



# DAILY TAILGATE SAFETY MEETING LOG

Date: 10-25-17

Client: USACE

Location: FORBES MISSILE

Job No.: 16-118

Meeting conducted by: Doug Murphy

**Details of safety meeting presented (use back of sheet if necessary):**

Level of Protection: MWD D

Contaminants: TCE, DCE, VC

Physical Hazards: SLIPS TRIPS & FALLS HEAVY Equipment

Operations Pouch Pumps

Other:

P.P.E pump operation Fall Hazards confined space procedures, respirators, Ladder safety.

**Are any permits/clearances required on this day?:**

**ATTENDEES:**

Printed Name:

Doug Murphy

Tyler Wright

Andy Stanton

Nyle Botelle

Asa id

Cale Bergstrom

Josh Phillips

Signature:

Doug Murphy

Tyler Wright

Andy Stanton

Nyle Botelle

Asa id

Cale Bergstrom

Josh Phillips





Arrowhead Contracting, Inc.

Sheet 1 of 2

Initial/Follow-up Inspection Checklist				
<b>Definable Feature of Work (DFW):</b> <i>#2 Power Washing of Sumps TRAPS, AND TUNNELS</i>	<b>Date:</b> <i>10-25-17</i>	<b>Subcontract No:</b>		
	<b>Time:</b> <i>0930</i>			
<b>Inspection Type (circle one):</b> <b>Initial</b> <b>Follow-up</b>				
Item	Yes	No	NA	Remarks
Is the work being performed in accordance with the applicable section(s) of the subcontract specifications?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the work being performed in accordance with approved design drawings and specifications?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the work being performed in accordance with approved work plans (e.g. CQCP, EPP, SAMP/QAPP)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the work being performed cautiously and with acceptable levels of workmanship?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is equipment being operated properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the work being performed using proper methods and procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have any defective or damaged materials been identified?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are results of applicable tests, samples, and/or measurements within acceptable levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is the work being performed in a safe manner and in accordance with the SSHP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have pertinent records been completed or collected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have any nonconformances been identified, corrected, and re-inspected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Notes:</b>				



Arrowhead Contracting, Inc.

Sheet 2 of 2

Initial/Follow-up Inspection Checklist				
<b>Definable Feature of Work (DFW):</b> <i>H3 Removal TESTING AND DISPOSAL</i>	<b>Date:</b> <i>10-25-17</i>	<b>Subcontract No:</b>		
	<b>Time:</b> <i>0930</i>			
<b>InspectionType (circle one):</b> <b>Initial</b> <b>Follow-up</b>				
Item	Yes	No	NA	Remarks
Is the work being performed in accordance with the applicable section(s) of the subcontract specifications?	✓			
Is the work being performed in accordance with approved design drawings and specifications?	✓			
Is the work being performed in accordance with approved work plans (e.g. CQCP, EPP, SAMP/QAPP)?	✓			
Is the work being performed cautiously and with acceptable levels of workmanship?	✓			
Is equipment being operated properly?	✓			
Is the work being performed using proper methods and procedures?	✓			
Have any defective or damaged materials been identified?			✓	
Are results of applicable tests, samples, and/or measurements within acceptable levels?	✓			<i>collected sample # SS-W-08 &amp; SSW-09</i>
Is the work being performed in a safe manner and in accordance with the SSHP?	✓			
Have pertinent records been completed or collected?	✓			
Have any nonconformances been identified, corrected, and re-inspected?	✓			
<b>Notes:</b> <i>collected TEST samples from TANK #5 (ID SS-W-08) and from TANK #6 (ID SS-W-09). SENT samples for TEST</i>				



# HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>ACE</i>	Contract No.: Subcontract No.
Equipment Description: <i>Telescopic Handler</i>	Model No.(s): <i>GENIE</i>	Serial No.(s): <i>10673495</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems			✓
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher			✓
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

*[Signature]*  
Signature of Certified Operator

*ACE*  
Company

*10-25-17*  
Date



# HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>ACF</i>	Contract No.: Subcontract No.
Equipment Description: <i>TAKEZCHI</i>	Model No.(s): <i>JL8</i>	Serial No.(s): <i>10659850</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems			✓
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher			✓
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

*[Signature]*  
Signature of Certified Operator

*ACF*  
Company

*10-25-17*  
Date



# HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORCES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>HmR1</i>	Contract No.: Subcontract No.
Equipment Description: <i>Peterbilt vac truck</i>	Model No.(s): <i>T260</i>	Serial No.(s): <i>T260</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	/		
2. Lubrication, engine oil	/		
3. Brakes	/		
4. Tires, tracks	/		
5. Air systems	/		
6. Horn	/		
7. Safety guards	/		
8. Mirrors	/		
9. Steering mechanism	/		
10. Cooling water	/		
11. Operation controls	/		
12. Lights and reflectors	/		
13. Windshield wipers, defroster	/		
14. Backup alarm	/		
15. Fire extinguisher	/		
16. Seat belts	/		
17. Filters (air, oil, fuel, hydraulic)	/		/
18. Lift arm and bucket	/		
19. Grab handles	/		
20. Steps (tread, no slip hazards)	/		
21. Parking brake	/		
22. General condition	/		

Remarks:

Certification

*Andy Blanton*

Signature of Certified Operator

*Haz-mat*

Company

*10/25/17*

Date



# HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>HMB</i>	Contract No.: Subcontract No.
Equipment Description: <i>GUZZIER <sup>STAPLING</sup></i>	Model No.(s): <i>T-200</i>	Serial No.(s): <i>T-200</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	/		
2. Lubrication, engine oil	/		
3. Brakes	/		
4. Tires, tracks	/		
5. Air systems	/		
6. Horn	/		
7. Safety guards	/		
8. Mirrors	/		
9. Steering mechanism	/		
10. Cooling water	/		
11. Operation controls	/		
12. Lights and reflectors	/		
13. Windshield wipers, defroster	/		
14. Backup alarm	/		
15. Fire extinguisher	/		
16. Seat belts	/		
17. Filters (air, oil, fuel, hydraulic)	/		
18. Lift arm and bucket	/		/
19. Grab handles	/		
20. Steps (tread, no slip hazards)	/		
21. Parking brake	/		
22. General condition	/		

Remarks:

Certification

*Andy Bente* \_\_\_\_\_ *HAZ-mat* \_\_\_\_\_ *10/25/17* \_\_\_\_\_  
 Signature of Certified Operator Company Date



TestAmerica Denver  
 4955 Yarrow Street  
 Arvada, CO 80002  
 Phone (303) 736-0100 Fax (303) 431-7171

# Chain of Custody Record



<b>Client Information</b>				Sampler: Rothmeyer, Stephanie K	Lab PV: Rothmeyer, Stephanie K	Carrier Tracking No(s):	COC No:																																						
Client Contact: Mr. Josh Phillips				Phone:	E-Mail: stephanie.rothmeyer@testamericainc.com		Page: 1 of 1																																						
Company: Arrowhead Contracting					<b>Analysis Requested</b>			Job #:																																					
Address: 10981 Eicher Drive		Due Date Requested: 10/26/17		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Field Filtered Sample (Yes or No)</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Perform MS/MSD (Yes or No)</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">az60B_D005 - VOCs - Water</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">az60B_D005 - VOCs - Soil</td> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Percent Moisture</td> <td colspan="4"></td> </tr> </table>				Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	az60B_D005 - VOCs - Water	az60B_D005 - VOCs - Soil	Percent Moisture					<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2"><b>Preservation Codes:</b></td> </tr> <tr> <td>A - HCL</td> <td>M - Hexane</td> </tr> <tr> <td>B - NaOH</td> <td>N - None</td> </tr> <tr> <td>C - Zn Acetate</td> <td>O - AsNaO2</td> </tr> <tr> <td>D - Nitric Acid</td> <td>P - Na2O4S</td> </tr> <tr> <td>E - NaHSO4</td> <td>Q - Na2SO3</td> </tr> <tr> <td>F - MeOH</td> <td>R - Na2S2O3</td> </tr> <tr> <td>G - Amchlor</td> <td>S - H2SO4</td> </tr> <tr> <td>H - Ascorbic Acid</td> <td>T - TSP Dodecahydrate</td> </tr> <tr> <td>I - Ice</td> <td>U - Acetone</td> </tr> <tr> <td>J - DI Water</td> <td>V - MCAA</td> </tr> <tr> <td>K - EDTA</td> <td>W - pH 4-5</td> </tr> <tr> <td>L - EDA</td> <td>Z - other (specify)</td> </tr> <tr> <td colspan="2">Other:</td> </tr> </table>	<b>Preservation Codes:</b>		A - HCL	M - Hexane	B - NaOH	N - None	C - Zn Acetate	O - AsNaO2	D - Nitric Acid	P - Na2O4S	E - NaHSO4	Q - Na2SO3	F - MeOH	R - Na2S2O3	G - Amchlor	S - H2SO4	H - Ascorbic Acid	T - TSP Dodecahydrate	I - Ice	U - Acetone	J - DI Water	V - MCAA	K - EDTA	W - pH 4-5	L - EDA	Z - other (specify)	Other:	
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	az60B_D005 - VOCs - Water	az60B_D005 - VOCs - Soil					Percent Moisture																																					
<b>Preservation Codes:</b>																																													
A - HCL	M - Hexane																																												
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K - EDTA	W - pH 4-5																																												
L - EDA	Z - other (specify)																																												
Other:																																													
City: Lenexa		TAT Requested (days): 24hr TAT																																											
State, Zip: KS, 66219		PO #: 16-126																																											
Phone: (515)961-8000		WO #:																																											
Email: jphillips@arrowhead-usa.com		Project #: 28017409																																											
Project Name: Atlas Missile Site Lyon County, KS		SSOW#:																																											
Site:																																													
<b>Sample Identification</b>				Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=TISSUE, A=Air)	<b>Special Instructions/Note:</b>																																							
Sample Date		Sample Time				A J/F N																																							
Preservation Code:																																													
55-W-08		10-25-17 1400				3	24hr TAT																																						
55-W-09		10-25-17 1400				3	24hr TAT																																						
TRIP BLANK						1																																							
<b>Possible Hazard Identification</b>				<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>																																									
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological				<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																																									
Deliverable Requested: I, II, III, IV, Other (specify)				Special Instructions/QC Requirements:																																									
Empty Kit Relinquished by:			Date:			Time:			Method of Shipment:																																				
Relinquished by: Doug Murphy			Date/Time: 10-25-17 5:15			Company: ACE			Received by:			Date/Time:																																	
Relinquished by:			Date/Time:			Company:			Received by:			Date/Time:																																	
Relinquished by:			Date/Time:			Company:			Received by:			Date/Time:																																	
Custody Seals Intact: △ Yes △ No		Custody Seal No.:				Cooler Temperature(s) °C and Other Remarks:																																							



## *Daily Quality Control Report*

REPORT NO.   9  

CONTRACT NO.   W912DQ-16-D-3006 Task Order 0002  

Date:   10/26/17  

LOCATION OF WORK:   Former Forbes Atlas Missile S-5, Lyon County, KS  

DESCRIPTION:   Interim Remedial Action.  

**WEATHER CLASSIFICATION:**

No interruptions of any kind from weather conditions occurring on this or previous shifts	Classification:	
Weather occurred during this shift that caused a complete stoppage of all work	Class <u>  A  </u>	
Weather occurred during this shift that caused a partial stoppage of work	Temperature (°F): 71	
Weather overhead excellent or suitable during shift. Work completely stopped due to results of previous adverse weather	Max: 71°F Min: 43°F	
Weather overhead excellent or suitable during shift but work partially stopped due to previous adverse manner	Precipitation:	
Explain:	Inches <u>  0.00  </u>	

**1. Work Performed Today by Kemron/Arrowhead JV:**

Contractors arrived on site at 0800. Upon arrival Arrowhead conducted the Daily Tailgate Safety Meeting with all JV staff and subcontract personnel. Inspection of equipment was completed prior to beginning operations. Refer to the attached meeting and inspections logs for additional detail. Contractors began cleaning flame pit, continued pumping water from main sump pit, continued to filter water from settling tank to treated holding tanks, and conducted maintenance on GAC treatment system (changed bag filter elements).

HMR conducted continuous air quality monitoring while cleaning out Flame Pit. No air contaminants were detected throughout the day while working in the Flame Pit.

Arrowhead received laboratory results from samples submitted for VOC analysis of contents of finished water in holding tanks #2 (sample ID S5-W-07) tank #3 (sample ID S5-W-05) and tank #4 (sample ID S5-W-06). Results indicated no Contaminant of Concern above detection limits. Data was forwarded to USACE for review. Upon receipt of approval from USACE in coordination with KDHE, Arrowhead discharged 21,000 gallons from Tank #2 to the outfall area. Tank #3 and Tank #4 will be released on 10/27/17. Tank #3 and Tank #4 total 42,000 gallons.

Throughout the day continued operation of the GAC treatment system. At the conclusion of work approximately 17,000 gallons had been processed with a cumulative total of approximately 11,000 gallons treated. The total volume of water removed from the various basins is approximately 201,000 gallons.

**2. Work Performed Today by Subcontractors:**

Began Cleaning Flame Pit.

Continued to pump water from main sump pit. No significant change in water level has been noticed. Water level dropped approximately 1ft during the day.

**3. Type and Results of Inspection: (Include Satisfactory Work Completed or Deficiencies with Action to be taken).**

Initial inspections for Definable Features of Work #2 and #3 were conducted, see attached documents for results of inspections. No deficiencies were noted or found.

**4. List Type and Location of Tests Performed and Results of These Tests:**

Arrowhead received analytical sample results for water sample S5-W-05 and S5-W-06 collected on 10/23 and is associated with 42,000 gallons of treated water held in storage tank #3 and storage tank #4, respectively. Received analytical sample results for water sample S5-W-07 collected on 10/24 and is associated with 21,000 gallons of treated water held in storage tank #2. Please refer to the attached laboratory report detection summary. The completed data package will be transmitted to USACE under separate submittal.

**5. Verbal Instructions Received:**

USACE in coordination with KDHE approved surface discharge of 63,000 gallons of treated water from tank #2, tank #3, and tank #4. 21,000 gallons of water was released from tank #2, remaining 42,000 gallons from tank #3 and tank #4 will be discharged 10/27/17.

**6. Corrective Actions Proposed/Taken:**

None.

**7. Remarks:**

None.

**8. Safety Violations Observed:**

None.

**9. CERTIFICATION:** I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications, except as may be noted above.

*D. Rank*

---

Site Superintendent / Quality Control Officer



Cleaning Flame Pit.



View from inside of Flame pit.



# DAILY TAILGATE SAFETY MEETING LOG

Date: 10/26/17

Client: USACE

Location: FORBES MISSILE SITE

Job No.: 16-118

Meeting conducted by: Doug Murphy

**Details of safety meeting presented (use back of sheet if necessary):**

Level of Protection: MO P D.

Contaminants: TCE, DEC, VC

Physical Hazards: SLIPS, TRIPS, and Falls HEAVY Equipment

operations finch points

Other: \_\_\_\_\_

P.P.R. pump operations, Fall hazards and protection

Confined Space resources, respirators, Ladder Safety

**Are any permits/clearances required on this day?:**

**ATTENDEES:**

Printed Name:

Signature:

Doug Murphy

[Signature]

Tyler Wright

[Signature]

Andy Blanton

[Signature]

DALEYARBROUGH

[Signature]

Kyle Botello

[Signature]

Cale Bergstrom

[Signature]

Jason L'Ecyer

[Signature]





Forbes Field Former Atlas Missile Site S-5  
Sump Dewatering Pumping Summary

Tank	Date Filled	Quantity Pumped (gallons)	Sample Date	Data Received	Sample ID	Date Released	Treated Volume Released (gallons)	Notes:
#2	16-Oct	21,000	16-Oct	18-Oct	S5-W-01	18-Oct	21,000	
	19-Oct	21,000	19-Oct	23-Oct	S5-W-04	23-Oct	21,000	
	24-Oct	21,000	24-Oct	26-Oct	S5-W-07	26-Oct	21,000	
#3	17-Oct	21,000	17-Oct	19-Oct	S5-W-02	20-Oct	21,000	
	20-Oct	21,000	23-Oct	26-Oct	S5-W-05			
#4	17-Oct	21,000	17-Oct	19-Oct	S5-W-03	19-Oct	21,000	
	23-Oct	21,000	23-Oct	26-Oct	S5-W-06			
#5	25-Oct	21,000	25-Oct		S5-W-08			
#6	25-Oct	15,000	25-Oct		S5-W-09			

**Total Volume Discharged (gallons) 105,000**

Note: Tank #1 designated as untreated water settling basin

18,000 gallons currently in tank

Volume treated 183,000 gallons  
Volume Pumped if tank #1 is full 204,000 gallons

Volume pumped through COB 10/25 201,000



# Detection Summary

Client: Arrowhead Contracting  
Project/Site: Atlas Missile Site Lyon County, KS

TestAmerica Job ID: 280-102726-1

## Client Sample ID: S5-W-07

## Lab Sample ID: 280-102726-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.33	J	1.0	0.15	ug/L	1	1	8260B	Total/NA
cis-1,2-Dichloroethene	0.33	J	1.0	0.15	ug/L	1	1	8260B	Total/NA
Trichloroethene	0.43	J	1.0	0.16	ug/L	1	1	8260B	Total/NA

## Client Sample ID: TRIP BLANK

## Lab Sample ID: 280-102726-2

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Denver



# Detection Summary

Client: Arrowhead Contracting  
Project/Site: Atlas Missile Site Lyon County, KS

TestAmerica Job ID: 280-102678-1

## Client Sample ID: S5-W-05

Lab Sample ID: 280-102678-1

No Detections.

## Client Sample ID: S5-W-06

Lab Sample ID: 280-102678-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	1.1	J	2.0	0.30	ug/L	1		8260B	Total/NA

## Client Sample ID: TRIP BLANK

Lab Sample ID: 280-102678-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.34	J	5.0	0.32	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Denver





Arrowhead Contracting, Inc.

Sheet 2 of 2

Initial/Follow-up Inspection Checklist				
<b>Definable Feature of Work (DFW):</b> H3 REMOVAL, TESTING AND DISPOSAL	Date: 10/26/17		Subcontract No:	
	Time: 0900			
<b>Inspection Type (circle one):</b> Initial    Follow-up				
Item	Yes	No	NA	Remarks
Is the work being performed in accordance with the applicable section(s) of the subcontract specifications?	<input checked="" type="checkbox"/>			
Is the work being performed in accordance with approved design drawings and specifications?	<input checked="" type="checkbox"/>			
Is the work being performed in accordance with approved work plans (e.g. CQCP, EPP, SAMP/QAPP)?	<input checked="" type="checkbox"/>			
Is the work being performed cautiously and with acceptable levels of workmanship?	<input checked="" type="checkbox"/>			
Is equipment being operated properly?	<input checked="" type="checkbox"/>			
Is the work being performed using proper methods and procedures?	<input checked="" type="checkbox"/>			
Have any defective or damaged materials been identified?		<input checked="" type="checkbox"/>		
Are results of applicable tests, samples, and/or measurements within acceptable levels?	<input checked="" type="checkbox"/>			Received results from TANK #2, TANK #3, TANK #4
Is the work being performed in a safe manner and in accordance with the SSHP?	<input checked="" type="checkbox"/>			
Have pertinent records been completed or collected?	<input checked="" type="checkbox"/>			
Have any nonconformances been identified, corrected, and re-inspected?	<input checked="" type="checkbox"/>			
<b>Notes:</b> Received results for samples ID SS-W-05, SS-W-06, and SS-W-07. USACE approved discharge of 63,000 gallons upon receipt of favorable test results.				



Arrowhead Contracting, Inc.

Sheet 1 of 2

**Initial/Follow-up Inspection Checklist**

**Definable Feature of Work (DFW):**

H2 Power washing of Sumps, TRAPS,  
AND TUNNELS

Date: 10/26/17

Subcontract No:

Time: 0930

**Inspection Type (circle one):**      Initial      Follow-up

Item	Yes	No	NA	Remarks
Is the work being performed in accordance with the applicable section(s) of the subcontract specifications?	✓			
Is the work being performed in accordance with approved design drawings and specifications?	✓			
Is the work being performed in accordance with approved work plans (e.g. CQCP, EPP, SAMP/QAPP)?	✓			
Is the work being performed cautiously and with acceptable levels of workmanship?	✓			
Is equipment being operated properly?	✓			
Is the work being performed using proper methods and procedures?	✓			
Have any defective or damaged materials been identified?			✓	
Are results of applicable tests, samples, and/or measurements within acceptable levels?				
Is the work being performed in a safe manner and in accordance with the SSHP?	✓			
Have pertinent records been completed or collected?	✓			
Have any nonconformances been identified, corrected, and re-inspected?	✓			

Notes:



## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>ACE</i>	Contract No.: Subcontract No.
Equipment Description: <i>Telescopic HANDLER</i>	Model No.(s): <i>GENIE</i>	Serial No.(s): <i>106 73 495</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems			✓
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher			✓
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

 _____ Signature of Certified Operator	<i>ACE</i> _____ Company	<i>10-26-17</i> _____ Date
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## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>ACE</i>	Contract No.: Subcontract No.
Equipment Description: <i>TAKEZCHZ</i>	Model No.(s): <i>JL8</i>	Serial No.(s): <i>10659850</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems			✓
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher			✓
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

\_\_\_\_\_  
 Signature of Certified Operator

*ACE*  
 \_\_\_\_\_  
 Company

*10-25-17*  
 \_\_\_\_\_  
 Date



# HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name:	Project Number:	Client:
Project:	Contractor:	Contract No.: Subcontract No.
Equipment Description: <i>Peterbilt Vac Truck</i>	Model No.(s): <i>PB348</i>	Serial No.(s): <i>T260</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	/		
2. Lubrication, engine oil	/		
3. Brakes	/		
4. Tires, tracks	/		
5. Air systems	/		
6. Horn	/		
7. Safety guards	/		
8. Mirrors	/		
9. Steering mechanism	/		
10. Cooling water	/		
11. Operation controls	/		
12. Lights and reflectors	/		
13. Windshield wipers, defroster	/		
14. Backup alarm	/		
15. Fire extinguisher	/		
16. Seat belts	/		
17. Filters (air, oil, fuel, hydraulic)	/		
18. Lift arm and bucket	/		/
19. Grab handles	/		
20. Steps (tread, no slip hazards)	/		
21. Parking brake	/		
22. General condition	/		

Remarks:

Certification

*[Signature]*  
Signature of Certified Operator

*HIMEI*  
Company

*10-26-17*  
Date



## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name:	Project Number:	Client:
Project:	Contractor:	Contract No.: Subcontract No.
Equipment Description: <i>Starling Guzzles</i>	Model No.(s): <i>T 200</i>	Serial No.(s): <i>T 200</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems	✓		
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher	✓		
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		/
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

  
 \_\_\_\_\_  
 Signature of Certified Operator

*HMRI*  
 \_\_\_\_\_  
 Company

*10-26-17*  
 \_\_\_\_\_  
 Date





## *Daily Quality Control Report*

REPORT NO.   10  

CONTRACT NO.   W912DQ-16-D-3006 Task Order 0002  

Date:   10/27/17  

LOCATION OF WORK:   Former Forbes Atlas Missile S-5, Lyon County, KS  

DESCRIPTION:   Interim Remedial Action.  

**WEATHER CLASSIFICATION:**

No interruptions of any kind from weather conditions occurring on this or previous shifts	Classification:	
Weather occurred during this shift that caused a complete stoppage of all work	Class <u>  A  </u>	
Weather occurred during this shift that caused a partial stoppage of work	Temperature (°F): <u>  63  </u>	
Weather overhead excellent or suitable during shift. Work completely stopped due to results of previous adverse weather	Max: <u>  63°F  </u> Min: <u>  27°F  </u>	
Weather overhead excellent or suitable during shift but work partially stopped due to previous adverse manner	Precipitation:	
Explain:	Inches <u>  0.00  </u>	

**1. Work Performed Today by Kemron/Arrowhead JV:**

Contractors arrived on site at 0800. Upon arrival Arrowhead conducted the Daily Tailgate Safety Meeting with all JV staff and subcontract personnel. Inspection of equipment was completed prior to beginning operations. Refer to the attached meeting and inspections logs for additional detail. Contractors continued cleaning the flame pit, continued pumping water from main sump pit, continued to filter water from settling tank to treated holding tanks, and conducted maintenance on GAC treatment system (changed bag filter elements).

HMR conducted continuous air quality monitoring while cleaning out Flame Pit. No air contaminants were detected throughout the day while working in the Flame Pit. HMR deployed additional dumpster to remove debris from Flame Pit.

During the cleanup of Flame Pit the contractor (HMR) found a loaded weapon in the bottom of the

pit. The weapon was unloaded and Arrowhead notified USACE. After consulting with USACE Arrowhead contacted the Lyons county sheriff's department. A deputy was dispatched to the work area and the weapon was removed. The Deputy (Rodriguez) collected information from contractors and the land owner to conduct a full report.

Arrowhead received laboratory results from samples submitted for VOC analysis of contents of finished water in holding tanks #5 (sample ID S5-W-08) and tank #6 (sample ID S5-W-09). Data was forwarded to USACE for review. Upon receipt of approval from USACE in coordination with KDHE, Arrowhead discharged 42,000 gallons of water from tank #3 and tank #4 to the outfall area.

Throughout the day continued operation of the GAC treatment system. At the conclusion of work approximately 23,000 gallons had been processed with a cumulative total of approximately 207,000 gallons treated. The total volume of water removed from the various basins is approximately 210,000 gallons. Refer to attached spreadsheet for updated information on water collected and discharged.

**2. Work Performed Today by Subcontractors:**

Continued cleaning Flame Pit.

Continued to pump water from main sump pit. No significant change in water level has been noticed. Water level dropped approximately 2ft during the day.

**3. Type and Results of Inspection: (Include Satisfactory Work Completed or Deficiencies with Action to be taken).**

Initial inspections for Definable Features of Work #2 and #3 were conducted, see attached documents for results of inspections. No deficiencies were noted or found.

**4. List Type and Location of Tests Performed and Results of These Tests:**

Arrowhead received analytical sample results for water sample S5-W-08 and S5-W-09 collected on 10/25 and is associated with 42,000 gallons of treated water held in storage tank #5 and storage tank #6, respectively. Please refer to the attached laboratory report detection summary. The completed data package will be transmitted to USACE under separate submittal.

**5. Verbal Instructions Received:**

None.

**6. Corrective Actions Proposed/Taken:**

None.

**7. Remarks:**

None.

**8. Safety Violations Observed:**

None.

**9. CERTIFICATION:** I certify that the above report is complete and correct and that I, or my

authorized representative, have inspected all work performed this day by the contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications, except as may be noted above.

D. J. Runk

---

Site Superintendent / Quality Control Officer



Debris from bottom of Flame Pit. Removed and cleaned.



Removed debris from back side of Flame Pit.



Cleaning back side of Flame Pit.



Removing debris from Flame Pit.



Forbes Field Former Atlas Missile Site S-5  
Sump Dewatering Pumping Summary

Tank	Date Filled	Quantity Pumped (gallons)	Sample Date	Data Received	Sample ID	Date Released	Treated Volume Released (gallons)	Notes:
#2	16-Oct	21,000	16-Oct	18-Oct	S5-W-01	18-Oct	21,000	
	19-Oct	21,000	19-Oct	23-Oct	S5-W-04	23-Oct	21,000	
	24-Oct	21,000	24-Oct	26-Oct	S5-W-07	26-Oct	21,000	
	27-Oct	18,000						
#3	17-Oct	21,000	17-Oct	19-Oct	S5-W-02	20-Oct	21,000	
	20-Oct	21,000	23-Oct	26-Oct	S5-W-05			
#4	17-Oct	21,000	17-Oct	19-Oct	S5-W-03	19-Oct	21,000	
	23-Oct	21,000	23-Oct	26-Oct	S5-W-06			
#5	25-Oct	21,000	25-Oct		S5-W-08			
#6	25-Oct	21,000	25-Oct		S5-W-09			

**Total Volume Discharged (gallons)**

**105,000**

Note: Tank #1 designated as untreated water settling basin

3,000 gallons currently in tank

Volume treated 207,000 gallons  
Volume Pumped if tank #1 is full 228,000 gallons

Volume pumped through COB 10/27 210,000

# Detection Summary

Client: Arrowhead Contracting  
Project/Site: Atlas Missile Site Lyon County, KS

TestAmerica Job ID: 280-102816-1

## Client Sample ID: S5-W-08

## Lab Sample ID: 280-102816-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.23	J	1.0	0.15	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.23	J	1.0	0.15	ug/L	1		8260B	Total/NA
o-Xylene	0.26	J	1.0	0.19	ug/L	1		8260B	Total/NA
Toluene	0.19	J	1.0	0.17	ug/L	1		8260B	Total/NA
Trichloroethene	0.26	J	1.0	0.16	ug/L	1		8260B	Total/NA

## Client Sample ID: S5-W-09

## Lab Sample ID: 280-102816-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethene, Total	0.22	J	1.0	0.15	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.22	J	1.0	0.15	ug/L	1		8260B	Total/NA
o-Xylene	0.24	J	1.0	0.19	ug/L	1		8260B	Total/NA
Trichloroethene	0.21	J	1.0	0.16	ug/L	1		8260B	Total/NA

## Client Sample ID: TRIP BLANK

## Lab Sample ID: 280-102816-3

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Denver



# DAILY TAILGATE SAFETY MEETING LOG

Date: 10/27/17

Client: USACE

Location: FORBES MISSILE SITE

Job No.: 16-118

Meeting conducted by: Doug Murphy

**Details of safety meeting presented (use back of sheet if necessary):**

Level of Protection: MOD D

Contaminants: TCE, PCE, VC

Physical Hazards: SLIPS TRIPS & FALLS HEAVY Equipment operations

Pinch Points

Other:

P.P.E. Pump operations, Fall hazards and protection confined SPACE procedures, Respirators, Ladder Safety

**Are any permits/clearances required on this day?:**

**ATTENDEES:**

Printed Name:

Signature:

Doug Murphy

Kyle Costello

Andy Blanton

Taylor W. Gagnier

Seth Schlesiener

Taylor Wright

Tyler Wright

DALE YARBROUGH

Robert Brocker

Cate Bergstrom

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]

[Signature]







Arrowhead Contracting, Inc.

Sheet 1 of 2

<b>Initial/Follow-up Inspection Checklist</b>				
<b>Definable Feature of Work (DFW):</b> <i># 2 power washing of Sumps, traps and Trunks</i>	<b>Date:</b> <i>10/27/17</i>	<b>Subcontract No:</b>		
	<b>Time:</b> <i>0930</i>			
<b>Inspection Type (circle one):</b> <b>Initial</b> <b>Follow-up</b>				
Item	Yes	No	NA	Remarks
Is the work being performed in accordance with the applicable section(s) of the subcontract specifications?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the work being performed in accordance with approved design drawings and specifications?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the work being performed in accordance with approved work plans (e.g. CQCP, EPP, SAMP/QAPP)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the work being performed cautiously and with acceptable levels of workmanship?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is equipment being operated properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the work being performed using proper methods and procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have any defective or damaged materials been identified?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Are results of applicable tests, samples, and/or measurements within acceptable levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Is the work being performed in a safe manner and in accordance with the SSHP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have pertinent records been completed or collected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have any nonconformances been identified, corrected, and re-inspected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Notes:</b>    				



Arrowhead Contracting, Inc.

Sheet 2 of 2

Initial/Follow-up Inspection Checklist				
Definable Feature of Work (DFW): #3 Removal, disposal and testing		Date: 10/27/17	Subcontract No:	
		Time: 0930		
Inspection Type (circle one):    Initial    Follow-up				
Item	Yes	No	NA	Remarks
Is the work being performed in accordance with the applicable section(s) of the subcontract specifications?	✓			
Is the work being performed in accordance with approved design drawings and specifications?	✓			
Is the work being performed in accordance with approved work plans (e.g. CQCP, EPP, SAMP/QAPP)?	✓			
Is the work being performed cautiously and with acceptable levels of workmanship?	✓			
Is equipment being operated properly?	✓			
Is the work being performed using proper methods and procedures?	✓			
Have any defective or damaged materials been identified?		✓		
Are results of applicable tests, samples, and/or measurements within acceptable levels?	✓			Received results for sample SS-W-08 and SS-W-09
Is the work being performed in a safe manner and in accordance with the SSHP?	✓			
Have pertinent records been completed or collected?	✓			
Have any nonconformances been identified, corrected, and re-inspected?	✓			
Notes: Received results for samples SS-W-08 and SS-W-09 for Tanks #5 and #6. Results were sent to USACE for approval of discharge.				



# HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>ACE</i>	Contract No.: Subcontract No.
Equipment Description:	Model No.(s):	Serial No.(s):

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems			✓
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher			✓
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

*[Signature]*

Signature of Certified Operator

*ACE*

Company

*10/27/17*

Date



## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USA CE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>ACE</i>	Contract No.: Subcontract No.
Equipment Description: <i>telescopic handler</i>	Model No.(s): <i>Genie</i>	Serial No.(s):

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems			✓
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher			✓
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

*[Signature]*  
Signature of Certified Operator

*ACE*  
Company

*10/27/17*  
Date



## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>HMR</i>	Contract No.: Subcontract No.
Equipment Description: <i>Sterling Guzzler</i>	Model No.(s): <i>T200</i>	Serial No.(s): <i>T200</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems	✓		
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher	✓		
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	/		✓
19. Grab handles	/		
20. Steps (tread, no slip hazards)	/		
21. Parking brake	/		
22. General condition	/		

Remarks:

Certification

*[Signature]*  
\_\_\_\_\_  
Signature of Certified Operator

*HMR*  
\_\_\_\_\_  
Company

*10-27-17*  
\_\_\_\_\_  
Date



## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>76-118</i>	Client: <i>USACE</i>
Project: <i>APLAS MISSILE</i>	Contractor: <i>FINAR</i>	Contract No.: Subcontract No.
Equipment Description: <i>Peterbilt Vac Truck</i>	Model No.(s): <i>T260 - PB348</i>	Serial No.(s): <i>T260</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	/		
2. Lubrication, engine oil	/		
3. Brakes	/		
4. Tires, tracks	/		
5. Air systems	/		
6. Horn	/		
7. Safety guards	/		
8. Mirrors	/		
9. Steering mechanism	/		
10. Cooling water	/		
11. Operation controls	/		
12. Lights and reflectors	/		
13. Windshield wipers, defroster	/		
14. Backup alarm	/		
15. Fire extinguisher	/		
16. Seat belts	/		
17. Filters (air, oil, fuel, hydraulic)	/		
18. Lift arm and bucket	/		/
19. Grab handles	/		
20. Steps (tread, no slip hazards)	/		
21. Parking brake	/		
22. General condition	/		

Remarks:

Certification

*[Signature]*  
Signature of Certified Operator

*[Signature]*  
Company

*10-27-17*  
Date



## *Daily Quality Control Report*

REPORT NO.   11  

CONTRACT NO.   W912DQ-16-D-3006 Task Order 0002  

Date:   10/30/17  

LOCATION OF WORK:   Former Forbes Atlas Missile S-5, Lyon County, KS  

DESCRIPTION:   Interim Remedial Action.  

**WEATHER CLASSIFICATION:**

No interruptions of any kind from weather conditions occurring on this or previous shifts	Classification:	
Weather occurred during this shift that caused a complete stoppage of all work	Class <u>  A  </u>	
Weather occurred during this shift that caused a partial stoppage of work	Temperature (°F): 51°F	
Weather overhead excellent or suitable during shift. Work completely stopped due to results of previous adverse weather	Max: 51°F Min: 26°F	
Weather overhead excellent or suitable during shift but work partially stopped due to previous adverse manner	Precipitation:	
Explain:	Inches <u>  0.00  </u>	

**1. Work Performed Today by Kemron/Arrowhead JV:**

Contractors arrived on site at 0800. Upon arrival Arrowhead conducted the Daily Tailgate Safety Meeting with all JV staff and subcontract personnel. Inspection of equipment was completed prior to beginning operations. Refer to the attached meeting and inspections logs for additional detail. Contractors continued cleaning flame pit, continued pumping water from main sump pit, and conducted maintenance on GAC treatment system (system froze over weekend, replaced broken fittings).

HMR conducted continuous air quality monitoring while cleaning out Flame Pit. No air contaminants were detected throughout the day while working in the Flame Pit.

**2. Work Performed Today by Subcontractors:**

Continued cleaning Flame Pit.

Continued to pump water from main sump pit. Approximately 18,000 gallons was pumped from Main Sump Pit.

**3. Type and Results of Inspection: (Include Satisfactory Work Completed or Deficiencies with Action to be taken).**

Initial inspections for Definable Features of Work #2 and #3 were conducted, see attached documents for results of inspections. No deficiencies were noted or found.

**4. List Type and Location of Tests Performed and Results of These Tests:**

None.

**5. Verbal Instructions Received:**

None.

**6. Corrective Actions Proposed/Taken:**

None.

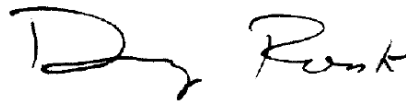
**7. Remarks:**

None.

**8. Safety Violations Observed:**

None.

**9. CERTIFICATION:** I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications, except as may be noted above.



---

Site Superintendent / Quality Control Officer





Cleaning Flame Pit.



Cleaning and removing debris from Flame Pit.



Forbes Field Former Atlas Missile Site S-5  
Sump Dewatering Pumping Summary

Tank	Date Filled	Quantity Pumped (gallons)	Sample Date	Data Received	Sample ID	Date Released	Treated Volume Released (gallons)	Notes:
#2	16-Oct	21,000	16-Oct	18-Oct	S5-W-01	18-Oct	21,000	
	19-Oct	21,000	19-Oct	23-Oct	S5-W-04	23-Oct	21,000	
	24-Oct	21,000	24-Oct	26-Oct	S5-W-07	26-Oct	21,000	
	27-Oct	18,000						
#3	17-Oct	21,000	17-Oct	19-Oct	S5-W-02	20-Oct	21,000	
	20-Oct	21,000	23-Oct	26-Oct	S5-W-05			
#4	17-Oct	21,000	17-Oct	19-Oct	S5-W-03	19-Oct	21,000	
	23-Oct	21,000	23-Oct	26-Oct	S5-W-06			
#5	25-Oct	21,000	25-Oct		S5-W-08			
#6	25-Oct	21,000	25-Oct		S5-W-09			

**Total Volume Discharged (gallons) 105,000**

Note: Tank #1 designated as untreated water settling basin

18,000 gallons currently in tank

Volume treated 207,000 gallons  
Volume Pumped if tank #1 is full 228,000 gallons

Volume pumped through COB 10/30 222,000







Arrowhead Contracting, Inc.

Sheet 1 of 2

Initial/Follow-up Inspection Checklist				
<b>Definable Feature of Work (DFW):</b> #2 power washing of Sumps Traps & Turnels	<b>Date:</b> 10/30/17		<b>Subcontract No:</b>	
	<b>Time:</b> 4:30			
<b>Inspection Type (circle one):</b> Initial      Follow-up				
Item	Yes	No	NA	Remarks
Is the work being performed in accordance with the applicable section(s) of the subcontract specifications?	✓			
Is the work being performed in accordance with approved design drawings and specifications?	✓			
Is the work being performed in accordance with approved work plans (e.g. CQCP, EPP, SAMP/QAPP)?	✓			
Is the work being performed cautiously and with acceptable levels of workmanship?	✓			
Is equipment being operated properly?	✓			
Is the work being performed using proper methods and procedures?	✓			
Have any defective or damaged materials been identified?		✓		
Are results of applicable tests, samples, and/or measurements within acceptable levels?			✓	
Is the work being performed in a safe manner and in accordance with the SSHP?	✓			
Have pertinent records been completed or collected?	✓			
Have any nonconformances been identified, corrected, and re-inspected?	✓			
<b>Notes:</b>    				



Arrowhead Contracting, Inc.

Sheet 2 of 2

**Initial/Follow-up Inspection Checklist**

<b>Definable Feature of Work (DFW):</b> <i>#3 Removal, Asphal and Testing</i>	<b>Date:</b>	<i>10/30/17</i>	<b>Subcontract No:</b>
	<b>Time:</b>	<i>0830</i>	

**InspectionType (circle one):**      **Initial**      **Follow-up**

Item	Yes	No	NA	Remarks
Is the work being performed in accordance with the applicable section(s) of the subcontract specifications?	✓			
Is the work being performed in accordance with approved design drawings and specifications?	✓			
Is the work being performed in accordance with approved work plans (e.g. CQCP, EPP, SAMP/QAPP)?	✓			
Is the work being performed cautiously and with acceptable levels of workmanship?	✓			
Is equipment being operated properly?	✓			
Is the work being performed using proper methods and procedures?	✓			
Have any defective or damaged materials been identified?		✓		
Are results of applicable tests, samples, and/or measurements within acceptable levels?			✓	
Is the work being performed in a safe manner and in accordance with the SSHP?	✓			
Have pertinent records been completed or collected?	✓			
Have any nonconformances been identified, corrected, and re-inspected?	✓			

**Notes:**



## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>ACE</i>	Contract No.: Subcontract No.
Equipment Description: <i>Telescopic Handler</i>	Model No.(s): <i>Genie</i>	Serial No.(s): <i>10673495</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems			✓
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher			✓
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

*[Signature]*  
Signature of Certified Operator
*ACE*  
Company
*10/30/17*  
Date



## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ALAS MISSILE</i>	Contractor: <i>ACE</i>	Contract No.: Subcontract No.
Equipment Description: <i>TAKEZCHI</i>	Model No.(s): <i>JL8</i>	Serial No.(s): <i>10659850</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems			✓
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher			✓
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

\_\_\_\_\_  
 Signature of Certified Operator
 

 ACE  
 \_\_\_\_\_  
 Company
 

 10/30/17  
 \_\_\_\_\_  
 Date





# HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>HMR</i>	Contract No.: Subcontract No.
Equipment Description: <i>Sterling Guzzler</i>	Model No.(s): <i>T200</i>	Serial No.(s): <i>T200</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems	✓		
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher	✓		
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		✓
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

*[Signature]*  
Signature of Certified Operator

*Hmrl*  
Company

*10-30-17*  
Date



## *Daily Quality Control Report*

REPORT NO.   12  

CONTRACT NO.   W912DQ-16-D-3006 Task Order 0002  

Date:   10/31/17  

LOCATION OF WORK:   Former Forbes Atlas Missile S-5, Lyon County, KS  

DESCRIPTION:   Interim Remedial Action.  

**WEATHER CLASSIFICATION:**

No interruptions of any kind from weather conditions occurring on this or previous shifts	Classification:	
Weather occurred during this shift that caused a complete stoppage of all work	Class <u>  A  </u>	
Weather occurred during this shift that caused a partial stoppage of work	Temperature (°F): 43	
Weather overhead excellent or suitable during shift. Work completely stopped due to results of previous adverse weather	Max: 43°F Min: 24°F	
Weather overhead excellent or suitable during shift but work partially stopped due to previous adverse manner	Precipitation:	
Explain:	Inches <u>  0.00  </u>	

**1. Work Performed Today by Kemron/Arrowhead JV:**

Contractors arrived on site at 0800. Upon arrival Arrowhead conducted the Daily Tailgate Safety Meeting with all JV staff and subcontract personnel. Inspection of equipment was completed prior to beginning operations. Refer to the attached meeting and inspections logs for additional detail. Contractors continued cleaning flame pit, continued to pump water from main sump, continued to filter water from settling tank to treated holding tanks, and conducted maintenance on GAC treatment system (changed bag filter elements).

A sample of treated water was collected from tank #2 (sample ID S5-W-10) and from tank #4 (sample ID S5-W-11) and was submitted to the subcontract laboratory for VOC analysis by method 8260.

HMR conducted continuous air quality monitoring while cleaning out Flame Pit. No air contaminants were detected throughout the day while working in the Flame Pit.

Throughout the day continued operation of the GAC treatment system continued. At the conclusion of work approximately 21,000 gallons had been processed with a cumulative total of approximately 228,000 gallons treated. The total volume of water removed from the various basins is approximately 243,000 gallons. Refer to attached pumping data spreadsheet for updated information.

**2. Work Performed Today by Subcontractors:**

Continued cleaning Flame Pit.  
Continued pumping water from Main Sump Pit.

**3. Type and Results of Inspection: (Include Satisfactory Work Completed or Deficiencies with Action to be taken).**

Initial inspections for Definable Features of Work #2 and #3 were conducted, see attached documents for results of inspections. No deficiencies were noted or found.

**4. List Type and Location of Tests Performed and Results of These Tests:**

A sample of treated water was collected from tank #2 (sample ID S5-W-10) and from tank #4 (sample ID S5-W-11) and was submitted to the subcontract laboratory for VOC analysis by method 8260.

**5. Verbal Instructions Received:**

None.

**6. Corrective Actions Proposed/Taken:**

None.

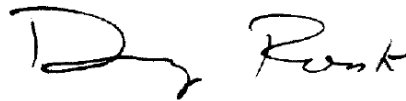
**7. Remarks:**

None.

**8. Safety Violations Observed:**

None.

**9. CERTIFICATION:** I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications, except as may be noted above.



---

Site Superintendent / Quality Control Officer



Flame Pit back side (cleaned).



Front side of Flame Pit (cleaned).



Front of Flame Pit (cleaned).



# DAILY TAILGATE SAFETY MEETING LOG

Date: 10/31/17

Client: USACE

Location: FORBES MISSILE SS

Job No.: 14-118

Meeting conducted by: Doug Murphy

**Details of safety meeting presented (use back of sheet if necessary):**

Level of Protection: MDD

Contaminants: TCE, PCL, VC

Physical Hazards: SLIPS, TRIPS, & FALLS Heavy Equipment operations

Arch Pumps

Other:

PPE Pump operations Fall hazards and protection  
Confined space procedures Respirators ladder safety  
arc monitoring

**Are any permits/clearances required on this day?:**

**ATTENDEES:**

Printed Name:

Signature:

Doug Murphy  
Andy Blanton  
Robert Brocker  
Tyler Wright  
Taylor Wiggins  
Taylor Wright  
Kyle Botello  
Calo Bergstrom

Doug Murphy  
Andy Blanton  
Robert Brocker  
Tyler Wright  
Taylor Wiggins  
Taylor Wright  
Kyle Botello  
Calo Bergstrom





Forbes Field Former Atlas Missile Site S-5  
Sump Dewatering Pumping Summary

Tank	Date Filled	Quantity Pumped (gallons)	Sample Date	Data Received	Sample ID	Date Released	Treated Volume Released (gallons)	Notes:
#2	16-Oct	21,000	16-Oct	18-Oct	S5-W-01	18-Oct	21,000	
	19-Oct	21,000	19-Oct	23-Oct	S5-W-04	23-Oct	21,000	
	24-Oct	21,000	24-Oct	26-Oct	S5-W-07	26-Oct	21,000	
	27-Oct	21,000	31-Oct		S5-W-10			
#3	17-Oct	21,000	17-Oct	19-Oct	S5-W-02	20-Oct	21,000	
	20-Oct	21,000	23-Oct	26-Oct	S5-W-05	27-Oct	21,000	Tank #3 is now a collection Tank
#4	17-Oct	21,000	17-Oct	19-Oct	S5-W-03	19-Oct	21,000	
	23-Oct	21,000	23-Oct	26-Oct	S5-W-06	27-Oct	21,000	
	31-Oct	18,000	31-Oct		S5-W-11			
#5	25-Oct	21,000	25-Oct	27-Oct	S5-W-08			
#6	25-Oct	21,000	25-Oct	27-Oct	S5-W-09			

**Total Volume Discharged (gallons)**

**147,000**

Note: Tank #1 and Tank #3 designated as untreated water settling basin

3,000 gallons Tank #1 and 11,000 in Tank #3

Volume treated 228,000 gallons

Volume pumped through COB 10/31 243,000





Arrowhead Contracting, Inc.

Sheet 1 of 2

Initial/Follow-up Inspection Checklist				
<b>Definable Feature of Work (DFW):</b> <i>H2 Power washing of Sumps, Traps            and Joints</i>		<b>Date:</b> <i>10/31/17</i>	<b>Subcontract No:</b>	
		<b>Time:</b> <i>0900</i>		
<b>InspectionType (circle one):</b> Initial      Follow-up				
Item	Yes	No	NA	Remarks
Is the work being performed in accordance with the applicable section(s) of the subcontract specifications?	✓			
Is the work being performed in accordance with approved design drawings and specifications?	✓			
Is the work being performed in accordance with approved work plans (e.g. CQCP, EPP, SAMP/QAPP)?	✓			
Is the work being performed cautiously and with acceptable levels of workmanship?	✓			
Is equipment being operated properly?	✓			
Is the work being performed using proper methods and procedures?	✓			
Have any defective or damaged materials been identified?		✓		
Are results of applicable tests, samples, and/or measurements within acceptable levels?			✓	
Is the work being performed in a safe manner and in accordance with the SSHP?	✓			
Have pertinent records been completed or collected?	✓			
Have any nonconformances been identified, corrected, and re-inspected?	✓			
<b>Notes:</b>     				



Arrowhead Contracting, Inc.

Sheet 2 of 2

Initial/Follow-up Inspection Checklist				
<b>Definable Feature of Work (DFW):</b> <i>#3 Removal, Disposal and Testing</i>	<b>Date:</b> <i>10/31/17</i>	<b>Subcontract No:</b>		
	<b>Time:</b> <i>0900</i>			
<b>Inspection Type (circle one):</b> <b>Initial</b> <b>Follow-up</b>				
Item	Yes	No	NA	Remarks
Is the work being performed in accordance with the applicable section(s) of the subcontract specifications?	✓			
Is the work being performed in accordance with approved design drawings and specifications?	✓			
Is the work being performed in accordance with approved work plans (e.g. CQCP, EPP, SAMP/QAPP)?	✓			
Is the work being performed cautiously and with acceptable levels of workmanship?	✓			
Is equipment being operated properly?	✓			
Is the work being performed using proper methods and procedures?	✓			
Have any defective or damaged materials been identified?		✓		
Are results of applicable tests, samples, and/or measurements within acceptable levels?	✓			<i>collected samples SS-w-10 and SS-w-11</i>
Is the work being performed in a safe manner and in accordance with the SSHP?	✓			
Have pertinent records been completed or collected?	✓			
Have any nonconformances been identified, corrected, and re-inspected?	✓			
<b>Notes:</b> <i>collected sample SS-w-10 from tank #2 and sample SS-w-11 from tank #4.</i>				



## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>ACE</i>	Contract No.: Subcontract No.
Equipment Description: <i>Telescopic Handler</i>	Model No.(s): <i>Genie</i>	Serial No.(s): <i>106 73495</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems			✓
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher			✓
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

	<i>ACE</i>	<i>10/31/17</i>
Signature of Certified Operator	Company	Date



## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number:	Client:
Project: <i>ATLAS MISSILE</i>	Contractor:	Contract No.: Subcontract No.
Equipment Description: <i>Fukerzho</i>	Model No.(s): <i>TL8</i>	Serial No.(s): <i>10659850</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems			✓
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher			✓
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

*[Signature]*  
Signature of Certified Operator

ACI  
Company

10/31/17  
Date



## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name:	Project Number:	Client:
Project:	Contractor:	Contract No.: Subcontract No.
Equipment Description: <i>Sterling Guzzler</i>	Model No.(s): <i>T 200</i>	Serial No.(s): <i>T 200</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems	✓		
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher	✓		
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		✓
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

 _____ Signature of Certified Operator	 _____ Company	10-31-07 _____ Date
--	----------------------	---------------------------



## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name:	Project Number:	Client:
Project:	Contractor:	Contract No.: Subcontract No.
Equipment Description: <i>John Deere Mini-Ex</i>	Model No.(s): <i>50 D</i>	Serial No.(s): <i>E 65</i> <i>1221</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems	✓		
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	/		
10. Cooling water	✓		
11. Operation controls	/		
12. Lights and reflectors	/		
13. Windshield wipers, defroster	/		
14. Backup alarm	/		
15. Fire extinguisher	/		
16. Seat belts	/		
17. Filters (air, oil, fuel, hydraulic)	/		
18. Lift arm and bucket	/		
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	/		
22. General condition	/		

Remarks:

Certification

*[Handwritten Signature]*

Signature of Certified Operator

*HMR*

Company

*10-31-17*

Date



## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name:	Project Number:	Client:
Project:	Contractor:	Contract No.: Subcontract No.
Equipment Description: <i>Peterbilt Vac Truck</i>	Model No.(s): <i>PB348</i>	Serial No.(s): <i>T 260</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems	✓		
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher	✓		
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		✓
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

	<i>HMEI</i>	<i>10-31-17</i>
Signature of Certified Operator	Company	Date

### Chain of Custody Record

<b>Client Information</b>		Sampler:		Lab PM:		Carrier Tracking No(s):		COC No:	
Client Contact: Mr. Josh Phillips		Phone:		Rothmeyer, Stephanie K		E-Mail: stephanie.rothmeyer@testamericainc.com		Page: <u>1</u> of <u>1</u>	
Company: Arrowhead Contracting		Address: 10981 Eicher Drive		City: Lenexa		State, Zip: KS, 66219		Job #:	
Due Date Requested: <u>11/02/17</u>		TAT Requested (days): <u>24h - TAT</u>		PO #: 16-126		WO #:		Preservation Codes:	
Project Name: Atlas Missile Site Lyon County, KS		Project #: 28017409		SSOW#:		Field Filtered Sample (Yes or No)		Total Number of Containers	
Site:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=soil/sediment, T=tissue, A=air)	
Analysis Requested		Preservation Code:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Special Instructions/Note:	
A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDTA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2S2O3 R - Na2S2O4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)									
A J/F N									
3 3 1									
24h - TAT 24h - TAT									
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:			
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:			
Relinquished by: <u>Murphy</u>		Date/Time: <u>10/31/17 1715</u>		Company: <u>ACE</u>		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:					





## *Daily Quality Control Report*

REPORT NO.   13  

CONTRACT NO.   W912DQ-16-D-3006 Task Order 0002  

Date:   11/01/17  

LOCATION OF WORK:   Former Forbes Atlas Missile S-5, Lyon County, KS  

DESCRIPTION:   Interm Remedial Action.  

### **WEATHER CLASSIFICATION:**

CLASS A	No interruptions of any kind from weather conditions occurring on this or previous shifts	Classification:
CLASS B	Weather occurred during this shift that caused a complete stoppage of all work	Class <u>  A  </u>
CLASS C	Weather occurred during this shift that caused a partial stoppage of work	Temperature (°F):
CLASS D	Weather overhead excellent or suitable during shift. Work completely stopped due to results of previous adverse weather	Max: 58°F    Min: 32
CLASS E	Weather overhead excellent or suitable during shift but work partially stopped due to previous adverse manner	Precipitation:
OTHER	Explain:	Inches <u>  0.00  </u>

### **1. Work Performed Today by Kemron/Arrowhead JV:**

Contractors arrived on site at 0800. Upon arrival Arrowhead conducted the Daily Tailgate Safety Meeting with all JV staff and subcontract personnel. Inspection of equipment was completed prior to beginning operations. Refer to the attached meeting and inspections logs for additional detail.

Contractors finished cleaning the flame pit, continued to pump water from main sump and place in the settling tank. HMR set up and checked all equipment for the Confined Space Rescue Plan and Procedure. A confined space permit was completed and entry was made into the shaft of the main sump. Entry was made to the depth needed to remove the debris at the bottom of the shaft.

The remaining debris in the pit on the south side at the top of the flame pit was washed and removed and placed into a roll-off. That pit was and also the main bay of the missile silo was power-washed. All of the sediment and debris on site, except for pending debris out of the main sump, is loaded into the roll-offs.

HMR continued using the Guzzler vac truck to pump the water out of the main chamber of the sump pit. Approximately 500 gallons were removed and there is another 1.5 ft of water until the floor of the main chamber is reached.

HMR conducted continuous air quality monitoring while cleaning the flame pit and entering the main sump shaft. No air contaminants were detected throughout the day.

**2. Work Performed Today by Subcontractors:**

Finished power-washing the flame pit and upper south pit.  
All sediment and debris was loaded into the roll-offs.  
Removed debris that was blocking the main sump shaft.  
Continued pumping water from the main sump.

**3. Type and Results of Inspection: (Include Satisfactory Work Completed or Deficiencies with Action to be taken).**

Follow-up inspections for Definable Features of Work #2 and #3 were conducted, see attached documents for results of inspections. No deficiencies were noted or found.

**4. List Type and Location of Tests Performed and Results of These Tests:**

None

**5. Verbal Instructions Received:**

None

**6. Corrective Actions Proposed/Taken:**

None

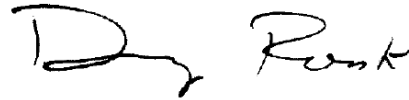
**7. Remarks:**

None

**8. Safety Violations Observed:**

None

**9. CERTIFICATION:** I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications, except as may be noted above.

A handwritten signature in black ink, appearing to read "D. Rank". The signature is written in a cursive style with a large initial "D" and a smaller "Rank" following it.

---

Site Superintendent / Quality Control Officer





Forbes Field Former Atlas Missile Site S-5  
Sump Dewatering Pumping Summary

Tank	Date Filled	Quantity Pumped (gallons)	Sample Date	Data Received	Sample ID	Date Released	Treated Volume Released (gallons)	Notes:
#2	16-Oct	21,000	16-Oct	18-Oct	S5-W-01	18-Oct	21,000	
	19-Oct	21,000	19-Oct	23-Oct	S5-W-04	23-Oct	21,000	
	24-Oct	21,000	24-Oct	26-Oct	S5-W-07	26-Oct	21,000	
	27-Oct	21,000	31-Oct		S5-W-10			
#3	17-Oct	21,000	17-Oct	19-Oct	S5-W-02	20-Oct	21,000	
	20-Oct	21,000	23-Oct	26-Oct	S5-W-05	27-Oct	21,000	Tank #3 is now a collection Tank
#4	17-Oct	21,000	17-Oct	19-Oct	S5-W-03	19-Oct	21,000	
	23-Oct	21,000	23-Oct	26-Oct	S5-W-06	27-Oct	21,000	
	31-Oct	18,000	31-Oct		S5-W-11			
#5	25-Oct	21,000	25-Oct	27-Oct	S5-W-08	1-Nov	21,000	
#6	25-Oct	21,000	25-Oct	27-Oct	S5-W-09			
<b>Total Volume Discharged (gallons)</b>							<b>168,000</b>	

Note: Tank #1 and Tank #3 designated as untreated water settling basin  
Volume treated 228,000 gallons

3,000 gallons Tank #1 and 11,000 in Tank #3

Volume pumped through COB 11/1/17 243,000



# DAILY TAILGATE SAFETY MEETING LOG

Date: 11/1/17

Client: USACE

Location: FORBES MISSILE SS

Job No.: 16-118

Meeting conducted by: Doug Murphy

**Details of safety meeting presented (use back of sheet if necessary):**

Level of Protection: MDD D

Contaminants: TCE, PCE, VC

Physical Hazards: SLIPS, TRIPS, & FALLS HEAVY EQUIPMENT

Operations Pinch Points

Other:

P.P.E. pump operations Fall hazards and protection  
confined space procedures Respirators, ladder safety  
air monitoring

**Are any permits/clearances required on this day?:**

**ATTENDEES:**

Printed Name:

Signature:

Doug Murphy  
Tyler Wright  
Andy Blanton  
Robert Brocker  
Kyle Botello  
Taylor Wright  
Taylor Wiggins  
Cole Bergstrom

Doug Murphy  
Tyler Wright  
Andy Blanton  
Robert Brocker  
Kyle Botello  
Taylor Wright  
Taylor Wiggins  
Cole Bergstrom



Rescue plan to be attached with Confined Space Entry Permit and Posted at entry location of confined space.

# Haz-Mat Response, Inc

# Permit Required Confined Space Rescue Plan & Procedure

Date: 11-2-17 Tank #: Main Sump  
 Location: Allen, KS Job Number: 1T2171350  
 Physical Address: Road D HMRI Supervisor: Tyler Wright  
 Customer Representative: Josh Phillips (ACI) / Steve Fess (Safety)  
 Description of work: Make entry, pump water, and clean sump.

Confined Space Supervisor: (Required) Tyler Wright  
 Confined Space Attendants: (Required) Gus Wiggin  
 Confined Space Entrants: (Required) Andy Blanton, Tyler Wright  
 On Site HMRI Rescue Personnel: Kyle Botello, Taylor Wright  
 Public Emergency Response: (Required) - Method for Summoning Outside Services (Cellular)  
 Fire Department: 911 - Agnes City Fire  
 Emergency Medical: Morris County Hospital - 600 N. Washington Council Grove, KS  
 Specialized Rescue: 911

Chemicals / Products / Material: (Check all that apply)

<input type="checkbox"/> Gasoline	<input type="checkbox"/> Crude Oil	<input type="checkbox"/> H2S Hydrogen Sulfide	<input type="checkbox"/> Lead
<input type="checkbox"/> Diesel	<input type="checkbox"/> Additive (attach SDS)	<input type="checkbox"/> Benzene	<input type="checkbox"/> Asbestos
<input type="checkbox"/> Ethanol	<input type="checkbox"/> Acid / Caustic	<input type="checkbox"/> Carbon Monoxide	<input checked="" type="checkbox"/> Other: <u>Contact Water</u>

Required Confined Space Entry and Rescue Equipment Required: (Check all that apply)

<input checked="" type="checkbox"/> 4 Gas Air Monitor	<input checked="" type="checkbox"/> 5 Point Work Harness	<input checked="" type="checkbox"/> 4:1 Haul System	<input checked="" type="checkbox"/> CSE signage
<input checked="" type="checkbox"/> Benzene Air Monitor	<input checked="" type="checkbox"/> 5 Point Rescue Harness	<input checked="" type="checkbox"/> Tri-Pod	<input checked="" type="checkbox"/> Pulleys / Carabineers
<input checked="" type="checkbox"/> SCBA	<input checked="" type="checkbox"/> Retrieval Tag Line	<input checked="" type="checkbox"/> Tri- Pod Retrieval Winch	<input checked="" type="checkbox"/> Intrinsically Safe Lights
<input type="checkbox"/> Supplied Air Lines	<input type="checkbox"/> Tank Ladder	<input checked="" type="checkbox"/> Tri- Pod Fall Arrester	<input checked="" type="checkbox"/> Emergency Air Horn
<input checked="" type="checkbox"/> Air Purifying Respirator	<input type="checkbox"/> Tank Wire Ladder	<input checked="" type="checkbox"/> Rescue Packaging System	<input checked="" type="checkbox"/> 3/4" Rescue Rope
<input checked="" type="checkbox"/> Personal Protective Equip	<input type="checkbox"/> Anchor Straps	<input checked="" type="checkbox"/> Ascend / Descend Equip.	<input checked="" type="checkbox"/> Ventilation Fan

Other: \_\_\_\_\_



*Rescue plan to be attached with Confined Space Entry Permit and Posted at entry location of confined space.*

---

### **Rescue Equipment**

- Rescue Equipment is to be thoroughly inspected for integrity and working condition prior to each work day as part of the confined space permit procedure. In the event that a piece of equipment is not in proper working condition equipment must be repaired or replaced before confined space entry is allowed.
  - All Rescue equipment shall be placed at the entrance of the confined space (in a location that will not interfere with daily work activities and is easily accessible in the event of a rescue).
- 

### **Rescue Action Plan**

- Man watch attendant will alert (whistle or air horn) project team of potential emergency inside confined space.
- Entry Supervisor will assess the situation and notify facility operations and/ or public emergency response organizations.
- Entrant will attempt to perform self-rescue.
- Second attendant will don proper personal protective equipment (PPE) to perform rescue operations, if necessary. *(If second attendant is not available Entry supervisor will co-role as Entry supervisor / Man watch attendant and original man watch attendant will become rescuer.)*
- Supervisor will coordinate rescue, second attendant assumes role of rescuer, team assembles to support rescue effort.
- If entrant cannot successfully perform self-rescue, HMRI will attempt non-entry rescue, if non-entry is not successful HMRI will perform confined space entry rescue.
- Upon direction, second attendant will enter to assist in safe removal of downed worker (entrants).
- Rescuer will attach lifeline to downed worker and remove him through egress point.
- Rescue team will aid in removal of downed worker from outside the confined space.
- Rescue team will safely and rapidly decontaminate downed worker once outside the confined space.
- Rescue team or medical responders will initiate basic life support on downed workers.
- With the completion of the rescue the downed worker will be treated accordingly and taken to a medical facility for observation and released by a treating medical physician before being allowed to return to work.
- An evaluation of the rescue will be submitted by the entry supervisor to a HMRI safety manager.
- Following the evaluation the HMRI safety manager will submit a written report to the client and Health and Safety.



# HAZ-MAT Response, Inc.sm

IT2171350

1. ISSUED TO		2. DATE		3. LOCATION	
HMRI		11-3-17		Allen, ks	
4. WORK TO BE DONE (IF HOT WORK SEE SP. 8)					
Make entry & clean main sump.					
5. EQUIPMENT TO BE USED					
6. PRINT NAMES OF MEN ENTERING			6. PRINT NAMES OF WATCHMEN		
A. Blanton		T. Wright		T. Wright	
				K. Botello	
				Ty Wright	
7. SPECIFIC LINES TO BE BLANKED OR DISCONNECTED					
NA					
8. LINES NOT TO BE BLANKED (REASON)					
Horizontal lines/piping (connected to empty pits that have been cleaned)					
9. SPECIFIC EQUIPMENT TO BE LOCKED OUT (SP. 4)					
NA - All electrical disconnected					
10. SPECIFIC SAFETY AND WORKING INSTRUCTIONS					
Maintain constant communication w/ entrant(s)					

**11. NOTE:** Permit Will Not Be Signed Until All Steps Are Completed!

**CHECKLIST ( EACH BLOCK MUST BE INITIALED)**

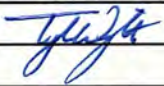


OPERATION	YES	NO	EXPLAIN ANY "RESPONSE"	MAN ENTERING
a. HAS EQUIPMENT BEEN THOROUGHLY CLEANED, WASHED AND/OR FLOODED?		✓	Reason for entry	TW
b. LOCK OUT PROCEDURE COMPLETE (SP. 4)		✓	No valves or electrical	TW
c. SAFETY LIGHT IN USE.	✓		Intrinsically head lamps	TW
d. CONFINED SPACE PURGED AND REPURGED WITH AIR	✓		Forced air - copus	TW
e. BLOWER OPERATING	✓		Forced air - copus	TW
f. SELF-CONTAINED BREATHER APPARATUS, AIR LINE MASK, GAS MASK	✓		SCBA's in use	TW
g. SAFETY HARNESS TYPE (EXPLAIN)	✓		S point work/rescue	TW
h. ALL CONNECTIONS BLANKED OR BROKEN	✓		Connections - empty/cleaned	TW
i. ARE SURROUNDING AREAS SAFE?	✓		Clean work area	TW
j. CONTINUOUS GAS/O <sub>2</sub> MONITOR IN OPERATION?	✓		Continuous monitoring	TW
k. ATMOSPHERIC TEST	✓		Air quality recorded	TW

O <sub>2</sub> TYPE AND METER NUMBER	ACCEPTABLE RESULTS	RESULTS	TIME
Dräger Xam 2500	(at least 19.5%)	20.9%	14:25
COMBUSTIBLE GAS TYPE & METER	ACCEPTABLE RESULTS	RESULTS	BY
AR5F 3061	(10%)	0%	Wright

**12. NOTE:** Permit Expires At End Of Shift And Is Void If Surrounding Conditions Change During The Shift.

13A. ENTRY		13B. EXIT (FINAL)	
TIME	INITIALS	TIME	INITIALS
14:35	TW	14:45	TW

**14. STATEMENT:** I Have Read The Entire Permit, Reviewed SP-1 And Checked All Entries

A. SIGNATURE(S) MEN ENTERING CONFINED SPACE	B. SIGNATURE(S) WATCHMEN
	
C. SIGNATURE(S) SUPERVISOR(S)	
	

**DISTRIBUTION INSTRUCTIONS**

1. RETURN ORIGINAL TO SAFETY DIRECTOR IMMEDIATELY! Rescue Company # HMRI
2. POST DUPLICATE ON OR NEAR CONFINED SPACE AND RETURN TO SAFETY DIRECTOR UPON COMPLETION.



## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>HMC</i>	Contract No.: Subcontract No.
Equipment Description: <i>Sterling Guzzler</i>	Model No.(s): <i>T200</i>	Serial No.(s): <i>T200</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems	✓		
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher	✓		
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket			✓
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

 _____ Signature of Certified Operator	<i>HMC</i> _____ Company	<i>NOV 11-1-17</i> _____ Date
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## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORGES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>HMPR</i>	Contract No.: Subcontract No.
Equipment Description: <i>Peterbilt Vac Truck</i>	Model No.(s): <i>PB348</i>	Serial No.(s): <i>T260</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	/		
2. Lubrication, engine oil	/		
3. Brakes	/		
4. Tires, tracks	/		
5. Air systems	/		
6. Horn	/		
7. Safety guards	/		
8. Mirrors	/		
9. Steering mechanism	/		
10. Cooling water	/		
11. Operation controls	/		
12. Lights and reflectors	/		
13. Windshield wipers, defroster	/		
14. Backup alarm	/		
15. Fire extinguisher	/		
16. Seat belts	/		
17. Filters (air, oil, fuel, hydraulic)	/		
18. Lift arm and bucket	/		/
19. Grab handles	/		
20. Steps (tread, no slip hazards)	/		
21. Parking brake	/		
22. General condition	/		

Remarks:

Certification

	<i>HMPR</i>	<i>11-1-17</i>
Signature of Certified Operator	Company	Date



## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>HMAC</i>	Contract No.: Subcontract No.
Equipment Description: <i>John Deere Mini Ex</i>	Model No.(s): <i>SOD</i>	Serial No.(s): <i>EG3</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems	✓		
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher	✓		
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

Signature of Certified Operator	<i>HMAC</i> Company	<i>11-1-17</i> Date
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## HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>ACI</i>	Contract No.: Subcontract No.
Equipment Description: <i>Telescopic HANDLER</i>	Model No.(s): <i>GENIE</i>	Serial No.(s): <i>106 73495</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems			✓
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher			✓
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

*[Signature]*  
Signature of Certified Operator

*ACI*  
Company

*11/4/17*  
Date



# HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>FORBES MISSILE</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>ATLAS MISSILE</i>	Contractor: <i>ACI</i>	Contract No.: Subcontract No.
Equipment Description: <i>TAKE 201F</i>	Model No.(s): <i>TL8</i>	Serial No.(s): <i>10659850</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel			
2. Lubrication, engine oil			
3. Brakes			
4. Tires, tracks			
5. Air systems			
6. Horn			
7. Safety guards			
8. Mirrors			
9. Steering mechanism			
10. Cooling water			
11. Operation controls			
12. Lights and reflectors			
13. Windshield wipers, defroster			
14. Backup alarm			
15. Fire extinguisher			
16. Seat belts			
17. Filters (air, oil, fuel, hydraulic)			
18. Lift arm and bucket			
19. Grab handles			
20. Steps (tread, no slip hazards)			
21. Parking brake			
22. General condition			

Remarks:

Certification

*[Signature]*

Signature of Certified Operator

*ACI*

Company

*11/1/17*

Date





Arrowhead Contracting, Inc.

Sheet 1 of 2

Initial/Follow-up Inspection Checklist				
<b>Definable Feature of Work (DFW):</b> <i>H2 power washing of sumps            TRAPS &amp; Tunnels</i>		<b>Date:</b> <i>11/1/17</i>	<b>Subcontract No:</b>	
		<b>Time:</b> <i>0900</i>		
<b>InspectionType (circle one):</b> <b>Initial</b> <b>Follow-up</b>				
Item	Yes	No	NA	Remarks
Is the work being performed in accordance with the applicable section(s) of the subcontract specifications?	✓			
Is the work being performed in accordance with approved design drawings and specifications?	✓			
Is the work being performed in accordance with approved work plans (e.g. CQCP, EPP, SAMP/QAPP)?	✓			
Is the work being performed cautiously and with acceptable levels of workmanship?	✓			
Is equipment being operated properly?	✓			
Is the work being performed using proper methods and procedures?	✓			
Have any defective or damaged materials been identified?		✓		
Are results of applicable tests, samples, and/or measurements within acceptable levels?			✓	
Is the work being performed in a safe manner and in accordance with the SSHP?	✓			
Have pertinent records been completed or collected?	✓			
Have any nonconformances been identified, corrected, and re-inspected?	✓			
<b>Notes:</b>				



Arrowhead Contracting, Inc.

Sheet 2 of 2

Initial/Follow-up Inspection Checklist				
<b>Definable Feature of Work (DFW):</b> #3 Removal, disposal and Testing	<b>Date:</b> 11/1/17		<b>Subcontract No:</b>	
	<b>Time:</b> 0900			
<b>Inspection Type (circle one):</b> Initial      Follow-up				
Item	Yes	No	NA	Remarks
Is the work being performed in accordance with the applicable section(s) of the subcontract specifications?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the work being performed in accordance with approved design drawings and specifications?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the work being performed in accordance with approved work plans (e.g. CQCP, EPP, SAMP/QAPP)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the work being performed cautiously and with acceptable levels of workmanship?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is equipment being operated properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the work being performed using proper methods and procedures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have any defective or damaged materials been identified?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Are results of applicable tests, samples, and/or measurements within acceptable levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Is the work being performed in a safe manner and in accordance with the SSHP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have pertinent records been completed or collected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have any nonconformances been identified, corrected, and re-inspected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Notes:</b>				



## *Daily Quality Control Report*

REPORT NO.   14  

CONTRACT NO.   W912DQ-16-D-3006 Task Order 0002  

Date:   11/02/17  

LOCATION OF WORK:   Former Forbes Atlas Missile S-5, Lyon County, KS  

DESCRIPTION:   Interm Remedial Action.  

### **WEATHER CLASSIFICATION:**

CLASS A	No interruptions of any kind from weather conditions occurring on this or previous shifts	Classification:
CLASS B	Weather occurred during this shift that caused a complete stoppage of all work	Class <u>  A  </u>
CLASS C	Weather occurred during this shift that caused a partial stoppage of work	Temperature (°F):
CLASS D	Weather overhead excellent or suitable during shift. Work completely stopped due to results of previous adverse weather	Max: 55°F    Min: 38
CLASS E	Weather overhead excellent or suitable during shift but work partially stopped due to previous adverse manner	Precipitation:
OTHER	Explain:	Inches <u>  0.00  </u>

### **1. Work Performed Today by Kemron/Arrowhead JV:**

Contractors arrived on site at 0800. Upon arrival Arrowhead conducted the Daily Tailgate Safety Meeting with all JV staff and subcontract personnel. Inspection of equipment was completed prior to beginning operations. Refer to the attached meeting and inspections logs for additional detail.

Contractors continued to pump water from main sump and place in the settling tank. HMR set up and checked all equipment for the Confined Space Rescue Plan and Procedure. A confined space permit was completed and entry was made into the shaft of the main sump and the chambers.

HMR continued using the Guzzler vac truck to pump the water out of the main chamber and lower chamber of the sump pit. Approximately 19,000 gallons were removed. The hatch between the main and lower chamber was functioning and there was access to the lower chamber. All of the water in the main sump and most of the water in the lower chamber has been removed. Sediment removal and power-washing is what remains to be completed in the lower chamber.

HMR conducted continuous air quality monitoring while entering the main sump shaft and both chambers. No air contaminants were detected throughout the day.

**2. Work Performed Today by Subcontractors:**

Sediment and debris was pulled out of the main sump chamber.  
All sediment and debris was loaded into the roll-offs.  
Continued pumping water from the main sump and lower chamber.

**3. Type and Results of Inspection: (Include Satisfactory Work Completed or Deficiencies with Action to be taken).**

Follow-up inspections for Definable Features of Work #2 and #3 were conducted, see attached documents for results of inspections. No deficiencies were noted or found.

**4. List Type and Location of Tests Performed and Results of These Tests:**

None

**5. Verbal Instructions Received:**

None

**6. Corrective Actions Proposed/Taken:**

None

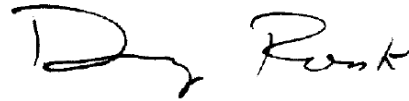
**7. Remarks:**

None

**8. Safety Violations Observed:**

Non

**9. CERTIFICATION:** I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications, except as may be noted above.

A handwritten signature in black ink, appearing to read "D. Rank". The signature is written in a cursive style with a large initial "D" and a smaller "Rank" following it.

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Site Superintendent / Quality Control Officer



Forbes Field Former Atlas Missile Site S-5  
Sump Dewatering Pumping Summary

Tank	Date Filled	Quantity Pumped (gallons)	Sample Date	Data Received	Sample ID	Date Released	Treated Volume Released (gallons)	Notes:
#2	16-Oct	21,000	16-Oct	18-Oct	S5-W-01	18-Oct	21,000	
	19-Oct	21,000	19-Oct	23-Oct	S5-W-04	23-Oct	21,000	
	24-Oct	21,000	24-Oct	26-Oct	S5-W-07	26-Oct	21,000	
	27-Oct	21,000	31-Oct		S5-W-10			
#3	17-Oct	21,000	17-Oct	19-Oct	S5-W-02	20-Oct	21,000	
	20-Oct	21,000	23-Oct	26-Oct	S5-W-05	27-Oct	21,000	Tank #3 is now a collection Tank
#4	17-Oct	21,000	17-Oct	19-Oct	S5-W-03	19-Oct	21,000	
	23-Oct	21,000	23-Oct	26-Oct	S5-W-06	27-Oct	21,000	
	31-Oct	18,000	31-Oct		S5-W-11			
#5	25-Oct	21,000	25-Oct	27-Oct	S5-W-08	1-Nov	21,000	
#6	25-Oct	21,000	25-Oct	27-Oct	S5-W-09			
<b>Total Volume Discharged (gallons)</b>							<b>168,000</b>	

Note: Tank #1 and Tank #3 designated as untreated water settling basin  
Volume treated 228,000 gallons

(11-1-17) 3,000 gallons Tank #1 and 11,000 in Tank #3  
(11-2-17) 18,000 gallons Tank 1# and 16,000 in Tank#3

Volume pumped through COB 11/2/17 262,000



# DAILY TAILGATE SAFETY MEETING LOG

Date: 11/2/17

Client: USACE

Location: Forbes Missile

Job No.: UG-118

Meeting conducted by: Cale Bergstrom

**Details of safety meeting presented (use back of sheet if necessary):**

Level of Protection: Mod D

Contaminants: TCE, DCE, VC

Physical Hazards:

Other: Slips/trips/falls, foggy conditions/wet  
Heavy Equipment, Confined Space Entry,  
pinch points, fall hazards, ladder  
safety

**Are any permits/clearances required on this day?:**

**ATTENDEES:**

Printed Name:

Signature:

Cale Bergstrom

Cale Bergstrom

Taylor Wiggins

Taylor Wiggins

Layne Kreter

Layne Kreter

Andy Blanton

Andy Blanton

Taylor Wright

Taylor Wright

Kyle Botello

Kyle Botello

Doug Feak

Doug Feak

Taylor Wright

Taylor Wright





# HAZ-MAT Response, Inc.<sup>SM</sup>

1R2M1350

1. ISSUED TO <b>HMRI</b>	2. DATE <b>11-2-17</b>	3. LOCATION <b>Allen, KS</b>
4. WORK TO BE DONE (IF HOT WORK SEE SP. 8) <b>Make entry, clean out main sump.</b>		
5. EQUIPMENT TO BE USED <b>CSE Tr 129/Tri pod, Winch, 4:1 Pulley, Rescue Gear</b>		
6. PRINT NAMES OF MEN ENTERING <b>A. Blanton</b> <b>L. Kreter</b>		6. PRINT NAMES OF WATCHMEN <b>T. Wright</b> <b>K. Botello</b> <b>L. Kreter</b> <b>T. Wiggins</b>
7. SPECIFIC LINES TO BE BLANKED OR DISCONNECTED <b>All lines that run to main sump have been cleaned/washed</b>		
8. LINES NOT TO BE BLANKED (REASON) <b>NA</b>		
9. SPECIFIC EQUIPMENT TO BE LOCKED OUT (SP. 4) <b>No electrical or valves to lock out</b>		
10. SPECIFIC SAFETY AND WORKING INSTRUCTIONS <b>Maintain constant communication w/ entrants</b>		

**11. NOTE:** Permit Will Not Be Signed Until All Steps Are Completed!

CHECKLIST (EACH BLOCK MUST BE INITIALED)				
OPERATION	YES	NO	EXPLAIN ANY "RESPONSE"	MAN ENTERING
a. HAS EQUIPMENT BEEN THOROUGHLY CLEANED, WASHED AND/OR FLOODED?		✓	Reason for entry	AB/LE
b. LOCK OUT PROCEDURE COMPLETE (SP. 4)		✓	NA	AB/LE
c. SAFETY LIGHT IN USE.	✓		Intrinsically safe	AB/LE
d. CONFINED SPACE PURGED AND REPURGED WITH AIR	✓		Copus fan	AB/LE
e. BLOWER OPERATING	✓		Copus fan	AB/LE
f. SELF-CONTAINED BREATHER APPARATUS, AIR LINE MASK, GAS MASK	✓		SCBA in use	AB/LE
g. SAFETY HARNESS TYPE (EXPLAIN)	✓		5 point work/rescue	AB/LE
h. ALL CONNECTIONS BLANKED OR BROKEN		✓	NA	AB/LE
i. ARE SURROUNDING AREAS SAFE?	✓		Clean work area	AB/LE
j. CONTINUOUS GAS/O <sub>2</sub> MONITOR IN OPERATION?	✓		Constant monitoring	AB/LE
k. ATMOSPHERIC TEST	✓		Air quality is recorded	AB/LE

O <sub>2</sub> TYPE AND METER NUMBER	ACCEPTABLE RESULTS	RESULTS	TIME
<b>Dräger Xam 2500</b>	(at least 19.5%)	<b>20.9%</b>	<b>8:25</b>
COMBUSTIBLE GAS TYPE & METER	ACCEPTABLE RESULTS	RESULTS	BY
<b>ARISE 3001</b>	(10%)	<b>0%</b>	<b>Wright</b>

**12. NOTE:** Permit Expires At End Of Shift And Is Void If Surrounding Conditions Change During The Shift.

13A. ENTRY		13B. EXIT (FINAL)	
TIME	INITIALS	TIME	INITIALS
<b>8:39/10:26/11:25</b>	<b>AB/LE</b>	<b>9:18/11:15/11:25</b>	<b>AB/LE</b>

**14. STATEMENT:** I Have Read The Entire Permit, Reviewed SP-1 And Checked All Entries

A. SIGNATURE(S) MEN ENTERING CONFINED SPACE <b>A. Blanton</b> <b>L. Kreter</b>		B. SIGNATURE(S) WATCHMEN <b>T. Wright</b> <b>K. Botello</b> <b>L. Kreter</b> <b>T. Wiggins</b>	
C. SIGNATURE(S) SUPERVISOR(S) <b>[Signature]</b>			

**DISTRIBUTION INSTRUCTIONS**

1. RETURN ORIGINAL TO SAFETY DIRECTOR IMMEDIATELY! Rescue Company # **HMRI**
2. POST DUPLICATE ON OR NEAR CONFINED SPACE AND RETURN TO SAFETY DIRECTOR UPON COMPLETION.



Arrowhead Contracting, Inc.

Sheet of

Initial/Follow-up Inspection Checklist				
<b>Definable Feature of Work (DFW):</b> # 2 <i>lower washing Sumps/traps/tunnels</i>	<b>Date:</b> 11/2/17  <b>Time:</b> 830	<b>Subcontract No:</b> <i>Forbes Atlas</i>		
<b>InspectionType (circle one):</b> Initial <u>Follow-up</u>				
Item	Yes	No	NA	Remarks
Is the work being performed in accordance with the applicable section(s) of the subcontract specifications?	<input checked="" type="checkbox"/>			
Is the work being performed in accordance with approved design drawings and specifications?	<input checked="" type="checkbox"/>			
Is the work being performed in accordance with approved work plans (e.g. CQCP, EPP, SAMP/QAPP)?	<input checked="" type="checkbox"/>			
Is the work being performed cautiously and with acceptable levels of workmanship?	<input checked="" type="checkbox"/>			
Is equipment being operated properly?	<input checked="" type="checkbox"/>			
Is the work being performed using proper methods and procedures?	<input checked="" type="checkbox"/>			
Have any defective or damaged materials been identified?		<input checked="" type="checkbox"/>		
Are results of applicable tests, samples, and/or measurements within acceptable levels?			<input checked="" type="checkbox"/>	
Is the work being performed in a safe manner and in accordance with the SSHP?	<input checked="" type="checkbox"/>			
Have pertinent records been completed or collected?	<input checked="" type="checkbox"/>			
Have any nonconformances been identified, corrected, and re-inspected?			<input checked="" type="checkbox"/>	
<b>Notes:</b>				



Arrowhead Contracting, Inc.

Sheet \_\_\_ of \_\_\_

Initial/Follow-up Inspection Checklist				
Definable Feature of Work (DFW): #3 Removal, disposal and testing		Date: 11/2/17	Subcontract No:	
		Time: 830	Forbes Atlas	
InspectionType (circle one): Initial <u>Follow-up</u>				
Item	Yes	No	NA	Remarks
Is the work being performed in accordance with the applicable section(s) of the subcontract specifications?	✓			
Is the work being performed in accordance with approved design drawings and specifications?	✓			
Is the work being performed in accordance with approved work plans (e.g. CQCP, EPP, SAMP/QAPP)?	✓			
Is the work being performed cautiously and with acceptable levels of workmanship?	✓			
Is equipment being operated properly?	✓			
Is the work being performed using proper methods and procedures?	✓			
Have any defective or damaged materials been identified?		✓		
Are results of applicable tests, samples, and/or measurements within acceptable levels?	✓			
Is the work being performed in a safe manner and in accordance with the SSHP?	✓			
Have pertinent records been completed or collected?	✓			
Have any nonconformances been identified, corrected, and re-inspected?		✓		
Notes:				




# HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name:	Project Number:	Client:
Project:	Contractor:	Contract No.: Subcontract No.
Equipment Description: <i>Steering Guzzler</i>	Model No.(s): <i>T 200</i>	Serial No.(s): <i>T 200</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems	✓		
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher	✓		
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket			✓
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

 Signature of Certified Operator	<i>HMRI</i> Company	<i>11-2-17</i> Date
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# HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name:	Project Number:	Client:
Project:	Contractor:	Contract No.: Subcontract No.
Equipment Description: <i>Peterbilt Vac Truck</i>	Model No.(s): <i>T 260 / PB348</i>	Serial No.(s): <i>T 260</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems	✓		
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher	✓		
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket			✓
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

*[Signature]*  
Signature of Certified Operator

*HMRI*  
Company

*11-2-17*  
Date



# HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>Forbes Missile</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>Atlas Missile</i>	Contractor: <i>ACI</i>	Contract No.: Subcontract No.
Equipment Description: <i>Takachi</i>	Model No.(s): <i>TL 8</i>	Serial No.(s): <i>10659850</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems			✓
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher			✓
16. Seat belts	✓		
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

*[Signature]*

Signature of Certified Operator

*ACI*

Company

*11/2/17*

Date



# HEAVY EQUIPMENT DAILY INSPECTION CHECKLIST

Project Name: <i>Forbes</i>	Project Number: <i>16-118</i>	Client: <i>USACE</i>
Project: <i>Atlas Missile</i>	Contractor: <i>ACI</i>	Contract No.: Subcontract No.
Equipment Description: <i>T-handler</i>	Model No.(s): <i>Genie</i>	Serial No.(s): <i>106 73495</i>

CHECKLIST	OK	Not OK	N/A
1. Fuel	✓		
2. Lubrication, engine oil	✓		
3. Brakes	✓		
4. Tires, tracks	✓		
5. Air systems			✓
6. Horn	✓		
7. Safety guards	✓		
8. Mirrors	✓		
9. Steering mechanism	✓		
10. Cooling water	✓		
11. Operation controls	✓		
12. Lights and reflectors	✓		
13. Windshield wipers, defroster	✓		
14. Backup alarm	✓		
15. Fire extinguisher	✗		✓
16. Seat belts	✓		✗
17. Filters (air, oil, fuel, hydraulic)	✓		
18. Lift arm and bucket	✓		
19. Grab handles	✓		
20. Steps (tread, no slip hazards)	✓		
21. Parking brake	✓		
22. General condition	✓		

Remarks:

Certification

*[Signature]*

Signature of Certified Operator

*ACI*

Company

*11/2/17*

Date



## *Daily Quality Control Report*

REPORT NO.   15  

CONTRACT NO.   W912DQ-16-D-3006 Task Order 0002  

Date:   11/03/17  

LOCATION OF WORK:   Former Forbes Atlas Missile S-5, Lyon County, KS  

DESCRIPTION:   Interm Remedial Action.  

**WEATHER CLASSIFICATION:**

CLASS A	No interruptions of any kind from weather conditions occurring on this or previous shifts	Classification:
CLASS B	Weather occurred during this shift that caused a complete stoppage of all work	Class <u>  A  </u>
CLASS C	Weather occurred during this shift that caused a partial stoppage of work	Temperature (°F):
CLASS D	Weather overhead excellent or suitable during shift. Work completely stopped due to results of previous adverse weather	Max: 46°F    Min: 35
CLASS E	Weather overhead excellent or suitable during shift but work partially stopped due to previous adverse manner	Precipitation:
OTHER	Explain:	Inches <u>  0.00  </u>

**1. Work Performed Today by Kemron/Arrowhead JV:**

Contractors arrived on site at 0800. Upon arrival Arrowhead conducted the Daily Tailgate Safety Meeting with all JV staff and subcontract personnel. Inspection of equipment was completed prior to beginning operations. Refer to the attached meeting and inspections logs for additional detail.



Contractors continued to pump water from the lower chamber of the main sump and place in the settling tank. HMR set up and checked all equipment for the Confined Space Rescue Plan and Procedure. A confined space permit was completed and entry was made into the shaft of the main sump and the chambers.

HMR continued using the Guzzler Vac truck to pump the water out of the lower chamber of the sump pit. Approximately 8,000 gallons were removed. The total amount of water pumped for the project was 270,000 gallons. All of the water in the main sump and lower chamber were removed. All of the sediment in the main chamber and lower chamber was removed. Power-washing in the upper and lower chamber of the main sump was completed. All pumping activities and all power-washing activities were completed.

HMR conducted continuous air quality monitoring while entering the main sump shaft and both chambers. No air contaminants were detected throughout the day.

**2. Work Performed Today by Subcontractors:**

Sediment and debris was pulled out of the lower sump chamber.  
All sediment and debris was loaded into the roll-offs.  
Completed pumping water from the main sump and lower chamber.  
Dewatered the main sediment roll-off.

**3. Type and Results of Inspection: (Include Satisfactory Work Completed or Deficiencies with Action to be taken).**

Follow-up inspections for Definable Features of Work #2 and #3 were conducted, see attached documents for results of inspections. No deficiencies were noted or found.

**4. List Type and Location of Tests Performed and Results of These Tests:**

None

**5. Verbal Instructions Received:**

None

**6. Corrective Actions Proposed/Taken:**

None

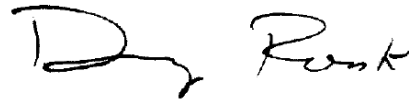
**7. Remarks:**

None

**8. Safety Violations Observed:**

Non

**9. CERTIFICATION:** I certify that the above report is complete and correct and that I, or my authorized representative, have inspected all work performed this day by the contractor and each subcontractor and have determined that all materials, equipment, and workmanship are in strict compliance with the plans and specifications, except as may be noted above.

A handwritten signature in black ink, appearing to read "D. Rank". The signature is written in a cursive style with a large initial "D" and a stylized "Rank".

---

Site Superintendent / Quality Control Officer

# HAZ-MAT Response, Inc.<sup>SM</sup>

1R2171350

1. ISSUED TO	2. DATE	3. LOCATION
HMRI	11-3-17	Allen, KS
4. WORK TO BE DONE (IF HOT WORK SEE SP. 8)		
Finish cleaning main sump		
5. EQUIPMENT TO BE USED		
CSE Tr 129, Tripod, Winch, Rescue Gear		
6. PRINT NAMES OF MEN ENTERING		6. PRINT NAMES OF WATCHMEN
A. Blanton T. Wright	Ty Wright	T. Wright K. Botello
		C. Wiseman G. Wiggin
7. SPECIFIC LINES TO BE BLANKED OR DISCONNECTED		
Main sump is not hooked into any 'live' system		
8. LINES NOT TO BE BLANKED (REASON)		
NA		
9. SPECIFIC EQUIPMENT TO BE LOCKED OUT (SP. 4)		
NA		
10. SPECIFIC SAFETY AND WORKING INSTRUCTIONS		
Maintain communication w/ entrants		

11. NOTE: Permit Will Not Be Signed Until All Steps Are Completed!

**CHECKLIST (EACH BLOCK MUST BE INITIALED)**

OPERATION	YES	NO	EXPLAIN ANY "RESPONSE"	MAN ENTERING
a. HAS EQUIPMENT BEEN THOROUGHLY CLEANED, WASHED AND/OR FLOODED?		✓	Lower sump needs cleaned	WAB TC
b. LOCK OUT PROCEDURE COMPLETE (SP. 4)	✓		HMRI 'lots'	WAB TC
c. SAFETY LIGHT IN USE.	✓		Intrinsically safe	WAB TC
d. CONFINED SPACE PURGED AND REPURGED WITH AIR	✓		Copas in use	WAB TC
e. BLOWER OPERATING	✓		Copas in use	WAB TC
f. SELF-CONTAINED BREATHER APPARATUS, AIR LINE MASK, GAS MASK	✓		SCBA's	WAB TC
g. SAFETY HARNESS TYPE (EXPLAIN)	✓		S point	WAB TC
h. ALL CONNECTIONS BLANKED OR BROKEN	✓		Safe area	WAB TC
i. ARE SURROUNDING AREAS SAFE?	✓		Clean work area	WAB TC
j. CONTINUOUS GAS/O <sub>2</sub> MONITOR IN OPERATION?	✓		Constant monitoring	WAB TC
k. ATMOSPHERIC TEST	✓		Air is recorded	WAB TC

O <sub>2</sub> TYPE AND METER NUMBER	ACCEPTABLE RESULTS	RESULTS	TIME
Drager X <sub>2</sub> 2500	(at least 19.5%)	20.9%	8:42
COMBUSTIBLE GAS TYPE & METER	ACCEPTABLE RESULTS	RESULTS	BY
ARST 3661	(10%)	0%	Wright

Bump Test  
11-3 8:24 AM

12. NOTE: Permit Expires At End Of Shift And Is Void If Surrounding Conditions Change During The Shift.

13A. ENTRY		13B. EXIT (FINAL)	
TIME	INITIALS	TIME	INITIALS
9:00 / 12:15	WAB	12:10 / 12:32	WAB TC

14. STATEMENT: I Have Read The Entire Permit, Reviewed SP-1 And Checked All Entries

A. SIGNATURE(S) MEN ENTERING CONFINED SPACE		B. SIGNATURE(S) WATCHMEN	
		C. SIGNATURE(S) SUPERVISOR(S)	

**DISTRIBUTION INSTRUCTIONS**

1. RETURN ORIGINAL TO SAFETY DIRECTOR IMMEDIATELY! Rescue Company # HMRI
2. POST DUPLICATE ON OR NEAR CONFINED SPACE AND RETURN TO SAFETY DIRECTOR UPON COMPLETION.

