

AKZO ZOUT CHEMIE NEDERLAND B.V.
LOKATIE DELFZIJL



NAUWKEURIGHEIDSWATERPASSING

concessie Adolf van Nassau en
uitbreiding concessie Adolf van Nassau
waterwingebied Kibbelgaarn

1984

projectnr.: 00825

12776/04

Verslag van de meting, berekening en vereffening van de nauwkeurigheds-waterpassing, uitgevoerd in opdracht van AKZO Zoutchemie Locatie Delfzijl, in de zomer van 1984.

De metingen zijn volgens de methode van gemotoriseerde nauwkeurigheds-waterpassing uitgevoerd. Er werd een sectietolerans van $\pm 2,5 \sqrt{L}$ mm en een kringtolerans van $\pm 2 \sqrt{L}$ mm aangehouden.
(L = lengte van de sectie respectievelijk kring in km).

Voor de aansluiting zijn de punten 12F42 en 8C150 gehanteerd, met de voorlopige hoogten; berekend uit de in 1984 uitgevoerde metingen door de Nederlandse Aardolie Maatschappij.

De vereffening geschiedde volgens de methode van de kleinste kwadraten, waaruit de hoogteverschillen tussen de knooppunten verkregen werden. De tussenliggende peilmerken zijn evenredig met hun onderlinge afstanden vereffend en in hoogte berekend.

Het waterpasnet is een integraal net van de concessies Adolf van Nassau en het waterwingebied Kibbelgaarn.
Ten opzichte van de voorgaande meting in 1982 is het net ongewijzigd gebleven.

De differentiestaat is voor het eerst computermatig vervaardigd. In verband hiermee zijn de hoogtemerken vernummerd. De vernummering is in dit rapport toegelicht, er is tevens een verwijslijst opgemaakt. Als bijlage zijn twee overzichtskaarten vervaardigd, één met de nieuwe nummering en één met zowel de nieuwe als de oude nummering.

De indeling van de nieuwe differentiestaat is dezelfde als de indeling van de differentiestaat van de metingen van AKZO Hengelo. Naast de nulmeting en de actuele meting worden automatisch de drie meest recente metingen afgedrukt, met de differentie ten opzichte van de nulmeting en ten opzichte van de voorgaande meting.

De berekende differenties; de zakkingen worden grotendeels veroorzaakt door de gaswinning in dit gebied (vergelijk met de zakking van het aansluitpunt 12F42 en van de punten 8C120 en 8C84).

Heerenveen, december 1984

Ingenieursbureau 'Oranjewoud' B.V.

I N H O U D :

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B I J L A G E N :

Overzichtskaart trajecten en hoogtemerken

Overzichtskaart oude- en nieuwe nummering van de hoogtemerken
(boutnummers)

OMNUMMERING BOUTNUMMERS

| NIEUW NUMMER | OLD NUMMER | NIEUW NUMMER | OLD NUMMER |
|-----------------|---------------|-----------------|---------------|
| 122 | 27-2 | 5101 | 1 (KNZ paal) |
| 123 | 38-3A | 5102 | 2 (KNZ paal) |
| 140 | 34-1 | 5103 | 3 (KNZ paal) |
| 141 | 47-2 | 5104 | 4 (KNZ paal) |
| 142 | 47-3 | 5105 | 3A (KNZ paal) |
| 151 | 104-3 | 5106 | KNZ paal |
| 154 | 100A | 5201 | 69-7 |
| 155 | III A | 5202 | 69-6 |
| 160 | 46-1A | 5203 | 104-1 |
| 180 | 76-2 | 5204 | 104-2 |
| 181 | 76-3 | 5205 | 48-2 |
| 182 | 103-5 | 5401 | 76-4 |
| 1100 | A boring | 5402 | 76-6 |
| 1150 | IV B | 5403 | 103-1A |
| 1175 | V | 5404 | 104-4 |
| 1200 | B boring | 5405 | 76-5 |
| 1250 | 131-1 | 5406 | 76-1 |
| 1300 | C boring | 5407 | 47-4 |
| 1400 | D boring | 9010 | 47-1 |
| 1500 | E boring | | |
| 1550 | VIII | | |
| 1600 | F boring | | |
| 1700 | G boring | | |
| 1800 | H boring | | |
| 1900 | I boring | | |
| 3100 | 1 boring | | |
| 3210 | 2A (KNZ paal) | | |
| 3300 | 3 boring | | |
| 3400 | 4 boring | | |
| 3500 | 5 boring | | |
| 3600 | 6 boring | | |
| 3700 | 7 boring | | |
| 5001 | XVI | | |
| 5002 | 119A | | |
| 5004 | 69-4 | | |
| 5005 | 69-3A | | |
| 5006 | 69-2 | | |
| 5007 | 65-2 | | |
| 5008 | 65-1 | | |
| 5009 | 103-3A | | |
| 5010 | 103-4 | | |
| 5011 | 48-1 | | |
| 5012 | 37-1 | | |
| 5013 | 37-2 | | |
| 5014 | 32-2 | | |
| 5015 | 32-1 | | |
| 5016 | 21-1 | | |
| 5017 | 21-2 | | |
| 5019 | XI | | |
| 5020 | 69-5A | | |

Overzicht van de indeling en toekenning van de boutnummering in het waterpasnet Veendam - Heiligerlee, waarvan geen NAP nummering bestaat. Alle bouten krijgen een nummer uit de serie

1100 - 9999

Deze nummering is verdeeld in 3 groepen te weten voor:

- | | |
|---|-------------|
| 1. Lokaties nabij Tranendallaan | 1100 - 3099 |
| 2. Lokaties nabij Zuidwending | 3100 - 4999 |
| 3. Alle overige bouten opgenomen in het net en niet opgenomen in het NAP-register van Rijkswaterstaat | 5000 - 9999 |

1.1 De indeling voor de lokaties van groep 1 is als volgt:

| | |
|--------------------------------|-------------|
| Lokatie A (lokatie A is nr. 1) | 1100 - 1199 |
| Lokatie B (lokatie B is nr. 2) | 1200 - 1299 |
| Lokatie C (enz.) | 1300 - 1399 |
| Lokatie D | 1400 - 1499 |
| Lokatie E | 1500 - 1599 |
| Lokatie F | 1600 - 1699 |
| Lokatie G | 1700 - 1799 |
| Lokatie H | 1800 - 1899 |
| Lokatie I | 1900 - 1999 |

Indeling van de boutnummering op een lokatie is als volgt onderverdeeld op bijvoorbeeld lokatie A: (1100 - 1199)

| | |
|-----------------|---|
| (11)00 - (11)09 | - bouten in betonnen palen |
| 10 - 19 | - bouten in stalen buizen (conductorpijp) |
| 20 - 49 | - nog niet gedefinieerd |
| 50 - 99 | - bouten in huizen en gebouwen |

Indeling van de boutnummering in de serie 5000 - 9999

| | |
|-------------|---|
| 5000 - 5099 | - bouten in gebouwen (maar geen NAP bout) |
| 5101 - 5199 | - bouten in ijzeren palen (KNZ palen) |
| 5201 - 5299 | - bouten in betonnen palen bovengronds |
| 5301 - 5399 | - bouten in betonnen palen ondergronds |
| 5401 - 5499 | - bouten in waterwinputten |

RESUMPTIE DOORGAANDE WATERPASSING

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GEBIED Adolf v. Nassau, Kibbelgaarn

| PEILMERK | | LENGTE L IN KM | GEMETEN HOOGTEVERSCHIL | | | CORR. | HOOGTE T.O.V. N.A.P. | V= H + T IN MM | 2,5 √L | OPM. |
|--------------|----------------|-------------------|------------------------|------------|-----------------|--------|----------------------------|----------------------|--------|---------------|
| TOP- BLAD | NR. | | HEEN H | TERUG T | GEMIDDEL- DE | | | | | |
| 12F | traj. 2 042 | 1.020 | - 0.5764 | + 0.5745 | - 0.57545 | + 0.19 | + 3.0370 | - 1.9 | 2.5 | |
| 12F | 051 | 0.980 | + 0.1070 | - 0.1088 | + 0.10790 | + 0.19 | + 2.4617 | - 1.8 | 2.5 | |
| 12F | 059 | 1.120 | + 0.7790 | - 0.7810 | + 0.78000 | + 0.21 | + 2.5698 | - 2.0 | 2.6 | |
| 12F | 103 | 0.830 | - 0.9089 | + 0.9067 | - 0.90780 | + 0.16 | + 3.3500 | - 2.2 | 2.3 | |
| 12F | 071 | 0.770 | - 0.4218 | + 0.4215 | - 0.42165 | + 0.15 | + 2.4424 | - 0.3 | 2.2 | |
| 12F | 072 | 1.050 | - 0.2557 | + 0.2563 | - 0.25600 | + 0.20 | + 2.0209 | + 0.6 | 2.6 | |
| 12F | 101 | 0.950 | - 0.3549 | + 0.3547 | - 0.35480 | + 0.18 | + 1.7651 | - 0.2 | 2.4 | |
| 12F | 083 | 0.920 | - 1.2321 | + 1.2326 | - 1.23235 | + 0.17 | + 1.4105 | + 0.5 | 2.4 | |
| 12F | 074 | 7.640 | - 2.8638 | + 2.8565 | - 2.86015 | + 1.45 | + 0.1783 | - 7.3 | | σ = + 0.73 |
| 12F | traj. 3 042 | 0.650 | - 0.3285 | + 0.3274 | - 0.32795 | + 0.32 | + 3.0370 | - 1.1 | 2.0 | |
| 12F | 043 | 0.020 | - 0.2077 | + 0.2074 | - 0.20755 | + 0.01 | + 2.7094 | - 0.3 | 0.4 | |
| 12F | 044 | 0.650 | - 0.2075 | + 0.2068 | - 0.20715 | + 0.32 | + 2.5018 | - 0.7 | 2.0 | |
| | 5014 | 0.450 | + 0.4460 | - 0.4471 | + 0.44655 | + 0.22 | + 2.2950 | - 1.1 | 1.7 | |
| | 5015 | 0.560 | + 0.4943 | - 0.4940 | + 0.49415 | + 0.28 | + 2.7418 | + 0.3 | 1.9 | |
| 12F | 033 | 2.330 | + 0.1966 | - 0.1995 | + 0.19805 | + 1.15 | + 3.2362 | - 2.9 | | σ = + 0.71 |

RESUMPTIE DOORGAANDE WATERPASSING

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GEBIED Adolf v. Nassau, Kibbelgaarn

| PEILMERK | | LENGTE L IN KM | GEMETEN HOOGTEVERSCHIL | | | CORR. | HOOGTE T.O.V. N.A.P. | V= H + T IN MM | 2,5√L | OPM. |
|--------------|----------------|-------------------|------------------------|------------|-----------------|--------|----------------------------|----------------------|-------|------------------|
| TOP- BLAD | NR. | | HEEN H | TERUG T | GEMIDDEL- DE | | | | | |
| 12F | traj. 4 033 | 0.440 | - 0.5119 | + 0.5105 | - 0.51120 | - 0.10 | + 3.2362 | - 1.4 | 1.7 | |
| | 5101 | 0.780 | - 0.1789 | + 0.1773 | - 0.17810 | - 0.18 | + 2.7249 | - 1.6 | 2.2 | |
| 12F | 037 | 0.450 | + 0.0728 | - 0.0723 | + 0.07255 | - 0.10 | + 2.5466 | + 0.5 | 1.7 | |
| | 5012 | 0.230 | + 0.5055 | - 0.5057 | + 0.50560 | - 0.05 | + 2.6191 | - 0.2 | 1.2 | |
| 12F | 077 | 0.240 | - 0.3593 | + 0.3586 | - 0.35895 | - 0.05 | + 3.1246 | - 0.7 | 1.2 | |
| | 5013 | 0.310 | + 0.2784 | - 0.2785 | + 0.27845 | - 0.07 | + 2.7656 | - 0.1 | 1.4 | |
| | 5018 | 2.450 | - 0.1934 | + 0.1899 | - 0.19165 | - 0.55 | + 3.0440 | - 3.5 | | $\sigma = +0.66$ |
| 12F | traj. 5 033 | 0.240 | + 0.7050 | - 0.7061 | + 0.70555 | + 0.17 | + 3.2362 | - 1.1 | 1.2 | |
| | 034 | 0.690 | - 0.1472 | + 0.1471 | - 0.14715 | + 0.50 | + 3.9419 | - 0.1 | 2.1 | |
| 12F | 140 | 0.610 | + 0.4020 | - 0.4038 | + 0.40290 | + 0.44 | + 3.7953 | - 1.8 | 2.0 | |
| | 027 | 0.600 | - 0.2700 | + 0.2697 | - 0.26985 | + 0.44 | + 4.1986 | - 0.3 | 1.9 | |
| 12F | 122 | 2.140 | + 0.6898 | - 0.6931 | + 0.69145 | + 1.55 | + 3.9292 | - 3.3 | | $\sigma = +0.81$ |

RESUMPTIE DOORGAANDE WATERPASSING

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GEBIED Adolf v. Nassau, Kibbelgaarn

| PEILMERK | | LENGTE L IN KM | GEMETEN HOOGTEVERSCHIL | | | CORR. | HOOGTE T.O.V. N.A.P. | V= H + T IN MM | 2,5 \sqrt{L} | OPM. |
|--------------|---------|-------------------|------------------------|------------|-----------------|--------|----------------------------|----------------------|----------------|---------------------|
| TOP- BLAD | NR. | | HEEN H | TERUG T | GEMIDDEL- DE | | | | | |
| 12F | traj. 6 | | | | | | + 3.9292 | | | |
| | 122 | | | | | | | - 0.6 | 2.1 | |
| | | 0.670 | - 0.6988 | + 0.6982 | - 0.69850 | + 0.14 | | | | |
| | 3500 | | | | | | + 3.2308 | - 0.5 | 1.4 | |
| | | 0.300 | - 0.1846 | + 0.1841 | - 0.18435 | + 0.06 | | | | |
| | 3600 | | | | | | + 3.0466 | - 1.0 | 1.6 | |
| | | 0.390 | + 0.0037 | - 0.0047 | + 0.00420 | + 0.08 | | | | |
| | 3700 | | | | | | + 3.0508 | + 0.5 | 1.9 | |
| | | 0.550 | - 0.7046 | + 0.7051 | - 0.70485 | + 0.12 | | | | |
| | 3100 | | | | | | + 2.3461 | | | |
| | | 1.910 | - 1.5843 | + 1.5827 | - 1.58350 | + 0.40 | | - 1.6 | | $\sigma =$ +0.52 |
| | zijslag | | | | | | | | | |
| | traj. 6 | | | | | | | | | |
| | 3500 | | | | | | + 3.2308 | - 0.4 | 1.6 | |
| | | 0.390 | - 0.0994 | + 0.0990 | - 0.09920 | | | | | |
| | 3300 | | | | | | + 3.1316 | + 1.1 | 1.5 | |
| | | 0.380 | + 0.0059 | - 0.0048 | + 0.00535 | | | | | |
| | 3400 | | | | | | + 3.1370 | | | |
| | | 0.770 | - 0.0935 | + 0.0942 | - 0.09385 | | | + 0.7 | | |
| | zijslag | | | | | | | | | |
| | traj. 6 | | | | | | | | | |
| | 3300 | | | | | | + 3.1316 | + 0.2 | 1.5 | |
| | | 0.350 | - 0.0004 | + 0.0006 | - 0.00050 | | | | | |
| | 3210 | | | | | | + 3.1311 | | | |

RESUMPTIE DOORGAANDE WATERPASSING

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GEBIED Adolf v. Nassau, Kibbelgaarn

| PEILMERK | | LENGTE L IN KM | GEMETEN HOOGTEVERSCHIL | | | CORR. | HOOGTE T.O.V. N.A.P. | V= H + T IN MM | 2,5 \sqrt{L} | OPM. |
|--------------|----------------|-------------------|------------------------|------------|-----------------|--------|----------------------------|----------------------|----------------|------------------|
| TOP- BLAD | NR. | | HEEN H | TERUG T | GEMIDDEL- DE | | | | | |
| 12F | traj. 7 122 | 0.660 | + 0.1297 | - 0.1300 | + 0.12985 | + 0.34 | + 3.9292 | - 0.3 | 2.0 | |
| 12F | 021 | 0.410 | - 0.9705 | + 0.9694 | - 0.96995 | + 0.22 | + 4.0594 | - 1.1 | 1.6 | |
| | 5016 | 0.070 | - 0.2131 | + 0.2126 | - 0.21285 | + 0.04 | + 3.0897 | - 0.5 | 0.7 | |
| | 5104 | 0.580 | + 0.2570 | - 0.2575 | + 0.25725 | + 0.30 | + 2.8768 | - 0.5 | 1.9 | |
| | 5017 | 0.580 | + 1.1914 | - 1.1918 | + 1.19160 | + 0.30 | + 3.1344 | - 0.4 | 1.9 | |
| 12F | 014 | 2.300 | + 0.3954 | - 0.3973 | + 0.39590 | + 1.20 | + 4.3263 | - 2.8 | | $\sigma = +0,61$ |
| 12F | traj. 8 014 | 0.680 | - 0.3576 | + 0.3587 | - 0.35815 | | + 4.3263 | + 1.1 | 2.1 | |
| 12F | 011 | | | | | | + 3.9682 | | | |
| 12F | traj. 9 014 | 0.840 | - 0.6519 | + 0.6499 | - 0.65090 | + 0.45 | + 4.3263 | - 2.0 | 2.3 | |
| 13A | 037 | 0.800 | - 0.3899 | + 0.3889 | - 0.38940 | + 0.43 | + 3.6758 | - 1.0 | 2.2 | |
| 13A | 046 | 0.680 | - 1.1908 | + 1.1891 | - 1.18995 | + 0.37 | + 3.2869 | - 1.7 | 2.1 | |
| 13A | 160 | 2.320 | - 2.2326 | + 2.2279 | - 2.23025 | + 1.25 | + 2.0973 | - 4.7 | | $\sigma = +0,92$ |

RESUMPTIE DOORGAANDE WATERPASSING

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GEBIED Adolf v. Nassau, Kibbelgaarn

| PEILMERK | | LENGTE L IN KM | GEMETEN HOOGTEVERSCHIL | | | CORR. | HOOGTE T.O.V. N.A.P. | V= H + T IN MM | 2,5 √L | OPM. |
|--------------|----------|-------------------|------------------------|------------|-----------------|--------|----------------------------|----------------------|--------|------|
| TOP- BLAD | NR. | | HEEN H | TERUG T | GEMIDDEL- DE | | | | | |
| 13A | traj. 10 | | | | | | + 2.0973 | | | |
| | 160 | 0.730 | + 0.2729 | - 0.2741 | + 0.27350 | + 0.23 | | - 1.2 | 2.1 | |
| | 5103 | 0.040 | + 0.2793 | - 0.2794 | + 0.27935 | + 0.01 | + 2.3710 | - 0.1 | 0.5 | |
| 13A | 159 | 0.100 | - 0.1345 | + 0.1346 | - 0.13455 | + 0.03 | + 2.6504 | + 0.1 | 0.8 | |
| | 5011 | 0.480 | + 0.2653 | - 0.2647 | + 0.26500 | + 0.15 | + 2.5159 | + 0.6 | 1.7 | |
| | 5205 | 0.630 | + 0.1103 | - 0.1088 | + 0.10955 | + 0.20 | + 2.7810 | + 1.5 | 2.0 | |
| 12F | 123 | 1.180 | - 0.5456 | + 0.5445 | - 0.54505 | + 0.38 | + 2.8908 | - 1.1 | 2.7 | |
| | 3100 | | | | | | + 2.3461 | | | |
| | | 3.160 | + 0.2477 | - 0.2479 | + 0.24780 | + 1.00 | | - 0.2 | | |
| 12F | traj. 11 | | | | | | | | | |
| | 3100 | | | | | | + 2.3461 | | | |
| | | 1.020 | + 0.3000 | - 0.3012 | + 0.30060 | + 0.58 | | - 1.2 | 2.5 | |
| | 038 | 0.120 | + 0.3964 | - 0.3969 | + 0.39665 | + 0.07 | + 2.6473 | - 0.5 | 0.9 | |
| | 5018 | | | | | | + 3.0440 | | | |
| | | 1.140 | + 0.6964 | - 0.6981 | + 0.69725 | + 0.65 | | - 1.7 | | |

RESUMPTIE DOORGAANDE WATERPASSING

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GEBIED Adolf v. Nassau, Kibbelgaarn

| PEILMERK | | LENGTE L IN KM | GEMETEN HOOGTEVERSCHIL | | | CORR. | HOOGTE T.O.V. N.A.P. | V= H + T IN MM | 2,5 √L | OPM. |
|--------------|------------------|-------------------|------------------------|------------|-----------------|--------|----------------------------|----------------------|--------|---------------|
| TOP- BLAD | NR. | | HEEN H | TERUG T | GEMIDDEL- DE | | | | | |
| 12F | traj. 12 5018 | 0.380 | - 0.9271 | + 0.9263 | - 0.92670 | + 0.11 | + 3.0440 | - 0.8 | 1.5 | hulp- punt |
| | 5102 | 0.900 | - 0.6416 | + 0.6394 | - 0.64050 | + 0.26 | + 2.1174 | - 2.2 | 2.4 | |
| | 9001 | 0.710 | + 0.0974 | - 0.0987 | + 0.09805 | + 0.20 | + 1.4772 | - 1.3 | 2.1 | |
| | 141 | 0.790 | - 0.0738 | + 0.0730 | - 0.07340 | + 0.23 | + 1.5754 | - 0.8 | 2.2 | |
| | 12F 142 | 0.670 | - 0.5895 | + 0.5884 | - 0.58895 | + 0.19 | + 1.5022 | - 1.1 | 2.0 | |
| | 5407 | 0.750 | + 0.5174 | - 0.5172 | + 0.51730 | + 0.21 | + 0.9135 | + 0.2 | 2.2 | |
| | 5406 | 4.200 | - 1.6172 | + 1.6112 | - 1.61420 | + 1.20 | + 1.4310 | - 6.0 | | |
| | traj. 13 5406 | 0.510 | + 0.4884 | - 0.4897 | + 0.48905 | + 0.23 | + 1.4310 | - 1.3 | 1.8 | |
| | 13A 076 | 0.960 | + 0.2721 | - 0.2741 | + 0.27310 | + 0.42 | + 1.9203 | - 2.0 | 2.5 | |
| | 13A 181 | 1.470 | + 0.7605 | - 0.7638 | + 0.76215 | + 0.65 | + 2.1938 | - 3.3 | | |
| 13A | traj. 14 181 | 0.450 | - 0.4054 | + 0.4041 | - 0.40475 | + 0.35 | + 2.1938 | - 1.3 | 1.7 | |
| | 5401 | 0.510 | - 1.3131 | + 1.3125 | - 1.31280 | + 0.40 | + 1.7894 | - 0.6 | 1.8 | |
| 13A | traj. 15 5401 | | | | | | + 1.7894 | | | |
| | 182 | | | | | | + 0.4770 | | | |

 $\sigma =$
 $+ 0.71$

RESUMPTIE DOORGAANDE WATERPASSING

GEBIED Adolf v. Nassau, Kibbelgaarn

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| PEILMERK | | LENGTE L IN KM | GEMETEN HOOGTEVERSCHIL | | | CORR. | HOOGTE T.O.V. N.A.P. | V= H + T IN MM | 2,5 √L | OPM. |
|--------------|----------|-------------------|------------------------|------------|-----------------|--------|----------------------------|----------------------|--------|---------------|
| TOP- BLAD | NR. | | HEEN H | TERUG T | GEMIDDEL- DE | | | | | |
| 13A | traj. 16 | | | | | | + 0.4770 | | | |
| | 182 | | | | | | | | | |
| | 5010 | 0.640 | + 1.2675 | - 1.2692 | + 1.26835 | + 0.35 | + 1.7457 | - 1.7 | 2.0 | |
| | traj. 17 | | | | | | + 1.7457 | | | |
| | 5010 | 0.570 | - 0.2217 | + 0.2202 | - 0.22095 | - 0.09 | + 1.5247 | - 1.5 | 1.9 | |
| | 9003 | 0.720 | + 0.2713 | - 0.2720 | + 0.27165 | - 0.11 | + 1.7962 | - 0.7 | 2.1 | hulp- punt |
| | 5006 | | | | | | | | | |
| | | 11.290 | + 0.0496 | - 0.0518 | + 0.05070 | - 0.20 | | - 2.2 | | |
| | traj. 18 | | | | | | + 2.0973 | | | |
| | 160 | 0.850 | + 0.4759 | - 0.4768 | + 0.47635 | + 0.18 | + 2.5738 | - 0.9 | 2.3 | |
| 13A | 057 | 0.360 | + 1.0041 | - 1.0048 | + 1.00445 | + 0.07 | + 3.5784 | - 0.7 | 1.5 | |
| 13A | 058 | 0.880 | - 1.4268 | + 1.4259 | - 1.42635 | + 0.18 | + 2.1522 | - 0.9 | 2.3 | |
| 13A | 065 | 0.560 | + 0.0828 | - 0.0839 | + 0.08335 | + 0.12 | + 2.2356 | - 1.1 | 1.9 | |
| | 5008 | 0.680 | + 0.0401 | - 0.0413 | + 0.04070 | + 0.14 | + 2.2765 | - 1.2 | 2.1 | |
| | 5007 | 1.270 | - 0.4816 | + 0.4795 | - 0.48055 | + 0.26 | + 1.7962 | - 2.1 | 2.8 | |
| | 5006 | | | | | | | | | |
| | | 4.600 | - 0.3055 | + 0.2986 | - 0.30205 | + 0.95 | | - 6.9 | | σ = +0.68 |
| | traj. 19 | | | | | | + 1.7457 | | | |
| | 5010 | 0.880 | - 1.2209 | + 1.2192 | - 1.22005 | + 0.60 | + 0.5262 | - 1.7 | 2.3 | |
| | 5009 | 1.040 | - 0.1086 | + 0.1063 | - 0.10745 | + 0.70 | + 0.4195 | - 2.3 | 2.6 | |
| | 5105 | | | | | | | | | |
| | | 1.920 | - 1.3295 | + 1.3255 | - 1.32750 | + 1.30 | | - 4.0 | | |

- 12 -

- 12 -

| PEILMERK | | LENGTE L IN KM | GEMETEN HOOGTEVERSCHIL | | | CORR. | HOOGTE T.O.V. N.A.P. | V= H + T IN MM | 2,5 √ L | OPM. |
|--------------|----------|-------------------|------------------------|------------|-----------------|--------|----------------------------|----------------------|---------|---------------|
| TOP- BLAD | NR. | | HEEN H | TERUG T | GEMIDDEL- DE | | | | | |
| 13A | traj. 20 | | | | | | + 0.4195 | | | |
| | 5105 | 0.290 | + 0.0395 | - 0.0407 | + 0.04010 | - 0.03 | | - 1.2 | 1.3 | |
| | 5201 | 0.420 | + 0.1249 | - 0.1262 | + 0.12555 | - 0.04 | + 0.4596 | - 1.3 | 1.6 | |
| | 5202 | 0.440 | - 0.3887 | + 0.3883 | - 0.38850 | - 0.04 | + 0.5851 | - 0.4 | 1.7 | |
| | 5020 | 0.450 | + 0.6202 | - 0.6197 | + 0.61995 | - 0.05 | + 0.1965 | + 0.5 | 1.7 | |
| | 5004 | 0.480 | - 0.1915 | + 0.1914 | - 0.19145 | - 0.05 | + 0.8164 | - 0.1 | 1.7 | |
| | 5005 | 0.340 | + 0.3296 | - 0.3301 | + 0.32985 | - 0.03 | + 0.6249 | - 0.5 | 1.5 | |
| | 176 | 0.610 | + 0.8414 | - 0.8416 | + 0.84150 | - 0.06 | + 0.9548 | - 0.2 | 2.0 | |
| | 5006 | | | | | | + 1.7962 | | | |
| | | 3.030 | + 1.3754 | - 1.3786 | + 1.37700 | - 0.30 | | - 3.2 | | σ = + 0.62 |
| 13A | traj. 21 | | | | | | + 0.4770 | | | |
| | 182 | 0.510 | - 0.1602 | + 0.1588 | - 0.15950 | + 0.12 | | - 1.4 | 1.8 | |
| | 5403 | 0.770 | + 0.8084 | - 0.8096 | + 0.80900 | + 0.18 | + 0.3176 | - 1.2 | 2.2 | |
| 13A | 151 | | | | | | + 1.1268 | | | |
| | | 1.280 | + 0.6482 | - 0.6508 | + 0.64950 | + 0.30 | | - 2.6 | | |
| 13A | traj. 22 | | | | | | + 1.1268 | | | |
| | 151 | 0.150 | - 0.3575 | + 0.3573 | - 0.35740 | 0 | | - 0.2 | 1.0 | |
| | 5204 | | | | | | + 0.7694 | | | |
| | traj. 23 | | | | | | + 0.7694 | | | |
| | 5204 | 0.370 | - 0.3447 | + 0.3448 | - 0.34475 | + 0.05 | | + 0.1 | 1.5 | |
| 13A | 235 | | | | | | + 0.4246 | | | |

RESUMPTIE DOORGAANDE WATERPASSING

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GEBIED Adolf v. Nassau, Kibbelgaarn

| PEILMERK | | LENGTE L IN KM | GEMETEN HOOGTEVERSCHIL | | | CORR. | HOOGTE T.O.V. N.A.P. | V= H + T IN MM | 2,5 √L | OPM. |
|--------------|------------------|-------------------|------------------------|------------|-----------------|--------|----------------------------|----------------------|--------|----------------------|
| TOP- BLAD | NR. | | HEEN H | TERUG T | GEMIDDEL- DE | | | | | |
| 13A | traj. 24 235 | 0.740 | - 1.3517 | + 1.3501 | - 1.35090 | - 0.19 | + 0.4246 | - 1.6 | 2.2 | hulp- punt |
| | 9002 | 0.620 | + 1.1044 | - 1.1055 | + 1.10495 | - 0.16 | - 0.9265 | - 1.1 | 2.0 | |
| 12F | 074 | 1.360 | - 0.2473 | + 0.2446 | - 0.24595 | - 0.35 | + 0.1783 | - 2.7 | | |
| | traj. 25 5406 | 0.220 | - 0.2049 | + 0.2054 | - 0.20515 | - 0.06 | + 1.4310 | + 0.5 | 1.2 | |
| 13A | 180 | 0.650 | - 0.6971 | + 0.6957 | - 0.69640 | - 0.17 | + 1.2258 | - 1.4 | 2.0 | |
| | 5203 | 0.300 | - 0.1051 | + 0.1040 | - 0.10455 | - 0.07 | + 0.5292 | - 1.1 | 1.4 | |
| 13A | 235 | 1.170 | - 1.0071 | + 1.0051 | - 1.00610 | - 0.30 | + 0.4246 | - 2.0 | | $\sigma =$ + 0.83 |
| | traj. 26 5204 | 0.400 | + 0.3931 | - 0.3938 | + 0.39345 | + 0.07 | + 0.7694 | - 0.7 | 1.6 | |
| | 5404 | 0.470 | + 0.1645 | - 0.1652 | + 0.16485 | + 0.08 | + 1.1629 | - 0.7 | 1.7 | |
| | 5405 | 0.540 | + 0.8661 | - 0.8656 | + 0.86585 | + 0.10 | + 1.3278 | + 0.5 | 1.8 | |
| 13A | 181 | 1.410 | + 1.4237 | - 1.4246 | + 1.42415 | + 0.25 | + 2.1938 | - 0.9 | | $\sigma =$ + 0.48 |
| | traj. 27 5401 | 0.550 | + 1.1049 | + 1.1045 | - 1.10470 | 0 | + 1.7894 | - 0.4 | 1.9 | |
| | 5402 | 0.700 | + 0.4419 | - 0.4423 | + 0.44210 | 0 | + 0.6847 | - 0.4 | 2.1 | |
| 13A | 151 | 1.250 | - 0.6030 | + 0.6022 | - 0.66260 | 0 | + 1.1268 | - 0.8 | | |

RESUMPTIE DOORGAANDE WATERPASSING

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GEBIED Adolf v. Nassau, Kibbelgaarn

| PEILMERK | | LENGTE L IN KM | GEMETEN HOOGTEVERSCHIL | | | CORR. | HOOGTE T.O.V. N.A.P. | V= H + T IN MM | 2,5 \sqrt{L} | OPM. |
|--------------|-----------------|-------------------|------------------------|------------|-----------------|--------|----------------------------|----------------------|----------------|----------------------|
| TOP- BLAD | NR. | | HEEN H | TERUG T | GEMIDDEL- DE | | | | | |
| 12F | traj. 28 074 | 0.870 | - 0.2907 | + 0.2912 | - 0.29095 | - 0.05 | + 0.1783 | + 0.5 | 2.3 | |
| 13A | 154 | 1.070 | + 2.7770 | - 2.7779 | + 2.77745 | - 0.06 | - 0.1127 | - 0.9 | 2.6 | |
| 13A | 097 | 0.660 | - 1.1078 | + 1.1067 | - 1.10725 | - 0.04 | + 2.6647 | - 1.1 | 2.0 | |
| 13A | 124 | | | | | | + 1.5574 | | | |
| | | 2.600 | + 1.3785 | - 1.3800 | + 1.37925 | - 0.15 | | - 1.5 | | $\sigma =$ + 0.49 |
| 13A | traj. 29 124 | 0.400 | - 0.3230 | + 0.3224 | - 0.32270 | - 0.28 | + 1.5574 | - 0.6 | 1.6 | |
| 13A | 123 | 0.350 | + 0.3238 | - 0.3253 | + 0.32455 | - 0.24 | + 1.2344 | - 1.5 | 1.5 | |
| 13A | 106 | 0.770 | - 1.2150 | + 1.2136 | - 1.21430 | - 0.54 | + 1.5587 | - 1.4 | 2.2 | |
| 13A | 113 | 0.420 | + 0.0753 | - 0.0765 | + 0.07590 | - 0.29 | + 0.3439 | - 1.2 | 1.6 | |
| | 5105 | | | | | | + 0.4195 | | | |
| | | 11940 | - 1.1389 | + 1.1342 | - 1.13655 | - 1.35 | | - 4.7 | | $\sigma =$ + 0.91 |

RESUMPTIE DOORGAANDE WATERPASSING

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GEBIED Adolf v. Nassau, Kibbelgaarn

| PEILMERK | | LENGTE | GEMETEN HOOGTEVERSCHIL | | | CORR. | HOOGTE T.O.V. N.A.P. | V= H + T IN MM | 2,5 √L | OPM. |
|--------------|-----------------------------|--------|------------------------|------------|-----------------|--------|----------------------------|----------------------|--------|---------------|
| TOP- BLAD | NR. | | HEEN H | TERUG T | GEMIDDEL- DE | | | | | |
| 13A | traj. 30 5105 | | | | | | + 0.4195 | | | |
| | | 0.660 | + 0.1711 | - 0.1717 | + 0.17140 | + 0.07 | | - 0.6 | 2.0 | |
| | 114 | | | | | | + 0.5910 | | | |
| | | 0.440 | + 0.6722 | - 0.6734 | + 0.67280 | + 0.04 | | - 1.2 | 1.7 | |
| 13A | 5003 | | | | | | + 1.2638 | | | |
| | | 0.310 | - 0.3260 | + 0.3256 | - 0.32580 | + 0.03 | | - 0.4 | 1.4 | |
| | 118 | | | | | | + 0.9380 | | | |
| | | 0.200 | - 0.4294 | + 0.4292 | - 0.42930 | + 0.02 | | - 0.2 | 1.1 | |
| 13A | 1800 | | | | | | + 0.5088 | | | |
| | | 0.320 | + 0.8867 | - 0.8874 | + 0.88705 | + 0.03 | | - 0.7 | 1.4 | |
| | 1300 | | | | | | + 1.3958 | | | |
| | | 0.090 | + 0.2824 | - 0.2823 | + 0.28235 | + 0.01 | | + 0.1 | 0.8 | |
| 13A | 125 | | | | | | + 1.6782 | | | |
| | | 0.210 | - 0.1240 | + 0.1244 | - 0.12420 | + 0.02 | | + 0.4 | 1.2 | |
| | 1500 | | | | | | + 1.5540 | | | |
| | | 0.090 | + 0.0821 | - 0.0820 | + 0.08205 | + 0.01 | | + 0.1 | 0.8 | |
| 13A | 1550 | | | | | | + 1.6361 | | | |
| | | 0.170 | + 0.8329 | - 0.8329 | + 0.83290 | + 0.02 | | 0 | 1.0 | |
| | 131 | | | | | | + 2.4690 | | | |
| | | 2.490 | + 2.0480 | - 2.0505 | + 2.04925 | + 0.25 | | - 2.5 | | σ = + 0.44 |
| 13A | zijslag traj. 30 5003 | | | | | | + 1.2638 | | | |
| | | 0.020 | - 0.4513 | + 0.4511 | - 0.45120 | | | - 0.2 | 0.4 | |
| | 5019 | | | | | | + 0.8126 | | | |
| | zijslag traj. 30 118 | | | | | | + 0.9380 | | | |
| 13A | | 0.290 | + 1.0190 | - 1.0194 | + 1.01920 | | | - 0.4 | 1.4 | |
| | 5002 | | | | | | + 1.9572 | | | |
| | | 0.450 | - 0.7306 | + 0.7306 | - 0.73060 | | | 0 | 1.7 | |
| | 1900 | | | | | | + 1.2266 | | | |
| | | 0.740 | + 0.2884 | - 0.2888 | + 0.28860 | | | - 0.4 | | |

RESUMPTIE DOORGAANDE WATERPASSING

GEBIED Adolf v. Nassau, Kibbelgaarn

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| PEILMERK | | LENGTE L IN KM | GEMETEN HOOGTEVERSCHIL | | | CORR. | HOOGTE T.O.V. N.A.P. | V= H + T IN MM | 2,5 \sqrt{L} | OPM. |
|--------------|---------------------|-------------------|------------------------|------------|-----------------|--------|----------------------------|----------------------|----------------|---------------------|
| TOP- BLAD | NR. | | HEEN H | TERUG T | GEMIDDEL- DE | | | | | |
| 13A | traj. 31 | | | | | | | | | |
| | 131 | 0.320 | - 0.9193 | + 0.9193 | - 0.91930 | + 0.22 | + 2.4690 | 0 | 1.4 | |
| | 1400 | 0.200 | - 0.6848 | + 0.6847 | - 0.68475 | + 0.13 | + 1.5499 | - 0.1 | 1.1 | |
| | 1169 | 0.210 | - 0.4811 | + 0.4808 | - 0.48095 | + 0.14 | + 0.8653 | - 0.3 | 1.2 | |
| | 1151 | 0.170 | + 0.4546 | - 0.4555 | + 0.45505 | + 0.11 | + 0.3845 | - 0.9 | 1.0 | |
| | 8C 155 | 0.220 | + 0.3548 | - 0.3560 | + 0.35540 | + 0.15 | + 0.8396 | - 1.2 | 1.2 | |
| | 8C 001 | | | | | | + 1.1952 | | | |
| | | 1.120 | - 1.2758 | + 1.2733 | - 1.27455 | + 0.75 | | - 2.5 | | $\sigma =$ +0.77 |
| 13A | zijslag traj. 31 | | | | | | | | | |
| | 131 | 0.150 | - 0.8295 | + 0.8299 | - 0.82970 | | + 2.4690 | - 0.4 | 1.0 | |
| | 1200 | | | | | | + 1.6393 | | | |
| | traj. 32 | | | | | | | | | |
| | 8C 001 | 0.420 | + 0.9889 | - 0.9904 | + 0.98965 | - 0.24 | + 1.1952 | - 1.5 | 1.6 | |
| | 8C 137 | 0.580 | - 0.4284 | + 0.4266 | + 0.42750 | - 0.32 | + 2.1846 | - 1.8 | 1.9 | |
| | 13A 127 | 0.340 | - 0.1999 | + 0.1985 | - 0.19920 | - 0.19 | + 1.7568 | - 1.4 | 1.5 | |
| | 13A 124 | | | | | | + 1.5574 | | | |
| | | 1.340 | + 0.3606 | - 0.3653 | + 0.36295 | - 0.75 | | - 4.7 | | $\sigma =$ +1.18 |

RESUMPTIE DOORGAANDE WATERPASSING

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GEBIED Adolf v. Nassau, Kibbelgaarn

| PEILMERK | | LENGTE L IN KM | GEMETEN HOOGTEVERSCHIL | | | CORR. | HOOGTE T.O.V. N.A.P. | V= H + T IN MM | 2,5 √L | OPM. |
|--------------|-----------------------------|-------------------|------------------------|------------|-----------------|--------|----------------------------|----------------------|--------|---------------|
| TOP- BLAD | NR. | | HEEN H | TERUG T | GEMIDDEL- DE | | | | | |
| 13A | traj. 33 131 | 0.040 | + 0.5806 | - 0.5804 | + 0.58050 | - 0.03 | + 2.4690 | + 0.2 | 0.5 | |
| | 1250 | 0.340 | - 1.6606 | + 1.6602 | - 1.66040 | - 0.21 | + 3.0495 | - 0.4 | 1.5 | |
| | 1600 | 0.100 | + 0.0280 | - 0.0282 | + 0.02810 | - 0.06 | + 1.3889 | - 0.2 | 0.8 | |
| 13A | 130 | 0.740 | + 0.6323 | - 0.6308 | + 0.63155 | - 0.46 | + 1.4169 | + 1.5 | 2.2 | |
| | 5001 | 0.700 | - 0.1485 | + 0.1466 | - 0.14755 | - 0.44 | + 2.0480 | - 1.9 | 2.1 | |
| 8C | 150 | 1.920 | - 0.5682 | + 0.5674 | - 0.56780 | - 1.20 | + 1.9000 | - 0.8 | | σ = + 0.71 |
| | zijslag traj. 33 1600 | 0.390 | - 0.4043 | + 0.4047 | - 0.40450 | | + 1.3889 | + 0.4 | 1.6 | |
| | 1700 | | | | | | + 0.9844 | | | |
| | traj. 34 150 | 0.350 | - 0.7050 | + 0.7037 | - 0.70435 | - 0.45 | + 1.9000 | - 1.3 | 1.5 | |
| 8C | 001 | | | | | | + 1.1952 | | | |
| | traj. 35 150 | 0.090 | - 0.4327 | + 0.4327 | - 0.43270 | | + 1.9000 | 0 | 0.8 | |
| 8C | 120 | 0.570 | - 1.1340 | + 1.1324 | - 1.13320 | | + 1.4673 | - 1.6 | 1.9 | |
| 8C | 106 | 0.510 | + 0.0786 | - 0.0797 | + 0.07915 | | + 0.3341 | - 1.1 | 1.8 | |
| | 5106 | 0.380 | + 1.2277 | - 1.2282 | + 1.22795 | | + 0.4132 | - 0.5 | 1.5 | |
| 8C | 084 | 1.550 | - 0.2604 | + 0.2572 | - 0.25880 | | + 1.6412 | - 3.2 | | σ = + 0.69 |

| NR | BOUTNR | JAAR | B.HGTE | V | M1980 | V | M1982 | V | M1984 |
|----|----------|------|--------|-------------|--------|--------------|--------|-------------|-------------------------------|
| 1 | 08C 0001 | 1969 | 1.2607 | - 4 - 52 | 1.2085 | - 6 - 58 | 1.2028 | - 8 - 66 | 1.1952 |
| 2 | 12F 0011 | 1969 | 3.9760 | + 9 - 4 | 3.9723 | - 7 - 11 | 3.9647 | + 3 - 8 | 3.9682 |
| 3 | 12F 0014 | 1969 | 4.3462 | + 7 - 11 | 4.3345 | - 10 - 21 | 4.3251 | + 1 - 20 | 4.3263 |
| 4 | 12F 0021 | 1969 | 4.0851 | + 4 - 18 | 4.0670 | - 9 - 27 | 4.0576 | + 1 - 26 | 4.0594 |
| 5 | 12F 0027 | 1969 | 4.2248 | + 2 - 19 | 4.2064 | - 9 - 28 | 4.1966 | + 2 - 26 | 4.1986 |
| 6 | 12F 0033 | 1969 | 3.2684 | + 2 - 22 | 3.2455 | - 8 - 30 | 3.2381 | - 2 - 32 | 3.2362 |
| 7 | 12F 0034 | 1984 | 3.9419 | | | | | 0 | 3.9419 |
| 8 | 12F 0037 | 1969 | 2.5744 | + 2 - 20 | 2.5537 | - 10 - 30 | 2.5439 | + 3 - 27 | 2.5466 |
| 9 | 13A 0037 | 1969 | 3.6893 | + 7 - 9 | 3.6798 | - 8 - 17 | 3.6715 | + 4 - 13 | 3.6758 |
| 10 | 12F 0038 | 1969 | 2.6733 | + 2 - 20 | 2.6528 | - 10 - 30 | 2.6433 | + 4 - 26 | 2.6473 |
| 11 | 12F 0042 | 1969 | 3.0636 | - 1 - 25 | 3.0390 | - 2 - 27 | 3.0370 | 0 - 27 | 3.0370 ^{0359 NAM/84} |
| 12 | 12F 0043 | 1969 | 2.7434 | - 2 - 30 | 2.7126 | - 2 - 32 | 2.7111 | - 2 - 34 | 2.7094 |
| 13 | 12F 0044 | 1969 | 2.5315 | - 2 - 27 | 2.5053 | - 1 - 28 | 2.5044 | - 2 - 30 | 2.5018 |
| 14 | 13A 0046 | 1969 | 3.3044 | + 5 - 14 | 3.2903 | - 9 - 23 | 3.2813 | + 6 - 17 | 3.2869 |
| 15 | 12F 0051 | 1969 | 2.4952 | - 2 - 33 | 2.4622 | - 3 - 36 | 2.4592 | + 3 - 33 | 2.4617 |
| 16 | 13A 0057 | 1969 | 2.5898 | + 4 - 14 | 2.5764 | - 8 - 22 | 2.5675 | + 6 - 16 | 2.5738 |
| 17 | 13A 0058 | 1969 | 3.5998 | + 4 - 19 | 3.5813 | - 9 - 28 | 3.5724 | + 6 - 22 | 3.5784 |
| 18 | 12F 0059 | 1980 | 2.5712 | 0 | 2.5712 | - 4 - 4 | 2.5665 | + 3 - 1 | 2.5698 |
| 19 | 13A 0065 | 1969 | 2.1699 | + 4 - 16 | 2.1541 | - 6 - 22 | 2.1475 | + 4 - 18 | 2.1522 |
| 20 | 12F 0071 | 1980 | 2.4474 | 0 | 2.4474 | - 5 - 5 | 2.4420 | 0 - 5 | 2.4424 |

| NR | ROUTNR | JAAR | B.HGTE | V | M1980 | V | M1982 | V | M1984 |
|----|----------|------|--------|-------------|--------|--------------|--------|--------------------|--------|
| 1 | 12F 0072 | 1980 | 2.0280 | 0 | 2.0280 | - 6 - 6 | 2.0220 | - 1 - 7 | 2.0209 |
| 2 | 12F 0074 | 1969 | 0.2596 | - 9 - 72 | 0.1882 | - 8 - 80 | 0.1804 | - 2 <u>- 82</u> | 0.1783 |
| 3 | 13A 0076 | 1973 | 1.9371 | 0 - 15 | 1.9219 | - 6 - 21 | 1.9156 | + 4 - 17 | 1.9203 |
| 4 | 12F 0077 | 1982 | 3.1206 | | | 0 | 3.1206 | + 4 + 4 | 3.1246 |
| 5 | 12F 0083 | 1980 | 1.4168 | 0 | 1.4168 | - 5 - 5 | 1.4121 | - 1 - 6 | 1.4105 |
| 6 | 08C 0084 | 1969 | 1.7002 | - 1 - 46 | 1.6536 | - 8 - 54 | 1.6456 | - 5 - 59 | 1.6412 |
| 7 | 13A 0097 | 1969 | 2.7188 | - 4 - 43 | 2.6761 | - 5 - 48 | 2.6710 | - 6 <u>- 54</u> | 2.6647 |
| 8 | 12F 0101 | 1980 | 1.7706 | 0 | 1.7706 | - 5 - 5 | 1.7659 | - 1 - 6 | 1.7651 |
| 9 | 12F 0103 | 1980 | 3.3550 | 0 | 3.3550 | - 4 - 4 | 3.3505 | - 1 - 5 | 3.3500 |
| 10 | 13A 0106 | 1969 | 1.6230 | - 7 - 53 | 1.5701 | - 6 - 59 | 1.5642 | - 5 <u>- 64</u> | 1.5587 |
| 11 | 08C 0106 | 1969 | 0.3900 | - 3 - 45 | 0.3448 | - 6 - 51 | 0.3392 | - 5 - 56 | 0.3341 |
| 12 | 13A 0113 | 1969 | 0.4204 | - 5 - 59 | 0.3605 | - 9 - 68 | 0.3524 | - 8 <u>- 76</u> | 0.3439 |
| 13 | 13A 0114 | 1969 | 0.6439 | - 2 - 44 | 0.6001 | - 6 - 50 | 0.5935 | - 3 <u>- 53</u> | 0.5910 |
| 14 | 13A 0118 | 1969 | 0.9920 | - 3 - 43 | 0.9485 | - 6 - 49 | 0.9426 | - 5 <u>- 54</u> | 0.9380 |
| 15 | 08C 0120 | 1969 | 1.5292 | - 5 - 50 | 1.4794 | - 4 - 54 | 1.4750 | - 8 <u>- 62</u> | 1.4673 |
| 16 | 13A 0120 | 1969 | 1.4957 | - 1 - 35 | 1.4605 | - 5 - 40 | 1.4558 | | |
| 17 | 12F 0122 | 1974 | 3.9527 | + 2 - 14 | 3.9390 | - 11 - 25 | 3.9279 | + 1 - 24 | 3.9292 |
| 18 | 12F 0123 | 1978 | 2.8905 | + 3 + 3 | 2.8941 | - 7 - 4 | 2.8871 | + 4 0 | 2.8908 |
| 19 | 13A 0123 | 1969 | 1.3019 | - 7 - 55 | 1.2474 | - 5 - 60 | 1.2421 | - 8 <u>- 68</u> | 1.2344 |
| 20 | 13A 0124 | 1969 | 1.6201 | - 6 - 50 | 1.5695 | - 5 - 55 | 1.5649 | - 8 <u>- 63</u> | 1.5574 |

| NR | BOUENR | JAAR | B.HGTE | V | M1980 | V | M1982 | V | M1984 |
|----|----------|------|---------|-------------|---------|--------------|---------|--------------|--------------------------------|
| 1 | 13A 0125 | 1969 | 1.7480 | - 6 - 53 | 1.6954 | - 7 - 60 | 1.6879 | - 10 - 70 | 1.6782 * |
| 2 | 13A 0127 | 1969 | 1.8262 | - 7 - 54 | 1.7717 | - 6 - 60 | 1.7658 | - 9 - 69 | 1.7568 |
| 3 | 13A 0130 | 1969 | 1.4862 | - 5 - 52 | 1.4339 | - 7 - 59 | 1.4270 | - 10 - 69 | 1.4169 * |
| 4 | 13A 0131 | 1982 | 2.4813 | | | 0 | 2.4813 | - 12 - 12 | 2.4690 * |
| 5 | 08C 0137 | 1969 | 2.2451 | - 5 - 48 | 2.1971 | - 4 - 52 | 2.1934 | - 8 - 60 | 2.1846 |
| 6 | 12F 0140 | 1969 | 3.8252 | + 2 - 22 | 3.8030 | - 9 - 31 | 3.7937 | + 1 - 30 | 3.7953 |
| 7 | 12F 0141 | 1973 | 1.5947 | + 1 - 18 | 1.5769 | - 10 - 28 | 1.5665 | + 8 - 20 | 1.5754 |
| 8 | 12F 0142 | 1973 | 1.5224 | + 1 - 17 | 1.5050 | - 10 - 27 | 1.4945 | + 7 - 20 | 1.5022 |
| 9 | 08C 0150 | 1982 | 1.9066 | | | 0 | 1.9066 | - 7 - 7 | 1.9000 <i>1.9999 NAM/84</i> |
| 10 | 13A 0151 | 1973 | 1.1506 | + 1 - 19 | 1.1321 | - 5 - 24 | 1.1265 | 0 - 24 | 1.1268 |
| 11 | 13A 0154 | 1980 | -0.1059 | 0 | -0.1059 | - 7 - 7 | -0.1131 | 0 - 7 | -0.1127 |
| 12 | 08C 0155 | 1978 | 0.8598 | - 6 - 6 | 0.8540 | - 5 - 11 | 0.8485 | - 9 - 20 | 0.8396 |
| 13 | 13A 0159 | 1984 | 2.6504 | | | | | 0 | 2.6504 |
| 14 | 13A 0160 | 1978 | 2.0959 | + 5 + 5 | 2.1008 | - 11 - 6 | 2.0898 | + 7 + 1 | 2.0973 |
| 15 | 13A 0176 | 1982 | 0.9543 | | | 0 | 0.9543 | + 1 + 1 | 0.9548 |
| 16 | 13A 0180 | 1973 | 1.2460 | 0 - 17 | 1.2292 | - 7 - 24 | 1.2217 | + 4 - 20 | 1.2258 |
| 17 | 13A 0181 | 1973 | 2.2107 | + 2 - 15 | 2.1963 | - 5 - 20 | 2.1910 | + 3 - 17 | 2.1938 |
| 18 | 13A 0182 | 1973 | 0.4991 | + 3 - 16 | 0.4825 | - 5 - 21 | 0.4779 | - 1 - 22 | 0.4770 |
| 19 | 13A 0235 | 1984 | 0.4246 | | | | | 0 | 0.4246 |
| 20 | 13A 1100 | 1969 | 1.1666 | - 6 - 62 | 1.1047 | - 8 - 70 | 1.0974 | - 11 - 81 | 1.0858 * |

| NR | BOUTNR | JAAR | B.HGTE | V | M1980 | V | M1982 | V | M1984 |
|----|----------|------|--------|-------------|--------|--------------|--------|--------------|----------|
| 1 | 08C 1150 | 1974 | 0.8821 | - 6 - 29 | 0.8525 | - 8 - 37 | 0.8452 | - 10 - 47 | 0.8350 * |
| 2 | 08C 1151 | 1984 | 0.3845 | | | | | 0 | 0.3845 |
| 3 | 13A 1169 | 1984 | 0.8653 | | | | | 0 | 0.8653 |
| 4 | 08C 1175 | 1969 | 1.4628 | - 7 - 58 | 1.4051 | - 5 - 63 | 1.3996 | - 12 - 75 | 1.3884 * |
| 5 | 13A 1200 | 1969 | 1.7206 | - 7 - 60 | 1.6610 | - 10 - 70 | 1.6513 | - 12 - 82 | 1.6393 * |
| 6 | 13A 1250 | 1972 | 3.1298 | - 8 - 60 | 3.0704 | - 8 - 68 | 3.0623 | - 12 - 80 | 3.0495 * |
| 7 | 13A 1300 | 1969 | 1.4636 | - 52 | 1.4118 | - 7 - 59 | 1.4046 | - 9 - 68 | 1.3958 |
| 8 | 13A 1400 | 1969 | 1.6300 | - 8 - 60 | 1.5704 | - 7 - 67 | 1.5626 | - 13 - 80 | 1.5499 * |
| 9 | 13A 1500 | 1969 | 1.6266 | - 6 - 55 | 1.5719 | - 8 - 63 | 1.5641 | - 10 - 73 | 1.5540 * |
| 10 | 13A 1550 | 1969 | 1.7255 | - 8 - 68 | 1.6580 | - 10 - 78 | 1.6484 | - 12 - 90 | 1.6361 * |
| 11 | 13A 1600 | 1969 | 1.4586 | - 5 - 53 | 1.4057 | - 8 - 61 | 1.3975 | - 9 - 70 | 1.3889 |
| 12 | 13A 1700 | 1969 | 1.0570 | - 6 - 56 | 1.0005 | - 8 - 64 | 0.9933 | - 9 - 73 | 0.9844 |
| 13 | 13A 1800 | 1969 | 0.5512 | - 2 - 30 | 0.5205 | - 7 - 37 | 0.5139 | - 5 - 42 | 0.5088 |
| 14 | 13A 1900 | 1969 | 1.2664 | - 1 - 34 | 1.2322 | - 4 - 38 | 1.2283 | - 1 - 39 | 1.2266 |
| 15 | 12F 3100 | 1969 | 2.3728 | + 3 - 20 | 2.3525 | - 9 - 29 | 2.3435 | + 2 - 27 | 2.3461 |
| 16 | 12F 3210 | 1969 | 3.1588 | 0 - 22 | 3.1373 | - 6 - 28 | 3.1307 | 0 - 28 | 3.1311 |
| 17 | 12F 3300 | 1969 | 3.1593 | + 2 - 20 | 3.1387 | - 8 - 28 | 3.1305 | + 1 - 27 | 3.1316 |
| 18 | 12F 3400 | 1969 | 3.1638 | + 2 - 21 | 3.1426 | - 8 - 29 | 3.1348 | + 2 - 27 | 3.1370 |
| 19 | 12F 3500 | 1969 | 3.2584 | + 1 - 20 | 3.2380 | - 9 - 29 | 3.2292 | + 2 - 27 | 3.2308 |
| 20 | 12F 3600 | 1969 | 3.0783 | + 2 - 23 | 3.0549 | - 9 - 32 | 3.0457 | + 1 - 31 | 3.0466 |

| NR | BOUTNR | JAAR | B.HGTE | V | M1980 | V | M1982 | V | M1984 |
|----|----------|------|--------|-------------|--------|--------------|--------|-------------|--------|
| 1 | 12F 3700 | 1969 | 3.0774 | + 1 - 19 | 3.0580 | - 9 - 28 | 3.0488 | + 2 - 26 | 3.0508 |
| 2 | 08C 5001 | 1969 | 2.1179 | - 6 - 55 | 2.0634 | - 7 - 62 | 2.0558 | - 8 - 70 | 2.0480 |
| 3 | 13A 5002 | 1978 | 1.9690 | - 3 - 3 | 1.9662 | - 5 - 8 | 1.9614 | - 4 - 12 | 1.9572 |
| 4 | 13A 5003 | 1984 | 1.2638 | | | | | 0 | 1.2638 |
| 5 | 13A 5004 | 1969 | 0.8417 | + 3 - 21 | 0.8209 | - 6 - 27 | 0.8154 | + 1 - 26 | 0.8164 |
| 6 | 13A 5005 | 1980 | 0.6312 | 0 | 0.6312 | - 6 - 6 | 0.6254 | 0 - 6 | 0.6249 |
| 7 | 13A 5006 | 1969 | 1.8147 | + 4 - 16 | 1.7993 | - 4 - 20 | 1.7948 | + 1 - 19 | 1.7962 |
| 8 | 13A 5007 | 1969 | 2.3043 | + 2 - 24 | 2.2802 | - 6 - 30 | 2.2737 | + 3 - 27 | 2.2765 |
| 9 | 13A 5008 | 1969 | 2.2768 | + 2 - 35 | 2.2424 | - 7 - 42 | 2.2346 | + 1 - 41 | 2.2356 |
| 10 | 13A 5009 | 1980 | 0.5301 | 0 | 0.5301 | - 4 - 4 | 0.5255 | 0 - 4 | 0.5262 |
| 11 | 13A 5010 | 1973 | 1.7664 | + 2 - 16 | 1.7503 | - 3 - 19 | 1.7465 | - 1 - 20 | 1.7457 |
| 12 | 13A 5011 | 1969 | 2.5322 | + 4 - 13 | 2.5188 | - 8 - 21 | 2.5114 | + 5 - 16 | 2.5159 |
| 13 | 12F 5012 | 1969 | 2.6472 | + 1 - 22 | 2.6253 | - 9 - 31 | 2.6160 | + 3 - 28 | 2.6191 |
| 14 | 12F 5013 | 1969 | 2.7998 | + 1 - 27 | 2.7734 | - 10 - 37 | 2.7626 | + 3 - 34 | 2.7656 |
| 15 | 12F 5014 | 1976 | 2.3097 | - 1 - 11 | 2.2993 | - 2 - 13 | 2.2970 | - 2 - 15 | 2.2950 |
| 16 | 12F 5015 | 1969 | 2.7807 | - 1 - 31 | 2.7497 | - 5 - 36 | 2.7446 | - 3 - 39 | 2.7418 |
| 17 | 12F 5016 | 1969 | 3.1127 | + 5 - 16 | 3.0967 | - 9 - 25 | 3.0878 | + 2 - 23 | 3.0897 |
| 18 | 12F 5017 | 1969 | 3.1486 | + 8 - 10 | 3.1385 | - 8 - 18 | 3.1308 | + 3 - 15 | 3.1344 |
| 19 | 12F 5018 | 1984 | 3.0440 | | | | | 0 | 3.0440 |
| 20 | 13A 5019 | 1969 | 0.8689 | - 1 - 48 | 0.8208 | - 4 - 52 | 0.8171 | - 4 - 56 | 0.8126 |

| NR | BOUTNR | JAAR | B.HGTE | V | M1980 | V | M1982 | V | M1984 |
|----|----------|------|--------|-------------|--------|--------------|--------|---------------------|----------|
| 1 | 13A 5020 | 1980 | 0.2031 | 0 | 0.2031 | - 6 - 6 | 0.1966 | 0 - 6 | 0.1965 |
| 2 | 12F 5101 | 1969 | 2.7521 | + 2 - 20 | 2.7320 | - 8 - 28 | 2.7243 | + 1 - 27 | 2.7249 |
| 3 | 12F 5102 | 1969 | 2.1399 | + 2 - 20 | 2.1200 | - 10 - 30 | 2.1104 | + 7 - 23 | 2.1174 |
| 4 | 13A 5103 | 1969 | 2.3858 | + 4 - 12 | 2.3738 | - 8 - 20 | 2.3659 | + 5 - 15 | 2.3710 |
| 5 | 12F 5104 | 1969 | 2.8961 | + 4 - 14 | 2.8823 | - 8 - 22 | 2.8741 | + 3 - 19 | 2.8768 |
| 6 | 13A 5105 | 1969 | 0.4591 | 0 - 34 | 0.4249 | - 6 - 40 | 0.4194 | + 1 - 39 | 0.4195 |
| 7 | 08C 5106 | 1969 | 0.4795 | - 1 - 45 | 0.4347 | - 7 - 52 | 0.4279 | - 15 <u>- 67</u> | 0.4132 * |
| 8 | 13A 5201 | 1969 | 0.4946 | + 1 - 31 | 0.4638 | - 6 - 37 | 0.4584 | + 2 - 35 | 0.4596 |
| 9 | 13A 5202 | 1969 | 0.6188 | + 1 - 29 | 0.5896 | - 6 - 35 | 0.5844 | + 1 - 34 | 0.5851 |
| 10 | 13A 5203 | 1973 | 0.5521 | 0 - 19 | 0.5326 | - 6 - 25 | 0.5265 | + 2 - 23 | 0.5292 |
| 11 | 13A 5204 | 1973 | 0.8097 | - 2 - 31 | 0.7791 | - 8 - 39 | 0.7712 | - 2 - 41 | 0.7694 |
| 12 | 13A 5205 | 1972 | 2.7864 | + 22 + 1 | 2.7865 | - 10 - 9 | 2.7772 | + 4 - 5 | 2.7810 |
| 13 | 13A 5401 | 1973 | 1.8105 | + 2 - 18 | 1.7931 | - 5 - 23 | 1.7880 | + 1 - 22 | 1.7894 |
| 14 | 13A 5402 | 1973 | 0.7065 | + 2 - 17 | 0.6901 | - 6 - 23 | 0.6840 | + 1 - 22 | 0.6847 |
| 15 | 13A 5403 | 1978 | 0.3214 | + 2 + 2 | 0.3226 | - 4 - 2 | 0.3191 | - 1 - 3 | 0.3176 |
| 16 | 13A 5404 | 1973 | 1.1834 | + 1 - 16 | 1.1670 | - 6 - 22 | 1.1607 | + 2 - 20 | 1.1629 |
| 17 | 13A 5405 | 1973 | 1.3459 | + 2 - 14 | 1.3318 | - 6 - 20 | 1.3260 | + 2 - 18 | 1.3278 |
| 18 | 13A 5406 | 1973 | 1.4498 | 0 - 17 | 1.4330 | - 6 - 23 | 1.4268 | + 4 - 19 | 1.4310 |
| 19 | 12F 5407 | 1973 | 0.9337 | + 2 - 17 | 0.9166 | - 10 - 27 | 0.9072 | + 7 - 20 | 0.9135 |
| 20 | 12F 9010 | 1973 | 1.5342 | 0 - 27 | 1.5074 | - 8 - 35 | 1.4985 | | |