CHAPTER VII :
THE EFFECTIVENESS OF THE EXPLORATION WORK

VII.1. LEGAL GROUNDS FOR IMPLEMENTATION

- Pursuant to a joint contract on "prospecting, survey, exploration, exploitation and processing of gold mineral resources in Attapu Province" signed on 21-11-2006 in Vientiane- Capital of Laos between Mining Team of the Ministry of National Defense of Lao P.D.R. and Viet-Lao Joint Stock Company.

- Pursuant to economic contract signed between the Viet-Lao Joint Stock Company and some units such as Geological Party 301 – Northwest Geological Division; Geophysical Party 79 – Geophysical Division ; Geological Party 701 – Mien Trung Water Resources Survey Division. Intergeo is involved in gold exploration in Vang Tat Gold Mine.

- Based on Dicision No 20/2006/QĐ-BTNMT of the Minister of Natural Resources and Environment dated 12/12/2006 promulgating a set of estimated unit price for geoengineerings (according to minimum salary level: 450,000 VND/month).

VII.2. IMPLEMENTED WORK ITEMS AND THEIR VALUES

All of implemented work items with their volumes and values are shown in the table VII.2.

Table VII.2 – 1. Volumes and values of geodesic work

No	Work items	Unit	Volume	Unit price	Total expense
A	**FIELD SURVEY**				**1,597,259,029**
1	Set up triangulation grid class 4	Point	7	38,846,986	271.928.902
2	Set up polygonometric grid I	Point	4	23,329,583	93.318.332
3	Set up polygonometric grid II	Point	12	4,403,880	52.846.560
4	Meridian- latitude slope line	km	11	7,141,329	78.554.619
5	Tachymetric line	km	7.65	3,481,195	26.631.142
6	Grid controlling plane and elevation	km	27.37	1,463,253	40.049.235
7	1: 2.000 scale topographic mapping	km	3	140,716,700	422.150.100
8	1: 2.000 scale topographic profile mapping	km	32.46	5,637,338	182.987.991
9	Set up of exploration lines KC stake 50m	km	3	1,909,654	5.728.962
10	Set up of exploration lines KC stake 10m	km	32.46	3,140,755	101.948.907
11	Engineering to the field	Point	33	1,926,691	63.580.803
12	Measurement of main engineering' coordinates	Point	54	1.593.260	86.036.040
13	Measurement of minor engineering' coordinates	Point	126	1.015.907	128.004.282
14	Digitazing topographic map	Sheet	3	14.497.718	43.493.154
B	**OTHER EXPENSES**				**83,100,066**
1	Buying marker' coordinates mốc	Point	2	5.000.000	10.000.000
2	Establishing final report	Report	1	2%A	31.945.181
3	Examination and approval			1,5%A	23.958.885
4	Moving staffs	km	1200	14.330	17.196.000
	Total (A+B)				**1,680,359,095**

Table VII.2 – 2 – Volume and values of geophysical work

No	Work items	Unit	Volume	Unit price	Expenses
A	**FIELD MAPPING**				
1	IP sounding with demension equipment: d = 50, n = 8	Point	658	1.332.628	870.289.224
2	IP sounding with demension equipment: d= 10, n = 8	Point	741	1.006.096	745.571.136
B	**EXPENSES FOR TRANSPORTATION**				20.000.000
	TOTAL				**1,635,806,360**

Table VII.2 – 3 – Volume and values of exploration drilling

No	Work items	Unit	Volume	Unit price	Expenses
A	**EXPENSES FOR DRILLING**				
1	Expenses for road and drilling platform making	Hole	50	7.000.000	350000000
2	Expenses for exploration drilling	m	3463	1.800.000	6233400000
3	Drilling marker making	Hole	50	300.000	15000000
B	**EXPENSES FOR**				1167900000
	TOTAL				**7,766,300,000**

Table VII.2 – 4 – Volume and values of hydrogeological – geoengiering work

No	Work items	Unit	Volume	Unit price	Expenses
1	**Hydrogeological-geoengineering work**				
1.1	1/2000 scale general Hydrogeological-geoengineering mapping				
1.1.1	Field work	Km^2	3	20.513.000	61.539.000
1.1.2	Office work			3.923.230	11.769.700
1.2	Hydrogeological-geoengineering monitoring over drilling-engineering work				
1.2.1	Drilling engineering	eng	14	56.460	790.400
1.2.2	Engineering	eng	10	56.460	564.600
1.3	Slug test (water withdrawing and pouring)				
1.3.1	Preparation and finish	Drillhole	6	7.866.920	47.201.500
1.3.2	Slug test (water withdrawing and pouring)	Ca	54	1.416.930	76.514.200
1.3.3	Measurement of water return level	Ca	18	461.930	8.314.700
2	Sampling				
2.1	Alround water chemical sample	Sample	14	42.010	588.100
2.2	Microbiotic sample	Sample	2	42.010	82.020
2.3	Physic-mechanic soil sample	Sample	10	458.100	4.581.000
2.4	Physic-mechanic rock sample	Sample	15	458.100	6.871.500
2	Expenses for sum-up				59.165.000
3	Expenses for tent				20.000.000
	Total				**297,983,900**

TABLE VII.2 – 5 – VOLUME AND VALUES OF GEOLOGICAL WORK

No	Work items	Unit	Volume	Unit price	Expenses
1	**Geological survey**				
1.1	1/2000 scale geological mapping				
1.1.1	Field work	Km^2	3	61728.710	185186130
1.1.2	Office work			45158.82	270952000
2	**Sample collecting work**				
2.1	Trench samples collected in outcrop, drift, trench	Sample	185	134.400	24864000
2.2	Drilling core sampling	Sample Mẫu	561	78.270	43909470
2.3	Specific gravity samples	Sample	59	293.180	17297620
2.4	Technological samples	Sample	3	10.000.000	30000000
3	Execution of geological engineerings				
3.1	Outcrop cleaning	M^3	252	123.000	31611000
3.2	Shallow trenches		816	402.720	328619520
4	Transportation expenses				25000000
5	Expenses for tent				19148795
6	**Expenses for sum-up of final report**				150000000
	Total				**1,126,588,535**

Table VII.2 – 6 – Volume and values of prosesing and analyzing different samples

No	Work items	Unit	Volume	Unit price	Expenses
1	**Processing different samples**				
1.1	AAS sample	Sample	746	40.11	29922000
1.2	Thin sections	Sample	25	63.75	1593100
1.3	Polished sections	Sample	20	82.07	1641400
2	**Analyzing different samples**				
2.1	AAS sample (Au, Ag)	Sample	878	300.000	263400000
2.2	ICP -MS	Sample	10	225.75	2257500
2.3	Technological samples	Sample	3	50.000.000	150000000
2.4	Alround water chemical sample	Sample	14	383.49	5368900
2.5	Microbiotic sample Mẫu vi sinh	Sample	2	383.490	767000
2.6	Physic-mechanic soil sample	Sample	10	1.755.400	17554000
2.7	Physic-mechanic rock sample	Sample	15	1.755.400	26331000
	Total				**498,834,900**

Table VII.2 – 6 – Total values and expenses

No	Work items	Expenses
1	Geodesic work	**1680359095**
2	Geophysic work	**1635806360**
3	Exploration drilling work	**7766300000**
4	Hydrogeological-geoengineering work	**2979839**
5	Geological work	**1126588535**
6	Sample' processing and analyzing work	**498834900**
7	Other expenses equal 10% of total exploration expense values (Examination-approval, report review, data digitazing, etc.)	**1271086873**
	Total	**13,981,955,602**

VII.3. THE EFFECTIVENESS OF THE INVESTMENT CAPITAL

The exploration expenses have been reduced in comparison with estimated due to the regulation on exploration area so that this can be suite with practical data. This regulation has led to other regulation on related work volumes with the tendence of reducing in comparison with initially estimated cost 34,620,177,341 VN Đồng (2,163,761 USD) including exploration on an area of 6 km^2 and 1/10.000 scale prospecting on an area of 24 km^2 of Vang Tat area. This has confirmed that the abobe-mentioned regulation is quite rational.

Mineral resources have been assessed at category 122 = 3,161 ton of metallic Au.

These data at category 122 show that the unit price of exploration for a product unit ***4,189,978***VNĐồng/1kg, while the the expenses spent for given products are ***1,474,954,000,000*** VN Đồng. Thus, the expenses for exploration occupy only **1%** of economic value of given products.