

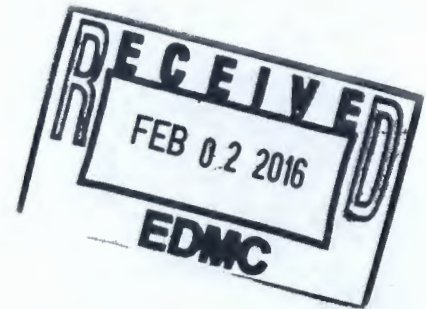


Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

1235590
[0078629H]

16-ESQ-0032

JAN 28 2016



Ms. J. A. Hedges, Manager
Nuclear Waste Program
Washington State Department of Ecology
3100 Port of Benton Boulevard
Richland, Washington 99354

Dear Ms. Hedges:

NOTIFICATION OF GROUND WATER SAMPLING RESULTS EXCEEDING SPECIFIC CONDUCTANCE FOR THE 216-A-29 DITCH MONITORING WELL NETWORK IN 2015 PER 40 CFR 265.93(2)(d)(1)

The sample results for the 216-A-29 Ditch Monitoring Well Network for 2015 indicate that three wells (299-E25-32P, 299-E25-35, and 299-E25-48) have exceeded the specific conductance mean value. The Soil and Ground Water Remediation Project will prepare a ground water quality assessment plan to evaluate specific conductance exceedance. Attachments 1 and 2 summarize the sampling results for the 216-A-29 Wells that show exceedance for specific conductance. Attachment 3 is a map showing the 216-A-29 Ditch Well Network for 2015.

During the meeting with the Washington State Department of Ecology (Ecology) staff on December 14, 2015, the U.S. Department of Energy Richland Operations Office (RL) informed Ecology of the exceedances in the ground water samples for the 216-A29 Ditch Well Network. At that time, RL explained that there would be a delay in resampling the wells to confirm the results as per 40 CFR 265(b)(2), due to access to Well 299-E25-48 being blocked with equipment associated with the 241-AY-102 Pipeline construction. RL wanted to be as efficient as possible by waiting until the 241-AY-102 Pipeline construction was out of the way, thus allowing to resampling all of the wells in the 216-A-29 Ditch Network in one sweep.

On January 14, 2016, RL and the CH2M HILL Plateau Remediation Company called Ecology staff to provide information on the confirmed specific conductance exceedance of the critical mean for the three ground water monitoring wells. In that call, it was also discussed that for a fourth well, 299-E25-26, the total organic carbon results were not exceeded after the well pump was removed, the well cleaned, the pump placed back in the well, and the well water sampled and analyzed.

On January 20, 2016, RL e-mailed Ecology staff the sample result tables confirming the specific conductance exceedance of the critical mean for the three ground water monitoring wells.

Ms. J. A. Hedges
16-ESQ-0032

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JAN 28 2016

If you have any questions, please contact me, or your staff may contact Jeffrey A. Frey, Assistant Manager for Safety and Environment, on (509) 376-7727.

Sincerely,



Stacy Charboneau
Manager

ESQ:ACM

Attachments

cc w/attachs:

J. D. Crumpler, Ecology

W. R. Faught, CHPRC

D. Goswami, Ecology

M. N. Jaraysi, CHPRC

N. M. Menard, Ecology

T. Mullin, Ecology

J. F. Williams Jr., CHPRC

Administrative Record, D-2-3

Ecology Environmental Portal Hanford

Ecology NWP Library

Environmental Portal, LMSI, A3-95

HF Operating Record (J. K. Perry, MSA A3-01)

ATTACHMENT

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216-A-29 DITCH TABLE 1-1

Consisting of 2 pages,
Including this cover page

Table 1-1. Sampling Event Summary for 216-A-29 Ditch Wells with an Exceedance of the Specific Conductance Critical Mean

Well Number	Indicator Parameter	Sample Event	Collection Date	HEIS Data Results Distributed	Comments	
299-E25-35	Specific Conductance (SC)	Semiannual	10/07/2015	10/20/2015	Average of quadruplicate field readings exceeded 401 uS/cm SC critical mean	
		<i>Met with Ecology on 12/14/15 to discuss 216-A-29 Ditch multi-well SC exceedance issues.</i>				
		Verification	12/14/2015	01/07/2016	Quadruplicate field instrument readings with two different meters and duplicate laboratory analyses. Confirmed SC critical mean exceedance.	
299-E25-48	Specific Conductance (SC)	Semiannual	10/09/2015	11/02/2015	Average of quadruplicate field readings exceeded 401 uS/cm SC critical mean	
		<i>Met with Ecology on 12/14/15 to discuss 216-A-29 Ditch multi-well SC exceedance issues.</i>				
		Verification	12/18/15	01/07/2016	Initially, access to well was blocked by WMA A/AX tank farm equipment. Quadruplicate field instrument readings with two different meters and duplicate laboratory analyses. Confirmed SC critical means exceedance.	
299-E25-32P	Specific Conductance (SC)	Semiannual	10/27/2015	11/18/2015	Average of quadruplicate field readings exceeded 401 uS/cm SC critical mean	
		<i>Met with Ecology on 12/14/15 to discuss 216-A-29 Ditch multi-well SC exceedance issues.</i>				
		Verification	11/20/15	12/01/15	11/20/15 - Requested lab run SC analysis on available sample. Lab analysis value verified previous quadruplicate field result. Confirmed SC critical means exceedance.	

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216-A-29 DITCH TABLE 1-2

Consisting of 3 pages,
Including this cover page

Table 1-2 Specific Conductance (SC) Measure Results

Well Name	Sample Date	Semiannual Sampling Event (SE) or Verification Sample (VS)	Sample Number	Value (uS/cm)	Measurement	Average Value <i>(2015 SC Critical Mean = 401 uS/cm)</i>
299-E25-32P	10/27/2015	SE	B32LK8	454	Field	454
299-E25-32P	10/27/2015	SE	B32MR2	455	Field	
299-E25-32P	10/27/2015	SE	B32MR4	454	Field	
299-E25-32P	10/27/2015	SE	B32MR3	454	Field	
299-E25-32P	11/20/2015	VS	B32LK9	486	Lab	490
299-E25-32P	11/20/2015	VS	B32LL0	493	Lab	
299-E25-35	10/7/2015	SE	B32LL3	491	Field	493
299-E25-35	10/7/2015	SE	B32MR7	493	Field	
299-E25-35	10/7/2015	SE	B32MR6	493	Field	
299-E25-35	10/7/2015	SE	B32MR5	493	Field	
299-E25-35	12/14/2015	VS	B33YN7	528	Field	518
299-E25-35	12/14/2015	VS	B33YN8	517	Field	
299-E25-35	12/14/2015	VS	B33YX1	520	Field	
299-E25-35	12/14/2015	VS	B33YN9	507	Field	
299-E25-35	12/14/2015	VS	B34943	533	Field	
299-E25-35	12/14/2015	VS	B34944	521	Field	523
299-E25-35	12/14/2015	VS	B34945	521	Field	
299-E25-35	12/14/2015	VS	B34946	515	Field	
299-E25-35	12/14/2015	VS	B33YX2	466	Lab	465
299-E25-35	12/14/2015	VS	B33YX3	463	Lab	
299-E25-48	10/9/2015	SE	B32MR8	577	Field	577
299-E25-48	10/9/2015	SE	B32LL6	576	Field	
299-E25-48	10/9/2015	SE	B32MR9	577	Field	
299-E25-48	10/9/2015	SE	B32MT0	577	Field	
299-E25-48	12/18/2015	VS	B33YP0	596	Field	590
299-E25-48	12/18/2015	VS	B33YX9	591	Field	
299-E25-48	12/18/2015	VS	B33YX4	587	Field	
299-E25-48	12/18/2015	VS	B33YY0	586	Field	

Table 1-2 Specific Conductance (SC) Measure Results

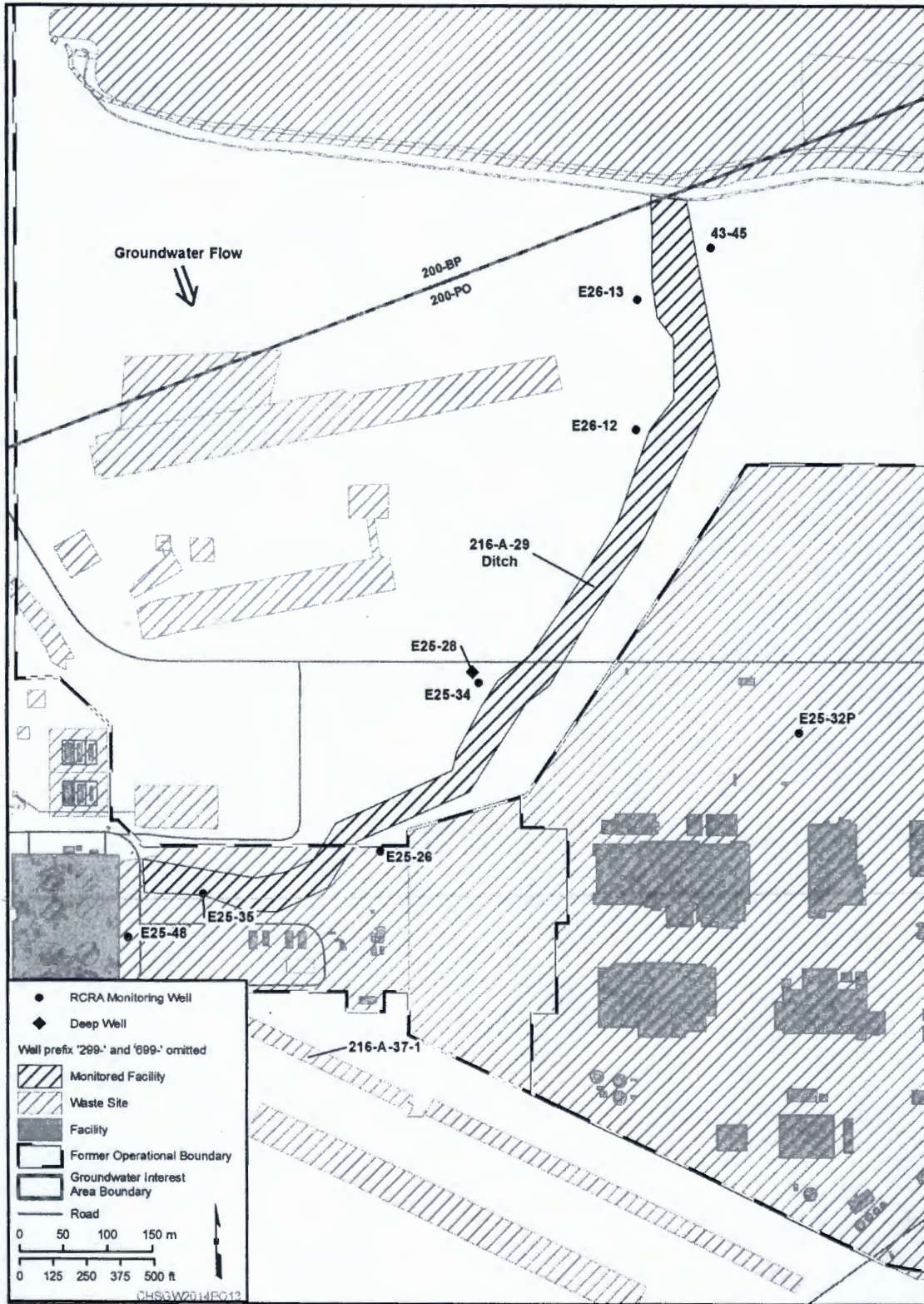
Well Name	Sample Date	Semiannual Sampling Event (SE) or Verification Sample (VS)	Sample Number	Value (uS/cm)	Measurement	Average Value <i>(2015 SC Critical Mean = 401 uS/cm)</i>
299-E25-48	12/18/2015	VS	B33YX5	642	Lab	636
299-E25-48	12/18/2015	VS	B33YX6	629	Lab	
299-E25-48	12/18/2015	VS	B34948	584	Field	568
299-E25-48	12/18/2015	VS	B33YX4	564	Field	
299-E25-48	12/18/2015	VS	B34950	563	Field	
299-E25-48	12/18/2015	VS	B33YY0	561	Field	

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216-A-29 DITCH WELL NETWORK MAP

Consisting of 2 pages,
Including this cover page



216-A-29 Ditch RCRA Well Network in 2015