

## NOTICE OF COLLABORATIVE EFFORT IN MEOR

RAM Biochemicals, Inc. is pleased to announce an ongoing joint effort in microbial enhanced oil recovery (MEOR). RAM began collaborations with the Polish Oil and Gas Institute (POGI/INIG), Krakow, Poland in September, 2009. POGI/INIG is investigating the potential of microbial systems to recover significant amounts of stranded oil from mature oil fields that are compatible with MEOR technology. A microbial system comprised of several naturally selected microbial strains supplied by RAM Biochemicals has been evaluated for performance by POGI/INIG with positive results.

For information about the engineering evaluations, please contact:  
POGI/INIG, Dr. Slawomir Falkowicz  
[falkowicz@inig.pl](mailto:falkowicz@inig.pl)

For information about the microbial system or MEOR applications in general, please contact:  
RAM Biochemicals, Dr. Rebecca S. Bryant, COO Applied Field Microbiology  
[rbryant@rambiochemicals.com](mailto:rbryant@rambiochemicals.com)

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RAM uses a systematic approach to developing microbial enhanced waterflood projects:

- 1) Initial studies require samples of produced oil and injection water.
- 2) Water samples and microbial strains are evaluated for compatibility, nutrient requirements, and growth characteristics.
- 3) Prepared cores are saturated with crude oil from the candidate field and evaluated.
- 4) The volume of residual oil recovered by the microbial system after waterflooding is measured and expressed as a percentage of the residual oil after waterflooding.
- 5) The percentage of residual oil recovered oil and the average oil saturation of the field are used to estimate the volume of recoverable oil (net pay) from microbial enhanced waterflooding.
- 6) ROI calculations provide the basis for a go / no-go decision to proceed with a microbial enhanced waterflood project.

This systematic approach yields information early on which allows oil producers the ability to evaluate the economics of a microbial enhanced waterflood project with a minimum of up front investment.

Please visit: [www.rambiochemicals.com/docs/Systematic\\_Approach.pdf](http://www.rambiochemicals.com/docs/Systematic_Approach.pdf)