

fract'ol
Computer Graphics Fractals

 $Summary: \ \ This \ project \ involves \ creating \ graphically \ beautiful \ fractals.$ 

Version: 3.2

## Contents

| 1         | Foreword                       | 2                  |
|-----------|--------------------------------|--------------------|
| II        | Introduction                   | 3                  |
| III       | Objectives                     | 4                  |
| IV        | Common Instructions            | 5                  |
| V V.1 V.2 | Mandatory part Rendering       | <b>7</b><br>8<br>8 |
| VI        | Bonus part                     | 9                  |
| VII       | Submission and peer-evaluation | 10                 |

## Chapter I

## Foreword

Here's what Wikipedia has to say on hydraulic fracturing:

"Hydraulic fracturing," is the targeted disruption of geological formations with low permeability by means of injection under high pressure of a fluid to micro-cracking and crack the rock. This fracturing can be performed near the surface or at depth (over 1 km or more than 4 km in the case of shale gas) and from vertical wells, sloped or horizontal.

This relatively old technique (1947), developed for conventional oil deposits, is renewed by its association with horizontal drilling (developed from 1980). It is the gradual mastery of the economic viability of this association for non-conventional deposits, which guided the recent development of the operation of these: it made available formerly inaccessible resources, or which have been exploited at exorbitant costs and slowly.

It is performed by fracturing the rock by a mechanical "stress" using a fluid injected under high pressure from a surface drilling, to increase the macro porosity and less the micro porosity. The fluid could be the water, a slurry or a technical fluid whose viscosity was adjusted.

This project is not called *fract'oil* and accordingly has no relation to hydraulic fracturing.