

2153

6

09.1

+19

48

± 2

msd

+00005 -014

+0001

+0014

+001-014

+30.96

5.71 -20 125 1024 2.745

122 1032

244
1220

2.745
27
6.15

2193.000*

6.000*

9.100*

19.000*

48.000*

0.001*

-0.014*

6.150*

15.8 169.824

30.900

-0.011

0.982

28.448

-0.059

-0.190

-15.927

-0.028

0.011

-4.417

76

6.150
19.800
0.500
-18.500
6.550
204
30.900

-0.101
0.160
0.982
-14.294
27.421

-0.475
0.860
-0.189
-76.433
-21.457

0.874
0.485
0.011
-40.599
-7.955

76

5 46.1
606.1

96 2

2494

1014
+000+334
5104

10024000

5741 018
1425
1.9
-66

11004
11004
150 081.9
-1018
246

138
+184
475
1585
045
1110
1585

000551004

0918
5965

+0012 +0175
+0010 +01004
+00114
+1766

10107
10155+082

58.9

5766 193642

8.871 56.50
-11
810
38
6672
0
863

1978 70095
5788
+73 10136+00185

10136+00185

77



6.100
-66.000
38.000
22.000
4.850
93
17.600

-0.090
0.992
-0.088
96.877
7.500

-0.481
-0.120
-0.869
-47.756
-19.744

0.872
0.036
-0.488
67.644
-2.272

77

6.100
-66.000
33.000
18.500
4.750
89
17.600

-0.090
0.992
-0.088
81.284
5.703

-0.481
-0.120
-0.869
-41.128
-18.952

0.872
0.036
-0.488
58.641
-3.358

77

2262 6 09.2 -4 39 B9

6.18 -08 -37 L
34

6.18 -028 118 642 2.731 B9p
110 648
220
868

B+06

-00045 -00366+
-00095 -0042 +23.0

$M_V = -0.85$
110 $\frac{6.05}{6.96}$

-0112
[-009 -004]

295

08.6

45

Ap

-0008 FL.9 -0009 73.9

15.450 1894.7

-0001

+008 9.42 1500.1

15.449

0000

+45
9.49

1323

14.105

50.80

1934.38

~~15.449~~

15.449

-12.55

8.35

15.443

15.447

9.90

+346

15.440 -004

9.3
+.11

2

2211

6 09.2 -45 16

hersch

0 630 -03

mem
1241

-009 126 1122 2.824 st

0211 321
956
1506

1000
100 ✓

1006
100 ✓
100 ✓

66

-014 127 1121

10013

100+100
100+100

2202.000*

6.000*

9.200*

-4.000*

-39.000*

-0.009*

-0.004*

6.850*

234.423

23.000

675

223.5

~~0010542~~ ~~001332~~
~~015~~
 13528 60-0008
 44 5000
 672
 002- +03
 7216

13626 -0005-001
 -20541
 12.75 8582

13580
 -17
 573
 12.10 55.50
 -11
 12.21

13606 1221 69.52

+7
 613
 12.35

7

40

R.A. : 6.200
DEC. : 29.500
M. R.A. : -82.600
M. DEC. : -262.600
DISTANCE : 3.070
MODULUS : 41
AD. VEL. : 20.700

q1 (U) : -0.113
q2 (U) : -0.007
q3 (U) : 0.994
dU : 46.577
U : 22.483

q1 (V) : -0.468
q2 (V) : 0.882
q3 (V) : -0.047
dV : -938.465
V : -39.562

q1 (W) : 0.876
q2 (W) : 0.471
q3 (W) : 0.102
dW : -884.636
W : -34.252

40

4548 4245 4142
 1.190 880 .150
 6 12.2 +29 31 68 II

1.147 = C_m

2219

43039

22
+10

4.35 41.01 40.81 75
 3.52 40.38 25
 3.87 40.37 2A
 3.50 40.375 54

3.53
3.00

1

1.00544 - 0.2648 F₁₀₄ + 20.3a

-0710

-072-265



73 due
2229
243247

6 13.0 +12 34 B9 II-III

5.44

14514 + 2422 + 15711

066

(14) 14 + 15 + 16 + 17

+ 050

069

1025

2681

suppl + 10 + 16 + 15

W 1000

078

1015

+ 13.5

$\frac{156}{1191}$

10001 - 003

1.55

#1000 0015

6.25

+ 2.6

1007

+ 12.7

10002 - 0015

- 4

$\frac{1}{7.7} \rightarrow 13.1$

$\frac{1000-001}{7.35}$

10005 1000

1005

$\frac{-004}{1000}$

+0001 772 -002 #19

Sl. 416 1891.3 +0001 6.54 1891.0

-0005 -001 .12

400

6.66

Sl. 302

6.57 (6.54) 6.07

56.393

+0001 -003

6.57

193950

+ 20
403

6.31
+003

6.34

~~19~~
19

56.372

+ 633

405

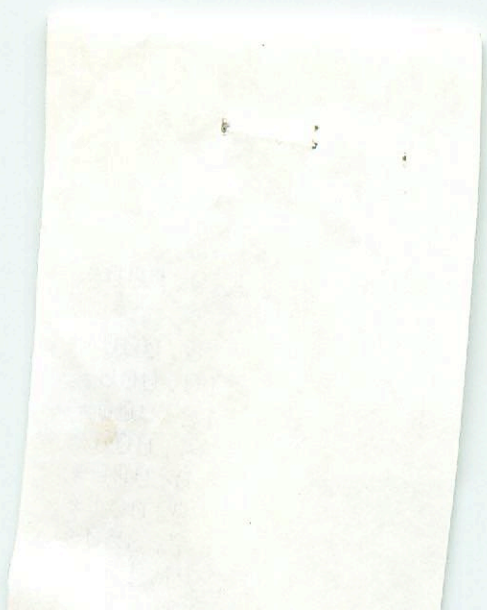
404

6.45
+17

1934.9

6.62

199
249



2229.000*

6.000*

13.000*

12.000*

34.000*

0.000*

-0.001*

7.350*

295.121 *269.1*

12.700

6.250
12.600
-4.000
0.000
7.700
347
13.500

-0.124
0.283
0.951
2.293
13.635

-0.462

2237

6 131 -9 01

89 511

555
555

$$\Delta m = 0.03$$

6.09 -08 -31

92,232

$$B = 104$$

-026 106 704 2.764

+19.1

86 709

$$AV = -0.25$$

198

905

6.20

but

-9

-0013 +003

-19

$$V_0 = 6.25$$

$$m = -2.5$$

$$T = 5.0$$

-0017 +0016

12

-0218

6.29

~~-1911000~~
-019+002

14

19

$V_0 = 6.25$
 $m = -2.5$
 $T = 5.0$

-0025 ± 5.5 $+015 \pm 6.1$
 -0013 $+004$
 $5. \text{ approx } -1506.6$

3005
 125
 $\hline 3133$

-65
 $\hline 6.36$

$51,546$
 $11,530$
 $\hline 3,076$

-0013 $+003$
 ~~$+005$~~

35.90 1934.90

$3,091$
 7
 $\hline 3188$

$+25.42$
 $\hline 5.32$
 1.27

3188

4205

4.59
 4.84
 $\hline 7.25$



-045

$3,016$
 ~~200~~ 6.25
 699 109
 739

$+0.11$



2237.000*

6.000*

13.100*

-9.000*

-1.000*

-0.030*

0.008*

7.000*

10275

251.189

19.100

0.040

0.781

122

24.931

0.091

-0.589

16

11.702

8

-0.108

-0.209

-24

-31.191



6.200
-9.000
-19.000
2.000
6.950
245
19.000

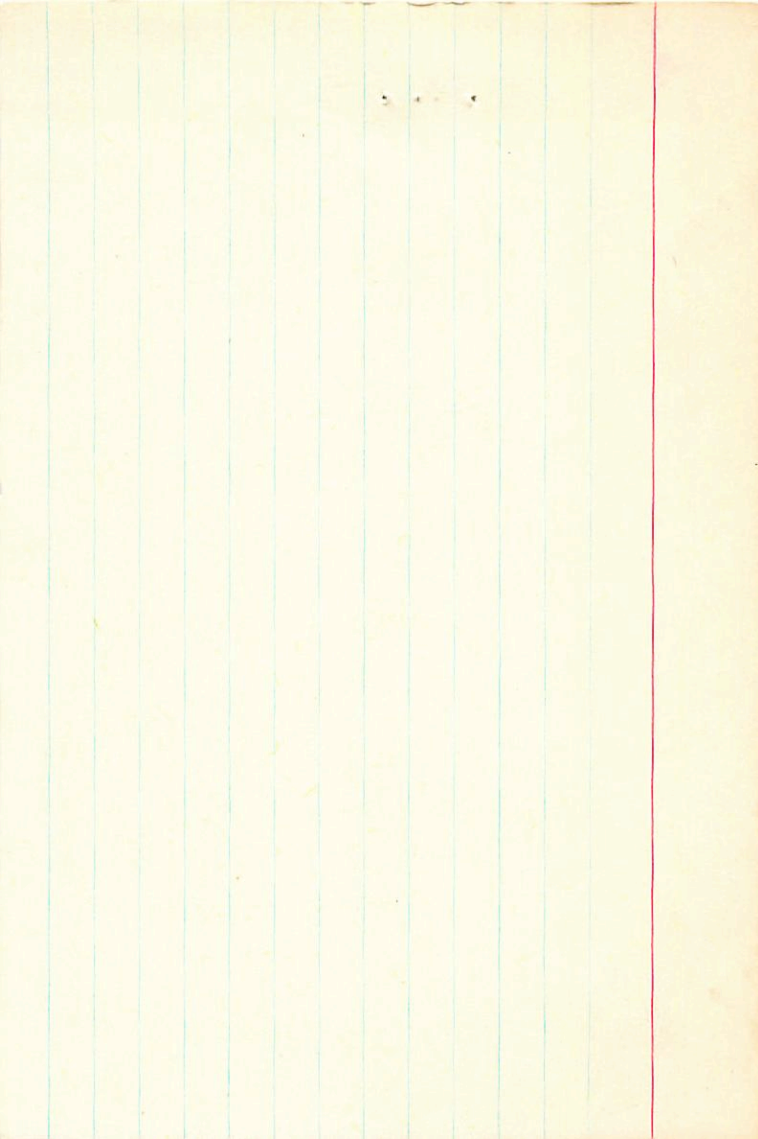
-0.113
0.613
0.782
15.829
18.738

-0.468
0.661
-0.586
47.939
0.631

HN2244 6 13.5 -13 -12 +35d

5.00 -0.06 ~~0.85~~ +0.10 -0.106c

6.2
-13.7
+13
+4.5
5.9
+35



+0007 ±5.7
+0010
+0011

-010 ±5.1
+009
+004 1.92 1408-6

+0011

+41
2.3

+0010 +0006

00066 +0043

¹²⁴
+0096

27.366
+
374

+012.5 +004.5

+029

2.41 1939.10

+32
2.09

+24

70.77

2.13
+4
2.09

27387
+
2.415

2244 6 135 -13 42 857

43445

(103)

5.01 - 0.8 -24 25
5.00 -0.8 -24
5.00 -0.8 -24
5.00 -0.8 -24

103 893

(23)

2747(3)

~~43445~~

204
1099

~~43445~~

435

$M_V = -0.85$
 $r_0 = 4.95$
 5.75

3

15.9 Wrdy

2250

$$E = 0.1$$

6.59 - 0.24 140 966 2824 104

103 201
 $\frac{6.00}{1.37}$

$$M_V = 10.15$$
$$V_U = \frac{6.60}{6.46}$$

100035-0095 Gut +10;
100020 -1082

10029
1004-008

$$\begin{array}{r}
 42.886 \\
 -9 \\
 \hline
 42.877 \\
 +10002.7 \\
 +10005 \\
 \hline
 14052 \\
 -0.15 \pm 8.0 \\
 -664 \\
 \hline
 41.31 \quad 14025
 \end{array}$$

$$\begin{array}{r}
 42.859 \\
 +33 \\
 \hline
 42.892 \\
 +10003 \\
 \hline
 14065
 \end{array}$$

$$\begin{array}{r}
 41.58 \\
 +17 \\
 \hline
 41.75 \\
 +56 \\
 \hline
 41.87 \\
 14344
 \end{array}$$

$$\begin{array}{r}
 892 \\
 +1015 \\
 \hline
 1907
 \end{array}$$

$$\begin{array}{r}
 41.75 \\
 -1.12 \\
 \hline
 40.63
 \end{array}$$

58

2250.000*

20407

6.000*

+3

14.700*

-10

14.000*

0

5.000*

0.004*

-0.008*

6.400*

2135

190.546

10.000

+5.9

-0.012

0.958

+7

7.274

3,37 +3.

-0.041

-0.285

-10

-11

-10.590

-9.4 ✓ -10

-0.002 0

-0.016

-0.40

-0.451

84

0

-08-34

2255 6 16.1 417 20 Ap

~~105~~

628-055¹⁵ 145 253 2789 0911 p

129 764
258

log^t 6V
0.248 7V

10115 - 0.248^{6V} 0.0

-10078 - 0.226 0.0

-10093 - 0.221 1.44

-0133

~~013-0.222~~

$m_V = -0.95$

$v_0 = 6.28$

$\frac{0.0}{7.30}$

2258.000*

6.000*

16.100*

17.000*

20.000*

-0.013*

-0.022*

7.100*

2128 263.027 223

0.000

-0.013

0.971

13 -3.509

-0.061

-0.240

13 -15.995

-0.104

0.016

85

85

m

-27.000

W4002

6 16.1 +17 21

+40 50

H.D 43819

GL8101

-0.0006 -0.020 18650

224

49 04

-61

-61

49

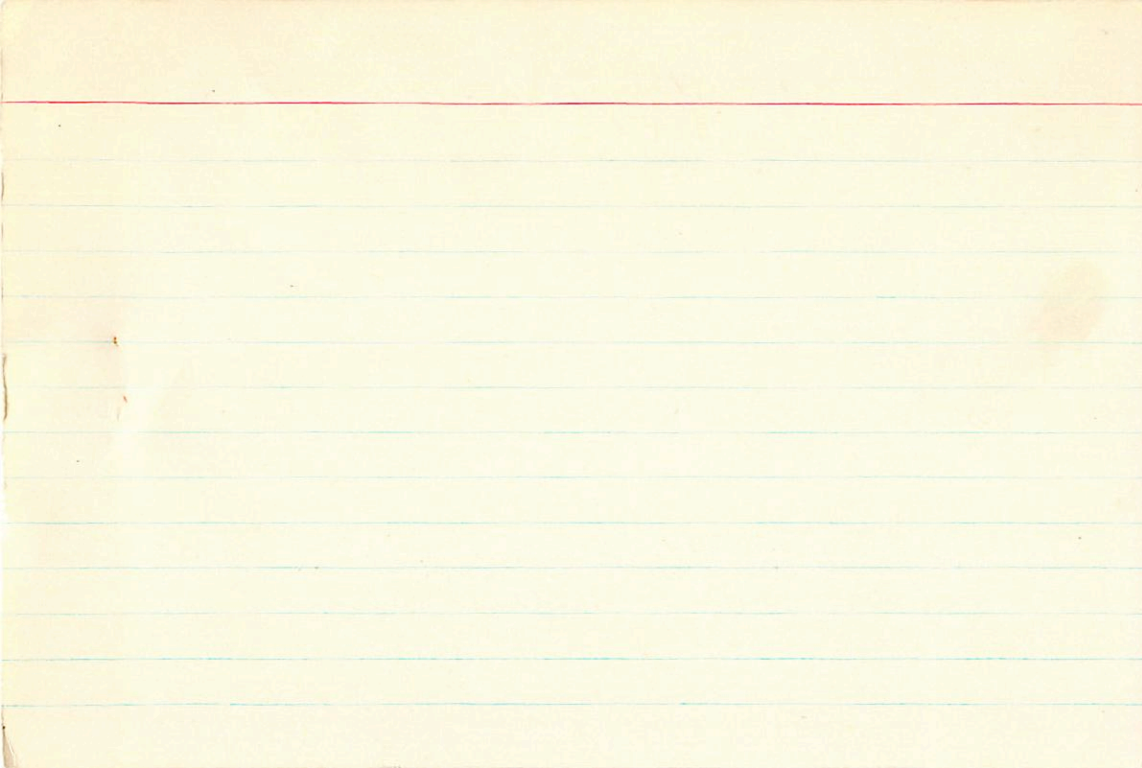
-149 34

10.0

356

-124	260	972	+053	-0190	-0137	-3.1	+3.9
-462	855	-235	+0197	-0510	-0.13	-13.7	-0.9
878	478	010	-0375	-0453	-0828	-18.5	

6.74



2276 6 16.7 -8 3.3 B9

E_{100}

6.22-04-03

6.22 -025 135 994 2.815 0.54

128 994

$\frac{256}{1250}$

$\rho_{00.11}$

$M_V = 0.0$
 V_0 $\frac{6.12}{6.12}$

+4.3

-6022; +003;

-1025 +002

-0371

$\boxed{-035+002}$

44.819 1503.5
669
388

-0015-18.7
+017
52.18 1561.3

32485
11805
44290
+
4424
44301
-087

16.21
33.45
5016
130
6176
5115
+54

28



OWNER

NAME

NO.

DATE

TIME

PLACE

REASON

REMARKS

SIGNATURE

DATE

TIME

PLACE

REASON

REMARKS

SIGNATURE

DATE

TIME

PLACE

REASON

REMARKS

SIGNATURE

DATE

TIME

PLACE

REASON

28

2270.000*

6.000*

16.700*

-8.000*

-33.000*

-0.035*

0.002*

6.200*

173.780

4.300

0.027

0.784

8.129

0.082

-0.590

11.778

-0.142

-0.192

-25.447

SP

2272 6 18.0 +29 34 A1E

44092

0.25

8156

0116 154 558 2.864 at of

79

~~225 31000~~ 2E

159 398
1246
1248

n=005
n=033

1.58

100168-0536
+ 24
150-054
11104
1001
+014

1014
5.25

87

62229

17.4 - 24

5.77-09

2008-08-18 2788.5

107.3

200
107.3

slay
60

+0005-003 +26;

+0005-003 F154

+006.1

+010-003

6.3

-344

+8

0

6.0

+26

VO 5.77
603

2279.000*

6.000*

17.900*

-34.000*

-22.000*

0.010*

-0.003*

6.050*

15485 162.181

26.000

-0.019

0.441

8.381

-0.026

-0.823

-25.678

0.037

-0.359

-3.289



$\Delta m = 00 \text{ } 0.1$

2312 6 22.7 +1 31 A0

E (107) 6.66-03-21 L

037

~~-008 136 760 2.741~~
~~134 762~~

6.67-60³ 115 788
116 787 2.805 1.030

1.018

$m_V = 0.0$

6.80

6.4

6.80

+1.5

7.5

+2

7.28

-5

7.15

+7

-0035 -010 GUT

+7.0

-0054 -010 FRY

-0087

-007-010

42.961 1500.1

640

43.021

43.001

~~+32~~
43.038

+017

42.984

+28

.017

-0012 ± 8.7 - 012 ± 7.3

+0005
0000

50.48

+64

50.01 15047

+17
50.18

~~+1.30~~

0750
+002-005

~~+0005-005~~
00000 -0055

50.31
64.50

50.33

68

-5.000
7.150
269
7.000

-0.158
0.461
0.873
-12.418
2.771

-0.443
0.757
-0.480
-22.148
-9.319

89

0.883
0.463
-0.005
-2.599
-1.292

2323

229 15
6 23.1 -40 16 B9

6.30-05

22, 233

-022 113 1.000 2.794 sth

415 429 422 444 45

107 1004

214

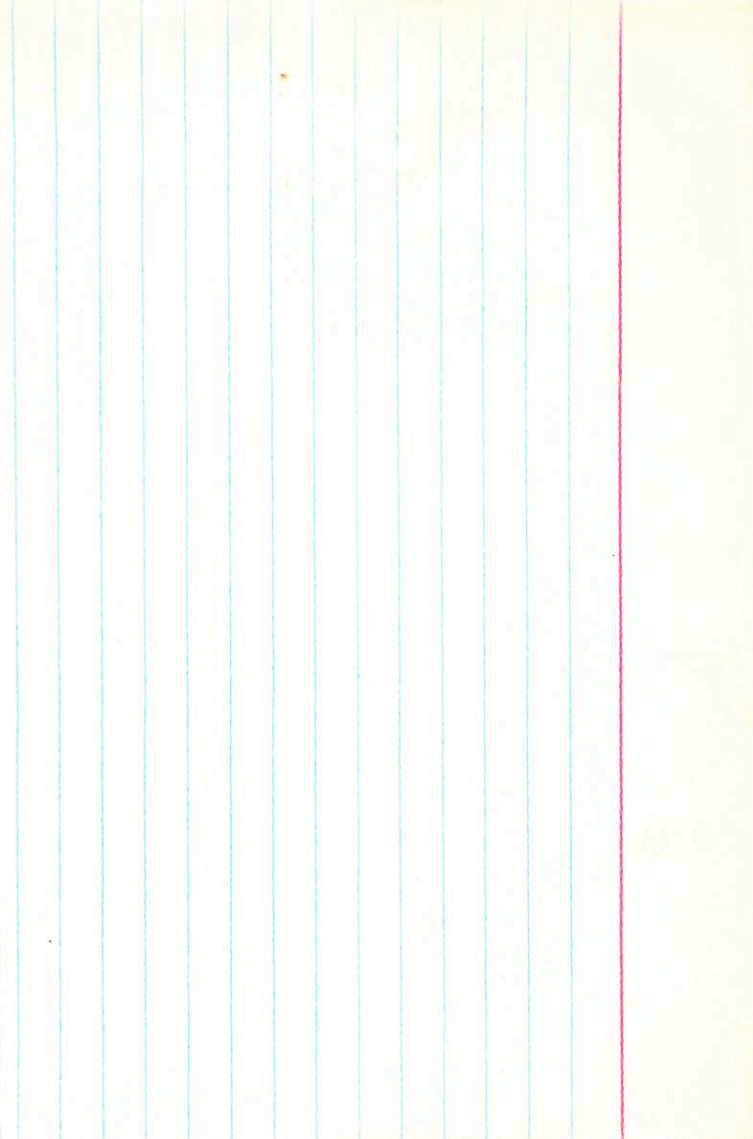
1218

Van der

-002.7 -009.0
P105
(B)

$m_v = -0.25$
 $\hookrightarrow 6.25$
 $\underline{\quad}$
6.45

9940 ~ 4224
-1043 ~ 9004



20 35.1

(189)

23 y lumber

6 2.40 +47

45108
10194007

30 24.1

-023 157 929 2863

20173 10056 W₂ 10
for 2.40

-10197 10066

6.4
47.25

-0184

-5048 0213
4258 -0038

-20
+7

[-0205-1007]

1530
-9882

575

159.9 1001.5
2.15
(E)

410

-12.0

4262 9852
-9046 1713

90

6.400
47.250
-30.000
7.000
5.750
141
-12.000

-0.158
-0.304
0.940
5.150
-10.547

-0.443
0.872
0.200
71.694
7.634

0.883
0.383
0.272
-72.467
-13.504

90

23.5

6 22.2 + 2 18

$$\begin{array}{r} -0003 \\ +0003 \end{array}$$

$$\begin{array}{r} +0003 \ 575 \\ -00237.1 \\ \hline \end{array}$$

$$\begin{array}{r} -0002 \\ 665 \ 95.5 \\ \hline \end{array}$$

$$\begin{array}{r} 10.204 \ 94.7 \\ -15 \\ \hline 189 \end{array}$$

$$0000 - 023$$

$$-00003$$

$$\begin{array}{r} 10.153 \\ +27 \\ \hline 10.180 \\ -0004 \end{array}$$

$$\begin{array}{r} 0015 +22 \\ \hline \end{array}$$

$$\begin{array}{r} +12 \\ 5.75 \\ \hline \end{array}$$

$$\begin{array}{r} -0004 \end{array}$$

$$\begin{array}{r} 10.136 \\ +28 \\ \hline 10.164 \end{array}$$

$$\begin{array}{r} 5.116 \\ -2.154 \\ \hline \end{array}$$

$$\begin{array}{r} 70.86 \end{array}$$

$$-022$$

$$-00237.1$$

$$-0007 \ 95.5$$

$$\begin{array}{r} 665 \\ 14 \\ \hline 6.8 \end{array}$$

$$6.4$$

$$+2.3$$

$$-1.5$$

$$23$$

$$6.15$$

$$+24$$

$$5.61 \ 35.1$$

$$+12$$

$$\begin{array}{r} 5.75 \\ \hline \end{array}$$

$$\begin{array}{r} 7.160 \\ \hline \end{array}$$

91

2327 6 244 + 0 52 AO

45357

8344 6.70 + 04 00 C

44

0010 10000 000

018 162 993 2.871 et of

F104

332

108

110R

0000

022-006

0000000

1325

9=18

0000

1361

n=4028

010000

1421 85

1.66

063

1000

6.4

180

0009-0005

1000

10.9

084

0012-0000

1000

11.5

15+

0010-0000

1000

14

121

0011-0000

1000

15

15+

0012-0000

1000

16

15+

0013-0000

1000

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

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33

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277

278

279

280

281

282

283

284

285

286

287

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289

290

291

292

293

294

295



92

2327.000*

6.000*

24.400*

0.000*

52.000*

-0.022*

-0.006*

5.700*

130.038

10.000

0.000

0.868

9.126

0.025

-0.489

-1.477

-0.105

-0.008

-15.400

92

6.400

8.900

-15.000

-8.000

5.75 5.300

115

10.000

-0.158

0.470

0.868

-6.599

78 7.927

-0.443

0.752

-0.488

2.962

-4 -4.536

0.883

92 0.462

-0.089

-80.247

-12 -10.108

2345 6 23.6 -6.0 15 A.0

85963

long

29.49

30.98

0ms

11.37 round

5.80 -17 175 1014 2852 2852

170 1017

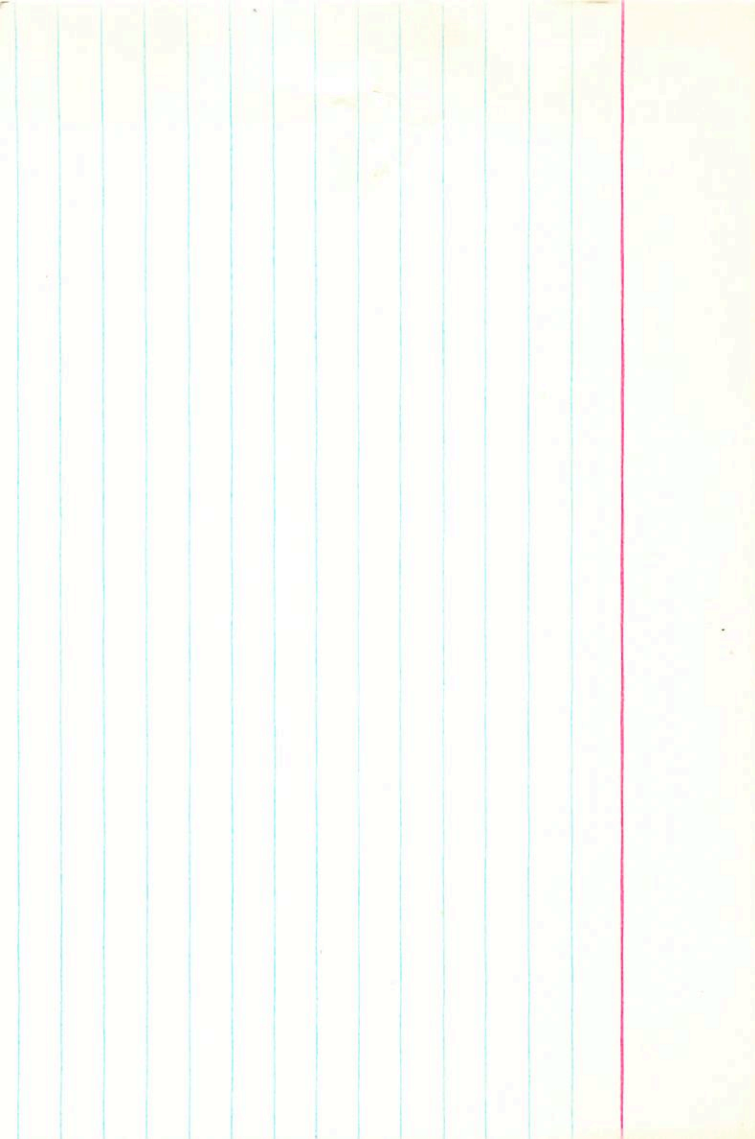
340

57

54

125

16.9



622 6 25.6 + 1 57

-013
-028+73

-0000171

024
43.25 944

545 -0006
-0008

40863
011
474

4483

-0007 -0711
-00005

44.30 341

40823
+ 27

+17
4447

-0045
-011-017

-17
84561

40850
-28

442

40789 4389 (700)
+ 24 / 817 -24 43.87

93

12.040
12.041
12.042
12.043
12.044
12.045
12.046
12.047
12.048
12.049
12.050

20

12.051
12.052
12.053
12.054
12.055
12.056
12.057
12.058
12.059
12.060
12.061
12.062
12.063
12.064
12.065
12.066
12.067
12.068
12.069
12.070
12.071
12.072
12.073
12.074
12.075
12.076
12.077
12.078
12.079
12.080
12.081
12.082
12.083
12.084
12.085
12.086
12.087
12.088
12.089
12.090
12.091
12.092
12.093
12.094
12.095
12.096
12.097
12.098
12.099
12.100

23

-24.000

883

63

081

7.795

12.661

6.400

7.250

-11.000

-11.000

6.100

166

42.000

-0.158

0.454

0.877

-15.444

34.268

-0.443

0.761

-0.474

-16.604

-22.653

0.883

0.463

-0.081

-70.141

-15.040

93

94



2346.000*

6.000*

31.600*

79.000*

39.200*

0.007*

0.016*

5.050*

102.329

-5.900

-0.063

0.629

-10.830

0.034

0.640

-0.903



6.500
79.650
-11.000
14.000
5.200
110
-6.900

17

-0.180
-0.756
0.629
-48.470
-9.658

10

-0.430
0.636
0.641
46.237
0.648

2347 6 25.7 +1 56 B9

1012 H₂O
6.48 -0.5 -16

6.49 -0.30 142 889 2831 B94
133 895
264
1167

Room

$M_V = +0.4$
 $V_0 = 6.50$
3.98
6.1

+420 -5 -10

1003-01864

55000

-6092

810 200
-006 -018

-0002 ± 2.1
-0004

40.863 1894.8

-028 ± 2.3
-009
43.28 1894.6

$\frac{011}{874}$

+1.55
47.83

40.823

44.30 1934.1

$\frac{37}{40.860}$

$\frac{17}{44.47}$
-1.36

514

2202.000*

6.000*

9.200*

-4.000*

-39.000*

-0.009*

-0.004*

6.850*

675
223.8

234.423

23.000

-0.006

0.827

17.592

0.007

-0.529

-10.544

78

-0.046

-0.190

-15.103

2211

6 09.2 45 16

12824

0 630 -03

num
1421

-005 126 122 2.824 24

1001 1001

0211 321

1451
256

~~1001~~

1001
+10

~~1001~~

10013

-014 127 1121

1001+002

669
-45.25
-3
+2
6.9
+123
20

103
20

~~0010542~~ ~~0011332~~

~~016~~

13428

600-0005

6000

001 12.19 28

+03

672

12.16

13.626 -0005-001

12.75 8582

~~30591~~

~~12.70~~

13.580

12.10 55.50

~~573~~

~~12.21~~

13606

1221 69.52

+7

-14

613

12.35

7



6.150

-45.250

-3.000

2.000

6.900

240

20.000

-0.101

0.950

0.269

10.094

7.796

-0.475

0.191

-0.859

6.562

-15.610

0.874

0.214

-0.435

-6.720

-10.319

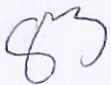
79

6.200
-13.700
13.000
4.500
5.900
151
35.000

-0.113
0.675
0.729
7.666
26.670

-0.468
0.611
-0.638
-15.019
-24.615

0.876
0.413
-0.248
61.275
0.607



2250

+5.9 WdH

6 14.7

+14 05

89.57

-04-09

$E = 01$

6.59 -024 140 966 2.924 A04

133 971

264

137

$M_V = +0.15$
 $V_U = 6.60$
6.48

+00035-0095 GUT

+00020-0082 +10:

+0029

+004-008

$$\begin{array}{r}
 42.886 \\
 + 1002.787 \\
 + 1005 \\
 \hline
 1405.2 \\
 - 0.1578.D \\
 - 0.064 \\
 \hline
 1402.5
 \end{array}$$

$$\begin{array}{r}
 -9 \\
 \hline
 42.877
 \end{array}$$

$$\begin{array}{r}
 +56 \\
 \hline
 41.87
 \end{array}$$

$$\begin{array}{r}
 42.859 \\
 + 33 \\
 \hline
 10005
 \end{array}$$

$$\begin{array}{r}
 4158 \\
 + 109 \\
 \hline
 14344
 \end{array}$$

$$\begin{array}{r}
 892 \\
 \hline
 1015
 \end{array}$$

$$\begin{array}{r}
 4195 \\
 \hline
 -0.12
 \end{array}$$

78

2272,000*

6,000*

16,000*

29,000*

34,000*

0,014*

-0,054*

5,250*

5.55

125.52

112,202

21,000

-0,007

0,991

820

19,976

-0,258

-0,057

-34

-30,095

87

-0,059

0,123

-5

-4,060

2229 6 17.9 -34 22 B9

5.77-09

¹⁰2
-048 131 797 2.775 Stok

118 807

$\frac{236}{1043}$

(Slurp) 66

+0005-003 +26;

+0005-003 F154

+0061

+010-003

$m_v = -0.3$
VO 5.775
605

6.3
-3.44

+8

0

6.0

+26

+012 4/13

~~00000000~~

~~40000000~~

52.813

6.68

25.92 1.0

+00000000

000 43.0

$\frac{-24}{997}$

+0003

$\frac{-00}{000}$

52.764

+0002

26.12

38.47

$\frac{1.9}{978}$

$\frac{25.91}{000}$

+0002 000

26.25

54.97

52.778

+0005

$\frac{+20}{000}$

$\frac{+1}{000}$ +0006.5 000

62.779

+22

25.89 (10.12)

801

25.92

88