February 21, 2013

Mr. Johnny Lee
MSA
1000 Cranberry Drive
Cranberry Township, PA 16066

Re: **ITEM:** Personal Gas Detector  
**MODEL NO.:** Altair 4X;  
**VOLTAGE:** n/a  
**KVA:** n/a  
**HP:** n/a  
**APSID NO.:** 803232  
**APPROVAL NO. BFE 32-13**

Dear Mr. Lee:

We have completed our evaluation of the equipment noted above, and approve its use in all bituminous underground coal mines of Pennsylvania. The information received will be filed. The equipment meets the legal requirements of the *Pennsylvania Bituminous Coal Mine Act.*

Pennsylvania approval number **BFE 32-13** has been assigned to the equipment. This number must appear conspicuously on the outside of the subject equipment on a 1" x 2" rust-resistant metal plate, or any other Bureau acceptable material. The approval plate should read "Commonwealth of Pennsylvania" and "Approval No. BFE 32-13". The plate and lettering should be resistant to removal by abrasion.

If you want to make changes or alterations on this equipment, a written request outlining the proposed changes, together with any related prints or drawings, must be submitted to this office for approval. If you have any questions, please contact me at the telephone number below.

Sincerely,

[Signature]

Joseph A. Sbaffoni  
Director  
Bureau of Mine Safety
May 28, 2013

Johnny Lee
MSA
1000 Cranberry Wood Drive
Cranberry Township, PA 16086

Re: ITEM: Personal Gas Detector
    MODEL NO.: Altair4X; SERIAL NO.: n/a; VOLTAGE: 5VDC; HP: n/a
    APSID NO.: 812479
    MODIFICATION OF APPROVAL NO. BFE 32-13

Dear Mr. Lee:

We have completed our evaluation of the equipment noted above, and approve its use in the bituminous underground coal mines of Pennsylvania. The information received will be filed. The equipment meets the legal requirements of the Pennsylvania Bituminous Coal Mine Act.

Pennsylvania approval number BFE 32-13 has been assigned to the equipment. This number must appear conspicuously on the outside of the subject equipment on a 1" x 1" rust-resistant metal plate, or any other Bureau acceptable material. The approval plate should read "Commonwealth of Pennsylvania" and "Approval No. BFE 32-13". The plate and lettering should be resistant to removal by abrasion.

If you want to make changes or alterations on this equipment, a written request outlining the proposed changes, together with any related prints or drawings, must be submitted to this office for approval. If you have any questions, please contact me at the below telephone number.

Sincerely,

[Signature]

Joseph A. Sbaffoni
Director
Bureau of Mine Safety
July 1, 2014

Johnny Lee
MSA
1000 Cranberry Woods Drive
Cranberry Township, PA 16066

Re: ITEM: PERSONAL GAS DETECTOR
MODEL NO.: ALTAIR 4X
APSID NO.: 846386
MODIFICATION OF APPROVAL NO. BFE 32-13
*Add Galaxy 2 calibration system and updated drawings*

Dear Mr. Lee:

We have completed our evaluation of the equipment noted above, and approve its use in the bituminous underground coal mines of Pennsylvania. The information received will be filed. The equipment meets the legal requirements of the Pennsylvania Bituminous Coal Mine Act.

Pennsylvania approval number BFE 32-13 has been assigned to the equipment. This number must appear conspicuously on the outside of the subject equipment on a 1" x 1" rust-resistant metal plate, or any other Bureau acceptable material. The approval plate should read "Commonwealth of Pennsylvania" and "Approval No. BFE 32-13". The plate and lettering should be resistant to removal by abrasion.

If you want to make changes or alterations on this equipment, a written request outlining the proposed changes, together with any related prints or drawings, must be submitted to this office for approval. If you have any questions, please contact me at the below telephone number.

Sincerely,

[Signature]
Joseph A. Sbaffoni
Director

Bureau of Mine Safety
Fayette County Health Center | 100 New Salem Road | Uniontown, PA 15401 | 724.439.7469 | www.depweb.state.pa.us
March 2, 2015

Johnny Lee
MSA 1
000 Cranberry Woods Drive
Cranberry Township, PA 16066

Re: ITEM: PERSONAL GAS DETECTOR  
MODEL NO.: ALTAR 4X  
APSID NO.: 863753  
MODIFICATION TO APPROVAL NO. BFE 32-13  
*Minor changes to original design*

Dear Mr. Lee:

We have completed our evaluation of the equipment noted above, and approve its use in all bituminous underground coal mines of Pennsylvania. The information received will be filed. The equipment meets the legal requirements of the Pennsylvania Bituminous Coal Mine Act.

Pennsylvania approval number BFE 32-13 has been assigned to the equipment. This number must appear conspicuously on the outside of the subject equipment on a 2" x 4" rust-resistant metal plate, or any other Bureau acceptable material. The approval plate should read "Commonwealth of Pennsylvania" and "Approval No. BFE 32-13". The plate and lettering should be resistant to removal by abrasion.

If you want to make changes or alterations on this equipment, a written request outlining the proposed changes, together with any related prints or drawings, must be submitted to this office for approval. If you have any questions, please contact me at the telephone number below.

Sincerely,

[Signature]

Joseph A. Sbarno
Director
May 22, 2015

Mr. Johnny Lee
MSA
1000 Cranberry Drive
Cranberry Township, PA 16066

Re: ITEM: Personal Gas Detector
    MODEL NO.: Altair 4X; VOLTAGE: n/a KVA: n/a HP: n/a
    APSID NO.: 870894
    MODIFICATION TO APPROVAL NO. BFE 32-13
*Minor changes in methods*

Dear Mr. Lee:

We have completed our evaluation of the equipment noted above, and approve its use in the bituminous underground coal mines of Pennsylvania. The information received will be filed. The equipment meets the legal requirements of the Pennsylvania Bituminous Coal Mine Act.

Pennsylvania approval number BFE 32-13 has been assigned to the equipment. This number must appear conspicuously on the outside of the subject equipment on a 2" x 4" rust-resistant metal plate, or any other Bureau acceptable material. The approval plate should read "Commonwealth of Pennsylvania" and "Approval No. BFE 32-13". The plate and lettering should be resistant to removal by abrasion.

If you want to make changes or alterations on this equipment, a written request outlining the proposed changes, together with any related prints or drawings, must be submitted to this office for approval. If you have any questions, please contact me at the below telephone number.

Sincerely,

[Signature]
Joseph A. Sbaugh
Director

Bureau of Mine Safety
Fayette County Health Center | 100 New Salem Road | Uniontown, PA 15401 | 724.439.7469 | www.depweb.state.pa.us
October 6, 2016

Mr. Craig Gestler
MSA Corporate Center
1000 Cranberry Woods Drive
Cranberry Township, Pa 16066

Re: ITEM: Gas Detector
MODEL NO.: Altair 4 X MSHA Detector; SERIAL NO.: n/a; VOLTAGE: n/a; HP: n/a
APSID NO.: 922250
MODIFICATION OF APPROVAL NO. BFE 32-13
*revised circuitry changes to the approved model*

Dear Mr. Gestler:

We have completed our evaluation of the equipment noted above, and approve its use in the bituminous underground coal mines of Pennsylvania. The information received will be filed. The equipment meets the legal requirements of the Pennsylvania Bituminous Coal Mine Act.

Pennsylvania approval number BFE 32-13 has been assigned to the equipment. This number must appear conspicuously on the outside of the subject equipment on a 2" x 4" rust-resistant metal plate, or any other Bureau acceptable material. The approval plate should read "Commonwealth of Pennsylvania" and "Approval No. BFE 32-13". The plate and lettering should be resistant to removal by abrasion.

If you want to make changes or alterations on this equipment, a written request outlining the proposed changes, together with any related prints or drawings, must be submitted to this office for approval. If you have any questions, please Jeff Kerch, Program Manager, at 724.404.3140.

Sincerely,

Colvin C. Carson
Director

Bureau of Mine Safety
131 Broadview Road | New Stanton, PA 15672 | 724.404.3139 | www.dep.pa.gov