PR82-135

SOURCE-BED EVALUATION

FOR

PANCONTINENTAL PETROLEUM LIMITED

WELL: DINGO-1

AMADEUS BASIN

AUSTRALIA

Geochemical Services

CORE

24A LIM TECK BOO ROAD, SINGAPORE 1953. TELEX: RS21423 TEL 282 1222

18 February 1982

CORE LABORATORIES

Geochemical
Services

Mr. John D Gorter
PanContinental Petroleum Limited
20 Bond Street
Sydney, NSW 2000
AUSTRALIA.

Subject: Source-Bed Evaluation
Well: Dingo-1
Amadeus Basin
Australia
Our File No. GCS 81111A

Dear Mr. Gorter,

The following report presents the results of our geochemical study of forty-nine (49) samples from the Dingo-1 well. These samples consisted predominantly of dolomite and limestone, with small amounts of shale, siltstone and sandstone present. The average total organic carbon content (TOC) was 0.07% with a range from 0.03% to 0.37%.

Rock-Eval pyrolysis was performed on two (2) shale samples that were above the 0.20% TOC level. These results indicate gas prone organic matter that is in the early stage of thermal maturity.

Should you have any questions on these data, please do not hesitate to contact us. We appreciate the opportunity to be of continuing service to PanContinental Petroleum Limited.

Yours very truly
CORE LABORATORIES INTERNATIONAL LTD

D Kirk Cromer

D Kirk Cromer
Manager - Geochemical Services

DKC:cy

3 cc: Addressee

Table 1

Lithology and Total Organic Carbon (TOC)

Depth (ft)	Sample Type	Lithology	TOC (wt %)
3260-3290	ctgs	60% Ss: wh, v lt gy, v f gn, sub ang-sub rnd, w srtd, fri-mod hd 30% Sh: dk gy, dk grn gy, n calc, sl mica, frm 10% Dol: gy rd, mic xln, ahrl, frm	0.04
3290-3320	ctgs	70% Sh: dk gy, n calc, mica, frm 20% Dol: m lt gy, gy rd, mic xln, ahrl, frm 10% Ss: wh, v lt gy, v f gn, sub ang-sub rnd, w srtd, fri-mod hd	0.19
3320-3350	ctgs	Sh: dk gy, n calc, mica, frm Pres: dol	0.21
3349.7-3379.2	ctgs	90% Sh: m-m dk gy, sl calc, carb, frm 10% Ls: lt-m lt gy, mic xln, occ sl fos, w ind	0.37
4500-4550	ctgs	Dol: m lt gy, brn gy, wh, v f xln, ahrl, frm Tr: sh	0.03
4550-4600	ctgs	Dol: m lt gy, v lt gy, v f xln, ahrl, frm Tr: sd	0.05
4600-4650	ctgs	Dol: m lt gy, v lt gy, v f xln, ahrl, frm	0.07
4650-4700	ctgs	Dol: m lt gy, v lt gy, v f xln, ahrl, frm Pres: sh	0.04/0.05

Table 1

Lithology and Total Organic Carbon (TOC)

Depth (ft)	Sample Type	Lithology	TOC (wt %)
4700-4750	ctgs	80% Dol: m lt gy, v lt gy, v f xln, ahrl, frm 20% Sh: dk gy, brn gy, n calc, mica, frm	0.06
4750-4800	ctgs	Dol: m lt gy, v lt gy, v f xln, ahrl, frm Tr: sh	0.06
4800-4850	ctgs	Dol: m lt gy, v lt gy, v f xln, ahrl, frm	0.06
4850-4950	ctgs	70% Dol: m lt gy, v lt gy, v f xln, ahrl, frm 30% Sh: gy rd, dk gy, n calc, mica, frm	0.04
4900-4950	ctgs	80% Dol: m lt gy, v lt gy, v f xln, ahrl, frm 20% Sh: gy rd, dk gy, n calc, mica, frm	0.05
4950-5000	ctgs	Dol: v lt gy, m dk gy, mic-v f xln, ahrl, frm Tr: sh, ss	0.05
5000-5050	ctgs	Dol: v lt gy, m dk gy, mic-v f xln, ahrl, frm Tr: sh	0.04
5050-5100	ctgs	Dol: v lt gy, m dk gy, mic-v f xln, ahrl, frm Tr: sh, ss	0.03/0.04

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Table 1

Lithology and Total Organic Carbon (TOC)

Depth (ft)	Sample Type	Lithology	TOC (wt %)
5100-5150	ctgs	Dol: v lt gy, m dk gy, mic-v f xln, ahrl, frm Pres: ss	0.06
5150-5200	ctgs	90% Dol: v lt gy, m dk gy, mic-v f xln, ahrl, frm 10% Ss: wh, v f gn, sub ang-sub rnd, fri-mod hd, dolc	0.07
5200-5250	ctgs	Ls: m gy, lt gy, mic xln, dolc, mod ind	0.05
5250-5300	ctgs	Ls: m gy, lt gy, mic xln, dolc, mod ind Tr: ss	0.05
5300-5350	ctgs	Ls: m gy, lt gy, mic xln, dolc, mod ind Tr: ss, sh	0.05
5350-5400	ctgs	90% Ls: m gy, lt gy, mic xln, dolc, mod ind 10% Dol: m dk gy, mic xln, ahrl, frm-hd	0.04
5400-5450	ctgs	Ls: m gy, lt gy, mic xln, dolc, mod ind Pres: dol	0.06
5450-5500	ctgs	Ls: m gy, lt gy, mic xln,.dolc, mod ind Pres: dol	0.06

Table 1

Lithology and Total Organic Carbon (TOC)

Depth (ft)	Sample Type	Lithology	TOC (wt %)
5500-5550	ctgs	Ls: m gy, lt gy, mic xln, dolc, mod ind Pres: sh	0.06
5550-5600	ctgs	70% Ls: m gy, lt gy, mic xln, dolc, mod ind 30% Sh: gy rd, n calc, mica, frm	0.05
5600-5650	ctgs	90% Ls: lt-m gy, mic xln, dolc, mod ind 10% Sh: gy rd, n calc, mica, frm Pres: ls	0.05
5650-5700	ctgs	80% Ls: lt-m gy, mic xln, dolc, mod ind 20% Sh: gy rd, m dk gy, n calc, mica, frm	0.05
5700-5750	ctgs	50% Sh: gy rd, m dk gy, n calc, mica, frm 30% Dol: brn gy, grn gy, mic xln, ahrl, frm 20% Ls: lt gy-m lt gy, mic xln, dolc, mod ind	0.10
5750-5800	ctgs	40% Sh: gy rd, m dk gy, n calc, mica, frm 30% Dol: brn gy, grn gy, mic xln, ahrl, frm 30% Ls: lt gy-m lt gy, mic xln, dolc, mod ind	0.05

Table 1

Lithology and Total Organic Carbon (TOC)

Depth (ft)	Sample Type	Lithology	TOC (wt %)
5800-5850	ctgs	80% Dol: brn gy, grn gy, mic xln, ahrl, frm 10% Sh: gy rd, m dk gy, n calc, mica, frm 10% Ls: lt gy-m lt gy, mic xln, dolc, mod ind	0.07
5850-5900	ctgs	90% Ls: dk gy, m lt-m gy, mic xln, occ sl mica, frm 10% Sltst: gy brn, dusky brn, n calc, mica, mod ind Tr: ss	0.08
5900-5950	ctgs	80% Ls: dk gy, m lt-m gy, mic xln, occ sl mica, frm 20% Sltst: gy brn, dusky brn, n calc, mica, mod ind Tr: ss	0.06
5950-6000	ctgs	80% Ls: dk gy, m lt-m gy, mic xln, occ sl mica, frm 20% Sltst: gy brn, dusky brn, n calc, mica, mod ind Tr: ss	0.06
6000-6050	ctgs	80% Ls: dk gy, m lt-m gy, mic xln, occ sl mica, frm 20% Dol: gy brn, dusky brn, mic xln, occ sl mica, frm Tr: ss	0.07
6050-6100	ctgs	90% Ls: dk gy, m lt-m gy, mic xln, occ sl mica, frm 10% Dol: gy brn, dusky brn, mic xln, occ sl mica, frm Tr: ss	0.07

Table I

Lithology and Total Organic Carbon (TOC)

Depth (ft)	Sample Type	Lithology	TOC (wt %)
6900-6950	ctgs	Dol: gy, brn-m brn, m dk gy-dk gy, m lt gy, v f-mic xln, occ sl mica, frm	0.03/0.03
6950-7000	ctgs	Dol: gy, brn-m brn, m dk gy-dk gy, m lt gy, v f-mic xln, occ sl mica, frm	0.03
7000-7050	ctgs	Dol: gy, brn-m brn, m dk gy-dk gy, m lt gy, v f-mic xln, occ sl mica, frm	0.03
7050-7100	ctgs	Dol: gy, brn-m brn, m dk gy-dk gy, m lt gy, v f-mic xln, occ sl mica, frm	0.03
7100-7150	ctgs	Dol: gy, brn-m brn, m dk gy-dk gy, m lt gy, v f-mic xln, occ sl mica, frm Tr: ss	0.03
7150-7200	ctgs	Dol: gy, brn-m brn, m dk gy-dk gy, m lt gy, v f-mic xln, occ sl mica, frm	0.03
7200-7250	ctgs	Dol: gy brn, wh-lt gy, m lt gy, v f-mic xln, ahrl, occ mica, frm Tr: ls	0.04
7250-7300	ctgs	Dol: gy brn, wh-lt gy, m lt gy, v f-mic xln, ahrl, occ mica, frm	0.04/0.04

Table)

Lithology and Total Organic Carbon (TOC)

Depth (ft)	Sample Type	Lithology	TOC (wt %)
7300-7350	ctgs	Dol: gy brn, wh-lt gy, m lt gy, v f-mic xln, ahrl, occ mica, frm	0.04
8169.2-8267.6	ctgs	80% Dol: pa rd brn, dk brn gy, sl calc, occ arg, ind-frm 10% Sltst: m-m dk gy, n calc, carb, occ abdnt cl incl, p-mod ind 10% Ls: v lt-lt gy, calclut, sl slty, mod ind Tr: sd	0.17
9585	Junk Basket	Dol: m dk gy, mic xln, ahrl, sl calc, frm	0.06
10010-10020	ctgs	Dol: m dk gy, mod rd, mic xln, ahrl, amph, sft-frm Pres: sd Tr: ss	0.05/0.05
10023	Junk Basket	Sh: dk gy, n calc, frm	0.14

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Table 2

ROCK-EVAL PYROLYSIS

SAMPLE DEPTH (FT)	TOC (WT.%)	MG/GM ROCK S1	MG/GM ROCK S2	MG/GM ROCK S3	HYDROGEN INDEX	OXYGEN INDEX	OIL AND GAS SHOWS	OIL AND GAS POTENTIAL	TRANSFORMATION RATIO	TMAX (°C)
3320-3350	0.21	0.02	0.12	0.28	57.1	133.3	0.02	0.14	0.14	450
3349.7-3379.2	0.37	0.02	-	0.42	-	113.5	0.02	0.02	-	-