Perimeter Rad Data

To Whom It May Concern:

There is a disconnect designed into the Radiological Data of this Exercise package. In order to drive the projected doses to the levels required to support the Off-site Protective Actions, the level of radioactivity in the release path and the release rate has been manually elevated.

The level of radioactivity in the Reactor Building/Containment (the source) is lower than that which is being released. Any questions from players in regards to the data associated with this disconnect should be answered by the controller for that area and the players should be informed that they should use the indicated release data or survey information. The discussion should be brief with only the information necessary to keep the scenario on track. Any additional information has the possibility to be considered coaching.

Dale R. Lewis
Rad/Chem Supervisor, EP
Lead Drill Controller

HP and FMT Controllers

When releasing data to Field Monitoring Teams or providing data from radiological survey maps, take note of the following items and provide the corresponding information:

- What instrument(s) is(are) being used?
- Is it turned on
- What scale is it on

The information you release should be adjusted to be valid for the instrument(s) being used.
Air sample results should be rounded up or down. 100 cpm is the minimum detectable limit.

The following is provided for your information.

LUDLUM MODEL 14C

PRECAUTIONS AND LIMITATIONS

- THE MODEL 14C MAY NOT BE USED TO QUANTIFY BETA DOSE RATES. USE THE APPROPRIATE ION CHAMBER INSTRUMENT TO ESTABLISH BETA DOSE RATES.
- THE X1000 RANGE UTILIZES AN INTERNAL DETECTOR.
- THE BATTERIES SHOULD BE REMOVED FROM THE INSTRUMENT ANYTIME IT IS NOT GOING TO BE USED FOR A LONG PERIOD OF TIME.

OPERATING CHARACTERISTICS

- THE MODEL 14C IS A PORTABLE SURVEY INSTRUMENT USED FOR THE MEASUREMENT OF GAMMA EXPOSURE RATES AND THE DETECTION OF BETA RADIATION. THE 14C HAS RANGES OF 0-.2 MR/HR, 0-2 MR/HR, 0-20 MR/HR, 0-200 MR/HR, AND 0-2000 MR/HR.
- THIS INSTRUMENT IS TYPICALLY USED FOR GENERAL AREA LOW LEVEL RADIATION SURVEYS USING A HAND HELD SIDE WINDOW GM DETECTOR FOR THE 4 LOWEST RANGES AND AN INTERNAL GM DETECTOR FOR THE HIGHEST RANGE.
- THERE IS A BETA SHIELD ON THE SIDE-WINDOW GM DETECTOR TO BE USED FOR BETA DETECTION. THE INTERNAL DETECTOR MEASURES GAMMA EXPOSURE ONLY.

LUDLUM MODEL RO-2(X)

OPERATING CHARACTERISTICS

- THE RO-2(X) SERIES ARE PORTABLE ION CHAMBER INSTRUMENTS USED TO DETECT BETA AND GAMMA RADIATION.
- THE RO-2 HAS 4 DECADE RANGES WITH A MAXIMUM OF 5 R/HR.
- THE RO-2A HAS 4 DECADE RANGES WITH A MAXIMUM OF 50 R/HR.
- THE RO-20 HAS 5 DECADE RANGES WITH A MAXIMUM OF 50 R/HR.

Open window data should not be used for AmerenUE FMTs.

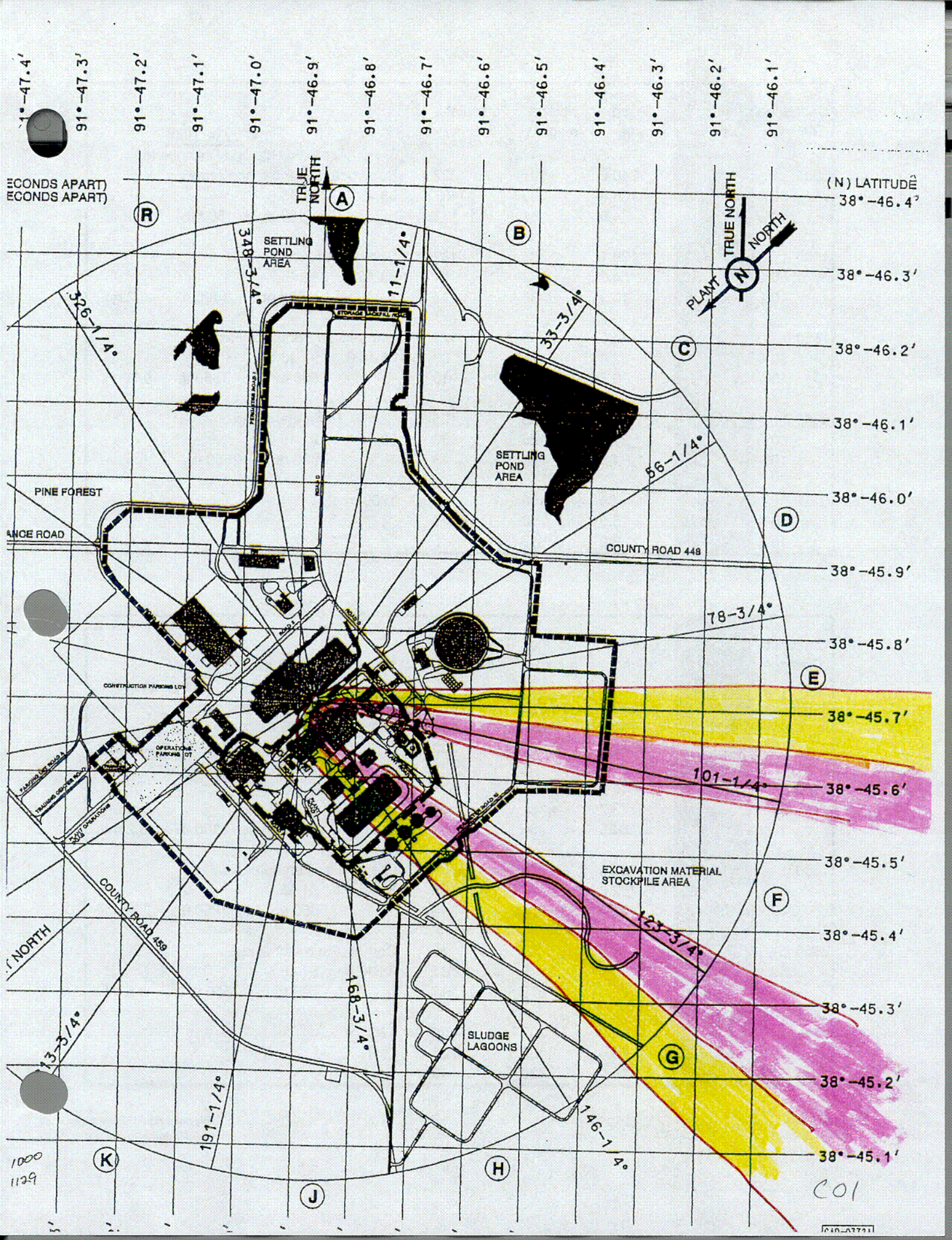
The release has just initiated and has not yet reached the EAB. It has just begun to exit the Unit Vent at 1014. All readings should be background at th EAB and beyond.

Plant FMTs should not be taking open window readings. Do not release open window readings to AmerenUE FMTs.

For State FMTs only.

The "grayed out" readings are to be used in the event that the State requests open window readings. During the plume phase of the release, the waist and ground level readings will be essentially the same with the ground level reading no more than 10% higher at the most.

Centerline Distance	Open mr/hr	Closed mr/hr	Iodine n cpm	Particulate n cpm	10/3/01 Time: **1000-1014**			
					Approx Centerline Distance to:			
500 ft	1.5	0.4	0	0	Road between Plant and Annex			
50%	0.8	0.2	0	0	38.45.7	91.46.8		
10%	0.2	0.0	0	0		150 m.	500 ft.	0.1 mi.
1100 ft.	0.7	0.2	0	0	Corner PA fence			
50%	0.3	0.1	0	0	38.45.6	91.46.7		
10%	0.1	0.0	0	0		325 m.	1100 ft.	0.2 mi.
1850 ft.	0.4	0.1	0	0	Intersection Perimeter Road			
50%	0.2	0.1	0	0	38.45.6	91.46.5		
10%	0.0	0.0	0	0		550 m.	1850 ft.	0.35 mi.
2650 ft.	0.3	0.1	0	0	Corner Perimeter Road			
50%	0.1	0.0	0	0	38.45.6	91.46.4		
10%	0.0	0.0	0	0		800 m.	2650 ft.	0.5 mi.
EAB	0.2	0.05			1200 m.			
50%	0.1	0.0	0	0				
10%	0.0	0.0	0	0				



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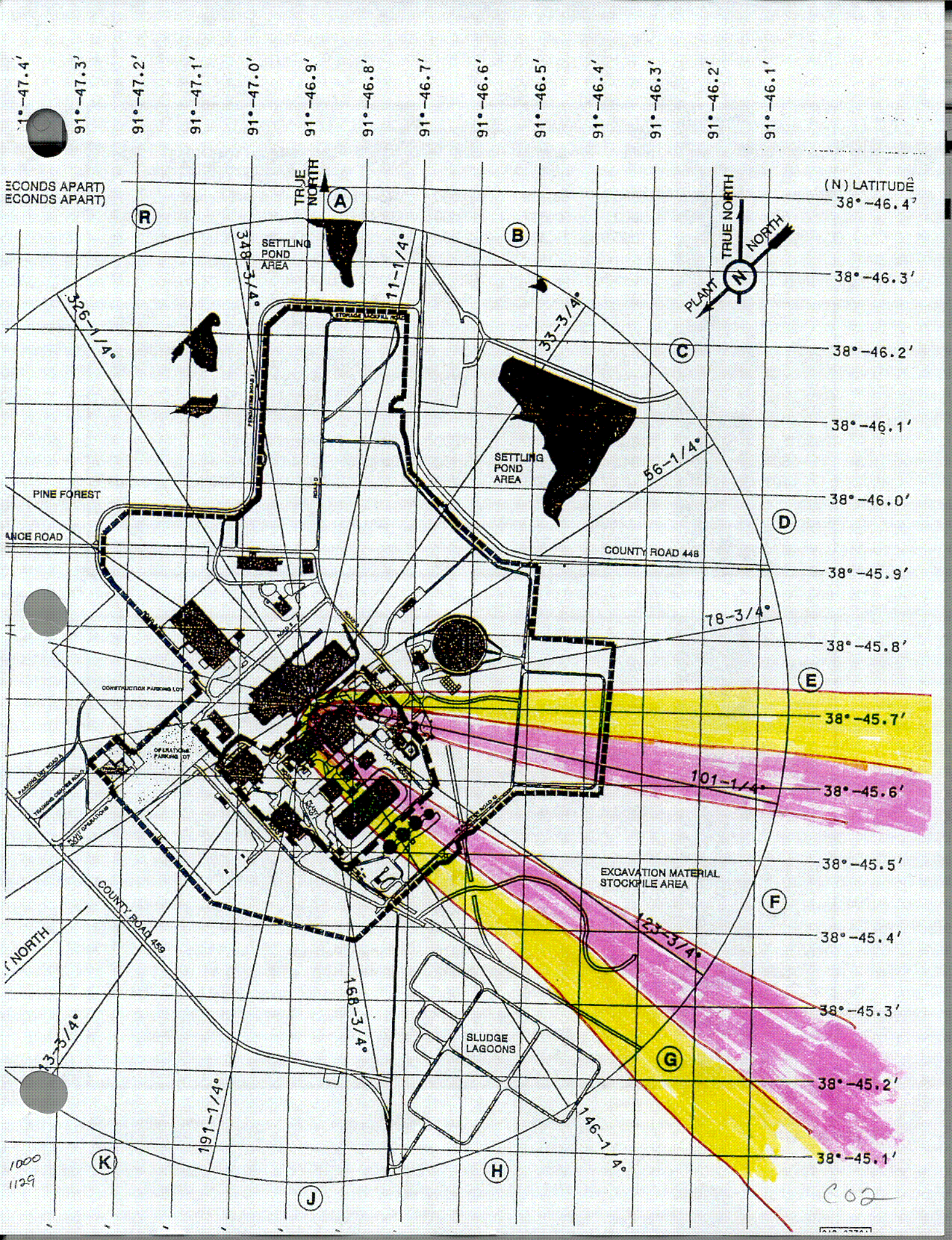
1129

C01

Centerline Distance	Open mr/hr	Closed mr/hr	Iodine n cpm	Particulate n cpm	10/3/01	Time: **1015-1029**		
					Approx Centerline Distance to:			
500 ft	912.0	240.0	667	333	Road between Plant and Annex			
50%	456.0	120.0	333	167	38.45.7	91.46.8		
10%	91.2	24.0	67	33		150 m.	500 ft.	0.1 mi.
1100 ft.	414.5	109.1	364	182	Corner PA fence			
50%	207.3	54.5	182	91	38.45.6	91.46.7		
10%	41.5	10.9	36	18		325 m.	1100 ft.	0.2 mi.
1850 ft.	246.5	64.9	250	125	Intersection Perimeter Road			
50%	123.2	32.4	125	63	38.45.6	91.46.5		
10%	24.6	6.5	25	13		550 m.	1850 ft.	0.35 mi.
2650 ft.	172.1	45.3	250	125	Corner Perimeter Road			
50%	86.0	22.6	125	63	38.45.6	91.46.4		
10%	17.2	4.5	25	13		800 m.	2650 ft.	0.5 mi.
EAB	114.0	30	100	50	1200 m.			
50%	57.0	15.0	50	25				
10%	11.4	3.0	10	5				

Centerline Distance	Open mr/hr	Closed mr/hr	Iodine n cpm	Particulate n cpm	10/3/01	Time: **1030-1044**		
					Approx Centerline Distance to:			
500 ft	4560.0	1200.0	15,333	3,000	Road between Plant and Annex			
50%	2280.0	600.0	7,667	1,500	38.45.7	91.46.8		
10%	456.0	120.0	1,533	300		150 m.	500 ft.	0.1 mi.
1100 ft.	2072.7	545.5	8,364	1,636	Corner PA fence			
50%	1036.4	272.7	4,182	818	38.45.6	91.46.7		
10%	207.3	54.5	836	164		325 m.	1100 ft.	0.2 mi.
1850 ft.	1232.4	324.3	5750	1125	Intersection Perimeter Road			
50%	616.2	162.2	2,875	563	38.45.6	91.46.5		
10%	123.2	32.4	575	113		550 m.	1850 ft.	0.35 mi.
2650 ft.	860.4	226.4	5750	1125	Corner Perimeter Road			
50%	430.2	113.2	2,875	563	38.45.6	91.46.4		
10%	86.0	22.6	575	113		800 m.	2650 ft.	0.5 mi.
EAB	570.0	150	2,300	450	1200 m.			
50%	285.0	75.0	1,150	225				
10%	57.0	15.0	230	45				



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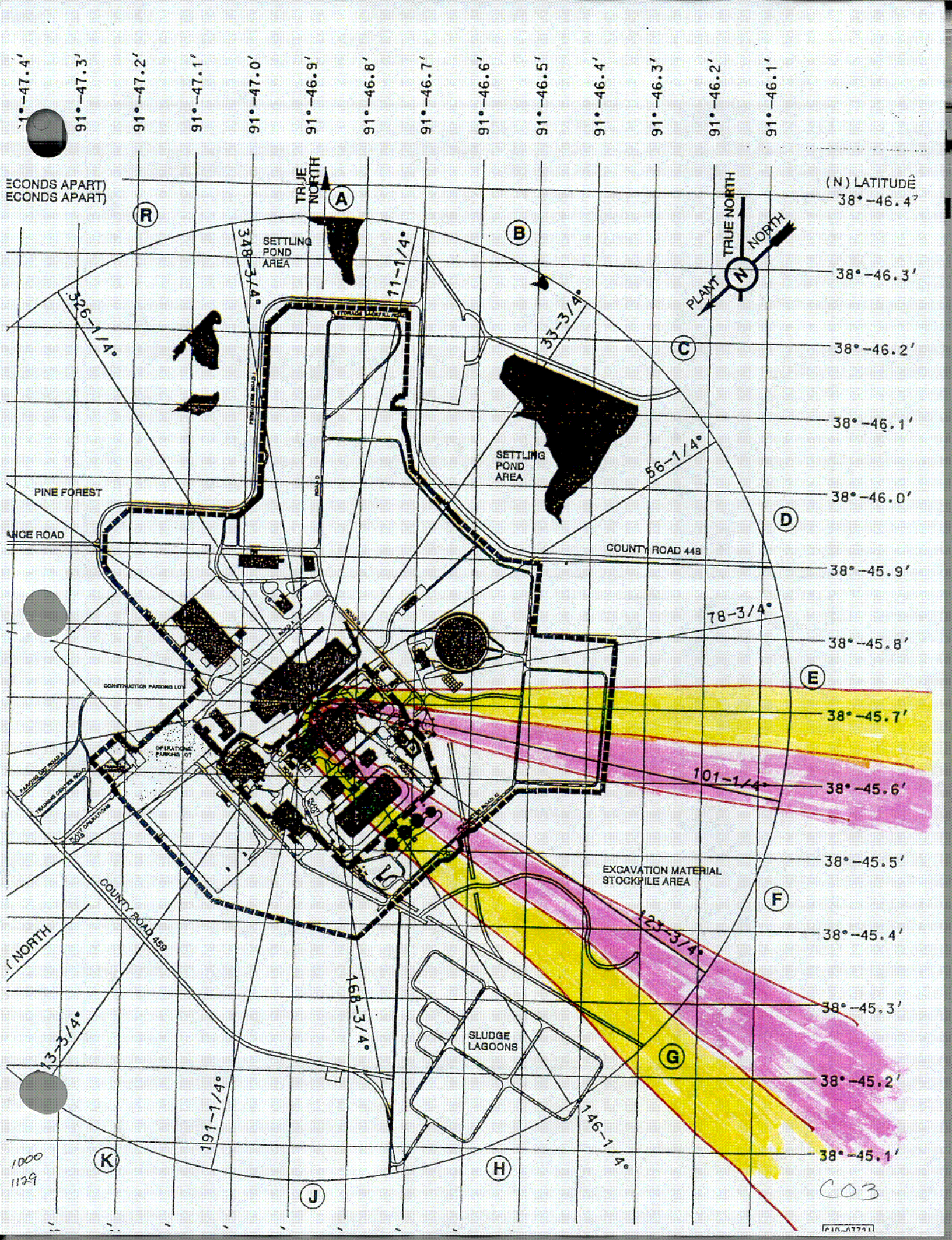
C02

Centerline Distance	Open mr/hr	Closed mr/hr	Iodine n cpm	Particulate n cpm	10/3/01 Time: **1045-1059**			
					Approx Centerline Distance to:			
500 ft	38000.0	10000.0	183,333	20,000	Road between Plant and Annex			
50%	19000.0	5000.0	91,667	10,000	38.45.7	91.46.8		
10%	3800.0	1000.0	18,333	2,000		150 m.	500 ft.	0.1 mi.
1100 ft.	17272.7	4545.5	100,000	10,909	Corner PA fence			
50%	8636.4	2272.7	50,000	5,455	38.45.6	91.46.7		
10%	1727.3	454.5	10,000	1,091		325 m.	1100 ft.	0.2 mi.
1850 ft.	10270.3	2702.7	68750	7500	Intersection Perimeter Road			
50%	5135.1	1351.4	34,375	3,750	38.45.6	91.46.5		
10%	1027.0	270.3	6,875	750		550 m.	1850 ft.	0.35 mi.
2650 ft.	7169.8	1886.8	68750	7500	Corner Perimeter Road			
50%	3584.9	943.4	34,375	3,750	38.45.6	91.46.4		
10%	717.0	188.7	6,875	750		800 m.	2650 ft.	0.5 mi.
EAB	4750.0	1250	27,500	3,000	1200 m.			
50%	2375.0	625.0	13,750	1,500				
10%	475.0	125.0	2,750	300				

Centerline Distance	Open mr/hr	Closed mr/hr	Iodine n cpm	Particulate n cpm	10/3/01 Time: **1100-1114**			
					Approx Centerline Distance to:			
500 ft	39520.0	10400.0	183,333	18,333	Road between Plant and Annex			
50%	19760.0	5200.0	91,667	9,167	38.45.7	91.46.8		
10%	3952.0	1040.0	18,333	1,833		150 m.	500 ft.	0.1 mi.
1100 ft.	17963.6	4727.3	100,000	10,000	Corner PA fence			
50%	8981.8	2363.6	50,000	5,000	38.45.6	91.46.7		
10%	1796.4	472.7	10,000	1,000		325 m.	1100 ft.	0.2 mi.
1850 ft.	10681.1	2810.8	68750	6875	Intersection Perimeter Road			
50%	5340.5	1405.4	34,375	3,438	38.45.6	91.46.5		
10%	1068.1	281.1	6,875	688		550 m.	1850 ft.	0.35 mi.
2650 ft.	7456.6	1962.3	68750	6875	Corner Perimeter Road			
50%	3728.3	981.1	34,375	3,438	38.45.6	91.46.4		
10%	745.7	196.2	6,875	688		800 m.	2650 ft.	0.5 mi.
EAB	4940.0	1300	27,500	2,750	1200 m.			
50%	2470.0	650.0	13,750	1,375				
10%	494.0	130.0	2,750	275				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TRUE NORTH
PLANT NORTH
SETTLING POND AREA
SETTLING POND AREA
PINE FOREST
ANGE ROAD
COUNTY ROAD 448
COUNTY ROAD 459
CONSTRUCTION PARKING LOT
OPERATIONAL PARKING LOT
EXCAVATION MATERIAL STOCKPILE AREA
SLUDGE LAGOONS
348-3/4°
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168-3/4°
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146-1/4°
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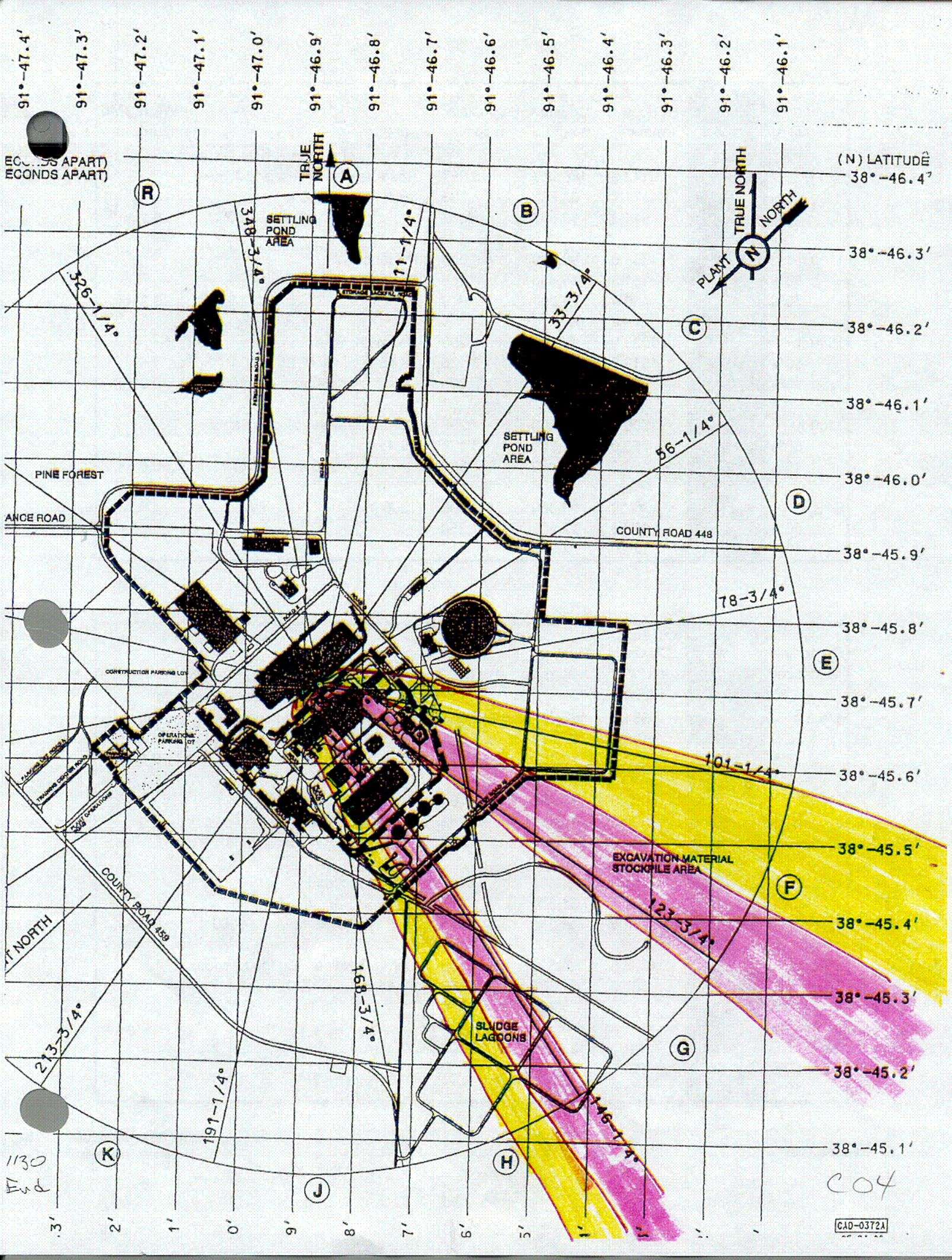
C03

Centerline Distance	Open mr/hr	Closed mr/hr	Iodine n cpm	Particulate n cpm	10/3/01	Time: **1115-1129**		
					Approx Centerline Distance to:			
500 ft	**41040.0**	10800.0	186,667	18,000	Road between Plant and Annex			
50%	**20520.0**	5400.0	93,333	9,000	38.45.7	91.46.8		
10%	**4104.0**	1080.0	18,667	1,800		150 m.	500 ft.	0.1 mi.
1100 ft.	**18654.5**	4909.1	101,818	9,818	Corner PA fence			
50%	**9327.3**	2454.5	50,909	4,909	38.45.6	91.46.7		
10%	**1865.5**	490.9	10,182	982		325 m.	1100 ft.	0.2 mi.
1850 ft.	**11091.9**	2918.9	70000	6750	Intersection Perimeter Road			
50%	**5545.9**	1459.5	35,000	3,375	38.45.6	91.46.5		
10%	**1109.2**	291.9	7,000	675		550 m.	1850 ft.	0.35 mi.
2650 ft.	**7743.4**	2037.7	70000	6750	Corner Perimeter Road			
50%	**3871.7**	1018.9	35,000	3,375	38.45.6	91.46.4		
10%	**774.3**	203.8	7,000	675		800 m.	2650 ft.	0.5 mi.
EAB	**5130.0**	1350	28,000	2,700	1200 m.			
50%	**2565.0**	675.0	14,000	1,350				
10%	**513.0**	135.0	2,800	270				

Centerline Distance	Open mr/hr	Closed mr/hr	Iodine n cpm	Particulate n cpm	10/3/01	Time: **1130-1144**		**Wind Shift begins**
					Approx Centerline Distance to:			
500 ft	**39520.0**	10400.0	186,667	18,333	Road between Plant and Annex			
50%	**19760.0**	5200.0	93,333	9,167	38.45.7	91.46.8		
10%	**3952.0**	1040.0	18,667	1,833		150 m.	500 ft.	0.1 mi.
1100 ft.	**17963.6**	4727.3	101,818	10,000	Corner PA fence			
50%	**8981.8**	2363.6	50,909	5,000	38.45.6	91.46.7		
10%	**1796.4**	472.7	10,182	1,000		325 m.	1100 ft.	0.2 mi.
1850 ft.	**10681.1**	2810.8	70000	6875	Intersection Perimeter Road			
50%	**5340.5**	1405.4	35,000	3,438	38.45.6	91.46.5		
10%	**1068.1**	281.1	7,000	688		550 m.	1850 ft.	0.35 mi.
2650 ft.	**7456.6**	1962.3	70000	6875	Corner Perimeter Road			
50%	**3728.3**	981.1	35,000	3,438	38.45.6	91.46.4		
10%	**745.7**	196.2	7,000	688		800 m.	2650 ft.	0.5 mi.
EAB	**4940.0**	1300	28,000	2,750	1200 m.			
50%	**2470.0**	850.0	18,000	1,000				
10%	**494.0**	130.0	2,800	275				



1130

C04

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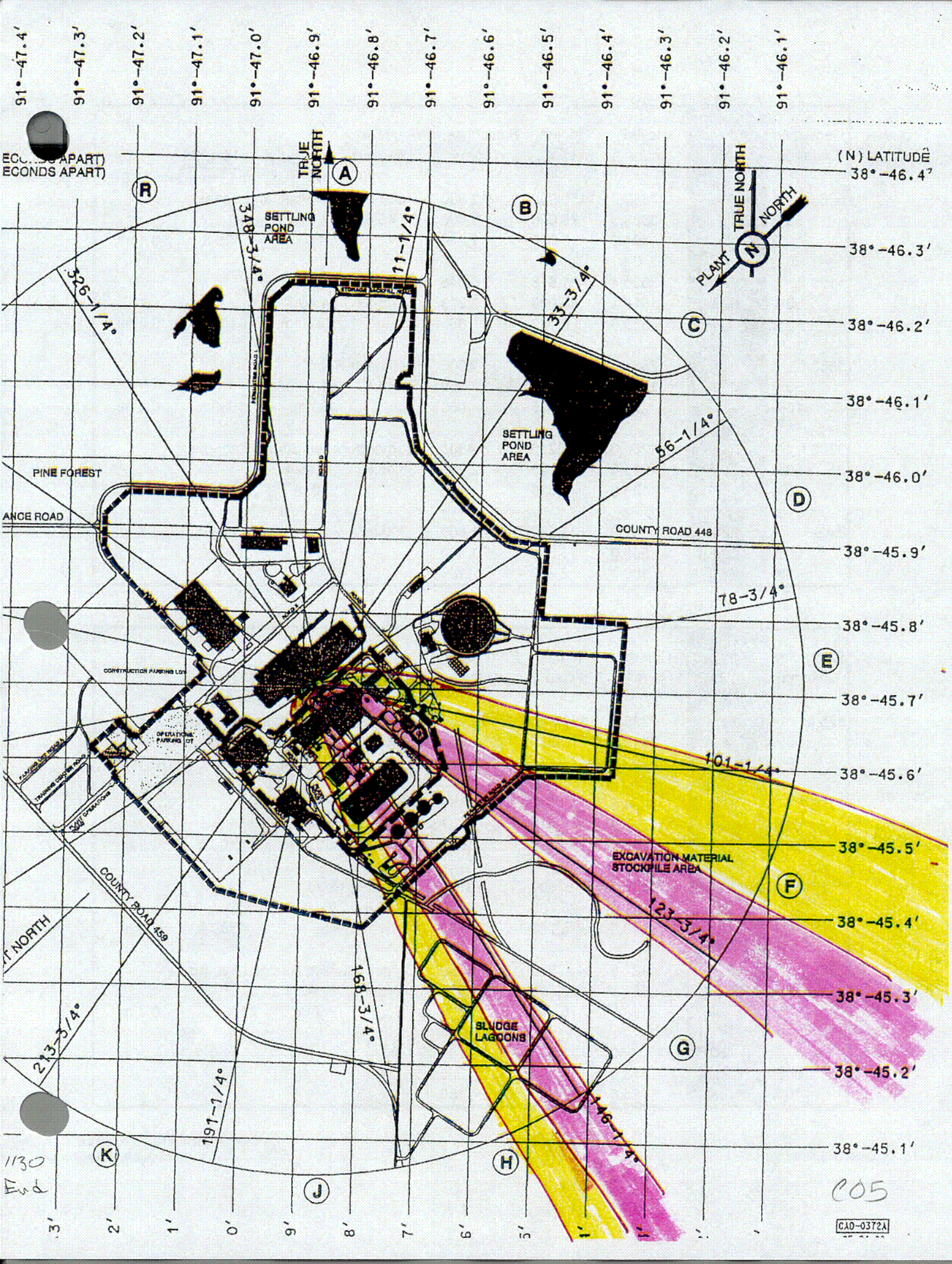
Centerline Distance	Open mr/hr	Closed mr/hr	Iodine n cpm	Particulate n cpm	10/3/01	Time: **1145-1159**		**Wind Shift Complete**
					Approx Centerline Distance to:			
525 ft	36480.0	9142.9	166,667	16,667	Road between Plant and Annex			
50%	18240.0	4571.4	83,333	8,333	38.45.65	91.46.8		
10%	3648.0	914.3	16,667	1,667		160 m.	525 ft.	0.1 mi.
1100 ft.	16581.8	4363.6	90,909	9,091	PA fence			
50%	8290.9	2181.8	45,455	4,545	38.45.57	91.46.7		
10%	1658.2	436.4	9,091	909		320 m.	1100 ft.	0.2 mi.
1580 ft.	9859.5	3038.0	62500	6250	Perimeter Road			
50%	4929.7	1519.0	31,250	3,125	38.45.5	91.46.65		
10%	985.9	303.8	6,250	625		480 m.	1580 ft.	0.3 mi.
3200 ft.	6883.0	1500.0	62500	6250	Corner between Sludge Lagoons			
50%	3441.5	750.0	31,250	3,125	38.45.6	91.46.4		
10%	688.3	150.0	6,250	625		960 m.	3200 ft.	0.6 mi.
EAB	4560.0	1200	25,000	2,500	1200 m.			
50%	2280.0	600.0	12,500	1,250				
10%	456.0	120.0	2,500	250				

Centerline Distance	Open mr/hr	Closed mr/hr	Iodine n cpm	Particulate n cpm	10/3/01	Time: **1200-1214**		
					Approx Centerline Distance to:			
525 ft	33440.0	8381.0	166,667	15,333	Road between Plant and Annex			
50%	16720.0	4190.5	83,333	7,667	38.45.65	91.46.8		
10%	3344.0	838.1	16,667	1,533		160 m.	525 ft.	0.1 mi.
1100 ft.	15200.0	4000.0	90,909	8,364	PA fence			
50%	7600.0	2000.0	45,455	4,182	38.45.57	91.46.7		
10%	1520.0	400.0	9,091	836		320 m.	1100 ft.	0.2 mi.
1580 ft.	9037.8	2784.8	62500	5750	Perimeter Road			
50%	4518.9	1392.4	31,250	2,875	38.45.5	91.46.65		
10%	903.8	278.5	6,250	575		480 m.	1580 ft.	0.3 mi.
3200 ft.	6309.4	1375.0	62500	5750	Corner between Sludge Lagoons			
50%	3154.7	687.5	31,250	2,875	38.45.6	91.46.4		
10%	630.9	137.5	6,250	575		960 m.	3200 ft.	0.6 mi.
EAB	4180.0	1100	25,000	2,300	1200 m.			
50%	2090.0	550.0	12,500	1,150				
10%	418.0	110.0	2,500	230				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213-3/4°
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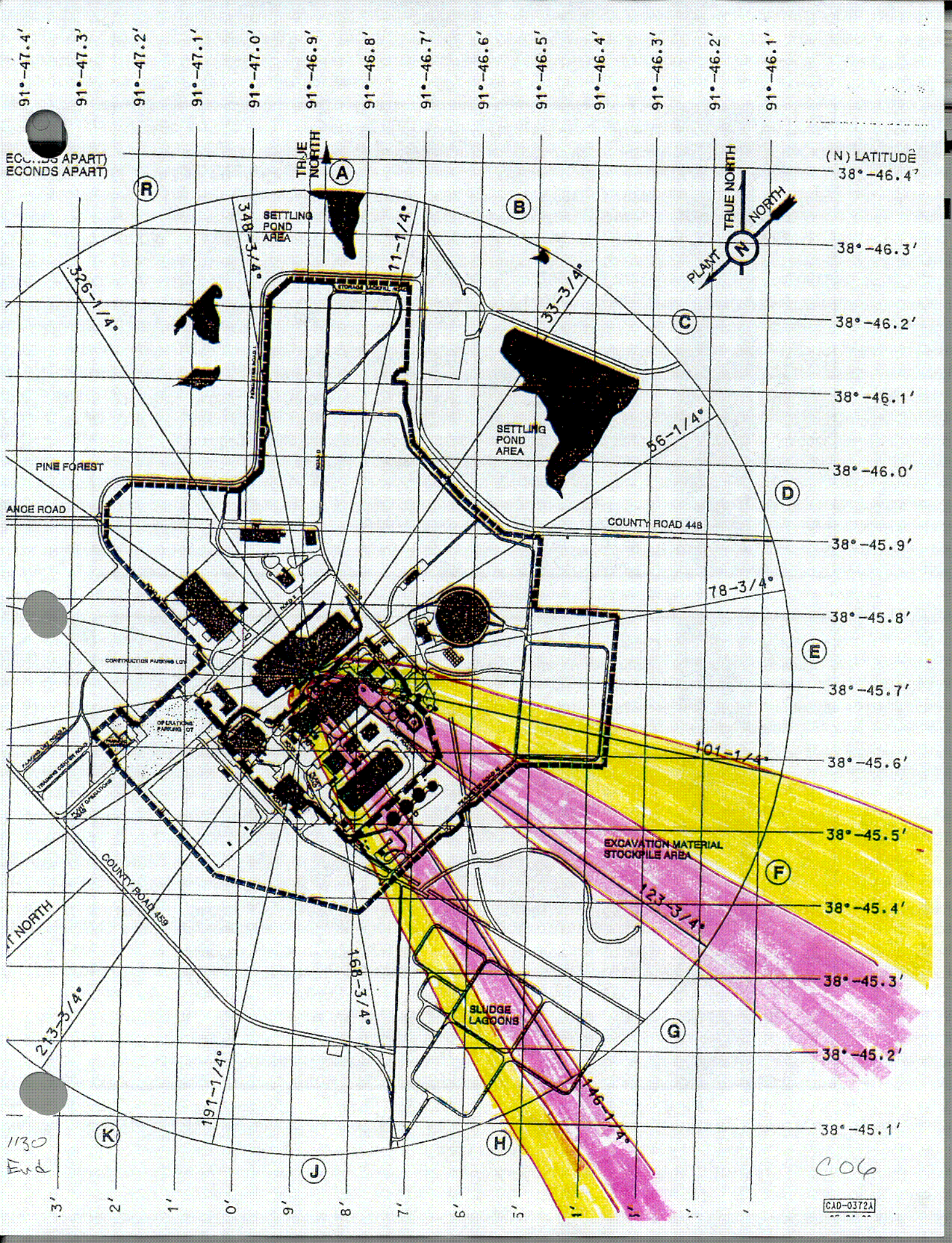
Centerline Distance	Open mr/hr	Closed mr/hr	Iodine n cpm	Particulate n cpm	10/3/01	Time: **1215-1229**		
					Approx Centerline Distance to:			
525 ft	30400.0	7619.0	150,000	12,000	Road between Plant and Annex			
50%	15200.0	3809.5	75,000	6,000	38.45.65	91.46.8		
10%	3040.0	761.9	15,000	1,200		160 m.	525 ft.	0.1 mi.
1100 ft.	13818.2	3636.4	81,818	6,545	PA fence			
50%	6909.1	1818.2	40,909	3,273	38.45.57	91.46.7		
10%	1381.8	363.6	8,182	655		320 m.	1100 ft.	0.2 mi.
1580 ft.	8216.2	2531.6	56250	4500	Perimeter Road			
50%	4108.1	1265.8	28,125	2,250	38.45.5	91.46.65		
10%	821.6	253.2	5,625	450		480 m.	1580 ft.	0.3 mi.
3200 ft.	5735.8	1250.0	56250	4500	Corner between Sludge Lagoons			
50%	2867.9	625.0	28,125	2,250	38.45.6	91.46.4		
10%	573.6	125.0	5,625	450		960 m.	3200 ft.	0.6 mi.
EAB	3800.0	1000	22,500	1,800	1200 m.			
50%	1900.0	500.0	11,250	900				
10%	380.0	100.0	2,250	180				

Centerline Distance	Open mr/hr	Closed mr/hr	Iodine n cpm	Particulate n cpm	10/3/01	Time: **1230-1244**		
					Approx Centerline Distance to:			
525 ft	28880.0	7238.1	153,333	10,000	Road between Plant and Annex			
50%	14440.0	3619.0	76,667	5,000	38.45.65	91.46.8		
10%	2888.0	723.8	15,333	1,000		160 m.	525 ft.	0.1 mi.
1100 ft.	13127.3	3454.5	83,636	5,455	PA fence			
50%	6563.6	1727.3	41,818	2,727	38.45.57	91.46.7		
10%	1312.7	345.5	8,364	545		320 m.	1100 ft.	0.2 mi.
1580 ft.	7805.4	2405.1	57500	3750	Perimeter Road			
50%	3902.7	1202.5	28,750	1,875	38.45.5	91.46.65		
10%	780.5	240.5	5,750	375		480 m.	1580 ft.	0.3 mi.
3200 ft.	5449.1	1187.5	57500	3750	Corner between Sludge Lagoons			
50%	2724.5	593.8	28,750	1,875	38.45.6	91.46.4		
10%	544.9	118.8	5,750	375		960 m.	3200 ft.	0.6 mi.
EAB	3610.0	950	23,000	1,500	1200 m.			
50%	1805.0	475.0	11,500	750				
10%	361.0	95.0	2,300	150				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38°-45.6'
38°-45.5'
38°-45.4'
38°-45.3'
38°-45.2'
38°-45.1'
TRUE NORTH
PLANT NORTH
SETTLING POND AREA
SETTLING POND AREA
PINE FOREST
COUNTY ROAD 448
COUNTY ROAD 459
EXCAVATION MATERIAL STOCKPILE AREA
SLUDGE LAGOONS
348-3/4°
11-1/4°
33-3/4°
326-1/4°
56-1/4°
78-3/4°
101-1/4°
123-3/4°
146-1/4°
168-3/4°
191-1/4°
213-3/4°
A
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C
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3'
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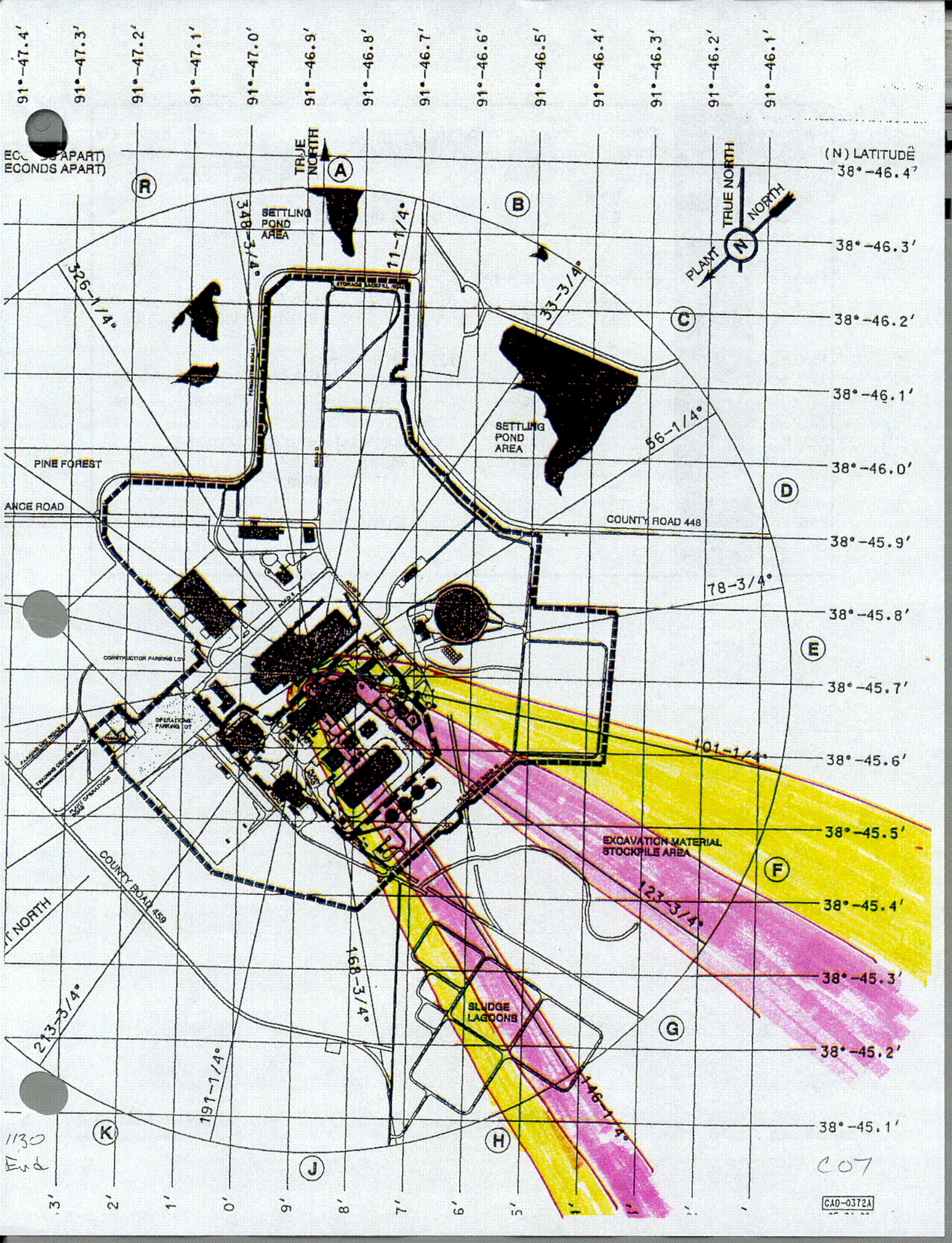
CAD-0372A

1130
C06

Centerline Distance	Open mr/hr	Closed mr/hr	Iodine n cpm	Particulate n cpm	10/3/01	Time: **1244-1259**		
					Approx Centerline Distance to:			
525 ft	27360.0	6857.1	133,333	8,333	Road between Plant and Annex			
50%	13680.0	3428.6	66,667	4,167	38.45.65	91.46.8		
10%	2736.0	685.7	13,333	833		160 m.	525 ft.	0.1 mi.
1100 ft.	12436.4	3272.7	72,727	4,545	PA fence			
50%	6218.2	1636.4	36,364	2,273	38.45.57	91.46.7		
10%	1243.6	327.3	7,273	455		320 m.	1100 ft.	0.2 mi.
1580 ft.	7394.6	2278.5	50000	3125	Perimeter Road			
50%	3697.3	1139.2	25,000	1,563	38.45.5	91.46.65		
10%	739.5	227.8	5,000	313		480 m.	1580 ft.	0.3 mi.
3200 ft.	5162.3	1125.0	50000	3125	Corner between Sludge Lagoons			
50%	2581.1	562.5	25,000	1,563	38.45.6	91.46.4		
10%	516.2	112.5	5,000	313		960 m.	3200 ft.	0.6 mi.
EAB	3420.0	900	20,000	1,250	1200 m.			
50%	1710.0	450.0	10,000	625				
10%	342.0	90.0	2,000	125				

Centerline Distance	Open mr/hr	Closed mr/hr	Iodine n cpm	Particulate n cpm	10/3/01	Time: **1300-1314**		
					Approx Centerline Distance to:			
525 ft	25840.0	6476.2	120,000	6,667	Road between Plant and Annex			
50%	12920.0	3238.1	60,000	3,333	38.45.65	91.46.8		
10%	2584.0	647.6	12,000	667		160 m.	525 ft.	0.1 mi.
1100 ft.	11745.5	3090.9	65,455	3,636	PA fence			
50%	5872.7	1545.5	32,727	1,818	38.45.57	91.46.7		
10%	1174.5	309.1	6,545	364		320 m.	1100 ft.	0.2 mi.
1580 ft.	6983.8	2151.9	45000	2500	Perimeter Road			
50%	3491.9	1075.9	22,500	1,250	38.45.5	91.46.65		
10%	698.4	215.2	4,500	250		480 m.	1580 ft.	0.3 mi.
3200 ft.	4875.5	1062.5	45000	2500	Corner between Sludge Lagoons			
50%	2437.7	531.3	22,500	1,250	38.45.6	91.46.4		
10%	487.5	106.3	4,500	250		960 m.	3200 ft.	0.6 mi.
EAB	3230.0	850	18,000	1,000	1200 m.			
50%	1615.0	425.0	9,000	500				
10%	323.0	85.0	1,800	100				



1130
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C07

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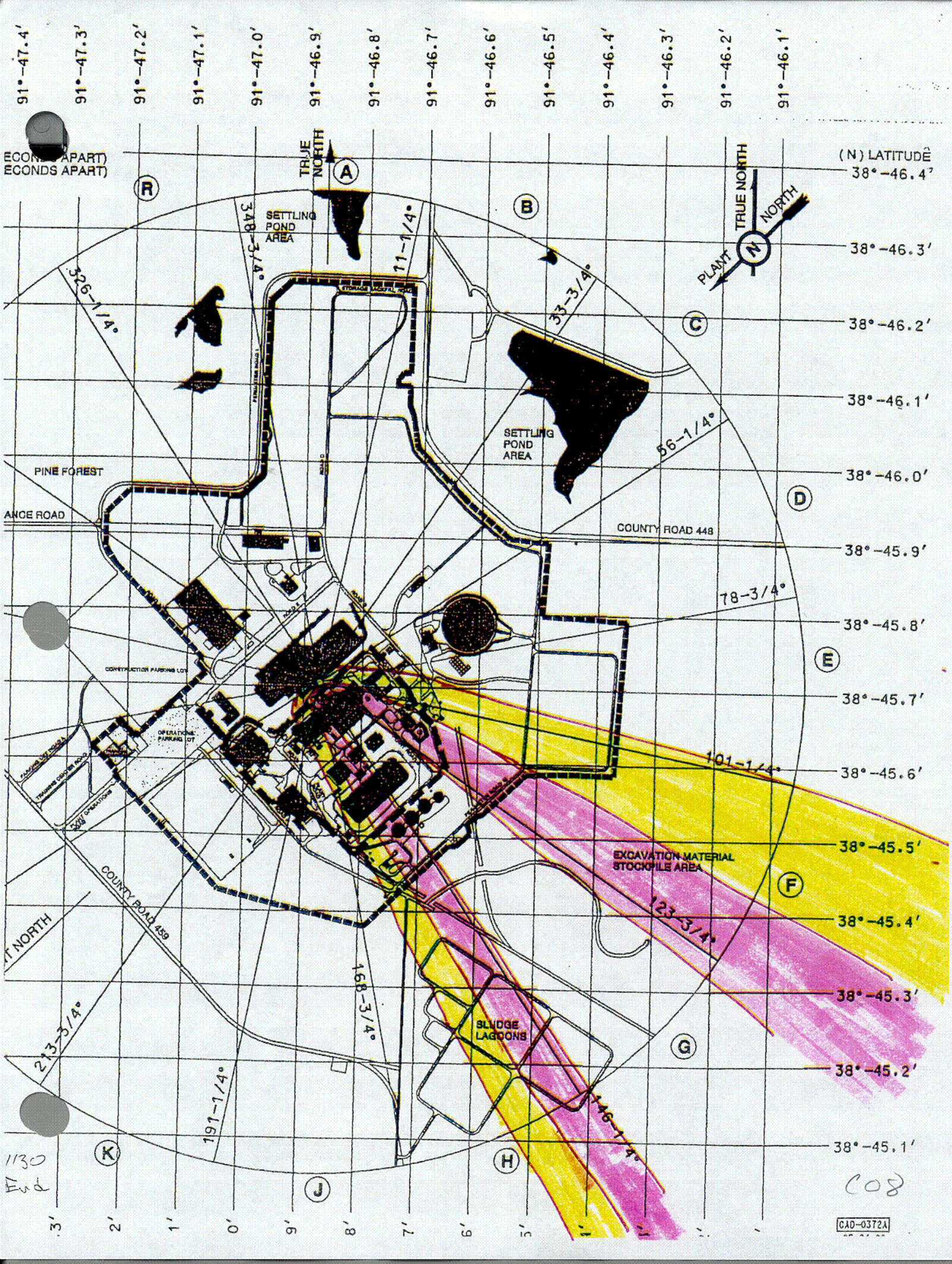
Centerline Distance	Open mr/hr	Closed mr/hr	Iodine n cpm	Particulate n cpm	10/3/01	Time: **1315-end**		**Release is Stopped**
					Approx Centerline Distance to:			
525 ft	60.8	0.7	<100	0	Road between Plant and Annex			
50%	30.4	0.4		0	38.45.65	91.46.8		
10%	6.1	0.1		0		160 m.	525 ft.	0.1 mi.
1100 ft.	27.6	1.0	100	< 100	PA fence			
50%	13.8	0.5	50		38.45.57	91.46.7		
10%	2.8	0.1	10			320 m.	1100 ft.	0.2 mi.
1580 ft.	16.4	1.2	100	<100	Perimeter Road			
50%	8.2	0.6	50		38.45.5	91.46.65		
10%	1.6	0.1	10			480 m.	1580 ft.	0.3 mi.
3200 ft.	11.5	2.0	150	125	Corner between Sludge Lagoons			
50%	5.7	1.0	75	63	38.45.6	91.46.4		
10%	1.1	0.2	15	13		960 m.	3200 ft.	0.6 mi.
EAB	7.6	2	150	50	1200 m.			
50%	3.8	1.0	75	25				
10%	0.8	0.2	15	5				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38°-45.1'
TRUE NORTH
NORTH
PLANT
SETTLING POND AREA
SETTLING POND AREA
PINE FOREST
COUNTY ROAD 448
COUNTY ROAD 459
EXCAVATION MATERIAL STOCKPILE AREA
SLUDGE LAGOONS
326-1/4°
348-3/4°
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101-1/4°
123-3/4°
146-1/4°
168-3/4°
191-1/4°
213-3/4°
CAD-0372A

Field Monitoring Maps

HP and FMT Controllers

When releasing data to Field Monitoring Teams or providing data from radiological survey maps, take note of the following items and provide the corresponding information:

- What instrument(s) is(are) being used?
- Is it turned on
- What scale is it on

The information you release should be adjusted to be valid for the instrument(s) being used.
Air sample results should be rounded up or down. 100 cpm is the minimum detectable limit.

The following is provided for your information.

LUDLUM MODEL 14C

PRECAUTIONS AND LIMITATIONS

- THE MODEL 14C MAY NOT BE USED TO QUANTIFY BETA DOSE RATES. USE THE APPROPRIATE ION CHAMBER INSTRUMENT TO ESTABLISH BETA DOSE RATES.
- THE X1000 RANGE UTILIZES AN INTERNAL DETECTOR.
- THE BATTERIES SHOULD BE REMOVED FROM THE INSTRUMENT ANYTIME IT IS NOT GOING TO BE USED FOR A LONG PERIOD OF TIME.

OPERATING CHARACTERISTICS

- THE MODEL 14C IS A PORTABLE SURVEY INSTRUMENT USED FOR THE MEASUREMENT OF GAMMA EXPOSURE RATES AND THE DETECTION OF BETA RADIATION. THE 14C HAS RANGES OF 0-.2 MR/HR, 0-2 MR/HR, 0-20 MR/HR, 0-200 MR/HR, AND 0-2000 MR/HR.
- THIS INSTRUMENT IS TYPICALLY USED FOR GENERAL AREA LOW LEVEL RADIATION SURVEYS USING A HAND HELD SIDE WINDOW GM DETECTOR FOR THE 4 LOWEST RANGES AND AN INTERNAL GM DETECTOR FOR THE HIGHEST RANGE.
- THERE IS A BETA SHIELD ON THE SIDE-WINDOW GM DETECTOR TO BE USED FOR BETA DETECTION. THE INTERNAL DETECTOR MEASURES GAMMA EXPOSURE ONLY.

LUDLUM MODEL RO-2(X)

OPERATING CHARACTERISTICS

- THE RO-2(X) SERIES ARE PORTABLE ION CHAMBER INSTRUMENTS USED TO DETECT BETA AND GAMMA RADIATION.
- THE RO-2 HAS 4 DECADE RANGES WITH A MAXIMUM OF 5 R/HR.
- THE RO-2A HAS 4 DECADE RANGES WITH A MAXIMUM OF 50 R/HR.
- THE RO-20 HAS 5 DECADE RANGES WITH A MAXIMUM OF 50 R/HR.

Open window data should not be used for AmerenUE FMTs.

The release has just initiated and has not yet reached the EAB. It has just begun to exit the Unit Vent at 1014. All readings should be background at the EAB and beyond.

Plant FMTs should not be taking open window readings. Do not release open window readings to AmerenUE FMTs.

For State FMTs only.

The "grayed out" readings are to be used in the event that the State requests open window readings. During the plume phase of the release, the waist and ground level readings will be essentially the same with the ground level reading no more than 10% higher at the most.

FMT DATA

Real Time	1000	to	1014	
Distance	Dose Rate mr/hr		Iodine	Particulate
	Waist Level			
	open	closed	net cpm	net cpm
EAB	0	0	0	0
50%	0	0	0	0
10%	0	0	0	0
1 mi.	0	0	0	0
50%	0	0	0	0
10%	0	0	0	0
2 mi.	0			
50%	0	0	0	0
10%	0	0	0	0
3 mi.	0	0	0	0
50%	0	0	0	0
10%	0	0	0	0
4 mi.	0	0	0	0
50%	0	0	0	0
10%	0	0	0	0
5 mi.	0	0	0	0
50%	0	0	0	0
10%	0	0	0	0
6 mi.	0	0	0	0
50%	0	0	0	0
10%	0	0	0	0
7 mi	0	0	0	0
50%	0	0	0	0
10%	0	0	0	0
8 mi.	0	0	0	0
50%	0	0	0	0
10%	0	0	0	0
9 mi.	0	0	0	0
50%	0	0	0	0
10%	0	0	0	0
10 mi.	0	0	0	0
50%	0	0	0	0
10%	0	0	0	0

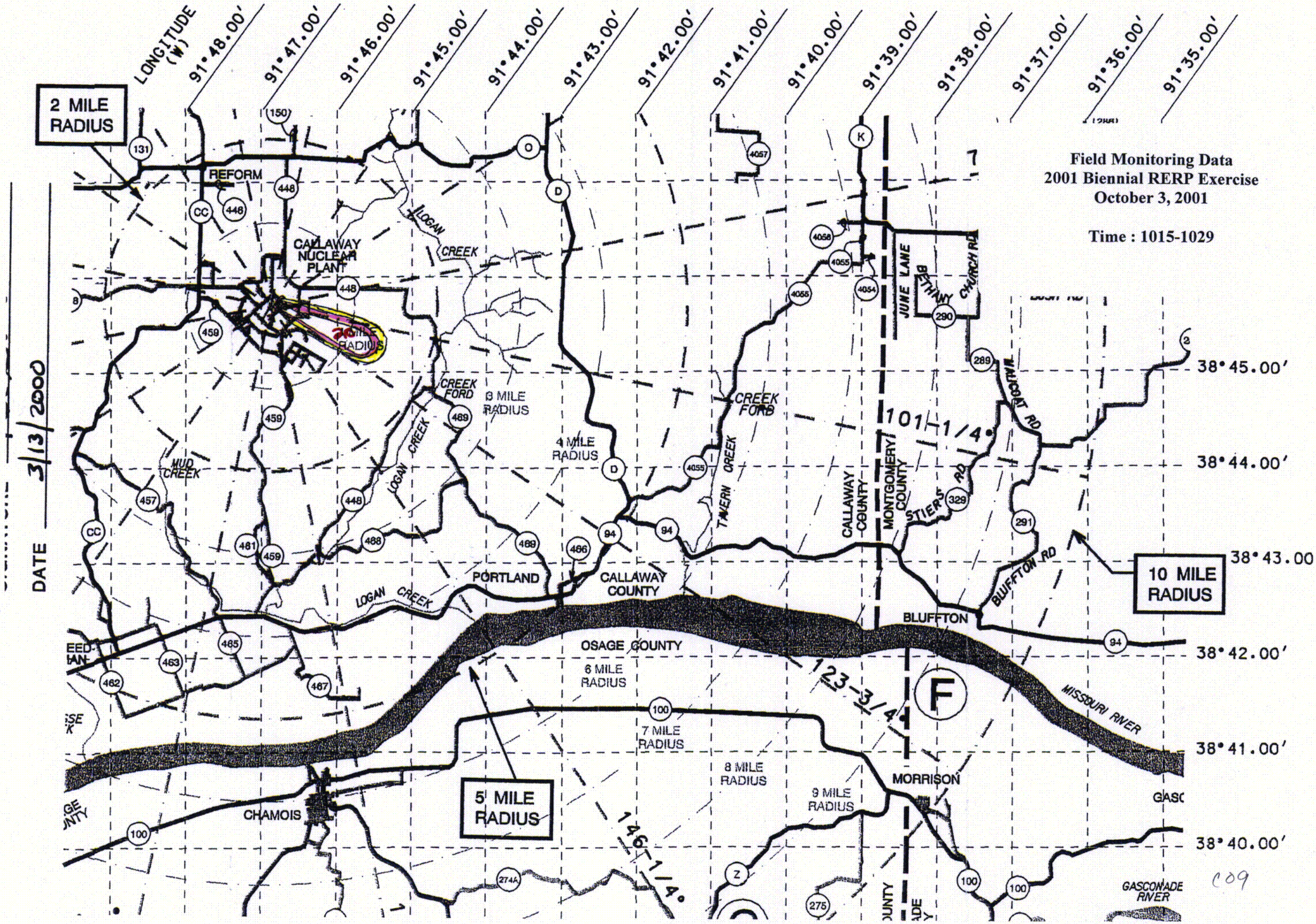
Air sample results are based upon a 10 ft3 sample (5 minutes at 2 cfm)
Dispersion is based on a D stability class

FMT DATA

Real Time 1015 to 1029

Distance	Dose rate mr/hr Waist Level open	closed	Iodine net cpm	Particulate net cpm
EAB	114	30	0	0
50%	57	15	0	0
10%	11	3	0	0
1 mi.	76	20	0	0
50%	38	10	0	0
10%	8	2	0	0
2 mi.				
50%				
10%				
3 mi.				
50%				
10%				
4 mi.				
50%				
10%				
5 mi.				
50%				
10%				
6 mi.				
50%				
10%				
7 mi				
50%				
10%				
8 mi.				
50%				
10%				
9 mi.				
50%				
10%				
10 mi.				
50%				
10%				
10%			#REF!	#REF!

Air sample results are based upon a 10 ft3 sample (5 minutes at 2 cfm)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October 3, 2001
Time : 1015-1029
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91°46.00'
91°45.00'
91°44.00'
91°43.00'
91°42.00'
91°41.00'
91°40.00'
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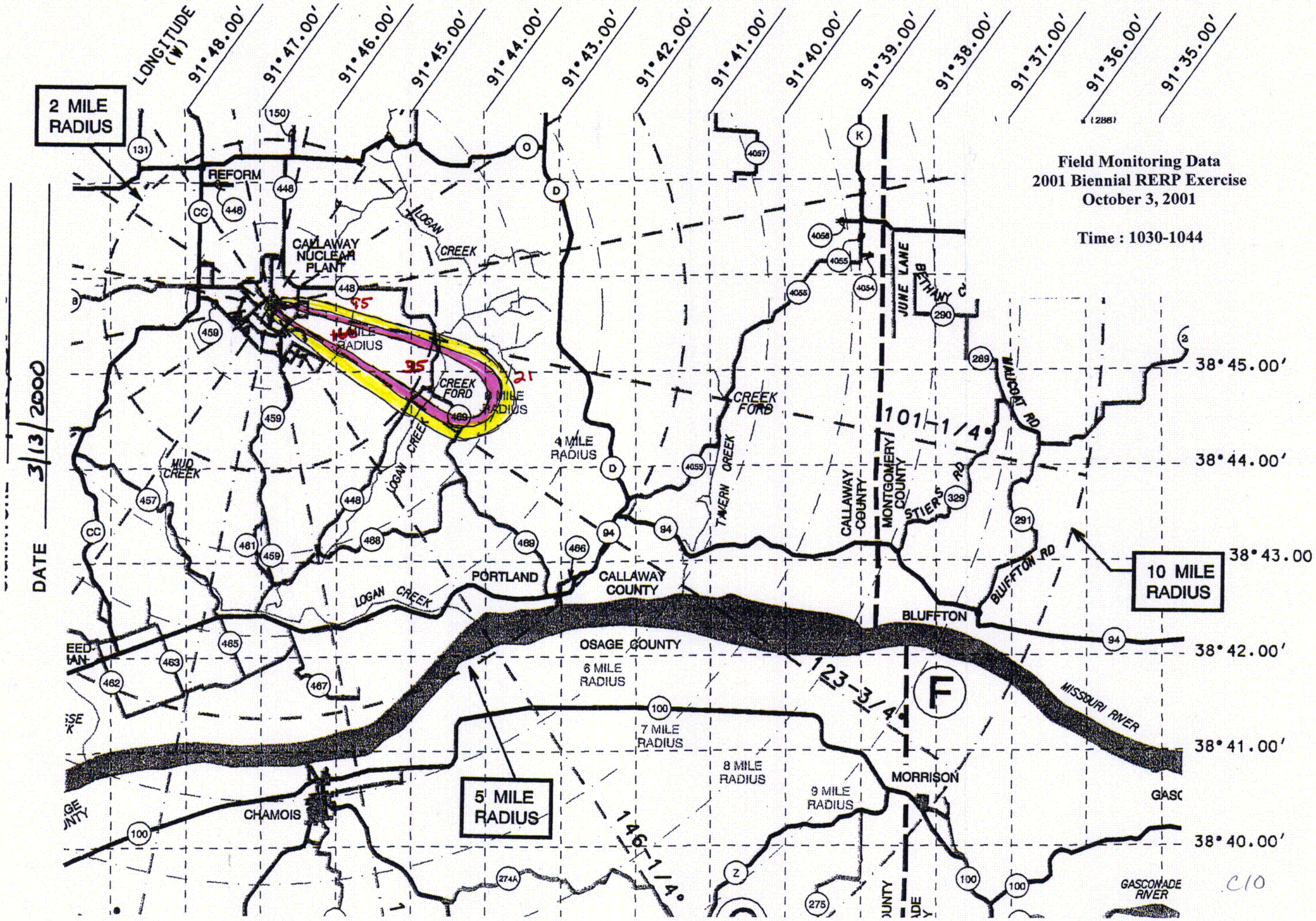
91°35.00'
38°45.00'
38°44.00'
38°43.00
38°42.00'
38°41.00'
38°40.00'
2 MILE RADIUS
10 MILE RADIUS
5 MILE RADIUS
REFORM
CALLAWAY NUCLEAR PLANT
LOGAN CREEK
CREEK FORD
3 MILE RADIUS
4 MILE RADIUS
6 MILE RADIUS
7 MILE RADIUS
8 MILE RADIUS
9 MILE RADIUS
MUD CREEK
TAVERN CREEK
PORTLAND
CALLAWAY COUNTY
OSAGE COUNTY
MONTGOMERY COUNTY
BLUFFTON
MORRISON
CHAMOIS
MISSOURI RIVER
GASCONADE RIVER
JUNE LANE
BETHANY CHURCH RD
MALCOLT RD
STIERS RD
BLUFFTON RD
101-1/4°
123-3/4°
146-1/4°
DATE 3/13/2000
1000
14
C09

FMT DATA

Real Time 1030 to 1044

Distance	Dose rate mr/hr Waist Level open	closed	Iodine net cpm	Particulate net cpm
EAB	612	161	2,300	460
50%	306	81	1,150	230
10%	61	16	230	46
1 mi.	359	95	1,350	270
50%	180	47	675	135
10%	36	9	135	27
2 mi.	133	35	500	100
50%	67	18	250	50
10%	13	4	50	10
3 mi.	80	21	300	60
50%	40	11	150	30
10%	8	2	30	6
4 mi.				
50%				
10%				
5 mi.				
50%				
10%				
6 mi.				
50%				
10%				
7 mi				
50%				
10%				
8 mi.				
50%				
10%				
9 mi.				
50%				
10%				
10 mi.				
50%				
10%				

Air sample results are based upon a 10 ft3 sample (5 minutes at 2 cfm)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October 3, 2001
Time : 1030-1044
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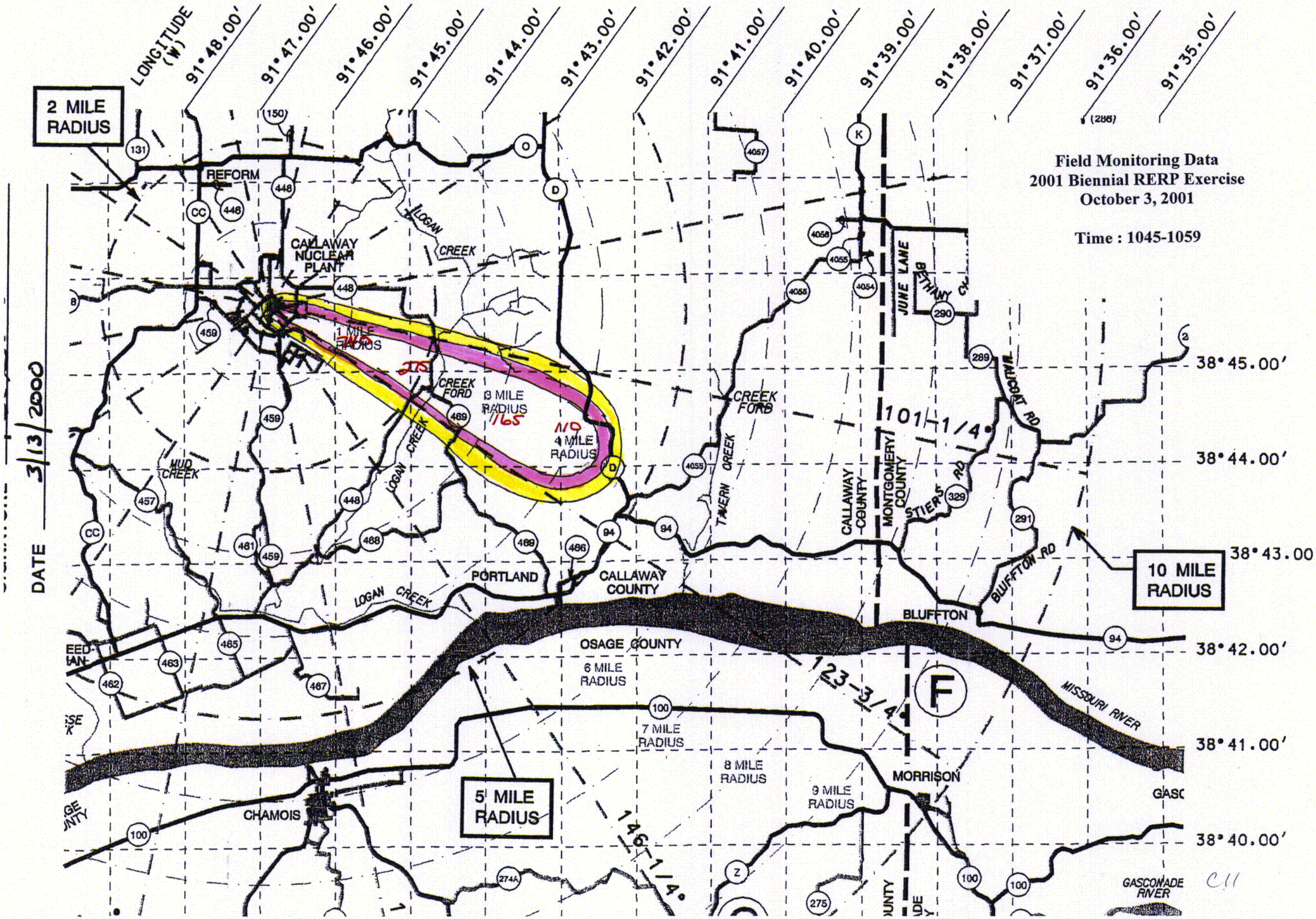
91°38.00'
91°37.00'
91°36.00'
91°35.00'
38°45.00'
38°44.00'
38°43.00
38°42.00'
38°41.00'
38°40.00'
2 MILE RADIUS
10 MILE RADIUS
5 MILE RADIUS
DATE 3/13/2000
REFORM
CALLAWAY NUCLEAR PLANT
LOGAN CREEK
CREEK FORD
4 MILE RADIUS
6 MILE RADIUS
7 MILE RADIUS
8 MILE RADIUS
9 MILE RADIUS
MUD CREEK
TAVERN CREEK
PORTLAND
CALLAWAY COUNTY
MONTGOMERY COUNTY
OSAGE COUNTY
BLUFFTON
MORRISON
CHAMOIS
MISSOURI RIVER
GASCONADE RIVER
JUNE LANE
BETHANY CH
WALCOAT RD
STIERS RD
BLUFFTON RD
101 1/4°
123 3/4°
146 1/4°
95
95
21
F
1015
1017
C10

FMT DATA

Real Time 1045 to 1059

Distance	Dose rate mr/hr Waist Level open	closed	Iodine net cpm	Particulate net cpm
EAB	4807	1265	27,600	3,220
50%	2404	633	13,800	1,610
10%	481	127	2,760	322
1 mi.	2822	743	16,200	1,890
50%	1411	371	8,100	945
10%	282	74	1,620	189
2 mi.	1045	275	6,000	700
50%	523	138	3,000	350
10%	105	28	600	70
3 mi.	627	165	3,600	420
50%	314	83	1,800	210
10%	63	17	360	42
4 mi.	418	110	2,400	280
50%	209	55	1,200	140
10%	42	11	240	28
5 mi.				
50%				
10%				
6 mi.				
50%				
10%				
7 mi				
50%				
10%				
8 mi.				
50%				
10%				
9 mi.				
50%				
10%				
10 mi.				
50%				
10%				

Air sample results are based upon a 10 ft3 sample (5 minutes at 2 cfm)


Field Monitoring Data
2001 Biennial RERP Exercise
October 3, 2001
Time : 1045-1059
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91°35.00'
38°45.00'
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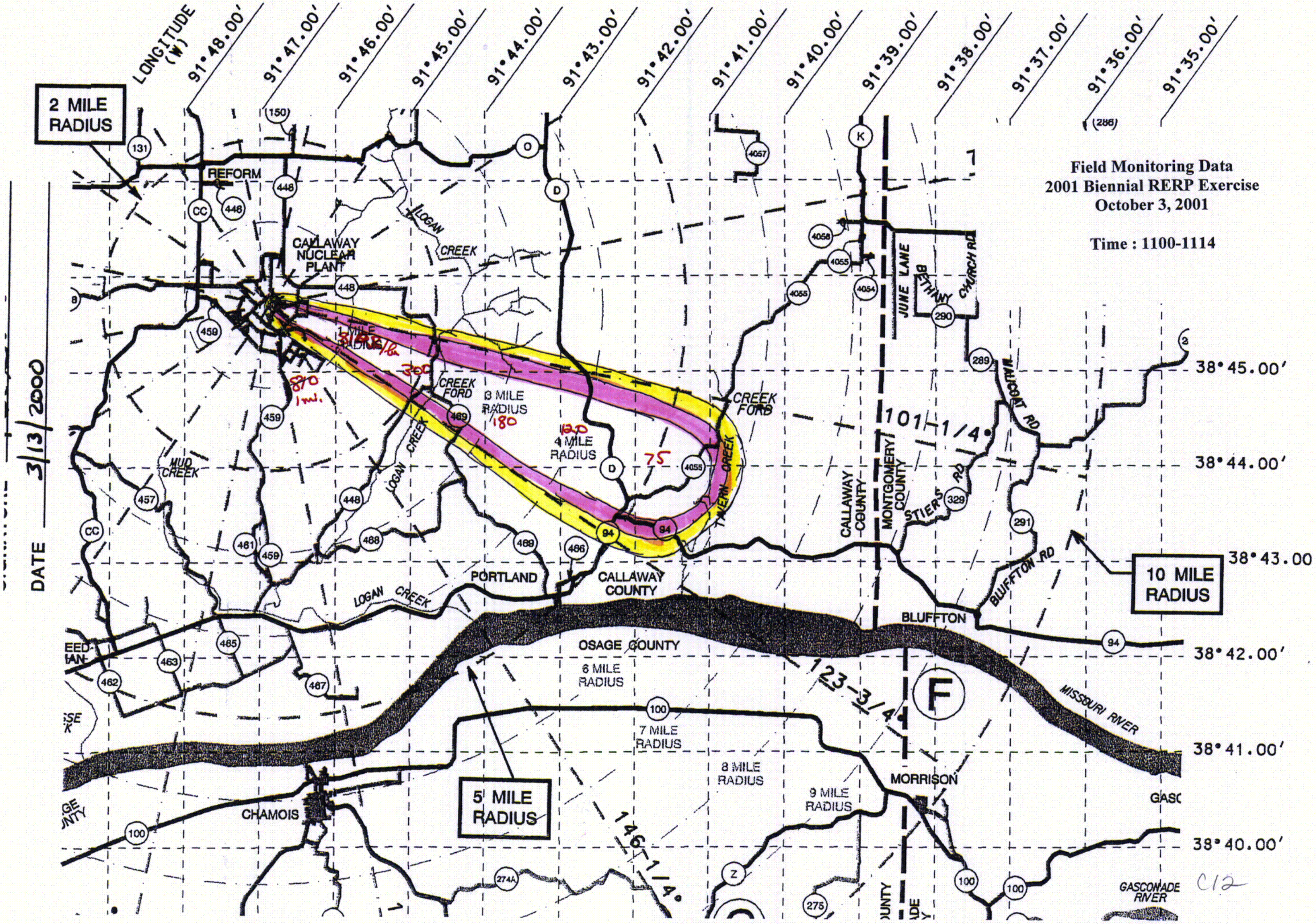
38°43.00
38°42.00'
38°41.00'
38°40.00'
2 MILE RADIUS
10 MILE RADIUS
5 MILE RADIUS
1 MILE RADIUS
3 MILE RADIUS
4 MILE RADIUS
6 MILE RADIUS
7 MILE RADIUS
8 MILE RADIUS
9 MILE RADIUS
REFORM
CALLAWAY NUCLEAR PLANT
LOGAN CREEK
CREEK FORD
MUD CREEK
TAVERN CREEK
CALLAWAY COUNTY
MONTGOMERY COUNTY
JUNE LANE
BETHANY CH
WALCOAT RD
STIERS RD
BLUFFTON RD
PORTLAND
BLUFFTON
OSAGE COUNTY
MISSOURI RIVER
MORRISON
CHAMOIS
GASCONADE RIVER
101 1/4°
123 3/4°
146 1/4°
DATE 3/13/2000

FMT DATA

Real Time 1100 to 1114

Distance		Dose rate mr/hr Waist Level open	closed	Iodine net cpm	Particulate net cpm
EAB		5244	1380	27,600	2,760
	50%	2622	690	13,800	1,380
	10%	524	138	2,760	276
1 mi.		3078	810	16,200	1,620
	50%	1539	405	8,100	810
	10%	308	81	1,620	162
2 mi.		1140	300	6,000	600
	50%	570	150	3,000	300
	10%	114	30	600	60
3 mi.		684	180	3,600	360
	50%	342	90	1,800	180
	10%	68	18	360	36
4 mi.		456	120	2,400	240
	50%	228	60	1,200	120
	10%	46	12	240	24
5 mi.		285	75	1,500	150
	50%	143	38	750	75
	10%	29	8	150	15
6 mi.					
	50%	13	4		
	10%	4	1		
7 mi					
	50%				
	10%				
8 mi.					
	50%				
	10%				
9 mi.					
	50%				
	10%				
10 mi.					
	50%				
	10%				

Air sample results are based upon a 10 ft3 sample (5 minutes at 2 cfm)


Field Monitoring Data
2001 Biennial RERP Exercise
October 3, 2001
Time : 1100-1114
2 MILE RADIUS
10 MILE RADIUS
5 MILE RADIUS
LONGITUDE (W)
91°48.00'
91°47.00'
91°46.00'
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91°43.00'
91°42.00'
91°41.00'
91°40.00'
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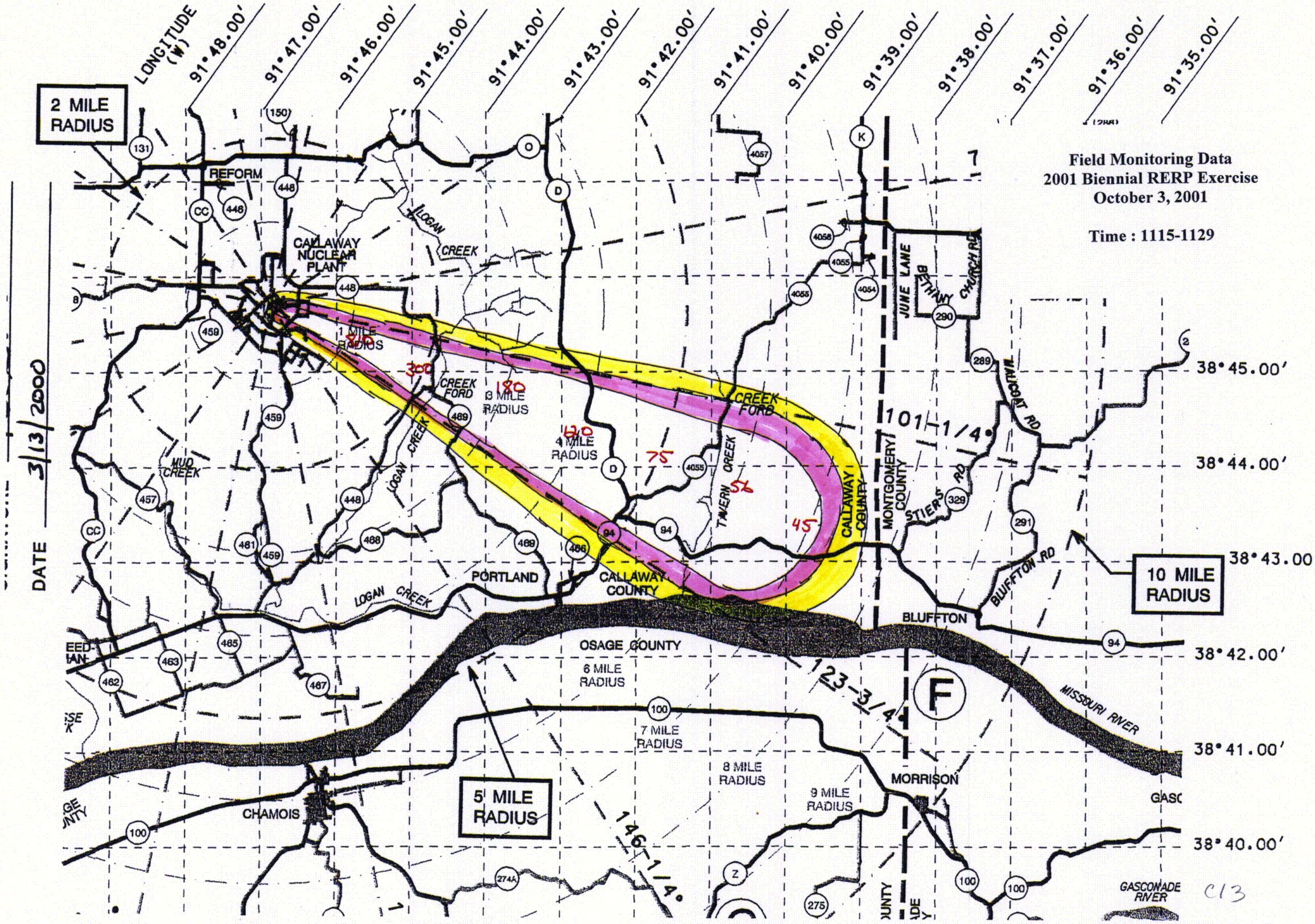
91°38.00'
91°37.00'
91°36.00'
91°35.00'
38°45.00'
38°44.00'
38°43.00
38°42.00'
38°41.00'
38°40.00'
REFORM
CALLAWAY NUCLEAR PLANT
LOGAN CREEK
CREEK FORD
3 MILE RADIUS
4 MILE RADIUS
6 MILE RADIUS
7 MILE RADIUS
8 MILE RADIUS
9 MILE RADIUS
MUD CREEK
PORTLAND
CALLAWAY COUNTY
OSAGE COUNTY
MONTGOMERY COUNTY
BLUFFTON
MORRISON
CHAMOIS
MISSOURI RIVER
GASCONADE RIVER
JUNE LANE
BETHANY CHURCH RD
WALCOAT RD
STIERS RD
BLUFFTON RD
TWENTY CREEK
101-1/4
123-3/4
146-1/4
DATE 3/13/2000
F
C12

FMT DATA

Real Time 1115 to 1129

Distance		Dose rate mr/hr Waist Level open	closed	Iodine net cpm	Particulate net cpm
EAB		5244	1380	28,750	2,760
	50%	2622	690	14,375	1,380
	10%	524	138	2,875	276
1 mi.		3078	810	16,875	1,620
	50%	1539	405	8,438	810
	10%	308	81	1,688	162
2 mi.		1140	300	6,250	600
	50%	570	150	3,125	300
	10%	114	30	625	60
3 mi.		684	180	3,750	360
	50%	342	90	1,875	180
	10%	68	18	375	36
4 mi.		456	120	2,500	240
	50%	228	60	1,250	120
	10%	46	12	250	24
5 mi.		285	75	1,563	150
	50%	143	38	781	75
	10%	29	8	156	15
6 mi.		214	56	1,172	113
	50%	107	28	586	56
	10%	21	6	117	11
7 mi		171	45		
	50%	22	6		
	10%	7	2		
8 mi.					
	50%				
	10%				
9 mi.					
	50%				
	10%				
10 mi.					
	50%				
	10%				

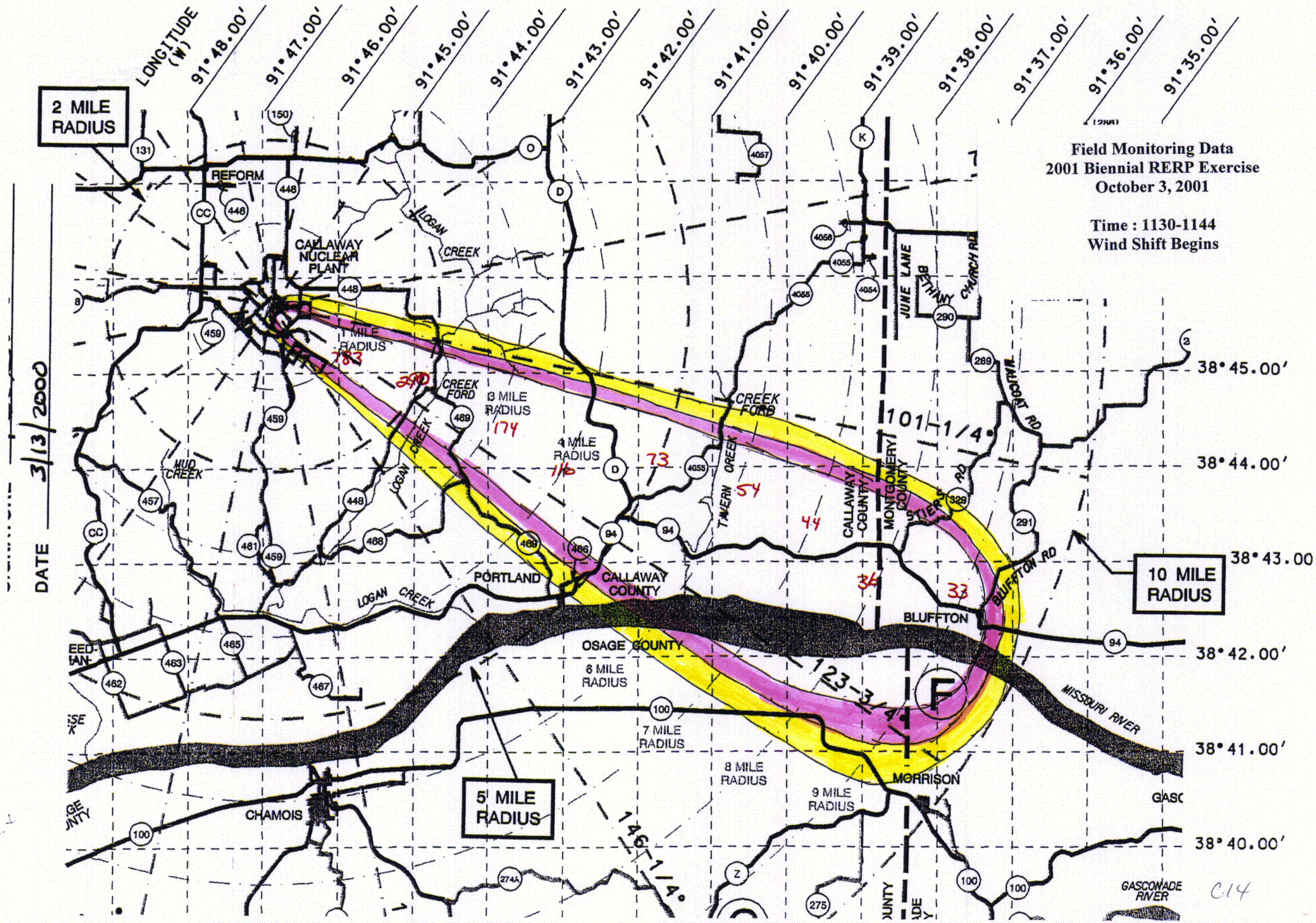
Air sample results are based upon a 10 ft3 sample (5 minutes at 2 cfm)


Field Monitoring Data
2001 Biennial RERP Exercise
October 3, 2001
Time : 1115-1129
LONGITUDE (W)
91°48.00'
91°47.00'
91°46.00'
91°45.00'
91°44.00'
91°43.00'
91°42.00'
91°41.00'
91°40.00'
91°39.00'
91°38.00'
91°37.00'
91°36.00'
91°35.00'
38°45.00'
38°44.00'
38°43.00
38°42.00'
38°41.00'
38°40.00'
2 MILE RADIUS
10 MILE RADIUS
5 MILE RADIUS
1 MILE RADIUS
3 MILE RADIUS
4 MILE RADIUS
6 MILE RADIUS
7 MILE RADIUS
8 MILE RADIUS
9 MILE RADIUS
CALLAWAY NUCLEAR PLANT
REFORM
PORTLAND
BLUFFTON
MORRISON
CHAMOIS
OSAGE COUNTY
CALLAWAY COUNTY
MONTGOMERY COUNTY
MISSOURI RIVER
GASCONADE RIVER
LOGAN CREEK
CREEK FORD
TAVERN CREEK
MUD CREEK
JUNE LANE
BETHANY CHURCH RD
WALCOTT RD
STIERS RD
BLUFFTON RD
101 1/4°
123 3/4°
146 1/4°
DATE 3/13/2000
1100
1119
C13

FMT DATA

Real Time	1130	to	1144	Wind Shift Begins
Distance	Dose Rate mr/hr		Iodine	Particulate
	Waist Level			
	open	closed	net cpm	net cpm
EAB	5069	1334	28,520	2,760
50%	2535	667	14,260	1,380
10%	507	133	2,852	276
1 mi.	2975	783	16,740	1,620
50%	1488	392	8,370	810
10%	298	78	1,674	162
2 mi.	1102	290	6,200	600
50%	551	145	3,100	300
10%	110	29	620	60
3 mi.	661	174	3,720	360
50%	331	87	1,860	180
10%	66	17	372	36
4 mi.	441	116	2,480	240
50%	220	58	1,240	120
10%	44	12	248	24
5 mi.	276	73	1,550	150
50%	138	36	775	75
10%	28	7	155	15
6 mi.	207	54	1,163	113
50%	103	27	581	56
10%	21	5	116	11
7 mi	165	44	930	90
50%	83	22	465	45
10%	17	4	93	9
8 mi.	138	36	775	75
50%	69	18	388	38
10%	14	4	78	8
9 mi.	124	33	698	68
50%	62	16	349	34
10%	12	3	70	7
10 mi.				
50%				
10%				

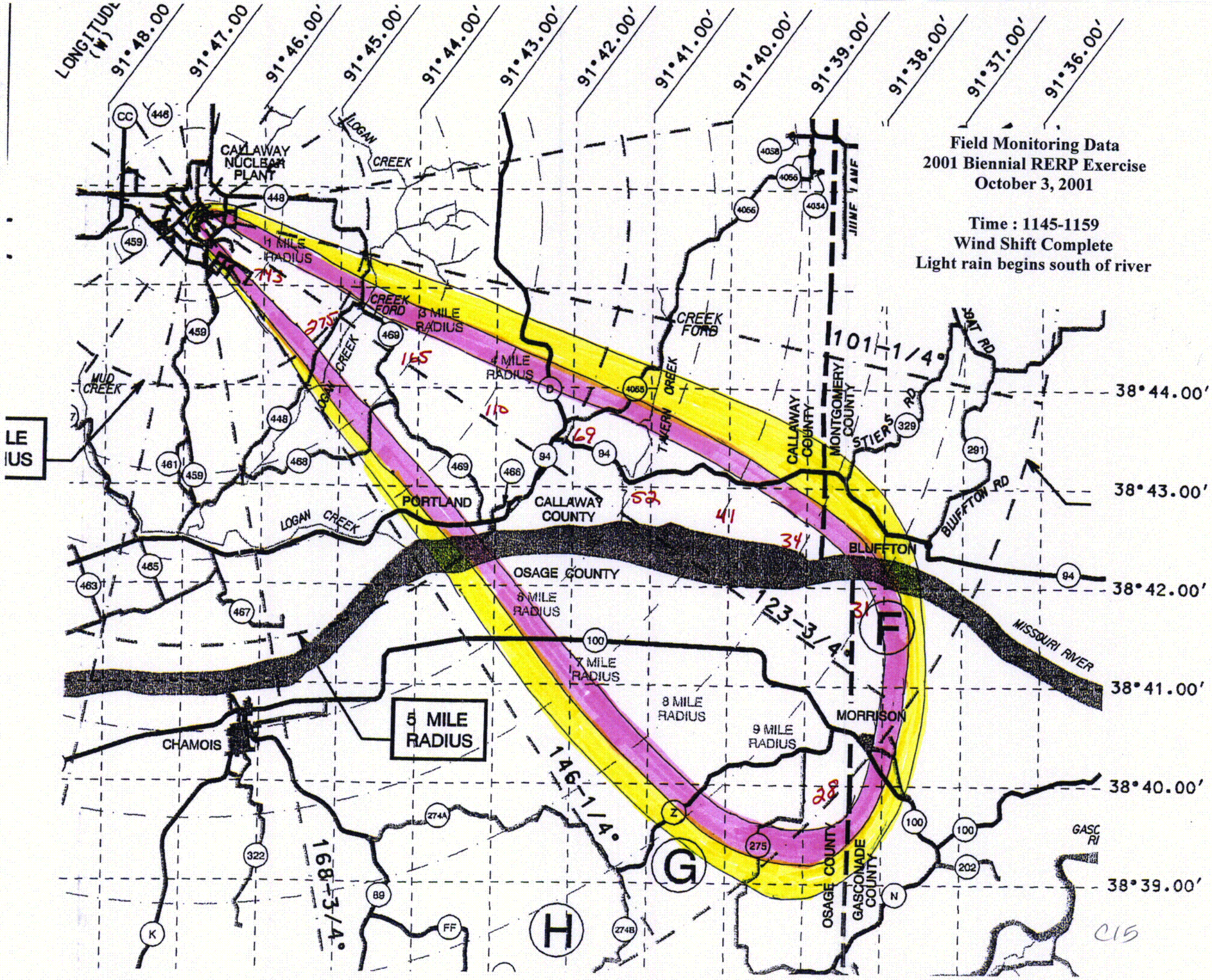
Air sample results are based upon a 10 ft3 sample (5 minutes at 2 cfm)
Dispersion is based on a D stability class


Field Monitoring Data
2001 Biennial RERP Exercise
October 3, 2001
Time : 1130-1144
Wind Shift Begins
2 MILE RADIUS
10 MILE RADIUS
5 MILE RADIUS
LONGITUDE (W)
91°48.00'
91°47.00'
91°46.00'
91°45.00'
91°44.00'
91°43.00'
91°42.00'
91°41.00'
91°40.00'
91°39.00'
91°38.00'
91°37.00'
91°36.00'
91°35.00'
38°45.00'
38°44.00'
38°43.00
38°42.00'
38°41.00'
38°40.00'
DATE 3/13/2000
REFORM
CALLAWAY NUCLEAR PLANT
LOGAN CREEK
1 MILE RADIUS
183
CREEK FORD
3 MILE RADIUS
174
4 MILE RADIUS
116
73
54
44
36
33
101-1/4°
123-3/4°
146-1/4°
MUD CREEK
TAVERN CREEK
CALLAWAY COUNTY
MONTGOMERY COUNTY
JUNE LANE
BETHANY CHURCH RD
TALBOTT RD
STIERS RD
BLUFFTON RD
PORTLAND
BLUFFTON
OSAGE COUNTY
6 MILE RADIUS
7 MILE RADIUS
8 MILE RADIUS
9 MILE RADIUS
MISSOURI RIVER
MORRISON
CHAMOIS
GASCONADE RIVER
C14

FMT DATA

Real Time	1145	to	1159	Wind Shift Complete
Distance	Dose Rate mr/hr		Iodine	Particulate
	Waist Level			
	open	closed	net cpm	net cpm
EAB	4807	1265	26,680	2,530
50%	2404	633	13,340	1,265
10%	481	127	2,668	253
1 mi.	2822	743	15,660	1,485
50%	1411	371	7,830	743
10%	282	74	1,566	149
2 mi.	1045	275	5,800	550
50%	523	138	2,900	275
10%	105	28	580	55
3 mi.	627	165	3,480	330
50%	314	83	1,740	165
10%	63	17	348	33
4 mi.	418	110	2,320	220
50%	209	55	1,160	110
10%	42	11	232	22
5 mi.	261	69	1,450	138
50%	131	34	725	69
10%	26	7	145	14
6 mi.	196	52	1,088	103
50%	98	26	544	52
10%	20	5	109	10
7 mi	157	41	870	83
50%	78	21	435	41
10%	16	4	87	8
8 mi.	131	34	725	69
50%	65	17	363	34
10%	13	3	73	7
9 mi.	118	31	653	62
50%	59	15	326	31
10%	12	3	65	6
10 mi.	105	28	580	55
50%	52	14	290	28
10%	10	3	58	6

Air sample results are based upon a 10 ft3 sample (5 minutes at 2 cfm)
Dispersion is based on a D stability class

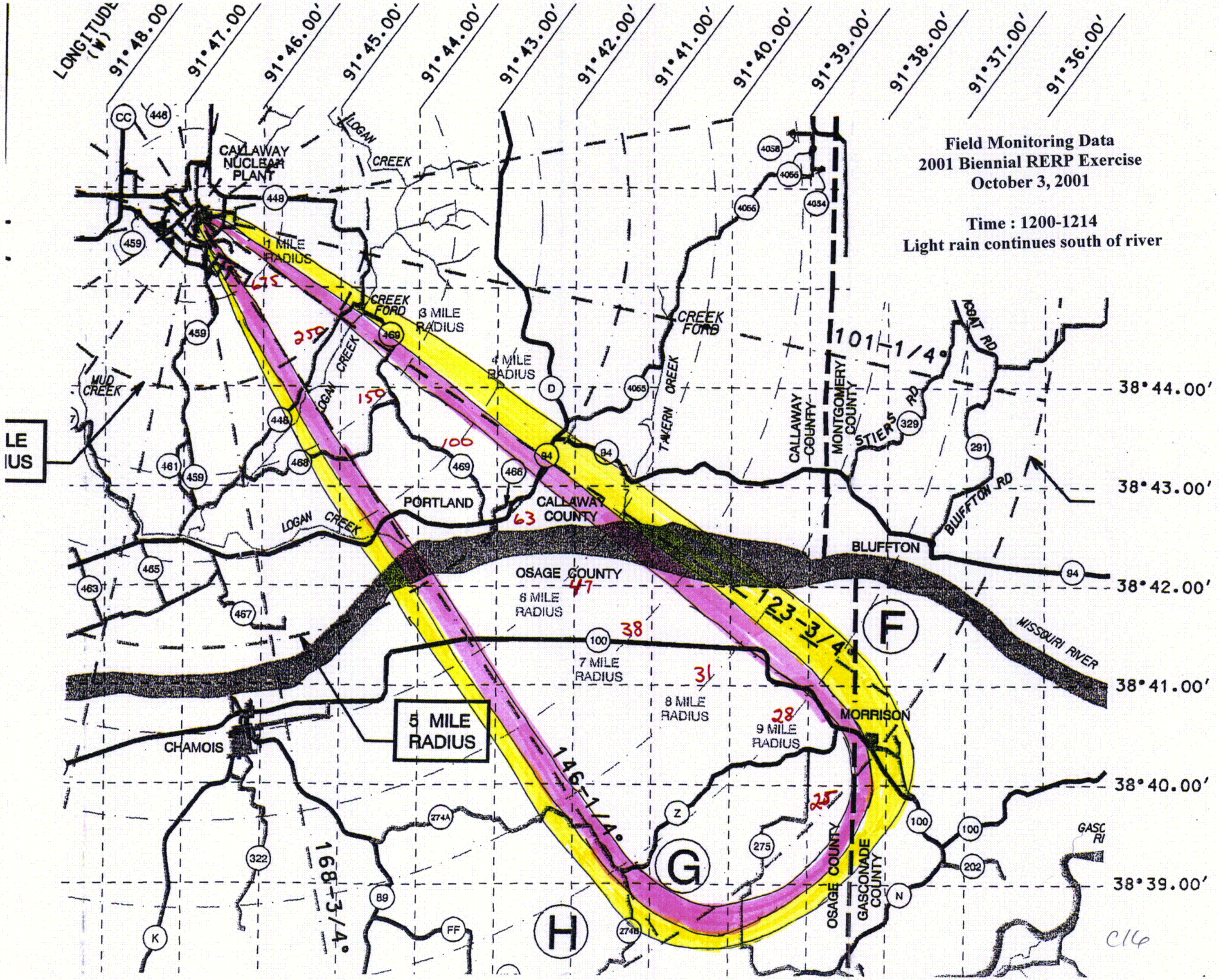

Field Monitoring Data
2001 Biennial RERP Exercise
October 3, 2001
Time : 1145-1159
Wind Shift Complete
Light rain begins south of river
LONGITUDE (W)
91°48.00
91°47.00
91°46.00'
91°45.00'
91°44.00'
91°43.00'
91°42.00'
91°41.00'
91°40.00'
91°39.00'
91°38.00'
91°37.00'
91°36.00'
38°44.00'
38°43.00'
38°42.00'
38°41.00'
38°40.00'
38°39.00'
CALLAWAY NUCLEAR PLANT
LOGAN CREEK
1 MILE RADIUS
2 MILE RADIUS
3 MILE RADIUS
4 MILE RADIUS
5 MILE RADIUS
6 MILE RADIUS
7 MILE RADIUS
8 MILE RADIUS
9 MILE RADIUS
CREEK FORD
TAVERN CREEK
MUD CREEK
PORTLAND
CALLAWAY COUNTY
OSAGE COUNTY
MONTGOMERY COUNTY
BLUFFTON
MORRISON
CHAMOIS
MISSOURI RIVER
GASCONADE COUNTY
101 1/4°
123 3/4°
146 1/4°
168 3/4°
F
G
H
743
275
165
110
69
57
41
34
31
28
C15

11:30
11:44

FMT DATA

Real Time	1200	to	1214	
Distance	Dose Rate mr/hr		Iodine	Particulate
	Waist Level			
	open	closed	net cpm	net cpm
EAB	4370	1150	26,450	2,300
50%	2185	575	13,225	1,150
10%	437	115	2,645	230
1 mi.	2565	675	15,525	1,350
50%	1283	338	7,763	675
10%	257	68	1,553	135
2 mi.	950	250	5,750	500
50%	475	125	2,875	250
10%	95	25	575	50
3 mi.	570	150	3,450	300
50%	285	75	1,725	150
10%	57	15	345	30
4 mi.	380	100	2,300	200
50%	190	50	1,150	100
10%	38	10	230	20
5 mi.	238	63	1,438	125
50%	119	31	719	63
10%	24	6	144	13
6 mi.	178	47	1,078	94
50%	89	23	539	47
10%	18	5	108	9
7 mi	143	38	863	75
50%	71	19	431	38
10%	14	4	86	8
8 mi.	119	31	719	63
50%	59	16	359	31
10%	12	3	72	6
9 mi.	107	28	647	56
50%	53	14	323	28
10%	11	3	65	6
10 mi.	95	25	575	50
50%	48	13	288	25
10%	10	3	58	5

Air sample results are based upon a 10 ft3 sample (5 minutes at 2 cfm)
Dispersion is based on a D stability class



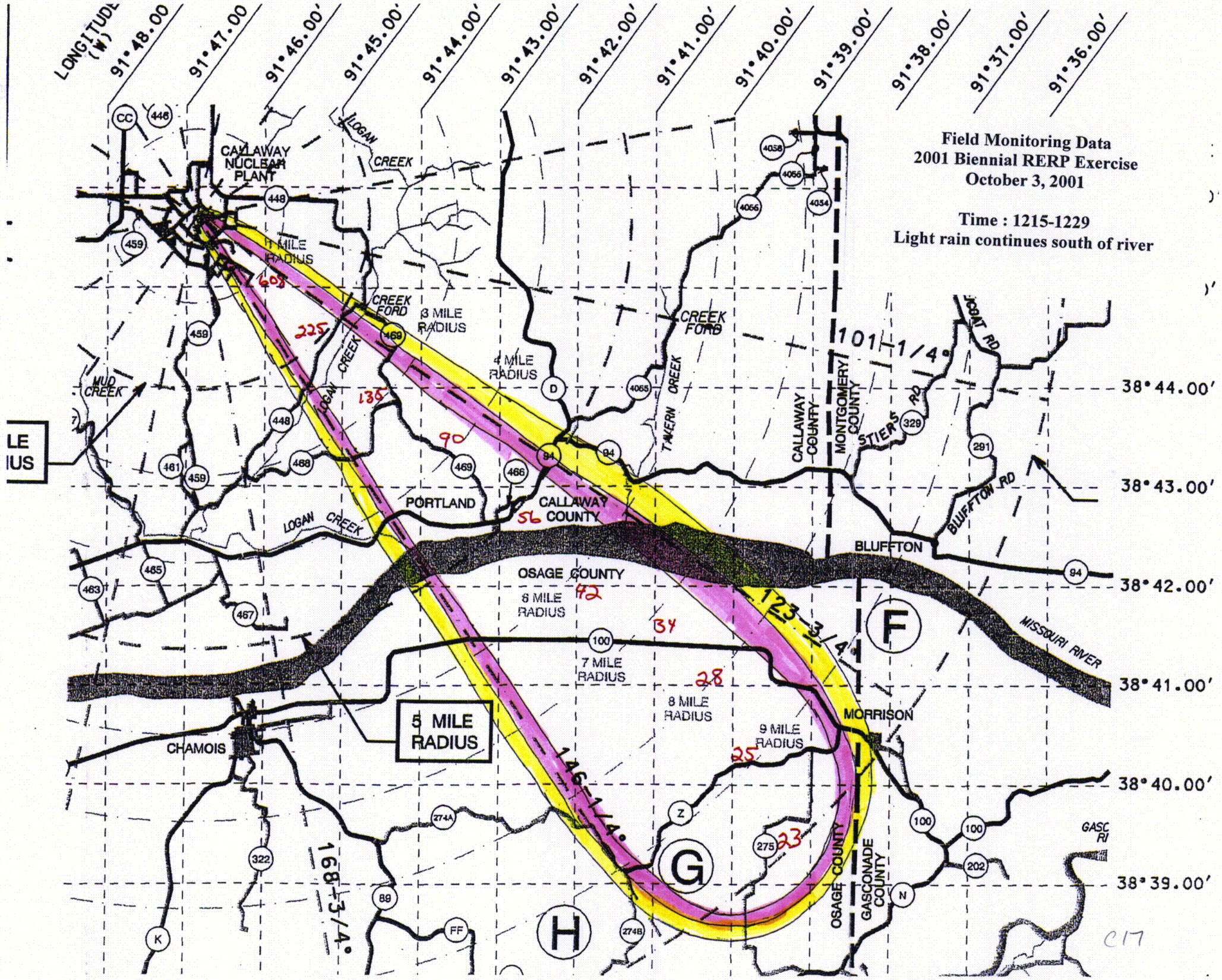
1145
1149

C16

FMT DATA

Real Time	1215	to	1229	
Distance	Dose Rate mr/hr		Iodine	Particulate
	Waist Level			
	open	closed	net cpm	net cpm
EAB	3933	1035	25,300	1,840
50%	1967	518	12,650	920
10%	393	104	2,530	184
1 mi.	2309	608	14,850	1,080
50%	1154	304	7,425	540
10%	231	61	1,485	108
2 mi.	855	225	5,500	400
50%	428	113	2,750	200
10%	86	23	550	40
3 mi.	513	135	3,300	240
50%	257	68	1,650	120
10%	51	14	330	24
4 mi.	342	90	2,200	160
50%	171	45	1,100	80
10%	34	9	220	16
5 mi.	214	56	1,375	100
50%	107	28	688	50
10%	21	6	138	10
6 mi.	160	42	1,031	75
50%	80	21	516	38
10%	16	4	103	8
7 mi	128	34	825	60
50%	64	17	413	30
10%	13	3	83	6
8 mi.	107	28	688	50
50%	53	14	344	25
10%	11	3	69	5
9 mi.	96	25	619	45
50%	48	13	309	23
10%	10	3	62	5
10 mi.	86	23	550	40
50%	43	11	275	20
10%	9	2	55	4

Air sample results are based upon a 10 ft3 sample (5 minutes at 2 cfm)
Dispersion is based on a D stability class



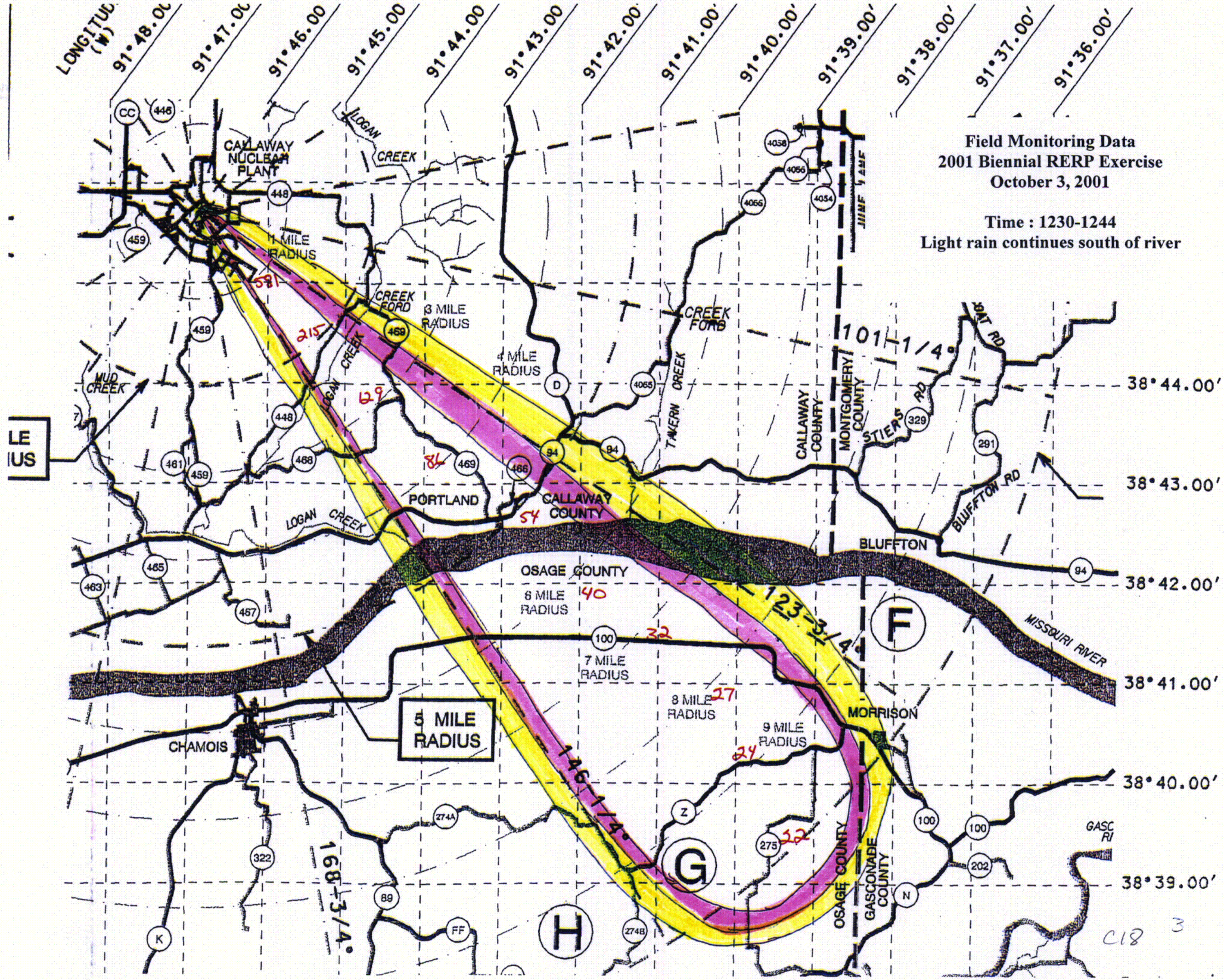
1200
1214

C17

FMT DATA

Real Time	1230	to	1244	
Distance	Dose Rate mr/hr		Iodine	Particulate
	Waist Level			
	open	closed	net cpm	net cpm
EAB	3758	989	23,000	1,610
50%	1879	495	11,500	805
10%	376	99	2,300	161
1 mi.	2206	581	13,500	945
50%	1103	290	6,750	473
10%	221	58	1,350	95
2 mi.	817	215	5,000	350
50%	409	108	2,500	175
10%	82	22	500	35
3 mi.	490	129	3,000	210
50%	245	65	1,500	105
10%	49	13	300	21
4 mi.	327	86	2,000	140
50%	163	43	1,000	70
10%	33	9	200	14
5 mi.	204	54	1,250	88
50%	102	27	625	44
10%	20	5	125	9
6 mi.	153	40	938	66
50%	77	20	469	33
10%	15	4	94	7
7 mi	123	32	750	53
50%	61	16	375	26
10%	12	3	75	5
8 mi.	102	27	625	44
50%	51	13	313	22
10%	10	3	63	4
9 mi.	92	24	563	39
50%	46	12	281	20
10%	9	2	56	4
10 mi.	82	22	500	35
50%	41	11	250	18
10%	8	2	50	4

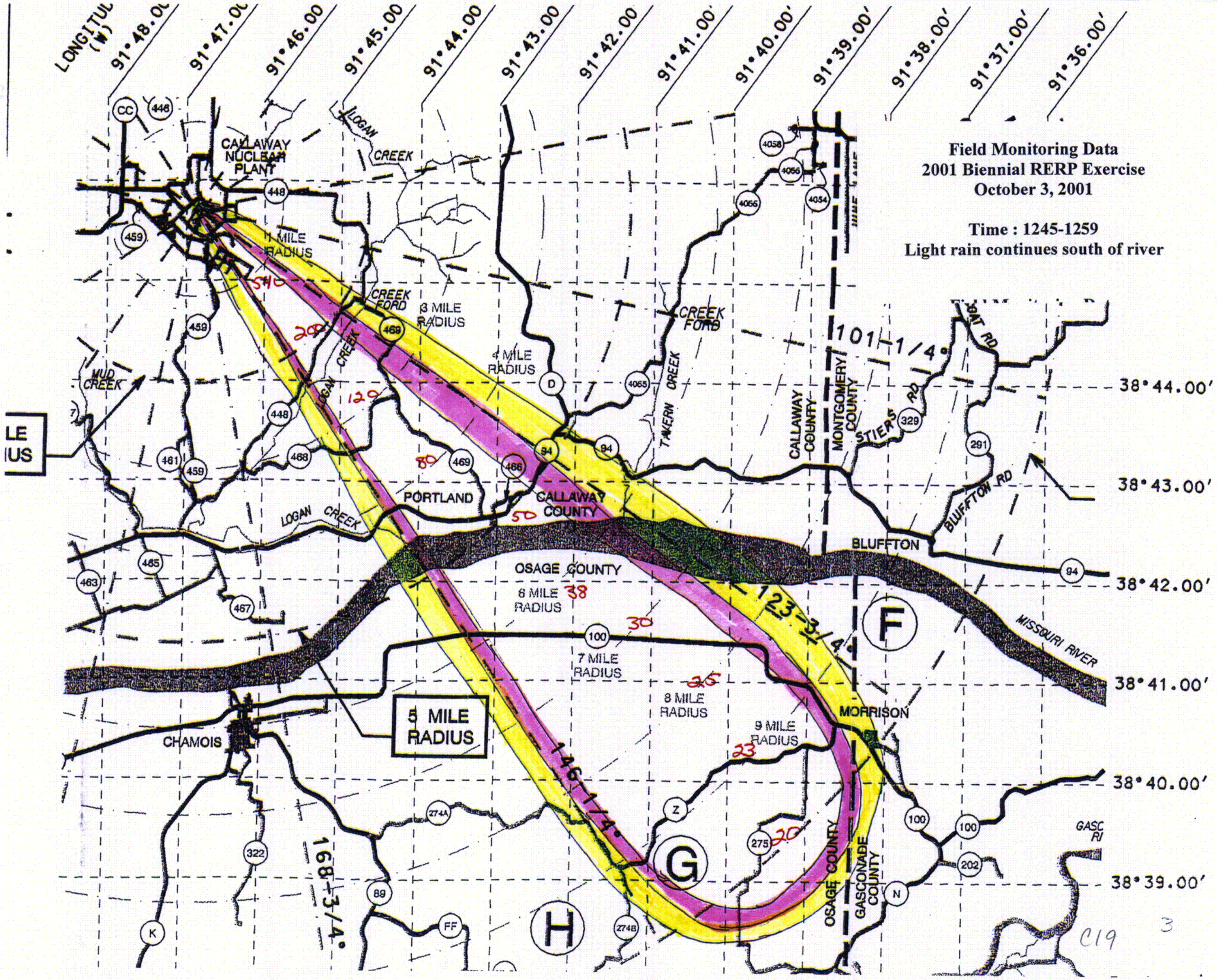
Air sample results are based upon a 10 ft3 sample (5 minutes at 2 cfm)
Dispersion is based on a D stability class


Field Monitoring Data
2001 Biennial RERP Exercise
October 3, 2001
Time : 1230-1244
Light rain continues south of river
LONGITUDE (W)
91°48.00'
91°47.00'
91°46.00'
91°45.00'
91°44.00'
91°43.00'
91°42.00'
91°41.00'
91°40.00'
91°39.00'
91°38.00'
91°37.00'
91°36.00'
38°44.00'
38°43.00'
38°42.00'
38°41.00'
38°40.00'
38°39.00'
CALLAWAY NUCLEAR PLANT
LOGAN CREEK
1 MILE RADIUS
CREEK FORD
3 MILE RADIUS
4 MILE RADIUS
MUD CREEK
PORTLAND
CALLAWAY COUNTY
OSAGE COUNTY
6 MILE RADIUS
7 MILE RADIUS
8 MILE RADIUS
9 MILE RADIUS
5 MILE RADIUS
CHAMOIS
TAVERN CREEK
CALLAWAY COUNTY
MONTGOMERY COUNTY
BLUFFTON
MISSOURI RIVER
MORRISON
OSAGE COUNTY
GASCONADE COUNTY
101 1/4°
123 3/4°
146 1/4°
168 3/4°
58
215
129
86
54
40
32
27
24
22
F
G
H

FMT DATA

Real Time	1245	to	1259	
Distance	Dose Rate mr/hr		Iodine	Particulate
	Waist Level			
	open	closed	net cpm	net cpm
EAB	3496	920	20,700	1,380
50%	1748	460	10,350	690
10%	350	92	2,070	138
1 mi.	2052	540	12,150	810
50%	1026	270	6,075	405
10%	205	54	1,215	81
2 mi.	760	200	4,500	300
50%	380	100	2,250	150
10%	76	20	450	30
3 mi.	456	120	2,700	180
50%	228	60	1,350	90
10%	46	12	270	18
4 mi.	304	80	1,800	120
50%	152	40	900	60
10%	30	8	180	12
5 mi.	190	50	1,125	75
50%	95	25	563	38
10%	19	5	113	8
6 mi.	143	38	844	56
50%	71	19	422	28
10%	14	4	84	6
7 mi	114	30	675	45
50%	57	15	338	23
10%	11	3	68	5
8 mi.	95	25	563	38
50%	48	13	281	19
10%	10	3	56	4
9 mi.	86	23	506	34
50%	43	11	253	17
10%	9	2	51	3
10 mi.	76	20	450	30
50%	38	10	225	15
10%	8	2	45	3

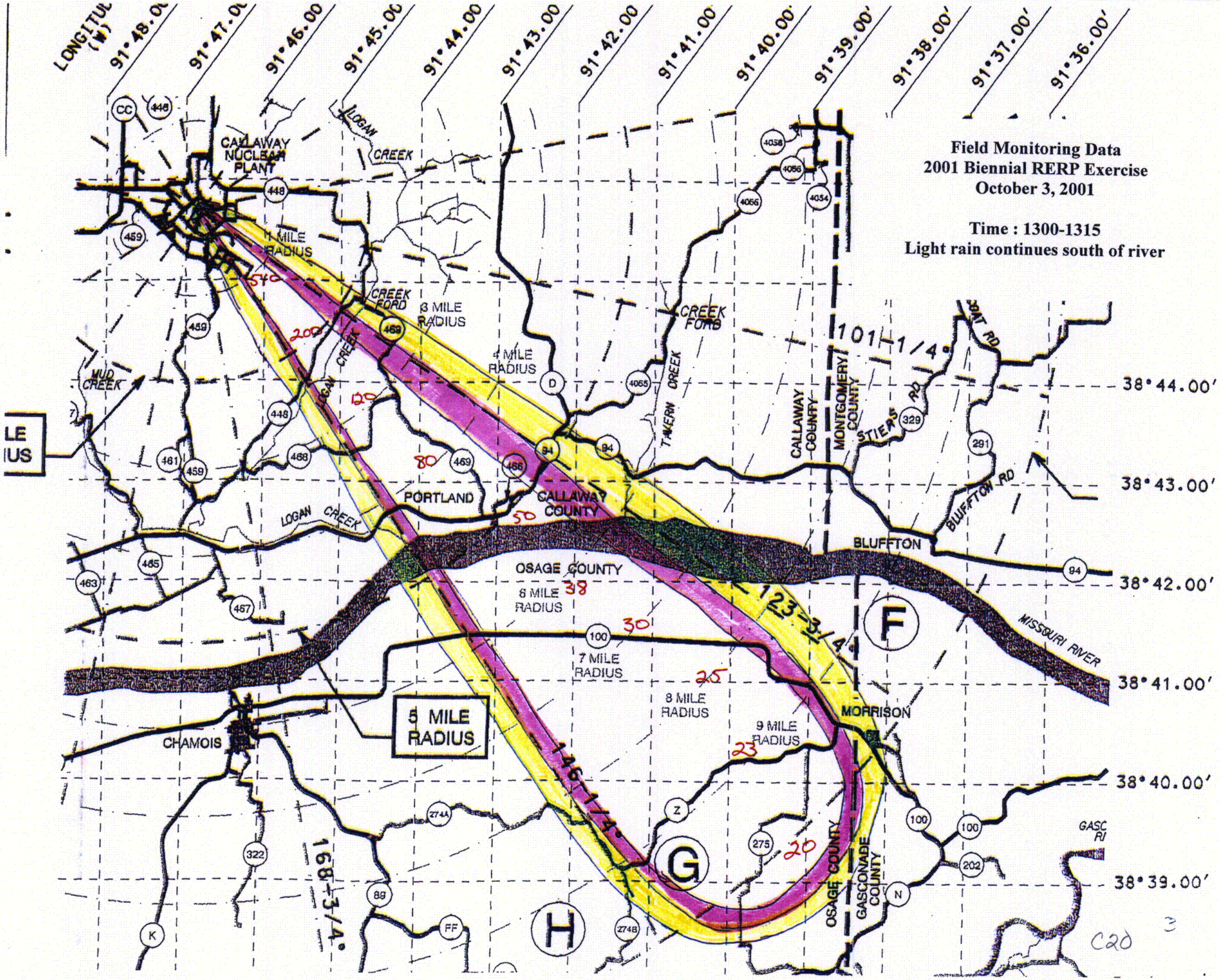
Air sample results are based upon a 10 ft3 sample (5 minutes at 2 cfm)
Dispersion is based on a D stability class


Field Monitoring Data
2001 Biennial RERP Exercise
October 3, 2001
Time : 1245-1259
Light rain continues south of river
LONGITUDE (W)
91°48.00
91°47.00
91°46.00
91°45.00
91°44.00
91°43.00
91°42.00
91°41.00
91°40.00
91°39.00
91°38.00
91°37.00
91°36.00
38°44.00'
38°43.00'
38°42.00'
38°41.00'
38°40.00'
38°39.00'
CALLAWAY NUCLEAR PLANT
LOGAN CREEK
CREEK FORD
MUD CREEK
1 MILE RADIUS
3 MILE RADIUS
4 MILE RADIUS
5 MILE RADIUS
6 MILE RADIUS
7 MILE RADIUS
8 MILE RADIUS
9 MILE RADIUS
PORTLAND
CALLAWAY COUNTY
OSAGE COUNTY
MONTGOMERY COUNTY
GASCONADE COUNTY
BLUFFTON
MORRISON
CHAMOIS
MISSOURI RIVER
TAVERN CREEK
STIERS RD
BLUFFTON RD
101 1/4°
123 3/4°
146 1/4°
168 3/4°
F
G
H
510
200
120
80
50
38
30
25
23
20

FMT DATA

Real Time	1300	to	1314	
Distance	Dose Rate mr/hr		Iodine	Particulate
	Waist Level			
	open	closed	net cpm	net cpm
EAB	3496	920	18,400	1,150
50%	1748	460	9,200	575
10%	350	92	1,840	115
1 mi.	2052	540	10,800	675
50%	1026	270	5,400	338
10%	205	54	1,080	68
2 mi.	760	200	4,000	250
50%	380	100	2,000	125
10%	76	20	400	25
3 mi.	456	120	2,400	150
50%	228	60	1,200	75
10%	46	12	240	15
4 mi.	304	80	1,600	100
50%	152	40	800	50
10%	30	8	160	10
5 mi.	190	50	1,000	63
50%	95	25	500	31
10%	19	5	100	6
6 mi.	143	38	750	47
50%	71	19	375	23
10%	14	4	75	5
7 mi	114	30	600	38
50%	57	15	300	19
10%	11	3	60	4
8 mi.	95	25	500	31
50%	48	13	250	16
10%	10	3	50	3
9 mi.	86	23	450	28
50%	43	11	225	14
10%	9	2	45	3
10 mi.	76	20	400	25
50%	38	10	200	13
10%	8	2	40	3

Air sample results are based upon a 10 ft3 sample (5 minutes at 2 cfm)
Dispersion is based on a D stability class

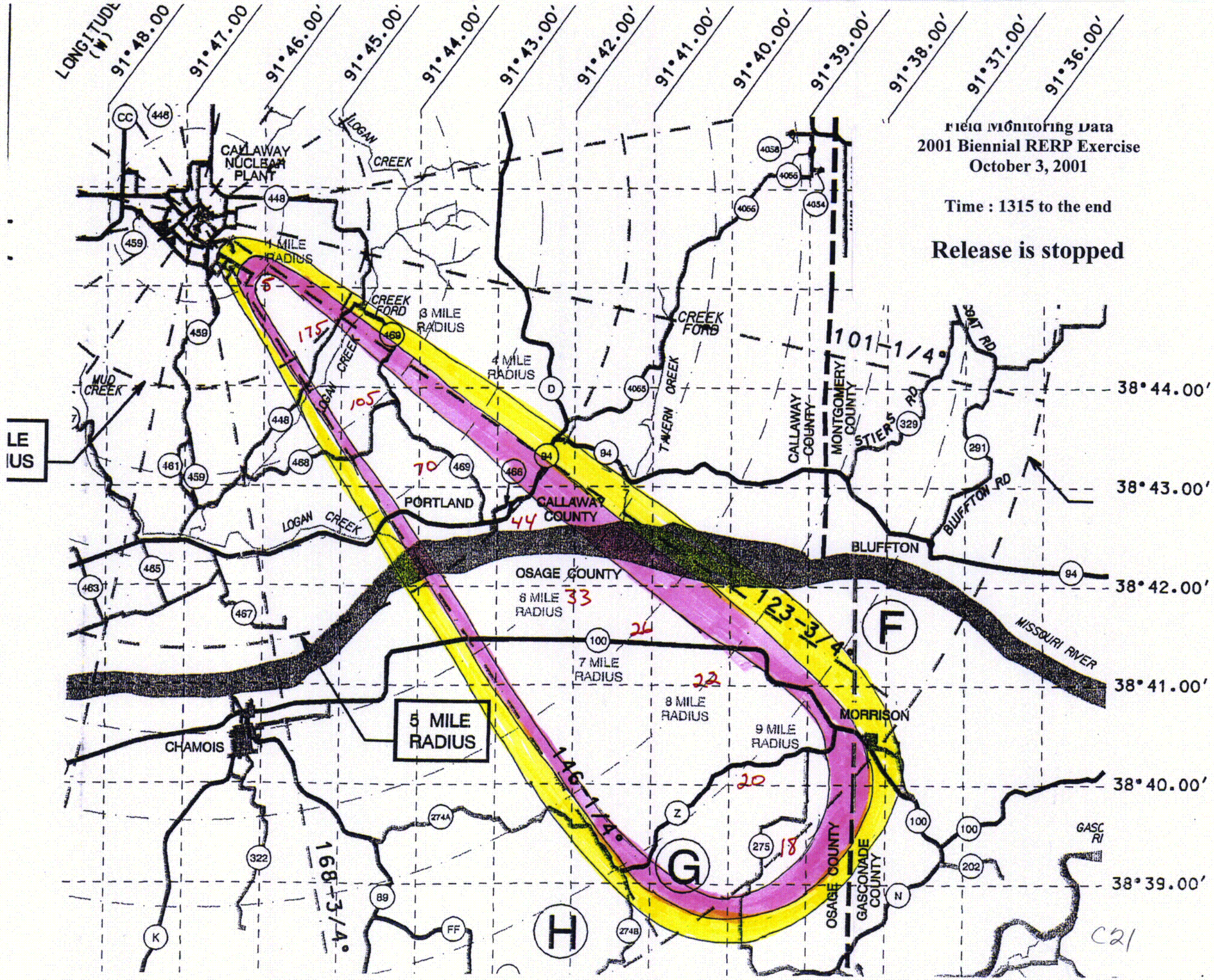

Field Monitoring Data
2001 Biennial RERP Exercise
October 3, 2001
Time : 1300-1315
Light rain continues south of river
LONGITUDE (W)
91°48.00'
91°47.00'
91°46.00'
91°45.00'
91°44.00'
91°43.00'
91°42.00'
91°41.00'
91°40.00'
91°39.00'
91°38.00'
91°37.00'
91°36.00'
38°44.00'
38°43.00'
38°42.00'
38°41.00'
38°40.00'
38°39.00'
CALLAWAY NUCLEAR PLANT
LOGAN CREEK
1 MILE RADIUS
CREEK FORD
3 MILE RADIUS
4 MILE RADIUS
MUD CREEK
TAVERN CREEK
CALLAWAY COUNTY
MONTGOMERY COUNTY
PORTLAND
BLUFFTON
BLUFFTON RD
STIERS RD
OSAGE COUNTY
6 MILE RADIUS
7 MILE RADIUS
8 MILE RADIUS
9 MILE RADIUS
MISSOURI RIVER
MORRISON
CHAMOIS
5 MILE RADIUS
GASCONADE COUNTY
101 1/4°
123 3/4°
146 1/4°
168 3/4°
540
200
120
80
50
38
30
25
23
20
F
G
H

FMT DATA

Real Time 0 Release is stopped. from 1315 on or whenever release is stopped

Distance		Dose Rate mr/hr Waist Level open	closed	Iodine net cpm	Particulate net cpm
EAB		11	3	200	100
	50%	6	2	100	50
	10%	1	0	20	10
1 mi.		19	5	200	100
	50%	10	3	100	50
	10%	2	1	20	10
2 mi.		665	175	3,000	250
	50%	333	88	1,500	125
	10%	67	18	300	25
3 mi.		399	105	1,800	150
	50%	200	53	900	75
	10%	40	11	180	15
4 mi.		266	70	1,200	100
	50%	133	35	600	50
	10%	27	7	120	10
5 mi.		166	44	750	63
	50%	83	22	375	31
	10%	17	4	75	6
6 mi.		125	33	563	47
	50%	62	16	281	23
	10%	12	3	56	5
7 mi		100	26	450	38
	50%	50	13	225	19
	10%	10	3	45	4
8 mi.		83	22	375	31
	50%	42	11	188	16
	10%	8	2	38	3
9 mi.		75	20	338	28
	50%	37	10	169	14
	10%	7	2	34	3
10 mi.		67	18	300	25
	50%	33	9	150	13
	10%	7	2	30	3

Air sample results are based upon a 10 ft3 sample (5 minutes at 2 cfm)
Dispersion is based on a D stability class



Release is stopped