April 1, 2015

Memo To: File

From: Michael Wentzel

Subject: Figures from Indian Point Quarter 3 2014 Groundwater Monitoring Report

The following figures are from the 3rd quarter 2014 groundwater monitoring report for Indian Point (available at http://www.safesecurevital.com/uploads/15-3-20.pdf) and were made available to NRC staff by request as documented in an email from Dara Gray, Entergy, to Michael Wentzel, NRC, dated March 31, 2015. The files listed below, which were identified in the March 31, 2015 email, are not included because the NRC staff was unable to open the files:

FINAL Figure 4 - Q3 2014 Current and Potential Future SSC Source Locations.pdf
FINAL Figure 5A - Q3 2014 Longterm Transducer Monitoring Evaluation Map.pdf
FINAL Figure 5A - Q3 2014 Longterm Transducer Monitoring Evaluation M...LY].pdf

3RD QUARTER 2014 ROLLING AVERAGE[1] STRONTIUM-90 ACTIVITY MAP

Well ID	Strontium Results (pCi/L)							
	Quarter 4 2013	Quarter 1 2014	Quarter 2 2014	Supplementary Quarter 2 2014	Quarter 3 2014	Supplementary Quarter 2 2014	2014 Investigation Level	Rolling Annual Average
MW-30-69	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-30-84	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-31-69	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-31-63	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-31-85	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-32-59	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-32-82	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-32-109	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-33-131	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-33-190	ND	ND	ND	***	ND	NA	2.00E+00	ND
MW-33	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-35	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-36-24	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-36-41	2.51E+00	3.31E+00	3.56E+00	NA	5.33E+00	NA	2.00E+00	ND
MW-36-52	6.68E+00	6.98E+00	3.96E+00	NA	ND	NA	2.00E+00	ND
MW-37-22	1.12E+01	7.01E+00	6.63E+00	NA	6.20E+00	NA	1.66E+01	7.76E+00
MW-37-52	8.63E+01	1.01E+02	1.44E+02	NA	1.17E+02	NA	2.51E+01	1.37E+02
MW-37-80	1.31E+01	1.23E+01	1.91E+01	NA	1.90E+01	NA	2.26E+00	1.59E+01
MW-38-17	9.52E+01	1.34E+02	2.34E+02	NA	2.43E+02	NA	2.26E+00	2.04E+02
MW-38-47	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-38-84	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-39-102	1.95E+00	NA	ND	NA	NA	NA	2.00E+00	1.95E+00
MW-39-124	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-39-161	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-39-195	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-40-27	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-40-46	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-40-81	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-40-100	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-40-157	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-40-162	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-41-40	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-41-63	2.53E+00	1.56E+00	ND	NA	2.53E+00	NA	2.09E+00	2.21E+00
MW-42-49	2.08E+01	2.45E+01	2.46E+00	NA	3.78E+00	NA	2.00E+01	1.29E+01
MW-42-78	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-43-28	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-43-62	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-44-66	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-44-102	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-45-42	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-45-61	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-46	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-47-56	NA	ND	ND	NA	NA	**	ND	ND
MW-47-80	NA	2.24E+00	ND	NA	NA	**	2.24E+00	ND
MW-49-26	1.34E+01	1.87E+01	1.25E+01	NA	1.04E+01	NA	2.34E+01	1.38E+01
MW-49-47	1.39E+01	1.38E+01	1.43E+01	NA	1.51E+01	NA	2.77E+01	1.54E+01
MW-49-65	6.41E+00	7.78E+00	8.67E+00	NA	9.87E+00	NA	1.43E+01	8.17E+00
MW-50-42	7.81E+00	5.87E+00	1.67E+01	NA	7.56E+00	NA	1.43E+01	9.27E+00
MW-50-66	2.38E+01	2.10E+01	2.01E+01	NA	1.52E+01	NA	3.70E+01	2.00E+01
MW-51-40	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-51-79	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-51-104	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-51-135	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-51-163	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-51-189	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-52-13	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-52-18	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-52-68	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-52-64	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-52-102	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-52-162	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-52-178	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-53-82	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-55-159	2.74E+01	3.64E+01	3.67E+01	NA	1.79E+01	NA	5.34E+01	2.81E+01

Well ID	Strontium Results (pCi/L)							
	Quarter 4 2013	Quarter 1 2014	Quarter 2 2014	Supplementary Quarter 2 2014	Quarter 3 2014	Supplementary Quarter 2 2014	2014 Investigation Level	Rolling Annual Average
MW-56-57	4.30E+00	2.11E+00	3.60E+00	NA	3.50E+00	NA	5.19E+00	3.40E+00
MW-56-58	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-56-123	ND	ND	ND	NA	ND	NA	3.25E+00	ND
MW-56-144	6.99E+00	6.05E+00	6.84E+00	NA	5.78E+00	1.35E+01	6.41E+00	
MW-56-173	3.56E+00	3.17E+00	4.86E+00	NA	2.11E+00	9.52E+00	3.18E+00	
MW-56-190	1.14E+01	1.42E+01	1.40E+01	NA	1.32E+01	2.45E+01	1.32E+01	
MW-56-24	1.05E+01	1.76E+01	2.15E+01	NA	1.61E+01	1.89E+01	1.69E+01	
MW-56-35	1.26E+01	1.61E+01	2.88E+01	NA	2.23E+01	3.12E+01	2.00E+01	
MW-56-54	1.53E+01	1.82E+01	1.73E+01	NA	1.40E+01	3.00E+01	1.58E+01	
MW-56-53	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-56-83	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-57-11	NA	NA	3.44E+01	NA	NA	NA	3.54E+01	3.44E+01
MW-57-20	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-57-45	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-58-26	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-58-65	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-59-35	NA	NA	ND	NA	NA	**	**	ND
MW-59-45	NA	NA	ND	NA	NA	NA	**	ND
MW-59-68	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-60-33	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-60-52	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-60-102	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-60-135	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-60-156	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-62-18	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-62-37	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-62-53	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-62-71	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-62-92	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-62-138	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-62-182	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-18	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-34	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-50	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-93	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-112	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-121	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-163	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-178	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-66-21	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-66-36	7.26E+00	9.85E+00	7.49E+00	NA	7.96E+00	1.40E+01	8.14E+00	
MW-67-39	9.98E+00	9.06E+00	5.66E+00	NA	4.64E+00	1.70E+01	7.33E+00	
MW-67-105	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-67-173	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-67-278	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-67-278	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-67-323	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-67-348	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-68-19	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-68-29	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-68-57	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-68-103	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-68-132	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-107	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-111	NA	NA	ND	NA	NA	NA	2.00E+00	ND
U3-4D	ND	ND	ND	NA	NA	NA	2.00E+00	ND
U3-4S	ND	ND	ND	NA	NA	NA	2.00E+00	ND
U3-T1	ND	ND	ND	NA	NA	NA	2.00E+00	ND
U1-4A/SS	2.42E+01	1.84E+01	3.57E+00	NA	NA	NA	1.48E+01	1.42E+01
U1-NCD	3.55E+01	3.56E+01	2.21E+01	6.92E+01	4.92E+01	*	*	4.81E+01
U1-SFDS	6.32E+00	5.02E+00	2.58E+00	3.56E+00	3.96E+00	*	*	4.35E+00
I-2	ND	ND	ND	NA	NA	ND	2.00E+00	ND
LAF-002	ND	NA	ND	NA	NA	positive		ND
B-1	NA	NA	NA	NA	NA	*	*	NA
B-6	ND	ND	ND	NA	NA	*	*	ND
MH-5 VCFD	ND	NA	ND	NA	NA	*	*	ND

Notes:

1) Only results greater than the MDC are reported herein. ND therefore indicates that the analytical result was below the MDC and typically also below the standard deviation threshold of three times 1 sigma. The rolling average is calculated using only results greater than the MDC. Given that ND represents real groundwater samples results where the radionuclide activity level is either positive but very low and unquantifiable, or not detectable above background, its exclusion results in a high bias to the average and thus adds a measure of conservatism to the subsequent dose computations.

2) A (shaded value) indicates that the reported activity exceeds the Investigation Level (I.L.) that was applicable at the time of sampling. NA indicates that data is not available for this time period.

3) * Foundation drain sampling locations, for which investigation levels are not applicable.

4) ** Standby monitoring installation, for which investigation levels are not applicable.

5) *** Multiple Sup-Q2 2014 samples were collected. Refer to Table 4 for the laboratory analytical results of these samples.

6) An aliquot of this sample was re-analyzed for Strontium-90. The original and aliquot results were 18.6 pCi/L and 14.7 pCi/L, respectively (MW-50-42; Q2 2014). In conformance with the LTMP, both results were averaged and the average was used in the annual rolling average calculations.

LEGEND

MW-30 — Boring / Monitoring Installation Designation
Longterm Radionuclide Monitoring Installation
Standby Radionuclide Monitoring Installation
Active Storm Drain
Abandoned Storm Drain
Catch Basin
Footing Drain

Localized Transient Releases

6 — Transient Distillate Tank Valve Leak in Unit 1 Fuel Storage Building - 03/07/2009
7 — Unit 3 SFP Evap. Washout to MH-A2 – 3/25/09 (initial)
8 — Transient Spill from Temporary R.O. Skid Piping - Entered MW-32 Vault and MH-9 - 11/21/2009
9 — Sample Sink Overflow - Unit 1 Chemical Systems Building - Q2 2011
10 — Unit 2 MOB Drain Leak - Q2 2012
11 — Unit 1 Containment Spray Annulus (CSA) Overflow
12 — Unit 2 Fan Building 51' Floor Drain Overfill

Probable Legacy Release SSCs

Unit 2 Fuel Pool
(All identified leaks repaired as of December 2007)
Unit 1 West Fuel Pool
(All U1-SFPs drained and inactive as of October 2008)
Terminated Connection To Storm Drain
Drain Exfiltration
Inter-Structure Joint / Mud Mat
Containment Spray Sump Trench

Depth-Specific Data

Average activity of Sr90 (pCi/L) for each screened interval.
11.3 / 11.9 / 12.6 / 12.8
Multiple Screened Intervals w/ Depth
Screened in Soil
Screened in Bedrock
[1] Groundwater elevation for each screened interval at time of low river tide for Q4 2008 (11/11/2008)[1].

Activity Data[1,2]

Bar Graphs; Average Sr-90, pCi/L

No Sample
ND — Not Detected (ND)
0.74 — ND - 1
1.7 — 1.0 - 2.0
2.86 — 2.0 - 4.0
5.5 — 4.0 - 8.0
18.4 — 8.0 - 25
48.4 — > 25

Isopleths; Average Sr-90, pCi/L

2 - 4
4 - 8
8 - 25
> 25

Note: Illustration of contaminant plume is a schematic representation only. **In reality**, the geologic bedrock formation is over 99% solid, crystalline rock, with the contaminated water contained only in the remaining (less than 1%) interstitial space (i.e. fractures).

Groundwater Elevation Contours

20 — [1]Ambient "Watertable" Contours for Q4 2008 (11/11/2008)[1]
5 — Contours Other Than 10' Interval
Vadose Zone Contaminant Transport

Notes:
1. Groundwater contours drawn from Q4 2008 groundwater data to show groundwater conditions used for recalibration of the Precipitation Mass Balance Model (see Q2 2009 LTM Report). These contours developed from limited data collected on 11/11/2008. Actual elevations may vary from conditions shown and the actual distribution of piezometric heads is likely more complex than indicated.

Data Notes:
1. Average Sr-90 isopleths and activity values are yearly rolling arithmetic averages of the current and preceeding three quarters' data. Only values greater than the MDC are used in this average, thus adding a degree of conservatism to the subsequent dose computations.
2. Illustration of contaminant plume is a schematic representation only. In reality, the geologic bedrock formation is over 99% solid, crystalline rock, with the contaminated water contained only in the remaining (less than 1%) interstitial space (i.e. fractures).
3. Storm or foundation drain sampling locations, for which investigation levels are not applicable.
4. Two discrete isopleths have been drawn around MW-39 and MW-41 given average concentrations greater than 2 pCi/L. It is expected that similar concentrations exist at other locations along the legacy piping alignment in addition to the locations shown.
5. Sr-90 activity at MW-111 may be due to description of residual Sr-90 from backfill used in the Transformer Yard.
6. Historically elevated Tritium levels in MW-42-49 observed during Q1 2009 were consistent with leakage visually identified on 03/07/2009 (and terminated immediately thereafter) from the waste distillate tank valves located within the Unit 1 fuel storage building. Data trends through Q1 2010 indicate that the observed Tritium peaks in MW-42-49 and downgrading wells associated with this release have dissipated through the groundwater flow system.
7. Historically elevated Tritium levels in MW-45-42 observed during Q2 2009 were consistent with an increased activity observed in Unit 3 Manhole A2. This release was initially detected in a storm drain sample collected 03/25/2009 under the 80-10 Effluents Program. This Tritium peak dissipated prior to samples taken during the subsequent quarter. Additionally, transient Tritium peaks have been recently detected in MH-A2 from Q3 2010 to Q3 2011. These increases are consistent with elevated Tritium levels in MW-41-40, MW-46 and B-1. Based on investigations initiated in, and ongoing since, 2009 and the more recent sampling of the Unit 3 Fuel Storage Building (FSB) roof drains, it has been concluded that these increases in storm drain and monitoring well Tritium activity are due to condensation of SFP evaporation on the FSB roof (Washout) when the exhaust fan is not operating, which then enters the roof drains and discharges directly into MH-A2 during rainfall events. As such, Entergy placed the FSB vent fan back in service on 7-21-2011 and the Tritium activity in MH-A2 returned to baseline conditions within 2 weeks.
8. Elevated levels of Tritium detected in MH-9 and MH-10a during routine 80-10 Effluents Program sampling on 1/15/2010 appears to have originated from a 11/21/2009 transient leak in temporary RWST / R.O. skid connection hoses, which flowed into MH-9. It also appears that this release entered the well vault for MW-32, and may have penetrated the well casings and entered the subsurface around the monitoring installation.
9. Elevated levels of Tritium initially detected in U1-CSS, MW-39, MW-46, MW-54, MW-56 and MW-57 during the Q2-2011 sampling event appear to have originated from a Q2 2011 Sample Sink Overflow and subsequent floor flooding in a Unit 1 Chemical Systems Building sample room on the 53' elevation.
10. Elevated levels of Tritium initially detected in MW-31 during the Q2 2012 sampling event appear to have originated from a leak in an existing Unit 2 Maintenance Outage Building (MOB) drain line. This double contained, stainless steel line was used to service the R.O. skid at its new location in the MOB during the 2012 Unit 2 refueling outage.
11. Elevated levels of Tritium initially detected in MW-42-49, MW-53-82 and U1-CSS during the Q4 2013 sampling event appear to have originated from an overflow of the Unit 1 Containment Spray Annulus (CSA).
12. Elevated levels of Tritium initially detected in Q2 2014 supplemental samples from MW-31 and MW-32. Release originated from transient flooding of the Unit 2 Fan Building 51' floor during 2014 refueling outage discharge of RCS drain down to a partially obstructed floor drain.

General Notes:
1. Base map was developed from an untitled electronic file provided by Badey and Watson Surveying and Engineering, P.C., Dated 2/3/06; CAD file name : "GZA.dwg".

50 25 0 50 100 150 Feet

Plant North

HUDSON RIVER

GZA GeoEnvironmental, Inc.
249 Vanderbilt Avenue
Norwood, MA 02062
Phone: (781) 278-3700 Fax: (781) 278-5701

INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

3RD QUARTER 2014 ROLLING AVERAGE[1] STRONTIUM-90 ACTIVITY MAP

Proj. Mgr.: MJB Designed By: MJB Reviewed By: MJB Operator: EDC	Dwg. Date: 03-17-2015 Job No.: 01.0017869.93	Figure No.: 7

3RD QUARTER 2014 ROLLING AVERAGE[1] STRONTIUM-90 ACTIVITY MAP

Well ID	Strontium Results (pCi/L)							
	Quarter 4 2013	Quarter 1 2014	Quarter 2 2014	Supplementary Quarter 2 2014	Quarter 3 2014	Supplementary Quarter 2 2014	2014 Investigation Level	Rolling Annual Average
MW-30-69	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-30-84	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-31-69	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-31-63	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-31-85	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-32-59	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-32-82	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-32-109	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-33-113	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-35-100	ND	ND	ND	***	ND	***	2.00E+00	ND
MW-53	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-35	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-36-24	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-36-41	2.51E+00	3.31E+00	3.56E+00	NA	5.33E+00	NA	2.00E+00	ND
MW-36-52	6.68E+00	6.98E+00	3.96E+00	NA	ND	NA	2.00E+00	ND
MW-37-22	1.12E+01	7.01E+00	6.63E+00	NA	6.20E+00	NA	1.66E+01	7.76E+00
MW-37-52	8.63E+01	1.01E+02	1.46E+02	NA	1.17E+02	NA	2.51E+02	1.37E+02
MW-37-80	1.31E+01	1.23E+01	1.91E+01	NA	1.90E+01	NA	2.26E+00	1.59E+01
MW-39-17	1.92E+01	1.76E+01	2.31E+01	NA	2.47E+01	NA	2.00E+00	2.00E+00
MW-39-47	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-39-84	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-39-102	1.95E+00	NA	ND	NA	NA	NA	2.00E+00	1.95E+00
MW-39-124	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-39-161	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-39-195	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-40-27	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-40-66	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-40-81	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-40-100	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-40-127	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-40-162	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-41-40	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-41-63	2.53E+00	1.56E+00	ND	NA	2.53E+00	NA	2.00E+00	2.21E+00
MW-42-49	2.08E+01	2.45E+01	2.40E+00	NA	3.78E+00	NA	2.00E+00	1.29E+01
MW-42-78	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-43-28	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-43-62	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-44-66	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-44-102	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-45-42	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-45-61	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-46	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-47-56	NA	ND	ND	NA	NA	**	ND	ND
MW-47-80	NA	2.24E+00	ND	NA	NA	**	2.24E+00	ND
MW-49-26	1.34E+01	1.87E+01	1.25E+01	NA	1.04E+01	NA	2.34E+01	1.38E+01
MW-49-47	1.39E+01	1.38E+01	1.43E+01	NA	1.15E+01	NA	2.77E+01	1.34E+01
MW-49-65	6.41E+00	7.78E+00	8.67E+00	NA	9.87E+00	NA	1.43E+01	8.17E+00
MW-50-42	7.81E+00	5.67E+00	1.67E+01	NA	7.56E+00	NA	8.29E+00	9.27E+00
MW-50-66	2.38E+01	2.10E+01	2.01E+01	NA	1.52E+01	NA	3.70E+01	2.00E+01
MW-51-40	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-51-79	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-51-104	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-51-135	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-51-163	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-51-189	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-52-51	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-52-18	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-52-68	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-52-64	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-52-102	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-52-162	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-52-191	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-53-82	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-53-109	2.74E+01	3.64E+01	3.67E+01	NA	1.79E+01	NA	5.34E+01	2.81E+01

Well ID	Strontium Results (pCi/L)							
	Quarter 4 2013	Quarter 1 2014	Quarter 2 2014	Supplementary Quarter 2 2014	Quarter 3 2014	Supplementary Quarter 2 2014	2014 Investigation Level	Rolling Annual Average
MW-54-37	4.30E+00	2.11E+00	3.68E+00	NA	3.50E+00	NA	5.19E+00	3.40E+00
MW-54-58	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-54-123	ND	ND	ND	NA	ND	NA	3.25E+00	ND
MW-54-144	6.99E+00	6.05E+00	6.84E+00	NA	5.78E+00	1.35E+01	6.41E+00	
MW-54-173	3.26E+00	2.17E+00	4.86E+00	NA	2.11E+00	9.52E+00	3.18E+00	
MW-54-190	1.14E+01	1.42E+01	1.40E+01	NA	1.32E+01	2.45E+01	1.32E+01	
MW-55-24	1.05E+01	1.76E+01	3.16E+01	NA	1.61E+01	1.89E+01	1.69E+01	
MW-55-35	1.26E+01	1.61E+01	2.88E+01	NA	2.23E+01	3.12E+01	2.00E+01	
MW-55-54	1.53E+01	1.62E+01	1.73E+01	NA	1.45E+01	3.06E+01	1.58E+01	
MW-56-33	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-56-83	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-57-11	NA	NA	3.44E+01	NA	NA	NA	3.54E+01	3.44E+01
MW-57-20	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-57-45	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-58-26	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-58-65	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-59-35	NA	NA	ND	NA	NA	NA	**	ND
MW-59-45	NA	NA	ND	NA	NA	NA	**	ND
MW-59-68	ND	NA	ND	NA	NA	NA	2.00E+00	ND
MW-60-33	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-60-53	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-60-76	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-62-18	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-62-37	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-62-53	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-62-71	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-62-92	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-62-138	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-62-182	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-18	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-34	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-50	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-93	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-112	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-121	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-163	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-63-174	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-66-21	ND	ND	ND	NA	ND	NA	2.00E+00	ND
MW-66-36	7.26E+00	9.85E+00	7.49E+00	NA	7.96E+00	1.40E+01	8.14E+00	
MW-67-39	9.98E+00	9.04E+00	5.66E+00	NA	4.64E+00	1.70E+01	7.33E+00	
MW-67-105	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-67-173	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-67-239	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-67-276	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-67-323	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-67-348	ND	ND	ND	NA	NA	NA	2.00E+00	ND
MW-68-19	NA	ND	ND	NA	NA	NA	2.00E+00	ND
MW-68-29	NA	ND	ND	NA	NA	NA	2.00E+00	ND
MW-68-57	NA	ND	ND	NA	NA	NA	2.00E+00	ND
MW-68-103	NA	ND	ND	NA	NA	NA	2.00E+00	ND
MW-68-132	NA	ND	ND	NA	NA	NA	2.00E+00	ND
MW-107	NA	NA	ND	NA	NA	NA	2.00E+00	ND
MW-111	NA	NA	ND	NA	NA	NA	2.00E+00	ND
U3-4D	ND	ND	ND	NA	NA	NA	2.00E+00	ND
U3-4S	ND	ND	ND	NA	NA	NA	2.00E+00	ND
U3-T1	ND	ND	ND	NA	NA	NA	2.00E+00	ND
U3-T2	2.42E+01	1.84E+01	3.57E+00	NA	NA	NA	1.48E+01	1.42E+01
U1-SFDS	6.32E+00	5.02E+00	2.54E+00	3.56E+00	3.96E+00	NA	ND	2.00E+00
U-2	ND	ND	ND	NA	NA	NA	2.00E+00	ND
LAF-002	ND	NA	ND	NA	NA	NA	positive	ND
B-1	NA	NA	NA	NA	NA	NA	*	NA
B-6	ND	ND	ND	NA	NA	NA	*	ND
MH-5 VCFD	ND	NA	ND	NA	NA	NA	*	ND

Notes:

1) Only results greater than the MDC are reported herein. ND therefore indicates that the analytical result was below the MDC and typically also below the standard deviation threshold of three times 1 sigma. The rolling average is calculated using only results greater than the MDC. Given that ND represents real groundwater sampling results where the radionuclide activity level is either positive but very low and unquantifiable, or not detectable above background, its exclusion results in a high bias to the average and thus adds a measure of conservatism to the subsequent dose computations.

2) A (shaded value) indicates that the reported activity exceeds the Investigation Level (I.L.) that was applicable at the time of sampling. NA indicates that data is not available for this time period.

3) * Foundation drain sampling locations, for which investigation levels are not applicable.

4) ** Standby monitoring installation, for which investigation levels are not applicable.

5) *** Multiple Sep-Q2 2014 samples were collected. Refer to Table 4 for the laboratory analytical results of these samples.

6) An aliquot of this sample was re-analyzed for Strontium-90. The original and aliquot results were 18.6 pCi/L and 14.7 pCi/L, respectively (MW-50-42, Q2 2014). In conformance with the LTMP, both results were averaged and the average was used in the annual rolling average calculations.

LEGEND

- MW-30 — Boring / Monitoring Installation Designation
- Longterm Radionuclide Monitoring Installation
- Standby Radionuclide Monitoring Installation
- Active Storm Drain
- Abandoned Storm Drain
- Catch Basin
- Footing Drain

Localized Transient Releases

- 6 — Transient Distillate Tank Valve Leak in Unit 1 Fuel Storage Building - 03/07/2009
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- Unit 2 Fuel Pool (All identified leaks repaired as of December 2007)
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- Terminated Connection To Storm Drain
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- Containment Spray Sump Trench

Depth-Specific Data

Average activity of Sr90 (pCi/L) for each screened interval.

Multiple Screened Intervals w/ Depth

Screened in Soil

Screened in Bedrock

[1] Groundwater elevation for each screened interval at time of low river tide for Q4 2008 (11/11/2008).

Activity Data[1,2]

Bar Graphs; Average Sr-90, pCi/L		Isopleths; Average Sr-90, pCi/L	
No Sample		2 - 4	
ND	Not Detected (ND)	4 - 8	
0.74	ND - 1	8 - 25	
1.7	1.0 - 2.0	> 25	
2.86	2.0 - 4.0		
5.5	4.0 - 8.0		
18.4	8.0 - 25		
48.4	> 25		

Note: Illustration of contaminant plume is a schematic representation only. **In reality**, the geologic bedrock formation is over 99% solid, crystalline rock, with the contaminated water contained only in the remaining (less than 1%) interstitial space (i.e. fractures).

Groundwater Elevation Contours

- 20 — [1]Ambient "Watertable" Contours for Q4 2008 (11/11/2008)[1]
- 5 — Contours Other Than 10' Interval
- Vadose Zone Contaminant Transport

Notes:

1. Groundwater contours drawn from Q4 2008 groundwater data to show groundwater conditions used for recalibration of the Precipitation Mass Balance Model (see Q2 2009 LTM Report). These contours developed from limited data collected on 11/11/2008. Actual elevations may vary from conditions shown and the actual distribution of piezometric heads is likely more complex than indicated.

Data Notes:

1. Average Sr-90 isopleths and activity values are yearly rolling arithmetic averages of the current and preceeding three quarters' data. Only values greater than the MDC are used in this average, thus adding a degree of conservatism to the subsequent dose computations.
2. Illustration of contaminant plume is a schematic representation only. In reality, the geologic bedrock formation is over 99% solid, crystalline rock, with the contaminated water contained only in the remaining (less than 1%) interstitial space (i.e. fractures).
3. Storm or foundation drain sampling locations, for which investigation levels are not applicable.
4. Two discrete isopleths have been drawn around MW-39 and MW-41 given average concentrations greater than 2 pCi/L. It is expected that similar concentrations exist at other locations along the legacy piping alignment in addition to the locations shown.
5. Sr-90 activity at MW-111 may be due to description of residual Sr-90 from backfill used in the Transformer Yard.
6. Historically elevated Tritium levels in MW-42-49 observed during Q1 2009 were consistent with leakage visually identified on 03/07/2009 (and terminated immediately thereafter) from the waste distillate tank valves located within the Unit 1 fuel storage building. Data trends through Q1 2010 indicate that the observed Tritium peaks in MW-42-49 and downgrading wells associated with this release have dissipated through the groundwater flow system.
7. Historically elevated Tritium levels in MW-45-42 observed during Q2 2009 were consistent with an increased activity observed in Unit 3 Manhole A2. This release was initially detected in a storm drain sample collected 03/25/2009 under the 80-10 Effluents Program. This Tritium peak dissipated prior to samples taken during the subsequent quarter. Additionally, transient Tritium peaks have been recently detected in MH-A2 from Q3 2010 to Q3 2011. These increases are consistent with elevated Tritium levels in MW-41-40, MW-46 and B-1. Based on investigations initiated in, and ongoing since, 2009 and the more recent sampling of the Unit 3 Fuel Storage Building (FSB) roof drains, it has been concluded that these increases in storm drain and monitoring well Tritium activity are due to condensation of SFP evaporation on the FSB roof (Washout) when the exhaust fan is not operating, which then enters the roof drains and discharges directly into MH-A2 during rainfall events. As such, Entergy placed the FSB vent fan back in service on 7-21-2011 and the Tritium activity in MH-A2 returned to baseline conditions within 2 weeks.
8. Elevated levels of Tritium detected in MH-9 and MH-10a during routine 80-10 Effluents Program sampling on 1/15/2010 appears to have originated from a 11/21/2009 transient leak in temporary RWST / R.O. skid connection hoses, which flowed into MH-9. It also appears that this release entered the well vault for MW-32, and may have penetrated the well casings and entered the subsurface around the monitoring installation.
9. Elevated levels of Tritium initially detected in U1-CSS, MW-39, MW-46, MW-54, MW-56 and MW-57 during the Q2-2011 sampling event appear to have originated from a Q2 2011 Sample Sink Overflow and subsequent floor flooding in a Unit 1 Chemical Systems Building sample room on the 53' elevation.
10. Elevated levels of Tritium initially detected in MW-31 during the Q2 2012 sampling event appear to have originated from a leak in an existing Unit 2 Maintenance Outage Building (MOB) drain line. This double contained, stainless steel line was used to service the R.O. skid at its new location in the MOB during the 2012 Unit 2 refueling outage.
11. Elevated levels of Tritium initially detected in MW-42-49, MW-53-82 and U1-CSS during the Q4 2013 sampling event appear to have originated from an overflow of the Unit 1 Containment Spray Annulus (CSA).
12. Elevated levels of Tritium initially detected in Q2 2014 supplemental samples from MW-31 and MW-32. Release originated from transient flooding of the Unit 2 Fan Building 51' floor during 2014 refueling outage discharge of RCS drain down to a partially obstructed floor drain.

General Notes:

1. Base map was developed from an untitled electronic file provided by Badey and Watson Surveying and Engineering, P.C., Dated 2/3/06; CAD file name : "GZA.dwg".

50 25 0 50 100 150 Feet

Plant North

HUDSON RIVER

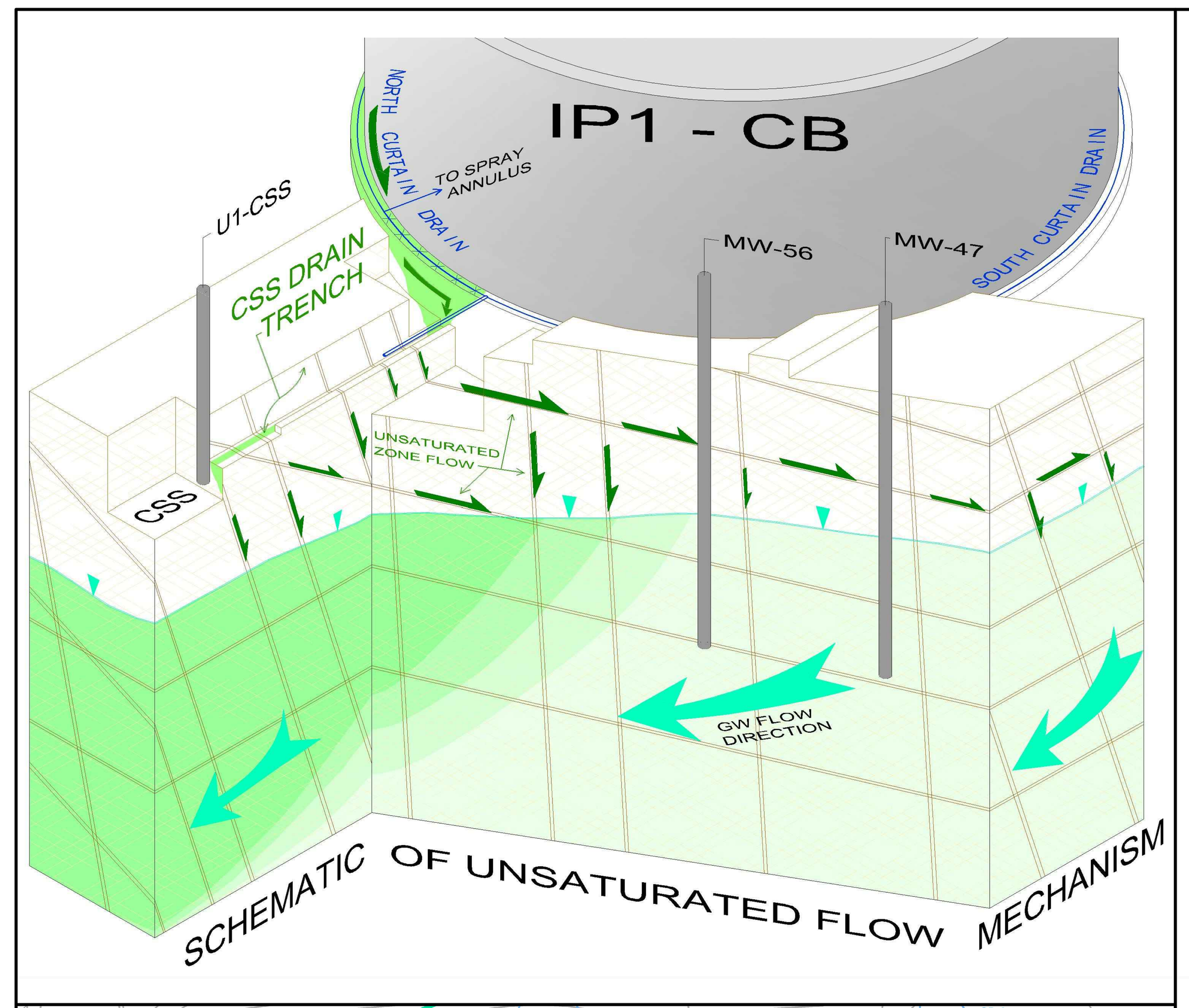
GZA GeoEnvironmental, Inc.
249 Vanderbilt Avenue
Norwood, MA 02062
Phone: (781) 278-3700 Fax: (781) 278-5701

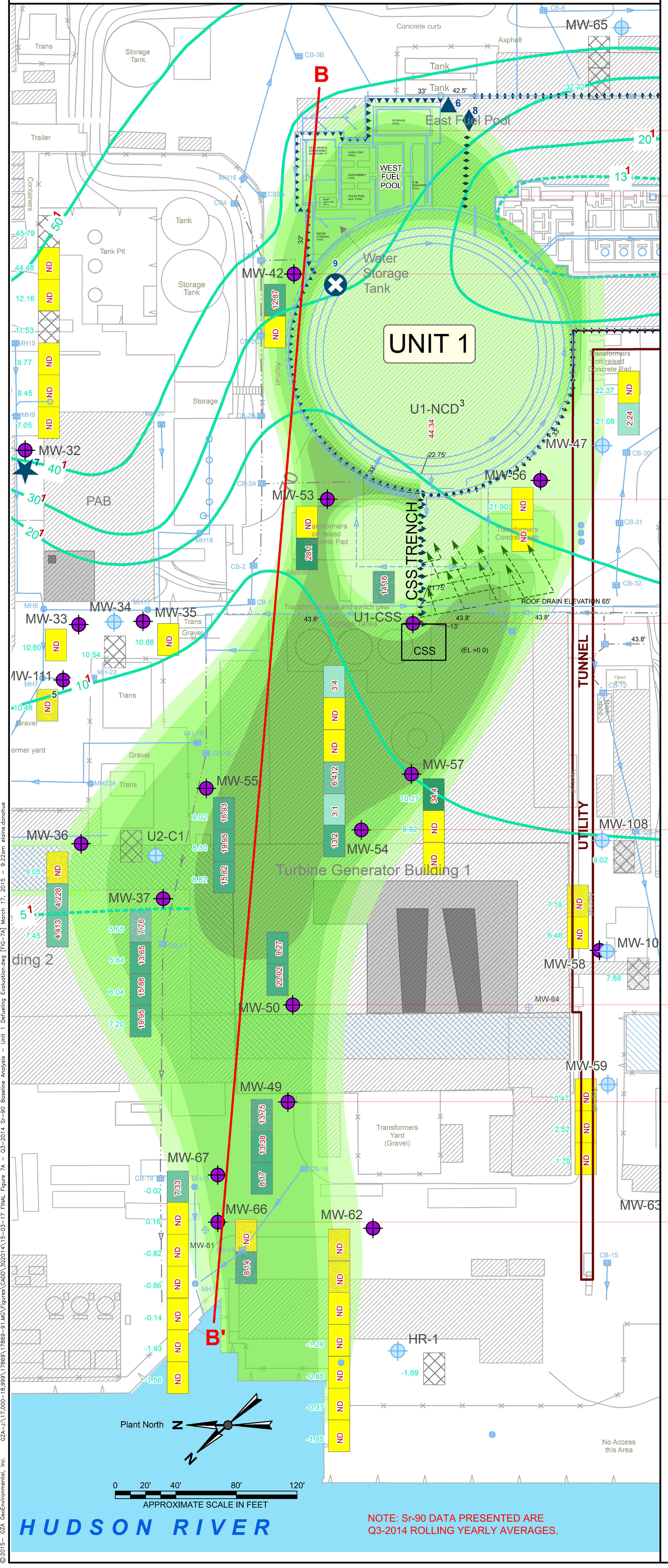
INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

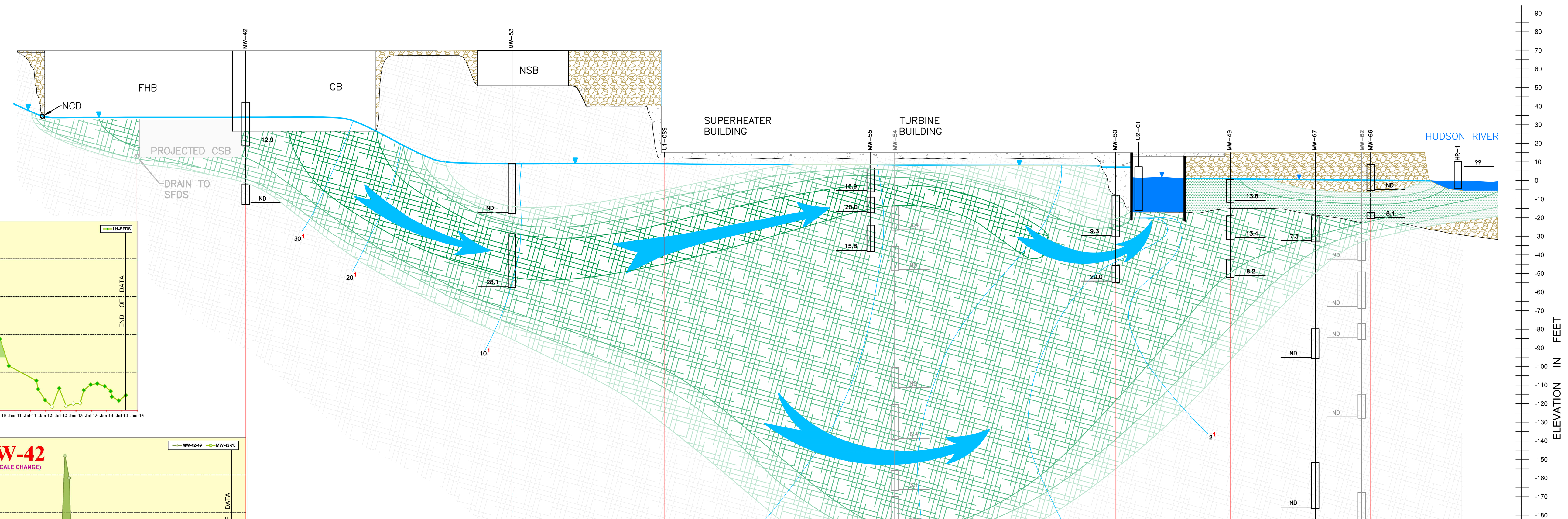
3RD QUARTER 2014 ROLLING AVERAGE[1] STRONTIUM-90 ACTIVITY MAP

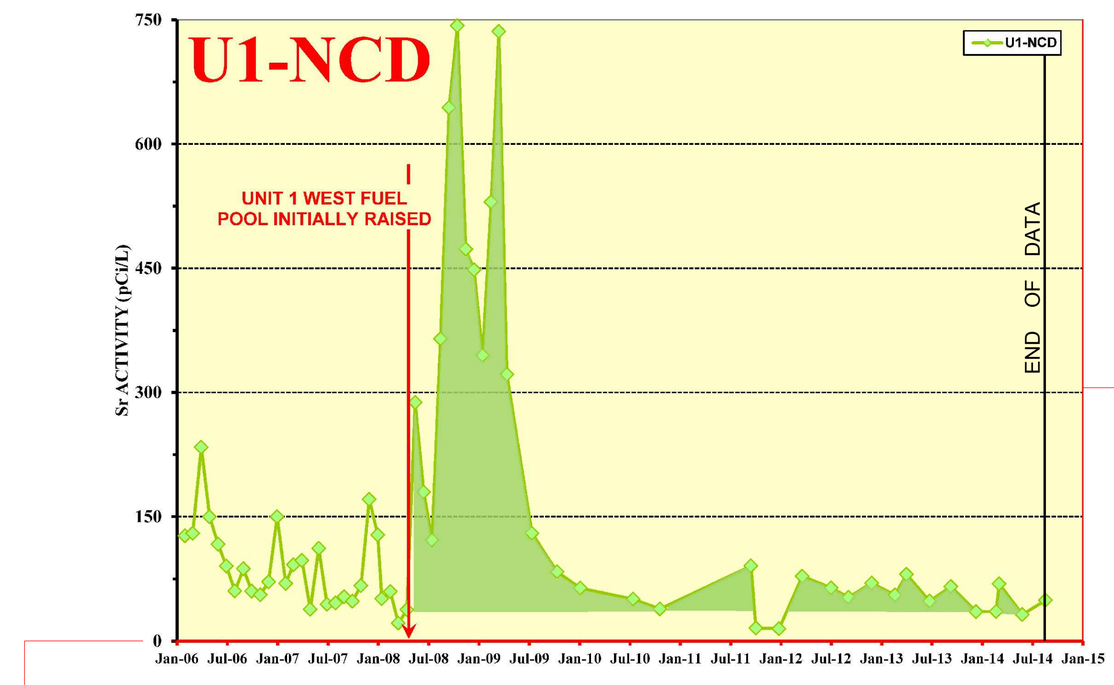
Proj. Mgr.: MJB Designed By: MJB Reviewed By: MJB Operator: EDC	Dwg. Date: 03-17-2015 Job No.: 01.0017869.93	Figure No.: 7

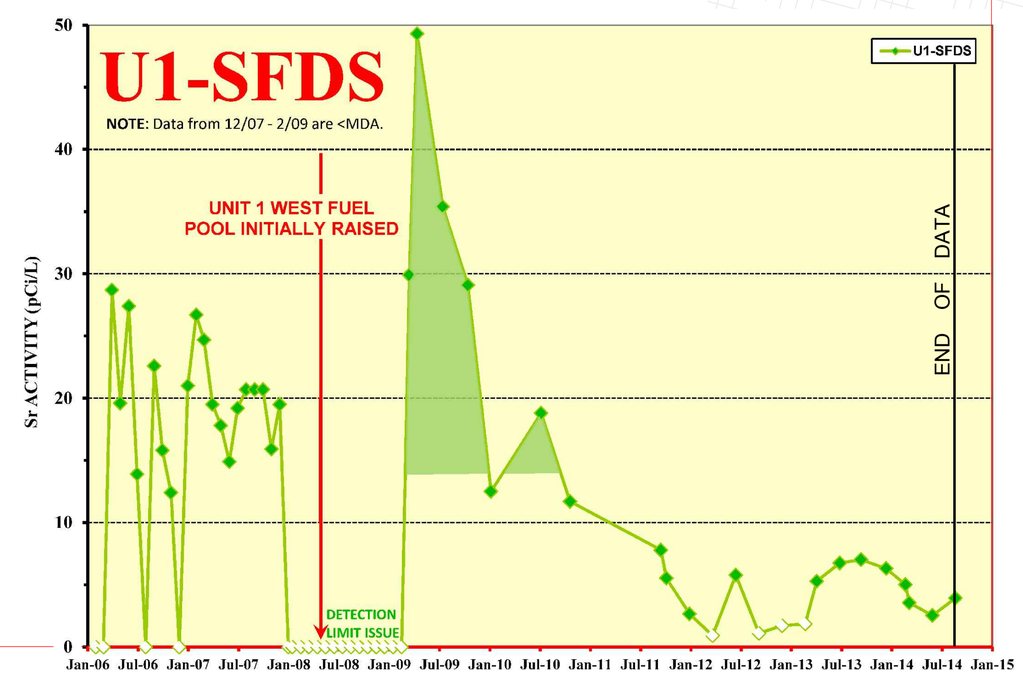
Sr-90 BASELINE ANALYSIS - UNIT 1 DEFUELING EVALUATION 3rd QUARTER 2014

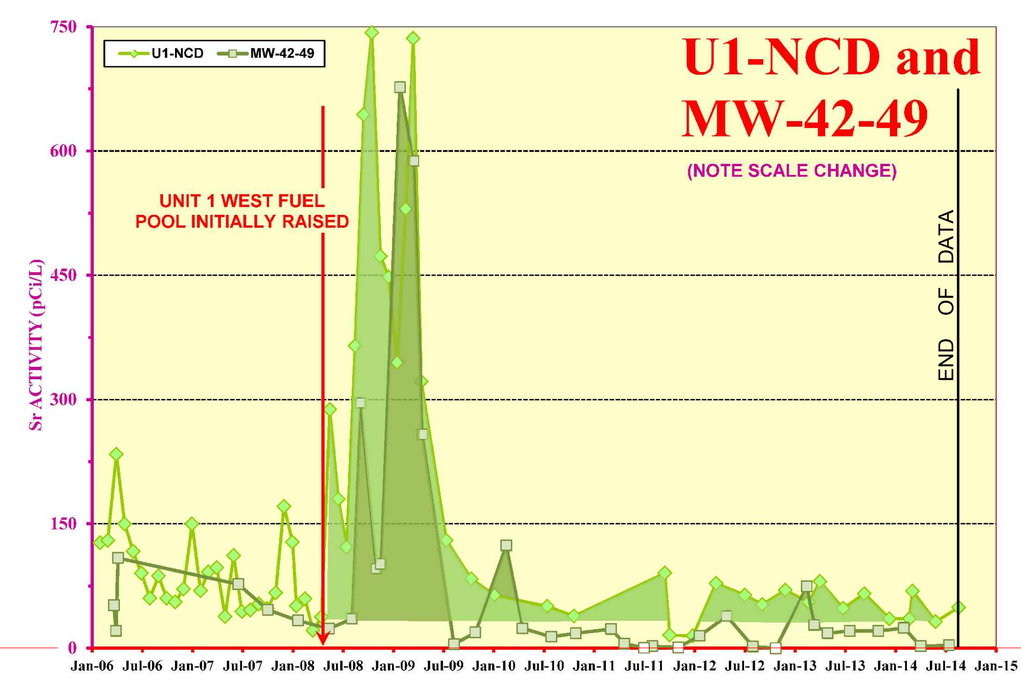


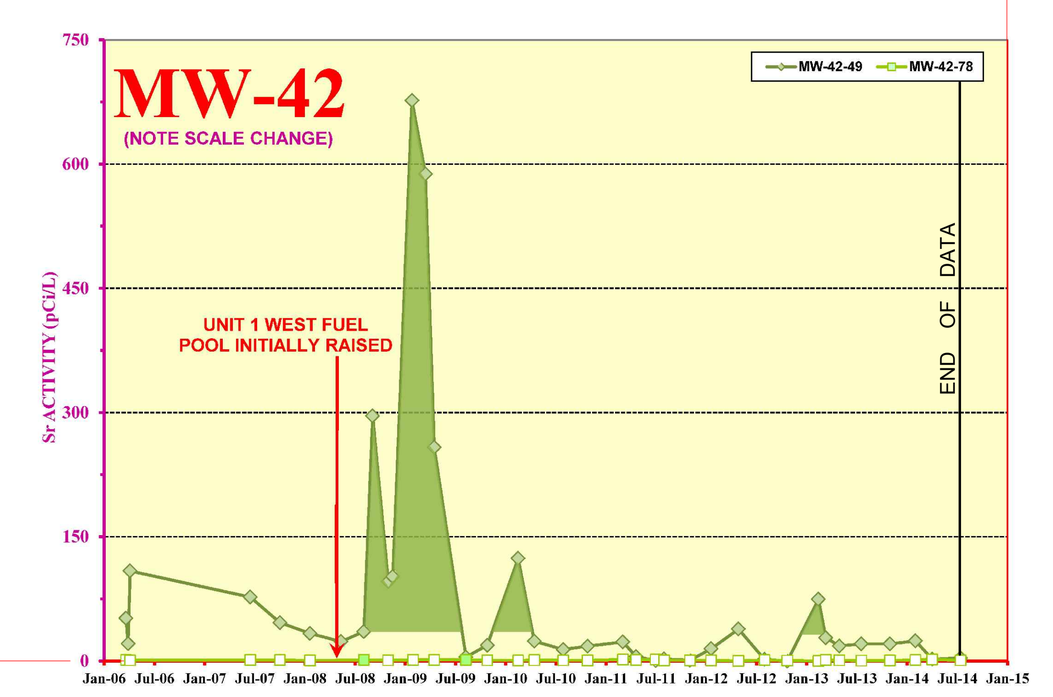


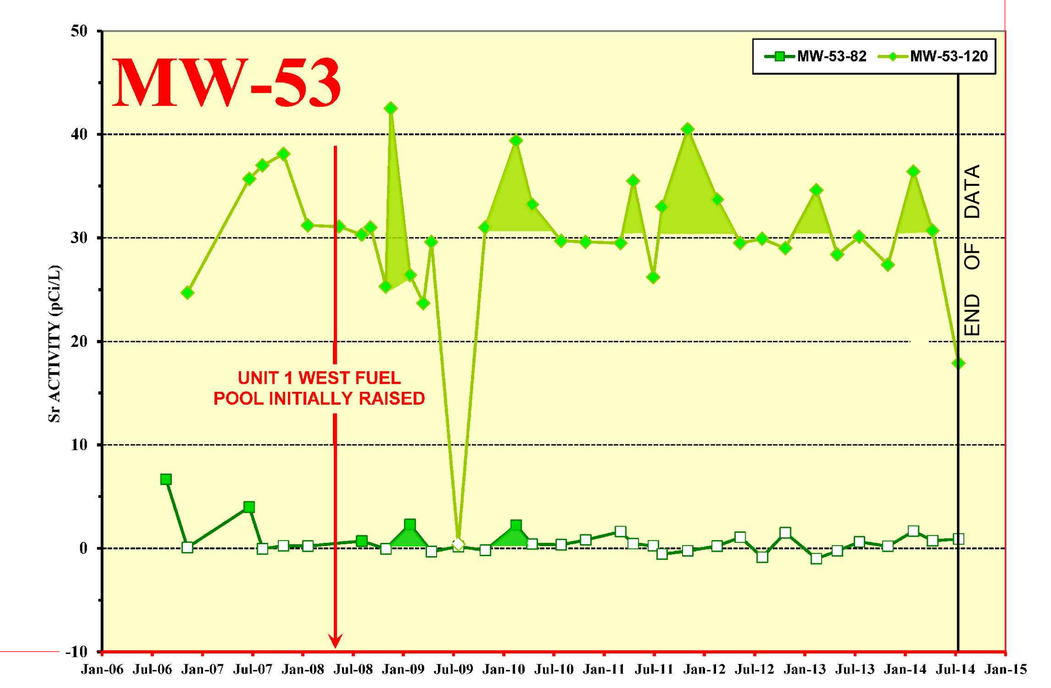


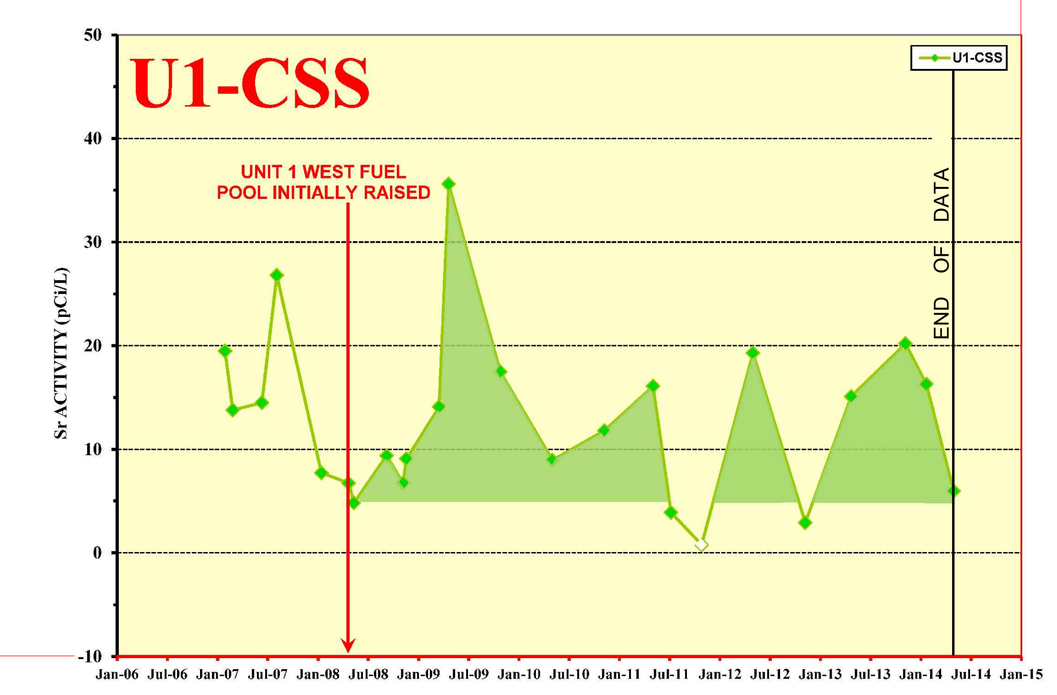


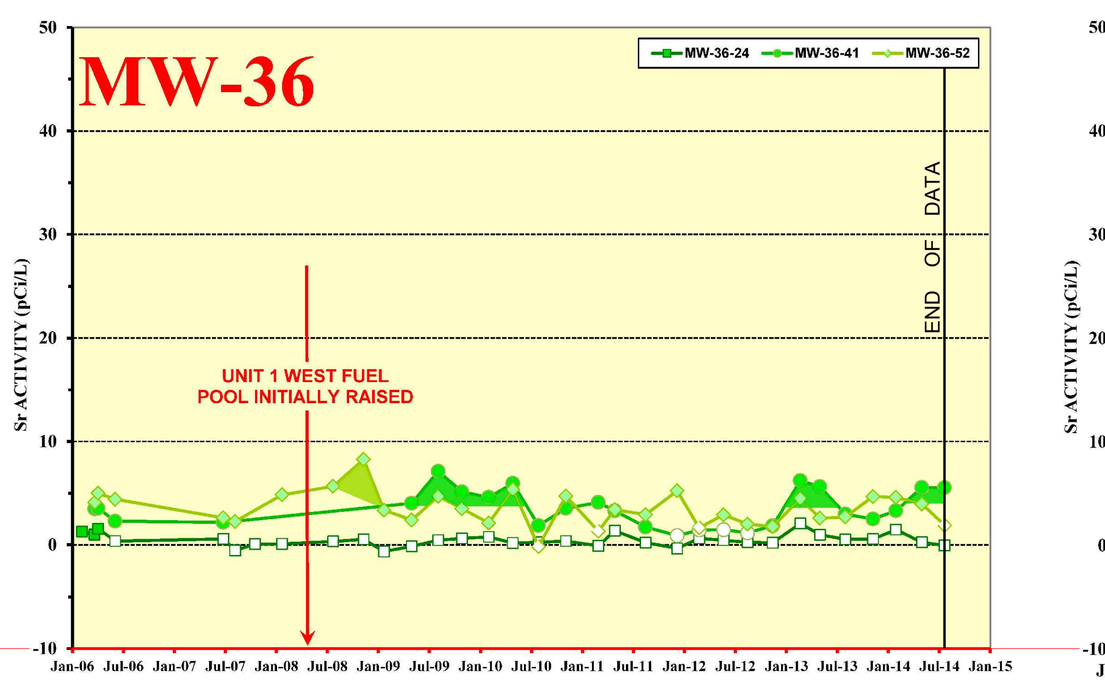


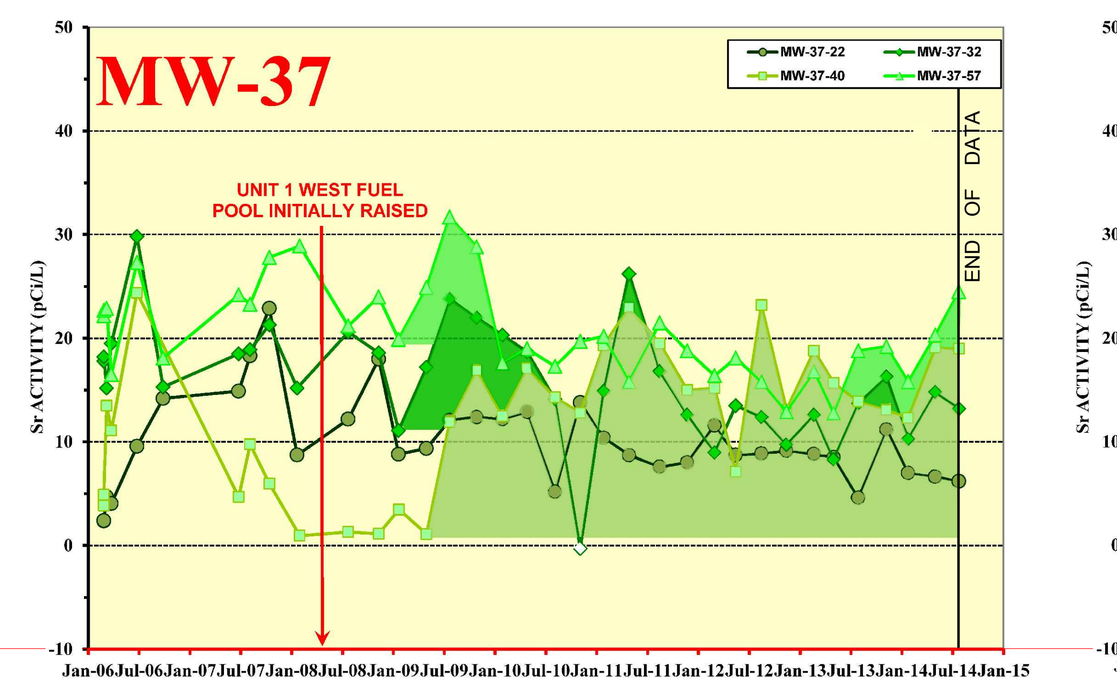


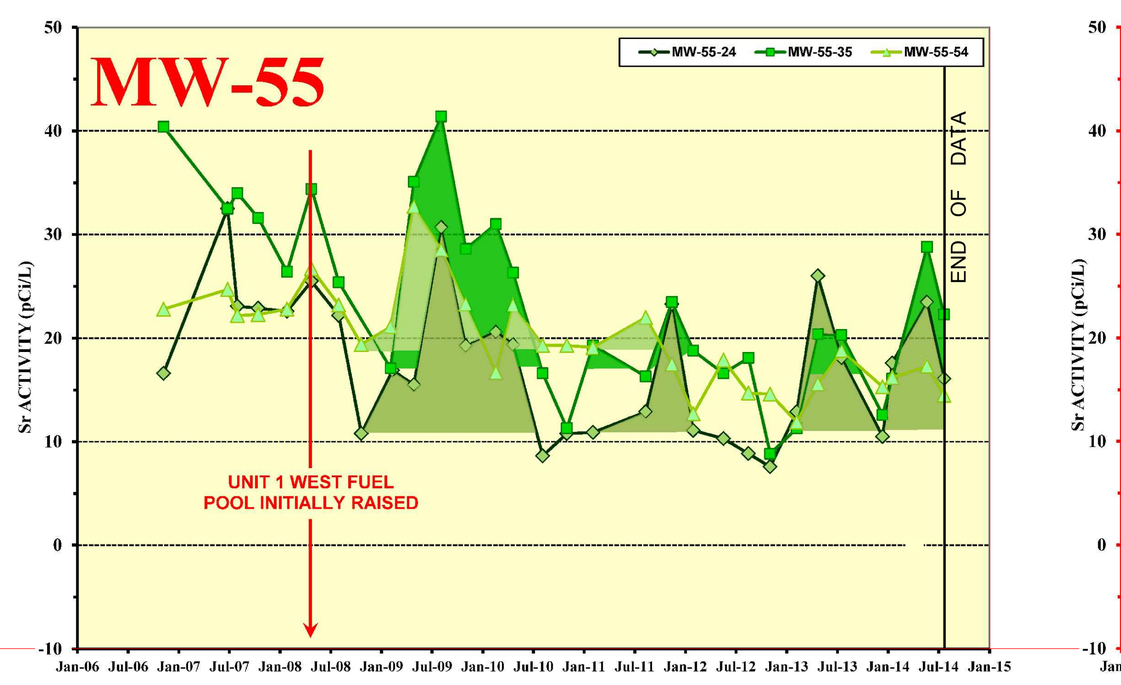


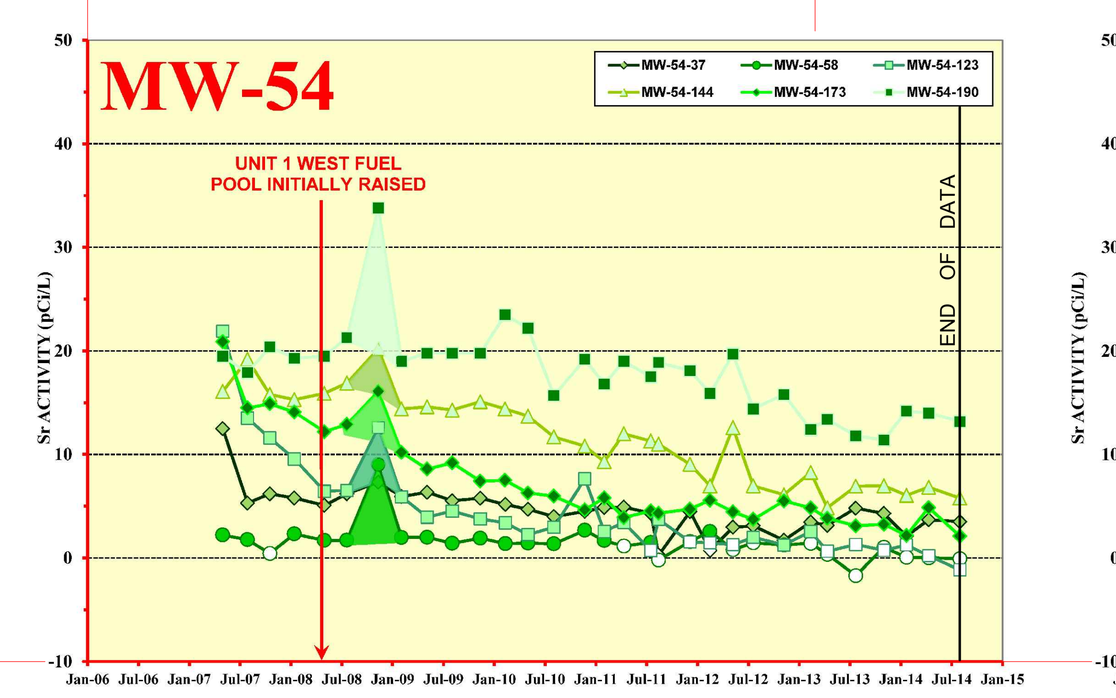


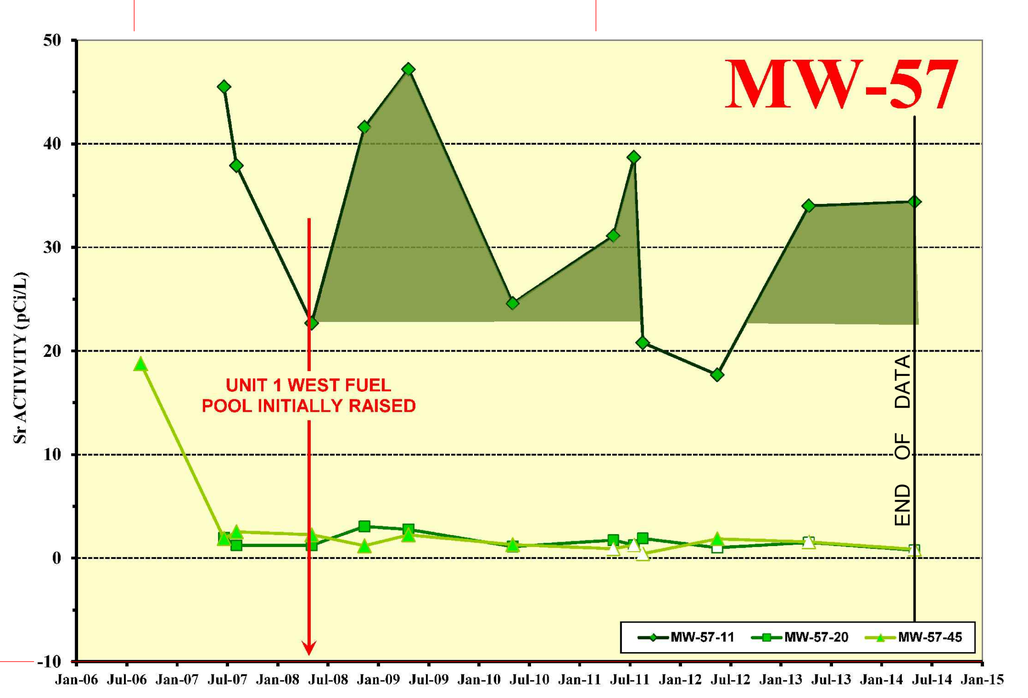


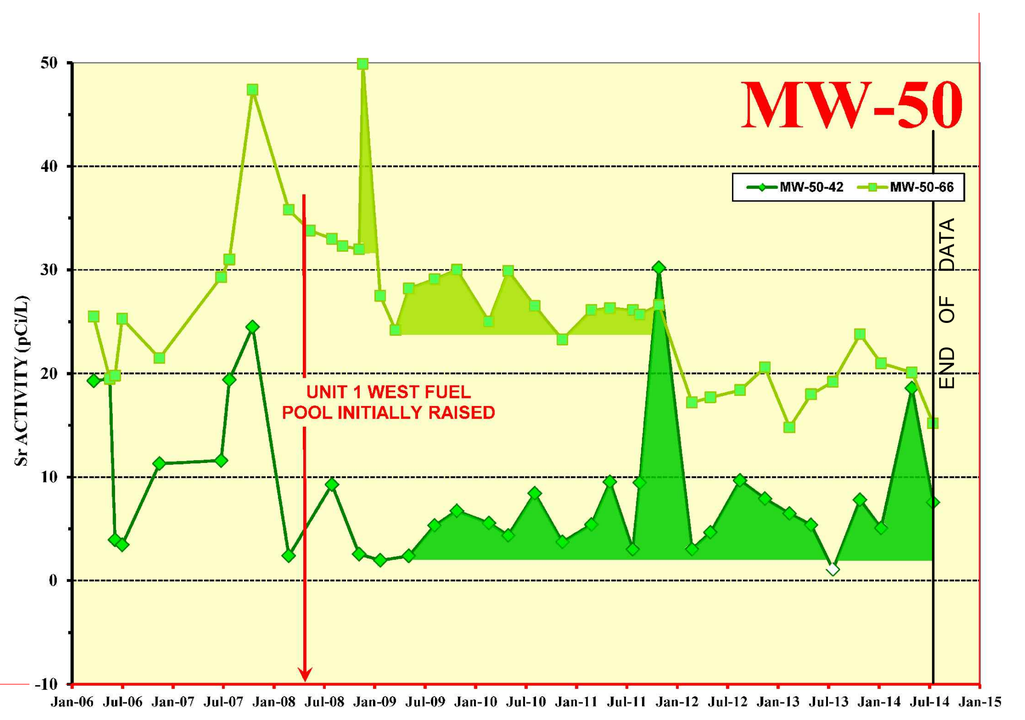


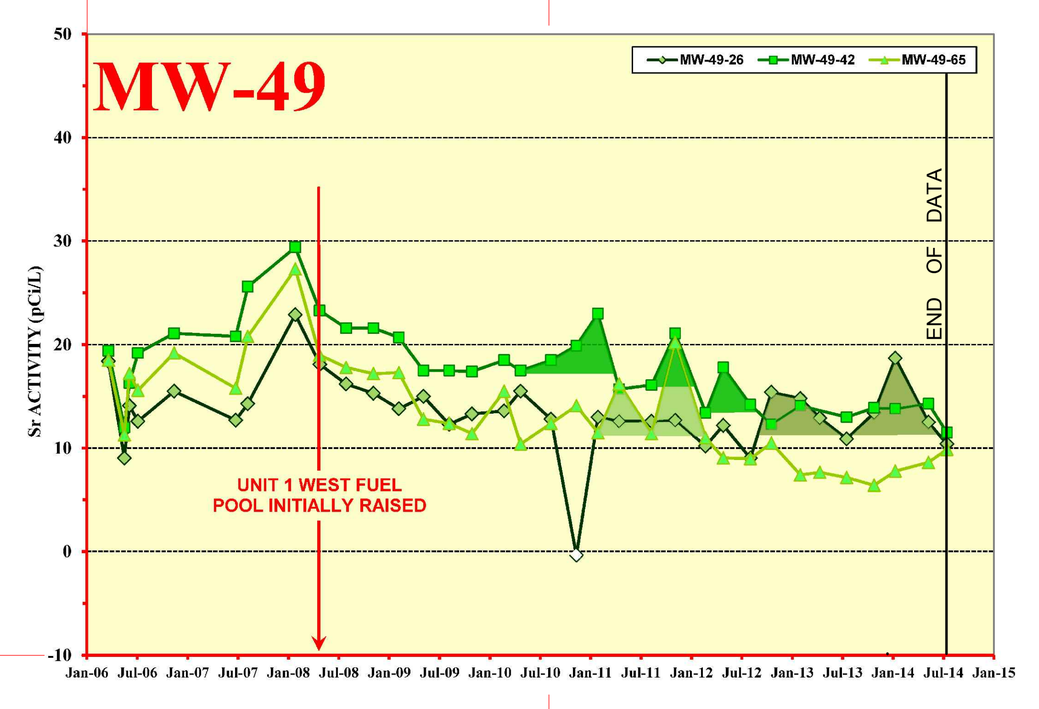


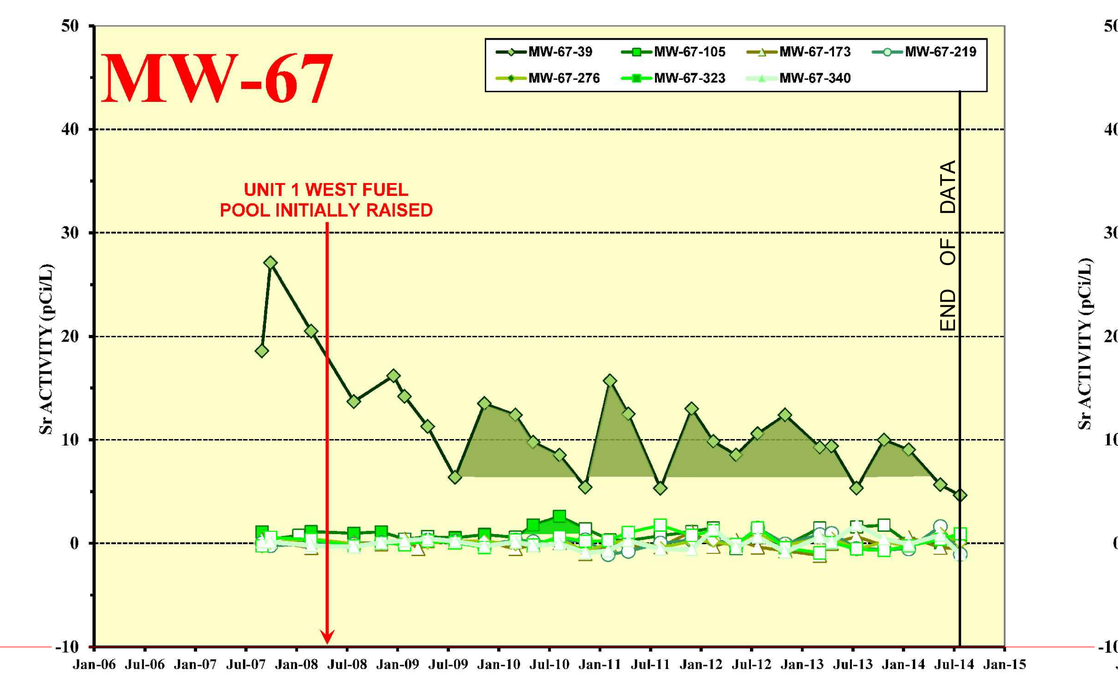


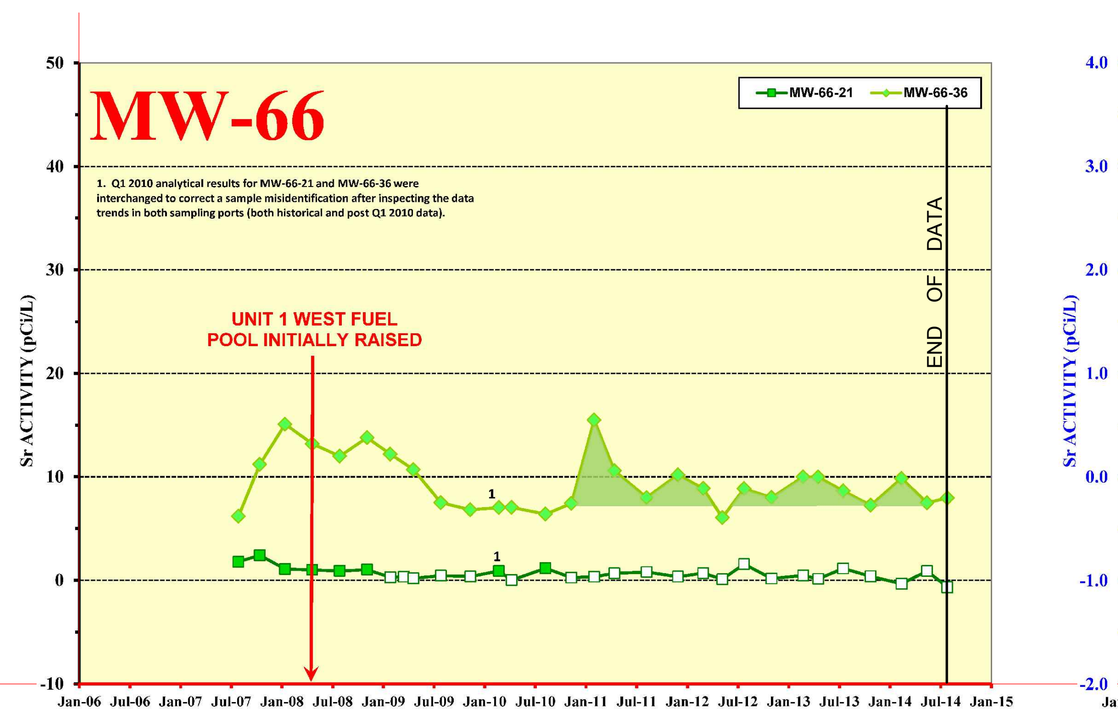


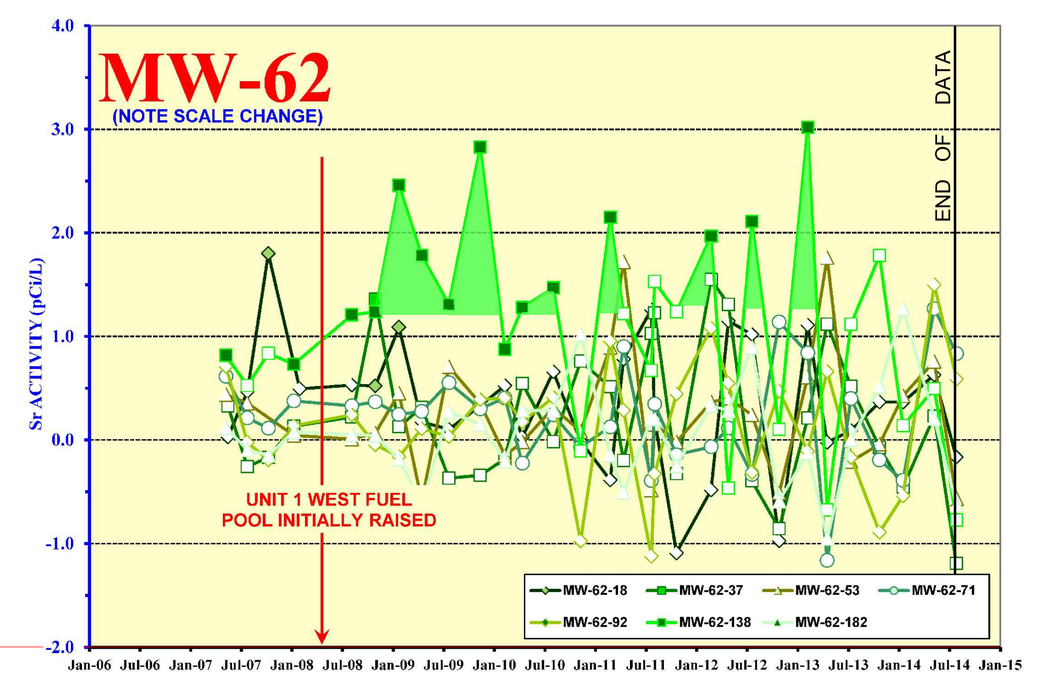












LEGEND

Sr-90 DATA GRAPHS

Point Shading

- △,○ Analytical Results Below MDC
- ●,□ Analytical Results Above MDC

Hatching

- Probable Response to Raising of Unit 1 West Fuel Pool

ISOPLETH PLAN

Isopleth Plan View Extracted from Figure 7

LEGEND

- MW-30 — Boring / Monitoring Installation Designation
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- Unit 1 West Fuel Pool **(All U1-SFPs drained and inactive as of October 2008)**
- Terminated Connection To Storm Drain
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- Containment Spray Sump Trench

Depth-Specific Data

Average activity of Sr90 (pCi/L) for each screened interval.

11.3	1.3	
11.9	6.0	
12.6	20.2	Multiple Screened Intervals w/ Depth
12.8	1.6	

- Screened in Soil
- Screened in Bedrock

[1] Groundwater elevation for each screened interval at time of low river tide for Q4 2008 (11/11/2008)[1].

Activity Data[1,2]

Bar Graphs; Average Sr-90, pCi/L		Isopleths; Average Sr-90, pCi/L
(crosshatch)	No Sample	2 - 4
ND	Not Detected (ND)	4 - 8
0.74	ND - 1	8 - 25
1.7	1.0 - 2.0	> 25
2.86	2.0 - 4.0	
5.5	4.0 - 8.0	
16.1	8.0 - 25	
40.4	> 25	

Note: Illustration of contaminant plume is a schematic representation only. **In reality**, the geologic bedrock formation is over 99% solid, crystalline rock, with the contaminated water contained only in the remaining (less than 1%) interstitial space (i.e. fractures).

Groundwater Elevation Contours

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1. Groundwater contours drawn from Q4 2008 groundwater data to show groundwater conditions used for recalibration of the Precipitation Mass Balance Model (see Q2 2009 LTM Report). These contours developed from limited data recorded on 11/11/2008. Actual elevations may vary from conditions shown and the actual distribution of piezometric heads is likely more complex than indicated.

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- Concrete
- Overburden
- Bedrock
- [1]Groundwater Piezometric Head Contours for Q4 2008 (11-11-2008)[1]
- [1]Groundwater Table Q4 2008 (11-11-2008)[1]
- Groundwater Flow Direction
- Monitoring Well
- Screened Interval
- 8.6 Average Activity of SR-90 (pCi/L) for each Screened Interval (Quarter 3 2014)

CONTOUR INTERVAL

SOIL	ROCK	
		2-4 pCi/L
		4-8 pCi/L
		8-25 pCi/L
		>25 pCi/L

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5. Base map developed from electronic files, prepared by Badey and Watson Surveying & Engineering PC, Cold Spring, NY 10516. Exact locations and orientations of structures above the water table are approximate and/or have been modified on these sections to better illustrate contaminant source mechanisms and/or migration pathways.

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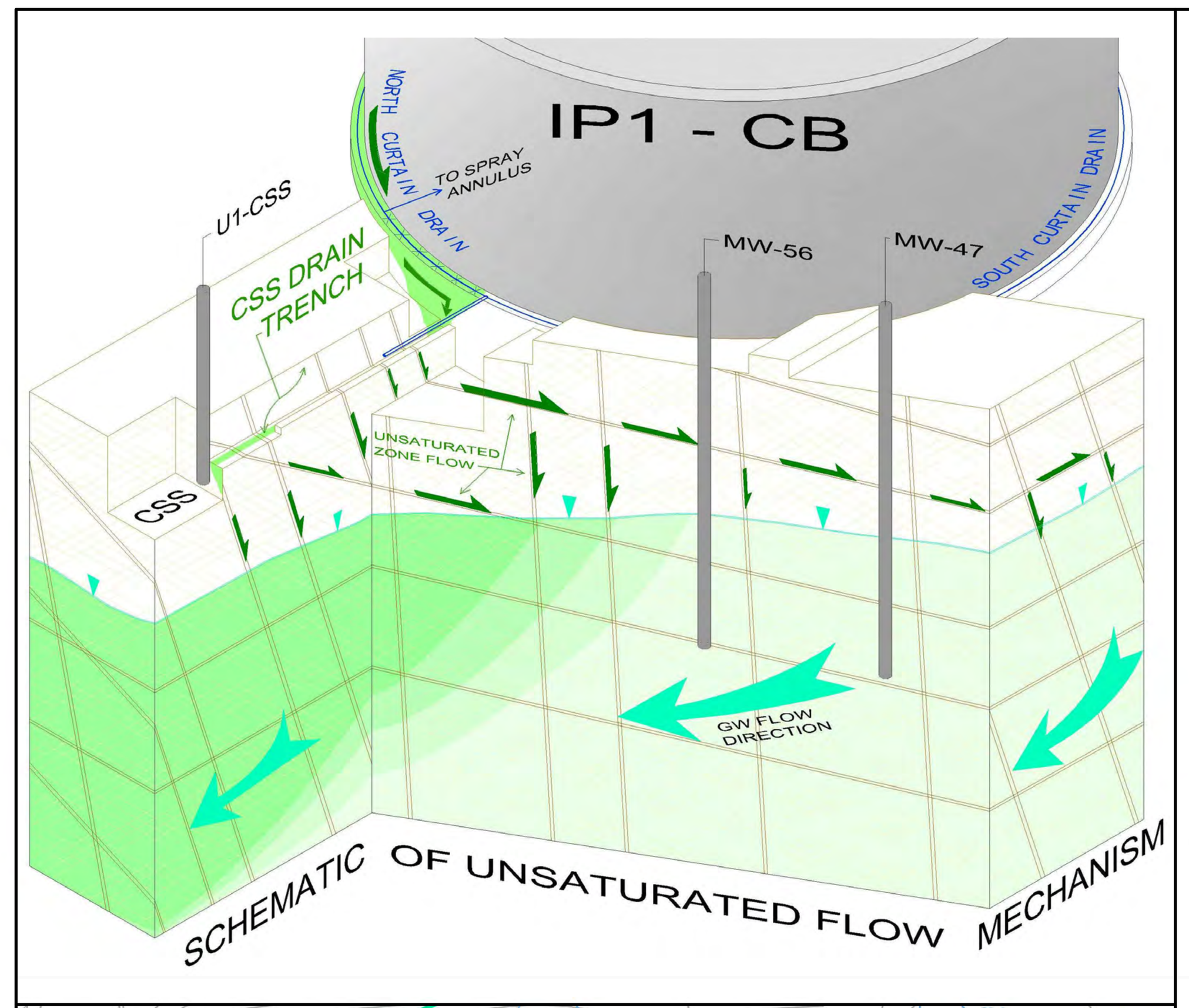
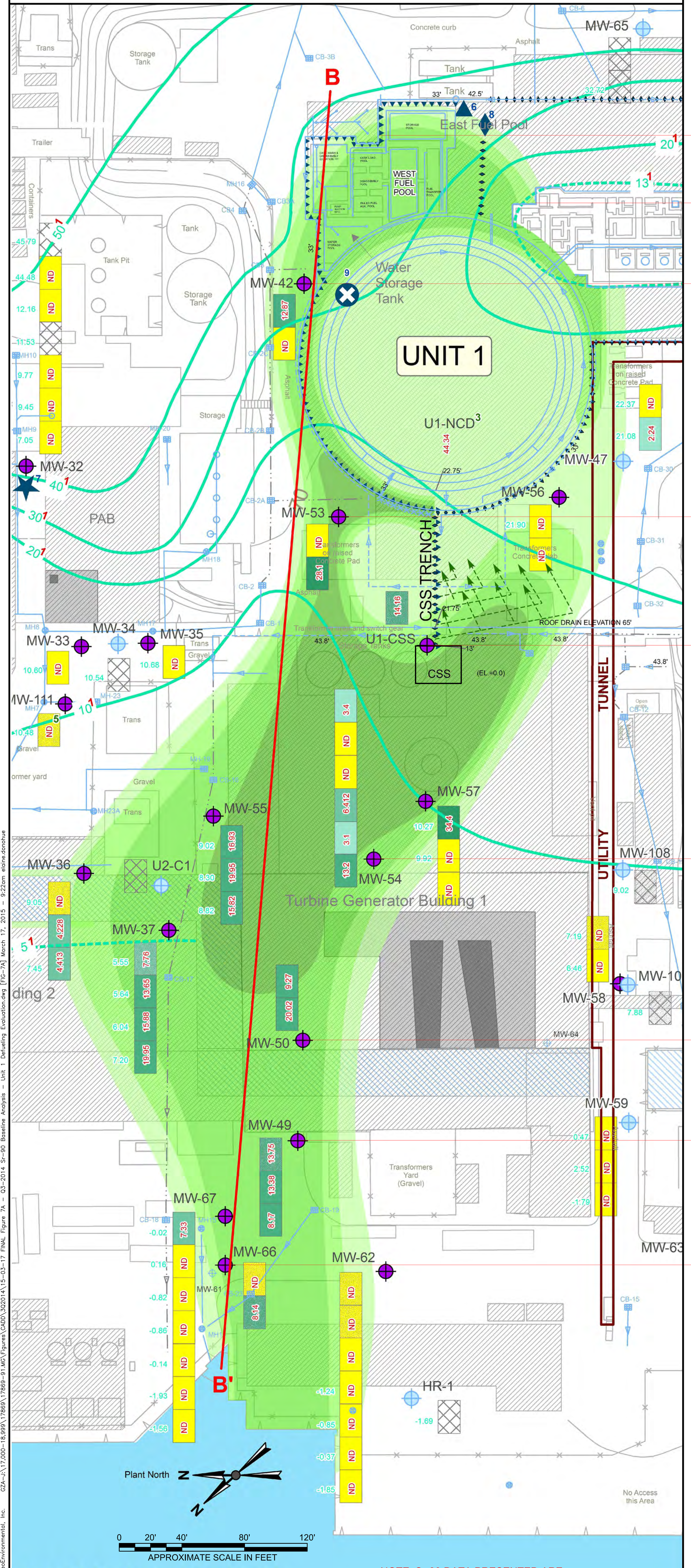
INDIAN POINT ENERGY CENTER
BUCHANAN, NEW YORK

Sr-90 BASELINE ANALYSIS - UNIT 1 DEFUELING EVALUATION 3rd QUARTER 2014

PROJ MGR: MJB DESIGNED BY: MJB REVIEWED BY: MJB DRAWN BY: GAS / EMD	DWG. DATE 3-17-2015 JOB NO. 01.0017869.93	FIGURE NO. 7A

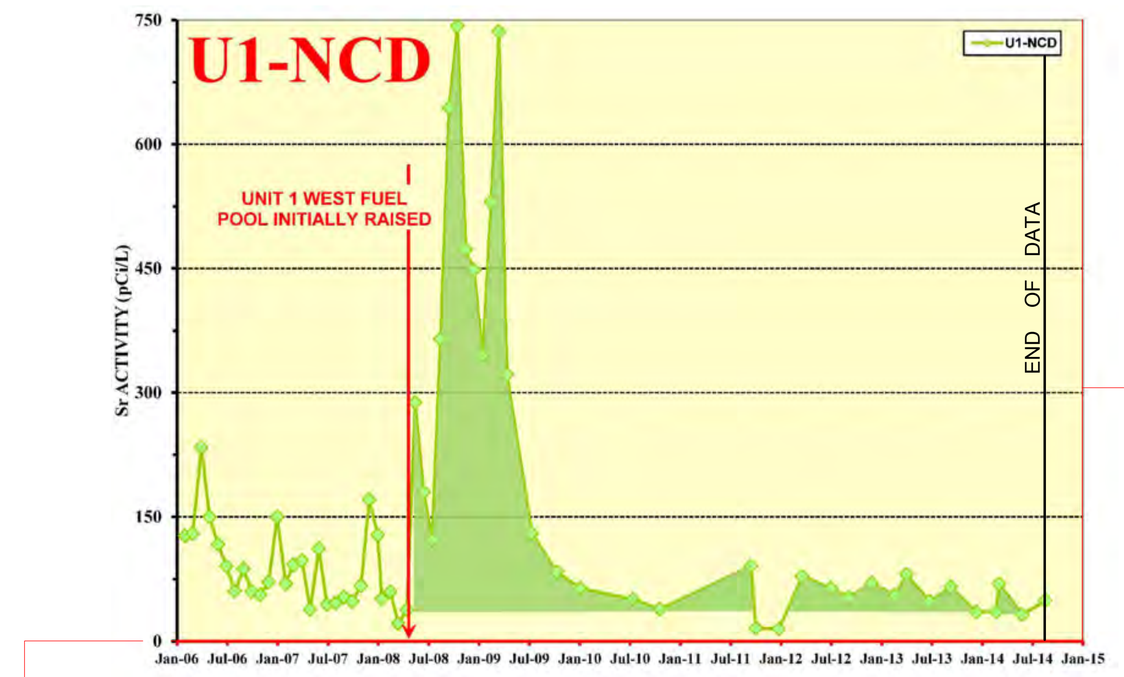
Sr-90 BASELINE ANALYSIS - UNIT 1 DEFUELING EVALUATION 3rd QUARTER 2014

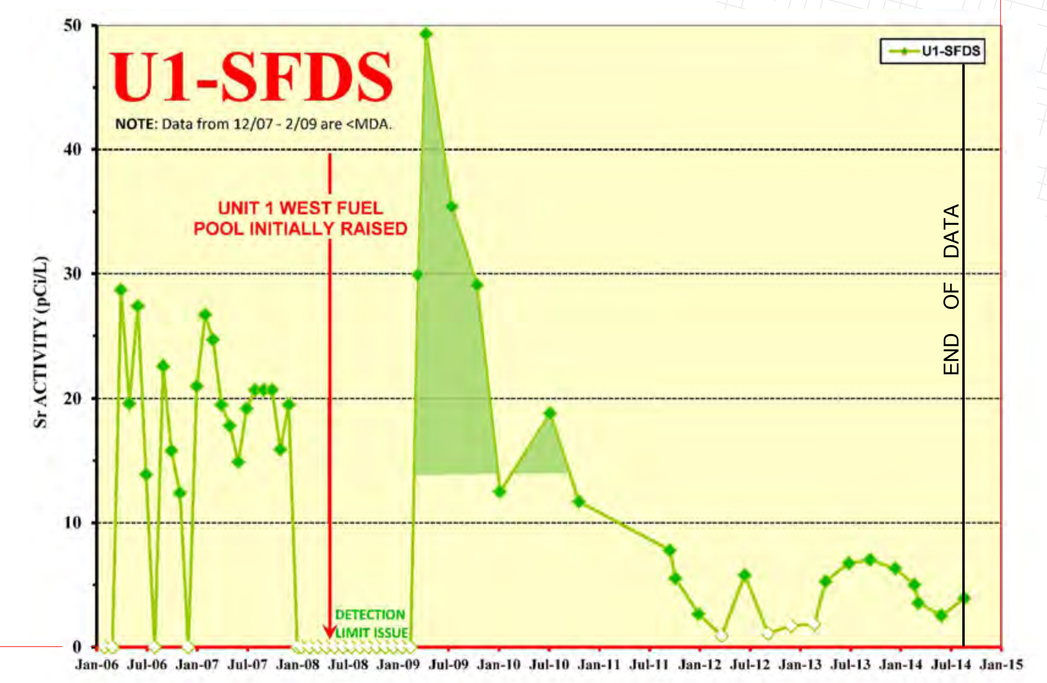


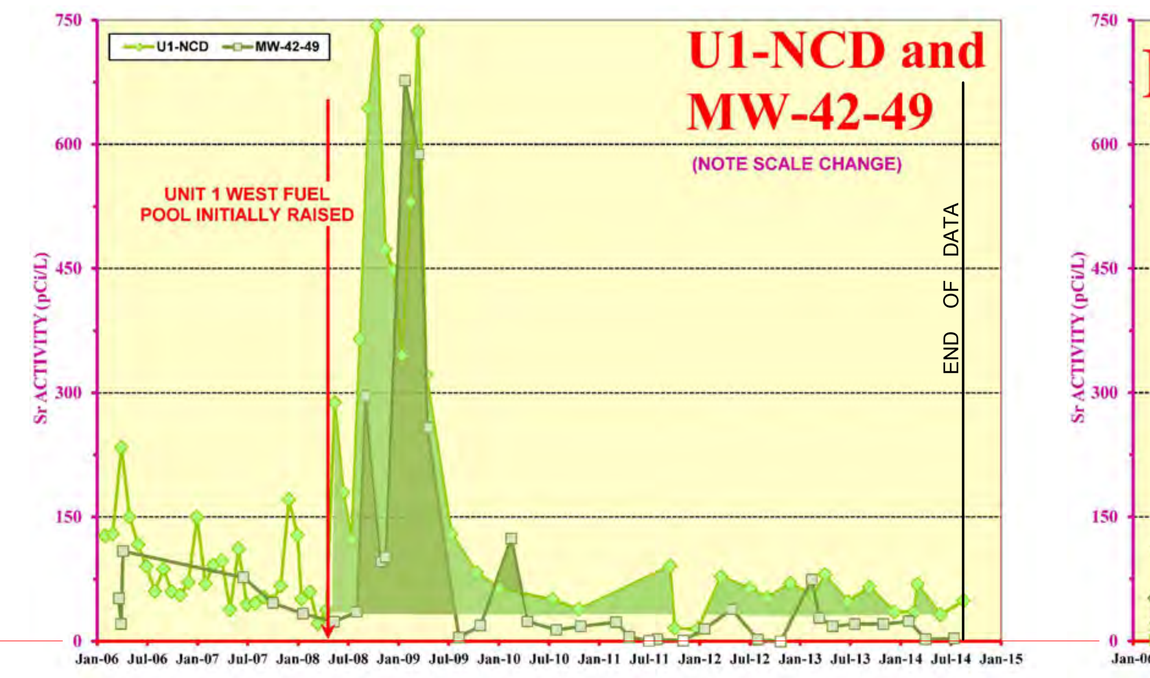


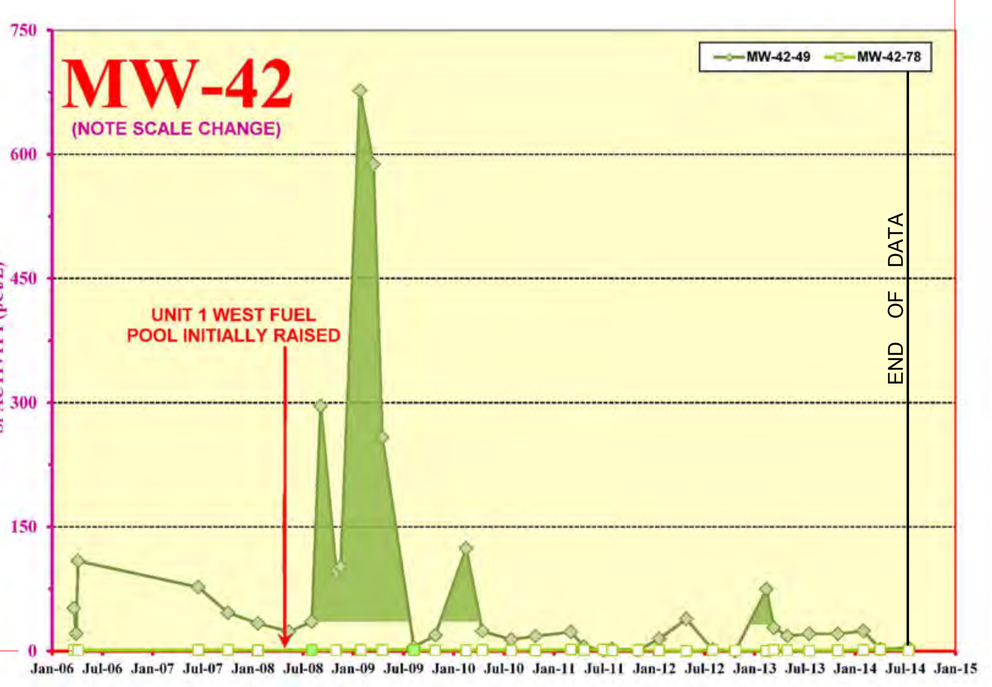
MW-65
B
East Fuel Pool
West Fuel Pool
Water Storage Tank
UNIT 1
U1-NCD
MW-42
MW-47
MW-32
PAB
MW-53
MW-56
CSS TRENCH
U1-CSS
CSS
TUNNEL
MW-33
MW-34
MW-35
MW-111
MW-55
MW-57
MW-36
U2-C1
MW-54
Turbine Generator Building 1
MW-37
UTILITY
MW-108
MW-58
MW-50
MW-59
MW-49
Transformer Yard
MW-67
MW-66
MW-62
MW-63
HR-1
B'
Plant North
APPROXIMATE SCALE IN FEET
HUDSON RIVER

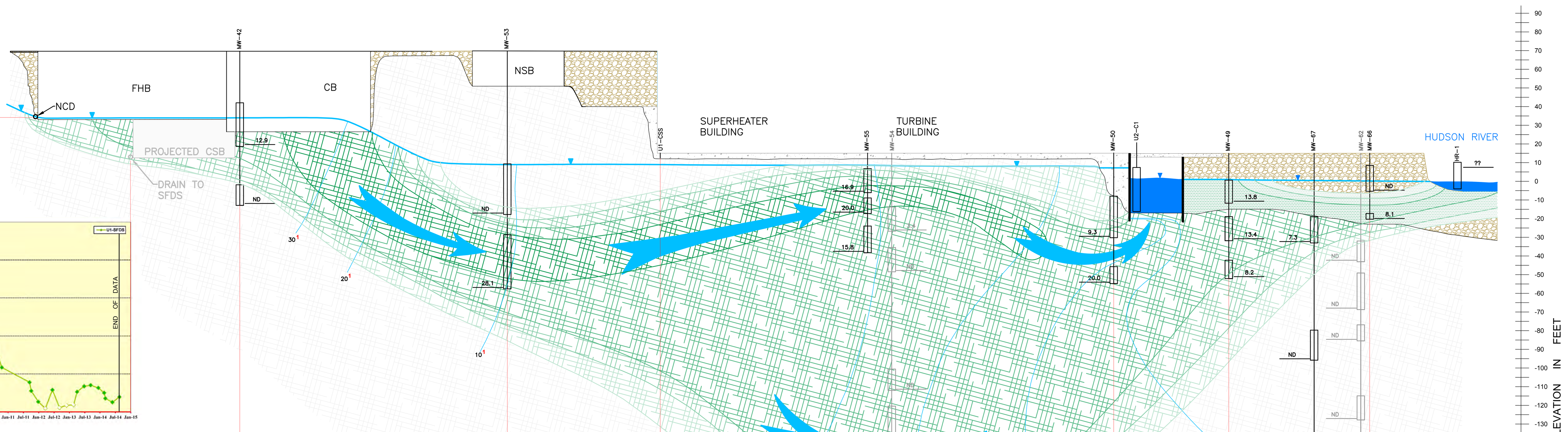
NOTE: Sr-90 DATA PRESENTED ARE Q3-2014 ROLLING YEARLY AVERAGES.

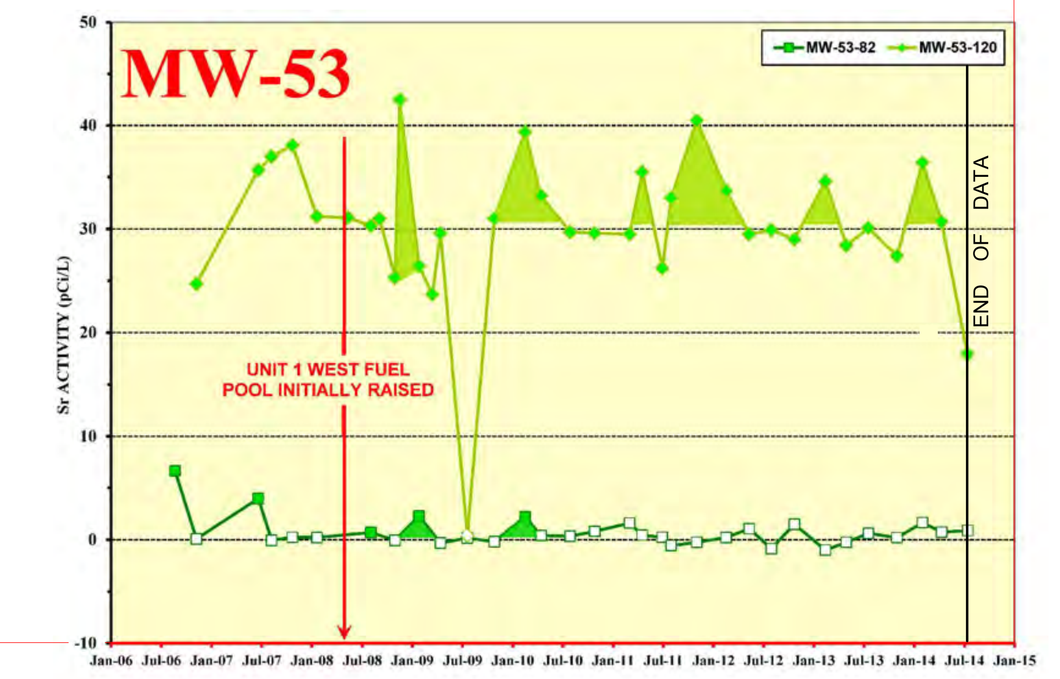


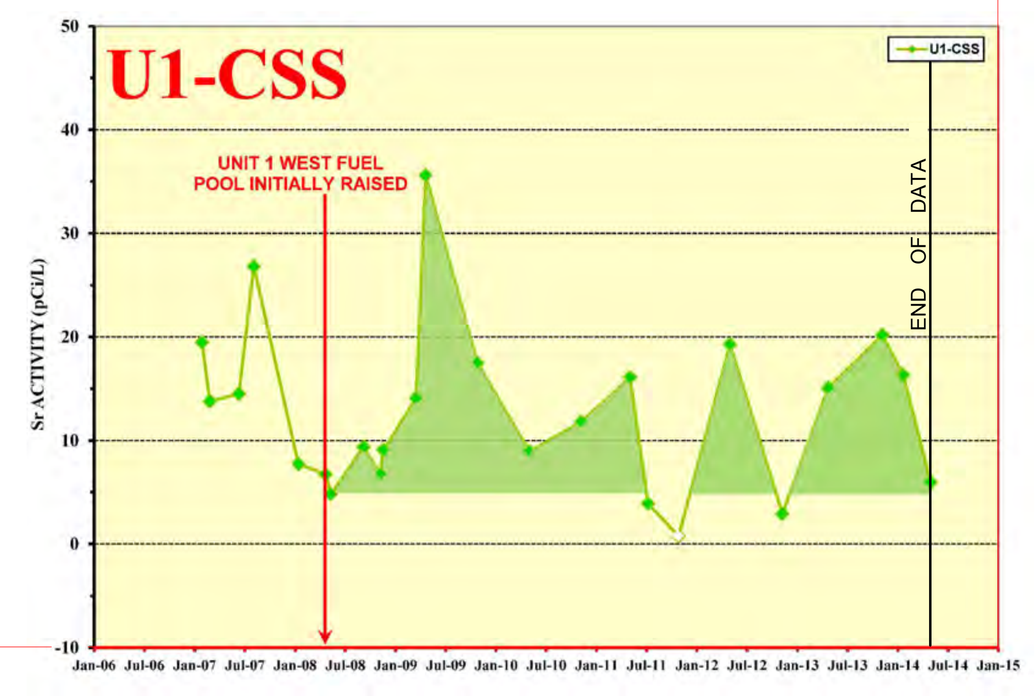


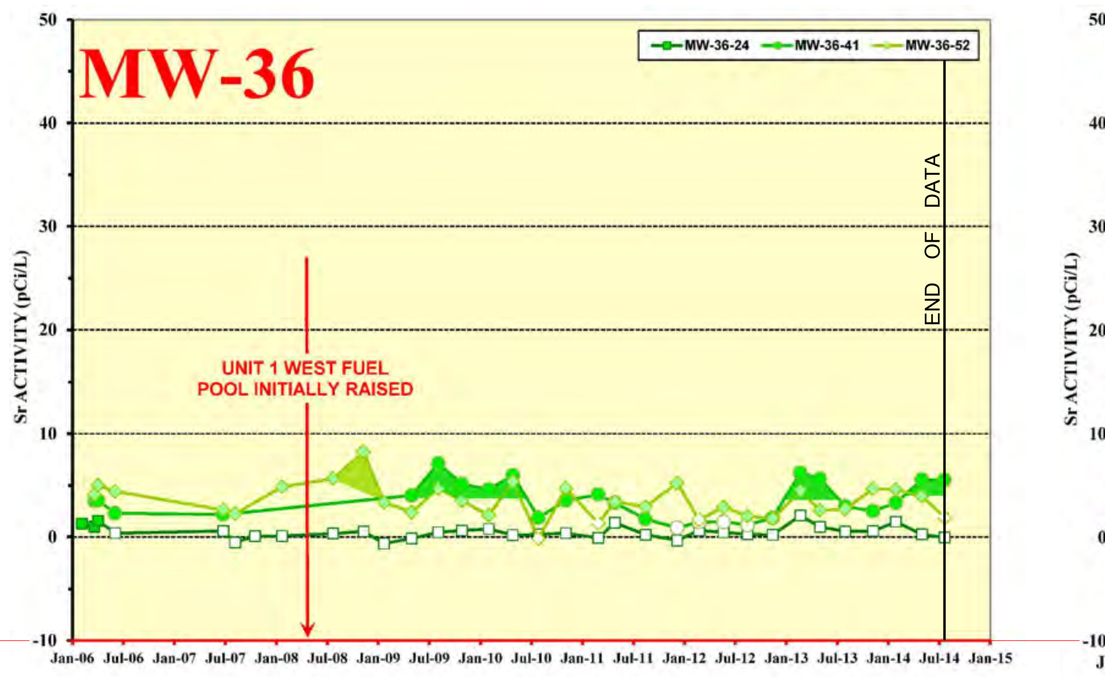


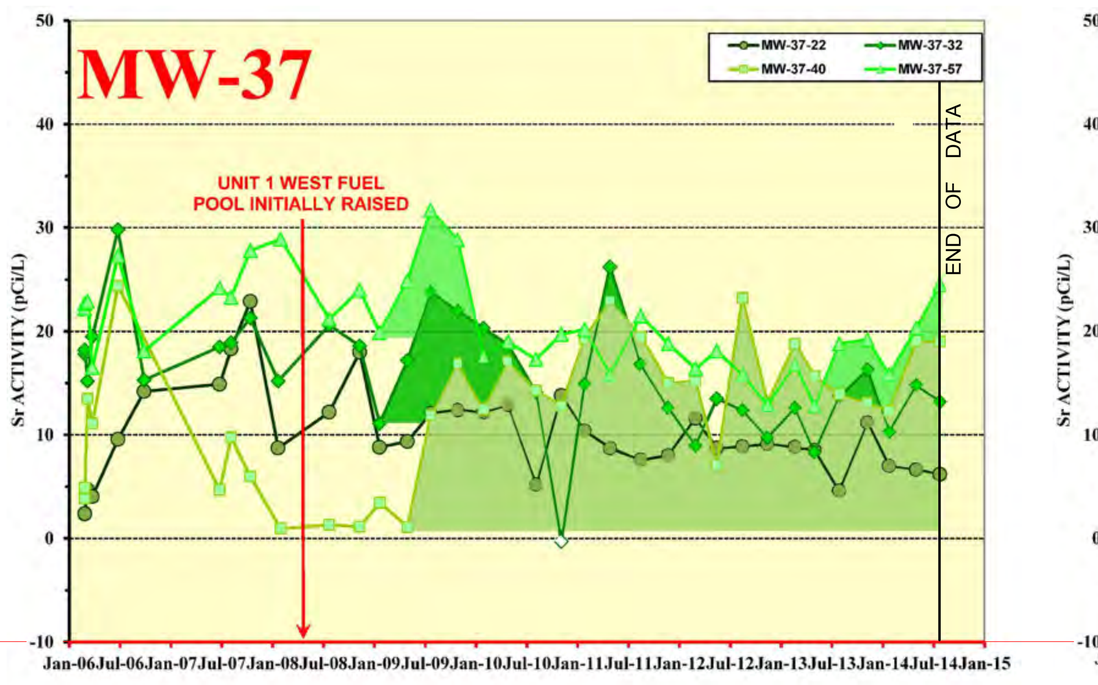


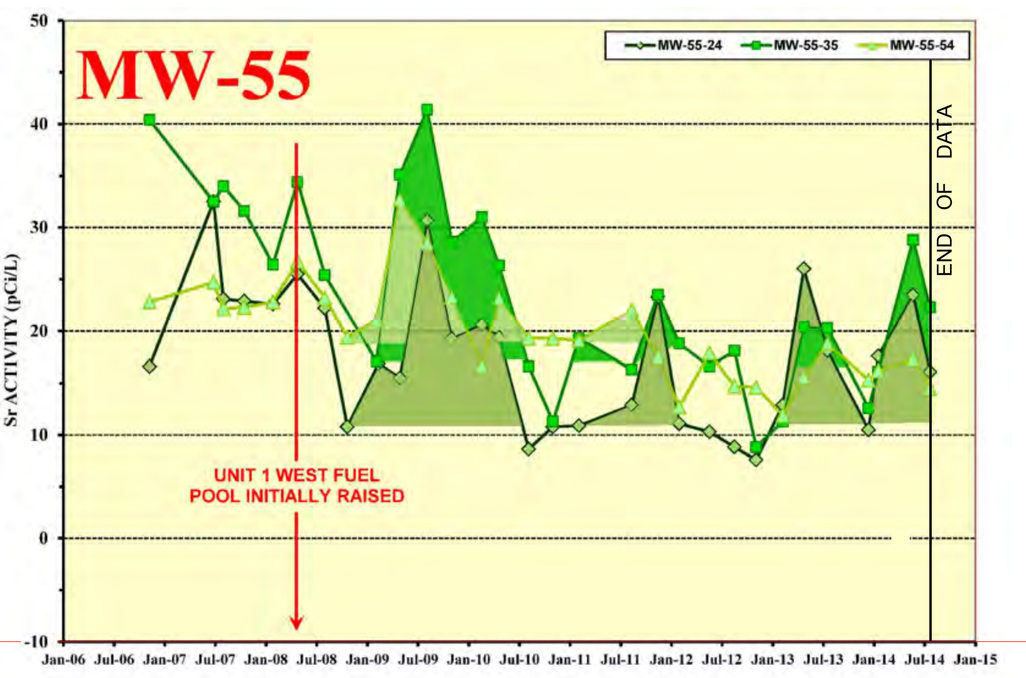


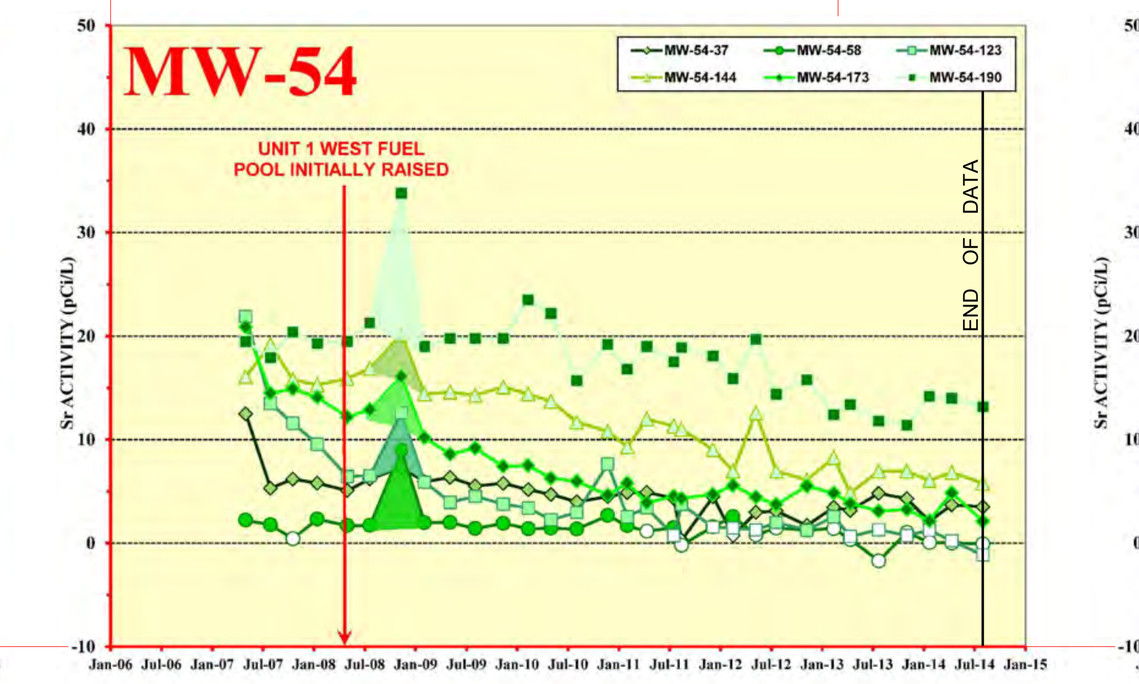


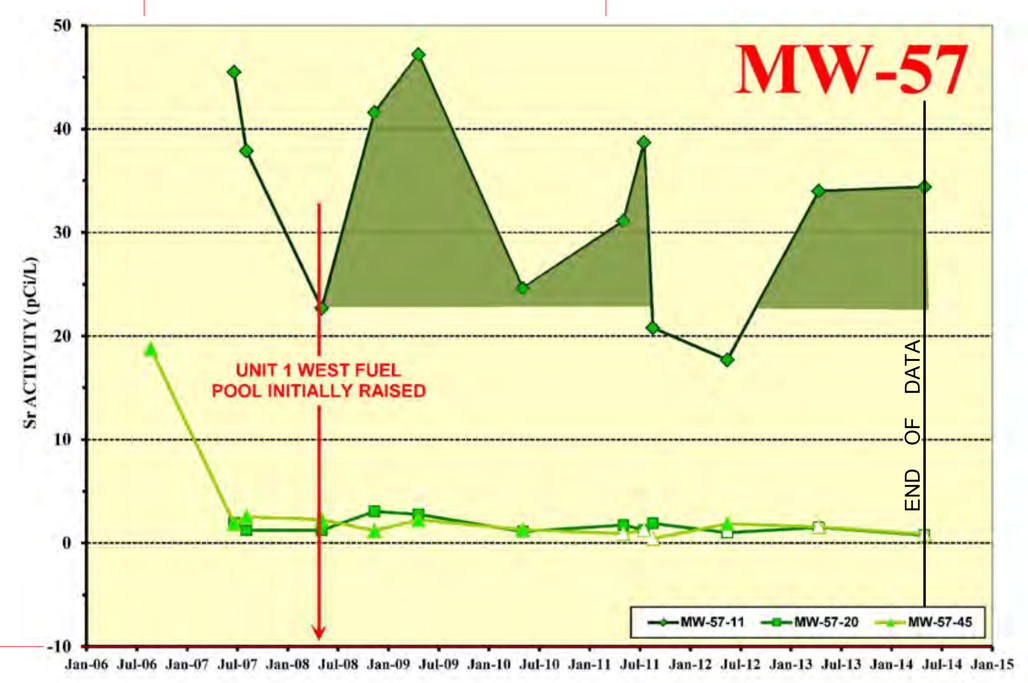


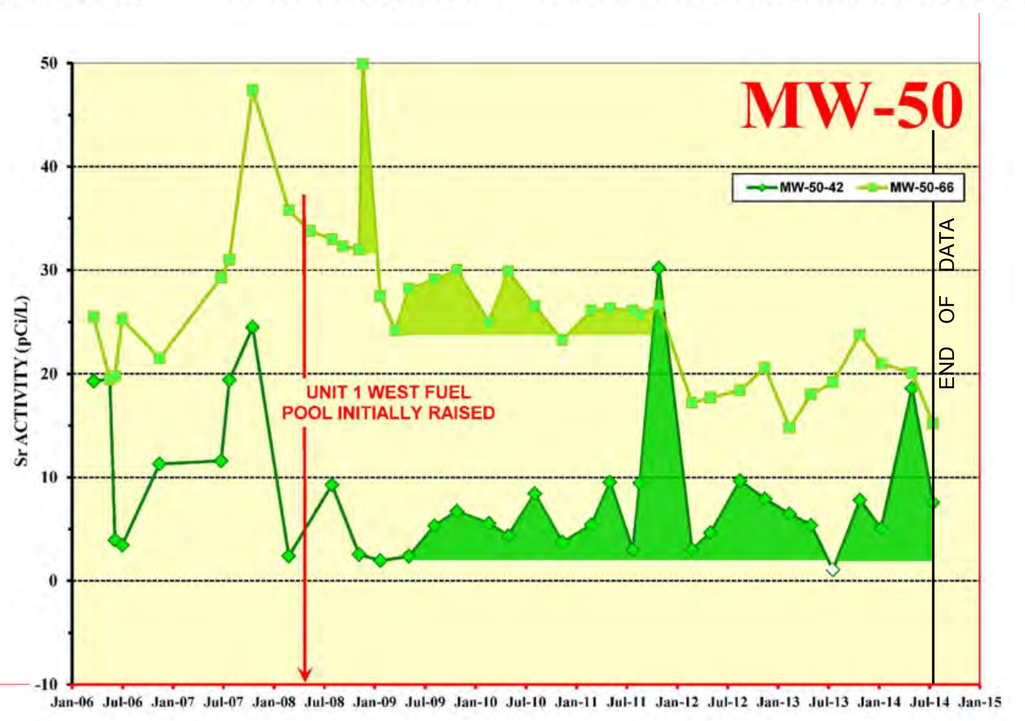


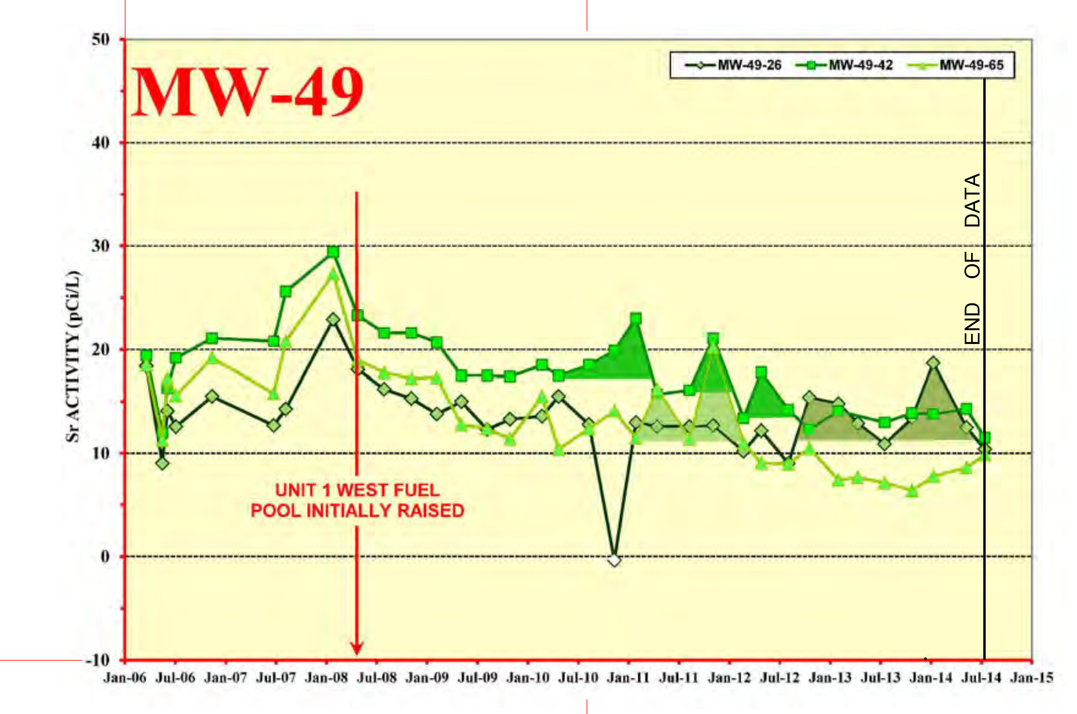


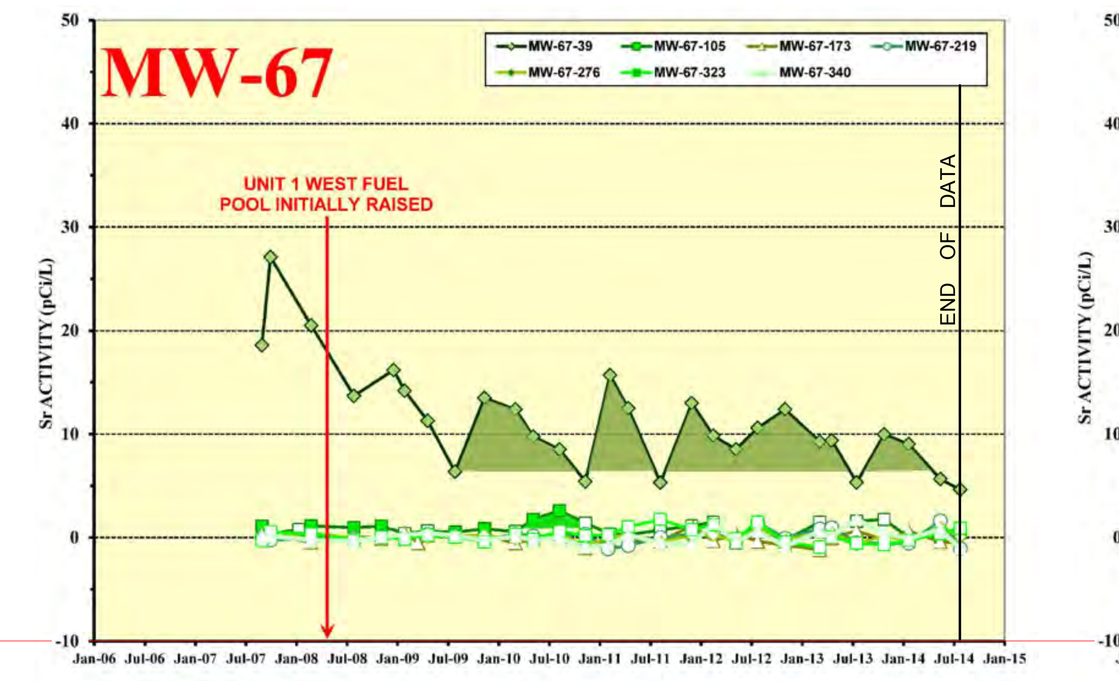


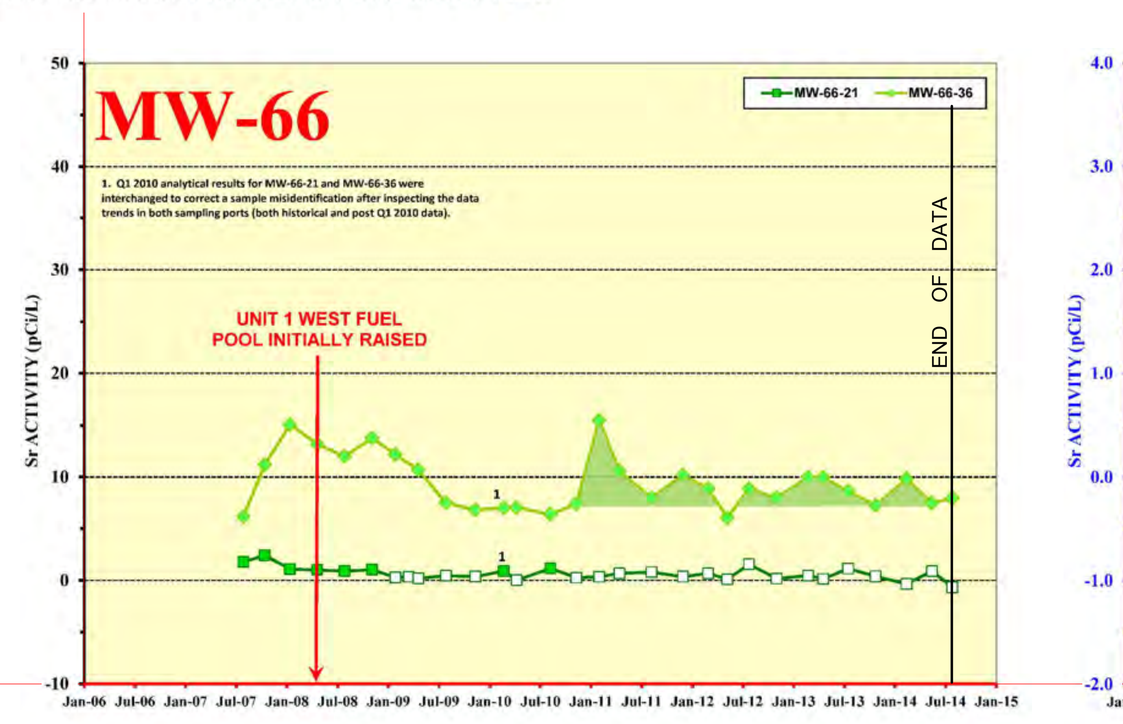


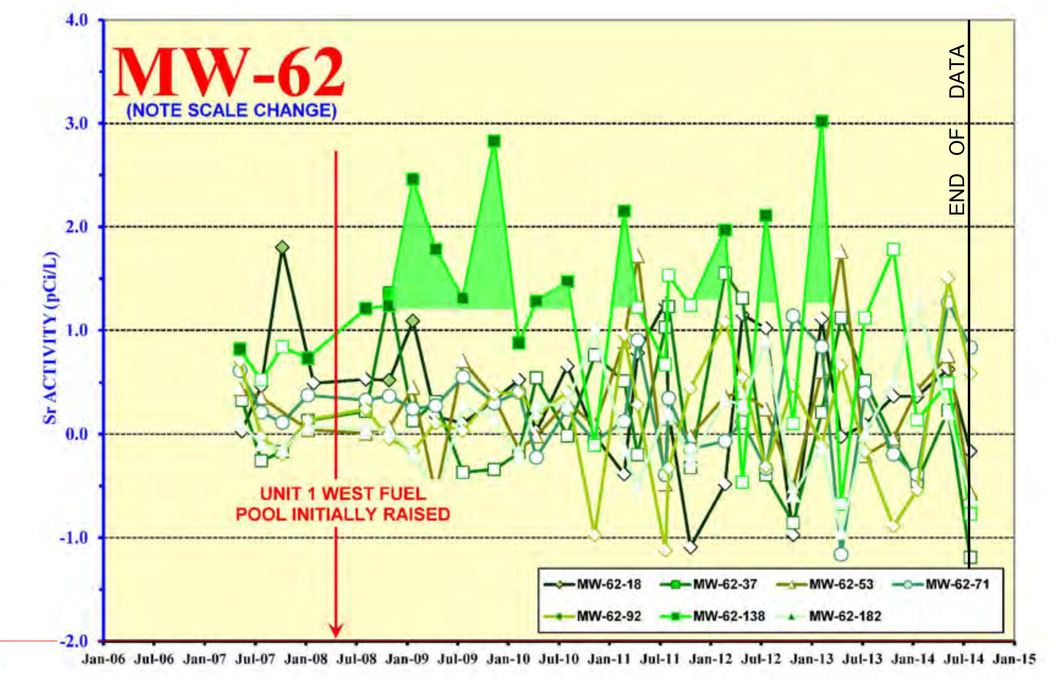












LEGEND

Sr-90 DATA GRAPHS

Point Shading

- △,○ Analytical Results Below MDC
- ●,□ Analytical Results Above MDC

Hatching

- Probable Response to Raising of Unit 1 West Fuel Pool

ISOPLETH PLAN

Isopleth Plan View Extracted from Figure 7

LEGEND

- MW-30 — Boring / Monitoring Installation Designation
- Longterm Radionuclide Monitoring Installation
- Standby Radionuclide Monitoring Installation
- Active Storm Drain
- Abandoned Storm Drain
- Catch Basin
- Footing Drain

Localized Transient Releases

- 6 Transient Distillate Tank Valve Leak in Unit 1 Fuel Storage Building - 03/07/2009
- 7 Unit 3 SFP Evap. Washout to MH-A2 – 3/25/09 (initial)
- 8 Transient Spill from Temporary R.O. Skid Piping - Entered MW-32 Vault and MH-9 - 11/21/2009
- 9 Sample Sink Overflow - Unit 1 Chemical Systems Building - Q2 2011
- 10 Unit 2 MOB Drain Leak - Q2 2012
- 11 Unit 1 Containment Spray Annulus (CSA) Overflow
- 12 Unit 2 Fan Building 51' Floor Drain Overfill

Probable Legacy Release SSCs

- Unit 2 Fuel Pool (All identified leaks repaired as of December 2007)
- Unit 1 West Fuel Pool (All U1-SFPs drained and inactive as of October 2008)
- Terminated Connection To Storm Drain
- Drain Exfiltration
- Inter-Structure Joint / Mud Mat
- Containment Spray Sump Trench

Depth-Specific Data

Average activity of Sr90 (pCi/L) for each screened interval.

Groundwater elevation	Average activity
11.3	1.3
11.9	6.0
12.6	20.2
12.8	1.6

Multiple Screened Intervals w/ Depth

- Screened in Soil
- Screened in Bedrock

[1] Groundwater elevation for each screened interval at time of low river tide for Q4 2008 (11/11/2008)[1].

Activity Data[1,2]

Bar Graphs; Average Sr-90, pCi/L	
(hatched)	No Sample
ND	Not Detected (ND)
0.74	ND - 1
1.7	1.0 - 2.0
2.86	2.0 - 4.0
5.5	4.0 - 8.0
16.1	8.0 - 25
40.4	> 25

Isopleths; Average Sr-90, pCi/L

- 2 - 4
- 4 - 8
- 8 - 25
- > 25

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Groundwater Elevation Contours

- 20 — [1] Ambient "Watertable" Contours for Q4 2008 (11/11/2008)[1]
- 5 - - - Contours Other Than 10' Interval
- Vadose Zone Contaminant Transport

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PROJ MGR: MJB	DWG. DATE	3-17-2015	FIGURE NO.
DESIGNED BY: MJB			7A
REVIEWED BY: MJB	JOB NO.	01.0017869.93	
DRAWN BY: GAS / EMD			