

AUTOMATION DATA SHEET					
PROJECT/CLIENT		PETRONAS			
SITE LOCATION		TOWN NORTH			
HARWARE CONFIGURATION					
ANALYZER		CTX			
PLC		MICRO850			
HMI		5" PROFACE			
STREAM 1					
TAG	AT-4050	PROCESS	LPG		
PRESSURE	TRANSMITTER	LOW RANGE	0 kPag		
MEASUREMENT		HIGH RANGE	5000 kPag		
TEMPERATURE	TRANSMITTER	LOW RANGE	-20 C		
MEASUREMENT		HIGH RANGE	80 C		
FLOW	N/A	LOW RANGE	N/A		
MEASUREMENT		HIGH RANGE	N/A		
SAMPLING	SWITCH	INTERRUPTION	N/A		
AUTOMATION		VALVE			
STREAM 2					
TAG	AT-4002	PROCESS	DEBUTANIZER		
PRESSURE	TRANSMITTER	LOW RANGE	0 kPag		
MEASUREMENT		HIGH RANGE	2000 kPag		
TEMPERATURE	TRANSMITTER	LOW RANGE	-20 C		
MEASUREMENT		HIGH RANGE	80 C		
FLOW	N/A	LOW RANGE	N/A		
MEASUREMENT		HIGH RANGE	N/A		
SAMPLING	SWITCH	INTERRUPTION	N/A		
AUTOMATION		VALVE			
STREAM 3					
TAG	AT-4003	PROCESS	STABILIZER		
PRESSURE	TRANSMITTER	LOW RANGE	0 kPag		
MEASUREMENT		HIGH RANGE	2000 kPag		
TEMPERATURE	TRANSMITTER	LOW RANGE	-20 C		
MEASUREMENT		HIGH RANGE	80 C		
FLOW	N/A	LOW RANGE	N/A		
MEASUREMENT		HIGH RANGE	N/A		
SAMPLING	SWITCH	INTERRUPTION	N/A		
AUTOMATION		VALVE			
STREAM 4					
TAG	N/A	PROCESS	N/A		
PRESSURE	N/A	LOW RANGE	N/A		
MEASUREMENT		HIGH RANGE	N/A		
TEMPERATURE	N/A	LOW RANGE	N/A		
MEASUREMENT		HIGH RANGE	N/A		
FLOW	N/A	LOW RANGE	N/A		
MEASUREMENT		HIGH RANGE	N/A		
SAMPLING	N/A	INTERRUPTION	N/A		
AUTOMATION		VALVE			

SOFTWARE CONFIGURATION			
COMMUNICATION		TCP/IP MODBUS	
OUTPUTS	<input type="checkbox"/> DO	0	QTY
		NOT REQUIRED	
	<input type="checkbox"/> AO	0	QTY
		NOT REQUIRED	
COMPONENTS			
STREAM 1 TAG		AT-4050	
PROCESS		LPG	
<input type="checkbox"/> VPCR4			
<input type="checkbox"/> DEEMED C4			
<input type="checkbox"/> C1/C3 RATIO			
<input type="checkbox"/> C2/C3 RATIO			
<input checked="" type="checkbox"/> C1		MOL%	
<input checked="" type="checkbox"/> C2		MOL%	
<input checked="" type="checkbox"/> C3		MOL%	
<input checked="" type="checkbox"/> iC4		MOL%	
<input checked="" type="checkbox"/> nC4		MOL%	
<input checked="" type="checkbox"/> iC5		MOL%	
<input checked="" type="checkbox"/> nC5		MOL%	
<input checked="" type="checkbox"/> C6		MOL%	
<input type="checkbox"/> C7		N/A	
<input type="checkbox"/> C8		N/A	
<input type="checkbox"/> C9		N/A	
<input type="checkbox"/> C10		N/A	
<input type="checkbox"/> C11		N/A	
<input type="checkbox"/> C12		N/A	
STREAM 2 TAG		AT-4002	
PROCESS		DEBUTANIZER	
<input type="checkbox"/> VPCR4			
<input checked="" type="checkbox"/> DEEMED C4			
<input type="checkbox"/> C1/C3 RATIO			
<input type="checkbox"/> C2/C3 RATIO			
<input checked="" type="checkbox"/> C1		VOL%	
<input checked="" type="checkbox"/> C2		VOL%	
<input checked="" type="checkbox"/> C3		VOL%	
<input checked="" type="checkbox"/> iC4		VOL%	
<input checked="" type="checkbox"/> nC4		VOL%	
<input type="checkbox"/> iC5		N/A	
<input type="checkbox"/> nC5		N/A	
<input type="checkbox"/> C6		N/A	
<input type="checkbox"/> C7		N/A	
<input type="checkbox"/> C8		N/A	
<input type="checkbox"/> C9		N/A	
<input type="checkbox"/> C10		N/A	
<input type="checkbox"/> C11		N/A	
<input type="checkbox"/> C12		N/A	
STREAM 3 TAG		AT-4003	
PROCESS		STABILIZER	
<input type="checkbox"/> VPCR4			
<input checked="" type="checkbox"/> DEEMED C4			
<input type="checkbox"/> C1/C3 RATIO			
<input type="checkbox"/> C2/C3 RATIO			
<input checked="" type="checkbox"/> C1		VOL%	
<input checked="" type="checkbox"/> C2		VOL%	
<input checked="" type="checkbox"/> C3		VOL%	
<input checked="" type="checkbox"/> iC4		VOL%	
<input checked="" type="checkbox"/> nC4		N/A	
<input type="checkbox"/> iC5		N/A	
<input type="checkbox"/> nC5		N/A	
<input type="checkbox"/> C6		N/A	
<input type="checkbox"/> C7		N/A	
<input type="checkbox"/> C8		N/A	
<input type="checkbox"/> C9		N/A	
<input type="checkbox"/> C10		N/A	
<input type="checkbox"/> C11		N/A	
<input type="checkbox"/> C12		N/A	
STREAM 4 TAG		N/A	
PROCESS		N/A	
<input type="checkbox"/> VPCR4			
<input type="checkbox"/> DEEMED C4			
<input type="checkbox"/> C1/C3 RATIO			
<input type="checkbox"/> C2/C3 RATIO			
<input type="checkbox"/> C1		N/A	
<input type="checkbox"/> C2		N/A	
<input type="checkbox"/> C3		N/A	
<input type="checkbox"/> iC4		N/A	
<input type="checkbox"/> nC4		N/A	
<input type="checkbox"/> iC5		N/A	
<input type="checkbox"/> nC5		N/A	
<input type="checkbox"/> C6		N/A	
<input type="checkbox"/> C7		N/A	
<input type="checkbox"/> C8		N/A	
<input type="checkbox"/> C9		N/A	
<input type="checkbox"/> C10		N/A	
<input type="checkbox"/> C11		N/A	
<input type="checkbox"/> C12		N/A	

PETRONAS - TOWN NORTH - CLIENT MODBUS MAP - FAT 2020/07/16

REV 1

	Tag Number	PLC Tag	Service Description (Max=32 Characters)	Data Type	Read/Write	PLC ModBus Address	Bit	Min Range	Max Range	Eng Unit	STATUS 0	STATUS 1	Comments	VERIFIED BY
1	RESET	RESET	Reset Alarm	BOOL	WRITE	00001	N/A	N/A	N/A	N/A	OFF	RESET	Pulse for 2 seconds to reset latched alarms	DD/JW - 20/07/16
2	OBC_COMM_FAIL	OBC_COMM_FAIL	On Board Computer Communication Fault	BOOL	READ	00002	N/A	N/A	N/A	N/A	FAULT	OK	No change in VCON BeatModbus > 10 min	DD/JW - 20/07/16
3	STREAM - 1 - LPG													
4	UA_4050A	Stream_1_Analyzer_Warning	Stream 1-Analyzer Common Warning Alarm	BOOL	READ	00010	N/A	N/A	N/A	N/A	OFF	WARNING	Warning Local To Analyzer Control Cabinet	DD/JW - 20/07/16
5	UA_4050B	Stream_1_Model_Warning	Stream 1 - Analyzer Model Quality Warning	BOOL	READ	00011	N/A	N/A	N/A	N/A	OFF	WARNING	Calibration Quality	DD/JW - 20/07/16
6	UA_4050C	Stream_1_Sample_Panel_Warning	Stream 1-Sample Panel Common Warning Alarm	BOOL	READ	00012	N/A	N/A	N/A	N/A	OFF	WARNING	Warning Local To Sample System Enclosure	DD/JW - 20/07/16
7	PAH-4050	Stream_1_High_Pressure_Alarm	Stream 1 - High Pressure Warning Alarm	BOOL	READ	00015	N/A	N/A	N/A	N/A	OFF	WARNING	Setpoint Local to HMI	DD/JW - 20/07/16
8	TAH-4050	Stream_1_High_Temperature_Alarm	Stream 1 - High Temperature Warning Alarm	BOOL	READ	00016	N/A	N/A	N/A	N/A	OFF	WARNING	Setpoint Local to HMI	DD/JW - 20/07/16
9	XA_4050A	Stream_1_Analyzer_Fault	Stream 1-Analyzer Common Fault Alarm	BOOL	READ	00018	N/A	N/A	N/A	N/A	OFF	FAULT	Faut Local To Analyzer Control Cabinet	DD/JW - 20/07/16
10	XA_4050B	Stream_1_Model_Fault	Stream 1 - Analyzer Model Quality Fault	BOOL	READ	00019	N/A	N/A	N/A	N/A	OFF	FAULT	Calibration Quality	DD/JW - 20/07/16
11	XA_4050C	Stream_1_Sample_Panel_Fault	Stream 1-Sample Panel Common Fault Alarm	BOOL	READ	00020	N/A	N/A	N/A	N/A	OFF	FAULT	Faut Local To Sample System Enclosure	DD/JW - 20/07/16
12	STREAM - 2 - DEBUTANIZER													
13	UA_4002A	Stream_2_Analyzer_Warning	Stream 2-Analyzer Common Warning Alarm	BOOL	READ	00050	N/A	N/A	N/A	N/A	OFF	WARNING	Warning Local To Analyzer Control Cabinet	DD/JW - 20/07/16
14	UA_4002B	Stream_2_Model_Warning	Stream 2 - Analyzer Model Quality Warning	BOOL	READ	00051	N/A	N/A	N/A	N/A	OFF	WARNING	Calibration Quality	DD/JW - 20/07/16
15	UA-4002C	Stream_2_Sample_Panel_Warning	Stream 2-Sample Panel Common Warning Alarm	BOOL	READ	00052	N/A	N/A	N/A	N/A	OFF	WARNING	Warning Local To Sample System Enclosure	DD/JW - 20/07/16
16	PAH-4002	Stream_2_High_Pressure_Alarm	Stream 2 - High Pressure Warning Alarm	BOOL	READ	00055	N/A	N/A	N/A	N/A	OFF	WARNING	Setpoint Local to HMI	DD/JW - 20/07/16
17	TAH-4002	Stream_2_High_Temperature_Alarm	Stream 2 - High Temperature Warning Alarm	BOOL	READ	00056	N/A	N/A	N/A	N/A	OFF	WARNING	Setpoint Local to HMI	DD/JW - 20/07/16
18		Stream_2_Sampling_Alarm	Stream 2 - Sample Switch Warning	BOOL	READ	00057	N/A	N/A	N/A	N/A	OFF	WARNING	Left in SAMPLE mode > 20 min	DD/JW - 20/07/16
19	XA-4002A	Stream_2_Analyzer_Fault	Stream 2-Analyzer Common Fault Alarm	BOOL	READ	00058	N/A	N/A	N/A	N/A	OFF	FAULT	Faut Local To Analyzer Control Cabinet	DD/JW - 20/07/16
20	XA-4002B	Stream_2_Model_Fault	Stream 2 - Analyzer Model Quality Fault	BOOL	READ	00059	N/A	N/A	N/A	N/A	OFF	FAULT	Calibration Quality	DD/JW - 20/07/16
21	XA-4002C	Stream_2_Sample_Panel_Fault	Stream 2-Sample Panel Common Fault Alarm	BOOL	READ	00060	N/A	N/A	N/A	N/A	OFF	FAULT	Faut Local To Sample System Enclosure	DD/JW - 20/07/16
22	STREAM - 3 - STABILIZER													
23	UA_4003A	Stream_3_Analyzer_Warning	Stream 3-Analyzer Common Warning Alarm	BOOL	READ	00090	N/A	N/A	N/A	N/A	OFF	WARNING	Warning Local To Analyzer Control Cabinet	DD/JW - 20/07/16
24	UA_4003B	Stream_3_Model_Warning	Stream 3 - Analyzer Model Quality Warning	BOOL	READ	00091	N/A	N/A	N/A	N/A	OFF	WARNING	Calibration Quality	DD/JW - 20/07/16
25	UA-4003C	Stream_3_Sample_Panel_Warning	Stream 3-Sample Panel Common Warning Alarm	BOOL	READ	00092	N/A	N/A	N/A	N/A	OFF	WARNING	Warning Local To Sample System Enclosure	DD/JW - 20/07/16
26	PAH-4003	Stream_3_High_Pressure_Alarm	Stream 3 - High Pressure Warning Alarm	BOOL	READ	00095	N/A	N/A	N/A	N/A	OFF	WARNING	Setpoint Local to HMI	DD/JW - 20/07/16
27	TAH-4003	Stream_3_High_Temperature_Alarm	Stream 3 - High Temperature Warning Alarm	BOOL	READ	00096	N/A	N/A	N/A	N/A	OFF	WARNING	Setpoint Local to HMI	DD/JW - 20/07/16
28	XA-4003A	Stream_3_Analyzer_Fault	Stream 3-Analyzer Common Fault Alarm	BOOL	READ	00098	N/A	N/A	N/A	N/A	OFF	FAULT	Faut Local To Analyzer Control Cabinet	DD/JW - 20/07/16
29	XA-4003B	Stream_3_Model_Fault	Stream 3 - Analyzer Model Quality Fault	BOOL	READ	00099	N/A	N/A	N/A	N/A	OFF	FAULT	Calibration Quality	DD/JW - 20/07/16
30	XA-4003C	Stream_3_Sample_Panel_Fault	Stream 3-Sample Panel Common Fault Alarm	BOOL	READ	00100	N/A	N/A	N/A	N/A	OFF	FAULT	Faut Local To Sample System Enclosure	DD/JW - 20/07/16

	Tag Number	PLC Tag	Service Description (Max=32 Characters)	Data Type	Read/Write	PLC ModBus Address	Bit	Min Range	Max Range	Eng Unit	STATUS 0	STATUS 1	Comments	VERIFIED BY
32	CT-4000	CT_4000	Communications Heartbeat Register to DCS	INT	READ	40007	N/A	0	60	N/A	N/A	N/A	PLC Clock Seconds passed onto master controller. Alarm if value has not changed after set	DD/JW - 20/07/16
33	STREAM - 1 - LPG													
34	PIT-4104	Stream_1_Pressure	Stream 1, Pressure	REAL	READ	40010	N/A	0	5000	kPag	N/A	N/A		DD/JW - 20/07/16
35	TIT-4050	Stream_1_Temperature	Stream 1, Temperature	REAL	READ	40012	N/A	-20	80	C	N/A	N/A		DD/JW - 20/07/16
36	AIT-4050A	Stream_1_C1 (Mol%)	Stream 1, C1	REAL	READ	40014	N/A	0	100	MOL%	N/A	N/A		DD/JW - 20/07/16
37	AIT-4050B	Stream_1_C2 (Mol%)	Stream 1, C2	REAL	READ	40016	N/A	0	100	MOL%	N/A	N/A		DD/JW - 20/07/16
38	AIT-4050C	Stream_1_C3 (Mol%)	Stream 1, C3	REAL	READ	40018	N/A	0	100	MOL%	N/A	N/A		DD/JW - 20/07/16
39	AIT-4050D	Stream_1_iC4 (Mol%)	Stream 1, iC4	REAL	READ	40020	N/A	0	100	MOL%	N/A	N/A		DD/JW - 20/07/16
40	AIT-4050E	Stream_1_nC4 (Mol%)	Stream 1, nC4	REAL	READ	40022	N/A	0	100	MOL%	N/A	N/A		DD/JW - 20/07/16
41	AIT-4050F	Stream_1_iC5 (Mol%)	Stream 1, iC5	REAL	READ	40024	N/A	0	100	MOL%	N/A	N/A		DD/JW - 20/07/16
42	AIT-4050G	Stream_1_nC5 (Mol%)	Stream 1, nC5	REAL	READ	40026	N/A	0	100	MOL%	N/A	N/A		DD/JW - 20/07/16
43	AIT-4050H	Stream_1_C6+ (Mol%)	Stream 1, C6 plus	REAL	READ	40028	N/A	0	100	MOL%	N/A	N/A		DD/JW - 20/07/16
44	AIT-4050J	Stream_1_Transmission	Stream 1, Transmission	REAL	READ	40030	N/A	0	100	%	N/A	N/A	Analyzer Diagnostic Signal	DD/JW - 20/07/16
45	STREAM - 2 - DEBUTANIZER													
46	PIT-4002	Stream_2_Pressure_1	Stream 2, Pressure	REAL	READ	40060	N/A	0	2000	kPag	N/A	N/A		DD/JW - 20/07/16
47	TIT-4002	Stream_2_Temperature_1	Stream 2, Temperature	REAL	READ	40062	N/A	-20	80	C	N/A	N/A		DD/JW - 20/07/16
48	AIT-4002A	Stream_2_Deemed C4	Stream 2, Deemed C4- calculated as: Deemed C4- = (3*(%C1+%C2+%C3)) + (%iC4+%nC4)	REAL	READ	40064	N/A	0	100	VOL%	N/A	N/A		DD/JW - 20/07/16
49	AIT-4002B	Stream_2_VPCR	Stream 2, VAPOUR PRESSURE D6377	REAL	READ	40066	N/A	0	100	kPaa	N/A	N/A	NOT USED ON THIS BUILD	N/A
50	AIT-4002C	Stream_2_C1 (Vol%)	Stream 2, C1	REAL	READ	40068	N/A	0	100	VOL%	N/A	N/A		DD/JW - 20/07/16
51	AIT-4002D	Stream_2_C2 (Vol%)	Stream 2, C2	REAL	READ	40070	N/A	0	100	VOL%	N/A	N/A		DD/JW - 20/07/16
52	AIT-4002E	Stream_2_C3 (Vol%)	Stream 2, C3	REAL	READ	40072	N/A	0	100	VOL%	N/A	N/A		DD/JW - 20/07/16
53	AIT-4002F	Stream_2_iC4 (Vol%)	Stream 2, iC4	REAL	READ	40074	N/A	0	100	VOL%	N/A	N/A		DD/JW - 20/07/16
54	AIT-4002G	Stream_2_nC4 (Vol%)	Stream 2, nC4	REAL	READ	40076	N/A	0	100	VOL%	N/A	N/A		DD/JW - 20/07/16
55	AIT-4002H	Stream_2_Stream_2_Transmission	Stream 2, Transmission	REAL	READ	40078	N/A	0	100	%	N/A	N/A	Analyzer Diagnostic Signal	DD/JW - 20/07/16
56	STREAM - 3 - STABILIZER													
57	PIT-4003	Stream_3_Pressure_1	Stream 3, Pressure	REAL	READ	40100	N/A	0	2000	kPag	N/A	N/A		DD/JW - 20/07/16
58	TIT-4003	Stream_3_Temperature_1	Stream 3, Temperature	REAL	READ	40102	N/A	-20	80	C	N/A	N/A		DD/JW - 20/07/16
59	AIT-4003A	Stream_3_Deemed C4	Stream 3, Deemed C4- calculated as: Deemed C4- = (3*(%C1+%C2+%C3)) + (%iC4+%nC4)	REAL	READ	40104	N/A	0	100	VOL%	N/A	N/A		DD/JW - 20/07/16
60	AIT-4003B	Stream_3_VPCR	Stream 3, VAPOUR PRESSURE D6377	REAL	READ	40106	N/A	0	100	kPa	N/A	N/A	NOT USED ON THIS BUILD	N/A
61	AIT-4003C	Stream_3_C1 (Vol%)	Stream 3, C1	REAL	READ	40108	N/A	0	100	VOL%	N/A	N/A		DD/JW - 20/07/16
62	AIT-4003D	Stream_3_C2 (Vol%)	Stream 3, C2	REAL	READ	40110	N/A	0	100	VOL%	N/A	N/A		DD/JW - 20/07/16
63	AIT-4003E	Stream_3_C3 (Vol%)	Stream 3, C3	REAL	READ	40112	N/A	0	100	VOL%	N/A	N/A		DD/JW - 20/07/16
64	AIT-4003F	Stream_3_iC4 (Vol%)	Stream 3, iC4	REAL	READ	40114	N/A	0	100	VOL%	N/A	N/A		DD/JW - 20/07/16
65	AIT-4003G	Stream_3_nC4 (Vol%)	Stream 3, nC4	REAL	READ	40116	N/A	0	100	VOL%	N/A	N/A		DD/JW - 20/07/16
66	AIT-4003H	Stream_3_Stream_3_Transmission	Stream 3, Transmission	REAL	READ	40118	N/A	0	100	%	N/A	N/A	Analyzer Diagnostic Signal	DD/JW - 20/07/16

PETRONAS - TOWN NORTH - IO MAP

DI	DESCRIPTION	STREAM	CHECKED
00	SWITCH P2	4050	DD/JW - 20/07/16
01	SWITCH P3	4050	DD/JW - 20/07/16
02	SWITCH P2	4002	DD/JW - 20/07/16
03	SWITCH P3	4002	DD/JW - 20/07/16
04	SWITCH P2	4003	DD/JW - 20/07/16
05	SWITCH P3	4003	DD/JW - 20/07/16
06	SPARE		
07	SPARE		
08	SPARE		
09	SPARE		
10	SPARE		
11	SPARE		
12	SPARE		
13	SPARE		
14	SPARE		
15	SPARE		

DO	DESCRIPTION	STREAM	CHECKED
00	SPECTROMETER POWER	SPEC	DD/JW - 20/07/16
01	SPARE		
02	SPARE		
03	SPARE		
04	SPARE		
05	SPARE		
07	SPARE		
08	VCON READY LIGHT	4050	DD/JW - 20/07/16
09	SPARE		
10	SPARE		
11	VCON READY LIGHT	4002	DD/JW - 20/07/16
12	SPARE		
13	SPARE		
14	VCON READY LIGHT	4003	DD/JW - 20/07/16
15	SPARE		
16	SPARE		
17	SPARE		
18	SPARE		

AI	DESCRIPTION	STREAM	CHECKED
P2AI00	PRESSURE	4050	DD/JW - 20/07/16
P2AI01	PRESSURE	4002	DD/JW - 20/07/16
P2AI02	PRESSURE	4003	DD/JW - 20/07/16
P2AI03	SPARE		
P3AI00	TEMPERATURE	4050	DD/JW - 20/07/16
P3AI01	TEMPERATURE	4002	DD/JW - 20/07/16
P3AI02	TEMPERATURE	4003	DD/JW - 20/07/16
P3AI03	SPARE		
P4AI00	SPARE		
P4AI01	SPARE		
P4AI02	SPARE		
P4AI03	SPARE		

PETRONAS - TOWN NORTH - MODBUS MAP - FAT 2020/07/16

REV 1

	Tag Number	PLC Tag	Service Description (Max=32 Characters)	Data Type	Read/Write	PLC ModBus Address	Bit	Min Range	Max Range	Eng Unit	STATUS 0	STATUS 1	Comments	CHECKED BY
1	RESET	RESET	Reset Alarm	BOOL	WRITE	00001	N/A	N/A	N/A	N/A	OFF	RESET	Pulse for 2 seconds to reset latched alarms	DD/JW - 200716
2	OBC_COMM_FAIL	OBC_COMM_FAIL	On Board Computer Communication Fault	BOOL	READ	00002	N/A	N/A	N/A	N/A	FAULT	OK	No change in VCON BeatModbus > 10 min	DD/JW - 200716
3		SYSTEM_STSTUS	System Status	BOOL	READ	00003	N/A	N/A	N/A	N/A	FAULT	OK	No change in VCON BeatModbus > 10 min	DD/JW - 200716
4	STREAM - 1 - LPG													
5	UA_4050A	Stream_1_Analyzer_Warning	Stream 1-Analyzer Common Warning Alarm	BOOL	READ	00010	N/A	N/A	N/A	N/A	OFF	WARNING	Warning Local To Analyzer Control Cabinet	DD/JW - 200716
6	UA_4050B	Stream_1_Model_Warning	Stream 1 - Analyzer Model Quality Warning	BOOL	READ	00011	N/A	N/A	N/A	N/A	OFF	WARNING	Calibration Quality	DD/JW - 200716
7	UA_4050C	Stream_1_Sample_Panel_Warning	Stream 1-Sample Panel Common Warning Alarm	BOOL	READ	00012	N/A	N/A	N/A	N/A	OFF	WARNING	Warning Local To Sample System Enclosure	DD/JW - 200716
8	FSL_4050	Stream_1_FSL_COND	Stream 1 - Low Sample Flow Warning	BOOL	READ	00013	N/A	N/A	N/A	N/A	OFF	WARNING	No Flow Condition at Sample Cell	NOT USED
9	FSH_4050	Stream_1_FSH_COND	Stream 1 - High Sample Flow Warning	BOOL	READ	00014	N/A	N/A	N/A	N/A	OFF	WARNING	Hi Flow Condition at Sample Cell	NOT USED
10	PAH-4050	Stream_1_High_Pressure_Alarm	Stream 1 - High Pressure Warning Alarm	BOOL	READ	00015	N/A	N/A	N/A	N/A	OFF	WARNING	Setpoint Local to HMI	DD/JW - 200716
11	TAH-4050	Stream_1_High_Temperature_Alarm	Stream 1 - High Temperature Warning Alarm	BOOL	READ	00016	N/A	N/A	N/A	N/A	OFF	WARNING	Setpoint Local to HMI	DD/JW - 200716
12		Stream_1_Sampling_Alarm	Stream 1 - Sample Switch Warning	BOOL	READ	00017	N/A	N/A	N/A	N/A	OFF	WARNING	Left in SAMPLE mode > 20 min	DD/JW - 200716
13	XA_4050A	Stream_1_Analyzer_Fault	Stream 1-Analyzer Common Fault Alarm	BOOL	READ	00018	N/A	N/A	N/A	N/A	OFF	FAULT	Faut Local To Analyzer Control Cabinet	DD/JW - 200716
14	XA_4050B	Stream_1_Model_Fault	Stream 1 - Analyzer Model Quality Fault	BOOL	READ	00019	N/A	N/A	N/A	N/A	OFF	FAULT	Calibration Quality	DD/JW - 200716
15	XA_4050C	Stream_1_Sample_Panel_Fault	Stream 1-Sample Panel Common Fault Alarm	BOOL	READ	00020	N/A	N/A	N/A	N/A	OFF	FAULT	Faut Local To Sample System Enclosure	DD/JW - 200716
16		Stream_1_Temperature_Fault	Stream 1 - Temperature Transmitter Fault	BOOL	READ	00021	N/A	N/A	N/A	N/A	OFF	FAULT	Hardware Fault	DD/JW - 200716
17		Stream_1_Pressure_Fault	Stream 1 - Pressure Transmitter Fault	BOOL	READ	00022	N/A	N/A	N/A	N/A	OFF	FAULT	Hardware Fault	DD/JW - 200716
18		Stream_1_VCON_Normal	Stream 1 - Analyzer In Continous Analysis Mode	BOOL	READ	00023	N/A	N/A	N/A	N/A	FALSE	TRUE	Local HMI status bit	DD/JW - 200716
19		Stream_1_VCON_Get_Ready	Stream 1 - Analyzer Sample Collection Mode Request	BOOL	READ	00024	N/A	N/A	N/A	N/A	FALSE	TRUE	Local HMI status bit	DD/JW - 200716
20		Stream_1_VCON_Sampling	Stream 1 - Analyzer in Sample Collection Mode	BOOL	READ	00025	N/A	N/A	N/A	N/A	FALSE	TRUE	Local HMI status bit	DD/JW - 200716
21		Stream_1_VCON_Ready	Stream 1 - Analyzer Ready For Sample Collection	BOOL	READ	00026	N/A	N/A	N/A	N/A	FALSE	TRUE	Local HMI status bit	DD/JW - 200716
22		Stream_1_Sample_Source	Stream 1 - Sample Request Source	BOOL	READ	00027	N/A	N/A	N/A	N/A	HMI	SWITCH	Hardware Configuration Setting	DD/JW - 200716
23		Stream_1_Active_Alarm	Stream 1 - Active Alarm	BOOL	READ	00028	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
24		Stream_1_Analyzer_Warning_Test_Enable	Stream 1 Analyzer Warning Test Enable	BOOL	READ	00029	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
25		Stream_1_Analyzer_Warning_Test	Stream 1 Analyzer Warning Test	BOOL	READ	00030	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
26		Stream_1_Analyzer_Fault_Test_Enable	Stream 1 Analyzer Fault Test Enable	BOOL	READ	00031	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
27		Stream_1_Analyzer_Fault_Test	Stream 1 Analyzer Fault Test	BOOL	READ	00032	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
28		Stream_1_Model_Warning_Test_Enable	Stream 1 Model Warning Test Enable	BOOL	READ	00033	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
29		Stream_1_Model_Warning_Test	Stream 1 Model Warning Test	BOOL	READ	00034	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
30		Stream_1_Model_Fault_Test_Enable	Stream 1 Model Fault Test Enable	BOOL	READ	00035	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
31		Stream_1_Model_Fault_Test	Stream 1 Model Fault Test	BOOL	READ	00036	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
32		Stream_1_Sample_Plan_Test_Enable	Stream 1 Sample Plan Test Enable	BOOL	READ	00037	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
33		Stream_1_Sample_Plan_Test	Stream 1 Sample Plan Test	BOOL	READ	00038	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
34		Stream_1_Transmission_Test_Enable	Stream 1 Transmission Test Enable	BOOL	READ	00039	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
35														

	Tag Number	PLC Tag	Service Description (Max=32 Characters)	Data Type	Read/Write	PLC ModBus Address	Bit	Min Range	Max Range	Eng Unit	STATUS 0	STATUS 1	Comments	CHECKED BY
36	STREAM - 2 - DEBUTANIZER													
37	UA_4002A	Stream_2_Analyzer_Warning	Stream 2-Analyzer Common Warning Alarm	BOOL	READ	00050	N/A	N/A	N/A	N/A	OFF	WARNING	Warning Local To Analyzer Control Cabinet	DD/JW - 200716
38	UA_4002B	Stream_2_Model_Warning	Stream 2 - Analyzer Model Quality Warning	BOOL	READ	00051	N/A	N/A	N/A	N/A	OFF	WARNING	Calibration Quality	DD/JW - 200716
39	UA-4002C	Stream_2_Sample_Panel_Warning	Stream 2-Sample Panel Common Warning Alarm	BOOL	READ	00052	N/A	N/A	N/A	N/A	OFF	WARNING	Warning Local To Sample System Enclosure	DD/JW - 200716
40	FSL_4002	Stream_2_FSL_COND	Stream 2 - Low Sample Flow Warning	REAL	READ	00053	N/A	N/A	N/A	N/A	OFF	WARNING	No Flow Condition at Sample Cell	NOT USED
41	FSH-4002	Stream_2_FSH_COND	Stream 2 - High Sample Flow Warning	REAL	READ	00054	N/A	N/A	N/A	N/A	OFF	WARNING	Hi Flow Condition at Sample Cell	NOT USED
42	PAH-4002	Stream_2_High_Pressure_Alarm	Stream 2 - High Pressure Warning Alarm	BOOL	READ	00055	N/A	N/A	N/A	N/A	OFF	WARNING	Setpoint Local to HMI	DD/JW - 200716
43	TAH-4002	Stream_2_High_Temperature_Alarm	Stream 2 - High Temperature Warning Alarm	BOOL	READ	00056	N/A	N/A	N/A	N/A	OFF	WARNING	Setpoint Local to HMI	DD/JW - 200716
44		Stream_2_Sampling_Alarm	Stream 2 - Sample Switch Warning	BOOL	READ	00057	N/A	N/A	N/A	N/A	OFF	WARNING	Left in SAMPLE mode > 20 min	DD/JW - 200716
45	XA-4002A	Stream_2_Analyzer_Fault	Stream 2-Analyzer Common Fault Alarm	BOOL	READ	00058	N/A	N/A	N/A	N/A	OFF	FAULT	Faut Local To Analyzer Control Cabinet	DD/JW - 200716
46	XA-4002B	Stream_2_Model_Fault	Stream 2 - Analyzer Model Quality Fault	BOOL	READ	00059	N/A	N/A	N/A	N/A	OFF	FAULT	Calibration Quality	DD/JW - 200716
47	XA-4002C	Stream_2_Sample_Panel_Fault	Stream 2-Sample Panel Common Fault Alarm	BOOL	READ	00060	N/A	N/A	N/A	N/A	OFF	FAULT	Faut Local To Sample System Enclosure	DD/JW - 200716
48		SPARE	SPARE	BOOL	READ	00061	N/A	N/A	N/A	N/A	OFF	FAULT	Hardware Fault	DD/JW - 200716
49		Stream_2_Temperature_Fault	Stream 2 - Temperature Transmitter Fault	BOOL	READ	00062	N/A	N/A	N/A	N/A	OFF	FAULT	Hardware Fault	DD/JW - 200716
50		Stream_2_Pressure_Fault	Stream 2 - Pressure Transmitter Fault	BOOL	READ	00063	N/A	N/A	N/A	N/A	OFF	FAULT	Hardware Fault	DD/JW - 200716
51		Stream_2_VCON_Normal	Stream 2 - Analyzer In Continous Analysis Mode	BOOL	READ	00064	N/A	N/A	N/A	N/A	FALSE	TRUE	Local HMI status bit	DD/JW - 200716
52		Stream_2_VCON_Get_Ready	Stream 2 - Analyzer Sample Collection Mode Request	BOOL	READ	00065	N/A	N/A	N/A	N/A	FALSE	TRUE	Local HMI status bit	DD/JW - 200716
53		Stream_2_VCON_Sampling	Stream 2 - Analyzer in Sample Collection Mode	BOOL	READ	00066	N/A	N/A	N/A	N/A	FALSE	TRUE	Local HMI status bit	DD/JW - 200716
54		Stream_2_VCON_Ready	Stream 2 - Analyzer Ready For Sample Collection	BOOL	READ	00067	N/A	N/A	N/A	N/A	FALSE	TRUE	Local HMI status bit	DD/JW - 200716
55		Stream_2_Sample_Source	Stream 2 - Sample Request Source	BOOL	READ	00068	N/A	N/A	N/A	N/A	HMI	SWITCH	Hardware Configuration Setting	DD/JW - 200716
56		Stream_2_Active_Alarm	Stream 2 - Active Alarm	BOOL	READ	00069	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
57		Stream_2_Analyzer_Warning_Test_Enable	Stream 2 Analyzer Warning Test Enable	BOOL	READ	00070	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
58		Stream_2_Analyzer_Warning_Test	Stream 2 Analyzer Warning Test	BOOL	READ	00071	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
59		Stream_2_Analyzer_Fault_Test_Enable	Stream 2 Analyzer Fault Test Enable	BOOL	READ	00072	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
60		Stream_2_Analyzer_Fault_Test	Stream 2 Analyzer Fault Test	BOOL	READ	00073	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
61		Stream_2_Model_Warning_Test_Enable	Stream 2 Model Warning Test Enable	BOOL	READ	00074	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
62		Stream_2_Model_Warning_Test	Stream 2 Model Warning Test	BOOL	READ	00075	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
63		Stream_2_Model_Fault_Test_Enable	Stream 2 Model Fault Test Enable	BOOL	READ	00076	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
64		Stream_2_Model_Fault_Test	Stream 2 Model Fault Test	BOOL	READ	00077	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
65		Stream_2_Sample_Plan_Test_Enable	Stream 2 Sample Plan Test Enable	BOOL	READ	00078	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
66		Stream_2_Sample_Plan_Test	Stream 2 Sample Plan Test	BOOL	READ	00079	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
67		Stream_2_Transmission_Test_Enable	Stream 2 Transmission Test Enable	BOOL	READ	00080	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
68														

	Tag Number	PLC Tag	Service Description (Max=32 Characters)	Data Type	Read/Write	PLC ModBus Address	Bit	Min Range	Max Range	Eng Unit	STATUS 0	STATUS 1	Comments	CHECKED BY
69	STREAM - 3 - STABILIZER													
70	UA_4003A	Stream_3_Analyzer_Warning	Stream 3-Analyzer Common Warning Alarm	BOOL	READ	00090	N/A	N/A	N/A	N/A	OFF	WARNING	Warning Local To Analyzer Control Cabinet	DD/JW - 200716
71	UA_4003B	Stream_3_Model_Warning	Stream 3 - Analyzer Model Quality Warning	BOOL	READ	00091	N/A	N/A	N/A	N/A	OFF	WARNING	Calibration Quality	DD/JW - 200716
72	UA-4003C	Stream_3_Sample_Panel_Warning	Stream 3-Sample Panel Common Warning Alarm	BOOL	READ	00092	N/A	N/A	N/A	N/A	OFF	WARNING	Warning Local To Sample System Enclosure	DD/JW - 200716
73	FSL_4003	Stream_3_FSL_COND	Stream 3 - Low Sample Flow Warning	BOOL	READ	00093	N/A	N/A	N/A	N/A	OFF	WARNING	No Flow Condition at Sample Cell	NOT USED
74	FSH-4003	Stream_3_FSH_COND	Stream 3 - High Sample Flow Warning	BOOL	READ	00094	N/A	N/A	N/A	N/A	OFF	WARNING	Hi Flow Condition at Sample Cell	NOT USED
75	PAH-4003	Stream_3_High_Pressure_Alarm	Stream 3 - High Pressure Warning Alarm	BOOL	READ	00095	N/A	N/A	N/A	N/A	OFF	WARNING	Setpoint Local to HMI	DD/JW - 200716
76	TAH-4003	Stream_3_High_Temperature_Alarm	Stream 3 - High Temperature Warning Alarm	BOOL	READ	00096	N/A	N/A	N/A	N/A	OFF	WARNING	Setpoint Local to HMI	DD/JW - 200716
77		Stream_3_Sampling_Alarm	Stream 3 - Sample Switch Warning	BOOL	READ	00097	N/A	N/A	N/A	N/A	OFF	WARNING	Left in SAMPLE mode > 20 min	DD/JW - 200716
78	XA-4003A	Stream_3_Analyzer_Fault	Stream 3-Analyzer Common Fault Alarm	BOOL	READ	00098	N/A	N/A	N/A	N/A	OFF	FAULT	Faut Local To Analyzer Control Cabinet	DD/JW - 200716
79	XA-4003B	Stream_3_Model_Fault	Stream 3 - Analyzer Model Quality Fault	BOOL	READ	00099	N/A	N/A	N/A	N/A	OFF	FAULT	Calibration Quality	DD/JW - 200716
80	XA-4003C	Stream_3_Sample_Panel_Fault	Stream 3-Sample Panel Common Fault Alarm	BOOL	READ	00100	N/A	N/A	N/A	N/A	OFF	FAULT	Faut Local To Sample System Enclosure	DD/JW - 200716
81		SPARE	SPARE	BOOL	READ	00101	N/A	N/A	N/A	N/A	OFF	FAULT	Hardware Fault	DD/JW - 200716
82		Stream_3_Temperature_Fault	Stream 3 - Temperature Transmitter Fault	BOOL	READ	00102	N/A	N/A	N/A	N/A	OFF	FAULT	Hardware Fault	DD/JW - 200716
83		Stream_3_Pressure_Fault	Stream 3 - Pressure Transmitter Fault	BOOL	READ	00103	N/A	N/A	N/A	N/A	OFF	FAULT	Hardware Fault	DD/JW - 200716
84		Stream_3_VCON_Normal	Stream 3 - Analyzer In Continous Analysis Mode	BOOL	READ	00104	N/A	N/A	N/A	N/A	FALSE	TRUE	Local HMI status bit	DD/JW - 200716
85		Stream_3_VCON_Get_Ready	Stream 3 - Analyzer Sample Collection Mode Request	BOOL	READ	00105	N/A	N/A	N/A	N/A	FALSE	TRUE	Local HMI status bit	DD/JW - 200716
86		Stream_3_VCON_Sampling	Stream 3 - Analyzer in Sample Collection Mode	BOOL	READ	00106	N/A	N/A	N/A	N/A	FALSE	TRUE	Local HMI status bit	DD/JW - 200716
87		Stream_3_VCON_Ready	Stream 3 - Analyzer Ready For Sample Collection	BOOL	READ	00107	N/A	N/A	N/A	N/A	FALSE	TRUE	Local HMI status bit	DD/JW - 200716
88		Stream_3_Sample_Source	Stream 3 - Sample Request Source	BOOL	READ	00108	N/A	N/A	N/A	N/A	HMI	SWITCH	Hardware Configuration Setting	DD/JW - 200716
89		Stream_3_Active_Alarm	Stream 3 - Active Alarm	BOOL	READ	00109	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
90		Stream_3_Analyzer_Warning_Test_Enable	Stream 3 Analyzer Warning Test Enable	BOOL	READ	00110	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
91		Stream_3_Analyzer_Warning_Test	Stream 3 Analyzer Warning Test	BOOL	READ	00111	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
92		Stream_3_Analyzer_Fault_Test_Enable	Stream 3 Analyzer Fault Test Enable	BOOL	READ	00112	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
93		Stream_3_Analyzer_Fault_Test	Stream 3 Analyzer Fault Test	BOOL	READ	00113	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
94		Stream_3_Model_Warning_Test_Enable	Stream 3 Model Warning Test Enable	BOOL	READ	00114	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
95		Stream_3_Model_Warning_Test	Stream 3 Model Warning Test	BOOL	READ	00115	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
96		Stream_3_Model_Fault_Test_Enable	Stream 3 Model Fault Test Enable	BOOL	READ	00116	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
97		Stream_3_Model_Fault_Test	Stream 3 Model Fault Test	BOOL	READ	00117	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
98		Stream_3_Sample_Plan_Test_Enable	Stream 3 Sample Plan Test Enable	BOOL	READ	00118	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
99		Stream_3_Sample_Plan_Test	Stream 3 Sample Plan Test	BOOL	READ	00119	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
100		Stream_3_Transmission_Test_Enable	Stream 3 Transmission Test Enable	BOOL	READ	00120	N/A	N/A	N/A	N/A	OFF	ALARM	Local HMI status bit	DD/JW - 200716
101														

	Tag Number	PLC Tag	Service Description (Max=32 Characters)	Data Type	Read/Write	PLC ModBus Address	Bit	Min Range	Max Range	Eng Unit	STATUS 0	STATUS 1	Comments	CHECKED BY
102	Holding Registers													
103	PLC_YEAR	PLC_YEAR	PLC Clock Year	INT	READ	40001		2016	2116				Real Time Clock From PLC	DD/JW - 200716
104	PLC_MONTH	PLC_MONTH	PLC Clock Month	INT	READ	40002		1	12				Real Time Clock From PLC	DD/JW - 200716
105	PLC_DAY	PLC_DAY	PLC Clock Day	INT	READ	40003		1	31				Real Time Clock From PLC	DD/JW - 200716
106	PLC_HOUR	PLC_HOUR	PLC Clock Hour	INT	READ	40004		0	24				Real Time Clock From PLC	DD/JW - 200716
107	PLC_MINUTE	PLC_MINUTE	PLC Clock Minute	INT	READ	40005		0	60				Real Time Clock From PLC	DD/JW - 200716
108	PLC_SECOND	PLC_SECOND	PLC Clock Second	INT	READ	40006		0	60				Real Time Clock From PLC	DD/JW - 200716
109	CT-4000	CT_4000	Communications Heartbeat Register to DCS	INT	READ	40007	N/A	0	60	N/A	N/A	N/A	PLC Clock Seconds passed onto master controller. Alarm if value has not changed after set	DD/JW - 200716
110		STREAMS_ENABLED	Number of Streams Enabled in Logic	INT	READ	40008	N/A	0	4	N/A	N/A	N/A	Configuration Parameter	DD/JW - 200716
111														
112	STREAM - 1 - LPG													
113	PIT-4104	Stream_1_Pressure	Stream 1, Pressure	REAL	READ	40010	N/A	0	5000	kPag	N/A	N/A		DD/JW - 200716
114	TIT-4050	Stream_1_Temperature	Stream 1, Temperature	REAL	READ	40012	N/A	-20	80	C	N/A	N/A		DD/JW - 200716
115	AIT-4050A	Stream_1_C1 (Mol%)	Stream 1, C1	REAL	READ	40014	N/A	0	100	MOL%	N/A	N/A		DD/JW - 200716
116	AIT-4050B	Stream_1_C2 (Mol%)	Stream 1, C2	REAL	READ	40016	N/A	0	100	MOL%	N/A	N/A		DD/JW - 200716
117	AIT-4050C	Stream_1_C3 (Mol%)	Stream 1, C3	REAL	READ	40018	N/A	0	100	MOL%	N/A	N/A		DD/JW - 200716
118	AIT-4050D	Stream_1_iC4 (Mol%)	Stream 1, iC4	REAL	READ	40020	N/A	0	100	MOL%	N/A	N/A		DD/JW - 200716
119	AIT-4050E	Stream_1_nC4 (Mol%)	Stream 1, nC4	REAL	READ	40022	N/A	0	100	MOL%	N/A	N/A		DD/JW - 200716
120	AIT-4050F	Stream_1_iC5 (Mol%)	Stream 1, iC5	REAL	READ	40024	N/A	0	100	MOL%	N/A	N/A		DD/JW - 200716
121	AIT-4050G	Stream_1_nC5 (Mol%)	Stream 1, nC5	REAL	READ	40026	N/A	0	100	MOL%	N/A	N/A		DD/JW - 200716
122	AIT-4050H	Stream_1_C6+ (Mol%)	Stream 1, C6 plus	REAL	READ	40028	N/A	0	100	MOL%	N/A	N/A		DD/JW - 200716
123	AIT-4050J	Stream_1_Transmission	Stream 1, Transmission	REAL	READ	40030	N/A	0	100	%	N/A	N/A		DD/JW - 200716
124		Stream_1_Sample_Mode	Stream 1, Sampling Mode	INT	READ	40032	N/A	0	4	N/A	N/A	N/A		DD/JW - 200716
125		Stream_1_Sample_Mode_HMI_Select	Stream 1, Sampling Mode HMI Select	INT	READ	40033	N/A	0	1	N/A	N/A	N/A		DD/JW - 200716
126		Stream_1_Pressure_Range_Lo	Stream 1, Cell Pressure Scale Low SP	REAL	READ	40034	N/A	0	100	kPag	N/A	N/A		DD/JW - 200716
127		Stream_1_Pressure_Range_Hi	Stream 1, Cell Pressure Scale High SP	REAL	READ	40036	N/A	0	100	kPag	N/A	N/A		DD/JW - 200716
128		Stream_1_Pressure_Alarm_Hi_SP	Stream 1, Cell Pressure Scale High Alarm SP	REAL	READ	40038	N/A	0	100	kPag	N/A	N/A		DD/JW - 200716
129		Stream_1_Temperature_Range_Lo	Stream 1, Cell Temperature Scale Low SP	REAL	READ	40040	N/A	0	300	C	N/A	N/A		DD/JW - 200716
130		Stream_1_Temperature_Range_Hi	Stream 1, Cell Temperature Scale High SP	REAL	READ	40042	N/A	0	300	C	N/A	N/A		DD/JW - 200716
131		Stream_1_Temperature_Alarm_Hi_SP	Stream 1, Cell Temperature Scale High Alarm SP	REAL	READ	40044	N/A	0	300	C	N/A	N/A	Analyzer Diagnostic Signal	DD/JW - 200716
132		Stream_1_Transmission_Test	Stream 1 Transmission Test	REAL	R/W	40046	N/A	0	300	%	N/A	N/A		DD/JW - 200716
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Tag Number	PLC Tag	Service Description (Max=32 Characters)	Data Type	Read/Write	PLC ModBus Address	Bit	Min Range	Max Range	Eng Unit	STATUS 0	STATUS 1	Comments	CHECKED BY
STREAM - 2 - DEBUTANIZER													
PIT-4002	Stream_2_Pressure_1	Stream 2, Pressure	REAL	READ	40060	N/A	0	2000	kPag	N/A	N/A		DD/JW - 200716
TIT-4002	Stream_2_Temperature_1	Stream 2, Temperature	REAL	READ	40062	N/A	-20	80	C	N/A	N/A		DD/JW - 200716
AIT-4002A	Stream_2_Deemed C4	Stream 2, Deemed C4- calculated as: Deemed C4- = (3*(%C1+%C2+%C3)) + (%iC4+%nC4)	REAL	READ	40064	N/A	0	100	VOL%	N/A	N/A		DD/JW - 200716
AIT-4002B	Stream_2_VPCR	Stream 2, VAPOUR PRESSURE D6377	REAL	READ	40066	N/A	0	100	kPaa	N/A	N/A	NOT USED ON THIS APP	N/A
AIT-4002C	Stream_2_C1 (Vol%)	Stream 2, C1	REAL	READ	40068	N/A	0	100	VOL%	N/A	N/A		DD/JW - 200716
AIT-4002D	Stream_2_C2 (Vol%)	Stream 2, C2	REAL	READ	40070	N/A	0	100	VOL%	N/A	N/A		DD/JW - 200716
AIT-4002E	Stream_2_C3 (Vol%)	Stream 2, C3	REAL	READ	40072	N/A	0	100	VOL%	N/A	N/A		DD/JW - 200716
AIT-4002F	Stream_2_iC4 (Vol%)	Stream 2, iC4	REAL	READ	40074	N/A	0	100	VOL%	N/A	N/A		DD/JW - 200716
AIT-4002G	Stream_2_nC4 (Vol%)	Stream 2, nC4	REAL	READ	40076	N/A	0	100	VOL%	N/A	N/A		DD/JW - 200716
AIT-4002H	Stream_2_Stream_2_Transmission	Stream 2, Transmission	REAL	READ	40078	N/A	0	100	%	N/A	N/A	Analyzer Diagnostic Signal	DD/JW - 200716
	Stream_2_Sample_Mode	Stream 2, Sampling Mode	INT	READ	40080	N/A	0	3	N/A	N/A	N/A	0=Normal, 1=Get Ready, 2=Ready, 3=Sampling	DD/JW - 200716
	Stream_2_Sample_Mode_HMI_Select	Stream 2, Sampling Mode HMI Select	INT	R/W	40081	N/A	0	2	N/A	N/A	N/A	1 = HMI P2, 2 = HMI P3	DD/JW - 200716
	Stream_2_Pressure_Range_Lo	Stream 2, Cell Pressure Scale Low SP	REAL	R/W	40082	N/A	0	10000	kpa	N/A	N/A		DD/JW - 200716
	Stream_2_Pressure_Range_Hi	Stream 2, Cell Pressure Scale High SP	REAL	R/W	40084	N/A	0	10000	kpa	N/A	N/A		DD/JW - 200716
	Stream_2_Pressure_Alarm_Hi_SP	Stream 2, Cell Pressure Scale High Alarm SP	REAL	R/W	40086	N/A	0	10000	kpa	N/A	N/A		DD/JW - 200716
	Stream_2_Temperature_Range_Lo	Stream 2, Cell Temperature Scale Low SP	REAL	R/W	40088	N/A	0	300	C	N/A	N/A		DD/JW - 200716
	Stream_2_Temperature_Range_Hi	Stream 2, Cell Temperature Scale High SP	REAL	R/W	40090	N/A	0	300	C	N/A	N/A		DD/JW - 200716
	Stream_2_Temperature_Alarm_Hi_SP	Stream 2, Cell Temperature Scale High Alarm SP	REAL	R/W	40092	N/A	0	300	C	N/A	N/A		DD/JW - 200716
	Stream_2_Transmission_Test	Stream 2 Transmission Test	REAL	R/W	40094	N/A	0	100	%	N/A	N/A		DD/JW - 200716
													DD/JW - 200716

Tag Number	PLC Tag	Service Description (Max=32 Characters)	Data Type	Read/Write	PLC ModBus Address	Bit	Min Range	Max Range	Eng Unit	STATUS 0	STATUS 1	Comments	CHECKED BY
155	STREAM - 3 - STABILIZER												
156	PIT-4003	Stream_3_Pressure_1	Stream 3, Pressure	REAL	READ	40100	N/A	0	2000	kPag	N/A	N/A	DD/JW - 200716
157	TIT-4003	Stream_3_Temperature_1	Stream 3, Temperature	REAL	READ	40102	N/A	-20	80	C	N/A	N/A	DD/JW - 200716
158	AIT-4003A	Stream_3_Deemed C4	Stream 3, Deemed C4- calculated as: Deemed C4- = (3*(%C1+%C2+%C3)) + (%iC4+%nC4)	REAL	READ	40104	N/A	0	100	VOL%	N/A	N/A	DD/JW - 200716
159	AIT-4003B	Stream_3_VPCR	Stream 3, VAPOUR PRESSURE D6377	REAL	READ	40106	N/A	0	100	kPa	N/A	N/A	NOT USED ON THIS APP N/A
160	AIT-4003C	Stream_3_C1 (Vol%)	Stream 3, C1	REAL	READ	40108	N/A	0	100	VOL%	N/A	N/A	DD/JW - 200716
161	AIT-4003D	Stream_3_C2 (Vol%)	Stream 3, C2	REAL	READ	40110	N/A	0	100	VOL%	N/A	N/A	DD/JW - 200716
162	AIT-4003E	Stream_3_C3 (Vol%)	Stream 3, C3	REAL	READ	40112	N/A	0	100	VOL%	N/A	N/A	DD/JW - 200716
163	AIT-4003F	Stream_3_iC4 (Vol%)	Stream 3, iC4	REAL	READ	40114	N/A	0	100	VOL%	N/A	N/A	DD/JW - 200716
164	AIT-4003G	Stream_3_nC4 (Vol%)	Stream 3, nC4	REAL	READ	40116	N/A	0	100	VOL%	N/A	N/A	DD/JW - 200716
165	AIT-4003H	Stream_3_Stream_3_Transmission	Stream 3, Transmission	REAL	READ	40118	N/A	0	100	%	N/A	N/A	Analyzer Diagnostic Signal DD/JW - 200716
166		Stream_3_Sample_Mode	Stream 3, Sampling Mode	INT	READ	40120	N/A	0	3	N/A	N/A	N/A	0=Normal, 1=Get Ready, 2=Ready, 3=Sampling DD/JW - 200716
167		Stream_3_Sample_Mode_HMI_Select	Stream 3, Sampling Mode HMI Select	INT	R/W	40121	N/A	0	2	N/A	N/A	N/A	1 = HMI P2, 2 = HMI P3 DD/JW - 200716
168		Stream_3_Pressure_Range_Lo	Stream 3, Cell Pressure Scale Low SP	REAL	R/W	40122	N/A	0	10000	kpa	N/A	N/A	DD/JW - 200716
169		Stream_3_Pressure_Range_Hi	Stream 3, Cell Pressure Scale High SP	REAL	R/W	40124	N/A	0	10000	kpa	N/A	N/A	DD/JW - 200716
170		Stream_3_Pressure_Alarm_Hi_SP	Stream 3, Cell Pressure Scale High Alarm SP	REAL	R/W	40126	N/A	0	10000	kpa	N/A	N/A	DD/JW - 200716
171		Stream_3_Temperature_Range_Lo	Stream 3, Cell Temperature Scale Low SP	REAL	R/W	40128	N/A	0	300	C	N/A	N/A	DD/JW - 200716
172		Stream_3_Temperature_Range_Hi	Stream 3, Cell Temperature Scale High SP	REAL	R/W	40130	N/A	0	300	C	N/A	N/A	DD/JW - 200716
173		Stream_3_Temperature_Alarm_Hi_SP	Stream 3, Cell Temperature Scale High Alarm SP	REAL	R/W	40132	N/A	0	300	C	N/A	N/A	DD/JW - 200716
174		Stream_3_Transmission_Test	Stream 3 Transmission Test	REAL	R/W	40134	N/A	0	100	%	N/A	N/A	DD/JW - 200716
175													

LPG (CH1)					
SPECIES	REG TYPE	Reg #	24_Hr_Avg Reg#	Data Type	Range/Logic
C1_MOL	Input	7001	8001	32-bit Floating Point	MOL%
C2_MOL	Input	7003	8003	32-bit Floating Point	MOL%
C3_MOL	Input	7005	8005	32-bit Floating Point	MOL%
iC4_MOL	Input	7007	8007	32-bit Floating Point	MOL%
nC4_MOL	Input	7009	8009	32-bit Floating Point	MOL%
iC5_MOL	Input	7011	8011	32-bit Floating Point	MOL%
nC5_MOL	Input	7013	8013	32-bit Floating Point	MOL%
C6_MOL	Input	7015	8015	32-bit Floating Point	MOL%
Temperature_1	Input	7017	8017	32-bit Floating Point	MOL%
Pressure_1	Input	7019	8019	32-bit Floating Point	MOL%
Transmission_1	Input	7021	8021	32-bit Floating Point	MOL%
Fault_Ireg	Input	7023	8023	16-bit Integer	ENCODED
Warning_Ireg	Input	7024	8024	16-bit Integer	ENCODED
Alarm IReg	Input	7025	8025	16-bit Integer	0=Normal, 1=Warning, 2=Fault
Model IReg	Input	7026	8026	16-bit Integer	0=Normal, 1=Warning, 2=Fault
VCON IReg	Input	7027	8027	16-bit Integer	41=VCON_Ready
Sample Plan IReg	Input	7028	8028	16-bit Integer	41=Trigger to pull sample
INPUTS					
Temperature_1	Holding	1	N/A	16-bit Integer	
Pressure_1	Holding	2	N/A	16-bit Integer	
vcon trigger	Holding	3	N/A	16-bit Integer	
no flow	Holding	4	N/A	16-bit Integer	
vcon_get_ready	Holding	21	N/A	16-bit Integer	41=VCON GET READY
vcon_sample	Holding	22	N/A	16-bit Integer	41=SAMPLE IN PROGRESS
CONFIG SETTINGS					
spec_power	Input	7095	N/A	16-bit Integer	REMOTE POWER CYCLE
Status_Modbus	Input	7097	N/A	16-bit Integer	STREAM INDICATOR
Beat_Modbus	Input	7098	N/A	16-bit Integer	TOGGLE BETWEEN 0 AND 41

prefix: PT_

DEBUTANIZER

SPECIES	REG TYPE	Reg #	24_Hr_Avg Reg#	Data Type	Range/Logic
C1_VOL	Input	7101	8101	32-bit Floating Point	VOL%
C2_VOL	Input	7103	8103	32-bit Floating Point	VOL%
C3_VOL	Input	7105	8105	32-bit Floating Point	VOL%
iC4_VOL	Input	7107	8107	32-bit Floating Point	VOL%
nC4_VOL	Input	7109	8109	32-bit Floating Point	VOL%
DEEMED_C4	Input	7111	8111	32-bit Floating Point	VOL%
SPARE	Input	7113	8113	32-bit Floating Point	kPaa
SPARE	Input	7115	8115	32-bit Floating Point	
Temperature_1	Input	7117	8117	32-bit Floating Point	MOL%
Pressure_1	Input	7119	8119	32-bit Floating Point	MOL%
Transmission_1	Input	7121	8121	32-bit Floating Point	MOL%
Fault_Ireg	Input	7123	8123	16-bit Integer	ENCODED
Warning_Ireg	Input	7124	8124	16-bit Integer	ENCODED
Alarm IReg	Input	7125	8125	16-bit Integer	0=Normal, 1=Warning, 2=Fault
Model IReg	Input	7126	8126	16-bit Integer	0=Normal, 1=Warning, 2=Fault
VCON IReg	Input	7127	8127	16-bit Integer	41=VCON_Ready
Sample Plan IReg	Input	7128	8128	16-bit Integer	41=Trigger to pull sample

INPUTS					
Temperature_1	Holding	5	N/A	16-bit Integer	
Pressure_1	Holding	6	N/A	16-bit Integer	
vcon trigger	Holding	7	N/A	16-bit Integer	
no flow	Holding	8	N/A	16-bit Integer	
vcon_get_ready	Holding	23	N/A	16-bit Integer	41=VCON GET READY
vcon_sample	Holding	24	N/A	16-bit Integer	41=SAMPLE IN PROGRESS

CONFIG SETTINGS					
spec_power	Input	7095	N/A	16-bit Integer	REMOTE POWER CYCLE
Status_Modbus	Input	7097	N/A	16-bit Integer	STREAM INDICATOR
Beat_Modbus	Input	7098	N/A	16-bit Integer	TOGGLE BETWEEN 0 AND 41

DEBUTANIZER

SPECIES	REG TYPE	Reg #	24_Hr_Avg Reg#	Data Type	Range/Logic
C1_VOL	Input	7201	8201	32-bit Floating Point	VOL%
C2_VOL	Input	7203	8203	32-bit Floating Point	VOL%
C3_VOL	Input	7205	8205	32-bit Floating Point	VOL%
iC4_VOL	Input	7207	8207	32-bit Floating Point	VOL%
nC4_VOL	Input	7209	8209	32-bit Floating Point	VOL%
DEEMED_C4	Input	7211	8211	32-bit Floating Point	VOL%
SPARE	Input	7213	8213	32-bit Floating Point	kPaa
SPARE	Input	7215	8215	32-bit Floating Point	
Temperature_1	Input	7217	8217	32-bit Floating Point	MOL%
Pressure_1	Input	7219	8219	32-bit Floating Point	MOL%
Transmission_1	Input	7221	8221	32-bit Floating Point	MOL%
Fault_Ireg	Input	7223	8223	16-bit Integer	ENCODED
Warning_Ireg	Input	7224	8224	16-bit Integer	ENCODED
Alarm IReg	Input	7225	8225	16-bit Integer	0=Normal, 1=Warning, 2=Fault
Model IReg	Input	7226	8226	16-bit Integer	0=Normal, 1=Warning, 2=Fault
VCON IReg	Input	7227	8227	16-bit Integer	41=VCON_Ready
Sample Plan IReg	Input	7228	8228	16-bit Integer	41=Trigger to pull sample

INPUTS					
Temperature_1	Holding	9	N/A	16-bit Integer	
Pressure_1	Holding	10	N/A	16-bit Integer	
vcon trigger	Holding	11	N/A	16-bit Integer	
no flow	Holding	12	N/A	16-bit Integer	
vcon_get_ready	Holding	25	N/A	16-bit Integer	41=VCON GET READY
vcon_sample	Holding	26	N/A	16-bit Integer	41=SAMPLE IN PROGRESS

CONFIG SETTINGS					
spec_power	Input	7095	N/A	16-bit Integer	REMOTE POWER CYCLE
Status_Modbus	Input	7097	N/A	16-bit Integer	STREAM INDICATOR
Beat_Modbus	Input	7098	N/A	16-bit Integer	TOGGLE BETWEEN 0 AND 41

[illegible]