

Creative Solution for Seamless Coke Handling

Troy Savage & Boyd Draper

Coking.com Conference

Galveston, Texas

March 26, 2009



Topics for today

- Savage Overview
- The Savage approach to Creative Solutions
- Frontier El Dorado Refinery Coke Handling Challenges and Needs
- Creative Solution Process – Seamless System
- Savage Operating Results

Savage Services Corporation

- Privately held company based in Salt Lake City, UT - 63 years
- Over 136 Operations in North America
 - Refinery and Sulphur Services
 - Coal and Power Generation Services
 - Rail Centric Services (Switching and Transloading)
- Dedicated to understanding customer unique needs, and developing *Creative Solutions* for our customers
- Committed to providing our customers with “*Best Value – No Worry*” service
- Services delivered through our S⁷ Operating System

3



Savage Services Operations



Coke Services

- in-plant handling and management
- dedicated transportation systems
- distribution terminals and ports



The Savage Approach to Creative Solutions

- Mission – Deliver Distinctive and sustainable services from an operator's viewpoint
- Materials management and transportation systems
- Facilities and related services
- Savage is committed to delivering Best Value-No Worry service

5



Frontier Refinery Coke Handling System Description & Challenges



Challenges:
Labor intensive,
double handling of
petcoke, etc.



6



Customer Specific Needs

- **Technical Criteria**
 - Cutting Cycle
 - Material Flow from the Drums
 - Product Dewatering and Sizing
 - Eliminate Multiple Handling of Product
 - Stockpile Management
 - SH&E Requirements
 - System Reliability
 - Best Value

7

SAVAGE

Creative Solution

- **Develop a seamless coke handling system by using proven technology in a new application**
 - Coke Delivery and Sizing
 - Coke Dewatering
 - Coke Conveying
 - Coke Stacking
 - Coke Reclaim
 - Coke Loading and Data Collection

8

SAVAGE

Coke Delivery and Sizing



9

SAVAGE

Coke Dewatering



10

SAVAGE

Coke Conveying



11

SAVAGE

Coke Stacking, Reclaiming, Loading and Data Collection



12

SAVAGE

Savage Operating Results

- Achieved the Technical and Financial Criteria
- Improved Safety
- Improved Environmental
- Improved Reliability
- Achieved Seamless Handling
- Less Labor Intensive
- Improved Operations
- Delivering Best Value – No Worry Service

13



Thank You



14



Savage Services Corporation

- 801.944.6600
- Troy@SavageServices.com
- BoydD@SavageServices.com
- www.SavageServices.com