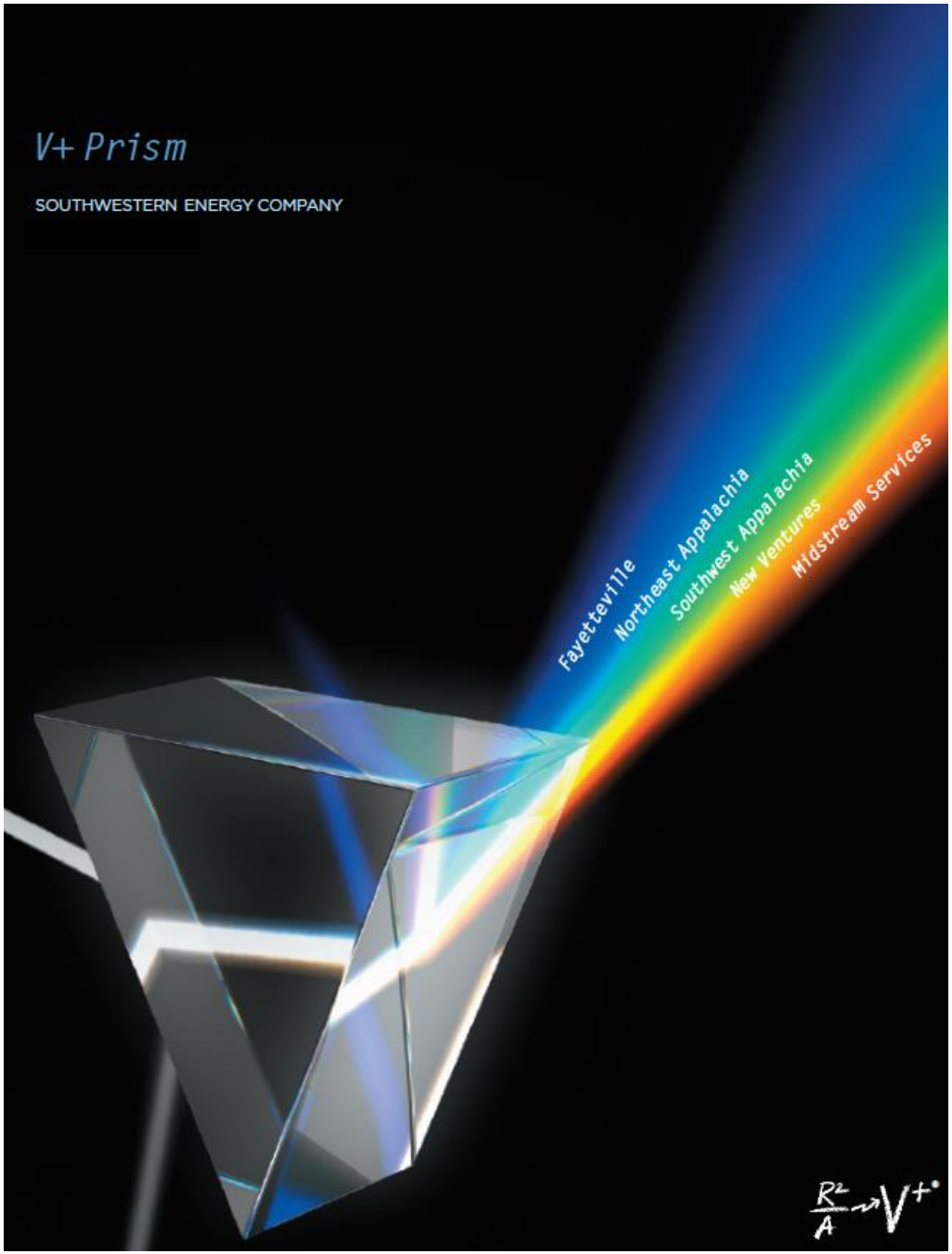


Southwestern Energy®

EPA Natural Gas STAR 2015 Annual Implementation Workshop

Rocket Rigs, Fuel Cells and Super Emitters

Douglas Jordan
Director
Corporate Environmental Programs

Todays Outline

- SWN Overview
- SWN EPA Natural Gas STAR
- SWN Rocket Rigs
- SWN Fuel Cell Project
- SWN SMART LDAR+

Forward-Looking Statements

All statements, other than historical facts and financial information, may be deemed to be forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements that address activities, outcomes and other matters that should or may occur in the future, including, without limitation, statements regarding the financial position, business strategy, production and reserve growth and other plans and objectives for the company's future operations, are forward-looking statements. Although the company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. The company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. You should not place undue reliance on forward-looking statements. They are subject to known and unknown risks, uncertainties and other factors that may cause the company's actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. In addition to any assumptions and other factors referred to specifically in connection with forward-looking statements, these risks, uncertainties and factors include, but are not limited to: the volatility of commodity prices; access to and cost of capital for operations and capital investments; access to and availability of transportation, processing and refining facilities; success in discovering, developing, producing and estimating reserves including timing concerns and the intent to focus in specific areas or formations; the impact of regulation, including any increase in taxes, legislation relating to hydraulic fracturing, the climate, accounting and other operational matters; the costs and availability of equipment, services, resources and personnel required to complete the company's operating activities; success in property acquisition or divestiture activities; adverse outcomes in material litigation actions; environmental and weather risks; increased competition; credit risk relating to the financial strength of the company's counterparties; electronic, cyber or physical security attacks, including acts of war or terrorism; and any other factors listed in the reports the company has filed and may file with the Securities and Exchange Commission (SEC). For additional information with respect to certain of these and other factors, see the reports filed by the company with the SEC.

The SEC has generally permitted oil and gas companies, in their filings with the SEC, to disclose only proved reserves that a company has demonstrated by actual production or conclusive formation tests to be economically and legally producible under existing economic and operating conditions. We use the terms "estimated ultimate recovery," "EUR," "probable," "possible," and "non-proven" reserves, reserve "potential" or "upside" or other descriptions of volumes of reserves potentially recoverable through additional drilling or recovery techniques that the SEC's guidelines may prohibit us from including in filings with the SEC. These estimates are by their nature more speculative than estimates of proved reserves and accordingly are subject to substantially greater risk of being actually realized by the company.

The contents of this presentation are current as of January16, 2015.

Vertically Integrated Company

North American Areas of Operation

RESERVES & PRODUCTION

2013 Reserves: 6,976 Bcfe
2013 Production: 657 Bcfe
2014 Estimated Production: 758-764 Bcfe

A NORTHEAST APPALACHIA
2013 Reserves: 1,963 Bcf (28%)
2013 Production: 151 Bcf (23%)
Net Acres: 292,446 (12/31/13)

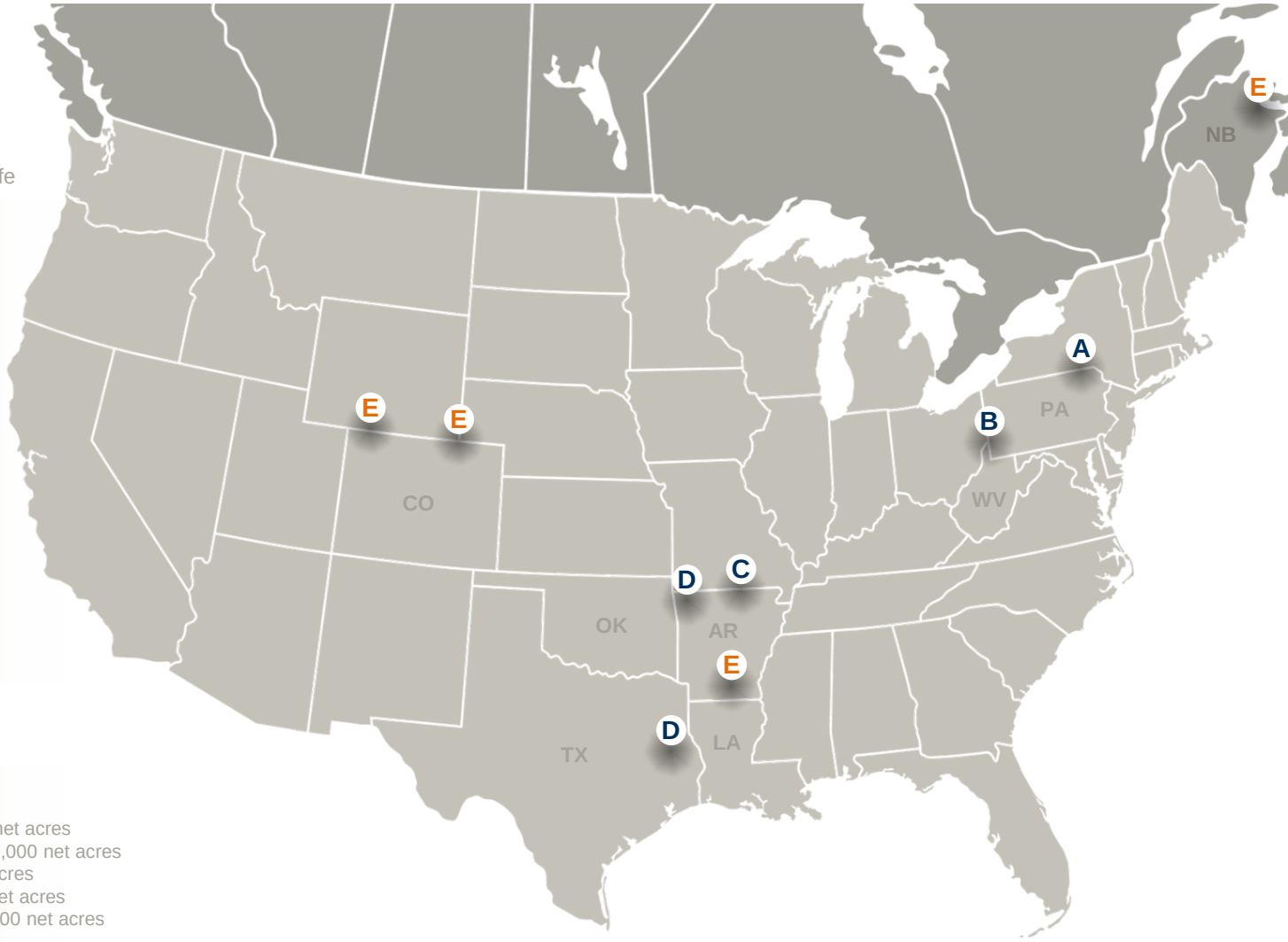
B SOUTHWEST APPALACHIA
July 2014 Reserves: 2.5 Tcfe
Dec 2014 Production: 370 Mmcfe/d
Net Acres: 443,000 (Dec 2014)

C FAYETTEVILLE SHALE
2013 Reserves: 4,795 Bcf (69%)
2013 Production: 486 Bcf (74%)
Net Acres: 905,684 (12/31/13)

D ARK-LA-TEX
2013 Reserves: 215 Bcf (3%)
2013 Production: 18 Bcf (3%)
Net Acres: 152,937 (12/31/13)

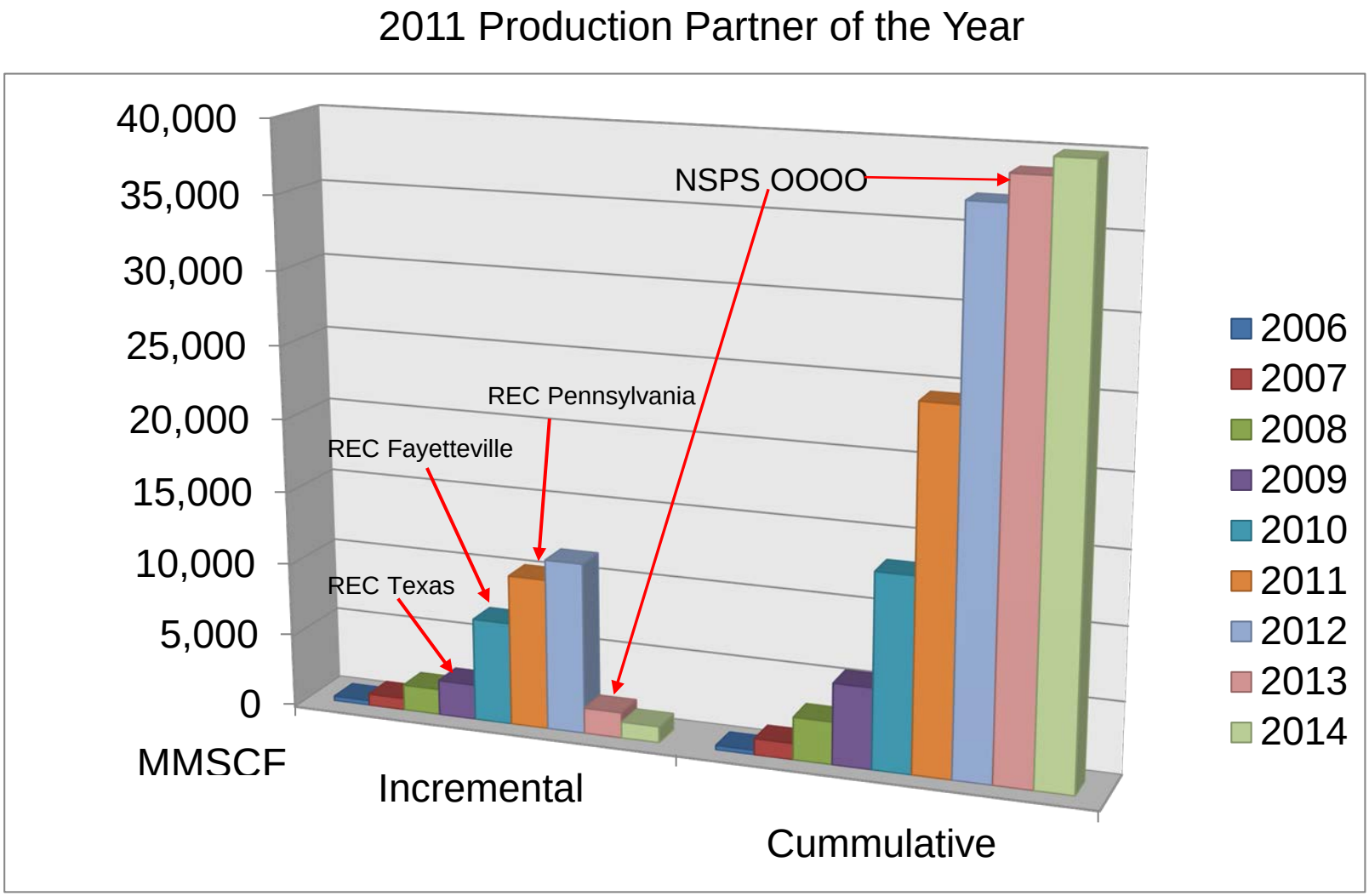
NEW VENTURES

E EXPLORATION
Sand Wash Basin – Approx. 380,000 net acres
Denver Julesburg Basin – Approx. 302,000 net acres
Brown Dense – Approx. 350,000 net acres
New Brunswick – Approx. 2.5 million net acres
Undisclosed Ventures – Approx. 685,000 net acres

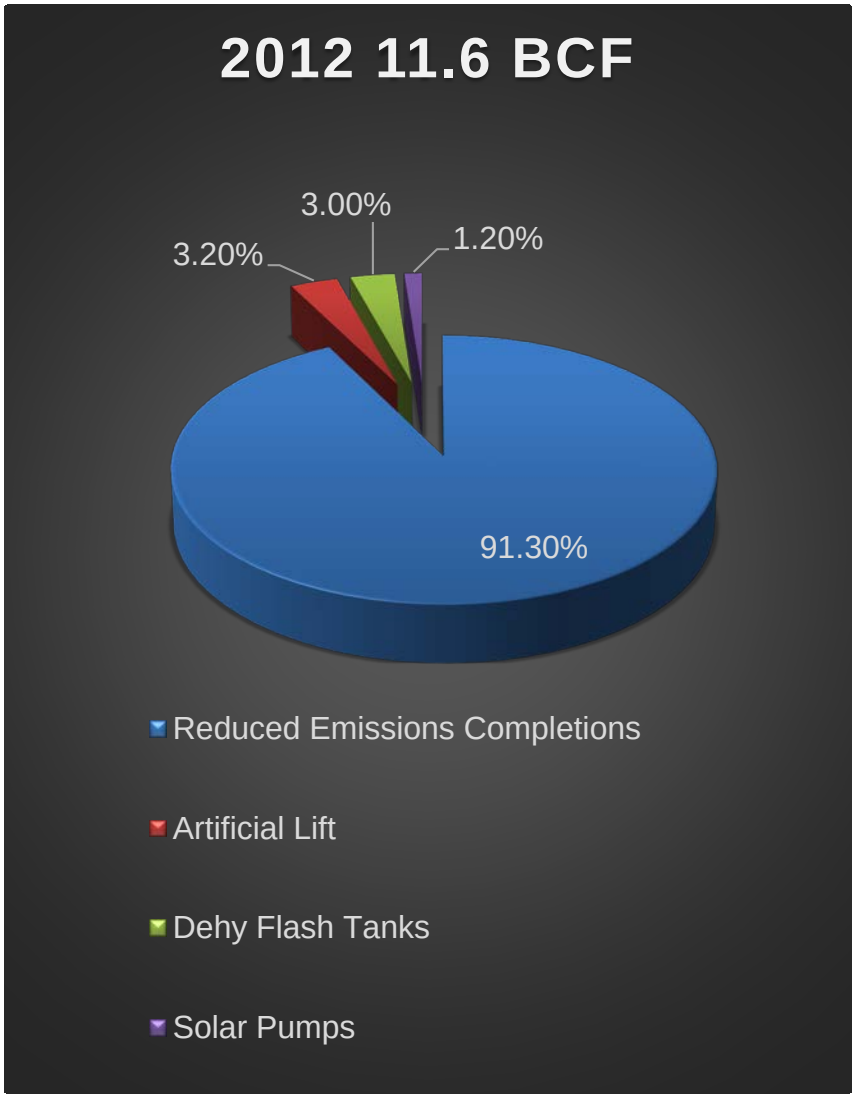


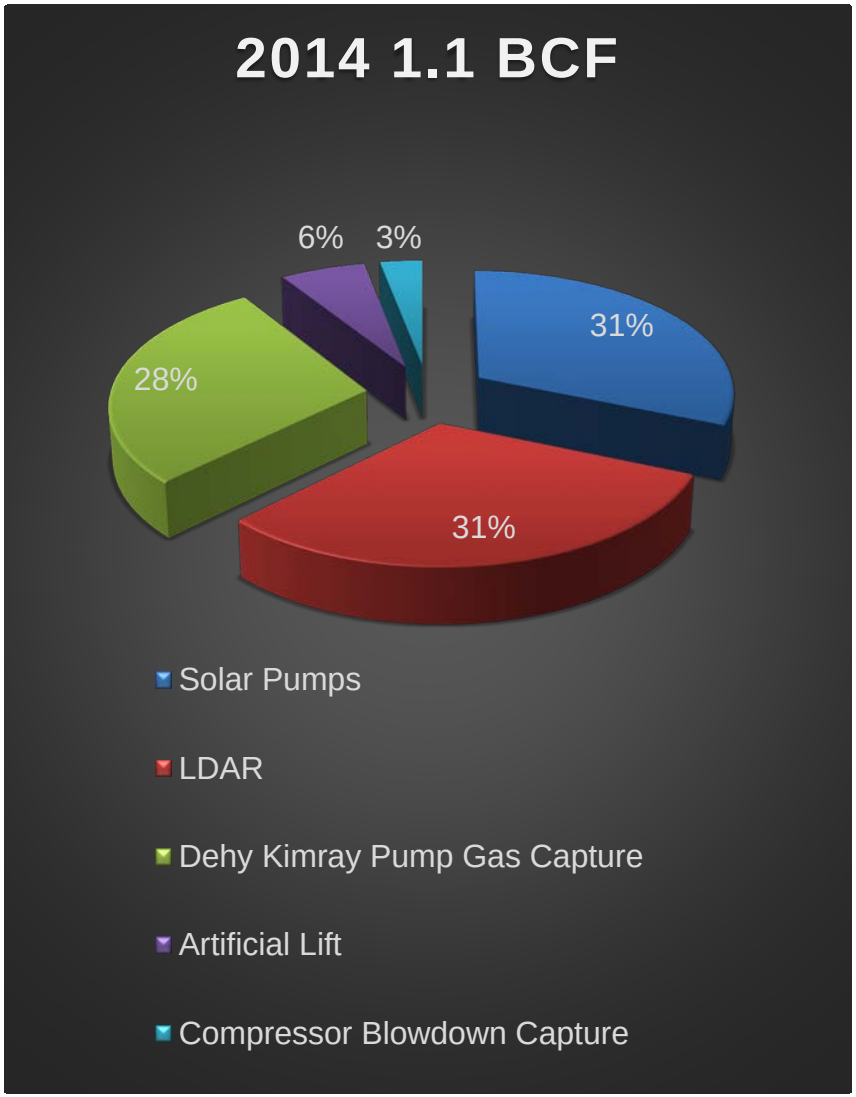
Notes: Ark-La-Tex acreage excludes 124,220 net acres in the conventional Arkoma Basin operating area that are also within the company's Fayetteville Shale focus area. Reserves as of December 31, 2013 except for Southwest Appalachia, which is July 1, 2014.

SWN EPA Natural Gas STAR Reductions

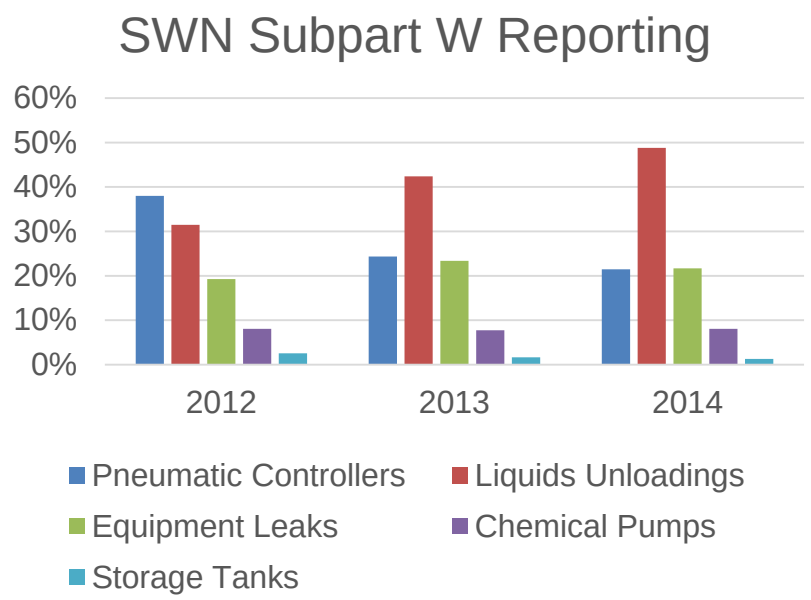


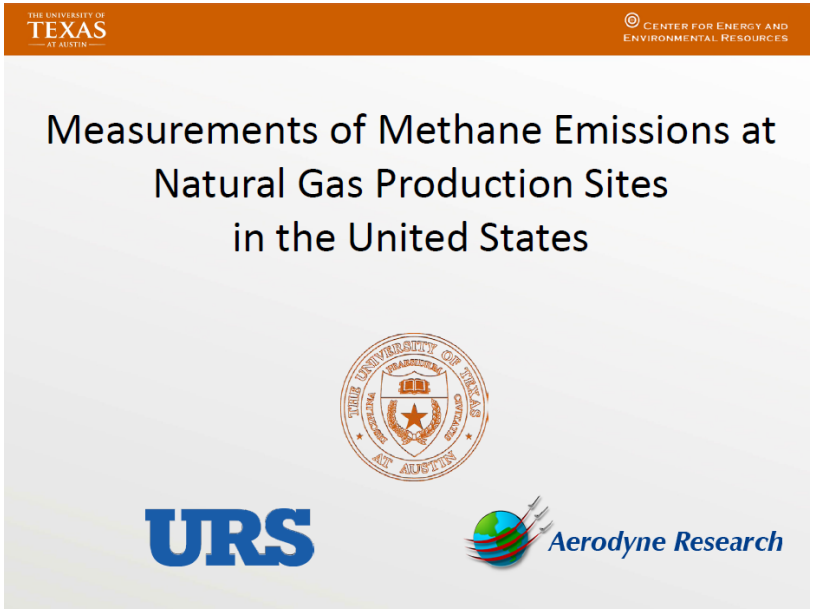
SWN EPA Natural Gas STAR Reductions





Where Are The Opportunities





Methane Emissions from U.S. Natural Gas Gathering and Processing

Anthony Marchese[1,*], Daniel Zimmerle[2], Timothy Vaughn[1], David Martinez[2],, Laurie Williams[2], Allen Robinson[3], Austin Mitchell[3], Daniel Tkacik[3], R. Subramanian[3], Scott Herndon[4], Rob Roscioli[4]

[1]Department of Mechanical Engineering, Colorado State University, [2]The Energy Institute, Colorado State University, [3]Department of Mechanical Engineering, Carnegie Mellon University, [4]Aerodyne Research

** Principal Investigator, http://www.engr.colostate.edu/~marchese*

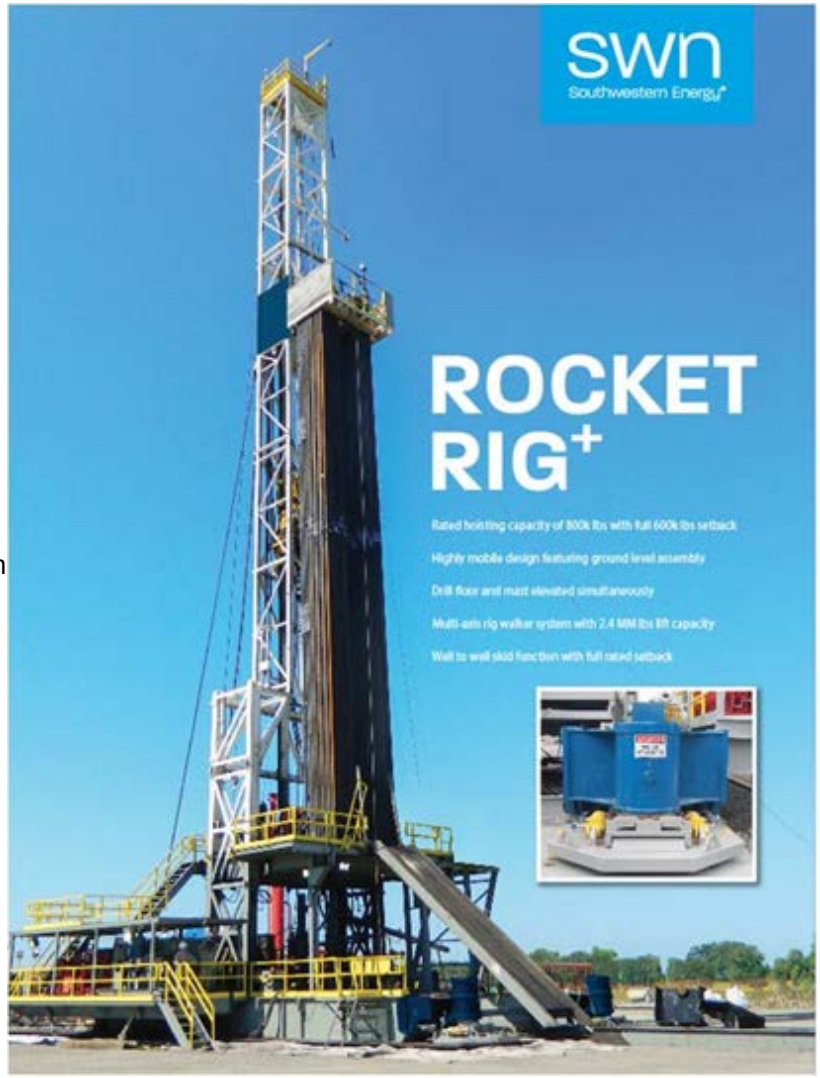
Colorado State University

SWN Rocket Rigs

- 15 Rigs in SWN fleet
- Initial Conversion 2013
- 7 SWN rigs dual fuel
  - Rigs with multiple variable speed engines do not lend themselves to cost effective conversion

SWN Rocket Rigs

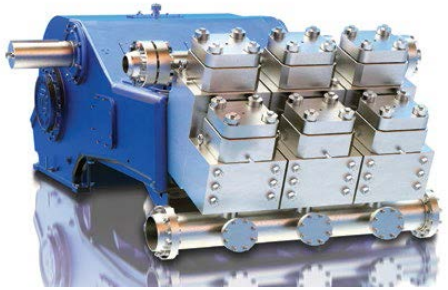
Electric driven Canrig Top Drive
4 times the torque power



Rack and move
20,000 ft of pipe

Caterpillar Dynamic Gas Blending System
Diesel or Blended Fuel Options

Gardner Denver 2400 hp pump
Replaces two “conventional” pumps



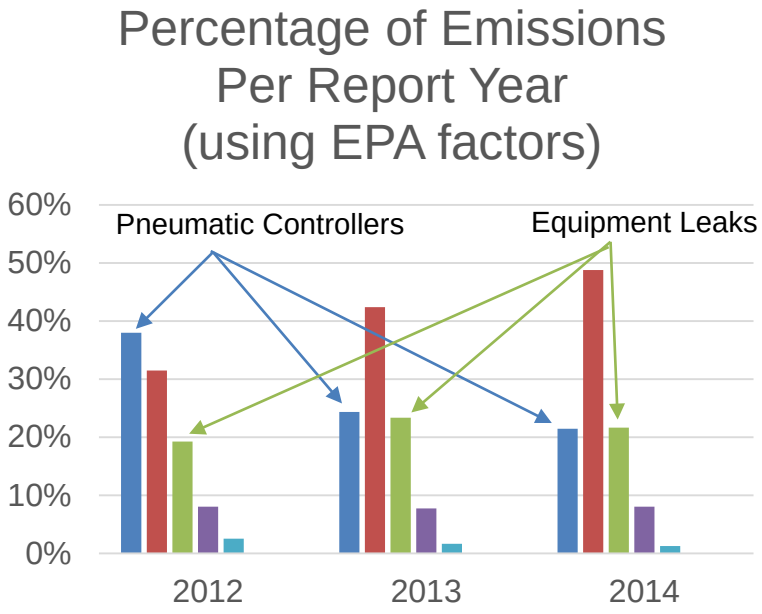
SWN Rocket Rigs Walk

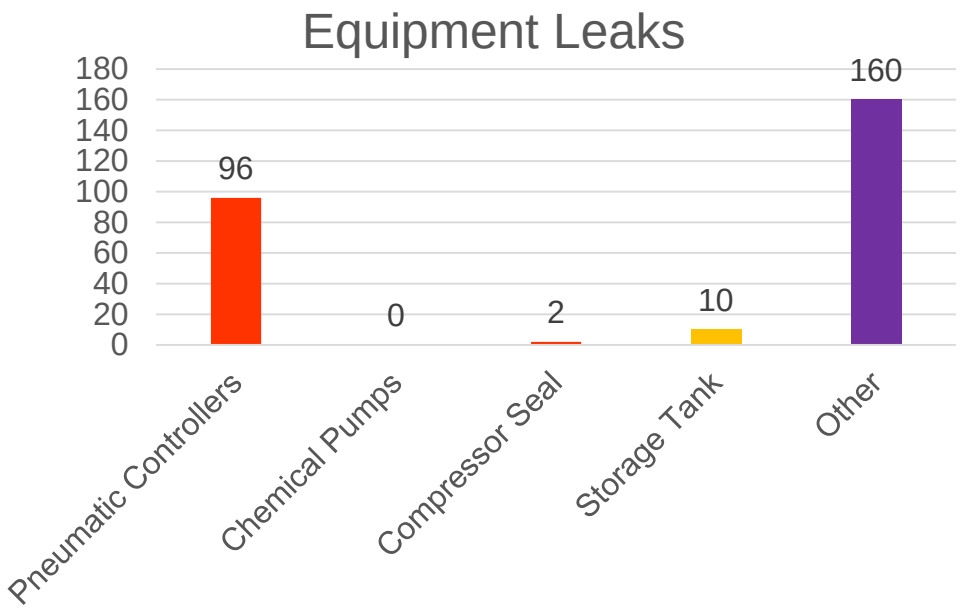
SWN Rocket Rigs

- Burns Diesel Fuel and Natural Gas
- Reduction in fuel use and cost
  - Up to 70% substitution of diesel
  - Up to 50% savings in fuel cost
- Conversion Cost
  - ~$450,000 per rig
- Reduction in NOx, CO, VOC, **CO2**
  - NOX
    - Gas = 14.87 lbs
    - Diesel = 17.97 lbs
  - CO2
    - Gas = 1555 lbs CO2/hr
    - Diesel = 1625 lbs CO2/hr
- Reduction in emissions associated with rig relocation
- Reduction in truck road traffic
- Low price of diesel affects cost savings

Rig	Average Substitution (2014)	Total Gas MCF (2014)	Total Savings (2014)
1	40%	21103	$405,000
2	68%	24255	$408,000
3	53%	20616	$331,000
4	53%	16739	$253,000
5	59%	13188	188,000
6	55%	4741	$54,000
Total	55%	100642	$1,640,000

SWN Fuel Cell Project





SWN Fuel Cell Project

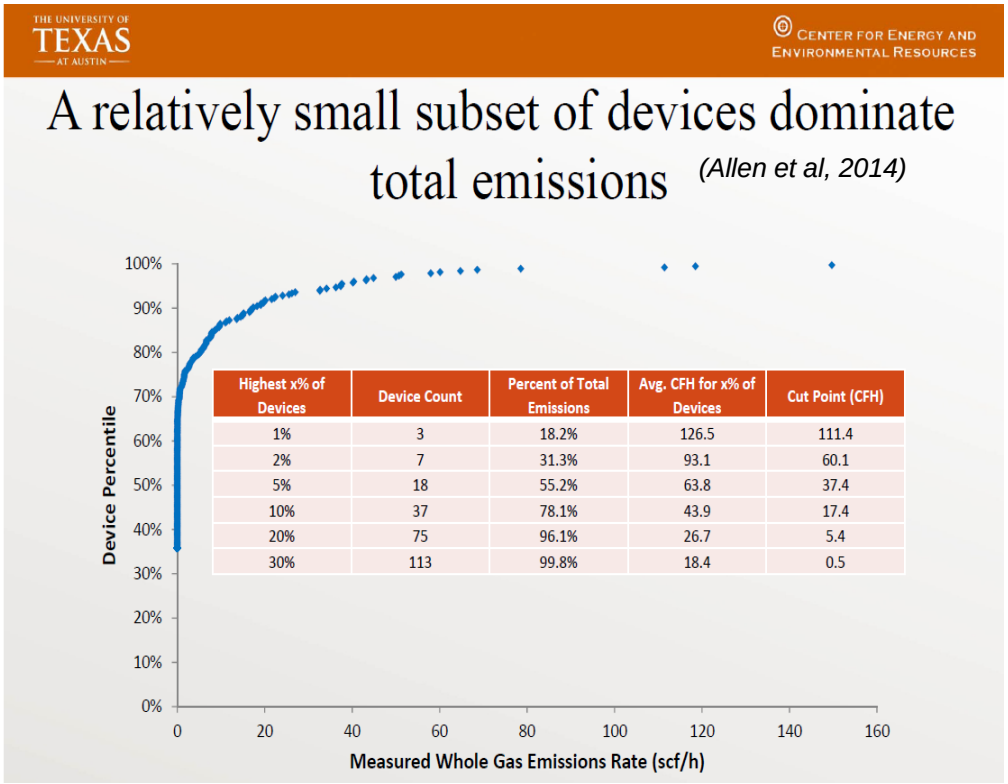
- Key Components
  - Intermittent Level Controller
  - 500 kW Fuel Cell
  - Fuel Gas Dryer
  - Batteries
  - Air Compressor

SWN Fuel Cell Project

- Implementation Cost
  - $35,000
- Fuel Use
  - 137 scfd
  - 50 MCFY
  - $200/year
- Methane Reduction
  - EPA Subpart W
    - 13.5 scfhr/intermittent controller
    - 118 MCFY or $472 (@$4/mcf)
    - 25 controllers for 3-year break even
  - SWN Estimate
    - 3 scfd/intermittent controller
    - 1 MCFY or $4/year
    - >3,000 controllers for 3-year break even (cost vs savings)

SWN SMART LDAR +

- Chasing the “Fat Tails” (Super Emitters)



Highest x% of Devices	Device Count	Percent of Total Emissions	Avg. CFH for x% of Devices	Cut Point (CFH)
1%	3	18.2%	126.5	111.4
2%	7	31.3%	93.1	60.1
5%	18	55.2%	63.8	37.4
10%	37	78.1%	43.9	17.4
20%	75	96.1%	26.7	5.4
30%	113	99.8%	18.4	0.5

Studies suggest that emissions are dominated by a small fraction of ‘super emitter’ sources at well sites, gas-processing plants, coproduced liquids storage tanks, transmission compressor stations, and distribution systems.”*(Brandt et al, 2014)*

SWN SMART LDAR

Opcal EyeC Gas

FLIR

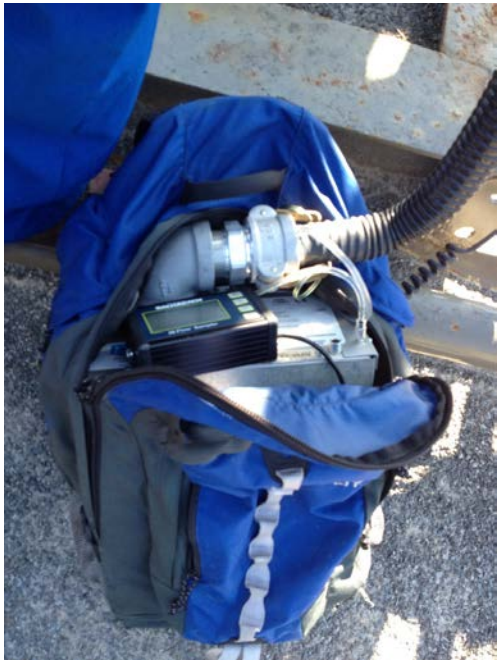
- Implemented by SWN personnel
- New and Existing Facilities
- Components and Equipment
- Annual Survey
- Leak Repair within 15 Days
- Recordkeeping for Trend Review

SWN SMART LDAR – “Enhancement” Tools

- Heath Remote Methane Leak Detector (RMLD)
  - Tunable Diode Laser Absorption Spectroscopy (TDLAS)
  - Methane Specific
  - <50 ppm

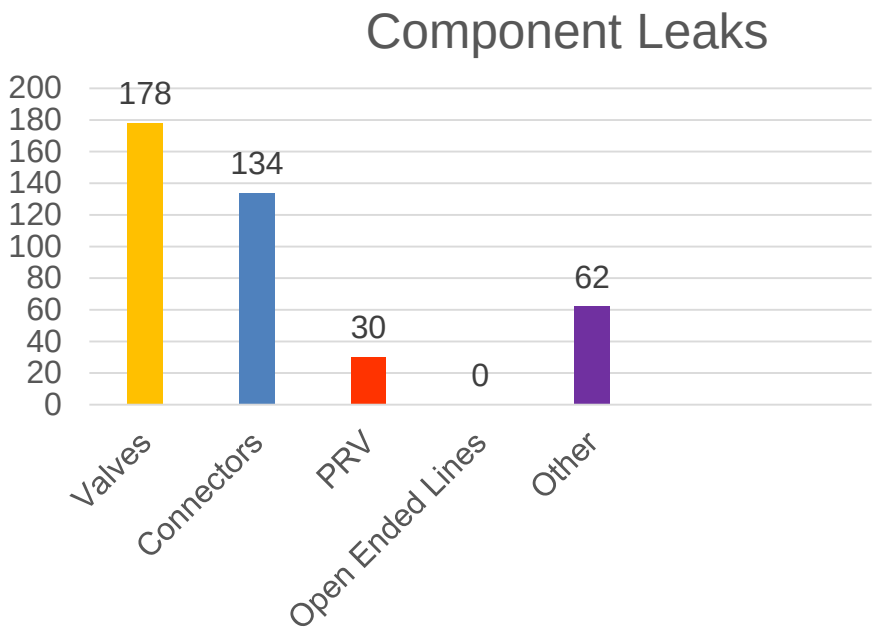
SWN SMART LDAR – “Enhancement” Tools

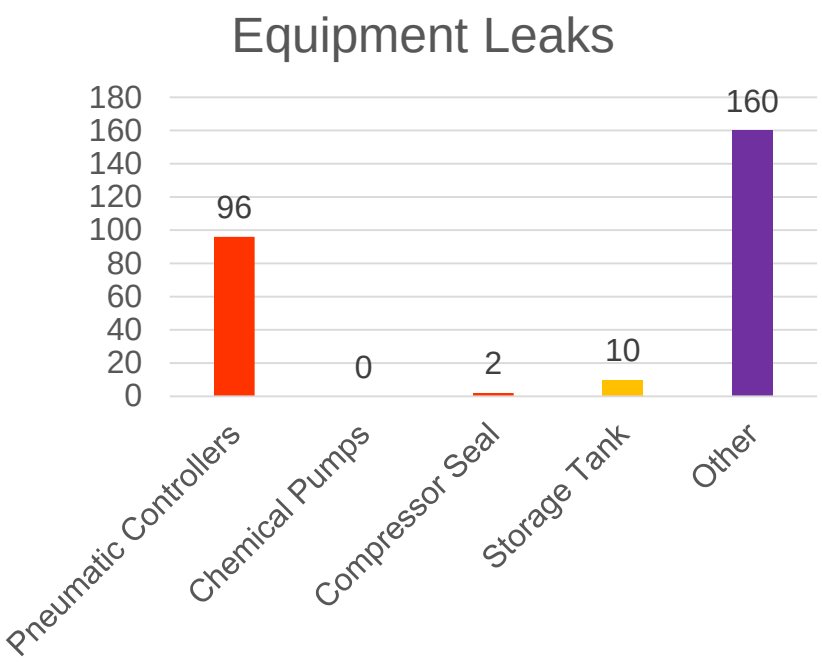
- Bacharach HiFlow
  - Quantifies Emissions (<10 cubic feet per minute)
  - Assists in identifying equipment as leaking or operating as intended



SWN SMART LDAR - Production

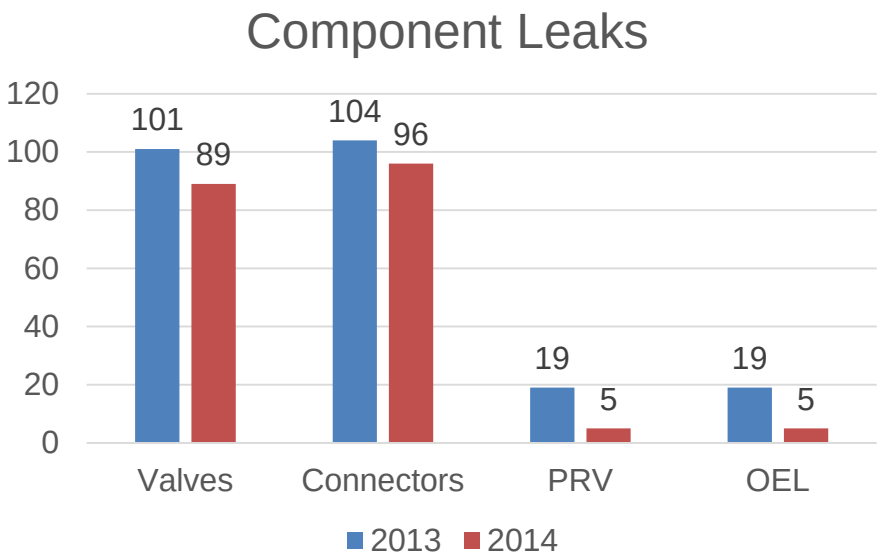
- SWN Production 2014
  - 3071 Wells
  - 769 leaking components/equipment
  - 148 MMSCF Estimated “Recovery”

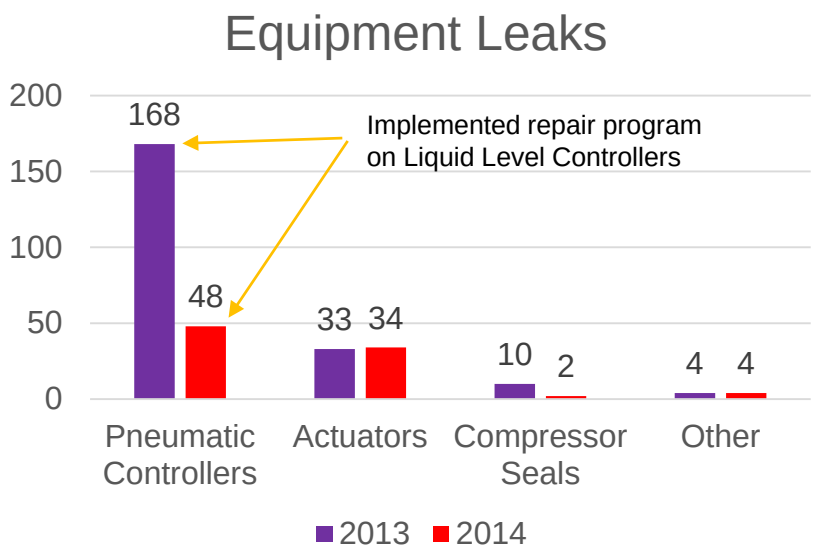




SWN SMART LDAR – Midstream

- 2014 LDAR
  - 458 Leaks
  - 201 MMSCF estimated recovery
- 2015 LDAR
  - 283 leaking components/equipment
  - 63 MMSCF estimated recovery

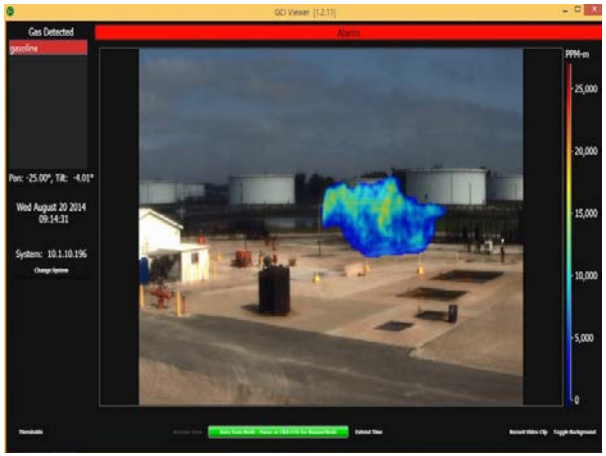




More “Super Emitter” Chasing

EDF Detector Challenge

Piccaro Surveyor



Rebellion Photonics
Gas Cloud Imaging

ARPAE MONITOR