



CURRICULUM VITAE

Name : ***Antony Hansson OSMAN***
Sex : *Male*
Nationality : *Australian*
Date of Birth : *6 September 1939*
Marital Status : *Married with three adult children*

EDUCATION

Certificate Bahasa Indonesia
 Universitas Kristen Satya Wacana
 Salatiga, Central Java
 Indonesia, 1990

BSc Mathematics & Geophysics
 University of Melbourne
 Australia, 1965

BSc Geology
 University of Western Australia
 Australia, 1962

OTHER ACCREDITATION

JORC (Australia) and KCMI (Indonesia) Competent Person for coal

OTHER TRAINING

Attendance at professional conferences and seminars (including presentation of papers) and relevant training sessions.

Attended Stermoyle Course on Discounted cash flow method of valuation, Perth 1973.

LANGUAGE AND DEGREE OF PROFICIENCY

English	Excellent
Bahasa Indonesia	Fair
Bahasa Dawan (Timor)	Rudimentary
Tok Pisin / No-Melanesian	Rudimentary
Scientific French	University Studies

MEMBERSHIP OF PROFESSIONAL SOCIETIES

AUSTRALIA

- | | |
|--|----------------|
| * The Australasian Institute of Mining & Metallurgy | Fellow |
| - AusIMM Overseas Liaison Officer 1999- | |
| - Councillor 1990-98 (Representing Overseas 1997-98) | |
| - Chairman, Sydney Branch 1988/89 | |
| - Chartered Professional Geologist 2000- | |
| - Board of Chartered Professionals (Environment / Geology), Member 2005- | |
| - AusIMM Publications & Conferences Task Force, | Member 2005-11 |
| - AusIMM Minerals Heritage Committee, | Member 2004-05 |
| * Mineral Industry Consultants Association, Inc. (MICA) | Member |
| - Director, 2003- | |
| - Editor MICA Newsletter 2003- | |
| * Coalfield Geology Council of NSW | Member |
| - Executive Committee 1995-97 | |
| * Geological Society of Australia | Member |
| * Australian Society of Exploration Geophysicists | Member |
| * Sydney Mineral Exploration Discussion Group | Member |
| * Coal Preparation Society of Australia (NSW Div) | Member |
| * Royal Society of Western Australia | Member |

INDONESIA

- | | |
|---|----------------|
| * Indonesia-Australia Business Council | Member |
| * Melbourne Uni Alumni Association in Indonesia | Fndtn Member |
| * IMA/AusIMM Joint Professional Cooperation Group | Fndtn V- Chair |
| * PERHAPI | Member |
| * IAGI | Member. |

UNITED KINGDOM

- | | |
|----------------------------------|--------|
| * The Geological Society, London | Fellow |
|----------------------------------|--------|

- | | | |
|-----|--|--------|
| USA | * Society of Economic Geologists | Fellow |
| | * Society of Mining, Metallurgy & Exploration, Inc | Member |

A. H OSMAN
BSc (WA & Melb)
FAusIMM(CP) MMICA FGS FSEG SME

CAPABILITY STATEMENT

Commencing with coal evaluation work in Australia in 1969 A H Osman has acquired the status of " **Competent Person**" for the assessment and reporting of coal resources/reserves and qualities for Australian Stock Exchange purposes and hence the Stock Exchanges of Jakarta and Surabaya. Has status as "Expert Witness" in coal related matters. Osman has worked on / evaluated coal deposits throughout Australia, and Indonesia and Vietnam, and has visited coal mines in Germany, England, Wales, Spain and Malaysia. He has worked on a variety of coal deposits and types (coking, steaming, lignite, anthracite), with varying degrees of structural and interpretational complexity.

1981- to date Osman acquired specific skills in the establishment of coal company operations in Indonesia (PMA and PMDN), and the initiation and monitoring of the processes thereof from Application, Justice Dept approval and through to Gazettal. (Later monitored the incorporation processes of a PT PMA company involved with mining etc management information systems software and installation, review and drafting of legal documents). Following his establishment of PT ARUTMIN Indonesia in 1981-84 he has regularly visited and traveled in Indonesia and worked on a variety of coal related projects. In the mid '90's was involved in the establishment of the operations of a PMDN coal exploration company.

In 1996-99 he reviewed the entire Indonesian coal mining industry for a major foreign company. Review of Indonesian coal properties continues for various clients. He maintains contact with Indonesian Government and private mining industry personnel. He has just completed an investment survey into the Indonesian coal industry for a major overseas company.

Osman has worked with major and minor exploration companies with experience in, porphyry Cu-Au-Mo, diamonds, lead-zinc, nickel, kaolin, manganese, bauxite etc. Most work has required supervision of field and office staff. During the course of his career he has worked on and sampled lateritic iron ore and sedimentary iron ore deposits in Western Australia and Indonesia and Cambodia.

He has a detailed understanding of requirements of national and expatriate personnel and families living and working in Indonesia, Melanesia and Asia, "culture shock" etc. He has training and teaching experience and he has high stress tolerance.

(The recently published book (April 2005) by PT ARUTMIN Indonesia and COMDES entitled "Langkah Perjalanan PT ARUTMIN Indonesia-Menegakkan Good Mining Practices", includes details of A H Osman's part in the establishment of PT ARUTMIN in 1981-84 and a photo. The ARUTMIN House Magazine "Serasi" for July-September 2005 also carries an article with A H Osman on the establishment of the company in the earliest days).

DETAILED WORK EXPERIENCE

- 2010-2012, Various clients, including a Chinese National company, JORC compliant coal programs in Indonesia, due diligence .Thar Coal deposit Sindh Province, Pakistan, assessment.
Attended Coal Conferences, Trans Asia, Bali, (2011-12) and Trans Mongolia, Ulaan Baatar (June 2011)
Review coal concession areas, Central, West, South and East Kalimantan (Borneo)
Speaker at JORC Coal Seminars, Samarinda, Kalimantan Timur (Feb and Nov 2011)

12 /10 -2/11 : Manganese deposits review / assessment, West Timor. (Hong Kong Stock Exchange)

01-12 /10 , 01/11 : Review coal geology and potential of Central and East Kalimantan, and South Sumatra concessions.
- 2009

12 / 09 : Review geology and potential of a Central Kalimantan coal deposit

10—12 / 09, 2010 : Evaluate core drilling recovery problems at South Sumatra coal KP. Retained to advise on procedures for a JORC Code compliant evaluation program

5-7/09 : Client due diligence for JORC compliance drilling and assessment program low rank coal, East Kalimantan. (Thai / Malaysian Group)

4/09. : With Coffey Mining. Brisbane, Queensland)
Revision of Qi Pan Jing coal mine (Inner Mongolia, PRC) Resources and Reserves report. (Hong Kong Stock Exchange)

Assist Mining Associates Pty Ltd with several potential projects in Indonesia
- **2008 - Various clients.**
Due diligence on Indonesian coal properties, Kalimantan, Sumatra, Suluwesi
- **12/07-3/08. With Coffey Mining**
Due diligence on Qi Pan Jing (Inner Mongolia, PRC) underground Coal mine (coking and steaming coal products).
- 7-9 / 2007 Two clients
Review and advise on aspects of Indonesian bauxite production and evaluation.
- **7-8 / 2007 Indian client**
Review coal area in East Kalimantan
- **5/2007 Malaysian client**
Review coal prospect in Sumatra
- 3/2007 Thai Indonesian client
Review of lateritic nickel prospect
- **1-2/2007 Assisting Barlow Jonker Pty Ltd**
Indonesian client with two prospects in Kalimantan Selatan
- **6-11 / 2006 BHP-Billiton**
Review of coal geological reports (Jakarta)

- **5/2006 Various Australian clients onwards**
Review of coal potential of KP's
- **3/2006 Queensland based client**
Presentation to senior management on the Indonesian coal mining industry.
- **3/2006 Malaysian Client**
Iron ore resources of Indonesia and Cambodia
- **1/2006-2/2006 Singapore Client**
Due diligence on coal resources and reserves at an East Kalimantan coal mine.
- **11/2005 -12/2005 Australian Client**
Coal Bed Methane study –Indonesian coal seam prospects
- **3/2005 – 12/2005 . Overseas Client.**
Preparation of comprehensive report on entry into the Indonesian coal mining industry.
- **3/2005 Gulf Alumina**
Review of potential for bauxite development in Indonesia. Occurrences of lateritic iron ore deposits.
- **11 /2004-1 /2005 .** Worked in association with **Ir H Achmad Prijono** (former President Director of PN Tambang Batubara) in preparation of a coal supply business plan for PLN (The Indonesian State electricity company). Ir Prijono passed away suddenly 30 January '05.
- **7/- 12/2004. PT Ceramic Diamond Industries Group, Surabaya, Indonesia.**
Retained to provide advice on Central Kalimantan coal deposits, their acquisition, evaluation and development
- **5-7/2003. AuIron Energy Ltd** Sydney, valuation (geological and reserves estimates checking) of Yarabee Coal Company (anthracite coal) Queensland (in association with Anderson & Schwab Australia Ltd and KPMG Melbourne)
- **10/01- 5/2002** In-country specialist (with **Anderson & Schwab Australia and KPMG**) for the valuation of **PT KIDECO Jaya Agung**, East Kalimantan (for then 100% shareholder Samtan Ltd of South Korea). Visited Pasir mine site, port site and collected data and wrote report on geology, reserves, mining, coal preparation, infrastructure, transport, shipping, valuation aspects.
- **5-6/2001. Aquila Resources Ltd** Perth WA. Retained to advise on entry of Aquila into NSW and Queensland coal industries
- **3-5/2000** Acted as expert witness in Singapore Arbitration Court for a client of **BAKER & MCKENZIE International Law Firm** relating to an Indonesian coal property.(Case decided in client's favor)
- **1-2/1997** Consultant to **PT VIETMINDO ENERGATAMA** relating to a northern Vietnamese anthracite coal deposit.
- **1996-1999** Reviewed entire Indonesian coal industry for **CYPRUS AUSTRALIA COAL COMPANY** leading to recommendations for acquisition and negotiations, Kalimantan and Sumatra.

- 1996-2002 Reviewed Indonesian coal industry and retained to provide coal industry data for **AME MINERAL ECONOMICS**. 1999 prepared study on Australian coal exporters strategies for survival.
- General consulting work on Indonesian coal properties for a number of smaller companies, including **Herald Resources, White Mining**.

Consultant / Contractor with clients including AusAID/GRM International (foreign government capacity building programs). NSW Department of Mineral Resources (study of mined-out areas rehabilitation procedures world-wide), Civic Equities Corporation (telecommunications), Weda Bay Minerals Inc / PT Aneka Tambang. (Halmahera Island-lateritic nickel, core logging, mapping, sampling), Xenolith (manganese, coal)

1995-1996

Executive Vice-President **PT MININDO DARMASAKTI ANUGERAH**, Jakarta. Establishment of a coal exploration and development group with properties in West and South Kalimantan. Visited Silantek coal mine in Sarawak, Malaysia.

1990-1995

Consultant/Contractor to companies including AIDAB/AusAID (NTT Integrated Area Development Project, West Timor-One year Deputy Team Leader), Australian Trade Commission (Jakarta- collection of Indonesian mining industry data), Alfred MacAlpine International (UK), MINVAL Associates, P T Mincom Indoservices (Jakarta- monitoring of incorporation processes for this PMA software leasing company, marketing), etc From 1991 onwards provided liaison services between The Australasian Institute of Mining & Metallurgy (AusIMM) and The Indonesian Mining Association (IMA), The Association of Indonesian Mining Professionals (PERHAPI) and PII/BKT (Mining manpower section of the Indonesian Institution of Engineers). IMA & PERHAPI request contribution of papers at mining conferences eg 2003 & 2005. AHO has provided Mineral Industry Consultants Association of Australia (MICA) liaison services with the aforementioned three Indonesian groups.

1985-1990

Contractor to companies including Pancontinental Mining (Australia and PNG), Earth Resources Australia (Australia and Indonesia), PT Mincon Abadi (Australia and Indonesia) et al. involving diamonds, gold, magnetite iron ore, graphite, kaolin, manganese, etc

- 9/89-3/90 **NSW COAL COMPENSATION BOARD**, Member of the Board, and later a consultant to the Board.

1984

ANACONDA INDONESIA INC, Jakarta, General Manager, diamonds joint venture with PT Aneka Tambang (the Indonesian State general mining company) in Central and West Kalimantan.

1981-1984

PT ARUTMIN Indonesia, Jakarta, First employee and performed the duties of Exploration and General Managers and President Director; established the entire company, management, field operations (three sites/offices), staff hiring and training, and exploration programs (General Survey and Exploration stages) of this the first PMA (foreign capital investment) coal contractor company in Block 6, South Kalimantan. This was a First Generation Coal Co-operation Agreement with the then state coal company PN Tambang Batubara.

This was a massive undertaking including monitoring of the incorporation processes.. First year budget of approx US\$5 million. The area of 1.2million ha was the largest of any of the coal contractor areas, then or since. Liaison with many government agencies. Visited PT Utah (now PT Kendilo) operations, PT Krakatau Steel, PLN Suralaya Power plant site, Ombilin coal mine, etc. Valuable long standing contacts made and retained.

1978-1981

ARCO AUSTRALIA LIMITED, Sydney, achieving positions of Chief Geologist and an Alternate Resident Manager. Review of Australian coal properties for acquisition, Joint Venture and development (steaming and coking coal, coal suitable for syncrude processes.)

1974-1978

BP AUSTRALIA LTD-COAL DIVISION, Melbourne then Sydney, coal Project Geologist involved in mostly steam coal property review, sampling and acquisition. Assessment of Run-of-Mine characteristics from outcrop and core samples. Syncrude from coal studies. Review study of pipeline transportation of coal.

1972-1973

WESTCOLL-PEABODY JOINT VENTURE, Collie WA, Consultant, appointed Chief Geologist, steam coal exploration, drilling and development at Collie Coalfield. Prepared reserve / resource statements for Australian Stock Exchange purposes. Carried out a specific audit for the Auditors of Peabody Coal Inc, St Louis. USA

1969-1972

CRA EXPLORATION PTY LTD, Central Queensland, achieving position of Senior Field Geologist and Agent for the Company. Coal exploration especially drilling of Blair Athol open cut steam coal deposit, Capella coking and steaming deposit, and other deposits. Supervision of field crews.

1967-1968

CRA EXPLORATION PTY LTD, Bougainville Island, PNG, Panguna Porphyry Copper / Gold / Molybdenum deposit, Field Geologist, Mapping and drilling (auger and diamond coring) of surface and underground exposures. Training of indigenous employees. Supervision of field crews.

1965-1966

CRA EXPLORATION PTY LTD, WA, Field Geologist, base metals, nickel (north of Menzies) and bauxite/laterite (Kimberleys) exploration. Supervision of field crews. Visited Mt Tom Price Iron ore deposit and discussions with site geologists

1959-61 University Vacations

Western Aluminium NL, Darling Ranges, W.A
Bauxite and laterite iron ore mapping, sampling

Western Mining Ltd

Iron ore-mapping and sampling, areas north of Kalgoorlie WA.

PAPERS PRESENTED AT CONFERENCES etc

PT Stannia Bara Consulting

Samarinda, Kalimantan Timur, February and November, 2011
Seminar on the JORC Code for coal- Speaker

PT Carsurin Seminar

Bali, Indonesia, October 2008
JORC Code procedures for coal deposits

PT Carsurin Coal Handling and Shipment 2007 Seminar

Bali, Indonesia, 14-16 August
Osman, A H

Paper Titles : " Coal in Indonesia" and "Evaluation of a Coal Prospect"

Indonesian Mining Conference 2005

Jakarta, Indonesia, 21-22 September.

Sorentino, C M & Osman, A H

Paper Title : " The benefits of increasing the relationship and cooperation between
IMA (The Indonesian Mining Association) and MICA (The Mineral Industry Consultants
Association Inc of Australia) with regard to the future"

PACRIM Conference 2004

Adelaide, South Australia, 19-22 September.

Osman, A H

Paper Title : "Exploration and Project Development Risk Reduction Approaches
in the PacRim-The Indonesian Experience."

Indonesian Mining Conference 2003

Jakarta, October, 2003

Sorentino, C M & Osman, A H

Paper Title : "Certification and accreditation of Mining Professionals-the
Australian experience for the era of Regional Autonomy"

Osman, A H, 2003, "Indonesian Coal Update" Australian Mining Club Journal, No 2

Indonesian Mining Conference 2001

Jakarta 7-8 November 2001

Theme "Decentralisation of the Indonesian Mining Sector in the Global Context : Challenges and Opportunities"

Osman, A H

Paper Title : "Regional Autonomy-some issues for the Exploration and Mining
Professionals in the Field"

Mining Indonesia '00

Jakarta, Indonesia, 5-6 April 2000

Osman, A H

Paper Titles : " The Potential for Mineral Resources in Indonesia",
and
: "Regional and Mining Co-operation from the point of view of Co-operation between Professional
Associations"

McCloskey's Coal Forecast 2000

Brisbane, Qld, 8-9 November 1999

Osman, A H

Paper Title : Indonesia II : "Assessing the threat of the Indonesian coal producers in gaining market share
from the Australian producers"

Temu Professi Tahunan VIII PERHAPI (Annual Meeting of PERHAPI)

Bandung, 21-22 October 1999

Osman, A H

Paper Title : "Co-operation between Mining Professional associations to elevate
Professionalism within the Mining Industry"

PACRIM '99 CONFERENCE

Bali, 10-13 October 1999

Member of AusIMM Organizing Committee and named Chairman of Coal Session

Mining Indonesia '98

Jakarta, 3-5 December 1998

Osman, A H

Paper Title : "Balancing Social and Cultural Impacts of Mining Projects"

(At the request of the Department of Mines and Energy RI this paper was republished in a slightly edited form in "The Indonesian Minerals Exploration and Mining Directory 1999/2000" published by The Australian Trade Commission in association with the Gold Group Asia.)

Report to Council of The AusIMM 1997

" The AusIMM in Asia. Report on a visit to Singapore, Beijing, Hong Kong and Manila, September 3-10, 1997" – A H Osman FAusIMM, Councillor Representing Overseas. (This report reviewed the ways a foreign incorporated body like the AusIMM could operate overseas in Asia)

5th Asia Pacific Mining Conference

Jakarta, 16-18 October 1996

Osman, A H

Paper Title : "Progress and Practice of coal exploration in Indonesia 1981-1996"

Session Chairman (Session B Track 1 - Coal Development) & Plenary Session VI

Indonesian Mining Conference 1995

Jakarta, 22-23 November 1995

Osman, A H

Paper Title : "General Summary of Status and Prospects of Exploration and Investment", in "Mining Indonesia Fifty Years Development 1945-1995"
158.____

, pp142-

Environmental Aspects of Mining in Indonesia

Jakarta, 9-10 November, 1993

(The IMA/ AusIMM Two-Day Seminar on Environment)

A H Osman & Ken Ferguson prepared the "Report on the Seminar" for inclusion in the published book issued in 1994 by IMA.

Indonesian Coal Contractor Company Meeting (Under the auspices of PN Tambang Batubara)

December 1983, Banjarmasin & Balikpapan

Joint Chairman (with Theo van Leeuvin) of Organising Committee.

Visited the coal contractor company areas and organized presentations by the various companies in Banjarmasin and Balikpapan.

Osman, A H & Wilson, R G, 1975 : "Blair Athol Coalfield" in Economic Geology of Australia and Papua New Guinea, 2. Coal. The AusIMM, Melbourne pp376-380

Second Bowen Basin Symposium

Brisbane, Queensland, 7-9 October 1970

Osman, A H

Paper Title : "The Blair Athol Coalfield"

(Osman has extensive experience in writing reports and articles on a wide range of topics... Diamonds in Indonesia, Coal in Indonesia and The Mineral Heritage of Indonesia;