#18. Carlos Perez	Summary
Customer: BMS	A Twin Combi PAL was sold as a stand- a-lone system to prep samples for deriv- itization. Samples are then transferred to a GC PAL for injection on to a Agilent 6890 with Waters MS.
Products: Twin Combi PAL and Cyclone	
	The prep system introduces an internal
Also Involved:	standard to a 2ml vial containing sample followed by a solvent. This sample is then picked up by the PAL and placed into an Agitator for extraction / mixing of sample with no heating required. The sample is then returned to tray. Second arm will remove the top layer clean syringe then remove bottom layer into two separate vials on a second traythe sample is then manually placed into the Cyclone for evaporation. Customer adds the derivitization solution prior to placing the sample on to the GC PAL for GC-MS analysis Customer will be exploring using a SPE step for further clean up and also looking into the 96 well plate format.
Brian Peat	

Customer: We	
Michigan State Police rece	We have heard much with reference in the recent past as to the threats to the market and the aggressive marketing of the competition. For this is the reason I share this success story. Michigan State Police have been using the PAL and A200S for more than 10 years. They use the PAL to do such diverse analyzes as blood alcohol, trace chemical evidence, narcotics analysis as well as arson analysis. Recently, they were persuaded by Thermo to try the TriPlus autosampler instead and we lost nearly 6 sales as a result of this. However this device did not prove as reliable (breaking down in the headspace mode regularly) or as versatile as the PAL (the TriPlus requires a separate injection head to carry out liquid injection and another for headspace) and as a result of an on site visit and communication with the customer it was possible to replace 2 of the TriPlus' for headspace applications. We have since received a commitment for 6 PALs.
Products: cess Combi PAL and GC PAL Mich	
Glen Cook Glen Cook Iyzes dend anal Ther stea of th relia mod (the head for h visit was head	

#20. Scott Donenfeld	Summary
Customer: Merck	The PAL is being used to add and transfer diluents to vials then transfer them to the Agitator for mixing. Once this matrix is diluted, an aliquot is then either transferred to a DW96 and/or then injected into an injection valve plumbed to an Agilent 1100 LC/PDA. The PAL is basically used as a standalone liquid handling workstation. The customer really likes the ability to deliver the finished diluted product from a vial to a plate and then straight to an HPLC system. This is being compared to a modified Tecan workstation, which has higher throughput but not the precision, LC capability, and flexibility the PAL has been showing. So far, the dilution accuracy of the PAL is under 1% marginal error compared to the Tecan that's averaging between 5-8% error. The dilution volumes have ranged from 40ul to 20ml with no sacrifice in accuracy. This PAL has been successfully running since early January 2006.
Products: HTS PAL with Dilutor, Agitator, Tray Holder, Coolstack, and LC Valve. Controlled by Cycle Composer and Chem- station (16-bit) when running HPLC.	
Also Involved: Thomas Tobien	
will have 4 c tures for a b	Eventually they will upgrade to an HTX that will have 4 coolstacks at different temperatures for a bulk stability screen with similar liquid handling needs.

# 21. Gordon Nye	Summary
Customer: All installed TM iD customers, ABI/Sciex, York U., MDS Pharma Services, Millenium Pharmaceuticals Products:	The most difficult issue we face attempting to spot with the TM iD is the MALDI matrix solution we use. This solution is a saturated salt solution in 50% organic solvent. The problems arise when organic solvents evaporate (which they do quite readily) and the salts come out of solution.
TM iD	
Also Involved: Werner Martin	Recognizing the problems we encounter with solution stability on the TM iD platform lead to Werner's suggestion of minimizing evaporation by using a simple but practical approach. In the photo you see that the affect of limiting the surface area exposed to air reduces evaporation. The use of an "ink-well" or "silo" design for reducing evaporation will be a key element to allow dispensing these very difficult solutions. The evaporation and subsequent salt crystal formation interfering with automation can be in-expensively reduced or completely eliminated. Further studies will be run to optimize the design and test the process stability.
Hole in Lid example shows ~20% loss Silo example has virtually no loss while still allowing access to the solution for dispensing	

# 22. Eric Wethington	Summary
Customer: GSK, King of Prussia	Just shipped out an upgraded OPT-DISS unit. The significance is that this is the first upgrade we have performed for a customer that was using one of the first configuration
Products: OPT-DISS	OPT-DISS systems. The upgrade allows the customer to use the latest version of software available.
Also Involved: Jim Caverly	Jim helped by going on-site back in October to pack the system properly to ensure a successful upgrade.
	I will re-install the system during the first week of March.