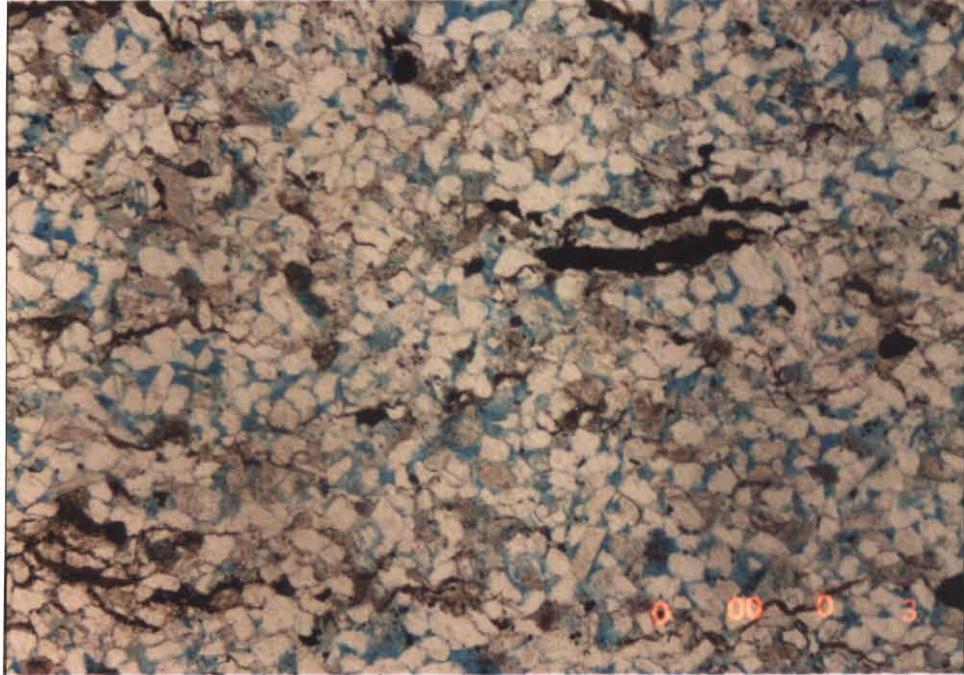
Upper L. Galmier

FIGURE 18A

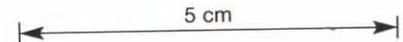
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#166



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Very fine grained, well sorted, subangular sandstone, organic streaks and inclusions. Scattered hematite grains. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of rock fragments, feldspar and possibly some carbonate has created good porosity. Authigenic kaolinite is infilling some pores reducing pore sizes and permeability. Estimated visible porosity is 14-17%. Scattered fine siderite crystals, numerous mica flakes and minor grains of brownish hornblende. Porosity in the thin section photograph is shown in blue.

147083

Poole 8816

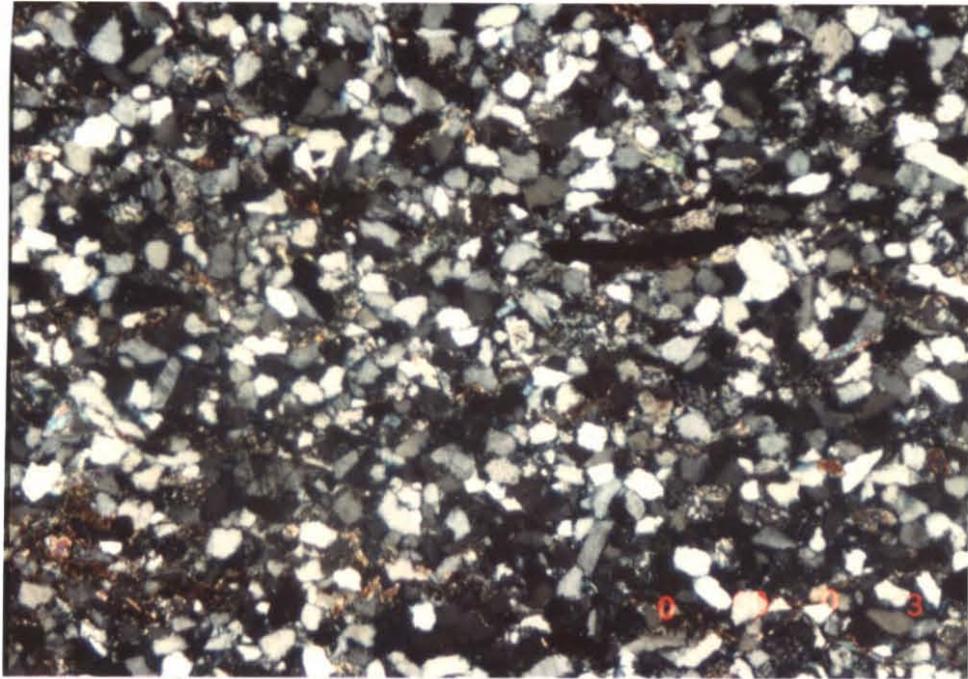
Upper L. balmeri

FIGURE 18B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#166



THIN SECTION PHOTO
40X
X-NICOLS



THIN SECTION DESCRIPTION

Very fine grained, well sorted, subangular sandstone, organic streaks and inclusions. Scattered hematite grains. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of rock fragments, feldspar and possibly some carbonate has created good porosity. Authigenic kaolinite is infilling some pores reducing pore sizes and permeability. Estimated visible porosity is 14-17%. Scattered fine siderite crystals, numerous mica flakes and minor grains of brownish hornblende. Porosity in the thin section photograph is shown in blue.

147084

Poo-baa 8818

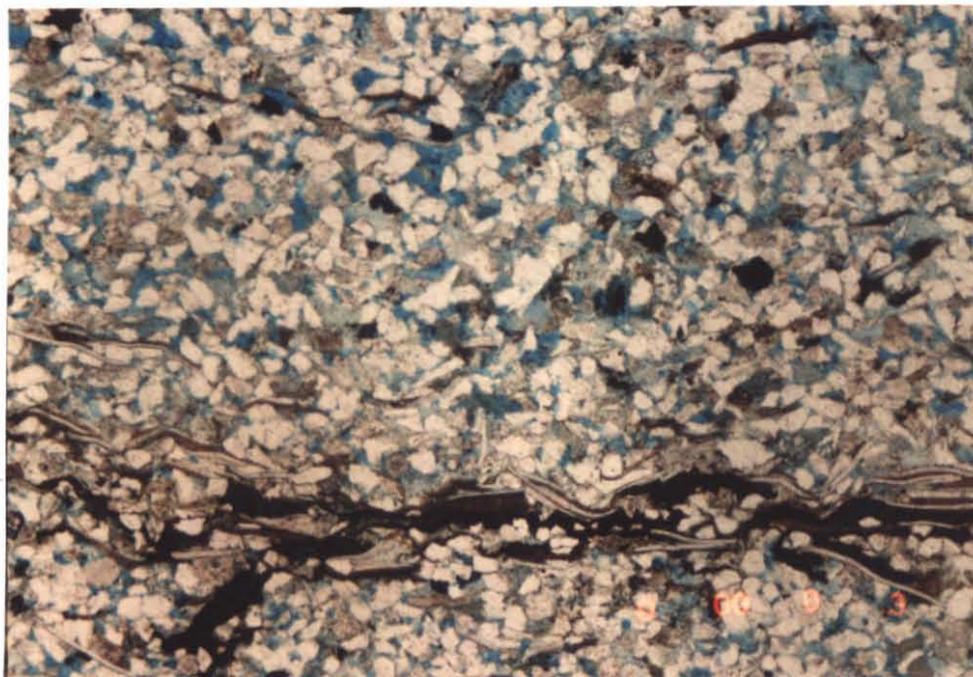
Upper L. balnei

FIGURE 19A

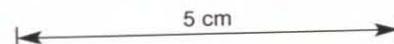
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#167



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Very fine grained, well sorted, subangular sandstone, organic streaks and inclusions. Scattered hematite grains. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of rock fragments, feldspar and possibly some carbonate has created good porosity. Authigenic kaolinite is infilling some pores reducing pore sizes and permeability. Estimated visible porosity is 14-17%. Numerous mica flakes and minor grains of brownish hornblende. Porosity in the thin section photograph is shown in blue.

147085 Poole 8816

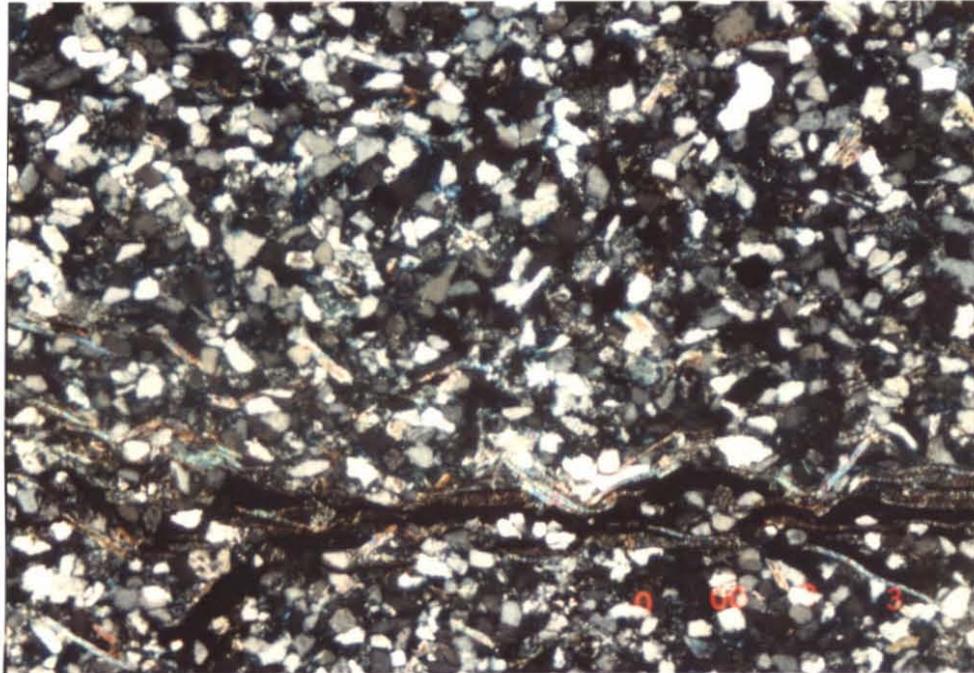
Upper L. balnei

FIGURE 19B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#167



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Very fine grained, well sorted, subangular sandstone, organic streaks and inclusions. Scattered hematite grains. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of rock fragments, feldspar and possibly some carbonate has created good porosity. Authigenic kaolinite is infilling some pores reducing pore sizes and permeability. Estimated visible porosity is 14-17%. Numerous mica flakes and minor grains of brownish hornblende. Porosity in the thin section photograph is shown in blue.

147086

Berber 9966

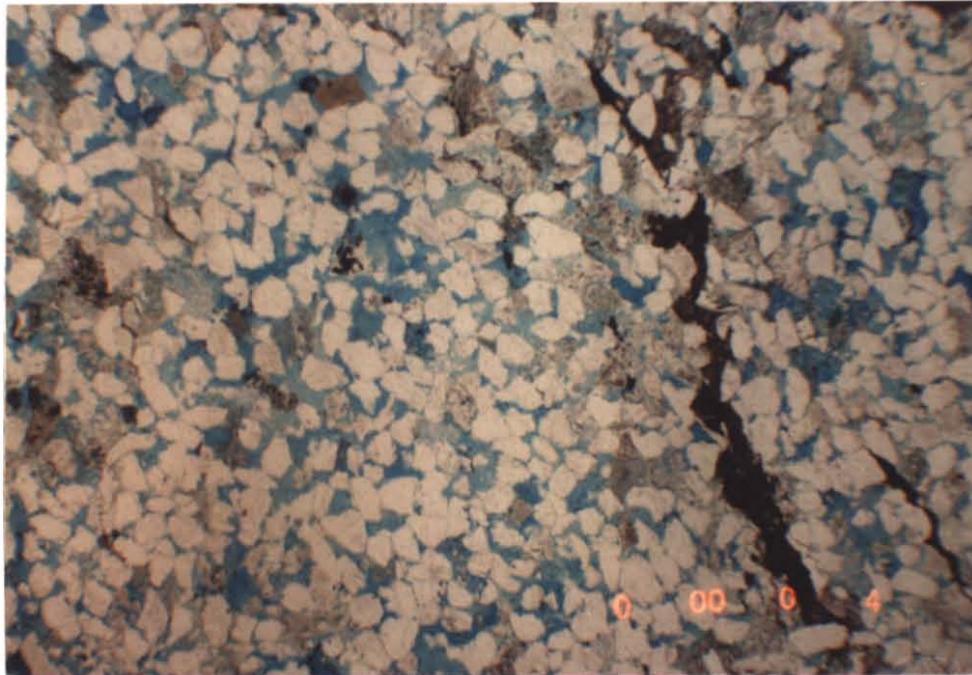
Lower L. Basin

FIGURE 20A

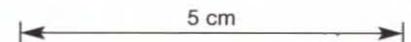
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#173



THIN SECTION PHOTO
20X



THIN SECTION DESCRIPTION

Fine to very fine grained, well sorted, subangular sandstone, organic streaks and inclusions. Scattered hematite grains. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of rock fragments, feldspar and possibly some carbonate has created good porosity. Authigenic kaolinite is infilling some pores reducing pore sizes and permeability. Estimated visible porosity is 14-17%. Scattered fine siderite crystals, numerous mica flakes and minor grains of brownish hornblende. Porosity in the thin section photograph is shown in blue.

147087

Boaboo 9961

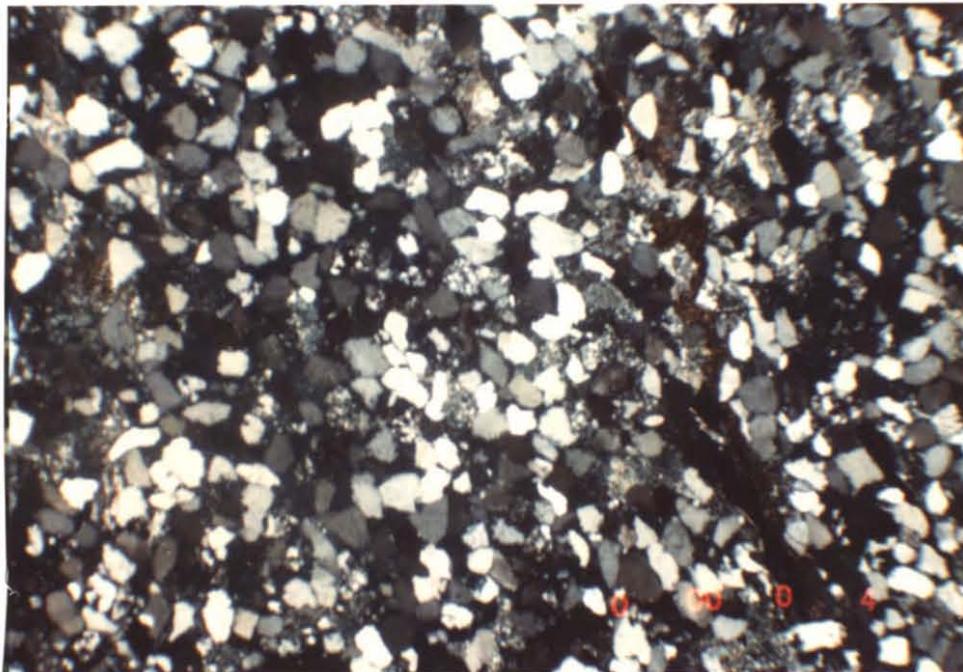
Lower. balnei

FIGURE 20B

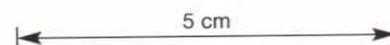
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#173



THIN SECTION PHOTO
20X
X-NICOLS



THIN SECTION DESCRIPTION

Fine to very fine grained, well sorted, subangular sandstone, organic streaks and inclusions. Scattered hematite grains. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of rock fragments, feldspar and possibly some carbonate has created good porosity. Authigenic kaolinite is infilling some pores reducing pore sizes and permeability. Estimated visible porosity is 14-17%. Scattered fine siderite crystals, numerous mica flakes and minor grains of brownish hornblende. Porosity in the thin section photograph is shown in blue.

147088

Pearson 9968

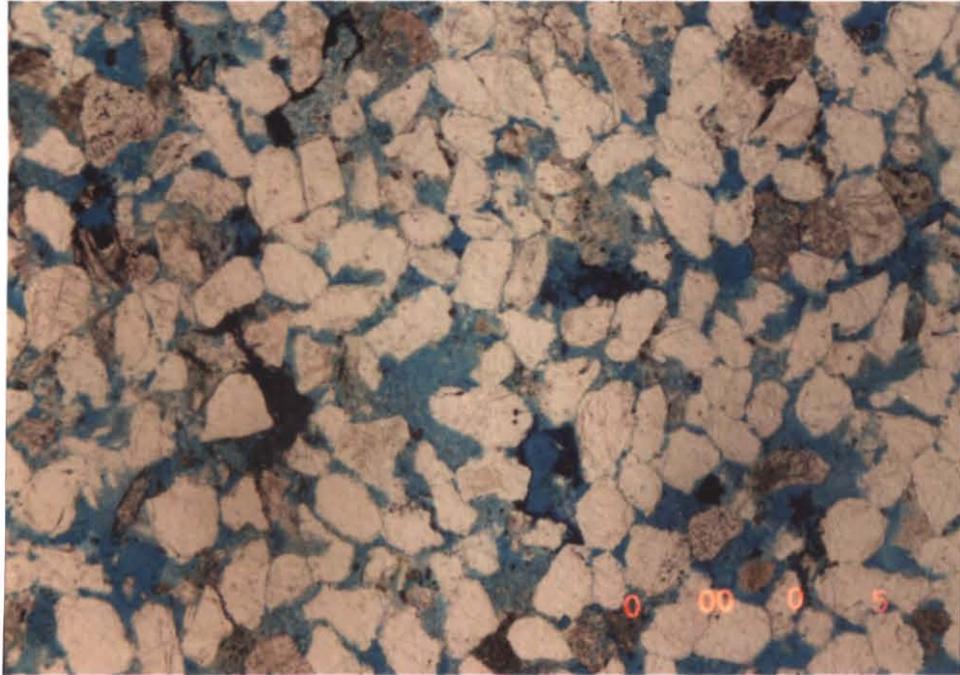
Lowry L. Palmer

FIGURE 21A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#174



THIN SECTION PHOTO
40X

← 5 cm →

THIN SECTION DESCRIPTION

Fine grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 15-19% with fair to low permeability due to authigenic kaolinite infilling pores and reducing pore size. Numerous scattered metamorphic rock fragments. Scattered chert grains. Scattered minor siderite grains. Authigenic quartz overgrowth of a few grains. The overgrowth is marked by a dust rim. Porosity in the thin section photograph is shown in blue.

147089

Berber 9968

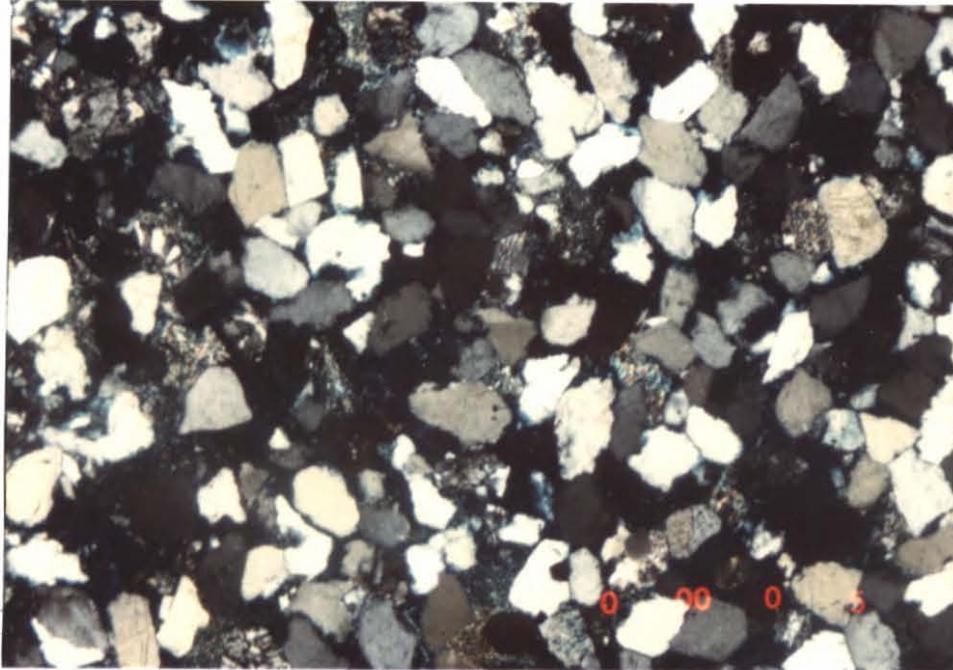
Lower L. balmeri

FIGURE 21B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#174



THIN SECTION PHOTO

40X

X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Fine grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 15-19% with fair to low permeability due to authigenic kaolinite infilling pores and reducing pore size. Numerous scattered metamorphic rock fragments. Scattered chert grains. Scattered minor siderite grains. Authigenic quartz overgrowth of a few grains. The overgrowth is marked by a dust rim. Porosity in the thin section photograph is shown in blue.

147090

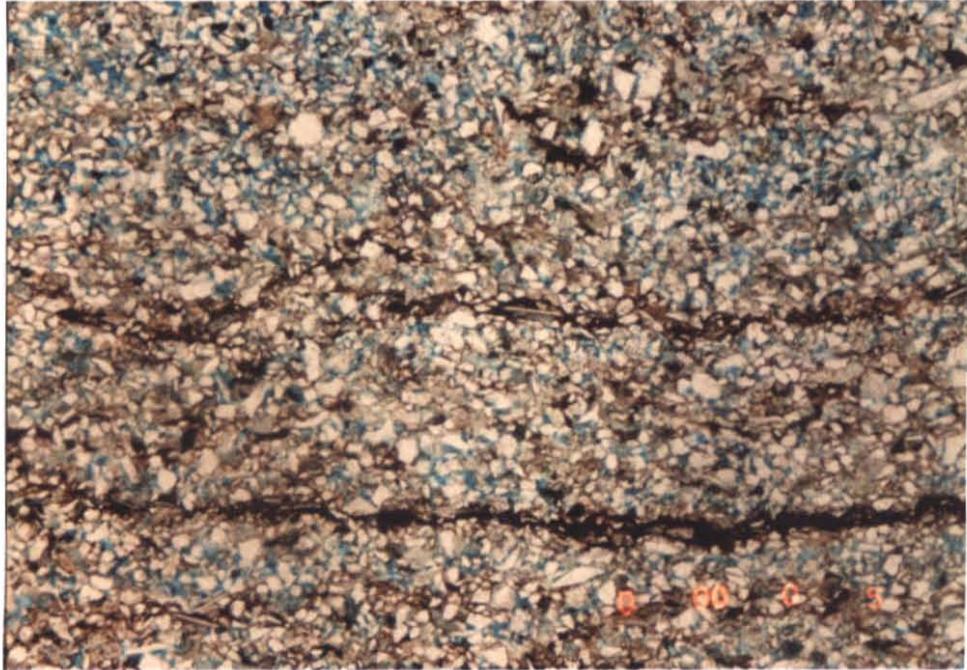
Torok 6435
Lower N. sp443

FIGURE 22A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#182



THIN SECTION PHOTO
40X

5 cm

THIN SECTION DESCRIPTION

Very fine grained silty, fair sorted, subangular sandstone with thin organic shaley streaks and inclusions. Pressure solution of silica between grains has destroyed part of the original intergranular porosity in the sands. Dissolution of rock fragments and feldspar has created good porosity in the sandstone estimated to be from 8-12% with low permeability due to fine pore size. Organic staining in a stylolitic pattern around some grains. Porosity in the thin section photograph is shown in blue.

147091

Torvale 6435

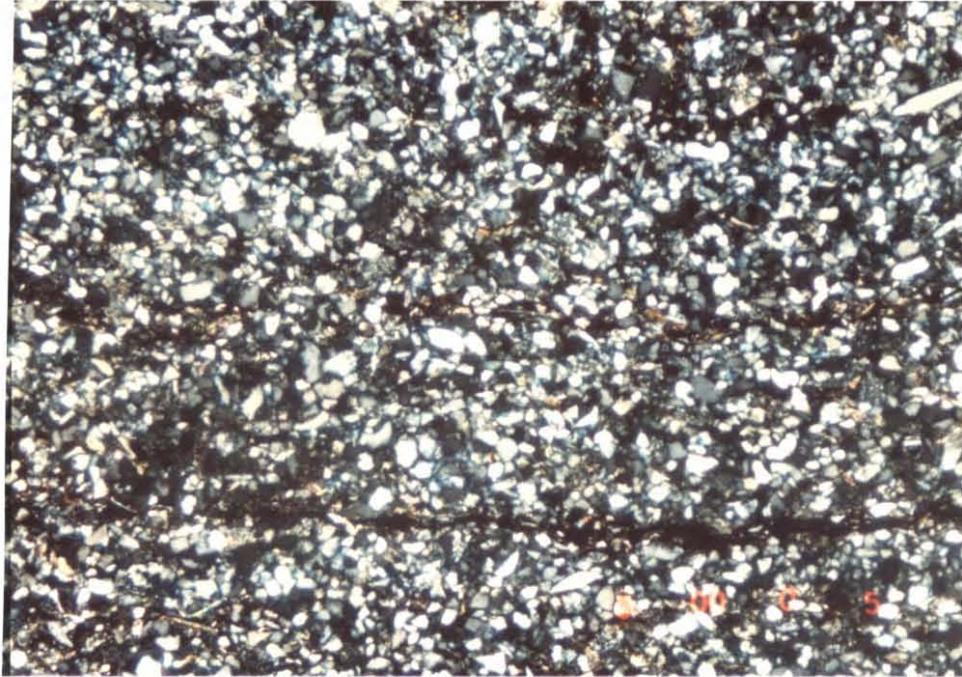
Lower N. aspen s

FIGURE 22B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

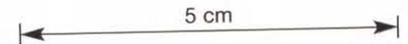
#182



THIN SECTION PHOTO

40X

X-NICOLS



THIN SECTION DESCRIPTION

Very fine grained silty, fair sorted, subangular sandstone with thin organic shaley streaks and inclusions. Pressure solution of silica between grains has destroyed part of the original intergranular porosity in the sands. Dissolution of rock fragments and feldspar has created good porosity in the sandstone estimated to be from 8-12% with low permeability due to fine pore size. Organic staining in a stylolitic pattern around some grains. Porosity in the thin section photograph is shown in blue.

147092

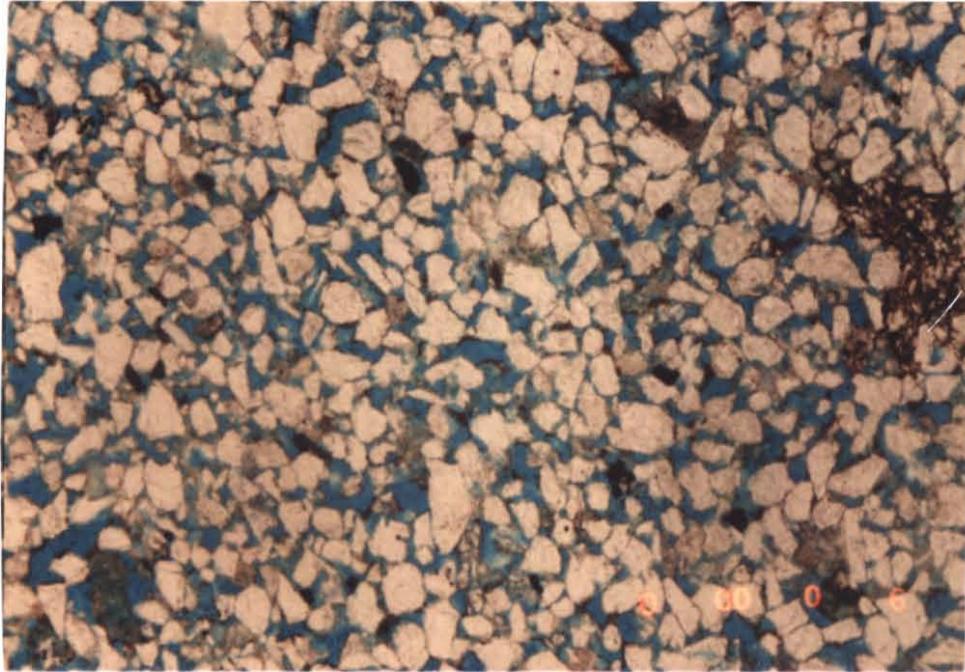
Tarabk 6446
Lower N. espous

FIGURE 23A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#186



THIN SECTION PHOTO
40X

5 cm

THIN SECTION DESCRIPTION

Fine grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 16-20% with fair to low permeability due to authigenic kaolinite infilling pores and reducing pore size. Numerous scattered metamorphic rock fragments. Scattered chert grains. Scattered minor siderite grains. Authigenic quartz overgrowth of a few grains. The overgrowth is marked by a dust rim. Porosity in the thin section photograph is shown in blue.

147093

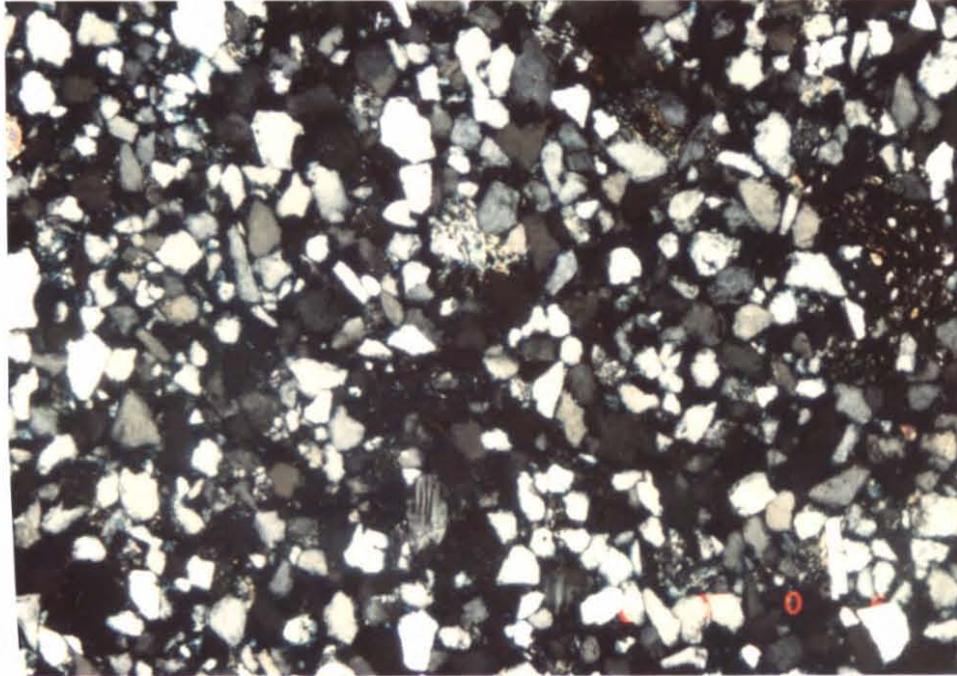
Tanook 649
Lower N. o. sp. 4.5

FIGURE 23B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#186



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Fine grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 16-20% with fair to low permeability due to authigenic kaolinite infilling pores and reducing pore size. Numerous scattered metamorphic rock fragments. Scattered chert grains. Scattered minor siderite grains. Authigenic quartz overgrowth of a few grains. The overgrowth is marked by a dust rim. Porosity in the thin section photograph is shown in blue.

147094

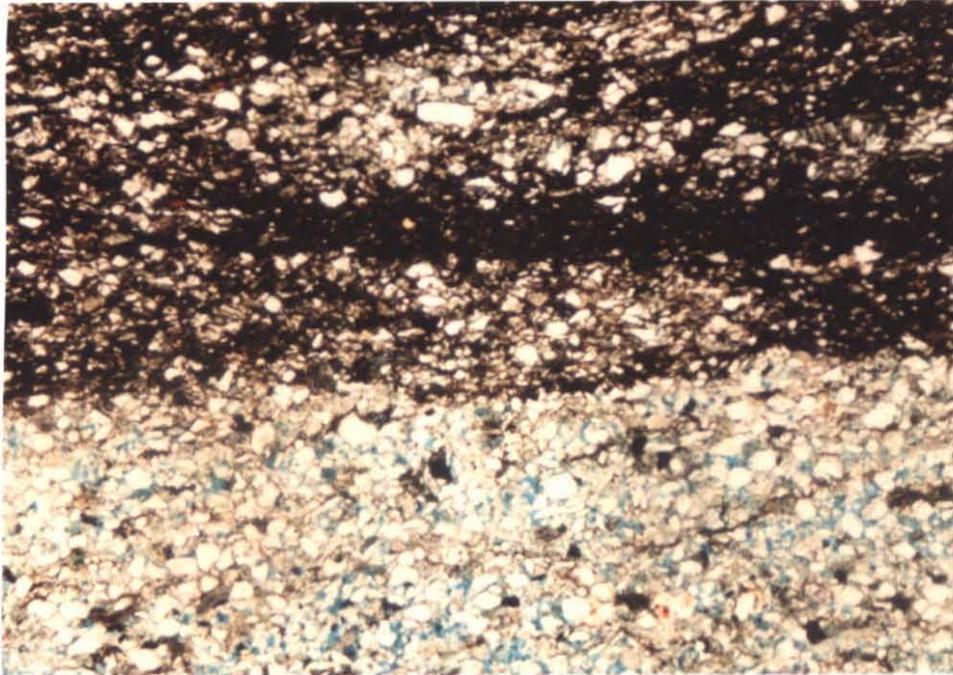
Tarook 6460
Lower N. argens

FIGURE 24A

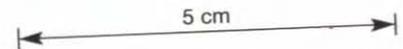
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#192



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Very fine grained silty, fair sorted, subangular sandstone with thin organic shaley streaks and inclusions. Pressure solution of silica between grains has destroyed part of the original intergranular porosity in the sands. Dissolution of rock fragments and feldspar has created good porosity in the sandstone estimated to be from 6-10% with low permeability due to fine pore size. Organic staining in a stylolitic pattern around some grains. Porosity in the thin section photograph is shown in blue. Numerous fine siderite crystals.

147095

Tarook 6660

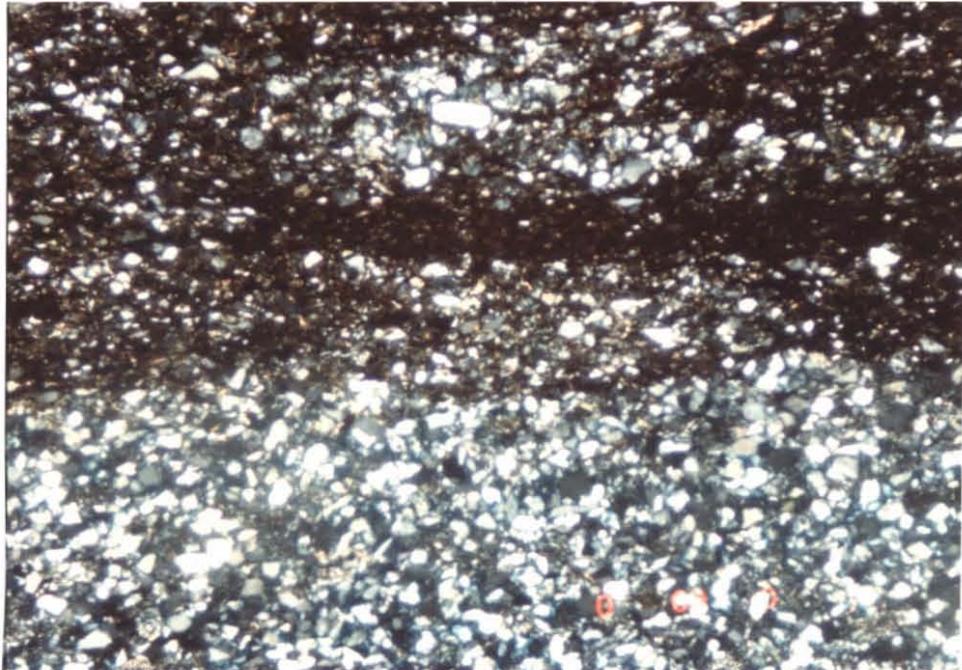
Lower N. asperus

FIGURE 24B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#192



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Very fine grained silty, fair sorted, subangular sandstone with thin organic shaley streaks and inclusions. Pressure solution of silica between grains has destroyed part of the original intergranular porosity in the sands. Dissolution of rock fragments and feldspar has created good porosity in the sandstone estimated to be from 6-10% with low permeability due to fine pore size. Organic staining in a stylolitic pattern around some grains. Porosity in the thin section photograph is shown in blue. Numerous fine siderite crystals.

147096

Yeronggi 7048

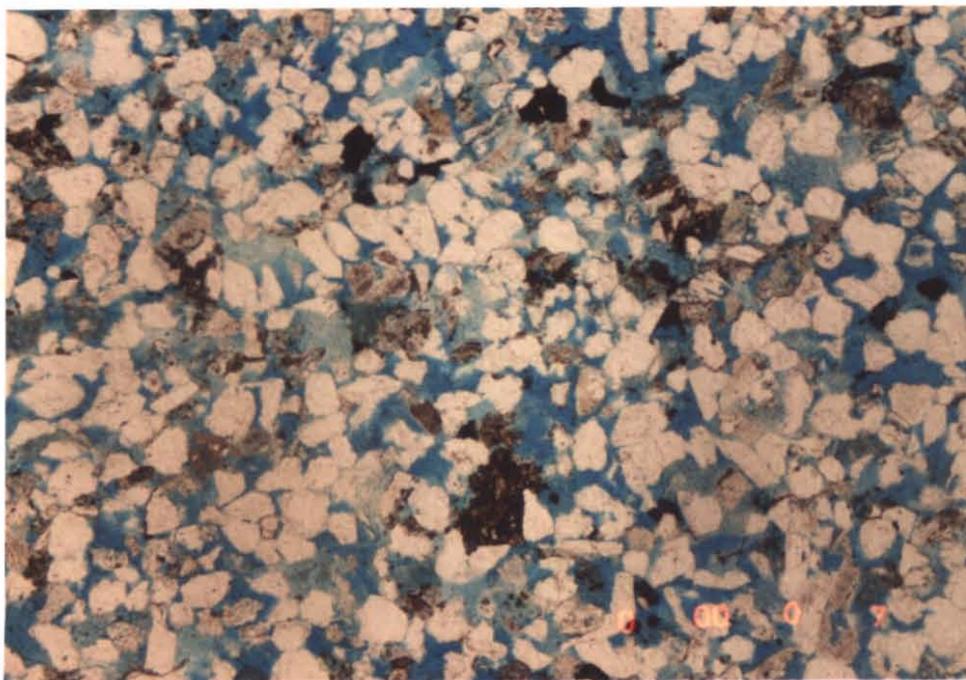
Upper L. Salmei

FIGURE 25A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#208



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Fine grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 16-20% with fair to low permeability due to authigenic kaolinite infilling pores and reducing pore size. Numerous scattered metamorphic rock fragments. Scattered chert grains. Scattered minor siderite grains. Authigenic quartz overgrowth of a few grains. The overgrowth is marked by a dust rim. Porosity in the thin section photograph is shown in blue. Numerous fine siderite crystals.

147097

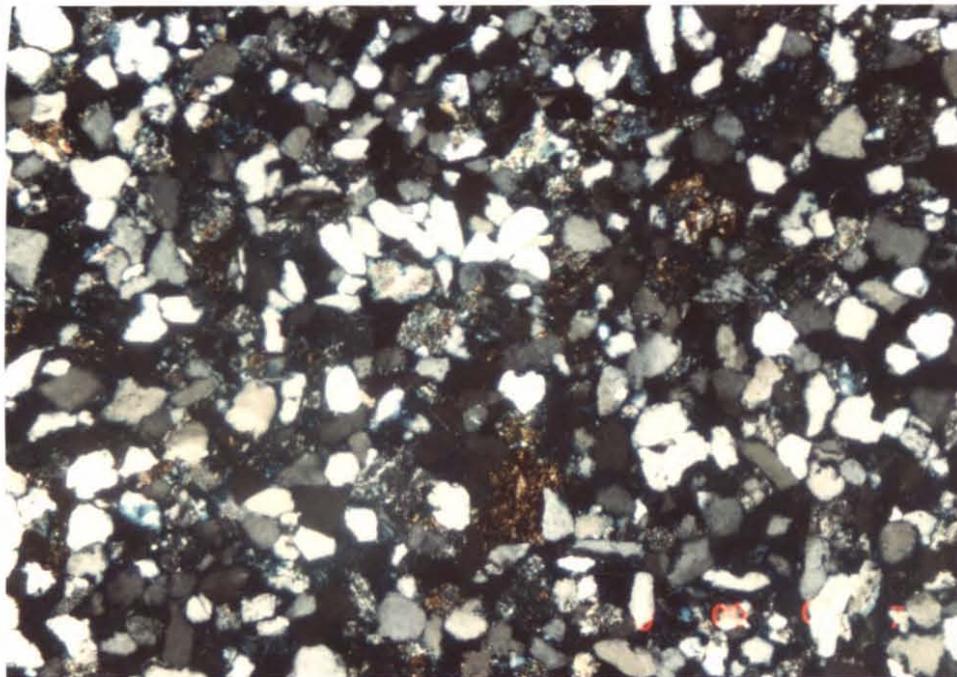
Yarrongi 7048
Upper L. balnei

FIGURE 25B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#208



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Fine grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 16-20% with fair to low permeability due to authigenic kaolinite infilling pores and reducing pore size. Numerous scattered metamorphic rock fragments. Scattered chert grains. Scattered minor siderite grains. Authigenic quartz overgrowth of a few grains. The overgrowth is marked by a dust rim. Porosity in the thin section photograph is shown in blue. Numerous fine siderite crystals.

147098

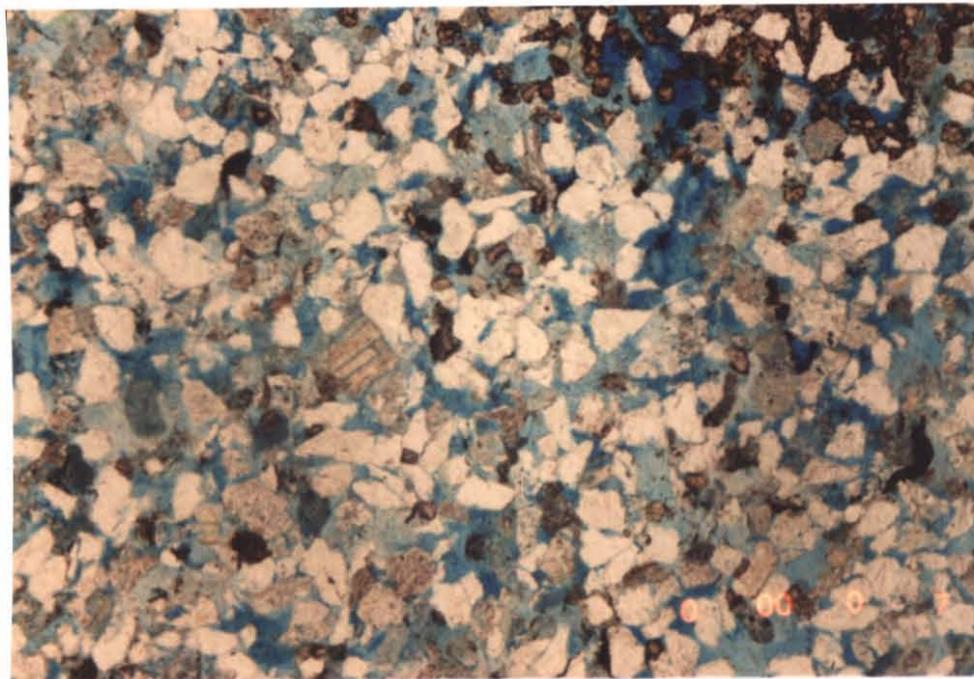
Yurongi 7065
Upper L. L. L. L.

FIGURE 26A

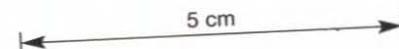
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#216



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

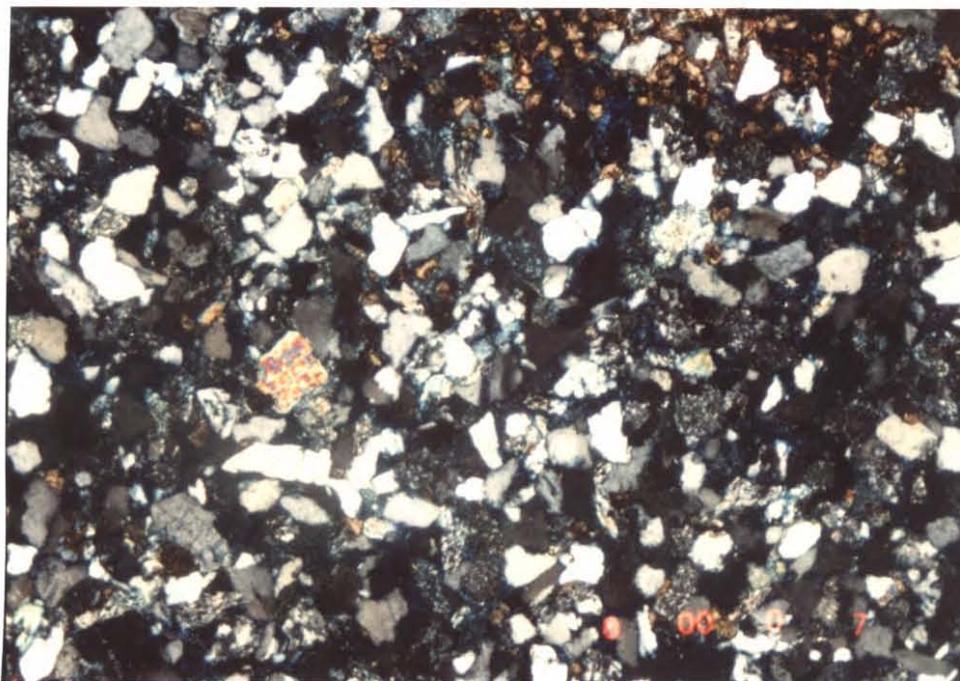
Fine grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 16-20% with fair to low permeability due to authigenic kaolinite infilling pores and reducing pore size. Numerous scattered metamorphic rock fragments. Scattered chert grains. Scattered minor siderite grains. Authigenic quartz overgrowth of a few grains. The overgrowth is marked by a dust rim. Porosity in the thin section photograph is shown in blue. Numerous fine siderite crystals.

FIGURE 26B

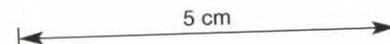
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#216



THIN SECTION PHOTO
40X
X-NICOLS

THIN SECTION DESCRIPTION

Fine grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 16-20% with fair to low permeability due to authigenic kaolinite infilling pores and reducing pore size. Numerous scattered metamorphic rock fragments. Scattered chert grains. Scattered minor siderite grains. Authigenic quartz overgrowth of a few grains. The overgrowth is marked by a dust rim. Porosity in the thin section photograph is shown in blue. Numerous fine siderite crystals.

147100

Area 9518

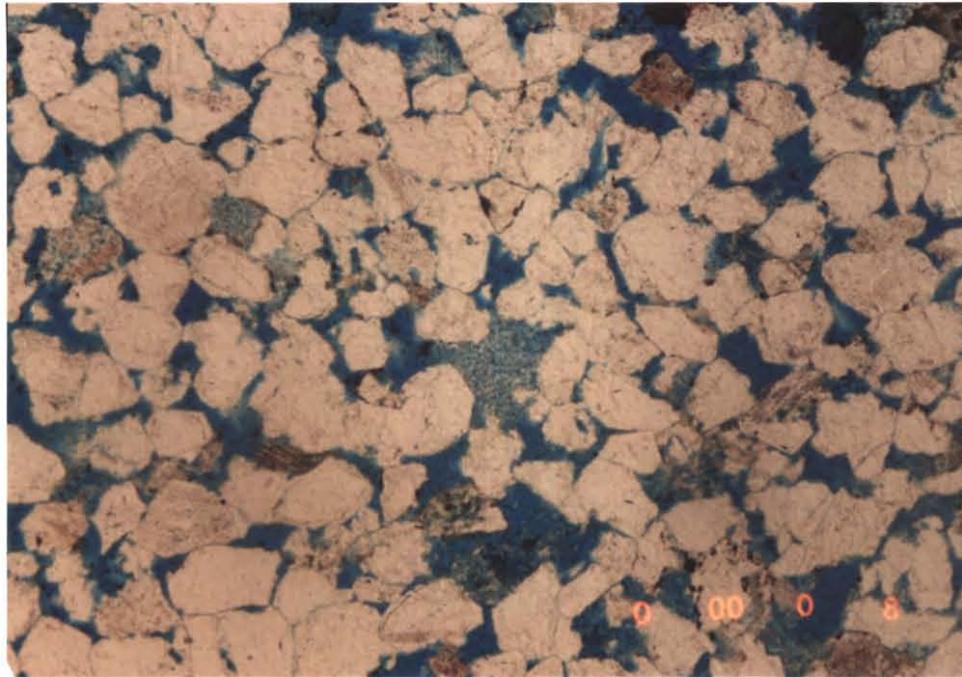
Lower L. Salmer

FIGURE 27A

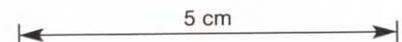
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#222



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

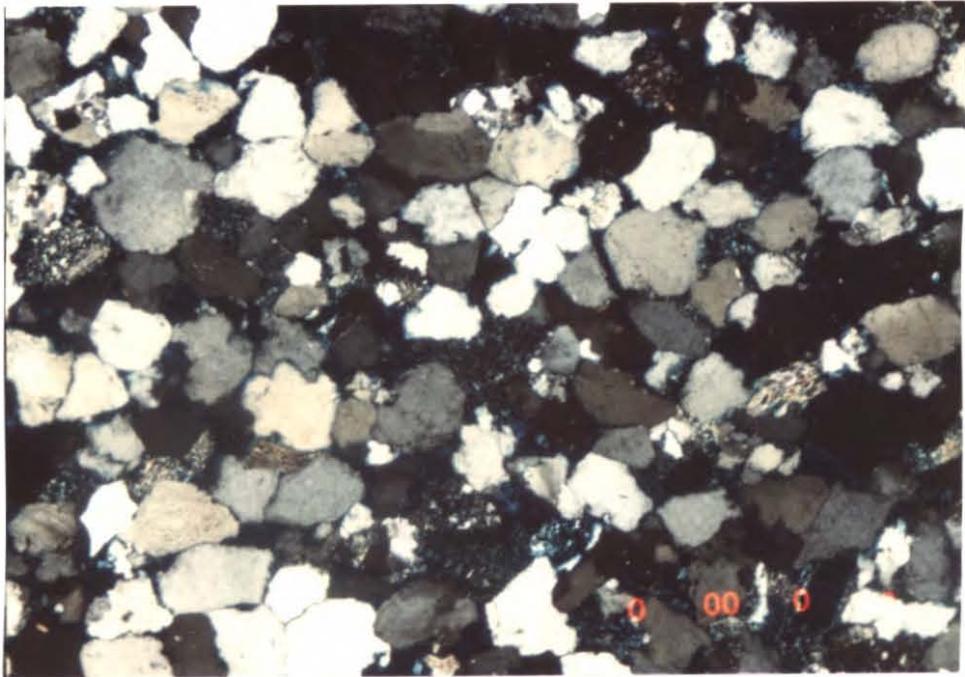
Medium to fine grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 20%+ with fair to low permeability due to authigenic kaolinite infilling pores and reducing pore size. Numerous scattered metamorphic rock fragments. Scattered chert grains. Scattered minor siderite grains. Authigenic quartz overgrowth of a few grains. The overgrowth is marked by a dust rim. Porosity in the thin section photograph is shown in blue. Numerous fine siderite crystals.

FIGURE 27B

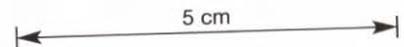
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#222



THIN SECTION PHOTO
40X
X-NICOLS

THIN SECTION DESCRIPTION

Medium to fine grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 20%+ with fair to low permeability due to authigenic kaolinite infilling pores and reducing pore size. Numerous scattered metamorphic rock fragments. Scattered chert grains. Scattered minor siderite grains. Authigenic quartz overgrowth of a few grains. The overgrowth is marked by a dust rim. Porosity in the thin section photograph is shown in blue. Numerous fine siderite crystals.

1 17 02

Area 9524

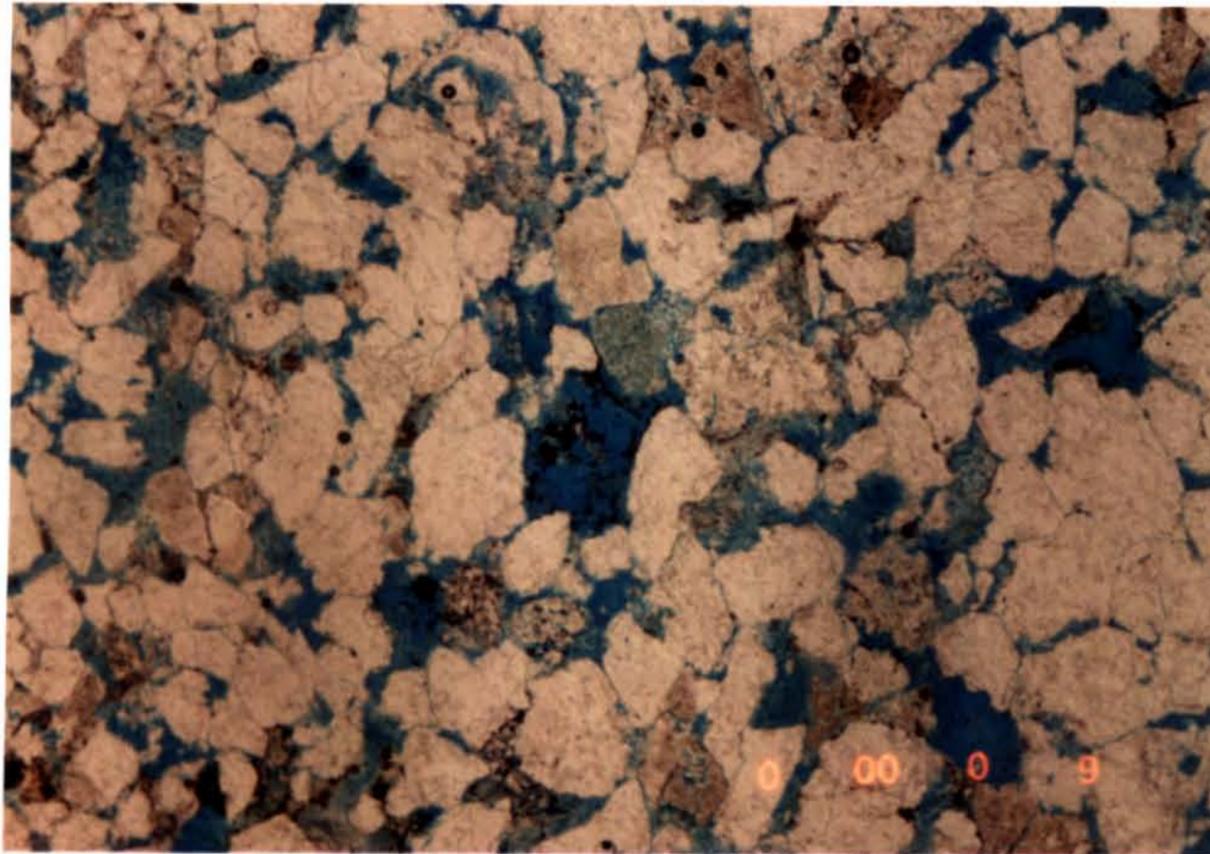
Lower L. balmeri

FIGURE 28A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#225



THIN SECTION PHOTO
40X

5 cm

THIN SECTION DESCRIPTION

Medium to fine grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 20%+ with fair to low permeability due to authigenic kaolinite infilling pores and reducing pore size. Numerous scattered metamorphic rock fragments. Scattered chert grains. Scattered minor siderite grains. Authigenic quartz overgrowth of a few grains. The overgrowth is marked by a dust rim. Porosity in the thin section photograph is shown in blue. Numerous fine siderite crystals.

147103

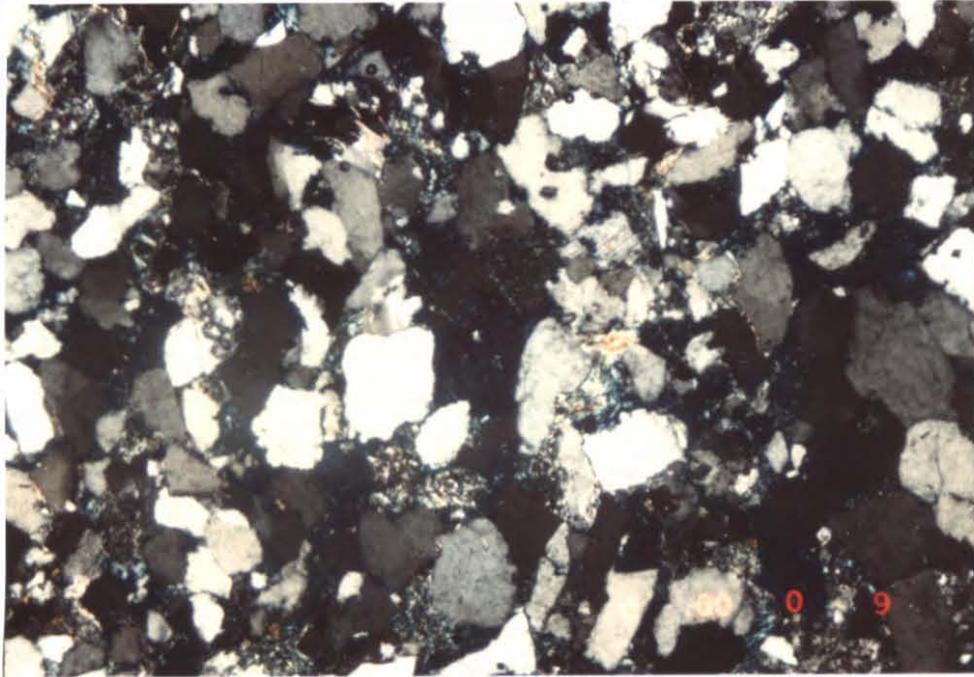
Area 9524
Lower L. balmi

FIGURE 28B

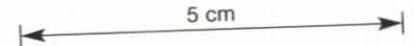
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#225



THIN SECTION PHOTO
40X
X-NICOLS



THIN SECTION DESCRIPTION

Medium to fine grained, well sorted, subrounded sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 20%+ with fair to low permeability due to authigenic kaolinite infilling pores and reducing pore size. Numerous scattered metamorphic rock fragments. Scattered chert grains. Scattered minor siderite grains. Authigenic quartz overgrowth of a few grains. The overgrowth is marked by a dust rim. Porosity in the thin section photograph is shown in blue. Numerous fine siderite crystals.

147104

Area 9530

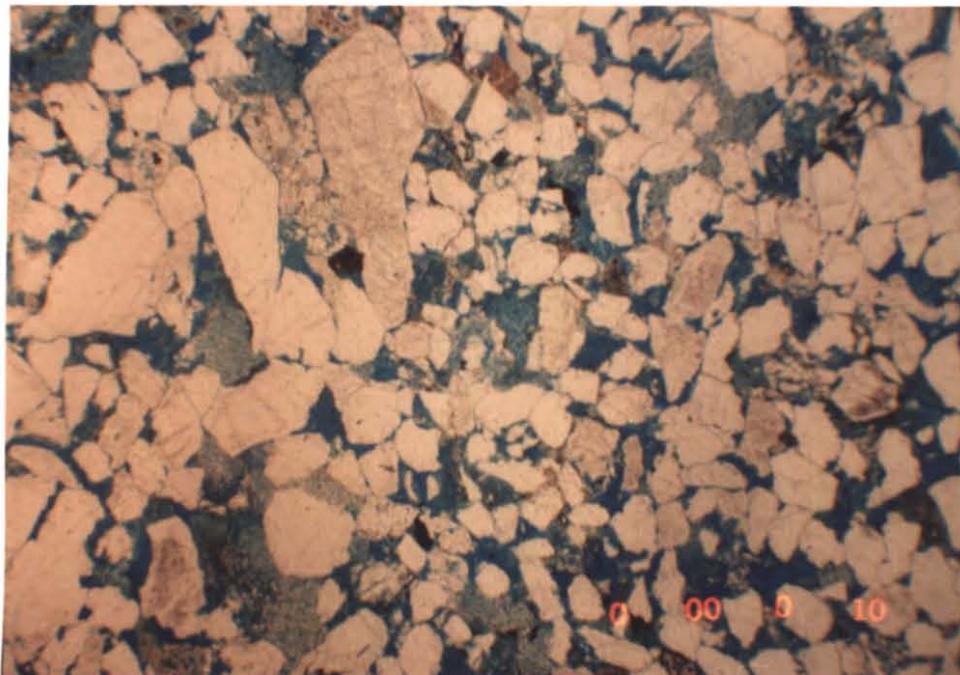
Lower L. balmei

FIGURE 29A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#227



THIN SECTION PHOTO
40X

5 cm

THIN SECTION DESCRIPTION

Medium grained fair sorted, subangular sandstone, scattered coarse grains. Pressure solution of silica between grains has destroyed intergranular porosity. Dissolution of feldspar and rock fragments has created good to excellent porosity estimated to be 16-20% with fair to low permeability due to authigenic kaolinite infilling dissolution pores. Numerous metamorphic rock fragments. Scattered chert grains. Some quartz grains show undulatory extension due to metamorphic strain. Porosity in the thin section photograph is shown in blue.

147105

Area 9530

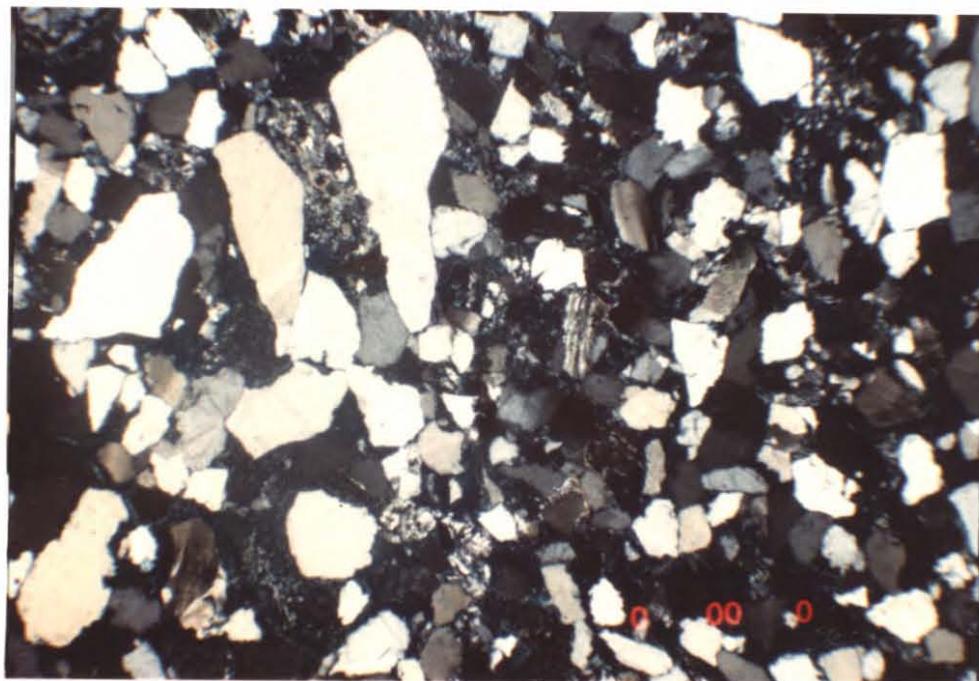
Lower L. balmeri

FIGURE 29B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#227



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Medium grained fair sorted, subangular sandstone, scattered coarse grains. Pressure solution of silica between grains has destroyed intergranular porosity. Dissolution of feldspar and rock fragments has created good to excellent porosity estimated to be 16-20% with fair to low permeability due to authigenic kaolinite infilling dissolution pores. Numerous metamorphic rock fragments. Scattered chert grains. Some quartz grains show undulatory extension due to metamorphic strain. Porosity in the thin section photograph is shown in blue.

147106

Bass 6410

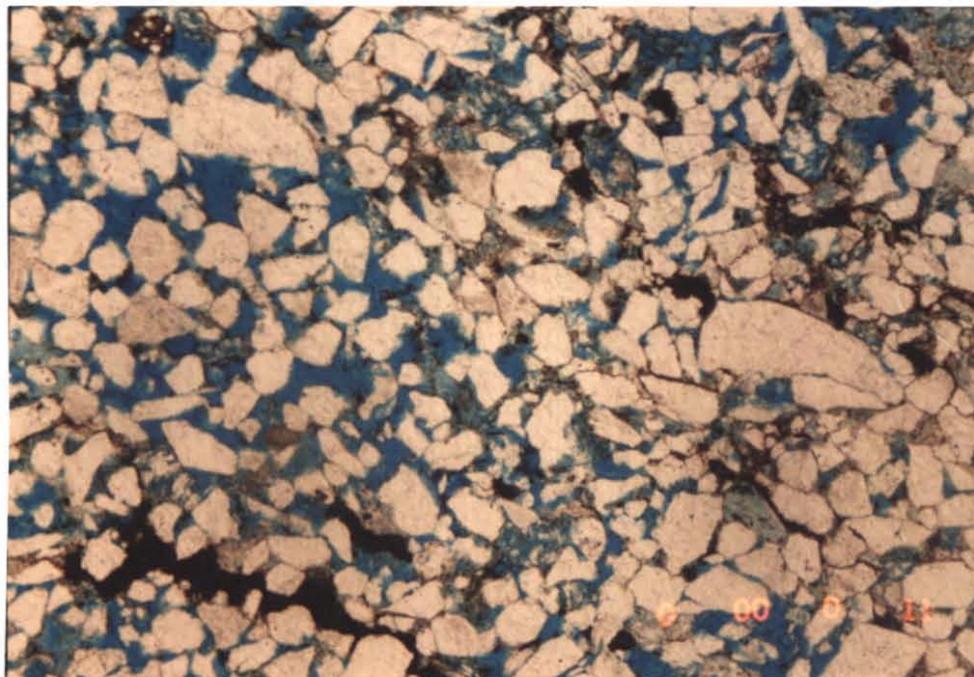
Lower N. aspen

FIGURE 30A

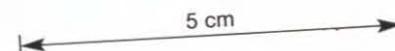
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#233



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Fine grained, subangular, fair to poorly sorted sandstone, scattered medium grains. Black to brownish bitumen staining in streaks and inclusions. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created good visible porosity estimated at 14-18% with low permeability due to reduction of pore size due to authigenic clay infilling dissolution pores. Rock fragments are not as numerous as found in samples 7-227. Porosity in the thin section photograph is shown in blue.

147107

Bassi 6410

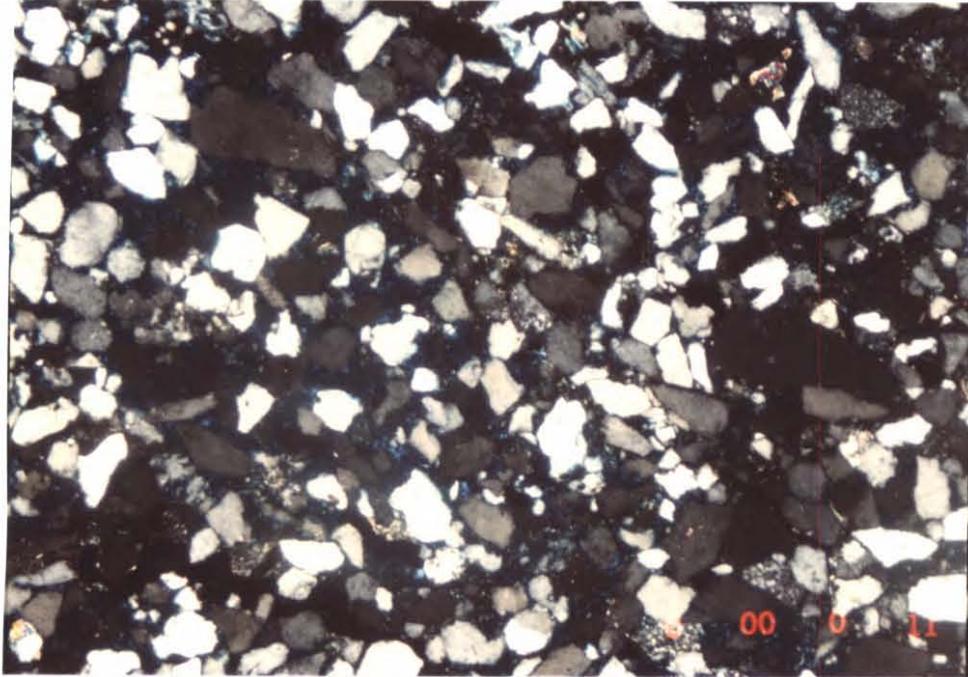
Lower N. argus

FIGURE 30B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#233



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Fine grained, subangular, fair to poorly sorted sandstone, scattered medium grains. Black to brownish bitumen staining in streaks and inclusions. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created good visible porosity estimated at 14-18% with low permeability due to reduction of pore size due to authigenic clay infilling dissolution pores. Rock fragments are not as numerous as found in samples 7-227. Porosity in the thin section photograph is shown in blue.

147108

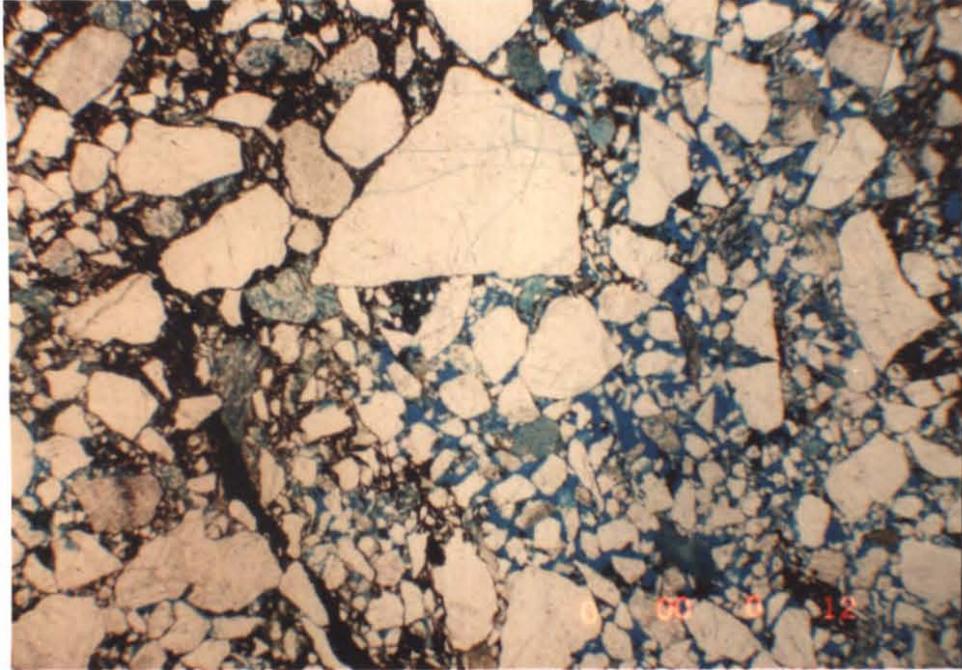
Bass 6112
Lower N. - porous

FIGURE 31A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#234



THIN SECTION PHOTO
20X

← 5 cm →

THIN SECTION DESCRIPTION

Coarse to fine grained, poorly sorted, angular to subangular, conglomeratic sandstone. Only a few rock fragment grains. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created good to excellent visible porosity estimated to be from 12-18%. Brownish bitumen infilling porosity in streaks and inclusions. Porosity in the thin section photograph is shown in blue.

147109

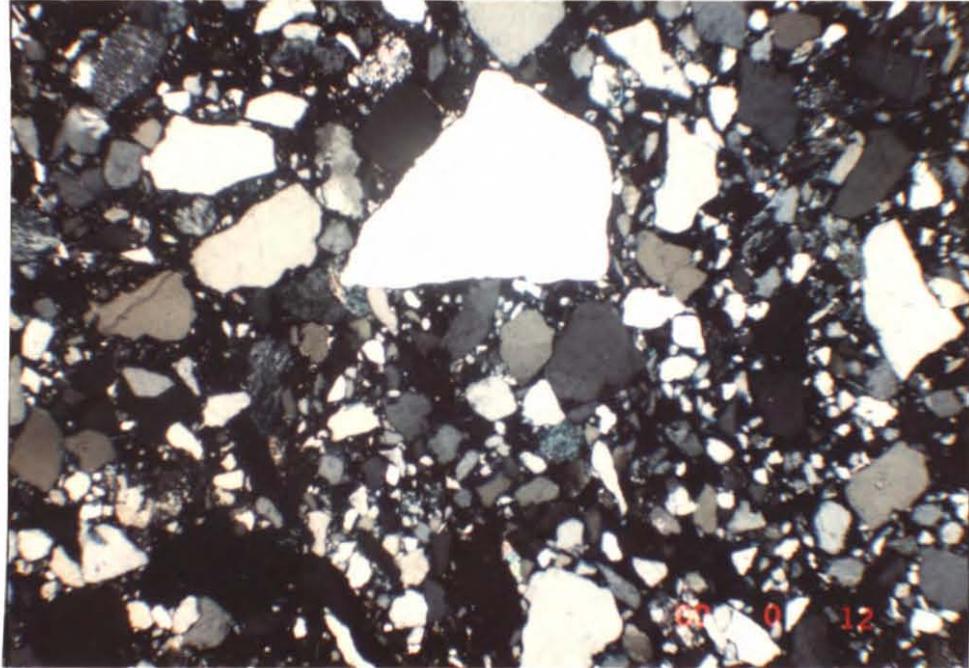
Bassi 6412
Lower N. = spurs

FIGURE 31B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#234



THIN SECTION PHOTO
20X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Coarse to fine grained, poorly sorted, angular to subangular, conglomeratic sandstone. Only a few rock fragment grains. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created good to excellent visible porosity estimated to be from 12-18%. Brownish bitumen infilling porosity in streaks and inclusions. Porosity in the thin section photograph is shown in blue.

147110

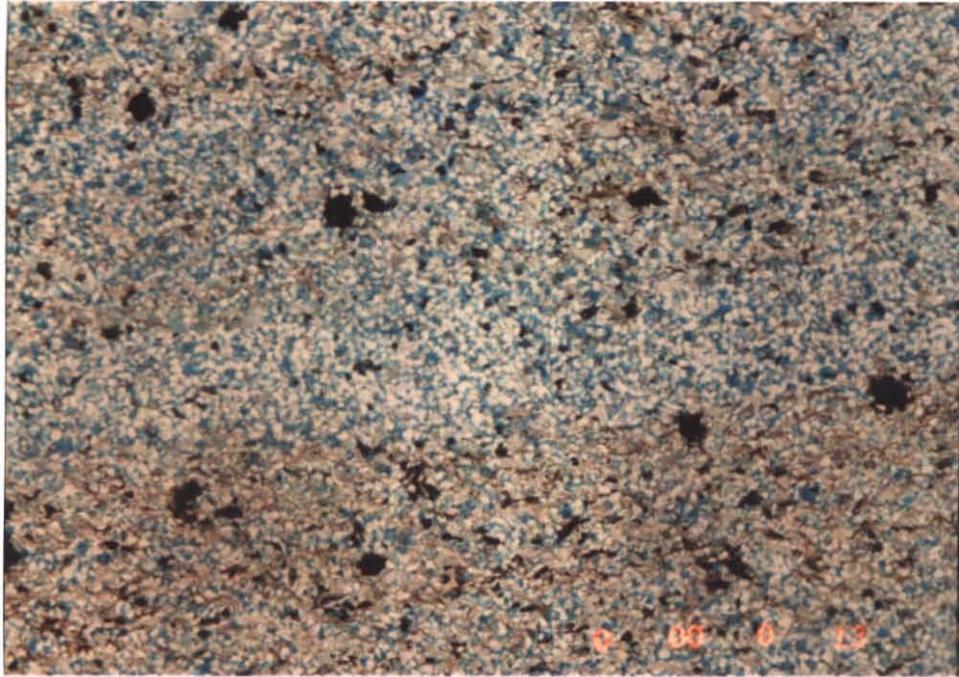
Bass 6414
lower N. aspers

FIGURE 32A

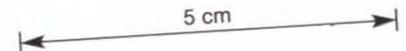
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#235



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Very fine grained, well sorted, subangular silt to sandstone. Scattered brownish organic grains and staining. Pressure solution of silica between quartz grains destroyed intergranular porosity. Dissolution of feldspar and rock fragment created porosity estimated to be 15-20% with low permeability due to fine pore size and to authigenic kaolinite infilling dissolution pores. Numerous mica flake grains. Porosity in the thin section photograph is shown in blue.

147111

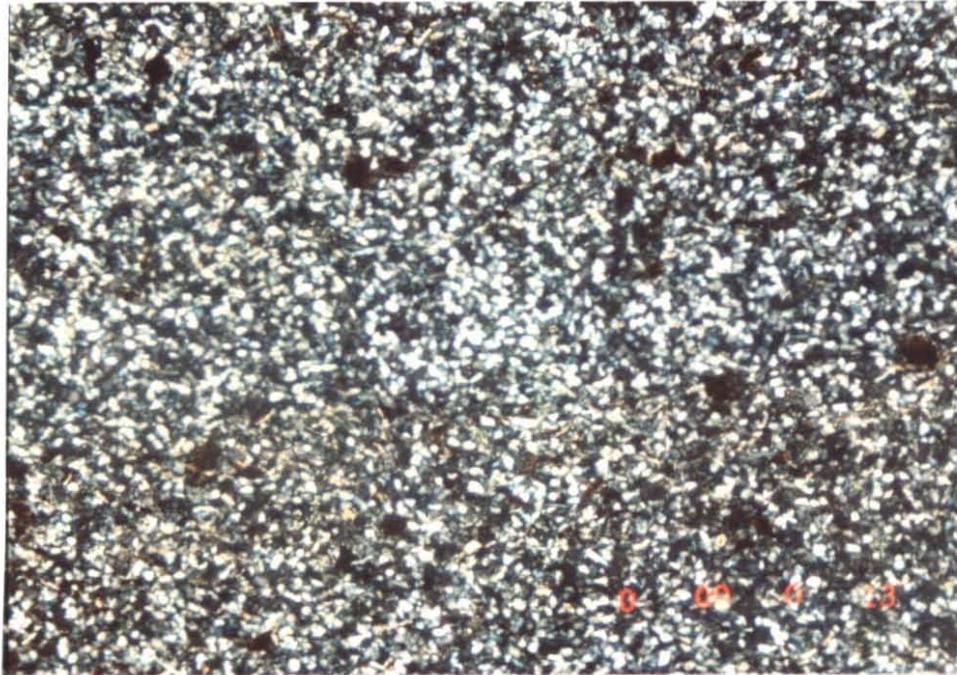
Bass 614
Lower N. apex

FIGURE 32B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#235



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Very fine grained, well sorted, subangular silt to sandstone. Scattered brownish organic grains and staining. Pressure solution of silica between quartz grains destroyed intergranular porosity. Dissolution of feldspar and rock fragment created porosity estimated to be 15-20% with low permeability due to fine pore size and to authigenic kaolinite infilling dissolution pores. Numerous mica flake grains. Porosity in the thin section photograph is shown in blue.

147112

Bassi 6420

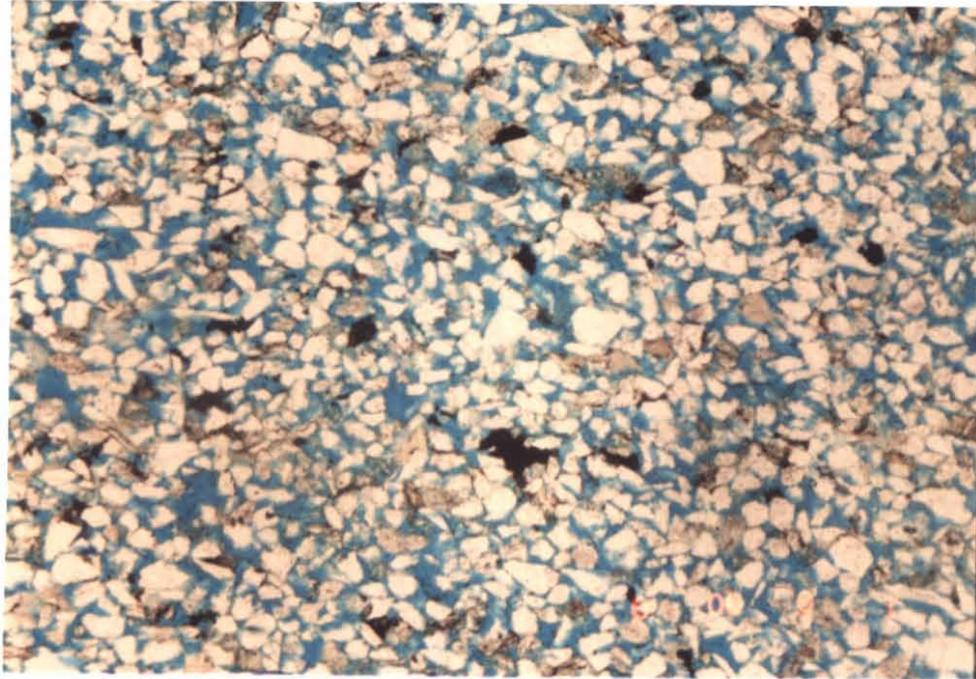
Lower N. cretaceous

FIGURE 33A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#238



THIN SECTION PHOTO
40X

5 cm

THIN SECTION DESCRIPTION

Very fine grained, well sorted, subangular silt to sandstone. Scattered brownish organic grains and staining. Pressure solution of silica between quartz grains destroyed intergranular porosity. Dissolution of feldspar and rock fragment created porosity estimated to be 20%+ with low permeability due to fine pore size and to authigenic kaolinite infilling dissolution pores. Numerous mica flake grains. Porosity in the thin section photograph is shown in blue.

147113

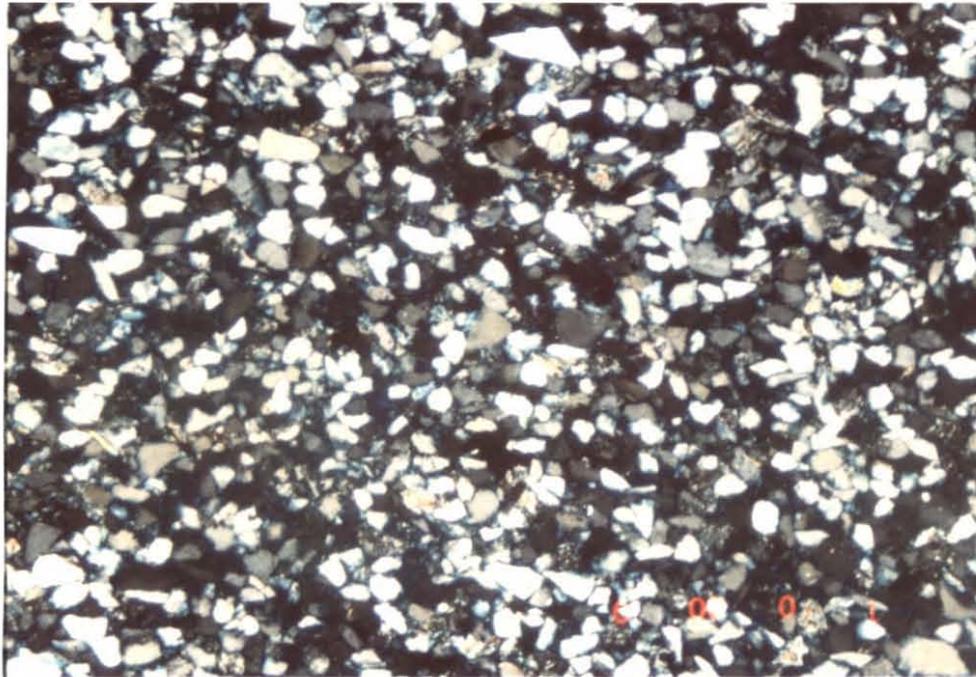
Bassi 6020
Lower N. aspinus

FIGURE 33B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#238



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Very fine grained, well sorted, subangular silt to sandstone. Scattered brownish organic grains and staining. Pressure solution of silica between quartz grains destroyed intergranular porosity. Dissolution of feldspar and rock fragment created porosity estimated to be 20%+ with low permeability due to fine pore size and to authigenic kaolinite infilling dissolution pores. Numerous mica flake grains. Porosity in the thin section photograph is shown in blue.

147114

Bass 3 S328

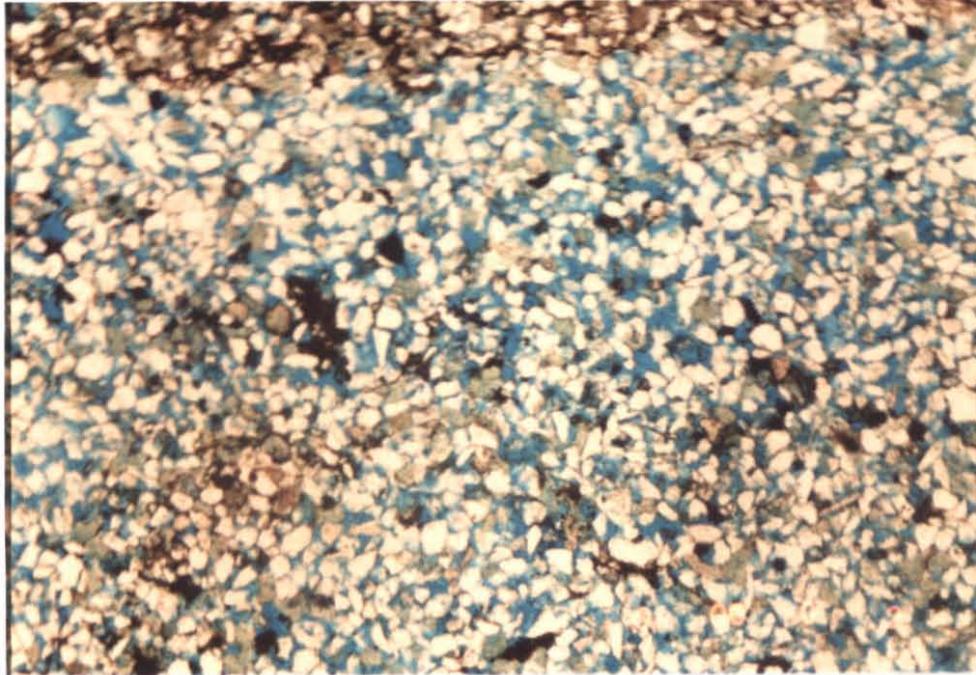
Middle N. aspluv

FIGURE 34A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#246



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Very fine grained, well sorted, subangular silt to sandstone. Scattered brownish organic grains and staining. Pressure solution of silica between quartz grains destroyed intergranular porosity. Dissolution of feldspar and rock fragment created porosity estimated to be 15-20% with low permeability due to fine pore size and to authigenic kaolinite infilling dissolution pores. Numerous mica flake grains. Porosity in the thin section photograph is shown in blue.

147115

Bass 3 5328

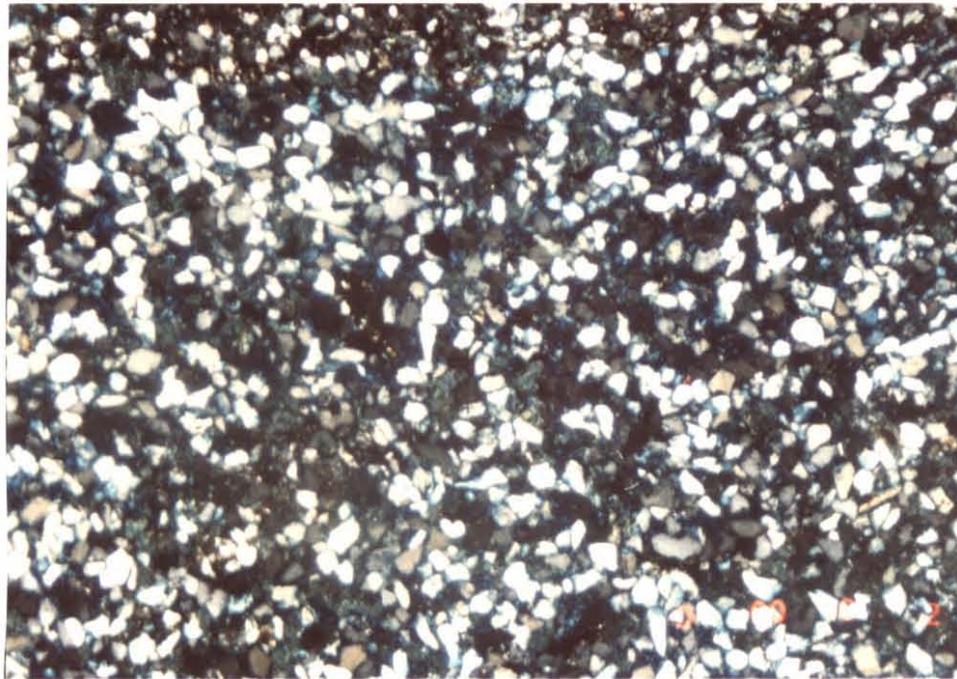
Middle N. = spurs

FIGURE 34B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#246



THIN SECTION PHOTO
40X
X-NICOLS



THIN SECTION DESCRIPTION

Very fine grained, well sorted, subangular silt to sandstone. Scattered brownish organic grains and staining. Pressure solution of silica between quartz grains destroyed intergranular porosity. Dissolution of feldspar and rock fragment created porosity estimated to be 15-20% with low permeability due to fine pore size and to authigenic kaolinite infilling dissolution pores. Numerous mica flake grains. Porosity in the thin section photograph is shown in blue.

147116

Casuarina 6004

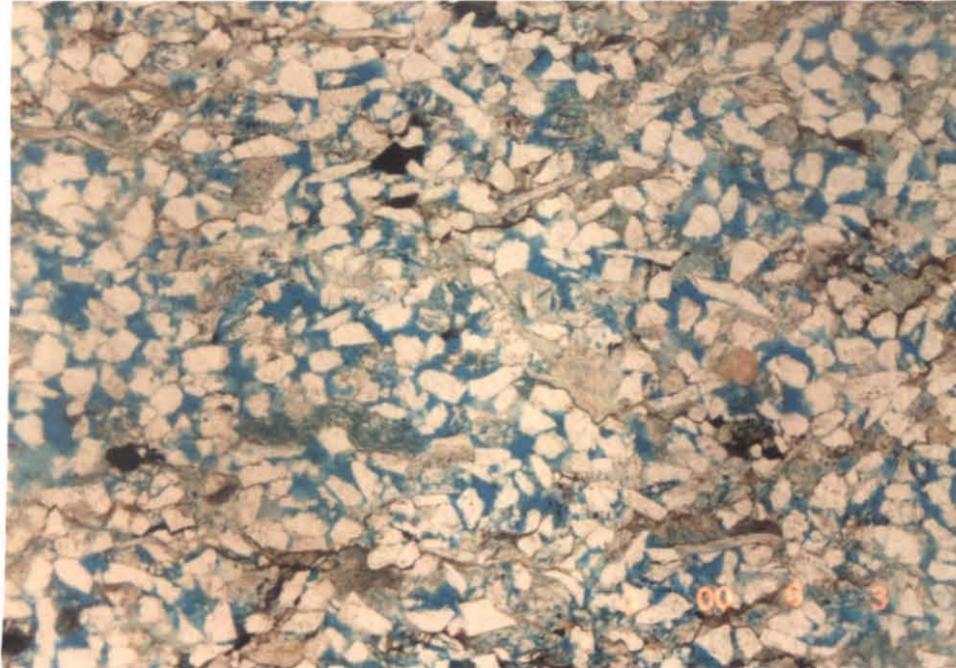
P. asperifolius

FIGURE 35A

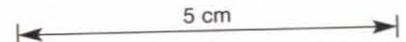
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#249



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Very fine grained, well sorted, subangular silt to sandstone. Scattered brownish organic grains and staining. Pressure solution of silica between quartz grains destroyed intergranular porosity. Dissolution of feldspar and rock fragment created porosity estimated to be 14-18% with low permeability due to fine pore size and to authigenic kaolinite infilling dissolution pores. Numerous mica flake grains. Porosity in the thin section photograph is shown in blue.

147117

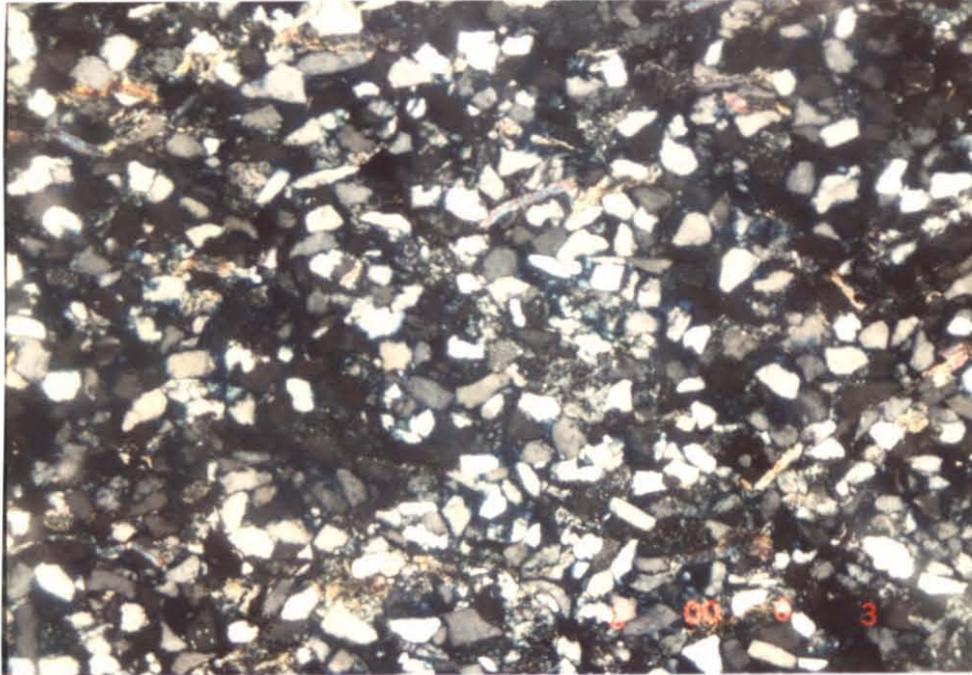
Casuarina Gully
Pasperopolis

FIGURE 35B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#249



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Very fine grained, well sorted, subangular silt to sandstone. Scattered brownish organic grains and staining. Pressure solution of silica between quartz grains destroyed intergranular porosity. Dissolution of feldspar and rock fragment created porosity estimated to be 14-18% with low permeability due to fine pore size and to authigenic kaolinite infilling dissolution pores. Numerous mica flake grains. Porosity in the thin section photograph is shown in blue.

147118

Cement 6010

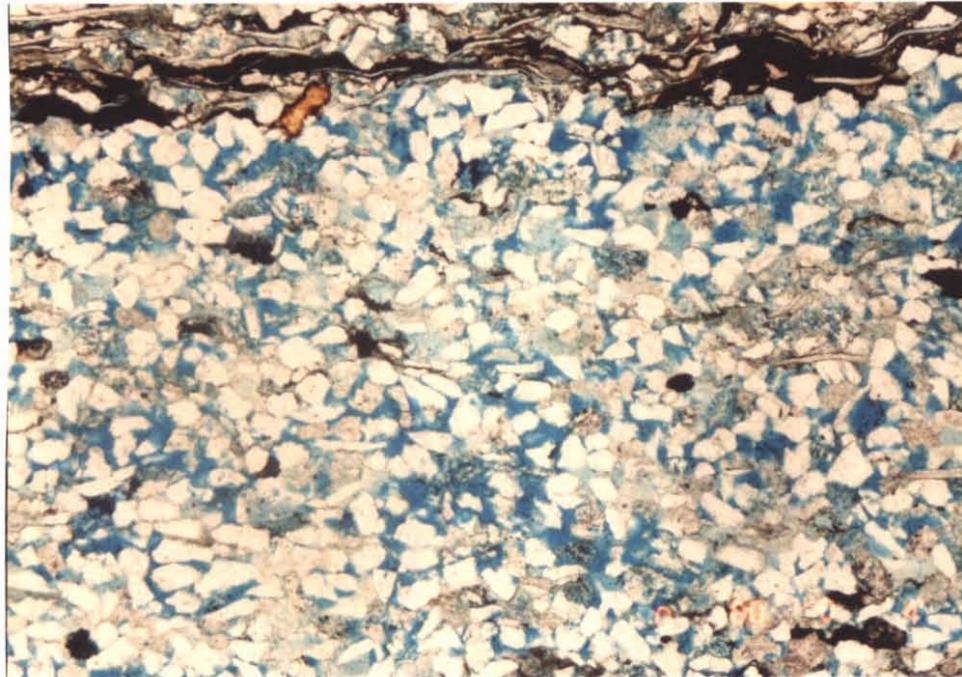
P. asperopolus

FIGURE 36A

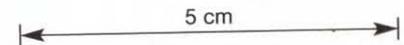
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#250



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Fine grained, subangular, fair to well sorted sandstone. Streaks of thin bedded brown organic matter containing some disseminated siderite. Scattered hematite staining. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created good to excellent porosity now partially infilled with authigenic kaolinite reducing pore size and permeability. Numerous mica flake oriented parallel to thin bedding. Numerous metamorphic rock fragment grains. Estimated visible porosity is 14-18% with low permeability. Porosity in the thin section photograph is shown in blue.

147119

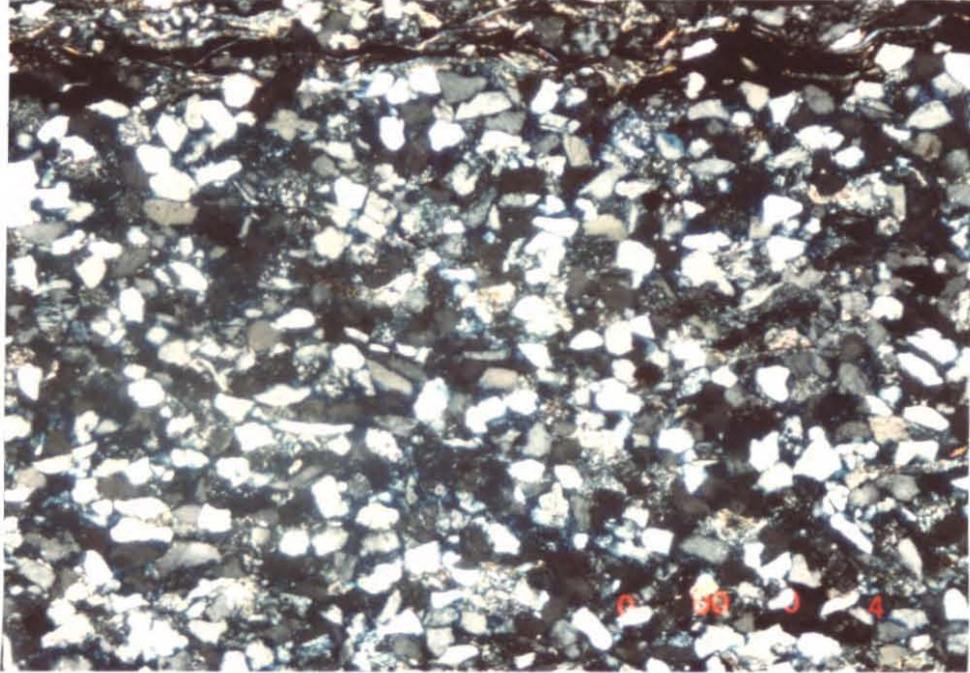
Carnarvon 6010
P. asperulus

FIGURE 36B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#250



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Fine grained, subangular, fair to well sorted sandstone. Streaks of thin bedded brown organic matter containing some disseminated siderite. Scattered hematite staining. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created good to excellent porosity now partially infilled with authigenic kaolinite reducing pore size and permeability. Numerous mica flake oriented parallel to thin bedding. Numerous metamorphic rock fragment grains. Estimated visible porosity is 14-18% with low permeability. Porosity in the thin section photograph is shown in blue.

147120

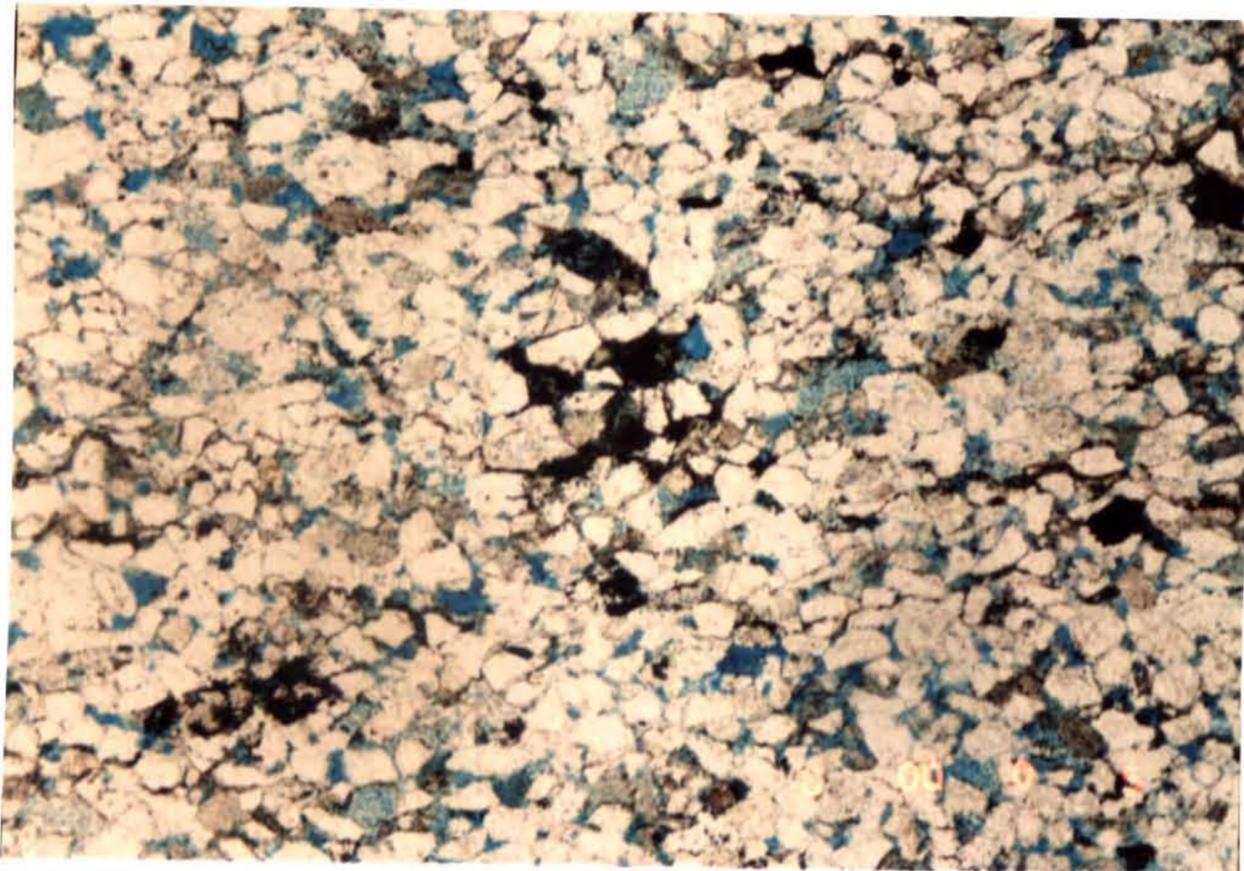
Casuarina 9106
Lower M. diversus

FIGURE 37A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#255



THIN SECTION PHOTO
40X

5 cm

THIN SECTION DESCRIPTION

Fine grained, well sorted, subangular sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 12-16%. Authigenic kaolinite is infilling some dissolution porosity. Fine dark stained siderite crystals outline some grains and infill some pores. Some stylolitic streaks of brown organic matter. Numerous rock fragment grains. Porosity in the thin section photograph is shown in blue.

147121

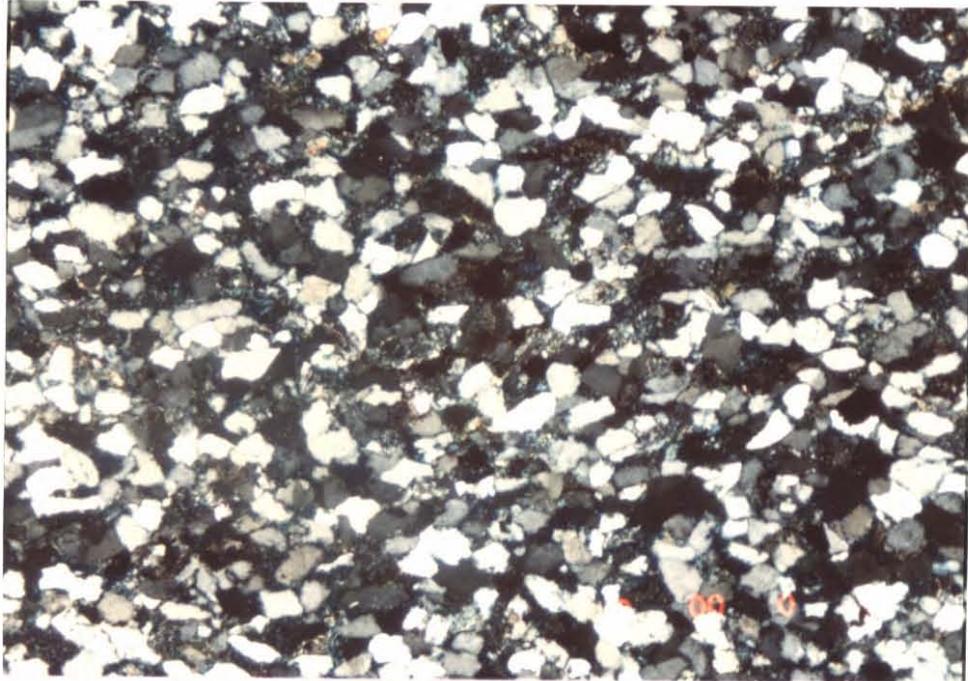
Cosmoant 9106
Lower N. diversus

FIGURE 37B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#255



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Fine grained, well sorted, subangular sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 12-16%. Authigenic kaolinite is infilling some dissolution porosity. Fine dark stained siderite crystals outline some grains and infill some pores. Some stylolitic streaks of brown organic matter. Numerous rock fragment grains. Porosity in the thin section photograph is shown in blue.

147122

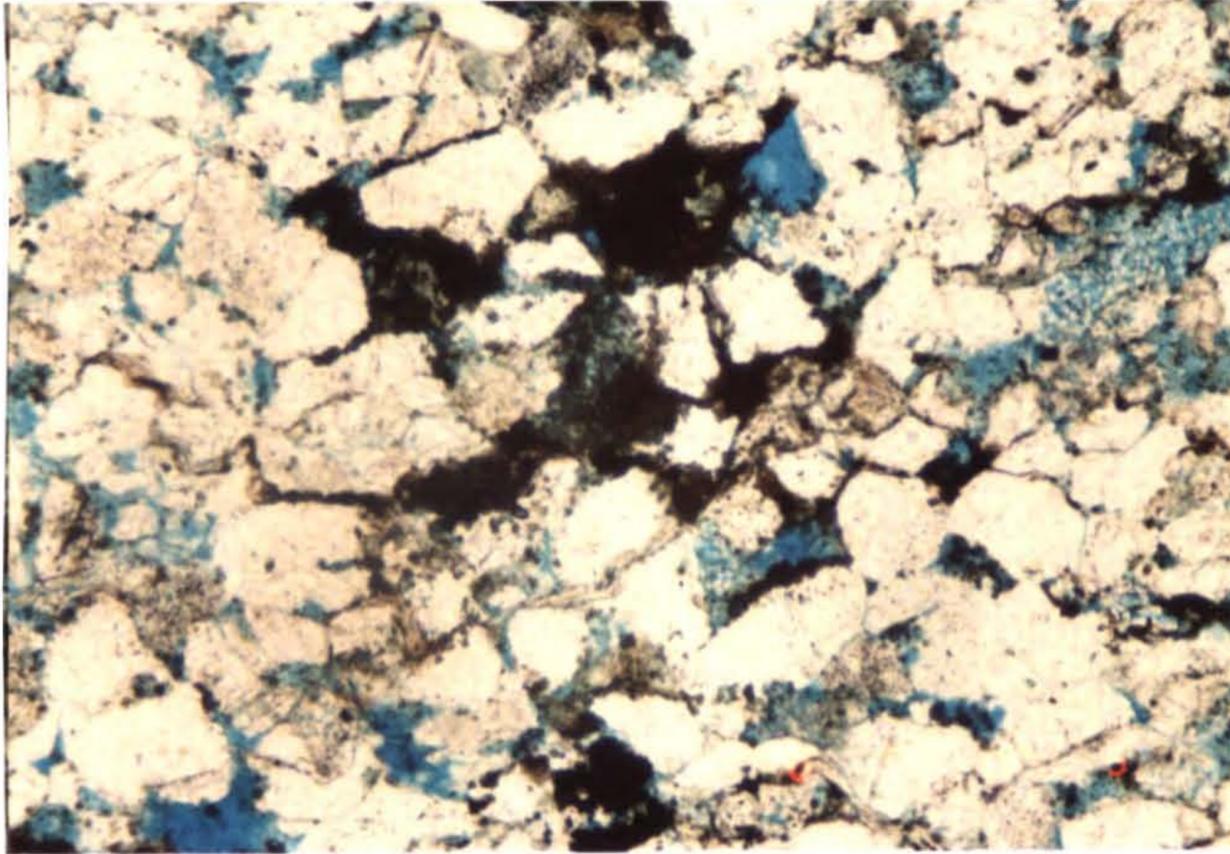
Comment 9106
Lower M division

FIGURE 37D

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#255



THIN SECTION PHOTO
100X

5 cm

THIN SECTION DESCRIPTION

Fine grained, well sorted, subangular sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 12-16%. Authigenic kaolinite is infilling some dissolution porosity. Fine dark stained siderite crystals outline some grains and infill some pores. Some stylolitic streaks of brown organic matter. Numerous rock fragment grains. Porosity in the thin section photograph is shown in blue.

147123

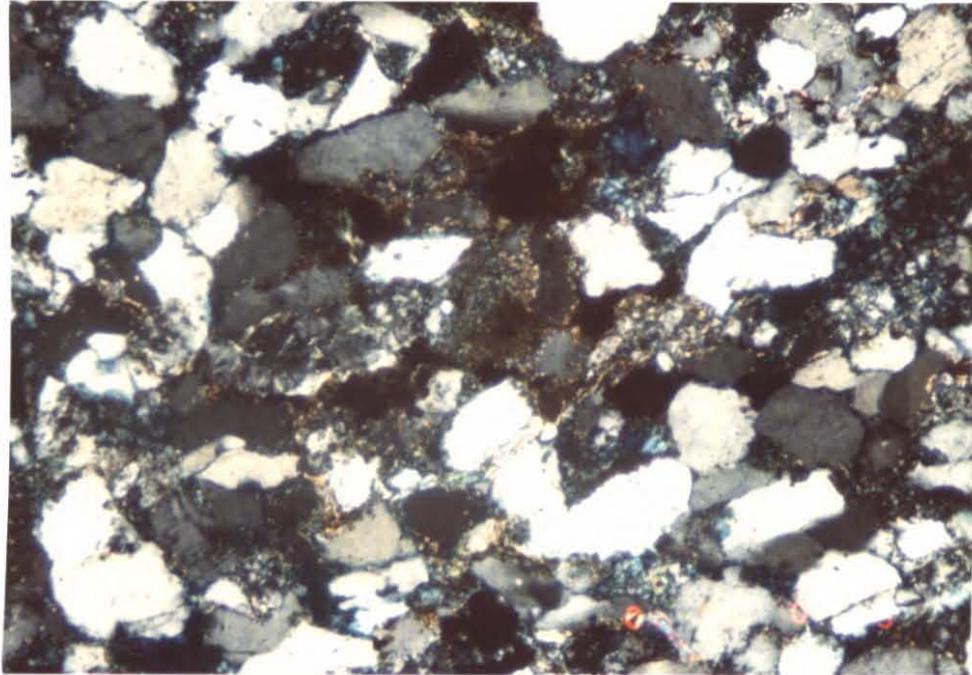
Casuarina 9106
Lower M diversus

FIGURE 37E

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#255



THIN SECTION PHOTO
100X
X-NICOLS



THIN SECTION DESCRIPTION

Fine grained, well sorted, subangular sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created porosity estimated to be 12-16%. Authigenic kaolinite is infilling some dissolution porosity. Fine dark stained siderite crystals outline some grains and infill some pores. Some stylolitic streaks of brown organic matter. Numerous rock fragment grains. Porosity in the thin section photograph is shown in blue.

147124

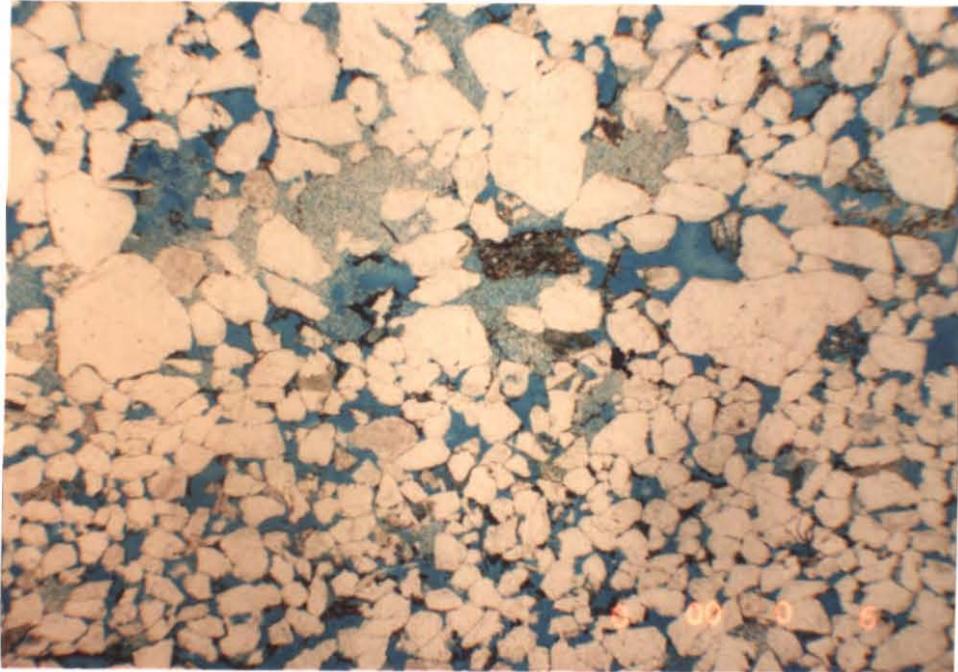
Dowden 7690
Lower M. diversus

FIGURE 38A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#262



THIN SECTION PHOTO
20X

5 cm

THIN SECTION DESCRIPTION

Thin bedded, subrounded to subangular, well sorted streaks of coarse grained sand interbedded with thin beds of fine grained sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar, rock fragments and carbonate has created good intergranular porosity estimated to be 14-18%. Authigenic kaolinite has infilled some feldspar and rock fragment dissolution porosity. Some organic (?) staining surrounding dissolution pores. Scattered fine siderite crystals. A few scattered metamorphic rock fragments. Porosity in the thin section photograph is shown in blue.

147125

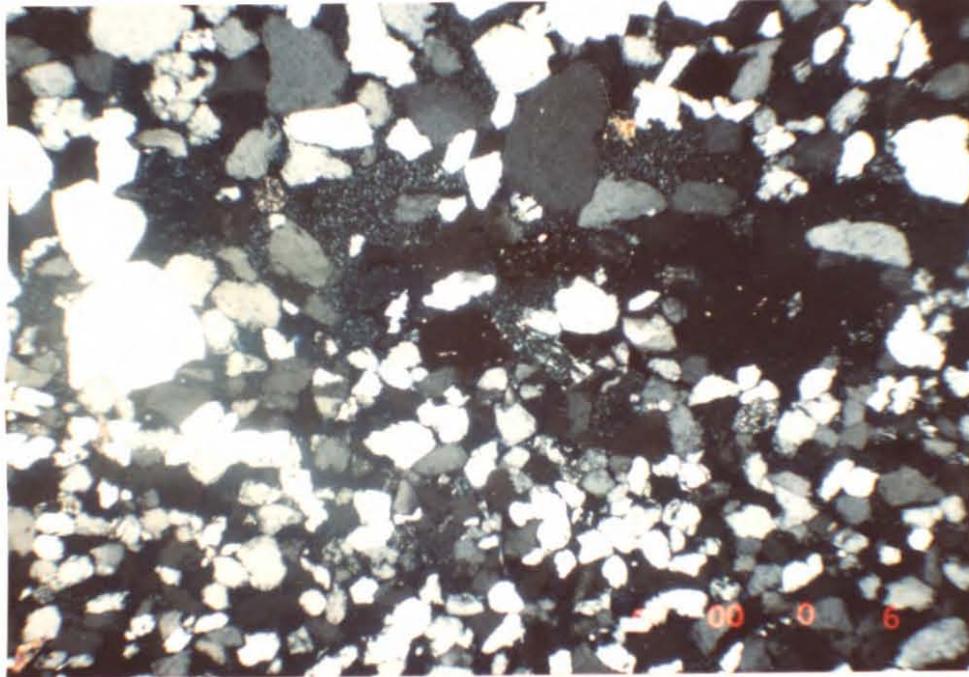
Danden 7690
Lower N. danden

FIGURE 38B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#262



THIN SECTION PHOTO
20X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Thin bedded, subrounded to subangular, well sorted streaks of coarse grained sand interbedded with thin beds of fine grained sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar, rock fragments and carbonate has created good intergranular porosity estimated to be 14-18%. Authigenic kaolinite has infilled some feldspar and rock fragment dissolution porosity. Some organic (?) staining surrounding dissolution pores. Scattered fine siderite crystals. A few scattered metamorphic rock fragments. Porosity in the thin section photograph is shown in blue.

147126

Danden 7706

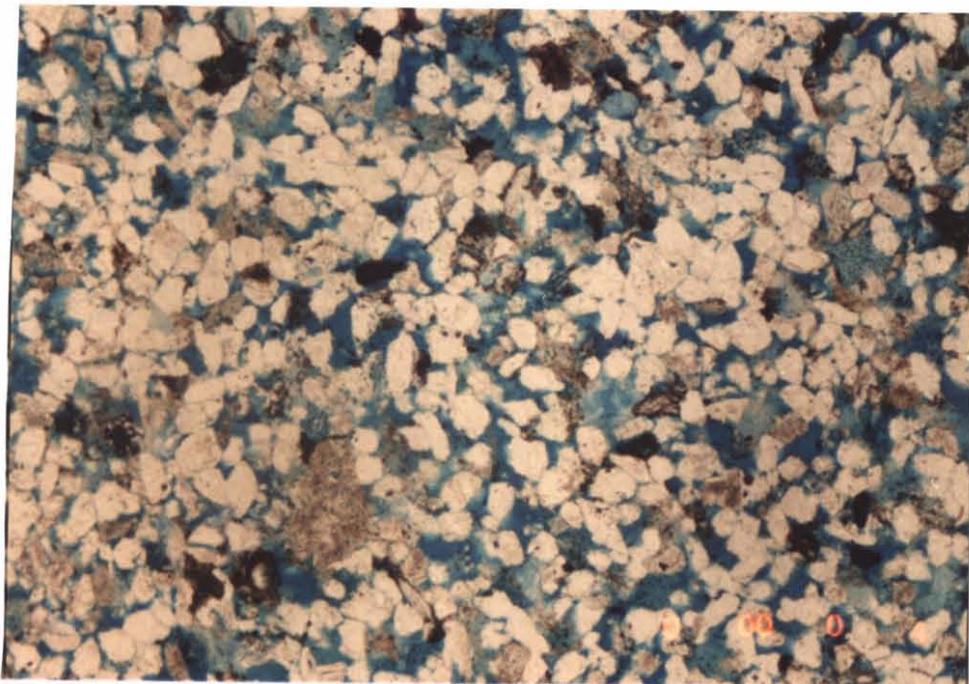
Lower M. diorssus

FIGURE 39A

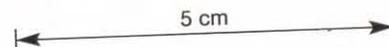
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#270



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Very fine grained, well sorted, subangular silt to sandstone. Scattered brownish organic grains and staining. Pressure solution of silica between quartz grains destroyed intergranular porosity. Dissolution of feldspar and rock fragment created porosity estimated to be 15-20% with low permeability due to fine pore size and to authigenic kaolinite infilling dissolution pores. Numerous mica flake grains. Porosity in the thin section photograph is shown in blue.

147127

Danden 7706

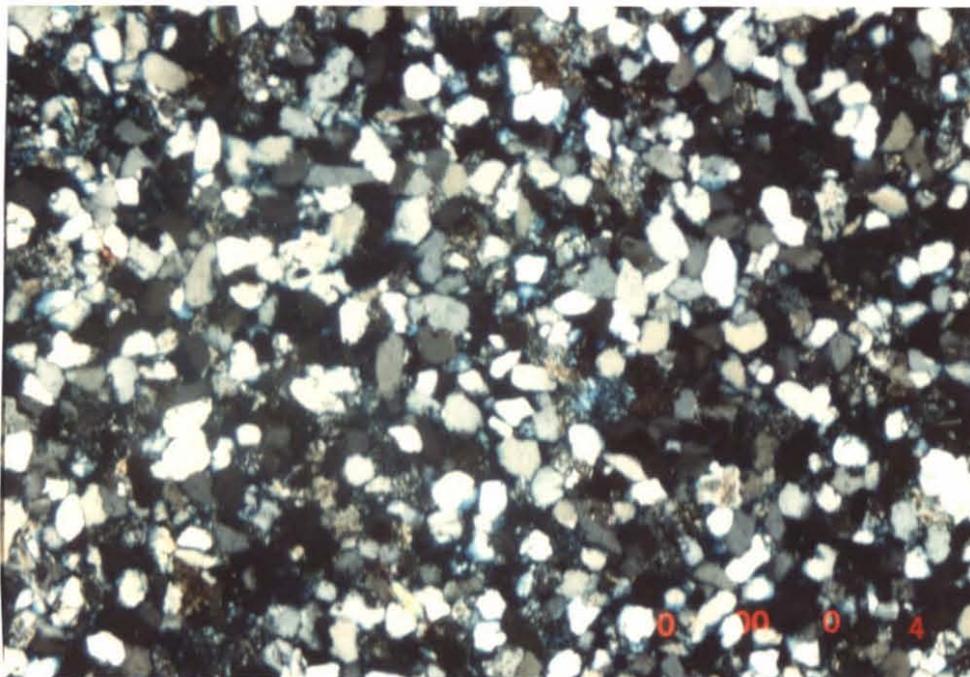
Lower M. diversus

FIGURE 39B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#270



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Very fine grained, well sorted, subangular silt to sandstone. Scattered brownish organic grains and staining. Pressure solution of silica between quartz grains destroyed intergranular porosity. Dissolution of feldspar and rock fragment created porosity estimated to be 15-20% with low permeability due to fine pore size and to authigenic kaolinite infilling dissolution pores. Numerous mica flake grains. Porosity in the thin section photograph is shown in blue.

147128

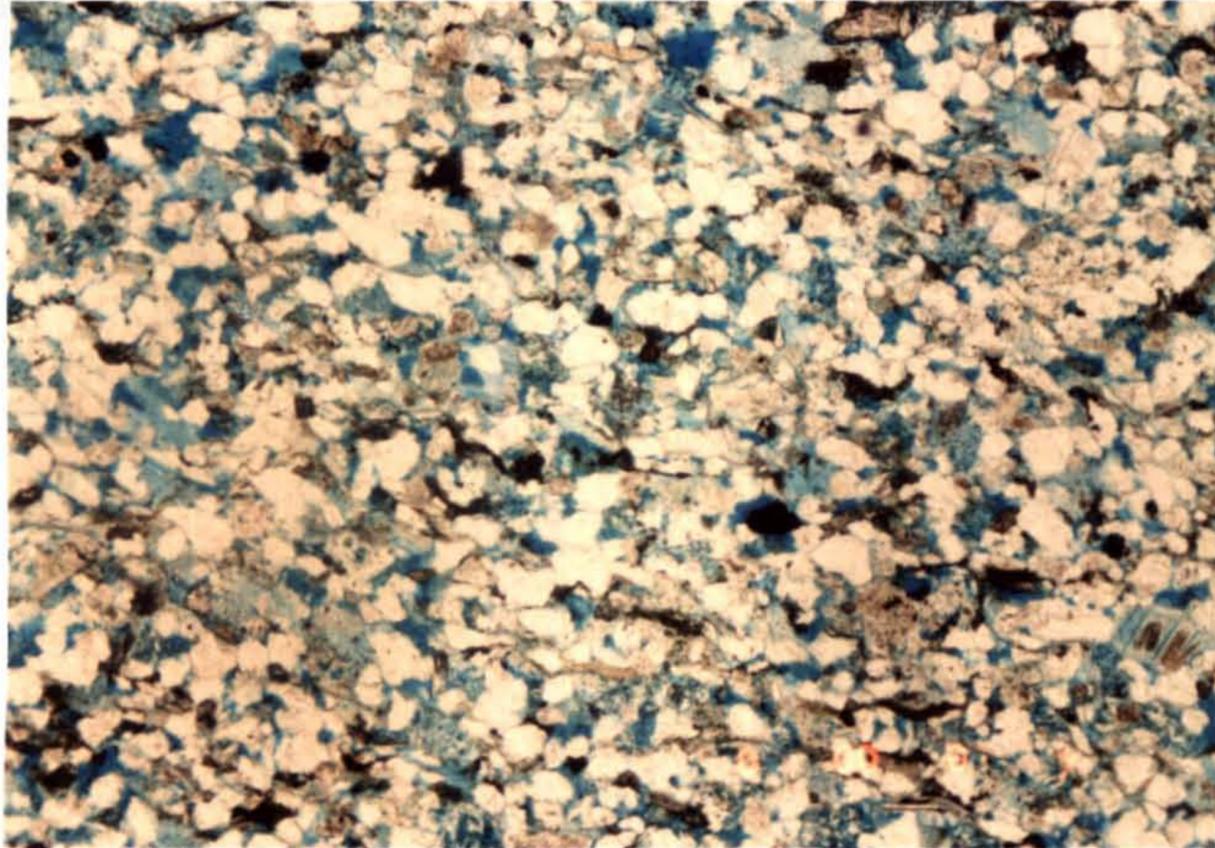
Dowden 7716
Lower M. diversus

FIGURE 40A

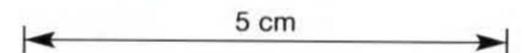
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#275



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Very fine grained, subangular, fair to well sorted sandstone. Streaks of thin bedded brown organic matter containing some disseminated siderite. Scattered hematite staining. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created good to excellent porosity now partially infilled with authigenic kaolinite reducing pore size and permeability. Numerous mica flake oriented parallel to thin bedding. Numerous metamorphic rock fragment grains. Estimated visible porosity is 14-18% with low permeability. Porosity in the thin section photograph is shown in blue.

147129

Dowden 7716

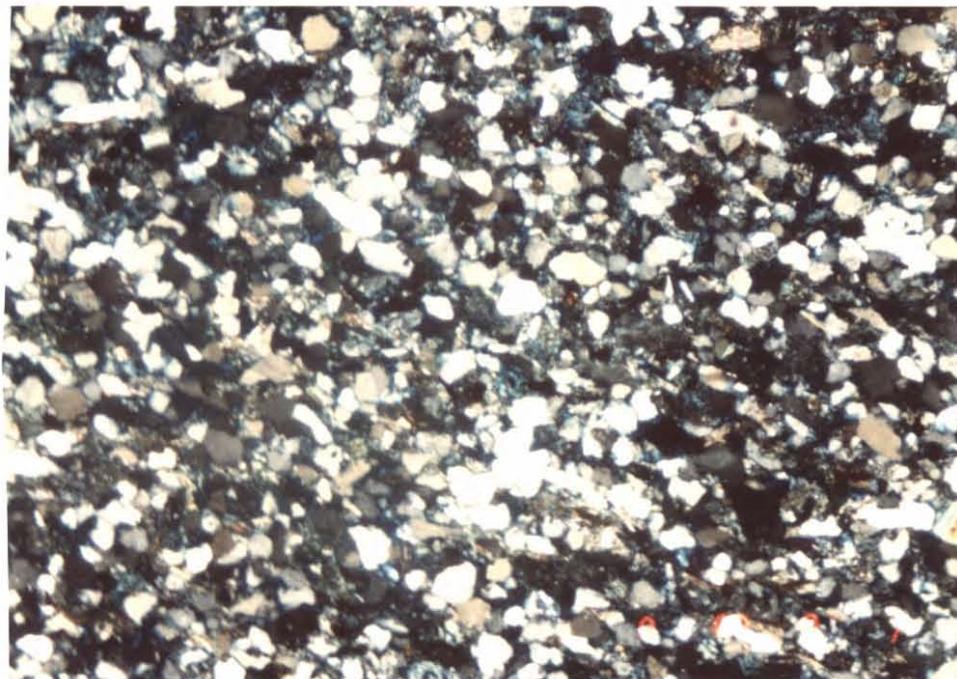
Lowe M. diversus

FIGURE 40B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#275



THIN SECTION PHOTO
40X
X-NICOLS



THIN SECTION DESCRIPTION

Very fine grained, subangular, fair to well sorted sandstone. Streaks of thin bedded brown organic matter containing some disseminated siderite. Scattered hematite staining. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created good to excellent porosity now partially infilled with authigenic kaolinite reducing pore size and permeability. Numerous mica flake oriented parallel to thin bedding. Numerous metamorphic rock fragment grains. Estimated visible porosity is 14-18% with low permeability. Porosity in the thin section photograph is shown in blue.

147130

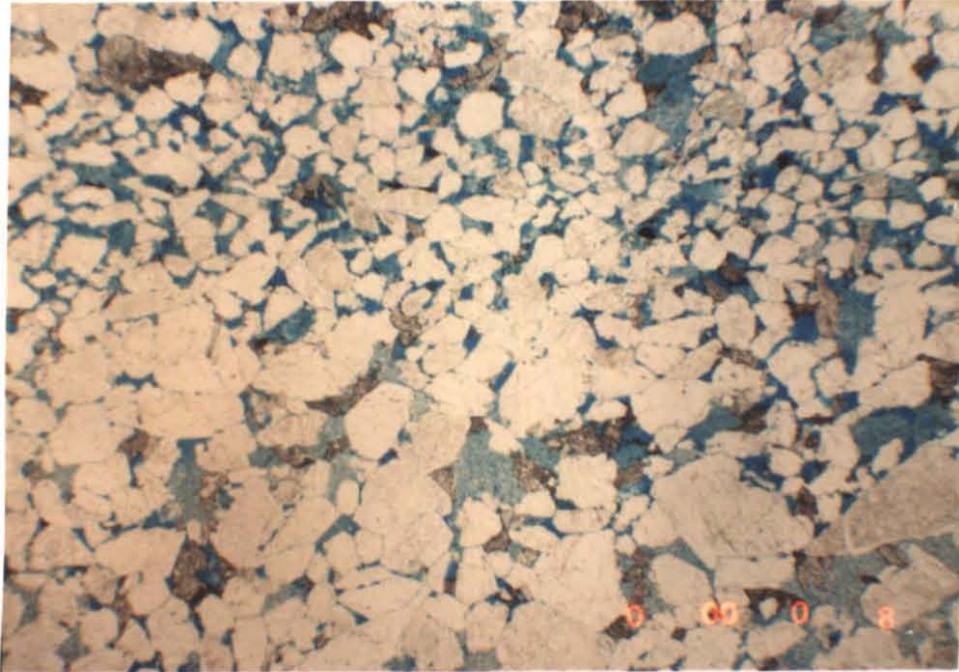
Box 7731
Lower M. division

FIGURE 41A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#280



THIN SECTION PHOTO
20X

5 cm

THIN SECTION DESCRIPTION

Thin bedded, subrounded to subangular, well sorted streaks of coarse grained sand interbedded with thin beds of fine grained sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar, rock fragments and carbonate has created good intergranular porosity estimated to be 14-18%. Authigenic kaolinite has infilled some feldspar and rock fragment dissolution porosity. Some organic (?) staining surrounding dissolution pores. Siderite replacing grains and infilling dissolution pores. A few scattered metamorphic rock fragments. Porosity in the thin section photograph is shown in blue.

147131

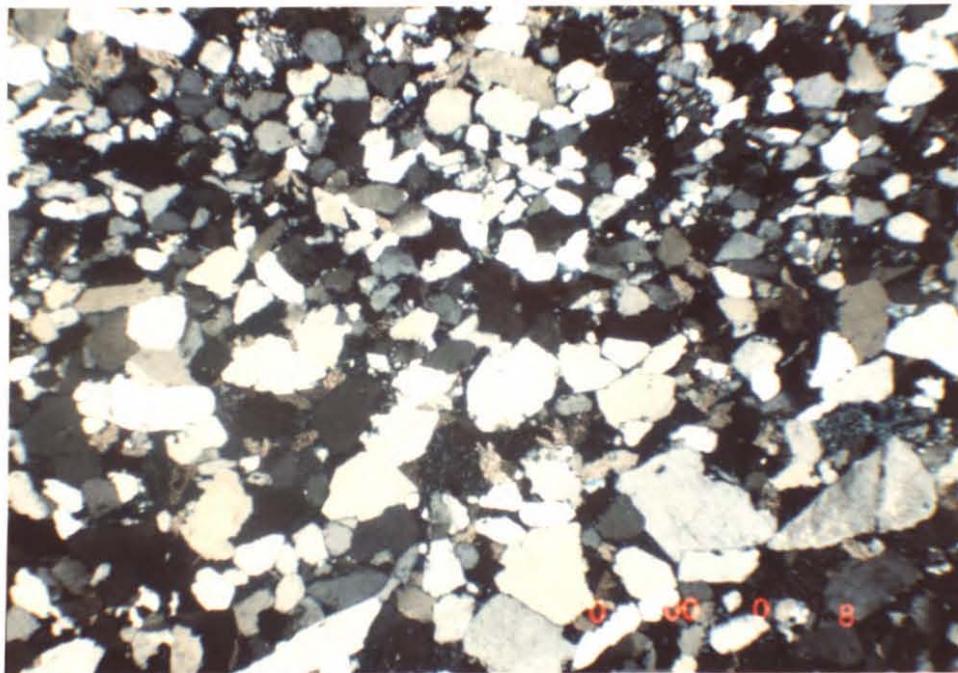
Borden 7731
Lower M. diversus

FIGURE 41B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#280



THIN SECTION PHOTO
20X
X-NICOLS



THIN SECTION DESCRIPTION

Thin bedded, subrounded to subangular, well sorted streaks of coarse grained sand interbedded with thin beds of fine grained sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar, rock fragments and carbonate has created good intergranular porosity estimated to be 14-18%. Authigenic kaolinite has infilled some feldspar and rock fragment dissolution porosity. Some organic (?) staining surrounding dissolution pores. Siderite replacing grains and infilling dissolution pores. A few scattered metamorphic rock fragments. Porosity in the thin section photograph is shown in blue.

147132

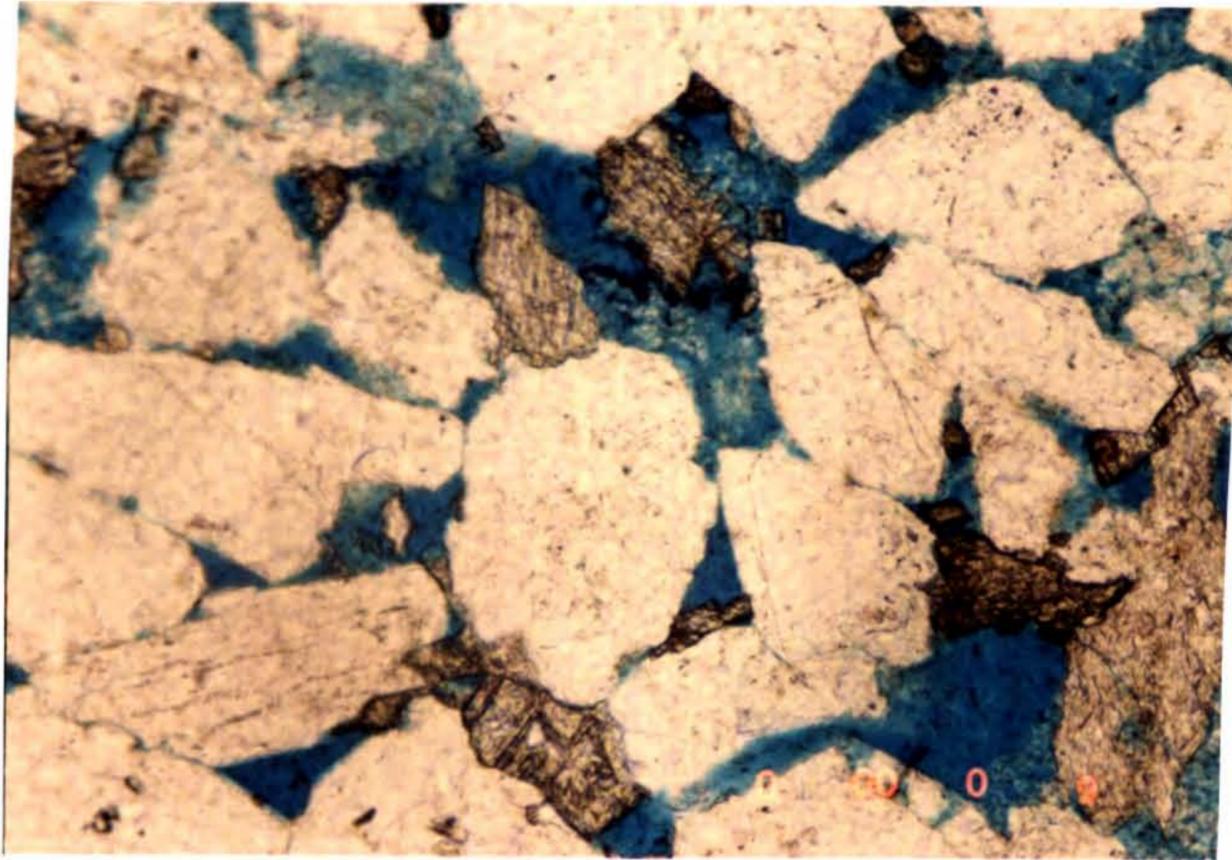
Zone 7731
Lower N. diversus

FIGURE 41C

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#280



THIN SECTION PHOTO
100X

5 cm

THIN SECTION DESCRIPTION

Thin bedded, subrounded to subangular, well sorted streaks of coarse grained sand interbedded with thin beds of fine grained sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar, rock fragments and carbonate has created good intergranular porosity estimated to be 14-18%. Authigenic kaolinite has infilled some feldspar and rock fragment dissolution porosity. Some organic (?) staining surrounding dissolution pores. Siderite replacing grains and infilling dissolution pores. A few scattered metamorphic rock fragments. Porosity in the thin section photograph is shown in blue.

147133

Dander 7731
Lower M. diversus

FIGURE 41D

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#280



THIN SECTION PHOTO
100X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Thin bedded, subrounded to subangular, well sorted streaks of coarse grained sand interbedded with thin beds of fine grained sandstone. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar, rock fragments and carbonate has created good intergranular porosity estimated to be 14-18%. Authigenic kaolinite has infilled some feldspar and rock fragment dissolution porosity. Some organic (?) staining surrounding dissolution pores. Siderite replacing grains and infilling dissolution pores. A few scattered metamorphic rock fragments. Porosity in the thin section photograph is shown in blue.

147134

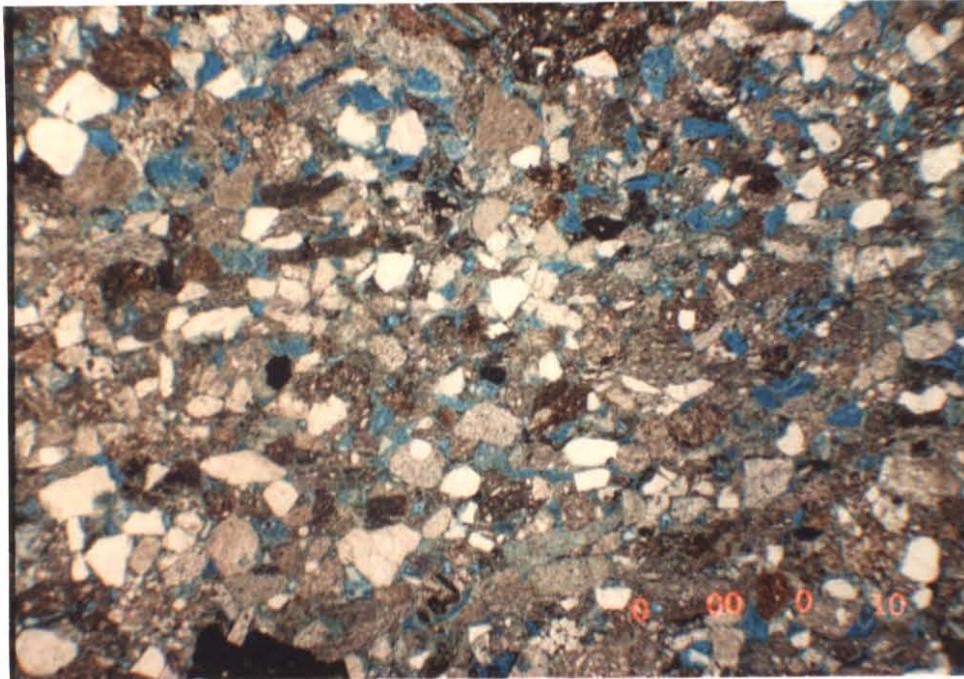
Jurraon 5562
C. pederns

FIGURE 42A

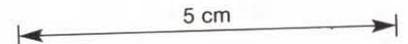
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#281



THIN SECTION PHOTO
20X



THIN SECTION DESCRIPTION

Fine grained, fair to well sorted, subangular sandstone. Approximately 10-20% quartz grains and 80-90% rock fragment grains from a metamorphic and metamorphosed sedimentary source. Numerous shale and shaley sand fragments. Some pressure has deformed incompetent shale grains. Some dissolution porosity with minor intergranular pores. Pores are lined with authigenic chlorite coatings. Dissolution occurred after authigenic chlorite coated grains. Some grains of black bitumen. Estimated visible porosity is 12-15%. Porosity in the thin section photograph is shown in blue.

147135

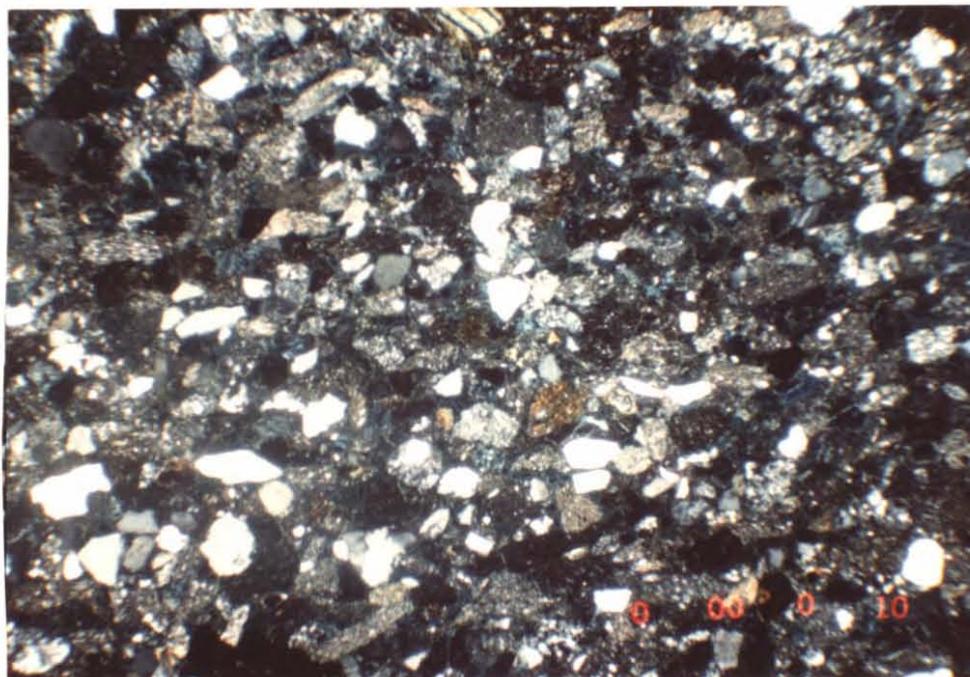
Dunroon 5562
C. paradoxus

FIGURE 42B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#281



THIN SECTION PHOTO
20X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Fine grained, fair to well sorted, subangular sandstone. Approximately 10-20% quartz grains and 80-90% rock fragment grains from a metamorphic and metamorphosed sedimentary source. Numerous shale and shaley sand fragments. Some pressure has deformed incompetent shale grains. Some dissolution porosity with minor intergranular pores. Pores are lined with authigenic chlorite coatings. Dissolution occurred after authigenic chlorite coated grains. Some grains of black bitumen. Estimated visible porosity is 12-15%. Porosity in the thin section photograph is shown in blue.

147136

Dutton 5562

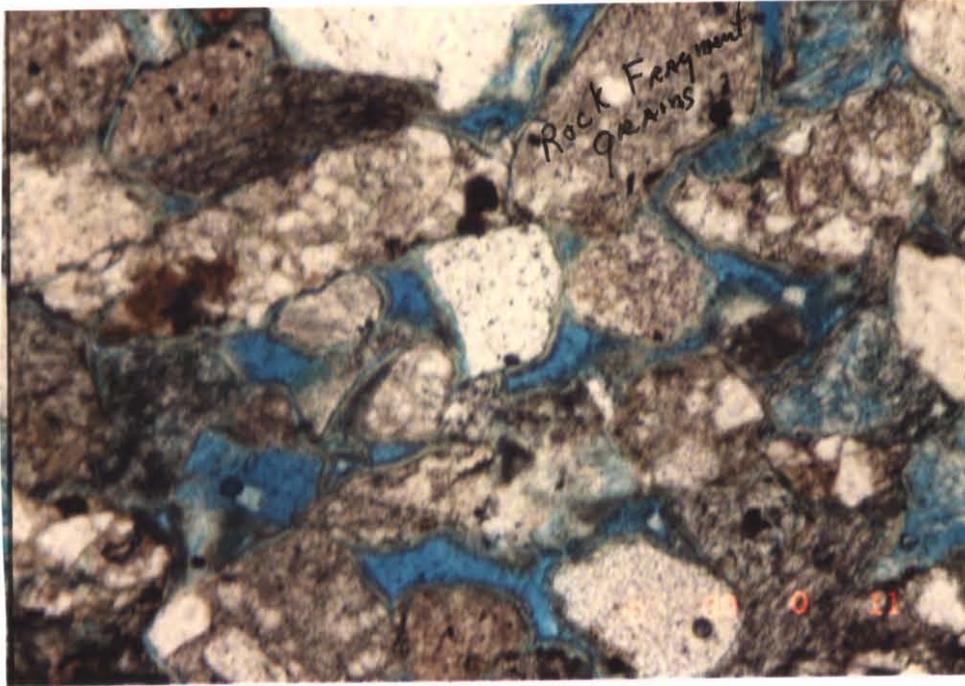
C. paradoxus

FIGURE 42C

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#281



THIN SECTION PHOTO
100X

5 cm

THIN SECTION DESCRIPTION

Fine grained, fair to well sorted, subangular sandstone. Approximately 10-20% quartz grains and 80-90% rock fragment grains from a metamorphic and metamorphosed sedimentary source. Numerous shale and shaley sand fragments. Some pressure has deformed incompetent shale grains. Some dissolution porosity with minor intergranular pores. Pores are lined with authigenic chlorite coatings. Dissolution occurred after authigenic chlorite coated grains. Some grains of black bitumen. Estimated visible porosity is 12-15%. Porosity in the thin section photograph is shown in blue.

147137

Dunoon 5562

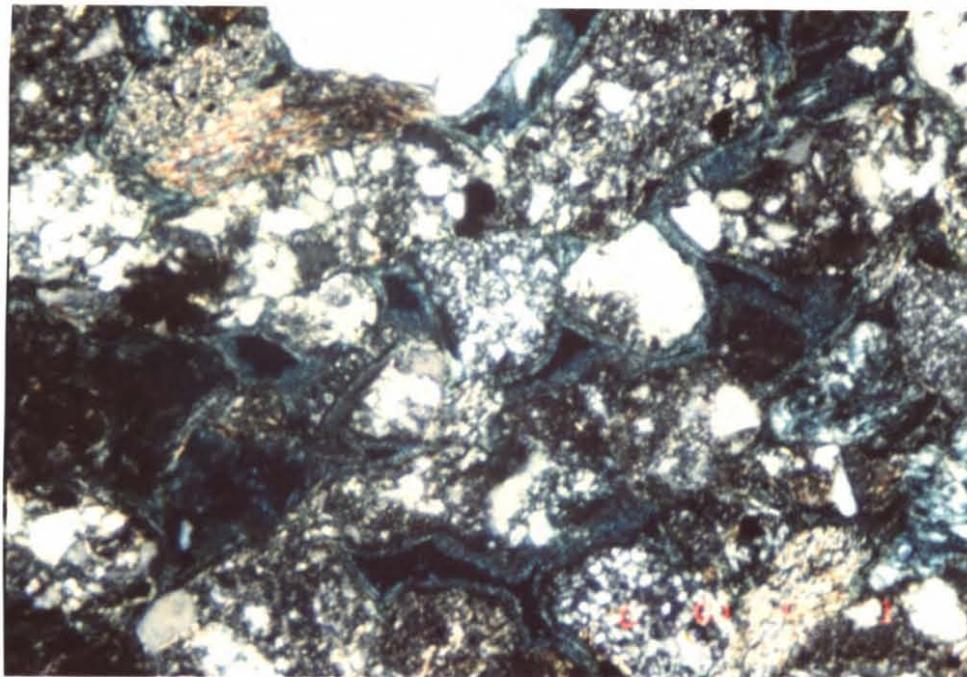
C. paradoxus

FIGURE 42D

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#281



THIN SECTION PHOTO
100X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

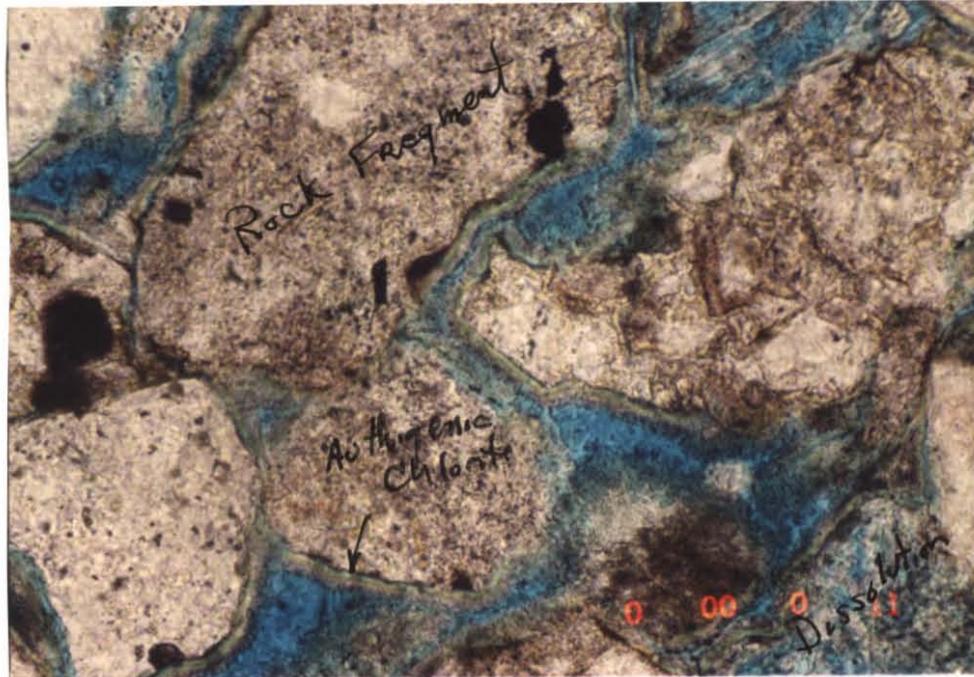
Fine grained, fair to well sorted, subangular sandstone. Approximately 10-20% quartz grains and 80-90% rock fragment grains from a metamorphic and metamorphosed sedimentary source. Numerous shale and shaley sand fragments. Some pressure has deformed incompetent shale grains. Some dissolution porosity with minor intergranular pores. Pores are lined with authigenic chlorite coatings. Dissolution occurred after authigenic chlorite coated grains. Some grains of black bitumen. Estimated visible porosity is 12-15%. Porosity in the thin section photograph is shown in blue.

FIGURE 42E

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#281



THIN SECTION PHOTO
200X

5 cm

THIN SECTION DESCRIPTION

Fine grained, fair to well sorted, subangular sandstone. Approximately 10-20% quartz grains and 80-90% rock fragment grains from a metamorphic and metamorphosed sedimentary source. Numerous shale and shaley sand fragments. Some pressure has deformed incompetent shale grains. Some dissolution porosity with minor intergranular pores. Pores are lined with authigenic chlorite coatings. Dissolution occurred after authigenic chlorite coated grains. Some grains of black bitumen. Estimated visible porosity is 12-15%. Porosity in the thin section photograph is shown in blue.

147139

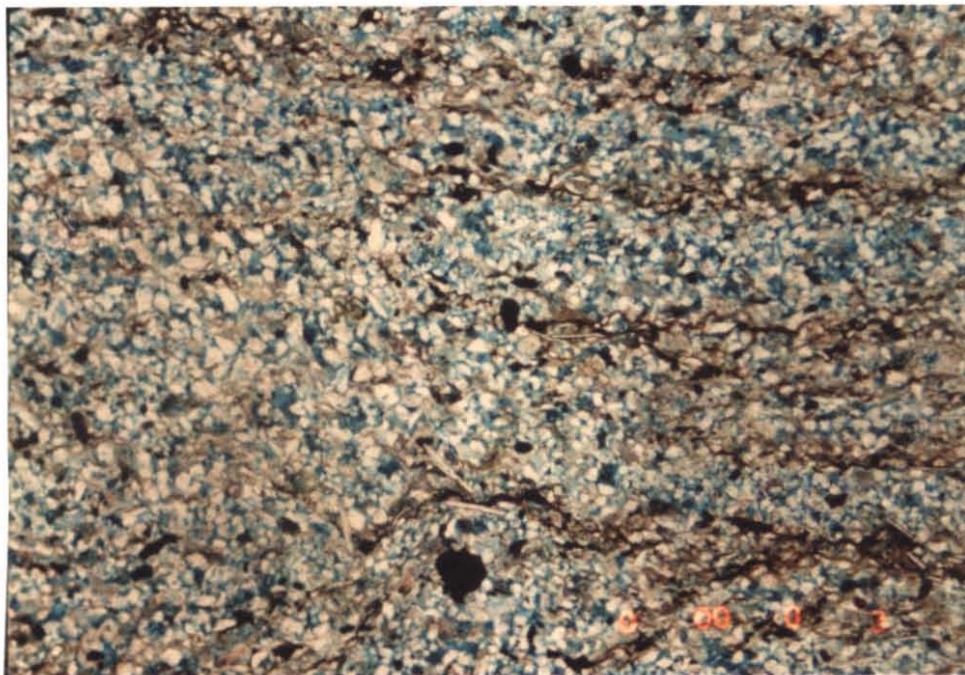
Nangkur 7407
Upper M. diversus

FIGURE 43A

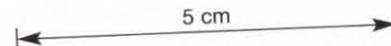
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#282



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Very fine grained, subangular, fair to well sorted sandstone. Streaks of thin bedded brown organic matter containing some disseminated siderite. Scattered hematite staining. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created good to excellent porosity now partially infilled with authigenic kaolinite reducing pore size and permeability. Numerous mica flake oriented parallel to thin bedding. Numerous metamorphic rock fragment grains. Estimated visible porosity is 12-15% with low permeability. Porosity in the thin section photograph is shown in blue.

147140

Nankero 7407

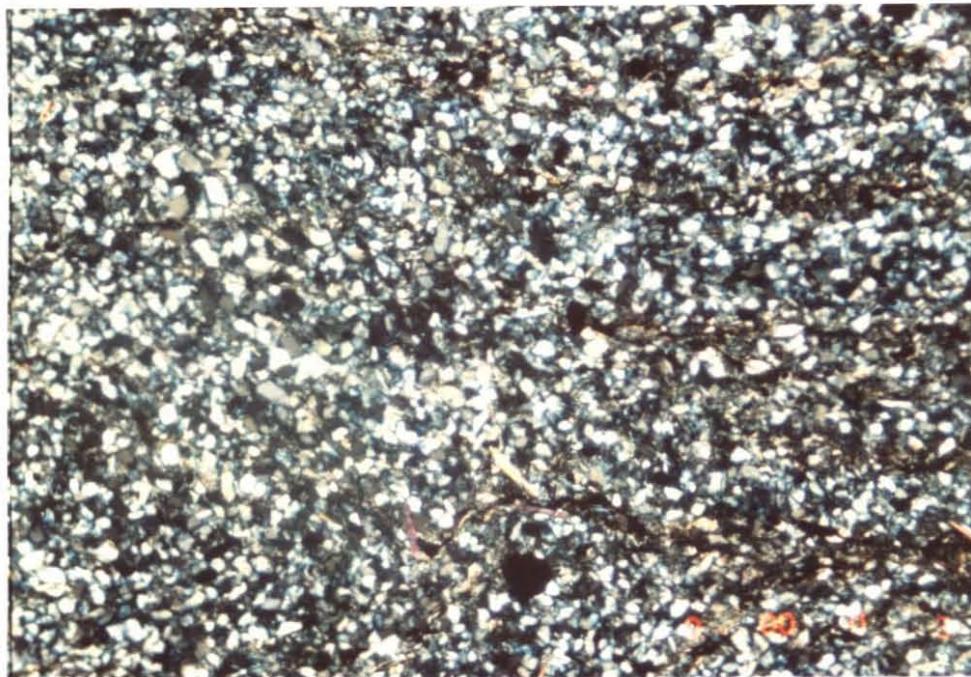
Upper M. Devonian

FIGURE 43B

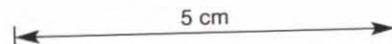
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#282



THIN SECTION PHOTO
40X
X-NICOLS



THIN SECTION DESCRIPTION

Very fine grained, subangular, fair to well sorted sandstone. Streaks of thin bedded brown organic matter containing some disseminated siderite. Scattered hematite staining. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created good to excellent porosity now partially infilled with authigenic kaolinite reducing pore size and permeability. Numerous mica flake oriented parallel to thin bedding. Numerous metamorphic rock fragment grains. Estimated visible porosity is 12-15% with low permeability. Porosity in the thin section photograph is shown in blue.

147141

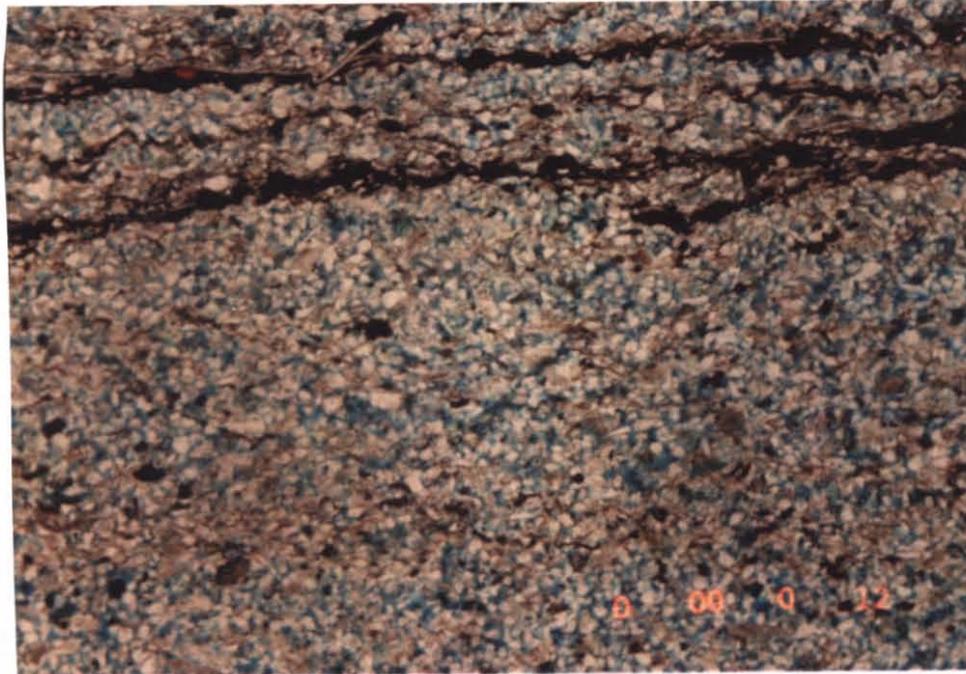
Newland 7413
Upper M. diversus

FIGURE 44A

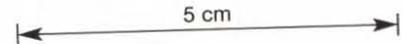
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#285



THIN SECTION PHOTO
40X



THIN SECTION DESCRIPTION

Very fine grained, subangular, fair to well sorted sandstone. Streaks of thin bedded brown organic matter containing some disseminated siderite. Scattered hematite staining. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created good to excellent porosity now partially infilled with authigenic kaolinite reducing pore size and permeability. Numerous mica flake oriented parallel to thin bedding. Numerous metamorphic rock fragment grains. Estimated visible porosity is 12-15% with low permeability. Porosity in the thin section photograph is shown in blue.

147142

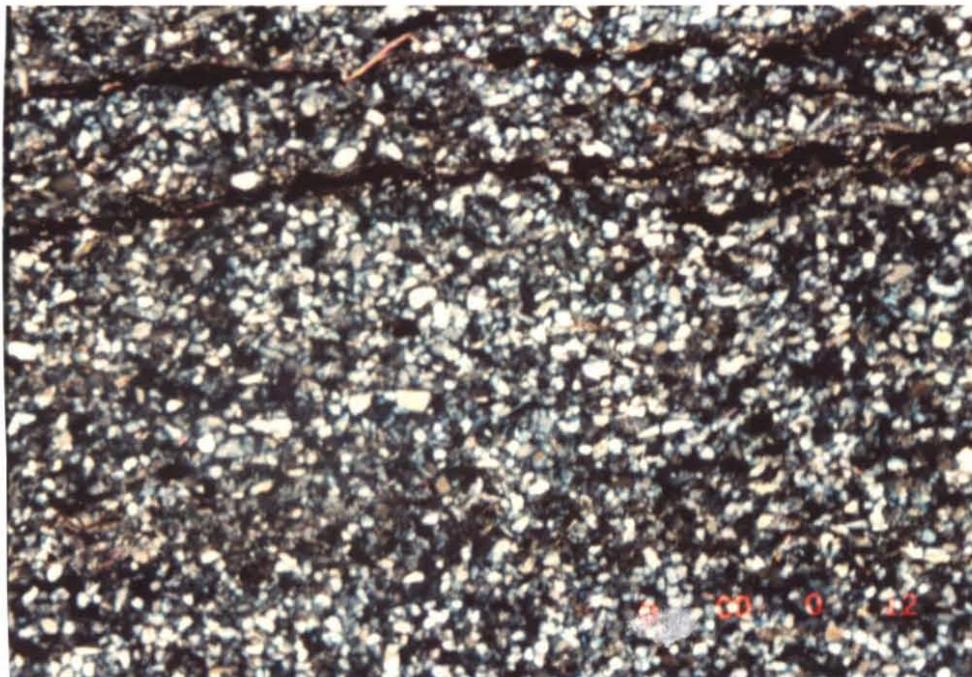
Nankana 7413
Upper M. diversus

FIGURE 44B

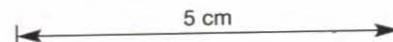
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#285



THIN SECTION PHOTO
40X
X-NICOLS



THIN SECTION DESCRIPTION

Very fine grained, subangular, fair to well sorted sandstone. Streaks of thin bedded brown organic matter containing some disseminated siderite. Scattered hematite staining. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created good to excellent porosity now partially infilled with authigenic kaolinite reducing pore size and permeability. Numerous mica flake oriented parallel to thin bedding. Numerous metamorphic rock fragment grains. Estimated visible porosity is 12-15% with low permeability. Porosity in the thin section photograph is shown in blue.

147143

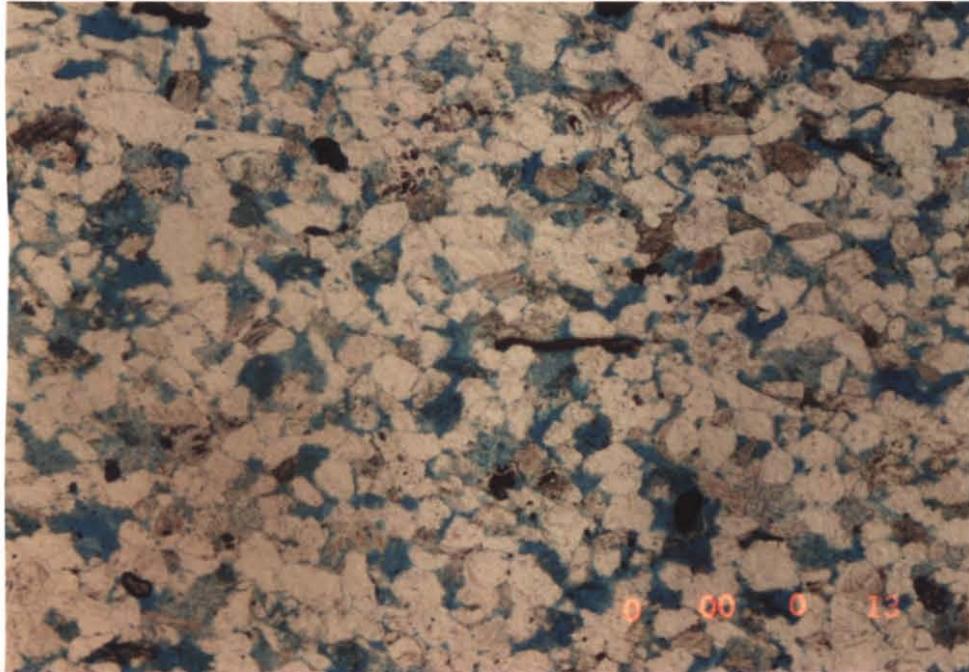
Narumba 9516
Lower M. diversus

FIGURE 45A

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#291



THIN SECTION PHOTO
40X

5 cm

THIN SECTION DESCRIPTION

Very fine grained, subangular, fair to well sorted sandstone. Streaks of thin bedded brown organic matter containing some disseminated siderite. Scattered hematite staining. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created good to excellent porosity now partially infilled with authigenic kaolinite reducing pore size and permeability. Numerous mica flake oriented parallel to thin bedding. Numerous metamorphic rock fragment grains. Estimated visible porosity is 12-15% with low permeability. Porosity in the thin section photograph is shown in blue.

147144

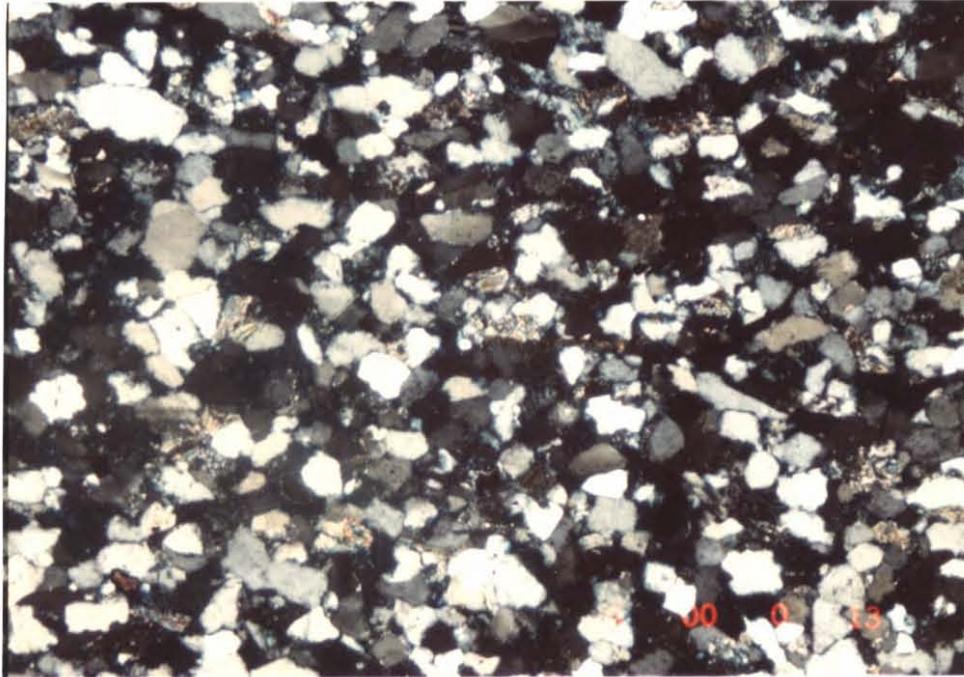
Name 9516
Lower M. diversus

FIGURE 45B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#291



THIN SECTION PHOTO
40X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Very fine grained, subangular, fair to well sorted sandstone. Streaks of thin bedded brown organic matter containing some disseminated siderite. Scattered hematite staining. Pressure solution of silica between grains has destroyed the original intergranular porosity. Dissolution of feldspar and rock fragments has created good to excellent porosity now partially infilled with authigenic kaolinite reducing pore size and permeability. Numerous mica flake oriented parallel to thin bedding. Numerous metamorphic rock fragment grains. Estimated visible porosity is 12-15% with low permeability. Porosity in the thin section photograph is shown in blue.

147145

Norumba 9754

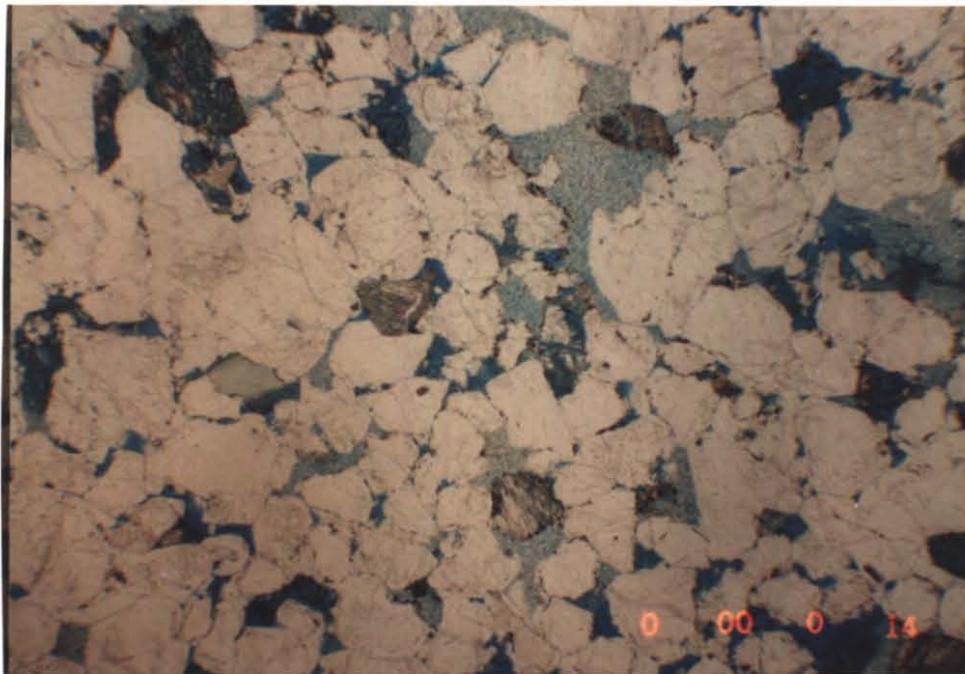
Lower N. diversus

FIGURE 46A

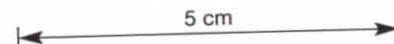
AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#294



THIN SECTION PHOTO
20X



THIN SECTION DESCRIPTION

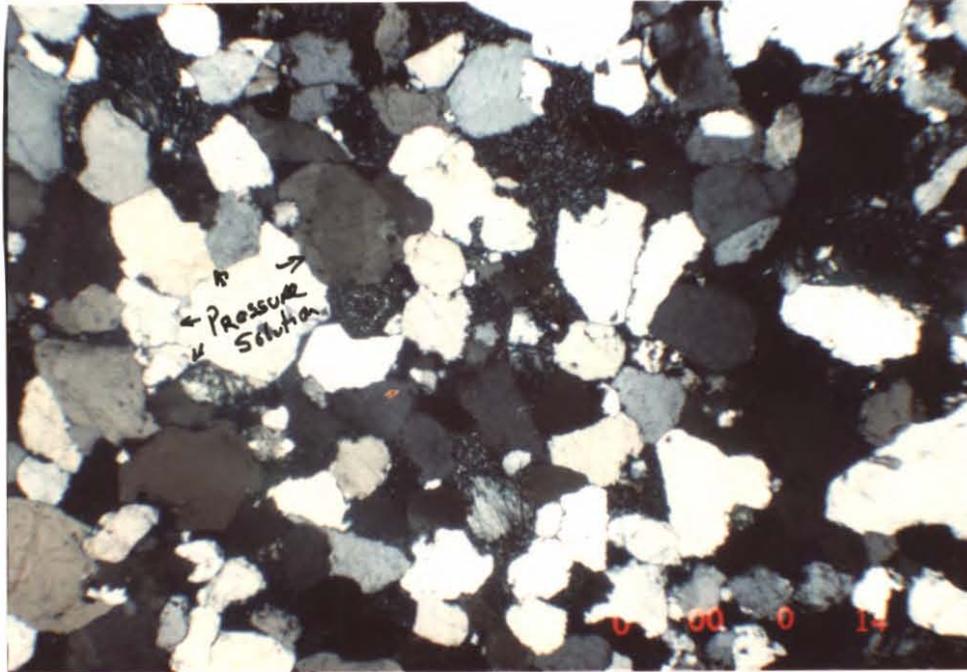
Medium grained, well sorted subrounded to subangular sandstone. Pressure solution of silica between grains has destroyed original intergranular porosity. Dissolution of feldspar, calcite and rock fragments created visible porosity estimated to be from 10-14%. Authigenic siderite crystals outlining some grains and partially infilling scattered dissolution porosity. One or two partially decomposed amphibole grains. Authigenic kaolinite infilling some dissolution porosity. Scattered chert and metamorphic rock fragment grains. Porosity in the thin section photograph is shown in blue.

FIGURE 46B

AMOCO PRODUCTION COMPANY

Bass Basin, Australia

#294



THIN SECTION PHOTO
20X
X-NICOLS

5 cm

THIN SECTION DESCRIPTION

Medium grained, well sorted subrounded to subangular sandstone. Pressure solution of silica between grains has destroyed original intergranular porosity. Dissolution of feldspar, calcite and rock fragments created visible porosity estimated to be from 10-14%. Authigenic siderite crystals outlining some grains and partially infilling scattered dissolution porosity. One or two partially decomposed amphibole grains. Authigenic kaolinite infilling some dissolution porosity. Scattered chert and metamorphic rock fragment grains. Porosity in the thin section photograph is shown in blue.

APPENDIX

Appendix

The Core Analysis Report contains the depth of each sample analyzed.

<u>Well</u>	<u>Core No.</u>	<u>Number of Samples Plugged</u>	<u>Reason for Not Sampling</u>
Aroo-1	1	9	
	2	3	
	3	-	Volcanics
Bass-1	1-11	-	Shallow stratigraphically
	12-13	11	
	14	-	No sandstone
	15	-	Already analyzed
Bass-2	1-6	-	Shallow strat./No sandstone
	7-8	-*	Already analyzed
	9-10	-	Metamorphics
Bass-3	1-5	-	Shallow stratigraphically
	6	3	
	7	-	No sandstone
	8	1	
	9-11	-	Already analyzed
Cormorant-1	1-7	-	Shallow strat./already analyzed
	8	4	
	9	-	No sandstone
	10	-	Already analyzed/thin-bedded
	11	-	Volcanics
	12	1	
	13	9	
Dondu-1	1	19	
Durroon-1	1	-	Stratigraphically shallow
	2	-	No recovery
	3	1	Only sandstone
	4	-	Already analyzed
	5	-*	Tight
Nangkero-1	1	5	
Narimba-1	1	2	
	2	5	
	3	2	

* Subsequently sampled

Pelican-1	1-4	-	Stratigraphically shallow
	5	21	
	6	22	
	7	1	Only sandstone
	8	18	
	9	27	
Pelican-2	1	2	
Pelican-3	1-3	50	
Pelican-4	1	11	
Poonboon-1	1	-	No sandstone
	2	6	
	3	12	
	4	6	
	5	-	Already analyzed
Tarook-1	1	16	
	2	11	
	3	-	No sandstone
Toolka-1A	1	2	
Yurongi-1	1	14	