## 15392000 BIRCH CREEK ABOVE TWELVEMILE CREEK NEAR MILLER HOUSE

LOCATION.--Lat $65^{\circ} 23^{\prime} 33^{\prime \prime}$, Long $145^{\circ} 42^{\prime} 45^{\prime \prime}$, in $\mathrm{NW}^{1} / 4, \mathrm{SW}^{1} / 4, \mathrm{NW}{ }^{1} / 4$ sec.33, T. $7 \mathrm{~N} ., \mathrm{R}$. 10 E., Fairbanks Meridian (Circle B-4 quad), Yukon-Koyukuk Borough, Hydrologic Unit 19040402, on right bank one quarter mile upstream of the Bureau of Land Management Twelvemile wayside parking lot at mile 93.9 of the Steese Highway.
DRAINAGE AREA. --89. $2 \mathrm{mi}^{2}$.
PERIOD OF RECORD.--August 28, 2001 to current year (no winter records).
GAGE.--Water-stage recorder. Elevation of gage is $1,950 \mathrm{ft}$ above sea level, from topographic map.
REMARKS.--Records fair except for estimated daily discharges, which are poor and July $27-28$, 2003 which are poor. GOES satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, $2,100 \mathrm{ft} 3 / \mathrm{s}$, July 27 , 2003 , from rating curve extended above 280 $\mathrm{ft}^{3} / \mathrm{s}$ on basis of slope-area measurement of peak flow, gage height, 48.14 ft. Minimum not determined, occurs during winter.

EXTREMES FOR WATER YEAR 2001.--Maximum and minimum discharges not determined, occurred outside period of record.
EXTREMES FOR WATER YEAR 2002.--Maximum discharge, $1,460 \mathrm{ft}^{3} / \mathrm{s}$, June 11 , gage height, 46.88 ft , minimum not determined occurs during winter.

EXTREMES FOR WATER YEAR 2003.--Maximum discharge, $2,100 \mathrm{ft}^{3} / \mathrm{s}$, July 27 , from rating curve extended above $280 \mathrm{ft} / \mathrm{s}$ on basis of slope-area measurement of peak flow, gage height, 48.14 ft. Minimum not determined, occurs during winter.

EXTREMES FOR WATER YEAR 2004.--Maximum discharge, $810 \mathrm{ft}^{3} / \mathrm{s}$, May 30 , gage height, 45.33 ft , minimum not determined occurs during winter.

DISCHARGE, CUBIC FEET PER SECOND,WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 94 |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- | -- | --- | 88 |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 85 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 81 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- | -- | -- | 90 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 90 |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 87 |
| 8 | -- | --- | --- | --- | --- | --- | --- | --- | --- | -- | --- | 83 |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | -- | --- | 81 |
| 10 | --- | --- | --- | --- | --- | --- | -- | --- | --- | -- | -- | 78 |
| 11 | -- | --- | --- | -- | --- | --- | --- | --- | --- | --- | --- | 75 |
| 12 | --- | --- | --- | - | -- | --- | - | -- | --- | - | - | 73 |
| 13 |  | --- | --- | --- | --- | --- | --- | --- | --- | -- | --- | 70 |
| 14 | --- | -- | --- | -- | -- | --- | --- | -- | --- | --- | -- | 65 |
| 15 | --- | -- | --- | -- | -- | --- | --- | -- | --- | - - | --- | 62 |
| 16 | -- | - | - | --- | - | --- | - | - | --- | --- | - | 59 |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 56 |
| 18 | -- | --- | --- | - | --- | --- | --- | --- | --- | -- | --- | 54 |
| 19 | - | --- | - | --- | - | --- | --- | --- | - | --- | --- | 52 |
| 20 | --- | -- | --- | --- | -- | --- | --- | --- | --- | --- | --- | 50 |
| 21 | - | - | --- | - | --- | --- | -- | --- | --- | --- | --- | 49 |
| 22 | --- | --- | --- | - | --- | --- | --- | --- | --- | --- | --- | 47 |
| 23 | --- | --- | --- | --- | --- | -- | --- | --- | --- | - | --- | 46 |
| 24 | -- | --- | --- | -- | --- | --- | --- | --- | --- | -- | --- | 42 |
| 25 | --- | --- | --- | -- | --- | --- | --- | --- | --- | -- | --- | 39 |
| 26 | -- | -- | -- | - | --- | --- | --- | --- | --- | --- | --- | 39 |
| 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 37 |
| 28 | --- | --- | --- | -- | --- | --- | --- | --- | --- | --- | 115 | 34 |
| 29 | --- | --- | --- | -- | --- | --- | --- | --- | --- | - | 110 | 33 |
| 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 101 | 32 |
| 31 | --- | --- | --- | -- | --- | --- | -- | --- | --- | --- | 100 | --- |
| TOTAL | --- | -- | --- | - | --- | --- | --- | --- | --- | -- | -- | 1871 |
| MEAN | --- | --- | --- | -- | -- | --- | -- | --- | --- | - | --- | 62.4 |
| MAX | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |  | 94 |
| MIN | -- | - | - | - | - | --- | - | - | - | --- |  | 32 |
| MED | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |  | 60 |
| AC-FT | --- | --- | --- | -- | --- | --- | -- | --- | --- | --- | --- | 3710 |
| CFSM | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 0.70 |
| IN. | --- | --- | --- |  |  |  |  |  | -- |  | -- | 0.78 |

## YUKON ALASKA

15392000 BIRCH CREEK ABOVE TWELVEMILE CREEK NEAR MILLER HOUSE—Continued

| DAY | ост | nov | DEC | JAN | FEB | MAR | APR | MAY | Jun | JUL | AUG | SEP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 33 | --- | --- | --- | --- | --- | --- | --- | 122 | 27 | 75 | 110 |
| 2 | 33 |  |  |  | --- | --- |  | --- | 174 | 30 | 65 | 116 |
| 3 |  |  |  |  | --- | --- | --- | --- | 157 | 232 | 55 | 105 |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | 134 | 331 | 48 | 102 |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | 136 | 203 | 42 | 104 |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | 128 | 235 | 36 | 133 |
| 7 | --- | - | --- | --- | --- | --- | --- | --- | 114 | 212 | 34 | 244 |
| 8 | --- | - |  | --- | --- | --- | --- | --- | 113 | 145 | 36 | 204 |
| 9 | --- | --- |  | --- | --- | --- | --- | --- | 102 | 104 | 43 | 177 |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | 145 | 83 | 54 | 153 |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | 1130 | 69 | 69 | 135 |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | 773 | 76 | 79 | 130 |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | 504 | 96 | 95 | 116 |
| 14 | --- | - |  | --- | - | --- |  | --- | 306 | 77 | 104 | 105 |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | 198 | 63 | 95 | 97 |
| 16 | --- | --- | --- | --- | --- | --- | --- | 519 | 144 | 53 | 145 | 90 |
| 17 | --- | --- | --- | --- | --- | --- | --- | 508 | 115 | 44 | 339 | 86 |
| 18 | --- | - |  | --- | --- | --- | --- | 584 | 98 | 37 | 395 | 85 |
| 19 | --- | - |  |  |  |  |  | 590 | 91 | 157 | 386 | 88 |
| 20 | --- | --- | --- | --- | --- | --- | --- | 710 | e85 | 254 | 274 | 89 |
| 21 | --- | --- | --- | --- | --- | --- | --- | 750 | e80 | 135 | 198 | 85 |
| 22 | --- | - | --- | --- | --- | --- | --- | 602 | e91 | 111 | 218 | 79 |
| 23 | --- | - |  | --- | --- | --- | --- | 499 | e80 | 82 | 222 | 76 |
| 24 | --- | --- | --- | --- | --- | --- | --- | 398 | e60 | 67 | 272 | 73 |
| 25 | --- | --- |  | --- | --- | --- | --- | 343 | 45 | 63 | 265 | 74 |
| 26 | --- | - | --- | --- | --- | --- | --- | 319 | 54 | 109 | 192 | 74 |
| 27 | --- | - | --- | --- | --- | --- | --- | 214 | 48 | 140 | 164 | 84 |
| 28 | --- | -- |  | --- | --- | --- | --- | 129 | 40 | 239 | 156 | 87 |
| 29 | --- | ¥0.4 | --- | --- | --- | --- | --- | 107 | 35 | 168 | 129 | 87 |
| 30 | --- | --- |  | --- | --- | --- | --- | 104 | 30 | 118 | 108 | 87 |
| 31 | --- | --- | --- | --- | --- | --- | --- | 115 | -- | 91 | 100 | - |
| total | --- | - | --- | --- | --- | --- | --- | --- | 5332 | 3851 | 4493 | 3275 |
| MEAN | --- | --- | --- | --- | --- | --- | --- | --- | 178 | 124 | 145 | 109 |
| MAX |  | --- | --- | --- | --- | --- | --- |  | 1130 | 331 | 395 | 244 |
| MIN |  | --- | --- | --- | --- | --- | --- |  | 30 | 27 | 34 | 73 |
| MED |  | --- | --- | --- | --- | --- | --- |  | 113 | 104 | 104 | 94 |
| AC-FT | --- | --- | --- | --- | --- | --- | --- | -- | 10580 | 7640 | 8910 | 6500 |
| CFSM | ---- | - | ---- | ---- | ---- | ---- | --- | --- | 1.99 | 1.39 | 1.62 | 1.22 |
| IN. |  |  |  |  |  |  |  |  |  |  |  | 1.37 |

e Estimated
Result of discharge measurement

15392000 BIRCH CREEK ABOVE TWELVEMILE CREEK NEAR MILLER HOUSE—Continued

| discharge, CUbic feet per Second, Water year october 2002 to September 2003 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DAY | ост | nov | Dec | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
| 1 | 86 | --- | --- | --- | --- | --- | --- | e135 | 248 | 39 | 365 | 636 |
| 2 | 83 |  | - | --- | --- | --- | --- | e120 | 184 | 36 | 271 | 1050 |
| 3 | 79 | --- | \$13 | --- | --- | --- | --- | e110 | 173 | 37 | 244 | 750 |
| 4 | 75 | --- |  | --- | --- | --- | --- | e100 | 162 | 35 | 304 | 554 |
| 5 | 64 | --- | --- | --- | --- | --- | --- | e90 | 138 | 31 | 244 | 501 |
| 6 | 38 | --- | --- | --- | --- | --- | --- | e100 | 270 | 38 | 198 | 434 |
| 7 | 75 | --- | --- | --- | --- | --- | --- | e110 | 341 | 71 | 141 | 390 |
| 8 | 65 | --- | --- | -- | --- | --- | --- | 139 | 249 | 73 | 100 | 346 |
| 9 | 51 | - | --- | --- | --- | --- | --- | 201 | 177 | 57 | 75 | 297 |
| 10 | 50 | --- | --- | --- | --- | --- | --- | 250 | 134 | 44 | 57 | 261 |
| 11 | 35 | --- | --- | --- | --- | --- | --- | 236 | 119 | 39 | 44 | 295 |
| 12 | 53 | --- | --- | --- | --- | --- | --- | 240 | 82 | 37 | 36 | 333 |
| 13 | 45 | --- | --- | --- | --- | --- | --- | 297 | 64 | 36 | 30 | 257 |
| 14 | 27 | - | --- | --- | --- | --- | --- | 219 | 52 | 46 | 25 | 206 |
| 15 | 41 | --- | --- | --- | --- | --- | --- | 181 | 46 | 212 | 22 | 178 |
| 16 | 20 | --- | --- | --- | --- | --- | --- | 151 | 40 | 274 | 19 | 163 |
| 17 | 20 | --- | --- | --- | --- | --- | --- | 112 | 39 | 283 | 16 | 134 |
| 18 | --- | --- | --- | --- | --- | --- | --- | 106 | 40 | 254 | 13 | 121 |
| 19 | --- | --- | --- | --- | --- | --- | --- | 109 | 34 | 160 | 14 | 115 |
| 20 | - | --- | --- | --- | --- | --- | --- | 138 | 27 | 117 | 15 | 105 |
| 21 | --- | --- | --- | --- | --- | --- | --- | 141 | 25 |  | 16 |  |
| 22 | --- |  | --- |  |  |  |  | 124 | 25 | 77 | 13 | 87 |
| 23 | --- | --- | --- | --- | --- | --- | --- | 120 | 23 | 67 | 14 | 72 |
| 24 | --- | --- | --- | --- | --- | --- | --- | 134 | 30 | 59 | 22 | 56 |
| 25 | --- | --- | --- | --- | --- | --- | --- | 135 | 63 | 54 | 44 | 69 |
| 26 | --- | --- | --- | --- | --- | --- | --- | 173 | 46 | 66 |  |  |
| 27 | - |  | --- |  | --- | --- |  | 251 | 66 | 970 | 43 | 64 |
| 28 | - | --- | --- | --- | --- | --- | --- | 273 | 77 | 960 | 35 | 55 |
| 29 | --- | - | --- | --- | --- | --- | --- | 310 | 60 | 420 | 30 | 56 |
| 30 | --- | --- | --- | --- | --- | --- |  | 270 | 47 | 295 | 28 | 57 |
| 31 | --- | --- | --- | --- | --- | --- | --- | 276 | --- | 415 | 36 | - |
| TOTAL | - | - | --- | --- | --- | --- | --- | 5351 | 3081 | 5396 | 2559 | 7809 |
| MEAN | - | - | --- | --- | --- | --- | --- | 173 | 103 | 174 | 82.5 | 260 |
| MAX |  | - |  | --- | --- | --- | --- | 310 | 341 | 970 | 365 | 1050 |
| MIN |  | - |  | --- | --- | --- | --- | 90 | 23 | 31 | 13 | 55 |
| MED |  | - |  | --- | --- | --- | --- | 139 | 64 | 67 | 36 | 170 |
| AC-FT | --- | - | --- | --- | --- | --- | --- | 10610 | 6110 | 10700 | 5080 | 15490 |
| CFSM | - | --- | --- | --- | --- | --- | --- | 1.94 | 1.15 | 1.95 | 0.93 | 2.92 |
| IN. | --- | --- | --- | -- | --- | --- | --- | 2.23 | 1.28 | 2.25 | 1.07 | 3.26 |

$\ddagger \quad$ Estimated
Result of discharge measurement

15392000 BIRCH CREEK ABOVE TWELVEMILE CREEK NEAR MILLER HOUSE—Continued

| 004 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DAY | ост | Nov | Dec | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUg | SEP |
| 1 | 55 | --- | --- | --- | --- | --- | --- | -- | 431 | 14 | 122 | 23 |
| 2 | 50 |  |  | --- |  | --- |  |  | 293 | 14 | 140 | 26 |
| 3 | 49 | --- | --- | --- | --- | --- | --- | --- | 255 | 15 | 98 | 24 |
| 4 | 47 | --- | --- | --- | --- | --- | --- | --- | 184 | 23 | 76 | 23 |
| 5 | 43 | --- | --- | --- | --- | --- | --- | --- | 152 | 20 | 65 | 23 |
| 6 | 42 | -- | --- | --- | --- | --- | --- | --- | 122 | 23 | 57 | 22 |
| 7 | 39 | --- | --- | --- | --- | --- | --- | --- | 97 | 19 | 50 | 21 |
| 8 | 37 | --- | --- | --- | --- | --- | --- | --- | 82 | 17 | 44 | 21 |
| 9 | 38 | --- | --- | --- | --- | -- | --- | --- | 75 | 16 | 40 | 20 |
| 10 | 38 | --- | --- | --- | --- | --- | --- | --- | 60 | 17 | 38 | 19 |
| 11 | --- | --- | --- | --- | --- | --- | --- | -- | 49 | 15 | 36 | 19 |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | 40 | 13 | 34 | 18 |
| 13 | --- |  |  |  |  | --- | --- | 528 | 35 | 13 | 32 | 18 |
| 14 | --- | --- | --- | --- | --- | --- | --- | 566 | 46 | 13 | 31 | 18 |
| 15 | --- | --- | --- | --- | --- | --- | --- | 635 | 73 | 13 | 30 | 16 |
| 16 | - | --- | --- | --- | --- | --- | --- | 641 | 57 | 17 | 28 | 15 |
| 17 | --- | --- | --- | --- | --- | --- | --- | 573 | 45 | 17 | 27 | 15 |
| 18 | --- |  |  | --- |  | --- |  | 488 | 37 | 15 | 27 | 13 |
| 19 | --- | --- | --- | --- | --- | --- | --- | 384 | 34 | 16 | 26 | e14 |
| 20 | --- |  | --- | --- | --- | --- | --- | 214 | 30 | 19 | 25 | e15 |
| 21 | --- | --- | --- | --- | --- | --- | --- | 168 | 26 | 52 | 25 | e15 |
| 22 | - | --- | --- | --- |  | --- |  | 207 | 24 | 51 | 25 | e15 |
| 23 | - |  | --- | --- |  | --- |  | 253 | 22 | 92 | 25 | e15 |
| 24 | - | --- | --- | --- | --- | --- | --- | 559 | 18 | 79 | 25 | e15 |
| 25 | - |  |  | --- |  | --- | --- | 562 | 18 | 81 | 24 | e14 |
| 26 | - | --- | --- | --- | --- | --- | --- | 369 | 18 | 107 | 24 | e14 |
| 27 | - |  |  |  |  |  |  | 270 | 17 | 80 | 23 | e15 |
| 28 | - | --- | --- | --- | --- | --- | --- | 298 | 15 | 71 | 23 | e15 |
| 29 | --- | --- | --- | --- | --- | --- | --- | 357 | 14 | 73 | 23 | \$15 |
| 30 | --- |  |  |  |  | --- | --- | 625 | 14 | 77 | 22 | e15 |
| 31 | --- | --- | --- | --- | --- | --- | --- | 402 |  | 91 | 21 |  |
| total | --- | --- | --- | --- | --- | --- |  | --- | 2383 | 1183 | 1286 | 531 |
| MEAN | --- |  | --- | --- | --- | --- | --- | --- | 79.4 | 38.2 | 41.5 | 17.7 |
| MAX |  | --- | --- | --- | --- | --- | --- |  | 431 | 107 | 140 | 26 |
| MIN |  |  | --- | --- | --- | --- | --- |  | 14 | 13 | 21 | 13 |
| MED |  |  | --- | --- | --- | --- | --- |  | 42 | 19 | 28 | 16 |
| AC-FT | --- | --- | --- | --- | --- | --- | --- | --- | 4730 | 2350 | 2550 | 1050 |
| ${ }_{\text {CFSM }}$ | - | --- | --- | --- | --- | --- | --- | --- | 0.89 | 0.43 | 0.47 | 0.20 |
| In. | - | --- | --- |  |  | --- |  |  | 0.99 | 0.49 | 0.54 | 0.22 |

e Estimated

