

# Naat'1anii N4ezgi Din4 { eejin Choyoo['9go N7ch'i Bitahg00 ! y0sin 7g7



**Figure 1.** Naat'1anii N44z bich'i di atsinilt'ish bits'33d66' [id k0t'4ego naaniigo dahshoogish yileeh doo hazh0'0 naazhch'i da haleehgo. Haigo t'47 7yis77k0n1t'8h [eh. Diane J. Schmidt.

Din4 [3 biyol d00 bij47yilz0lii asthma woly4h7g7, ch'44h jididziigho hayol dahn1hidiid11h7g70oly4, 47bee bidahodiit'i' azg3 doo ay0o n7da' a[ t' oh da nidi. HaghangOne' d00 n71hg00 t' '00' g00 n7ch' i y1' t' 44h7g7bii' nijigh1ago 47hayol d00 haj47yilz0lii doo b22h t4eh da. Din4 [3 [eejin ay0o chodayoo]'9doo ay0o 79g00 d00 dina'7g7b22. USGS d00 Naat'1anii N4ezgi Din4 Biw0dahgo ) Ita' d00 Ts4gh1hoodz1n7di Din4 Bits'7s Baa ! h1y3 bik'i ad4est'9d66' ahij' adeezhnishgo Naat'1anii N4ezgi haz'1n7gi [eejin hooghangOne' choo'7n7g7n7diilk11'. { eejin bee daak-'7g7d0' bits'33d00 din4 biyol d00 bij47yilz0lii bihodiit'i' i' 7sh 11 ha' n7n7g7b44hodooz88. Na'alkaahgo 47. 1) b44sh bii' k- '7a[ '22 1daat'4ego choo'7n7g7dad'7n0ol'88, 2) aze'e' 1l'98di din4 n1hididziigh7g7bee an1h00t'i'igo b7k1 an7da' alwo' go naaltsoos dabik11'7g7dad'7n0ol'88, 3) [eejin Din4 nidayii[niih7g7d00 nin1dayiieeh7g7nidoolkah, 4) hooghan bii' [eejin chod1o' n7gone' n7ch' i nidadoolkah. ! niid haash9n7tsogo na'7d44kidgo binahj8' b44dahoozin7g747 kwe'4 baa hane' doolee].

Tl'00'g00 doo naazhch'i da haleehgo.—Naat'1anii N44z haz'1n7gi d00 binaag00 nahaz'1n7g00 n7ch' i Din4 yii' neildeeh7g7 doo ts'7d1 n7zh0n7da yileeh nahd66' h0t'11hd66' n7ch' i doo ay0o bii' naazhch'i7g7 h0t'1ahgi niigh1ahgo [id d00 t'1adoole'4 doo y1'1sh0onii n71hg00 [eejin bee atsin7t'ish 1daal'7n7g7bits'33d66' n7ch' i bitah yileehgo t'00 nihi] dashoogishgo 1yiii'8h (fig. 1). Naat'1anii N44z haz'1n7gi d00 binaag00 haigo 7yis77Din4 biyol d00 bij47yilz0lii bidahodiit'i' n1h1dlee. Sh9go 47doo 1t'4e da [eh. Haigo n7ch' i [ahgo 1t'4ego doo ay0o naazhch' i da lko [eejin d00 chizh d00 t'11 ha'1t'7sh9bee daak-'go bilid7g7doo tashoog4esh da.

Ats'7s baa 1h1y33j7aj47yilz0lii bich'8' an1h00t'i' naaltsoos dabik11'7g7.—Naat'1anii N4ezgi aze'e' 1l'9gi din4 ts'7da 12'7ay0o n7daakah 1l' biyol d00 bij47yilz0lii bich'8' an7dahazi' i'7g7biniinaa. Naat'1anii N44z binaadi Din4 k44dahat'7n7g747 doo [3 biyol d00 bij47yilz0lii bich'8' an7dahazi' i' 1l. J0 47n74idi bits1hwiin732di 47w0dahgo dahwiin732go ay0o nidaazhch'ih. ! 1d00 n11n1 [ahgo 47Naat'1anii N44zgi 1[ch7n7ashdla' bin11hai d00 yaago7g7d00 t'11 h0y1anii ashdladiin d00 bi' aan hast33 d00 bil11hg00 b44d11hai7g747[3 biyol d00 bij47yilz0lii bidahodiit'7g7biniinaa. T'11 47k0t'4ego naw0ln7h11l1 1[ch7n7d00 Din4 n11s daazl9'7g747 haigo hooghangOne'4 7yis77nidah1azt'32 [eh. ! [ch7n7'ahdoo ashdla' bin1h1h7g7d00 t'11 h0y1anii ashdadiin d00 bi' aan hast33 d00 n1asj8bin11hai7g7bits'7s doo ay0o ha'1t'7 da y7n7dzil da.



**Figure 2.** D7b44sh bii'k-'7doo [eejin bii' didlid b1 1lyaa da. Veronica Francisco-Lapahie.

B44sh bii' k- '7a[ '22 1daat'4h7g7d00 choo'7n7g7.—{ eejin chojoo['9go 47b44sh bii'k-'7hazh0'0 b1 1daalyaa7g7beezhdi[idgo nizh0n7. 2004y65d33' Din4 nab7d4elkidgo 137 go b44sh bii' k- '7chodaa'7n7g7dan44l'98. 34 go b44sh bii' k- '7doo ay0o sidoo7g7Din4 choo['911. ! 1d00 [ahg00 b44sh bii' k- '7doo dajook1a da, bigh1 dahasdz3 d00 d00 [id7g7 doo hazh0'0 ch'7daaztsxaaz da 1l. D77binahj8' k0t'4ego ch'7honiit'aah doolee]. B44sh bii'k-'7chojoo['9go hasht'e j0singo bii' nin1hojishohgo, d00 [id7g7hazh0'0 t' '00'g00 b1 ch'7n71ago 1j0singo, d00 b44sh bii'k-'7hazh0'0 1daalyaa7g7 chojoo['9go d00 [eejin d00 bileeshch' iih t'11 beehaz'1n7gi 1t'4ego nidaji-jaahgo 47y1'1t'44h (fig. 2).

Na'ask11'7g7binahj8' 47k0t'4ego hazh0'0 hab44sh bii' k- '7baa 1hojily65go hayol d00 haj47yilz0lii doo bihodiidoo't'ih da.

- B44sh bii' k- '7[eejin beezhdi[id7g7bii' h11hojishoh d00 hasht'ej0sin doolee]
- B44sh bii' k- '7bizoo[ jook1ago bee [id nizh0n7go ch'7daaztsxaazgo 1j0sin
- B44sh bii' k- '7[eejin d00 chizh bee didlidgo b1 1daalyaa7g7chojoo['9 { eejin d00 [eeshch' iih baa 1hojily65go nijijaah doolee]

{ eejin naask11'.—Din4 nidab7d44kid7g7747Navajo Mined66' [eejin 7yis77 chojoo['911. Din4 dabighandi [eejin naazhjaa'7g7d00 n747ha' ag4edi [eejin7g7 dan44l'98. { eejin bii' dah0l0n7g7nidaask11'. D77[eejin7g747doo hait'1o da [ahgo 1t'4e da 1l. T'11 ha'1t'7 da bideezla' d00 ba'1t'e' dah0l0n7g7, b44sh naago'7g7, Mercury woly4h7g7, 47doo baahasti'7gi 1dan4elt'e' dabitah da 1l.

{ eejin bileeshch' iih d00 bizhool.—{ eejin dook'32[go bits'33d00 t'1adoole'4 b1dahadzid7g7bileeshch' iih bits'1n7saazgo 1t'4. 8yis77baa hasti'7g747PM<sub>2.5</sub> dei[n7n7g7. S747[eeshch' iih 1daa[ts'7s7go doo daat'98da, 47 0oly4. 8shj33sh9tsigh1 haan7ts1lz [eh. S71ldiingo 1[ts1j7ts' i' go t'11 [1'7go b22h haj7732go 47bee n7tsogo 0oly4. J0 [eeshch' iih 1k0dan7tso bi] adzi-idiigho y4ego baahasti'. S7bi] adziidziigho n747haj47yilz0lii biyi' g0yaaah doolee]. ! adi hadi] bitah shidoogish. S711d00 hats'7ahg00 hats'1n747 biyi' g00 da, d00 haj47d7shjool biyi' g00 da yileeh. Aj47d7shjool ay0o at7'9 USGS-d66' nida' a[kaah7g747 [eejin d00 bileeshch' iih 1dan7tsoo7g7 hooghangOne' dah0l0n7g7 nidei[kaah d00 ha'1t'7sh 1daat'4h7g7 nidei[kaah.

B44dahoozin7g7.—{ eejin choo'7n7g7naalkaahgo bina'anish7g7binahj8 niha'1[ch7n7w0dahgo bidziilgo Olta'77bi] na'anishgo Ohoo'aah d7k7gosh9 haz'3 47y7dahwiidoo[11]. Y1gh1h0k32di nahasdz11n t'1adoole'4 yin11kahgo 1daalyaa 47nahasdz11n bik11' 1dahoot'4h7g7bee haalz7d 47bee na'anish y7dah- wiidoo[11], d00 b7a'ashdla'ii dahnaazhjaa'g00 ats'7s yihodiit'4ehii bina'anish a[d0' y7dahwiidoo[11], d00 ts4 47doodago hadaat'e' a[ '22 11t' eel ahij' nidaalmish naalkaah7g7haash9n7tsogo y7dahwiidoo[11]. S7a[ts0 na'alkaah bina'azhnishgo, 44dahozin7g7nihinaat'1anii d00 Din4 bee bi] 7shj11n 1dooln7. S7bik'ehgo [eejin choo'9Din4 b1 y1'1t'44h doolee[7g7binahodoo't' aal.

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