



Laboratories



## WATER ANALYSIS

|                          |
|--------------------------|
| Container Identification |
| PB 3B                    |

|                   |
|-------------------|
| Laboratory Number |
| WG46433B          |

|                          |
|--------------------------|
| Operator Name            |
| PARAMOUNT RESOURCES LTD. |

|                        |                            |                          |
|------------------------|----------------------------|--------------------------|
| Unique Well Identifier | Well Name                  | Elevation                |
| 60DEG05'123DEG22'      | PARA ET AL FORT LIARD I-46 | KB m 542.50 GRD m 537.50 |

|               |              |                   |
|---------------|--------------|-------------------|
| Field or Area | Pool or Zone | Sampler's Company |
| LIARD         | MATTSON      | BAKER             |

|           |          |               |                 |
|-----------|----------|---------------|-----------------|
| Test Type | Test No. | Test Recovery | Name of Sampler |
| DST       | 5        |               |                 |

|                        |                |                  |           |        |         |          |
|------------------------|----------------|------------------|-----------|--------|---------|----------|
| Test Interval or Perfs | Sampling Point | Separator        | Reservoir | Source | Sampled | Received |
| 1734.50-1740.00        | TOP            |                  |           |        |         |          |
| mKB                    |                |                  |           |        |         |          |
|                        |                | Pressure (kPa)   |           |        |         |          |
|                        |                | Temperature (°C) |           |        |         |          |

|              |               |               |         |
|--------------|---------------|---------------|---------|
| Date Sampled | Date Received | Date Reported | Analyst |
| Dec 24, 1999 | Dec 30, 1999  | Jan 10, 2000  | LN      |

|                   |
|-------------------|
| Other Information |
|                   |

## Cations

| ION | mg/L   | Mass Fraction | mmol/L |
|-----|--------|---------------|--------|
| Na  | 1270.0 | 0.205         | 55.2   |
| K   | 73.0   | 0.012         | 1.9    |
| Ca  | 1130.0 | 0.182         | 28.2   |
| Mg  | 0.8    | Trace         | Trace  |
| Fe  | Trace  | Trace         | Trace  |

## Anions

| ION              | mg/L   | Mass Fraction | mmol/L |
|------------------|--------|---------------|--------|
| Cl               | 3499.0 | 0.564         | 98.7   |
| HCO <sub>3</sub> | Nil    | Nil           | Nil    |
| SO <sub>4</sub>  | 126.0  | 0.020         | 1.3    |
| CO <sub>3</sub>  | 105.0  | 0.017         | 1.7    |
| OH               | 4.3    | 0.001         | 0.2    |

## Other Measurements

| Measurement                              | Value |
|------------------------------------------|-------|
| Total Dissolved Solids (Calculated) mg/L | 6208  |
| Observed pH                              | 10.47 |
| H <sub>2</sub> S (25°C) mg/L             | N/D   |
| Relative Density (25°C)                  | 1.004 |
| Resistivity / OHM-m (25°C)               | 0.944 |
| Salinity %                               | 0.63  |

Total Cations 113.5

Total Anions 103.3

## Logarithmic Pattern mmol/L

