

19 March 2019

Refining NZ Operational Update for January/February 2019

HIGHLIGHTS

Strong operational performance marked by record hydrocracker throughput and 100.0% operational availability led to refinery throughput of 6.96 million barrels.

The Company earned NZD 34.9 million in Processing Fees for January-February.

Refining NZ's Gross Refining Margin (GRM) was USD 4.88 per barrel, a very strong uplift over the Singapore Dubai complex margin which was negative during the period, as a result of weak gasoline prices.

Gasoline margins were as low as negative USD 2 per barrel during the January-February reporting period but have strengthened to almost USD 6 per barrel since the period.

Volumes of products delivered through the refinery to Auckland pipeline remained strong.

Outstanding process and personal safety performance was achieved:

- No Tier 1 or Tier 2 process safety events in the January/February period; and
- No recordable or lost time injuries since November 2018.

Overall operating and capital costs have been controlled tightly versus budget.

COMMENTARY

Refining - Margins and throughput

Record hydrocracker throughput and excellent plant uptime combined with refinery throughput of 6.96 million barrels and a Gross Refinery Margin of USD 4.88 per barrel has seen the Company earn NZD 34.9 million in Processing Fees for January-February.

Global refining margins were low during the January/February period, impacted mostly by gasoline margins which were as low as negative USD 2 per barrel in Singapore versus the Dubai crude price. The Singapore gasoline margin (which directly impacts Refining NZ's Processing Fee income) recovered to over USD 1 per barrel by the end of the January/February period and is currently just under USD 6 per barrel. This recovery has been driven by strong South- and South-East Asian demand, significant refinery maintenance and falling US gasoline stocks.

The Singapore Dubai complex margin for the January/February period was negative USD 0.32 per barrel, impacted mostly by gasoline margins. However, Refining NZ's January/February uplift over the Singapore Dubai complex margin was very strong at USD 5.20 per barrel. Refining NZ's balanced product slate and locational advantage enabled it to achieve a strong margin uplift notwithstanding global pressure on gasoline margins.

The average exchange rate for the January/February period was USD/NZD 0.68, the same as the November/December 2018 period.

Refinery throughput of 6.96 million barrels in the January/February period was impacted slightly by delays in some crude shipments and by reduced natural gas usage due to the gas supply shortfall currently being experienced in New Zealand. The Pohokura offshore gas field operator plans to complete required maintenance by the end of April to restore supply. Nevertheless, Refining NZ continues to build a gas portfolio and will make up any shortfall through firing of liquid fuels. It does not expect any material impact on the Company.

The refinery enjoyed excellent uptime of 100.0% during the January/February period and a new hydrocracker throughput record was set which supported production of higher margin jet fuel and diesel.

Distribution – Refinery to Auckland Pipeline

Pipeline operational availability was high and volumes of products delivered through the pipeline remained strong.

Health, safety and environment

Process and personal safety performance were outstanding with no Tier 1 or Tier 2 process safety events in the January/February period and no recordable or lost time injuries since November 2018.

Other

Overall operating and capital costs have been tightly controlled versus budget despite pressure from higher electricity prices.

Site construction on the sulphur solidification plant has commenced and is due to be finished before the end of the year. Refining NZ's tank maintenance programme continues with the use of robotic technology shortening the expected duration.

OPERATIONAL DATA

		Jan/Feb 2019	Jan/Feb 2018	YTD 2019	FY 2018
Health, Safety & Environment					
LTI	#	0	0	0	5
LTIF	#/200,000hrs	-	-	0.47	0.48
TRC	#	0	1	0	8
TRCF	#/200,000hrs	-	-	0.70	0.76
Tier I Process Safety Events	#	0	1	0	2
Tier II Process Safety Events	#	0	1	0	3
Releases outside of consent	#	0	0	0	5

Refining

Brent Crude Oil Price	US\$/bbl	61.8	67.2	61.8	71.2
Exchange Rate	US\$/NZ\$	0.68	0.73	0.68	0.69
Operational availability	%	100.0	99.9	100.0	90.7
Refining throughput	Mbbl	6.96	7.01	6.96	40.44
Gross Refining Margin	US\$/bbl	4.88	7.54	4.88	6.31
Gross Refining Margin (excluding Fee Floor/Margin Cap)	US\$M	34.0	52.8	34.0	255
Processing Fee (after Fee Floor/Margin Cap)	US\$M	23.8	37	23.8	178.6
Processing fee (after Fee Floor/Margin Cap)	NZ\$M	34.9	50.8	34.9	258.7

Distribution

RAP throughput	Mbbl	3.5	3.6	3.5	21.0
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Notes:

1. The information provided in this announcement excludes revenue from distribution or other activities.
2. The Processing Fee results reported in this announcement are subject to change due to post announcement price updates and independent audit.
3. A five year history of Throughput, Margins and Processing Fees is attached below.
4. Refer to the explanatory notes/glossary for a definition of terms.

HISTORICAL INFORMATION - REFINING

		2015	2016	2017	2018	2019
Jan/Feb	Barrels 000's	7,056	6,826	7,160	7,011	6,963
	RNZ USD GRM per barrel ¹⁾	9.91	7.96	6.58	7.54	4.88
	Singapore Dubai Complex GRM	5.40	4.95	3.42	3.37	-0.32
	Uplift vs. Singapore Dubai Complex ³⁾	4.51	3.01	3.16	4.17	5.20
	NZD Processing Fee (million) ²⁾	59.6	57.0	45.9	50.8	34.9
Mar/Apr	Barrels 000's	7,411	7,471	5,140	6,958	
	RNZ USD GRM per barrel ¹⁾	8.77	1.84	9.35	6.82	
	Singapore Dubai Complex GRM	4.82	3.18	3.02	3.75	
	Uplift vs. Singapore Dubai Complex ³⁾	3.95	-1.34	6.33	3.07	
	NZD Processing Fee (million) ²⁾	62.3	14.8	48.1	45.8	
May/Jun	Barrels 000's	6,416	6,837	7,755	3,910	
	RNZ USD GRM per barrel ¹⁾	8.55	6.26	7.63	0.18	
	Singapore Dubai Complex GRM	4.24	2.13	2.90	2.02	
	Uplift vs. Singapore Dubai Complex ³⁾	4.31	4.13	4.73	-1.84	
	NZD Processing Fee (million) ^{2); 5)}	48.9	43.3	58.4	0.7	
Jul/Aug	Barrels 000's	7,519	6,833	7,511	7,615	
	RNZ USD GRM per barrel ¹⁾	7.66	6.20	8.87	6.86	
	Singapore Dubai Complex GRM	2.52	1.86	4.70	2.57	
	Uplift vs. Singapore Dubai Complex ³⁾	5.14	4.34	4.17	4.29	
	NZD Processing Fee (million) ²⁾	63.5	41.3	63.6	54.3	
Sept/Oct	Barrels 000's	7,221	7,251	6,816	7,639	
	RNZ USD GRM per barrel ¹⁾	9.47	7.49	9.31	7.09	
	Singapore Dubai Complex GRM	5.12	3.18	4.73	2.47	
	Uplift vs. Singapore Dubai Complex ³⁾	4.35	4.31	4.58	4.62	
	NZD Processing Fee (million) ²⁾	71.8	52.5	62.2	57.8	
Nov/Dec	Barrels 000's	7,017	7,447	7,342	7,307	
	RNZ USD GRM per barrel ¹⁾	10.82	9.20	6.83	6.53	
	Singapore Dubai Complex GRM	6.37	4.19	3.67	1.80	
	Uplift vs. Singapore Dubai Complex ³⁾	4.45	5.01	3.16	4.73	
	NZD Processing Fee (million) ²⁾	73.0	67.6	50.7	49.2	
Total	Barrels 000's	42,639	42,665	41,724	40,440	6,963
	USD GRM per barrel ¹⁾	9.20	6.47	8.02	6.31	4.88
	NZD Processing Fee (million) ²⁾	379.2	276.6	328.9	258.7	34.9
	YTD Cap adjustment	14.4				
	NZD Processing Fee (million) ¹⁾					

1) Excludes Fee Floor/Cap adjustment

2) Includes Fee Floor/Cap adjustment

3) RNZ uplift vs. Singapore Dubai Complex GRM is in USD per barrel

EXPLANATORY NOTES/GLOSSARY

LTI (Lost time injuries) and LTIF (Lost time injury frequency)

Lost time injuries refer to fatalities, permanent disabilities or time lost from work.

Lost time injury frequency refers to the number of lost time injuries over a rolling 12-month period, per 200,000 hours worked.

TRC (Total recordable cases) and TRCF (Total recordable case frequency)

Total recordable cases refer to lost time injuries, medical treatment and restricted work cases.

Total recordable case frequency refers to the number of recordable injuries over a rolling 12-month period, per 200,000 hours worked.

Tier 1 Process Safety Event (API 754)

A tier 1 Process Safety Event (PSE) is an unplanned or uncontrolled release of any material, including non-toxic and non-flammable, from a process which results in one or more of the following: A LTI and/or fatality; a fire or explosion resulting in greater than or equal to \$25,000 of direct cost to the company; a release of material greater than the threshold quantities given in Table 1 of API 754 in any one-hour period; an officially declared community evacuation or community shelter-in-place.

Tier 2 Process Safety Event (API 754)

A tier 2 Process Safety Event (PSE) is an unplanned or uncontrolled release of any material, including non-toxic and non-flammable, from a process which results in one or more of the following: A recordable injury; a fire or explosion resulting in greater than or equal to \$2,500 of direct cost to the company; a release of material greater than the threshold quantities given in Table 2 of API 754 in any one-hour period.

Operational availability

Operational availability is the percent of time available for manufacturing after subtracting maintenance and regulatory/process downtimes.

Refining throughput

Refining throughput is the volume of feedstock intake, comprising crude oil, residues, natural gas and blendstock, measured in barrels. One barrel equates to approximately 159 litres.

Gross Refining Margin (excluding Fee Floor/Margin Cap)

The Gross Refining Margin is calculated in USD as the difference between the value of products and the cost of feedstock for each refining customer. The value of products use Singapore quoted prices adjusted for New Zealand quality and the cost of importing those products to New Zealand. Feedstocks are valued using the notional market values adjusted for the cost of getting the feedstock to the refinery. The Gross Refining Margin incorporates the cost of hydrocarbon used as fuel and incurred as process losses.

Typically, Refining NZ has an uplift over the Singapore complex margins of around USD 3.00 to 4.00 per barrel. The value of the uplift varies due to fluctuations in freight rates, product quality premium, crude market premium and operational performance. Product quality premium are the cost differentials between products made to New Zealand quality and products made to the quality that applies to quoted prices in Singapore. Crude market premium are the cost differences between the crude types actually processed at Refining NZ and Dubai (used as basis for the Singapore complex margins).

Margin Cap/Fee Floor Adjustment

The processing agreements with our customers contain both Floor and Margin Cap clauses, both effective over a full calendar year.

The Fee Floor is the minimum Processing Fee due, for a calendar year, up to a current maximum of NZD 137.5 million. If the year-to-date Processing Fee is below the pro-rata Fee Floor, then an interim pro-rata Fee Floor payment is made by the Customers. Should the Processing Fee exceed the Fee Floor in future months any pro-rata Fee Floor payments that have been made are repaid to the Customers.

The Margin Cap limits the Gross Refining Margin for each customer to a maximum of USD 9.00 per barrel over the calendar year. Should the Gross Refining Margin fall below the Cap in future months any pro-rata Cap reductions that have been made are repaid by the Customers.

The Cap and the Floor are subject to year-to-date adjustments.

Any balance remaining at the end of the year cannot be carried over to the next year.

Processing Fee (after Fee Floor/Margin Cap)

The Processing Fee is 70% of the Gross Refining Margin after any adjustment for the Margin Cap or Fee Floor. The Processing Fee is paid by our customers in NZD.

RAP throughput

RAP throughput is the volume of refined products, comprising gasoline, jet fuel and diesel that are delivered via the Refinery to Auckland Pipeline (RAP) to the Wiri oil terminal.