

## **APPENDIX K**

### **IN-SITU GAS & GROUNDWATER MONITORING RESULTS**

## FIELD GAS MONITORING RESULTS

Job No.: 12923  
 Site: Jacks Pill Newport  
 Monitoring Date: 08.11.21  
 Monitoring Round: 1

### Monitoring Conditions

Weather: Very Light Rain  
 Ambient Temp: 12 °C  
 Instrument: GA5000

### Barometric Pressure (mb)

On Arrival: 1021  
 During Monitoring: 1021  
 End of Monitoring: 1021

| Location                                                                                                                                                                                                                                                                                                                                                                  | Well Base Level<br>(mbgl) | Water Level<br>(mbgl) | Methane (CH4) %v/v |        | Methane % LEL |        | Oxygen (O2) %v/v |        | Carbon Dioxide (CO2) %v/v |        | Carbon Monoxide<br>(CO)<br>(ppm) | Hydrogen<br>Sulphide (H2S)<br>(ppm) | Peak Gas Flow<br>(l/hr) | VOC Vapours<br>(ppm>background) |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------------|--------------------|--------|---------------|--------|------------------|--------|---------------------------|--------|----------------------------------|-------------------------------------|-------------------------|---------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                           |                           |                       | Peak               | Steady | Peak          | Steady | Peak             | Steady | Peak                      | Steady |                                  |                                     |                         |                                 |
| BH 1                                                                                                                                                                                                                                                                                                                                                                      | 3.03                      | 1.42                  | 0.20               | 0.20   | 4.00          | 4.00   | 16.80            | 18.80  | 1.60                      | 1.60   | <1                               | <1                                  | 0.80                    | <0.1                            |
| BH 2                                                                                                                                                                                                                                                                                                                                                                      | 4.08                      | 1.48                  | 19.30              | 19.20  | >100          | >100   | 10.60            | 10.60  | 1.10                      | 1.10   | <1                               | <1                                  | <0.3                    | <0.1                            |
| BH 3                                                                                                                                                                                                                                                                                                                                                                      | 3.61                      | 2.33                  | 0.10               | 0.10   | 2.00          | 2.00   | 17.80            | 17.80  | 0.40                      | 0.30   | <1                               | <1                                  | <0.3                    | <0.1                            |
| BH 4                                                                                                                                                                                                                                                                                                                                                                      | 4.59                      | 2.68                  | 2.40               | 2.40   | 48.00         | 48.00  | 6.30             | 6.90   | 1.90                      | 1.90   | <1                               | <1                                  | <0.3                    | <0.1                            |
| <b>Typical Instrument Accuracy:</b><br>%CH <sub>4</sub> 0-70% +/- 0.5%      CO 0-500ppm +/- 2% FS<br>%CO <sub>2</sub> 0-60% +/- 0.5%      H <sub>2</sub> S 0-5000ppm +/- 2.0% FS<br>%O <sub>2</sub> 0-25% +/- 1.0%      Flow from borehole +/- 0.3l/h<br><div style="text-align: right;">LEL = Lower Explosive Limit<br/>N/R = No Reading Taken<br/>FS = Full Scale</div> |                           |                       |                    |        |               |        |                  |        |                           |        |                                  |                                     |                         |                                 |
| <b>Notes:</b><br>Tidal Conditions at time of monitoring: 12.00 to 13.00pm Falling Tide                                                                                                                                                                                                                                                                                    |                           |                       |                    |        |               |        |                  |        |                           |        |                                  |                                     |                         |                                 |

## FIELD GAS MONITORING RESULTS

Job No.: 12923  
 Site: Jacks Pill Newport  
 Monitoring Date: 16.11.21  
 Monitoring Round: 2

### Monitoring Conditions

Weather: Light Rain  
 Ambient Temp: 12 °C  
 Instrument: GA5000

### Barometric Pressure (mb)

On Arrival: 1022  
 During Monitoring: 1022  
 End of Monitoring: 1022

| Location                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Well Base Level<br>(mbgl) | Water Level<br>(mbgl) | Methane (CH <sub>4</sub> ) %v/v |        | Methane % LEL |        | Oxygen (O <sub>2</sub> ) %v/v |        | Carbon Dioxide (CO <sub>2</sub> ) %v/v |        | Carbon Monoxide<br>(CO)<br>(ppm) | Hydrogen<br>Sulphide (H <sub>2</sub> S)<br>(ppm) | Peak Gas Flow<br>(l/hr) | VOC Vapours<br>(ppm>background) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------------------|---------------------------------|--------|---------------|--------|-------------------------------|--------|----------------------------------------|--------|----------------------------------|--------------------------------------------------|-------------------------|---------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                           |                       | Peak                            | Steady | Peak          | Steady | Peak                          | Steady | Peak                                   | Steady |                                  |                                                  |                         |                                 |
| <b>BH 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3.03                      | 1.52                  | 0.10                            | 0.10   | 2.00          | 2.00   | 16.20                         | 16.20  | 1.40                                   | 1.40   | <1                               | <1                                               | 0.40                    | <0.1                            |
| <b>BH 2</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4.08                      | 2.13                  | 12.30                           | 12.30  | >100          | >100   | 14.50                         | 14.50  | 0.80                                   | 0.80   | <1                               | <1                                               | <0.3                    | <0.1                            |
| <b>BH 3</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 3.61                      | 2.24                  | 0.10                            | 0.10   | 2.00          | 2.00   | 18.50                         | 18.50  | 0.20                                   | 0.20   | <1                               | <1                                               | <0.3                    | <0.1                            |
| <b>BH 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4.59                      | 2.62                  | 1.40                            | 1.40   | 28.00         | 28.00  | 4.50                          | 4.50   | 1.20                                   | 1.20   | <1                               | <1                                               | <0.3                    | <0.1                            |
| <b>Typical Instrument Accuracy:</b><br><div> <div>%CH<sub>4</sub></div> <div>0-70% +/- 0.5%</div> <div>CO</div> <div>0-500ppm +/- 2% FS</div> </div> <div> <div>%CO<sub>2</sub></div> <div>0-60% +/- 0.5%</div> <div>H<sub>2</sub>S</div> <div>0-5000ppm +/- 2.0% FS</div> </div> <div> <div>%O<sub>2</sub></div> <div>0-25% +/- 1.0%</div> <div>Flow from borehole +/- 0.3l/h</div> </div> <div> <div>LEL = Lower Explosive Limit</div> <div>N/R = No Reading Taken</div> <div>FS = Full Scale</div> </div> |                           |                       |                                 |        |               |        |                               |        |                                        |        |                                  |                                                  |                         |                                 |
| <b>Notes:</b><br><div>Tidal Conditions at time of monitoring: 13.00 to 14.00pm Rising Tide</div>                                                                                                                                                                                                                                                                                                                                                                                                             |                           |                       |                                 |        |               |        |                               |        |                                        |        |                                  |                                                  |                         |                                 |