

3 simple letters that give You plenty to smile about



The Importance of System Integration In Data Reconciliation Project

By Lim Tiong Beng, CSE-EIS Pte Ltd



Customer Satisfaction, Everytime.

## Agenda

- Why Data Reconciliation Projects ?
- Understanding of System Setup
- Examples of System Integration Considerations
- Q & A

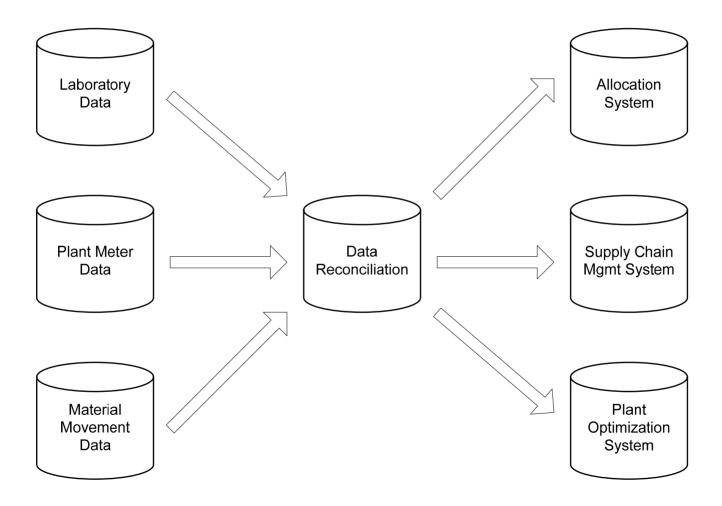


# Why Data Reconciliation Projects ?

- Product Allocation / Accounting
  - Profits sharing and costs allocation
- Inventory / Supply Chain Management
  - Accurate information on plant inventories
- Improve Material Movement Management
  - Movement of products across fences
  - Movement of materials within fences
- Improve Data Quality for Plant Optimization
  - Accurate information of plant yield to feed optimization software



## Understanding of System Setup





Customer Satisfaction, Everytime.

## **TMS** Integration

- Material Movement Data
  - Known as transfers in Sigmafine
- Information May Reside in Different Software Applications for Different Organizations
  - Inventory Management / Tank Management / ERP
  - Different software systems handle data, changes differently



## TMS Tank Information

Movement Status	Values	Create Date	Tank Level	Temperature	Densi	y TOV	GSV15 GS	¥30 I	Mass
Midnight Values	Midnight (ATG)	23-Aug-2005 00:00:00	13,510	34	1.9 85	9.5 969.328	953.431 98	65.304	819.428
Save Cancel		Tank Calcula	tion						
ank History		🏈 Master File 🔻 🔀 Wor	k Order 🔻 🕹 Labor	atory 🔻 į Movem	ient 🕶 🚮 Ta	ink & Meter 🔻 🧾	Report 🔻 😫 Ad	Iministrato	r 🔻 🔯 Log Out
Novement Status	Before/After	Tank Calculation	OPEN	CLC	SE T	OTAL TRANSFER	ARC (JIS)	i.	ARC (T-54B)
ATG/Dip before transfer	OPEN(ATG)(Manual)	2 LEVEL(MM)		9,055	2,554			20,554	20,55
	CLOSE (DIP)	TEMPERATURE('C)	2	39.3	39.6			39.6	39
	SUMMAR	DENSITY(Kg/m3)		835	771			772.0	772
C/D from supplier	OPEN	24 TOV(M3)	4	91.098	139.129	351.96	9 3	151.965	351.9
	CLOSE C/D	GOV(M3)	41	89.362	137.125	352.23	7 3	52.233	352.23
	SUMMAR		4	79.134	133.217	345.91	7 3	45.915	342.33
Fransfer	OPEN	GSV 30'C(M3)	4	85.396	135.562	349.83		349.830	348.29
		MASS IN VACUO(Mtor	.) 3:	99.837	102.657	297.18	0 2	97.180	264.28
		MASS IN AIR(Mton)	3	99.297	102.508	296.78	9 2	96.778	263.90
		LONG TONs(Lton)	3:	92.990	100.889	292.10	1 2	90.032	259.73
		US BARRELS 60'F(Ba	rrel) 3.0	15.190	838.468	2,176.72	2 2.1	73.500	2,154.6
		Save Canc	el Calculate	Re-Entry					



#### **TMS Meter Calculations**

Master File 🔻 🗳 Work Orde	er 🔻 🕰 Laboratory 👻	į Movement 👻 🚮	Tank & Meter 🔻 ᢖ Rep	ort 🔻 😫 Administrato
eter Calculation DATA	FLOW 1	FLOW 2	TOTAL TRANSFER	CUSTOMER
FLOW ID:	935FT11	935FT22	·	142F05
Batch Gross(M3):	51.386	34.296	85.682	85.681
Batch Net(15 Deg.C)(M3):	1,280.373	1,313.365	2,593.738	2,593.637
Batch Net(30 Deg.C)(M3):	1,295.468	1,269.969	2,565.437	2,565.332
BATCH MASS(TON):	1,230.968	1,272.316	2,503.284	2,503.175
Temperature(Deg.C):	37.1	35.5	[	36.1
Density (15 Deg.C)(KG/M3):	9,999.0	9,999.0	[	
Density (30 Deg.C)(KG/M3):	9,999.0	9,999.0	[	
/CF (15 Deg.C):	9999.0000	9999.0000	[	
VCF (30 Deg.C):	9999.0000	9999.0000	[	
CPL:	9999.0000	9999.0000	[	
Meter Factor:	9999.0000	9999.0000	[	
K-Factor:	9999.0000	9999.0000	[	



## Material Movement Summary

- Dispatch/receipt via pipeline
- Tank to tank transfer

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1	TK17A	1	945TK17A	Feed T	ank		117		:	STATIC			
1	TK17B	!	945TK17B	Feed T	ank		117			STATIC			
1	TK17C		945TK17C	Interme	diate Tan	k	117	Intermediate		Feed Pipe <mark>C</mark>	/D from supplier		
1	TK18A		945TK18A	Produc	t Tank		117			STATIC			
1	TK18B	!	945TK18B	Feed T	ank		117			STATIC			
1	TK19A	!	945TK19A	By Proc	duct Tank		117		1	Feed Pipe C	/D from supplier		
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1	TK20C	Work RP-TO	Order DC-RF-05-07-008		evision	Product Na	<u>1me</u>		1	945TK6B	<u>Quantity(M3)</u> 2,000	Movement Sta ATG/Dip after tr	ansfer
/ / /	TK200 TK21A	Work RP-TO RP-AP	Order DC-RF-05-07-008 RC-C9A-05-08-002		evision O 1	Product Na RAFFINATE C9 AROMA	ame E TICS		1 9 9	945TK6B 945TK15A	Quantity(M3) 2,000 3,000	Movement Sta ATG/Dip after tr ATG/Dip before	ansfer transfer
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## **LIMS** Integration

- Mass Balance Data
  - Density, Composition or MW analysis
- Component Mass Balance Data
  - Limited online analyzer data
  - Uses routine laboratory GC analyses data
- LIMS Application
  - Understand the data handling of LIMS application



## LIMS Data Processing

Coogle C   Go   Search web   Search web   Search web   Search web   Search web   Sapphire	>
Sapphire       Sapphire       AQC © Tests © Others © Certifications © Reference © Reports © Stability © Studies ©       Other Tasks       Other Tasks       Other Tasks       Other Tasks       DataEntry       Single Sample       Other Tasks       Other Tasks       DataEntry       Save          ØunRelease          Other Tasks   Other Tasks       DataEntry   Save    Save    ØunRelease    ØunRelease    ØunRelease    ØunRelease    ØunRelease    ØunRelease    ØunRelease    ØunRelease    ØunRelease   ØunRelease    ØunRelease  ØunRelease   ØunRelease    ØunRelease    ØunRelease   ØunRelease    ØunRelease </th <th>&gt;</th>	>
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- Categories Parameter Type Rep Entered Value Info Unit	
- Roles H2S Standard 1 1.0000 1 mol%	
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- Tests D12 Standard 1 3 0000 9 mol%	
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	ouping
Bulletins Dic4H10 Standard 1 7.0000 mol%	IMS tes
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Recent Items     I Recent Items.     I Recent Items.     OCON	mponen
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## Summary

- Integration of Systems is Important for all Data Reconciliation Project Implementation
  - Data Reconciliation is not an end by itself
  - Understand what and where the required data is; data exchange mechanism, final data users
- CSE-EIS As a Sigmafine VAR
  - Years of experience implementing RtPM, LIMS, TMS and Data Reconciliation



#### **Questions and Answers**





Customer Satisfaction, Everytime.