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\*\*\*\*\* GAMMA SPECTRUM ANALYSIS \*\*\*\*\*  
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OYSTER CREEK NUCLEAR GENERATING STATION CHEMISTRY DEPARTMENT

Detector Name : DET01  
Report Generated On : 4/25/09 5:48:15 PM  
Spectral Data File Name : C:\PCNT2K\CAMFILES\3LLIQMAR\800246.CNF



Sample Title : 3-L Liq Mar'lli  
Sample Description : CST @1335 Decay Study  
User ID : Bob  
Sample Type : 8  
Sample Geometry : 3-L Marinelli



Peak Locate Threshold : 3.00  
Peak Locate Range (in channels) : 1 - 4096  
Peak Area Range (in channels) : 100 - 4096  
Identification Energy Tolerance : 1.000 keV

APR 26 2009

Sample Size : 3000.00 cc  
Sample Taken On : 4/25/09 5:31:32 PM  
Acquisition Started : 4/25/09 5:31:32 PM  
Decay Time : 0.00E+000 Minutes  
Live Time : 1000.0 Seconds  
Dead Time : 1001.2 Seconds  
Lead Time : 0.12 %

Energy Calibration Used Done On : 1/8/09  
Efficiency Calibration Used Done On : 8/5/06

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\*\*\*\*\* BACKGROUND SUBTRACT REPORT \*\*\*\*\*  
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Detector Name: DET01

Sample Title: 3-L Lig Mar'lli

Peak Analysis Performed on: 4/25/09 5:48:15 PM

Peak No.	Energy (keV)	Original Area	Orig. Area Uncert.	Ambient Background	Backgr. Uncert.	Subtracted Area	Subtracted Uncert.
1	249.63	3.71E+001	6.54			3.71E+001	6.54E+000

1 = First peak in a multiplet region  
1 = Other peak in a multiplet region  
? = Fitted singlet

Errors quoted at 1.000 sigma

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\*\*\*\*\* N U C L I D E I D E N T I F I C A T I O N R E P O R T \*\*\*\*\*  
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Sample Title: 3-L Liq Mar'lli  
Nuclide Library Used: C:\GENIE2K\CAMFILES\ANL002.NLB

..... IDENTIFIED NUCLIDES .....

Nuclide Name	Id Confidence	Energy (keV)	Yield (%)	Activity (uCi/cc )	Activity Uncertainty
XE-135	0.964	249.79* 608.18	89.90 2.89	5.48E-008	9.91E-009

\* = Energy line found in the spectrum.

@ = Energy line not used for Weighted Mean Activity

Energy Tolerance : 1.000 keV

Nuclide confidence index threshold = 0.30

Errors quoted at 1.000 sigma

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\*\*\*\*\* INTERFERENCE CORRECTED REPORT \*\*\*\*\*  
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Nuclide Name	Nuclide Id Confidence	Wt mean Activity (uCi/cc )	Wt mean Activity Uncertainty
XE-135	0.964	5.48E-008	9.91E-009
Total Activity		5.48E-008	

? = nuclide is part of an undetermined solution  
X = nuclide rejected by the interference analysis  
@ = nuclide contains energy lines not used in Weighted Mean Activity

Errors quoted at 1.000 sigma

\*\*\*\*\* UNIDENTIFIED PEAKS \*\*\*\*\*

Peak Locate Performed on: 4/25/09 5:48:15 PM  
Peak Locate From Channel: 100  
Peak Locate To Channel: 4096

Peak No.	Energy (keV)	Peak Size in Counts per Second	Peak CPS % Uncertainty
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All peaks were identified.

M = First peak in a multiplet region  
m = Other peak in a multiplet region  
F = Fitted singlet

Errors quoted at 1.000 sigma