No. 35

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) MINISTRY OF INDUSTRY THE ARAB REPUBLIC OF EGYPT

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Revised Feesibility Study

The Expansion Project

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The El Dikheliu Iron and Steel Works

The Areb Republic of Egypt

FINAL REPORT (APPENDIX I)

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MANUFACTURING

COST SHEET (AMOUNT)

LIBRARY

A LOCAL

国際協力事業団 26434

CASE 0-1

EXISTING WITHOUT ESCALATION

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| | | | | MANUFAC | MANUFACTURING COST SHEETLAMOUNT | IEET (AMOUNT) | |
|--|-----------------|---------------|---------------|---------------|---------------------------------|-----------------|---------------|
| (UNIT : 1,000US\$) | | | • . | | | | |
| VARIABLE COST | | 2661 | 1994 | 1995 | 1996 | 1997 | 866I |
| RAW MATERIAL & SUPPLIES PELLET COST | | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| SUB TOTAL | * | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | COST)TAL ** | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,933 | 685 51,938 |
| BY-PRODUCT OXIDE FINES OXIDE THICKNER | | 00 | <u>.</u> | 00 | .00 | 00 | 00 |
| UTILITIES ELECTRICITY | · | 1,964 | 1,963 | 1,963 | 1,963 | 1,963 | I - 963 |
| NATURAL GAS | | 17,294 | 17,294 | 17,294 | 17,294 | 17,294 | 17,294 |
| 02N2 | | 41 | 40 | 40 | 6 4 | 04 | 40 |
| COMPRESSED AIR | | 208 | 208 | 208 | 208 | 208 | 208 |
| WATER | | 585 | 584 | 583 | 583 | 583 | 583 |
| UTILITIES COST TOTAL | ** | 20,091 | 20,090 | 20,088 | 20,088 | 20,088 | 20,088 |
| VARIABLE COST TOTAL | *** | 72,029 | 72,028 | 72,026 | 72,026 | 72,026 | 72,026 |
| FIXED COST LABOR COST TOTAL | | 684 4 | 684 684 | 684 | 684 | 684 | 684 6 |
| DEPRECIATION TOTAL | | 6.153 | 6.136 | 6,136 | 6,134 | 6+136 | 6.136 |
| REPAIR COST TOTAL | | 2,499 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 |
| S REPAIR COST TOTAL | | 1,537 | 1,537 | 1,537 | 1,537 | 1,537 | 1,537 |
| OTHER COST TOTAL | | 6,852 | 6,526 | 6,526 | 6,526 | 6,526 | 6,526 |
| FIXED COST TOTAL | *** | 17,725 | 17,382 | 17,383 | 17,380 | 17,382 | 17,383 |
| DRP COST TOTAL | **** | 89,754 | 89,410 | 89,408 | 89,406 | 89,408 | 89,408 |
| | | | | | | | |

| (UNIT : 1,000US\$) | | | MANULFAC | MANUFACTURING COST SHEET (AMOUNT) - DRP DRP | IEET (AMOUNT) |
|--|---------------|---------------|---------------|--|-----------------|
| ŝ | 1999 | 2000 | 2001 | 2002 | 2003 |
| & SUPPLIES | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| * | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 |
| | 00 | 001 | 00 | 00 | 00 |
| | 1,963 | 1,963 | 1,938 | 1,926 | 1,959 |
| | 17,294 | 17,294 | 17,280 | 17,274 | 17,288 |
| | 40 | 9 | 32 | 6.1 | 85 |
| | 203 | 208 583 | 173 509 | 158 473 | 197 568 |
| ** | 20,088 | 20,088 | 19,932 | 19,859 | 20,050 |
| *** | 72,026 | 72,026 | 71,870 | 71,797 | 71,988 |
| | | | | | |
| | 684 | 684 | 684 | 6 84 | 684 |
| | 6,136 | 6,134 | 5,684 | 3,295 | 3,295 |
| | 2,500 | 2,500 | 2,485 | 2,478 | 4,998 |
| | 0 | 1,537 | 1,537 | 1,537 | 1,537 |
| | 6,526 | 6,526 | 6,495 | 6,479 | 6,524 |
| *** | 15,846 | 17,380 | 16,884 | 14,472 | 17,038 |
| *** | 87,871 | 89,406 | 88,755 | 86,269 | 89,026 |

1,959 17,288 38 197 568 20,050

71,988

684 3,293 4,998 1,537 6,534 17,036 89,024

2004

51,253 51,253 685 51,938

00

•

| 2006 2007 51,253 51,253 51,253 51,253 51,253 51,253 51,253 51,253 51,253 51,253 51,253 51,253 51,958 17,288 17,288 17,288 17,288 17,288 17,288 17,288 17,288 17,288 17,288 17,288 17,288 17,288 17,288 17,288 17,298 17,298 17,298 11,250 20,050 87,489 11,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | (UNET : 1,000US\$) | | | | MANUFAC | MANUFACTURING COST SHEET(AMOUNT - DRP - DRP - | IEET (AMOUNT) | |
|---|--|--------------------|--------------------|---------------|---------------|---|-----------------|---------------|
| CGT 51,253 51,253 51,253 51,253 51,253 CTAL * 51,253 51,253 51,253 51,253 VRING SUPPLIES COST 685 685 51,936 51,936 51,936 R SUPPLIES C TOTAL ** 51,938 51,936 51,936 5 R NES 0 0 0 0 0 R NES 0 0 0 0 0 IT 0 0 0 0 0 0 ICKNER 0 0 0 0 0 0 IT 0 0 0 0 0 0 ICKNER 17,288 17,288 17,288 17,288 SIT 17,288 17,7288 17,288 197 SS 137 197 197 197 SS 138 197 197 197 SED AIR 17,288 17,959 197 SE COST TOTAL *** 71,988 71,988 SS COST TOTAL *** 71,983 71,988 ST TOTAL **** 71,983 71,988 71,988 SS | E COST VTERIAL & SUPPLIES | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| OTAL * 51,253 51,253 51,253 51,253 51,938 17,288 197 | ET COST | | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| URING SUPPLIES COST 485 685 685 685 685 685 51,938 51,938 51,938 51,938 51,938 51,938 51,938 51,938 51,938 51,938 51,938 51,938 51,938 51,938 51,958 17,288 17,988 71,998 71,988 | UB TOTAL | * | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| T T T T T T T T T T T T T T | FACTURING SUPPLIES MAT & SUPPLIES C T | \$ COST OTAL ** | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 |
| SED AIR 1,959 1,959 1,959 SED AIR 17,288 17,288 17,288 SED AIR 197 197 38 38 SED AIR 197 197 197 SED AIR 197 197 197 SED AIR 197 568 197 SED AIR 568 197 568 SE COST TOTAL ** 20,050 20,050 SC COST TOTAL *** 71,983 71,983 SE COST TOTAL *** 71,983 71,983 ST TOTAL 5.3295 5.295 ST TOTAL 1,537 1,533 ST TOTAL 1,537 1,550 ST TOTAL **** 89,043 89,056 ST TOTAL **** 89,043 89,026 | ı | | 00 | 00 | 00 | 00 | 00 | 00 |
| AIT 1,723 1,723 1,723 1,723 GAS 17,288 17,288 17,288 17,288 17,288 SED AIR 197 568 568 568 568 SE COST TOTAL ** 20,050 20,050 20,050 SE COST TOTAL ** 71,983 71,983 71,983 ST TOTAL *** 71,983 71,983 71,983 ST TOTAL **** 71,983 71,983 71,983 ST TOTAL **** 71,983 71,983 71,983 ST TOTAL **** 1,537 1,537 6,54 ST TOTAL **** 17,055 1,7,053 15,501 ST TOTAL **** 89,043 89,026 87,489 | TIES | | c LC | 090 F | 640 F | | 010 F | 010 |
| SED AIR 38 38 38 38 38 38 38 38 38 38 38 38 38 38 38 56 568 71,988 | RAL GAS | | 17.288 | 17,288 | 17,288 | 17,288 | 17,288 | 17,288 |
| SED AIR 197 197 197 197 SE CAST TOTAL ** 568 568 568 SE COST TOTAL ** 20,050 20,050 20,050 6 E COST TOTAL *** 71,983 71,988 71,988 71,988 ST TOTAL *** 71,983 71,988 71,988 71,988 ST TOTAL *** 71,983 71,988 71,988 ST TOTAL *** 71,983 71,988 71,988 ST TOTAL *** 71,983 71,988 71,988 ST TOTAL *** 684 684 684 ST TOTAL 5.3212 3,295 4,998 ST TOTAL 1,537 1,557 0 ST TOTAL **** 17,055 17,038 15,501 ST TOTAL **** 89,043 89,026 87,489 | | | 38 | 38 | 82 | 38 | 38 | 38 |
| ES COST TOTAL *** 568 568 568 568 568 568 568 568 568 568 | RESSED AIR | | 197 | 197 | 197 | 197 | 197 | 197 |
| <pre>COST TOTAL *** 20,050 20,050 20,050 20,050 20,050 20,050 20,050 20,050 20,050 20,050 20,050 20,051 10,058 71,988 71,</pre> | æ | | 568 | 568 | 568 | 568 | 568 | 563 |
| E COST TOTAL *** 71,988 71,988 71,988 71,988 71,988 51 707AL *** 71,988 71,988 71,988 71,988 71,988 71,988 71,988 71,988 71,998 684 684 684 684 7100 TOTAL 5,212 5,212 5,295 5,295 5,295 5,295 5,295 5,598 6,524 6,524 5,550 17,055 17,055 17,055 1,526 5,501 5,50 | ITTES COST TOTAL | ** | 20,050 | 20,050 | 20,050 | 20,050 | 20,050 | 20,050 |
| ST TOTAL ST TOTAL TION TOTAL ST TOTAL SST TOTAL ST TOTAL | ABLE COST TOTAL | *** | 71,988 | 71,988 | 71,988 | 71,988 | 71,988 | 71,988 |
| 0.04 0.04 0.04 0.04 3,312 3,295 3,295 4,998 4,998 4,998 1,537 1,537 0 1,534 6,524 6,524 **** 17,035 17,038 **** 89,043 89,026 | 0ST 10111 | | ž | 201 | 201 | 707 7 | 70 7 | 767 |
| 4,998 4,998 4,998 1,537 1,537 0 1,537 1,537 0 *** 17,055 17,038 15,501 **** 89,043 89,026 87,489 | CUST JULAL | | 404 417 | | 2004 2001 | 7,292 | 2.212 | 7.79F |
| 1,537 1,537 0 1,537 1,537 0 6,524 6,524 6,524 *** 17,038 15,501 **** 89,043 89,026 87,489 | R COST TOTAL | | 11111 1000 - 10 | | 4997.1 | 4,998 | 4,998 | 4,998 |
| 6,524 6,524 6,524 *** 17,055 17,038 15,501 **** 89,043 89,026 87,489 | AIR COST TOTAL | | 1,537 | 1,537 | 0 | 1,537 | 1,537 | 1,537 |
| *** 17,055 17,038 15,501 **** 89,043 89,026 87,489 | COST TOTAL | | 6,524 | 6.524 | 6,524 | 6,524 | 6,524 | 6,524 |
| **** 89,043 89,026 87,489 | COST TOTAL | *** | 17,055 | 17,038 | 15,501 | 17,036 | 17,055 | 17,038 |
| | COST TOTAL | *** | 89,043 | 89,026 | 87,489 | 89,024 | 89,043 | 89,026 |

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| | (UP-2) |
|------|------------|
| | ESCALATION |
| | G WITHOUT |
| 1-0 | EXISTING |
| CASE | |

| | | | | MANUFAC | MANUFACTURING COST SHEET(AMOUNT) - DDD - | HEET (AMOUNT) |
|--|-----------------|---------------|---------------|---------------|---|-----------------|
| (UNIT : 1,000US\$) | | | | | | • . |
| | | 1102 | 2012 | 2013 | 2014 | 2015 |
| RAM MATERIAL & SUPPLIES PELLET COST | · | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| SUB TOTAL | * | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| MANUFACTURING SUPPLIES COST RAW MAT & SUPPLIES C TOTAL ** | COST DTAL ** | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 |
| BY-PRODUCT OXIDE FINES OXIDE THICKNER | | | α φ. | 00 | 00 | 00 |
| UTILITIES ELECTRICITY | | 1,959 | 1,959 | 1,959 | 1,959 | 1,959 |
| NALUKAL GAS O2N2 | | 17,238 33 | 17,288 | 17,288 38 | 17,288 38 | 17,288 38 |
| COMPRESSED AIR WATER | | 197 568 | 197 | 197 568 | 197 568 | 197 568 |
| UTILITIES COST TOTAL | ** | 20,050 | 20,050 | 20,050 | 20,050 | 20,050 |
| VARIABLE COST TOTAL | *** | 71,988 | 71,988 | 71,988 | 71,988 | 71,988 |
| FIXED COST | · | | - | | | • |
| LABOR COST TOTAL DEBECTATION TOTAL | | 684 900 | 684 202 | 684 7 71 0 | 684 | 684 |
| REPAIR COST TOTAL | | 4,998 | 4,998 | 4,998 | 4,998 | 6,998 |
| S REPAIR COST TOTAL | | 1,537 | 1,537 | 1,537 | 1,537 | 0 |
| DTHER COST TOTAL | | 6,524 | 6,524 | 6,524 | 6,524 | 6,524 |
| FIXED COST TOTAL | *** | 17,038 | 17,036 | 17,055 | 17,038 | 15,501 |
| DRP COST TOTAL | **** | 89,026 | 89,024 | 89,043 | 89,026 | 87,489 |

AI-4

CASE 0-1 Existing Mithout Escalation (UP-2)

| | | | | MANUFA | MANUFACTURING COST SHEET(AMOUNT - 1CP - | IEET (AMOUNT) | |
|--|----------|------------|------------|------------|--|-----------------|------------|
| (UNIT : 1,000US\$) | · | | | · | | | |
| | ÷ | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
| VARIABLE COST RAM MATERIAL & SUPPLIES | | | | | | | |
| LIME STONE COST | | 486 | 486 | 486 | 4 86 | 486 | 486 |
| SUB TOTAL | * | 486 | 486 | 486 | 486 | 486 | 486 |
| | COST | ŝ | μ | ŋ | L | ហ្ | IJ |
| RAW MAT & SUPPLIES C TO | TOTAL ** | 491 | 491 | 491 | 164 | 491. | 165 |
| BY-PRODUCT | | | | | | | |
| LIME FINES | | 0 | 0 | o | 0 | 0 | 0 |
| LIME STONE FINES | | 0 | 0 | 0 | 0 | 0 | 0 |
| UTILITIES | | | | | | . • | |
| ELECTRICITY | | 57 | 57 | 57 | 57 | 57 | 57 |
| NATURAL GAS | | 300 | 300 | 300 | 300 | 300 | 300 |
| OZNZ | | Ø | Ø | ø | ø | Ø | co |
| COMPRESSED AIR | | 0 | 0 | 0 | Ð | C | 0 |
| MATER | | 0 | 0 | o | œ | 0 | 0 |
| UTILITIES COST TOTAL | ** | 365 | 365 | 365 | 365 | 365 | 365 |
| VARIABLE COST TOTAL | *** | 856 | 856 | 856 | 856 | 856 | 856 |
| FIXED COST | | | | · | | - | |
| LABOR COST TOTAL DEDECTATION FOTAL | · | 143 747 | 143 241 | 143 241 | 143 743 | 143 | 143 143 |
| REPAIR COST TOTAL | | 157 | 157 | 157 | 157 | 157 | 157 |
| S REPAIR COST TOTAL | | 0 | 118 | 118 | 118 | 118 | 0 |
| OTHER COST TOTAL | | 399 | 358 | 358 | 358 | 358 | 358 |
| FIXED COST TOTAL | *** | 1,041 | 1,116 | 1,117 | 1,117 | 1,117 | 666 |
| LCP COST TOTAL | **** | 1,897 | 1,972 | 1,972 | 1,972 | 1,972 | 1,854 |

| | | | | MANS IS AN | TO TOT ONTO L | C ET A MON BIE A |
|---|------------------|--------------|----------|------------|--|------------------|
| (UNIT : 1,000US\$) | | | | MANUFAC | MANUFACIURING COST SHEET (AMUUNI) - LCP - LCP - | HEET (AMOUNT) |
| VARIABLE COST | | 1999 | 2000 | 2001 | 2002 | 2003 |
| RAW MATERIAL & SUPPLIES LIME STONE COST | s | 486 | 486 | 486 | 486 | 486 |
| SUB TOTAL | * | 486 | 486 | 486 | 486 | 486 |
| MANUFACTURING SUPPLIES COST RAW MAT & SUPPLIES C TOTAL | COST TOTAL ** | 5 64 7 | 5 491 | 5 491 | 5 491 | 5. 191 |
| BY-PRODUCT LIME FINES LIME STONE FINES | | 00 | 00 | 00 | 00 | 00 |
| UTILITIES ELECTRICITY | | 57 | 57 | 56 | 56 | 57 |
| NATURAL GAS | | 300 | 300 | 300 | 300 | 300 |
| O2N2 | | 60 1 | 80 | ~ ' | ، ف | ن ئ |
| COMPRESSED AIR Water | | 0 0 | 8 C | 0 0 | • - | 0 0 |
| UTILITIES COST TOTAL | ** | 365 | 365 | 362 | 361 | 364 |
| VARIABLE COST TOTAL | *** | 856 | 856 | 853 | 852 | 855 |
| FIXED COST | | | | | | |
| LABOR COST TOTAL | | I43 | 143 | 143 | 143 | 143 |
| DEPRECIATION TOTAL | | 341 | 341 | 255 | 207 | 206 |
| REPAIR COST TOTAL | · | 157 | 157 | 156 | 155 | 313 |
| S REPAIR COST TOTAL | | 118 | 118 | 118 | 118 | O |
| OTHER COST TOTAL | 3 | 358 | 358 | 332 | 319 | 359 |
| FIXED COST FUTAL | *** | 1,117 | 1,117 | 1,004 | 246 | 120,1 |

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57 364 364 143 206 313 318 318 358 358 1,139 1,994

1,876

1,857 1,794

1,972

1,972

LCP COST TOTAL

AI-6

CASE 0-1 EXIS 2004

486 486 00

•

| | 2010 | 486 | 486 | 4 19 11 19 | o | 0 | 57 | 300 | 8 | • | | 364 | 855 | ; | 145 206 | 313 | 118 | 359 | 1,139 | 1,994 |
|-----------------------------------|--|-----------------|-----------|---|--------------------------|------------------|--------------------------|-------------|------|----------------|----------|----------------------|---------------------|------------|---------------------------------------|-------------------|---------------------|------------------|------------------|----------------|
| SHEET (AMOUNT) | 2009 | 486 | 486 | 5 491 | o | 0 | 57 | 300 | Ø | 0 | C | 364 | 855 | | 4 4 0 4 7 0 4 | 313 | 118 | 359 | 1,139 | 1,994 |
| MANJFACTURING COST SHE - LCP - | 2008 | 486 | 486 | 5 491 | o | Q | 57 | 300 | 8 | 0 | | 364 | 855 | | 145 206 | 313 | 0 | 358 | 1,021 | 1,876 |
| MANUFACT | 2007 | 486 | 486 | 5 491 | G | 0 | 57 | 300 | 8 | 0 | 0 | 364 | 855 | | 145 206 | 313 | 118 | 359 | 1,139 | 1,994 |
| | 2006 | 486 | 486 | 5 491 | 8 | 0 | 57 | 300 | Ø | 0 | 0 | 364 | 855 | | 145 | 313 | 118 | 359 | 1,139 | 1,994 |
| | 2005 | 486 | 486 | - 5 491 | C | 0 | 57 | 300 | Ø | 0 | | 364 | 855 | | 245 206 | 313 | 118 | 359 | 1,139 | 1,994 |
| | | | * | COST TOTAL ** | | | | | | | | ** | *** | | | | | | *** | **** |
| (UNIT : 1,000US\$) | VARIABLE COST Dalm Matedian & Suiddifes | LIME STONE COST | SUB TOTAL | MANUFACTURING SUPPLIES (RAM MAT & SUPPLIES C TO | BY-PRODUCT LIME FINES | LIME STONE FINES | UTILITIES ELECTRICITY | NATURAL GAS | 02N2 | COMPRESSED AIR | WATER | UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST | LABUK CUSI IUIAL Dedectàtion intài | REPAIR COST TOTAL | S REPAIR COST TOTAL | OTHER COST TOTAL | FIXED COST TOTAL | LCP COST TOTAL |

| | (10-2) |
|------|------------|
| | ESCALATION |
| | NETHOUT |
| 5 | EXISTING |
| CASE | |

| MANUFACTURING COST SHEET(AMOUNT) - LCP - | 2014 2015 486 486 | | 5 5 491 491 | 00 | 57 | 303 8 8 | 0 0 0 0 364 364 | 855 855 | 143 143 206 313 313 | | 1,994 1,994 |
|---|---|-----------|---|--|--------------------------|---------------|---|---------------------|---|---|----------------|
| MANUFACTURING - LCP | 2013 486 | 486 | 5 5 | | 57 | 300 8 | 0 0 364 | 855 | | 0 359 1,021 1 | 1,876 l |
| | 2012 686 | 486 | 5 491 | ~ ~ | 57 | 300 | 0 264 264 | 855 | 143 206 313 | 118 358 1,139 | 1,994 |
| | 2011 | 486 | 5 491 | 00 | 57 | 000 | 0 364 | 855 | 143 206 313 | 118 359 1,139 | 1,594 |
| | IES | * | ES COST C TOTAL ** | | | | ** | *** | | *** | **** |
| (UNIT : 1,000US\$) | VARIABLE COST RAM MATERIAL & SUPPLIES LIME STONE COST | SUB TOTAL | MANUFACTURING SUPPLIES COST Raw Mat & Supplies C Total | BY-PRODUCT LIME FINES LIME STONE FINES | UTILITIES ELECTRICITY | D2N2 GAS | CUMPRESSED AIN MATER UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL | S REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL | LCP COST TOTAL |

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| (UNIT : 1,000US\$) | | | | F GMS L | : | |
|-----------------------------------|-----------------|---------|---------------|---------------|---------------|---------|
| VARIABLE COST | 2661 | 1994 | 1995 | 1.996 | 1997 | 1993 |
| RAW MATERIAL & SUPPLIES | | | | | | |
| DRI | 89,754 | 89,410 | 89,408 | 89,406 | 89,408 | 89,408 |
| LIME STONE | 1,897 | 1,972 | 1,972 | 1,972 | 1,972 | 1,854 |
| SCRAP | 39,866 | 39,862 | 39,855 | 39,855 | 39,855 | 39,855 |
| FESI | 2,403 | 2,403 | 2,403 | 2,403 | 2,403 | 2,403 |
| AL | 185 | 185 | 185 | 185 | 185 | 185 |
| COKE BREEZE | 545 | 545 | 545 | 545 | 545 | 545 |
| ELECTRODE | 10,936 | 10,936 | 10,936 | 10,936 | 10,936 | 10,936 |
| FURNACE BRICK | 1,923 | 1,923 | 1,923 | 1,923 | 1,923 | 1,923 |
| LADLE BRICK | 3,600 | 3,600 | 3,600 | 3,600 | 3,600 | 3,600 |
| TUNDISH BRICK | 1,669 | 1,669 | 1,669 | 1,669 | 1,669 | 1,669 |
| FETLING MAT | 4,026 | 4,026 | 4,026 | 4,026 | 4,026 | 4,026 |
| HBI | 24,655 | 24,655 | 24,655 | 24,655 | 24,655 | 24,655 |
| FEMN | 6,801 | 6,801 | 6,801 | 6,801 | 6,801 | 6,801 |
| FEV | 72 | 72 | 72 | 72 | 72 | 72 |
| BURNT DOLOMITE | 67 | 67 | 67 | 67 | 67 | 67 |
| sub total * | 188,401 | 188,128 | 188,120 | 188,118 | 188,120 | 188,002 |
| | 930 | 930 | 630 | 930 | 026 | 930 |
| RAW MAT & SUPPLIES C TOTAL ** | 189.331 | 189.058 | 789.050 | 189.048 | 180.050 | 120 070 |
| | | | 00000 | 0406/07 | ncn t ot | 1001 C |
| BY-PRODIET | | | | | | |
| SCRAP | 2,589 | 2,589 | 2,589 | 2.589 | .2.589 | 2.ERG |
| DUST | 0 | 0 | | | | |
| SLAG | Ģ | 0 | | | • C | |
| SCALE SMP | 0 | 0 | 0 | . 0 | | |
| WASTE BRICK | Ö | 0 | 0 | 0 | 0 | 0 |
| SUB TOTAL * | 2,589 | 2,589 | 2,589 | 2,589 | 2,589 | 2,589 |
| UTILITIES | | | | | | |
| ELECTRICITY | 18,173 | 18,171 | 18,169 | 18,169 | 18,169 | 18,169 |
| NATURAL GAS | 352 | 352 | 352 | 352 | 352 | 352 |
| 02N2 | 87 | 86 | 85 | 85 | 85 | 85 |
| COMPRESSED AIR | 153 | 153 | 153 | 153 | 153 | 153 |
| MALEK 1171) TTFS COST TOTAL ** | 46U 18.226 | 10,000 | 787 910 01 | 454 10 010 | 459 10 212 | 459 |
| 4 | 072 6 77 | 727547 | QTZ 4AT | 27267 | 19,218 | 19,218 |

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MANUFACTURING COST SHEET(AMOUNT) - SMP -

| 205,561 | 2,311 11,243 4,105 4,848 2,508 22,508 228,069 |
|---------------------|---|
| 205,679 | 2,311 11,245 4,105 4,847 4,847 22,506 22,506 |
| 205,677 | 2,311 11,243 4,105 4,848 22,507 22,507 |
| 205,679 | 2,311 11,243 4,105 4,778 22,438 22,438 |
| 205,691 | 2,311 11,243 4,105 4,718 22,437 22,437 228,128 |
| 205,968 | 2,311 11,501 4,103 6,289 24,004 229,972 |
| *** | **** |
| VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL DEPRECLATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL SMP COST TOTAL |

CASE 0-1 Existing Mithout Escalation (UP-2)

| - 240 - | 2002 2003 2004 | 89,026 2026 | L,194 L,876 L,994 20.866 Z0.866 Z0.866 | 2,403 | 185 | 545 | 10,936 10, | 1,923 | 3,600 | | 4,026 | 24,655 | 6,801 | | 67 67 | 184,803 187,642 187,757 | | 185,733 188,572 188,687 | | 2,589 2,589 2,589 | | 0 | 0 | 0 | 2,589 2,589 2,589 | | 18,128 | 352 | 81 | 117 145 145 | 447 | 19,153 |
|--------------------|--|----------------------------------|---|-------|-----|-------------|------------|---------------|-------------|---------------|-------------|--------|-------|-----|----------------|-------------------------|-----------------------------|-------------------------------|------------|-------------------|------|------|-----------|-------------|-------------------|-----------|-------------|-------------|------|----------------|-----|-------------------------|
| | 2001 | 88,755 | 1 CD41 79.855 | 2,403 | 185 | 545 | 10,936 | 1,923 | 3,600 | 1,669 | 4,026 | 24,655 | 6,801 | 72 | 67 | 187,351 | 930 | 188,281 | | 2,589 | 0 | 0 | 0 | 0 | 2,589 | | 17,937 | 352 | 68 | 128 | 400 | 18,885 |
| | 2000 | 89,406 | 1,7/2 29.855 | 2,403 | 185 | 545 | 10,936 | 1,923 | 3,600 | 1,669 | 4,026 | 24,655 | 6,801 | 72 | 67 | 188,118 | 930 | 189,048 | | 2,589 | Ð | 0 | ð | 0 | 2,589 | | 18,169 | 352 | 85 | 153 | 459 | 19,218 |
| | 666 I | 87,871 | 4,57/6 20.2555 | 2,403 | 185 | 545 | 10,936 | 1,923 | 3,600 | 1,669 | 4,026 | 24,655 | 6,801 | 72 | 67 | 186,583 | 026 | 187,513 | | 2,589 | 0 | 0 | 0 | o | 2,589 | | 18,169 | 352 | 85 | 153 | 459 | 19,218 |
| (UNIT : 1,000US\$) | VARIABLE COST BAW MATERIAL & SUDDITES | DRI STORE & COTTLEO Pre store | SCRAP | FESI | AL | COKE BREEZE | ELECTRODE | FURNACE BRICK | LADLE BRICK | TUNDISH BRICK | FETLING MAT | 18H | FEMN | FEV | BURNT DOLOMITE | SUB TOTAL * | MANUFACTURING SUPLLIES COST | RAW MAT & SUPPLIES C TOTAL ** | BY-PRODUCT | SCRAP | DUST | SLAG | SCALE SMP | WASTE BRICK | SUB TOTAL * | UTILITIES | ELECTRICITY | NATURAL GAS | D2N2 | COMPRESSED AIR | | UTILITIES COST TOTAL ** |

MANUFACTURING COST SHEET (AMOUNT)

| 205,250 | 2,311 6,603 8,208 4,837 21,960 21,960 |
|---------------------|---|
| 205,135 | 2,311 6,603 8,208 8,208 4,838 21,960 21,960 |
| 201,868 | 2,311 6,603 4,069 4,769 17,752 219,620 |
| 204,577 | 2,311 8,153 4,080 4,797 19,341 19,341 223,918 |
| 205,677 | 2,311 11,243 4,105 4,848 22,507 228,184 |
| 204,142 | 2,311 11,243 4,105 4,848 22,508 22,508 |
| *** | **** |
| VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL SMP COST TOTAL |

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| | 2010 | 89,026 | 1,994 | 39,855 | 2,403 | 185 | 545 | 10,936 | 1,923 | 3,600 | 1,669 | 4,026 | 24,655 | 6,801 | 72 | 67 | 187,760 | 930 | 188,690 | | 2,589 | 0 | 0 | 0 | Ċ | 2,589 | | 18.128 | 245 | ία | 145 | 447 | 19,153 | |
|--------------------|---------------|--------------------------------|------------|--------|-------|-----|-------------|-----------|---------------|-------------|---------------|-------------|--------|-------|-----|----------------|-------------|-----------------------------|-------------------------------|------------|-------|------|------|-----------|-------------|-------------|-----------|-------------|-------------|------|----------------|-------|-------------------------|--|
| | 2009 | 89,043 | 1,994 | 39,855 | 2,403 | 185 | 545 | 10,936 | 1,923 | 3,600 | 1,669 | 4,026 | 24,655 | 6,801 | 72 | 67 | 187,777 | 930 | 188,707 | | 2,589 | 0 | 0 | 0 | 0 | 2,589 | | 18.128 | 750 | 1 | 145 | 647 | 19,153 | |
| | 2008 | 89,024 | 1,876 | 39,855 | 2,403 | 185 | 545 | 10,936 | 1,923 | 3,600 | 1,669 | 4,026 | 24,655 | 6,801 | 72 | 67 | 187,639 | 930 | 188,569 | | 2,589 | 0 | 0 | ð | 0 | 2,589 | | 18.128 | 2012 | | 145 | 242 | 19,153 | |
| | 2007 | 87,469 | 1,994 | 39,855 | 2,403 | 185 | 545 | 10,936 | 1,923 | 3,600 | 1,669 | 4,026 | 24,655 | 6,801 | 72 | 67 | 186,222 | 930 | 187,152 | | 2,589 | 0 | 0 | Ð | 0 | 2,569 | | 18,128 | 352 | 18 | 145 | 447 | 19,153 | |
| | 2006 | 89,026 | 1,994 | 39,855 | 2,403 | 185 | 545 | 10,936 | 1,923 | 3,600 | 1,669 | 4,026 | 24,655 | 6,801 | 72 | 67 | 187,760 | 930 | 188,690 | | 2,589 | 0 | 0 | o | 0 | 2,589 | | 18,128 | 352 | 81 | 145 | 447 | 19,153 | |
| | 2005 | 89,043 | 1,994 | 39,855 | 2,403 | 185 | 54D | 10,936 | 1,923 | 3,600 | 1,669 | 4,026 | 24,655 | 6,301 | 72 | 67 | 187,776 | 930 | 188,706 | | 2,589 | o | o | Ð | 0 | 2,589 | | 18,128 | 352 | 81 | 145 | 442 | 19,153 | |
| (UNIT : 1,000US\$) | VARIABLE COST | RAM MATERIAL & SUPPLIES Dri | LIME STONE | SCRAP | FESI | AL | COKE BREEZE | ELECTRODE | FURNACE BRICK | LADLE BRICK | TUNDISH BRICK | FETLING MAT | HBT | FEMN | FEV | BURNT DOLOMITE | SUB TOTAL * | MANUFACTURING SUPLLIES COST | RAM MAT & SUPPLIES C TOTAL ** | BY-PRODUCT | SCRAP | DUST | SLAG | SCALE SMP | WASTE BRICK | SUB TOTAL * | UTILITIES | ELECTRICITY | NATURAL GAS | O2N2 | COMPRESSED AIR | MATER | UTILITIES COST TOTAL ** | |

MANUFACTURING COST SHEET(AMOUNT) - SMP -

| 205,253 | 2,311 6,603 8,208 4,838 2,838 2,358 21,960 21,960 |
|---------------------|---|
| 205,270 | 2,311 6,603 8,208 4,838 21,960 21,960 |
| 205,132 | 2,311 6,603 8,208 4,837 21,960 227,092 |
| 203,715 | 2,311 6,603 8,208 4,836 21,959 21,959 |
| 205,253 | 2,311 6,603 6,208 4,838 21,960 21,960 |
| 205,270 | 2,311 6,603 8,208 4,837 21,960 227,229 |
| *** | * * * ** * * |
| VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL SMP COST TOTAL |

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|--------|
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| 1102 |
|----------------|
| 89,026 |
| 1,994 |
| 39,855 |
| 2,403 |
| |
| |
| 10,936 |
| 1,923 |
| 3,600 |
| 1,669 |
| 4,026 |
| 24,655 |
| 6,801 |
| |
| |
| 187,760 |
| 930 188,690 |
| |
| • |
| 2,589 |
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| |
| 2,589 |
| |
| 18,128 |
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| |
| |
| 19,153 |
| |
| |

| 203,716 | 2,311 6,603 8,208 8,208 4,838 2,838 21,960 225,676 |
|---------------------|---|
| 205,253 | 2,311 6,603 8,208 4,838 21,960 21,960 |
| 205,152 | 2,511 6,603 8,208 4,837 21,959 227,111 |
| 205,250 | 2,311 6,603 8,208 4,837 21,959 227,209 |
| 205,253 | 2,311 6,603 8,208 4,838 21,960 21,960 |
| *** | * * * * * |
| VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL SMP COST TOTAL |

1998 1,606 1,939 795 1,505 102 2,573 891 3,033 1,203 868 5,996 118,199 118,199 119,805 170 120,439 126,435 MANUFACTURING COST SHEET(AMOUNT) - BAR -1,606 119,866 1997 1,939 795 1,505 170 102 2,573 891 3,034 1,203 868 5,996 126,496 118,260 118,260 Ö o 120,499 1996 1,606 119,865 **1,**939 795 1,505 170 0 102 2,573 891 3,033 1,203 868 5,995 118,259 118,259 o 126,494 120,499 1,606 119,830 1,939 795 1,505 170 0 102 2,573 891 3,033 1,203 868 1995 5,996 0 126,460 118,224 0 118,224 120,464 891 3,033 1,203 863 863 5,990 **1,561** 116,563 1,880 0 774 1,464 168 100 2,505 1994 115,002 0 117,188 123,179 o 115,002 1,518 114,194 1993 112,676 0 1,833 0 752 1,423 165 2,438 891 3,047 1,203 919 6,059 114,799 120,859 112,676 5 MANUFACTURING SUPLLIES COST RAM MAT & SUPPLIES C TOTAL ** **** *** *** * × VARIABLE COST RAM MATERIAL & SUPPLIES BAR BILLET COST P.BILLET COST UTILITIES COST TOTAL FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL VARIABLE COST TOTAL OTHER COST TOTAL FIXED COST TOTAL BAR COST TOTAL (UNIT : 1,000US\$) COMPRESSED AIR UTILITIES ELECTRICITY NATURAL GAS SUB TOTAL BY-PRODUCT SCRAP COST SCALE BAR MATER 02N2

0

MANUFACTURING COST SHEET(AMOUNT)

| (UNIT : 1,000US\$) | | | | | 1 XYG 1 | | |
|---|-------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| VARIABLE COST RAM MATERIAL & SUPPLIE | TES | 1999 | 2000 | 1002 | 2002 | 2003 | 2004 |
| BAR BILLET COST P.BILLET COST | 2 | 117,464 0 | 118,259 0 | 116,048 0 | 113,821 0 | 117,695 0 | 117,754 0 |
| SUB TOTAL | * | 117,464 | 118,259 | 116,048 | 113,821 | 117,695 | 117,754 |
| MANUFACTURING SUPLLIE RAM MAT & SUPPLIES C | LIES COST C TOTAL ** | 1,606 119,070 | 1,606 119,865 | 1,606 117,654 | 1,606 115,427 | 1,606 119,301 | 1,606 119,360 |
| BY-PRODUCT SCRAP COST | | 1,939 | 1,939 | 1,939 | 1,939 | 1,939 | 1,939 |
| SCALE DAR | | . | • | 5 | ⇒ | 2 | 3 |
| ULLITES ELECTRICITY | | 262 | 795 | 785 | 780 | 262 | 262 |
| NATURAL GAS | | 1,505 | 1,505 | 1,504 | 1,504 | 1,505 | 1,505 |
| COMPRESSED AIR | | 20 | 0/1 | 0 0 | 5 <u>1</u> 0 | 797 1 | 201 01 |
| MATER | | 102 | 102 | 89 | 83 | 001 | IOO |
| UTILITIES COST TOTAL | ** | 2,573 | 2,573 | 2,515 | 2,489 | 2,560 | 2,560 |
| VARIABLE COST TOTAL | *** | 119,704 | 120,499 | 118,230 | 115,977 | 119,921 | 119,981 |
| FIXED COST | | | | | | | |
| LABOR COST TOTAL DEDDEFIATION TOTAL | | 2 . NZZ | 2.027 | 891 2 770 | 168 177 | 168 1227 L | 168 1740 |
| REPAIR COST TOTAL | | 1,203 | 1,203 | 1,196 | 1,193 | 2,406 | 2,406 |
| OTHER COST TOTAL | | 368 | 868 | 841 | 827 | 868 | 867 |
| FIXED COST TOTAL | *** | 5,996 | 5,995 | 5,267 | 4,547 | 5,801 | 5,800 |
| BAR COST TOTAL | **** | 125,699 | 126,494 | 123,497 | 120,524 | 125,722 | 125,781 |

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MANUFACTURING COST SHEET (AMOUNT) - BAR -

| (UNIT : 1,000US\$) VARIABLE COST RAM MATERIAL & SUPPLIES BAR BILLET COST P.BILLET COST BAR BILLET COST BAR DELLET COST RAM MAT & SUPPLIES COST MANUFACTURING SUPLLES COST RAM MAT & SUPPLIES C TOTAL ** BY-PRODUCT SCRAP COST SCALE BAR UTILITIES SCALE BAR UTILITIES COMPRESED AIR MATURAL GAS COMPRESED AIR MATURAL GAS COMPRESED AIR MATURAL GAS COMPRESED AIR MATURAL GAS COMPRESED AIR MATURAL COST TOTAL ** VARIABLE COST TOTAL *** VARIABLE COST TOTAL *** | | | 2006 2006 117,756 117,756 11,756 1,606 119,356 1,606 1,505 1,606 2,560 119,983 2,560 2,406 2,406 2,406 | 2007 2007 116,958 1,606 1,505 1,505 1,505 1,505 1,505 2,560 2,560 1,636 2,560 1,636 2,560 2,500 2,560 2,5000 2,500 2,500 2,500 2,5000 2,500 2,5000 2,5000 2, | 2008 2008 117,693 117,693 1,606 119,699 1,939 1,939 1,939 1,939 1,939 1,939 1,939 1,939 1,939 1,939 2,5560 1,939 2,5560 2,5665 2,5665 2,5660 2,56655 2,56655 2,56655 2,56655 2,566555 2,566555 2,5665555555555 | 2009 2009 117,765 117,765 1,966 1,959 1,959 1,950 2,560 119,991 2,600 2,560 2,560 2,560 2,560 2,560 | 2010 2010 117,756 117,756 119,756 1,939 1,606 1,562 1,560 1,562 2,560 119,983 1,636 2,560 119,983 |
|--|-----------|-----|---|--|--|--|---|
| FIXED COST TOTAL *** | ι Ω | 800 | 5,801 | 5,801 | 5,800 | 5,801 | 5,801 |
| BAR COST TOTAL **** | • 125,792 | 792 | 125,783 | 124,986 | 125,720 | 125,792 | 125,783 |

MANUFACTURING COST SHEET(AMOUNT) - BAB -

| 3Y-PRODUCT | 2012 117,754 117,754 119,360 | | 2013 117,703 0 117,703 119,309 | 2013 2014 ,703 117,756 0 0 ,703 117,756 ,606 1,606 |
|---|---------------------------------------|---------|--|--|
| SCRAP COST 1,939 SCALE BAR 0 | 1,939 0 | 1, | 1,939 0 | 939 I.,939 0 0 |
| UTILITIES ELECTRICITY 793 | 262 | ~ | 793 | 93 793 |
| 1, | 1,505 | 1,505 | ñ | ч, |
| | 162 | 162 | ŝ | |
| ESED AIR | o | | 0 | |
| NATER 100 International 100 International 100 | 100 2,660 | 100 | ~ ~ | 100 |
| | 119,981 | 119,930 | | 1 |
| FIXED COST | | | | |
| ST TOTAL | 168 | 168 | | 891 |
| AĿ | 1,636 | 1,636 | | 1,636 |
| REPAIR COST TOTAL 2,406 | 2,406 | 2,406 | | 2,406 |
| | 867 | 867 | | |
| TOTAL *** | 5,800 | 5,800 | | មា |

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124,987

125,783

125,730

125,781

125,783

BAR COST TOTAL

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| | | | | MANUF | ACTURING COST | MANUFACTURING COST SHEET(AMDUNT) | |
|---|------------------------|------------------|------------------|------------------|------------------|----------------------------------|------------------|
| (UNIT : 1,000US\$) | | | | | | ••• | |
| VARIABLE COST PAN MATEDIAL • • • • • • • • • • • • • • • • • • • | | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
| ROD BILLET COST P.BILLET COST | | 111,924 0 | 111,027 0 | 111,021 0 | 111,054 0 | 111,055 0 | 110,998 0 |
| SUB TOTAL | * | 111,924 | 111,027 | 111,021 | 111,054 | 111,055 | 110,998 |
| MANUFACTURING SUPPLIES RAW MAT & SUPPLIES C TO | LES COST : TOTAL ** | 1,481 113,405 | 1,548 112,575 | 1,296 112,317 | 1,296 112,350 | 1,296 112,351 | 1,296 112,294 |
| BY-PRODUCT SCRAP SCALE ROD | | 1,324 0 | 1,324 | 3,324 0 | 1,324 0 | 1,324 0 | 1,324 C |
| UTILITIES | | | , , | 4 4 1 | | | - |
| NATURAL GAS | | 1,230 | 1,230 | 1,230 | 1,230 | 1,230 | 1,230 1,230 |
| O2N2 COMPRESSED AIR | | 27 0 | 26 2 | 26 0 | 26 7 | 2¢ | 26 D |
| WATER UTILITIES COST TOTAL | ** | 150 | 150 2,735 | 150 2,735 | 150 2,735 | 150 2,735 | 150 2,735 |
| VARIABLE COST TOTAL | *** | 114,817 | 113,986 | 113,728 | 113,760 | 113,761 | 113,704 |
| FIXED COST LABOR COST TOTAL | | 715 | 715 | 715 | 715 | 517 | 715 |
| DEPRECIATION TOTAL | | 4,309 | 4,292 | 4,292 | 4,292 | 4,292 | 4,292 |
| REPAIR COST TOTAL | | 1,395 | 1,396 | 1,396 | 1,396 | 1,396 | 1,396 |
| OTHER COST TOTAL | | 1,119 | 1,074 | 1,069 | 1,069 | 1,069 | 1,069 |
| FIXED COST FOIAL | *** | 7,539 | 17461 | 7,473 | 7,472 | 7,473 | 7,473 |
| ROD COST TOTAL | *** | 122,356 | 121,463 | 121,200 | 121,233 | 121,234 | 121,177 |

CASE 0-1 Existing Mithout Escalation (UP-2)

MANUFACTURING COST SHEET (AMOUNT) - ROD -

| (UNIT : 1,000US\$) | | .* | | | 1 CON 1 | | |
|---|-------------------------|------------------|------------------|-----------------------|------------------|------------------|------------------|
| VARIABLE COST | | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
| RAM MATERIAL & SUPPLIES ROD BILLET COST P.BILLET COST | | 110,307 0 | 0 0 | 108,978 0 | 106,886 0 | 110,524 0 | 110,580 0 |
| SUB TOTAL | * | 110,307 | 111,054 | 108,978 | 106,886 | 110,524 | 110,580 |
| MANUFACTURING SUPPLIES RAW MAT & SUPPLIES C TO | LIES COST C TOTAL ** | 1,296 111,603 | 1,296 112,350 | 1,296 110,274 | 1,296 108,182 | 1,296 111,820 | 1,296 111,876 |
| BY-PRODUCT SCRAP SCALE ROD | | 1,324 | 1,324 0 | 1,324 0 | 1,324 0 | 1,324 0 | 1,324 0 |
| UTILITIES | | 1.200 | 1 200 | 012 F | 202 6 | 102 7 | נו ה ר |
| NATURAL GAS | | 1.230 | 1,230 | 1,229 | 1.229 | 0224T | 070'T |
| 02N2 | | 26 | 26 | 21 | 19 | 25 | 55 |
| COMPRESSED AIR | | 0 | 0 | o ¹ | 0 | Q | 0 |
| WATER Utilities cost total | ** | 150 2,735 | 150 2,735 | 131 2,692 | 122 2,672 | 146 2,726 | 146 2,726 |
| VARIABLE COST TOTAL | *** | 113,014 | 113,760 | 111,642 | 109,530 | 113,222 | 113,278 |
| FIXED COST I ABOR COST | | L F F | Ļ | i i i | L F | L F | Ļ |
| DEPRECIATION TOTAL | | 4.292 | 4.292 | 4,312 | 3,082 | 669°2 | 669°2 |
| REPAIR COST TOTAL | | 1,396 | 1,396 | 1,388 | 1,384 | 2,791 | 2,791 |
| OTHER COST TOTAL | | 1,069 | 1,069 | 1,043 | 1,029 | 1,069 | 1,068 |
| FIXED COST TOTAL | *** | 7,473 | 7,472 | 73,457 | 6,210 | 7,275 | 7,274 |
| RCD COST TOTAL | **** | 120,486 | 121,233 | 119,099 | 115,740 | 120,496 | 120,552 |
| | | | | | | | |

MANUFACTURING COST SHEET (AMOUNT)

| (UNIT : 1,000US\$) | | · . | · | | - KOD - | | |
|--|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|
| VARIABLE COST DAW MATEDIAN & SUDDITES | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| ROD BILLET COST P.BILLET COST | | 110,590 0 | 110,582 0 | 109,833 0 | 110,523 0 | 110,590 0 | 110,582 0 |
| SUB TOTAL | * | 110,590 | 110,582 | 109,833 | 110,523 | 110,590 | 110,582 |
| MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | COST DTAL ** | 1,296 111,886 | 1,296 111,878 | 1,296 111,129 | 1,296 111,819 | 1,296 111,886 | 1,296 111,878 |
| BY-PRODUCT SCRAP SCALE ROD | | 1,324 0 | 1,324 0 | 1,324 0 | 1,324 0 | 1,324 0 | 1,324 0 |
| UTILITES | | | | | | | I |
| ELECTRICITY | | 1,325 | 1,325 | 1,325 | 1,325 | 1,325 | 1,325 |
| NALUKAL BAS | | 1,725U 25 | 1,25U 25 | 1,725U 25 | 1,25U 25 | 1,23U 25 | 1,250 |
| COMPRESSED AIR | | • | 0 | 0 | Ö | Ö | a |
| WATER | X | 146 | 146 2 707 | 146 207 | 146 124 | 146 | 146 |
| ALTERITES CASE INIAL | ĸĸ | - 07/47 | 07/67 | 67/67 | 07/67 | 07/67 | 07/67 |
| VARIABLE COST TOTAL | *** | 113,287 | 113,279 | 112,530 | 113,221 | 113,288 | 113,279 |
| FIXED COST LABOR COST TOTAL | | 317 | 715 | 715 | 715 | זנע | 715 217 |
| DEPRECIATION TOTAL | | 2,700 | 2,700 | 2,700 | 2,699 | 2,699 | 2,699 |
| REPAIR COST TOTAL | | 2,791 | 2,791 | 2,791 | 2,791 | 2,791 | 2,791 |
| OTHER COST TOTAL | | 1,069 | 1,069 | 1,069 | 1,068 | 1,069 | 1,069 |
| FIXED COST TOTAL | × * | 7,275 | 7,276 | 7,275 | 7,274 | 7,275 | 7,275 |
| ROD COST TOTAL | **** | 120,563 | 120,555 | 119,806 | 120,495 | 120,562 | 120,554 |

| | (102) |
|------|------------|
| | ESCALATION |
| | MITHOUT |
| | EXISTING |
| CASE | |

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MANUFACTURING COST SHEET(AMOUNT) - ROD -

| (UNIT : 1,000US\$) | | | | | 1 ROD 1 | |
|--|-----------------|------------------|------------------|------------------|------------------|------------------|
| VARIABLE COST | | 2011 | 2012 | 2013 | 2014 | 2015 |
| RAW MATERIAL & SUPPLIES ROD BILLET COST P.BILLET COST | | 110,582 0 | 110,580 0 | 110,532 0 | 110,582 0 | 109,834 0 |
| SUB TOTAL | * | 110,582 | 110,580 | 110,532 | 110,582 | 109,834 |
| MANUFACTURING SUPPLIES COST RAW MAT & SUPPLIES C TOTAL ** | COST OTAL ** | 1,296 111,878 | 1,296 111,876 | 1,296 111,828 | 1,296 111,878 | 1,296 111,130 |
| BY-PRODUCT SCRAP SCALE ROD | | 1,324 0 | 1,324 0 | 1,324 0 | 1,324 0 | 1,324 0 |
| UTILITIES FLECTRICITY | | 1.3 <i>9</i> F | 1.325 | 1.325 | 1.20F | 707. ľ |
| NATURAL GAS | | 1,230 | 1,230 | 1,230 | 1.230 | 1,230 |
| 02N2 | | 25 | 25 | 25 | 25 | 25 |
| COMPRESSED AIR | | 0 | 0 | Ö | 0 | 0 |
| MATER | | 146 | 146 | 146 | 146 | 146 |
| UTILITIES COST TOTAL | * | 2,726 | 2,726 | 2,726 | 2,726 | 2,726 |
| VARIABLE COST TOTAL | *** | 113,279 | 113,278 | 113,230 | 113,279 | 112,531 |
| FIXED COST LABOR COST TOTAL | | 715 | 715 | 715 | 715 | 715 |
| DEPRECIATION TOTAL | | 2,699 | 2,699 | 2,699 | 2,699 | 2,699 |
| REPAIR COST TOTAL | | 2,791 | 2,791 | 2,791 | 2,791 | 2,791 |
| OTHER COST TOTAL | | 1,069 | 1,069 | 1,069 | 1,069 | 1,069 |
| FIXED COST TOTAL | *** | 7,275 | 7,274 | 7,274 | 7,275 | 7,275 |
| ROD COST TOTAL | **** | 120,554 | 120,552 | 120,504 | 120,554 | 119,306 |

CASE 1-1

UPDATE WITHOUT ESCALATION

.

CASE 1-1 UPDATE-2 WITHOUT ESCALATION

| (UNIT : 1,000US\$) | | | : | MANUFAC | MANUFACTURING COST SHEET(AMOUNT) - DRP - | HEET (AMOUNT) | |
|--|-----------------|----------------|----------------|----------------|---|----------------|----------------|
| VARIABLE COST | | 1993 | 966T | 1995 | 1996 | 1997 | 1998 |
| RAM MATERIAL & SUPPLIES Pellet Cost | | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| SUB TOTAL | * | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | COST OTAL ** | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 |
| BY-PRODUCT OXIDE FINES OXIDE THICKNER | | 00 | 00 | 00 | 00 | 00 | 00 |
| UTTLITIES ELECTRICITY | | 1,964 | 1,963 | 1,963 | 2,052 | 1,970 | 1,969 |
| NATURAL GAS D2N2 | | 17,294 41 | 17,294 40 | 17,294 40 | 17,292 84 | 17,285 69 | 17,285 69 |
| COMPRESSED AIR MATER | | 203 585 | 208 584 | 208 583 | 448 | 151 796 | 151 790 |
| UTILITIES COST TOTAL | * | 20,091 | 20,090 | 20,088 | 20,929 | 20,272 | 20,264 |
| VARIABLE COST TOTAL | *** | 72,029 | 72,028 | 72,026 | 72,867 | 72,210 | 72,202 |
| FIXED COST LABOR COST TOTAL | | 684 | 684 | 684 | 684 | 684 | 684 |
| DEPRECIATION TOTAL REPAIR COST TOTAL | | 6,153 2,499 | 6,136 2,500 | 6,136 2,500 | 6,134 2,023 | 6,136 2,022 | 6,136 2,022 |
| S REPAIR COST TOTAL OTHER COST TOTAL | | 1,537 6,852 | 1,537 6,526 | 1,537 6,526 | 1,537 6,625 | 1,537 6,681 | 1,537 6,682 |
| FIXED COST TOTAL | *** | 17,725 | 17,382 | 17,383 | 17,002 | 17,060 | 17,061 |

89,264

89,270

89,869

89,403

89,410

89,754

DRP COST TOTAL

CASE 1-1 UPDATE-2 MITHOUT ESCALATION

2004

| (UNIT : 1,000U\$\$) | · | | | MANUFAC | MANUFACTURING COST SHEET (AMOUNT) - DRP - | SEET (AMOUNT) | |
|---|---------------------|---------------|---------------|---------------|--|-----------------|---------------|
| VARIABLE COST | | 666 I | 2000 | 2001 | 2002 | 2003 | 2004 |
| RAW MATERIAL & SUPPLIES PELLET COST | ŝ | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| SUB TOTAL | * | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| MANUFACTURING SUPPLIES COST RAW MAT & SUPPLIES C TOTAL | IS COST TOTAL ** | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 |
| BY-PRODUCT OXIDE FINES OXIDE THICKNER | | 00 | 00 | 00 | 00 | 00 | 00 |
| UTILITIES ELECTRICITY | | 1,969 | 1,969 | I ,948 | 1,937 | 1,965 | 1,965 |
| NATURAL GAS | | 17,285 | 17,285 | 17,272 | 17,266 | 17,280 | 17,280 |
| OZNZ COMPRESSED AIR | | 69 153 | 151 | 148 | 09 146 | 67 150 | 67 150 |
| MATER | · | 262 | 064 | 735 | 208 | 279 | 644 |
| UTILITIES COST TOTAL | ** | 20,264 | 20,264 | 20,164 | 20,117 | 20,242 | 20,242 |
| VARIABLE COST TOTAL | *** | 72,202 | 72,202 | 72,102 | 72,055 | 72,180 | 72,180 |
| FIXED COST | | | • | ÷ | | | |
| LABOR COST TOTAL | | 684 | 684 | 684 | 684 | 684 | 684 |
| DEPRECIATION TOTAL | | 6,136 | 6 , 134 | 5,684 | 3,295 | 3,295 | 3,293 |
| REPAIR COST TOTAL | | 2,022 | 2,023 | 2,019 | 2,018 | 4,524 | 4,524 |
| S REPAIR COST TOTAL | | 0 | 1,537 | 1,537 | 1,537 | 1,537 | 1,537 |
| OTHER COST TOTAL | | 6,682 | 6,682 | 6,651 | 6,635 | 6,680 | 6,680 |
| FIXED COST TOTAL | *** | 15,524 | 17,059 | 16,575 | 14,169 | 16,720 | 16,718 |
| DRP COST TOTAL | **** | 87,727 | 89,261 | 88,678 | 86,224 | 88,900 | 83,895 |

CASE 1-1 UPDATE-2 MITHOUT ESCALATION

| | | | : | MANUFAC | MANUFACTURING COST SHEET (AMOUNT) | EET (AMOUNT) | |
|---|-------------------|---------------|---------------|---------------|-----------------------------------|----------------|---------------|
| (UNIT : 1,000US\$) | | | | | 1 DKP 1 | | |
| VARIABLE COST | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| RAW MATERIAL & SUPPLIES PELLET COST | | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| SUB TOTAL | * | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| MANUFACTURING SUPPLIES RAM MAT & SUPPLIES C TI | t COST OTAL ** | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 |
| BY-PRODUCT OXIDE FINES OXIDE THICKNER | | 00 | . 00 | 00 | 0 0 | . 00 | 00 |
| UTILITIES ELECTRICITY | | 1,965 | 1,965 | 1,965 | 1,965 | 1,965 | 1,965 |
| NATURAL GAS | | 17,280 | 17,280 | 17,280 | 17,280 | 17,280 | 17,280 |
| OZNZ COMPRESSED ATR | | 67 160 | 67 150 | 67 150 | 67 160 | 67 3 ED | 67 150 |
| MATER | | 677 | 622 | 279 | 644 | 622 | 622 |
| UTILITIES COST TOTAL | ** | 20,242 | 20,242 | 20,242 | 20,242 | 20,242 | 20,242 |
| VARIABLE COST TOTAL | *** | 72,180 | 72,180 | 72,180 | 72,180 | 72,180 | 72,180 |
| FIXED COST LABOR COST TOTAL | | 684 | 684 684 | 68¢ | 684 684 | 684 | 684 |
| DEPRECIATION TOTAL | | 3,312 | 3,295 | 3,295 | 3,293 | 3,312 | 3,295 |
| REPAIR COST TOTAL | | 4,524 | 4,524 | 4,524 | 4,524 | 4,524 | 4,524 |
| S REPAIR COST TOTAL | | 1,537 | 1,537 | 0 | 1,537 | 1,537 | 1,537 |
| OTHER COST TOTAL | | 6,680 | 6,680 | 6,680 | 6,680 | 6,680 | 6,680 |
| FIXED COST TOTAL | *** | 16,737 | 16,720 | 15,183 | 16,718 | 16,737 | 16,720 |
| DRP COST TOTAL | **** | 88,917 | 88,900 | 87,363 | 88,898 | 88,917 | 88,900 |

| | ESCALATION |
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| | MITHOUT |
| 1-1 | UPDATE-2 |
| CASE | |

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| (MIT : 1,000US\$) | | | | MANUFAC | MANUFACTURING COST SHEET(AMOUNT) - DRP - | EET (AMOUNT) |
|--|-----------------|-----------------|------------------|-----------------|---|-----------------|
| VARIABLE COST | | 1102 | 2012 | 2013 | 2014 | 2015 |
| RAW MATERIAL & SUPPLIES PELLET COST | | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| SUB TOTAL | * | 51,253 | 51,253 | 51,253 | 51,253 | 51,253 |
| MANUFACTURING SUPPLIES COST RAW MAT & SUPPLIES C TOTAL ** | COST DTAL ** | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 | 685 51,938 |
| BY-PRODUCT OXIDE FINES OXIDE THICKNER | | 00 | 60 | 00 | 00 | 00 |
| UTILITIES ELECTRICITY NATURAL GAS | | 1,959 17,280 | 1,965 17.280 | 1,965 17,280 | 1,965 17,280 | 1,965 17,280 |
| O2N2 COMPRESSED AIR | | 105 | 145 | 99 145 | 145 | |
| WATER UTILITIES COST TOTAL | * | 670 20,069 | 768 20,224 | 768 20,224 | 768 20,224 | 768 20,224 |
| VARIABLE COST TOTAL | *** | 72,007 | 72,162 | 72,162 | 72,162 | 72,162 |
| FIXED COST LABOR COST TOTAL | | 684 2004 | 684 200 | 684 | 684 684 | 684 |
| REPAIR COST TOTAL | | 4,532 4,532 | 5, 575 4, 525 | 5,512 4,525 | 5,295 4,525 | 3,2%5 4,525 |
| S REPAIR COST TOTAL OTHER COST TOTAL | | 1,537 6,680 | 1,537 6.678 | 1,537 6.679 | 1,537 | 0 6.679 |
| FIXED COST TOTAL | *** | 16,727 | 16,717 | 16,736 | 16,720 | 15,183 |
| DRP COST TOTAL | **** | 88,735 | 88,880 | 88,899 | 88,882 | 87,345 |

| | ESCALATION |
|------------|-------------------|
| | WI THOUT |
| 1-1 1-1 | UPDATE-2 |
| CASE | |

| | | | · | MANUFAC | MANUFACTURING COST SHEET (AMOUNT - LCP - | HEET (AMOUNT) | · |
|---|--------------------|----------|----------|----------|---|-----------------|---------------|
| (\$200) | | 1993 | 1994 | 1995 | 966T | 1997 | 1,998 |
| VARIABLE COST RAW MATERIAL & SUPPLIES LIME STONE COST | | 486 | 486 | 486 | 649 | 767 | 767 |
| SUB TOTAL | * | 486 | 486 | 486 | 649 | 767 | 767 |
| MANUFACTURING SUPPLIES (RAM MAT & SUPPLIES C TO | S COST TOTAL ** | 5 491 | 5 491 | 164 2 | 4 5 4 5 4 | 8 775 | \$ \$ |
| BY-PRODUCT LIME FINES LIME STONE FINES | | 00 | 00 | 00 | 00 | 00 | 00 |
| UTILITIES ELECTRICITY | | 57 | 57 | 57 | 52 | 8 | 8 (|
| NATURAL GAS | | 300 8 | 300 | 300 8 | 277 16 | 473 22 | 473 22 |
| COMPRESSED AIR | | 00 | 00 | 00 | 2 |] 0 | ; • |
| WATER UTILITIES COST TOTAL | ** | 0 365 | 0 265 | 365 | 0 348 | 0 586 | 0 286 |
| VARIABLE COST TOTAL | *** | 856 | 856 | 856 | 802 | 1,361 | 1,361 |
| XED COST 1 AROP COST TOTAL | | 291 | 29L | 29F | | 16% | 277L |
| DEPRECIATION TOTAL | | 343 | 341 | 341 | 341 | 341 | н 14 14 |
| REPAIR COST TOTAL | | 157 | 157 | 157 | 127 | 127 | 127 |
| S REPAIR COST TOTAL | | 0 | 118 | 118 | 118 | 118 | 0 |
| OTHER COST TOTAL | | 399 | 358 | 358 | 384 | 426 | 427 |
| FIXED COST TOTAL | *** | 1,041 | 1,116 | 1,117 | 1,112 | 1,154 | 1,037 |
| LCP COST TOTAL | **** | 1,897 | 1,972 | 1,972 | 1,914 | 2,515 | 2,398 |

| (TN | 3 2004 | 767 | 767 | 8 8 5 775 | 00 | | | | | ບ ເ ເຂົ | 0 1,360 | | | | | | | 0 1,177 | .9 2,537 |
|--|---|-----------------|-----------|--|--|---------------------------|-------------|------|----------------|----------------------|---------------------|------------|------------------|--------------------|-------------------|---------------------|------------------|------------------|----------------|
| ST SHEET (AMOUI | 2003 | 767 | 767 | 8 775 | | ā | 473 | 8 | | 585 | 1,360 | | 143 | 20 | 28 | | 42 | 1,06 | 2,419 |
| MANUFACTURING COST SHEET (AMOUNT) - LCP - | 2002 | 767 | 767 | 775 | 00 | . a | 473 | 19 | 00 | 580 | 1,356 | | I43 | 207 | 127 | 118 | 387 | 985 | 2,337 |
| MAN | 1002 | 767 | 767 | 8 775 | | Ċ | 473 | 20 | 00 | 582 | 1,357 | | 143 | 255 | 127 | 118 | 401 | 1,043 | 2,400 |
| | 2000 | 767 | 767 | 8 775 | 00 | G | 473 | 22 | 00 | 586 | 1,361 | | 143 | 341 | 127 | 118 | 426 | 1,155 | 2,516 |
| | 1999 | 767 | 767 | 8 775 | 00 | G | 473 | 22 | 00 | 586 | 1,361 | | 143 | 341 | 127 | 118 | 427 | 1,155 | 2,516 |
| | LIES | | * | IES COST C TOTAL ** | • | | | | | AL ** | L *** | | | | | | | *** | **** |
| (UNIT : 1,000US\$) | VARIABLE COST RAM MATERIAL & SUPPLIE | LIME STONE COST | SUB TOTAL | MANUFACTURING SUPPLIES RAM MAT & SUPPLIES C | BY-PRODUCT LIME FINES LIME STONE FINES | UTTLITIES EI ECTRICITY | NATURAL GAS | OZN2 | COMPRESSED AIR | UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST | LABOR COST TOTAL | DEPRECIATION TOTAL | REPAIR COST TOTAL | S REPAIR COST TOTAL | OTHER COST TOTAL | FIXED COST TOTAL | LCP COST TOTAL |

AI-30

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MANUFACTURING COST SHEET (AMOUNT)

| (UNIT : 1,000US\$) VARIABLE COST RAW MATERIAL & SUPPLIES RAW MATERIAL & SUPPLIES SUB TOTAL MANUFACTURING SUPPLIES (RAM MAT & SUPPLIES C TI | s * cost TOTAL ** | 2005 767 767 8 | 2006 767 767 8 775 | 2007 767 767 8 8 | - LCP - 2008 767 767 8 8 | 2009 767 755 775 | |
|---|-------------------------|--------------------------|--------------------------------|--|---|---|--|
| | | 00 | 00 | 00 | 00 | 00 | |
| UTILITIES ELECTRICITY NATURAL GAS 02N2 COMPRESSED AIR | | 6 44 22 2 2 2 0 0 | 90 22 22 0 | 6 5 5 5 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 473 22 22 0 | 473 22 22 22 | |
| WATER UTILITIES COST TOTAL VAPTARIE COST TOTAL | * * | 0 585 1.260 | 0 585 1.260 | 0 585 1,260 | 0 585 1 260 | 0 585 | |
| FIXED COST TOTAL LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL | | 143 143 206 284 | 145 2065 2865 2865 | 143 206 284 | 143 206 284 | 2004 11 2004 12 2004 12 2004 2004 2004 2 | |
| S REFAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL | *** | 427 427 1,177 | 427 427 1,178 | 427 427 1,177 | 427 1,059 | 427 427 1,178 | |
| LCP COST TOTAL | **** | 2,537 | 2,537 | 2,537 | 2,419 | 2,537 | |

| | ESCALATION |
|------|------------|
| | MITHOUT |
| 1-1 | UPDATE-2 |
| CASE | |

| (UNT : 1,000US\$) | | | | MANUFACTUR | Manufacturing Cost Sheet(amount) - LCP - | r (AMOUNT) |
|---|-----------|----------|------------|------------|---|--------------|
| VARIABLE COST | | 1102 | 2012 | 2013 | 2014 | 2015 |
| RAW MATERIAL & SUPPLIES LIME STONE COST | | 767 | 767 | 767 | 767 | 767 |
| SUB TOTAL * | | 767 | 767 | 767 | 767 | 767 |
| MANUFACTURING SUPPLIES COST RAW MAT & SUPPLIES C TOTAL | 1 1 ** | 8 775 | 8 775 | 8 775 | 8 775 | 8 775 |
| BY-PRODUCT LIME FINES LIME STONE FINES | | 00 | 00 | 00 | 00 | 00 |
| UTILITIES ELECTRICITY | | 89 | 06 | 06 | 06 | 06 |
| NATURAL GAS | | 473 | 473 | 473 | 473 | 473 |
| D2N2 | | 18 | 22 | 22 | 22 | 22 |
| COMPRESSED AIR | | 0 (| 0 | | 0 | 0 |
| MATER UTILITIES COST TOTAL * | * | 580 | 584 | 584 | 584 | 584 584 |
| VARIABLE COST TOTAL * | *** | 1,356 | 1,359 | 1,359 | 1,359 | 1,359 |
| FIXED COST LABOR COST TOTAL | · | 143 | 143 | 143 | 143 | 143 |
| DEPRECIATION TOTAL | | 206 | 206 | 206 | 206 | 206 |
| REPAIR COST TOTAL S BEDATE COST TOTAL | | 284 | 284 118 | 284 0 | 284 | 284 |
| OTHER COST TOTAL | | 427 | 425 | 425 | 110 | 425 625 |
| | *** | 1,178 | 1,176 | 1,058 | 1,176 | 1,176 |
| LCP COST TOTAL * | **** | 2,533 | 2,535 | 2,417 | 2,535 | 2,535 |

MANUFACTURING COST SHEET (AMOUNT) - SMP -

| (UNIT : 1,000US\$) | | | | | - Sivib - | | |
|--|------|---------|----------|---------|-----------|---------|---------|
| | | | | | | | |
| 7000 L [0] + 4400 | | £66T | 1994 | 1995 | 1996 | 1997 | 1998 |
| VANLADLE LUS! RAM MATERIAL & SUPPLIES | | | | | | | |
| | | 89,754 | 89,410 | 89,408 | 89,869 | 89,270 | 89,264 |
| LIME STONE | | 1,897 | 1,972 | 1,972 | 1,914 | 2,515 | 2,393 |
| SCRAP | | 39,866 | 39,862 | 39,855 | 41,831 | 96,032 | 96,023 |
| FESI | | 2,403 | 2,403 | 2,403 | 2,020 | 2,917 | 2,917 |
| AL | | 185 | 185 | 185 | 164 | 250 | 250 |
| COKE BREEZE | | 545 | 545 | 545 | 1,046 | 2,537 | 2,537 |
| ELECTRODE | | 10,936 | 10,936 | 10,936 | 6,790 | 15,183 | 15,183 |
| FURNACE BRICK | ` | 1,923 | 1,923 | L , 923 | I,647 | 2,385 | 2,385 |
| LADLE BRICK | | 3,600 | 3,600 | 3,600 | 3,614 | 6,331 | 6,331 |
| TUNDISH BRICK | | 1,669 | 1,669 | 1,669 | 1,479 | 2,258 | 2,258 |
| FETLING MAT | | 4,026 | 4,026 | 4,026 | 3,242 | 4,753 | 4,753 |
| HBI | | 24,655 | 24,655 | 24,655 | 19,643 | 25,308 | 25,308 |
| FEPTN | | 6,801 | 6,801 | 6,801 | 5,699 | 8,205 | 8,205 |
| FEV | | 72 | 72 | 72 | 58 | 78 | 78 |
| BURNT DOLOMITE | | 67 | 67 | 67 | 55 | 62 | 79 |
| SUB TOTAL | * | 188,401 | 188,128 | 188,120 | 182,071 | 258,101 | 257,968 |
| MANUFACTURING SUPLLIES COST | ST | 930 | 630 | 930 | 824 | 1,258 | 1.258 |
| | **] | 189,331 | 189,058 | 189,050 | 182,895 | 259,359 | 259,226 |
| | | | | | | | |
| BY-PRODUCT | | | | | | | |
| SURAP | | 2,589 | 2,589 | 2,589 | 2,294 | 3,512 | 3,512 |
| | | 0 | . | 0 | 0 | 0 | 0 |
| SLAG | | 0 | 0 | 0 | 0 | 0 | 0 |
| SCALE SMP | | 0 | 0 | • | 0 | • | 0 |
| WASIE BRICK | | 0 | 0 | o | 0 | 0 | 0 |
| SUB TOTAL | * | 2,589 | 2,589 | 2,589 | 2,294 | 3,512 | 3,512 |
| UTILITES | | | | | · | | |
| ELECTRICITY | | 18,173 | 18,171 | 18,169 | 15,775 | 20,982 | 20,973 |
| NATURAL GAS | | 352 | 352 | 352 | 318 | 500 | 500 |
| 02N2 | | 87 | 36 | 85 | 158 | 200 | 66I |
| COMPRESSED AIR | | 153 | 153 | 153 | 2,197 | 2,502 | 2,502 |
| | | 460 | 460 | 459 | 177 | 953 | 946 |
| UTILITIES COST TOTAL | ** | 19,226 | 19,222 | 19,218 | 19,218 | 25,137 | 25,120 |
| | | ÷ | | | | | |

| 280,834 | 3,082 | 16,435 | 5,159 | 5,625 | 30,301 | 311,135 |
|---------------------|--------------------------------|--------------------|-------------------|------------------|------------------|----------------|
| 280,985 | 3,082 | 16,435 | 5,159 | 5,623 | 30,298 | 311,283 |
| 199,820 | 3,082 | 13,406 | 5,160 | 5,376 | 27,024 | 226,843 |
| 205,679 | 2,311 | 11,243 | 4,105 | 4,778 | 22,438 | 228,117 |
| 205,691 | 2,311 | 11,243 | 4,105 | 4,778 | 22,437 | 228,128 |
| 205,968 | 2,311 | 11,301 | 4,103 | 6,289 | 24,004 | 229,972 |
| *** | | | | | *** | ** ** |
| VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL | DEPRECIATION TOTAL | REPAIR COST TOTAL | OTHER COST TOTAL | FIXED COST TOTAL | SMP COST TOTAL |

MANUFACTURING COST SHEET (AMOUNT) - SMP -

.

| 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|---------|-----------------|----------------|---------|---------|-----------------|
| | | 1001 | | | |
| 87,727 | 89,261 | 88,678 | 86,224 | 006*88 | 88,898 |
| 2,516 | 2,516 | 2,400 | 2,337 | 2,419 | 2,537 |
| 70,UCS | 220,07 2 017 | 70,07 70,07 | 70,025 | 70°04 | 70,070 7 0 0 |
| C 211 | 250 | 250 | 250 | 250 | 250 |
| 2,537 | 2,537 | 2,537 | 2,537 | 2,537 | 2,537 |
| 15,183 | 15,183 | 15,183 | 15,183 | 15,183 | 15,183 |
| 2,385 | 2,385 | 2,385 | 2,385 | 2,385 | 2,385 |
| 6,331 | 6,331 | 6,331 | 6,331 | 6,331 | 6,331 |
| 2,258 | 2,258 | 2,258 | 2,258 | 2,258 | 2,258 |
| 4,753 | 4,753 | 4,753 | 4,753 | 4,753 | 4,753 |
| 25,308 | 25,308 | 25,308 | 25,308 | 25,308 | 25,308 |
| 8,205 | 8,205 | 8,205 | 8,205 | 8,205 | 3,205 |
| 78 | 78 | 78 | 78 | 78 | 78 |
| 62 | 62 | 62 | 29 | 29 | 62 |
| 256,549 | 258,083 | 257,384 | 254,868 | 257,626 | 257,741 |
| 1,258 | 1,258 | 1,258 | 1,258 | 1,258 | 1,258 |
| 257,807 | 259,341 | 258,642 | 256,126 | 258,884 | 258,999 |
| | | | | | |
| 3,512 | 3,512 | 3,512 | 3,512 | 3,512 | 3,512 |
| 0 | 0 | 0 | 0 | 0 | - |
| • | 0 | 0 | • | 0 | |
| Q | Q | G | 0 | 0 | 0 |
| 0 | 0 | • | o | 0 | Ű |
| 3,512 | 3,512 | 3,512 | 3,512 | 3,512 | 3,512 |
| | - | | | | : |
| 20,973 | 20,973 | 20,745 | 20,633 | 20,932 | 20,932 |
| 500 | 500 | 464 | 499 | 499 | 465 |
| 199 | 199 | 180 | 172 | 194 | 194 |
| 2,502 | 2,502 | 2,444 | 2,418 | 2,484 | 2 ,484 |
| 946 | 946 | 880 | 848 | 633 | 933 |
| 25,120 | 25,120 | 24,748 | 24,570 | 25,043 | 25,043 |
| | | | | | |

| 280,530 | | 3,082 | 211,795 | 9,266 | 5,614 | 29,757 | 310,287 | |
|---------------------|------------|------------------|--------------------|-------------------|------------------|------------------|----------------|--|
| 280,415 | | 3,082 | 11,795 | 9,266 | 5,614 | 29,757 | 310,172 | |
| 277, 184 | | 3,082 | 11,795 | 5,149 | 5,546 | 25,571 | 302,755 | |
| 279,879 | | 3,082 | 13,345 | 5, 151 | 5,573 | 27,151 | 307,030 | |
| 280,950 | | 3,082 | 16,435 | 5,160 | 5,624 | 30,300 | 311,250 | |
| 279,415 | | 3,082 | 16,435 | 5,159 | 5,625 | 30,301 | 309,716 | |
| *** | | | | | | *** | **** | |
| VARIABLE COST TOTAL | FIXED COST | LABOR COST TOTAL | DEPRECIATION TOTAL | REPAIR COST TOTAL | OTHER COST TOTAL | FIXED COST TOTAL | SMP COST TOTAL | |

MANUFACTURING COST SHEET(AMDUNT) - SMP -

| (UNIT : 1,000US\$) | | | | | | |
|-------------------------------|------------|---------|---------|-----------------|---------|---------|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| RAM MATERIAL & SUPPLIES | F 10 00 | 000 00 | | 600 | 110 00 | 000 00 |
| LIME STONE | 2,537 | 2,537 | 2,537 | 00,070 2.419 | 2.537 | 2,537 |
| SCRAP | 96,023 | 96,023 | 96,023 | 96,023 | 96,023 | 96,023 |
| FESI | 2,917 | 2,917 | 2,917 | 2,917 | 2,917 | 2,917 |
| AL | 250 | 250 | 250 | 250 | 250 | 250 |
| COKE BREEZE | 2,537 | 2,537 | 2,537 | 2,537 | 2,537 | 2,537 |
| ELECTRODE | 15,183 | 15,183 | 15,183 | 15,183 | 15,183 | 15,183 |
| FURNACE BRICK | 2,385 | 2,385 | 2,385 | 2,385 | 2,385 | 2,385 |
| LADLE BRICK | 6,331 | 6,331 | 6,331 | 6,331 | 6,331 | 6,331 |
| TUNDISH BRICK | 2,258 | 2,258 | 2,258 | 2,258 | 2,258 | 2,258 |
| FETLING MAT | 4,753 | 4,753 | 4,753 | 4,753 | 4,753 | 4,753 |
| HBI | 25,308 | 25,308 | 25,308 | 25,308 | 25,308 | 25,308 |
| FEMN | 8,205 | 8,205 | 8,205 | 8,205 | 8,205 | 8,205 |
| FEV | 78 | 78 | 78 | 78 | 78 | 78 |
| BURNT DOLOMITE | 62 | 62 | 62 | 62 | 62 | 62 |
| SUB TOTAL * | 257,760 | 257,744 | 256,206 | 257,623 | 257,761 | 257,744 |
| MANUFACTURING SUPLLIES COST | 1,258 | 1,258 | 1,258 | 1,258 | 1,258 | 1,258 |
| RAW MAT & SUPPLIES C TOTA! ** | 259.01R | 259.002 | 267.464 | 959 501 | 250.010 | 000 010 |
| | | | | Toolors | CT06/03 | 300(763 |
| BY PRODUCT | | | | | | |
| SCRAP | 3,512 | 3.512 | 3.512 | 3.612 | 3.612 | X. 510 |
| DUST | | 0 | 0 | 0 | 0 | 0 |
| SLAG | 0 | 0 | 0 | . 0 | 0 | 0 |
| SCALE SMP | 0 | • | 0 | 0 | 0 | 0 |
| WASTE BRICK | o | 0 | 0 | • | 0 | 0 |
| SUB TOTAL * | 3,512 | 3,512 | 3,512 | 3,512 | 3,512 | 3,512 |
| UTILITIES | | | | | | |
| ELECTRICITY | 20,932 | 20,932 | 20,932 | 20,932 | 20,932 | 20,932 |
| NATURAL GAS | 669 | 665 | 499 | 666 | 499 | 664 |
| O2N2 | 194 | 194 | 194 | 194 | 194 | 194 |
| COMPRESSED AIR | 2,484 | 2,484 | 2,484 | 2,484 | 2,484 | 2,484 |
| | 933 | 933 | 933 | 933 | 933 | 933 |
| UTILITIES COST TOTAL ** | 25,043 | 25,043 | 25,043 | 25,043 | 25,043 | 25,043 |
| | | | , T (| 27 | | |

AI-37

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| 280,533 | 3,082 11,795 9,266 5,614 29,757 | 310,290 | | |
|---------------------|---|----------------|--|-------|
| 280,550 | 3,082 11,795 9,266 5,614 29,757 | 310,307 | | : · · |
| 280,412 | 3,082 11,795 9,266 5,614 29,757 | 310,169 | | õ |
| 278,995 | 3,082 11,795 9,266 5,613 29,756 | 308,751 | | AI-38 |
| 280,533 | 3,082 11,795 9,266 5,614 29,757 | 310,290 | | |
| 280,549 | 3,082 3,082 9,266 5,614 29,756 | 310,306 | | |
| *** | *** | **** | | |
| VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL | SHP COST TOTAL | | |

MANUFACTURING COST SHEET(AMOUNT) - SMP -

| (UNIT : 1,000US\$) | | | | | |
|--|---------|------------|--------------|---------------|---------|
| | 2011 | 2012 | 2013 | 2014 | 2015 |
| VARIABLE COST Ram Material & Supplies | | | | | |
| DRI | 88,735 | 88,880 | 88,899 | 88,882 | 87,345 |
| LIME STONE | 2,533 | 2,535 | 2,417 | 2,535 | 2,535 |
| SCRAP | 96,023 | 96,023 | 96,023 | 96,023 | 96,023 |
| FESI | 2,917 | 2,917 | 2,917 | 2,917 | 2,917 |
| AL | 250 | 250 | 250 | 250 | 250 |
| COKE BREEZE | 2,537 | 2,537 | 2,537 | 2,537 | 2,537 |
| ELECTRODE | 15,183 | 15,183 | 15,183 | 15,183 | 15,183 |
| FURNACE BRICK | 2,385 | 2,385 | 2,385 | 2,385 | 2,385 |
| LADLE BRICK | 6,331 | 6,331 | 6,331 | 6,331 | 6,331 |
| TUNDISH BRICK | 2,258 | 2,258 | 2,258 | 2,258 | 2,258 |
| FETLING MAT | 4,753 | 4,753 | 4,753 | 4,753 | 4,753 |
| HBI | 25,308 | 25,308 | 25,308 | 25,308 | 25,308 |
| FEMN | 8,205 | 8,205 | 8,205 | 8,205 | 8,205 |
| FEV | 78 | 78 | 78 | . 78 | 78 |
| BURNT DOLOMITE | 62 | 62 | 62 | - 62 | 61 |
| SUB TOTAL * | 257,574 | 257,721 | 257,622 | 257,724 | 256,187 |
| MANUFACTURING SUPLLIES COST | 1,258 | 1,258 | 1,258 | 1,258 | 1,258 |
| RAM MAT & SUPPLIES C TOTAL ** | 258,832 | 258,979 | 258,880 | 258,982 | 257,445 |
| | | | | | |
| BY-PRODUCT SCDAD | 4 E J 2 | 2 613 | 2 510 | 2 E10 | 7 E10 |
| DUST | 0 | 317.6 | 20 | 0 | 0 |
| SLAG | 0 | 0 | 0 | 0 | 0 |
| SCALE SMP | 0 | 0 | 0 | 0 | • |
| WASTE BRICK | 0 | Ð | 0 | 0 | 0 |
| SUB TOTAL * | 3,512 | 3,512 | 3,512 | 3,512 | 3,512 |
| WILITIES | | | | | |
| ELECTRICITY | 20,864 | 20,925 | 20,925 | 20,925 | 20,925 |
| NATURAL GAS | 665 | 464 | 469 | 499 | 466 |
| 02N2 | 159 | 161 | 191 | 161 | 161 |
| COMPRESSED AIR | 1,743 | 2,410 | 2,410 000 | 2,410 | 2,410 |
| MAIEK Hitiittee Cost total VV | 20.0 | 026 176 | 026 076 | 920 92 920 | 926 |
| ULTRITES COST TURE | 24,068 | 24,945 | 24,945 | 24, 445 | 24, 47 |
| | | | | 00 | |

| 278,873 | 5,082 9,267 11,544 5,613 29,504 308,333 |
|---------------------|---|
| 280,415 | 3,082 3,082 11,544 5,613 29,504 309,920 |
| 280,314 | 3,082 9,267 11,544 5,612 29,503 309,817 |
| 280,413 | 3,082 9,267 11,544 5,612 29,504 309,916 |
| 279,388 | 3,082 10,742 9,285 5,614 28,722 308,110 |
| *** | * ** * ** * * |
| VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL SMP COST TOTAL |

,

MANUFACTURING COST SHEET(AMOUNT) - BAR -1,605 120,869 1,939 0 798 1,505 296 140 2,738 891 3,034 932 5,830 1997 974 127,498 121,668 119,264 119,264 1,605 135,020 1,939 0 831 1,505 356 891 3,033 974 1,018 5,915 127,698 5,717 185 2 ,878 141,873 1996 133,415 0 135,958 1,606 119,830 1,939 0 891 3,033 1,203 868 5,996 795 1,505 170 102 126,460 1995 0 C 118,224 120,464 118,224 1,561 116,563 1,880 0 774 1,464 168 891 3,033 1,203 863 5,990 1002,505 117,188 123,179 1994 C 0 115,002 115,002 1,833 891 3,047 1,203 919 6,059 120,859 **1993** 1,518 752 1,423 165 0 2,438 a 112,676 114,194 114,799 112,676 6 MANUFACTÚRING SUPLLIES COST RAM MAT & SUPPLIES C TOTAL ** **** *** *** * * VARIABLE COST RAW MATERIAL & SUPPLIES BAR BILLET COST P.BILLET COST UTILITIES COST TOTAL FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL VARIABLE COST TOTAL BAR COST TOTAL (UNIT : 1,000US\$) COMPRESSED AIR UTILITIES ELECTRICITY NATURAL GAS SUB TOTAL BY-PRODUCT SCRAP COST SCALE BAR MATER 02N2

1,605 120,812

119,207

1,939 0

798 1,505 294

139

121,603

891 3,033 974 924 5,822

127,430

1998

119,207

MANUFACTURING COST SHEET(AMOUNT) - BAR -1,605 120,443 2003 1,939 1,636 2,173 924 5,629 796 1,504 287 137 2,725 121,228 126,857 118,838 118,838 ο 168 117,601 1,939 0 1,636 972 884 4,382 785 1,503 254 122,710 2002 ¢ 115,996 0 124 2,666 118,328 115,996 391 1,605 119,239 1,939 0 891 2,339 972 897 5,099 789 1,503 266 129 2,687 2001 ç 0 125,087 117,634 117,634 119,987 1,605 120,856 1,939 0 798 1,505 294 891 3,033 974 2000 139 2,736 924 5,821 127,474 121,653 119,251 119,251 1,605 120,268 1999 1,939 0 798 1,505 294 139 2,736 891 3,033 974 924 5,822 118,663 121,065 126,386 118,663 MANUFACTURING SUPLLIES COST RAW MAT & SUPPLIES C TOTAL ** **** *** *** * * VARIABLE COST RAM MATERIAL & SUPPLIES BAR BILLET COST P.BILLET COST UTILITIES COST TOTAL VARIABLE COST TOTAL FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL BAR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL (\$SN000'1 : 11N0) COMPRESSED AIR WATER UTILITIES ELECTRICITY NATURAL GAS SUB TOTAL BY-PRODUCT SCRAP COST SCALE BAR 02N2

1,605 120,487

118,882

2004

118,882 0 1,939

0

121,273

891 1,636 2,178 923 5,628 126,901

137 2,725

796 1,504 287

MANUFACTURING COST SHEET (AMOUNT)

•

| (UNIT : 1,000US\$) | | | | | - BAR - | | |
|--|--------------------|------------------|------------------|-------------------|------------------|------------------|------------------|
| VARIABLE COST Variable Cost Ram Materia! & Suddiffs | Ū | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| PAR BILLET COST P.BILLET COST | | 118,889 0 | 118,883 0 | 118,293 0 | 118,837 0 | 118,890 0 | 118,883 0 |
| SUB TOTAL | * | 118,889 | 118,883 | 118,293 | 118,837 | 118,890 | 116,883 |
| MANUFACTURING SUPLLIES COST RAM MAT & SUPPLIES C TOTAL ** | S COST TOTAL ** | 1,605 120,494 | 1,605 120,488 | 1,605 119,898 | 1,605 120,442 | 1,605 120,495 | 1,605 120,488 |
| BY-PRODUCT SCRAP COST SCALE BAR | | 1,939 0 | 1,939 0 | 0 939 1,939 | 1,939 0 | 0 0 1,939 | 1,939 0 |
| UTILITIES ELECTRICITY | | 702 | 702 | 702 | 702 | 202 | 702 |
| RECURPTION NATURAL GAS | | 1.504 | 1.504 | 1.504 | 1.504 | 1.504 | 1.504 |
| OZNZ | | 287 | 287 | 287 | 287 | 287 | 287 |
| COMPRESSED AIR | | | 0 | 0 | • | 0 | 0 |
| WALER UTILITIES COST TOTAL | ** | 2,725 | 2,725 | 1.57 2,725 | 157 2,725 | 137 2,725 | 157 2,725 |
| VARIABLE COST TOTAL | *** | 121,280 | 121,273 | 120,684 | 121,227 | 121,280 | 121,273 |
| FIXED COST LABOR COST TOTAL | | 168 | 168 | 891 | 891 | 168 | 168 |
| DEPRECIATION TOTAL | | 1,636 | 1,636 | 1,636 | 1,636 | 1,636 | 1,636 |
| REPAIR COST TOTAL | | 2,178 | 2,178 | 2,178 | 2,178 | 2,178 | 2,178 |
| OTHER COST TOTAL | | 924 | 924 | 924 | 923 | 924 | 924 |
| FIXED COST TOTAL | *** | 5,629 | 5,629 | 5,629 | 5,628 | 5,629 | 5,629 |
| BAR COST TOTAL | **** | 126,908 | 126,902 | 126,313 | 126,856 | 126,909 | 126,902 |

MANUFACTURING COST SHEET (AMOUNT)

| | | | | MANU | MANUFACTURING COST SHEET(AMOUNI - BAR - | SHEET (AMOUN |
|--|---------------------|----------------------|------------------|------------------|--|------------------|
| (UNIT : 1,000US\$) | | | | | | |
| VARTABLE COST | , | 2011 | 2012 | 2013 | 2014 | 2015 |
| RAM MATERIAL & SUPPLIES BAR BILLET COST P.BILLET COST | 0 | 118,04 8 0 | 118,740 0 | 118,702 0 | 118,741 0 | 118,152 0 |
| SUB TOTAL | * | 118,048 | 118,740 | 118,762 | 118,741 | 118,152 |
| MANUFACTURING SUPLLIES COST RAW MAT & SUPPLIES C TOTAL ** | IS COST TOTAL ** | 1,605 119,653 | 1,605 120,345 | 1,605 120,307 | 1,605 120,346 | 1,605 119,757 |
| BY-PRODUCT SCRAP COST SCALE BAR | | 1,939 0 | 1,939 0 | 1,939 0 | 1,939 0 | Т,939 О |
| UTILITIES ELECTRICITY | | 794 | 796 | 796 | 796 | 196 |
| NATURAL GAS | | 1,504 | 1,504 | 1,504 | 1,504 | 1,504 |
| O2N2 Courdesses att | | 235 | 282 | 282 | 282 | 282 |
| LURIPRESSED AIN MATER | | 0 118 | 135 | 135 | 135 | 135 |
| UTILITIES COST TOTAL | ** | 2,650 | 2,717 | 2,717 | 2,717 | 2,717 |
| VARIABLE COST TOTAL | *** | 120,364 | 121,123 | 121,085 | 121,124 | 120,535 |
| FIXED COST | | | | | | |
| LABOR COST TOTAL | | 168 | 891 | 168 | 891 | 168 |
| DEPRECIATION TOTAL | | 1,636 | 1,636 | 1,636 | 1,636 | 1,636 |
| REPAIR COST TOTAL | | 2,182 | 2,179 | 2,179 | 2,179 | 2,179 |
| COST | | 923 | 922 | 922 | 922 | 922 |
| FIXED COST TOTAL | *** | 5,632 | 5,627 | 5,627 | 5,628 | 5,628 |
| BAR COST TOTAL | **** | 125,996 | 126,750 | 126,712 | 126,752 | 126,163 |

| (\$SU000, | |
|-----------|--|
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| •• | |
| LIND | |

| | | | | MANUF | MANUFACTURING COST SHEETLAMOUNT | SHEET (AMOUNT) | |
|---|--------------------|---------------------------------|---|---------------------------------|---|--------------------------------|--------------------------------|
| (UNIT : 1,000US\$) | | | · | | I DON I | | |
| VARIABLE COST · CUMPLIES | , | 2661 | 1994 | 1995 | 1996 | 1997 | 1998 |
| RAN THICKLAL & SUPPLIES ROD BILLET COST P.BILLET COST | o . | 111,924 0 | 111,027 0 | 111,021 0 | 100,430 4,562 | 184,681 0 | 192,866 0 |
| SUB TOTAL | * | 111,924 | 111,027 | 111,021 | 104,992 | 184,681 | 192,866 |
| MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL | S COST TOTAL ** | 1,481 113,405 | 1,548 112,575 | 1,296 112,317 | 2,553 107,545 | 2,667 187,348 | 2,667 195,533 |
| BY-PRODUCT SCRAP SCALE ROD | | 1,324 0 | 1,324 0 | 1,324 0 | 1,100 0 | 2,176 D | 2,276 0 |
| UTILITIES ELECTRICITY NATURAL GAS OZNZ | | 1,329 1,230 27 | 1,329 1,226 26 | 1,329 1,230 26 | 1,138 1,009 45 | 2,089 1,924 | 2,181 2,010 74 |
| COMPRESSED AIR WATER UTILITIES COST TOTAL | * | 150 150 2,736 | 150 2,735 | 2,735 2,735 | 260 260 2,452 | 467 467 4,550 | 0 484 4,749 |
| VARIABLE COST TOTAL | *** | 114,817 | 113,986 | 113,728 | 108,897 | 189,722 | 198,011 |
| FIXED COST LABOR COST TOTAL LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL | **** | 715 4,309 1,1395 7,539 | 715 4,292 1,596 1,074 7,477 | 715 4,292 1,3396 1,069 | 961 5,543 2,138 1,181 9,823 | 961 7,294 1,327 1,330 | 961 7,294 2,137 1,390 |
| ROD COST TOTAL | *** | 122,356 | 121,463 | 121,200 | 118,720 | 201,495 | 209,794 |

2,667 195,007 961 5,701 3,534 1,389 11,585 192,340 192,340 197,472 209,057 MANUFACTURING COST SHEET (AMOUNT) 2,667 194,935 5,701 3,534 1,390 11,585 2,270 0 2,177 192,268 2003 477 4,736 197,401 208,986 192,268 72 1961 187,671 0 2,667 190,338 961 6,084 2,133 2,133 1,350 10,528 2,270 2,146 2,008 434 4,651 2002 192,719 203,247 - ROD -187,671 9 961 7,314 2,134 1,363 11,772 2,667 192,988 2,270 0 2,157 2,008 67 2001 4,683 190,321 4,50 195,400 207,173 190,321 961 7,294 2,138 1,389 11,782 2,667 195,604 2,270 0 484 4,749 2,181 2,010 74 2000 o o 198,083 209,865 192,937 192,937 961 7,294 2,137 1,390 11,783 2,667 194,653 2,270 0 484 4,749 1999 2,181 2,010 74 197,132 208,914 191,986 C 191,986 0 **** MANUFACTURING SUPPLIES COST RAW MAT & SUPPLIES C TOTAL ** *** *** ** ж VARIABLE COST RAW MATERIAL & SUPPLIES ROD BILLET COST P.BILLET COST UTILITIES COST TOTAL FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL VARIABLE COST TOTAL ROD COST TOTAL OZNZ Compressed Air Water (UNIT : 1,000US\$) UTILITIES ELECTRICITY NATURAL GAS SUB TOTAL SCRAP SCALE ROD BY-PRODUCT

2,270

2004

2,177 2,009 72 0

477 4,,736

MANUFACTURING COST SHEET (AMOUNT) - ROD -

.

| | 2010 | 192,341 0 | 192,341 | 2,667 195,008 | 2,270 0 | 741 0 | 5,11(2 | 72 | G | 477 | 4,736 | 197,474 | ţ | 102.5 | 3,534 | 1,390 | 11,585 | 209,059 |
|---------------------|---------------|---|-----------|---|----------------------------------|------------------|-------------|------|----------------|-------|----------------------|---------------------|------------|--------------------|-------------------|------------------|------------------|----------------|
| | 2009 | 192,352 0 | 192,352 | 2,667 195,019 | 2,270 0 | с 1 | 2,009 | 22 | 0 | 477 | 4,736 | 197,484 | , | 701 5.701 | 3,534 | 1,390 | 11,585 | 209,070 |
| ROD - | 2008 | 192,267 0 | 192,267 | 2,667 194,934 | 2,270 0 | 6 1 1 1 | 2,009 | 72 | 0 | 477 | 4,736 | 197,399 | | 102,5 | 3 ,534 | 1,389 | 11,585 | 208,984 |
| | 2007 | 191,388 0 | 191,388 | 2,667 194,055 | 2,270 0 | 7 L - 6 | 2,009 | 72 | 0 | 477 | 4,736 | 196,520 | | 5,702 | 3,534 | 1,389 | 11,586 | 208,106 |
| | 2006 | 192,341 0 | 192,341 | 2,667 195,008 | 2,270 0 | 64 6 | 600°2 | 72 | 0 | 477 | 4,736 | 197,474 | | 5,702 | 3,534 | 1,390 | 11,586 | 209,060 |
| | 2005 | 192,352 0 | 192,352 | 2,667 195,019 | 2,270 0 | 77 5 - 0 | 2,009 | 72 | 0 | 477 | 4,736 | 197,484 | | 5,702 | 3,534 | 1,389 | 11,586 | 209,070 |
| | | | * | S COST Total ** | | | | | | | ** | *** | | | | | *** | *** |
| (UNIT : 1,000US\$) | VARIABLE COST | RAN MAIEKIAL & SUFFLIES ROD BILLET COST P.BILLET COST | SUB TOTAL | MANUFACTURING SUPPLIES RAM MAT & SUPPLIES C TO | BY-PRODUCT SCRAP SCALE ROD | | NATURAL GAS | 02N2 | COMPRESSED AIR | MATER | UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST | DEPRECIATION TOTAL | REPAIR COST TOTAL | OTHER COST TOTAL | FIXED COST TOTAL | ROD COST TOTAL |

| | ESCALA |
|------|-----------------|
| | MITHOUT |
| 1-1 | UPDATE-2 |
| CASE | |

| CASE 1-1 UPDATE-2 WITHOUT ESCALATION | VLATION | | | | | |
|--|-----------------|------------------|------------------|------------------|---|------------------|
| (UNIT : 1,000US\$) | | | • | MANUF | MANUFACTURING COST SHEET(AMOUNT) - ROD - | SHEET (AMOUNT) |
| VADTARI & COST | | 1102 | 2012 | 2013 | 2014 | 2015 |
| RAM MATERIAL & SUPPLIES ROD BILLET COST P.BILLET COST | | 190,991 0 | 0 011,291 | 192,049 0 | 192,112 0 | 191,159 0 |
| SUB TOTAL | * | 190,991 | 192,110 | 192,049 | 192,112 | 191,159 |
| MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | COST JTAL ** | 2,667 193,658 | 2,667 194,777 | 2,667 194,716 | 2,667 194,779 | 2,667 193,826 |
| BY-PRODUCT SCRAP SCALE ROD | | 2,270 0 | 2,270 0 | 2,270 0 | 2,270 0 | 2,270 D |
| UTILITIES | | n7 1 . 0 | 711 0 | 721-6 | 721.6 | 71 0 |
| NATURAL GAS | | 2,009 | 2,009 | 2,009 | 2,009 | 2,009 |
| 02N2 | | 59 | 1 | 71 | 2 | 71 |
| COMPRESSED AIR | | 0 | 0 | 0 | G | 0 |
| MATER | ÷ | 410 | 470 | 470 | 470 | 470 |
| UTILITIES COST TOTAL | ** | 4,649 | 4,727 | 4,727 | 4,727 | 4,727 |
| VARIABLE COST TOTAL | *** | 196,036 | 197,234 | 197,172 | 197,236 | 196,283 |
| FIXED COST | | | | | ÷. | |
| LABOR COST TOTAL | | 961 | 196 | 196 | 1961 | 196 |
| DEPRECIATION TOTAL | | 5,123 | 4,314 | 4,314 | 4,314 | 4,314 |
| REPAIR COST TOTAL ATUED COST TOTAL | | 3,542 | 4,782 | 4,782 | 4,782 | 4,782 |
| FIXED COST TOTAL | *** | 11,015 | 11,446 | 11,445 | 11,446 | 11,446 |
| ROD COST TOTAL | **** | 207,051 | 208,680 | 208,618 | 208,682 | 207,729 |
| | | | | | | |

AI-48

CASE 0-2

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EXISTING WITH ESCALATION

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CASE 0-2 EXISTING WITH ESCALATION (UP-2)

| EET (AMOUNT) | | 1661 | 58,412 | 58,412 | 780 | 59,192 | 0 | 0 | · | 2,293 | 19,698 | 42 | 220 | 626 | 22,879 | 82,070 | · | 805 | 6,136 | 2,840 | 1,752 | 6,621 | 18,155 |
|---|--------------------|--|--------|-----------|-----------------------------|-------------------------------|---------------------------|----------------|-----------|-------------|-------------|-----------|----------------|----------|----------------------|---------------------|------------|------------------|--------------------|-------------------|---------------------|------------------|------------------|
| MANUFACTURING COST SHEET(AMOUNT) - DRP - | | 1996 | 58,412 | 58,412 | 780 | 59,192 | 0 | 0 | | 2,293 | 19,698 | 42 | 220 | 626 | 22,879 | 82,070 | | 805 | 6,134 | 2,840 | 1,752 | 6,621 | 18,153 |
| MANUFACT | | 566T | 57,098 | 57,098 | 780 | 57,878 | Ð | 0 | | 2,231 | 19,257 | 41 | 218 | 618 | 22,365 | 80,243 | - | 782 | 6,136 | 2,777 | 1,712 | 6,613 | 18,021 |
| | | 1994 | 54,902 | 54,902 | 747 | 55,649 | | Ο. | | 2,130 | 18,520 | 41 | 214 | 605 | 21,511 | 77,160 | | 745 | 6,136 | 2,673 | 1,646 | 6,577 | 17,777 |
| | | 1993 | 52,791 | 52,791 | 716 | 53,507 | o | 0 | | 2,034 | 17,811 | 1 | 210 | 56 76 | 20,690 | 74,196 | | 209 | 6,153 | 2,572 | 1,583 | 6,871 | 17,888 |
| | | | | * | COST | DTAL ** | | | | | | | | | ** | *** | | | | | | | *** |
| | (UNIT : 1,000US\$) | VARIABLE COST RAM MATERIAL & SUPPLIES | | SUB TOTAL | MANUFACTURING SUPPLIES COST | RAW MAT & SUPPLIES C TOTAL ** | BY-PRODUCT OXIDE FINES | OXIDE THICKNER | UTILITIES | ELECTRICITY | NATURAL GAS | 02N2 | COMPRESSED AIR | MATER | UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST | LABOR COST TOTAL | DEPRECIATION TOTAL | REPAIR COST TOTAL | S REPAIR COST TOTAL | OTHER COST TOTAL | FIXED COST TOTAL |

•

58,412 58,412

1998

780 59,192

00

2,293 19,698 42 220 626 22,879

82,070

AI-49

805 6,136 2,840 1,752 6,622 6,622

100,225

100,225

100,223

98,265

94,937

92,084

DRP COST TOTAL

CASE 0-2 EXISTING WITH ESCALATION (UP-2)

805 3,293 5,691 1,752 6,626 18,167 780 59,192 2004 612 22,855 58,412 58,412 2,293 19,695 215 82,046 3 MANUFACTURING COST SHEET(AMOUNT) - DRP --780 59,192 2003 805 3,295 5,691 1,752 6,626 18,169 0 0 2,293 19,695 215 612 22,855 58,412 82,046 58,412 5 2002 58,412 58,412 780 59,192 2,255 19,678 171 516 22,650 81,842 805 3,295 2,819 1,752 6,574 L5,245 οQ Ř 2001 58,412 780 805 5,684 2,825 1,752 1,752 1,752 1,752 58,412 2,267 34 186 552 22,723 81,915 00 805 6,134 2,840 1,752 6,621 18,153 2000 58,412 780 59,192 2,293 19,698 42 220 626 22,879 58,412 82,070 00 1999 220 626 22,879 82,070 58,412 58,412 780 59,192 o ø 2,293 19,698 6,136 2,840 6,622 16,403 4 500 MANUFACTURING SUPPLIES COST RAW MAT & SUPPLIES C TOTAL ** *** *** ≭ Ť VARIABLE COST RAW MATERIAL & SUPPLIES PELLET COST OZNZ Compressed Air Mater Utilities Cost Total VARIABLE COST TOTAL FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL S REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL BY-PRODUCT OXIDE FINES OXIDE THICKNER (UNIT : 1,000US\$) UTILITIES ELECTRICITY NATURAL GAS SUB TOTAL

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100,213

100,215

97,086

172,99

100,223

98,473

DRP COST TOTAL

CASE 0-2 EXISTING MITH ESCALATION (UP-2)

| (18117 - 1 000164) | | | | | - DRP - | | |
|--|----------|---------|---------|--------|---------|---------|------------|
| | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| VARIABLE COST RAW MATERIAL & SUPPLIES | | | | | | | |
| PELLET COST | | 58,412 | 58,412 | 58,412 | 58,412 | 58,412 | 58,412 |
| SUB TOTAL | * | 58,412 | 58,412 | 58,412 | 58,412 | 58,412 | 58,412 |
| ŭ | COST | 780 | 780 | 780 | 780 | 780 | 780 |
| RAM MAT & SUPPLIES C T | TOTAL ** | 59,192 | 59,192 | 59,192 | 59,192 | 59,192 | 59,192 |
| BY-PRODUCT | | | | | | • | |
| UXIDE FINES | | 0 | 0 | 0 | 0 | 0 | • |
| UXIDE THICKNER | | 0 | 0 | 0 | 0 | 0 | 0 |
| UTILITES | | • | | | · . | | |
| ELECTRICITY | | 2,293 | 2,293 | 2,293 | 2,293 | 2,293 | 2,293 |
| NATURAL GAS | | 19,695 | 19,695 | 19,695 | 19,695 | 19,695 | 19,695 |
| O2N2 | | 47 | 41 | 41 | 41 | 41 4 | 4 1 |
| COMPRESSED AIR | | 215 | 215 | 215 | 215 | 215 | 215 |
| MATER | | 612 | 612 | 612 | 612 | 612 | 612 |
| UTILITIES COST TOTAL | ** | 22,855 | 22,855 | 22,855 | 22,855 | 22,855 | 22,855 |
| VARIABLE COST TOTAL | *** | 82,046 | 82,046 | 82,046 | 82,046 | 82,046 | 82,046 |
| FIXED COST | | | | | | · | |
| LABOR COST TOTAL | | 805 | 805 | 805 | 805 | 805 | 805 |
| DEPRECIATION TOTAL | | 3,312 | 3,295 | 3,295 | 3,293 | 3,312 | 3,295 |
| REPAIR COST TOTAL | | 5,691 | 5,691 | 5,691 | 5,691 | 5,691 | 5,691 |
| S REPAIR COST TOTAL | | 1,752 | 1,752 | 0 | 1,752 | 1,752 | 1,752 |
| OTHER COST TOTAL | | 6,626 | 6,626 | 6,626 | 6,626 | 6,626 | 6,626 |
| FIXED COST TOTAL | *** | 18,186 | 18,169 | 16,417 | 18,167 | 18,186 | 18,169 |
| DRP COST TOTAL | **** | 100,232 | 100,215 | 98,463 | 100,213 | 100,232 | 100,215 |
| | | | | | | | |

MANUFACTURING COST SHEET (AMOUNT)

| | (UP-2) |
|------|-----------|
| | SCALATION |
| | MITH E |
| 0-2 | EXISTING |
| CASE | |

| (UNIT : 1,000US\$) | | | | MANUFA | MANUFACTURING COST SHEET(AMOUNT) - DRP - | EET (AMOUNT) |
|--|-------------------|---------------|---------------|---------------|---|----------------|
| VARIABLE COST | | 2011 | 2012 | 2013 | 2014 | 2015 |
| RAM MATERIAL & SUPPLIES PELLET COST | | 58,412 | 58,412 | 56,412 | 58,412 | 58,412 |
| SUB TOTAL | * | 58,412 | 58,412 | 58,412 | 58,412 | 58,412 |
| MANUFACTURINS SUPPLIES COST Ram mat & Supplies C Total ** | S COST OTAL ** | 780 59,192 | 780 59,192 | 780 59,192 | 780 59 ,1 92 | 780 59,192 |
| BY-PRODUCT OXIDE FINES OXIDE THICKNER | | 00 | 00 | 00 | 00 | 00 |
| UTILITES | | · | • | | | |
| ELECTRICITY | | 2,293 | 2,293 | 2,293 | 2,293 | 2,293 |
| NATURAL GAS | | 19,695 | 19,695 | 19,695 | 19,695 | 19,695 |
| O2N2 | | 41 | 41 | 41 | 61 | 4 |
| COMPRESSED AIR | | 215 | 5 15 · | 215 | 215 | 215 |
| WATER | | 612 | 612 | 612 | 612 | 612 |
| UTILITIES COST TOTAL | ** | 22,855 | 22,855 | 22,855 | 22,855 | 22,855 |
| VARIABLE COST TOTAL | *** | 82,046 | 82,046 | 82,046 | 82,046 | 82,046 |
| FIXED COST | | | L | L | 5 | 100 |
| | | 500 | 600 J | 502 I | 509 | 508 - |
| DEPRECIATION TOTAL | | 3,295 | 3,295 | 3,293 | 3,312 | 3,295 |
| REPAIR COST TOTAL | | 5,691 | 5,691 | 5,691 | 5,691 | 5,691 |
| S REPAIR COST TOTAL | | 1,752 | 1,752 | 1,752 | 1,752 | 0 |
| OTHER COST TOTAL | | 6,626 | 6,626 | 6,626 | 6,626 | 6,626 |
| FIXED COST TOTAL | *** | 18,169 | 18,169 | 18,167 | 18,186 | 16,417 |
| DRP COST TOTAL | **** | 100,215 | 100,215 | 100,213 | 100,232 | 98,463 |
| | | | | | | |

AI-52

CASE 0-2 EXISTING WITH ESCALATION (UP-2)

¢ 245 245

341 178 178 0 381 1,068 2,066 MANUFACTURING COST SHEET (AMOUNT) - LCP -341 178 131 381 1,199 342 342 9 9 0 0 0 0 0 0 0 0 0 2,197 ው 341 178 131 381 381 578 342 342 416 0 416 0 416 2,193 341 174 128 378 1,184 334 64 64 64 64 64 64 64 2,153 562 9 0 0 0 0 0 0 65 341 168 123 370 1,157 2,084 343 161 161 0 1,056 800 800 1,942 MANUFACTURING SUPPLIES COST RAW MAT & SUPPLIES C TOTAL ** **** *** *** ¥ * VARIABLE COST RAM MATERIAL & SUPPLIES LIME STONE COST UTILITIES COST TOTAL FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL S REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL VARIABLE COST TOTAL BY-PRODUCT LIME FINES LIME STONE FINES UTILITIES ELECTRICITY NATURAL GAS 02N2 COMPRESSED AIR MATER LCP_COST_TOTAL (#SN000'I : 11NN) SUB TOTAL

CASE 0-2 EXISTING MITH ESCALATION (UP-2)

(UNIT : 1,000US\$)

MANUFACTURING COST SHEET(AMOUNT) - LCP -

| ~1 | | |
|----------|--|-----------|
| 1999 | 572 | 572 |
| | | |
| | | * |
| | RAM MATERIAL & SUPPLIES LIME STONE COST | |
| ILE COST | MATERIAL STONE CO | sub total |
| VARIAE | RAN | . • |

| 2004 | 572 | 572 | 9 581 | 00 | 66 742 | 3 00 | 00 | 416 | 266 | 168 | 206 757 | 131 | 1,249 |
|--|-----------------|-----------|--|--|---|-----------|-------------------------|----------------------|---------------------|--------------------------------|--------------------|---------------------|------------------|
| 2003 | 572 | 572 | 6 581 | 00 | 66 2602 | 0 | 0 0 | 416 4 | 26 6 | 168 | 206 367 | 0 | , 1,118 |
| 2002 | 572 | 572 | 9 581 | 00 | 65 241 | 1.0 | 00 | 413 | £ 66 | 168 | 207 | 131 | 1,025 |
| 2001 | 572 | 572 | 9 581 | 00 | 59 197 1 | 110 | 00 | 414 | 366 | 168 | 253 177 | 121 | 1,084 |
| 2000 | 572 | 572 | 9 581 | 00 | 66 467 | 10 | 00 | 416 | 266 | 168 | 341 17r | 121 | 1994 L99 |
| 1999 | 572 | 572 | 5 81 | 00 | 99 972 | 3 6. F | 00 | 416 | 266 | 168 | 341 | 121 | 195 1,199 |
| ų | õ | * | torat ** | | | | · | ** | *** | | | | *** |
| VARIABLE COST DAW MATEDIAL • CUMDITEC | LIME STONE COST | SUB TOTAL | MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | BY-PRODUCT LIME FINES LIME STONE FINES | UTILITIES ELECTRICITY NATIDAL CAS | D2NZ | COMPRESSED AIR WATER | UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL | DEPRECIATION TOTAL | S REPAIR COST TOTAL | FIXED COST TOTAL |

AI-54

2,246

2,115

2,018

2,079

2,196

2,197

LCP COST TOTAL

CASE 0-2 EXISTING WITH ESCALATION (UP-2)

| ~ |
|--------|
| \$SN0 |
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| ā |
| - |
| |
| |
| |
| |
| |
| (UNIT |

| | ". | | | MANUFAC | MANUFACTURING COST SHEET (AMOUNT | JEET (AMOUNT) | |
|--|------------------|--------------|--------------|--------------|-----------------------------------|-----------------|--------------|
| (UNIT : 1,000US\$) | | | | | - | | |
| VARIABLE COST | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| RAM MATERIAL & SUPPLIES LIME STONE COST | | 572 | 572 | 572 | 572 | 572 | 572 |
| SUB TOTAL | * | 572 | 572 | 572 | 572 | 572 | 572 |
| MANUFACTURING SUPPLIES RAM MAT & SUPPLIES C T | COST TOTAL ** | 9 581 | 9 581 | 9 581 | 185 | 9 581 | 6 521 |
| BY-PRODUCT LIME FINES LIME STONE FINES | | 00 | 00 | 00 | 00 | 00 | 00 |
| UTILITIES Electricity | | 66 66 | 99 | 66 | 99 | 66 | 66 |
| NATURAL GAS | | 342 | 342 | 342 | 342 | 342 | 342 0 |
| UZNZ COMPRESSED AIR | | \$\$ \$ | 80 | 2) CJ | 80 | 80 | 80 |
| WATER UTILITIES COST TOTAL | * | 0 416 | 0 416 | 0 416 | 0 416 | 0 616 | 0 416 |
| VARIABLE COST TOTAL | *** | 266 | 799 | 266 | 266 | 266 | 266 |
| FIXED COST LABOR COST TOTAL | | 168 | 168 | 168 | 168 | 168 | 168 |
| DEPRECIATION TOTAL Repair COST TOTAL | | 206 357 | 206 357 | 206 357 | 206 357 | 206 357 | 206 357 |
| S REPAIR COST TOTAL | | 131 | 131 | 131 | Ö | 131 | 131 |
| OTHER COST TOTAL FIXED COST TOTAL | *** | 387 1,249 | 387 1,249 | 387 1,249 | 387 1,118 | 387 1,249 | 387 1,249 |
| LCP COST TOTAL | **** | 2,246 | 2,246 | 2,246 | 2,115 | 2,246 | 2,246 |

| | (UP-2) |
|------|------------|
| | ESCALATION |
| | HLIM |
| 0-2 | EXISTING |
| CASE | |

| | | | | MANUF | MANUFACTURING COST SHEET (AMOUNT) | HEET (AMOUNT) |
|---|------------------|---------------------|---------------------|---------------------|-----------------------------------|---------------------|
| (UNIT : 1,000US\$) | | | | | | |
| VARIABLE COST | | TT02 | 2012 | 2013 | 2014 | 2015 |
| RAW MATERIAL & SUPPLIES LIME STONE COST | () | 572 | 572 | 572 | 572 | 572 |
| SUB TOTAL | * | 572 | 572 | 572 | 572 | 572 |
| MANUFACTURING SUPPLIES COST RAW MAT & SUPPLIES C TOTAL | COST FOTAL ** | 9 581 | 9 581 | 9 581 | 9 531 | 6 581 |
| BY-PRODUCT LIME FINES LIME STONE FINES | | 00 | 00 | 00 | 00 | 00 |
| UTILITIES ELECTRICITY NATIPAL GAS | | 66 742 | 66 742 | 66 742 | 66 7427 | 66 742 |
| OZNZ COMPRESSED AIR | | 000 | 000 | 80 | 80 | |
| WATER UTILITIES COST TOTAL | * | 0 416 | 0 416 | 0 416 | 0 416 | 0 416 |
| VARIABLE COST TOTAL | *** | 266 | 266 | 266 | 266 | 166 |
| FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL | | 168 206 357 | 168 236 357 | 168 206 357 | 168 206 357 | 168 206 357 |
| S REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL | *** | 131 387 1,249 | 131 387 1,249 | 387 387 1,118 | 131 387 1,249 | 131 387 1,249 |
| LCP COST TOTAL | **** | 2,246 | 2,246 | 2,115 | 2,246 | 2,246 |

CASE 0-2 Existing with Escalation (UP-2)

(UNIT : 1,000US\$)

MANUFACTURING COST SHEET (AMOUNT) - SMP -

| L A SUPPLIES 92.000 94.987 99.665 100.225 100.226 100.226 100.226 100.226 100.226 100.226 100.226 100.226 100.226 100.226 100.226 100.226 100.226 100.226 100.226 100.207 102.000 2000 2000 2000 2000 2000 2000 2 | | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
|--|----------------|---------|---------|---------|---------|---------|---------|
| Al. A SUPPLIES 9,064 1,292 9,457 2,618 9,565 2,135 100,223 2,135 100,225 4,503 100,225 2,503 20,048 | | - | | | | | |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | | | | | | | |
| E 1,992 2,004 2,113 2,113 2,119 2,119 2,119 2,119 2,119 2,119 2,119 2,119 2,119 2,119 2,119 2,119 2,119 2,119 2,119 2,119 2,119 2,119 2,119 2,110 4,105 4, | DRI | 92,084 | 94,937 | 98,265 | 100,223 | 100,225 | 100,225 |
| Circle 5,104 46,203 </td <td>LIME STONE</td> <td>1,942</td> <td>2,084</td> <td>2,153</td> <td>2,193</td> <td>2,197</td> <td>2,066</td> | LIME STONE | 1,942 | 2,084 | 2,153 | 2,193 | 2,197 | 2,066 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | SCRAP | 41,239 | 43,127 | 45,104 | 46,303 | 46,303 | 46,303 |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | ISJ | 2,493 | 2,618 | 2,749 | 2,829 | 2,829 | 2,829 |
| RE 566 596 596 596 624 642 13,463 13,103 3,193 3,195 3,195 3,195 1,9103 13,103 4,103 4,103 4,103 4,103 4,103 4,103 4,103 4,103 4,103 4,103 4,103 4,103 4,103 14,103 4,103 4,103 14,103 4,1045 | AL | 192 | 201 | 211 | 217 | 217 | 217 |
| RICK 11,264 11,715 12,184 12,464 12,464 12,464 12,464 12,464 12,464 12,464 12,464 12,464 12,464 12,464 12,464 12,902 12,192 12,132 12,132 12,132 12,132 12,132 12,137 <td>COKE BREEZE</td> <td>566</td> <td>594</td> <td>624</td> <td>642</td> <td>642</td> <td>642</td> | COKE BREEZE | 566 | 594 | 624 | 642 | 642 | 642 |
| RICK 1,981 2,060 2,143 2,192 2,193 2,133 2,1 2,123 2,11 2,1,232 2,11 2,1,232 2,11 2,1,232 2,11 2,1,212 2,14,132 2,14,132 2,14,132 2,14,132 2,14,132 2,14,132 2,14,132 2,14,132 2,14,132 2,14,132 2,14,132 2,14,132 2,14,132 | ELECTRODE | 11,264 | 11,715 | 12,184 | 12,464 | 12,464 | 12,464 |
| CK 5,708 5,856 4,011 4,103 2,103 2,1 2,151 7,551 7,751 7,751 7,751 7,751 7,751 7,751 7,751 7,751 7,751 7,751 7,751 2,1,772 2,14,772 2,14,772 2,14,772 2,14,772 2,14,772 2,14,772 2,14,772 2,14,772 2,14,772 2,14,772 2,14,772 2,14,772 2,14,772 <td>FURNACE BRICK</td> <td>1,981</td> <td>2,060</td> <td>2,143</td> <td>2,192</td> <td>2,192</td> <td>2,192</td> | FURNACE BRICK | 1,981 | 2,060 | 2,143 | 2,192 | 2,192 | 2,192 |
| RICK 1,719 1,728 1,728 1,902 26,019 26,019 26,019 26,019 26,019 26,019 26,019 26,019 26,019 26,019 26,019 26,019 26,019 26,019 26,019 26,019 26,019 26,019 26,013 213,613 213,613 213,613 213,613 213,613 213,613 214 214 20,048 2,048 2,048 2,048 2,048 2,048 2,0448 2,0448 2,0448 2,0448 2,0448 2,0448 2,0448 2,0448 2,0448 2,0448 2,0448 2,0448 2,0448 2,044 | LADLE BRICK | 3,708 | 3,856 | 4.011 | 4,103 | 4,103 | 4,103 |
| AT 4,147 4,313 5,465 4,569 5,569 2,569 2,569 2,569 2,569 2,569 2,569 2,569 2,569 2,569 2,569 2,569 2,569 2,569 2,569 2,57 7,751 2,14,752 2,13,673 2,14 2,14 <th2,13< t<="" td=""><td>TUNDISH BRICK</td><td>1,719</td><td>1,788</td><td>1,860</td><td>1,902</td><td>1,902</td><td>1,902</td></th2,13<> | TUNDISH BRICK | 1,719 | 1,788 | 1,860 | 1,902 | 1,902 | 1,902 |
| Character Constrain Constrain <thconstrain< th=""> Constrain <thconstrain< th=""> Constrain Constrain</thconstrain<></thconstrain<> | FETLING MAT | 4,147 | 4.313 | 6,485 | 4.589 | 4,589 | 4.589 |
| Time Time <th< td=""><td>HBI</td><td>25,395</td><td>26,411</td><td>27,467</td><td>28,099</td><td>28,099</td><td>28,099</td></th<> | HBI | 25,395 | 26,411 | 27,467 | 28,099 | 28,099 | 28,099 |
| OHTE 73 77 61 82 82 82 82 77 75 77 76 77 75 77 75 77 75 77 75 77 75 77 75 77 75 77 75 77 75 77 75 77 75 77 75 76 75 76 75 76 75 76 75 76 75 76 7 | FEMN | 7,005 | 7,286 | 7.577 | 7.751 | 7,751 | 7,751 |
| OMITE 69 73 76 79 20 20 21 20 20 21 20 21 20 21 20 21 <th2< td=""><td>FEV</td><td>75</td><td>22</td><td>18</td><td>82</td><td>82</td><td>82</td></th2<> | FEV | 75 | 22 | 18 | 82 | 82 | 82 |
| TAL * 193,879 201,141 208,988 213,668 213,673 21 RING SUPLIFES COST 971 1,014 1,059 21,059 21,667 21,657 21,1659 21,1659 21 SUPPLIES C TOTAL ** 194,850 205,155 210,067 214,772 214,772 214,772 214,722 21 SUPPLIES C TOTAL ** 194,850 2,821 2,962 3,048 3,048 3,048 2,667 2,1517 21 22 31 22 31 22 31 22 21 21 21 21 21 21 21 21 21 21 21 21 | BURNT DOLOMITE | 69 | 73 | 76 | 26 | 62 | 62 |
| RING SUPLIFES COST 971 1,014 1,059 1,059 1,059 1,059 1,059 1,059 1,059 1,059 1,059 24,772 214,212 214,2 | · | 193,879 | 201,141 | 208,988 | 213,668 | 213,673 | 213,542 |
| SUPPLIES C TOTAL ** 194,850 202,155 210,047 214,727 214,722 21,732 21 CK 0 0 0 0 0 0 0 0 CK 0 0 0 0 0 0 0 0 CK 0 0 0 0 0 0 0 0 TAL * 2,687 2,821 2,962 3,048 3,048 TTY 8 88 88 89 69 621 62 GAS 8.6 8.8 8.9 69 621 62 GAS 155 158 161 162 162 GAS 647 647 643 643 SCOT TOTAL ** 19 | | 179 | 1,014 | 1,059 | 1,059 | 1,059 | 1,059 |
| CK 2,687 2,821 2,962 3,048 3,048 3,048 (1000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | TOTAL | 194,850 | 202,155 | 210,047 | 214,727 | 214,732 | 214,601 |
| Z,687 2,821 2,962 3,048 3,048 3,048 CK 0 0 0 0 0 0 CK 2,687 2,821 2,962 3,048 3,048 CK 362 3,771 20,646 21,217 2 CK 352 163 161 162 162 CK 158 158 161 162 4,03 CK 19,893 20,811 21,773 22,351 | | | | | | | |
| 2,687 2,821 2,962 5,048 3,048 SMP 0 0 0 0 0 SMP 0 0 0 0 0 BRICK 0 0 0 0 0 5 TOTAL * 2,687 2,821 2,962 3,048 3,048 5 TOTAL * 2,687 2,821 2,962 3,043 3,043 5 TOTAL * 2,687 2,821 2,962 3,043 3,043 5 TIES 1 2,962 3,043 3,043 3,043 TIES * 2,687 2,921 2,962 3,043 RICITY 8 88 89 89 89 AL GAS 88 88 89 89 RESED AIR 155 158 161 162 R 19,893 20,911 21,773 22,369 22,351 2 | 3Y-PRODUCT | | 7 | | | | |
| SHP 0 0 0 0 0 0 BRICK 0 0 0 0 0 0 0 BRICK 0 0 0 0 0 0 0 0 BRICK 0 0 0 0 0 0 0 0 0 BRICK 0 0 0 0 0 0 0 0 0 BRICK 0 0 0 0 0 0 0 0 0 BRICK 0 0 0 0 0 0 0 0 0 BRICK 0 0 0 0 0 0 0 0 0 TIES TRICITY 362 3771 20,646 21,217 21,217 2 RAL GAS 88 88 89 89 89 89 89 RESSED AIR 155 158 161 162 162 R 155 20,811 21,773 22,559 22,551 2 | SCRAP | 2,687 | 2,821 | 2,962 | 3,048 | 3,048 | 3,048 |
| SNP 0 10 11 11 11 11< | DUST | 0 | 0 | • | Ð | o | ¢ |
| X 0 0 0 0 0 0 0 TAL * 2,687 2,821 2,962 3,048 3,048 TAL * 2,687 2,821 2,962 3,048 3,048 TV * 2,687 2,821 2,962 3,048 3,048 TV * 2,687 2,821 2,962 3,048 3,048 SAS * 362 377 2,962 3,048 421 SAS 88 88 88 89 89 BAR 155 158 161 162 162 SCOT TOTAL ** 19,893 20,811 21,773 22,359 22,351 2 | SLAG | • | Ð | 0 | 0 | 0 | 0 |
| X 0 0 0 0 0 0 TAL * 2,687 2,821 2,962 3,048 3,048 TY * 2,687 2,821 2,962 3,048 3,048 TY * 2,687 2,821 2,962 3,048 3,048 TY * 2,687 2,821 2,962 3,048 3,048 SAS * 8 21,217 2 2 SAS 88 88 89 89 89 ED AIR 155 158 161 162 162 S COST TOTAL ** 19,893 20,811 21,773 22,359 22,351 2 | SCALE SMP | 0 | 0 | 0 | o | 0 | 0 |
| FAL * 2,687 2,821 2,962 3,048 3,046 TTY 18,820 19,711 20,646 21,217 21,217 2 SAS 362 377 392 409 421 2 SAS 88 88 89 89 89 ED AIR 155 158 161 162 162 S COST TOTAL ** 19,893 20,811 21,773 22,581 2 | WASTE BRICK | 0 | Ð | 0 | 0 | 0 | 0 |
| TY 18,820 19,711 20,646 21,217 21,217 21, 34S 362 377 392 409 421 21, 88 88 89 89 89 89 89 26 AIR 155 158 161 162 162 467 477 486 493 493 22,369 22,381 22, | | 2,687 | 2,821 | 2,962 | 3,048 | 3,048 | 3,048 |
| RICITY 18,820 19,711 20,646 21,217 21, CAL GAS 362 377 392 409 421 21, CAL GAS 362 377 392 409 421 21, CAL GAS 362 377 392 409 421 21, RESED AIR 155 158 161 162 162 R 467 477 486 493 493 R 19,893 20,811 21,773 22,369 22,381 22, | UTILITIES | | | | | | |
| CAL GAS 362 377 392 409 421 CAL GAS 362 377 392 409 421 ESSED AIR 88 88 89 89 89 ESSED AIR 155 158 161 162 162 A 477 486 493 493 TIES COST TOTAL ** 19,893 20,811 21,773 22,369 22,381 22, | ELECTRICITY | 18,820 | 19,711 | 20,646 | 21,217 | 21,217 | 21,217 |
| ESSED AIR 89 88 88 89 89 89 89 89 85 89 89 85 89 89 85 89 89 85 89 89 89 89 89 89 89 89 89 89 89 89 89 | NATURAL GAS | 362 | 377 | 392 | 404 | 421 | 421 |
| ESED AIR 155 158 161 162 162 555ED AIR 467 477 486 493 493 11ES COST TOTAL ** 19,893 20,811 21,773 22,369 22,381 22, | O2N2 | 88 | 88 | 88 | 89 | 69 | 89 |
| 467 477 486 493 493 72,369 22,381 22,323 | COMPRESSED AIR | 155 | 158 | 161 | 162 | 162 | 162 |
| L ** 19,893 20,811 21,773 22,369 22,381 | MATER | 467 | 477 | 486 | 693 | 493 | 493 |
| | | 19,893 | 20,811 | 21,773 | 22,369 | 22,381 | 22,381 |
| | | | | | | | |

| 233,935 | , , | 12/42 | 11,243 | 4,665 | 5,321 | 23,950 | 257,884 |
|---------------------|------------|------------------|--------------------|-------------------|------------------|------------------|----------------|
| 234,065 | | 72/42 | 11,243 | 4,665 | 5,320 | 23,948 | 258,013 |
| 234 , 048 | | 2,721 | 11,243 | 4,665 | 5,321 | 23,949 | 257,997 |
| 228,858 | | 2,644 | 11,243 | 4,561 | 5,098 | 23,546 | 252,404 |
| 220,144 | | 2,518 | 11,243 | 4,390 | 4,967 | 23,118 | 243,262 |
| 212,056 | | 2,398 | 11,301 | 4,223 | 6,353 | 24,276 | 236,332 |
| *** | | | | | | *** | **** |
| VARIABLE COST TOTAL | FIXED COST | LABUR COST IUIAL | DEPRECIATION TOTAL | REPAIR COST TOTAL | OTHER COST TOTAL | FIXED COST TOTAL | SMP COST TOTAL |

CASE 0-2 EXISTING WITH ESCALATION (UP-2)

| | | | MANUF | MANUFACTURING COST & | COST SHEET(AMOUNT) | · |
|--|------------------|----------------|---------------|----------------------|--------------------|---------------|
| (UNIT : 1,000US\$) | | | | 5 | | |
| | 666T | 2000 | 2001 | 2002 | 2003 | 2004 |
| RAM FRIEKIAL & SUPPLIES Dri | 98,473 | 100,223 | 99,571 | 97,086 | 100.215 | 100.213 |
| LIME STONE | 2,197 | 2,196 | 2,079 | 2,018 | 2,115 | 2,246 |
| SCRAP | 46,303 | 46,303 | 46,303 | 46,303 | 46,303 | 46,303 |
| FESI | 2,829 | 2,829 | 2,829 | 2,829 | 2,829 | 2,829 |
| AL | 217 | 217 | 217 | 217 | 217 | 217 |
| COKE BREEZE | 642 | 642 | 642 | 642 | 642 | 642 |
| ELECTRODE | 12,464 | 12,464 | 12,464 | 12,464 | 12,464 | 12,464 |
| FURNACE BRICK | 2,192 | 2,192 | 2,192 | 2,192 | 2,192 | 2,192 |
| LADLE BRICK | 4,103 | 4,103 | 4,103 | 4,103 | 4,103 | 4,103 |
| TUNDISH BRICK | 1,902 | 1,902 I | 1,902 | 1,902 | 1,902 | 1,902 |
| FETLING MAT | 4,589 | 6 ,5 89 | 4,589 | 4,589 | 4,589 | 4,589 |
| HBI | 28,099 | 28,099 | 28,099 | 28,099 | 28,099 | 28,099 |
| FEMN | 7,751 | 7,751 | 7,751 | 7,751 | 7,751 | 7,751 |
| FEV | 82 | 82 | 82 | 82 | 82 | 82 |
| BURNT DOLOMITE | 62 | 62 | 64 | 79 | 44 | 19 |
| SUB TOTAL * | 211,921 | 213,671 | 212,902 | 210,356 | 213,582 | 213,710 |
| MANUFACTURING SUPLLIES COST DAM MAT & SUDDITES F TOTAL ** | 1,059 212,020 | 1,059 | 1,059 | 1,059 21 615 | 1,059 | 1,059 |
| | 2442 | | 10/ (| 6716773 | 7406473 | 1016171 |
| BY-PRODUCT | | | | | | |
| SCRAP | 3,048 | 3,048 | 3,048 | 3,048 | 3,048 | 3,048 |
| | | | 0 0 | 0 0 | 0 0 | • |
| | | 5 6 | | э с | | |
| WASTE BRICK | • • | 00 | 00 | 00 | 0 | ~ 0 |
| SUB TOTAL * | 3,048 | 3,048 | 3,048 | 3,048 | 3,048 | 3,048 |
| UTILITIES | | | | | | |
| ELECTRICITY | 21,217 | 21,217 | 20,984 | 20,870 | 21,217 | 21,217 |
| NATURAL GAS | 421 | 421 | 421 | 420 | 421 | 421 |
| DZNZ | 68 | 89 | 72 | 65 | 87 | 87 |
| UUTPRESSEU AIR Wated | 707 702 | 291 791 | 137 676 | 126 | 159 | 159 |
| UTILITIES COST TOTAL ** | 22,381 | 22,381 | 454 22,048 | 406 21,887 | 481 22,365 | 481 22,365 |
| | / F | | | | |])))]] |

CASE 0-2 Existing with escalation (UP-2)

MANUFACTURING COST SHEET(AMOUNT) - SMP -

| (UNIT : 1,000US\$) | | | | r SMp - | | | |
|-----------------------------|---------|---------|---------|---------|---------------|-----------|---|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | |
| VARIABLE COST | | | | | | | |
| RAM MATERIAL & SUPPLIES | | | | | • | | |
| DRI | 100,232 | 100,215 | 98,463 | 100,213 | 100,232 | 100,215 | |
| LIME STONE | 2,246 | 2,246 | 2,246 | 2,115 | 2,246 | 2,246 | |
| SCRAP | 46,303 | 46,303 | 46,303 | 46,303 | 46,303 | 46,303 | |
| FESI | 2,829 | 2,829 | 2,829 | 2,829 | 2,829 | 2,829 | |
| AL | 217 | 217 | 217 | 217 | 217 | 217 | |
| COKE BREEZE | 542 | 642 | 642 | 642 | 642 | 642 | |
| ELECTRODE | 12,464 | 12,464 | 12,464 | 12,464 | 12,464 | 12,464 | |
| FURNACE BRICK | 2,192 | 2,192 | 2,192 | 2,192 | 2,192 | 2,192 | - |
| LADLE BRICK | 4,103 | 4,103 | 4,103 | 4,103 | 4,103 | 4,103 | |
| TUNDISH BRICK | 1,902 | 1,902 | 1,902 | 1,902 | 1,902 | 1,902 | |
| FETLING MAT | 4,589 | 4,589 | 4,589 | 4,589 | 4,589 | 4,589 | |
| IBH | 28,099 | 28,099 | 28,099 | 28,099 | 28,099 | 28,099 | |
| FEMN | 7,751 | 7,751 | 7,751 | 7,751 | 7,751 | 7,751 | |
| FEV | 82 | 82 | 82 | 82 | 82 | 82 | |
| BURNT DOLOMITE | 62 | 52 | 62 | 79 | <u>61</u> | 79 | |
| SUB TOTAL * | 213,730 | 213,713 | 211,961 | 213,579 | 213,730 | 213,713 | |
| MANUFACTURING SUPLLIES COST | 1,059 | 1,059 | 1,059 | 1,059 | 1,059 | 1,059 | |
| 0 | 214,789 | 214,772 | 213,020 | 214,638 | 214,789 | 214,772 | |
| | | | | | | | |
| BI-PROUCCI SCRAP | 3,048 | 3,048 | 3,048 | 3,048 | 3,048 | 3,048 | |
| DUST | 0 | 0 | 0 | | 0 | 0 | |
| SLAG | 0 | • • | 0 | 0 | 0 | 0 | |
| | • | 0 | 0 | Q | Ģ | 0 | |
| WASTE BRICK | • | 0 | a | Q | 0 | 0 | |
| SUB TOTAL * | 3,048 | 3,048 | 3,048 | 3,048 | 3,048 | 3,048 | |
| | | | · | | | | |
| UTILITIES | | | | | | | |
| ELECTRICITY | 21,217 | 21,217 | 21,217 | 21,217 | 21,217 | 21,217 | |
| NATURAL GAS | 421 | 421 | 421 | 421 | 421 | 421 01 | |
| DZNZ | 22 | 201 | 18 | 10 | 18 | 27 | |
| COMPRESSED AIR | 159 | 159 | 159 | 159 | 159 | 159 | |
| | 194 | | 181 | 481 | 481 20 201 | 181 | |
| ULTERTITES COSI TOTAL ** | 22,565 | 505122 | 22,365 | 22,365 | 22,345 | 202,355 | |
| | | | AT-61 | | | | |

| 234,089 | 2,721 | 6,603 | 9,346 | 5,320 | 23,990 | 258,079 |
|---------------------|--------------------------------|--------------------|-------------------|------------------|------------------|----------------|
| 234,106 | 2,721 | 6 »603 | 9,346 | 5,320 | 23,990 | 258,096 |
| 233,956 | 2,721 | 6,603 | 9,346 | 5,320 | 23,989 | 257,945 |
| 232,337 | 2,721 | 6,603 | 9,346 | 5,319 | 23,988 | 256,325 |
| 234,089 | 2,721 | 6,603 | 9,346 | 5,320 | 23,990 | 258,079 |
| 234,106 | 2.721 | 6,603 | 9,346 | 5,320 | 23,989 | 258,095 |
| **** | | | | | *** | **** |
| VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL | DEPRECIATION TOTAL | REPAIR COST TOTAL | OTHER COST TOTAL | FIXED COST TOTAL | SMP COST TOTAL |

CASE 0-2 EXISTING WITH ESCALATION (UP-2)

MANUFACTURING COST SHEET (AMOUNT) - SMP -

| (UNIT: : 1,000US\$) | | | | | |
|--|---------|---------|---------------|---------|---------|
| | 2011 | 2012 | 2013 | 2014 | 2015 |
| VARIABLE COST RAM MATERIAL & SUPPLIES | | | | | |
| DRI | 100,215 | 100,215 | 100,213 | 100,232 | 98,463 |
| LIME STONE | 2,246 | 2,246 | 2, 115 | 2,246 | 2,246 |
| SCRAP | 46,303 | 46,303 | 46,303 | 46,303 | 46,303 |
| IS33 | 2,829 | 2,829 | 2,829 | 2,829 | 2,829 |
| AL | 217 | 217 | 217 | 217 | 217 |
| COKE BREEZE | 642 | 642 | 642 | 642 | 642 |
| ELECTRODE | 12,464 | 12,464 | 12,464 | 12,464 | 12,464 |
| FURNACE BRICK | 2,192 | 2,192 | 2,192 | 2,192 | 2,192 |
| LADLE BRICK | 4,103 | 4,103 | 4,103 | 4,103 | 4,103 |
| TUNDISH BRICK | 1,902 | 1,902 | 1,902 | 1,902 | 1,902 |
| FETLING MAT | 4,589 | 4,589 | 4,589 | 4,589 | 4,539 |
| IBH | 28,099 | 28,099 | 28,099 | 28,099 | 28,099 |
| FEMN | 7,751 | 7,751 | 7,751 | 7,751 | 7,751 |
| FEV | 82 | 82 | 32 | 82 | 82 |
| BURNT DOLOMITE | 62 | 62 | 62 | 64 | 79 |
| SUB TOTAL * | 213,713 | 213,712 | 213,580 | 213,730 | 211,961 |
| MANUFACTURING SUPLLIES COST | 1,059 | 1,059 | 1,059 | 1,059 | 1,059 |
| RAW MAT & SUPPLIES C TOTAL ** | 214,772 | 214,771 | 214,639 | 214,789 | 213,020 |
| | | | | | |
| BYPRODUCT | | | | | |
| SCRAP | 3,048 | 3,048 | 3,048 | 3,048 | 3,048 |
| DUST | 0 | 0 | 0 | 0 | 0 |
| SLAG | 0 | 0 | 0 | 0 | 0 |
| | 0 | 0 | O | 0 | 0 |
| WASTE BRICK | 0 | 0 | 0 | 0 | 0 |
| SUB TOTAL * | 3,048 | 3,048 | 3,048 | 3,048 | 3,048 |
| UTILITIES | | | | | |
| ELECTRICITY | 21,217 | 21,217 | 21,217 | 21,217 | 21,217 |
| NATURAL GAS | 421. | 421 | 124 | 421 | 421 |
| D2N2 | 87 | 87 | 87 | 87 | 87 |
| COMPRESSED AIR | 159 | 159 | 159 | 159 | 159 |
| MATER | 481 | 481 | 481 | 481 | 481 |
| UTILITIES COST TOTAL ** | 22,365 | 22,365 | 22,365 | 22,365 | 22,365 |
| | | | C H H | | |

.

۰.

| 232,337 | 2,721 6,603 9,346 5,320 23,990 | 256,327 |
|---------------------|---|----------------|
| 234,106 | 2,721 6,603 9,346 5,320 23,990 | 258,096 |
| 233,956 | 2,721 6,603 9,346 5,319 23,989 | 257,945 |
| 234,089 | 2,721 6,603 9,346 5,319 23,989 | 258,077 |
| 234,089 | 2,721 6,603 9,346 5,320 23,990 | 258,079 |
| *** | *** | **** |
| VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL DEPRECLATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL | SMP COST TOTAL |

CASE 0-2 EXISTING MITH ESCALATION (UP-2)

| ł | |
|---|--|
| | |
| | |
| | |
| | |

MANUFACTURING COST SHEET (AMOUNT)

| BAR - | 1995 1996 1997 | 130,612 133,710 133,719 0 0 | 130,812 133,710 133,719 | 1,883 1,883 1,883 132,695 135,593 135,602 | 2,218 2,282 2,282 0 0 | 920 | 1,715 | 0 | 109 110 110 110 2,855 2,921 2,921 | 133,332 136,232 136,240 | 1,049 | 3,033 | 1,337 1,368 1,368 1,368 | 980 | 6,429 |
|--------------------|---|--------------------------------|-------------------------|--|---------------------------------------|--------------------------|---------------------|----------------|--------------------------------------|-------------------------|--------------------------------|--------------------|-------------------------|------------------|------------------|
| | 1994 | 122,631 0 | 122,631 | 1,754 124,385 | 2,048 0 | 831 | 1,568 | 10 | 104 2,674 | 125,011 | 026 | 3,033 | 1,237 | 976 7 | 6,207 |
| | 1993 | 115,793 0 | 115,793 | 1,632 117,425 | 1,901 1,901 | 111 | 1,466 | 0 | 99 2,502 | 118,025 | 924 | 3,047 | 1,238 | 7 1 E U | 09160 |
| | ŝ | | * | ES COST TOTAL ** | · | | | | * | *** | | | | ~~~~ | *** |
| (UNIT : 1,000US\$) | VARIABLE COST RAM MATERIAL & SUPPLIE | | SUB TOTAL | MANUFACTURING SUPLLIES COST RAM MAT & SUPPLIES C TOTAL ** | BY-PRODUCT SCRAP COST SCALE BAR | UTILITIES ELECTRICITY | NATURAL GAS D2N2 | COMPRESSED AIR | WATER UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL | DEPRECIATION TOTAL | REPAIR COST TOTAL | CENER COST TOTAL | LIXEN LUSI INIAL |

AI-65

142,603

142,671

142,661

139,676

131,218

124,176

BAR COST TOTAL

CASE 0-2 EXISTING WITH ESCALATION (UP-2)

| CAPACITING MILL ESCALATION (UP-2) | | | | | | | |
|--|---------------------|------------------|------------------|------------------|-----------------------|--|--------------|
| (UNIT : 1,000US\$) | | | | MANUF | ACTURING COST - BAR - | MANUFACTURING COST SHEET (AMOUNT) - BAR - | : |
| VARTARLE COST | | 6661 | 2000 | 2001 | 2002 | 2003 | 2004 |
| RAW MATERIAL & SUPPLIES BAR BILLET COST P.BILLET COST | ES | 132,812 0 | 133,718 0 | 131,506 D | 129,279 0 | 133,685 0 | 133,751 0 |
| SUB TOTAL | * | 132,812 | 133,718 | 131,506 | 129,279 | 133,685 | 133,751 |
| MANUFACTURING SUPLLIES COST RAM MAT & SUPPLIES C TOTAL ** | ES COST TOTAL ** | 1,883 134,695 | 1,883 135,601 | 1,883 133,389 | 1,883 131,162 | 1,883 | 1,883 |
| BYPRODUCT SCRAP COST SCALE BAR | | 2,282 0 | 2,282 0 | 2,282 0 | 2,282 0 | 2,282 0 | 2,282 0 |
| UTILITIES ELECTRICITY | | 026 | 920 | 606 | 506 | U26 | 046 |
| NATURAL GAS | | 1,715 | 1,715 | 1,713 | 1,713 | 1,714 | 1,714 |
| UZNZ COMPRESSED ATP | | 177 | 44T | 144 | 130 | 174 | 174 |
| WATER | | 110 | 110 | 26 | 91 | 107 | 107 |
| UTILITIES COST TOTAL | ** | 2,921 | 2,921 | 2,864 | 2,838 | 2,916 | 2,916 |
| VARIABLE COST TOTAL | *** | 135,333 | 136,240 | 133,971 | 131,718 | 136,201 | 136,267 |
| FIXED COST | | • | | 4 | | | |
| DEPRECTATION TOTAL | | 3.033 | 220-2 | 2,249 | 7, 676 1, 676 | 1,676 | 1.676 |
| REPAIR COST TOTAL | | 1,368 | 1,368 | 1,360 | 1,357 | 2,740 | 2,740 |
| OTHER COST TOTAL | | 186 | 980 | 953 | 940 | 985 | 985 |
| FIXED COST TOTAL | *** | 6,430 | 6,429 | 5,701 | 4,981 | 6,410 | 6,409 |
| BAR COST TOTAL | **** | 141,763 | 142,669 | 139,672 | 136,699 | 142,611 | 142,677 |
| | | | | ÷ | | ÷ | |

CASE 0-2 EXISTING WITH ESCALATION (UP-2)

MANUFACTURING COST SHEET(AMOUNT)

| (UNIT : 1,000US\$) | | | | | I BAR - | | · |
|--|---------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| VARIABLE COST PAM MATEDIAN & CUDDITES | ų | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| P. BILLET COST P. BILLET COST P. BILLET COST | 0 | 133,761 0 | 133,752 0 | 132,844 0 | 133,683 0 | 133,761 0 | 133,752 0 |
| SUB TOTAL | * | 133,761 | 133,752 | 132,844 | 133,683 | 133,761 | 133,752 |
| MANUFACTURING SUPLLIES COST Raw Mat & Supplies C Total ** | ES COST Total ## | 1,883 135,644 | 1,883 135,635 | 1,883 134,727 | 1,883 135,566 | 1,883 135,644 | 1,883 135,635 |
| BY-PRODUCT SCRAP COST SCALE BAR | | 2,282 0 | 2,282 0 | 2,282 0 | 2,282 0 | 2,282 0 | 2,282 0 |
| UTILITIES CULCTRICTIC | | | | | | | 400 |
| | | 920 | 920 | 920 | 920 | 920 | 026 |
| NATUKAL GAS D2N2 | | 1,714 | 1,714 174 | 1,714 | 1,714 | 1,714 174 | 1,714 174 |
| COMPRESSED AIR | | 0 | 0 | ì | 0 | i | i |
| MATER | | 107 | 107 | 107 | 107 | 107 | 107 |
| UTILITIES COST TOTAL | ** | 2,916 | 2,916 | 2,916 | 2,916 | 2,916 | 2,916 |
| VARIABLE COST TOTAL | *** | 136,277 | 136,269 | 135,360 | 136,200 | 136,278 | 136,269 |
| FIXED COST | · | 000 r | - | | 5 5 5 | | - |
| LADUR CUSI ICIAL | | | 640 °T | 540°T | 640 ° T | 7 > C + 2 | 1,049 |
| DEPRECIATION TOTAL | | 1,636 | 1,636 | 1,636 | 1,636 | 1,636 | 1,636 |
| REPAIR COST TOTAL | | 2,740 | 2,740 | 2,740 | 2,740 | 2,740 | 2,740 |
| OTHER COST TOTAL | | 985 | 985 | 985 | 985 | 585 | 985 |
| FIXED COST TOTAL | *** | 6,410 | 6,410 | 6,410 | 6,409 | 6,410 | 6,410 |
| BAR COST TOTAL | *** | 142,687 | 142,679 | 141,770 | 142,609 | 142,688 | 142,679 |

| | dED |
|------|------------|
| | ESCALATION |
| | HLIM |
| 0-2 | EXISTING |
| CASE | |

NG WITH ESCALATION (UP-2)

MANUFACTURING COST SHEET(AMOUNT) - BAR -

| (UNIT : 1,000US\$) | | | | | | |
|---|---------------------|------------------|------------------|------------------|------------------|------------------|
| VARIABLE COST RAW MATERIAL & SUPPLIES | ŝ | 2011 | 2102 | 2013 | 2014 | 2015 |
| BAR BILLET COST P.BILLET COST | | 133,752 0 | 133,752 0 | 133,663 0 | 133,761 0 | 132,844 0 |
| SUB TOTAL | * | 133 , 752 | 133,752 | 133,683 | 133,761 | 132,844 |
| MANUFACTURING "SUPLLIES COST RAM MAT & SUPPLIES C TOTAL ** | ES COST TOTAL ** | 1,883 135,635 | 1,883 135,635 | 1,883 135,566 | 1,883 135,644 | 1,883 134,727 |
| N-PRODUCT SCRAP COST SCALE BAR | | 2,282 0 | 2,282 0 | 2,282 0 | 2,282 0 | 2,282 0 |
| JTILITIES Electricity | | 920 | 920 | 920 | 920 | 920 |
| NATURAL GAS | | 1,714 | 1,714 | 1,714 | 1,714 | 1,714 |
| OZNZ Compressed AIR | | 0 | 1/4 | 1/4 | 7.4 4 | 0 7 |
| | | 107 | 107 | 107 | 107 | 107 |
| UTILITIES COST TOTAL | ** | 2,916 | 2,916 | . 2,916 | 2,916 | 37916 |
| VARIABLE COST TOTAL | *** | 136,269 | 136,268 | 136,199 | 136,278 | 135,361 |
| FIXED COST LABOR COST TOTAL | - | 1,049 | 1,049 | 1,049 | 1,049 | 1,049 |
| DEPRECIATION TOTAL | | 1.636 | 1,636 | 1,636 | 1,636 | 1,636 |
| REPAIR COST TOTAL | | 2,740 | 2,740 | 2,740 | 2,740 | 2,740 |
| OTHER COST TOTAL | | 985 | 985 | 985 | 985 | 985 |
| FIXED COST TOTAL | *** | 6,410 | 6,410 | 6,409 | 6,410 | 6,410 |
| BAR COST TOTAL | *** | 142,679 | 142,678 | 142,609 | 142,688 | 141,771 |
| | | | | | | |

CASE 0-2 EXISTING MITH ESCALATION (UP-2)

MANUFACTURING COST SHEET (AMOUNT)

| (UNIT : 1,000US\$) | | | · | | - KOD KOD - | SALE I (APAUNI) | |
|---|----------|------------------|------------------|------------------|------------------|-------------------|------------------|
| | | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
| RAW MATERIAL & SUPPLIES ROD BILLET COST P.BILLET COST | | 115,020 0 | 118,393 0 | 122,842 0 | 125,564 0 | 125,572 0 | 125,509 0 |
| SUB TOTAL | * | 115,020 | 118,393 | 122,842 | 125,564 | 125,572 | 125,509 |
| MANUFACTURING SUPPLIES RAM MAT & SUPPLIES C TI | TOTAL ** | 1,618 116,638 | 1,690 120,083 | 1,765 124,607 | 1,765 127,329 | 1,765 127,337 | 1,765 127,274 |
| BY-PRODUCT Scrap Scale Rod | | 1,374 0 | 1,443 0 | 1,515 0 | 1,559 0 | 1,559 0 | 1,559 0 |
| UTILITIES ELECTRICITY | | 1,576 | 1,441 | 1,510 | 1,551 | 1,551 | 1,551 |
| NAIUKAL GAS O2N2 | | 1,201 | 27 | L,5/U 27 | 27 27 | 1,401 | 27 27 |
| COMPRESSED AIR WATER | | 0 153 | 0 156 | 0 159 | 0 161 | 161 | 0 161 |
| UTILITIES COST TOTAL | ** | 2,823 | 2,941 | 3,065 | 3,141 | 3,141 | 3,141 |
| VARIABLE COST TOTAL | *** | 118,086 | 121,581 | 126,157 | 128,911 | 128,919 | 128,856 |
| FIXED COST LABOR COST TOTAL | | 742 | 622 | 818 | 842 | 842 | 842 |
| DEPRECIATION TOTAL | | 4,309 | 4,292 | 4,292 | 4,292 | 4,292 | 4,292 |
| REPAIR COST TOTAL | | 1,436 | 1,493 | 1,551 | 1,586 | 1,586 | 1,586 |
| OTHER COST TOTAL FIXED COST TOTAL | *** | 1,149 7,637 | 1,145 7,709 | 1,1827,843 | 1,2077,927 | 1,207 | 1,207 |
| ROD COST TOTAL | *** | 125,723 | 129,290 | 134,001 | 136,838 | 136,846 | 136,783 |

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CASE 0-2 EXISTING WITH ESCALATION (UP-2)

MANUFACTURING COST SHEET(AMOUNT) - ROD -

| (\$\$1000*1 : 1*000N\$) | | | |
|--|--------------|--------------|--|
| VARIABLE COST | 1999 | 2000 | ~ |
| RAM MATERIAL & SUPPLIES ROD BILLET COST P.BILLET COST | 124,720 D | 125,571 0 | 123, |
| SUB TOTAL * | 124,720 | 125,571 | 123, |
| MANUFACTURING SUPPLIES COST DAM MAT 9 CUMPLIES C TOTAL XX | 1,765 | 1,765 | , in the second se |

| 2003 2004 | 125,540 125,602 0 0 | 125,540 125,602 | 1,765 1,765 127,305 127,367 | 1,559 1,559 0 0 | 1,551 1,551 1,401 1,401 27 27 0 0 157 3,156 3,136 3,136 128,883 128,945 | 842 842 842 2,699 1,585 3,178 1,212 1,212 1,212 |
|---------------|---|-----------------|--|----------------------------------|---|---|
| 2002 | 121,403 | 121,403 | 1,765 123,168 | 1,559 0 | 1,526 1,400 20 133 3,078 124,688 | 842 1,872 1,574 1,167 |
| 2001 | 123,494 0 | 123,494 | 1,765 125,259 | 1,559 0 | 1,534 1,400 22 22 142 3,098 126,799 | 842 4,312 1,578 1,180 |
| 2000 | 125,571 0 | 125,571 | 1,765 127,336 | 1,559 0 | 1,551 1,401 27 27 161 3,141 128,918 | 842 4,292 1,586 |
| 1999 | 124,720 0 | 124,720 | 1,765 126,485 | 1,559 1 | 1,551 1,401 27 27 27 27 3 141 3,141 128,067 | 842 4,292 1,586 |
| VARIABLE COST | RAM MATERIAL & SUPPLIES ROD BILLET COST P.BILLET COST | SUB TOTAL * | MANUFACTURING SUPPLIES COST RAW MAT & SUPPLIES C TOTAL ** | BY-PRODUCT Scrap Scale Rod | UTILITIES ELECTRICITY NATURAL GAS OZNZ OZNZ COMPRESSED AIR MATER UTILITIES COST TOTAL *** VARIABLE COST TOTAL *** | LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL |

136,876

134,816

130,142

134,711

136,845

135,994

ROD COST TOTAL

CASE 0-2 EXISTING WITH ESCALATION (UP-2)

MANUFACTURING COST SHEET(AMOUNT)

| - ROD - | 2008 2009 2010 | 125,539 125,612 125,604 0 0 | | 1,765 1,765 1,765 1,765 127,369 | 1,559 1,559 1,559 0 0 0 | | | 1,401 | 27 | | 3,136 | 128,881 128,955 128,946 | 842 | 2,699 | 3,178 | 1,212 | 7,931 7,931 7,931 | |
|--------------------|--|--------------------------------|-----------|---|----------------------------------|----------|-------------|-------------|------|-------------------------|----------------------|-------------------------|--------------------------------|--------------------|-------------------|------------------|-------------------|--|
| | 2007 | 124,750 0 | 124,750 | 1,765 126,515 | 1,559 0 | | 1,551 | 1,401 | 57 | 157 | 3,136 | 128,093 | 842 | 2,700 | 3,178 | 1,212 | 7,932 | |
| | 2006 | 125,604 0 | 125,604 | 1,765 127,369 | 1,559 0 | | 1,551 | 1,401 | 27 | 157 | 3,136 | 128,946 | 842 | 2 . 700 | 3,178 | 1,212 | 7,932 | |
| | 2005 | 125,612 0 | 125,612 | 1,765 127,377 | 1,559 | | 1,551 | 1,401 | 27 | 157 | 3,136 | 128,954 | 842 | 2,700 | 3,178 | 1,212 | 7,932 | |
| · | : | | * | ES COST TOTAL ** | | | | | | | * | *** | | | | | *** | |
| (UNIT : 1,000US\$) | VARIABLE COST PAM WATEDIAL & SUDDITES | | SUB TOTAL | MANUFACTURING SUPPLIES RAM MAT & SUPPLIES C TI | BY-PRODUCT Scrap Scale Rod | UTILITES | ELECTRICITY | NATURAL GAS | UZNZ | CUMPRESSEU AIN MATER | UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL | DEPRECIATION TOTAL | REPAIR COST TOTAL | OTHER COST TOTAL | FIXED COST TOTAL | |

| | (UP-2) |
|------|------------|
| | ESCALATION |
| | HLIM |
| 0-2 | EXISTING |
| CASE | |

MANUFACTURING COST SHEET(AMOUNT) - ROD -

| (UNIT : 1,000US\$) | | | | | | |
|---|-----------------|------------------|------------------|------------------|------------------|------------------|
| VARIABLE COST | | 1102 | 2012 | 2013 | 2014 | 2015 |
| RAM MAIEKLAL & SUPPLIES ROD BILLET COST P.BILLET COST | | 125,604 D | 125,603 0 | 125,538 0 | 125,612 0 | 124,751 0 |
| SUB TOTAL | * | 125,604 | 125,603 | 125,538 | 125,612 | 124,751 |
| MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL | COST DTAL ** | 1,765 127,369 | 1,765 127,368 | 1,765 127,303 | 1,765 127,377 | 1,765 126,516 |
| BYPRODUCT SCRAP SCALE ROD | | 1,559 0 | 1,559 0 | 1,559 0 | 1,559 0 | 1,559 |
| UTILITIES | | | | i | 533 | 1 |
| ELECTRICETY NATURAL GAS | | 164,1 | 104.1 | 1,401 | 1,401 | 144.1 |
| 02N2 | | 27 | 27 | 27 | 27 | 27 |
| COMPRESSED AIR | | 0 | 0 | 0 | 0 | 0 |
| MATER | | 157 | 157 | 157 | 157 | 157 |
| UTILITIES COST TOTAL | ** | 3,136 | 3,136 | 3,136 | 3,136 | 3,136 |
| VARIABLE COST TOTAL | *** | 128,946 | 128,946 | 128,881 | 128,955 | 128,094 |
| | | | • | | | |
| FIXED COST LABOR COST TOTAL | | 842 | 842 | 842 842 | 842 | 842 |
| DEPRECIATION TOTAL | | 2,699 | 2,699 | 2,699 | 2,699 | 2,699 |
| REPAIR COST TOTAL | | 3,178 | 3,178 | 3,178 | 3,178 | 3,178 |
| OTHER COST TOTAL | | 1,212 | 1,212 | 1,212 | 1,212 | 1,212 |
| FIXED COST TOTAL | *** | 7,931 | 7,931 | 126*1 | 7,931 | 7,931 |
| ROD COST TOTAL | **** | 136,878 | 136,877 | 136,812 | 136,886 | 136,025 |
| | | | | | | |

CASE 1-2

UPDATE WITH ESCALATION

• .

| | 1997 1998 | 58,412 58,412 | 58,412 58,412 | 815 815 59,227 59,227 | 6 C 6 C | | 19, | 67 67 67 67 67 67 67 67 67 67 67 67 67 6 | 23, | 82,327 82,319 | | 6,136 6,136 2,222 0,222 | | ,828 6,829 | |
|--|--|----------------|---------------|--|---|--------------------------|-------------|--|----------------------|---------------------|--------------------------------|---|---------------------|------------------|------------------|
| MANUFACTURING COST SHEET(AMOUNT - DRP - | 1996 | 58,412 58, | 58,412 58, | 815 59,227 59, | | | 19,696 19, | | | 83,049 82, | | | | | |
| MANUFAC | 1995 | 57,098 | 57,098 | 780 57,878 | 00 | 2,231 | 19,257 | 218 218 618 | 22,365 | 80,243 | 782 | 6,136 | 1,712 | 6,613 | 18,021 |
| | 1994 | 54,902 | 54,902 | 747 55,649 | 00 | 2,130 | 18,520 | 214 606 | 21,511 | 77,160 | 745 | 6,136 2.673 | 1,646 | 6,577 | 177,177 |
| | 1993 | 52,79 1 | 52,791 | 716 53,507 | 00 | 2,034 | 17,811 | 210 294 | 20,690 | 74,196 | 209 | 6,153 2.572 | 1,583 | 6,871 | 17,688 |
| | | | * | COST OTAL ** | | | | | * | *** | | | | | *** |
| (UNIT : 1,000US\$) | VARIABLE COST DAM MATENTAL • COMPLETE | PELLET COST | SUB TOTAL | MANJFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | BY-PRODUCT OXIDE FINES OXIDE THICKNER | UTILITIES ELECTRICITY | NATURAL GAS | COMPRESSED AIR WATER | UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL | DEPRECIATION TOTAL REPAIR COST TOTAL | S REPAIR COST TOTAL | DTHER COST TOTAL | FIXED COSI IUIAL |

.

100,102

100,109

98,265 100,766

94,937

92,084

DRP COST TOTAL

| VARIABLE COST RAM MATERIAL & SUPPLIES | | | | | | |
|--|----------------|---------------|---------------|---------------|---------------|---------------|
| | · | 1999 | 2000 | 2001 | 2002 | 2003 |
| PELLET COST | | 58,412 | 58,412 | 58,412 | 58,412 | 58,412 |
| SUB TOTAL | * | 58,412 | 58,412 | 58,412 | 58,412 | 58,412 |
| MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | COST TAL ** | 815 59,227 | 815 59,227 | 815 59,227 | 815 59,227 | 815 59,227 |
| BY-PRODUCT OXIDE FINES OXIDE THICKNER | | 00 | 00 | 00 | 00 | 00 |
| UTILITIES El ECTDICITY | | TOZ 6 | LUZ 6 | 00¢.0 | 920.0 | 102 ¢ |
| NATURAL GAS | | 19.689 | 19,689 | 19,676 | 19,670 | 19,685 |
| OZNZ | | 75 | 75 | 68 | 65 | 74 |
| COMPRESSED AIR | | 170 | 170 | 166 | 165 | 169 |
| MATER | | 858 | 858 | 802 | 776 | 847 |
| UTILITIES COST TOTAL | ** | 23,092 | 23,092 | 22,992 | 22,945 | 23,077 |
| VARIABLE COST TOTAL | *** | 82,319 | 82,319 | 82,219 | 82,172 | 82,304 |
| FIXED COST | | | 100 | 100 | L | 2 |
| TYDAK CASE IN YT | | 600 | 600 | 600 | 500 | SUB |
| DEPRECIATION TOTAL | | 6,136 | 6,134 | 5,684 | 3,295 | 3,295 |
| REPAIR COST TOTAL | | 2,262 | 2,262 | 2,259 | 2,259 | 5,114 |
| S REPAIR COST TOTAL | | 0 | 1,752 | 1,752 | 1,752 | 1,752 |
| OTHER COST TOTAL | | 6.829 | 6.829 | 6.793 | 6.774 | 6.826 |
| | 22.2 | 620.41 | 17.781 | 200.71 | 100 JL | LO4 . 4 L |
| • | *** | 16,032 | 17,781 | 17,293 | 14,885 | |

2,301 19,635 74 169 847 23,077 82,304

805 3,293 5,114 1,752 6,826 17,789 100,093

100,095

97,056

99,512

100,100

98,350

DRP COST TOTAL

815 59,227

00

2004

58,412 58,412

,

| | | | | | MANUFAC | MANUFACTURING COST SHEET(AMOUNT) - DRP - | IEET (AMOUNT) | |
|--|--------------------|-----|---------------|---------------|---------------|---|-----------------|---------------|
| (UNIT : 1,000US\$) | | | | | | | | |
| VARIABLE COST | | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| RAW MALEKLAL & SUPPLIES PELLET COST | 'n | 58 | 58,412 | 58,412 | 58,412 | 58,412 | 58,412 | 58,412 |
| SUB TOTAL | * | 58 | 58,412 | 58,412 | 58,412 | 58,412 | 58,412 | 58,412 |
| MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | S COST TOTAL ** | 59 | 815 59,227 | 815 59,227 | 815 59,227 | 815 59,227 | 815 59,227 | 815 59,227 |
| BY-PRODUCT OXIDE FINES OXIDE THICKNER | | | | 00 | 00 | 00 | | 00 |
| UTILITES | | | | | | | | |
| ELECTRICITY | | ิณ | 2,301 | 2,301 | 2,301 | 2,301 | 2,301 | 2,301 |
| NATURAL GAS | | 19 | ,685 | 19,685 | 19,685 | 19,685 | 19,685 | 19,685 |
| OZNZ | | | 74 | 74 | 74 | 52 | 74 | 42 |
| CUTTREAGED ALK WATER | | | 107 847 | 167 2447 | 169 267 | 169 267 | 169 | 169 |
| UTILITIES COST TOTAL | ** | 23 | 23,077 | 23,077 | 23,077 | 23,077 | 23,077 | 23,077 |
| VARIABLE COST TOTAL | *** | 82 | 82,304 | 82,304 | 82,304 | 82,304 | 82,304 | 82,304 |
| FIXED COST LABOR COST TOTAL | | | 805 | 808 | 805 | 805 | 308 | BUE |
| DEPRECIATION TOTAL | | M | 3,312 | 3,295 | 3,295 | 3,293 | 3,312 | 3,295 |
| REPAIR COST TOTAL | | ហា | ,114 | 5,114 | 5,114 | 5,114 | 5,114 | 5,114 |
| S REPAIR COST TOTAL | | м | ,752 | 1,752 | o | 1,752 | 1,752 | 1,752 |
| OTHER COST TOTAL | | Ģ | ,826 | 6,826 | 6,825 | 6,826 | 6,826 | 6,826 |
| FIXED COST TOTAL | *** | 17 | ,808 | 17,791 | 16,039 | 17,789 | 17,808 | 17,791 |
| DRP COST TOTAL | **** | 100 | 100,112 | 100,095 | 98,343 | 100,093 | 100,112 | 100,095 |

| | | | | MANUFA | MANUFACTURING COST SHEET(AMOUNT) - DRP - | IEET (AMOUNT) |
|--|-----------------|-----------------|-----------------|-----------------|---|-----------------|
| (UNIT : 1,000US\$) | | | | | | |
| VARTABLE COST | | 2011 | 2012 | 2013 | 2014 | 2015 |
| RAM MATERIAL & SUPPLIES PELLET COST | | 58,412 | 58,412 | 58,412 | 58,412 | 58,412 |
| SUB TOTAL | * | 58,412 | 58,412 | 58,412 | 58,412 | 58,412 |
| MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | COST OTAL ** | 815 59,227 | 815 59,227 | 815 59,227 | 815 59,227 | 815 59,227 |
| BY-PRODUCT OXIDE FINES OXIDE THICKNER | | 00 | 00 | 00 | 00 | 00 |
| UTILITIES ELECTRICITY | | 2,294 | 2,301 | 2,301 | 2,301 | 2,301 |
| NATURAL GAS | | 19,686 | 19,685 | 19,685 | 19,685 | 19,685 |
| OZNZ COMPRESSED AIR | | 120 | 170 | 175 | 170 | 170 |
| MATER | | 726 | 835 | 835 | 835 | 835 |
| UTILITIES COST TOTAL | ** | 22,887 | 23,067 | 23,067 | 23,067 | 23,067 |
| VARIABLE COST TOTAL | *** | 82,114 | 82,293 | 82,293 | 82,293 | 82,293 |
| FIXED COST LABOR COST TOTAL | , | 805 | 805 | 805 | 805 | 805 |
| DEPRECIATION TOTAL | | 3,295 | 3,295 | 3,293 | 3,312 | 3,295 |
| REPAIR COST TOTAL | | 5,122 | 5,113 | 5,113 | 5,113 | 5,113 |
| S REPAIR COST TOTAL | • | 1,752 | 1,752 | 1,752 | 1,752 | • |
| OTHER COST TOTAL FIXED COST TOTAL | *** | 6,825 17,800 | 6,826 17,791 | 6,326 17,789 | 6,826 17,808 | 6,826 16,039 |
| DRP COST TOTAL | **** | 99,913 | 100,085 | 100,083 | 100,102 | 98,333 |

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Sec. 19.

No.

| SHEET (AMOUNT) | 1997 | 506 203 | 903 903 | 912 912 9 | 00 | | 105 105 220 220 | | | 0 0 | 669 668 | 1,581 1,580 | | | 341 341 | | | | 1,246 1,116 | 907.6 768.6 |
|---|---------------|---|-----------|--|--|-----------|---------------------------------|------|----------------|-------|----------------------|---------------------|------------|------------------|--------------------|-------------------|---------------------|------------------|------------------|----------------|
| MANUFACTURING COST SHEET(AMOUNT) - LCP - | 1996 | 529 | 529 | 6 535 | 00 | : | 49 7 1 2 | 212 | • | 0 | 397 | 932 | | 168 | 341 | 142 | 131 | 416 | 1,198 | 0.130 |
| MANU | 566T | 556 | 556 | 562 562 | 00 | : | 900 727 | | 0 | 0 | 407 | 969 | | 163 | 341 | 174 | 128 | 378 | 1,184 | 2,153 |
| | 1994 | 529 | 529 | 535 | 00 | ; | 61 791 | 4 G | ÷ | 0 | 291 | 926 | | 156 | 341 | 168 | 123 | 370 | 1,157 | 2,084 |
| | 2661 | 504 | 504 | 510 | 00 | ł | 2 2 2 2 2 2 2 | 6 | | 0 | 376 | 886 | | 148 | 242 | Jei | Ö | 404 | 1,056 | 1,942 |
| | | ទ | * | S COST TOTAL ** | | | | | | | ** | *** | | | | | | | ** | *** |
| (WIT : 1,000US\$) | VARIABLE COST | RAM MATERIAL & SUPPLIE LIME STONE COST | SUB TOTAL | MANUFACTURING SUPPLIES RAM MAT & SUPPLIES C | BY-PRODUCT LIME FINES LIME STONE FINES | UTILITIES | ELECTRICITY NATIBAL CAS | D2N2 | COMPRESSED AIR | MATER | UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST | LABOR COST TOTAL | DEPRECIATION TOTAL | REPAIR COST TOTAL | S REPAIR COST TOTAL | OTHER COST TOTAL | FIXED COST TOTAL | LCP COST TOTAL |

| MARUFACTURING COST SHEET(AMOUNT) - LCP - | 2001 2002 2003 | £06 £06 | 903 903 | 9 9 912 912 912 | •• | 103 | 539 539 539 539 22 21 24 | 0 | 0 0 0 665 663 668 | 1,577 1,575 1,580 1,580 | 168 168 | 207 206 142 321 | TST | 439 425 470 470 470 1,295 1,295 | 2.64R 2.74F |
|---|--------------------|--|-----------|--|--|--------------------------|-----------------------------|----------------|-------------------------------|-------------------------|--------------------------------|---|---------------------|--------------------------------------|----------------|
| | 2000 | 206 | 206 | 6 6 | 00 | 105 | 539 | ; 0 | 0 668 | 1,580 | 168 | 341 142 | 131 | 465 1,247 | 2,827 |
| | 1999 | 206 | 506 | 9 12 | 00 | 105 | 539 | .0 | 0 668 | 1,580 | 168 | 341 142 | 131 | 1,247 | 2,827 |
| | | ES | * | COST TOTAL ** | | | | | ** | *** | | | | *** | **** |
| | (UNIT : 1,000US\$) | VARIABLE COST RAM MATERIAL & SUPPLIE LIME STONE COST | SUB TOTAL | MANUFACTURING SUPPLIES RAW MAT & SUPPLIES C | BY-PRODUCT LIME FINES LIME STONE FINES | UTILITIES Electricity | NATURAL GAS | COMPRESSED AIR | WATER UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL | DEPRECIATION TOTAL REPAIR COST TOTAL | S REPAIR COST TOTAL | OTHER COST TOTAL FIXED COST TOTAL | LCP COST TOTAL |

| | | ESCALATION |
|--------|---|------------|
| | | HLIN |
| (, | 7-7 | UPDATE-2 |
| | un and and and and and and and and and an | |

| | | | | MANUFAC | HANUFACTURING COST SHEET (AMOUNT) | JEET (AMOUNT) | |
|--|------------------|------------|-----------|----------|-----------------------------------|-----------------|-------|
| (UNIT : 1,000US\$) | | - | | | י דרק ו | | • |
| VARIABLE COST | | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| RAM MALENIAL & SUPPLIES LIME STONE COST | | 503 | 506 | 506 | 903 | 206 | 503 |
| SUB TOTAL | * | 506 | 206 | 903 | 206 | 506 | 206 |
| MANUFACTURING SUPPLIES RAW MAT & SUPPLIES C T | COST TOTAL ** | 9 912 | 9 912 | 9 912 | 912 912 | 9 912 | 912 |
| BY-PRODUCT LIME FINES LIME STONE FINES | | 00 | 00 | 00 | 00 | 00 | 00 |
| UTILIES | | · | - | | | | |
| ELECTRICITY | | 105 | 105 | 105 | 105 | 105 | 105 |
| NALURAL BAS | | 429 25 | 554 25 | 539 | 539 | 539 | 539 |
| COMPRESSED AIR | | ť 0 | 4 O | ť, 0 | 7 , 0 | 4 7 | 5, 0 |
| MATER | | 0 | 0 | | . 0 | 0 | 0 |
| UTILITIES COST TOTAL | ** | 668 | 668 | 668 | 668 | 668 | 668 |
| VARIABLE COST TOTAL | *** | 1,580 | 1,580 | 1,580 | 1,580 | 1,580 | 1,580 |
| FIXED COST | | 67 F | - C P | | | | |
| DEPRECIATION TOTAL | | 504 204 | 206 | 700 T | 206 | 906 700 | 201 |
| REPAIR COST TOTAL | | 321 | 321 | 42T | 321 | 321 | 321 |
| S REPAIR COST TOTAL | | 131 | 131 | 131 | 0 | 131 | 131 |
| OTHER COST TOTAL | | 470 | 470 | 470 | 470 | 470 | 470 |
| FIXED COST TOTAL | *** | 1,296 | 1,296 | 1,296 | 1,164 | 1,296 | 1,296 |
| LCP COST TOTAL | **** | 2,876 | 2,876 | 2,876 | 2,745 | 2,876 | 2,876 |

| | ESCALATIO |
|------|-----------|
| | MITH |
| 1-12 | ATE-2 |
| CASE | |

DATE-2 WITH ESCALATION

MANUFACTURING COST SHEET(AMOUNT) - LCP -

| | 2015 | 903 | 603 | 9 212 | 00 | 105 539 | 300 | 668 | 1,580 | 168 206 | 320 131 | 470 1,296 | 2,876 |
|--------------------|---------------|--|-----------|---|--|---|---------------------------------|----------------------|---------------------|--|--|--------------------------------------|----------------|
| 1 | 2014 | 903 | 903 | 912 | 00 | 105 539 | 5 0 0 6 | 668 | 1,580 | 168 206 | 320 | 470 1,296 | 2,876 |
| | 2013 | 206 | 506 | 912 912 | 00 | 105 539 | 4 G O | 668 | 1,580 | 168 206 | 320 | 470 1,165 | 2,745 |
| | 2012 | 206 | 503 | 912 9 | 00 | 105 539 | 400 N | 668 | 1,580 | 168 206 | 321 | 470 1,296 | 2,876 |
| | 1102 | 503 | 603 | 9 21 | 00 | 105 539 | 000 | 663 | 1,575 | 168 206 | 321 131 | 470 1,296 | 2,871 |
| | | | * | COST OTAL ** | | | | ** | *** | | | *** | **** |
| (UNIT : 1,000US\$) | VARIABLE COST | RAM MATERIAL & SUPPLIES LIME STONE COST | SUB TOTAL | MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL | BY-PRODUCT LIME FINES LIME STONE FINES | UTILITIES ELECTRICITY NATURAL GAS | 02N2 COMPRESSED AIR WATER | UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL | REPAIR COST TOTAL S REPAIR COST TOTAL | OTHER COST TOTAL FIXED COST TOTAL | LCP COST TOTAL |

(\$SN0001: 1,000US\$)

24,508 569 216 2,812 1,027 29,133 100,102 2,696 3,635 3,635 3,635 2,636 17,303 17,303 17,303 17,303 2,718 1,433 294,933 4,133 4,133 1998 293,500 100,109 2,826 3,424 2,924 2,728 17,303 2,718 2,718 2,718 2,718 2,718 2,773 5,417 2,718 2,718 2,718 2,717 2,718 2,717 2,717 2,717 2,717 2,717 2,717 2,717 2,717 2,717 2,717 2,717 2,717 2,717 2,717 2,717 2,717 2,717 2,717 2,717 2,718 2,717 2,718 2,718 2,718 2,718 2,717 2,718 2,717 2,718 2,717 2,718 2,717 2,718 2,717 2,718 2,7 24,518 569 217 2,812 1,035 29,151 1,433 295,077 4,133 293,644 4,133 1997 68 10 10 00,766 2,130 48,536 48,536 2,337 2,337 2,337 1,157 1,157 1,157 1,157 1,157 1,157 1,157 1,157 1,157 1,157 1,157 1,157 1,568 2,5401 6,495 171 2,469 834 22,229 938 207,731 2,700 18,392 362 206,793 00 1996 2,700 <u>6</u>5 99 98,265 2,153 2,153 2,153 2,154 2,749 2,749 2,143 2,143 2,143 2,143 2,143 2,143 2,145 2,467 2,467 2,577 20,646 392 88 161 486 21,773 1,059 210,047 2,962 0 000 1995 208,988 2,962 91 88 158 477 20,811 94,937 2,084 2,084 2,084 2,084 2,013 2,014 2,050 3,856 1,715 2,050 3,856 1,715 2,050 2,050 2,050 2,050 2,050 2,051 2,050 2,051 2,052 1,014 202,155 19,711 377 2,821 0 000 2,821 1996 201,141 18,820 362 88 155 467 19,893 92,084 1,942 1,942 2,493 2,493 5,64 1,264 1,264 1,264 1,719 4,1719 4,1719 4,1719 4,1719 25,395 7,005 971 194,850 193,879 2,687 0 000 2,687 1993 5 69 MANUFACTURING SUPLLIES COST RAW MAT & SUPPLIES C TOTAL ** * * RAM MATERIAL & SUPPLIES DRI LIME STONE SCRAP FESI FESI AL COKE BREEZE ELECTRODE FUNDISH BRICK LADLE BRICK LADLE BRICK FETLING MAT HBI FEM WATER UTILITIES COST TOTAL COMPRESSED AIR BURNT DOLOMITE UTILITIES ELECTRICITY NATURAL GAS SUB TOTAL SLAG SCALE SMP MASTE BRICK SUB TOTAL VARIABLE COST BY-PRODUCT SCRAP 02N2 DUST

89 93

00

MANUFACTURING COST SHEET(AMOUNT)

| 319,932 | 3,627 16,954 5,975 6,275 32,782 32,782 352,713 |
|---------------------|---|
| 320,094 | 3,627 16,954 5,975 6,223 32,779 32,779 |
| 227,260 | 3,627 13,625 5,975 5,937 29,162 29,162 256,422 |
| 228,858 | 2,644 11,243 4,561 5,098 23,546 23,546 |
| 220,144 | 2,518 11,245 4,345 4,967 23,118 23,118 243,262 |
| 212,056 | 2,398 11,301 4,223 6,353 24,276 236,332 |
| | . * |
| *** | **** |
| VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL SMP COST TOTAL |

(\$SU000.1 : TJ,000US\$)

MANUFACTURING COST SHEET(AMOUNT) - SMP -

| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|--|---------|---------|---------|---------|---------|---------|
| RIADLE UUSI RAM MATERIAL & SUPPLIES | | | | | | |
| | 98,350 | 100,100 | 99,512 | 97,056 | 100,095 | 100,095 |
| | 2,827 | 2,827 | 2,709 | 2,648 | 2,745 | 2,876 |
| | 110,385 | 110,385 | 110,385 | 110,385 | 110,385 | 110,385 |
| | 3,434 | 3,434 | 3,434 | 3,434 | 3,434 | 3,434 |
| | 294 | 294 | 294 | 294 | 294 | 294 |
| | 2,986 | 2,986 | 2,986 | 2,986 | 2,986 | 2,986 |
| | 17,303 | 17,303 | 17,303 | 17,303 | 17,303 | 17,303 |
| | 2,718 | 2,718 | 2,718 | 2,718 | 2,718 | 2,718 |
| | 7,215 | 7,215 | 7,215 | 7,215 | 7,215 | 7,215 |
| | 2,573 | 2,573 | 2,573 | 2,573 | 2,573 | 2,573 |
| | 5,417 | 5,417 | 5,417 | 5,417 | 5,417 | 5,417 |
| | 28,842 | 28,842 | 28,842 | 28,842 | 28,842 | 28.842 |
| | 9,351 | 9,351 | 9,351 | 9,351 | 9,351 | 9,351 |
| | 89 | 89 | 89 | 89 | 89 | 89 |
| | 63 | 56 | 93 | 56 | 56 | 63 |
| * | 291,879 | 293,628 | 292,922 | 290,405 | 293,541 | 293,669 |
| MANUFACTURING SUPLLIES COST | 1,433 | I,433 | 1,433 | 1,433 | 1,433 | 1,433 |
| RAW MAT & SUPPLIES C TOTAL ** | 293,312 | 295,061 | 294,355 | 291,838 | 294,974 | 295,102 |
| | | | | | | |
| | 4,133 | 4,133 | 4,133 | 4,133 | 4,133 | 4,133 |
| | G | 0 | 0 | 0 | 0 | 0 |
| | 0 | o | 0 | 0 | 0 | C |
| | 0 | Ð | 0 | 0 | 0 | |
| | • | o | 0 | o | 0 | Ű |
| * | 4,133 | 4,133 | 4,133 | 4,133 | 4,133 | 4,133 |
| | | | | · | | |
| | 24,508 | 24,508 | 24,280 | 24,168 | 24,509 | 24,509 |
| | 569 | 569 | 569 | 569 | 569 | 20 |
| | 216 | 216 | 197 | 189 | 215 | 215 |
| | 2,812 | 2,812 | 2,754 | 2,728 | 2,803 | 2,803 |
| | 1,027 | 1,027 | 1961 | 929 | 1,014 | 1,01 |
| UTILITIES COST TOTAL ** | 29,133 | 29,133 | 28,760 | 28,582 | 29,110 | 29,11 |
| | | | | | | |

.

| 320,079 | 3,627 12,5314 10,657 6,785 32,785 32,785 |
|---------------------|---|
| 319,950 | 3,627 12,314 10,657 6,188 32,785 32,785 32,735 |
| 316,287 | 3,627 12,314 5,967 6,110 28,018 344,305 |
| 318,982 | 3,627 13,864 5,968 5,151 29,610 348,592 |
| 320,061 | 3,627 16,954 5,975 5,975 32,781 32,781 352,842 |
| 318,311 | 3,627 16,954 5,975 6,226 32,782 32,782 351,092 |
| *** | * * |
| VARIABLE COST TOTAL | FIXED COST LABOR COSY TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL SMP COST TOTAL |

· · · ·

(UNIT : 1,000US\$)

MANUFACTURING COST SHEET(AMOUNT) - SMP -

•

| (UNIT : 1,000US\$) | | | | | | |
|--|---------------------|---------------|---------|---------|---------|---------|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| VARIABLE COST RAM MATERIAL & SUPPLIES | | | | | | |
| DRI | 100,112 | 100,095 | 98,343 | 100,093 | 100,112 | 100,095 |
| LIME STONE | 2,876 | 2,876 | 2,876 | 2,745 | 2,876 | 2,876 |
| SCRAP | 110,385 | 110,385 | 110,385 | 110,385 | 110,385 | 110,385 |
| FESI | 3,434 | 3,434 | 3,434 | 5,434 | 3,434 | 3,434 |
| AL . | 294 | 294 | 294 | 294 | 294 | 294 |
| COKE BREEZE | 2,986 | 2,986 | 2,986 | 2,986 | 2,986 | 2,986 |
| ELECTRODE | 17,303 | 17,303 | 17,303 | 17,303 | 17,303 | 17,303 |
| FURNACE BRICK | 2,718 | 2,718 | 2,718 | 2,718 | 2,718 | 2,718 |
| I ADLE BRICK | 7.215 | 7.215 | 7.215 | 7.215 | 7.215 | 7.215 |
| TUNUTSH BRICK | 2. FYZ | 2 × 1 × 2 | 9.573 | 9. F73 | 2.573 | 2.573 |
| | | | | | | |
| TELLING MAI | 114,4 | 71444 | 27474 | 2144 | 71449 | 21442 |
| HBI | 28,842 | 28,842 | 28,842 | 28,842 | 28,842 | 28,842 |
| FEMN | 9,351 | 9,351 | 9,351 | 9,351 | 9,351 | 9,351 |
| FEV | 89 | 89 | 89 | 89 | 89 | 68 |
| BURNT DOLCHITE | 56 | 63 | 56 | 56 | 93 | 56 |
| SUB TOTAL * | 293,689 | 293,672 | 291,919 | 293,538 | 293,689 | 293,672 |
| MANUFACTURING SUPLLIES COST | 1,433 | 1,433 | 1,453 | 1,433 | 1,433 | 1,433 |
| RAW MAT & SUPPLIES C TOTAL ** | 295,122 | 295,105 | 293,352 | 294,971 | 295,122 | 295,105 |
| | | | | | | |
| BYPRODUCT | | | | | | |
| SCRAP | 4,133 | 6,13 3 | 4,133 | 4,133 | 4,133 | 4,133 |
| DUST | 6 | 0 | 0 | 0 | 0 | 0 |
| SLAG | Ð | 0 | 0 | D | Ð | 0 |
| SCALE SMP | Ð | 0 | o | 0 | 0 | 0 |
| MASTE BRICK | 0 | 0 | o | 0 | o | O |
| SUB TOTAL * | 4,133 | 4,133 | 4,133 | 4,133 | 4,133 | 4°133 |
| | | | | | - | |
| | | | | | 1 | |
| ELECTRICITY | 24,509 | 24,509 | 24,509 | 24,509 | 24,509 | 24,509 |
| NATURAL GAS | 569 | 569 | 569 | 569 | 569 | 569 |
| O2N2 | 215 | 215 | 215 | 215 | 215 | 215 |
| COMPRESSED AIR | 2,803 | 2,803 | 2,803 | 2,803 | 2,803 | 2,803 |
| MATER | 1,014 | 1,014 | 1,014 | 1,014 | 1,014 | 1,014 |
| UTILITIES COST TOTAL ** | 29,110 ⁻ | 29,110 | 29,110 | 29,110 | 29,110 | 29,110 |
| | | | 1 | | | |
| | | | | 1 | | |

| 320,081 | 3,627 12,5314 10,637 6,188 32,785 32,785 |
|---------------------|---|
| 320,098 | 3,627 12,314 10,657 6,188 32,785 32,785 |
| 319,948 | 3,627 12,314 10,657 6,187 32,785 352,733 |
| 318,329 | 3,627 12,314 10,657 6,186 32,784 351,113 |
| 320,081 | 3,627 12,314 10,657 6,188 32,785 32,785 |
| 320,098 | 3,627 12,314 10,657 6,187 32,785 32,785 |
| *** | * ** |
| VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL SWP COST TOTAL |

(UNIT : 1,000US\$)

98,333 2,876 2,876 3,634 3,634 2,946 17,303 2,718 2,718 2,573 2,575 2,575 2,575 2,575 2,576 2,577 2,577 2,577 2,576 2,576 2,576 2,576 2,576 2,5775 2,57755 2,57755 2,5775 2,5775 2,57755 2,575 24,511 569 216 2,824 1,000 29,119 291,910 1,433 293,343 4,133 4,133 100,102 2,876 110,385 3,634 2,946 117,998 2,718 1,433 295,112 24,511 569 216 2,824 1,000 29,119 2014 4,133 293,679 4,133 00 100,083 2,745 3,745 3,434 2,946 2,948 17,303 2,718 2,745 2,946 2,745 2,746 2,747 2,746 2,747 2,7 24,511 569 216 2,824 1,000 29,119 1,433 294,962 4,133 2013 000 4,133 293,529 100,085 2,876 3,635 3,635 2,94 2,94 2,718 24,511 569 216 2,824 1,000 29,119 1,433 295,095 4,133 4,133 2012 Q 293,662 89 89 99,913 2,871 2,871 3,4385 2,845 2,738 2,71 24,434 569 176 1,989 870 28,037 1,433 294,918 4,133 000 89 93 293,485 o 2011 4,133 MANUFACTURING SUPLLIES COST RAM MAT & SUPPLIES C TOTAL ** × * VARIABLE COST RAW MATERIAL & SUPPLIES DRI LIME STONE SCRAP FESI UTILITIES ELECTRICITY NATURAL GAS O2N2 COMPRESSED AIR WATER UTILITES COST TOTAL COKE BREEZE ELECTRODE FURNACE BRICK LADLE BRICK FUNDISH BRICK FETLING MAT HBI FEWN FEV BURNT DOLOMITE SUB TOTAL SUB TOTAL SCALE SMP MASTE BRICK BY - PRODUCT SCRAP SLAG DUST ÅL

0 000

MANUFACTURING COST SHEET (AMOUNT) - SMP --

2015

AJ-87

| 318,329 | 3,627 9,533 13,508 6,188 32,857 | 351,185 |
|---------------------|---|----------------|
| 320,098 | 3,627 9,533 13,508 6,188 6,188 | 352, 954 |
| 319,947 | 3,627 9,533 13,508 6,187 32,856 | 352,803 |
| 320,080 | 3,627 9,533 13,508 6,187 32,856 | 352,936 |
| 318,822 | 3,627 11,155 10,680 5,187 31,649 | 350,471 |
| *** | × * | **** |
| VARIABLE COST TOTAL | FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL | SMP COST TOTAL |

.

MANUFACTURING COST SHEET(AMOUNT) - BAR - ,

| (\$1000 !: 11 NO) | | | - | | - BAR - | | • |
|---|---------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| VARIABLE COST | Ę | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
| NAW PAILERAL & SUPPLIES BAR BILLET COST P.BILLET COST | ŝ | 115,793 0 | 122,631 0 | 130,812 D | 144,348 6,515 | 135,198 | 135,137 0 |
| SUB TOTAL | * | 115,793 | 122,631 | 130,812 | 150,864 | 135,198 | 135,137 |
| MANUFACTURING SUPLLIES COST RAW MAT & SUPPLIES C TOTAL | ES COST TOTAL ** | 1,632 117,425 | 1,754 124,385 | 1,883 132,695 | 1,967 152,831 | 1,967 137,165 | 1,967 137,104 |
| BY-PRODUCT SCRAP COST SCALE BAR | | 1,901 0 | 2,048 D | 2,218 0 | 2,282 0 | 2,282 0 | 2,282 0 |
| UTILITIES ELECTRICITY | | 122 | 831 | 895 | 096 | 923 | 923 |
| NATURAL GAS | | 1,466 | 1,568 | 1,676 | 1,715 | 1,714 | 1,714 |
| 02N2 | | 167 | 171 | 176 | 386 | 321 | 319 |
| CUMPRESSEU AIR WATER | | 9 66 | 1040 | 109 | 0 200 | 152 | 151 |
| UTILITIES COST TOTAL | ** | 2,502 | 2,674 | 2,855 | 3,261 | 3,110 | 3,107 |
| VARIABLE COST TOTAL | *** | 118,025 | 125,011 | 133,332 | 153,809 | 137,993 | 137,929 |
| FIXED COST I ABOD COST | | 000 | 020 | ć F | | 6 5 7 | |
| DEPRECIATION TOTAL | | 3,047 | 3,033 | 3,033 | 1,049 3,033 | 1,049 3,034 | 3,033 |
| REPAIR COST TOTAL | | 1,238 | 1,287 | 1,337 | 1,089 | 1,089 | 1,089 |
| OTHER COST TOTAL | | 941 | 916 | 955 | 1,157 | 1,054 | 1,045 |
| FIXED COSI TUTAL | *** | 04140 | 6,207 | 6,344 | 6,327 | 6,225 | 6,216 |
| BAR COST TOTAL | **** | 124,176 | 131,218 | 139,676 | 160,136 | 144,219 | 144,144 |

MANUFACTURING COST SHEET (AMOUNT)

| (\$\$0000;1 : TINU) | | | | | TRANCE ACTORIANCE COST SALEET ATTOUNT | | |
|--|---------------------|------------------|------------------|------------------|---------------------------------------|------------------|------------------|
| VARIABLE COST Pain Witcotal • clindite | Ċ | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
| KAN RALENTAL & SUFFLIE BAR BILLET COST P.BILLET COST | 011 | 134,516 0 | 135,186 0 | 133,558 0 | 131,916 0 | 135,146 0 | 135,195 0 |
| SUB TOTAL | * | 134,516 | 135,186 | 133,558 | 131,916 | 135,146 | 135,195 |
| MANUFACTURING SUPLLIES COST Ram Mat & Supplies C Total ** | ES COST TOTAL ** | 1,967 136,483 | 1,967 137,153 | 1,967 135,525 | 1,967 133,883 | 1,967 137,113 | 1,967 137,162 |
| BY-PRODUCT SCRAP COST SCALE BAR | | 2,282 0 | 2,282 0 | 2,282 0 | 2,282 0 | 2,282 0 | 2,282 0 |
| UTILITIES Electricity | | 923 | 923 | 914 | 016 | 923 | 923 |
| NATURAL GAS | | 1,714 319 | 1,714 319 | 1,713 | 1,712 279 | 1,714 317 | 1,714 |
| COMPRESSED AIR WATER | | 0 | 0 151 | 141 | 0 | 0 6 7 F | 041 |
| UTILITIES COST TOTAL | * | 3,107 | 3,107 | 3,059 | 3,037 | 3,103 | 3,103 |
| VARIABLE COST TOTAL | *** | 137,308 | 137,978 | 136,302 | 134,638 | 137,933 | 137,982 |
| FIXED COST | · | | | • | | | |
| LABOR COST TOTAL DEPRECIATION TOTAL | | 1,049 3,033 | 1,049 3,033 | 1,049 2,339 | 1,049 | 1,049 1,636 | 1,049 1,636 |
| REPAIR COST TOTAL | · | 1,089 | 1.089 | 1,088 | 1,087 | 2,462 | 2,462 |
| OTHER COST TOTAL FIXED COST TOTAL | *** | 1,045 6,216 | 1,045 6,215 | 1,018 5,493 | 1,003 | 1,049 6,195 | 1,048 6,195 |
| BAR COST TOTAL | **** | 143,523 | 144,193 | 141,795 | 139,413 | 144,128 | 144,177 |

2010

137,163 135,196 135,196 137,983 MANUFACTURING COST SHEET (AMOUNT) - BAR -1,967 137,169 1,049 1,636 2,462 1,049 6,195 2009 2,282 0 923 1,714 149 3,103 C 317 137,989 135,202 135,202 1,967 137,112 2,282 3,103 1,049 1,636 2,462 1,048 6,195 2008 0 923 1,714 317 135,145 135,145 137,932 2,282 0 1,049 1,636 2,462 1,049 6,195 1,967 136,491 923 1,714 317 3,103 2007 0 149 134,524 C 134,524 137,311 1,049 1,636 2,462 1,049 6,195 1,967 137,163 2,282 0 2006 923 1,714 317 3,103 135,196 C 135,196 o 137,983 1,967 137,169 1,049 1,636 2,462 1,049 6,195 2005 2,282 0 923 1,714 149 3,103 317 0 o 137,989 135,202 135,202 MANUFACTURING SUPLILES COST RAM MAT & SUPPLIES C TOTAL ** *** *** ** * VARIABLE COST RAM MATERIAL & SUPPLIES BAR BILLET COST UTILITIES COST TOTAL FIXED COST LABOR COST TOTAL DEPRECIATION TOTAL REPAIR COST TOTAL OTHER COST TOTAL FIXED COST TOTAL VARIABLE COST TOTAL (INIT : 1,000US\$) O2N2 COMPRESSED AIR P.BILLET COST UTILITIES ELECTRICITY NATURAL GAS SUB TOTAL BY-PRODUCT SCRAP COST SCALE BAR MATER

2,282 0

0 149 3,103

923 1,714 317 1,049 1,636 2,462 1,049 6,195

144,178

144,185

144,127

143,506

144,178

144,184

BAR COST TOTAL

| | ESCALATI |
|------|----------|
| | HUIM |
| 1-2 | UPDATE-2 |
| CASE | |

NOI 1 MANUFACTURING COST SHEET (AMOUNT)

د

| | | | | MANUI | MANUFACTURING COST SHEET (AMOUNT) - BAR - | SHEET (AMOUNT') |
|--|--------------------|------------------|------------------|------------------|--|-------------------|
| (UNIT : 1,000US\$) | | | | | | · |
| VEDTAR! F COST | | 1102 | 2012 | 2013 | 2014 | 2015 |
| RAW MATERIAL & SUPPLIES BAR BILLET COST P.BILLET COST | 10 | 134,278 0 | 135,223 0 | 135,172 0 | 135,230 0 | 134,552 0 |
| SUB TOTAL | * | 134,278 | 135,223 | 135,172 | 135,230 | 134,552 |
| MANUFACTURING SUPLLIES COST RAM MAT & SUPPLIES C TOTAL ** | S COST TOTAL ** | 1,967 136,245 | 1,967 157,190 | 1,967 137,139 | 1,967 137,197 | 1,967 136,519 |
| BY-PRODUCT SCRAP COST SCALE BAR | | 2,282 0 | 2,282 0 | 2,282 0 | 2,282 0 | 2,282 0 |
| UTILITIES ELECTRICITY | | 920 | 923 | 923 | 923 | 923 |
| NATURAL GAS | | 1,714 | 1,714 | 1,714 | 1,714 | 1,714 |
| COMPRESSED AIR | | 097 | 6T0 | 474 0 | 670 | 0 |
| WATER UTILITIES COST TOTAL | * | 128 3,021 | 147 3,102 | 147 3,102 | 147 3,102 | 147 3,102 |
| VARIABLE COST TOTAL | *** | 136,984 | 138,009 | 137,958 | 138,016 | 137,338 |
| FIXED COST LABOR COST TOTAL | | 1,049 | 1,049 | 1,049 | 1,049 | 1,049 |
| DEPRECIATION TOTAL | | 1,636 | 1,636 | 1,636 | 1,636 | 1,636 |
| REPAIR COST TOTAL | | 2,466 | 2,462 | 2,462 | 2,462 | 2,462 |
| OTHER COST TOTAL | | 1,049 | 1,049 | 1,049 | 1,049 | 1,049 |
| FIXED COST TOTAL | *** | 6,199 | 6,196 | 6,195 | 6,196 | 6,196 |
| BAR COST TOTAL | **** | 143,183 | 144,205 | 144,153 | 144,212 | 143,534 |

MANUFACTURING COST SHEET (AMOUNT)

| (\$\$0000'I : 11NN) | | | | | - ROD - | | |
|--|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|
| VARIABLE COST | | 266 T | 1994 | 1995 | 1996 | 1991 | 966 T |
| RAM FWIEKLAL & SUFFLES ROD BILLET COST P.BILLET COST | | 115,020 0 | 118,393 0 | 122,842 0 | 113,525 5,199 | 209,356 D | 218,639 D |
| SUB TOTAL | * | 115,020 | 118,393 | 122,842 | 118,724 | 209,356 | 218,639 |
| MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | COST OTAL ** | 1,618 116,638 | 1,690 120,083 | 1,765 124,607 | 1,544 120,268 | 3,040 212,396 | 3,176 221,815 |
| BY-PRODUCT SCRAP SCALE ROD | | 1,374 0 | 1,443 0 | 1,515 0 | 1,294 0 | 2,561 0 | 2,672 |
| UTILITIES | | | | · | | | |
| ELECTRICITY | | 1,376 | 1,641 | 1,510 | 1,327 | 2,441 | 2,549 |
| NATURAL GAS | | 1,267 | 1,317 | 1,370 | 1,149 | 2,191 | 2,289 |
| 02N2 | | 27 | 27 | 27 | ¢9 | 77 | 18 |
| COMPRESSED AIR | | 0 | 0 | 0 | • | 0 | 0 |
| MATER | | 153 | 156 | 159 | 281 | 507 | 525 |
| UTILITIES COST TOTAL | ** | 2,823 | 2,941 | 3,065 | 2,806 | 5,216 | 5,444 |
| VARIABLE COST TOTAL | *** | 118,086 | 121,581 | 126,157 | 121,780 | 215,051 | 224,587 |
| FIXED COST | | | 1 | | | | |
| LABUK CUSI IUIAL | | 247 | 611 | 818 | 75141 | 1,152 | 1,152 |
| DEPATE COST TOTAL DEPATE COST TOTAL | | 4,503 | 1 402 | 122 5 | 500 C | 164() | 12267 0 |
| ALTAIN COUL TAXA | | | | | 1000 | 1000 | 100,12 |
| OTHER COST TOTAL | | 1,149 | 1,145 | 1,182 | 1,342 | 1,575 | 1,587 |
| FIXED COST TOTAL | *** | 7,637 | 2,709 | 7,843 | 10,646 | 12,806 | 12,819 |
| ROD COST TOTAL | **** | 125,723 | 129,290 | 134,001 | 132,426 | 227,857 | 237,406 |

MANUFACTURING COST SHEET(AMOUNT) - ROD -

| (UNIT : 1,000US\$) | | | | | | | |
|--|-------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| VARIABLE COST | ٥ | 666T | 2000 | 2001 | 2002 | 2003 | 2004 |
| | 0 | 217,634 0 | 218,719 0 | 216,084 0 | 213,427 0 | 218,653 0 | 218,732 0 |
| SUB TOTAL | * | 217,634 | 218,719 | 216,084 | 213,427 | 218,653 | 218,732 |
| MANUFACTURING SUPPLIES RAM MAT & SUPPLIES C 1 | LIES COST C TOTAL ** | 3,176 220,810 | 3,176 221,895 | 3,176 219,260 | 3,176 216,603 | 3,176 221,829 | 3,176 221,908 |
| BY-PRODUCT SCRAP | | 2,672 | 2,672 | 2,672 | 2,672 | 2,672 | 2,672 |
| SCALE ROD | | 0 | 0 | 0 | 0 | D | 0 |
| UTILITIES ELECTRICITY | | 2 549 | 2,549 | 2,525 | 2,513 | 2,549 | 2,549 |
| NATURAL GAS | | 2,289 | 2,289 | 2,288 | 2,287 | 2,289 | 2,289 |
| O2N2 COMDESSED AID | | 91 | 81 | 73 | 02 | 80 | 8. |
| UUTER AIR WATER | | 525 | 525 | 491 4 | 475 475 | 519 | 519 |
| UTILITIES COST TOTAL | ** | 5,444 | 5,444 | 5,378 | 5,346 | 5,436 | 5,436 |
| VARIABLE COST TOTAL | *** | 223,582 | 224,667 | 221,966 | 219,277 | 224,593 | 224,673 |
| FIXED COST LABOR COST TOTAL | | 1,132 | 1,132 | 1,132 | 1,132 | 1,152 | 1,132 |
| DEPRECIATION TOTAL | | 7,597 | 7,597 | 7,617 | 5,177 | 5,600 | 6,004 |
| REPAIR COST TOTAL | | 2,503 | 2,504 | 2,501 1 540 | 2,500 | 2,502 | 4,096 |
| FIXED COST TOTAL | *** | 12,819 | 12,818 | 12,809 | 10,354 | 10,824 | 12,821 |
| ROD COST TOTAL | **** | 236,401 | 237,485 | 234,775 | 229,631 | 235,417 | 237,494 |

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MANUFACTURING COST SHEET(AMOUNT) - ROD -

| (UNIT : 1,000US\$) | | | | | 1 ROD 1 | | |
|--|-----------------|------------------|------------------|------------------|------------------|--------------------------|------------------|
| VARIABLE COST Raw Material & Supplies | | 2005 | 2006 | 2007 | 8002 | 2009 | 2010 |
| ROD BILLET COST P.BILLET COST | | 218,744 0 | 218,734 0 | 217,647 D | 218,651 0 | 218,7 44 0 | 218,734 0 |
| SUB TOTAL | * | 218,744 | 218,734 | 217 , 647 | 218,651 | 218,744 | 218,734 |
| MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | COST DTAL ## | 3,176 221,920 | 3,176 221,910 | 3,176 220,823 | 3,176 221,827 | 3,176 221,920 | 3,176 221,910 |
| BY-PRODUCT SCRAP SCALE ROD | | 2,672 0 | 2,672 0 | 2,672 0 | 2,672 0 | 2,672 0 | 2,672 |
| UTILITIES | | | | | | | |
| ELECTRICITY | | 2,549 | 2,549 | 2,549 | 2,549 | 2,549 | 2,549 |
| NATURAL GAS | | 2,289 | 2,289 | 2,289 | 2,289 | 2,289 | 2,289 |
| O2N2 | | 80 | 80 | 80 | 80 | 80 | 80 |
| COMPRESSED AIR | | 0 | c | 0 | 0 | 0 | 0 |
| MATER | | 519 | 519 | 519 | 519 | 519 | 519 |
| UTILITIES COST TOTAL | ** | 5,436 | 5,436 | 5,436 | 5,436 | 5,436 | 5,436 |
| VARIABLE COST TOTAL | *** | 224,684 | 224,674 | 223,587 | 224,592 | 224,685 | 224,674 |
| FIXED COST LABOR COST TOTAL | | 1,132 | 1,132 | 1,132 | 1,132 | 1.132 | 1,132 |
| DEPRECIATION TOTAL | | 6,005 | 6,005 | 6,005 | 6,004 | 6,004 | 6,004 |
| REPAIR COST TOTAL | | 4,095 | 4,095 | 4,095 | 4,096 | 4,095 | 4,095 |
| OTHER COST TOTAL | | 1,591 | 1,591 | 1,591 | 1,590 | 1,591 | 1,591 |
| FIXED COST TOTAL | *** | 12,822 | 12,823 | 12,823 | 12,821 | 12,822 | 12,822 |
| ROD COST TOTAL | **** | 237,507 | 237,497 | 236,410 | 237,413 | 237,506 | 237,496 |
| | | | | | | | |

| | ESCALATION |
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| 1-2 | UPDATE-2 |
| CASE | |

MANUFACTURING COST SHEET(AMOUNT)

| (UNIT : 1,000US\$) | | | | | - ROD - | |
|--|-----------------|------------------|------------------|------------------|--------------------------|------------------|
| VARIABLE COST | | 2011 | 2012 | 2013 | 2014 | 2015 |
| RAW MATERIAL & SUPPLIES ROD BILLET COST P.BILLET COST | | 217,249 0 | 218,777 0 | 218,695 0 | 218,7 88 0 | 217,692 D |
| SUB TOTAL | * | 217,249 | 218,777 | 218,695 | 218,788 | 217,692 |
| MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | COST OTAL ** | 3,176 220,425 | 3,176 221,953 | 3,176 221,871 | 3,176 221,964 | 3,176 220,868 |
| 9Y-PRODUCT Scrap Scale Rod | | 2,672 0 | 2,672 0 | 2,672 0 | 2,672 0 | 2,672 0 |
| JTILITIES ELECTRICITY | | 2,541 | 2,549 | 2,549 | 2,549 | 2 .549 |
| NATURAL GAS D2N2 | | 2,289 65 | 2,289 80 | 2,289 An | 2,289 80 | 2,289 an |
| COMPRESSED AIR | | 0 | 3 0 | ; 0 | 30 | 30 |
| WATER UTILITIES COST TOTAL | ** | 445 5,340 | 511 5.430 | 511 5.470 | 511 511 | 511 5.470 |
| VARIABLE COST TOTAL | *** | 223,094 | 224,711 | 224,628 | 224,722 | 223,625 |
| FIXED COST LABOR COST TOTAL | | 1,132 | 1,132 | 1,132 | 1,132 | . I,132 |
| DEPRECIATION TOTAL | | 5,368 | 4,478 | 4,478 | 4,478 | 4,478 |
| REPAIR COST TOTAL | | 4,105 | 5,660 | 5,660 | 5,660 | 5,660 |
| OTHER COST TOTAL Fixed Cost Total | *** | 1,591 | 1,591 12,861 | 1,591 12,861 | 1,591 12,861 | 1,591 |
| ROD COST TOTAL | **** | 235,289 | 237,572 | 237,489 | 237,583 | 236,487 |
| | | | | | | |
| | | | | | | |

MANUFACTURING

COST SHEET

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••••

CASE 0-1

EXISTING WITHOUT ESCALATION

CASE 0-1 EXISTING MITHOUT ESCALATION

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| (UNIT : US\$/DRI TON) | | | : | MANUFAC | MANUFACTURING COST SHEET - DRP - | EET | |
|---|---------------|------------------------|------------------------|------------------------|-------------------------------------|------------------------|--------------------------|
| VARTABLE COST | | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 |
| RAM MATERIAL & SUPPLIES PELLET UNIT PRICE | : | 43.430 | 43.430 | 63, 430 | 43.430 | 43,430 | 63 630 |
| PELLET UNIT CONSUMPTION | | 1.520 | 1.520 | 1.520 | 1.520 | 1.520 | 1.520 |
| PELLET COST | | 66.014 | 66.014 | 66.014 | 66.014 | 66.014 | 66.014 |
| SUB TOTAL * | * | 66.014 | 66.014 | 66.014 | 66.014 | 66.014 | 66.014 |
| | ST S | .882 | .832 | .882 | .882 | .882 | .882 |
| RAW MAT & SUPPLIES C TOTAL ** | Ľ ** | 66.896 | 66.896 | 66.896 | 66.896 | 66.896 | 66.896 |
| BY-PRODUCT OXIDE FINES UNIT CONSUMPTION OXIDE THICKNER UNIT CONSUMPTION | ION MPTION | .060 | .060 | .060 | .060 | .060 | .060 .025 |
| UTILITIES ELECT UNIT PRICE | | .023 | .023 | .023 | .023 | .023 | .023 |
| ELECT UNIT CONSUMPTION ELECTRICITY COST | | 110.000 2.529 | 2.529 | 110.000 2.529 | 110.000 2.529 | 110.000 2.529 | 110.000 2.529 |
| N GAS UNIT PRICE N GAS UNIT FONSIMBITON | | .077 200 000 | 077 | .077 | .077 | 10.000 | 077 |
| NATURAL GAS COST | | 22.275 | 22.275 | 22.274 | 22.274 | 22.274 | 22.274 |
| OZNZ UNIT PRICE OZNZ UNIT CONSUMPTION OZNZ COST | | .134 2.000 .267 | .134 2.000 .267 | .134 2.000 .267 | .134 2.000 .267 | .134 2.000 .267 | .134 2.000 .267 |
| COMP AIR UNIT PRICE COMP AIR UNIT CONSUMPTION COMPRESSED AIR COST | | .003 18.000 .053 | .003 18.000 .052 | .003 18.000 .051 | 005 18.000 .051 | .003 18.000 .051 | .003 18.000 18.051 |
| MATER UNIT PRICE WATER UNIT CONSUMPTION WATER COST | | .502 1.500 .753 | .501 1.500 .752 | .751 1.500 .751 | .501 1.500 .751 | .751 1.500 | .501 1.500 .751 |
| UTILITIES COST TOTAL ** | * | 25.877 | 25,875 | 25.873 | 25.873 | 25.873 | 25.873 |
| VARIABLE COST TOTAL ** | *** | 92.773 | 92.771 | 92.769 | 92.769 | 92.769 | 92.769 |

FIXED COST

| LABOR COST DEPRECIATION COST Repair Cost S Repair Cost Other Cost Fixed Cost Total | * * * | .881 7.925 3.218 1.980 8.826 2.829 | .881 7.903 3.219 1.980 8.405 22.388 | ,881 7,903 1,920 1,920 8,406 22,389 | .881 7.901 3.219 1.980 8.405 22.386 | .381 7,903 3,219 1,980 8,405 22,388 | .881 7.903 3.219 1.980 8.406 |
|---|-------------|---|--|--|--|--|--|
| DRP COST TOTAL | **** | 115.602 | 115.159 | 115.157 | 115.154 | 115.157 | 115.157 |
| DRI PRODUCTION | | 776,400 | 776,400 | 776,400 | 776,400 | 776,400 | 776,400 |
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CASE 0-1 EXISTING WITHDUT ESCALATION

(UNIT : US\$/DRI TON)

| 2004 | 027 630 | 1.520 | 66.014 | 66.014 | .882 | 66.896 | .060 | .025 | 797 197 | 110.000 | 2.523 | .077 | 290.000 | 22.267 | .127 | 2.000 | .254 | .003 | 18.000 | .049 | .488 | 1.500 | .732 | 25.825 | 92.720 |
|----------------------|--|-------------------------|-------------|-------------|------|-------------------------------|--|---------------------------------|--------------------------------|------------------------|------------------|------------------|------------------------|------------------|-----------------|-----------------------|-----------|---------------------|---------------------------|---------------------|------------------|------------------------|------------|-------------------------|-------------------------|
| 2003 | U27 29 | 1.520 | 66.014 | 66.014 | .882 | 66.896 | .060 | .025 | 797 1 | 000.011 | 2.523 | .077 | 290.000 | 22.267 | .127 | 2.000 | . 254 | .003 | 18.000 | .049 | .488 | I.500 | . 732 | 25.825 | 92.720 |
| 2002 | U29 29 | 1.520 | 66.014 | 66.014 | .882 | 66.896 | .060 | .025 | 200 | 110.000 | 2.480 | .077 | 290.000 | 22.249 | .102 | 2.000 | .204 | .002 | 18.000 | .037 | .406 | 1.500 | .609 | 25.579 | 92.474 |
| 2001 | 62 630 | 1.520 | 66.014 | 66.014 | .882 | 66.896 | .060 | .025 | 200 | 110.000 | 2.496 | .077 | 290.000 | 22.256 | .112 | 2.000 | .223 | .002 | 18.000 | .041 | .437 | 1.500 | . 655 | 25.673 | 92.568 |
| 2000 | 029 - 27 - | 1.520 | 66.014 | 66.014 | .882 | 66.896 | 090. | .025 | 260 | 110.000 | 2.529 | .077 | 290.000 | 22.274 | .134 | 2.000 | .267 | .003 | 18.000 | .051 | .501 | 1.500 | . 751 | 25.873 | 92.769 |
| 1999 | 027 - 29 | 1.520 | 66.014 | 66.014 | .882 | 66.896 | .060 | .025 | 260 | 110.000 | 2.529 | .077 | 290.000 | 22.274 | .134 | 2.000 | .267 | .003 | 18.000 | .051 | .501 | 1.500 | . 751 | 25.873 | 92.769 |
| (NDI THOUSSO : ITNO) | VARIABLE COST RAM MATERIAL & SUPPLIES DEILET LINIT DRICE | PELLET UNIT CONSUMPTION | PELLET COST | SUB TOTAL * | - 64 | RAW MAT & SUPPLIES C TOTAL ** | BY-PRODUCT OXIDE FINES UNIT CONSUMPTION | OXIDE THICKNER UNIT CONSUMPTION | UTILITIES FI FCT INIT DOTCE | ELECT UNIT CONSUMPTION | ELECTRICITY COST | N GAS UNIT PRICE | N GAS UNIT CONSUMPTION | NATURAL GAS COST | O2N2 UNIT PRICE | O2N2 UNIT CONSUMPTION | O2N2 COST | COMP AIR UNIT PRICE | COMP AIR UNIT CONSUMPTION | COMPRESSED AIR COST | WATER UNIT PRICE | WATER UNIT CONSUMPTION | MATER COST | UTILITIES COST TOTAL ** | VARIABLE COST TOTAL *** |

AI-99

FIXED COST

| LABOR COST | | .681 | .881 | .881 | 188. | .881 | .881 |
|-------------------|-----|---------|---------|-----------------|---------|---------|---------|
| DEPRECIATION COST | | 7.903 | 7.901 | 7.321 | 4.244 | 4.244 | 4.241 |
| REPAIR COST | | 3.219 | 3.219 | 3.200 | 3.191 | 6.437 | 6.437 |
| S REPAIR COST | | 000 | 1.980 | 1.980 | 1.980 | 1.980 | 1.980 |
| OTHER COST | - | 8.406 | 8.405 | 8.366 | 8.345 | 8.403 | 8.403 |
| FIXED COST TOTAL | *** | 20.409 | 22.386 | 21.747 | 18.640 | 21.945 | 21.942 |
| DRP COST TOTAL | *** | 113.178 | 115.154 | 114.31 6 | 111.115 | 114.665 | 114.663 |
| DRI PRODUCTION | | 776,400 | 776,400 | 776,400 | 776,400 | 776,400 | 776,400 |

CASE 0-1 EXISTING MITHOUT ESCALATION

| SHEET | |
|---------------|-------|
| COST | r |
| MANUFACTURING | - DRP |

| | 2010 | 43.430 1.520 66.014 | 66.014 | .882 66.896 | .060 | .023 110.000 2.523 | .077 290.000 22.267 | .127 2.000 .254 | .003 18.000 .049 | ,488 1.500 .732 | 25,825 | 92.720 |
|----------------------|--|--|---------------|--|---|---|--|---|---|--|-------------------------|-------------------------|
| | 2009 | 43.430 1.520 66.014 | 66.014 | .882 66.896 | .060 | .023 110.000 2.523 | .077 290.000 22.267 | .127 2.000 .254 | .003 18.000 .049 | .488 1.500 .732 | 25,825 | 92.720 |
| - 1144 | 2008 | 43.430 1.520 66.014 | 66.014 | .882 66.896 | .060 | .023 110.000 2.523 | .077 290.000 22.267 | .127 2.000 .254 | .003 18.000 049 | ,488 1.500 .732 | 25.825 | 92.720 |
| | 2007 | 43.430 1.520 66.014 | 66.014 | .882 66.896 | .060 | .023 110.000 2.523 | .077 290.000 22.267 | .127 2.000 .254 | .003 18.000 .049 | .488 1.500 .732 | 25.825 | 92.720 |
| | 2006 | 43.430 1.520 66.014 | 66.014 | .882 66.896 | .060 | .023 110.000 2.523 | .077 290.000 22.267 | .127 2.000 .254 | .003 18.000 049 | .488 1.500 .732 | 25.825 | 92.720 |
| | 2005 | 43.430 1.520 66.014 | 66.014 | .882 66.896 | .060 | .023 110.000 2,523 | .077 290.000 22.267 | .127 2.000 .254 | .003 18.000 049 | .488 1.500 .732 | 25.825 | 92.720 |
| (UNIT : USS/DRI TON) | VARIABLE COST BAM MATERIA! & SUPPLIES | PELLET UNIT PRICE PELLET UNIT PRICE PELLET UNIT CONSUMPTION PELLET COST | SUB TOTAL * | MANUFACTURING SUPPLIES COST Ram Mát & Supplies C total ** | BY-PRODUCT OXIDE FINES UNIT CONSUMPTION OXIDE THICKNER UNIT CONSUMPTION | UTILITIES ELECT UNIT PRICE ELECT UNIT CONSUMPTION ELECTRICITY COST | N GAS UNIT PRICE N GAS UNIT CONSUMPTION NATURAL GAS COST | O2N2 UNIT PRICE O2N2 UNIT CONSUMPTION O2N2 COST | COMP AIR UNIT PRICE COMP AIR UNIT CONSUMPTION COMPRESSED AIR COST | WATER UNIT PRICE MATER UNIT CONSUMPTION WATER COST | UTILITIES COST TOTAL ** | VARIABLE COST TOTAL *** |

FIXED COST

AI-101

| LABOR COST | | .881 | .831 | 188, | .881 | 188. | .881 | |
|-------------------|-----|---------|---------|---------|---------|---------|-------------|--|
| DEPRECIATION COST | | 4.266 | 4.244 | 4,244 | 4.241 | 4.266 | 4.244 | |
| REPAIR COST | | 6.437 | 6.437 | 6.437 | 6.437 | 6.437 | 6.437 | |
| S REPAIR COST | | 1.980 | 1.980 | .000 | 1.980 | 1.980 | 1.980 | |
| OTHER COST | | 8.403 | 8.403 | 8.403 | 8.403 | 8.403 | 8.403 | |
| FIXED COST TOTAL | *** | 21.967 | 21.945 | 19.965 | 21.942 | 21.967 | 21.945 | |
| DRP COST TOTAL | *** | 114.687 | 114.665 | 112.685 | 114.663 | 114.687 | 114.665 | |
| DRI PRODUCTION | | 776,400 | 776,400 | 776,400 | 776,400 | 776,400 | 776,400 | |
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| | ESCALATION |
|------|------------|
| : | MITHOUT |
| 1-0 | EXISTING |
| CASE | - |

(UNIT : US\$/DRI TON)

MANUFACTURING COST SHEET - DRP -

AI-103

FIXED COST

| LABOR COST DEPRECIATION COST REPAIR COST S REPAIR COST OTHER COST FIXED COST TOTAL BRP COST TOTAL **** | PRODUCTION |
|---|------------|
| .881 4.244 6.437 1.980 8.403 21.945 21.945 | 776,400 |
| .881 4.241 6.437 1.980 1.980 8.403 21.942 21.942 | 776,400 |
| .881 4.266 6.437 1.980 8.403 21.967 114.687 | 776,400 |
| .881 4.244 6.437 1.980 8.403 21.945 114.665 | 776,400 |
| .881 4.244 6.437 0.000 8.403 19.965 112.686 | 776,400 |

CASE 0-1 EXISTING WITHOUT ESCALATION

MANUFACTURING COST SHEET - LCP -

| | 8661 | 5,910 2.000 11.820 | 11.820 | .122 11.942 | .020 .150 | .023 60.000 1.379 | .077 95.000 7.297 | .134 .000 | .003 70.000 .200 | .501 .000 | 8.876 | 20.817 |
|-----------------------|---------------|--|-------------|--|---|---|--|---|---|--|-------------------------|-------------------------|
| | 1997 | 5.910 2.000 11.820 | 11.820 | .122 11.942 | .020 | .023 60.000 1.379 | .077 95.000 7.297 | 134 | .003 70.000 .200 | 105. 000 | 8.876 | 20,817 |
| - LCP - | 9661 | 5.910 2.000 11.820 | 11.820 | .122 11.942 | .020 | .023 60.000 1.379 | .077 95.000 7.297 | .134 .000 .000 | .003 70.000 .200 | .501 .000 | 8.876 | 20.817 |
| | 1995 | 5.910 2.000 11.820 | 11.820 | 122 11.942 | .020 | .023 60.000 1.379 | .077 95.000 7.297 | .134 .000 .000 | .003 70.000 .200 | 501 000 | 8.876 | 20.817 |
| | 766T | 5.910 2.000 11.820 | 11.820 | 122 11.942 | .020 | .023 60.000 1.379 | .077 95.000 7.297 | .134 .000 .000 | .003 70.000 .203 | .000 .000 | 8,879 | 20,821 |
| | 266T | 5.910 2.000 11.820 | 11.820 | .122 11.942 | .020 .150 | .023 60.000 1.380 | .077 95.000 7.297 | .000 | .003 70.000 .206 | .502 .000 .000 | 8,882 | 20.824 |
| (UNIT : US\$/LCP TON) | VARIABLE COST | RAM MATERIAL & SUPPLIES LIME STONE UNIT PRICE LIME STONE UNIT CONSUMPTION LIME STONE COST | SUB TOTAL * | MANUFACTURING SUPPLIES COST RAW MAT & SUPPLIES C TOTAL ** | BY-PRODUCT LIME FINES UNIT CONSUMPTION LIME STONE FINES UNIT CONSUMPTIO | UTILITIES ELECT UNIT PRICE ELECT UNIT CONSUMPTION ELECTRICITY COST | N GAS UNIT PRICE N GAS UNIT CONSUMPTION NATURAL GAS COST | 02N2 UNIT PRICE 02N2 UNIT CONSUMPTION 02N2 COST | COMP AIR UNIT PRICE Comp air Unit Consumption Compressed air Cost | MATER UNIT PRICE MATER UNIT CONSUMPTION MATER COST | UTILITIES COST TOTAL ** | VARIABLE COST TOTAL *** |

FIXED COST

| ABOR COST | | 3.476 | 3.476 | 3.476 | 3.476 | 3.476 | 3.476 |
|-------------------|------|--------|--------|--------|--------|--------|--------|
| EPRECIATION COST | | 8.345 | 8.297 | 8.297 | 8.297 | 8.297 | 8.297 |
| EPAIR COST | | 3.810 | 3.812 | 3.812 | 3.812 | 3.812 | 3.812 |
| REPAIR COST | | .000 | 2.871 | 2.871 | 2.871 | 2,871 | 000. |
| THER COST | | 9.70I | 8.708 | 8.718 | 8.712 | 8.717 | 8.718 |
| FIXED COST TOTAL | *** | 25.333 | 27.164 | 27.174 | 27.168 | 27.173 | 24.303 |
| LCP COST TOTAL | **** | 46.157 | 47.985 | 47.991 | 47.986 | 47,990 | 45.120 |
| B.LIME PRODUCTION | | 41,100 | 41,100 | 41,100 | 41,100 | 41,100 | 41,100 |

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CASE 0-1 EXISTING WITHOUT ESCALATION

| (NNIT : US\$/LCP TON) | | | MANUFA | MANUFACTURING COST SHEET - LCP - | НЕЕТ | |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|--------------------------|--------------------------|
| VARIABLE COST | 666 T | 2000 | 2001 | 2002 | 2003 | 2004 |
| RAM MATERIAL & SUPPLIES LIME STONE UNIT PRICE LIME STONE LNIT CONSUMPTION LIME STONE COST | 5.910 2.000 11.820 | 5.910 2.000 11.820 | 5.910 2.000 11.820 | 5.910 2.000 11.820 | 5.910 2.000 11.820 | 5.910 2.000 11.820 |
| SUB TOTAL * | 11.820 | 11.820 | 11,820 | 11.820 | 11.820 | 11.820 |
| MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | .122 11.942 | .122 11.942 | .122 11.942 | .122 11.942 | .122 11.942 | .122 11.942 |
| BY-PRODUCT LIME FINES UNIT CONSUMPTION LIME STONE FINES UNIT CONSUMPTIO | .020 .150 | .020 .150 | .020 .150 | .020 .150 | .020 | .020 .150 |
| UTILITIES ELECT UNIT PRICE ELECT UNIT CONSUMPTION ELECTRICITY COST | .023 60.000 1.379 | .023 60.000 1.379 | .023 60.000 1.362 | .023 60.000 1.353 | .023 60.000 1.376 | .023 60.000 1.376 |
| N GAS UNIT PRICE N GAS UNIT CONSUMPTION NATURAL GAS COST | .077 95.000 7.297 | .077 95.000 7.297 | .077 95.000 7.291 | .077 95.000 7.288 | .077 95.000 7.294 | .077 95.000 7.294 |
| O2N2 UNIT PRICE O2N2 UNIT CONSUMPTION D2N2 COST | .134 .000 .000 | .134 .000 .000 | .000 000 | .102 .000 | .127 .000 | .000 |
| COMP AIR UNIT PRICE COMP AIR UNIT CONSUMPTION COMPRESSED AIR COST | .003 70.000 .200 | .003 70.000 .200 | .002 70.000 .161 | .002 70.000 .144 | 003 70.000 190 | .003 70.000 .190 |
| WATER UNIT PRICE WATER UNIT CONSUMPTION WATER COST | .501 .000 | .501 .000 | .437 .000 .000 | 406 000 000 | .000 000 | ,488 ,000 ,000 |
| UTILITIES COST TOTAL ** | 8.876 | 8.876 | 8.813 | 8.785 | 8.861 | 8,861 |
| VARIABLE COST TOTAL *** | 20.817 | 20.817 | 20.755 | 20.727 | 20.802 | 20.802 |

AI-107

FIXED COST

| 3.476 5.012 7.622 2.871 8.721 8.721 27.702 | 48,505 | 41,100 |
|---|----------------|-------------------|
| 3.476 5.012 7.622 8.726 8.726 24.837 | 45.639 | 41,100 |
| 3,476 5.036 3.779 2.871 7.754 22.917 | 43 . 644 | 41,100 |
| 3.476 6.204 5.789 2.871 24.423 24.423 | 45.177 | 41,100 |
| 3.476 8.297 3.812 2.871 8.712 27.168 | 47.986 | 41,100 |
| 3.476 8.297 3.812 2.871 8.718 8.718 2.114 | 47.991 | 41,100 |
| *** | **** | |
| LABOR COST DEPRECIATION COST REPAIR COST S REPAIR COST OTHER COST FIXED COST TOTAL | LCP COST TOTAL | B.LIME PRODUCTION |

CASE 0-1 Existing Without Escalation

MANUFACTURING COST SHEET - LCP -

| | 2010 | 5,910 2,000 11,820 | 11.820 | .122 11.942 | .020 | 023 60.000 1.376 | .077 95.000 7.294 | .127 .000 | .003 70.000 .190 | 488 000 000 | 8.861 | 20.802 |
|-----------------------|---------------|---|-------------|--|---|---|--|---|---|--|-------------------------|-------------------------|
| | 2009 | 5.910 2.000 11.820 | 11.820 | .122 11.942 | .020 .150 | .023 60.000 1.376 | .077 95.000 7.294 | .127 .000 .000 | 003 70.000 190 | .000 .000 | 8.861 | 20,802 |
| | 2008 | 5.910 2.000 11.820 | 11.620 | .122 11.942 | .020 | .023 60.000 1.376 | .294 7.294 | .127 .000 | 003 70,000 190 | .488 .000 .000 | 8,861 | 20,802 |
| | 2007 | 5.910 2.000 11.820 | 11.820 | .122 11.942 | .020 | .023 60.000 1.376 | 、077 95、000 7、294 | .000 | .003 70.000 190 | ,488 ,000 ,000 | 8.861 | 20.802 |
| | 2006 | 5.910 2.000 11.820 | 11.820 | 122.122 | .020 | .023 60.000 1.376 | .077 95.000 7.294 | .127 .000 .000 | .003 70.000 .190 | ,488 000 000 | 8.861 | 20.802 |
| | 2005 | 5.910 2.000 11.820 | 11.820 | .122 31.942 | .020 | .023 60.000 1.376 | .077 95.000 7.294 | .000 | .003 70.000 190 | . 488 . 000 . 000 | 8.861 | 20.802 |
| (UNIT : US\$/LCP TON) | VARIABLE COST | KAN TATENAL & SUPPLIES LIME STONE UNIT PRICE LIME STONE UNIT CONSUMPTION LIME STONE COST | SUB TOTAL * | MANUFACTURING SUPPLIES COST Raw Mat & Supplies C total ** | BY-PRODUCT LIME FINES UNIT CONSUMPTION LIME STONE FINES UNIT CONSUMPTIO | UTILITIES ELECT UNIT PRICE ELECT UNIT CONSUMPTION ELECTRICITY COST | N GAS UNIT PRICE N GAS UNIT CONSUMPTION Natural GAS COST | O2N2 UNIT PRICE O2N2 UNIT CONSUMPTION O2N2 COST | COMP AIR UNIT PRICE COMP AIR UNIT CONSUMPTION COMPRESSED AIR COST | MATER UNIT PRICE Mater Unit Consumption Mater Cost | UTILITIES COST TOTAL ** | VARIABLE COST TOTAL *** |

FIXED COST

AI-109

| LABOR COST DEPRECIATION COST REPAIR COST S REPAIR COST DTHER COST FIXED COST TOTAL | *** | 3.476 5.012 7.622 2.871 8.726 8.726 27.707 | 3.476 5.012 7.622 2.871 8.726 8.726 27.708 | 3.476 5.012 7.622 2.871 8.725 8.725 27.707 | 3.476 5.012 7.622 000 8.721 24.831 | 3.476 5.012 7.622 2.871 8.726 8.726 27.708 | 3.476 5.012 7.622 2.871 8.726 27.708 |
|---|------|--|--|--|---|--|---|
| LCP COST TOTAL | **** | 48.509 | 48.510 | 48.509 | 45.634 | 48.510 | 48.510 |
| B.LIME PRODUCTION | | 41,100 | 41,100 | 41,100 | 41,100 | 41,100 | 41,100 |

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CASE 0-1 EXISTING WITHOUT ESCALATION

(UNIT : US\$/LCP TON)

MANUFACTURING COST SHEET - LCP -

| INNI : OSSARCH INNI | VARIABLE COST Ram Material & Supplies | LIME STONE UNIT PRICE LIME STONE UNIT CONSUMPTION LIME STONE COST | SUB TOTAL | MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | BY-PRODUCT LIME FINES UNIT CONSUMPTION LIME STONE FINES UNIT CONSUMPTIO | UTILITIES ELECT UNIT PRICE ELECT UNIT CONSUMPTION ELECTRICITY COST | N GAS UNIT PRICE N GAS UNIT CONSUMPTION NATURAL GAS COST | OZNZ UNIT PRICE CZNZ UNIT CONSUMPTION OZNZ COST | COMP AIR UNIT PRICE COMP AIR UNIT CONSUMPTION COMPRESSED AIR COST | WATER UNIT PRICE MATER UNIT CONSUMPTION WATER COST | UTILITIES COST TOTAL | VARIABLE COST TOTAL |
|---------------------|--|---|-----------|--|---|---|--|---|---|--|----------------------|---------------------|
| | | NOIL | * | COST DTAL ** | PTION CONSUMPTIO | | | | NO | ÷ | ** | *** |
| | 1102 | 5.910 2.000 11.820 | 11.820 | .122 11.942 | .020 .150 | .023 60.000 1.376 | .077 95.000 7.294 | .127 .000 .000 | 003 70.000 190 | .488 .000 .000 | 8.861 | 20.802 |
| | 2012 | 5.910 2.000 11.820 | 11.820 | .122 11.942 | .020 .150 | .023 60.000 1.376 | .077 95.000 7.294 | .127 .000 .000 | 003. 70.002 79.002 | .488 .000 .000 | 8.861 | 20.802 |
| | 2013 | 5.910 2.000 11.820 | 11.820 | .122 11.942 | .020 | .023 60.000 1.376 | .077 95.000 7.294 | .127 .000 .000 | 200. 000.07 190 | .488 .000 .000 | 8.861 | 20.802 |
| | 2014 | 5.910 2.000 11.820 | 11.820 | .122 11.942 | .020 | .023 60.000 1.376 | .077 95.000 7.294 | .000 | 003 70.000 190 | 488 000 000 | 8.861 | 20.802 |
| | 2015 | 5.910 2.000 11.820 | 11.820 | .122 11.942 | 020 | .023 60.000 1.376 | .077 95.000 7.294 | .000 | .003 70.000 190 | . 000 000 | 8.861 | 20.802 |

AI-111

FIXED COST

| 3,476 5,012 7,622 2,871 8,726 8,726 27,708 | 48.510 | 41,100 |
|---|----------------|-------------------|
| 3.476 5.012 7.622 2.871 8.726 27.703 | 48.510 | 41,100 |
| 3.476 5.012 7.622 8.725 8.725 24.835 | 45.638 | 41,100 |
| 3.476 5.012 7.622 2.871 8.721 27.702 | 48.505 | 41,100 |
| 3.476 5.012 7.622 2.871 8.726 27.708 | 48.510 | 41,100 |
| *** | **** | |
| LABOR COST DEPRECIATION COST REPAIR COST S REPAIR COST OTHER COST FIXED COST TOTAL | LCP COST TOTAL | B.LIME PRODUCTION |

EXISTING WITHOUT ESCALATION CASE 0-1

(NOT 94%/SMP TON)

MANUFACTURING COST SHEET - SMP -

122.944 .283 34.793 45.120 .036 1.619 1,399.240 001 1.679 607.180 .002 1.457 115.157 678 78.052 .004 2.098 .161 95.190 200. 476 004 9.547 .003 1998 537.950 1,611.940 **1,047.570** 2,512.440 1,399.240 .001 1.679 1,047.570 .003 3.143 122.944 .283 34.793 607.180 .002 1.457 47.990 036 1.722 .004 2.098 1,611.940 .000 .161 95.190 .005 .476 004 9.547 1997 .678 537.950 2,512,440 115.157 95.190 .005 .476 .003 3.143 115.154 .678 78.050 47.986 .036 1.722 122.944 .283 34.793 .004 2.098 1,611.940 .000 004 9.547 :001 1.679 .002 2,512,440 1,399.240 1,047.570 1996 537.950 607.180 161. 1,399.240 100. 1.679 1,047.570 .003 3.143 607.180 .002 1.457 95.190 .005 .476 2,512.440 .004 9.547 1,611.940 .000 .161 47.991 .036 1.722 .283 34.793 537.950 .004 2.098 1995 .678 115.157 122.944 1,611.940 .000 .161 95.190 .005 .476 2,512.440 .004 9.547 1,399.240 .001 1.679 1,047.570 .003 3.143 607.180 .002 1.457 47.985 .036 1.722 .283 34.798 .004 2.098 .678 78.053 537.950 1994 115.159 122.962 95.190 .005 .476 1,399.240 .001 1.679 607.180 .002 1.457 46.157 .036 1.656 122.978 .283 34.803 537.950 .004 2.098 1,611.940 .000 .161 2,512.440 .004 9.547 1,047.570 .003 3.143 **1993** .678 115.602 TUNDISH BRICK PRICE TUNDISH BRICK UNIT CONSUMPTION TUNDISH BRICK COST FURNACE BRICK PRICE FURNACE BRICK UNIT CONSUMPTION FURNACE BRICK COST LADLE BRICK PRICE LADLE BRICK UNIT CONSUMPTION LADLE BRICK COST COKE BREEZE PRICE COKE BREEZE UNIT CONSUMPTION COKE BREEZE COST ELECTRODE PRICE ELECTRODE UNIT CONSUMPTION ELECTRODE COST VARIABLE COST RAM MATERIAL & SUPPLIES DRI UNIT PRICE DRI UNIT CONSUMPTION DRI COST B LIME UNIT PRICE B LIME UNIT CONSUMPTION B LIME COST SCRAP UNIT PRICE SCRAP UNIT CONSUMPTION SCRAP COST FESI PRICE FESI UNIT CONSUMPTION FESI COST AL PRICE AL UNIT CONSUMPTION AL COST

| 519.530 .011 3.515 | 126.610 .170 21.524 | 534.900 .011 5.937 | 12,629.520 .000 .063 | 72.840 .001 .058 | 164.122 | .812 164.934 | 118.240 .019 2.261 | 010 153 005 012 | .023 690.000 15.862 | .077 4.000 .307 | .134 1.000 .134 | .003 26.000 .074 | . 501 | |
|---|---|--|---|-------------------------------------|-------------|--|--|--|---|--|---|---|--|-----------|
| 319.530 .011 3.515 | 126.610 .170 21.524 | 534.900 .011 5.937 | 12,629,520 .000 .063 | 72.840 .001 .058 | 164.225 | .812 165.037 | 118.240 019 2.261 | .010 .153 .005 .012 | .023 690.000 15.862 | .077 4.000 .307 | .134 1.000 .134 | .003 26.000 .074 | 501 800 400 | |
| 319.530 .011 3.515 | 126.610 .170 21.524 | 534.900 .011 5.937 | 12,629.520 .000 .063 | 72.840 .001 .058 | 164.223 | .812 165.035 | 118.240 .019 2.261 | , 010 ,153 ,005 | .023 690.000 15.862 | .077 4.000 .307 | 134 1.000 134 | .003 26.000 .074 | .501 .800 | * * |
| 319.530 .011 3.515 | 126.610 .170 21.524 | 534.900 .011 5.937 | 12,629,520 .000 .063 | 72.840 | 164.225 | .812 165.037 | 118.240 ,019 2.261 | .153 .153 .005 | .023 690.000 15.862 | .077 4.000 .307 | .134 1.000 .134 | .003 26.000 .074 | .501 | A T A Z A |
| 319.530 .011 3.515 | 126.610 .170 21.524 | 534.900 .011 5.937 | 12,629,520 .000 .063 | 72.840 .001 .058 | 164.232 | .812 165.044 | 118.240 .019 2.261 | .010 .153 .005 | .023 690.000 15.863 | .077 4.000 .307 | .134 1.000 .134 | .003 26.000 .075 | .501 .800 .401 | |
| 319.530 .011 3.515 | 126.610 .170 21.524 | 534.900 .011 5.937 | 12,629.520 .000 .065 | 72.840 .001 .058 | 164.471 | .812 165.283 | 118.240 .019 2.261 | .010 .153 .005 | .023 690.000 15.865 | .077 4.000 .307 | .134 1.000 .134 | .003 26.000 .076 | .502 .800 .402 | |
| FETLING MAT PRICE FETLING MAT UNIT CONSUMPTION FETLING MAT COST | HBI PRICE HBI UNIT CONSUMPTION HBI COST | FEMN PRICE FEMN UNIT CONSUMPTION FEMN COST | FEV PRICE FEV UNIT CONSUMPTION FEV COST | DOLO PRICE Dolo Unit consumption | SUB TOTAL * | MANUFACTURING SUPLLIES COST RAW MAT & SUPPLIES C TOTAL ** | BY-PRODUCT SCRAP UNIT PRICE SCRAP UNIT CONSUMPTION SCRAP COST | DUST UNLT CONSUMPTION SLAG UNIT CONSUMPTION SCALE SMP UNIT CONSUMPTION MASTE BRICK UNIT CONSUMPTION | UTILITIES ELECT UNIT PRICE ELECT_UNIT CONSUMPTION ELECTRICITY COST | N GAS UNIT PRICE N GAS UNIT CONSUMPTION NATURAL GAS COST | O2N2 UNIT PRICE O2N2 UNIT CONSUMPTION O2N2 COST | COMP AIR UNIT PRICE COMP AIR UNIT CONSUMPTION COMPRESSED AIR COST | WATER UNIT PRICE WATER UNIT CONSUMPTION WATER COST | |

| | 16.777 | 179.451 | | 2.018 | 9.815 | 3.583 | 4.233 | 19.649 | 199.100 | 1,145,500 | | | | | | |
|-----------|----------------------|---------------------|------------|------------|-------------------|-------------|------------|------------------|----------------|------------------|---|------|--|---|--|--|
| | 16.777 | 179.554 | | 2.018 | 9.815 | 3.583 | 4.231 | 19.647 | 199.201 | 1,145,500 | | | | | | |
| | 16.777 | 179.552 | | 2.018 | 9.815 | 3.583 | 4.232 | 19,643 | 199.200 | 1,145,500 | | | | | | |
| | 16.777 | 179.554 | | 2.018 | 9.815 | 3.584 | 4.171 | 19.588 | 199.142 | 1,145,500 | | | | | | |
| | 16.781 | 179.564 | | 2.018 | 9.815 | 3.584 | 4.171 | 19,587 | 199,151 | 1,145,500 | | | | · | | |
| | 16.784 | 179.806 | | 2.018 | 9.866 | 3.582 | 5,490 | 20.955 | 200.761 | 1,145,500 | | | | | | |
| | ** | *** | | | | ı | | *** | *** | | | | | | | |
| · · · · · | UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST | LABOR COST | DEPRICIALION COST | REPAIR COST | OTHER COST | FIXED COST TOTAL | SMP COST TOTAL | BILLT PRODUCTION | • | | | | | |

CASE 0-1 EXISTING WITHOUT ESCALATION

| (UNIT : US\$/SMP TON) | | | MANU | MANUFACTURING COST SHEET - SMP - | SHEET | |
|---|---------------------------|---------------------------|---------------------------|-------------------------------------|---------------------------|--------------------------|
| | 1999 | 5000 | 2001 | 2002 | 2003 | 2004 |
| RAW MATERIAL & SUPPLIES Dri Unit Price Dri Unit Consumption Dri Cost | 113.178 .678 76.710 | 115.154 .678 78.050 | 114.316 .678 77.481 | 111.115 .678 75.312 | 114.665 .678 77.718 | 114.663 .678 77.77 |
| B LIME UNIT PRICE | 47.991 | 47.986 | 45.177 | 43.644 | 45.639 | 48.505 |
| 5 LIME UNIT CONSUMPTION | .036 | .036 | .036 | .036 | .036 | .036 |
| 8 LIME COST | 1.722 | 1.722 | 1.621 | 1.566 | 1.638 | 1.740 |
| SCRAP UNIT PRICE | 122.944 | 122.944 | 122.944 | 122.944 | 122.944 | 122.944 |
| SCRAP UNIT CONSUMPTION | .283 | .283 | .283 | .283 | .283 | .283 |
| SCRAP COST | 34.793 | 34.793 | 34.793 | 34.793 | 34.793 | 34.793 |
| FEST PRICE | 537.950 | 537.950 | 537.950 | 537.950 | 537.950 | 537.950 |
| FEST UNIT CONSUMPTION | .004 | .004 | .004 | .004 | .004 | .004 |
| FEST COST | 2.098 | 2.098 | 2.098 | 2.098 | 2.098 | 2.098 |
| AL PRICE | 1,611.940 | 1,611.940 | 1,611.940 | 1,611.940 | 1,611.940 | 1,611.940 |
| AL UNIT CONSUMPTION | ,000 | .000 | .000 | .000 | .000 | .000 |
| AL COST | .161 | .161 | .161 | .161 | .161 | .161 |
| COKE BREEZE PRICE COKE BREEZE UNIT CONSUMPTION COKE BREEZE COST | 95.190 .005 | 95.190 .005 | 95.190 .005 .476 | 95.190 .005 .476 | 95.190 .005 .476 | 95.190 .005 |
| ELECTRODE PRICE | 2,512,440 | 2,512.440 | 2,512.440 | 2,512.440 | 2,512.440 | 2;512.440 |
| ELECTRODE UNIT CONSUMPTION | .004 | .004 | .004 | .004 | .004 | .004 |
| ELECTRODE COST | 9.547 | 9.547 | 9.547 | 9.547 | 9.547 | 9.547 |
| FURNACE BRICK PRICE | 1,399.240 | 1,399.240 | 1,399,240 | 1,399.240 | 1,399.240 | 1,399.240 |
| FURNACE BRICK UNIT CONSUMPTION | .001 | .001 | .001 | .001 | .001 | .001 |
| FURNACE BRICK COST | 1.679 | 1.679 | 1.679 | 1.679 | 1.679 | 1.679 |
| LADLE BRICK PRICE | 1,047.570 | 1,047.570 | 1,047.570 | 1,047.570 | 1,047.570 | 1,047.570 |
| LADLE BRICK UNIT CONSUMPTION | .003 | .003 | .003 | .003 | .003 | .003 |
| LADLE BRICK COST | 3.143 | 3.143 | 3.143 | 3.143 | 3.143 | 3.143 |
| TUNDISH BRICK PRICE | 607.180 | 607.180 | 607.180 | 607.180 | 607.180 | 607.130 |
| TUNDISH BRICK UNIT CONSUMPTION | .002 | .002 | .002 | .002 | .002 | .002 |
| TUNDISH BRICK COST | 1.457 | 1.457 | 1.457 | 1.457 | 1.457 | 1.457 |

AI-116

10. M

Charles

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|---|--|---|---|--|---|--|--|--|-------------|--|---|--|---|---|
| | .488 .800 .390 | .003 26.003 .071 | ,127 1.000 127 | .077 4.000 .307 | .023 690.000 15.825 | .010 .153 .005 | 118.240 .019 2.261 | .812 164.720 | 163,908 | 72.840 .001 .058 | 12,629.520 .000 .063 | 534.900 .011 5.937 | 126.610 .170 21.524 | 319.530 .011 3.515 |
| | 884. 800. 390 | 2600, 26,000 26,071 | .127 1.000 .127 | .077 4.000 .307 | .023 690.000 15.625 | , 010 , 153 , 005 | 118.240 .019 2.261 | .812 164.619 | 163.808 | 72.840 .001 | 12,629.520 .000 .063 | 534.900 .011 5.937 | 126.610 .170 21.524 | 319,530 ,011 3,515 |
| 1 | .406 .800 .325 | .002 26.000 .054 | .102 1.000 .102 | .077 4.000 .307 | .023 690.000 15.559 | .010 .153 .005 .012 | 118.240 .019 2.261 | .812 162.141 | 161.329 | 72.840 .001 | 12,629.520 .000 .063 | 534.900 .011 5.937 | 126.610 .170 21.524 | 319.530 011 3.515 |
| 1 | .437 .800 .349 | .002 26.000 .060 | .112 1.000 .112 | .077 4.000 .307 | .023 690.000 15.659 | .010 .153 .005 | 118.240 .019 2.261 | .812 164.366 | 163.554 | 72.840 .001 .058 | 12,629.520 .000 .063 | 534.900 .011 5.937 | 126.610 .170 21.524 | 319.530 .011 3.515 |
| | .501 .800 .400 | .003 26.000 .074 | .134 1.000 .134 | .077 4.000 .307 | .023 690.000 15.862 | 010.153.005.012 | 118.240 .019 2.261 | .812 165.035 | 164.223 | 72.840 .001 .058 | 12,629,520 .000 .063 | 534.900 .011 5.937 | 126.610 .170 21.524 | 319.530 .011 3.515 |
| | .501 .800 .400 | .003 26.000 | ,134 1.000 1.134 | .077 4.000 .307 | .023 690.000 15.862 | .010 .153 .005 | 118.240 .019 2.261 | .812 163.695 | 162.884 | 72.840 .001 .058 | 12,629.520 .000 .063 | 534.900 .011 5.937 | 126.610 .170 21.524 | 319.530 .011 3.515 |
| | WATER UNIT PRICE Water Unit Consumption Water Cost | COMP AIR UNIT PRICE COMP AIR UNIT CONSUMPTION COMPRESSED AIR COST | D2N2 UNIT PRICE D2N2 UNIT CONSUMPTION D2N2 COST | N GAS UNIT PRICE N GAS UNIT CONSUMPTION NATURAL GAS COST | UTILITIES Elect UNIT PRICE Elect UNIT CONSUMPTION Electricity COST | DUST UNIT CONSUMPTION SLAG UNIT CONSUMPTION SCALE SMP UNIT CONSUMPTION WASTE BRICK UNIT CONSUMPTION | BY-PRODUCT Scrap UNIT PRICE Scrap UNIT CONSUMPTION Scrap COST | MANUFACTURING SUPLLIES COST RAW MAT & SUPPLIES C TOTAL ** | SUB TOTAL * | DOLO PRICE Dolo Unit Consumption Dolo Cost | FEV PRICE FEV UNIT CONSUMPTION FEV COST | FEMN PRICE FEMN UNIT CONSUMPTION FEMN COST | HBI PRICE HBI UNIT CONSUMPTION HBI COST | FETLING MAT PRICE FETLING MAT UNIT CONSUMPTION FETLING MAT COST |
| | A M A M A M | 888 | 0000 | ŻZĂ | ដ្ឋដដ | AA SCL U | - 73 25 25 25 25 25 25 25 25 25 25 25 25 25 | MA RA | - | 888 | | | 888 | |

| 16.720 | 179.180 | 810.S | 5.764 | 7.165 | 4.223 | 19.170 | 198.350 | 1,145,500 | |
|----------------------|---------------------|---------------------------|-------------------|-------------|------------|------------------|----------------|------------------|--|
| 16.720 | 179.079 | 810.5 | 5.764 | 7.165 | 4.223 | 19.171 | 198,250 | 1,145,500 | |
| 16.346 | 176.227 | 2 NTR | 5.764 | 3.552 | 4.163 | 15.497 | 191.724 | 1,145,500 | |
| 16.486 | 178.591 | 810.5 | 7.117 | 3.562 | 4.187 | 16.885 | 195.476 | 1,145,500 | |
| 16.777 | 179.552 | 2.01R | 9.815 | 3 , 583 | 4.232 | 19.648 | 199.200 | I,145,500 | |
| 16.777 | 178.212 | 2 N18 | 9.815 | 3.583 | 4.233 | 19.649 | 197.861 | 1,145,500 | |
| * | *** | | | | | *** | **** | | |
| UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST 1 AROR COST | DEPRICIATION COST | REPAIR COST | OTHER COST | FIXED COST TOTAL | SMP COST TOTAL | BILLT PRODUCTION | |

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CASE 0-1 EXISTING MITHOUT ESCALATION

| | | | MANUI | MANUFACTURING COST SHEET | SHEET | |
|--------------------------------|-----------|-----------|-----------|--------------------------|-----------|-----------|
| (UNIT : US\$/SMP TON) | | | | 5 | | |
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
| VARIABLE COST | | | | | | |
| RAM MATERIAL & SUPPLIES | | | | | | |
| DRI UNIT PRICE | 114.687 | 114.665 | 112.685 | 114.663 | 114.687 | 114.665 |
| DRI UNIT CONSUMPTION | .678 | .678 | .678 | .678 | 673 | . 678 |
| DRI COST | 77.733 | 77.718 | 76.376 | 77.716 | 77.733 | 77.718 |
| B LINE UNIT PRICE | 48.509 | 48.510 | 48.509 | 45.634 | 48.510 | 48.510 |
| B LIME UNIT CONSUMPTION | .036 | .036 | .036 | 036 | .036 | .036 |
| B LIME COST | 1.740 | 1.741 | 1.740 | 1.637 | 1,741 | 1.741 |
| SCRAP UNIT PRICE | 122.944 | 122.944 | 122.944 | 122.944 | 122.944 | 122.944 |
| SCRAP UNIT CONSUMPTION | . 283 | . 283 | . 283 | . 283 | . 283 | . 283 |
| SCRAP COST | 34.793 | 34.793 | 34.793 | 34.793 | 34.793 | 34.793 |
| FESI PRICE | 537.950 | 537.950 | 537.950 | 537.950 | 537.950 | 537.950 |
| FESI UNIT CONSUMPTION | .004 | .004 | .004 | .004 | .004 | .004 |
| FESI COST | 2.098 | 2.098 | 2.098 | 2.098 | 2.098 | 2.098 |
| AL PRICE | 1,611.940 | 1,611.940 | 1,611,940 | 1,611.940 | 1,611.940 | 1,611.940 |
| AL UNIT CONSUMPTION | .000 | 000. | .000 | 000 | 000 | 000 |
| AL COST | .161 | .161 | .161 | .161 | .161 | .161 |
| COKE BREEZE PRICE | 95.190 | 95.190 | 95.190 | 95.190 | 95.190 | 95.190 |
| COKE BREEZE UNIT CONSUMPTION | .005 | .005 | .005 | .005 | .005 | .005 |
| COKE BREEZE COST | .476 | .476 | .476 | 476 | .476 | 476 |
| ELECTRODE PRICE | 2,512.440 | 2,512.440 | 2,512.440 | 2,512.440 | 2,512.440 | 2,512.440 |
| ELECTRODE UNIT CONSUMPTION | ,000 | .004 | , 004 | .004 | .004 | .004 |
| ELECTRODE COST | 9.547 | 9.547 | 9.547 | 9.547 | 9.547 | 9.547 |
| FURNACE BRICK PRICE | 1,399.240 | 1,399.240 | 1,399.240 | 1,399.240 | 1,399.240 | 1,399.240 |
| FURNACE BRICK UNIT CONSUMPTION | 100. | 100. | 100. | 100. | 100. | .001 |
| FURNACE BRICK COST | 1.679 | 1.679 | 1.679 | I.679 | I.679 | 1.679 |
| LADLE BRICK PRICE | 1,047.570 | 1,047.570 | 1,047.570 | 1,047.570 | 1,047.570 | 1,047.570 |
| LADLE BRICK UNIT CONSUMPTION | .003 | .003 | ,003 | .003 | .003 | .003 |
| LADLE BRICK COST | 3.143 | 3.143 | 3.143 | 3.143 | 3.143 | 3.143 |
| TUNDISH BRICK PRICE | 607.180 | 607.180 | 607.180 | 607.180 | 607.180 | 607.180 |
| TUNDISH BRICK UNIT CONSUMPTION | .002 | | -002 | | . 002 | .002 |
| TUNDISH BRICK COST | 1.45/ | 1.457 | 144.1 | 1.457 | 1.457 | 1.457 |

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| | | 120 | AI-120 | ALAN A | | |
|------------------------------|--------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--|
| 48 8 | ,488 | . 488 | .488 | .488 | . 800 | MATER UNIT PRICE |
| .800 | ,800 | . 800 | .800 | .800 | | MATER UNIT CONSUMPTION |
| .390 | ,390 | . 390 | .390 | .390 | | MATER COST |
| 110. | .003 | .003 | .003 | .003 | .003 | COMP AIR UNIT PRICE |
| 2003 | 26.000 | 26.000 | 26.000 | 26.000 | 26.000 | COMP AIR UNIT CONSUMPTION |
| 2003 | .071 | .071 | .071 | .071 | .071 | COMPRESSED AIR COST |
| .127 | .127 | .127 | .127 | .127 | .127 | D2N2 UNIT PRICE |
| 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | D2N2 UNIT CONSUMPTION |
| .127 | .127 | .127 | .127 | .127 | .127 | D2N2 COST |
| .077 | .077 | .077 | .077 | .077 | .077 | N GAS UNIT PRICE |
| 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | 4.000 | N GAS UNIT CONSUMPTION |
| .307 | .307 | .307 | .307 | .307 | .307 | NATURAL GAS COST |
| .023 690.000 15.825 | .023 .023 15.825 | ,023 690,000 15.825 | .023 690.000 15.825 | .023 690.000 15.825 | .023 690.000 15.825 | UTILITIES ELECT UNIT PRICE ELECT UNIT CONSUMPTION ELECTRICITY COST |
| .010 .153 .005 .012 | .010 .005 .012 | .010 .153 .005 | .010 .153 .005 | 010 153 005 | .010 .153 .005 | DUST UNIT CONSUMPTION SLAG UNIT CONSUMPTION SCALE SMP UNIT CONSUMPTION MASTE BRICK UNIT CONSUMPTION |
| 118.240 .019 2.261 | 118.240 .019 2.261 | 118.240 .019 2.261 | 118.240 ,019 2.261 | 118.240 .019 2.261 | 118.240 .019 2.261 | BY-PRODUCT SCRAP UNIT PRICE SCRAP UNIT CONSUMPTION SCRAP COST |
| .812 | .812 | .812 | .812 | .812 | .812 | MANUFACTURING SUPLLIES COST |
| 164.722 | 164.737 1 | 164.617 | 163.380 | 164.722 | 164.737 | RAM MAT & SUPPLIES C TOTAL ** |
| .001 | .001 | .001 | .001 | .001 | .001 | DOLO CURT CONSUMPTION |
| .058 | .058 | .058 | .058 | .058 | .058 | DOLO COST |
| 163.911 | 163.925 | 163.805 | 162.569 | 163.911 | 163.925 | SUB TOTAL * |
| 12,629.520 | 12,629.520 12,6 | 12,629.520 | 12,629.520 | 12,629.520 | 12,629.520 | FEV PRICE |
| .000 | .000 | .000 | .000 | .000 | .000 | FEV UNIT CONSUMPTION |
| .063 | .063 | .063 | .063 | .063 | .063 | FEV COST |
| 534.900 | 534.900 5 | 534.900 | 534.900 | 534.900 | 534.900 | FEMN PRICE |
| .011 | .011 | .011 | .011 | .011 | .011 | FEMN UNIT CONSUMPTION |
| 5.937 | 5.937 | 5.937 | 5.937 | 5.937 | 5.937 | FEMN COST |
| 126.610 | 126.610 1 | 126.610 | 126.610 | 126,610 | 126.610 | HBI PRICE |
| .170 | .170 | .170 | .170 | .170 | .170 | HBI UNLT CONSUMPTION |
| 21.524 | 21.524 | 21.524 | 21.524 | 21.524 | 21.524 | HBI COST |
| 319.530 | 319.530 | 319.530 | 319.530 | 319.530 | 319.530 | FETLING MAT PRICE |
| .011 | 011 | .011 | .011 | .011 | .011 | FETLING MAT UNIT CONSUMPTION |
| 3.515 | 3.515 | 3.515 | 3.515 | 3.515 | 3.515 | FETLING MAT COST |
| | - | | | | | |

| 16.720 | 179.182 | 2.018 | 5.764 | 7.165 | 4.223 | 19.171 | 198.353 | 1,145,500 |
|----------------------|---------------------|--------------------------|-------------------|-------------|------------|------------------|-----------------|------------------|
| 16.720 | 179.197 | 2.018 | 5,764 | 7.165 | 4 223 | 171.91 | 198.367 | 1,145,500 |
| 16.720 | 179.077 | 2.018 | 5.764 | 7.165 | 4.223 | 19.170 | 198.247 | 1,145,500 |
| 16.720 | 177.840 | 2.018 | 5.764 | 7.165 | 4.222 | 19.169 | 600.79 I | 1,145,500 |
| 16.720 | 179.182 | 2.018 | 5.764 | 7.165 | 4.223 | 19.171 | 198.353 | 1,145,500 |
| 16.720 | 179.197 | 2.018 | 5.764 | 7.165 | 4.223 | 19.170 | 198.367 | 1,145,500 |
| ** | *** | · | | | | *** | **** | |
| UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST LABOR COST | DEPRICIATION COST | REPAIR COST | OTHER COST | FIXED COST TOTAL | SMP COST TOTAL | BILLT PRODUCTION |

CASE 0-1 EXISTING MITHOUT ESCALATION

(NOT 9%/\$%) : TINU)

MANUFACTURING COST SHEET

| 2014 | 114.665 | 48.510 | 122.944 | 537.950 |
|------|---------|--------|---------|---------|
| | .678 | .036 | .283 | .004 |
| | 77.718 | 1.741 | 34.793 | 2.098 |
| 2013 | 114.687 | 45.638 | 122.944 | 537.950 |
| | .678 | .036 | .283 | .004 |
| | 77.733 | 1.637 | 34.793 | 2.098 |
| 2012 | 114.662 | 48.505 | 122.944 | 537.950 |
| | .678 | .036 | .283 | .004 |
| | 77.716 | 1.740 | 34.793 | 2.098 |
| 2011 | 114.665 | 48.510 | 122.944 | 537.950 |
| | .678 | .036 | .283 | .004 |
| | 77.718 | 1.741 | 34.793 | 2.098 |
| | | | | |

112.686 .678 76.377

48.510 .036 1.741

2015

| 2014 | 114.665 .678 | 77.718 | 48.510 | 1.741 | 122.944 | .283 | 34.793 | 537.950 | .004 | 2.098 | 1,611.940 | .000 | .161 | 95.190 | .005 | .476 | 2,512.440 | 004 | 9.547 | 1,399.240 | 100. | 1.679 | 1,047.570 | .003 | 3.143 | 607.180 | .002 | 1.457 |
|---------------|--|----------|-----------|---------------|------------------|------------------------|------------|---------|-----------------------|-----------|-----------|------|---------|--------|--------|------------------|-----------|------|----------------|---------------------|--------------------------------|--------------------|-----------|-------|------------------|---------|--------------------------------|--------------------|
| 2013 | 114.687 .678 | 77.733 | 45.638 | .056 1.637 | 122.944 | . 283 | 34.793 | 537.950 | .004 | 2.098 | 1,611.940 | 000 | .161 | 95.190 | .005 | .476 | 2,512,440 | 400. | 9.547 | 1,399.240 | 100. | 1.679 | 1,047.570 | .003 | 3.143 | 607.180 | .002 | 1.457 |
| 2012 | 114.662 .678 | 77.716 | 48.505 | .030 1.740 | 122.944 | .283 | 34.793 | 537.950 | .004 | 2.098 | 1,611.940 | .000 | .161 | 95.190 | .005 | .476 | 2,512.440 | .004 | 9.547 | 1,399.240 | 100. | 1.679 | 1,047.570 | .003 | 3.143 | 607.180 | .002 | 1.457 |
| 2011 | 114.665 .678 | 77.718 | 48.510 | .036 1.741 | 122.944 | . 283 | 34.793 | 537.950 | .004 | 2.098 | 1,611.940 | 000. | .161 | 95.190 | .005 | .476 | 2,512.440 | .004 | 9.547 | 1,399.240 | 100. | 1.679 | 1,047.570 | .003 | 3.143 | 607.180 | .002 | 1.457 |
| VARIABLE COST | DRI UNIT PRICE DRI UNIT CONSUMPTION | DRI COST | LIME UNIT | B LIME COST | SCRAP UNIT PRICE | SCRAP UNIT CONSUMPTION | SCRAP COST | | FESI UNIT CONSUMPTION | FEST COST | | | AL COST | BREEZE | BREEZE | COKE BREEZE COST | | | ELECTRODE COST | FURNACE BRICK PRICE | FURNACE BRICK UNIT CONSUMPTION | FURNACE BRICK COST | BRICK | BRICK | LADLE BRICK COST | BRICK | TUNDISH BRICK UNIT CONSUMPTION | TUNDISH BRICK COST |

AI-122

1,399.240 .001 1.679

1,047.570 .003 3.143

607.180 .002 1.457

2,512.440 .004 9.547

95.190 005 476

1,611.940 .000 .161

537.950 .004 2.098

122.944 .283 34.793

| 319.530 .011 3.515 | 126.610 .170 21.524 | 534.900 .011 5.937 | 12,629.520 .000 .063 | 72.840 .001 .058 | 162.569 | .812 163.381 | 118.240 .019 2.261 | .010 .153 .005 | .023 690.000 15.825 | .077 4.000 .307 | ,127 1,000 127 | ,003 26,000 ,071 | 684, 008, 390 |
|---|---|--|---|--|-------------|--|--|--|---|--|---|---|--|
| 319.530 .011 3.515 | 126.610 .170 21.524 | 534.900 .011 5.937 | 12,629.520 .000 .063 | 72.840 .001 .058 | 163.911 | .812 164.722 | 118.240 .019 2.261 | .010 .005 .012 | .023 690.000 15.825 | .077 4.000 .307 | .127 1.000 .127 | .003 26.000 .071 | . 488 . 800 . 390 . 390 |
| 319.530 .011 3.515 | 126.610 .170 21.524 | 534.900 .012 5.937 | 12,629.520 .000 .063 | 72.840 .001 | 163,822 | .812 164.634 | 118.240 .019 2.261 | .010 .153 .005 | .023 690.000 15.825 | .077 4.000 .307 | .127 1.000 .127 | .003 26.000 .071 | .488 .800 .390 AI-123 |
| 319.530 .011 3.515 | 126.610 .170 21.524 | 534,900 .011 5.937 | 12,629.520 .000 .063 | 72.840 .001 .058 | 163.908 | .812 164.720 | 118.240 .019 2.261 | .010 .153 .005 | .023 690.000 15.825 | .077 4.000 .307 | .127 1.000 ,127 | .003 26.000 271 | .488 .800 .390 |
| 319.530 .011 3.515 | 126.610 .170 21.524 | 534.900 .011 5.937 | 12,629.520 .000 .063 | 72.840 .001 .058 | 163.911 | .812 164:722 | 118.240 .019 2.261 | .010 .153 .005 | .023 690.000 15.825 | .077 4.000 307 | .127 1.000 .127 | .003 26.000 .071 | 884. 008. 092. |
| FETLING MAT PRICE FETLING MAT UNIT CONSUMPTION FETLING MAT COST | HBI PRICE HBI UNIT CONSUMPTION HBI COST | FEMN PRICE FEMN UNIT CONSUMPTION FEMN COST | FEV PRICE FEV UNIT CONSUMPTION FEV COST | DOLO PRICE Dolo Unit Consumption Dolo Cost | SUB TOTAL * | MANUFACTURING SUPLLIES COST RAW MAT & SUPPLIES C TOTAL ** | BY-PRODUCT SCRAP UNIT PRICE SCRAP UNIT CONSUMPTION SCRAP COST | DUST UNIT CONSUMPTION SLAS UNIT CONSUMPTION SCALE SMP UNIT CONSUMPTION MASTE BRICK UNIT CONSUMPTION | UTILITIES ELECT UNIT PRICE ELECT UNIT CONSUMPTION ELECTRICITY COST | N GAS UNIT PRICE N GAS UNIT CONSUMPTION NATURAL GAS COST | OZNZ UNIT PRICE OZNZ UNIT CONSUMPTION OZNZ COST | COMP AIR UNIT PRICE COMP AIR UNIT CONSUMPTION COMPRESSED AIR COST | MATER UNIT PRICE MATER-UNIT CONSUMPTION MATER COST |

| 16.720 | 177.840 | | 8T0.2 | 5.764 | 7.165 | 4.223 | 19.171 | 110.791 | 1,145,500 | |
|----------------------|---------------------|------------|------------|-------------------|-------------|------------|------------------|----------------|------------------|--|
| 16.720 | 179.182 | | 8T0.2 | 5.764 | 7.165 | 4.223 | 171.91 | 198.353 | 1,145,500 | |
| 16.720 | 179.093 | | 2.018 | 5.764 | 7.165 | 4.223 | 19.170 | 198.263 | 1,145,500 | |
| 16.720 | 179.180 | | 210.2 | 5.764 | 7.165 | 4.223 | 19.170 | 198.350 | 1,145,500 | |
| 16.720 | 179.182 | | 210.2 | 5.764 | 7.165 | 4.223 | 171.91 | 198.353 | 1,145,500 | |
| * | *** | | | | | | *** | **** | | |
| UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST | LABUR CUSI | DEPRICIATION COST | REPAIR COST | OTHER COST | FIXED COST TOTAL | SMP COST TOTAL | BILLT PRODUCTION | |

CASE 0-1 EXISTING WITHOUT ESCALATION L

MANUFACTURING COST SHEET - BAR -

| | | . | | . • | N M | | | N.C.C | * ~ ~ | MOA | 200 |
|-----------------------|--|-----------------------------|---|-------------|--|--|---|--|---|---|--|
| · | 1998 | 199.100 1.045 208.061 | 258.260 .000 | 208.061 | 2.827 210.838 | 118.240 .029 3.413 | .023 60.900 1.400 | .077 34.500 2.650 | .134 .000 | .003 104.800 .299 | .501 .360 |
| | 1997 | 199.201 1.045 208.167 | 258.260 .000 | 208.167 | 2.827 210.994 | 118.240 .029 3.413 .009 | .023 60.900 1.400 | .077 34.500 2.650 | .134 | .003 104.800 .299 | .501 .360 .180 |
| - BAR - | 1996 | 199.200 1.045 208.166 | 258,260 .000 | 208.166 | 2.827 210.993 | 118.240 .029 3.413 .009 | .023 60.900 1.400 | .077 34.500 2.650 | .000 | .003 104.800 .299 | .501 ,360 ,180 |
| | 1995 | 199.142 1.045 208.105 | 2.58,260 .000 | 208.105 | 2.827 210.932 | 118.240 .029 3.413 | .023 60.900 1.400 | .077 34.500 2.650 | .134 | .003 104.800 .299 | .501 .360 .180 |
| | 1994 | 199.151 1.045 208.111 | 258.260 .000 | 208.111 | 2.825 210.935 | 118.240 .029 3.402 | .023 60.900 1.400 | .077 34.500 2.650 | .134 | .003 104.800 .303 | .501 .360 .181 |
| | 1993 | 200.761 1.045 209.787 | 258.260 000 | 209,787 | 2.826 212.613 | 118.240 .029 3.412 .009 | .023 60.900 1.400 | .077 34.500 2.650 | .134 .000 | .003 104.800 .308 | .502 .360 .181 |
| (UNIT : US\$/BAR TON) | VARIABLE COST Pam Mátertai & suddites | NIT PRIC | P.BILLET UNIT PRICE P.BILLET UNIT CONSUMPTION P.BILLET COST | SUB TOTAL * | MANUFACTURING SUPLILES COST RAM MAT & SUPPLIES C TOTAL ** | BY-PRODUCT SCRAP UNIT PRICE SCRAP UNIT CONSUMPTION SCRAP COST SCALE BAR UNIT CONSUMPTION | UTILITIES Elect UNIT PRICE Elect UNIT CONSUMPTION Electricity COST | N GAS UNIT PRICE N GAS UNIT CONSUMPTION NATURAL GAS COST | OZNZ UNIT PRICE OZNZ UNIT CONSUMPTION OZNZ COST | COMP AIR UNIT PRICE Comp Air Unit Consumption Compressed Air Cost | WATER UNIT PRICE WATER UNIT CONSUMPTION MATER COST |

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|--|------|--|--|--|--|--|--|
| UTILITIES COST TOTAL | ** | 4.539 | 4.534 | 4.529 | 4.529 | 4.529 | 4 |
| VARIABLE COST TOTAL | *** | 213.739 | 212.067 | 212.047 | 212.109 | 212.109 | 212.003 |
| FIXED COST LABOR COST DEPRICIATION COST REPAIR COST OTHER COST FIXED COST TOTAL | **** | 1.659 5.673 2.240 1.710 11.282 | 1.612 5.489 2.178 1.562 10.840 | 1.568 5.339 2.118 1.528 10.554 | 1.568 5.339 2.118 1.527 10.553 | 1.568 5.341 2.118 1.528 10.555 | 1.568 5.339 2.118 1.528 10.554 |
| BAR COST TOTAL | *** | 225.021 | 222.908 | 222.601 | 222.661 | 222.665 | 222.557 |
| BAR PRODUCTION | | 537,100 | 552,600 | 568,100 | 568,100 | 568,100 | 568,100 |
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CASE 0-1 EXISTING WITHOUT ESCALATION

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MANUFACTURING COST SHEET - BAR -

| (UNIT : US\$/BAR TON) | | | | 1 X100 1 | | |
|--|---------------------------------|----------------------------------|----------------------------------|----------------------------------|--------------------------------|-----------------------------|
| VARIABLE COST PAM MATERIAL & SUDPITES | 366 I | 2000 | 2001 | 2002 | 2003 | 2004 |
| BAR BILLET UNIT PRICE BAR BILLET UNIT CONSUMPTION BAR BILLET COST | 197.861 1.045 206.766 | 199.200 1.045 208.166 | 195.476 1.045 204.274 | 191.724 1.045 200.353 | 198.250 1.045 207.172 | 198.350 1.045 207.277 |
| P.BILLET UNIT PRICE P.BILLET UNIT CONSUMPTION P.BILLET COST | 258.260 .000 .000 | 258.260 .000 .000 | 258.260 .000 .000 | 258.260 .000 | 258.260 000 000 | 258.260 .000 .000 |
| SUB TOTAL * | 206.766 | 208.166 | 204.274 | 200.353 | 207.172 | 207.277 |
| MANUFACTURING SUPELLIES COST RAM MAT & SUPPLIES C TOTAL ** | 2.827 209.593 | 2.827 210.993 | 2.827 207.101 | 2.827 203.180 | 2.827 209.999 | 2.827 210.104 |
| BY-PRODUCT SCRAP UNIT PRICE SCRAP UNIT CONSUMPTION SCRAP COST SCALE BAR UNIT CONSUMPTION | 118.240 .029 3.413 009 | 118.240 .029 3.413 .009 | 118.240 .029 3.413 .009 | 118.240 .029 3.413 .009 | 118.240 029 3.413 009 | 118.240 .029 3.413 |
| UTILITIES ELECT UNIT PRICE ELECT UNIT CONSUMPTION ELECTRICITY COST | .023 60.900 1.400 | .023 60,900 1.400 | .023 60,900 1,382 | .023 60,900 1.373 | .023 60.900 1.397 | .023 60.900 1.397 |
| N GAS UNIT PRICE N GAS UNIT CONSUMPTION NATURAL GAS COST | .077 34.500 2.650 | .077 34.500 2.650 | .077 34.500 2.643 | .077 34.500 2.647 | .077 34.500 2.649 | .077 34.500 2.649 |
| OZNZ UNIT PRICE OZNZ UNIT CONSUMPTION OZNZ COST | .134 .000 .000 | .134 | .000 | .000 | .127 | .127 .000 |
| COMP AIR UNIT PRICE Comp Air Unit Consumption Compressed Air Cost | .003 104.800 .299 | .003 104.800 .299 | .002 104.800 .240 | .002 104.800 .216 | .003 104.800 .285 | .003 104.800 .285 |
| MATER UNIT PRICE MATER UNIT CONSUMPTION MATER COST | .501 .360 .180 | .501 | .437 .360 .157 | .406 .360 .146 | .488 .360 .176 | .488 .360 .176 |

| UTILITIES COST TOTAL | ** | 4.529 | 4.529 | 4.427 | 4.382 | 4.506 | 4.506 |
|---|------|--|--|----------------------------------|---|--|--|
| VARIABLE COST TOTAL | *** | 210.709 | 212.109 | 208,115 | 204.148 | 211.092 | 211.197 |
| FIXED COST LABOR COST DEPRICIATION COST REPAIR COST REPAIR COST FIXED COST TOTAL | *** | 1.568 5.339 2.118 1.528 10.554 | 1.568 5.339 2.118 1.527 10.553 | 1.568 4.117 2.106 1.480 | 1.568 2.880 2.100 1.455 8.004 | 1.568 2.880 4.236 1.527 10.211 | 1.568 2.880 4.236 1.526 10.210 |
| BAR COST TOTAL | **** | 221.263 | 222.661 | 217.386 | 212.152 | 221.303 | 221.407 |
| BAR PRODUCTION | | 568,100 | 568,100 | 568,100 | 568,100 | 568,100 | 563,100 |
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(UNIT : US\$/BAR TON)

MANUFACTURING COST SHEET - BAR -

| 2005 2006 | 198.357 198.353 0N 1.045 1.045 207.295 207.280 | 258.260 258.260 .000 .000 .000 .000 | 207.295 207.280 | ST 2.827 2.827 L ** 210.122 210.107 | 118.240 118.240 .029 .029 3.413 3.415 .009 .009 | .023 .023 .023 60.900 60.900 1.397 1.397 | .077 34.500 34.500 2.649 2.649 | .127 .000 .000 .000 | ,003 ,003 104,800 104,800 ,285 ,285 | . 488 |
|---------------|--|---|-----------------|--|--|---|--|---|---|------------------|
| VARIABLE COST | RAW MATERIAL & SUPPLIES BAR BILLET UNIT PRICE BAR BILLET UNIT CONSUMPTION BAR BILLET COST | P.BILLET UNIT PRICE P.BILLET UNIT CONSUMPTION P.BILLET COST | SUB TOTAL * | MANUFACTURING SUPLLIES COST Ram Mat & Supplies C Total ** | BY-PRODUCT SCRAP UNIT PRICE SCRAP UNIT CONSUMPTION SCRAP COST SCALE BAR UNIT CONSUMPTION | UTILITIES ELECT UNIT PRICE ELECT UNIT CONSUMPTION ELECTRICITY COST | M GAS UNIT PRICE N GAS UNIT CONSUMPTION NATURAL GAS COST | O2N2 UNIT PRICE O2N2 UNIT CONSUMPTION 02N2 COST | COMP AIR UNIT PRICE COMP AIR UNIT CONSUMPTION COMPRESSED AIR COST | WATER UNIT PRICE |

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| UTILITIES COST TOTAL | * | 4.506 | 4.506 | 4.506 | 4.506 | 4.506 | 4.506 |
|----------------------|------|---------|---------|---------|---|--------------------|---------|
| * | *** | 211.215 | 211.200 | 209.796 | 211.090 | 211.215 | 211.200 |
| | | 1 568 | 1 E48 | 893 [. | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 0 7 11 12 | |
| | | 2,830 | 2,830 | 2.880 | 2.880 | 2.880 | 2.880 |
| | | 4.236 | 4.236 | 4.236 | 4.236 | 4.236 | 4.236 |
| | | 1.527 | 1.527 | 1.527 | 1.526 | 1.527 | 1.527 |
| * | *** | 10.210 | 10.211 | 112.01 | 10.210 | 10.211 | 10.211 |
| * | **** | 221.425 | 221.411 | 220,007 | 221.299 | 221.426 | 221.411 |
| | | 568,100 | 568,100 | 568,100 | 568,100 | 568,100 | 568,100 |
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MANUFACTURING COST SHEET - BAR ~

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| | 2015 | 197.011 1.045 205.878 | 258.260 .000 .000 | 205.878 | 2.827 208.705 | 118.240 .029 3.413 | .023 60.900 1.397 | .077 34.500 2.649 | .127 .000 | .003 104.800 .285 | .488 .360 .176 |
|-----------------------|---------------|--|---|-------------|--|--|---|--|---|---|--|
| - BAR - | 2014 | 198.353 1.045 207.280 | 258.260 .000 .000 | 207.280 | 2.827 210.107 | 118.240 .029 3.413 .009 | .023 60.900 1.397 | .077 34.500 2.649 | .127 .000 | .003 104.800 .285 | .488 .360 .176 |
| | 2013 | 198.263 1.045 207.187 | 258.260 .000 .000 | 207.187 | 2.827 210.014 | 118.240 .029 3.413 .009 | .023 60.900 1.397 | .077 34.500 2.649 | .127 .000 .000 | .003 104.800 .285 | .488 .360 .176 |
| | 2012 | 198.350 1.045 207.277 | 258,260 .000 | 207.277 | 2.827 210.104 | 118.240 .029 3.413 .009 | .023 60.900 1.397 | .077 34.500 2.649 | .127 .000 .000 | .003 104.800 .285 | .488 .360 .176 |
| | 1102 | 198.353 1.045 207.280 | 258.260 .000 .000 | 207.280 | 2.827 210.107 | 118.240 .029 3.413 | .023 60.900 1.397 | .077 34.500 2.649 | .127 .000 .000 | .003 104.800 .285 | .488 .360 .176 |
| (UNIT : US\$/BAR TON) | VARIABLE COST | RAM MATERIAL & SUPPLIES BAR BILLET UNIT PRICE BAR BILLET UNIT CONSUMPTION BAR BILLET COST | P.BILLET UNIT PRICE P.BILLET UNIT CONSUMPTION P.BILLET COST | SUB TOTAL * | MANUFACTURING SUPLLIES COST Raw Mat & Supplies C Total ** | BY-PRODUCT SCRAP UNIT PRICE SCRAP UNIT CONSUMPTION SCRAP COST SCALE BAR UNIT CONSUMPTION | UTILITIES ELECT UNIT PRICE ELECT UNIT CONSUMPTION ELECTRICITY COST | N GAS UNIT PRICE N GAS UNIT CONSUMPTION NATURAL GAS COST | O2N2 UNIT PRICE O2N2 UNIT CONSUMPTION O2N2 COST | COMP AIR UNIT PRICE COMP AIR UNIT CONSUMPTION COMPRESSED AIR COST | MATER UNIT PRICE MATER UNIT CONSUMPTION MATER COST |

. AI-131

| 4.506 | 209,798 | 1.568 | 2.880 | 4.236 | 1.527 | 10.21 | 220.008 | 568,100 | |
|----------------------|---------------------|--------------------------|-------------------|-------------|------------|------------------|----------------|----------------|--|
| 4.506 | 211.200 | 1.568 | 2.880 | 4.236 | 1.527 | 10.211 | 221.411 | 568,100 | |
| 4.506 | 211.107 | 1.568 | 2.880 | 4.236 | 1.526 | 10.210 | 221.317 | 568,100 | |
| 4.506 | 291.112 | 1.568 | 2.880 | 4.236 | 1.527 | 10.210 | 221.407 | 568,100 | |
| 4.506 | 211.200 | 1.568 | 2.880 | 4.236 | 1.527 | 10.211 | 221.411 | 568,100 | |
| ** | *** | | | | | *** | **** | | |
| UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST LABOR COST | DEPRICIATION COST | REPAIR COST | OTHER COST | FIXED COST TOTAL | BAR COST TOTAL | BAR PRODUCTION | |

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CASE 0-1 Existing Mithout Escalation

(UNIT : US\$/ROD TON)

MANUFACTURING COST SHEET - ROD -

| (UNIT : US\$/ROD TON) | 200 F | 900 F | 300 F | 700 L | 100 F | 000 # |
|--|------------------|------------------|------------------|------------------|------------------|------------------|
| VARIABLE COST Ram Material & Supplies | | A-CC-T | 0.77.4 | 0// 4 | 1667 | 770 |
| ROD BILLET UNIT ROD BILLET UNIT CONSUMPTION | 200,761 1.023 | 199.151 1.023 | 199.142 1.023 | 199.200 1.023 | 199.201 1.023 | 199.100 |
| ROD BILLET COST | 205.479 | 203.831 | 203.821 | 203.881 | 203.882 | 203.778 |
| P.BILLET UNIT P.BILLET UNIT CONSUMPTION P.BILLET COST | 258.260 .000 | 258.260 .000 | 258.260 .000 | 258.260 .000 | 258.260 .000 | 258.260 .000 |
| SUB TOTAL * | 205.479 | 203,831 | 203.821 | 203.881 | 203.882 | 203.778 |
| MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | 2.719 208.198 | 2.842 206.673 | 2.379 206.201 | 2.379 206.260 | 2.379 206.261 | 2.379 206.158 |
| BY-PRODUCT SCRAP PRICE | 118.240 | 118.240 | 118.240 | 118.240 | 118.240 | 118, 240 |
| SCRAP UNIT CONSUMPTION SCRAP COST | 021 2.431 | 021 | 021 2.431 | 021 | .021 2.431 | .021 2.431 |
| SCALE ROD UNIT CONSUMPTION | 600. | 600° | 600. | 600 | 600. | 600. |
| UTILITIES Elect UNIT PRICE Elect UNIT CONSIMPTION | .023 | .023 | .023 | .023 | 023 | .023 |
| ELECTRICITY COST | 2.440 | 2.439 | 2.439 | 100,100 2,439 | 2.439 | 106.10U 2.439 |
| N GAS UNIT PRICE | .077 | 220 | .077 | .077 | .077 | .077 |
| N GAS UNIT CONSUMPTION NATURAL GAS COST | 29.400 2.258 | 29.400 2.258 | 2.258 | 29.400 2.258 | 29.400 2.258 | 29.400 2.258 |
| O2N2 UNIT PRICE | .134 | .134 | .134 | ,134 | .134 | .134 |
| DZNZ COST CONSUMPTION | 000 | 000. | 000. | 000. | 000. | 000. |
| COMP AIR UNIT PRICE | .003 | 003 | .003 | .003 | .003 | .003 |
| COMPRESSED AIR COST | 040. | 640' 16'810 | 048 | 16.8UU .048 | 16.800 .048 | 16.800 .048 |
| WATER UNIT PRICE | .502 | 501 | .501 | .501 | 105. | .501 |
| 7. | .276 | .276 | ,275 | .275 | .275 | .275 |

| 5.020 | 208.747 | 1.313 | 2.563 | 1.963 | 13.719 | 222.466 | 544,700 |
|----------------------|---------------------|--------------------------|-------------|------------|------------------|----------------|----------------|
| 5.020 | 208.85I | 1.313 | 2.563 | 1.963 | 13.719 | 222.569 | 544,700 |
| 5.620 | 208.850 | 1.313 | 2.563 | 1.962 | 15.718 | 222.568 | 544,700 |
| 5.020 | 208.790 | 1.313 | 2.563 | 1.963 | 13.719 | 222.509 | 544,700 |
| 5.022 | 209.264 | 1.313 | 2.563 | 1.971 | 13.727 | 222,991 | 544,700 |
| 5.023 | 210.790 | 1.313 | 2.562 | 2.054 | 13,840 | 224,629 | 544,700 |
| ** | *** | | | | *** | **** | |
| UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST LABOR COST | REPAIR COST | OTHER COST | FIXED COST TOTAL | ROD COST TOTAL | ROD PRODUCTION |

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(UNIT : US\$/ROD TON)

| 2003 | 198.250 1.023 202.908 | 258.260 .000 .000 | 202.908 | 2.379 205.288 | 118.240 .021 2.431 .009 | .023 106.100 2.433 | .077 29.400 2.257 | .000 | .003 16.800 .046 | .488 .550 .268 |
|--|---|---|-------------|--|---|---|--|---|---|--|
| 2002 | 191.724 1.023 196.229 | 258.260 .000 | 196.229 | 2.379 198.609 | 118.240 .021 2.431 .009 | .023 106.100 2.392 | .077 29.400 2.256 | .102 .000 | .002 16.800 .035 | .406 .550 .223 |
| 2001 | 195.476 1.023 200.070 | 258.260 .000 .000 | 200.070 | 2.379 202.449 | 118.240 .021 2.431 .009 | .023 106.100 2.408 | .077 29.400 2.256 | .000 000 | .002 16.800 .039 | .437 .550 .240 |
| 2000 | 199.200 1.023 203.881 | 258.260 .000 .000 | 203.881 | 2.379 206.260 | 118.240 .021 2.431 .009 | .023 106.100 2.439 | 077 29.400 2.258 | .134 .000 .000 | .003 16.800 .048 | .550 .275 |
| 1999 | 197.861 1.023 202.510 | 258.260 .000 .000 | 202.510 | 2.379 204.890 | 118.240 .021 2.431 009 | .023 106.100 2.439 | .077 29.400 2.258 | .134 .000 | .003 16.800 .048 | .501 .550 .275 |
| VARIABLE COST RAW MATERIAL & SUPPLIES | ROD BILLET UNIT ROD BILLET UNIT CONSUMPTION ROD BILLET COST | P.BILLET UNIT P.BILLET UNIT CONSUMPTION P.BILLET COST | SUB TOTAL * | MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | BY-PRODUCT SCRAP PRICE SCRAP UNIT CONSUMPTION SCRAP COST SCALE ROD UNIT CONSUMPTION | UTILITIES ELECT UNIT PRICE ELECT UNIT CONSUMPTION ELECTRICITY COST | N GAS UNIT PRICE N GAS UNIT CONSUMPTION NATURAL GAS COST | O2N2 UNIT PRICE O2N2 UNIT CONSUMPTION O2N2 COST | COMP AIR UNIT PRICE COMP AIR UNIT CONSUMPTION COMPRESSED AIR COST | MATER UNIT PRICE MATER UNIT CONSUMPTION MATER COST |

MANUFACTURING COST SHEET - ROD - 258.260 .000 .000

198.350 1.023 203.011

2004

205.379 205.390

203.011

118.240 .021 2.431 .009 .023 106.100 2.433 .077 29.400 2.257 .003 16.800 .046 .488 .550 .268

.000

| 5.005 | 207.964 | | | | | | 13.354 | 221.318 | 00 544,700 |
|----------------------|---------------------|------------|------------|-------------------|-------------|------------|------------------|----------------|----------------|
| 5.005 | 207.861 | | 1.313 | 4.955 | 5.124 | 1.963 | 13.355 | 221.216 | 544,700 |
| 4.906 | 201.083 | | 1.313 | 5.658 | 2.540 | 1.889 | 11.401 | 212.484 | 544,700 |
| 4.943 | 204.961 | | 1.313 | 7.916 | 2,547 | 1.914 | 13.691 | 218.651 | 544,700 |
| 5.020 | 208.850 | | 1.313 | 7.880 | 2.563 | 1.962 | 13.718 | 222.568 | 544,700 |
| 5.020 | 207.479 | | 1.313 | 7.880 | 2.563 | 1.963 | 13.719 | 221.198 | 544,700 |
| ** | * * | | | | | | *** | **** | |
| UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST | LABOR COST | DEPRICIATION COST | REPAIR COST | OTHER COST | FIXED COST TOTAL | ROD COST TOTAL | ROD PRODUCTION |

(UNIT : US\$/ROD TON)

MANUFACTURING COST SHEET

| 2010 | 198.353 1.023 203.014 | 258.260 .000 .000 | 203.014 | 2,379 205.393 | 118.240 .021 2.431 .009 | .023 106.100 2.433 | .077 29.400 2.257 | .000 | .003 16.800 .046 | .488 .550 .268 |
|---------------|--|---|-------------|--|---|---|--|---|---|--|
| 2009 | 198.367 1.023 203.029 | 258.260 .000 .000 | 203.029 | 2.379 205.408 | 118.240 .021 2.431 .009 | .023 .023 2.433 | .077 29.400 2.257 | .000 | .003 16.800 .046 | .488 .550 .268 |
| 2008 | 198.247 1.023 202.906 | 258.260 .000 .000 | 202.906 | 2.379 205.285 | 118.240 .021 2.431 .009 | .023 106.100 2.433 | .077 29.400 2.257 | .000 .000 | .003 16.800 .046 | .488 .550 .268 |
| 2007 | 197.009 1.023 201.639 | 258,260 .000 .000 | 201.639 | 2.379 204.018 | 118.240 .021 2.431 2.009 | .023 106.100 2.433 | .077 29.400 2.257 | .000 | .003 16.800 .046 | .488 .550 .268 |
| 2006 | 198.353 1.023 203.014 | 258,260 .000 .000 | 203.014 | 2.379 205.393 | 118.246 021 2.431 2.431 | 023 106.100 2.433 | .077 29.400 2.257 | .127 .000 | .003 16.800 .046 | .488 .550 .268 |
| 2005 | 198.367 1.023 203.028 | 258.260 .000 .000 | 203.028 | 2.379 205.408 | 118.240 .021 2.431 .009 | 023 106.100 2.433 | .077 29.400 2.257 | .127 .000 | .003 16.800 .046 | .488 ,550 .268 |
| VARIABLE COST | RAW MATERIAL & SUPPLIES ROD BILLET UNIT ROD BILLET UNIT CONSUMPTION ROD BILLET COST | P.BILLET UNIT P.BILLET UNIT CONSUMPTION P.BILLET COST | SUB TOTAL * | MANUFACTURING SUPPLIES COST RAM MAT & SUPPLIES C TOTAL ** | BY-PRODUCT SCRAP PRICE SCRAP UNIT CONSUMPTION SCRAP COST SCALE ROD UNIT CONSUMPTION | UTILITIES ELECT UNIT PRICE ELECT UNIT CONSUMPTION ELECTRICITY COST | N GAS UNIT PRICE N GAS UNIT CONSUMPTION NATURAL GAS COST | O2N2 UNIT PRICE O2N2 UNIT CONSUMPTION O2N2 COST | COMP AIR UNIT PRICE COMP AIR UNIT CONSUMPTION COMPRESSED AIR COST | WATER UNIT PRICE WATER UNIT CONSUMPTION WATER COST |

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|----------------------|---------------------|--------------------------|----------------------------------|--------------------------------|----------------|----------------|----------|------------|--|
| 5.005 | 207.967 | 1.313 | 4.955 5.124 | 1.963 13.355 | 221.322 | 544,700 | | | |
| 5.005 | 207.982 | 1.313 | 4.955 5.124 | 1.963 | 221.337 | 544,5700 | | н . | |
| 5.005 | 207.859 | 1.313 | 4.955 5.124 | 1.962 13.354 | 221.213 | 544,700 | - | <u>.</u> * | |
| 5.005 | 206.592 | 1.313 | 4.957 5.124 | 1.962 13.357 | 219.948 | 544,700 | | | |
| 5.005 | 207.967 | 1.313 | 4.957 5.124 | 1.963 13.357 | 221.323 | 544,700 | | | |
| 5,005 | 207.981 | 1.313 | 4.957 5.124 | 1.962 | 221.338 | 544,700 | | | |
| ** | ** | | | *** | **** | | | | |
| UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST LABOR COST | DEPRICIATION COST REPAIR COST | OTHER COST FIXED COST TOTAL | ROD COST TOTAL | ROD PRODUCTION | | | |

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(UNIT : US\$/ROD TON)

MANUFACTURING COST SHEET - ROD -

| | 1102 | 1-21 | | | |
|-------------------------------|------------------|---------|---------|---------|--|
| RAM MATERIAL & SUPPLIES | | | | | |
| ROD BILLET UNIT CONSUMPTION | 242.841 1.023 | 1.023 | 1.023 | 1,023 | |
| ROD BILLET COST | 203.014 | 203.011 | 202.922 | 203.014 | |
| | 258.260 | 258.260 | 258,260 | 258.260 | |
| | 000 | 000 | .000 | .000 | |
| P.BILLEI COST | .000 | .000 | .000 | 000 | |
| SUB TOTAL * | 203.014 | 203.011 | 202.922 | 203.014 | |
| MANUFACTURING SUPPLIES COST | 2.379 | 2.379 | 2.379 | 2.379 | |
| RAM MAT & SUPPLIES C TOTAL ** | 205.393 | 205.390 | 205.302 | 205.393 | |
| BY-PRODUCT | | | | | |
| SCRAP PRICE | 118.240 | 118.240 | 118.240 | 118.240 | |
| SCRAP UNIT CONSUMPTION | 120. | 120. | .021 | .021 | |
| SCRAP COST | 2.431 | 2.451 | 2.431 | 2.431 | |
| SCALE ROD UNIT CONSUMPTION | 600. | 600. | 600. | •000 | |
| UTILITIES | | | | | |
| ELECT UNIT PRICE | .023 | .023 | .023 | .023 | |
| ELECT UNIT CONSUMPTION | 106.100 | 106.100 | 106.100 | 106.100 | |
| ELECTRICETY CUSH | 2.455 | 2,455 | 2.433 | 2.433 | |
| N GAS UNIT PRICE | .077 | 220 | .077 | .077 | |
| N GAS UNIT CONSUMPTION | 29.400 | 29.400 | 29.400 | 29.400 | |
| NATURAL GAS COST | 2,257 | 2.257 | 2.257 | 2,257 | |
| O2N2 UNIT PRICE | .127 | .127 | .127 | .127 | |
| O2N2 UNIT CONSUMPTION | 000 | 000 | 000. | 000 | |
| 02N2 COST | .000 | 000' | 000' | 000. | |
| COMP AIR UNIT PRICE | 500 | .003 | .003 | 200. | |
| COMP AIR UNIT CONSUMPTION | 16.800 | 16.800 | 16.800 | 16.800 | |
| COMPRESSED AIR COST | .046 | .046 | .046 | .046 | |
| UNIT | 488 | 488 | 483 | ,488 | |
| | 550 | .550 | .550 | .550 | |
| WATER CUSI | . 268 | ,268 | .268 | .268 | |

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| 5.005 | 206.593 | | 1.313 | 4.955 | 5.124 | 1.963 | 13.355 | 219.948 | 544,700 | |
|----------------------|---------------------|------------|------------|-------------------|-------------|------------|------------------|----------------|----------------|---|
| 5.005 | 207.967 | | 1.313 | 4.955 | 5.124 | 1,963 | 13.355 | 221,322 | 544,700 | |
| 5.005 | 207.875 | | 1.313 | 4.955 | 5.124 | 1.962 | 13.354 | 221.230 | 544,700 | |
| 5.005 | 207.963 | | 1.313 | 4.955 | 5.124 | 1.962 | 13.355 | 221.318 | 544,700 | |
| 5.005 | 207.967 | | 1.313 | 4.955 | 5.124 | 1.963 | 13.355 | 221.322 | 544,700 | |
| ** | *** | | | | | | *** | **** | | |
| UTILITIES COST TOTAL | VARIABLE COST TOTAL | FIXED COST | LABOR COST | DEPRICIATION COST | REPAIR COST | OTHER COST | FIXED COST TOTAL | ROD COST TOTAL | ROD PRODUCTION | - |
| | | | | | | | | | | |

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