

在 1 m^2 地面面积下源岩柱内能生成油气的最大量) 来量度, 阿吾拉勒山西端巴卡拉萨依剖面 $SPI = 5.36$ 。由于晚二叠世沉积中心位于阿吾拉勒山西端, 露头剖面所求得的 SPI 具有一定的代表性。按照油气运移类型, 南斜坡属典型的横向排油系统。按横向排油系统 SPI 分类: 低级 ($SPI < 2$), 中级 ($2 \leq SPI < 7$), 高级 ($SPI \geq 7$) 判断, 南斜坡是二叠系油气运移的主要指向区, 属中级充注的排油系统。

4 圈闭

由于南斜坡相对稳定, 区域封闭层连续, 由于 $P_2b + T_1ch$ 两大套砾岩在斜坡明显减薄, 盖层主要以 P_2t 泥岩及 $T_{2-3}q$ 泥岩为主, 有效性较低, 属低阻抗圈闭类型。较为落实的圈闭有: 加格斯台圈闭

及同一构造背景上的海努克、回民庄构造, 是伊宁凹陷二叠系勘探的有利圈闭。

5 结论

总之, 伊宁凹陷二叠系含油气系统成烃关键时刻是印支末幕构造运动。由于海西末幕构造运动是伊犁盆地圈闭形成的主要时期, 对二叠系自生自储油气藏有明显的控制作用, 因此印支末幕及海西末幕构造运动是控制二叠系油气藏形成的主要因素。上二叠统生油岩在埋藏过程中, 形成两套生储组合或两套含油气系统: 自生自储生储组合是已知含油气系统, 最具勘探价值; 下生上储的生储盖组合也具有一定的勘探价值。伊宁凹陷南斜坡是油气运移的主要指向区, 具有中级充注, 横向排油, 低阻抗圈闭特征, 是二叠系油气勘探有利方向。

EVALUATION ON PERMIAN OIL AND GAS BEARING SYSTEM IN YINING DEPRESSION

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Abstract: Tiemulike Formation in the Permian above Yining depression is mainly composed of hydrocarbon source rocks which has formed two complete oil-bearing systems of $P_2t - P_2t$ self-generation & self-reserving and $P_2t - T_{2-3}$ lower intervals generation and upper interval reserving. The former system is a known system proved by drilling; the latter system is a system by deducing. The basin thermo-modeling results and comparatively analysis with Junggar basin indicate that the Permian oil and gas-bearing system in the depression had entered into hydrocarbon generation threshold by the earlier Triassic and had reached the peak of hydrocarbon generation by the earlier of the middle Jurassic and had ended oil generation and then gone into gas generation by the end Jurassic. Large scale of oil and gas generation and migration occurred in $J_3 - J_{1-2}$, the last Indo-China episodic tectonic movement (208Ma up to now) is a key movement of the system. The southern slope in the depression is believed to be a favorable region for the exploration of oil and gas on the basis of multi-analyses of the degree of oil and gas-filling, migration direction and trapping conditions etc.

Key words: Permian; oil and gas bearing system; Indo-China movement; Yining depression