Appendix A: Monte Carlo input parameters for the volumetric calculation

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1. Monte Carlo input parameters

Ro = 0.6% at 7000 ft	Accessible/volume$ of net mature section (x10^9 m^3)				Net organic-rich and potentially productive shale (%)			Free oil content (mgHC/gRock)			Correction for evaporative loss			Shale density (g/cm^3)			Oil density (g/cm^3)		
Formation	Upper cut-off	3950 ft cut-off	5000 ft cut-off	Lower cut-off	P90	P50	P10	P90	P50	P10	P90	P50	P10	P90	P50	P10	P90	P50	P10
Kimmeridge Clay	0.56	0.50	0.00	0.00	5	35	65	0.00	2.93	10.20	1.53	1.87	2.42	2.55	2.60	2.65	0.800	0.825	0.850
Oxford Clay	8.24	7.49	0.05	0.04	20	28	35	0.00	0.13	0.70	1.53	1.87	2.42	2.55	2.60	2.65	0.800	0.825	0.850
Upper Lias	16.58	15.07	3.65	2.92	1	3	5	0.00	0.20	0.80	1.53	1.87	2.42	2.55	2.60	2.65	0.800	0.825	0.850
Middle Lias	16.64	15.13	6.32	5.06	1	5	10	0.00	0.79	4.86	1.53	1.87	2.42	2.55	2.60	2.65	0.800	0.825	0.850
Lower Lias	57.18	51.98	32.81	26.25	20	35	45	0.00	1.87	6.62	1.53	1.87	2.42	2.55	2.60	2.65	0.800	0.825	0.850

Table 1a. Input parameters for the Monte Carlo simulation used to determine the total oil in place in the five main Jurassic shale units, Wessex area, southern Britain using a maturity cut-off at 7,000 ft (2,130 m) maximum burial depth. $ = volume of shale below various depth cut-offs.

Ro = 0.6% at 8000 ft	Accessible/volume$ of net mature section (x10^9 m^3)				Net organic-rich and potentially productive shale (%)			Free oil content (mgHC/gRock)			Correction for evaporative loss			Shale density (g/cm^3)			Oil density (g/cm^3)		
Formation	Lower cut-off	3950 ft cut-off	5000 ft cut-off	Upper cut-off	P90	P50	P10	P90	P50	P10	P90	P50	P10	P90	P50	P10	P90	P50	P10
Kimmeridge Clay	0.00	0.00	0.00	0.00	5	35	65	0.00	2.93	10.20	1.53	1.87	2.42	2.55	2.60	2.65	0.800	0.825	0.850
Oxford Clay	0.44	0.40	0.02	0.01	20	28	35	0.00	0.13	0.70	1.53	1.87	2.42	2.55	2.60	2.65	0.800	0.825	0.850
Upper Lias	2.42	2.20	1.99	1.59	1	3	5	0.00	0.20	0.80	1.53	1.87	2.42	2.55	2.60	2.65	0.800	0.825	0.850
Middle Lias	3.45	3.14	2.66	2.13	1	5	10	0.00	0.79	4.86	1.53	1.87	2.42	2.55	2.60	2.65	0.800	0.825	0.850
Lower Lias	20.01	18.19	16.79	13.43	20	35	45	0.00	1.87	6.62	1.53	1.87	2.42	2.55	2.60	2.65	0.800	0.825	0.850

Table 1b. Input parameters for the Monte Carlo simulation used to determine the total oil in place in the five main Jurassic shale units, Wessex area, southern Britain using a maturity cut-off at 8,000 ft (2,440 m) maximum burial depth. $ = volume of shale below various depth cut-offs.