

R2844538

**PC-40B**

Water Type	Na-Cl		
Dissolved Solids	13503 mg/kg	13600 mg/L	Measured
Density	1.0072 g/cm <sup>3</sup>		Calculated
Conductivity	18600 µmho/cm		Measured
Hardness (as CaCO <sub>3</sub> )			
Total	2140.5 mg/kg	2155.9 mg/L	Calculated
Carbonate	407.17	410.09	
Non-Carbonate	1733.4	1745.8	

**Primary Tests**

**Anion-Cation Balance**

Anions	194	
Cations	207	
% Difference	3.247	OK

**Measured TDS = Calculated TDS**

Measured	13503.293	
Calculated	11929.990	
Ratio	1.132	OK

**Measured EC = Calculated EC**

Measured	18600.000	
Calculated	12633.619	
Ratio	1.472	Not within range 0.9 to 1.1

**Secondary Tests**

**Measured EC and Ion Sums:**

Anions	1.043357	Within preferred range (0.9-1.1)
Cations	1.113391	Not within preferred range (0.9-1.1)

**Calculated TDS to EC ratio**

0.641 OK

**Measured TDS to EC ratio**

0.726 Not within preferred range (0.55-0.7)

**Organic Mass Balance**

**DOC ≥ Sum of Organics**

DOC unavailable

# H-48B

Water Type	Ca-Cl		
Dissolved Solids	18498 mg/kg	18700 mg/L	Measured
Density	1.0109 g/cm <sup>3</sup>		Calculated
Conductivity	25300 µmho/cm		Measured
Hardness (as CaCO <sub>3</sub> )			
Total	3763.4 mg/kg	3804.5 mg/L	Calculated
Carbonate	N/A		
Non-Carbonate	N/A		

## Primary Tests

### Anion-Cation Balance

Anions	245	
Cations	88.6	
% Difference	46.884	Not within ± 5%

### Measured TDS = Calculated TDS

Measured	18498.266	
Calculated	11079.815	
Ratio	1.670	Not within range 1.0 to 1.2

### Measured EC = Calculated EC

Measured	25300.000	
Calculated	12023.921	
Ratio	2.104	Not within range 0.9 to 1.1

## Secondary Tests

### Measured EC and Ion Sums:

Anions	0.968227	Within preferred range (0.9-1.1)
Cations	0.350127	Not within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.438	Not within preferred range (0.55-0.7)
Measured TDS to EC ratio	0.731	Not within preferred range (0.55-0.7)

## Organic Mass Balance

### DOC ≥ Sum of Organics

DOC unavailable

## MC-66BD

Water Type	Na-Cl		
Dissolved Solids	8501 mg/kg	8530 mg/L	Measured
Density	1.0034 g/cm <sup>3</sup>		Calculated
Conductivity	10700 µmho/cm		Measured
Hardness (as CaCO <sub>3</sub> )			
Total	3093.8 mg/kg	3104.3 mg/L	Calculated
Carbonate	154.81	155.34	
Non-Carbonate	2939	2949	

### Primary Tests

#### Anion-Cation Balance

Anions	121	
Cations	127	
% Difference	2.598	OK

#### Measured TDS = Calculated TDS

Measured	8500.969	
Calculated	8001.757	
Ratio	1.062	OK

#### Measured EC = Calculated EC

Measured	10700.000	
Calculated	8138.807	
Ratio	1.315	Not within range 0.9 to 1.1

### Secondary Tests

#### Measured EC and Ion Sums:

Anions	1.130789	Not within preferred range (0.9-1.1)
Cations	1.191121	Not within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.748	Not within preferred range (0.55-0.7)
Measured TDS to EC ratio	0.794	Not within preferred range (0.55-0.7)

### Organic Mass Balance

#### DOC ≥ Sum of Organics

DOC unavailable

## MC-65B

Water Type	Na-Cl		
Dissolved Solids	8798 mg/kg	8830 mg/L	Measured
Density	1.0036 g/cm <sup>3</sup>		Calculated
Conductivity	12800 µmho/cm		Measured
Hardness (as CaCO <sub>3</sub> )			
Total	2940.9 mg/kg	2951.6 mg/L	Calculated
Carbonate	129.61	130.08	
Non-Carbonate	2811.3	2821.6	

### Primary Tests

#### Anion-Cation Balance

Anions	134	
Cations	147	
% Difference	4.582	OK

#### Measured TDS = Calculated TDS

Measured	8797.998	
Calculated	8410.437	
Ratio	1.046	OK

#### Measured EC = Calculated EC

Measured	12800.000	
Calculated	9320.118	
Ratio	1.373	Not within range 0.9 to 1.1

### Secondary Tests

#### Measured EC and Ion Sums:

Anions	1.044719	Within preferred range (0.9-1.1)
Cations	1.145044	Not within preferred range (0.9-1.1)

Calculated TDS to EC ratio 0.657 OK

Measured TDS to EC ratio 0.687 OK

#### Organic Mass Balance

##### DOC ≥ Sum of Organics

DOC unavailable

## MC-66B

<b>Water Type</b>	Na-Cl		
<b>Dissolved Solids</b>	8015.5 mg/kg	8040 mg/L	Measured
<b>Density</b>	1.0031 g/cm <sup>3</sup>		Calculated
<b>Conductivity</b>	10600 µmho/cm		Measured
<b>Hardness (as CaCO<sub>3</sub>)</b>			
Total	3079.2 mg/kg	3088.6 mg/L	Calculated
Carbonate	152.58	153.04	
Non-Carbonate	2926.6	2935.6	

### Primary Tests

#### **Anion-Cation Balance**

Anions	120	
Cations	128	
<b>% Difference</b>	<b>2.974</b>	OK

#### **Measured TDS = Calculated TDS**

Measured	8015.542	
Calculated	7921.728	
<b>Ratio</b>	<b>1.012</b>	OK

#### **Measured EC = Calculated EC**

Measured	10600.000	
Calculated	8155.956	
<b>Ratio</b>	<b>1.300</b>	Not within range 0.9 to 1.1

### Secondary Tests

#### **Measured EC and Ion Sums:**

Anions	1.133743	Not within preferred range (0.9-1.1)
Cations	1.203249	Not within preferred range (0.9-1.1)
<b>Calculated TDS to EC ratio</b>	<b>0.747</b>	Not within preferred range (0.55-0.7)
<b>Measured TDS to EC ratio</b>	<b>0.756</b>	Not within preferred range (0.55-0.7)

### Organic Mass Balance

#### **DOC ≥ Sum of Organics**

DOC unavailable

**PC-37B**

<b>Water Type</b>	Na-SO <sub>4</sub>		
<b>Dissolved Solids</b>	7142.9 mg/kg	7160 mg/L	Measured
<b>Density</b>	1.0024 g/cm <sup>3</sup>		Calculated
<b>Conductivity</b>	9150 µmho/cm		Measured
<b>Hardness (as CaCO<sub>3</sub>)</b>			
Total	2521.4 mg/kg	2527.4 mg/L	Calculated
Carbonate	147.77	148.12	
Non-Carbonate	2373.6	2379.3	

**Primary Tests**

**Anion-Cation Balance**

Anions	498	
Cations	106	
% Difference	64.854	Not within ± 5%

**Measured TDS = Calculated TDS**

Measured	7142.875	
Calculated	25579.472	
Ratio	0.279	Not within range 1.0 to 1.2

**Measured EC = Calculated EC**

Measured	9150.000	
Calculated	18632.662	
Ratio	0.491	Not within range 0.9 to 1.1

**Secondary Tests**

**Measured EC and Ion Sums:**

Anions	5.438563	Not within preferred range (0.9-1.1)
Cations	1.159473	Not within preferred range (0.9-1.1)
Calculated TDS to EC ratio	2.796	Not within preferred range (0.55-0.7)
Measured TDS to EC ratio	0.781	Not within preferred range (0.55-0.7)

**Organic Mass Balance**

**DOC ≥ Sum of Organics**

DOC unavailable

## PC-72B

Water Type	Na-SO <sub>4</sub>		
Dissolved Solids	7261.9 mg/kg	7280 mg/L	Measured
Density	1.0025 g/cm <sup>3</sup>		Calculated
Conductivity	8530 µmho/cm		Measured
Hardness (as CaCO <sub>3</sub> )			
Total	2489.8 mg/kg	2496 mg/L	Calculated
Carbonate	132.05	132.38	
Non-Carbonate	2357.8	2363.6	

### Primary Tests

#### Anion-Cation Balance

Anions	94.1	
Cations	100	
% Difference	3.183	OK

#### Measured TDS = Calculated TDS

Measured	7261.941	
Calculated	6314.597	
Ratio	1.150	OK

#### Measured EC = Calculated EC

Measured	8530.000	
Calculated	6761.551	
Ratio	1.262	Not within range 0.9 to 1.1

### Secondary Tests

#### Measured EC and Ion Sums:

Anions	1.102687	Not within preferred range (0.9-1.1)
Cations	1.175182	Not within preferred range (0.9-1.1)
Calculated TDS to EC ratio	0.740	Not within preferred range (0.55-0.7)
Measured TDS to EC ratio	0.851	Not within preferred range (0.55-0.7)

### Organic Mass Balance

#### DOC ≥ Sum of Organics

DOC unavailable

## M-94B

<b>Water Type</b>	Na-SO <sub>4</sub>		
<b>Dissolved Solids</b>	8619.8 mg/kg	8650 mg/L	Measured
<b>Density</b>	1.0035 g/cm <sup>3</sup>		Calculated
<b>Conductivity</b>	9960 µmho/cm		Measured
<b>Hardness (as CaCO<sub>3</sub>)</b>			
Total	2831.8 mg/kg	2841.8 mg/L	Calculated
Carbonate	134.04	134.51	
Non-Carbonate	2697.8	2707.2	

### Primary Tests

#### **Anion-Cation Balance**

Anions	115	
Cations	119	
<b>% Difference</b>	<b>1.837</b>	OK

#### **Measured TDS = Calculated TDS**

Measured	8619.796	
Calculated	8088.657	
<b>Ratio</b>	<b>1.066</b>	OK

#### **Measured EC = Calculated EC**

Measured	9960.000	
Calculated	7435.218	
<b>Ratio</b>	<b>1.340</b>	Not within range 0.9 to 1.1

### Secondary Tests

#### **Measured EC and Ion Sums:**

Anions	1.151148	Not within preferred range (0.9-1.1)
Cations	1.194226	Not within preferred range (0.9-1.1)
<b>Calculated TDS to EC ratio</b>	<b>0.812</b>	Not within preferred range (0.55-0.7)
<b>Measured TDS to EC ratio</b>	<b>0.865</b>	Not within preferred range (0.55-0.7)

#### **Organic Mass Balance**

#### **DOC ≥ Sum of Organics**

DOC unavailable



## MC-62B

<b>Water Type</b>	Na-Cl		
<b>Dissolved Solids</b>	13602 mg/kg	13700 mg/L	Measured
<b>Density</b>	1.0072 g/cm <sup>3</sup>		Calculated
<b>Conductivity</b>	18900 µmho/cm		Measured
<b>Hardness (as CaCO<sub>3</sub>)</b>			
Total	1584.6 mg/kg	1596.1 mg/L	Calculated
Carbonate	267.08	269.02	
Non-Carbonate	1317.5	1327	

### Primary Tests

#### **Anion-Cation Balance**

Anions	189	
Cations	201	
<b>% Difference</b>	<b>3.150</b>	OK

#### **Measured TDS = Calculated TDS**

Measured	13601.587	
Calculated	11512.215	
<b>Ratio</b>	<b>1.181</b>	OK

#### **Measured EC = Calculated EC**

Measured	18900.000	
Calculated	12405.217	
<b>Ratio</b>	<b>1.524</b>	Not within range 0.9 to 1.1

### Secondary Tests

#### **Measured EC and Ion Sums:**

Anions	0.997511	Within preferred range (0.9-1.1)
Cations	1.062407	Within preferred range (0.9-1.1)

**Calculated TDS to EC ratio** 0.609 OK

**Measured TDS to EC ratio** 0.720 Not within preferred range (0.55-0.7)

#### Organic Mass Balance

#### **DOC ≥ Sum of Organics**

DOC unavailable

R2844538

Name	Unit	PC-40B	H-46E	MC-688D	MC-65B	MC-66B	PC-37B	PC-72B	M-94B	MC-62B
Samples ID	text	PC-40B	H-46E	MC-688D	MC-65B	MC-66B	PC-37B	PC-72B	M-94B	MC-62B
Units ID	text	1110532	1110661	1111264	1111265	1111266	1111267	1111763	1111764	1111765
Calcium	ug/L	428000	1.44E6	699000	623000	896000	557000	617000	673000	217000
Magnesium	ug/L	264000	59700.0	338000	338000	328000	276000	232000	282000	256000
Potassium	ug/L	34900.0	2790	23600.0	22600.0	13400.0	13400.0	13300.0	15200.0	39400.0
Sodium	ug/L	3.79E6	289000	1.49E6	256	1.5E6	1.27E6	1.15E6	1.42E6	3.86E6
Chloride	ug/L	32600.0	ND	523000	144000	470000	158000	208000	712000	ND
Perchlorate	ug/L	24900.0	341	466000	97100.0	364000	204000	288000	882000	ND
Bicarbonate	mg/L	250	ND	94.7	78.3	93.3	90.3	80.7	82	164
Carbonate	mg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloride	mg/L	5250	6670	2210	3090	2220	1700	1300	1600	5260
Conductivity	umhos/cm	18600.0	25300.0	10700.0	12800.0	10600.0	9150	8530	9680	18900.0
Fluoride	mg/L									
Nitrate	mg/L	1.43	0.602	33.3	5.73	32.1	12.1	31.3	66.8	ND
Phosphorus	mg/L	ND	0.284	0.0832	ND	ND	ND	ND	ND	0.11
Dissolved Solids	mg/L	13600.0	18700.0	8530	8830	8040	7160	7280	8650	13700.0
Sulfate	mg/L	1980	2810	2220	2040	2220	21300.0	2410	2360	1800