18 September 2019

Refining NZ Operational Update for July/August 2019

HIGHLIGHTS

- The Company earned NZD 56.2 million in Processing Fees for July/August, NZD 24 million more than the May/June period.
- Refinery throughput was 7.42 million barrels, the highest for 2019 which was achieved due to good utilisation by our customers and excellent refinery availability.
- Refining NZ's Gross Refining Margin (GRM) was strong at USD 7.10 per barrel which represents a healthy uplift over the Singapore Dubai complex margin.
- Global refining margins were stronger in July/August as gasoline cracks recovered and middle distillate cracks rose strongly.
- Lloyd's Register has issued an upgraded Refinery to Auckland pipeline certificate of fitness for an 82 bar gauge maximum operating pressure. The RAP is now delivering greater flow rates and providing increased resilience of supply to Auckland.
- Process and personal safety performance remained excellent:
  - No Tier 1 or Tier 2 process safety events in the July/August period; and
  - The lost time injury frequency is currently 0.27 per 200,000 work hours

COMMENTARY

Refining - Margins and throughput

The refinery achieved throughput of 7.42 million barrels due to good utilisation by our customers and excellent refinery availability. This throughput, coupled with a GRM of USD 7.10 per barrel, has earned the Company NZD 56.2 million Processing Fee revenue in the July/August period. Revenue showed an increase of NZD 24 million compared to the May/June period.

The refinery achieved excellent Operational Availability of 99.8% during the July/August period.

Global refining margins

Global refining margins recovered in July across the barrel. Gasoline margins recovered to a 10-month high of USD 8.50 per barrel due to the permanent shutdown of a key USA refinery and unplanned Asian refinery outages. As a result, Singapore inventories fell well below the five-year average. Middle distillates reached a year high as a result of strong demand and subdued Chinese exports. Fuel oil margins recovered strongly by USD 6.00 per barrel due to tight supplies and sustained demand. August was a mixed month with the gasoline margin losing some of its gains and diesel rising further to above USD 16 per barrel due to outages in key exporting countries. Fuel oil fell strongly by USD 8 per barrel, likely driven by sentiment as supplies remained tight.

Uplift over Singapore Dubai complex margin

Refining NZ's July/August uplift over the Singapore Dubai complex margin was healthy at USD 3.87 per barrel enabled by a balanced product slate, locational advantage and stable operations but negatively impacted a modest recovery in the naphtha margin. The Singapore Dubai complex margin for the July/August period was USD 3.23 per barrel.

Exchange rate

The average exchange rate for the July/August period was USD/NZD 0.66.

Natural gas

Natural gas supplies returned to more normal levels in July/August as the Pohokura offshore natural gas field production performance improved and Refining NZ was able to access its portfolio of additional 2019 gas supply. Natural gas prices fell more than ten percent compared to the May/June period.

Distribution – Refinery to Auckland Pipeline (RAP)

Operational availability on the pipeline was high and the volume of product delivered through the pipeline remained strong.

Lloyd's Register has issued an upgraded RAP certificate of fitness for an 82 bar gauge maximum operating pressure. The RAP is now operating at the increased pressure, delivering greater flow rates and providing increased resilience of supply to Auckland.

Government Pipeline Inquiry

Refining NZ welcomed the publication of the Government Inquiry report into the September 2017 pipeline outage and the resilience of the fuel supply to Auckland. It is pleased that the Inquiry concluded that Refining NZ maintained and operated the RAP properly and in keeping with all legal requirements and standard industry practice and that the response of our staff and contractors to the pipeline rupture was of a high standard. We are also pleased that the Inquiry has noted that Refining NZ is working to make timely investment decisions and that we have a clear goal of having new infrastructure in place shortly before it is needed to meet demand.

Health, safety and environment

Process safety performance was again outstanding with no Tier 1 or Tier 2 process safety events in the July/August period. The lost time injury frequency is currently 0.27 per 200,000 work hours. We continue to see record engagement in our hauora korero (safety talks) which, combined with the hauora hikoi (safety walks) and E Tu Tangata (stand up people) initiatives, underpins our continued improvement in safety performance.

Costs

Overall operating have been tightly controlled with the ongoing pressure from higher electricity prices.

OPERATIONAL DATA

		Jul/Aug 2019	Jul/Aug 2018	YTD 2019	FY 2018
Health, Safety & Environment					
LTI	#	1	0	1	5
LTIF	#/200,000hrs	-	-	0.27	0.48
TRC	#	1	0	1	8
TRCF	#/200,000hrs	-	-	0.41	0.76
Tier I Process Safety Events	#	0	0	0	2
Tier II Process Safety Events	#	0	0	0	3
Releases outside of consent	#	0	2	1	5
Refining					
Brent Crude Oil Price	US$/bbl	61.52	73.49	64.89	71.2
Exchange Rate	US$/NZ$	0.66	0.67	0.67	0.69
Operational availability	%	99.8	97.0	99.9	90.7
Unplanned process downtime	%	0	0	1.3	0.8
Refining throughput	Mbbl	7.42	7.62	28.64	40.44
Gross Refining Margin	US$/bbl	7.10	6.86	5.78	6.31
Gross Refining Margin (excluding Fee Floor/Margin Cap)	US$M	52.7	52.2	165.5	255
Processing Fee (after Fee Floor/Margin Cap)	US$M	36.9	36.6	115.8	178.6
Processing fee (after Fee Floor/Margin Cap)	NZ$M	56.2	54.3	173.5	258.7
Distribution					
RAP throughput	Mbbl	3.4	3.4	13.7	21.0

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	7,312
	RNZ USD GRM per barrel [1)]	8.77	1.84	9.35	6.82	6.63
	Singapore Dubai Complex GRM	4.82	3.18	3.02	3.75	0.75
	Uplift vs. Singapore Dubai Complex [3)]	3.95	-1.34	6.33	3.07	5.88
	NZD Processing Fee (million) [2)]	62.3	14.8	48.1	45.8	50.1
May/Jun	Barrels 000's	6,416	6,837	7,755	3,910	6,945
	RNZ USD GRM per barrel [1)]	8.55	6.26	7.63	0.18	4.36
	Singapore Dubai Complex GRM	4.24	2.13	2.90	2.02	0.17
	Uplift vs. Singapore Dubai Complex [3)]	4.31	4.13	4.73	-1.84	4.19
	NZD Processing Fee (million) [2); 5)]	48.9	43.3	58.4	0.7	32.2
Jul/Aug	Barrels 000's	7,519	6,833	7,511	7,615	7,419
	RNZ USD GRM per barrel [1)]	7.66	6.20	8.87	6.86	7.10
	Singapore Dubai Complex GRM	2.52	1.86	4.70	2.57	3.23
	Uplift vs. Singapore Dubai Complex [3)]	5.14	4.34	4.17	4.29	3.87
	NZD Processing Fee (million) [2)]	63.5	41.3	63.6	54.3	56.2
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**	**28,640**
	USD GRM per barrel [1)]	**9.20**	**6.47**	**8.02**	**6.31**	**5.78**
	NZD Processing Fee (million) [2)]	**379.2**	**276.6**	**328.9**	**258.7**	**173.5**
	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.

Unplanned process downtime

A unit downtime is "planned" if the refinery is aware of and has scheduled that unit outage in the previous year. Unplanned process downtime is the weighted average of unplanned downtime across all process units.

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). Refining NZ's crude diet comprises of crudes that price off Dubai as well as crudes that price off different markers such as Brent. The fluctuations of these price markers relative to each other impact the uplift.

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.