

QEP Field Services

Blacks Fork Gas Processing Complex

August 16, 2012



The Resource Growth Company ♦ NYSE: QEP

What will we see and what is notable about the Blacks Fork Complex?

➤ The Blacks Fork Complex includes:

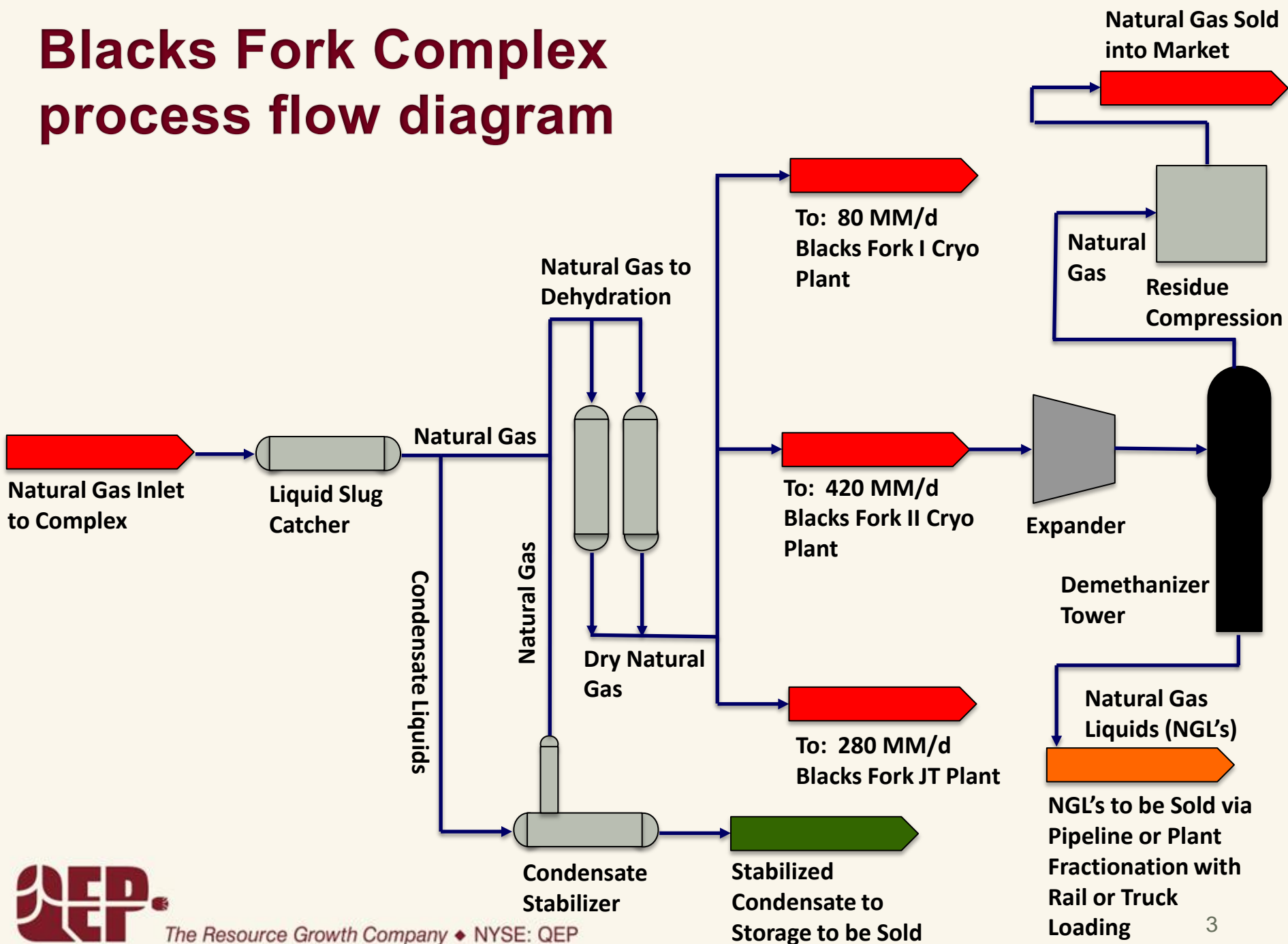
- Blacks Fork I cryogenic processing train – 80 MMscf/d capacity
- Blacks Fork JT processing train – 280 MMscf/d capacity
- Blacks Fork II cryogenic processing train – 350/420 MMscf/d capacity
- Blacks Fork fractionation train 1 – 5,000 Bbl/d capacity
- Blacks Fork fractionation train 2 – 10,000 Bbl/d capacity ***under construction***

➤ What is notable about Blacks Fork II

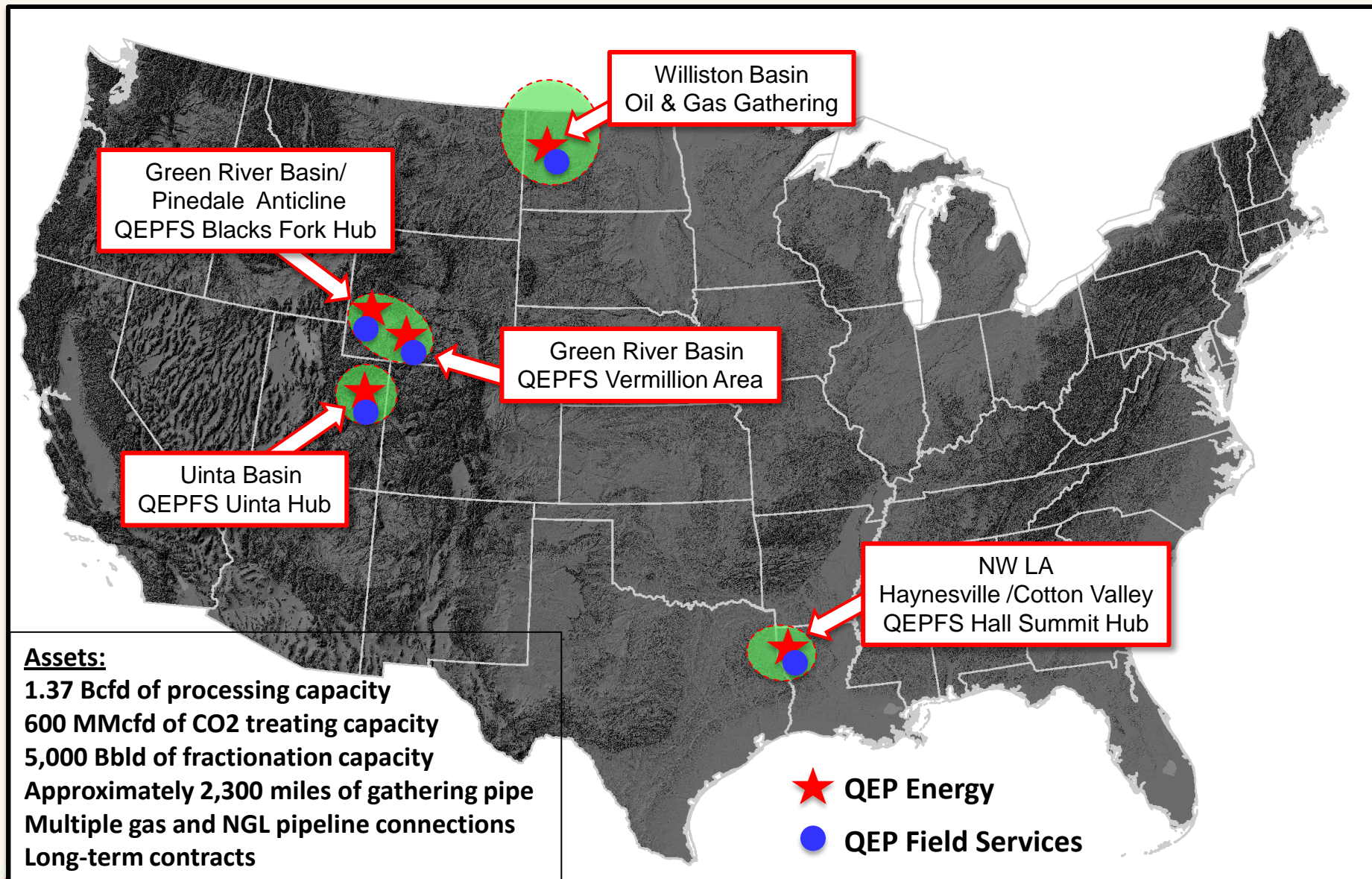
- Plant utilizes 2 of Ortloff Engineers, LTD. licensed processes
 - RSV (Recycle Split Vapor)
 - CDC (Carbon Dioxide Control)
- These 2 processes and the Pinedale gas composition allow optimal ethane recovery
- Blacks Fork II is the first “grass roots” facility built incorporating both of these processes
- Blacks Fork II utilizes waste heat recovery for process heat which reduces emissions and operating costs for the cryogenic plant and will also enable the new fractionation train to have “free heat”



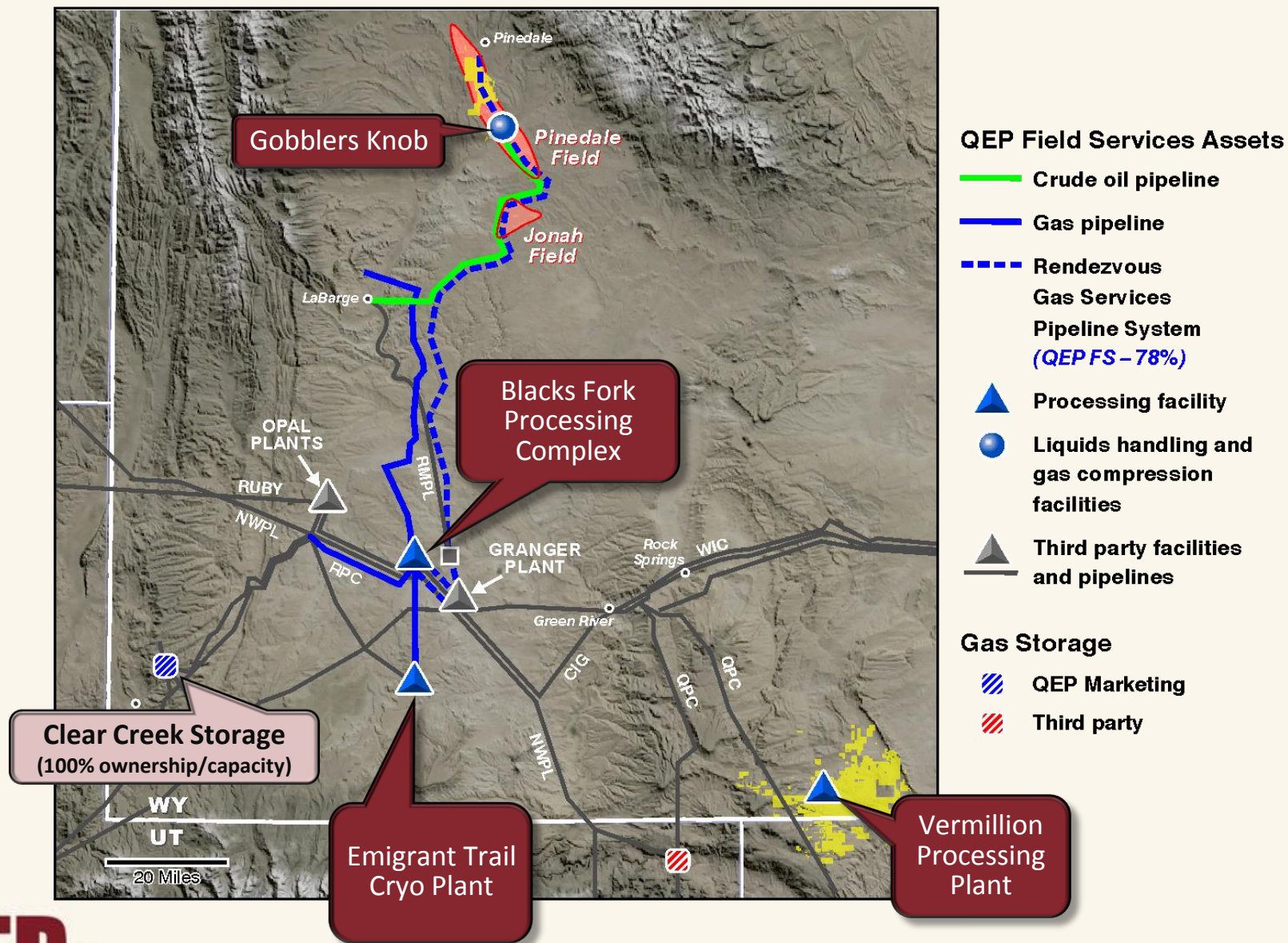
Blacks Fork Complex process flow diagram



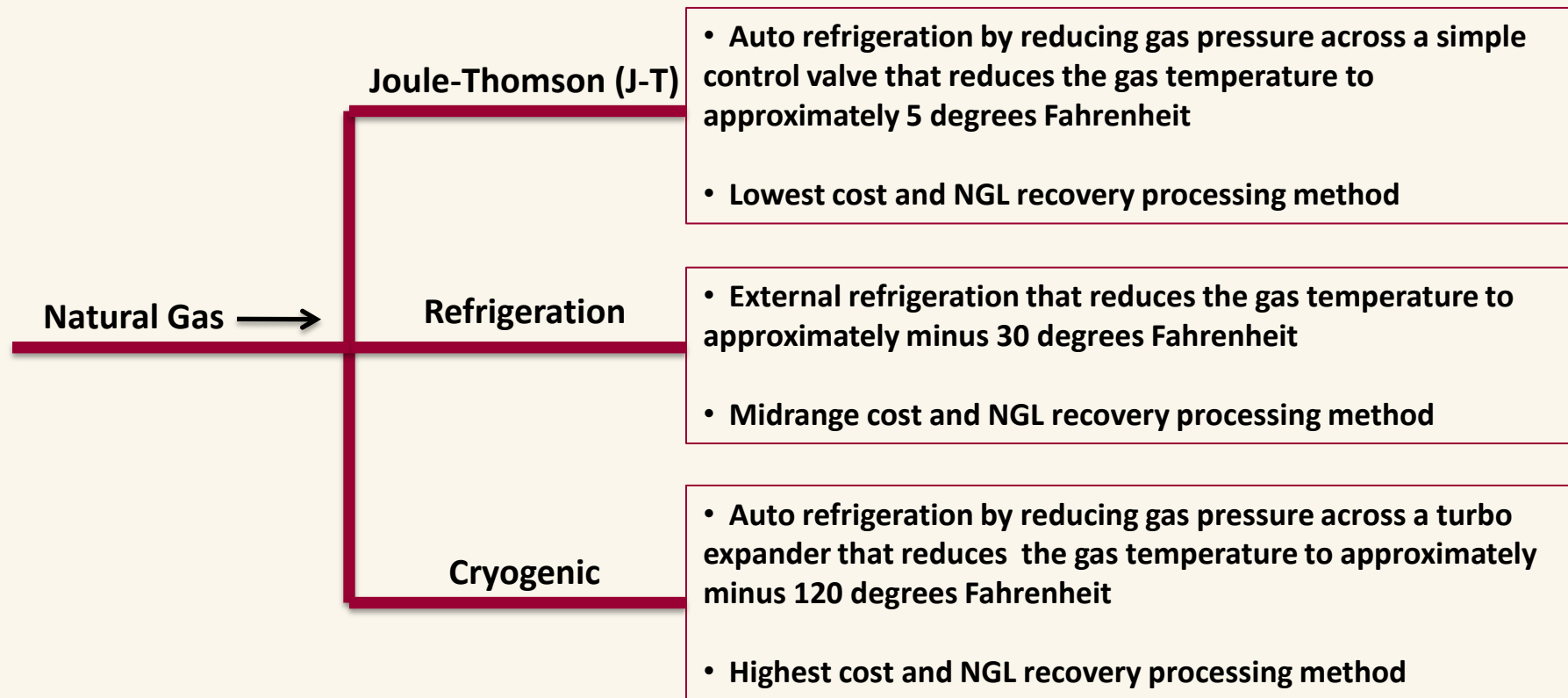
Areas of operation



Blacks Fork Hub – major facilities



Field Services offers various processing options



Stagecoach / Iron Horse Complex →



Natural gas processing economics

Frac Spread = The value of the natural gas liquids (NGL's) extracted from the gas stream less the local price of natural gas (\$/MMBtu) required to make up for the MMBtu extracted

- If Frac Spreads are positive, the liquids contained in the natural gas are more valuable as NGL's and the Producer/Processor will maximize liquid recovery
- If Frac Spreads are negative, the liquids contained in the natural gas are less valuable than natural gas and the Producer/Processor will minimize liquid recovery
- Each NGL component (ethane, propane, butane, natural gasoline) has its own Frac Spread



NGL recoveries comparison

Assume Blacks Fork II plant inlet of
420 MMcfpd

Daily Production Volume

		Cryogenic Process		Refrigeration Process		J-T Process	
Product	Product GPM	Recovery Factors	Gallons Produced	Recovery Factors	Gallons Produced	Recovery Factors	Gallons Produced
Ethane	1.20	82%	413,280	6%	30,240	1%	5,040
Propane	0.34	99%	141,372	30%	42,840	3%	4,284
N-Butane	0.08	100%	33,600	60%	20,160	10%	3,360
Iso-Butane	0.09	100%	37,800	60%	22,680	10%	3,780
Gasoline	0.17	100%	71,400	70%	49,980	35%	24,990
Totals	1.88		697,452		165,900		41,454

-120 degrees Fahrenheit

-30 degrees Fahrenheit

5 degrees Fahrenheit

QEP Field Services
Processing Capacity
(1.37 Bcfpd)

740 MMcfpd

Blacks Fork II – 420
Blacks Fork I – 80
Emigrant Trail – 55
Iron Horse I – 150
Vermillion – 35

350 MMcfpd

Stagecoach – 200
Red Wash – 150

280 MMcfpd

Blacks Fork JT – 280

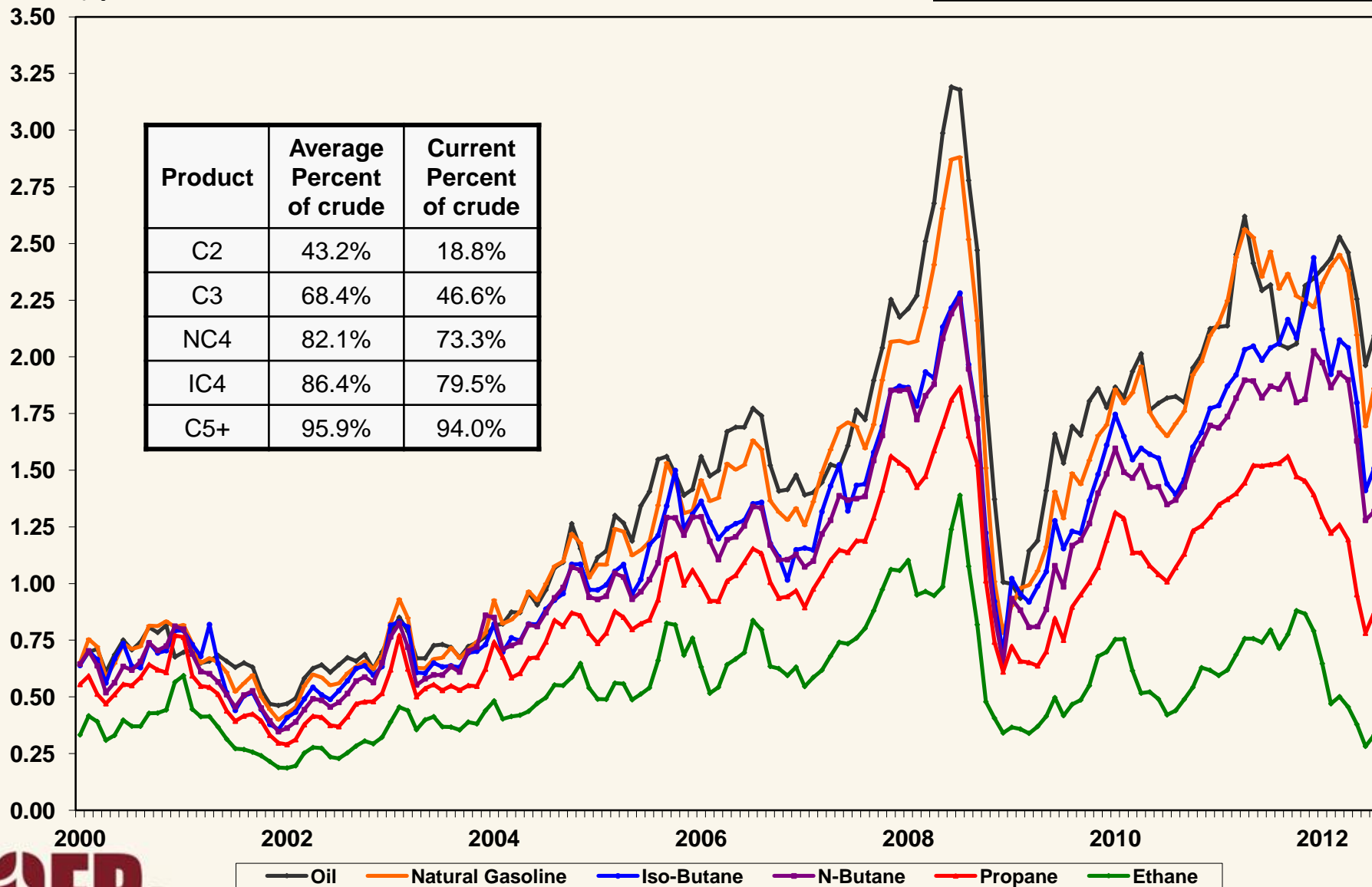


Historical liquid prices

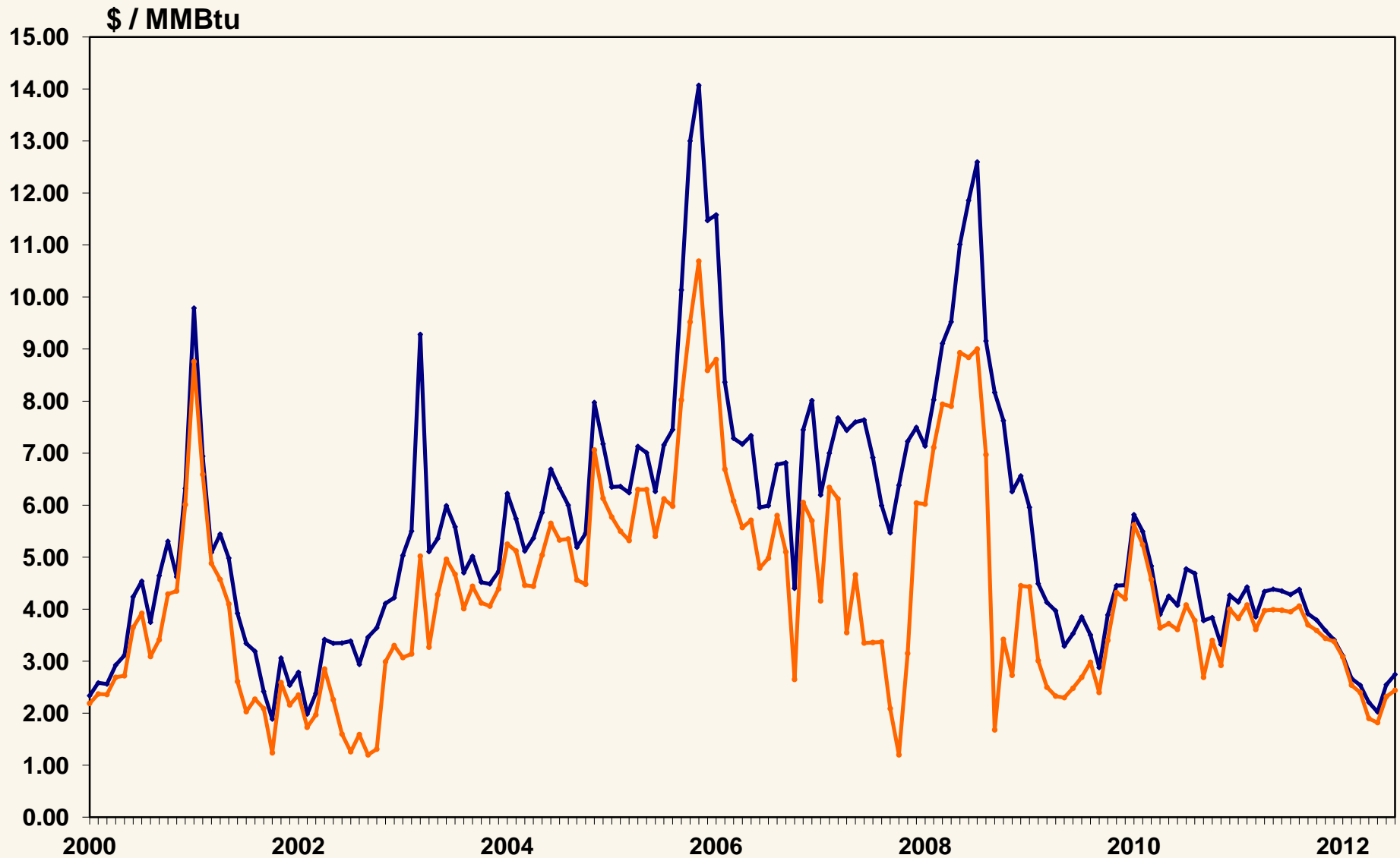
Crude Price – Nymex

NGL Prices – Mont Belvieu

\$ / Gallon



Historical natural gas prices



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— Nymex — Northwest Pipeline

Value of NGL components vs methane

Assume Blacks Fork II plant inlet of
420 MMcfpd

Daily Production Value

		Cryogenic Process		Refrigeration Process		J-T Process	
Product	2012 YTD Product Margin (\$)	Gallons Produced	Product Value (\$)	Gallons Produced	Product Value (\$)	Gallons Produced	Product Value (\$)
Ethane	0.1072	413,280	44,304	30,240	3,242	5,040	540
Propane	0.6924	141,372	97,886	42,840	29,662	4,284	2,966
N-Butane	1.2805	33,600	43,025	20,160	25,815	3,360	4,302
Iso-Butane	1.4305	37,800	54,073	22,680	32,444	3,780	5,521
Gasoline	1.7345	71,400	123,843	49,980	86,690	24,990	43,345
Totals		697,452	363,131	165,900	177,853	41,454	56,674

Annualized NGL Upgrade

\$132.5 MM

\$64.9 MM

\$20.7 MM

Breakdown:

QEPE

(BBL's)

4,242,830

(Value)

\$62.7 MM

QEPFS

1,181,360

\$69.8 MM



Comparison of NGL values

Assume plant inlet of 420 MMcfpd

Product	Product GPM	Plant Recovery Factors	Daily Gallons Produced	2012 YTD Product Margin (\$)	Daily Product Value (\$)	Annual Product Value (\$)
Ethane	1.20	82%	413,280	0.1072	44,304	16,170,960
Propane	0.34	99%	141,372	0.6924	97,886	35,728,390
N-Butane	0.08	100%	33,600	1.2805	43,025	15,704,125
Iso-Butane	0.09	100%	37,800	1.4305	54,073	19,736,645
Gasoline	0.17	100%	71,400	1.7345	123,843	45,202,695
Totals	1.88		697,452		363,131	132,542,815
Ethane	1.25	82%	430,500	0.1072	46,150	16,844,750
Propane	0.61	99%	253,638	0.6924	175,619	64,100,935
N-Butane	0.18	100%	75,600	1.2805	96,806	35,334,190
Iso-Butane	0.15	100%	63,000	1.4305	90,122	32,894,530
Gasoline	0.26	100%	109,200	1.7345	189,407	69,133,555
Totals	2.45		931,938		598,104	218,307,960

Pinedale production processed at Blacks Fork II processing plant

Uinta LMV production processed at new Red Wash processing plant



Gas processing contract types

Fee-Based (represents 75% of QEPFS contracted volume):

Producer pays processor a fee; producer receives 100% of the recovered NGLs plus 100% of the residue gas (less “shrink” and fuel)

Keep-Whole (represents 25% of QEPFS contracted volume):

Producer receives 100% of the Btu value of natural gas originally delivered to the processor; processor keeps 100% of the NGLs extracted from the processed gas and purchases natural gas to replace the Btu value of the extracted NGLs

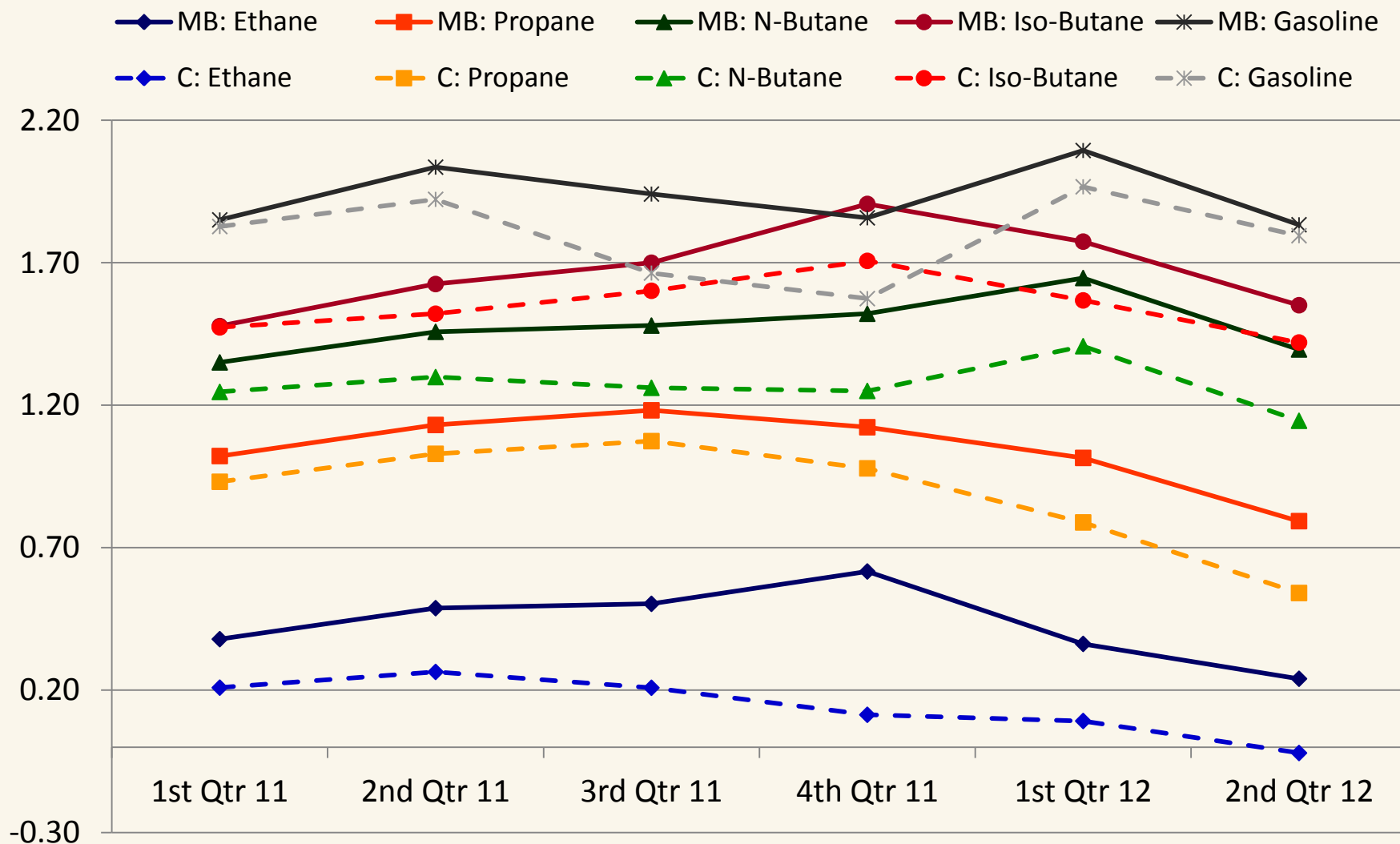
Percent of Proceeds (QEPFS has no POP contracts):

Producer and processor split the value of the proceeds received for the plant tailgate volume associated with the extracted NGL's and the natural gas (an example would be an 80/80 POP contract where the producer receives 80% of the proceeds and the processor receives 20% of the proceeds)



Mont Belvieu vs Conway frac spreads

\$ / Gallon



Market Hub NGL prices less Rockies gas prices



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The case for ethane

Ethane supply sources

Region	2012 BBL's/d	2014 BBL's/d	2016 BBL's/d
PADD I – Appalachia, Marcellus, Utica	20,000	110,000	150,000
PADD II – Midcontinent, Williston	200,000	240,000	240,000
PADD III – Texas, Louisiana, New Mexico	600,000	800,000	850,000
PADD IV - Rockies	180,000	195,000	210,000
Total Supply	1,000,000	1,345,000	1,450,000

Ethane demand sources

Region	2012 BBL's/d	2014 BBL's/d	2016 BBL's/d
Petrochemical Plants	1,000,000	1,299,000	1.33 – 1.38 MM
Exports to Canada	30,000	100,000	110,000
Total Demand	1,030,000	1,399,000	1.44 – 1.49 MM

New petrochemical capacity

- Various upgrades/expansions and start-ups between 2012 and 2016 – 331,000 BBL's/d
- Dow to construct new plant in Freeport, TX by late 2016 to early 2017 – 81,000 BBL's/d
- CP Chem to construct new plant in Cedar Bayou, TX by late 2016 to early 2017 – 93,000 BBL's/d
- Formosa to construct new plant in Point Comfort, TX by late 2016 – 50,000 BBL's/d
- Shell to construct new plant in northeast Pennsylvania by late 2016 to early 2017 – 69,000 BBL's/d



Sources: Bentek Energy, Purvin & Gertz, Goldman Sachs, Tudor, Pickering, Holt & Company
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The case for ethane (continued)

Cost to extract and transport ethane to the Mont Belvieu market (\$/Gallon)

Cost Category	PADD I (Marcellus)	PADD II (Midcontinent)	PADD II (Williston)	PADD III (Gulf Coast)	PADD IV (Rockies)
T&F Cost	0.200	0.185	0.310	0.150	0.180
Btu Shrink Cost	0.181	0.173	0.175	0.178	0.161
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Total Cost	0.381	0.358	0.485	0.328	0.341

Btu shrink cost is based on July 2012 Platts Index regional gas prices

- T&F Cost is stands for the transportation expense required to transport by pipeline the NGL's from the regional area to the Mont Belvieu market and the fractionation expense required to fractionate the NGL's into their purity components (ethane, propane, normal butane, iso-butane, natural gasoline)
- QEP Field Services has contracted for firm transportation and fractionation services for the NGL's extracted and transported from its processing plants to the Mont Belvieu market

Why fractionate locally – To capture the T&F Cost associated with getting the extracted non-ethane NGL's to the Mont Belvieu market (Rockies rate of \$0.18/gallon based on Platts data above) and receive similar or better value for the locally sold NGL's compared to the Mont Belvieu market. The Blacks Fork Complex non-ethane fractionation capacity (when the new 10,000 BBL's/d fractionator is in service) will be approximately 6,500 BBL's/d, which equates to approximately \$18 MM of captured T&F Cost annually.

