

Essential Petroleum Resources Limited

## Daily Geology Report

| Well N                                |                  |                |                |               | East Wing-1   |
|---------------------------------------|------------------|----------------|----------------|---------------|---|
| Report No: 6                          |                  |                | For date:      |               | 1-May-08  |
| Days: 6 Midnig                        |                  | Midnigh        | t depth:       | 886           |   |
| 24 hr progress:<br>0600 depth update: |                  |                |                |               | 281   |
|                                       |                  |                |                |               | 963   |
|                                       | opera<br>progra  |                | Dril           | ling ahea     | ad at 963 m in the Pember Mudstone. Planned operation is to drill ahead.  |
|                                       | ghts ai<br>tops: |                | Тор С          | )<br>ilwyn Fo | ormation (Burrungule Member) at 700m on prognosis, top Pember Mdst 950  |
|                                       | 1000.            |                |                |               | Interval Descriptions   |
|                                       |                  | <b>T</b> 1 · 1 | ROP            | GAS           |   |
| From                                  | То               | Thick<br>ness  | m/hr           | PPM           | Description and shows   |
|                                       |                  |                | min-m          |               |   |
| 605                                   | 700              | 95             | 9 - 53<br>(29) | nil           | CALCAREOUS SILTSTONE (40 - 100%): Brownish gy, soft to firm, amorph to blocky, comm dk gy gn glauc pelloids, occ fossil frags gt CALCAREOUS CLAYSTONE (0 - 60%). SANDSTONE (0 - 60%): 1.  |
|                                       | Avera            | ge Gas         | s Analysi      | s PPM         | Gn gy, yell gy, yell orange, quartz grains translucent with yell orange limonite? stain ip, also rnd claystone intraclasts or pelloids?, f-m, sa, poorly sorted, in abund white calcite matrix, soft to very firm.  |
| C1                                    | C2               | C3             |                | C5            | 2. loose, c-vc quartz grains, translucent with orange brown limonite stain, sr-r. Comm fossil frags.  |
|                                       |                  |                |                |               |   |
|                                       |                  |                |                |               |   |
| From<br><b>700</b>                    | То               | Thick<br>ness  | ROP            | GAS           | Description and shows<br>SILTSTONE (0-80%): 1. Brn gy, dk brn gy, soft to firm, sandy ip, calc with fine fossil frags, rare glauc<br>pelloids and 2. Gn gy, firm, blocky, non-calc, sandy (vfn) ip. CLAYSTONE (0 - 100%): Pred 1. Brn gy, It<br>brn gy, predom soft, disp, silty, calc. Minor 2. Lt gy, It gn gy, generally non-calc and 3. white, orange |
|                                       |                  |                | m/hr           | PPM           |   |
|                                       |                  |                | min-m          | ax(av)        |   |
|                                       | 780              | 80             | 5 - 39<br>(21) | nil           |   |
| 0.1                                   | Average Gas      |                |                |               | brn, soft, disp, sandy (vf). SANDSTONE (0-70%): Disagg quartz sand, clear, transl, to white and   |
| C1                                    | C2               | C3             | i+nC4          | C5            | opaque, orange brown limonite stain ip, m-vc, generally sr-r. Trace fossil frags and coalified wood.  |
|                                       |                  |                |                |               |   |
| From                                  | То               | Thick<br>ness  | ROP            | GAS           | Description and shows   |
|                                       |                  |                | m/hr           | PPM           |   |
|                                       |                  |                | min-max(av)    |               | SANDSTONE (30 - 100%): Predom 1.disagg quartz grains, clear and translucent to opaque, m-vc, sr-r.  |
| 780                                   | 860              | 80             | 8 - 48         | nil           | Vinor 2. aggregates, f-m quartz sand with abundant brownish grey clay matrix and siliceous cement,  |
|                                       |                  |                | (26)           |               | poorly sorted, firm to hard. SILTSTONE (0-70%): brownish grey, generally soft, amorphous when wet, dispersive ip, sandy (vf - c quartz grains) ip, calcareous ip, glauconitic pelloids ip, grading to SILTY   |
|                                       |                  |                | s Analysis PPM |               |   |
| C1                                    | C2               | C3             | i+nC4          | 05            | CLAYSTONE (0-100%).   |
|                                       |                  |                |                |               | ]   |
|                                       |                  | <b></b>        | ROP            | GAS           | <b>_</b>  |
| From<br><b>860</b>                    | То               | ness           | m/hr           | PPM           | Description and shows   ** A lot of clay washing out of sample ** CLAYSTONE (50-70%): brownish grey, amorphous, very dispersive, silty to sandy (vfn) ip. SANDSTONE (30-50%): disagg quartz grains, clear translucent to  |
|                                       |                  |                | min-m          |               |   |
|                                       | 886              |                | 6 - 47<br>(28) | nil           |   |
|                                       | Avera            | ge Gas         | s Analysi      |               |   |
| C1                                    | C2               | C3             | i+nC4          | C5            | opaque, rare orange and grey chert frags, c-vc, sr-rd Rare fossil frags.  |
|                                       |                  |                |                |               |   |
|                                       |                  |                |                |               | Openments on other evelve the second state  |
|                                       |                  |                |                |               | Comments, or other evaluation reports   |
|                                       |                  |                |                |               |   |
|                                       |                  |                |                |               |   |
|                                       |                  |                |                |               |   |