Selection on two indexed columns (a character and a date)

Code

```
Data credit_sasma;
    set SASMAHIS.SASMA_ACCOUNT_HISTORY
(where=(account_number='0010010000000001401' and Obs_Date =
'12JAN2023'd));
run;
```

Log – sub 1 second runtime

```
28         Data credit_sasma;
29             set SASMAHIS.SASMA_ACCOUNT_HISTORY
(where=(account_number='0010010000000001401' and Obs_Date =
'12JAN2023'd));
30         run;

NOTE: There were 1 observations read from the data set
SASMAHIS.SASMA_ACCOUNT_HISTORY.
      WHERE (account_number='0010010000000001401') and
(Obs_Date='12JAN2023'D);
NOTE: The data set WORK.CREDIT_SASMA has 1 observations and 850
variables.
NOTE: Compressing data set WORK.CREDIT_SASMA increased size by
100.00 percent.
      Compressed is 2 pages; un-compressed would require 1 pages.
NOTE: DATA statement used (Total process time):
      real time           0.08 seconds
      cpu time            0.02 seconds
```

Selection indexed column - date formatted column

Code

```
Data credit_sasma;
    set SASMAHIS.SASMA_ACCOUNT_HISTORY (where=(Obs_Date =
'12JAN2023'd));
run;
```

Log – 1 minute 22 seconds

```
28         Data credit_sasma;
29             set SASMAHIS.SASMA_ACCOUNT_HISTORY (where=(Obs_Date =
'12JAN2023'd));
30         run;

NOTE: There were 2789161 observations read from the data set
SASMAHIS.SASMA_ACCOUNT_HISTORY.
      WHERE Obs_Date='12JAN2023'D;
NOTE: The data set WORK.CREDIT_SASMA has 2789161 observations and
850 variables.
NOTE: Compressing data set WORK.CREDIT_SASMA decreased size by 67.65
percent.
      Compressed is 60148 pages; un-compressed would require 185945
pages.
NOTE: DATA statement used (Total process time):
      real time           1:22.18
      cpu time            1:20.71
```

Selection on two indexed character columns

```
Data credit_sasma;
    set SASMAHIS.SASMA_ACCOUNT_HISTORY
(where=(account_number='0010010000000001401' and
logo_desc='FOSCHINI'));
run;
```

Log – 21 seconds

```
28         Data credit_sasma;
29             set SASMAHIS.SASMA_ACCOUNT_HISTORY
(where=(account_number='0010010000000001401' and
logo_desc='FOSCHINI'));
30         run;

NOTE: There were 37 observations read from the data set
SASMAHIS.SASMA_ACCOUNT_HISTORY.
      WHERE (account_number='0010010000000001401') and
(logo_desc='FOSCHINI');
NOTE: The data set WORK.CREDIT_SASMA has 37 observations and 850
variables.
NOTE: Compressing data set WORK.CREDIT_SASMA decreased size by 0.00
percent.
      Compressed is 3 pages; un-compressed would require 3 pages.
NOTE: DATA statement used (Total process time):
      real time            0.21 seconds
      cpu time             0.04 seconds
```

Table Indexes

Library Name	Member Name	Member Type	Column Name	Column Index Type	Index Name	Position of Column in Concatenated Key	Nomiss Option	Unique Option
SASMAHIS	SASMA_ACCOUNT_HISTORY	DATA	Account_Number	COMPOSITE	numname	0	yes	no
SASMAHIS	SASMA_ACCOUNT_HISTORY	DATA	OBS_DATE	COMPOSITE	numname	19	yes	no
SASMAHIS	SASMA_ACCOUNT_HISTORY	DATA	LOGO_DESC	SIMPLE	LOGO_DESC	.	no	no
SASMAHIS	SASMA_ACCOUNT_HISTORY	DATA	Account_Status	SIMPLE	Account_Status	.	no	no
SASMAHIS	SASMA_ACCOUNT_HISTORY	DATA	OBS_DATE	SIMPLE	OBS_DATE	.	no	no
SASMAHIS	SASMA_ACCOUNT_HISTORY	DATA	Account_Number	SIMPLE	Account_Number	.	no	no