

Pit Additive Comparison Study Central Iowa (2018)

Swine manure in two different pits at the same site used two different pit treatment products – PENERGETIC g (for pig slurry) and a competitive product. [Otherwise conditions identical: same feed ration, same age/gender, same genetics, etc.]

Results from testing manure:

	Total N	Phosphorus	Potassium	Sulfur
Pit One (competitive product)	45	30	38	7
Pit Two (PENERGETIC)	55	37	39	7.5

PENERGETIC-treated manure tested: 22.2% higher in Total N, 23.3% higher Phosphorus and had 7.1% more Sulfur

Pit Additive Comparison Study Central Iowa (2018) continued...

Manure from both pits was injected into the soil at a 6" depth. Local Coop did a dollar value vs. commercial fertilizer rate (Dec. 2018). Results: Penergetic pit had a \$28.00/acre advantage (\$201.00 vs. \$172.00)

Product Cost Comparison

Penergetic: \$1,500.00 or 60¢/pig space || Competitor: \$1,875.00 or 75¢/pig space

Total Gallons Pumped from Each Pit (@ 3,200 gal./ac rate)

Penergetic Pit: 600,000 gallons which covered 188 acres

Competitor Pit: 475,000 gallons which covered 148 acres

Comparative Return on Investment [increased nutrient value – product cost]

Penergetic Pit: \$3,764.00 [\$5,264.00 (fertilizer value) – \$1,500.00 (cost)] (ROI = 2.51 to 1)

Competitor Pit*: – \$12,899.00 [– \$4,144.00 (lower fertilizer value) – \$1,875.00 (cost) – \$6,880.00 (cost of fertilizer for extra 40 acres – as sludge could not be pumped out).]

* Competitive Pit had a negative ROI, not counting extra cost of removing 125,000 gal. of sludge.

Summary: if both pits had been treated with Penergetic g, the total value of manure would have been \$10,500.00 minus \$3,000.00 (product cost) for a total increased in value of \$7,500.00.

[All figures in US dollars]