GARAH Critical Screening Parameters					Source (Ref.list)	Comments
Shale Name:	Kimmeridge clay					
Country:	UK					
Age (Age):						
Age (Epoch):	Upper Jurassic					
Basin:	North Sea					
Chance of success parameters					**Source (Ref.list)**	**Comments**
Mapping status	Good					
Sedimentary variability	Moderate					
Structural complexity	Moderate					
Available HC data	Good					
Proven source rock	Proven					
Maturity variability	Moderate					
Depth	Average					
Mineral composition	Poor					Favourable in areas with high clastic input (e.g. UK Quadrant 16)
Detailed parameter list	**Min**	**Max**	**Mean**	**Distribution**	**Source (Ref.list)**	**Comments**
1. Oil mature area (km2)	9710	13815	**11763**	Normal	**6,7**	From GIS polygons. Depth and maturity cut-offs applied.
Gas mature area (km2)	577	821	**699**	Normal	**6,7**	
2. Thickness (gross, m)	0,9	1123	**126**			From well penetrations (oil mature area only)
2a. Thickness (net, m)						
2b. Net/Gross (%)						
3. Depth (m)	22,1	6572	1757		**6**	From GIS raster
4. Density (g/cm3)	2,55	2,65	2,6		**1**	estimated
4b. Oil density (g/cm3)	0,8	0,85	0,825		**1**	analysed
5. TOC (%)	0	12	4,56		**4**	From samples in the IGI Database. (A small number of samples have TOCs up to 78%).
6. Porosity (%)		15			**3**	Up to 15%
7. Maturity (%VR) or graptolite equivalent					**6**	From GIS VR map
8. Reservoir pressure (psi)					**4**	Avg gradient 0.45psi/ft
9. Reservoir Temperature (°C)						Variable- depth dependant
10. Gas saturation (%)(Sg)						no data
11. Oil Saturation (%) So)						no data
12. Gas generation mgHC/g TOC (Hydrogen index)	0	12825	277,5		**4**	Min-mean-max from Kimmerige Clay samples in IGI database
13. Kerogen type			Type II		**2**	
14. Sorption capacity VReq. - 1,9 % (mmol/g)						no data
15. Matrix permeability (nDarcy)						no data
16. Adsorbed gas storage capacity (scf/ton)						no data
17. Compressibility factor (z)						no data
18a. Bg - Gas formation volume factor						no data
18b. Bo - Oil formation volume factor						no data
19. Langmuir Pressure (pL, psi)						no data
20. Langmuir Volume (nL, scf/ton)						no data
21. Bulk mineral constituents XRD						
21a Total Clay content (%)	20	50			**4**	Approximate range
Content of smectite						no data
Content of Illite & Mica						no data
Content of Kaolinite						no data
21b Quartz-feldspars content (%)	25	40			**8**	Approximate range
*21c C*arbonate content (%)		80	23		**3**	Up to 80%

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