Appendix B – Communication Code Tables

This appendix lists the codes for all Sentinel instruments.
Some codes may not apply to the instrument you are using.

Table 1: Data Type or Header Codes

type "TABLE HEADER"

	Data Type Code	Description
1	V	Variable Edit
2	L	List
3	M	Message
4	Q	Result List
5	T	Streaming Started
6	S	Streaming Value
7	X	Streaming Stopped
8	R	Result Value

Table 2: Program Evaluation Codes

type "TABLE RESULT"

	Program Evaluation Code	Description
1	P	TEST PASSED
2	F	TEST FAILED
3	E	TEST ERROR
4	S	TEST SKIPPED
5	X	TEST FAILED - LEVEL 1
6	Y	TEST FAILED - LEVEL 2
7	Z	TEST FAILED - LEVEL 3
8	M	AUTO-CAL MASTER PART
9	L	AUTO-CAL LEAK STANDARD PART
10	N	TEST FAILED - NO EVENT
11	C	TEST COMPLETE

Table 3: Test Evaluation Codes

type "TABLE EVALUATION"

	Test Evaluation Code	Description		Test Evaluation Code	Description
1	A	PROGRAM ACCEPT	31	ER	SYSTEM ERROR - SERVICE REQ
2	AC	AUTO SETUP SEQ COMPLETE	32	FO	FLOW TRANSDUCER OVER-RANGE
3	AF	PROGRAM CALIBRATION FAILED	33	FX	ERROR: EXCESSIVE FLOW
4	AM	MASTER PART COMPLETE	34	FZ	FLOW TRANSDUCER ZERO BAD
5	AP	PROGRAM CALIBRATION PASSED	35	HF	HELIUM BACKGROUND FAULT
6	AT	ERROR: ANTI-TIE-DOWN	36	IC	INVALID INPUT CONFIGURATION
7	BR	ERROR: BARCODE REQ TO START	37	ID	INVALID CALIBRATION DATA
8	C1	MASTER+LEAK LOSS<MASTER LOSS	38	IE	INPUT INITIAL STATE ERROR
9	C2	MASTER LOSS>MAX M+L LOSS	39	IF	I/O FAULT
10	C3	MASTER+LEAK LOSS>MAX M+L LOSS	40	IO	INVALID I/O CONFIGURATION
11	C4	MASTER FLOW>MAX M+L FLOW	41	IP	INVALID PROGRAM SELECTED
12	C5	MASTER FLOW<MIN MASTER FLOW	42	IS	ISOLATION FAILURE
13	C6	MASTER+LEAK FLOW>MAX M+L FLOW	43	LD	ERROR: DUPLICATE TARGET LINK
14	C7	MASTER FLOW>MAX MASTER FLOW	44	LE	LEAK STD SELECT CONFIG ERROR
15	C8	MASTER+LEAK FLOW<MASTER FLOW	45	LL	ERROR: LINK EXECUTION LOOP
16	C9	MASTER LOSS<MIN MASTER LOSS	46	LN	ERROR: NO LINKS DEFINED
17	CA	CAL PROGRAM ACCEPT	47	LO	ERROR: DISSIMILAR LINK ORDER
18	CE	CALCULATION ERROR	48	LP	ERROR: LINK PROG IS PARENT
19	CF	CAL REQUIRED - LIMIT EXCEEDED	49	LU	ERROR: LINK PROG UNDEFINED
20	CM	MIN PERF FACTOR ERROR	50	MF	ERROR: PART MARK FAULT
21	CP	CAL REQUIRED - PARAM CHANGED	51	MS	MAN FILL SWITCH
22	CR	CAL PROGRAM REJECT	52	NE	NO EVENT OCCURRED
23	CX	CHAMBER EVACUATION FAULT	53	OC	ATMOSPHERIC PRESSURE COMPLETE
24	DF	DP TRANSDUCER FAULT	54	OE	ATMOSPHERIC PRESSURE ERROR
25	DO	DP TRANSDUCER OVER-RANGE	55	PA	ABOVE TARGET PRESSURE
26	DZ	DP TRANSDUCER ZERO BAD	56	PB	BELOW TARGET PRESSURE
27	EC	ELEC REGULATOR CAL COMPLETE	57	PC	ERROR: PART NOT CHANGED
28	EE	ELEC REGULATOR CAL ERROR	58	PE	PROGRAM CONFIGURATION ERROR
29	EF	PART EVAC FAULT	59	PF	PART NOT FULL
30	EP	PROG ERROR	60	PH	TEST PRESSURE HIGH

type "TABLE EVALUATION"

	Test Evaluation Code	Description
61	PL	TEST PRESSURE LOW
62	PP	ERROR: PART NOT PRESENT
63	PR	POWER RESET
64	PS	PART NOT STABILIZED
65	PV	PROCESS FAULT
66	PX	PART NOT EXHAUSTED
67	QC	SEQUENCE COMPLETE
68	R	PROGRAM REJECT
69	R1	PART REJECT - LEVEL 1
70	R2	PART REJECT - LEVEL 2
71	R3	PART REJECT - LEVEL 3
72	RF	CHAMBER RISE FAULT
73	RH	PRE-PRESSURE HIGH
74	RL	PRE-PRESSURE LOW
75	RX	SOURCE PRESSURE EXCEEDED
76	S1	LD ZERO < MIN
77	S2	LD ZERO > MAX
78	S3	LD LEAK < MIN
79	S4	LD LEAK > MAX
80	SB	STOP BUTTON PRESSED
81	SC	START COMMON INPUT LOW
82	SE	PRESSURE SELECT CONFIG ERROR
83	SF	SELF-TEST FAILED
84	SH	ERROR: STOP INPUT HIGH
85	SI	STOP INPUT RECEIVED
86	SL	SEVERE LEAK
87	SM	SNIFFER MODE MISMATCH
88	SN	ERROR: SNIFFER NOT READY
89	SP	SELF-TEST PASSED
90	SR	SNIFFER READY INPUT FAULT

	Test Evaluation Code	Description
91	ST	SNIFFER TYPE MISMATCH
92	SU	SNIFFER UNITS MISMATCH
93	SX	SYSTEM PRESSURE EXCEEDED
94	TB	T-GAS BACKGROUND FAULT
95	TC	T-GAS CHAMBER CLEANUP FAULT
96	TE	ERROR: TOOLING NOT RESET
97	TI	ERROR: TWO-INPUT REQ TO START
98	TM	T-GAS MIN LEAK RATE FAULT
99	TP	TEST PORT SELECT CONFIG ERROR
100	TR	ERROR: TOOLING NOT RETRACTED
101	TS	TOOLING RESET
102	TX	ERROR: TOOLING NOT EXTENDED
103	VR	VENT PART RESET TOOLING
104	WA	WEIGHT ABOVE MAX
105	WB	WEIGHT BELOW MIN
106	WC	SCALE CONFIG ERROR
107	WH	SCALE WEIGHT HIGH
108	WL	SCALE WEIGHT LOW
109	WR	SCALE NOT READY
110	WS	SCALE NOT STABLE
111	XC	TRANSDUCER CAL COMPLETE
112	XE	TRANSDUCER CAL ERROR
113	XF	PRESSURE TRANSDUCER FAULT
114	XH	EXT SWITCH DID NOT GO HIGH
115	XL	EXT SWITCH DID NOT GO LOW
116	XO	TRANSDUCER OVER-RANGE
117	XP	EXTERNAL XDCR PRESS
118	XV	TRANSDUCER VERIFY COMPLETE
119	XZ	TRANSDUCER ZERO BAD

Table 4: Segment Codes

type "TABLE SEGMENT"

	Segment Code	Description		Segment Code	Description
1	%VR	Percent of Reference Volume Test	31	ERA	Setup - Electronic Regulator Analyze
2	APC	Setup - Atmospheric Pressure Check	32	ERS	Setup - Electronic Regulator Setpoint
3	AR	Autorun Relax	33	ERZ	Setup - Electronic Regulator Zero
4	BAL	Stabilize DP Xdcr Balance	34	ESI	Internal - Empty-Seq
5	CBC	Chamber - blower control	35	EST	Fill Evac
6	CC0	Chamber - circulation off	36	EXE	Exhaust until Empty
7	CC1	Chamber - circulation on	37	EXH	Exhaust
8	CCX	Chamber - accumulation rest	38	EXP	Exhaust until Pressure
9	CE0	Chamber - evacuate off	39	EXT	Tooling Motion Extend
10	CE1	Chamber - evacuate on	40	FFL	Fill until Full
11	CHA	Exhaust - Chamber Output Rest	41	FGN	General Fill
12	CIF	Chamber - inlet blower off	42	FLC	Mass Flow - Leak Rate Test
13	CIO	Chamber - inlet blower on	43	FLL	Fill (without pressure monitoring)
14	CLN	Stabilize Chamber Cleanup	44	FLR	Precise Mass Flow Test (Differential Flow)
15	CO0	Chamber - outlet blower off	45	FLW	Mass Flow Test
16	CO1	Chamber - outlet blower on	46	FRF	Fill Reference
17	CP0	Chamber - pre-purge	47	FRP	Fill Ramp
18	CPC	Chamber - clamshell purge rings control	48	FST	Fill Tracer
19	CPG	Chamber - Exh/Purge	49	FTS	Setup - Flow Transducer Setpoint
20	CPO	Chamber - clamshell purge rings option	50	FTV	Setup - Flow Transducer Verification
21	CPR	Chamber - clamshell purge rings rest	51	FTZ	Setup - Flow Transducer Zero
22	CST	Fill Clean	52	HVC	Chamber - hard vac control
23	CV0	Chamber - vent off	53	LKC	Link Control
24	DLY	Delay	54	LNK	Link Decision
25	DPD	Differential Pressure Decay Test	55	MVX	Setup - Mix Verification
26	DPL	Differential Pressure Decay - Leak Std Test	56	OCC	Occlusion Test (Backpressure)
27	DPS	Setup - DP Transducer Setpoint	57	PLO	Pressure Loss Test
28	DPT	Rate of Pressure Loss Test	58	PLR	Pressure Decay - Leak Standard Test
29	DTV	Setup - DP Transducer Verification	59	PMK	Tooling Part Mark
30	DTZ	Setup - DP Transducer Zero	60	PRF	Prefill/Fill

type "TABLE SEGMENT"

	Segment Code	Description
61	PRF	Prefill until Pressure
62	PRF	Proof Test
63	PRI	Internal - Pre-Seq
64	PRI	Internal - Evaluate Part Result
65	PRP	Prefill Pre-Pressure
66	PRS	Step Proof
67	PSI	Internal - Post-Seq
68	PTS	Setup - Pressure Transducer Setpoint
69	PTV	Setup - Pressure Transducer Verification
70	PTZ	Setup - Pressure Transducer Zero
71	PVF	Pressure Verify
72	RCF	Refrigerant Iso Off
73	RCX	Refrigerant CS Isolation
74	REC	Exhaust - T-Gas
75	REF	Refrigerant Fill
76	RET	Tooling Motion Retract
77	REV	Exhaust - Re-Evacuate
78	RFE	Refrigerant Evac
79	RFM	Refrigerant Manual Fill
80	RFS	Stabilize Scale
81	RFT	Refrigerant Fill
82	RFX	Refrigerant Stabilize
83	RL	Calibration Relax
84	RPS	Refrigerant Part Switch
85	RTE	Ramp to Pressure Event Test
86	RTF	Ramp to Flow Event Test
87	RTI	Ramp to Digital Input Event Test
88	RVN	Refrigerant Vent
89	SCI	Setup - Scale Init
90	SD1	Setup - Sniffer idle

	Segment Code	Description
91	SDP	Stabilize for DP
92	SFS	Stabilize Tracer
93	SGL	Fill Tracer Gross
94	SGS	Stabilize Tracer Gross
95	SI1	Setup - Sniffer Init
96	SI2	Setup - Sniffer Init 2
97	SLE	Tooling Seal Extend
98	SLR	Tooling Seal Retract
99	SME	Setup - Manifold Exhaust
100	SMF	Setup - Manifold Fill
101	SMI	Setup - Manifold Isolate
102	SNF	Sniffer Test
103	SNG	Sniffer Gross Test
104	SNW	Stabilize Tracer Wait
105	SPF	Fill Step
106	SPL	Setup - Pressure Select
107	SPR	Setup - Pre-Seq
108	SPS	Setup - Post-Seq
109	SSD	Stabilize Step Dwell
110	SSR	Setup - Set Regulator
111	STE	Stabilize Evac
112	STF	Stabilize for Flow
113	STG	General Stabilize
114	STR	Setup - Transducer Residual
115	STR	Stabilize Reference Volume
116	STS	Stabilize until Slope
117	SVD	Evac Test
118	SXT	Stabilize for Xdcr Test
119	TMC	Tooling Motion Control
120	XDR	Transducer Test

Table 5: Test Data Identifier Codes
type "TABLE VARIABLE"

	Test Data Identifier Code	Description		Test Data Identifier Code	Description
1	%P	Percent Precision	46	CM	Cal Method
2	2in	Two Inputs to Start	47	CM	Malfunction Cycles
3	AAA	Accum Autozero	48	CMN	Clean Min Pressure
4	AAV	Accept Average	49	CMX	Maximum Pressure
5	ACT	Auto-Cycle Test Mode	50	COF	Continue on Fail
6	AD	Analog A/D	51	COL	Cutoff Limit
7	AER	Permit Early Reject	52	CP	Current Precision
8	ALR	Alt Leak Rate	53	CPP	Copy Program
9	APC	Accept Percentage	54	CPS	TLR Change/Sec
10	APC	Atm Pressure Check	55	CPT	Consecutive Points
11	APP	Accept Program	56	CPT	Consecutive Points
12	ARC	Autorun Cycle Count	57	CR	Reject Cycles
13	ARE	Autorun Enable	58	CRA	Clean Part Source
14	ARM	Autorun Method	59	CRF	Pre-Purge
15	ARR	Autorun Relax	60	CRS	Chamber Crossover
16	ASA	Short Autozero	61	CSC	Cycles Since Cal
17	ASD	Accept Std Dev	62	CSN	Clear Since New Counter
18	ASM	Auto Setup Method	63	CSN	Cycles Since New
19	ASP	Accept SPC Std Dev	64	CST	Custom Self-Test
20	ATD	Anti-Tie-Down	65	CT	Total Cycles
21	AZD	Autozero Delay	66	CTG	Target Pressure
22	AZE	Autozero Enable	67	CTP	Copy to Target Prog
23	Ain	Analog Input	68	CTR	Clean Part Timer
24	Aot	Analog Output	69	DA	Analog D/A
25	BCM	Barcode Method	70	DD	Decay Direction
26	BR	Barcode Required	71	DFL	Direct Flow
27	CA	Accept Cycles	72	DL	Diff Press Loss
28	CAP	Calibrate Percent	73	DLL	DP Master+Leak Loss
29	CC	Capability Code	74	DLR	Diff Press Loss Rd
30	CCD	Ch Evac Valve Dly	75	DLT	Delay Timer
31	CCP	Clear Prog Counters	76	DML	DP Master Part Loss
32	CCR	Clear Chan Results	77	DMR	DP Mstr Part Loss Read
33	CCS	Clear Chan Counters	78	DP	Diff Pressure
34	CEF	Chamber Evac Limit	79	DPI	DP Iso Percent
35	CEV	Chamber Evac Close	80	DPP	Δ Press Precision
36	CFS	Chamber Clean	81	DVF	Vent During Fill
37	CHM	Post-Purge Method	82	DVM	Test Mode
38	CHO	Chamber Post-Purge	83	DVO	Device Mode
39	CHP	Chamber Pressure	84	Dt	Date
40	CHV	Chamber Volume	85	ECL	ERC Crossover Limit
41	CID	CS Iso Delay	86	EDC	EDC Offset
42	CLF	Corr. Leak Std Flow	87	EDE	EDC Enabled
43	CLM	Clamshell	88	EDP	Event ΔP
44	CLP	Check Limit Percent	89	EDP	EDC Percentage
45	CLR	Cumulative Leak	90	EDQ	EDC Quantity

type "TABLE VARIABLE"

	Test Data Identifier Code	Description
91	EDT	Event ΔT
92	EIL	ERC Increment Limit
93	EMP	Ext Xdcr Pressure
94	ENB	E-NOB
95	ENC	Enable Calibration
96	ENT	Enable Tooling I/O
97	EOL	ERC Offset Limit
98	EPP	Pressure Precision
99	EPR	Pressure Reference
100	ERA	Atm Pressure
101	ERC	ERC Method
102	ERE	ERC Enabled
103	ERP	ERC Rate/Period
104	ERQ	ERC Quantity
105	ERR	E-Regulator Rest
106	ERV	Re-Evac After Test
107	ESC	Ext Switch Low Chk
108	ESN	External Sniffer
109	ESP	Exhaust Setpoint
110	ET	Elapsed Time
111	ETP	Evacuation Setpoint
112	ETP	Fine T-Gas Target
113	ETW	ERC Target Window
114	ETW	ERC Target Window
115	ETY	Edge Type
116	EUP	Pressure Unit
117	EVA	Evacuation Source
118	EVC	Eval Condition
119	EVD	Vacuum Decay
120	EVL	Test Evaluation
121	EVM	Allow Evac Limit
122	EVP	Event Pressure
123	EVT	Event Type
124	EXD	Evacuation Xdcr
125	EXP	Execution Pause
126	FCC	Force Cal Cycles
127	FCD	FCal Date Limit
128	FCL	FCal Cycle Limit
129	FCM	Force Cal Mode
130	FCT	FCal Time Limit
131	FCT	Force Cal Time
132	FEL	Flow Event Limit
133	FL	Flow
134	FLD	Fine T-Gas Decay
135	FLF	Fine T-Gas Fill

	Test Data Identifier Code	Description
136	FMV	Finish Mix Verify
137	FNB	FF-NOB
138	FP	Flow Precision
139	FPR	Fill Pressure
140	FPS	Fine Sample
141	FSW	Final Source Weight
142	FTA	Dwell
143	FTA	Fill
144	FTX	Test Failed Text
145	Fdb	Tooling Feedback
146	GLD	Gross T-Gas Decay
147	GLF	Gross T-Gas Fill
148	GLN	Gross T-Gas Min
149	GLT	Gross T-Gas Target
150	GLX	Gross T-Gas Max
151	GPS	Gross Sample
152	GPT	Gross Fill Pulse
153	HLE	High Limit Event
154	HLF	High Limit Flow
155	HLL	High Limit Loss
156	HLP	High Limit Pressure
157	HLQ	High Limit Leak
158	HLR	High Limit Rate
159	HLV	High Limit %Vref
160	I/O	I/O ID
161	IET	Event Type
162	IF	Instrument Flow
163	IIS	Input Initial State
164	ILS	Level State
165	ILT	Level Time
166	IPR	Close Inner Purge
167	IS	Input State
168	LAV	Leak Alarm Volume
169	LCD	Leak Std/Cal Define
170	LCD	Leak Std Cal Date
171	LCF	Correction Factor
172	LDP	Leak Det Precision
173	LDT	Dev Zero Delay
174	LDU	Leak Det Unit
175	LDZ	Device Zero
176	LF	Master+Leak Flow
177	LFC	Leak Std Cal Flow
178	LFR	Master+Leak Flow Rd
179	LIN	Linearity
180	LKM	Link Motion

type "TABLE VARIABLE"

	Test Data Identifier Code	Description		Test Data Identifier Code	Description
181	LL	Master+Leak Loss	226	MQR	Master Part QL Rd
182	LLE	Low Limit Event	227	MSL	Reject Rate
183	LLF	Low Limit Flow	228	MSO	MS Iso Open Delay
184	LLL	Low Limit Loss	229	MSP	Max Pressure - Opt
185	LLP	Low Limit Pressure	230	MSR	Mark Severe Lk Rej
186	LLQ	Low Limit Leak	231	MST	Mass Spec Purge
187	LLR	Master+Leak Loss Rd	232	MTM	Min T-Gas Mode
188	LLR	Low Limit Rate	233	MTS	T-Gas Source
189	LLV	Low Limit %Vref	234	MV	T-Gas Mix Verify
190	LMP	Link Motion Preempt	235	MVF	T-Gas Target Press
191	LNL	Linearity Limit	236	MVH	Leak Rate High Limit
192	LOF	Loss Offset	237	MVL	Leak Rate Low Limit
193	LQ	Master+Leak QL	238	MVM	T-Gas Leak Rate
194	LQD	DP Mstr+Lk QL Rd	239	MVS	Start Mix Verify
195	LQD	DP Master+Leak QL	240	MVT	T-Gas Fill Timer
196	LQF	Master+Leak QF Rd	241	MXT	Max Tare Weight
197	LQF	Master+Leak QF	242	Mot	Motion Number
198	LQR	Master+Leak QL Rd	243	Mot	Number of Motions
199	LR	Leak Rate	244	NAM	Program Name
200	LRC	Leak Std Recert	245	NBC	Number of Barcodes
201	LSC	Leak Std Chk	246	NLK	Number of Links
202	LSP	Leak Std Pressure	247	NOP	Number of Options
203	LSS	Leak Std Select	248	NPP	Next Program
204	LSV	Leak Std Value	249	NPS	Number of Steps
205	LV	Launch Validation	250	NTP	Sample Points
206	MF	Master Part Flow	251	NUM	Number of Programs
207	MFO	Manual Fill	252	OLS	Open Leak Std
208	MFR	Master Part Flow Rd	253	OPT	Option
209	MFT	Manual Fill	254	P	Master Gauge Press
210	ML	Master Part Loss	255	P	Instrument Pressure
211	MLR	Master Part Loss Rd	256	P	Meas Pressure
212	MMF	Min Master Flow	257	P%V	Part %Vref
213	MMF	Min Master Flow	258	PC	Pneumatic Code
214	MML	Min Master Loss	259	PCL	Leak Std Cal Press
215	MNT	Min Tare Weight	260	PCR	Pressure Correction
216	MO	Master Flow Offset	261	PCT	Chamber Post-Purge
217	MOR	Master Flow Offset	262	PDL	Press Delta Limit
218	MPC	Malfunction Percent	263	PEP	Part Evac Fault
219	MPF	Min Perform Factor	264	PET	Part Evac Limit
220	MPP	Max System Pressure	265	PEV	Part Evacuation
221	MQ	Master Part QL	266	PEX	Partial Exhaust
222	MQD	DP Mstr Part QL Rd	267	PF	Performance Factor
223	MQD	DP Master Part QL	268	PFL	Part Flow
224	MQF	Master Part QF Rd	269	PFM	Prefill Method
225	MQF	Master Part QF	270	PG	Target Pressure

type "TABLE VARIABLE"

	Test Data Identifier Code	Description
271	PKP	Peak Pressure
272	PL	Pressure Loss
273	PLP	Predicted Loss
274	PLQ	Master+Leak Q-Press
275	PLR	Pressure Loss Rd
276	PLR	DP Mstr+Lk Loss Rd
277	PM	Master Part Press
278	PM	Part Mark
279	PMF	Part Mark Feedback
280	PML	Master+Leak Press
281	PMN	Minimum Pressure
282	PMQ	Master Part Q-Press
283	PMX	Maximum Pressure
284	PNM	Sniffer Test Point
285	PP	Pressure Precision
286	PP	Proof Pressure
287	PPC	Part Present Check
288	PPE	Pre-Press Enable
289	PPR	Pre-Pressure
290	PPS	Pre-Press Select
291	PPW	Pre-Pressure Window
292	PQ	Predicted Leak
293	PRF	Prefill
294	PRI	Programmable Input
295	PRO	Programmable Output
296	PRR	Pressure Restrict
297	PSL	Pressure Select
298	PSL	Pressure Select
299	PSL	Pressure Select
300	PSP	Setpoint Pressure
301	PST	Self-Test Pressure
302	PSV	Part Sniffer Type
303	PT	Target Pressure
304	PTF	Prefill
305	PTG	Gross Prefill
306	PTP	$\Delta P/\Delta T$ Precision
307	PTS	Port Select
308	PTS	Part Seal
309	PTU	$\Delta P/\Delta T$ Unit
310	PTX	Test Passed Text
311	PW	Weight Precision
312	Pp	Part Pressure
313	Pr	Ref Pressure
314	Pt	Test Pressure
315	Pt	Target Pressure

	Test Data Identifier Code	Description
316	Pt	Apply to Program #
317	Pt	Program Number
318	Pv	Estimated Part Size
319	QF	Quik Flow
320	QHL	Quik Test HL Band
321	QL	Quik Loss
322	QLL	Quik Test LL Band
323	QP	Quik Test Pressure
324	QPT	Quantity Points
325	QTE	Quik Test Enable
326	RAN	Number of Points
327	RAP	Analysis Pressure
328	RAS	Analysis Voltage
329	RAT	Analysis Percent
330	RAV	Reject Average
331	RC	Elec Regulator Cal
332	RC1	EReg Zero DA Cal
333	RC2	EReg Span DA Cal
334	RC3	EReg Zero Base Cal
335	RC4	EReg Span Base Cal
336	RCA	Analog Value
337	RCD	Last Cal Date
338	RCI	Instrument Pressure
339	RCP	Retention Cutoff
340	RCS	Setpoint Voltage
341	RCT	Last Cal Time
342	RCV	Master Value
343	RDI	Restore Default I/O
344	RDT	Reg Dwell Timer
345	RED	Refrgnt Vent Close
346	REG	Regulator
347	REO	Refrigerant Vent
348	REX	Refrigerant Vent
349	RFC	Fill Close Delay
350	RFL	Reference Loss
351	RL	Loss Rate
352	RLC	Run Leak Calibrate
353	RLR	Loss Rate Rd
354	RLV	Leak Std Value
355	RMX	EReg Span DA Cal
356	RNP	Number of Points
357	ROS	Reject on Slope
358	RPC	Reject Percentage
359	RPM	Ramp Method
360	RPP	Reject Program
361	RPP	Retain Part Press

type "TABLE VARIABLE"

	Test Data Identifier Code	Description
362	RR	Retract on Reject
363	RR	Ramp Rate
364	RRT	Reject Rate Total
365	RSI	Result Information
366	RSP	Slope Window
367	RSR	Slope Change/Sec
368	RST	Stabilize
369	RVH	High Limit Voltage
370	RVH	High Limit Voltage
371	RVL	Low Limit Voltage
372	RVL	Low Limit Voltage
373	RVP	Retain Volume Press
374	RXM	Pre-Evac Exhaust
375	SAM	Sample Size
376	SAS	Start Auto Setup
377	SCF	Cal Coefficient
378	SCL	Leak Std Value
379	SCO	Cal Offset
380	SCP	Start Clean Part
381	SCR	Reject Rate Percent
382	SCT	Scale Type
383	SEV	Leak Rate Window
384	SF	Standard Flow
385	SGN	Sample Gas Number
386	SIO	Sniffer Init
387	SMP	Sample Time
388	SN	Step Number
389	SNR	SNR
390	SP	Starting Pressure
391	SP	Standard Pressure
392	SPM	Fine Wait
393	SPT	Gross Wait
394	SR	Set Regulator
395	SRC	Start Calibration
396	SRH	LD Leak Val Max
397	SRL	LD Leak Val Min
398	SSW	Starting Source Weight
399	STL	Self-Test Level
400	STM	Self-Test Method
401	STN	Self-Test Program
402	STP	Target Press
403	STS	Start Self-Test
404	STS	Self-Test Source
405	STT	Self-Test Limit
406	STV	Step Target Press
407	STW	Target Window

	Test Data Identifier Code	Description
408	SXC	Start Calibration
409	SXT	Start Xdcr Test
410	SXV	Start Verification
411	SZH	LD Zero Val Max
412	SZL	LD Zero Val Min
413	Ser	Serial Number
414	Stn	Channel Number
415	T	Timer
416	T	Timer
417	TBF	Background Limit
418	TI	Iso Delay Timer
419	TL	Tooling Option
420	TLK	Test Leak Rate
421	TLP	Leak Rate Precision
422	TLR	T-Gas Leak Rate
423	TLU	Leak Rate Unit
424	TML	Min T-Gas Setpoint
425	TMN	Fine T-Gas Min
426	TMP	Temp Precision
427	TMX	Fine T-Gas Max
428	TP	Time Precision
429	TPP	Target Program
430	TPW	Target Press Window
431	TQ	Quik Test Timer
432	TR1	Trigger 1
433	TRA	T-Gas Source
434	TRM	T-Gas Recovery
435	TSM	T-Gas Sampling
436	TT	Test Sel Timer
437	TT	Test Execution Time
438	TTF	TracerMate Flags
439	TTY	Test Type
440	TTY	Test Type
441	TV	Valve Delay Timer
442	TW	Target Weight
443	TWN	Min Fill Weight
444	TWX	Max Fill Weight
445	Tcy	Desired Cycle Time
446	Tm	Time
447	Tm	Timer Mode
448	UC	Current Unit
449	UDP	Δ Pressure Unit
450	UF	Flow Unit
451	UP	Percent Unit
452	UP	Pressure Unit
453	UPD	Unit/Prec Define

type "TABLE VARIABLE"

	Test Data Identifier Code	Description
454	UT	Time Unit
455	UTM	Temperature Unit
456	UV	Voltage Unit
457	UV	Volume Unit
458	UW	Weight Unit
459	V	V
460	VAN	Valve A Num - Opt
461	VAP	Valve A PWM - Opt
462	VAT	Valve A Type - Opt
463	VBN	Valve B Num - Opt
464	VBP	Valve B PWM - Opt
465	VBT	Valve B Type - Opt
466	VC	Valve Code
467	VCN	Valve C Num - Opt
468	VCP	Valve C PWM - Opt
469	VCT	Valve C Type - Opt
470	VDN	Valve D Num - Opt
471	VDP	Valve D PWM - Opt
472	VDT	Valve D Type - Opt
473	VFL	Virtual Flow
474	VHT	Vent/Halt Tooling
475	VLP	Volume Precision
476	VLV	Valve Number
477	VNP	Number of Points
478	VP	Voltage Precision
479	VPS	Setpoint Pressure
480	VPW	Valve PWM
481	VSP	Setpoint Voltage
482	VWO	Residual Offset
483	WGT	Refrigerant Weight
484	WHL	High Limit
485	WIN	Stat History Length
486	WLL	Low Limit
487	XAN	Xdcr Zero LL
488	XAX	Xdcr Base Max
489	XBH	Xdcr Zero Hwin
490	XBL	Xdcr Zero Lwin
491	XC	Transducer Cal
492	XC1	Xdcr Zero AD Cal
493	XC2	Xdcr Span AD Cal
494	XC3	Xdcr Zero Base Cal
495	XC4	Xdcr Span Base Cal
496	XCA	Analog Value
497	XCB	Atm Pressure
498	XCD	Last Cal Date
499	XCF	Instrument Flow

	Test Data Identifier Code	Description
500	XCI	Instrument Pressure
501	XCL	Xdcr Current Limit
502	XCM	Master Reading
503	XCP	Cal Pressure
504	XCS	Setpoint Pressure
505	XCT	Last Cal Time
506	XCV	Master Value
507	XCX	Xdcr Cal X Array
508	XCY	Xdcr Cal Y Array
509	XFC	Xdcr Filter Code
510	XFP	Flow Precision
511	XID	Xdcr Iso Delay
512	XIS	Xdcr Span Inter Cal
513	XIZ	Xdcr Zero Inter Cal
514	XLF	Max Mstr+Leak Flow
515	XMF	Max Master Flow
516	XML	Max Mstr+Leak Loss
517	XMN	Xdcr Base Min
518	XMX	Xdcr Base Max
519	XNP	Number of Points
520	XOP	Crossover Pressure
521	XPC	Pressure Correction
522	XPM	Pressure Mode
523	XPP	Pressure Precision
524	XPR	Pressure Reference
525	XRL	Xdcr Residual Limit
526	XRW	Xdcr Residual Warn
527	XSP	Setpoint Pressure
528	XT	Transducer
529	XT	Xdcr Tare
530	XTG	Xdcr Tare Range
531	XTR	Xdcr Typ Residual
532	XUF	Flow Unit
533	XUP	Pressure Unit
534	XV	Transducer Verify
535	XVD	Verify Date
536	XVF	Instrument Flow
537	XVI	Instrument Pressure
538	XVM	Master Reading
539	XVS	Setpoint Pressure
540	XVT	Verify Time
541	XVV	Master Value
542	XZC	Xdcr Zero Check
543	XZH	Xdcr Zero HL
544	XZL	Xdcr Zero LL
545	XZW	Xdcr Zero Window