Quantifying Netbacks From Condensate Markets

Tom Ramsey, Vitol Inc. Head of North American Crude Oil Marketing and Midstream

Tom Ramsey

- Head of North American Crude Oil Marketing & Midstream at Vitol, Inc.
- Previous:
 - Chief Operating Officer and Head of Energy at Gavilon
 - Chief Commercial Officer and Head of NGL Marketing & Origination at BP
 - <u>Other BP Roles</u>: Head of NGL & Olefins Supply & Trading (Innovene); Head of Americas Crude Oil Marketing & Trading; Head of Oil Trading International Americas Finance
 - Previous roles in the futures and banking industries

Vitol

Physical trading, logistics and distribution



268 million tonnes crude and products traded in 2014:

- 6,053 ship journeys undertaken
- 200+ vessels at sea at any one time

Vitol's trading business is built upon long standing relationships with producers, refiners and industrial clients.



350,000 bpd

In excess of 350,000 bpd refining capacity world wide. Refinery investments include; Viva Energy Australia; Geelong refinery, Varo Energy; Cressier in Switzerland and Bayernoil in Germany, ATPC in Belgium and FRCL in UAE.



11.7 million m³

11.7 million m³ of storage, comprising:

- 7.5 m m³ in VTTI a global storage & terminals company with assets across five continents.
- 1.7 m m³ in Varo Energy.
- 1.6 m m³ in Viva Energy Australia .
- 900 k m³ in Vivo Energy.



2,300+ outlets

Vitol's marketing businesses include bunkering, 4 million tonnes of jet into wing at 60 airports worldwide and Vivo Energy's 1,440+ petrol stations across Africa. Viva Energy, Shell's downstream business in Australia has added 870 petrol stations.



20 years

Vitol has 20+ years experience in E&P managing projects across diverse geographies, from FSU to the Philippines. Current projects include gas in Ghana and shale in the US.



1,240 MW

VPI Immingham – one of the cleanest and most efficient power plants in Europe with a capacity of c2.5% of UK peak demand.

Outline

- Understanding the Current Markets
- Calculating Competitiveness and Demand Internationally
- Quantifying the Impacts of Increased Condensate in Long Haul Pipelines
- Assessing the Capital and Operating Costs Required for Batching

Condensate Markets: 50 to 120 API



WTI to Brent spread but also C5 for more 'chem grade' condensate

EIA Export Volumes

	Ir	n 000s o	f BBLs			
Export Origin	Import Destination	1Q 2014	2Q 2014	3Q 2014	4Q 2014	1Q 2015
US PADD 1	Canada	2,709	2,761	5,352	7,142	5,537
US PADD 2	Canada	7,208	7,189	6,577	6,405	4,493
US PADD 3	Canada	12,018	17,298	16,416	17,403	20,299
US PADD 4	Canada	2	130	1,217	1,567	1,082
US PADD 5	Canada	2	-	-	21	-
	TOTAL	21,939	27,378	29,562	32,538	31,411
Export Origin	Import Destination	1Q 2014	2Q 2014	3Q 2014	4Q 2014	1Q 2015
US PADD 3	Asia	-	-	-	508	
US PADD 5	Asia	-	-	869	-	309
	TOTAL	-	-	869	508	309
Export Origin	Import Destination	1Q 2014	2Q 2014	3Q 2014	4Q 2014	1Q 2015
US PADD 3	Europe	-	567	2,309	2,115	1,435
	TOTAL EXPORTS	21,939	27,945	32,740	35,161	33,155
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NON-CANADA DESTINATION		-	567	3,178	2,623	1,744
% OF EXPORTS		0%	2%	10%	7%	5%

Permian: Pipeline Batching Coming?



Source: RBN Energy

Costs to Batch

CAPEX

- Tankage at the Origin
- Tankage at the Destination
- Re-piping of manifolds; truck stations

OPEX

- Minimal additional power but additional costs related to:
 - More pipes/tanks and pipe/tank maintenance
 - Interface and Interface Handling
 - Time to stage batches

Costs without Pipelines

- Un-Processed (un-stabilized) Condensate
 - Truck from origin to processing-several \$/bbl
 - Rail (if needed)-costs can range from \$10-15/bbl
 - Barge (if not on rail)-several \$/bbl
- Processing several \$/bbl
- Processed (stabilized) Condensate
 - Truck from processing facility-several \$/bbl
 - Rail (if needed)-costs can range from \$10-15/bbl
 - Barge (if not on rail)-several \$/bbl
- Export or Not? Function of Brent to WTI spread and/or C5 markets vs. cost of export transportation
- <u>Bottom Line:</u> Growing supply, limited pipeline capacity today, double handing, many costs = Large Discounts

Thank You!

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