5

SEP 14 1994 (date stamp)

ENGINEERING DATA TRANSMITTAL

1. EDT 608067

2. To: (Receiving Organization)	3. From: (Originating Organization)	4. Related EDT No.:
Core Sampling	Characterization Equipment	N/A
5. Proj./Prog./Dept./Div.:	**6. Cog. Engr.:**	**7. Purchase Order No.:**
Core Sampling Aux. Equipment	J.L. Smalley	404883

8. Originator Remarks:

ETN-94-0023-G
This Acceptance Test Procedure is transmitted for approval. The procedure was prepared by the Seller and will be performed at the Sellers location. It will show compliance with specification WHC-S-0251 Rev.0.

9. Equip./Component No.: N/A

10. System/Bldg./Facility: 200 General

11. Receiver Remarks:

12. Major Assm. Dwg. No.: N/A

13. Permit/Permit Application No.: N/A

14. Required Response Date: 9/9/94

15. DATA TRANSMITTED

(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	(F) Approval Designator	(G) Reason for Transmittal	(H) Originator Disposition	(I) Receiver Disposition
1	WHC-SD-WM-ATP-104	N/A	0	Breathing Air Trailer Acceptance Test Procedure	SQ	1	1	

16. KEY

Approval Designator (F)	Reason for Transmittal (G)	Disposition (H) & (I)
E, S, Q, D or N/A (see WHC-CM-3-5, Sec.12.7)	1. Approval 4. Review 2. Release 5. Post-Review 3. Information 6. Dist. (Receipt Acknow. Required)	1. Approved 4. Reviewed no/comment 2. Approved w/comment 5. Reviewed w/comment 3. Disapproved w/comment 6. Receipt acknowledged

17. SIGNATURE/DISTRIBUTION (See Approval Designator for required signatures)

(G) Reason	(H) Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN	(J) Name	(K) Signature	(L) Date	(M) MSIN	(G) Reason	(H) Disp.
1	1	Cog.Eng. J.L. Smalley	J.L. Smalley	9/13/94	R1-17	O.S.T.I (2)			28-07		
1	1	Cog. Mgr. R.J. Blanchard	J.L. Smalley FOR	9/13/94	R1-17						
1	1	QA J.J. Verderber		9/14/94	S1-57						
1	1	Safety O.M. Jaka	M.E. Burda for	9-14-94							
		Env. N/A									
1	1	Core Sampling Cog. A.P. Mousel	A.P. Mousel	9/14/94							
		Central Files			L8-04						

18.	19.	20.	21. DOE APPROVAL (if required)
AJ Kostelnik Signature of EDT Originator — Date: 9-6-94	AP Mousel Authorized Representative for Receiving Organization — Date: 9/14/94	RJ Blanchard Cognizant Manager — Date: 9/14/94 R.J. BLANCHARD	Ctrl. No. [ ] Approved [ ] Approved w/comments [ ] Disapproved w/comments

BD-7400-172-2 (04/94) GEF097

MASTER

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BD-7400-172-1 (07/91)

RELEASE AUTHORIZATION

Document Number:	WHC-SD-WM-ATP-104, REVISION 0
Document Title:	Breathing Air Trailer Acceptance Test Procedure
Release Date:	09/14/94

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This document was reviewed following the procedures described in WHC-CM-3-4 and is:

APPROVED FOR PUBLIC RELEASE

* * * * * * * * * * * * * *

WHC Information Release Administration Specialist:

Kara Broz — 09/14/94

(Signature) (Date)

SUPPORTING DOCUMENT

1. Total Pages 11

2. Title	3. Number	4. Rev No.
Breathing Air Trailer Acceptance Test Procedure	WHC-SD-WM-ATP-104	0

5. Key Words

ETN-94-0023-G, Core Sampling, Breathing Air, Specification WHC-S-0251, Trailer, American Bristol, Air Compressor, Purchase Order 404883, Core Sampling Auxiliary Equipment, Portable Breathing Air Supply

APPROVED FOR PUBLIC RELEASE
KMB 9/14/94

6. Author

Name: Alois J Kostelnik

Signature

Organization/Charge Code 7EA40/N457D

7. Abstract

This Acceptance Test Procedure (ATP) will document compliance with the requirements of WHC-S-0251 Rev.0 and ECNs 613530 and 606113. The equipment being tested is a Breathing Air Supply Trailer purchased as a Design and Fabrication procurement activity. The ATP was written by the Seller and will be performed by the Seller with representatives of the Westinghouse Hanford Company witnessing the test at the Seller's location.

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9. Impact Level SQ

10. RELEASE STAMP

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ACCEPTANCE TEST PROCEDURE

MOBILE BREATHING AIR TRAILER

MODEL 5014-0001

WRITTEN BY Bob Jacobson DATE 8/23/94
BOB JACOBSON
PRODUCT ENGINEER

APPROVED BY Charles Lamoreaux PE DATE 8/23/94
CHARLES LAMOREAUX
PRESIDENT

1.0 SCOPE

This test procedure is to verify that the American Bristol Industries, Inc., Model 5014-0001 low pressure Mobile Breathing Air Trailer, meets or exceeds the requirements of the Westinghouse Hanford specification. (WHC-S-0251)

2.0 SEQUENCE

ABI will complete the following tests in the order deemed best by ABI personnel.

3.0 VISUAL INSPECTION

Visually inspect the unit to verify that it complies with the requirements of the purchase specification. Record the pertinent data on the data sheets provided.

3.1 Visually inspect the unit for:

3.1.1 Damage.

3.1.2 Cleanliness; no weld spatter; no foreign materials.

3.1.3 Uniformity of finish: no bubbles, chips, scratches.

3.1.4 All wiring and plumbing secured in place.

3.1.5 All wiring undamaged, connections tight.

3.1.6 All wires tagged.

3.1.7 All major components tagged with manufacturers' nameplates.

3.1.8 ABI nameplate stamped & installed.

3.1.9 VIN number stamped on unit.

3.1.10 All ground wires properly connected.

3.1.11 Verify that lunette eye ID is 2.75 inches minimum.

4.0 OPERATIONAL INSPECTIONS

4.1 Break-in Inspections

4.1.1 Verify incoming power at the magnetic starter.

4.1.2 Verify proper compressor rotation before starting break-in procedures.

4.1.3 Operate each unit in accordance with the break-in schedule table on the data sheets. Record the start up current and the running current.

4.1.4 During break-in, carefully observe the unit for any evidence of excessive vibration, excessive heat, strange noises, odors, etc., loose components, interferences between components and leakages. Correct as required.

4.2 Leak Test

4.2.1 Upon completion of the break-in test, shut the system down with the rated pressure trapped in the system. Bubble test all fittings, joints, valve stems, burst discs, etc. for any evidence of leakage. Correct as required. (Working pressure 80-125 psig)

4.2.2 Attach hose and manifold to system and pressurize to working pressure. Bubble test all joints for any evidence of leakage. Correct as required.

4.3 Relief Valve Test

4.3.1 With the unit running, activate all relief valves to verify each valve will flow.

4.3.2 Verify each relief valve reseats and does not leak.

4.4 Condensate Drain Test

4.4.1 With the unit running, verify that there are no leaks in the automatic condensate drain system by immersing the drain tube in water and observe any leakage. Correct as required.

4.4.2 Record the time between dump cycles and the duration of the dump.

4.4.3 Allow the system to shut off automatically. Verify that the dump valves open and that the compressor continues to run in its cool down mode. Record the time of the cool down run.

4.4.4 Close the interstage and filter manual drain valves. Bring the system up to pressure and shut off. Observe for leakage by immersing the drain tube in water.

4.5 Compressor Operational Test

4.5.1 Measure compressor output per standard practice sheet or by use of a pressure gauge and a flow meter. Record the data.

4.5.2 Record the rotational speed of the compressor.

4.5.3 Record the temperature of the air receiver at its discharge while flowing air at rated pressure and flow.

4.5.4 Take an air sample in accordance with the sampling company's procedures and ship the sample for analysis.

4.5.5 Shut down the system and allow it to cool to room temperature. After it has cooled down, run it again for 5 minutes with the intercooler drains open to remove any additional condensation.

4.6 Monitor / Controller Operational Test

4.6.1 Verify that the Automatic start/stop function operates.

4.6.2 Verify that the Manual start/stop function operates.

4.6.3 Verify that the high temperature stop operates properly.

4.6.4 Verify that the low oil stop operates properly.

4.6.5 Verify that the high CO portion of the monitor operates in accordance with its manual. (Set at 10ppm and 25ppm)

4.6.6 Verify that the high dew point portion of the monitor operates in accordance with its manual.

4.6.7 Verify the low pressure sensor actuates the reserve air supply. (and there is adequate supply for 5 minutes.)

4.6.8 Verify that the audio/visual alarms function whenever any of the above safety features are actuated.

4.7 Filters, Dryer, and Chiller Operation

4.7.1 Verify that the filters have the correct elements installed.

4.7.2 Verify that the swing dryer has the correct chemicals installed and that it functions in accordance with its operating manual.

4.7.3 Verify that the chiller functions in accordance with its operating manual.

5.0 POST OPERATIONAL CHECKOUTS

5.1 Verify all tires are at recommended inflation pressure

5.2 Set the parking brake. Verify that the parking brakes hold by pushing / pulling the unit. The wheels should skid instead of rolling. Adjust as required.

5.3 Verify the surge brakes actuate by towing the unit and applying the brakes. The unit should not push the tow vehicle nor fish tail. Adjust as required.

5.4 Verify that the compressor oil level is full.

5.5 Verify that the surge brake system is full of brake fluid.

5.6 Record final hour meter reading.

5.7 Verify that all components are securely mounted.

5.8 Verify that the cable reel fully extends and retracts.

5.9 Verify that the main landing jack and leveling jacks extend and retract and that the leveling jacks pivot and lock out of the way.

5.10 Verify that all DOT lights are functional.

5.11 Verify that the brake lights, back up lights and turn signals are functional.

ACCEPTANCE TEST PROCEDURE WORK SHEET

DATE:_____

Order # _____ CUSTOMER: _____

Model # _____ Serial # _____

Configuration: _____

OPERATOR: INSPECTOR:

NO.	TEST DESCRIPTION		INITIALS
	COMPRESSOR	Make: _____ Model: _____	
	S/N: _____	CFM: _____ PSI: _____	
	MOTOR	Make: _____ Model: _____	
	S/N: _____	HP _____ RPM: _____	
	Volts: _____	Phase _____ Hz: _____	
	ENGINE	Make: _____ Model: _____	
	S/N: _____	HP _____ RPM: _____	
	DRYER	Make: _____ Model: _____	
	S/N: _____	CFM: _____ PSI: _____	
	CHILLER	Make: _____ Model: _____	
	S/N: _____	CFM: _____ PSI: _____	
	Volts: _____	Phase _____ Hz: _____	
	_____	Make: _____ Model: _____	
	S/N: _____	CFM: _____ PSI: _____	
	DRIVE SYSTEM		
	All belts tight?	Yes ☐ (1/64" per inch of span) _____	
	All pulleys aligned?	Yes ☐	
	FILTER SYSTEM	Model No _____	
		CFM: _____ PSI: _____	

Chamber No	1	2	3	4	5
S/N:					
Logged?	Yes ☐	Yes ☐	Yes ☐	Yes ☐	Yes ☐
Element p/n:					
Element type:					
Element sealed:	Yes ☐	Yes ☐	Yes ☐	Yes ☐	Yes ☐
Element installed:	Yes ☐	Yes ☐	Yes ☐	Yes ☐	Yes ☐
Chamber backed off:	Yes ☐	Yes ☐	Yes ☐	Yes ☐	Yes ☐
Burst disk PSI:					
Drain Valve Ops	OK ☐	OK ☐	OK ☐	OK ☐	OK ☐
ID Tag typed & on:	Yes ☐	Yes ☐	Yes ☐	Yes ☐	Yes ☐
Relief Valve Installed:	Yes ☐	Psi Setting: _____		Wired:	Yes ☐
Check Valve Installed:	Yes ☐				

INLET FILTER Installed: Yes ☐ Element Installed Yes ☐

STORAGE SYSTEM P/n _____ ASME ☐ DOT ☐ Qty _____

Psi _____ Size _____

S/N's:	#1	#2	#3	#4

Relief Valve Installed: Yes ☐ Psi Setting: _____ Qty _____

Psi Setting: _____ Wired: Yes ☐

Drain Valve Installed: Yes ☐ Qty _____

ACCEPTANCE TEST PROCEDURE WORK SHEET

DATE:_____

Order # _____ CUSTOMER: _____

Model # _____ Serial # _____

Configuration: _____

OPERATOR: INSPECTOR:

NO.	TEST DESCRIPTION	INITIALS
3.0.	VISUAL EXAMINATION	
3.1.1	No damage:	
3.1.2	Clean, no weld spatter,foreign material:	
3.1.3	Finish : Uniform, no bubbles, chips nor scratches	
3.1.4	Wiring & plumbing secured:	
3.1.5	No damage to wires, All connections tight & in place:	
3.1.6	All wires tagged	
3.1.7	All major components tagged with mfg'r's nameplates:	
3.1.8	ABI nameplate stamped & installed:	
3.1.9	VIN number stamped on unit No: _____	
3.1.10	All wires grounded:	
3.1.11	Lunette eye ID > 2.75 inches _____	
4.0.	OPERATIONAL INSPECTIONS AND TESTS	
4.1	Break In Inspections	
4.1.1	Voltage: *460(230)VAC _____ Current: _____	
4.1.2	Proper Rotation: (CCW)	
4.1.3	Operate each unit according to the following table and record start up and running current	

Motor	Engine	Speed	Load	Start Up Current	Running Current
30 Min		Rated	Low		
3-4 Hrs.		Rated	Rated		
	15-30 Min	Fast Idle	Min		
	1 Hr	Rated	Light-Med		
	2-3 Hrs	Rated	Rated		

4.1.4	Observe unit for:	Excessive heat _____
		Strange noises _____
		Strange odors _____
		Other _____
		Vibration _____
4.2	Leak Test	
4.2.1	No leaks in system	
4.2.2	No leaks in hoses	

		1	2	3	4	5	
4.3	Relief Valve Test						
4.3.1	Activate all relief valves						
4.3.2	All relief valves reseat						

4.4	Condensate Drain Test			
4.4.1	Does not leak during operation			
4.4.2	Time between dump cycles _____	Duration of dump	_____	
4.4.3	Veriy dumps open during Cool Down & Purge	_____ Time	_____	
4.4.4	Does not leak after shut off	_____	_____	

ACCEPTANCE TEST PROCEDURE WORK SHEET

DATE _____

Order # _____ CUSTOMER: _____

Model # _____ Serial # _____

Configuration: _____

OPERATOR: INSPECTOR:

NO.	TEST DESCRIPTION		INITIALS
4.5	Compressor Operational Test		
4.5.1	Measure Output	_____ minutes to fill a _____ cubic feet vessel to _____ psi	
		FAD = _____ SCFM @ _____ PSI	
4.5.2	Compressor	_____ RPM	
4.5.3	Temperature	_____ F	
4.5.4	Take Air Sample	_____ Results _____	
4.5.5	After cool down to room temp run for 5 minutes with drains open		
4.6	Monitor / Controller Operational Test		
4.6.1	Auto start / stop		
4.6.2	Manual start / stop		
4.6.3	High temperature stop		
4.6.4	Low oil stop		
4.6.5	Hi CO operation	10ppm _____ 25ppm _____	
4.6.6	Hi dew point operation		
4.6.7	Low air pressure sensor operation	and 5 minutes reserve air available.	
4.6.8	Audio / Visual alarm functions with all of the above		
4.7	Filters, Dryer and Chiller Operation		
4.7.1	Correct filter elements installed		
4.7.2	Chemical installed in swing dryer	_____ Operates properly _____	
4.7.3	Chiller operates properly		
5.0.	POST OPERATIONAL CHECKOUTS		
5.1	Tire pressure		
5.2	Parking brake functions properly		
5.3	Surge brake functions properly		
5.4	Compressor oil level	FULL _____	
5.5	Surge brake system oil level	FULL _____	
5.6	Hour Meter Reading	_____	
5.7	All components securely mounted. No loose bolts, nuts, pins, etc..		
5.8	Cable reel pays out and picks up cable		
5.9	Main landing jack extends & retracts		
	Leveling jacks extend, retract & pivot & lock out of the way		
5.10.	DOT lights are functional		
5.11	Brake lights, turn signals, & backup lights are functional		

I hereby certify that the above data is true and correct.

QC Inspector _____

Date _____

TEST EXCEPTIONS

Step #	Description of exception and resolution.

TEST COMPLETED BY:

PRINT NAME	COMPANY	SIGNATURE	DATE