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SOURCE-ROCK EVALUATION
FOR
PANCONTINENTAL PETROLEUM LTD
WELL: WEST WALKER-1
AMADEUS BASIN
AUSTRALIA

Geochemical Services

DEPT. OF MINES & ENERGY
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P00941

CORE

28 January 1983

CORE LABORATORIES



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

Geochemical
Services

Subject: Source-Rock Evaluation
Well: West Walker-1
Amadeus Basin
Australia
Our File No. GCS 82102A

Dear Mr. Gorter,

The following report presents the final results of our geochemical study on a total of eleven (11) drill cuttings samples from the West Walker-1 well. This report incorporates the data presented in an earlier final report as well as additional samples received after that report was completed.

We appreciate the opportunity to be of continuing assistance to PanContinental Petroleum Ltd in their hydrocarbon exploration program. Should you have any questions on this data, please contact us.

Yours very truly
CORE LABORATORIES INTERNATIONAL LTD

D Kirk Cromer

D Kirk Cromer
Manager - Geochemical Services
Eastern Hemisphere

DKC:cy

3 cc: Addressee

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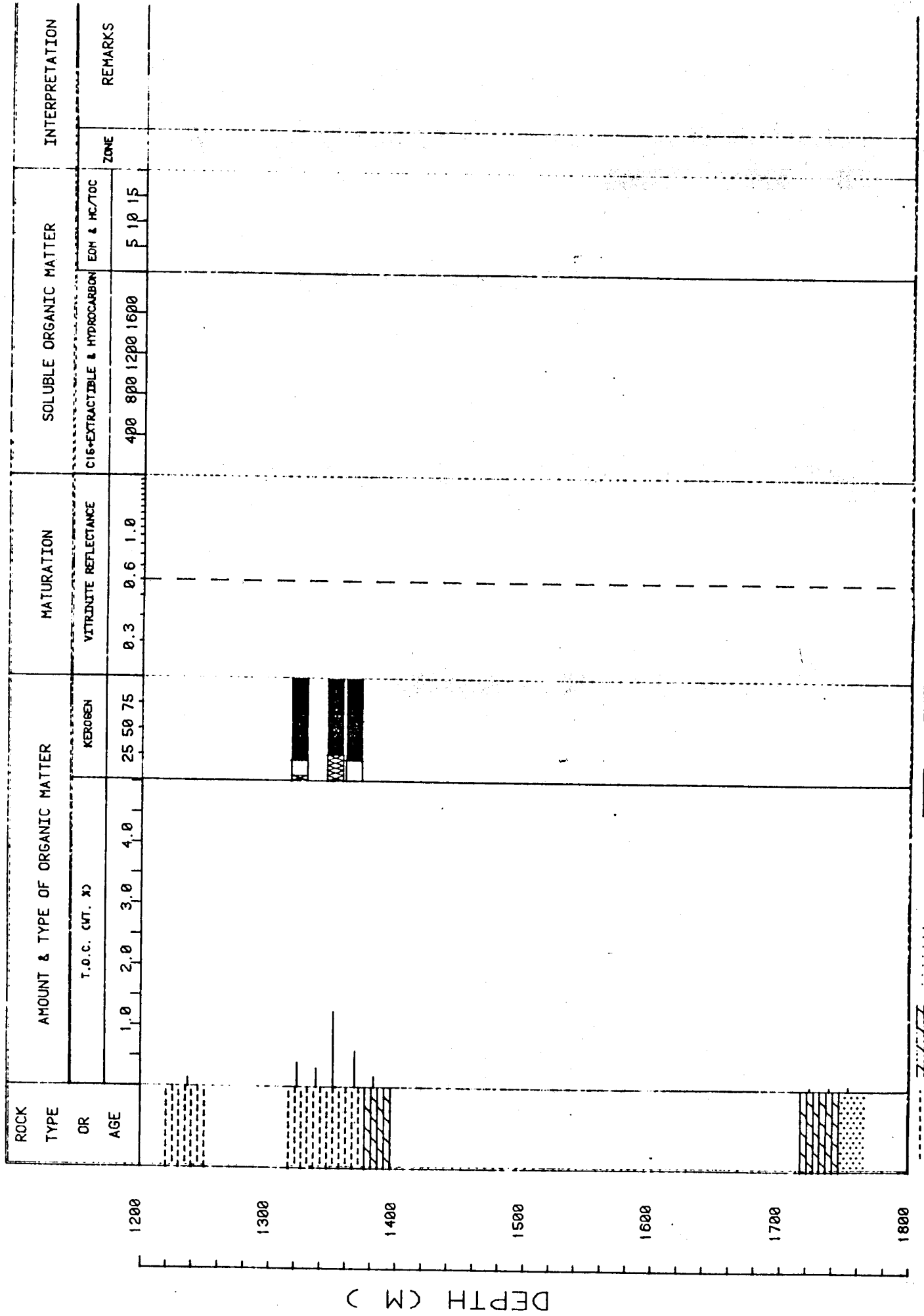
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ANALYTICAL DATA

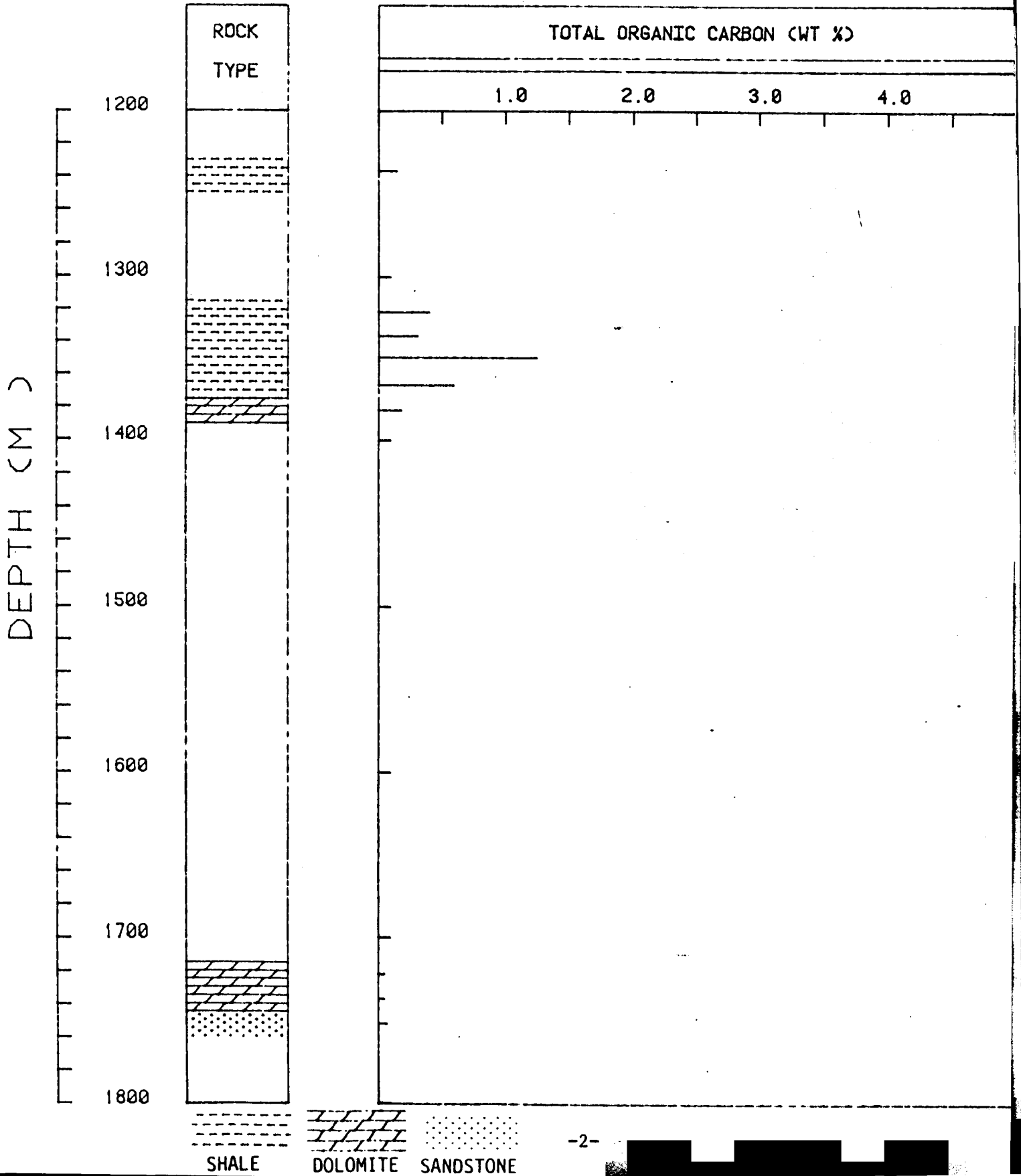
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GEOCHEMICAL SUMMARY PROFILE

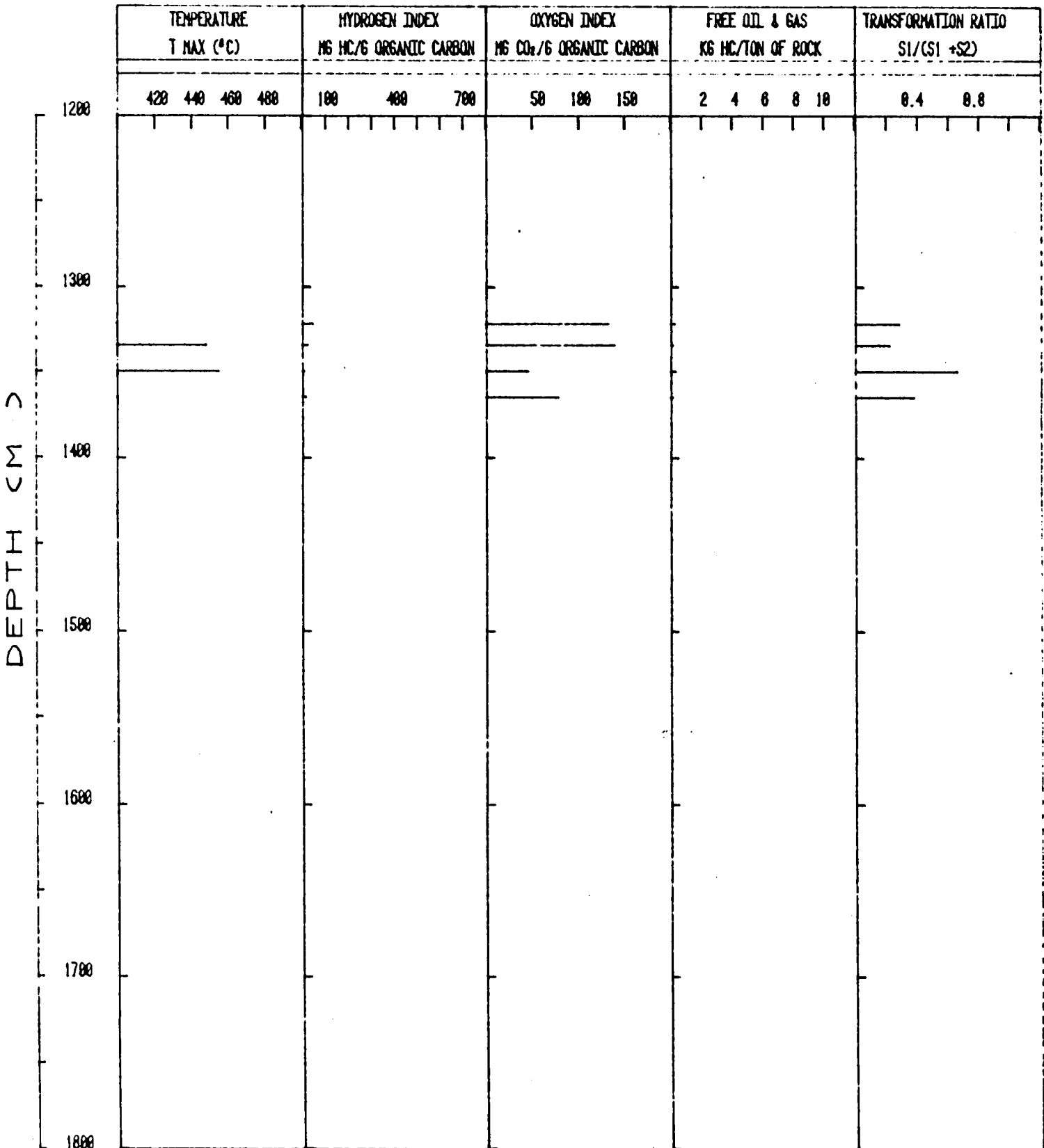


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TOTAL ORGANIC CARBON CHARACTERIZATION



Display 3
ROCK-EVAL PYROLYSIS
PROFILE



Display 4

KEROGEN TYPE THERMAL MATURITY

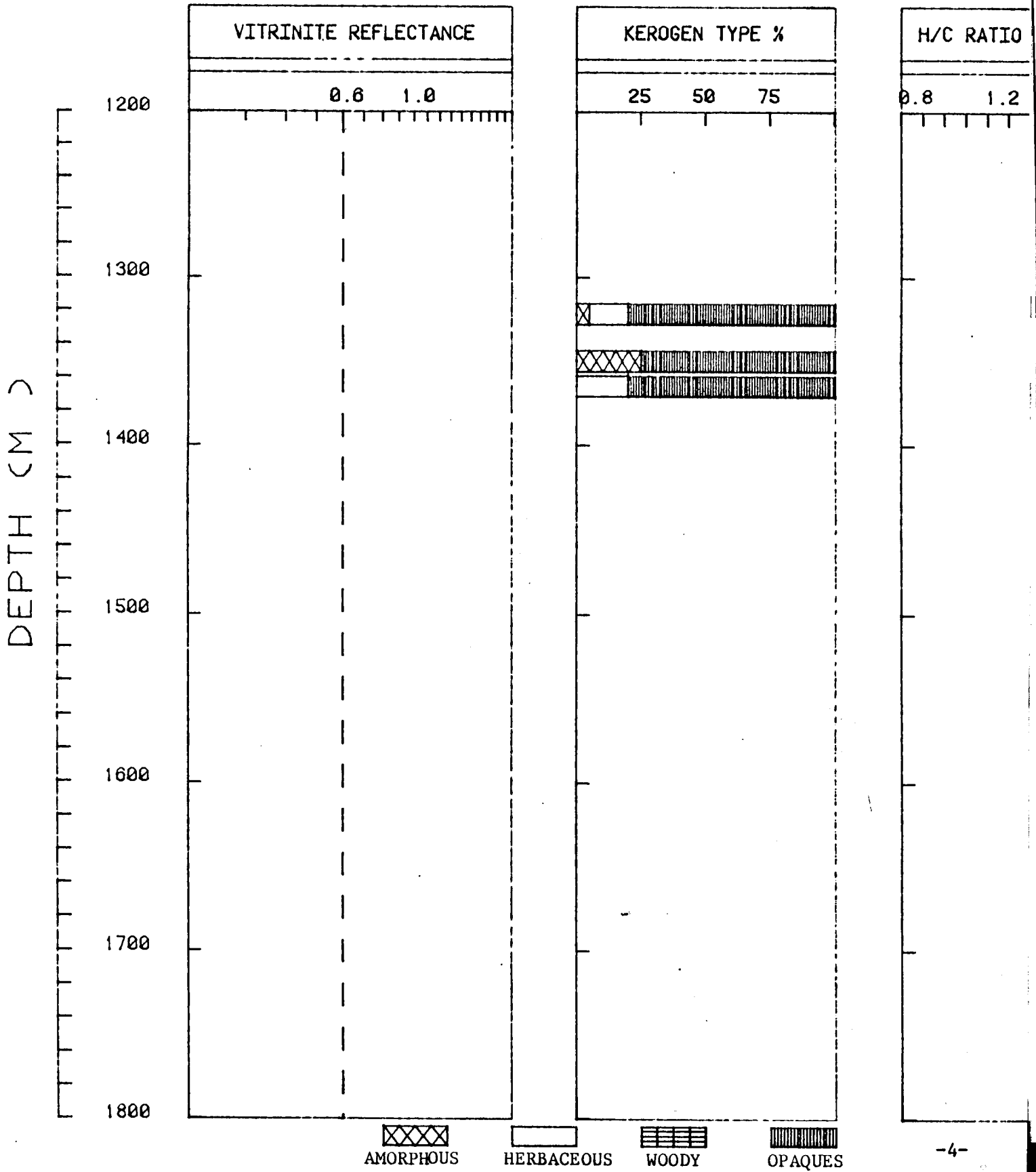


Table 1
Geochemical Data Summary

Sample Depth (m)	Lithology	TOC (wt.%)	H Index	S ₁ + S ₂ (kg HC/Ton)	Tmax (°C)	TAI	R ₀
150-170	Shale	0.10					
1230-1245	Shale	0.14					
1315-1330	Shale	0.40	45.0	0.25	388*	3+	N.D.
1330-1340	Shale	0.31	22.6	0.09	443*		
1345-1355	Shale	1.24	8.1	0.29	449*	3+	N.D.
1345-1360	Casing Cement	N.R.					
1360-1375	Shale	0.59	13.6	0.13	388*	3+	N.D.
1375-1390	Dolomite	0.18					
1715-1730	Dolomite	0.05					
1730-1745	Dolomite	0.05					
1745-1760	Sandstone/Dolomite	0.07					

* Tmax data is unreliable due to extremely small S2 peak

N.D. = No Data

Table 2
Lithology and Total Organic Carbon (TOC)

Depth (m)	Sample Type	Lithology	TOC (wt %)
150- 170	ctgs	90% Sh: m dk gy, sl calc, dolc, occ sl mica, frm-hd 10% Dol: mod brn, mic xln, ahrl, hd	0.10
1230- 1245	ctgs	Sh: m dk-dk gy, n calc, occ mica, occ intbd w/ss, sl carb, frm-hd Pres: ss & dol	0.14
1315- 1330	ctgs	90% Sh: gy blk, n calc, dolc, occ mica, occ sl sdy, sl carb, frm 10% Ss: v lt gy, v f gn, sub ang-sub rnd, w srted, mod hd	0.40
1330- 1340	ctgs	Sh: m dk-dk gy, n calc, occ mica, occ intbd w/ss, sl carb, frm-hd Tr: ls, dol	0.31
1345- 1355	ctgs	Sh: gy blk, n calc, dolc, occ sl mica, v carb, slty, sft-frm	1.24
1345- 1360	ctgs	90% Casing cement 10% Sh: gy blk, n calc, dolc, occ mica, occ sl sdy, sl carb, frm	N.R.
1360- 1375	ctgs	Sh: gy blk, n calc, dolc, occ mica, occ sl sdy, sl carb, frm Pres: dol	0.59/0.58

N.R. = Not Run

Table 2 (Cont'd)
Lithology and Total Organic Carbon (TOC)

Depth (m)	Sample Type	Lithology	TOC (wt %)
1375- 1390	ctgs	60% Dol: lt-m gy, mic xln, ahrl, hd 40% Sh: gy blk, n calc, dolc, occ mica, occ sl sdy, sl carb, frm	0.18
1715- 1730	ctgs	90% Dol: lt-m lt gy, mic-v f xln, ahrl, sl sdy, frm-hd 10% Sd: lt gy, f-m gn, sub rnd-rnd, p-mod srted Pres: ss	0.05
1730- 1745	ctgs	70% Dol: lt-m lt gy, mic-v f xln, ahrl, sl sdy, sl glauc, frm-hd 30% Ss: wh, v lt gy, v f-f gn, ang-sub ang, w srted, mod hd, cmted w/dol	0.05
1745- 1760	ctgs	60% Ss: wh, v lt gy, v f-f gn, ang-sub ang, w srted, mod hd, cmted w/dol 40% Dol: lt-m lt gy, mic-v f xln, ahrl, sl sdy, sl glauc, frm-hd Tr: gyp	0.07

Table 3
Rock-Eval Pyrolysis

Sample Depth (m)	TOC (wt.%)	Mg/Gm Rock			Hydrogen Index	Oxygen Index	Oil and Gas		Transformation Ratio	Tmax (°C)
		S1	S2	S3			Shows	Potential		
1315-1330	0.40	0.07	0.18	0.53	45.0	132.5	0.07	0.25	0.28	388*
1330-1340	0.31	0.02	0.07	0.43	22.6	138.7	0.02	0.09	0.22	443*
1345-1355	1.24	0.19	0.10	0.56	8.1	45.2	0.19	0.29	0.66	449*
1360-1375	0.59	0.05	0.08	0.46	13.6	77.9	0.05	0.13	0.38	388*

*Tmax not reliable because of low S2 peak

Table 4
Kerogen Data Summary

Depth (m)	%Amorphous	%Herbaceous	%Woody	%Coaly	Opakes	Thermal Alteration Index	Vitrinite Reflectance
1315- 1330	5	15			80	3+	N.D.
1345- 1355	25				75	3+	N.D.
1360- 1375	T	20			80	3+	N.D.

Amorphous = algal debris (filaments, acritarchs, algal spores, dinoflagellates) and amorphous sapropels; Herbaceous = waxy and resinous materials generally having a characteristic form; i.e., terrestrial plant cuticle, pollen, spores, resin, etc. Opakes = chitinozoa (translucent) and graptolite material, and opaque fragmented kerogen that has no identifying characteristics.

N.D. = No Data

