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# EPA INFORMATION REQUEST

## 1. The industry (employment) multipliers generated/applied by Butcher & Partners

Industry (106 industries)	Employment Multipliers								
	South Taranaki/Whanganui	Taranaki/Whanganui	New Zealand	South Taranaki/Whanganui	Taranaki/Whanganui	New Zealand	South Taranaki/Whanganui	Taranaki/Whanganui	New Zealand
	FTEs/Output (\$1m) (direct)			Type I (direct + indirect)			Type II (direct + indirect + induced)		
Fabricated metal product manufacturing	4.1	4.1	4.1	1.2	1.3	1.8	1.3	1.6	2.5
Exploration and other mining support services	1.6	1.6	1.6	2.3	2.3	3.7	2.8	2.8	5.5
Scientific, architectural and engineering services	6.3	6.3	6.3	1.1	1.2	1.6	1.3	1.5	2.3
Other transport	*	*	*	1.2	1.3	1.8	1.3	1.5	2.5
Basic material wholesaling	-	*	*	-	1.3	1.7	-	1.5	2.3
Legal and accounting services	-	*	*	-	1.2	1.4	-	1.4	2.0
Health and general insurance	-	-	2.5	-	-	2.6	-	-	4.0
<b>Total</b>									

Where direct employment was TTR employees, the TTR employment intentions were used instead of the FTE/output ratio. In the case of exploration and other mining support services there was a combination of TTR employees and subcontracted services and so both the TTR employment intentions and the FTE/output ratio were used.

## 2. Initial Output Table as to the application of the multipliers to TTR forecasted direct employment, and in particular to the (30) overseas sources labour.

Industry (106 industries)	Direct employment from business case			
	South Taranaki/Whanganui	Taranaki/Whanganui	New Zealand	Offshore
Fabricated metal product manufacturing				
Exploration and other mining support services	48	114	151	26
Scientific, architectural and engineering services				
Other transport	13	44	44	4
Basic material wholesaling	0	5	6	0
Legal and accounting services	0	9	35	0
Health and general insurance				
<b>Total</b>	<b>61</b>	<b>172</b>	<b>236</b>	<b>30</b>

The employment numbers are cumulative ie the South Taranaki/Whanganui employees totals are included in the Taranaki/Whanganui employees totals, which are included in the New Zealand employees totals. Note that the 30 offshore workers are not included in the analysis as they will be based outside of New Zealand (and paid offshore).

## 3. The Regional I-O Multiplier is a static model, is TTR able to provide output from sensitivity analysis that they undertook to verify project viability, to exchange rate, ore price, Heavy Oil Fuel cost and employment numbers.

The EI analysis is expenditure based, therefore ore prices aren't relevant. To the extent they are relevant it is in respect of Royalty and Income tax, which are generally a net inflow to the NZ economy. (Refer p24 of the report).

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TTR's proposed operation is a relatively fixed process with fixed costs. Employment is not a variable cost to TTR. Therefore, with few variable costs, sensitivity is to costs which are volatile, i.e. exchange driven or oil price driven (affecting US\$ price of HFO).

High level sensitivity analysis by TTR estimates that a 10% movement in the exchange rate or price of HFO results in approximately 1% movement in TTR costs. These foreign exchange or oil price based costs are ultimately paid offshore and generate little employment. HFO costs are about 9 percent of Taranaki/Whanganui costs, and 24 percent of New Zealand total costs, a change in HFO costs would affect the respective GDP.

As a large proportion of the direct employment is through TTR, changes in TTRs employment intentions would have an impact. The relative impact would be greater at the South Taranaki/Whanganui area level and less so at the NZ level.

#### 4. A more detailed (than shown in Table 5) as to staffing roles and employment needs, especially as to rotational crewing.

The table below shows high level numbers by operating location.

	#	
Integrated Mining Vessel	122	Total over two shifts
Trans-shipment FSO	51	Total over two shifts
Support vessels and ops	59	Total over two shifts
General and Admin	35	Total
<b>Total</b>	<b>268</b>	

#### 5. Direct Expenditure is forecast at \$254 m per annum. Information is provided as to operation expenditure by industry.

Operating costs with total costs of ~US\$165m (or ~NZ\$254m at US\$/NZ\$ of 0.65). The following table is a breakdown of how much of that money will be spent in each study area (NZ\$).

Industry (106 industries)	Expenditure/Output		
	South Taranaki/ Whanganui	Taranaki/ Whanganui	New Zealand
Fabricated metal product manufacturing	\$21,341,462	\$21,341,462	\$21,341,462
Exploration and other mining support services	\$7,576,473	\$17,210,413	\$34,422,451
Scientific, architectural and engineering services	\$3,693,671	\$15,816,535	\$15,816,535
Other transport	\$2,000,000	\$10,365,673	\$10,365,673
Basic material wholesaling	\$0	\$6,484,428	\$32,617,140
Legal and accounting services	\$0	\$2,136,684	\$14,244,557
Health and general insurance	\$0	\$0	\$3,919,828
<b>Total</b>	<b>\$34,611,605</b>	<b>\$73,355,194</b>	<b>\$132,727,645</b>

#### Is it possible for TTR to specify expenditure by expense category (P&L analysis)?

Alternative breakdown provided, but not on traditional P&L analysis basis.

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NZ spend	NZ\$M
Engineering services	9.9
Fuel and power	32.6
Labour (mining support)	15.5
R&M	21.3
Other engineering and support	5.6
FSO NZ costs	17.8
Insurances	3.9
Other vessels (AHT, Geo-tech)	10.4
Environment and exploration	1.5
General and administration	14.2
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	132.7

**6. From the data provided, it appears that TTR will not be undertaking any regional capital expenditure. Is that correct?**

*Correct. No regional capital expenditure has been accounted for. Note, however, support industries and partners might build facilities and there could also be additional projects that would require regional capital expenditure, e.g. helipad, training school.*

Jason Leung-Wai Martin Jenkins 2016