

10/12/54

10/14/54  
10/15/54

10/16/54

10/17/54  
10/18/54

10/19/54

10/20/54  
10/21/54  
10/22/54  
10/23/54  
10/24/54

RAD  
MO  
DIR  
FM  
FM

10/25/54

10/26/54

10/27/54

01179

544

268

510 + 0.5504 01.5  
1 6617 5917 21.9

1W 20 8E - 28 02 M1

01  
8th  
14h

R.A. : 11.850  
DEC. : -34.800  
PM. R.A. : -97.000  
PM. DEC. : -28.000  
DISTANCE : 4.620  
MODULUS : 84  
RAD. VEL. : -7.000

q1 (U) : -0.875  
q2 (U) : 0.378  
q3 (U) : -0.303  
dU : 280.025  
U : 25.627

q1 (V) : 0.431  
q2 (V) : 0.320  
q3 (V) : -0.844  
dV : -205.106  
V : -11.311

q1 (W) : 0.222  
q2 (W) : 0.868  
q3 (W) : 0.443  
dW : -199.187  
W : -19.823

419 524 371 458 280 0317  
419 524 371 458 380 817  
477.6 -34 21 968 +2.00

W2157

20.24  
41

4.11

+0.96

0.112 -5.11  
40.24  
40.24

-0.412 -0.515

FIN 5 20.05 1.27 -0.51 -0.49 6.6  
3.16 1.27 -0.51 -0.49 6.30  
3.80 -0.51 -0.49 6.23

00388 -0.514

0.79

-0.046.3 -0.051.5

375  
31.23

98.68  
16.20

-7.55  
-6.58

0.187  
0.088

-57.5  
-51.5

45.50

2088

6m 11.171

-5

42.0

17.53

0.188

3.14

1.165 741 199 MF 000 217 1165 291 171 085

+2.35

40.25  
70.76

538.546 - 542 806 - 051 - 047 + 2.0 028 - 1.1 - 180

+ 043 - 023 - 028 015 133 - 242 + 1.6 + 0.9 + 1.3 02.

+ 75 - 108 - 10.1

$\boxed{-13.5 + 10.8 - 19.5}$

+ 9.5 - 14.8 - 13.1 015

02.79 1955.06  
2.28  
+11

34.814  
+4  
828

34.508  
0

41.8  
46.3  
936.2

2.36  
- 2.13

3.16  
0  
(4.44)

1.51  
92.7

1935.54  
2.20  
+17  
2.03

840-048  
0402-0480  
0451-0507  
87.5

34.562  
-14  
946

1505.0  
2.43  
+2.26  
0.23

35.078  
171

00422.5 -04972.4  
-040  
-051  
47.6 -36 21 4.2  
65 +2.0a

24160  
3  
4624 34.507 1909.3  
-36 21 2.43  
1905.0

2197

2

1922

1922	100
1923	100
1924	100
1925	100
1926	100
1927	100
1928	100
1929	100
1930	100
1931	100
1932	100
1933	100
1934	100
1935	100
1936	100
1937	100
1938	100
1939	100
1940	100
1941	100
1942	100
1943	100
1944	100
1945	100
1946	100
1947	100
1948	100
1949	100
1950	100

4

3.750

-36.330

-59.500

-52.000

3.650

87 53.70

2.000

0.429

0.842

0.328

-304.929

-15.719

-0.660

0.540

-0.522

16.784

-0.143

0.617

-0.008

-0.787

-138.249

-0.999

2



7686

11983 31

χ Sm Su Cr

18 35.4 + 13 02

2006

5943 602073

+7 154 1044

1050

R 60186

Sm 9974

+8 209 1041

Summ

144160

+002

223 1045

600-654

000 202 1048

2.514 Cr

100

356 245 10 1420 80 10 1420 80 10

+20

15766

416

186

+00275-020

Q = +029 194  
N = +016 127

+00245  
-0150

358

+ 8 207 1047 2915

104107

13

600-9804

956

9559-6537

1960

1046  
414  
1700  
1495

F26

F24

26.111 2.1 ✓ +0026 -020

23.26 14

$\frac{124}{59}$  +0030 -017

57

5.9 ✓ +0020 -016

24.23

26.100 ✓ +0021 -015 ✓

23.77 40.15 ✓

$\frac{-2}{26.055}$  +0022 -016

-19

26.055 ✓ +0023 -0115 ✓

23.58

26.106 ✓ +0336

23.59 58.22 ✓  
-17

$\frac{114}{26.113}$  +036-009

23.32 ✓

26.113 23.58

20.17 65.20

8.19 ✓ 23

12.9 ✓ 23.20

3

1900  
1900  
1900  
1900

1900  
1900  
1900  
1900

1900  
1900  
1900  
1900

1900  
1900  
1900  
1900

2

157.630  
13.000  
37.000  
-9.000  
4.000  
63  
0.000

-0.447  
0.640  
-0.625  
-103.712  
-6.544

0.662  
0.706  
0.250  
83.005  
5.237

-0.602  
0.302  
0.740  
15.651

3



5843.000\*

15.000\*

39.400\*

13.000\*

0.000\*

0.044\*

-0.013\*

0.050\*

30135 4 43.3 +40 13

HRISN 6.1

965-12018  
1003-030 6  
37

5  
0  
30  
44  
40  
135

1514.000\*

4.000\*

43.300\*

40.000\*

13.000\*

0.000\*

-0.030\*

5.000\*

100.000

34.100

0.028

0.958

35.522

-0.114

0.280

-1.044

-0.082

-0.056

-10.091

1945 July 1003-030 1371 of 9000 - 109  
722

9

4



11 Don  
30478

4 43.6 -59 49 5.4 A3 +1.86

+0042 ±3.4

2794

-3 356  
var

5810 35.692 ± 1906.3

||

+0042 +040 N30

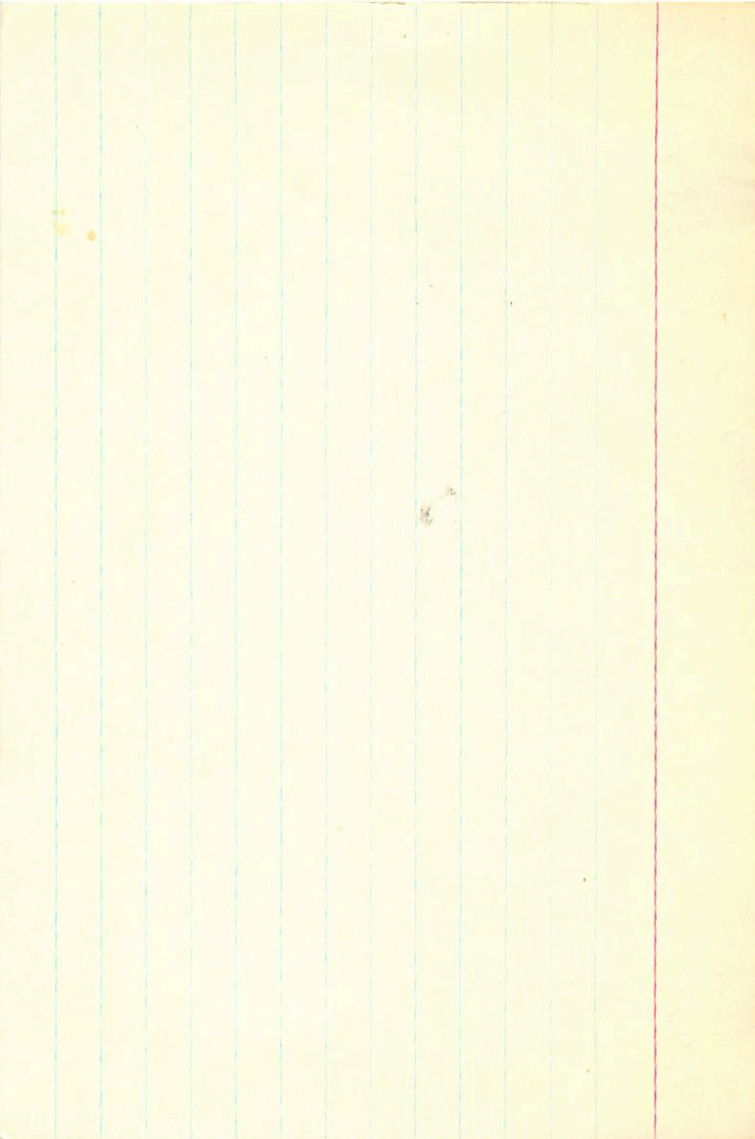
~~+0042 ±3.4~~ +038 ±3.0

+0052 - +041 66 →

+0047 +040  
23

+034

||



AD63434

4 43.8 +53 13

+53613

+0332

+031-0775

7880

6157

6284

-7770

0797

-0246

NV

+10000 55.4 -075.444

50.8490 00.2

-149  
1.691

+10038

-077

49.64 924

+10042

-082

394

5358

50.947

+10040

-080

5003

49.22

+12  
813

+10040 -0785

4911

+10037 -0761

49.76

46.67

50.869  
+116  
596

49.51

50.855

+28  
1.923

49.97

57.51

4979

-0015 ± 12.0  
+0042

-016 ± 11.3  
-014

30165 4 44.6 +61 25 7.7 gms +53.33

2806

5827 34877 1910.9 +61 25 13.28 1910.9

059  
936

25.7

20.24  
14.55  
34.79  
34.158  
64.9  
96

0087  
35.041  
+108

35.113  
7  
120

62  
13.90

29.0  
46.58  
15.32

1927.6

7318

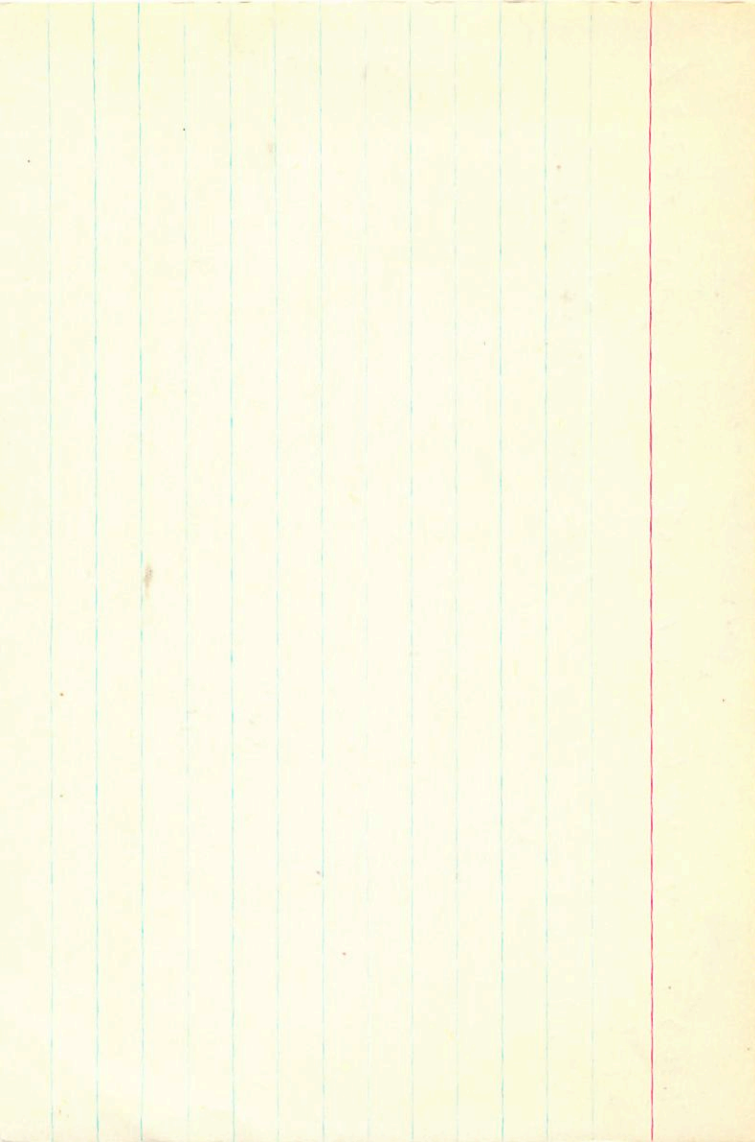
36.6  
25.7

1.07  
13.54  
-36

2  
26  
13.34  
6

13.1  
13.69  
1945.58

-24  
13.45



+250733 4 44.6 +26 04 dno +45 d

10.6

+115-084 McComid

val?

946 324 440 898 +115 -084 +45 -037 +30 -357  
-109 035 037 -012 -436 341 +40.4 +13 +38

+4 +45 +13



30418 4 4515 + 27 40 2F3 + 43e

+240689

8.0

$$\frac{+035 - 032 - 7}{+025 - 028 2}$$

948 319 418 809 +025 ~~1025~~ +43 -010+15 -109

-024 009+008-003 -009 081 +39.1 +12 +37

+2 +45 +7

01

$\boxed{+43 -14 -6}$

T Case      4   45.5   -36      13   24      →      +4.4   17      1W

0   4037   7cd, FHP Y  
 +0040   +0.14   Cope CC

+0001   +0009   2.0000

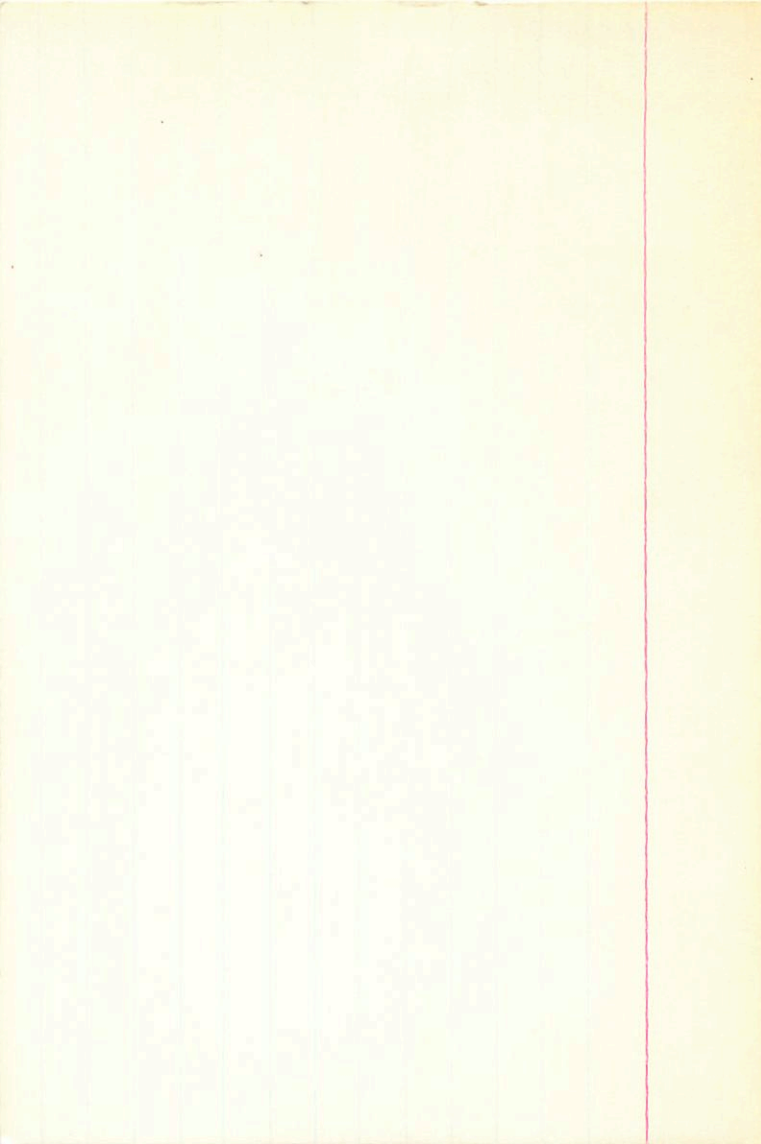
[+0018   +0.22   steps]

-006   -002   0   6L   → 0.20

---

2463

180	895	409	-0051	-2.9
-594	429	676	+0170	+4.7
780	123	613	-0222	+4.3

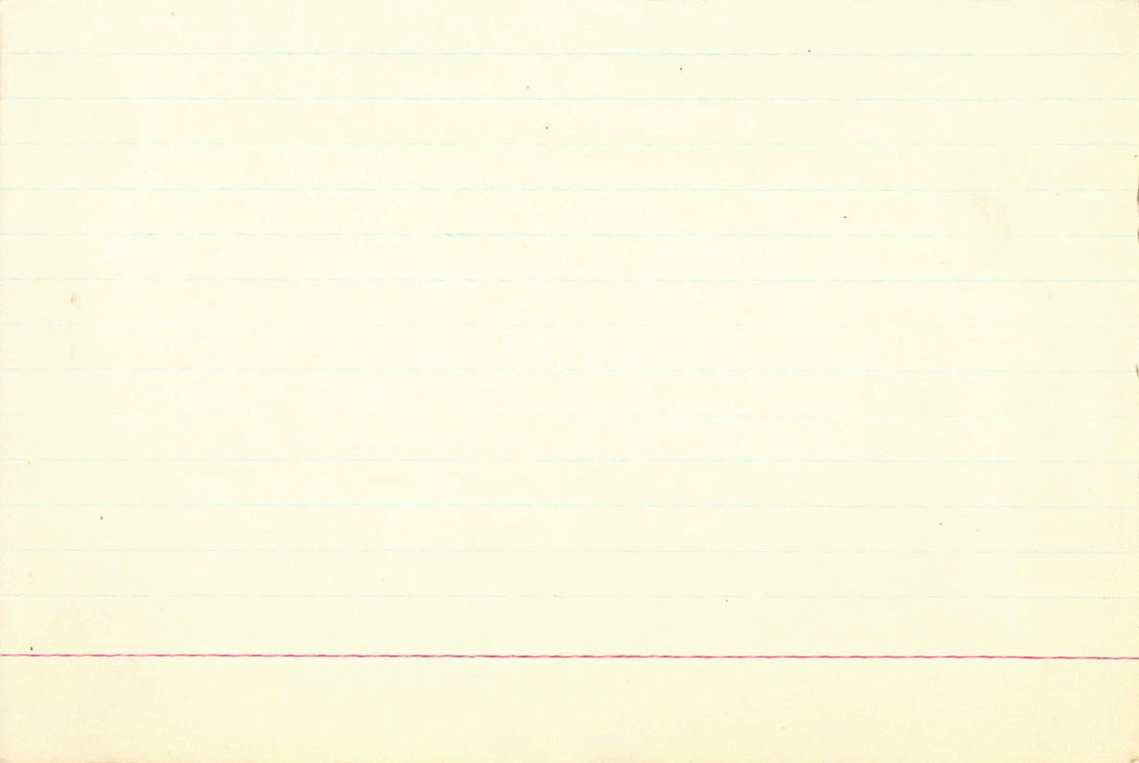


6,157

31081 4 45.8 -76 24 FFB-B -0.424

7.73 +48

5849



30454

4

46.0

+31

21

5.8

941 + 22.98

5853

2819

0.295

1911.9

+31

21

8.40

1910.9

61

234

+0020

-100

4.03

12.43

0.264

34

298

9.90

1939.07

-20

9.70

(3)

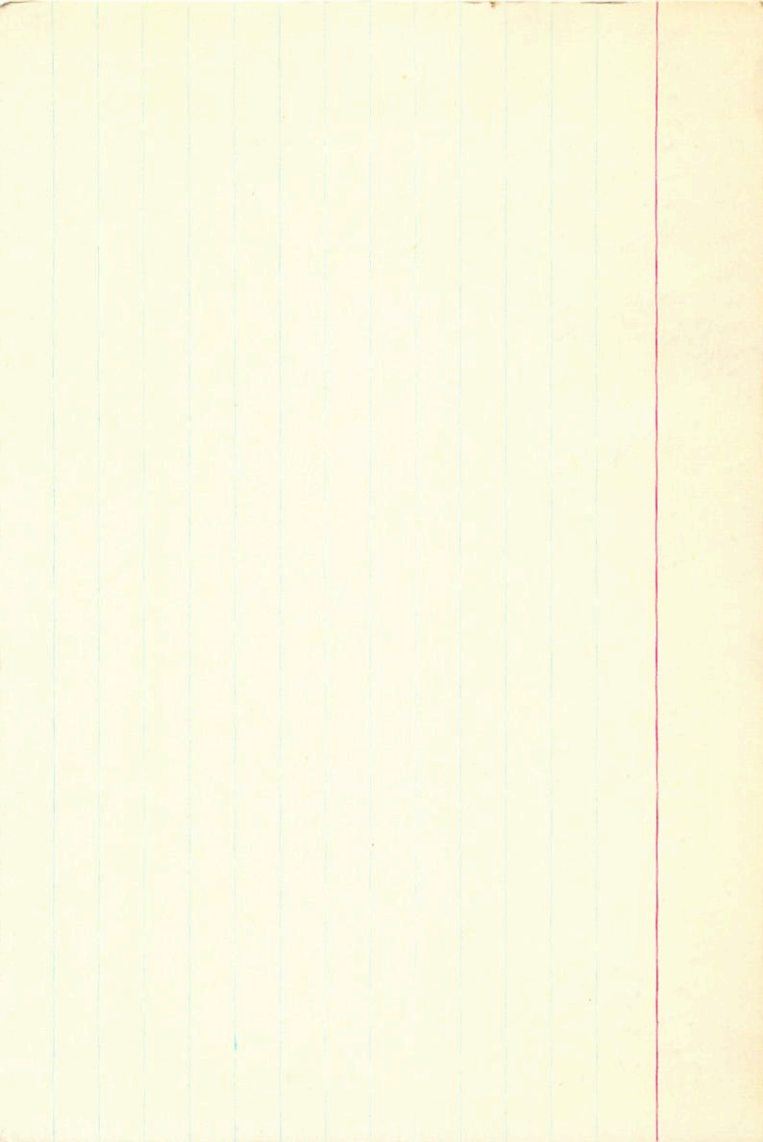
+0016 ± 3.4

+0024

-103 ± 3.1

-097

+23.9





-0052±6.0  
-0049

-071±4.8  
-080

4 46.0 -46

4/ 6.8g

743.0±0.7 g (4)

30684  
5855

812 + 81

2.487 1905.8 -46 41 10.80 1902.6

3.34  
7.44

230  
717

19.455  
43.198  
2.653

30.6

1135  
568  
-149

669  
164.8  
-65.8

2.494  
-117  
480

48.84  
40.40  
8.44  
-25  
9.19

1428.29

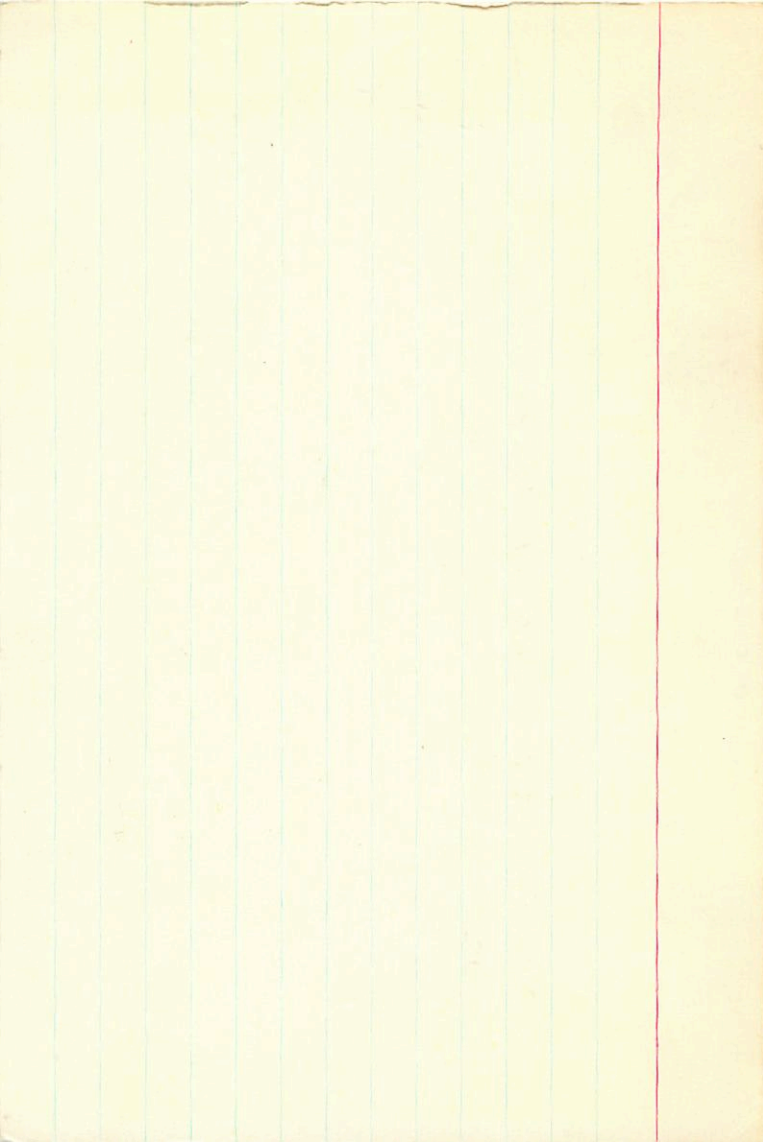
72.89  
36.4  
33.8

2033  
10.10  
-272

5460

11.03  
-4  
11.07

15.5  
46.5



8.89 +2.08 +62

+20.2W

W2821

4 46.0 +34 54 90 R4

H030443

600

+380911

950

57.508  
071

57.833

57.838  
080  
+868

57.86  
+030  
890

57.93  
22  
952

217-090 972

-611 764 208

701 639-111

+0216 +0153 +0364

-0208 -1304 -1412

+0757 -1090 -0333

+009  
1028

+0018-176

+0020

1509.70019

+0017 -035  
+0021

262 823  
896 W

63 55.58  
1.52

920 55.44

1000

-040  
-032 +7.8

-036

54.09 1909.2

200  
54.06

5-858 1950.1

+03  
55.55

55.9 1930.0

-03  
55.87 7.8

1935.8

55.44  
-0.17  
55.23

+22148

-1147444

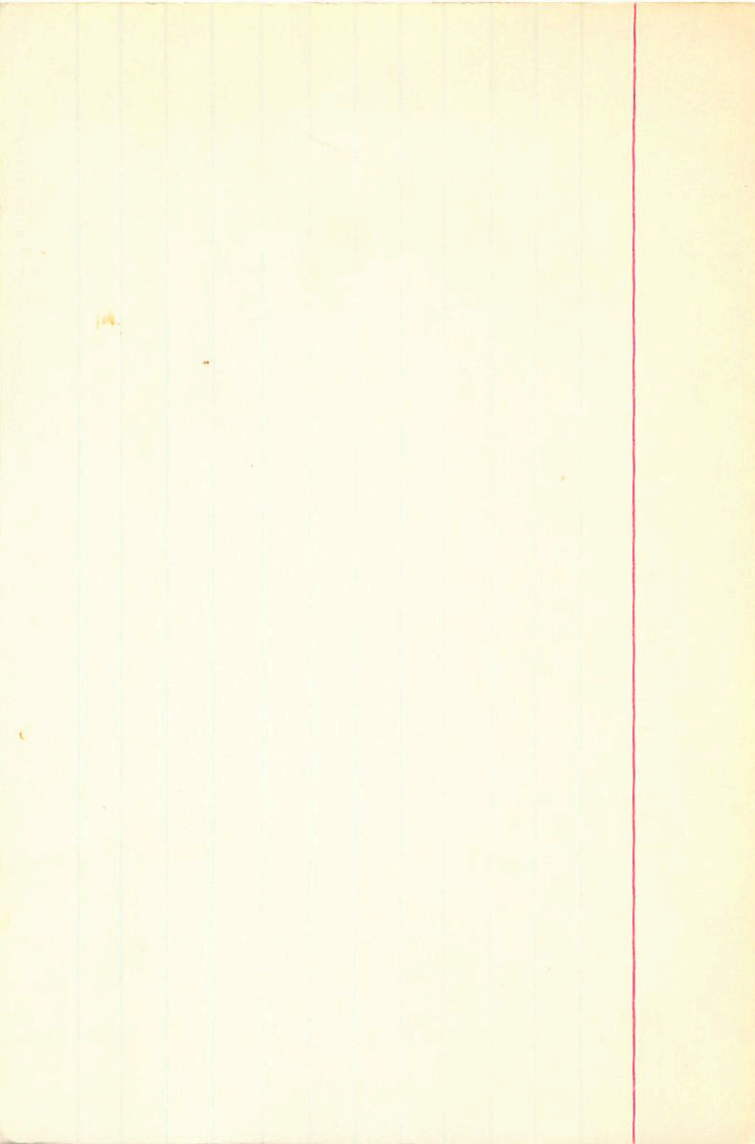
-20,0-78

+40

-100

55.66-28

1440



30694

4 46.1

-44 21 8.12 + 32 F2D

5861

+ 9.251.39 (4)

8.437 190400

-44 21 20.35 19022

0

229

18.06

22.583

458258

8.404

422

409

58.66 1930.27

4030

18.80

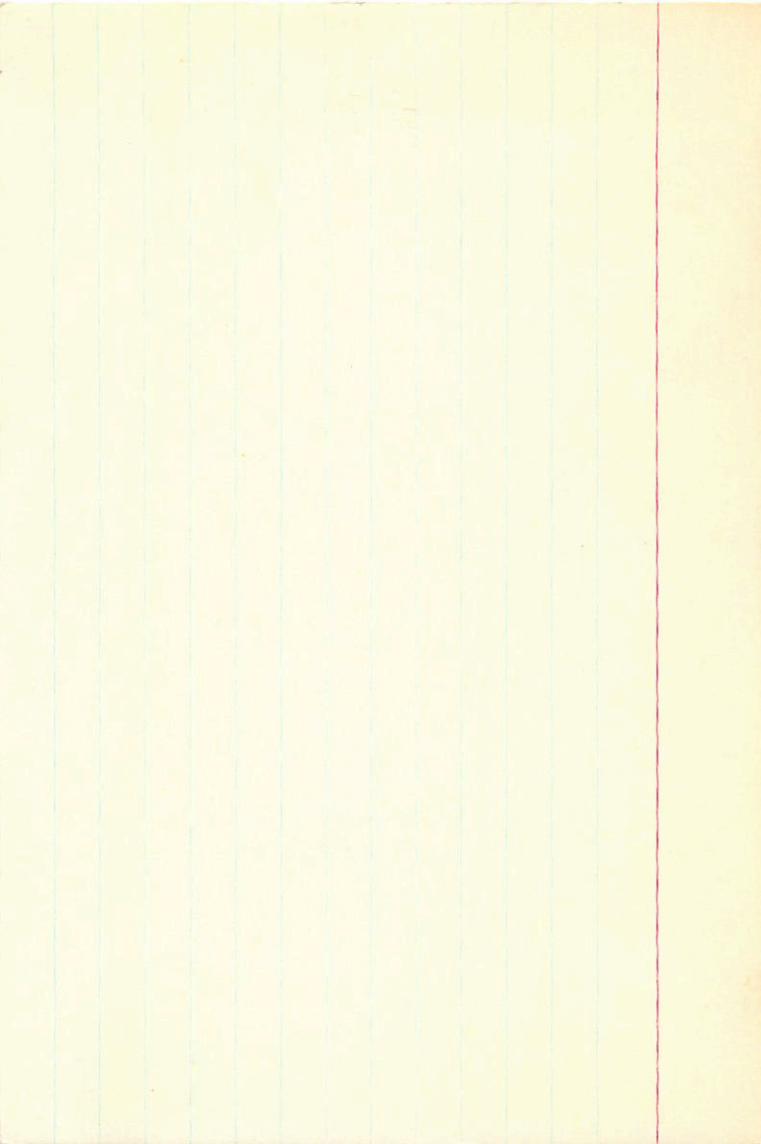
19.17

19.23

8.295

20.07 1854.89

0000 ± 13.0 - 048 ± 11.3



1 Am

30504 4 46.5 +37 24 5.1 g N4 -23.38

2833

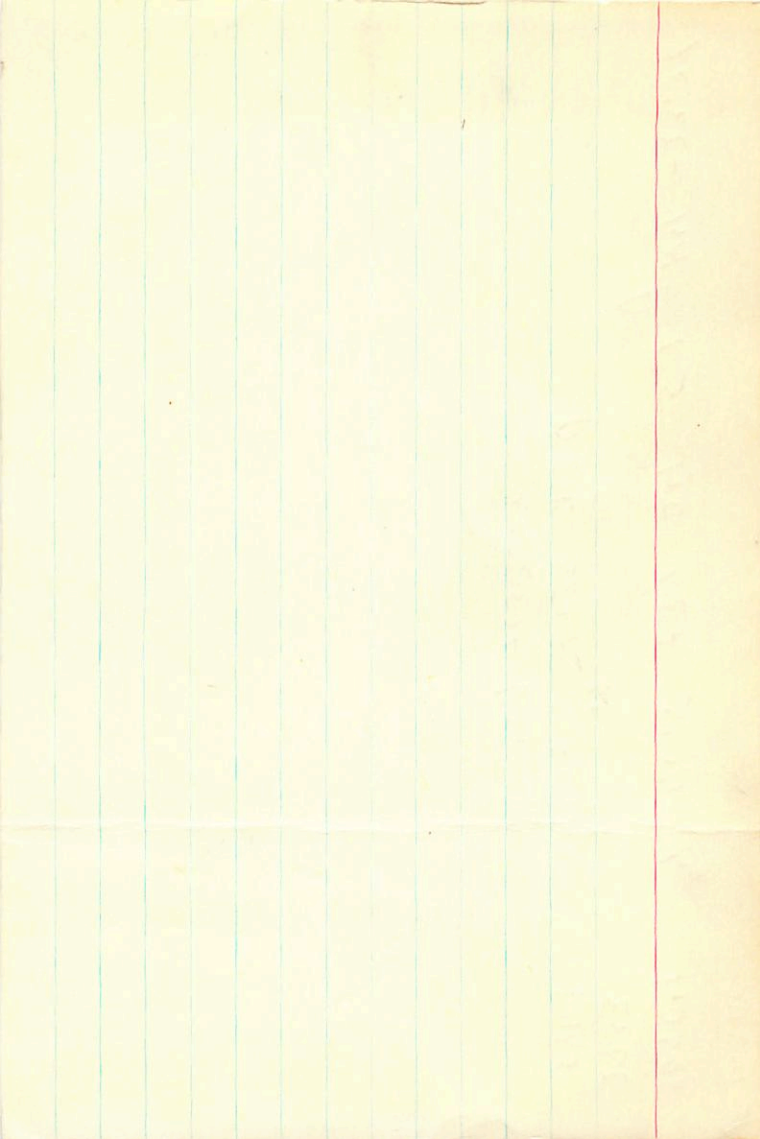
38

-0028 +038 N30

-25.45

5868

-0028±2.9 +035±2.0





30589

4

46.7 +15 45

260 +402

W2534

2.9

+079 -027 6c

+420 (3)  
+33 (3)

+051 -025 6c

~~+077 2~~

Ray  
VB

949314 272962 +051-025 +40. -007 +11 -114

-077007 025-002-355 152 +35.5 +12 +37

-6 +45 +5 02

+42 -20 0

025

-2 +43 +6

+41 -16 -2

+41 -15 -1 022

-5 +44 +6 21.5

+42 -17 0

15A

4 421 76 52

30652

22449

46318 1162

12400 ± 0.95

4041

9999

8147

0102

+0026 = 2.4 - 0.20 = 2.1  
+0029  
-0.20

X Sa 140160  
HR 5843 21105  
9061

A Op + 1.98

5.26 + 0.02 + 0.05 Aip + 0.38 - 0.20 Gc  
+ 0.12 - 0.15 F

W 9061

26.111 1402.5 + 13 0 23.36 + 0.40 - 0.17  
124 + 0.97 1501.4

2433

25,987

23.77 1935.0  
- 14

26.062  
17  
079

35.1

23.63

23.77 1940.15

26.100  
2  
098

- 19

75.15

23.88

37.6

23.60

36.2

73

-818-576 225 524 +040-017 +1.4 -002+0.4 -081

033 002 -023 001 152 -115 +1.9 -1.1 -1.6

01

+14.1 -13.4 -7.7

-14.2 +7.0 -13.6

1478

015

+9.0 -10.1 -5.0

-10.4 +5.1 -5.5

X<sub>Sn</sub> 15 39.4 +13.00 Top 11.87 0.012

5.33 10.04

5.33 10.04 +0.05 +0.38 -0.2086

0064 0210  
PR

9964 7864 0505  
0790 16835 0026

4764 1813  
18.34  
-4.42

40.9  
-310  
4714  
41.6

-818 -576 225 574 +035 -020 +1.8 -004 0 -090

031 -003 -022 002 137 -115 -1 -2 ~~014~~ 014

+9 -11 -6  
[-12 +4 -9]

012

+10 -12 -8

[-14 +4 -12]

5

R.A. : 15.650  
DEC. : 13.000  
M. R.A. : 40.900  
M. DEC. : -31.000  
DISTANCE : 4.450  
MODULUS : 78  
RAD. VEL. : 1.500

q1 (U) : -0.449  
q2 (U) : 0.640  
q3 (U) : -0.623  
dU : -178.883  
U : -14.821

q1 (V) : 0.662  
q2 (V) : 0.707  
q3 (V) : 0.249  
dV : 21.256  
V : 2.023

q1 (W) : -0.600  
q2 (W) : 0.301  
q3 (W) : 0.741  
dW : -157.552  
W : -11.118



Ap ~~5000~~ 5  
15 394

5843

140760

21105

add 208 (082.900)

5.30 + 04 + 04 + 4 996 - 13 00 Ap

0006 206

007 194  
007 207

1048

1041  
1046

2-502

2-502

2-502

2-502

1260  
0250

14 = 2 ✓

2195  
402

1043  
14458  
14400

0714

9474

16564  
7544

114  
398

21851

136 -14  
+1.9

1. 22-14

—

49/117

USO 922 ✓

~~AS 872~~

16 419 - 13 89

6197D

118 - 166

2.34

25 ✓

35045

3 0.4' C

+65 53

54597

12.87 14.63

-5.0

AA km

1.24 1.02

R. A. : 7.150  
DEC. : 68.900  
. R. A. : 12.840  
. DEC. : 14.630  
STANCE : 10.000  
MODULUS : 1000  
. VEL. : -50.000

q1 (U) : -0.323  
q2 (U) : -0.585  
q3 (U) : 0.744  
dU : -47.641  
U : -84.842

q1 (V) : -0.337  
q2 (V) : 0.806  
q3 (V) : 0.487  
dV : 48.482  
V : 24.120

q1 (W) : 0.884  
q2 (W) : 0.093  
q3 (W) : 0.457  
dW : 25.861  
W : 3.001

6

6

Plumber

-3.0

819 104 2910  
289

861

480  
-0040

3 45 +24  
~~5258 8970 8970 5259~~  
~~-8506 4419 4419 +8506~~

~~5259 8970~~  
~~-8506 4419~~

9207 4892  
3891 8721

4157  
-43.0  
7.15  
+11.7

0963  
-0053

2 Rev

3 35 +50

327

-28

+25  
601  
13

0495  
0204

0499

0463  
-0053

462  
-0041

484  
2046  
0363  
0767

~~9987 5000~~  
~~0505 -8660~~

8841 0460  
-7297 0163

9999 4775  
-0134 -8786

7

Al-  
Lst Mt

Nettel

12/10/00

(45)

135

1000-020

1000-020

1571 1487 }  
9876 - 7807 } 0283  
0100

6132

46

123.4 234

1157 236

1146 236

1145 236

6120



8

R.A. : 13.520  
DEC. : -42.820  
R.A. : -22.000  
DEC. : -28.800  
DISTANCE : 6.328  
VEL. : 184  
6.800

(U) :  
(U) : -0.741  
(U) : -8.002  
C1 : -8.871  
D : 20.832  
6.232

(U) :  
(U) : 8.458  
(U) : 8.044  
96 : -8.228  
U : -01.824  
-51.851

(U) :  
(U) : -8.237  
(U) : 9.238

R.A. :  
DEC. : 13.850  
R.A. : -46.850  
DEC. : -29.000  
TANCE : -20.000  
DULUS : 6.320  
VEL. : 184  
          6.000

1 (U) :  
2 (U) : -0.741  
3 (U) : -0.009  
dU : -0.671  
U : 70.535  
          8.927

1 (V) :  
2 (V) : 0.628  
3 (V) : 0.344  
dV : -0.698  
V : -91.654  
          -21.021

(W) :  
(W) : -0.237  
(W) : 0.939

4

230858

2011/3/14

23 240, 27 16 2408 F 5664W

228

9.23 1.27W 03209 01544 (2)

Handwritten notes and a box containing '2011 210'.

1' DEC	881.0
2' DISTANCE	881.0
3' SURF	881.0
4' VER	881.0
(U) TP	954.0
(U) SP	131.0
(U) EP	498.0
UB	153.0
U	222.11
(U) TP	886.0
(U) SP	157.0
(U) EP	115.0
UB	185.085
U	818.91
(M) TP	718.0
(M) SP	282.0
(M) EP	293.0
MB	280.0
M	280.0

5

199854

20

57.4. - 15 19

FC7/W A10

7

15.5858

056

245 mm  
195 mm

8.96 310 070 0806 2.

895 314 405 1744 2008 40  
212 556

258 082 787

- 1002-cell Group

2002-1002

5004206

-4

-6

255

222 750

10





R.A. : 20.950  
DEC. : -15.300  
R.A. : -4.000  
DEC. : -6.000  
7.940  
387 5.000

STANCE :  
MODULUS : 0.657  
D. VEL. : 0.314

q1 (U) : -0.686  
q2 (U) : -20.939  
q3 (U) : -11.536  
dU :  
U :

q1 (V) : 0.039  
q2 (V) : 0.894  
q3 (V) : 0.446  
dV : -26.134  
V : -7.889

q1 (W) : -0.753  
q2 (W) : 0.320  
q3 (W) : -0.575  
dW : 4.576  
W : 0.665

10

~~116604~~ 13 23.1 - 65 34 G2W F > E

116627

15.2324 0.52 Slight possibility that weak -  
PIP 116627! ~~PIP~~ lined appearance in ducts overlying.  
+14.5-1

+0010 +0029 ✓  
+0025 -030 ✓  
+0018 -0.0105 ✓

7011-006

107

10

575

156 156

803

801 959 160 400

2135 ③

803 446 177 434

453 168 431

+0024 -0276  
- 4 -9

+0025 -036  
+6

+0025

11

50

-38

+30

36

DR. F. E. ...  
DEC. 1 ...  
DR. F. E. ...  
DEC. 1 ...  
DR. F. E. ...  
DEC. 1 ...

DR. F. E. ...  
DEC. 1 ...  
DR. F. E. ...  
DEC. 1 ...

R.Y.

DEC.

R.Y.

13.400

105.000

27.000

10.000

5.750

//

PLB 1P  
PLB 2P  
PLB 3P  
PLB 4P  
PLB 5P  
PLB 6P  
PLB 7P  
PLB 8P  
PLB 9P  
PLB 10P

0-5-18  
0-5-19

65 414 5055

364 148

⑤ 524 581 484 149

272 181 284

040

6119  
4027  
454

84  
040

1411  
2.5-

050-1011

PRO-1000

51 510 55 39

14642

5291411

12

21105

8.05

13

67

20

17072

-66138

02 40.0 -63 27

70114554 -035±6.0

89787 96.3

4682 91.7

17072  
 -66138  
 02 40.0 -63 27  
 70114554 -035±6.0  
 89787 96.3  
 4682 91.7

RAD. VEL. 10.00  
 MODULES 1.00  
 DISTANCE 1.00  
 FM. DEC. 1.00  
 FM. R.A. 1.00  
 DEC. 1.00  
 B.A. 1.00

17072  
 -66138  
 02 40.0 -63 27  
 70114554 -035±6.0  
 89787 96.3  
 4682 91.7

17072  
 -66138  
 02 40.0 -63 27  
 70114554 -035±6.0  
 89787 96.3  
 4682 91.7



R.A. : 3.900  
DEC. : 14.950  
PM. R.A. : 7.000  
PM. DEC. : -40.000  
DISTANCE : 7.540  
MODULUS : 322  
RAD. VEL. : -5.20

q1 (U) : 0.39  
q2 (U) : 0.26  
q3 (U) : 0.87  
dU : -37.67  
U : -16.70

q1 (V) : -0.65  
q2 (V) : 0.75  
q3 (V) : 0.07  
dV : -163.5

288  
~~119~~  
-589  
32

How

17092  
-69138

2 400 -69 27

6.58 440 137 452 2

6.1 442 132 452 19

067-044

420 140

0025-014

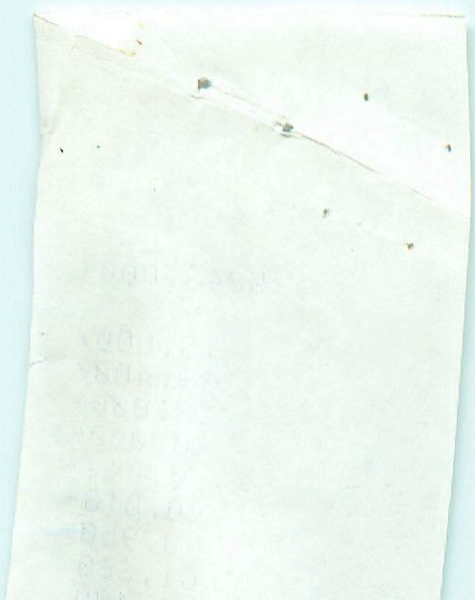
191

14

151

1624

6



5843.000\*

15.000\*

39.400\*

13.000\*

0.000\*

0.044\*

-0.013\*

3.950\*

61.660

100

30135 4 43.3 440 13 965 430.18

HR1514 6.1 1003-030 C-

+

945 328 645 264 +003-030 +34.1 of 9 +000 -109  
-003 of 8-001-006 014 090 +26.1 +9 +25

+9 +34 +11

01

+11 +36 +9

005

2

1

2

1514.000\*

4.000\*

43.300\*

40.000\*

13.000\*

0.003\*

-0.030\*

5.000\*

100.000

34.100

0.028

0.958

35.522

-0.114

0.280

-1.844

-0.082

-0.056

-10.091

4



R.A. : 3.900  
DEC. : 14.950  
PM. R.A. : 7.000  
PM. DEC. : -40.000  
DISTANCE : 7.54  
MODULUS : 322  
RAD. VEL. : -5.20

q1 (U) : 0.39  
q2 (U) : 0.28  
q3 (U) : 0.87  
DU : -37.67  
U : -16.70

q1 (V) : -0.65  
q2 (V) : 0.75  
q3 (V) : 0.0  
DV : -163.5

V : -53.058

12

q1 (M) : 0.641  
q2 (M) : 0.603  
q3 (M) : -0.474  
DM : -93.771  
M : -27.737

17072

02 40.0 -63 27

-69138

+0114589 -035±6.0

89787

96.3

468291.7

268

~~269~~

589

52

13