

**Notable Event Report**

Title of Event			
<b>Event Title:</b>	Fractured Foot While Assisting with Lift in Hall B		
<b>Date and Time of Occurrence:</b>	8:00 am	<b>Notable Event Number:</b>	PHY-16-1206
<b>Event Location:</b>	Hall B	<b>Date Notable Event Report is Due*:</b>	01/06/2017

\*The Notable Event Report is due to the ESH&Q Reporting Officer with 30 days of the Initial Fact Finding Meeting unless an extension is requested.

**Summary of Event and / or Injuries, including Initial Fact Finding Meeting information:** determine the chain of events and timeline. Use attachment as necessary.

On December 6th, two workers in the Physics Division were tasked by their supervisor, with moving a steel lifting fixture (~850 pounds) to an elevated platform using the overhead crane in Hall B. The qualified crane operator had performed this lift before without a counter weight and without incident. The crane operator/rigger attached 3 lifting slings to 3 anchor points on the "L" shaped load, without a tagline and raised it to the platform level without incident.

The spotter donned their Jefferson Lab issued body harness with a retractable lanyard and used the manlift to access the elevated steel platform (Approximately 6 ft. by 15 ft.). Upon reaching the platform, the spotter exited the manlift and attached his lanyard snaphook on the guardrail of the platform. Once the load was positioned approximately waist high, the worker serving as the lift activity spotter positioned themselves immediately adjacent to one side of the load. As the load was being lowered, the "L" arm of the load contacted the steel deck plate first, and as the crane operator continued to lower the load, the asymmetrical shape of the load caused it to kick and skid. The spotter was unable to react in time to re-position both feet when the load shifted. A circular flange on the load contacted the top and side of the spotter's safety shoe, behind the steel toe protection. The load lowered all of the way but it was not totally settled on the top of the platform. The crane operator witnessed his reaction, but was not fully aware of the injury. The spotter requested that the Crane Operator adjust the fixture. The spotter assisted the operator with getting the lifting arm off the platform and flying it out. Once the lifting arm was flown out, the spotter used the manlift and safely returned to the ground. The lifting arm was placed on the ground.

The Operator proceeded to aid the injured spotter. Once the injured spotter was taken care of, another qualified operator guided the Operator as he re-rigged the lifting arm using 2 straps, double choked and changed the angle of the L side. Another qualified spotter was assigned. The spotter donned their JLab issued body harness, and proceeded to use the manlift to gain access to the elevated platform. The lifting arm was safely placed back on the elevated platform without further incident.

After the lift was complete, the workers were tasked with Hall clean-up efforts and prep for the installation of the TORUS gas lines.

**Causal Analysis:** (Use attachment as necessary)

<b>Root Cause:</b>	<p>Work planning for this task was less than adequate- The planning for rigging of the lifting fixture was insufficient as it did not take into consideration all possible hazards associated with the lift. Technicians failed to recognize the need for taglines, which would have aided in properly guiding the load to the platform.</p> <p>There was also limited space for the spotter on the platform, no room to “run” if needed. Should always plan for the worst case scenario.</p>
<b>Contributing Causes:</b> (List as many as apply.)	**Although not a contributing factor, it was noted during the investigation that the tie off point (guardrail) used by the spotter on the elevated platform was not compliant.

Extent of Condition Check	<u>JLab CATS Number</u>	Target Date	Action Owner

Corrective Action(s)	<u>JLab CATS Number</u>	Target Date	Action Owner
<p>As this is skill of the craft related failure, a hall meeting will be conducted to share the lessons learned from this event (worker was too close to the load, proper use of taglines, maintaining spotter safe distance from the load, understanding when loads have the potential to shift due to an irregular center of gravity and not planning the lift with the worst case scenario in mind) with others that perform these types of lifts.</p> <p>Evidence of completion: Presentation/PowerPoint and attendance sheet with signature.</p>	NE-2016-21-01-01	02/28/2017	Ed Folts/ Doug Tilles
<p>Share lessons learned with all crane and rigging trained individuals.</p> <p>Evidence of completion: Snap shot of LL entry into database.</p>	NE-2016-21-01-02	03/31/2017	Tina Johnson/Mary Jo Bailey
<p>Have the Physics DSO conduct a safety observation during the next lift for this device to ensure that we are using the best configuration possibly to safely lift and place this device on any surface.</p> <p>Evidence of completion: Safety Observation link</p>	NE-2016-21-01-03	3/31/2017	Ed Folts

# Notable Event Report

Corrective Action(s)	<u>JLab CATS Number</u>	Target Date	Action Owner
As per the ESH manual in the instance of an accident, the crane operator's privilege and hoist is revoked until retaining is accomplished (ESH Manual 6141-Appendix T1 (Sec. 4.2))  Evidence of completion: Email from DSO to supervisor and employee	NE-2016-21-01-04	01/27/2017	Doug Tilles
**The Crane Operator and Spotter shall complete "SAF 202B - Fall Protection (Site Specific) training as a refresher."  Evidence of completion: Copy of the updated training record.	NE-2016-21-01-05	03/31/2017	Ed Folts

Lessons Learned (Confer with Lessons Learned Coordinator) (Use attachment as necessary)	<u>Lessons Learned Number</u>
Even if you have completed the same task multiple times you should always reevaluate your set-up, if not sure ask for an extra set of eyes before completing the task. This includes questioning the worst case scenario with co-workers that may perform similar tasks.	989
Ask questions when planning your work. This communication method gives other the opportunity to provide valuable nuggets of information.	989

**Witness Accounts:** (Use attachments as necessary. Box will expand as necessary)

**Records, Documents, Pictures, and Other References:** (Copy and paste, use attachments or document links as necessary)

Approx. position of spotter



**Lessons Learned** (Confer with Lessons Learned Coordinator)  
(Use attachment as necessary)

Lessons  
Learned  
Number



**Lessons Learned** (Confer with Lessons Learned Coordinator)  
(Use attachment as necessary)

[Lessons Learned Number](#)

Markings from the lifting arm as it rolled onto the steel toed shoe



**Lessons Learned** (Confer with Lessons Learned Coordinator)  
(Use attachment as necessary)

Lessons  
Learned  
Number



**Jefferson Science Associates**

Thomas Jefferson National Accelerator Facility

**Occupational Health & Safety**

628 Hofstadter Rd., Ste. 3  
Newport News, VA 23606  
Phone: (757) 269-7539  
Secured Fax: (757) 269-7881

W. Smith Chandler MD, MPH, MS  
JoAnne Newman, LPN  
Johnie B. Banks, CMA

Name: JOSHUA FOYLES

Date of Birth: \_\_\_\_\_

Employer: JLAB

Med: ORE

Supervisor: TOO CARSTENS

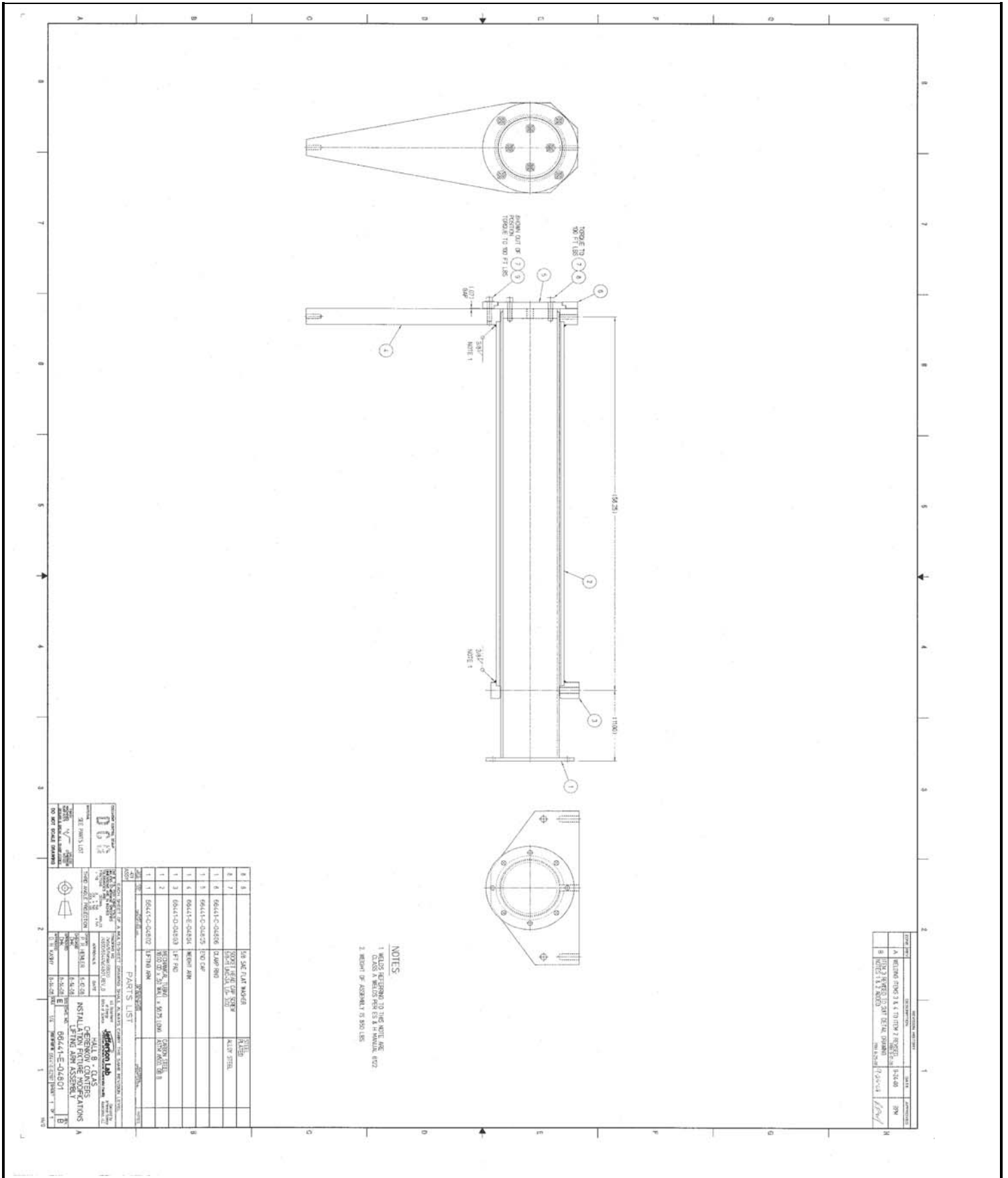
Allergies: \_\_\_\_\_

Division: PHYSICS

Last Tetanus: \_\_\_\_\_

WHILE SPOTTING A LIFTING FIXTURE
BEING SET ON A PLATFORM - THE
FIXTURE SWD - CAUSING THE OTHER
END TO DRAP DOWN APPROX 12"

\*\* CLICK ON THE ABOVE IMAGE TO REVIEW ENTIRE DOCUMENT \*\*



REV	DATE	DESCRIPTION	BY	CHKD
A	10/20/17	ISSUE FOR FABRICATION	TJ	JK
B	11/20/17	ISSUE FOR ASSEMBLY	TJ	JK

**NOTES**  
 1. WELDS REFERRED TO THIS NOTE ARE CLASS A WELDS PER ES & H MANUAL, 027.  
 2. WEIGHT OF ASSEMBLY IS 500 LBS.

NO.	QTY	PART NUMBER	DESCRIPTION	UNIT
1	1	66441-C-04006	TOP PLATE	PLATE
2	1	66441-C-04007	FLANGE	FLANGE
3	1	66441-C-04008	FLANGE	FLANGE
4	1	66441-C-04009	FLANGE	FLANGE
5	1	66441-C-04010	FLANGE	FLANGE
6	1	66441-C-04011	FLANGE	FLANGE
7	1	66441-C-04012	FLANGE	FLANGE
8	1	66441-C-04013	FLANGE	FLANGE

**JEFFERSON LAB**  
 3810 CENTRE EXP. AVENUE  
 FARMINGTON, CT 06030  
 TEL: 860-452-3200 FAX: 860-452-3201  
 WWW.JEFFERSONLAB.ORG

**PROJECT:** HALL B CLASSIFICATION FACILITY MODIFICATIONS  
**WORK CENTER:** 66441-E-04001  
**DATE:** 11/20/17  
**BY:** TJ  
**CHKD:** JK

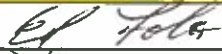
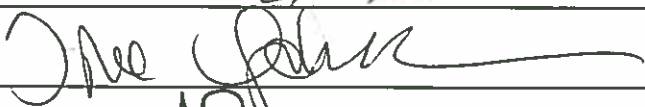



Emergency Notifications Made (Subsequent to the Event):	Date	Time
Fire, Rescue & Emergency Medical: (9-911)		
Guard Post: x5822; 269-5822		
Occupational Medicine 269-7539	12/06/2016	0800
ESH&Q Reporting Officer: 876-1750	12/06/2016	0830
Crew Chief 630-7050		
Industrial Hygiene: 269-7863:		
Other: Steve Neilson	12/6/2016	1139


<b>Confirmation Review Distribution:</b> Investigation Team Members Affected Division Managers ESH&Q Reporting Officer	It is asked that you review and provide comments to this document to the Lead Investigator (denoted on Page 1) within ___ days. Your comments will be reviewed and incorporated as appropriate. Thank you for your consideration in this matter.
---	--

### Investigation Team Confirmation:

The below signees, confirm to the best of their knowledge, that the information presented in this document is accurate and complete.

Role	Print	Signature	Date
Lead Investigator	Ed Folts		1/1
ESH&Q-Reporting Office	Tina Johnson		1/20/17
SME- Fall Protection	George Perry		1/23/17

### Acceptance/Acknowledgement of Facts

	Print	Signature	Date:
Associate Director/ Department Manger	Rolf Ent		01/25/17

Upon confirmation submit document to the ES&H Reporting Officer for completion and distribution.

### Documentation of Findings: (To be Completed by ESH&Q Reporting Officer)

<b>Notable Event Number:</b>	PHY-16-1206
<b>CATS Number:</b>	NE-2016
<b>Lessons Learned Number:</b>	989
<b>ORPS Number:</b>	SC--TJSO-JSA-TJNAF-2016-0008
<b>NTS Number:</b>	N/A

<b><u>CAIRS Entry:</u></b>	16-1206
<b><u>DOE Cause Code:</u></b>	A3, B1, C01-Check of work was LTA, A3, B2, C04- previous success in the use of this rule reinforced continued use,A4B3C08- Job Scoping did not take into consideration this unique device
<b><u>ISM Code:</u></b>	Analyze the Hazards

Unless otherwise specified the following is to be completed by the [Lead Investigator](#).

Step 1 Initial Fact-Finding Meeting (To be held as soon as reasonably possible following event (within 24 hours))			
<b>Date:</b>	12/6/2016	<b>Time:</b>	1400
<b>Location:</b>	Hall B		
Required Attendees: (Print Name)		Optional Attendees: (Print Name) Present	
<b>Lead Investigator:</b>	Ed Folts	<b>Associate Director:</b>	Rolf Ent <span style="float: right;">Notified</span>
<b>ESH&amp;Q Representative:</b>	Tina Johnson	<b>TJSO Observer:</b>	Steve Neilson <span style="float: right;">Present</span>
<b>Supervisor of involved persons(s):</b>	Tom Carstens	<b><u>Subject Matter Expert</u>(s), Facility/Equipment Owner as applicable:</b>	
<b>Involved or impacted person(s):</b>	Josh Foyles	SME- George Perry	
		Hall Cord.- Doug Tilles	
<b>Witness(es):</b>	Adam Bradshaw		

<b>Agenda</b> <i>(Ensure the pace of the meeting allows time for accurate note taking.)</i>	<b>√ if Complete</b>
1. Introduction – Provide Event Title, Date and Time of Occurrence, and Location:	√
2. Attendance - Are Required Attendees present.	√
3. Purpose of Initial Fact-Finding meeting.	√
4. Event Reconstruction – Use information to complete Section 3. <a href="#">Summary of Event and/or Injuries</a> below.	√
a. Personnel and organizations involved in the event.	√
b. Conditions and actions preceding the event.	√
c. Chronology (timeline) of the event; and	√
d. Immediate actions taken in response to the event.	√
5. Clarify information – <a href="#">Subject-Matter Expert</a> (SME) confirms work conditions.	√
6. <a href="#">Stop Work</a> or the <a href="#">Tag Out</a> Required? If “Yes” – establish the restart criteria and inform the affected Management chain.	N/A
7. Compensatory Actions Required? If “Yes” determine responsibility and include confirmation documentation.	N/A
8. Records or documentation required to confirm, clarify, or complete information (i.e., work plans, work control documents, photos, etc).	√
9. Other Questions or Concerns: Ask attendees if there are any other questions, concerns, or information that they wish to provide.	√
10. Obtain TJSO Observer feedback on conduct of fact finding meeting and potential improvements.	√

<b>Step 2 Investigation Team:</b>		<b>Date Convened:</b>	12/8/2016
		(Within 24 hours of Fact Finding Meeting.)	
Role	Name	Department/Group	Phone
Lead Investigator	Ed Folts	PHY	7857
Reporting Officer	Tina Johnson	ESH&Q	7611
SME	George Perry	ESH&Q	6381
<a href="#">TJSO Observer</a>	Steve Neilson	TJSO	7215

Environmental Aspects			
<b>Type of Material Released:</b>		<b>Quantity:</b>	
<b>Source:</b>		<b>Time Flow was Halted or Controlled:</b>	
For Investigation Team (✓ All That Apply):			
<input type="checkbox"/> Reportable Quantity	<input type="checkbox"/> Impact Ground/Soil	<input type="checkbox"/> Storm Water Channel/Drain	<input type="checkbox"/> Sanitary Sewer

Categorization and Reporting			
(To be completed by ESH&Q Reporting Officer within two hours – unless essential information is still pending)			
<b>ORPS Determination:</b>	<b>Date:</b>	12/7/2016	<b>Time:</b> 0904

**Categorization and Reporting**

(To be completed by ESH&Q Reporting Officer within two hours – unless essential information is still pending)

<b>ORPS Determination:</b>	<b>Date:</b> 12/7/2016	<b>Time:</b> 0904
----------------------------	------------------------	-------------------



**NTS/ORPS/CAIRS Determination: Physics Incident Notification**

12/7/2016

From: Tina Johnson

To: Steve Neilson

Cc: Mary Logue Ed Folts Tina Johnson

1481056422677 (11.6 KB) [Download](#) | [Briefcase](#) | [Remove](#)

Steve:

As you know a technician (spotter) was assisting a crane operator in Hall B with the move of a lifting arm device **this morning** and was injured. The operator was placing the steel device onto the elevated steel platform, and the arm shifted. The shift caused the arm to slightly hang off of the platform which caused the device to drop and roll in the wrong direction. The lifting arm rolled on the technician's foot subsequently breaking it. The break is right above the point where the steel toe stops within the shoe. The lifting arm was secured and the technician immediately reported to Occupational Medicine.

The technician was evaluated by Dr. Chandler and sent offsite for further evaluation. The technician was diagnosed with a fractured foot and was permitted to return to work with restrictions. The technician was also referred to an Orthopedist for further evaluation.

The Lab has determined that this is ORPS and CAIRS reportable and we will complete and submit our reports in a timely manner.

**OSHA Recordkeeping Evaluation:**Based on the information below, this case is recordable (DART).

**Which work-related injuries and illnesses should you record?**

Record those work-related injuries and illnesses that result in:

<b>10 CFR 851 Screen:</b>	<b>Date:</b> 12/7/2016	<b>Time:</b> 0904
---------------------------	------------------------	-------------------

Negative: This event does not meet the voluntary criteria as a discreet programmatic weakness.

**Final Distribution:**

- [ES&H Reporting Officer](#) (Original)  
 Associate Director/Department Manager
- [Division Safety Officer](#)  
 Investigation Team Members
- [ESH&Q Liaisons](#)

**Form Revision Summary**

- Revision 1.5 – 10/04/13** – Changed COE to Lessons Learned; updated links.
- Revision 1.4 – 09/06/12** – Qualifying Periodic Review. Clarification of content only.
- Revision 1.3 – 01/31/12** – Updated ESH&Q Reporting Officer assignment from S.Smith to C.Johnson per M.Logue Edited to clarify process steps.
- Revision 1.2 – 10/20/11** – Updated ESH&Q Reporting Officer assignment from J.Kelly to S.Smith per M.Logue.
- Revision 1.1 – 05/24/11** – Edited to clarify process steps.
- Revision 1.0 – 11/23/10** – Updated to reflect current laboratory operations.

ISSUING AUTHORITY	FORM TECHNICAL POINT-OF-CONTACT	APPROVAL DATE	REVIEW DATE	REV.
ESH&Q Division	<a href="#">Tina Johnson</a>	10/04/13	10/04/16	1.5

*This document is controlled as an on line file. It may be printed but the print copy is not a controlled document. It is the user's responsibility to ensure that the document is the same revision as the current on line file. This copy was printed on 1/26/2017.*