

Rift Basin Petroleum System with Ombilin Basin as a Case Study

Dr. Dardji Noeradi & Dr. Eddy A. Subroto

Bukit Tinggi February 22 - 26, 2010

Course duration: 5 days (two days coursework and 3 days fieldwork)

Who should attend

Geologists, Basin analysts, Geophysicists

About the course:

This is a combination between course and fieldworks. The two day course will provide background theory about rift basin in terms of its geological and geochemical characteristics. After the course, participants will be taken to the real and ideal outcrops related to rift basin development. Fieldtrip is designed to visit several interesting places related to rift sequences; pre-rift of various basement rocks, early syn-rift which mainly related to lacustrine sedimentation and post-rift of fluvial to deltaic deposits. Oil and gas seepages will be visited to complete the observation. Recent lacustrine sediment will be observed in the beautiful Singkarak Lake as an analog and comparison.

Course content:

1. Rift basin development and related petroleum system components
 - Basin formation
 - Basin filling
 - Basin deformation
2. Petroleum system for lacustrine sedimentary basin
3. Lacustrine source rock
 - Specific kerogen type
 - The use of geochemical biomarkers to define lacustrine sources
4. Field trips to some interesting outcrops related to rift basin developments around Bukittinggi, such as Harau, Ombilin River with its fish fossils, and so on (see the itinerary).

Field Trips Itinerary

Day 1

Observation outcrops of pre-rift and early syn-rift outcrops at **Lasi to Sulit Air area**, which consist of granites and other basement rocks, lacustrine deposits of Sangkarewang Formation and conglomerates of Brani Formation.

Day 2

Observation of pre-rift and early syn-rift of granite overlain by conglomerates of braided river deposits at **Bukit Pagias** area continue with lacustrine deposits and oil seep at Kolok area.

Day 3

Observation of late syn-rift sediment of sandstone, shale and coal of **Sawahlunto** Formation at Allied Indocoal open mine and post-rift of Sawah Tambang Formation..

Day 4

Observation of post rift of **sawah Tambang and Poro to Ombilin** Formations along the Sumatra Highway and to visit beautiful Harau area.

Observing morphology and sedimentation at **Lake Singkarak** as modern analog and comparison.

Instructors:

1. **Dr. Dardji Noeradi**, Sedimentologist, Department of Geology, Bandung Institute of Technology (ITB).

Dr. Dardji Noeradi is a Ph.D. in Basin Analysis graduated from Savoy University Chambery France in 1994. His first degree is geology (sarjana) from the Department of Geology, Bandung Institute of Technology (1982). After one year (1983-1984) joining a consultant company in Oil and Gas he joined the teaching staff of the Department of Geology, Bandung Institute of Technology in 1984, where he lectured Petroleum Geology, Subsurface Geology and Sedimentology until present time. He has also served as a consultant to many national and international oil companies operating in Indonesia and Malaysia. He has written numerous articles on Basin Analysis and petroleum geology in the Indonesian and international journals and proceedings. He is a member of IAGI, HAGI, IPA, AAPG, and also an Executive Council of AAAPG (Association of Afro-Asian Petroleum Geochemists).

2. **Dr. Eddy A. Subroto**, Geochemist, Department of Geology, Bandung Institute of Technology (ITB).

Dr. Eddy Subroto is a Ph.D. in petroleum geochemistry graduated from Curtin University of Technology, Perth (Western Australia) in 1990. His first degree is geology (sarjana) from the Department of Geology, Bandung Institute of Technology (1979). After one year (1979-1980) joining an exploration mineral company, he joined the teaching staff of the Department of Geology, Bandung Institute of Technology in 1980, where he lectured petroleum geochemistry, biomarkers, and source rock geochemistry until present time. He has also served as a consultant to many national and international oil companies operating in Indonesia and Malaysia. He has written numerous articles on petroleum geochemistry and petroleum geology in the Indonesian and international journals and proceedings. He is a member of IAGI, IPA, AAPG, EAOG (European Association of Organic Geochemists) and also an Executive Council of AAAPG (Association of Afro-Asian Petroleum Geochemists).

ENROLLMENT

In order to allow sufficient time for arranging travel plans, early enrolment is recommended. Registration will be closed on February 5, 2010. Late enrolment may result in course cancellation.

CERTIFICATE

A certificate of participation will be awarded to each person completing the course.

CANCELLATION, SUBSTITUTION & REFUND

The tuition fee will be refunded (less US\$ 100 registration fee) only if notification of cancellation is received at least 7 days prior to the commencement. Non payment of tuition fee does not constitute automatic cancellation of participation. Substitution may be made at any time for those enrolled.

TUITION FEE

Tuition fee at USD 2,250 + 10% VAT per delegate is due and payable upon confirmation of enrollment. The fee is included :

1. Accommodation at The Hills Bukit Tinggi Hotel from February 21 - 27, 2010.
2. Ground Transport during field trip
3. Field Guide

Payment should be settled at the latest on February 5, 2010. Any bank charges in connection with payment in US Dollars must be added to payment. Also the tuition fee includes admittance to the course, course materials, daily refreshments and full lunch.

Payment can be made to PT.GEOSERVICES (Ltd.)
Bank Central Asia, KCU Sudirman – Jakarta
Account No. : 035.3070.964 (US\$)