



NGL Feb Value Trade Lessons Learned

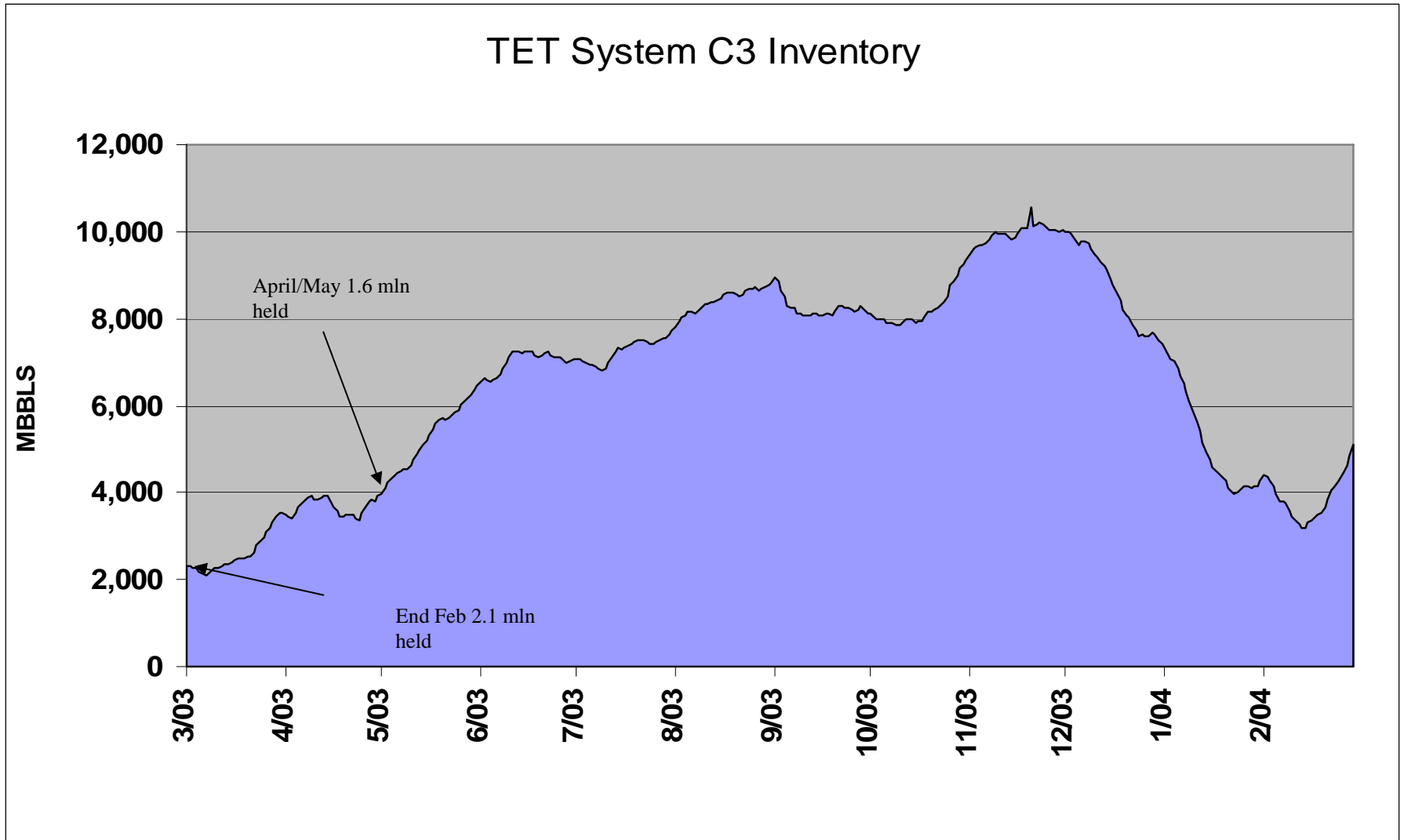


February Trade Strategy

- Entering Feb, NAGP owned nearly 50% of available physical propane bbls at the TET location
- Feb-March spread was trading at a 6 cent premium
- Two key fundamentals led to the belief that the Feb-Mar spread would widen by month end:
 - Need to maintain a minimum inventory level of apx. 2 million bbls at TET
 - High level of imports hedged with paper TET swaps
- View was that gulf coast propane would become short as importers went to the market to cover hedges
- Strategy was to sell a portion of the acquired bbls at a higher Feb price, rolling the balance to March



TET Propane Inventory



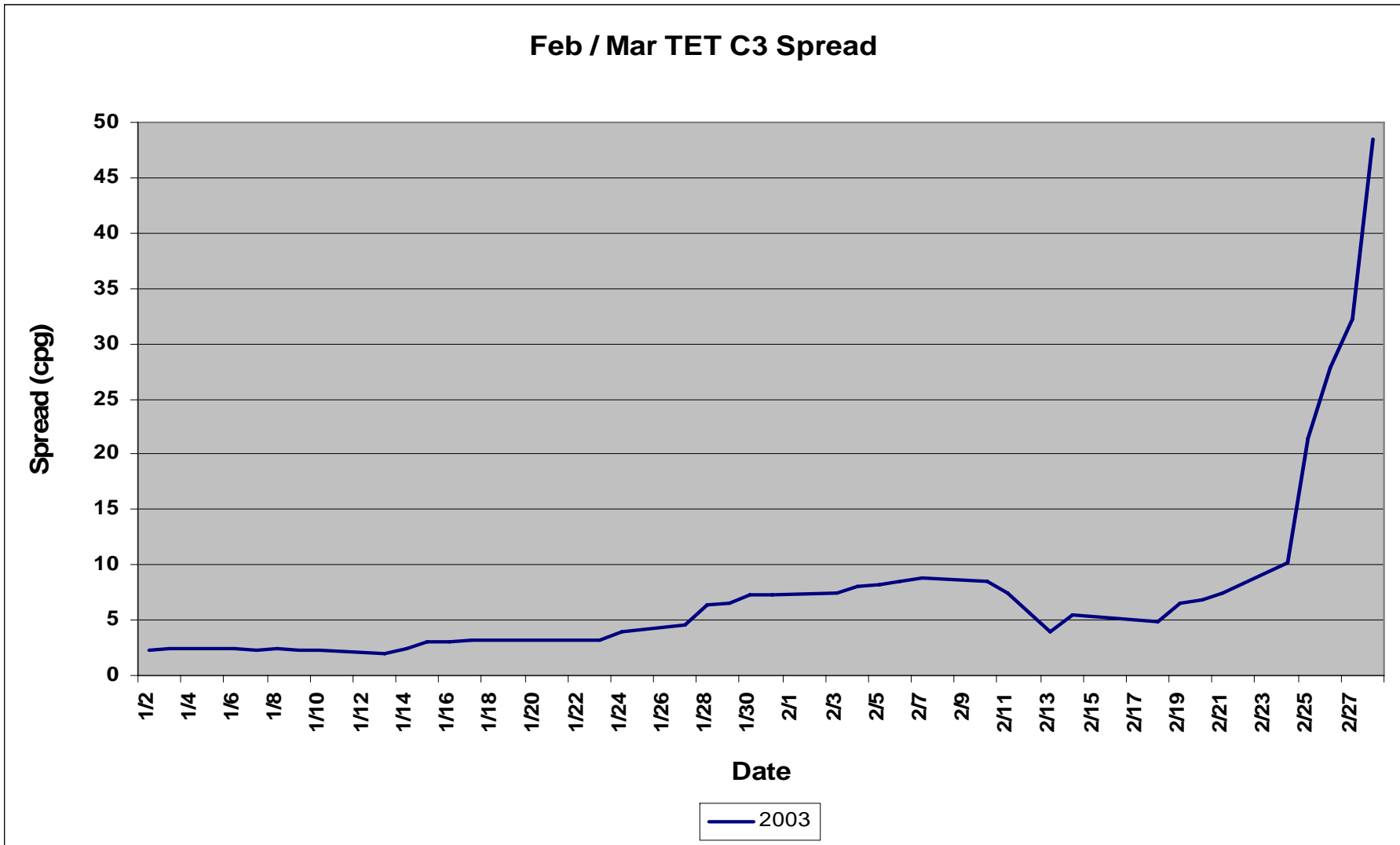


Feb-04 TET Hedged Imports by Location

Gulf Coast:	2,741 MBBLS
East Coast:	1,642 MBBLS
Mexico:	852 MBBLS
<i>Total:</i>	<i>5,235 MBBLS</i>



February / March TET C3 Spread: 2003



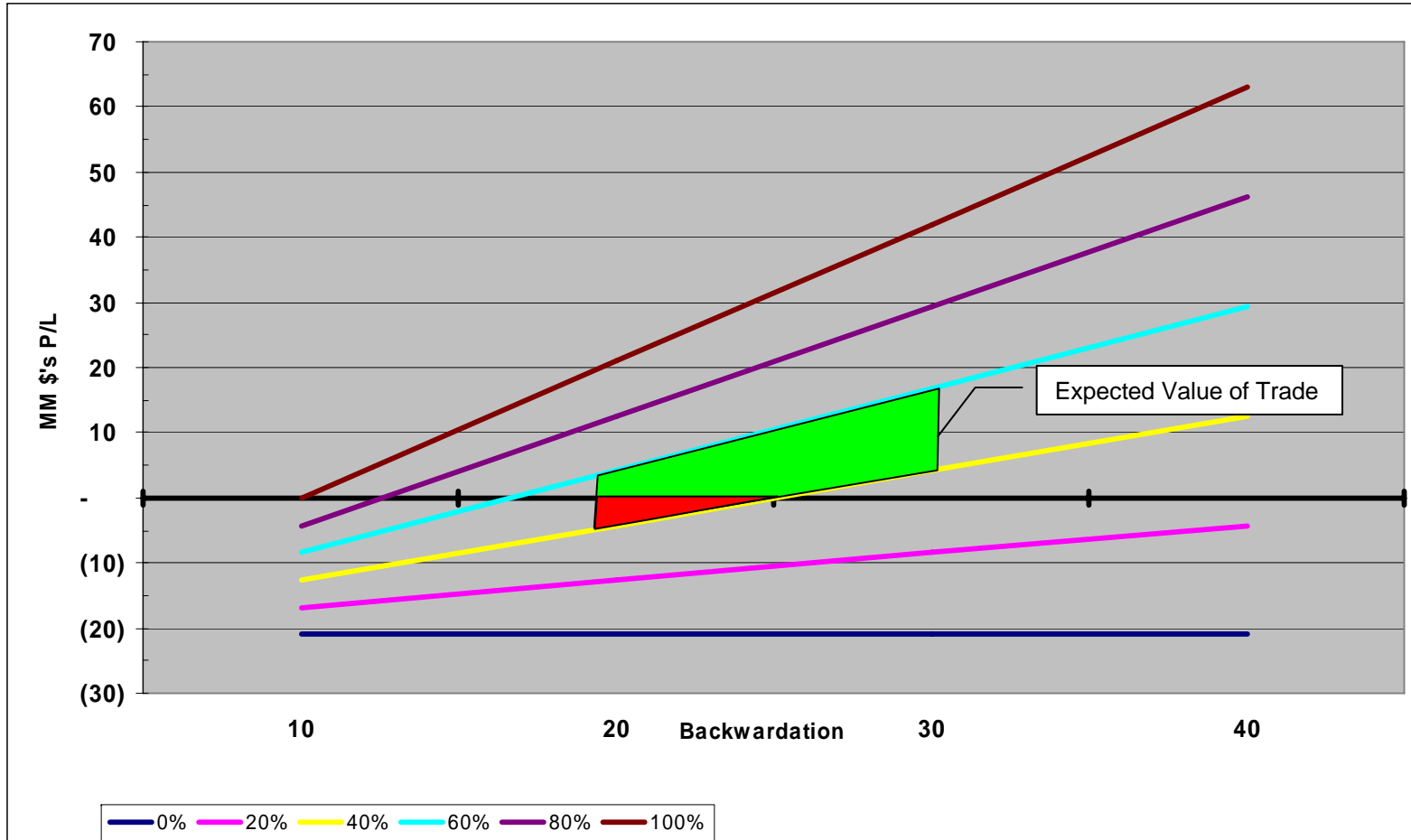


Expected outcome at trade entry

- Peak BP TET Inventory build: 4 mln bbls
- TET Minimum Dead Stock: 1.6 – 2 mln bbls
- Volume Sold in February: 40% - 60% (1.6 – 2.4)
- Feb/March backwardation: 20 – 30 cents/gal
- **Profit/Loss: - \$5M to + \$15M
(20% chance of loss)**

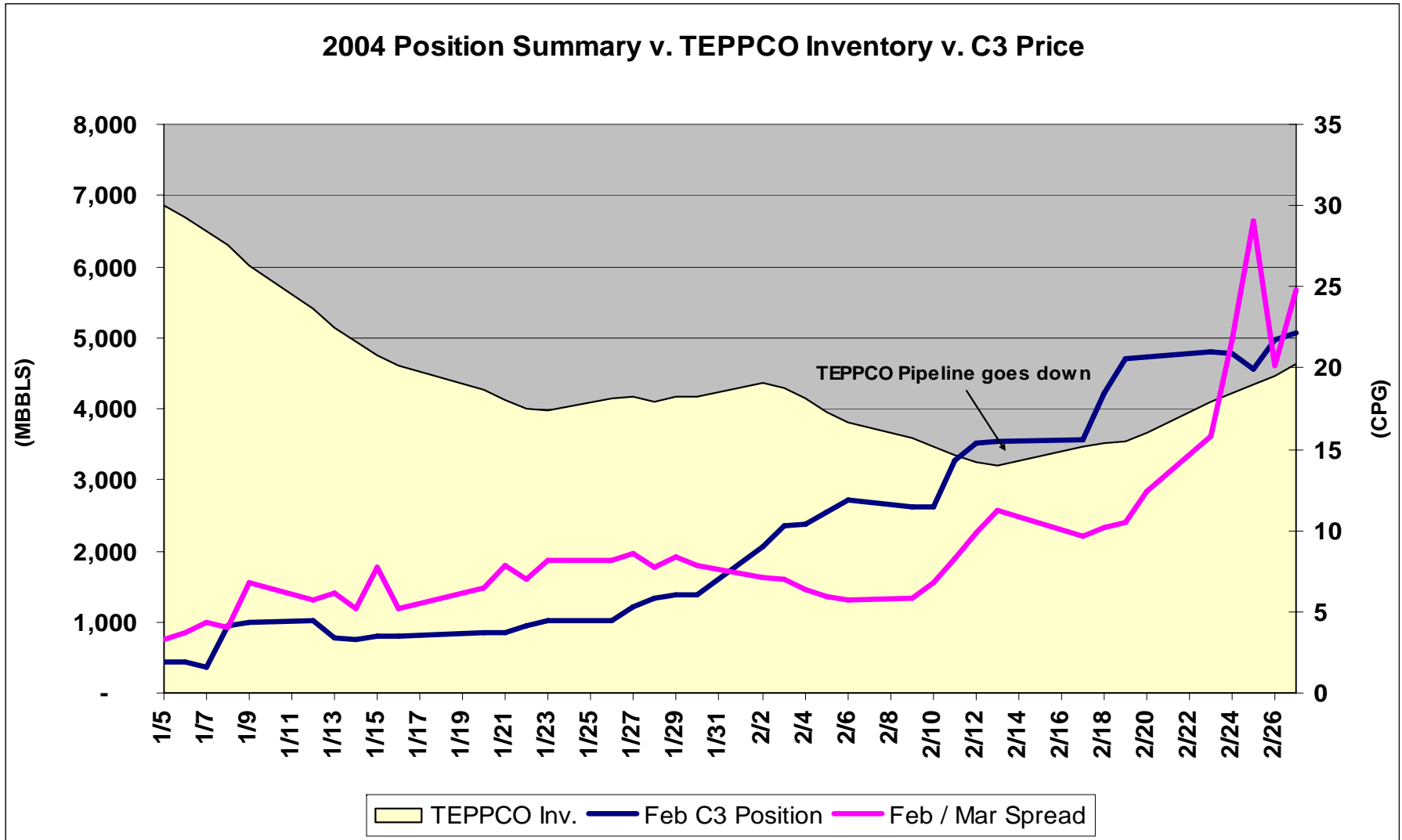


Possible Value of Trade



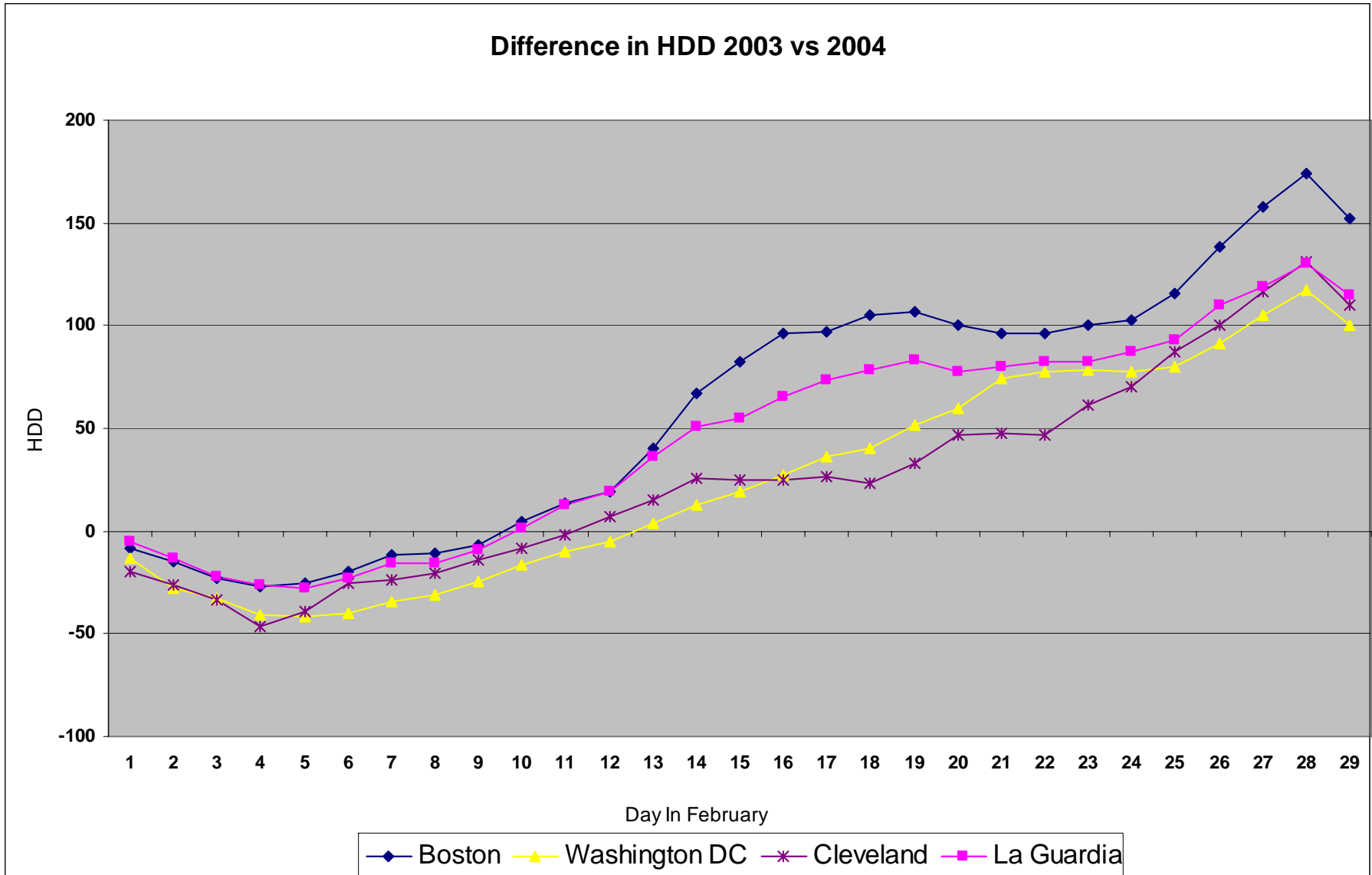


February 2004 Timeline





February Weather Summary



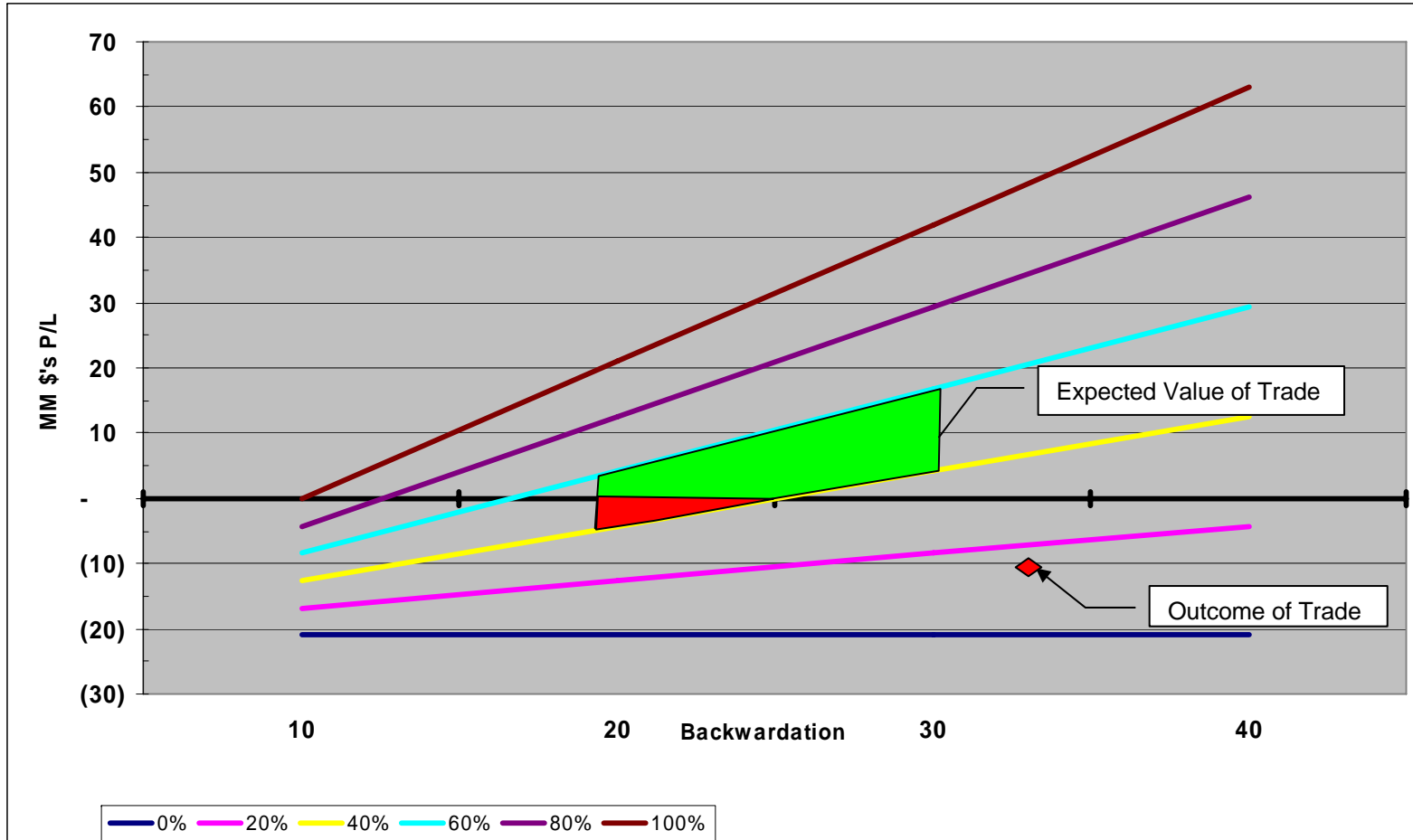


Actual Outcome

- Peak BP TET Inventory build: 4 mln bbls
-Peak BP Build: 5.1 mln bbls
- TET Minimum Dead Stock: 1.6 – 2 mln bbls
-Actual Dead Stock: .7 mln bbls
- Volume Sold in February: 40% - 60% (1.6 – 2.4)
-Actual February Sales: 17% (.9 mln bbls)
- Feb/March backwardation: 20 – 30 cents/gal
-Final Feb/March Spread: 34 cents/gal
- Profit/Loss: (\$5M) to + \$15M (20% chance of loss)
-MTM Trade Loss: (\$10M)



Possible Value of Trade





Lessons Learned



Trading Strategy

- Method to establish dead stock level flawed
- Too much focus on year to year similarities, not enough on differences (e.g nat gas price)
- Lack of system levers a significant disadvantage (e.g no TET marketing position)
- Transparency of TET inventory position (Inventory reports & OTC)
- Use of a potential weather hedge (short Z6 market)
- Extend trading play across all TET grades
- Spread limit on ability to short March/April
- Aggregating group position in advance - critical
- Use of index sales as opposed to fixed price



Controls

- **MVAR limit**

- Calc's based on 90-day volatility of Feb-Mar spread
- MVAR averaged just over \$1 M throughout March
- No change in MVAR associated with trade strategy

- **Calendar Spread limit**

- Calculated based on minimum of net monthly longs and shorts
- Calendar spread limited by net shorts not Feb length
- Stayed within limit by increasing flat price exposure in Feb
- Well within total flat price + calendar limit of 7 MMBBL's
- Calendar spread limit prevented using additional shorts as downside protection



Controls (Continued)

- **Rolling unsold barrels**

- Typical process for marking inventory is 100% at prompt
- Barrels that can't be sold during the month are marked at prompt during the month, and then rolled at the end of the month
- Following this protocol would have shown unrealistic gains in daily P&L
- Bench chose to do 2 mid-month rolls rather than wait until the end of the month
- These rolls were done manually, resulting in calculation errors that had to be corrected several days later



Compliance: Key risks

- Regulatory - No violations under current framework, but could increase the risk of regulatory intervention
- Legal/credit – No specific legal concerns identified, but could increase the risk of an “aggrieved short” failing to make payment or filing a claim for damages
- Reputational – Primary risk.



Compliance: Lessons Learned

- Involve compliance group early. Only consulted once initial play was on, and exit would have resulted in significant financial loss.
- Education is required. The potential risks were unclear to those making decisions on the bench.
- Reputational issues outside of NAGP should be considered and key stakeholders consulted.
- A credit strategy is critical. As Feb price and volume increased many counterparties exceeded their credit limit, reducing NAGP's ability to liquidate physical inventory

Communication with NGLBU

Primary concerns of BU:

- Financial losses from trading
 - BU was unaware of potential for a \$10M loss
 - Not informed when “sizable” positions are on
 - Concerned over applicability of current DOA’s
- Reputational risk
 - NAGP only consulted internal compliance group, no dialogue with NGLBU over compliance issues
 - BU is concerned about “regulatory issues”
 - Having to answer customer questions

Communication with NGLBU

Primary concerns of BU (continued):

- Assurance that trading team has access to all information and optionality within the BU that can be used to increase chance of success
 - Information from within BU could have helped NAGP better understand dead stock flexibility
 - Use of physical optionality within asset base
- BU Indirect financial impacts on business
 - Did Feb price spike have a negative impact on liftings which cost the BU money?

To be discussed separately



Actions going forward

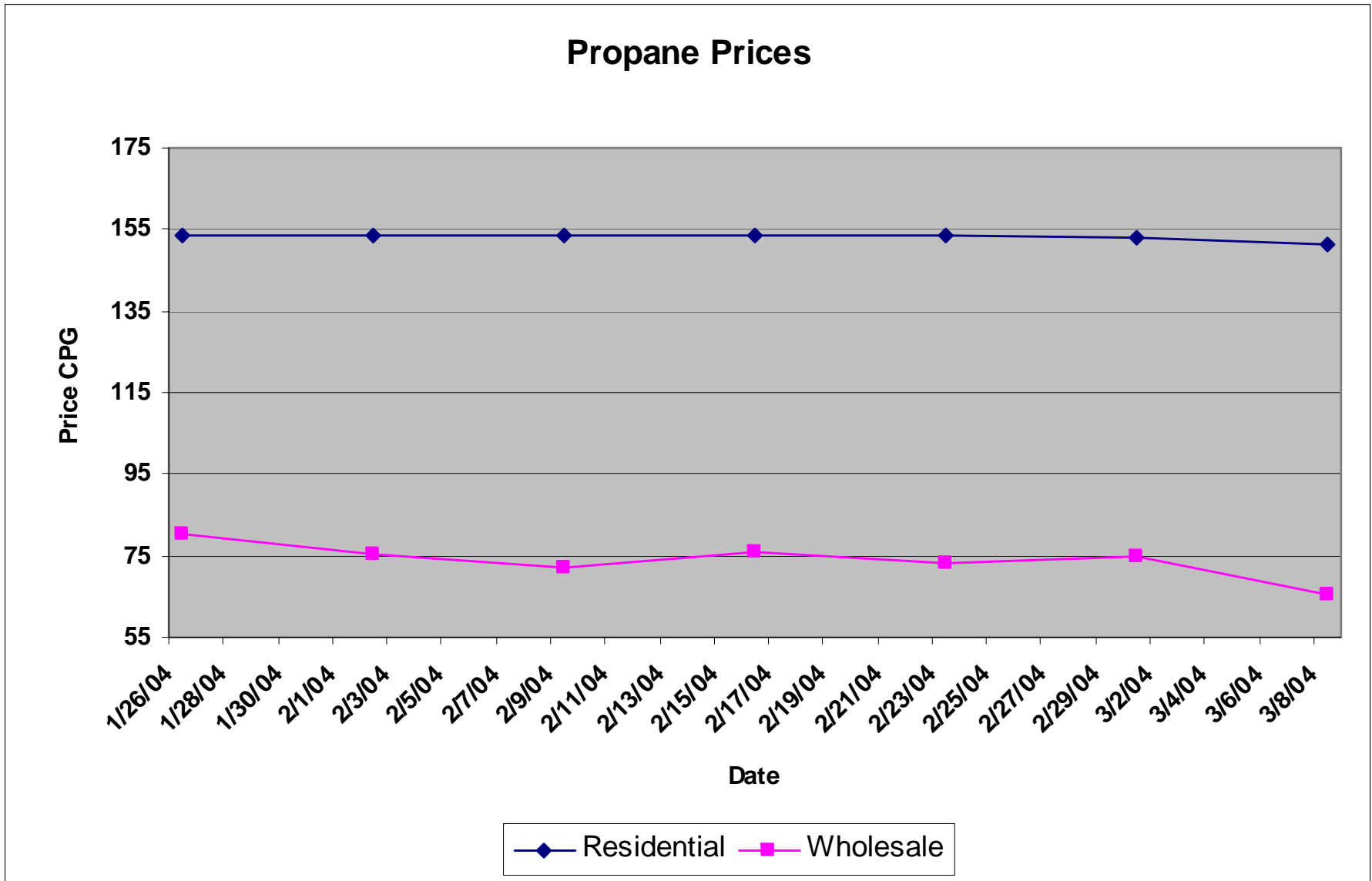
- Peer Review – **Done**
- Hire new NGL Risk Manager – **Done**
- Compliance/regulatory training for NGL's – **Requested**
- Evaluating control “trigger points” that would necessitate discussion between NAGP and NGLBU – **In progress**
- Implement weekly meetings with Marketing & Logistics to review trading positions and share opportunities – **Pending**
- Review NAGP DOA's, establish clear accountabilities, implement improved communication protocols - **Pending**



Back-up Slides

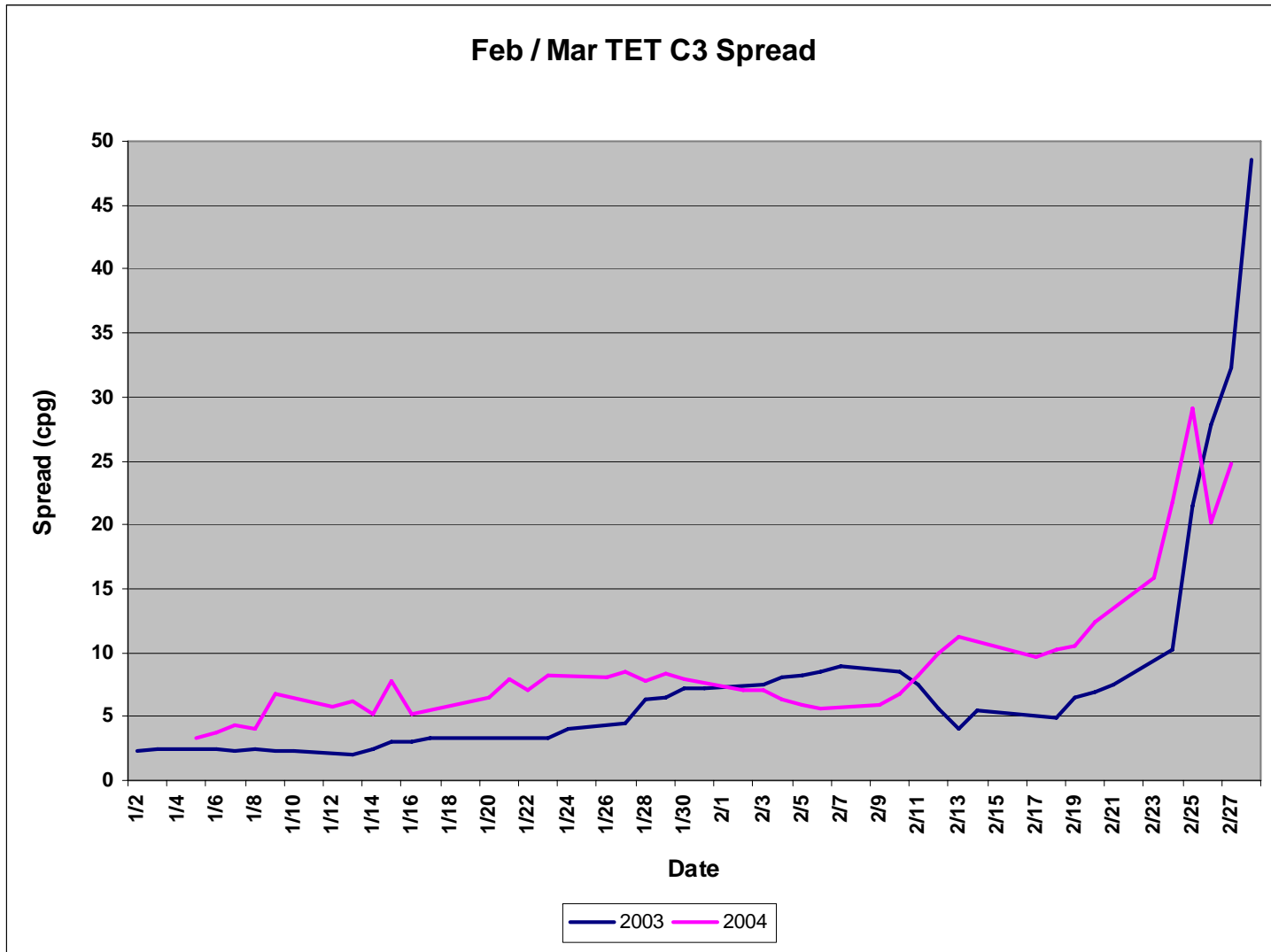


Residential & Wholesale C3 Prices



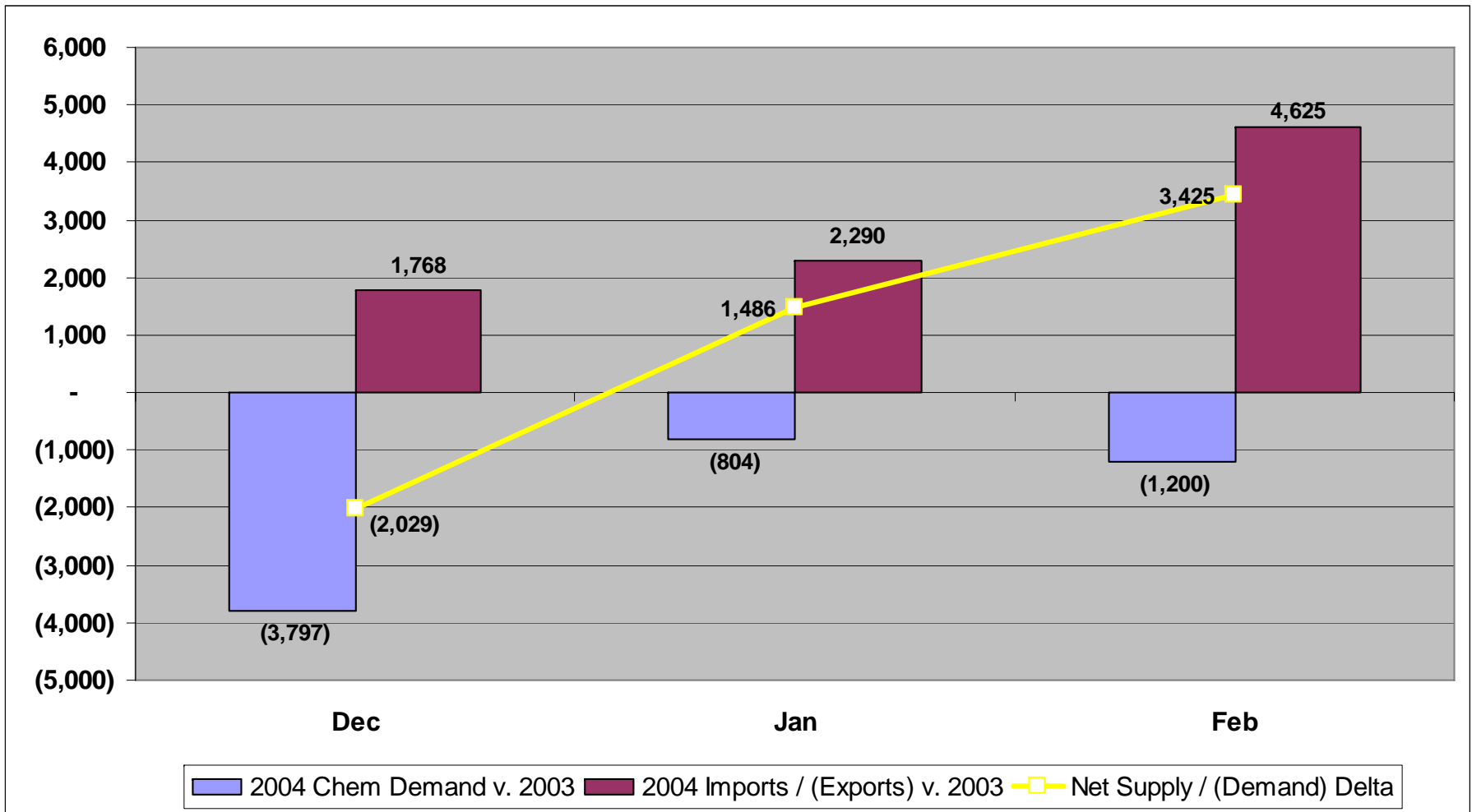


February / March TET C3 Spread: 2003 v. 2004



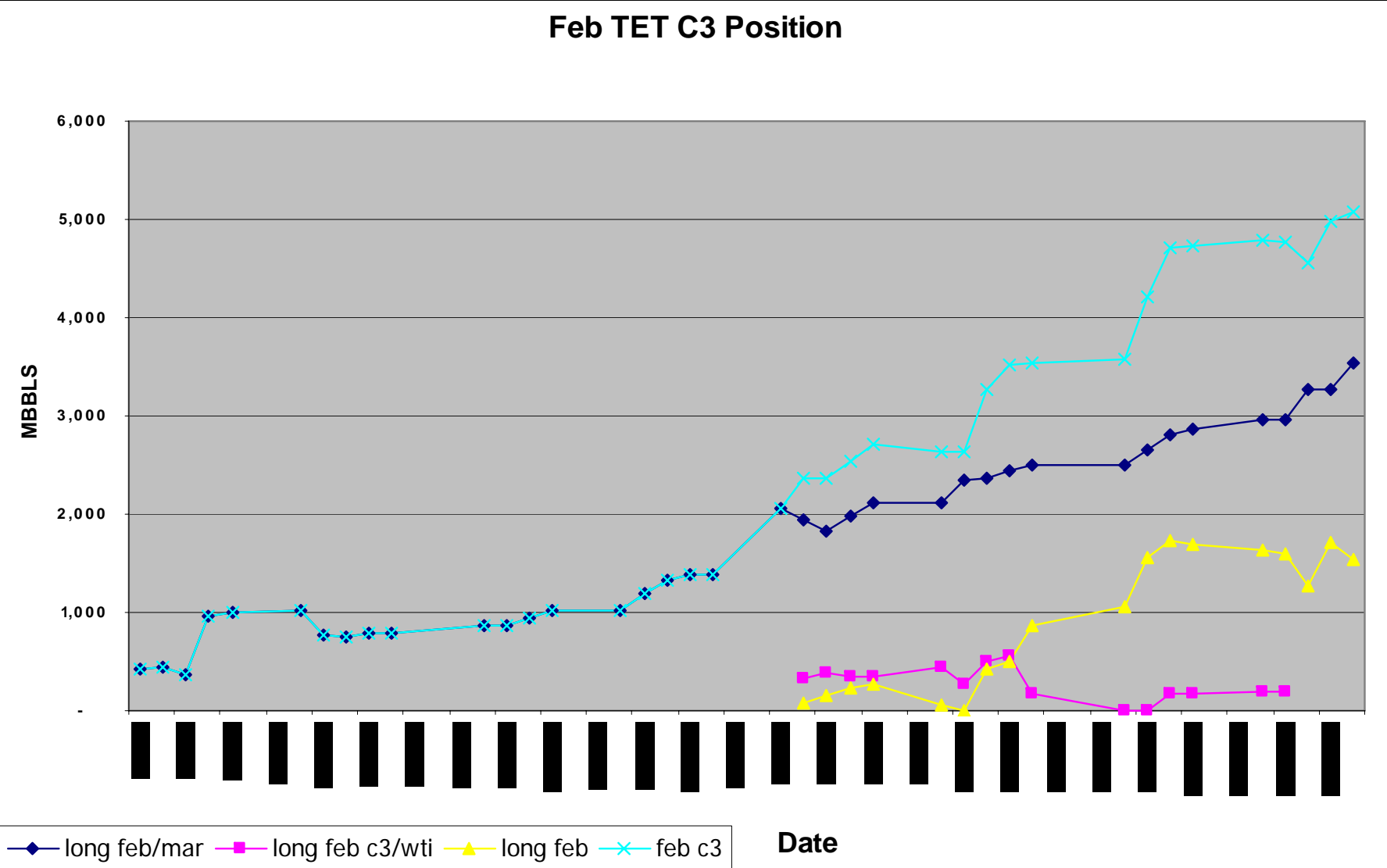


C3 Supply & Demand: 2003 v. 2004



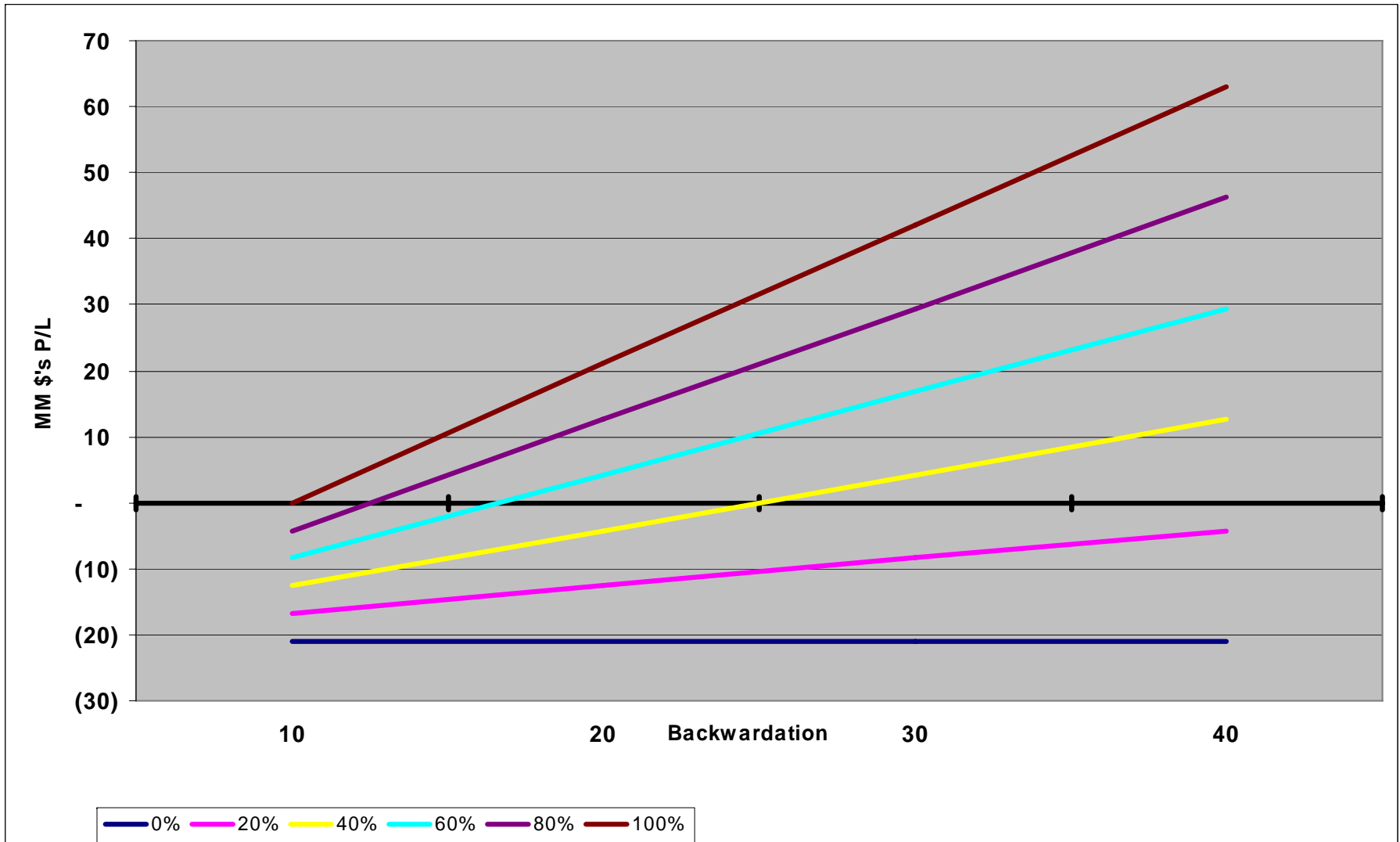


Position Summary



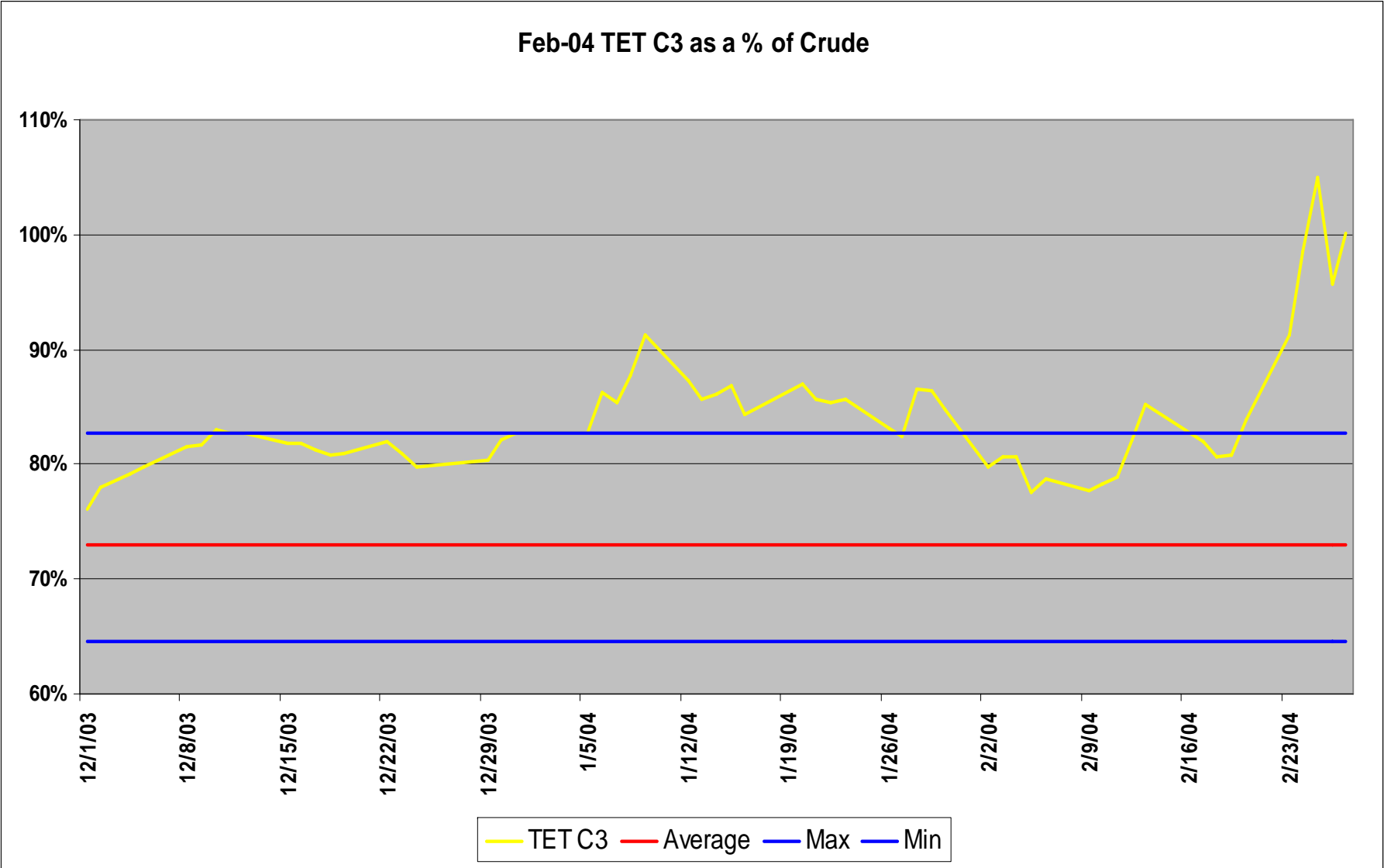


Possible Value of Trade



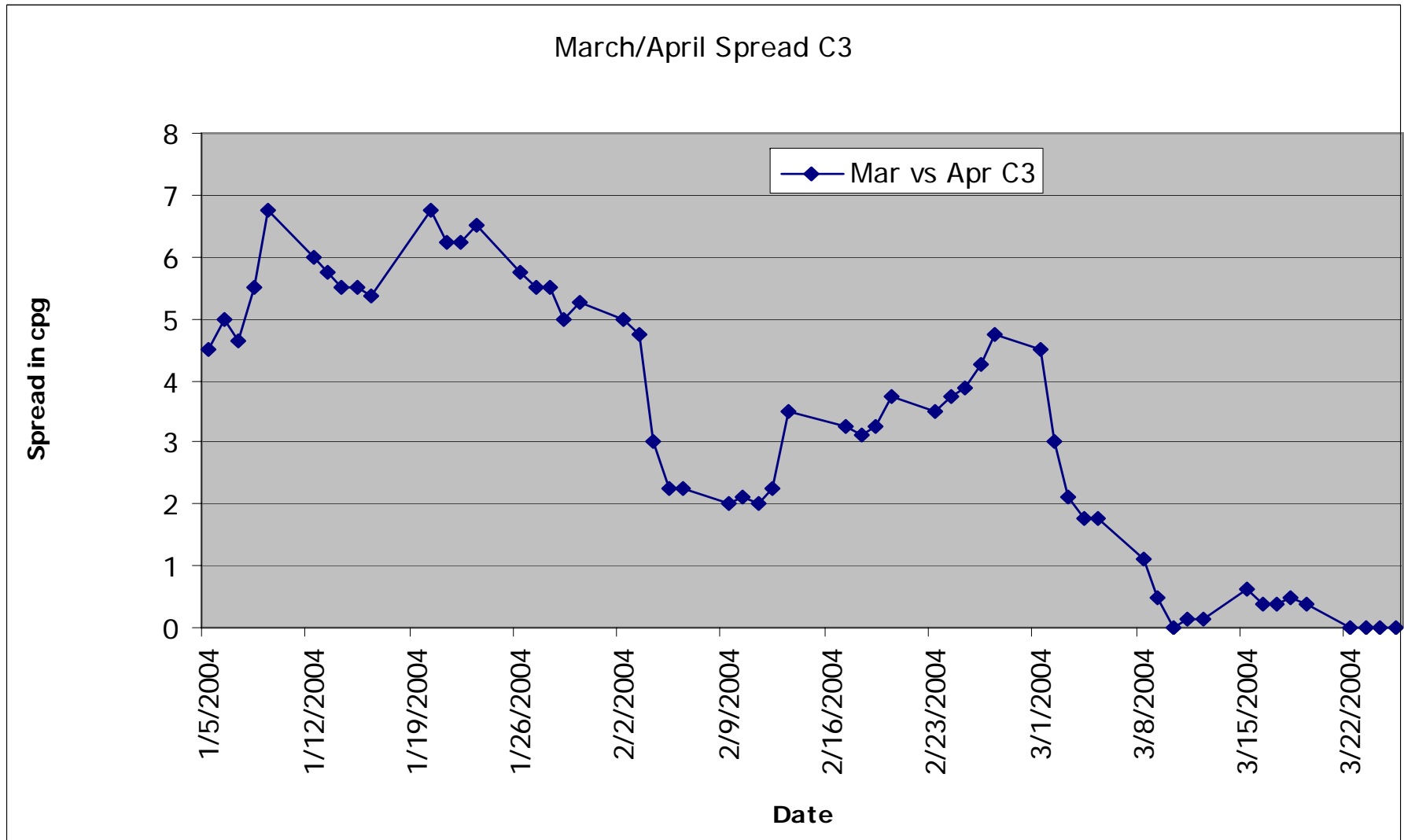


Feb-04 TET C3: as a % of Crude





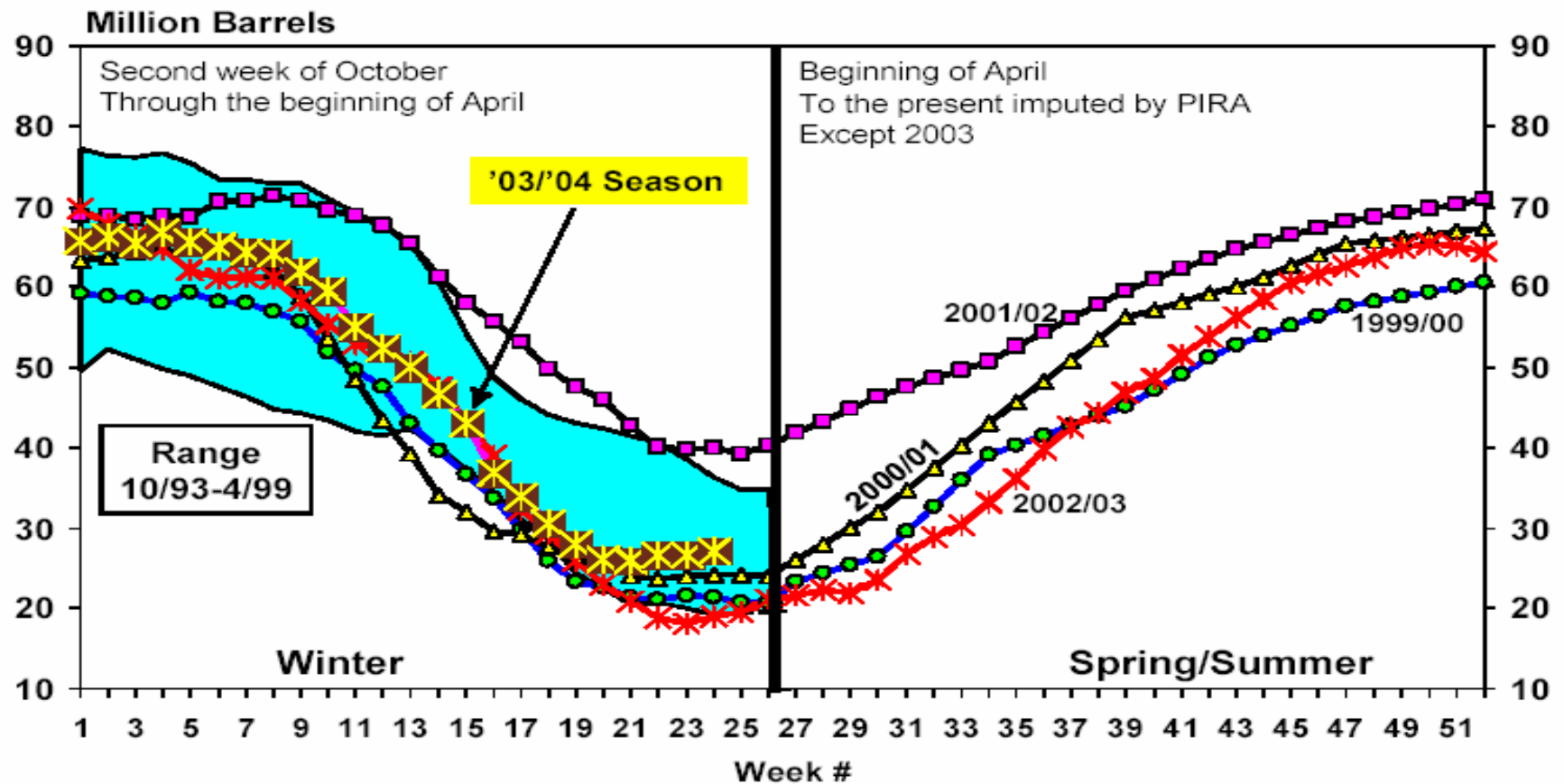
Mar / Apr C3 Spread





PIRA C3 Inventory Chart: Total US

Total U.S. Weekly Propane Stocks Winter 1993-2003; Spring/Summer 2000-2003





PIRA C3 Inventory Chart: Gulf Coast

U.S. Weekly Propane Stocks In PADD III Winter 1993-2003; Spring/Summer 2000-2003

