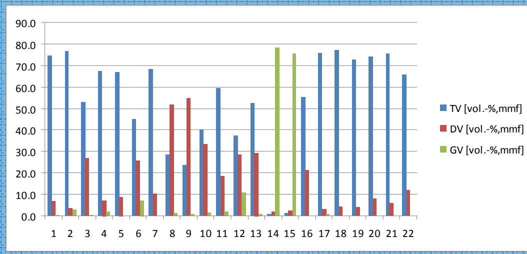
RIC 2010 - 64th ICCP Meeting, September 2012, Beijing China

RIC 2008 Vitrinite Sub-Groups



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analyst	TV	DV	GV
	[vol.-%,mmf]	[vol.-%,mmf]	[vol.-%,mmf]
1	74.7	6.9	0.3
2	76.7	3.5	2.7
3	52.9	26.9	0.2
4	67.7	7.2	2.0
5	67.2	9.0	0.0
6	45.1	25.7	7.3
7	68.2	10.6	0.0
8	28.4	52.0	1.0
9	23.5	55.1	0.8
10	40.4	33.4	1.4
11	59.6	18.3	1.8
12	37.4	28.4	11.0
13	52.5	29.2	0.6
14	0.8	2.2	78.2
15	1.0	2.5	75.6
16	55.3	21.2	0.0
17	76.0	3.1	0.8
18	77.2	4.2	0.0
19	72.6	3.9	0.0
20	74.3	7.8	0.0
21	75.5	6.1	0.0
22	66.1	12.0	0.0

VITRINITE SUB-GROUPS

	TV	DV	GV
mean	54.23	16.78	8.36
stdev	23.59	15.57	22.35
max.	77.2	55.1	78.2
min.	0.8	2.2	0.0
n	22	22	22

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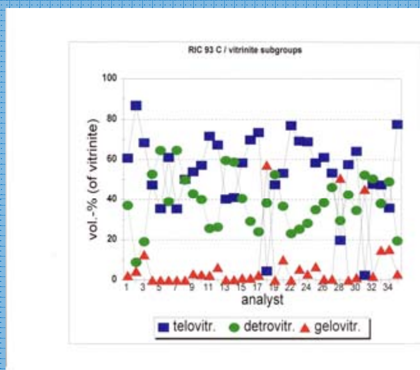

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Sydney, Sept. 5, 2010

Standardization Working Group Round Robin RIC 2010

'Thank you for your interest in the recent round robin of the Standardization WG.

Following from the results of the previous RIC 2008 round robin with rather unsatisfactory results especially with the vitrinte maceral sub-groups this exercise is designed to tackle this problem. Images of the same sample as in RIC 2008 are distributed. Each image contains various circles and analysts are asked to identify the maceral sub-groups accordingly and report them to the attached report sheet. This should make sure that we all are identifying exactly the same macerals.
The round robin sample is a Permian bituminous coal from Queensland (Australia) of medium rank b-c (according to ISO 11760, formerly also known as high volatile bituminous coal). The sample is from Gregory, Bowen Basin, German Creek Formation of late Permian (German Creek Seam).

Please report Telvitrinite (TV), Detrovitrinite (DV) and Gelovitrinite (GV) as by ICCP System 1994 and the very few others I marked, mainly to keep you awake during the exercise, in the attached Excel spread sheet.
Please comment freely and send your result back by early 2011 to the attached e-mail address.

Looking forward to your results.

With best wishes

Walter Pickel

Convener of the Standardization Working Group

e-mail: walter.pickel@organicpetrology.com

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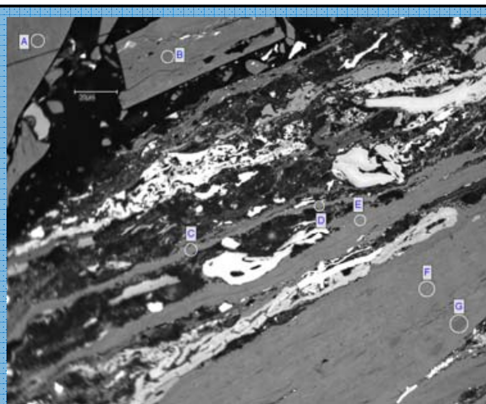

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RIC 2010 Round Robin

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CD Content:

Ammended letter RIC 2010.doc (instructions)

Images (47, bmp)

Template results (xls)

Gramado presentation of RIC 2008

Belgrade presentation of RIC 2010

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TELOVITRINITE

Origin of term
Term introduced by the ICCP 1994 to denote vitrinite with cell structure. This structure may or may not be apparent in reflected white light. Derivation: *tela* (L)-tissue; *vitrum* (L)-glass.

Related terms
Transmitted light microscopy: anthraxylon; humotelinite (brown coal).

Definition
Telovitrinite is a subgroup of the maceral group vitrinite, comprising vitrinites with preserved botanical cell structures which may or may not be visible.

Comment. The subgroup comprises the macerals telinite and collotelinite which are distinguishable by their different degree of geochemical gelification (vitrinitization). The former consists of clearly recognizable cell walls; the latter is of more or less structureless form which, in sections more or less parallel to the bedding may be of considerable areal extent and without linear margins. When viewed perpendicular to the bedding collotelinite appears as layers of varying thickness.

ICCP System 1994

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DETROVITRINITE

Origin of term
Term introduced by the ICCP 1994 to denote particulate vitrinitic substances. Derivation: *detritus* (L)-abrasion,
vitrum (L)-glass.

Related terms
Transmitted light microscopy: translucent humic degradation matter; humodetrinite (brown coal).

Definition
Detrovitrinite is a subgroup of the maceral group vitrinite consisting of finely fragmented vitrinitized plant remains occurring either isolated or cemented by amorphous vitrinitic matter.

Comment. To this subgroup belong the macerals vitrodetrinite and collodetrinite. The former describes the clearly visible and separate particles of vitrinite, occurring isolated or cemented by amorphous vitrinitic matter or minerals; the latter describes aggregates or a groundmass of vitrinite in which boundaries of individual particles can no longer be distinguished without etching because of gelification. Where the outline of individual particles of detrovitrinite is discernible, particle size is less than 10 micron in the maximum dimension for rounded grains. Elongate remainsrepresenting fragments of cell walls should have a minimum dimension of less than 10 micron.

ICCP System 1994

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GELOVITRINITE

Origin of term
Term introduced by the ICCP in 1994 to classify a subgroup of macerals originated from the jelling of humic solutions and not corresponding to specific plant tissues. Derivation: *gelu. us* (L)-frost, stiffening (of bodies due to age), *vitrum* (L)-glass.

Related terms Humocollinite (brown coal).

Definition
Gelovitrinite is a maceral subgroup of the maceral group vitrinite consisting of colloidal infillings of vitrinitic material in former voids.

Comment. The subgroup consists of the macerals corpogelinite and gelinite. The former describes discrete bodies representing mainly the primary phlobaphenitic infillings of cell lumeris occurring *in situ* or isolated within the coaly or mineral matrix; the latter describes secondary homogeneous infillings of microfissures, cleats or other formerly empty spaces. The size is variable.

Note. Dispersed organic bodies or infillings within telinite with a lower reflectance than that of the surrounding collodetrinite or enclosing telinite component are excluded from gelovitrinite.

ICCP System 1994

ICCP Commission I Standardization WG, RIC 2010

PARTICIPANTS	
Ray Smith	Aivars Depers
Gisela Bieg	Elisabeth Gawronski
Joan Esterle	Elena Karmazina
Paul Hackley	Harold Read
Lauren Johnson	Matt Todd
Kimon Christanis	Glecy Basea
George Siavalas	Rosanna Requero
Stavros Kalaitzidis	Nick Cullen
Kaydy Pinetown	Jessica Cope
Laura McParland	Susan Cabillon
Angeles G. Borrego	Walter Pickel
Jose Ramon Montes	
Deolinda Flores	
Sandra Rodrigues Johan Joubert	

THANK YOU ALL!!

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26 Participants

Only 9 not from Australia
17 from Australia
Of those 11 from 1 lab

General Comments:

I think it is a good exercise both for testing the subgroups and eventually also for testing the macerals. I hope there will be a lot of discussion if a detailed analysis of results is provided. The images are excellent. *Angeles G. Borrego*

Thank you sir. May I have another? *Paul Hackley*

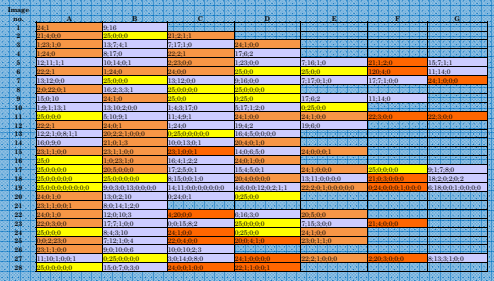
All Images on the same scale would be beneficial in future RR like this one. Improved focus is required on some images. *Lauren Johnson*

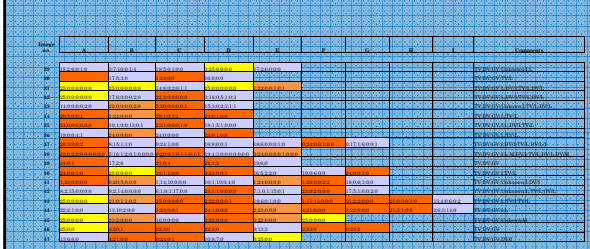
Difficult to see fine detail in some images - need microscope to rack focus up and down to assist diagnosis. *Ray Smith*

Particles at the edges of the photos difficult to identify due to resolution problems. *Stavros Kalaitzidis*

varying light & focus could help degree of certainty on some grains, but a fun :-) exercise & will make for
interesting reading of results. *Matt Todd*

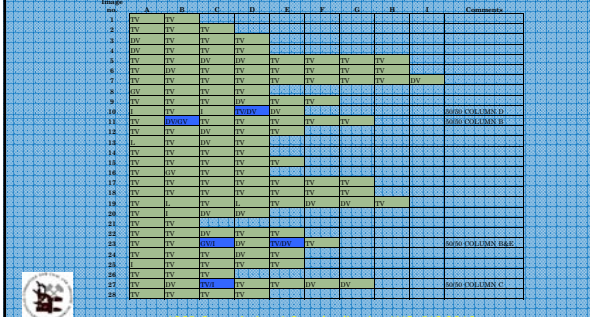
Nice coal *Joan Esterle*





256 images

'perfect' matches 35 14%
more or at least 20 in agreement: 112 44%



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35	TV	L	DV	TV						
36	TV	TV	TV	TV						
37	TV	DV	DV	TV	TV	DV	I			
38	TV	DV	DV	TV	DV					
39	TV	TV	TV	TV	TV					
40	TV	TV	TV	DV	TV	TV	TV			
41	DV	DV	DV	TV	DV	DV	TV			
42	GV	GV	L	TV	L	TV	TV			
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47	TV	DV	DV	TV	DV					

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Sydney Lab less than 2% disagreement

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Conclusions: for us to work out

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