

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification:	950-TKH-04
City:	Montrose County
State:	Colorado
Company:	Energy Fuels
Type of Tank:	Horizontal Tank
Description:	Gasoline storage tank

**Tank Dimensions**

Shell Length (ft):	12.50
Diameter (ft):	5.83
Volume (gallons):	2,000.00
Turnovers:	26.00
Net Throughput(gal/yr):	52,000.00
Is Tank Heated (y/n):	N
Is Tank Underground (y/n):	N

**Paint Characteristics**

Shell Color/Shade:	White/White
Shell Condition	Good

**Breather Vent Settings**

Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Grand Junction, Colorado (Avg Atmospheric Pressure = 12.37 psia)

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**Liquid Contents of Storage Tank**

**950-TKH-04 - Horizontal Tank**  
**Montrose County, Colorado**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 9)	All	55.06	48.57	61.56	52.95	4.1804	3.6638	4.7542	67.0000			92.00	Option 4: RVP=9, ASTM Slope=3

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**Detail Calculations (AP-42)**

**950-TKH-04 - Horizontal Tank**  
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Annual Emission Calculations

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Standing Losses (lb):	421.3316
Vapor Space Volume (cu ft):	212.5384
Vapor Density (lb/cu ft):	0.0507
Vapor Space Expansion Factor:	0.1763
Vented Vapor Saturation Factor:	0.6076
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	212.5384
Tank Diameter (ft):	5.8300
Effective Diameter (ft):	9.6351
Vapor Space Outage (ft):	2.9150
Tank Shell Length (ft):	12.5000
Vapor Density	
Vapor Density (lb/cu ft):	0.0507
Vapor Molecular Weight (lb/lb-mole):	67.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	4.1804
Daily Avg. Liquid Surface Temp. (deg. R):	514.7342
Daily Average Ambient Temp. (deg. F):	52.9333
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	512.6233
Tank Paint Solar Absorptance (Shell):	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	1,578.3125
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.1763
Daily Vapor Temperature Range (deg. R):	25.9688
Daily Vapor Pressure Range (psia):	1.0903
Breather Vent Press. Setting Range (psia):	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	4.1804
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	3.6638
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	4.7542
Daily Avg. Liquid Surface Temp. (deg R):	514.7342
Daily Min. Liquid Surface Temp. (deg R):	508.2420
Daily Max. Liquid Surface Temp. (deg R):	521.2264
Daily Ambient Temp. Range (deg. R):	25.6333
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.6076
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	4.1804
Vapor Space Outage (ft):	2.9150
Working Losses (lb):	346.7735
Vapor Molecular Weight (lb/lb-mole):	67.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	4.1804
Annual Net Throughput (gal/yr.):	52,000.0000
Annual Turnovers:	26.0000
Turnover Factor:	1.0000
Tank Diameter (ft):	5.8300
Working Loss Product Factor:	1.0000
Total Losses (lb):	768.1052

**TANKS 4.0.9d**  
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**Individual Tank Emission Totals**

**Emissions Report for: Annual**

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Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Gasoline (RVP 9)	346.77	421.33	768.11

