

67483

8 5.9 +13 47 ⁴¹⁷₁₈₆ 2.2⁴ dF3

HR3184

G411047

12line

6.23 +0.475 +0.01 ①

.313 .152 .514 ② SPL 2.635 ③ 4+

323

22+

~~208~~ +25

451r 118

~~188~~

+225

51.3pa.

-6.4 +0.3 -6.1

-23 -81 -44

+17.5
-1

" -002

" -020 -100

" +75 202 msc46
-0025 -0180

-0028

-0029

-00K-016

48

3184.000*

3.000*

5.900*

13.000*

47.000*

-3.001*

-3.016*

3.900*

60.256

-10.000

-3.020

3.804

-3.269

-3.066

-3.445

3.505

-3.033

3.394

-3.899

35

673.6

-92

40.6

0

51

478

-0027±3.6
-0025
-075

67224 8 06.0 +58 24 6.0 9.14 +34.36
5399 +88.46

11050 58.403 1898.3 +58 23 48.19 1898.3

$\frac{140}{543}$

55.11

3.505

58.613

-1.887

58.422

448

58.395

33

42

58.432

22

454

40.8

49.23

-3.04

443

-1.100

443

144706

48.74

-20

48.54

4.08

52.27

70.1

-17.55

52.15

-1.92

50.23

50.22

50.45

48.85

-17

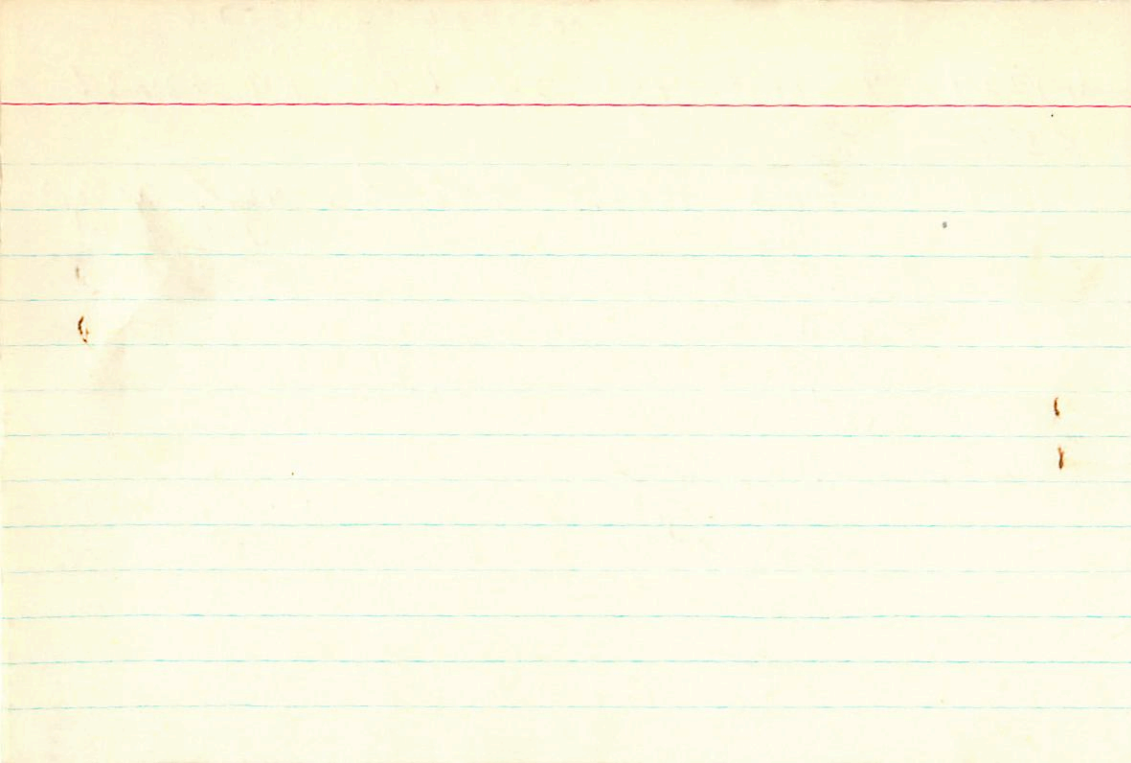
48.68

39.7

408

192510

1945131



1493181

8

060

442 34

6.30 g 103

4428⑤

-004-0776-L

+37.9

49



3181.000*

8.000*

6.000*

42.000*

34.000*

-0.004*

-0.077*

6.000*

158.489

000

SE Dym

8 06.1

+44 37

+22

+23.0
~~+3.0~~

+80 h/yr

-017-034 At 103

9.5 3.0

-007-039 Clarke + 9

-018-032 At 103 + low 8.6

~~-012-036~~

5 575

314

Clarke

$-0.007 - 0.039 \pm 0.006$ std error

-0.017

+49

-19

-37

+131.6

-32.1

-17.1

+27.

+69

+163

+10.6

P

+40

-49

+27.0

+2.0

+16.9

-510 -155 846

-188 980 064

839 126 529

+0483 +0125 +0603

+0178 0790 -0612

-0795 -0102 -0897

295 po.

+0169 +0286 +0455 +13.4

+0062 -1812 -1750 -51.6

-0278 -0233 -0511 -15.1

McNamara, D.T. and Faculty R.A.

1976 NXP 88, 124, 9 A.S. 10, 16

Barnes, T.B. and Murphy, S. 197X



50

WRONG FILE TYPE

8.100

44.600

-17.000

-36.000

7.250

28.84

23.000

-0.513

-0.154

0.844

55.658

35.109

-0.185

0.981

0.066

-156.717

-42.648

0.838

0.122

0.532

-68.935

-7.203

7.5
2

74.5

310.5

437

-47

-9

27.75

50

RT MOR

-10°2396

8 06.3

-10

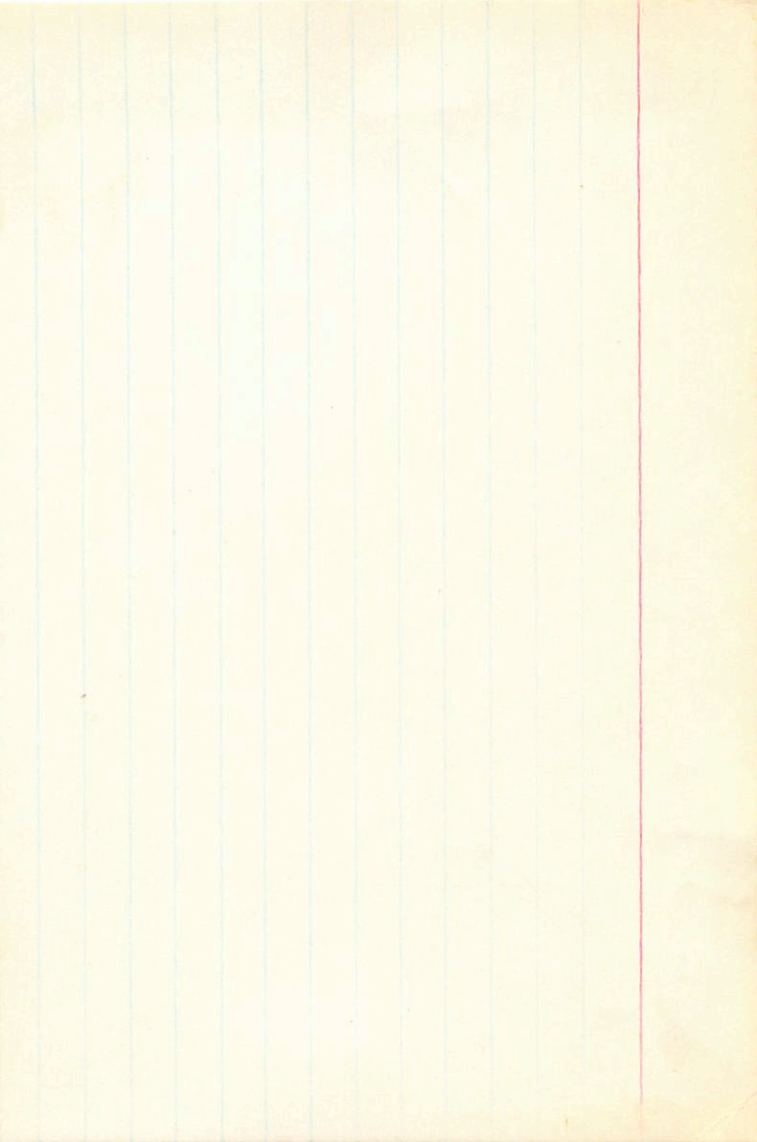
38

+430

DDM

RT MOR

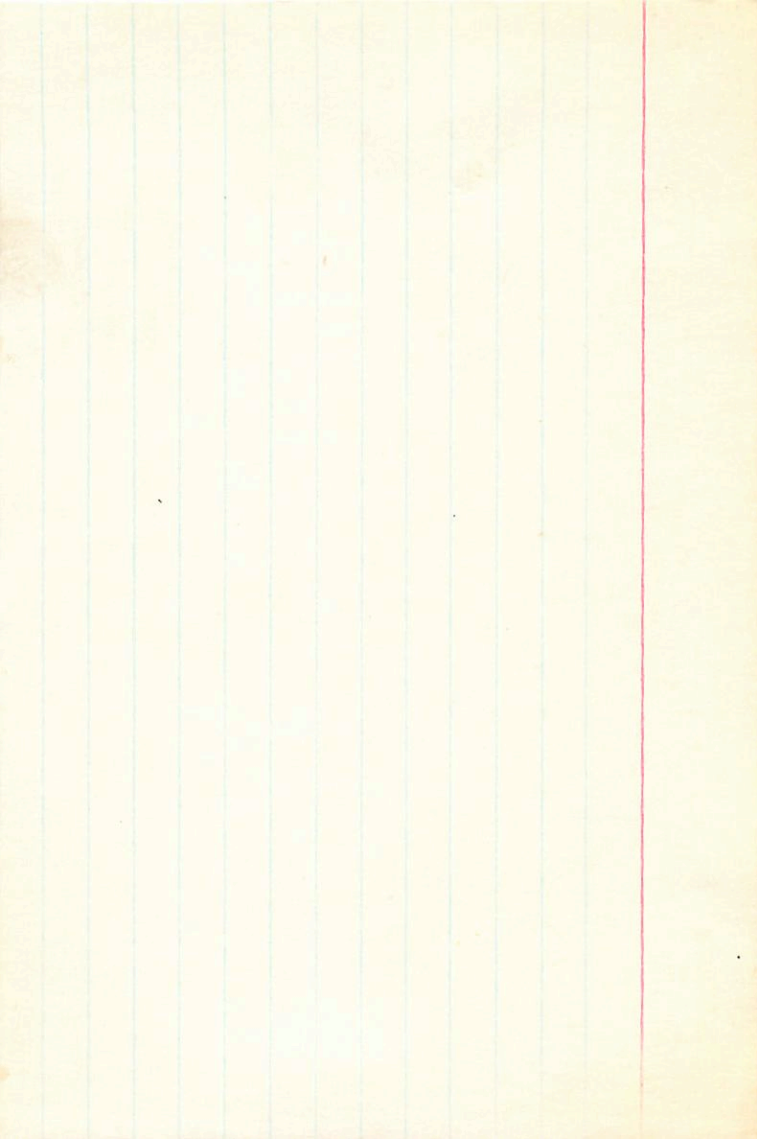
67650



PT nos 8 064 10 39 1432^{aw}

25963PH

no 10



67587 8 06.9 +35 36 6.6 d60 -54.88

5408

11073

+0172⁴⁰ -254 N30

+0165±3.7 -239±3 GC → N30

7250

2092-243.9 P106 ✓

257
274

2

-546

664 350 161 8700

5

Handwritten notes on a piece of paper, including a small drawing of a stick figure and some illegible text.

R.A. : 8.100
DEC. : 35.600
R.A. : 257.000
DEC. : -244.000
ANCE : 2.000
UIS : 25
-54.800

NGC 8 07 49 20

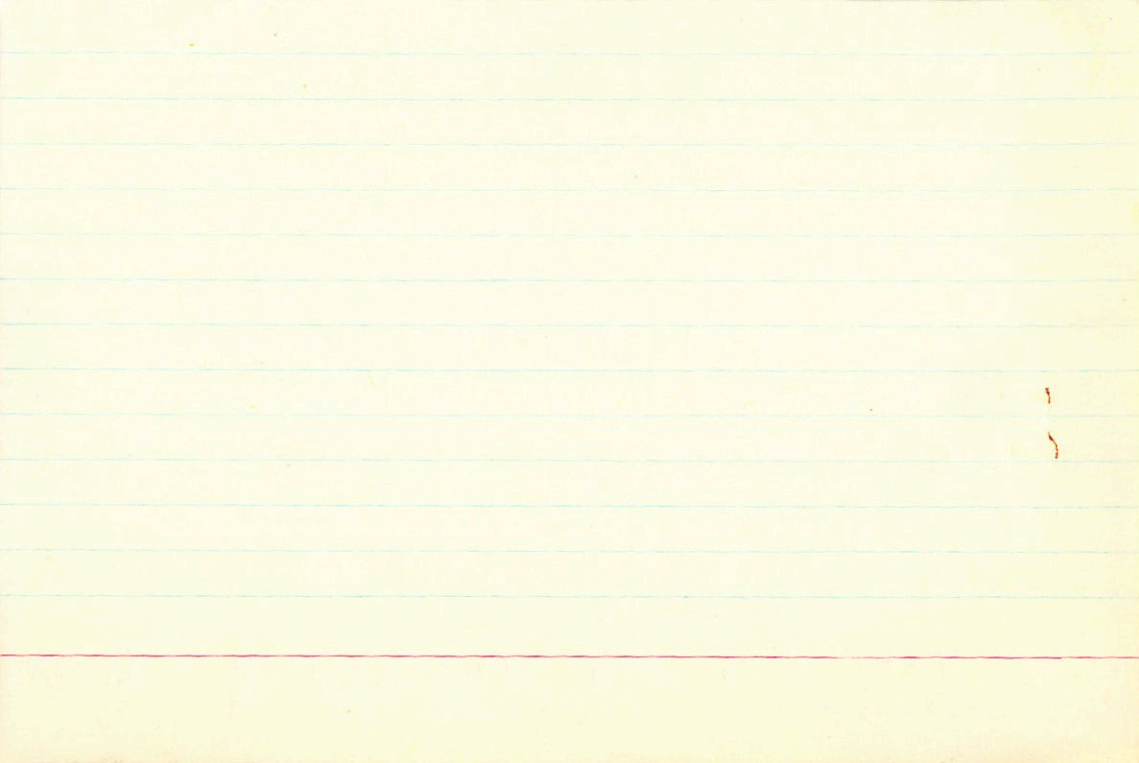
		120.0	
"	-10129	-0072	} 130
"	+10061	+0062	

380 m

519	+946	+124	+0177	+0249	+0426	+14.2	+2.4	+18
-179	+34	-953	+0061	+0070	+0071	+2.7	-19.6	-17
+836	-533	-134	-0285	+0157	-0178	-4.9	-2.6	-8

68074 8 07.2 -49 2/ A0II +25.1 ± 1.7 G(5)

8.26 -12 1.29



136ms

67690 8 07.2 +26 00 6.7 gN3 +5.56

5412

11082

11
-0010 -038 N30
-0011 ± 23 -034 ± 2.0 6.6 → N30

25

0.100
~~25.000~~
-15.000
-36.000
7.000
251
5.500

400

0727

707

+0910

-0.513
0.124
0.849
11.678
7.685

-0.185
0.956
-0.256
-155.368
-39.146

57.9

0.830
0.285
0.465
-102.249
-23.127

-38.9

2

Wilbur 00091, 37, 1571

$\frac{48}{384}$

5.36

55 cans

8 07.9

46.8 38

68.11

14067447

HR0182

-1012 (P)
R

6 = +330

R-I

5.20 +10.5 +0.80 4.85 +0.335

+03

3217 7 07.8 -43 39 B7 e?

68723

6.80-006 089 622-2.696

about
P=

253

6.34 -3 88 636 2194
87 637

10015 -00 560+

10013 1001 130.36

1029

174
811

1029
1001 1001
1001 1001

6.25
17/95

~~8205~~ 8 081 ~~242~~ 20 40

~~1002676.4~~ -003±5.3

45.744 1858.3 -0037 ~~100~~ 12.29 1855.6

~~134~~
~~883~~

~~115~~
~~12.13~~

26.130

1528.66

14.710

4724

~~940~~

24.50

45.660

~~11.98~~
~~30~~

~~780~~

~~113~~

~~12.09~~
~~105~~

5



3217.000*

8.000*

7.800*

-63.000*

-39.000*

-0.020*

0.004*

7.950*

D.L

389.045^{331.0}

300

8 08.1 +38 53 6.5 F8 +25578

11107
(5420)
67827

-0096 -085 N30
-0084 ± 4.0 -066 ± 3.2 06 → N30

(3640)

38

60982 -0723 N8 50

60997 -0765

-148
-74

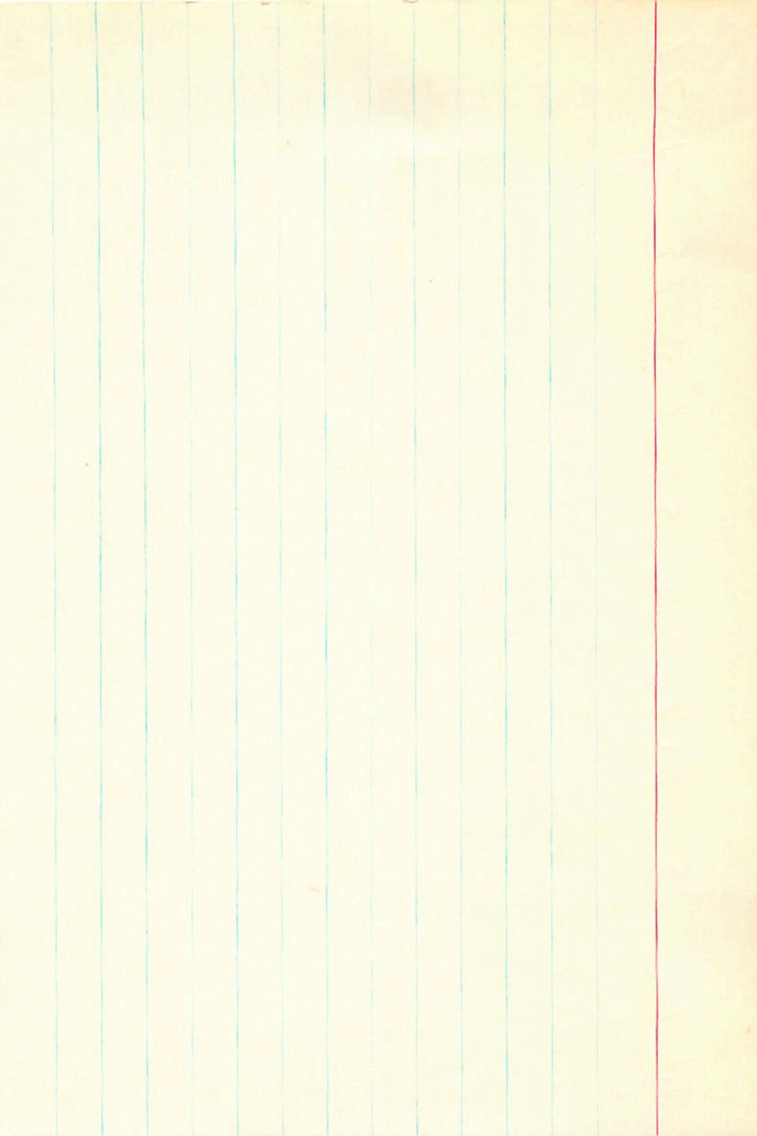
34 0 6352 -0691
7691 -9931

-1490
[-115 -074]

(425)

494

370 143 42 2608



Hyals?

8 8.1 +38 53 G-0

67827

HR3153

GC11107

6.44 +58 +09 8557

.268 .194 .390 ③ 506 - 2.608 ④ ct

[141] 260 +7

371

[57] 316 $\frac{31}{+38}$

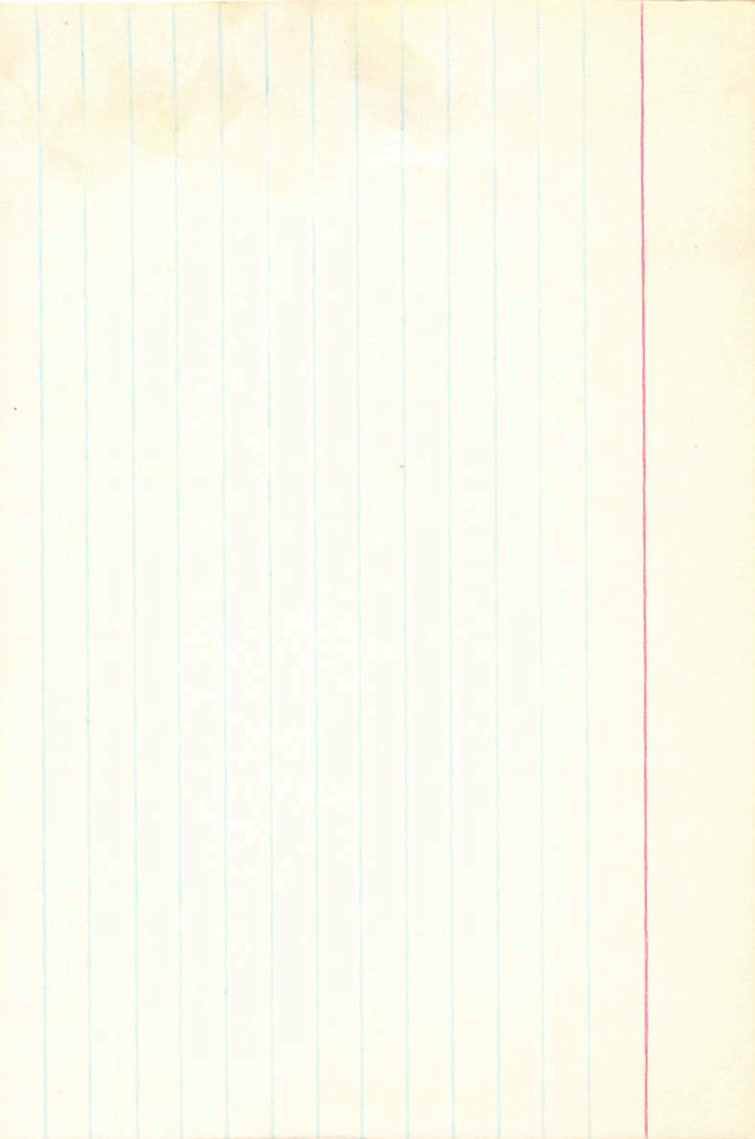
4.00 +354 -168 -163
+3 -3 -5

^S

-0090 +25.7

-075

178 525
389 1050



68434

601119

8 08.4

-55 56

+25.063 Bun

~~-000~~

+0002

+0250-0 →

+028

5.8

-518 855 -006

-150 -116 -976

836 505 -215

+1134

+ -0154

+0670

0

-24.4

-5.4

23.723 151.4

⁴²
815

-0211 F23
-0210

+025 F3.8
+030

14.50 1907.8

-1.05
15.45

23520

-33

788

-027

15.00 15348

+10

14.90

+ .95

68863

8

085

-82

14

152 III

220 + 134 - wayman

$$6.56 + 0.505 \text{ (2)}$$

$$\begin{array}{r} 628 \\ 03 \end{array}$$

$$\begin{array}{r} 5.6 \\ 20 \\ \hline 965 \end{array}$$

+61.7 wayman

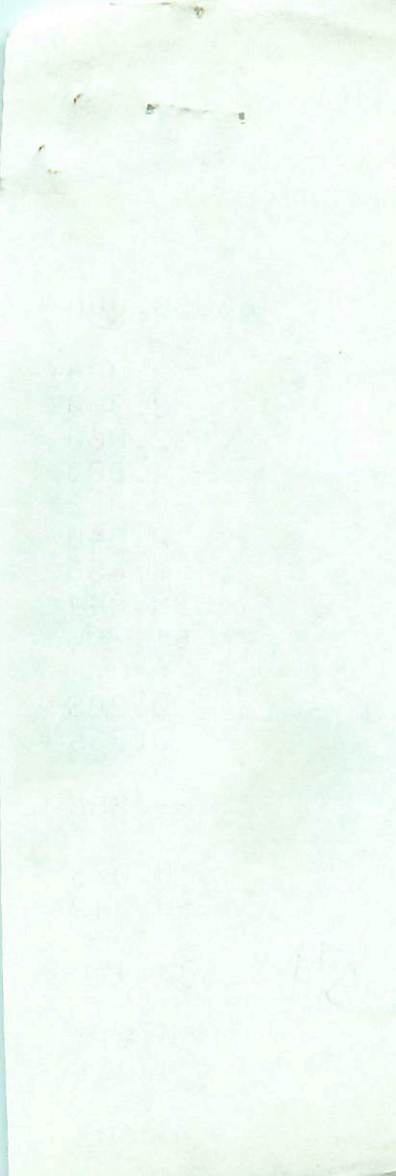
-022 +040 stay new → F14

-020 +042 ~~man~~ Oct, +8+6 F14

-021 +041

-019 +043 +602

84



68363.000*

8.000*

8.900*

-32.000*

-14.000*

-0.022*

0.040*

7.650*

338.844

61.700

0.203

0.336

89.556

0.073

-0.942

54
-33.450

0.017

0.011

6.602

68363 808.9 32 14

7.20 134 131.1 +61.7

621133
~~-0005~~
~~-0024 ± 100~~
~~-0010~~

1291
 +045
 +056 ± 7.3
 +24.44

53.345 1902.2
 139
~~53.984~~

49.43 1899.1 618
 2.858
 52.28

54.455
 59.005
~~53.460~~
~~005~~
~~415~~
 +6
 471
 = 0.13

24.97 1926.49
 25.38
 50.35
 90

~~0017~~ +050
~~0015~~ 0.42
~~0010~~
~~049~~
~~018~~ +094

51.217 +1.20
 51.08
 52.43

51.217 +1.20
 51.08
 52.43

51.217 +1.20
 51.08
 52.43

7.55

68363.000*

8.000*

8.900*

-32.000*

-14.000*

-014 -0.018*

044 0.052*

7.550*

323.594

61.700

0.238

0.336

97.683

0.086

-0.942

-30.371

0.065

0.011

21.597

JS

S

ADS 6650

F 09.3 #17 48

5.6 df7 - 5.7a

6.0 dg2 - 11.38

- 5.7a

3 line

5m AB 0.30

AB-6 1.02

68257

5432

11141

+ 0046 ± 1.4 - 140 ± 1.2 GG → N 30

+ 0047 ± 1

- 137 ± 0.2 van Hark → N 30

- 5.5 (1)

- 5.3 (1)

+ 071 - 138 H

FYS -535 306 962 4071 -135-57 -042-2 -630

-060 035-035 022.-389 0-5:5 +3 -5 0470

-5- -5- -15

-11	-11	-2
-----	-----	----

68332

5435

11150

8 09.6 +14 09 6.4 AS -9.48

-0018 ± 5.7 -014 ± 4.7
-0018 +006

34.413 1900.4 +14 9 16.46 1893.8

$\frac{89}{502}$

$\frac{79}{17.25}$

34.414

17.39 1933.3

$\frac{25}{429}$

$\frac{12}{17.51}$

31.3

$\frac{349}{31.7}$

10.442
-4.000

44.39 1930.19

$\frac{34.442}{413}$

$\frac{25.95}{18.20}$

$\frac{17.46}{1.21}$

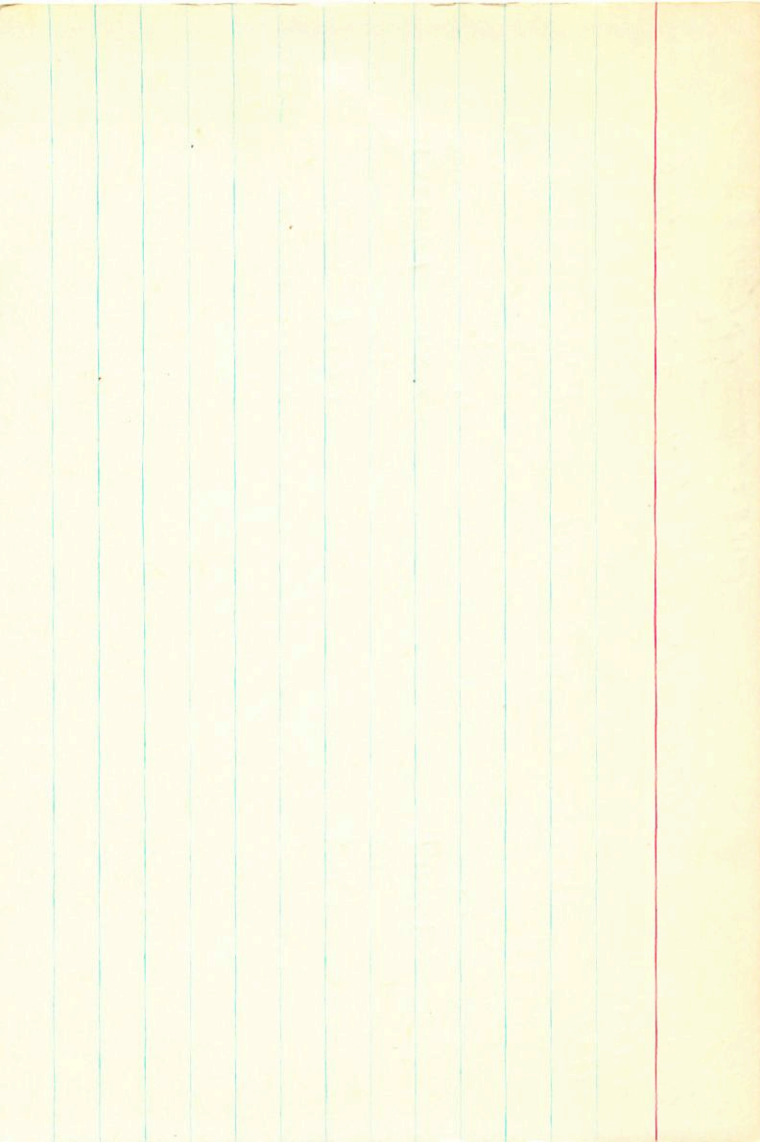
$\frac{413}{449}$

$\frac{17.29}{17.41}$

$\frac{1940.11}{16.86}$

34.418
-0.37

$\frac{16.86}{16.91}$



-0003 ± 4.3
-0006
5811
064 ± 3.7

14R3226 5 09.7 -42 4x 118.2a

14068601

8-439
11155

44.498
12
500

1909.1 -42 50 13.76 1903.4

-003 0006c

44.492
11
498

14.10 1938.70

14.10

-40

-017

-0032 ± 5.3
 -0030
 -027 ± 3.2
 -030
 58(10)
 (+32.2)

68483
 8
 10.2
 109
 44
 245
 245
 235.68

AOS6659
 4.6
 7.4
 9.3
 -045
 -027
 06

68483
 5415
 11166
 9.415
 1896.6
 171
 586
 43
 44.92
 1.77
 46.69
 1884.5

9.451
 23
 474
 1933.9
 12
 45.17
 45.19
 150

?

843-538 168 986 -048 -027 +35.4 -005 +6 -128

070 004 026 003 175 142 +35.1 -20 +32 -104

-2 +46 -7 01

-8 +41 -3 015

26

8.150
9.700
-46.000
-28.000
5.000
100
38.600

-0.522
0.358
0.774
64.718
36.341

-0.176
0.842
-0.509
-73.892
-27.042

0.834
0.402
0.377
-232.719
-8.726

26

48.942

22-71

AH Ved 8 10.4 -46 30

+26.0

-0011 0000

590 pa.

-527	+840	+130	+0284	0	+16.8
-172	+045	-984	+0093	0	+5.5
+832	+541	-121	-0418	0	-26.4

+20

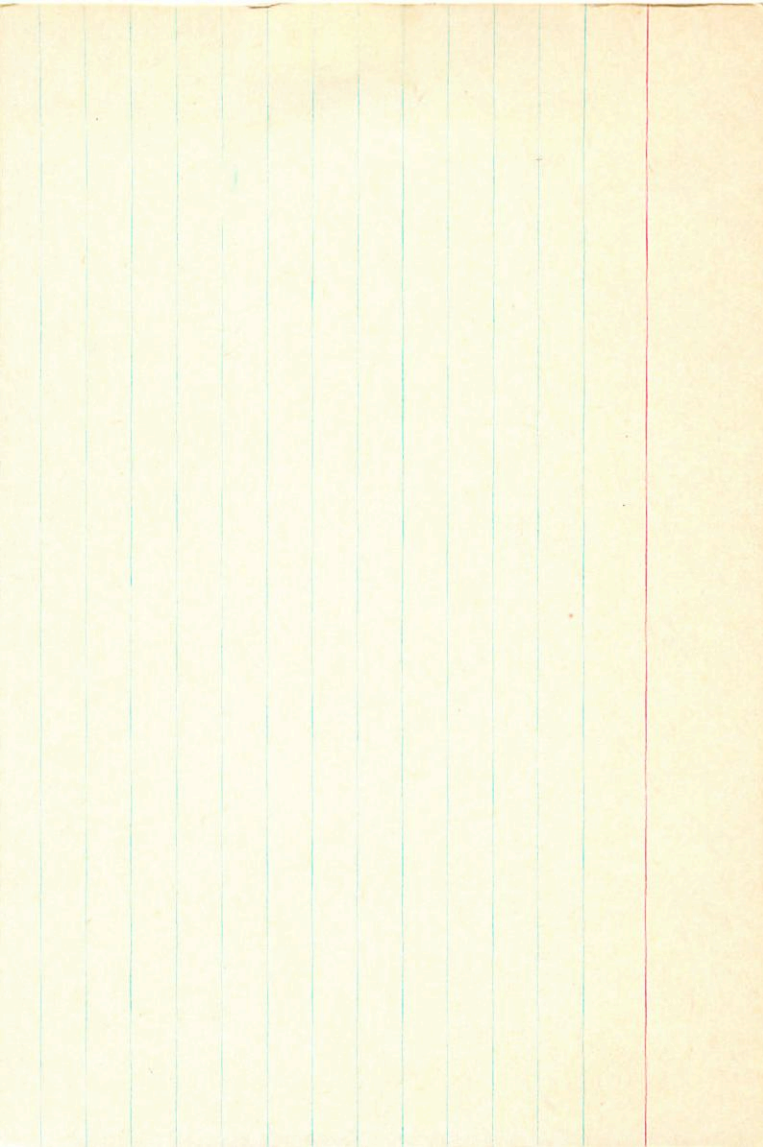
-20

-30

+3.4

-25.6

-3.1



HR3224

8

10.7 + 23

17

-2d

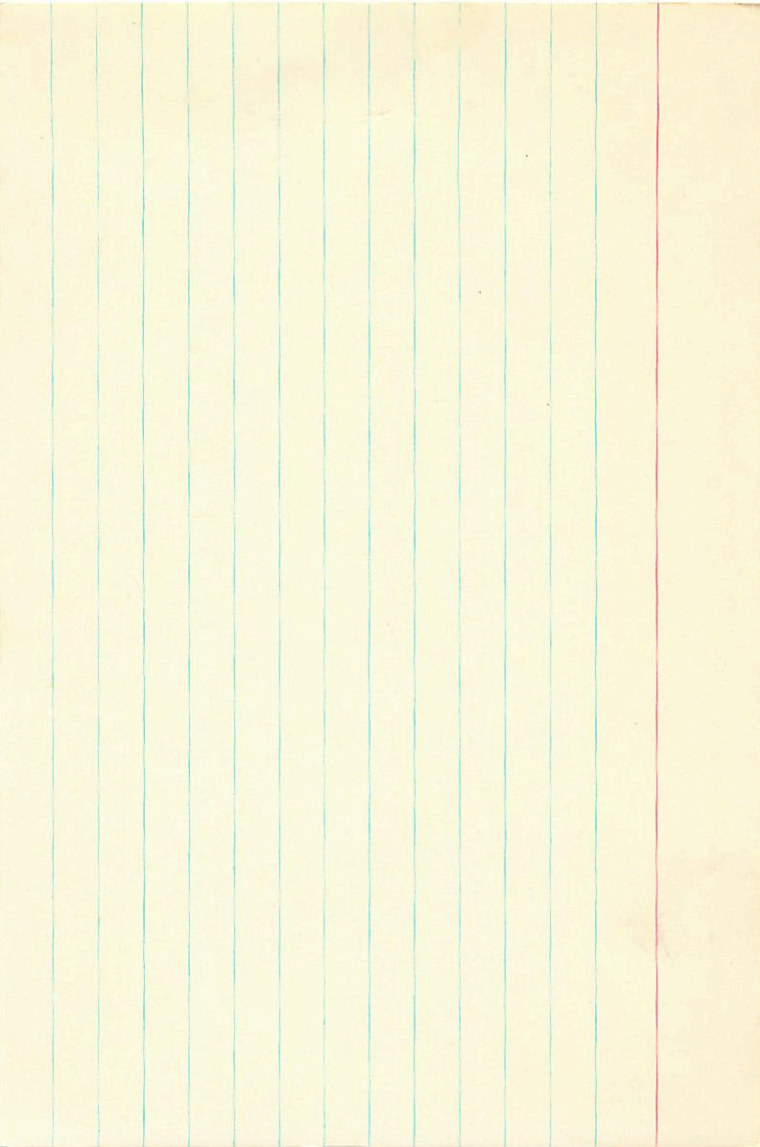
W5447

6.4

17314

-033

-015-6-C



68703

8

11.3 +17 50

F0

HR3228

118906

.174 1221 .810 2506 2.775

[m] 253

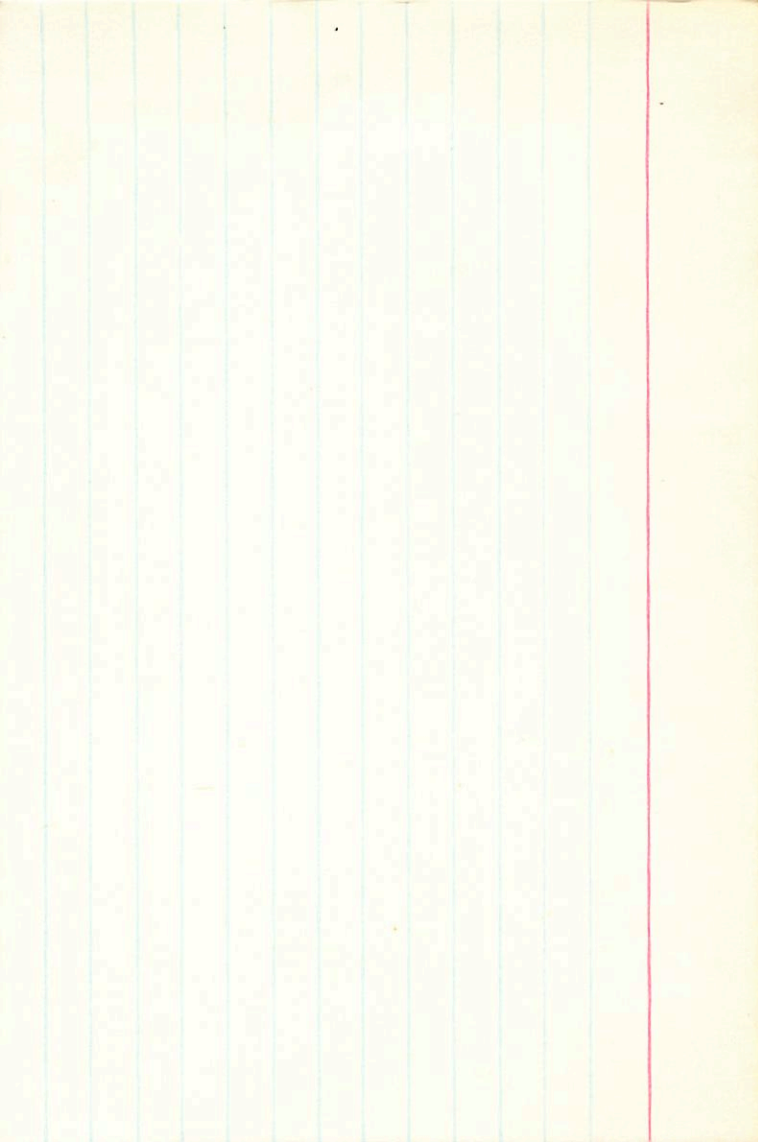
[c] 778

70ps.

-1.4 +3.2 -2.2

+19 +27 -11

-005 -3.3
+006



7.5

XZ Pump

8

11.4

-23

45

24

22.1

2306977

03476

23

600

U.S. 200K

+21.4 Unit

-049512 -001512Y

+8

-040

+5

+003 →

-532	723	438	+1009	+0103	+1112	+22.2	+22	+9.6
-167	417	-893	+0317	+0059	+0376	+7.5	-12	-19.6
829	548	097	-1572	+0078	-1494	-29.8	-28	+2.1

P=2.19

A0

840-5-12 - 404 815 - 045 1005 + 222 - 002 - 9 023
036 002 024001 175-123 + 20.1 - 11 + 17

005-

68978

8 11.6 -31 35

+48.5 ± 0.8 (14)

GC11198

+50.2 1 SA

6.68 +0.61 - GSD - \bar{x} Ceye

1941

6.75 +0.61 +0.07 285

-310571

+87 -22

-43 .020

+68 -23

-22 .030

+51 -34

-20 .046

-341 ± 9 +143 ± 9 GC

-330

+143 Ceye

-335

+113



±12
196 (7)

840-853 -524 852 -335 +143 +46.5 -95-25-8-78
281063152041 1.137.1161 +413 -22 +35

-0267±9.0 +143±8.7

-0256 +151

-254 LMS CP

+84-23-44

+34+91+3

02

36.555 1894.2 -31 35 2.45 1897.8

+16+20-9

03

1.356

37.911

~~412.4~~

-7.46

14.91

4319

34.24 1926.71

41.6

32.435

54.521

37.213

214

230

34.397

413

3943

36.822

9.64

15.8/6.63

~~413.9~~

10.5.3

10.3

1956.48

1.086

04.32

6.26

2548

8^h 11.3 -5° 39' 19.50

-5° 24' 9 -005 -015

-5° 24' 11 -031 -006

-5° 24' 47 -023 000

-5° 24' 36 -004 -018

-5° 24' 14 -006 0

-5 (4)

-1 (4)

+4 (3)

+11 (2)

-013	-008
4	3
-009	-005
1	-1
-010	-006

$\rho = -26$ *Temp*
90 km

4	3
-009	-005
1	-1
-010	-006

-010	-006
------	------

-525 +548 +650

-174 +680 -713

+433 +487 +262

+0254 -0156

+0083 -0193

-0395 -0138

0533

+0096 +41 -17

-0110 -11 +18

-0533 -53 -7

56.6mm

-0016 ± 2.9 +004 ± 2.4
-0015 +006

HR3221

8

11.6

+60

32

dA7 -15.7 8

68457

6.4

-012 +004 GL

W5459

-013 +004 GL(2)

11199

38.549

1985.8

+60

32

1.80

1977.7

$\frac{103}{652}$

$\frac{-29}{1.51}$

10mm 300

-0023 +008

$\frac{31.56}{6.908}$

31.9 1925.3

2839

$\frac{38.708}{.554}$

$\frac{3.52}{-1.95}$

$\frac{5.76}{5.76}$

$\frac{1.59}{1.23}$

$\frac{1.80}{1.80}$

$\frac{2.00}{-1.87}$

$\frac{1.87}{1.87}$

1944.97

$\frac{1.84}{+33}$

$\frac{1.84}{1.87}$

$\frac{1.87}{1.87}$

$\frac{1.87}{1.87}$

7027

35.1

57.4

578
-074 (49.3)

$\frac{28.549}{.5}$
 $\frac{38}{1.80}$

3850 1870
4224 4882

840-543 870 442 -063+004 -15.7 003-14 009

011-003 007-002 062 019 -7.7+4-6 01

+10-4-13

001

Van

-0005 ± 6.1 -025 ± 6.3
-0013 -020

68461 8 10.2 +16 40 6.1 96.3 -19.5 ± 8

5443 3822 -9241 -2224 -9749 0214 -0054 0147

11165 9.363 1904.5 +16 39 56.29 1904.4
023
386
1.14
57.43

56.39 1433.7

26
56.65

85.05 1931.66

26.90 371

58.15 586

-1.30 56.19

-1.57
57.0

-0141
-013-019

28.2

1008 017
-012-017

9.349
269
369

43.998
25.323
9.2 31

123.7
322
348

348 / 0.38

3222

1019

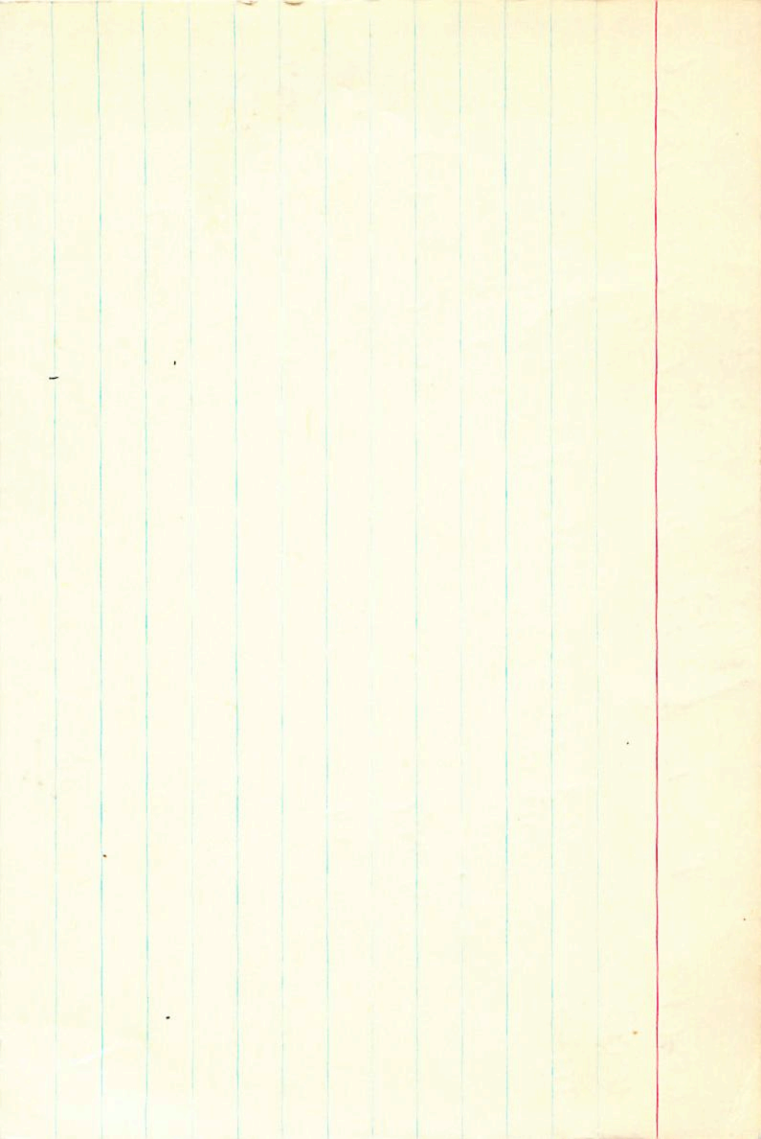
2188

9757

11200

3100

4264



-700

8 12.1 -50 03

W5-460

GC11210

190

-008 ± 5.1

-014

37.00 1909.0

+33

36.67

0000 ± 5.5

+0009

7.263 1912.1

+0004 -011

+0009 -009

+0009 -009

37.05 1939.30

-3

37.08

-41

-0587 -11.1 -0.5 -11.6

-0009 -1.2 -16.9 +5.7

+0123 +23 -1.0 +1.3

7.295

-7

7.287

+024

-0227 -0360

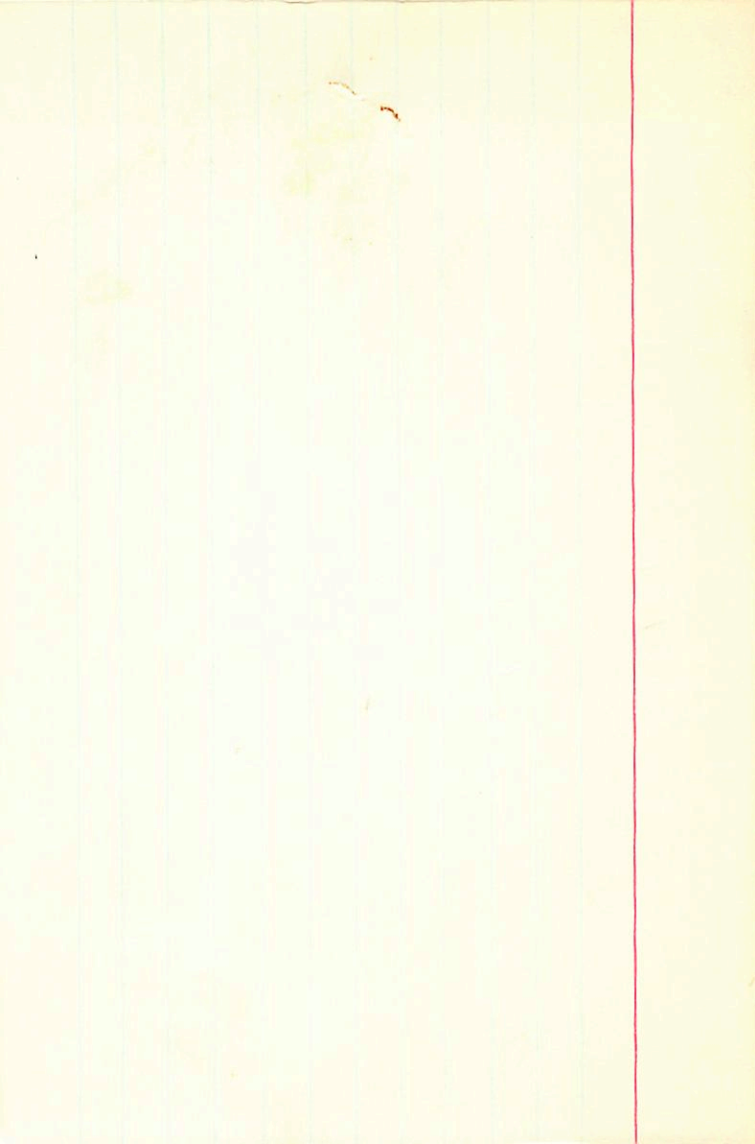
+0071 +0007

+0353 -0230

-532 843 076

-167 -016 -986

824 536 -149



10037 10026

P2.111

Al Ved 8 12.4 -44 2.5

A2052

GC 11221

6.4

10044 1022

100 C Ad(21)
150

~~10044 + 116~~
10227 + 029

144

91

10217 - 029

10226 10544 GC
+ 028 4 + 0 1/6 CR
+ 019 + 034 CR
024 044

533 + 832 + 158
- 167 + 080 - 483
+ 830 + 550 - 050

- 0682 + 1144 + 0402
- 0213 + 0110 - 0103
+ 1062 + 0756 + 1818

+ 7.7 + 4.2
- 1.7 - 0.9
+ 30.1 + 16.5

P

+ 2.4

- 1.7

- 1.4

10019 + 019
+ 00205 + 021

10019

~~+ 0044 + 032~~

+ 022

1026 + 023

10026

~~+7024~~ 457
~~+10232~~
+054 ± 8.7

26.237 1899.9

21.97 1899.5

~~170~~
26.067

+0011

+0000

2.82
2499

+0015

+012

25.81

1956.73

~~151~~
26.166

-30

24.11

+184

.69

~~24.102~~
26.777

51.35

1927.70

~~26.112~~
26.119

32.224

2359
77

~~26.122~~
26.119

24.340

24.29

26.119

Δd ΔS 835 - 546 - 700 714 + 029 + 036 + 20 - 025 - 14 | 23
 $\overset{S}{-}.37$ $\overset{S}{-}.14$ -024 021 - 016 014 - 150 024 + 14.3 - 8 + 12 027

1927.70

$p = 2$
 $p_0(d) = 6.25$
 $p_0(S) = 4.58$
 $\xi_0 = 99.5(d), 97.8(S)$

$\xi(d) = .278$ $\xi(S) = .299$

$P_{.25} = 1.90 (S \text{ and } d)$

$\Delta \mu = \overset{S}{-}.006 (d)$
 $\Delta \mu = \overset{S}{-}.026 (S)$

$\Delta \mu = \overset{S}{-}.019 (S)$

$\overset{S}{-}.0005 = \overset{S}{-}.0005 (d)$

-15 + 13 - 9

+6 - 20 + 7

-26 + 14 - 2

+9 - 21 + 20

-38 + 16 + 6

+14 - 20 + 33

01

006

SP



Sp

10

11

12

1000

8.20000
- 44.40000
36.00000
23.00000
6.00000

4.85

93.32

158

1.48

~~20.000~~

15.0

- 8.532

8.832

8.159

25.911

~~7.278~~

6.5

15

- 8.168

8.888

- 8.983

- 11.759

- 21.515

-16

-16-6

8.838

8.549

- 8.897

161.858

13

23.581

24.0

5

+0006±2.7 -032±2.7
+0008 -014
+59 21 6.7 9112 -28.556

(1877)

5472

11237

50.916 1890.2 +59 20 37.61 1887.3

$\frac{-36}{880}$

46.716

4.358

57.106

50.922

50.910

$\frac{33}{543}$

50.876

2.7
6.9

44.3

$\frac{922}{+042}$

$\frac{2.01}{34.62}$

71.7

30.68

41.02

41.92

39.23

39.35

35.02

-17.88

38.56

38.20
38.56

39.5
52.7

1926.6

$\frac{38.86}{38.86}$
-0.

1844.79

14706

68375 8 13.3 +75 55 5.7966 +6.76

5474

11246

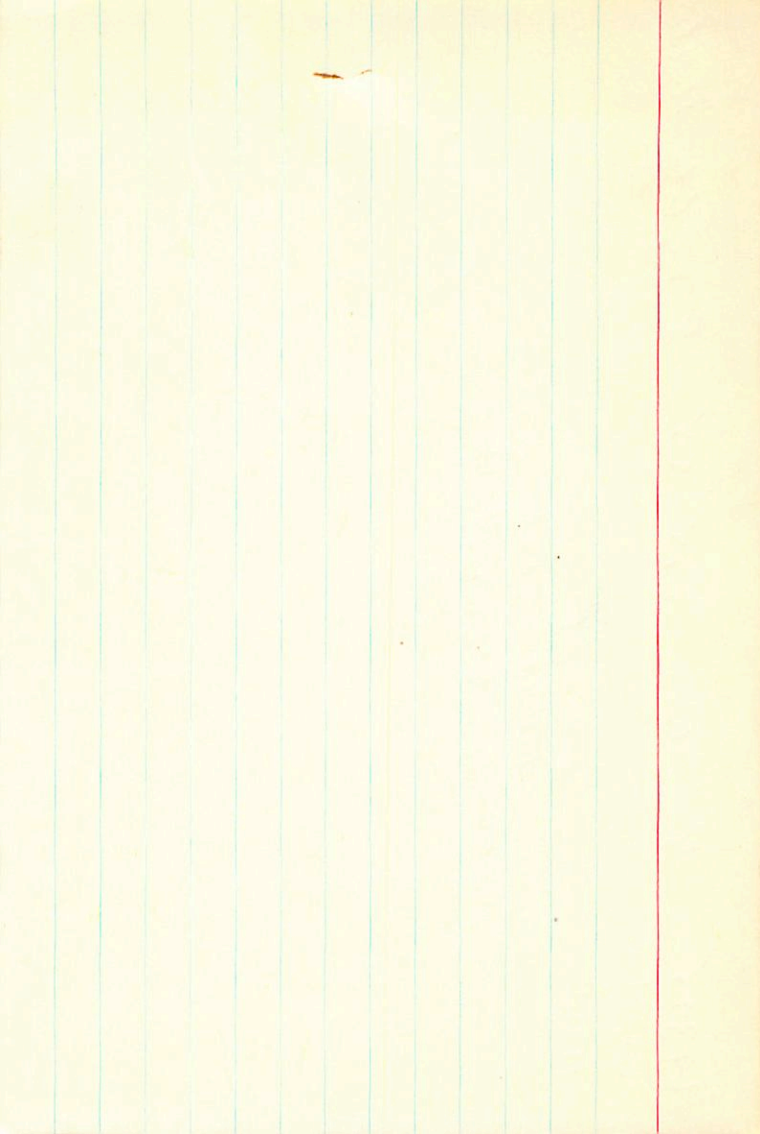
787

$(\times 10^3)^{8N}$

+0090 +020

+0088 ± 1.3 +014 ± 1.6

+7.3 ①



69371 5 13.9 -15 32 JNO 12288

2.3 -029¹¹ 1014¹¹ Y

1014

834-552 - 267564 - 024 + 011 + 278 - 004 - 7 062

005

+6 + 40 + 5

[+38 - 11 - 10]

004

+2 + 37 + 3

[+34 - 13 - 7]

80

8.200
- 15.550
- 30.000
14.000
7.000
251
27.000

- 0.532
0.652
0.540
116.101
44.186

- 0.168
0.544
- 0.022
59.120
- 0.002

0.830
0.528
0.180
- 78.721
- 14.779

58

68744
6611271
W5481
Y1955
+73 0404
B₂₅₋₂₀₀ CC

8 14.4 +73 30 LG-1 +53.01W(2)

8.50 + 0.60 + 0.05 \bar{E} 0.2 R

$\delta = -0.05$

8.64 404 138 346 \bar{E} W (+1.2)

-063 -255 CC
-077 -249 CAZ
-070 -252

+74 -18 +29 . 020

-10M(4)
36(15)
5-D(4)

-2±7

883-533 959 284 -070 -252 +53.0 -242 +51 -341
+058 202 039 134 -360 1.142 +15.1 -8 +13

-31+87+29 01.55

+87 -32 +27

68744

\bar{y} 14.4 ± 73 30

dg1 +53.0 8w13)

LC11271

8.50 ± 0.60 ± 0.05 G02

+730406

$\delta = 0.8$

w5481

-063 -255 G-C

-075

McR

-104(6)

46(7)

129(4)

933 -553 554 300 -063 -255 +53.0 -244 +51 -360

052 203 035 135 -384 1.130 9 +13 021

-2 5914
-14 -30 26
24 -11 14

-28 +67 +34
+73 -18 +29
-24 +55 +37
+64 -9 +29
026

2 49 +17
-12 -25 +28
21 -9 +17

30 days

BR3254

W55-01

69548
5501

11338

24617 1893.3

-436
181

23.30
1.315

24.615
-1.44
1426

1426
-1.44
139

24.537
11
553

535
+1354

24.564
114

+0077 ± 2.0
+0077

+010 ± 1.8
+015 5.9

F 16.4 +57 54 df2 -14.8 8

+061 +010 6e

+015 6m2

46.3

3.20

43.0
-37.30
5.70

1927.0

39.6
50.9

-1.83
3.14
+1.4
1.06

41.06
41.11
1944.67

3.97
+0.77

4.27
1.84

3.0
4.22
1947.06

-2.2
4.00

828-560 947 531 +061 +013-14.8 011-12.5 033
-051-009-034-006 - 213-204-7.9 +4.4-6.5

01

051
SLC
92c