

	EPR	Endeavour
Spreading rate	110 km/my	60 km/my
Axial graben/trough	<5 - 15 m depth <50 - 400 m width	75 - 200 m depth <500 m - 1 km width
Axial magma chamber	Segmented? ~1.4-1.7 km deep	Segmented ~2.1-3.3 km deep
Basalts	More evolved to south Mainly N-MORB	More evolved to north Wide range independent of differentiation (60% E-MORB)
Flows	Frequent eruptions (decade) Sheet flows dominate axis Overfilling AST common	Infrequent (intrusions common?) Sheet flows, lobate, pillows Flank eruptions common-pillows
Faults	100's m length, <10 m throw Volcanic overprinting	> 1 km length, 10's m throw Highly tectonized

	EPR	Endeavour
Black smokers	<30 vents over 18 km	>>200 vents over 18 km 5 major fields, 600 m in length
	Typically < 10 m tall Pinnacles common	Typically 10 m tall (to 45 m) Edifices up to 50 m across; flanges common Amorphous silica abundant
Fluids	Phase separation common Basaltic influence	Phase separation common Enriched in NH ₄ , relatively high pH, d ¹³ CH ₄ - 55‰ Basaltic & sediment influence
Diffuse flow	~10 x 10 m sparse	~20 x 50 m or more, common