DISTRIBUTION SHEET

To 200 Area Water & Sanitary Systems	From Structural Assessments	Page 1 of 1 Date 09/12/94
Project Title/Work Order Load Test of the 283W Clearwell Roof Deck and Support Structure		EDT No. 608786 ECN No. N/A

Name	MSIN	Text With All Attach.	Text Only	Attach./ Appendix Only	EDT/ECN Only
T. J. Conrads	H5-55	X			
P. L. Davis	H5-55	X			
J. U. Greenough	S4-61	X			
C. M. Hartman	S6-21	X			
R. M. McCoy	H5-55	X			
T. E. Perry	T1-06	X			
A. K. Sharma	H5-60	X			
Central Files (orig. + 2)	L8-04	X			
OSTI (2)	L8-07	X			

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ENGINEERING DATA TRANSMITTAL

Page 1 of 1

1. EDT

608786

2. To: (Receiving Organization) 200A Water & Sanitary Systems	3. From: (Originating Organization) Structural Assessments	4. Related EDT No.: N/A
5. Proj./Prog./Dept./Div.: Roof Inspections	6. Cog. Engr.: R. M. McCoy	7. Purchase Order No.: N/A
8. Originator Remarks: This reports the results of the load test of the 283W Clearwell Roof Deck and Support Structure		9. Equip./Component No.: N/A
		10. System/Bldg./Facility: N/A
11. Receiver Remarks:		12. Major Assm. Dwg. No.: N/A
		13. Permit/Permit Application No.: N/A
		14. Required Response Date: 09/26/94

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(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	Impact Level	Reason for Transmittal	Originator Disposition	Receiver Disposition
1	WHC-SD-GN-TRP-20014		0	Load Test of the 283W Clearwell Roof Deck and Support Structure	SQ	1	1	

16. KEY		
Impact Level (F)	Reason for Transmittal (G)	Disposition (H) & (I)
1, 2, 3, or 4 (see MRP 5.43)	1. Approval 2. Release 3. Information 4. Review 5. Post-Review 6. Dist. (Receipt Acknow. Required)	1. Approved 2. Approved w/comment 3. Disapproved w/comment 4. Reviewed no/comment 5. Reviewed w/comment 6. Receipt acknowledged

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Reason	Disp.								
1	1	Cog. Eng. R. M. McCoy	<i>R. M. McCoy</i>	9-28-94	H5-55				
1	1	Cog. Mgr. T. J. Greenough	<i>T. J. Greenough</i>	11/7/94	H5-55				
1	1	QA AK Sharma	<i>AK Sharma</i>	11/7/94	H5-60				
1	1	Safety CM Hartman	<i>CM Hartman</i>	10/6/94	S6-21				
		Env.							
		OSTI (2)		18-07					
		Central Files (orig. +2)		18-04					

18. R. M. McCoy <i>R. M. McCoy</i> Signature of EDT Originator Date 9-28-94	19. J. U. Greenough <i>J. U. Greenough</i> Authorized Representative for Receiving Organization Date 10/27/94	20. T. J. Greenough <i>T. J. Greenough</i> Cognizant/Project Engineer's Manager Date 11/7/94	21. DOE APPROVAL (if required) Ltr. No. N/A ☐ Approved ☐ Approved w/comments ☐ Disapproved w/comments
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Document Number: WHC-SD-GN-TRP-20014, REV. 0

Document Title: Load Test of the 283W Clearwell Roof Deck and Support Structure

Release Date: 11/09/94

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

APPROVED FOR PUBLIC RELEASE

WHC Information Release Administration Specialist:

Niki L. Solis

11/09/94

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Support Structure

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WHC-SD-GN-TRP-20014

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5. Key Words

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6. Author

Name: R.M. McCoy

R.M. McCoy
Signature

Organization/Charge Code 80440/MD2F7

7. Abstract

This report the results of the results of the load test of the 283W Clearwell Roof
Deck and Support Structure

8. RELEASE STAMP

OFFICIAL RELEASE
BY WHC
DATE NOV 11 1994

35 SECTION 21

TEST REPORT

WHC-SD-GN-TRP-20014

Revision 0

LOAD TEST OF THE 283W CLEARWELL ROOF DECK AND SUPPORT STRUCTURE

For Personnel Access Using
a Remotely Operated Robot

Prepared By: R. M. McCoy Date: 9-6-94
R. M. McCoy, Senior Engineer
Structural Assessments

Reviewed By: R. A. Giller Date: 9-28-94
R. A. Giller, Senior Engineer
Structural Assessments

Approved By: T. J. Conrads Date: 10-3-94
T. J. Conrads, Manager
Structural Assessments

WESTINGHOUSE HANFORD COMPANY
Hanford Operations and Engineering Contractor
for the Department of Energy

MASTER

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for

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1.0 INTRODUCTION

The 283W Clearwell roof area was load tested according to the approved load-test procedure, WHC-SD-GN-TP-30015, Revision 0, as modified below. The 283W Clearwell is located in the 200 West Area of the Hanford Site and has the following characteristics:

- Roof deck - concrete slab supported by columns and walls
- Roof membrane - tar and gravel
- Roof slope - flat (<10 deg)
- Roof elevation - approximately 6 in. above ground level.

The 283W Clearwell was visited in April 1993 for a visual inspection, but could not be inspected because of the confined space requirements. It was revisited in February 1994 for the purpose of writing this test report. Because the roof could not be inspected, a test was determined to be the best way to qualify the roof for personnel access.

2.0 SUMMARY

The 283W Clearwell roof was load tested according to the approved load-test procedure, WHC-SD-GN-TP-30015, Revision 0; the specific directions of this test report were followed. The test was performed on August 31, 1994, from 1:00 p.m. to 2:00 p.m.

All pre-test approvals and pre-test checklist items were signed off as shown in Sections 3.3, 3.4, and 3.5 below. On the day of the test, the pre-test briefing was held. The pre-test briefing consisted of filling out the pre-test checklist, discussing proper lifting techniques, reviewing the fall-protection plan, reviewing the job hazards analysis, and reviewing the robot travel path.

The load-test results consist of visual observations and the test engineer's conclusions. Visual observations found no adverse conditions such as large deflections or permanent deformations. No deflection measurements were recorded because the tar and gravel on roofs get displaced by the robot tracks; the result is large variations in deflection measurements.

The conclusions are that the roof has been qualified for 500-lb total roof load and that the "No Roof Access" signs can be changed to "Roof Access Restricted" signs as described in section 4.3.

3.0 LOAD TEST

3.1 LOAD-TEST RISKS

Roof load tests involve risks. These risks must be addressed and mitigated by the load-test team and the results accepted or rejected by Safety and the building manager before the test begins. The risks associated with the roof load test fall into two categories: personnel injury and building or equipment damage.

Personnel risks are minimized by evacuating and barricading the work areas, testing the procedure steps, and verifying that the risks are acceptable. Test personnel are also protected by procedures that incorporate job hazards analyses and fall-protection evaluations.

The risks to buildings, building equipment, and the robot are much higher than those for personnel and were evaluated on the basis of the following cost-benefit evaluation based on the 25 buildings to be tested initially.

- Roof access is needed for routine maintenance of roof-mounted equipment, roof membrane repair, and re-roofing work.
- The estimated cost of load testing a roof is \$8,000 per building including the cost of the robot, equipment, and test plan development.
- The estimated cost to move roof-mounted equipment to the ground level is more than \$10,000 per building.
- The estimated cost to remove and replace rigid drywall ceilings so that the roof can be inspected rather than tested is more than \$50,000 per building.
- If a robot falls through the roof, the financial losses are the cost of the robot @ \$50,000 and the repair of building equipment @ \$10,000. [Note: Damage to the building is not included because the roof would have to be repaired anyway.]

Possible damage to building, equipment, and robot is a cost-only risk that is mitigated as follows.

- Visual inspections shall be performed to look for deterioration and test feasibility.
- Expensive equipment is removed from the test areas and the areas beneath.
- The roof is evaluated structurally to verify that, as designed, it is adequate to support the robot.
- Testing of roofs that perform poorly, such as pre-cast concrete or gypsum materials, or structurally suspect roofs will be avoided. Testing of these roofs shall be contingent on further cost-benefit analyses.

- Test failures are expected to be localized, e.g., one wheel of the robot punches through the roof membrane. During the test, deflections are monitored so that if a local failure occurs the test can be stopped before the whole robot falls through the roof.
- Thought was given to tethering the robot to anchor points or overhead cranes. However, it would cost an estimated \$10,000 per building (for a total of \$250,000) to secure the \$50,000 robot. Additionally, the sudden snap of the securing cable system or crane boom movement would be more dangerous to the robot operators than letting the robot free fall.

3.2 TEST PROCEDURE

- The test engineer was designated as R. M. McCoy.
- The 283W Clearwell roof area was visited for inspection in April 1993; an inspection of the southeast half of the roof could not be performed because of confined space requirements.
- Deflection calculations (Appendix A) indicate a maximum deflection at the point of greatest deflection of 0.01 in. for 1,062 lb.
- The building plan provided in Appendix B indicates the test area, the observation area, the route that the robot will take to get to and from the roof, and the route the robot will take to test the roof.
- The test engineer has prepared this test report and obtained the pre-test approvals indicated in Section 3.3.
- The job hazards analysis appears in Appendix C.
- A fall-protection program is not required for this ground-level roof test.
- Pre-job briefing minutes appear in Appendix D.
- The area around the exterior of the clearwell where the load test is being performed shall be barricaded off at ground level with "CAUTION" tape, and posted with "DANGER" signs.
- Observation ladders and platforms are not required for this load test.
- The qualified robot operator for this test shall be R. M. McCoy.
- The robot requires no special preparation for accessing this ground-level roof.

- The robot shall move across the roof following the path specified on the building plan in Appendix B. The first pass shall be made with an unloaded robot (600 lb). The second pass shall be made with the fully loaded robot (1,062 lb). Note: The fully loaded robot weighs 1,062 lb; that weight divided by the robot footprint yields a uniform load under the robot of 90 lb/ft².
- The test engineer shall observe the movement of the robot and look for abnormally large or permanent deflections. The test engineer shall base the pass/fail determination on these observed deflections. [Note: This pass/fail determination deviates from the approved test procedure.] Failed roof deck and support members shall be considered unsafe to walk on or under, and appropriate safety measures shall be taken by the building manager.
- The robot requires no special preparation for removal from this ground-level roof.
- The test engineer or building manager shall remove the load-test postings following the test.
- The building manager shall post the building as unsafe, as required, on the basis of the results of the load testing or at the recommendation of Industrial Safety.
- The test engineer shall complete this test report.

3.3 PRE-TEST APPROVALS, RELEASE TO PROCEED

Your signature on this form signifies your agreement with this roof deck load-test plan, and with the pre-test checklist items. The load test may proceed anytime within three months of signing this form.

R. M. McCoy/ R.M. McCoy Date: 8-10-94
Test Engineer (Printed/Signature)

T. J. Conrads/ T.J. Conrads Date: 8-10-94
Engineering, Analysis and Technology Management (Printed/Signature)

C. M. Hartman/ CMH Date: 8/22/94
Industrial Safety (Printed/Signature)

A. K. Sharma/ Ak Sharma Date: 8/24/94
Quality Assurance (Printed/Signature)

J. U. Greenough/ J. U. Greenough Date: 8/12/94
Building Manager (Printed/Signature)

3.4 TEST ENGINEER'S QUALIFICATION

- Degree or equivalent work experience in structural, civil, or mechanical engineering fields.
- Two years of combined field and analysis experience in the design, evaluation and construction of building structures.
- Experience in the construction materials of the building being tested, e.g., steel concrete, or wood.
- Approval of the engineering manager shall testify to the ability and credentials of the test engineer.

R. M. McCoy/ R.M. McCoy Date: 8-10-94
Test Engineer (Printed/Signature)

T. J. Conrads/ T.J. Conrads Date: 8-10-94
Manager (Printed/Signature)

3.5 PRE-TEST CHECKLIST

STEP	SIGNATURE	DATE
BEFORE THE LOAD TEST IS SCHEDULED:		
Verify that an attempt was made to inspect the roof visually, to find deficiencies and to determine the feasibility of making a load test.	R.M. Mody	Asham 8-10-94
Verify that the roof needs to be load tested.	R.M. Mody	Asham 8-10-94
Determine slope of roof $\leq 25^\circ$.	R.M. Mody	AK Sharma 8-10-94
Prepare building roof plan.	R.M. Mody	Asham 8-10-94
Prepare stress and deflection calculations based on the as-built member strengths.	R.M. Mody	Asham 8-10-94
Prepare job hazards analysis.	R.M. Mody	Asham 8-10-94
Prepare fall-protection plan.	R.M. Mody	Asham 8-10-94
Obtain pre-test approvals.	R.M. Mody	Asham 8-10-94
Schedule test date.	R.M. Mody	Asham 8-30-94
Notify Industrial Safety of test date.	R.M. Mody	Asham 8-30-94
Notify QA of test date.	R.M. Mody	Asham 8-30-94
DAY BEFORE TEST:		
Check robot batteries for full charge.	R.M. Mody	8-30-94
Hold pre-job briefing. (May be conducted on the day of the test.)	R.M. Mody	Asham 8-31-94
ON THE TEST DAY:		
Verify that personnel and valuable/critical equipment have been removed from the building below the load-test area.	NA	—
Barricade off and post danger signs in the load-test area.	R.M. Mody	Asham 8-31-94
De-energize or shut down equipment or switchgears that are installed under or on the roof test area	NA	—
Place observation ladders or platforms.	NA	—

4.0 RESULTS AND RECOMMENDATIONS

4.1 LOAD-TEST DATA

The load-test data consist of the following visual observations by the test crew.

- The control cable and turning of the robot resulted in the gravel on the roof being moved.
- The tar roof membrane under the gravel layer was not damaged.
- No large deflection or permanent deformation of the deck was noted.

4.2 QUALIFICATION RESULTS

The loads for this test were 600 lb for the unloaded robot and 1,062 lb for the fully loaded robot. With these loads no large deflections or permanent deformations were noted. Visual observations reported no soft or weak spots in the roof deck.

On the basis of these observations, the roof deck is qualified for limited personnel access. Personnel and equipment should be limited to half of the tested load or about 500 lb on any one area of the roof. Roof area is defined by the purlin spacing and the width of 4 ft: roughly one person on any 4- by 4-ft area.

4.3 RECOMMENDATIONS

The roof is qualified for 500 lb of personnel and equipment in each roof area. The "No Roof Access" signs can be changed to one of the following:

- "Roof Access Restricted. See Building Manager for Access."
- "Roof Load Restricted to 500 lb Total."

The roof deck should be load tested at 5-year intervals. This interval is recommended as the maximum inspection interval on the basis of the present condition of the roof. It assumes that the roof is maintained to prevent deterioration from both interior and exterior sources (e.g., roof or steam leaks). The recommended interval should be shortened, should the possibility of deterioration occur (e.g., roof leaks). If the roof is to have regular foot traffic, the load test-interval should be reduced to half of the suggested interval.

5.0 REFERENCES

WHC, 1994, *Procedure for the Load Testing of Roof Decks and Support Structures*, WHC-SD-GN-TP-30015, Rev. 0, Westinghouse Hanford Company, Richland, Washington.

APPENDIX A
STRESS/DEFLECTION CALCULATIONS

DON'T SAY IT --- Write It! APPENDIX A

DATE 02/16/94TO R. M. McCoyFROM J. A. RyanSUBJECT CALCULATED ROOF SLAB DISPLACEMENTS

The roof slab was modeled as a quarter sector to take advantage of symmetry. The model dimensions were 34 ft x 22.5 ft. The model was generated in the units of inches, pounds/in² and psi. The model was generated using a grid of 12 x 9 elements, a dead weight loading of 0.52083 psi (75 psf) was applied and run as load condition input.001. The maximum displacement occurred at node 243, -0.1015 in.

The second load case, input.002, included a 500 lb load applied at node 118 (only half of the 1000 lb is applied due to the symmetry. The displacement in this case, dead weight plus concentrated load, was calculated as -0.1028 in at node 243. Note, the minus sign on displacement indicates downward deflection of the roof slab.

A third load case, input.003, was run with the concentrated load input at node 243. The maximum displacement for the dead weight only loading occurred at this node, $\Delta = -0.1015$ in. The application of the 1000 lb concentrated load at node 243 yields a displacement at this node of -0.1114 in.

A sketch of the model is included in the data package to show nodes 118 and 243, and columns and other details of the model.

"TO MAKE LIFE LAST, PUT SAFETY FIRST"

$$\Delta_{DL} = .1015''$$

$$\Delta_{DL+LL} = .1114''$$

$$\Delta_{LL} = .1114'' - .1015'' = \underline{\underline{.0099''}}$$

R. A. Miller 2-18-94
Checked By

DEAD WEIGHT LOADING ONLY

FILE: INPUT.001

/SHOW
/TITLE
N,100
N,124,,408
FILL
NGEN,10,25,100,124,1,31.66667
EX,1,3.122E06
NUXY,1,0.3
DENS,1,2.25E-04
R,1,6
ET,1,63
E,100,125,126,101
EGEN,24,1,1
EGEN,9,25,1,24,1
D,124,UX,,,,UY,UZ,ROTX,ROTZ
D,149,UX,,,349,25,UY,UZ
D,325,UX,,,,UY,UZ,ROTY,ROTZ
D,326,UX,,,348,,UY,UZ
D,101,UX,,,123,,ROTY,ROTZ
D,125,UY,,,300,25,ROTX,ROTZ
D,100,UX,,,,UY,ROTX,ROTY,ROTZ
D,175,UZ,,,187,12
EP,ALL,2,0.5208333
LWRI
AFWR

Checker Note:

Actual Moments and cracked section moments are nearly the same. In this situation actual deflections are/should be based on gross section properties. This validates the gross section property assumption.

THE FOLLOWING X,Y,Z DISPLACEMENTS ARE IN GLOBAL COORDINATES

NODE	UX	UY	UZ	ROTX	ROTY	ROTZ
100	0.00000000E+00	0.00000000E+00	-0.39952658E-01	0.00000000E+00	0.00000000E+00	0.00000000E+00
101	0.00000000E+00	0.00000000E+00	-0.41505381E-01	-0.17557260E-03	0.00000000E+00	0.00000000E+00
102	0.00000000E+00	0.00000000E+00	-0.45668128E-01	-0.29580937E-03	0.00000000E+00	0.00000000E+00
103	0.00000000E+00	0.00000000E+00	-0.51160697E-01	-0.32763607E-03	0.00000000E+00	0.00000000E+00
104	0.00000000E+00	0.00000000E+00	-0.56394426E-01	-0.26755390E-03	0.00000000E+00	0.00000000E+00
105	0.00000000E+00	0.00000000E+00	-0.59941029E-01	-0.13625940E-03	0.00000000E+00	0.00000000E+00
106	0.00000000E+00	0.00000000E+00	-0.60872303E-01	0.30065785E-04	0.00000000E+00	0.00000000E+00
107	0.00000000E+00	0.00000000E+00	-0.58954163E-01	0.18795272E-03	0.00000000E+00	0.00000000E+00
108	0.00000000E+00	0.00000000E+00	-0.56706981E-01	0.29417484E-03	0.00000000E+00	0.00000000E+00
109	0.00000000E+00	0.00000000E+00	-0.49335732E-01	0.31355434E-03	0.00000000E+00	0.00000000E+00
110	0.00000000E+00	0.00000000E+00	-0.44517098E-01	0.22794580E-03	0.00000000E+00	0.00000000E+00
111	0.00000000E+00	0.00000000E+00	-0.42024160E-01	0.46061028E-04	0.00000000E+00	0.00000000E+00
112	0.00000000E+00	0.00000000E+00	-0.43203862E-01	-0.19030106E-03	0.00000000E+00	0.00000000E+00
113	0.00000000E+00	0.00000000E+00	-0.48442167E-01	-0.41421020E-03	0.00000000E+00	0.00000000E+00
114	0.00000000E+00	0.00000000E+00	-0.56928011E-01	-0.55831900E-03	0.00000000E+00	0.00000000E+00
115	0.00000000E+00	0.00000000E+00	-0.66875200E-01	-0.57958377E-03	0.00000000E+00	0.00000000E+00
116	0.00000000E+00	0.00000000E+00	-0.76043469E-01	-0.46727860E-03	0.00000000E+00	0.00000000E+00
117	0.00000000E+00	0.00000000E+00	-0.82249266E-01	-0.23699395E-03	0.00000000E+00	0.00000000E+00
118	0.00000000E+00	0.00000000E+00	-0.83735874E-01	0.78592547E-04	0.00000000E+00	0.00000000E+00
119	0.00000000E+00	0.00000000E+00	-0.79396796E-01	0.43741493E-03	0.00000000E+00	0.00000000E+00
120	0.00000000E+00	0.00000000E+00	-0.68890654E-01	0.79274181E-03	0.00000000E+00	0.00000000E+00
121	0.00000000E+00	0.00000000E+00	-0.52718159E-01	0.10906683E-02	0.00000000E+00	0.00000000E+00
122	0.00000000E+00	0.00000000E+00	-0.32470529E-01	0.12435070E-02	0.00000000E+00	0.00000000E+00
123	0.00000000E+00	0.00000000E+00	-0.11905323E-01	0.10384254E-02	0.00000000E+00	0.00000000E+00
124	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.63505514E-04	0.00000000E+00
125	0.00000000E+00	0.00000000E+00	-0.32321411E-01	0.00000000E+00	-0.45811711E-03	0.00000000E+00
126	0.00000000E+00	0.00000000E+00	-0.34377791E-01	-0.23238650E-03	-0.42680122E-03	-0.00000000E+00
127	0.00000000E+00	0.00000000E+00	-0.39822253E-01	-0.38288502E-03	-0.34839526E-03	0.00000000E+00
128	0.00000000E+00	0.00000000E+00	-0.46859027E-01	-0.41493705E-03	-0.25356864E-03	0.00000000E+00
129	0.00000000E+00	0.00000000E+00	-0.53441870E-01	-0.33387885E-03	-0.17159335E-03	0.00000000E+00
130	0.00000000E+00	0.00000000E+00	-0.57863386E-01	-0.17032087E-03	-0.11902402E-03	0.00000000E+00
131	0.00000000E+00	0.00000000E+00	-0.59067039E-01	0.32897803E-04	-0.10266947E-03	0.00000000E+00
132	0.00000000E+00	0.00000000E+00	-0.56776988E-01	0.22837139E-03	-0.12458840E-03	0.00000000E+00
133	0.00000000E+00	0.00000000E+00	-0.51533039E-01	0.36853983E-03	-0.18417162E-03	0.00000000E+00
134	0.00000000E+00	0.00000000E+00	-0.44659968E-01	0.41041142E-03	-0.27522718E-03	0.00000000E+00
135	0.00000000E+00	0.00000000E+00	-0.38131162E-01	0.32421209E-03	-0.38015619E-03	0.00000000E+00
136	0.00000000E+00	0.00000000E+00	-0.34225822E-01	0.10818261E-03	-0.46654407E-03	0.00000000E+00
137	0.00000000E+00	0.00000000E+00	-0.34871815E-01	-0.19256343E-03	-0.49982983E-03	0.00000000E+00
138	0.00000000E+00	0.00000000E+00	-0.40725285E-01	-0.48196889E-03	-0.46179239E-03	0.00000000E+00
139	0.00000000E+00	0.00000000E+00	-0.50743491E-01	-0.66373620E-03	-0.36834210E-03	0.00000000E+00
140	0.00000000E+00	0.00000000E+00	-0.62603852E-01	-0.69204314E-03	-0.25139009E-03	0.00000000E+00
141	0.00000000E+00	0.00000000E+00	-0.73616717E-01	-0.56751906E-03	-0.14000291E-03	0.00000000E+00
142	0.00000000E+00	0.00000000E+00	-0.81376306E-01	-0.31852621E-03	-0.47367824E-04	0.00000000E+00
143	0.00000000E+00	0.00000000E+00	-0.84101512E-01	0.13173771E-04	0.26050861E-04	0.00000000E+00
144	0.00000000E+00	0.00000000E+00	-0.80783774E-01	0.37962253E-03	0.86396805E-04	0.00000000E+00
145	0.00000000E+00	0.00000000E+00	-0.71267045E-01	0.72787003E-03	0.14139052E-03	0.00000000E+00
146	0.00000000E+00	0.00000000E+00	-0.56340464E-01	0.99912809E-03	0.19501825E-03	0.00000000E+00
147	0.00000000E+00	0.00000000E+00	-0.37815945E-01	0.11375261E-02	0.23312818E-03	0.00000000E+00
148	0.00000000E+00	0.00000000E+00	-0.1829071E-01	0.11311269E-02	0.17623674E-03	0.00000000E+00
149	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.10709802E-02	-0.44154514E-04	0.00000000E+00
150	0.00000000E+00	0.00000000E+00	-0.13207471E-01	0.00000000E+00	-0.67785609E-03	0.00000000E+00
151	0.00000000E+00	0.00000000E+00	-0.17262719E-01	-0.43639024E-03	-0.56693116E-03	0.00000000E+00
152	0.00000000E+00	0.00000000E+00	-0.27096556E-01	-0.65305779E-03	-0.37941250E-03	0.00000000E+00
153	0.00000000E+00	0.00000000E+00	-0.38621669E-01	-0.65158817E-03	-0.21239634E-03	0.00000000E+00
154	0.00000000E+00	0.00000000E+00	-0.48639194E-01	-0.49594014E-03	-0.97478615E-04	0.00000000E+00
155	0.00000000E+00	0.00000000E+00	-0.55110986E-01	-0.24969406E-03	-0.32195866E-04	0.00000000E+00
156	0.00000000E+00	0.00000000E+00	-0.56963642E-01	0.35757515E-04	-0.10781712E-04	0.00000000E+00
157	0.00000000E+00	0.00000000E+00	-0.53917852E-01	0.31581935E-03	-0.31884415E-04	0.00000000E+00
158	0.00000000E+00	0.00000000E+00	-0.46438841E-01	0.54521074E-03	-0.99838297E-04	0.00000000E+00
159	0.00000000E+00	0.00000000E+00	-0.35809870E-01	0.67019159E-03	-0.22324968E-03	0.00000000E+00
160	0.00000000E+00	0.00000000E+00	-0.24335216E-01	0.62276407E-03	-0.40634592E-03	0.00000000E+00
161	0.00000000E+00	0.00000000E+00	-0.15568735E-01	0.33407113E-03	-0.61439982E-03	0.00000000E+00
162	0.00000000E+00	0.00000000E+00	-0.14014400E-01	-0.19498881E-03	-0.73834554E-03	0.00000000E+00
163	0.00000000E+00	0.00000000E+00	-0.22160375E-01	-0.71507695E-03	-0.61416567E-03	0.00000000E+00
164	0.00000000E+00	0.00000000E+00	-0.37213666E-01	-0.97691913E-03	-0.40325454E-03	0.00000000E+00
165	0.00000000E+00	0.00000000E+00	-0.54367810E-01	-0.97984929E-03	-0.21179049E-03	0.00000000E+00
166	0.00000000E+00	0.00000000E+00	-0.69772429E-01	-0.79324025E-03	-0.71095214E-04	0.00000000E+00
167	0.00000000E+00	0.00000000E+00	-0.80838752E-01	-0.48604686E-03	0.27178226E-04	0.00000000E+00
168	0.00000000E+00	0.00000000E+00	-0.86019185E-01	-0.11338649E-03	0.96471775E-04	0.00000000E+00

169	0.00000000E+00	0.84607315E-01	0.27862728E-03	0.14618670E-03
170	0.00000000E+00	0.76635525E-01	0.64869134E-03	0.17887949E-03
171	0.00000000E+00	0.62802967E-01	0.96065435E-03	0.18886608E-03
172	0.00000000E+00	0.44358841E-01	0.11868135E-02	0.16621501E-03
173	0.00000000E+00	0.22890273E-01	0.13142381E-02	0.10627187E-03
174	0.00000000E+00	0.00000000E+00	0.1355211E-02	0.94313828E-06
175	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.23712489E-03
176	0.00000000E+00	0.86065059E-02	0.76783373E-03	0.23701311E-03
177	0.00000000E+00	0.23624294E-01	0.91677980E-03	0.23697669E-03
178	0.00000000E+00	0.38638638E-01	0.81496064E-03	0.23780494E-03
179	0.00000000E+00	0.50762152E-01	0.59093236E-03	0.24049027E-03
180	0.00000000E+00	0.58419152E-01	0.29804523E-03	0.24585033E-03
181	0.00000000E+00	0.60756338E-01	0.26577722E-04	0.25416853E-03
182	0.00000000E+00	0.57528349E-01	0.34814646E-03	0.26495075E-03
183	0.00000000E+00	0.49086646E-01	0.63146347E-03	0.27686803E-03
184	0.00000000E+00	0.36405339E-01	0.83795395E-03	0.28791815E-03
185	0.00000000E+00	0.21224051E-01	0.91016406E-03	0.29579796E-03
186	0.00000000E+00	0.67183784E-02	0.70546697E-03	0.29841362E-03
187	0.00000000E+00	0.00000000E+00	0.18828400E-03	0.29844406E-03
188	0.00000000E+00	0.13089294E-01	0.10748006E-02	0.28371982E-03
189	0.00000000E+00	0.33720474E-01	0.12579456E-02	0.26738870E-03
190	0.00000000E+00	0.54541655E-01	0.11503309E-02	0.24736369E-03
191	0.00000000E+00	0.72146842E-01	0.89528713E-03	0.22713358E-03
192	0.00000000E+00	0.84581938E-01	0.55115813E-03	0.20819433E-03
193	0.00000000E+00	0.90668135E-01	0.19190624E-03	0.19190624E-03
194	0.00000000E+00	0.89864433E-01	0.25221262E-03	0.17737871E-03
195	0.00000000E+00	0.82165738E-01	0.64462544E-03	0.16149280E-03
196	0.00000000E+00	0.68136170E-01	0.99116562E-03	0.13928448E-03
197	0.00000000E+00	0.48769751E-01	0.12666457E-02	0.10509908E-03
198	0.00000000E+00	0.25467908E-01	0.14487156E-02	0.57151133E-04
199	0.00000000E+00	0.00000000E+00	0.15139588E-02	0.22255652E-05
200	0.00000000E+00	0.27627823E-01	0.00000000E+00	0.10999466E-02
201	0.00000000E+00	0.31661669E-01	0.43419429E-03	0.98780022E-03
202	0.00000000E+00	0.41454591E-01	0.65128432E-03	0.79750142E-03
203	0.00000000E+00	0.52980770E-01	0.65455352E-03	0.62849195E-03
204	0.00000000E+00	0.63119447E-01	0.50813013E-03	0.51535708E-03
205	0.00000000E+00	0.69899296E-01	0.27409706E-03	0.45832283E-03
206	0.00000000E+00	0.72275446E-01	0.99416841E-06	0.45287185E-03
207	0.00000000E+00	0.69941286E-01	0.27014474E-03	0.49697225E-03
208	0.00000000E+00	0.63273436E-01	0.63273436E-03	0.59204454E-03
209	0.00000000E+00	0.53415761E-01	0.62954691E-03	0.74190319E-03
210	0.00000000E+00	0.42507901E-01	0.59888717E-03	0.94495422E-03
211	0.00000000E+00	0.33950816E-01	0.33472222E-03	0.11609511E-02
212	0.00000000E+00	0.32147782E-01	0.16617830E-03	0.12770797E-02
213	0.00000000E+00	0.39570721E-01	0.65994160E-03	0.11285430E-02
214	0.00000000E+00	0.53504693E-01	0.90261170E-03	0.87936682E-03
215	0.00000000E+00	0.69300420E-01	0.89713120E-03	0.64123515E-03
216	0.00000000E+00	0.83303690E-01	0.71363507E-03	0.45251666E-03
217	0.00000000E+00	0.93106466E-01	0.41844219E-03	0.31172152E-03
218	0.00000000E+00	0.97268177E-01	0.60591471E-04	0.21024406E-03
219	0.00000000E+00	0.95058769E-01	0.32277278E-03	0.13954764E-03
220	0.00000000E+00	0.86317782E-01	0.70047723E-03	0.91777215E-04
221	0.00000000E+00	0.71386637E-01	0.10440317E-02	0.59603453E-04
222	0.00000000E+00	0.51080257E-01	0.13258078E-02	0.36578645E-04
223	0.00000000E+00	0.26686992E-01	0.15172838E-02	0.17662474E-04
224	0.00000000E+00	0.00000000E+00	0.16617830E-03	0.14618670E-03
225	0.00000000E+00	0.57953521E-01	0.00000000E+00	0.70304424E-03
226	0.00000000E+00	0.59993748E-01	0.21966413E-03	0.69416413E-03
227	0.00000000E+00	0.65057318E-01	0.36505309E-03	0.60308635E-03
228	0.00000000E+00	0.71827282E-01	0.40460213E-03	0.49288414E-03
229	0.00000000E+00	0.78388218E-01	0.34449717E-03	0.39946911E-03
230	0.00000000E+00	0.83236625E-01	0.21146025E-03	0.34553015E-03
231	0.00000000E+00	0.85426088E-01	0.41375539E-04	0.34174415E-03
232	0.00000000E+00	0.84648209E-01	0.12755495E-03	0.39060035E-03
233	0.00000000E+00	0.81251329E-01	0.25684969E-03	0.48796466E-03
234	0.00000000E+00	0.76228656E-01	0.31031980E-03	0.62035584E-03
235	0.00000000E+00	0.71140636E-01	0.26052225E-03	0.76032586E-03
236	0.00000000E+00	0.67863800E-01	0.10191486E-03	0.86520818E-03
237	0.00000000E+00	0.68043491E-01	0.13050070E-03	0.89265628E-03
238	0.00000000E+00	0.72267403E-01	0.35496413E-03	0.82191401E-03
239	0.00000000E+00	0.79675051E-01	0.48922363E-03	0.67279903E-03
240	0.00000000E+00	0.88335067E-01	0.49718226E-03	0.48646915E-03

313	0.00000000E+00	0.00000000E+00	-0.46885260E-01	-0.28398674E-04	-0.13183860E-02	0.00000000E+00
314	0.00000000E+00	0.00000000E+00	-0.47351326E-01	-0.23189172E-04	-0.13376632E-02	0.00000000E+00
315	0.00000000E+00	0.00000000E+00	-0.47605436E-01	-0.24517612E-05	-0.13523922E-02	0.00000000E+00
316	0.00000000E+00	0.00000000E+00	-0.47353708E-01	0.36723785E-04	-0.13528989E-02	0.00000000E+00
317	0.00000000E+00	0.00000000E+00	-0.46274552E-01	0.94677517E-04	-0.13287199E-02	0.00000000E+00
318	0.00000000E+00	0.00000000E+00	-0.44061391E-01	0.16938125E-03	-0.12700753E-02	0.00000000E+00
319	0.00000000E+00	0.00000000E+00	-0.40459606E-01	0.25684986E-03	-0.11690886E-02	0.00000000E+00
320	0.00000000E+00	0.00000000E+00	-0.35296419E-01	0.35150886E-03	-0.10207419E-02	0.00000000E+00
321	0.00000000E+00	0.00000000E+00	-0.28506199E-01	0.44631802E-03	-0.82366920E-03	0.00000000E+00
322	0.00000000E+00	0.00000000E+00	-0.20157077E-01	0.53241091E-03	-0.58101443E-03	0.00000000E+00
323	0.00000000E+00	0.00000000E+00	-0.10490232E-01	0.59777640E-03	-0.30099796E-03	0.00000000E+00
324	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.62306023E-03	-0.26168946E-05	0.00000000E+00
325	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.54281081E-04	0.00000000E+00	0.00000000E+00
326	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.10008873E-04	-0.98419342E-03	0.00000000E+00
327	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.24607605E-05	-0.11137463E-02	0.00000000E+00
328	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.23841144E-06	-0.12463191E-02	0.00000000E+00
329	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.53364629E-06	-0.13461703E-02	0.00000000E+00
330	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.29187601E-06	-0.14200291E-02	0.00000000E+00
331	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.26008919E-06	-0.14714918E-02	0.00000000E+00
332	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.27519122E-06	-0.15048635E-02	0.00000000E+00
333	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.29525124E-06	-0.15245948E-02	0.00000000E+00
334	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.27932740E-06	-0.15355737E-02	0.00000000E+00
335	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.20713604E-06	-0.15427719E-02	0.00000000E+00
336	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.77415002E-07	-0.15503503E-02	0.00000000E+00
337	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.90908402E-07	-0.15605622E-02	0.00000000E+00
338	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.26459654E-06	-0.15728459E-02	0.00000000E+00
339	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.40943521E-06	-0.15834342E-02	0.00000000E+00
340	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.50319757E-06	-0.15856268E-02	0.00000000E+00
341	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.54015744E-06	-0.15706374E-02	0.00000000E+00
342	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.52728378E-06	-0.15287689E-02	0.00000000E+00
343	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.47724134E-06	-0.14506501E-02	0.00000000E+00
344	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.40271916E-06	-0.13283590E-02	0.00000000E+00
345	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.31094652E-06	-0.11563732E-02	0.00000000E+00
346	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.20924386E-06	-0.93241036E-03	0.00000000E+00
347	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.37229656E-07	-0.65844999E-03	0.00000000E+00
348	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.82554427E-07	-0.34177971E-03	0.00000000E+00
349	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.47038775E-06	-0.52153263E-05	0.00000000E+00

MAXIMUMS

NODE	0	0	243	224	340	0
VALUE	0.00000000E+00	0.00000000E+00	-0.10148574	0.15870970E-02	-0.15856268E-02	0.00000000E+00

MODE	FX	FY	FZ	MX	MY	MZ
100	0.00000000E+00	0.00000000E+00	0.00000000E+00	6784.0107	7127.9604	0.00000000E+00
101	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	13774.485	0.00000000E+00
102	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	12507.994	0.00000000E+00
103	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	10946.652	0.00000000E+00
104	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	9540.1788	0.00000000E+00
105	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	8574.9275	0.00000000E+00
106	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	8219.5759	0.00000000E+00
107	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	8542.9736	0.00000000E+00
108	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	9523.1931	0.00000000E+00
109	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	11019.514	0.00000000E+00
110	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	12743.086	0.00000000E+00
111	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	14203.042	0.00000000E+00
112	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	14843.914	0.00000000E+00
113	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	14439.761	0.00000000E+00
114	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	13136.816	0.00000000E+00
115	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	11394.456	0.00000000E+00
116	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	9574.7969	0.00000000E+00
117	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	7790.0513	0.00000000E+00
118	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	5932.3986	0.00000000E+00
119	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	3609.9827	0.00000000E+00
120	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	-133.75341	0.00000000E+00
121	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	-7311.2806	0.00000000E+00
122	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	-20259.736	0.00000000E+00
123	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	-30210.778	0.00000000E+00
124	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	-96566.564	0.00000000E+00
125	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	23236.277	0.00000000E+00
149	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	10.653974	0.00000000E+00
150	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	69581.245	0.00000000E+00
174	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	961.59900	0.00000000E+00
175	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	10442.945	0.00000000E+00
187	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	23464.418	0.00000000E+00
199	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	1296.9481	0.00000000E+00
200	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	67406.264	0.00000000E+00
224	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	1368.8237	0.00000000E+00
225	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	1444.8653	0.00000000E+00
249	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	18123.379	0.00000000E+00
250	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	3336.7313	0.00000000E+00
274	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	2998.1166	0.00000000E+00
299	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	33660.264	0.00000000E+00
300	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	929.98178	0.00000000E+00
324	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	2008.5256	0.00000000E+00
326	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	123.10468	0.00000000E+00
327	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	316.20684	0.00000000E+00
328	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	463.09178	0.00000000E+00
329	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	615.61118	0.00000000E+00
330	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	664.95358	0.00000000E+00
331	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	689.73322	0.00000000E+00
332	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	694.54072	0.00000000E+00
333	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	687.39950	0.00000000E+00
334	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	673.87416	0.00000000E+00
335	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	660.11848	0.00000000E+00
336	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	652.22603	0.00000000E+00
337	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	654.90829	0.00000000E+00
338	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	669.96389	0.00000000E+00
339	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	695.56642	0.00000000E+00
340	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	726.85525	0.00000000E+00
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342	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	780.28886	0.00000000E+00
343	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	789.29727	0.00000000E+00
344	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	778.47787	0.00000000E+00
345	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	741.78284	0.00000000E+00
346	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	672.68944	0.00000000E+00
347	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	558.86602	0.00000000E+00
348	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	386.18363	0.00000000E+00
349	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	-1606.9487	0.00000000E+00
TOTAL	0.00000000E+00	0.00000000E+00	0.00000000E+00	60562.502	281027.04	214728.37

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ET,1,63
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EGEN,24,1,1
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D,149,UX,,,349,25,UY,UZ
D,325,UX,,,,,UY,UZ,ROTY,ROTX
D,326,UX,,,348,,UY,UZ
D,101,UX,,,123,,ROTY,ROTX
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LWRI
AFWR

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172	0.00000000E+00	0.46687181E-01	0.12549615E-02	0.15005931E-03	0.00000000E+00
173	0.00000000E+00	0.24049644E-01	0.13827094E-02	0.99949154E-04	0.00000000E+00
174	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.13755049E-02	0.00000000E+00
175	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.23549035E-03	0.00000000E+00
176	0.00000000E+00	0.85508088E-02	0.76242979E-03	0.23530948E-03	0.00000000E+00
177	0.00000000E+00	0.23452650E-01	0.90899573E-03	0.23505316E-03	0.00000000E+00
178	0.00000000E+00	0.38324141E-01	0.80620607E-03	0.23547346E-03	0.00000000E+00
179	0.00000000E+00	0.50297322E-01	0.58221977E-03	0.23750271E-03	0.00000000E+00
180	0.00000000E+00	0.57812304E-01	0.29026493E-03	0.24187849E-03	0.00000000E+00
181	0.00000000E+00	0.60030698E-01	0.32557977E-04	0.24878825E-03	0.00000000E+00
182	0.00000000E+00	0.56727187E-01	0.35716460E-03	0.25763177E-03	0.00000000E+00
183	0.00000000E+00	0.48251838E-01	0.63124602E-03	0.26697217E-03	0.00000000E+00
184	0.00000000E+00	0.35610587E-01	0.83327647E-03	0.274771004E-03	0.00000000E+00
185	0.00000000E+00	0.20554552E-01	0.89980108E-03	0.27847287E-03	0.00000000E+00
186	0.00000000E+00	0.62886697E-02	0.68670874E-03	0.27616050E-03	0.00000000E+00
187	0.00000000E+00	0.00000000E+00	0.22343535E-03	0.26652945E-03	0.00000000E+00
188	0.00000000E+00	0.13844435E-01	0.11239062E-02	0.24965461E-03	0.00000000E+00
189	0.00000000E+00	0.353337954E-01	0.13081981E-02	0.227110634E-03	0.00000000E+00
190	0.00000000E+00	0.56973121E-01	0.11944616E-02	0.20174018E-03	0.00000000E+00
191	0.00000000E+00	0.75241780E-01	0.92813118E-03	0.17708554E-03	0.00000000E+00
192	0.00000000E+00	0.88112592E-01	0.56893199E-03	0.15640394E-03	0.00000000E+00
193	0.00000000E+00	0.9635548E-01	0.15781329E-03	0.141522310E-03	0.00000000E+00
194	0.00000000E+00	0.93413619E-01	0.26828920E-03	0.13173258E-03	0.00000000E+00
195	0.00000000E+00	0.853119850E-01	0.67521698E-03	0.12339291E-03	0.00000000E+00
196	0.00000000E+00	0.70669406E-01	0.10326652E-02	0.11048228E-03	0.00000000E+00
197	0.00000000E+00	0.50530215E-01	0.13151325E-02	0.861466922E-04	0.00000000E+00
198	0.00000000E+00	0.26367406E-01	0.15007890E-02	0.47881123E-04	0.00000000E+00
199	0.00000000E+00	0.00000000E+00	0.15671126E-02	0.26645779E-05	0.00000000E+00
200	0.00000000E+00	0.27495537E-01	0.00000000E+00	0.10951049E-02	0.00000000E+00
201	0.00000000E+00	0.31493866E-01	0.43021462E-03	0.98348510E-03	0.00000000E+00
202	0.00000000E+00	0.41191828E-01	0.64444411E-03	0.79408601E-03	0.00000000E+00
203	0.00000000E+00	0.52585190E-01	0.64607374E-03	0.62587778E-03	0.00000000E+00
204	0.00000000E+00	0.62572639E-01	0.49905680E-03	0.51328783E-03	0.00000000E+00
205	0.00000000E+00	0.69198918E-01	0.62547336E-03	0.45647336E-03	0.00000000E+00
206	0.00000000E+00	0.71433605E-01	0.66725554E-03	0.45098930E-03	0.00000000E+00
207	0.00000000E+00	0.68983686E-01	0.27888321E-03	0.49482002E-03	0.00000000E+00
208	0.00000000E+00	0.62240298E-01	0.50034606E-03	0.58945362E-03	0.00000000E+00
209	0.00000000E+00	0.5256489E-01	0.62880250E-03	0.73880250E-03	0.00000000E+00
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211	0.00000000E+00	0.33142696E-01	0.31975611E-03	0.11563555E-02	0.00000000E+00
212	0.00000000E+00	0.31677727E-01	0.19117100E-03	0.12696527E-02	0.00000000E+00
213	0.00000000E+00	0.39604809E-01	0.69341485E-03	0.1143795E-03	0.00000000E+00
214	0.00000000E+00	0.54133882E-01	0.93854633E-03	0.85727791E-03	0.00000000E+00
215	0.00000000E+00	0.70534160E-01	0.93031412E-03	0.61209234E-03	0.00000000E+00
216	0.00000000E+00	0.85046295E-01	0.73976429E-03	0.41825546E-03	0.00000000E+00
217	0.00000000E+00	0.95216272E-01	0.65322003E-04	0.17314237E-03	0.00000000E+00
218	0.00000000E+00	0.99557420E-01	0.32938593E-03	0.10488821E-03	0.00000000E+00
219	0.00000000E+00	0.97323939E-01	0.71775817E-03	0.61783073E-04	0.00000000E+00
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229	0.00000000E+00	0.77810335E-01	0.336772049E-03	0.39971310E-03	0.00000000E+00
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233	0.00000000E+00	0.80237310E-01	0.25954033E-03	0.49131220E-03	0.00000000E+00
234	0.00000000E+00	0.75197611E-01	0.30934277E-03	0.62395571E-03	0.00000000E+00
235	0.00000000E+00	0.70164373E-01	0.25479248E-03	0.76357912E-03	0.00000000E+00
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237	0.00000000E+00	0.67453600E-01	0.14753608E-03	0.89163298E-03	0.00000000E+00
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239	0.00000000E+00	0.79804262E-01	0.51268880E-03	0.66209781E-03	0.00000000E+00
240	0.00000000E+00	0.88860574E-01	0.51961984E-03	0.47045016E-03	0.00000000E+00
241	0.00000000E+00	0.96936652E-01	0.40077939E-03	0.28346174E-03	0.00000000E+00
242	0.00000000E+00	0.10206781	0.18073212E-03	0.12684051E-03	0.00000000E+00

243	0.00000000E+00	0.10279578	0.1087457E-03	0.43560352E-03	0.11323592E-04	0.00000000E+00
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248	0.00000000E+00	0.26779151E-01	0.15251691E-02	0.44451198E-04	0.00000000E+00	0.00000000E+00
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251	0.00000000E+00	0.71669919E-01	0.12854193E-03	0.33369335E-04	0.00000000E+00	0.00000000E+00
252	0.00000000E+00	0.74744115E-01	0.22108247E-03	0.15229020E-05	0.00000000E+00	0.00000000E+00
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262	0.00000000E+00	0.84939953E-01	0.10069987E-03	0.16499438E-03	0.00000000E+00	0.00000000E+00
263	0.00000000E+00	0.87503145E-01	0.19409693E-03	0.11594959E-03	0.00000000E+00	0.00000000E+00
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265	0.00000000E+00	0.95471723E-01	0.22493874E-03	0.88362290E-04	0.00000000E+00	0.00000000E+00
266	0.00000000E+00	0.98660173E-01	0.13224601E-03	0.20258278E-03	0.00000000E+00	0.00000000E+00
267	0.00000000E+00	0.99670444E-01	0.28877880E-04	0.29831784E-03	0.00000000E+00	0.00000000E+00
268	0.00000000E+00	0.974496267E-01	0.24366630E-03	0.36204695E-03	0.00000000E+00	0.00000000E+00
269	0.00000000E+00	0.91236982E-01	0.49332416E-03	0.38651762E-03	0.00000000E+00	0.00000000E+00
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271	0.00000000E+00	0.65575796E-01	0.10084082E-02	0.31564092E-03	0.00000000E+00	0.00000000E+00
272	0.00000000E+00	0.46481106E-01	0.12254914E-02	0.22944867E-03	0.00000000E+00	0.00000000E+00
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277	0.00000000E+00	0.63882110E-01	0.17923792E-03	0.67666041E-03	0.00000000E+00	0.00000000E+00
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281	0.00000000E+00	0.75627111E-01	0.91751574E-04	0.72074885E-03	0.00000000E+00	0.00000000E+00
282	0.00000000E+00	0.76723347E-01	0.35426378E-04	0.71416586E-03	0.00000000E+00	0.00000000E+00
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287	0.00000000E+00	0.77437101E-01	0.59080164E-04	0.64310789E-03	0.00000000E+00	0.00000000E+00
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292	0.00000000E+00	0.81425827E-01	0.11748931E-03	0.84956438E-03	0.00000000E+00	0.00000000E+00
293	0.00000000E+00	0.78243861E-01	0.26424497E-03	0.84480333E-03	0.00000000E+00	0.00000000E+00
294	0.00000000E+00	0.72331539E-01	0.43560352E-03	0.80032826E-03	0.00000000E+00	0.00000000E+00
295	0.00000000E+00	0.63369339E-01	0.1955291E-03	0.7224253E-03	0.00000000E+00	0.00000000E+00
296	0.00000000E+00	0.51276352E-01	0.80004846E-03	0.58103145E-03	0.00000000E+00	0.00000000E+00
297	0.00000000E+00	0.36253155E-01	0.95926155E-03	0.41169242E-03	0.00000000E+00	0.00000000E+00
298	0.00000000E+00	0.1883894E-01	0.10750581E-02	0.21357293E-03	0.00000000E+00	0.00000000E+00
299	0.00000000E+00	0.00000000E+00	0.11184816E-02	0.77859895E-06	0.00000000E+00	0.00000000E+00
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302	0.00000000E+00	0.34863542E-01	0.18637542E-03	0.10779058E-02	0.00000000E+00	0.00000000E+00
303	0.00000000E+00	0.38037673E-01	0.1677779E-03	0.11208657E-02	0.00000000E+00	0.00000000E+00
304	0.00000000E+00	0.40596698E-01	0.13368168E-03	0.11703485E-02	0.00000000E+00	0.00000000E+00
305	0.00000000E+00	0.42562030E-01	0.98476603E-04	0.12156518E-02	0.00000000E+00	0.00000000E+00
306	0.00000000E+00	0.43948024E-01	0.65783920E-04	0.12493571E-02	0.00000000E+00	0.00000000E+00
307	0.00000000E+00	0.44818239E-01	0.38307550E-04	0.12695954E-02	0.00000000E+00	0.00000000E+00
308	0.00000000E+00	0.45284339E-01	0.18768651E-04	0.12782561E-02	0.00000000E+00	0.00000000E+00
309	0.00000000E+00	0.45499787E-01	0.90389848E-05	0.12798130E-02	0.00000000E+00	0.00000000E+00
310	0.00000000E+00	0.45635385E-01	0.91174876E-05	0.12799572E-02	0.00000000E+00	0.00000000E+00
311	0.00000000E+00	0.45843433E-01	0.16517518E-04	0.12840097E-02	0.00000000E+00	0.00000000E+00
312	0.00000000E+00	0.46209419E-01	0.26330860E-04	0.12952592E-02	0.00000000E+00	0.00000000E+00
313	0.00000000E+00	0.46721649E-01	0.32084828E-04	0.13136199E-02	0.00000000E+00	0.00000000E+00
314	0.00000000E+00	0.47253727E-01	0.27183780E-04	0.13350613E-02	0.00000000E+00	0.00000000E+00

A11

MAXIMUMS	NODE	VALUE
315	0	0.0000000E+00
316	0	0.0000000E+00
317	0	0.0000000E+00
318	0	0.0000000E+00
319	0	0.0000000E+00
320	0	0.0000000E+00
321	0	0.0000000E+00
322	0	0.0000000E+00
323	0	0.0000000E+00
324	0	0.0000000E+00
325	0	0.0000000E+00
326	0	0.0000000E+00
327	0	0.0000000E+00
328	0	0.0000000E+00
329	0	0.0000000E+00
330	0	0.0000000E+00
331	0	0.0000000E+00
332	0	0.0000000E+00
333	0	0.0000000E+00
334	0	0.0000000E+00
335	0	0.0000000E+00
336	0	0.0000000E+00
337	0	0.0000000E+00
338	0	0.0000000E+00
339	0	0.0000000E+00
340	0	0.0000000E+00
341	0	0.0000000E+00
342	0	0.0000000E+00
343	0	0.0000000E+00
344	0	0.0000000E+00
345	0	0.0000000E+00
346	0	0.0000000E+00
347	0	0.0000000E+00
348	0	0.0000000E+00
349	0	0.0000000E+00
224	0	0.0000000E+00
225	0	0.0000000E+00
226	0	0.0000000E+00
227	0	0.0000000E+00
228	0	0.0000000E+00
229	0	0.0000000E+00
230	0	0.0000000E+00
231	0	0.0000000E+00
232	0	0.0000000E+00
233	0	0.0000000E+00
234	0	0.0000000E+00
235	0	0.0000000E+00
236	0	0.0000000E+00
237	0	0.0000000E+00
238	0	0.0000000E+00
239	0	0.0000000E+00
240	0	0.0000000E+00
241	0	0.0000000E+00
242	0	0.0000000E+00
243	0	0.0000000E+00
244	0	0.0000000E+00
245	0	0.0000000E+00
246	0	0.0000000E+00
247	0	0.0000000E+00
248	0	0.0000000E+00
249	0	0.0000000E+00
250	0	0.0000000E+00
251	0	0.0000000E+00
252	0	0.0000000E+00
253	0	0.0000000E+00
254	0	0.0000000E+00
255	0	0.0000000E+00
256	0	0.0000000E+00
257	0	0.0000000E+00
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259	0	0.0000000E+00
260	0	0.0000000E+00
261	0	0.0000000E+00
262	0	0.0000000E+00
263	0	0.0000000E+00
264	0	0.0000000E+00
265	0	0.0000000E+00
266	0	0.0000000E+00
267	0	0.0000000E+00
268	0	0.0000000E+00
269	0	0.0000000E+00
270	0	0.0000000E+00
271	0	0.0000000E+00
272	0	0.0000000E+00
273	0	0.0000000E+00
274	0	0.0000000E+00
275	0	0.0000000E+00
276	0	0.0000000E+00
277	0	0.0000000E+00
278	0	0.0000000E+00
279	0	0.0000000E+00
280	0	0.0000000E+00
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291	0	0.0000000E+00
292	0	0.0000000E+00
293	0	0.0000000E+00
294	0	0.0000000E+00
295	0	0.0000000E+00
296	0	0.0000000E+00
297	0	0.0000000E+00
298	0	0.0000000E+00
299	0	0.0000000E+00
300	0	0.0000000E+00

THE FOLLOWING X,Y,Z FORCES ARE IN GLOBAL COORDINATES

NODE	FX	FY	FZ	MX	MY	MZ
100	0.00000000E+00	0.00000000E+00	0.00000000E+00	6685.6767	7118.4420	0.00000000E+00
101	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	13758.159	0.00000000E+00
102	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	12499.396	0.00000000E+00
103	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	10949.847	0.00000000E+00
104	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	9559.5651	0.00000000E+00
105	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	8617.2989	0.00000000E+00
106	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	8296.0006	0.00000000E+00
107	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	8670.0580	0.00000000E+00
108	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	9723.1177	0.00000000E+00
109	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	11318.715	0.00000000E+00
110	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	13170.268	0.00000000E+00
111	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	14786.740	0.00000000E+00
112	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	15612.835	0.00000000E+00
113	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	15431.756	0.00000000E+00
114	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	14420.306	0.00000000E+00
115	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	13121.735	0.00000000E+00
116	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	12076.111	0.00000000E+00
117	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	11532.004	0.00000000E+00
118	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	10889.956	0.00000000E+00
119	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	7062.6528	0.00000000E+00
120	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	1708.2361	0.00000000E+00
121	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	-6841.7471	0.00000000E+00
122	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	-21233.237	0.00000000E+00
123	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	-32235.428	0.00000000E+00
124	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	-103678.85	0.00000000E+00
125	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	22982.020	0.00000000E+00
149	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	69082.128	0.00000000E+00
150	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	151555.28	0.00000000E+00
175	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	23797.433	0.00000000E+00
187	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	1316.0772	0.00000000E+00
199	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	66875.780	0.00000000E+00
200	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	1373.7212	0.00000000E+00
224	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	1444.6559	0.00000000E+00
249	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	3149.9628	0.00000000E+00
250	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	1444.1904	0.00000000E+00
275	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	1320.0015	0.00000000E+00
299	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	33477.125	0.00000000E+00
300	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	2865.7903	0.00000000E+00
324	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	64965.976	0.00000000E+00
325	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	2002.8867	0.00000000E+00
326	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	125.11347	0.00000000E+00
327	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	317.53605	0.00000000E+00
328	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	463.53895	0.00000000E+00
329	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	615.07508	0.00000000E+00
330	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	663.70620	0.00000000E+00
331	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	687.80073	0.00000000E+00
332	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	691.97517	0.00000000E+00
333	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	684.28271	0.00000000E+00
334	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	670.34229	0.00000000E+00
335	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	656.36998	0.00000000E+00
336	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	648.51660	0.00000000E+00
337	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	651.52244	0.00000000E+00
338	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	667.18162	0.00000000E+00
339	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	693.59283	0.00000000E+00
340	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	725.79303	0.00000000E+00
341	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	757.18546	0.00000000E+00
342	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	780.89223	0.00000000E+00
343	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	790.46817	0.00000000E+00
344	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	779.96938	0.00000000E+00
345	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	743.34261	0.00000000E+00
346	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	674.07377	0.00000000E+00
347	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	559.93725	0.00000000E+00
348	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	386.68861	0.00000000E+00
349	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	-1615.0961	0.00000000E+00
TOTAL	0.00000000E+00	0.00000000E+00	0.00000000E+00	61062.502	270828.40	234978.76

/SHOW
/TITLE
N,100
N,124,,408
FILL
NGEN,10,25,100,124,1,31.66667
EX,1,3.122E06
NUXY,1,0.3
DENS,1,2.25E-04
R,1,6
ET,1,63
E,100,125,126,101
EGEN,24,1,1
EGEN,9,25,1,24,1
D,124,UX,,,,,UY,UZ,ROTX,ROTZ
D,149,UX,,,349,25,UY,UZ
D,325,UX,,,,,UY,UZ,ROTY,ROTZ
D,326,UX,,,348,,UY,UZ
D,101,UX,,,123,,ROTY,ROTZ
D,125,UY,,,300,25,ROTX,ROTZ
D,100,UX,,,,,UY,ROTX,ROTY,ROTZ
D,175,UZ,,,187,12
EP,ALL,2,0.5208333
F,243,FZ,-1000.
LWRI
AFWR

MODE	LN	LY	UZ	ROT X	ROT Y	ROT Z
170	0.00000000E+00	0.00000000E+00	-0.80510069E-01	0.68270582E-03	0.22373069E-03	0.00000000E+00
169	0.00000000E+00	0.00000000E+00	-0.88897883E-01	0.29272357E-03	0.19618942E-03	0.00000000E+00
168	0.00000000E+00	0.00000000E+00	-0.90353140E-01	-0.12174363E-03	0.14851190E-03	0.00000000E+00
167	0.00000000E+00	0.00000000E+00	-0.84857835E-01	-0.51574650E-03	0.77964775E-04	0.00000000E+00
166	0.00000000E+00	0.00000000E+00	-0.73121242E-01	-0.84125511E-03	-0.24675172E-04	0.00000000E+00
165	0.00000000E+00	0.00000000E+00	-0.56779480E-01	-0.10403615E-02	-0.17236587E-03	0.00000000E+00
164	0.00000000E+00	0.00000000E+00	-0.38538002E-01	-0.10420664E-02	-0.37278736E-03	0.00000000E+00
163	0.00000000E+00	0.00000000E+00	-0.22395050E-01	-0.77554126E-03	-0.59327392E-03	0.00000000E+00
162	0.00000000E+00	0.00000000E+00	-0.13321370E-01	-0.24183662E-03	-0.72497993E-03	0.00000000E+00
161	0.00000000E+00	0.00000000E+00	-0.14224191E-01	-0.30400364E-03	-0.60291814E-03	0.00000000E+00
160	0.00000000E+00	0.00000000E+00	-0.22609398E-01	-0.60689055E-03	-0.39437731E-03	0.00000000E+00
159	0.00000000E+00	0.00000000E+00	-0.33912983E-01	-0.66505743E-03	-0.21064655E-03	0.00000000E+00
158	0.00000000E+00	0.00000000E+00	-0.44527738E-01	-0.54480511E-03	-0.87168092E-04	0.00000000E+00
157	0.00000000E+00	0.00000000E+00	-0.52108802E-01	-0.32507026E-03	-0.19606631E-04	0.00000000E+00
156	0.00000000E+00	0.00000000E+00	-0.55340357E-01	-0.47850156E-04	-0.89383265E-06	0.00000000E+00
155	0.00000000E+00	0.00000000E+00	-0.53728175E-01	-0.23455526E-03	-0.21095754E-04	0.00000000E+00
154	0.00000000E+00	0.00000000E+00	-0.47523650E-01	-0.48005433E-03	-0.86716909E-04	0.00000000E+00
153	0.00000000E+00	0.00000000E+00	-0.37771730E-01	-0.63754909E-03	-0.20154909E-03	0.00000000E+00
152	0.00000000E+00	0.00000000E+00	-0.26479803E-01	-0.64106892E-03	-0.36793689E-03	0.00000000E+00
151	0.00000000E+00	0.00000000E+00	-0.16811944E-01	-0.42945067E-03	-0.55443354E-03	0.00000000E+00
150	0.00000000E+00	0.00000000E+00	-0.12818533E-01	0.00000000E+00	-0.66468816E-03	0.00000000E+00
149	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.11262802E-02	-0.54449980E-04	0.00000000E+00
148	0.00000000E+00	0.00000000E+00	-0.19001158E-01	0.11748618E-02	0.18808773E-03	0.00000000E+00
147	0.00000000E+00	0.00000000E+00	-0.39280209E-01	0.11813476E-02	0.25246455E-03	0.00000000E+00
146	0.00000000E+00	0.00000000E+00	-0.58514412E-01	0.10370416E-02	0.21820676E-03	0.00000000E+00
145	0.00000000E+00	0.00000000E+00	-0.53958448E-01	0.75388512E-03	0.16771633E-03	0.00000000E+00
144	0.00000000E+00	0.00000000E+00	-0.83825092E-01	0.38964430E-03	0.11371602E-03	0.00000000E+00
143	0.00000000E+00	0.00000000E+00	-0.87163583E-01	0.54799331E-05	0.53595508E-04	0.00000000E+00
142	0.00000000E+00	0.00000000E+00	-0.84158856E-01	-0.36424669E-03	-0.21158915E-04	0.00000000E+00
141	0.00000000E+00	0.00000000E+00	-0.75850898E-01	-0.36322203E-03	-0.11670187E-03	0.00000000E+00
140	0.00000000E+00	0.00000000E+00	-0.64087875E-01	-0.74011168E-03	-0.23228450E-03	0.00000000E+00
139	0.00000000E+00	0.00000000E+00	-0.51369605E-01	-0.71303008E-03	-0.35410495E-03	0.00000000E+00
138	0.00000000E+00	0.00000000E+00	-0.40493254E-01	-0.53018500E-03	-0.45217022E-03	0.00000000E+00
137	0.00000000E+00	0.00000000E+00	-0.33882516E-01	-0.23363212E-03	-0.49365008E-03	0.00000000E+00
136	0.00000000E+00	0.00000000E+00	-0.32650974E-01	0.79593337E-06	-0.46212471E-03	0.00000000E+00
135	0.00000000E+00	0.00000000E+00	-0.36170557E-01	0.30731167E-03	-0.37607749E-03	0.00000000E+00
134	0.00000000E+00	0.00000000E+00	-0.42504818E-01	0.40400634E-03	-0.2707210E-03	0.00000000E+00
133	0.00000000E+00	0.00000000E+00	-0.4934671E-01	0.37071147E-03	-0.17905677E-03	0.00000000E+00
132	0.00000000E+00	0.00000000E+00	-0.54686832E-01	0.23699100E-03	-0.11900823E-03	0.00000000E+00
131	0.00000000E+00	0.00000000E+00	-0.37164763E-01	0.45851065E-04	-0.96794684E-04	0.00000000E+00
130	0.00000000E+00	0.00000000E+00	-0.56205133E-01	-0.15507477E-03	-0.11292741E-03	0.00000000E+00
129	0.00000000E+00	0.00000000E+00	-0.32049715E-01	-0.31831260E-03	-0.16522254E-03	0.00000000E+00
128	0.00000000E+00	0.00000000E+00	-0.45722041E-01	-0.40095505E-03	-0.24679741E-03	0.00000000E+00
127	0.00000000E+00	0.00000000E+00	-0.38897932E-01	-0.37226610E-03	-0.34112779E-03	0.00000000E+00
126	0.00000000E+00	0.00000000E+00	-0.33595302E-01	-0.22662207E-03	-0.41909851E-03	0.00000000E+00
125	0.00000000E+00	0.00000000E+00	-0.31588845E-01	0.00000000E+00	-0.45023439E-03	0.00000000E+00
124	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.64796813E-04	0.00000000E+00
123	0.00000000E+00	0.00000000E+00	-0.12306418E-01	0.10736051E-02	0.00000000E+00	0.00000000E+00
122	0.00000000E+00	0.00000000E+00	-0.33570046E-01	0.12857717E-02	0.00000000E+00	0.00000000E+00
121	0.00000000E+00	0.00000000E+00	-0.54502662E-01	0.11271220E-02	0.00000000E+00	0.00000000E+00
120	0.00000000E+00	0.00000000E+00	-0.71201299E-01	0.81722515E-03	0.00000000E+00	0.00000000E+00
119	0.00000000E+00	0.00000000E+00	-0.81998445E-01	0.44688078E-03	0.00000000E+00	0.00000000E+00
118	0.00000000E+00	0.00000000E+00	-0.86355938E-01	0.71476888E-04	0.00000000E+00	0.00000000E+00
117	0.00000000E+00	0.00000000E+00	-0.84612524E-01	-0.25961987E-03	0.00000000E+00	0.00000000E+00
116	0.00000000E+00	0.00000000E+00	-0.77906404E-01	-0.50260798E-03	0.00000000E+00	0.00000000E+00
115	0.00000000E+00	0.00000000E+00	-0.68056462E-01	-0.62323549E-03	0.00000000E+00	0.00000000E+00
114	0.00000000E+00	0.00000000E+00	-0.57330287E-01	-0.60497283E-03	0.00000000E+00	0.00000000E+00
113	0.00000000E+00	0.00000000E+00	-0.48061113E-01	-0.45847469E-03	0.00000000E+00	0.00000000E+00
112	0.00000000E+00	0.00000000E+00	-0.42121011E-01	-0.22768996E-03	0.00000000E+00	0.00000000E+00
111	0.00000000E+00	0.00000000E+00	-0.40384167E-01	0.18363901E-04	0.00000000E+00	0.00000000E+00
110	0.00000000E+00	0.00000000E+00	-0.42496397E-01	0.21088713E-03	0.00000000E+00	0.00000000E+00
109	0.00000000E+00	0.00000000E+00	-0.47112971E-01	0.30657272E-03	0.00000000E+00	0.00000000E+00
108	0.00000000E+00	0.00000000E+00	-0.52442197E-01	0.29576792E-03	0.00000000E+00	0.00000000E+00
107	0.00000000E+00	0.00000000E+00	-0.56770555E-01	0.19616808E-03	0.00000000E+00	0.00000000E+00
106	0.00000000E+00	0.00000000E+00	-0.58877098E-01	0.42722132E-04	0.00000000E+00	0.00000000E+00
105	0.00000000E+00	0.00000000E+00	-0.58185220E-01	-0.12128965E-03	0.00000000E+00	0.00000000E+00
104	0.00000000E+00	0.00000000E+00	-0.54899485E-01	-0.25234153E-03	0.00000000E+00	0.00000000E+00
103	0.00000000E+00	0.00000000E+00	-0.49913918E-01	-0.31411185E-03	0.00000000E+00	0.00000000E+00
102	0.00000000E+00	0.00000000E+00	-0.44625710E-01	-0.28567170E-03	0.00000000E+00	0.00000000E+00
101	0.00000000E+00	0.00000000E+00	-0.40597551E-01	-0.17013663E-03	0.00000000E+00	0.00000000E+00
100	0.00000000E+00	0.00000000E+00	-0.39091828E-01	0.00000000E+00	0.00000000E+00	0.00000000E+00

171	0.00000000E+00	0.65955919E-01	0.10103421E-02	0.22579600E-03	0.00000000E+00
172	0.00000000E+00	0.46567608E-01	0.12669261E-02	0.19280391E-03	0.00000000E+00
173	0.00000000E+00	0.26022322E-02	0.13796308E-02	0.12064455E-03	0.00000000E+00
174	0.00000000E+00	0.00000000E+00	0.14224635E-02	0.81035821E-06	0.00000000E+00
175	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.26539834E-03	0.00000000E+00
176	0.00000000E+00	0.85167204E-02	0.75911958E-03	0.24552331E-03	0.00000000E+00
177	0.00000000E+00	0.23547282E-01	0.90619791E-03	0.24619008E-03	0.00000000E+00
178	0.00000000E+00	0.38130823E-01	0.80078831E-03	0.24816819E-03	0.00000000E+00
179	0.00000000E+00	0.50010557E-01	0.57677748E-03	0.25242134E-03	0.00000000E+00
180	0.00000000E+00	0.57436197E-01	0.28533112E-03	0.25973517E-03	0.00000000E+00
181	0.00000000E+00	0.59578493E-01	0.36439808E-04	0.27033440E-03	0.00000000E+00
182	0.00000000E+00	0.56216194E-01	0.35372889E-03	0.28379698E-03	0.00000000E+00
183	0.00000000E+00	0.47725270E-01	0.63128440E-03	0.29870485E-03	0.00000000E+00
184	0.00000000E+00	0.35106648E-01	0.83040703E-03	0.31311411E-03	0.00000000E+00
185	0.00000000E+00	0.20129625E-01	0.89314950E-03	0.32478362E-03	0.00000000E+00
186	0.00000000E+00	0.60182263E-02	0.67468196E-03	0.33172618E-03	0.00000000E+00
187	0.00000000E+00	0.00000000E+00	0.24482511E-03	0.33274337E-03	0.00000000E+00
188	0.00000000E+00	0.14297877E-01	0.11538051E-02	0.32779271E-03	0.00000000E+00
189	0.00000000E+00	0.36331185E-01	0.13407372E-02	0.31779905E-03	0.00000000E+00
190	0.00000000E+00	0.58516359E-01	0.12256890E-02	0.30519443E-03	0.00000000E+00
191	0.00000000E+00	0.77280650E-01	0.95422034E-03	0.29107560E-03	0.00000000E+00
192	0.00000000E+00	0.90525424E-01	0.58595863E-03	0.27622894E-03	0.00000000E+00
193	0.00000000E+00	0.96961132E-01	0.16264556E-03	0.26016259E-03	0.00000000E+00
194	0.00000000E+00	0.95968922E-01	0.27653637E-03	0.26083944E-03	0.00000000E+00
195	0.00000000E+00	0.87649771E-01	0.69512341E-03	0.21583233E-03	0.00000000E+00
196	0.00000000E+00	0.72576546E-01	0.10618318E-02	0.18160736E-03	0.00000000E+00
197	0.00000000E+00	0.51878674E-01	0.13510024E-02	0.13388661E-03	0.00000000E+00
198	0.00000000E+00	0.27065030E-01	0.15407783E-02	0.71637191E-04	0.00000000E+00
199	0.00000000E+00	0.00000000E+00	0.16085021E-02	0.18641247E-05	0.00000000E+00
200	0.00000000E+00	0.27733529E-01	0.00000000E+00	0.11011527E-02	0.00000000E+00
201	0.00000000E+00	0.31720377E-01	0.42899013E-03	0.99014886E-03	0.00000000E+00
202	0.00000000E+00	0.41391259E-01	0.64270841E-03	0.80219082E-03	0.00000000E+00
203	0.00000000E+00	0.52755907E-01	0.64463840E-03	0.63598461E-03	0.00000000E+00
204	0.00000000E+00	0.62766333E-01	0.69867066E-03	0.52589032E-03	0.00000000E+00
205	0.00000000E+00	0.69359488E-01	0.26668789E-03	0.47211273E-03	0.00000000E+00
206	0.00000000E+00	0.71636893E-01	0.28338960E-03	0.47028939E-03	0.00000000E+00
207	0.00000000E+00	0.69278113E-01	0.26880040E-03	0.51850649E-03	0.00000000E+00
208	0.00000000E+00	0.62688187E-01	0.48914252E-03	0.61837318E-03	0.00000000E+00
209	0.00000000E+00	0.53044477E-01	0.61202778E-03	0.77393505E-03	0.00000000E+00
210	0.00000000E+00	0.42530128E-01	0.56915506E-03	0.98375009E-03	0.00000000E+00
211	0.00000000E+00	0.34604772E-01	0.28897597E-03	0.12069527E-02	0.00000000E+00
212	0.00000000E+00	0.33729246E-01	0.22105973E-03	0.13286623E-02	0.00000000E+00
213	0.00000000E+00	0.42418926E-01	0.74114953E-03	0.11810056E-02	0.00000000E+00
214	0.00000000E+00	0.57818730E-01	0.99110379E-03	0.93178969E-03	0.00000000E+00
215	0.00000000E+00	0.75114536E-01	0.98215654E-03	0.69544184E-03	0.00000000E+00
216	0.00000000E+00	0.90461522E-01	0.78331701E-03	0.51127283E-03	0.00000000E+00
217	0.00000000E+00	0.10123773	0.45947037E-03	0.37619787E-03	0.00000000E+00
218	0.00000000E+00	0.10576829	0.66669535E-04	0.27669886E-03	0.00000000E+00
219	0.00000000E+00	0.10318823	0.73699244E-03	0.19702833E-03	0.00000000E+00
220	0.00000000E+00	0.93435799E-01	0.77435617E-03	0.13606206E-03	0.00000000E+00
221	0.00000000E+00	0.77044852E-01	0.11393143E-02	0.90937209E-04	0.00000000E+00
222	0.00000000E+00	0.54990989E-01	0.14342950E-02	0.56502090E-04	0.00000000E+00
223	0.00000000E+00	0.28681332E-01	0.16329001E-02	0.27304893E-04	0.00000000E+00
224	0.00000000E+00	0.00000000E+00	0.17049446E-02	0.19336480E-03	0.00000000E+00
225	0.00000000E+00	0.58078396E-01	0.00000000E+00	0.73078582E-03	0.00000000E+00
226	0.00000000E+00	0.59997119E-01	0.21722216E-03	0.69517878E-03	0.00000000E+00
227	0.00000000E+00	0.65102848E-01	0.36093827E-03	0.60569760E-03	0.00000000E+00
228	0.00000000E+00	0.71796424E-01	0.40004244E-03	0.49783344E-03	0.00000000E+00
229	0.00000000E+00	0.78284883E-01	0.34086626E-03	0.40722102E-03	0.00000000E+00
230	0.00000000E+00	0.83091094E-01	0.21045395E-03	0.35637783E-03	0.00000000E+00
231	0.00000000E+00	0.852295418E-01	0.44553737E-04	0.35589964E-03	0.00000000E+00
232	0.00000000E+00	0.84618212E-01	0.11843425E-03	0.40824965E-03	0.00000000E+00
233	0.00000000E+00	0.81438830E-01	0.22985749E-03	0.50920565E-03	0.00000000E+00
234	0.00000000E+00	0.76785075E-01	0.28336720E-03	0.64508176E-03	0.00000000E+00
235	0.00000000E+00	0.72253530E-01	0.22153431E-03	0.78795783E-03	0.00000000E+00
236	0.00000000E+00	0.69753331E-01	0.49313146E-04	0.89440366E-03	0.00000000E+00
237	0.00000000E+00	0.70946869E-01	0.19689120E-03	0.92133501E-03	0.00000000E+00
238	0.00000000E+00	0.76404478E-01	0.43280109E-03	0.84771549E-03	0.00000000E+00
239	0.00000000E+00	0.852033325E-01	0.57357914E-03	0.69392313E-03	0.00000000E+00
240	0.00000000E+00	0.95308738E-01	0.58100571E-03	0.50211016E-03	0.00000000E+00
241	0.00000000E+00	0.10449358	0.45626316E-03	0.31423637E-03	0.00000000E+00
242	0.00000000E+00	0.11034603	0.21777980E-03	0.15599914E-03	0.00000000E+00

243	0.00000000E+00	0.00000000E+00	-0.11139070	0.12045566E-03	0.38093022E-04	0.00000000E+00
244	0.00000000E+00	0.00000000E+00	-0.10609218	0.49704190E-03	-0.38443513E-04	0.00000000E+00
245	0.00000000E+00	0.00000000E+00	-0.94574969E-01	0.85239078E-03	-0.77555703E-04	0.00000000E+00
246	0.00000000E+00	0.00000000E+00	-0.77249267E-01	0.11754014E-02	-0.85615152E-04	0.00000000E+00
247	0.00000000E+00	0.00000000E+00	-0.54843196E-01	0.14432333E-02	-0.70094705E-04	0.00000000E+00
248	0.00000000E+00	0.00000000E+00	-0.28528612E-01	0.16273879E-02	-0.39217522E-04	0.00000000E+00
249	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.16946800E-02	0.20985058E-05	0.00000000E+00
250	0.00000000E+00	0.00000000E+00	-0.70952390E-01	0.00000000E+00	0.45746752E-04	0.00000000E+00
251	0.00000000E+00	0.00000000E+00	-0.72094953E-01	-0.12979517E-03	0.32767858E-04	0.00000000E+00
252	0.00000000E+00	0.00000000E+00	-0.75201962E-01	-0.22375835E-03	-0.17187411E-05	0.00000000E+00
253	0.00000000E+00	0.00000000E+00	-0.79447460E-01	-0.26120675E-03	-0.46008690E-04	0.00000000E+00
254	0.00000000E+00	0.00000000E+00	-0.83823565E-01	-0.24066276E-03	-0.86199108E-04	0.00000000E+00
255	0.00000000E+00	0.00000000E+00	-0.87434604E-01	-0.17544639E-03	-0.10904685E-03	0.00000000E+00
256	0.00000000E+00	0.00000000E+00	-0.89690611E-01	-0.87101845E-04	-0.10566934E-03	0.00000000E+00
257	0.00000000E+00	0.00000000E+00	-0.90405345E-01	-0.31778663E-06	-0.73183966E-04	0.00000000E+00
258	0.00000000E+00	0.00000000E+00	-0.89813431E-01	0.61248538E-04	-0.15680158E-04	0.00000000E+00
259	0.00000000E+00	0.00000000E+00	-0.88517898E-01	0.78984487E-04	0.55309258E-04	0.00000000E+00
260	0.00000000E+00	0.00000000E+00	-0.87366732E-01	0.43735051E-04	0.12186472E-03	0.00000000E+00
261	0.00000000E+00	0.00000000E+00	-0.87249975E-01	-0.39363943E-04	0.16275924E-03	0.00000000E+00
262	0.00000000E+00	0.00000000E+00	-0.88824215E-01	-0.14780789E-03	0.15970213E-03	0.00000000E+00
263	0.00000000E+00	0.00000000E+00	-0.92231654E-01	-0.24578018E-03	0.10564590E-03	0.00000000E+00
264	0.00000000E+00	0.00000000E+00	-0.96970642E-01	-0.29663346E-03	0.80775736E-05	0.00000000E+00
265	0.00000000E+00	0.00000000E+00	-0.10199652	-0.27522612E-03	-0.11423075E-03	0.00000000E+00
266	0.00000000E+00	0.00000000E+00	-0.10596967	-0.17174259E-03	-0.23913037E-03	0.00000000E+00
267	0.00000000E+00	0.00000000E+00	-0.10749665	0.10820298E-04	-0.34571888E-03	0.00000000E+00
268	0.00000000E+00	0.00000000E+00	-0.10532219	0.25827782E-03	-0.41561513E-03	0.00000000E+00
269	0.00000000E+00	0.00000000E+00	-0.98562481E-01	0.54126904E-03	-0.43446034E-03	0.00000000E+00
270	0.00000000E+00	0.00000000E+00	-0.86901795E-01	0.82793030E-03	-0.40747936E-03	0.00000000E+00
271	0.00000000E+00	0.00000000E+00	-0.70487528E-01	0.10951371E-02	-0.34216325E-03	0.00000000E+00
272	0.00000000E+00	0.00000000E+00	-0.49836917E-01	0.13204404E-02	-0.24634287E-03	0.00000000E+00
273	0.00000000E+00	0.00000000E+00	-0.25871757E-01	0.14779402E-02	-0.12905130E-03	0.00000000E+00
274	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.15360636E-02	0.14421528E-05	0.00000000E+00
275	0.00000000E+00	0.00000000E+00	-0.60751106E-01	0.00000000E+00	-0.68083688E-03	0.00000000E+00
276	0.00000000E+00	0.00000000E+00	-0.61710166E-01	-0.10955226E-03	-0.67797794E-03	0.00000000E+00
277	0.00000000E+00	0.00000000E+00	-0.64266023E-01	-0.18227829E-03	-0.68099963E-03	0.00000000E+00
278	0.00000000E+00	0.00000000E+00	-0.67704158E-01	-0.20959636E-03	-0.68889536E-03	0.00000000E+00
279	0.00000000E+00	0.00000000E+00	-0.71235308E-01	-0.19625050E-03	-0.70346608E-03	0.00000000E+00
280	0.00000000E+00	0.00000000E+00	-0.74267685E-01	-0.15553219E-03	-0.71987421E-03	0.00000000E+00
281	0.00000000E+00	0.00000000E+00	-0.76477404E-01	-0.10348358E-03	-0.72824651E-03	0.00000000E+00
282	0.00000000E+00	0.00000000E+00	-0.77800951E-01	-0.54502867E-04	-0.72377424E-03	0.00000000E+00
283	0.00000000E+00	0.00000000E+00	-0.78396845E-01	-0.20244243E-04	-0.70743980E-03	0.00000000E+00
284	0.00000000E+00	0.00000000E+00	-0.78590842E-01	-0.84313157E-05	-0.68530955E-03	0.00000000E+00
285	0.00000000E+00	0.00000000E+00	-0.78796024E-01	-0.21227428E-04	-0.66676089E-03	0.00000000E+00
286	0.00000000E+00	0.00000000E+00	-0.79404705E-01	-0.53821677E-04	-0.66184208E-03	0.00000000E+00
287	0.00000000E+00	0.00000000E+00	-0.80664871E-01	-0.94292592E-04	-0.67805952E-03	0.00000000E+00
288	0.00000000E+00	0.00000000E+00	-0.82573386E-01	-0.12582613E-03	-0.71733942E-03	0.00000000E+00
289	0.00000000E+00	0.00000000E+00	-0.84827205E-01	-0.13106957E-03	-0.77462405E-03	0.00000000E+00
290	0.00000000E+00	0.00000000E+00	-0.86854221E-01	-0.96613973E-04	-0.83876628E-03	0.00000000E+00
291	0.00000000E+00	0.00000000E+00	-0.87906674E-01	-0.15638994E-04	-0.89504288E-03	0.00000000E+00
292	0.00000000E+00	0.00000000E+00	-0.87182072E-01	0.11141904E-03	-0.92796001E-03	0.00000000E+00
293	0.00000000E+00	0.00000000E+00	-0.83946201E-01	0.27717647E-03	-0.92413548E-03	0.00000000E+00
294	0.00000000E+00	0.00000000E+00	-0.77645473E-01	0.46838078E-03	-0.87455193E-03	0.00000000E+00
295	0.00000000E+00	0.00000000E+00	-0.67979998E-01	0.66887471E-03	-0.77604369E-03	0.00000000E+00
296	0.00000000E+00	0.00000000E+00	-0.54932300E-01	0.86190041E-03	-0.63077883E-03	0.00000000E+00
297	0.00000000E+00	0.00000000E+00	-0.38778500E-01	0.10293475E-02	-0.44548439E-03	0.00000000E+00
298	0.00000000E+00	0.00000000E+00	-0.20126515E-01	0.11496803E-02	-0.23055348E-03	0.00000000E+00
299	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.11947529E-02	0.38789469E-06	0.00000000E+00
300	0.00000000E+00	0.00000000E+00	-0.30494629E-01	0.00000000E+00	-0.11848069E-02	0.00000000E+00
301	0.00000000E+00	0.00000000E+00	-0.32155023E-01	-0.13922340E-03	-0.11292267E-02	0.00000000E+00
302	0.00000000E+00	0.00000000E+00	-0.35191245E-01	-0.18874467E-03	-0.10844125E-02	0.00000000E+00
303	0.00000000E+00	0.00000000E+00	-0.38291350E-01	-0.17076295E-03	-0.11284459E-02	0.00000000E+00
304	0.00000000E+00	0.00000000E+00	-0.40912216E-01	-0.13783388E-03	-0.11795355E-02	0.00000000E+00
305	0.00000000E+00	0.00000000E+00	-0.42957947E-01	-0.10385415E-03	-0.12270589E-02	0.00000000E+00
306	0.00000000E+00	0.00000000E+00	-0.44447616E-01	-0.72673865E-04	-0.12637056E-02	0.00000000E+00
307	0.00000000E+00	0.00000000E+00	-0.45449666E-01	-0.46990959E-04	-0.12877418E-02	0.00000000E+00
308	0.00000000E+00	0.00000000E+00	-0.46080284E-01	-0.29486555E-04	-0.13011945E-02	0.00000000E+00
309	0.00000000E+00	0.00000000E+00	-0.46496407E-01	-0.21944310E-04	-0.13086548E-02	0.00000000E+00
310	0.00000000E+00	0.00000000E+00	-0.46870782E-01	-0.24207554E-04	-0.13158807E-02	0.00000000E+00
311	0.00000000E+00	0.00000000E+00	-0.47352307E-01	-0.33546675E-04	-0.13281698E-02	0.00000000E+00
312	0.00000000E+00	0.00000000E+00	-0.48021090E-01	-0.44710208E-04	-0.13486444E-02	0.00000000E+00
313	0.00000000E+00	0.00000000E+00	-0.48851363E-01	-0.50788069E-04	-0.13768472E-02	0.00000000E+00
314	0.00000000E+00	0.00000000E+00	-0.49695105E-01	-0.44693685E-04	-0.14081114E-02	0.00000000E+00

315	0.00000000E+00	0.00000000E+00	-0.50292773E-01	-0.20731424E-04	-0.14339456E-02	0.00000000E+00
316	0.00000000E+00	0.00000000E+00	-0.50307691E-01	0.24278712E-04	-0.14432775E-02	0.00000000E+00
317	0.00000000E+00	0.00000000E+00	-0.49374289E-01	0.90503624E-04	-0.14241539E-02	0.00000000E+00
318	0.00000000E+00	0.00000000E+00	-0.47149871E-01	0.17514546E-03	-0.13655356E-02	0.00000000E+00
319	0.00000000E+00	0.00000000E+00	-0.43361531E-01	0.27296653E-03	-0.12589218E-02	0.00000000E+00
320	0.00000000E+00	0.00000000E+00	-0.37840854E-01	0.37709904E-03	-0.10994771E-02	0.00000000E+00
321	0.00000000E+00	0.00000000E+00	-0.30545811E-01	0.47960563E-03	-0.88669041E-03	0.00000000E+00
322	0.00000000E+00	0.00000000E+00	-0.21578986E-01	0.57121903E-03	-0.62487953E-03	0.00000000E+00
323	0.00000000E+00	0.00000000E+00	-0.11219673E-01	0.63985149E-03	-0.32344653E-03	0.00000000E+00
324	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.66623401E-03	-0.27246107E-05	0.00000000E+00
325	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.54368997E-04	0.00000000E+00	0.00000000E+00
326	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.10021678E-04	-0.98586859E-03	0.00000000E+00
327	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.24720181E-05	-0.11158569E-02	0.00000000E+00
328	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.24902691E-06	-0.12491373E-02	0.00000000E+00
329	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.54720364E-06	-0.13500764E-02	0.00000000E+00
330	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.30683657E-06	-0.14256288E-02	0.00000000E+00
331	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.27597921E-06	-0.14796406E-02	0.00000000E+00
332	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.29096747E-06	-0.15166764E-02	0.00000000E+00
333	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.30932653E-06	-0.15414280E-02	0.00000000E+00
334	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.28942340E-06	-0.15589702E-02	0.00000000E+00
335	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.21029387E-06	-0.15743620E-02	0.00000000E+00
336	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.70281476E-07	-0.15916959E-02	0.00000000E+00
337	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.11136506E-06	-0.16129405E-02	0.00000000E+00
338	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.29995052E-06	-0.16369821E-02	0.00000000E+00
339	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.45846968E-06	-0.16592097E-02	0.00000000E+00
340	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.56078229E-06	-0.16718117E-02	0.00000000E+00
341	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.59643446E-06	-0.16647191E-02	0.00000000E+00
342	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.56822377E-06	-0.16269616E-02	0.00000000E+00
343	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.49141970E-06	-0.15481493E-02	0.00000000E+00
344	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.38934204E-06	-0.14198388E-02	0.00000000E+00
345	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.27957844E-06	-0.12366015E-02	0.00000000E+00
346	0.00000000E+00	0.00000000E+00	0.00000000E+00	-0.17213186E-06	-0.99679501E-03	0.00000000E+00
347	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.65773251E-09	-0.70340021E-03	0.00000000E+00
348	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.11192435E-06	-0.36485023E-03	0.00000000E+00
349	0.00000000E+00	0.00000000E+00	0.00000000E+00	0.50845056E-06	-0.52331760E-05	0.00000000E+00

MAXIMUMS

NODE	0	0	243	224	340	0
VALUE	0.00000000E+00	0.00000000E+00	-0.11139070	0.17049446E-02	-0.16718117E-02	0.00000000E+00

[illegible]

DEAD WT = 150 #/FT² = 75 #/FT² (SLAB = 6" THICK)
 = 0.52085 #/IN²

MAX Δ @ NO. 6 243

APPENDIX B
BUILDING PLAN

APPENDIX B

BUILDING PLAN

Test Area: entire roof.
Observation Area: North-South-East sides of
roof test area.

BUILDING PLAN

283W
North

70'

69'

Route for loaded Robot

Enter

Exit

APPENDIX C
JOB HAZARDS ANALYSIS

HANFORD JOB HAZARD ANALYSIS CHECKLIST							Page 1 of <u>2</u>				
Prepared By R. M. McCoy				Date 08/10/94		Area 200W		Bldg. 283W			
Scope/Description: Roof load test of the 283W Clearwell using a remotely operated robot							☒ New ☐ Revised				
Emergency Contact Person(s): Primary: Secondary: Emergency Radio/Phone Number: MOBIL 811							JHA Number (not required):				
Specific Work Location(s): 283W Clearwell Roof											
KNOWN OR POTENTIAL HAZARDS											
	Yes	No	✓	●	Reference		Yes	No	✓	●	Reference
1. Radiation Area Work		X	✓	●		10. Respiratory Hazards		X	✓	●	
2. Hazardous Waste Operations		X	✓	●		11. Electrical Hazards		X	✓	●	
3. Confined Space Entry		X	✓	●		12. Lock and Tag		X	✓	●	
4. Cutting/Welding		X		●		13. Scaffolding		X			
5. Roof Work	X				See page 2	14. Aerial Lifts		X	✓	●	
6. Fall Hazards (> = 10')		X				15. Asbestos Removal		X	✓	●	
7. Excavation/Trenching		X		●		16. Other (see JHA Sht. 2):		X			
8. Asbestos Inspection Report		X		●		✓ = Formal training required.					
9. Hazardous Materials		X	✓			● = Items that require a permit/form/report.					
Other Hazards				Yes	No	Control Measures					
1. Temperature Extremes				X							
2. Noise				X							
3. Poor Lighting				X							
4. Animals/Insects				X							
5. Process Chemicals/Steam				X							
6. Dust				X							
7. Flammable/Combustible Materials				X							
8. Ladders				X							
9. Wet/Slippery Floors				X							
10. Uneven Terrain				X							
11. Open Excavations/Trenches	X				No roof access in untested areas						
12. Adjacent Water Hazard				X							
13. Vehicle Traffic	X				Barcade off work area and post						
14. Heavy Equipment				X							
15. Rigging Operation				X							
16. Manual Lifting	X				Manual lifting of weights, see page 2 for control measures						
17. Power Tools	X				Robot will be operated by trained and qualified operators						
18. Pinch Points	X				See page 2 for control measures						
19. Falling Objects	X				Barcade off work area and post area as no access.						
20. Sharp Objects				X							
21. Overhead Obstructions				X							
22. Site Control (Signs/Barricades)	X				"CAUTION" tape & "DANGER" sign will be used to barcade area						
23. Remote Work Area				X							
24. Other (see JHA Sht. 2):				X							
MINIMUM DRESS REQUIREMENTS: See page 2											
APPROVALS											
Does further evaluation of the job steps, associated hazards, or safety measures need to be performed? ☐ Yes ☐ No											
If Yes, continue job hazard analysis on the following pages.											
Supervisor, Person in Charge R. M. McCoy (Signature) <i>R. M. McCoy</i>						Industrial Safety/Hygiene C. M. Hartman (Signature) <i>CMH</i>					

HANFORD JOB HAZARD ANALYSIS CHECKLIST

Roof Work	Load testing the roof deck and supporting structure will be performed from the roof top.
Fall Hazard	The fall hazard associated with this task is a property-damage risk and a personnel hazard. See fall-protection program.
Manual Lifting	<p>Lifting of the robot weights has the potential for back injury.</p> <p>Correct lifting methods shall be used, and the robot operators who will be doing the lifting have been trained in these methods during group safety meetings.</p> <p>Weights shall be lifted onto the robot only on areas of the roof that have already been qualified by visual inspection.</p>
Pinch Points	The operation of the robot produces pinch points. During the operation of the robot, all personnel shall maintain a minimum distance of 10 ft except for the operators of the robot. The operators shall maintain a distance of 2 ft from the pinch point areas during the robot operations.
Overhead Obstr.	During the lifting of the robot and equipment, no personnel shall be under the boom or equipment.
Minimum Dress	<p>The following are the minimum dress requirements:</p> <ul style="list-style-type: none"> - dress for outside work - safety shoes - safety glasses and - hard hat (required only when there are overhead hazards).

APPENDIX D
PRE-JOB BRIEFING MINUTES

Pre-Job Briefing Minutes

Date: 8-31-94
Building: 283W Clearwell
Attendance: R. M. McCoy, C. J. Furubotten

The pre-job briefing meeting was attended by Engineering, Analysis and Technology (EAT). The meeting covered the procedure to load test the 283W Clearwell.

The following topics were reviewed:

- Risk associated with the load test
- The building plan
- The job hazards analysis
- The fall-protection program
- Safety barricading requirements.

Any additional personnel who come onto the test site must read the 283W Clearwell test report (WHC-SD-GN-TRP-20014) and review the above topics.