



UNITED STATES



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US independent refiners

Company	Ticker	Rating	Target Price (\$/sh)		Current Price
			Current	Previous	6/9/11 (\$/sh)
Alon USA Energy	ALJ	Neutral	\$12.00	\$11.00	\$11.04
Frontier Oil	FTO	Outperform	\$39.00	\$37.00	\$28.05
Holly	HOC	Outperform	\$81.00	\$77.00	\$58.32
Sunoco	SUN	Neutral	\$43.00	\$45.00	\$41.06
Tesoro	TSO	Outperform	\$28.00	\$31.00	\$21.47
Valero Energy	VLO	Neutral	\$27.00	\$30.00	\$25.40
Western Refining	WNR	Outperform	\$22.00	\$20.00	\$15.10

Source: Macquarie Capital (USA), June 2011

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Macquarie Capital (USA) Inc.

US independent refiners

Why WTI crude price discounts will remain wide for years—it's structural

Permian Basin supply/demand balance driving wide spreads

It is our belief that the discount of WTI prices to other benchmark sweet crude grades such as Brent will stay wide relative to historical levels for at least the next two years due to a structural change in particular US inland crude supply/demand dynamics. Our analysis suggests the most leveraging factor impacting WTI differentials is the crude oil supply/demand dynamics in and around the Permian Basin and Cushing trading hub. **We believe crude production and supply in this region will outpace demand by a wide margin for potentially years to come.** As a result, we estimate that WTI crude prices will generally trade at a US\$13.00 discount to Brent until mid-2013 when incremental pipeline capacity to carry crude from Cushing to the Gulf Coast is scheduled for commissioning.

Bakken and Eagle Ford dynamics matter less

The Bakken and Eagle Ford shale plays have garnered high levels of industry interest but we believe both regions actually have minimal impact on the dynamics that influence WTI pricing. In the Bakken, we believe the industry has developed adequate takeaway capacity that exceeds production capacity, which provides transportation solutions for producers to access refining markets in the Midwest and Gulf Coast. In the Eagle Ford, producers are marketing production directly to refineries in South Texas, which is a completely separate and isolated supply/demand dynamic. In both cases, we expect incremental production to bypass the Permian/Cushing region altogether and move directly to more diverse markets.

Canadian crude influx: refiners swap out US inland crudes

Five refineries in the Southwest, Mid-Continent and Midwest regions have undertaken projects targeted at running incremental volumes of heavy Canadian feedstocks that could place an estimated 515kb/d of domestic crudes back on the market by 2013. This dynamic will likely only add to the length of crude supply in the Cushing/Permian region. BP (BP US) and ConocoPhillips (COP US) have the high profile projects coming in 2012-13, but we suspect the market may be overlooking the impact of Holly's (HOC US) crude slate changes at its Tulsa, OK and Artesia, NM plants on the WTI discount. These changes alone have likely displaced approximately 60kb/d of domestic crudes for Canadian within the past year.

Advantage extends for inland, niche market refiners

Our analysis suggests that the structural crude pricing advantage of the inland refiners that source crudes priced off WTI should continue for the next two years. We have updated our 2011-13 earnings estimates, which clearly indicate the upside for the inland, niche market companies (see Fig 2). At this point, we maintain our Outperform ratings for Frontier Oil (FTO US), HOC, Tesoro (TSO US) and Western Refining (WNR US). Our adjusted target prices are indicated in the table on the left.

Why WTI crude price discounts will remain wide for years—it's structural

Permian Basin supply/demand dynamics driving wide spreads

We believe that the discount of WTI prices to other benchmark sweet crude grades such as Brent and LLS will stay wide relative to historical levels for at least the next two years due to a structural change in particular US inland crude supply/demand dynamics

We believe that the discount of WTI prices to other benchmark sweet crude grades such as Brent and Light Louisiana Sweet (LLS) will stay wide relative to historical levels for at least the next two years due to a structural change in particular US inland crude supply/demand dynamics. The WTI-Brent differential significantly widened to record levels earlier in 2011, reaching the US\$19-20/bbl range in mid-February 2011, while widening back out to the US\$17-18/bbl range this week heading into the peak refinery utilization season during the summer. In our view, the blow-out in differentials this year is driven by:

- Temporary and structural issues that have caused availability of inland crude to overwhelm takeaway capacity, particularly in the regions around the Permian Basin and Cushing.
- US refiners displacing domestic and other foreign feedstocks with Canadian crudes.
- A lack of meaningful near-term incremental pipeline, rail or other transportation capacity to move stranded crude at Cushing to new markets. New pipelines and/or existing pipeline conversions and reversals are planned to help drain Cushing but we believe none of these projects will likely commission until mid-2013 at the earliest.
- Brent prices bid up due to the Libyan production shut in and North Sea maintenance issues.

Our analysis suggests the most leveraging factor impacting WTI differentials is the crude oil supply/demand dynamics in and around the Permian Basin and Cushing trading hub. Cushing, of course, is the pricing point for physical WTI crude and in our view crude supply in this region will outpace demand by a wide margin for potentially years to come. To that point, there is a decent correlation between the WTI-Brent differential and spare crude oil storage capacity at Cushing. The expected influx of incremental production from the Permian in the coming years could keep storage generally full for an extended period, thus supporting ongoing wide discounts for WTI.

We suspect that many investors expect the differential to tighten on a seasonal basis into the summer as regional refineries increase utilization rates and work away at the Cushing inventory overhang. We do not subscribe to this theory. While we acknowledge that some tightening could occur as refiners ramp up gasoline production, we believe the differential should still stay much wider than historical averages and potentially remain above the US\$10/bbl range throughout the summer months. Thereafter, we believe the regional crude oil supply/demand balance could loosen and once again widen the WTI discount to averages seen earlier this year.

Accordingly, we are widening our WTI-Brent crude price differential assumptions as indicated in Fig 1. We believe the differential will hold around US\$13.00/bbl longer-term until mid-2013 when new pipeline capacity is scheduled to start-up. There are many implications of our analysis across the energy landscape, but in this note we focus on the potentially meaningful implications for US inland refiner earnings.

Fig 1 Macquarie WTI-Brent crude price differential assumptions

	2011E		2012E		2013E			
	Current	Previous	Current	Previous	Current	Previous		
1Q11	(\$10.94)	(\$10.94)	1Q12E	(\$15.00)	(\$7.00)	1Q13E	(\$13.00)	(\$5.00)
2Q11E	(13.76)	(12.85)	2Q12E	(13.00)	(7.00)	2Q13E	(13.00)	(5.00)
3Q11E	(13.00)	(10.00)	3Q12E	(13.00)	(7.00)	3Q13E	(7.00)	(5.00)
4Q11E	(13.00)	(10.00)	4Q12E	(13.00)	(7.00)	4Q13E	(7.00)	(5.00)
2011E	(\$12.68)	(\$10.95)	2012E	(\$13.50)	(\$7.00)	2013E	(\$10.00)	(\$5.00)

Source: Macquarie Capital (USA), June 2011

In spite of all the attention and acclaim, we believe the Bakken and Eagle Ford actually have minimal impact on the dynamics that influence the discounted pricing of WTI

Bakken and Eagle Ford dynamics matter less

The Bakken and Eagle Ford unconventional shale plays have garnered high levels of interest from a production standpoint and certainly play a role in supplying new sources of feedstocks to refineries in various regions of the US. In spite of all the attention and acclaim, we believe both regions actually have minimal impact on the dynamics that influence the discounted pricing of WTI. In particular:

- Bakken light sweet crude prices have disconnected from WTI dynamics and are currently trading at approximately US\$5-6/bbl above WTI. This pricing disconnect is in our opinion a sure sign that supply/demand balance for Bakken production is distinctly separate and unique from the dynamics at Permian/Cushing.
- Given the abundance of maintenance and unscheduled downtime of the oil sands upgraders in Alberta so far in 2011, we believe refiners in the Upper Midwest have increased demand and bid up prices for Bakken crudes as a substitute for Canadian Syncrude. The Bakken crudes are generally transported down the same Enbridge pipeline from Canada as Syncrude.
- Producers and logistics providers have brought on incremental rail capacity from the Bakken directly to supply terminals in the Gulf Coast, such as at St. James, LA, that act as crude feedstock delivery points to refineries in the region. We believe the marginal barrel of Bakken production is now bypassing Cushing altogether as producers have developed rateable sources of takeaway capacity to both the Upper Midwest and Gulf Coast refining centers.
- In the Eagle Ford, logistics providers have announced over 1mb/d of new pipeline capacity by the end of 2012 that will deliver crude and condensates directly to refineries in Corpus Christi and Three Rivers, TX. We believe these incremental feedstocks will increasingly compete with foreign waterborne and Gulf of Mexico crude oil grades that typically flow to these plants, which is a separate supply/demand dynamic than what occurs in and around Cushing.

Canadian crude influx: refiners swap out US inland crudes

We suspect most investors are aware of the growing influx of Canadian crudes into the US given the new pipeline capacity that has started up in recent years but the potential magnitude of displaced inland US crudes may prove surprising to the Street. Of the refineries that pull crude directly from Cushing or producing regions feeding Cushing, we believe five plants in the Southwest, Mid-Continent and Midwest regions have undertaken projects targeted at running incremental volumes of heavy Canadian feedstocks that could place an estimated 515kb/d of domestic crudes back on the market by 2013. This dynamic will likely only add to the length of crude supply in the Cushing/Permian region.

While upcoming large coker projects by BP (BP US) and ConocoPhillips (COP US) in their respective plants in the Midwest and Mid-Continent region have remained on investors' radar screens for some time, we argue that Holly's (HOC US) under-the-radar crude slate changes at its Tulsa, OK and Artesia, NM refineries may have contributed meaningfully to the widening WTI discounts so far this year.

Advantage extends for inland, niche market refiners

Our analysis suggests that the structural crude pricing advantage of the inland, niche market refiners that source Permian Basin crudes or feedstocks based on WTI pricing should continue at least for the next two years. We have updated our 2011-13 EPS estimates for the refiners as indicated in Fig 2. Not surprisingly, our estimates for the refiners leveraged to the inland regions in general show the most upside compared to current consensus including ALJ, FTO and HOC. We have also adjusted our price targets as shown in Fig 2 based on the updated asset valuation analysis for each company. At this point, we are maintaining our Outperform ratings for most of the inland-focused refiners, including FTO, HOC and WNR, as well as TSO which has ancillary exposure to the Mid-Continent/Rockies region. We believe valuation levels are compelling for all of these companies, particularly heading into what looks to be another strong earnings season ahead for 2Q11.

Fig 2 Macquarie updated US independent refiner 2011E EPS estimates and target prices

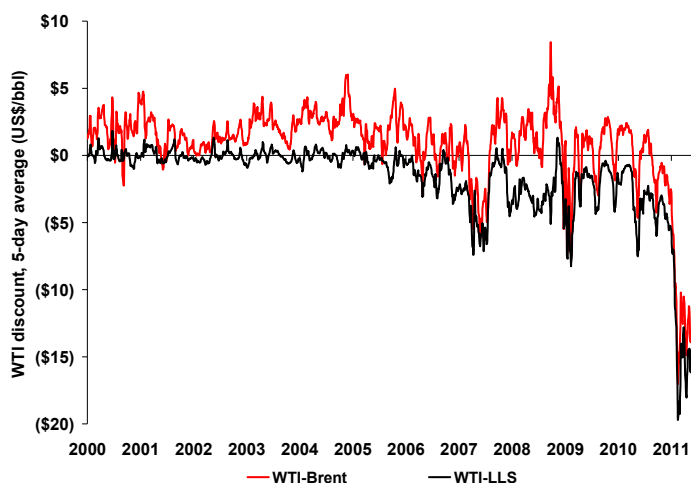
	2Q11E			2011E			Price Targets		2011E Valuation		Rating
	Macquarie		Consensus	Macquarie		Consensus	Current	Previous	P/E	EV/ EBITDA	
	Current	Previous		Current	Previous						
Alon USA Energy	\$0.58	\$0.43	\$0.36	\$1.25	\$0.27	\$0.62	\$12.00	\$11.00	8.9x	4.6x	Neutral
Frontier Oil	\$1.78	\$1.72	\$1.14	\$5.00	\$4.75	\$3.92	\$39.00	\$37.00	5.6x	2.7x	Outperform
Holly	\$2.74	\$2.68	\$2.13	\$8.82	\$8.11	\$6.72	\$81.00	\$77.00	6.6x	4.3x	Outperform
Sunoco	\$0.72	\$0.38	\$0.52	\$0.73	\$0.17	\$0.62	\$43.00	\$45.00	nmf	7.1x	Neutral
Tesoro	\$1.02	\$1.03	\$1.17	\$2.84	\$2.83	\$3.15	\$28.00	\$31.00	7.6x	3.4x	Outperform
Valero Energy	\$1.49	\$1.60	\$1.42	\$3.10	\$3.53	\$3.63	\$27.00	\$30.00	8.2x	3.8x	Neutral
Western Refining	\$1.13	\$0.98	\$1.01	\$2.77	\$2.25	\$2.55	\$22.00	\$20.00	5.5x	3.4x	Outperform

Source: FactSet, Macquarie Capital (USA), June 2011

What has changed this year?

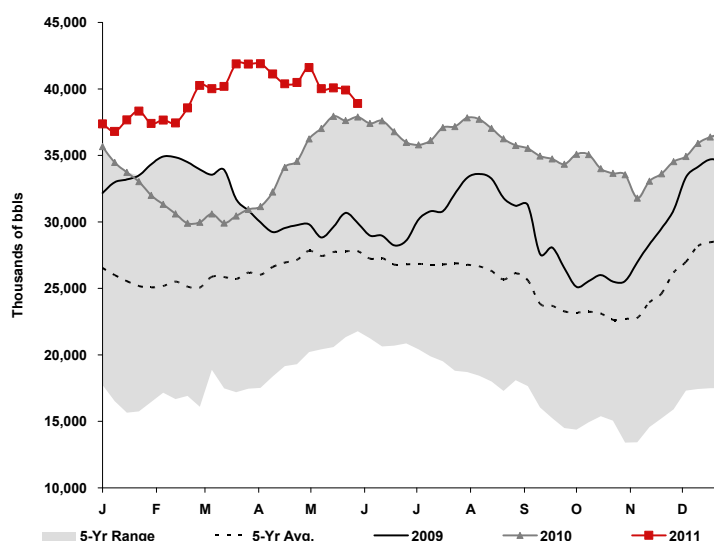
The discount between the price of WTI and other benchmark light, sweet crude grades has widened to record levels so far in 2011. Relative to Brent and LLS, WTI has traded at a US\$11.76/bbl and US\$14.24/bbl discount, respectively, year-to-date 2011 after reaching nearly US\$19.00/bbl in mid-February for both measures (see Fig 3). The record level of crude oil inventories at Cushing, which is a direct measure of the level of stranded feedstocks in the Mid-Continent region that has developed this year, is one of the key factors that have driven the discount (see Fig 4).

Fig 3 WTI vs. Brent/LLS, 5-day average, 2000-YTD 2011



Source: Bloomberg, Macquarie Capital (USA), June 2011

Fig 4 Cushing crude oil inventories

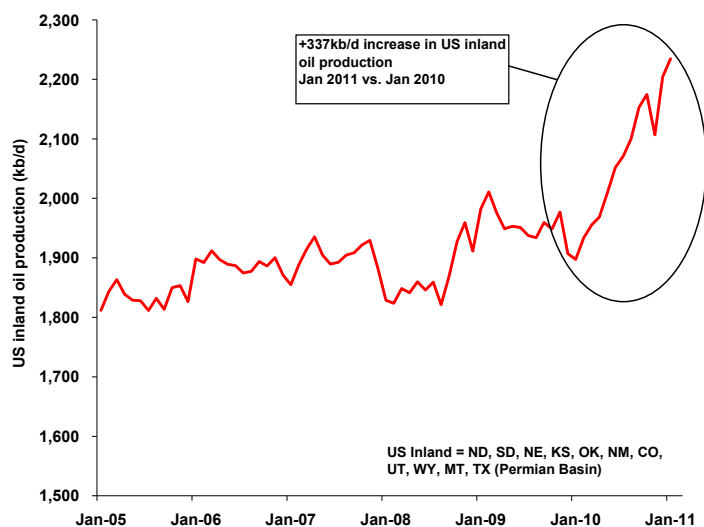


Source: EIA, Macquarie Capital (USA), June 2011

In general terms, we see several temporary and structural factors that have contributed to the widening WTI differentials:

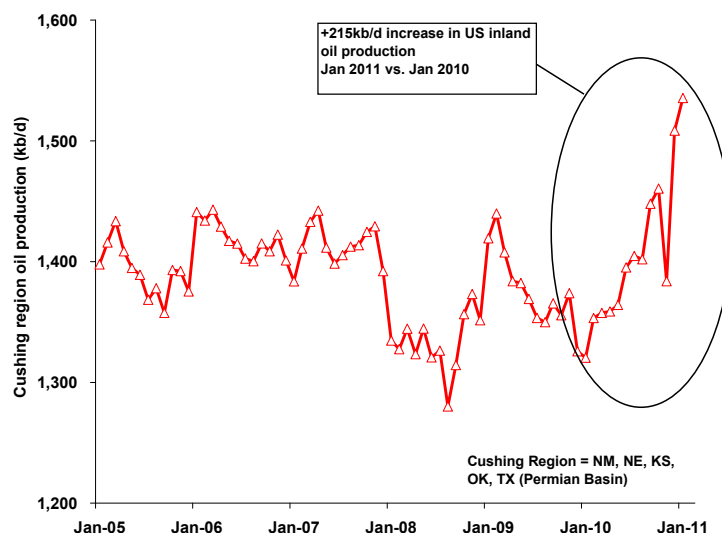
- **Refinery maintenance/unplanned outages (temporary).** US inland refineries experienced high levels of planned and unplanned downtime, particularly in the Southwest and Texas Panhandle where most plants suffered shutdowns due to sub-zero temperatures pushing into the region in Feb 2011. We estimate that an effective 250-300kb/d of refining capacity in and around Cushing was offline in Jan-Apr 2011 due to planned and unplanned refinery outages, which caused regional crude inventories to build.
- **Brent prices bid up on Libya and maintenance issues (temporary).** The shut-in of Libyan oil production has kept upward pressure on high quality light, sweet barrels such as Brent as refiners shift crude slates to replace lost barrels from Libya. In addition, maintenance issues on North Sea production platforms have tightened the prompt Brent market. Nexen (NXY CN) has experienced ongoing production disruptions at its platform in the Buzzard field that has significantly reduced Forties production. NXY is currently upgrading the cooling system on the platform which will not be completed until July 2011. Buzzard represents approximately 33% of Forties' total 600kb/d of production.
- **Burgeoning crude oil production in inland US basins (structural).** Crude oil production in liquids rich, US inland resource plays is booming. Based US DOE data, crude production in Mid-Continent, Rockies and Southwest regions increased to over 2.2mb/d in Jan 2011, up nearly 340kb/d from Jan 2010 (see Fig 5). Of the Jan 2011 total, 64% is represented by production in regions that feed into Cushing (see Fig 6). We believe the lack of incremental takeaway capacity from this region will keep inventories full and WTI differentials generally wide over the next two years at a minimum.

Fig 5 US inland crude oil production



Source: EIA, Macquarie Capital (USA), June 2011

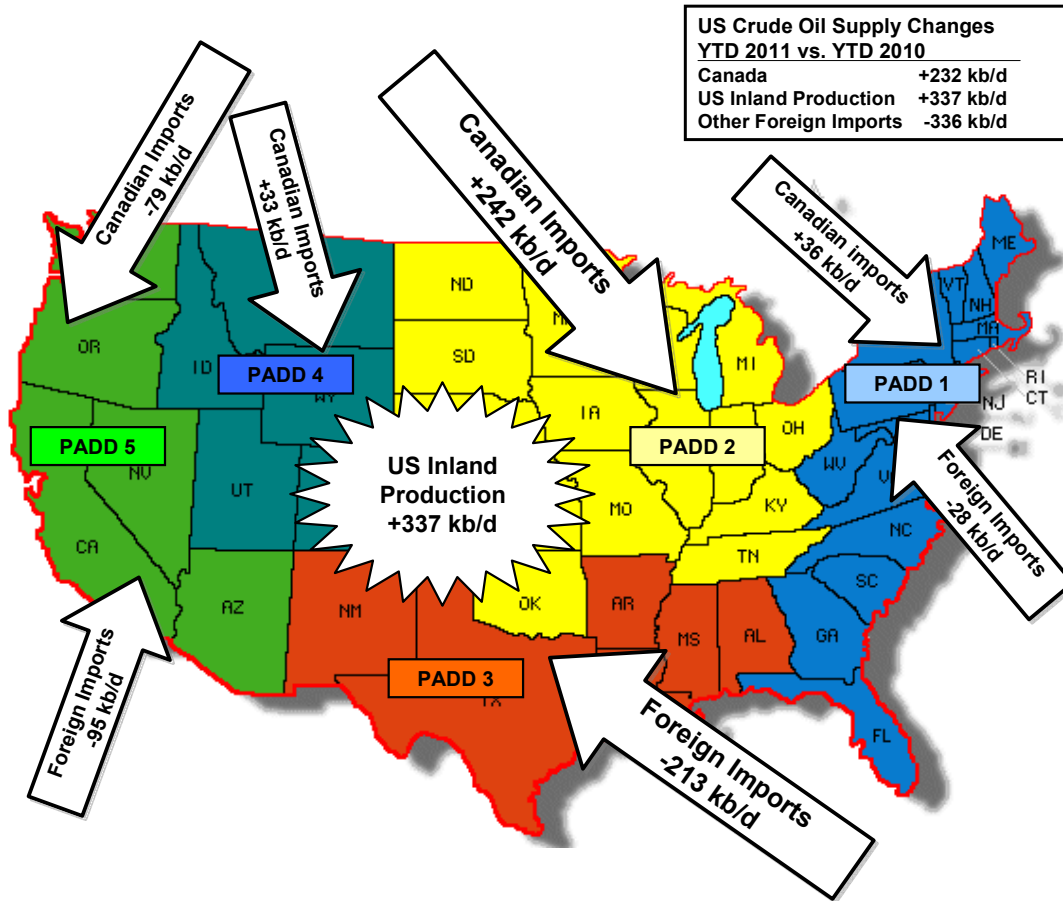
Fig 6 Cushing-region crude oil production



Source: EIA, Macquarie Capital (USA), June 2011

- **Ongoing influx of Canadian crudes into the US (structural).** So far in 2011, imports of Canadian crudes into the US have increased by 232kb/d compared to the same period in 2010 (see Fig 7). The increase is likely driven by the growth in incremental pipeline capacity that has come online this year, including TransCanada's (TRP CN) 155kb/d Keystone Phase II Extension pipeline that began transporting Canadian crudes into Cushing starting in Feb 2011. This volume has added to the growth in inland oil supply with ongoing domestic production growth (+337kb/d) and lack of incremental efficient transportation modes to carry stranded crude to the Gulf Coast refining center. The increase in Canadian imports and inland US production growth has caused imports of other foreign crudes to decline by 336kb/d so far this year, which by design has lowered US dependence on Middle East and other non-Canadian foreign barrels.
- **Inland refineries switching crude slates towards Canadian (structural).** Many inland refineries have undertaken projects or strategies that will likely place incremental barrels of domestically produced crudes back on the market in the Mid-Continent region. The refineries driving this dynamic include plants owned by HOC, BP and COP located in the Southwest, Mid-Continent and Midwest regions. In total, we believe potentially 515kb/d of domestic crude grades could be displaced by Canadian heavy barrels or the ongoing rationalization in the coming years. This dynamic will likely lower the effective takeaway capacity of stranded crudes in the Cushing/Permian region longer-term. We will discuss further details of this trend later in this report.

Fig 7 Net changes to US crude oil supply, YTD 2011 vs. YTD 2010



Source: EIA, TX Railroad Commission, Macquarie Capital (USA), June 2011

Permian Basin/Cushing dynamics

We believe the crude oil supply/demand balance in the Permian Basin/Cushing region is the main driving factor for the widening discount of WTI prices. And we think the developing dynamics are structural for years to come. In our view, the most important issues in evaluating the sustainability of the WTI discount include:

- The crude oil supply vs. takeaway capacity balance in the region.
- The timing of incremental pipeline capacity from Cushing to the Gulf Coast refining center.
- The level of spare crude oil storage capacity at Cushing.
- The anticipated crude slate changes of certain regional refineries, switching from US inland crude grades to Canadian feedstocks.

Supply/demand balance

We believe crude oil production capacity has exceeded takeaway capacity in the Permian/Cushing region for the first time in 2011 based on our estimates (see Fig 8). We believe the gap between supply and existing takeaway capacity could widen significantly in the coming years if no other incremental pipeline capacity is added out of Cushing.

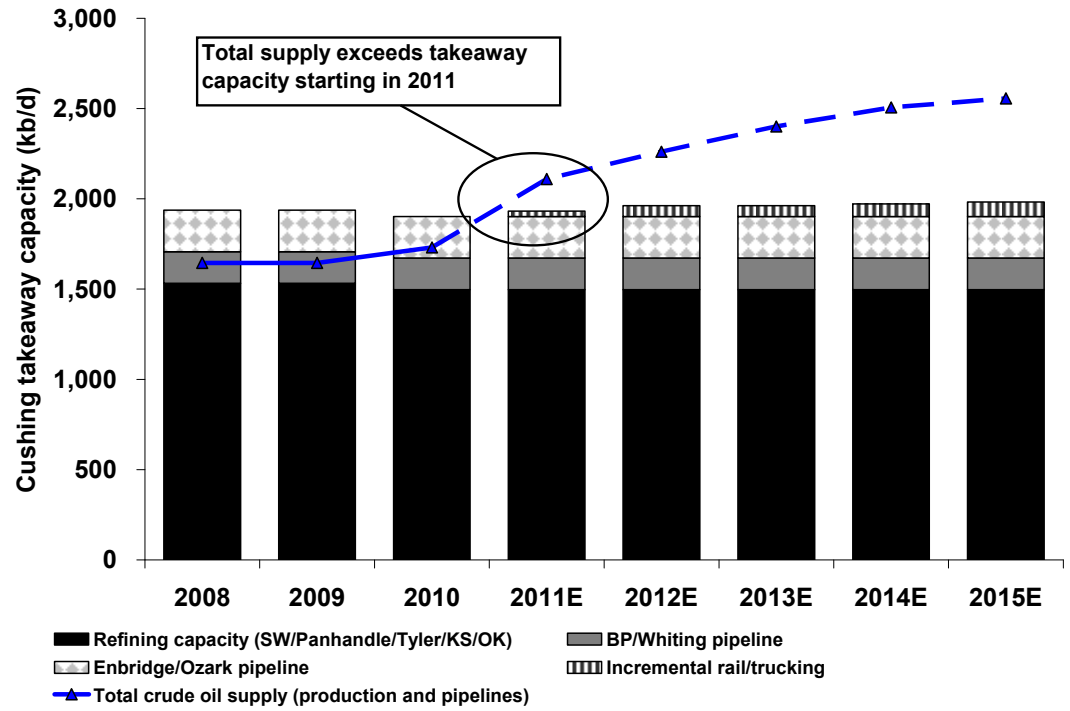
- **Regional crude oil supply focus.** Our analysis isolates supply to oil production in West Texas, New Mexico, Oklahoma, Kansas and Nebraska (defined as the Permian/Cushing region). We believe production from these regions in general flows to refineries in the Mid-Continent region or to Cushing. We also consider additional supply into Cushing from Enbridge's (ENB CN) Spearhead pipeline, the Keystone Phase II Extension pipeline, Plains All American Pipeline's (PAA US) White Cliffs pipeline and unit train capacity from the Bakken. We estimate that supply will jump from approximately 1.7mb/d in 2010 to 2.1mb/d in 2011 due mostly to the start-up of the Keystone Extension line in Feb 2011 and increased production growth in the Permian Basin. We project total supply could reach over 2.5mb/d by 2014. We believe Permian crude production is set to meaningfully accelerate given our forecast of horizontal rig count growth in the region (see Fig 9). The rig count growth comparisons to what has occurred in the Bakken are striking, only about two years later for the Permian. Accordingly, we would potentially expect a similar bullish outlook for production growth in the Permian region as what has occurred in the Bakken.
- **Current regional takeaway capacity: refineries and pipelines.** There currently is limited incremental takeaway capacity in the Permian/Cushing region without additional pipeline capacity to carry crude supply out of the area. We see four sources of crude oil demand in the region: (1) approximately 1.5mb/d of refining capacity from refineries in West Texas, New Mexico, Oklahoma and Kansas, (2) the 175kb/d dedicated BP pipeline from Cushing to the company's Whiting, IN refinery, (3) the 230kb/d Ozark pipeline from Cushing to Wood River, IL and (4) any incremental rail/trucking capacity that may develop out of Cushing.

Numerous industry players have announced or are contemplating incremental pipeline capacity to transport crude from the Permian/Cushing region to the Gulf Coast refining center. We believe there are five projects that could help alleviate the length in Cushing crude supply starting in 2013 (see Fig 10):

1. Partial reversal and conversion of the 135kb/d Longhorn Pipeline by Magellan Midstream Partners (MMP US).
2. Potential reversal of COP's 350kb/d Seaway Pipeline.
3. TRP's 500kb/d Keystone XL Pipeline.
4. ENB's 150kb/d Monarch Pipeline.
5. Enterprise Products Partners L.P. (EPD US) and Energy Transfer Partners L.P.'s (ETP US) joint venture 450kb/d Houston Crude Oil Pipeline.

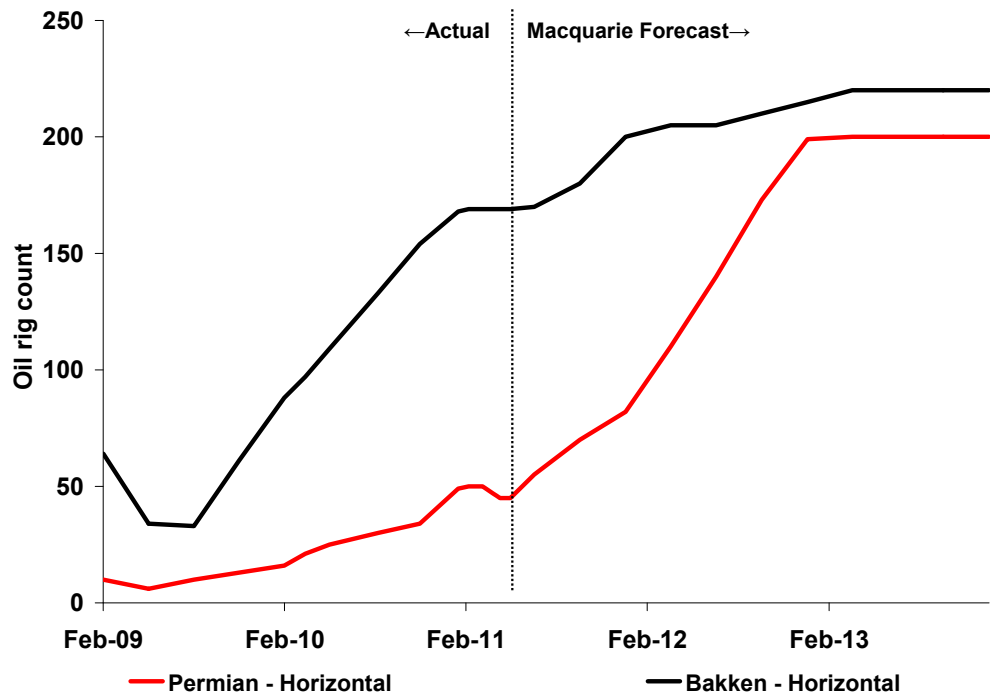
We believe crude oil production capacity has exceeded takeaway capacity in the Permian/Cushing region for the first time in 2011 based on our estimates

Fig 8 Permian Basin/Cushing crude oil supply/demand balance



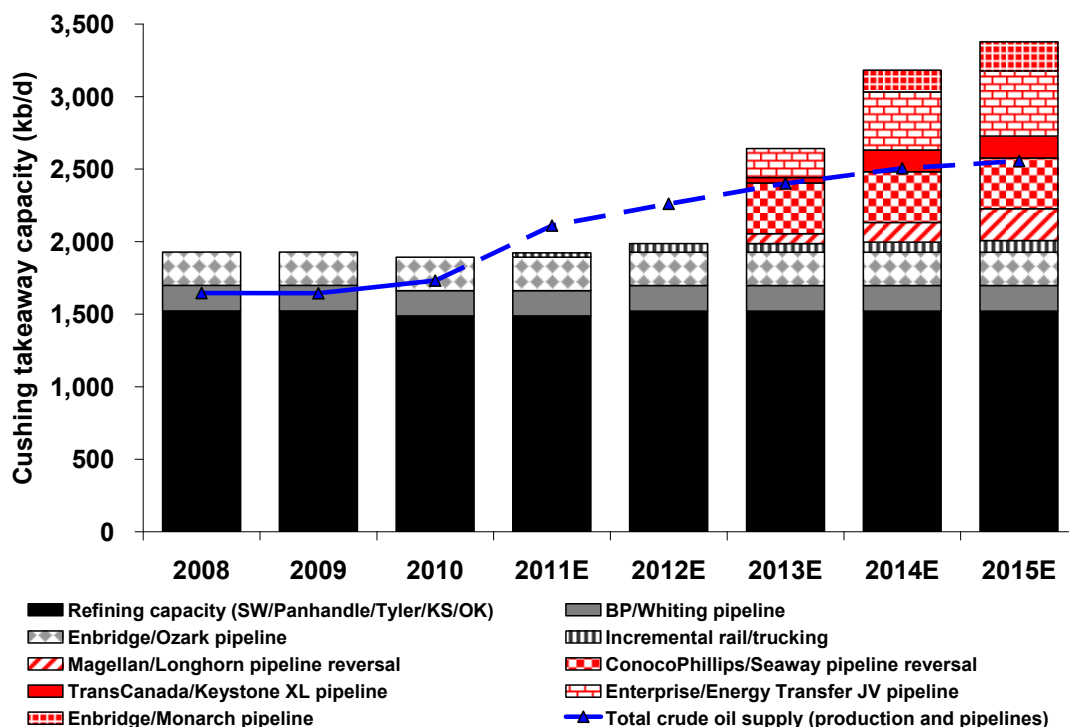
Source: Company reports, EIA, TX Railroad Commission, Oil & Gas Journal, Macquarie Capital (USA), June 2011

Fig 9 Horizontal rig count growth: Permian vs. Bakken



Source: Smith International, Macquarie Capital (USA), June 2011

Fig 10 Permian Basin/Cushing crude oil supply/demand balance with incremental announced takeaway capacity



Source: Company reports, EIA, TX Railroad Commission, Oil & Gas Journal, Macquarie Capital (USA), June 2011

Fig 10 indicates the potential impact of the incremental takeaway capacity from these projects if all are commissioned as scheduled. In theory, the crude supply length in the Permian/Cushing could dissipate by 2013, but we highly doubt that all of these projects will move forward. A myriad of issues and complications could force the delay and/or cancellation of a number of these ventures, including:

- Ongoing permitting issues on Keystone XL that could delay approval of the pipeline by the US government until year-end 2011 or into 2012.
- MMP stated that a reversal of Longhorn would take 18-24 months following a decision to move forward even though the project uses an existing pipeline. We suspect that permitting issues could delay the conversion from a products pipeline since Longhorn crosses key aquifers that supply water to Central Texas and crude oil carries a far more negative sentiment given the numerous US pipeline ruptures and spills that have occurred in recent years.
- COP is evaluating the reversal of Seaway but we suspect that it may not decide to move forward due to competitive reasons.
- The decision on Seaway will likely impact whether the EPD/ETP project moves forward as COP and EPD jointly own the Seaway pipeline.

Accordingly, the un-risked view of the supply/demand balance indicated in Fig 10 could very well look different when all the issues that influence company decisions on moving forward on these projects play out over the next few years. We believe the potential pipeline reversals (Seaway and Longhorn) offer the quickest ways to help move excess crude out of Cushing storage as compared to the complexities of constructing new pipeline capacity. The many pipeline ruptures and accidents in the US within the past 12 months likely places the new pipeline projects at risk of lengthy permitting delays (with the Keystone XL project being the poster child). Accordingly, we believe that incremental takeaway capacity may not exceed crude oil supply in the region until 2014-15, which could result in ongoing wide WTI discounts for years to come.

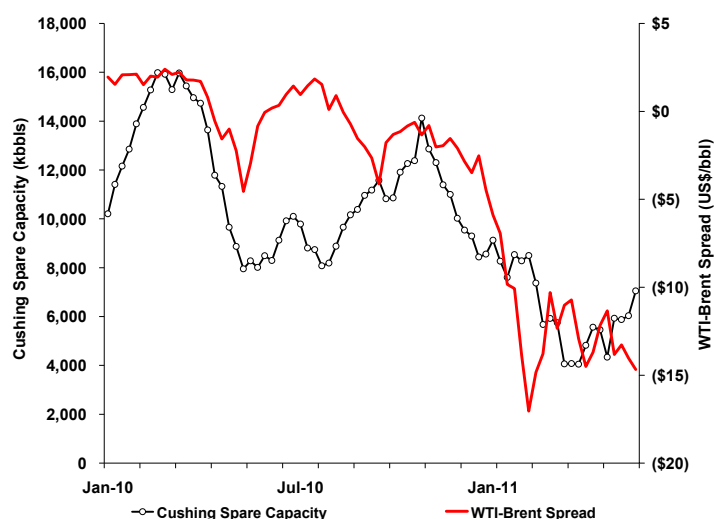
We believe that incremental takeaway capacity may not exceed crude oil supply in the region until 2014-15, which could result in ongoing wide WTI discounts for years to come

Cushing spare crude oil capacity

A decent trend has developed between the WTI-Brent spread and spare crude oil storage capacity at Cushing (see Fig 11). While the R² correlation factor has remained only at 56% since the beginning of 2010, the two factors have in general trended directionally together since fall 2010. The low spare capacity indicates that storage tanks at Cushing are relatively full at approximately 6.0mbbls on a current working base of 46mbbls.

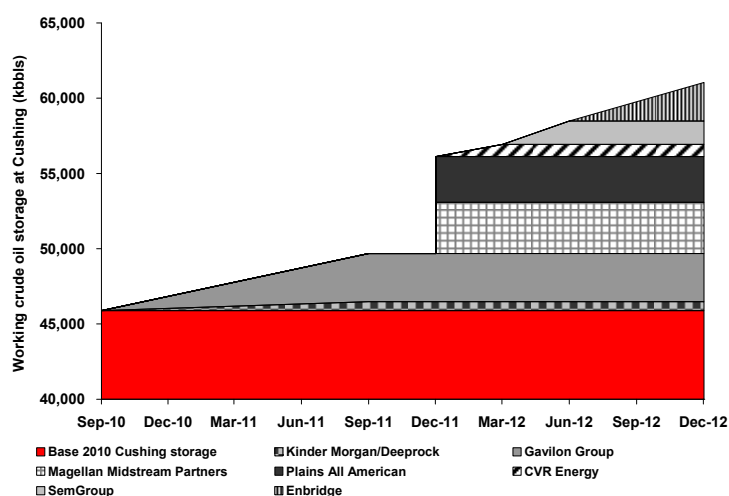
There are far too many moving pieces to accurately forecast Cushing storage levels but we believe spare capacity should continue to stay low given the apparent aggressive production growth in the Permian and continued crude slate changes by refineries in the region. Many logistics providers and refiners have also announced projects to increase crude oil storage capacity over the next year (see Fig 12). If all projects proceed, upwards of 61mbbls of working storage capacity could be available by year-end 2012, which could extend the crude overhang at Cushing for years.

Fig 11 Cushing spare crude oil storage capacity vs. WTI-Brent differential



Source: Bloomberg, EIA, Macquarie Capital (USA), June 2011

Fig 12 Expected Cushing crude oil storage capacity growth

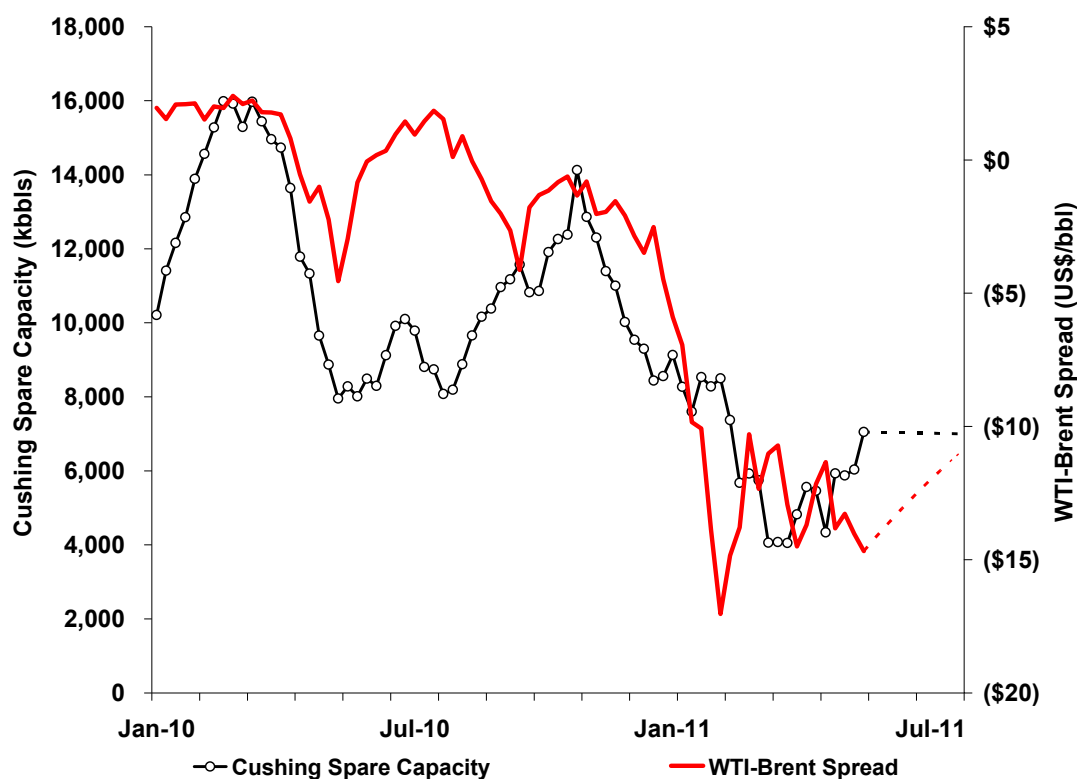


Source: EIA, Macquarie Capital (USA), June 2011

We have taken a cursory view on the outlook for Cushing at least into the summer driving season in 2011 (see Fig 13). We believe spare capacity should remain relatively low in the 6-7mmbbl range through mid-Aug 2011 and the WTI-Brent differential will tighten only to the US\$11-13/bbl level. We suspect many investors assume that increased refinery utilization during the summer months may help erode the crude inventory overhang at Cushing but we offer the following factors that might suggest otherwise:

- **PADD 2 utilization already >90%.** Refinery utilization in PADD 2, the closest proxy for operations in the Cushing region, has averaged over 90% since late May 2011 thus we do not believe any further seasonal increases in utilization alone will meaningfully impact the WTI discount. We remind investors that the WTI-Brent spread has widened to US\$17-18/bbl this week.
- **Increase in seasonal utilization not enough to offset crude production growth.** We estimate approximately 1.5mb/d of domestic refining capacity pulls crude either directly from the Permian Basin or from Cushing storage, thus even a reasonable 5% seasonal increase in utilization would amount to only 75kb/d of incremental crude usage. While we do not have accurate current production data, we note that crude production in the Permian/Cushing region increased by 215kb/d from Jan 2010 to Jan 2011 (see Fig 6). If this trend continued from the beginning of 2011, we expect production growth to potentially equal or outstrip any increase in seasonal refinery utilization during the summer months.

Fig 13 Cushing spare crude oil storage capacity vs. WTI-Brent differential, Summer 2011 forecast



Source: Bloomberg, EIA, Macquarie Capital (USA), June 2011

Refinery crude slate changes

We believe the market may be overlooking the impact of HOC's crude slate changes at Tulsa, OK and Artesia, NM as a primary driver of excess domestic feedstocks being placed back in the market so far in 2011

We suspect the Street underestimates the potential impact of changing refiner crude diets on the WTI discount. A number of Mid-Continent and Midwest plants are undertaking projects and rationalization efforts that are aimed at substituting heavy Canadian feedstocks for WTI and other inland US crudes typically processed at these plants (see Fig 14). There are several high profile coker projects from BP at Whiting, IN and COP at both Wood River, IL and Borger, TX that still remain under construction until 2012-13. However, we believe the market may be overlooking the impact of HOC's crude slate changes at Tulsa, OK and Artesia, NM as a primary driver of excess domestic feedstocks being placed back in the market so far in 2011:

- **HOC/Tulsa, OK changes.** HOC acquired both refineries in Tulsa in 2009 and subsequently lowered the nameplate capacity of the combined refineries by 35kb/d by operating both facilities as one unit. In addition, HOC reported that it now processes approximately 10kb/d of heavy Western Canadian Select (WCS) crude at the facility to produce asphalt for the company's asphalt marketing business. We do not believe the previous owners of the plants used any WCS for its operations. The net result is that HOC's Tulsa refinery has likely placed approximately 45kb/d of domestic, inland sweet crudes back on the Permian/Cushing market over the past year by switching these volumes to WCS feedstock.
- **HOC/Artesia, NM changes.** HOC stated that it will increase the throughputs of WCS crude within the Artesia, NM refinery's residuum oil supercritical extraction (ROSE) unit from approximately 10kb/d to a targeted 25kb/d in 2011. We believe the Artesia plant has historically processed primarily WTI and WTS crudes given its close proximity to the Permian Basin.

These crude slate changes by HOC alone have likely placed upwards of 60kb/d of domestic crudes back on the market within the past year.

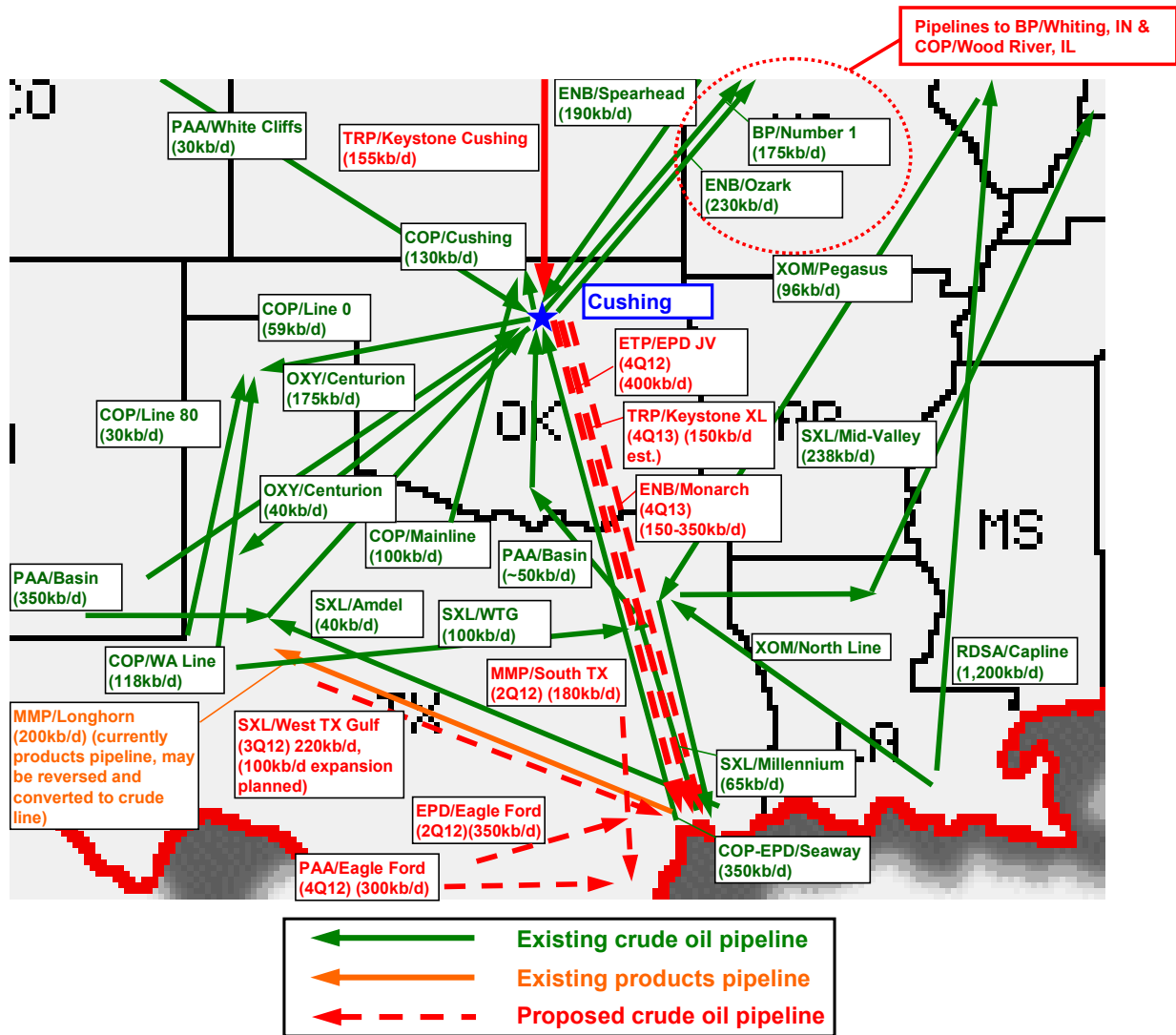
Fig 14 Regional refinery crude slate changes

Company	Refinery	Crude Slate Change	Estimated Volume Impact (kb/d)	Timing
Holly	Tulsa, OK	Rationalization of crude throughputs between acquired plants Incremental WCS throughputs vs. historical levels, displacing WTI	35.0 10.0	2010 2010
Holly	Artesia, NM	Ramp up of ROSE unit WCS inputs, displacing WTI/WTS	15.0	2011
ConocoPhillips	Wood River, IL	New 65kb/d coker commissioning in 4Q11, targeting 130kb/d incremental bitumen capacity, displacing inland US grades.	130.0	2012
ConocoPhillips	Borger, TX	New 26kb/d coker, increase runs of heavy Canadian crudes, displacing WTI/WTS.	115.0	2013
BP	Whiting, IN	New 70kb/d coker commissioning in mid-2013, potentially less inland US crude pulled from Cushing on dedicated BP pipeline.	210.0	2013
Total Potential WTI/Inland US Crude Grade Displacement			515.0	

Source: Company reports, Macquarie Capital (USA), June 2011

The potential impact from the BP/Whiting and COP/Wood River crude slate changes in 2012 could cause both companies to pull more WCS crude from the two pipelines connecting both plants to Cushing (BP/Number 1 and ENB/Ozark) as opposed to locally produced sweet barrels (see Fig 15). Going forward, this dynamic could significantly exacerbate the amount of US inland crudes backed up at Cushing and keep the WTI discount wide. In total, we believe the refinery crude slate changes listed in Fig 14 could alone increase demand of heavy Canadian crudes by an estimated 515kb/d at the expense of domestic US grades by 2013.

Fig 15 Crude oil pipeline around Cushing



Source: Company reports, Macquarie Capital (USA), June 2011

Bakken and Eagle Ford dynamics matter less

In the matter of why WTI and other inland crudes linked to WTI continue to trade at discounted levels, we believe the supply/demand dynamics in both the Bakken and Eagle Ford actually have little influence

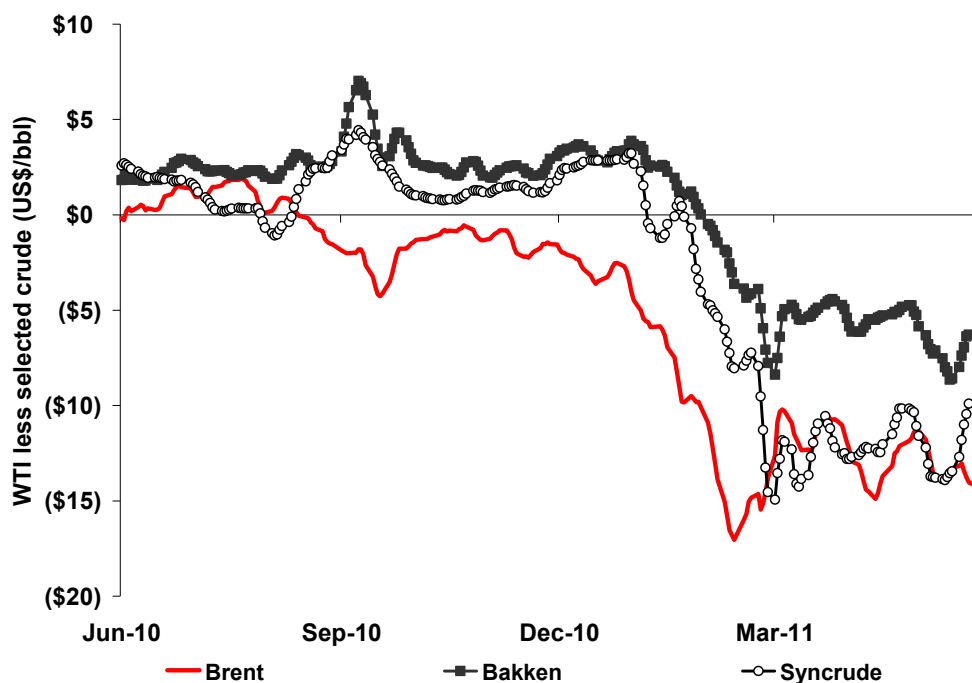
The burgeoning unconventional shale plays in the Bakken and Eagle Ford continue to garner high praise and interest among industry players and investors alike, and with good reason given the vast production potential in both regions. However, in the matter of why WTI and other inland crudes linked to WTI continue to trade at discounted levels, we believe the supply/demand dynamics in both the Bakken and Eagle Ford actually have little influence. In our view, producers and logistics providers in the Bakken have developed enough projects so that takeaway capacity will exceed production capacity starting in 2012, if not this year. In the Eagle Ford, we believe incremental pipeline solutions should adequately move expected future production directly to refineries in Corpus Christi and Three Rivers, TX. In both cases, we expect incremental production from these shale plays to bypass the Permian/Cushing region altogether and move directly to refining markets in the Gulf Coast and Midwest.

Bakken supply/demand balance

Pricing of light sweet crude from the Bakken has disconnected from WTI this year (see Fig 16). For much of 2010, Bakken Sweet crude traded at a US\$2-5/bbl discount to WTI but has since swung to a US\$5-10/bbl premium so far in 2011. Bakken Sweet does not trade at quite the premium of Brent (potentially representing transportation cost differences), but the dramatic change in pricing is to us a sure indication that the crude oil supply/demand dynamics in the Bakken are far different than in the Permian/Cushing region. The market has bid up prices for Bakken crudes we suspect due to several factors:

- **Substitute for Syncrude.** Ongoing operational and maintenance issues with the oil sands upgraders in Alberta throughout 2011 have tightened the Syncrude market, causing prices to surge to US\$10-15/bbl above WTI in recent months (see Fig 16). We believe US refiners have likely turned to the Bakken crudes as a substitute light, sweet feedstock given that it is largely transported down the same ENB pipeline to refineries in the upper Midwest region. In our view, this dynamic has caused Bakken prices to follow the same trend as Syncrude this year.

Fig 16 Brent, Bakken Sweet, Canadian Syncrude pricing vs. WTI



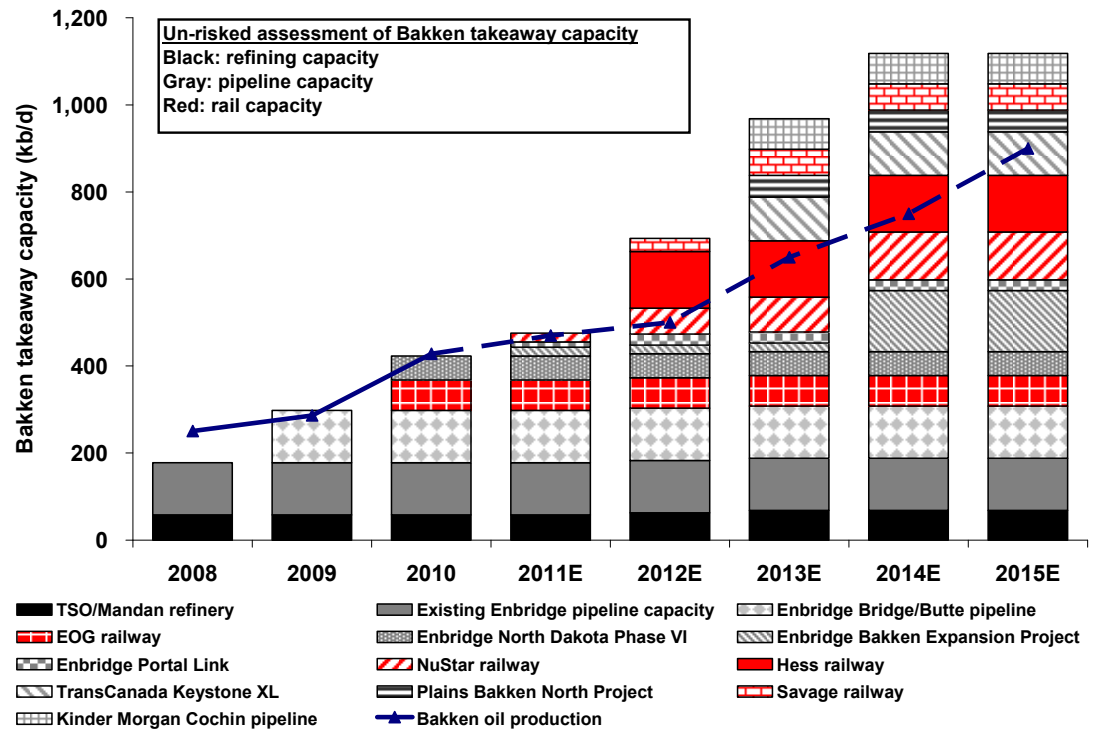
Source: Bloomberg, Platts, Macquarie Capital (USA), June 2011

We believe both the supply/demand balance and pricing dynamic of Bakken crudes differ significantly from the Permian/Cushing region and are separate issues from factors impacting the discount on WTI and WTI-based crudes

- **Rail solutions accelerating.** Incremental rail capacity has helped move Bakken crudes to markets in the Mid-Continent and Gulf Coast regions since 2010. EOG Resources (EOG US) began operating unit trains with approximately 70kb/d of capacity to transport Bakken production primarily to Cushing and potentially points further south in the Gulf Coast region. Later in 2011, NuStar Energy LP (NS US) plans to operate unit trains from the Bakken to its St. James, LA terminal, a key distribution facility that serves many Gulf Coast refineries. Hess (HES US) also has new rail capacity planned for 2012. The EOG rail service started the trend and the additional rail projects will allow producers to readily access diverse markets located in various regions, including the Mid-Continent, Midwest and Gulf Coast.
- **Weather tightening supplies.** Record levels of rainfall and snow in the upper Mid-Continent region have hampered production and transportation of Bakken crudes over the past few months. Tesoro (TSO US) indicated that it will run at reduced rates in the near-term at its Mandan, ND refinery due to disruptions of crude deliveries from its related crude gathering system in the Bakken. Flooding and muddy conditions have hampered transportation modes throughout the region. We believe these issues could cause further temporary tightening of the Bakken supply/demand balance.

Unlike in the Permian/Cushing region, the industry appears to have developed adequate longer-term takeaway capacity from the Bakken in the form of incremental rail and pipeline capacity (see Fig 17). There are reports that suggest Bakken crude oil production could reach 800-1,000kb/d by 2015, but takeaway capacity will likely exceed production for years to come based on all the announced new projects. Accordingly, we believe both the supply/demand balance and pricing dynamic of Bakken crudes differ significantly from the Permian/Cushing region and are separate issues from factors impacting the discount on WTI and WTI-based crudes.

Fig 17 Bakken crude oil supply/demand balance



Source: Company reports, EIA, Macquarie Capital (USA), June 2011

We believe the vast majority of Eagle Ford production is marketed to refineries in Corpus Christi and Three Rivers, TX via pipeline with little, if any, volume transported to Cushing

Eagle Ford supply/demand balance

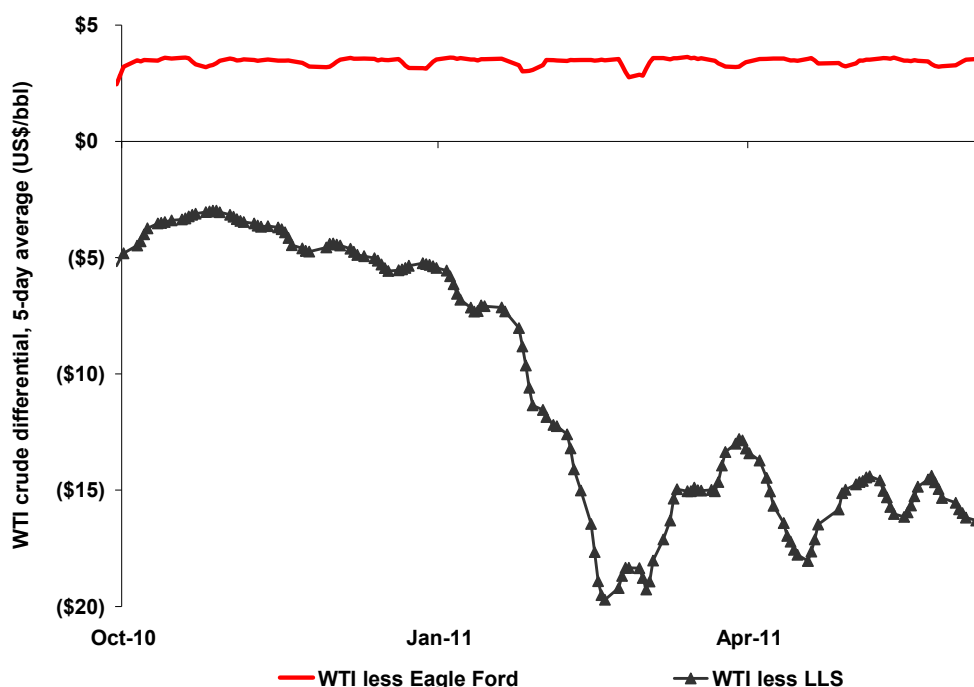
While the supply/demand outlook in the Eagle Ford is rapidly changing given producers' heightened focus in the play, we believe the dynamics in the region have little to do with the WTI discount because at this point the two feedstocks do not readily compete with each other. We believe the vast majority of Eagle Ford production is marketed to refineries in Corpus Christi and Three Rivers, TX via pipeline with little, if any, volume transported to Cushing (rail and trucking are the only current transportation options to Cushing). Accordingly, Eagle Ford crudes should compete with other foreign waterborne or Gulf of Mexico-produced sweet grades available to Gulf Coast refiners rather than inland US grades that flow to Cushing.

The pricing of Eagle Ford sweet crudes appear pegged off WTI as prices have held steady at approximately US\$3-4/bbl under WTI (see Fig 18). Conversely, the benchmark Gulf of Mexico sweet crude grade, LLS, continues to trade at a US\$15+/bbl premium to WTI. Current crude production in the Eagle Ford remains only in the 60kb/d range, but we expect that LLS prices could potentially decline meaningfully once additional pipeline capacity is constructed to transport Eagle Ford feedstocks to the Corpus Christi/Three Rivers refineries. LLS and other waterborne light, sweet crude demand could face downward pressure as both Eagle Ford and WTI/inland US crudes start making their way to the Gulf Coast on the new pipelines.

Our estimated supply/demand balance for Eagle Ford crude suggests that incremental takeaway capacity in the form of many announced pipeline projects could far outstrip production growth over the next few years if all of the pipelines proceed as planned (see Fig 19). We recognize that the pipelines will also transport produced condensates but we include only crude oil production for the purposes of our analysis. Current crude production in the Eagle Ford averaged approximately 60kb/d in 4Q10 and 1Q11, and our base case estimate suggests production could reach approximately 240kb/d by mid-2013. Conversely, total pipeline capacity could reach over 1.4mb/d out of the Eagle Ford region.

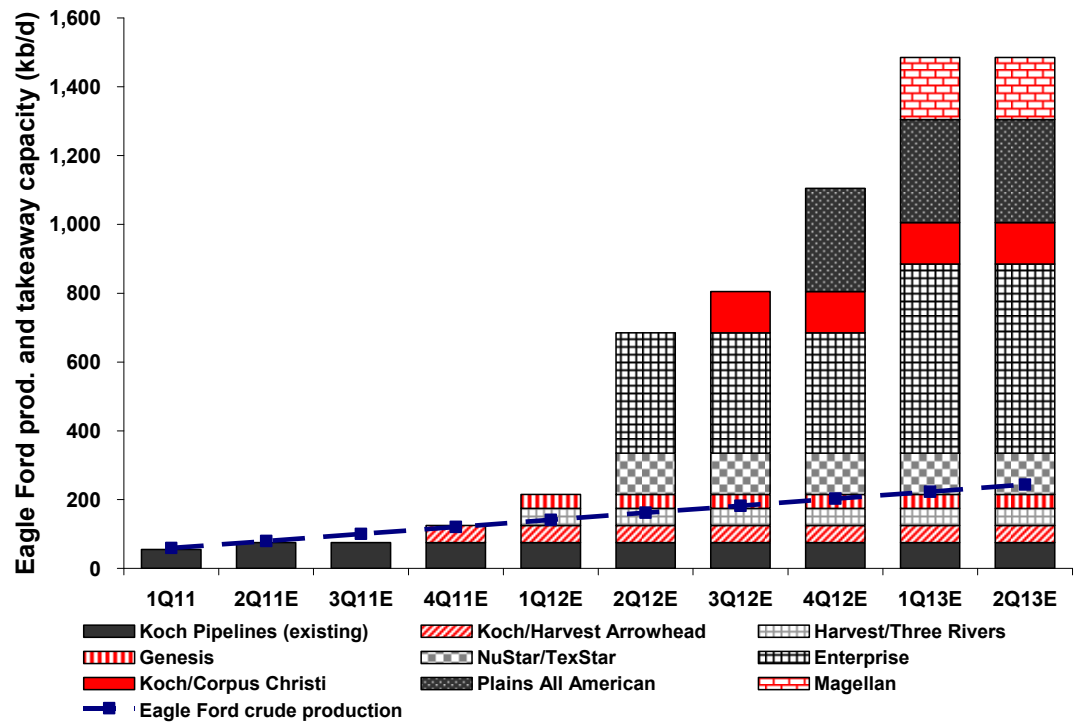
Accordingly, we believe the supply/demand dynamics in Eagle Ford are separate from the Permian/Cushing region, even if crude pricing remains currently tied to WTI.

Fig 18 Eagle Ford, LLS pricing vs. WTI



Source: Bloomberg, Macquarie Capital (USA), June 2011

Fig 19 Eagle Ford crude oil supply/demand balance



Source: Company reports, EIA, TX Railroad Commission, Oil & Gas Journal, Macquarie Capital (USA), June 2011

US independent refiners inland crude sensitivities

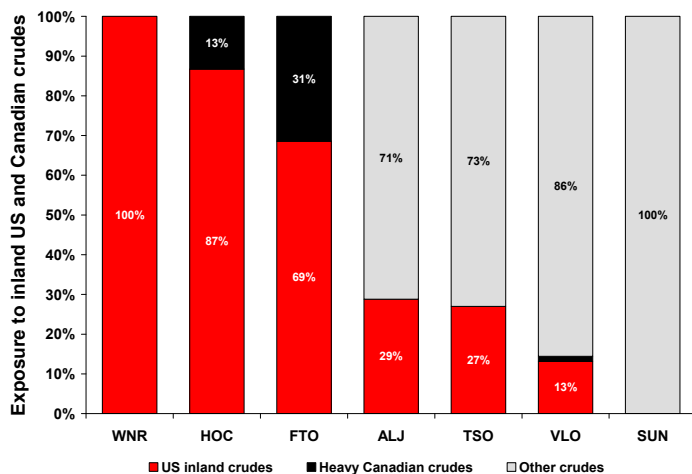
We feel at this point the Street is highly informed on the advantages certain inland, niche market refiners hold given their respective exposure to WTI-based crudes. In this section, we feel it is important to remind investors on the magnitude of earnings upside for the companies given that the WTI-Brent spread has widened back out to US\$17-18/bbl this week.

The crude slates of the US independent refiners vary depending on the geographic location, refinery configuration and other factors for each company's system. Fig 20 indicates for each US refiner under our coverage the relative exposure to US inland, heavy Canadian and all other crude sources for 2010. Three of the companies, WNR, HOC and FTO, have substantially more exposure to inland US and Canadian crudes than the other refiners. These companies all have refineries located in the Southwest, Mid-Continent and Rockies regions that have the potential to fully benefit from the WTI spreads.

As discounted as WTI has become, many specific inland crudes processed by these companies trade at even below WTI. Fig 21 indicates that certain common crudes produced in Colorado, New Mexico, Utah and Wyoming and processed by the inland niche market refiners have traded at generally rateable discounts to WTI since 2010. In essence, a refinery need not have a direct link to Cushing to benefit from discounted crude feedstocks. Plants in the Southwest and Rockies stand to benefit from stranded crudes in the inland regions as much as refineries in and around Cushing. We note, however, that the pricing of Bakken light sweet crude has disconnected from WTI-based grades as discussed in detail earlier in this note.

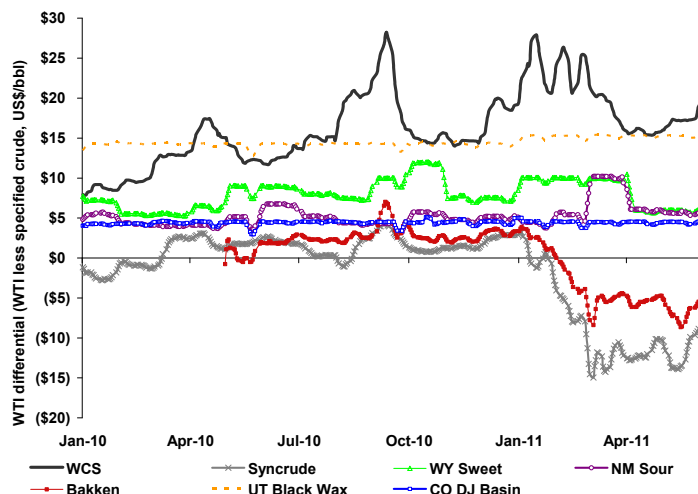
The discounted crude pricing in the inland regions are generally apparent in our updated earnings estimates for the independent refiners as indicated in Fig 2. We believe these pricing trends are structural and the discounts will continue longer-term at least into 2013. Our updated estimates reflect this expected dynamic as our updated full-year 2011-13 EPS estimates remain well above current consensus for the niche market refiners (see Fig 22).

Fig 20 US independent refiners crude pricing exposure



Source: Company data, Macquarie Capital (USA), June 2011

Fig 21 US inland crude prices vs. WTI



Source: Bloomberg, Platts, Macquarie Capital (USA), June 2011

Fig 22 US independent refiner EPS estimates 2011-13

Company	2011E		2012E		2013E	
	Macquarie	Consensus	Macquarie	Consensus	Macquarie	Consensus
Alon USA Energy	\$1.25	\$0.62	\$2.01	\$0.77	\$2.65	\$0.96
Frontier Oil	\$5.00	\$3.92	\$4.05	\$3.06	\$3.94	\$2.71
Holly	\$8.82	\$6.72	\$9.32	\$6.15	\$8.61	\$6.60
Sunoco	\$0.73	\$0.62	\$1.55	\$2.33	\$2.47	\$3.37
Tesoro	\$2.84	\$3.15	\$2.94	\$2.82	\$2.60	\$2.59
Valero Energy	\$3.10	\$3.63	\$3.26	\$3.75	\$4.65	\$3.89
Western Refining	\$2.77	\$2.55	\$3.45	\$2.35	\$3.22	\$1.89

Source: Company data, FactSet, Macquarie Capital (USA), June 2011

Fig 23 US independent refiners valuation comparison

Company	Symbol	6/9/11 Market Price	Rating	Target Price	Expected Return	Market Cap (US\$m)	Enterprise Value (US\$m)	Total Debt/ Cap	Dividend Yield	Stock Price Performance			ROCE					
										2009	2010	2011 YTD	2009	2010	2011E	2012E		
Alon USA Energy	ALJ	\$11.04	Neutral	\$12.00	9%	\$602	\$1,469	72%	1.4%	-25%	-13%	85%	-1%	-6%	10%	13%		
Frontier Oil	FTO	28.05	Outperform	39.00	39%	2,967	2,629	24%	0.9%	-5%	50%	56%	-4%	5%	35%	22%		
Holly	HOC	58.32	Outperform	81.00	39%	3,109	4,313	38%	1.0%	41%	59%	43%	4%	12%	35%	27%		
Sunoco	SUN	41.06	Neutral	43.00	5%	4,964	6,700	40%	1.5%	-40%	54%	2%	0%	5%	3%	5%		
Tesoro	TSO	21.47	Outperform	28.00	30%	3,040	4,243	37%	0.0%	3%	37%	16%	0%	3%	10%	9%		
Valero Energy	VLO	25.40	Neutral	27.00	6%	14,376	18,072	34%	0.8%	-23%	38%	10%	0%	5%	9%	9%		
Western Refining	WNR	15.10	Outperform	22.00	46%	1,334	2,376	60%	0.0%	-39%	125%	43%	4%	1%	16%	17%		
Average										25%	0.8%	-13%	50%	36%	0%	4%	17%	15%

Company	EPS				Cash Flow/Share				Recurring EBITDA (US\$m)				Refining EBITDA/bbl Capacity			
	2009	2010	2011E	2012E	2009	2010	2011E	2012E	2009	2010	2011E	2012E	2009	2010	2011E	2012E
Alon USA Energy	(\$1.89)	(\$2.41)	\$1.25	\$2.01	\$0.27	(\$2.38)	\$3.25	\$4.20	\$49	(\$25)	\$318	\$404	(\$0.10)	(\$0.87)	\$3.25	\$3.64
Frontier Oil	(0.72)	0.36	5.00	4.05	0.41	1.20	6.50	5.47	(20)	173	976	818	(0.29)	2.53	14.30	11.98
Holly	0.32	1.95	8.82	9.32	3.32	4.84	12.26	13.31	199	384	1,012	1,068	0.65	2.32	8.89	9.39
Sunoco	(0.27)	1.79	0.73	1.55	8.46	9.30	4.88	6.36	372	1,035	942	921	(0.77)	0.83	0.17	(0.09)
Tesoro	(0.70)	(0.28)	2.84	2.94	2.99	2.78	6.30	4.63	411	544	1,265	1,295	1.13	2.05	4.61	4.42
Valero Energy	(0.60)	1.53	3.10	3.26	2.88	5.26	6.31	6.70	1,441	3,367	4,704	4,868	1.42	4.06	5.79	6.00
Western Refining	(0.06)	(0.10)	2.77	3.45	2.34	1.71	4.76	5.43	182	284	699	795	3.03	2.76	10.81	12.80

Company	PER				P/CF				EV/EBITDA				FCF Yield			
	2009	2010	2011E	2012E	2009	2010	2011E	2012E	2009	2010	2011E	2012E	2009	2010	2011E	2012E
Alon USA Energy	nmf	nmf	8.9 x	5.5 x	38.5 x	nmf	3.4 x	2.6 x	29.9 x	nmf	4.6 x	3.6 x	24%	-11%	15%	23%
Frontier Oil	nmf	38.5 x	5.6 x	6.9 x	33.6 x	11.5 x	4.3 x	5.1 x	nmf	7.2 x	2.7 x	3.2 x	-2%	10%	21%	16%
Holly	nmf	14.9 x	6.6 x	6.3 x	7.0 x	6.0 x	4.8 x	4.4 x	11.8 x	7.1 x	4.3 x	4.0 x	-8%	5%	15%	18%
Sunoco	nmf	18.6 x	nmf	26.4 x	3.5 x	3.6 x	8.4 x	6.5 x	16.3 x	5.5 x	7.1 x	7.3 x	-10%	23%	-6%	5%
Tesoro	nmf	nmf	7.6 x	7.3 x	4.8 x	4.8 x	3.4 x	4.6 x	8.4 x	5.9 x	3.4 x	3.3 x	11%	5%	14%	9%
Valero Energy	nmf	12.2 x	8.2 x	7.8 x	6.7 x	3.5 x	4.0 x	3.8 x	11.8 x	4.6 x	3.8 x	3.7 x	-5%	12%	18%	9%
Western Refining	nmf	nmf	5.5 x	4.4 x	3.7 x	3.4 x	3.2 x	2.8 x	9.5 x	9.5 x	3.4 x	3.0 x	4%	11%	23%	32%
Average	nmf	21.0 x	7.0 x	9.2 x	14.0 x	6.5 x	4.5 x	4.3 x	14.6 x	6.6 x	4.2 x	4.0 x	2%	8%	14%	16%

nmf: not meaningful

Source: Company data, Macquarie Capital (USA), June 2011

As a result of our analysis, we continue to hold a positive view on the inland refiners and maintain our Outperform ratings for FTO, HOC, TSO and WNR. In our view, the stocks remain cheap based on our updated earnings figures. On our 2011 estimates, the stocks are trading at a discounted valuation range of 2.7x EV/EBITDA for FTO to 4.3x for HOC (including the impact Holly Energy Partners) (see Fig 23).

Recent macroeconomic data has not been overly favorable for the refining sector including disappointing employment and manufacturing reports for May 2011. However, Macquarie's US economists suggest that the softening economic indicators represent only a pause in the US economy, not a downturn. We look for the current accommodative monetary conditions, a healthy corporate sector and consumer resilience to support above-trend GDP growth and a potentially sharp snapback in economic growth during 2H11. Refining fundamentals have certainly held in despite the somewhat dire macro data, thus at this point we cannot get too negative on the group. In particular, we believe the advantages of the inland refiners leveraged to WTI-based crudes should hold for the foreseeable future.

Appendices

Fig 24 Macquarie ALJ operational and financial summary

(US\$m, except per barrel & per share items)

	2008	2009	2010					2011E					2012E	2013E
			1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11E	3Q11E	4Q11E	2011E		
Operating Data														
Refining														
Refinery Throughput (kb/d)														
Big Spring, TX	37.8	59.8	42.8	42.8	53.1	57.3	49.0	62.2	64.0	65.0	62.0	63.3	65.8	67.8
Paramount, CA	31.1	31.2	18.3	19.4	21.0	11.7	17.6	-	20.0	50.0	60.0	32.7	60.0	60.0
Krotz Springs, LA	58.2	48.4	0.0	22.0	64.2	69.8	39.2	73.5	42.6	65.0	64.0	61.2	67.8	72.3
Recurring Gross Margin (US\$/bbl)														
Big Spring, TX	(\$3.18)	\$4.74	\$4.91	\$9.58	\$5.04	\$5.16	\$6.03	\$19.50	\$24.31	\$20.11	\$13.42	\$19.37	\$16.87	\$15.89
Paramount, CA	\$2.07	\$0.69	(\$0.42)	\$2.87	\$0.17	\$2.13	\$1.09	\$0.00	(\$3.53)	\$0.64	\$1.11	\$0.22	\$3.74	\$3.89
Krotz Springs, LA	\$7.25	\$5.91	\$0.00	(\$1.95)	\$1.00	\$4.55	\$1.35	\$5.06	\$2.57	\$1.80	\$2.25	\$3.03	\$3.87	\$6.26
Operating Costs (US\$/bbl)														
Big Spring, TX	\$4.40	\$4.12	\$6.57	\$5.78	\$4.66	\$3.78	\$5.06	\$4.13	\$4.00	\$3.95	\$4.00	\$4.02	\$3.77	\$3.77
Paramount, CA	\$5.81	\$5.01	\$8.82	\$7.46	\$6.86	\$8.10	\$7.73	\$0.00	\$6.00	\$3.50	\$3.50	\$3.88	\$3.50	\$3.50
Krotz Springs, LA	\$4.30	\$4.23	\$3.70	\$7.69	\$3.39	\$2.56	\$4.36	\$2.85	\$4.00	\$2.90	\$2.90	\$3.08	\$2.85	\$2.75
Operating Income before depreciation														
Big Spring, TX	(\$106.7)	\$13.6	(\$6.4)	\$14.8	\$1.9	\$7.3	\$17.5	\$86.0	\$118.3	\$96.7	\$53.7	\$354.7	\$314.3	\$299.9
Paramount, CA	(\$42.6)	(\$49.1)	(\$15.2)	(\$8.1)	(\$12.9)	(\$6.4)	(\$42.7)	\$0.0	(\$17.3)	(\$13.2)	(\$13.2)	(\$43.7)	\$5.3	\$8.6
Krotz Springs, LA	\$31.5	\$29.7	(\$10.6)	(\$19.3)	(\$11.9)	(\$1.3)	(\$43.1)	\$14.8	(\$5.5)	(\$6.6)	(\$3.8)	(\$1.1)	\$25.4	\$92.6
Asphalt														
Asphalt Sales Volume (k tons)	1,298	1,191	151	219	307	186	863	192	250	320	200	962	1,225	1,270
Asphalt Margin (US\$/ton)	113.43	46.07	(28.50)	67.12	77.59	52.94	51.06	18.18	55.00	60.00	75.00	53.47	70.00	70.00
Asphalt Operating Income	\$97.4	\$2.8	(\$18.2)	\$0.5	\$9.0	(\$3.7)	(\$12.5)	(\$9.6)	\$0.0	\$5.5	\$1.3	(\$2.8)	\$26.9	\$30.0
Retail														
Fuel Gross Margin	19.1	17.0	2.9	5.0	4.9	5.5	18.4	5.4	6.2	5.4	4.8	21.7	20.3	21.1
Merchandise Gross Margin	\$80.8	\$83.0	\$19.0	\$23.9	\$24.1	\$22.7	\$89.7	\$22.5	\$24.8	\$24.3	\$23.7	\$95.4	\$91.6	\$92.8
Retail Operating Income	(\$1.2)	\$7.8	(\$1.9)	\$7.7	\$8.8	\$5.1	\$19.8	\$4.2	\$10.3	\$8.2	\$6.8	\$29.5	\$25.0	\$27.0
Pretax Income	\$155.9	(\$167.1)	(\$91.5)	(\$48.6)	(\$38.7)	(\$44.4)	(\$223.1)	\$20.7	\$60.1	\$43.4	(\$3.8)	\$120.4	\$206.6	\$274.0
Financial Results														
Recurring Net Income	\$2.4	(\$88.6)	(\$49.1)	(\$29.6)	(\$31.8)	(\$19.9)	(\$130.4)	\$18.7	\$34.9	\$24.6	(\$4.7)	\$73.5	\$118.7	\$160.5
Discretionary Cash Flow	(\$100.2)	\$14.2	(\$56.5)	(\$23.1)	(\$28.4)	(\$24.7)	(\$132.7)	\$46.4	\$64.9	\$56.2	\$29.1	\$196.5	\$254.0	\$295.8
Recurring EBITDA	\$25.7	\$48.6	(\$34.7)	(\$2.3)	(\$4.0)	\$15.5	(\$25.5)	\$72.2	\$106.9	\$91.7	\$46.9	\$317.7	\$404.3	\$465.4
ROCE	3%	-1%	-9%	-5%	-7%	-2%	-6%	10%	15%	11%	2%	10%	13%	15%
Total Debt/Total Capitalization	72%	69%	72%	73%	74%	73%	73%	72%	69%	67%	67%	67%	58%	52%
Diluted Shares Outstanding (m)	48.2	52.4	54.2	54.2	54.2	60.1	55.7	60.5	60.5	60.5	60.5	60.5	60.5	60.5
EPS - Fully Diluted	\$0.05	(\$1.89)	(\$0.91)	(\$0.55)	(\$0.59)	(\$0.37)	(\$2.41)	\$0.31	\$0.58	\$0.41	(\$0.09)	\$1.25	\$2.01	\$2.65
CFPS - Fully Diluted	(\$2.08)	\$0.27	(\$1.04)	(\$0.43)	(\$0.52)	(\$0.41)	(\$2.38)	\$0.77	\$1.07	\$0.93	\$0.48	\$3.25	\$4.20	\$4.89

Source: Company data, Macquarie Capital (USA), June 2011

Fig 25 Macquarie ALJ asset valuation analysis

Refining Asset Valuation			
	Annual Refining EBITDA (US\$m)	Selected EBITDA Multiple Range	Implied Refining Asset Value (US\$m)
2011E Refining EBITDA	\$288.4	4.0 x - 4.5 x	\$1,153 - \$1,298
2012E Refining EBITDA	\$323.0	3.5 x - 4.0 x	\$1,131 - \$1,292
Implied Refining Asset Value (US\$m)			\$1,142 - \$1,295

Asphalt Asset Valuation			
	Annual Asphalt EBITDA (US\$m)	Selected EBITDA Multiple Range	Implied Asphalt Asset Value (US\$m)
2011E Asphalt EBITDA	\$4.1	5.0 x - 5.5 x	\$20 - \$22
Average Implied Asphalt Asset Value (US\$m)			\$20 - \$22

Retail Asset Valuation			
	Annual Retail EBITDA (US\$m)	Selected EBITDA Multiple Range	Implied Retail Asset Value (US\$m)
2011E Retail Marketing EBITDA	\$43.1	5.5 x - 6.0 x	\$237 - \$259
Implied Retail Asset Value (US\$m)			\$237 - \$259

Net Asset Value¹			
	US\$m		\$/share
Implied Refining Asset Value	\$1,142 - \$1,295		\$18.88 - \$21.41
Implied Asphalt Asset Value	20 - 22		0.33 - 0.37
Implied Retail Asset Value	237 - 259		3.92 - 4.27
Total Asset Value	\$1,399 - \$1,576		\$23.13 - \$26.05
Cash and Cash Equivalents	\$119		\$1.97
Total Debt	(947)		(15.66)
Net Asset Value	\$571 - \$748		\$9.40 - \$12.40
Fully Diluted Shares (m)			60.5

¹ Balance sheet items and share count as of 31 Mar 2011.

Source: Company data, Macquarie Capital (USA), June 2011

Fig 26 Macquarie FTO operational and financial summary

(US\$m, except per barrel & per share items)	2010							2011E						
	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11E	3Q11E	4Q11E	2011E	2012E	2013E
Operating Data														
Total Product Sales (kb/d)														
Cheyenne	49.9	48.5	46.3	51.6	40.6	52.9	47.8	48.0	50.0	48.0	51.0	49.3	52.7	52.8
El Dorado	116.4	126.8	126.2	143.5	144.0	149.6	140.9	150.4	146.0	148.0	146.0	147.6	145.8	147.0
Recurring Gross Margin (US\$/bbl)														
Cheyenne	\$11.67	\$5.28	\$2.61	\$11.38	\$10.98	\$6.01	\$7.71	\$18.00	\$20.60	\$17.62	\$10.64	\$16.64	\$15.23	\$14.99
El Dorado	\$9.68	\$5.65	\$3.56	\$9.94	\$7.19	\$8.06	\$7.32	\$20.42	\$23.76	\$18.96	\$13.20	\$19.08	\$16.18	\$15.70
Operating Costs (US\$/bbl)														
Cheyenne	\$6.38	\$6.89	\$6.18	\$4.09	\$8.80	\$5.72	\$6.05	\$6.01	\$5.50	\$5.85	\$5.50	\$5.71	\$5.40	\$5.46
El Dorado	\$4.80	\$4.31	\$4.34	\$3.43	\$3.77	\$3.64	\$3.77	\$3.68	\$3.75	\$3.65	\$3.70	\$3.69	\$3.70	\$3.66
Operating Income before depreciation														
Cheyenne	\$96.6	(\$28.5)	(\$14.9)	\$34.2	\$8.1	\$1.4	\$28.9	\$51.8	\$68.7	\$52.0	\$24.1	\$196.6	\$189.8	\$183.5
El Dorado	\$207.8	\$61.9	(\$8.9)	\$85.0	\$45.3	\$60.8	\$182.3	\$226.6	\$265.9	\$208.5	\$127.7	\$828.7	\$665.8	\$646.0
Pretax Income	\$341.7	(\$131.3)	(\$64.8)	\$108.5	\$8.0	\$1.9	\$53.6	\$220.5	\$294.2	\$213.8	\$105.3	\$833.7	\$679.7	\$660.7
Financial Results														
Recurring Net Income	\$135.0	(\$75.0)	(\$40.3)	\$66.1	\$8.3	\$3.6	\$37.8	\$139.9	\$188.3	\$134.7	\$66.3	\$529.2	\$428.2	\$416.3
Discretionary Cash Flow	\$466.7	\$42.8	(\$33.4)	\$126.8	\$28.6	\$4.1	\$126.1	\$184.8	\$227.1	\$173.2	\$102.8	\$687.9	\$578.8	\$566.5
Recurring EBITDA	\$331.5	(\$20.1)	(\$37.1)	\$136.9	\$37.3	\$35.8	\$173.0	\$256.1	\$329.6	\$249.8	\$140.7	\$976.2	\$817.6	\$798.6
ROCE	11%	-4%	-11%	21%	5%	6%	5%	43%	53%	37%	18%	35%	22%	18%
Total Debt/Total Capitalization	25%	27%	28%	26%	26%	26%	26%	24%	20%	18%	16%	16%	13%	11%
Diluted Shares Outstanding (m)	103.7	104.1	103.9	105.6	106.2	106.3	105.5	105.8	105.8	105.8	105.8	105.8	105.8	105.8
EPS Fully Diluted	\$1.30	(\$0.72)	(\$0.39)	\$0.63	\$0.08	\$0.03	\$0.36	\$1.32	\$1.78	\$1.27	\$0.63	\$5.00	\$4.05	\$3.94
CFPS - Fully Diluted	\$4.50	\$0.41	(\$0.32)	\$1.20	\$0.27	\$0.04	\$1.20	\$1.75	\$2.15	\$1.64	\$0.97	\$6.50	\$5.47	\$5.36

Source: Company data, Macquarie Capital (USA), June 2011

Fig 27 Macquarie FTO asset valuation analysis

Refining Asset Valuation			
	Annual EBITDA (US\$m)	Selected EBITDA Multiple Range	Implied Refining Asset Value (US\$m)
2011E EBITDA	\$976.2	4.5 x - 5.0 x	\$4,393 - \$4,881
2012E EBITDA	\$817.6	4.0 x - 4.5 x	\$3,270 - \$3,679
Implied Refining Asset Value (US\$m)			\$3,832 - \$4,280

Net Asset Value¹				
	US\$m		\$/share	
Implied Refining Asset Value (US\$m)	\$3,832 - \$4,280		\$36.23 - \$40.47	
Cash and cash equivalents	\$685		\$6.48	
Expected tax rebate	31		0.29	
Total debt	(348)		(3.29)	
Net Asset Value	\$4,200 - \$4,649		\$39.70 - \$44.00	
Fully Diluted Shares (millions)			106	

¹ Balance sheet items and share count as of 31 Mar 2011.

Source: Company data, Macquarie Capital (USA), June 2011

Fig 28 Macquarie HOC operational and financial summary

(US\$m, except per barrel & per share items)	2010							2011E					2012E	2013E
	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11E	3Q11E	4Q11E	2011E		
Operating Data														
Refinery Production (kb/d)														
Navajo	89.6	87.3	86.9	93.0	92.2	97.9	92.5	79.8	93.0	92.0	92.0	89.3	94.5	94.3
Woods Cross	22.4	27.0	28.2	29.1	27.5	26.5	27.8	26.7	31.0	30.0	30.0	29.4	30.3	30.3
Tulsa		37.6	98.8	111.9	113.0	107.3	107.8	100.0	105.0	115.0	115.0	108.8	120.0	120.0
Recurring Gross Margin (\$/bbl)														
Navajo	\$9.55	\$7.20	\$5.10	\$9.13	\$8.21	\$6.44	\$7.25	\$15.39	\$17.37	\$15.81	\$12.33	\$15.22	\$14.04	\$13.21
Woods Cross	\$16.59	\$11.25	\$14.80	\$22.36	\$21.78	\$15.66	\$18.72	\$18.90	\$23.88	\$22.60	\$17.86	\$20.89	\$19.92	\$18.91
Tulsa		\$4.33	\$3.33	\$9.61	\$9.42	\$7.23	\$7.54	\$14.79	\$19.00	\$18.40	\$13.07	\$16.31	\$15.04	\$14.68
Operating Costs (\$/bbl)														
Navajo	\$4.58	\$4.81	\$5.18	\$4.61	\$5.25	\$4.78	\$4.95	\$6.34	\$5.15	\$5.00	\$5.10	\$5.36	\$5.05	\$5.06
Woods Cross	\$7.42	\$6.60	\$6.20	\$5.30	\$6.11	\$6.83	\$6.09	\$6.43	\$5.50	\$5.50	\$5.70	\$5.76	\$5.50	\$5.47
Tulsa		\$5.25	\$5.91	\$4.70	\$4.80	\$4.47	\$4.94	\$5.98	\$5.50	\$4.50	\$4.50	\$5.08	\$4.43	\$4.43
Operating Income before depreciation														
Navajo	\$163.0	\$76.3	(\$0.6)	\$38.3	\$25.1	\$15.0	\$77.7	\$65.0	\$103.4	\$91.5	\$61.2	\$321.1	\$310.9	\$280.2
Woods Cross	\$75.1	\$45.9	\$21.8	\$45.1	\$39.7	\$21.5	\$128.1	\$29.9	\$51.9	\$47.2	\$33.6	\$162.5	\$159.8	\$148.4
Tulsa		(\$12.6)	(\$22.9)	\$50.0	\$48.0	\$27.2	\$102.3	\$79.3	\$129.0	\$147.1	\$90.7	\$446.1	\$465.9	\$449.0
Equity in HEP Earnings	\$3.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Pretax Income	\$185.4	\$49.2	(\$39.9)	\$112.3	\$90.9	\$29.1	\$192.4	\$140.0	\$252.2	\$258.9	\$160.8	\$812.0	\$860.0	\$806.1
Financial Results														
Recurring Net Income	\$119.1	\$16.2	(\$28.1)	\$66.2	\$51.2	\$14.7	\$104.0	\$84.7	\$146.9	\$151.0	\$90.2	\$472.8	\$499.8	\$461.9
Discretionary Cash Flow	\$192.5	\$167.5	(\$18.9)	\$111.5	\$109.2	\$56.8	\$258.6	\$111.6	\$201.7	\$206.4	\$138.1	\$657.7	\$714.0	\$676.1
Recurring EBITDA	\$271.7	\$199.2	\$5.6	\$162.2	\$137.4	\$78.8	\$383.9	\$187.5	\$303.1	\$309.8	\$211.7	\$1,012.2	\$1,067.6	\$1,013.8
ROCE	20%	4%	-9%	33%	25%	9%	12%	31%	52%	49%	27%	35%	27%	20%
Total Debt/Total Capitalization	28%	37%	41%	40%	39%	39%	39%	38%	35%	33%	32%	32%	26%	23%
Diluted Shares Outstanding (m)	50.5	50.5	53.2	53.4	53.6	53.6	53.5	53.6	53.6	53.6	53.6	53.6	53.6	53.6
EPS Fully Diluted	\$2.36	\$0.32	(\$0.53)	\$1.24	\$0.96	\$0.27	\$1.95	\$1.58	\$2.74	\$2.82	\$1.68	\$8.82	\$9.32	\$8.61
CFPS - Fully Diluted	\$3.81	\$3.32	(\$0.36)	\$2.09	\$2.04	\$1.06	\$4.84	\$2.08	\$3.76	\$3.85	\$2.57	\$12.26	\$13.31	\$12.61

Source: Company data, Macquarie Capital (USA), June 2011

Fig 29 Macquarie HOC asset valuation analysis

Refining Assets - EBITDA Multiple Valuation						
	Annual Refining EBITDA (US\$m)	EBITDA Multiple Range			Implied Refining Asset Valuation (US\$m)	
2011E EBITDA	\$830	4.5 x	-	5.0 x	\$3,736	- \$4,151
2012E EBITDA	\$877	4.0 x	-	4.5 x	\$3,509	- \$3,948
Average Implied Refining Asset Value (US\$m)					\$3,623	- \$4,049

HEP Interest Valuation								
	Common & Subordinated LP Units (m)	HEP Quarterly Distribution (US\$/unit)	Quarterly Distribution (US\$m)	LP Unit Yield Range			Implied Valuation of HEP LP Units (US\$m)	
Limited Partnership Units	7.3	\$0.855	\$6.2	5.0%	-	6.0%	\$416	- \$499
			1Q11 Incentive Dist. Payout (US\$m)	GP Cash Flow Multiple Range			Implied Valuation of HEP GP Units (US\$m)	
General Partnership Interest			\$15.1	20.0 x	-	22.0 x	\$302	- \$332
Average Implied Value of HEP Interest (US\$m)							\$774	

Net Asset Value¹				
	US\$m		\$/share	
Refining Assets	\$3,623	- \$4,049	\$67.54	- \$75.50
HEP Interest		774		14.44
Total Asset Value	\$4,397	- \$4,824	\$81.98	- \$89.94
Cash and cash equivalents		\$291		\$5.43
Total debt		(500)		(9.33)
Net Asset Value	\$4,188	- \$4,615	\$78.10	- \$86.00
Fully Diluted Shares (m)				53.6

¹ Balance sheet items and share count as of 31 Mar 2011, excluding estimated HEP portion for analytical purposes.

Source: Company data, Macquarie Capital (USA), June 2011

Fig 30 Macquarie SUN operational and financial summary

(US\$m, except per barrel & per share items)	2010						2011E					2012E	2013E	
	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11E	3Q11E	4Q11E			2011E
Operating Data														
Refining														
Production Available for Sale (kb/d)	786	693	591	664	682	634	643	512	485	500	500	499	501	511
Recurring Gross Margin (US\$/bbl)	\$8.60	\$3.66	\$4.08	\$7.34	\$3.88	\$4.77	\$5.04	\$3.14	\$5.93	\$6.70	\$3.12	\$4.71	\$4.16	\$4.79
Implied Operating Costs (US\$/bbl)	\$5.64	\$4.58	\$4.23	\$3.93	\$3.90	\$3.96	\$4.00	\$5.00	\$4.25	\$4.00	\$4.00	\$4.31	\$4.04	\$3.96
Retail Marketing														
Gross Margins														
Retail	\$779	\$463	\$99	\$140	\$132	\$84	\$454	\$82	\$167	\$132	\$129	\$510	\$505	\$505
Merchandise	149	140	27	33	38	31	129	28	37	38	35	138	143	143
Operating Expenses	\$518	\$362	\$72	\$77	\$80	\$86	\$315	\$76	\$82	\$82	\$82	\$323	\$329	\$329
Chemicals														
Gross Margin	\$487	\$325	\$44	\$49	\$43	\$53	\$190	\$35	\$55	\$55	\$23	\$168	\$95	\$95
Operating Expenses	361	281	32	35	31	41	140	37	42	42	17	137	65	64
Coke														
Coke Production (k tons)	4,207	4,135	1,254	1,305	1,384	1,286	5,229	1,192	1,300	1,370	1,420	5,282	5,915	5,940
Implied Unit Gross Margin (\$/ton)	\$41.60	\$54.66	\$49.44	\$51.34	\$42.63	\$28.77	\$43.03	\$18.46	\$22.00	\$35.00	\$40.00	\$29.41	\$51.26	\$60.00
Implied Gross Margin	\$175	\$226	\$62	\$67	\$59	\$37	\$225	\$22	\$29	\$48	\$57	\$155	\$303	\$356
Segment Operating Income (pre-tax)														
Refining & Supply	\$717	(\$513)	(\$70)	\$138	(\$70)	(\$17)	(\$19)	(\$138)	\$24	\$74	(\$90)	(\$130)	(\$178)	(\$46)
Retail Marketing	300	146	34	73	68	1	176	12	97	63	57	229	207	207
Chemicals	59	(21)	5	7	5	6	23	(9)	(134)	6	2	(134)	14	15
Logistics	127	152	27	30	42	37	136	31	41	41	42	155	180	180
Coke	159	193	51	56	44	25	176	9	15	34	43	100	217	251
Segment Operating Income (after-tax)														
Refining & Supply	\$489	(\$307)	(\$42)	\$86	(\$44)	(\$8)	(\$9)	(\$121)	\$15	\$46	(\$56)	(\$116)	(\$110)	(\$28)
Retail Marketing	201	86	21	45	41	3	110	11	60	39	35	145	129	128
Chemicals	36	1	24	5	3	4	36	(8)	(88)	4	2	(90)	9	10
Logistics	85	97	17	20	26	23	86	27	25	25	26	104	112	112
Coke	105	180	37	41	33	21	132	8	11	25	32	76	163	188
Financial Results														
Recurring Net Income	\$848	(\$31)	\$17	\$158	\$27	\$13	\$215	(\$122)	\$87	\$112	\$10	\$88	\$188	\$299
Discretionary Cash Flow	\$1,574	\$989	\$100	\$368	\$171	\$478	\$1,117	(\$92)	\$272	\$267	\$143	\$590	\$769	\$898
Recurring EBITDA	\$1,895	\$372	\$62	\$418	\$320	\$235	\$1,035	\$46	\$392	\$336	\$167	\$942	\$921	\$1,088
ROCE	21%	0%	2%	16%	4%	-1%	5%	-11%	11%	12%	3%	3%	5%	7%
Total Debt/Total Capitalization	40%	44%	43%	43%	41%	39%	39%	40%	40%	39%	39%	39%	38%	37%
Diluted Shares Outstanding (m)	117.0	117.0	118.8	119.7	120.8	121.0	120.1	120.9	120.9	120.9	120.9	120.9	120.9	120.9
EPS Fully Diluted	\$7.25	(\$0.27)	\$0.14	\$1.32	\$0.22	\$0.11	\$1.79	(\$1.01)	\$0.72	\$0.93	\$0.08	\$0.73	\$1.55	\$2.47
CFPS - Fully Diluted	\$13.45	\$8.46	\$0.84	\$3.07	\$1.42	\$3.95	\$9.30	(\$0.76)	\$2.25	\$2.21	\$1.18	\$4.88	\$6.36	\$7.43

Source: Company data, Macquarie Capital (USA), June 2011

Fig 31 Macquarie SUN asset valuation analysis

SunCoke Asset Valuation			
			Implied Asset Value (US\$m)
Coke Asset Value			\$1,156 - \$1,350
Coal Asset Value			\$323 - \$396
Implied SunCoke Segment Asset Value (US\$m)			\$1,478 - \$1,745

Refining Asset Valuation			
	Annual EBITDA (US\$m)	Selected EBITDA Multiple Range	Implied Refining Asset Value (US\$m)
2011E Refining EBITDA	\$32	4.0 x - 4.5 x	\$127 - \$143
Implied Refining Asset Value - EBITDA Multiple Value (US\$m)			\$127 - \$143

Sunoco Logistics Partners, L.P. Interest Valuation					
	Common LP Units (m)	SXL 1Q11 Distribution (\$/unit)	Quarterly Distribution (US\$m)	LP Unit Yield Range (%)	Implied Value of SXL LP Units (US\$m)
LP Units	9.9	\$1.180	\$11.6	5.0% - 6.0%	\$776 - \$931
			GP 1Q11 Incentive Distribution Payout (US\$m)	GP Cash Flow Multiple Range	Implied Value of SXL GP Interest (US\$m)
GP Interest			\$12.0	20.0 x - 22.0 x	\$960 - \$1,056
Average Implied SXL Interest Value (US\$m)					\$1,736 - \$1,987

Retail Asset Valuation			
	Annual EBITDA (US\$m)	Selected EBITDA Multiple Range	Implied Retail Marketing Asset Value (US\$m)
2011E Retail Marketing EBITDA	\$313	5.0 x - 5.5 x	\$1,566 - \$1,722
Implied Retail Asset Value (US\$m)			\$1,566 - \$1,722

Chemicals Asset Valuation			
	Annual EBITDA (US\$m)	Selected EBITDA Multiple Range	Implied Chemicals Asset Value (US\$m)
2011E Chemicals EBITDA	\$25	3.0 x - 4.0 x	\$76 - \$101
Implied Chemicals Asset Value (US\$m)			\$76 - \$101

Net Asset Value¹		
	US\$m	US\$/share
Coke asset value	\$1,478 - \$1,745	\$12.23 - \$14.43
Refining asset value	127 - 143	1.05 - 1.19
SXL interest value	1,736 - 1,987	14.36 - 16.44
Retail asset value	1,566 - 1,722	12.95 - 14.25
Chemicals asset value	76 - 101	0.63 - 0.84
Total Asset Value	\$4,983 - \$5,699	\$41.22 - \$47.14
Cash and equivalents	\$1,478	\$12.22
Two-year note from PBF Energy related to the sale of the Toledo refinery	200	1.65
Estimated cash for Philadelphia phenol plant divestiture, including inventories	85	0.70
Retirement benefit liabilities	(483)	(4.00)
Total debt	(1,681)	(13.91)
Net Asset Value	\$4,582 - \$5,213	\$37.90 - \$43.10
Fully Diluted Shares (m)		120.9

¹ Balance sheet items and share count as of 31 Mar 2011, excluding estimated SXL portion for analytical purposes.

Source: Company data, Macquarie Capital (USA), June 2011

Fig 32 Macquarie TSO operational and financial summary

(US\$m, except per barrel & per share items)														
	2008A	2009A	2010				2011E				2012E	2013E		
			1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11E	3Q11E	4Q11E	2011E		
Operating Data														
Refining														
Throughput Volumes (kb/d)														
California	258	241	190	239	241	221	223	248	240	250	240	244	258	261
Pacific Northwest	159	135	122	84	64	102	93	135	155	150	140	145	155	160
Hawaii	69	68	66	67	53	69	64	69	70	72	70	70	71	71
Mid-Continent	109	105	93	84	114	113	101	109	112	116	112	112	121	124
Recurring Gross Margin (US\$/bbl)														
California	\$15.58	\$10.18	\$7.74	\$13.48	\$13.74	\$12.24	\$12.03	\$16.66	\$12.45	\$12.44	\$9.79	\$12.84	\$10.74	\$10.21
Pacific Northwest	6.48	7.66	5.85	12.78	11.68	14.58	10.84	13.39	12.76	10.79	5.85	10.71	8.32	7.43
Hawaii	7.58	3.62	0.05	5.35	5.00	4.79	3.77	(3.05)	3.50	2.00	3.50	1.53	4.00	4.00
Mid-Continent	15.45	10.95	8.60	17.38	17.16	14.88	14.62	20.77	24.37	22.67	18.33	21.55	20.48	20.47
Operating Costs (US\$/bbl)														
California	\$7.18	\$6.86	\$8.84	\$7.01	\$7.02	\$7.56	\$7.53	\$6.68	\$7.55	\$6.80	\$7.00	\$7.00	\$6.51	\$6.46
Pacific Northwest	3.99	3.81	4.36	5.98	10.23	4.89	5.89	4.08	3.75	3.80	4.10	3.92	3.65	3.52
Hawaii	3.30	3.18	2.78	2.92	3.93	3.21	3.18	4.69	3.35	3.25	3.30	3.64	3.29	3.50
Mid-Continent	3.44	3.49	4.34	4.18	3.04	3.44	3.68	3.65	3.70	3.45	3.70	3.62	3.49	3.46
Retail														
Fuel Margin (US\$/gal)	\$0.21	\$0.21	\$0.23	\$0.22	\$0.22	\$0.17	\$0.21	\$0.14	\$0.22	\$0.19	\$0.19	\$0.19	\$0.21	\$0.21
Fuel Margin	\$287	\$273	\$73	\$73	\$77	\$57	\$280	\$50	\$99	\$86	\$86	\$320	\$389	\$389
Merchandise Margin	\$57	\$53	\$12	\$14	\$14	\$13	\$53	\$12	\$16	\$18	\$16	\$61	\$60	\$62
Retail Operating Expenses	\$216	\$202	\$49	\$50	\$49	\$50	\$198	\$51	\$57	\$57	\$57	\$222	\$228	\$228
Operating Income														
Refining	\$627	\$55	(\$169)	\$150	\$146	\$128	\$255	\$303	\$285	\$262	\$80	\$930	\$818	\$737
Retail	46	83	24	30	32	11	97	2	51	39	37	129	193	195
Corporate/Other	(202)	(195)	(57)	(37)	(49)	(69)	(212)	(86)	(54)	(49)	(39)	(228)	(168)	(168)
Total Operating Income	\$471	(\$57)	(\$202)	\$143	\$129	\$70	\$140	\$219	\$282	\$252	\$78	\$831	\$843	\$763
Pretax Income	\$429	(\$188)	(\$239)	\$107	\$94	\$13	(\$25)	\$177	\$238	\$211	\$37	\$664	\$683	\$603
Financial Results														
Recurring Net Income	\$293	(\$98)	(\$136)	\$43	\$73	(\$19)	(\$39)	\$107	\$148	\$131	\$23	\$409	\$423	\$374
Discretionary Cash Flow	\$863	\$418	(\$114)	\$154	\$196	\$158	\$394	\$314	\$268	\$220	\$106	\$907	\$666	\$690
Recurring EBITDA	\$964	\$411	(\$83)	\$228	\$257	\$142	\$544	\$323	\$392	\$362	\$188	\$1,265	\$1,295	\$1,231
ROCE	8%	0%	-9%	5%	8%	-1%	3%	11%	13%	12%	4%	10%	9%	8%
Total Debt/Total Capitalization	33%	37%	39%	37%	37%	38%	38%	37%	36%	35%	35%	35%	33%	31%
Diluted Shares Outstanding (m)	138.3	139.6	139.5	142.5	142.0	142.8	141.7	144.0	144.0	144.0	144.0	144.0	144.0	144.0
EPS Fully Diluted	\$2.12	(\$0.70)	(\$0.97)	\$0.30	\$0.51	(\$0.13)	(\$0.28)	\$0.74	\$1.02	\$0.91	\$0.16	\$2.84	\$2.94	\$2.60
CFPS - Fully Diluted	\$6.24	\$2.99	(\$0.82)	\$1.08	\$1.38	\$1.11	\$2.78	\$2.18	\$1.86	\$1.53	\$0.73	\$6.30	\$4.63	\$4.79

Source: Company data, Macquarie Capital (USA), June 2011

Fig 33 Macquarie TSO asset valuation analysis

Refining Asset Valuation					
	Annual EBITDA (US\$m)	Less: TLLP EBITDA (US\$m)	Net Annual EBITDA (US\$m)	Selected EBITDA Multiple Range	Implied Refining Asset Value (US\$m)
2011E Refining EBITDA	\$1,120	(\$49)	\$1,071	4.0 x - 4.5 x	\$4,284 - \$4,820
2012E Refining EBITDA	\$1,073	(\$53)	\$1,020	3.5 x - 4.0 x	\$3,571 - \$4,081
Implied Refining Asset Value (US\$m)					\$3,928 - \$4,451

Retail Marketing Asset Valuation			
	Annual EBITDA (US\$m)	Selected EBITDA Multiple Range	Implied Retail Asset Value (US\$m)
2011E Retail Marketing EBITDA	\$148	5.0 x - 5.5 x	\$738 - \$812
Implied Retail Asset Value (US\$m)			\$738 - \$812

Tesoro Logistics LP Valuation					
	Common LP Units (m)	TLLP Quarterly Distribution (\$/unit)	Quarterly Distribution (US\$m)	LP Unit Yield Range (%)	Implied Value of TLLP LP Units (US\$m)
LP Units	16.2	\$0.338	\$5.5	5.0% - 6.0%	\$364 - \$437
			GP Incentive Distribution Payout (US\$m)	GP Cash Flow Multiple Range	Implied Value of TLLP GP Interest (US\$m)
GP Interest			\$0.2	18.0 x - 20.0 x	\$15 - \$17
Average Implied TLLP Interest Value (US\$m)					\$379 - \$454

Net Asset Value (US\$m, except per share figures)¹		
	US\$m	\$/share
Refining assets	\$3,928 - \$4,451	\$27.28 - \$30.91
Retail assets	738 - 812	5.12 - 5.64
Tesoro Logistics interest	379 - 454	2.63 - 3.15
Average Asset Value	\$5,045 - \$5,716	\$35.03 - \$39.69
Cash and equivalents	\$724	\$5.03
Total debt	(1,927)	(13.38)
Net Asset Value	\$3,842 - \$4,513	\$26.70 - \$31.30
Fully Diluted Shares (millions)		144.0

¹ Balance sheet items and share count as of 31 Mar 2011.

Source: Company data, Macquarie Capital (USA), June 2011

Fig 34 Macquarie VLO operational and financial summary

(US\$m, except per barrel & per share items)	2010						2011E						2012E	2013E
	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11E	3Q11E	4Q11E	2011E		
Operating Data														
Refining														
Throughput Volumes (kb/d)														
Gulf Coast	1,405	1,274	1,137	1,329	1,336	1,313	1,279	1,299	1,404	1,356	1,340	1,350	1,356	1,380
Mid-Continent	423	387	363	390	422	418	398	403	369	428	405	401	420	420
Northeast	374	344	333	356	354	212	314	209	198	204	200	203	202	202
West Coast	276	267	262	262	252	247	256	195	268	262	259	246	265	265
Recurring Gross Margin (US\$/bbl)														
Gulf Coast	\$11.57	\$5.13	\$6.08	\$10.28	\$8.34	\$7.78	\$8.20	\$6.45	\$11.88	\$9.83	\$8.78	\$9.30	\$10.83	\$12.47
Mid-Continent	9.28	6.52	5.34	9.13	8.06	6.62	7.33	9.68	15.72	14.22	8.39	11.96	10.77	12.01
Northeast	11.60	5.18	5.80	5.49	5.26	6.65	5.70	7.02	13.92	8.78	2.30	7.97	0.41	1.93
West Coast	10.85	9.17	5.20	10.55	8.66	6.42	7.72	5.62	8.21	7.03	4.10	6.30	4.89	4.80
Operating Costs (US\$/bbl)														
Gulf Coast	\$4.50	\$3.71	\$4.44	\$3.34	\$3.65	\$3.50	\$3.70	\$3.86	\$3.50	\$3.60	\$3.65	\$3.65	\$3.65	\$3.60
Mid-Continent	4.24	3.67	4.07	3.54	3.34	3.54	3.61	3.65	3.90	3.35	3.55	3.60	3.45	3.47
Northeast	3.91	3.40	4.27	3.38	3.47	3.02	3.58	2.81	2.95	2.90	2.95	2.90	3.00	3.00
West Coast	5.37	4.83	4.97	4.87	5.42	5.10	5.09	6.15	4.80	4.80	4.85	5.08	4.74	4.75
Retail														
Fuel Margin														
US (US\$/gal)	\$0.23	\$0.15	\$0.14	\$0.22	\$0.21	\$0.09	\$0.16	\$0.08	\$0.20	\$0.17	\$0.11	\$0.14	\$0.12	\$0.12
US	\$401	\$279	\$61	\$103	\$100	\$39	\$303	\$33	\$96	\$82	\$51	\$263	\$219	\$222
Canada (US\$/gal)	\$0.27	\$0.26	\$0.30	\$0.28	\$0.26	\$0.29	\$0.28	\$0.32	\$0.28	\$0.28	\$0.28	\$0.29	\$0.28	\$0.28
Canada	\$313	\$300	\$83	\$78	\$78	\$88	\$326	\$92	\$80	\$84	\$85	\$341	\$336	\$340
Merchandise														
US Margin (% of sales)	30%	29%	29%	29%	30%	28%	29%	28%	28%	28%	28%	28%	28%	28%
Canada Margin (% of sales)	28%	29%	32%	31%	31%	29%	31%	30%	28%	28%	28%	28%	28%	28%
US Sales	\$1,097	\$1,171	\$272	\$316	\$322	\$295	\$1,205	\$283	\$322	\$325	\$298	\$1,228	\$1,247	\$1,266
Canada Sales	\$200	\$201	\$52	\$61	\$66	\$61	\$240	\$57	\$53	\$55	\$49	\$214	\$202	\$202
Selling Expenses														
US	\$505	\$464	\$111	\$122	\$127	\$106	\$466	\$98	\$108	\$108	\$108	\$422	\$428	\$428
Canada	\$263	\$232	\$62	\$65	\$65	\$64	\$256	\$64	\$65	\$65	\$65	\$259	\$260	\$260
Operating Income														
Refining	\$1,039	\$105	(\$51)	\$921	\$571	\$424	\$1,865	\$276	\$1,432	\$1,035	\$490	\$3,233	\$3,380	\$4,541
Retail	369	293	71	109	105	61	346	66	113	107	84	369	367	379
Corporate/other	(741)	(456)	(52)	(109)	(105)	(107)	(373)	(98)	(107)	(118)	(129)	(452)	(496)	(496)
	\$667	(\$58)	(\$32)	\$921	\$571	\$378	\$1,838	\$244	\$1,437	\$1,023	\$445	\$3,149	\$3,251	\$4,423
Pretax Income														
	\$449	(\$449)	(\$148)	\$806	\$470	\$334	\$1,462	\$144	\$1,336	\$926	\$347	\$2,753	\$2,893	\$4,132
Financial Results														
Recurring Net Income	\$2,431	(\$325)	(\$101)	\$530	\$292	\$144	\$865	\$104	\$855	\$592	\$224	\$1,775	\$1,866	\$2,665
Discretionary Cash Flow	\$4,622	\$1,568	\$229	\$928	\$873	\$947	\$2,977	\$455	\$1,382	\$1,094	\$685	\$3,616	\$3,838	\$4,821
Recurring EBITDA	\$5,752	\$1,441	\$336	\$1,289	\$961	\$781	\$3,367	\$626	\$1,813	\$1,418	\$847	\$4,704	\$4,868	\$6,090
ROCE	7%	0%	0%	10%	6%	4%	5%	3%	16%	11%	5%	9%	9%	11%
Total Debt/Total Capitalization	30%	33%	36%	35%	34%	36%	36%	34%	33%	32%	32%	32%	27%	21%
Diluted Shares Outstanding (m)	531.0	543.6	562.0	567.0	568.0	569.0	566.5	573.0	573.0	573.0	573.0	573.0	573.0	573.0
EPS Fully Diluted	\$4.58	(\$0.60)	(\$0.18)	\$0.93	\$0.51	\$0.25	\$1.53	\$0.18	\$1.49	\$1.03	\$0.39	\$3.10	\$3.26	\$4.65
CFPS - Fully Diluted	\$8.70	\$2.88	\$0.41	\$1.64	\$1.54	\$1.66	\$5.26	\$0.79	\$2.41	\$1.91	\$1.20	\$6.31	\$6.70	\$8.41

Source: Company data, Macquarie Capital (USA), June 2011

Fig 35 Macquarie VLO asset valuation analysis

Refining Asset Valuation			
	Annual EBITDA (US\$m)	Selected EBITDA Multiple Range	Implied Refining Asset Value (US\$m)
2011E Refining EBITDA	\$4,072	4.0 x - 4.5 x	\$16,287 - \$18,323
2012E Refining EBITDA	\$4,253	3.5 x - 4.0 x	\$14,886 - \$17,013
Implied Refining Asset Value (US\$m)			\$15,587 - \$17,668

Ethanol Asset Valuation			
	Annual EBITDA (US\$m)	Selected EBITDA Multiple Range	Implied Ethanol Asset Value (US\$m)
2011E Ethanol EBITDA	\$198	5.0 x - 5.5 x	\$990 - \$1,089
Implied Ethanol Asset Value (US\$m)			\$990 - \$1,089

Retail Asset Valuation			
	Annual EBITDA (US\$m)	Selected EBITDA Multiple Range	Implied Retail Asset Value (US\$m)
2011E Retail Marketing EBITDA	\$454	5.0 x - 5.5 x	\$2,272 - \$2,499
Implied Retail Asset Value (US\$m)			\$2,272 - \$2,499

Net Asset Value (US\$m, except per share figures)¹				
	US\$m		US\$/share	
Implied Refining Asset Value	\$15,587	- \$17,668	\$27.20	- \$30.83
Implied Ethanol Asset Value	990	- 1,089	1.73	- 1.90
Implied Retail Asset Value	2,272	- 2,499	3.96	- 4.36
Total Asset Value	\$18,848	- \$21,256	\$32.89	- \$37.10
Cash and Equivalents		\$4,133		\$7.21
Pembroke acquisition proceeds		(730)		(1.27)
Total Debt		(7,829)		(13.66)
Net Asset Value	\$14,423	- \$16,830	\$25.20	- \$29.40
Fully Diluted Shares (m)				573

¹ Balance sheet items and share count as of 31 Mar 2011.

Source: Company data, Macquarie Capital (USA), June 2011

Fig 36 Macquarie WNR operational and financial summary

(US\$m, except per barrel & per share items)	2010							2011E					2012E	2013E
	2008	2009	1Q10	2Q10	3Q10	4Q10	2010	1Q11	2Q11E	3Q11E	4Q11E	2011E		
Operating Data														
Refining														
Refinery Throughput (kb/d)														
El Paso	126.6	126.5	110.6	130.7	135.1	131.9	127.2	96.7	129.0	135.0	132.0	123.3	133.5	134.0
Yorktown	69.8	62.7	61.3	61.4	50.8	0.0	43.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Four Corners	30.8	26.6	21.1	24.9	25.3	25.1	24.1	24.9	24.0	26.0	25.0	25.0	25.5	25.5
Recurring Gross Margin (US\$/bbl)														
El Paso	\$9.45	\$9.20	\$6.91	\$11.57	\$9.77	\$8.83	\$9.37	\$18.70	\$22.26	\$19.95	\$15.73	\$19.17	\$17.02	\$16.02
Yorktown	\$6.43	\$5.97	\$2.80	\$2.41	\$3.35	na	\$2.82	na	na	na	na	na	na	na
Four Corners	\$15.49	\$15.17	\$15.27	\$18.16	\$19.44	\$14.13	\$16.82	\$19.70	\$25.45	\$21.90	\$17.38	\$21.07	\$19.41	\$18.03
Operating Costs (US\$/bbl)														
El Paso	\$4.07	\$3.59	\$3.77	\$3.44	\$3.27	\$3.57	\$3.50	\$5.91	\$3.70	\$3.50	\$3.50	\$4.02	\$3.47	\$3.46
Yorktown	\$4.75	\$4.95	\$4.54	\$4.72	\$6.17	\$0.00	\$6.32	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Four Corners	\$8.35	\$8.79	\$7.54	\$6.20	\$6.21	\$6.91	\$6.68	\$6.70	\$7.90	\$6.25	\$6.50	\$6.82	\$6.34	\$6.28
Operating Income before depreciation														
El Paso	\$249.4	\$258.7	\$31.3	\$96.7	\$80.8	\$63.8	\$272.6	\$111.3	\$217.9	\$204.4	\$148.6	\$682.1	\$662.1	\$614.3
Yorktown	42.8	23.3	(9.6)	(12.9)	(13.2)	(19.5)	(55.2)	(14.7)	(13.0)	(5.0)	(5.0)	(37.7)	8.0	12.0
Four Corners	80.4	62.0	14.7	27.1	30.8	16.7	89.2	29.1	38.3	37.4	25.0	129.9	122.1	109.3
Wholesale														
Fuel Gross Margin	\$63.4	\$45.1	\$15.2	\$15.7	\$18.2	\$16.5	\$65.6	\$32.4	\$27.0	\$25.6	\$24.9	\$109.8	\$108.9	\$116.0
Lubricants Gross Margin	20.3	10.6	2.0	2.9	2.7	2.6	10.1	3.2	3.1	3.1	2.8	12.1	11.7	11.7
Wholesale Operating Income	22.9	(30.7)	6.7	5.0	5.2	4.0	20.7	16.9	8.3	7.2	6.7	39.1	35.2	42.3
Retail														
Fuel Gross Margin	\$37.5	\$38.2	\$7.0	\$10.6	\$12.4	\$8.8	\$38.7	\$6.9	\$10.8	\$11.0	\$9.4	\$38.1	\$40.7	\$41.3
Merchandise Gross Margin	50.8	53.7	11.9	14.1	15.1	13.3	54.5	12.4	13.9	13.7	13.7	53.6	52.3	52.3
Retail Operating Income	14.1	(12.2)	1.2	5.1	7.6	2.5	16.4	0.8	5.1	5.0	3.5	14.4	14.6	15.2
Pretax Income	\$84.4	(\$391.2)	(\$70.6)	\$33.2	\$12.0	(\$17.8)	(\$39.2)	\$19.0	\$171.4	\$135.7	\$83.9	\$410.0	\$521.7	\$487.7
Financial Results														
Recurring Net Income	\$118.8	(\$4.7)	(\$30.7)	\$14.4	\$11.4	(\$3.5)	(\$8.4)	\$15.2	\$102.8	\$81.4	\$50.4	\$249.8	\$313.0	\$292.6
Discretionary Cash Flow	\$216.6	\$185.2	(\$30.0)	\$77.9	\$80.4	\$22.8	\$151.1	\$63.7	\$147.3	\$125.2	\$93.1	\$429.4	\$492.8	\$470.8
Recurring EBITDA	\$323.1	(\$118.0)	\$26.2	\$107.7	\$86.8	\$63.5	\$284.1	\$91.2	\$242.5	\$207.0	\$158.4	\$699.1	\$795.0	\$750.6
ROCE	9%	4%	-3%	6%	7%	3%	1%	8%	26%	22%	15%	16%	17%	16%
Total Debt/Total Capitalization	62%	62%	65%	65%	62%	61%	61%	60%	57%	55%	54%	54%	40%	26%
Diluted Shares Outstanding (m)	67.7	79.1	88.0	88.2	88.3	88.3	88.2	88.4	90.8	90.8	90.8	90.2	90.8	90.8
EPS Fully Diluted	\$1.75	(\$0.06)	(\$0.35)	\$0.16	\$0.13	(\$0.04)	(\$0.10)	\$0.17	\$1.13	\$0.90	\$0.55	\$2.77	\$3.45	\$3.22
CFPS - Fully Diluted	\$3.20	\$2.34	(\$0.34)	\$0.88	\$0.91	\$0.26	\$1.71	\$0.72	\$1.62	\$1.38	\$1.03	\$4.76	\$5.43	\$5.18

Source: Company data, Macquarie Capital (USA), June 2011

Fig 37 Macquarie WNR asset valuation analysis

Refining Asset Valuation			
	Annual EBITDA (US\$m)	Selected EBITDA Multiple Range	Implied Refining Asset Value (US\$m)
2011E Refining EBITDA	\$603	4.0 x - 4.5 x	\$2,412 - \$2,714
2012E Refining EBITDA	\$714	4.0 x - 4.5 x	\$2,855 - \$3,212
Implied Refining Asset Value (US\$m)			\$2,633 - \$2,963

Wholesale Marketing Asset Valuation			
	Annual EBITDA (US\$m)	Selected EBITDA Multiple Range	Implied Wholesale Marketing Asset Value (US\$m)
2011E Wholesale Marketing EBITDA	\$42	4.0 x - 4.5 x	\$168 - \$189
Implied Wholesale Asset Value (US\$m)			\$168 - \$189

Retail Asset Valuation			
	Annual EBITDA (US\$m)	Selected EBITDA Multiple Range	Implied Retail Asset Value (US\$m)
2011E Retail Marketing EBITDA	\$20	5.0 x - 5.5 x	\$101 - \$111
Implied Retail Asset Value (US\$m)			\$101 - \$111

Net Asset Value (US\$m, except per share figures)¹				
	US\$m		US\$/sh	
Refining Assets	\$2,633	- \$2,963	\$29.80	- \$33.53
Wholesale Assets	168	- 189	1.90	- 2.14
Retail Assets	101	- 111	1.15	- 1.26
Total Sum-of-Parts Asset Value	\$2,903	- \$3,263	\$32.85	- \$36.93
Cash and equivalents		\$12		\$0.14
Total debt		(1,054)		(11.93)
Net Asset Value	\$1,861	- \$2,221	\$21.10	- \$25.10
Fully Diluted Shares (m)				88.4

¹ Balance sheet items and share count as of 31 Mar 2011.

Source: Company data, Macquarie Capital (USA), June 2011

Fig 38 Valuation and risks

VALUATION	RISKS
<p>ALJ</p> <p>Our US\$12 price target is based on our sum-of-the-parts asset valuation analysis. For ALJ's refining segment, we applied multiples ranging from 3.5x-4.5x on estimated 2011E and 2012E refining EBITDA. For the asphalt segment, we applied multiples ranging from 5.0x-5.5x on 2011E asphalt EBITDA. For the retail segment, we applied multiples ranging from 5.5x-6.0x on 2011E retail EBITDA. Finally we adjusted for cash and total debt.</p>	<p>Upside risks include an improvement in global and US economic conditions, an improvement in US employment, an increase in US gasoline and diesel demand in ALJ's markets, an expansion in refining margins, an increase in asphalt prices, and potential carbon legislation, as ALJ may be less affected by carbon legislation than its competitors. Downside risks include a deterioration in general US and global macroeconomic conditions, a decline in refining margins, a decline in product demand in the Southwest, South Central and West Coast markets, the ability of the company to service its debt, the ability of the company to raise new capital for maintaining and upgrading its refineries, operational accidents, a lack of liquidity in ALJ's stock, labor issues, and the ability of ALJ to execute on the Bakersfield expansion strategy.</p>
<p>FTO</p> <p>Our US\$39 price target is based on an EV/EBITDA approach. For FTO's refining segment, we applied multiples ranging from 4x-5x on estimated 2011E and 2012E refining EBITDA. We also adjusted for cash, an expected tax rebate resulting from FTO's inventory accounting change, and total debt.</p>	<p>Risks include global and US economic challenges, worsening US unemployment, improvements in US fuel economy, a decrease in US gasoline and diesel demand, a compression in refining margins, a compression in crude differentials, proposed carbon legislation, regulation changes, ethanol mandates, improvements in biofuels or other substitute fuels, the ability of the company to service its debt, operational accidents, labor issues, and the ability of FTO to execute on its operational and cost reduction efforts at the Cheyenne refinery.</p>
<p>HOC</p> <p>Our US\$81 price target is based on our sum-of-the-parts asset valuation analysis. For HOC's refining segment, we applied multiples ranging from 4x-5x on estimated 2011E and 2012E refining EBITDA. For HOC's ownership interest in HEP, we used MLP market yields and cash flow multiples for HOC's limited and general partner interests. Finally we adjusted for cash and total debt.</p>	<p>Risks include global and US economic challenges, worsening US unemployment, improvements in US fuel economy, a decrease in US gasoline and diesel demand, a compression in refining margins, a compression in crude differentials, proposed carbon legislation, regulation changes, ethanol mandates, improvements in biofuels or other substitute fuels, a change in pipeline transportation fees, the ability of the company to service its debt, the execution of the UNEV pipeline, the ability of the company to raise new capital for maintaining and upgrading its refineries, operational accidents, labor issues, and the ability of HOC to execute on the Tulsa integration.</p>
<p>SUN</p> <p>Our US\$43 price target is based on our sum-of-the-parts asset valuation analysis. For SUN's refining segment, we applied multiples ranging from 3.5x-4.0x on 2012E refining EBITDA. For the coke segment, we used a combination of a DCF approach and an EBITDA approach. For the retail segment, we applied multiples ranging from 5.0x-5.5x on 2011E retail EBITDA. For SUN's ownership interest in SXL, we used MLP market yields and cash flow multiples for SUN's limited and general partnership interests. For chemicals, we applied multiples ranging from 3.5x-4.0x on 2011E chemicals EBITDA. Finally, we adjusted for cash, retirement benefit liabilities and total debt.</p>	<p>Risks to our price target include global and US economic challenges, worsening US unemployment, improvements in US fuel economy, a decrease in US gasoline and diesel demand, a compression in refining margins, a compression in crude differentials, proposed carbon legislation, regulation changes, ethanol mandates, improvements in biofuels or other substitute fuels, competition from imports, a decline in phenol demand, a decline in coke demand, a change in pipeline transportation fees, the ability of the company to service its debt, the ability of the company to raise new capital for maintaining and upgrading its refineries, operational accidents, a conglomerate discount, labor issues, and the ability of SUN to execute on its international coke strategy.</p>
<p>TSO</p> <p>Our US\$28 price target is based on our sum-of-the-parts asset valuation analysis. For TSO's refining segment, we applied multiples ranging from 3.5x-4.5x on 2011E and 2012E refining EBITDA. For the retail segment, we applied multiples ranging from 5.0x-5.5x on 2011E retail EBITDA. For TSO's ownership interest in TLLP, we used MLP market yields and cash flow multiples for TSO's limited and general partnership interests. Finally we adjusted for cash and total debt.</p>	<p>Risks include global and US economic challenges, potential litigation from the Anacortes accident, worsening US unemployment, improvements in US fuel economy, a decrease in US gasoline and diesel demand, a compression in refining margins, a compression in crude differentials, proposed carbon legislation in California, ethanol mandates, improvements in biofuels or other substitute fuels, the ability of the company to service its debt, competition from imports, the ability of the company to raise new capital for maintaining and upgrading its refineries, labor issues, and the ability for new management to implement its proposals.</p>
<p>VLO</p> <p>Our US\$27 price target is based on our sum-of-the-parts asset valuation analysis. For VLO's refining segment, we applied multiples ranging from 3.5x-4.5x on 2011E and 2012E refining EBITDA. For the ethanol segment, we applied multiples ranging from 5.0x-5.5x on 2011E ethanol EBITDA. For the retail segment, we applied multiples ranging from 5.0x-5.5x on 2011E retail EBITDA. Finally we adjusted for cash and total debt.</p>	<p>Risks include global and US economic challenges, worsening US unemployment, improvements in US fuel economy, a decrease in US gasoline and diesel demand, a compression in refining margins, a compression in crude differentials, proposed carbon legislation, regulation changes, ethanol mandates, improvements in biofuels or other substitute fuels, a reduction in ethanol demand, the ability of the company to service its debt, competition from imports, unsuccessful asset sales, tax changes in Aruba, the ability of the company to raise new capital for maintaining and upgrading its refineries, operational accidents, and labor issues.</p>
<p>WNR</p> <p>Our US\$22 price target is based on our sum-of-the-parts asset valuation analysis. For WNR's refining segment, we applied multiples ranging from 4.0x-4.5x on 2011E and 2012E refining EBITDA. For the wholesale marketing segment, we applied multiples ranging from 4x-5x on 2011E wholesale marketing EBITDA. For the retail segment, we applied multiples ranging from 5.0x-5.5x on 2011E retail EBITDA. Finally we adjusted for cash, estimated Yorktown divestiture proceeds and total debt.</p>	<p>Risks include global and US economic challenges, worsening US unemployment, improvements in US fuel economy, a decrease in US gasoline and diesel demand, a compression in refining margins, a compression in crude differentials, proposed carbon legislation, regulation changes, ethanol mandates, improvements in biofuels or other substitute fuels, the ability of the company to service its debt, the ability of the company to raise new capital for maintaining and upgrading its refineries, competition from imports, operational accidents, WNR's elevated cost structure, increased competition from the Longhorn pipeline, the ability of the company to convert Yorktown to a terminal, a lack of liquidity in WNR's stock, and labor issues.</p>

Source: Macquarie Capital (USA), June 2011

Other companies mentioned:

BP PLC (BP US, US\$44.24, NR)

ConocoPhillips (COP US, US\$72.51, N, Jason Gammel)

Nexen (NXY CN, C\$21.01, OP, Chris Feltin)

TransCanada (TRP CN, C\$42.02, OP, Matthew Akman)

Enpar Technologies (ENP CN, C\$0.15, NR)

Plains All American Pipeline (PAA US, US\$ 61.92, NR)

Magellan Midstream Partners (MMP US, US\$58.74, NR)

Enterprise Products Partners (EPD US, US\$40.96, NR)

Energy Transfer Partners (ETP US, US\$47.32, NR)

EOG Resources (EOG US, US\$110.78, N, Joseph Magner)

NuStar Energy (NS US, US\$63.29, NR)

Hess Corp (HES US, US\$75.11, NR)

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Recommendation definitions	Volatility index definition*	Financial definitions																																
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<p>Recommendation proportions – For quarter ending 31 March 2011</p> <table border="1"> <thead> <tr> <th></th> <th>AU/NZ</th> <th>Asia</th> <th>RSA</th> <th>USA</th> <th>CA</th> <th>EUR</th> <th></th> </tr> </thead> <tbody> <tr> <td>Outperform</td> <td>45.65%</td> <td>65.72%</td> <td>59.70%</td> <td>43.02%</td> <td>68.91%</td> <td>51.16%</td> <td>(for US coverage by MCUSA, 14.36% of stocks covered are investment banking clients)</td> </tr> <tr> <td>Neutral</td> <td>39.49%</td> <td>19.00%</td> <td>29.85%</td> <td>53.09%</td> <td>26.43%</td> <td>35.73%</td> <td>(for US coverage by MCUSA, 17.55% of stocks covered are investment banking clients)</td> </tr> <tr> <td>Underperform</td> <td>14.86%</td> <td>15.28%</td> <td>10.45%</td> <td>3.89%</td> <td>4.66%</td> <td>13.11%</td> <td>(for US coverage by MCUSA, 0.00% of stocks covered are investment banking clients)</td> </tr> </tbody> </table>				AU/NZ	Asia	RSA	USA	CA	EUR		Outperform	45.65%	65.72%	59.70%	43.02%	68.91%	51.16%	(for US coverage by MCUSA, 14.36% of stocks covered are investment banking clients)	Neutral	39.49%	19.00%	29.85%	53.09%	26.43%	35.73%	(for US coverage by MCUSA, 17.55% of stocks covered are investment banking clients)	Underperform	14.86%	15.28%	10.45%	3.89%	4.66%	13.11%	(for US coverage by MCUSA, 0.00% of stocks covered are investment banking clients)
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