

UQFL183

Ian Webster Morley Collection

Size	23 boxes, 3 parcels
Contents	Correspondence dealing with the history of the mineral sands industry (1976-1980) and with University of Queensland Press (1980-1981); general correspondence, typescript drafts and galley proofs of "Black sands"; transcripts of talks given by Ian Morley (1977-1978); photographs, sound recordings, transcripts of sound recordings, mineral samples; newspaper cuttings; card file; personal papers including curriculum vitae 1975, 1979, 1982; research material for <i>Black sands: a history of the minerals and mining industry in eastern Australia</i> .
Date range	[1870] to 1984
Biography	Ian Morley was born in Melbourne in 1904 and educated at Melbourne University. He graduated a Bachelor of Metallurgical Engineering and Bachelor of Mining Engineering 1928/1929. In 1969 he was awarded the Imperial Service Order. His career was spent as a mining engineer in Australia and New Guinea. From 1940-1969, he was the State Mining Engineer and Chief Inspector of Mines in Queensland. He was a consultant to the United Nations, various Australian governments and mineral, petroleum and finance companies both here and abroad from the 1950's to 1970's. He was the author of many mining articles and published <i>Black sands: a history of the mineral and mining industry in eastern Australia</i> in 1981.
Notes	Unrestricted access

Box 1

Whitmore, RL (ed.), *Eminent Queensland engineers*, The Institution of Engineers, Australia Queensland Division. With annotations identifying I W Morley's contributions.

Pintz, WS 1984, *OK Tedi: evolution of a third world mining project*, Mining Journal Books, London. 4 reprints enclosed inside book: book reviews.

Visitors book, State Mining Engineer Queensland, 1959 to 1965

Visitors book, *Black Sands* launch, 20 Nov 1981

Folder 1

42 slides made in connection with *Black Sands*.

JKMRC IW Morley, April 1982

Original envelopes accompanying slides

Folder 2

Copies of CV

Application for admission to the Degree of Master of Arts, UQ to Prof M Thomas.

Circular letter from Editorial Director to possible entrants for Who's Who etc.

Photocopy of UQ Enrolment form – 1979

Photograph of house and carport

Autographed menu & place card – Luncheon on the occasion of the second meeting of the Australian Minerals Council given by the Hon David Fairbairn, Minister of State for National Development, Parliament House, Canberra, Monday, 3 Mar 1969.

Correspondence from Commonwealth Secretariat, Project Officer Kegal, Technical Assistance Group CFTC MM Rahim to IW Morley & Associates re sending particulars of expertise in safety aspects of the petroleum industry.

Old Mining Journal. March 1969 Vol. 70, No. 809. [Cover photo and editorial on IW Morley's retirement after 29 years as State Mining Engineer]

Autographed copy and place card of Mount Isa Mines Limited Menu, held at Barkly Hotel, Thursday, 6 Mar 1969, on occasion of visit by Mr IW Morley, State Mining Engineer and Chief Inspector of Mines.

Folder 3

Correspondence re mining adventures on Tasmania's West Coast in the 1920's by IW Morley. Rp from *Bull Proc Australian Inst Min & Metall*, v290. no 2. March 1985.

Notes by IW Morley on Thomas, Lord Cochrane, 10th Earl of Dundonald GCB – 1775 to 1860. Admiral of Chili; Brazil, Greece and Admiral of the fleet, UK

Hunt, Doug [JCU] Industrial conflict at Mt Coolon 1935, to IW Morley 29 May 1969.

Correspondence between IW Morley; JA Walsh & K Spann 1969 to 1970

Programme Royal visit to Queensland, 1963.

Invitation from HM the Queen and HRH Duke of Edinburgh to the unveiling at Bulwer Island at 3:15pm on Wednesday 6 Mar 1963 of the stone to mark the first major discovery of oil in Australia.

Program & menu of 8th Commonwealth Mining and Metallurgical Congress in the presence of His Excellency the Governor of Victoria, Tuesday 2 March 1965, Royale Ballroom, Melbourne.

Telegram of congratulations from 'Colyn' Card of congratulations on your ISO [unsigned]

Clippings from *Aust Women's Weekly* 19 Sep 1962 of photograph of Mrs Ian Morley & friends at Parliamentary garden party.

Eighth Commonwealth Mining & Metallurgical Congress. [Australia-New Zealand 1965] Technical papers and technical sessions.

Editorial from *Queensland Government Mining Journal*, Mar 1969 Page 79.

Foreword by AJ Lynch

Photocopy of foreword to Ian Morley *Black Sands* by DJ Murphy [Dr] Reader in History

Career Resume – IW Morley [photocopies] & CV

Newspaper *Courier Mail*, Sat June 14 1969, p3.13 Birthday honours in State list – ISO citation.

Newspaper *The Times*, Sat June 14 1969 p6. Qld ISO.

Tube 1

Share certificate. London register of the Great Fitzroy Mines Ltd, 5 shares of 5 shillings each, in the name of Henry Herbert Meaden.

Tube 2

Photocopy of Bachelor of Metallurgical Engineering certificate from University of Melbourne.

Photocopy of Institution of Mining and Metallurgy Association certificate.

Photocopy of Bachelor of Mining Engineering, Certificate from University of Melbourne.

Board of Professional Engineers of Queensland, Certificate.

Institute of Quarrying. Hon Member, Certificate.

Revised certificate of above, Hon Fellow.

Photocopy of Manager's certificate of competency, [2 copies] IW Morley.

Box 2

Black Sands

Morley, IW 1979, *Black Sands: a history of the mineral sand mining industry in Eastern Australia*, Department of Mining and Metallurgical Engineering, typescript with handwritten annotations, 353 p.

Morley, IW 1982, *Black Sands: a history of the mineral sand mining industry in Eastern Australia*, University of Queensland Press, St Lucia.

Cassette tape, marked ABC – Qld

Cassette tape, marked 2 M Thompson Mg

Folder 1

Correspondence dated 1 Oct 1981 to 20 Dec 1984

Folder 2

3 photos

Folder 3

Journal articles and catalogues dated 1981 to 1984

Box 3

White, WS 1964, *The professional: Lyndon B Johnson*, Houghton Mifflin Company, Boston. Inscribed: 'To Mr I W Morley with all good wishes [signature] American Ambassador Canberra, ACT Sept. 22, 1966'

Stevenson, GJ 1963, *Increase in excellence: a history of Emory & Henry College 1836-1963*, Appleton & Century-Crofts, New York. Includes 1966 Commencement program and 6 College brochures, plus handwritten note from Harold Wenten[?], 14 Apr 1968

Printout of Gardiner J Bibliography, Confidential references at end.

Gardiner, J, *Heavy mineral sands along the east coast of Australia*, Record 1975/92 Department of Minerals and Energy, Bureau of Mineral Resources; Geology and Geophysics.

Morley, IW 1979, *Black Sands: a history of the mineral sand mining industry in eastern Australia*, Department of Mining and Metallurgical Engineering, typescript, 353 p.

Taylour, Harold and Morley, IW, 'Development of gold mining in Marobe, New Guinea', *Proceedings (Australasian Institute of Mining and Metallurgy*, no 89, 1933

Box 4

Folder 1

Working papers, drafts and correspondence re *Black Sands*, chapter 10

Folder 2

Working papers, drafts and correspondence re *Black Sands*, chapter 11

Folder 3

Working papers, drafts and correspondence re *Black Sands*, chapter 12

Folder 4

Working papers, drafts and correspondence re *Black Sands*, chapter 12

Folder 5

Working papers, drafts and correspondence re *Black Sands*, chapter 13

Folder 6

Working papers, drafts and correspondence re *Black Sands*, chapter 13

Box 5

Folder 1

Working papers, drafts and correspondence re *Black Sands*, Appendices

Folder 2

Working papers, drafts and correspondence re *Black Sands*, Appendices

Folder 3

Interviews, notes re chapter 12 Mining and the environment

Folder 4

Pamphlets on Rutile Zircon, Titanium beach sands in WA, NSW & QLD

Folder 5

Maps of sand mining areas – various localities – illustrating enclosed SIM committee report press release and detailed parish and county maps of areas QLD NSW etc.

Manilla folders on Industrial Minerals, 1970, photocopies of articles etc Including :

- handwritten notes 1971 & 1972, 1973, 1974, 1975.
- Australian mining: 1969, 1970, 1972, 1973.
- Chemical engineering and mining reviews 1931 to 1948.

Box 6

Photo album of sand mining processes 1930s

Minerals and the state, Mineral Sands Producers Association 1981 Symposium 18 May 1981 Sydney.

Red folder containing cover, correspondence and notes on style and layout, Nov 1978.

Folder 1

Production tables of mining firms at various localities 1934 to 1971.

Folder 2

Till MW, *Brief history of NSW Rutile Mining Company Pty Ltd Cudgen*.

Paper from Murphy Ores Inc Pty Ltd to Mr IW Morley re cancellation of sand mining leases on Fraser Island.

Press statement by the acting minister for National Resources the Hon PJ Nixon, MP 20 Dec 1976.

Printed pamphlet the *Murso Process for upgrading ilmenites to rutile grade material* [Murutile] introduces a new era for TiO₂ [presented by Murphyores Inc Pty Ltd].

Murphyores Holdings Ltd, Memorandum of offer for sale 28 March 1968 [Printed brochure].

Sinha, Dr HN *Mineral Sands: their occurrence and uses*, Printed by Murphyores Inc Pty Ltd DM Minerals [A Dillingha – Murphyores Joint Venture]

We care for Fraser Island [printed brochures with coloured illustrations].

Photocopy of extract from Hansard, House of Reps – 10 Nov 1976 re Fraser Island. Ministerial statement attached is a photocopy of US commodity data summaries, 1976.

Extract of article on conservation from *The Bulletin*, 22 Jan 1977.

Box 7

Beach Sands, reports and papers assoc. Prof HH Dunkin. Contents listed inside cover.

Hartley, BA 1968, *Report of the committee of enquiry on differences and conflicts between interests of parks and conservation authorities, scientific bodies and mining companies*. To the Hon WC Fife, MLA, Minister for Mines, and the Hon TL Lewis, MLA, Minister for Lands. Sydney, typescript with handwritten annotations.

Queensland Government Mining Journal Jubilee, 1900 to 1950 Vol 51, No 584, June 1950. Inc 2 articles by IW Morley – *Port-Wai mining exploration in Queensland*, p.527-528 and *The copper industry of Queensland*, pp.530-533.

Folder 1

A literature survey Warren Spring Laboratory, Steenoge Herts, GB, Ministry of Technology.

Ronoed typescript by KS Blaskett *Research projects in the concentration of Australian beach sands, Report following a trip to east coast operators*, 1963.

The Australian minerals sands industry, Jan 1966, An investment review, Ian Potter & Co, confidential for the use of clients only.

IPM – Industrial Products Magazine, Vol 5 No 1 Dec 1955, Published by Dunlop Rubber Australia [2 copies] ANZ bank Ltd, Economics and Statistical Department, *Beach sands in Australia*, Sep 1966.

ANZ bank Ltd quarterly survey, Jan 1967.

Mineral sands: a special Australian Financial Review survey, 25 Sep 1967.

Various photocopies of articles and newspaper cuttings on mineral sands industry.

Folder 2

Report on the Cooloola issue at the Gympie warden's court, 11 May to 21 May 1970. Inc newspaper cuttings.

Folder 3

Paterson, OD 1962, *Mineral sands in eastern Australia – paper no 1: the search for deposits of rutile and zircon* to be presented for discussion at the 1962 annual conference of the Australian IMM to be held at Surfers Paradise, Qld 5-11 Aug 1962.

Ward, WT, *Sand movement on Fraser Island: a response to the hanging climates*.

Connah, TH 1961, *Beach sand heavy mineral deposits of Queensland*, Qld Department of Mines, Geological Survey of Qld, Publication No 302 Brisbane, 1961.

Winward, K 'Quaternary coastal sediments', Extract chapter photocopied from NL Markham and H Basden (eds.), *The mineral deposits of NSW*

Lauer, PK (ed.), 1977, *Occasional papers in Anthropology* No 8, March 1977, Queensland University Anthropology Museum.

Whitworth, HF, *The Zircon-Rutile deposits on the beaches of the east coast of Australia with special reference to their mode of occurrence and the origin of the minerals*.

Box 8**Folder 1**

Cooloola & C & MSDA Cooloola issue, HA Stevenson and newspaper reports *Courier Mail*, *Sunday Mail*, *Telegraph*, *Gympie Times*, etc [from ANZ press clippings service] including photocopies of articles and correspondence from *Nambour Chronicle*, *The Australian* etc 1969 to 1970

Folder 2

Cooloola conservationist articles, correspondence and newspaper clippings 1970 to 1977

Folder 3

Annual reports dated between 1963 to 1980: Peko-Wallsend; Mineral Deposits Ltd; Western Titanium Ltd; Associated Minerals Consolidated Ltd; Murphyores Holdings Ltd.

Folder 4

Correspondence dated between 1975 to 1979 re accounts for consultancy work to Julius Kruttschnitt Mineral Research Centre.

Folder 5

Industry leaflets and pamphlets

Folder 6

Tue 3 June 1975, 'Australia: top mineral sands producer', *Courier Mail*. p14.

Sinha, Dr HN, *Mineral sands: their occurrence and use*. Murphyores Inc Pty Ltd.

Brown, GA 22 Feb 1967, *Offshore minerals in Australia*, Presented to 96th annual meeting of the American Institute of Mining, Metallurgical and Petroleum Engineers, Los Angeles.

Brown, GA & MacCulloch, RF 1970, *Investigations for heavy minerals off the east coast of Australia*, Planet Management and Research Pty Ltd, Sydney.

Duplicated typescript, Associated Minerals Consolidated Ltd, 1 Lake Munmorah NSW, 2 Rehabilitation of mined areas.

Brown, GA 1971, *Offshore mineral exploration in Australia*, Rp from Underwater Journal.

Jones, HA & Davies, PJ *Preliminary studies of offshore placer deposits – eastern Australia*.

Brown, GA 1971, *Review of results of exploration of offshore rutile off eastern Australia*, Prepared for Planet Metals Ltd.

National Bank monthly summary, Aug 1975.

Murphyores Holdings Ltd Letter of offer to shareholders, 11 Dec 1980.

Rutile Corporation of Australasia Ltd Prospectus

Uranium mining and nuclear power: a discussion paper, Australian Uranium Products Forum.

The Australian mineral sands and a profile of one of its early pioneers, tribute to Mr James Patrick M Murphy, NSW Rutile Mining Company Pty Ltd.

Australian Mining Industry Council, Correspondence to IW Morley from KF Paterson re AMIC pubs relating to the mineral sands industry, Illustrated leaflet from Murphyores re Fraser Island enquiry–rehabilitation. Photocopy from *The Chronicle* [Nambour?] dated Mon 13 Nov 1978 headed 'Island revegetation program looks good'.

Typescript letter from AMIC executive director G Paul Phillips, 10 Feb 1977 re Fraser Island.

Plus accompanying comments on the Fraser Island environmental enquiry and the subsequent federal government decision on 10 Nov 1976 to ban the export of the products of mining on the island, 19pp.

A declaration of policy by the AMIC mining and the environment 1978.

Box 9

90 Audio tape cassettes. *Mineral Sand mining history records*, Research by IW Morley. Cassette nos. 101 to 123; 125 to 133; 141 to 148; 153 to 155; 157 to 171; 180 to 208; 220 to 221.

Box 10

9 Audio tape cassettes, *Mineral Sand mining history records*, Research by IW Morley, Cassette nos 134 to 140; 150 to 151.

Index to tapes

Folder 1

Photocopies of *AMI Quarterly Review & Statistics*, Bureau of Mineral Resources, Geology and Geophysics.

- 1961 30 Jun v14 No2 p.43
- 1961 30 Sep v14 No3 p.71
- 1961 31 Dec v14 No4 p.97
- 1962 31 Mar v15 No1 p.21
- 1962 30 Jun v15 No2 p.59
- 1962 30 Sep v15 No3 p.109

General summary Australian mineral production published: 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, no tables 1958, 1959, 1960, 1961, 1962, 1963, Monazite, Titanium, Zirconium 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976

Folder 2

Australian Mineral Industry Annual Review

Preprint Titanium: 1977, 1978 & 1979.

Photocopied tables from 1976 quarterly bulletin

Photocopy of chapter 15 from 8th CMC 1965 v3. The AMMMI

Mineral commodity summaries 1979

Loose correspondence [green duplicates] from IAW re Black Sands production statistics and related matters.

Photocopy of stats from Conzinc Riotinto of Australia re TAZI 1950 to 1968

Photocopied notes on sand minerals: Titanium, Zirconium, Monazite [Ilmerite]

Folder 3

Proc of the Aus IMM No 193, 1960.

Pular, Stuart B & Glenn, RJ *Control methods in the treatment of beach sand minerals*

And

Pular, Stuart B, *Metallurgical practice in the black sands industry*.

AIME, *Lightmetals*, 1976 v1.

Bernstein, D 1995, 'Transportation planning', in WF Chen (ed.), *The civil engineering handbook*, CRC Press, Boca Raton.

Ward, J 1976, 'The Australian Titaniferous minerals industry and its resources', pp.457-479, in *Lightmetals*, v1, AIME.

Ward, J, *Australian mineral sand mining industry*, p.80.

Pearson, HF, *Statistics on Titanium & Ward J, Statistics on Zirconium*.

Hand written notes on mineral sands – *Black Sands* chapters 7 & 8.

McKellar, JB 1955, *The eastern Australian rutile province*.

Davison, CN, *Concentration and hydraulic transport of heavy mineral concentrate with automatic control*.

Dunkin, HH, *Concentration of Zircon Rutile beach sands* chapter 5.

2x Photocopy *Queensland Government Gazette* No 80 1973 re Currumbin minerals mining plus map.

Extract on income tax leading cases:

Heavy minerals Pty Ltd v Federal Commissioner of taxation 1966, Australian Income Tax Reporter 1969. v.10, p.140 Butterworth, Sydney.

NSW state reports – NSW Rutile Mining Co Pty Ltd v Simpson and others.

Mining [renewal of leases] Amendment Act No 59 1961, NSW Statutes.

ALJR [High Court of Australia] 1961 to 62 Associated Minerals Ltd v NSW Rutile Mining Co and others, pp.296-300.

Folder 4

The Australian Digest Master Volume 1967-1972, Wyong Shire Council v Associated Minerals Consolidated Ltd.

Duplicated typescript: Bunning Walter, Jan 1971, *Report shire of Great Lakes, Proposed mining of high dunes adjoining Myall-Smith Lakes*. Appeal by Mineral Deposits Ltd Inc personal notes.

Cooloola Privy Council decision 1974, Cudgen Rutile no 2 Pty Ltd v Gordon William Wesley Chalk and consolidated appeals. As reported: Privy Council Appeal Nos 16, 17 & 18 of 1973. Full court of the Supreme Court of Queensland.

Fraser Island Environmental Inquiry Final Report Oct 1976, Report of Commission. Inc personal notes.

Recommendations and findings of the warden in relation to mining lease applications no 165, 164 & 152 [Agnes Waters?] et al Magistrates Courts Office 24 July 1975.

Photocopied typescript court records: Court hearing resumed at 2pm pp.431-448 & Court hearing resumed at 11:07am pp.415-430.

Cash, NJ & Muir, Sir David 1977, Report – Committee of Enquiry – Future land use – Moreton Island, pp.13-71.

Morley, IW 1978, MSH [Mineral Sands Holdings?] Hand written notes.

Wade v. NSW Rutile Mining Co Pty Ltd & others. Court of Appeal. Herron CJ, Sugerman & Walsh JJA. Nov 21, 22; Dec 5, 1967 pp.227-243.

Supreme Court of NSW, Murphy v Ramsay, Full Court, Sugarman, Maguire and Walsh JJ. 2,3,4,5 Dec 1963, 5 Feb 1964.

pp.267-274.

Supreme Court of NSW, Murphy v. Ramsay, Jacobs J. 23,24,25,29,30 July; 2,14 Aug, 1963 pp. 461-469.

Table of cases 1967 to 1972

Supreme Court of NSW, Ex parte Murphy: re Mineral Deposits Pty Ltd, Full Court, Sugarman, Collins and MacFarlan, JJ. 22 April, 3 May 1963. pp.1199-1204.

Supreme Court of NSW. Ex parte Wade: re Burns and others. Full Court, Sugarman, McClemans and Maguire JJ. 25,26,27 Oct, 16 Dec, 1965. pp.1377-1386.

Wade v NSW Rutile Mining Company Pty Ltd and another, pp.247-257 from Australian Law Journal Reports 31 July 1969.

Sinclair, V. Mining Warden at Maryborough and Queensland, Titanium Mines Pty Ltd Brisbane. 27, 28 May 1975. High Court of Australia. pp.166-173.

Samples of Rutile, Zircon, Ilmenite & Monazite.

Box 11

Folder 1

Company reports from the Sydney Stock Exchange Research Division Library.

Folder 2

Ferree, TJ & Terrill, IJ 1978, *The Reichert cone concentrator – an update: gravity separation technology short course 13-16 Oct*, Mackay school of mines: University of Nevada.

AMA official opening at South Stradbroke, 9th April 1968. Courier Mail supplement.

Circular re Dormer's Engineering, Murwillumbah NSW.

2x Readings of Lismore Pty Ltd Mineral processing equipment and technical services.

Lismore machinery firm completes 1.6m export order to South Africa, *Northern Star*, 3 July 1974 & 23 Sept 1976.

Readings – the Wright impact plate gravity concentrator. Bulletin IPC 475.

Australian Mining v.69, 9 Sep 1977 – see p.30.

Proposed new flow sheet Zircon section NSW by AR Devon, Design Engineer, Sep 1972.

Beach Protection Authority of Qld, Coastal sand dunes. Leaflet no. 1-03.1 ISSN 0313 7796.

DM Minerals: a partnership of Dillingham Constructions Pty Ltd. Murphysores Inc Pty LTd. Fraser Island – *why just compensation is due*. June 1978.

York equipment brochure.

Hard hats and green fingers: a guide to mineral sand mining and rehabilitation, Associated Minerals Ltd.

Consolidated Rutile Ltd, North Stradbroke Island, Description of operations, 31 Aug 1967 5p plus 2 flow sheets.

5x brochures locker/rotex screeners.

Flow chart, Plant no 20, Test results.

Australian mineral sands and a profile of one of its early pioneers, NSW Rutile Mining Company Pty Ltd.

Folder 3

Hand printed memo to Mr IW Morley from Alan W Smith, Underhill Day and Co Pty Ltd, Toowong. Harrison, RL. [Manager Locker Rotex division] 5 Aug 1966, *Methods of obtaining best possible capacity and efficiency from Locker Rotex screens, including recommended test procedures.*

Associated Minerals Consolidated Ltd Jan 1979, *Making progress possible.*

Readings of Lismore Pty Ltd Equipment.

Rutile & Zircon mines [Newcastle] Ltd, The company and its products.

Chlorine technology: an integrated ilmenite beneficiation system.

Flow sheets to accompany Consolidated Rutile Limited – notes on a new cutter suction dredge and floating wet concentrator.

The mineral deposits, fibreglass, linatex-lined spiral. Manufactured by Mineral Deposits Pty Ltd, Southport.

Impact plate gravity concentrator.

Prospecting & proving alluvial deposits 3rd ed. Dormers Engineering, Murwillumbah.

AMA Associated Minerals Consolidated Ltd. 1500 TPH concentrating plant flow sheet.

Vibrating conveyor feeders with out of balance drive types DKF & DRF [UHDE] Locker Industries Pty Ltd.

Mineral sands air tables, Wilton-Oliver.

Toll-Chadwick transport [folder only].

Folder 4

Press cuttings 1980 to 81 *Black Sands*.

Box 12

Northern Star [Lismore] 1876 to 1976 Centenary issue, Thursday 13 May 1976 [**originally from Box 15**]

Daily News [Murwillumbah] 1823 to 1973 Sesquicentenary supplement, Monday 19 Oct 1973. [**originally from Box 15**]

Folders 1 – 3

Draft copies of chapters from Morley, IW. *Black Sands: history of mineral sand mining*.

Folder 4 [originally from box 14]

Photocopy of chapter 8 with corrections, drafts, correspondence and notes re chapter 8.

Box 13

Copy of bound *Black Sands* by IW Morley, University of Queensland, Department of Mining and Metallurgical Engineering, Julius Kruttschnitt Mineral Research Centre.

Folders 1a – 1b

Galley proofs of book *Black Sands* up to page 80 and photocopies of pages up to page 269. Includes maps, diagrams and tables.

Folder 2

Original yellow plastic folder and typed card file: abstracts of articles appearing in periodicals and newspapers published in Australia.

Box 14

Folder 1

Copies of IW Morley's correspondence to Dr DJ Murphy re chapter titles and dates, Appendices, maps, diagrams, recording discussions also with DA Berkman and Dr AJ Lynch and replies to IW Morley. 1978.

Folder 2

Black Sands: Drafts of layouts, notes on style layout, references, illustrations, proposed chapters and appendices.

Folder 3

Black Sands: Marked & unmarked typed copies of chapters 2-7

Folder 4

Black Sands: draft copies chapter 8

Folder 5

Black Sands: corrected copies of chapters 1-7

Folder 6

Black Sands: typed and written notes and drafts chapters 7 & 8

Folder 7

1979 draft of chapter 9 with corrections and additions.

Correspondence from Murphyores attached to notes. 2x typed copies of first draft [March 1979] of chapter 9.

Box 15**Folder 1**

Morley IW, Miscellaneous notes of interviews for tapes 1976 to 1979

Folder 2

Typescript of 'Mineral Sand Mining History', Sir Maurice Mawby, Director, Conzinc Rio Tinto on Australia Ltd 12 Aug 1976. Notes of interview concerning Maurice Mawby's association with the mineral sand industry [2 copies and notes].

Zircon-Rutile Ltd, Melbourne, Friday 26 March 1976. Meeting – C. Wallace Smith/F.S.Wright.

Zircon Rutile Ltd, chairman's speech at annual general meeting held 10 Oct 1945.

Zircon Rutile Ltd, report of proceedings at extraordinary general meeting of shareholders, Tuesday 14 March 1936.

Written version of taped discussion between C Wallace-Smith, F.S Wright and IW Morley.

Chapter 20 *Black Sands* appended.

Coffs Harbour Rutile NL

Photocopy of handwritten copy book kept on ledger pages headed Drake Gold Fields 20 Aug 1870.

History of mineral sand industry, eastern Australia, Notes by IW Morley June 1977. McAulay diaries 1895 to 1997.

Newspaper clipping, *Northern Star* 16 May 1894 re mining in district. Reference to card 192. French mining syndicate 2.5 miles north of Jerusalem Creek, about 1907. Including letter from P.Maddern, Warragul to TC Hewitt & photocopies of old newspaper cuttings re beach sands and mining 1920s to 1930s.

Appendix 14 – report on the auriferous beach sands of the Esk river and Jerusalem Creek in the parish of Esk, County Richmond. Geological survey branch, Department of Mines and Agriculture.

Typed copy of article appearing in the *Clarence and Richmond River Examiner*, Grafton, 13 Sep 1870. [see card no 214 ref] plus photocopy from NSW Geological Survey Bulletin no 7 pp21 & 22 'Gold' by EJ Kinny. Beach Sands.

Peak HG 1961, Extract from *Action and observation at Ballina during 1909 & 1910*, Brisbane for the Richmond River Historical Society.

Typed copy and photocopy of original letter from AJ Buckland to NC Hewitt 24 Oct 1927, accompanying article on beach mining.

Photocopies of reference cards with subject headings referring to proposals for prospecting assistance to work for gold in mineral sands.

Mingaye, John CH 5 July 1892, *Notes on the occurrence of platinum gold and tin in the beach sands in the Richmond River District NSW* pp.368-70

'Auriferous beach mining in Australia', *Engineering and Mining Journal* 491-492.

Photocopy of US Department of the Interior Bureau of Mines. Commodity data summaries, 1976. An up to date summary of 95 mineral commodities.

Typed transcript of side A of cassette 112. See ref card 242. Interview with Mr HG Whitworth.

Folder 3

Typed transcript of Mineral sand history cassette 114 side B, Interview with WH Derrick 26 Oct 1976. See ref card 239.

Photocopy from Northern Star 24 Nov 2011 p.46 *Vanished sand hills* see ref card 248. Annotation on last page by IW Morley.

Photocopied extract from annual report of the Department of Mines NSW 1896. Report by DW Munro on prospecting work done on the Northern Beaches. See ref card 245. Inc. Sketch plans a and b. Parish of Riley, County of Richmond.

Carbon copies notes on interview with Dr Barry Morrison. Mineral Deposits Ltd, Southport. Tues 31 May 1977 re. AJ Knowles.

Typed transcript, Mineral sand history 16 Oct 1976. AM Watson, an early partner and later managing director of Mineral Deposits Syndicate and later Mineral Deposits Pty Ltd. and at the last, Chairman of such company before it was finally taken over by the NL Group see rec 259.

Typed transcript of cassette 123a PW Newman [WA] history re Tamco and Murphy – Feb 1977.

Transcript of cassette no 128 side B 24 Jan 1977 Southport, Interview with Charlie Newey, Planning and Development Manager, Mineral Deposits Ltd.

PMH *Black sands of the northern beaches*: Part 1. Sydney Morning Herald 10 Dec 1930 p.12. Part 2. Sydney Morning Herald 11 Dec. 1930 p.10. Attached photocopies of SMH.

Carlson, A 10 Dec 1948, *A progressive south coast industry*. Queensland Government Mining Journal, pp.476-482.

Connah, TH 20 July 1948, 'Reconnaissance survey of black sands deposits: south east Queensland', *Queensland Government Mining Journal* pp.223-245 and errata for article in QGMJ 21 March 1949.

Carlson OJ 20 June 1950, 'The beach sands minerals industry of South East Queensland', *Queensland Government Mining Journal*, pp.493-498.

Bayly, MG 20 Sep 1952, 'Beach sand mining in Queensland', *Queensland Government Mining Journal* pp.742-748;753;755.

Carlson, OJ 20 June 1944, 'Exploitation of minerals in beach sands on the south coast, Queensland', *Queensland Government Mining Journal*, pp.144-145.

Ball, Lionel C 15 Feb 1905, 'Gold, platinum, tinstone and monazite in the beach sands on the south coast of Queensland', *Queensland Government Mining Journal* pp.62-67.

Brooks, JH 20 July 1944, 'Mineral sand deposits – Tugun', *Queensland Government Mining Journal* pp.493-494.

Bayley, MG 20 Dec 1960, 'Review of the Australian beach mining industry', *Queensland Government Mining Journal*, pp.629-642.

Folder 4

Research papers and McAulay diaries.

List of early day slides

Green copy of letter from IWM to Mr J Butt re Australasian Institute of Mining and Metallurgy, Southern Queensland Branch – Feb 1977 re talk given by IWM on 'A history of mineral sand mining, east coast of Australia'.

Xerox of address given by IWM on his retirement, in the presence of the Premier of Qld.

Typescript of J Scott Moffat – notes concerning JSMs association with the mineral sand industry compiled by IWM. Jan 1978.

Letter to IWM from KP Yarwood, Mineral Deposits Ltd, 3 Feb 1977.

Letter to IWM from RA Cameron, managing director, Consolidated Rutile Ltd, 12 Sept 1977.

Letter to IWM from AR Devon AMA Associated Minerals Consolidated Ltd, 13 Sept 1977. Also letter 8 Feb 1977.

Letter from IWM to Mr JA Coker re history of mineral sand mining industry re making negatives or prints of the photos from Mr FS Wrights album.

Typed copy of history of mineral sand mining industry, eastern Australia, old photographs listing for possible reproduction in finally printed history.

Typed ½ yellow pages. Transcript of seminar talk by IW Morley entitled 'Technological advances – mineral sand industry during last 45 years' 1977.

Typed ½ yellow pages. Transcript of seminar talk by IW Morley entitled 'History of the production of heavy mineral sands on the Australian east coast' plus table of slides shown 1977.

Transcript of seminar talk by IW Morley entitled 'Black sand: preliminary researches in mineral sand mining history' 1976.

Transcript of talk to AIMM 'Notes on the history of mineral sand mining east coast of Australia' 1976.

Notes 13 Oct 1978 JKMRC seminary IWM 'The rutile boom of the fifties before during after'.

Yellow paper notes in red ink on illustrations for talk to institute 15 Feb & 30 July.

Seminar – IW Morley JKMRC 30 July 1976 *black sand – preliminary researches in mineral sand mining history* – as recorded by tape and substantially corrected but not edited.

Morley IW *Researching mineral sands history*.

Morley IW *Researching and writing mineral sands history*.

Fourth draft, Nov 1978 *Black sands*, notes on style, layout, references, illustrations, proposed chapters and appendices.

Folder 5

Letter to IWM from WC Mierendorf, sec. Chamber of Manufacturers of NSW, Newcastle re mineral sands industry and their history. includes Mineral sands [state] award-wages table and schedule of award.

Newspaper cuttings: *Australian Financial Review* 'Mineral sands bounce back: AMC plans \$18 million rutile expansion'.

Thursday 5 July 1979 'Rutile heads the mineral sands big recovery: the mining revival – part 4'. *Australian Financial Review*, pp. 18-19

Handwritten notes attached to photocopy of tables on *Quarterly Bulletin of Mineral Sands Statistics*, March quarter 1979. Bureau of Mineral Resources, Geology and Geophysics, Canberra ACT.

Typed tables for appendix III and appendix V cover.

Letter from Australian Bureau of Statistics, 10 July 1979 attached to previous letter a copy of a letter from IWM to Deputy Commonwealth Statistician 27 June 1979. Notes and tables attached.

Correspondence from Australian Oil and Gas Corporation Ltd, 29 Aug 1977 from DA Berkman, Chief Geologist. Photocopy of page from '*The Mineral deposits of NSW*', 1974 by NL Markham and H Baden, eds. *Heavy mineral sands* by K Winward. Copy of letters to DA Berkman 2 Aug 1977 & 4 July 1977 plus notes and maps attached.

Typed mineral sands potential at Department variations in Ru-zr-II ratios, Notes compiled from company reports and other data for AOG Minerals Pty Ltd.

Summary of information obtained to date concerning the early days of Tamco and National Lead in the mineral sands industry in Australia as compiled by IW Morley.

Letter from IW Morley & associates to Mrs GJ Armstrong, thanks for help in arranging visit and interview with her father Mr WH Derrick, 8 Nov 1976.

Printed brochure – Readings of Lismore Pty Ltd, Mineral Processing Equipment and Technical Services.

Leaflet Neumann Associate Companies, Currumbin, Gold Coast , Qld.

Brochure Neumann Equipment Marketing Pty Ltd.

Typed memorandum, Under-secretary for mines – 2 Sep 1949, Beach sand mineral research, signed IWM.

Photocopy of letter from Consolidated Rutile Ltd, GE Maynard to the Manager, Brisbane Stock Exchange, re company information.

Typed carbon list of authorities to prospect mineral sands, Listed chronologically from Annual Report, Department Mines, 1948 to 1976.

Mineral History : contacts to be made

Itinerary of Southern visit Sep/Oct 1977

Letter from DJ Murphy to Ian Morley re John Sinclair.

Bibliography

Requirements for and presentation of PhD degree in UQ

List of IMM abstracts arranged according to Universal Decimal Classification

Reprint of supplement to the *Queensland Government Mining Journal* v.73 no 847 May 1972.

Selected list of journal titles abbreviated according to World List of Scientific Periodicals and including select list of journal titles abbreviated according to the principles of world list of scientific periodicals or abbreviated according to Australian Science Index CSIRO. Source indicated.

Australian history instructions for the presentation of essays and tutorial assignments.

Australasian Institute of Mining and Metallurgy – guide to authors of conference and symposium papers, Oct 1974.

Written notes JKMRC seminar

Corrections, fore pages IV to VII

Box 16

Australia Department of Post-war Reconstruction, Northern Australia Development Committee, final draft report, 5th meeting Melbourne, 13-14 March 1947.

Hetherington Chas R 1964, 'Energy resources of Queensland and their use' Report to the Premier of Qld.

Queensland Department. of the co-ordinator general of public works 1947, '*Report on large scale development of Blair Athol coalfield*', Queensland Department. of the Co-ordinator General of Public Works, Qld.

Folder 1

Qld Department of Mines, Report IW Morley, State mining engineer, North American Study tour May to June 1966 & accompanying circular stating "confidential" for Cabinet. & memorandum, 26 Aug 1966 66/1082.

5 Dec 1966, 'Revived source of power' *Courier Mail*

8 Nov 1966, 'Japan 'delay' to \$50m industry' *Courier Mail*

6 Nov 1966, 'Board to watch on energy' *Sunday Mail*

Qld Department of Mines. State energy [fuel] policy. Outline of steps. 1 typed sheet, newspaper paragraphs attached headed 'set policy on energy' *Courier Mail* 2 Nov 1966.

Circular for cabinet re Qld. energy resources [state fuel policy].

Qld Government Mining Journal, v67, no781, 1966

Qld Government Mining Journal, v68, no783, 1967

Qld Government Mining Journal, v68, no784, 1967

Brochure to accompany *The cliffs are red* film, an introduction to Weipa Bauxite produced by the Commonwealth Aluminium Corporation Pty Ltd.

Folder 2

Newspaper – *The Daily Colonist Victoria*, 11 May 1966, front page photo of IW Morley in Canada photographing fence paintings.

2x Souvenir copy of agreement between the State of Queensland and Commonwealth Aluminium Corporation Pty Ltd, 16 Dec 1957.

2x Queensland Energy Resources Advisory Council Annual Report year ended 30 June 1968, Mineral House, Oct 1968.

'Minerals and governments' being an address given by IWM to 1974 Management Systems Council Conference on utilisation of resources 19 Sep 1984.

Qld Department of Mines, Bauxite on Cape York, status as at January 1957; press statement appended from minister of mines 20 Nov 1956 Hon EH Devries; Annotated printed contents listed p9. Map of North Qld and Cape York entitled Qld showing local govt areas and principal stock routes scale 16 miles to an inch or 1:1,013,760. Qld 16 mile stock route map sheet 8 page 7 and chart of companies p8.

Typed notes [1/2 page green copy paper] an address to be given to the annual dinner of the central Qld branch of the Australian Institute of Mining and Metallurgy, Rockhampton, 17 July 1971.

'The future economic development in Queensland as a result of the mining boom', Notes for an address to be given to the Chartered Institute of Secretaries, Qld division, meeting 8 June 1971 and for the annual meeting of the central Qld branch of the AIMM at Rockhampton on Saturday 19 July 1971. Minerals and Qld

'Careers in geology, mining and metallurgy' being an address given by IWM to the Qld branch of the Australian Science Teachers Association at the careers forum of their annual conference at the central technical college, Brisbane on Tues 20 Aug 1957.

'Twenty years of Queensland mining', address given to the Mount Isa Rotary Club, Wed 12 Aug 1959. 8pp.

'Some observations on oil exploration in Queensland', APEA conference Brisbane, March 1963. Morley IW 1967, 'Queensland Mineral Development'.

28 Nov 1963, 'Petroleum exploration and development Qld', talk given to the Qld State Advisory Committee of the CSIRO.

Norrie AW [Assistant State Mining Engineer of Qld] 10 Feb 1969, 'Large scale prospecting for minerals in Queensland'

Morley IW June 1963, 'Oil exploration in Queensland' paper delivered to visiting Canadian industrialists at a seminar held at Lennons Hotel, Brisbane on Wed 10 April 1963.

Strauss Simon D, 2 Oct 1972, 'Stability of metal markets – is it likely?' Julius Kruttschnitt lecture, AIMM, Southern Qld branch

Morley IW July 1962, 'The mining industry of Queensland', *Queensland Government Mining Journal*, pp.3-8.

Morley IW 20th Sept 1957, 'Queensland mining in progress, 1947 to 1956', *Queensland Government Mining Journal*, pp.641-648.

Camm RE 1972, 'Mining and the environment', *Queensland Government Mining Journal*, vol.73, no. 843. pp.4-6

UQ Department of Mining and Metallurgical Engineering printed leaflet & programme – Alchemy clock

Morley J 1972, Thirteenth annual report, Australasian Institute of Mining and Metallurgy, Southern Queensland Branch Women's Auxiliary.

Black photograph album 7 March 1969?, Underground workings of Mt Isa mines, visit by IWM before retirement.

Box 17

Navy blue folder: API-FWPCA joint conference on prevention and control of oil spills. New York 15-17 Dec. 1969. Report for Department. of Mines Qld by IW Morley. Brisbane, 1 March 1970.

Navy blue folder: Report for Northern Territory Chamber of Mines Inc. Conference – Nov 1973 – Darwin Northern Territory Mines Regulation Ordinance by IW Morley & Associates Jan 1974, With related correspondence, legislation and drafts.

Navy blue folder: Study for United Nations sea-bed committee, Common denominators in existing legislation relating to offshore mineral resources by IW Morley, Brisbane Nov to Dec 1969, inc related documents.

Folder 1

Byrnes J 1977, 'The work and times of Horace Whitworth 1902-1976', [obituary] *Mineral vol 22*, no 4, p.17.

Correspondence from Ken Lamin to IWM 24 Feb 1978 with photocopied duplicate file note dated 26 Oct 1977 attached, 'Beach sands minerals in Australia' 3pp.

Photocopy of graph showing amalgamations of various sand mining companies.

Whitworth HF 1931, 'The mineralogy and origin of the natural beach sand concentrates of NSW' *Proceedings of the Royal Society of NSW*, vol.65, pp. 59-74.

1947 'Electrical Machine' in *Encyclopaedia Britannica*, pp.143-144.

Description of the workings at special leases 39,40,44, and 60 owned by Metal Recoveries Pty Ltd. Complaint by Zircon Rutile Ltd, Report by Government Geologist 3 Dec 1940.

Markham NL 1977, 'Gold in quaternary coastal sediments', *Reports of the Geological Survey of NSW*. pp.173-177.

Correspondence from Geological Survey of NSW to Mr IW Morley re Mr Morrison's report on visit to North Coast with Mr DH Newland.

Correspondence from Kevin Winward, Department of Mines, NSW to IWM giving information on enclosures on beach sands and gold deposits and geological coastal deposition of beach sands.

Nyan DW [Senior Geologist] 22 April 1963, 'Mineral resources of Illawarra region – limestone and beach sand minerals'

Proposals for Mines Department to assay and value min/sand cores.

Extracts from prospecting board records, 1989 by D Dolstra.

Pittman EF [Govt. Geologist] 1898, 'The auriferous beach sands of the northern coastal districts'.

Notes on beach sand with concentrates and tailings.

List of authorities to prospect mineral sands.

'Coast mine plan tests sea power' *Sunday Mail*.

'State to rule coast waters' *Sunday Mail*, March 1979,

Stempf CR 1972, 'An ABC of the Australian mineral sands industry', *Australian Mining*.

'Treatment of gold bearing sands', & diagram of sand sludger.

Contributions of various material to *Black Sands* by K Winward. Quarternary coastal sediments; beach conservation issue no. 31, April 1978 and Beach Protection Authority of Queensland leaflet no 11-02 coastal sand dunes.

Winward K January 1975, 'Economic history of the heavy mineral sands industry in NSW' Geological survey of NSW, Department of Mines. Geological Survey Report o. GS 1975/011.

Miscellaneous notes – Bibliography of Australian Heavy mineral sands?

List of beach sand operators, North coast NSW/QLD 1949 or 1950.

List of NSW mineral sands industry, Firms operating separation plants 1957 with photocopies of newspaper articles on beach sands, Itinerary of tour visiting various firms. Notes of visits to beach sand plants, 1958.

Archibald JW, 'Origin and distribution of gold and platinum, north coast beaches, NSW', Abstracted from *Australian Mining Standard*, vol. 9 pp 193 & 220 from Federated Institution of Mining Engineers. Transactions. Vol.. 5, 1892-1893.

Hones HA and Davies PJ 'Preliminary studies of offshore placer deposits, eastern Australia' Extract from *Abstracts of the 25th international Geological Congress*, vol. 3.

Extract from Annual report 1880 'Southern district – Moruya division'

Thurs 2 June 1977, 'The sands of time run out for the mineral magnate' *Gold Coast Bulletin*

Thurs 2 June 1977, 'Are the protectors not the destroyers' *Gold Coast Bulletin*

Friday 8 Feb 1963, 'Modern super-structure mineral sands headquarters' *South Coast Bulletin*

Information and illustrations re first dredge use in 1934

Henry Thomas R 1948, 'our next magic metal?', *Saturday Evening Post*, 20 Nov 1948.

Cummins DG 1977, *Mineral sands industry in Australia*, Copy of lectures given to the Sydney branch of AIMM.

Sinha Dr HN, '*Mineral sands: their occurrence and uses*.

Heavy minerals in mining in the Belmont and Swansea area.

Ward, WT, Reprint, Geological Society of Australia Inc. Qld Division. 1977 Field conference; Lady Elliot Island-Fraser Island – Gayndah-Biggenden; Brisbane's North Coast and Fraser Island from the air; Quaternary geology and geomorphology of Fraser Island; Field excursion from Orchid Beach to Triangle Cliff and Lake Bowarrady.

Morrison, RP 1977, 'Mathematical modelling of high tension roll separator' extract from PhD thesis vol. 2.

Berkman Don 1976, 'Episodes of quaternary sand accumulation of the southeast Queensland coast', Summary of a talk by WT Ward from *The Australian Geologist*, Sept 1976.

Sectional maps [geological] of Fraser Island and of North Stradbroke Island.

Ward, WT & Litte, OP 1975, 'Times of coastal sand accumulation in south-east Queensland' Proceedings of the Ecological Society of Australia vol. 9 pp. 313-317.

Ward, WT 'Notes on the origin of Stradbroke Island'

Winward, K Dec. 1974, 'Compilation of exploration reports on heavy mineral sands on the north coast of NSW' Geological Survey of NSW Department. of Mines. Geol. Surv. Rep. no. GS 1974/447.

Premiers Department. re mineral resources of the Richmond-Tweed, Clarence, New England and Namoi regions. MS60/6778.

Letter from Richmond Historical Society 9 Nov 1955.

Sheet with drawn specimens of leaves?

Folder 2

Printed Commonwealth of Australia CSIRO and Mining Department, University of Melbourne. 'Ore dressing investigations', list of publications Jan 1935 to Feb 1970, Melbourne, March 1971.

Harrison, EJ 1949, 'Beach Sands' Department. of Mines NSW Geological Survey of NSW.

Bambrick, Susan 1971, 'Australia's mineral sands industry – economic perspective' 43rd Congress, Brisbane May 1971, Australian and New Zealand Association for the Advancement of Science.

Box 18

Folders 1a – 1b

General correspondence from 1976 to 1980 on the history of mineral sands industry.

Folder 2

Black Sands statistics for January 1981

'Australian Mineral Industry', *Quarterly Review, Quarterly Statistics*, vol. 19, No. 4, June 1967.

'Australian Mineral Industry,' *Quarterly Review, Quarterly Statistics*, vol. 19, No. 1, June 1966.

'Australian Mineral Industry:Australian resources of mineral sands' Reprint from *Quarterly Review* vol. 25, no. 1, September 1972.

Folder 3

Correspondence Jan 1980 to Feb 1981 re University of Queensland Press re physical production of book *Black Sands*

Folder 4

'Mining rehabilitation world's best', *Maryborough Chronicle* 22 Sept 1981.

'Pioneer dies, 68', *Courier Mail* 27 March 81

'A special soviet submarine', *Newsweek*, Feb 9 1981.

'Titanium', Supplement to American Metal Market, July 28 1981

Paterson, OD 1981, 'Note of caution in rutile industry', *The Australian*, 30 March 1981

Kingston, John 1981, 'Waiting for Washington', *AMM/MN-Aerospace Metals & I*, 16 March 1981.

Herbert, HW 1981, 'The facts of sand mining', *Sunday Mail*, 22 March 1981

'Reagan aims to build up strategic mineral stocks', *The Age*, Tuesday 17 March 1981.

Mineral Sands Producers Association, *Australia's mineral sands industry*, MSPA Oct. 1980 x2

Horler, KM, 'An industry under siege', Mineral Sands Producers' Association Ltd.

Coaldrake, JE 1979, 'Coastal sandmining and landscape rehabilitation in eastern Australia', *Landscape Planning*, 6 pp. 359-374.

'Proof Correction', in *Australian Style Manual*, 3rd ed.

Dunn, Rosalind 1980, 'Telling the voyage of Torres Strait', *The Weekend Australian*, 10 Oct 1980.

Letter from Prof Malcolm Thomis to IWM, re request to use MS on *Black Sands* for MA and letter supporting the application signed by DA Berkman and two other letters re historical matters.

Box 19

Folder 1

Correspondence re book launch 1981

Ruth, John P 1981, 'Rumblings in Ruthenia: rising problems seen for copper production', *American Metal Market*, 4 Sept 1981. Review of 'Reflections on an era', by Sir Ronald Prain.

Maher, Peter (ed.), 'Rutile output slashed', *The Mining and Oil Review*.

Morley, IW 1981, 'The story behind our mineral sands industry', *The Gladstone Observer*, Saturday 10 Oct 1981.

Overseas Trading: journal of the Australian Department of Trade and Resources, vol. 33, no.15, 31 July 1981.

Folder 2

Transcripts of cassette tapes of interviews by IW Morley, Mineral sand mining history.

Cassette no. 103, side B. 9 Oct 1976, Mr Ross Bartlett, Processing supervisor. Associated Minerals Consolidated.

Cassette no. 104, [A&B] 105, A. 7 Sept 1976, Mr O Howden

Cassette no. 107, side A. 20 Oct 1976, Mr Paul Oliver, General Manager, Rutile Zircon Mines Ltd, Hexham.

Cassette no 109, side A. 21 Oct 1976 George Ashton, District Mine Manager, Associated Minerals Consolidated Ltd.

Cassette no 110, side A. 21 Oct 1976 BA [George] Hadley, Ex-inspector and chief inspector of mines, NSW, 1939 to 1967

Folder 3

Cassette no 112, side B. RB [Ralph] Randell. Zircon Rutile

Cassette no 115, side A. 27 Oct 1976 SS Pullar, Metallurgist. Titanium Alloy Mfg, Co & RZ Mines Ltd.

Cassette no 116, side A&B. 28 Oct 1976 ER [Roy] Hudson, Rutile & Zircon Mines Ltd.

Cassette no 117, side B. 27 April 1977 Graham Brown, [geologist] executive director. Australian Marine Resources Planet Group.

Cassette no 117, side A. March 1977, CW Marshall

Cassette no 118, side B. 1 Nov 1976, KRCC Ken Cooper, Field manager/area manager 1945-1955, Mineral Deposits Syndicate.

Cassette no 118, side A 1 Nov 1976 FJ Glen, Assistant area manager, Mineral Deposits Ltd.

Cassette no 120, side B. 4 Nov 1976 HT Reading, Owner, Readings of Lismore.

Folder 4

Cassette no 121, side B. 5 Nov 1976 CS [Stuart] McDonald, Inspector of Mines, NSW. Lismore and Dalwood.

Cassette no 122, side B. 6 Nov 1977 Harold Sloane, General Manager [Electrical engineer]. Watson Dredging Pty Ltd.

Cassette no 125, side A. 4 Jan 1977 Jack [JA] Watson, Chairman and Managing Director, Watson Dredging Pty Ltd.

Cassette no 126, side A. 4 Jan 1977 Miklos Gruneberg, Mining Engineer.

Cassette no 127, side A. 5 Jan 1977 KM Horler, Accountant executive director, Aust Petroleum Explor Assoc.

Cassette no 129, side B. 24 Jan 1977 Robert Neumann & Peter James Neumann [sons of Alfred Neumann] , Carpenter, Beach Sand Mining Co, also P. Neumann and Mrs Ruck : newspaper clipping re death of 'father of beach mining' Alfred Neumann.

Cassette no 131. Side A. 24 Jan 1977 Neville Cooley, Cudgen and Tweed Heads.

Folder 5

Cassette no 132, side A. 25 Jan 1977 AE [Bert] Canning, Manager Technical Services. Assoc. Mineral Cosol. AMA.

Cassette no 133, side A. 28 Jan 1977 W&T Murphy [Bill & Tom], Chairman and Managing Director. Murphyores, Cudgen.

Cassette no 134, side A. 14 Feb 1977, Sir Clarence Byrne, OBE, Gold Mines of Australia.

Cassette no 135, side A. 15 Feb 1977, IW Morley, Address to the Southern Qld. Branch of the Aus IMM, Brisbane.

Cassette no 137, side A. 4 March 1977 IW Morley, Talk to Julius Kruttschnitt Mineral Research Centre Seminar.

Cassette no 185, side A. 30 May 1977 JP Murphy [Jim]. NSW Rutile Pty Ltd, NSW, Gold Pty Ltd. Murphyoires Inc.

Cassette no 189, side A. 14 Nov 1978 GJ [Geoff] Brittingham, Master of Mechanical Engineering Metallurgist. Cudgen RZ Partnership, Southport.

Box 20

Folder 1

Seminar, IW Morley – Julius Kruttschnitt Mineral Research Centre, 30 July 1976, 15pp.

Handwritten note 25 May 1979 headed GAM Alcorn.

Interview summary with JK McKellar, Operations Manager, Associated Minerals Consolidated Ltd, AMA, Southport, IWM 14 July 1976.

Interview summary with Mr OD Paterson, Managing Director, Mineral Deposet Ltd, Southport, IWM 13 July 1976.

Interview summary with Bob York of York Bros, Swan Bay [Richmond River] NSW, 4 Nov 1976.

Notes of interview with Mr Vic O'Connell of Mullumbimby, 5 Aug 1976

Reminiscences of VJ McSweeney re beach sand industry.

Notes on interview with D Barry Morrison – Mineral Deposits Ltd, Southport, Tuesday 31 May 1977 re AJ Knowles [Arthur Jay].

Notes on interview with Mr Arthur Kelly, Mooball, 4 Aug 1976. Mineral sand mining industry,

Copy of letter from DA Berkman, 21 Oct 1976

Pinter, J. Managing Director, Associated Minerals Consolidated, 14 July 1976. Notes of interview regarding J.Pinter's history and the growth of Associated Minerals plus copy incorporating corrections, From Joe Pinter concerning the rough draft and letters in connection with J Pinter and Associated Minerals, Interspersed by handwritten pages of notes IWM.

Letter from IW Morley & Associates to MR J Pinter, 13 March 1978, Inc handwritten notes.

Transcript of cassette no 149, side A&B, 30 May 1977 on AMA retirement party for Joe Pinter.

Extract from Company Review re Associated Minerals Consolidated Ltd.

Extract from Jobson's Mining Year book for 1973, re Associated Minerals Consol Ltd, pp.368-369.

Mines inspection reports, NSW Department of Mines, Notes from extracts for Inspector of mines, Reports 1950 to 1965.

History of mineral sand industry – eastern Australia, Mines Department, Brisbane.

Study of old lease titles [card 197] NSW-Qld border to Minnie Water [south of Clarence river].

NSW Department. of Mines, Geological Survey: Zirconium, titanium, thorium and the rare-earth metals by HG Raggatt, Sydney Govt. Printer, 1929.

Poole, WR 1939, 'Zircon and Rutile from beach black sand deposits: extent, formation and composition of the black sand deposits of NSW', *Chemical Engineering and Mining Review*, 10 Feb 1939.

Folder 2

Report on the administration of the Mines Registration Acts in the southern inspection division submitted for the year ended 31 Dec 1956, Report by Mr JO Jones.

Extract from *Geological Survey of NSW*, The mineral resources of NSW by Edward F Pittman, 1901. pp. 8-9 & 76-79.

Extract from *The Australian Mining Standard* June 1896, p.1119 & p.1190 NSW Coast, 16 July 1896 pp.904-906 12 March 1896.

Extract from Annual report of the Department of Mines NSW for 1880, southern district, Morya division pp.122-124.

Dixon WA, Report to the Department of Mines NSW for 1878, other minerals, p.43

Correspondence between Mr RM Quirk, manager, Kibuka Mines Pty Ltd and IWM, 28 June 1977 and 19 July 1977.

Correspondence between Mr SL Segal, Chairman, Consolidated Gold Fields of Australia Ltd, and IWM. 1977 to 1979.

Correspondence between Mr WBG Walker, Assistant Chief Geologist and IWM

Table of schedules of production companies operating in NSW and producing rutile and zircon concentrates 1934-1958 from Mines Inspection Board, NSW Mines Department, Oct 1976.

Summary of interview with RL Anthony [photographer] and N Badderham at Tweed Heads, 4 Aug 1976. IWM

Interview notes with Mr DW Woodhouse, representative, American Cyanamide, Southport, 16 July 1976. IWM

Bell Lionel C 1905, 'Mineral beach sands, Queensland' *Australian Mining Standard*, p.296, 2 March 1905.

'Beach mining' *Australian Mining Standard*, p.505, 3 May 1905.

'Zircon and Rutile' *Queensland Government Mining Journal*, p.288, Oct 1932.

'Zircon Rutile Minerals' *Queensland Government Mining Journal*, p.189, Friday 15 July 1932.

'Beach sand mining, dredging', p.130

Table 1, Australian mineral sand resources, June 1972.

'Progress in Australian waters', 4 pages.

'Titanium [rutile and ilmenite] Summary Report no. 2. pp. 5-17.

'Gold' *Australian Town and Country Journal*, Sydney. p.15. 3 Sept 1870

'New gold-field at Ballina' *Australian Town and Country Journal*, Sydney. p.17, 17 Sept 1870

'Ballina gold-fields' *Australian Town and Country Journal*, Sydney, p.15, 1 Oct 1870

GM Stephens [photo] gold and diamond washing machine, *Australian Town and Country Journal*, Sydney. p.15, 8 Oct 1870.

'Gold and diamond washing machine,' *Australian Town and Country Journal*, Sydney, p.15, 8 Oct 1870.

Mineral sands – joint compilation by R Lawrence, F Stabback, R Zines, P Nash, W Bennets & P Fenner.

Letter from Mr FG Adrian to NC Hewitt, File & Beach mining, original letter in archives box 690.

Folder 3

'Producing famous metals: the story of beach sands on Richmond and Tweed beaches', Richmond River Historical Files, 13 May 1935.

'When the seas spilled gold on Evans Head Beach', *The Northern Star* Tuesday 31 January 1939.

'The sunshine industry of the north coast', Richmond River Historical Society files, Transcript of radio talk, 10pp.

'Beach mining', [special topic] Broadcast talk written by LT Daley, Hon Sec for RRHS.

Mineral sands history, Notes on an interview with HJ Evans and Haddon King, Melbourne, 12 Aug 1976. Plus handwritten notes & attached memo.

Letter from Comalco, 21 Sept 1978. To IWM

Mineral sands history: Mineral deposits syndicate – 1945 to 1955, Notes on interview between IWM and JT Wolfe, 20 July 1976.

Yellow pages of handwritten notes re newspaper articles.

Handwritten notes of interview with Paul Oliver.

KL Foster, Director, Consolidated Rutile Ltd. Interview with IWM. 21 January 1977.

Correspondence between IWM, Micron Research Pty Ltd, and Mr Arnold Griffin.

Letter to Mr AG Bomford, Director, Division of National Mapping, Department of National Development, Queanbeyan, NSW, re aerial photograph – southern Fraser Island 1967.

Handwritten notes on foolscap & yellow pages.

Herzog A & Gerard R, 'The effects of rutile mining on the yield of Aquifers near Tomago, NSW', Extract from *Northern Star*, 14 May 2014 p.7a, Ballina gold mining and mineral Co Ltd.

Folder 4

Rutile Sands meeting minutes, balance sheets, financial statements and correspondence pertaining to same 1942 to 1957

Folder 5

Rutile Sands meeting minutes, balance sheets, financial statements and correspondence pertaining to same 1942 to 1957

Folder 6

Correspondence 1947 to 1951

Box 21

Folder 1

Miscellaneous correspondence with brochures, pamphlets, clippings and notices, 1940s.

Folder 2

Notices of meetings, minutes, managers' reports, production data, financial summaries and correspondence 1947 to 1951

Folder 3

Notices of meetings, minutes, managers' reports, production data, financial summaries and correspondence 1947 to 1951

Folder 4

Rutile Sands meeting minutes, balance sheets, financial statements and correspondence pertaining to same 1942 to 1957

Folder 5

Financial statements, minutes, letters to shareholders, list of samples 1944 to 1963

Poole WR 1939, 'Zircon and Rutile from beach black sand deposits' *Chemical Engineering and Mining Review*, Tait Publishing, Sydney 1939.

Folder 6

Rutile Sands Proprietary accounts. Cost accounts and profit and loss accounts for half year ended 31 Dec 1947 and balance sheet as at 31 Dec 1947.

As above for ½ year ended:-

- June 30 1947
- June 30 1948
- Dec 31 1948
- 30 June 1949
- 31 Dec 1949
- 1 Jan to 30 June 1950
- 1 Jan to 31 Dec 1950
- 1 Jan to 30 June 1951
- 1 July to 31 Dec 1951
- 1 Jan to 30 June 1952
- 1 July to 31 Dec 1952

Folder 7

As above for ½ year ended:-

- 1 Jan to 30 June 1953
- 31 Dec 1953
- 30 June 1954
- 31 Dec 1954
- 30 June 1954
- 31 Dec 1954
- 30 June 1956
- 30 June 1957
- 30 June 1957 [not a duplicate]
- 31 Jan 1957

Box 22

Blue folder containing general correspondence, information brochure plus: Department of Mines 1970, *Joint conference on prevention and control of oil spills: New York, December 15-17 1969*, report by IW Morley, Department of Mines, Qld.

Queensland Annual Report of the under-secretary for mines, 1954 and 1956. With handwritten annotations.

Photo album of Lorne, University Survey camp, St. George River, Victoria, 1923 to 24.

Folder 1

Six slides with description of mining methods in early Qld.

The Australian Institute of Mining and Metallurgy 1982, The AusIMM Bulletin, No, 468. October 1982.

Folder 2

Report with covering letter of valuation Blair Athol Coal Pty Ltd, to Associated Australian Oilfields, NL Conzinc Riotinto of Australia Ltd and IW Morley & Associates and per Messrs, Darling and Co. Ltd. merchant bankers – marked confidential.

Press statement from Hon RE Camm, MLA Minister for Mines and Main Roads, 'Unique distinction for Queensland Department of Mines'.

Copy of letter from IW Morley to MR JH Northcott, 19 Dec 1973.

International Labour Organisation 'Second tripartite technical meeting for mines other than coal mines', Note on the proceedings of the meeting Geneva, 18 to 29 Nov 1968. 'Measures – particularly training – needed to meet safety and health requirements in mines other than coals

mines' & 'Employment and conditions of work in mines other than coal mines in the light of fluctuation in the international mineral trade'.

Folder 3

Lumb, RD 1964, 'The maritime boundaries of Qld and NSW', University of Qld papers, Faculty of Law, Vol. 1 No. 4, 1964.

Cumbræ-Stewart, FWS 1930, 'The boundaries of Qld, with special reference to the maritime boundary and the territorial waters jurisdiction act, 1878: a paper read before the Australasian Association for the Advancement of Science Section E – History, at Brisbane, 29 May 1930.

Article of unknown origin by Edward M Gant on Corexit.

US Department of the Interior Geological Survey, Reports on union oil drilling, various requirements and notices.

Ladd, Harry S 1968, Preliminary report on conservation and controlled exploitation of the Great Barrier Reef.

Folder 4

UN General Assembly Committee on the peaceful uses of the sea-bed and ocean floor beyond the limits of national jurisdiction, Economic and Technical Sub-Committee, Interim report 24 March 1970.

Bank of NSW 1971, *Offshore Australia: the continental shelf, the slope and beyond*, Bank of NSW, Sydney.

Letter headed Department of National Development, to IW Morley from JBR Livermore re paper on the United Nations Seabed committee, 1972.

Livermore JBR 1971, *The seabed and ocean floor beyond the limits of national jurisdiction: a review of United Nations discussions, Address to Australian Petroleum Exploration Association*, Annual conference – 29 March 1971.

Livermore, JBR 1971, *The seabed and ocean floor beyond the limits of national jurisdiction: a review of United Nations discussions, Australian Petroleum Exploration Association*, Annual conference, 1971.

Australian Mineral Industry, *Mineral resources offshore with special reference to Australia, Reprint from quarterly review vol. 23, no. 2 December 1970. Bureau of Mineral Resources, Geology and Geophysics, Canberra ACT.*

Letter, headed Department. of National Development, to IW Morley attached to papers from UN: [a] announcement by President Nixon on United States Oceans policy, Saturday 23 May 1970. [b] Statement by Sir Laurence McIntyre, leader of the Australian delegation to the UN seabed committee, Geneva, 12 August 1970. [c] Committee on the seabed and ocean floor economic and technical sub-committee.

Letter, headed Department of National Development to IW Morley from John Livermore, attached to pp.7-9 of statement by Mr Grabovsky USSR on outline procedure for developing and protecting natural resources on the continental shelf of the Soviet Union.

Folder 5

AMIRA ventilation course, University of Melbourne, Feb 1971.

Lectures:

Morley IW, *Diesel engines underground*

Morley IW, *Environmental standards and diesel engines underground: draft basic code*

Morley IW, *Environmental standards*

Morley IW, *Environmental standards and diesel engines underground*

Temperatures in mines, draft rules following discussion with Dr Allan on 19 May 1970

Allen, Dr A 1968, Assessing the heat stress and establishing the limits for work in a hot mine.

Letter to IW Morley from Bill Nevill, Department of Mines, Memorandum – the Under Secretary for mines, Brisbane.

Letter to IW Morley from Bill Nevill, University of Melbourne, Mining Department sending copy of article by GJK Acres *Platinum catalysts for diesel engine exhaust purification*, from *Platinum Metals Review* vol.14, no. 3 pp.78-85. And programme for summer school on ventilation of coal and mineral mines, International house, University of Melbourne, 14 to 26 Feb 1971.

Letter to IW Morley from John Northcott, International Labour Office.

Memorandum from Under Secretary for Mines, *First Australian Pneumoconiosis Conference.*

Letter to IW Morley from HFC Nevill, Senior lecturer in mining, dated 11 Sept 1970.

Letter to HFC Nevill from IW Morley 7 Sep 1970 & from HFC Nevill to IW Morley 3 Sep 1970.

Box 23

Framed cartoon by Lumley – *Courier Mail*, Brisbane 11 Oct 1950

Silver stand inscribed 'Silver anniversary' 1947 to 1972, presented to Jan and Ian Morley by their associates in the southern Qld branch of the Australasian Institute of Mining and Metallurgy.

Coloured drawing of Santa Fe shaft drilling.

Australasian Institute of Mining and Metallurgy, Proceedings no. 284, December 1982, See p.8 re honorary membership to IW Morley.

Australian Natural History vol. 21, no. 3, 1983. Article marked pp.103-15 by Charles Marshall.

AIMM 1982 Annual Conference Programme

Visitors book 30 Jul 1965 to 3 Jun 1969

Folder 1

Mounted map of Qld mines with miniature sample ores attached.

Folder 2

Queensland Government Mining Journal, vol. 70, no. 809, March 1969. Cover photo IW Morley and editorial on his resignation as state mining engineer and chief inspector of mines.

Australasian Institute of Mining and Metallurgy Bulletin no. 460 Feb 1982. P3 honorary membership.

Address by the president of the institute [BT Loton] in introducing IW Morley ISO

The Lion, published for the Wesley College family, Melbourne Jul 1982, no.37, p.6, item and photograph of IW Morley.

University of Queensland ceremony of conferring honorary and higher degrees, Mayne Hall, Tues 16 Dec 1975 at 6pm, By Deputy Chancellor.

AIMM 1982 annual conference, Melbourne, Victoria, Official dinner – Tuesday 24 Aug – program.

Institute Honorary Membership speech – IW Morley 2 copies.

AIMM presentation of certificate of honorary membership to IW Morley, ISO.

AIMM 1982 annual conference program.

Biographical section entry for International Year Book and Statesman's Who's Who, 1978 edition.

Correspondence 1982.

Folder 3

Department of Mines press release, 9 Jan 1968

Correspondence relating to Australian Aquitaine Petroleum Pty Ltd, 1969

Conferring of degrees ceremony speech, 1975

Folder 4

Correspondence relating to publication of 'Industrial conflict at Mount Coolon, 1935' and 'Gunpowder to radon gas', 1984 to 1985

Folder 5

Correspondence relating to Australasian Institute of Mining and Metallurgy, 1988 to 1989

Folder 6

Correspondence and transcripts relating to history interviews, 1983 to 1986

Folder 7

Correspondence relating to biography in *Eminent Queensland Engineers II*, 1998

Parcel 1

Framed cartoon – Rigby on the Gold Coast [March 1968] **ART00408**

Loose cartoons in packet – Berry 1937 **ART00412**

Loose cartoons in packet – Max Guard 1984 **ART413**

2 copies of departmental verse on retirement and cartoons **ART00414**

Letter re notification of retirement [from EK Healy, Under Secretary, Department of Mines]

Framed cartoon by Ian Gall 6 Dec 1961 **ART00409**

Photograph [coloured] of sea oil-drilling rig – Southern Cross **ART00410**

Coloured photograph of oil-drilling rig **ART00410**

Parcel 2

Proofs – *Black Sands*

Parcel 3

Blue vinyl folder: IW Morley & Assoc – *Northern Territory Mines Regulations Ordinance and related matters: Review for the Northern Territory Chamber of Mines Inc* June to Dec 1972 [incomplete] Cover letter 6 Dec 1972. **[originally from Box 16]**

Light blue folder: Review for the Northern Territory Chamber of Mines Inc, Northern Territory Mines Regulations Ordinance and related matters, By IW Morley, June to Dec 1972. **[originally from Box 17]**