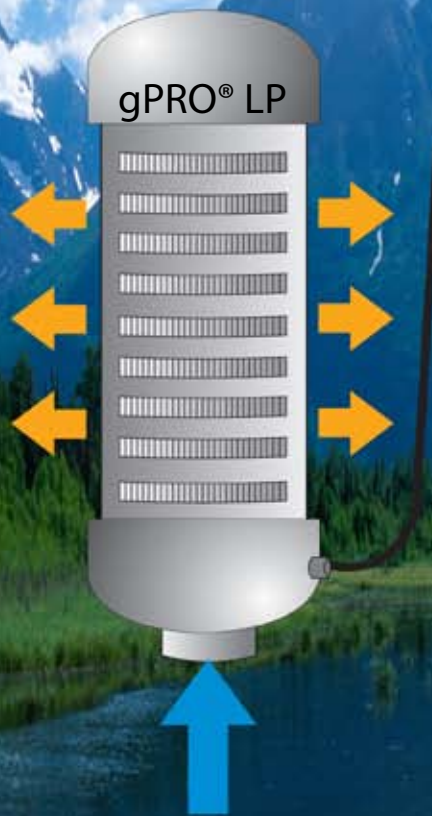


gPRO® LP

Closing Sites Quickly to
Restore Nature's Beauty




inVentures
Technologies
incorporated

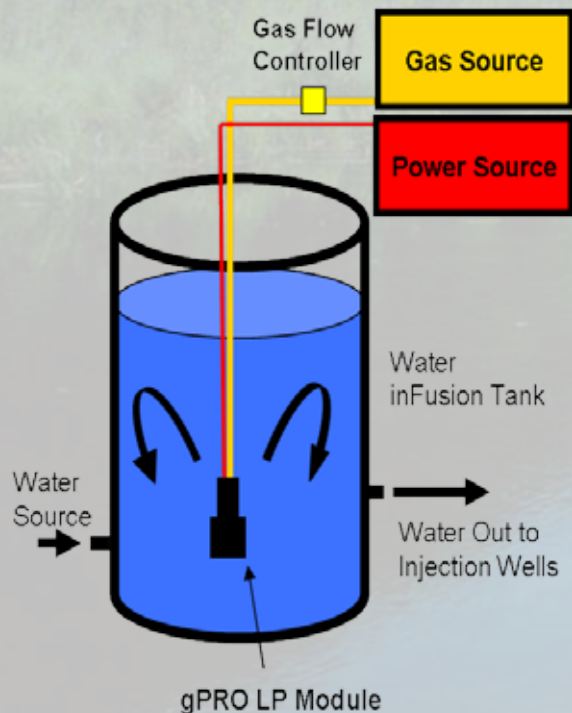
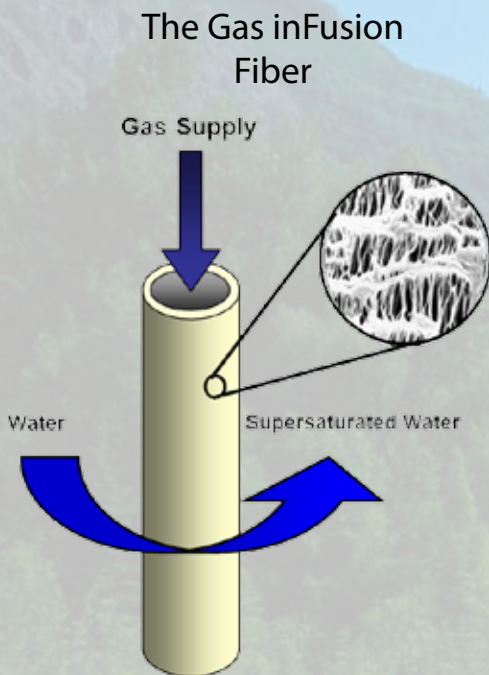
www.gasinfusion.com

gPRO® LP: A Versatile Tool for Groundwater Treatment

Versatile is the best way to describe the groundwater Pressurized Remediation Optimizer gPRO® (Low Pressure) LP system. Based on inVentures' patented Gas inFusion technology, gPRO® LP inFuses higher stabilized concentrations of dissolved gas into water compared to any other technology. The gPRO® LP is completely unique in that the device is submerged in the body of water and directly inFuses the dissolved gas. For superb bioremediation results inFusion is accomplished without additives such as hydrogen peroxide, ozone or other agents with potentially harmful side effects.

The gPRO® LP Process

- The gPRO® LP system is submerged directly into the body of water
- Water is pumped through an internal core and passes over the gPRO® LP fiber modules
- The ENORMOUS surface area allows for high amounts of dissolved gas to transfer into the water
- 25 -125 mg/l of dissolved oxygen (DO) can be attained (based upon depths up to 70 feet)
- Any miscible gas (hydrogen, carbon dioxide, propane, methane, hydrogen sulfide, etc.) can be applied depending upon the remediation required and the applicable site conditions
- gPRO® LP system will provide aerobic /anaerobic / Comatabolic treatment depending on gas infused



gPRO® LP Tank System

Enhance Your Pump and Treat System

- gPRO LP can be used in an above ground tank
- Saturates water with a dissolved gas
- Batch or continuous operation
- Gas saturated water can be introduced into groundwater using 1/2 inch or larger injection wells

gPRO® LP — Features and Benefits

No Hassles, No Problems, No Issues

- No gas loss
- No risk of vapor intrusion
- No off gassing
- No preferential pathways
- No gas entrapment leading to mounding

Cost Effective Bioremediation

- Low power consumption
- Lower installation costs
- More efficient mass transfer for cost savings
- Used as stand alone or easily retrofitted to an existing pump and treat system

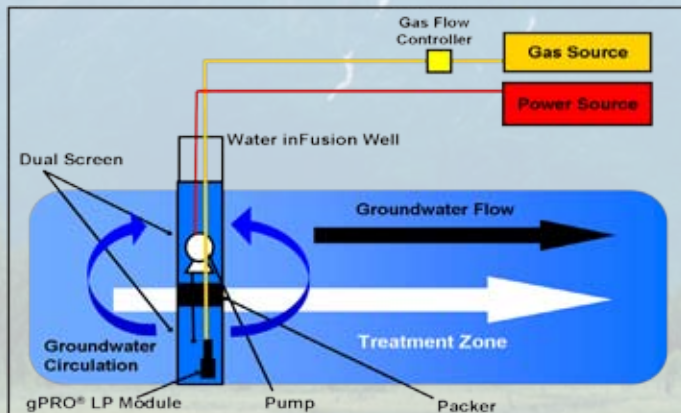
Stimulate the Microbes

- Increased biological degradation rates
- Revitalizes asymptotic pump and treat sites
- Higher dissolved gas levels at ambient pressure

gPRO® LP DUAL SCREEN IN-WELL SYSTEM

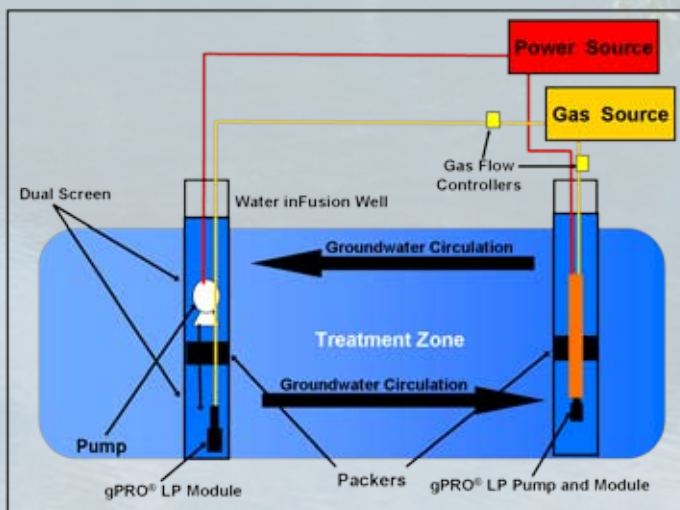
(Deep to Shallow)

- Well fitted with a pump and packer
- Pump is located above the packer and gPRO® LP below
- Creates an upward circulation pattern which increases the area of influence around the well
- Partially closing the lower screened area creates higher levels of gas concentrations



gPRO® LP DUAL HORIZONTAL FLOW IN-WELL SYSTEM

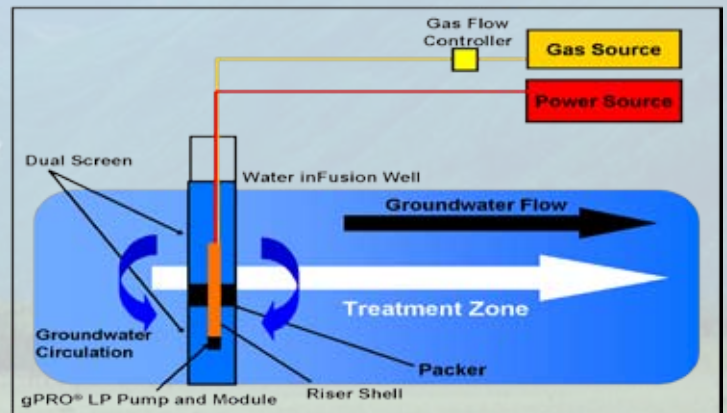
- Utilizing two wells or a series of wells over a treatment zone
- Groundwater with enhanced levels of dissolved gas circulates within the treatment zone
- Strategic deployment of gPRO® LP infusers with packers and riser shells can create a large treatment zone



gPRO® LP DUAL SCREEN IN-WELL SYSTEM

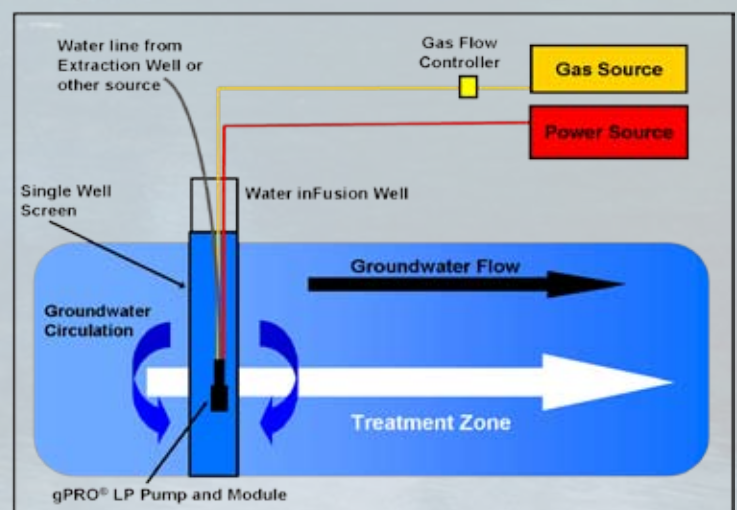
(Shallow to Deep)

- Well fitted with a pump, packer and riser shell
- Pump and gPRO® LP unit are located below the packer
- Water flows upward through riser shell, increasing the area of influence
- Higher dissolved gas concentrations are achieved by partially restricting the riser shell



gPRO® LP IN-WELL AMENDED GROUNDWATER RECHARGE SYSTEM

- gPRO® LP adds supersaturated water from an outside source to the aquifer
- Water can be from a potable supply or a re-injection well from a pump and treat system



gPRO® LP Unit Oxygen Transfer

Basis: T = 10°C | Water in = 0 ppm

Water Circulation (LPM / GPM)			40 / 10.6	50 / 13.2	75 / 19.8	100 / 26.4	150 / 39.6
Depth (ft / m)	Psi (gauge)	kPa	Oxygen Transfer Rate (kg/day)				
5 / 1.5	2.2	15	0.784	0.984	1.456	1.863	2.424
25 / 7.6	11.2	76	1.181	1.486	2.214	2.863	3.841
50 / 15.2	22.4	152	1.670	2.103	3.147	4.092	5.582
100 / 30.5	44.8	305	2.620	3.303	4.960	6.481	8.968

Gas Type	Conversion Factor
Hydrogen (H ₂)	0.038
Methane (CH ₄)	0.380
Propane (C ₃ H ₈)	2.020
Ethane (C ₂ H ₆)	1.050
Carbon Dioxide (CO ₂)	90.05
Hydrogen Sulfide (H ₂ S)	99.10

To convert to a specific gas transfer rate, multiply the oxygen transfer rate by the conversion factor

For example:

The methane transfer rate (kg/day) for 40 LPM (10.6 GPM) at a depth of 5 feet (1.5 meters) would be:
 $0.380 \times 0.784 = 0.298$ kg/day

www.gasinfusion.com

- Proven Technology — inVentures patented gas inFusion delivery system has been successfully demonstrated at hundreds of installations worldwide
- Quality — All inVentures' products are manufactured with the highest quality components from our dedicated suppliers
- Customer Service — Our experienced, friendly and courteous sales team will rapidly assist you with any concerns



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