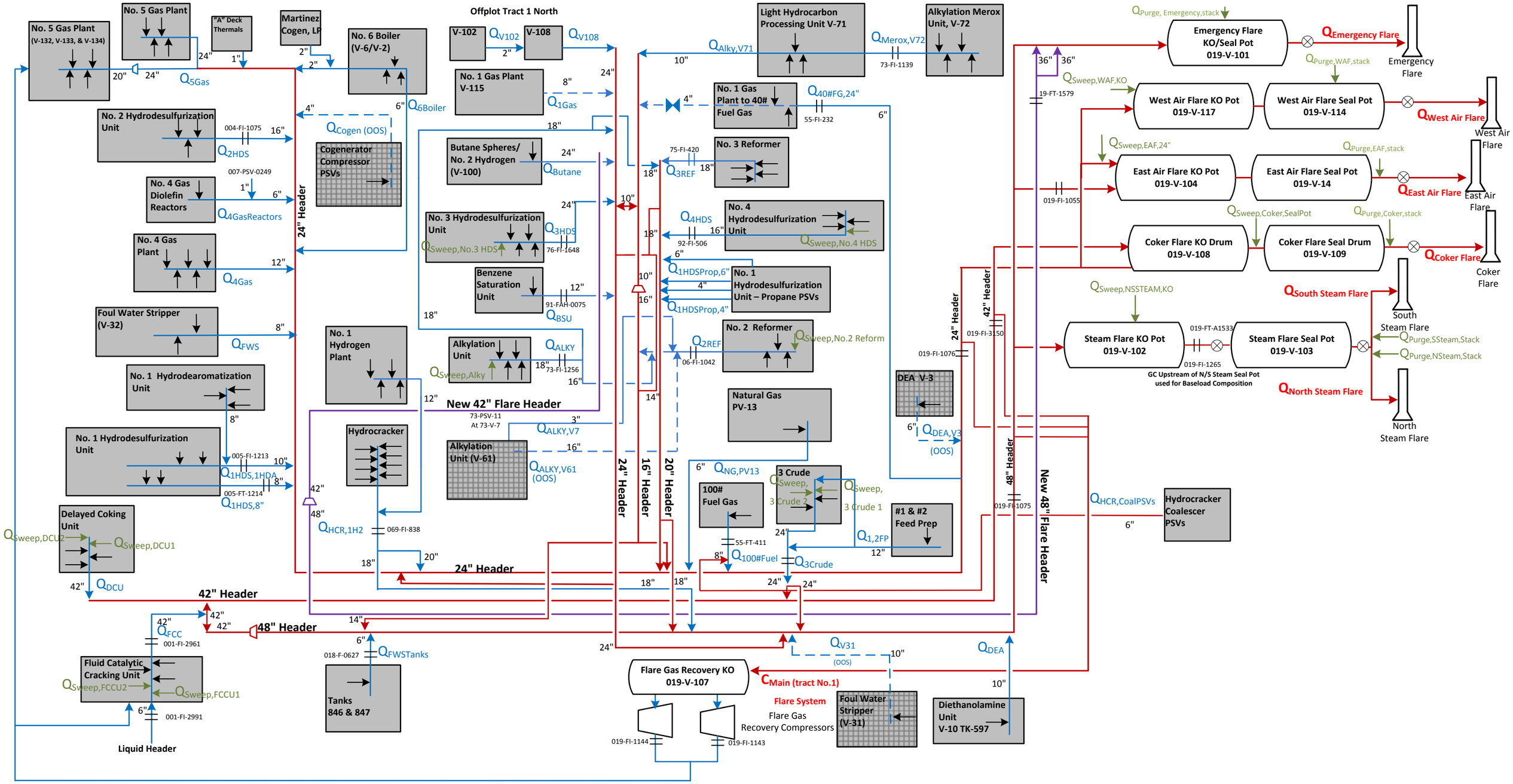
Table A-1 History of revisions

Revision	Date	Summary of Changes
1.0	April 1, 2017	Initial CDFMP

Main (Tract No. 1) Refinery Flare System

Waste Gas Map



Flare Drawing Color Legend			
	Main Flare Header(s)		Out of Service Process Unit
	Flaring Process Unit Headers		Process Unit
	1-30 Individual Flare Connections		GC Composition Sample Points
	1-5 Individual Sweep or Purge Connections		Flow Meter
	Blinded Process Unit Connection		New Header Installation; as-of April 1, 2017

REV.	DESCRIPTION	DATE	BY
A	Issued for Information	4/1/17	Barr

TESORO

TESORO MARTINEZ REFINERY

WASTE GAS MAP
MAIN (TRACT No. 1) FLARE SYSTEM

DWG NO 019-BA-XXX-001 C

SCALE NONE SHEET 1 OF 1

Main (Tract No. 1) Refinery Flare System

Q_{PH} Evaluation

Table B - 1 - 1 Main (Tract No. 1) Refinery Flare System Source Descriptions

Flare Process Unit Header	Q_{PH} Flow (MMSCFD)[1]	Sources	Detailed Source Description
Q_{1Gas}	0	Blinded Connection	Blinded connection from No. 1 Gas Plant. Now connects to 40# Fuel Gas system and is connected to the flare via that system.
$Q_{1HDS,1HDA}$	0.0242	20 PSVs 17 Drains 13 Vents 3 Hose Connections 3 Process Valves 1 Sample Return 3 Depressuring Valves 15 Other	PSV-0006
			P-3714 Vent Valve
			P-3713 Vent Valve
			PV-0086A
			V-5017 (C-11) Drain Valve
			E-4211 Shell Side Outlet
			E-4212 Shell Side Outlet
			E-4232 Shell Side Outlet
			E-4211 Shell Side Inlet
			E-4231 Shell Side Inlet
			E-4212 Shell Side Inlet
			PSV-0017
			PSV-0018
			Recycle Hydrogen from E-4830 to E4211/4231 Shell Side
			Recycle Hydrogen from E-4830 to E4212/4232 Shell Side
			R-1 (C-12) Blind Flanged Valve
			R-1 (C-12) Connections for Hoses
			F-16 Fuel Gas Vent
			R-2 (HV-70) Valve at Top
			R-2 (HV-70) Valve at Bottom
			V-5016 to E-4221 Shell Side Bottoms
			PSV-0004
			LV-0024
			PSV-0189
			PSV-0205
			V-5016 Bottoms Level Bridle and Instrument Drains
			PSV-0016
			V-5016 (HV-10) Deethanizer Column
			PSV-0190
			Eductor V-52, Hydrogen from V-73
			PSV-0185
			V-52 Drain
			PSV-0201
			PSV-0202
			V-5087 Vent Valve
			HV-1088
			CP-275 and CP-274 Vent Blowdown
			CP-274 and CP-274 Drain Blowdown
			V-73 Drain
			Multiple Hose Connections
			PSV-0214
			V-79 Drain Valve
			005-FT-1214 Liquid Drain
			AIT-3264 Sample Return
			Multiple Utility Hose Connections
			P-9750 Vent Valves
			P-9751 Vent Valves
			P-9754
			PSV-0061
			V-12 Vent to Blowdown
			PSV-0077
			PSV-0025
			V-4 Vent to Blowdown
			V-17 Drain Valve
			V-17 Drain Trap
			V-18 Drain Valve
			V-18 Drain Trap
			010-PIT-0176 Vent to Blowdown
			V-20 Drain Valve
			V-20 Drain Trap
			V-19 Drain Valve

[1] NA indicates non-continuous flows or flows that cannot be feasibly estimated through engineering analysis.

			V-19 Drain Trap
			010-PIT-0177 Vent to Blowdown
			HV-0164 – Unit Depressuring Valve
			Unit Eductor to Blowdown
			PSV-0068
			PSV-0069
			V-16 Drain Valve
			V-66 Drain Valve
			PSV-0067
			PV-0062B
			PSV-0066
			PSV-0064
			PSV-0063
			CP-276 Gland Gas to Blowdown
			CP-277 Gland Gas to Blowdown
$Q_{1HDS,8''}$	0.0746	7 PSVs 3 Process Valves 1 Sample Return 2 Vent Valves 1 Hose Connection 7 Drains 2 Manual Bypasses 6 Other	PV-4203B
			P-9964 Normally Closed Valve
			P-9965 Normally Closed Valve
			P-3715 Vent Valve
			P-3716 Vent Valve
			PV-0082A
			PSV-200
			PSV-0203
			PSV-0194
			PSV-0194 Bypass Valve
			PSV-0199
			PSV-0199 Bypass Valve
			V-4005 Drain Valve
			PV-0915C
			PSV-0213
			V-104 Drain Valve
			V-104 Drain Trap
			V-105 Drain Valve
			V-105 Drain Trap
			PSV-0195
			CP-287 Drip to Blowdown
			V-102 Drain Valve
			V-102 Drain Trap
			V-103 Drain Valve
			V-103 Drain Trap
			PSV-0198
			CP-286 Drips to Blowdown
			AIT-3264 Sample Return
			Hose Connection to Blowdown Header
			CP-287 Gland Sweep
			CP-286 Gland Sweep
$Q_{1HDSProp,4''}$	NA	3 PSVs	PSV-0210
			PSV-0047
			PSV-0043
$Q_{1HDSProp,6''}$	NA	6 PSVs 4 Vent Valves 2 Blowdowns 1 Sample Point	PSV-0031
			V-5074 Vent Valve
			PSV-0030
			V-5067 Vent Valve
			V-5068 Vent Valve
			SP-0005
			PSV-0216
			PSV-0217
			P-9708 Vent Valve
			V-5076 Blowdown
			V-5078 Blowdown
			PSV-0211
			PSV-0184
$Q_{100\#Fuel}$	0.0406	1 PSV 1 Process Valve	PV-1
			PSV-0059
Q_{2HDS}	0.0604	13 PSVs 14 Drain Valves 29 Vent Valves 5 Blowdown 1 Unit Depressuring Valve	PSV-0086
			SE-2026 Vent Valve
			PSV-0087
			SE-2027 Vent Valve
			V-4001 Vent Valve

		1 Process Valve 5 Other	PSV-002
			PV-649A
			P-10318 Vent Valve
			P-10318 Seal Vent Valve
			P-10318 Case Vent Valve
			P-3939 Vent Valve
			P-3938 Vent Valve
			F-20 Drain Valves
			V-4004 Drain Valve
			PSV-0009
			PSV-0098
			V-4004 Vent Valves
			PSV-0088
			V-34 Vent to Blowdown
			V-34 Drain Valve
			V-34 Double Block/Bleed to Blowdown
			V-42 Drain Valve
			V-42 Double Block/Bleed to Blowdown
			V-775 Drain Valve
			V-775 Vent Valve
			CP-284 Multiple Connections
			PSV-0093
			V-33 Vent to Blowdown
			V-33 Double Block/Bleed to Blowdown
			Eductor to Blowdown
			V-43 Drain Valve
			V-43 Double Block/Bleed to Blowdown
			HV-640 Unit Depressuring Valve
			PSV-0017
			V-4007 Vent Valve
			V-4012 Drain Valve
			PSV-0018
			PSV-0104
			E-4858/4859 Shell Side and E-4363-4364 Shell Side
			PSV-0094
			V-4008 Drain Valve
			P-3943 Vent Valve
			P-3942 Vent Valve
			P-3944 Vent Valve
			P-3945 Vent Valve
			F-19 Drain Valves
			V-4009 Drain Valve
			V-4009 Vent Valve
			V-4009 Wet Gas Vent Valve
			V-4009 Level Bridle Drain Valve
			LV-679A
			LP Wet Gas Vent Valve
			HP Wet Gas Vent Valve
			P-3513 Vent Valve
			P-3526 Vent Valve
			PSV-0058
			PSV-0043
			V-4015 Drain Valve
			V-4015 Drain Valve
			100# Fuel Gas Vent Valve
			F-19 Fuel Gas Vent Valve
			F-19 Pilot Gas Vent Valve
			F-20 Fuel Gas Vent Valve
			Multiple Hose Connections on Blowdown Header
			P-3942 Seal Fluid Reservoir Vent Valve
			P-3943 Seal Fluid Reservoir Vent Valve
			CP-283 Seal Gland Sweeps
			CP-285 Seal Gland Sweeps
Q_{2REF}	0.204	15 PSVs 38 Vent Valves 15 Drains 4 Process Valves 4 Relief Valves 6 Other	PSV-0055
			PSV-0056
			PSV-0041
			V-114 Vent Valve
			PSV-0003
			P-0632 Vent Valve

			FI-1374
			P-0528 Vent Valve
			P-0550 Vent Valve
			PSV-0040
			V-120 Drain Valve
			E-4389/E-4390 Drain Valve
			PSV-0082
			E-4400/E-4399 Drain Valve
			PSV-0033
			PV-429B
			V-104 Effluent Line Drain Valve
			V-104 Drain Valve
			CP-0310 Drain Valve
			CP-0310 Vent Valve
			Ejector on V-104
			Hydrogen from V-104 Vent Valve
			Relief Valve on Bottoms from V-104
			Relief Valve on line from E-4404
			C-6 Drain Valve
			C-6 Drain Valve
			E-4405 Drain Valve
			P-0512 Vent Valve
			Relief Valve on Line from P-0512
			V-161 Vent Valve
			P-0513 Vent Valve
			Relief Valve on Line from P-0513
			V-160 Vent Valve
			V-105 Drain Valve
			PSV-0073
			PSV-0021
			PSV-0022
			PSV-0023
			PSV-0075
			V-108 Drain Valve
			FV-591
			PSV-0034
			E-5012 Shell Side Drain and Vent
			E-5013 Shell Side Drain and Vent
			PV-979B
			V-109 Drain Valve
			FV-980
			PSV-0074
			E-5016 Vent Valves
			P-9568 Seal Vent
			P-9567 Seal Vent
			E-4408 Line to Blowdown
			PSV-0004
			V-116 Drain Valve
			100# Fuel Gas Sweep to V-115
			100# Fuel Gas Line Bleed
			Sour Oil Trap
			Seal Oil Vent
			E-5367 Vent Valve
			E-5368 Vent Valve
			E-5369 Vent Valve
			E-5370 Vent Valve
			P-0524 Vent Valve
			E-5042 Vent Valve
			E-5046 Vent Valve
			V-152 Vent Valve
			V-153 Vent Valve
			P-0521 Vent Valve
			E-5041 Vent Valve
			E-5045 Vent Valve
			V-154 Vent Valve
			V-155 Vent Valve
			P-0515 Vent Valve
			E-5043 Vent Valve
			E-5039 Vent Valve

			V-158 Vent Valve
			V-159 Vent Valve
			P-0517 Vent Valve
			V-156 Vent Valve
			V-157 Vent Valve
			E-5040 Vent Valve
			E-5044 Vent Valve
Q_{3Crude}	0.1123	25 PSVs 8 Flushes 14 Vent Valves 2 Steam-Out Connections 6 Sweep Gas Connections 4 Other	PSV-0047
			PSV-1047
			Diesel Flush Line for PSV-0047 & PSV-1047
			PSV-006
			PSV-017
			Vent Valve on Line from E-4446 Fractionator Overhead Condenser Outlet and Overhead from V-51
			Vent Valve on Line from E-4446 Outlet
			Vent Valve on Line from E-4187 Fractionator Overhead Cooler Outlet
			Vent Valve on Line from E-4446 (Shell Side)
			PSV-0024
			V-105 Vent Valve
			Diesel Flush Line
			PSV-0025
			V-106 Vent Valve
			Diesel Wash from 2' Header
			Diesel Wash from P-803/P-804 to Line from E-4578
			PSV-0003
			PSV-0004
			Crude from F-8 Line Clean-Out Line
			PSV-0034
			PSV-0019
			Vent Valve on P-803
			Line from V-54 to P-3098 M-0214 Diesel Product/Diesel Reflux Common Line
			Seal Oil Flush of Atmospheric Resid from F-71 Line
			Atmospheric Resid From F-71 Line Clean-Out Line
			PSV-0048
			Seal Oil Flush to V-170
			Flush Oil Flush to V-91
			PSV-0020
			P-369 Vent Valve
			P-3299 Vent Valve
			PSV-0045
			Vent Valve on P-388 (P-8969)
			PSV-0050
			PSV-0319
			PSV-1012
			PSV-0010
			PSV-1026
			PSV-1027
			PSV-1028
			PSV-1029
			PSV-1033
			PSV-1032
			PSV-1031
			PSV-1030
			Diesel Flush Line to Flare Header Line
			Steam Out- 250 PSIG Steam to Header
			V-91 Flare Knock Out Drum Sweep Gas (6 Connections)
			From #1 & #2 Feed Prep Knock Out Drum V-170
			Steam-Out Valve from 250# Steam to V-91
			Vent Valve on P-10221
			Vent Valve on P-10222
			V-92 P-10221 Seal Reservoir Vent
			V-93 P-10222 Seal Reservoir Vent
Q_{3HDS}	0.3073	29 PSVs 29 Vents 17 Drains 1 Unit Depressure Valve 4 Process Valves 1 Sample Point 1 Hose Connection 1 Analyzer	PSV-1005
			PSV-1009
			Make-up Gas from V-131 (V-31)
			PSV-1008
			V-7 Vent Valve
			PSV-1007
			V-6 Vent Valve

		1 Sweep 11 Other	V-6 to V-125 Line Vent Valve
			V-6 to V-129 Line Vent Valve
			PSV-1139
			V-17 Vent Valve
			PSV-1138
			V-18 Vent Valve
			PSV-1137
			V-19 Drain Valve
			1st stage Discharge Bottle Vent Valve
			1st stage Discharge Bottle Drain Valve
			1st Stage Suction Bottle Drain Valves (2)
			V-32 (V-141) Drain Valve
			V-32 (V-141) Vent Valve
			Make-up Gas to CP-440 Discharge Line Vent
			PSV-1010
			V-32 (V-141) Vent Valve
			2nd Stage Suction Bottle Drain Valve
			PSV-1012
			V-8 Vent Valve
			PSV-1014
			V-127 (V-27) Vent Valve
			V-28 (V-128, V-140) Drain Valve
			v-28 (V-128, V-140) To V-4 Line Vent Valve
			PSV-1013
			V-28 (V-128, V-140) Vent Valve
			2nd Stage Suction Bottle Drain Valve
			V-127 Valve
			V-127 Vent Valve
			V-125 (V-25) Drain Valves (2)
			R-1 Reactor "A" Reactor Purge
			R-2 Reactor "B" Reactor Purge
			PSV-1538
			PSV-1539
			PSV-1021
			PSV-1022
			V-2 Vent Valve
			PSV-1023
			PSV-1024
			HV-219, V-2 Unit Depressuring Valve
			PSV-1132
			PSV-1026
			V-3 Vent Valve
			PSV-1133
			P-8816 Vent Valve
			P-8815 Vent Valve
			V-13 Level Instrument Drains (2)
			PSV-1028
			V-13 Vent Valve
			P-8816 Barrier Fluid Reservoir Vent
			P-8815 Barrier Fluid Reservoir Vent
			V-14 Overhead Receiver and Level Instrumentation Drain Valves
			PV-94A
			Multiple 1" Hose Connections (6), Located Downstream of PV-94A
			PSV-1031
			PSV-1032
			PSV-1037
			V-15 Vent Valve
			V-15 Level Instrumentation Drains (2)
			PV-116A
			SP-0008 Recycle Hydrogen Sample Point
			PSV-1006
			V-4 Vent Valve
			Eductor from V-4 to Blowdown
			Recycle Compressor Knock-Out Drum Drain Valve
			Recycle Compressor Knock-Out Drum Level Instrumentation Drain
			CP-434 Vents
			CP-434 Discharge Vent
			FT-1517 on Nitrogen from Header
			PV-61B

			PSV-1018
			PSV-1030
			V-9 Sour Water Flash Drum
			PSV-1040
			V-10 Drain Valve
			PSV-1087
			PV-332B
			E-5494 P-8829 Relief Drum Pump Fluid Reservoir Vent
			Recycle Gas H2 Purity Analyzer
			V-137 Drain Valve
			V-138 Drain Valve
			CP-439 Packing Section 2nd Stage
			CP-439 Packing Section 1st Stage
			CP-440 Packing Section 2nd Stage
			CP-440 Packing Section 1st Stage
			CP-439 Unloaders
			CP-440 Unloaders
			P-8813 Vent
			P-8814 Vent
			Blowdown Header Natural Gas Sweep
Q_{3REF}	0.261	20 PSVs 4 Sweeps 17 Vents 17 Drains 1 Sample Point 5 Process Valves 2 Maintenance Valves 2 Other	PSV-1002
			Vent Valve on P-8671 Seal
			Vent Valve on P-8670
			Vent Valve on P-8672
			Vent Valve on P-8673
			PV-21B
			PSV-1009
			PV-181B
			PSV-1010
			SP-8 Sample Point
			Vents from V-150/V-151
			PSV-1013
			PSV-1013
			PSV-1011
			PSV-1011
			Drain Valve on V-154
			Drain Valve on V-155
			Drain Valve on V-156
			Drain Valve on V-157
			Drain on 1st and 2nd Stage on CP-408
			V-4 Drain
			Drain from V-6
			PSV-1015
			PSV-1015
			PSV-1014
			PSV-1014
			Drain Valve on 1st Stage Suction Surge Drum
			Drain Valve on 2nd Stage Suction Surge Drum
			Drain Valve on V-160
			Drain Valve on V-161
			PSV-1012
			PSV-1012
			Drain on 1st and 2nd Stage on CP-409
			PSV-1016
			V-6 Maintenance Valve
			PSV-1019
			C-3 Debutanizer Maintenance Valve
			Vent Valve on P-8681
			Vent Valve on P-8682
			PSV-1020
			V-3 Drain Valve
			PV-580
			Drain Valve on D-27 (V-27)
			Drain Valve on E-4605
			PSV-1021
			BV-9
			PSV-1022
			BV-49
			PSV-1023

			V-150 Vent
			V-151 Vent
			PSV-1056
			Drain Valve on D-34
			Fuel Gas Filter Drain
			Flare Header Sweep Gas via FI-683
			Flare Header Sweep Gas via FI-682A
			Flare Header Sweep Gas via FI-691
			Flare Header Sweep Gas via FI-682B
			Vent Valves on P-8677
			Vent Valves on P-8678
			Vent Valve on E-5488
			Vent Valve on E-5488
			V-330 P-8681 Outer Liquid Barrier Pot
			P-8683 Vent Valves
			P-8684 Vent Valves
			V-332 Vent
			V-333 Vent
			V-331 P-8682 Outer Liquid Barrier Pot
Q_{4Gas}	0.0	24 PSVs 69 Vents 6 Drains 13 Blowdowns 2 Sample Points 5 Process Valves 4 Other	SP-0014
			Repressuring Gas Line Vent to Blowdown
			PSV-0024
			V-275 and V-277 to Blowdown
			PSV-0012
			V-274 and V-276 to Blowdown
			Each Compressor has 1" Valves that Tie the 6" PSV Relief Header to a 1 1/2" Header to V-205B Flare Knock Out Pot
			Wash Water Header Vent
			PSV-0023
			V-279 and V-281 to Blowdown
			PSV-0016
			V-278 and V-280 to Blowdown
			PSV-0025
			V-283 and V-285 to Blowdown
			PSV-0014
			V-282 and V-284 to Blowdown
			PSV-0018
			V-287 and V-289 to Blowdown
			PSV- 0015
			V-286 and V-288 to Blowdown
			PSV-0027
			V-291 and V-293 to Blowdown
			PSV-0013
			V-290 and V-292 to Blowdown
			PSV-0264
			PSV-0047
			V-295 and V-297 to Blowdown
			PSV-0048
			V-294 and V-296 to Blowdown
			V-205B Vent
			PSV-0265
			V-1 & V-2 Vent
			V-2 Drain
			E-4023/E-4024 Vent
			LV-1994
			PSV-1411
			LV-201
			Lower Reboiler Line Vent
			PSV-0175
			PSV-0174
			E-4721/E-4727 Vent Valve (Shell Side)
			PSV-0171
			C-10 Vent Valve
			P-10042 Vent
			P-10042 Barrier Fluid Reservoir
			V-15 Vent
			Sour Gas to No. 5 Gas Plant Line
			HV-1978
			E-4716 & E-4717 Vent Valve

			E-4016 & E-4017 Vent Valve
			HV-1975
			P-9356 Vent Valve
			P-9355 Vent Valve
			P-3814 Vent Valves (2)
			P-255 Vent Valves (2)
			HV-1976
			P-3448 Vent
			P-3443 Vent
			C-6 #1 H2S Absorber Sweet Propane Vapor Sample
			HV-1977
			P-8894 Vent Valve
			P-8895 Vent Valve
			PV-2632B
			PSV-0275
			V-316 Vent
			V-345 Vent
			V-346 Vent
			P-10034 Vent Valve
			P-10034 Vent Valve
			PSV-0279
			PSV-0284
			C-315 Vent
			V-349 Vent
			E-5387 Vent
			V-350 Vent
			E-5388 Vent
			P-10040 Vent Valve
			P-10041 Vent Valve
			PSV-0278
			V-317 Vent
			PV-2697A
			V-347 Vent
			V-348 Vent
			P-10036 Vent Valve
			P-10037 Vent Valve
			CP-192 Seal Pot Vents x4 to V-205B
			CP-193 Seal Pot Vents x4 to V-205B
			CP-194 Seal Pot Vents x4 to V-205B
			CP-195 Seal Pot Vents x4 to V-205B
			Auto Pump on Drain Header from Compressor #1-6
			CP-196 Seal Pot Vents x4 to V-205B
			CP-250 Seal Pot Vents x4 to V-205B
			PSV-180
			V-20 Drain Valve
			V-20 6" Pipe (Vertical Pipe for Liquid Knock Out)
			V-363 Vent Valve
			V-362 Vent Valve
			V-354 Vent
			V-355 Vent
			V-360 Vent
			V-361 Vent
			V-358 Vent
			V-359 Vent
			V-356 Vent
			V-357 Vent
			V-365 Vent
			V-366 Vent
			V-367 Vent
			V-368 Vent
			V-369 Vent
			V-370 Vent
			P-3817 Seal Vent
			P-3818 Seal Vent
			Seal Cooler for P-29 Vent Valve
			Seal Cooler for P-29 Vent Valve
			Seal Cooler for P-25 Vent Valve
			Seal Cooler for P-25 Vent Valve
			Seal Cooler For P-8475 Vent Valve

			Seal Cooler For P-8475 Vent Valve
			P-3812 Vent
			P-3813 Vent
			PSV-0170
			V-269 Drain Valve
$Q_{4GasReactors}$	NA	1 PSV 2 Vent Valves	V-201 Vent Valve
			V-202 Vent Valve
			PSV-0249
$Q_{40\#FG,24''}$	0.0	1 Process Valve 1 PSV	PV-2
			PSV-58
Q_{4HDS}	0.2252	14 PSVs 33 Vents 15 Drains 1 Sample Point 4 Process Valves 1 Sweep 5 Other	PSV-0001
			V-5 Level Drains
			P-10060 Vent
			P-10060 Drain
			P-10061 Vent
			P-10061 Drain
			P-10060 Seal Fluid Reservoir Vent
			P-10061 Seal Fluid Reservoir Vent
			P-10060 Cooler Vent
			P-10061 Cooler Vent
			Natural Gas from Header Depressuring
			PSV-0007
			PSV-0007
			HV-0298
			P-10062 Vent
			P-10062 Seal Fluid Vent
			P-10063 Vent
			P-10063 Seal Fluid Vent
			P-10064 Vent
			P-10065 Vent
			P-10064 Seal Fluid Vent
			P-10065 Seal Fluid Vent
			PSV-0010
			PSV-0010
			SP-0005
			Recycle Gas from V-6 and C-2
			PSV-0011
			PSV-0011
			EJ-1009 Ejector
			CP-0541 Spillback to Flare
			CP-0541 Drain Valves
			SE-2094 Drain Valve
			SE-2095 Drain Valve
			SE-2096 Drain Valve
			SE-2097 Drain Valve
			SE-2098 Drain Valve
			SE-2099 Drain Valve
			CP-0541 Drain Valve
			CP-0541 Primary Drive End Vent
			CP-0541 Primary Non-Drive End Vent
			HV-0550A
			HV-0550B
			PSV-0016
			PSV-0016
			V-10 Drain Valve
			PSV-0017
			PSV-0017
			C-3 Drain Valve
			LB-451
			V-8 Drain Valve
			V-8 Vent Gas
			V-8 Drain
			P-10066/P-10067 Liquid to V-12
			P-10066 Vent
			P-10067 Vent
			P-10066 Seal Fluid Vent
			P-10067 Seal Fluid Vent
			P-10068 Vent
			P-10069 Vent

			P-10068 Seal Fluid Vent
			P-10069 Seal Fluid Vent
			P-10068 Cooler Vent
			P-10069 Cooler Vent
			PSV-0026
			PSV-0026
			Sweep to V-12
			P-10072 Vent
			P-10073 Vent
			P-10072 Seal Fluid Vent
			P-10073 Seal Fluid Vent
			V-13 Vent
			V-13 Water Drain
Q_{5Gas}	0.0792	34 PSVs 5 Process Valves 2 Sample Points 52 Vents 3 Drains 9 Blowdowns 1 Other	PSV-106
			PSV-116
			PSV-117
			PSV-188
			PSV-0103
			PSV-0104
			PSV-0105
			PSV-55
			V-132 Sample Line
			PV-2401
			PSV-0006
			PSV-0007
			P-3889 Vent Valve
			P-3888 Vent Valve
			P-3889 Vent
			P-3888 Vent
			P-3890 Pump Vents (2)
			P-3890 Future Connection for Seal Pot Vent
			PSV-0025
			PSV-15
			PSV-31
			P-3896 Future Connection Seal Pot Vent
			P-3897 Seal Pot Vent
			P-3879 Seal Pot Vent
			PSV-0146
			C-5 Vent
			P-3878 Future Connection for Seal Pot Vent
			Seal Pot Vent Header to Blowdown
			PSV-35
			V-131 Vent Valve
			PSV-155
			Drain to "PD" Line to Blowdown
			V-45 Drain Valve
			V-45 Drain Valve to V-139
			PSV-0157
			F-22 Recycle Line to Blowdown
			PSV-34
			C-2 Vent Valve
			PV-4367
			PSV-0017
			V-138 Vent
			E-4314/E-4315 to Blowdown via Depressuring Line
			E-4566/E-4567 to Blowdown via Depressuring Line
			PSV-36
			C-14 Vent Valve Permanently Blinded Closed
			P-3880 Future Connection Seal Pot Vent
			P-3894 Future Connection Seal Pot Vent
			P-3895 Future Connection Seal Pot Vent
			PSV-0018
			E-4321 to Blowdown
			PV-4392
			C-3 Vent
			C-3 and C-9 Vent
			E-4318/E-4319 to Blowdown
			PSV-0022
			P-3883 Future Seal Pot Vent

			Future Connection for P-3884 Seal Pot Vent
			PSV-0002
			C-17 Vent Valve
			C-18 Vent Valve
			PSV-0003
			SP-0016
			PSV-0001
			PSV-0027
			PSV-0028
			PSV-0195
			C-10 Depressurizing Line to Blowdown
			P-3885 Vent
			P-3911 Pump Vent
			P-3910 Pump Vent
			P-3885 Seal Pot Vent
			P-3911 Future Connection Seal Pot Vent
			P-3910 Future Connection Seal Pot Vent
			PSV-48
			C-20 Vent Valve
			C-21 Vent Valve
			PSV-0037
			PSV-0047
			C-22 Vent Valve
			PSV-183
			PSV-0179
			FIT-4803
			PSV-0180
			PV-22
			LV-84
			Depressuring Line from E-4315/4567 and Line from E-4319
			P-3929 Vent Valves (4)
			CP-297 Seal Eductors (SE-3026A/B) to Blowdown
			CP-298 Seal Eductors (SE-3027A/B) to Blowdown
			P-3896 Vents
			P-3897 Vents (3)
			P-3879 Vents (3)
			P-3881 Vent
			P-3882 Vent
			P-3883 Valve
			P-3892 Valve
			P-3893 Valve
			P-3883 Valve
			P-3884 Valve
			P-3880 Vent and Seal (1/2") Vent Valves
			P-3895 Vent and Seal (1/2") Vent Valve
			P-3894 and Barrier Fluid Reservoir Vent Valves
			P-3886 Vent Valve
			P-3887 Vent Valve
			Vent Valve for P-10261
			Vent Valve for P-10262
$Q_{6Boiler}$	NA	2 PSVs 2 Drains	PSV-0082
			PSV-0075
			V-6 Drain Valve
			V-2 Drain Valve
Q_{BSU}	NA	10 PSVs 1 Depressure Valve 4 Drains 4 Vents to Relief Header	PSV-0001
			V-2 to Relief Header
			PSV-0016
			PSV-0002
			V-1 Drain
			PSV-0011
			V-14 Drain
			PSV-0014
			PSV-0004
			YV-0040 Unit Depressure Valve
			Steam Jet Ejector to Relief Header
			PSV-0015
			PSV-0005
			PSV-0013
			V-5 to Relief Header

			PSV-0008
			P-9847 Liquid to Relief Header
			V-6 Liquid Drain
			V-6 Vapor Drain
Q_{Butane}	NA	9 PSVs 9 Vents 8 Drains	PSV-0109
			PSV-0110
			PSV-0115
			22-V-129 Vent
			22-V-130 Vent
			Vent Valve on Suction Line from TK-514
			22-P-9729 Vent Valve
			22-P-9730 Vent Valve
			PSV-0111
			PSV-0112
			22-TK-516 Drain Valve
			22-V-125 Vent
			Drain Valve for TK-572
			Drain Valve for TK-515
			Drain Valve for TK-554
			Drain Valve for TK-514
			TK-598 & TK-652 Water Drain
			TK-516 Water Drain
			PSV-0113
			PSV-0002
			PSV-0114
			Water Knock Out Pot Drain Valve
			#2 H2 Plant to Flare
			PSV-0001
			22-V-131 Vent
			22-P-9731 Vent Valve
Q_{Cogen}	OOS	2 PSVs	PSV-0001
			PSV-0014
Q_{DCU}	0.5478	14 PSVs 1 Process Valve 44 Vents 1 Sweep 5 Drains 1 Other	Fuel Gas Vent Valve after PCV-403 (F-78)
			Fuel Gas Vent Valve after PCV-434 (F-78)
			Fuel Gas Vent Valve after PCV-435 (F-78)
			Fuel Gas Vent Valve after PCV-1376 (F-79)
			Fuel Gas Vent Valve after PCV-1405 (F-79)
			Fuel Gas Vent Valve after PCV-1406 (F-79)
			PSV-0063
			Natural Gas Sweep to Instrument Levels
			PSV-0065
			PSV-0017
			PSV-0054
			V-06 Drain Valve
			SE-79 Drain Valve
			SE-80 Drain Valve
			PSV-0099
			V-05 to Flare Header
			PSV-0025
			PSV-0026
			PSV-0027
			PSV-0028
			PSV-0043
			PSV-0048
			PV-2581
			PSV-0052
			PSV-0053
			PSV-0064
			Vent Valve on P-10247
			Drain Valve on P-10247
			Vent Valve on P-10248
			Drain Valve on P-10248
			V-38 Vent
			V-62 Vent
			V-39 Vent
			V-63 Vent
			V-40 Vent
			V-41 Vent
			V-50 Vent

			V-51 Vent
			V-52 Vent
			V-53 Vent
			V-54 Vent
			V-55 Vent
			Vent Valve on P-10234
			Vent Valve on P-10235
			Vent Valve on P-10251
			Vent Valve on P-10252
			Vent Valve on P-10253
			Vent Valve on P-10254
			Vent Valve on P-10260
			Vent Valve on P-10283
			V-42 Vent
			V-43 Vent
			V-46 Vent
			V-47 Vent
			V-60 Vent
			V-61 Vent
			V-44 Vent
			V-45 Vent
			V-58 Vent
			V-59 Vent
			V-48 Vent
			V-64 Vent
			V-49 Vent
			V-65 Vent
			P-10249 Seal Cooler Vent
			P-10250 Seal Cooler Vent
Q_{DEA}	0.0209	5 PRVs 2 Process Valves 1 Pump	PSE-0005
			PV-182
			PSV-0179
			PSV-0180
			PV-197
			PSV-195
			PSV-196
			P-9590/9618 to Flare Header
Q_{FCC}	0.6749	26 PSVs 6 Process Vents 27 Drains 4 Vents 1 Flow Transmitter 1 Sweep 7 Other	PSV-0120
			E-4075 Shell Side Drains (2)
			PSV-0119
			E-4005 Shell Side Drains (2)
			PSV-0036
			E-4008 Drain Valve
			PSV-0037
			E-4009 Drain Valve
			PSV-0038
			E-4010 Drain Valve
			E-4008 Drain Valves (3)
			E-4009 Drain Valves (3)
			E-4010 Drain Valves (3)
			Slurry 8" Bypass
			Fresh Feed Line Drain Upstream of HV-2008
			PSV-0126
			PSV-0127
			E-4259 Shell Side Drain
			E-4259 Tube Side Drain
			E-4260 Shell-Side Drain
			E-4260 Tube Side Drain
			FT-13A
			Vent Valveon Reflux from Fractionator Reflux Pump
			Rich Sponge Oil From #4 Gas C-10 to Blowdown Valve
			PSV-2137
			E-4256 Vent
			LV-2958
			Hot LCO Flush to 6" Liquid Blowdown Header
			E-4254/E-4255 Vent and Drain Valves (2)
			E-4252/E-4253 Vent and Drain Valves (2)
			E-4000/E-4002 Vent and Drain Valves (2)
			E-4001/E-4003 Vent and Drain Valves (2)

			E-4074/E-4004 Vent and Drain Valves (2)
			PV-1774
			PSV-0010
			PSV-0011
			PSV-0012
			PSV-0025
			PSV- 0026
			E-4012 Tube Side Drain Valve
			E-4013 Tube Side Drain Valve
			PSV-0122
			E-4258 Tube Side Drain
			PSV-0123
			E-4257 Tube Side Drain
			FV-2395
			PSV-1154
			PSV-0114
			Miscellaneous Liquid Drains from the Slops Header to the FCC Blowdown Drum
			PSV-0116
			PSV-0197
			PCV-3016
			Vent from P-8884 Seal Pot
			Natural Gas Sweep on V-491 Instruments
			V-496 Vent
			V-497 Vent
			PSV-2131
			PSV-2130
			PSV-2121
			PSV-2120
			PSV-2119
			PSV-2118
			PSV-2117
			Condensate Pot on Remote Sense Line Drain
			E-4026 Drain
			Line Vent Behind EIV-2952
			E-4721/E-4727 Vent Valve (Tube Side)
			C-10 Drain
			V-17 Drain Valve
			No. 4 Gas Plant Main Accumulator Routed Materials (V-317, V-316. V-205A, and V-17) to Blowdown Header
			P-3817 Vent Valve
			P-3818 Vent Valve
$Q_{1,2FP}$	0.015	14 PSVs 3 Drains 5 Vents 1 Sweep 1 Other	PSV-001
			PSV-002
			PSV-0013
			PSV-0014
			E-4583/E-4584 Drain
			PSV-0012
			V3-59 to Flare Header
			PSV-0010
			Vent Valves on F-9
			F-12 to Flare Header
			PSV-150
			PSV-154
			PSV-155
			PSV-0183
			PSV-0152
			Drain Valve on V-12A
			Drain Valve on V-12B
			Natural Gas Sweep to Instruments Connections (6 Connections)
			PSV-0001
			PSV-0019
			PSV-0010
			Feed from F-13 to C-1 (F-13 Clean-Out Connection)
			V-92 Vent
			V-93 Vent
Q_{FWS}	0.0	2 PSVs 4 Vents 2 Other	No. 1 FWS V-12 & V-16 Vent
			#2 FWS V-15 & V-17 Vent
			#3 FWS V-26 & V-28 Vent
			Tail Gas from #1 FP, #2 FP & #3 Crude to Flare at V-32

			PSV-503
			PSV-504
			V-32 Compressor (CP-525/CP-526) Gas to Flare
			V-36 Drain Pot Vent (Pot Drains Liquid from the Flare Line - Pocketed)
$Q_{HCR,1H2}$	0.7476	90 PSVs 40 Vents 92 Drains 20 Process Valves 1 Sample Point 3 Depressuring Valve 31 Bypass 34 Float Traps 18 Other	6" Blind Flanged Line to Blowdown
			PSV-0014
			PV-4255
			C-2 Level Instrument Drains
			PSV- 0148
			PV-204
			C-4 Drain Valve
			SP-0006
			PSV-0024
			PSV-0615
			PSV-0002
			V-157 Vent Valve
			Hogging Jet
			HV-96 Stage 1 Depressuring Valve
			HV-96 Bypass Valve
			V-5 Drain Valve
			V-5 Instrumentation Drains
			V-120 Drain Valve
			V-121 Drain Valve
			CP-368 Drain Valves
			V-120 Vent Valve
			V-121 Vent Valve
			V-131 Drain Valve
			V-127 Drain Valve
			PSV-0020
			PSE-106
			PSE-107
			PSE-108
			PSE-100
			PSE-101
			PSE-102
			PSV-0150
			V-133 Drain Valve
			V-137 Drain Valve
			PSE-109
			PSE-110
			PSE-111
			PSV-0016
			V-143 Drain Valve
			V-139 Drain Valve
			PSE-103
			PSE-104
			PSE-105
			PSV-0152
			V-149 Drain Valve
			V-145 Drain Valve
			PSV-0079
			Make Up Hydrogen Line Vent
			CP-368 Line Vent
			PSV-0033
			PSE-113
			PSE-112
			Reference Line Connection to Blowdown
			PV-0844
			PSV-0078
			V-160 Bypass to Flare for V-163
			V-160 Bypass to Flare for V-130
			Trim Furnaces Drain Valve
			Miscellaneous Hose Connections
			CP-332 Packing Vents
			CP-332 Unloader Vents
			CP-333 Pacing Vents
			CP-333 Unloader Vents
			E-5539 Vent
			E-5540 Vent

			P-8030 Seal Pot Vent
			P-8030 Seal Pot Vent
			CP-334 Line Vent
			C-4 Drain
			PSV-18
			PSV-0782
			PSV-0041
			V-5 Drain
			PV-1170
			P-8036 Drain Valve
			P-8037 Drain Valve
			V-11 Drain Valve
			V-101 Drain
			V-102 Drain
			CP-369 Vent
			Stabilizer Overhead Vent
			C-8 Drain
			C-6 Drain
			P-8038 Vent/Drain Valves
			P-8039 Vent/Drain Valves
			P-8040 Vent/Drain Valves
			P-8068 Vent Valve
			P-8068 Cooler Vent Valve
			P-8068 Barrier Fluid Reservoir Vent Valve
			P-8069 Drain
			PSV-0035
			PV-1520
			PV-270B
			C-7 Drain Valve
			P-9381 Vent Valve
			P-9382 Vent Valve
			PSV-0017
			C-9 Drain Valve
			E-5017 Shell Side Drain Valve
			PSV-0024
			V-10 Vent Valve
			V-10 Drain Valve
			P-9821 Drain Valve
			P-9822 Drain Valve
			V-181 Drain
			PSV-0037
			PSV-0036
			A-I887 Analyzer Drain
			HV-932 Depressuring Valve
			HV-933 Depressuring Valve
			HV-932/HV-933 Vents
			C-3 Vent
			PSV-0091
			PSV-0092
			PSV-0029
			C-3 Drain
			CP-334 Drain and Vent
			PSV-0095
			PV-0416C
			V-162 Float Trap
			V-12 Inlet Float Trap
			V-12 Inlet Float Trap Bypass
			V-12 Outlet Float Trap
			V-12 Outlet Float Trap Bypass
			PSV-0015
			PSV-0071
			V-16 Drain Valve
			V-16 Condensate to Blowdown
			PSV-0776
			C-22 Float Trap
			C-22 Float Trap Bypass
			C-22 Instrumentation Drain
			C-22 Drain
			PSV-0031

			PV-940
			PSV-0040
			PSV-0021
			PSE-100
			PSE-101
			PSE-102
			V-129 Drain Valve
			V-135 Drain
			V-128, V-103, V-134, and V-135 Float Traps
			PSV-0080
			PSE-103
			PSE-104
			PSE-105
			PSV-0038
			V-141 Drain
			V-147 Drain
			V-146, V-104, V-140, and V-147 Float Traps
			PSV-0039
			PSV-0700
			V-26 Drain Valve
			V-21 Drain
			V-21 Vent
			100# Fuel Gas Vent
			PSV-0084
			V-32 Vent
			V-32 Drain
			V-31 Vent
			V-31 Drain
			PSV-0070
			V-16 Condensate to Blowdown
			V-17 Drain
			V-17 Gas to Blowdown
			PSV-0071
			PSV-0063
			CP-336 Drains
			PSV-0064
			CP-335 Drains
			PSV-0065
			CP-471 Drains
			PSV-0075
			PV-846
			PV-319
			V-11 Drain
			V-11 Gas to Blowdown
			PSV-0011
			V-13 Drain
			PSV-0015
			C-5 Drain
			PSV-0013
			V-12B Float Trap
			V-12B Vent
			V-12B Drain
			V-12B Outlet Drain
			PSV-0012
			V-12A Drain
			V-12A Float Trap
			V-12A Vent
			V-12A Outlet Drain
			E-1120
			E-1120 Vapor Discharge
			E-1120 Liquid Discharge
			PSV-0072
			V-100 Vent
			F-1B Drain
			F-1A Drain
			PSV-0008
			PV-416D
			V-105 Blowdown
			PSV-0074

			Liquid Float Trap
			Float Trap upstream HV-295A
			Float Trap downstream HV-295A
			V-102 Drain
			PSV-0118
			PSV-0119
			SE-2070 Drain
			SE-2071 Drain
			SE-2071 Drain
			PSV-732
			V-25 Drain
			V-247 Drain
			PSV-0035
			V-105 Vent
			PSV-0070
			V-16 Drain Valve
			V-17 Blowdown
			PSV-0071
			PSV-0063
			CP-336 C2W Drain Valve
			V-229 Drain Valves
			V-225 Drain Valves
			V-227 Drain Valves
			V-249 Drain Valve
			V-231 Float Trap
			V-231 Float Trap Bypass Valve
			V-226 Float Trap
			V-226 Float Trap Bypass Valve
			V-230 Float Trap
			V-230 Float Trap Bypass Valve
			V-224 Float Trap
			V-224 Float Trap Bypass Valve
			V-290C/V-228 Float Trap
			V-228 Drain Bypass Valve
			V-209C/V-228 Float Trap Bypass Valve
			PSV-0064
			V-238 Float Trap
			V-238 Float Trap Bypass Valve
			V-232 Float Trap and Drain Valve
			V-232 Float Trap Bypass Valve
			V-209D/V-236 Float Trap
			V-209D/V-236 Float Trap Bypass Valve
			V-236 Trap Bypass Valve
			V-239 Float Trap
			V-239 Float Trap Bypass Valve
			V-234 Float Trap
			V-234 Float Trap Bypass Valve
			V-250 Drain Valve
			CP-335 D2W Drain Valve
			V-235 Drain Valves
			V-237 Drain Valves
			V-207 Float Trap
			V-207 Float Trap Bypass Valve
			V-240 Float Trap
			V-240 Float Trap Bypass Valve
			V-244 Float Trap Bypass Valve
			V-209/V-244 Float Trap
			V-209/V-244 Float Trap Bypass Valve
			PSV-0065
			V-208 Float Trap
			V-208 Float Trap Bypass Valve
			V-242 Float Trap
			V-242 Float Trap Bypass Valve
			CP-741 E2W Drain Valve
			V-243 Drain Valves
			V-241 Drain Valves
			V-245 Drain Valves
			V-210 Drain Valve
			69-LV-315

			PSV-0075
			PV-846
			69-PV-846 Float Trap
			69-PV-846 Float Trap Bypass Valve
			69-LV-315
			69-PV-319
			69-PV-319 Float Trap
			PSV-0011
			69-PV-319 Float Trap Bypass Valve
			V-13 Level Valve
			PSV-0015
			E-1120 Trap Vent Valve
			E-1120 Liquid Blowdown
			E-1120 Vent to Blowdown
			69-LV-122
			PSV-0013
			V-12B Regen Bottoms Valve
			V-12B Relief Valve
			V-12B Regen Top Valve
			V-12B Drain Valve
			V-12B Drain Float Trap
			V-12B Drain Float Trap Bypass Valve
			V-12A Regen Top Valve
			V-12A Regen Bottoms Valve
			V-12A Drain Valve
			V-12A Drain Float Trap
			V-12A Drain Float Trap Bypass Valve
			PSV-0012
			PSV-0072
			PSV-0072 Bypass Valve
			F-1B Burner Drain Line
			F-1A Burner Drain Line
			PSV-0074
			PSV-008
			Condensate Trap upstream of TV-0292
			Condensate Trap upstream of TV-0292 Bypass Valve
			Condensate Trap upstream of HV-0295A
			Condensate Trap upstream of HV-0295A Bypass Valve
			Condensate Trap downstream of HV-0295A
			Condensate Trap downstream of HV-0295A Bypass Valve
			PV-416D
			V-105 to E-1107 Blowdown Valve
			V-102 Drain Valve
			069-LV-1067
			PSV-0118
			SE-2070 Drain Valve
			PSV-0119
			SE-2071 Drain Valve
			V-25 Drain Valve
			PSV-0732
			PSV-0035
			V-260 Drain Valve
			CP-336 C1W, C2W, C1E, C2E Unloader & Packer Vents
			CP-335 Compressor "D" D1W, D2W, D1E, D2E Unloader and Packer Vents
			CP-471 Compressor 'E' E1W, E2W, E1E, E2E Unloader and Packer Vents
Q_{ALKY}	0.052	34 PSVs 3 Sweeps 40 Vents 20 Maintenance Valves 3 Process Valves 3 Analyzers 3 Drains 2 Hose Connections 8 Other	PSV-0015
			V-2 Bleed
			PSV-0701
			PSV-0679
			PSV-0679
			V-17 Blowdown Drum
			Sweep, Natural Gas
			Sweep, Natural Gas
			V-17 LSH-167 Natural Gas Sweep
			V-073 Vent
			V-074 Vent
			PSV-0704
			Acid to V-101 Maintenance Connection

			PSV-0706
			P-10044 Vent Valve
			PSV-0016
			PSV-0016 Maintenance Valve
			PSV-0017
			PSV-0017 Maintenance Valve
			PSV-0018
			PSV-0018 Maintenance Valve
			R1 to R6, V-4, and V-5 Drain
			R1 to R6 Dump Valves
			1" Hose Connection
			PSV-0304
			PV-0461
			PSV-0052
			PSV-0019
			PSV-0019
			PSV-0020
			PSV-0020
			PSV-0021
			PSV-0021
			PSV-0022
			PSV-0022
			PSV-0023
			PSV-0023
			PSV-0024
			PSV-0024
			Acid Settler Level Drains
			PSV-0054
			PSV-0054
			V-67 Atmospheric Vent Drain to Flare
			PSV-0702
			AI-1166
			PSV-0026
			PV-260B
			V-90 Vent
			V-99 Vent
			P-9136 Vent
			P-8162 Vent
			AI-1165
			PSV-0634
			PSV-0027
			PSV-0634/ PSV-0027
			PSV-0028
			PSV-0635
			PSV-0635/ PSV-0028
			V-66 Vent
			PSV-1344
			V-107 Vent
			V-108 Vent
			P-10323 Vent
			P-10324 Vent
			PSV-0029
			PSV-0067
			PSV-0029/ PSV-0067
			PSV-0696
			PSV-0705
			PSV-0068
			PSV-0030
			PSV-0030/ PSV-0068
			PSV-0031
			PSV-0032
			PSV-0031/ PSV-0032
			E-4989/ E-4491 Maintenance Line
			PSV-0010
			PSV-0010 Maintenance Valve
			V-103 Vent
			V-102 Vent
			AIT-3575
			P-9579 Vent

			P-9578 Vent
			PSV-0033
			HV-217
			V-100 Vent
			V-101 Vent
			P-9576 Vent
			P-9577 Vent
			P-10285 Vent
			SE-3065 Vent
			YV-754 Vent
			SE-2047 Vent
			SE-2048 Vent
			Seal Oil Reservoir Vent
			Sour Seal Oil Trap (North) Vent
			Sour Seal Oil Trap (South) Vent
			Sour Seal Oil Traps Blowdown
			V-91 Vent
			V-92 Vent
			V-93 Vent
			V-94 Vent
			V-95 Vent
			V-96 Vent
			V-97 Vent
			V-98 Vent
			P-8174 Vent
			P-8173 Vent
			P-8163 Vent
			P-8164 Vent
			P-8163 Vent
			P-8163 Vent
			P-8164 Vent
			P-8164 Vent
			Multiple Hose Connections
$Q_{ALKY,V71}$	0.127	15 PSVs 5 Sample Points 5 Vent Valves 8 Maintenance Valves 1 Process Valve 1 Drain Valve 2 Other	PSV-0039
			PSV-0039 Maintenance Valve
			SP-0004 Return
			P-8133 Maintenance Valve
			P-8133 Vent Valve
			P-8545 Vent Valve
			PSV-0043
			PSV-0043 Maintenance Valve
			PSV-0606
			PSV-0606 Maintenance Valve
			SP-008 Return
			PSV-0611
			PSV-0611 Maintenance Valve
			SP-0003 Return
			P-9868 Vent Valve
			P-9869 Vent Valve
			PSV-0097
			PSV-0093
			PSV-0040
			SP-0002 Return
			PSV-0096
			PSV-0094
			PSV-0095
			PSV-0092
			PSV-0092 Maintenance Valve
			MV-6
			PSV-0041
			PSV-0041 Maintenance Valve
			PSV-0044
			PSV-0044 Maintenance Valve
			PSV-0042
			PSV-0099
			SP-0024
			V-72 Vent
			Acid & Base Blowdown Header
			V-111 Drain Valve

			To/From Vapor Recovery System
$Q_{ALKY,V7}$	NA	1 PSV	PSV-0011
$Q_{ALKY,V61}$	OOS	1 AIP Vessel	V-61 Flare Knockout Drum (Abandoned in Place)
Q_{V108}	NA	1 PSV 1 Vent 1 Sweep	V-102 Off Gases and Sweep
			PSV-0035
			P-9728 Vent
Q_{V102}	NA	1 PSV 1 Sweep	Nitrogen to V-102
			PSV-0022
Q_{V31}	OOS	1 Other	Abandoned 10" Connection to Flare Header from V-31 Degasser
$Q_{NG,PV-13}$	0.0	1 Process Valve	PV-13
$Q_{DEA,V-3}$	OOS	1 Vent	V-3 Vent
$Q_{HCRCoalPSVs}$	NA	2 PSVs	PSV-115
			PSV-116
$Q_{Merox,V-72}$	NA	1 Connection	V-72
$Q_{FWSTanks}$	0.001	2 Other	Tank 846
			Tank 847

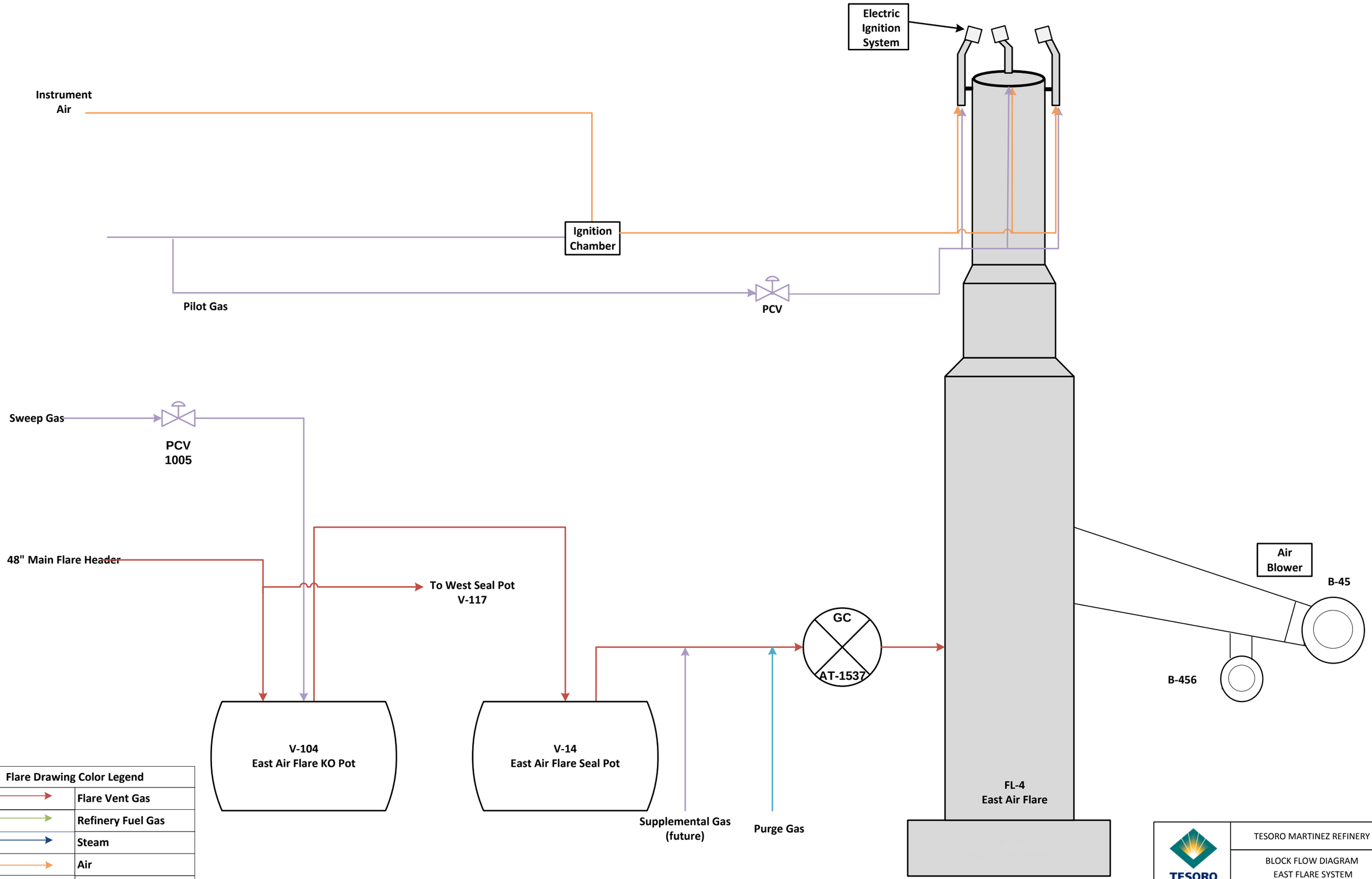
Table B -1 - 2 Main (Tract No. 1) Refinery Flare System Sweep, Supplemental and Purge Gas Details

Flow	Flow[2] (MMSCFD)	Flow Type	Type of Gas	Composition Monitoring[3]	Exemption
$Q_{Sweep,WAF,KO}$	NA	Sweep	Natural Gas	AT-1536	N/A
$Q_{Sweep,NSSTEAM,KO}$	NA	Sweep	Natural Gas	AT-1535	N/A
$Q_{Purge,EAF,stack}$	0.0382	Purge	Natural Gas	AT-1537	N/A
$Q_{Purge,NSteam,Stack}$	0.0729	Purge	Natural Gas	AT-1535	N/A
$Q_{Purge,SSteam,Stack}$	0.0729	Purge	Natural Gas	AT-1535	N/A
$Q_{Purge,WAF,stack}$	0.0257	Purge	Natural Gas	AT-1536	N/A
$Q_{Purge,Emergency,stack}$	0.0588	Purge	Nitrogen	See Note 3	N/A
$Q_{Purge,Coker,stack}$	0.02112	Purge	Natural Gas	AT-1539	N/A
$Q_{Sweep,Coker,SealPot}$	NA	Purge	Natural Gas	AT-1539	N/A
$Q_{Sweep,EAF,24''}$	NA	Sweep	Nitrogen	AT-1537	N/A
$Q_{Sweep,\ No.4\ HDS}$	NA	Sweep	Nitrogen	See Note 3	N/A
$Q_{Sweep,\ No.\ 2\ Reform}$	OOS	Sweep	Fuel Gas	See Note 3	N/A
$Q_{Sweep,\ Alky}$	0.027	Sweep	Natural Gas	See Note 3	N/A
$Q_{Sweep,\ No.3HDS}$	NA	Sweep	Natural Gas	See Note 3	N/A
$Q_{Sweep,\ DCU1}$	0.01	Sweep	Natural Gas	See Note 3	N/A
$Q_{Sweep,\ DCU2}$	0.11	Sweep	Natural Gas	See Note 3	N/A
$Q_{Sweep,\ FCCU1}$	0.076	Sweep	Natural Gas	See Note 3	N/A
$Q_{Sweep,\ FCCU2}$	0.076	Sweep	Natural Gas	See Note 3	N/A
$Q_{Sweep,\ 3Crude1}$	0.076	Sweep	Natural Gas	See Note 3	N/A
$Q_{Sweep,\ 3Crude2}$	0.076	Sweep	Natural Gas	See Note 3	N/A

[2] NA indicates non-continuous flows or flows that cannot be feasibly estimated through engineering analysis.
[3] Sweep and/or Purge gas that enters the Main (Tract 1) Flare System can be monitored at any of the Main System flare GC's, depending on which flare it is routed to.

Main (Tract No. 1) Refinery Flare System

Flare Detail Drawings



Flare Drawing Color Legend	
→	Flare Vent Gas
→	Refinery Fuel Gas
→	Steam
→	Air
→	Natural Gas
→	Nitrogen

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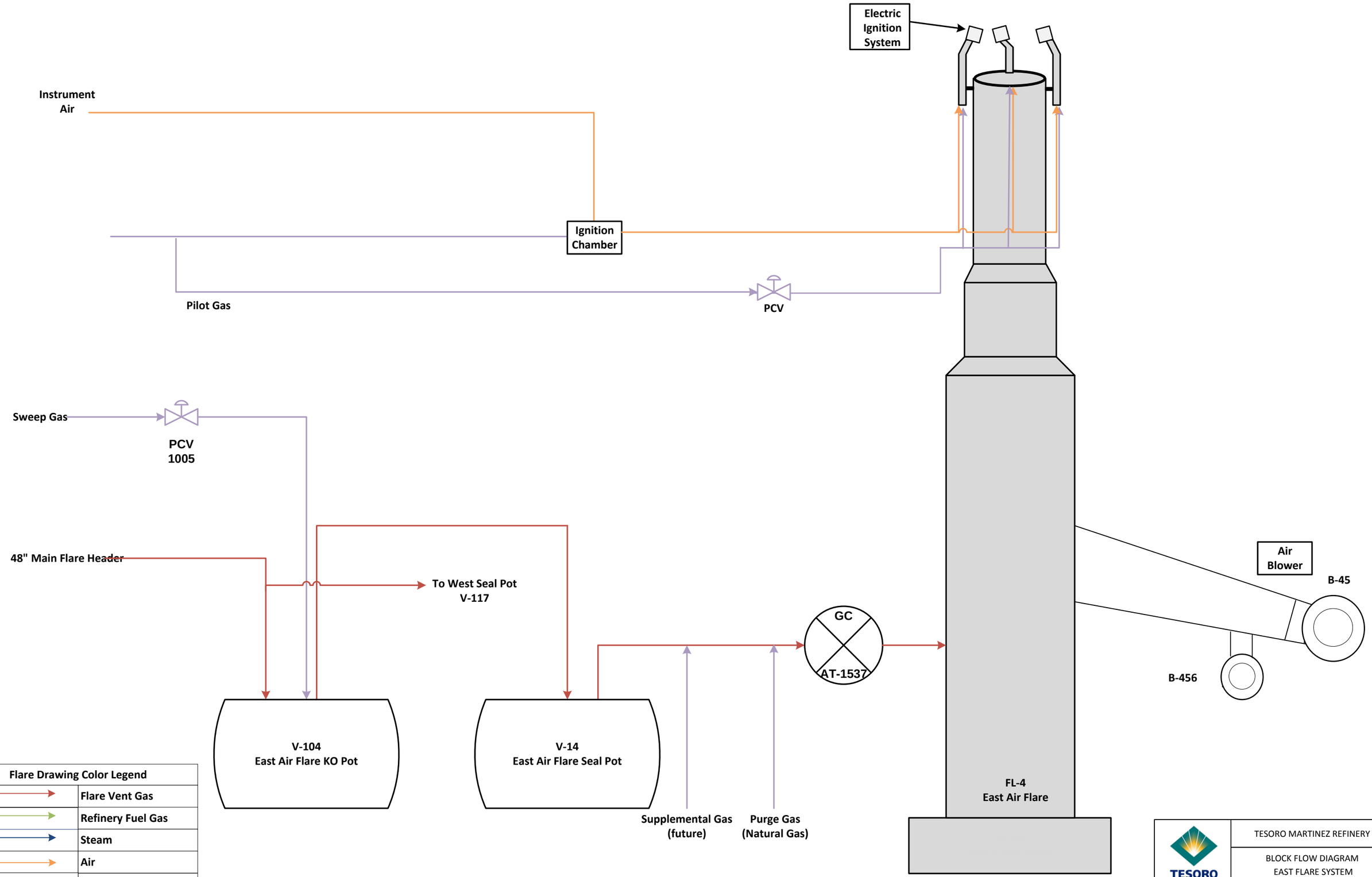
TESORO MARTINEZ REFINERY

BLOCK FLOW DIAGRAM
EAST FLARE SYSTEM

SCALE NONE | SHEET 1 OF 1



Flare Drawing Color Legend	
→	Flare Vent Gas
→	Refinery Fuel Gas
→	Steam
→	Air
→	Natural Gas
→	Nitrogen

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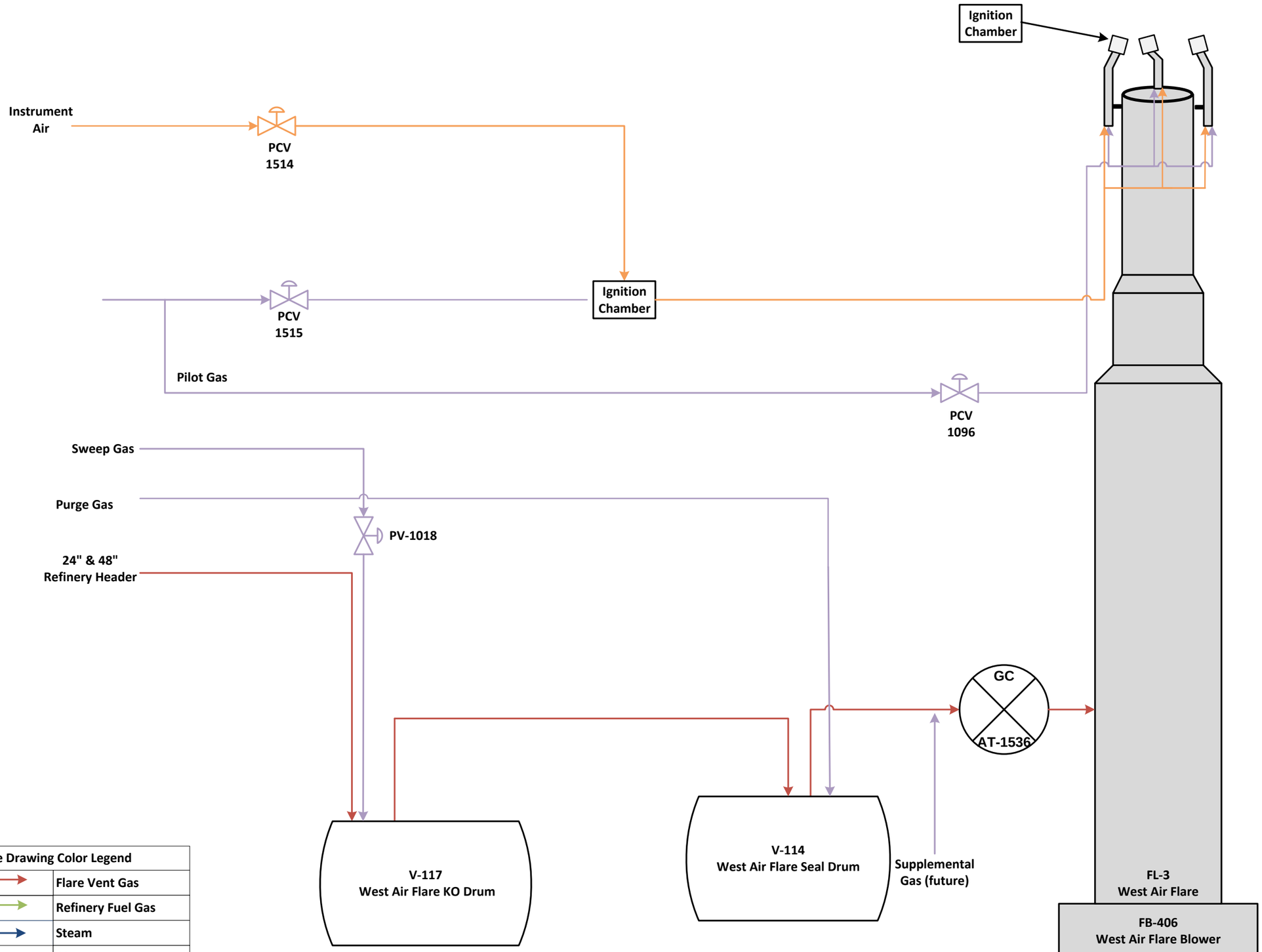
TESORO MARTINEZ REFINERY

BLOCK FLOW DIAGRAM
EAST FLARE SYSTEM

SCALE NONE | SHEET 1 OF 1



Flare Drawing Color Legend	
→	Flare Vent Gas
→	Refinery Fuel Gas
→	Steam
→	Air
→	Natural Gas
→	Nitrogen

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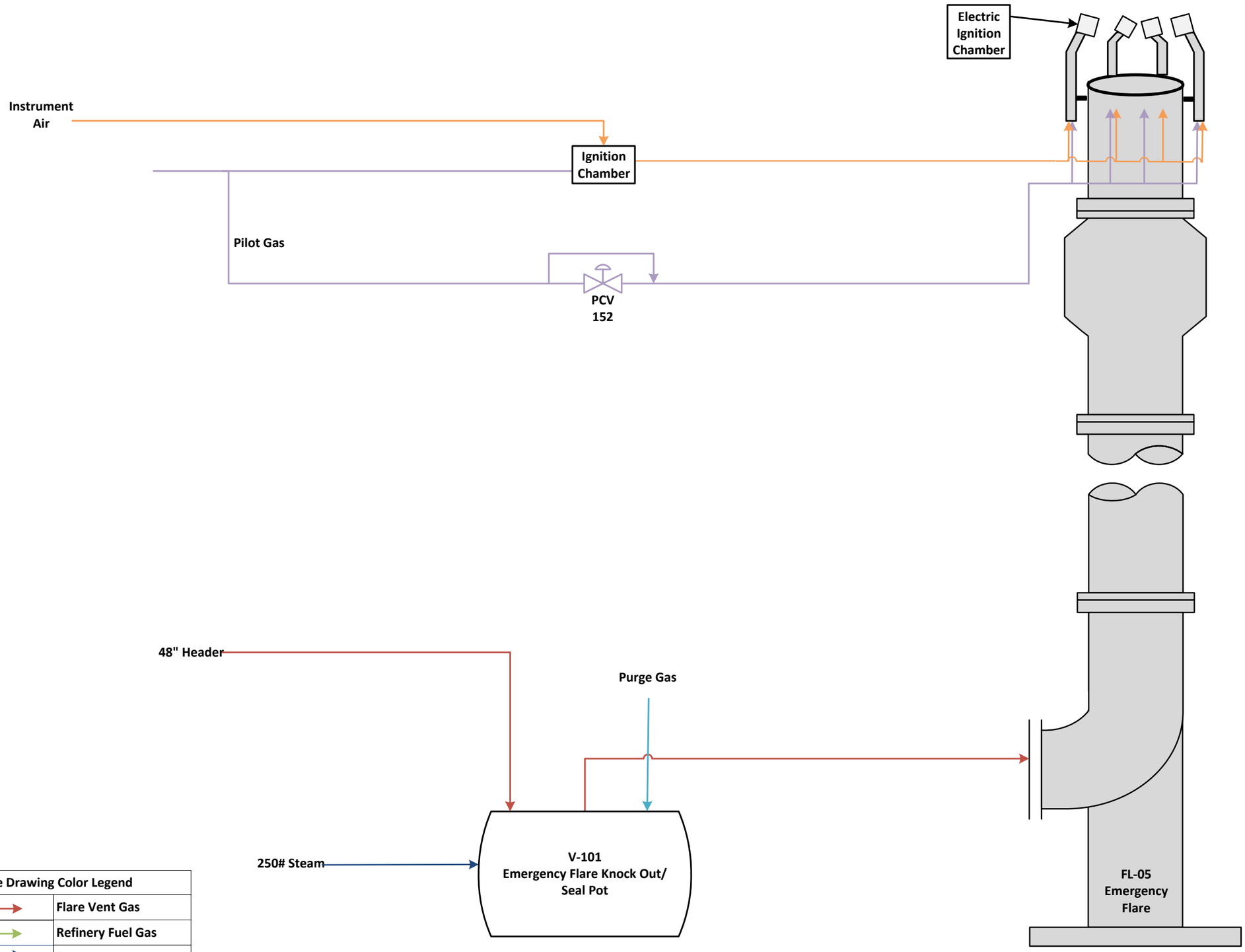
BLOCK FLOW DIAGRAM
WEST FLARE SYSTEM

SCALE NONE | SHEET 1 OF 1



Flare Drawing Color Legend	
→	Flare Vent Gas
→	Refinery Fuel Gas
→	Steam
→	Air
→	Natural Gas
→	Nitrogen

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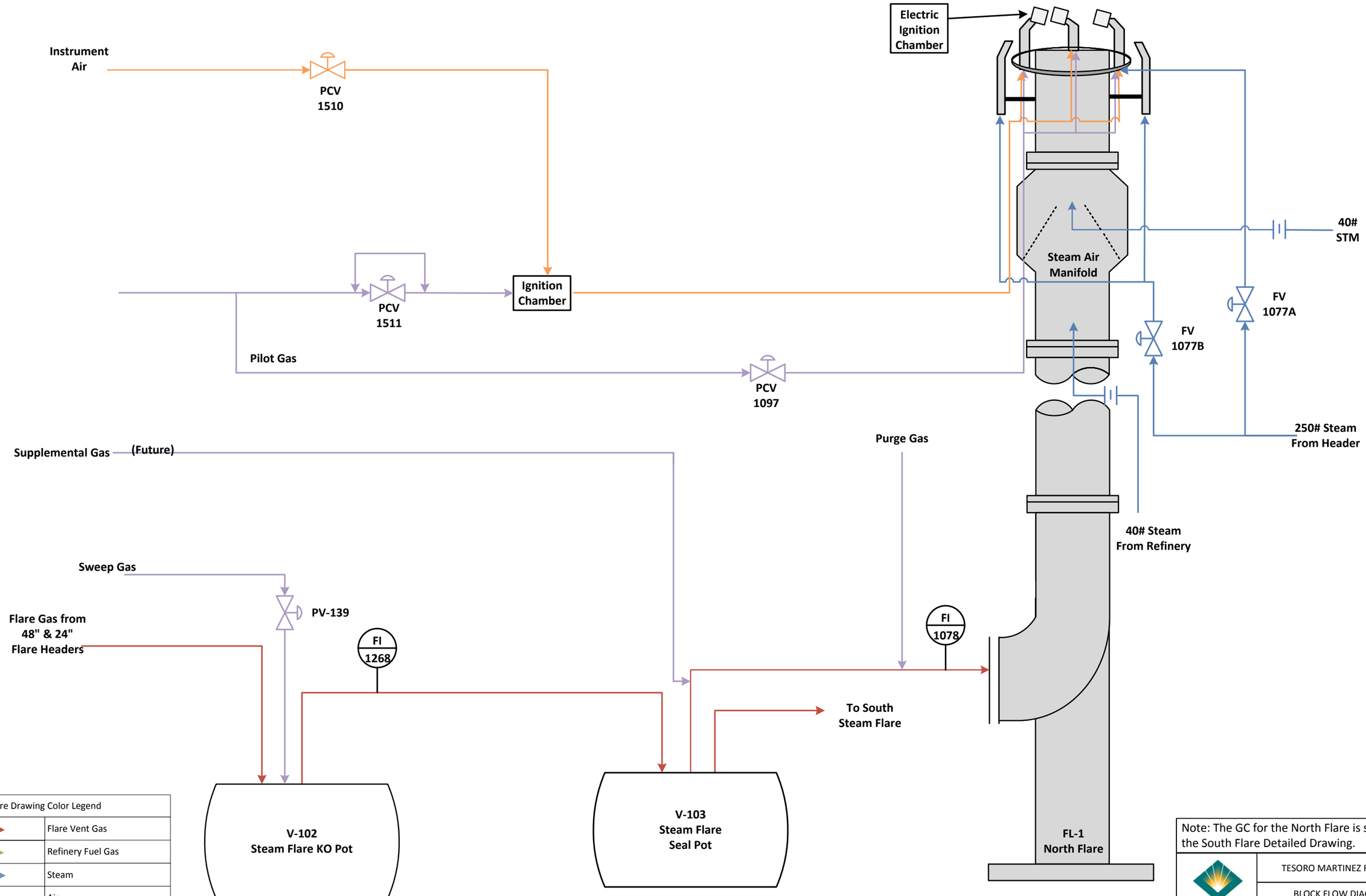
BLOCK FLOW DIAGRAM
EMERGENCY FLARE SYSTEM

SCALE NONE | SHEET 1 OF 1



Flare Drawing Color Legend	
→	Flare Vent Gas
→	Refinery Fuel Gas
→	Steam
→	Air
→	Natural Gas
→	Nitrogen

Note: The GC for the North Flare is shown in the South Flare Detailed Drawing.

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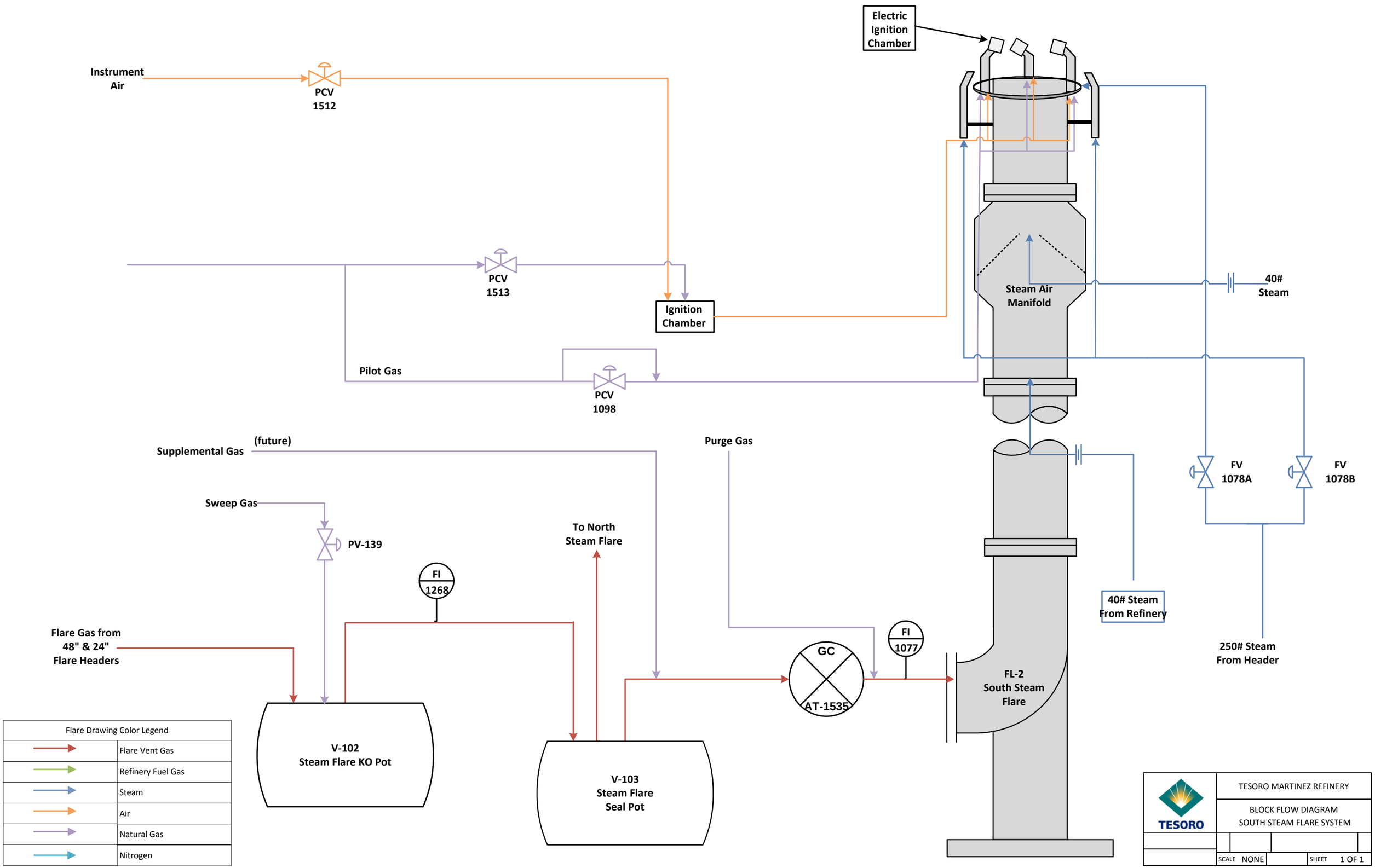
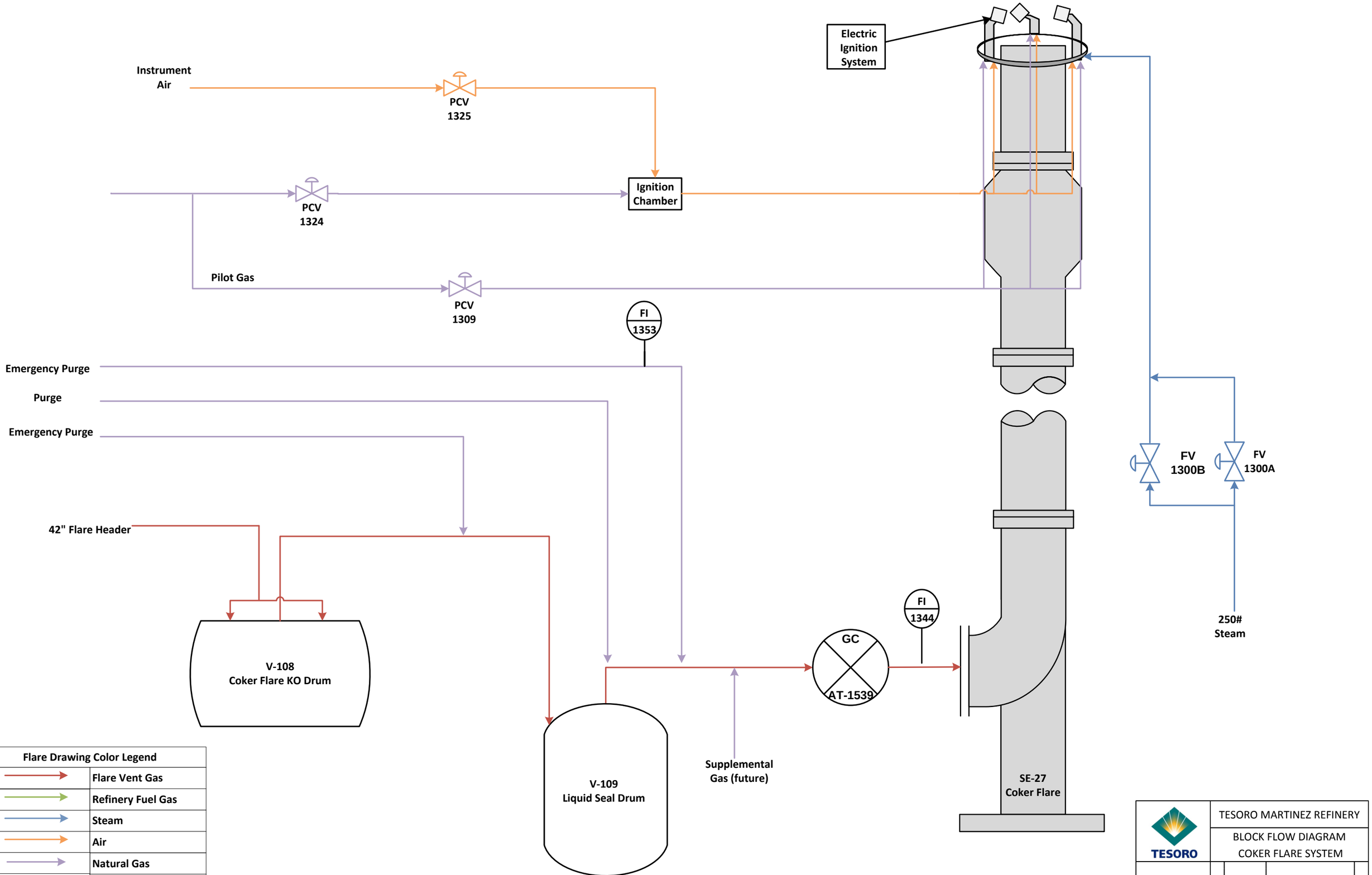
BLOCK FLOW DIAGRAM
NORTH STEAM FLARE SYSTEM

SCALE NONE | SHEET 1 OF 1


Electric Ignition Chamber
Instrument Air
PCV 1512
PCV 1513
Ignition Chamber
Steam Air Manifold
40# Steam
Pilot Gas
PCV 1098
(future)
Supplemental Gas
Purge Gas
FV 1078A
FV 1078B
Sweep Gas
PV-139
To North Steam Flare
FI 1268
40# Steam From Refinery
Flare Gas from 48" & 24" Flare Headers
GC
AT-1535
FI 1077
FL-2 South Steam Flare
250# Steam From Header
V-102 Steam Flare KO Pot
V-103 Steam Flare Seal Pot
Flare Drawing Color Legend
Flare Vent Gas
Refinery Fuel Gas
Steam
Air
Natural Gas
Nitrogen
TESORO
TESORO MARTINEZ REFINERY
BLOCK FLOW DIAGRAM
SOUTH STEAM FLARE SYSTEM
SCALE NONE
SHEET 1 OF 1


Instrument Air
PCV 1325
PCV 1324
Ignition Chamber
Electric Ignition System
Pilot Gas
PCV 1309
FI 1353
Emergency Purge
Purge
Emergency Purge
42" Flare Header
V-108 Coker Flare KO Drum
V-109 Liquid Seal Drum
Supplemental Gas (future)
GC
AT-1539
FI 1344
SE-27 Coker Flare
FV 1300B
FV 1300A
250# Steam
Flare Drawing Color Legend
Flare Vent Gas
Refinery Fuel Gas
Steam
Air
Natural Gas
Nitrogen
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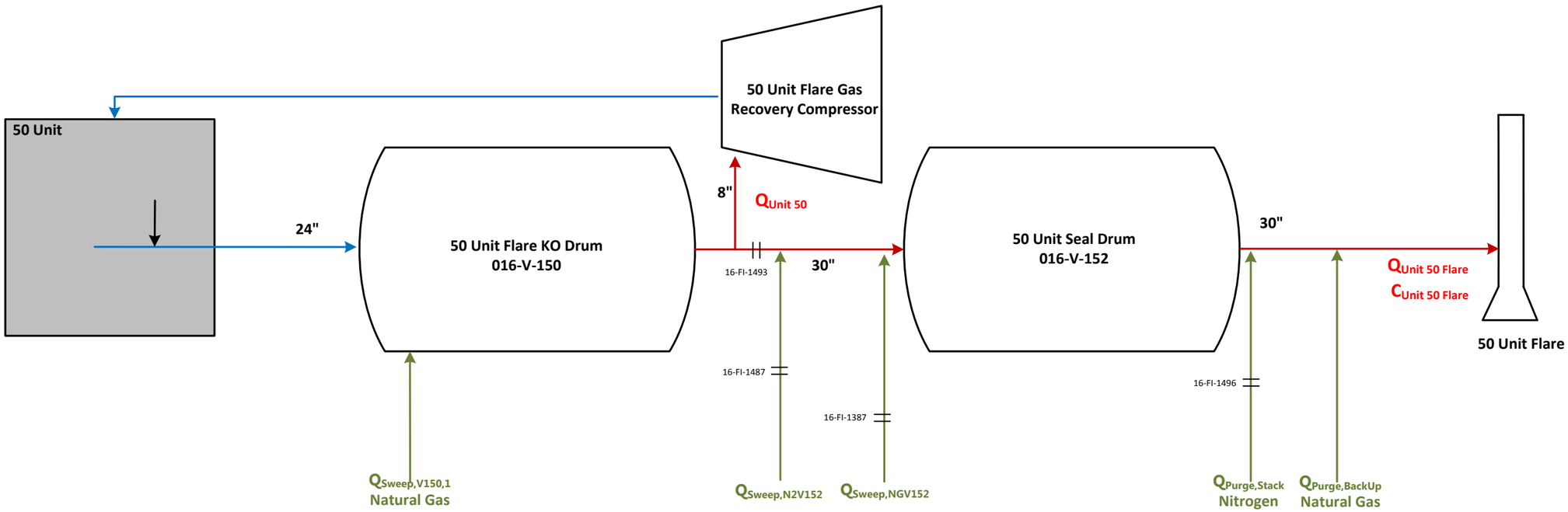
TESORO MARTINEZ REFINERY
BLOCK FLOW DIAGRAM
COKER FLARE SYSTEM
SCALE NONE
SHEET 1 OF 1

50 Unit Flare Waste Gas Map



Flare Drawing Color Legend			
	Main Flare Header(s)		1-5 Individual Sweep or Purge Connections
	Flaring Process Unit Headers		Process Unit
	1-30 Individual Flare Connections	||	Flow Meter

REV.	DESCRIPTION	DATE	BY
A	Issued for Information	9/1/16	Barr

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WASTE GAS MAP
50 UNIT FLARE SYSTEM

DWG NO 019-BA-XXX-001 C

SCALE NONE SHEET 1 OF 1

Unit 50 Flare

Q_{PH} Evaluation

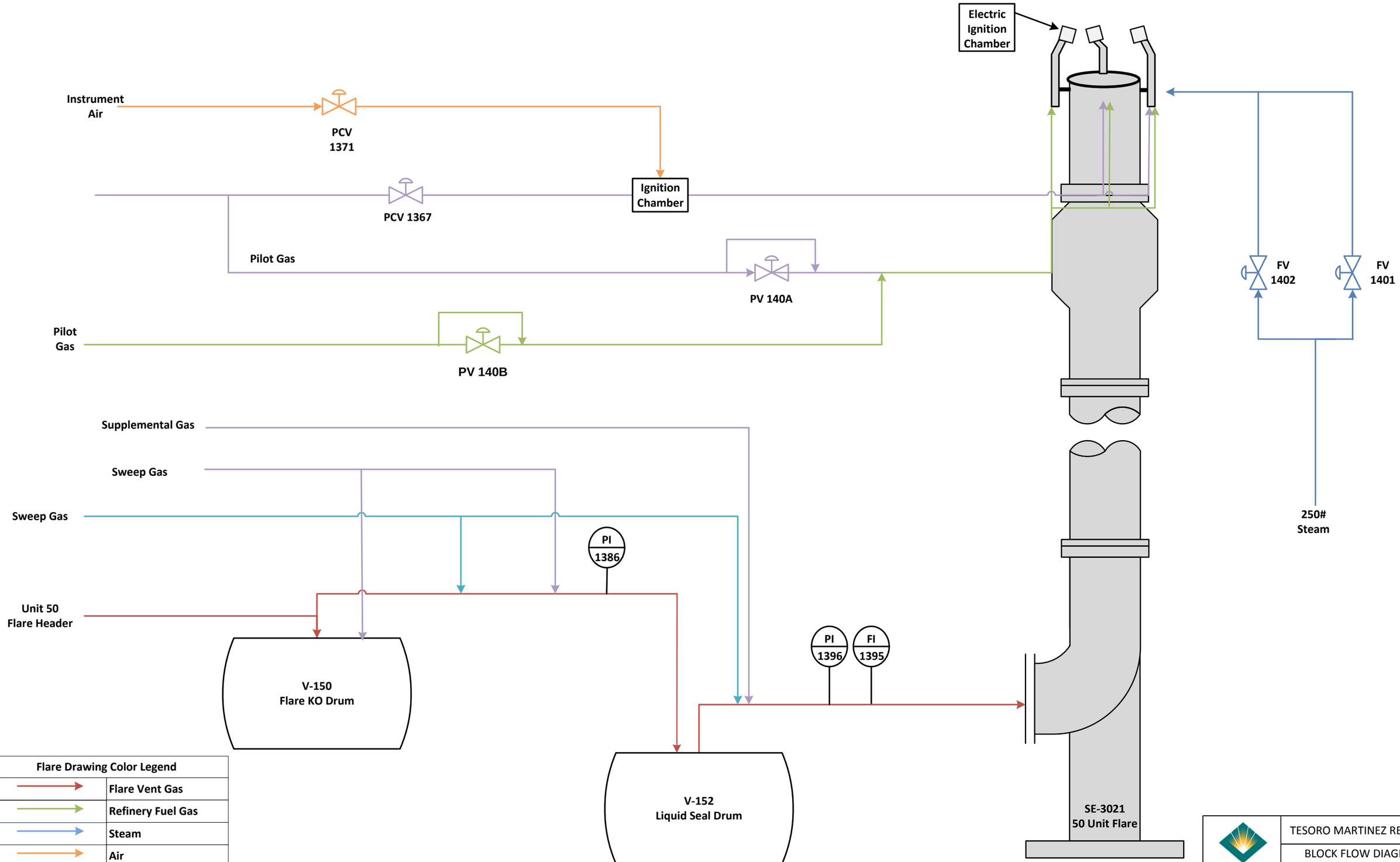
Table B - 2 - 1 Unit 50 Flare Source Descriptions

Flare Process Unit Header	Flow (MSCFD)	Sources	Detailed Source Description
Q_{Unit50}	17.4	9 PSVs 7 T/A Vents 1 Drain 3 Vents 3 Other	F-27 T/A Vent
			F-26 T/A Vent
			F-50 T/A Vent
			PSV-0089
			PSV-0088
			PSV-0682
			V-7 T/A Vent via PV-1447B
			PSV-0606
			PSV-0586
			PSV-0020
			V-115 T/A Vent
			PSV-0021
			V-116 T/A Vent
			V-144 T/A Vent
			250# steam to relief header
			PSV-0674
			V-161 Drain
			N2 purge to relief header
			V-157 Vent
			V-158 Vent
			V-159 Vent
			PSV-0673
			Foul water to KO drum from V-160 via LV-1527

Table B - 2 - 2 Unit 50 Flare Sweep, Supplemental and Purge Gas Details

Flow	Flow (MMSCFD)	Flow Type	Type of Gas	Composition Monitoring	Exemption
$Q_{Sweep,V150,1}$	0.008	Sweep	Natural Gas	Not Required	N/A
$Q_{Sweep,N2V152}$	NA	Sweep	Nitrogen	Not Required	N/A
$Q_{Sweep,NGV152}$	NA	Sweep	Natural Gas	Not Required	N/A
$Q_{Purge,BackUp}$	.013	Purge	Natural Gas	Not Required	N/A
$Q_{purge,Stack}$	0.81	Purge	Nitrogen	Not Required	N/A

50 Unit Flare Detail Drawing


Electric Ignition Chamber
Instrument Air
PCV 1371
Ignition Chamber
PCV 1367
Pilot Gas
PV 140A
Pilot Gas
PV 140B
FV 1402
FV 1401
250# Steam
Supplemental Gas
Sweep Gas
Sweep Gas
PI 1386
Unit 50 Flare Header
PI 1396
FI 1395
V-150 Flare KO Drum
V-152 Liquid Seal Drum
SE-3021 50 Unit Flare
Flare Drawing Color Legend
Flare Vent Gas
Refinery Fuel Gas
Steam
Air
Natural Gas
Nitrogen
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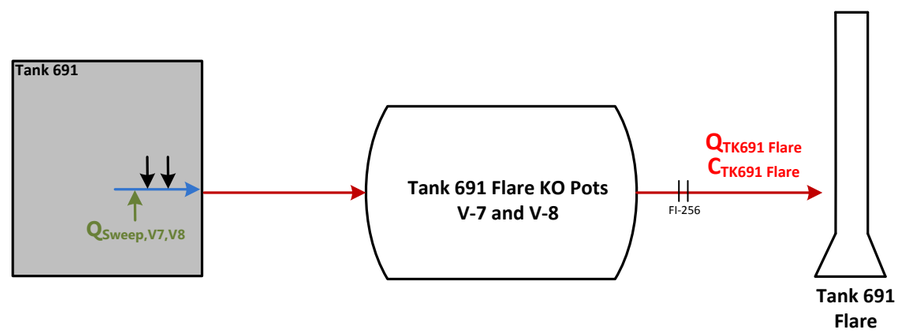
TESORO MARTINEZ REFINERY
BLOCK FLOW DIAGRAM
UNIT 50 FLARE SYSTEM
SCALE NONE
SHEET 1 OF 1

Tank 691 Flare Waste Gas Map



Flare Drawing Color Legend	
	Main Flare Header(s)
	Flaring Process Unit Headers
	1-30 Individual Flare Connections
	1-5 Individual Sweep or Purge Connections
	Process Unit

A	Issued for Information	9/1/16	Barr
REV.	DESCRIPTION	DATE	BY

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WASTE GAS MAP
TANK 691 FLARE SYSTEM

DWG NO 019-BA-XXX-001 C

SCALE NONE SHEET 3 OF 3

Tank 691 Flare

Q_{PH} Evaluation

Table B -3 - 1 Tank 691 Flare Source Descriptions

Flare Process Unit Header	Flow (MMSCFD)	Sources	Detailed Source Description
Q_{TK691}	0	16 PSVs 10 Drains 38 Vents 1 Purge 1 Process Valve 2 Seal Reservoirs	Butane product drain
			Natural Gas Coalescer drain
			Natural Gas purge to flare header via RO-333
			PSV-0069
			PSV-0118 & Bypass
			E-4472 vent via LV-204 and bypass
			V-1 drain
			E-4772 drain via LT-0028 tap lines
			PSV-0094
			V-10 Drain
			PSV-0092
			PSV-0099
			Butane from TK-691 via PV-2 and bypass
			V-109 Drain via RO-334
			V-109 Drain
			Unloader Vents (10)
			V-101 Vent
			V-107 Vent
			PSV-0110
			Cylinder vents (4)
			PSV-0114
			PSV-0115
			PSV-0111
			PSV-0066
			V-106 Vent
			V-104 Vent
			Unloader Vents (10)
			V-103 Vent
			V-105 Vent
			PSV-0113
			PSV-0116
			PSV-0117
			PSV-0112
			Cylinder vents (4)
			PSV-0070
			V-102 Vent
			V-100 Vent
			V-5 Drain
			V-11 drain
			PSV-0078 and bypass
			V-6 Vent
			V-6 Drain
			P-9956 Seal Reservoir
			P-9446 Seal Reservoir

Table B – 3 - 2 Tank 691 Flare Sweep, Supplemental and Purge Gas Details

Flow	Flow (MMSCFD)	Flow Type	Type of Gas	Composition Monitoring	Exemption
$Q_{Sweep,V7,V8}$	0.0007	Sweep	Natural Gas	Not Required	N/A

Tank 691 Flare Detail Drawing

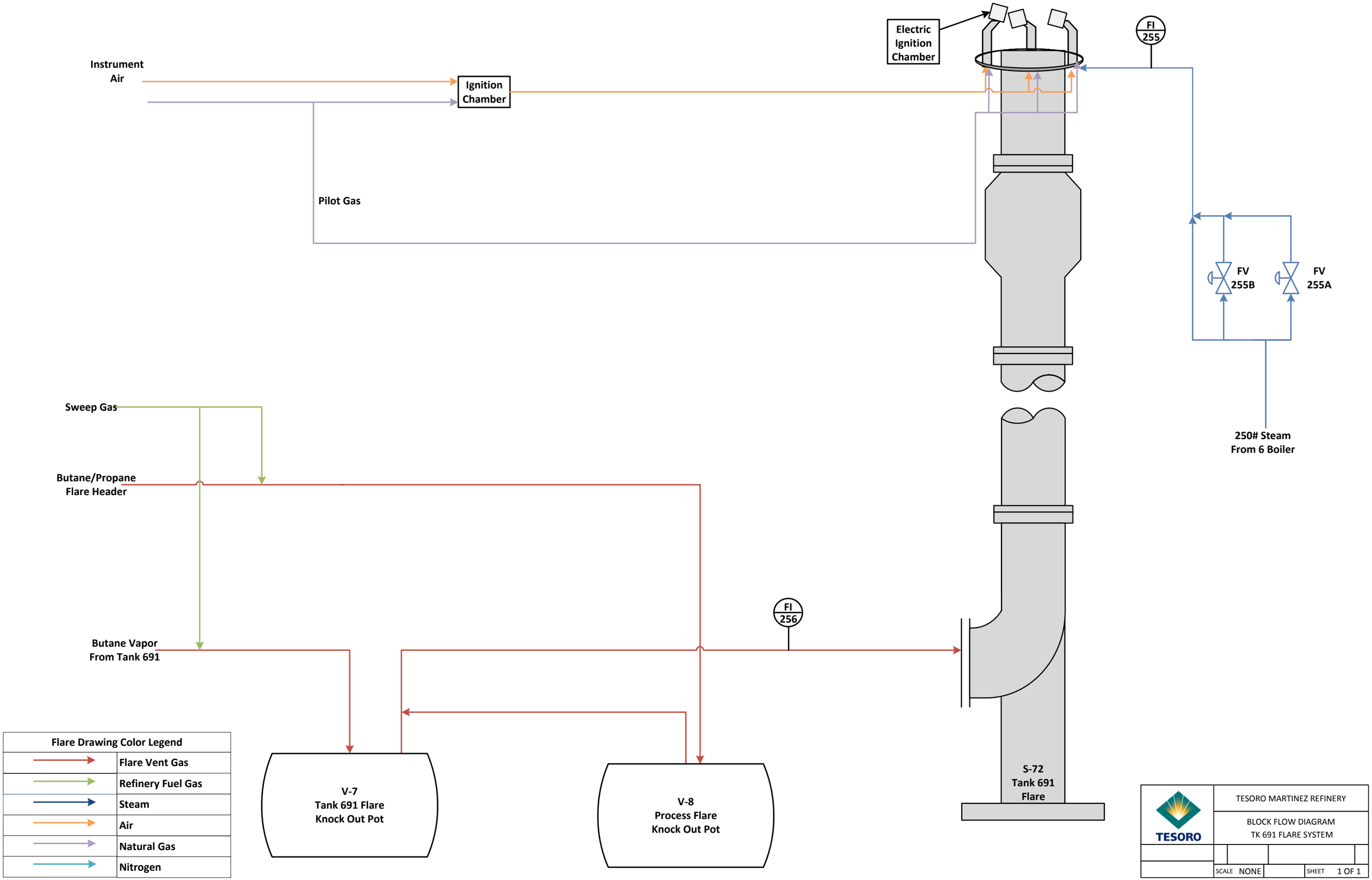
Instrument Air
Ignition Chamber
Electric Ignition Chamber
FI 255
Pilot Gas
FV 255B
FV 255A
250# Steam From 6 Boiler
Sweep Gas
Butane/Propane Flare Header
FI 256
Butane Vapor From Tank 691
V-7 Tank 691 Flare Knock Out Pot
V-8 Process Flare Knock Out Pot
S-72 Tank 691 Flare
Flare Drawing Color Legend
Flare Vent Gas
Refinery Fuel Gas
Steam
Air
Natural Gas
Nitrogen
TESORO
TESORO MARTINEZ REFINERY
BLOCK FLOW DIAGRAM
TK 691 FLARE SYSTEM
SCALE NONE
SHEET 1 OF 1

Table C - 1 Consent Decree Cross Reference Table

Citation	Consent Decree Requirement	Location
127(a)	A listing of all refinery Flaring Process Units, ancillary equipment, and Fuel Gas Systems connected to the Flare for each Covered Flare.	Section 3.0 Section 5.0
127(b)	An assessment of whether discharges to Covered Flares from these Flaring Process Units, ancillary equipment and Fuel Gas Systems can be minimized or prevented during periods of Startup, Shutdown, or emergency releases. The Flare minimization assessment must (at a minimum) consider the items in Paragraphs 127.b.i-iii below. The assessment must provide clear rationale in terms of costs (capital and annual operating), natural gas offset credits (if applicable), technical feasibility, secondary environmental impacts and safety considerations for the selected minimization alternative(s) or a statement, with justifications, that flow reduction could not be achieved. Based upon the assessment, Settling Defendants shall identify the minimization alternatives that they have implemented by the due date of the Flare Management Plan and shall include a schedule for the prompt implementation of any selected measures that cannot reasonably be completed as of that date.	Section 6.0 Section 7.0
127(b)(i)	Modification in Startup and Shutdown procedures to reduce the quantity of process gas discharge to the Flare.	Section 6.0
127(b)(ii)	Plan and schedule for conducting acoustic monitoring on all hydrocarbon PRVs directed to a Covered Flare that are not identified in Appendix C - 2.2, as required by Paragraph 116 above.	Section 4.0
127(b)(iii)	Installation of a FGRS, or, for facilities that are Fuel Gas rich, a FGRS and a co-generation unit or combined heat and power unit.	Section 2.0 Section 7.0
127(c)	A description of each Covered Flare containing the following information:	Section 2.0
127(c)(i)	A general description of the Covered Flare, including whether it is a ground Flare or elevated (including height), the type of assist system (e.g., air, steam, pressure, nonassisted), whether the Flare is used on a routine basis or if it is only used during periods of Startup, Shutdown or emergency release, and whether the Flare is equipped with a FGRS.	Section 2.0

Citation	Consent Decree Requirement	Location
127(c)(ii)	The smokeless capacity of the Covered Flare based on design conditions. Note: a single value must be provided for the smokeless capacity of the Flare.	Section 2.0
127(c)(iii)	The maximum Vent Gas flow rate (hydraulic load capacity).	Section 2.0
127(c)(iv)	The maximum Supplemental Gas flow rate.	Section 2.0
127(c)(v)	For Covered Flares that receive Assist Steam, the Minimum Total Steam Rate and the maximum Total Steam rate.	Section 2.0
127(c)(vi)	For Covered Flares that receive Assist Air, an indication of whether the fan/blower is single speed, multi-fixed speed (e.g., high, medium, and low speeds), or variable speeds. For fans/blowers with fixed speeds, provide the estimated Assist Air flow rate at each fixed speed. For variable speeds, provide the design fan curve (e.g., air flow rate as a function of power input).	Section 2.0
127(c)(vii)	Simple process flow diagram showing the locations of the Covered Flare following components of the Flare: Flare tip	Appendix D: Flare Detail Drawing
127(c)(vii)	Flare tip date installed, manufacturer, nominal and effective tip diameter	Section 2.0
127(c)(vii)	Flare tip drawing	Confidential - Available Onsite
127(c)(vii)	Simple process flow diagram showing the locations of the Covered Flare following components of the Flare: knockout or surge drum(s) or pot(s)	Appendix D: Flare Detail Drawing
127(c)(vii)	Knockout or surge drum(s) or pot(s)' dimensions and design capacities	Section 2.0
127(c)(vii)	Simple process flow diagram showing the locations of the Covered Flare following components of the Flare: Flare header(s) and subheader(s)	Appendix D: Waste Gas Map
127(c)(vii)	Simple process flow diagram showing the locations of the Covered Flare following components of the Flare: assist system	Appendix D: Flare Detail Drawing
127(c)(vii)	Simple process flow diagram showing the locations of the Covered Flare following components of the Flare: ignition system.	Appendix D: Flare Detail Drawing
127(d)	Description and simple process flow diagram showing all gas lines (including Waste Gas, Purge Gas or Sweep Gas (as applicable) Supplemental Gas) that are associated with the Covered Flare.	Appendix D: Waste Gas Map

Citation	Consent Decree Requirement	Location
127(d)	For Purge, Sweep, and Supplemental Gas, identify the type of gas used. Designate which lines are exempt from composition or Net Heating Value monitoring and why (e.g., natural gas, gas streams that have been demonstrated to have consistent composition, Pilot Gas). Designate which lines are monitored and	Appendix D: Sweep Supplemental and Purge Table
127(d)	Identify on the process flow diagram the location and type of each monitor.	Appendix D: Waste Gas Map
127(d)	Designate the pressure relief devices that are vented to the Flare.	Section 4.0
127(e)	For each flow rate, gas composition, Net Heating Value calorimeter or hydrogen concentration monitor identified in Paragraph 127.d above, provide a detailed description of the manufacturer's specifications, including, but not limited to, make, model, type, range, precision, accuracy, calibration, maintenance and quality assurance procedures.	Section 2.0
127(f)	For each pressure relief valve vented to the Covered Flare identified in Paragraphs 127.d above, provide a detailed description of each pressure release valve, including type of relief device (rupture disc, valve type) diameter of the relief valve, set pressure of the relief valve and listing of the Prevention Measures implemented. This information may be maintained in an electronic database on-site and does not need to be submitted as part of the Flare Management Plan unless requested to do so by EPA and the Applicable State Co-Plaintiff.	Section 4.0
127(g)	Procedures to minimize or eliminate discharges to the Flare during the planned Startup and Shutdown of the refinery Flaring Process Units and ancillary equipment that are connected to the Covered Flare, together with a schedule for the prompt implementation of any procedures that cannot reasonably be implemented as of the date of the submission of the Flare Management Plan.	Section 6.0
127(h)	Waste Gas Characterization and Mapping. Settling Defendants shall assess the Waste Gas being disposed of at each Covered Flare subject to this requirement as set forth in Appendix C - 2.1 and determine its characteristics as follows:	Appendix D: Waste Gas Map

Citation	Consent Decree Requirement	Location
127(h)(i)	Volumetric (in scfd) Flow Rate. Settling Defendants shall identify the volumetric flow of Waste Gas, in scfm on a 30-day Rolling Average vented to each Covered Flare subject to this requirement as set forth in Appendix C - 2.1 between December 1, 2015, and November 30, 2016. To the extent that, for any particular Covered Flare, Settling Defendants have instrumentation capable of measuring the volumetric flow rate of hydrogen, nitrogen, oxygen, carbon monoxide, carbon dioxide, and/or steam in the Waste Gas, Settling Defendants may break down the volumetric flow as between: (i) all Waste Gas flows excluding hydrogen, nitrogen, oxygen, carbon monoxide, carbon dioxide, and/or water (steam); and (ii) hydrogen, nitrogen, oxygen, carbon monoxide, carbon dioxide, and/or water (steam) flows in the Waste Gas. Settling Defendants may use either an engineering evaluation or measurements from monitoring or a combination to determine flow rate. In determining flow rate, flows during all periods (including but not limited to normal operations and periods of Startup, Shutdown, Malfunction, process upsets, relief valve leakages, power losses due to an interruptible power service agreement, and emergencies arising from events within the boundaries of each of the Covered Refineries), except those described in the next sentence, shall be included. Flows that could not be prevented through reasonable planning and are caused by a natural disaster, act of war or terrorism, or External Power Loss are the only flows that shall be excluded from the calculation of flow rate.	Section 5.0
127(h)(i)	Settling Defendants shall specifically describe the date, time, and nature of the event that results in the exclusion of any flows from the calculation.	Section 5.0
127(h)(ii)	Baseload Waste Gas Flow Rates. Settling Defendants shall utilize flow rate data to determine the Baseload Waste Gas Flow Rate, in scfd, to each Covered Flare subject to this requirement as set forth in Appendix C - 2.1. The Baseload Waste Gas Flow Rate shall not include flows during periods of Startup, Shutdown, and Malfunction. The Baseload Waste Gas Flow Rate shall be based on the period between December 1, 2015, and November 30, 2016.	Section 5.0
127(h)(iii)	Identification of Constituent Gases. For each Covered Flare subject to this requirement as set forth in Appendix C - 2.1, Settling Defendants shall use best efforts to identify the constituent gases within the Waste Gas and the typical range of constituent concentrations during baseload conditions. Settling Defendants may use either an engineering evaluation or measurements from monitoring or a combination to determine Waste Gas constituents.	Section 5.0

Citation	Consent Decree Requirement	Location
127(h)(iv)	Waste Gas Mapping. Using instrumentation, isotopic tracing, and/or engineering calculations, Settling Defendants shall identify and estimate the flow from each Flaring Process Unit Flare header to the main Flare header(s) for each Covered Flare subject to this requirement as set forth in Appendix C - 2.1. Using that information and all other available information, Settling Defendants shall complete an identification of each Waste Gas tie-in to the main Flare header(s) and Flaring Process Unit Flare header(s), as applicable, consistent with Appendix C - 1.11. Temporary connections to a Flare's header(s) and/or subheader(s) are not required to be included in the mapping.	Appendix D: Waste Gas Map
127(i)	Taking a Covered Flare out of Service. Settling Defendants shall identify any Covered Flare that it intends to take out of service, including the date for completion of the decommissioning. Taking a Covered Flare "out of service" means physically removing piping in Flare header or physically isolating the piping with a welded blind so as to eliminate direct piping to the Covered Flare.	Section 10.0
127(j)	Prevention Measures. Settling Defendants shall describe and evaluate all Prevention Measures, including a schedule for the expeditious implementation and commencement of operation of all Prevention Measures, to address the following:	Section 6.0
127(j)(i)	Flaring that has occurred or may reasonably be expected to occur during planned maintenance activities, including Startup and Shutdown. The evaluation shall include a review of flaring that has occurred during these activities in the past three years and shall consider the feasibility of performing these activities without flaring.	Section 7.0
127(j)(ii)	Flaring that may reasonably be expected to occur due to issues of gas quantity and quality. The evaluation shall include an audit of the flare gas recovery capacity of each Covered Flare subject to this requirement as set forth in Appendix C - 2.1, the capacity including internal piping systems and the amine treating capacity available for Waste Gases including any limitations associated with the amine treating of Waste Gases for use as fuel. The evaluation shall consider the feasibility of reducing flaring through the recovery, treatment, and use of the Waste Gas.	Section 7.0
127(j)(iii)	Flaring caused by the recurrent failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. The evaluation shall consider the adequacy of existing maintenance schedules and protocols for such equipment. A failure is "recurrent" if it occurs more than twice during any five year period as a result of the same root cause.	Section 7.0

Citation	Consent Decree Requirement	Location
128	Updated Flare Management Plans. On the date specified in Appendix C - 2.1 and annually thereafter, Settling Defendants shall submit to EPA and the Applicable State Co- Plaintiff an Updated FMP, which shall update for the preceding calendar year, if and as necessary, the information required in Paragraphs 127.a-127.j and shall also include the following:	Section 12.0
128(a)	Reductions Based on Root Cause Analysis. Settling Defendants shall review all of the Root Cause Analysis reports prepared pursuant to 40 C.F.R. Part 60, Subpart Ja or this Consent Decree to determine if reductions in addition to the reductions achieved through any corrective action can be realized; and	Section 6.0
128(b)	Revised Schedule. To the extent that Settling Defendants propose to extend any schedule set forth in the Initial FMP, Settling Defendants shall do so only with good cause.	