

## ANALYTICAL SERVICE REPORT

Date: 04/08/16



|               |  |
|---------------|--|
| Customer:     | <b>H+S Aviation Ltd</b>  |
| Site name(s): | Airport Service Road & Robinson Way  |
| Email:        | <a href="mailto:Steve.conway@hsaviation.co.uk">Steve.conway@hsaviation.co.uk</a> |

| ANALYSIS                    | Water Softener Samples |                          |                    |                      |                        | Cooling tower samples |                   |                   |                   |                      |                       | LIMITS                  |
|-----------------------------|------------------------|--------------------------|--------------------|----------------------|------------------------|-----------------------|-------------------|-------------------|-------------------|----------------------|-----------------------|-------------------------|
|                             | 1 bed water Softener   | 3 + 4 Bed Softener Water | TC5 Water Softener | E.A.B Water Softener | Process Water Softener | TC1 Cooling Tower     | TC3 Cooling Tower | TC4 Cooling tower | TC5 Cooling Tower | E.A.B. Cooling Tower | Process Cooling Tower |                         |
| Total Hardness              | Nil                    | Nil                      | Nil                | Nil                  | Nil                    | 10                    | 5                 | 20                | <10               | 25                   | 25                    | <b>Softeners &lt; 2</b> |
| P.Alkalinity                |                        |                          |                    |                      |                        | 30                    | 0                 | 50                | 10                | 100                  | 80                    |                         |
| M.Alkalinity                |                        |                          |                    |                      |                        | 740                   | 390               | 780               | 410               | 1,120                | 1,080                 |                         |
| OH.Alkalinity               |                        |                          |                    |                      |                        | 0                     | 0                 | 0                 | 0                 | 0                    | 0                     |                         |
| Chloride                    | 30                     | 30                       | 30                 | 30                   | 30                     | 110                   | 55                | 150               | 60                | 200                  | 200                   |                         |
| Conductivity                | 580                    | 580                      | 600                | 580                  | 590                    | 1,320                 | 680               | 1,580             | 650               | 2,140                | 2,170                 |                         |
| Conc. Factor                |                        |                          |                    |                      |                        | 2.3                   | 1.2               | 2.7               | 1.1               | 3.7                  | 3.2                   | <b>Max 5.0</b>          |
| pH                          | 7.4                    | 7.4                      | 7.5                | 7.4                  | 7.5                    | 8.7                   | 8.1               | 8.8               | 8.3               | 9.1                  | 8.9                   |                         |
| Bromine (ppm)               |                        |                          |                    |                      |                        | 4.0                   | n/a               | n/a               | n/a               | n/a                  | n/a                   | <b>≥0.5</b>             |
| Total Fe (mg/l)             |                        |                          |                    |                      |                        | <0.1                  | <0.1              | <0.1              | <0.1              | <0.1                 | <0.1                  | <b>&lt;0.1</b>          |
| Inhibitor SC320 Phosphonate |                        |                          |                    |                      |                        | 210                   | 245               | 350               | 280               | 350                  | 420                   | <b>200 - 400</b>        |
| Make - Up water Meter (M3)  |                        |                          |                    |                      |                        | 24590                 | 135               | 540               | 2115              | 631                  | -                     |                         |
| Temperature °C              |                        |                          |                    |                      |                        | 24.0                  | 18.2              | 19.3              | 17.6              | 19.0                 | 22.0                  |                         |
| Bacteria Dipslide           | -                      | -                        | -                  | -                    | -                      | √                     | √                 | √                 | √                 | √                    | √                     |                         |
| Time of sampling            |                        |                          |                    |                      |                        | 10:40                 | 10:55             | 11:05             | 10:25             | 10:10                | 12:30                 |                         |

**Comments and recommendation:**

Water Softeners – All producing good quality soft water.

Cooling Towers:-

1 Bed Cooling Tower – Shows good results.

3 Bed Cooling Tower – Shows good results.

4 Bed Cooling Tower – Shows good results.

TC5 Cooling Tower – Shows good results.

E.A.B. Cooling Tower – Shows good results.

Process Cooling Tower – Shows good results.

Additional Notes:

Low or empty chemical drums changed for new. All salt topped up today in water softener brine tanks.

\*4 Bed BC60 Pump primed with syringe.

|                         |              |                             |                     |
|-------------------------|--------------|-----------------------------|---------------------|
| Customer Name ( print ) | Steve Conway | Representative Name (print) | Ben Freeston        |
| Customer Signature      |              | Representative Signature    | <i>Ben Freeston</i> |