

**Bujak Mudge Database:  
Palaeocene-Eocene Stratigraphy of the UK North Sea  
Licensing Round 33**



Immediate Delivery | ArcGIS & Individual Well Files

North Sea continues to be a major oil and gas province in the world. Dr. Jonathan Bujak and Dr. David Mudge have worked on the stratigraphy of the North Sea formation for over three decades. This data package offers high-resolution Palaeocene-Eocene stratigraphy of the UK North Sea (Round 33) delivered both on an interactive ArcGIS platform and individual well files.

▪ **Tabulated data for each of 1,170 wells**

Top picks for sequence and lithostratigraphic units, two-way time marks, gross and net sand thicknesses, and hydrocarbon shows and tests. Accumulation rates and hiatus durations are also given.

▪ **Graphic Age-Depth Plots for each of 1,170 wells**

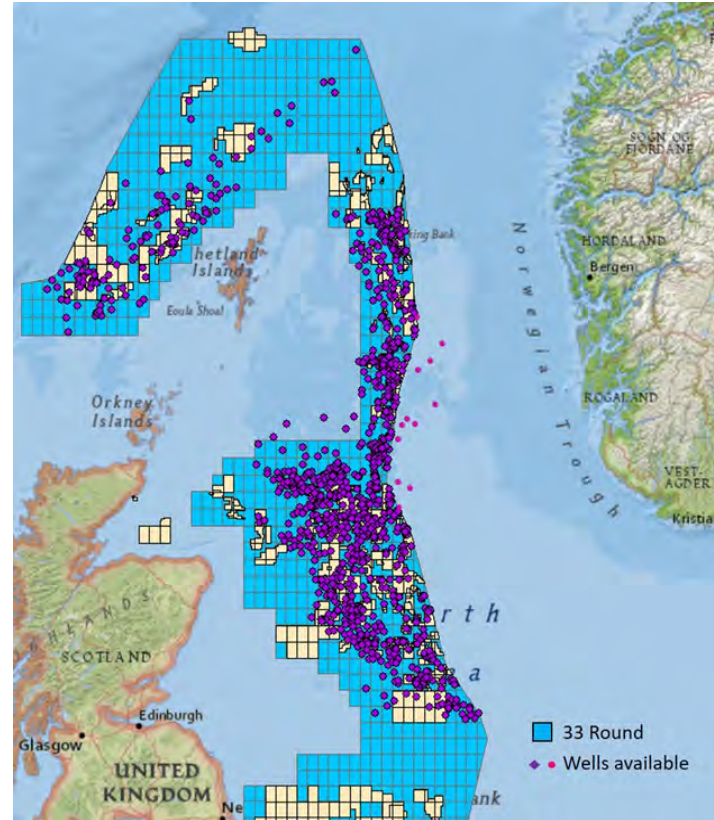
Detailed age-depth data together with stratigraphic markers and depositional hiatuses based on available data and created by **Stratabug**.

▪ **Graphic logs for 389 key wells**

High-resolution litho- and biostratigraphy on depth profiles as well as gamma-ray, sonic and/or resistivity logs

▪ **Synthesis** including regional correlative stratigraphy, selected Wheeler diagrams, paleogeographic maps, bibliography, and papers by the authors (Bujak and Mudge)

**The data package covers 1,158 wells from 28 UK North Sea and West Shetland quadrants and 12 reference wells from 5 Norwegian North Sea quadrants.**



**Cost US \$40,000**

**Report delivered on ArcGIS and individual well files (spreadsheets, pdf, and Stratabug files)**

**This data package is offered by EGI in partnership with *Bujak Research International*.**

**Please contact us for more information and purchase.**

WELL Name			
OPERATOR	Unocal	KB	77 ft
SECTION	Palaeocene-Eocene	TD	5150 ft
TERTIARY STATUS	Oil Test		
GEOLOGICAL PROVINCE	East Shetland Platform	BUJAK MUDGE DATABASE	

Stratigraphic Unit	Top	TWT	Qual	Base	TWT	Qual	Thick ness	Net Sand	Shows Tests
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STRONSAY GP	0		np	2895	0.890		nd		
Horda Fm	0		np	2336	0.732		nd		
MORAY GP	2895	0.890		3879	1.153		984	704	
MONTROSE GP	3879	1.153		5022	1.461		1143	351	SO SO
<i>GRID SEQUENCE</i>	0		np	0		np	nd		
Upper Mousa Fm	0		np	0		np	nd		
<i>ALBA SEQUENCE</i>	0		nd	0		nd	nd		
Caran Sst	0		a	0		a	0		
Middle Mousa Fm	0		a	0		a	0		
<i>FRIGG SEQUENCE</i>	0		nd	2895	0.890		nd	490	
<i>Frigg II Marker</i>	0		nd						
Frigg Sst Mbr	0		a	0		a	0		
Lower Mousa Fm	2336	0.732		2895	0.890		559	490	
<i>BALDER SEQUENCE</i>	2895	0.890		3480	1.044		585	551	
Balder Fm	0		a	0		a	0		
Balder Tuff	0		a	0		a	0		
Odin Mbr	0		a	0		a	0		
Beaully Fm	2895	0.890		3480	1.044		585	551	
<i>DORNOCH SEQUENCE</i>	3480	1.044		3796	1.129		316	120	
Dornoch Fm	3480	1.044		3620			140	120	
Sele Fm	3620			3796	1.129		176		
Hermod Mbr	0		a	0		a	0		
<i>FORTIES SEQUENCE</i>	3745			3796	1.129		51	33	
Teal Sst Mbr	3745			3796	1.129		51	33	
<i>LISTA SEQUENCE</i>	3796	1.129		4755	1.402		959	130	
Lista Fm	3796	1.129		4755	1.402		959	130	SO SO
Heimdal Mbr	4163	1.224		4405	1.308		242	130	SO SO
<i>MAUREEN SEQUENCE</i>	4755	1.402		5022	1.461		267	221	
Maureen Fm	4755	1.402		5022	1.461		267	221	SO SO
Maureen Sst	4755	1.402		5022	1.461		267	221	SO SO
<i>EKOFISK SEQUENCE</i>	0		a	0		a	0		
Ekofisk Fm	0		a	0		a	0		

<b>TESTS:</b> Heimdal Mbr: oil zone 4163-4405 ft. DST 2 4155-4236 ft flowed 1595 bopd
Maureen Fm: oil zone 4755-4910 ft. DST 1 4756-4850 ft flowed 565 bopd

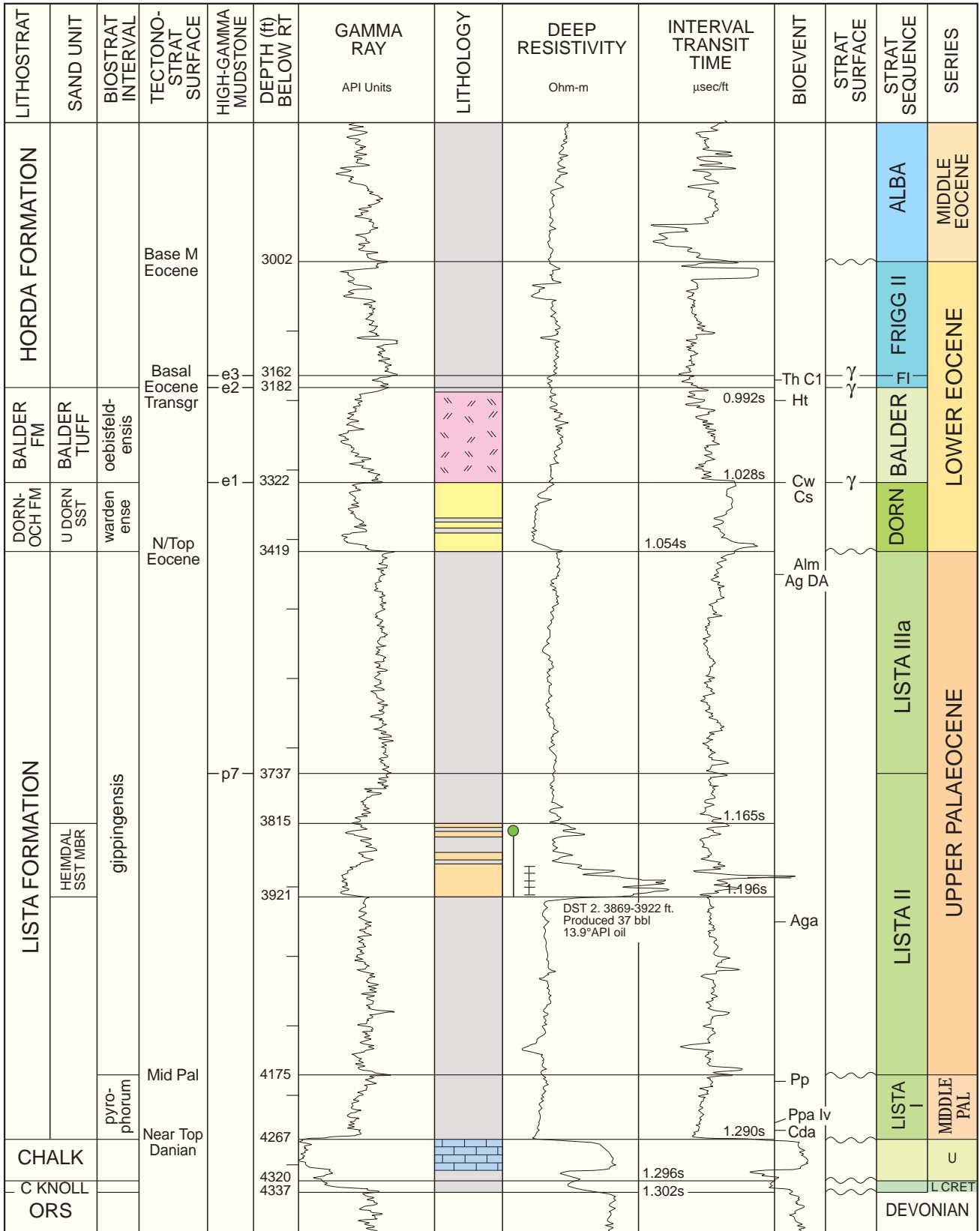
Qualifier	Shows/Tests
? uncertain pick	O oil T trace
a absent	G gas S significant
np not picked	C cond NF no flow to
nd not distinguished	
nr not reached	
td total depth	
Depths in feet below KB	

Well Name: AGE, UNCONFORMITIES AND DEPOSITIONAL RATES				
Age	Depth (ft)	Age (Ma) Gradstein 2022	acumulation rate (ft/Ma)	unconformity duration (Ma)
PRIABONONIAN	5154.2	33.56	56.1 ft/Ma	
	5387.14	37.71	117.0 ft/Ma	
BARTONONIAN	5774.28	41.72	126.0 ft/Ma	
	<b>5774.28</b>	<b>41.03</b>		<b>0.69 Ma</b>
LUTETIAN	6026.9	44.29	415.0 ft/Ma	
	<b>6026.9</b>	<b>43.73</b>		<b>0.56 Ma</b>
	6371.39	45.12	230.0 ft/Ma	
	6500	46.24	257.0 ft/Ma	
	<b>6500</b>	<b>45.68</b>		<b>0.56 Ma</b>
	6656.82	46.85	485.0 ft/Ma	
	6875	48.49	295.0 ft/Ma	
	<b>6875</b>	<b>47.3</b>		<b>1.19 Ma</b>
YPRESIAN	6990	48.88	274.0 ft/Ma	
	7220	50.65	145.0 ft/Ma	
	<b>7220</b>	<b>49.72</b>		<b>0.93 Ma</b>
	7417.98	54.85	547.0 ft/Ma	
	<b>7417.98</b>	<b>52.02</b>		<b>2.83 Ma</b>
	7614.83	55.21	118.0 ft/Ma	
	7680	55.76	215.0 ft/Ma	
	7731.63	56	172.0 ft/Ma	
7759.19	57.1	76.7 ft/Ma		
	<b>7759.19</b>	<b>56.16</b>		<b>0.94 Ma</b>
THANETIAN	7862	58.44	1370.0 ft/Ma	
SELANDIAN	8960	59.51	258.0 ft/Ma	
	<b>8960</b>	<b>59.24</b>		<b>0.27 Ma</b>
	9225.72	60.9	207.0 ft/Ma	
	<b>9225.72</b>	<b>60.54</b>		<b>0.36 Ma</b>
DANIAN	9383.2	62.54	328.0 ft/Ma	
	<b>9383.2</b>	<b>61.66</b>		<b>0.88 Ma</b>
MAASTRICHTIAN	9478.35	62.83	139.0 ft/Ma	
	9796.59	65.12	Base section	

Well Name

LOCATION: East Shetland Platform  
 INTERVAL: Palaeocene-Lower Eocene  
 SCALE: 1:2500

KB: 80 ft  
 TD: 4818 ft  
 Bujak Mudge interpretation



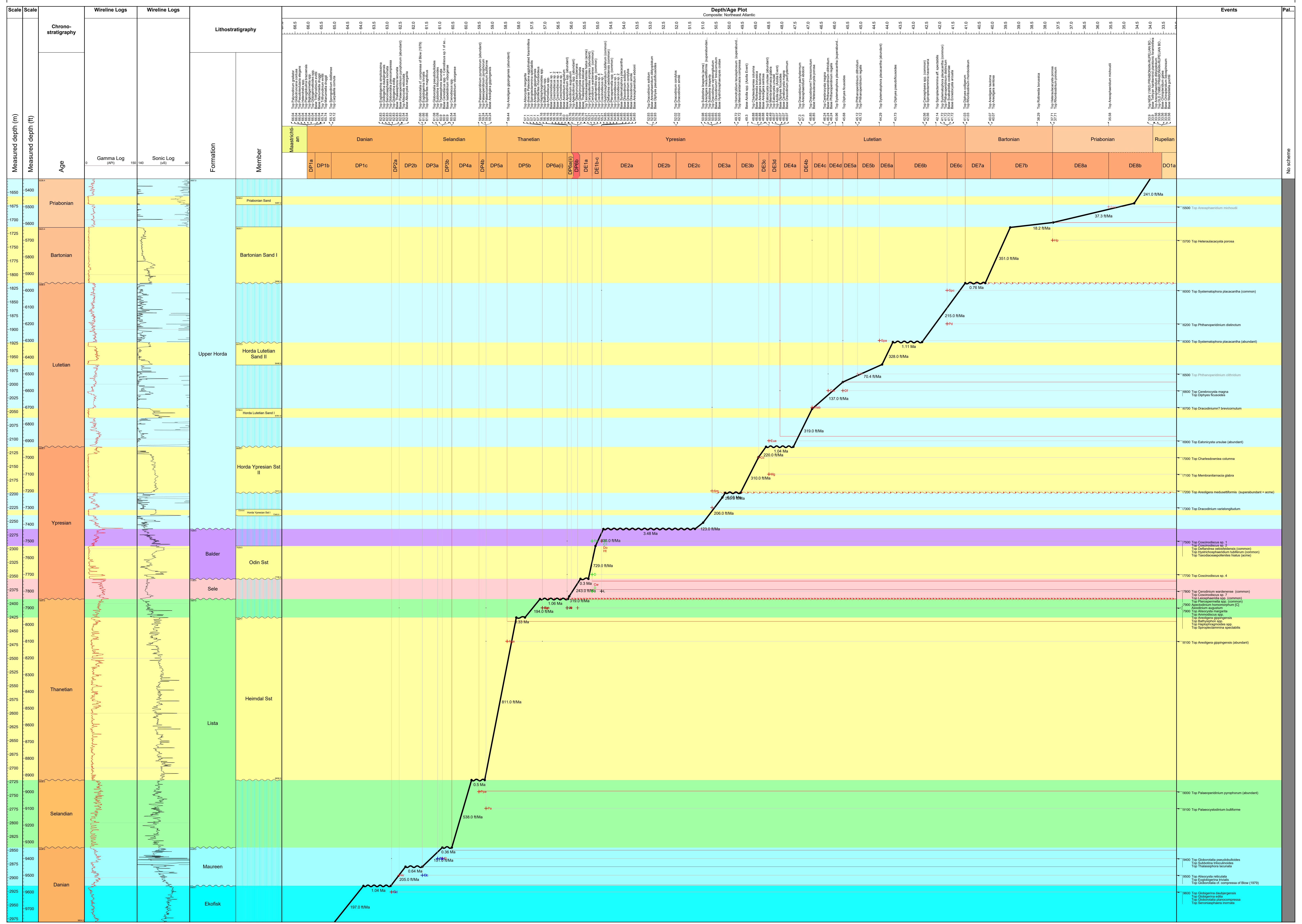
EXAMPLE WELL



No scheme

Pal...

EXAMPLE WELL



Scale Scale

Measured depth (ft)  
Measured depth (m)

Chronostratigraphy  
Age

Wireline Logs  
Gamma Log (API)  
Sonic Log (GS)

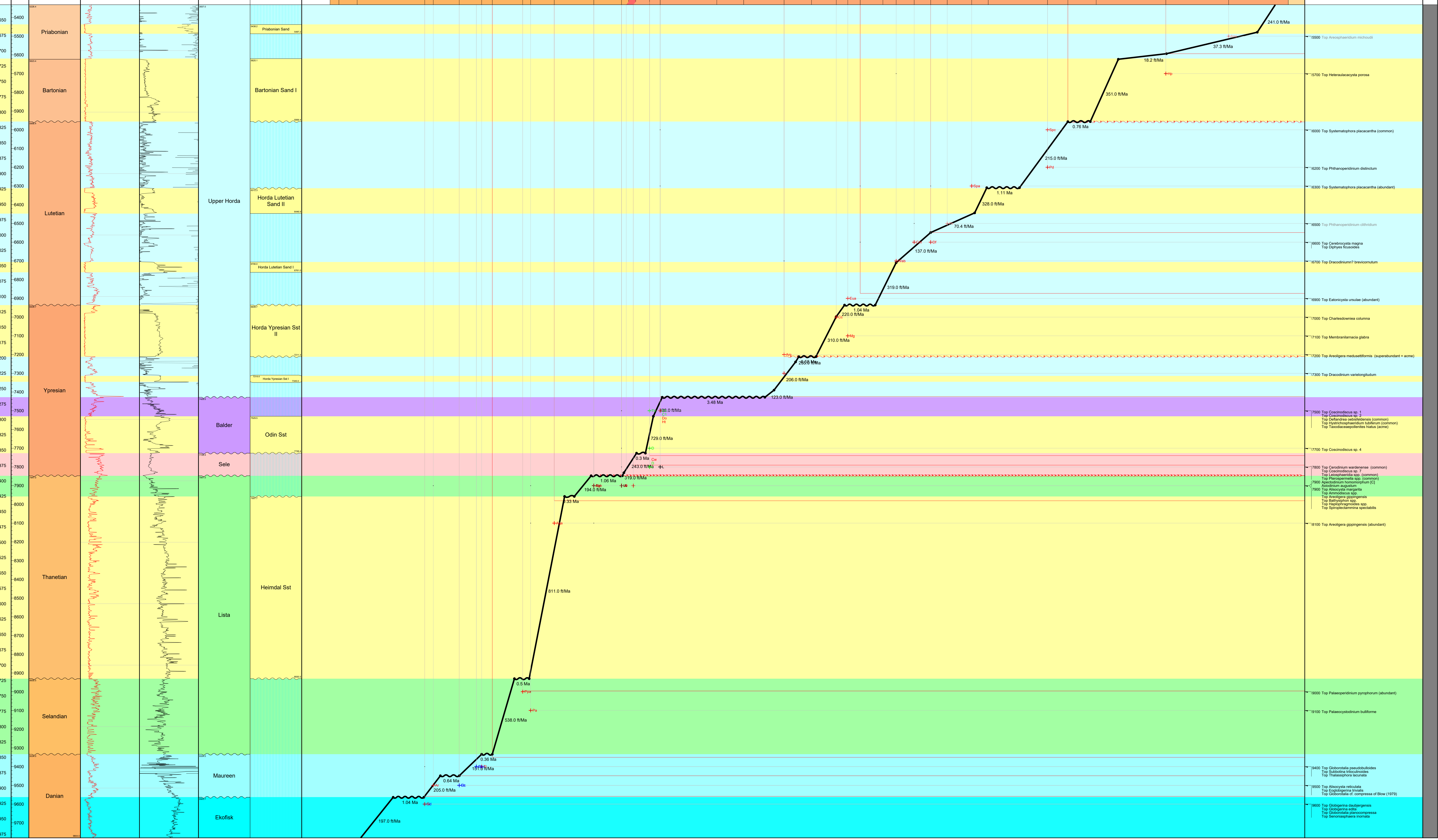
Wireline Logs

Lithostratigraphy  
Formation  
Member

Member	Sub-member	Depth Range (ft)	Depth Range (m)
Maestrichtian	DP1a	0 - 150	0 - 150
	DP1b	150 - 140	150 - 140
	DP1c	140 - 140	140 - 140
	DP2a	140 - 140	140 - 140
Danian	DP2b	140 - 140	140 - 140
	DP3a	140 - 140	140 - 140
	DP3b	140 - 140	140 - 140
	DP4a	140 - 140	140 - 140
Selandian	DP4b	140 - 140	140 - 140
	DP5a	140 - 140	140 - 140
	DP5b	140 - 140	140 - 140
	DP6a(I)	140 - 140	140 - 140
Thanetian	DP6b(II)	140 - 140	140 - 140
	DE1a	140 - 140	140 - 140
	DE1b-c	140 - 140	140 - 140
	DE2a	140 - 140	140 - 140
Ypresian	DE2b	140 - 140	140 - 140
	DE2c	140 - 140	140 - 140
	DE3a	140 - 140	140 - 140
	DE3b	140 - 140	140 - 140
	DE3c	140 - 140	140 - 140
	DE3d	140 - 140	140 - 140
	DE4a	140 - 140	140 - 140
	DE4b	140 - 140	140 - 140
	DE4c	140 - 140	140 - 140
	DE4d	140 - 140	140 - 140
	DE5a	140 - 140	140 - 140
	DE5b	140 - 140	140 - 140
Lutetian	DE6a	140 - 140	140 - 140
	DE6b	140 - 140	140 - 140
	DE6c	140 - 140	140 - 140
	DE7a	140 - 140	140 - 140
	DE7b	140 - 140	140 - 140
	DE8a	140 - 140	140 - 140
Bartonian	DE8b	140 - 140	140 - 140
	DE8c	140 - 140	140 - 140
	DE8d	140 - 140	140 - 140
	DE8e	140 - 140	140 - 140
Priabonian	DE8f	140 - 140	140 - 140
	DE8g	140 - 140	140 - 140
Rupelian	DO1a	140 - 140	140 - 140
	DO1b	140 - 140	140 - 140

Events

Pal...



No. scheme