27/5-17-75

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DACRIN - A COMPUTER PROGRAM
FOR CALCULATING ORGAN DOSE
FROM ACUTE OR CHRONIC RADIONUCLIDE
INHALATION:
MODIFICATION FOR GASTROINTESTINAL
TRACT DOSE

MASTER

Battelle

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Richland, Washington 99352

FEBRUARY 1975

Prepared for the U.S. Atomic Energy
Commission under Contract AT(45-1):1830

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PACIFIC NORTHWEST LABORATORY
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BATTELLE
for the
U.S. ATOMIC ENERGY COMMISSION
Under Contract AT(45-1)-1830

Printed in the United States of America
Available from
National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, Virginia 22151
Price: Printed Copy \$5.45; Microfische \$2.25

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MODIFICATION FOR GASTROINTESTINAL TRACT DOSE

by

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February 1974

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MODIFICATION FOR GASTROINTESTINAL TRACT DOSE

D. L. Streng

INTRODUCTION

The computer program DACRIN⁽¹⁾ uses the lung model proposed by the ICRP Task Group on Lung Dynamics^(2,3) to calculate the effective dose to the respiratory tract and other organs following either acute or chronic inhalation of radionuclides. The computer program has been expanded to calculate doses to the G.I. tract compartments using the lung model as the input mechanism. The mathematical models used in the G.I. tract dose calculation are described in Appendix A. The other appendices in this supplemental report cover additions to the DACRIN report (BNWL-B-389, Reference 1) and describe the G.I. dose calculation modifications.

MATHEMATICAL MODELS AND METHODS

The model of the respiratory tract adopted by the Task Group on Lung Dynamics^(2,3) is the basis for the mathematical models used in DACRIN. A schematic diagram of the respiratory system with translocation pathways is presented in Figure 1. The original version of DACRIN calculated the pulmonary dose and the dose to other organs of interest. The program has now been extended to calculate the dose to the four gastrointestinal tract compartments; stomach (S), small intestine (SI), upper large intestine (ULI) and lower large intestine (LLI).

FIGURE 1. Schematic Diagram of DACRIN Metabolic Model

The ICRP G.I. tract model⁽⁴⁾ is used to describe movement of material within the G.I. tract compartments with input to the G.I. model described by the lung model of DACRIN. A diagram of the G.I. tract model is given in Figure 2. Material from the respiratory tract enters the G.I. tract through the stomach. The stomach is assumed to be uniformly irradiated for a mean residence time of 1 hour. Absorption into the blood is assumed to occur from the small intestine only. An exponential absorption model is used with the rate constant defined so that a fraction f_1 is absorbed in passing through the SI. Values of f_1 are those recommended by the ICRP.⁽⁴⁾

FIGURE 2. Schematic Diagram of G.I. System Model

The details of the additions made to DACRIN mathematical models, data libraries and input preparation are given in Appendices A through F. Sample problem input and output is contained in Appendix G.

REFERENCES

1. J. R. Houston, D. L. Streng, E. C. Watson, DACRIN - A Computer Program for Calculating Organ Dose from Acute or Chronic Radionuclide Inhalation, BNWL-B-389, Battelle Northwest, Richland, WA, December 1974.
2. "Task Group on Lung Dynamics for Committee II of the International Commission on Radiological Protection," Health Physics 12, 173, 1966.
3. "The Metabolism of Compounds of Plutonium and Other Actinides," ICRP Publication 19, Pergamon Press, Oxford, 1972.
4. The International Commission on Radiological Protection, "Report of Committee II on Permissible Dose for Internal Radiation," ICRP Publication 2, Pergamon Press, Oxford, 1959.

APPENDIX A

DESCRIPTION OF MATHEMATICAL MODELS

APPENDIX A

DESCRIPTION OF MATHEMATICAL MODELS

A graphic representation of the Task Group on Lung Dynamics lung model (TGLM) is illustrated in Figure 1. The computer program DACRIN calculates organ doses for uptake by this model. When the organ of interest is a portion of the G.I. tract, the only pathways to consider are those labeled b, d, f and g in Figure 1 since the others are via the blood system and are assumed not to contribute significantly to the G.I. tract dose. Values for the clearance parameters for the TGLM are given in Table A-1.

TABLE A.1. Values of the Clearance Parameters
for the Task Group Lung Model

Compartment	k(a)	Solubility Class					
		D		W		Y	
		T_k (b)	f_k (c)	T_k	f_k	T_k	f_k
NP	a	0.01	0.5	0.01	0.1	0.01	0.01
	b	0.01	0.5	0.40	0.9	0.4	0.99
TB	c	0.01	0.95	0.01	0.5	0.01	0.01
	d	0.2	0.05	0.2	0.5	0.2	0.99
P	e	0.5	0.8	50	0.15	500	0.05
	f	n.a.	n.a.	1	0.4	1	0.4
	g	n.a.	n.a.	50	0.4	500	0.4
	h	0.5	0.2	50	0.05	500	0.15
L	i	0.5	1	50	1	1000	0.9

(a) Metabolic pathways from lung.

(b) Removal half time in days from compartment via pathway k.

(c) Fraction removed from compartment via pathway k.

n.a. Not Applicable

To determine the amount of a radionuclide reaching the G.I. tract, it is necessary to know the radionuclide concentration in each compartment of the lung (b, d, f and g) as a function of time. For the uptake period this concentration is given by Equation 5 of BNWL-B-389, Appendix A which is:

$$Q_{lj}(t) = f_j D_i P_o \frac{1 - e^{-\lambda_j t}}{\lambda_j}$$

where $Q_{lj}(t)$ • radionuclide concentration in lung compartment j, μCi

f_j • fraction of uptake D_i which goes to lung compartment j

D_i • fraction of uptake, P_o , which goes to major lung compartment

P_o • uptake rate, $\frac{\mu\text{Ci}}{\text{sec}}$

λ_j • effective removal rate constant for compartment j, sec^{-1}

$\lambda_j = \lambda_j^b + \lambda_r$

λ_j^b • biological removal rate constant for pathway j, sec^{-1}

λ_r • physical decay constant for the given radionuclide, sec^{-1}

The rate of material entering the G.I. tract from the respiratory system is calculated from Equation 1 as

$$q_{IG}(t) = \sum_{j = b, d, f, g} \lambda_j^b Q_{lj}(t), \frac{\mu\text{Ci}}{\text{sec}} \quad (1)$$

The total amount entering the G.I. tract during the uptake period is:

$$Q_{1G} = \int_0^{T_1} q_{1G}(t) dt = P_0 \sum_{j=b,d,f,g} \frac{\lambda_j^b f_j D_i}{\lambda_j} \left[T_1 - \frac{1 - e^{-\lambda_j T_1}}{\lambda_j} \right] \quad (2)$$

Where T_1 • uptake period, sec.

Equation 2 can be reduced to:

$$Q_{1G} = P_0 \sum_{j=b,d,f,g} C_j \left[T_1 - \frac{1 - e^{-\lambda_j T_1}}{\lambda_j} \right]$$

$$\text{where } C_b = \frac{\lambda_b^b f_b D_3}{\lambda_b}$$

$$C_d = \frac{\lambda_d^b f_d D_4}{\lambda_d}$$

$$C_f = \frac{\lambda_f^b f_f D_5}{\lambda_f}$$

$$C_g = \frac{\lambda_g^b f_g D_5}{\lambda_g}$$

The amount of a radionuclide in each lung compartment during the second period (i.e., from the time uptake stops to the dose time) is given by Equation 14 of BNWL-B-389 which is:

$$Q_{2j}(t) = Q_{1j}(T_1) e^{-\lambda_j t} (\mu\text{Ci})$$

The rate at which a nuclide enters the G.I. tract during the second period is then

$$q_{2G}(t) = \sum_{j = b,d,f,g} \lambda_j^b Q_{1j}(T_1) e^{-\lambda_j t} \frac{(\mu Ci)}{\text{sec}}$$

and the total amount (μCi) for the second period is

$$Q_{2G} = \int_0^{T_2} q_{2G}(t) dt = P_0 \sum_{j = b,d,f,g} \frac{C_j}{\lambda_j} \left(1 - e^{-\lambda_j T_1}\right) \left(1 - e^{-\lambda_j T_2}\right) \quad (3)$$

The amount entering the G.I. tract from the start of uptake to the dose time is:

$$Q_G = Q_{1G} + Q_{2G}$$

This amount can give a radiation dose to each of the four G.I. tract compartments; stomach (S), small intestine (SI), upper large intestine (ULI) and lower large intestine (LLI).

This dose to each part of the G.I. tract is a function of residence time and absorption into the blood stream. For the G.I. tract model of the ICRP,⁽⁴⁾ only the small intestine has absorption. Figure 2 is a schematic diagram of the ICRP G.I. tract model. Data for this model is given in Table A.2.

TABLE A.2. G.I. Tract Data

G.I. Tract Compartment	Residence Time, Hours	Time for Material to Reach Compartment, Hours	Mass of Contents, Grams
S	1	--	250
SI	4	1	1100
ULI	8	5	135
LLI	18	13	150

STOMACH DOSE

Material leaving the lung goes first to the stomach. The material is assumed to expose the stomach for a mean time of 1 hour and then go to the small intestine. The dose to the stomach is

$$D_S = 2.96 \times 10^{-4} \frac{E_S Q_G}{m_S} \frac{(1 - e^{-\lambda_r \tau_S})}{\lambda_r} \quad (4)$$

where E_S • effective energy per disintegration for the radionuclide in the stomach, MeV/dis

m_S • mass of the contents of the stomach, grams

τ_S • mean residence time for the stomach, sec

Q_G • total input to G.I. system, μCi .

$$2.96 \times 10^{-4} = (1/2) \times 3.7 \times 10^4 \left(\frac{\text{dis/sec}}{\mu\text{Ci}} \right) 1.6 \times 10^{-6} \left(\frac{\text{ergs}}{\text{MeV}} \right) 10^{-2} \frac{\text{rads}}{\text{erg/g}}$$

The factor of 1/2 is included because the dose to the walls of the G.I. system is about 1/2 the dose to the contents.

SMALL INTESTINE

The factor f_1 is the fraction of material entering the SI that is absorbed into the blood. The amount of material leaving the SI is then $1 - f_1$. If the material is assumed to be absorbed at a constant rate (λ_a), the following expression holds,

$$1 - f_1 = e^{-\lambda_a \tau_{SI}}$$

which can be solved for λ_a .

$$\lambda_a = \frac{1}{\tau_{SI}} \ln \frac{1}{1 - f_1} \quad (5)$$

where λ_a • absorption rate constant for a given element, sec^{-1}

τ_{SI} • residence time in SI, sec.

Equation (5) requires f_1 to be less than 1. For elements where f_1 is given as 1 (ICRP Publication 2) f_1 is set to 0.95. This is consistent with the ICRP assumption that at least 5% of all elements reach the large intestines in calculating the dose to the ULI and LLI.

The dose to the SI is calculated as:

$$D_{SI} = 2.96 \times 10^{-4} \left(\frac{E_{SI}}{m_{SI}} \right) \left(e^{-\lambda_r \tau_S} \right) \left(\frac{1 - e^{-\lambda_{SI} \tau_{SI}}}{\lambda_{SI}} \right) Q_G$$

where $e^{-\lambda_r \tau_S}$ represent decay of Q_G in passing through the stomach

λ_{SI} • effective removal constant for the nuclide in the small intestine, sec^{-1} .

$$\lambda_{SI} = \lambda_a + \lambda_r$$

E_{SI} • effective energy per disintegration for the radionuclide in the SI, MeV/dis.

m_{SI} • mass of the contents of the SI, grams.

UPPER LARGE INTESTINE

The material leaving the SI enters the upper large intestine. The amount of material is Q_G reduced by decay in passing through the S and SI and by absorption in the SI. The material is assumed to flow linearly through the ULI so that the dose is given by

$$D_{ULI} = 2.96 \times 10^{-4} \tau_{ULI} e^{-\lambda_r (\tau_S + \tau_{SI})} \left(\frac{E_{ULI}}{m_{ULI}} \right) Q_G (1 - f_1)$$

where τ_{ULI} • mean residence time in ULI, sec

m_{ULI} • mass of contents of ULI, grams

E_{ULI} • effective energy per disintegration for the radionuclide in the ULI, MeV/dis.

LOWER LARGE INTESTINE

The equation for dose to the LLI is similar to the ULI equation except that decay during passage through the ULI is included.

$$D_{LLI} = 2.96 \times 10^{-4} \tau_{LLI} e^{-\lambda_r(\tau_S + \tau_{SI} + \tau_{ULI})} \left(\frac{E_{LLI}}{m_{LLI}} \right) Q_G (1 - f_1)$$

where τ_{LLI} • mean residence time in LLI, sec

m_{LLI} • mass of contents of LLI, grams

E_{LLI} • effective energy for the radionuclide in the LLI, MeV/dis.

The above equations for ULI and LLI calculate the dose at the entrance to the compartment as recommended by the ICRP.⁽⁴⁾

APPENDIX B

COMPUTER CODE

APPENDIX B

COMPUTER CODE

The models described in Appendix A have been added to DACRIN. The changes to DACRIN are indicated in Figure B-1 in the form of program library update cards for the CDC Cyber 74 Computer.

Three new functions have been added to DACRIN.

GIDOT

Function GIDOT controls calculation of G.I. tract compartment doses over the uptake and dose time periods (referred to as periods T_1 and T_2 in BNWL-B-389). GIDOT uses functions QUINT1 and QUINT2 described below. The use of GIDOT is similar to ORDOT1 and ORDOT2.

QUINT1

Function QUINT1 calculates the time integral of material entering the G.I. system over the uptake period T_1 .

QUINT2

Function QUINT2 calculates the time integral of material entering the G.I. system over the second time period, T_2 .


```

      IF(NUPT.LT.2) GO TO 100
*J MAIN.352
      IF(DIAM.GT.0.) CALL DEF
      PRINT 830, DIAM,D3,D4,D5
*DELETE LIBB.9
      3 FORMAT(' LIBRARY DATA SEQUENCE ERROR',7,'2I3,11,A2,12,8E10.4')
*J LIBB.11
      DO 100 I=1,620
*J LIBB.22
      IF(EOF(28)) 99,105
      105 IF(KE-KFT) 150,110,160
*J LIBB.67
      REWIND 28
      REWIND 29
*J LIBB.68
      99 PRINT 199
      REWIND 28
      REWIND 29
      RETURN
      199 FORMAT('OEND OF FILE READ ON ORGLIB, UNIT 28')
*J UNIT.4
      DIMENSION DTLH(10),DTLN(10),UPTIME(10)
*DELETE ORDOSE.44
      DO 106 I=1,25
*J ORDOSE.46
      IF(I.EQ.19) LGI=LORG
*DELETE ORDOSE.102
      DO 400 MORG=1,25
*J ORDOSE.111
      IF(MORG.NE.19) GO TO 312
      C INITIALIZE DOSE ARRAYS FOR GI TISSUE
      DO 311 I=1,NDT
      DOSE(I,LGI)=0.
      IRLNK(I,LGI)=0
      311 CONTINUE
      GO TO 400
*DELETE ORDOSE.136
      IF(MORG.LE.19) D1=ORDOT1(KRN,MORG)
      IF(MORG.GT.19.AND.MORG.LT.24) D1=GIDOT(KRN,MORG,ISO,1)
*DELETE ORDOSE.138
      IF(MORG.LE.19) D2=ORDOT2(KRN,MORG,ISO)
      IF(MORG.GT.19.AND.MORG.LT.24) D2=GIDOT(KRN,MORG,ISO,2)
*J ORDOSE.154
      IF(KORG(19).EQ.0.OR.MORG.LT.20) GO TO 395
      DOSE(ITM,LGI)=DOSE(ITM,LGI)+DOSE(ITM,LORG)
      SUMDOS(KRKUPT,ITM,LGI)=SUMDOS(KRKUPT,ITM,LGI)+DOSE(ITM,LORG)
*DELETE ORDOSE.224
      DO 900 MORG=1,25
*J ORDOSE.232

```



```

      IF (MORG.NE.19) GO TO 814
C   INITIALIZE DOSE ARRAYS FOR GI TISSUE
      DO 813 I=1,NOT
      DOSE(I,LGI)=0.
      IRLNK(I,LGI)=0
      P13 CONTINUE
      GO TO 900
      R14 CONTINUE
      *DELETE ORDOSE,257
      IF (MORG.LE.19) D1=ORDOT1(KRN,MORG)
      IF (MORG.GT.19.AND.MORG.LT.24) D1=GIDOT(KRN,MORG,IS,1)
      *DELETE ORDOSE,259
      IF (MORG.GT.19.AND.MORG.LT.24) D2=GIDOT(KRN,MORG,IS,2)
      IF (MORG.LE.19) D2=ORDOT2(KRN,MORG,IS)
      *I ORDOSE,275
      IF (KORG(19).EQ.0.OR.MORG.LT.20) GO TO 895
      DOSE(ITM,LGI)=DOSE(ITM,LGI)+DOSE(ITM,LORG)
      SUMDOS(KRKUPT,ITM,LGTT)=SUMDOS(KRKUPT,ITM,LGTT)+DOSE(ITM,LORG)
      *I ORDOT2,42
      *DECK GIDOT
      FUNCTION GIDOT(KRN,MORG,ISO,IT)
      DIMENSION TAU(4)
      *CALL COMN
      *CALL COMO
      DATA TAU/3600.,14400.,28800.,64800./
C
C   QS IS TIME INTEGRAL OF ACTIVITY REACHING GI SYSTEM
C
C   IT = 1 FOR PERIOD 1
C   IT = 2 FOR PERIOD 2
C
      QS=0.
      IF (IT.EQ.1) QS=QUINT1(DUM)/F1(ISO)
      IF (IT.EQ.2) QS=QUINT2(DUM)
      IGO=MORG-19
      IF (IGO.GT.4) GO TO 10
      FF=2.96E-4*ENG(KRN,NSOL)/OMASS(MORG)
      FONE=F1(ISO)
      IF (FONE.GT..95) FONE=.95
C   TRANSFER TO GI COMPARTMENT DESIRED
      GO TO (1,2,3,4),IGO
C   STOMACH
      1 ARG=LAMBDA(ISO)*TAU(1)
      OM=1.-EXP(-ARG)
      IF (ARG.GT.1000.) OM=1.
      IF (ARG.LT..0001) OM=ARG
      FACT=FF*OM/LAMBDA(ISO)
      GO TO 5
C   SMALL INTESTINE

```

```

2- ALE= ALOG(1./(1.-FONE)) /TAU(2)
ARG=(ALE+LAMBDA(ISO))*TAU(2)
FACT=EF*EXP(-LAMBDA(ISO)*TAU(1))*(1.-EXP(-ARG))/(ALE+LAMBDA(ISO))
GO TO 5
C UPPER LARGE INTESTINE
3 FACT=EF*EXP(-LAMBDA(ISO)*(TAU(2)+TAU(1)))*(1.-FONE)*TAU(3)
GO TO 5
C LOWER LARGE INTESTINE
4 FACT=EF*EXP(-LAMBDA(ISO)*(TAU(1)+TAU(2)+TAU(3)))*(1.-FONE)*TAU(4)
5 GI DOSE=QS*FACT
RETURN
10 PRINT 20, MORG
20 FORMAT('1MORG TOO LARGE FOR GI DOSE, = '110)
STOP
END
*DECK QUINT1
FUNCTION QUINT1(DUM)
*CALL COMO
QUINT1=0.
IF (T1.LE.1.) RETURN
QQ=0.
DO 1 I=2,6,2
1 QQ=QQ+C(I)*(T1-OMEJ1(I)/ALL(I))
QQ=QQ+C(7)*(T1-OMEJ1(7)/ALL(7))
QUINT1=QQ
RETURN
END
*DECK QUINT2
FUNCTION QUINT2(DUM)
*CALL COMO
QUINT2=0.
IF (T2.LE.1.) RETURN
QQ=0.
DO 1 I=2,6,2
1 QQ=QQ+ALB(I)*VOLUT1(I)*OMEJ2(I)/ALL(I)
QQ=QQ+ALB(7)*VOLUT1(7)*OMEJ2(7)/ALL(7)
QUINT2=QQ
RETURN
END

```

APPENDIX C

CODE FLOW DIAGRAM

APPENDIX C

CODE FLOW DIAGRAM

Changes to the DACRIN flow diagram are indicated here. The only figures to be corrected are C.1 and C.9 which are shown below with corrections.

FIGURE C.1. Code Flow Diagram

FIGURE C.9. Code Flow Diagram

APPENDIX D

DATA LIBRARIES

APPENDIX D

DATA LIBRARIES

Two data libraries are used by the code.

1. Isotope Data Library
2. Organ Data Library

The structure of the libraries is given in BNWL-B-389, Appendix D. The isotope data library has been expanded to include a few more radionuclides. The organ data library has been expanded to include G.I. tract data for most nuclides. A listing of the current data libraries follows.

450 RIBD LIBRARY UP-DATED THRU 7/21/70

72301,938E-001,600E-051,200E-040,	0,	0,	.12	1,235	ZN 2	001
72315,875E-010,	0,	0,	.43	2,869	GA 2	002
7232 0,	0,	1,			GE 2	003
73301,390E-039,800E-050,			2,25		ZN 2	004
73312,000E-012,000E-06			.42	.409	GA 2	005
7332 0,	0,	14,			GE 2	006
74315,555E-033,500E-040,			1.01	3,149	GA 2	007
7432 0,	0,	.5	.4		GE 2	008
75311,389E-034,000E-04			1.43	.58	GA 2	009
75325,671E-044,000E-04				.139	GE*1	010
75325,694E-02			.42	.038	GE 2	011
7533 0,	0,	4.5			AS 2	012
76313,704E-04 .001			2.74	1,	GA 2	013
7632 .001		.2	.55		GE 2	014
76331,104E-000,	0,		1.09	0.404	AS 2	015
7634 0,	0,	85,	.259		SE 2	016
77328,829E-045,400E-030,			0.640	.77 0.098	GE*1	017
77324,708E-013,700E-030,			.64	1.134	GE 2	018
77331,625E-000,	0,		.22	0.022	AS 2	019
77342,083E-04				.16	SE*1	020
7734 0,	0,	42,			SE 2	021
78326,111E-021,800E-020,			.32	0.300	GE 2	022
78336,319E-032,000E-030,			1.47	0.888	AS 2	023
7834 0,	0,	.41	.878		SE 2	024
79336,250E-034,000E-020,			1,	.90	AS 2	025
79342,708E-030,	0,			0.096	SE*1	026
79342,555E-070,	0,		.04		SE 2	027
79350,	0,	1,080E-010,25 0,			BR 2	028
80331,736E-04 .08			2.73	.5	AS 2	029
8034 0,	0,	.61	.131		SE 2	030
80351,875E-010,	0,			0.085	BR*1	031
80351,250E-020,	0,		.72	.116	BR 2	032
8036 0,	0,	15,			KR 2	033
81333,819E-041,250E-010,			1.66		AS 2	034
81343,958E-028,400E-030,				0.103	SE*1	035
81341,250E-020,	0,		.53		SE 2	036
8135 0,	0,	3,			BR 2	037
81367,665E+070,	0,				KR 2	038
8234 3,800E-050,		5,400E-020,9250,			GE 2	039
82351,471E-00			.14	2,648	BR 2	040
8236 0,	0,	45,	.067		KR 2	041
83347,986E-043,000E-011,200E-01			1,0001,55	0.200	SE*1	042
83341,736E-021,800E-018,600E-02			.69	1,000	SE 2	043
83351,000E-010,	8,400E-020,	0,	1,000,34	0.010	BR 2	044
83367,750E-020,	0,	0,	0,	0.041	KR*1	045
8336 0,	0,	180,			KR 2	046
84342,083E-034,100E-023,000E-02			.49		SE 2	047
84354,167E-031,900E-021,000E-02			1,	.71 3,396	BR*1	048
84352,222E-029,200E-014,300E-01			1.23	1,863	BR 2	049
8436 0,	0,	.14	.714		KR 2	050
85334,977E-065,500E-011,260E-01			1.28	5.0	AS 2	051
85344,514E-045,500E-011,260E-01			2.24		SE 2	052
85352,083E-034,000E-011,600E-01			1,	1.04	BR 2	053
85361,833E-010,	0,		0.810,29	.179	KR*1	054
85363,927E-030,	1,270E-0115,		.25	0.004	KR 2	055
8537 0,	0,	1,000E-000,1			BR 2	056
86341,852E-041,010E-003,800E-01			1.76		SE 2	057
86356,250E-041,010E-003,800E-01			3.23	.9	BR 2	058
8636		.06			KR 2	059

86376,944E-040,	0,		0,56	RB*1	060
86371,870E 012,800E-052,300E-05			,66 0,097	RB 2	061
8638	0,	0,		SR 2	062
87341,852E-042,700E 009,200E-01		,8 1,	3,73	SE 2	063
87356,366E-040,	0,		1,87 3,780	BR 2	064
87365,278E-020,	0,	600,	1,34 1,089	KR 2	065
8737	0,	0,		RB 2	066
87381,167E-010,	0,		0,388	SR*1	067
8738	0,	0,		SR 2	068
88351,852E-042,900E 001,100E 00		17,	3,22 ,035	BR 2	069
88361,167E-018,000E-013,200E-01			,38 1,922	KR 2	070
88371,250E-020,	0,	1,	1,99 ,748	RB 2	071
8838	0,	0,	,005	SR 2	072
89355,208E-052,000E-017,000E-02			3, ,075	BR 2	073
89362,222E-034,400E 001,640E 00			1,39 2,265	KR 2	074
89371,042E-022,000E-010,			,60 2,455	RB 2	075
89385,06 E 010,	0,	,4	,0002,58 ,0002	SR 2	076
89391,852E-04			,915	Y* 1	077
8939	0,	0,		Y 2	078
90351,852E-052,600E 009,800E-01		1,301 ,00080,	3, ,075	BR 2	079
90363,819E-042,600E 009,800E-01			1,37 2,23	KR 2	080
90372,014E-037,000E-012,900E-01			2,05 4,15	RB 2	081
90381,051E 040,	0,	1,	,20	SR 2	082
90391,333E-01			,68	Y* 1	083
90392,675E-000,	0,		,94 ,0003	Y 2	084
9040	0,	0,		ZR 2	085
91361,157E-043,700E 001,260E 00			,5 1,56 2,	KR 2	086
91379,722E-032,000E-017,000E-02			1, 1,27 2,8	RB*1	087
91378,338E-042,000E 001,100E 00			2,04 0,4	RB 2	088
91384,042E-010,	0,		,590 ,63 0,742	SR 2	089
91393,472E-020,	0,		,0,55	Y 2	090
91395,900E 010,	0,	1,4	,61 0,004	Y 2	091
9140	0,	0,	1,58	ZR 2	092
92363,472E-052,700E 001,530E 00			2,73	KR 2	093
92375,787E-052,800E 001,540E 00			2,97	RB 2	094
92381,125E-016,000E-017,000E-02			2,26 1,274	SR 2	095
92391,471E-010,	0,		1,44 0,266	Y 2	096
9240	0,	0,		ZR 2	097
93362,315E-051,300E 007,700E-01		,25	3,82	KR 2	098
93376,944E-053,100E 001,820E 00			2,83	RB 2	099
93385,764E-032,000E 001,320E 00			1,40 1,0	SR 2	100
93394,208E-011,000E-016,000E-02			1,18 0,102	Y 2	101
93403,468E 080,	0,	4,	,25 ,015	ZR 2	102
93411,351E 030,	0,		0,029	NB*1	103
9341	0,	0,		NB 2	104
94361,157E-056,000E-016,000E-01		1,1 ,909	2,70	KR 2	105
94373,472E-052,300E 001,500E 00			4,57	RB 2	106
94388,333E-042,900E 001,640E 00			1,46	SR 2	107
94391,389E-027,000E-017,400E-01			2,23 1,	Y 2	108
9440	0,	0,		ZR 2	109
94414,375E-030,	0,		,001 ,00050,042	NB*1	110
94417,300E 060,	0,	15,	,16 1,570	NB 2	111
9442	0,	0,		MO 2	112
95361,157E-053,200E 002,900E 00			4,57	KR 2	113
95372,314E-053,200E 002,900E 00			3,58	RB 2	114
95385,556E-04			2,72	SR 2	115
95397,639E-03			2,09	Y 2	116
95406,500E 010,	0,		,02 ,12 0,728	ZR 2	117
95413,750E 000,	0,		0,235	NB*1	118
95413,500E 010,	0,	7,	,043 0,760	NB 2	119

9542	0.	0.	14.5				MO 2	120
96391,597E-033,200E 002,585E 00				1.55	1.7		Y 2	121
9640	3,200E 002,585E 00,053						ZR 2	122
96419,583E-015,700E-043,600E-03				.22	2.456		NB 2	123
9642	0.	0.	1.				MO 2	124
97361,157E-052,400E 002,210E 00				4.20			KR 2	125
97372,315E-052,400E 002,210E 00				4.39			RB 2	126
97383,472E-05				3.57			SR 2	127
97396,944E-05				2.31			Y 2	128
97407,083E-011,400E 001,230E 00				.9	.70	0.221	ZR 2	129
97416,944E-040,	0.					0.75	NB*1	130
97415,000E-020,	0.			.47	.673		NB 2	131
9742	0.	0.	2.				MO 2	132
98406,944E-04	.2	1,000E-01		1.99			ZR 2	133
98411,806E-02	3.	2.845E 00		1.26	1.2		NB*1	134
98413,576E-02	.064	1,000E-01		1.	1.31	2.	NB 2	135
9842	2,516	2,845E 00,15					MO 2	136
99401,852E-053,050E 003,050E 00				1.55			ZR 2	137
99411,736E-033,050E 003,050E 00				1.36	.26		NB 2	138
99422,792E 00				.92	.41	0.124	MO 2	139
99432,500E-010,	0.					.1423	TC*1	140
99437,665E 070,	0.	22.		.084			TC 2	141
9944	0.	0.	10.6				RU 2	142
100412,083E-036,300E 007,100E 00				3.39	1.05		NB 2	143
10042	0.	0.	.2				MO 2	144
100431,968E-040,	0.			1.44	.114		TC 2	145
10044	0.	0.	10.4				RU 2	146
101416,944E-042,500E 002,950E 00				1.03			NB 2	147
101421,014E-022,500E 002,950E 00				.42	1.649		MO 2	148
101439,722E-030,	0.			.47	0.362		TC 2	149
10144	0.	0.	3.1				RU 2	150
102427,639E-034,200E 005,990E 00				.44	1.3		MO 2	151
102435,787E-050,	0.			1.79			TC 2	152
10244	0.	0.	1.44				RU 2	153
103435,787E-041,550E 002,835E 00				1.03			TC 2	154
103444,000E+011,450E 002,835E 00				.995	.063	0.488	RU 2	155
103453,958E-020,	0.					0.040	RH*1	156
10345	0.	0.	150.	.073			RH 2	157
104421,111E+031,800E 005,930E 00				1.08	1.		MO 2	158
104431,250E-020,	0.			.98	3.1		TC 2	159
10444	0.	0.	.7				RU 2	160
104453,056E-030,	0.	800.		.0013	.0002	.131	RH*1	161
104454,861E-040,	0.	40.		.98	0.013		RH 2	162
10446	0.	0.					PD 2	163
105424,630E-046,000E-012,600E 00				2.54			MO 2	164
105435,556E-033,000E-011,300E 00				2.09			TC 2	165
105441,846E-010,	0.	.2		.2690	.42	.7680	RU 2	166
105453,472E-040,	0.					0.129	RH*1	167
105451,500E 000,	0.	2,100E+04,714	0.	.17	0.032		RH 2	168
10546	0.	0.					PD 2	169
106443,650E 023,800E-014,570E 00,15				.01			RU 2	170
106459,167E-02				1.	.35	2.627	RH*1	171
106453,472E-040,	0.			1.40	.222		RH 2	172
10646	0.	0.	.29				PD 2	173
107433,356E-041,600E-013,600E 00				2.71			TC 2	174
107442,917E-034,000E-020,				1.67	.144		RU 2	175
107451,507E-020,	0.			.42	0.328		PH 2	176
107462,555E 090,	0.			.014			PD 2	177
10747	0.	0.	35.	0.			AG 2	178
108443,125E-038,000E-022,100E 00				.54	0.059		RU 2	179

108451,968E=040,	0,			1,74	0,553	RH 2	180
10846	0,	0,	12,26	,021		PD 2	181
108473,650E 040,	0,			,9	1,605	AG*1	182
108471,667E=030,	0,				,62	AG 2	183
10848	0,	0,	10,		,017	CD 2	184
109453,472E=042,800E=021,400E 00				1,	1,16	RH 2	185
109463,333E=030,	0,				0,18	PD*1	186
109465,625E=010,	0,			1,	,36	PD 2	187
109474,630E=040,	0,				0,088	AG*1	188
10947	0,	0,	91,	,038		AG 2	189
11046	2,000E=020,		,237	,156		PD 2	190
110472,600E 020,	0,		80,	0,98	,069	AG*1	191
110472,778E=040,	0,				1,17	AG 2	192
11048	2,000E=070,		3,1	,0323		CD 2	193
111462,292E=011,000E=031,000E=02				0,32	,048	PD*1	194
111461,528E=021,800E=022,200E=01				1,	,85	PD 2	195
111478,565E=04					,065	AG*1	196
111477,500E 00					,36	AG 2	197
111483,403E=020,	0,				0,397	CD*1	198
11148	0,	0,				CD 2	199
112468,750E=011,100E=021,200E=01					,08	PD 2	200
112471,333E=010,	0,				1,44	AG 2	201
11248	0,	0,	,26	,115		CD 2	202
113461,042E=031,100E=021,000E=02				1,	1,40	PD 2	203
113478,333E=040,	0,			,1	,08	AG*1	204
113472,208E=010,	0,				,79	AG 2	205
113485,110E 030,	0,			0,999	,18	CD*1	206
11348	0,	0,	2,000E 04		,0003	CD 2	207
11349			10,5	,714		IN 2	208
114461,667E=031,000E=021,000E=02					,52	PD 2	209
114475,787E=050,	0,				2,02	AG 2	210
11448	0,	0,	1,24	0,1130,		CD 2	211
114495,000E 01					,192	IN*1	212
114498,333E=04					,779	IN 2	213
115465,208E=04 ,01	,0038			,28	1,91	PD 2	214
115472,315E=04				1,	1,49	AG*1	215
115471,458E=02 ,0005	3,000E=04			,09	1,21	AG 2	216
115484,300E 010,	0,			1,	,61	CD*1	217
115482,300E 000,	0,			1,	,32	CD 2	218
115491,833E=010,	0,			,055	,015	IN*1	219
11549	0,	0,	207,	,78	,15	IN 2	220
11550	0,	0,				SN 2	221
116463,472E=041,000E=020,					,93	PD 2	222
116471,736E=030,	0,				2,21	AG 2	223
11648	0,		1,4	1,0		CD 2	224
116493,750E=020,	0,			1,	,29	IN*1	225
116491,620E=040,	0,				1,39	IN 2	226
11650	3,000E=030,	,0006	1,			SN 2	227
117477,639E=041,100E=021,100E=02				,5	1,63	AG 2	228
117481,333E=010,	0,			1,	,35	CD*1	229
117481,042E=010,	0,			1,	,70	CD 2	230
117497,917E=020,	0,			0,8	,52	IN*1	231
117493,125E=020,	0,				,24	IN 2	232
117501,400E 010,	0,				,73	SN*1	233
11750	0,	0,			0,32	SN 2	234
118483,472E=021,000E=021,000E=03					,27	CD 2	235
118495,903E=050,	0,				1,85	IN 2	236
11850	0,	0,	,01	1,		SN 2	237
119481,875E=03 ,01	4,000E=03			,99	1,56	CD*1	238
119486,597E=03				1,	1,44	CD 2	239

119491,250E-02				.96	1.04	0.066	IN*1	240
119491,389E-03				.1	.61	.84	IN 2	241
119502,500E+02						.089	SN*1	242
11950	0.	0.					SN 2	243
120495,093E-040,500E-020,500E-03					.88	3.2	IN 2	244
12050	0,500E-020,500E-03,141		.007				SN 2	245
121482,431E-032,500E-042,500E-03					1.73	0.85	CO 2	246
121492,153E-032,500E-042,500E-03				1.	1.58		IN*1	247
121493,472E-04,0005,0053					1.20	.94	IN 2	248
121509,125E+030,500E-030,500E-02				1.	.15	.01	SN*1	249
121501,112E 001,400E-023,000E-02					.11		SN 2	250
12151	0,	0,	6.06	.01			SB 2	251
122498,681E-050,650E-020,500E-03					2.68	2.14	IN 2	252
12250	0,650E-020,500E-03,201		.005				SN 2	253
122512,847E-030,	0,					0.136	SB*1	254
122512,800E-000,	0,				.58	.405	SB 2	255
12252	0,	0,	3,	.333			TE 2	256
123491,157E-040,600E-030,500E-03					1.39	1.1	IN 2	257
123502,778E-021,400E-020,				1,	.46	0.160	SN*1	258
123501,290E+020,600E-030,500E-03					.52	0.022	SN 2	259
12351	0,	0,	3,345	.0135			SB 2	260
123521,170E+02						.248	TE*1	261
12352	0,	0,	400,				TE 2	262
12450	2,000E-020,		.144	.972			SN 2	263
124511,458E-020,	0,			.982	.97	0.427	SB*1	264
124516,020E+010,	0,	2000,			.38	1.899	SB 2	265
12452	0,	0,	7,	.714			TE 2	266
125506,736E+031,100E-021,000E+03				1,	.79	0.361	SN*1	267
125509,620E 001,200E-027,100E-02					.92	0.094	SN 2	268
125519,855E 020,	0,	20,		.135	.096	.415	SB 2	269
125525,800E-010,	0,					0.145	TE*1	270
12552	0,	0,	1.5				TE 2	271
126503,650E+071,000E-012,000E-01				1,	.12	.09	SN 2	272
126511,319E-020,	0,			.01	.00780	.117	SB*1	273
126511,250E 010,	0,				.74	1.780	SB 2	274
12652	0,	0,	1,	.1			TE 2	275
127508,750E-022,400E-013,900E-01					1.34	1.	SN 2	276
127513,900E-001,000E-021,000E-02				.2	.38	0.505	SB 2	277
127521,050E 020,	0,			.015	.00410	.088	TE*1	278
127523,875E-010,	0,				.23	0.004	TE 2	279
12753	0,	0,	6.2				I 2	280
128504,306E-023,700E-014,000E-01				.03	3.85	3.27	SN 2	281
128514,000E-015,000E-020,				1,	.35	3.6	SB*1	282
128516,944E-038,000E-021,000E-01					1.20	1.7	SB 2	283
12852	0,	0,	.157	.108			TE 2	284
128531,736E-023,000E-052,000E-04					.77	0.093	I 2	285
12854	0,	0,	5,				XE 2	286
129511,875E-011,000E 001,000E 00				.36	.542	.916	SB 2	287
129523,400E 010,	0,					0.106	TE*1	288
129524,653E-020,	0,				.45	.238	TE 2	289
129535,840E 090,	0,	28,			.050	.040	I 2	290
12954	0,	0,	25,				XE 2	291
130501,806E-032,000E 002,000E 00					4.23		SN 2	292
130512,708E-020,	0,				1.72	1.0	SB 2	293
13052	0,	0,	.24	.167			TE 2	294
130535,208E-01,0005,0052,18,					.27	2.123	I 2	295
13054	0,	0,	5,				XE 2	296
131511,722E-022,700E 003,100E 00				.15	1.33		SB 2	297
131521,200E 004,000E-021,300E-01				.783	.16	1.468	TE*1	298
131521,806E-021,600E-015,400E-01					.74	0.376	TE 2	299

131538,050E 00,2	0,	.7	.007	.18	0,399	I 2	300
131541,200E 010,	1,000E-02				0,164	XE+1	301
13154	0,	85,				XE 2	302
132511,458E-033,400E 005,100E 00				2,68		SB 2	303
132523,250E 001,000E 00,18				.055	0,280	TE 2	304
132539,583E-020,	0,			.49	2,249	I 2	305
13254		.272	.081			XE 2	306
133512,847E-033,800E 003,000E 00			.72	1,72		SB 2	307
133523,472E-021,100E 001,000E 00			.87	.49	1,613	TE+1	308
133521,389E-031,100E 001,000E 00				.97	0,6	TE 2	309
133538,750E-015,000E-012,000E-01			.02	.46	.53	I 2	310
133542,300E 000,	0,				0,233	XE+1	311
133545,270E 000,	1,700E-00190,			.10	.082	XE 2	312
13355	0,	30,6	.085			CS 2	313
134511,736E-053,000E 003,500E 00				3,45	0,200	SB 2	314
134522,917E-023,700E 004,000E 00				.52	.1	TE 2	315
134533,681E-029,000E-010,				.78	2,5	I 2	316
13454	0,	.228	.123			XE 2	317
134551,208E-010,	0,		.01	.00170	1,153	CS+1	318
134557,665E 020,	0,	136,		.16	1,588	CS 2	319
13456		2,0	.079			BA 2	320
135512,199E-05 4,3	1,1			3,16		SB 2	321
135523,356E-04				2,68		TE 2	322
135532,792E-01 1,9	5,700E 00		.27	.32	1,642	I 2	323
135541,111E-020,	0,				0,530	XE+1	324
135543,833E-013,000E-01,47	2,700E+06			.31	0,261	XE 2	325
135557,300E+080,	8,7			.055		CS 2	326
135561,208E 000,	0,				0,268	BA+1	327
13556	0,	5,8				BA 2	328
136539,606E-043,100E 002,100E 00				1,66	3,237	I 2	329
13654	3,36	4,520E 00,281				XE 2	330
136551,300E 016,800E-031,100E-01				.11	2,466	CS 2	331
13656	0,	.4	.030			BA 2	332
137532,778E-044,900E 005,100E 00				2,19	.71	I 2	333
137542,917E-031,300E 001,530E 00				1,48	1,	XE 2	334
137551,095E+040,	0,	.11	.92	.20		CS 2	335
137561,806E-030,	0,				0,662	BA+1	336
13756	0,	5,1				BA 2	337
138537,292E-053,400E 003,700E 00				3,10	1,5	I 2	338
138541,181E-022,100E 002,210E 00				.96	0,420	XE 2	339
138552,236E-023,000E-014,000E-01				1,10	2,153	CS 2	340
13856	0,	.4				BA 2	341
139532,315E-051,800E 001,700E 00				2,40		I 2	342
139544,745E-042,900E 002,800E 00				2,00	.4	XE 2	343
139556,597E-031,200E 001,230E 00				1,74	0,232	CS 2	344
139565,764E-021,000E-011,400E-014,				.91	.053	BA 2	345
13957	0,	8,9				LA 2	346
140541,852E-043,700E 003,300E 00				1,09		XE 2	347
140557,639E-042,300E 002,100E 00				2,66	.59	CS 2	348
140561,280E 013,000E-010,	12,			.30	.222	BA 2	349
140571,675E 000,	2,000E-01			.48	2,468	LA 2	350
14058	0,	.6				CE 2	351
141542,315E-051,800E 001,100E 00				2,36		XE 2	352
141552,778E-042,900E 003,700E 00				1,72		CS 2	353
141561,250E-021,200E 009,000E-01				1,14	.46	BA 2	354
141571,625E-011,000E-010,				.96	.0272	LA 2	355
141583,250E 010,	0,	30,		.15	0,101	CE 2	356
14159	0,	12,				PR 2	357
142541,736E-053,500E-013,100E-01				1,70		XE 2	358
142552,662E-053,050E 002,870E 00				2,98		CS 2	359

142567,639E-032,200E 001,830E 00	.78	.112	BA 2	360
142575,633E-023,000E-010,	1.42	1.164	LA 2	361
14258 0, 0, .95			CE 2	362
142598,000E-010, 0, 20,	.83	.063	PR 2	363
14260 0, 0, 17,			ND 2	364
143541,157E-053,100E 002,650E 00	2.91		XE 2	365
143552,315E-053,100E 002,650E 00	2.32		CS 2	366
143561,389E-04	1.47		BA 2	367
143579,722E-03	1.33	1.	LA 2	368
143581,375E 000, 0, 6,	.37	.377	CE 2	369
143591,370E 010, 0, 89,	.32		PR 2	370
14360 0, 0, 330,			ND 2	371
144541,157E-052,900E 001,600E 00	2.19		XE 2	372
144552,315E-052,900E 001,600E 00	3.50		CS 2	373
144563,472E-05	1.00		BA 2	374
144574,630E-05	2.23		LA 2	375
144582,850E 023,000E-015,900E-011,	.080	0.030	CE 2	376
144591,201E-020, 1,400E-01	1.22	.031	PR 2	377
14460 0, 0, 5,			ND 2	378
145582,083E-034,200E 003,130E 00	.77		CE 2	379
145592,458E-010, 0,	.68	.056	PR 2	380
14560 0, 0, 52,			ND 2	381
146589,722E-033,200E 002,600E 00	.22	0.320	CE 2	382
146591,667E-021,000E-010,	1.27	1.107	PR 2	383
14660 0, 0, 2,			ND 2	384
147587,639E-040,650E 000,550E 00	1.55		CE 2	385
147598,333E-030,650E 000,550E 00	1.12	1.	PR 2	386
147601,110E+011,300E 001,100E 00	.23	0.196	ND 2	387
147619,490E 020, 0, 230, .478	.059		PM 2	388
14762 0, 0, 90,			SM 2	389
148584,661E-041,710E-001,730E-00	.95		CE 2	390
148591,389E-030, 0,	2.17	0.300	PR 2	391
148614,100E 010, 0, 3,000E+04	.41	1.227	PM 1	393
14860 0, 0, 4,			ND 2	392
148615,400E 000, 0, 2000, 1,	.39	1.343	PM 2	394
14862 0, 0,			SM 2	395
149607,208E-021,300E 001,320E 00	.55	.5	ND 2	396
149612,208E 000, 0,	.36	.055	PM 2	397
14962 0, 0, 4,100E 04			SM 2	398
15060 7,400E-011,010E 001,5			ND 2	399
15062 0, 0, 102,			SM 2	400
151608,333E-034,800E-018,000E-01	.63	0.717	ND 2	401
151611,167E 002,000E-020,	.38	.715	PM 2	402
151623,285E 040, 0, 1,500E 04	.019	.0004	SM 2	403
15163 0, 0, 8,800E 03,353			EU 2	404
152614,167E-031,500E-013,100E-01	.86	2.8	PM 2	405
15262 1,500E-013,100E-01210,			SM 2	406
152633,875E-010, 0,	.60	.238	EU 1	407
152634,526E 030, 0, 5000,	.19	1.209	EU 2	408
15264 0, 0, 125,			GD 2	409
153613,819E-03 .075 .185	.62	.3	PM 2	410
153621,958E 00 .075 .185	.22	.108	SM 2	411
15363 0, 0, 320,			EU 2	412
154611,736E-03 .045 .145	1.		PM 2	413
15462 .045 .145 5,			SM 2	414
154635,840E 030, 0, 1400,	.20	1.351	EU 2	415
15464 0, 0, 100,			GD 2	416
155621,528E-023,100E-022,300E-01	.60	0.115	SM 2	417
155636,570E 020, 0, 1,300E 04	.046	0.072	EU 2	418
15564 0, 0, 6,100E 04			GD 2	419

156623,917E-011,300E-021,100E-01	.30	SM 2	420
156631,520E 010, 0,	.70 1,2	EU 2	421
15664 0, 0,	11,5	GD 2	422
157636,333E-017,400E-037,400E-02	.42 0,525	EU 2	423
15764 0, 0,	2,540E 05	GD 2	424
158633,194E-022,000E-034,000E-02	1,04 0,600	EU 2	425
15864 0, 0,	3,4	GD 2	426
159631,319E-02,00055 ,0105	.86 ,2	EU 2	427
159647,500E-01,00055 ,0105	.29 0,075	GD 2	428
15965 0, 0,	46,	TB 2	429
160631,736E-02,00135 ,00081	1,5	EU 2	430
16064 ,00135 ,00081	.8	GD 2	431
160657,200E 010, 0,	525,	TB 2	432
16066 0, 0,	55,	DY 2	433
161642,569E-03 ,008 3,900E-03	.59 0,428	GD 2	434
161656,900E 000, 0,	.15 0,037	TB 2	435
16166 0, 0,	600,	DY 2	436
162643,650E+02 1,800E-03	.34 1,	GD 2	437
162658,333E-02	1,68	TB 2	438
16266 150,		DY 2	439
163652,708E-01 4,000E-04	1,22 ,2	TB 2	440
16366 4,000E-04125,		DY 2	441
16466 0, 3,000E-042700, ,740		DY 2	442
165668,727E-040, 1,200E-04	.03 ,00840,120	DY*1	443
165669,792E-020, 0,	4700,	DY 2	444
16567 0, 0,	67,	HO 2	445
166663,417E 000, 6,800E-05	.12 0,088	DY 2	446
166671,133E 000, 0,	.67 ,0558	HO 2	447
16668 0, 0,	45, ,073	ER 2	448
167682,894E-050, 0,	0,208	ER*1	449
16768 0, 0,	550,	EM 2	450
161			
3 1 4500,		H 2	
7,4 53,6		BE 2	
10 4 9,18E8		BE 2	
14 6 2,0 E6		C 2	
18 9 0,078		F 2	
2211 950,		NA 2	
2411 0,63		NA 2	
3114 0,11		SI 2	
3215 14,3		P 2	
3516 87,1		S 2	
3617 1,2 E8		CL 2	
3817 0,026		CL 2	
4118 0,0763		AR 2	
4219 ,52		K 2	
4120 2,97E7		CA 2	
4520 164,		CA 2	
4720 4,9		CA 2	
4621 85,		SC 2	
4721 3,43		SC 2	
4821 1,83		SC 2	
4823 16,1		V 2	
5124 27,8		CR 2	
5225 5,55		MN 2	
5425 300,		MN 2	
5625 ,11		MN 2	
5526 1100,		FE 2	
5926 45,1		FE 2	
5727 270,		CO 2	

5827	0.38	CO*1
5827	72.	CO 2
6027	1.9 E3	CO 2
5928	2.9 E7	NI 2
6328	2.9 E4	NI 2
6528	.11	NI 2
6429	.53	CU 2
6530	245.	ZN 2
6930	.58	ZN*1
6930	.036	ZN 2
7132	12.	GE 2
7333	76.	AS 2
7433	17.5	AS 2
7534	127.	SE 2
8538	.049	SR*1
8538	65.	SR 2
9342	1.10E6	HQ 2
9643	.036	TC*1
9643	4.3	TC 2
9743	.25	TC*1
9743	3.7 E6	TC 2
9744	2.8	RU 2
10346	17.	PD 2
10547	40.	AG 2
10948	475.	CD 2
11349	.073	IN*1
11350	112.	SN 2
12653	13.3	I 2
13155	10.	CS 2
13156	11.6	BA 2
15364	236.	GD 2
16667	4.38E5	HO*1
16968	9.4	ER 2
17168	0.31	ER 2
17069	127.	TM 2
17169	694.	TM 2
17570	4.1	YB 2
17771	6.8	LU 2
18172	46.	HF 2
18273	112.	TA 2
18174	140.	W 2
18574	74.	W 2
18774	1.	W 2
18375	73.	RE 2
18675	3.79	RE 2
18775	1.8E13	RE 2
18875	.71	RE 2
18576	95.	OS 2
19176	.58	OS*1
19176	16.	US 2
19376	1.3	OS 2
19077	12.	IR 2
19277	74.5	IR 2
19477	.74	IR 2
19178	3.	PT 2
19378	3.4	PT*1
19378	1.8 E5	PT 2
19778	.058	PT*1
19778	.75	PT 2
19679	5.6	AU 2

19879	2.7	AU 2
19979	3.15	AU 2
19780	1.	HG*1
19780	2.7	HG 2
20380	45.8	HG 2
20081	1.13	TL 2
20181	3.	TL 2
20281	12.	TL 2
20481	1.1 E3	TL 2
20382	2.17	PB 2
21082	7.1 E3	PB 2
21282	.44	PB 2
20683	6.4	BI 2
20783	2.9 E3	BI 2
21083	5.0	BI 2
21283	.042	BI 2
21084	138.4	PO 2
21185	.3	AT 2
22388	11.7	RA 2
22488	3.64	RA 2
22588	14.8	RA 2
22688	5.9 E5	RA 2
22888	2.4 E3	RA 2
22589	10.	AC 2
22789	8.0 E3	AC 2
22889	.26	AC 2
22790	18.4	TH 2
22890	700.	TH 2
22990	2.86E6	TH 2
23090	2.9 E7	TH 2
23190	1.07	TH 2
23290	5.1E12	TH 2
23490	24.1	TH 2
23091	17.7	PA 2
23191	1.3 E7	PA 2
23391	27.4	PA 2
23092	20.8	U 2
23292	2.7 E4	U 2
23392	5.9 E7	U 2
23492	9.1 E7	U 2
23592	2.6E11	U 2
23692	8.7 E9	U 2
23792	6.75	U 2
23892	1.7E12	U 2
24092	.588	U 2
23793	8.0 E8	NP 2
23993	2.33	NP 2
23794	45.6	PU 2
23894	3.3 E4	PU 2
23994	8.9 E6	PU 2
24094	2.4 E6	PU 2
24194	4.8 E3	PU 2
24294	1.4 E8	PU 2
24394	.208	PU 2
24494	2.92E10	PU 2
24195	1.7 E5	AM 2
24295	5.6 E4	AM*1
24295	0.677	AM 2
24395	2.9 E6	AM 2
24495	.421	AM 2

24296	162.5		
24396	1.3 E4		CM 2
24496	6.7 E3		CM 2
24596	7.3 E6		CM 2
24696	2.4 E6		CM 2
24796	5.844E9		CM 2
24896	1.720E8		CM 2
24997	290,		CM 2
25097	.134		BK 2
24998	1.31 E5		BK 2
25098	3.7 E3		CF 2
25298	803,		CF 2

2146 ORGAN DATA LIBRARY MARCH 5, 1975											
1	3	M	1	,450+04	,120+02	,100+01	,100+01	,100+01	,100+01	ORG008	1
1	3	M	2	,450+04	,120+02	,100+01	,100+01	,100+01	,100+01	FINST	1
1	3	M	8							ORGLIB	4
4	7	BE	1	,536+02	,180+03	,200+02	,250+00	,100+01	,350+01	ORGLIB	5
4	7	BE	3	,536+02	,120+03	,600+04	,750+02	,300+01	,120+01	ORGLIB	6
4	7	BE	4	,536+02	,270+03	,200+03	,250+01	,100+00	,160+01	ORGLIB	7
4	7	BE	5	,536+02	,540+03	,400+05	,500+03	,200+02	,120+01	ORGLIB	8
4	7	BE	6	,536+02	,450+03	,640+03	,800+01	,320+00	,850+01	ORGLIB	9
4	7	BE	8							ORGLIB	10
4	7	BE	20	,536+02					,160+01	ORGLIB	11
4	7	BE	21	,536+02					,016	ORG008	2
4	7	BE	22	,536+02					,035	ORG008	3
4	7	BE	23	,536+02					,0085	ORG008	4
4	10	BE	1	5,84E8	180,	,002	,25	1,	,209	ORG008	5
4	10	BE	3	5,84E8	120,	6,E=5	,0075	,03	,209	ORGLIB	12
4	10	BE	4	5,84E8	270,	2,E=4	,025	,1	,209	ORGLIB	13
4	10	BE	6	5,84E8	450,	6,4E=4	,08	,32	1,045	ORGLIB	14
4	10	BE	8	,584+09					,209	ORGLIB	15
4	10	BE	20	,584+09					,209	ORG001	1
4	10	BE	21	,584+09					,209	ORG001	2
4	10	BE	22	,584+09					,209	ORG001	3
4	10	BE	23	5,84E8	0,				,209	ORG001	4
6	14	C	1	,200+07	,100+02	,100+01	,750+00	,100+01	,540+01	ORGLIB	17
6	14	C	6	,200+07	,400+02	,250+01	,200+01	,250+01	,270+00	ORGLIB	18
6	14	C	7	,200+07	,120+02	,500+00	,380+00	,500+00	,540+01	ORGLIB	19
6	14	C	20	,200+07					,054	ORGLIB	20
6	14	C	21	,200+07					,054	ORG001	5
6	14	C	22	,200+07					,054	ORG001	6
6	14	C	23	,200+07					,054	ORG004	2
9	18	F	1	,780+01	,808+03	,100+01	,750+00	,100+01	,890+00	ORG001	7
9	18	F	6	,780+01	,145+04	,530+00	,400+00	,530+00	,140+01	ORGLIB	21
9	18	F	8						,540+00	ORGLIB	22
9	18	F	20	,708+01					,54	ORGLIB	23
9	18	F	21	,708+01					,89	ORG001	8
9	18	F	22	,708+01					,41	ORG001	9
9	18	F	23	,708+01					,41	ORG001	10
11	22	NA	1	,950+03	,110+02	,100+01	,750+00	,100+01	,160+01	ORG001	11
11	22	NA	8						,800+00	ORG001	11
11	22	NA	20	,950+03					,80	ORGLIB	24
11	22	NA	21	,950+03					,1,6	ORGLIB	25
11	22	NA	22	,950+03					,53	ORG001	12
11	22	NA	23	,950+03					,53	ORG001	13
11	24	NA	1	,630+00	,110+02	,100+01	,750+00	,100+01	,270+01	ORG001	14
11	24	NA	8						,150+01	ORG001	15
11	24	NA	20	,630+00					,1,5	ORGLIB	26
11	24	NA	21	,630+00					,2,7	ORGLIB	27
11	24	NA	22	,630+00					,1,0	ORG001	16
11	24	NA	23	,630+00					,1,0	ORG001	17
14	31	SI	1	,110+00	,600+02	,850+00	,680+00	,100+01	,590+00	ORG001	18
14	31	SI	8	,110+00	,600+02	,900+01	,700+01	,100+00	,590+00	ORG001	19
14	31	SI	9	,110+00	,600+02	,850+03	,700+03	,100+02	,590+00	ORGLIB	28
14	31	SI	10	,110+00	,600+02	,430+03	,340+03	,500+03	,590+00	ORGLIB	29
14	31	SI	11	,110+00	,600+02	,500+04	,400+04	,600+03	,590+00	ORGLIB	30
14	31	SI	12	,110+00	,600+02	,300+01	,300+01	,400+01	,590+00	ORGLIB	31
14	31	SI	20	,110+00					,59	ORGLIB	32
14	31	SI	21	,110+00					,59	ORG001	20
14	31	SI	22	,110+00					,59	ORG001	21
14	31	SI	23	,110+00					,59	ORG001	22
15	32	P	1	,143+02	,257+03	,750+00	,630+00	,100+01	,690+00	ORG001	23
										ORGLIB	34

15 32	P 4	.143+02	.180+02	.500-01	.400-01	.700-01	.690-00	ORGL18	35
15 32	P 6	.143+02	.115+04	.375-00	.320-00	.200-00	.350+01	ORGL19	36
15 32	P 8						.690+00	ORGL18	37
15 32	P13	.143+02	.257+03	.530+02	.440+02	.700+02	.690-00	ORGL18	38
15 32	P20	.143+02					.69	ORG001	24
15 32	P21	.143+02					.69	ORG001	25
15 32	P22	.143+02					.69	ORG001	26
15 32	P23	.143+02					.69	ORG001	27
16 35	S 1	.871+02	.900+02	.100+01	.750-00	.100+01	.560-01	ORGL18	39
16 35	S 6	.871+02	.600+03	.300+01	.200-01	.300+01	.280-00	ORGL18	40
16 35	S 8						.560-01	ORGL18	41
16 35	S10	.871+02	.623+03	.130+02	.980+03	.130+02	.560-01	ORGL19	42
16 35	S12	.871+02	.153+04	.100+01	.750+02	.100+01	.560-01	ORGL18	43
16 35	S20	.871+02					.056	ORG001	28
16 35	S21	.871+02					.056	ORG001	29
16 35	S22	.871+02					.056	ORG001	30
16 35	S23	.871+02					.056	ORG001	31
17 36	CL 1	.120+09	.290+02	1.0	.75	1.0	.26	ORGL18	32
17 36	CL 8						.260+00	ORGL18	45
17 36	CL20	.120+09					.26	ORG001	33
17 36	CL21	.120+09					.26	ORG001	34
17 36	CL22	.120+09					.26	ORG001	35
17 36	CL23	.120+09					.26	ORG001	36
17 38	CL 1	.260-01					2.3	ORG001	37
17 38	CL 8						.160+01	ORGL18	47
17 38	CL20	.260-01					1.9	ORG001	38
17 38	CL21	.260-01					2.3	ORG001	39
17 38	CL22	.260-01					1.7	ORG001	40
17 38	CL23	.260-01					1.7	ORG001	41
19 42	K 1	.520-00	.580+02	.100+01	.750+00	.100+01	.160+01	ORGL18	48
19 42	K 4	.520-00	.580+02	.200-01	.150-01	.200-01	.150+01	ORGL18	49
19 42	K 5	.520-00	.580+02	.400-02	.300-02	.400-02	.150+01	ORGL18	50
19 42	K 8						.150+01	ORGL18	51
19 42	K13	.520-00	.580+02	.400-01	.300-01	.400-01	.150+01	ORGL18	52
19 42	K14	.520-00	.580+02	.650-00	.490-00	.650-00	.160+01	ORGL18	53
19 42	K20	.520-00					1.5	ORG001	42
19 42	K21	.520-00					1.6	ORG001	43
19 42	K22	.520-00					1.5	ORG001	44
19 42	K23	.520-00					1.5	ORG001	45
20 41	CA 1	4.75E7	1.64E4	.60	.55	1.	.0036	ORGL18	54
20 41	CA 6	4.75E7	18000.	.54	.5	0.9	.0036	ORGL18	55
20 41	CA 8	4.75E7					.0036	ORGL18	56
20 41	CA20	.475+08					.0036	ORG001	46
20 41	CA21	.475+08					.0036	ORG001	47
20 41	CA22	.475+08					.0036	ORG001	48
20 41	CA23	4.75E7					.0036	ORGL18	57
20 45	CA 1	.164+03	.164+05	.600-00	.550-00	.100+01	.860-01	ORGL18	58
20 45	CA 6	.164+03	.180+05	.340-00	.580-00	.900-00	.430-00	ORGL18	59
20 45	CA 8						.860-01	ORGL18	60
20 45	CA20	.164+03					.086	ORG001	49
20 45	CA21	.164+03					.086	ORG001	50
20 45	CA22	.164+03					.086	ORG001	51
20 45	CA23	.164+03					.086	ORG001	52
20 47	CA 1	.490+01	.164+05	.600-00	.550-00	.100+01	.140+01	ORGL18	61
20 47	CA 6	.490+01	.180+05	.540-00	.500-00	.900-00	.260+01	ORGL18	62
20 47	CA 8						.657-00,81-00,82-00	ORGL18	63
20 47	CA20	.490+01					.61	ORG001	53
20 47	CA21	.490+01					1.2	ORG001	54
20 47	CA22	.490+01					.48	ORG001	55
20 47	CA23	.490+01					.48	ORG001	56

21 46 SC 1	.850+02	.300+02	.100+03	.250-00	.100+01	.130+01	ORGLIB	64
21 46 SC 3	.850+02	.750+02	.200+05	.500-02	.200-01	.500-00	ORGLIB	65
21 46 SC 4	.850+02	.360+02	.150+04	.400-01	.150-00	.640-00	ORGLIB	66
21 46 SC 6	.850+02	.330+02	.200+04	.500-01	.200-00	.900-00	ORGLIB	67
21 46 SC 8						.640+00	ORGLIB	68
21 46 SC20	.850+02					.64	ORGLIB	57
21 46 SC21	.850+02					1.3	ORGLIB	58
21 46 SC22	.850+02					.4	ORGLIB	59
21 46 SC23	.850+02					.4	ORGLIB	60
21 47 SC 1	.343+01	.300+02	.100+03	.250-00	.100+01	.260-00	ORGLIB	69
21 47 SC 3	.343+01	.750+02	.200+05	.500-02	.200-01	.200-00	ORGLIB	70
21 47 SC 4	.343+01	.360+02	.150+04	.400-01	.150-00	.210-00	ORGLIB	71
21 47 SC 6	.343+01	.330+02	.200+04	.500-01	.200-00	.890-00	ORGLIB	72
21 47 SC 8						.210+00	ORGLIB	73
21 47 SC20	.343+01					.21	ORGLIB	61
21 47 SC21	.343+01					.26	ORGLIB	62
21 47 SC22	.343+01					.19	ORGLIB	63
21 47 SC23	.343+01					.19	ORGLIB	64
21 48 SC 1	.183+01	.300+02	.100+03	.250-00	.100+01	.220+01	ORGLIB	74
21 48 SC 3	.183+01	.750+02	.200+05	.500-02	.200-01	.850-00	ORGLIB	75
21 48 SC 4	.183+01	.360+02	.150+04	.400-01	.150-00	.110+01	ORGLIB	76
21 48 SC 6	.183+01	.330+02	.200+04	.500-01	.200-00	.160+01	ORGLIB	77
21 48 SC 8						.110+01	ORGLIB	78
21 48 SC20	.183+01					1.1	ORGLIB	65
21 48 SC21	.183+01					2.2	ORGLIB	66
21 48 SC22	.183+01					0.69	ORGLIB	67
21 48 SC23	.183+01					0.69	ORGLIB	68
23 48 V 1	.161+02	.420+02	.200+01	.260-00	.100+01	.190+01	ORGLIB	79
23 48 V 3	.161+02	.740+02	.800+03	.100-01	.400-01	.700-00	ORGLIB	80
23 48 V 4	.161+02	.700+02	.120+02	.200+01	.600-01	.900-00	ORGLIB	81
23 48 V 5	.161+02	.900+02	.200+03	.260+02	.100-01	.700-00	ORGLIB	82
23 48 V 6	.161+02	.135+03	.280+02	.400+01	.140-00	.120+01	ORGLIB	83
23 48 V 8						.900+00	ORGLIB	84
23 48 V20	.161+02					.9	ORGLIB	69
23 48 V21	.161+02					1.9	ORGLIB	70
23 48 V22	.161+02					.56	ORGLIB	71
23 48 V23	.161+02					.56	ORGLIB	72
24 51 CR 1	.278+02	.616+03	.500+02	.250-00	.100+01	.250-01	ORGLIB	85
24 51 CR 3	.278+02	.616+03	.130+04	.680+03	.270+02	.120-01	ORGLIB	86
24 51 CR 8	.278+02	.616+03	.200+03	.100+01	.400-01	.140-01	ORGLIB	87
24 51 CR15	.278+02	.616+03	.450+05	.230+03	.900+03	.840+02	ORGLIB	88
24 51 CR16	.278+02	.616+03	.450+05	.230+03	.900+03	.840+02	ORGLIB	89
24 51 CR20	.278+02					.014	ORGLIB	73
24 51 CR21	.278+02					.025	ORGLIB	74
24 51 CR22	.278+02					.010	ORGLIB	75
24 51 CR23	.278+02					.010	ORGLIB	76
25 52 MN 1	.555+01	.170+02	.100+00	.300+00	.100+01	.210+01	ORGLIB	90
25 52 MN 4	.555+01	.250+02	.200+01	.700+01	.240+00	.960+00	ORGLIB	91
25 52 MN 8						.960+00	ORGLIB	92
25 52 MN17	.555+01	.570+01	.300+02	.900+02	.300+01	.560+00	ORGLIB	93
25 52 MN20	.555+01					.76	ORGLIB	77
25 52 MN21	.555+01					2.1	ORGLIB	78
25 52 MN22	.555+01					.56	ORGLIB	79
25 52 MN23	.555+01					.56	ORGLIB	80
25 54 MN 1	.300+03	.170+02	.100+00	.300+00	.100+01	.510+00	ORGLIB	94
25 54 MN 4	.300+03	.230+02	.200+01	.700+01	.240+00	.230+00	ORGLIB	95
25 54 MN 8						.230+00	ORGLIB	96
25 54 MN17	.300+03	.570+01	.300+02	.900+02	.300+01	.130+00	ORGLIB	97
25 54 MN20	.300+03					.23	ORGLIB	81
25 54 MN21	.300+03					.51	ORGLIB	82

25 54 MN22	.300+03					.13	ORG001	83
25 54 MN23	.300+03					.13	ORG001	84
25 56 MN 1	.110+00	.170+02	.100+00	.300-00	.100+01	.190+01	ORGL18	98
25 56 MN 4	.110+00	.250+02	.200-01	.700-01	.240-00	.130+01	ORGL18	99
25 56 MN 8						.130+01	ORGL18	100
25 56 MN17	.110+00	.570+01	.300-02	.900-02	.300-01	.110+01	ORGL18	101
25 56 MN20	.110+00					1.3	ORG001	85
25 56 MN21	.110+00					1.9	ORG001	86
25 56 MN22	.110+00					1.1	ORG001	87
25 56 MN23	.110+00					1.1	ORG001	88
26 55 FE 1	.110+04	.800+03	.100+00	.300-00	.100+01	.650-02	ORGL18	102
26 55 FE 4	.110+04	.554+03	.130-01	.400-01	.130-00	.650-02	ORGL18	103
26 55 FE 5	.110+04	.600+03	.200-02	.600-02	.200-01	.650-02	ORGL18	104
26 55 FE 6	.110+04	.168+04	.100-01	.300-01	.100+00	.650-02	ORGL18	105
26 55 FE 8	.110+04	.320+04	.200-02	.600-02	.200-01	.650-02	ORGL18	106
26 55 FE20	.110+04					.0065	ORG001	89
26 55 FE21	.110+04					.0065	ORG001	90
26 55 FE22	.110+04					.0065	ORG001	91
26 55 FE23	.110+04					.0065	ORG001	92
26 59 FE 1	.451+02	.800+03	.100+00	.300-00	.100+01	.810-00	ORGL18	107
26 59 FE 4	.451+02	.554+03	.130-01	.400-01	.130-00	.420-00	ORGL18	108
26 59 FE 5	.451+02	.600+03	.200-02	.600-02	.200-01	.340-00	ORGL18	109
26 59 FE 8	.451+02	.320+04	.200-02	.600-02	.200-01	.420-00	ORGL18	110
26 59 FE20	.451+02					.42	ORG001	93
26 59 FE21	.451+02					.81	ORG001	94
26 59 FE22	.451+02					.29	ORG001	95
26 59 FE23	.451+02					.29	ORG001	96
27 57 CO 1	.270+03	.950+01	.300-00	.400-00	.100+01	.900-01	ORGL18	111
27 57 CO 4	.270+03	.950+01	.700-02	.200-01	.400-01	.530-01	ORGL18	112
27 57 CO 5	.270+03	.950+01	.420-03	.560-03	.140-02	.450-01	ORGL18	113
27 57 CO 9						.530-01	ORGL18	114
27 57 CO17	.270+03	.950+01	.600-03	.800-03	.200-02	.400-01	ORGL18	115
27 57 CO20	.270+03					.053	ORG001	97
27 57 CO21	.270+03					.090	ORG001	98
27 57 CO22	.270+03					.040	ORG001	99
27 57 CO23	.270+03					.040	ORG001	100
27 58 CO 1	.720+02	.950+01	.300-00	.400-00	.100+01	.610-00	ORGL18	116
27 58 CO 4	.720+02	.950+01	.700-02	.200-01	.400-01	.290-00	ORGL18	117
27 58 CO 5	.720+02	.950+01	.420-03	.560-03	.140-02	.220-00	ORGL18	118
27 58 CO 8						.290+00	ORGL18	119
27 58 CO17	.720+02	.950+01	.600-03	.800-03	.200-02	.170-00	ORGL18	120
27 58 CO20	.720+02					.29	ORG001	101
27 58 CO21	.720+02					.61	ORG001	102
27 58 CO22	.720+02					.17	ORG001	103
27 58 CO23	.720+02					.17	ORG001	104
27 581CO 1	.380-00	.950+01	.300-00	.400-00	.100+01	.990-01	ORGL18	121
27 581CO 4	.380-00	.950+01	.700-02	.200-01	.400-01	.590-01	ORGL18	122
27 581CO 5	.380-00	.950+01	.420-03	.560-03	.140-02	.490-01	ORGL18	123
27 581CO 8						.280-01, 14-00, 28-00	ORGL18	124
27 581CO17	.380-00	.950+01	.600-03	.800-03	.200-02	.390-01	ORGL18	125
27 581CO20	.380+00					.024	ORG001	105
27 581CO21	.380+00					.026	ORG001	106
27 581CO22	.380+00					.019	ORG001	107
27 581CO23	.380+00					.019	ORG001	108
27 60 CO 1	.190+04	.950+01	.300-00	.400-00	.100+01	.150+01	ORGL18	126
27 60 CO 4	.190+04	.950+01	.700-02	.200-01	.400-01	.720-00	ORGL18	127
27 60 CO 5	.190+04	.950+01	.420-03	.560-03	.140-02	.560-00	ORGL18	128
27 60 CO 8						.720+00	ORGL18	129
27 60 CO17	.190+04	.950+01	.600-03	.800-03	.200-02	.440+00	ORGL18	130
27 60 CO20	.190+04					.72	ORG001	109

27 60 C021	.190+04					1.5	ORC001	110
27 60 C022	.190+04					.44	ORC001	111
27 60 C023	.190+04					.44	ORC001	112
28 59 NI 1	.290+08	.667+03	.300-00	.400-00	.100+01	.770-02	ORGL18	131
28 59 NI 4	.290+08	.500+03	.200-01	.300-01	.700-01	.770-02	ORGL18	132
28 59 NI 6	.290+08	.800+03	.150-00	.200-00	.500-00	.770-02	ORGL18	133
28 59 NI 8						.770-02	ORGL18	134
28 59 NI20	.290+08					.0077	ORC001	113
28 59 NI21	.290+08					.0077	ORC001	114
28 59 NI22	.290+08					.0077	ORC001	115
28 59 NI23	.290+08					.0077	ORC001	116
28 63 NI 1	.290+05	.667+03	.300-00	.400-00	.100+01	.210-01	ORGL18	135
28 63 NI 4	.290+05	.500+03	.200-01	.300-01	.700-01	.210-01	ORGL18	136
28 63 NI 6	.290+05	.800+03	.150-00	.200-00	.500-00	.110+00	ORGL18	137
28 63 NI 8						.210-01	ORGL18	138
28 63 NI20	.290+05					.021	ORC001	117
28 63 NI21	.290+05					.021	ORC001	118
28 63 NI22	.290+05					.021	ORC001	119
28 63 NI23	.290+05					.021	ORC001	120
28 65 NI 1	.110+00	.667+03	.300-00	.400-00	.100+01	.140+01	ORGL18	139
28 65 NI 4	.110+00	.500+03	.200-01	.300-01	.700-01	.120+01	ORGL18	140
28 65 NI 6	.110+00	.800+03	.150-00	.200-00	.500-00	.530+01	ORGL18	141
28 65 NI 8						.120+01	ORGL18	142
28 65 NI20	.110+00					1.2	ORC001	121
28 65 NI21	.110+00					1.4	ORC001	122
28 65 NI22	.110+00					1.1	ORC001	123
28 65 NI23	.110+00					1.1	ORC001	124
29 64 CU 1	.530-00	.800+02	.280-00	.390-00	.100+01	.250-00	ORGL18	143
29 64 CU 3	.530-00	.160+02	.100-01	.200-01	.500-01	.170-00	ORGL18	144
29 64 CU 4	.530-00	.150+03	.200-01	.300-01	.800-01	.190-00	ORGL18	145
29 64 CU 5	.530-00	.200+01	.200-01	.300-01	.700-01	.170-00	ORGL18	146
29 64 CU 8						.190+00	ORGL18	147
29 64 CU13	.530-00	.800+03	.300-02	.400-02	.100-01	.210-00	ORGL18	148
29 64 CU18	.530-00	.800+02	.300-02	.400-02	.100-01	.170-00	ORGL18	149
29 64 CU20	.530+00					.19	ORC001	125
29 64 CU21	.530+00					.25	ORC001	126
29 64 CU22	.530+00					.16	ORC001	127
29 64 CU23	.530+00					.16	ORC001	128
30 65 ZN 1	.245+03	.933+03	.100+00	.300-00	.100+01	.320-00	ORGL18	150
30 65 ZN 3	.245+03	.149+03	.400-02	.120-01	.400-01	.110+00	ORGL18	151
30 65 ZN 4	.245+03	.910+02	.350-01	.110+00	.350-00	.150-00	ORGL18	152
30 65 ZN 6	.245+03	.130+04	.150-01	.450-01	.150-00	.940-01	ORGL18	153
30 65 ZN 8						.150+00	ORGL18	154
30 65 ZN10	.245+03	.270+03	.900-04	.270-03	.900-03	.560-01	ORGL18	155
30 65 ZN11	.245+03	.107+03	.400-04	.120-03	.400-03	.560-01	ORGL18	156
30 65 ZN14	.245+03	.196+04	.300-01	.900-01	.300-00	.320-00	ORGL18	157
30 65 ZN15	.245+03	.140+02	.600-02	.200-01	.600-01	.560-01	ORGL18	158
30 65 ZN17	.245+03	.250+02	.300-02	.900-02	.300-01	.840-01	ORGL18	159
30 65 ZN20	.245+03					0.15	ORC001	129
30 65 ZN21	.245+03					0.32	ORC001	130
30 65 ZN22	.245+03					0.084	ORC001	131
30 65 ZN23	.245+03					0.084	ORC001	132
30 69 ZN 1	.360-01	.933+03	.100+00	.300-00	.100+01	.370-00	ORGL18	160
30 69 ZN 3	.360-01	.149+03	.400-02	.120-01	.400-01	.370-00	ORGL18	161
30 69 ZN 4	.360-01	.910+02	.350-01	.110+00	.350-00	.370-00	ORGL18	162
30 69 ZN 6	.360-01	.130+04	.150-01	.450-01	.150-00	.190+01	ORGL18	163
30 69 ZN 8						.370+00	ORGL18	164
30 69 ZN10	.360-01	.270+03	.900-04	.270-03	.900-03	.370-00	ORGL18	165
30 69 ZN11	.360-01	.107+03	.400-04	.120-03	.400-03	.370-00	ORGL18	166
30 69 ZN14	.360-01	.196+04	.300-01	.900-01	.300-00	.370-00	ORGL18	167

30 69 ZN15	.360-01	.140+02	.600-02	.200-01	.600-01	.370-00	ORGLIB	158
30 69 ZN17	.360-01	.250+02	.300-02	.900-02	.300-01	.370-00	ORGLIB	159
30 69 ZN20	.360-01					0,37	ORG001	153
30 69 ZN21	.360-01					0,37	ORG001	154
30 69 ZN22	.360-01					0,37	ORG001	155
30 69 ZN23	.360-01					0,37	ORG001	156
30 691ZN 1	.580-00	.933+03	.100+00	.300-00	.100+01	.640-00	ORGLIB	170
30 691ZN 3	.580-00	.149+03	.400-02	.120-01	.400-01	.470-00	ORGLIB	171
30 691ZN 4	.580-00	.910+02	.350-01	.110+00	.350-00	.500-00	ORGLIB	172
30 691ZN 6	.580-00	.130+04	.150+01	.450-01	.150-00	.210+01	ORGLIB	173
30 691ZN 8	.580-00					.487-00,50-00,50-00	ORGLIB	174
30 691ZN10	.580-00	.270+03	.900-04	.270-03	.900-03	.430-00	ORGLIB	175
30 691ZN11	.580-00	.107+03	.400-04	.120-03	.400-03	.430-00	ORGLIB	176
30 691ZN14	.580-00	.146+04	.300-01	.900-01	.300-00	.640-00	ORGLIB	177
30 691ZN15	.580-00	.140+02	.600-02	.200-01	.600-01	.430-00	ORGLIB	178
30 691ZN17	.580-00	.250+02	.300-02	.900-02	.300-01	.450-00	ORGLIB	179
30 691ZN20	.580-00					0,13	ORG001	137
30 691ZN21	.580-00					0,27	ORG001	138
30 691ZN22	.580-00					0,081	ORG001	159
30 691ZN23	.580-00					0,081	ORG001	160
31 72 GA 1	.590-00	.600+01	.100-02	.250-00	.100+01	.180+01	ORGLIB	180
31 72 GA 3	.590-00	.900+01	.200-04	.500-02	.200-01	.890-00	ORGLIB	181
31 72 GA 4	.590-00	.480+01	.250-03	.630-01	.250-00	.110+01	ORGLIB	182
31 72 GA 5	.590-00	.600+01	.100-04	.250-02	.100-01	.890-00	ORGLIB	183
31 72 GA 6	.590-00	.120+02	.300-03	.750-01	.300-00	.260+01	ORGLIB	184
31 72 GA 8	.590-00					.110+01	ORGLIB	185
31 72 GA20	.590-00					1,1	ORG001	141
31 72 GA21	.590-00					1,8	ORG001	142
31 72 GA22	.590-00					0,78	ORG001	143
31 72 GA23	.590-00					0,78	ORG001	144
32 71 GE 1	.120+02	.100+01	.100-01	.260-00	.100+01	.100-01	ORGLIB	186
32 71 GE 3	.120+02	.120+02	.300-03	.800-02	.300-01	.100-01	ORGLIB	187
32 71 GE 4	.120+02	.750+01	.200-03	.500-02	.200-01	.100-01	ORGLIB	188
32 71 GE 8	.120+02					.100-01	ORGLIB	189
32 71 GE20	.120+02					0,010	ORG001	145
32 71 GE21	.120+02					0,010	ORG001	146
32 71 GE22	.120+02					0,010	ORG001	147
32 71 GE23	.120+02					0,010	ORG001	148
33 73 AS 1	.760+02	.280+03	.300-01	.270-00	.100+01	.610-01	ORGLIB	190
33 73 AS 3	.760+02	.550+03	.300-03	.270-02	.100-01	.360-01	ORGLIB	191
33 73 AS 4	.760+02	.550+03	.900-03	.800-02	.300-01	.410-01	ORGLIB	192
33 73 AS 8	.760+02					.410-01	ORGLIB	193
33 73 AS20	.760+02					0,041	ORG001	149
33 73 AS21	.760+02					0,061	ORG001	150
33 73 AS22	.760+02					0,033	ORG001	151
33 73 AS23	.760+02					0,033	ORG001	152
33 74 AS 1	.175+02	.280+03	.300-01	.270-00	.100+01	.560-00	ORGLIB	194
33 74 AS 3	.175+02	.550+03	.300-03	.270-02	.100-01	.340-00	ORGLIB	195
33 74 AS 4	.175+02	.550+03	.900-03	.800-02	.300-01	.380-00	ORGLIB	196
33 74 AS 8	.175+02					.380+00	ORGLIB	197
33 74 AS20	.175+02					0,38	ORG001	153
33 74 AS21	.175+02					0,56	ORG001	154
33 74 AS22	.175+02					0,32	ORG001	155
33 74 AS23	.175+02					0,32	ORG001	156
33 76 AS 1	.111+01	.280+03	.300-01	.270-00	.100+01	.130+01	ORGLIB	198
33 76 AS 3	.111+01	.550+03	.300-03	.270-02	.100-01	.110+01	ORGLIB	199
33 76 AS 4	.111+01	.550+03	.900-03	.800-02	.300-01	.110+01	ORGLIB	200
33 76 AS 8	.111+01					.110+01	ORGLIB	201
33 76 AS20	.111+01					1,1	ORG001	157
33 76 AS21	.111+01					1,3	ORG001	158

33 76 AS22	.111+01					1.1	ORG001	159
33 76 AS23	.111+01					1.1	ORG001	160
33 77 AS 1	.162+01	.280+03	.300-01	.270-00	.100+01	.240-00	ORGL18	202
33 77 AS 3	.162+01	.550+03	.300-03	.270-02	.100-01	.240-00	ORGL18	203
33 77 AS 4	.162+01	.550+03	.900-03	.800-02	.300-01	.240-00	ORGL18	204
33 77 AS 8						.240+00	ORGL18	205
33 77 AS20	.162+01					0.24	ORG001	161
33 77 AS21	.162+01					0.24	ORG001	162
33 77 AS22	.162+01					0.24	ORG001	163
33 77 AS23	.162+01					0.24	ORG001	164
34 75 SE 1	.127+03	.110+02	.900-00	.700-00	.100+01	.200-00	ORGL18	206
34 75 SE 3	.127+03	.110+02	.400-01	.300-01	.400-01	.720-01	ORGL18	207
34 75 SE 4	.127+03	.240+02	.600-01	.500-01	.700-01	.940-01	ORGL18	208
34 75 SE 5	.127+03	.160+02	.450+02	.350+02	.500-02	.720-01	ORGL18	209
34 75 SE 8						.940+01	ORGL18	210
34 75 SE20	.127+03					0.094	ORG001	165
34 75 SE21	.127+03					0.20	ORG001	166
34 75 SE22	.127+03					0.056	ORG001	167
34 75 SE23	.127+03					0.056	ORG001	168
34 79 SE 1	2.37E7	11.	.9	.7	1.	.042	ORGL18	211
34 79 SE 3	2.37E7	11.	.04	.03	.04	.042	ORGL18	212
34 79 SE 4	2.37E7	24.	.06	.05	.07	.042	ORGL18	213
34 79 SE 8	2.37E7					.042	ORGL18	214
34 79 SE20	2.37E7					0.042	ORG001	169
34 79 SE21	2.37E7					0.042	ORG001	170
34 79 SE22	2.37E7					0.042	ORG001	171
34 79 SE23	2.37E7					.042	ORG004	3
35 82 BR 1	.150+01	.800+01	.100+01	.750-00	.100+01	.180+01	ORGL18	216
35 82 BR 8						.850+00	ORGL18	217
35 82 BR20	.150+01					0.85	ORG001	172
35 82 BR21	.150+01					1.8	ORG001	173
35 82 BR22	.150+01					0.53	ORG001	174
35 82 BR23	.150+01					0.53	ORG001	175
37 86 RB 1	.186+02	.450+02	.100+01	.750-00	.100+01	.700-00	ORGL18	218
37 86 RB 4	.186+02	.630+02	.500-01	.400-01	.500-01	.660-00	ORGL18	219
37 86 RB 5	.186+02	.450+02	.400-02	.300-02	.400-02	.660-00	ORGL18	220
37 86 RB 8						.660+00	ORGL18	221
37 86 RB14	.186+02	.800+02	.450-00	.340-00	.450-00	.700-00	ORGL18	222
37 86 RB17	.186+02	.600+02	.300-02	.230-02	.300-02	.650-00	ORGL18	223
37 86 RB20	.186+02					0.66	ORG001	176
37 86 RB21	.186+02					0.70	ORG001	177
37 86 RB22	.186+02					0.65	ORG001	178
37 86 RB23	.186+02					0.65	ORG001	179
37 87 RB 1	.180+14	.450+02	.100+01	.750-00	.100+01	.900-01	ORGL18	224
37 87 RB 4	.180+14	.630+02	.500-01	.400-01	.500-01	.900-01	ORGL18	225
37 87 RB 5	.180+14	.450+02	.400-02	.300-02	.400-02	.900-01	ORGL18	226
37 87 RB 8						.900-01	ORGL18	227
37 87 RB14	.180+14	.800+02	.450-00	.340-00	.450-00	.900-01	ORGL18	228
37 87 RB17	.180+14	.600+02	.300-02	.230-02	.300-02	.900-01	ORGL18	229
37 87 RB20	.180+14					0.090	ORG001	180
37 87 RB21	.180+14					0.090	ORG001	181
37 87 RB22	.180+14					0.090	ORG001	182
37 87 RB23	.180+14					0.090	ORG001	183
38 85 SR 1	.650+02	.130+05	.300-00	.400-00	.100+01	.330-00	ORGL18	230
38 85 SR 6	.650+02	.180+05	.900-01	.120+00	.175-00	.910-01	ORGL18	231
38 85 SR 8						.160+00	ORGL18	232
38 85 SR20	.650+02					0.16	ORG001	184
38 85 SR21	.650+02					0.33	ORG001	185
38 85 SR22	.650+02					0.091	ORG001	186
38 85 SR23	.650+02					0.	ORG001	187

38 851SR 1	.490-01	.130+05	.300-00	.400-00	.100+01	.470-00	ORGLIB	233
38 851SR 6	.490-01	.180+05	.900-01	.120+00	.175-00	.130-00	ORGLIB	234
38 851SR 8						.150+00,17+00,23+00	ORGLIB	235
38 851SR20	.490-01					0.051	ORGLIB	188
38 851SR21	.490-01					0.098	ORGLIB	189
38 851SR22	.490-01					0.034	ORGLIB	190
38 851SR23	.490-01					0.03	ORGLIB	191
38 89 SR 1	.505+02	.130+05	.300-00	.400-00	.100+01	.550-00	ORGLIB	236
38 89 SR 6	.505+02	.180+05	.900-01	.120+00	.175-00	.280+01	ORGLIB	237
38 89 SR 8						.550+00	ORGLIB	238
38 89 SR20	.505+02	.300-00	.100+01	.625-00	.000	.550-00	ORGLIB	239
38 89 SR21	.505+02	.300-00	.100+01	.625-00	.000	.550-00	ORGLIB	240
38 89 SR22	.505+02	.300-00	.100+01	.625-00	.000	.550-00	ORGLIB	241
38 89 SR23	.505+02	.300-00	.100+01	.625-00	.000	.550-00	ORGLIB	242
38 90 SR 1	.100+05	.130+05	.300-00	.400-00	.100+01	.110+01	ORGLIB	243
38 90 SR 6	.100+05	.180+05	.900-01	.120+00	.750+01	.550+01	ORGLIB	244
38 90 SR 8						.452-00,11+01,11+01	ORGLIB	245
38 90 SR20	.100+05					0.21	ORGLIB	192
38 90 SR21	.100+05					0.21	ORGLIB	193
38 90 SR22	.100+05					0.21	ORGLIB	194
38 90 SR23	.100+05					0.21	ORGLIB	195
38 91 SR 1	.400-00	.130+05	.300-00	.400-00	.100+01	.240+01	ORGLIB	246
38 91 SR 6	.400-00	.180+05	.900-01	.120+00	.175-00	.740+01	ORGLIB	247
38 91 SR 8						.115+01,14+01,17+01	ORGLIB	248
38 91 SR20	.400-00					0.68	ORGLIB	196
38 91 SR21	.400-00					0.98	ORGLIB	197
38 91 SR22	.400-00					0.58	ORGLIB	198
38 91 SR23	.400-00					0.58	ORGLIB	199
38 92 SR 1	.110+00	.130+05	.300-00	.400-00	.100+01	.260+01	ORGLIB	249
38 92 SR 6	.110+00	.180+05	.900-01	.120+00	.175-00	.800+01	ORGLIB	250
38 92 SR 8						.175+01,19+01,19+01	ORGLIB	251
38 92 SR20	.110+00					0.45	ORGLIB	200
38 92 SR21	.110+00					0.96	ORGLIB	201
38 92 SR22	.110+00					0.37	ORGLIB	202
38 92 SR23	.110+00					0.37	ORGLIB	203
39 90 Y 1	.268+01	.140+05	.100-03	.250-00	.100+01	.890-00	ORGLIB	252
39 90 Y 6	.268+01	.180+05	.750-04	.190-00	.750-00	.440+01	ORGLIB	253
39 90 Y 8						.890+00	ORGLIB	254
39 90 Y20	.268+01					0.89	ORGLIB	4
39 90 Y21	.268+01					0.89	ORGLIB	5
39 90 Y22	.268+01					0.89	ORGLIB	6
39 90 Y23	.268+01					0.89	ORGLIB	7
39 91 Y 1	.580+02	.140+05	.100-03	.250-00	.100+01	.590-00	ORGLIB	255
39 91 Y 6	.580+02	.180+05	.750-04	.190-00	.750-00	.290+01	ORGLIB	256
39 91 Y 8						.590+00	ORGLIB	257
39 91 Y20	.580+02					0.59	ORGLIB	208
39 91 Y21	.580+02					0.59	ORGLIB	209
39 91 Y22	.580+02					0.59	ORGLIB	210
39 91 Y23	.580+02					0.59	ORGLIB	211
39 911 Y 1	.350-01	.140+05	.100-03	.250-00	.100+01	.930-00	ORGLIB	258
39 911 Y 6	.350-01	.180+05	.750-04	.190-00	.750-00	.300+01	ORGLIB	259
39 911 Y 8						.100-00,42-00,68-00	ORGLIB	260
39 911 Y20	.350-01					0.59	ORGLIB	212
39 911 Y21	.350-01					0.59	ORGLIB	213
39 911 Y22	.350-01					0.59	ORGLIB	214
39 911 Y23	.350-01					0.59	ORGLIB	215
39 92 Y 1	.150-00	.140+05	.100-03	.250-00	.100+01	.160+01	ORGLIB	261
39 92 Y 6	.150-00	.180+05	.750-04	.190-00	.750-00	.690+01	ORGLIB	262
39 92 Y 8						.150+01	ORGLIB	263
39 92 Y20	.150-00					1.5	ORGLIB	216

39 92	Y21	,150-00					1,6	ORG001	217
39 92	Y22	,150-00					1,4	ORG001	218
39 92	Y23	,150-00					1,4	ORG001	219
39 93	Y 1	,420-00	,140+05	,100-03	,250-00	,100+01	,170+01	ORGL18	264
39 93	Y 6	,420-00	,180+05	,750-04	,190-00	,750-00	,650+01	ORGL18	265
39 93	Y 8						,150+01,15+01,15+01	ORGL18	266
39 93	Y20	,420-00					1,5	ORG001	220
39 93	Y21	,420-00					1,7	ORG001	221
39 93	Y22	,420-00					1,4	ORG001	222
39 93	Y23	,420-00					1,4	ORG001	223
40 93	ZR 1	,480+09	,450+03	,100-03	,250-00	,100+01	,240-01	ORGL18	267
40 93	ZR 3	,480+09	,900+03	,200-05	,500-02	,200-01	,240-01	ORGL18	268
40 93	ZR 4	,480+09	,320+03	,700-05	,200-01	,700-01	,250-01	ORGL18	269
40 93	ZR 5	,480+09	,900+03	,600-06	,150-02	,600-02	,250-01	ORGL18	270
40 93	ZR 6	,480+09	,100+04	,360-04	,900-01	,360-00	,110+00	ORGL18	271
40 93	ZR 8						,190-01,20-01,24-01	ORGL18	272
40 93	ZR20	,480+09					0,019	ORG001	224
40 93	ZR21	,480+09					0,019	ORG001	225
40 93	ZR22	,480+09					0,019	ORG001	226
40 93	ZR23	,480+09					0,019	ORG001	227
40 95	ZR 1	,633+02	,450+03	,100-03	,250-00	,100+01	,110+01	ORGL18	273
40 95	ZR 3	,633+02	,900+03	,200-05	,500-02	,200-01	,460-00	ORGL18	274
40 95	ZR 4	,633+02	,320+03	,700-05	,200-01	,700-01	,570-00	ORGL18	275
40 95	ZR 5	,633+02	,900+03	,600-06	,150-02	,600-02	,460-00	ORGL18	276
40 95	ZR 6	,633+02	,100+04	,360-04	,900-01	,360-00	,110+01	ORGL18	277
40 95	ZR 8						,327-00,47-00,56-00	ORGL18	278
40 95	ZR20	,633+02					,32	ORG001	228
40 95	ZR21	,633+02					,57	ORG001	229
40 95	ZR22	,633+02					,24	ORG001	230
40 95	ZR23	,633+02					,24	ORG001	231
40 97	ZR 1	,710-00	,450+03	,100-03	,250-00	,100+01	,210+01	ORGL18	279
40 97	ZR 3	,710-00	,900+03	,200-05	,500-02	,200-01	,150+01	ORGL18	280
40 97	ZR 4	,710-00	,320+03	,700-05	,200-01	,700-01	,160+01	ORGL18	281
40 97	ZR 5	,710-00	,900+03	,600-06	,150-02	,600-02	,150+01	ORGL18	282
40 97	ZR 6	,710-00	,100+04	,360-04	,900-01	,360-00	,620+01	ORGL18	283
40 97	ZR 8						,155+01,16+01,16+01	ORGL18	284
40 97	ZR20	,710-00					,94	ORG001	232
40 97	ZR21	,710-00					1,2	ORG001	233
40 97	ZR22	,710-00					,85	ORG001	234
40 97	ZR23	,710-00					,85	ORG001	235
41 931NB 1		,370+04	,760+03	,100-03	,250-00	,100+01	,380-01	ORGL18	285
41 931NB 3		,370+04	,760+03	,200-05	,500-02	,200-01	,380-01	ORGL18	286
41 931NB 4		,370+04	,845+03	,900-05	,200-01	,900-01	,380-01	ORGL18	287
41 931NB 5		,370+04	,950+02	,800-06	,200-02	,800-02	,380-01	ORGL18	288
41 931NB 6		,370+04	,100+04	,380-04	,100+00	,380-00	,120+00	ORGL18	289
41 931NB 8							,380-01	ORGL18	290
41 931NB20		,370+04					0,038	ORG001	236
41 931NB21		,370+04					0,038	ORG001	237
41 931NB22		,370+04					0,038	ORG001	238
41 931NB23		,370+04					0,038	ORG001	239
41 95 NB 1		,350+02	,760+03	,100-03	,250-00	,100+01	,510-00	ORGL18	291
41 95 NB 3		,350+02	,760+03	,200-05	,500-02	,200-01	,200-00	ORGL18	292
41 95 NB 4		,350+02	,840+03	,900-05	,200-01	,900-01	,260-00	ORGL18	293
41 95 NB 5		,350+02	,950+02	,800-06	,200-02	,800-02	,200-00	ORGL18	294
41 95 NB 6		,350+02	,100+04	,380-04	,100+00	,380-00	,370-00	ORGL18	295
41 95 NB 8							,260+00	ORGL18	296
41 95 NB20		,350+02					0,26	ORG001	240
41 95 NB21		,350+02					0,51	ORG001	241
41 95 NB22		,350+02					0,16	ORG001	242
41 95 NB23		,350+02					0,16	ORG001	243

41 97 NB 1	.510-01	.760+03	.100-03	.250-00	.100+01	.870-00	ORGLIB	297
41 97 NB 3	.510-01	.760+03	.200-05	.500-02	.200-01	.600-00	ORGLIB	298
41 97 NB 4	.510-01	.840+03	.900-05	.200-01	.900-01	.640-00	ORGLIB	299
41 97 NB 5	.510-01	.950+02	.800-06	.200-02	.800-02	.600-00	ORGLIB	300
41 97 NB 6	.510-01	.100+04	.380-04	.100+00	.380-00	.240+01	ORGLIB	301
41 97 NB 8						.640+00	ORGLIB	302
41 97 NB20	.510-01					0.65	ORGLIB	244
41 97 NB21	.510-01					0.87	ORGLIB	245
41 97 NB22	.510-01					0.56	ORGLIB	246
41 97 NB23	.510-01					0.56	ORGLIB	247
42 93 MO 1	1.10E6	5.	.8	.65	1.	.048	ORGLIB	303
42 93 MO 3	1.10E6	3.	.06	.05	.08	.048	ORGLIB	304
42 93 MO 4	1.10E6	45.	.08	.065	.1	.048	ORGLIB	305
42 93 MO 8	1.10E6					.048	ORGLIB	306
42 93 MO20	1.10E6					0.048	ORGLIB	248
42 93 MO21	1.10E6					0.048	ORGLIB	249
42 93 MO22	1.10E6					0.048	ORGLIB	250
42 93 MO23	1.10E6						ORGLIB	8
42 99 MO 1	.279+01	.500+01	.800-00	.650-00	.100+01	.510-00	ORGLIB	308
42 99 MO 3	.279+01	.300+01	.800-01	.500-01	.800-01	.480-00	ORGLIB	309
42 99 MO 4	.279+01	.450+02	.800+01	.650+01	.100+00	.480-00	ORGLIB	310
42 99 MO 8						.470-00, 47-00, 47-00	ORGLIB	311
42 99 MO20	.279+01					0.44	ORGLIB	251
42 99 MO21	.279+01					0.48	ORGLIB	252
42 99 MO22	.279+01					0.43	ORGLIB	253
42 99 MO23	.279+01					0.43	ORGLIB	254
43 96 TC 1	.430+01	.100+01	.500-00	.500-00	.100+01	.140+01	ORGLIB	312
43 96 TC 3	.430+01	.200+02	.500-02	.500-02	.100-01	.470-00	ORGLIB	313
43 96 TC 4	.430+01	.300+02	.150-02	.150-02	.300-02	.640-00	ORGLIB	314
43 96 TC 6	.430+01	.250+02	.100-02	.100-02	.200-02	.350-00	ORGLIB	315
43 96 TC 8	.430+01	.500-01	.450-03	.450-03	.900-03	.640-00	ORGLIB	316
43 96 TC12	.430+01	.100+02	.500-02	.500-02	.100-01	.830-02	ORGLIB	317
43 96 TC20	.430+01					0.64	ORGLIB	255
43 96 TC21	.430+01					1.4	ORGLIB	256
43 96 TC22	.430+01					0.35	ORGLIB	257
43 96 TC23	.430+01					0.35	ORGLIB	258
43 961TC 1	.360-01	.100+01	.500-00	.500-00	.100+01	.300-00	ORGLIB	318
43 961TC 3	.360-01	.200+02	.500-02	.500-02	.100-01	.420-00	ORGLIB	319
43 961TC 4	.360-01	.300+02	.150-02	.150-02	.300-02	.600-00	ORGLIB	320
43 961TC 6	.360-01	.250+02	.100-02	.100-02	.200-02	.390-00	ORGLIB	321
43 961TC 8	.360-01					.155-00, 62-00, 67-00	ORGLIB	322
43 961TC12	.360-01	.100+02	.500-02	.500-02	.100-01	.210-01	ORGLIB	323
43 961TC20	.360-01					0.034	ORGLIB	259
43 961TC21	.360-01					.034	ORGLIB	260
43 961TC22	.360-01					0.032	ORGLIB	261
43 961TC23	.360-01					0.032	ORGLIB	262
43 97 TC 1	.370+07	.100+01	.500-00	.500-00	.100+01	.200-01	ORGLIB	324
43 97 TC 3	.370+07	.200+02	.500-02	.500-02	.100-01	.200-01	ORGLIB	325
43 97 TC 4	.370+07	.300+02	.150-02	.150-02	.300-02	.200-01	ORGLIB	326
43 97 TC 6	.370+07	.250+02	.100-02	.100-02	.200-02	.190-01	ORGLIB	327
43 97 TC 8	.370+07	.500+01	.450-03	.450-02	.900-03	.200-01	ORGLIB	328
43 97 TC12	.370+07	.100+02	.500-02	.500-02	.100-01	.110-02	ORGLIB	329
43 97 TC20	.370+07					0.020	ORGLIB	263
43 97 TC21	.370+07					0.020	ORGLIB	264
43 97 TC22	.370+07					0.019	ORGLIB	265
43 97 TC23	.370+07					0.019	ORGLIB	266
43 971TC 1	.920+02	.100+01	.500-00	.500-00	.100+01	.900-01	ORGLIB	330
43 971TC 3	.920+02	.200+02	.500-02	.500-02	.100-01	.900-01	ORGLIB	331
43 971TC 4	.920+02	.300+02	.150-02	.150-02	.300-02	.900-01	ORGLIB	332
43 971TC 6	.920+02	.250+02	.100-02	.100-02	.200-02	.370-00	ORGLIB	333

43 971TC 8										900-01, 90-01, 90-01	ORGLIB	334
43 971TC12	.920+02	.100+02	.500-02	.500-02	.100-01	.710-01					ORGLIB	335
43 971TC20	.920+02					0.09					ORG001	267
43 971TC21	.920+02					0.09					ORG001	268
43 971TC22	.920+02					0.089					ORG001	269
43 971TC23	.920+02					0.089					ORG001	270
43 99 TC 1	.730+08	.100+01	.500-00	.500-00	.100+01	.940-01					ORGLIB	336
43 99 TC 3	.730+08	.200+02	.500-02	.500-02	.100-01	.940-01					ORGLIB	337
43 99 TC 4	.730+08	.300+02	.150-02	.150-02	.300-02	.940-01					ORGLIB	338
43 99 TC 6	.730+08	.250+02	.100-02	.100-02	.200-02	.940-01					ORGLIB	339
43 99 TC 8	.730+08	.500+01	.450-03	.450-03	.900-03	.940-01					ORGLIB	340
43 99 TC12	.730+08	.100+02	.500-02	.500-02	.100-01	.470-00					ORGLIB	341
43 99 TC20	.730+08					0.094					ORG001	271
43 99 TC21	.730+08					0.094					ORG001	272
43 99 TC22	.730+08					0.094					ORG001	273
43 99 TC23	.730+08					0.094					ORG001	274
44 97 RU 1	.280+01	.730+01	.300-01	.270-00	.100+01	.150-00					ORGLIB	342
44 97 RU 3	.280+01	.250+01	.600-02	.500-01	.200-00	.770-01					ORGLIB	343
44 97 RU 6	.280+01	.160+02	.240-02	.200-01	.800-01	.130-00					ORGLIB	344
44 97 RU 8						.790-01, 11+00, 15-00					ORGLIB	345
44 97 RU20	.280+01					0.078					ORG001	275
44 97 RU21	.280+01					0.15					ORG001	276
44 97 RU22	.280+01					0.05					ORG001	277
44 97 RU23	.280+01					0.05					ORG001	278
44103 RU 1	.410+02	.730+01	.300-01	.270-00	.100+01	.440-00					ORGLIB	346
44103 RU 3	.410+02	.250+01	.600-02	.500-01	.200-00	.220-00					ORGLIB	347
44103 RU 6	.410+02	.160+02	.240-02	.200-01	.800-01	.620-00					ORGLIB	348
44103 RU 8						.263-00, 26-00, 26+00					ORGLIB	349
44103 RU20	.410+02					0.21					ORG001	279
44103 RU21	.410+02					0.38					ORG001	280
44103 RU22	.410+02					0.14					ORG001	281
44103 RU23	.410+02					0.14					ORG001	282
44105 RU 1	.190-00	.730+01	.300-01	.270-00	.100+01	.120+01					ORGLIB	350
44105 RU 3	.190-00	.250+01	.600-02	.500-01	.200-00	.840-00					ORGLIB	351
44105 RU 6	.190-00	.160+02	.240-02	.200-01	.800-01	.350+01					ORGLIB	352
44105 RU 8						.795-00, 90-00, 91-00					ORGLIB	353
44105 RU20	.190-00					0.72					ORG001	283
44105 RU21	.190-00					0.98					ORG001	284
44105 RU22	.190-00					0.62					ORG001	285
44105 RU23	.190-00					0.62					ORG001	286
44106 RU 1	.365+03	.730+01	.300-01	.270-00	.100+01	.140+01					ORGLIB	354
44106 RU 3	.365+03	.250+01	.600-02	.500-01	.200-00	.130+01					ORGLIB	355
44106 RU 6	.365+03	.160+02	.240-02	.200-01	.800-01	.650+01					ORGLIB	356
44106 RU 8						.140+01					ORGLIB	357
44106 RU20	.365+03	.300-01	.100+01	.625-00	.000	.140+01					ORGLIB	358
44106 RU21	.365+03	.300-01	.100+01	.625-00	.000	.140+01					ORGLIB	359
44106 RU22	.365+03	.300-01	.100+01	.625-00	.000	.130+01					ORGLIB	360
44106 RU23	.365+03	.300-01	.100+01	.625-00	.000	.130+01					ORGLIB	361
451031RH 1	.380-01	.104+02	.200-00	.350-00	.100+01	.550-01					ORGLIB	362
451031RH 3	.380-01	.280+02	.600-02	.100-01	.300-01	.540-01					ORGLIB	363
451031RH 4	.380-01	.182+02	.800-02	.140-01	.400-01	.550-01					ORGLIB	364
451031RH 5	.380-01	.208+02	.200-02	.350-02	.100-01	.540-01					ORGLIB	365
451031RH 6	.380-01	.166+02	.100-01	.200-01	.500-01	.190-00					ORGLIB	366
451031RH 8						.550-01					ORGLIB	367
451031RH20	.380-01					0.055					ORG001	287
451031RH21	.380-01					0.055					ORG001	288
451031RH22	.380-01					0.053					ORG001	289
451031RH23	.380-01					0.053					ORG001	290
45105 RH 1	.152+01	.104+02	.200-00	.350-00	.100+01	.200-00					ORGLIB	368
45105 RH 3	.152+01	.280+02	.600-02	.100-01	.300-01	.190-00					ORGLIB	369

45105 RM 4	.152+01	.182+02	.800+02	.140-01	.400-01	.190-00	ORGLIB	370
45105 RM 5	.152+01	.208+02	.200-02	.350-02	.100-01	.190-00	ORGLIB	371
45105 RM 6	.152+01	.166+02	.100-01	.200-01	.500-01	.950-00	ORGLIB	372
45105 RM 8						.190-01	ORGLIB	373
45105 RM20	.152+01					0.19	ORG001	291
45105 RM21	.152+01					0.20	ORG001	292
45105 RM22	.152+01					0.19	ORG001	293
45105 RM23	.152+01					0.19	ORG001	294
46103 PD 1	.170+02	.500+01	.200-00	.350-00	.100+01	.640-01	ORGLIB	374
46103 PD 3	.170+02	.300+02	.200-01	.300-01	.800-01	.610-01	ORGLIB	375
46103 PD 4	.170+02	.190+02	.200-01	.300-01	.900-01	.630-01	ORGLIB	376
46103 PD 5	.170+02	.150+02	.200-02	.350-02	.100-01	.610-01	ORGLIB	377
46103 PD 8						.625-01, .64-01, .64-01	ORGLIB	378
46103 PD20	.170+02					0.022	ORG001	295
46103 PD21	.170+02					0.023	ORG001	296
46103 PD22	.170+02					0.019	ORG001	297
46103 PD23	.170+02					0.019	ORG001	298
46107 PD 1	2.37E9	5.	.2	.35	1.	.0089	ORGLIB	379
46107 PD 3	2.37E9	30.	.02	.03	.08	.0089	ORGLIB	380
46107 PD 4	2.37E9	19.	.02	.03	.09	.0089	ORGLIB	381
46107 PD 8	2.37E9					.0089 .0089 .0089	ORGLIB	382
46107 PD20	2.37E9					0.0089	ORG001	299
46107 PD21	2.37E9					0.0089	ORG001	300
46107 PD22	2.37E9					0.0089	ORG001	301
46107 PD23						.048	ORG004	9
46109 PD 1	.570-00	.500+01	.200-00	.350-00	.100+01	.420-00	ORGLIB	384
46109 PD 3	.570-00	.300+02	.200-01	.300-01	.800-01	.420-00	ORGLIB	385
46109 PD 4	.570-00	.190+02	.200-01	.300-01	.900-01	.420-00	ORGLIB	386
46109 PD 5	.570-00	.150+02	.200-02	.350-02	.100-01	.420-00	ORGLIB	387
46109 PD 8						.420+00	ORGLIB	388
46109 PD20	.570-00					0.42	ORG001	302
46109 PD21	.570-00					0.42	ORG001	303
46109 PD22	.570-00					0.42	ORG001	304
46109 PD23	.570-00					0.42	ORG001	305
47105 AG 1	.400+02	.500+01	.100-01	.260-00	.100+01	.630-00	ORGLIB	389
47105 AG 3	.400+02	.100+02	.200-03	.500-02	.200-01	.220-00	ORGLIB	390
47105 AG 4	.400+02	.150+02	.300-03	.770-02	.300-01	.290-00	ORGLIB	391
47105 AG 6	.400+02	.300+02	.500-03	.130-01	.500-01	.160-00	ORGLIB	392
47105 AG 8						.290+00	ORGLIB	393
47105 AG20	.400+02					0.29	ORG001	306
47105 AG21	.400+02					0.63	ORG001	307
47105 AG22	.400+02					0.16	ORG001	308
47105 AG23	.400+02					0.16	ORG001	309
471101AG 1	.270+03	.500+01	.100-01	.260-00	.100+01	.170+01	ORGLIB	394
471101AG 3	.270+03	.100+02	.200-03	.500-02	.200-01	.650-00	ORGLIB	395
471101AG 4	.270+03	.150+02	.300-03	.770-02	.300-01	.840-00	ORGLIB	396
471101AG 6	.270+03	.300+02	.500-03	.130-01	.500-01	.110+01	ORGLIB	397
471101AG 8						.840+00	ORGLIB	398
471101AG20	.270+03					0.84	ORG001	310
471101AG21	.270+03					1.7	ORG001	311
471101AG22	.270+03					0.51	ORG001	312
471101AG23	.270+03					0.51	ORG001	313
47111 AG 1	.750+01	.500+01	.100-01	.260-00	.100+01	.400-00	ORGLIB	399
47111 AG 3	.750+01	.100+02	.200-03	.500-02	.200-01	.370-00	ORGLIB	400
47111 AG 4	.750+01	.150+02	.300-03	.770-02	.300-01	.380-00	ORGLIB	401
47111 AG 6	.750+01	.300+02	.500-03	.130-01	.500-01	.180+01	ORGLIB	402
47111 AG 8						.380+00	ORGLIB	403
47111 AG20	.750+01					0.38	ORG001	314
47111 AG21	.750+01					0.40	ORG001	315
47111 AG22	.750+01					0.37	ORG001	316

47111 AG23	.750+01					0,37	ORG001	317
48109 CD 1	.475+03	.200+03	.250-02	.250-00	.100+01	.110+00	ORGL18	404
48109 CD 3	.475+03	.300+03	.250-03	.250-01	.100+00	.980-01	ORGL18	405
48109 CD 4	.475+03	.200+03	.190-02	.190-00	.750-00	.100+00	ORGL18	406
48109 CD 8						.100+00	ORGL18	407
48109 CD20	.475+03					0,10	ORG001	318
48109 CD21	.475+03					0,11	ORG001	319
48109 CD22	.475+03					0,092	ORG001	320
48109 CD23	.475+03					0,092	ORG001	321
481131CD 1	5,33E3	200,	2,5E-3	.25	1,	.184	ORGL18	408
481131CD 3	5,33E3	300,	2,5E-4	.025		.184	ORGL18	409
481131CD 4	5,33E3	200,	1,9E-3	.19		.184	ORGL18	410
481131CD 8	5,33E3					.184	ORGL18	411
481131CD20	5,33E3					.184	ORG004	10
481131CD21	5,33E3					.184	ORG004	11
481131CD22	5,33E3					.184	ORG004	12
481131CD23	5,33E3					.184	ORGL18	412
48115 CD 1	.220+01	.200+03	.250-02	.250-00	.100+01	.710-00	ORGL18	413
48115 CD 3	.220+01	.300+03	.250-03	.250-01	.100+00	.560-00	ORGL18	414
48115 CD 4	.220+01	.200+03	.190-02	.190-00	.750-00	.580-00	ORGL18	415
48115 CD 8						.650-18,38-16,39-15	ORGL18	416
48115 CD20	.220+01					0,38	ORG001	325
48115 CD21	.220+01					0,45	ORG001	326
48115 CD22	.220+01					0,36	ORG001	327
48115 CD23	.220+01					0,36	ORG001	328
481151CD 1	.430+02	.200+03	.250-02	.250-00	.100+01	.610-00	ORGL18	417
481151CD 3	.430+02	.300+03	.250-03	.250-01	.100+00	.610-00	ORGL18	418
481151CD 4	.430+02	.200+03	.190-02	.190-00	.750-00	.610-00	ORGL18	419
481151CD 8						.610-00,61-00,61-00	ORGL18	420
481151CD20	.430+02					0,20	ORG001	329
481151CD21	.430+02					0,26	ORG001	330
481151CD22	.430+02					0,13	ORG001	331
481151CD23	.430+02					0,18	ORG001	332
491131IN 1	.730-01	.480+02	.200-02	.250-00	.100+01	.290-00	ORGL18	421
491131IN 3	.730-01	.600+02	.800-04	.100-01	.400-01	.190-00	ORGL18	422
491131IN 4	.730-01	.580+02	.280-03	.400-01	.140-00	.210-00	ORGL18	423
491131IN 5	.730-01	.480+02	.400-04	.500-02	.200-01	.190-00	ORGL18	424
491131IN 6	.730-01	.570+02	.340-03	.400-01	.170-00	.680-00	ORGL18	425
491131IN 8						.210+00	ORGL18	426
491131IN12	.730-01	.670+02	.360-03	.500-01	.180-00	.130-00	ORGL18	427
491131IN16	.730-01	.840+01	.800-06	.100-03	.400-03	.160-00	ORGL18	428
491131IN20	.730-01					0,21	ORG001	333
491131IN21	.730-01					0,29	ORG001	334
491131IN22	.730-01					0,17	ORG001	335
491131IN23	.730-01					0,17	ORG001	336
491141IN 1	.490+02	.480+02	.200-02	.250-00	.100+01	.970-00	ORGL18	429
491141IN 3	.490+02	.600+02	.800-04	.100-01	.400-01	.930-00	ORGL18	430
491141IN 4	.490+02	.580+02	.280-03	.400-01	.140-00	.940-00	ORGL18	431
491141IN 5	.490+02	.480+02	.400-04	.500-02	.200-01	.930-00	ORGL18	432
491141IN 6	.490+02	.570+02	.340-03	.400-01	.170-00	.450+01	ORGL18	433
491141IN 8						.940+00	ORGL18	434
491141IN12	.490+02	.670+02	.360-03	.500-01	.180-00	.900-00	ORGL18	435
491141IN16	.490+02	.840+01	.800-06	.100-03	.400-03	.920-00	ORGL18	436
491141IN20	.490+02					0,94	ORG001	337
491141IN21	.490+02					0,97	ORG001	338
491141IN22	.490+02					0,93	ORG001	339
491141IN23	.490+02					0,93	ORG001	340
49115 IN 1	.220+18	.480+02	.200-02	.250-00	.100+01	.170-00	ORGL18	437
49115 IN 3	.220+18	.600+02	.800-04	.100-01	.400-01	.170-00	ORGL18	438
49115 IN 4	.220+18	.580+02	.280-03	.400-01	.140-00	.170-00	ORGL18	439

49115 IN 5	.220+18	.480+02	.400-04	.500-02	.200-01	.170-00	ORGLIB	440
49115 IN 6	.220+18	.570+02	.340-03	.400-01	.170-00	.850-00	ORGLIB	441
49115 IN 8						.170-00	ORGLIB	442
49115 IN12	.220+18	.670+02	.360-03	.500-01	.180-00	.170-00	ORGLIB	443
49115 IN16	.220+18	.840+01	.800-06	.100-03	.400-03	.170-00	ORGLIB	444
49115 IN20	.220+18					0.17	ORGLIB	341
49115 IN21	.220+18					0.17	ORGLIB	342
49115 IN22	.220+18					0.17	ORGLIB	343
49115 IN23	.220+18					0.17	ORGLIB	344
49115 IN 1	.190-00	.480+02	.200-02	.250-00	.100+01	.260-00	ORGLIB	445
49115 IN 3	.190-00	.600+02	.800-04	.100-01	.400-01	.190-00	ORGLIB	446
49115 IN 4	.190-00	.580+02	.280-03	.400-01	.140-00	.200-00	ORGLIB	447
49115 IN 5	.190-00	.480+02	.400-04	.500-02	.200-01	.190-00	ORGLIB	448
49115 IN 6	.190-00	.570+02	.340-03	.400-01	.170-00	.740-00	ORGLIB	449
49115 IN 8						.773-18,39-16,39-15	ORGLIB	450
49115 IN12	.190-00	.670+02	.360-03	.500-01	.180-00	.140-00	ORGLIB	451
49115 IN16	.190-00	.840+01	.800-06	.100-03	.400-03	.160-00	ORGLIB	452
49115 IN20	.190-00					0.20	ORGLIB	345
49115 IN21	.190-00					0.20	ORGLIB	346
49115 IN22	.190-00					0.18	ORGLIB	347
49115 IN23	.190-00					0.18	ORGLIB	348
50113 SN 1	.112+03	.350+02	.500-01	.280-00	.100+01	.320-00	ORGLIB	453
50113 SN 4	.112+03	.700+02	.500-03	.280-02	.100-01	.230-00	ORGLIB	454
50113 SN 6	.112+03	.100+03	.200-01	.800-01	.300-01	.700-00	ORGLIB	455
50113 SN 8						.220-00,23-00,23-00	ORGLIB	456
50113 SN15	.112+03	.350+02	.800-04	.440-03	.160-02	.160-00	ORGLIB	457
50113 SN16	.112+03	.700+02	.500-05	.280-04	.100-03	.160-00	ORGLIB	458
50113 SN20	.112+03					0.028	ORGLIB	349
50113 SN21	.112+03					0.028	ORGLIB	350
50113 SN22	.112+03					0.018	ORGLIB	351
50113 SN23	.112+03					0.018	ORGLIB	352
50125 SN 1	.950+01	.350+02	.500-01	.280-00	.100+01	.940-00	ORGLIB	459
50125 SN 4	.950+01	.700+02	.500-03	.280-02	.100-01	.940-00	ORGLIB	460
50125 SN 6	.950+01	.100+03	.200-01	.800-02	.300-00	.480+01	ORGLIB	461
50125 SN 8						.930-00,94-00,10+01	ORGLIB	462
50125 SN15	.950+01	.350+02	.800-04	.440-03	.160-02	.940-00	ORGLIB	463
50125 SN16	.950+01	.700+02	.500-05	.280-04	.100-03	.930-00	ORGLIB	464
50125 SN20	.950+01					0.93	ORGLIB	353
50125 SN21	.950+01					0.93	ORGLIB	354
50125 SN22	.950+01					0.93	ORGLIB	355
50125 SN23	.950+01					0.93	ORGLIB	356
50126 SN 1	3.65E7	35.	.05	.28	1.	1.3	ORGLIB	465
50126 SN 4	3.65E7	70.	.0005	.0028	.0016	1.1	ORGLIB	466
50126 SN 6	3.65E7	100.	.02	.08	.3	4.	ORGLIB	467
50126 SN 8	3.65E7					1.1 1.1 1.1	ORGLIB	468
50126 SN16	3.65E7	70.	6.E-6	2.8E-5	.0001	.38	ORGLIB	469
50126 SN20	3.65+08					1.1	ORGLIB	357
50126 SN21	3.65+08					1.3	ORGLIB	358
50126 SN22	3.65+00					0.2	ORGLIB	359
50126 SN23	3.65+08					0.2	ORGLIB	360
51122 SB 1	.280+01	.380+02	.300-01	.270-00	.100+01	.820-00	ORGLIB	471
51122 SB 4	.280+01	.380+02	.600-04	.500-03	.200-02	.670-00	ORGLIB	472
51122 SB 6	.280+01	.100+03	.300-02	.300-01	.100-01	.270+01	ORGLIB	473
51122 SB 8	.280+01	.100+03	.900-03	.300-02	.300-01	.670-00	ORGLIB	474
51122 SB16	.280+01	.400+01	.900-06	.300-05	.300-04	.590-00	ORGLIB	475
51122 SB20	.280+01					0.67	ORGLIB	361
51122 SB21	.280+01					0.82	ORGLIB	362
51122 SB22	.280+01					0.61	ORGLIB	363
51122 SB23	.280+01					0.61	ORGLIB	364
51124 SB 1	.600+02	.380+02	.300-01	.270-00	.100+01	.160+01	ORGLIB	476

51124	SB 4	.600+02	.380+02	.600+04	.500-03	.200-02	.920-00	ORGL18	477
51124	SB 6	.600+02	.100+03	.300-02	.300-01	.100+00	.230+01	ORGL18	478
51124	SB 8	.600+02	.100+03	.900-03	.800-02	.300-01	.920-00	ORGL18	479
51124	SB16	.600+02	.400+01	.900-06	.800-05	.300-04	.570-00	ORGL18	480
51124	SB20	.600+02					0.92	ORG001	365
51124	SB21	.600+02					1.6	ORG001	366
51124	SB22	.600+02					0.68	ORG001	367
51124	SB23	.600+02					0.68	ORG001	368
51125	SB 1	.877+03	.380+02	.300-01	.270-00	.100+01	.340-00	ORGL18	481
51125	SB 4	.877+03	.380+02	.600+06	.500-03	.200-02	.230-00	ORGL18	482
51125	SB 6	.877+03	.100+03	.300-02	.300-01	.100+00	.690-00	ORGL18	483
51125	SB 8						.211-00,23-00,26-00	ORGL18	484
51125	SB16	.877+03	.400+01	.900+06	.800-05	.300-04	.150-00	ORGL18	485
51125	SB20	.877+03					0.21	ORG001	369
51125	SB21	.877+03					0.43	ORG001	370
51125	SB22	.877+03					0.13	ORG001	371
51125	SB23	.877+03					0.13	ORG001	372
51126	SB 1	12.4	.38	.03	.27	1.	1.4	ORGL18	486
51126	SB 4	12.4	.38	6,E-5	5,E-4	.002	.96	ORGL18	487
51126	SB 6	12.4	100.	.003	.03	.1	3.3	ORGL18	488
51126	SB 8	12.4					.96	ORGL18	489
51126	SB16	12.4	4.	9,E-7	8,E-6	.00003	.96 .96	ORGL18	490
51126	SB20	12.4+02					0.96	ORG001	373
51126	SB21	12.4+02					1.4	ORG001	374
51126	SB22	12.4+02					0.78	ORG001	375
51126	SB23	12.4					.78	ORG005	1
521251TE 1		.580+02	.150+02	.250-00	.380-00	.100+01	.150-00	ORGL18	492
521251TE 3		.580+02	.300+02	.200-01	.300-01	.700-01	.140-00	ORGL18	493
521251TE 4		.580+02	.300+02	.100-01	.200-01	.500-01	.140-00	ORGL18	494
521251TE 5		.580+02	.300+02	.250-02	.380-02	.100-01	.140-00	ORGL18	495
521251TE 6		.580+02	.300+02	.230-01	.340-01	.900-01	.510-00	ORGL18	496
521251TE 8							.140+00	ORGL18	497
521251TE10		.580+02	.300+02	.750-03	.110-02	.300-02	.110+00	ORGL18	498
521251TE16		.580+02	.900+01	.250-03	.380-03	.300-00	.110+00	ORGL18	499
521251TE20		.580+02					0.14	ORG001	376
521251TE21		.580+02					0.15	ORG001	377
521251TE22		.580+02					0.13	ORG001	378
521251TE23		.580+02					0.13	ORG001	379
52127 TE 1		.390-00	.150+02	.250-00	.380-00	.100+01	.240-00	ORGL18	500
52127 TE 3		.390-00	.300+02	.200-01	.300-01	.700-01	.240-00	ORGL18	501
52127 TE 4		.390-00	.300+02	.100-01	.200-01	.500-01	.240-00	ORGL18	502
52127 TE 5		.390-00	.300+02	.250-02	.380-02	.100-01	.240-00	ORGL18	503
52127 TE 6		.390-00	.300+02	.230-01	.340-01	.900-01	.120+01	ORGL18	504
52127 TE 8							.240+00	ORGL18	505
52127 TE10		.390-00	.300+02	.750-03	.110-02	.300-02	.240-00	ORGL18	506
52127 TE16		.390-00	.900+01	.250-03	.380-03	.300-00	.240-00	ORGL18	507
52127 TE20		.390-00					0.24	ORG001	380
52127 TE21		.390-00					0.24	ORG001	381
52127 TE22		.390-00					0.24	ORG001	382
52127 TE23		.390-00					0.24	ORG001	383
521271TE 1		.105+03	.150+02	.250-00	.380-00	.100+01	.320-00	ORGL18	508
521271TE 3		.105+03	.300+02	.200-01	.300-01	.700-01	.320-00	ORGL18	509
521271TE 4		.105+03	.300+02	.100-01	.200-01	.500-01	.320-00	ORGL18	510
521271TE 5		.105+03	.300+02	.250-02	.380-02	.100-01	.320-00	ORGL18	511
521271TE 6		.105+03	.300+02	.230-01	.340-01	.900-01	.150+01	ORGL18	512
521271TE 8							.256-00,32-00,32-00	ORGL18	513
521271TE10		.105+03	.300+02	.750-03	.110-02	.300-02	.310-00	ORGL18	514
521271TE16		.105+03	.900+01	.250-03	.380-03	.300-00	.300-00	ORGL18	515
521271TE20		.105+03					0.083	ORG001	384
521271TE21		.105+03					0.089	ORG001	385

521271TE22	.105+03					0,076	ORG001	386
521271TE23	.105+03					0,076	ORG001	387
52129 TE 1	.510+01	.150+02	.250+00	.380+00	.100+01	.980+00	ORGL18	516
52129 TE 3	.510+01	.300+02	.200+01	.300+01	.700+01	.680+00	ORGL18	517
52129 TE 4	.510+01	.300+02	.100+01	.200+01	.500+01	.730+00	ORGL18	518
52129 TE 5	.510+01	.300+02	.250+02	.380+02	.100+01	.680+00	ORGL18	519
52129 TE 6	.510+01	.300+02	.230+01	.340+01	.900+01	.280+01	ORGL18	520
52129 TE 8						.730+00,73+00,73+00	ORGL18	521
52129 TE10	.510+01	.300+02	.750+03	.110+02	.300+02	.600+00	ORGL18	522
52129 TE16	.510+01	.900+01	.250+03	.380+03	.300+00	.600+00	ORGL18	523
52129 TE20	.510+01					0,73	ORG001	388
52129 TE21	.510+01					0,98	ORG001	389
52129 TE22	.510+01					0,64	ORG001	390
52129 TE23	.510+01					0,64	ORG001	391
521291TE 1	.330+02	.150+02	.250+00	.380+00	.100+01	.110+01	ORGL18	524
521291TE 3	.330+02	.300+02	.200+01	.300+01	.700+01	.780+00	ORGL18	525
521291TE 4	.330+02	.300+02	.100+01	.200+01	.500+01	.830+00	ORGL18	526
521291TE 5	.330+02	.300+02	.250+02	.380+02	.100+01	.780+00	ORGL18	527
521291TE 6	.330+02	.300+02	.230+01	.340+01	.900+01	.320+01	ORGL18	528
521291TE 8						.795+00,A3+00,A3+00	ORGL18	529
521291TE10	.330+02	.300+02	.750+03	.110+02	.300+02	.690+00	ORGL18	530
521291TE16	.330+02	.900+01	.250+03	.380+03	.300+00	.680+00	ORGL18	531
521291TE20	.330+02					0,10	ORG001	392
521291TE21	.330+02					0,11	ORG001	393
521291TE22	.330+02					0,093	ORG001	394
521291TE23	.330+02					0,093	ORG001	395
521311TE 1	.125+01	.150+02	.250+00	.380+00	.100+01	.160+01	ORGL18	532
521311TE 3	.125+01	.300+02	.200+01	.300+01	.700+01	.810+00	ORGL18	533
521311TE 4	.125+01	.300+02	.100+01	.200+01	.500+01	.970+00	ORGL18	534
521311TE 5	.125+01	.300+02	.250+02	.380+02	.100+01	.800+00	ORGL18	535
521311TE 6	.125+01	.300+02	.230+01	.340+01	.900+01	.260+01	ORGL18	536
521311TE 8						.763+00,99+00,10+01	ORGL18	537
521311TE16	.125+01	.900+01	.250+03	.380+03	.300+00	.690+00	ORGL18	538
521311TE20	.125+01					0,73	ORG001	396
521311TE21	.125+01					1,2	ORG001	397
521311TE22	.125+01					0,55	ORG001	398
521311TE23	.125+01					0,55	ORG001	399
52132 TE 1	.320+01	.150+02	.250+00	.380+00	.100+01	.190+01	ORGL18	539
52132 TE 3	.320+01	.300+02	.200+01	.300+01	.700+01	.900+00	ORGL18	540
52132 TE 4	.320+01	.300+02	.100+01	.200+01	.500+01	.110+01	ORGL18	541
52132 TE 5	.320+01	.300+02	.250+02	.380+02	.100+01	.960+00	ORGL18	542
52132 TE 6	.320+01	.300+02	.230+01	.340+01	.900+01	.310+01	ORGL18	543
52132 TE 8						.104+01,11+01,11+01	ORGL18	544
52132 TE10	.320+01	.300+02	.750+03	.110+02	.300+02	.730+00	ORGL18	545
52132 TE16	.320+01	.900+01	.250+03	.380+03	.300+00	.160+00	ORGL18	546
52132 TE20	.125+01					0,13	ORG001	400
52132 TE21	.125+01					0,21	ORG001	401
52132 TE22	.125+01					0,10	ORG001	402
52132 TE23	.125+01					0,10	ORG001	403
53126 I 1	.133+02	.138+03	.100+01	.750+00	.100+01	.230+00	ORGL18	547
53126 I 8						.180+01	ORGL18	548
53126 I16	.133+02	.138+03	.300+00	.230+00	.300+00	.160+00	ORGL18	549
53126 I20	.133+02					0,18	ORG001	404
53126 I21	.133+02					0,23	ORG001	405
53126 I22	.133+02					0,17	ORG001	406
53126 I23	.133+02					0,17	ORG001	407
53129 I 1	.630+10	.138+03	.100+01	.750+00	.100+01	.890+01	ORGL18	550
53129 I 3	.630+10	.700+01	.400+01	.300+01	.400+01	.210+09	ORGL18	551
53129 I 4	.630+10	.700+01	.120+09	.700+01	.120+09	.400+09	ORGL18	552
53129 I 5	.630+10	.700+01	.500+02	.580+02	.500+02	.170+09	ORGL18	553

53129	I 6	.630+10	.140+02	.700+01	.530+01	.700+01	.960+10	ORGLIB	554
53129	I 8						.820+01	ORGLIB	555
53129	I 10	.630+10	.700+01	.500+02	.380+02	.500+02	.150+09	ORGLIB	556
53129	I 16	.630+10	.138+03	.300+00	.230+00	.300+00	.680+01	ORGLIB	557
53129	I 20	.630+10					0.082	ORG001	408
53129	I 21	.630+10					0.089	ORG001	409
53129	I 22	.630+10					0.073	ORG001	410
53129	I 23	.630+10					0.073	ORG001	411
53131	I 1	.805+01	.138+03	.100+01	.750+00	.100+01	.440+00	ORGLIB	558
53131	I 8						.300+00	ORGLIB	559
53131	I 16	.805+01	.138+03	.300+00	.230+00	.300+00	.230+00	ORGLIB	560
53131	I 20	.805+01					0.30	ORG001	412
53131	I 21	.805+01					0.44	ORG001	413
53131	I 22	.805+01					0.25	ORG001	414
53131	I 23	.805+01					0.25	ORG001	415
53132	I 1	.970+01	.138+03	.100+01	.750+00	.100+01	.170+01	ORGLIB	561
53132	I 3	.970+01	.700+01	.400+01	.300+01	.400+01	.850+00	ORGLIB	562
53132	I 4	.970+01	.700+01	.120+00	.900+01	.120+00	.990+00	ORGLIB	563
53132	I 5	.970+01	.700+01	.500+02	.380+02	.500+02	.850+00	ORGLIB	564
53132	I 6	.970+01	.140+02	.700+01	.530+01	.700+01	.270+01	ORGLIB	565
53132	I 8						.100+00	ORGLIB	566
53132	I 10	.970+01	.700+01	.500+02	.380+02	.500+02	.640+00	ORGLIB	567
53132	I 16	.970+01	.138+03	.300+00	.230+00	.300+00	.650+00	ORGLIB	568
53132	I 20	.970+01					1.0	ORG001	416
53132	I 21	.970+01					1.7	ORG001	417
53132	I 22	.970+01					0.76	ORG001	418
53132	I 23	.970+01					0.76	ORG001	419
53133	I 1	.870+00	.138+03	.100+01	.750+00	.100+01	.840+00	ORGLIB	569
53133	I 8						.866+00,78+00,80+00	ORGLIB	570
53133	I 16	.870+00	.138+03	.300+00	.230+00	.300+00	.540+00	ORGLIB	571
53133	I 20	.870+00					0.64	ORG001	420
53133	I 21	.870+00					0.84	ORG001	421
53133	I 22	.870+00					0.57	ORG001	422
53133	I 23	.870+00					0.57	ORG001	423
53134	I 1	.360+01	.138+03	.100+01	.750+00	.100+01	.150+01	ORGLIB	572
53134	I 8						.110+01	ORGLIB	573
53134	I 16	.360+01	.138+03	.300+00	.230+00	.300+00	.820+00	ORGLIB	574
53134	I 20	.360+01					1.1	ORG001	424
53134	I 21	.360+01					1.5	ORG001	425
53134	I 22	.360+01					0.90	ORG001	426
53134	I 23	.360+01					0.90	ORG001	427
53135	I 1	.280+00	.138+03	.100+01	.750+00	.100+01	.130+01	ORGLIB	575
53135	I 8						.990+00,11+01,11+01	ORGLIB	576
53135	I 16	.280+00	.138+03	.300+00	.230+00	.300+00	.520+00	ORGLIB	577
53135	I 20	.280+00					0.70	ORG001	428
53135	I 21	.280+00					0.12	ORG001	429
53135	I 22	.280+00					0.54	ORG001	430
53135	I 23	.280+00					0.54	ORG001	431
55131	CS 1	.100+02	.700+02	.100+01	.750+00	.100+01	.290+01	ORGLIB	578
55131	CS 3	.100+02	.420+02	.100+01	.750+02	.100+01	.210+01	ORGLIB	579
55131	CS 4	.100+02	.900+02	.700+01	.500+01	.700+01	.240+01	ORGLIB	580
55131	CS 5	.100+02	.960+02	.500+02	.380+02	.500+02	.210+01	ORGLIB	581
55131	CS 6	.100+02	.140+03	.400+01	.300+01	.400+01	.170+01	ORGLIB	582
55131	CS 8	.100+02	.140+03	.300+02	.230+02	.300+02	.240+01	ORGLIB	583
55131	CS 14	.100+02	.140+03	.400+00	.300+00	.400+00	.290+01	ORGLIB	584
55131	CS 20	.100+02					0.024	ORG001	432
55131	CS 21	.100+02					0.029	ORG001	433
55131	CS 22	.100+02					0.017	ORG001	434
55131	CS 23	.100+02					0.017	ORG001	435
55134	CS 1	.840+03	.700+02	.100+01	.750+00	.100+01	.110+01	ORGLIB	585

55134 CS 3	.840+03	.420+02	.100-01	.750-02	.100-01	.460-00	ORGLIB	586
55134 CS 4	.840+03	.900+02	.700-01	.500-01	.700-01	.570-00	ORGLIB	587
55134 CS 5	.840+03	.980+02	.500-02	.380-02	.500-02	.460-00	ORGLIB	588
55134 CS 6	.840+03	.140+03	.400-01	.300-01	.400-01	.990-00	ORGLIB	589
55134 CS 8	.840+03	.140+03	.300-02	.230-02	.300-02	.570-00	ORGLIB	590
55134 CS14	.840+03	.140+03	.400-00	.300-00	.400-00	.110+01	ORGLIB	591
55134 CS20	.840+03					0.57	ORGLIB	436
55134 CS21	.840+03					1.1	ORGLIB	437
55134 CS22	.840+03					0.38	ORGLIB	438
55134 CS23	.840+03					0.38	ORGLIB	439
551341CS 1	.130-00	.700+02	.100+01	.750-00	.100+01	.190-00	ORGLIB	592
551341CS 3	.130-00	.420+02	.100-01	.750-02	.100-01	.110+00	ORGLIB	593
551341CS 4	.130-00	.900+02	.700-01	.500-01	.700-01	.150-00	ORGLIB	594
551341CS 5	.130-00	.980+02	.500-02	.380-02	.500-02	.130-00	ORGLIB	595
551341CS 6	.130-00	.140+03	.400-01	.300-01	.400-01	.490-00	ORGLIB	596
551341CS 8						.927-01, 12+00, 30-00	ORGLIB	597
551341CS14	.130-00	.140+03	.400-00	.300-00	.400-00	.260-00	ORGLIB	598
551341CS20	.130-00					0.092	ORGLIB	440
551341CS21	.130-00					0.011	ORGLIB	441
551341CS22	.130-00					0.083	ORGLIB	442
551341CS23	.130-00					0.083	ORGLIB	443
55135 CS 1	.110+10	.700+02	.100+01	.750-00	.100+01	.660-01	ORGLIB	599
55135 CS 3	.110+10	.420+02	.100-01	.750-02	.100-01	.660-01	ORGLIB	600
55135 CS 4	.110+10	.900+02	.700-01	.500-01	.700-01	.660-01	ORGLIB	601
55135 CS 5	.110+10	.980+02	.500-02	.380-02	.500-02	.660-01	ORGLIB	602
55135 CS 6	.110+10	.140+03	.400-01	.300-01	.400-01	.330-00	ORGLIB	603
55135 CS 8	.110+10	.140+03	.300-02	.230-02	.300-02	.660-01	ORGLIB	604
55135 CS14	.110+10	.140+03	.400-00	.300-00	.400-00	.660-01	ORGLIB	605
55135 CS20	.110+10					0.066	ORGLIB	444
55135 CS21	.110+10					0.066	ORGLIB	445
55135 CS22	.110+10					0.066	ORGLIB	446
55135 CS23	.110+10					0.066	ORGLIB	447
55136 CS 1	.130+02	.700+02	.100+01	.750-00	.100+01	.650-00	ORGLIB	606
55136 CS 3	.130+02	.420+02	.100-01	.750-02	.100-01	.290-00	ORGLIB	607
55136 CS 4	.130+02	.900+02	.700-01	.500-01	.700-01	.350-00	ORGLIB	608
55136 CS 5	.130+02	.980+02	.500-02	.380-02	.500-02	.290-00	ORGLIB	609
55136 CS 6	.130+02	.140+03	.400-01	.300-01	.400-01	.720-00	ORGLIB	610
55136 CS 8	.130+02	.140+03	.300-02	.230-02	.300-02	.350-00	ORGLIB	611
55136 CS14	.130+02	.140+03	.400-00	.300-00	.400-00	.650-00	ORGLIB	612
55136 CS20	.130+02					0.35	ORGLIB	448
55136 CS21	.130+02					0.65	ORGLIB	449
55136 CS22	.130+02					0.24	ORGLIB	450
55136 CS23	.130+02					0.24	ORGLIB	451
55137 CS 1	.110+05	.700+02	.100+01	.750-00	.100+01	.590-00	ORGLIB	613
55137 CS 3	.110+05	.420+02	.100-01	.750-02	.100-01	.370-00	ORGLIB	614
55137 CS 4	.110+05	.900+02	.700-01	.500-01	.700-01	.410-00	ORGLIB	615
55137 CS 5	.110+05	.980+02	.500-02	.380-02	.500-02	.370-00	ORGLIB	616
55137 CS 6	.110+05	.140+03	.400-01	.300-01	.400-01	.140+01	ORGLIB	617
55137 CS 8	.110+05	.140+03	.300-02	.230-02	.300-02	.410-00	ORGLIB	618
55137 CS14	.110+05	.140+03	.400-00	.300-00	.400-00	.590-00	ORGLIB	619
55137 CS20	.110+05					0.41	ORGLIB	452
55137 CS21	.110+05					0.59	ORGLIB	453
55137 CS22	.110+05					0.34	ORGLIB	454
55137 CS23	.110+05					0.34	ORGLIB	455
56131 BA 1	.116+02	.650+02	.500-01	.280-00	.100+01	.380-00	ORGLIB	620
56131 BA 3	.116+02	.850+01	.500-05	.280-04	.100-03	.140-00	ORGLIB	621
56131 BA 4	.116+02	.975+03	.300-04	.170-03	.600-03	.190-00	ORGLIB	622
56131 BA 5	.116+02	.130+02	.250-05	.140-04	.500-04	.140-00	ORGLIB	623
56131 BA 6	.116+02	.650+02	.350-01	.170-00	.700-00	.110+00	ORGLIB	624
56131 BA 8						.172-00, 19-00, 19-00	ORGLIB	625

56131	BA14	.116+02	.200+04	.150+03	.830+03	.300+02	.380+00	ORGLIB	626
56131	BA20	.116+02					0.17	ORG001	456
56131	BA21	.116+02					0.35	ORG001	457
56131	BA22	.116+02					0.093	ORG001	458
56131	BA23	.116+02					0.093	ORG001	459
56140	BA 1	.128+02	.650+02	.500+01	.280+00	.100+01	.230+01	ORGLIB	627
56140	BA 3	.128+02	.850+01	.500+05	.280+04	.100+03	.120+01	ORGLIB	628
56140	HA 4	.128+02	.975+03	.300+04	.170+03	.600+03	.140+01	ORGLIB	629
56140	BA 5	.128+02	.130+02	.250+05	.140+04	.500+04	.120+01	ORGLIB	630
56140	BA 6	.128+02	.650+02	.350+00	.190+00	.700+00	.420+01	ORGLIB	631
56140	BA 8						.751+00,14+01,14+01	ORGLIB	632
56140	BA14	.128+02	.200+04	.150+03	.830+03	.300+02	.230+01	ORGLIB	633
56140	BA20	.128+02					0.34	ORG001	460
56140	BA21	.128+02					0.40	ORG001	461
56140	BA22	.128+02					0.32	ORG001	462
56140	BA23	.128+02					0.32	ORG001	463
57140	LA 1	.168+01	.500+03	.100+03	.250+00	.100+01	.190+01	ORGLIB	634
57140	LA 4	.168+01	.400+03	.150+04	.400+01	.150+00	.110+01	ORGLIB	635
57140	LA 6	.168+01	.100+04	.400+04	.100+00	.400+00	.270+01	ORGLIB	636
57140	LA 8						.110+01	ORGLIB	637
57140	LA20	.168+01					1.1	ORG001	464
57140	LA21	.168+01					1.9	ORG001	465
57140	LA22	.168+01					0.80	ORG001	466
57140	LA23	.168+01					0.80	ORG001	467
58141	CE 1	.320+02	.563+03	.100+03	.250+00	.100+01	.210+00	ORGLIB	638
58141	CE 3	.320+02	.563+03	.200+05	.500+02	.200+01	.180+00	ORGLIB	639
58141	CE 4	.320+02	.293+03	.250+04	.600+01	.250+00	.180+00	ORGLIB	640
58141	CE 6	.320+02	.150+04	.300+04	.750+01	.300+00	.810+00	ORGLIB	641
58141	CE 8						.180+00	ORGLIB	642
58141	CE20	.320+02					0.18	ORG001	468
58141	CE21	.320+02					0.21	ORG001	469
58141	CE22	.320+02					0.17	ORG001	470
58141	CE23	.320+02					0.17	ORG001	471
58143	CE 1	.133+01	.563+03	.100+03	.250+00	.100+01	.970+00	ORGLIB	643
58143	CE 3	.133+01	.563+03	.200+05	.500+02	.200+01	.820+00	ORGLIB	644
58143	CE 4	.133+01	.293+03	.250+04	.600+01	.250+00	.850+00	ORGLIB	645
58143	CE 6	.133+01	.150+04	.300+04	.750+01	.300+00	.380+01	ORGLIB	646
58143	CE 8						.562+00,79+00,85+00	ORGLIB	647
58143	CE20	.133+01					0.54	ORG001	472
58143	CE21	.133+01					0.66	ORG001	473
58143	CE22	.133+01					0.49	ORG001	474
58143	CE23	.133+01					0.49	ORG001	475
58144	CE 1	.290+03	.563+03	.100+03	.250+00	.100+01	.130+01	ORGLIB	648
58144	CE 3	.290+03	.563+03	.200+05	.500+02	.200+01	.130+01	ORGLIB	649
58144	CE 4	.290+03	.293+03	.250+04	.600+01	.250+00	.130+01	ORGLIB	650
58144	CE 6	.290+03	.150+04	.300+04	.750+01	.300+00	.630+01	ORGLIB	651
58144	CE 8						.130+01,13+01,13+01	ORGLIB	652
58144	CE20	.290+03					1.3	ORG001	476
58144	CE21	.290+03					1.3	ORG001	477
58144	CE22	.290+03					1.3	ORG001	478
58144	CE23	.290+03					1.3	ORG001	479
59142	PR 1	.800+00	.750+03	.100+03	.250+00	.100+01	.850+00	ORGLIB	653
59142	PR 3	.800+00	.750+03	.200+05	.500+02	.200+01	.810+00	ORGLIB	654
59142	PR 4	.800+00	.375+03	.200+04	.500+01	.200+00	.810+00	ORGLIB	655
59142	PR 6	.800+00	.150+04	.400+04	.100+00	.400+00	.370+01	ORGLIB	656
59142	PR 8						.810+00	ORGLIB	657
59142	PR20	.800+00					0.81	ORG001	480
59142	PR21	.800+00					0.85	ORG001	481
59142	PR22	.800+00					0.80	ORG001	482
59142	PR23	.800+00					0.80	ORG001	483

59143 PR 1	.137+02	.750+02	.100-03	.250-00	.100+01	.320-00	ORGLIB	658
59143 PR 3	.137+02	.750+03	.200-05	.500-02	.200-01	.320-00	ORGLIB	659
59143 PR 4	.137+02	.375+03	.200-04	.500-01	.200-00	.320-00	ORGLIB	660
59143 PR 6	.137+02	.150+04	.400-04	.100+00	.400-00	.160+01	ORGLIB	661
59143 PR 8						.320+00	ORGLIB	662
59143 PR20	.137+02					0.32	ORG001	484
59143 PR21	.137+02					0.32	ORG001	485
59143 PR22	.137+02					0.32	ORG001	486
59143 PR23	.137+02					0.32	ORG001	487
60144 ND 1	.730+08	.656+03	.100-03	.250-00	.100+01	.200+02	ORGLIB	663
60144 ND 3	.730+08	.656+03	.500-05	.100-01	.500-01	.200+02	ORGLIB	664
60144 ND 4	.730+08	.131+03	.500-04	.130-00	.500-00	.200+02	ORGLIB	665
60144 ND 6	.730+08	.150+04	.350-04	.900-01	.350-00	.100+03	ORGLIB	666
60144 ND 8						.200+02	ORGLIB	667
60144 ND20	.730+08					0.19	ORG001	488
60144 ND21	.730+08					0.19	ORG001	489
60144 ND22	.730+08					0.19	ORG001	490
60144 ND23	.730+08					0.19	ORG001	491
60147 ND 1	.113+02	.656+03	.100-03	.250-00	.100+01	.400-00	ORGLIB	668
60147 ND 3	.113+02	.656+03	.500-05	.100-01	.500-01	.310-00	ORGLIB	669
60147 ND 4	.113+02	.131+03	.500-04	.130-00	.500-00	.320-00	ORGLIB	670
60147 ND 6	.113+02	.150+04	.350-04	.900-01	.350-00	.140+01	ORGLIB	671
60147 ND 8						.290-00, 29-00, 31-00	ORGLIB	672
60147 ND20	.113+02					0.29	ORG001	492
60147 ND21	.113+02					0.37	ORG001	493
60147 ND22	.113+02					0.26	ORG001	494
60147 ND23	.113+02					0.26	ORG001	495
60149 ND 1	.830-01	.656+03	.100-03	.250-00	.100+01	.110+01	ORGLIB	673
60149 ND 3	.830-01	.656+03	.500-05	.100-01	.500-01	.970-00	ORGLIB	674
60149 ND 4	.830-01	.131+03	.500-04	.130-00	.500-00	.990-00	ORGLIB	675
60149 ND 6	.830-01	.150+04	.350-04	.900-01	.350-00	.470+01	ORGLIB	676
60149 ND 8						.688-00, 77-00, 77-00	ORGLIB	677
60149 ND20	.830-01					0.55	ORG001	496
60149 ND21	.830-01					0.55	ORG001	497
60149 ND22	.830-01					0.55	ORG001	498
60149 ND23	.830-01					0.55	ORG001	499
61147 PM 1	.920+03	.656+03	.100-03	.250-00	.100+01	.690-01	ORGLIB	678
61147 PM 3	.920+03	.656+03	.200-05	.500-02	.200-01	.690-01	ORGLIB	679
61147 PM 4	.920+03	.656+03	.600-05	.200-01	.600-01	.690-01	ORGLIB	680
61147 PM 6	.920+03	.150+04	.350-04	.900-01	.350-00	.350-00	ORGLIB	681
61147 PM 8						.640-01, 69-01, 69-01	ORGLIB	682
61147 PM20	.920+03					0.069	ORG001	500
61147 PM21	.920+03					0.069	ORG001	501
61147 PM22	.920+03					0.069	ORG001	502
61147 PM23	.920+03					0.069	ORG001	503
61149 PM 1	.220+01	.656+03	.100-03	.250-00	.100+01	.540-00	ORGLIB	683
61149 PM 3	.220+01	.656+03	.200-05	.500-02	.200-01	.420-00	ORGLIB	684
61149 PM 4	.220+01	.656+03	.600-05	.200-01	.600-01	.440-00	ORGLIB	685
61149 PM 6	.220+01	.150+04	.350-04	.900-01	.350-00	.190+01	ORGLIB	686
61149 PM 8						.440+00	ORGLIB	687
61149 PM20	.220+01					0.44	ORG001	504
61149 PM21	.220+01					0.54	ORG001	505
61149 PM22	.220+01					0.41	ORG001	506
61149 PM23	.220+01					0.41	ORG001	507
62147 SM 1	.480+14	.656+03	.100-03	.250-00	.100+01	.230+02	ORGLIB	688
62147 SM 3	.480+14	.656+03	.200-05	.500-02	.200-01	.230+02	ORGLIB	689
62147 SM 4	.480+14	.167+03	.350-04	.900-01	.350-00	.230+02	ORGLIB	690
62147 SM 6	.480+14	.150+04	.350-04	.900-01	.350-00	.115+03	ORGLIB	691
62147 SM 8						.230+02	ORGLIB	692
62147 SM20	.480+14					0.22	ORG001	508

62147 SM21	.480+14						0,22	ORG001	509
62147 SM22	.480+14						0,22	ORG001	510
62147 SM23	.480+14						0,22	ORG001	511
62151 SM 1	.370+05	.656+03	.100-03	.250-00	.100+01	.420-01		ORGL18	693
62151 SM 3	.370+05	.656+03	.200-05	.500-02	.200-01	.420-01		ORGL18	694
62151 SM 4	.370+05	.187+03	.350-04	.900-01	.350-00	.420-01		ORGL18	695
62151 SM 6	.370+05	.150+04	.350-04	.900-01	.350-00	.130-00		ORGL18	696
62151 SM 8						.420-01		ORGL18	697
62151 SM20	.370+05						0,042	ORG001	512
62151 SM21	.370+05						0,042	ORG001	513
62151 SM22	.370+05						0,041	ORG001	514
62151 SM23	.370+05						0,041	ORG001	515
62153 SM 1	.196+01	.656+03	.100-03	.250-00	.100+01	.300-00		ORGL18	698
62153 SM 3	.196+01	.656+03	.200-05	.500-02	.200-01	.250-00		ORGL18	699
62153 SM 4	.196+01	.187+03	.350-04	.900-01	.350-00	.260-00		ORGL18	700
62153 SM 6	.196+01	.150+04	.350-04	.900-01	.350-00	.110+01		ORGL18	701
62153 SM 8						.260+00		ORGL18	702
62153 SM20	.196+01						0,26	ORG001	516
62153 SM21	.196+01						0,30	ORG001	517
62153 SM22	.196+01						0,24	ORG001	518
62153 SM23	.196+01						0,24	ORG001	519
63152 EU 1	.470+04	.635+03	.100-03	.250-00	.100+01	.660-00		ORGL18	703
63152 EU 3	.470+04	.148+04	.300-05	.750-02	.300-01	.250-00		ORGL18	704
63152 EU 4	.470+04	.127+03	.250-04	.600-01	.250-00	.330-00		ORGL18	705
63152 EU 6	.470+04	.150+04	.360-04	.900-01	.360-00	.450-00		ORGL18	706
63152 EU 8						.330+00		ORGL18	707
63152 EU20	.470+04						0,71	ORG001	520
63152 EU21	.470+04						0,88	ORG001	521
63152 EU22	.470+04						0,65	ORG001	522
63152 EU23	.470+04						0,65	ORG001	523
63154 EU 1	.580+04	.635+03	.100-03	.250-00	.100+01	.130+01		ORGL18	708
63154 EU 3	.580+04	.148+04	.300-05	.750-02	.300-01	.760-00		ORGL18	709
63154 EU 4	.580+04	.127+03	.250-04	.600-01	.250-00	.860-00		ORGL18	710
63154 EU 6	.580+04	.150+04	.360-04	.900-01	.360-00	.270+01		ORGL18	711
63154 EU 8						.860+00		ORGL18	712
63154 EU20	.580+04						0,86	ORG001	524
63154 EU21	.580+04						1,3	ORG001	525
63154 EU22	.580+04						0,69	ORG001	526
63154 EU23	.580+04						0,69	ORG001	527
63155 EU 1	.621+03	.635+03	.100-03	.250-00	.100+01	.160-00		ORGL18	713
63155 EU 3	.621+03	.148+04	.300-05	.750-02	.300-01	.830-01		ORGL18	714
63155 EU 4	.621+03	.127+03	.250-04	.600-01	.250-00	.950-01		ORGL18	715
63155 EU 6	.621+03	.150+04	.360-04	.900-01	.360-00	.280-00		ORGL18	716
63155 EU 8						.950-01		ORGL18	717
63155 EU20	.621+03						0,095	ORG001	528
63155 EU21	.621+03						0,16	ORG001	529
63155 EU22	.621+03						0,075	ORG001	530
63155 EU23	.621+03						0,075	ORG001	531
64153 GD 1	.236+03	.550+03	.100-03	.250-00	.100+01	.170-00		ORGL18	718
64153 GD 4	.236+03	.460+03	.120-04	.300-01	.120+00	.990-01		ORGL18	719
64153 GD 6	.236+03	.100+04	.450-04	.110+00	.450-00	.230-00		ORGL18	720
64153 GD 8						.990-01		ORGL18	721
64153 GD20	.236+03						0,099	ORG001	532
64153 GD21	.236+03						0,17	ORG001	533
64153 GD22	.236+03						0,072	ORG001	534
64153 GD23	.236+03						0,072	ORG001	535
64159 GD 1	.750-00	.550+03	.100-03	.250-00	.100+01	.360-00		ORGL18	722
64159 GD 4	.750-00	.460+03	.120-04	.300-01	.120+00	.330-00		ORGL18	723
64159 GD 6	.750-00	.100+04	.450-04	.110+00	.450-00	.750-00		ORGL18	724
64159 GD 8						.330+00		ORGL18	725

64159	GD20	,750-00						0,33	ORG001	536
64159	GD21	,750-00						0,36	ORG001	537
64159	GD22	,750-00						0,32	ORG001	538
64159	GD23	,750-00						0,32	ORG001	539
65160	T8 1	,730+02	,670+03	,100-03	,250-00	,100+01	,850-00		ORGLIB	726
65160	T8 3	,730+02	,700+03	,300-05	,750-02	,300-01	,400-00		ORGLIB	727
65160	T8 6	,730+02	,100+04	,600-04	,150-00	,600-00	,110+01		ORGLIB	728
65160	T8 8						,480+00		ORGLIB	729
65160	T820	,730+02						0,48	ORG001	540
65160	T821	,730+02						0,85	ORG001	541
65160	T822	,730+02						0,34	ORG001	542
65160	T823	,730+02						0,34	ORG001	543
66165	DY 1	,970-01	,700+03	,100-03	,250-00	,100+01	,510-00		ORGLIB	730
66165	DY 4	,970-01	,500+03	,600-05	,200-01	,600-01	,390-00		ORGLIB	731
66165	DY 6	,970-01	,100+04	,600-04	,150-00	,600-00	,150+01		ORGLIB	732
66165	DY 8						,390+00		ORGLIB	733
66165	DY20	,970-01						0,39	ORG001	544
66165	DY21	,970-01						0,51	ORG001	545
66165	DY22	,970-01						0,34	ORG001	546
66165	DY23	,970-01						0,34	ORG001	547
66166	DY 1	,340+01	,700+03	,100-03	,250-00	,100+01	,790-00		ORGLIB	734
66166	DY 4	,340+01	,500+03	,600-05	,200-01	,600-01	,780-00		ORGLIB	735
66166	DY 6	,340+01	,100+03	,600-04	,150-00	,600-00	,390+01		ORGLIB	736
66166	DY 8						,423-00,77-00,78-00		ORGLIB	737
66166	DY20	,340+01						0,094	ORG001	548
66166	DY21	,340+01						0,094	ORG001	549
66166	DY22	,340+01						0,094	ORG001	550
66166	DY23	,340+01						0,094	ORG001	551
67166	HO 1	,110+01	,750+03	,100-03	,250-00	,100+01	,700-00		ORGLIB	738
67166	HO 3	,110+01	,800+03	,200-05	,500-02	,200-01	,690-00		ORGLIB	739
67166	HO 4	,110+01	,875+03	,600-05	,200-01	,600-01	,690-00		ORGLIB	740
67166	HO 6	,110+01	,100+04	,600-04	,160-00	,600-00	,340+01		ORGLIB	741
67166	HO 8						,690+00		ORGLIB	742
67166	HO20	,110+01						0,69	ORG001	552
67166	HO21	,110+01						0,70	ORG001	553
67166	HO22	,110+01						0,69	ORG001	554
67166	HO23	,110+01						0,69	ORG001	555
671661HO 1	4,38E5	750,	,0001	,25	1,		,81		ORGLIB	743
671661HO 3	4,38E5	800,	2,E-6	,005	,02		,32		ORGLIB	744
671661HO 4	4,38E5	875,	6,E-6	,02	,06		,37		ORGLIB	745
671661HO 6	4,38E5	1000,	6,4E-5	,16	,64		,4		ORGLIB	746
671661HO 8	4,38E5						,37	,37	ORGLIB	747
671661HO20	4,38+06							0,37	ORG001	556
671661HO21	4,38+06							0,81	ORG001	557
671661HO22	4,38+06							0,20	ORG001	558
671661HO23	4,38E5						,2		ORG006	1
68169	ER 1	,940+01	,650+03	,100-03	,250-00	,100+01	,370-00		ORGLIB	749
68169	ER 3	,940+01	,650+03	,200-05	,500-02	,200-01	,190-00		ORGLIB	750
68169	ER 4	,940+01	,433+03	,300-05	,750-02	,600-01	,220-00		ORGLIB	751
68169	ER 6	,940+01	,100+04	,600-04	,150-00	,600-00	,580-00		ORGLIB	752
68169	ER 8						,220+00		ORGLIB	753
68169	ER20	,940+01						0,22	ORG001	559
68169	ER21	,940+01						0,37	ORG001	560
68169	ER22	,940+01						0,17	ORG001	561
68169	ER23	,940+01						0,17	ORG001	562
68171	ER 1	,310-00	,650+03	,100-03	,250-00	,100+01	,650-00		ORGLIB	754
68171	ER 3	,310-00	,650+03	,200-05	,500-02	,200-01	,440-00		ORGLIB	755
68171	ER 6	,310-00	,100+04	,600-04	,150-00	,600-00	,200+01		ORGLIB	756
68171	ER 8						,490-00,49-00,50-00		ORGLIB	757
68171	ER20	,310-00						0,49	ORG001	563

68171 ER21	.310-00	0.64	ORG001	564
68171 ER22	.310-00	0.43	ORG001	565
68171 ER23	.310-00	0.43	ORG001	566
69170 TM 1	.127+03 .675+03 .100-03 .250-00 .100+01 .340-00		ORGLIB	758
69170 TM 3	.127+03 .335+03 .200-05 .500-02 .200-01 .340-00		ORGLIB	759
69170 TM 6	.127+03 .100+04 .650-04 .160-00 .650-00 .170+01		ORGLIB	760
69170 TM 8		.340+00	ORGLIB	761
69170 TM20	.127+03	0.34	ORG001	567
69170 TM21	.127+03	0.34	ORG001	568
69170 TM22	.127+03	0.34	ORG001	569
69170 TM23	.127+03	0.34	ORG001	570
69171 TM 1	.694+03 .675+03 .100-03 .250-00 .100+01 .300-01		ORGLIB	762
69171 TM 3	.694+03 .335+03 .200-05 .500-02 .200-01 .300-01		ORGLIB	763
69171 TM 6	.694+03 .100+04 .650-04 .160-00 .650-00 .150-00		ORGLIB	764
69171 TM 8		.300-01	ORGLIB	765
69171 TM20	.694+03	0.030	ORG001	571
69171 TM21	.694+03	0.030	ORG001	572
69171 TM22	.694+03	0.030	ORG001	573
69171 TM23	.694+03	0.030	ORG001	574
70175 YB 1	.410+01 .685+03 .100-03 .250-00 .100+01 .160-00		ORGLIB	766
70175 YB 3	.410+01 .685+03 .500-05 .130-01 .500-01 .150-00		ORGLIB	767
70175 YB 6	.410+01 .100+04 .580-04 .150-00 .580-00 .710-00		ORGLIB	768
70175 YB 8		.150+00	ORGLIB	769
70175 YB20	.410+01	0.15	ORG001	575
70175 YB21	.410+01	0.16	ORG001	576
70175 YB22	.410+01	0.15	ORG001	577
70175 YB23	.410+01	0.15	ORG001	578
71177 LU 1	.670+01 .750+03 .100-03 .250-00 .100+01 .170-00		ORGLIB	770
71177 LU 3	.670+01 .750+03 .100-05 .250-02 .100-01 .160-00		ORGLIB	771
71177 LU 6	.670+01 .100+04 .680-04 .170-00 .680-00 .760-00		ORGLIB	772
71177 LU 8		.160+00	ORGLIB	773
71177 LU20	.670+01	0.16	ORG001	579
71177 LU21	.670+01	0.17	ORG001	580
71177 LU22	.670+01	0.16	ORG001	581
71177 LU23	.670+01	0.16	ORG001	582
72181 HF 1	.460+02 .563+03 .100-03 .250-00 .100+01 .500-00		ORGLIB	774
72181 HF 3	.460+02 .563+03 .200-05 .500-02 .200-01 .250-00		ORGLIB	775
72181 HF 4	.460+02 .625+03 .450-04 .110+00 .450-00 .290-00		ORGLIB	776
72181 HF 5	.460+02 .350+03 .130-04 .300-01 .130-00 .250-00		ORGLIB	777
72181 HF 6	.460+02 .600+03 .150-04 .400-01 .150-00 .740-00		ORGLIB	778
72181 HF 8		.290+00	ORGLIB	779
72181 HF20	.460+02	0.29	ORG001	583
72181 HF21	.460+02	0.50	ORG001	584
72181 HF22	.460+02	0.22	ORG001	585
72181 HF23	.460+02	0.22	ORG001	586
73182 TA 1	.112+03 .240+03 .100-03 .250-00 .100+01 .110+01		ORGLIB	780
73182 TA 3	.112+03 .406+03 .300-05 .750-02 .300-01 .450-00		ORGLIB	781
73182 TA 4	.112+03 .400+03 .300-04 .800-01 .300-00 .560-00		ORGLIB	782
73182 TA 5	.112+03 .240+03 .100-05 .250-02 .100-01 .450-00		ORGLIB	783
73182 TA 6	.112+03 .300+03 .200-04 .500-01 .200-00 .100+01		ORGLIB	784
73182 TA 8		.560+00	ORGLIB	785
73182 TA20	.112+03	0.56	ORG001	587
73182 TA21	.112+03	1.1	ORG001	588
73182 TA22	.112+03	0.38	ORG001	589
73182 TA23	.112+03	0.38	ORG001	590
74181 W 1	.140+03 .100+01 .100+00 .300-00 .100+01 .200-00		ORGLIB	786
74181 W 4	.140+03 .400+01 .600-02 .200-01 .600-01 .870-01		ORGLIB	787
74181 W 6	.140+03 .900+01 .700-02 .200-01 .700-01 .470-01		ORGLIB	788
74181 W 8		.970-01	ORGLIB	789
74181 W20	.140+03	0.087	ORG001	591

74181	W21	.140+03						0.20	ORG001	592
74181	W22	.140+03						0.047	ORG001	593
74181	W23	.140+03						0.047	ORG001	594
74185	W 1	.740+02	.100+01	.100+00	.300-00	.100+01	.140-00		ORGLIB	790
74185	W 4	.740+02	.400+01	.600-02	.200-01	.600-01	.140-00		ORGLIB	791
74185	W 6	.740+02	.900+01	.700-02	.200-01	.700-01	.680-00		ORGLIB	792
74185	W 8						.140+00		ORGLIB	793
74185	W20	.740+02						0.14	ORG001	595
74185	W21	.740+02						0.14	ORG001	596
74185	W22	.740+02						0.14	ORG001	597
74185	W23	.740+02						0.14	ORG001	598
74187	W 1	.100+01	.100+01	.100+00	.300-00	.100+01	.680-00		ORGLIB	794
74187	W 4	.100+01	.400+01	.600-02	.200-01	.600-01	.440-00		ORGLIB	795
74187	W 6	.100+01	.900+01	.700-02	.200-01	.700-01	.140+01		ORGLIB	796
74187	W 8						.440-00, .44-00, .44-00		ORGLIB	797
74187	W20	.100+01						0.44	ORG001	599
74187	W21	.100+01						0.68	ORG001	600
74187	W22	.100+01						0.36	ORG001	601
74187	W23	.100+01						0.36	ORG001	602
75183	RE 1	.730+02	.700+01	.500-00	.500-00	.100+01	.240-00		ORGLIB	798
75183	RE 4	.730+02	.140+02	.500-02	.500-02	.100-01	.100+00		ORGLIB	799
75183	RE 6	.730+02	.350+01	.500-02	.500-02	.100-01	.550+01		ORGLIB	800
75183	RE 8						.100+00		ORGLIB	801
75183	RE12	.730+02	.250+02	.130-00	.130-00	.250-00	.120-02		ORGLIB	802
75183	RE16	.730+02	.300+01	.350-02	.350-02	.700-02	.340-01		ORGLIB	803
75183	RE20	.730+02						0.10	ORG001	603
75183	RE21	.730+02						0.24	ORG001	604
75183	RE22	.730+02						0.055	ORG001	605
75183	RE23	.730+02						0.055	ORG001	606
75186	RE 1	.379+01	.700+01	.500-00	.500+00	.100+01	.380-00		ORGLIB	804
75186	RE 4	.379+01	.140+02	.500-02	.500-02	.100-01	.370-00		ORGLIB	805
75186	RE 6	.379+01	.350+01	.500-02	.500-02	.100-01	.180+01		ORGLIB	806
75186	RE 8						.370+00		ORGLIB	807
75186	RE12	.379+01	.250+02	.130-00	.130-00	.250-00	.360-00		ORGLIB	808
75186	RE16	.379+01	.300+01	.350-02	.350-02	.700-02	.370-00		ORGLIB	809
75186	RE20	.379+01						0.37	ORG001	607
75186	RE21	.379+01						0.38	ORG001	608
75186	RE22	.379+01						0.36	ORG001	609
75186	RE23	.379+01						0.36	ORG001	610
75187	RE 1	.180+14	.700+01	.500-00	.500-00	.100+01	.120-01		ORGLIB	810
75187	RE 4	.180+14	.140+02	.500-02	.500-02	.100-01	.120-01		ORGLIB	811
75187	RE 6	.180+14	.350+01	.500-02	.500-02	.100-01	.620-01		ORGLIB	812
75187	RE 8						.120-01		ORGLIB	813
75187	RE12	.180+14	.250+02	.130-00	.130-00	.250-00	.120-01		ORGLIB	814
75187	RE16	.180+14	.300+01	.350-02	.350-02	.700+02	.120-01		ORGLIB	815
75187	RE20	.180+14						0.012	ORG001	611
75187	RE21	.180+14						0.012	ORG001	612
75187	RE22	.180+14						0.012	ORG001	613
75187	RE23	.180+14						0.012	ORG001	614
75188	RE 1	.710-00	.700+01	.500-00	.500-00	.100+01	.940-00		ORGLIB	816
75188	RE 4	.710-00	.140+02	.500-02	.500-02	.100-01	.850-00		ORGLIB	817
75188	RE 6	.710-00	.350+01	.500-02	.500-02	.100-01	.390+01		ORGLIB	818
75188	RE 8						.850+00		ORGLIB	819
75188	RE12	.710-00	.250+02	.130-00	.130-00	.250-00	.780-00		ORGLIB	820
75188	RE16	.710-00	.300+01	.350-02	.350-02	.700-02	.800-00		ORGLIB	821
75188	RE20	.710-00						0.85	ORG001	615
75188	RE21	.710-00						0.94	ORG001	616
75188	RE22	.710-00						0.92	ORG001	617
75188	RE23	.710-00						0.82	ORG001	618
76185	US 1	.950+02	.200+01	.100+00	.300-00	.100+01	.510-00		ORGLIB	822

76185 OS 3	.950+02	.500+01	.500-02	.200-01	.500-01	.250-00	ORGLIB	823
76185 OS 4	.950+02	.550+01	.400-02	.100-01	.400-01	.290-00	ORGLIB	824
76185 OS 8						.290+00	ORGLIB	825
76185 OS20	.950+02					0.29	ORGLIB	826
76185 OS21	.950+02					0.51	ORGLIB	827
76185 OS22	.950+02					0.23	ORGLIB	828
76185 OS23	.950+02					0.23	ORGLIB	829
76191 OS 1	.160+02	.200+01	.100+00	.300-00	.100+01	.160-00	ORGLIB	830
76191 OS 3	.160+02	.500+01	.500-02	.200-01	.500-01	.110+00	ORGLIB	831
76191 OS 4	.160+02	.550+01	.400-02	.100-01	.400-01	.120+00	ORGLIB	832
76191 OS 8						.120+00	ORGLIB	833
76191 OS20	.160+02					0.12	ORGLIB	834
76191 OS21	.160+02					0.16	ORGLIB	835
76191 OS22	.160+02					0.10	ORGLIB	836
76191 OS23	.160+02					0.10	ORGLIB	837
76191 OS 1	.580-00	.200+01	.100+00	.300-00	.100+01	.600-01	ORGLIB	838
76191 OS 3	.580-00	.500+01	.500-02	.200-01	.500-01	.390-01	ORGLIB	839
76191 OS 4	.580-00	.550+01	.400-02	.100-01	.400-01	.490-01	ORGLIB	840
76191 OS 8						.251-01, 11+00, 13-00	ORGLIB	841
76191 OS20	.580-00					0.018	ORGLIB	842
76191 OS21	.580-00					0.042	ORGLIB	843
76191 OS22	.580-00					0.097	ORGLIB	844
76191 OS23	.580-00					0.097	ORGLIB	845
76193 OS 1	.131+01	.200+01	.100+00	.300-00	.100+01	.380-00	ORGLIB	846
76193 OS 3	.131+01	.500+01	.500-02	.200-01	.500-01	.380-00	ORGLIB	847
76193 OS 4	.131+01	.550+01	.400-02	.100-01	.400-01	.380-00	ORGLIB	848
76193 OS 8						.380+00	ORGLIB	849
76193 OS20	.131+01					0.38	ORGLIB	850
76193 OS21	.131+01					0.38	ORGLIB	851
76193 OS22	.131+01					0.38	ORGLIB	852
76193 OS23	.131+01					0.38	ORGLIB	853
77190 IR 1	.120+02	.200+02	.100+00	.300-00	.100+01	.370-00	ORGLIB	854
77190 IR 3	.120+02	.500+02	.450-02	.140-01	.450-01	.120+00	ORGLIB	855
77190 IR 4	.120+02	.270+02	.230-01	.700-01	.230-00	.160-00	ORGLIB	856
77190 IR 5	.120+02	.500+02	.200-02	.600-02	.200-01	.120+00	ORGLIB	857
77190 IR 8						.160+00	ORGLIB	858
77190 IR20	.120+02					0.16	ORGLIB	859
77190 IR21	.120+02					0.37	ORGLIB	860
77190 IR22	.120+02					0.087	ORGLIB	861
77190 IR23	.120+02					0.087	ORGLIB	862
77192 IR 1	.745+02	.200+02	.100+00	.300-00	.100+01	.110+01	ORGLIB	863
77192 IR 3	.745+02	.500+02	.450-02	.140-01	.450-01	.500-00	ORGLIB	864
77192 IR 4	.745+02	.270+02	.230-01	.700-01	.230-00	.600+00	ORGLIB	865
77192 IR 5	.745+02	.500+02	.200-02	.600-02	.200-01	.500+00	ORGLIB	866
77192 IR 8						.600+00	ORGLIB	867
77192 IR20	.745+02					0.60	ORGLIB	868
77192 IR21	.745+02					1.1	ORGLIB	869
77192 IR22	.745+02					0.42	ORGLIB	870
77192 IR23	.745+02					0.42	ORGLIB	871
77194 IR 1	.790-00	.200+02	.100+00	.300-00	.100+01	.810-00	ORGLIB	872
77194 IR 3	.790-00	.500+02	.450-02	.140-01	.450-01	.810-00	ORGLIB	873
77194 IR 4	.790-00	.270+02	.230-01	.700-01	.230-00	.810-00	ORGLIB	874
77194 IR 5	.790-00	.500+02	.200-02	.600-02	.200-01	.810-00	ORGLIB	875
77194 IR 8						.810+00	ORGLIB	876
77194 IR20	.790-00					0.81	ORGLIB	877
77194 IR21	.790-00					0.81	ORGLIB	878
77194 IR22	.790-00					0.81	ORGLIB	879
77194 IR23	.790-00					0.81	ORGLIB	880
78191 PT 1	.300+01	.240+02	.100+00	.300-00	.100+01	.700-00	ORGLIB	881
78191 PT 3	.300+01	.600+02	.100-01	.300-01	.100+00	.220-00	ORGLIB	882

78191 PT 4	,300+01	,200+02	,800-03	,240-02	,800-02	,310-00	ORGLIB	855
78191 PT 5	,300+01	,600+02	,800-03	,240-02	,800-02	,220-00	ORGLIB	856
78191 PT 8						,310+00	ORGLIB	857
78191 PT20	,300+01					,31	ORGLIB	857
78191 PT21	,300+01					,70	ORGLIB	857
78191 PT22	,300+01					,16	ORGLIB	857
78191 PT23	,300+01					,16	ORGLIB	857
78193 PT 1	,180+06	,240+02	,100+00	,300-00	,100+01	,430-01	ORGLIB	858
78193 PT 3	,180+06	,600+02	,100+01	,300-01	,100+00	,140-01	ORGLIB	859
78193 PT 4	,180+06	,200+02	,800-03	,240-02	,800-02	,190-01	ORGLIB	860
78193 PT 5	,180+06	,600+02	,800-03	,240-02	,800-02	,140-01	ORGLIB	861
78193 PT 8						,190-01	ORGLIB	862
78193 PT20	,180+06					,019	ORGLIB	861
78193 PT21	,180+06					,043	ORGLIB	862
78193 PT22	,180+06					,0099	ORGLIB	863
78193 PT23	,180+06					,0099	ORGLIB	864
78193 PT 1	,350+01	,240+02	,100+00	,300-00	,100+01	,750-01	ORGLIB	863
78193 PT 3	,350+01	,600+02	,100+01	,300-01	,100+00	,230-01	ORGLIB	864
78193 PT 4	,350+01	,200+02	,800-03	,240-02	,800-02	,320-01	ORGLIB	865
78193 PT 5	,350+01	,600+02	,800-03	,240-02	,800-02	,230-01	ORGLIB	866
78193 PT 8						,320-01,32-01,32-01	ORGLIB	867
78193 PT20	,350+01					,032	ORGLIB	865
78193 PT21	,350+01					,075	ORGLIB	866
78193 PT22	,350+01					,017	ORGLIB	867
78193 PT23	,350+01					,017	ORGLIB	868
78197 PT 1	,750-00	,240+02	,100+00	,300-00	,100+01	,260-00	ORGLIB	868
78197 PT 3	,750-00	,600+02	,100+01	,300-01	,100+00	,230-00	ORGLIB	869
78197 PT 4	,750-00	,200+02	,800-03	,240-02	,800-02	,240-00	ORGLIB	870
78197 PT 5	,750-00	,600+02	,800-03	,240-02	,800-02	,230-00	ORGLIB	871
78197 PT 8						,240+00	ORGLIB	872
78197 PT20	,750+00					,24	ORGLIB	869
78197 PT21	,750-00					,20	ORGLIB	860
78197 PT22	,750-00					,23	ORGLIB	861
78197 PT23	,750-00					,23	ORGLIB	862
78197 PT 1	,560-01	,240+02	,100+00	,300-00	,100+01	,550-00	ORGLIB	873
78197 PT 3	,560-01	,600+02	,100+01	,300-01	,100+00	,500-00	ORGLIB	874
78197 PT 4	,560-01	,200+02	,800-03	,240-02	,800-02	,510-00	ORGLIB	875
78197 PT 5	,560-01	,600+02	,800-00	,240-02	,800-02	,500-00	ORGLIB	876
78197 PT 8						,417-00,52-00,52-00	ORGLIB	877
78197 PT20	,560-01					,28	ORGLIB	863
78197 PT21	,560-01					,30	ORGLIB	864
78197 PT22	,560-01					,27	ORGLIB	865
78197 PT23	,560-01					,27	ORGLIB	866
79196 AU 1	,560+01	,120+03	,100+00	,300-00	,100+01	,460-00	ORGLIB	878
79196 AU 3	,560+01	,280+03	,300-02	,900-02	,300-01	,150-00	ORGLIB	879
79196 AU 4	,560+01	,300+03	,400-02	,100-01	,400-01	,210-00	ORGLIB	880
79196 AU 5	,560+01	,240+03	,500+03	,150-02	,500-02	,150-00	ORGLIB	881
79196 AU 8						,210+00	ORGLIB	882
79196 AU20	,560+01					,21	ORGLIB	867
79196 AU21	,560+01					,46	ORGLIB	868
79196 AU22	,560+01					,11	ORGLIB	869
79196 AU23	,560+01					,11	ORGLIB	870
79198 AU 1	,270+01	,120+03	,100+00	,300-00	,100+01	,560-00	ORGLIB	883
79198 AU 3	,270+01	,280+03	,300-02	,900-02	,300-01	,410-00	ORGLIB	884
79198 AU 4	,270+01	,300+03	,400-02	,100-01	,400-01	,440-00	ORGLIB	885
79198 AU 5	,270+01	,240+03	,500+03	,150-02	,500-02	,410-00	ORGLIB	886
79198 AU 8						,440+00	ORGLIB	887
79198 AU20	,270+01					,44	ORGLIB	871
79198 AU21	,270+01					,58	ORGLIB	872
79198 AU22	,270+01					,38	ORGLIB	873

79198 AU23	.270+01					0,38	ORG001	874
79199 AU 1	.315+01	.120+03	.100+00	.300+00	.100+01	.180+00	ORGLIB	888
79199 AU 3	.315+01	.280+03	.300+02	.900+02	.300+01	.120+00	ORGLIB	889
79199 AU 4	.315+01	.300+03	.400+02	.100+01	.400+01	.130+00	ORGLIB	890
79199 AU 5	.315+01	.240+03	.500+03	.150+02	.500+02	.120+00	ORGLIB	891
79199 AU 8						.130+00	ORGLIB	892
79199 AU20	.315+01					0,13	ORG001	875
79199 AU21	.315+01					0,18	ORG001	876
79199 AU22	.315+01					0,11	ORG001	877
79199 AU23	.315+01					0,11	ORG001	878
80197 HG 1	.270+01	.100+02	.750+00	.630+00	.100+01	.970+01	ORGLIB	893
80197 HG 3	.270+01	.145+02	.260+00	.220+00	.350+00	.430+01	ORGLIB	894
80197 HG 4	.270+01	.135+02	.110+00	.900+01	.150+00	.520+01	ORGLIB	895
80197 HG 5	.270+01	.100+02	.200+01	.100+01	.200+01	.430+01	ORGLIB	896
80197 HG 8						.520+01	ORGLIB	897
80197 HG20	.270+01					0,052	ORG001	879
80197 HG21	.270+01					0,097	ORG001	880
80197 HG22	.270+01					0,036	ORG001	881
80197 HG23	.270+01					0,036	ORG001	882
80197 HG 1	.100+01	.100+02	.750+00	.630+00	.100+01	.300+00	ORGLIB	898
80197 HG 3	.100+01	.145+02	.260+00	.220+00	.350+00	.180+00	ORGLIB	899
80197 HG 4	.100+01	.135+02	.110+00	.900+01	.150+00	.190+00	ORGLIB	900
80197 HG 5	.100+01	.100+02	.200+01	.100+01	.200+01	.170+00	ORGLIB	901
80197 HG 8						.165+00,20+00,21+00	ORGLIB	902
80197 HG20	.100+01					0,15	ORG001	883
80197 HG21	.100+01					0,22	ORG001	884
80197 HG22	.100+01					0,13	ORG001	885
80197 HG23	.100+01					0,13	ORG001	886
80203 HG 1	.458+02	.100+02	.750+00	.630+00	.100+01	.250+00	ORGLIB	903
80203 HG 3	.458+02	.145+02	.260+00	.220+00	.350+00	.150+00	ORGLIB	904
80203 HG 4	.458+02	.135+02	.110+00	.900+01	.150+00	.170+00	ORGLIB	905
80203 HG 5	.458+02	.100+02	.200+01	.100+01	.200+01	.150+00	ORGLIB	906
80203 HG 6						.170+00	ORGLIB	907
80203 HG20	.458+02					0,17	ORG001	887
80203 HG21	.458+02					0,25	ORG001	888
80203 HG22	.458+02					0,14	ORG001	889
80203 HG23	.458+02					0,14	ORG001	890
81200 TL 1	.113+01	.500+01	.450+00	.480+00	.100+01	.400+00	ORGLIB	908
81200 TL 3	.113+01	.700+01	.230+01	.240+01	.500+01	.130+00	ORGLIB	909
81200 TL 4	.113+01	.500+01	.200+01	.200+01	.400+01	.180+00	ORGLIB	910
81200 TL 6	.113+01	.700+01	.250+01	.260+01	.550+01	.950+01	ORGLIB	911
81200 TL 8	.113+01	.600+01	.270+02	.290+02	.600+02	.180+00	ORGLIB	912
81200 TL14	.113+01	.550+01	.240+00	.260+00	.540+00	.400+00	ORGLIB	913
81200 TL20	.113+01					0,18	ORG001	891
81200 TL21	.113+01					0,40	ORG001	892
81200 TL22	.113+01					0,095	ORG001	893
81200 TL23	.113+01					0,095	ORG001	894
81201 TL 1	.300+01	.500+01	.450+00	.480+00	.100+01	.170+00	ORGLIB	914
81201 TL 3	.300+01	.700+01	.230+01	.240+01	.500+01	.110+00	ORGLIB	915
81201 TL 4	.300+01	.500+01	.200+01	.200+01	.400+01	.120+00	ORGLIB	916
81201 TL 6	.300+01	.700+01	.250+01	.260+01	.550+01	.440+00	ORGLIB	917
81201 TL 8	.300+01	.600+01	.270+02	.290+02	.600+02	.120+00	ORGLIB	918
81201 TL14	.300+01	.550+01	.240+00	.260+00	.540+00	.170+00	ORGLIB	919
81201 TL20	.300+01					0,12	ORG001	895
81201 TL21	.300+01					0,17	ORG001	896
81201 TL22	.300+01					0,10	ORG001	897
81201 TL23	.300+01					0,10	ORG001	898
81202 TL 1	.120+02	.500+01	.450+00	.480+00	.100+01	.380+00	ORGLIB	920
81202 TL 3	.120+02	.700+01	.230+01	.240+01	.500+01	.240+00	ORGLIB	921
81202 TL 4	.120+02	.500+01	.200+01	.200+01	.400+01	.270+00	ORGLIB	922

81202	TL 6	,120+02	,700+01	,250-01	,260-01	,550-01	,940-00	ORGLIB	923
81202	TL 8	,120+02	,600+01	,270-02	,290-02	,630-02	,270-00	ORGLIB	924
81202	TL14	,120+02	,550+01	,240-00	,260-00	,540+00	,380-00	ORGLIB	925
81202	TL20	,120+02					0,27	ORG001	699
81202	TL21	,120+02					0,38	ORG001	700
81202	TL22	,120+02					0,23	ORG001	701
81202	TL23	,120+02					0,23	ORG001	702
81204	TL 1	,110+04	,500+01	,450-00	,480-00	,100+01	,250-00	ORGLIB	926
81204	TL 3	,110+04	,700+01	,230-01	,240-01	,500-01	,250-00	ORGLIB	927
81204	TL 4	,110+04	,500+01	,200-01	,200-01	,400-01	,250+00	ORGLIB	928
81204	TL 6	,110+04	,700+01	,250-01	,260-01	,550-01	,130+01	ORGLIB	929
81204	TL 8	,110+04	,600+01	,270-02	,290-02	,600-02	,250-00	ORGLIB	930
81204	TL14	,110+04	,550+01	,240-00	,260-00	,540-00	,250-00	ORGLIB	931
81204	TL20	,110+04					0,25	ORG001	703
81204	TL21	,110+04					0,25	ORG001	704
81204	TL22	,110+04					0,25	ORG001	705
81204	TL23	,110+04					0,25	ORG001	706
82203	PB 1	,217+01	,146+04	,800-01	,290-00	,100+01	,220-00	ORGLIB	932
82203	PB 3	,217+01	,531+03	,100-01	,400-01	,140-00	,690-01	ORGLIB	933
82203	PB 4	,217+01	,195+04	,640-02	,230-01	,800-01	,940-01	ORGLIB	934
82203	PB 6	,217+01	,365+04	,200-01	,800-01	,280-00	,510-01	ORGLIB	935
82203	PB 8						,940-01	ORGLIB	936
82203	PB20	,217+01					0,094	ORG001	707
82203	PB21	,217+01					0,22	ORG001	708
82203	PB22	,217+01					0,051	ORG001	709
82203	PB23	,217+01					0,051	ORG001	710
82210	PB 1	,710+04	,146+04	,800-01	,290-00	,100+01	,520+01	ORGLIB	937
82210	PB 3	,710+04	,531+03	,100-01	,400-01	,140-00	,100+02	ORGLIB	938
82210	PB 4	,710+04	,195+04	,640-02	,230-01	,800-01	,100+02	ORGLIB	939
82210	PB 6	,710+04	,365+04	,200-01	,600-01	,280-00	,290+02	ORGLIB	940
82210	PB 8						,157-00,14+02,43+02	ORGLIB	941
82210	PB20	,710+04					0,027	ORG001	711
82210	PB21	,710+04					0,045	ORG001	712
82210	PB22	,710+04					0,019	ORG001	713
82210	PB23	,710+04					0,019	ORG001	714
82212	PB 1	,440-00	,146+04	,800-01	,290-00	,100+01	,820+02	ORGLIB	942
82212	PB 3	,440-00	,531+03	,100-01	,400-01	,140-00	,810+02	ORGLIB	943
82212	PB 4	,440-00	,195+04	,640-02	,230-01	,800-01	,830+02	ORGLIB	944
82212	PB 6	,440-00	,365+04	,200-01	,804-01	,280-00	,100+02	ORGLIB	945
82212	PB 8						,799+02,83+02,83+02	ORGLIB	946
82212	PB20	,440-00					0,24	ORG001	715
82212	PB21	,440-00					0,29	ORG001	716
82212	PB22	,440-00					0,22	ORG001	717
82212	PB23	,440-00					0,22	ORG001	718
83206	BI 1	,640+01	,500+01	,100-01	,260-00	,100+01	,180+01	ORGLIB	947
83206	BI 3	,640+01	,600+01	,300-02	,800-01	,300-00	,580-00	ORGLIB	948
83206	BI 4	,640+01	,150+02	,150-02	,400-01	,150-00	,800-00	ORGLIB	949
83206	BI 5	,640+01	,100+02	,100-03	,260-02	,100-01	,580-00	ORGLIB	950
83206	BI 6	,640+01	,133+02	,300-03	,770-02	,300-01	,430-00	ORGLIB	951
83206	BI 8						,800+00	ORGLIB	952
83206	BI20	,640+01					0,80	ORG001	719
83206	BI21	,640+01					1,8	ORG001	720
83206	BI22	,640+01					0,43	ORG001	721
83206	BI23	,640+01					0,43	ORG001	722
83207	BI 1	,290+04	,500+01	,100-01	,260-00	,100+01	,100+01	ORGLIB	953
83207	BI 3	,290+04	,600+01	,300-02	,800-01	,300-00	,330-00	ORGLIB	954
83207	BI 4	,290+04	,150+02	,150-02	,400-01	,150-00	,450-00	ORGLIB	955
83207	BI 5	,290+04	,100+02	,100-03	,260-02	,100-01	,330-00	ORGLIB	956
83207	BI 6	,290+04	,133+02	,300-03	,770-02	,300-01	,240-00	ORGLIB	957
83207	BI 8						450+00	ORGLIB	958

83207	B120	.290+04						0,45	ORG001	723
83207	B121	.290+04						1,0	ORG001	724
83207	B122	.290+04						0,24	ORG001	725
83207	B123	.290+04						0,24	ORG001	726
83210	B1 1	.500+01	.500+01	.100-01	.260-00	.100+01	.100+02		ORGLIB	959
83210	B1 3	.500+01	.600+01	.300-02	.800-01	.300-00	.190+02		ORGLIB	960
83210	B1 4	.500+01	.150+02	.150-02	.400-01	.150-00	.130+02		ORGLIB	961
83210	B1 5	.500+01	.100+02	.100-03	.260-02	.100-01	.170+02		ORGLIB	962
83210	B1 6	.500+01	.133+02	.300-03	.770-02	.300-01	.400+02		ORGLIB	963
83210	B1 8						.795-00,15+02,43+02		ORGLIB	964
83210	B120	.500+01						0,40	ORG001	727
83210	B121	.500+01						0,40	ORG001	728
83210	B122	.500+01						0,40	ORG001	729
83210	B123	.500+01						0,40	ORG001	730
83212	B1 1	.420-01	.500+01	.100-01	.260-00	.100+01	.830+02		ORGLIB	965
83212	B1 3	.420-01	.600+01	.300-02	.800-01	.300-00	.820+02		ORGLIB	966
83212	B1 4	.420-01	.150+02	.150-02	.400-01	.150-00	.830+02		ORGLIB	967
83212	B1 5	.420-01	.160+02	.100-03	.260-02	.100-01	.820+02		ORGLIB	968
83212	B1 6	.420-01	.133+02	.300-03	.770-02	.300-01	.411+03		ORGLIB	969
83212	B1 8						.830+02		ORGLIB	970
83212	B120	.420-01						1,8	ORG001	731
83212	B121	.420-01						2,2	ORG001	732
83212	B122	.420-01						1,7	ORG001	733
83212	B123	.420-01						1,7	ORG001	734
84210	P0 1	.138+03	.300+02	.600-01	.280-00	.100+01	.550+02		ORGLIB	971
84210	P0 3	.138+03	.700+02	.400-02	.200-01	.700-01	.550+02		ORGLIB	972
84210	P0 4	.138+03	.410+02	.100-01	.500-01	.170-00	.550+02		ORGLIB	973
84210	P0 5	.138+03	.600+02	.200-02	.100-01	.400-01	.550+02		ORGLIB	974
84210	P0 6	.138+03	.240+02	.600-02	.300-01	.100+00	.280+03		ORGLIB	975
84210	P0 8						.550+02		ORGLIB	976
84210	P020	.138+03						0,53	ORG001	735
84210	P021	.138+03						0,53	ORG001	736
84210	P022	.138+03						0,53	ORG001	737
84210	P023	.138+03						0,53	ORG001	738
85211	AT 1	.300-00	.270+02	.100+01	.750-00	.100+01	.610+02		ORGLIB	977
85211	AT 5	.300-00	.270+02	.300+01	.200-01	.300-01	.610+02		ORGLIB	978
85211	AT 8						.700+02,70+02,70+02		ORGLIB	979
85211	AT11	.300-00	.135+02	.200-02	.150-02	.200-02	.610+02		ORGLIB	980
85211	AT16	.300-00	.360+02	.300-01	.230-01	.300-01	.610+02		ORGLIB	981
85211	AT20	.300-00						0,76	ORG001	739
85211	AT21	.300-00						0,79	ORG001	740
85211	AT22	.300-00						0,75	ORG001	741
85211	AT23	.300-00						0,75	ORG001	742
88223	RA 1	.117+02	.810+04	.300-00	.400-00	.100+01	.280+03		ORGLIB	982
88223	RA 6	.117+02	.164+05	.150-00	.200-00	.500-00	.280+03		ORGLIB	983
88223	RA 8						.280+03		ORGLIB	984
88223	RA20	.117+02						3,7	ORG001	743
88223	RA21	.117+02						3,8	ORG001	744
88223	RA22	.117+02						3,7	ORG001	745
88223	RA23	.117+02						3,7	ORG001	746
88224	RA 1	.364+01	.810+04	.300-00	.400-00	.100+01	.280+03		ORGLIB	985
88224	RA 6	.364+01	.164+05	.150-00	.200-00	.500-00	.280+03		ORGLIB	986
88224	RA 8						.249+03,28+03,28+03		ORGLIB	987
88224	RA20	.364+01						1,9	ORG001	747
88224	RA21	.364+01						1,9	ORG001	748
88224	RA22	.364+01						1,9	ORG001	749
88224	RA23	.364+01						1,9	ORG001	750
88225	RA 1	14,8	.8100	.3	.4	1	.280		ORGLIB	988
88225	RA 3	14,8	10,	6,E=4	8,E=4	.002	.250,		ORGLIB	989
88225	RA 4	14,8	10,	.00012	.00016	.0004	.250,		ORGLIB	990

88225	RA 8	14,8	16400,	15	2	5	280,	ORGLIB	991
88225	RA 8	14,8					250,	ORGLIB	992
88225	RA23	14,8					3,5	ORGLIB	993
88226	RA 1	590+06	810+04	300-00	400-00	100+01	110+03	ORGLIB	994
88226	RA 6	590+06	164+05	400-01	300-01	100+00	110+03	ORGLIB	995
88226	RA 8						110+03	ORGLIB	996
88226	RA20	590+06					0,48	ORGLIB	752
88226	RA21	590+06					0,48	ORGLIB	753
88226	RA22	590+06					0,48	ORGLIB	754
88226	RA23	590+06					0,48	ORGLIB	755
88228	RA 1	240+04	810+04	300-00	400-00	100+01	230+03	ORGLIB	997
88228	RA 6	240+04	164+05	400-01	300-01	100+00	190+03	ORGLIB	998
88228	RA 8						716-00,22+02,14+03	ORGLIB	999
88228	RA20	240+04					0,0046	ORGLIB	756
88228	RA21	240+04					0,0046	ORGLIB	757
88228	RA22	240+04					0,0046	ORGLIB	758
88228	RA23	240+04					0,0046	ORGLIB	759
89225	AC 1	10,0	24000,	0,001	25	1,	280,	ORGLIB	1000
89225	AC 3	10,0	24000,	1,E-6	0,03	0,01	280,	ORGLIB	1001
89225	AC 4	10,0	73000,	5,E-5	13	5	280,	ORGLIB	1002
89225	AC 6	10,0	73000,	3,E-5	0,08	3	1340,	ORGLIB	1003
89225	AC 8	10,0					270,	ORGLIB	1004
89225	AC23	10,0					3,3	ORGLIB	1005
89227	AC 1	800+04	240+05	100-03	250-00	100+01	200+03	ORGLIB	1006
89227	AC 3	800+04	240+05	100-05	300-02	100+01	620+02	ORGLIB	1007
89227	AC 4	800+04	240+04	500-04	130-00	500-00	620+02	ORGLIB	1008
89227	AC 6	800+04	365+05	300-04	800-01	300-00	100+04	ORGLIB	1009
89227	AC 8						489+01,21+03,32+03	ORGLIB	1010
89227	AC20	800+04					0,019	ORGLIB	761
89227	AC21	800+04					0,019	ORGLIB	762
89227	AC22	800+04					0,019	ORGLIB	763
89227	AC23	800+04					0,019	ORGLIB	764
89228	AC 1	260-00	240+05	100-03	250-00	100+01	230+03	ORGLIB	1011
89228	AC 3	260-00	240+05	100-05	300-02	100+01	550+02	ORGLIB	1012
89228	AC 4	260-00	240+04	500-04	250-00	500-00	560+02	ORGLIB	1013
89228	AC 6	260-00	365+05	300-04	800-01	300-00	970+03	ORGLIB	1014
89228	AC 8						897-00,22+02,14+03	ORGLIB	1015
89228	AC20	260-00					0,74	ORGLIB	765
89228	AC21	260-00					1,1	ORGLIB	766
89228	AC22	260-00					0,62	ORGLIB	767
89228	AC23	260-00					0,62	ORGLIB	768
90227	TH 1	184+02	570+05	100-03	250-00	100+01	200+03	ORGLIB	1016
90227	TH 3	184+02	220+05	500-05	100-01	500-01	610+02	ORGLIB	1017
90227	TH 4	184+02	570+05	500-05	100-01	500-01	610+02	ORGLIB	1018
90227	TH 6	184+02	365+05	700-04	180-00	700-00	990+03	ORGLIB	1019
90227	TH 8						827+02,28+03,33+03	ORGLIB	1020
90227	TH20	184+02					0,64	ORGLIB	769
90227	TH21	184+02					0,64	ORGLIB	770
90227	TH22	184+02					0,62	ORGLIB	771
90227	TH23	184+02					0,62	ORGLIB	772
90228	TH 1	700+03	570+05	100-03	250-00	100+01	230+03	ORGLIB	1021
90228	TH 3	700+03	220+05	500-05	100-01	500-01	560+02	ORGLIB	1022
90228	TH 4	700+03	570+05	500-05	100-01	500-01	560+02	ORGLIB	1023
90228	TH 6	700+03	365+05	700-04	180-00	700-00	970+03	ORGLIB	1024
90228	TH 8						110+03,31+03,33+03	ORGLIB	1025
90228	TH20	700+03					0,54	ORGLIB	773
90228	TH21	700+03					0,54	ORGLIB	774
90228	TH22	700+03					0,54	ORGLIB	775
90228	TH23	700+03					0,54	ORGLIB	776
90229	TH 1	2,68E6	57000,	0,001	25	1,	330,	ORGLIB	1026

90229	TH 3	2.68E6	22000.	5.E-6	.01	.05	49.	ORGLIB	1027
90229	TH 4	2.68E6	57000.	5.E-6	.01	.05	49.	ORGLIB	1028
90229	TH 6	2.68E6	73000.	7.E-5	.18	.7	940.	ORGLIB	1029
90229	TH 8	2.68E6					273. 270. 270.	ORGLIB	1030
90229	TH23	2.68E6					4.	ORGLIB	1031
90230	TH 1	.290+08	.570+05	.100-03	.250-00	.100+01	.480+02	ORGLIB	1032
90230	TH 3	.290+08	.220+05	.500-05	.100-01	.500-01	.430+02	ORGLIB	1033
90230	TH 4	.290+08	.570+05	.500-05	.100-01	.500-01	.480+02	ORGLIB	1034
90230	TH 6	.290+08	.365+05	.700-04	.180-00	.700-00	.240+03	ORGLIB	1035
90230	TH 8						.460+02, .48+02, .48+02	ORGLIB	1036
90230	TH20	.290+08					0.47	ORGO01	777
90230	TH21	.290+08					0.47	ORGO01	778
90230	TH22	.290+08					0.47	ORGO01	779
90230	TH23	.290+08					0.47	ORGO01	780
90231	TH 1	.107+01	.570+05	.100-03	.250-00	.100+01	.180-00	ORGLIB	1037
90231	TH 3	.107+01	.220+05	.500-05	.100-01	.500-01	.140-00	ORGLIB	1038
90231	TH 4	.107+01	.570+05	.500-05	.100-01	.500-01	.160-00	ORGLIB	1039
90231	TH 6	.107+01	.365+05	.700-04	.180-00	.700-00	.560-00	ORGLIB	1040
90231	TH 8						.110+00, .11+00, .11+00	ORGLIB	1041
90231	TH20	.107+01					0.11	ORGO01	781
90231	TH21	.107+01					0.14	ORGO01	782
90231	TH22	.107+01					0.093	ORGO01	783
90231	TH23	.107+01					0.093	ORGO01	784
90232	TH 1	.510+13	.570+05	.100-03	.250-00	.100+01	.620+02	ORGLIB	1042
90232	TH 3	.510+13	.220+05	.500-05	.100-01	.500-01	.410+02	ORGLIB	1043
90232	TH 4	.510+13	.570+05	.500-05	.100-01	.500-01	.410+02	ORGLIB	1044
90232	TH 6	.510+13	.365+05	.700-04	.130-00	.700-00	.270+03	ORGLIB	1045
90232	TH 8						.410+02, .41+02, .65+02	ORGLIB	1046
90232	TH20	.510+13					0.40	ORGO01	785
90232	TH21	.510+13					0.41	ORGO01	786
90232	TH22	.510+13					0.40	ORGO01	787
90232	TH23	.510+13					0.40	ORGO01	788
90234	TH 1	.241+02	.570+05	.100-03	.250-00	.100+01	.910-00	ORGLIB	1047
90234	TH 3	.241+02	.570+05	.500-05	.100-01	.500-01	.900-00	ORGLIB	1048
90234	TH 4	.241+02	.570+05	.500-05	.100-01	.500-01	.900-00	ORGLIB	1049
90234	TH 6	.241+02	.365+05	.500-05	.100-01	.700-00	.450+01	ORGLIB	1050
90234	TH 8						.900+00	ORGLIB	1051
90234	TH20	.241+02					0.90	ORGO01	789
90234	TH21	.241+02					0.91	ORGO01	790
90234	TH22	.241+02					0.90	ORGO01	791
90234	TH23	.241+02					0.90	ORGO01	792
91230	PA 1	.177+02	.410+05	.100-03	.250-00	.100+01	.670-01	ORGLIB	1052
91230	PA 3	.177+02	.510+05	.400-05	.100-01	.400-01	.310-01	ORGLIB	1053
91230	PA 6	.177+02	.365+05	.450-04	.110+00	.450-00	.110+00	ORGLIB	1054
91230	PA 8						.320+01, .50+02, .68+02	ORGLIB	1055
91230	PA20	.177+02					0.042	ORGO01	793
91230	PA21	.177+02					0.064	ORGO01	794
91230	PA22	.177+02					0.035	ORGO01	795
91230	PA23	.177+02					0.035	ORGO01	796
91231	PA 1	.130+08	.410+05	.100-03	.250-00	.100+01	.140+03	ORGLIB	1056
91231	PA 3	.130+08	.510+05	.400-05	.100-01	.400-01	.790+02	ORGLIB	1057
91231	PA 4	.130+08	.580+05	.500-05	.130-01	.500-01	.630+02	ORGLIB	1058
91231	PA 6	.130+08	.365+05	.450-04	.110+00	.450-00	.750+03	ORGLIB	1059
91231	PA 8						.510+02, .52+02, .70+02	ORGLIB	1060
91231	PA20	.130+08					0.60	ORGO01	797
91231	PA21	.130+08					0.70	ORGO01	798
91231	PA22	.130+08					0.56	ORGO01	799
91231	PA23	.130+08					0.56	ORGO01	800
91233	PA 1	.274+02	.410+05	.100-03	.250-00	.100+01	.320-00	ORGLIB	1061
91233	PA 3	.274+02	.510+05	.400-05	.100-01	.400-01	.150-00	ORGLIB	1062

91233	PA 4	.274+02	.580+05	.500-05	.130-01	.500-01	.180-00	ORGLIB	1063
91233	PA 6	.274+02	.365+05	.450-04	.110+00	.450-00	.410-00	ORGLIB	1064
91233	PA 8						.180+00	ORGLIB	1065
91233	PA20	.274+02					0.18	ORGLIB	801
91233	PA21	.274+02					0.32	ORGLIB	802
91233	PA22	.274+02					0.13	ORGLIB	803
91233	PA23	.274+02					0.13	ORGLIB	804
92230	U 1	.208+02	.100+03	.100-03	.250-00	.100+01	.350+03	ORGLIB	1066
92230	U 3	.208+02	.150+02	.110-04	.280-01	.110+00	.350+03	ORGLIB	1067
92230	U 6	.208+02	.300+03	.110-04	.280-01	.110+00	.180+04	ORGLIB	1068
92230	U 8						.348+03, .35+03, .35+03	ORGLIB	1069
92230	U20	.208+02					3.4	ORGLIB	805
92230	U21	.208+02					3.4	ORGLIB	806
92230	U22	.208+02					3.4	ORGLIB	807
92230	U23	.208+02					3.4	ORGLIB	808
92232	U 1	.270+05	.100+03	.100-03	.250-00	.100+01	.280+03	ORGLIB	1070
92232	U 3	.270+05	.150+02	.110-04	.280-01	.110+00	.110+03	ORGLIB	1071
92232	U 6	.270+05	.300+03	.110-04	.280-01	.110+00	.120+04	ORGLIB	1072
92232	U 8						.552+02, .76+02, .19+03	ORGLIB	1073
92232	U20	.270+05					0.54	ORGLIB	809
92232	U21	.270+05					0.54	ORGLIB	810
92232	U22	.270+05					0.53	ORGLIB	811
92232	U23	.270+05					0.53	ORGLIB	812
92233	U 1	.590+08	.100+03	.100-03	.250-00	.100+01	.500+02	ORGLIB	1074
92233	U 3	.590+08	.150+02	.110-04	.280-01	.110+00	.500+02	ORGLIB	1075
92233	U 6	.590+08	.300+03	.110-04	.280-01	.110+00	.250+03	ORGLIB	1076
92233	U 8						.500+02	ORGLIB	1077
92233	U20	.590+08					0.49	ORGLIB	813
92233	U21	.590+08					0.49	ORGLIB	814
92233	U22	.590+08					0.49	ORGLIB	815
92233	U23	.590+08					0.49	ORGLIB	816
92234	U 1	.910+08	.100+03	.100-03	.250-00	.100+01	.490+02	ORGLIB	1078
92234	U 3	.910+08	.150+02	.110-04	.280-01	.110+00	.490+02	ORGLIB	1079
92234	U 6	.910+08	.300+03	.110-04	.280-01	.110+00	.240+03	ORGLIB	1080
92234	U 8						.490+02	ORGLIB	1081
92234	U20	.910+08					0.48	ORGLIB	817
92234	U21	.910+08					0.49	ORGLIB	818
92234	U22	.910+08					0.48	ORGLIB	819
92234	U23	.910+08					0.48	ORGLIB	820
92235	U 1	.260+12	.100+03	.100-03	.250-00	.100+01	.460+02	ORGLIB	1082
92235	U 3	.260+12	.150+02	.110-04	.280-01	.110+00	.460+02	ORGLIB	1083
92235	U 6	.260+12	.300+03	.110-04	.280-01	.110+00	.230+03	ORGLIB	1084
92235	U 8						.461+02, .46+02, .46+02	ORGLIB	1085
92235	U20	.260+12					0.56	ORGLIB	821
92235	U21	.260+12					0.77	ORGLIB	822
92235	U22	.260+12					0.52	ORGLIB	823
92235	U23	.260+12					0.52	ORGLIB	824
92236	U 1	.870+10	.100+03	.100-03	.250-00	.100+01	.470+02	ORGLIB	1086
92236	U 3	.870+10	.150+02	.110-04	.280-01	.110+00	.477+02	ORGLIB	1087
92236	U 6	.870+10	.300+03	.110-04	.280-01	.110+00	.230+03	ORGLIB	1088
92236	U 8						.470+02	ORGLIB	1089
92236	U20	.870+10					0.45	ORGLIB	825
92236	U21	.870+10					0.46	ORGLIB	826
92236	U22	.870+10					0.45	ORGLIB	827
92236	U23	.870+10					0.45	ORGLIB	828
92238	U 1	.160+13	.100+03	.100-03	.250-00	.100+01	.430+02	ORGLIB	1090
92238	U 3	.160+13	.150+02	.110-04	.280-01	.110+00	.430+02	ORGLIB	1091
92238	U 6	.160+13	.300+03	.110-04	.280-01	.110+00	.220+03	ORGLIB	1092
92238	U 8						.430+02	ORGLIB	1093
92238	U20	.160+13					0.43	ORGLIB	829

92238	U21	.160+13					0.43	ORG001	830
92238	U22	.160+13					0.43	ORG001	831
92238	U23	.160+13					0.43	ORG001	832
93237	NP 1	.800+09	.390+05	.100+03	.250+00	.100+01	.490+02	ORGLIB	1094
93237	NP 3	.800+09	.640+05	.300+05	.750+02	.300+01	.490+02	ORGLIB	1095
93237	NP 4	.800+09	.540+05	.500+05	.130+01	.500+01	.490+02	ORGLIB	1096
93237	NP 6	.800+09	.365+05	.540+04	.110+00	.450+00	.250+03	ORGLIB	1097
93237	NP 8						.490+02,49+02,49+02	ORGLIB	1098
93237	NP20	.800+09					0.50	ORG001	833
93237	NP21	.800+09					0.52	ORG001	834
93237	NP22	.800+09					0.49	ORG001	835
93237	NP23	.800+09					0.49	ORG001	836
93239	NP 1	.233+01	.390+05	.100+03	.250+00	.100+01	.290+00	ORGLIB	1099
93239	NP 3	.233+01	.640+05	.300+05	.750+02	.300+01	.210+00	ORGLIB	1100
93239	NP 4	.233+01	.540+05	.500+05	.130+01	.500+01	.220+00	ORGLIB	1101
93239	NP 6	.233+01	.365+05	.540+04	.110+00	.450+00	.980+00	ORGLIB	1102
93239	NP 8						.160+00,16+00,16+00	ORGLIB	1103
93239	NP20	.233+01					0.16	ORG001	837
93239	NP21	.233+01					0.22	ORG001	838
93239	NP22	.233+01					0.14	ORG001	839
93239	NP23	.233+01					0.14	ORG001	840
94237	PU 1	.45,6	.650+05	.300+04	.250+00	.100+01	.038	PU237	1
94237	PU 3	.45,6	.320+05	.600+06	.500+02	.200+01	.024	PU237	2
94237	PU 4	.45,6	.300+05	.450+05	.380+01	.450+00	.027	PU237	3
94237	PU 6	.45,6	.365+05	.240+04	.2	.450+00	.068	PU237	4
94237	PU 8	.45,6					.027	PU237	5
94237	PU20	.45,6					.027	PU237	6
94237	PU21	.45,6					.038	PU237	7
94237	PU22	.45,6					.022	PU237	8
94237	PU23	.45,6					.022	PU237	9
94238	PU 1	.330+05	.650+05	.300+04	.250+00	.100+01	.570+02	ORGLIB	1104
94238	PU 3	.330+05	.320+05	.600+06	.500+02	.200+01	.570+02	ORGLIB	1105
94238	PU 4	.330+05	.146+05	.450+05	.380+01	.450+00	.570+02	ORGLIB	1106
94238	PU 6	.330+05	.365+05	.240+04	.200+00	.450+00	.280+03	ORGLIB	1107
94238	PU 8	.330+05	.120+03	.300+04	.125+00	.000	.570+02	ORGLIB	1108
94238	PU20	.330+05	.300+04	.100+01	.625+00	.000	.550+00	ORGLIB	1109
94238	PU21	.330+05	.300+04	.100+01	.625+00	.000	.550+00	ORGLIB	1110
94238	PU22	.330+05	.300+04	.100+01	.625+00	.000	.550+00	ORGLIB	1111
94238	PU23	.330+05	.300+04	.100+01	.625+00	.000	.550+00	ORGLIB	1112
94239	PU 1	.890+07	.650+05	.300+04	.250+00	.100+01	.530+02	ORGLIB	1113
94239	PU 3	.890+07	.320+05	.600+06	.500+02	.200+01	.530+02	ORGLIB	1114
94239	PU 4	.890+07	.146+05	.450+05	.380+01	.450+00	.530+02	ORGLIB	1115
94239	PU 6	.890+07	.365+05	.240+04	.200+00	.450+00	.270+03	ORGLIB	1116
94239	PU 8	.890+07	.120+03	.300+04	.125+00	.000	.530+02	ORGLIB	1117
94239	PU20	.890+07	.300+04	.100+01	.625+00	.000	.520+00	ORGLIB	1118
94239	PU21	.890+07	.300+04	.100+01	.625+00	.000	.520+00	ORGLIB	1119
94239	PU22	.890+07	.300+04	.100+01	.625+00	.000	.520+00	ORGLIB	1120
94239	PU23	.890+07	.300+04	.100+01	.625+00	.000	.520+00	ORGLIB	1121
94240	PU 1	.240+07	.650+05	.300+04	.250+00	.100+01	.530+02	ORGLIB	1122
94240	PU 3	.240+07	.320+05	.600+06	.500+02	.200+01	.530+02	ORGLIB	1123
94240	PU 4	.240+07	.146+05	.450+05	.380+01	.450+00	.530+02	ORGLIB	1124
94240	PU 6	.240+07	.365+05	.240+04	.200+00	.450+00	.270+03	ORGLIB	1125
94240	PU 8	.240+07	.120+03	.300+04	.125+00	.000	.530+02	ORGLIB	1126
94240	PU20	.240+07	.300+04	.100+01	.625+00	.000	.520+00	ORGLIB	1127
94240	PU21	.240+07	.300+04	.100+01	.625+00	.000	.520+00	ORGLIB	1128
94240	PU22	.240+07	.300+04	.100+01	.625+00	.000	.520+00	ORGLIB	1129
94240	PU23	.240+07	.300+04	.100+01	.625+00	.000	.520+00	ORGLIB	1130
94241	PU 1	.480+04	.650+05	.300+04	.250+00	.100+01	.230+01	ORGLIB	1131
94241	PU 3	.480+04	.320+05	.600+06	.500+02	.200+01	.250+01	ORGLIB	1132
94241	PU 4	.480+04	.146+05	.450+05	.380+01	.450+00	.220+01	ORGLIB	1133

94241	PU 6	,480+04	,365+05	,240+04	,200+00	,450+00	,130+02	ORGLIB	1134
94241	PU 8						,133-01,30-01,18-00	ORGLIB	1135
94241	PU20	,480+04	,300+04	,100+01	,625+00	,000	,570+00	ORGLIB	1136
94241	PU21	,480+04	,300+04	,100+01	,625+00	,000	,600+00	ORGLIB	1137
94241	PU22	,480+04	,300+04	,100+01	,625+00	,000	,570+00	ORGLIB	1138
94241	PU23	,480+04	,300+04	,100+01	,625+00	,000	,570+00	ORGLIB	1139
94242	PU 1	,140+09	,650+05	,300+04	,250+00	,100+01	,510+02	ORGLIB	1140
94242	PU 3	,140+09	,320+05	,600+06	,500+02	,200+01	,510+02	ORGLIB	1141
94242	PU 4	,140+09	,146+05	,450+05	,380+01	,450+00	,510+02	ORGLIB	1142
94242	PU 6	,140+09	,365+05	,240+04	,200+00	,450+00	,250+03	ORGLIB	1143
94242	PU 8	,140+09	,120+03	,300+04	,125+00	,000	,510+02	ORGLIB	1144
94242	PU20	,140+09	,300+04	,100+01	,625+00	,000	,490+00	ORGLIB	1145
94242	PU21	,140+09	,300+04	,100+01	,625+00	,000	,490+00	ORGLIB	1146
94242	PU22	,140+09	,300+04	,100+01	,625+00	,000	,490+00	ORGLIB	1147
94242	PU23	,140+09	,300+04	,100+01	,625+00	,000	,490+00	ORGLIB	1148
94243	PU 1	,208	,650+05	,300+04	,250	,100+01	,37	PU243	1
94243	PU 3	,208	,320+05	,600+06	,500+02	,200+01	,37	PU243	2
94243	PU 4	,208	,300+05	,450+05	,380+01	,450+00	,25	PU243	3
94243	PU 6	,208	,365+05	,240+04	,2	,450+00	,2	PU243	4
94243	PU 8	,208					,14	PU243	5
94243	PU20	,208					,18	PU243	6
94243	PU21	,208					,19	PU243	7
94243	PU22	,208					,18	PU243	8
94243	PU23	,208					,18	PU243	9
94244	PU 1	3,03E10	65000,	,00003	,25	1,	58,4	ORGLIB	1149
94244	PU 3	3,03E10	32000,	6,E-7	,005	,02	58,4	ORGLIB	1150
94244	PU 4	3,03E10	1,46E4	4,5E-6	,038	,05	58,4	ORGLIB	1151
94244	PU 6	3,03E10	,365E5	2,4E-5	,2	,45	292,1	ORGLIB	1152
94244	PU 8	3,03E10					58,4 58,4 58,4	ORGLIB	1153
94244	PU20	,303+11					0,76	ORGLIB	1154
94244	PU21	,303+11					0,76	ORGLIB	1155
94244	PU22	,303+11					0,76	ORGLIB	1156
94244	PU23	3,03E10					,76	ORGLIB	1157
95241	AM 1	,170+06	,200+05	,100+03	,250+00	,100+01	,570+02	ORGLIB	1158
95241	AM 3	,170+06	,270+05	,300+05	,750+02	,300+01	,570+02	ORGLIB	1159
95241	AM 4	,170+06	,146+05	,350+04	,880+01	,350+00	,570+02	ORGLIB	1160
95241	AM 6	,170+06	,365+05	,250+04	,630+01	,250+00	,280+03	ORGLIB	1161
95241	AM 8	,167+06	,120+03	,300+04	,125+00	,000	,570+02	ORGLIB	1162
95241	AM20	,167+06					,56	ORGLIB	1163
95241	AM21	,167+06					,59	ORGLIB	1164
95241	AM22	,167+06					,56	ORGLIB	1165
95241	AM23	,1700+06					,56	ORGLIB	1166
95242	AM 1	,667+00	,200+05	,100+03	,250+00	,100+01	,670+02	ORGLIB	1167
95242	AM 3	,667+00	,270+05	,300+05	,750+02	,300+01	,660+02	ORGLIB	1168
95242	AM 4	,667+00	,348+04	,350+04	,088+00	,350+00	,630+02	ORGLIB	1169
95242	AM 6	,667+00	,365+05	,250+04	,063+00	,250+00	,340+03	ORGLIB	1170
95242	AM 8						,540+00,13+02,40+02	ORGLIB	1171
95242	AM20	,667+00					,22	ORGLIB	1172
95242	AM21	,667+00					,22	ORGLIB	1173
95242	AM22	,667+00					,20	ORGLIB	1174
95242	AM23	,667					,2	ORGLIB	1175
952421AM 1		,560+05	,200+05	,100+03	,250+00	,100+01	,610+02	ORGLIB	1176
952421AM 3		,560+05	,270+05	,300+05	,750+02	,300+01	,610+02	ORGLIB	1177
952421AM 4		,560+05	,348+04	,350+04	,088+00	,350+00	,570+02	ORGLIB	1178
952421AM 6		,560+05	,365+05	,250+04	,063+00	,250+00	,300+03	ORGLIB	1179
952421AM 8							,340+00,13+02,40+02	ORGLIB	1180
952421AM20		,560+05					,019	ORGLIB	1181
952421AM21		,560+05					,037	ORGLIB	1182
952421AM22		,560+05					,011	ORGLIB	1183
952421AM23		,560+05					,011	ORGLIB	1184

95243	AM 1	.290+07	.200+05	.100-03	.250-00	.100+01	.540+02	ORGLIB	1170
95243	AM 3	.290+07	.270+05	.300-05	.750-02	.300-01	.540+02	ORGLIB	1171
95243	AM 4	.290+07	.348+04	.350-04	.880-01	.350-00	.540+02	ORGLIB	1172
95243	AM 6	.290+07	.365+05	.250-04	.630-01	.250-00	.270+03	ORGLIB	1173
95243	AM 8						.540+02,54+02,54+02	ORGLIB	1174
95243	AM20	.290+07					0,54	ORG003	14
95243	AM21	.290+07					0,56	ORG003	15
95243	AM22	.290+07					.54	ORG003	16
95243	AM23	.290+07					.54	ORG002	5
95244	AM 1	.421	.200+05	.100-03	.250-00	.100+01	.44	AM244	1
95244	AM 3	.421	.270+05	.300-05	.750-02	.300-01	.44	AM244	2
95244	AM 4	.421	.348+04	.350-04	.880-01	.350-00	.20	AM244	3
95244	AM 6	.421	.365+05	.250-04	.630-01	.250-00	.250	AM244	4
95244	AM 8	.421					1,6	AM244	5
95244	AM20	.421					.52	AM244	6
95244	AM21	.421					.52	AM244	7
95244	AM22	.421					.52	AM244	8
95244	AM23	.421					.52	AM244	9
96242	CM 1	.163+03	.240+05	.100-03	.250-01	.100+01	.600+02	ORGLIB	1175
96242	CM 3	.163+03	.240+05	.200-05	.500-02	.200-01	.780+02	ORGLIB	1176
96242	CM 4	.163+03	.300+04	.400-04	.100+00	.400-00	.780+02	ORGLIB	1177
96242	CM 6	.163+03	.365+05	.300-04	.750-01	.300-00	.400+03	ORGLIB	1178
96242	CM 8						.630+02,63+02,64+02	ORGLIB	1179
96242	CM20	.163+03					0,62	ORG003	17
96242	CM21	.163+03					0,62	ORG003	18
96242	CM22	.163+03					0,61	ORG003	19
96242	CM23	.163+03					.61	ORG002	6
96243	CM 1	.130+05	.240+05	.100-03	.250-00	.100+01	.600+02	ORGLIB	1180
96243	CM 3	.130+05	.240+05	.200-05	.500-02	.200-01	.600+02	ORGLIB	1181
96243	CM 4	.130+05	.300+04	.400-04	.100+00	.400-00	.600+02	ORGLIB	1182
96243	CM 6	.130+05	.365+05	.300-04	.750-01	.300-00	.300+03	ORGLIB	1183
96243	CM 8						.600+02,60+02,60+02	ORGLIB	1184
96243	CM20	.130+05					0,64	ORG003	20
96243	CM21	.130+05					0,71	ORG003	21
96243	CM22	.130+05					0,61	ORG003	22
96243	CM23	.130+05					.61	ORG002	7
96244	CM 1	.670+04	.240+05	.100-03	.250-00	.100+01	.600+02	ORGLIB	1185
96244	CM 3	.670+04	.240+05	.200-05	.500-02	.200-01	.600+02	ORGLIB	1186
96244	CM 4	.670+04	.300+04	.400-04	.100+00	.400-00	.600+02	ORGLIB	1187
96244	CM 6	.670+04	.365+05	.300-04	.750-01	.300-00	.300+03	ORGLIB	1188
96244	CM 8						.600+02,60+02,60+02	ORGLIB	1189
96244	CM10	.670+04	.100+09			.0005	.600+02	ORGLIB	1190
96244	CM11	.670+04	.100+09			.0001	.600+02	ORGLIB	1191
96244	CM20	.670+04					.59	ORG003	23
96244	CM21	.670+04					.59	ORG003	24
96244	CM22	.670+04					.59	ORG003	25
96244	CM23	.670+04					.58	ORG002	8
96245	CM 1	.730+07	.240+05	.100-03	.250-00	.100+01	.560+02	ORGLIB	1192
96245	CM 3	.730+07	.240+05	.200-05	.500-02	.200-01	.560+02	ORGLIB	1193
96245	CM 4	.730+07	.300+04	.400-04	.100+00	.400-00	.560+02	ORGLIB	1194
96245	CM 6	.730+07	.365+05	.300-04	.750-01	.300-00	.280+03	ORGLIB	1195
96245	CM 8						.550+02,55+02,55+02	ORGLIB	1196
96245	CM20	.730+07					.57	ORG003	26
96245	CM21	.730+07					.61	ORG003	27
96245	CM22	.730+07					.56	ORG003	28
96245	CM23	.730+07					.55	ORG002	9
96246	CM 1	.240+07	.240+05	.100-03	.250-00	.100+01	.560+02	ORGLIB	1197
96246	CM 3	.240+07	.240+05	.200-05	.500-02	.200-01	.560+02	ORGLIB	1198
96246	CM 4	.240+07	.300+04	.400-04	.100+00	.400-00	.56	CM246	2
96246	CM 6	.240+07	.365+05	.300-04	.750-01	.300-00	.280+03	ORGLIB	1199

96246	CM 8										,560+02		ORGLIB	1200
96246	CM20	,240+07									,54		ORG003	29
96246	CM21	,240+07									,54		ORG003	30
96246	CM22	,240+07									,54		ORG003	31
96246	CM23	,240+07									,54		ORG003	32
96247	CM 1	5,62E9	24000,	.0001	,25	1.					55,		ORGLIB	1201
96247	CM 3	5,62E9	24000,	2.E-6	,005	,02					55,		ORGLIB	1202
96247	CM 4	5,62E9	3000,	.00004	,1	,4					270,		ORGLIB	1203
96247	CM 6	5,62E9	,365E5	.00003	,075	,3					55,		ORGLIB	1204
96247	CM 8	5,62E9									55,	55,	ORGLIB	1205
96247	CM20	5,62E9									0,53		ORG001	841
96247	CM21	5,62E9									0,53		ORG001	842
96247	CM22	5,62E9									0,53		ORG001	843
96247	CM23	5,62E9									0,53		ORG004	15
96248	CM 1	1,28E8	24000,	.0001	,25	1.					453,3		ORGLIB	1207
96248	CM 3	1,28E8	24000,	2.E-6	,005	,02					453,3		ORGLIB	1208
96248	CM 4	1,28E8	3000,	4.E-5	,1	,4					453,3		ORGLIB	1209
96248	CM 6	1,28E8	,365E5	.00003	,075	,3					2244,		ORGLIB	1210
96248	CM 8	1,28E8									453,3	453,3 453,3	ORGLIB	1211
96248	CM20	1,28E9									11,45		ORG001	844
96248	CM21	1,28E9									11,45		ORG001	845
96248	CM22	1,28E9									11,45		ORG001	846
96248	CM23	1,28E9									11,45		ORG004	16
97249	BK 1	,290+03	,650+05	,300-04	,250-00	,100+01					,380+01		ORGLIB	1213
97249	BK 6	,290+03	,365+05	,240-04	,200-00	,800-00					,200+02		ORGLIB	1214
97249	BK 8										,264-01,44-01,20-00		ORGLIB	1215
97249	BK20	,290+03									0,32		ORG001	847
97249	BK21	,290+03									0,32		ORG001	848
97249	BK22	,290+03									0,32		ORG001	849
97249	BK23	,290+03									0,32		ORG001	850
98249	CF 1	,170+06	,650+05	,300-04	,250-00	,100+01					,620+02		ORGLIB	1216
98249	CF 6	,170+06	,365+05	,240-04	,200-00	,800-00					,300+03		ORGLIB	1217
98249	CF 8										,600+02		ORGLIB	1218
98249	CF20	,170+06									0,66		ORG001	851
98249	CF21	,170+06									0,76		ORG001	852
98249	CF22	,170+06									0,63		ORG001	853
98249	CF23	,170+06									0,63		ORG001	854
98250	CF 1	,370+04	,650+05	,300-04	,250-00	,100+01					,620+02		ORGLIB	1219
98250	CF 6	,370+04	,365+05	,240-04	,200-00	,800-00					,310+03		ORGLIB	1220
98250	CF 8													

APPENDIX E

PROGRAM LISTING

APPENDIX E

PROGRAM LISTING

A listing follows of DACRIN subroutines that have been changed by adding the G.I. tract dose calculation. The order of the listing is:

MAIN
LIBB
ORDOSE
GIDOT
QUINT1
QUINT2
UNIT

Note that the COMMON block COMN has been changed to allow increased dimensions for some variables. All subroutines that previously included COMN (in addition to the above) should be changed to correspond to the COMN (and COMNA) cards of program MAIN.

E.2

	PROGRAM MAIN(INPUT,OUTPUT,TAPE5=INPUT,TAPE6=OUTPUT,PUNCH,	MAIN	2
	ORGLIB,RIBLIB,TAPE2H=ORGLIB,TAPE2H=RIBLIB,TAPE1)	9/7/74	9
	COMMON NFP,NAC,INTGT,HCFNUG(96),SKIP(96),MASS(620,2),LAMBDA(620),	COMMON	1
	CHAINS,OKFRCT(450,3),REC(620),ML(620),ICL(620)	COMMON	2
5	COMMON MA(620),LAMBDA(2400),FWAT(2400),FAIR(2400),F2P(2400),	COMMON	3
	TORG(7400),ENG(2400,3)	COMMON	4
	COMMON F1(620),IBEG(620),IEND(620)	COMMON	5
	COMMON OOSTIM(10),O3,O4,O5,UPTIME(5),ISM(620)	COMMON	6
10	COMMON BRATE(5),R(10),X(10),SY(10),SZ(10),DIAM	COMMON	7
	COMMON KORG(25),SUMDOS(50,10,10),TITLE2(8),NOT,TLH,TLN	COMMON	7
	COMMON IPAGE,ORGAN(2,10)	COMMON	9
	COMMON/NAM/ORGNAME(2,25)	COMMON	10
	REAL LAMBDA,LAMBDA,MASS	COMMON	11
15	INTEGER CHAINS,SKIP	COMMON	12
	LOGICAL FISPD,ACTPFD	COMMON	13
	COMMON ACTPFD,FISPPD,KR,KUNT,JOY	COMMON	14
	COMMON LINT(7)	9/9/74	3
	DIMENSION SMASS(620),CTLN(5),OTLH(5),ORGANS(10)	SUPP	115
	DIMENSION QUANTY(600)	MAIN	6
20	DIMENSION STUB(5),SIGZ(10,5),SIGY(10,5),EQQ(10,5)	MAIN	7
	INTEGER REC,ORGANS	MAIN	8
	REAL KSQD	MAIN	9
	DIMENSION NAME(600),M(600)	MAIN	10
	DIMENSION CTLH(10),CTLN(10),ISL(600)	MAIN	11
25	DIMENSION ITAB(21)	MAIN	12
	DIMENSION ISPACE(100),JFMT(7),JFMT(5),JFMT(6),JFMT(9),IFIELD(10)	MAIN	13
	DIMENSION NFLO(10)	SUPP	116
	DATA JFMT/'(1H0," " "X,"12HDISTANC","E (H),4X"," " "(A6,A5"," ")	SUPP	117
30	DATA (JFMT(I),I=1,5) /'(1H " " "X,9HD","056 T1","ME)"/	SUPP	118
	DATA (JFMT(I),I=1,6) /'(1H " " "X,1H","F8.0","7H MEI","ERS//)	MAIN	16
	DATA JFMT/'(1H0," " "X,F1.0","7X,1F","E11.2"," " " "(E11.2",	MAIN	17
	DATA JFMT/'(1H0," " "X,F1.0","7X,1F","E11.2"," " " "(E11.2",	SUPP	119
	DATA IFIELD/'0","1","2","3","4","5","6","7","8","9"/	SUPP	120
35	DATA ISPACE/'46","41","36","31","26","21","16","11","6","1"/	MAIN	22
	DATA NFLO/'1","2","3","4","5","6","7","8","9","10"/	SUPP	121
	DATA CH,OH/13.8,232./	SUPP	122
	DATA (JORGNAME(I,J),I=1,2),J=1,23) /'TOTAL ","BODY ","BODY W",	MAIN	23
40	1"ATER "," KION","EYS "," LIV","ER "," SPLE","EN "	MAIN	24
	2" BUN","E "," FA","T "," LUN","GS "," ADREN"," "	MAIN	25
	3"ALS "," TES","TES "," OVAR","TES "," SKI","N "	MAIN	26
	4" DR","IN "," MUSC","LE "," PROST","ATE "," THYR"," "	MAIN	27
	5"OID "," PANCR","EAS "," HEA","RT "," GI TR","ACT "	MAIN	28
45	6" STON","ACH "," S","I "," UL","I "," LL"," "	SUPP	123
	7"1 "	SUPP	124
	NAMELIST/INPUT/NEXT,MET,AH,BH,CH,OH,KSQD,CZ,CY,EN,UBAR,O3,O4,O5,	SUPP	125
	1H,DIAM,UPTIME,BRATE,STUB,IPR,ICL,IUP,SIGZ,SIGY,R,OOSTIM,ORGANS	MAIN	32
	UNIT 25 IS FOR RIBD LIBRARY, USE LOGICAL FILE NAME AND PERMANENT	MAIN	33
50	FILE NAME OF -RIBLIB- ON ATTACH CARD.	MAIN	34
		MAIN	35
		MAIN	36
	UNIT 23 IS FOR THE ORGAN DATA LIBRARY, USE LOGICAL AND PERMANENT	MAIN	37
	FILE NAME OF -ORGLIB- ON ATTACH CARD.	MAIN	38
		MAIN	39
55	CALL DATE(OGY)	MAIN	40
	IEF=3	MAIN	41
	MET=-1	MAIN	42

		IPAGE=1	MAIN	43
	100	READ 1000, TITLE2	MAIN	44
60		READ (C,INFUT)	MAIN	45
		KASE=1	MAIN	46
		IF (NEXT.GT.C.ANC.NEXT.LE.4) GO TO 110	MAIN	47
		PRINT 900,NEXT	MAIN	48
		STOP	MAIN	49
65	110	GO TO 1120,130,270,810,NEXT	MAIN	50
	C	READ NUCLIDE DATA LIBRARY	MAIN	51
	120	CONTINUE	MAIN	52
		CALL L13K	MAIN	53
		CALL L188	MAIN	54
70	130	DO 140 I=1,CHAINS	MAIN	55
		SKIP(I)=0	MAIN	56
	140	CONTINUE	MAIN	57
		IER=0	MAIN	58
	C	INITIALIZE NUCLIDE MASS ARRAY	MAIN	59
75		DO 150 I=1,NTOT	MAIN	60
		MASS(I,2)=0.	MAIN	61
	150	MASS(I,1)=G.G	MAIN	62
		N1=NFP	MAIN	63
		N2=NTOT	MAIN	64
80	C	READ NUCLIDE INVENTORY FROM CARDS	MAIN	65
		READ 850, NUMBER	MAIN	66
		READ 850, (NAME(I),M(I),ISL(I),QUANTY(I),I=1,NUMBER)	MAIN	67
		LIM=282	MAIN	68
		PRINT 855,IPAGE,DOY	MAIN	69
85		PRINT 856,(LIST(I),I=1,7)	9/9/74	4
		PRINT 860	MAIN	70
		ISTART=1	MAIN	71
	160	IPAGE=IPAGE+1	MAIN	72
		ISTOP=MIN(NUMBER,LIM)	MAIN	73
90		DO 170 I=ISTART,ISTOP,6	MAIN	74
		JSTOP=MIN(I+5,ISTOP)	MAIN	75
	170	PRINT 870, (NAME(J),M(J),ISL(J),QUANTY(J),J=I,JSTOP)	MAIN	76
		IF (ISTOP.EQ.NUMBER) GO TO 180	MAIN	77
		ISTART=ISTOP+1	MAIN	78
95		PRINT 820,IPAGE,DOY	MAIN	79
		LIM=LIM+330	MAIN	80
		GO TO 160	MAIN	81
	C		MAIN	82
	C	TRY TO IDENTIFY NUCLIDES READ FROM CARDS	MAIN	83
100	180	DO 210 I=1,NUMBER	MAIN	84
		DO 190 J=1,NTOT	MAIN	85
		IF (NAME(I).EQ.REC(J).AND.M(I).EQ.MLT(J)) GO TO 200	MAIN	86
	190	CONTINUE	MAIN	87
	C		MAIN	88
105	C	IF CAN NOT IDENTIFY NUCLIDE -STOP	MAIN	89
		PRINT 890, NAME(I),M(I)	MAIN	90
		IER=IER+1	MAIN	91
	C	CONVERT CURIES TO CURIE-SEC	MAIN	92
	200	MASS(J,1)=QUANTY(I)/LAMDA(J)	MAIN	93
110		ICL(J)=ISL(I)	MAIN	94
		IF (ISL(I).GE.1.AND.ISL(I).LE.3) GO TO 210	MAIN	95
	C	IF NO SOLUBILITY INDEX ON NUCLIDE PRINT OFFENDER	MAIN	96
		IF (ICL(I).GE.1.AND.ICL(I).LE.3) GO TO 210	MAIN	97
		PRINT 1060, NAME(I),M(I),ICL(I)	MAIN	98

115		IER=IER+1	MAIN	99
	210	CONTINUE	MAIN	100
	C	ELIMINATE UNUSED CHAINS	MAIN	101
	C	FISPRD = FALSE IF NO FISSION PRODUCTS PRESENT	MAIN	102
	C	ACTPRD = FALSE IF NO ACTIVATION PRODUCTS PRESENT	MAIN	103
120		ACTPRD=.FALSE.	MAIN	104
		FISPRD=.FALSE.	MAIN	105
		ISCTOP=0	MAIN	106
		DO 230 K=1,CHAINS	MAIN	107
		LIM=NOFNUC(K)	MAIN	108
125		IF (SKIP(K).NE.0) GO TO 240	MAIN	109
		DO 220 I=1,LIM	MAIN	110
		L=ISOTOP+I	MAIN	111
		IF (H433(L,1).GT.1.E-30.AND.LA180A(L).GT.1.E-30) GO TO 230	MAIN	112
	220	CONTINUE	MAIN	113
130		SKIP(K)=LIM	MAIN	114
		GO TO 240	MAIN	115
	230	CONTINUE	MAIN	116
		FISPRD=.TRUE.	MAIN	117
	240	ISOTOP=ISOTOP+LIM	MAIN	118
135	250	CONTINUE	MAIN	119
		DO 260 L=N1,N2	MAIN	120
		IF (H433(L,1).LT.1.E-30.OR.LA180A(L).LT.1.E-30) GO TO 260	MAIN	121
		ACTPRD=.TRUE.	MAIN	122
	260	CONTINUE	MAIN	123
140	C	COMPT DOSE TIMES, DISTANCES, AND UPTAKE TIMES	MAIN	124
	270	NUPT=0	MAIN	125
		NR=0	MAIN	126
		NOT=0	MAIN	127
		IF (NEXT.LT.3) GO TO 275	MAIN	128
145		PPRINT 820,IPAGE,DOY	MAIN	129
		IPAGE=IPAGE + 1	MAIN	130
	275	GO 320 I=1,10	MAIN	131
		IF (R(I)) 290,290,280	MAIN	132
	280	NR=I	MAIN	133
150	290	IF (DOSTIM(I)) 310,310,300	MAIN	134
	300	NOT=1	MAIN	135
	310	IF (NUPT.6E-5.OR.1.GT.5.OR.UPTIME(I).LE.0.) GO TO 320	MAIN	136
		NUPT=NUPT+1	MAIN	137
		UPTIME(NUPT)=UPTIME(I)	MAIN	138
155	320	CONTINUE	MAIN	139
		CALL UNIT(OTLN,DTLN,NUPT,UPTIME)	MAIN	140
		CALL UNIT(CTLN,CTLN,NOT,DOSTIM)	SUPP	141
		IO=0	MAIN	141
		DO 330 I=1,25	SUPP	127
160	330	KORG(I)=0	MAIN	143
		DO 340 I=1,10	MAIN	144
		IND=ORGANS(I)	MAIN	145
		IF (IND.LE.0) GO TO 340	MAIN	146
		IO=IO+1	MAIN	147
165		KORG(IND)=1	MAIN	148
	340	CONTINUE	MAIN	149
		IF (IO.GT.1) GO TO 350	MAIN	150
		PRINT 910, ORGANS	MAIN	151
		IER=IER+1	MAIN	152
170	350	IF (UBAR.LT.1.E-30) IER=IER+1	MAIN	153
		IF (BRATE(1).LE.0.) IER=IER+1	MAIN	154

		IF (MET.LT.0.OR.MET.GT.10) IER=IER+1	MAIN	155
		IF (LIM.LE.220) GO TO 355	MAIN	156
175		IPAGE=IPAGE + 1	MAIN	157
	355	PRINT 820,IPAGE,DOY	MAIN	158
		PRINT 928,UBAR,BRATE,MET	MAIN	159
		IM=H	MAIN	160
	356	PRINT 355,IM	MAIN	161
180		FORMAT(1H,"H=",I5," METERS")	MAIN	162
		IGO=MET	MAIN	163
		IF (MET.EQ.0) GO TO 815	MAIN	164
		IF (MET.GT.3) IGO=3	MAIN	165
		GO TO (360,330,390), IGO	MAIN	166
	360	IF (AH.LE.0.) IER=IER+1	MAIN	167
185		IF (AH.LE.0.) IER=IER+1	MAIN	168
		IF (CH.LE.0.) IER=IER+1	MAIN	169
		IF (OH.LE.0.) IER=IER+1	MAIN	170
		IF (KSOD.LE.0.) IER=IER+1	MAIN	171
		IF (STUB(1).LE.0.) IER=IER+1	MAIN	172
190		PRINT 930, AH,BH,CH,OH,KSOD,STUB(1)	MAIN	173
		IF (NUPT.EQ.1) GO TO 390	MAIN	174
		DO 370 I=2,NUPT	MAIN	175
		IF (STUB(I).LE.1.E-30) STUB(I)=STUB(I-1)	MAIN	176
195	370	IF (BRATE(I).LE.0.) BRATE(I)=BRATE(I-1)	MAIN	177
		CONTINUE	MAIN	178
		GO TO 390	MAIN	179
	380	IF (CZ.LE.0.) IER=IER+1	MAIN	180
		IF (CY.LE.0.) IER=IER+1	MAIN	181
200		IF (EN.LE.0.) IER=IER+1	MAIN	182
	390	PRINT 940, CY,CZ,EN	MAIN	183
		IF (DIAM.GT.0.) CALL DEP	MAIN	184
		IF (D3.GT.0.) GO TO 400	MAIN	185
		IF (D4.GT.0.) GO TO 400	MAIN	186
		IF (D3.GT.0.) GO TO 400	MAIN	187
205		IER=IER+1	MAIN	188
	400	PRINT 830,DIAM,D3,D4,D5	MAIN	189
		IF (R(1).LE.0.) IER=IER+1	MAIN	190
		IF (DOSTIM(1).LE.0.) IER=IER+1	MAIN	191
210		PRINT 950, NR,(R(I),I=1,NR)	MAIN	192
		PRINT 960, NUPT,(UPTIME(I),I=1,NUPT)	MAIN	193
		PRINT 970, NDT,(DOSTIM(I),I=1,NDT)	MAIN	194
		IF (IER.LT.1) GO TO 410	MAIN	195
		PRINT 1020, IER	MAIN	196
		STOP	MAIN	197
215	410	CONTINUE	MAIN	198
		DOUB=1/UBAR	MAIN	199
		IGO=MET	MAIN	200
		GO TO (420,450,540,480,483,487,480,480,480,590), MET	MAIN	201
	C	HAIFORD MODEL	MAIN	202
220	420	CONTINUE	MAIN	203
		DO 440 I0=1,NUPT	MAIN	204
		DO 430 I=1,NR	MAIN	205
		IT=R(I)*DOUB	MAIN	206
		IT2=IT*IT	MAIN	207
225		EXFO=KSOD*IT2	MAIN	208
		EXX=EXP(-EXFO)	MAIN	209
		CM2=1.-EXX	MAIN	210
		SZ2=BH*IT+OME*AH	MAIN	211

		SIGZ(IR,IU)=SQRT(SZ2)	MAIN	212
230		BA=CH*CH*STUB(IU)	MAIN	213
		APH=.5*BA/(STUB(IU)**2)	MAIN	214
		SY2=BA*(1T-APH*(1.-EXP(-1T/APH)))	MAIN	215
		SIGY(IR,IU)=SQRT(SY2)	MAIN	216
	430	CONTINUE	MAIN	217
235	440	CONTINUE	MAIN	218
		GO TO 543	MAIN	219
	C	SUTTON MODEL	MAIN	220
	450	CONTINUE	MAIN	221
		SQ2=1./SQRT(2.)	MAIN	222
240		DO 470 IR=1,NR	MAIN	223
		SIGY(IR,1)=CY*SQ2*(R(IR)**(1.-.5*EN))	MAIN	224
		SIGZ(IR,1)=CZ*SQ2*(R(IR)**(1.-.5*EN))	MAIN	225
		DO 460 IU=2,NUPT	MAIN	226
		SIGZ(IR,IU)=SIGZ(IR,1)	MAIN	227
245		SIGY(IR,IU)=SIGY(IR,1)	MAIN	228
	460	CONTINUE	MAIN	229
	470	CONTINUE	MAIN	230
		GO TO 543	MAIN	231
	C	PASQUILL CURVES FOR SIGMA Z	MAIN	232
250	480	ITM3=MET-3	MAIN	233
		DO 490 IR=1,NR	MAIN	234
		X(IR)=100.*R(IR)	MAIN	235
	490	CONTINUE	MAIN	236
		ERR=0.	MAIN	237
255		CALL PASSIG (ITM3,WR,ERR)	MAIN	238
		IF (ERR) 510,510,550	MAIN	239
	500	WRITE (6,960) MET	MAIN	240
	510	CONTINUE	MAIN	241
		DO 530 IR=1,NR	MAIN	242
260		DO 520 IU=1,NUPT	MAIN	243
		SIGZ(IR,IU)=SZ(IR)/100.	MAIN	244
		SIGY(IR,IU)=SY(IR)/100.	MAIN	245
	520	CONTINUE	MAIN	246
	530	CONTINUE	MAIN	247
265	C	PRINT SIGMA Y AND SIGMA Z VALUES IF IPR GT 0	MAIN	248
	540	IF (IPR) 560,560,550	MAIN	249
	550	WRITE (6,990)	MAIN	250
		WRITE (6,1000) R	MAIN	251
270		WRITE (6,1010) UBAR, (SIGZ(IR,IU),IR=1,10),IU=1,NUPT)	MAIN	252
		WRITE (6,1070)	MAIN	253
		WRITE (6,1090) R	MAIN	254
		WRITE (6,1010) UBAR, (SIGY(IR,IU),IR=1,10),IU=1,NUPT)	MAIN	255
	560	CONTINUE	MAIN	256
	C	CALCULATE EQQ	MAIN	257
275		DO 580 IR=1,NR	MAIN	258
		DO 570 IU=1,NUPT	MAIN	259
		DENOM=SIGY(IR,IU)*SIGZ(IR,IU)*UBAR*3.1415927	MAIN	260
		EQQ=(-.5*(H/SIGZ(IR,IU))**2)	MAIN	261
		EQQ(IR,IU)=EXP(EQQ)/DENOM	MAIN	262
280	570	CONTINUE	MAIN	263
	580	CONTINUE	MAIN	264
		IF (IFU.GT.0) PUNCH 840, ((EQQ(I,J),I=1,10),J=1,NUPT)	MAIN	265
		GO TO 600	MAIN	266
	590	PEAC (5,840) ((EQQ(I,J),I=1,10),J=1,NUPT)	MAIN	267
285	600	CONTINUE	MAIN	268

	C	PRINT IQQ VALUES IF IQQ.GT.0	MAIN	269
		IF (IQQ.LE.3) GO TO 620	MAIN	270
		PRINT 820, IPAGE, DOY	MAIN	271
290		PRINT 1130, (R(I), I=1, NR)	MAIN	272
		IPAGE=IPAGE+1	MAIN	273
		DO 610 IU=1, NUPT	MAIN	274
		PRINT 1140, UPTIME(IU), (EQQ(IR, IU), IR=1, NR)	MAIN	275
	610	CONTINUE	MAIN	276
295	C	START DOSE CALCULATION	MAIN	277
	C	MAIN DO LOOP ON DISTANCES	MAIN	279
	620	DO 720 IR=1, NR	MAIN	280
		KR=IR	MAIN	281
		IT=R(IRT/UBAR	MAIN	282
300		IF (.NOT.FISPRD) GO TO 630	MAIN	283
		CALL CHAINT (2, IT, 1)	MAIN	284
	630	IF (.NOT.ACTPRD) GO TO 650	MAIN	285
		DO 640 ISO=N1, NTOT	MAIN	286
		IF (MASS(ISO, 1).LT.1.E-30) GO TO 640	MAIN	287
		MASS(ISO, 2)=MASS(ISO, 1)*EXP(-LAMBDA(ISO)*IT)	MAIN	288
305	640	CONTINUE	MAIN	289
	650	DO 660 ISO=1, NTOT	MAIN	290
	660	SMASS(ISO)=MASS(ISO, 2)	MAIN	291
		DO 710 IU=1, NUPT	MAIN	292
		DOSE=SMATL(IU)*CON(IR, IU)/UPTIME(IU)	MAIN	293
310		IF (.NOT.FISPRD) GO TO 680	MAIN	294
		DO 670 ISO=1, NFP	MAIN	295
	670	MASS(ISO, 2)=SMASS(ISO)*800	MAIN	296
	680	IF (.NOT.ACTPRD) GO TO 700	MAIN	297
		DO 690 ISO=N1, NTOT	MAIN	298
315	690	MASS(ISO, 2)=SMASS(ISO)*800	MAIN	299
	700	TLH=OTLH(IU)	MAIN	300
		TLN=OTLN(IU)	MAIN	301
		KUFT=IU	MAIN	302
		CALL ORDOSE	MAIN	303
320	C	END OF CASE	MAIN	304
	710	CONTINUE	MAIN	305
	720	CONTINUE	MAIN	306
		WRITE(1, 725)	9/4/74	11
	725	FORMAT(" START OF NEXT CASE")	9/4/74	12
325		DO 729 KO=1, IO	9/4/74	13
		DO 729 IU=1, NOT	9/4/74	14
		KOG=ORGANS(KO)	9/4/74	15
		WRITE(1, 728) TITLE2(1), IO, KOG, (SUMDOS(IR, ID, KO), IR=1, NR)	9/4/74	16
	728	FORMAT(A4, 3X, I1, I2, 10E7, 2)	9/4/74	17
330	729	CONTINUE	9/4/74	18
	C	RETURN TO START FOR NEXT CASE	MAIN	307
	C	CALCULATE WEIGHTED DOSE VALUES OVER TOTAL RELEASE PERIOD	MAIN	308
		LFMT(2)=ISFACE(10)	MAIN	310
		LFMT(6)=NFLD(10)	SUPP	128
335		HFMT(2)=ISFACE(10)	MAIN	312
		HFMT(2)=ISFACE(10)	MAIN	313
		JFMT(7)=FIELD(10)	MAIN	314
		JFMT(2)=ISFACE(10)	MAIN	315
		GO 2730 ID=1, NOT	SUPP	129
340		PRINT 1120, TITLE2, DOY, OTLH(1), OTLN(1), CTLH(10), CTLN(10)	SUPP	130
	1120	FORMAT(" ", 24X, 8A10, 10X, 41X, 41X "DOSE TO SELECTED ORGANS OF INTERES	SUPP	131
		.T VIA INHALATION"/43X, "TASK GROUP ON LUNG DYNAMICS MODEL"/47X,	SUPP	132

		."DURATION OF INHALATION",1PE9.2,1X,A6 /5-X."DOSE TIME"1PE9.2,1X,A6	SUPP	133
		."ORGAN DOSE IN REM")	SUPP	134
345		WRITE(6,FM1) ((ORG=N(I,J),I=1,2),J=1,IO)	SUPP	135
		DO 1730 IR=1,NR	SUPP	136
		WRITE(6,FM1) R(IR),(SUMDOS(IR,IO,KO),KO=1,IO)	SUPP	137
	1730	CONTINUE	SUPP	138
	2730	CONTINUE	SUPP	139
350		IF(NUPT.LT.2) GO TO 100	SUPP	140
		DO 760 IU=2,NUPT	MAIN	316
		FAC=UPTIME(IU)/(UPTIME(IU)+UPTIME(IU-1))	MAIN	317
		DO 750 IO=1,NOT	MAIN	318
		DO 740 KO=1,IO	MAIN	319
355		DO 730 IR=1,NR	MAIN	320
		IRIU=IR + (IU-1)*10	MAIN	321
		IRIU=IR + (IU-2)*10	MAIN	322
		SUMDOS(IRIU,IO,KO)=SUMDOS(IRIU,IO,KO)*FAC+SUMDOS(IRIU,IO,KO)*(1-	MAIN	323
		1FAC)	MAIN	324
360	730	CONTINUE	MAIN	325
	740	CONTINUE	MAIN	326
	750	CONTINUE	MAIN	327
	760	CONTINUE	MAIN	328
		CALL UNIT (CTLH,CTLN,NDF,DOSTIME)	MAIN	329
365		ILINE=0	MAIN	330
		DO 950 IU=1,NUPT	MAIN	331
		DO 790 IR=1,NR	MAIN	332
		IRIU=IR + (IU-1)*10	MAIN	333
370		IF (ILINE.NOT+3.LE.51) GO TO 770	MAIN	334
		ILINE=0	MAIN	335
		PRINT 1040,IPAGE,DO*,OTLH(IU),OTLN(IU)	MAIN	336
		WRITE(6,1090) ((ORG=N(I,J),I=1,2),J=1,IO)	MAIN	337
		IPAGE=IPAGE+1	MAIN	338
	770	WRITE(6,1100) R(IR)	MAIN	339
375		ILINE=ILINE+3	MAIN	340
		DO 780 IO=1,NOT	MAIN	341
		WRITE(6,1110) CTLH(IO),CTLN(IO),(SUMDOS(IRIU,IO,KO),KO=1,10)	MAIN	342
	780	CONTINUE	MAIN	343
		ILINE=ILINE+NOT	MAIN	344
380	790	CONTINUE	MAIN	345
	800	CONTINUE	MAIN	346
		GO TO 100	MAIN	347
	C	STOP ON END OF FILE	MAIN	348
	810	STOP	MAIN	349
385	C		MAIN	350
	C	ORGAN DOSE CALCULATION ONLY	MAIN	351
	815	IF(IEP.GT.2) GO TO 319	MAIN	352
		IF(DIAM.GT.0.) CALL GEP	SUPP	141
		PRINT 830, DIAM,03.0+.05	SUPP	142
390		PRINT 860,NUPT,(UPTIME(I),I=1,NUPT)	MAIN	353
		PRINT 970,NOT,(DOSTE(I),I=1,NOT)	MAIN	354
		KUPT=1	MAIN	355
		KP=1	MAIN	356
		DO 817 I=1,NUPT	MAIN	357
395		DO 816 J=1,NOT	MAIN	358
	816	MASS(J,2)=MASS(J,1)*1.E+6/UPTIME(I)	MAIN	359
		TLH=OTLH(I)	MAIN	360
		TLN=OTLN(I)	MAIN	361
		KUPT=I	MAIN	362

400	K=1	MAIN	363
	CALL ORJOSE	MAIN	364
	817 CONTINUE	MAIN	365
	GO TO 130	MAIN	366
	819 IER=IER+1	MAIN	367
405	PRINT 1020,IER	MAIN	368
	STOP	MAIN	369
	C	MAIN	370
	820 FORMAT (1H1,"PAGE",I5,11X,A9/)	MAIN	371
	830 FORMAT (1H,"DIAM =",F9.3," MICROMETERS"/1H,"D3 =",F9.3/1H,"D4 =",F9.3/1H,"D5 =",F9.3)	MAIN	372
410	1",F9.3/1H,"D5 =",F9.3)	MAIN	373
	840 FORMAT (10E7.3)	MAIN	374
	850 FORMAT (I3)	MAIN	375
	855 FORMAT (1H1,"PAGE",I5,4X,"***** INPUT DATA *****",44X,A9///)	MAIN	376
	856 FORMAT (1H0.7A10)	9/0774	19
415	860 FORMAT (1H0.5X,"NUCLIDE RELEASE IN Curies"/)	MAIN	377
	870 FORMAT (1H,2X,6(2X,A3,I3,I2,1PE11.4))	MAIN	378
	880 FORMAT (1(A3,I3,I2,1E12.0))	MAIN	379
	890 FORMAT (1"UNKNOWN ISOTOPE - "A3,I3)	MAIN	380
	900 FORMAT (1" INVALID VALUE FOR NEXT - "I6,)	MAIN	381
420	910 FORMAT (1" NO ORGANS SPECIFIED - ORGANS",10I2)	MAIN	382
	920 FORMAT (1H0///1H0,"UBAR =",F6.1/1H,"BRATE =",F9.0/1H,"MET =",I3)	MAIN	383
	930 FORMAT (1" AH="F7.1/" BH="F8.5/" CH="F7.1/" DH="F7.1/" KSQO="F9.6/	MAIN	384
	1" STUR(1)="F7.3)	MAIN	385
	940 FORMAT (1" CY="F6.3/" CZ="F6.3/" EN="F6.3)	MAIN	386
425	950 FORMAT (1" "I3," DISTANCES, METERS",10F10.3)	MAIN	387
	960 FORMAT (1H,13," UPTAKE TIMES, SECONDS ",1P5E10.3)	MAIN	388
	970 FORMAT (1H,13," DOSE TIMES, SECONDS ",1P10E10.3)	MAIN	389
	980 FORMAT (57H0LIMITS OF STORED SIGZ DATA EXCEEDED FOR METEOROLGY TY	MAIN	390
	1PE,I3)	MAIN	391
430	990 FORMAT (1//65X,"SIGMA Z VALUES")	MAIN	392
	1000 FORMAT (13H0AVERAGE WIND,30X,3,H0ISTANCE FROM RELEASE POINT METERS	MAIN	393
	1/13H SPEED, M/SEC,10F10.0/)	MAIN	394
	1010 FORMAT (1H,12X,10F10.0/1H,12X,10F10.0/)	MAIN	395
	1020 FORMAT (1" IER = "I3," ERRORS IN INPUT DATA - STOP")	MAIN	396
435	1030 FORMAT (1H0.61X,"2/0 VALUES",1H0,	MAIN	397
	1 TIMES / DISTANCES"/1H,2X,"(SECONDS)",5X,"(METERS)",10F10.0)	MAIN	398
	1040 FORMAT (1H0,1PE10.3,15X,10E11.3/1H,1PE10.3,15X,10E10.3))	MAIN	399
	1050 FORMAT (810)	MAIN	400
	1060 FORMAT (1" IMPROPER SOLUBILITY INDEX SPECIFIED FOR ",A3,I3,I2)	MAIN	401
440	1070 FORMAT (1//60X,"SIGMA Y VALUES")	MAIN	402
	1080 FORMAT (1H1,"PAGE",I5,4X,"DOSE COMMITMENT FROM UPTAKE",44X,A9/	MAIN	403
	11H,40X,"AVERAGED OVER A TOTAL RELEASE PERIOD OF ",F5.1,1X,A6/1H0,	MAIN	404
	249X,"TASK GROUP ON LUNG DYNAMICS MODEL"/1H,55X,"ORGAN DOSE IN KEM	MAIN	405
	3"/)	MAIN	406
445	1090 FORMAT (1"DISTANCE"/13X"ORGANS CONSIDERED ARE"/" DOSE TIME "10(	MAIN	407
	1A6,A5))	MAIN	408
	1100 FORMAT (1" "F8.0," METERS"/)	MAIN	409
	1110 FORMAT (1" "F8.1,1X45,1PAJE11.2)	MAIN	410
	END	MAIN	411

		SUBROUTINE L193		L193	2
	C	L193 READS AN ORGAN DATA LIBRARY		L193	3
		COMMON HFF,NAC,NTOT,NDFHUC(96),SKIP(96),MASS(620,2),LAMBDA(620),		COMNA	1
		CHAINS,DKF,ACT(400,3),REL(620),ML(620),ICL(620)		COMNA	2
5		COMMON MA(420),LAMBDA(2400),FWA(2400),FAIR(2400),F2P(2400),		COMNA	3
		IORG(2-90),ENG(2400,3)		COMNA	4
		COMMON F1(620),I1EG(620),IEND(620)		COMNA	5
		COMMON DOSTIM(10),O1,O4,O5,UPTIME(5),ISM(620)		COMNA	6
10		COMMON RATE(5),R(10),KI(10),SY(10),SZ(10),DIAM		COMN	7
		COMMON KORG(25),SUMDOS(50,10,10),TITLE2(6),NOT,TLH,TLN		COMNA	7
		COMMON IPAGE,ORGAN(2,10)		COMN	9
		COMMON/NH4/ORGNAME(2,25)		COMN	10
		REAL LAMBDA,LAMBDA,MASS		COMN	11
		INTEGER CHAINS,SKIP		COMN	12
15		LOGICAL FISPRD,ACTPRD		COMN	13
		COMMON ACTPRD,FISPRD,KR,KUPT,DUR		COMN	14
		COMMON LIST(7)		9/9/74	1
		LOGICAL SKIP0		L193	5
	C	READ BIOLOGICAL DATA LIBRARY		L193	6
20	1	FORMAT(I1,7A13)		9/9/74	1
	2	FORMAT(I2I3,I1,A2,I2,DE3,3,2E6,2)		L193	8
	3	FORMAT(" LIBRARY DATA SEQUENCE ERROR"/" "2I3,I1,A2,I2,8E10,4)		SUPP	2
		SKIP0=.FALSE.		L193	10
		DO 100 I=1,620		SUPP	3
25	100	IB=6(I)=9		L193	12
		KRN=1		L193	13
		KET=0		L193	14
		KIST=0		L193	15
		KMT=0		L193	16
30		IOT=0		L193	17
		KJ=0		L193	18
		READ(23,1) NCDS,(LIST(K),K=1,7)		9/9/74	2
		DO 300 I=1,NCDS		L193	20
		READ(28,2) KE,KIS,KM,ELT,IO,IR,TE,FW,FA,FP2,EFF1,EFF2,EFF3		L193	21
35		IF(IECF(25)) 99,100		SUPP	4
	100	IF(KE-KET) 100,110,160		SUPP	5
	110	IF(KIS-KIST) 100,120,160		L193	23
	120	IF(KM-KMT) 100,130,160		L193	24
	130	IF(IO-IOT) 100,150,210		L193	25
40	C	LIBRARY DATA SEQUENCE ERROR		L193	26
	160	PRINT 3, KE,KIS,KM,ELT,IO,IR,TE,FW,FA,FP2,EFF1,EFF2,EFF3		L193	27
		STOP		L193	28
	165	IOT=1		L193	29
		KET=KE		L193	30
45		KIST=KIS		L193	31
		KMT=KM		L193	32
		IF(IO=1) 100,170,190		L193	33
	170	IF(KRN.GT.0) IEND(IJ)=KRN		L193	34
		SKIP0=.FALSE.		L193	35
50		DO 190 J=1,NTOT		L193	36
		IF(KF.NE.MA(J).OR.FIS.NE.ML(J)) GO TO 190		L193	37
		IF(KM) 170,175,190		L193	38
	175	IF(KM+2.00,ISM(J)) GO TO 200		L193	39
		GO TO 190		L193	40
55		190 IF(KM.EQ.ISM(J)) GO TO 210		L193	41
		190 CONTINUE		L193	42
	C	ISOTOPE NOT IN READ LIBRARY		L193	43

SUBROUTINE LIBB

74/74

OPT=1

FTN 4.2+74351

03/06/75 01.19.19.

PAGE

2

		SKIPO=.TRUE.	LIBB	44
		GO TO 300	LIBB	45
60	C	NEW ISOTOPE	LIBB	46
	200	KJ=J	LIBB	47
		IBEG(KJ)=KRN+1	LIBB	48
		FI(KJ)=FW	LIBB	49
65	210	IF(SKIP0) GO TO 300	LIBB	50
		IGT=IO	LIBB	51
		KRN=KRN+1	LIBB	52
		IF(ITS.LE.0.) GO TO 220	LIBB	53
		LAMBIO(KRN)=.69314/(86400.*TS)	LIBB	54
		GO TO 230	LIBB	55
70	220	LAMBIO(KRN)=0.	LIBB	56
	230	FWAT(KRN)=FW	LIBB	57
		FAIR(KRN)=FA	LIBB	58
		F2P(KRN)=FP2	LIBB	59
		IOHG(KRN)= IO	LIBB	60
75		ENG(KRN,1)=EFF1	LIBB	61
		ENG(KRN,2)=EFF2	LIBB	62
		ENG(KRN,3)=EFF3	LIBB	63
		IF(EFF2.LE.0.) ENG(KRN,2)=EFF1	LIBB	64
		IF(EFF3.LE.0.) ENG(KRN,3)=EFF1	LIBB	65
80	300	CONTINUE	LIBB	66
		IEND(KJ)=KRN	LIBB	67
		REWIND 24	SUPP	68
		REWIND 29	SUPP	69
		RETURN	LIBB	70
85	99	PRINT 199	SUPP	71
		REWIND 28	SUPP	72
		REWIND 29	SUPP	73
		RETURN	SUPP	74
	100	FORMAT('END OF FILE READ ON D-CLIB, UNIT 28')	SUPP	75
90		END	LIBB	76

E.11

		IF(KORG(1).EQ.0) GO TO 156	ORJOSE	45
		LC=0+LCRG+1	ORJOSE	46
60		IF(I.EQ.19) LCI=LORG	SUPP	83
		CO=195 J=1,2	ORJOSE	47
	135	ORGN(J,LORG)=ORGNAM(J,I)	ORJOSE	48
	136	CONTINUE	ORJOSE	49
		IF(L(LORG+7)='1')	ORJOSE	50
65		NORG=LCRG	ORJOSE	51
		IF(FISERD) GO TO 200	ORJOSE	52
		IF(ACTERD) GO TO 700	ORJOSE	53
		WRITE(6,110) KUPT	ORJOSE	54
	110	FORMAT(1H3,"NO FISSION PRODUCTS OR ACTIVATION PRODUCTS SPECIFIED FOR	ORJOSE	55
70		14 CASE",I3)	ORJOSE	56
		GO TO 3000	ORJOSE	57
	C	LOOP ON NUCLEIDE CHAINS	ORJOSE	58
	230	DO 600 ICH=1,CHAINS	ORJOSE	59
		LIM=NOFNUG(ICH)	ORJOSE	60
75	C	BYPASS UNUSED CHAINS	ORJOSE	61
		IF(SKIP(ICH).EQ.0) GO TO 300	ORJOSE	62
		ISC=ISC+LIM	ORJOSE	63
		GO TO 600	ORJOSE	64
	350	DO 500 K=1,LIM	ORJOSE	65
80		ISO=ISC + 1	ORJOSE	66
		IF(MASS(ISO,2).LE.0.) GO TO 500	ORJOSE	67
	C		ORJOSE	68
	C	IF DAUGHTER NUCLEIDE SOLUBILITY INDEX HAS NOT BEEN SPECIFIED USE	ORJOSE	69
	C	THE SOLUBILITY INDEX OF THE PARENT	ORJOSE	70
85		DO 312 J=1,K	ORJOSE	71
		IF(ICL(ISO).GT.0) GO TO 314	ORJOSE	72
		ICL(ISO)=ICL(ISO-J)	ORJOSE	73
	312	CONTINUE	ORJOSE	74
		PRINT 303,ISO	ORJOSE	75
90		333 FORMAT(1H3,"*** NO SOLUBILITY CLASS NUMBER FOR",I5," FOUND")	ORJOSE	76
	304	NSOL=ICL(ISO)	ORJOSE	77
		L1=IEND(ISO)	ORJOSE	78
		L2=IEND(ISC)	ORJOSE	79
		LC=0	ORJOSE	80
95		DO 305 L=1,9	ORJOSE	81
		ALL(L)=ALLB(L,NSOL) + LAMBDA(ISO)	ORJOSE	82
		FT(L)=F(L,NSOL)	ORJOSE	83
		ARG=ALL(L)*T1	ORJOSE	84
		ONEJ1(L)=1. - EXP(-ARG)	ORJOSE	85
100		IF(ARG.GT.1000.) ONEJ1(L)=1.	ORJOSE	86
		ALB(L)=ALLB(L,NSOL)	ORJOSE	87
	305	CONTINUE	ORJOSE	88
		C(1)=ALB(1)*FT(1)*D3/ALL(1)	ORJOSE	89
		C(2)=ALB(2)*FT(2)*D3/ALL(2)*F1(ISO)	ORJOSE	90
105		C(3)=ALB(3)*FT(3)*D4/ALL(3)	ORJOSE	91
		C(4)=ALB(4)*FT(4)*D4/ALL(4)*F1(ISO)	ORJOSE	92
		C(5)=ALB(5)*FT(5)*D5/ALL(5)	ORJOSE	93
		C(6)=ALB(6)*FT(6)*D5/ALL(6)*F1(ISO)	ORJOSE	94
		C(7)=ALB(7)*FT(7)*D5/ALL(7)*F1(ISO)	ORJOSE	95
110		C(8)=ALB(8)*ALB(9)*FT(8)*F1(9)*D5/ALL(8)	ORJOSE	96
		C(9)=C(8)/ALB(9)	ORJOSE	97
		VOLMT1=OLMT1(JUMHY)	ORJOSE	98
		DO 310 J=1,3	ORJOSE	99
306		VOLUT1(J)=OLUNT1(J)	ORJOSE	100

115	C	ORGAN LOOP	ORDOSE	131
		DO 400 MORG=1,25	SUPP	84
	C	TEST FOR ORGAN INCLUSION	ORDOSE	133
		IF(MORG(MORG).EQ.0) GO TO 400	ORDOSE	134
	C	TEST FOR ORGAN-NUCLIDE COMBINATION	ORDOSE	135
120		LORG=LORG + 1	ORDOSE	136
		IF(L1.EQ.0.0R.L2.EQ.0) GO TO 312	ORDOSE	137
		DO 317 IO=L1,L2	ORDOSE	138
		KRN=IO	ORDOSE	139
		IF(IORG(IO).EQ.MORG) GO TO 320	ORDOSE	140
125	310	CONTINUE	ORDOSE	141
		IF(MORG.NE.19) GO TO 312	SUPP	85
	C	INITIALIZE DOSE ARRAYS FOR GI TISSUE	SUPP	86
		DO 311 I=1,NDT	SUPP	87
		DOSE(I,LGI)=0.	SUPP	88
130		IBLNK(I,LGI)=0	SUPP	89
	311	CONTINUE	SUPP	90
		GO TO 400	SUPP	91
	C	NO ORGAN DATA AVAILABLE FOR THIS NUCLIDE - BLANK THE DOSE	ORDOSE	142
	312	DO 315 ITH=1,NDT	ORDOSE	143
135		IBLNK(ITH,LORG)=1	ORDOSE	144
	315	DOSE(ITH,LORG)=""	ORDOSE	145
		GO TO 400	ORDOSE	146
	320	ALAMC=LAMBDA(I0) * LAMBDA(ISO)	ORDOSE	147
		OMEN1=1. - EXP(-ALAMC*T1)	ORDOSE	148
140		VONT1=ONT1(KRN)	ORDOSE	149
		CL=0.	ORDOSE	150
	C	LOOP OVER DOSE TIMES	ORDOSE	151
		DO 395 ITH=1,NDT	ORDOSE	152
		D2=0.	ORDOSE	153
145		T2=DOSTIN(ITH)	ORDOSE	154
	C	ZERO OUT DOSE TIME FOR PRINT OUT IF LESS THAN 1 SEC	ORDOSE	155
		IF(T2.LT.1.) T2=0.	ORDOSE	156
		IBLNK(ITH,LORG)=0	ORDOSE	157
		IF(ITH.GT.1.AND.T2.LE.0.) GO TO 345	ORDOSE	158
150		OMEN2=1. - EXP(-ALAMC*T2)	ORDOSE	159
		DO 325 J=1,9	ORDOSE	160
		ARG=ALL(J)*T2	ORDOSE	161
		OMEJ2(J)=1. - EXP(-ARG)	ORDOSE	162
		IF(ARG.GT.1000.) OMEJ2(J)=1.	ORDOSE	163
155	325	CONTINUE	ORDOSE	164
	330	IF(ITH.GT.1) GO TO 340	ORDOSE	165
		IF(MORG.LE.19) D1=CRDOT1(KRN,MORG)	SUPP	92
		IF(MORG.GT.19.AND.MORG.LT.24) D1=GIGOT(KRN,MORG,ISO,1)	SUPP	93
	340	IF(T2.LE.1.) GO TO 345	ORDOSE	166
160		IF(MORG.LE.19) D2=CRDOT2(KRN,MORG,ISO)	SUPP	94
		IF(MORG.GT.19.AND.MORG.LT.24) D2=GIGOT(KRN,MORG,ISO,2)	SUPP	95
	345	IF(MORG.EQ.0) GO TO 360	ORDOSE	167
		DOSE(ITH,LORG)=MASS(ISC,2) * LAMBDA(ISO) * (D1 + D2)	ORDOSE	168
		GO TO 340	ORDOSE	169
165	C	ADD LUNG DOSE DUE TO PRIMARY DEPOSITION	ORDOSE	170
	360	SUM2=0.	ORDOSE	171
		IF(ITH.GT.1) GO TO 370	ORDOSE	172
		SUM1=0.	ORDOSE	173
		DO 365 J=1,9	ORDOSE	174
170	365	SUM1=SUM1 + 0.92E-4*ENG(KRN,NECL)/GMASS(MORG)*FT(J)*D5/ALL(J)	ORDOSE	175
		1*(T1 - OMEJ2(J)/ALL(J))	ORDOSE	176

	375	IF (IT2.LE.3.) GO TO 390	ORDCSE	149
		DO 375 J=5,8	ORDCSE	150
175	375	SUM2=SUM2 + 5.92E-4*ENG(KRM,NSOL)/OMASS(MORG)*FT(J)*D5/ALL(J)**2	ORDCSE	151
		1*CHEJ1(J)*OYEJ2(J)	ORDCSE	152
	380	DOSE(IITM,LORG)=MASS(ISC,2)*LAMBDA(ISO)*(SUM1+SUM2+O1*O2)	ORDCSE	153
	385	SUMDOOS(KRKUPT,IITM,LORG)=SUMDOOS(KRKUPT,IITM,LORG) + DOSE(IITM,LORG)	ORDCSE	154
		IF (KORG+19).EQ.1.OR.KORG.LT.20) GO TO 395	SUPP	96
		DOSE(IITM,LGI)=DOSE(IITM,LGI)+DOSE(IITM,LORG)	SUPP	97
180		SUMDOOS(KRKUPT,IITM,LGI)=SUMDOOS(KRKUPT,IITM,LGI)+DOSE(IITM,LORG)	SUPP	98
	C	END OF TIME LOOP	ORDCSE	155
	395	CONTINUE	ORDCSE	156
	C	END OF ORGAN LOOP	ORDCSE	157
	400	CONTINUE	ORDCSE	158
205	C	SET UP TO WRITE DATA FOR ONE NJCLIDE	ORDCSE	159
		IF (ILINE + NOT + 1.LE.60) GO TO 420	ORDCSE	160
	C	WRITE NEW PAGE HEADER	ORDCSE	161
		WRITE(6,410) IPAGE,DOY,TLH,TLN	ORDCSE	162
	410	FORMAT(1H1,"PAGE",I5,31X,"DOSE TO SELECTED ORGANS OF INTEREST VIA	ORDCSE	163
190		11NHALATION",32X,A9/1H ,49X,"TASK GROUP ON LUNG DYNAMICS MODEL"/	ORDCSE	164
		21H ,46X,"DURATION OF INHALATION",1F9.2,1X,A1/1H ,56X,"ORGAN DOSE	ORDCSE	165
		31H RM"/)	ORDCSE	166
		KFMT(2)=ISPACE(NORG)	ORDCSE	167
		KFMT(1)=KFMT(2)	ORDCSE	168
195		WRITE(6,KFMT) ((ORGAN(M,N),M=1,2),N=1,NORG)	ORDCSE	169
		IFMT(2)=KFMT(2)	ORDCSE	170
		IPAGE=IPAGE+1	ORDCSE	171
		ILINE=19	ORDCSE	172
200	420	DO 450 IITM=1,NOT	ORDCSE	173
		DO 430 I=1,NORG	ORDCSE	174
		IFMT(I+6)="E11.3"	ORDCSE	175
	430	IF (IBLNK(IITM,I).EQ.1) IFMT(I+6)="5X,A6"	ORDCSE	176
		IF (IITM.GT.1) GO TO 440	ORDCSE	177
		IFMT(1)="1H,"	ORDCSE	178
205		IFMT(4)="A3,I3,"	ORDCSE	179
		WRITE(6,IFMT) REC(ISO),ML(ISO),TLH2(1),(DOSE(1,I),I=1,NORG)	ORDCSE	180
		GO TO 450	ORDCSE	181
	440	IFMT(1)="1H,"	ORDCSE	182
		IFMT(4)="A6,"	ORDCSE	183
210		MARK=ISOL(INSOL)	ORDCSE	184
		IF (IITM.GT.2) MARK=" "	ORDCSE	185
		WRITE(6,IFMT) MARK,TLH2(IITM),(DOSE(IITM,I),I=1,NORG)	ORDCSE	186
	450	CONTINUE	ORDCSE	187
		ILINE=ILINE+NOT+1	ORDCSE	188
215	C	END OF FP CHAIN LOOP	ORDCSE	189
	590	CONTINUE	ORDCSE	190
	C	END OF FP LOOP	ORDCSE	191
	600	CONTINUE	ORDCSE	192
		IF (ACTFRB) GO TO 700	ORDCSE	193
220		GO TO 2000	ORDCSE	194
	C	DO LOOP OVER ACTIVATION PRODUCTS	ORDCSE	195
	700	ISTART=NFP+1	ORDCSE	196
		DO 1000 IS=ISTART,NTOT	ORDCSE	197
		IF (MASS(IS,2).LE.0.) GO TO 1000	ORDCSE	198
225		L1=IBEG(IS)	ORDCSE	199
		L2=IEND(IS)	ORDCSE	200
		NSOL=ICL(IS)	ORDCSE	201
		LORG=C	ORDCSE	202

		DO 705 J=1,9	ORDOSE	203
230		ALL(I)=ALLB(I,NSOL)*LAMBDA(I)	ORDOSE	204
		FT(I)=I(L,NSOL)	ORDOSE	205
		APG=ALL(I)*T1	ORDOSE	206
		CMCJ1(I)=1.-EXP(-APG)	ORDOSE	207
		IF (APG.GT.1000.) O=F(I,I)=1.	ORDOSE	208
235		ALL(I)=ALLB(I,NSOL)	ORDOSE	209
	735	CONTINUE	ORDOSE	210
		C(1)=ALB(1)*FT(1)*I3/ALL(1)	ORDOSE	211
		C(2)=ALB(2)*FT(2)*I3/ALL(2)*F1(I)	ORDOSE	212
		C(3)=ALB(3)*FT(3)*I4/ALL(3)	ORDOSE	213
240		C(4)=ALB(4)*FT(4)*I4/ALL(4)*F1(I)	ORDOSE	214
		C(5)=ALB(5)*FT(5)*I5/ALL(5)	ORDOSE	215
		C(6)=ALB(6)*FT(6)*I5/ALL(6)*F1(I)	ORDOSE	216
		C(7)=ALB(7)*FT(7)*I5/ALL(7)*F1(I)	ORDOSE	217
		C(8)=ALB(8)*ALB(9)*FT(8)*FT(9)*I5/ALL(9)	ORDOSE	218
245		C(9)=C(5)/ALB(9)	ORDOSE	219
		VOLMT1=OLMT1(DUM1)	ORDOSE	220
		DO 706 J=1,9	ORDOSE	221
	720	VOLMT1(J)=VOLMT1(J)	ORDOSE	222
	C	ORGAN LOOP	ORDOSE	223
250		DO 900 MORG=1,25	SUPP	99
	C	TEST FOR ORGAN INCLUSION	ORDOSE	225
		IF (KORG(MORG).EQ.0) GO TO 900	ORDOSE	226
	C	TEST FOR ORGAN-NUCLIDE COMBINATION DATA	ORDOSE	227
		LORG=LORG+1	ORDOSE	228
255		DO 810 IC=L1,L2	ORDOSE	229
		KRM=IC	ORDOSE	230
		IF (IORG(I0).EQ.MORG) GO TO 820	ORDOSE	231
	810	CONTINUE	ORDOSE	232
		IF (MORG.NE.19) GO TO 814	SUPP	100
260	C	INITIALIZE DOSE ARRAYS FOR GI TISSUE	SUPP	101
		DO 813 I=1,NDT	SUPP	102
		DOSE(I,LGI)=0.	SUPP	103
		ISLNK(I,LGI)=0	SUPP	104
	813	CONTINUE	SUPP	105
265		GO TO 900	SUPP	106
	814	CONTINUE	SUPP	107
	C	NO ORGAN DATA FOR THIS NUCLIDE - BLANK DOSE ARRAY	ORDOSE	233
		DO 815 ITM=1,NDT	ORDOSE	234
		ISLNK(ITM,LORG)=1	ORDOSE	235
270	815	DOSE(ITM,LORG)=0.	ORDOSE	236
		GO TO 900	ORDOSE	237
	820	ALAMC=LAMBDA(I0)*LAMBDA(I)	ORDOSE	238
		OMCN1=1.-EXP(-ALAMC*T1)	ORDOSE	239
		VONT1=ONT1(KRM)	ORDOSE	240
275		O1=0.	ORDOSE	241
	C	THE FOLLOWING TWO CARDS WERE ADDED TO ALLOW CHANGING THE MASS OF	9/4/74	3
	C	THE LUNG TO 570 GRAMS IF A ALPHA-EMITTER DOSE IS BEING COMPUTED.	9/4/74	4
		OMCF=1.	9/4/74	5
		IF (MORG.EQ.3.AND.ENG(KRM,NSOL).GT.10.) OMCF=1.754	9/4/74	6
280	C	LOOP OVER DOSE TIMES	ORDOSE	242
		DO 835 ITM=1,NDT	ORDOSE	243
		D2=0.	ORDOSE	244
		T2=OSTIM*(ITM)	ORDOSE	245
	C	ZERO OUT DOSE TIME FOR PRINT OUT IF LESS THAN 1 SEC	ORDOSE	246
285		IF (T2.LT.1.) T2=0.	ORDOSE	247

290 IRLNK(ITM,LORG)=0 ORDCSE 248
 IF(ITM.GT.1.AND.T2.LE.0.) GO TO 845 ORDCSE 249
 OMEN2=1. - EXP(-ALAMO*T2) ORDCSE 250
 DO 825 J=1,9 ORDCSE 251
 ARG=ALL(J)*T2 ORDCSE 252
 OMJ2(J)=1. - EXP(-ARG) ORDCSE 253
 IF(ARG.GT.1000.) OMJ2(J)=1. ORDCSE 254
 825 CONTINUE ORDCSE 255
 295 830 IF(ITM.GT.1) GO TO 840 ORDCSE 256
 IF(MORG.LE.19) O1=ORDOT1(KRN,MORG) SUPP 108
 IF(MORG.GT.19.AND.MORG.LT.24) O1=GIDOT(KRN,MORG,IS,1) SUPP 109
 840 IF(T2.LE.0) GO TO 845 ORDCSE 258
 IF(MORG.GT.19.AND.MORG.LT.24) O2=GIDOT(KRN,MORG,IS,2) SUPP 110
 IF(MORG.LE.19) O2=ORDOT2(KRN,MORG,IS) SUPP 111
 300 845 IF(MORG.EQ.8) GO TO 860 ORDCSE 260
 DOSE(ITM,LORG)=MASS(IS,2)*LAMDA(IS) * (O1 + O2) ORDCSE 261
 GO TO 835 ORDCSE 262
 C ADD LUNG DOSE FOR THAT DEPOSITED DIRECTLY ORDCSE 263
 850 SUM2=0. ORDCSE 264
 305 IF(ITM.GT.1) GO TO 870 ORDCSE 265
 SUM1=0. ORDCSE 266
 DO 865 J=5,8 ORDCSE 267
 865 SUM1=SUM1 + 5.92E-4*ENG(KRN,NSOL)/OMASS(MORG)*FT(J)*O5/ALL(J) ORDCSE 268
 1*(T1 - OMJ1(J)/ALL(J)) * OMCF 974/74 7
 310 870 IF(T2.LE.0.) GO TO 890 ORDCSE 270
 DO 875 J=5,8 ORDCSE 271
 875 SUM2=SUM2 + 5.92E-4*ENG(KRN,NSOL)/OMASS(MORG)*FT(J)*O5/ALL(J)*2 ORDCSE 272
 1*(OMJ1(J)*OMJ2(J) * OMCF 974/74 8
 315 880 DOSE(ITM,LORG)=MASS(IS,2)*LAMDA(IS)*(SUM1+SUM2+O1+O2) ORDCSE 274
 885 SUMDOS(KRKUPT,ITM,LORG)=SUMDOS(KRKUPT,ITM,LORG) + DOSE(ITM,LORG) ORDCSE 275
 IF(KORG(19).EQ.0.OR.MORG.LT.20) GO TO 895 SUPP 112
 DOSE(ITM,LGI)=DOSE(ITM,LGI)+DOSE(ITM,LORG) SUPP 113
 SUMDOS(KRKUPT,ITM,LGI)=SUMDOS(KRKUPT,ITM,LGI)+DOSE(ITM,LORG) SUPP 114
 C END OF TIME LOOP ORDCSE 276
 320 895 CONTINUE ORDCSE 277
 C END OF ORGAN LOOP ORDCSE 278
 900 CONTINUE ORDCSE 279
 C SET UP TO WRITE DATA FOR ONE NUCLEIDE ORDCSE 280
 IF (ILINE + NOT + 1.LE.60) GO TO 920 ORDCSE 281
 325 C WRITE NEW PAGE HEADER ORDCSE 282
 WRITE(6,41C) IPAGE,DUY,ILN,TLN ORDCSE 283
 KFMT(2)=ISPAGE(MORG) ORDCSE 284
 KFMT(1)=KFMT(2) ORDCSE 285
 WRITE(6,KFMT) ((ORGAN(N,N),N=1,2,N=1,NORG) ORDCSE 286
 330 IFMT(2)=KFMT(2) ORDCSE 287
 IFMT(MORG+7)="" ORDCSE 288
 IPAGE=IPAGE+1 ORDCSE 289
 ILINE=10 ORDCSE 290
 920 DO 930 I=1,NOT ORDCSE 291
 335 DO 930 I=1,NORG ORDCSE 292
 IFMT(I+6)=",11.3" ORDCSE 293
 930 IF(IRLNK(ITM,I).EQ.1) IFMT(I+6)=",5X,A6" ORDCSE 294
 IF(ITM.GT.1) GO TO 940 ORDCSE 295
 IFMT(1)=""(10)," ORDCSE 296
 340 IFMT(4)=""A3,I3," ORDCSE 297
 WRITE(6,IFMT) REC(IS),ML(IS),TLN2(1),DOSE(1,1),I=1,NORG) ORDCSE 298
 GO TO 950 ORDCSE 299

	947	IFMT(1)="1H,"	GROCSE	300
		IFMT(4)="F6,"	GROCSE	301
345		MARK=ISOL(NSOL)	GROCSE	302
		IF (ITM.GT.2.DX.NSOL.CO.0) MARK=" "	GROCSE	303
		WRITE(6,IFMT) MARK,TLF2(ITM),(DOSE(ITM,I),I=1,NORG)	GROCSE	304
	950	CONTINUE	GROCSE	305
		ILINE=ILINE+NOT+1	GROCSE	306
350	C	END OF ACTIVATION PRODUCT LOOP	GROCSE	307
	1000	CONTINUE	GROCSE	308
	C	SUMMARY PAGE OUTPUT	GROCSE	309
	2000	WRITE(6,2001) IPAGE,KUFT,KR,TITLE2,DOY	GROCSE	310
	2001	FORMAT(1H,"PAGE",I5,1X,"(",I2,"",I2,"")",8X,8A10,17X,A9)	GROCSE	311
355		WRITE(6,2010) TLM,TLM	GROCSE	312
	2010	FORMAT(1H,46X,"DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION	GROCSE	313
		1"/1H,48X,"TASK GROUP ON LUNG DYNAMICS MODEL"/1H,46X,	GROCSE	314
		2"DURATION OF INHALATION",1P29.2,1X,A6/1H,57X,"ORGAN DOSE IN REM"/	GROCSE	315
		1/)	GROCSE	316
360		WRITE(6,KFMT)((ORGAN(I,J),I=1,2),J=1,NORG)	GROCSE	317
		IFMT(1)="1H9,"	GROCSE	318
		IFMT(4)="A6,"	GROCSE	319
		HALL="ALL "	GROCSE	320
	DO 2015 I=1,NORG		GROCSE	321
365	2015	IFMT(1+6)="E11.2"	GROCSE	322
		IPAGE=IPAGE+1	GROCSE	323
	DO 2020 I=1,NOI		GROCSE	324
		WRITE(6,IFMT) HALL,TLF2(I),(SUMDOS(KRKUPT,I,J),J=1,NORG)	GROCSE	325
	2020	CONTINUE	GROCSE	326
370	3000	RETURN	GROCSE	327
		END	GROCSE	328

		FUNCTION GIDOT(KRN,MORG,ISO,IT)	SUPP	7
		DIREGION TAU(4)	SUPP	8
		COMMON NFP,NAC,NTOT,NOFNUC(96),SKIP(96),MASS(620,2),LAMBCA(620),	COMNA	1
		CHAINS,ORFAC(4,50,3),REC(620),ML(620),ICL(620)	COMNA	2
5		COMMON MA(620),LAMBJO(2400),FWAT(2400),FAIR(2400),F2P(2400),	COMNA	3
		ICPG(2400),ENG(2400,3)	COMNA	4
		COMMON F1(620),IBEG(620),IEND(620)	COMNA	5
		COMMON DCSTIM(10),O3,O4,O5,UPTIME(5),ISM(620)	COMNA	6
10		COMMON BRATE(5),R(10),X(10),SY(10),SZ(10),DIAM	COMNA	7
		COMMON KORG(25),SUMDJS(50,10,10),TITLE2(8),NDT,TLH,TLN	COMNA	7
		COMMON IPAGE,ORGAN(2,10)	COMN	9
		COMMON/NAM/ORGNA(2,25)	COMN	10
		REAL LAMBIO,LAMBDA,MASS	COMN	11
15		INTEGER CHAINS,SKIP	COMN	12
		LOGICAL FISPRD,ACTPRD	COMN	13
		COMMON ACTPRD,FISPRD,KR,KUFT,DOY	COMN	14
		COMMON/CGMO/ALAMO,ALB(9),ALL(9),C(9),FT(9),NSOL,ONEJ1(9),	COMO	2
		ICMEJ2(9),OMEN1,OMEN2,T1,T2,VQNT1,VQLMT1,VQLUT1(8),OMASS(25)	COMO	3
		DATA TAU/3600.,14400.,28800.,64800./	SUPP	11
20	C	QS IS TIME INTEGRAL OF ACTIVITY REACHING GI SYSTEM	SUPP	12
	C		SUPP	13
	C	IT = 1 FOR PERIOD 1	SUPP	14
	C	IT = 2 FOR PERIOD 2	SUPP	15
25	C		SUPP	16
		QS=0.	SUPP	17
		IF(IT.EQ.1) QS=QUINT1(DUM)/F1(ISO)	SUPP	18
		IF(IT.EQ.2) QS=QUINT2(DUM)/F1(ISO)	SUPP	19
		IGO=MORG-19	SUPP	20
30		IF(IGO.GT.4) GO TO10	SUPP	21
		EF=2.96E-4*ENG(KRN,NSOL)/OMASS(MORG)	SUPP	22
		FONE=F1(ISO)	SUPP	23
		IF(FONE.GT..95) FONE=.95	SUPP	24
	C	TRANSFER TO GI COMPARTMENT DESIRED	SUPP	25
35		GO TO (1,2,3,4),IGO	SUPP	26
	C	STOMACH	SUPP	27
		1 ARG=LAMBDA(ISO)*TAU(1)	SUPP	28
		CH=1.-EXP(-ARG)	SUPP	29
		IF(ARG.GT.1000.) OM=1.	SUPP	30
40		IF(ARG.LT..0001) OM=ARG	SUPP	31
		FACT=EF*OM/LAMBDA(ISO)	SUPP	32
		GO TO 5	SUPP	33
	C	SMALL INTESTINE	SUPP	34
		2 ALL= ALOG(1./(1.-FONE)) /TAU(2)	SUPP	35
45		ARG=(ALL+LAMBDA(ISO))*TAU(2)	SUPP	36
		FACT=EF*EXP(-LAMBDA(ISO)*TAU(1))*(1.-EXP(-ARG))/(ALL+LAMBDA(ISO))	SUPP	37
		GO TO 5	SUPP	38
	C	UPPER LARGE INTESTINE	SUPP	39
		3 FACT=EF*EXP(-LAMBDA(ISO)*(TAU(2)+TAU(1)))*(1.-FONE)*TAU(3)	SUPP	40
50		GO TO 5	SUPP	41
	C	LOWER LARGE INTESTINE	SUPP	42
		4 FACT=EF*EXP(-LAMBDA(ISO)*(TAU(1)+TAU(2)+TAU(3)))*(1.-FONE)*TAU(4)	SUPP	43
		5 GIDOT=QS*FACT	SUPP	44
		RETURN	SUPP	45
55		10 PRINT 20, MORG	SUPP	46
		20 FORMAT('MORG TOO LARGE FOR GI DOSE, = "I10")	SUPP	47
		STOP	SUPP	48
		END	SUPP	49
			SUPP	50

FUNCTION QUINT1 74/74 OPT=1

FTN 4.2+74351

03/01/75 GC.56:37.

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	FUNCTION QUINT1(JUMP)	SUPP	52
	COMMON/COMO/ALAMO,F1309),ALL(9),C(9),FI(9),NSOL,OMEJ1(9),	COMO	2
	1OMEJ2(9),OMEN1,OMEN2,T1,T2,VQNT1,VQMT1,VQLUT1(8),OMASS(25)	COMO	3
	QJINT1=0.	SUPP	54
5	IF(T1.LE.1.) RETURN	SUPP	55
	QJ=0.	SUPP	56
	DO 1 I=2,6,2	SUPP	57
	QJ=QJ+C(I)*(T1-OMEJ1(I)/ALL(I))	SUPP	58
	QJ=QJ+C(7)*(T1-OMEJ1(7)/ALL(7))	SUPP	59
10	QJINT1=QJ	SUPP	60
	RETURN	SUPP	61
	END	SUPP	62

E.20

FUNCTION QUINT2

74/74

OPT=1

FTN 4.2+74351

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FUNCTION QUINT2(JUM)

SUPP 64

COMMON/COMO/ALAM0,ALB(9),ALL(9),C(9),FI(9),NSOL,OMEJ1(9),

COMO 2

1 OMEJ2(9),OMEN1,OMEN2,T1,T2,VQNT1,VQLMT1,VQLUT1(8),OMASS(25)

COMO 3

QUINT2=C.

SUPP 66

IF(T2.LE.1.) RETURN

SUPP 67

QQ=C.

SUPP 68

DO 1 I=2,6,2

SUPP 69

1 QQ=QQ+ALB(I)*VQLUT1(I)*OMEJ2(I)/ALL(I)

SUPP 70

QQ=QQ+ALB(7)*VQLUT1(7)*OMEJ2(7)/ALL(7)

SUPP 71

QUINT2=QQ

SUPP 72

RETURN

SUPP 73

END

SUPP 74

	SUBROUTINE UNIT(DTLN,DTLN,NUPT,UPTIME)	UNIT	2
	UNIT CONVERTS TIME IN SECONDS TO MORE CONVENIENT UNITS	UNIT	3
	DIMENSION DTLN(10),DTLN(10),UPTIME(10)	SUPP	1
	DO 100 I=1,NUPT	UNIT	5
5	IF(UPTIME(I).GT.60.) GO TO 10	UNIT	6
	DTLN(I)=UPTIME(I)	UNIT	7
	DTLN(I)='SEC'	UNIT	8
	GO TO 100	UNIT	9
10	IF(UPTIME(I).GT.3600.) GO TO 20	UNIT	10
	DTLN(I)=UPTIME(I)/60.	UNIT	11
	DTLN(I)='MIN'	UNIT	12
	GO TO 100	UNIT	13
20	IF(UPTIME(I).GT.86400.) GO TO 30	UNIT	14
	DTLN(I)=UPTIME(I)/3600.	UNIT	15
15	DTLN(I)='HOURS'	UNIT	16
	GO TO 100	UNIT	17
30	IF(UPTIME(I).GT.3.1536E7) GO TO 40	UNIT	18
	DTLN(I)=UPTIME(I)/86400.	UNIT	19
	DTLN(I)='DAYS'	UNIT	20
25	GO TO 100	UNIT	21
40	DTLN(I)=UPTIME(I)/3.1536E7	UNIT	22
	DTLN(I)='YEARS'	UNIT	23
100	CONTINUE	UNIT	24
	RETURN	UNIT	25
25	END	UNIT	26

APPENDIX F

INPUT PREPARATION

APPENDIX F

INPUT PREPARATION

Input to DACRIN has not been changed and the reader is referred to Reference BNWL-B-389, Appendix F for details. However, the list of organs has been expanded to include the G.I. tract compartments. The current organ list follows.

The numerical code 19 is for summation of the doses to the G.I. compartments (20 through 23) as specified on input cards.

ORGAN LIST

<u>Numerical Code</u>	<u>Organ</u>	<u>Numerical Code</u>	<u>Organ</u>
1	Total Body	12	Skin
2	Body Water	13	Brain
3	Kidneys	14	Muscle
4	Liver	15	Prostrate
5	Spleen	16	Thyroid
6	Bone	17	Pancreas
7	Fat	18	Heart
8	Lungs	19	G.I. Tract
9	Adrenals	20	Stomach
10	Testes	21	Small Intestine
11	Ovaries	22	Upper Large Intestine
		23	Lower Large Intestine

APPENDIX G

SAMPLE PROBLEMS

APPENDIX G

SAMPLE PROBLEM

The sample problem illustrated below is identical to sample problem two of BNWL-B-389 (Appendix G) except doses are calculated here for the G.I. tract compartments in addition to the four previous organs. The problem calculates doses at two dose times following passage of the cloud produced by a short term release to the atmosphere of a mixture of transuranic nuclides. Input for the problem is described below and a listing of the input cards is given in Figure G-1. A listing of the output reports follows the input listing. Note that an additional summary report has been added to the output of DACRIN.

Name List Parameter	Value	Remarks
NEXT	1	Program control variables.
MET	1	General atmospheric dispersion variables.
H	70	Release height in meters
R	100,200,300,500, 1000,2000,3000, 5000,10000,20000	Downwind distances in meters
UBAR	1.	Windspeed in meters/sec Hanford Model Parameters.
STUB	0.04	$(\sigma_{\theta} \bar{u})$ radian-meter/sec
AH	97	a, m^2
BH	0.33	$b, m^2/sec$
CH	13	$c, m^2/sec$
DH	230	d, sec
KSQD	0.00025	k^2, sec^{-2}
D3	0.30	Respiratory tract deposition factors for one micrometer particles.
D4	0.08	
D5	0.25	

Name List Parameter	Value	Remarks
BRATE	350	Ventilation rate of receptor in cm ³ /sec
UPTIME	3600	Uptake time in seconds (1 hour)
DOSTIM	3.156 x 10 ⁷ 1.578 x 10 ⁹	Dose times in seconds (1 year and 50 years)
ORGANS		Organs Considered:
	3	Kidneys
	4	Liver
	6	Bone
	8	Lung
	20	S
	21	SI
	22	ULI
	23	LLI

SAMPLE PROBLEM NUMBER TWO WITH GI DOSE, ACUTE INHALATION
 \$INPUT NEXT=1,MET=1,H=70.,R=100.,200.,300.,500.,1000.,2000.,3000.,
 5000.,10000.,20000.,UBAR=1.,STUR=.04,4*0.,AH=97.,RH=.330,CH=13.,DH=230.,
 KSD=2.5E-4,BRATE(1)=350.,UPTIME=3600.,4*0.,1PR=1.,1QP=1.,ORGANS(1)=3,4,
 6,8,20,21,22,23,DOSTIM(1)=3.156E7,1.578E9,D3=.3,D4=.08,D5=.25\$
 003
 PU 238 3 5.E-4PU 239 3 4.E-2PU 240 3 1.E-2

FIGURE G.1. Sample Problem Input

ORGAN DATA LIBRARY VERSION 1A SEPTEMBER 4, 1974

NUCLIDE RELEASE IN GURIES

PU 233 3.5.0000E-04 PU 239 3.4.0000E-02 PU 240 3.1.0000E-02

UBAR = 1.0

BRATE = 350. 0. 0. 0. 0.

MET = 1

H = 70 METERS

AH = 97.3

BH = .33000

CH = .13.0

DH = 235.0

KSCD = .000250

STUB(1) = .540

DIAM = 0.000 MICROMETERS

D3 = .300

D4 = .280

D5 = .250

10 DISTANCES, METERS 100. 200. 300. 500. 1000. 2000. 3000. 5000. 10000. 20000.

1 UPTAKE TIMES, SECONDS 3.600E+33

2 DOSE TIMES, SECONDS 3.156E+07 1.578E+09

SIGMA Z VALUES

AVERAGE WIND

SPEED, M/SEC

DISTANCE FROM RELEASE POINT METERS

100. 200. 300. 500. 1000. 2000. 3000. 5000. 10000. 20000.

1.0 11. 13. 14. 16. 21. 28. 33. 42. 58. 82.

SIGMA Y VALUES

AVERAGE WIND

SPEED, M/SEC

DISTANCE FROM RELEASE POINT METERS

100. 200. 300. 500. 1000. 2000. 3000. 5000. 10000. 20000.

1.0 4. 8. 12. 20. 39. 76. 112. 179. 323. 546.

E/D VALUES

UPTAK TIMES / DISTANCES
(SECONDS) (METERS)

	100.	200.	300.	500.	1000.	2000.	3000.	5000.	10000.	20000.
3.600E+03	1.380E-11	9.236E-10	7.112E-09	8.644E-10	1.271E-06	5.957E-06	9.055E-06	1.049E-05	8.216E-06	4.937E-06

PAGE 3

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION

03/01/75

TASK GROUP ON LUNG DYNAMICS MODEL

DURATION OF INHALATION 6.00E+01 MIN

ORGAN DOSE IN REM

RADIO-NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
PU 238	3.65E+02	1.209E-12	4.799E-12	5.729E-12	5.337E-10	1.354E-13	2.920E-15	2.654E-15	4.325E-14	8.759E-14
(Y)	1.83E+04	2.704E-10	1.062E-09	2.307E-09	1.317E-09	1.520E-13	3.253E-15	2.957E-15	4.819E-14	9.759E-14
PU 239	3.65E+02	9.033E-11	3.585E-10	4.439E-10	3.962E-08	1.332E-11	2.203E-13	2.008E-13	3.272E-12	6.627E-12
(Y)	1.83E+04	2.435E-09	9.559E-09	1.222E-07	9.948E-08	1.153E-11	2.457E-13	2.243E-13	3.659E-12	7.400E-12
PU 240	3.65E+02	2.258E-11	8.964E-11	1.110E-10	9.904E-09	2.530E-12	5.922E-14	5.320E-14	8.181E-13	1.657E-12
(Y)	1.83E+04	6.075E-09	2.385E-08	3.048E-08	2.487E-08	2.831E-12	6.167E-14	5.606E-14	9.136E-13	1.850E-12

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SAMPLE PROBLEM NUMBER TWO WITH GI DOSE, ACUTE INHALATION

03/01/75

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN.
 ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
ALL	3.65E+02	1.14E-10	4.53E-10	5.61E-10	5.01E-08	9.30E-11	2.79E-13	2.54E-13	4.13E-12	8.37E-12
ALL	1.83E+04	3.07E-03	1.21E-07	1.54E-07	1.26E-07	1.46E-11	3.12E-13	2.83E-13	4.62E-12	9.35E-12

G.5

PAGE 5

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN.
 ORGAN DOSE IN REM

03/01/75

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
PU 238	3.65E+02	8.137E-11	3.230E-10	3.856E-10	3.572E-08	9.181E-12	1.965E-13	1.786E-13	2.911E-12	5.895E-12
(Y)	1.83E+04	1.820E-08	7.151E-08	8.795E-08	8.867E-08	1.023E-11	2.189E-13	1.990E-13	3.244E-12	8.568E-12
PU 239	3.65E+02	6.079E-09	2.413E-08	2.988E-08	2.666E-06	6.946E-10	1.437E-11	1.352E-11	2.202E-10	4.460E-10
(Y)	1.83E+04	1.639E-06	6.434E-06	8.222E-06	6.595E-06	7.757E-10	1.660E-11	1.599E-11	2.460E-10	4.981E-10
PU 240	3.65E+02	1.520E-09	6.033E-09	7.469E-09	6.666E-07	1.737E-10	3.717E-12	3.379E-12	5.506E-11	1.115E-10
(Y)	1.83E+04	4.089E-07	1.605E-06	2.051E-06	1.674E-06	1.939E-10	4.151E-12	3.773E-12	6.149E-11	1.245E-10

PAGE 6 (1, 2)

SAMPLE PROBLEM NUMBER TWO WITH GI DOSE. ACUTE INHALATION

03/01/75

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN
 ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
ALL	3.65E+02	7.68E-09	3.05E-10	1.77E-08	3.37E-06	8.77E-10	1.88E-11	1.71E-11	2.78E-10	5.63E-10
ALL	1.93E+04	2.37E-06	8.11E-06	1.04E-05	8.46E-06	9.80E-10	2.10E-11	1.91E-11	3.11E-10	6.29E-10

6.6

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DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN
 ORGAN DOSE IN REM

03/01/75

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
FU 238	3.65E+02	6.231E-10	2.474E-04	2.553E-09	2.736E-07	7.031E-11	1.505E-12	1.368E-12	2.223E-11	4.915E-11
(Y)	1.93E+04	1.394E-07	5.476E-07	6.735E-07	6.791E-07	7.934E-11	1.677E-12	1.524E-12	2.484E-11	5.330E-11
FU 239	3.65E+02	4.656E-09	1.849E-03	2.268E-07	2.842E-05	5.320E-09	1.139E-10	1.035E-10	1.687E-09	3.416E-09
(Y)	1.93E+04	1.255E-05	4.927E-05	6.297E-05	5.127E-05	5.941E-09	1.272E-10	1.156E-10	1.834E-09	3.815E-09
FU 240	3.65E+02	1.164E-08	4.620E-05	5.720E-08	5.105E-06	1.330E-09	2.646E-11	2.588E-11	4.217E-10	8.539E-10
(Y)	1.93E+04	3.132E-06	1.229E-05	1.571E-05	1.292E-05	1.485E-09	3.179E-11	2.890E-11	4.759E-10	9.536E-10

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN
 ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
ALL	3.65E+02	5.88E-05	2.34E-07	2.89E-07	2.58E-05	6.72E-09	1.44E-10	1.31E-10	2.13E-09	4.31E-09
ALL	1.83E+04	1.58E-05	6.21E-05	7.94E-05	6.48E-05	7.50E-09	1.61E-10	1.46E-10	2.38E-09	4.82E-09

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN
 ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
FU 238	3.65E+02	7.974E-09	3.007E-09	3.539E-08	3.32E-05	8.546E-10	1.829E-11	1.663E-11	2.710E-10	5.487E-10
(Y)	1.83E+04	1.694E-06	6.056E-06	8.186E-06	8.254E-06	9.522E-10	2.039E-11	1.953E-11	3.019E-10	6.114E-10
FU 239	3.65E+02	5.659E-07	2.246E-06	2.781E-06	2.487E-04	6.486E-08	1.384E-09	1.238E-09	2.050E-08	4.151E-08
(Y)	1.83E+04	1.525E-04	5.989E-04	7.654E-04	6.23E-04	7.221E-08	1.545E-09	1.405E-09	2.290E-08	4.636E-08
FU 240	3.65E+02	1.415E-07	5.616E-07	6.952E-07	6.20E-05	1.616E-08	3.460E-10	3.145E-10	5.125E-09	1.038E-08
(Y)	1.83E+04	3.816E-05	1.454E-04	1.910E-04	1.55E-04	1.805E-08	3.864E-10	3.512E-10	5.724E-09	1.159E-08

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN
 ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
ALL	3.65E+02	1.15E-07	2.84E-06	3.51E-06	3.14E-04	8.17E-08	1.75E-05	1.59E-09	2.59E-08	5.24E-08
ALL	1.83E+04	1.92E-04	7.55E-04	9.64E-04	7.87E-04	9.12E-08	1.95E-05	1.77E-09	2.89E-08	5.86E-08

TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN
 ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
FU 238	3.65E+02	1.113E-07	4.420E-07	5.276E-07	4.898E-05	1.25E-08	2.689E-10	2.444E-10	3.983E-09	8.066E-09
(Y)	1.93E+14	2.491E-05	9.783E-05	1.203E-04	1.213E-04	1.400E-08	2.996E-10	2.724E-10	4.438E-09	8.987E-09
FU 239	3.65E+02	8.519E-06	3.302E-05	4.098E-05	3.649E-03	9.50E-07	2.34E-08	1.849E-08	3.014E-07	6.103E-07
(Y)	1.83E+04	2.243E-03	8.964E-03	1.123E-02	9.161E-03	1.061E-06	2.272E-08	2.065E-08	3.366E-07	6.815E-07
FU 240	3.65E+02	2.040E-06	8.255E-06	1.322E-05	9.121E-04	2.376E-07	5.086E-09	4.623E-09	7.534E-08	1.526E-07
(Y)	1.83E+14	5.595E-04	2.197E-03	2.807E-03	2.290E-03	2.654E-07	5.681E-09	5.163E-09	8.414E-08	1.704E-07

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN
 ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
ALL	3.65E+02	1.05E-15	4.17E-05	5.16E-35	4.61E-03	1.20E-06	2.57E-08	2.34E-08	3.81E-07	7.71E-07
ALL	1.93E+04	2.93E-03	1.11E-02	1.42E-02	1.16E-02	1.34E-06	2.87E-08	2.61E-08	4.25E-07	8.61E-07

6.9

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN
 ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
PU 238	3.65E+02	5.219E-07	2.072E-06	2.473E-06	2.291E-04	5.889E-08	1.263E-09	1.146E-09	1.867E-08	3.781E-08
(Y)	1.93E+04	1.169E-04	4.587E-04	5.641E-04	5.688E-04	6.562E-08	1.484E-09	1.277E-09	2.081E-08	4.213E-08
PU 239	3.65E+02	3.930E-35	1.548E-04	1.916E-04	1.710E-02	4.456E-06	9.537E-08	8.670E-08	1.413E-06	2.861E-06
(Y)	1.93E+04	1.051E-02	4.127E-02	5.274E-02	4.295E-02	4.975E-06	1.065E-07	9.692E-08	1.579E-06	3.195E-06
PU 241	3.65E+02	9.749E-05	3.873E-05	4.791E-05	4.276E-03	1.114E-06	2.384E-08	2.167E-08	3.532E-07	7.152E-07
(Y)	1.93E+04	2.623E-03	1.032E-02	1.316E-02	1.074E-02	1.244E-06	2.663E-08	2.420E-08	3.944E-07	7.987E-07

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN
 ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
ALL	3.65E+02	4.93E-05	1.96E-04	2.42E-04	2.16E-02	5.63E-06	1.20E-07	1.10E-07	1.78E-06	3.61E-06
ALL	1.93E+04	1.33E-02	5.23E-02	6.65E-02	5.43E-02	6.29E-06	1.35E-07	1.22E-07	1.99E-06	4.04E-06

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN
 ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
FU 238	3.65E+02	7.93E-07	3.15E-06	3.76E-06	3.48E-04	8.95E-08	1.91E-09	1.74E-09	2.83E-08	5.74E-08
(Y)	1.83E+04	1.77E-04	6.97E-04	8.57E-04	8.64E-04	9.97E-08	2.13E-09	1.94E-09	3.16E-08	6.40E-08
FU 239	3.65E+02	5.92E-05	2.35E-04	2.91E-04	2.60E-02	6.77E-06	1.45E-07	1.31E-07	2.14E-06	4.34E-06
(Y)	1.83E+04	1.59E-02	6.27E-02	8.01E-02	6.52E-02	7.56E-06	1.61E-07	1.47E-07	2.39E-06	4.85E-06
FU 240	3.65E+02	1.48E-05	5.88E-05	7.28E-05	6.80E-03	1.69E-06	3.62E-08	3.24E-08	5.36E-07	1.08E-06
(Y)	1.83E+04	3.98E-03	1.56E-02	2.00E-02	1.63E-02	1.89E-06	4.04E-08	3.67E-08	5.96E-07	1.21E-06

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN
 ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
ALL	3.65E+02	7.49E-05	2.97E-04	3.68E-04	3.28E-02	8.56E-06	1.93E-07	1.66E-07	2.71E-06	5.49E-06
ALL	1.83E+04	2.01E-12	7.91E-02	1.01E-01	8.25E-02	9.56E-26	2.05E-07	1.86E-07	3.03E-06	6.14E-06

G.11

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN
 ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
PU 238	3.65E+02	9.19E-07	3.849E-06	4.355E-06	4.035E-04	1.037E-07	2.221E-09	2.018E-09	3.298E-08	6.659E-08
(Y)	1.83E+04	2.056E-04	8.077E-04	9.934E-04	1.002E-03	1.196E-07	2.473E-09	2.248E-09	3.664E-08	7.419E-08
FU 239	3.65E+02	6.867E-05	2.726E-04	3.375E-04	3.012E-02	7.846E-06	1.679E-07	1.527E-07	2.488E-06	5.038E-06
(Y)	1.83E+04	1.891E-02	7.268E-02	9.288E-02	7.563E-02	8.763E-06	1.875E-07	1.705E-07	2.778E-06	5.626E-06
PU 240	3.65E+02	1.717E-05	6.815E-05	8.437E-05	7.533E-03	1.982E-06	4.198E-08	3.817E-08	6.220E-07	1.259E-06
(Y)	1.83E+04	4.619E-03	1.813E-02	2.317E-02	1.850E-02	2.191E-06	4.689E-08	4.262E-08	6.946E-07	1.407E-06

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION

TASK GROUP ON LUNG DYNAMICS MODEL

DURATION OF INHALATION 6.00E+01 MIN

ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
ALL	3.6E+02	8.68E-05	3.44E-04	4.26E-04	3.81E-02	9.91E-06	2.12E-07	1.93E-07	3.14E-06	6.36E-06
ALL	1.83E+04	2.33E-02	9.16E-02	1.17E-01	9.55E-02	1.11E-05	2.37E-07	2.15E-07	3.51E-06	7.11E-06

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION

TASK GROUP ON LUNG DYNAMICS MODEL

DURATION OF INHALATION 6.00E+01 MIN

ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
PU 238	3.6E+02	7.19E-07	2.85E-05	3.41E-06	3.16E-04	8.12E-08	1.73E-09	1.58E-09	2.57E-08	5.21E-08
(Y)	1.83E+04	1.61E-04	6.32E-04	7.78E-04	7.84E-04	9.05E-08	1.93E-09	1.76E-09	2.87E-08	5.81E-08
PU 239	3.6E+02	5.37E-05	2.13E-04	2.63E-04	2.35E-02	6.14E-06	1.31E-07	1.19E-07	1.94E-06	3.94E-06
(Y)	1.83E+04	1.45E-02	5.69E-02	7.27E-02	5.92E-02	6.86E-06	1.46E-07	1.33E-07	2.17E-06	4.40E-06
PU 240	3.6E+02	1.34E-05	5.33E-05	6.60E-05	5.19E-03	1.53E-06	3.28E-08	2.99E-08	4.87E-07	9.86E-07
(Y)	1.83E+04	3.61E-03	1.42E-02	1.81E-02	1.48E-02	1.71E-06	3.67E-08	3.33E-08	5.44E-07	1.10E-06

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN
 ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
ALL	3.65E+02	6.80E-05	2.70E-04	3.34E-04	2.98E-02	7.76E-06	1.66E-07	1.51E-07	2.46E-06	4.98E-06
ALL	1.33E+04	1.83E-02	7.18E-02	9.17E-02	7.48E-02	8.67E-06	1.86E-07	1.69E-07	2.75E-06	5.57E-06

6.13

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN
 ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
PU 238	3.65E+02	4.326E-07	1.717E-06	2.050E-06	1.899E-04	4.881E-08	1.045E-09	9.498E-10	1.548E-08	3.134E-08
(Y)	1.83E+04	9.677E-05	3.802E-04	4.676E-04	4.714E-04	5.439E-08	1.104E-09	1.058E-09	1.724E-08	3.492E-08
PU 239	3.65E+02	3.232E-05	1.283E-04	1.538E-04	1.018E-02	3.693E-06	7.904E-08	7.186E-08	1.171E-06	2.371E-06
(Y)	1.83E+04	8.713E-03	3.421E-02	4.372E-02	3.860E-02	4.124E-06	8.827E-08	8.025E-08	1.309E-06	2.648E-06
PU 240	3.65E+02	8.080E-06	3.208E-05	3.971E-05	3.044E-03	9.233E-07	1.976E-08	1.796E-08	2.927E-07	5.928E-07
(Y)	1.83E+04	2.174E-03	3.535E-03	1.091E-02	8.198E-03	1.031E-06	2.207E-08	2.006E-08	3.269E-07	6.620E-07

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SAMPLE PROBLEM NUMBER TWO WITH GI DOSE. ACUTE INHALATION

03/01/75

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
 TASK GROUP ON LUNG DYNAMICS MODEL
 DURATION OF INHALATION 6.00E+01 MIN
 ORGAN DOSE IN REM

RADIO- NUCLIDE	DOSE TIME (DAYS)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
ALL	3.65E+02	4.08E-05	1.62E-04	2.11E-04	1.79E-02	4.67E-06	9.99E-03	9.08E-08	1.48E-06	3.00E-06
ALL	1.83E+02	1.10E-02	4.31E-02	5.51E-02	4.50E-02	5.21E-06	1.12E-07	1.01E-07	1.65E-06	3.35E-06

G.14

SAMPLE PROBLEM NUMBER TWO WITH GI DOSE, ACUTE INHALATION
DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION
TASK GROUP ON LUNG DYNAMICS MODEL
DURATION OF INHALATION 6.00E+01 MIN
DOSE TIME 1.00E+00 YEARS
ORGAN DOSE IN REM

03/01/75

DISTANCE (M)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
100.	1.14E-10	4.53E-10	5.61E-10	5.01E-09	1.30E-11	2.79E-13	2.54E-13	4.13E-12	8.37E-12
200.	7.68E-09	3.05E-08	3.77E-08	3.37E-06	8.77E-10	1.88E-11	1.71E-11	2.78E-10	5.63E-10
300.	5.88E-08	2.34E-07	2.89E-07	2.58E-05	6.72E-09	1.44E-10	1.31E-10	2.13E-09	4.31E-09
500.	7.15E-07	2.84E-06	3.51E-06	3.14E-04	8.17E-08	1.75E-09	1.59E-09	2.59E-08	5.24E-08
1000.	1.05E-05	4.17E-05	5.16E-05	4.61E-03	1.20E-06	2.57E-08	2.34E-08	3.81E-07	7.71E-07
2000.	4.93E-05	1.96E-04	2.42E-04	2.16E-02	5.63E-06	1.20E-07	1.10E-07	1.78E-06	3.61E-06
3000.	7.49E-05	2.97E-04	3.68E-04	3.29E-02	8.56E-06	1.83E-07	1.66E-07	2.71E-06	5.49E-06
5000.	8.08E-05	3.44E-04	4.26E-04	3.81E-02	9.91E-06	2.12E-07	1.93E-07	3.14E-06	6.36E-06
10000.	6.80E-05	2.70E-04	3.34E-04	2.98E-02	7.76E-06	1.66E-07	1.51E-07	2.46E-06	4.98E-06
20000.	4.08E-05	1.62E-04	2.01E-04	1.79E-02	4.67E-06	9.98E-08	9.08E-08	1.48E-06	3.00E-06

SAMPLE PROBLEM NUMBER TWO WITH GI DOSE, ACUTE INHALATION

03/31/75

DOSE TO SELECTED ORGANS OF INTEREST VIA INHALATION

TASK GROUP ON LUNG DYNAMICS MODEL

DURATION OF INHALATION 6.00E+01 MIN

DOSE TIME 5.00E+01 YEARS

ORGAN DOSE IN REM

DISTANCE (M)	KIDNEYS	LIVER	BONE	LUNGS	GI TRACT	STOMACH	SI	ULI	LLI
100.	3.87E-08	1.21E-07	1.54E-07	1.20E-07	1.46E-11	3.12E-13	2.83E-13	4.62E-12	9.35E-12
200.	2.07E-08	8.11E-08	1.04E-07	8.48E-08	9.80E-10	2.10E-11	1.91E-11	3.11E-10	6.29E-10
300.	1.58E-08	6.21E-08	7.94E-08	6.43E-08	7.50E-09	1.61E-10	1.46E-10	2.38E-09	4.82E-09
500.	1.32E-08	7.55E-08	9.24E-08	7.87E-08	9.12E-08	1.95E-09	1.77E-09	2.89E-08	5.86E-08
1000.	2.93E-08	1.11E-07	1.42E-07	1.15E-07	1.34E-06	2.87E-08	2.61E-08	4.25E-07	8.61E-07
2000.	1.33E-07	5.20E-07	6.65E-07	5.43E-07	6.29E-06	1.35E-07	1.22E-07	1.99E-06	4.04E-06
3000.	2.01E-07	7.91E-07	1.01E-06	8.25E-07	9.56E-06	2.05E-07	1.80E-07	3.03E-06	6.14E-06
5000.	2.33E-07	9.10E-07	1.17E-06	9.55E-07	1.11E-05	2.37E-07	2.18E-07	3.51E-06	7.11E-06
10000.	1.93E-07	7.19E-07	9.17E-07	7.48E-07	8.67E-06	1.86E-07	1.69E-07	2.75E-06	5.57E-06
20000.	1.10E-07	4.31E-07	5.51E-07	4.50E-07	5.21E-06	1.12E-07	1.01E-07	1.65E-06	3.35E-06

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N. P. Nisick
P. Wegner
- 1 United Nuclear Industries, Inc.
A. E. Engler
- 1 Hanford Engineering Development Laboratory
G. D. Carpenter
- 80 Battelle Northwest
H. V. Larson J. R. Houston (20)
J. K. Soldat K. R. Heid
C. M. Unruh J. M. Selby
E. C. Watson (10) Tech. Inf. Files (3)
D. L. Strenge (40) Tech. Publication (2)