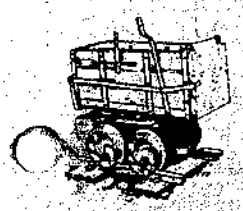

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LONGSTREET PROJECT
Nye County, Nevada

Pre-Feasibility Study
July, 1988

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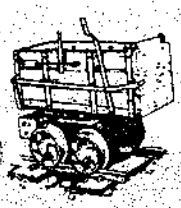

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SURPAC MINING SYSTEMS

LONGSTREET PROJECT
Nye County, Nevada
Pre-Feasibility Study
July, 1988

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MINE ENGINEERING SERVICES
SURPAC MINING SYSTEMS

22 July, 1988

Mr. Guenter Liedtke
Naneco Resources
510-5th Street S.W.
Suite 800
Calgary, Alberta, Canada
T2P 3S2

Dear Guenter:

Enclosed please find the results of Mine Development Associates' preliminary investigation of the Longstreet property. The property contains 3.023 million tons of proven mineable reserves, with a stripping ratio of 0.95:1. A heap leaching operation is envisioned. The results of our study, which has an accuracy of plus or minus 15%, indicate the Longstreet project to be feasible at metal prices of $475 gold and $6.75 silver, contingent on certain conditions being satisfied, as outlined below and shown in sections 9 and 10.

The results of an economic evaluation are tabulated below for two cases:

BASE CASE:USING PROVEN RESERVES ONLY:

PRESENT VALUE (10%) ($000'S)	RATE OF RETURN	METAL PRICES GOLD	SILVER
$(1123.7)	-2.60%	$400	$6.00
(216.2)	7.53%	425	6.25
691.3	18.08%	450	6.50
1550.9	28.51%	475	6.75
2384.9	39.11%	500	7.00

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CASE 1A:PROVEN RESERVES PLUS ONE ADDITIONAL YEAR

$ 241.8	12.31%	$425	$6.25
1328.5	22.90%	450	6.50
2361.2	33.30%	475	6.75
3374.8	43.90%	500	7.00

A preliminary economic evaluation of the Longstreet deposit indicates the project is potentially profitable at current metal prices. The project is very sensitive to metal prices, with 10% fluctuations changing the economics considerably. The project is also sensitive to fluctuations in operating cost. Additional reserves improve the project economics.

The project is on the border of providing acceptable returns. If metal prices fluctuate between $450 and $500 the project appears to be economic and should provide good returns. If metal prices fluctuate between $400 and $450 the project will not provide an adequate rate of return, and may not provide payback of capital. We believe the project to be economically feasible at metal prices of $475 gold and $6.75 silver provided the following conditions can be met:

-Obtain contracts for mining and crushing at, or lower than the costs estimated of $1.10 per ton for mining and $1.40 for crushing and stacking the pad ore. A savings of $0.10 per ton of ore increases the return on investment from 18.08% in the base case to 20.43%, and increases the present value by about $200,000.

The project is very sensitive to fluctuations in price and operating cost. Efforts should be made to stabilize operating cost by contracts, and stabilize price by hedging. A 10% change in operating costs or metal price will have significant impacts on rate of return and capital payback. A $0.30 change in the operating cost changes the rate of return as follows:

OPERATING COST	RATE OF RETURN	PRESENT VALUE
$6.04	24.73%	$1245.3
6.34	18.08%	691.3
6.64	11.12%	97.2

The project has a very small margin for error at current prices of $450 gold and $6.50 silver. Almost 50% of the operating costs can be fixed by contracts, and a portion of projected production can be hedged to limit risk as much as possible.

-Develop additional reserves. The rate of return (base case-$450 gold) improves from 18.08% to 22.90% by increasing reserves by 800,000 tons. The present value also improves by over $600,000.

We would recommend the following work:

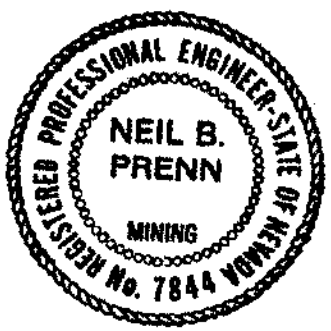
* Develop additional reserves by drilling an additional 50 drill-holes in target areas (15,000'). The drilling should be concentrated in the area of drill-holes 383-393 in the stockwork and rim zones. The cost of drilling, assaying, and logging has averaged $12.00 per foot, or $180,000 would be required. The cost of drill roads and support would increase the cost to an estimated $200,000

* Resolve the problem of angle hole vs. vertical hole samples by additional work. The angle holes are about 20% higher in grade than the vertical drill-holes. The work will probably consist of additional drilling and underground sampling.

* Resolve the problem of sample recovery in the ore grade zones. Sample recovery is generally significantly lower in the ore zones than the weakly mineralized zones. This could lead to obtaining more unmineralized sample than mineralized sample in the drill hole sample when the drill hole drilled an equal footage. This could tend to downgrade the sample assay on the fringes of the ore zones and in narrow mineralized zones.

* Obtain all necessary permits. The cost for completing the permit work is estimated to be $50,000.

* Obtain project financing. The financing should be in place before the bids from contractors are received to be able to negotiate from a strong position. The capital required in Year 1 is $4.36 million, with an additional $0.68 million required in Year 2. At metal prices of $475 gold and $6.75 silver, the project has a projected rate of return of 22.05%. Naneco Resources should be aware of, and act to minimize the downside risks, and then should be able to attain a reasonable rate of return.



Best Regards,

Neil B. Prenn, P.E.

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* Resolve the problem of angle hole vs. vertical hole samples by additional work. The angle holes are about 20% higher in grade than the vertical drill-holes. The work will probably consist of additional drilling and underground sampling.

Note

* Resolve the problem of sample recovery in the ore grade zones. Sample recovery is generally significantly lower in the ore zones than the weakly mineralized zones. This could lead to obtaining more unmineralized sample than mineralized sample in the drill hole sample when the drill hole drilled an equal footage. This could tend to downgrade the sample assay on the fringes of the ore zones and in narrow mineralized zones.

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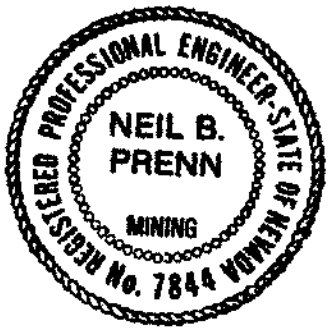
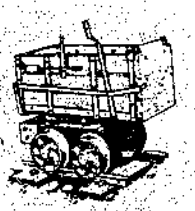


Best Regards,

Neil B. Prenn, P.E.



MINE DEVELOPMENT ASSOCIATES

MINE ENGINEERING SERVICES
SURPAC MINING SYSTEMS

LONGSTREET PROJECT
NYE COUNTY, NEVADA
July, 1988

1.0 INTRODUCTION

Naneco Resources Ltd. has requested Mine Development Associates (MDA) to review and summarize the available technical data on its Longstreet property in Nye County, Nevada. Metallurgical testwork and a design and cost study have been completed by Kappes, Cassiday and Associates (KCA) of Sparks, Nevada. Mine Development Associates has completed ore reserve studies and preliminary economic studies. Mine Development Associates is to determine if the preliminary economics indicate that additional drilling is warranted in target areas, if a detailed feasibility should be completed, and if the property should be placed in production.

The Longstreet property is a low grade gold-silver deposit that testwork indicates is amenable to heap leaching. The deposit can be mined by open-pit methods. The scope of this preliminary study includes a review of metallurgical testwork, an assessment of ore reserves, and an order of magnitude economic study. MDA has visited the site and witnessed drilling and sampling methods used by Naneco Resources, supervised obtaining the metallurgical bulk sample, and made a preliminary investigation of the crushing, plant and leach-pad sites.

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2.0 LOCATION AND ACCESS

The Longstreet property is located on the east flank of the Monitor mountain range. The closest town is Tonopah, Nevada, which is 62 kilometers (38 miles) to the southwest of the property. The location of the project is shown in figure 2.1 ($38^{o}22'$ North latitude; 116^{o} 42' West longitude). The property can be accessed by driving east on Nevada State Highway 6 for 48 kilometers (30 miles), proceeding north on Stone Cabin road, a gravel road, for a distance of about 42 kilometers (26 miles) to Windy Canyon road, a jeep road, for a distance of about 4 kilometers (2 miles). The Longstreet deposit is located between the 7200 ft. and 7800 ft. elevations

FIGURE 2-1

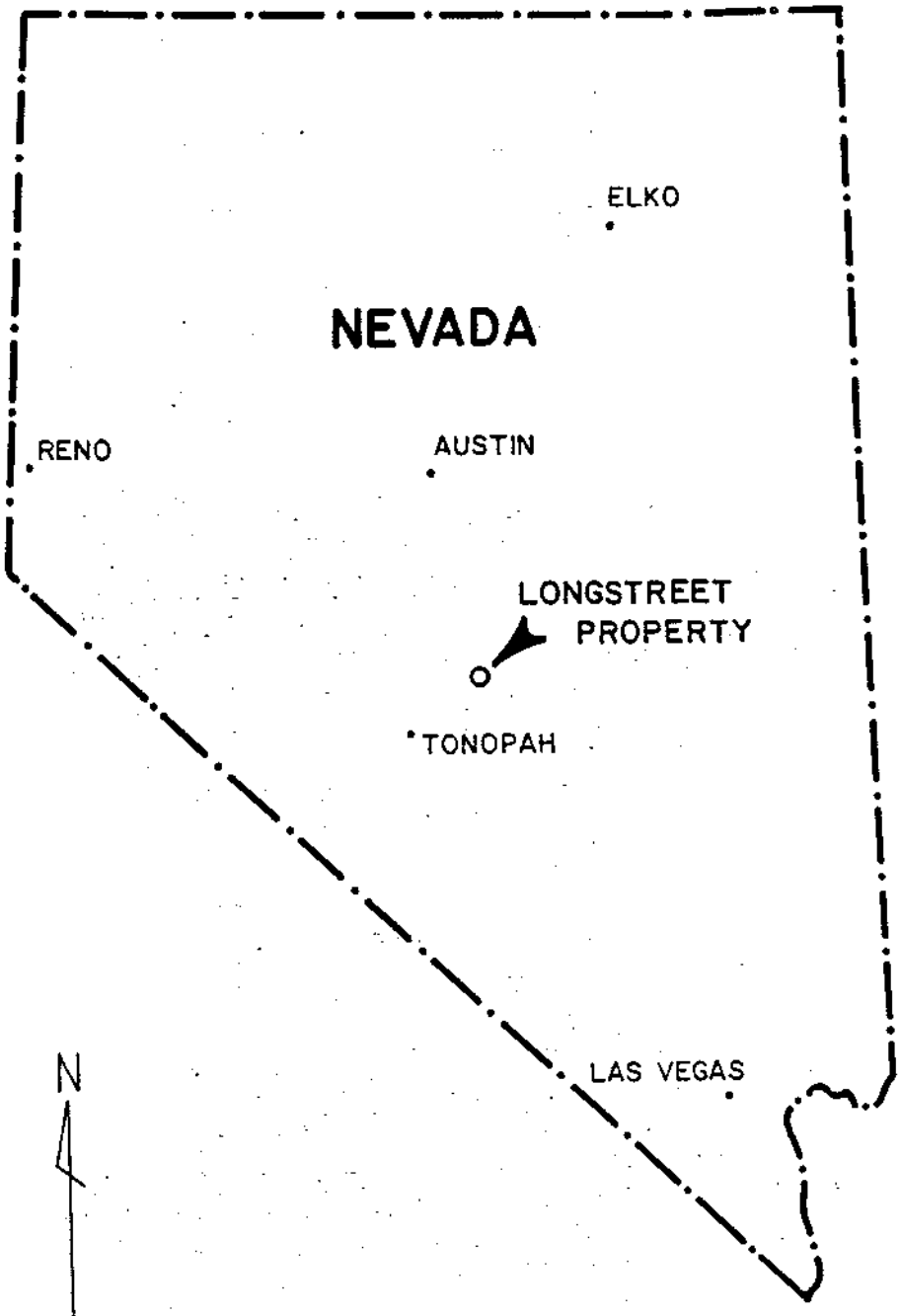
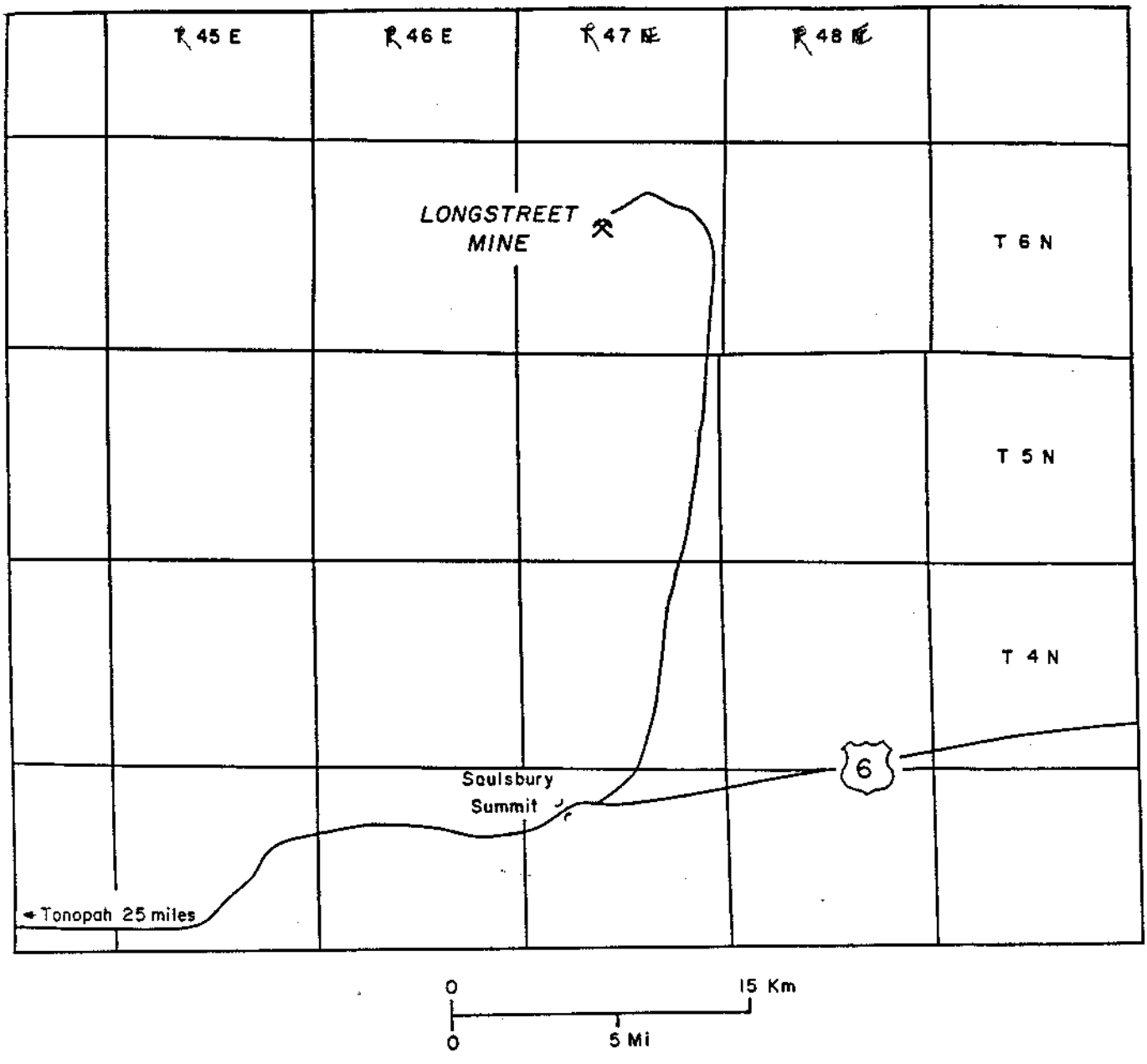


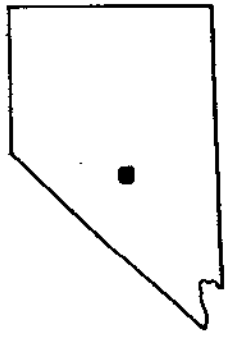
FIGURE No.					
MINE DEVELOPMENT ASSOCIATES					
LONGSTREET PROJECT					
LOCATION MAP					
JOB No.		DATE	DRAWN BY	SCALE	
		05 NOV., 1987	CEH	As Shown	
No.	Date	Revision		By:	P. E.

FIGURE 2-2



MINE DEVELOPMENT ASSOCIATES, INC.

LONGSTREET MINE
NANECO RESOURCES, INC.
Nye County, Nevada
T 6 N, R 47 E



3.0 PROPERTY

The property consists of 91 unpatented mining claims. The claims were purchased from the Clifford family of Stone Cabin, Nevada. Naneco Resources owns 100% of the claim group. The property vendors retain an 8% net profits interest in the property. The claims are shown in figure 3-1 and tabulated below:

CLAIM NAME	BLM NUMBERS
Morning Star	NMC # 96719
Longstreet 1A-10A inclusive	NMC # 149047-149056 inclusive
Longstreet 11A-16A inclusive	NMC # 164002-164007 inclusive
Longstreet 1-73 inclusive	NMC # 176339-176411 inclusive
Longstreet 76	NMC # 176412

FIGURE 3-1

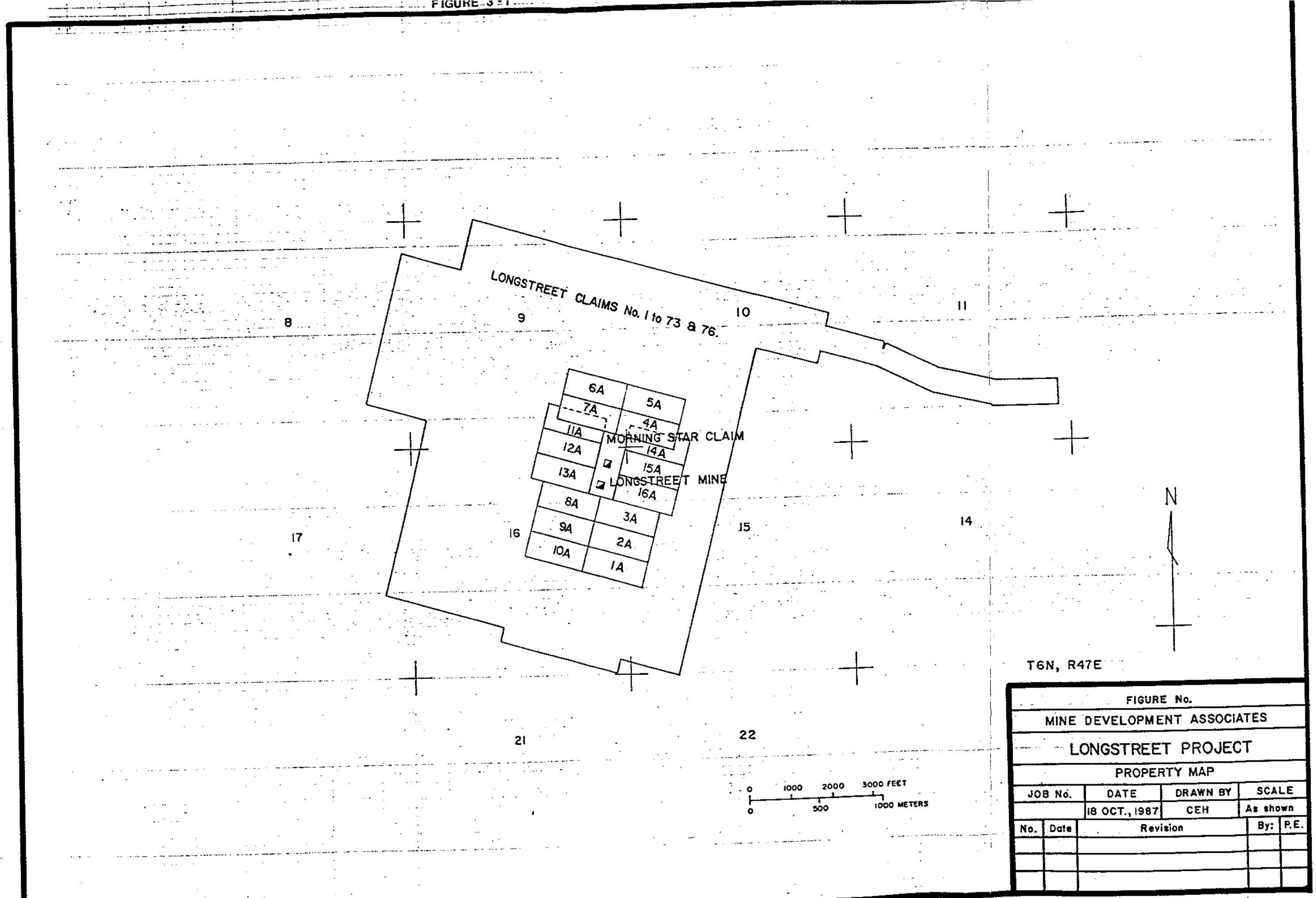


FIGURE No.

MINE DEVELOPMENT ASSOCIATES

LONGSTREET PROJECT

PROPERTY MAP

JOB No.	DATE	DRAWN BY	SCALE
	18 OCT., 1987	CEH	As shown

No.	Date	Revision	By:	P.E.

4.0 HISTORY

The gold and silver mineralization was initially reported in the early 1900's with the discovery of the Longstreet vein. Two underground levels were being developed by 1912. A mill was also constructed, however the absence of mill tailings indicates little ore was treated. The property soon became idle until 1929 when Golden Lion Mines developed (J. N. Butler) reported reserves of 300,000 tons of oxidized ore grading 0.20 ounces per ton and 8 ounces of silver per ton over a 5 ft. width. Golden Lion's effort to establish a mine was unsuccessful and the property again became idle. Interest in the property was revived in 1980 when Keradamex and E & B Explorations, Inc. formed a joint venture to explore the property. Keradamex carried out a program that included drilling 8 diamond drill-holes, and a surface rock and soil geochemistry study. The joint venture was dissolved in 1982 and Minerva Exploration, a wholly owned subsidiary of Naneco, obtained a lease from the Clifford family. Naneco purchased the E & B Explorations interest and has completed 337 reverse circulation drill-holes totaling about 56,000 ft.

5.0 GEOLOGY

The reserves occur in two distinct zones, the upper zone and the main zone. Ore grade mineralization occurs in an altered rhyolite tuff in both zones. The main zone is separated from the south zone by the footwall fault, an east/west striking structure, dipping to the north 30-50°. Ore grade mineralization to the south of the footwall fault extends several hundred feet up the hillside and is exposed by surface outcrop. The ore grade mineralization strikes north/south and has a near vertical dip.

Three other targets exist on the property. The targets are the north stockwork zone, the north rim zone, and the south C or rim zone. The north rim zone is located about 1 mile north of the Longstreet deposit. The stockwork zone is about 3000 ft. north of the north stockwork zone and the rim zone is about 2000-3000 ft. southwest of the Longstreet deposit.

All of the targets have been drilled and ore grade mineralization has been found at all three targets. A total of 66 holes totalling 9500 ft. have been drilled in the rim (area "C") target with the following ore grade intercepts reported:

HOLE	INTERCEPT	GRADE
1002	45-70	0.029 O/T AU
1043	70-85	0.162 O/T AU

A total of 24 holes have been drilled in the north stockwork zones, totalling 3400 ft. with the most significant results shown below:

HOLE	INTERCEPT	GRADE	
		AU	AG
320	170-200	0.029	1.81
402	150-225	0.038	1.30
403	90-130	0.061	0.93

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402	150-225	0.038	1.30
403	90-130	0.061	0.93

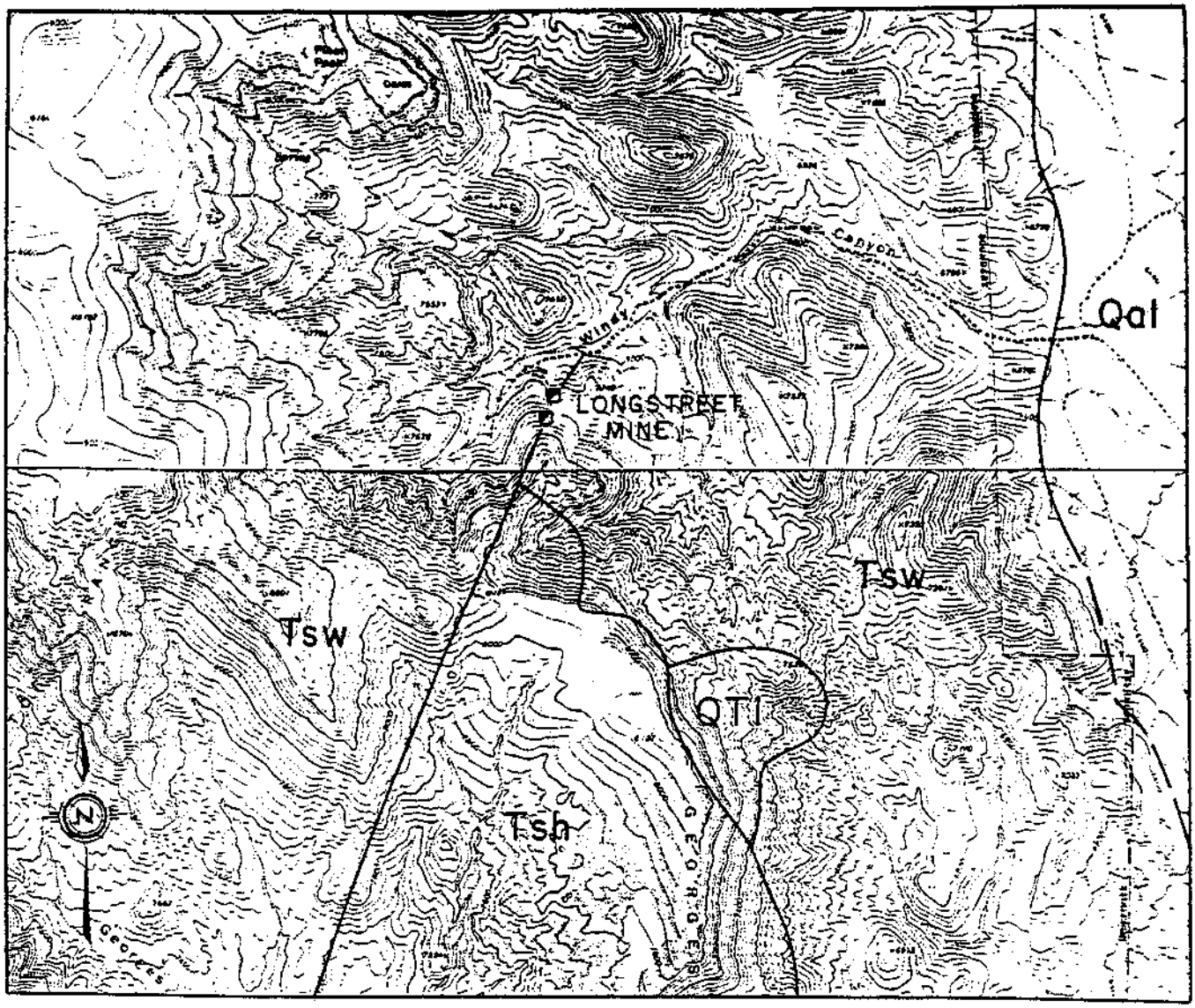
None of the above holes were angled across the Targets.

(Stockwks target)

A total of 22 holes have been drilled in the rim zones totalling 3700 ft. with the most significant zones reported as follows:

HOLE	INTERCEPT	GRADE	
		AU	AG
383	50-80	0.032	0.28
385	145-180	0.045	0.32
393	5-15	0.117	0.75
393	15-35	0.023	0.66

All three target areas have the potential to increase reserves, as ore grade mineralization has been found at all the targets.



MINE DEVELOPMENT ASSOCIATES, INC.

GEOLOGY OF

LONGSTREET MINE

NANECO RESOURCES, INC.

Nye County, Nevada

T 6 N, R 47 E

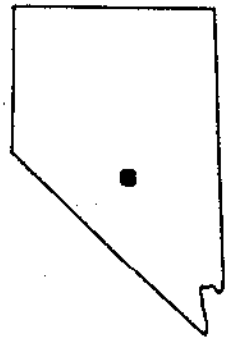
EXPLANATION

Qal Quaternary alluvium

QTl Quaternary landslide deposit

Tsw Saulsbury Wash tuff

Tsh Single Pass tuff



Geology from Bulletin 99A & B, Nevada Bureau of Mines and Geology.

6.0 ORE RESERVES

6.1 MINERAL MODEL DEVELOPMENT

6.1.1 DATA COLLECTION

A total of 337 reverse circulation drill-holes totaling 55,906 ft. of drilling was used to determine ore reserves. All drill-holes completed prior to October 1, 1987 were used in the study. The drill-hole samples were split on site and sent to Chemex Labs in Vancouver, B.C. for assaying. All of the samples collected were dry. Samples were normally collected on 5 ft. intervals and were fire assayed for gold and silver.

6.1.2 DRILL-HOLES

The deposit is located on a relatively steep hillside. Drill roads were constructed on 60-80 ft. horizontal distance spacing. The initial drilling was completed with mostly vertical drill-holes. It became apparent that the vertical drill-holes gave a distorted picture of the steeply dipping deposit, as they tended to follow softer waste zones between the ore zones. An angle drilling program was started to compare the results of the angle drill-holes to the vertical drill-holes. The comparison indicated that the angle drill-hole grade was about 20% higher than the vertical drill-hole grade. We believe the angle drill-holes give a more accurate representation of the deposit, however both the angle drill-holes and the vertical drill-holes were used to calculate ore reserves.

The drill-hole sample recovery was notably lower in the ore zones than in the waste zones, probably due to the fractured nature of the ore zone. Several drill-holes were twinned and sampled on both 2 ft. and 5 ft. intervals. The twinned drill-holes were generally in good agreement with the original drill-holes as shown in table 6-1, with respect to ore zone location, and in reasonable agreement with respect to ore zone grade. We would suggest some of the drill-holes listed in table 6-1 be twinned with core holes to compare core and RC assays and ore zone definition, however good core recovery is essential and may be difficult. We have observed the drilling and sampling procedure and believe no bias has been introduced.

TABLE 6-1
TWIN DRILL-HOLE COMPARISON

Original Drill Hole				Missing	Twin Drill Hole			
Hole	Interval	Grade		Interval	Hole	Interval	Grade	
		Au	Ag				Au	Ag
1	0- 35	0.018	0.42	0-5	53	0- 35	0.008	0.23
1	35-105	0.080	0.80		53	35-105	0.041	0.61
1	105-115	0.027	0.28		53	105-115	0.004	0.14
1	0- 35	0.018	0.42		250*	0- 35	0.026	0.49
1	35-105	0.080	0.80		250*	35-105	0.098	0.63
1	105-115	0.027	0.28		250*	105-115	0.008	0.14
3	0- 30	0.021	0.36		248*	0- 30	0.016	0.33
3	30- 70	0.012	0.25		248*	30- 70	0.004	0.10
3	70-180	0.035	0.69		248*	70-180	0.031	0.76
5	0- 50	0.028	0.23	10-15, 20-40	247*	0- 50	0.020	0.21
5	50- 65	0.007	0.27		247*	50- 65	0.005	0.14
5	65- 90	0.198	0.53		247*	65- 90	0.029	0.18
5	90-120	0.021	0.75		247*	90-120	0.013	0.81
5	120-195	0.010	0.59		247*	120-162	0.004	0.56
7	0-130	0.026	0.46	20-45	246	0-100	0.046	0.29
8	0-135	0.021	0.39	5-20	243*	0-155	0.018	0.40
8	135-155	0.025	1.90		243*	155-175	0.022	1.87
8	155-190	0.015	0.66		243*	175-190	0.002	0.44
18	0- 15	0.013	0.41		245	0- 15	0.013	0.41
18	40- 95	0.018	0.55		245	40- 95	0.011	0.44
50	0- 50	0.009	0.21		244	0- 50	0.014	0.27
50	50- 65	0.012	0.28		244	50- 65	0.082	2.74
50	0- 50	0.009	0.21		21	0- 50	0.046	0.97
50	50- 65	0.012	0.28		21	50- 65	0.003	0.35
51	0- 20	0.012	0.12		249*	0- 20	0.025	0.29
51	20- 80	0.018	0.27		249*	20- 80	0.011	0.20
51	80-100	0.004	0.06		249*	80-100	0.010	0.13
51	100-135	0.062	0.91		249*	100-135	0.033	0.49
Totals	1260 ft.	0.031	0.49			1197 ft.	0.027	0.49
2 ft. check Totals	805 ft.	0.031				782 ft.	0.026	

* Sampled on 2 ft. intervals.

6.2 MODEL DEVELOPMENT

The ore body model was developed for the area enclosed by the following coordinates:

North	9750-11600
East	9400-11100
Elev	7200-7850

The model was developed by first producing bench level plans with the drill-hole composite grade printed on each 20 ft. interval bench map. Outlines were placed around each mineralized area to define the extent of mineralized zones. The level plan outlines were drawn around areas where the drill-hole bench composite gold grade was at least 0.01 ounces per ton. The drill-hole spacing of 60-80 ft. is sufficient to classify the in-place and mineable reserves as proven. The outline of the talus slope was also drawn on the level plans from drill-hole information.

The outlines of the mineralized zones and talus were digitized and reviewed. The outlines were viewed on a computer monitor and corrected as necessary. Several outlines could be viewed at once to alter the outlines if necessary for continuity from bench to bench. The Longstreet deposit consists of two main zones of mineralization. The main zone is located south of the footwall fault and is typically a 100 by 500 ft. mineralized zone. The main zone narrows with depth. The footwall zone is located north of the footwall fault. Near the surface all the material north of the footwall fault is mineralized, however deeper in the deposit the footwall zone appears to form two separate smaller zones.

Topography was digitized from a 1 in.=50 ft. topographic map and input to the computer. A topographic map was prepared by the software used (SURPAC) on a 10 ft. contour interval and compared to the original map.

Material density tests were performed by Kappes, Cassiday and Associates in Sparks, Nevada. The 28 tests on material from the surface and underground metallurgical test samples resulted in an average density of 2.314. A tonnage factor of 13.5 cubic feet per ton was used for ore and waste in this study. The tonnage factor used for talus material was 18 cubic feet per ton of material.

6.3 GEOLOGIC RESERVES

In-place reserves were calculated by averaging all the drill-hole composites within each ore outline on each bench (Average Grade method). The average grade was also calculated by using a Sichel T estimate of the grade. The Sichel T estimate assumes the deposit is lognormally distributed. The in-place or geologic reserve was then totaled for each bench to the 7200 ft. elevation. Geologic reserves are summarized in detail in table 6-2. The geologic reserves are shown below using a 0.01 cutoff grade:

METHOD	TONS ORE 000'S	GRADE-OZ/PER TON AU	AG	AU-EQUIVALENT
AVERAGE GRADE	3855.1	0.023	0.55	0.029
Sichel T	3882.0	0.023	0.56	0.029

Both the average grade method and the Sichel T estimate are nearly equal. The average grade method was used to determine mineable reserves. The in-place reserves were compared by calculating ore block grade using only the angle holes or vertical drill-holes .

6.3.1 ANGLE DRILL-HOLE VS. VERTICAL DRILL-HOLE COMPARISON

The deposit was initially drilled with vertical drill-holes. As knowledge of the deposit improved, the angle hole drilling increased. The angle drill-hole assays appeared to be higher than the vertical drill-holes in the same area. A comparison was made on the ore blocks in the main zone and in the upper portion of the south zone. The comparison indicates that the angle drill-holes are about 20% higher in grade than the vertical drill-holes . The angle drill-holes should sample a steeply dipping deposit better than the vertical drill-holes as the angle holes will cut the structure nearly perpendicularly, while the vertical drill-holes may follow the structure. Both in-place and mineable reserves were calculated by using both the angle and vertical drill-holes.

Table 6-3 shows a comparison between angle and vertical drill-holes within several ore zones.

6.3.2 DEPOSIT STATISTICS

The deposit statistics were calculated for angle and vertical drill-holes as follows:

Drill-Hole Type	Minimum Assay	Mean Au	Standard Deviation	Coefficient Variable	Sample Interval
Vertical	0.006	0.024	0.051	1.875	5
Angle	0.006	0.027	0.036	1.493	5
All	0.006	0.021	0.024	1.120	20

TABLE 6-2
IN-PLACE RESERVES

	Average Grade				Sichel-t Estimate			
		Grade				Grade		
Bench	Tons 000's	Au	Ag	Au Equiv	Tons	Au 000's	Ag	Au Equiv
7200	43.2	0.018	1.97	0.034	43.2	0.018	1.94	0.034
7220	53.1	0.044	2.01	0.061	53.1	0.044	1.99	0.061
7240	88.3	0.017	0.49	0.021	88.3	0.017	0.49	0.021
7260	66.0	0.014	0.86	0.022	66.0	0.016	0.87	0.023
7280	77.4	0.019	1.02	0.028	77.4	0.021	1.04	0.029
7300	91.8	0.029	0.91	0.036	91.8	0.028	0.88	0.035
7320	121.6	0.022	0.69	0.028	121.6	0.026	0.70	0.032
7340	112.1	0.019	0.76	0.025	112.1	0.026	0.94	0.033
7360	114.9	0.023	0.55	0.028	114.9	0.022	0.67	0.028
7380	128.1	0.021	0.44	0.025	128.1	0.020	0.44	0.024
7400	112.7	0.019	0.60	0.024	112.7	0.019	0.66	0.024
7420	173.4	0.019	0.65	0.024	173.4	0.019	0.58	0.025
7440	154.7	0.018	0.48	0.022	154.7	0.019	0.48	0.023
7460	140.8	0.024	0.60	0.029	140.8	0.027	0.68	0.032
7480	174.4	0.026	0.51	0.030	174.4	0.027	0.63	0.031
7500	148.5	0.026	0.52	0.030	148.5	0.029	0.56	0.033
7520	151.7	0.029	0.44	0.033	151.7	0.029	0.44	0.032
7540	153.2	0.039	0.58	0.044	153.2	0.039	0.59	0.044
7560	177.0	0.027	0.49	0.030	177.0	0.026	0.48	0.030
7580	184.2	0.019	0.45	0.023	184.2	0.018	0.43	0.022
7600	231.2	0.019	0.36	0.022	231.2	0.019	0.35	0.022
7620	207.6	0.020	0.42	0.023	207.6	0.019	0.38	0.023
7640	156.6	0.024	0.41	0.027	156.6	0.026	0.43	0.030
7660	139.1	0.025	0.42	0.028	139.1	0.022	0.40	0.025
7680	107.7	0.030	0.43	0.033	107.7	0.030	0.43	0.032
7700	90.7	0.025	0.43	0.028	90.7	0.025	0.44	0.029
7720	59.5	0.023	0.26	0.025	59.5	0.022	0.26	0.024
7740	73.9	0.020	0.33	0.022	73.9	0.020	0.33	0.022
7760	54.9	0.026	0.52	0.030	54.9	0.022	0.50	0.026
7780	26.1	0.014	0.51	0.018	26.1	0.014	0.51	0.018
Total	3614.8	0.024	0.57	0.029	3614.8	0.024	0.58	0.029
Talus*	240.3	0.014	0.29	0.016	267.2	0.014	0.28	0.016
+0.01 Total	3855.1	0.023	0.55	0.029	3882.0	0.023	0.56	0.029
Total Contained Ounces		90,100	2,130,100			90,500	2,171,400	

*Note: Bench summaries do not include talus material.

TABLE 6-3
COMPARISON OF VERTICAL AND ANGLE DRILL-HOLE GRADES

BENCH	ORE BLOCK	TONS	VERTICAL HOLES No.	Au	Ag	ANGLE HOLES No.	Au	Ag
7630	1	87,526	14	0.016	0.301	7	0.016	0.310
7610	1	107,270	23	0.020	0.379	8	0.022	0.387
7590	1	116,154	30	0.019	0.376	7	0.040	0.379
7570	1	118,431	30	0.029	0.459	5	0.021	0.443
SUBTOTAL	1	429,431	97	0.021	0.384	27	0.025	0.443
7710	2	17,604	2	0.011	0.282	3	0.051	0.577
7690	2	14,179	3	0.010	0.038	3	0.022	0.159
7670	2	17,918	3	0.009	0.415	3	0.057	0.206
7650	2	29,808	4	0.008	0.453	4	0.016	0.362
7630	2	31,985	3	0.016	0.302	4	0.016	0.319
SUBTOTAL	2	111,494	15	0.011	0.324	17	0.029	0.333
7790	3	32,225	4	0.014	0.671	4	0.017	0.481
7770	3	58,172	10	0.016	0.671	10	0.033	0.447
7750	3	59,396	11	0.024	0.393	16	0.016	0.314
7730	3	57,949	11	0.019	0.361	14	0.014	0.213
7710	3	67,278	11	0.021	0.466	15	0.027	0.454
7690	3	68,256	11	0.027	0.483	15	0.042	0.458
7670	3	80,718	12	0.015	0.264	17	0.026	0.600
7650	3	69,072	11	0.021	0.299	11	0.020	0.268
7630	3	69,313	12	0.029*	1.051*	6	0.015	0.292
7610	3	76,285	13	0.015	0.573	7	0.014	0.283
7590	3	33,646	5	0.006	0.219	6	0.009	0.354
SUBTOTAL	3	672,310	111	0.020	0.478	121	0.022	0.383
TOTAL	1-3	1,213,185	223	0.020	0.430	165	0.024	0.379

*Note: LRH-69 has a very high gold & silver grade for this bench. Omitting this bench gives the following totals:

	1,143,871		0.019	0.383	0.024	0.384

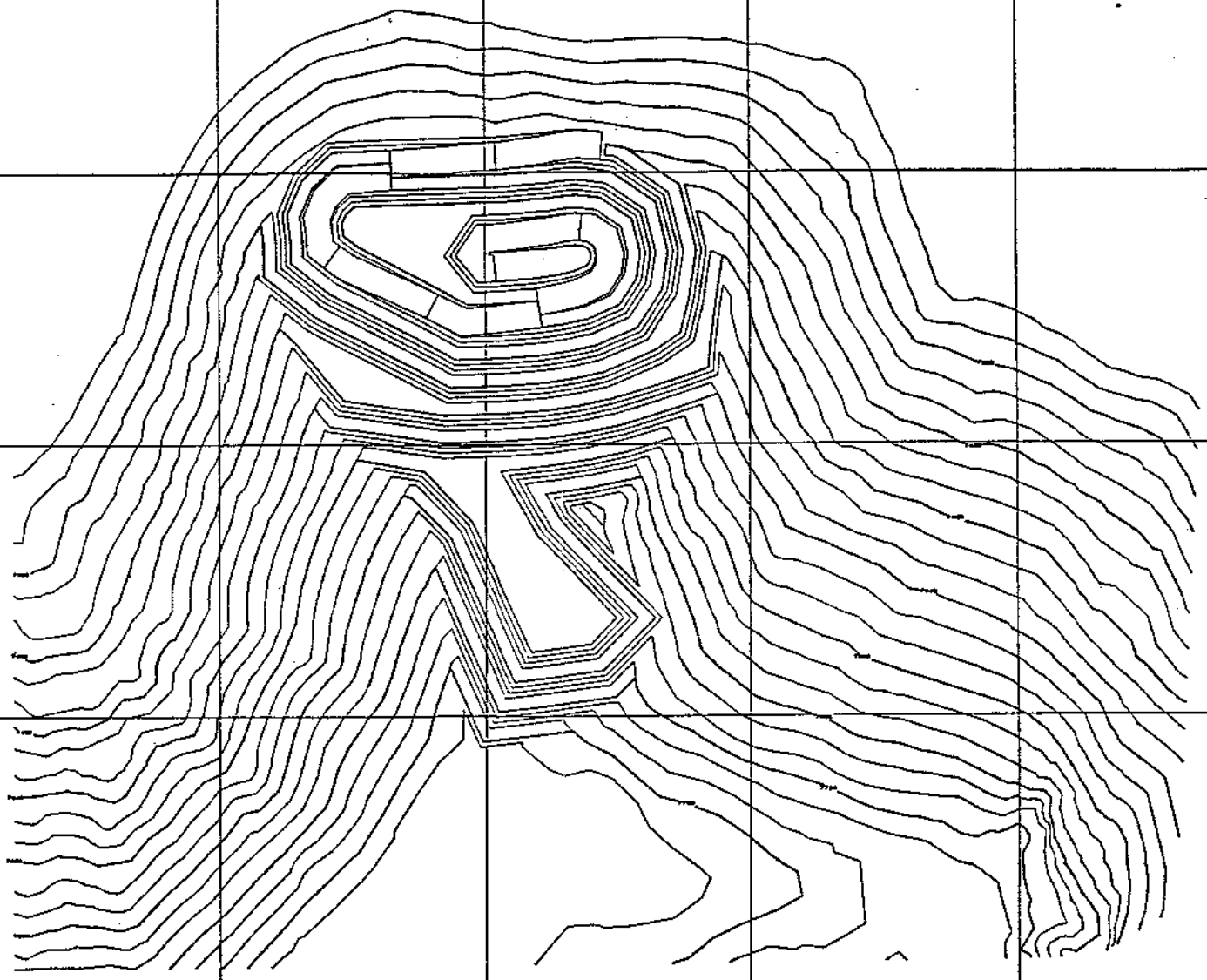
6.4 MINEABLE RESERVES

The mineable reserves were calculated by designing a pit using a 50° pit slope and 50 ft. wide 10% grade haul roads. The mineable reserves are shown below:

MINEABLE RESERVES - LONGSTREET PROJECT

CUTOFF GRADE(O/T) GOLD	TONS ORE (13.5 CF/T)	GRADE AU	GRADE AG	TONS WASTE (13.5 CF/T)	SR
0.010	3,023,000	0.023	0.54	2,886,100	0.95
0.020	2,227,000	0.026	0.55	3,682,100	1.65

FIGURE 6-1



MINE DEVELOPMENT ASSOCIATES

LONGSTREET PROJECT
TRIAL III FINAL PIT MAP

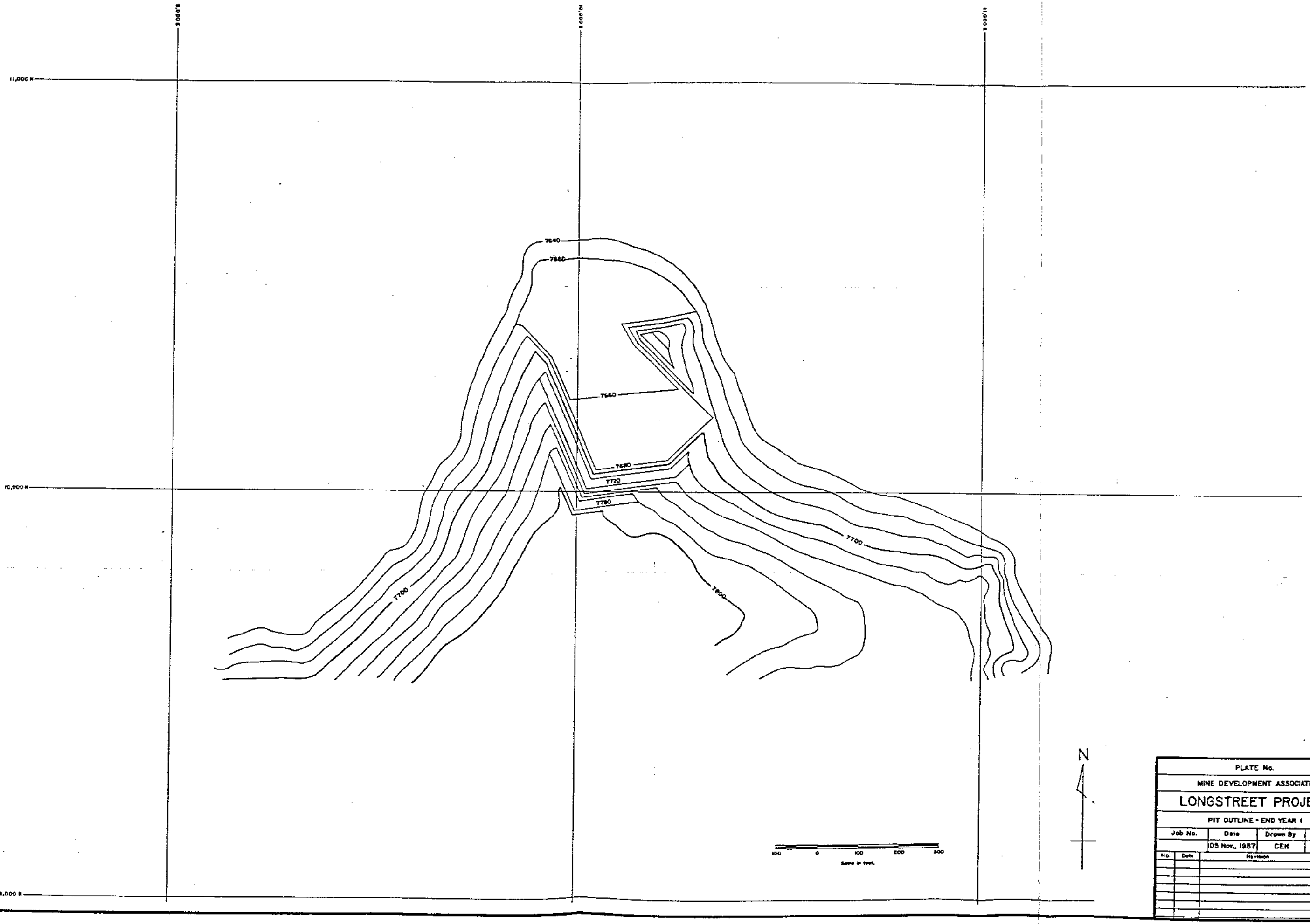


PLATE No.			
MINE DEVELOPMENT ASSOCIATES			
LONGSTREET PROJECT			
PIT OUTLINE - END YEAR 1			
Job No.	Date	Drawn By	Scale
	05 Nov., 1987	CEH	1"=1,200

No.	Date	Revision	By:	P.E.

PLATE No.

MINE DEVELOPMENT ASSOCIATES

LONGSTREET PROJECT

PIT OUTLINE - END YEAR 2

Job No.	Date	Drawn By	Scale
	05 Nov., 1987	CEH	1:1,200

No.	Date	Revision	By	P.E.

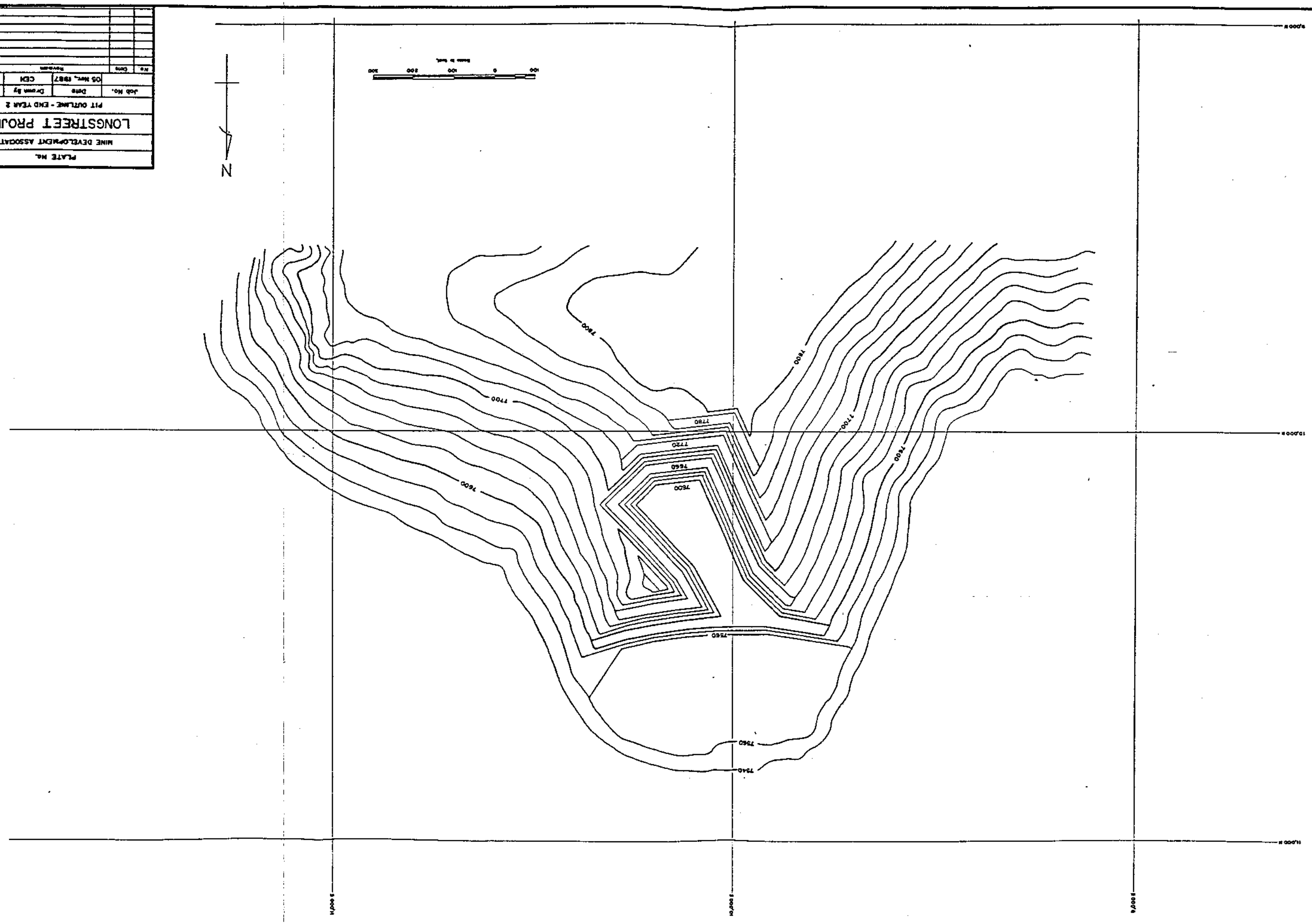


FIGURE 6-3

7.0 METALLURGY

Metallurgical testing of the Longstreet ores was done at Kappes, Cassiday and Associates' laboratory in Sparks, Nevada. A considerable amount of testwork on the Longstreet deposit has been completed. 31 drill-hole composites from representative ore zones were tested by centrifuge to determine if the gold and silver was amenable to heap leaching with favorable results. The 31 drill-hole composites were again composited into 10 composites. The 10 composites were used for -10 mesh bottle roll tests with resulting recoveries ranging between 82.1% to 87.2% gold and 28.3% to 57.9 % silver.

A large bulk sample was obtained from 3 surface sites and 4 underground sites. The bulk sample was screened and split into 6 samples for metallurgical testing. The samples tested were +3 in. (bucket tests), -3 in. (column tests), and -1/4 in. (column tests). The samples were leached with sodium cyanide for a period of 42-46 days with the following results:

SIZE	DAYS LEACHED	CALCULATED HEAD		TAIL ASSAY		RECOVERY	
		AU	AG	AU	AG	AU	AG
+3" (S)	44	0.011	0.37	0.004	0.37	63.6	<1.0
+3" (U)	44	0.032	1.32	0.016	1.26	50.0	4.6
-3" (U)	45	0.041	1.19	0.005	1.06	87.8	10.9
-3" (S)	45	0.025	0.53	0.008	0.45	68.0	15.1
-1/4" (S)	42	0.022	0.48	0.003	0.36	86.4	25.0
-1/4" (U)	42	0.033	1.09	0.003	0.83	90.9	23.9

For ore similar to that tested, field heap leach recoveries are estimated by Kappes, Cassiday and Associates to be as follows:

SIZE	ESTIMATED GOLD RECOVERY	ESTIMATED SILVER RECOVERY
RUN OF MINE	65%	5%
-3 in.	75%	15%
-1/4 in.	85%	20%

8.0 PRELIMINARY FEASIBILITY

8.1 SUMMARY

This study presents an analysis of engineering design specifications, and capital and operating costs, for a 100,000 ton per month (8 month per year), production operation at Longstreet, Nye County, Nevada. The design is based on a mine life starting in the Spring of 1988 with a reserve of 3,000,000 tons of leach material.

The ore is a grayish white, fine grained, rhyolite. Treatment of the ore will involve contract open pit mining, contract crushing to minus 3 in. and heap leaching. Laboratory test work indicates recovery will be 75% of contained (fire assayable) gold and 15% of contained silver, provided ore is similar to the samples tested. This is based on a heap height of 30 ft. with the ore being crushed to 100% passing minus 3 in..

Assuming an average head grade after dilution of 0.023 ounces per ton gold, 0.54 ounces per ton silver, and a gold price of $450.00 per ounce, silver price of $6.50 per ounce, recovery will be $8.29 per ton.

Site operations will be conducted eight months per year with a four month shutdown for winter.

Total installed capital cost of the project is $4,358,000, which includes $1,191,000 for working capital (equal to the initial three month's operating costs). An additional $676,000 expenditure is required in Year 2 to expand the pad area. Average production costs of the project are estimated to be $7.00 per ton.

Ore production (ore stacking on leach pads) will begin approximately 5 months after the start of construction, and will reach the target level in the 8th month after start of construction. The completion of small items of construction and process optimization may require up to four additional months after the project is in full production mode. This schedule would be considered a "fast track" schedule, and may be delayed due to local government or business conditions.

Figures 8.1 and 8.2 present a summary of capital and operating costs.

TABLE 8.1.
LONGSTREET 3000 TON PER DAY HEAP LEACH
SCHEDULE OF CAPITAL INVESTMENT

Item Number	Description of Operation	Cost
	Mining and Crushing Mobilization	$250,000
1	Geotechnical Evaluation	20,000
1	Site/Pads/Ditches	412,000
1	Ponds	219,000
1	Site Drainage	10,000
1	Solution Collection	77,000
2	Recovery Plant	529,000
2	Heap Piping Systems	89,000
3	Laboratory	125,000
3	Access Roads & Reclamation	313,000
3	Office & Admin. Building	65,000
3	Warehouse	10,000
3	Fences & Site Security	50,000
3	Service & Support Vehicles	105,000
3	Water Supply	80,000
3	Power Supply	50,000
	Subtotal	$2,654,000
	Engineering/design	$125,000
	Construction Management	125,000
	Contingency, 15 percent	398,100
	Total capital cost for Installed Facilities	$3,052,100
	Estimated Working Capital (3 months @90,000 tons/month)	$1,191,000
	Total Estimated Project Capital Requirements	$4,243,100

Note: Items 1 also grouped in some tables as leach pad and ponds, items 2 as portable plant and items 3 as general and infrastructure.

TABLE 8.2.
LONGSTREET 3000 TON PER DAY HEAP LEACH
SCHEDULE OF OPERATING COSTS

Description of Operation	Cost per Ton 3000 tons/day
Mining($1.10 per ton mined)	$2.15
Crushing & Stacking	1.40
Plant Costs	
Leach Reagents, supplies and power	1.25
Maintenance	0.05
Plant Labor	0.48
G & A Labor *	0.46
G & A General *	0.53
Total Operating Cost per ton ore	$ 6.34

* NOTE: Average cost except for Year 1 is $0.84/ton for supervision and $0.83/ton for G & A general costs.

8.2 METALLURGICAL BASIS OF DESIGN

The project is designed to process ore by heap leaching after crushing to minus 3 in. Bulk samples were taken from both the surface and underground. The surface sample was taken from three different locations, and the underground sample was taken from four different locations.

The two bulk samples were individually tested at KCA's Sparks laboratory to determine the cyanide leachability of the material. Based on these tests, recoveries are expected to be 75% for gold and 15% for silver after being crushed to minus 3 in.. Although the 3 in. crush size is used for this study, crushing to minus 1/4 in. increased gold recovery by 10%, but agglomeration was required at that size. These recoveries are expected for heaps up to 30 ft. high. Heaps higher than 30 ft. may experience slower and possibly less total recovery.

Cyanide consumption in field heap leaches will vary from 0.50 pounds NaCN per ton for near surface oxide to several pounds per ton for some of the partially oxidized vein material. Overall cyanide consumption is expected to be 0.75 pounds NaCN per ton.

No significant quantities of other base metals or of cyanide reactive components were noted. Laboratory tests reached these recoveries in 39 to 44 days, however, field results will probably be slower. It is estimated that 60 to 75 days will be required with a minus 3 in. crush size to achieve the same recovery in the field heaps.

8.3 DESCRIPTION OF PRODUCTION OPERATIONS

8.3.1 SUMMARY OF MINING, CRUSHING AND STACKING

The system is designed to process ore at an average rate of 100,000 tons per month for 8 months per year. During the first year only 200,000 tons of ore will be processed. During subsequent years, production will take place at the full design rate of 800,000 tons per year.

The first year's production will be stacked on the lower half of pad segment #1.

The ore will be mined by a mining contractor, assuming the material will be broken by drilling and blasting methods, loaded into 50 ton trucks, then hauled by truck to a crushing facility. The mining and crushing and stacking costs were estimated costs by contractors who have visited the site. The final feasibility should be based on competitive bids from area mine contractors. An alternative of crushing and stacking by the owner should be investigated. Crushing to -1/4 in. by contractor is expected to increase costs by about $1.50 per ton, while only adding about $1.00 per ton of recoverable gold at $450.00 per ounce gold. Crushing to -1/4 by owner may be feasible, however crushing tests are required to determine costs.

This study assumes ore will be crushed by a contractor to minus 3 in. then carried out onto the pad by a series of conveyors by a contractor. The final conveyor will be an elevated belt (not necessarily a radial stacker) which will discharge on top of the heap, after which a dozer will spread the ore out in a 30 ft. lift.

The ore will be stacked on plastic membrane pads protected with a layer of geotextile for leaching. The heap will be built as one continuously expanding pile of ore. The heap area will be segmented (by included berms on the pad below the heap) to permit separation of solution flows from the various segments of the heap.

After leaching, cyanide in the ore will be washed out or neutralized, the heap edges will be graded to provide for gradual contours, and the heaps will be revegetated

A mobilization fee of $350,000 has been estimated for the contractors' mining and crushing equipment.

8.3.2 SUMMARY OF RECOVERY OPERATIONS

The cyanide in the leach solution dissolves gold from the ore. Typically in a heap leach the tenor of the pregnant leach solution is very low and cannot be economically recovered without upgrading the concentration first. Granular activated carbon has an affinity to adsorb large quantities of dissolved metals and will be used at Longstreet to upgrade the gold concentration.

The pregnant solution will be passed through columns containing activated carbon where the gold will be removed from solution. Flow to the columns will continue until the maximum economic capacity of the carbon to adsorb gold is reached.

The gold will be stripped from the loaded carbon using a hot caustic alcohol solution. The hot solution is pumped into the columns and the overflowing solution contains several grams per ton of gold. The gold in the high grade stripping solution can then be plated out as gold metal in an electrolytic cell.

In the electrolytic cell the gold is collected on steel wool cathodes. The entire cathode is smelted to produce an impure bullion bar.

8.4 DESIGN PARAMETERS

Ore Production and Leaching Rate:

Tons Ore per Day:	3,000
Tons Ore per Month:	100,000
Tons ore per year:	800,000

Operating Time Period:

Mining: Days per month:	30
Processing: Days per month:	30
Operating: Months per year:	8

Gold Recovery Rate:
(Assumed Rates for Design Purposes)

Ore Head Grade Oz./Ton		Recoverable Grade Oz./Ton	
Gold	Silver	Gold	Silver
0.05	0.75	0.04	0.15

Maximum Total Daily Recoverable Gold and Silver
(For Process Plant Design Only)

	Ounces
Gold	120
Silver	450
TOTAL	570

Recovery Plant:
Type: Portable Carbon ADR Plant

Nominal Carbon Loading Level:	150 oz./ton
Average Carbon Processed:	3.8 tons/day
Maximum Capacity:	7.5 tons/day

Heap Height:	30 feet
Number of Leach Cycles:	1

Heap Flowrate:

Flow in leach cycle:	500 gpm
Average plant flowrate:	400 gpm
Design plant flowrate:	500 gpm

Rainfall:

Maximum 100 yr., 24 hour event:	4.0"/24 hr.
Maximum 3 month rainfall:	5.0"
Average monthly rainfall:	0.5"

Fresh Water Requirement for Leaching:	130	gpm
Mining (dust control):	33	gpm
Miscellaneous:	7	gpm
Total Water Required:	170	gpm

8.5 SITE LAYOUT: PAD & POND DESIGN & INSTALLATION

8.5.1 GENERAL CHARACTERISTICS OF PAD SITE

KCA Drawing 1186-3 shows the heap layout on a scale of 1 in. = 100 ft. (1:1200). The area selected for the leach pads lies on a hillside which slopes from 10% or less to as much as 25% in some areas. The slopes are steep but acceptable.

The available pad area has been divided into a primary area consisting of 1,300,000 sq. ft. of pad area and a secondary heap area consisting of another 319,000 sq. ft. of pad area. The areas were separated because the secondary pad area is steeper and requires a separate drainage system, although it can be butted against the primary heap on one side.

The total tonnage which can be placed on the primary pad area with a single 30 ft.. lift is approximately 1,700,000 tons. If the secondary pad area is used with a single 30 ft. lift an additional 447,000 tons can be stacked, for a total of 2,147,000 tons on the first 30 ft. lift.

The remaining 1,053,000 tons of reserves may require approximately 850,000 sq. ft. of additional pad area, however, for this study MDA assumed it would be feasible to stack additional lifts on top of the initial 30 ft. lift. There is room for some additional pad area to the south of the proposed pad site, but it would be a narrow heap and pad construction costs would be higher. There appears to be potential for more pad area approximately 1/4 mile down the canyon from the proposed site. An additional pond and pump system would be required, as well as a considerably longer haul from the mine to a crusher site. Also, at the mouth of the canyon, there is sufficient room to stack the entire 3,200,000 tons of reserves, although it would be a much longer distance to transport the ore.

There is the possibility of stacking the heap to a higher total height in the area currently proposed. However, the test work completed by KCA is considered to be representative only for heaps with a single lift up to 30 ft. high. For the purpose of this preliminary study placing a second lift on the pad was considered to be feasible. If it is desired to place the extra reserves as a second lift or as a single lift higher than 30 ft., it will be necessary to do some rather extensive testwork on site, while in operation.

This testwork would require that a portion of the pad surface be separated from the adjoining pad surface by the construction of additional internal berms. A separate drain system with a flow recording flume and a separate sprinkler solution flowmeter would also be required. The best information would be obtained by running the test heap solution through a small, separate, recovery system to determine the actual amounts of gold produced.

This test heap would have to be closely monitored during construction to get accurate tonnage and grade figures and during operation of the test heap, it would be necessary to closely monitor the solution flows and the gold recovery.

KCA considers this test to be necessary prior to making any decision to stack the heaps higher than a single 30 foot lift. Because of the low head grade of the Longstreet deposit, recovery is going to be very critical to the project's success.

The cost of this test is not included in this report.

8.5.2 INITIAL PAD CONSTRUCTION PLANS

During the first year sufficient pad area will be installed to contain the first year's production and three to four months of the second year's production for a total of 750,000 tons. The pad installed during the first year will measure approximately 630 ft. across slope and 1000 ft. in an upslope-downslope direction.

The primary pad will be divided into three large segments. The first segment will hold approximately 750,000 tons, the second will hold 493,000 tons, and the third will hold 450,000 tons.

Each succeeding segment will abut the previous segment to form a smooth, continuous top heap surface.

Below the heaps, berms on the pad surface will be used to isolate each heap segment from the adjacent heap so that leach solutions can be kept separate. These berms will be constructed by placing a low mound of compacted damp earth on the soil surface prior to placing the liner.

8.5.3 SUBBASE REQUIREMENTS

The requirements for an optimum leach base are as follows:

1. The area immediately below the membrane liner should be a soil composed primarily of inorganic (non-decomposing) materials.

2. The soil should have sufficient gradation of materials to allow moderate compaction and impermeability.

3. The soil should be predominantly fine material with few rocks above 4 in. diameter and few areas where the plus 1/2 in. fraction exceeds 20% of the weight.

4. The leach area should have few areas with outcropping rock. Any rocky areas should be plated with 6 in. of fine soil and compacted.

8.5.4 GEOTECHNICAL INVESTIGATION

Because the pad area is steep in some areas, we feel it is worthwhile to have the pad area evaluated by a geotechnical engineer. Methods of subsurface drainage, or the height and slope setback of the lower heap, could then be modified as necessary to insure heap stability.

It will also be necessary to evaluate the proposed pond sites because of their location in the adjacent drainage and also because the pond containment berms will be over 10 ft. high.

The pad and pond areas should be evaluated by a geotechnical engineer with specific findings in the following areas:

* A profile of the soil, defining horizons, soil types, and rock content (if any).
* Plasticity and saturation point of each soil horizon.
* The effects of moisture content on the stability of the components of the soil horizons.
* Optimum moisture content for compaction.
* The maximum height of the water table.
* The need for and feasibility of draining the area below the heaps and/or ponds.
* The soil shear resistance and its relationship to the eventual heap load.
* The heap stability on the plastic liner.

During the geotechnical evaluation likely sources of the materials outlined below should be located.

Drainage Gravel - This material should be clean gravel with a minimum of clayey fines, screened to minus 1 in. Approximately 1,550 cu. yds. will be required. (If a convenient source is not available, crushed waste will be acceptable for this purpose).

Sub-base Fill - This material will be used below the lined sections and as such, must be free of significant organic matter and have few rocks larger than 1/2 in. in diameter. Material selected should have high impermeability when compacted, and great stability when saturated and under load.

Common Backfill - This material should be without significant organic matter, free from clayey fines and be substantially free of rocks larger than 1 in..

Estimated cost of geotechnical evaluation for leach pad and pond areas: $20,000

8.5.5 LEACH PAD INSTALLATION PROCEDURES

Details of pad construction are shown on KCA Drawing 1186-7 and the pad area covered in the first year is shown in Drawing 1186-3.

Leach pad installation will proceed as outlined below.

1. Prepare the ground surface by removing plant material and humus-rich top soil.
2. Fill where required to eliminate depressions.
3. Place underpad drainage system. In low lying areas, dig 2 ft. deep trenches. Extend the trenches to an area below the pads , to a point where they naturally drain to surface. Place 3 in. perforated drainage pipe in the trenches and cover with 1.5 feet of drainage gravel. Cover gravel with 6 inches of soil and lightly compact. Approximately 3400 ft. of trench will be required.
4. Place a 6 in. deep fine soil cover where required in rocky areas.
5. Moisten and lightly compact the soil to form a smooth, moderately dense (95% standard Proctor) surface.
6. Place berms where appropriate.
7. Spray the surface with soil sterilant (herbicide and insecticide).
8. Install a plastic membrane of 40 mil PVC.
9. Install a protective geotextile layer on top of the PVC membrane.
10. Install perforated polyethylene drain pipes on the membrane on 20 ft. centers.

The pad surface will then be immediately protected against wind and flood damage by placing drainage gravel (and associated pipes) at the berms.

8.5.6 LEACH PAD AND DITCH LINER REQUIREMENTS

The leach pad will be 40 mil thick PVC. The ditches and ponds will be 36 mil thick reinforced Hypalon. The amount of installed pad material will be slightly larger than the required finished pad size, to allow for edge berms, buried edges, and 3% in every direction for shrinkage and seams. The finished pad size for the first segment is 590,700 sq. ft. The installation will require purchase and delivery of 640,000 sq. ft. of material.

The solution collection pipe ditch is located immediately downslope from the leach pads. The ditch is 2 ft. deep, 3 ft. wide at the bottom, with 1.5:1 sideslopes. The ditch liner is a 20 ft. wide strip of 36 mil thick Hypalon. The main and connecting ditches have a total length of 1250 ft., and require 25,000 sq. ft. of installed liner material.

8.5.7 SITE PREPARATION EARTHWORK AND COSTS

Preparation of the ground prior to pad installation is estimated to take 25 working days, including 5 days for clearing of brush and topsoil, 10 days for excavation and compaction, and 10 days for raking, berm building and installing subdrains. Raking and fine grading will require about 65 manshifts and will occur during this period. Ditches also will be excavated and prepared for lining during this period.

The PVC pad, ditch and pond liners will be installed on a contract fixed bid basis by the membrane supplier. Pad liner installation is expected to take 3 weeks, and pond liner installation is expected to take an additional 2 weeks.

The equipment listed below will have to be on-site for at least a portion of the 10-week construction period.

Bulldozer, D-9 or equivalent,	10 days
Front end loader,	15 days
Earthmover (Wheel Tractor-Scraper),	5 days
Road grader with scarifying teeth,	25 days
4,000 gallon water truck with spray bar	25 days
Vibratory roller compactor,	5 days
Hand tools: wheelbarrows	(6)
Shovels and rakes:	(20 each)
Axes for cutting roots:	(6)
400 gallon tank mounted on wheeled trailer, with pump and spraybar for application of herbicide: (20 gallons)	4 days

Operating Personnel: excluding equipment operators:

6 man crew	20 days
1 surveyor/asst. engineer	10 days
1 engineer/supervisor	7 weeks

The cost of the equipment and manpower for pad and pond installation is estimated below. Equipment costs are for operated and maintained equipment.

D-9 Dozer	$1,200.00/day
14G Grader	800.00/day
Self Loading Scraper	1,100.00/day
Vibratory Compactor	600.00/day
Front End Loader	800.00/day
Water Truck	600.00/day
Equipment Mobilization	500.00 each
Total Ground Preparation Cost:	$70,500

Total cost for the installed liner is presented below.

Surface Preparation (above):	$70,500
Cost of Pad Liner plus installation on prepared surface: 640,000 sq. ft. 40 mil PVC @ $0.34/sq. ft.	217,500
Cost of geotextile to protect pad liner: 610,000 sq. ft. @ $0.12/sq. ft.	73,000
Cost of Ditch liner plus installation on prepared surface: 25,000 sq. ft. 36 mil Hypalon @ $0.58/sq. ft.	14,500
Herbicide, Insecticide	2,000
Expendable Tools	5,000
Drainage System	2,500
Shipping and Insurance for Liner Material	2,000
Labor: 120 man shifts	15,000
Supervision	10,000
Total	$412,350

Total cost for pad plus ditch installation, per square foot of finished pad area:

$0.68/sq. ft.

8.5.8 RAINFALL: DESIGN CONSIDERATIONS

The climatic conditions at Longstreet consist of a dry summer and a cold but moderately dry winter. Storage will have to be provided for excess precipitation during the three-four month winter shutdown.

In sizing the system for rainfall, monthly total precipitation records for Tonopah and the Rattlesnake weather recording stations were examined. The average total annual precipitation for both stations was approximately 5 in.. The maximum for any three month time period occurred from October through November and equaled 4.78 in. for Tonopah in 1946 and 3.88 in. for Rattlesnake in 1957.

Isopluvials covering the state of Nevada were also examined to determine the precipitation for a single 100 yr. - 24 hr. event. In the Longstreet area that was 3.0 in.. The maximum within a 30 mile radius of Longstreet is 3.6 in.. Tonopah was shown at 2.2 in. and Rattlesnake at 2.6 in..

The system design was based on an average total yearly precipitation of 5.0 in.. Pond capacity was based on containing 5.0 in. of rainfall.

8.5.9 MAKEUP WATER REQUIREMENTS AND WATER BALANCE

Annual evaporation is greater than the annual cumulative rainfall, and the system will require a net addition of water from local water sources. Water make-up requirements include water absorbed and retained by the ore, losses due to evaporation, and miscellaneous uses.

Water absorption during saturation of the new heaps will be about 14.4 gallons per ton of ore processed, or 43,200 gallons per day. Loss due to evaporation is a function of the amount of solution sprinkled. Maximum loss due to evaporation is estimated at 20% of solution pumped onto the heaps. A maximum of 100 gpm of make-up water to the heaps (144,000 gallons per day) will therefore be required.

Dust suppression on haul roads will require up to 40,000 gallons per day. Dust suppression requirements of the crusher are estimated to be 7200 gallons per day.

Miscellaneous plant requirements are estimated at a maximum of 14,400 gallons per day.

This results in a maximum daily water requirement of 248,800 gallons per day. To insure adequate supply, a water source capable of 290,000 gallons per day (200 gpm) should be developed.

8.5.10 POND DESIGN

Storage will have to be provided for excess precipitation during the winter shutdown. During this period, solution stored in the ponds will originate from several sources:

- working volume in ponds at shutdown
- drainage water from the heaps following shutdown
- winter precipitation less winter evaporation

Two leach ponds will be in active use. One used for pregnant solution storage and one used for barren solution. The pregnant solution pond will be located at a higher elevation than the barren and an overflow ditch will connect the two.

Minimum Pond Solution Level. Each pond will contain a minimum solution volume (solution plus settled solids) of approximately 100,000 gallons (total of 200,000 gallons in both ponds).

Working Volume in Ponds. In addition to the minimum solution level, sufficient solution will be maintained in the system to permit routine operation; this is equivalent to 24 hours of normal flow to the heaps. Total flowrate for the leach cycle is 500 gpm, 720,000 gallons during 24 hours.

Drainage Water after Shutdown. In late fall when the heaps are ready to be shutdown, 180,000 tons of ore will be under active leach. After shutdown, these heaps will continue to slowly drain until they discharge approximately 10 gallons of solution per ton of ore. Total solution drained will be 1,800,000 gallons.

Precipitation Storage. Winter precipitation will collect from late fall storms, winter snowfall, and early spring storms. Total precipitation is expected to be less than 5 inches water equivalent. This amount of precipitation occurring as a single event or a long-term accumulation, is used as the design amount.

The entire pad area is taken into consideration when calculating the heap area subject to precipitation. This total area is equal to 1,306,800 sq. ft. The drainage ditch and ponds will add another 110,000 sq. ft. of surface area. Using 5 inches as the maximum total precipitation to be contained, that gives 4,415,700 gallons to be contained. Adding the secondary pad area results in another 318,900 sq. ft. of area subject to precipitation. This requires an additional 994,000 gallons of storage capacity.

Due to space limitations in the area of the recovery plant, pregnant and barren ponds, it will be necessary to add a third pond if the secondary pad area is used. This pond will be 150 x 150 x 15 ft. deep and will contain approximately 1,400,000 gallons. The third pond will be used to give the additional precipitation storage necessary and would not normally be in the circuit. Normal operation would have the pregnant solution from the secondary pad area flow directly to the normal pregnant pond. At the time of the winter shutdown, or in case of an emergency situation, the secondary pad pregnant solution would be directed into the third pond. An overflow line to the normal pregnant pond would be in place as well as a pump to transfer solution back into the normal circuit when desired.

The cost of this additional pond is not included in this study.

Pond Capacity & Size. Total system capacity is summarized below (normal pregnant and barren ponds only):

Minimum pond volume	200,000 gallons
Pond working volume	720,000 gallons
Drainage volume	1,800,000 gallons
Precipitation storage	4,415,700 gallons
Total for two ponds	7,135,700 gallons

The pregnant solution pond will have a finished crest dimension of 130 by 325 ft., a depth of 25 ft., and 2.5:1 sideslopes inside. The barren solution pond will have a finished crest dimension of 150 by 275 ft., a depth of 25 ft., and 2.5:1 sideslopes inside. Outside sideslopes will be 1.5:1 slopes.

The ponds are constructed relatively deep due to the restricted space in which they will be built.

The ponds will be constructed with a minimal amount of material cut due to the potentially shallow water table in the pond area.

Pond construction will involve moving approximately 50,000 cu. yds. of material.

8.5.11 POND INSTALLATION PROCEDURES AND COSTS

The ponds can be constructed in any soil or rock terrain. Ideally, the soil in the area will be moderately fine and the subsoil can be excavated easily by ripping with a bulldozer.

A drainage network will be placed under the ponds to act as a leak detection system and to allow ground water to be removed from under the pond liners. Additionally, the site should be reviewed by a geotechnical engineer to determine the water table, and to determine if the soil material to be used in the berms can be naturally compacted to form a stable dam.

Since the ponds will be constructed primarily above the ground surface and will be 25 ft. deep, they will have to be permitted as dams and proper quality control will have to be exercised during construction.

Subject to geotechnical confirmation, pond installation will proceed as outlined below.

1. Prepare the ground surface by removing plant material and approximately 6 in. of topsoil.

2. Excavate the ponds using scrapers, bulldozers, and loaders. The ponds will be excavated as deep as is practical depending on the geotechnical report with respect to ground water.

3. Trench end to end underneath (12 in. deep) each pond area and install a length of 3 in. perforated drain pipe sufficient to reach from end to end in each pond. At the downslope end of each pond adapt the perforated pipe to a solid 4 in. PVC pipe and run it downslope to an area clear of both ponds for monitoring. Backfill the trench with drainage gravel and ensure that the drainage/monitor trenches for the individual ponds are isolated from one another.

4. Compact the material excavated from the ponds and haul in enough additional material to form berms around all four sides of the ponds as needed. There should be a minimum 12 ft. wide roadway around the top of the pond berms.

5. Manually rake the inner pond sidewall surfaces to remove rocks larger than 1/2 in. and any residual plant material. Install a 4 in. thick cover of fine soil in areas of coarse rocks. Lightly compact bottom and sidewalls of pond to form a smooth firm surface.

6. Install a 3 in. thick layer of porous fine gravel on the pond bottom; if larger than 1/2 in. or if angular, then cover the gravel with geotextile..

7. Install pond underliner (20 mil PVC).

8. Install a layer of geotextile on the pond bottom.

9. At the lowest corner of the pond, form a shallow sump; fill the sump with fine porous gravel even with the pond bottom and cover with geotextile. Run a 4 in. diameter PVC pipe from the sump up a depression in the pond sidewall so that it is daylighted above the pond edge.

10. Install primary pond liner of 36 mil reinforced Hypalon. Bury the edge of both liners in a 1 ft. deep trench around the edge of the pond.

11. Install a lined overflow connecting ditch so that the pregnant pond will fill and overflow to the barren pond before any loss of solution occurs. Install a lined emergency spillway on the down-slope edge of the barren pond.

Some geotechnical evaluation of the pond area will be required.

Other costs of the ponds are listed below.

Material excavation and embankment compaction, 50,000 cu. yds., $2.00 per cubic yard	$100,000
Geotextile, $0.12/sq. ft., total 2 ponds:	4,000
Gravel, $5.00/cu. yd.,total 2 ponds 550 cu. yd.:	2,700
PVC underliner, $0.34/sq. ft. installed, 110,000 sq. ft., total 2 ponds:	37,400
Hypalon primary liner, $0.58/sq. ft. installed, 110,000 sq. ft., total 2 ponds:	63,800
Labor, 25 man shifts @ $125/shift	3,100
Supervision	5,000
Drainage system under ponds	3,000
Total process pond cost (2 ponds)	$219,000

(Total cost per pond, $109,500)

8.5.12 SITE DRAINAGE

There are two drainages within the proposed leach pad and pond area that need to be considered during the site layout. The first drainage runs from the south end of the leach pad area toward the pond area to the north and connects with the second drainage downstream of the ponds. This drainage has only intermittent flow resulting from storm runoff in the local area. It will have to be moved up tight against the east side of the canyon. This is a relatively minor change affecting approximately 1000 ft. of the drainage.

The second drainage runs past the recovery plant and pond areas from west to east. This drainage is generally intermittent although it may flow several months per year depending on the precipitation. The drainage will have to be moved up against the north side of the canyon for a distance of approximately 1000 ft.

It will be necessary to have a large berm to protect the plant and pond area from any excessive flows resulting from heavy rains. In addition, it will be necessary to install several culverts along the drainage for road crossings.

Total cost of this work is estimated to be $10,000.

8.5.13 SOLUTION COLLECTION SYSTEM

Details of the solution collection system are contained in KCA Drawing 1186-7. The heap will be extended across slope in stages. Heap segment #1 is approximately 630 ft. wide by 1000 ft. long. This area will be lined for Year one. All heap areas will abut each other to form a continuous top surface.

Below the heap, each segment will be divided from its neighbor (and the adjacent area) by a 3 ft. high internal berm created by an earth embankment below the plastic pad liner.

To ensure good drainage from the heaps, and to reduce hydrostatic pressure on the plastic membrane, 2 in. diameter perforated pipes (agricultural drain pipe) will be installed below the ore on the leach pad on 20 ft. centers. These pipes will transport the solution in a downslope direction. First years operations will require the installation of 31,000 lineal ft. of 2 in. drainage pipe and 1700 pipe hold-down tabs (4 x 18 in. x 40 mil PVC tabs glued to the plastic pad surface).

Similar 8 in. perforated drainage pipes will be located along the berm separating segments to collect flows at this location.

The perforated pipes will conduct solution to the lowest point in the heap segment. Solution will then flow into a 12 in. diameter PVC collection pipe which penetrates the berm through a concrete seal. This collection pipe will carry the solution to a ditch paralleling the front (lower) edge of the heaps. A 12 in. pipe in this ditch will carry the solution to the pregnant pond. Provision will be made to add a second pipe to carry solution to the barren pond for recirculation, if desired.

The ditch and pipe will be periodically extended and reconnected as new heap segments are added.

Near the ponds, the pipes will flow into Parshall flumes. Instrumentation for measuring and totallizing heap flows will be housed in an adjacent enclosure.

The cost to line and install the ditches and connections is included in section 8.5.7. The cost for the pipes and the flume building and instrumentation is discussed on the next page.

Drain pipes below heap, 2 in. drainage pipe, 31,000 ft.	$9,000
1700 pipe hold-down tabs, installed	2,000
Drain pipes at berms, 8 in. drainage pipe, 1,500 ft.	5,000
Gravel at berm edge, 700 cu. yds. gravel placed on top of 8 in. drainage pipe	4,000
Geotextile at berm edge, 30,000 sq. ft.	4,000
Pipe in ditch to ponds 12 in. PVC pipe, 1,250 feet	19,000
Fittings, Tools and Glue	5,000
Labor (150 man shifts)	19,000
Total cost pipe, installed	$ 67,000
Flumes and Instrumentation:	
1 Instrumentation Enclosure	$2,000
2 Flumes	2,000
2 Instrumentation Packages	6,000
Total Cost Flumes Installed	$10,000
Total Cost Solution Collection and Measurement Systems	$77,000

8.6 CRUSHING AND STACKING SYSTEM

The ore will be stacked at the average rate of 3000 tons during one 10 hour operating shift (circuit rated at 400 tons per hour at 100% availability). Crusher discharge will be minus 3 in. material. A crushing contractor will operate the crushing plant, and stack the ore on the heaps. The ore will be stacked by conveying the ore from the crusher system down the hill to the pad area and then spreading it in a 30 ft. high lift with a dozer. This method was chosen because the pad surface is too steep and irregular for a normal radial stacker type of system. Truck stacking was not chosen because truck stacking would require a large investment in a haul road and could adversely affect the solution percolation through the heaps.

8.6.1 HEAP CONSTRUCTION METHOD

The steep and irregular slopes in the pad area at Longstreet require careful techniques for and scheduling of heap construction.

The steep slopes in some sections of the heap area create the potential for the heap to slide on the plastic, which would destroy the liner. To eliminate the potential for sliding, the heaps will be stacked from bottom to top.

Drawing 1186-3 (KCA) presents the various locations of the stacking conveyors. The numbered conveyor locations indicate the stacking sequence.

The ore will be stacked by conveying it out onto the pad and then spreading it with a dozer to build a 30 ft. high heap. The stacking will be initiated at the lowest part of each heap segment. To accomplish this, it will be necessary to get the conveyors out onto the pad and then build the 30 ft. lift by retreating uphill.

The pad plastic will need protection from the initial conveyor run. This will be accomplished by stacking a runway for the conveyors. Once the conveyors are advanced across the runway to the pad's lowest point, then stacking to the full 30 ft. height can be started. The conveyors can retreat off the pad as necessary and the initial runway will be ripped to ensure there is no compaction.

The dozer will rip the completed portions of the heap prior to laying out the sprinklers. Sprinklers will be put up as soon as is practical behind the stacking, and leaching will start.

8.7 RECOVERY PLANT, HEAP PIPING AND LABORATORY

8.7.1 RECOVERY PLANT

Activated carbon recovery has been selected for use at Longstreet. System design parameters are tabulated in section 8.3. The recovery system will be built as a portable unit installed in 3 semi-trailers.

Recovery of gold using activated carbon consists of several processes, discussed below.

Adsorption

The carbon adsorption process begins by passing gold-rich (pregnant) solution through beds of granular activated carbon. The carbon granules are large (1/8 in. in diameter), and it is possible to treat the process solution without any removal of suspended solids or other treatment. The carbon recovers the gold from solution without further significant effect on the leach solution. The solution is then discharged to the barren pond from where it is recycled to the heaps to collect more gold.

The activated carbon is contained in 12 up-flow fluidized-bed columns. The 12 columns are split between two trailers which are run in parallel. In each trailer the columns are arranged as three sets of two columns and each pair is treated as a single unit. The three units in each trailer are piped in series so that the solution flows from one unit to the next until it exits the last column. As soon as the "lead" unit is fully loaded with gold, it is isolated from the adsorption circuit by closing valves.

Desorption (stripping)

The carbon in the loaded unit is stripped of its gold content using a hot caustic alcohol solution.

The stripping solution is maintained in a 2,500 gallon tank and contains 1% sodium hydroxide, 1% sodium carbonate and 20% ethanol.

The solution is heated to about 85°C and pumped through the carbon at 20 gpm.

After leaving the second column in the unit the gold laden strip solution flows to the recovery circuit to reclaim the gold.

Recovery

The recovery circuit contains 2 electrolytic cells that will each accept 20 gpm. Gold is recovered as metallic gold on steel wool cathodes. The solution from the cells flows back to the strip solution storage tank and is recycled through the carbon.

When the strip cycle is completed, the cathodes are removed from the electrolytic cell and smelted directly using a flux containing sodium nitrate to oxidize the iron in the steel wool. The cathodes are smelted in a gas-fired pot furnace. Impure metal bullion (dore) is produced which contains gold and silver, and usually a few percent iron and copper. This is sold to a commercial refiner for further processing.

Acid Washing

Upon completion of the desorption cycle the stripping solution is drained from the columns and the carbon is washed with dilute hydrochloric acid to remove chemical scale that may coat the carbon and reduce the loading capacity.

After completion of acid washing the solution is drained to the barren pond and the carbon is washed with process solution. At this point the carbon column set (2 columns) is ready to be returned to the adsorption circuit, where it will become the last set in the adsorption series.

Regeneration

Acid washing does not restore carbon to its fully active state and slowly the carbon will become less active. If the carbon were to be left untreated it would eventually have to be replaced.

To regain normal activity levels it is necessary to reactivate the carbon at high temperatures in a reactivation furnace or replace the carbon.

At Longstreet the carbon will be either reactivated by an outside party on contract or it will be replaced once per year.

Reagent Handling

Cyanide will be added by dissolving solid cyanide in a mixing launder located immediately next to the barren pond. The barren solution from the recovery plant is allowed to wash through the launder, into the barren pond, dissolving the cyanide. A screen will keep the solid cyanide from washing into the pond. Lime will be added for pH control by slurrying hydrated lime in a small tank and allowing the slurry to overflow into the process ponds.

8.7.2 RECOVERY PLANT AND EQUIPMENT COSTS

All items of equipment will be constructed in the U.S. Site activities will consist of installing the trailers on a concrete pad built on-site, and installing pipes to interconnect the trailers.

The process equipment and materials will consist of the following items, with estimated costs as shown.

Adsorption/Desorption Sections:
Complete system for gold recovery: $409,000
- 12 columns contained on two 40 ft. semi-trailers
- one 40 ft. trailer holding: Electrolytic Cells, solution storage tank, heaters and pumps -

Concrete slab for trailers	11,000
Pumps and Pond Intakes	20,000
Smelting Furnace on slab	5,500
Initial Carbon Charge	33,500
Lime Slurry & Cyanide Addition System	10,000
Shipping	5,000
Setup	30,000
Spare Parts	5,000
Total Process Plant Cost	$529,000

8.7.3 HEAP PIPING SYSTEMS AND SPRINKLERS

At any given time during the leach cycle, solution will be sprinkled onto a portion of one heap section containing 180,000 tons of ore, with an average flowrate of 500 gpm. Wash water (when applicable) will be applied at full flow rate but only for long enough to maintain the water balance.

The solution distribution lines are shown on KCA Drawing 1186-6. The system includes one "Main" pipeline coming from the pump in the barren pond. This line is placed along the top of the heap and will be extended as each heap is placed under leach. This pipeline is designed for a maximum flowrate of 600 gpm and will be 6 inch diameter PVC pipe. A second pipeline will be installed from the fresh water system to the heaps, parallel to the first pipeline.

A system of distribution lines on the heap will terminate in 1 1/2 in. PVC lines that contain Senninger Wobbler sprinklers. These pipes will be spaced 20 ft. apart, and contain sprinklers on 20 ft. centers (flow from one sprinkler will overlap the flow from adjacent sprinklers).

The flowrate onto the heap will be equivalent to approximately .004 gpm/sq. ft.

First year heap piping requirements include pipe for all of heap segment #1. Replacement of pipes and sprinklers is included in the section on operating cost. Total pipe requirements and costs for first year's heaps are shown on the following page.

ITEM & SPECIFICATION	QUANTITY	PRICE
Solution Mains:		
6 in. PVC	3000 ft	$9,500
Headers:		
6 in. PVC	900 ft	2,900
Distribution Pipes:		
1 1/2 in. PVC	25,000 ft	15,400
Valves:		
6 in. butterfly	2 ea	250
4 in. butterfly	4 ea	300
1 1/2 in. PVC gate	100 ea	1200
Sprinklers:		
Senninger #9 "Wobbler"	1300 ea	5,000
Pressure Gauges with guard	6 ea	350
Pipe Fittings:		
6 in.		11,300
4 in.		1,100
3 in.		300
1 1/2 in.		11,400
Installation, Glue & Supplies		6,000
Miscellaneous, 10%		7,000
Shipping		2,000
Labor:		
120 man days		15,000
Total Cost, Initial Heap Piping System		$ 89,000

8.8 LABORATORY DESIGN AND SAMPLING

Mine grade control will require that up to 120 pit samples be taken each day from the active faces in the mine. These samples will include drill-hole cuttings from the blasthole drills, broken rock samples taken from endloader buckets, or chip samples taken manually from the pit face.

The samples, typically weighing 5 to 15 lbs., will be crushed if necessary through a small jaw crusher then 1 lb. will be split out and pulverized.

These pit samples, plus occasional exploration samples, will be analyzed in an on-site laboratory using a test known as a cyanide centrifuge tube leach test. In this test, a small portion of sample is agitated with cyanide leach solution, the solution is separated from the ore by centrifugation, and the solution is read directly on an atomic absorption spectrophotometer.

For plant control purposes, solution samples will be taken at several points in the process as listed below (flowrates will also be measured at each point):

Barren solution (at barren pump)
Pregnant solution (at pregnant pump)
Discharge from each carbon column (12 points)
Heap discharge - heap in primary cycle
Heap discharge - heap in wash cycle
Strip solution entering strip tank
Strip solution entering electrolytic cells
Strip solution discharging electrolytic cells

The flowrates from the heaps will be measured using open weirs (Parshall flumes). Column flowrates will be measured using continuous recording flowmeters. Electrolytic cell input and discharge flows will be sampled and measured using automatic proportional samplers.

Leach solution flows will be measured and sampled on two or four-hour intervals. Strip solution flows will be sampled at variable intervals of 1/2 to 2 hours, but stripping will operate only 30% of the time. The laboratory will typically process an average of 100 solution samples per day, and will assay these by AA for gold and silver, by titration for cyanide content, and by pH meter for alkalinity control.

In addition to the above samples, the carbon in the columns will be sampled each time it is transferred in or out of the columns for regeneration. These carbon samples plus about 150 pit samples (10% of all samples processed) will be sent out for fire assay every two weeks.

Normally, one laboratory chemist with two assistants for general cleanup can process all samples including cleaning and maintenance of glassware and laboratory. Two additional technicians will be required for sample preparation, organization and record keeping. Two persons under the surveyor's supervision will be assigned to take the samples in the mine.

The sample preparation room will be equipped with a coarse jaw crusher (4 x 6 in.), a fine product jaw crusher (3 x 2 in.), pulverizer, screens, and splitters. The wet assaying lab will be equipped with an atomic absorption spectrophotometer, fume hood and fan, wrist action shaker, pH meter, centrifuge, and general labware and chemicals.

The laboratory and sample preparation area will be constructed in two 28 ft. semi-trailers complete with utilities including lights, heat, ventilation and power outlets. One trailer houses the "wet chemistry" section, which includes an atomic absorption spectrophotometer, a fume hood, cabinets and racks for laboratory apparatus and supplies, a large floor mounted centrifuge, a pH meter, sample and reagent balances, an instrument air source, a sink and other associated equipment for running cyanide-soluble gold determinations using centrifuge tube leach apparatus. The other trailer houses a sample preparation section which includes a 4 x 6 in. jaw crusher, a small chipmunk jaw crusher, a disc pulverizer, work tables, an electric drying oven, a compressed air outlet and a dust exhaust ventilation system. The laboratory will be stocked with one year's supply of consumable items and specialized spare parts for the equipment. The cost of the laboratory is shown on the next page.

Cost of Laboratory	$100,000
Shipping/insurance	2,500
Setup	2,500
Spare Parts and Supplies	20,000
	$125,000

It is estimated that equipping the laboratory to have fire assay capabilities would be an additional $40,000.

8.9 INFRASTRUCTURE AND SUPPORT FACILITIES

Infrastructure and support facilities will consist of the items discussed below.

8.9.1 HAUL ROAD, ACCESS ROAD, YARD AREAS, & RECLAMATION

Approximately 2 miles of existing gravel access road will have to be improved. This work will be done primarily with a road grader and a water truck. Some dozer work may be required and several culverts will have to be installed. In addition about 9000 ft. of mine haul roads will have to be constructed as well as the pad for the crusher stockpile and area. In addition, a yard area will be required near the recovery plant. Cost for this work is estimated to be $193,000.

An estimate of $120,000 has been included to reclaim about 40 acres of pad, pond and crusher area.

8.9.2 OFFICE AND ADMINISTRATION BUILDING

The office and administration building will contain 1400 sq. ft. of floor space, and will be constructed from two office trailers measuring 12 x 60 ft. each.

Total cost of office trailers and facilities, plus $25,000 for furniture and office equipment	$50,000
Communications equipment: Radio telephone	10,000
Shipping/insurance	5,000
Total cost office facility	$65,000

8.9.3 WAREHOUSE

Heap leach systems generally involve specialized supply items which can be kept in working areas. For this reason, only a minimal central warehouse facility is planned. This warehouse will consist of an 8 x 40 ft. modular unit equipped with bins and shelves and a service counter. An adjacent chain-link fenced area will house large parts or miscellaneous chemicals. Total cost of this unit is estimated below.

Cost of Warehouse	$10,000

8.9.4 FENCES AND SITE SECURITY

Site security will be minimal, consisting of an outer perimeter 4-strand barbed wire fence around the heap area and a 6 ft. chain link fence around the plant and pond area.

Total cost of fence, installed	$50,000

8.9.5 SERVICE AND SUPPORT VEHICLES

The following service and support vehicles will be required:

Pickup/utility trucks (4)	$50,000
Forklift (used)	10,000
Small backhoe/endloader (used)	35,000
Shipping/insurance	5,000
Spare Parts	5,000
Total vehicle cost	$105,000

8.9.6 PROCESS AND POTABLE WATER SUPPLY

Water for all activities will be taken from a well field located in Windy Canyon. Maximum water requirement for the process will occur during the months of June through August when evaporation may equal 2% of the solution pumped. One pumping cycle of 500 gpm will be in operation during this time, so that maximum evaporation will equal 100 gpm.

Saturation of ore will also require the addition of process water. It's estimated that the ore will absorb an average of 10% moisture. In-situ ore probably contains 4% moisture, so that ore uptake will be 6% moisture. At a production rate of 3000 tons per day, water requirement for ore saturation will be 30 gpm.

Mine roads will have to be watered to prevent dust buildup. Experience indicates that maximum water requirement in the middle of the dry season will require the constant use of a water truck 10 hours per day, at a usage rate of 4000 gallons per hour. The crusher is estimated to need 7200 gallons per day. The recovery plant and office complex is estimated to use up to 3,000 gallons per day.

Total maximum water consumption averaged over 24 hours is summarized below.

Water evaporated:	100 gpm
Water to saturate ore:	30 gpm
Water for dust control:	33 gpm
Miscellaneous plant water:	2 gpm
Total fresh water requirement:	165 gpm
Acceptable Well Development:	200 gpm

A storage tank will be required which will hold a minimum of 20,000 gallons. This will provide a surge for filling the water truck and a supply for the process plant.

Annual water usage is estimated below, based on the following assumptions:

Water to saturate ore:	6% of ore weight 810,000 tons ore per year
Evaporation:	2 months @ 20% of solution flow 3 months @ 15% of solution flow 4 months @ 10% of solution flow (solution flow, 500 gpm)
Mine dust control:	33 gpm, average 24 hrs/day 7 months per year
Miscellaneous uses:	1000 gallons per day 9 months per year

Total annual water consumption is 49 million gallons per year.

The cost of the water system is estimated to be $80,000 assuming that one well will supply the necessary water.

8.9.7 POWER

Power to run the crushing system is assumed to be supplied by the contractor. Power for mine maintenance facilities are also assumed to be supplied by the contractor. Installed power in the stacking system will be approximately 203 Hp. A significant portion of the power is installed to provide braking for the downhill conveyor runs. Therefore, the average running requirement is estimated to be 68% of installed power: 138 Hp. Power will be supplied by the contractor by a diesel generator which will be separate from the process power system.

Power to run the office complex and the process and treatment systems is estimated to require approximately 180 KW peak demand. Power will be supplied by a diesel generator. A back-up generator should also be installed. Power for the water system was not determined although it's estimated that a minimum of 40 Hp will be required. A 250 KW generator should be sufficient for the office, recovery plant and water distribution system.

Cost of the power systems is estimated to be $50,000.

8.10 OPERATING COSTS

Operating costs developed below are based on a production rate of 3000 tons per day, 30 days per month, with an annual production of 800,000 tons per year.

8.10.1 OPERATING LABOR

Total effective personnel requirement is 25 full-time employees. If the company operates the stacking system an additional 6 full-time employees will be required. Company employees will conduct the following activities:

- Management and administrative functions
- Surveying/ore control in the mine
- Preparation of leach pads and ponds
- Sample preparation and assaying
- Operation of leach and gold recovery systems
- Minor construction activities; miscellaneous jobs

It is expected that the liner installation for the pads and ponds will be conducted by a contractor.

The normal company operating staff and personnel will be responsible for the following functions:

RECOVERY PLANT

1. Dayshift:
   - Supervise the mining & crushing contractor.
   - Keep mine surveys and maps up to date
   - Mine grade control
   - Installation and maintenance of heap pipes and sprinklers
   - Solution and ore sample organization and assaying
   - Carbon stripping
   - Plant maintenance
   - Site security
   - Smelting and gold sales
   - General & administrative functions

2. Swingshift: Maintain status quo of plant and heap operating systems
3. Graveyard: Maintain status quo of plant and heap operating system.

The personnel needed to perform the preceding tasks are summarized below:

	$/Year (Direct Cost)
RECOVERY PLANT LABOR	
Lab Technicians	
2 @ 40 hrs./wk; $10/hr.	
10 months per year	$35,000
Sample Prep.	
2 @ 40 hrs./wk; $10/hr.	
10 months per year	35,000
Laborers	
3 @ 40 hrs./wk; $10/hr.	
10 months per year	52,000
Plant Operators	
8 @ 40 hrs./wk; $12/hr.	
10 months per year	167,000
SUBOTAL PLANT LABOR COST	$289,000
BURDEN, 35%	101,100
TOTAL YEARLY PLANT LABOR COST	$390,100
SUPERVISORY LABOR	
General Manager	60,000
Mill Superintendent/Metallurgist	45,000
Mine Superintendent	45,000
Secretary - Purchasing Agent	18,000
Chief Assayer	24,000
Surveyor - Draftsman	24,000
Security	18,000
Mechanic/Electrician	24,000
SUBTOTAL G & A SUPERVISORY	$258,000
SUPERVISORY FRINGES (35%)	90,300
TOTAL G & A SUPERVISORY	$348,300

Labor costs per ton of ore are about $0.44 for G & A labor and about $0.48 for plant and lab labor.

8.10.2 LEACH SOLUTION REAGENTS: LIME AND CYANIDE

The cost of reagents is outlined below.

Reagent	Usage lbs/ton of ore	Cost $/lb of reagent	Cost $/ton of ore
NaCN (Sodium Cyanide)	0.75	$0.70	$0.53
$Ca(OH)_2$ (lime)	1.0	0.04	0.04
Solution descalant (estimated)			0.05
	Total Reagent Cost:		$0.62/ton

8.10.3 LEACH UTILITIES:POWER AND WATER

Power consumed for operations (other than stacking) is estimated at 1.50 KW.hr per ton. Power costs are estimated to be $0.10 per KW.hr.

It is estimated that 40 Hp will be required to pump 200 gpm. As yearly consumption is 49,000,000 gallons, the total time pumping will be 4084 hrs./year. At $0.10/ this equals $14,300 per year or $0.018/ton.

Cost of propane for building heat and smelting furnace operation will be less than $15,000 per year, or $0.019/ton.

Total cost leach utilities: $0.187/ton

8.10.4 HEAP PIPES AND SPRINKLERS

The initial cost of pipes and sprinklers to service the operating heap is included in capital costs Operating cost will include replacement cost of broken parts. Replacement is estimated at 50% per year. The replaceable parts of the system cost $73,000. This cost is prorated over the yearly production of 800,000 tons.

Cost of sprinklers and pipes: $0.045/ton

8.10.5 CARBON STRIPPING, REGENERATION, & PLANT MAINTENANCE

This section discusses the cost of plant maintenance and operating supplies.

Plant Maintenance: The plant equipment is relatively simple, standard technology equipment, and the process solutions are non-corrosive to exposed mild steel. Plant maintenance involves periodic replacement of pump and valve parts, maintenance on flowmeters, and occasional replacement of pipes broken by freezing or by poor valve operating procedures.

Total maintenance is expected to cost 7.5% per year of plant capital cost. Plant cost is $524,700, and annual maintenance is about $40,000. The cost of maintenance is prorated over a year's production (800,000 tons).

Plant maintenance cost: $0.05/ton.

Carbon Strip Chemicals:

Plant chemical requirements include alcohol, sodium hydroxide and sodium carbonate for the gold recovery (carbon stripping) operations, acid for carbon washing, and fluxes and furnace parts for smelting of dore bars.

There will be approximately 30 strip cycles per month. Each batch of strip solution will be used three times before discarding; a total of ten batches of strip solution will be used per month. Each batch of strip solution will have a volume of 2500 gallons (20,000 lbs.), and will require 500 gallons ethanol and 300 lbs. each of sodium hydroxide and sodium carbonate. Total cost of the reagents will be $800 per batch, or $8000 per month.

Following each intermediate strip (20 strips per month), an additional 5% alcohol will be added to replace evaporation and adsorption losses, equal to 1000 gallons per month ($1500/month). Also, 250 lbs. each of sodium carbonate and sodium hydroxide will be added ($650/month).

Electrolytic cell cathodes will cost approximately $30.00 per strip, or $900 per month. Replacement of the anodes will be done annually at a cost of $1000 per year, or $110.00 per operating month.

Smelting will take place eight times per month, and will require a total of 50 lbs. fluxes with a cost of $60.00 per smelt or $480 per month. Crucible replacement will be $300 per month.

After stripping, each batch of carbon will be acid washed. This operation will consume 20 gallons muriatic acid per ton of carbon, or 2300 gallons per month, costing $5000 per month.

Total cost of the process chemicals and supplies outlined above is $16,940 per operating month, or $152,460 per operating year.

Total Cost for Carbon Stripping Chemicals: $0.188/ton

Carbon Regeneration:

To maintain the gold loading capacity of the activated carbon, it will be either regenerated off-site on a contract basis or replaced once per year. Assuming the least expensive method is used, the maximum yearly cost would be the cost of replacing the carbon. Twelve tons of carbon at $1.40 per pound is $33,600 per year or $0.042 per ton.

Carbon Regeneration: $0.042/ton

The costs developed in this section are summarized below.

Plant Maintenance	$0.050/ton
Strip Chemicals	
Cathodes	
Smelting	
Acid Washing	0.188
Carbon Regeneration	0.042
Total Section 8.9.5:	$0.280/ton

8.10.6 LABORATORY

Operating costs of the laboratory for control of both mine and plant functions are included here. Laboratory labor costs are included in plant labor costs. Cost for reagents, supplies and lab maintenance are presented below.

Assay Procedure	Daily Volume	$/Sample	$/Day
Ore sample preparation and storage	120	$0.60	$72.00
Carbon sample preparation and storage	1	0.60	1.00
Centrifuge tube tests plus AA assays	120	0.15	18.00
Solution AA assays	100	0.10	10.00
Outside check fire assays	6	12.00	72.00
Total cost of lab operation per day			$173.00

Laboratory operations will be performed 5 days per week, but the sample volume outlined above must be performed for 7 days sampling and assaying per week, at a cost of $5,250 per month or $47,250 per year.

Cost of sampling and assaying: $0.058/ton.

8.10.7 GOLD SALES

Several impure gold dore bars will be produced on-site each month. The expenses for gold sales include refinery charges for secondary refinement and insurance charges for shipment of the bar to the refinery. The costs will be approximately 2% of the contained gold value of the bar. The project will produce an average of 2100 troy ounces of gold per month. At a value of $450.00 per ounce the value of the bars will be $931,500.

Gold Sales, 1% of value:	$ 9315/month
(per ton basis):	$0.104/ton

8.10.8 GENERAL AND ADMINISTRATIVE

General and Administrative costs include items such as property and equipment taxes, support vehicle operation, local goodwill expenses, office and communication expenses, legal and accounting fees, outside technical consulting, insurance, company recreation facilities and professional housing allowance. Numerous additional expenses can be included in this category. The cost presented is a typical cost for an operation in the United States of $0.50 per ton exclusive of labor costs. This cost will increase if a company supported trailer court is envisioned.

8.10.9 CONTRACT MINING AND CRUSHING

The contract mining and crushing costs were estimated by contractors who have visited the site. When the final feasibility is completed competitive bids should be used to estimate costs. The costs projected in this study for mining is $1.10 per ton of material and for contract crushing and stacking on the pad is $1.40 per ton ore.

FIGURE 8-1

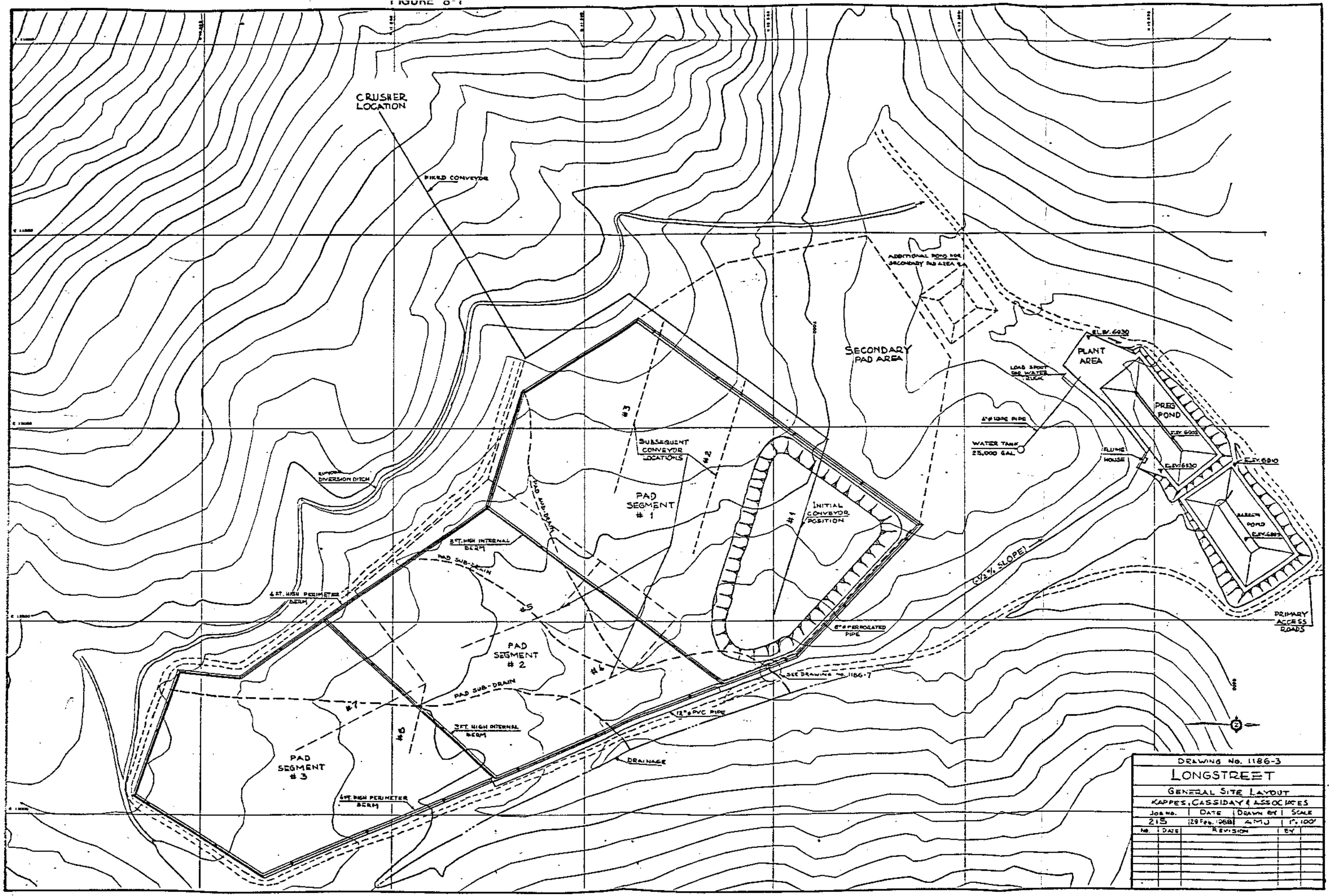
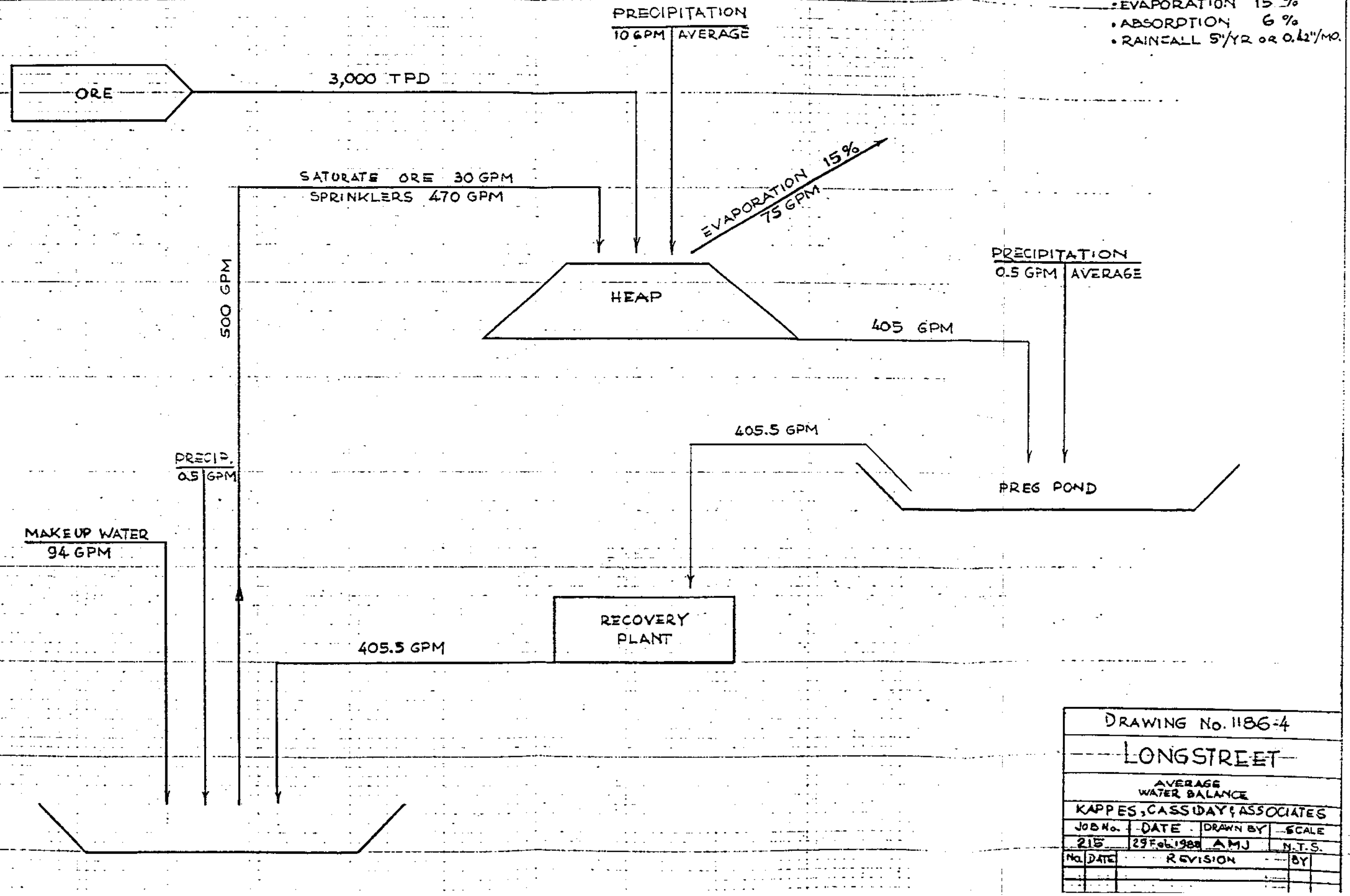

CRUSHER LOCATION
FIXED CONVEYOR
DIVERSION DITCH
ADDITIONAL POND FOR SECONDARY PAD AREA
SECONDARY PAD AREA
PLANT AREA
ELEV. 6930
LOAD SPOUT
6"ø HDPE PIPE
WATER TANK 25,000 GAL
PREG POND
FLUME HOUSE
BARREN POND
ELEV. 6910
SUBSEQUENT CONVEYOR LOCATIONS
PAD SEGMENT # 1
INITIAL CONVEYOR POSITION
#1
#2
#3
#5
#6
#7
#8
3FT. HIGH INTERNAL BERM
PAD SUB-DRAIN
6FT. HIGH PERIMETER BERM
PAD SEGMENT # 2
8"ø PERFORATED PIPE
(1/2% SLOPE)
PRIMARY ACCESS ROADS
SEE DRAWING No. 1186-7
12"ø PVC PIPE
DRAINAGE
PAD SEGMENT # 3
DRAWING No. 1186-3
LONGSTREET
GENERAL SITE LAYOUT
KAPPES, CASSIDAY & ASSOCIATES
JOB NO. | DATE | DRAWN BY | SCALE
215 | 29 Feb. 1988 | AMJ | 1"=100'
No. | DATE | REVISION | BY

FIGURE 8-2



DRAWING No. 1186-4

LONGSTREET

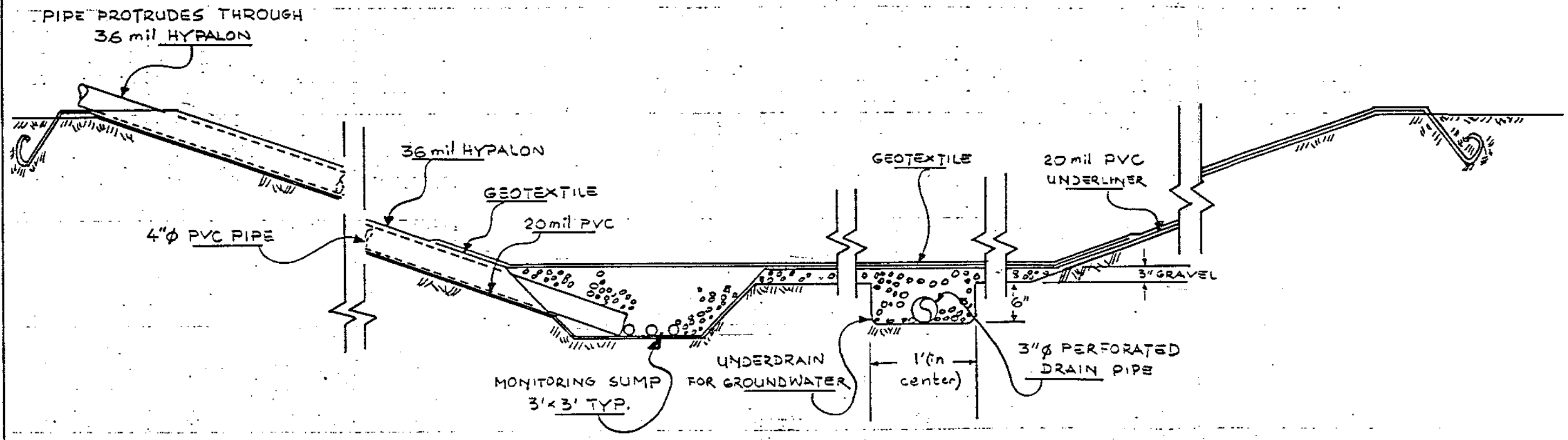
AVERAGE WATER BALANCE

KAPPES, CASSIDAY & ASSOCIATES

JOB No.	DATE	DRAWN BY	SCALE
215	29 Feb 1988	AMJ	N.T.S.

No.	DATE	REVISION	BY

FIGURE 8-3



DRAWING No. 1186-5

LONGSTREET

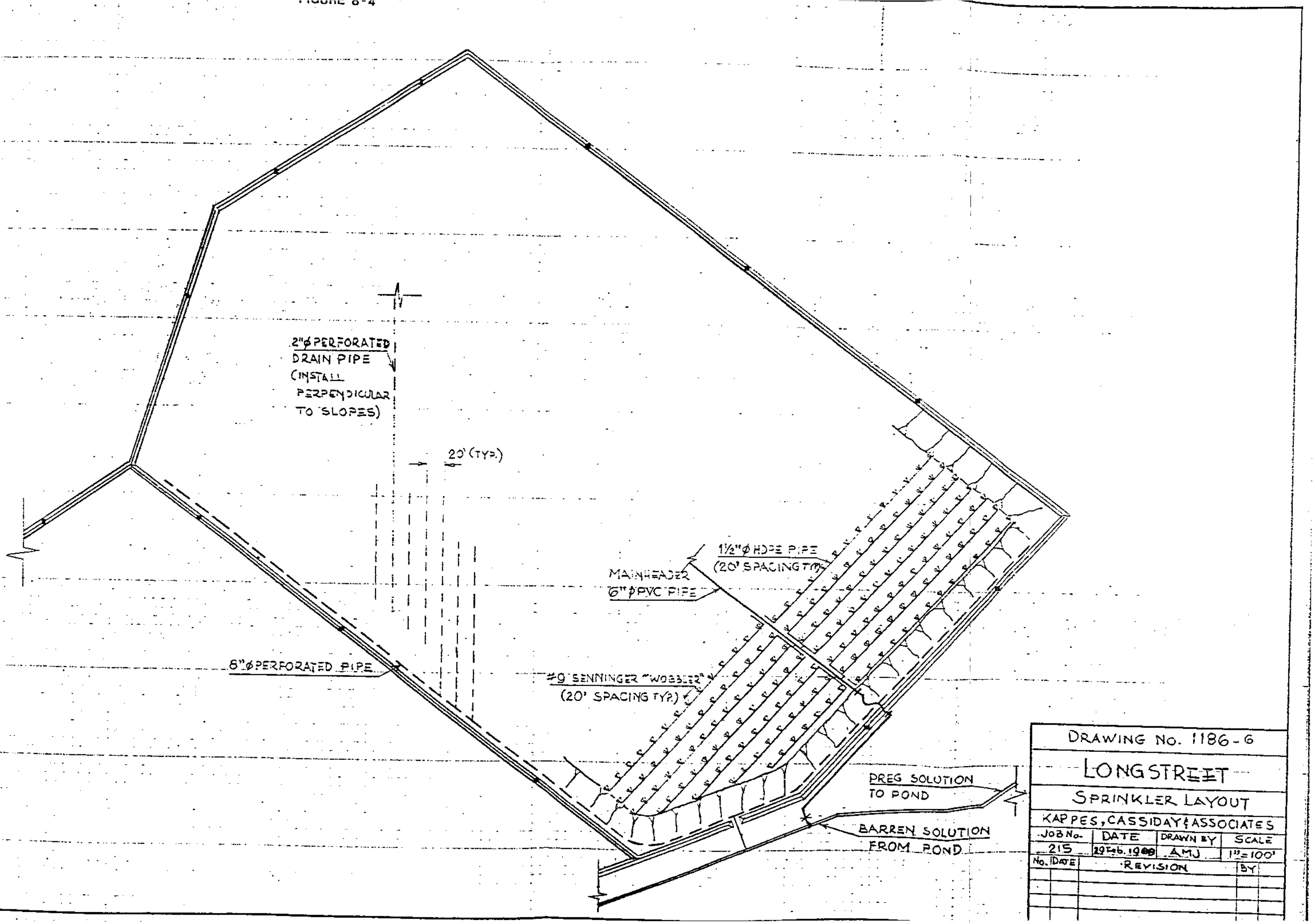
POND DETAIL

KAPPES, CASSIDAY & ASSOCIATES

JOB No.	DATE	DRAWN BY	SCALE
215	29 Feb. 1988	AMJ	NTS

No.	DATE	REVISION	BY

FIGURE 8-4



DRAWING NO. 1186-6

LONGSTREET

SPRINKLER LAYOUT

KAPPES, CASSIDAY & ASSOCIATES

JOB No.	DATE	DRAWN BY	SCALE
215	29-Feb-1989	AMJ	1"=100'

No.	DATE	REVISION	BY

9.0 ECONOMIC EVALUATION

The results of an economic evaluation are tabulated below for two cases:

BASE CASE: USING PROVEN RESERVES ONLY

PRESENT VALUE (10%) ($000'S)	RATE OF RETURN	METAL PRICES GOLD	SILVER
$(1123.7)	-2.60%	$400	$6.00
(216.2)	7.53%	425	6.25
691.3	18.08%	450	6.50
1550.9	28.51%	475	6.75
2384.9	39.11%	500	7.00

CASE IA: PROVEN RESERVES PLUS ONE ADDITIONAL YEAR

$ 241.8	12.31%	$425	$6.25
1328.5	22.90%	450	6.50
2361.2	33.30%	475	6.75
3374.8	43.90%	500	7.00

The cash flow summaries are included in the Appendix.

SENSITIVITY

The sensitivity to price, operating cost, and gold and silver recovery is shown on the following page and in the Appendix.

Longstreet Study
July, 1988

SENSITIVITY VARIABLE	NET PRESENT VALUE(@10%)	RATE OF RETURN
OPERATING COST $/TON	000's	
$6.04	$1,245.3	24.7%
6.14	1,067.2	22.6%
6.24	888.1	20.4%
6.34	691.3	18.1%
6.44	493.3	15.7%
6.54	295.2	13.4%
6.64	97.2	11.1%
GOLD RECOVERY		
$70.00	$(351.0)	6.0%
72.50	170.2	12.0%
75.00	691.5	18.1%
77.50	1,192.8	24.1%
80.00	1,674.3	30.1%
SILVER RECOVERY		
$15.00	$ 691.3	18.1%
20.00	1,026.1	22.0%
25.00	1,343.2	25.8%
30.00	1,656.7	29.5%
35.00	1,969.9	33.3%

10.0 CONCLUSIONS AND RECOMMENDATIONS

10.1 CONCLUSIONS

A preliminary economic evaluation of the Longstreet deposit indicates the project is potentially profitable with existing proven reserves at current metal prices. The project is very sensitive to metal prices, with 10% fluctations changing the economics considerably. The project is also sensitive to fluctuations in operating cost. Establishing additional reserves of mineralization on the property from known areas, or new areas improves the project economics.

The project is on the border of providing acceptable returns. If metal prices fluctuate between $450 and $500 the project appears to be economic and should provide good returns. If metal prices fluctuate between $400 and $450 per ounce the project will not provide an adequate rate of return, and may not provide payback of Capital. We believe the project to be economically feasible with existing proven reserves at metal prices of $475 gold and $6.75 silver provided the following conditions can be met:

-Obtain contracts for mining and crushing at, or lower than the costs estimated of $1.10 per ton for mining and $1.40 for crushing and stacking the pad ore. A savings of $0.10 per ton of ore increases the return on investment from 18.08% in the base case to 20.43%, and increases the present value by about $200,000.

-Efforts should be made to stabilize operating cost by contracts, and stabilize price by hedging. The project is very sensitive to fluctuations in price and operating cost. A 10% change in operating costs or metal price will have significant impacts on rate of return and capital payback. A $0.30 change in the operating cost changes the rate of return as follows:

OPERATING COST	RATE OF RETURN	PRESENT VALUE
$6.04	24.73%	$1245.3
6.34	18.08%	691.3
6.64	11.12%	97.2

The project has a very small margin for error at current prices of $450 gold and $6.50 silver. Almost 50% of the operating costs can be fixed by contracts, and a portion of projected production can be hedged to limit risk as much as possible.

10.2 RECOMMENDATIONS

* Develop additional reserves. The rate of return (base case- $450 gold) improves from 18.08% to 22.90% by increasing reserves by 800,000 tons. The present value also improves by $600,000.

* Develop additional reserves by drilling an additional 50 drill-holes in target areas (15,000'). The drilling should be concentrated in the area of drill-holes 383-393 in the stockwork and rim zones. The cost of drilling, assaying, and logging has averaged $12.00 per foot, or $180,000 would be required. The cost of drill roads and support would increase the cost to an estimated $200,000

* Resolve the problem of angle hole vs vertical hole samples by additional work. The angle holes are about 20% higher in grade than the vertical drill-holes. The work will probably consist of additional drilling and underground sampling.

* Resolve the problem of sample recovery in the ore grade zones. Sample recovery is generally significantly lower in the ore zones than the weakly mineralized zones. This could lead to obtaining more un-mineralized sample than mineralized sample when the drill-hole drilled has an equal footage. This could tend to downgrade the sample assay on the fringes of the ore zones and in narrow mineralized zones.

* Obtain all necessary permits. The cost for completing the permit work is estimated to be $50,000.

* Obtain project financing. The financing should be in place before the bids from contractors are received to be able to negotiate from a strong position. The capital required in Year 1 is $4.36 million, with an additional $0.68 million requried in Year 2. At metal prices of $475 gold and $6.75 silver, the project has a projected rate of return of 22.05%. Naneco Resources should be aware of, and act to minimize the downside risks, and then should be able to attain a reasonable rate of return.

CERTIFICATE

I, Neil B. Prenn, of Gardnerville, Nevada, do hereby certify:

1. That I am employed at Mine Development Associates, a Consulting Engineering Firm, whose address is 1845 Glendale Ave., Sparks, Nevada 89431.

2. That I am a registered Professional Engineer in the State of Nevada.

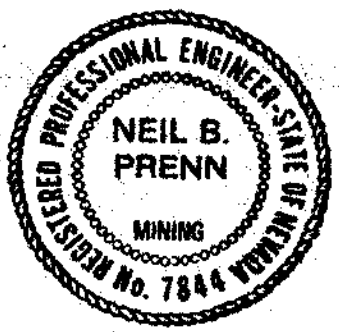
3. That I am a graduate of the Colorado School of Mines with an Engineer of Mines Degree (1967).

4. That I have practiced my profession for over 20 years.

5. That I have no material interest, direct or indirect, in the property discussed in this report or in the securities of Naneco Resources Ltd.

6. That I consent to the publication of this report, dated July, 1988, entitled, Longstreet Project, Nye County, Nevada, Pre-Feasibility Study.

Neil B. Prenn, P. Eng.
July, 1988



LONGSTREET PROJECT -- CASH FLOW SUMMARY -- 800000 TON PER YEAR CASE 25-Apr-88

GOLD = $400.00 PER OUNCE
SILVER = $6.00 PER OUNCE

PRODUCTION STATISTICS	YEAR	1	2	3	4	5	TOTALS
ORE(000'S TONS)		300.0	800.0	800.0	800.0	323.0	3023.0
GOLD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.0233
SILVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.533
WASTE(000'S TONS)		300.0	800.0	800.0	800.0	186.1	2886.1
METAL RECOVERED							
GOLD(OUNCES)	75.00% RECOVERY	4950	15000	15000	12600	5329	52879
SILVER(OUNCES)	15.00% RECOVERY	20700	56400	56400	80400	27616	241516
REVENUE($ 000'S)							
GOLD		$1,980.0	$6,000.0	$6,000.0	$5,040.0	$2,131.8	$21,152
SILVER		$124.2	$338.4	$338.4	$482.4	$165.7	$1,449
TOTAL REVENUE		$2,104.2	$6,338.4	$6,338.4	$5,522.4	$2,297.5	$22,601
COSTS							
CAPITAL COST($ 000'S)							
CONTRACT MOBILIZATION AND DEMOB		$250.0					$250
PORTABLE RECOVERY PLANT		$618.0				($206.0)	$412
LEACH PAD AND PONDS		$738.0	$676.0				$1,414
MINE ROADS AND RECLAMATION		$313.0					$313
GENERAL AND INFRASTRUCTURE		$485.0					$485
ENGINEERING AND CONST SUPERVISION		$250.0					$250
SUBTOTAL		$2,654.0					$3,124
CONTINGENCY AT 15%		$398.1					$398
TOTAL CAPITAL COST		$3,052.1					$3,522
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0				($1,191.0)	$0
TOTAL CAPITAL INVESTMENT		$4,243.1	$676.0			($1,397.0)	$3,522
OPERATING COSTS							
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$6,500
CRUSH,AGGLOM & LOAD	$1.40 PER TON	$420.0	$1,120.0	$1,120.0	$1,120.0	$452.2	$4,232
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$155.0	$1,451
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$3,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$16.1	$151
G & A - SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$142.1	$1,450
G & A - GENERAL	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$161.5	$1,611
TOTAL OPERATING COST		$2,116.0	$5,056.0	$5,056.0	$5,056.0	$1,890.8	$19,175
TOTAL COST PER TON ORE		$7.05	$6.32	$6.32	$6.32	$5.85	$6.34
TOTAL COST PER OUNCE GOLD		$402.4	$314.5	$314.5	$363.0	$323.7	$335.2
INCOME BEFORE TAXES		($11.8)	$1,282.4	$1,282.4	$466.4	$406.7	$3,426
DEPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)	($1,800)
DEPLETION @ 15%		$5.9	($641.2)	($641.2)	($233.2)	($203.4)	($1,713)
TAXABLE INCOME		($805.9)	$161.2	$353.2	$60.4	$144.2	($87)
INCOME TAX @ 30%		$0.0	$48.4	$106.0	$18.1	$43.2	$216
CASH FLOW							
INCOME AFTER TAXES		($805.9)	$112.8	$247.2	$42.3	$100.9	($303)
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$1,800
DEPLETION		($5.9)	$641.2	$641.2	$233.2	$203.4	$1,713
CAPITAL COST		($4,243.1)	($676.0)			$1,397.0	($3,522)
CASH FLOW		($4,254.9)	$558.0	$1,176.4	$448.3	$1,760.5	($312)
CUMULATIVE CASH FLOW		($4,254.9)	($3,696.9)	($2,520.4)	($2,072.1)	($311.7)	($312)
NET PRESENT VALUE @ 10% ($000'S)	($1,123.7)						
INTERNAL RATE OF RETURN	-2.60%						

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- 800000 TON PER YEAR CASE 25-Apr-88

GOLD = $425.00 PER OUNCE
SILVER = $6.25 PER OUNCE

		YEAR 1	2	3	4	5	TOTALS
ODUCTION STATISTICS							
r 000'S TONS)		300.0	800.0	800.0	800.0	323.0	3023.0
LD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.0233
SILVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.533
WASTE(000'S TONS)		300.0	800.0	800.0	800.0	186.1	2886.1
TAL RECOVERED							
GOLD(OUNCES)	75.00% RECOVERY	4950	15000	15000	12600	5329	52879
SILVER(OUNCES)	15.00% RECOVERY	20700	56400	56400	80400	27616	241516
VENUE($ 000'S)							
GOLD		$2,103.7	$6,375.0	$6,375.0	$5,355.0	$2,265.0	$22,474
SILVER		$129.4	$352.5	$352.5	$502.5	$172.6	$1,509
TOTAL REVENUE		$2,233.1	$6,727.5	$6,727.5	$5,857.5	$2,437.6	$23,983
OSTS							
APITAL COST($ 000'S)							
CONTRACT MOBILIZATION AND DEMOB		$250.0					$250
PORTABLE RECOVERY PLANT		$618.0				($206.0)	$412
LEACH PAD AND PONDS		$738.0	$676.0				$1,414
MINE ROADS AND RECLAMATION		$313.0					$313
GENERAL AND INFRASTRUCTURE		$485.0					$485
ENGINEERING AND CONST SUPERVISION		$250.0					$250
SUBTOTAL		$2,654.0					$3,124
CONTINGENCY AT 15%		$398.1					$398
TOTAL CAPITAL COST		$3,052.1					$3,522
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0				($1,191.0)	$0
TOTAL CAPITAL INVESTMENT		$4,243.1	$676.0			($1,397.0)	$3,522
OPERATING COSTS							
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$6,500
CRUSH,AGGLOM & LOAD	$1.40 PER TON	$420.0	$1,120.0	$1,120.0	$1,120.0	$452.2	$4,232
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$155.0	$1,451
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$3,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$16.1	$151
G & A - SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$142.1	$1,450
G & A - GENERAL	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$161.5	$1,611
TOTAL OPERATING COST		$2,116.0	$5,056.0	$5,056.0	$5,056.0	$1,890.8	$19,175
TOTAL COST PER TON ORE		$7.05	$6.32	$6.32	$6.32	$5.85	$6.34
TOTAL COST PER OUNCE GOLD		$401.3	$313.6	$313.6	$361.4	$322.4	$334.1
NCOME BEFORE TAXES		$117.1	$1,671.5	$1,671.5	$801.5	$546.9	$4,808
EPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)	($1,800)
EPLETION @ 15%		($58.6)	($835.7)	($835.7)	($400.7)	($273.4)	($2,404)
AXABLE INCOME		($741.4)	$355.7	$547.7	$227.9	$214.2	$604
NCOME TAX @ 30%		$0.0	$106.7	$164.3	$68.4	$64.3	$404
ASH FLOW							$201
INCOME AFTER TAXES		($741.4)	$249.0	$383.4	$159.6	$150.0	$1,800
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$2,404
DEPLETION		$58.6	$835.7	$835.7	$400.7	$273.4	($3,522)
CAPITAL COST		($4,243.1)	($676.0)			$1,397.0	$883
ASH FLOW		($4,126.0)	$888.8	$1,507.2	$733.1	$1,879.6	$883
UMULATIVE CASH FLOW		($4,126.0)	($3,237.2)	($1,730.0)	($996.9)	$882.7	
ET PRESENT VALUE @ 10% ($000'S)	($216.2)						
INTERNAL RATE OF RETURN	7.53%						

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- 800000 TON PER YEAR CASE 25-Apr-88

GOLD = $450.00 PER OUNCE
SILVER = $6.50 PER OUNCE

PRODUCTION STATISTICS	YEAR	1	2	3	4	5	TOTALS
ORE(000'S TONS)		300.0	800.0	800.0	800.0	323.0	3023.0
GOLD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.0233
SILVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.533
WASTE(000'S TONS)		300.0	800.0	800.0	800.0	186.1	2886.1
METAL RECOVERED							
GOLD(OUNCES)	75.00% RECOVERY	4950	15000	15000	12600	5329	52879
SILVER(OUNCES)	15.00% RECOVERY	20700	56400	56400	80400	27616	241516
REVENUE($ 000'S)							
GOLD		$2,227.5	$6,750.0	$6,750.0	$5,670.0	$2,398.3	$23,796
SILVER		$134.5	$366.6	$366.6	$522.6	$179.5	$1,570
TOTAL REVENUE		$2,362.0	$7,116.6	$7,116.6	$6,192.6	$2,577.8	$25,366
COSTS							
CAPITAL COST($ 000'S)							
CONTRACT MOBILIZATION AND DEMOB		$250.0					$250
PORTABLE RECOVERY PLANT		$618.0				($206.0)	$412
LEACH PAD AND PONDS		$738.0	$676.0				$1,414
MINE ROADS AND RECLAMATION		$313.0					$313
GENERAL AND INFRASTRUCTURE		$485.0					$485
ENGINEERING AND CONST SUPERVISION		$250.0					$250
SUBTOTAL		$2,654.0					$3,124
CONTINGENCY AT 15%		$398.1					$398
TOTAL CAPITAL COST		$3,052.1					$3,522
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0				($1,191.0)	$0
TOTAL CAPITAL INVESTMENT		$4,243.1	$676.0			($1,397.0)	$3,522
OPERATING COSTS							
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$6,500
CRUSH,AGGLOM & LOAD	$1.40 PER TON	$420.0	$1,120.0	$1,120.0	$1,120.0	$452.2	$4,232
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$155.0	$1,451
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$3,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$16.1	$151
G & A - SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$142.1	$1,450
G & A - GENERAL	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$161.5	$1,611
TOTAL OPERATING COST		$2,116.0	$5,056.0	$5,056.0	$5,056.0	$1,890.8	$19,175
TOTAL COST PER TON ORE		$7.05	$6.32	$6.32	$6.32	$5.85	$6.34
TOTAL COST PER OUNCE GOLD		$400.3	$312.6	$312.6	$359.8	$321.1	$332.9
INCOME BEFORE TAXES		$246.0	$2,060.6	$2,060.6	$1,136.6	$687.0	$6,191
DEPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)	($1,800)
DEPLETION @ 15%		($123.0)	($1,030.3)	($1,030.3)	($568.3)	($343.5)	($3,095)
TAXABLE INCOME		($677.0)	$550.3	$742.3	$395.5	$284.3	$1,295
INCOME TAX @ 30%		$0.0	$165.1	$222.7	$118.6	$85.3	$592
CASH FLOW							
INCOME AFTER TAXES		($677.0)	$385.2	$519.6	$276.8	$199.0	$704
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$1,800
DEPLETION		$123.0	$1,030.3	$1,030.3	$568.3	$343.5	$3,095
CAPITAL COST		($4,243.1)	($676.0)			$1,397.0	($3,522)
CASH FLOW		($3,997.0)	$1,219.5	$1,837.9	$1,017.9	$1,998.7	$2,077
CUMULATIVE CASH FLOW		($3,997.0)	($2,777.5)	($939.6)	$78.3	$2,077.0	$2,077
NET PRESENT VALUE @ 10% ($000'S)	$691.3						
INTERNAL RATE OF RETURN	18.08%						

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- 800000 TON PER YEAR CASE 25-Apr-88

GOLD = $475.00 PER OUNCE
SILVER = $6.75 PER OUNCE

RODUCTION STATISTICS	YEAR	1	2	3	4	5	TOTALS
'000'S TONS)		300.0	800.0	800.0	800.0	323.0	3023.0
JLD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.0233
SILVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.533
WASTE(000'S TONS)		300.0	800.0	800.0	800.0	186.1	2886.1
ETAL RECOVERED							
GOLD(OUNCES)	75.00% RECOVERY	4950	15000	15000	12600	5329	52879
SILVER(OUNCES)	15.00% RECOVERY	20700	56400	56400	80400	27616	241516
EVENUE($ 000'S)							
GOLD		$2,351.2	$7,125.0	$7,125.0	$5,985.0	$2,531.5	$25,118
SILVER		$139.7	$380.7	$380.7	$542.7	$186.4	$1,630
TOTAL REVENUE		$2,491.0	$7,505.7	$7,505.7	$6,527.7	$2,717.9	$26,748
OSTS							
CAPITAL COST($ 000'S)							
CONTRACT MOBILIZATION AND DEMOB		$250.0					$250
PORTABLE RECOVERY PLANT		$618.0				($206.0)	$412
LEACH PAD AND PONDS		$738.0	$676.0				$1,414
MINE ROADS AND RECLAMATION		$313.0					$313
GENERAL AND INFRASTRUCTURE		$485.0					$485
ENGINEERING AND CONST SUPERVISION		$250.0					$250
SUBTOTAL		$2,654.0					$3,124
CONTINGENCY AT 15%		$398.1					$398
TOTAL CAPITAL COST		$3,052.1					$3,522
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0				($1,191.0)	$0
TOTAL CAPITAL INVESTMENT		$4,243.1	$676.0			($1,397.0)	$3,522
OPERATING COSTS							
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$6,500
CRUSH,AGGLOM & LOAD	$1.40 PER TON	$420.0	$1,120.0	$1,120.0	$1,120.0	$452.2	$4,232
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$155.0	$1,451
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$3,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$16.1	$151
G & A - SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$142.1	$1,450
& A - GENERAL	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$161.5	$1,611
TOTAL OPERATING COST		$2,116.0	$5,056.0	$5,056.0	$5,056.0	$1,890.8	$19,175
TOTAL COST PER TON ORE		$7.05	$6.32	$6.32	$6.32	$5.85	$6.34
TOTAL COST PER OUNCE GOLD		$399.2	$311.7	$311.7	$358.2	$319.8	$331.8
NCOME BEFORE TAXES		$375.0	$2,449.7	$2,449.7	$1,471.7	$827.2	$7,573
EPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)	($1,800)
EPLETION @ 15%		($187.5)	($1,125.9)	($1,125.9)	($735.8)	($407.7)	($3,583)
AXABLE INCOME		($612.5)	$843.8	$1,035.8	$563.0	$360.3	$2,190
NCOME TAX @ 30%		$0.0	$253.1	$310.8	$168.9	$108.1	$841
ASH FLOW							
INCOME AFTER TAXES		($612.5)	$590.7	$725.1	$394.1	$252.2	$1,350
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$1,800
DEPLETION		$187.5	$1,125.9	$1,125.9	$735.8	$407.7	$3,583
CAPITAL COST		($4,243.1)	($676.0)			$1,397.0	($3,522)
ASH FLOW		($3,868.1)	$1,520.5	$2,138.9	$1,302.8	$2,116.1	$3,210
UMULATIVE CASH FLOW		($3,868.1)	($2,347.6)	($208.6)	$1,094.1	$3,210.2	$3,210
NET PRESENT VALUE @ 10% ($000'S)	$1,550.9						
INTERNAL RATE OF RETURN	28.51%						

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- 800000 TON PER YEAR CASE 25-Apr-88

GOLD = $500.00 PER OUNCE
SILVER = $7.00 PER OUNCE

PRODUCTION STATISTICS	YEAR	1	2	3	4	5	TOTALS
('000'S TONS)		300.0	800.0	800.0	800.0	323.0	3023.0
GOLD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.0233
SILVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.533
WASTE('000'S TONS)		300.0	800.0	800.0	800.0	186.1	2886.1
METAL RECOVERED							
GOLD(OUNCES)	75.00% RECOVERY	4950	15000	15000	12600	5329	52879
SILVER(OUNCES)	15.00% RECOVERY	20700	56400	56400	80400	27616	241516
REVENUE($ 000'S)							
GOLD		$2,475.0	$7,500.0	$7,500.0	$6,300.0	$2,664.7	$26,440
SILVER		$144.9	$394.8	$394.8	$562.8	$193.3	$1,691
TOTAL REVENUE		$2,619.9	$7,894.8	$7,894.8	$6,862.8	$2,858.1	$28,130
COSTS							
CAPITAL COST($ 000'S)							
CONTRACT MOBILIZATION AND DEMOB		$250.0					$250
PORTABLE RECOVERY PLANT		$618.0				($206.0)	$412
LEACH PAD AND PONDS		$738.0	$676.0				$1,414
MINE ROADS AND RECLAMATION		$313.0					$313
GENERAL AND INFRASTRUCTURE		$485.0					$485
ENGINEERING AND CONST SUPERVISION		$250.0					$250
SUBTOTAL		$2,654.0					$3,124
CONTINGENCY AT 15%		$398.1					$398
TOTAL CAPITAL COST		$3,052.1					$3,522
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0				($1,191.0)	$0
TOTAL CAPITAL INVESTMENT		$4,243.1	$676.0			($1,397.0)	$3,522
OPERATING COSTS							
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$6,500
CRUSH,AGGLOM & LOAD	$1.40 PER TON	$420.0	$1,120.0	$1,120.0	$1,120.0	$452.2	$4,232
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$155.0	$1,451
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$3,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$16.1	$151
G & A - SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$142.1	$1,450
G & A - GENERAL	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$161.5	$1,611
TOTAL OPERATING COST		$2,116.0	$5,056.0	$5,056.0	$5,056.0	$1,890.8	$19,175
TOTAL COST PER TON ORE		$7.05	$6.32	$6.32	$6.32	$5.85	$6.34
TOTAL COST PER OUNCE GOLD		$398.2	$310.7	$310.7	$356.6	$318.5	$330.6
INCOME BEFORE TAXES		$503.9	$2,838.8	$2,838.8	$1,806.8	$967.3	$8,956
DEPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)	($1,800)
DEPLETION @ 15%		($251.9)	($1,184.2)	($1,184.2)	($903.4)	($428.7)	($3,952)
TAXABLE INCOME		($548.0)	$1,174.6	$1,366.6	$730.6	$479.4	$3,203
INCOME TAX @ 30%		$0.0	$352.4	$410.0	$219.2	$143.8	$1,125
CASH FLOW							
INCOME AFTER TAXES		($548.0)	$822.2	$956.6	$511.4	$335.6	$2,078
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$1,800
DEPLETION		$251.9	$1,184.2	$1,184.2	$903.4	$428.7	$3,952
CAPITAL COST		($4,243.1)	($676.0)			$1,397.0	($3,522)
CASH FLOW		($3,739.2)	$1,810.4	$2,428.8	$1,587.6	$2,220.5	$4,308
CUMULATIVE CASH FLOW		($3,739.2)	($1,928.8)	$500.0	$2,087.7	$4,308.1	$4,308
NET PRESENT VALUE @ 10% ($000'S)	$2,384.9						
INTERNAL RATE OF RETURN	39.11%						

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- 800000 TON PER YEAR CASE 25-Apr-88

GOLD = $600.00 PER OUNCE
SILVER = $8.00 PER OUNCE

PRODUCTION STATISTICS	YEAR	1	2	3	4	5	TOTALS
(000'S TONS)		300.0	800.0	800.0	800.0	323.0	3023.0
GOLD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.0233
SILVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.533
WASTE(000'S TONS)		300.0	800.0	800.0	800.0	186.1	2886.1
METAL RECOVERED							
GOLD(OUNCES)	75.00% RECOVERY	4950	15000	15000	12600	5329	52879
SILVER(OUNCES)	15.00% RECOVERY	20700	56400	56400	80400	27616	241516
REVENUE($ 000'S)							
GOLD		$2,970.0	$9,000.0	$9,000.0	$7,560.0	$3,197.7	$31,728
SILVER		$165.6	$451.2	$451.2	$643.2	$220.9	$1,932
TOTAL REVENUE		$3,135.6	$9,451.2	$9,451.2	$8,203.2	$3,418.6	$33,660
COSTS							
CAPITAL COST($ 000'S)							
CONTRACT MOBILIZATION AND DEMOB		$250.0					$250
PORTABLE RECOVERY PLANT		$618.0				($206.0)	$412
LEACH PAD AND PONDS		$738.0	$676.0				$1,414
MINE ROADS AND RECLAMATION		$313.0					$313
GENERAL AND INFRASTRUCTURE		$485.0					$485
ENGINEERING AND CONST SUPERVISION		$250.0					$250
SUBTOTAL		$2,654.0					$3,124
CONTINGENCY AT 15%		$398.1					$398
TOTAL CAPITAL COST		$3,052.1					$3,522
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0				($1,191.0)	$0
TOTAL CAPITAL INVESTMENT		$4,243.1	$676.0			($1,397.0)	$3,522
OPERATING COSTS							
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$6,500
CRUSH,AGGLOM & LOAD	$1.40 PER TON	$420.0	$1,120.0	$1,120.0	$1,120.0	$452.2	$4,232
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$155.0	$1,451
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$3,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$16.1	$151
G & A - SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$142.1	$1,450
G & A - GENERAL	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$161.5	$1,611
TOTAL OPERATING COST		$2,116.0	$5,056.0	$5,056.0	$5,056.0	$1,890.8	$19,175
TOTAL COST PER TON ORE		$7.05	$6.32	$6.32	$6.32	$5.85	$6.34
TOTAL COST PER OUNCE GOLD		$394.0	$307.0	$307.0	$350.2	$313.3	$326.1
INCOME BEFORE TAXES		$1,019.6	$4,395.2	$4,395.2	$3,147.2	$1,527.9	$14,485
DEPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)	($1,800)
DEPLETION @ 15%		($470.3)	($1,417.7)	($1,417.7)	($1,230.5)	($512.8)	($5,049)
TAXABLE INCOME		($250.7)	$2,497.5	$2,689.5	$1,743.9	$955.9	$7,636
INCOME TAX @ 30%		$0.0	$749.3	$806.9	$523.2	$286.8	$2,366
CASH FLOW							
INCOME AFTER TAXES		($250.7)	$1,748.3	$1,882.7	$1,220.7	$669.1	$5,270
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$1,800
DEPLETION		$470.3	$1,417.7	$1,417.7	$1,230.5	$512.8	$5,049
CAPITAL COST		($4,243.1)	($676.0)			$1,397.0	($3,522)
CASH FLOW		($3,223.5)	$2,969.9	$3,588.3	$2,624.0	$2,638.1	$8,597
CUMULATIVE CASH FLOW		($3,223.5)	($253.6)	$3,334.8	$5,958.8	$8,596.9	$8,597
NET PRESENT VALUE @ 10% ($000'S)	$5,650.3						
INTERNAL RATE OF RETURN	87.26%						

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- ONE YEAR ADDED RESERVES CASE 25-Apr-88

GOLD = $400.00 PER OUNCE
SILVER = $6.00 PER OUNCE

PRODUCTION STATISTICS	YEAR	1	2	3	4	5	6	TOTALS
ORE(000'S TONS)		300.0	800.0	800.0	800.0	800.0	323.0	3823.0
GOLD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.023	0.0231
SILVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.54	0.54
WASTE(000'S TONS)		300.0	800.0	800.0	800.0	800.0	186.1	3686.1
METAL RECOVERED								
GOLD(OUNCES)	75.00% RECOVERY	4950	15000	15000	12600	13200	5572	66322
SILVER(OUNCES)	15.00% RECOVERY	20700	56400	56400	80400	68400	26163	308463
REVENUE($ 000'S)								
GOLD		$1,980.0	$6,000.0	$6,000.0	$5,040.0	$5,280.0	$2,228.7	$26,529
SILVER		$124.2	$338.4	$338.4	$482.4	$410.4	$157.0	$1,851
TOTAL REVENUE		$2,104.2	$6,338.4	$6,338.4	$5,522.4	$5,690.4	$2,385.7	$28,379
COSTS								
CAPITAL COST($ 000'S)								
CONTRACT MOBILIZATION AND DEMOB		$250.0						$250
PORTABLE RECOVERY PLANT		$618.0					($206.0)	$412
LEACH PAD AND PONDS		$738.0	$676.0					$1,414
MINE ROADS AND RECLAMATION		$313.0						$313
GENERAL AND INFRASTRUCTURE		$485.0						$485
ENGINEERING AND CONST SUPERVISION		$250.0						$250
SUBTOTAL		$2,654.0						$3,124
CONTINGENCY AT 15%		$398.1						$398
TOTAL CAPITAL COST		$3,052.1						$3,522
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0					($1,191.0)	$0
TOTAL CAPITAL INVESTMENT		$4,243.1	$676.0				($1,397.0)	$3,522
OPERATING COSTS								
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$8,260
CRUSH & LOAD PAD	$1.40 PER TON	$420.0	$1,120.0	$1,120.0	$1,120.0	$1,120.0	$452.2	$5,352
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$384.0	$155.0	$1,835
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$4,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$40.0	$16.1	$191
SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$352.0	$142.1	$1,802
G & A	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$400.0	$161.5	$2,011
TOTAL OPERATING COST		$2,116.0	$5,056.0	$5,056.0	$5,056.0	$5,056.0	$1,890.8	$24,231
TOTAL COST PER TON ORE		$7.05	$6.32	$6.32	$6.32	$6.32	$5.85	$6.34
TOTAL COST PER OUNCE GOLD		$402.4	$314.5	$314.5	$363.0	$351.9	$311.2	$337.4
INCOME BEFORE TAXES		($11.8)	$1,282.4	$1,282.4	$466.4	$634.4	$494.9	$4,149
DEPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)		($1,800)
DEPLETION @ 15%		$5.9	($641.2)	($641.2)	($233.2)	($317.2)	($247.5)	($2,074)
TAXABLE INCOME		($805.9)	$161.2	$353.2	$60.4	$258.0	$247.5	$274
INCOME TAX @ 30%		$0.0	$48.4	$106.0	$18.1	$77.4	$74.2	$324
CASH FLOW								
INCOME AFTER TAXES		($805.9)	$112.8	$247.2	$42.3	$180.6	$173.2	($50)
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$0.0	$1,800
DEPLETION		($5.9)	$641.2	$641.2	$233.2	$317.2	$247.5	$2,074
CAPITAL COST		($4,243.1)	($676.0)				$1,397.0	($3,522)
CASH FLOW		($4,254.9)	$558.0	$1,176.4	$448.3	$557.0	$1,817.7	$302
CUMULATIVE CASH FLOW		($4,254.9)	($3,696.9)	($2,520.4)	($2,072.1)	($1,515.1)	$302.5	$302
NET PRESENT VALUE @ 10% ($000'S)	($845.0)							
INTERNAL RATE OF RETURN	2.04%							

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- ONE YEAR ADDED RESERVES CASE 25-Apr-88

GOLD = $425.00 PER OUNCE
SILVER = $6.25 PER OUNCE

PRODUCTION STATISTICS	YEAR	1	2	3	4	5	6	TOTALS
ORE(000'S TONS)		300.0	800.0	800.0	800.0	800.0	323.0	3823.0
GOLD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.023	0.0231
SILVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.54	0.54
WASTE(000'S TONS)		300.0	800.0	800.0	800.0	800.0	186.1	3686.1
METAL RECOVERED								
GOLD(OUNCES)	75.00% RECOVERY	4950	15000	15000	12600	13200	5572	66322
SILVER(OUNCES)	15.00% RECOVERY	20700	56400	56400	80400	68400	26163	308463
REVENUE($ 000'S)								
GOLD		$2,103.7	$6,375.0	$6,375.0	$5,355.0	$5,610.0	$2,368.0	$28,187
SILVER		$129.4	$352.5	$352.5	$502.5	$427.5	$163.5	$1,928
TOTAL REVENUE		$2,233.1	$6,727.5	$6,727.5	$5,857.5	$6,037.5	$2,531.5	$30,115
COSTS								
CAPITAL COST($ 000'S)								$250
CONTRACT MOBILIZATION AND DEMOB		$250.0					($206.0)	$412
PORTABLE RECOVERY PLANT		$618.0						$1,414
LEACH PAD AND PONDS		$738.0	$676.0					$313
MINE ROADS AND RECLAMATION		$313.0						$485
GENERAL AND INFRASTRUCTURE		$485.0						$250
ENGINEERING AND CONST SUPERVISION		$250.0						$3,124
SUBTOTAL		$2,654.0						$398
CONTINGENCY AT 15%		$398.1						$3,522
TOTAL CAPITAL COST		$3,052.1					($1,191.0)	$0
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0						
TOTAL CAPITAL INVESTMENT		$4,243.1	$676.0				($1,397.0)	$3,522
OPERATING COSTS								
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$8,260
CRUSH & LOAD PAD	$1.40 PER TON	$420.0	$1,120.0	$1,120.0	$1,120.0	$1,120.0	$452.2	$5,352
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$384.0	$155.0	$1,835
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$4,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$40.0	$16.1	$191
SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$352.0	$142.1	$1,802
G & A	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$400.0	$161.5	$2,011
TOTAL OPERATING COST		$2,116.0	$5,056.0	$5,056.0	$5,056.0	$5,056.0	$1,890.8	$24,231
TOTAL COST PER TON ORE		$7.05	$6.32	$6.32	$6.32	$6.32	$5.85	$6.34
TOTAL COST PER OUNCE GOLD		$401.3	$313.6	$313.6	$361.4	$350.6	$310.0	$336.3
INCOME BEFORE TAXES		$117.1	$1,671.5	$1,671.5	$801.5	$981.5	$640.7	$5,884
DEPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)		($1,800)
DEPLETION @ 15%		($58.6)	($835.7)	($835.7)	($400.7)	($490.7)	($320.4)	($2,942)
TAXABLE INCOME		($741.4)	$355.7	$547.7	$227.9	$431.5	$320.4	$1,142
INCOME TAX @ 30%		$0.0	$106.7	$164.3	$68.4	$129.5	$96.1	$565
CASH FLOW								
INCOME AFTER TAXES		($741.4)	$249.0	$383.4	$159.6	$302.1	$224.3	$577
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$0.0	$1,800
DEPLETION		$58.6	$835.7	$835.7	$400.7	$490.7	$320.4	$2,942
CAPITAL COST		($4,243.1)	($676.0)				$1,397.0	($3,522)
CASH FLOW		($4,126.0)	$888.8	$1,507.2	$733.1	$852.0	$1,941.6	$1,797
CUMULATIVE CASH FLOW		($4,126.0)	($3,237.2)	($1,730.0)	($996.9)	($144.9)	$1,796.7	$1,797
NET PRESENT VALUE @ 10% ($000'S)	$241.8							
INTERNAL RATE OF RETURN	12.31%							

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- ONE YEAR ADDED RESERVES CASE 25-Apr-88

GOLD = $450.00 PER OUNCE
SILVER = $6.50 PER OUNCE

PRODUCTION STATISTICS	YEAR	1	2	3	4	5	6	TOTALS
ORE(000'S TONS)		300.0	800.0	800.0	800.0	800.0	323.0	3823.0
GOLD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.023	0.0231
SILVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.54	0.54
WASTE(000'S TONS)		300.0	800.0	800.0	800.0	800.0	186.1	3686.1
METAL RECOVERED								
GOLD(OUNCES)	75.00% RECOVERY	4950	15000	15000	12600	13200	5572	66322
SILVER(OUNCES)	15.00% RECOVERY	20700	56400	56400	80400	68400	26163	308463
REVENUE($ 000'S)								
GOLD		$2,227.5	$6,750.0	$6,750.0	$5,670.0	$5,940.0	$2,507.3	$29,845
SILVER		$134.5	$366.6	$366.6	$522.6	$444.6	$170.1	$2,005
TOTAL REVENUE		$2,362.0	$7,116.6	$7,116.6	$6,192.6	$6,384.6	$2,677.3	$31,850
COSTS								
CAPITAL COST($ 000'S)								$250
CONTRACT MOBILIZATION AND DEMOB		$250.0					($206.0)	$412
PORTABLE RECOVERY PLANT		$618.0						$1,414
LEACH PAD AND PONDS		$738.0	$676.0					$313
MINE ROADS AND RECLAMATION		$313.0						$485
GENERAL AND INFRASTRUCTURE		$485.0						$250
ENGINEERING AND CONST SUPERVISION		$250.0						$3,124
SUBTOTAL		$2,654.0						$398
CONTINGENCY AT 15%		$398.1						$3,522
TOTAL CAPITAL COST		$3,052.1					($1,191.0)	$0
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0						
TOTAL CAPITAL INVESTMENT		$4,243.1	$676.0				($1,397.0)	$3,522
OPERATING COSTS								
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$8,260
CRUSH & LOAD PAD	$1.40 PER TON	$420.0	$1,120.0	$1,120.0	$1,120.0	$1,120.0	$452.2	$5,352
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$384.0	$155.0	$1,835
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$4,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$40.0	$16.1	$191
SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$352.0	$142.1	$1,802
G & A	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$400.0	$161.5	$2,011
TOTAL OPERATING COST		$2,116.0	$5,056.0	$5,056.0	$5,056.0	$5,056.0	$1,890.8	$24,231
TOTAL COST PER TON ORE		$7.05	$6.32	$6.32	$6.32	$6.32	$5.85	$6.34
TOTAL COST PER OUNCE GOLD		$400.3	$312.6	$312.6	$359.8	$349.3	$308.8	$335.1
INCOME BEFORE TAXES		$246.0	$2,060.6	$2,060.6	$1,136.6	$1,328.6	$786.6	$7,619
DEPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)		($1,800)
DEPLETION @ 15%		($123.0)	($1,030.3)	($1,030.3)	($568.3)	($664.3)	($393.3)	($3,809)
TAXABLE INCOME		($677.0)	$550.3	$742.3	$395.5	$605.1	$393.3	$2,010
INCOME TAX @ 30%		$0.0	$165.1	$222.7	$118.6	$181.5	$118.0	$806
CASH FLOW								
INCOME AFTER TAXES		($677.0)	$385.2	$519.6	$276.8	$423.6	$275.3	$1,204
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$0.0	$1,800
DEPLETION		$123.0	$1,030.3	$1,030.3	$568.3	$664.3	$393.3	$3,809
CAPITAL COST		($4,243.1)	($676.0)				$1,397.0	($3,522)
CASH FLOW		($3,997.0)	$1,219.5	$1,837.9	$1,017.9	$1,147.1	$2,065.6	$3,291
CUMULATIVE CASH FLOW		($3,997.0)	($2,777.5)	($939.6)	$78.3	$1,225.4	$3,291.0	$3,291
NET PRESENT VALUE @ 10% ($000'S)	$1,328.5							
INTERNAL RATE OF RETURN	22.90%							

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- ONE YEAR ADDED RESERVES CASE 25-Apr-88

GOLD = $475.00 PER OUNCE
SILVER = $6.75 PER OUNCE

PRODUCTION STATISTICS		YEAR	1	2	3	4	5	6	TOTALS
ORE(000'S TONS)			300.0	800.0	800.0	800.0	800.0	323.0	3823.0
GOLD(OZ/TON)			0.022	0.025	0.025	0.021	0.022	0.023	0.0231
SILVER(OZ/TON			0.46	0.47	0.47	0.67	0.57	0.54	0.54
WASTE(000'S TONS)			300.0	800.0	800.0	800.0	800.0	186.1	3686.1
METAL RECOVERED									
GOLD(OUNCES)	75.00%	RECOVERY	4950	15000	15000	12600	13200	5572	66322
SILVER(OUNCES)	15.00%	RECOVERY	20700	56400	56400	80400	68400	26163	308463
REVENUE($ 000'S)									
GOLD			$2,351.2	$7,125.0	$7,125.0	$5,985.0	$6,270.0	$2,646.6	$31,503
SILVER			$139.7	$380.7	$380.7	$542.7	$461.7	$176.6	$2,082
TOTAL REVENUE			$2,491.0	$7,505.7	$7,505.7	$6,527.7	$6,731.7	$2,823.2	$33,585
COSTS									
CAPITAL COST($ 000'S)									
CONTRACT MOBILIZATION AND DEMOB			$250.0						$250
PORTABLE RECOVERY PLANT			$618.0					($206.0)	$412
LEACH PAD AND PONDS			$738.0	$676.0					$1,414
MINE ROADS AND RECLAMATION			$313.0						$313
GENERAL AND INFRASTRUCTURE			$485.0						$485
ENGINEERING AND CONST SUPERVISION			$250.0						$250
SUBTOTAL			$2,654.0						$3,124
CONTINGENCY AT 15%			$398.1						$398
TOTAL CAPITAL COST			$3,052.1						$3,522
WORKING CAPITAL(3 MONTHS OP COST)			$1,191.0					($1,191.0)	$0
TOTAL CAPITAL INVESTMENT			$4,243.1	$676.0				($1,397.0)	$3,522
OPERATING COSTS									
CONTRACT MINE	$1.10	PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$8,260
CRUSH & LOAD PAD	$1.40	PER TON	$420.0	$1,120.0	$1,120.0	$1,120.0	$1,120.0	$452.2	$5,352
PLANT-LABOR	$0.48	PER TON	$144.0	$384.0	$384.0	$384.0	$384.0	$155.0	$1,835
-REAGENTS/SUPP	$1.25	PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$4,779
-MAINT	$0.05	PER TON	$15.0	$40.0	$40.0	$40.0	$40.0	$16.1	$191
SUPERVISION	$0.44	PER TON	$252.0	$352.0	$352.0	$352.0	$352.0	$142.1	$1,802
G & A	$0.50	PER TON	$250.0	$400.0	$400.0	$400.0	$400.0	$161.5	$2,011
TOTAL OPERATING COST			$2,116.0	$5,056.0	$5,056.0	$5,056.0	$5,056.0	$1,890.8	$24,231
TOTAL COST PER TON ORE			$7.05	$6.32	$6.32	$6.32	$6.32	$5.85	$6.34
TOTAL COST PER OUNCE GOLD			$399.2	$311.7	$311.7	$358.2	$348.0	$307.7	$334.0
INCOME BEFORE TAXES			$375.0	$2,449.7	$2,449.7	$1,471.7	$1,675.7	$932.4	$9,354
DEPRECIATION			($800.0)	($480.0)	($288.0)	($172.8)	($59.2)		($1,800)
DEPLETION @ 15%			($187.5)	($1,125.9)	($1,125.9)	($735.8)	($837.8)	($423.5)	($4,436)
TAXABLE INCOME			($612.5)	$843.8	$1,035.8	$563.0	$778.6	$508.9	$3,118
INCOME TAX @ 30%			$0.0	$253.1	$310.8	$168.9	$233.6	$152.7	$1,119
CASH FLOW									
INCOME AFTER TAXES			($612.5)	$590.7	$725.1	$394.1	$545.1	$356.3	$1,999
DEPRECIATION			$800.0	$480.0	$288.0	$172.8	$59.2	$0.0	$1,800
DEPLETION			$187.5	$1,125.9	$1,125.9	$735.8	$837.8	$423.5	$4,436
CAPITAL COST			($4,243.1)	($676.0)				$1,397.0	($3,522)
CASH FLOW			($3,868.1)	$1,520.5	$2,138.9	$1,302.8	$1,442.1	$2,176.7	$4,713
CUMULATIVE CASH FLOW			($3,868.1)	($2,347.6)	($208.6)	$1,094.1	$2,536.3	$4,713.0	$4,713
NET PRESENT VALUE @ 10% ($000'S)		$2,361.2							
INTERNAL RATE OF RETURN		33.30%							

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- ONE YEAR ADDED RESERVES CASE 25-Apr-88

GOLD = $500.00 PER OUNCE
SILVER = $7.00 PER OUNCE

PRODUCTION STATISTICS	YEAR	1	2	3	4	5	6	TOTALS
ORE(000'S TONS)		300.0	800.0	800.0	800.0	800.0	323.0	3823.0
GOLD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.023	0.0231
SILVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.54	0.54
.STE(000'S TONS)		300.0	800.0	800.0	800.0	800.0	186.1	3686.1
METAL RECOVERED								
GOLD(OUNCES)	75.00% RECOVERY	4950	15000	15000	12600	13200	5572	66322
SILVER(OUNCES)	15.00% RECOVERY	20700	56400	56400	80400	68400	26163	308463
REVENUE($ 000'S)								
GOLD		$2,475.0	$7,500.0	$7,500.0	$6,300.0	$6,600.0	$2,785.9	$33,161
SILVER		$144.9	$394.8	$394.8	$562.8	$478.8	$183.1	$2,159
TOTAL REVENUE		$2,619.9	$7,894.8	$7,894.8	$6,862.8	$7,078.8	$2,969.0	$35,320
COSTS								
CAPITAL COST($ 000'S)								
CONTRACT MOBILIZATION AND DEMOB		$250.0						$250
PORTABLE RECOVERY PLANT		$618.0					($206.0)	$412
LEACH PAD AND PONDS		$738.0	$676.0					$1,414
MINE ROADS AND RECLAMATION		$313.0						$313
GENERAL AND INFRASTRUCTURE		$485.0						$485
ENGINEERING AND CONST SUPERVISION		$250.0						$250
SUBTOTAL		$2,654.0						$3,124
CONTINGENCY AT 15%		$398.1						$398
TOTAL CAPITAL COST		$3,052.1						$3,522
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0					($1,191.0)	$0
TOTAL CAPITAL INVESTMENT		$4,243.1	$676.0				($1,397.0)	$3,522
OPERATING COSTS								
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$8,260
CRUSH & LOAD PAD	$1.40 PER TON	$420.0	$1,120.0	$1,120.0	$1,120.0	$1,120.0	$452.2	$5,352
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$384.0	$155.0	$1,835
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$4,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$40.0	$16.1	$191
SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$352.0	$142.1	$1,802
G & A	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$400.0	$161.5	$2,011
TOTAL OPERATING COST		$2,116.0	$5,056.0	$5,056.0	$5,056.0	$5,056.0	$1,890.8	$24,231
TOTAL COST PER TON ORE		$7.05	$6.32	$6.32	$6.32	$6.32	$5.85	$6.34
TOTAL COST PER OUNCE GOLD		$398.2	$310.7	$310.7	$356.6	$346.8	$306.5	$332.8
INCOME BEFORE TAXES		$503.9	$2,838.8	$2,838.8	$1,806.8	$2,022.8	$1,078.2	$11,089
DEPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)		($1,800)
DEPLETION @ 15%		($251.9)	($1,184.2)	($1,184.2)	($903.4)	($1,011.4)	($445.4)	($4,981)
TAXABLE INCOME		($548.0)	$1,174.6	$1,366.6	$730.6	$952.2	$632.9	$4,309
INCOME TAX @ 30%		$0.0	$352.4	$410.0	$219.2	$285.7	$189.9	$1,457
CASH FLOW								
INCOME AFTER TAXES		($548.0)	$822.2	$956.6	$511.4	$666.5	$443.0	$2,852
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$0.0	$1,800
DEPLETION		$251.9	$1,184.2	$1,184.2	$903.4	$1,011.4	$445.4	$4,981
CAPITAL COST		($4,243.1)	($676.0)				$1,397.0	($3,522)
CASH FLOW		($3,739.2)	$1,810.4	$2,428.8	$1,587.6	$1,737.1	$2,285.4	$6,110
CUMULATIVE CASH FLOW		($3,739.2)	($1,928.8)	$500.0	$2,087.7	$3,824.8	$6,110.2	$6,110
NET PRESENT VALUE @ 10% ($000'S)	$3,374.8							
INTERNAL RATE OF RETURN	43.90%							

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- ONE YEAR ADDED RESERVES CASE 25-Apr-88

GOLD = $600.00 PER OUNCE
SILVER = $8.00 PER OUNCE

PRODUCTION STATISTICS	YEAR	1	2	3	4	5	6	TOTALS
ORE(000'S TONS)		300.0	800.0	800.0	800.0	800.0	323.0	3823.0
GOLD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.023	0.0231
SILVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.54	0.54
WASTE(000'S TONS)		300.0	800.0	800.0	800.0	800.0	186.1	3686.1
METAL RECOVERED								
GOLD(OUNCES)	75.00% RECOVERY	4950	15000	15000	12600	13200	5572	66322
SILVER(OUNCES)	15.00% RECOVERY	20700	56400	56400	80400	68400	26163	308463
REVENUE($ 000'S)								
GOLD		$2,970.0	$9,000.0	$9,000.0	$7,560.0	$7,920.0	$3,343.0	$39,793
SILVER		$165.6	$451.2	$451.2	$643.2	$547.2	$209.3	$2,468
TOTAL REVENUE		$3,135.6	$9,451.2	$9,451.2	$8,203.2	$8,467.2	$3,552.3	$42,261
COSTS								
CAPITAL COST($ 000'S)								$250
CONTRACT MOBILIZATION AND DEMOB		$250.0					($206.0)	$412
PORTABLE RECOVERY PLANT		$618.0						$1,414
LEACH PAD AND PONDS		$738.0	$676.0					$313
MINE ROADS AND RECLAMATION		$313.0						$485
GENERAL AND INFRASTRUCTURE		$485.0						$250
ENGINEERING AND CONST SUPERVISION		$250.0						$3,124
SUBTOTAL		$2,654.0						$398
CONTINGENCY AT 15%		$398.1						$3,522
TOTAL CAPITAL COST		$3,052.1					($1,191.0)	$0
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0						
TOTAL CAPITAL INVESTMENT		$4,243.1	$676.0				($1,397.0)	$3,522
OPERATING COSTS								
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$8,260
CRUSH & LOAD PAD	$1.40 PER TON	$420.0	$1,120.0	$1,120.0	$1,120.0	$1,120.0	$452.2	$5,352
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$384.0	$155.0	$1,835
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$4,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$40.0	$16.1	$191
SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$352.0	$142.1	$1,802
G & A	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$400.0	$161.5	$2,011
TOTAL OPERATING COST		$2,116.0	$5,056.0	$5,056.0	$5,056.0	$5,056.0	$1,890.8	$24,231
TOTAL COST PER TON ORE		$7.05	$6.32	$6.32	$6.32	$6.32	$5.85	$6.34
TOTAL COST PER OUNCE GOLD		$394.0	$307.0	$307.0	$350.2	$341.6	$301.8	$328.1
INCOME BEFORE TAXES		$1,019.6	$4,395.2	$4,395.2	$3,147.2	$3,411.2	$1,661.6	$18,030
DEPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)		($1,800)
DEPLETION @ 15%		($470.3)	($1,417.7)	($1,417.7)	($1,230.5)	($1,270.1)	($532.9)	($6,339)
TAXABLE INCOME		($250.7)	$2,497.5	$2,689.5	$1,743.9	$2,081.9	$1,128.7	$9,891
INCOME TAX @ 30%		$0.0	$749.3	$806.9	$523.2	$624.6	$338.6	$3,042
CASH FLOW								
INCOME AFTER TAXES		($250.7)	$1,748.3	$1,882.7	$1,220.7	$1,457.3	$790.1	$6,848
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$0.0	$1,800
DEPLETION		$470.3	$1,417.7	$1,417.7	$1,230.5	$1,270.1	$532.9	$6,339
CAPITAL COST		($4,243.1)	($676.0)				$1,397.0	($3,522)
CASH FLOW		($3,223.5)	$2,969.9	$3,588.3	$2,624.0	$2,786.6	$2,720.0	$11,465
CUMULATIVE CASH FLOW		($3,223.5)	($253.6)	$3,334.8	$5,958.8	$8,745.4	$11,465.4	$11,465
NET PRESENT VALUE @ 10% ($000'S)	$7,277.9							
INTERNAL RATE OF RETURN	91.25%							

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- CRUSH TO 0.25 INCH CASE 25-Apr-88

GOLD = $400.00 PER OUNCE
SILVER = $6.00 PER OUNCE

PRODUCTION STATISTICS	YEAR	1	2	3	4	5	TOTALS
ORE(000'S TONS)		300.0	800.0	800.0	800.0	323.0	3023.0
GOLD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.0233
SILVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.533
WASTE(000'S TONS)		300.0	800.0	800.0	800.0	186.1	2886.1
METAL RECOVERED							
GOLD(OUNCES)	85.00% RECOVERY	5610	17000	17000	14280	6040	59930
SILVER(OUNCES)	20.00% RECOVERY	27600	75200	75200	107200	36822	322022
REVENUE($ 000'S)							
GOLD		$2,244.0	$6,800.0	$6,800.0	$5,712.0	$2,416.0	$23,972
SILVER		$165.6	$451.2	$451.2	$643.2	$220.9	$1,932
TOTAL REVENUE		$2,409.6	$7,251.2	$7,251.2	$6,355.2	$2,637.0	$25,904
COSTS							
CAPITAL COST($ 000'S)							
CONTRACT MOBILIZATION AND DEMOB		$350.0					$350
PORTABLE RECOVERY PLANT		$618.0				($206.0)	$412
LEACH PAD AND PONDS		$738.0	$676.0				$1,414
MINE ROADS AND RECLAMATION		$313.0					$313
GENERAL AND INFRASTRUCTURE		$485.0					$485
ENGINEERING AND CONST SUPERVISION		$250.0					$250
SUBTOTAL		$2,754.0					$3,224
CONTINGENCY AT 15%		$413.1					$413
TOTAL CAPITAL COST		$3,167.1					$3,637
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0				($1,191.0)	$0
TOTAL CAPITAL INVESTMENT		$4,358.1	$676.0			($1,397.0)	$3,637
OPERATING COSTS							
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$6,500
CRUSH,AGGLOM & LOAD	$2.50 PER TON	$750.0	$2,000.0	$2,000.0	$2,000.0	$807.5	$7,557
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$155.0	$1,451
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$3,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$16.1	$151
G & A - SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$142.1	$1,450
G & A - GENERAL	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$161.5	$1,611
TOTAL OPERATING COST		$2,446.0	$5,936.0	$5,936.0	$5,936.0	$2,246.1	$22,500
TOTAL COST PER TON ORE		$8.15	$7.42	$7.42	$7.42	$6.95	$7.44
TOTAL COST PER OUNCE GOLD		$406.5	$322.6	$322.6	$370.6	$335.3	$343.2
INCOME BEFORE TAXES		($36.4)	$1,315.2	$1,315.2	$419.2	$390.9	$3,404
DEPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)	($1,800)
DEPLETION @ 15%		$18.2	($657.6)	($657.6)	($209.6)	($195.4)	($1,702)
TAXABLE INCOME		($818.2)	$177.6	$369.6	$36.8	$136.3	($98)
INCOME TAX @ 30%		$0.0	$53.3	$110.9	$11.0	$40.9	$216
CASH FLOW							($314)
INCOME AFTER TAXES		($818.2)	$124.3	$258.7	$25.8	$95.4	$1,800
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$1,702
DEPLETION		($18.2)	$657.6	$657.6	$209.6	$195.4	($3,637)
CAPITAL COST		($4,358.1)	($676.0)			$1,397.0	($449)
CASH FLOW		($4,394.5)	$585.9	$1,204.3	$408.2	$1,747.0	($449)
CUMULATIVE CASH FLOW		($4,394.5)	($3,808.6)	($2,604.3)	($2,196.1)	($449.1)	
NET PRESENT VALUE @ 10% ($000'S)		($1,242.4)					
INTERNAL RATE OF RETURN		-3.69%					

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- CRUSH TO 0.25 INCH CASE 25-Apr-88

GOLD = $425.00 PER OUNCE
SILVER = $6.25 PER OUNCE

		YEAR 1	2	3	4	5	TOTALS
PRODUCTION STATISTICS							
ORE(000'S TONS)		300.0	800.0	800.0	800.0	323.0	3023.0
GOLD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.0233
SILVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.533
STE(000'S TONS)		300.0	800.0	800.0	800.0	186.1	2886.1
METAL RECOVERED							
GOLD(OUNCES)	85.00% RECOVERY	5610	17000	17000	14280	6040	59930
SILVER(OUNCES)	20.00% RECOVERY	27600	75200	75200	107200	36822	322022
REVENUE($ 000'S)							
GOLD		$2,384.2	$7,225.0	$7,225.0	$6,069.0	$2,567.0	$25,470
SILVER		$172.5	$470.0	$470.0	$670.0	$230.1	$2,013
TOTAL REVENUE		$2,556.7	$7,695.0	$7,695.0	$6,739.0	$2,797.2	$27,483
COSTS							
CAPITAL COST($ 000'S)							
CONTRACT MOBILIZATION AND DEMOB		$350.0					$350
PORTABLE RECOVERY PLANT		$618.0				($206.0)	$412
LEACH PAD AND PONDS		$738.0	$676.0				$1,414
MINE ROADS AND RECLAMATION		$313.0					$313
GENERAL AND INFRASTRUCTURE		$485.0					$485
ENGINEERING AND CONST SUPERVISION		$250.0					$250
SUBTOTAL		$2,754.0					$3,224
CONTINGENCY AT 15%		$413.1					$413
TOTAL CAPITAL COST		$3,167.1					$3,637
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0				($1,191.0)	$0
TOTAL CAPITAL INVESTMENT		$4,358.1	$676.0			($1,397.0)	$3,637
OPERATING COSTS							
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$6,500
CRUSH,AGGLOM & LOAD	$2.50 PER TON	$750.0	$2,000.0	$2,000.0	$2,000.0	$807.5	$7,557
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$155.0	$1,451
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$3,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$16.1	$151
G & A - SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$142.1	$1,450
G & A - GENERAL	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$161.5	$1,611
TOTAL OPERATING COST		$2,446.0	$5,936.0	$5,936.0	$5,936.0	$2,246.1	$22,500
TOTAL COST PER TON ORE		$8.15	$7.42	$7.42	$7.42	$6.95	$7.44
TOTAL COST PER OUNCE GOLD		$405.3	$321.5	$321.5	$368.8	$333.8	$341.9
INCOME BEFORE TAXES		$110.7	$1,759.0	$1,759.0	$803.0	$551.1	$4,983
DEPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)	($1,800)
DEPLETION @ 15%		($55.4)	($879.5)	($879.5)	($401.5)	($275.6)	($2,491)
TAXABLE INCOME		($744.6)	$399.5	$591.5	$228.7	$216.4	$691
INCOME TAX @ 30%		$0.0	$119.8	$177.4	$68.6	$64.9	$431
CASH FLOW							
INCOME AFTER TAXES		($744.6)	$279.6	$414.0	$160.1	$151.4	$261
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$1,800
DEPLETION		$55.4	$879.5	$879.5	$401.5	$275.6	$2,491
CAPITAL COST		($4,358.1)	($676.0)			$1,397.0	($3,637)
CASH FLOW		($4,247.4)	$963.1	$1,581.5	$734.4	$1,883.2	$915
CUMULATIVE CASH FLOW		($4,247.4)	($3,284.2)	($1,702.6)	($968.3)	$914.9	$915
NET PRESENT VALUE @ 10% ($000'S)	($206.1)						
INTERNAL RATE OF RETURN	7.68%						

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- CRUSH TO 0.25 INCH CASE

GOLD = $450.00 PER OUNCE
SILVER = $6.50 PER OUNCE

		YEAR	1	2	3	4	5	TOTALS
PRODUCTION STATISTICS								
ORE(000'S TONS)			300.0	800.0	800.0	800.0	323.0	3023.0
GOLD(OZ/TON)			0.022	0.025	0.025	0.021	0.022	0.0233
SILVER(OZ/TON			0.46	0.47	0.47	0.67	0.57	0.533
E(000'S TONS)			300.0	800.0	800.0	800.0	186.1	2886.1
METAL RECOVERED								
GOLD(OUNCES)	85.00% RECOVERY		5610	17000	17000	14280	6040	59930
SILVER(OUNCES)	20.00% RECOVERY		27600	75200	75200	107200	36822	322022
REVENUE($ 000'S)								
GOLD			$2,524.5	$7,650.0	$7,650.0	$6,426.0	$2,718.0	$26,969
SILVER			$179.4	$488.8	$488.8	$696.8	$239.3	$2,093
TOTAL REVENUE			$2,703.9	$8,138.8	$8,138.8	$7,122.8	$2,957.4	$29,062
COSTS								
CAPITAL COST($ 000'S)								
CONTRACT MOBILIZATION AND DEMOB			$350.0				($206.0)	$350
PORTABLE RECOVERY PLANT			$618.0					$412
LEACH PAD AND PONDS			$738.0	$676.0				$1,414
MINE ROADS AND RECLAMATION			$313.0					$313
GENERAL AND INFRASTRUCTURE			$485.0					$485
ENGINEERING AND CONST SUPERVISION			$250.0					$250
SUBTOTAL			$2,754.0					$3,224
CONTINGENCY AT 15%			$413.1					$413
TOTAL CAPITAL COST			$3,167.1					$3,637
WORKING CAPITAL(3 MONTHS OP COST)			$1,191.0				($1,191.0)	$0
TOTAL CAPITAL INVESTMENT			$4,358.1	$676.0			($1,397.0)	$3,637
OPERATING COSTS								
CONTRACT MINE	$1.10 PER TON		$660.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$6,500
CRUSH,AGGLOM & LOAD	$2.50 PER TON		$750.0	$2,000.0	$2,000.0	$2,000.0	$807.5	$7,557
PLANT-LABOR	$0.48 PER TON		$144.0	$384.0	$384.0	$384.0	$155.0	$1,451
-REAGENTS/SUPP	$1.25 PER TON		$375.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$3,779
-MAINT	$0.05 PER TON		$15.0	$40.0	$40.0	$40.0	$16.1	$151
G & A - SUPERVISION	$0.44 PER TON		$252.0	$352.0	$352.0	$352.0	$142.1	$1,450
G & A - GENERAL	$0.50 PER TON		$250.0	$400.0	$400.0	$400.0	$161.5	$1,611
TOTAL OPERATING COST			$2,446.0	$5,936.0	$5,936.0	$5,936.0	$2,246.1	$22,500
TOTAL COST PER TON ORE			$8.15	$7.42	$7.42	$7.42	$6.95	$7.44
TOTAL COST PER OUNCE GOLD			$404.0	$320.4	$320.4	$366.9	$332.2	$340.5
INCOME BEFORE TAXES			$257.9	$2,202.8	$2,202.8	$1,186.8	$711.3	$6,562
DEPRECIATION			($800.0)	($480.0)	($288.0)	($172.8)	($59.2)	($1,800)
DEPLETION @ 15%			($128.9)	($1,101.4)	($1,101.4)	($593.4)	($355.7)	($3,281)
TAXABLE INCOME			($671.0)	$621.4	$813.4	$420.6	$296.5	$1,481
INCOME TAX @ 30%			$0.0	$186.4	$244.0	$126.2	$88.9	$646
CASH FLOW								
INCOME AFTER TAXES			($671.0)	$435.0	$569.4	$294.4	$207.5	$835
DEPRECIATION			$800.0	$480.0	$288.0	$172.8	$59.2	$1,800
DEPLETION			$128.9	$1,101.4	$1,101.4	$593.4	$355.7	$3,281
CAPITAL COST			($4,358.1)	($676.0)			$1,397.0	($3,637)
CASH FLOW			($4,100.2)	$1,340.4	$1,958.8	$1,060.6	$2,019.4	$2,279
CUMULATIVE CASH FLOW			($4,100.2)	($2,759.8)	($801.0)	$259.6	$2,279.0	$2,279
NET PRESENT VALUE @ 10% ($000'S)		$830.2						
INTERNAL RATE OF RETURN		19.56%						

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- CRUSH TO 0.25 INCH CASE 25-Apr-88

GOLD = $475.00 PER OUNCE
SILVER = $6.75 PER OUNCE

		YEAR 1	2	3	4	5	TOTALS
RODUCTION STATISTICS							
ORE(000'S TONS)		300.0	800.0	800.0	800.0	323.0	3023.0
GOLD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.0233
^ILVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.533
E(000'S TONS)		300.0	800.0	800.0	800.0	186.1	2886.1
ETAL RECOVERED							
GOLD(OUNCES)	85.00% RECOVERY	5610	17000	17000	14280	6040	59930
SILVER(OUNCES)	20.00% RECOVERY	27600	75200	75200	107200	36822	322022
EVENUE($ 000'S)							
GOLD		$2,664.7	$8,075.0	$8,075.0	$6,783.0	$2,869.0	$28,467
SILVER		$186.3	$507.6	$507.6	$723.6	$248.5	$2,174
TOTAL REVENUE		$2,851.0	$8,582.6	$8,582.6	$7,506.6	$3,117.6	$30,640
OSTS							
CAPITAL COST($ 000'S)							
CONTRACT MOBILIZATION AND DEMOB		$350.0					$350
PORTABLE RECOVERY PLANT		$618.0				($206.0)	$412
LEACH PAD AND PONDS		$738.0	$676.0				$1,414
MINE ROADS AND RECLAMATION		$313.0					$313
GENERAL AND INFRASTRUCTURE		$485.0					$485
ENGINEERING AND CONST SUPERVISION		$250.0					$250
SUBTOTAL		$2,754.0					$3,224
CONTINGENCY AT 15%		$413.1					$413
TOTAL CAPITAL COST		$3,167.1					$3,637
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0				($1,191.0)	$0
TOTAL CAPITAL INVESTMENT		$4,358.1	$676.0			($1,397.0)	$3,637
OPERATING COSTS							
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$6,500
CRUSH,AGGLOM & LOAD	$2.50 PER TON	$750.0	$2,000.0	$2,000.0	$2,000.0	$807.5	$7,557
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$155.0	$1,451
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$3,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$16.1	$151
G & A - SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$142.1	$1,450
G & A - GENERAL	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$161.5	$1,611
TOTAL OPERATING COST		$2,446.0	$5,936.0	$5,936.0	$5,936.0	$2,246.1	$22,500
TOTAL COST PER TON ORE		$8.15	$7.42	$7.42	$7.42	$6.95	$7.44
TOTAL COST PER OUNCE GOLD		$402.8	$319.3	$319.3	$365.0	$330.7	$339.2
INCOME BEFORE TAXES		$405.0	$2,646.6	$2,646.6	$1,570.6	$871.5	$8,140
DEPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)	($1,800)
DEPLETION @ 15%		($202.5)	($1,287.4)	($1,287.4)	($785.3)	($435.8)	($3,998)
TAXABLE INCOME		($597.5)	$879.2	$1,071.2	$612.5	$376.6	$2,342
INCOME TAX @ 30%		$0.0	$263.8	$321.4	$183.7	$113.0	$882
CASH FLOW							
INCOME AFTER TAXES		($597.5)	$615.4	$749.8	$428.7	$263.6	$1,460
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$1,800
DEPLETION		$202.5	$1,287.4	$1,287.4	$785.3	$435.8	$3,998
CAPITAL COST		($4,358.1)	($676.0)			$1,397.0	($3,637)
CASH FLOW		($3,953.0)	$1,706.8	$2,325.2	$1,386.8	$2,155.6	$3,621
CUMULATIVE CASH FLOW		($3,953.0)	($2,246.2)	$79.0	$1,465.9	$3,621.4	$3,621
NET PRESENT VALUE @ 10% ($000'S)	$1,849.6						
INTERNAL RATE OF RETURN	31.81%						

LONGSTREET PROJECT -- CASH FLOW SUMMARY -- CRUSH TO 0.25 INCH CASE 25-Apr-88

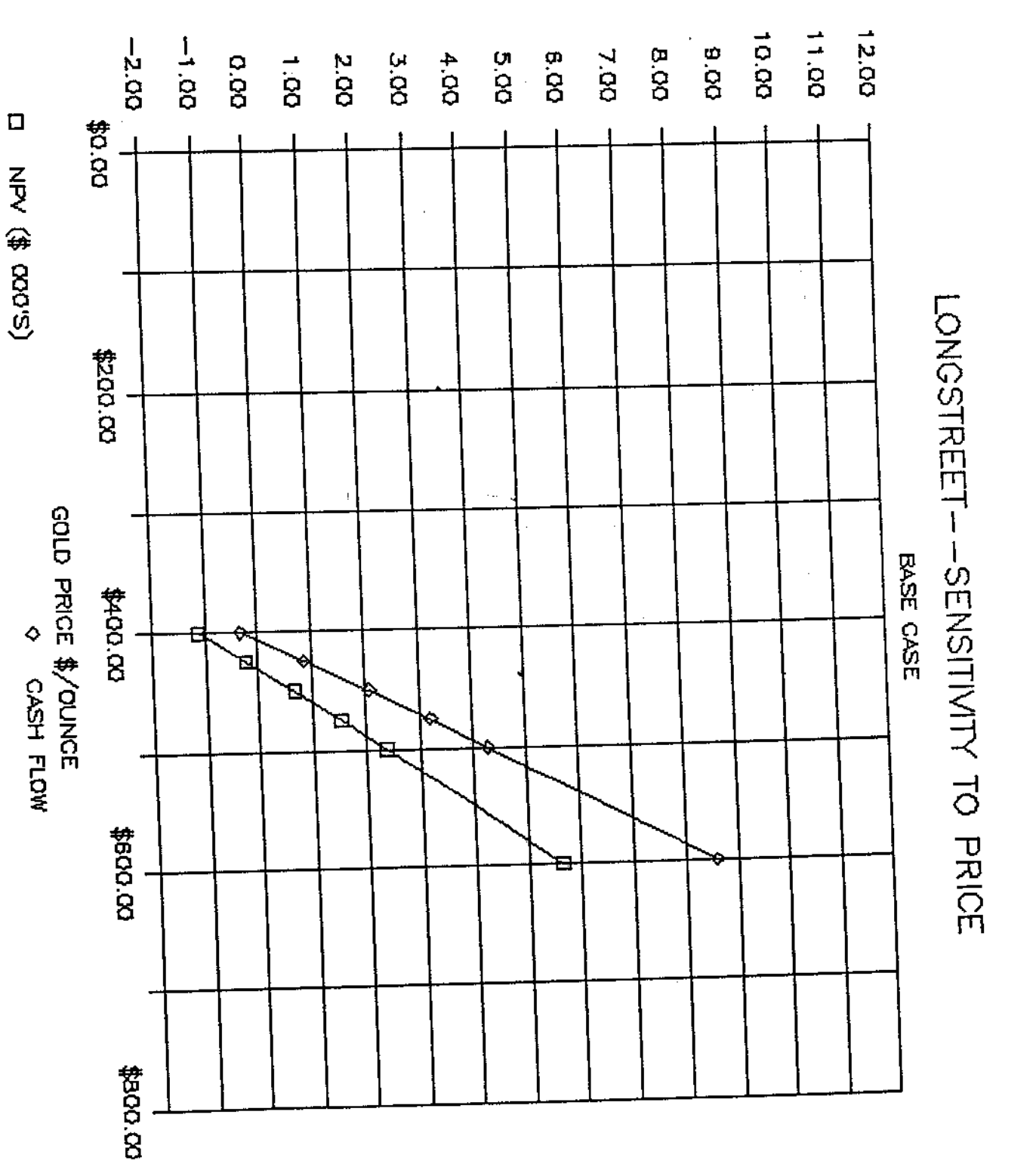
GOLD = $500.00 PER OUNCE
SILVER = $7.00 PER OUNCE

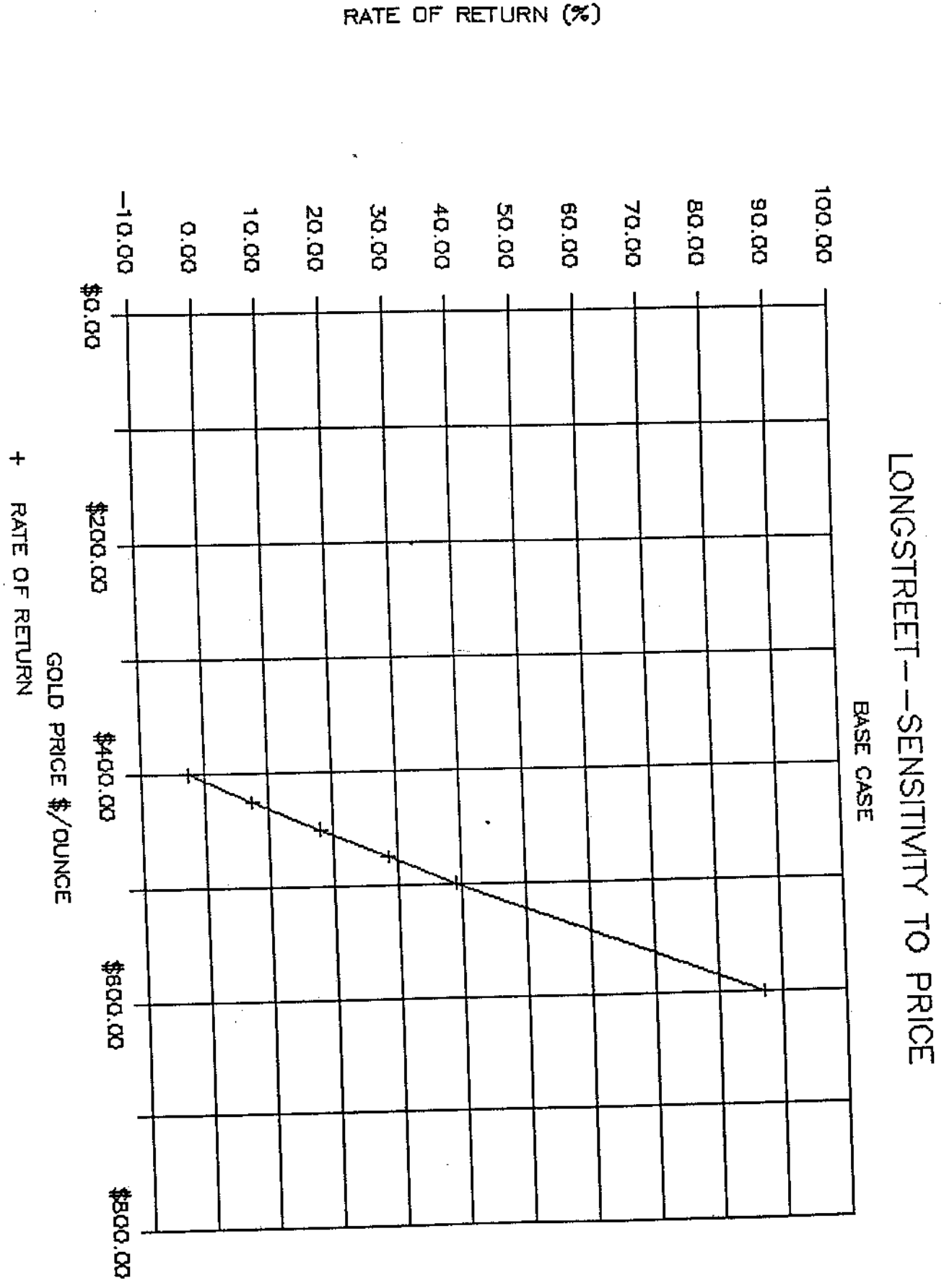
PRODUCTION STATISTICS	YEAR	1	2	3	4	5	TOTALS
ORE(000'S TONS)		300.0	800.0	800.0	800.0	323.0	3023.0
GOLD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.0233
SILVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.533
ORE(000'S TONS)		300.0	800.0	800.0	800.0	186.1	2886.1
METAL RECOVERED							
GOLD(OUNCES)	85.00% RECOVERY	5610	17000	17000	14280	6040	59930
SILVER(OUNCES)	20.00% RECOVERY	27600	75200	75200	107200	36822	322022
REVENUE($ 000'S)							
GOLD		$2,805.0	$8,500.0	$8,500.0	$7,140.0	$3,020.0	$29,965
SILVER		$193.2	$526.4	$526.4	$750.4	$257.8	$2,254
TOTAL REVENUE		$2,998.2	$9,026.4	$9,026.4	$7,890.4	$3,277.8	$32,219
COSTS							
CAPITAL COST($ 000'S)							
CONTRACT MOBILIZATION AND DEMOB		$350.0					$350
PORTABLE RECOVERY PLANT		$618.0				($206.0)	$412
LEACH PAD AND PONDS		$738.0	$676.0				$1,414
MINE ROADS AND RECLAMATION		$313.0					$313
GENERAL AND INFRASTRUCTURE		$485.0					$485
ENGINEERING AND CONST SUPERVISION		$250.0					$250
SUBTOTAL		$2,754.0					$3,224
CONTINGENCY AT 15%		$413.1					$413
TOTAL CAPITAL COST		$3,167.1					$3,637
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0				($1,191.0)	$0
TOTAL CAPITAL INVESTMENT		$4,358.1	$676.0			($1,397.0)	$3,637
OPERATING COSTS							
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$6,500
CRUSH,AGGLOM & LOAD	$2.50 PER TON	$750.0	$2,000.0	$2,000.0	$2,000.0	$807.5	$7,557
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$155.0	$1,451
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$3,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$16.1	$151
G & A - SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$142.1	$1,450
G & A - GENERAL	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$161.5	$1,611
TOTAL OPERATING COST		$2,446.0	$5,936.0	$5,936.0	$5,936.0	$2,246.1	$22,500
TOTAL COST PER TON ORE		$8.15	$7.42	$7.42	$7.42	$6.95	$7.44
TOTAL COST PER OUNCE GOLD		$401.6	$318.2	$318.2	$363.1	$329.2	$337.8
INCOME BEFORE TAXES		$552.2	$3,090.4	$3,090.4	$1,954.4	$1,031.7	$9,719
DEPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)	($1,800)
DEPLETION @ 15%		($276.1)	($1,354.0)	($1,354.0)	($977.2)	($491.7)	($4,453)
TAXABLE INCOME		($523.9)	$1,256.4	$1,448.4	$804.4	$480.9	$3,466
INCOME TAX @ 30%		$0.0	$376.9	$434.5	$241.3	$144.3	$1,197
CASH FLOW							
INCOME AFTER TAXES		($523.9)	$879.5	$1,013.9	$563.1	$336.6	$2,269
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$1,800
DEPLETION		$276.1	$1,354.0	$1,354.0	$977.2	$491.7	$4,453
CAPITAL COST		($4,358.1)	($676.0)			$1,397.0	($3,637)
CASH FLOW		($3,805.9)	$2,037.5	$2,655.9	$1,713.1	$2,284.5	$4,885
CUMULATIVE CASH FLOW		($3,805.9)	($1,768.4)	$887.4	$2,600.5	$4,885.0	$4,885
NET PRESENT VALUE @ 10% ($000'S)	$2,807.9						
INTERNAL RATE OF RETURN	43.90%						

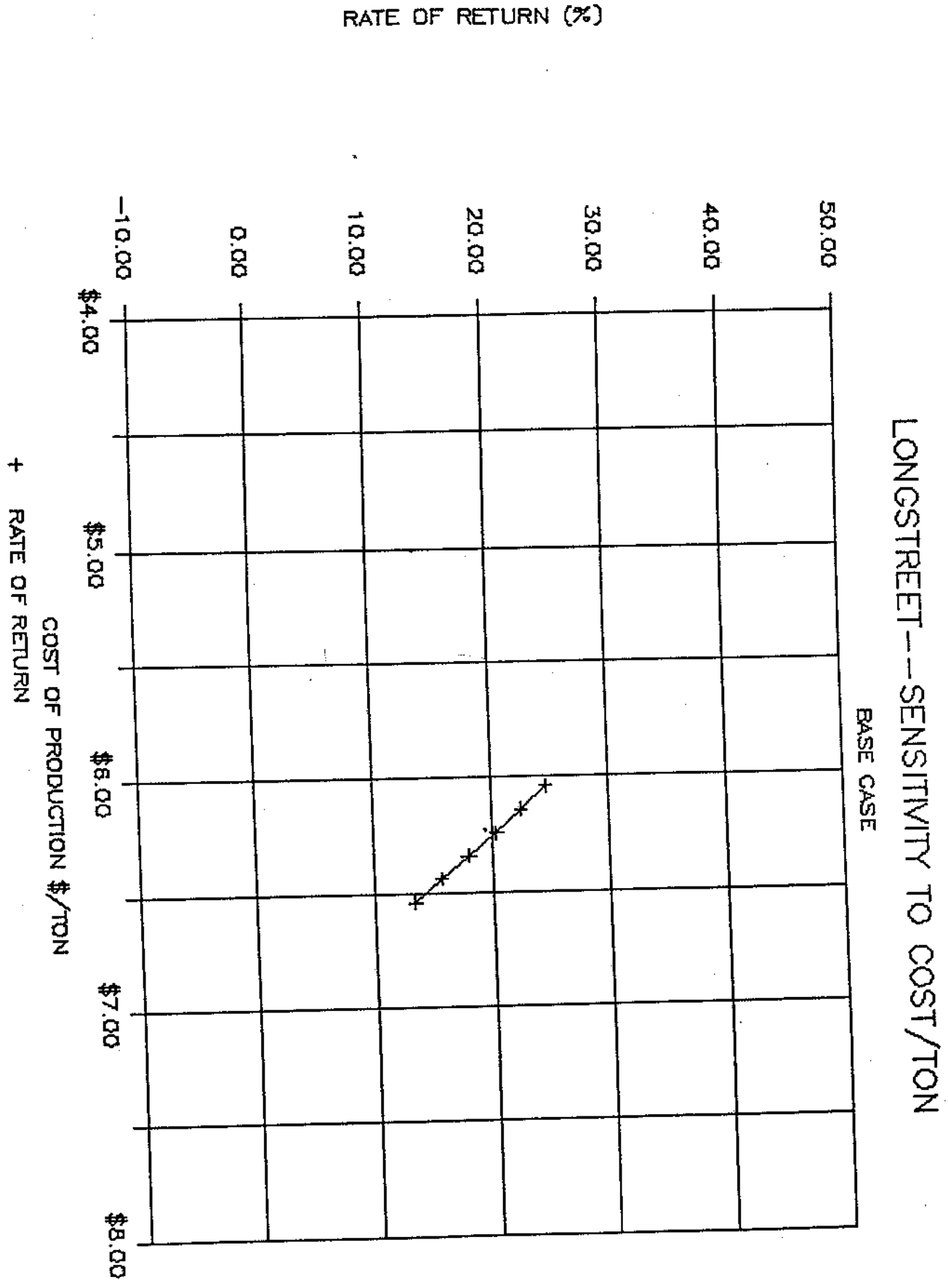
LONGSTREET PROJECT -- CASH FLOW SUMMARY -- CRUSH TO 0.25 INCH CASE 25-Apr-88

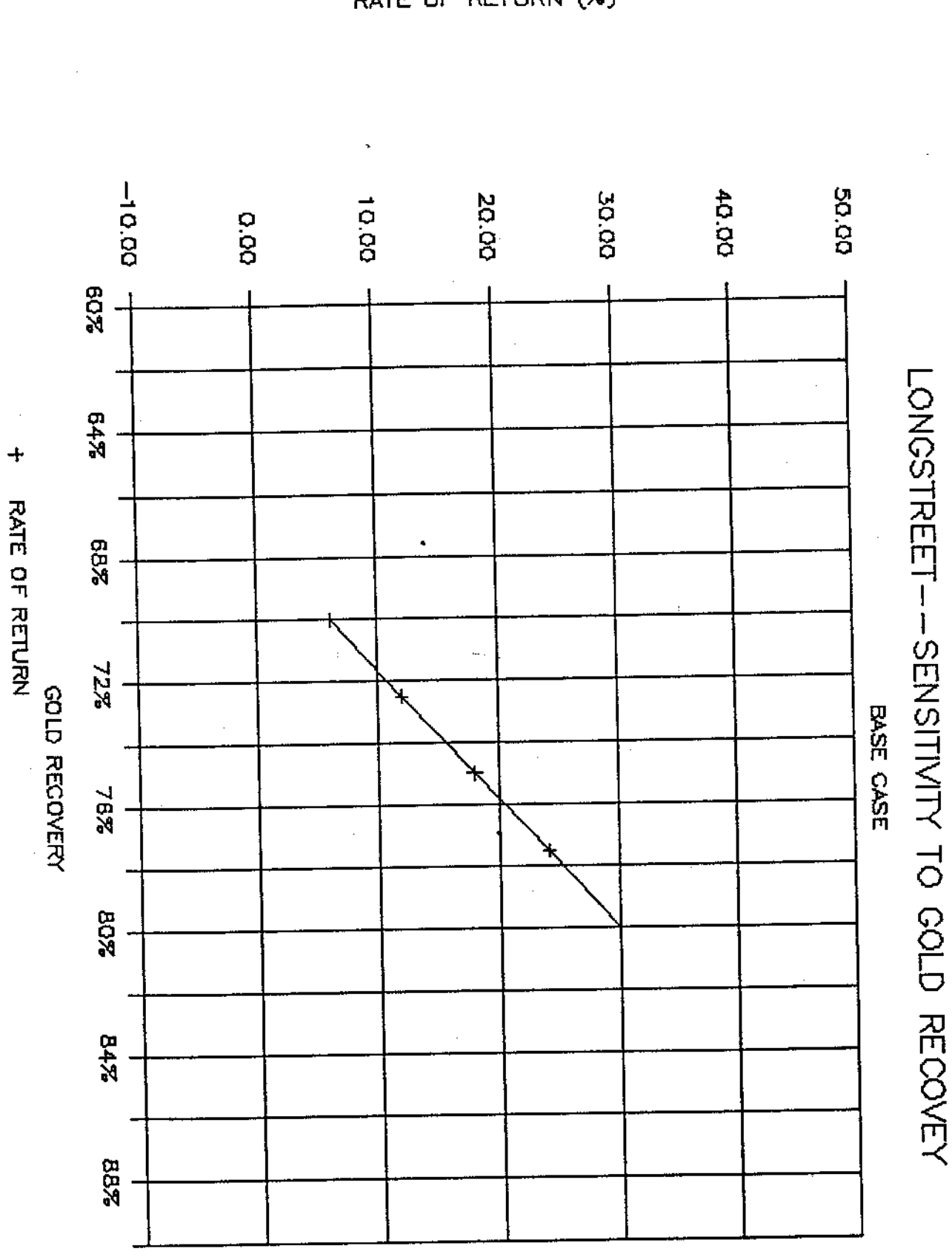
GOLD = $600.00 PER OUNCE
SILVER = $8.00 PER OUNCE

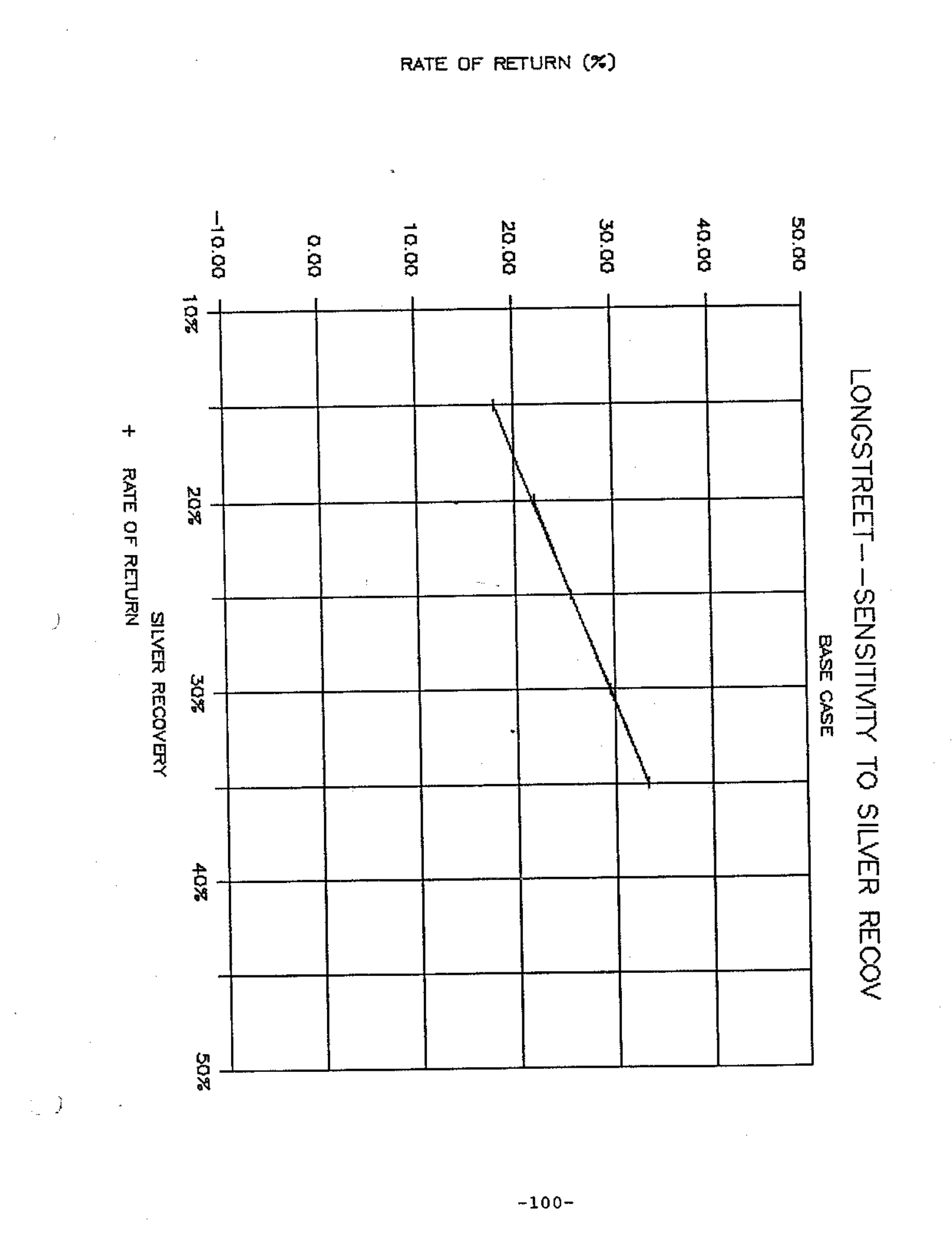
RODUCTION STATISTICS	YEAR	1	2	3	4	5	TOTALS
ORE(000'S TONS)		300.0	800.0	800.0	800.0	323.0	3023.0
GOLD(OZ/TON)		0.022	0.025	0.025	0.021	0.022	0.0233
LVER(OZ/TON		0.46	0.47	0.47	0.67	0.57	0.533
E(000'S TONS)		300.0	800.0	800.0	800.0	186.1	2886.1
ETAL RECOVERED							
GOLD(OUNCES)	85.00% RECOVERY	5610	17000	17000	14280	6040	59930
SILVER(OUNCES)	20.00% RECOVERY	27600	75200	75200	107200	36822	322022
EVENUE($ 000'S)							
GOLD		$3,366.0	$10,200.0	$10,200.0	$8,568.0	$3,624.1	$35,958
SILVER		$220.8	$601.6	$601.6	$857.6	$294.6	$2,576
TOTAL REVENUE		$3,586.8	$10,801.6	$10,801.6	$9,425.6	$3,918.6	$38,534
OSTS							
APITAL COST($ 000'S)							
CONTRACT MOBILIZATION AND DEMOB		$350.0					$350
PORTABLE RECOVERY PLANT		$618.0				($206.0)	$412
LEACH PAD AND PONDS		$738.0	$676.0				$1,414
MINE ROADS AND RECLAMATION		$313.0					$313
GENERAL AND INFRASTRUCTURE		$485.0					$485
ENGINEERING AND CONST SUPERVISION		$250.0					$250
SUBTOTAL		$2,754.0					$3,224
CONTINGENCY AT 15%		$413.1					$413
TOTAL CAPITAL COST		$3,167.1					$3,637
WORKING CAPITAL(3 MONTHS OP COST)		$1,191.0				($1,191.0)	$0
TOTAL CAPITAL INVESTMENT		$4,358.1	$676.0			($1,397.0)	$3,637
OPERATING COSTS							
CONTRACT MINE	$1.10 PER TON	$660.0	$1,760.0	$1,760.0	$1,760.0	$560.0	$6,500
CRUSH,AGGLOM & LOAD	$2.50 PER TON	$750.0	$2,000.0	$2,000.0	$2,000.0	$807.5	$7,557
PLANT-LABOR	$0.48 PER TON	$144.0	$384.0	$384.0	$384.0	$155.0	$1,451
-REAGENTS/SUPP	$1.25 PER TON	$375.0	$1,000.0	$1,000.0	$1,000.0	$403.7	$3,779
-MAINT	$0.05 PER TON	$15.0	$40.0	$40.0	$40.0	$16.1	$151
G & A - SUPERVISION	$0.44 PER TON	$252.0	$352.0	$352.0	$352.0	$142.1	$1,450
G & A - GENERAL	$0.50 PER TON	$250.0	$400.0	$400.0	$400.0	$161.5	$1,611
TOTAL OPERATING COST		$2,446.0	$5,936.0	$5,936.0	$5,936.0	$2,246.1	$22,500
TOTAL COST PER TON ORE		$8.15	$7.42	$7.42	$7.42	$6.95	$7.44
TOTAL COST PER OUNCE GOLD		$396.6	$313.8	$313.8	$355.6	$323.1	$332.4
NCOME BEFORE TAXES		$1,140.8	$4,865.6	$4,865.6	$3,489.6	$1,672.6	$16,034
EPRECIATION		($800.0)	($480.0)	($288.0)	($172.8)	($59.2)	($1,800)
EPLETION @ 15%		($538.0)	($1,620.2)	($1,620.2)	($1,413.8)	($587.8)	($5,780)
AXABLE INCOME		($197.2)	$2,765.4	$2,957.4	$1,903.0	$1,025.6	$8,454
NCOME TAX @ 30%		$0.0	$829.6	$887.2	$570.9	$307.7	$2,595
ASH FLOW							
INCOME AFTER TAXES		($197.2)	$1,935.7	$2,070.1	$1,332.1	$717.9	$5,859
DEPRECIATION		$800.0	$480.0	$288.0	$172.8	$59.2	$1,800
DEPLETION		$538.0	$1,620.2	$1,620.2	$1,413.8	$587.8	$5,780
CAPITAL COST		($4,358.1)	($676.0)			$1,397.0	($3,637)
ASH FLOW		($3,217.3)	$3,360.0	$3,978.4	$2,918.7	$2,761.9	$9,802
UMULATIVE CASH FLOW		($3,217.3)	$142.7	$4,121.1	$7,039.8	$9,801.7	$9,802
ET PRESENT VALUE @ 10% ($000'S)	$6,549.5						
NTERNAL RATE OF RETURN	99.81%						


LONGSTREET--SENSITIVITY TO PRICE
BASE CASE
DOLLARS
(Thousands)
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
3.00
2.00
1.00
0.00
-1.00
-2.00
$0.00
$200.00
$400.00
$600.00
$800.00
GOLD PRICE $/OUNCE
□ NPV ($ 000'S)
◇ CASH FLOW


RATE OF RETURN (%)
LONGSTREET--SENSITIVITY TO PRICE
BASE CASE
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
-10.00
$0.00
$200.00
$400.00
$600.00
$800.00
GOLD PRICE $/OUNCE
+ RATE OF RETURN


RATE OF RETURN (%)
LONGSTREET--SENSITIVITY TO COST/TON
BASE CASE
50.00
40.00
30.00
20.00
10.00
0.00
-10.00
$4.00
$5.00
$6.00
$7.00
$8.00
COST OF PRODUCTION $/TON
+ RATE OF RETURN


RATE OF RETURN (%)
LONGSTREET--SENSITIVITY TO GOLD RECOVEY
BASE CASE
50.00
40.00
30.00
20.00
10.00
0.00
-10.00
60%
64%
68%
72%
76%
80%
84%
88%
GOLD RECOVERY
+ RATE OF RETURN


RATE OF RETURN (%)
LONGSTREET--SENSITIVITY TO SILVER RECOV
BASE CASE
50.00
40.00
30.00
20.00
10.00
0.00
-10.00
10%
20%
30%
40%
50%
SILVER RECOVERY
+ RATE OF RETURN