

ภาคผนวก ค
การวิเคราะห์การถดถอยของ DO
โดยใช้โปรแกรมสำเร็จรูปประมวลผลทางสถิติ

ตารางผนวกที่ ค1 Variables Entered/Removed (b)

Model	Variables Entered	Variables Removed	Method
1	POP. TUR. TEMP. RAIN. PH. SAL. DEPTH(a)	.	Enter

a All requested variables entered.

b Dependent Variable: DO

ตารางผนวกที่ ค2 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.489(a)	.239	.181	1.11962

a Predictors: (Constant). POP. TUR. TEMP. RAIN. PH. SAL. DEPTH

ตารางผนวกที่ ค3 ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.901	7	5.129	4.091	.001(a)
	Residual	114.073	91	1.254		
	Total	149.974	98			

a Predictors: (Constant). POP. TUR. TEMP. RAIN. PH. SAL. DEPTH

b Dependent Variable: DO

ตารางผนวกที่ ๓4 Coefficients (a)

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	.607	1.693		.358	.721
	DEPTH	-.197	.203	-.095	-.973	.333
	TEMP	5.119E-02	.039	.124	1.299	.197
	PH	.684	.178	.363	3.837	.000
	TUR	-.011	.006	-.169	-1.774	.079
	SAL	4.287	3.338	.125	1.284	.202
	RAIN	9.378E-04	.001	.109	1.136	.259
	POP	4.323E-05	.000	.110	1.143	.256

a Dependent Variable: DO

ตารางผนวกที่ ๓5 Variables Entered/Removed (a)

Model	Variables	Variables	Method
	Entered	Removed	
1			
	PH		. Forward (Criterion: Probability-of-F-to-enter <= .050)

a Dependent Variable: DO

ตารางผนวกที่ ๖ Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.404(a)	.163	.155	1.13740

a Predictors: (Constant), PH

ตารางผนวกที่ ๗ ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.488	1	24.488	18.929	.000(a)
	Residual	125.486	97	1.294		
	Total	149.974	98			

a Predictors: (Constant), PH

b Dependent Variable: DO

ตารางผนวกที่ ๘ Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.505	1.314		1.146	.255
	PH	.762	.175	.404	4.351	.000

a Dependent Variable: DO

ตารางผนวกที่ ๙ Excluded Variables (b)

Model		Beta In	t	Sig.	Partial	Collinearity Statistics
					Correlation	Tolerance
1	DEPTH	-.007(a)	-.077	.939	-.008	.987
	TEMP	.099(a)	1.068	.288	.108	.999
	TUR	-.164(a)	-1.758	.082	-.177	.972
	SAL	.149(a)	1.614	.110	.163	.998
	RAIN	.068(a)	.726	.470	.074	.999
	POP	.098(a)	1.036	.303	.105	.973

a Predictors in the Model: (Constant). PH

b Dependent Variable: DO

ตารางผนวกที่ ๑๐ Variables Entered/Removed (b)

Model	Variables Entered	Variables	
		Removed	Method
1	POP. TUR. TEMP. RAIN. PH. SAL. DEPTH(a)		. Enter
2		. DEPTH	Backward (criterion: Probability of F-to-remove >= .100).
3		. RAIN	Backward (criterion: Probability of F-to-remove >= .100).
4		. POP	Backward (criterion: Probability of F-to-remove >= .100).
5		. TEMP	Backward (criterion: Probability of F-to-remove >= .100).
6		. SAL	Backward (criterion: Probability of F-to-remove >= .100).

a All requested variables entered.

b Dependent Variable: DO

ตารางผนวกที่ ค11 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.489(a)	.239	.181	1.11962
2	.481(b)	.231	.181	1.11930
3	.473(c)	.224	.182	1.11870
4	.464(d)	.216	.182	1.11872
5	.454(e)	.206	.181	1.11952
6	.435(f)	.189	.172	1.12533

a Predictors: (Constant), POP, TUR, TEMP, RAIN, PH, SAL, DEPTH

b Predictors: (Constant), POP, TUR, TEMP, RAIN, PH, SAL

c Predictors: (Constant), POP, TUR, TEMP, PH, SAL

d Predictors: (Constant), TUR, TEMP, PH, SAL

e Predictors: (Constant), TUR, PH, SAL

f Predictors: (Constant), TUR, PH

ตารางผนวกที่ ค12 ANOVA (g)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	35.901	7	5.129	4.091	.001(a)
	Residual	114.073	91	1.254		
	Total	149.974	98			
2	Regression	34.714	6	5.786	4.618	.000(b)
	Residual	115.260	92	1.253		
	Total	149.974	98			

ตารางผนวกที่ ก12 (ต่อ)

Model		Sum of Squares	df	Mean Square	F	Sig.
3	Regression	33.586	5	6.717	5.367	.000(c)
	Residual	116.388	93	1.251		
	Total	149.974	98			
4	Regression	32.330	4	8.082	6.458	.000(d)
	Residual	117.644	94	1.252		
	Total	149.974	98			
5	Regression	30.909	3	10.303	8.220	.000(e)
	Residual	119.066	95	1.253		
	Total	149.974	98			
6	Regression	28.402	2	14.201	11.214	.000(f)
	Residual	121.572	96	1.266		
	Total	149.974	98			

a Predictors: (Constant), POP, TUR, TEMP, RAIN, PH, SAL, DEPTH

b Predictors: (Constant), POP, TUR, TEMP, RAIN, PH, SAL

c Predictors: (Constant), POP, TUR, TEMP, PH, SAL

d Predictors: (Constant), TUR, TEMP, PH, SAL

e Predictors: (Constant), TUR, PH, SAL

f Predictors: (Constant), TUR, PH

g Dependent Variable: DO

ตารางผนวกที่ ๑13 Coefficients (a)

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	.607	1.693		.358	.721
	DEPTH	-.197	.203	-.095	-.973	.333
	TEMP	5.119E-02	.039	.124	1.299	.197
	PH	.684	.178	.363	3.837	.000
	TUR	-.011	.006	-.169	-1.774	.079
	SAL	4.287	3.338	.125	1.284	.202
	RAIN	9.378E-04	.001	.109	1.136	.259
	POP	4.323E-05	.000	.110	1.143	.256
2	(Constant)	.600	1.693		.354	.724
	TEMP	4.276E-02	.038	.103	1.113	.269
	PH	.669	.178	.355	3.769	.000
	TUR	-.010	.006	-.160	-1.694	.094
	SAL	3.813	3.301	.111	1.155	.251
	RAIN	7.645E-04	.001	.089	.949	.345
	POP	4.127E-05	.000	.105	1.093	.277
3	(Constant)	.692	1.689		.410	.683
	TEMP	4.393E-02	.038	.106	1.145	.255
	PH	.677	.177	.359	3.817	.000
	TUR	-.011	.006	-.167	-1.767	.081
	SAL	3.360	3.265	.098	1.029	.306
	POP	3.763E-05	.000	.095	1.002	.319
4	(Constant)	.839	1.683		.499	.619
	TEMP	4.076E-02	.038	.098	1.066	.289
	PH	.708	.175	.375	4.050	.000
	TUR	-.010	.006	-.157	-1.669	.098
	SAL	4.066	3.188	.118	1.275	.205

ตารางผนวกที่ ค13 (ต่อ)

Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
5	(Constant)	1.950	1.322		1.476	.143
	PH	.705	.175	.374	4.030	.000
	TUR	-.010	.006	-.147	-1.574	.119
	SAL	4.478	3.167	.130	1.414	.161
6	(Constant)	1.984	1.328		1.494	.139
	PH	.710	.176	.377	4.044	.000
	TUR	-.011	.006	-.164	-1.758	.082

a Dependent Variable: DO

ตารางผนวกที่ ๑14 Excluded Variables (f)

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
2	DEPTH	-.095(a)	-.973	.333	-.101	.867
3	DEPTH	-.071(b)	-.744	.459	-.077	.910
	RAIN	.089(b)	.949	.345	.098	.957
4	DEPTH	-.068(c)	-.713	.477	-.074	.911
	RAIN	.078(c)	.841	.402	.087	.967
	POP	.095(c)	1.002	.319	.103	.920
5	DEPTH	-.043(d)	-.461	.646	-.048	.957
	RAIN	.082(d)	.883	.379	.091	.968
	POP	.086(d)	.909	.366	.093	.926
	TEMP	.098(d)	1.066	.289	.109	.978
6	DEPTH	-.023(e)	-.248	.804	-.025	.978
	RAIN	.058(e)	.633	.528	.065	.996
	POP	.110(e)	1.180	.241	.120	.968
	TEMP	.113(e)	1.225	.223	.125	.993
	SAL	.130(e)	1.414	.161	.144	.982

a Predictors in the Model: (Constant). POP. TUR. TEMP. RAIN. PH. SAL

b Predictors in the Model: (Constant). POP. TUR. TEMP. PH. SAL

c Predictors in the Model: (Constant). TUR. TEMP. PH. SAL

d Predictors in the Model: (Constant). TUR. PH. SAL

e Predictors in the Model: (Constant). TUR. PH

f Dependent Variable: DO

ตารางผนวกที่ ค15 Variables Entered/Removed (a)

Model	Variables		Method
	Variables Entered	Removed	
1	PH		Stepwise (Criteria: Probability-of-F-to-enter <= .050, Probability-of-F-to-remove >= .100).

a Dependent Variable: DO

ตารางผนวกที่ ค16 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.404(a)	.163	.155	1.13740

a Predictors: (Constant), PH

ตารางผนวกที่ ๑17 ANOVA (b)

		Sum of	df	Mean Square	F	Sig.
Model		Squares				
1	Regression	24.488	1	24.488	18.929	.000(a)
	Residual	125.486	97	1.294		
	Total	149.974	98			

a Predictors: (Constant). PH

b Dependent Variable: DO

ตารางผนวกที่ ๑18 Coefficients (a)

		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
1	(Constant)	1.505	1.314		1.146	.255
	PH	.762	.175	.404	4.351	.000

a Dependent Variable: DO

ตารางผนวกที่ ๑19 Excluded Variables (b)

Mode					Partial	Collinearity
1		Beta In	t	Sig.	Correlation	Statistics
						Tolerance
1	DEPTH	-.007(a)	-.077	.939	-.008	.987
	TEMP	.099(a)	1.068	.288	.108	.999
	TUR	-.164(a)	-1.758	.082	-.177	.972
	SAL	.149(a)	1.614	.110	.163	.998
	RAIN	.068(a)	.726	.470	.074	.999
	POP	.098(a)	1.036	.303	.105	.973

a Predictors in the Model: (Constant), PH

b Dependent Variable: DO