```
T-TEST

/TESTVAL=0

/MISSING=ANALYSIS

/VARIABLES=Temperatue Turbidity Length River_Depth Velocity Dischage Area Dissolved_Oxy
gen

Total_Nitrate Total_Phosphate pH_Level Distance Conductivity Width

/ES DISPLAY(TRUE)

/CRITERIA=CI(.95).
```

#### T-Test

#### **Notes**

Output Created		30-JUN-2024 04:23:44	
Comments			
Input	Data	D:\Hunter\Data Works\Godiva\Data Model.sav	
	Active Dataset	DataSet2	
	Filter	<none></none>	
	Weight	<none></none>	
	Split File	<none></none>	
	N of Rows in Working Data File	3	
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.	
	Cases Used	Statistics for each analysis are based on the cases with no missing or out-of-range data for any variable in the analysis.	
Syntax		T-TEST /TESTVAL=0 /MISSING=ANALYSIS  /VARIABLES=Temperatue Turbidity Length River_Depth Velocity Dischage Area Dissolved_Oxygen Total_Nitrate Total_Phosphate pH_Level Distance Conductivity Width /ES DISPLAY(TRUE) /CRITERIA=CI(.95).	

### Notes

Resources	Processor Time	00:00:00.02	
	Elapsed Time	00:00:00.07	

### **One-Sample Statistics**

		-		
	N	Mean	Std. Deviation	Std. Error Mean
Temperature	3	30.67800	1.411865	.815141
Turbidity	3	34.05000	21.950171	12.672937
Length	3	34.88667	26.173751	15.111422
River Depth	3	2.41233	1.660297	.958573
Velocity	3	.278067	.2089728	.1206505
Discharge	3	79.24600	75.416789	43.541903
Area	3	204.514000	164.4986455	94.9733372
Dissolved Oxygen	3	73.833	41.0314	23.6895
Total Nitrates	3	1.000	.1000	.0577
Total Phosphates	3	1.8000	.85294	.49244
pH Level	3	7.8133	.12055	.06960
Distance	3	22.79100	22.385637	12.924354
Conductivity	3	204.6000	39.05163	22.54647
Width	3	3.61000	2.701907	1.559947

# **One-Sample Test**

Test Value = 0

	rest value – 0				
				Mean	95% Confidence
	t	df	Sig. (2-tailed)	Difference	Lower
Temperature	37.635	2	.001	30.678000	27.17073
Turbidity	2.687	2	.115	34.050000	-20.47725
Length	2.309	2	.147	34.886667	-30.13253
River Depth	2.517	2	.128	2.412333	-1.71207
Velocity	2.305	2	.148	.2780667	241050
Discharge	1.820	2	.210	79.246000	-108.09969
Area	2.153	2	.164	204.5140000	-204.123289
Dissolved Oxygen	3.117	2	.089	73.8333	-28.094
Total Nitrates	17.321	2	.003	1.0000	.752
Total Phosphates	3.655	2	.067	1.80000	3188
pH Level	112.257	2	.000	7.81333	7.5139
Distance	1.763	2	.220	22.791000	-32.81801
Conductivity	9.075	2	.012	204.60000	107.5904
Width	2.314	2	.147	3.610000	-3.10191

## **One-Sample Test**

Test Value = 0 95% Confidence Interval of the ...

	Upper	
Temperature	34.18527	
Turbidity	88.57725	
Length	99.90587	
River Depth	6.53674	
Velocity	.797184	
Discharge	266.59169	
Area	613.151289	
Dissolved Oxygen	175.761	
Total Nitrates	1.248	
Total Phosphates 3.91		
pH Level	8.1128	
Distance 78.400		
Conductivity	301.6096	
Width	10.32191	

# **One-Sample Effect Sizes**

				95% Confidence Interval	
		Standardizer <sup>a</sup>	Point Estimate	Lower	Upper
Temperature	Cohen's d	1.411865	21.729	3.411	41.759
	Hedges' correction	2.502466	12.259	1.925	23.560
Turbidity	Cohen's d	21.950171	1.551	290	3.311
	Hedges' correction	38.905665	.875	164	1.868
Length	Cohen's d	26.173751	1.333	371	2.937
	Hedges' correction	46.391765	.752	209	1.657
River Depth	Cohen's d	1.660297	1.453	326	3.141
	Hedges' correction	2.942800	.820	184	1.772
Velocity	Cohen's d	.2089728	1.331	372	2.933
	Hedges' correction	.3703946	.751	210	1.655
Discharge	Cohen's d	75.416789	1.051	486	2.473
	Hedges' correction	133.672778	.593	274	1.395
Area	Cohen's d	164.4986455	1.243	406	2.786
	Hedges' correction	291.5662576	.701	229	1.572
Dissolved Oxygen	Cohen's d	41.0314	1.799	206	3.747
	Hedges' correction	72.7262	1.015	116	2.114
Total Nitrates	Cohen's d	.1000	10.000	1.488	19.262
	Hedges' correction	.1772	5.642	.840	10.867
Total Phosphates	Cohen's d	.85294	2.110	108	4.305
	Hedges' correction	1.51179	1.191	061	2.429
pH Level	Cohen's d	.12055	64.812	10.297	124.489
	Hedges' correction	.21368	36.566	5.810	70.235
Distance	Cohen's d	22.385637	1.018	501	2.421
	Hedges' correction	39.677509	.574	283	1.366
Conductivity	Cohen's d	39.05163	5.239	.629	10.168
	Hedges' correction	69.21722	2.956	.355	5.736
Width	Cohen's d	2.701907	1.336	370	2.942
	Hedges' correction	4.789005	.754	209	1.660

a. The denominator used in estimating the effect sizes. Cohen's d uses the sample standard deviation.

Hedges' correction uses the sample standard deviation, plus a correction factor.