التحليل السحني والبيئات الترسيبية لتتابعات الكمبانيان المتأخر – الأيوسين الأعلى في طية شيخان – شمال العراق

اطروحة دكتوراه تقدم بها

رافع ابراهيم عبدالله الحميدي

الى

مجلس كلية العلوم في جامعة الموصل

وهي جزء من متطلبات نيل شهادة دكتوراه فلسفة

في علوم الأرض

باشراف

الأستاذ المساعد

الدكتور عبد العزيز محمود مصطفى الحمداني

1428 هـ **2007 م**

Facies Analysis and Sedimentary Environments of Later Campanian – Late Eocene Sequences of Sheekhan Fold – Northern Iraq

A thesis Submitted
By

Rafi Ibrahim Abdullah Al-Hmeedi

To

The Council of the College of Science

University of Mosul

In Partial Fulfillment of the Requirements

For the Degree of Ph.D in Geology-Sedimentology

Supervised

By

Assistant Prof.

Dr. Abdul Aziz M.M. Al-Hamdani

1428A.H **2007 A.B**

ABSTRACT

The petrography and faceis of the oldest four formations exposed at the core of Sheikhan anticline have been studied. The formations are: Bekhme Formation (Late Campanian–Maastrichtina) represents only the middle sequences and upper parts of the lower formation. In general it consists of massive dolomitic carbonate rocks that have been subjected to recrystallization, and represents lagoonal facies deposits behind barriers that semi–restricts water movement.

The Kolosh clastics (Paleocene–Early Eocene) consists of cyclic sediments, in each cycle the whole units of Bouma sequence or certain parts of it are exhibited. Generally it is deep marine facies that is characterized of Kolosh Formation of typical turbidities. It was noted that the successions of Kolosh Formation was contemporaneously associated with orogeneis movements that affected the region, as the Laramide orogeny and the movement associated with rewelding of island arc with both Iranian and Anatolian Plates, in addition to the Apline orogney associated with the collision of the plates with the Arabian Plates, which indicate that these thick clastic sediments are in fact represent flysch turbidities

The succession of Gercus Formation (Middle–Late Eocene) represents shoreline transition and continental Molasse sediments that were deposited at the end of the orogenic movements associated with the collision of the continental plates in the region. It is believed that the dolomitized calcareous rocks of the Pilaspi Formation (Late Eocene) have been deposited within semi–closed lagoon that have been formed as a result of the revolution of Listeric normal faults, which deposited within the north easterly edge of the Arabian plate.