

A new ³Abraha inscription from the Great Dam of Mārib*

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Forty-three inscriptions and fragments of inscriptions are now visible on the walls of the North Sluice at the Great Dam at Mārib.¹ Some of them have been known since the first European travellers visited Mārib in the nineteenth century,² but a significant number are new to us. With a few exceptions, these inscriptions do not refer to the building of the Great Dam, the stones on which they were carved having simply been re-used as building materials. Among them, we have found dedications from the sanctuaries known as Bar³ān³ and Ḥarūnum, the latter being situated within the city walls of Mārib.⁴ We have also found various fragments of

legal texts.⁵ The implication is that these fragments are much older than the construction date of the North Sluice. But this is not the topic of this paper.

By far the most important find was no longer in the walls of the North Sluice when it was discovered, but lay in the sand, close to the outside of the wall of the Great Basin (Fig. 1, and see Vogt 2004). It is a limestone column, c. 1.30 m high, which is inscribed on all four sides. The author was ³Abraha, the Ethiopian king of Yemen, from whom we have the long inscription recording the breaking of the Great Dam (C 541), which was also erected close to the North Sluice. Our new find

GROSSER DAMM IN MARIB · NORDBAU
SCHEMATISCHER GRUNDRISS STAND: 2 / 04

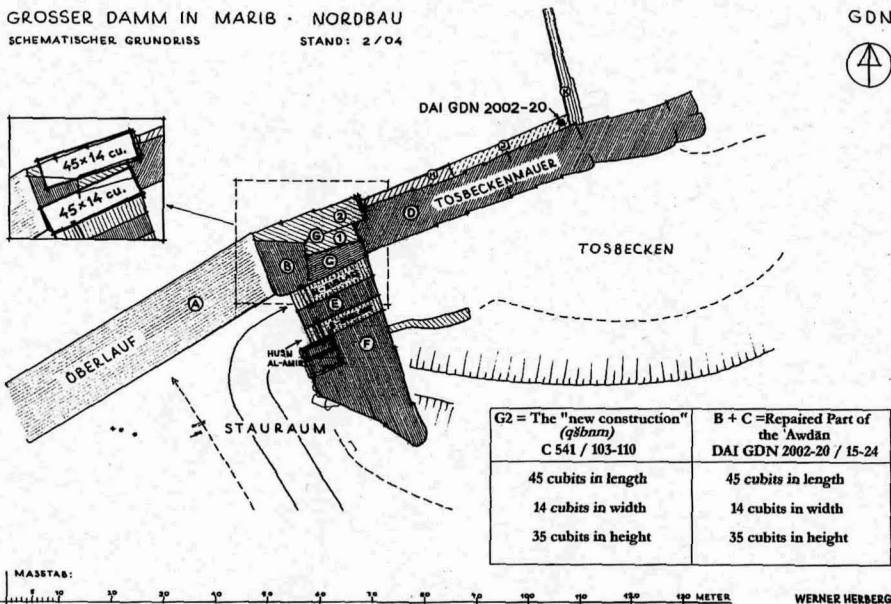


FIGURE 1. A reconstruction of the North Sluice of the Great Dam at Mārib by Werner Herberg, using the epigraphic and archaeological evidence.



Face D



Face C

FIGURE 2a. The new ^oAbraha inscription from the Great Dam at Mārib (DAI GDN 2002-20).

is dated to the year 658 of the Himyarite era, which corresponds to AD 548, and it predates the great inscription of ^oAbraha by one month.

The importance of the new ^oAbraha inscription (DAI GDN 2002-20)

In contrast to the great inscription (C 541), the new

document is much shorter and focuses on a different subject. The central theme of C 541 is ^oAbraha's eleven month sojourn in Mārib (see below), during which the rupture and repair of the Great Dam took place, as well as a series of other historical events. By contrast, our new find concentrates on one theme: the reconstruction of a core part of the North Sluice which was known in Sabaic as ^oAwdān (^owdn). Seven lines (97–103) of C



Face B



Face A

FIGURE 2b. *The new ²Abraha inscription from the Great Dam at Mārib (DAI GDN 2002-20).*

541 also refer to the reconstruction of this central element, but our new find describes it in much more detail.

The new inscription is significant for two reasons. Firstly, the measurements it contains make it possible to identify the element of the dam which ²Abraha was restoring. Secondly, the text provides the name of a new month which is hitherto unattested in the Himyarite inscriptions. This requires not only a re-evaluation of the chronological sequence of the events mentioned in C

541, but also raises the question of whether the Himyarite calendar was really a purely solar calendar, as has previously been thought, or whether it was really a lunisolar calendar requiring an intercalary month.

Monograms (Fig. 2a, Side D)

The stone of side A is heavily eroded. There is also a rectangular area without any writing, as in C 541. In

contrast to C 541, however, the monograms are not inserted into the body of the text but are found all together on side D, without any text. With the help of C 541, we can read these monograms without difficulty. ²Abraha's monograms are in the first line. The second line contains the traditional monograms of the Himyarite kings, which are relatively smaller than ²Abraha's above.⁶ Reading from left to right, the first monogram in line 1, consists of the letters *z-b-y-m-n* which are also found as an epithet of ²Abraha in the body of the text (Side A lines 6–7). Without entering into a detailed discussion of previous interpretations of these letters, I would take them as an Ethiopic intrusion into Sabaic, standing for *zä-bä-yāmān* in Ge'ez (see the discussion below). This is followed by monograms which consist of the letters of ²Abraha's name and his epithet *rmhs*² which can probably be read as *Romaioš*, if this vocalization is correct (Kropp 1991: 137–138).

DAI GDN 2002-20 (Figs. 2a and 2b)

Measurements: 30.5 cm in length, 134 cm in height, 34 cm in width; letter height: 5–6 cm.

Side A

1. *b-hyl/w-n{s}{r}*
2. *w-rd²/rhmn*
3. *m² s'mym*
4. *w-ms² hh{w}*
5. *{h}qh mlk*
6. *n²b{r}h/z{-b-}*
7. *{y}{m}n/mlk/s²*
8. *[b²]/w-d{r}{y}{d}{n}{t}/}*
9. *{w-}[h]{d}rmwt/w-*
10. *[ymn]t/w-²r*
11. *[bh]mw/twd*
12. *[m/w-]th<m>t²w*
13. *[dn/b-]qdm/mqh*
14. *[s²rhh²]/y²f*
15. *[r/w-h]qhhw/b*
16. *n/mw/trhw/zw*

Side B

17. *[r]{m}{²d}{y}{/}{²f}{r}{²s}*
18. *hw²hd/w-²r*
19. *b²y²/mm/w-²rw*
20. *lm/s²-dn/w*
21. *rdm/hms²t/w-²*
22. *rb²y²/mm/w-²r*
23. *b²t²s²r²/mm/r*
24. *hbm/w-hw|hw
| |*

25. *b-qd{m}/wrhn/d-*
26. *hltn/d-l-²mnt*
27. *w-hs²qrhw/b-²*
28. *d²rhw/mbr²m*
29. *b-grbm/w-gyrm*
30. *mbr²m/{d}{-}{h}q*
31. *m/w-k-kl/l*
32. *w/m²s²ndh*
33. *mw/w-mqhhm*

Side C

34. *[w]/b-²[²rmm/w-²]*
35. *b-²rm/w-qdm*
36. *m²qm{n}/wrh*
37. *hw/d-hln*
38. *²h{r}{n}/d-l-²{t}*
39. *mnt/w-h[ms²]*
40. *y/w-s²t{/}m²{t}*
41. *m*

Translation

Lines 1–15: "With the power and the help and the support of Rahmānān, the Lord of heaven, and of his Anointed One, king ²Abraha, who is in Yemen, the King of Sa[ba²] and dhū Raydān and [Ḥa]dramawt and [Yamm]at and their bedouins in the highlands and the lowlands, has built the ²Aw[²dān] [in] front of the building construction of [Shurāḥbi]l Ya²fu[r]."

Lines 15–24: "[And] he [*scil.* ²Abraha] built it from its foundation, (that is to say) the bedrock, up to its highest parts, forty-one cubits (high). And the length which extends in the direction of the wadi is forty-five cubits. And fourteen cubits is the width."

Lines 24–26: "And he carried out the work on its foundation before the month of dhū Ḥillatān in the year eight [i.e. 658]."

Lines 27–31: "And he has erected it with his followers as a building construction in dressed stone and plaster, a building construction which he completed."

Lines 31–41: "And the whole completion of their inscription and their building work on [the dam and (?)] on the bed rock and in front of the outlet was in the month of the Latt[er] dhū Ḥillatān in the year six hundred and fi[ty]-eight."

Short discussion of the text

The text opens with the Christian invocation. However, in contrast to the opening of C 541/2–3 which invokes the Holy Trinity (*rhmn/w-ms²h-hw/w-rh [q]ds²*), here only Rahmānān and his Anointed One (*ms²h-hw*) ap-

pear, with no reference to the Holy Ghost. In addition, 'Abraha's titles are not complete, being restricted to the traditional title of the Himyarite kings, preceded by his epithet *zbymn*, which can only be read according to Ge'ez as zā-bā-yāmān and translated "he who is in Yamān".

These abbreviated invocations and titles have been found before, in 'Abraha's third important inscription, Ry 506, which he had engraved on a rock during a military campaign against rebellious bedouin in Central Arabia, some years later.⁷ An interesting difference between our text and the other two 'Abraha inscriptions is that here 'Abraha is referred to in the third person *singular* and not in the plural form, as is evident from *haqāha* (*hqh*) in line 5.

Grammatically *haqāha* (*hqh*) in line 5 is also the key word of the inscription, the object of which can only be understood as **w[dn]* in lines 12–13. The sentence is complemented by the prepositional phrase [*b-]**qdm/mqh* [*s'rhb*]/*l/y'ff[r]*.

Then follow statements which give the measurements of the repaired part of the 'Awdān. Lines 16–19 give the height of the construction from the bedrock (*zwrn*) to the top, which is 41 cubits. The length in the direction of the wadi — in Sabaic */t/wlm/s'-d/hbn/wrdm*⁸ — which is 45 cubits, is given in lines 19–22. Finally, according to lines 22–24, the construction is 14 cubits wide.

Lines 24–26 state that the foundations were laid before the month of dhū Ḥillatān in the year 658. The building material to be used is also mentioned. In line 29, we read that the work must be made of dressed stones (*grbm*) and plaster (*gyrm*).

The final sentence, beginning in line 31, summarizes where and when the building work was completed. If we accept the restoration of the letters in line 34, for which I must thank Peter Stein (Jena), then the building work was carried out on the dam and on the rocks and in front of the *m'qmn*, which Walter Müller (Marburg) has suggested is the northern outlet. The completion of the work carried out is dated to the month of the Latter dhū Ḥillatān in the year 658.

The passages in C 541 which refer to the new inscription

Lines 97–103 of the great 'Abraha inscription⁹ summarize the content of the new text.

C 541

97. *w-k-ʿs'yhmwʿsʿcʿbn/brhmwʿk*
98. *bw/d-ʿtbr/bnʿwdn/d-tqhwʿf*

99. *b-sʿbʿ/w-ʿqwlwʿp*
100. *lht/knwʿm/mlk*
101. *n/w-nzrhmw/w-k-ʿ*
102. *qbw/bn/tbʿlʿ*
103. *rnʿdy/sʿqrmʿ*

Translation

"After the tribes had restored their loyalty to Him (*scil.* 'Abraha, using the plural form) He repaired (those parts,) which had been broken from the 'Awdān, which Yaʿfur (*scil.* Shurahbi'il Yaʿfur) had erected, together with Sabaʿ, the tribal leaders, who were with the king, and his followers. And He repaired it (*scil.* those parts which had been broken of the 'Awdān) from the excavation into the bedrock up to the highest point."

If we compare these two inscriptions it is easy to recognize that they complement each other. The text of C 541 is more precise in specifying that 'Abraha repaired those parts of the 'Awdān which Shurahbi'il Yaʿfur had erected and which had been broken. On the other hand, the new inscription gives us the height, length and width of the repaired parts.

The identification of the 'Awdān

With this, we come to the central question: which elements of the North Sluice constituted the 'Awdān of Shurahbi'il Yaʿfur, and which parts did 'Abraha repair?

If we look at C 540, the inscription of Shurahbi'il Yaʿfur recording the breaking of the Great Dam, which was written ninety-three years earlier,¹⁰ it does not provide us with any clues. In line 77, this inscription simply states that Shurahbi'il Yaʿfur had erected the 'Awdān with squared stones, but without any information as to its exact location.¹¹ However, a clue to the identification of the 'Awdān is provided by the measurements, not just in our new inscription but also in lines 103–110 of the great inscription of 'Abraha:

C 541

103. ...*w-k-d-w*
104. *zʿw/b-qdmʿwdn/q*
105. *sʿbnm/d-tqhw/b-ʿsʿ*
106. *ʿbn/hmsʿ/w-ʿrbʿyʿ*
107. *ʿmmʿ/ʿlmʿ/w-hmsʿ/w-*
108. *ʿltyʿ/mmʿ/rʿymmʿ/w-ʿ*
109. *rbʿtʿsʿrʿ/mmʿ/rh*
110. *bmʿ/grbm*

Translation

"And that which He (*scil.* 'Abraha, using the plural form) added in front of the 'Awdān is a new construc-

tion which He erected with the tribes, forty-five cubits in length, thirty-five cubits in height and fourteen cubits in width, (erected) with dressed stones."

In these lines, which follow on from the description of the reconstruction work on the 'Awdān, we read that a new part, i.e. qashbānum (*qs²bnm*) in Sabaic, was inserted in front of the 'Awdān. The measurements are given as forty-five cubits long, thirty-five cubits high and fourteen cubits wide.

Werner Herberg, the architect of the restoration campaign, correlated the measurements in the two 'Abraha inscriptions with the architectural evidence. The result can be seen in Fig. 1. It is clear that at times of flood, the northern pillar is the most vulnerable part of the structure and the weakest link in the system. As is evident from Fig. 1, the northern pillar has an irregular structure. Section G was built in front of sections B and C in order to provide a massive reinforcement of the whole construction. In fact, it seems that the complete construction — sections B+C and G — is described in both inscriptions. Werner Herberg identified the parts of the 'Awdān which had been broken, with building sections B and C. Section G, which is mentioned as "a new construction" (*qs²bnm*) in C 541/104–105, was placed as the reinforcement building in front of the 'Awdān.

This was the evidence provided by the first campaign. As a result of the excavation of section G during the second campaign between December 2003 and January 2004, the preliminary interpretation of this section has had to be modified, insofar as section G consists of two separate parts, G1 and G2, both parts serving as a reinforcement to the rear of sections B and C.

Taking the measurements given in both inscriptions as correct, and assuming a mason's cubit of 40 cms, these measurements can only be correlated in a reasonable manner with the actual dimensions of sections B+C and G2. The close-up view in Fig. 1 shows the bases of B+C and G2, each measuring 45 x 14 cubits, projected onto the floor plan. While sections B and C should in fact turn out to be 41 cubits high after having been completely excavated, G2 does not reach the height mentioned in C 541. Architectural details suggest to Werner Herberg a secondary reduction in height soon after the completion of 'Abraha's building project.

This new evidence leads us to a possible identification of the 'Awdān which, as stated in both 'Abraha inscriptions, was built by Shurahḫi'il Ya'fur. If B+C constitute that part of the 'Awdān which was ruptured and are situated at the front of Shurahḫi'il Ya'fur's main structure, then the 'Awdān must be the main architectural element of the North Sluice. In other words, the 'Awdān is the three-pillar construction which must have

consisted of elements B+C, E and F. This three-pillar construction was erected by Shurahḫi'il Ya'fur in the year 565 of the Himyarite Era (AD 455). This evidence is confirmed by many fragments of inscriptions reused as building materials in the pillar walls. A closer look at these inscriptions informs us that they come not only from the time of the Aelius Gallus' expedition but also from later times.

The new month dhū Ḥillatān 'āḥirān and the chronological sequence of events in C 541

Up until now, it has been generally accepted that the Himyarite year was based on the Julian calendar consisting of twelve months, and that it was a solar year and as such did not require an intercalary month.

This opinion was first formulated by A.F.L. Beeston (1974), was reconfirmed by Christian Robin (1998: 124–125) and was also supported by François de Blois (1998) in a thought-provoking paper published in the *Proceedings* some years ago. References to this can be found in the works of certain mediaeval Yemeni authors, such as the almanac of the Rasulid sultan, al-Malik al-Ashraf (Varisco 1994: 64–71). These provide us not only with a complete set of twelve Himyarite month-names in Arabic transcription, but also arrange the months in their correct order with their corresponding equivalents in the Julian calendar.

However, the new 'Abraha inscription shows that we must re-interpret the evidence. In lines 36–41, this inscription is dated to the same year as C 541,¹² i.e. 658 (Himyarite), but in a different month; and in lines 36–38, this month is called dhū Ḥillatān 'āḥir[ān] (*d-ḥltm 'ḥr[n]*), that is to say "the Latter dhū Ḥillatān".

It need hardly be said that *d-ḥltm 'ḥr[n]* must have followed immediately after the month called *d-ḥltm* without a suffix. We can also say definitely that the Latter dhū Ḥillatān is not another name for the following month of dhū Ma'ūn, because the author of C 541 explicitly uses the month-name dhū Ma'ūn. From this, it is evident that the Latter dhū Ḥillatān was the name of a particular month and that, in this year, it was placed between the months dhū Ḥillatān without a suffix, and dhū Ma'ūn. Because the Julian calendar is organized as a solar year consisting of approximately three hundred and sixty five days and only twelve months each with a predetermined duration, we have to assume that this thirteenth month, the Latter dhū Ḥillatān, was intercalary. The purpose of such a thirteenth, intercalary, month is to compensate for the dif-

Himyarite Months	C 541	DAI GDN 2002-20
dhū Qiyāzān	657: assembling of the troops [lines 24ff.]	
dhū Maḡraʿān	(65)7: rupture of the Great Dam [lines 43ff.]	
dhū Khirāfān		
dhū ʿAllān		
dhū Ṣurābān	(65)7: convocation of the tribes [lines 61ff.]; commencement of the repair-work;	
dhū Muhlatān	beginning of work on the foundations of the ʿAwdān. Plague; dismissal of the	
dhū ʿĀlān	tribes; departure for the nearby town of Mārib. Diplomatic missions from abroad; the plague abates; recommencement of	
dhū Diʿāwān	the repair work "during the second (or last) period of dhū Diʿāwān" [line 96]	
dhū Ḥillatān		before (65)8: foundation work on the ʿAwdān is finished
dhū Ḥillatān ʾaḥirān		658: repair work on the ʿAwdān, on the dam and in front of the Maʿqamān is finished
dhū Maʿūn	658: "they completed their work within fifty-eight days and returned within eleven months" [lines 130ff.]	
dhū Thābatān		
dhū Mabkarān		

FIGURE 3. The chronological sequence of events mentioned in C541 and DAI GDN 2002–20.

ference between the 354 days of the twelve lunations and the c. 365 days of the solar year (de Blois 1998: 17).

With this "additional" month gleaned from the recently discovered 'Abraha inscription, we can establish a new and logical chronological sequence of the events recorded in C 541. In the year 657 Himyarite/AD 547, in the month of dhū Qiyāzān, which corresponds to our June, 'Abraha concentrated his troops in his capital Ṣan'ā'. In the following month of the same year, dhū Maḍra'ān, the rupture of Great Dam was reported. The commencement of the repair work was agreed in dhū Ṣurābān, which corresponds to October. Immediately after work began on the foundations of the 'Awdān, there was an outbreak of plague which caused the work to stop. During this interval, 'Abraha dismissed the tribes and left the dam for the nearby town of Mārib where he received diplomatic missions from abroad. Once the plague had abated, the building work was recommenced by the re-assembled tribes in the second or last period of the month dhū Di'āwān.

Up till now, the dating of the chronological sequence of the events has presented great difficulties because of the time periods mentioned at the end of C 541. Firstly, it states that the work was completed within fifty-eight days and secondly that 'Abraha returned to Ṣan'ā' within eleven months, and that that was in the month dhū Ma'ūn in the year 658 Himyarite/AD 548.¹³

If we accept these figures, one thing becomes immediately obvious. Without this new intercalary month, the numbers do not add up. Without the Latter dhū Ḥillatān, it is difficult to accommodate the fifty-eight days if we take into account that the month of dhū Ma'ūn was not a working month, but one in which 'Abraha was returning. And without this intercalary month only ten, and not eleven, months would have elapsed since dhū Qiyāzān, the month in which 'Abraha and his followers departed from their capital.

This problem has been solved with the insertion of the intercalary month. Not only do the 58 days fit the facts without a problem, but also there are exactly eleven months from dhū Ma'ūn to dhū Qiyāzān, the period during which 'Abraha was not resident in his capital.

On the basis of this new situation, we have to reconsider the beginning of the Himyarite year. Christian Robin suggested that it began with the month dhū Thābatān. However his calculations predated the discovery of this intercalary month and were based on very different premises and translations.¹⁴ Mediaeval Yemeni scholars regarded dhū Ṣurābān as the first month of the Himyarite year,¹⁵ but if we accept the time frame of eleven months as stated in C 541, then this also cannot

be correct.

Within the time-frame of the eleven months, the beginning of the year must be after the month of dhū Ṣurābān 657 and before, or in, the month of dhū Ḥillatān of the year 658. I think that the only serious candidate for the beginning of the year is dhū Ḥillatān. A clue may be found in lines 24–26 of our new inscription where it is stated that 'Abraha completed the foundation work before the month of dhū Ḥillatān in the year 658. The purpose of such a statement could be that the author of the inscription wanted to leave no doubt that the foundation work was finished before the first month of the new year.

To turn to a more general conclusion, it has become evident from the new inscription that the Himyarite calendar, which 'Abraha employed in his inscriptions, makes use of an intercalary month and thus is a calendar of the lunisolar type which will presumably also be found in the other civilizations of pre-Islamic South Arabia.

Notes

* This is a slightly revised version of a paper presented at the Seminar for Arabian Studies, in London, in July 2003. In revising it, I have taken into account some of the individual results of the second campaign, between December 2003 and January 2004. A more detailed study, also taking into account the results of the second campaign, will be published in volume 4 of the monograph series *Epigraphische Forschungen auf der Arabischen Halbinsel*, where the epigraphical and philological aspects of the new 'Abraha inscription will be treated in more detail.

¹ This statement is based on the results of the first campaign conducted by the German Archaeological Institute on the North Sluice in March 2002. A catalogue of these inscriptions is in preparation and will be published in the forthcoming volumes of the series *Epigraphische Forschungen auf der Arabischen Halbinsel*.

² Inscriptions from the North Sluice were copied by the Frenchman Thomas J. Arnaud who was the first European to reach Mārib in modern times. He was followed by Joseph Halévy and Eduard Glaser. See C 627, C 385, C 487, and other examples listed in Müller 1982: 129–132.

³ In R 2661 = C 730, which was reused in the western façade of the southern pillar of the North Sluice, we find the name of y^hkrb/bn/s/mhkrb/bn/nnn who appears as the dedicant in numerous versions of one

and the same votive inscription from the Bar'ān temple. See Nebes, forthcoming.

⁴ 'Almaqah, revered in Ḥarūnum, is addressed as [lmaq]htḥwn/w-ṭwrbl/hr[wmm] (DAI GDN-M 02-12/10').

⁵ Most of these belong to the *wf/n*-category of the Middle Sabaic period.

⁶ For the monograms of the Himyarite kings, see Robin 1987: 122–124 and Bāfaqih 1988.

⁷ The inscription from Bi'r Murayghān is dated in the month dhū 'Allān of the year 662 of the Himyarite Era/AD 552.

⁸ I understand the Sabaic wording of this passage as ṭūlum s'ū-ḡahabān wāridum which clearly shows the preposition s' in s'ū-ḡahabān, and wāridum as a participle referring to the preceding ṭūlum.

⁹ For a new translation and excellent photographs of C 541, see Müller 1999: 268–270.

¹⁰ C 540 is dated in the month dhū Di'āw of the year 565 Himyarite/AD 455.

¹¹ C 540/77: w-^cwdn/br^cw/b-m^cr^btm/w-[grbm (?)] "and the 'Awdān He (using the plural, *scil.* Shuraḥbi'il) built with squared and [dressed (?)] stones".

¹² C 541 is dated in the month dhū Ma'ūn of the year 658 Himyarite/AD 548; see n. 13.

¹³ C 541/130-136: w-k[ml]⁽¹³¹⁾w/mqḥhmw/b-ṭmny[ṭ/w-h]⁽¹³²⁾ms'y/ymtm/w-ḡ[lw]⁽¹³³⁾b-hd^cs^cr^cw[rh]⁽¹³⁴⁾m/b-wr^hd-m^cn/d-[l]⁽¹³⁵⁾ṭmnyṭ/w-ḥms^cy/w-s^c(136)ṭ/m^ctm

"and they completed their work within fifty-eight days and returned within eleven months, in the month dhū Ma'ūn of the year six hundred and fifty-eight".

¹⁴ Robin 1981: 45–48; 1998: 125. Robin's interpretation (1981: 47) of the crucial passages (see n. 13) is based on Beeston's translation (1974: 5, n. 9).

¹⁵ Robin 1998: 125. According to al-Malik al-'Ashraf's list, dhū Ṣirāb is the first month of the Himyarite calendar, see Varisco 1994: 41 and 65.

Sigla

C	Inscriptions in <i>Corpus Inscriptionum Semiticarum</i> . Pars IV. <i>Inscriptiones Himyariticas et Sabaicas continens</i> . Paris. 1889–1932.
DAI	Deutsches Archäologisches Institut.
GDN	Großer Damm Nord.
GDN-M	Großer Damm Nord — (in der Mauer (verbaut)).
R	Inscriptions in <i>Répertoire d'épigraphie sémitique</i> . Paris, 1900–1968.
Ry 506	Inscription in Ryckmans 1953.

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