

4.120.6.i 6 O’Clock (PEER 7) STAR Gas Detection Tests

PASS ANNUAL ACCEPTANCE TEST PROTOCOL

Division A Software Filename and Checksum: Title: _____ **Checksum:** _____

Division B Software Filename and Checksum: Title: _____ **Checksum:** _____

Initial testing complete:

Test Team Leader’s Name (Print): _____ **Life Number:** _____

Test Team Leader’s Name (Sign): _____ **Date:** ____/____/____

Acceptance test procedure complete (following repairs and retesting if required):

Test Team Leader’s Name (Print): _____ **Life Number:** _____

Test Team Leader’s Name (Sign): _____ **Date:** ____/____/____

Test results reviewed by:

Safety Section Head’s Name (Print): _____ **Life Number:** _____

Safety Section Head’s Name (Sign): _____ **Date:** ____/____/____

Test results accepted by Radiation Safety Committee:

RSC Member’s Name (Print): _____ **Life Number:** _____

RSC Member’s Name (Sign): _____ **Date:** ____/____/____

1.1 Current Source Test of STAR West Gas Detector, 6XAS1, in Mode 8

- CONN Voltmeter to **Div A: Mod 11 Input 3, 1006B**
 CONN Voltmeter to **Div B: Mod 6 Input 1, 1006B**
 CONN Current Srce to **Tp 3(+), Tp 4(-) 6XAS1 pcb in Div A cab 1006B**
- PLACE Peer 7 in Mode 8**
 VERIFY Peer 7 is in Restricted Access **MODE 8**
- RAISE** Current value (~ **1.7 mA**) for **Level 1** response at **MCR**
 VERIFY Response at **MCR** is **LEVEL 1**
RECORD Current value _____ mA
RECORD Div A vltg: _____ V Div B vltg: _____ V **~ 1.4V**
- RAISE** Current value (~ **2.5 mA**) for **Level 2** response at **MCR**
 VERIFY Response at **MCR** is **LEVEL 2**
RECORD Current value _____ mA
RECORD Div A vltg: _____ V Div B vltg: _____ V **~ 1.6V**
- RAISE** Current value (~ **4.1 mA**) for **Alarm** response at **MCR**
 VERIFY Response at **MCR** is **ALARM**
RECORD Current value _____ mA
RECORD Div A vltg: _____ V Div B vltg: _____ V **~ 2.0V**
- VERIFY** Fan **6XEF1** is **ON**
 VERIFY Fan **6XEF2** is **ON**
 VERIFY Vent **6XAV1** is **OPEN**
 VERIFY Vent **6XAV2** is **OPEN**
 VERIFY **Evac & Exp alarm** **ON**
 VERIFY **Peer 7 is in Safe Mode** **MODE 2**
- LOWER** Current value for ~ **1.6 V** output for Div A & B
 VERIFY Attempt to **reset Alarm** at **MCR** **FAIL**
LOWER Current value for ~ **1.4 V** output for Div A & B
- VERIFY** Fan **6XEF1** is **OFF**
 VERIFY Fan **6XEF2** is **OFF**
 VERIFY Vent **6XAV1** is **CLOSED**
 VERIFY Vent **6XAV2** is **CLOSED**
 VERIFY **Evac & Exp alarm** **OFF**
- LOWER** Current value for ~ **1.0 V** output for Div A & B
RESET **Alarm** at **MCR**
- VERIFY** **MCR** sees **6XAS1** as **SAFE**
- Check acceptance of Current Source test of STAR West Gas detector, 6XAS1, in Mode 8**

1.2 Current Source Test of West Gas Detector 6XAS1 in STAR in Mode 17

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|--|---|----------------|
| PLACE | Peer 7 in Mode 17 | |
| <input type="checkbox"/> VERIFY | Peer 7 is in Restricted Access | MODE 17 |
| RAISE | Current value (~ 4.1 mA) for Alarm Response at MCR | |
| <input type="checkbox"/> VERIFY | Response at MCR is | ALARM |
| RECORD | Current value | _____ mA |
| RECORD | Div A vltg: _____ V Div B vltg: _____ V | ~ 2.0V |
| <input type="checkbox"/> VERIFY | Fan 6XEF1 is | ON |
| <input type="checkbox"/> VERIFY | Fan 6XEF2 is | ON |
| <input type="checkbox"/> VERIFY | Vent 6XAV1 is | OPEN |
| <input type="checkbox"/> VERIFY | Vent 6XAV2 is | OPEN |
| <input type="checkbox"/> VERIFY | Evac & Exp alarm | ON |
| <input type="checkbox"/> VERIFY | Peer 7 is in Safe Mode | MODE 2 |
| LOWER | Current value for ~ 1.4 V output for Div A & B | |
| <input type="checkbox"/> VERIFY | Fan 6XEF1 is | OFF |
| <input type="checkbox"/> VERIFY | Fan 6XEF2 is | OFF |
| <input type="checkbox"/> VERIFY | Vent 6XAV1 is | CLOSED |
| <input type="checkbox"/> VERIFY | Vent 6XAV2 is | CLOSED |
| <input type="checkbox"/> VERIFY | Evac & Exp alarm | OFF |
| LOWER RESET | Current value for ~ 1.0 V output for Div A & B Alarm at MCR | |
| <input type="checkbox"/> VERIFY | MCR sees 6XAS1 as | SAFE |
- Check for test acceptance of Current Source test of West Gas detector 6XAS1 in STAR in Mode 17**

1.3 Current Source Test of West Gas Detector 6XAS1 in STAR in Mode 16

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|--|--|----------------|
| PLACE | Peer 7 in Mode 16 | |
| <input type="checkbox"/> VERIFY | Peer 7 is in Controlled Access | MODE 16 |
| RAISE | Current value (~ 4.1 mA) for Alarm Response at MCR | |
| <input type="checkbox"/> VERIFY | Response at MCR is | ALARM |
| RECORD | Current value | _____ mA |
| RECORD | Div A vltg: _____ V Div B vltg: _____ V | ~ 2.0V |
| <input type="checkbox"/> VERIFY | Fan 6XEF1 is | ON |
| <input type="checkbox"/> VERIFY | Fan 6XEF2 is | ON |
| <input type="checkbox"/> VERIFY | Vent 6XAV1 is | OPEN |
| <input type="checkbox"/> VERIFY | Vent 6XAV2 is | OPEN |
| <input type="checkbox"/> VERIFY | Evac & Exp alarm | ON |
| <input type="checkbox"/> VERIFY | Peer 7 is in Safe Mode | MODE 2 |
| LOWER | Current value for ~ 1.4 V output for Div A & B | |

- VERIFY** Fan **6XEF1** is **OFF**
- VERIFY** Fan **6XEF2** is **OFF**
- VERIFY** Vent **6XAV1** is **CLOSED**
- VERIFY** Vent **6XAV2** is **CLOSED**
- VERIFY** **Evac & Exp alarm** **OFF**

LOWER RESET Current value for ~ **1.0 V** output for Div **A & B Alarm** at **MCR**

- VERIFY** **MCR** sees **6XAS1** as **SAFE**

- Check for test acceptance of Current Source test of West Gas detector 6XAS1 in STAR in Mode 16**

1.4 Current Source Test of West Gas Detector 6XAS1 in STAR in Mode 2

- PLACE** **Peer 7 in Mode 17**
- VERIFY** **Peer 7** is in **Safe Access** **MODE 2**

- RAISE** Current value (~ **4.1 mA**) for **Alarm Response at MCR**
- VERIFY** **Response at MCR is** **ALARM**
- RECORD** Current value _____ **mA**
- RECORD** Div **A** vltg: _____ **V** Div **B** vltg: _____ **V** **~ 2.0V**

- VERIFY** Fan **6XEF1** is **ON**
- VERIFY** Fan **6XEF2** is **ON**
- VERIFY** Vent **6XAV1** is **OPEN**
- VERIFY** Vent **6XAV2** is **OPEN**
- VERIFY** **Evac & Exp alarm** **ON**
- VERIFY** **Peer 7** remains in **Safe Mode** **MODE 2**

LOWER Current value for ~ **1.4 V** output for Div **A & B**

- VERIFY** Fan **6XEF1** is **OFF**
- VERIFY** Fan **6XEF2** is **OFF**
- VERIFY** Vent **6XAV1** is **CLOSED**
- VERIFY** Vent **6XAV2** is **CLOSED**
- VERIFY** **Evac & Exp alarm** **OFF**

LOWER RESET Current value for ~ **1.0 V** output for Div **A & B Alarm** at **MCR**

- VERIFY** **MCR** sees **6XAS1** is **SAFE**

- Check for acceptance of Current source test of STAR West Gas detector, 6XAS1, in Mode 2**

1.5 Current Source Test of STAR West Gas Detector, 6XAS1, in Mode 24 and Bad Sensor check

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|--------------------------|--|--|-------------------|
| <input type="checkbox"/> | PLACE | Peer 7 in Mode 24 | |
| <input type="checkbox"/> | VERIFY | Peer 7 is in No Access | MODE 24 |
| <input type="checkbox"/> | RAISE | Current value (~ 4.1 mA) for Alarm Response at MCR | |
| <input type="checkbox"/> | VERIFY | Response at MCR is | ALARM |
| | RECORD | Current value | _____ mA |
| | RECORD | Div A vltg: _____ V Div B vltg: _____ V | ~ 2.0V |
| <input type="checkbox"/> | VERIFY | Fan 6XEF1 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 6XEF2 is | ON |
| <input type="checkbox"/> | VERIFY | Vent 6XAV1 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 6XAV2 is | OPEN |
| <input type="checkbox"/> | VERIFY | Evac & Exp alarm | ON |
| <input type="checkbox"/> | VERIFY | Peer 7 remains in No Access | MODE 24 |
| | LOWER | Current value for ~ 1.4 V output for Div A & B | |
| <input type="checkbox"/> | VERIFY | Fan 6XEF1 is | OFF |
| <input type="checkbox"/> | VERIFY | Fan 6XEF2 is | OFF |
| <input type="checkbox"/> | VERIFY | Vent 6XAV1 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 6XAV2 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Evac & Exp alarm | OFF |
| | LOWER | Current value for ~ 1.0 V output for Div A & B | |
| | RESET | Alarm at MCR | |
| <input type="checkbox"/> | VERIFY | MCR sees 6XAS1 as | SAFE |
| | REVERSE | Current Source connections | |
| <input type="checkbox"/> | RAISE | Current value (~ -1.15mA) for Bad Sensor response at MCR | |
| <input type="checkbox"/> | VERIFY | Response at MCR is | BAD SENSOR |
| | RECORD | Current value | _____ mA |
| | RECORD | Div A vltg: _____ V Div B vltg: _____ V | ~ 0.725V |
| <input type="checkbox"/> | VERIFY | Evac & Exp alarm | ON |
| | RAISE | Current value (~ -0.03 mA) for ~ 1V output | |
| | RECORD | Current value | _____ mA |
| | RECORD | Div A vltg: _____ V Div B vltg: _____ V | ~ 1.0V |
| <input type="checkbox"/> | VERIFY | Evac & Exp alarm | OFF |
| | RESET | Bad Sensor at MCR | |
| <input type="checkbox"/> | VERIFY | MCR sees 6XAS1 is | SAFE |
| <input type="checkbox"/> | Check for acceptance of Current Source test of STAR West Gas detector 6XAS1 in Mode 24 and Bad Sensor check | | |

1.6 Gas Activation test of STAR West Gas Detector, 6XAS1, in Mode 8

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|--------------------------|--|--|---------------|
| <input type="checkbox"/> | PLACE | Peer 7 in Mode 8 | |
| <input type="checkbox"/> | VERIFY | Peer 7 is in Restricted Access | MODE 8 |
| | DISCONN | Current Source | |
| | SPRAY | 50% L.E.L. gas on 6XAS1 (~2 mins reaction) | |
| | RECORD | Trip Level: Div A vltg: _____ V Div B vltg: _____ V | |
| <input type="checkbox"/> | VERIFY | Fan 6XEF1 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 6XEF2 is | ON |
| <input type="checkbox"/> | VERIFY | Vent 6XAV1 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 6XAV2 is | OPEN |
| <input type="checkbox"/> | VERIFY | Evac & Exp alarm | ON |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 7 is in Safe Mode | MODE 2 |
| | ALLOW | 50% L.E.L. gas dissipation (~ 2 mins) | |
| | RECORD | Quiescent Vltg: Div A vltg: _____ V Div B vltg: _____ V | |
| <input type="checkbox"/> | VERIFY | Fan 6XEF1 is | OFF |
| <input type="checkbox"/> | VERIFY | Fan 6XEF2 is | OFF |
| <input type="checkbox"/> | VERIFY | Vent 6XAV1 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 6XAV2 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Evac & Exp alarm | OFF |
| | RESET | Alarm at MCR | |
| <input type="checkbox"/> | VERIFY | MCR sees 6XAS1 as | SAFE |
| | DISCONN | Voltmeter | |
| <input type="checkbox"/> | Check for acceptance of Gas Activation test of STAR West Gas detector 6XAS1 in Mode 8 | | |

1.7 Current Source Test of STAR East Gas Detector, 6XAS2 , in Mode 8

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|--------------------------|---------------|--|-----------------|
| | CONN | Voltmeter to Div A: Mod 11 Input 0, 1006B | |
| | CONN | Voltmeter to Div B: Mod 6 Input 2, 1006B | |
| | CONN | Current Srce to Tp 3(+), Tp 4(-) 6XAS2 pcb in Div B cab 1006B | |
| <input type="checkbox"/> | PLACE | Peer 7 in Mode 8 | |
| <input type="checkbox"/> | VERIFY | Peer 7 is in Restricted Access | MODE 8 |
| | RAISE | Current value (~ 1.7 mA) for Level 1 response at MCR | |
| <input type="checkbox"/> | VERIFY | Response at MCR is | LEVEL 1 |
| | RECORD | Current value | _____ mA |
| | RECORD | Div A vltg: _____ V Div B vltg: _____ V | ~ 1.4V |
| | RAISE | Current value (~ 2.5 mA) for Level 2 response at MCR | |
| <input type="checkbox"/> | VERIFY | Response at MCR is | LEVEL 2 |
| | RECORD | Current value | _____ mA |
| | RECORD | Div A vltg: _____ V Div B vltg: _____ V | ~ 1.6V |
| | RAISE | Current value (~ 4.1 mA) for Alarm response at MCR | |
| <input type="checkbox"/> | VERIFY | Response at MCR is | ALARM |

- | | | |
|--------------------------|---|----------|
| RECORD | Current value | _____ mA |
| RECORD | Div A vltg: _____ V Div B vltg: _____ V | ~ 2.0V |
| <input type="checkbox"/> | VERIFY Fan 6XEF1 is | ON |
| <input type="checkbox"/> | VERIFY Fan 6XEF2 is | ON |
| <input type="checkbox"/> | VERIFY Vent 6XAV1 is | OPEN |
| <input type="checkbox"/> | VERIFY Vent 6XAV2 is | OPEN |
| <input type="checkbox"/> | VERIFY Evac & Exp alarm | ON |
| <input type="checkbox"/> | VERIFY Peer 7 is in Safe Mode | MODE 2 |
| | LOWER Current value for ~ 1.6 V output for Div A & B | |
| <input type="checkbox"/> | VERIFY Attempt to reset Alarm at MCR | FAIL |
| | LOWER Current value for ~ 1.4 V output for Div A & B | |
| <input type="checkbox"/> | VERIFY Fan 6XEF1 is | OFF |
| <input type="checkbox"/> | VERIFY Fan 6XEF2 is | OFF |
| <input type="checkbox"/> | VERIFY Vent 6XAV1 is | CLOSED |
| <input type="checkbox"/> | VERIFY Vent 6XAV2 is | CLOSED |
| <input type="checkbox"/> | VERIFY Evac & Exp alarm | OFF |
| | LOWER Current value for ~ 1.0 V output for Div A & B | |
| | RESET Alarm at MCR | |
| <input type="checkbox"/> | VERIFY MCR sees 6XAS2 as | SAFE |
- Check acceptance of Current Source test of STAR East Gas detector, 6XAS2 , in Mode 8

1.8 Current Source Test of East Gas Detector 6XAS2 in STAR in Mode 17

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|--------------------------|--|----------|
| | PLACE Peer 7 in Mode 17 | |
| <input type="checkbox"/> | VERIFY Peer 7 is in Restricted Access | MODE 17 |
| | RAISE Current value (~ 4.1 mA) for Response at MCR is | |
| <input type="checkbox"/> | VERIFY Response at MCR is | ALARM |
| | RECORD Current value | _____ mA |
| | RECORD Div A vltg: _____ V Div B vltg: _____ V | ~ 2.0V |
| <input type="checkbox"/> | VERIFY Fan 6XEF1 is | ON |
| <input type="checkbox"/> | VERIFY Fan 6XEF2 is | ON |
| <input type="checkbox"/> | VERIFY Vent 6XAV1 is | OPEN |
| <input type="checkbox"/> | VERIFY Vent 6XAV2 is | OPEN |
| <input type="checkbox"/> | VERIFY Evac & Exp alarm | ON |
| <input type="checkbox"/> | VERIFY Peer 7 is in Safe Mode | MODE 2 |
| | LOWER Current value for ~ 1.4 V output for Div A & B | |
| <input type="checkbox"/> | VERIFY Fan 6XEF1 is | OFF |
| <input type="checkbox"/> | VERIFY Fan 6XEF2 is | OFF |
| <input type="checkbox"/> | VERIFY Vent 6XAV1 is | CLOSED |
| <input type="checkbox"/> | VERIFY Vent 6XAV2 is | CLOSED |
| <input type="checkbox"/> | VERIFY Evac & Exp alarm | OFF |

- LOWER RESET** Current value for ~ 1.0 V output for Div A & B Alarm at MCR
- VERIFY** MCR sees 6XAS2 as SAFE
- Check for test acceptance of Current Source test of East Gas detector 6XAS2 in STAR in Mode 17

1.9 Current Source Test of East Gas Detector 6XAS2 in STAR in Mode 16

- PLACE** Peer 7 in Mode 16
- VERIFY** Peer 7 is in Controlled Access MODE 16
- RAISE** Current value (~ 4.1 mA) for Response at MCR is
- VERIFY** Response at MCR is ALARM
- RECORD** Current value _____ mA
- RECORD** Div A vltg: _____ V Div B vltg: _____ V ~ 2.0V
- VERIFY** Fan 6XEF1 is ON
- VERIFY** Fan 6XEF2 is ON
- VERIFY** Vent 6XAV1 is OPEN
- VERIFY** Vent 6XAV2 is OPEN
- VERIFY** Evac & Exp alarm ON
- VERIFY** Peer 7 is in Safe Mode MODE 2
- LOWER** Current value for ~ 1.4 V output for Div A & B
- VERIFY** Fan 6XEF1 is OFF
- VERIFY** Fan 6XEF2 is OFF
- VERIFY** Vent 6XAV1 is CLOSED
- VERIFY** Vent 6XAV2 is CLOSED
- VERIFY** Evac & Exp alarm OFF
- LOWER RESET** Current value for ~ 1.0 V output for Div A & B Alarm at MCR
- VERIFY** MCR sees 6XAS2 as SAFE
- Check for test acceptance of Current Source test of East Gas detector 6XAS2 in STAR in Mode 16

1.10 Current Source Test of East Gas Detector 6XAS2 in STAR in Mode 2

- PLACE** Peer 7 in Mode 17
- VERIFY** Peer 7 is in Safe Access MODE 2
- RAISE** Current value (~ 4.1 mA) for Response at MCR is
- VERIFY** Response at MCR is ALARM
- RECORD** Current value _____ mA

RECORD	Div A vltg: _____ V	Div B vltg: _____ V	~ 2.0V
<input type="checkbox"/>	VERIFY	Fan 6XEF1 is	ON
<input type="checkbox"/>	VERIFY	Fan 6XEF2 is	ON
<input type="checkbox"/>	VERIFY	Vent 6XAV1 is	OPEN
<input type="checkbox"/>	VERIFY	Vent 6XAV2 is	OPEN
<input type="checkbox"/>	VERIFY	Evac & Exp alarm	ON
<input type="checkbox"/>	VERIFY	Peer 7 remains in Safe Mode	MODE 2

LOWER	Current value for ~ 1.4 V output for Div A & B		
<input type="checkbox"/>	VERIFY	Fan 6XEF1 is	OFF
<input type="checkbox"/>	VERIFY	Fan 6XEF2 is	OFF
<input type="checkbox"/>	VERIFY	Vent 6XAV1 is	CLOSED
<input type="checkbox"/>	VERIFY	Vent 6XAV2 is	CLOSED
<input type="checkbox"/>	VERIFY	Evac & Exp alarm	OFF

LOWER RESET	Current value for ~ 1.0 V output for Div A & B Alarm at MCR		
<input type="checkbox"/>	VERIFY	MCR sees 6XAS2 is	SAFE

Check for acceptance of Current source test of STAR East Gas detector, 6XAS2 , in Mode 2

1.11 Current Source Test of STAR East Gas Detector, 6XAS2 , in Mode 24 and Bad Sensor check

PLACE	Peer 7 in Mode 24		
<input type="checkbox"/>	VERIFY	Peer 7 is in No Access	MODE 24

RAISE	Current value (~ 4.1 mA) for Response at MCR is		
<input type="checkbox"/>	VERIFY	Response at MCR is	ALARM
RECORD	Current value		_____ mA
RECORD	Div A vltg: _____ V	Div B vltg: _____ V	~ 2.0V

<input type="checkbox"/>	VERIFY	Fan 6XEF1 is	ON
<input type="checkbox"/>	VERIFY	Fan 6XEF2 is	ON
<input type="checkbox"/>	VERIFY	Vent 6XAV1 is	OPEN
<input type="checkbox"/>	VERIFY	Vent 6XAV2 is	OPEN
<input type="checkbox"/>	VERIFY	Evac & Exp alarm	ON
<input type="checkbox"/>	VERIFY	Peer 7 remains in No Access	MODE 24

LOWER	Current value for ~ 1.4 V output for Div A & B		
<input type="checkbox"/>	VERIFY	Fan 6XEF1 is	OFF
<input type="checkbox"/>	VERIFY	Fan 6XEF2 is	OFF
<input type="checkbox"/>	VERIFY	Vent 6XAV1 is	CLOSED
<input type="checkbox"/>	VERIFY	Vent 6XAV2 is	CLOSED
<input type="checkbox"/>	VERIFY	Evac & Exp alarm	OFF

LOWER RESET	Current value for ~ 1.0 V output for Div A & B Alarm at MCR		
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- VERIFY** **MCR sees 6XAS2 as** **SAFE**
- REVERSE** **Current Source connections**
- RAISE** Current value (~ **-1.15 mA**) for **Bad Sensor** response at **MCR**
- VERIFY** Response at **MCR** is **BAD SENSOR**
- RECORD** Current value _____ **mA**
- RECORD** Div A vltg: _____ V Div B vltg: _____ V **~ 0.725V**
- VERIFY** **Evac & Exp alarm** **ON**
- RAISE** Current value (~ **-0.03 mA**) for ~ **1V output**
- RECORD** Current value _____ **mA**
- RECORD** Div A vltg: _____ V Div B vltg: _____ V **~ 1.0V**
- VERIFY** **Evac & Exp alarm** **OFF**
- RESET** **Bad Sensor** at **MCR**
- VERIFY** **MCR sees 6XAS2 is** **SAFE**
- Check for acceptance of Current Source test of STAR East Gas detector 6XAS2 in Mode 24 and Bad Sensor check**

1.12 Gas Activation test of STAR East Gas Detector, 6XAS2 , in Mode 8

- PLACE** **Peer 7 in Mode 8**
- VERIFY** **Peer 7 is in Restricted Access** **MODE 8**
- DISCONN** **Current Source**
- SPRAY** **50% L.E.L. gas on 6XAS2 (~2 mins reaction)**
- RECORD** **Trip Level: Div A vltg: _____ V Div B vltg: _____ V**
- VERIFY** **Fan 6XEF1 is** **ON**
- VERIFY** **Fan 6XEF2 is** **ON**
- VERIFY** **Vent 6XAV1 is** **OPEN**
- VERIFY** **Vent 6XAV2 is** **OPEN**
- VERIFY** **Evac & Exp alarm** **ON**
- VERIFY** **MCR sees Peer 7 is in Safe Mode** **MODE 2**
- ALLOW** **50% L.E.L. gas dissipation (~ 2 mins)**
- RECORD** **Quiescent Vltg: Div A vltg: _____ V Div B vltg: _____ V**
- VERIFY** **Fan 6XEF1 is** **OFF**
- VERIFY** **Fan 6XEF2 is** **OFF**
- VERIFY** **Vent 6XAV1 is** **CLOSED**
- VERIFY** **Vent 6XAV2 is** **CLOSED**
- VERIFY** **Evac & Exp alarm** **OFF**
- RESET** **Alarm at MCR**
- VERIFY** **MCR sees 6XAS2 as** **SAFE**
- DISCONN** **Voltmeter**
- Check for acceptance of Gas Activation test of STAR East Gas detector 6XAS2 in Mode 8**

1.13 Test of STAR Gas Detector 6XAS3 in Mode 8 – Div A, simulated out put only.

	PLACE	Peer 7 in Mode 8	
<input type="checkbox"/>	VERIFY	Peer 7 is in Restricted Access	MODE 8
	CONN	24 VDC to Input 0 STAR Iface Block I/O Div A	
<input type="checkbox"/>	VERIFY	Fan 6XEF1 is	ON
<input type="checkbox"/>	VERIFY	Fan 6XEF2 is	ON
<input type="checkbox"/>	VERIFY	Vent 6XAV1 is	OPEN
<input type="checkbox"/>	VERIFY	Vent 6XAV2 is	OPEN
<input type="checkbox"/>	VERIFY	Evac & Exp alarm	ON
<input type="checkbox"/>	VERIFY	MCR sees 6Z1 Zone (6XAS3) is	EVAC
<input type="checkbox"/>	VERIFY	MCR sees Peer 7 in Safe Mode	MODE 2
	DISCONN	24 VDC from Input 0 STAR Iface Block I/O Div A	
<input type="checkbox"/>	VERIFY	Fan 6XEF1 is	OFF
<input type="checkbox"/>	VERIFY	Fan 6XEF2 is	OFF
<input type="checkbox"/>	VERIFY	Vent 6XAV1 is	CLOSED
<input type="checkbox"/>	VERIFY	Vent 6XAV2 is	CLOSED
<input type="checkbox"/>	VERIFY	Evac & Exp alarm	OFF
	RESET	Alarm at MCR	
<input type="checkbox"/>	VERIFY	MCR sees 6Z1 Zone (6XAS3) is	NO EVAC
<input type="checkbox"/>	VERIFY	MCR sees STAR (6XAS3) is	OK

Check for acceptance of test of STAR Gas detector 6XAS3 in Mode 8 – Div A, simulated out put only.

1.14 Test of STAR Gas Detector 6XAS3 in Mode 8 – Div B, simulated out put only

	PLACE	Peer 7 in Mode 8	
<input type="checkbox"/>	VERIFY	Peer 7 is in Restricted Access	MODE 8
	CONN	24 VDC to Input 0 STAR Iface Block I/O Div B	
<input type="checkbox"/>	VERIFY	Fan 6XEF1 is	ON
<input type="checkbox"/>	VERIFY	Fan 6XEF2 is	ON
<input type="checkbox"/>	VERIFY	Vent 6XAV1 is	OPEN
<input type="checkbox"/>	VERIFY	Vent 6XAV2 is	OPEN
<input type="checkbox"/>	VERIFY	Evac & Exp alarm	ON
<input type="checkbox"/>	VERIFY	MCR sees 6Z1 Zone (6XAS3) is	EVAC
<input type="checkbox"/>	VERIFY	MCR sees Peer 7 in Safe Mode	MODE 2
	DISCONN	24 VDC from Input 0 STAR Iface Block I/O Div B	
<input type="checkbox"/>	VERIFY	Fan 6XEF1 is	OFF
<input type="checkbox"/>	VERIFY	Fan 6XEF2 is	OFF
<input type="checkbox"/>	VERIFY	Vent 6XAV1 is	CLOSED
<input type="checkbox"/>	VERIFY	Vent 6XAV2 is	CLOSED
<input type="checkbox"/>	VERIFY	Evac & Exp alarm	OFF

- | | | | |
|--------------------------|---------------|-------------------------------------|----------------|
| | RESET | Alarm at MCR | |
| <input type="checkbox"/> | VERIFY | MCR sees 6Z1 Zone (6XAS3) is | NO EVAC |
| <input type="checkbox"/> | VERIFY | MCR sees STAR (6XAS3) is | OK |

- Check for acceptance of test of STAR Gas detector 6XAS3 in Mode 8 – Div B, simulated out put only.**

1.15 Test of STAR Gas Detector 6XAS3 in Mode 17 – Divs A&B, simulated out put only

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|--------------------------|---------------|---------------------------------------|----------------|
| | PLACE | Peer 7 in Mode 17 | |
| <input type="checkbox"/> | VERIFY | Peer 7 is in Restricted Access | MODE 17 |

CONN 24 VDC to Input 0 STAR Iface Block I/O Div A
CONN 24 VDC to Input 0 STAR Iface Block I/O Div B

- | | | | |
|--------------------------|---------------|-------------------------------------|---------------|
| <input type="checkbox"/> | VERIFY | Fan 6XEF1 is | ON |
| <input type="checkbox"/> | VERIFY | Fan 6XEF2 is | ON |
| <input type="checkbox"/> | VERIFY | Vent 6XAV1 is | OPEN |
| <input type="checkbox"/> | VERIFY | Vent 6XAV2 is | OPEN |
| <input type="checkbox"/> | VERIFY | Evac & Exp alarm | ON |
| <input type="checkbox"/> | VERIFY | MCR sees 6Z1 Zone (6XAS3) is | EVAC |
| <input type="checkbox"/> | VERIFY | MCR sees Peer 7 in Safe Mode | MODE 2 |

DISCONN 24 VDC from Input 0 STAR Iface Block I/O Div A
DISCONN 24 VDC from Input 0 STAR Iface Block I/O Div B

- | | | | |
|--------------------------|---------------|-----------------------------|---------------|
| <input type="checkbox"/> | VERIFY | Fan 6XEF1 is | OFF |
| <input type="checkbox"/> | VERIFY | Fan 6XEF2 is | OFF |
| <input type="checkbox"/> | VERIFY | Vent 6XAV1 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Vent 6XAV2 is | CLOSED |
| <input type="checkbox"/> | VERIFY | Evac & Exp alarm | OFF |

- | | | | |
|--------------------------|---------------|-------------------------------------|----------------|
| | RESET | Alarm at MCR | |
| <input type="checkbox"/> | VERIFY | MCR sees 6Z1 Zone (6XAS3) is | NO EVAC |
| <input type="checkbox"/> | VERIFY | MCR sees STAR (6XAS3) is | OK |

- Check for acceptance of test of STAR Gas detector 6XAS3 in Mode 17 – Divs A&B, simulated output only**

1.16 Test of STAR Gas Detector 6XAS3 in Mode 16 – Divs A&B, simulated out put only

	PLACE	Peer 7 in Mode 16	
<input type="checkbox"/>	VERIFY	Peer 7 is in Controlled Access	MODE 16
	CONN	24 VDC to Input 0 STAR Iface Block I/O Div A	
	CONN	24 VDC to Input 0 STAR Iface Block I/O Div B	
<input type="checkbox"/>	VERIFY	Fan 6XEF1 is	ON
<input type="checkbox"/>	VERIFY	Fan 6XEF2 is	ON
<input type="checkbox"/>	VERIFY	Vent 6XAV1 is	OPEN
<input type="checkbox"/>	VERIFY	Vent 6XAV2 is	OPEN
<input type="checkbox"/>	VERIFY	Evac & Exp alarm	ON
<input type="checkbox"/>	VERIFY	MCR sees 6Z1 Zone (6XAS3) is	EVAC
<input type="checkbox"/>	VERIFY	MCR sees Peer 7 in Safe Mode	MODE 2
	DISCONN	24 VDC from Input 0 STAR Iface Block I/O Div A	
	DISCONN	24 VDC from Input 0 STAR Iface Block I/O Div B	
<input type="checkbox"/>	VERIFY	Fan 6XEF1 is	OFF
<input type="checkbox"/>	VERIFY	Fan 6XEF2 is	OFF
<input type="checkbox"/>	VERIFY	Vent 6XAV1 is	CLOSED
<input type="checkbox"/>	VERIFY	Vent 6XAV2 is	CLOSED
<input type="checkbox"/>	VERIFY	Evac & Exp alarm	OFF
	RESET	Alarm at MCR	
<input type="checkbox"/>	VERIFY	MCR sees 6Z1 Zone (6XAS3) is	NO EVAC
<input type="checkbox"/>	VERIFY	MCR sees STAR (6XAS3) is	OK

Check for acceptance of test of STAR Gas detector 6XAS3 in Mode 16 – Divs A&B, simulated output only

1.17 Test of STAR Gas Detector 6XAS3 in Mode 2 – Divs A&B, simulated out put only

	PLACE	Peer 7 in Mode 2	
<input type="checkbox"/>	VERIFY	Peer 7 is in Safe Mode	MODE 2
	CONN	24 VDC to Input 0 STAR Iface Block I/O Div A	
	CONN	24 VDC to Input 0 STAR Iface Block I/O Div B	
<input type="checkbox"/>	VERIFY	Fan 6XEF1 is	ON
<input type="checkbox"/>	VERIFY	Fan 6XEF2 is	ON
<input type="checkbox"/>	VERIFY	Vent 6XAV1 is	OPEN
<input type="checkbox"/>	VERIFY	Vent 6XAV2 is	OPEN
<input type="checkbox"/>	VERIFY	Evac & Exp alarm	ON
<input type="checkbox"/>	VERIFY	MCR sees 6Z1 Zone (6XAS3) is	EVAC
<input type="checkbox"/>	VERIFY	MCR sees Peer 7 remain in Safe Mode	MODE 2
	DISCONN	24 VDC from Input 0 STAR Iface Block I/O Div A	
	DISCONN	24 VDC from Input 0 STAR Iface Block I/O Div B	

- VERIFY** Fan **6XEF1** is **OFF**
- VERIFY** Fan **6XEF2** is **OFF**
- VERIFY** Vent **6XAV1** is **CLOSED**
- VERIFY** Vent **6XAV2** is **CLOSED**
- VERIFY** **Evac & Exp alarm** **OFF**

- RESET Alarm at MCR**
- VERIFY** MCR sees **6Z1 Zone (6XAS3)** is **NO EVAC**
- VERIFY** MCR sees **STAR (6XAS3)** is **OK**

- Check for acceptance of test of STAR Gas detector 6XAS3 in Mode 2 – Divs A&B, simulated output only**

1.18 Test of STAR Gas Detector 6XAS3 in Mode 24 – Divs A&B, simulated out put only

- PLACE Peer 7 in Mode 24**
- VERIFY** Peer 7 is in **No Access** **MODE 24**

- CONN 24 VDC to Input 0 STAR Iface Block I/O Div A**
- CONN 24 VDC to Input 0 STAR Iface Block I/O Div B**

- VERIFY** Fan **6XEF1** is **ON**
- VERIFY** Fan **6XEF2** is **ON**
- VERIFY** Vent **6XAV1** is **OPEN**
- VERIFY** Vent **6XAV2** is **OPEN**
- VERIFY** **Evac & Exp alarm** **ON**
- VERIFY** MCR sees **6Z1 Zone (6XAS3)** is **EVAC**
- VERIFY** MCR sees Peer 7 remain in **MODE 24**

- DISCONN 24 VDC from Input 0 STAR Iface Block I/O Div A**
- DISCONN 24 VDC from Input 0 STAR Iface Block I/O Div B**

- VERIFY** Fan **6XEF1** is **OFF**
- VERIFY** Fan **6XEF2** is **OFF**
- VERIFY** Vent **6XAV1** is **CLOSED**
- VERIFY** Vent **6XAV2** is **CLOSED**
- VERIFY** **Evac & Exp alarm** **OFF**

- RESET Alarm at MCR**
- VERIFY** MCR sees **6Z1 Zone (6XAS3)** is **NO EVAC**
- VERIFY** MCR sees **STAR (6XAS3)** is **OK**

- Check for acceptance of test of STAR Gas detector 6XAS3 in Mode 24 – Divs A&B, simulated output only.**

1.19 Gas Activation test of STAR Gas-House Gas Detector, 6XAS4, in Mode 8

- PLACE** Peer 7 in Mode 8
- VERIFY** Peer 7 is in **Restricted Access** **MODE 8**
- RECORD** Ambient Level: Div A: _____ % Div B: _____ %
- SPRAY** 50% L.E.L. gas on **6XAS4** (~2 mins reaction)
- RECORD** Trip Level: Div A: _____ % Div B vltg: _____ %
- VERIFY** **LOCAL** Evac & Exp alarm **ON**
- ALLOW** 50% L.E.L. gas **dissipation** (~ 2 mins)
- VERIFY** **LOCAL** Evac & Exp alarm **OFF**
- RECORD** Ambient Level: Div A: _____ % Div B: _____ %
- Check for acceptance of Gas Activation test of STAR Gas-House Gas detector 6XAS4 in Mode 8

END OF TEST PROCEDURE

TTL: Sign for completion of initial testing: _____

Date: ____/____/____

TTL: Sign for completion of final testing: _____

Date: ____/____/____