



Weatherford[®]



The Asset Capturing System (ACS)

A.K.A. The Closed Loop Gas Recirculation Unit



What is the Asset Capture System

- The Asset Capturing System (ACS) is an equipment package can be used for post Frac sand cleanouts
- Other possible well applications include well testing, completions, pipeline pigging / evacuations, early production and some drilling applications
- Package includes compression, separation equipment and Data Acquisition completions system

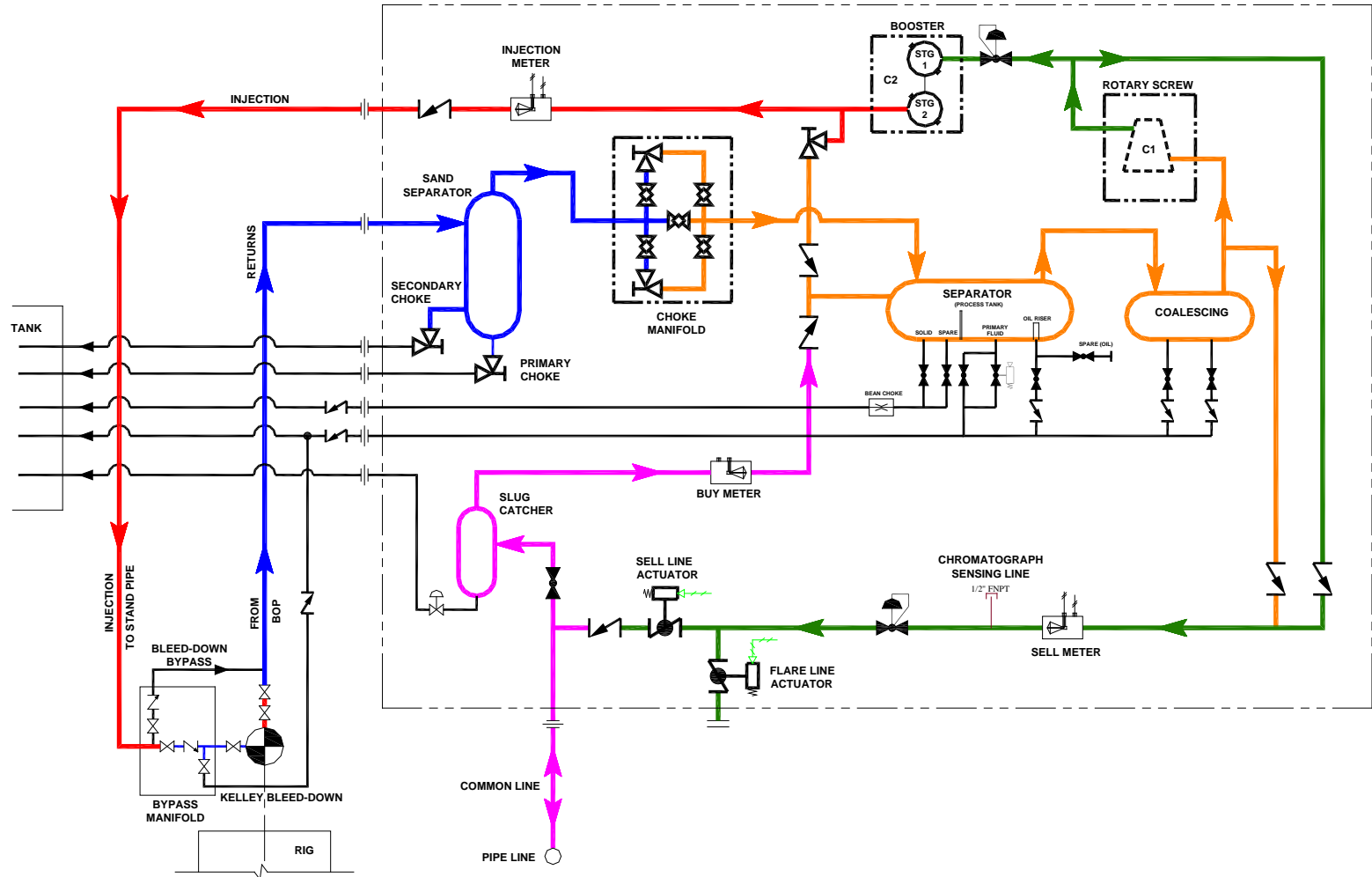


How does it work

- Buy natural gas to prime the system
- Sell excess recycled natural gas
- Four phase separation
- De-liquefied through the separation and coalescing components
- All well returns are piped into this closed loop system virtually eliminating the release of gas to atmosphere



Process Flow





Development of ACS

- In 2002 there was a negative impact of flaring natural gas
- Wasted Revenue
- The Solution
 - Eliminate Flaring
 - Use Existing Equipment
 - Pilot Project



Generation I - Pilot Project





Generation I Features

- Used primarily equipment we owned
- Built 4 phase separator (pressure tank)
- Skid mounted
- Operator driven



Generation I - Pilot Project Completion



- The 3-well pilot program was a success. The project commenced in January 2004
 - Economic
 - Gas was captured and not flared
 - Minimal emissions
 - Recyclable system worked



Closed Loop

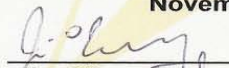
Certificate of Recognition

This Certifies that


***WEATHERFORD
UBS***

Has Demonstrated Exceptional Leadership
By Developing And Operating The "Greenhouse Gas" Unit,
Which Is A Great Example Of Twinning Environmental
Improvements With Safer Operations.

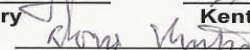
November 30, 2005



Jim O'Leary



Kent Sauvageau



Doug Chester



Leadership



Gaining Momentum

- Recognition of the “Closed-Loop” approach is continuing to gain recognition by customers as well as regulatory agencies. With the completion of 200 wells for BP and with support from Conoco/Phillips 4 more systems were constructed
- In 2006 Conoco/Phillips utilized 4 ACS Units on their completions projects
- Generation II ACS came on line



Generation II Features

- More mobile system (trailer mounted)
- DAQ House (computer)
- Fuel tank and rig up trailer (goose neck trailer)
- Automation started
- Increased the size of the separator



ACS Generation II - Booster Trailer





ACS Generation II - Separation Trailer





ACS Generation II-DAQ House and Pipe / Fuel Trailer





ACS Generation III

**Incorporating 6 years of “lessons learned” into
1 fully integrated system**





Generation III Improvements

- More automation less human error
- Increase the size of the separator again (performance and efficiency)
- Bigger coalescence filters (dry gas)
- Smaller footprint (less trailers)



Generation III - Features

- Oxygen Sensor (Automated Pipeline Bypass)

Reduction in personnel at well site

Reduce possibility of operator error



Generation III - Features

- Automated levels - sweet spot (separator liquid)

Reduction in personnel at well site

Eliminate the possibility of operator error

- Introduction of Data Pro (information gathering system)
- Overall System is more user friendly



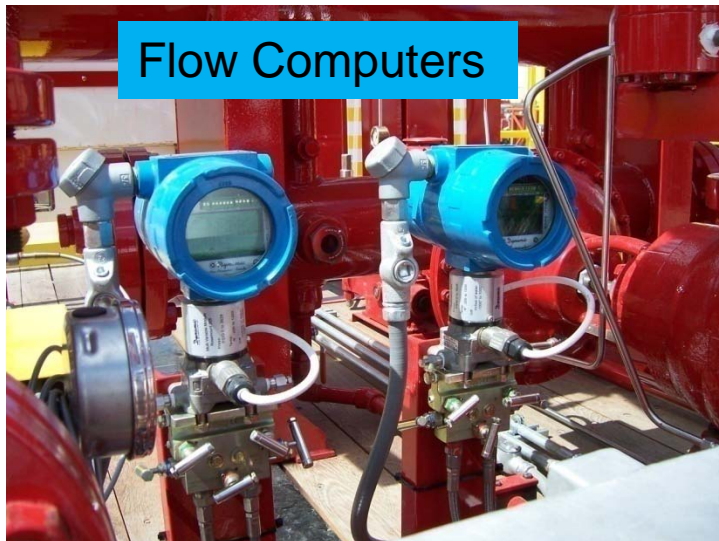
Generation III DataPro



Wireless Sensors

Less cables on Job Site
Faster Rig-Up,

The Wolverine Outdoor Monitor
Choke Operator can monitor
data while operating choke





Generation III Automation



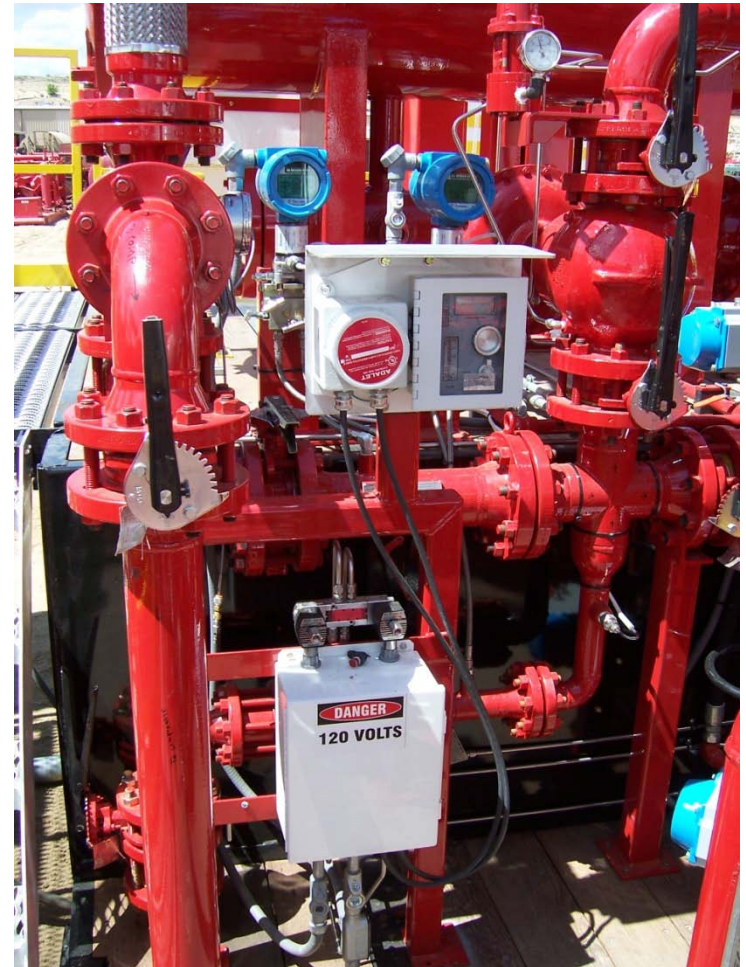


Generation III DataPro

DataPro MTL (PLC and Wireless Transmitter)



Trace Oxygen Analyzer





Generation III Features Continued

- Real Time Data Acquisition. LCD monitors located at chokes and in DAQ house
- Capable of metering bought, sold and injected gas to AGA custody transfer standards
- Equipped with 1500 gal double wall fuel tank enough
- Complete Rig-Up to cover multiple wells on same pad without move
- Small footprint and fast rig-up



Generation III Features Continued

- Two (2) onboard and integrated chemical pumping systems for foams, de-foams and methanol including metering
- Two (2) 1 barrel chemical tanks
- Electrical Generator with 20' light tower
- Mist Pump System with two (2) 10 bbl mixing tanks
- OSHA compliant Catwalks, Handrails and Ladders
- Class 1 Div 2 electrical devices and XPFC electric motors
- 5600 watts of lighting
- Independent emergency shutdowns including 1 master shutdown for complete system



ACS Generation III Small Footprint





Generation III - ACS Compression Trailer





Generation III - ACS Separation Trailer





Generation III - ACS Support Trailer





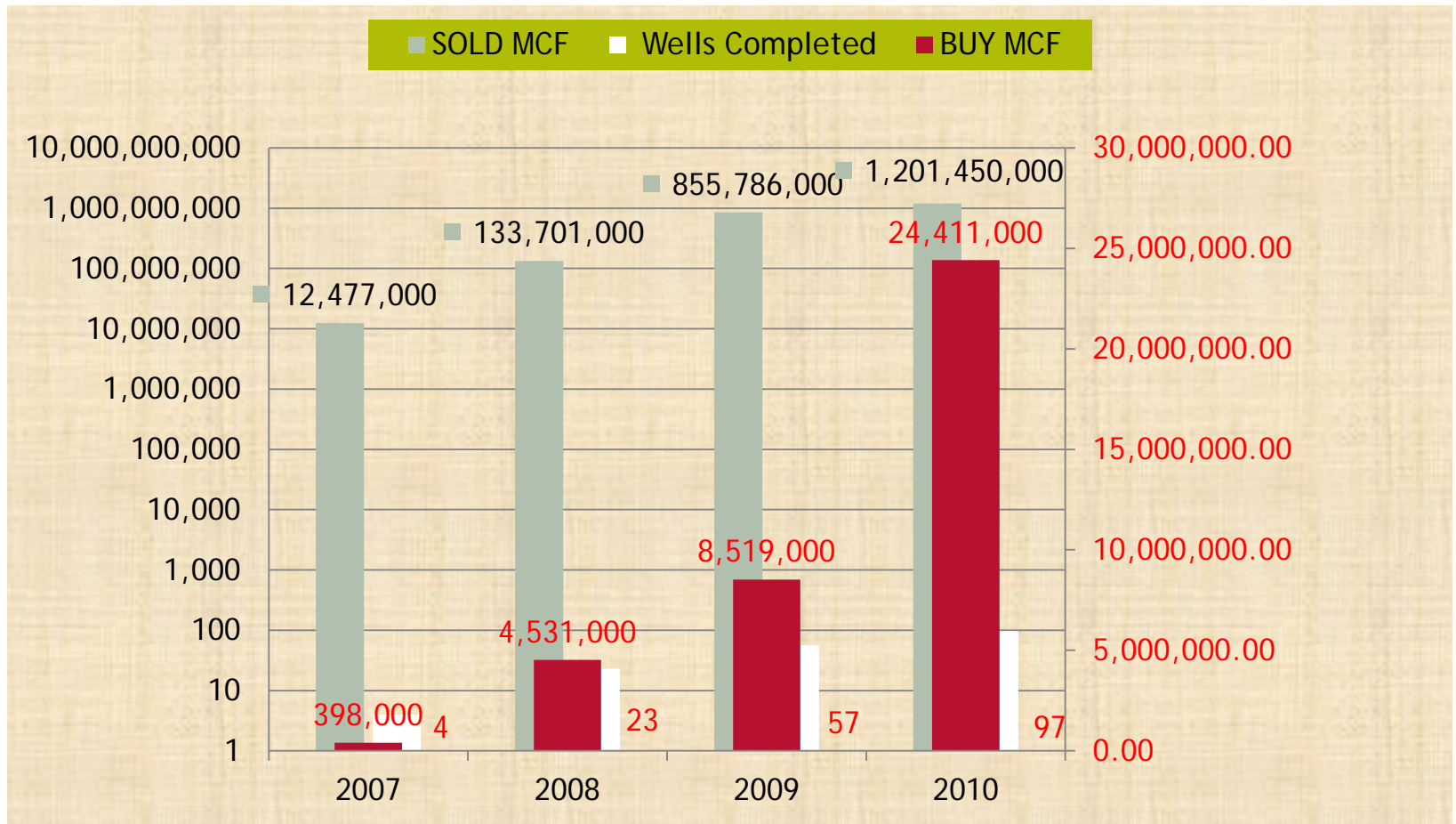
Basic Performance

- This system has the capability to compress and sell up to 5 MMSCFD of gas to pipeline while simultaneously injecting gas at higher pressures into the well for clean-out operation
- During flow back operations this unit is capable of cleaning and selling 20 MMSCFD
- RESULTS: Increase in gas sales due to no flaring



Actual Conoco Buy and Sells volumes

- BUY AND SELL WITH AMOUNT OF WELLS





Benefits

- Reduce corrosion factors (no air)
- Continued flowback for extended periods without concern of emissions or contaminants continued flowback with ability to sell dried gas
- Improve our client's public relations and environmental reputation
- maintain back pressure without contaminating well site



Qualification of ACS Candidates

- High volume wells
- Possibility of down hole fires
- Wells that are drilled close to pipeline
- Underbalanced completions
- The ACS continues to evolve with new equipment and applications. Initially designed for post-well stimulation flowbacks and cleanouts, the equipment is being considered for drilling applications. Weatherford is focused and committed to providing customer specific solutions for these closed loop applications



Another Green Completion

