

OTWAY BASIN
SOURCE ROCK

PETROLEUM DIVISION

22 AUG 1991

TABLE 1

ROCK-EVAL PYROLYSIS DATA (one run)

WELLNAME = SNAIL 1

DATE OF JOB = JULY 1989

DEPTH(m)	TMAX	S1	S2	S3	S1+S2	S2/S3	PI	PC	TOC	HI	OI
2626.0	412	0.21	1.60	4.65	1.81	0.34	0.12	0.15	3.95	40	117
3330.0-3350.0	nd	nd	nd	nd	nd	nd	nd	nd	0.42	nd	nd
3600.0	437	0.06	0.31	0.85	0.37	0.36	0.16	0.03	0.85	36	100

SNAIL-1

TMAX = Max. temperature S2
 S1+S2 = Potential yield
 PC = Pyrolysable carbon
 OI = Oxygen Index

S1 = Volatile hydrocarbons (HC)
 S3 = Organic carbon dioxide
 TOC = Total organic carbon
 nd = no data

S2 = HC generating potential
 PI = Production index
 HI = Hydrogen index

SNAIL NO. 1

Al/1

K.K. No.	Depth (ft)	\bar{R}_v max	Range	N	Description Including Liptinite (Exinite) Fluorescence
v1020	2546 SWC 27	0.35	0.26-0.44	26	Spores ?phytoplankton, yellow to orange, rare resinite, greenish yellow. (Clayey sandstone. Dom abundant, V>I>E. Vitrinite abundant, inertinite and exinite spares. Diffuse humic organic matter abundant. Iron oxides spares. Pyrite abundant, predominantly framboidal.)
v1021	2664 SWC 23	0.41	0.32-0.47	26	Spores ?phytoplankton/liptodetrinite, orange to dull orange, spores sporinite, orange, rare cutinite, yellow. (Shaly coal>carbonaceous shale. Shaly coal dominant, V>I>E. Vitrite. Dom major, V>E>I. Vitrinite major, inertinite and exinite sparse. Diffuse organic matter major. Sparse sclerotinite. Iron oxides rare. Pyrite sparse.)
v1022	3157 SWC 3 R ₁	0.45	0.35-0.54	8	Rare to sparse phytoplankton, yellow. (Sandstone>siltstone>coal. Coal sparse. V>I. Vitrite>vitrinertite(I). Dom sparse, I>E>V. Inertinite
		1.22	0.80-1.50	5	sparse, exinite rare to sparse, vitrinite rare. Rare reworked coal with \bar{R}_v max ranging from 0.85%-1.69%. Glauconite sparse. Iron oxide rare. Pyrite sparse.)
v1023	3330 3350 Ctgs	0.40	0.36-0.42	5	Rare phytoplankton, orange. (Claystone>siltstone>sandstone. Dom sparse, I>E>V. Inertinite sparse, exinite and vitrinite rare. Iron oxide sparse. Pyrite sparse.)
v1024	4031 SWC 1	0.39	0.30-0.47	26	Sparse phytoplankton, orange to dull orange. (Claystone>sandstone. Dom common, V>E>I. Vitrinite common, exinite sparse, inertinite rare. Diffuse organic matter abundant. Iron oxide sparse to common. Pyrite common.)

FIGURE : 1b
VITRINITE REFLECTANCE AND COAL MACERAL IDENTIFICATION

CLIENT NAME : SHELL

DATE : AUGUST 1989

WELL NAME : SNAIL 1

DEPTH OR SAMPLE No : 4031 Feet

SAMPLE TYPE : Sidewall Core

(Total No. of Readings = 26) 0.30 0.32 0.33 0.33 0.33 0.33 0.35 0.37 0.37 0.37 0.37 0.37 0.37 0.37 0.38 0.39 0.40 0.40
0.41 0.43 0.43 0.44 0.44 0.45 0.46 0.47 0.47

VITRINITE REFLECTANCE							MACERAL IDENTIFICATION				
POPULATION		No. of Readings	Mean Ro (%)	Min. Ro (%)	Max. Ro (%)	STD. Dev. (%)	Comments	% Alginite	% Exinite	% Vitrinite	% Inertinite
Number	%										
1	100	26	0.39	0.30	0.47	0.05	INDIGENOUS (I)	0.00	11.10	83.30	5.60

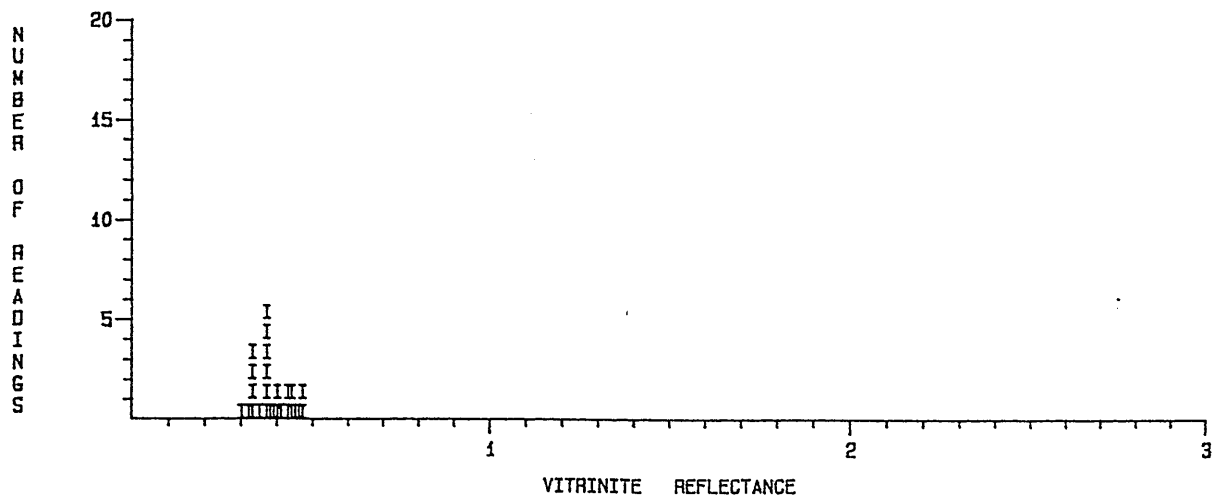
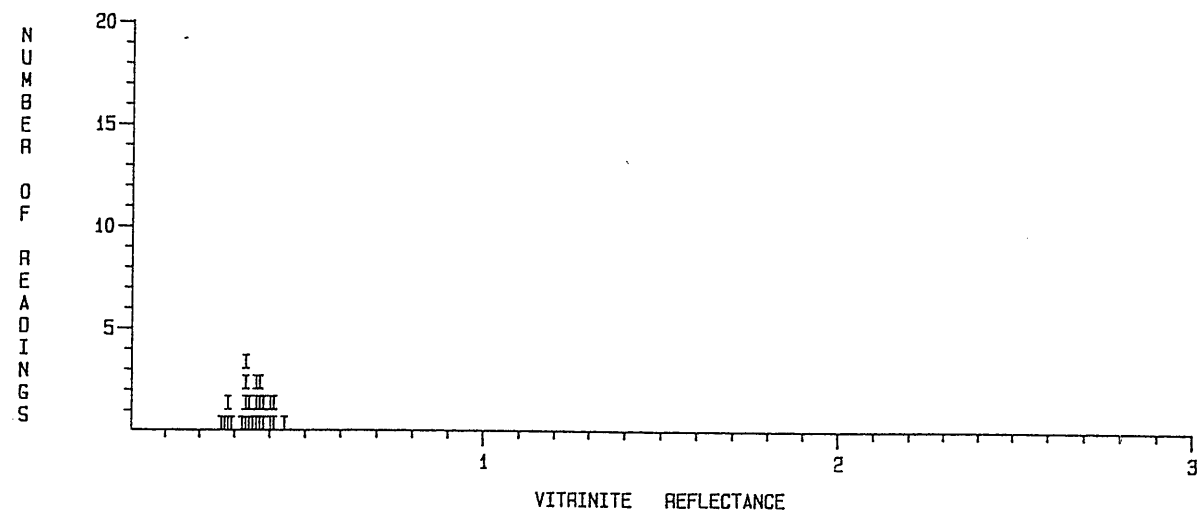


FIGURE : 1a

VITRINITE REFLECTANCE AND COAL MACERAL IDENTIFICATION

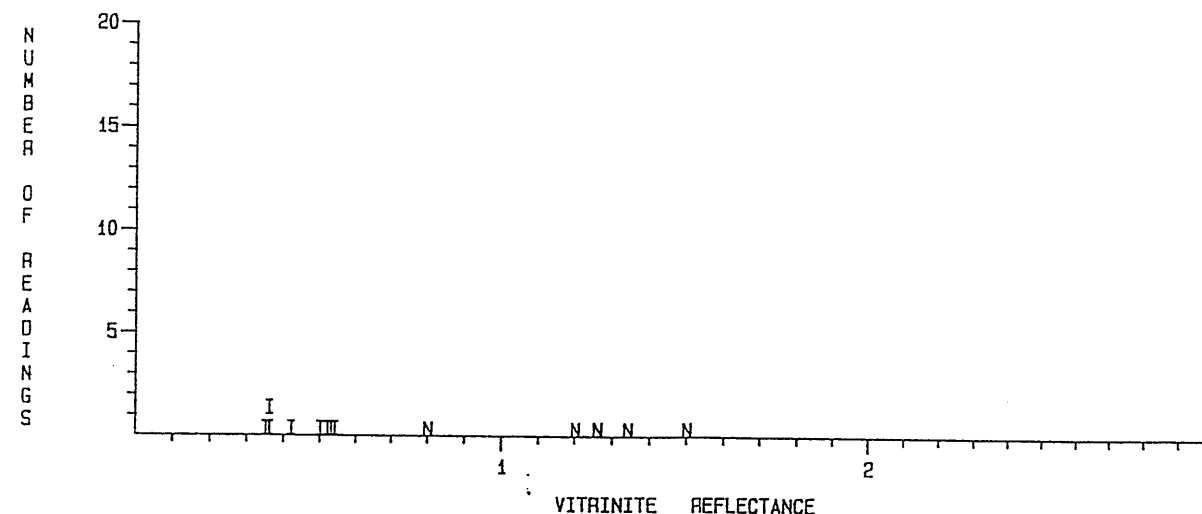
CLIENT NAME : SHELL DATE : AUGUST 1989 WELL NAME : SNAIL 1
 DEPTH OR SAMPLE No : 2546 Feet SAMPLE TYPE : Sidewall Core
 (Total No. of Readings = 26) 0.26 0.27 0.28 0.28 0.29 0.32 0.33 0.33 0.33 0.33 0.34 0.34 0.35 0.36 0.36 0.36 0.37
 0.37 0.37 0.38 0.38 0.40 0.40 0.41 0.41 0.44

VITRINITE REFLECTANCE							MACERAL IDENTIFICATION				
POPULATION		No. of	Mean	Min.	Max.	STD.	Comments	%	%	%	%
Number	%	Readings	Ro (%)	Ro (%)	Ro (%)	Dev. (%)		Alginite	Exinite	Vitrinite	Inertinite
1	100	26	0.35	0.26	0.44	0.05	INDIGENOUS (I)	0.00	4.10	83.30	12.60



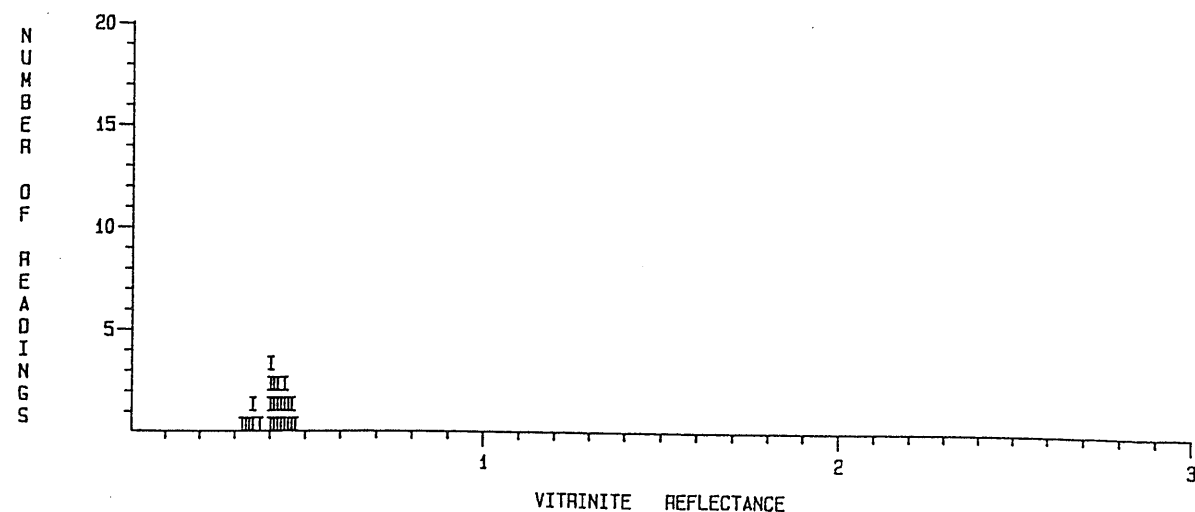
CLIENT NAME : SHELL DATE : AUGUST 1989 WELL NAME : SNAIL 1
 DEPTH OR SAMPLE No : 3157 Feet SAMPLE TYPE : Sidewall Core
 (Total No. of Readings = 13) 0.35 0.36 0.36 0.42 0.50 0.52 0.53 0.54 0.80 1.20 1.26 1.34 1.50

VITRINITE REFLECTANCE							MACERAL IDENTIFICATION				
POPULATION		No. of	Mean	Min.	Max.	STD.	Comments	%	%	%	%
Number	%	Readings	Ro (%)	Ro (%)	Ro (%)	Dev. (%)		Alginite	Exinite	Vitrinite	Inertinite
1	61.5	8	0.45	0.35	0.54	0.08	INDIGENOUS (I)	0.00	16.60	50.00	33.40
2	38.5	5	1.22	0.80	1.50	0.26	INERTINITE (N)	No data	No data	No data	No data



CLIENT NAME : SHELL DATE : AUGUST 1989 WELL NAME : SNAIL 1
 DEPTH OR SAMPLE No : 2664 Feet SAMPLE TYPE : Sidewall Core
 (Total No. of Readings = 26) 0.32 0.33 0.34 0.35 0.35 0.37 0.40 0.40 0.40 0.40 0.41 0.41 0.41 0.42 0.42 0.42 0.43
 0.43 0.44 0.44 0.44 0.45 0.45 0.46 0.46 0.47

VITRINITE REFLECTANCE							MACERAL IDENTIFICATION				
POPULATION		No. of	Mean	Min.	Max.	STD.	Comments	%	%	%	%
Number	%	Readings	Ro (%)	Ro (%)	Ro (%)	Dev. (%)		Alginite	Exinite	Vitrinite	Inertinite
1	100	26	0.41	0.32	0.47	0.04	INDIGENOUS (I)	0.00	0.80	97.80	1.40



CLIENT NAME : SHELL DATE : AUGUST 1989 WELL NAME : SNAIL 1
 DEPTH OR SAMPLE No : 3330-3350 Feet SAMPLE TYPE : Cuttings
 (Total No. of Readings = 5) 0.36 0.40 0.41 0.42 0.42

VITRINITE REFLECTANCE							MACERAL IDENTIFICATION				
POPULATION		No. of	Mean	Min.	Max.	STD.	Comments	%	%	%	%
Number	%	Readings	Ro (%)	Ro (%)	Ro (%)	Dev. (%)		Alginite	Exinite	Vitrinite	Inertinite
1	100	5	0.40	0.36	0.42	0.02	INDIGENOUS (I)	0.00	20.00	20.00	60.00

