

Deloitte Resource Evaluation & Advisory
International Forecast
Base Case Forecast Effective March 31, 2013
Real Prices

		Crude Oil Pricing																
		Average WTI Spot Real	Alaskan North Slope Real	California Kern River Real	Heavy Louisiana Sweet Real	Louisiana Light Sweet Real	MARS Blend Real	Wyoming Sweet Real	Brent Spot Real	Gulf Coast Argus Sour Crude Index Real	Average OPEC Basket Real	Venezuelan Merrey Real	Nigerian Bonny Light Real	Arabia UAE Dubai Feteah Real	Mexico Maya Real	Russia Urals Real	Indonesia Minas Real	
		US\$/bbl	US\$/bbl	US\$/bbl	US\$/bbl	US\$/bbl	US\$/bbl	US\$/bbl	US\$/bbl	US\$/bbl	US\$/bbl	US\$/bbl	US\$/bbl	US\$/bbl	US\$/bbl	US\$/bbl	US\$/bbl	
F	2013	\$92.00	\$91.00	\$95.00	\$97.00	\$99.00	\$94.00	\$83.00	\$112.00	\$94.00	\$109.25	\$103.00	\$110.00	\$109.00	\$102.00	\$110.00	\$114.00	
o	2014	\$90.00	\$89.00	\$92.00	\$92.00	\$95.00	\$90.00	\$81.00	\$105.00	\$90.00	\$102.25	\$95.00	\$103.00	\$102.00	\$95.00	\$103.00	\$107.00	
r	2015	\$88.00	\$86.00	\$89.00	\$89.00	\$91.00	\$87.00	\$79.00	\$93.00	\$86.00	\$90.25	\$83.00	\$91.00	\$90.00	\$83.00	\$91.00	\$95.00	
e	2016	\$88.00	\$86.00	\$87.00	\$87.00	\$91.00	\$87.00	\$79.00	\$93.00	\$86.00	\$90.25	\$83.00	\$91.00	\$90.00	\$83.00	\$91.00	\$95.00	
c	2017	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
a	2018	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
s	2019	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
t	2020	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
	2021	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
	2022	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
	2023	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
	2024	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
	2025	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
	2026	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
	2027	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
	2028	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
	2029	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
	2030	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
	2031	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
	2032	\$85.00	\$83.00	\$83.00	\$84.00	\$88.00	\$84.00	\$76.00	\$90.00	\$83.00	\$87.25	\$80.00	\$88.00	\$87.00	\$80.00	\$88.00	\$92.00	
	2032+	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%	0.0%	0.0%	0.0%	

Notes: Venezuelan Merrey replaced BCF-17 in the OPEC basket March 1, 2009.

		Natural Gas Pricing									Ethanol
		USD to GBP Exchange Rate	USD to EUR Exchange Rate	NYMEX Real US\$/Mcf	Permian Waha Real US\$/Mcf	San Juan Ignacio Real US\$/Mcf	Gulf Coast (onshore) Real US\$/Mcf	Louisiana East Texas Real US\$/Mcf	Rocky Mtn. Opal Real US\$/Mcf	UK NBP Real US\$/Mcf	U.S. CBOT Ethanol Real US\$/gal.
F	2013	1.600	1.300	\$3.65	\$3.30	\$3.35	\$3.50	\$3.65	\$3.25	\$10.65	\$2.25
o	2014	1.600	1.300	\$4.00	\$3.65	\$3.70	\$3.85	\$4.00	\$3.60	\$9.00	\$2.25
r	2015	1.600	1.300	\$4.20	\$3.85	\$3.90	\$4.05	\$4.20	\$3.80	\$7.70	\$2.25
e	2016	1.600	1.300	\$4.40	\$4.05	\$4.10	\$4.25	\$4.40	\$4.00	\$7.90	\$2.25
c	2017	1.600	1.300	\$4.60	\$4.25	\$4.30	\$4.45	\$4.60	\$4.20	\$8.10	\$2.25
a	2018	1.600	1.300	\$4.90	\$4.55	\$4.60	\$4.75	\$4.90	\$4.50	\$8.40	\$2.25
s	2019	1.600	1.300	\$5.10	\$4.75	\$4.80	\$4.95	\$5.10	\$4.70	\$8.60	\$2.25
t	2020	1.600	1.300	\$5.30	\$4.95	\$5.00	\$5.15	\$5.30	\$4.90	\$8.80	\$2.25
	2021	1.600	1.300	\$5.50	\$5.15	\$5.20	\$5.35	\$5.50	\$5.10	\$9.00	\$2.25
	2022	1.600	1.300	\$5.70	\$5.35	\$5.40	\$5.55	\$5.70	\$5.30	\$9.20	\$2.25
	2023	1.600	1.300	\$6.00	\$5.65	\$5.70	\$5.85	\$6.00	\$5.60	\$9.50	\$2.25
	2024	1.600	1.300	\$6.00	\$5.65	\$5.70	\$5.85	\$6.00	\$5.60	\$9.50	\$2.25
	2025	1.600	1.300	\$6.00	\$5.65	\$5.70	\$5.85	\$6.00	\$5.60	\$9.50	\$2.25
	2026	1.600	1.300	\$6.00	\$5.65	\$5.70	\$5.85	\$6.00	\$5.60	\$9.50	\$2.25
	2027	1.600	1.300	\$6.00	\$5.65	\$5.70	\$5.85	\$6.00	\$5.60	\$9.50	\$2.25
	2028	1.600	1.300	\$6.00	\$5.65	\$5.70	\$5.85	\$6.00	\$5.60	\$9.50	\$2.25
	2029	1.600	1.300	\$6.00	\$5.65	\$5.70	\$5.85	\$6.00	\$5.60	\$9.50	\$2.25
	2030	1.600	1.300	\$6.00	\$5.65	\$5.70	\$5.85	\$6.00	\$5.60	\$9.50	\$2.25
	2031	1.600	1.300	\$6.00	\$5.65	\$5.70	\$5.85	\$6.00	\$5.60	\$9.50	\$2.25
	2032	1.600	1.300	\$6.00	\$5.65	\$5.70	\$5.85	\$6.00	\$5.60	\$9.50	\$2.25
	2032+	1.600	1.300	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%



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