

VAPOR SYSTEMS TECHNOLOGIES, Inc. SINCE 1989



SPECIALIZES IN:

- DEVELOPMENT
- ENGINEERING
- MANUFACTURING
- SALES OF INNOVATIVE PRODUCTS SOLD INTO THE GDF SEGMENT OF THE PETROLEUM INDUSTRY

(HOSES, SAFETY BREAKAWAYS, NOZZLES, AND MEMBRANE PROCESSORS)

www.vsthose.com



ORVR SYSTEM SOLUTION

The VST ORVR Solution. Negative Pressure. Positive Cashflow.



CONSISTS OF – COMPLETE VST HANGING HARDWARE SET DESIGNED AND CERTIFIED AS A SYSTEM

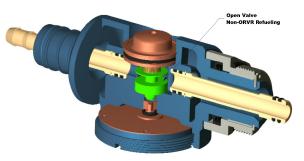
INCLUDES -

- WHIP HOSE
- SAFETY BREAKAWAY
- VACUUM ASSIST HOSE (INCLUDING ORVR VALVE)
- ENVIRO-LOC[™] NOZZLE

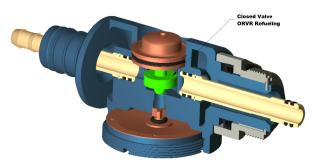


ENVIRO-LOC[™] ORVR VALVE

- RECOGNIZES ORVR AND NON-ORVR VEHICLES
- OPEN = NON-ORVR VEHICLES
- CLOSED = ORVR VEHICLES
- PATENTED TECHNOLOGY
- ADDITIONAL PATENTS
 PENDING

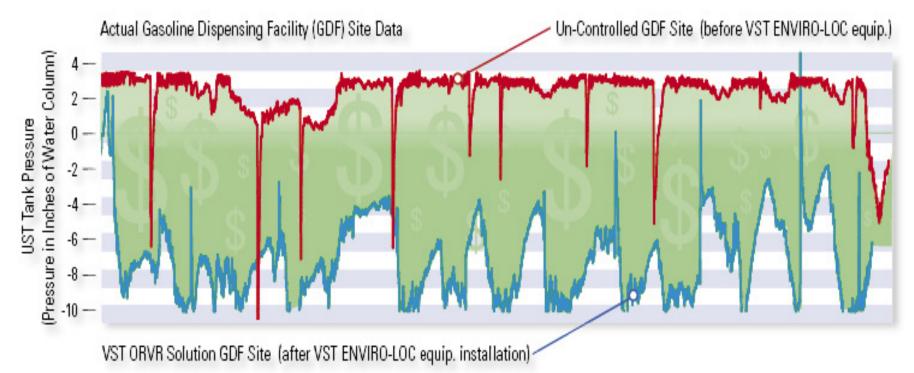


VST ENVIRO-LOC[™] ORVR VALVE



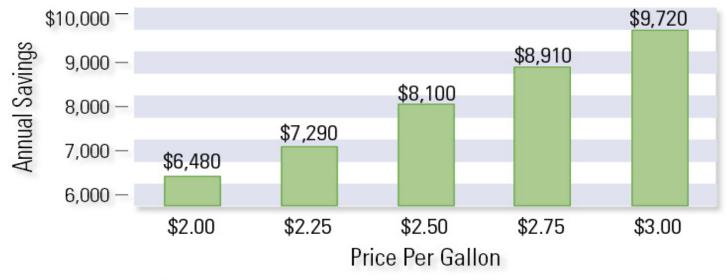
VST ENVIRO-LOC[™] ORVR VALVE





FUGITIVE EMISSIONS CAN NOT ESCAPE FROM NEGATIVE UST PRESSURES





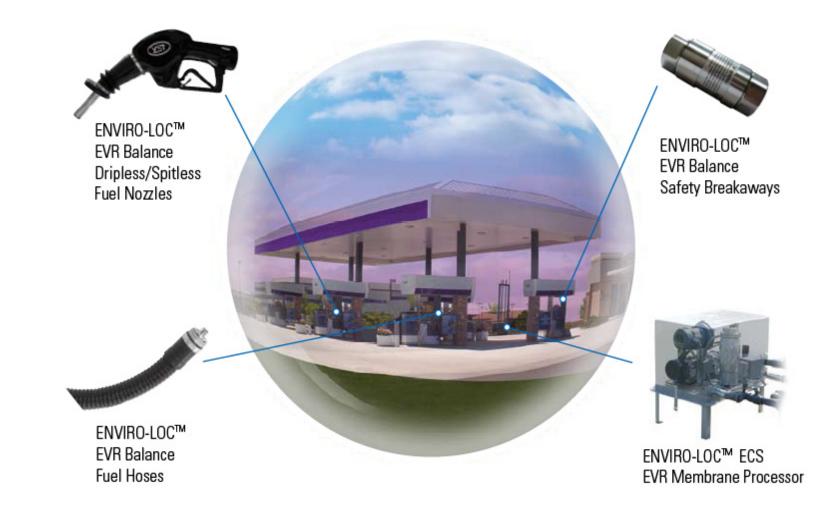
Savings Formula:

Gallons per Month x Vaporization Standard x Price per Gallon x 12 months = Additional Profit Dollars

Example: 150,000 Gal./Mo. x 0.0018 x \$2.25/Gal. x 12 = \$7,290

SAVINGS TODAY: 150,000 x .0018 x \$3.00 x 12 = \$9,720

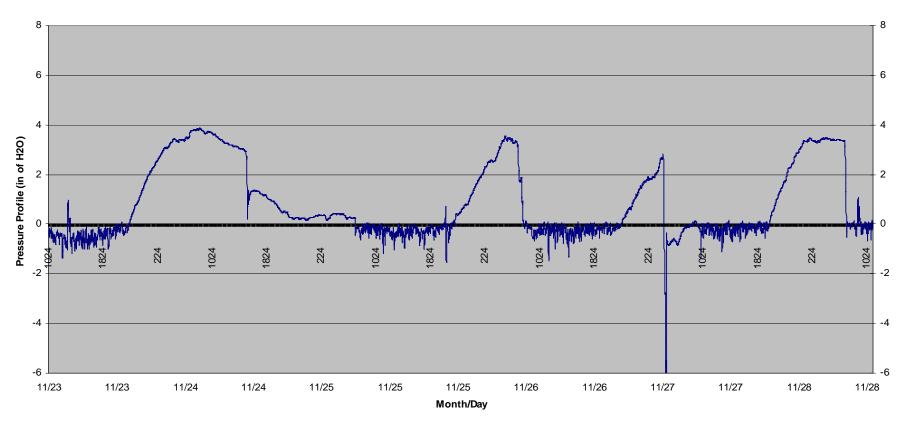
VST Simple Solution for Vapor Recovery



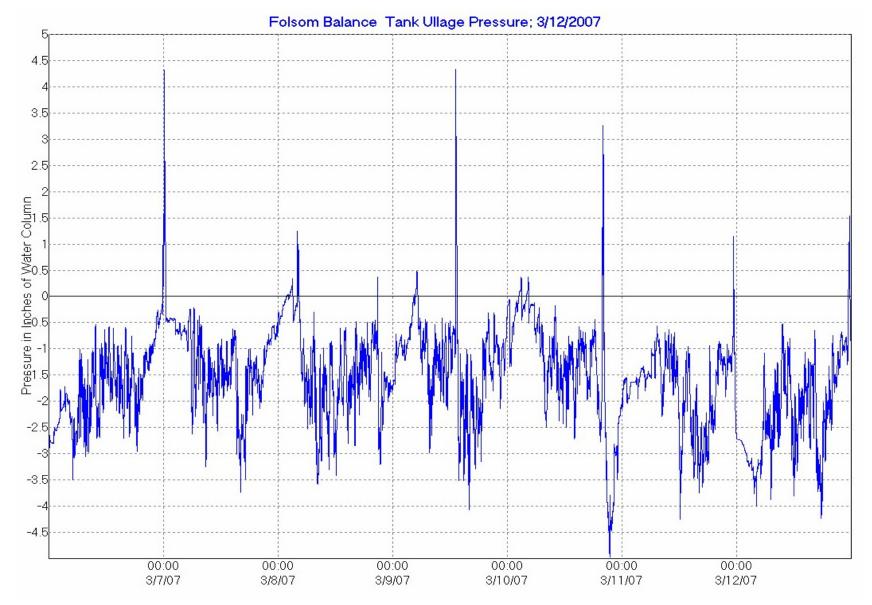


No ECS Membrane Processor Pressure Profile Challenge Mode Test Site

Riverside Ullage Pressure Profile



VSTPressure Profile with ECSMembrane Processor



ENVIRO-LOCTM



Enhanced Vapor Recovery Nozzles

Nozzle Category	Current USA Standards	CARB EVR Requirement	CARB Test Results
A. Liquid Retention	No known standard	\leq 100 ml. per 1,000 gal. dispensed	≤ 14.759 ml. per 1,000 gal. dispensed
B. Spillage	\leq .42 lbs per 1,000 gal. dispensed	\leq .24 lbs. per 1,000 gal. dispensed	≤ .016 lbs. per 1,000 gal. dispensed
C. Spitting	No known standard	≤ 1.0 ml. per refueling	Zero
D. Drops/refueling	No known standard	** \leq 3 drops per refueling	≤ 2.375drops per refueling
		** (included in spillage totals)	



Vehicles Tested		TP-203.2 Efficiency (%)	Emission Factor (lbs/10 ³ gal)
Conventional	127	98.8	0.09
ORVR	73	96.2	0.04
Combined	200	98.5	0.07

Fugitive Emission Rate: 0.015408 lbs/ 1000 gal

ORVR penetration rate: 36.5% by vehicle population, 41.2% by gasoline dispensed.



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