

30 APRIL 2021

Business Update



Compliance statements



Disclaimer

This presentation contains forward looking statements that are subject to risk factors associated with oil, gas and related businesses. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including, but not limited to: COVID-19 risks, price fluctuations, actual demand, currency fluctuations, drilling and production results, reserve estimates, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries and regions, political risks, project delays or advancements, approvals and cost estimates. Please refer to the Directors' Report in the FY20 annual report for more details specifically relating to COVID-19 risks.

Underlying EBITDAX (earnings before interest, tax, depreciation, amortisation, evaluation, exploration expenses and impairment adjustments), Underlying EBITDA (earnings before interest, tax, depreciation, amortisation, evaluation and impairment adjustments), underlying EBIT (earnings before interest, tax, and impairment adjustments) and underlying profit are non-IFRS financial information provided to assist readers to better understand the financial performance of the underlying operating business. They have not been subject to audit or review by Beach's external auditors. The information has been extracted from the audited or reviewed financial statements.

All references to dollars, cents or \$ in this presentation are to Australian currency, unless otherwise stated. References to "Beach" may be references to Beach Energy Limited or its applicable subsidiaries. Unless otherwise noted, all references to reserves and resources figures are as at 30 June 2020 and represent Beach's share.

References to planned activities in FY21 and beyond FY21 may be subject to finalisation of work programs, government approvals, joint venture approvals and board approvals.

Due to rounding, figures and ratios may not reconcile to totals throughout the presentation.

Authorisation

This release has been authorised for release by the Beach Energy Board.

Assumptions

Remaining FY21 guidance is uncertain and subject to change. Q4 FY21 guidance has been estimated on the basis of the following assumptions: 1. a US\$65.00/bbl Brent oil price; 2. 0.77 AUD/USD exchange rate; 3. various other economic and corporate assumptions; 4. assumptions regarding drilling results; and 5. expected future development, appraisal and exploration projects being delivered in accordance with their current expected project schedules.

These future development, appraisal and exploration projects are subject to approvals such as government approvals, joint venture approvals and board approvals. Beach expresses no view as to whether all required approvals will be obtained in accordance with current project schedules.

Reserves disclosure

Beach prepares its petroleum reserves and contingent resources estimates in accordance with the 2018 update to the Petroleum Resources Management System (PRMS) published by the Society of Petroleum Engineers.

The reserves and resources information in this report is based on, and fairly represents, information and supporting documentation prepared by, or under the supervision of, Mr David Capon (General Manager Development - Victoria, New Zealand). Mr Capon is a full-time employee of Beach Energy Limited and has a BSc (Hons) degree from the University of Adelaide and is a member of the Society of Petroleum Engineers. He has in excess of 25 years of relevant experience. The reserves and resources information in this presentation has been issued with the prior written consent of Mr Capon as to the form and context in which it appears.

Beach most recently released full Company reserves information in its 2020 Annual Report. Information about the updated reserves position relating to Beach's Western Flank oil and gas acreage contained in ASX announcement #013/21 from 30 April 2021: "Business Update", contracted acquisition of Senex is contained in ASX announcement #037/20 from 3 November 2020: "Beach expands Cooper Basin Portfolio" and the contracted acquisition of Mitsui's interests in the Bass Basin are contained in ASX announcement #002/21 from 27 January 2021: "FY21 Second Quarter Activities Results". Information about the Enterprise 1 discovery reserve booking are included in the ASX announcement #004/21 from 15 February 2021: "Enterprise Exploration Success Delivers Material 2P Reserves Booking". Beach confirms that it is not aware of any other new information or data that materially affects the information included in this announcement and that all the material assumptions and technical parameters underpinning the estimates in the aforesaid market announcements continue to apply and have not materially changed.

FY21 2P reserves estimates take into account forecast full year FY21 production as required. Reserve estimates may change if production is different to forecast. Conversion factors used to evaluate oil equivalent quantities are sales gas and ethane: 5.816 TJ per kboe, LPG: 8.458 ktonnes per boe, condensate: 1.069 bbl per boe and oil: 1 bbl per boe. The reference point for reserves determination is the custody transfer point for the products. Reserves are stated net of fuel, flare & vent and third-party royalties.

FY21 Third Quarter update



Q3 FY21 production down 5% on Q2 FY21 and 15% on Q3 FY20, impacted by:

- Reduced reservoir performance and natural field decline, predominately from Cooper Basin Western Flank oil fields
- Lower customer nominations for the Victorian Otway
- Partially offset by uplift in volumes relating to acquisition of Mitsui's Bass Basin assets¹, effective date of 1 January 2021

Revenue up 14% on prior period, mainly due to:

- 39% increase in realised oil price

Offset by:

- 4% lower sales volume

Liquidity up 6% to \$430 million

- Net debt reduced to \$20 million at the end of the quarter
- ~\$83 million completion payment made for acquisition of Senex Energy's Cooper Basin assets during the quarter
- \$22.8 million interim dividend payment

Positive outcome relating to Otway gas price review

	Q3 FY21	Prior corresponding period		Prior period	
		Q3 FY20	Change (%)	Q2 FY21	Change (%)
Production (MMboe) ²	5.89	6.94	(15%)	6.20	(5%)
Pro forma production (MMboe) ³	5.99	6.94	(14%)	6.55	(9%)
Sales volume (MMboe)	6.21	7.12	(13%)	6.44	(4%)
Revenue (\$ million)	393	431	(9%)	344	14%
Realised oil price (\$ per bbl)	90.7	74.0	23%	65.3	39%
Realised gas price (\$ per GJ)	7.4	7.6	(3%)	7.3	2%
Capital expenditure (\$ million)	184	246	(25%)	180	2%

Activities update

- 65% injury rate reduction over 12 months, TRIFR⁴ reduced to 1.7 injuries per million hours worked
- Booked 21 MMboe net 2P reserves at Enterprise⁵, de-risks Otway five-year production outlook
- Gas discovery with first offshore well at Artisan 1, delivered below budget
- Actively marketing up to ~3.75 MTPA of LNG over approximately five years from H2 2023
- Kupe compression expected to lift production back to full plant capacity from H1 FY22
- Executed an agreement for Beach to undertake FEED activities for the Moomba CCS project

POSITIVE PROGRESS IN VICTORIAN OFFSHORE OTWAY CAMPAIGN

¹Subject to completion, which is expected during Q1 FY22

²Production includes the impact of the acquisition of Senex Energy's Cooper Basin assets, from completion date 1 March 2021, and interest from Mitsui's Bass Basin assets from 1 January 2021.

³Pro forma production includes the impact of the acquisition of Senex Energy's Cooper Basin assets and Mitsui's Bass Basin assets, with effective date 1 July 2020

⁴Total Recordable Injury Frequency Rate (TRIFR)

⁵Refer to ASX announcement #004/21 from 15 February 2021 "Enterprise Exploration Success Delivers Material 2P Reserves Booking". Evaluation date of reserves as at 15 February 2021.

Overview

Downgrade to Western Flank 2P oil and gas reserves



Recent Western Flank oil production decline led to urgent review of 2P reserves

13.4 MMbbl net downgrade to Western Flank 2P oil reserves^{1,2}

5.0 MMboe net downgrade to Western Flank 2P gas reserves^{1,3}

FY21 pro forma⁴ production guidance downgraded to 25.2 – 25.7 MMboe⁵

Net reserve writedown equates to ~5% of Beach's 2P reserves at 30 June 2020

2017 acquisition of Lattice assets diversified Beach beyond the Cooper Basin

Gas growth projects progressing well at Waitsia and Otway

¹Refer to ASX announcement #013/21 from 30 April 2021: "Business Update". Evaluation date of reserves as at 30 June 2021.

²Reduction to Western Flank oil field 2P reserve of 17.6 MMbbls, offset by increase of 4.2 MMbbls in 2P oil reserves following acquisition of Senex Energy's Cooper Basin assets.

³Reduction to Western Flank gas field 2P reserve of 7.2 MMboe, offset by increase of 2.2 MMboe in 2P gas reserves following acquisition of Senex Energy's Cooper Basin assets.

⁴Pro forma includes production from Senex Energy's Cooper Basin and Mitsui's Bass Basin assets, with an effective date 1 July 2020.

⁵Previous pro forma guidance of 26.5 – 27.5 MMboe, updated at the FY21 half year result in February 2021.

Current status

Net downgrade to Western Flank 2P oil and gas reserves¹, equates to ~5% of Company 2P reserves at 30 June 2020



WESTERN FLANK 2P OIL AND GAS RESERVE DOWNGRADE

MMboe	
Bauer oil field (within ex-PEL 91)	(6.0)
Four other ex-PEL 91 oil fields ²	(8.2)
Four ex-PEL 92 oil fields ³	(2.2)
Acquired Senex Western Flank oil acreage ⁴	(1.2)
Total 2P oil reserve downgrade	(17.6)
Ex-PEL 106 gas fields	(7.2)
Total 2P gas reserve downgrade	(7.2)
Uplift from acquired Senex Western Flank oil acreage	4.2
Uplift from acquired Senex Western Flank gas acreage	2.2
Total 2P oil and gas reserve downgrade	(18.4)

CURRENT WESTERN FLANK 2P OIL AND GAS RESERVES

MMboe	30 June 2020	FY21 revisions	FY21 ⁵ production	30 June 2021	Change ⁶ (%)
Western Flank 2P oil reserves	46.1	(13.4)	(6.8)	25.9	(34%)
Western Flank 2P gas reserves	15.5	(5.0)	(1.8)	8.7	(36%)
Western Flank 2P oil and gas reserves	61.6	(18.4)	(8.6)	34.6	(35%)



¹Refer to ASX announcement #013/21 from 30 April 2021 "Business Update". Evaluation date of reserves as at 30 June 2021.

²Four ex-Bauer fields include Chiton, Kalladeina, Balgowan and Hanson.

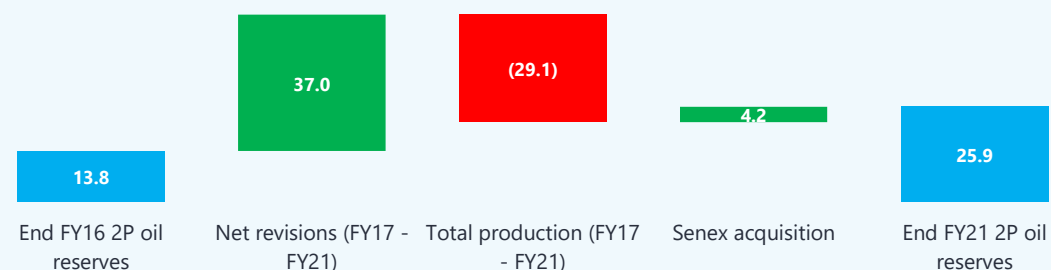
³PEL 92 field includes Callawonga, Butlers, Parsons and Rincon.

⁴Lower 2P oil reserves associated with the Senex Energy Cooper Basin asset acquisition were incorporated into the purchase price.

Annual reserve audit underway⁷, to be completed in August 2021

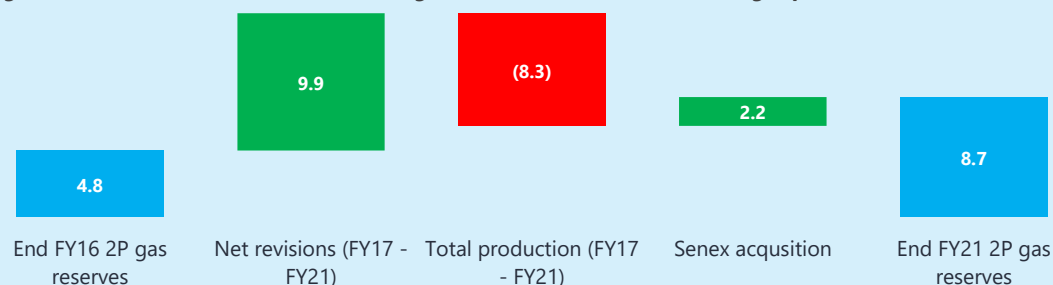
WESTERN FLANK 2P OIL RESERVES SINCE END-FY16 (MMbbls)

2P oil reserve remain ~90% above FY16 2P oil reserves, incl. ~29 MMbbls of oil production



WESTERN FLANK 2P GAS RESERVES SINCE END-FY16 (MMboe)

2P gas reserve remain ~80% above FY16 2P gas reserves, incl. ~8.2 MMboe of gas production



⁵Production forecast is a combination of actuals until the end of March 2021 and forecast production volumes for Q4 FY21.

⁶Change between 30 June 2020 and 30 June 2021, less production impact during FY21.

⁷Beach typically commence the annual reserve audit process during March, with completion in August.

Outlook

Impacts on FY21 guidance



FY21 GUIDANCE UPDATE

	Pre-acquisition guidance	Pro-forma guidance ¹	Updated pro-forma guidance
Production (MMboe)	25.5 – 26.5	26.5 – 27.5	25.2 – 25.7
Capital expenditure ² (\$ million)	\$720 – 760		\$700 – 740
Underlying EBITDA ^{3,4} (\$ million)	\$900 – 950		\$850 – 900
Unit operating cost (\$ per boe)	\$9.00 – 9.40		\$10.00 – 10.50
Unit DD&A (\$ per boe)	\$16.50 – 17.50		\$16.25 – 16.75

FY21 PRODUCTION GUIDANCE IMPACTED BY:

- Reduced reservoir performance and natural field declines within Western Flank oil fields
- Lower customer nominations for the Victorian Otway

Five-year outlook is withdrawn and Beach will no longer provide a five-year outlook in its current form⁵

Anticipate 4.0 – 5.0 MMbbl reduction in Western Flank oil production in FY22

Assessment of carrying values at the FY21 Full Year Audited Results in August 2021 could lead to impairment

Strong balance sheet and high quality, stable gas revenue underpins growth capital programs in FY22 and FY23

Gas business provides revenue stability with uplift on completion of offshore Otway and Waitsia developments

¹Pro forma includes production from Senex Energy's Cooper Basin and Mitsui's Bass Basin assets, with an effective date 1 July 2020. Other pro forma financial guidance based on Senex Energy Cooper Basin asset acquisition at completion of 1 March 2021 and assumes a Mitsui Bass Basin asset completion date of 1 January 2021 for accounting purposes.

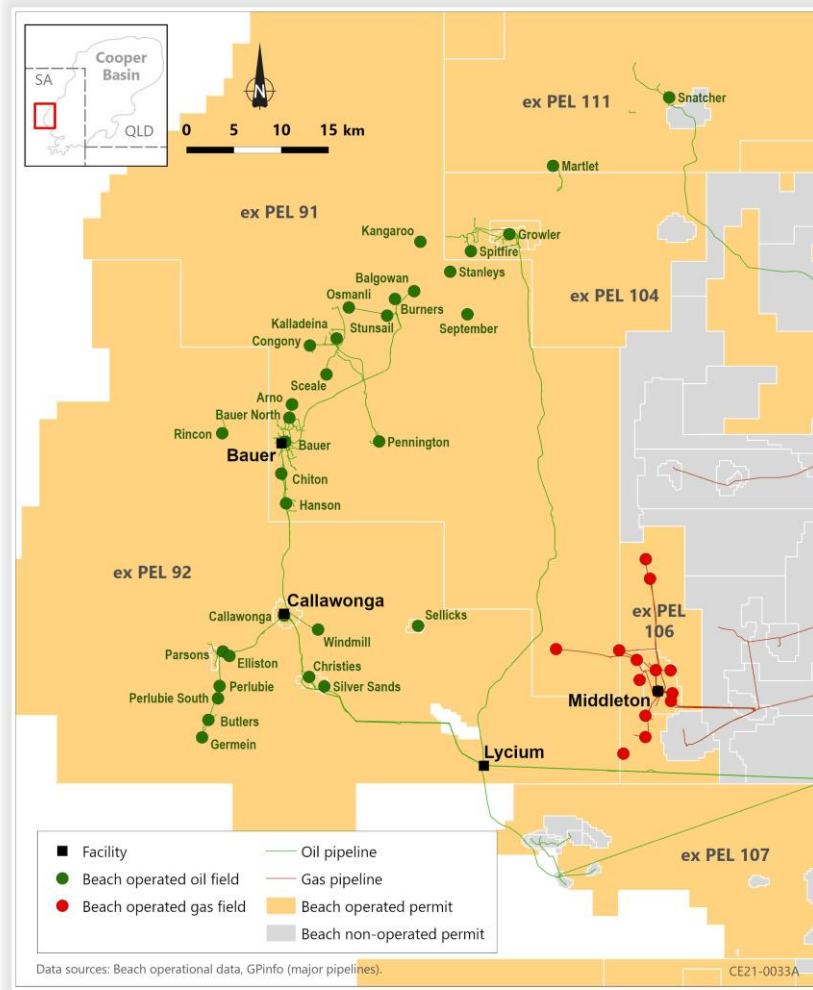
²Excludes abandonment activities.

³Economic assumption Q4 FY21: Brent price – US\$65.00 per bbl, AUD/USD – 0.770, NZD/AUD – 1.07.

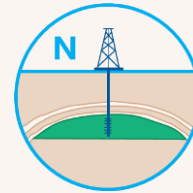
⁴Includes the preliminary outcome of the Otway gas price arbitration.

⁵Outlook impacted by variability to the business, which includes adjustments in work programs that were experienced during the COVID-19 pandemic, reductions in the Western Flank oil and gas production profile and variations to project interests as a result of asset acquisitions.

Western Flank oil overview

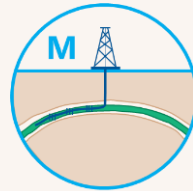


KEY FORMATIONS ACROSS THE WESTERN FLANK OIL ACREAGE



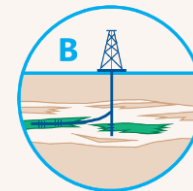
Namur

- Low complexity
- Uncertainty on quantifying reserves for low relief structural closes.
- 24% of Western Flank oil production in FY20



McKinlay

- Greater reservoir complexity than the Namur
- 63% of Western Flank oil production in FY20



Birkhead

- Play with potential upside, particularly in the northern Western Flank oil extension (PEL 104/111)
- 13% of Western Flank oil production in FY20

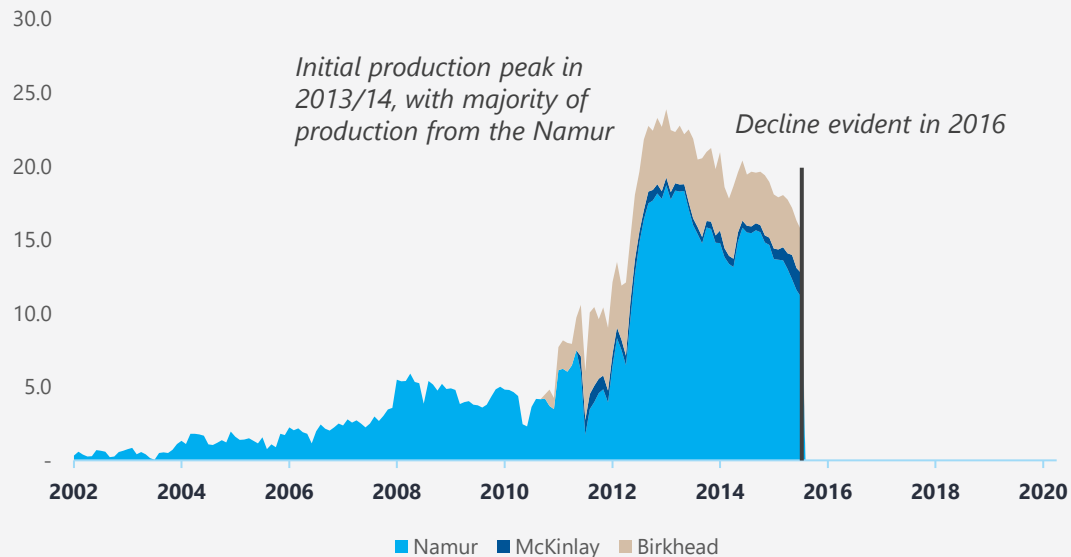
Western Flank oil background



Reversal of FY16 Western Flank oil decline accelerated balance sheet deleveraging to ~1% net gearing at 31 March 2021

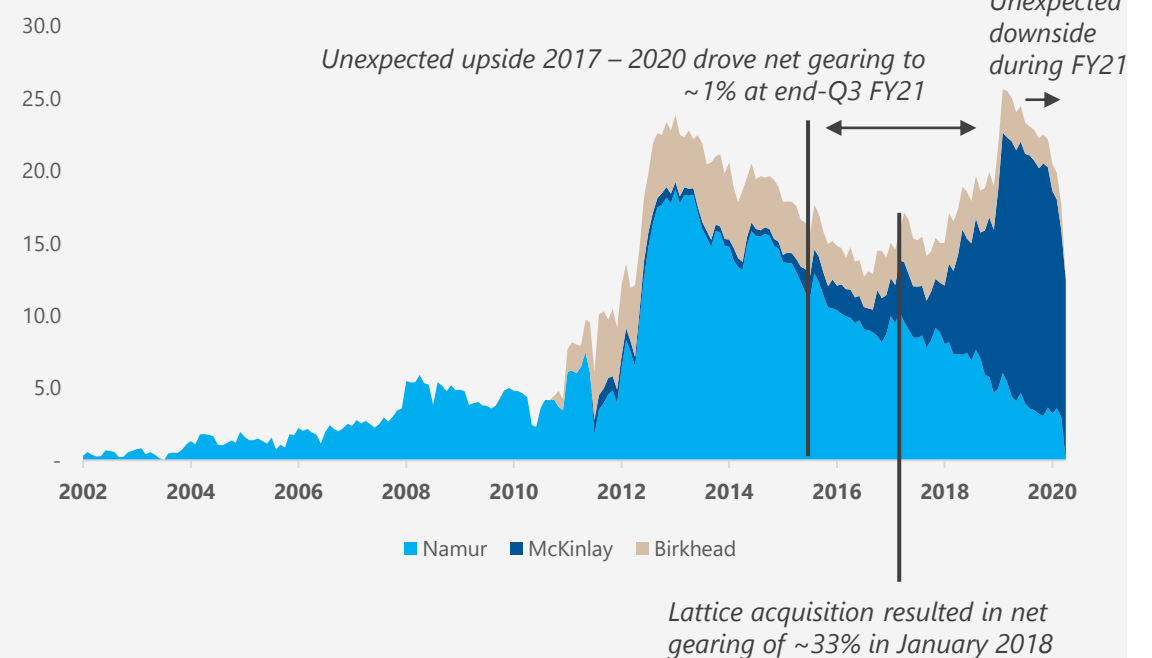
Western Flank oil production was in decline by FY16, with high future uncertainty

Monthly production (kbopd)



Introduction of horizontal drilling and development of McKinlay reservoir rejuvenated Western Flank oil and delivered a second production peak in 2020

Monthly production (kbopd)



The Bauer oil field

Complex field that has grown ~10x since original estimates



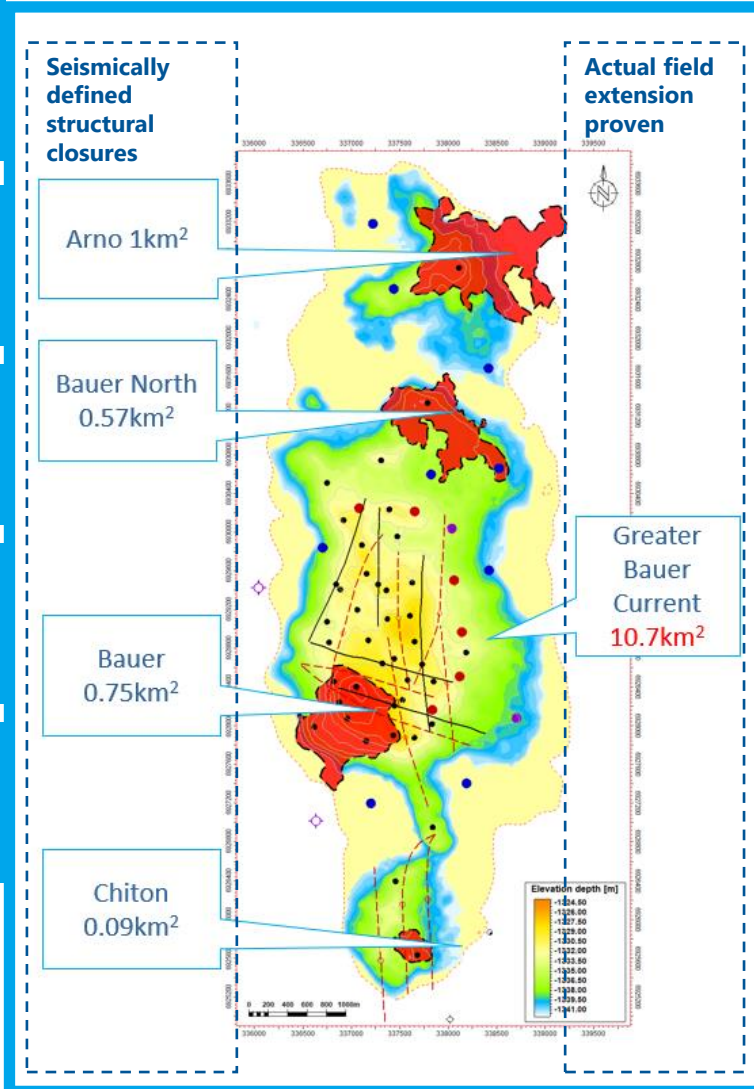
Flat structure and large areal extent makes assessing recoverable volumes on seismic challenging

Reserves for Western Flank oil assets use a combination of simulation Decline Curve Analysis (DCA) assessment

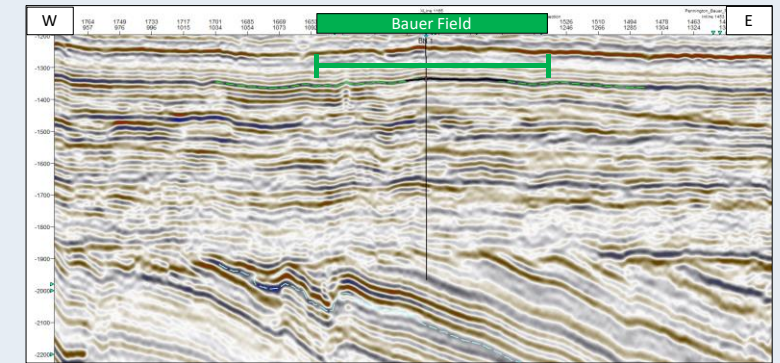
DCA consistently underestimated Estimated Ultimate Recoverable (EUR) volumes of the Bauer field

Bauer geological model devised to determine potential size, which was larger than seismic mapping

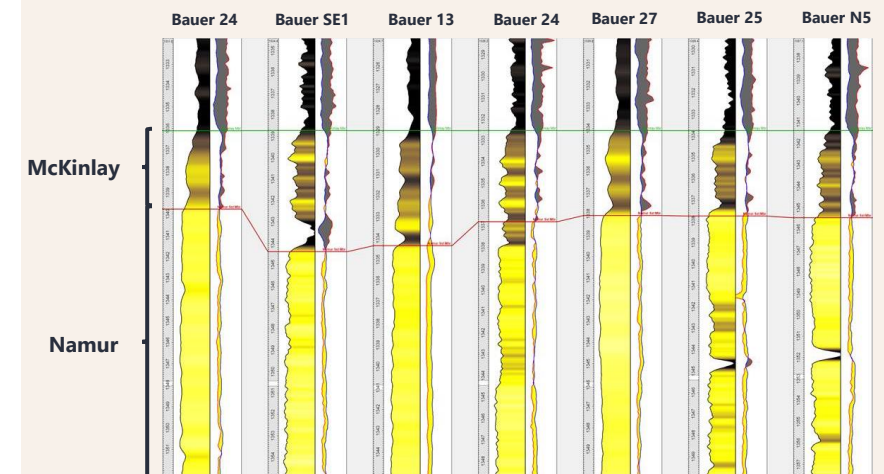
Appraisal drilling supported the geological model, with results increasing EUR



Seismic data captures the structure, but underestimated its true size



Bauer field data logs highlight differences between the Namur and McKinlay formations



Bauer oil field update

New production information now indicates 2P reserves downgrade



BAUER – DISCLOSED TO MARKET AT FEBRUARY 2021 RESULT

- 18 Bauer McKinlay horizontal development wells drilled in 2020
- Bauer wells came in on-prognosis throughout the program, however production declined more rapidly than predicted
- Disclosed larger than expected production declines within the Bauer field at the FY21 half year results
- Interference between new horizontal McKinlay producers and both existing Namur producers and other McKinlay wells
- Initial interpretation highlighted accelerated production with new data being assimilated before we could assess reserves impact

BAUER UPDATE

- New Bauer reservoir model developed incorporating FY21 drilling results, supported by DCA¹ to re-forecast field EUR
- New model indicates 2P reserve reduction of 6.0 MMbbls within the Bauer field (pre-production impact)
- Reserves reviewed by Beach's reserves auditor RISC. Procedures and methodologies reviewed by two other external reserves experts
- Field not yet fully developed - infield horizontal drilling opportunities remain and are planned to be targeted during the FY22 drilling program

Non-Bauer Western Flank oil field issues

Recent production data shows Bauer model likely not applicable across all Western Flank oil fields



1

28 fields outside Bauer made up ~60% of Western Flank 2P oil reserves

2

Bauer conceptual model had been applied to an additional nine fields outside of Bauer

3

FY19/20 appraisal drilling had supported Bauer geological model interpretation

4

FY21 drilling program highlighted the difficulty in prognosing depth in low relief Western Flank oil structures due to natural variability

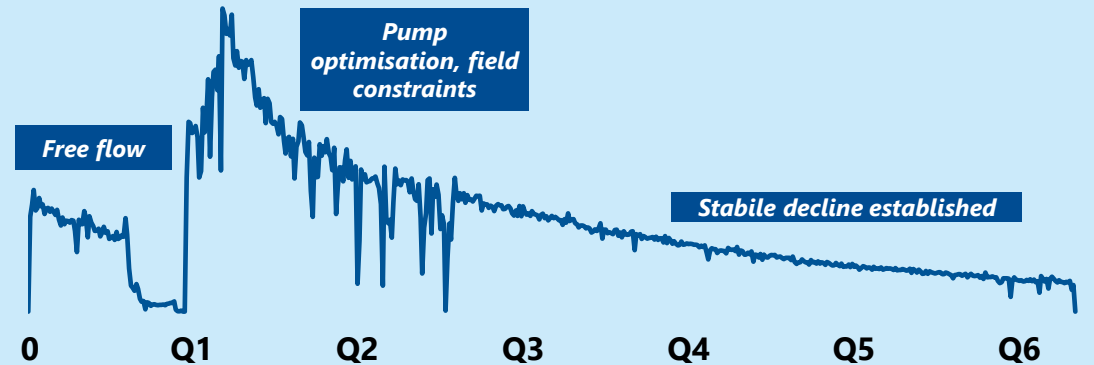
5

At the FY21 half year result, drilling operations were ongoing, with several wells remaining unconnected or yet to reach stable declines¹

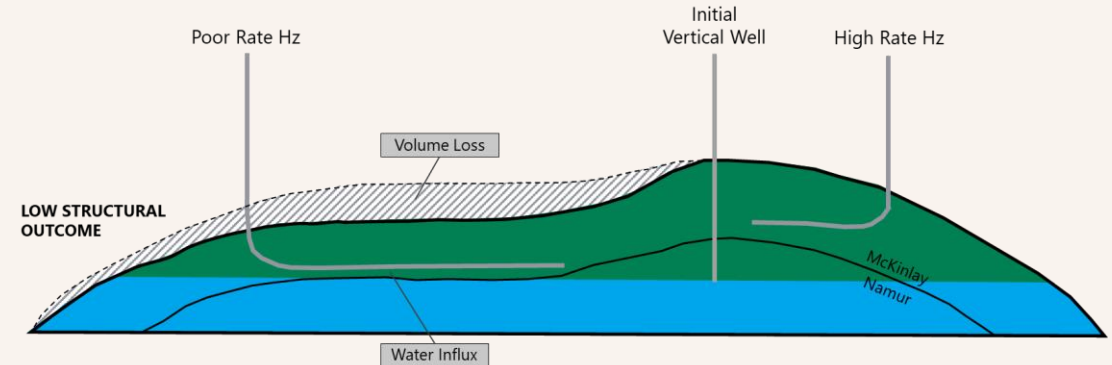
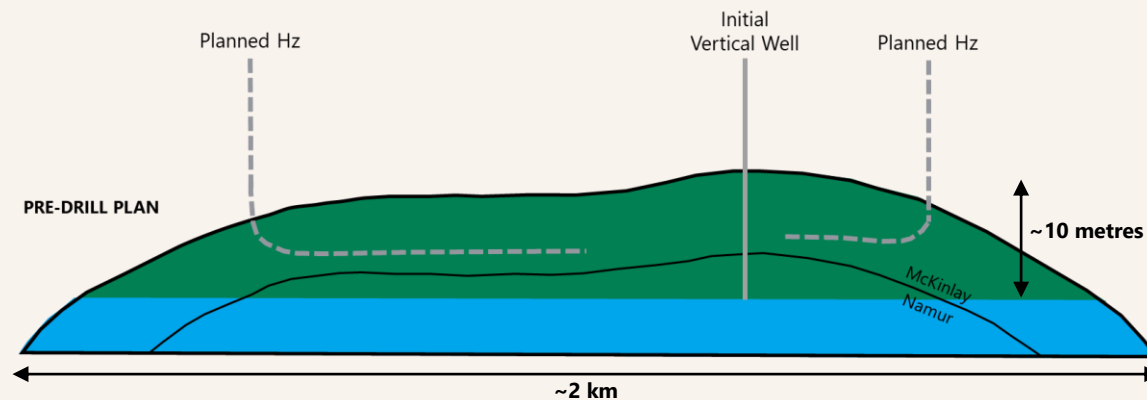
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New well data results from non-Bauer fields suggest seismic is more reliable than the previous Bauer model

Wells typically require 9–12 months to establish decline behaviour²



VOLUMETRIC AND PRODUCTION IMPACT OF LOW STRUCTURAL OUTCOMES ENCOUNTERED IN MANY NON-BAUER FIELDS DURING THE RECENT FY21 DEVELOPMENT DRILLING



¹FY21 drilling program completed in early March – two Balgowan wells and a single Callawonga well are still to be tied-in.

²Chiton 7 well profile is typical for a McKinlay horizontal well with artificial lift profile translatable across other Western Flank oil fields.

Western Flank gas

New production and pressure data reduces overall 2P reserves of Western Flank gas fields



beach

Lowry field produced ~41% of Western Flank gas volumes during FY20

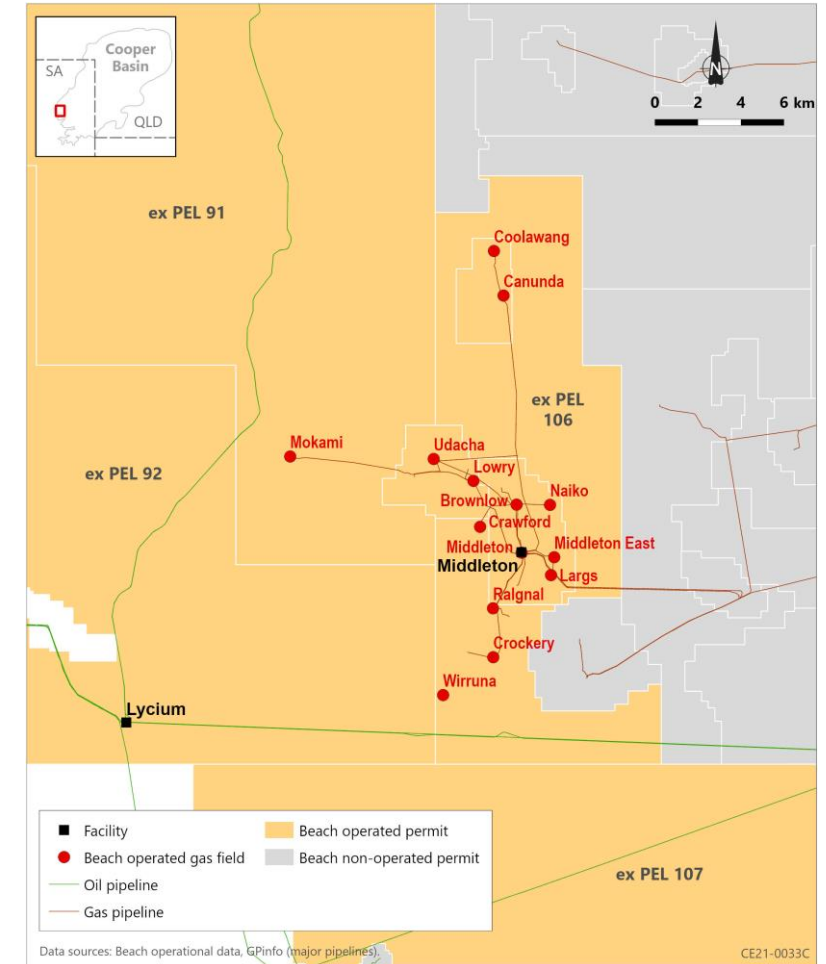
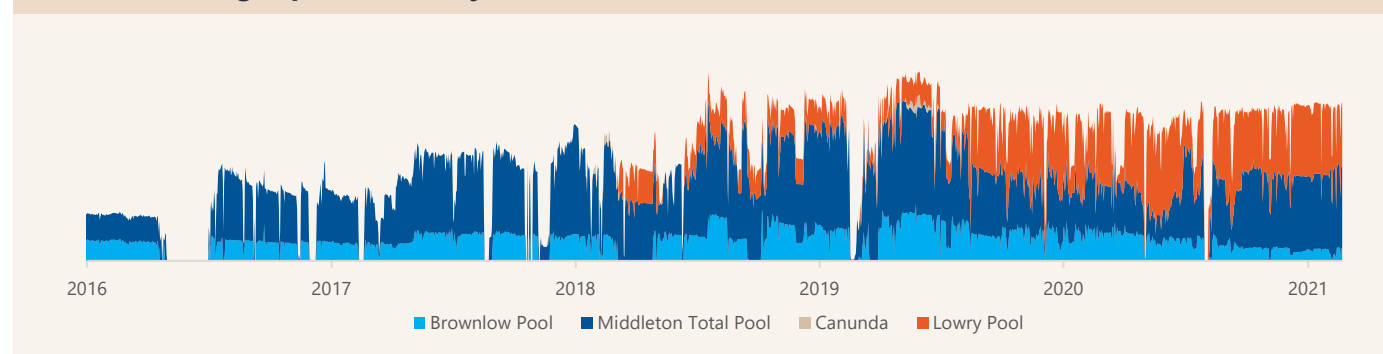
Prior 2P reserves at Lowry were based on volumetric mapping rather than material balance

Pressure and production data obtained in FY21 indicates a difference between the material balance and the previous mapped volumes, resulting in a 2P reserves downgrade at Lowry by 4.0 MMboe

Net 2P reserve downgrade of 3.2 MMboe across seven other fields within ex-PEL 106 due to new production and pressure data

2P reserve downgrade offset by an increase of 2.2 MMboe from the acquisition of Senex's Cooper Basin Western Flank gas assets

Western Flank gas production by field (MMscfd)



Future of the Western Flank oil and gas assets

Future focus on measured exploration and appraisal drilling of prospective acreage



<\$6 per bbl field operating costs across Western Flank oil assets during FYTD

Region supported by well-developed existing infrastructure

Future drilling based on new Western Flank interpretations and lessons learnt, focused on:

Infill drilling on existing fields

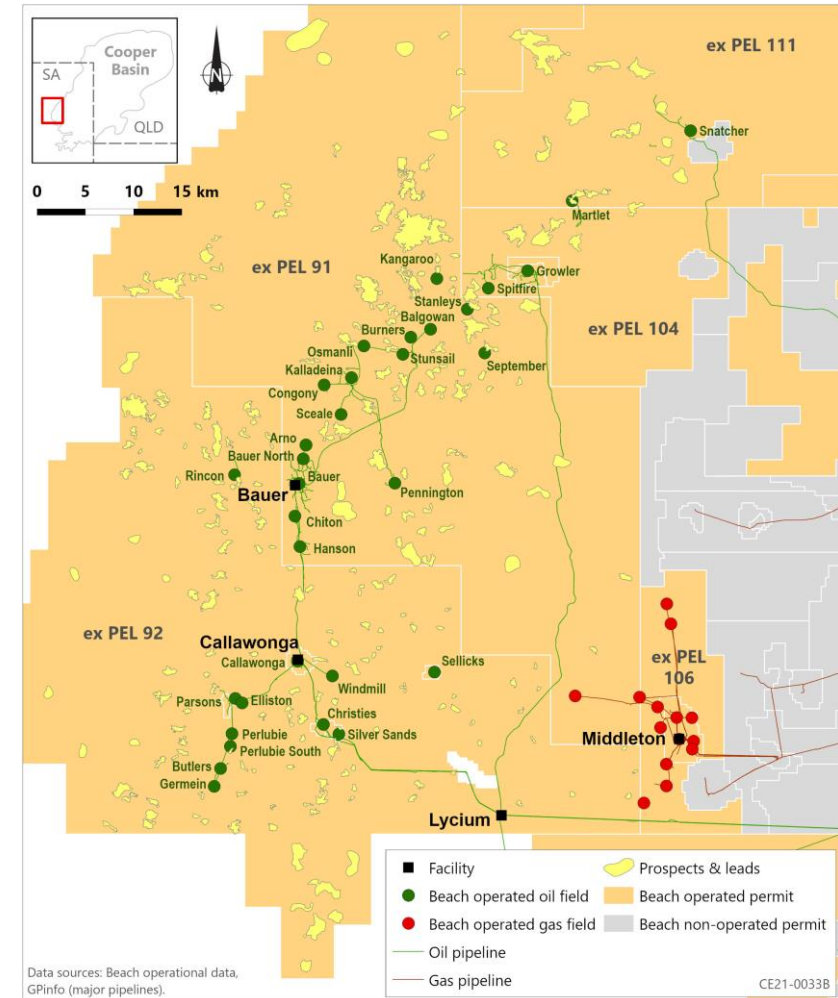
Appraisal and development of Birkhead (incl. Senex acreage)

Oil exploration focused on Namur targets

Gas exploration targeting near-field Patchawarra prospects

Re-focusing efforts on exploration portfolio, with historical exploration drilling success of 33%

> 100 prospects and leads already identified and being prioritised



A strategically diversified portfolio

2017 Lattice acquisition positioned Beach beyond Western Flank oil and gas assets



SINGLE ASSET RISK AND UNCERTAINTY OF WESTERN FLANK ASSETS WAS A KEY DRIVER OF DIVERSIFICATION

End FY16

- Single basin (Cooper)
- Reliance on legacy Cooper Basin infrastructure
- Single gas market
- Western Flank oil production in decline
- Western Flank oil 42% production and 20% 2P reserves¹
- Company 2P reserves life of 7.2 years

End FY20

- Six production hubs across five basins
- >400% increase in 2P reserves
- Four independent gas markets
- Broad portfolio for significant organic growth
- Western Flank oil 28% production and 13% 2P reserves¹
- Company 2P reserves life of 13.2 years

DIVERSIFICATION = Lattice acquisition + Exploration + Bolt-on acquisitions

WESTERN FLANK EXPLORATION AND DEVELOPMENT ACTIVITIES CONTINUING

Delivering on strategy

Continuing to deliver on our key growth projects



Growth projects targeting high returning, long-life and stable gas revenue



Two exploration successes to commence FY21 Otway drilling program with discovery of Enterprise and Artisan gas fields.



Taken Final Investment Decision for Waitsia Gas Project State 2. First gas planned for H2 2023



Two opportunistic bolt-on acquisitions during the downturn sets a platform for growth



Progressing potential Trefoil gas development towards FEED, utilising existing infrastructure and extending Yolla field life

High quality growth

Continuing to re-invest in our high-returning, diversified gas business



Lower production across Cooper Basin Western Flank oil and gas assets, offset by:

- Production uplift expected to fill Otway Gas Plant by mid-FY23. Early exploration success in the FY21 offshore Otway drilling campaign at Artisan and Enterprise
- Waitsia Gas Project Stage 2 targeting first gas in H2 2023
- Life extension of the Yolla gas platform from the potential Trefoil development¹ from FY25, FEED activities commencing in H2 FY21
- Potential exploration and appraisal across the entire Cooper Basin portfolio
- Kupe production returning to plateau following completion of compressor installation, targeting first gas in H1 FY22

Growth Projects	OTWAY BASIN		PERTH BASIN	BASS BASIN
	Offshore	Nearshore	Waitsia Gas Project Stage 2	Trefoil ¹
Ownership (%)	60%*		50%	90.25%*, ¹
Anticipated first production ²	FY22	FY23	H2 2023	FY25
Production uplift by FY25 (MMboe)	5.0 – 5.4 MMboe		5.5 – 6.0 MMboe	2.0 – 2.2 MMboe
Capital cost (\$ million) (gross) ³	1,100 – 1,300 ⁶	60 – 70	700 – 800	500 – 600
Project IRR (%) ⁴	>20%	>50%	~20%	>20%
Expected payback period (years) ⁵	< 4 years	< 3 years	< 3 years	< 3 years
Life of asset (years)	> 15 years		> 15 years	~15 years

*Denotes project operator

¹Not a committed project. Subject to completion of the proposed acquisition of Mitsui's Bass Basin assets, expected to complete in Q1 FY22

²Refer to "Compliance Statements" slide (p.2) of this presentation surrounding planned work programs.

³Forecast total project capital expenditure to first delivery of hydrocarbons (unless otherwise stated).

⁴Internal rate of return (IRR) calculated based on internal assumptions, set out on the "Compliance Statements" slide 2.

⁵Payback period calculated from time of first production.

⁶Upper end of the range includes contingent costs associated with Artisan 1 success case. Excludes any success at La Bella and T/30 P. Capital expenditure to completion of the drilling program..

Key takeaways

Despite the Western Flank downgrade, Beach is delivering its growth strategy



Recent Western Flank oil production decline led to urgent review of 2P reserves

18.4 MMboe net downgrade to Western Flank 2P oil and gas reserves^{1,2}

FY21 pro forma³ production guidance downgraded to 25.2 – 25.7 MMboe⁴

Net reserve writedown equates to ~5% of Beach's 2P reserves at 30 June 2020

2017 acquisition of Lattice assets diversified Beach beyond the Cooper Basin

Strong balance sheet to support FY22 and FY23 growth capital expenditure

Gas growth projects progressing well in the Otway and Perth Basins

¹Refer to ASX announcement #013/21 from 30 April 2021: "Business Update". Evaluation date of reserves as at 30 June 2021.

²Reduction to Western Flank oil field 2P reserve of 17.6 MMbbls, offset by increase of 4.2 MMbbls in 2P oil reserves following acquisition of Senex Energy's Cooper Basin assets. Reduction to Western Flank gas field 2P reserve of 7.2 MMboe, offset by increase of 2.2 MMboe in 2P gas reserves following acquisition of Senex Energy's Cooper Basin assets.

³Pro forma includes production from Senex Energy's Cooper Basin and Mitsui's Bass Basin assets, with an effective date 1 July 2020.

⁴Previous pro forma guidance of 26.5 – 27.5 MMboe, updated at the FY21 half year result in February 2021.

BUSINESS UPDATE PRESENTATION

Q&A



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