Enabling Delek's Digital Transformation with the Enterprise Agreement (EA)

Frank Simmons – VP, Refining Best Practices

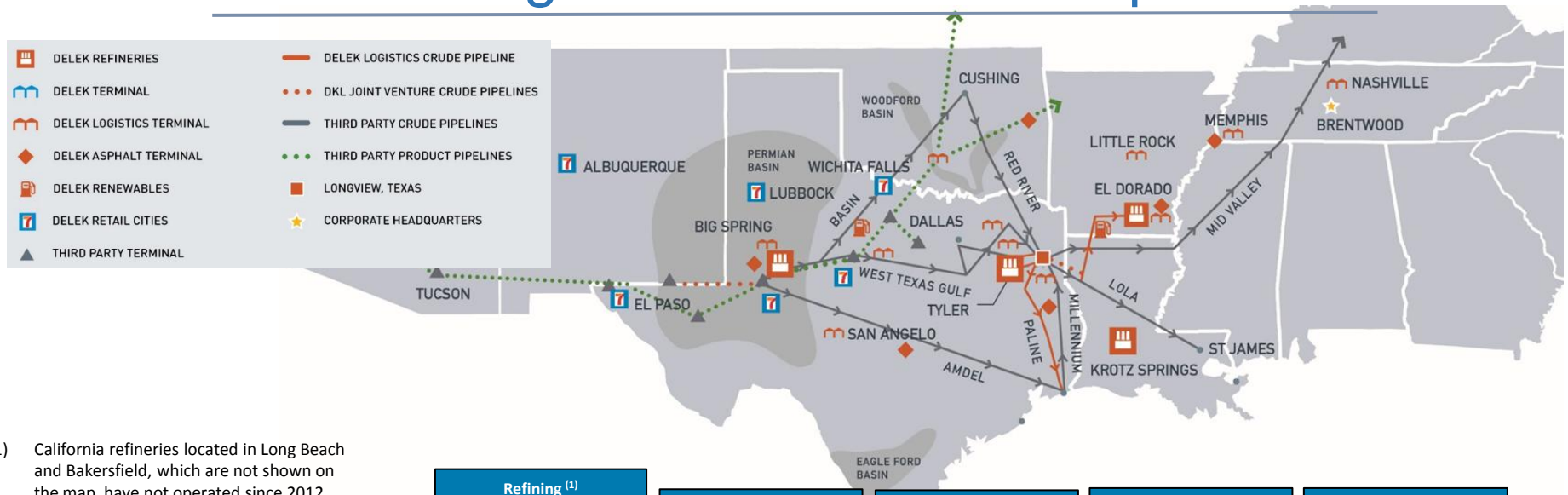
Bob Gonzales – Dir. Training & Operational Excellence

John Arney – Process Information Coordinator

Telling Our Story…

- Delek US at a Glance
- Supporting our Digital Transformation Strategy with the EA
- Delek US - Refining PI System Highlight Reel
- Best Practices & Lessons Learned
- Continuing our Digital Transformation Journey
- Summary

Delek US Holdings at a Glance…Enterprise View



1) California refineries located in Long Beach and Bakersfield, which are not shown on the map, have not operated since 2012
2) Amounts include the Big Spring drop down that closes in March 2018 with an effective date of March 1, 2018.
3) On February 12, 2018, Delek announced definitive agreement to sell the Mojave, Elk Grove, Phoenix, Fernley and Bakersfield terminals for $75.0 million; not included on map above.

Refining (1)

- 7th largest independent refiner
- 302,000 bpd in total
  - El Dorado, AR
  - Tyler, TX
  - Big Spring, TX
  - Krotz Springs, LA
- Crude oil supply: 262,000 bpd WTI linked (207,000 bpd of Permian access)

Logistics (2)

- 10 terminals
- Approximately 1,290 miles of Pipeline
- 11.4 million bbls of storage capacity
- West Texas wholesale
- Joint venture crude oil Pipelines: RIO / Caddo
- Own 63.5%, incl. 2% GP, of DKL

Asphalt (3)

- 14 asphalt terminals located in TN, OK, TX, WA, CA, AZ and NV
- Five terminals in CA, NV and AZ in process of being sold
- Largest asphalt supplier in CA and second largest asphalt supplier in TX

Retail

- Approximately 300 stores
- Southwest US locations
- Largest licensee of 7-Eleven stores in the US
- West Texas wholesale marketing business

Renewables

Approx. 61m gallons Biodiesel:
- Crossett, AR
- Cleburne, TX

Renewable Diesel/Jet:
- California

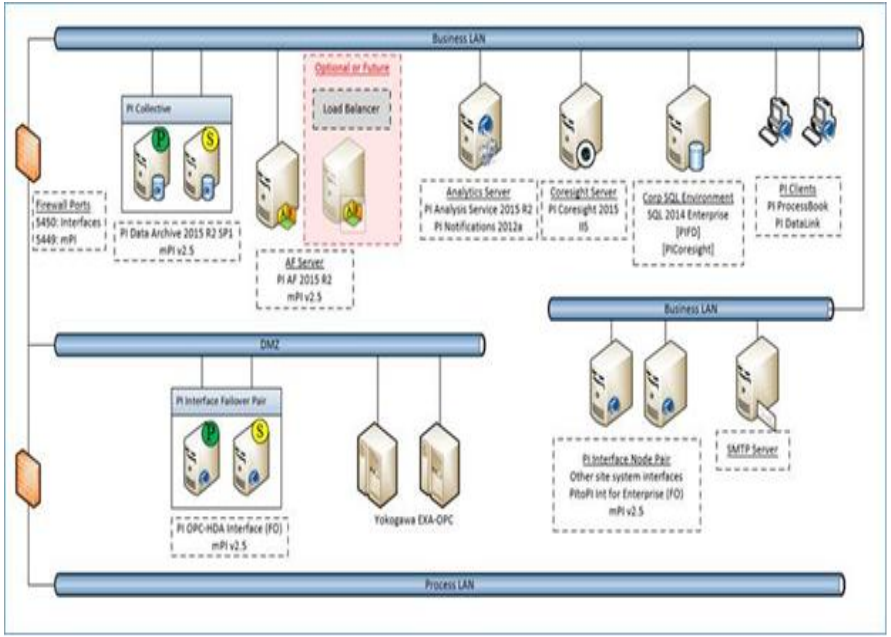
Delek US Holdings at a Glance…PI System View

Tyler, TX Refinery

Configured Tags: 39,167
# of Interfaces: 37
Event Frames: 2,283
Notifications: 193

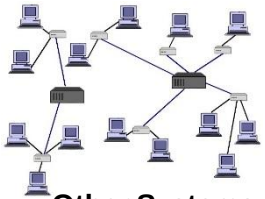
El Dorado, AR Refinery

Configured Tags: 42,308
# of Interfaces: 56
Event Frames: 10,685
Notifications: 14



High-level PI System Positioning

PI System Visualization



Other Systems

SAP

infor

Other DBs

Spreadsheets

Other data Sources

LIMS

YOKOGAWA

Tyler

EMERSON

El Dorado

Wonderware by Schneider Electric

Logistics

Our main focus was the digital transformation of Delek to enable Sustainable, Transformative Business Value.

What does that mean?

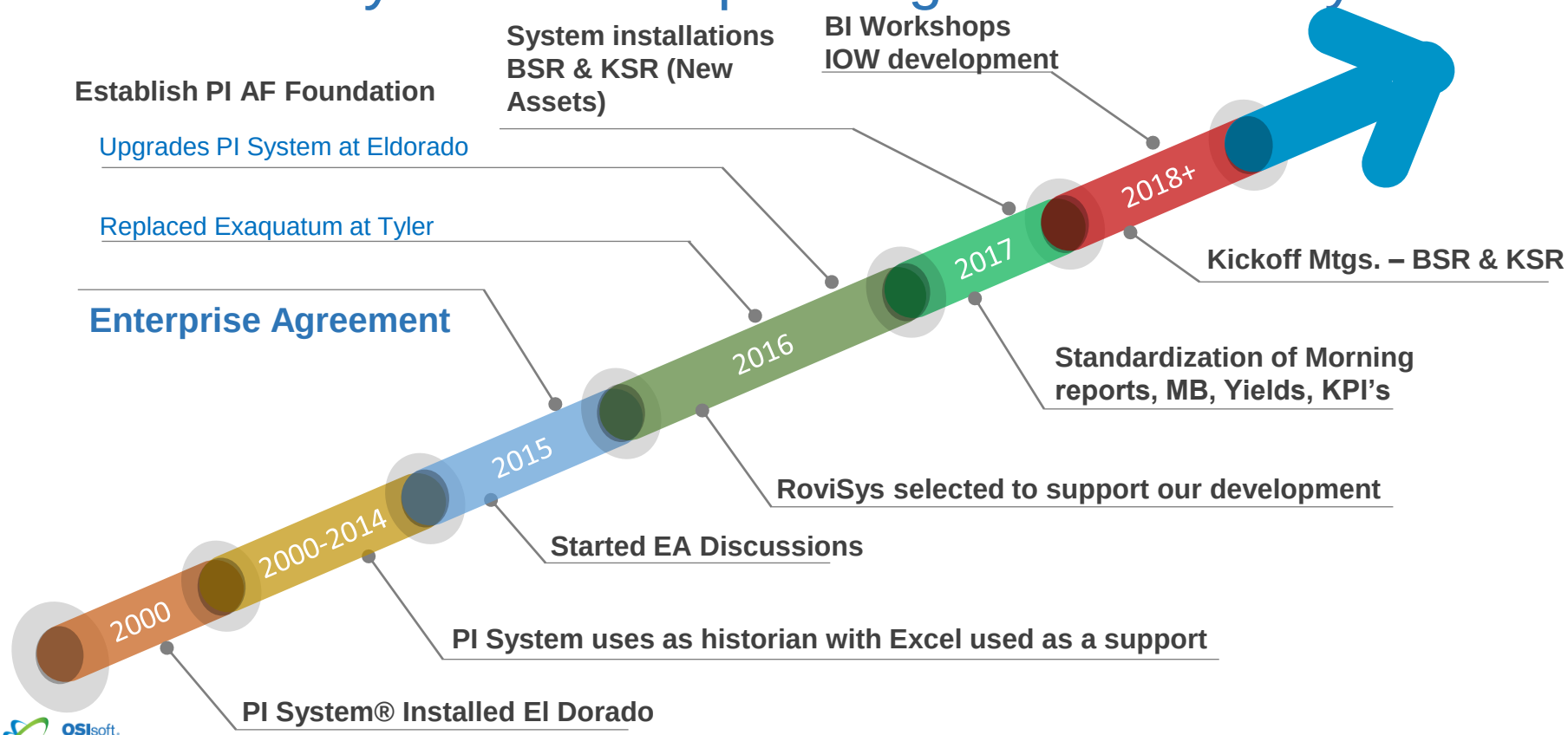
According to Wikipedia: **Digital transformation** is the change associated with the application of digital technology in all aspects of human society.

Digital transformation may be thought of as embracing digital technologies:

digital competence → digital usage → digital transformation

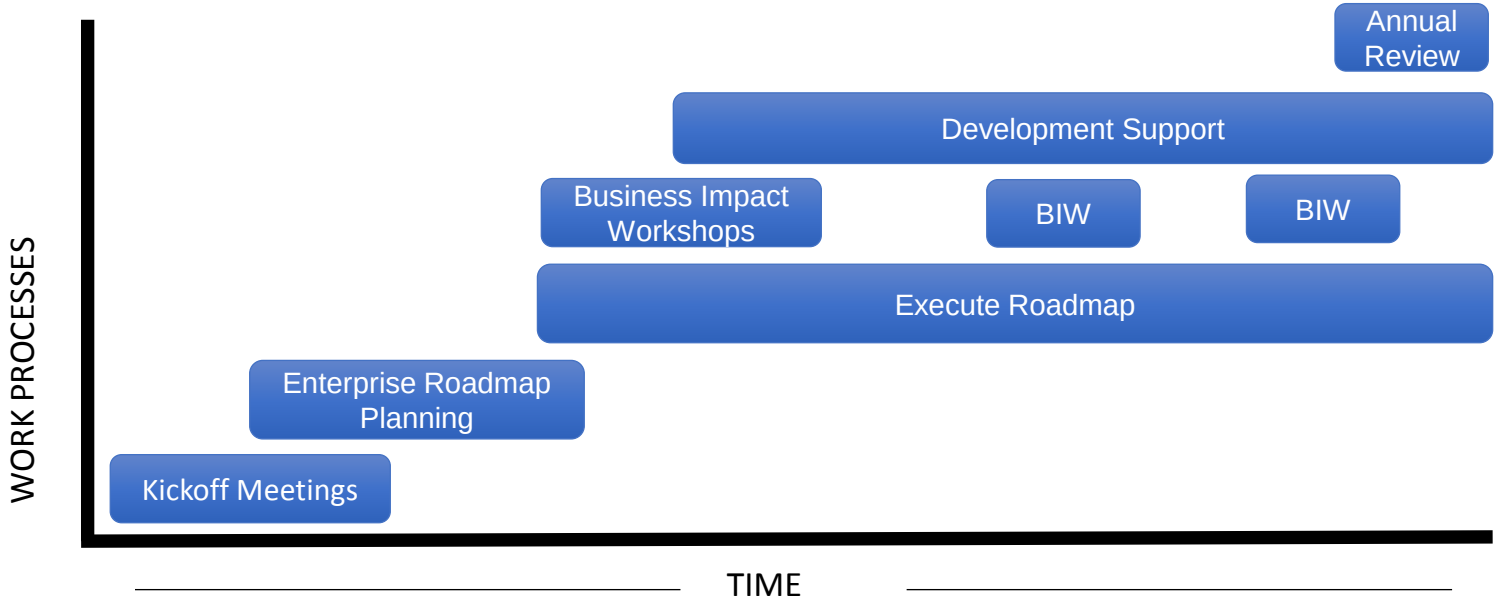
"People/culture empowerment/accountability & Process reengineering leveraging digital technologies"

Our Journey to an Enterprise Agreement & Beyond

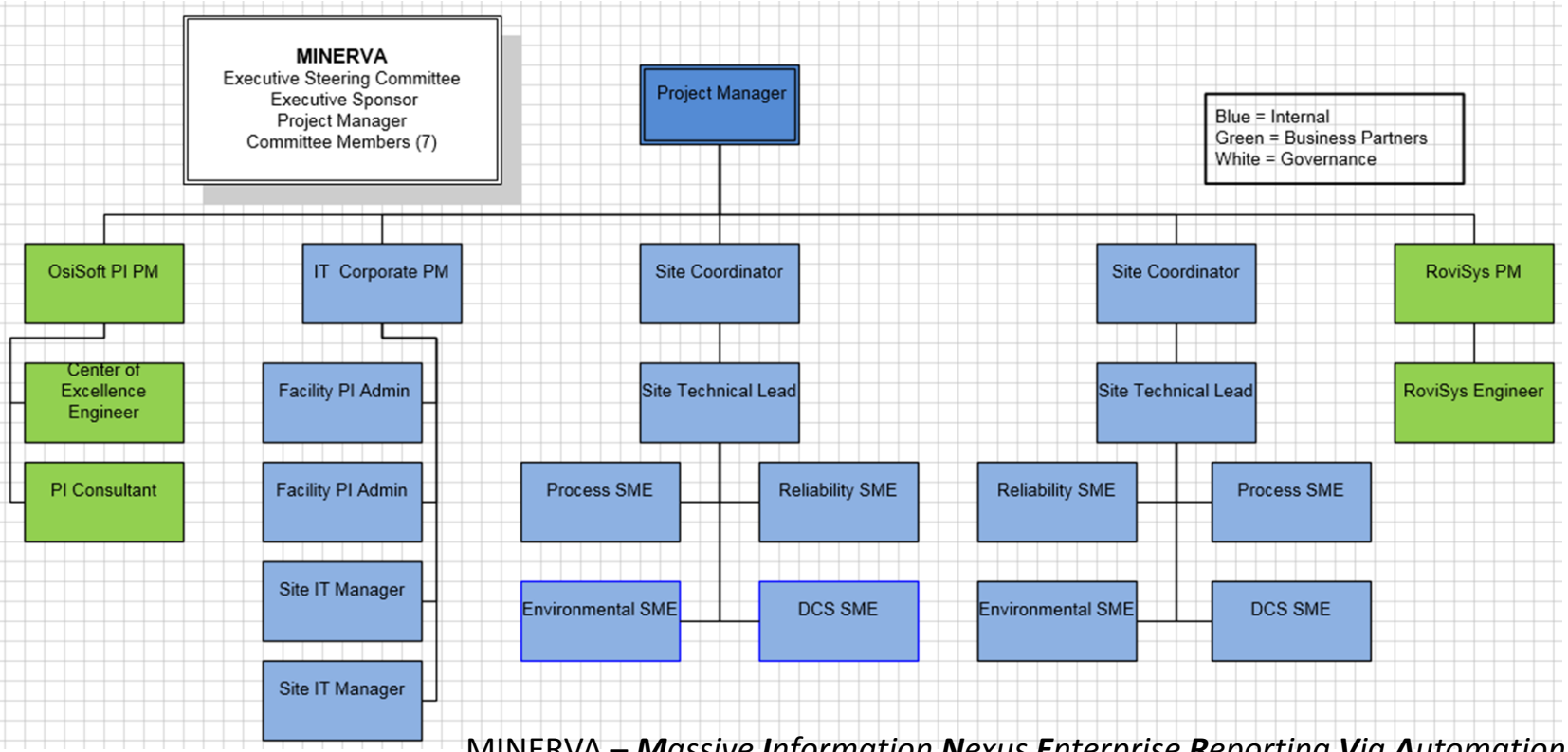


Why the Enterprise Agreement (EA)?

We needed a structured approach . . .



MINERVA Committee Support “Roles”



MINERVA – ***M**assive **I**nformation **N**exus **E**nterprise **R**eporting **V**ia **A**utomation*

Minerva Utilization – Training Levels

EVERYONE - Minimal training required. Online Resources or by Request

Someone who works in the System. Process Engineers, Analyst. Trained in both intro classes. Can create and share tools.

A specialist that gets to the next level. The go-to person in the department. Trained in both intro classes. Proficient in tool creation. Can train Users and assist
Specialist.

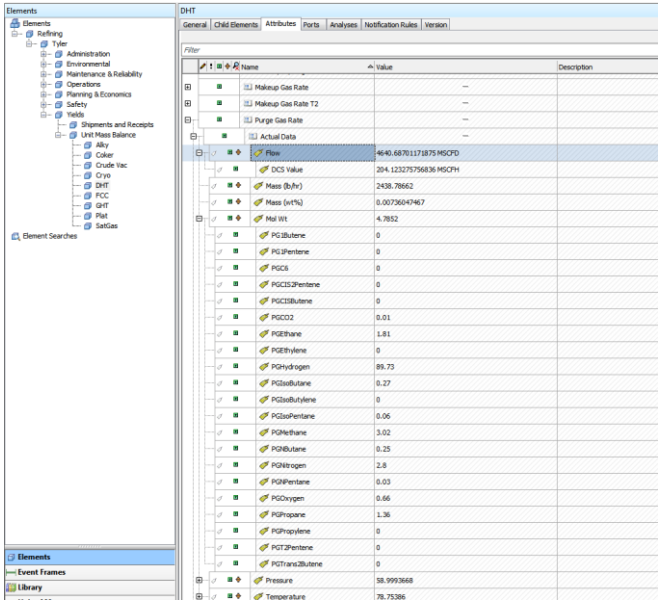
Coordinators of Process Information – full time in Minerva / PI. Expert Level Training Three weeks classroom Six Months Full Time
Experience

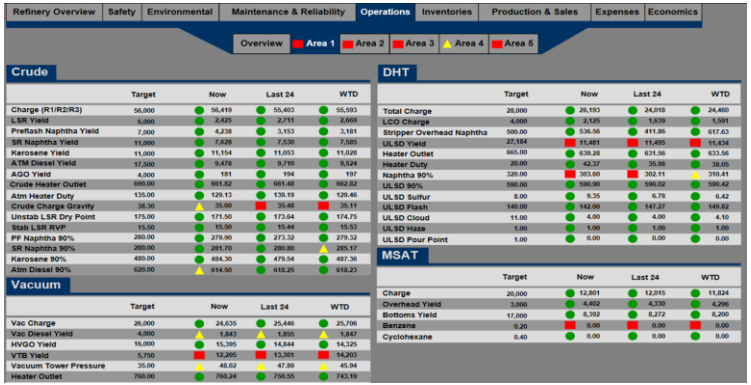
Challenges we had to Overcome

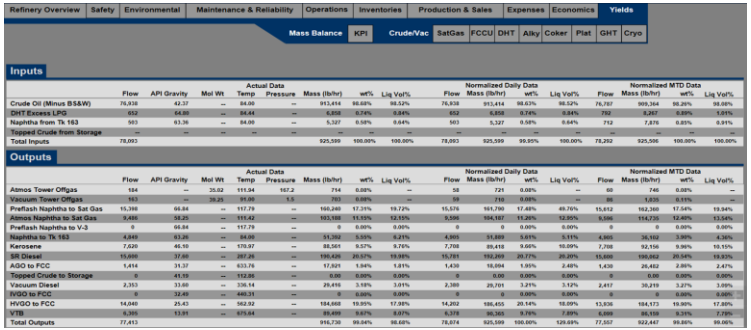
- Current Processes vs. Future Processes
- Scope Creep – what we didn't know using PI
- Communication – who was responsible / assumptions / teams
- Understanding of strategy and getting individuals and team alignment
- Ownership of future processes

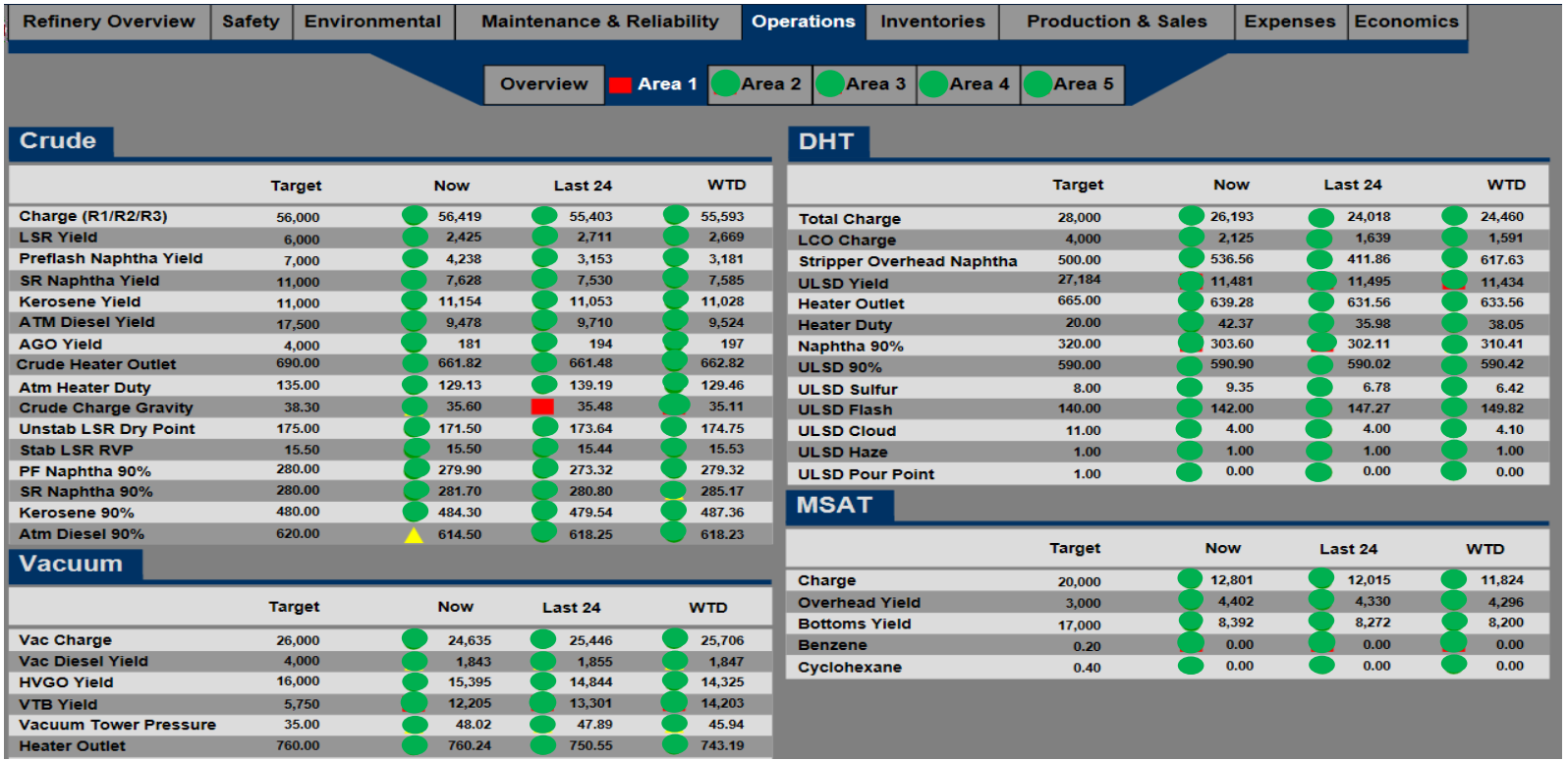
Delek Highlight Reel

PI AF Data Model is Foundational to Establishing Data Integrity and Trust

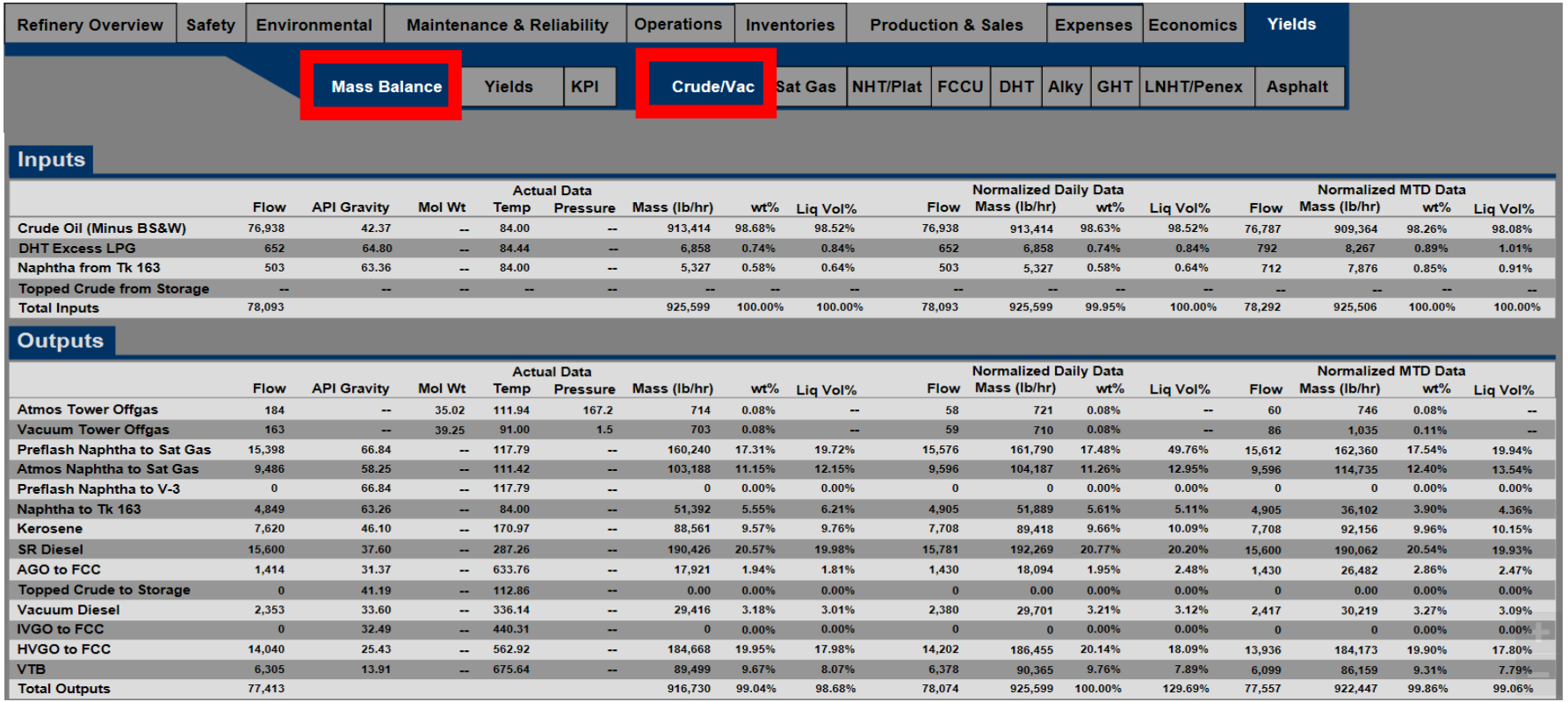








Typical Mass Balance Screen



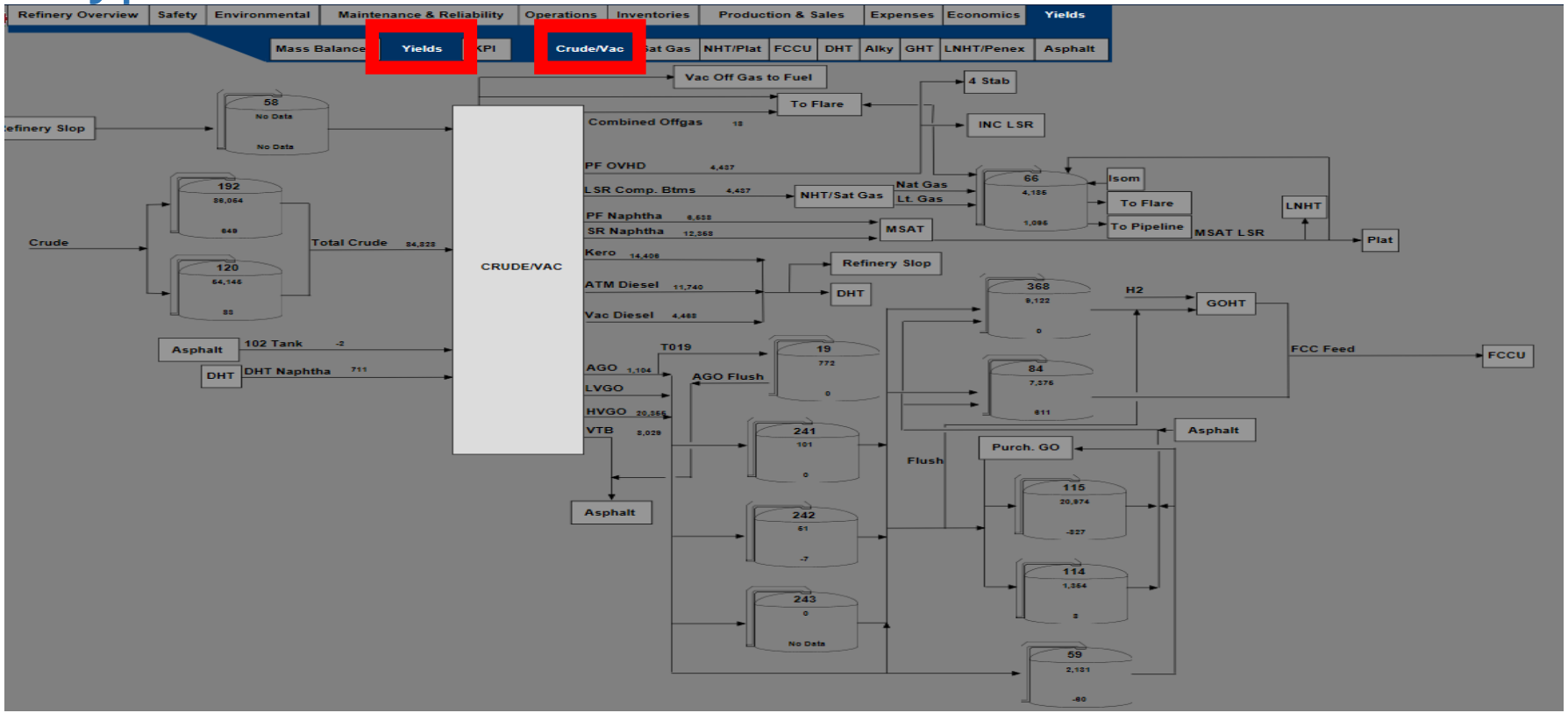
Inputs

	Actual Data								Normalized Daily Data				Normalized MTD Data			
	Flow	API Gravity	Mol Wt	Temp	Pressure	Mass (lb/hr)	wt%	Liq Vol%	Flow	Mass (lb/hr)	wt%	Liq Vol%	Flow	Mass (lb/hr)	wt%	Liq Vol%
Crude Oil (Minus BS&W)	76,938	42.37	--	84.00	--	913,414	98.68%	98.52%	76,938	913,414	98.63%	98.52%	76,787	909,364	98.26%	98.08%
DHT Excess LPG	652	64.80	--	84.44	--	6,858	0.74%	0.84%	652	6,858	0.74%	0.84%	792	8,267	0.89%	1.01%
Naphtha from Tk 163	503	63.36	--	84.00	--	5,327	0.58%	0.64%	503	5,327	0.58%	0.64%	712	7,876	0.85%	0.91%
Topped Crude from Storage	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Total Inputs	78,093					925,599	100.00%	100.00%	78,093	925,599	99.95%	100.00%	78,292	925,506	100.00%	100.00%

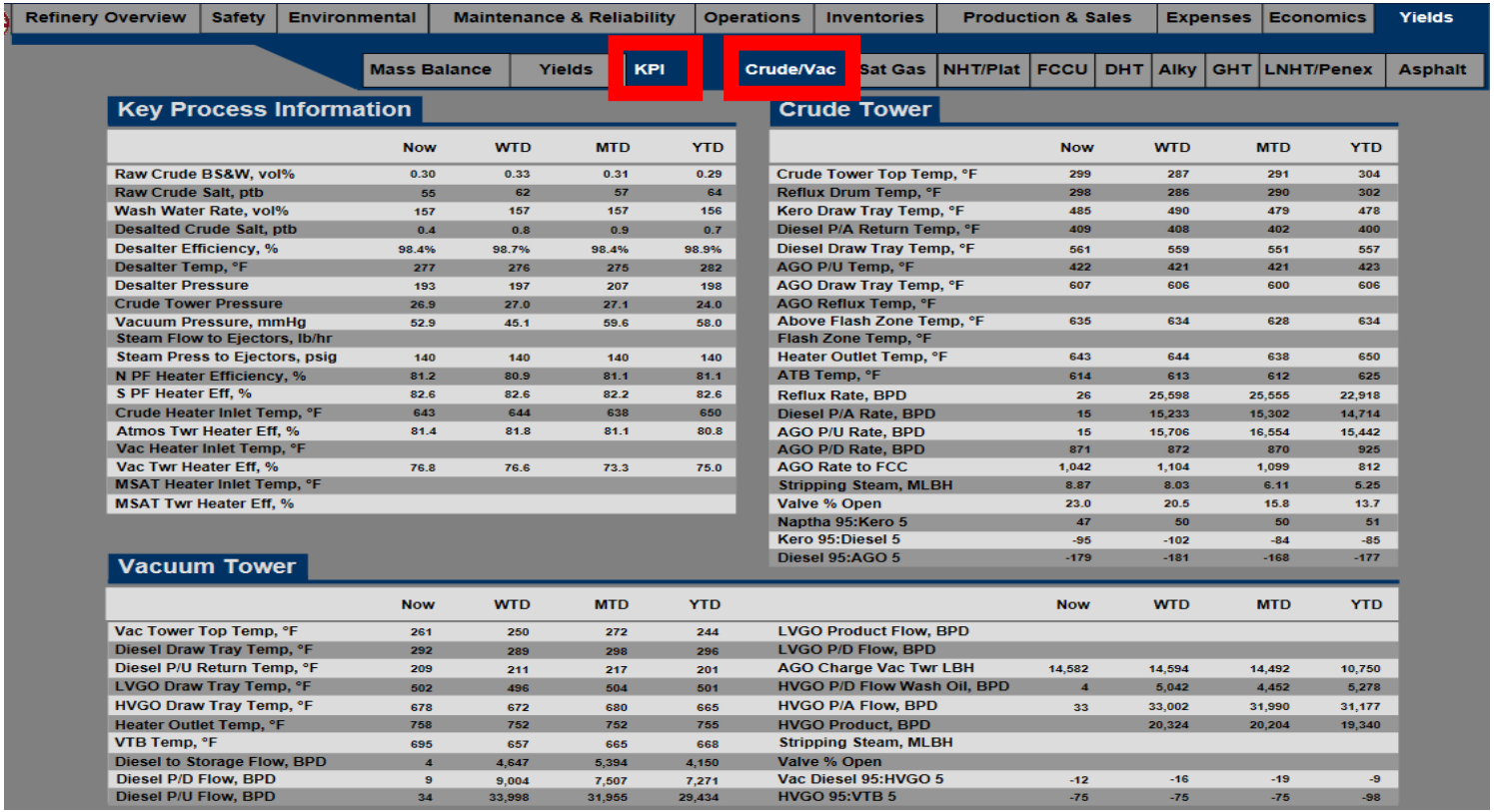
Outputs

	Actual Data								Normalized Daily Data				Normalized MTD Data			
	Flow	API Gravity	Mol Wt	Temp	Pressure	Mass (lb/hr)	wt%	Liq Vol%	Flow	Mass (lb/hr)	wt%	Liq Vol%	Flow	Mass (lb/hr)	wt%	Liq Vol%
Atmos Tower Offgas	184	--	35.02	111.94	167.2	714	0.08%	--	58	721	0.08%	--	60	746	0.08%	--
Vacuum Tower Offgas	163	--	39.25	91.00	1.5	703	0.08%	--	59	710	0.08%	--	86	1,035	0.11%	--
Preflash Naphtha to Sat Gas	15,398	66.84	--	117.79	--	160,240	17.31%	19.72%	15,576	161,790	17.48%	49.76%	15,612	162,360	17.54%	19.94%
Atmos Naphtha to Sat Gas	9,486	58.25	--	111.42	--	103,188	11.15%	12.15%	9,596	104,187	11.26%	12.95%	9,596	114,735	12.40%	13.54%
Preflash Naphtha to V-3	0	66.84	--	117.79	--	0	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0.00%	0.00%
Naphtha to Tk 163	4,849	63.26	--	84.00	--	51,392	5.55%	6.21%	4,905	51,889	5.61%	5.11%	4,905	36,102	3.90%	4.36%
Kerosene	7,620	46.10	--	170.97	--	88,561	9.57%	9.76%	7,708	89,418	9.66%	10.09%	7,708	92,156	9.96%	10.15%
SR Diesel	15,600	37.60	--	287.26	--	190,426	20.57%	19.98%	15,781	192,269	20.77%	20.20%	15,600	190,062	20.54%	19.93%
AGO to FCC	1,414	31.37	--	633.76	--	17,921	1.94%	1.81%	1,430	18,094	1.95%	2.48%	1,430	26,482	2.86%	2.47%
Topped Crude to Storage	0	41.19	--	112.86	--	0.00	0.00%	0.00%	0	0.00	0.00%	0.00%	0	0.00	0.00%	0.00%
Vacuum Diesel	2,353	33.60	--	336.14	--	29,416	3.18%	3.01%	2,380	29,701	3.21%	3.12%	2,417	30,219	3.27%	3.09%
IVGO to FCC	0	32.49	--	440.31	--	0	0.00%	0.00%	0	0	0.00%	0.00%	0	0	0.00%	0.00%
HVGO to FCC	14,040	25.43	--	562.92	--	184,668	19.95%	17.98%	14,202	186,455	20.14%	18.09%	13,936	184,173	19.90%	17.80%
VTB	6,305	13.91	--	675.64	--	89,499	9.67%	8.07%	6,378	90,365	9.76%	7.89%	6,099	86,159	9.31%	7.79%
Total Outputs	77,413					916,730	99.04%	98.68%	78,074	925,599	100.00%	129.69%	77,557	922,447	99.86%	99.06%

Typical Yields Screen



Typical Key Process Information Screen



Refinery Overview | Safety | Environmental | Maintenance & Reliability | Operations | Inventories | Production & Sales | Expenses | Economics | Yields

Mass Balance | Yields | KPI | Crude/Vac | Sat Gas | NHT/Plat | FCCU | DHT | Alky | GHT | LNHT/Penex | Asphalt

Key Process Information

	Now	WTD	MTD	YTD
Raw Crude BS&W, vol%	0.30	0.33	0.31	0.29
Raw Crude Salt, ptb	55	62	57	64
Wash Water Rate, vol%	157	157	157	156
Desalted Crude Salt, ptb	0.4	0.8	0.9	0.7
Desalter Efficiency, %	98.4%	98.7%	98.4%	98.9%
Desalter Temp, °F	277	276	275	282
Desalter Pressure	193	197	207	198
Crude Tower Pressure	26.9	27.0	27.1	24.0
Vacuum Pressure, mmHg	52.9	45.1	59.6	58.0
Steam Flow to Ejectors, lb/hr				
Steam Press to Ejectors, psig	140	140	140	140
N PF Heater Efficiency, %	81.2	80.9	81.1	81.1
S PF Heater Eff, %	82.6	82.6	82.2	82.6
Crude Heater Inlet Temp, °F	643	644	638	650
Atmos Twr Heater Eff, %	81.4	81.8	81.1	80.8
Vac Heater Inlet Temp, °F				
Vac Twr Heater Eff, %	76.8	76.6	73.3	75.0
MSAT Heater Inlet Temp, °F				
MSAT Twr Heater Eff, %				

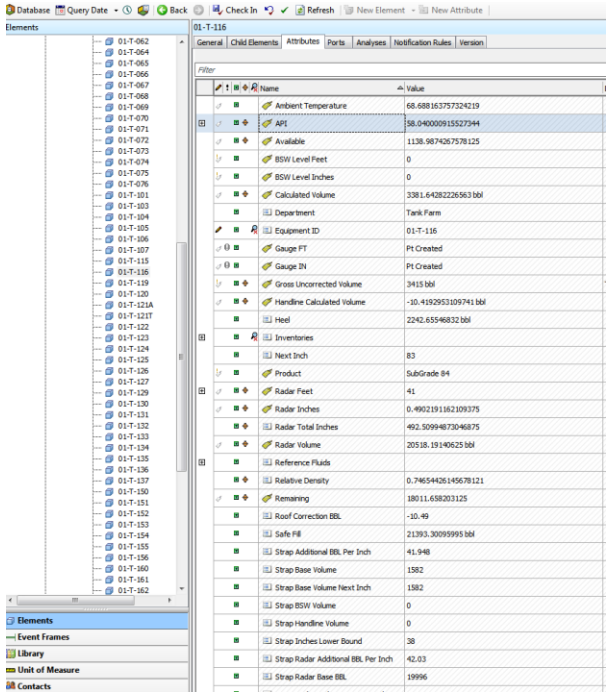
Crude Tower

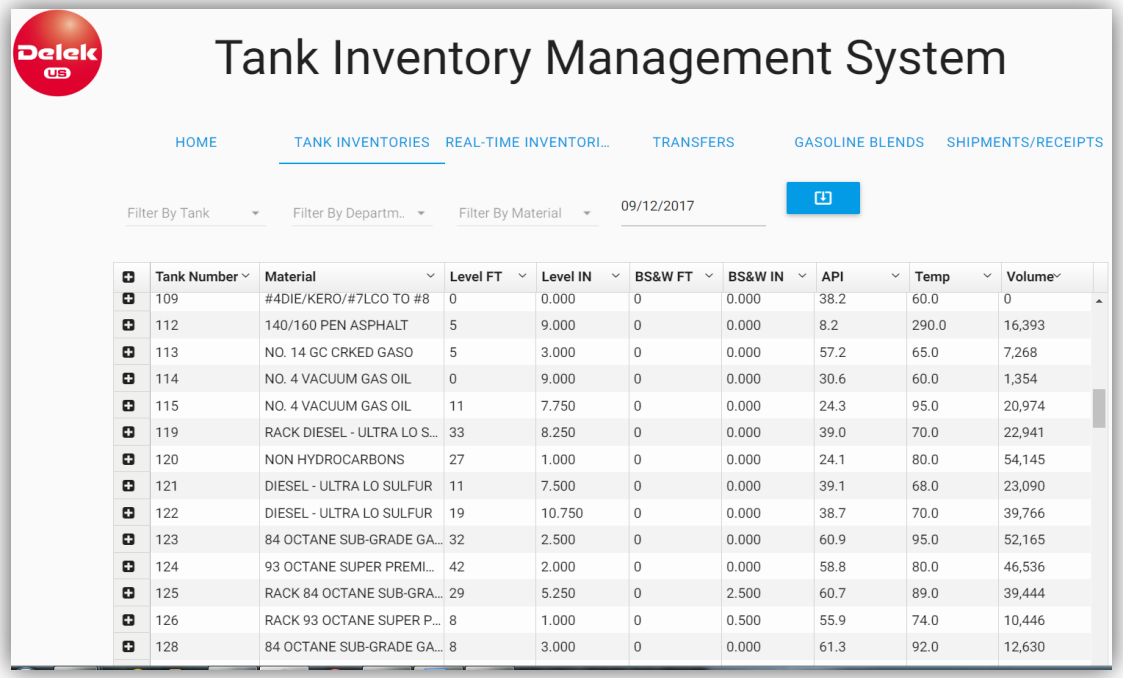
	Now	WTD	MTD	YTD
Crude Tower Top Temp, °F	299	287	291	304
Reflux Drum Temp, °F	298	286	290	302
Kero Draw Tray Temp, °F	485	490	479	478
Diesel P/A Return Temp, °F	409	408	402	400
Diesel Draw Tray Temp, °F	561	559	551	557
AGO P/U Temp, °F	422	421	421	423
AGO Draw Tray Temp, °F	607	606	600	606
AGO Reflux Temp, °F				
Above Flash Zone Temp, °F	635	634	628	634
Flash Zone Temp, °F				
Heater Outlet Temp, °F	643	644	638	650
ATB Temp, °F	614	613	612	625
Reflux Rate, BPD	26	25,598	25,555	22,918
Diesel P/A Rate, BPD	15	15,233	15,302	14,714
AGO P/U Rate, BPD	15	15,706	16,554	15,442
AGO P/D Rate, BPD	871	872	870	925
AGO Rate to FCC	1,042	1,104	1,099	812
Stripping Steam, MLBH	8.87	8.03	6.11	5.25
Valve % Open	23.0	20.5	15.8	13.7
Naptha 95:Kero 5	47	50	50	51
Kero 95:Diesel 5	-95	-102	-84	-85
Diesel 95:AGO 5	-179	-181	-168	-177

Vacuum Tower

	Now	WTD	MTD	YTD		Now	WTD	MTD	YTD
Vac Tower Top Temp, °F	261	250	272	244	LVGO Product Flow, BPD				
Diesel Draw Tray Temp, °F	292	289	298	296	LVGO P/D Flow, BPD				
Diesel P/U Return Temp, °F	209	211	217	201	AGO Charge Vac Twr LBH	14,582	14,594	14,492	10,750
LVGO Draw Tray Temp, °F	502	496	504	501	HVGO P/D Flow Wash Oil, BPD	4	5,042	4,452	5,278
HVGO Draw Tray Temp, °F	678	672	680	665	HVGO P/A Flow, BPD	33	33,002	31,990	31,177
Heater Outlet Temp, °F	758	752	752	755	HVGO Product, BPD		20,324	20,204	19,340
VTB Temp, °F	695	657	665	668	Stripping Steam, MLBH				
Diesel to Storage Flow, BPD	4	4,647	5,394	4,150	Valve % Open				
Diesel P/D Flow, BPD	9	9,004	7,507	7,271	Vac Diesel 95:HVGO 5	-12	-16	-19	-9
Diesel P/U Flow, BPD	34	33,998	31,955	29,434	HVGO 95:VTB 5	-75	-75	-75	-98

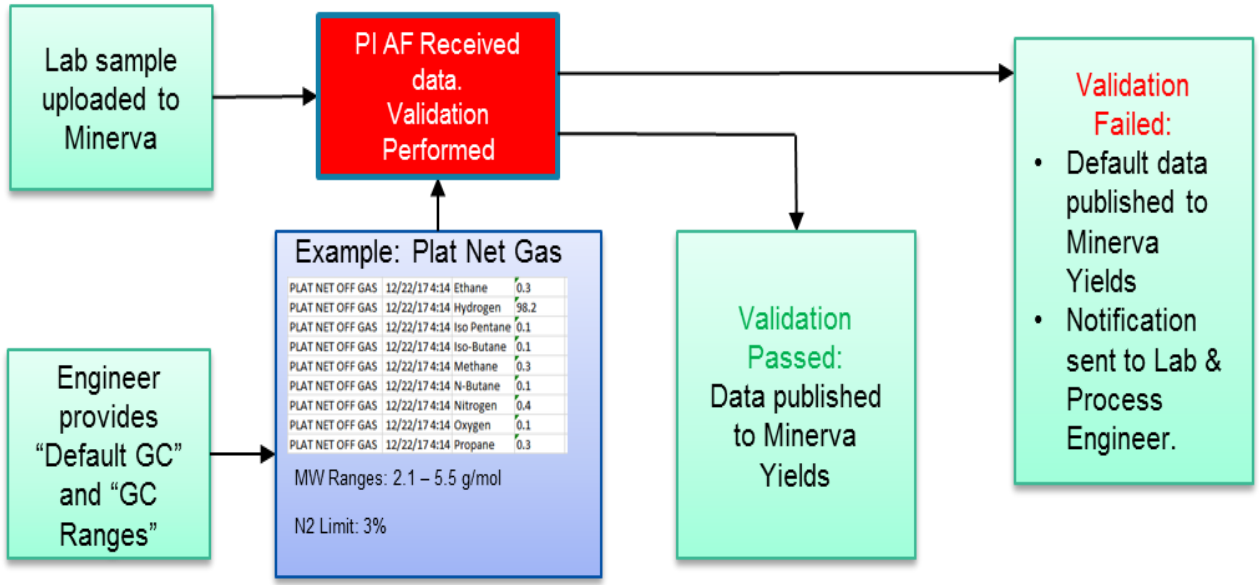
Tank Inventory Management System





PI / AF Assisted Data Integrity

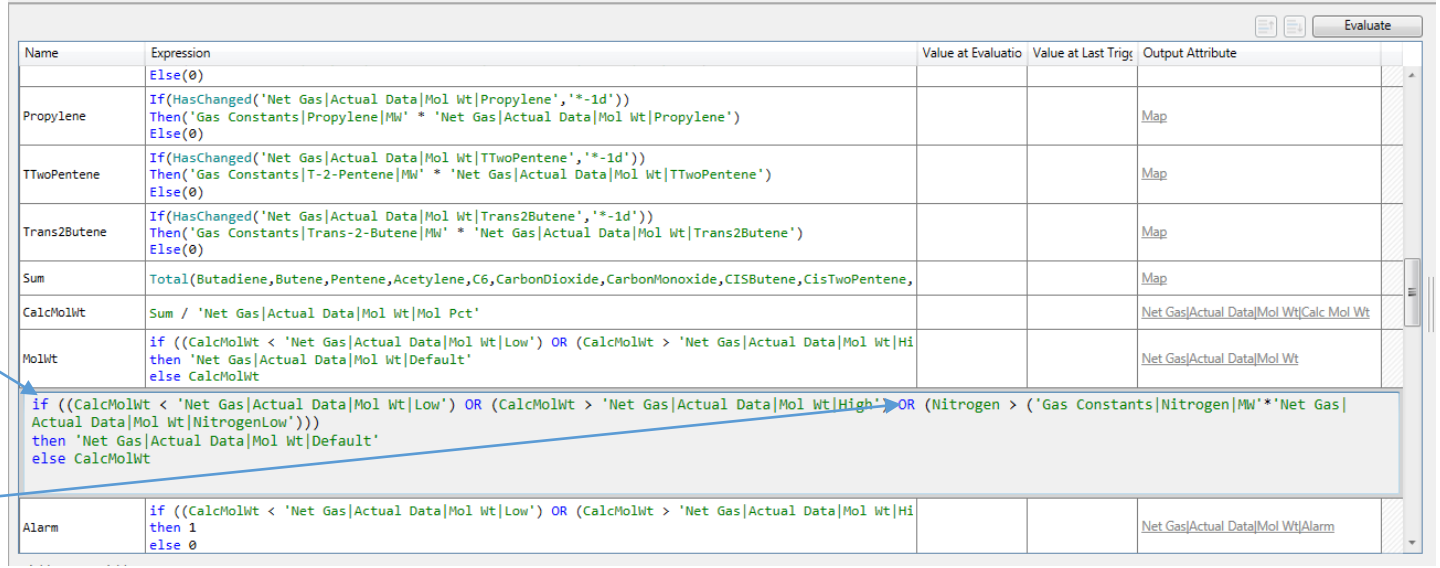
- Use PI AF to assist in foundation data integrity and trust.



PI / AF Assisted Data Integrity

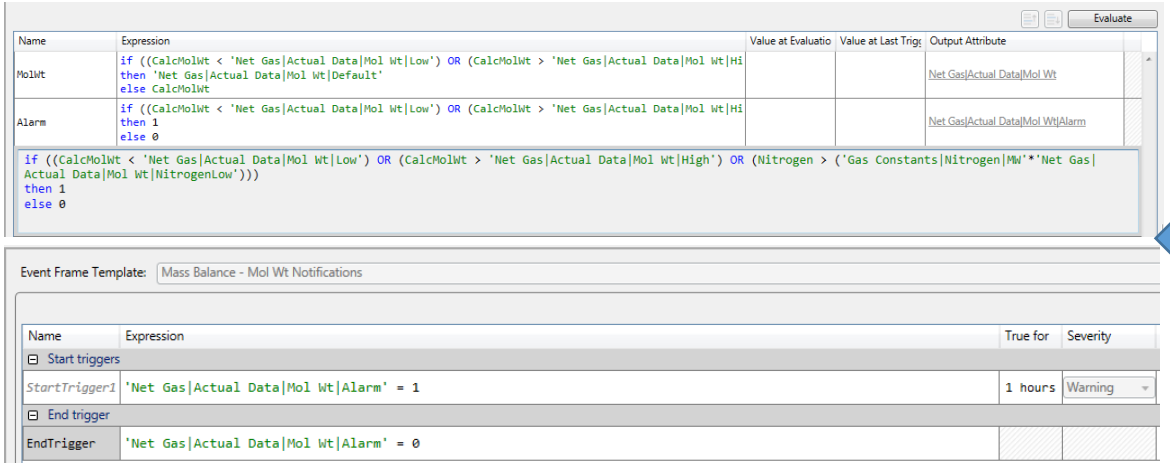
- EXAMPLE: Use PI AF to assist in foundation data integrity and trust.

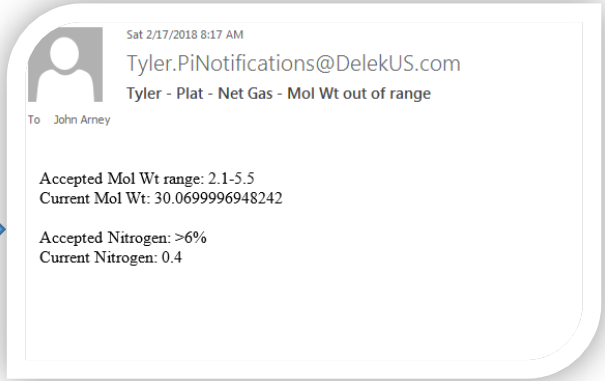
- MW Range Check.
- N2 in Sample Check.



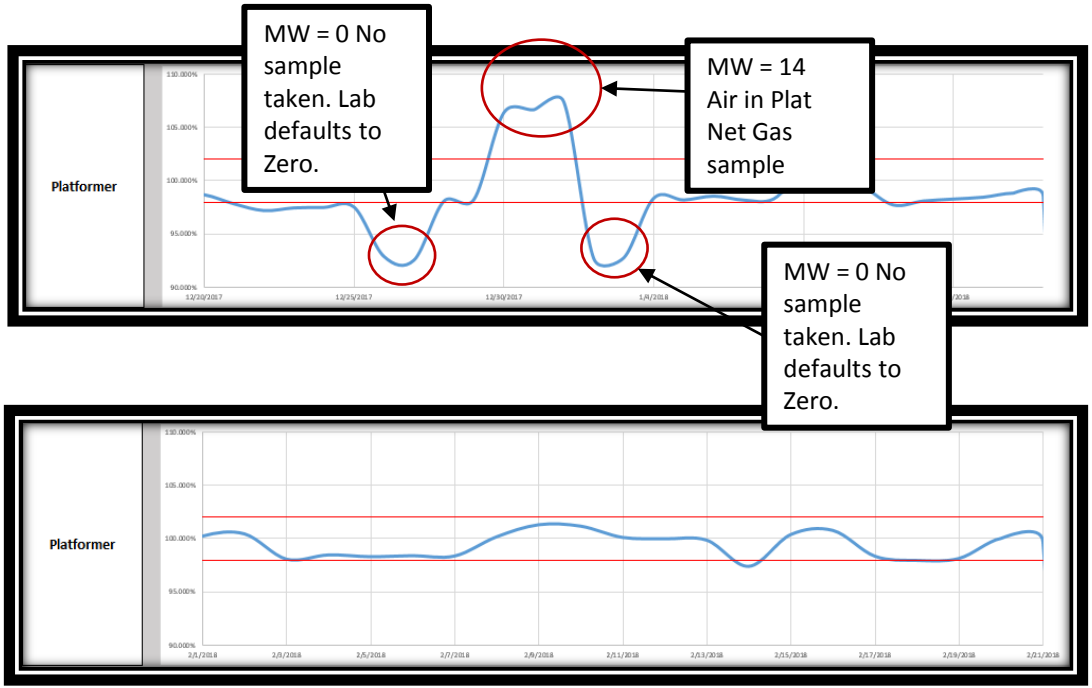
PI / AF Assisted Data Integrity

- We now have “Event Frames” set up to notify process engineer when MW or N2 is out of range.





PI / AF Assisted Data Integrity



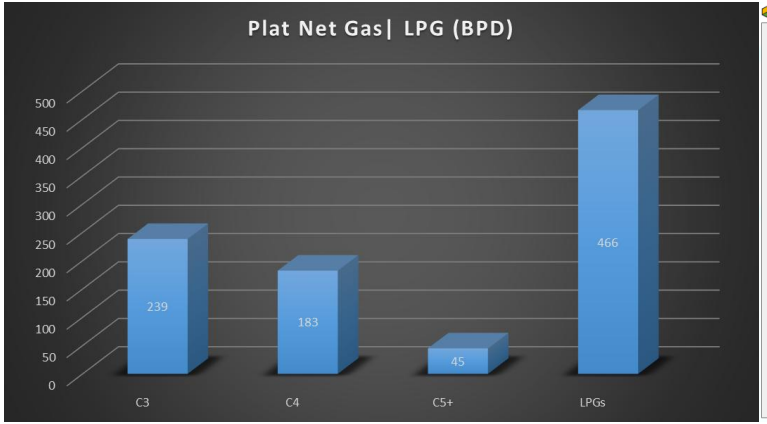
January 2018

February 2018

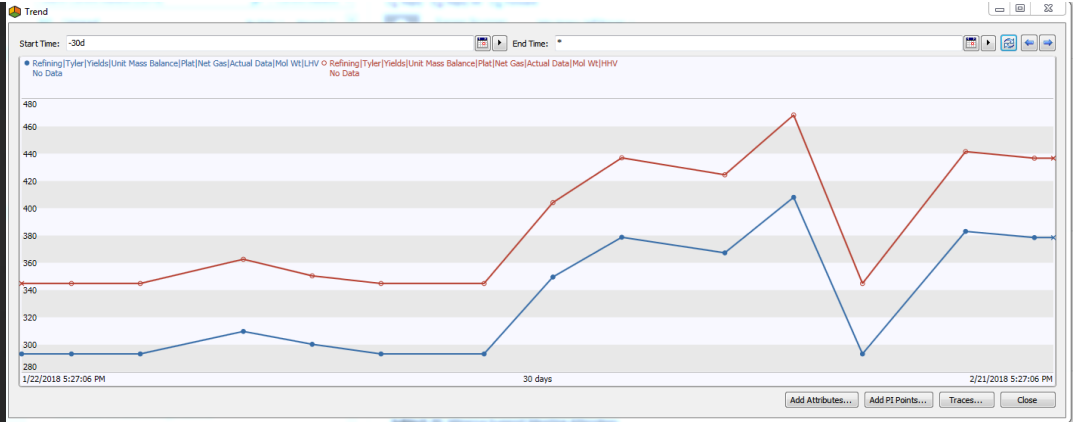
Improved Gas Stream Analysis

- Easily track barrels of LPG and BTU flow per stream.

Plat Net Gas| LPG (BPD)

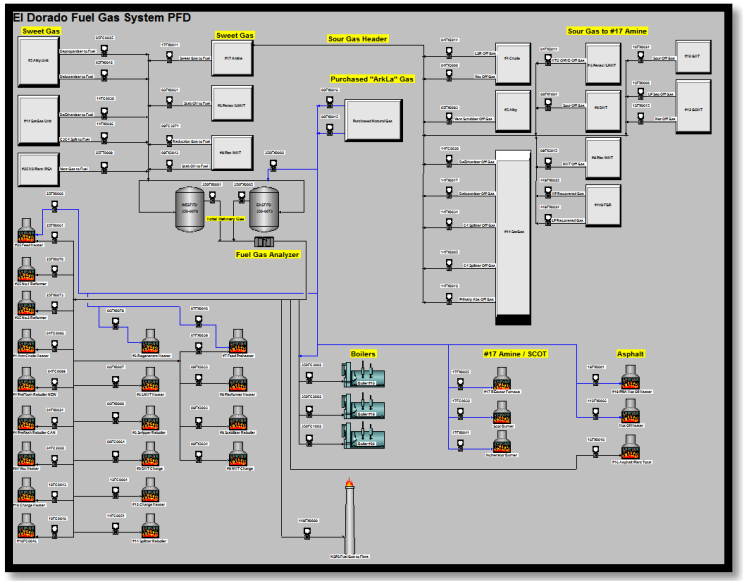


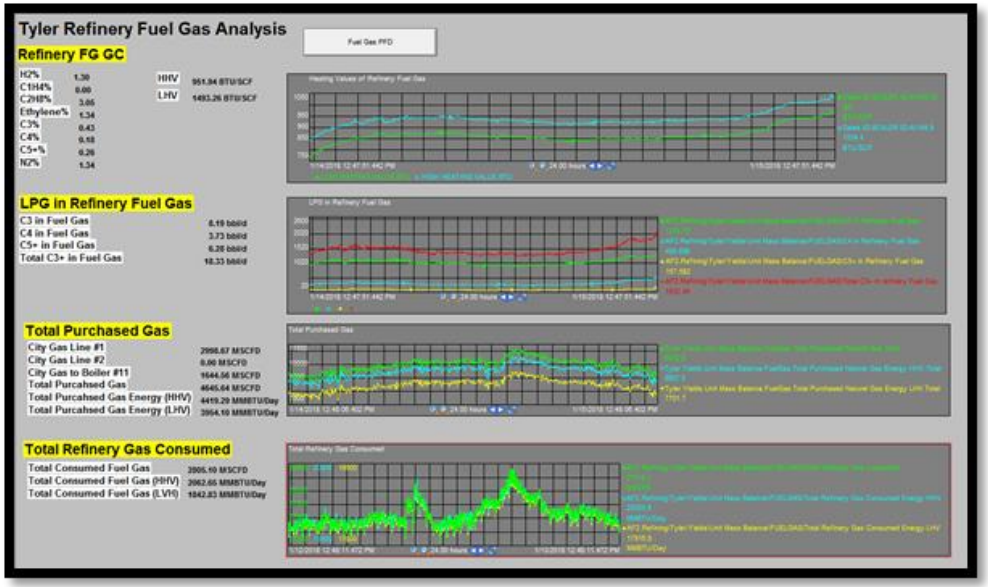
Plat Net Gas| HHV / LHV



Fuel Gas Analysis

- Live fuel gas analysis of each refinery to use as tool to properly manage and track fuel gas.





Heater Efficiency before PI AF – Excel

Start	10/30/13	
End	10/30/13	
Duration	2m	
A	1.00E-06	4.00E-06
B	0.0224	0.0364
C	-1.836	-4.5918

2 Reactor Heater GOH

Stack Temp, F	Excess Air 02	Excess Air 101	O2 %	xcess Air	tack Loss	Efficiency	Htr Hoottle	Fuel gas	Htr Duty	FR Duty Limit
12TX0300			12AX0600				12TC0305	12FC0004	EQ120301	
808.67	16.93	27.46	3.41	19.40	18.97	79.03	715.71	44.44	47.02	50.0
808.62	16.93	27.46	3.41	19.41	18.97	79.03	715.82	44.44	47.02	50.0
807.05	16.89	27.39	3.42	19.42	18.93	79.07	715.93	44.44	47.02	50.0
805.05	16.85	27.30	3.42	19.43	18.88	79.12	716.04	44.44	47.02	50.0
804.11	16.82	27.26	3.42	19.44	18.85	79.15	716.15	44.44	47.02	50.0
804.14	16.82	27.27	3.42	19.45	18.85	79.15	716.27	44.42	47.02	50.0
804.87	16.84	27.30	3.42	19.46	18.88	79.12	716.47	43.66	45.61	50.0
804.44	16.83	27.28	3.42	19.47	18.87	79.13	716.75	43.15	45.59	50.0
804.01	16.82	27.26	3.42	19.48	18.85	79.15	715.99	43.15	45.59	50.0
803.52	16.81	27.24	3.38	19.16	18.81	79.19	714.63	43.15	45.59	50.0
800.87	16.74	27.15	3.24	18.27	18.64	79.36	713.26	43.83	45.59	50.0
799.28	16.71	27.06	3.11	17.39	18.51	79.49	712.14	44.28	46.28	50.0
799.47	16.71	27.07	2.98	16.52	18.42	79.58	712.54	45.12	46.80	50.0
803.52	16.81	27.24	2.84	15.66	18.44	79.56	713.37	45.25	46.80	50.0
807.18	16.90	27.40	2.90	16.03	18.58	79.42	716.07	44.41	46.80	50.0
807.73	16.91	27.42	3.20	17.96	18.80	79.20	717.41	43.60	46.80	50.0
805.37	16.85	27.32	3.49	19.95	18.94	79.06	715.96	43.67	46.80	50.0
804.27	16.83	27.27	3.64	20.95	19.01	78.99	713.67	44.54	46.80	50.0
804.68	16.84	27.29	3.68	21.28	19.06	78.94	713.18	44.94	46.80	50.0
806.00	16.87	27.35	3.73	21.60	19.13	78.87	713.85	45.31	46.80	50.0
805.73	16.86	27.33	3.78	21.93	19.16	78.84	714.52	45.31	46.80	50.0
806.54	16.88	27.37	3.82	22.27	19.22	78.78	714.57	45.31	46.80	50.0
808.25	16.92	27.44	5.01	31.31	20.22	77.78	713.96	45.31	46.80	50.0
811.41	17.00	27.58	5.16	32.57	20.44	77.56	713.29	45.31	46.80	50.0
815.80	17.10	27.77	5.12	32.21	20.54	77.46	712.23	45.86	47.80	50.0
820.70	17.22	27.98	5.01	31.86	20.65	77.35	712.84	46.10	48.34	50.0
825.60	17.34	28.19	5.03	31.50	20.76	77.24	713.78	46.10	48.34	50.0
828.18	17.40	28.30	4.99	31.15	20.80	77.20	714.73	46.10	48.34	50.0
828.22	17.40	28.30	4.94	30.80	20.76	77.24	714.93	46.10	48.34	50.0
827.64	17.39	28.27	4.90	30.45	20.70	77.30	714.34	46.10	48.34	50.0
825.45	17.34	28.18	4.86	30.11	20.60	77.40	713.76	46.32	48.34	50.0
824.61	17.32	28.14	4.82	29.76	20.54	77.46	713.86	46.71	48.34	50.0
824.48	17.31	28.14	4.77	29.42	20.50	77.50	714.34	46.91	48.67	50.0
824.46	17.31	28.14	4.73	29.08	20.46	77.54	714.82	47.26	49.39	50.0
824.44	17.31	28.14	4.69	28.74	20.42	77.58	715.15	47.26	49.39	50.0
824.41	17.31	28.14	4.64	28.40	20.38	77.62	715.25	47.26	49.39	50.0
824.05	17.30	28.12	4.60	28.07	20.34	77.66	715.35	47.26	49.39	50.0
823.44	17.29	28.09	4.56	27.73	20.28	77.72	715.44	47.26	49.39	50.0
822.77	17.27	28.06	4.52	27.40	20.23	77.77	715.54	46.53	48.60	50.0
820.07	17.21	27.95	4.47	27.07	20.11	77.89	715.64	46.32	48.31	50.0
817.88	17.15	27.85	4.43	26.71	20.01	77.99	715.70	46.32	48.31	50.0
816.84	17.13	27.81	4.32	25.83	19.89	78.11	715.54	46.32	48.31	50.0
816.27	17.11	27.79	4.19	24.94	19.78	78.22	715.57	46.30	48.31	50.0
815.69	17.10	27.76	4.07	24.00	19.66	78.34	716.82	45.51	47.84	50.0
814.34	17.07	27.70	3.94	23.08	19.52	78.48	716.23	45.12	47.14	50.0
811.74	17.01	27.59	3.81	22.17	19.35	78.65	715.46	45.12	47.14	50.0
809.70	16.96	27.50	3.68	21.28	19.20	78.80	715.08	45.12	47.14	50.0
809.84	16.96	27.51	3.56	20.39	19.11	78.89	715.24	45.24	47.14	50.0
809.98	16.96	27.52	3.43	19.52	19.02	78.98	715.41	45.56	47.14	50.0
809.96	16.96	27.52	3.30	18.67	18.93	79.07	715.58	45.13	47.14	50.0
808.04	16.92	27.43	3.18	17.82	18.79	79.21	715.73	45.13	47.14	50.0
804.85	16.84	27.30	3.05	16.99	18.62	79.38	715.84	45.13	47.14	50.0
804.00	16.82	27.26	2.92	16.17	18.51	79.49	715.94	45.13	47.14	50.0
803.61	16.81	27.24	2.80	15.36	18.41	79.59	716.04	44.33	46.21	50.0
803.22	16.80	27.23	2.70	14.75	18.34	79.66	716.14	43.86	46.00	50.0
802.83	16.79	27.21	2.67	14.56	18.31	79.69	716.25	43.55	46.00	50.0
801.58	16.76	27.16	2.64	14.40	18.26	79.74	716.08	43.55	46.00	50.0

Coker

General | Child Elements | Attributes | Ports | Analyses | Notification Rules | Version

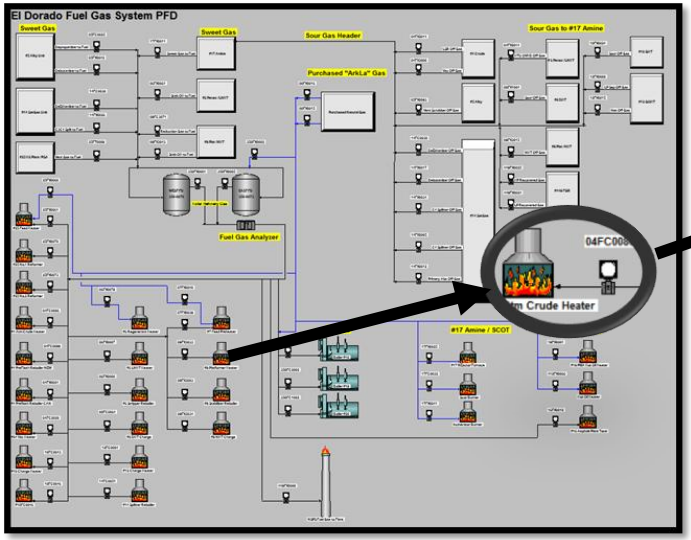
Filter

Name	Value
Burner Pressure	22.78773 psig
Calcs-Combustion	
Calcs-HeatLoss	
Calcs-RH	
Firing Rate	36773.6445
Fuel Efficiency	81.81252 %
Fuel Gas Flow Rate	3.757996E+07 SCFH
Fuel Gas LHV	978.5441 Btu
Heater Name	Coker
O2 Content	4.607892 %
Temperature - Ambient Air	52.84462 deg F
Temperature - Design Datum	60 deg F
Temperature - Heater Outlet	919.3098 deg F
Temperature - Stack	595.8001 deg F

Name	Expression	Value at Evaluatio
hL	'Calcs-Combustion|Heating Value'/'Calcs-Combustion|Fuel Mass'	20603
Deltaha	'Calcs-HeatLoss|Deltaha'	-36.528
Deltahf	'Calcs-HeatLoss|Deltahf'	-4.4984
Deltahm	'Calcs-HeatLoss|Deltahm'	0
hr	'Calcs-HeatLoss|hr'	515.06
hs	'Calcs-HeatLoss|hs'	3204.4
FE	((hL+Deltaha+Deltahf+Deltahm)-(hr+hs))/hL*100	81.747

Heater Efficiency / Reliability

- Use AF to monitor heater efficiency KPIs.
- Work being developed for Reliability: Tube Skin Temperature IOW



04 ATM Heater

Heater Efficiency

Fuel Efficiency

Name	Description	Value	Units	Trend	Average	Minimum	Maximum
04 ATM Heater|Fuel Efficiency	Fuel Efficiency	80.57	%		78.99	-148.09	83.36

Other Heater Parameters

Name	Description	Value	Units	Trend	Average	Minimum	Maximum
04 ATM Heater|Burner Pressure	FG To Burners	18.552	psig		18.804	15.274	24.848
04 ATM Heater|Firing Rate	Firing Rate	123009	MMBtu/hr		121788	106953	149264
04 ATM Heater|Fuel Gas Flow Rate	Furnace FG Flow	125.92	MSCFH		124.68	109.49	151.78
04 ATM Heater|Fuel Gas LHV	FUEL GAS LHV	976.86	Btu		976.86	976.86	976.86
04 ATM Heater|O2 Content	ATM. HTR. STACK CEM O2	3.4735	%		3.2212	0.015736	19.852
04 ATM Heater|Temperature - Heater Outlet	Furnace Outlet	653.72	deg F		649.69	625.53	674.9
04 ATM Heater|Temperature - Stack	ATM.HTR STACK BELOW DAMPER	664.78	deg F		663.25	653.22	669.53

Return to Operations Overview Return to Heater Efficiency Summary

Perspectives for Consideration

Best Practices:

- MINERVA Committee / Executive Committee meetings
- Roles versus job- interested resources to support continuous improvement
- Implemented an online change request form for minor / major changes
- Implemented “Sandbox” and “Production” database – MOC-type process to test / validate in “Sandbox” before moving to “Production”
- Each PI administration supports each others refinery
- Production database replaces Sandbox once a quarter

Lessons Learned:

- Identified “Scope Creep” and dealt with it
- A lot of assumptions were being made
- “My” process vs. “Our” process – getting everyone on board
- Digital transformation is an growing process that needs to be embraced

Digital Transformation – *Journey Continues . . .*

- Expand MINERVA to other Business Units
- Integration of MINERVA within the business units within the Company
- Evolve CBM (Condition Based Monitoring) and our focus on asset reliability leveraging PI AF and integration into a preventative maintenance program to leverage health indexes & anomaly detection
- Continue to “educate & empower” our resources on the capabilities of the PI System
- Continuous improvement through clear value metrics with audits and “Yearly Reviews”

Enabling Our Digital Transformation(DT) with the EA

GOAL: Become a 1st Quartile Performer in key Solomon indices and EBITDA though a digitally enhanced operational excellence program – a Digital Transformation.

CHALLENGE

Diverse culture and operational data systems inhibiting desired business performance risking long term sustainability

- Multiple historians and "Excel hell"
- Inefficient work processes, sharing of best practices and knowledge
- No local and enterprise wise, proactive, exception based data based decisions

SOLUTION

Entered into a strategic, value focused partnership with the EA and started our DT journey with Focus on historian and excel normalization via PI AF Templates

- Initially focused on KPIs, dashboards, and reports – normalization of data
- Started analytics with PI AF Templates
- Leveraged PI Vision for self serve BI and mobility

RESULTS

Standardization of key dashboards, KPIs, & reports; foundation for the next chapter in DT journey

- Defined the Delek "language" with PI AF
- Bringing culture together and capturing knowledge, best practices, and standards
- Established foundation for improved definition of our DT vision and "chapters"
- Ability to abstract new Alon refineries into our "OT chart of accounts" using PI AF

Contact Information

- **Frank Simmons**
- Frank.Simmons@delekus.com
- VP, Refining Best Practices
- Delek US

- **John Arney**
- John.Arney@delekus.com
- Process Information Coordinator
- Delek US

- **Bob Gonzales**
- Bob.Gonzales@delekus.com
- Director, Training & Operational Excellence
- Delek US

Merci

谢谢

Danke

Спасибо

Gracias

Thank You

감사합니다

ありがとう

Grazie

Obrigado