WRAMC	TIVAME	]						
		SOURCE	Initial Source DPM 36,300	half life, yrs 7.54E+04	<b>Decay-to-Date</b> 11/12/2004	lamda, yr-1 9.193E-06	decay, yrs	DPM on Date Efficiency Performed 36300
ISOTOPE	SOURCE ID #:	CREATION DATE:	00,000		,,	000_ 00	0.0 .	
Pu 239	48262	1/9/2004						μCi on Date
			Source μCi	half life, yrs	Decay-to-Date	lamda, yr-1	decay, yrs	Efficiency Performed
			DPM Based	μCi Based				
	Average	Average Source	Calculated	Calculated			Source plus	
	background	plus background	Efficiency,	Efficiency,		Background	Background	
	counts, cpm	counts, cpm	cpm/dpm	cpm/dpm	_	Counts, cpm	Counts, cpm	
	counts, cpm 0.1	counts, cpm 14373.9	cpm/dpm 0.396	cpm/dpm	]	0.6	14409	
				cpm/dpm	]	0.6 0.2	14409 14367	
Fare				cpm/dpm		0.6 0.2 0	14409 14367 14321	
For:	0.1	14373.9		cpm/dpm		0.6 0.2 0	14409 14367 14321 14247.33333	
Instrument/Probe	0.1 Ludlum 2929 w 43-	14373.9 10-1		cpm/dpm		0.6 0.2 0 0	14409 14367 14321 14247.33333 14280	
Instrument/Probe	0.1	14373.9 10-1		cpm/dpm		0.6 0.2 0 0 0	14409 14367 14321 14247.33333 14280 14415.66667	
Instrument/Probe	0.1 Ludlum 2929 w 43-	14373.9 10-1		cpm/dpm		0.6 0.2 0 0	14409 14367 14321 14247.33333 14280	
Instrument/Probe	0.1 Ludlum 2929 w 43-	14373.9 10-1		cpm/dpm		0.6 0.2 0 0 0 0 0.2	14409 14367 14321 14247.33333 14280 14415.66667 14603.33333	
Instrument/Probe Serial numbers By:	0.1 Ludlum 2929 w 43-	14373.9 10-1		cpm/dpm		0.6 0.2 0 0 0 0 0.2	14409 14367 14321 14247.33333 14280 14415.66667 14603.33333 14346.66667	

WRAMC	T TO TIVE							
		SOURCE	Initial Source DPM 21,500	half life, yrs 7.54E+04	<b>Decay-to-Date</b> 11/16/2009	lamda, yr-1 9.193E-06	decay, yrs	DPM on Date Efficiency Performed 21499
ISOTOPE	SOURCE ID #:	CREATION DATE:	21,500	7.54E+04	11/10/2009	9.1936-00	5.60	21499
Tc99	971115-3	1/29/2004						μCi on Date
			Source μCi	half life, yrs	Decay-to-Date	lamda, yr-1	decay, yrs	Efficiency Performed
			DPM Based	μCi Based				
	Average	Average Source	Calculated	Calculated			Source plus	
	background	plus background	Efficiency,	Efficiency,		Background	Background	
	counts, cpm	counts, cpm	cpm/dpm	cpm/dpm		_	Counts, cpm	
	169.4	4361.3	0.195			192	4318.333333	
					_	167	4363.333333	
						137	4348.666667	
For:						166	4342	
	Ludlum 2929 w 43-					164	4329.333333	
Serial numbers	152275 / PR155350					184	4419.666667	
						162	4427 4366.666667	
Ву:						173 185	4300.000007	
ъу.	Name	Date Performed				164	4354.333333	
	Al Craig	11/16/2009			Average		4361.3	
		,,			, ugo		.000	

WRAMC								
			Initial Source DPM	half life, yrs	Decay-to-Date	lamda, yr-1	decay, yrs	DPM on Date Efficiency Performed
		SOURCE	36,300	7.54E+04	11/12/2004	9.193E-06	0.84	36300
ISOTOPE	SOURCE ID #:	CREATION DATE:						
Pu 239	48262	1/9/2004						μCi on Date
			Source μCi	half life, yrs	Decay-to-Date	lamda, yr-1	decay, yrs	Efficiency Performed
	Average	Average Source	DPM Based Calculated	μCi Based Calculated			Source plus	
	background	plus background	Efficiency,	Efficiency,		Background	Background	
	baongrouna	pius backgi ouliu	Lilloidiley,	Elliolelley,		Dackground	Dackground	
	counts, cpm	counts, cpm	cpm/dpm	cpm/dpm		_	Counts, cpm	
		-	•	• •	]	_	_	
	counts, cpm	counts, cpm	cpm/dpm	• •	]	Counts, cpm	Counts, cpm	
	counts, cpm	counts, cpm	cpm/dpm	• •	1	Counts, cpm	<b>Counts, cpm</b> 7761.5	
For:	counts, cpm 0.8	counts, cpm 7807.0	cpm/dpm	• •		Counts, cpm 2 0	7761.5 7888.5 7806.5 7794.5	
Instrument/Probe	counts, cpm 0.8	counts, cpm 7807.0	cpm/dpm	• •	]	2 0 1.5 0.5	7761.5 7888.5 7806.5 7794.5 7793	
	counts, cpm 0.8	counts, cpm 7807.0	cpm/dpm	• •	]	2 0 1.5 0.5	7761.5 7888.5 7806.5 7794.5 7793 7870	
Instrument/Probe	counts, cpm 0.8	counts, cpm 7807.0	cpm/dpm	• •		2 0 1.5 0.5	7761.5 7888.5 7806.5 7794.5 7793 7870 7815	
Instrument/Probe Serial numbers	counts, cpm 0.8	counts, cpm 7807.0	cpm/dpm	• •	]	Counts, cpm  2  0  1.5  0.5  0  1  1	Counts, cpm 7761.5 7888.5 7806.5 7794.5 7793 7870 7815 7722.5	
Instrument/Probe	counts, cpm 0.8 Ludlum 2360 w 43- 184906 / PR116721	counts, cpm 7807.0	cpm/dpm	• •	]	2 0 1.5 0.5	Counts, cpm 7761.5 7888.5 7806.5 7794.5 7793 7870 7815 7722.5 7791.5	
Instrument/Probe Serial numbers By:	counts, cpm 0.8	counts, cpm 7807.0	cpm/dpm	• •	] Average	Counts, cpm  2 0 1.5 0.5 0 1 1 0.5 1	Counts, cpm 7761.5 7888.5 7806.5 7794.5 7793 7870 7815 7722.5	

WRAMC								
			Initial Source DPM	half life, yrs	Decay-to-Date	lamda, yr-1	decay, yrs	DPM on Date Efficiency Performed
		SOURCE	21,500	7.54E+04	11/16/2009	9.193E-06	5.80	21499
ISOTOPE	SOURCE ID #:	CREATION DATE:						
Tc99	971115-3	1/29/2004						μCi on Date
			Source μCi	half life, yrs	Decay-to-Date	lamda, yr-1	decay, yrs	Efficiency Performed
	Average	Average Source	DPM Based Calculated	μCi Based Calculated			Source plus	
	_	_					-	
	background	plus background	Efficiency,	Efficiency,		Background	Background	
	background counts, cpm	plus background counts, cpm	Efficiency, cpm/dpm	Efficiency, cpm/dpm		Background Counts, cpm	_	
			cpm/dpm	cpm/dpm	1	_	Counts, cpm 4679.5	
	counts, cpm	counts, cpm	cpm/dpm	•	]	Counts, cpm	Counts, cpm	
	counts, cpm	counts, cpm	cpm/dpm	•	]	Counts, cpm	<b>Counts, cpm</b> 4679.5	
For:	counts, cpm 48.4	counts, cpm 4713.2	cpm/dpm	•	]	Counts, cpm 49 54.2 45.2 48.8	4679.5 4677	
Instrument/Probe	counts, cpm 48.4 Ludlum 2360 w 43-	counts, cpm 4713.2	cpm/dpm	•	]	49 54.2 45.2 48.8 44.4	Counts, cpm 4679.5 4677 4713.5 4691 4741	
	counts, cpm 48.4	counts, cpm 4713.2	cpm/dpm	•	]	49 54.2 45.2 48.8 44.4 46.8	Counts, cpm 4679.5 4677 4713.5 4691 4741 4780	
Instrument/Probe	counts, cpm 48.4 Ludlum 2360 w 43-	counts, cpm 4713.2	cpm/dpm	•	]	Counts, cpm 49 54.2 45.2 48.8 44.4 46.8 48	Counts, cpm 4679.5 4677 4713.5 4691 4741 4780 4766.5	
Instrument/Probe Serial numbers	counts, cpm 48.4 Ludlum 2360 w 43-	counts, cpm 4713.2	cpm/dpm	•	]	49 54.2 45.2 48.8 44.4 46.8 48 48.8	Counts, cpm 4679.5 4677 4713.5 4691 4741 4780 4766.5 4727.5	
Instrument/Probe	counts, cpm 48.4  Ludlum 2360 w 43- 184906 / PR116721	counts, cpm 4713.2	cpm/dpm	•	1	Counts, cpm  49  54.2  45.2  48.8  44.4  46.8  48  48.8  49.4	Counts, cpm 4679.5 4677 4713.5 4691 4741 4780 4766.5 4727.5	
Instrument/Probe Serial numbers By:	counts, cpm 48.4 Ludlum 2360 w 43-	counts, cpm 4713.2	cpm/dpm	•	] Average	Counts, cpm  49  54.2  45.2  48.8  44.4  46.8  48  48.8  49.4  49.6	Counts, cpm 4679.5 4677 4713.5 4691 4741 4780 4766.5 4727.5	

#### PROJECT NAME

Al Craig

11/16/2009

WRAMC	) I WAWL	]						
			Initial Source DPM	half life, yrs	Decay-to-Date	lamda, yr-1	decay, yrs	DPM on Date Efficiency Performed
		SOURCE	36,300	7.54E+04	11/12/2004	9.193E-06	0.84	36300
ISOTOPE	SOURCE ID #:	CREATION DATE:						
Pu 239	48262	1/9/2004						μCi on Date
			Source μCi	half life, yrs	Decay-to-Date	lamda, yr-1	decay, yrs	Efficiency Performed
			DPM Based	μCi Based				
	Average	Average Source	Calculated	Calculated			Source plus	
	background	plus background	Efficiency,	Efficiency,		Background	_	
	counts, cpm	counts, cpm	cpm/dpm	cpm/dpm			Counts, cpm	1
	0.5	8243.7	0.227		]	1.2	8182	
						0.8	8218.5	
_						0.2	8234	
For:						0.2	8305.5	
	Ludlum 2360 w 43-					0	8108	
Serial numbers	225241 / PR160790					0.8	8180	
						0.4	8337 8221.5	
Dv.						0.8	8238.5	
Ву:	Name	Date Performed				0.2	8412	
	INAITIE	Date i enomieu			_	0.2	0412	

Average

8243.7

WRAMC								
			Initial Source DPM	half life, yrs	Decay-to-Date	lamda, yr-1	decay, yrs	DPM on Date Efficiency Performed
		SOURCE	21,500	7.54E+04	11/16/2009	9.193E-06	5.80	21499
ISOTOPE	SOURCE ID #:	CREATION DATE:						
Tc99	971115-3	1/29/2004						μCi on Date
			Source μCi	half life, yrs	Decay-to-Date	lamda, yr-1	decay, yrs	Efficiency Performed
	Average	Average Source	DPM Based Calculated	μCi Based Calculated			Source plus	
	_	_					<del>-</del>	
	nackarolina	nlus hackground	HTTICIENCY	Htticiency		Rackaround	Rackaround	
	background	plus background	Efficiency,	Efficiency,		Background	_	
	counts, cpm	counts, cpm	cpm/dpm	cpm/dpm	1	Counts, cpm	Counts, cpm	
			• .	• .	1	Counts, cpm	<b>Counts, cpm</b> 4589.5	
1	counts, cpm	counts, cpm	cpm/dpm	• .		140 129	Counts, cpm	
For:	counts, cpm	counts, cpm	cpm/dpm	• .	]	Counts, cpm	4589.5 4591	
	counts, cpm	counts, cpm 4602.4	cpm/dpm	• .		140 129 118	4589.5 4591 4613	
Instrument/Probe	counts, cpm 130.2	counts, cpm 4602.4	cpm/dpm	• .		Counts, cpm  140  129  118  123	4589.5 4591 4613 4311	
Instrument/Probe	counts, cpm 130.2 Ludlum 2360 w 43-	counts, cpm 4602.4	cpm/dpm	• .		140 129 118 123 136	4589.5 4591 4613 4311 4658	
Instrument/Probe	counts, cpm 130.2 Ludlum 2360 w 43-	counts, cpm 4602.4	cpm/dpm	• .		140 129 118 123 136 124	4589.5 4591 4613 4311 4658 4554	
Instrument/Probe	counts, cpm 130.2 Ludlum 2360 w 43-	counts, cpm 4602.4	cpm/dpm	• .		140 129 118 123 136 124 141.5	4589.5 4591 4613 4311 4658 4554 4607.5	
Instrument/Probe Serial numbers By:	counts, cpm 130.2 Ludlum 2360 w 43-	counts, cpm 4602.4	cpm/dpm	• .		140 129 118 123 136 124 141.5	Counts, cpm  4589.5  4591  4613  4311  4658  4554  4607.5  4727.5	

#### PROJECT NAME

WRAMC		

WRAMC		]						
			Initial Source					DPM on Date
			DPM	half life, yrs	Decay-to-Date	lamda, yr-1	decay, yrs	Efficiency Performed
		SOURCE	36,300	7.54E+04	11/12/2004	9.193E-06	0.84	36300
ISOTOPE	SOURCE ID #:	CREATION DATE:						
Pu 239	48262	1/9/2004						μCi on Date
		_	Source μCi	half life, yrs	Decay-to-Date	lamda, yr-1	decay, yrs	Efficiency Performed
			DPM Based	μCi Based				
	Average	Average Source	Calculated	Calculated			Source plus	
	background	plus background	Efficiency,	Efficiency,		Background	Background	
	counts, cpm	counts, cpm	cpm/dpm	cpm/dpm		Counts, cpm	Counts, cpm	
	2.2	2549.3	0.070	•		2	2282.5	
						2	2360	
						2.4	2382	
For:						1.8	2364	
Instrument/Probe	Ludlum 2360 w 43-	·37				1.4	2486.5	
Serial numbers	145474 / PR066273					3	2503.5	
	. 10 11 17 111000210					2.4	2346	
						2.4	2731	
Ву:						2.8	2964	
۵,	Name	Date Performed				2.2	3073.5	
	Al Craig	11/16/2009			Average		2549.3	
	Al Claig	11/10/2003			Average	۷.۷	20 <del>1</del> 3.0	

WRAMC								
			Initial Source DPM	half life, yrs	Decay-to-Date	lamda, yr-1	decay, yrs	DPM on Date Efficiency Performed
		SOURCE	21,500	7.54E+04	11/16/2009	9.193E-06	5.80	21499
ISOTOPE	SOURCE ID #:	CREATION DATE:						
Tc99	971115-3	1/29/2004						μCi on Date
			Source μCi	half life, yrs	Decay-to-Date	lamda, yr-1	decay, yrs	Efficiency Performed
	Average	Average Source	DPM Based Calculated	μCi Based Calculated			Source plus	
	background	plus background	Efficiency,	Efficiency,		Background	Background	
	background counts, cpm	plus background counts, cpm	Efficiency, cpm/dpm	Efficiency, cpm/dpm		_	Background Counts, cpm	
			•	•	1	_	_	
	counts, cpm	counts, cpm	cpm/dpm	•	]	Counts, cpm	Counts, cpm	
	counts, cpm	counts, cpm	cpm/dpm	•	]	Counts, cpm 64.4	Counts, cpm 3053.5	
For:	counts, cpm	counts, cpm	cpm/dpm	•	]	64.4 59.4	3053.5 3065.5	
	counts, cpm	counts, cpm 3290.6	cpm/dpm	•	]	64.4 59.4 60.4	3053.5 3065.5 3409.5	
	counts, cpm 63.3	counts, cpm 3290.6	cpm/dpm	•	]	Counts, cpm 64.4 59.4 60.4 58.2	3053.5 3065.5 3409.5 3484.5	
Instrument/Probe	counts, cpm 63.3 Ludlum 2360 w 43-	counts, cpm 3290.6	cpm/dpm	•	]	Counts, cpm 64.4 59.4 60.4 58.2 52.8	3053.5 3065.5 3409.5 3484.5 3547.5	
Instrument/Probe	counts, cpm 63.3 Ludlum 2360 w 43-	counts, cpm 3290.6	cpm/dpm	•	]	64.4 59.4 60.4 58.2 52.8 57.4	3053.5 3065.5 3409.5 3484.5 3547.5 3250.5	
Instrument/Probe	counts, cpm 63.3 Ludlum 2360 w 43-	counts, cpm 3290.6	cpm/dpm	•	]	Counts, cpm 64.4 59.4 60.4 58.2 52.8 57.4 68	Counts, cpm 3053.5 3065.5 3409.5 3484.5 3547.5 3250.5 3282.5	
Instrument/Probe Serial numbers By:	counts, cpm 63.3 Ludlum 2360 w 43-	counts, cpm 3290.6	cpm/dpm	•	]	Counts, cpm 64.4 59.4 60.4 58.2 52.8 57.4 68 65	Counts, cpm 3053.5 3065.5 3409.5 3484.5 3547.5 3250.5 3282.5 3308	