MLT Verification Codes Link

The list of MLT Verification (VER) Codes is given here to assist you in identifying the trouble after the MLT is performed.

VER	RESPONSE	DESCRIPTION
0	TEST OK	No obvious trouble was detected on the line. However, there may still be a problem with parts of the loop that were not tested. For example, there might be a problem in the station set, on a crossbar line, or in the Central Office (CO). When the system tests ok you will see that the DC resistances and voltage will not indicate a problem. The AC signature will be valid (if done), the line ckt will be ok and the system can draw and break dial tone. Balance should be good.
05	TEST OK - CHANNEL NOT TESTED	VER_05 (zero five) is applicable to all switches and applies to both integrated and universal DLC loops. It indicates that all metallic tests passed, but that the channel test was either not made, didn't complete in time or the returned results did not match the acceptable signatures. It does not mean that the channel is bad. For IDLC in 5ESS switches, it may be an indication that there may be a shortage of transmission test facility (TTF) responders. (The TTF performs the ISLC channel tests). This VER Code applies to the LTF, LTS, DCTU and CMU test heads. With this VER Code, the RSA may be able to arrange a front end close out as no trouble affecting the loop has been identified. NOTE: Length of loop is not given with this Ver code.
0A	TEST OK ADSL	VER 0A (zero A) indicates that either a FULL (X) or LOOP (X) test request was run and the signatures returned show that the line is an ADSL served line. After testing is completed, the system indicates that the line is OK; there were no problems with the copper pair.
0C	CPE or HIGH RESISTANCE OPEN	VER 0C (zero C) is used when no obvious trouble is detected on the line, however, it did find either a CPE termination or a high resistance open on the line. In most cases this will indicate that it is a CPE termination. The remote possibility exists however, that it could be a high resistance open problem. The TEST OK example below is for a single party line, Centrex line, Key System, and loop-start PBX lines with CPE termination. These lines may or may not have line records.
0M	TEST OK MTU	VER 0M (zero M) is used by LMOS to indicate a TEST OK condition on a line that has a Maintenance Termination Unit (MTU). This VER code is displayed on the TR, TV, TEST, DMLT, or MSCR mask, and will be used for flow-through.
0T	OUT OF TOLERANCE	This VER Code indicates that one or more results of the test exceed the pre-defined Benchmark Database (BMDB) thresholds. The screen will display the summary messages if space available.
11	CROSS TO WORKING PAIR-	DC foreign voltage (battery) was detected on the line. This can be caused by DC current flowing from one line to another, as can happen if exposed wires from the lines touch or come close. The

	FAULT	side of the line that is crossed usually has a low resistance to ground. A cross is usually a cable trouble, that is where lines are most likely to come in contact.
12	AC FEMF FAULT	An AC foreign voltage greater than the locally determined fault value (default = 25 v) was detected. This condition can be caused by a cross with a power line or AC induction due to telephone lines being close to power lines. If someone is dispatched on this trouble, they should be advised to use caution when working on the line since AC foreign voltage is potentially dangerous.
13	HAZARDOUS POTENTIAL	Preliminary tests on the line indicate that a potentially dangerous amount of voltage has been detected on the line (> 150 volts DC or 53 volts rms ac). When the system identifies this condition, it stops testing. If a repair person is dispatched on the trouble, they should be made aware of the potential danger and should use extreme caution.
14	CROSS: MARGINAL	DC foreign voltage (battery) was detected on the line. This can be caused by DC current flowing from one line to another, as can happen if exposed wires from the lines touch or come close. The side of the line that is crossed usually has a low resistance to ground. A cross is usually a cable trouble.
15	DC FEMF MARGINAL	System DC voltage detected on the line was between -8 and -20 volts. In addition, no other problems are found on the line. This condition is very similar to the cross to working pair conditions in that it indicates that foreign DC battery is flowing on the line. In the case of this VER code, there is not enough system DC voltage to be called a cross (> 20 v is required for a cross). However, DC femf marginal is probably a cable problem.
16	AC FEMF MARGINAL	An AC foreign voltage less than the local fault value (default 25 V) but greater than 15 volts is detected. This condition could be caused by a cross with a power line or AC induction due to telephone lines being close to power lines. A repair person dispatched on this trouble should be warned that there is AC FEMF on the line and that caution should be used.
17	RESISTIVE FAULT AND DC FEMF	A stable resistive trouble (short or ground) has been detected on the line that is below the local fault threshold (default 150 k ohms). In addition, the system DC voltage is greater than 8 volts. This VER code could be caused by a number of conditions. For example, this could be a cross that did not match the DC signature for a cross, or it could be a line in use, or a permanent signal type condition that did not match the DC signature for that condition.
18	OPEN OUT AND CROSS	An open on the line was detected and it has been determined that the open was out of the Central Office. In addition, a cross to a working pair has been detected on the line. Usually when there are two troubles on a line they are related. Because of the cross, it is likely that this trouble is in the cable. Probably, the line is cut in the cable and the open pairs are crossed with each other. It is also possible that there are two independent troubles.
1F	FITL-FEMF SEEN ON LOOP	This VER code is one of several that indicates the subscriber loop is served by a Digital Loop Carrier (DLC) system using fiber facilities all the way to the customer drop. This is also referred to as a Fiber-In-The-Loop (FITL) system. VER1F indicates the loop has

		foreign voltage (FEMF) present and the idle DLC channel transmission and signaling tests performed by MLT found no trouble with the carrier system. The repair ticket should be dispatched to the field technician.
1R	UDC - BAD RT CARD, LINE 2	This VER code is one of several that indicate the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER1R indicates a bad RT card at the customer premise or RT. This trouble should be dispatched out. Although unlikely, this VER code could result from an actual cable trouble. Example: VER 1R : PROBABLE UDC/DLC SIGNATURE SEEN BAD RT CARD DISPATCH-OUT CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 15.9 T-R 17.8 T-R 41.9 -14 T-G 75.9 -14 T-G 41.9 -14 R-G 75.9 -14 R-G
1U	UDC - DSL SHORT	This VER code is one of several that indicate the subscriber loop is served by a standalone or DLC-channelized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER1U indicates a shorted DSL facility. This trouble should be dispatched-out. Although unlikely, this VER code could result from an actual cable trouble. Example: VER 1U : PROBABLE UDC/DLC SIGNATURE SEEN BAD DSL - SHORT DISPATCH-OUT CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 1.00 T-R 1.00 T-R 325 0 T-G 325 0 T-G 325 0 R-G 325 0 R-G
1X	FITL-FEMF SEEN ON LOOP	This VER code is one of several that indicates the subscriber loop is served by a Digital Loop Carrier (DLC) system using fiber facilities all the way to the customer drop. This is also referred to as a Fiber-In-The-Loop (FITL) system. VER1X indicates the loop has foreign voltage (FEMF) present and the idle DLC channel transmission and signaling tests performed by MLT found a trouble with the carrier system. The repair ticket should be dispatched to the field technician.
21	GROUND FAULT	A low DC resistance to ground (t-g and/or r-g) that was below the local fault value (default is 150 kohms) has been detected.

		Normally, the only valid path to ground is in the Central Office line circuit. Any other ground is usually a trouble. A ground can occur if the insulation of the wires in a pair is worn and the wires either come in contact with or establish a path to a grounded object. The system will not display the AC signature with DC resistance-to-ground less than 50 kohms. With this fault condition, VER 21 will be displayed with either an open or a termination.
22	SHORT FAULT	It has been determined that the tip-ring resistance is below the local fault threshold (default 150 kohms). A short creates a path for the Central Office current to go between tip and ring. The only valid path between tip and ring is if the phone is off hook (roh). A short fault may be caused when the copper pair's insulation is worn down and the wires come very close or actually touch each other. The system will not display the AC signature with short less than 50 kohms. With this DC fault condition, VER 22 will be displayed with either an open or a termination.
23	SWINGING RESISTANCE: FAULT	A ground below the local fault threshold (default 150 kohms) but above 10 kohms has been detected. A soak test is then run on the line to determine the stability (whether the values vary over time). Six rapid measurements of the DC resistance are made. If the largest is 20% greater than the DC resistance before the soak test, the ground is "swinging" (not stable). If the largest value is >2000 kohms the fault is said to be "dried out". The system will not display the AC signature with DC faults less than 50 kohms.
24	SWINGING GROUND: MARGINAL	A ground above the local fault threshold (default 150 kohms) but below 1000 kohms has been detected. A soak test is run on the line to determine the stability (whether the values vary over time). Six rapid measurements of the DC resistance are made. If the largest is 20% greater than the DC resistance before the soak test, the ground is "swinging" (not stable). If the largest value is > 2000 kohms, it is said to be "dried out".
25	SHORT AND GROUND FAULTS	A DC resistance tip-ring below the local fault threshold (default 150 kohms) has been detected. Also, one or both of the DC resistances to ground are below the local fault threshold. The system will not display the AC signature with DC faults less than 50 kohms. With this fault condition, VER 25 will be displayed with either an open or a termination.
26	MDF TEST RECOMMENDED - LOW RES.	DC resistances below the local fault value (default 150 kohms) have been detected. In addition, the fault values are low enough that it cannot be determined whether the trouble is in or out of the Central Office. Therefore, an MDF test is recommended to sectionalize the trouble. An MDF test will be recommended when the resistances are: < 0.1 k t-r and/or < 0.07 k t-g and/or < 0.07 k r-g.
27	DC RESISTANCE: MARGINAL	A low DC resistance on the line (t-r, t-g, r-g) that was greater than the local fault threshold (default 150 kohms) but less than 1000 kohms has been detected. A marginal condition is not usually as severe as a fault condition, but should be handled according to local procedures.
28	SHORT OR GROUND	A drop test was run on an POTS/ISDN-SDV line. The test failed due to a possible short across the line circuit or a leakage to

		ground.
2F	FITL-LOOP RESISTIVE FAULT	This VER code is one of several that indicates the subscriber loop is served by a Digital Loop Carrier (DLC) system using fiber facilities all the way to the customer drop. This is also referred to as a Fiber-In-The-Loop (FITL) system. VER2F indicates the loop has a resistive fault but the idle DLC channel transmission and signaling tests performed by MLT found no trouble with the carrier system. Dispatch the repair ticket to the field technician.
2R	UDC - BAD DSL	This VER code is one of several that indicate the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER2R indicates a bad DSL facility. This trouble should be dispatched-out. Although unlikely, this VER code could result from an actual cable trouble. Example: VER 2R : PROBABLE UDC/DLC SIGNATURE SEEN BAD DSL FACILITY DISPATCH-OUT CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 23.6 T-R 28.0 T-R 43.9 -14 T-G 75.9 -14 T-G 43.9 -14 R-G 75.9 -14 R-G
2U	UDC - BAD SUBSCRIBER IW	This VER code is one of several that indicates the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER2U indicates a trouble with the subscriber premise inside wire. This trouble should be dispatched-out. Although unlikely, this VER code could result from an actual cable trouble. Example: VER 2U : PROBABLE UDC/DLC SIGNATURE SEEN BAD SUBSCRIBER INSIDE WIRE DISPATCH-OUT CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 77.4 T-R 150 T-R 59.4 0 T-G 80 0 T-G 59.4 0 R-G 80 0 R-G
2X	FITL-LOOP RESISTIVE FAULT	This VER code is one of several that indicates the subscriber loop is served by a Digital Loop Carrier (DLC) system using fiber facilities all the way to the customer drop. This is also referred to as a Fiber-In-The-Loop (FITL) system. VER2X indicates the loop has a resistive fault and the idle DLC channel transmission and signaling tests performed by MLT found a trouble with the carrier system.

		Dispatch the repair ticket to the field technician.
3	OPEN IN	An open condition has been detected and it has been determined that the open is in or very close to the Central Office. There is an offset value (in feet) stored in the computer for each nxx. If the open is detected within this offset limit, it is considered an open in. An open is a physical break in the line.
30	SWITCH COMMON EQUIP BAD	When the status indicates that an ISDN line is taken out of service because either the integrated service line unit (ISLU) or packet switching unit (PSU) is not functioning properly, VER 30 is returned with the appropriate summary message.
31	INVALID LINE CKT ARRANGEMENT	The arrangement of battery and ground on the Central Office line circuit was not what was expected, based on the line record information. Normally, the proper line circuit arrangement would be battery on the ring side and ground on the tip side. Another condition that could cause this VER code is if the line circuit was open on both tip and ring sides.
32	CAN'T DRAW DIAL TONE	The system attempts to draw and break dial tone after it checks the Central Office line circuit. In this case, it was not able to draw dial tone within the six second limit. Usually this is a Central Office Fault. However, in times of heavy load there may be a delay in drawing dial tone that may result in this VER code.
33	CAN'T BREAK DIAL TONE	The system attempts to draw and break dial tone after it checks the Central Office line circuit. In this case, it was able to draw dial tone successfully but was not able to break dial tone within the one second limit. Usually this is a Central Office Fault. However, in times of heavy load there may be a delay in breaking dial tone that may result in this VER code.
34	POSSIBLE INVALID ACCESS	The system may have made an improper access to the line. When the system sees an open in, it checks for the Central Office line circuit. If it sees the line circuit, it calls the open in valid (VER 3). If it does not see the line circuit, then one of two things is true: 1) There is an open between the test trunk and the line circuit, or 2) The system did not access the line properly.
35	OPEN IN AND CROSS	An open has been detected and it has been determined that the open is in or very near to the Central Office. Also, a system DC signature has been detected that identifies a cross to working pair. This problem is most likely a Central Office problem. A pair may be open at the frame and one of the open leads may be grounded against something in the Central Office (the MDF or a jumper of another pair). The ground could draw Central Office Battery.
36	LINE CKT & DIAL TONE PROBLEMS	An invalid line circuit arrangement has been detected in the Central Office. In addition, the system either cannot draw or break dial tone from the Central Office. The usual line circuit arrangement is battery on the ring side and ground on the tip side. Also, the system should be able to draw dial tone within six seconds and break it within one second.
37	DIAL TONE BURST DETECTED	If the system cannot draw dial tone, it checks for a one-second burst of dial tone. This burst can be caused by one of the following conditions: 1) Denied service, 2) Unigauge loop, 3) Remote make-busy key feature to prevent a false dispatch in. Check the line

		records to see which of these conditions are causing dial tone burst.
38	POSSIBLE C.O. WIRING ERROR	This VER code may have different meanings depending on the type of line being tested. For a pots line, this VER code will only appear for crossbar lines. When an open in on a crossbar line is detected, the system attempts to determine if the open in is valid. It monitors the line for a 480 hz tone. If the tone is detected, it is decided that the open in is due to a wiring problem in the office, and a VER 38 is reported. If the tone is not heard, a VER 3 open in is reported. For ISDN lines, VER 38 is returned when a digital test finds that the problem is between the switch and the cot and not in the cot channel unit nor in the line card.
39	CO EQUIP BAD	When a digital test indicates that the line card or the integrated services test facility (ISTF) or protocol handler (PH) is not functioning properly, VER 39 is returned with the appropriate summary message.
3R	UDC - BAD DROP	This VER code is one of several that indicates the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as DSL-8. VER3R indicates a bad drop. This trouble should be dispatched-out. Although unlikely, this VER code could result from an actual cable trouble. Example VER 3R : PROBABLE UDC/DLC SIGNATURE SEEN BAD DROP DISPATCH-OUT CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 37.6 T-R 50.0 T-R 47.4 -14 T-G 75.9 -14 T-G 47.4 -14 R-G 75.9 -14 R-G
3U	UDC-BAD RT	This VER code is one of several that indicates the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER3U indicates a bad RT card at the customer premise. This trouble should be dispatched-out. Although unlikely, this VER code could result from an actual cable trouble. Example: VER 3U : PROBABLE UDC/DLC SIGNATURE SEEN BAD RT CARD DISPATCH-OUT CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 233 T-R 350 T-R

		233 0 T-G 350 0 T-G 233 0 R-G 350 0 R-G
40	CO EQUIP SUSPECT	When digital loop-back tests can not conclusively show that the switch equipment has a problem but points towards the switch, VER 40 with a summary message is returned. The summary message also indicates what other equipment besides the CO equipment is suspect.
41	OPEN OUT BALANCED	An open has been detected on the line and it has been determined that the open is out of the Central Office. An open is simply a physical break in the telephone line. In a balanced open, the system estimates that both sides of the line are roughly the same length. The capacitive balance, which indicates the difference between the capacitance in each side of the line, is 99% or better. The higher this percent, the more similar the lengths of the sides are to each other.
42	OPEN OUT IN CABLE	An open on the line has been detected and t has been determined that it is out of the Central Office, probably in the cable. An open is a physical break in the line. In this type of open, one side of the loop is significantly less than the other. This could happen if one side is open and the other side goes on to the termination. The capacitive balance indicates this difference and the value will be less than 95%. A balance this low indicates that an open is located back in the cable.
43	HIGH RESISTANCE OPEN	An open on the line has been detected and it has been determined that it is out of the Central Office. This type of open can best be described as a marginal or intermittent open. This could be caused by conditions such as corrosion or a slight break in the line that only disrupts the customer's service from time to time. Such an open will be very hard to find for a repair person since it is not always in the easiest state to detect.
44	OPEN OUT 2 PTY OR BL	An open has been detected and it has been determined that the open is outside the Central Office. An open is a physical break in the line. The line records for this line indicate a two party service or a bridge lifter on the line. Because of the two party or the bridge lifters, no open measurements (distances and capacitive balance) are made, since the values can be distorted by the equipment.
45	OPEN OUT- NEAR DROP	An open has been detected and it has been determined that the open is outside the Central Office, probably in or very near the drop wire, and that the difference in length between the two sides of the line is marginal. The capacitive balance will be around 95- 99%. This range indicates that the open is likely to be back from the station in the drop wire or the cable just beyond the drop.
46	OPEN ON PREMISES	An open has been detected and it has been determined that the open is on the customer's premises. The system recognizes the electrical signature of a maintenance termination unit (mtu) but cannot see a ringer due to an open. Because it can see the mtu, the system assumes that the open is beyond it and on the customer premises.
47	OPEN IN REMOTE TERMINAL	An open condition has been detected when testing with a remote measurement unit (RMU) and has determined that the open is in or

		very close to a slc-96 remote terminal (RT). An offset value (in feet) is stored in the computer for each nxx. As a result of this offset, an open that is outside the RT, but very close to it, will be identified as an open in remote terminal. The system does not give a distance to the open when the open is in the RT. The RMU is located in the RT, several miles outside the Central Office.
48	T1 FACILITY BAD	A T1 facility can exist between the COT and RT, or between two D4 channel banks. When either the status returned from the switch or the digital loopback indicates that the T1 facility is bad, VER 48 is returned. Also, if the loopback test indicates that either the facility is provisioned for 64k restricted or 56k restricted service and not for 64k clear service, the system's ISDN software sees it as a problem and VER 48 is returned with a proper summary message. The ISDN BRI service should be provisioned for 64kbs clear channels. Three types of data rates are tested by the system's ISDN software: 64k restricted (64r), 64k clear (64c), and 56k restricted (56r). 64k clear is used to test the circuit provisioned to support 64k-bps clear channel.
49	CHANNEL UNIT UNDER TEST	The status of the line indicates that the DSL has been taken out of service because the link after brite channel unit has trouble and there is a test in progress somewhere on the line.
4F	FITL-NO LOOP TERMINATION SEEN	This VER code is one of several that indicates the subscriber loop is served by a Digital Loop Carrier (DLC) system using fiber facilities all the way to the customer drop. This is also referred to as a Fiber-In-The-Loop (FITL) system. VER4F indicates the loop termination test failed but the idle DLC channel transmission and signaling tests performed by MLT found no trouble with the carrier system. Dispatch the repair ticket to the field technician.
4R	UDC-RESISTIVE SHORT OR GROUND	This VER code is one of several that indicates the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER4R indicates a resistive short or ground fault on the DSL facility. This trouble should be dispatched-out. Although unlikely, this VER code could result from an actual cable trouble. Example VER 4R : PROBABLE UDC/DLC SIGNATURE SEEN RESISTIVE SHORT OR GROUND DISPATCH-OUT CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 44.7 T-R 63.4 T-R 49.1 -14 T-G 75.9 -14 T-G 49.1 -14 R-G 75.9 -14 R-G
4U	UDC - DSL TIP GROUND	This VER code is one of several that indicates the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER4U indicates a Tip ground

		on the DSL facility. This trouble should be dispatched-out. Although unlikely, this VER code could result from an actual cable trouble. Example VER 4U : PROBABLE UDC/DLC SIGNATURE SEEN DSL FACILITY TIP GROUND DISPATCH-OUT CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 1850 T-R 3500 T-R 1.00 0 T-G 1.00 0 T-G 1750 0 R-G 1750 0 R-G
4X	FITL-NO LOOP TERMINATION SEEN	This VER code is one of several that indicates the subscriber loop is served by a Digital Loop Carrier (DLC) system using fiber facilities all the way to the customer drop. This is also referred to as a Fiber-In-The-Loop (FITL) system. VER4X indicates the loop termination test failed and the idle DLC channel transmission and signaling tests performed by MLT found a trouble with the carrier system. Dispatch the repair ticket to the field technician.
50	COT CU SUSPECT	When either the status or digital and metallic tests indicate that the trouble may be in the COT channel unit, but can not conclusively say that the problem is the channel unit, VER 50 with the appropriate summary message is returned.
51	C.O. BATTERY ON PAIR GAIN SYS	A busy-no speech has been detected on a line that is equipped with a slc-96 and there is voltage on the line from the Central Office Battery. Note that the system indicates that this is not a line in use or similar condition. At this point, testing is stopped and metallic access is not attempted.
52	INVALID PAIR GAIN C.O. SIG	Before attempting metallic access on a line with a slc-96, the Central Office (C.O.) Signature is checked. If the C.O. Signature that is identified is not what is expected, the system will call the signature invalid and this VER code will be set. Testing will be stopped and no metallic access will be made.
53	PAIR GAIN SYSTEM BUSY	Metallic access on the pair gain system cannot be made because someone else is using the metallic access path to test the line. Testing is stopped and no metallic access is attempted. The system will automatically drop access to this line when this VER Code is generated.
54	PAIR GAIN SYSTEM FAILURE	Metallic access on the pair gain system cannot be made because of either a major alarm or some other failure in the system. Testing is stopped. The system will automatically drop access to this line when this VER Code is generated.
55	PAIR GAIN CHANNEL FAILURE	If metallic access is made on the pair gain system, the system makes its regular test on a line with a digital loop carrier (dlc). Meanwhile, the dlc conducts a self test to determine the condition of the digital carrier channel. If this test indicates a failure, then this VER code is displayed

56	COT CU BAD	If the condition of the digital carrier channel indicates a failure at the COT, VER 56 is returned. The condition of the digital carrier channel is determined by a digital DLC self check. This VER Code is only returned for SLC lines which use the Extended Test Controller (XTC) on either POTS or ISDN lines.
57	RT CU BAD	If the condition of the digital carrier channel indicates a problem in the RT channel unit, VER 57 is returned. The condition of the digital carrier channel is determined by a Digital Loop Carrier (DLC) self-check. VER 57 can be returned for either POTS or ISDN lines.
58	BAD COT AND RT CHANNEL UNIT	If metallic access is made on the pair gain system, the system makes its regular test on a line with a digital loop carrier (dlc). Meanwhile, the dlc conducts a self test to determine the condition of the digital carrier channel. If this test indicates a failure at the cot and rt, then this VER code is displayed.
59	RT CU SUSPECT	When digital or metallic tests indicate that a problem exists at the RT channel unit but can not confirm it, VER 59 with the appropriate summary message is returned. For these cases, other equipment, besides the RT channel unit, could also be bad. The summary message indicates what else could be suspect. For example; PML1 bad for the link between the RT and the NT1, but metallic test ok.
5B	FITL-ONU FAILURE	This VER code is one of several that indicates the subscriber loop is served by a Digital Loop Carrier (DLC) system using fiber facilities all the way to the customer drop. This is also referred to as a Fiber-In-The-Loop (FITL) system. VER5B indicates the Optical Network Unit (ONU) located in the field has experienced a failure. The repair ticket should be dispatched to the field technician.
5F	FITL-HDT TO ONU FACILITY FAIL	This VER code is one of several that indicates the subscriber loop is served by a Digital Loop Carrier (DLC) system using fiber facilities all the way to the customer drop. This is also referred to as a Fiber-In-The-Loop (FITL) system. VER5F indicates the transmission facility between the ONU in the field and the HDT in the central office has experienced a failure. Dispatch the repair ticket to the central office technician.
5O	FITL-HDT OLU FAILURE	This VER code is one of several that indicates the subscriber loop is served by a Digital Loop Carrier (DLC) system using fiber facilities all the way to the customer drop. This is also referred to as a Fiber-In-The-Loop (FITL) system. VER5O indicates the Optical Line Unit (OLU) in the Host Digital Terminal (HDT) in the central office has experienced a failure. Dispatch the repair ticket to the central office technician.
5R	UDC – NO RINGERS SEEN, POSSIBLE OPEN	This VER code is one of several that indicates the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER5R indicates missing CPE due to a ringer test failure. This may be simply a failure to recognize a standard ringer but it may also indicate an open loop. Call the subscriber to verify for CPE before dispatching-out. Although unlikely, this VER code could result from an actual cable trouble. Example: VER 5R : PROBABLE UDC/DLC SIGNATURE SEEN

		NO RINGERS SEEN VERIFY BEFORE DISPATCH-OUT CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 52.6 0 T-R 80.6 T-R 55.5 -14 T-G 75.9 -14 T-G 55.5 -14 R-G 75.9 -14 R-G
5U	UDC - RING GROUND ON DSL FACILITY	This VER code is one of several that indicates the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER5U indicates a Ring ground on the DSL facility. This trouble should be dispatched-out. Although unlikely, this VER code could result from an actual cable trouble. Example VER 5U : PROBABLE UDC/DLC SIGNATURE SEEN DSL FACILITY RING GROUND DISPATCH-OUT CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 1850 T-R 3500 T-R 1750 0 T-G 1750 0 T-G 1.00 0 R-G 1.00 0 R-G
5X	FITL-LOOP TOK	This VER code is one of several that indicates the subscriber loop is served by a Digital Loop Carrier (DLC) system using fiber facilities all the way to the customer drop. This is also referred to as a Fiber-In-The-Loop (FITL) system. VER5X indicates the loop tested okay but the idle DLC channel transmission and signaling tests performed by MLT found a trouble with the carrier system. Dispatch the repair ticket to the field technician.
6	BUSY-SPEECH	MLT found the line busy with what it identifies as conversation on the line.
60	BUSY PACKET	The switch denies access to the system's ISDN software for a test, because the requested test channel is busy with packet traffic.
61	LINE IN USE	It has been determined that the line was being used at the time of testing but no speech was detected. This VER code can occur for all switch types.
63	CRAFT ACTION	Status of the DSL indicates that it has been taken out of service because a craft is doing maintenance work on it. The status returned by the switch can be D-OOS-MAIN DIS, B-OOS-MAIN DIS or D-OOS-MANUAL REMOVE.
6R	UDC- POSSIBLE ROH	This VER code is one of several that indicates the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER6R

		indicates a possible ROH. Attempt to verify for an ROH before dispatching-out. Although unlikely, this VER code could result from an actual cable trouble. Example VER 6R : PROBABLE UDC/DLC SIGNATURE SEEN POSSIBLE ROH VERIFY BEFORE DISPATCH-OUT CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 61.0 0 T-R 102 T-R 53.2 -14 T-G 75.9 -14 T-G 53.2 -14 R-G 75.9 -14 R-G
6U	UDC – SYSTEM OK, LINE TEST OK	This VER code is one of several that indicates the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER6U indicates the DSL system and facility are okay and the customer line is also okay. This is similar to a VER0-TOK and should not be dispatched unless the customer complains of TRAN problems or this is a repeat report. Although unlikely, this VER code could result from an actual cable trouble in which case this trouble should be dispatched-out. Example VER 6U : PROBABLE UDC/DLC SIGNATURE SEEN REPORTED OR REPEAT RPT SYSTEM & FACILITY OK, LINE TEST OK DO NOT DISPATCH UNLESS TRAN CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 160 T-R 3500 T-R 80.0 0 T-G 80.0 0 T-G 80.0 0 R-G 80.0 0 R-G
71	RECEIVER OFF HOOK (ROH)	The receiver off hook test has been run and an roh was detected. No further tests are performed after an roh is found.
72	MDF TEST RECOMMEND-PERM SIG	This condition will appear on crossbar lines that are equipped with 7a regs. Permanent signal is detected on the line but the Central Office Battery cannot be released. Because of this, the system recommends the MDF test to allow the CO to be dropped off the line. Once the CO is off the line, the loop can be tested to determine the cause of the problem without interference.
73	LINE IN USE OR PERMANENT SIG	This VER code will occur in two conditions. First on a step-by-step line where the system cannot distinguish between a line in use or a permanent signal condition, and second on any switch if a busy signature is detected and the t-r MLT DC resistance is > 30 kohms.

74	PERMANENT SIGNAL	On ess or crossbar offices, MLT detects permanent signal on the line. This permanent signal may be due to a resistive fault drawing in the Central Office battery, or it may be due to an roh that the system cannot detect because the line is not roh testable.
75	SHORT - PROBABLY ROH	MLT has measured DC resistance between 100 ohms and 3.4 kohms and has run an roh test. The test has not verified an roh, and MLT now sends this message to show a possible short or roh condition. Try to verify roh by monitoring the line, checking with the subscriber, or following local procedures. If roh cannot be verified craft should be dispatched to determine the actual cause of the low resistance.
7F	FITL-ROH OR SHORT	This VER code is one of several that Indicates the subscriber loop is served by a Digital Loop Carrier (DLC) system using fiber facilities all the way to the customer drop. This is also referred to as a Fiber-In-The-Loop (FITL) system. VER7F indicates the loop has a T-R short or receiver off-hook (ROH) but the idle DLC channel transmission and signaling tests performed by MLT found no trouble with the carrier system. Dispatch the repair ticket to the field technician.
7R	UDC – SYSTEM OKAY, LINE TEST OKAY	This VER code is one of several that indicates the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER7R indicates the DSL system and the customer line are okay. This is similar to a VER0-TOK and should not be dispatched unless the customer complains of TRAN problems or this is a repeat report. Although unlikely, this VER code could result from an actual cable trouble in which case this trouble should be dispatched-out. Example VER 7R : PROBABLE UDC/DLC SIGNATURE SEEN REPORTED OR REPEAT RPT SYSTEM OK, LINE TEST OK DO NOT DISPATCH UNLESS TRAN CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 70.0 T-R 130 T-R 55.5 -14 T-G 75.9 -14 T-G 55.5 -14 R-G 75.9 -14 R-G
7U	UDC - BAD C.O. CARD	This VER code is one of several that indicate the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER7U indicates a bad COT card in the Central Office. This trouble should be dispatched-in. Although unlikely, this VER code could result from an actual cable trouble in which case this trouble should be dispatched-out. Example VER 7U : PROBABLE UDC/DLC SIGNATURE SEEN

		BAD COT CARD DISPATCH-IN CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 310 T-R 3500 T-R 155 0 T-G 155 0 T-G 155 0 R-G 155 0 R-G
7X	FITL-ROH OR SHORT	This VER code is one of several that indicates the subscriber loop is served by a Digital Loop Carrier (DLC) system using fiber facilities all the way to the customer drop. This is also referred to as a Fiber-In-The-Loop (FITL) system. VER7X indicates the loop has a T-R short or receiver off-hook (ROH) and the idle DLC channel transmission and signaling tests performed by MLT found a trouble with the carrier system. Dispatch the repair ticket to the field technician.
80	DIAL OK	This VER code will only appear on the rotary dial test. It indicates that the dial is working ok. This means that the dial speed was correct (correct speed is 8-11 pulses per second) and the percent break was within acceptable range (acceptable break is 57-64 %).
81	DIAL NOT OK	This VER code will only appear on the rotary dial test. It indicates that the dial has a problem. The problem could be that the dial speed was incorrect (correct speed is 8-11 pulses per second) or it could be that the percent break was not acceptable (correct break is 57-64 %).
8R	UDC - BAD C.O. CARD	This VER code is one of several that indicates the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER8R indicates a bad COT card in the Central Office. This trouble should be dispatched-in. Although unlikely, this VER code could result from an actual cable trouble in which case this trouble should be dispatched-out. Example VER 8R : PROBABLE UDC/DLC SIGNATURE SEEN BAD COT CARD DISPATCH-IN CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 142 T-R 2250 T-R 73.5 -14 T-G 75.9 -14 T-G 73.5 -14 R-G 75.9 -14 R-G
8U	UDC - RING OPEN ON DSL FACILITY	This VER code is one of several that indicate the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER8U indicates a Ring open on the DSL facility. This trouble should be dispatched-out. Although unlikely, this VER code could result from

		an actual cable trouble. Example VER 8U : PROBABLE UDC SIGNATURE SEEN DSL FACILITY RING OPEN DISPATCH-OUT CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 3500 T-R 3500 T-R 250 0 T-G 250 0 T-G 3500 0 R-G 3500 0 R-G
91	INVALID PBX SIGNATURE	The DC signature was not what was expected for the type of pbx termination indicated by the line record.
92	INVALID AC SIGNATURE	The system has found that the AC signature was not as expected for the type of equipment and services indicated by the line records.
93	POOR BALANCE	No major faults are detected on the line except poor longitudinal balance and poor capacitive balance. This condition could be caused by ringers improperly connected to ground, or a cable imbalance due to bridge taps, or sometimes incomplete line records. (if a reg is not listed in the line records, it will look like an unbalanced line).
95	RESISTIVE FAULT AND OPEN	The system has detected one or more DC resistances below the local fault threshold (short or grounds). In addition, an open on the line has been detected. Because of the resistive faults's effect, the system may not be able to sectionalize the open.
96	MARGINAL BALANCE	The system has detected no major faults on the line. However, the longitudinal balance was marginal (less than 65 db but greater than local fault value).
97	DERIVED PAIR NOT TESTED	The derived pair cannot be tested because the physical pair it is associated with is not served by the system.
98	NEED FULL RESULTS ANALYSIS	This VER code is set when no faults are found on the line, but the test ok VER code is not set. As a default VER code, VER 98 is set. It indicates that the detailed test results should be examined to identify the particular condition that exists on the line. This condition can occur on lines with uncataloged AC or multiparty termination.
99	MULTIPLE FAULTS DETECTED	This VER code is set when more than one fault is found on the line and each fault has a unique VER code to describe it. Instead of displaying both VER codes, the VER code 99 will be displayed. However, the summary messages that describe the faults found on the line will be displayed directly in the summary area. These summaries can then be used to identify the condition of the line
9F	FITL-LOOP TOK	This VER code is one of several that indicates the subscriber loop is served by a Digital Loop Carrier (DLC) system using fiber facilities all the way to the customer drop. This is also referred to as a Fiber-In-The-Loop (FITL) system. VER9F indicates the loop tested okay and the idle DLC channel transmission and signaling tests performed by MLT found no trouble with the carrier system.

		This result is similar to VER0 (TOK). Do not dispatch.
9H	FITL-HAZARDOUS POTENTIAL	This VER code is one of several that indicates the subscriber loop is served by a Digital Loop Carrier (DLC) system using fiber facilities all the way to the customer drop. This is also referred to as a Fiber-In-The-Loop (FITL) system. VER9H indicates the loop has a hazardous potential present but the idle DLC channel transmission and signaling tests performed by MLT found no trouble with the carrier system. Dispatch the repair ticket to the field technician with a caution about the hazardous potential.
9R	UDC - DSL TIP & RING OPEN	This VER code is one of several that indicate the subscriber loop is served by a Universal Digital Channel (UDC) system. VER9R indicates a Tip & Ring open on the DSL facility used by the UDC. This trouble should be dispatched-out if the line is served by a UDC. If this line is not served by a UDC this is likely a cable trouble and should be dispatched-out.
9U	UDC - TIP OPEN ON DSL FACILITY	This VER code is one of several that indicate the subscriber loop is served by a standalone or DLC-channellized Universal Digital Channel (UDC) or by a mini-DLC system such as GDSL-8. VER9U indicates a Tip open on the DSL facility. This trouble should be dispatched-out. Although unlikely, this VER code could result from an actual cable trouble. Example VER 9U : PROBABLE UDC SIGNATURE SEEN DSL FACILITY TIP OPEN DISPATCH-OUT CRAFT: DC SIGNATURE MLT: DC SIGNATURE KOHMS VOLTS KOHMS VOLTS 3500 T-R 3500 T-R 3500 0 T-G 3500 0 T-G 250 0 R-G 250 0 R-G
9X	FITL-HAZARDOUS POTENTIAL	This VER code is one of several that indicates the subscriber loop is served by a Digital Loop Carrier (DLC) system using fiber facilities all the way to the customer drop. This is also referred to as a Fiber-In-The-Loop (FITL) system. VER9X indicates the loop has a hazardous potential present and the idle DLC channel transmission and signaling tests performed by MLT found a trouble with the carrier system. Dispatch the repair ticket to the field technician with a caution about the hazardous potential.
B0	TEST EQUIPMENT BUSY-TIME OUT	MLT has attempted to test a line but wasn't successful due to busy system equipment. VER B0 occurs in the following cases: 1) OFFICE OVERFLOW 2) TIMEOUT IN TESTING 3) TIMEOUT IN ACCESS 4) COULD NOT ACCESS DUE TO: a. Unavailable dialers b. Unavailable busy detectors c. Unavailable trunks d. Unavailable test ports e. Possible Busy DSL
B1	TEST NOT MADE	The system has attempted to test a line but was not successful due to busy system equipment. VER B1 occurs in the following case: no test package available.

B2	TEST EQUIPMENT BUSY - SAN-DIAG	The system has attempted to test a line but was not successful due to busy system equipment. VER B2 occurs in the following cases: 1.Sanity in progress. 2.Diagnostics in progress.
B3	TEST SYSTEM BUSY-SIMUL TEST	The system has attempted to test a line but was not successful due to busy system equipment. VER B3 occurs when two test requests are made simultaneously for the same line. One line gets the access and the test and the other receives this VER code.
B4	TEST EQUIPMENT OUT OF SERVICE	The system has attempted to test a line but was not successful due to system equipment failure. VER B4 will appear when an LTF or LTS is out of service.
B5	PAIR GAIN ACCES EQUIPMENT BUSY	The system has attempted to test a line but was not successful due to busy system equipment. VER B5 occurs on loops equipped with slc-96. In this case, the slc-96 equipment was not available.
B6	DOWNLOAD IN PROGRESS	The system has attempted to test a line but was not successful due to download in progress.
B7	TEST EQUIP BUSY	When the switch cannot complete a request because of unavailable resources of a SM, PH, ISLU, ISTF, LTS, or DCTU, then VER B7 is returned.
B8	ALL TRUNKS ARE BUSY BY OTHER USERS	This VER Code is only displayed when the Loop Detect feature is active. VER B8 occurs when a user requests a test from the TV Mask or GUI and one of the following conditions exist: Other users are already using all EMU trunks. Or, the test waited more than two minutes for an EMU trunk to become available.
BA	NO DCTU PORT AVAILABLE	This VER Code indicates that all DCTU ports are in use or that there is a port allocation problem. Additional DCTU ports may be required.
BB	DCTU NOT AVAILABLE	This VER Code indicates that the DCTU is out-of-service because either the DCTU, EAN, PORTs or PMUs have been place out-of-service either automatically or manually.
BC	NO GDXC AVAILABLE	This VER Code indicates that a line unit could not be accessed because there are no GDX Compensator circuit packs (TN880) available because all are either busy or out-of-service. Additional GDX Compensator pack(s) on the MMSU may be required.
BD	NO MTB AVAILABLE	This VER Code indicates that the MTB (Metallic Test Bus) is either busy or out-of-service. MMSU assignments should be reviewed and compared to DOPS (SD5D005-01) engineering guidelines. Particular attention should be given to DCTU appearances in service groups where line units the section on de.
BE	NO MTIB AVAILABLE	This VER Code indicates that the MMSU switching matrix cannot interconnect the desired devices because the MTIB (Metallic Test Interconnect Bus) paths are all busy. This can indicate a MTIBAX (TN138) circuit pack problem in the MMSU, or improperly assigned testing devices (DCTU, PGTC, TBCU). MMSU assignments should be reviewed and compared to DOPS (SD5D005-01) engineering guidelines.
BF	NO MA PACK AVAILABLE	This VER Code indicates that the MMSU switching matrix cannot interconnect the desired devices because a MA (Metallic Access) pack (TN138) is out-of-service. This VER Code is applicable only to

		the DCTU.
BG	NO MAB AVAILABLE	This VER Code indicates that the MMSU switching matrix cannot interconnect the desired devices because the MAB (Metallic Access Bus) interconnect paths (junctors) are all busy. MMSU assignments should be reviewed and compared to DOPS (SD5D005-01) engineering guidelines. Particular attention should be given to the assignment of testing devices (DCTU, PGTC, TBCU, GDXC).
BH	NO PRTC AVAILABLE	This VER Code indicates that the MTIB (Metallic Test Interconnect Bus) path to the Protocol Circuit (PRTC) is unavailable or all of the Protocol Circuit hardware units are busy or out-of-service. Common contributors to this VER Code are (1) Protocol Bus, (2) MTIBAX CP (TN 138) and (3) Common CP (TN 879) being either busy or out-of-service. Use of the faster TN 879B Common CP is recommended.
BI	NO MTB TO PGTC AVAILABLE	This VER Code indicates that the PGTC port and the MTB (Metallic Test Bus) serving it are busy or out-of-service. This could mean that the PGTC ports are not properly assigned to the MMSU. MMSU assignments should be reviewed and compared to DOPS (SD5D005-01) engineering guidelines.
BJ	NO MTB TO PGTC PORT AVAILABLE	This VER Code indicates that there is no PGTC accessible to this DCTU. This can mean that there is no PGTC port assigned to the MMSU.
BK	PGTC PATH SETUP BLOCKAGE	This VER Code indicates that the setup of the metallic test path to the PGTC was blocked for reasons other than those stated under VER BI and VER BJ.
BL	NO PORT AVAILABLE	This VER code indicates that there is no port available because they are all either busy or out-of-service. For the CMU, there is an exception: if all CMU ports are out-of-service, VER Code FH will appear. This VER Code is applicable to the LTF, LTS, CMU and EMU. However, for the LTS and CMU the term port and trunk are synonymous.
BM	NO TRUNK AVAILABLE	This VER Code indicates that there is no test trunk available because all are either busy or out-of-service. This VER Code is applicable to the LTF.
BN	NO TEST PACKAGE AVAILABLE	This VER Code indicates that there is no test package available because all are either busy or out-of-service.
BP	NO PMU AVAILABLE	This VER Code indicates that there is no PMUs available because all are either busy or out-of-service. Excluded is the DCTU case where all PMUs are out-of-service (see VER BB). This VER Code is applicable to the LTS, DCTU and CMU (called a Measuring Unit).
BQ	NO DIALER AVAILABLE	This VER Code indicates that there is no dialer available because they are either busy or out-of-service. This VER Code is applicable to the LTF and LTS.
BR	NO BUSY DETECTOR AVAILABLE	This VER Code indicates that there is no busy detector available because all are either busy or out-of-service. This VER Code is applicable to the LTF and LTS.
BS	SWITCH TEST ACCESS BLOCKAGE	This VER Code indicates that switch could not set up the access to the subscriber loop. This could be caused by a switch resource shortage or a switch failure condition. This would normally not be a

		system equipment problem unless there was a misdialing error (such as incorrect number of digits or incorrect steering digits). This VER Code is applicable to the DCTU, LTF, LTS and CMU.
BT	REMOTE TEST HEAD IN USE	This VER Code indicates that a request has been made to access a remote test head that is already in use. Excessive occurrences of this VER Code may be indicative of excessive loading of pair gain systems on the remote test head.
BU	CAN'T CONN TO REMOTE TEST HEAD	This VER Code indicates that a local modem was used and that a busy remote test head was found.
BV	NO MODEM PORT AVAILABL	This VER Code indicates that there is no modem port available when requesting access to either an RMU or a CMU. This applies to calls from either a local modem pool or from a Datakit modem pool. This may indicate a shortage of modems.
BW	CAN'T CONN TO CO TEST HEAD	This VER Code indicates that a local modem was used and that a busy CO test head was found.
BY	DSLAM/RT EQUIPMENT BUSY	Resources within the AnyMedia Access System (AMAS) needed to complete the request were busy. Conditions which could cause this result are: 1) All TCP/IP ports into the AMAS were in use. 2) The Test Access Path (TAP) was being used by another application or local craft personnel. 3) Another user was logged into the AMAS using the login/password assigned to the system.
BZ	HDT INITIALIZING	The system received an invalid status indication from the SDV system. The SDV system may be experiencing initialization problems at the Host Digital Terminal (HDT). If the error remains after a period of time, contact the SDV system administrator.
C1	TOTALIZER OPERATION PROBLEM	If more than one attempt was made to home the totalizer, and more than 18 ma of current was needed to home it, this VER code will be set. In addition, no loop, CO, or other coin problems were found.
C2	TOTALIZER DEFECT	This VER code could occur in one of the following situations: 1. Totalizer could not be homed 2. Totalizer was homed but with more than 18 ma of current 3. Totalizer was a runaway 4. Totalizer was stalled.
C3	POLARITY GUARD PROBLEMS	A problem was detected in the a-relay or the polarity guard in a c-set coin phone. In addition, this code can be set if there is a lead reversal on an a-set coin phone.
C4	COIN RELAY PROBLEMS	This VER code can be caused by one of the following conditions: 1. Coin relay did not operate. 2. Coin relay did not operate at the correct speed. 3. More than one attempt was needed to operate the coin relay, and more than 41 ma of current was also required.
C5	COIN SUPERVISORY CKT PROBLEMS	If the totalizer is homed on the first attempt (with the proper current), or the coin relay is operated on the first attempt (with the proper current), and there are no loop or c.o. problems, VER code C5 should be set.
C6	IR OR FRAUD CONTACT PROBLEMS	The system has detected an initial rate (ir) or fraud contact open on a dial tone first coin phone.
C7	OSCILLATOR PROBLEMS	The system detected a possible coin oscillator problem. This occurs when the totalizer is homed but no tones are detected (the tones

		are the 1537 hz or the 1700 hz low frequency tone, and the 2200 hz high frequency tone).
D1	DENIED SERVICE - TERMINATING	The system has detected that this customer's service was denied by action from the switching control center, possibly due to nonpayment of bills. A terminating denial means the customer can make calls but cannot receive them. There is nothing wrong with the loop or CO equipment. You can still test this line and contact customers by setting up a callback with the ring transaction with no-test or MDF trunk access. VER D1 appears only on lines tested by the ESS5-D switch. Denied service on other ESS'S results in a VER 37.
D2	DENIED SERVICE - ORIGINATING	The system has detected that this customer's service was denied by action from the switching control center, possibly due to nonpayment of bills. An originating denial means that the customer can receive calls but not place them. There is nothing wrong with the loop or CO equipment. You can still test this line and contact customers by setting up a callback with the ring transaction with no-test or MDF trunk access. VER D2 appears only on lines tested by the ESS5-D switch. Denied service on other ESS'S results in a VER 37.
D3	DENIED SERVICE	The system has detected that this customer's service was denied by action from the switching control center, possibly due to nonpayment of bills. Denied service means the customer cannot make or receive calls. There is nothing wrong with the loop or CO equipment. You can still test this line and contact customers by setting up a callback using the ring transaction with no-test or MDF trunk access. VER D3 only appears on lines tested by the ESS5-D switch. Denied service on other ESS'S will result in a VER 37.
D4	DENIED SERVICE MIXED	This VER code is necessary for those cases where there are different types of restricted services on the PDN or DN. For example, some services could be denied while others are on intercept. If a service is on INTERCEPT, then that service can not be used. If the service is DENIED ORIGINATING then only incoming calls can be received. If the service is DENIED TERMINATING then only outgoing calls can be made. If the service is completely DENIED then the line is temporally out of service.
DG	REMOTE APPLICATION FAILURE	The system's ISDN software was not able to send a request to TL1ISDN because of a probable gateway failure. VER Code DG will only appear for requests involving the TL1 feature which permits ISDN testing through some DMS-100 switches.
DI	DENIED/ INTERCEPT - MIXED	This VER code appears only on the TE/TR mask as a result of a STATUS-L request. LMOS has determined via the system's ISDN software that some of the services on the DSL are on intercept while others are denied. ISDN testing will not occur.
DL	DATA LINK FAILURE	The data link between the MLT-1 controller and the LTF or between the Front End (FE) and the LTS has failed. No testing can be done while this condition exists.
DP	DEFECTIVE DC TEST PAIR - (OPEN, SHORT, GROUND or BATTERY)	This VER Code indicates that the 5ESS Diode Protocol Test (DPT) performed on the DC test pair failed between the TBCU and the Remote Terminal (RT) site. The type of failure (open, short, ground, battery) found will be part of the summary message. The

		measurements obtained from the DCTU will also be provided. This VER Code can also occur when DLC Loop calibration is enabled in the following situation: the open distance is 10% less than the calibration distance for the RT. If an open on a DLC line is 10% less than the calibrated RT distance, it is likely that the bypass pair is open and not the customer loop.
E0	TEST SYSTEM ERROR	The system could not test a line due to some system error condition. This condition may be temporary. Wait a short while and retest the line . If the same results appear repeatedly this is probably a widespread system problem and you should notify someone responsible for maintaining the system.
E1	TEST SYSTEM ERROR	The system could not test the line due to some system error. VER E1 is set when there is a power clear and reset of the system equipment during system testing. This condition may only be temporary. Wait a short while and retest the line. If the same results appear repeatedly, this is probably a widespread system problem. Notify someone responsible for maintaining the system.
E2	TEST EQUIPMENT FAILURE	The system could not test a line due to some system error condition. VER E2 is set when the LTF involved in the test was not calibrated. This situation may be only temporary. Notify the facilities manager of the situation and request calibration for the LTF.
E3	TEST EQUIPMENT FAILURE	When the switch can not complete a request because of an internal error, or the switch version number is not compatible with the system's ISDN software, or the requested command is not yet implemented VER E3 is returned.
E5	TEST SYSTEM ERROR	The system could not test a line due to some system error condition. VER E5 is set when an exchange key can`t be matched to, or derived from an NPANNX. These situations could be caused by a missing line record exchange key, or because the system is unable to access the default exchange key table.
E6	TEST SYSTEM ERROR	The system could not test a line due to some system error condition. VER E6 is set when one of the following conditions are met: 1. Testing a derived pair but the TN of the physical pair is not a valid 7 digit TN. 2. Testing over an MDF dedicated number that is not a valid 7 digit TN.
E7	TEST SYSTEM ERROR	The system could not test a line due to some system error condition. VER E7 is set when the NNX of the line to be tested plus the exchange key assigned to it does not match any entries in the access table of the data base. This VER code is most likely due to an error in the data base. Contact the system administrator to check for a data base error.
E8	CAN'T SEND REQ TO APPROP FE	The system has tried to access another FE to retrieve a line record, but could not establish a connection with that FE. When this happens, the system continues on the current FE with the default exchange key for that NPANNX. If a match for the default exchange key cannot be found in the access table, a VER E8 is returned.
EC	COMMUNICATION OR MML ERROR	When you make a request, the system sends a Man Machine Language (MML) command to the Switch and is used in conjunction with the OE Retrieval Feature. If the command sent to the switch was not interpreted correctly, a VER Code EC will be

		sent back to the TV Mask. This could be due to corrupted data communications or command format change for a particular switch generic. Check communications to the Switch to determine if the switch has been updated with a new software release that does not match the current system release.
EL	SWITCH LOGIN FAILURE	If the system logging into a switch failed, this VER Code will be displayed. The connection manager performs a two-part connection, the first part opens the socket and connects to the modem. The second part logs into the switch. If the second part fails, this VER Code is displayed.
F0	TEST EQUIPMENT FAILURE	The system could not test the line due to failure of the testing equipment. This condition indicates a serious problem and generally means that the system is down. Whenever this VER code occurs, notify the facilities manager.
F1	TEST EQUIPMENT FAILURE	The system could not test a line due to failure of the MLT testing equipment. Specifically VER F1 occurs on lines equipped with SLC-96. This condition indicates a failure in the SLC-96 testing equipment. Access will automatically be dropped to this line when this VER Code is generated.
F2	TEST EQUIPMENT FAILURE	The system could not test the line due to failure of the testing equipment. VER F2 indicates that failure could be due to unplugging of circuit packs during diagnostics.
FA	BUSY DETECTOR FAILURE	This VER Code indicates that the busy detector failed when it was in use. This VER Code is applicable only to the LTS.
FB	DIALER FAILURE	This VER Code indicates that the dialer failed when it was in use. This VER Code is applicable only to the LTS.
FC	PMU FAILURE	This VER Code indicates that the PMU failed when it was in use. This VER Code is applicable to the LTS, DCTU and CMU (called a Measuring Unit).
FD	SLEEVE CONTROL FAILURE	This VER Code indicates that there was a sleeve control failure associated with the no-test trunk connected to the LTS and CMU.
FE	CONTROL FAILURE - ISLC/DCTU	This VER Code indicates that there was a control failure with the DCTU during an ISLC access or, possibly, during a non-SLC access. The failure may occur before or after bypass.
FF	CONTROL FAILURE - USLC/DCTU	This VER Code indicates that there was a control failure after bypass of a universal DLC line when tested with a DCTU.
FG	TBCU PROTOCOL TEST FAILURE - (OPEN)	This VER Code indicates that the 5ESS Diode Protocol Test failed between the MMSU and the TBCU. This may indicate that the SM500 pack is defective. If the "continuity" part of the diode protocol test fails, "OPEN" will appear in the summary message (as indicated above). If the test failed because of either a ground, short or battery fault, the "OPEN" field in the summary message will be blank. This VER Code is applicable only to the DCTU.
FH	EQUIPMENT ACCESS FAILURE	This VER Code indicates that there was a failure in the LTS equipment that prevented access or that all CMU ports are out-of-service, or there was a CMU trunk access failure. This VER Code is applicable to the LTS and CMU.
FJ	SWITCH FAILURE	This VER Code indicates that there was a failure in the switch

		(which includes the metallic access network) that prevented access (other than those failures already represented by other VER Codes). If integrated DLC, this VER Code may indicate that the TBCU SM500 CP is missing. This VER Code is applicable only to the DCTU.
FK	GDXC FAILURE	This VER Code indicates that a GDXC circuit pack was obtained and that a problem occurred when it was operating. This VER Code is an indication that the GDXC CP (TN 880 or TN 140) may be defective or that the line unit is faulty. This VER Code is applicable only to the DCTU.
FL	MODEM CONNECTION FAILURE	This VER Code indicates that a local modem was obtained but failed in connecting to the RMU or CMU. The type of failures that can cause this VER Code are no dial tone or no answer. This VER Code is applicable only for the types of modems that are designed to provide a failure indication.
FM	TEST HEAD CONNECT FAILURE	The most likely cause of this VER Code is that the test head is busy when tested from another Front End or that the test head is disconnected. This VER Code can also indicate that there is a Datakit connection failure. That failure would most likely be a DKTRAM (Network Manager) problem.
FM	LOGIN FAILURE	This VER Code indicates that a modem was connected but couldn't complete the login because of problems such as: noisy connection, test head hardware problem, or password error. This VER Code is applicable to the CMU and RMU.
FP	OPERATION FAILED IN HDT	The system received an internal SDV status error: Status, Requested Operation Failed (SROF). This occurs when the requested test has been initiated within the SDV system, but the results were not available within a specified timeout period. If communications could not be established with the Host Digital Terminal (HDT), the following summary message may appear with the VER code: VER FP: HDT DID NOT RESPOND. Contact the SDV system administrator.
FQ	STUCK RELAY - MA CP	This VER Code indicates a stuck Junctor Relay detected with the MA CP. Contact the Switch Administrator. Perform Phase II and Phase III diagnostic with the 5ESS.
FR	LINK TO SDV-EM DOWN	The system cannot access the SDV Element Manager (EM) because the TCP/IP communications link to SDV-EM is down.
FS	MSU OUT OF SERVICE	This VER Code indicates that the MSUCOM pack is out of service. Contact the Switch Administrator. Perform Phase II and Phase III diagnostic with the 5ESS.
FT	CONNECT FAIL - PROTOCOL FAILURE	This VER Code indicates that there was no continuity detected on the MTB to test equipment or Line Unit. Contact the Switch Administrator. Perform Phase II and Phase III diagnostic with the 5ESS.
FV	DEFECTIVE DIST OR SCAN CP	This VER Code indicates that the DIST or SCAN pack in the MSU is out of service. Contact the Switch Administrator. Perform Phase II and Phase III diagnostic with the 5ESS.
FW	RT COMM FAIL	This VER Code indicates that a failure occurred while attempting to connect the metallic testing bus to line under test at the RT. This

		could be due to RT not responding to 5ESS switch-initiated events necessary to connect metallic test bus. TR008: Check "A" shelf to verify that no alarm condition exists. If alarm exists, find the cause and retire alarm. Check channel unit pack for line on which test is failing. TR303: Verify the that the EOC channel for the IDCU RT which terminates the line under test is in service. Check channel unit pack for failing line. TR008 or TR303: At switch maintenance terminal, execute the ALW:METALLIC,DEBUG. Record any PTRACEs, assets, and/or audits that may occur.
FZ	TEST HEAD COMM FAILURE	This VER code indicates that communication to the test head dropped during the test and could not be re-established. Repeated failures of this type on a single test head would indicate that a problem exists with the test head.
G0	VALID RINGER COUNT AND TERM	This ver code appears only for the RINGER series. It indicates that both the number of ringers and the arrangement of those ringers (T-R, T-G, and R-G) are what was expected, according to the line records.
G1	INVALID RINGER TERMINATION	This ver code can appear in the FULL or LOOP series as well as the RINGER series. It indicates that the ringer termination was not what was expected for a single party line record. For a RINGER request, the ringer count is displayed rather than the word YES.
G2	INVALID 2 PARTY RINGER TERM	This ver code will appear in the FULL, LOOP, or RINGER series. It indicates that the ringer termination was invalid for a two party termination as indicated by the line record. In this case the records indicate a two party-one assigned service, but the system shows a two party-two assigned service. For a ringer request, the ringer count is displayed rather than the word YES.
G4	RINGER TEST WITH NO RECORDS	This ver code will appear only in the RINGER test. It indicates that the ringer test was run on a line that did not have line records. Because of this, the system cannot determine whether the ringer termination or the count is valid. The results will show the ringer termination and count as measured.
G5	VALID 2 PARTY TERMINATION	This ver code will appear only in the RINGER test. It indicates that the ringer termination was valid for a two party line record.
G6	RINGER TEST - UNCATALOGED EQPT	This ver code will appear only on the RINGER test. It indicates that a ringer test ran on a line that had uncataloged equipment. The system cannot determine whether the ringer termination is valid for an uncataloged termination because it is not known what a valid termination should be for uncataloged equipment.
G8	NO RINGER FOUND	This ver code will appear only on the RINGER series. It indicates that no ringers were found when the system was expecting ringers as per the line record. This ver code will not appear for the line that had uncataloged equipment for the termination.
I0	TEST OK NOW	The status obtained from the switch indicates that the DSL is out of service (OOS) because of physical layer problems. However, all the digital tests and the metallic tests are ok. There is a possibility that a transient problem like high frequency loss or impulse noise has caused a large number of errors and caused the DSL to go out of service.

IA	WIRING ERROR - NT1 REVERSED	VER code IA occurs on ISDN lines, which are terminated with an NT1. The NT1 is polarity-sensitive and must be wired correctly between the tip and ring conductors. If they are wired backwards, VER IA is returned. Wiring an NT1 in reverse does not interfere with the operation of ISDN lines, so the customer will not experience any problems. It is also possible that an NT1 has been incorrectly installed on a non-ISDN line. Note that if an NT1 is left reversed the loop will eventually become open.
IB	UNEXPECTED ISDN TERMINATION	VER code IB occurs only on ISDN digital lines, which are terminated with a device known as an NT1. VER IB occurs when the line records do not indicate ISDN service, but an NT1 has been found. This should occur only on ISDN lines. Most likely, the records are wrong and need correction. Sometimes VER IB will be accompanied by the message "switch indicates ISDN service." this means that the system asked the switch if it was wired for ISDN on this loop, and it was. In this case, the most likely problem is a line record error.
IC	POSSIBLE AMI BRITE DETECTED	VER IC occurs only on ISDN digital lines wired through pair-gain systems like a slc-96. In this case, most of the line consists of a channel on the pr-gain system. There are short loops between the switch in the c.o. and the pair-gain system, and in the field, between the remote end of the pr-gain system and the subscriber's premises. The system tests the part of the loop inside the CO first, then uses a metallic bypass pair to test the outside part of the loop going to the customer. On certain lines, especially older ones, this is not possible. When this is the case, VER IC is set.
ID	ISDN TERMINATION MISMATCH	VER ID indicates that inconsistent information has been found during testing. Specifically, the line record indicates that the line has ISDN service. The system has checked with the switch serving the subscriber and it is not wired for ISDN service. This may be a line record or a switch wiring error. If the message "valid NT1 signature" occurs, it is probably a miswired ISDN line.
IE	ISDN TERMINATION ERROR	VER IE occurs only on ISDN digital lines, which are terminated with an NT1. When the line record and the switch both indicate that the service is non-ISDN but the system finds an NT1, VER IE is set. This indicates a probable installation error. You should try to find out the kind of service the subscriber expects to correct the error.
IF	INVALID TERM FOR ISDN LINE	When testing an ISDN line, a termination may be found that is incorrect for an ISDN line like a PBX or a POTS ringer. In that case, VER IF will be set, meaning the termination, while valid for some lines, is not valid on ISDN lines. VER IF is set if the loop is good with a valid termination, but the line records, the switch, or both indicate ISDN. The termination found is not an NT1. If the switch suggests ISDN, there is a wiring error, probably at the termination. If only the line record indicates ISDN, it may be a wiring or line record error.
IG	FURTHER TEST REQUIRED	This VER code appears only on the TE/TR mask as a result of a status-I request. It indicates a problem with DSL status, NT1 power or layers 1, 2, or 3 and further testing is necessary. This VER code causes the LMOS/WM to send a full request to the system's ISDN software via the retest queue.

IH	OE MISMATCH	When an automatic customer station rearrangement (ACSR) takes place, the OE associated with the requested PDN in the LMOS/WM line record may differ from the OE in the switch data base. The switch OE is the most current OE. system's ISDN software may find this discrepancy when it compares the OE from the line record with that from the switch obtained by a LINESPEC transaction. This comparison is made every time a user session starts. When a mismatch is found, VER IH is returned.
IJ	DENIED SERVICE - ADD ANALYSIS	This VER code appears only on the TE/TR mask as a result of a status-l request. It indicates that the service is denied by the switch. Although there are three classes of denied service, (originating, terminating and 2-way), the 5ESS code does not distinguish between the three. Denied service may also be the results of a CPE terminal being connected to the line.
IK	NOT AN ISDN LINE	VER code IK is returned when an ISDN request is made and the switch cannot verify that the line being tested is ISDN. This VER code indicates that either a line record does not exist or that the switch has indicated ISDN service.
IL	TERMINATION MISMATCH SUSPECTED	This VER code appears only on the TE/TR mask as a result of a status-l request. Information from the switch indicates that there appears to be a termination mismatch, but this condition must be verified by a test. This VER code causes the LMOS/WM to send a full test request to the system's ISDN software via the retest queue.
IM	DIGITAL TEST MARGINAL	When the standard loopback test indicates the DSL as marginal, VER IM is returned. A marginal status indicates that a longer loopback time of five minutes is needed to determine if the DSL is good or bad. The standard loopback time is 16 seconds.
IN	CPE (NT1) POWER SUSPECTED	VER code IN is returned when a status -l request is made. Information from the switch indicates that there is a power problem with the NT1. However, this condition must be verified by a test. This VER code causes LMOS/WM to send this condition to MLT/ISDN via the retest queue, in order for a full test to be run.
IP	TEST OK PARTIAL TEST DONE	When the test performed is OK but is not exhaustive this ver code is returned. To determine why metallic tests may not have been run, execute the MET or NFULL request. To determine why complete digital tests were not executed, a STATUS request may be used to determine if the channels are busy. If any of the B-Channels are busy, only logical loopbacks (LPBK) will be performed.
IR	CPE (NT1) ON SECONDARY POWER	This VER code appears only on the TE/TR request. This VER code indicates that the NT1 is running on secondary power instead of primary power. Such information can be communicated to the customer since they may not be aware of it. A full request is automatically put on the retest queue.
IS	SECTIONALIZE WITH LONGER LBPK	Because of the time constraint on the system's ISDN software to sectionalize and return the results to the user, it runs only 16 second loopback tests. When ISDN finds that longer loopback test are required to sectionalize a problem, the software will run a 100 second loopback test. If the 16 second test passes and the 100 second test fails, the user should run a 60 second loopback test

		from PREDICTOR or the TLWS to isolate the problem.
IT	TERMINATION MISMATCH	The status returned from the switch found a mismatch between the line card and the NT1 of a pair gain system. For example, the line card is ANSI standard while the NT1 is AMI.
IU	LINE RECORD SHOWS TERM MISMATCH	VER code IU is returned when a mismatch occurs between the type of NT1 detected by the system's ISDN software and the type of NT1 indicated in the line record.
IV	CHANNEL MISMATCH	The status returned from the switch found a mismatch between the line card and the COT (Central Office Terminal) of a pair gain system. For example, the line card is ANSI U card while the CU is AMI.
IW	INVALID W.C. IN LINE RECORD	This message will appear if you are attempting to test a special services line on a dlc, and there is no wire center in the line record.
IZ	DIGITAL ANALYSIS REQUIRED	This VER code indicates that T-DSL line has been tested and is in service. Since metallic testing was not available, it is recommended that further testing be done to isolate the problem.
LB	LOOP BAD	VER LB indicates that the fault is between the line card and NT1 (for a simple U-Interface Digital Subscriber Line - U-DSL) or between the RT channel unit and NT1 (for a SLC line). Another possible cause is a mismatch between the line card and the NT1, and therefore metallic access could not be achieved (usually because of an office overflow condition). In this last case, without metallic access, the type of NT1 cannot be identified.
LF	TEST TRANSFERRED - EXPECT DELAY	This VER Code appears when the test has been transferred from MLT-1 to MLT-2.
LM	REMOTE TST-EXPCT DELAYED RSLTS	This message is returned to warn that testing may take longer than normally expected. It appears as a line 24 message at the bottom of the screen.
LS	LOOP SUSPECT	VER LS is returned when the loop is suspect. The ISDN line that is out of service is a T-Interface Digital Subscriber Line (T_DSL) and a digital test to the line card passed. The CPE type is unknown, therefore a digital test could not be run to the CPE.
LT	LONG TEST-EXPECT DELAYED RESULTS	Mlt results are normaly returned to the user within one minute. With mlt/isdn fp3, users maybe informed that the test is going to take more than one minute to sectionalize digital loopback.
LU	LINE IN USE	This message is sent to warn that the subscriber is calling on the line to be tested.
MC	TEST OK CPE/MTU	This VER code is used by LMOS to indicate a TEST OK condition on a line that has a Maintenance Termination Unit (MTU), and a CPE termination. The remote possibility exists however, that it could be a high resistance open problem. This VER code is displayed on the TR, TV, TEST, DMLT, or MSCR mask, and will be used for flowthrough.
MD	MDF TEST RECOMMENDED	This condition can be caused by two different situations. The first is AC femf current detected on the line and testing is stopped. No DC tests have been run. An MDF test is needed to sectionalize the trouble in or out of the CO. The second is a CO test run over a no-

		test access on a xbar line. The CO test can't run in this condition and therefore needs an MDF access to make the CO test.
MH	MEMBER OF MLHG	The OE number could not be obtained for this line because it is part of a multiple trunk group and not the group's primary number. Check the Switch office records to identify hunt group and member number information needed to test the line.
MT	MDF TESTABLE ONLY	VER MT indicates the loop can only be accessed using an MDF access. This may be due to equipment in the central office that prohibits testing (dial long lines for example). This equipment is bypassed when testing is done on an MDF trunk.
ND	TN FROM FE ON DIFFERENT DCN	The line was not tested because the request was made from a FE that could not access the line. The FE is connected to a DCN that is not connected to the LTS that normally tests this line. This VER code can only occur when there are at least two DCNs.
NE	CHAN UNIT NOT EQUIPPED	The system received an internal SDV error: Equipage, Not Equipped (ENEQ). This occurs when a circuit pack supporting the Optical Network Unit (ONU) port is not properly equipped. Contact the SDV system administrator.
NG	INVALID TDSL REQUEST	VER code NG is returned when the test request entered is invalid for a T-interface digital subscriber loop (TDSL).
NK	LINE RECORD ERROR	The line record did not contain an OE code. Notify the system administrator.
NL	NO LINE RECORD IN SYSTEM	This is a special services TN and to do no-test trunk testing on this line, there must be a line record on the system. This error message means either there is no line record for this TN, or the line record could not be found.
NM	NETWORK MANAGER FAILURE	The network manager is the software that sends requests from one front end (FE) to another. It knows which FE to send the request to because each one has its own FE or machine id number. These machine ids are stored in the access table on each FE. If one of these ids is in error, the network manager can't send a request to that machine and VERN MN is returned.
NP	NOT VALID IDENTIFIER	When the switch denies access because the requested DN or the requested OE (line card equipment number in 5ESS) is not in the switch data base, VER NP with the appropriate summary message is returned. Currently the 5ESS switch denies a test request if the requested DN is not a PDN and returns VER NP with the specific summary message, "not primary DN". In the future, when a shared or non shared DN becomes a legal parameter for entering test requests, this summary message will not be displayed.
NS	LINE NOT SERVED BY MLT	The NXX of the telephone number in the test request is an NXX that is not served by the system. Therefore, no test can be made on that line.
NT	LINE NOT MLT TESTABLE	The line to be tested is not testable by the system. Therefore, no test is made. For example, a subscriber loop multiplexer (SLM) system is not testable. If the line has such a feature, the system will recognize this and not test. VER NT will also be returned when CMU/RMU testing has been requested and is not permissible.

NV	LINE NOT VERIFIED	VER NV will only appear on BORs and MORs. A test was requested for the line but the test could not be made because the trouble was a subsequent report, or through TE/TR when the NPA-NXX is defined in the NNXF as NDA (see LMOS/WM documentation number 413.NNX). When processing this trouble, follow local procedures for handling subsequent reports.
P1	DC RESISTIVE FAULT: PREMISES	A hard resistive fault on the customer premises has been detected. The fault can be either a short or a ground. In the example below, the system also detected a maintenance termination unit which helped it determine that the fault was on the customer premises. AC signatures with DC faults less than 50 kohms will not be displayed. With this fault condition, VER P1 will be displayed with either an open or a termination.
P2	DC RESIST MARGINAL: PREMISES	VERP2 indicates that the system has tested a line with an MTU on it. The MTU is a device usually located near the customer's protector. It is recognized by its electrical signature and helps the system determine whether faults are in the network or on the customer's premises. In this case, a resistive trouble above the local fault threshold but below 300 K ohms and determines that the fault is on the customer's premises.
P3	POSSIBLE FAULTY TELEPHONE	A possibly faulty telephone set on the customer's premises has been detected. This condition may be caused by a faulty ringer.
P4	CUST PREM EQUIP BAD	When the status obtained from the switch, the digital loopback testing, or the performance monitoring data indicates that the NT1 or T-interface on the customer side of the NT1 has a problem, VER P4 is returned. Each result causes different summary messages.
P5	CUST PREM EQUIP SUSPECT	When either the status or the tests indicate, but can not conclusively determine that the problem is in the CPE (either in NT1 or in the T-interface), VER P5 with the appropriate summary message is returned. If the status indicates that the DSL is in service but the switch is receiving too many user errors, or the digital test fails at the NT1 and passes at the line card but metallic test does not find any loop faults, a long loopback at the NT1 should be done before telling the customer that the problem is on their side of the NT1.
P6	CUST PREM EQUIP IN TEST MODE	The status indicates that the switch has taken the DSL out of service because the customer is performing a test on the NT1.
P7	CPE (STATION SET) BAD OR INVALID	This VER code appears only on the TE/TR mask as a result of a status-l request. It indicates that the station set has been taken out of service either because it is invalid or defective.
P8	CPE (T-INTERFACE) BAD	This VER code appears only on the TE/TR mask as a result of a status-l request. It indicates that the channel is out of service because the T-interface (CPE) of a U configuration is down.
P9	NT1 PRIMARY POWER FAIL	This VER code indicates that a U-dsl line has been tested and was found it to be in service. The results of the metallic test was ok. However, the NT1 primary power has failed indicating that the line is on secondary power.
PA	LAYER 2 PROBLEM	This VER code is returned when either the "D" or "B" channels indicate an excess number of layer 2 problems. Either one CPE is

		responsible for generating the maximum number of PERS or the problem is found uniformly among all users. The line may or may not be in service.
PB	POSSIBLE PROTOCOL PROBLEM	When the status indicates that the link layer remains in a transitional state suggesting there is a possible layer 2 protocol problem. Either there is an internal (switch) software or hardware error which prevents a link from being used, or the response and acknowledgement between the switch and the CPE is not correct. When the LMOS/WM asks for the status of the DSL via the status-l request, status messages which indicate protocol problems generate VER PB with specific summary messages. The user may or may not want to put this case into the retest queue. When the lines are re-tested and remain in a transitional state, VER PB is returned with a specific summary message.
PC	LAYER 3 PROBLEM	When a high rate of layer 3 protocol problems in the Q.931 signaling process or X.25 protocol problems occur, this VER code is returned. Either one CPE is responsible for generating the maximum number of PERS or the problem is found uniformly among all the users. The line may or may not be in service.
PD	SIGNAL LOSS FROM REMOTE END	When the status is obtained from the DSLAM, the service parameters retrieved from the DSLAM indicate that the Central Office DSLAM modem has detected a loss-of-signal from the customer premises end, and the customer powering off their XTU-R modem most likely causes this, VER PD is returned. It could also have been caused by a sudden break in the loop between the DSLAM and the Customer Premises. If VERPD has been returned after DSLDIG, it is recommended that a FULLX be run to verify the condition of the loop.
PF	SIGNAL LOSS FROM REMOTE END	When the status is obtained from the DSLAM, the service parameters retrieved from the DSLAM indicate that the Central Office DSLAM modem has detected a loss-of-signal from the customer premises end, and the cause of the loss-of-signal is not known, VER PI is returned. This situation can be caused by a sudden break in the loop between the DSLAM and the Customer Premises. If VER PD has been returned after a DSLDIG, it is recommended that a FULLX be run to verify the condition of the loop.
PR	XDSL CPE PROBLEM	When the status is obtained from the DSLAM, the service parameters retrieved from the DSLAM indicate that the customer XDSL equipment has encountered a problem, VER PR is returned. It is recommended that the customer be asked to reset the CPE by powering it on or off and the line re-tested to see if the condition is permanent. If the condition can be reproduced, the CPE may need to be replaced. If VER PR has been returned after a FULLX request, it indicates that the loop between the customer premises and the DSLAM in the Central Office was tested and found not to have any problems. Also, unless indicated by additional summary messages, no additional problems have been detected with the Customer Premises Equipment.
SO	LINE IN SERVICE - ADD ANALYSIS	This VER code appears only on the TE/TR mask as a result of a status-l request. It indicates that there is no problem with the DSL status, NT1 power or layers 1, 2, or 3, however, further testing may

		be required depending on the customer trouble report. This VER code causes the LMOS/WM to send a full request to the system's ISDN software via the retest queue.
SP	PROTECTED SERVICE	The line records indicate that the line to be tested is a protected service (an alarm for example). The system will not test the line unless you override the line records. Before testing the line by overriding the line records, you should first obtain the customer's permission to do so.
SS	SPECIAL SERVICES REQUIRED	The system has detected the electrical signature of either an MFT loop signal extender or a digital channel carrier. These are both types of special services equipment.
ST	INTERCEPT - ADD ANALYSIS	This VER code appears only on the TE/TR mask as a result of a STATUS-L request. LMOS has determined via the system's ISDN software that some of the services on the DSL are on intercept. Unless every service on the requested PDN or DN is on intercept, testing is possible. This VER code and summary message is necessary in order for LMOS/WM to send these cases to the system's ISDN software via the retest queue for a FULL test.
SU	INTERCEPT	The system has tested a line and found it to be on intercept. The VER SU stands for suspended service. No further tests are made once an intercept condition is identified.
SX	PBX RTE ADVANCE OR INTERCEPT	The system has tested a PBX line and found it to be on intercept. No further tests are made once an intercept condition is identified.
T1	SYSTEM TIMEOUT	The system has timed out while testing was in progress. This problem can be caused by data link problems between the various parts of the MLT system.
T2	SWITCH PROCESS TIMEOUT	Your request has timed out while testing was in progress. This Ver Code can be caused due to a switch being busy. The best thing to do is try the request again.
TB	DIGITAL TEST BUSY	VER TB is returned from the switch if a digital test was requested and not run because the line was busy. A busy line condition will cause a logical loopback test to be run instead of the physical loopback. Do to AMI channel hardware limitations this VER code will be generated if a logical loopback test is run on a line which contains an AMI channel unit.
TR	ANOTHER USER IS ACCESSING THIS REMOTE TEST EQUIPMENT	This VER Code is only displayed when the Loop Detect feature is active. It occurs when a user requests a test from the TV Mask or GUI and one of the following conditions exist: Another user previously requested a test that uses the same remote test equipment. The test waited more than two minutes for the remote test equipment to become available.
TS	SSA ACCESS REQUIRED	The line record says that this is a special services telephone number on a dlcs that is accessible via the ssa request. To do any testing, first establish access on the line by doing an ssa request.
U1	UNEXPECTED THERMISTORS	The system is testing a line with a cataloged termination and it suspects it is open. When a thermistor test is run on the line, a thermistor is detected. However, according to line records, the line should not have a thermistor.

U2	UNEXPECTED PBX SIGNATURE	The system indicates that the MLT DC signature matches one of the valid MLT DC signatures for a PBX. However, the line records indicate that the termination is not a PBX, and should not have a PBX signature.
U3	UNEXPECTED RINGER TERMINATION	The system tests a line whose records indicate that it is a ground start PBX. However, an AC signature is present and the t-r values are in the range of 2-14 kohms (which looks like a ringer). A ringer is not expected with these line records.
U4	UNEXPECTED INWARD SERVICE	The system detects a ground start PBX signature with no line circuit and no way to draw dial tone. It's possible that MLT is accessed to an inward only trunk that cannot make outgoing calls.
U5	UNEXPECTED CHANNEL TST RESULT	The results of the DLC self sanity check indicate that although the line records show that the line is either a coin or multi-party line, the channel unit is only capable of handling single-party service. This could mean a bad channel unit at the DLC central office terminal (cot) or remote terminal (RT), or the wrong type of channel unit installed.
U6	UNEXP. INTEGRATED/UNIVERSAL PGS	The results of a test indicate a discrepancy between the line record information and testing results. The system expects an integrated pair gain system (pgs) and test results show a universal PGS. The opposite scenario is also possible, which would also return a VER U6.
WC	XDSL DSLAM EQUIP PROBLEM	When the status is obtained from the DSLAM, the service parameters retrieved from the DSLAM indicate that the XDSL port in the DSLAM (that is, the xTU-C) assigned to the customer has a problem, VER WC is returned. If VERWC has been returned after a FULLX request was made, it indicates that the system verified that the loop between the customer premises and the DSLAM in the Central Office was tested and found not to have any problems. Also, unless indicated by additional summary messages, no additional problems have been detected with the Customer Premises Equipment. If VER WC has been returned after a DSLDIG request was made, it indicates that only the status of the DSLAM port and the Customer Premises Equipment was tested. No test on the condition of the loop in between them were made.
WT	XDSL MODEM IN TRANSITION PHASE	When the status is obtained from the DSLAM, the service parameters retrieved from the DSLAM indicate that the DSLAM port assigned to the customer is in a transition phase either from being down to the steady-state (normal) condition or from the steady-state to being down, VER WT is returned. Some possible causes for these transient conditions may be the presence of impulse noise on the loop, the customer premises equipment being turned on or off, etc. If this message is encountered, it is recommended that the test be re-run after waiting a few minutes.
WU	XDSL MODEM IN UNKNOWN STATE	When the status is obtained from the DSLAM, the service parameters retrieved from the DSLAM indicate that the DSLAM port assigned to the customer is in an unknown state, VER WU is returned. This is a highly unlikely situation and may be transient. If this message is encountered, it is recommended that the test be re-run after waiting a few minutes.

WX	XDSL CARD IS NOT IN SERVICE	When this status is obtained from the DSLAM, the service parameters retrieved from the DSLAM indicate that the card in the slot provided for testing is not in service, VER WX is returned. It is possible that an error was made when the slot number was entered by the system user. If so, check the slot number and test again. Alternatively, there may be craft activity causing this situation and the card may have been removed.
XA	OVRD-EXK/NNX COMBO NOT IN DB	The system can't match the override exchange key/nxx combination to the switch serving the line to be tested. Check records to determine the correct entries.
XF	INVALID/INCOMPLETE CIRCUIT INFO	The circuit data (shelf, slot, line) entered is either invalid or incomplete. Invalid implies that either the shelf, slot or line entry is not within the acceptable range for the AnyMedia FAST shelf.
XG	LDS NAME UNKNOWN TO SDV-EM - INVALID OR MISSING OE	The Local Digital Switch (LDS) Name of the switch host is invalid. The systems may be out of sync and they do not recognize the same LSDids known to each EM. Restart the SDV Group to get the databases back in sync. This can be done using the UIP System Administration menu Start option for the SDV Group. Contact the system administrator. Verify the OE code on the service order or on similar company-supplied form. Enter the correct OE code on the TV mask and resubmit the test request.
XH	LINE RECORD ERROR	A line record error has been received indicating an invalid Call Reference Value (CRV) for the line under test. Notify the System Administrator.
XI	INVALID TN	This message appears if you try to test a telephone number that is not a 10-digit TN, a 10-digit TN plus an extra series field starting with either ter, xn, s, ogo, or od, or a special services TN served by a dlc, such that you can do an ssa request. The line record does not indicate that you can do an ssa request on the line.
XO	TESTABLE VIA STV OPTION	This message will appear if you are on a TV mask, and the line record of the TN you are trying to test shows that this is a special services TN on a dlc system with special test equipment available in the co. If you see this message, you should use an stv mask and run an ssa request to access the line
XP	NOT A POTS(/ISDN) CHAN UNIT	While making a test request on a POTS/ISDN-SDV line, an internal SDV error was received: Invalid Access Identifier, Wrong Port Type. This occurs when the line record indicates the incorrect type of service. Contact the SDV system administrator.
XR	INVALID TEST REQUEST	VER code XR is returned when a feature required for the test request entered is turned off or the request entered is invalid for the type of line being tested. An example of the latter case would be a BENCH or DISP request entered for an ISDN line.
XS	TESTABLE VIA STV MASK ONLY	This message will appear if you try to test a line from any mask other than TV or stv, and the TN line record shows that this is a special services TN on a dlc system with special test equipment available in the co. If you see this message, you should use an stv mask and run an ssa request to access the line. There are two ways to bring up an stv mask: (1) clear the screen and enter: /for stv or, (2) on the TV mask, enter 'stv' in the req field.

XT	TRAINING SCRIPT UNAVAILABLE	This VER code appears only on the DISP, MSCR, or TE masks as a result of LMOS running a test using a training TN number. When this VER code appears either systems's ISDN training feature is turned off, or LMOS is sending a request which contains an invalid TN or OE number.
XU	TST EQUIP NOT AVAIL FOR WC	Special equipment in the CO is necessary to test this line. Either there is no such equipment available in this co, or the table that identifies this equipment has an invalid entry. If you think this is the case, check with the facilities manager.