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ภาคผนวก ก

ผลการทดสอบความนิ่ง Unit Root Test

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ผลการทดสอบความนิ่ง Unit Root Test ที่ Level

กรณีราคาทองคำแท่ง

Null Hypothesis: GP1 has a unit root

Exogenous: None

Lag Length: 7 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	0.772402	0.8800
Test critical values:		
1% level	-2.569469	
5% level	-1.941440	
10% level	-1.616285	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: GP1 has a unit root

Exogenous: Constant

Lag Length: 7 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.103387	0.2435
Test critical values:		
1% level	-3.442845	
5% level	-2.866943	
10% level	-2.569709	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: GP1 has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 7 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.260703	0.0741
Test critical values:		
1% level	-3.976011	
5% level	-3.418587	
10% level	-3.131808	

*MacKinnon (1996) one-sided p-values.

กรณีราคาทองคำรูปพรรณ

Null Hypothesis: GP2 has a unit root

Exogenous: None

Lag Length: 7 (Automatic based on AIC, MAXLAG=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	0.793539	0.8838
Test critical values:		
1% level	-2.569469	
5% level	-1.941440	
10% level	-1.616285	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: GP2 has a unit root

Exogenous: Constant

Lag Length: 7 (Automatic based on AIC, MAXLAG=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.097109	0.2461
Test critical values:		
1% level	-3.442845	
5% level	-2.866943	
10% level	-2.569709	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: GP2 has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 7 (Automatic based on AIC, MAXLAG=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.243611	0.0772
Test critical values:		
1% level	-3.976011	
5% level	-3.418587	
10% level	-3.131808	

*MacKinnon (1996) one-sided p-values.

กรณีราคาห้ามคืน

Null Hypothesis: OP has a unit root

Exogenous: None

Lag Length: 4 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	0.798542	0.8848
Test critical values:		
1% level	-2.568125	
5% level	-1.941256	
10% level	-1.616408	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: OP has a unit root

Exogenous: Constant

Lag Length: 4 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.391005	0.5878
Test critical values:		
1% level	-3.439056	
5% level	-2.865272	
10% level	-2.568813	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: OP has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 4 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.644153	0.7746
Test critical values:		
1% level	-3.970639	
5% level	-3.415968	
10% level	-3.130257	

*MacKinnon (1996) one-sided p-values.

ผลการทดสอบความนิ่ง Unit Root Test ที่ First Difference

กรณีราคาทองคำแท่ง

Null Hypothesis: D(GP1) has a unit root

Exogenous: None

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-27.41751	0.0000
Test critical values:		
1% level	-2.568530	
5% level	-1.941312	
10% level	-1.616371	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(GP1) has a unit root

Exogenous: Constant

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-27.44676	0.0000
Test critical values:		
1% level	-3.440197	
5% level	-2.865776	
10% level	-2.569083	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(GP1) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-27.42386	0.0000
Test critical values:		
1% level	-3.972257	
5% level	-3.416757	
10% level	-3.130725	

*MacKinnon (1996) one-sided p-values.

กรณีราคาทองคำรูปพรรณ

Null Hypothesis: D(GP2) has a unit root

Exogenous: None

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-27.40170	0.0000
Test critical values:		
1% level	-2.568530	
5% level	-1.941312	
10% level	-1.616371	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(GP2) has a unit root

Exogenous: Constant

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-27.43435	0.0000
Test critical values:		
1% level	-3.440197	
5% level	-2.865776	
10% level	-2.569083	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(GP2) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-27.41166	0.0000
Test critical values:		
1% level	-3.972257	
5% level	-3.416757	
10% level	-3.130725	

*MacKinnon (1996) one-sided p-values.

กรณีรากนำมั่นคง

Null Hypothesis: D(OP) has a unit root

Exogenous: None

Lag Length: 0 (Automatic based on AIC, MAXLAG=19)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-28.60738	0.0000
Test critical values:		
1% level	-2.568112	
5% level	-1.941254	
10% level	-1.616410	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(OP) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic based on AIC, MAXLAG=19)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-28.63745	0.0000
Test critical values:		
1% level	-3.439020	
5% level	-2.865256	
10% level	-2.568805	

*MacKinnon (1996) one-sided p-values.

Null Hypothesis: D(OP) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic based on AIC, MAXLAG=19)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-28.64853	0.0000
Test critical values:		
1% level	-3.970587	
5% level	-3.415942	
10% level	-3.130243	

*MacKinnon (1996) one-sided p-values.



ภาควิชาฯ

ผลการทดสอบ Cointegration

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กรณีราคาทองคำแท่งเป็นตัวแปรตาม ราคาน้ำมันเป็นตัวแปรอิสระ

Dependent Variable: GP1
 Method: Least Squares
 Date: 03/08/07 Time: 08:56
 Sample: 1/05/2004 10/31/2006
 Included observations: 703
 Excluded observations: 34

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4241.427	93.96076	45.14041	0.0000
OP	97.54450	1.906663	51.15980	0.0000
R-squared	0.788749	Mean dependent var	8892.248	
Adjusted R-squared	0.788448	S.D. dependent var	1369.515	
S.E. of regression	629.9060	Akaike info criterion	15.73186	
Sum squared resid	2.78E+08	Schwarz criterion	15.74482	
Log likelihood	-5527.748	F-statistic	2617.325	
Durbin-Watson stat	0.027466	Prob(F-statistic)	0.000000	

กรณีราคาทองคำรูปพรรณเป็นตัวแปรตาม ราคาน้ำมันอิสระ

Dependent Variable: GP2
 Method: Least Squares
 Date: 03/08/07 Time: 08:59
 Sample: 1/05/2004 10/31/2006
 Included observations: 703
 Excluded observations: 34

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4358.787	95.78142	45.50765	0.0000
OP	99.82007	1.943608	51.35813	0.0000
R-squared	0.790035	Mean dependent var	9118.104	
Adjusted R-squared	0.789736	S.D. dependent var	1400.322	
S.E. of regression	642.1116	Akaike info criterion	15.77024	
Sum squared resid	2.89E+08	Schwarz criterion	15.78320	
Log likelihood	-5541.240	F-statistic	2637.657	
Durbin-Watson stat	0.028152	Prob(F-statistic)	0.000000	

กรณีราคาน้ำมันเป็นตัวแปรตาม ราคาทองคำแท่งอิสระ

Dependent Variable: OP

Method: Least Squares

Date: 03/08/07 Time: 09:02

Sample(adjusted): 1/07/2004 10/31/2006

Included observations: 649

Excluded observations: 86 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-24.63107	1.518098	-16.22495	0.0000
GP1	0.008451	0.002453	3.444956	0.0006
GP1(-1)	0.000545	0.003332	0.163514	0.8702
GP1(-2)	-0.000845	0.002424	-0.348558	0.7275
R-squared	0.782815	Mean dependent var	47.70065	
Adjusted R-squared	0.781805	S.D. dependent var	12.36328	
S.E. of regression	5.775059	Akaike info criterion	6.351118	
Sum squared resid	21511.60	Schwarz criterion	6.378702	
Log likelihood	-2056.938	F-statistic	774.9393	
Durbin-Watson stat	0.028554	Prob(F-statistic)	0.000000	

กรณีราคาน้ำมันตัวแปรตาม ราคาทองคำรูปพรรณอิสระ

Dependent Variable: OP

Method: Least Squares

Date: 03/08/07 Time: 09:05

Sample(adjusted): 1/07/2004 10/31/2006

Included observations: 649

Excluded observations: 86 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-24.92845	1.517481	-16.42752	0.0000
GP2	0.008081	0.002360	3.423829	0.0007
GP2(-1)	0.000697	0.003206	0.217400	0.8280
GP2(-2)	-0.000796	0.002335	-0.340827	0.7333
R-squared	0.784297	Mean dependent var	47.70065	
Adjusted R-squared	0.783293	S.D. dependent var	12.36328	
S.E. of regression	5.755326	Akaike info criterion	6.344273	
Sum squared resid	21364.84	Schwarz criterion	6.371856	
Log likelihood	-2054.717	F-statistic	781.7392	
Durbin-Watson stat	0.028615	Prob(F-statistic)	0.000000	

ผลการทดสอบส่วนที่เหลือ (Residual) จากสมการทดแทน

Cointegration โดยการทดสอบยูนิรูต (Unit Root) ด้วย

วิธีการ Augmented Dicky Fully Test

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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กรณีราคาทองคำแต่งเป็นตัวแปรตาม ราคาน้ำมันดิบเป็นตัวแปรอิสระ

Null Hypothesis: RESID01 has a unit root

Exogenous: None

Lag Length: 4 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.776714	0.0054
Test critical values:		
1% level	-2.568976	
5% level	-1.941373	
10% level	-1.616330	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID01)

Method: Least Squares

Date: 03/08/07 Time: 08:58

Sample(adjusted): 1/12/2004 10/31/2006

Included observations: 577

Excluded observations: 155 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.018907	0.006809	-2.776714	0.0057
D(RESID01(-1))	-0.110208	0.040721	-2.706454	0.0070
D(RESID01(-2))	-0.028647	0.041105	-0.696905	0.4861
D(RESID01(-3))	-0.011869	0.040961	-0.289757	0.7721
D(RESID01(-4))	-0.021234	0.040828	-0.520098	0.6032
R-squared	0.027449	Mean dependent var	0.163897	
Adjusted R-squared	0.020648	S.D. dependent var	101.6377	
S.E. of regression	100.5829	Akaike info criterion	12.06847	
Sum squared resid	5786873.	Schwarz criterion	12.10623	
Log likelihood	-3476.753	Durbin-Watson stat	1.919259	

กรณีราคาทองคำรูปพรรณเป็นตัวแปรตาม ราคาน้ำมันดิบเป็นตัวแปรอิสระ

Null Hypothesis: RESID02 has a unit root

Exogenous: None

Lag Length: 4 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.823986	0.0047
Test critical values:		
1% level	-2.568976	
5% level	-1.941373	
10% level	-1.616330	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID02)

Method: Least Squares

Date: 03/08/07 Time: 09:00

Sample(adjusted): 1/12/2004 10/31/2006

Included observations: 577

Excluded observations: 155 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID02(-1)	-0.019490	0.006901	-2.823986	0.0049
D(RESID02(-1))	-0.112739	0.040714	-2.769080	0.0058
D(RESID02(-2))	-0.027927	0.041066	-0.680046	0.4968
D(RESID02(-3))	-0.011676	0.040879	-0.285623	0.7753
D(RESID02(-4))	-0.024309	0.040780	-0.596105	0.5513
R-squared	0.028599	Mean dependent var	0.151242	
Adjusted R-squared	0.021806	S.D. dependent var	104.8904	
S.E. of regression	103.7404	Akaike info criterion	12.13029	
Sum squared resid	6155910.	Schwarz criterion	12.16805	
Log likelihood	-3494.588	Durbin-Watson stat	1.914358	

กรณีรากน้ำมันเป็นตัวแปรตาม ราคาทองคำแท่งเป็นตัวแปรอิสระ

Null Hypothesis: RESID03 has a unit root

Exogenous: None

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.678056	0.0073
Test critical values:		
1% level	-2.568679	
5% level	-1.941332	
10% level	-1.616358	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID03)

Method: Least Squares

Date: 03/08/07 Time: 09:04

Sample(adjusted): 1/08/2004 10/31/2006

Included observations: 623

Excluded observations: 111 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID03(-1)	-0.018005	0.006723	-2.678056	0.0076
R-squared	0.011169	Mean dependent var	0.014855	
Adjusted R-squared	0.011169	S.D. dependent var	0.974298	
S.E. of regression	0.968842	Akaike info criterion	2.776174	
Sum squared resid	583.8434	Schwarz criterion	2.783292	
Log likelihood	-863.7781	Durbin-Watson stat	2.216383	

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กรณีราคาห้ามเป็นตัวแปรตาม ราคาทองคำรูปพรรณเป็นตัวแปรอิสระ

Null Hypothesis: RESID04 has a unit root

Exogenous: None

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.684225	0.0071
Test critical values:		
1% level	-2.568679	
5% level	-1.941332	
10% level	-1.616358	

*MacKinnon (1996) one-sided p-values.

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID04)

Method: Least Squares

Date: 03/08/07 Time: 09:06

Sample(adjusted): 1/08/2004 10/31/2006

Included observations: 623

Excluded observations: 111 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID04(-1)	-0.018070	0.006732	-2.684225	0.0071
R-squared	0.011231	Mean dependent var	0.014485	
Adjusted R-squared	0.011231	S.D. dependent var	0.972013	
S.E. of regression	0.966539	Akaike info criterion	2.771414	
Sum squared resid	581.0711	Schwarz criterion	2.778532	
Log likelihood	-862.2954	Durbin-Watson stat	2.204863	

ผลการทดสอบความสัมพันธ์เชิงดุลยภาพในระยะล้ำ

ภาคผนวก ง

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กรณีราคาทองคำแห่งเป็นตัวแปรตาม ราคาน้ำมันอิสระ

Dependent Variable: D(GP1)

Method: Least Squares

Date: 03/08/07 Time: 09:07

Sample(adjusted): 1/06/2004 10/31/2006

Included observations: 676

Excluded observations: 60 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.671246	3.419330	1.073674	0.2834
D(OP)	33.69558	4.011322	8.400117	0.0000
RESID01(-1)	-0.014296	0.005444	-2.625995	0.0088
R-squared	0.103517	Mean dependent var	5.103550	
Adjusted R-squared	0.100853	S.D. dependent var	93.64941	
S.E. of regression	88.80151	Akaike info criterion	11.81511	
Sum squared resid	5307082.	Schwarz criterion	11.83515	
Log likelihood	-3990.508	F-statistic	38.85578	
Durbin-Watson stat	2.154477	Prob(F-statistic)	0.000000	

กรณีราคาทองคำรูปพรรณเป็นตัวแปรตาม ราคาน้ำมันอิสระ

Dependent Variable: D(GP2)

Method: Least Squares

Date: 03/08/07 Time: 09:08

Sample(adjusted): 1/06/2004 10/31/2006

Included observations: 676

Excluded observations: 60 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.707454	3.541124	1.046971	0.2955
D(OP)	34.56828	4.154192	8.321300	0.0000
RESID02(-1)	-0.014679	0.005533	-2.653195	0.0082
R-squared	0.102095	Mean dependent var	5.180414	
Adjusted R-squared	0.099427	S.D. dependent var	96.90824	
S.E. of regression	91.96450	Akaike info criterion	11.88511	
Sum squared resid	5691877.	Schwarz criterion	11.90515	
Log likelihood	-4014.167	F-statistic	38.26131	
Durbin-Watson stat	2.157498	Prob(F-statistic)	0.000000	

กรณีราคาน้ำมันเป็นตัวแปร ราคาทองคำแท่งอิสระ

Dependent Variable: D(OP)

Method: Least Squares

Date: 03/08/07 Time: 09:18

Sample(adjusted): 1/08/2004 10/31/2006

Included observations: 623

Excluded observations: 111 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.027227	0.032449	0.839077	0.4017
D(GP1)	0.002708	0.000357	7.588709	0.0000
RESID03(-1)	-0.008218	0.005654	-1.453612	0.1466
R-squared	0.085508	Mean dependent var	0.032183	
Adjusted R-squared	0.082558	S.D. dependent var	0.845229	
S.E. of regression	0.809588	Akaike info criterion	2.420220	
Sum squared resid	406.3678	Schwarz criterion	2.441574	
Log likelihood	-750.8985	F-statistic	28.98594	
Durbin-Watson stat	2.215021	Prob(F-statistic)	0.000000	

กรณีราคาน้ำมันเป็นตัวแปรตาม ราคาทองคำรูปพรรณอิสระ

Dependent Variable: D(OP)

Method: Least Squares

Date: 03/08/07 Time: 09:10

Sample(adjusted): 1/08/2004 10/31/2006

Included observations: 623

Excluded observations: 111 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.027421	0.032469	0.844550	0.3987
D(GP2)	0.002596	0.000345	7.532662	0.0000
RESID04(-1)	-0.008306	0.005678	-1.462815	0.1440
R-squared	0.084388	Mean dependent var	0.032183	
Adjusted R-squared	0.081434	S.D. dependent var	0.845229	
S.E. of regression	0.810083	Akaike info criterion	2.421444	
Sum squared resid	406.8656	Schwarz criterion	2.442798	
Log likelihood	-751.2799	F-statistic	28.57118	
Durbin-Watson stat	2.214380	Prob(F-statistic)	0.000000	



ภาควิชาฯ

ข้อมูลราคาทองคำและราคาน้ำมันดิบ

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	Oil Price	ทองคำแท่ง	ทองรูปพรรณ
Date	OP	GP1	GP2
01/05/2004	28.08	7700.00	7898.36
01/06/2004	29.05	7750.00	7943.84
01/07/2004	28.90	7750.00	7943.84
01/08/2004	29.04	7700.00	7898.36
01/09/2004	29.45	7750.00	7943.84
01/12/2004	30.47	7800.00	7989.32
01/13/2004	29.70	7750.00	7943.84
01/14/2004	29.15	7750.00	7943.84
01/15/2004	29.28	7700.00	7898.36
01/16/2004	28.20	7500.00	7686.12
01/19/2004	28.98	7500.00	7686.12
01/20/2004	29.12	7500.00	7686.12
01/21/2004	29.46	7550.00	7746.76
01/22/2004	29.39	N/A	N/A
01/23/2004	29.40	N/A	N/A
01/26/2004	29.09	7500.00	7686.12
01/27/2004	28.80	7500.00	7686.12
01/28/2004	28.58	7500.00	7686.12
01/29/2004	28.30	7550.00	7746.76
01/30/2004	27.82	7400.00	7580.00
02/02/2004	27.15	7450.00	7640.64
02/03/2004	28.20	7400.00	7580.00
02/04/2004	27.87	7350.00	7534.52
02/05/2004	27.16	7350.00	7534.52
02/06/2004	27.63	7300.00	7473.88
02/09/2004	27.29	7400.00	7580.00
02/10/2004	27.70	7450.00	7640.64
02/11/2004	28.30	7450.00	7640.64

	Oil Price	ทองคำแท่ง	ทองรูปพรรณ
Date	OP	GP1	GP2
02/12/2004	28.06	7500.00	7686.12
02/13/2004	28.54	7500.00	7686.12
02/16/2004	28.95	7500.00	7686.12
02/17/2004	28.88	7550.00	7746.76
02/18/2004	29.44	7600.00	7792.24
02/19/2004	29.11	7550.00	7746.76
02/20/2004	29.46	7550.00	7746.76
02/23/2004	28.84	7400.00	7580.00
02/24/2004	29.27	7400.00	7580.00
02/25/2004	29.05	7450.00	7640.64
02/26/2004	29.77	7350.00	7534.52
02/27/2004	29.46	7350.00	7534.52
03/01/2004	30.06	7400.00	7580.00
03/02/2004	30.75	7400.00	7580.00
03/03/2004	30.40	7300.00	7473.88
03/04/2004	29.80	7300.00	7473.88
03/05/2004	30.69	N/A	N/A
03/08/2004	31.02	7400.00	7580.00
03/09/2004	30.68	7400.00	7580.00
03/10/2004	30.28	7450.00	7640.64
03/11/2004	30.04	7400.00	7580.00
03/12/2004	30.92	7450.00	7640.64
03/15/2004	30.45	7350.00	7534.52
03/16/2004	30.99	7400.00	7580.00
03/17/2004	30.77	7450.00	7640.64
03/18/2004	31.45	7500.00	7686.12
03/19/2004	31.09	7600.00	7792.24
03/22/2004	31.09	7600.00	7792.24

Oil Price	ทองคำแท่ง	ทองรูปพรรณ	
Date	OP	GP1	GP2
03/23/2004	31.19	7700.00	7898.36
03/24/2004	31.75	7700.00	7898.36
03/25/2004	31.01	7700.00	7898.36
03/26/2004	30.51	7700.00	7898.36
03/29/2004	29.98	7750.00	7943.84
03/30/2004	30.23	7750.00	7943.84
03/31/2004	30.76	7750.00	7943.84
04/01/2004	30.02	7800.00	7989.32
04/02/2004	29.38	7800.00	7989.32
04/05/2004	28.91	7700.00	7898.36
04/06/2004	29.07	N/A	N/A
04/07/2004	29.85	7700.00	7898.36
04/08/2004	31.24	7750.00	7943.84
04/09/2004	31.24	7750.00	7943.84
04/12/2004	31.86	N/A	N/A
04/13/2004	32.18	N/A	N/A
04/14/2004	31.43	N/A	N/A
04/15/2004	31.44	N/A	N/A
04/16/2004	32.28	7450.00	7640.64
04/19/2004	32.12	7500.00	7686.12
04/20/2004	31.85	7450.00	7640.64
04/21/2004	31.39	7350.00	7534.52
04/22/2004	31.38	7350.00	7534.52
04/23/2004	31.93	7400.00	7580.00
04/26/2004	31.89	7400.00	7580.00
04/27/2004	32.14	7450.00	7640.64
04/28/2004	32.61	7450.00	7640.64
04/29/2004	32.33	7250.00	7428.40

	Oil Price	ทองคำแท่ง	ทองรูปพรรณ
Date	OP	GP1	GP2
04/30/2004	33.19	7350.00	7534.52
05/03/2004	32.29	7350.00	7534.52
05/04/2004	32.67	7350.00	7534.52
05/05/2004	33.35	N/A	N/A
05/06/2004	34.29	7400.00	7580.00
05/07/2004	34.34	7350.00	7534.52
05/10/2004	33.38	7250.00	7428.40
05/11/2004	33.40	7300.00	7473.88
05/12/2004	34.67	7300.00	7473.88
05/13/2004	35.05	7300.00	7473.88
05/14/2004	35.60	7250.00	7428.40
05/17/2004	36.10	7300.00	7473.88
05/18/2004	35.31	7300.00	7473.88
05/19/2004	34.90	7300.00	7473.88
05/20/2004	36.20	7350.00	7534.52
05/21/2004	35.10	7350.00	7534.52
05/24/2004	34.31	7400.00	7580.00
05/25/2004	35.87	7400.00	7580.00
05/26/2004	35.50	7450.00	7640.64
05/27/2004	34.88	7450.00	7640.64
05/28/2004	34.47	7500.00	7686.12
05/31/2004	34.47	7450.00	7640.64
06/01/2004	35.33	7450.00	7640.64
06/02/2004	36.24	N/A	N/A
06/03/2004	35.13	7450.00	7640.64
06/04/2004	33.71	7400.00	7580.00
06/07/2004	33.41	7450.00	7640.64
06/08/2004	33.95	7500.00	7686.12

	Oil Price	ทองคำแท่ง	ทองรูปพรรณ
Date	OP	GP1	GP2
06/09/2004	33.11	7450.00	7640.64
06/10/2004	33.67	7350.00	7534.52
06/11/2004	33.81	7350.00	7534.52
06/14/2004	33.83	7400.00	7580.00
06/15/2004	33.05	7400.00	7580.00
06/16/2004	33.13	7450.00	7640.64
06/17/2004	33.56	7400.00	7580.00
06/18/2004	34.43	7450.00	7640.64
06/21/2004	33.91	7500.00	7686.12
06/22/2004	33.36	7500.00	7686.12
06/23/2004	33.61	7550.00	7746.76
06/24/2004	33.03	7550.00	7746.76
06/25/2004	32.85	7600.00	7792.24
06/28/2004	32.50	7600.00	7792.24
06/29/2004	31.52	7600.00	7792.24
06/30/2004	31.60	7500.00	7686.12
07/01/2004	32.22	7550.00	7746.76
07/02/2004	33.60	7550.00	7746.76
07/05/2004	34.25	7550.00	7746.76
07/06/2004	34.51	7550.00	7746.76
07/07/2004	34.44	7550.00	7746.76
07/08/2004	34.45	7600.00	7792.24
07/09/2004	34.72	7700.00	7898.36
07/12/2004	34.49	7700.00	7898.36
07/13/2004	33.48	7650.00	7837.72
07/14/2004	34.08	7650.00	7837.72
07/15/2004	35.21	7650.00	7837.72
07/16/2004	35.25	7650.00	7837.72

	Oil Price	ทองคำแท่ง	ทองรูปพรรณ
Date	OP	GP1	GP2
07/19/2004	34.97	7700.00	7898.36
07/20/2004	35.02	7700.00	7898.36
07/21/2004	34.55	7650.00	7837.72
07/22/2004	34.67	7650.00	7837.72
07/23/2004	35.03	7600.00	7792.24
07/26/2004	35.45	7550.00	7746.76
07/27/2004	35.16	7600.00	7792.24
07/28/2004	35.27	7550.00	7746.76
07/29/2004	35.67	7600.00	7792.24
07/30/2004	36.30	7550.00	7746.76
08/02/2004	36.81	N/A	N/A
08/03/2004	37.38	7600.00	7792.24
08/04/2004	37.62	7650.00	7837.72
08/05/2004	36.97	7650.00	7837.72
08/06/2004	37.98	7650.00	7837.72
08/09/2004	37.25	7700.00	7898.36
08/10/2004	38.17	7700.00	7898.36
08/11/2004	38.07	7700.00	7898.36
08/12/2004	38.31	N/A	N/A
08/13/2004	38.77	7700.00	7898.36
08/16/2004	39.84	7800.00	7989.32
08/17/2004	39.59	7800.00	7989.32
08/18/2004	40.30	7850.00	8065.12
08/19/2004	40.43	7850.00	8065.12
08/20/2004	41.43	7850.00	8065.12
08/23/2004	40.45	7900.00	8110.60
08/24/2004	39.15	7900.00	8110.60
08/25/2004	39.37	7850.00	8065.12

	Oil Price	ท่องค่าแท่ง	ท่องรูปพรรณ
Date	OP	GP1	GP2
08/26/2004	37.86	7900.00	8110.60
08/27/2004	37.09	7900.00	8110.60
08/30/2004	36.84	7850.00	8065.12
08/31/2004	36.01	7900.00	8110.60
09/01/2004	35.71	7950.00	8156.08
09/02/2004	36.15	7950.00	8156.08
09/03/2004	36.66	7900.00	8110.60
09/06/2004	36.14	7850.00	8065.12
09/07/2004	35.27	7850.00	8065.12
09/08/2004	34.66	7800.00	7989.32
09/09/2004	34.05	7850.00	8065.12
09/10/2004	35.87	7850.00	8065.12
09/13/2004	33.93	7850.00	8065.12
09/14/2004	34.64	7850.00	8065.12
09/15/2004	34.62	7850.00	8065.12
09/16/2004	34.08	7850.00	8065.12
09/17/2004	33.95	7850.00	8065.12
09/20/2004	35.48	7850.00	8065.12
09/21/2004	35.24	7850.00	8065.12
09/22/2004	35.21	7900.00	8110.60
09/23/2004	35.90	7900.00	8110.60
09/24/2004	36.26	7950.00	8156.08
09/27/2004	36.83	7950.00	8156.08
09/28/2004	37.89	7950.00	8156.08
09/29/2004	37.71	8000.00	8201.56
09/30/2004	37.35	8000.00	8201.56
10/01/2004	38.32	8100.00	8307.68
10/04/2004	37.93	8100.00	8307.68

Oil Price	คงค่าน้ำมัน	คงรูปพรรณ	
Date	OP	GP1	GP2
10/05/2004	37.94	8050.00	8262.20
10/06/2004	37.77	8100.00	8307.68
10/07/2004	38.01	8100.00	8307.68
10/08/2004	37.61	8100.00	8307.68
10/11/2004	38.27	8150.00	8353.16
10/12/2004	39.47	8150.00	8353.16
10/13/2004	37.38	8100.00	8307.68
10/14/2004	37.27	8100.00	8307.68
10/15/2004	37.65	8150.00	8353.16
10/18/2004	37.97	8150.00	8353.16
10/19/2004	37.66	8100.00	8307.68
10/20/2004	37.12	8150.00	8353.16
10/21/2004	38.37	8250.00	8459.28
10/22/2004	37.91	8200.00	8413.80
10/25/2004	38.17	8300.00	8519.92
10/26/2004	37.66	8250.00	8459.28
10/27/2004	38.14	8250.00	8459.28
10/28/2004	36.87	8200.00	8413.80
10/29/2004	35.75	8200.00	8413.80
11/01/2004	38.43	8300.00	8519.92
11/02/2004	36.78	8250.00	8459.28
11/03/2004	37.00	8150.00	8353.16
11/04/2004	36.87	8250.00	8459.28
11/05/2004	35.24	8250.00	8459.28
11/08/2004	35.45	8300.00	8519.92
11/09/2004	35.83	8300.00	8519.92
11/10/2004	34.14	8300.00	8519.92
11/11/2004	34.70	8300.00	8519.92

	Oil Price	ท่องคำแท่ง	ท่องรูปพรรณ
Date	OP	GP1	GP2
11/12/2004	33.64	8300.00	8519.92
11/15/2004	32.79	8300.00	8519.92
11/16/2004	33.08	8300.00	8519.92
11/17/2004	32.06	8350.00	8580.56
11/18/2004	32.49	8400.00	8626.04
11/19/2004	32.52	8350.00	8580.56
11/22/2004	34.58	8400.00	8626.04
11/23/2004	33.90	8400.00	8626.04
11/24/2004	34.85	8400.00	8626.04
11/25/2004	35.50	8400.00	8626.04
11/26/2004	35.31	8400.00	8626.04
11/29/2004	35.53	8400.00	8626.04
11/30/2004	36.10	8400.00	8626.04
12/01/2004	35.55	8400.00	8626.04
12/02/2004	34.28	8400.00	8626.04
12/03/2004	32.80	8350.00	8580.56
12/06/2004	33.70	N/A	N/A
12/07/2004	34.38	8400.00	8626.04
12/08/2004	32.42	8300.00	8519.92
12/09/2004	32.61	8200.00	8413.80
12/10/2004	33.53	8200.00	8413.80
12/13/2004	32.85	8150.00	8353.16
12/14/2004	33.85	8150.00	8353.16
12/15/2004	34.12	8150.00	8353.16
12/16/2004	35.57	8200.00	8413.80
12/17/2004	35.36	8150.00	8353.16
12/20/2004	36.48	8200.00	8413.80
12/21/2004	35.77	8200.00	8413.80

	Oil Price	ทองคำแท่ง	ทองรูปพรรณ
Date	OP	GP1	GP2
12/22/2004	36.08	8150.00	8353.16
12/23/2004	34.59	8150.00	8353.16
12/24/2004	34.59	8150.00	8353.16
12/27/2004	32.77	8200.00	8413.80
12/28/2004	33.25	8200.00	8413.80
12/29/2004	33.23	8200.00	8413.80
12/30/2004	34.01	8100.00	8307.68
12/31/2004	34.01	N/A	N/A
01/03/2005	34.28	8050.00	8262.20
01/04/2005	34.01	7950.00	8156.08
01/05/2005	34.92	7950.00	8156.08
01/06/2005	34.31	7950.00	8156.08
01/07/2005	36.57	7850.00	8065.12
01/10/2005	37.05	7800.00	7989.32
01/11/2005	36.63	7800.00	7989.32
01/12/2005	37.45	7800.00	7989.32
01/13/2005	37.71	7850.00	8065.12
01/14/2005	39.22	7800.00	7989.32
01/17/2005	39.40	7750.00	7943.84
01/18/2005	40.08	7750.00	7943.84
01/19/2005	39.76	7750.00	7943.84
01/20/2005	38.69	7750.00	7943.84
01/21/2005	39.10	7750.00	7943.84
01/24/2005	40.42	7800.00	7989.32
01/25/2005	40.05	7800.00	7989.32
01/26/2005	40.91	7750.00	7943.84
01/27/2005	40.63	7800.00	7989.32
01/28/2005	40.20	7800.00	7989.32

	Oil Price	ท่องคำแท่ง	ท่องรูปพรรณ
Date	OP	GP1	GP2
01/31/2005	38.47	7750.00	7943.84
02/01/2005	39.19	7750.00	7943.84
02/02/2005	38.62	7750.00	7943.84
02/03/2005	38.31	7750.00	7943.84
02/04/2005	38.55	7650.00	7837.72
02/07/2005	38.20	7600.00	7792.24
02/08/2005	37.49	7550.00	7746.76
02/09/2005	37.65	7550.00	7746.76
02/10/2005	38.11	7600.00	7792.24
02/11/2005	38.94	7700.00	7898.36
02/14/2005	38.83	7700.00	7898.36
02/15/2005	39.33	7700.00	7898.36
02/16/2005	39.22	7700.00	7898.36
02/17/2005	40.01	7750.00	7943.84
02/18/2005	40.08	7750.00	7943.84
02/21/2005	40.77	7800.00	7989.32
02/22/2005	41.01	7800.00	7989.32
02/23/2005	41.30	7850.00	8065.12
02/24/2005	41.85	7900.00	8110.60
02/25/2005	41.76	7900.00	8110.60
02/28/2005	42.71	7900.00	8110.60
03/01/2005	42.52	7900.00	8110.60
03/02/2005	42.95	7850.00	8065.12
03/03/2005	43.67	7850.00	8065.12
03/04/2005	43.94	7850.00	8065.12
03/07/2005	43.77	7900.00	8110.60
03/08/2005	44.04	7900.00	8156.08
03/09/2005	45.22	7950.00	8156.08

	Oil Price	ท่องค่าแท่ง	ท่องรูปพรรณ
Date	OP	GP1	GP2
03/10/2005	45.48	7950.00	8156.08
03/11/2005	44.68	8000.00	8201.56
03/14/2005	45.43	8050.00	8262.20
03/15/2005	45.98	8000.00	8201.56
03/16/2005	46.17	8000.00	8201.56
03/17/2005	47.64	8050.00	8262.20
03/18/2005	47.23	8000.00	8201.56
03/21/2005	47.95	8000.00	8201.56
03/22/2005	47.85	7900.00	8110.60
03/23/2005	47.27	7850.00	8065.12
03/24/2005	46.90	7800.00	7989.32
03/25/2005	46.90	7850.00	8065.12
03/28/2005	46.55	7850.00	8065.12
03/29/2005	45.90	7900.00	8110.60
03/30/2005	46.16	7900.00	8110.60
03/31/2005	46.62	7900.00	8110.60
04/01/2005	48.25	7900.00	8110.60
04/04/2005	50.22	7900.00	8110.60
04/05/2005	50.13	7900.00	8110.60
04/06/2005	49.84	7950.00	8156.08
04/07/2005	50.15	7950.00	8156.08
04/08/2005	48.12	7950.00	8156.08
04/11/2005	46.88	8000.00	8201.56
04/12/2005	47.82	8000.00	8201.56
04/13/2005	45.97	N/A	N/A
04/14/2005	45.12	N/A	N/A
04/15/2005	45.00	N/A	N/A
04/18/2005	44.13	7950.00	8156.08

	Oil Price	ห้องคำแท่ง	ห้องรูปพรรณ
Date	OP	GP1	GP2
04/19/2005	44.44	7950.00	8156.08
04/20/2005	46.28	8050.00	8262.20
04/21/2005	46.62	8050.00	8262.20
04/22/2005	47.53	8050.00	8262.20
04/25/2005	48.30	8050.00	8262.20
04/26/2005	47.38	8050.00	8262.20
04/27/2005	47.04	8100.00	8307.68
04/28/2005	45.72	8050.00	8262.20
04/29/2005	46.47	8050.00	8262.20
05/02/2005	44.27	N/A	N/A
05/03/2005	45.42	8050.00	8262.20
05/04/2005	45.21	8000.00	8201.56
05/05/2005	46.14	N/A	N/A
05/06/2005	45.94	8000.00	8201.56
05/09/2005	45.39	7950.00	8156.08
05/10/2005	45.70	7950.00	8156.08
05/11/2005	45.53	7950.00	8156.08
05/12/2005	44.96	7950.00	8156.08
05/13/2005	44.81	7850.00	8065.12
05/16/2005	44.38	7850.00	8065.12
05/17/2005	44.45	7900.00	8110.60
05/18/2005	44.82	7900.00	8110.60
05/19/2005	44.15	7950.00	8156.08
05/20/2005	44.82	7950.00	8156.08
05/23/2005	44.30	N/A	N/A
05/24/2005	45.04	7900.00	8110.60
05/25/2005	44.93	7900.00	8110.60
05/26/2005	46.07	7950.00	8156.08

Oil Price		ทองคำแท่ง	ทองรูปพรรณ
Date	OP	GP1	GP2
05/27/2005	46.51	7950.00	8156.08
05/30/2005	46.51	7950.00	8156.08
05/31/2005	47.52	7950.00	8156.08
06/01/2005	47.27	8000.00	8201.56
06/02/2005	49.24	8000.00	8201.56
06/03/2005	49.09	8050.00	8262.20
06/06/2005	50.02	8100.00	8307.68
06/07/2005	49.88	8100.00	8307.68
06/08/2005	49.31	8100.00	8307.68
06/09/2005	49.13	8100.00	8307.68
06/10/2005	50.08	8100.00	8307.68
06/13/2005	49.40	8100.00	8307.68
06/14/2005	51.03	8150.00	8353.16
06/15/2005	50.80	8150.00	8353.16
06/16/2005	50.66	8200.00	8413.80
06/17/2005	51.78	8350.00	8580.56
06/20/2005	52.42	8400.00	8626.04
06/21/2005	52.72	8400.00	8626.04
06/22/2005	52.41	8400.00	8626.04
06/23/2005	52.21	8400.00	8626.04
06/24/2005	53.24	8450.00	8671.52
06/27/2005	53.68	8450.00	8671.52
06/28/2005	54.03	8450.00	8671.52
06/29/2005	52.84	8400.00	8626.04
06/30/2005	52.28	8450.00	8671.52
07/01/2005	51.70	8400.00	8626.04
07/04/2005	53.16	8350.00	8580.56
07/05/2005	53.70	8350.00	8580.56

Oil Price	ท่องค่าแท่ง	ท่องรูปพรรณ	
Date	OP	GP1	GP2
07/06/2005	54.64	8300.00	8519.92
07/07/2005	55.51	8300.00	8519.92
07/08/2005	55.51	8350.00	8580.56
07/11/2005	53.40	8400.00	8626.04
07/12/2005	53.75	8400.00	8626.04
07/13/2005	54.54	8400.00	8626.04
07/14/2005	53.65	8350.00	8580.56
07/15/2005	52.17	8300.00	8519.92
07/18/2005	52.05	8300.00	8519.92
07/19/2005	50.85	8300.00	8519.92
07/20/2005	51.79	8300.00	8519.92
07/21/2005	50.82	8350.00	8580.56
07/22/2005	50.82	8300.00	8519.92
07/25/2005	51.64	8300.00	8519.92
07/26/2005	52.01	8300.00	8519.92
07/27/2005	52.16	8300.00	8519.92
07/28/2005	52.54	8350.00	8580.56
07/29/2005	53.71	8400.00	8626.04
08/01/2005	54.63	8450.00	8671.52
08/02/2005	54.83	8450.00	8671.52
08/03/2005	55.62	8400.00	8626.04
08/04/2005	54.42	8450.00	8671.52
08/05/2005	54.58	8450.00	8671.52
08/08/2005	55.24	8500.00	8717.00
08/09/2005	56.28	8450.00	8671.52
08/10/2005	56.20	8450.00	8671.52
08/11/2005	56.85	8450.00	8671.52
08/12/2005	57.79	8550.00	8777.64

	Oil Price	ท่องค่าแท่ง	ท่องรูปพรรณ
Date	OP	GP1	GP2
08/15/2005	57.50	8550.00	8777.64
08/16/2005	57.68	8550.00	8777.64
08/17/2005	57.29	8650.00	8868.60
08/18/2005	55.43	8550.00	8777.64
08/19/2005	55.09	8550.00	8777.64
08/22/2005	56.39	8500.00	8717.00
08/23/2005	56.44	8500.00	8717.00
08/24/2005	57.16	8500.00	8717.00
08/25/2005	58.21	8500.00	8717.00
08/26/2005	58.20	8500.00	8717.00
08/29/2005	58.65	8550.00	8777.64
08/30/2005	57.83	8550.00	8777.64
08/31/2005	58.57	8450.00	8671.52
09/01/2005	58.93	8500.00	8717.00
09/02/2005	58.88	8600.00	8823.12
09/05/2005	57.36	8600.00	8823.12
09/06/2005	57.34	8600.00	8823.12
09/07/2005	56.71	8600.00	8823.12
09/08/2005	55.88	8600.00	8823.12
09/09/2005	56.10	8600.00	8823.12
09/12/2005	55.61	8650.00	8868.60
09/13/2005	54.46	8650.00	8868.60
09/14/2005	54.95	8650.00	8868.60
09/15/2005	56.60	8650.00	8868.60
09/16/2005	56.00	8800.00	9035.36
09/19/2005	55.20	8850.00	9080.84
09/20/2005	56.85	9050.00	9293.08
09/21/2005	57.07	9050.00	9293.08

	Oil Price	คงค่าน้ำมัน	คงรูปพรรณ
Date	OP	GP1	GP2
09/22/2005	57.94	9150.00	9399.20
09/23/2005	55.80	9050.00	9293.08
09/26/2005	55.10	9000.00	9232.44
09/27/2005	56.55	9050.00	9293.08
09/28/2005	55.85	9050.00	9293.08
09/29/2005	56.77	9100.00	9353.72
09/30/2005	56.52	9150.00	9399.20
10/03/2005	57.75	9050.00	9293.08
10/04/2005	56.30	9050.00	9293.08
10/05/2005	55.35	9050.00	9293.08
10/06/2005	53.90	9050.00	9293.08
10/07/2005	53.25	9100.00	9353.72
10/10/2005	53.68	9150.00	9399.20
10/11/2005	53.85	9200.00	9459.84
10/12/2005	54.80	9200.00	9459.84
10/13/2005	54.60	9150.00	9399.20
10/14/2005	54.03	9150.00	9399.20
10/17/2005	54.85	9100.00	9353.72
10/18/2005	53.98	9150.00	9399.20
10/19/2005	53.35	9100.00	9353.72
10/20/2005	52.90	9000.00	9232.44
10/21/2005	52.30	8950.00	9186.96
10/24/2005	52.20	9050.00	9293.08
10/25/2005	52.38	9100.00	9353.72
10/26/2005	54.20	9100.00	9353.72
10/27/2005	53.88	9100.00	9353.72
10/28/2005	53.02	9100.00	9353.72
10/31/2005	52.65	9100.00	9353.72

	Oil Price	ทองคำแท่ง	ทองรูปพรรณ
Date	OP	GP1	GP2
11/01/2005	52.18	9000.00	9232.44
11/02/2005	52.98	8950.00	9186.96
11/03/2005	53.34	8950.00	9186.96
11/04/2005	54.43	8950.00	9186.96
11/07/2005	53.55	8900.00	9141.48
11/08/2005	52.75	8900.00	9141.48
11/09/2005	53.00	9000.00	9232.44
11/10/2005	52.08	9100.00	9353.72
11/11/2005	50.80	9050.00	9293.08
11/14/2005	51.20	9100.00	9353.72
11/15/2005	50.57	9100.00	9353.72
11/16/2005	50.57	9100.00	9353.72
11/17/2005	50.80	9250.00	9505.32
11/18/2005	50.05	9300.00	9550.80
11/21/2005	50.70	9300.00	9550.80
11/22/2005	50.92	9450.00	9702.40
11/23/2005	51.58	9450.00	9702.40
11/24/2005	51.30	9450.00	9702.40
11/25/2005	50.52	9500.00	9747.88
11/28/2005	50.35	9550.00	9823.68
11/29/2005	50.05	9650.00	9914.64
11/30/2005	50.10	9600.00	9869.16
12/01/2005	51.40	9600.00	9869.16
12/02/2005	52.35	9750.00	10020.76
12/05/2005	53.15	N/A	N/A
12/06/2005	53.35	9850.00	10111.72
12/07/2005	53.93	9900.00	10172.36
12/08/2005	53.37	10050.00	10339.12

	Oil Price	ท่องค่าแท่ง	ท่องรูปพรรณ
Date	OP	GP1	GP2
12/09/2005	55.18	10100.00	10384.60
12/12/2005	54.08	10450.00	10748.44
12/13/2005	54.90	10150.00	10430.08
12/14/2005	55.13	10000.00	10278.48
12/15/2005	54.85	9750.00	10020.76
12/16/2005	54.25	9600.00	9869.16
12/19/2005	52.55	9750.00	10020.76
12/20/2005	52.05	9800.00	10066.24
12/21/2005	51.95	9500.00	9747.88
12/22/2005	52.50	9600.00	9869.16
12/23/2005	52.10	9700.00	9975.28
12/26/2005	52.10	9750.00	10020.76
12/27/2005	51.62	9750.00	10020.76
12/28/2005	51.63	9850.00	10111.72
12/29/2005	53.20	10000.00	10278.48
12/30/2005	53.55	9950.00	10233.00
01/02/2006	53.55	N/A	N/A
01/03/2006	55.15	10000.00	10278.48
01/04/2006	56.58	10150.00	10399.76
01/05/2006	56.85	10100.00	10354.28
01/06/2006	56.53	9950.00	10233.00
01/09/2006	57.75	10150.00	10399.76
01/10/2006	57.20	10200.00	10445.24
01/11/2006	57.30	10150.00	10399.76
01/12/2006	57.82	10150.00	10399.76
01/13/2006	57.20	10150.00	10399.76
01/16/2006	58.18	10300.00	10551.36
01/17/2006	58.48	10450.00	10702.96

	Oil Price	ท่องค่าเฉลี่ย	ท่องรวมบรรณาณ
Date	OP	GP1	GP2
01/18/2006	59.70	10100.00	10354.28
01/19/2006	59.20	10250.00	10490.72
01/20/2006	60.30	10300.00	10551.36
01/23/2006	61.05	10250.00	10490.72
01/24/2006	60.70	10250.00	10490.72
01/25/2006	59.78	10300.00	10551.36
01/26/2006	59.33	10250.00	10490.72
01/27/2006	60.08	10200.00	10445.24
01/30/2006	60.73	10250.00	10490.72
01/31/2006	60.83	10350.00	10596.84
02/01/2006	61.00	10350.00	10596.84
02/02/2006	60.40	10500.00	10763.60
02/03/2006	58.70	10500.00	10763.60
02/06/2006	59.95	10500.00	10763.60
02/07/2006	59.18	10550.00	10809.08
02/08/2006	58.20	10300.00	10551.36
02/09/2006	58.10	10400.00	10657.48
02/10/2006	57.87	10400.00	10657.48
02/13/2006	57.00	N/A	N/A
02/14/2006	56.65	10050.00	10339.12
02/15/2006	55.72	10150.00	10399.76
02/16/2006	54.75	10050.00	10339.12
02/17/2006	55.50	10150.00	10399.76
02/20/2006	56.80	10200.00	10445.24
02/21/2006	57.25	10250.00	10490.72
02/22/2006	57.25	10250.00	10490.72
02/23/2006	56.30	10250.00	10490.72
02/24/2006	57.05	10200.00	10445.24

	Oil Price	ท่องค่าน้ำมัน	ท่องรูปพรรณ
Date	OP	GP1	GP2
02/27/2006	57.68	10300.00	10551.36
02/28/2006	56.85	10250.00	10490.72
03/01/2006	57.85	10300.00	10551.36
03/02/2006	58.70	10300.00	10551.36
03/03/2006	59.90	10300.00	10551.36
03/06/2006	59.70	10300.00	10551.36
03/07/2006	58.40	10200.00	10445.24
03/08/2006	56.80	10200.00	10445.24
03/09/2006	56.00	10100.00	10354.28
03/10/2006	56.61	10100.00	10354.28
03/13/2006	56.47	10050.00	10339.12
03/14/2006	57.24	10100.00	10354.28
03/15/2006	58.50	10200.00	10445.24
03/16/2006	57.49	10200.00	10445.24
03/17/2006	58.48	10200.00	10445.24
03/20/2006	57.36	10150.00	10399.76
03/21/2006	56.27	10150.00	10399.76
03/22/2006	56.72	10150.00	10399.76
03/23/2006	56.35	10100.00	10354.28
03/24/2006	57.38	10150.00	10399.76
03/27/2006	57.21	10250.00	10490.72
03/28/2006	57.86	10300.00	10551.36
03/29/2006	58.86	10250.00	10490.72
03/30/2006	59.53	10400.00	10657.48
03/31/2006	60.38	10550.00	10809.08
04/03/2006	61.77	10550.00	10809.08
04/04/2006	61.10	10600.00	10854.56
04/05/2006	60.46	10500.00	10763.60

	Oil Price	ทองคำแท่ง	ทองรูปพรรณ
Date	OP	GP1	GP2
04/06/2006	61.60	N/A	N/A
04/07/2006	61.21	10650.00	10915.20
04/10/2006	62.17	10600.00	10854.56
04/11/2006	63.57	10650.00	10915.20
04/12/2006	63.48	10650.00	10915.20
04/13/2006	63.29	N/A	N/A
04/14/2006	63.29	N/A	N/A
04/17/2006	64.70	10700.00	10960.68
04/18/2006	65.21	10900.00	11172.92
04/19/2006	65.65	11000.00	11279.04
04/20/2006	66.88	11300.00	11582.24
04/21/2006	65.86	11000.00	11279.04
04/24/2006	67.40	11250.00	11536.76
04/25/2006	66.87	11100.00	11370.00
04/26/2006	67.05	11250.00	11536.76
04/27/2006	65.33	11300.00	11582.24
04/28/2006	64.83	11300.00	11582.24
05/01/2006	67.79	N/A	N/A
05/02/2006	68.36	11550.00	11839.96
05/03/2006	68.63	11900.00	12203.80
05/04/2006	66.42	11850.00	12158.32
05/05/2006	64.96	N/A	N/A
05/08/2006	64.97	12100.00	12416.04
05/09/2006	65.01	12100.00	12416.04
05/10/2006	65.64	12400.00	12719.24
05/11/2006	67.16	12650.00	12992.12
05/12/2006	66.91	N/A	N/A
05/15/2006	65.17	12550.00	12886.00

	Oil Price	ท่องคำเที่ยง	ท่องรูปพรรณ
Date	OP	GP1	GP2
05/16/2006	63.93	12350.00	12673.76
05/17/2006	64.36	12700.00	13037.60
05/18/2006	62.46	12400.00	12719.24
05/19/2006	63.81	12350.00	12673.76
05/22/2006	62.39	11750.00	12052.20
05/23/2006	63.76	11900.00	12203.80
05/24/2006	64.56	12100.00	12416.04
05/25/2006	63.49	11750.00	12052.20
05/26/2006	64.88	11800.00	12097.68
05/29/2006	64.88	11750.00	12052.20
05/30/2006	64.87	11800.00	12097.68
05/31/2006	64.88	11800.00	12097.68
06/01/2006	65.06	11500.00	11794.48
06/02/2006	65.12	11300.00	11582.24
06/05/2006	67.48	11550.00	11839.96
06/06/2006	66.99	11500.00	11794.48
06/07/2006	66.42	11300.00	11582.24
06/08/2006	64.57	11300.00	11582.24
06/09/2006	65.62	11050.00	11324.52
06/12/2006	66.63	N/A	N/A
06/13/2006	64.56	N/A	N/A
06/14/2006	63.64	10300.00	10551.36
06/15/2006	63.97	10400.00	10657.48
06/16/2006	63.71	10550.00	10809.08
06/19/2006	63.18	10400.00	10657.48
06/20/2006	63.82	10350.00	10596.84
06/21/2006	62.90	10450.00	10702.96
06/22/2006	65.01	10700.00	10960.68

	Oil Price	ทองคำแท่ง	ทองรูปพรรณ
Date	OP	GP1	GP2
06/23/2006	64.87	10600.00	10854.56
06/26/2006	65.16	10650.00	10915.20
06/27/2006	66.28	10700.00	10960.68
06/28/2006	66.22	10600.00	10854.56
06/29/2006	66.56	10550.00	10809.08
06/30/2006	67.73	10800.00	11051.64
07/03/2006	68.83	11100.00	11370.00
07/04/2006	68.57	11100.00	11370.00
07/05/2006	68.25	11200.00	11476.12
07/06/2006	69.39	11250.00	11536.76
07/07/2006	69.26	11300.00	11582.24
07/10/2006	68.36	11250.00	11536.76
07/11/2006	68.07	N/A	N/A
07/12/2006	68.86	11400.00	11688.36
07/13/2006	70.27	11600.00	11885.44
07/14/2006	71.92	11800.00	12097.68
07/17/2006	72.32	12150.00	12476.68
07/18/2006	70.71	11700.00	12006.72
07/19/2006	68.77	11300.00	11582.24
07/20/2006	68.94	11450.00	11733.84
07/21/2006	68.60	11250.00	11536.76
07/24/2006	67.68	11050.00	11324.52
07/25/2006	69.38	11150.00	11430.64
07/26/2006	67.99	11100.00	11370.00
07/27/2006	68.69	11250.00	11536.76
07/28/2006	69.43	11250.00	11536.76
07/31/2006	67.58	11350.00	11642.88
08/01/2006	69.32	11300.00	11582.24

	Oil Price	ห้องคำแท่น	ห้องรูปพรรณ
Date	OP	GP1	GP2
08/02/2006	70.42	11550.00	11839.96
08/03/2006	70.54	11500.00	11794.48
08/04/2006	70.85	11500.00	11794.48
08/07/2006	71.41	11500.00	11794.48
08/08/2006	72.08	11500.00	11794.48
08/09/2006	72.03	11350.00	11642.88
08/10/2006	70.43	11500.00	11794.48
08/11/2006	70.49	11300.00	11582.24
08/14/2006	69.72	11200.00	11476.12
08/15/2006	68.97	11100.00	11370.00
08/16/2006	68.43	11050.00	11324.52
08/17/2006	66.82	11150.00	11430.64
08/18/2006	67.16	10950.00	11218.40
08/21/2006	68.05	11000.00	11279.04
08/22/2006	68.60	11100.00	11370.00
08/23/2006	67.98	11050.00	11324.52
08/24/2006	67.29	11050.00	11324.52
08/25/2006	68.76	11050.00	11324.52
08/28/2006	66.86	11050.00	11324.52
08/29/2006	66.44	10950.00	11218.40
08/30/2006	66.03	10900.00	11172.92
08/31/2006	65.86	11000.00	11279.04
09/01/2006	66.38	11100.00	11339.68
09/04/2006	64.23	11050.00	11279.04
09/05/2006	63.75	11050.00	11279.04
09/06/2006	63.95	11150.00	11385.16
09/07/2006	63.63	11150.00	11385.16
09/08/2006	62.79	10900.00	11142.60

Oil Price	ทองคำแท่ง	ทองรูปพรรณ	
Date	OP	GP1	GP2
09/11/2006	61.30	10550.00	10778.76
09/12/2006	61.27	10550.00	10778.76
09/13/2006	59.54	10300.00	10521.04
09/14/2006	59.71	10400.00	10612.00
09/15/2006	59.06	10200.00	10414.92
09/18/2006	58.96	10250.00	10460.40
09/19/2006	59.12	10300.00	10521.04
09/20/2006	56.88	N/A	N/A
09/21/2006	56.11	10250.00	10460.40
09/22/2006	57.03	10350.00	10566.52
09/25/2006	55.03	10350.00	10566.52
09/26/2006	56.07	10450.00	10672.64
09/27/2006	56.32	10500.00	10733.28
09/28/2006	57.58	10650.00	10869.72
09/29/2006	57.83	10650.00	10869.72
10/02/2006	59.16	10650.00	10869.72
10/03/2006	56.81	10550.00	10778.76
10/04/2006	55.36	10250.00	10460.40
10/05/2006	56.00	10050.00	10263.32
10/06/2006	56.44	10150.00	10369.44
10/09/2006	57.16	10250.00	10460.40
10/10/2006	56.88	10250.00	10460.40
10/11/2006	55.68	10150.00	10369.44
10/12/2006	55.01	10150.00	10369.44
10/13/2006	56.00	10200.00	10414.92
10/16/2006	56.84	10400.00	10612.00
10/17/2006	57.62	10500.00	10733.28
10/18/2006	57.02	10400.00	10612.00

	Oil Price	ท่องคำแท่ง	ท่องรูปพรรณ
Date	OP	GP1	GP2
10/19/2006	55.85	10400.00	10612.00
10/20/2006	57.15	10500.00	10733.28
10/23/2006	55.06	N/A	N/A
10/24/2006	55.11	10250.00	10460.40
10/25/2006	55.98	10250.00	10460.40
10/26/2006	57.54	10350.00	10566.52
10/27/2006	56.62	10350.00	10566.52
10/30/2006	56.92	10400.00	10612.00
10/31/2006	54.57	10400.00	10612.00

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ประวัติผู้เขียน

ชื่อ

นางสาวอังคณา ทาก้า

วัน เดือนปี กศด

5 ธันวาคม 2521

ประวัติการศึกษา

สำเร็จการศึกษาประกาศนียบัตรวิชาชีพ โรงเรียนเทคโนโลยี หมู่บ้านครู
ภาคเหนือ ปีการศึกษา 2538

สำเร็จการศึกษาประกาศนียบัตรวิชาชีพชั้นสูง โรงเรียนพาณิชยการล้านนา
ปีการศึกษา 2540

สำเร็จการศึกษาปริญญาตรี คณะบัญชี การเงินการธนาคาร สาขาวิเคราะห์
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