

SQL Report – Samples – How to keep last parameter values in SQL Query Report

Summary	
Module	Universal functions
Level	Advanced
Requirements	B1UP 2015.08 or higher

Description

This sample will show you how to keep the last parameter values entered so that there is no need to enter the value every time. You will only need to update the fields required if you need changes.

Pre-Requisite

In this example we have a query on Sales Orders information with 4 parameters, 'From Date', 'To Date', 'From BP' & 'To BP' please see query below.

```
SELECT T0.[DocDate], T0.[CardCode], T0.[CardName], T0.[DocNum], T0.[DocTotal]
FROM ORDR T0
WHERE T0.[DocDate] >[%0] AND T0.[DocDate] <[%1] AND T0.[CardCode] >[%2] AND
T0.[CardCode] <[%3]
```

This Query when run will pop up the following screen prompting user to fill in the values every time. If user wants to run it with a different set of BPs then they have to enter the Dates again.

So in order to help user to save this hassle, we will first create a User-Defined Table with 4 fields. Each field will correspond with each of the parameters and put in some values to start.

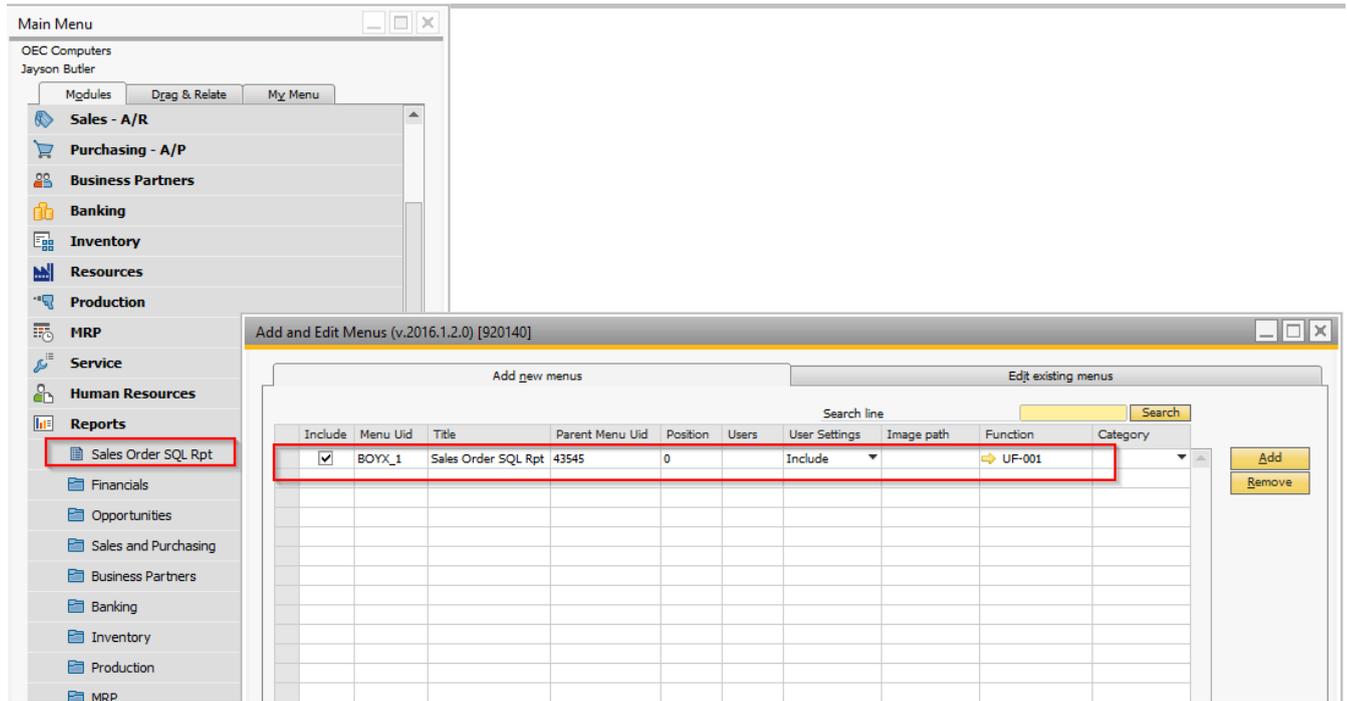
#	Code	Name	From Date	To Date	From BP	To BP
1	0001	0001	01/01/2007	02/17/2017	C30000	C50000
2						

In my example above I called it QRY_PARA which means in SAP it is called @QRY_PARA

Note: you are welcome to call it something else but please remember to change the table name in the query below.

Add and Edit Menu

We will now create a Menu Item for the SQL Report. (**Note:** you can assign this function to a button or any other Validation event, it is optional to create a menu item)



Under the Function Column, we will create our new Universal Functions.

Universal Functions

We will create a Universal Function of the type SQL Report. We will create 4 variables making them equal to the fields from the User-Defined Table that we just created. The Query is as below:

```
Declare @fromdate datetime = (select U_FromDate from SBODemoUS.dbo.[@QRY_PARA])
Declare @todate datetime = (select U_ToDate from SBODemoUS.dbo.[@QRY_PARA])
Declare @fromBP nvarchar(20) = (select U_FromBP from SBODemoUS.dbo.[@QRY_PARA])
Declare @toBP nvarchar(20) = (select U_ToBP from SBODemoUS.dbo.[@QRY_PARA])
```

```
SELECT T0.[CardCode], T0.[DocDate], T0.[CardName], T0.[DocNum], T0.[DocTotal]
FROM ORDR T0
WHERE T0.[DocDate] >= @fromdate AND T0.[DocDate] <= @todate
AND T0.[CardCode] >= @fromBP AND T0.[CardCode] <= @toBP
```

We also need to make sure select the Refresh Data Button option.

B1 Usability Package Sample

Universal Function Configuration (v.2016.1.2.0) [920140]

Code: UF-001 Remarks:
 Name: Sales Order
 Type: SQL Report Category:
 Form Title: Sales Order SQL Report Form State: Normal
 Width/Height: 800 | 600 Collapse Level: 0 (No grouping)
 View type: Grid Format: Wizard ?

SQL

```

Declare @fromdate datetime = (select U_FromDate from SBODemoUS.dbo.[@QRY_PARA])
Declare @todate datetime = (select U_ToDate from SBODemoUS.dbo.[@QRY_PARA])
Declare @fromBP nvarchar(20) = (select U_FromBP from SBODemoUS.dbo.[@QRY_PARA])
Declare @toBP nvarchar(20) = (select U_ToBP from SBODemoUS.dbo.[@QRY_PARA])

SELECT T0.[CardCode], T0.[DocDate], T0.[CardName], T0.[DocNum], T0.[DocTotal]
FROM ORDR T0
WHERE T0.[DocDate] >= @fromdate AND T0.[DocDate] <= @todate
AND T0.[CardCode] >= @fromBP AND T0.[CardCode] <= @toBP
  
```

CRM for Outlook

SQL Variables: Wizard ?

Start Collapsed Fixed col. count: 1 Select Data Target: ?

Banded row color Refresh option: Refresh Data Button First column is selection checkbox

Auto Refresh: Do not auto-refresh Formtype Suffix: UF-001 ? Import Export

OK Cancel

Next we will run this SQL report. When the Report is displayed, we will right click and select 'B1 Usability Pack' > Add or Edit Function Button.

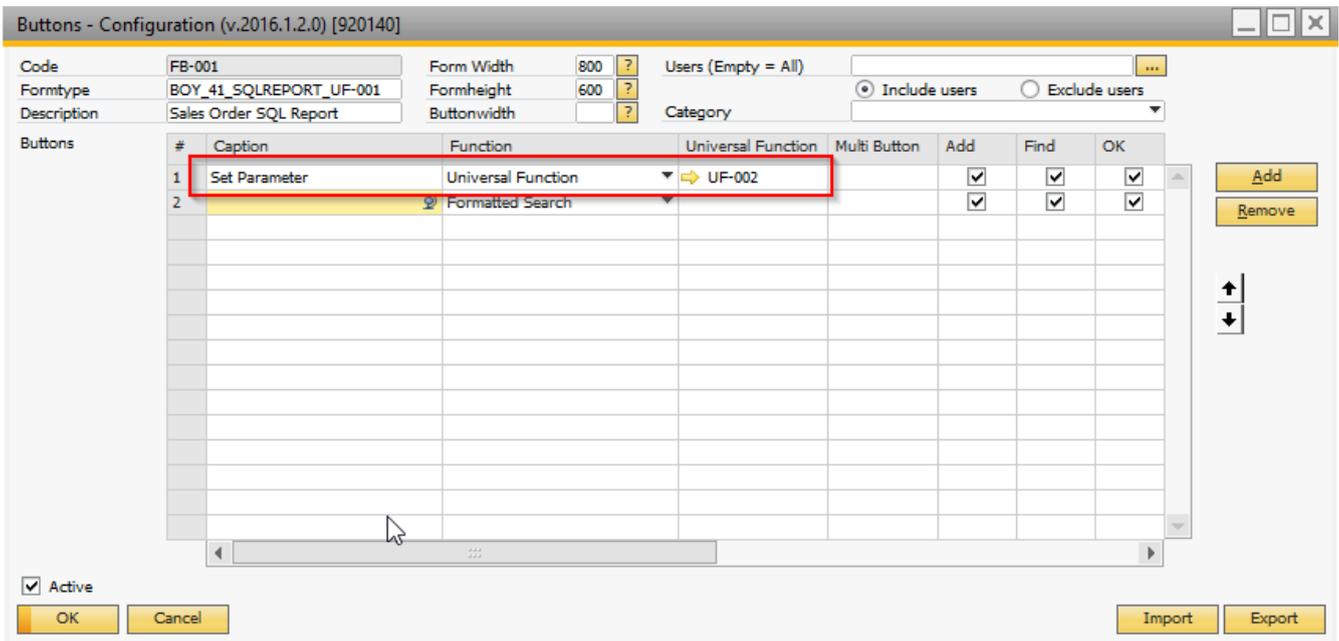
Sales Order SQL Report

CardCode	DocDate	CardName	DocNum	DocTotal
C30000	01/11/2007	Microchips	61	49,795.00
C40000	01/14/2007	Earthshaker Corporation		
C42000	01/17/2007	Mashina Corporation		
C50000	01/20/2007	ADA Technologies		
C30000	02/09/2007	Microchips		
C40000	02/12/2007	Earthshaker Corporation		
C42000	02/15/2007	Mashina Corporation		
C50000	02/18/2007	ADA Technologies		
C30000	03/13/2007	Microchips		
C40000	03/16/2007	Earthshaker Corporation		
C42000	03/19/2007	Mashina Corporation		
C50000	03/22/2007	ADA Technologies		
C30000	04/28/2007	Microchips		
C40000	05/13/2007	Earthshaker Corporation		
C42000	05/18/2007	Mashina Corporation		
C50000	05/23/2007	ADA Technologies		
C30000	06/28/2007	Microchips		
C40000	07/05/2007	Earthshaker Corporation		
C42000	07/09/2007	Mashina Corporation		
C50000	07/15/2007	ADA Technologies		
C30000	08/17/2007	Microchips	101	4,749.47
C40000	08/22/2007	Earthshaker Corporation	102	7,357.50
C42000	08/26/2007	Mashina Corporation	103	9,142.50

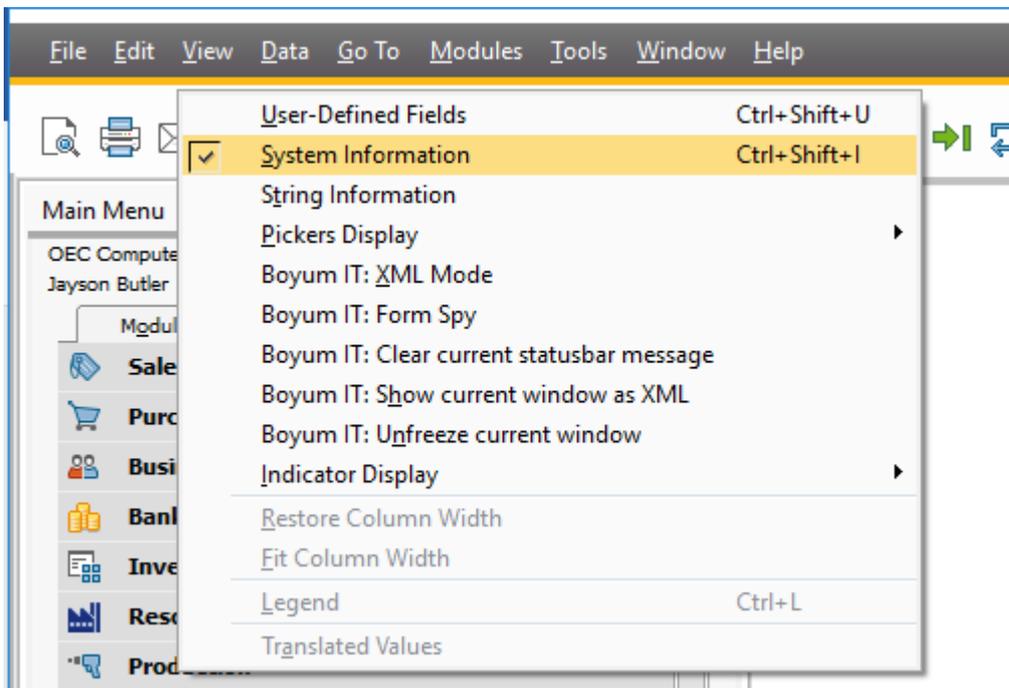
Right-click context menu options:

- Copy
- Copy system information
- Maximize/Restore Grid
- B1 Usability Package
- Add B1 Validation configuration
- Edit function buttons on this window**
- Make this column mandatory
- Add Help Information
- Create Template
- Get template...
- Make Items Read Only...
- Add Right-Click Menus to this window
- Edit this SQL Report configuration
- Refresh
- Filter Table

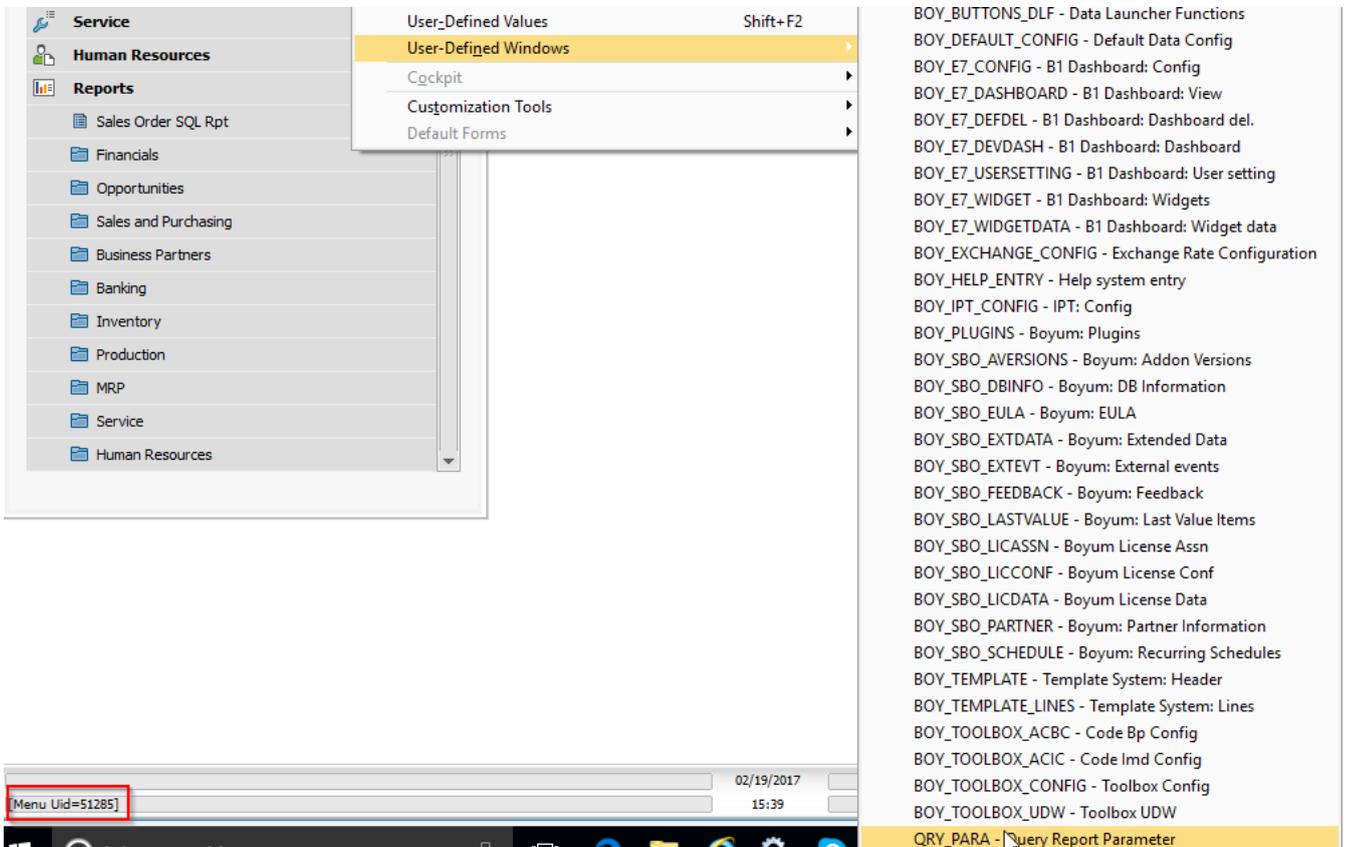
Then in the Button Configuration, we give the button a name and assign a new Universal Button which Open the User-Defined Table. This will allow user to Update the values of the parameter.



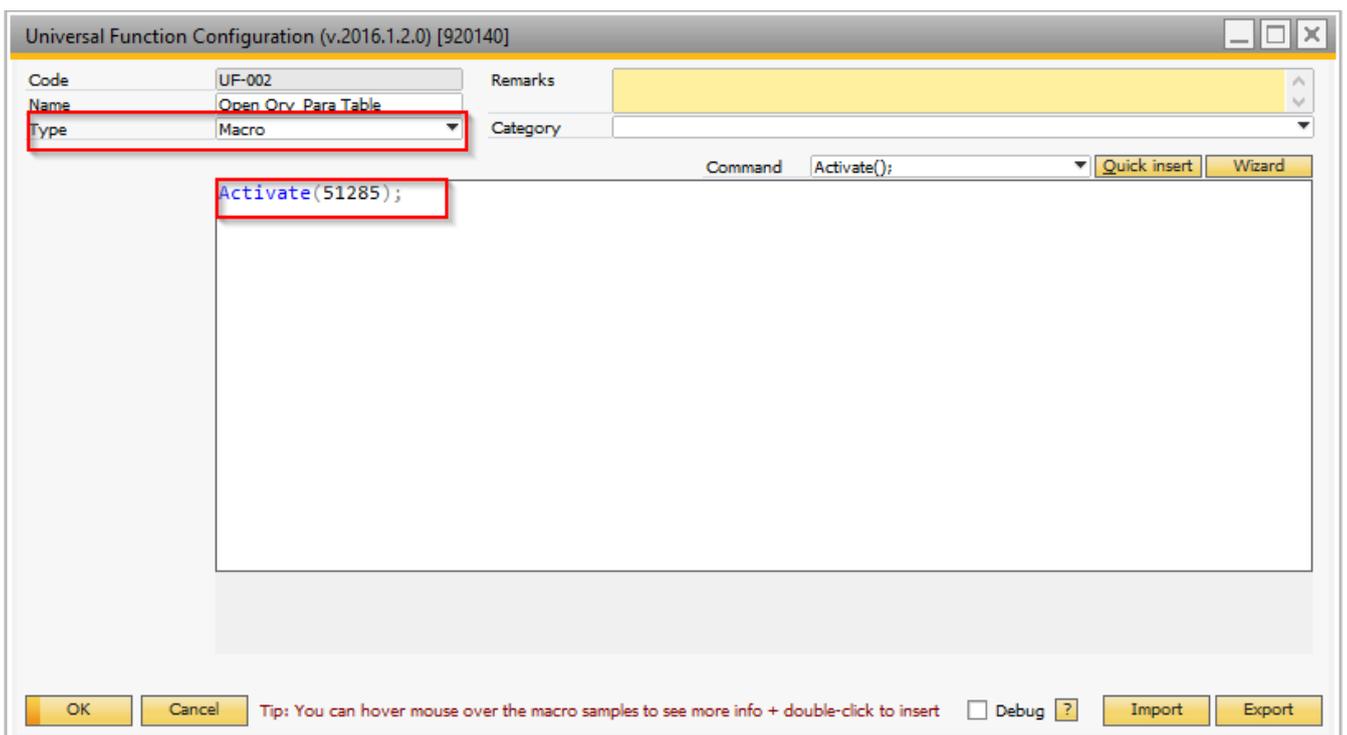
We go to View > System Information and enable it.



Then we go to Tools > User-Defined Windows, locate our User Defined Table and hover our arrow on top of the table. We can then look at the lower left hand corner to find out about the Menu UID of this table. In my example, the Menu UID is 51285



We will now create our second Universal Function and Assign it to the Set Parameter button that we just created. The Syntax is just `Activate(51285);` using the Menu UID that we just found out. Then we Add this function and another Add when back in the Button Configuration window.



Result

When menu item of the Sales Order SQL Report is click, the SQL report will be displayed using the initial values we put in the User-Defined Table. If customer wants to change the parameter, say now they want to see Sales Order for the year 2006 as well, then all they have to do is to click the 'Set Parmeter' to open the User Defined Table to update the parameter value

The screenshot shows a window titled "Sales Order SQL Report" with a table of sales data and a "Set Parameter" button in the top right corner.

CardCode	DocDate	CardName	DocNum	DocTotal
C30000	01/11/2007	Microchips	61	49,795.00
C40000	01/14/2007	Earthshaker Corporation	62	9,946.25
C42000	01/17/2007	Mashina Corporation	63	42,532.50
C50000	01/20/2007	ADA Technologies	64	15,900.00
C30000	02/09/2007	Microchips	69	28,145.00
C40000	02/12/2007	Earthshaker Corporation	70	208,217.25
C42000	02/15/2007	Mashina Corporation	71	53,987.13
C50000	02/18/2007	ADA Technologies	72	38,955.00
C30000	03/13/2007	Microchips	77	43,976.56
C40000	03/16/2007	Earthshaker Corporation	78	99,462.50
C42000	03/19/2007	Mashina Corporation	79	80,825.00
C50000	03/22/2007	ADA Technologies	80	54,722.50
C30000	04/28/2007	Microchips	85	5,175.71
C40000	05/13/2007	Earthshaker Corporation	86	4,019.38
C42000	05/18/2007	Mashina Corporation	87	1,722.50
C50000	05/23/2007	ADA Technologies	88	463.75
C30000	06/28/2007	Microchips	93	7,983.44
C40000	07/05/2007	Earthshaker Corporation	94	9,537.50
C42000	07/09/2007	Mashina Corporation	95	1,490.63
C50000	07/15/2007	ADA Technologies	96	4,836.25
C30000	08/17/2007	Microchips	101	4,749.47
C40000	08/22/2007	Earthshaker Corporation	102	7,357.50
C42000	08/26/2007	Mashina Corporation	103	9,142.50
C50000	08/31/2007	ADA Technologies	104	7,486.25
C30000	09/27/2007	Microchips	109	1,339.59

In our example we are changing the FromDate to 01/01/2006 and click Update.

The screenshot shows a dialog box titled "Query Report Parameter" with a table of parameters and "Update" and "Cancel" buttons at the bottom.

#	Code	Name	From Date	To Date	From BP	To BP
1	0001	0001	01/01/2006	02/17/2017	C30000	C50000
2						

B1 Usability Package Sample

Back in the SQL Report, user will need only to click the 'Refresh' button to see fresh data. This will save them the need to re-type the other parameters.

CardCode	DocDate	CardName	DocNum	DocTotal
C30000	01/15/2006	Microchips	2	2,976.88
C40000	01/20/2006	Earthshaker Corporation	3	12,535.00
C42000	01/30/2006	Mashina Corporation	5	18,391.00
C30000	02/15/2006	Microchips	6	8,795.31
C40000	02/21/2006	Earthshaker Corporation	7	10,573.00
C50000	03/16/2006	ADA Technologies	10	36,172.50
C40000	04/05/2006	Earthshaker Corporation	15	41,120.25
C42000	04/10/2006	Mashina Corporation	16	4,107.50
C50000	04/20/2006	ADA Technologies	17	21,412.00
C30000	05/25/2006	Microchips	21	25,114.00
C40000	06/01/2006	Earthshaker Corporation	22	6,540.00
C50000	06/10/2006	ADA Technologies	23	11,461.26
C42000	06/15/2006	Mashina Corporation	24	21,650.50
C30000	07/11/2006	Microchips	28	20,743.41
C42000	07/18/2006	Mashina Corporation	29	8,851.00
C40000	08/08/2006	Earthshaker Corporation	32	19,783.50
C50000	08/14/2006	ADA Technologies	33	22,061.26
C30000	09/09/2006	Microchips	39	7,848.13
C50000	09/15/2006	ADA Technologies	40	20,087.01
C30000	09/23/2006	Microchips	41	10,229.63
C42000	09/29/2006	Mashina Corporation	42	7,817.50
C40000	10/06/2006	Earthshaker Corporation	43	36,378.75
C42000	10/12/2006	Mashina Corporation	44	16,430.00
C30000	10/19/2006	Microchips	45	9,201.25
C50000	10/23/2006	ADA Technologies	46	26,659.01
C50000	12/02/2006	ADA Technologies	53	17,092.48
C42000	12/03/2006	Mashina Corporation	54	27,427.50
C40000	12/05/2006	Earthshaker Corporation	55	14,973.88
C30000	12/07/2006	Microchips	56	6,900.94
C30000	01/11/2007	Microchips	61	49,795.00
C40000	01/14/2007	Earthshaker Corporation	62	9,946.25