

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Residue												
	Alka-linity, wat flt fxd end	Bromide lab, water, water,	Chlor-ide, water, water,	Fluor-ide, water, water,	Silica, water, water,	Sulfate, water, water,	sum of constituents tuents	Residue water, fltrd,	Ammonia water, fltrd,	Ammonia water, fltrd,	Nitrate water, fltrd,	Nitrate water, fltrd,	
	Sodium, mg/L as percent (00932)	mg/L as (29801)	mg/L (71870)	mg/L (00940)	mg/L (00950)	mg/L (00955)	mg/L (00945)	tons/acre-ft (70301)	mg/L as N (70303)	mg/L as N (71846)	mg/L as N (00608)	mg/L (71851)	Nitrate water, fltrd, (00618)
413302097090530 VADOSE ZONE ACTVZ1-1A NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)													
APR 2004													
02...	--	--	--	--	--	--	--	--	.12	.09	14.3	3.23	
12...	--	--	--	--	--	--	--	--	--	--	--	--	
MAY													
10...	20	--o	.08	25.1	1.0	61.2	66.3	--	--	E.04n	15.7	3.54	
11...	17	201@c	.11	15.6	1.1	58.1	47.6	380	.52	.06	.04	18.3	
14...	15	221@c	.04	10.4	1.2	59.0	38.4	377	.51	.07	.06	19.0	
24...	--	231@c	--	--	--	--	--	--	--	E.03n	23.7	5.36	
JUN													
22...	9	238@c	E.01n	3.86	1.1	68.5	46.6	410	.56	.08	.07	--	
JUL													
06...	9	190@c	.28	2.81	1.1	66.2	39.3	376	.51	.17	.13	30.1	
22...	8	244@c	6.41d	1.91	1.1	66.8	35.7	413	.56	.29	.22	--	
23...	8	283@c	5.03d	1.50	1.2	61.9	27.5	411	.56	.11	.08	--	
413302097090531 VADOSE ZONE ACTVZ1-1B NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)													
APR 2004													
12...	--	--	--	--	--	--	--	--	--	--	--	--	
413302097090532 VADOSE ZONE ACTVZ1-1C NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)													
APR 2004													
02...	--	--	--	--	--	--	--	--	.46	.36	33.8	7.63	
12...	--	--	--	--	--	--	--	--	--	--	--	--	
MAY													
14...	--	--	--	--	--	--	--	--	.38	.30	32.1	7.25	
24...	--	--	--	--	--	--	--	--	.07	.05	29.9	6.76	
JUL													
22...	--	--	--	--	--	--	--	--	2.58	2.00d	30.6	6.92	
23...	--	--	--	--	--	--	--	--	1.01	.78	31.4	7.08	
AUG													
25...	--	--	--	--	--	--	--	--	5.41	4.20d	36.7	8.30	
SEP													
22...	--	--	--	--	--	--	--	--	3.88	3.01d	39.6	8.95	
413302097090533 VADOSE ZONE ACTVZ1-1D NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)													
APR 2004													
02...	35	--	.36	107	.3	63.0	154	--	.52	.40	35.2	7.96	
12...	--	--	--	--	--	--	--	--	--	--	--	--	
413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)													
APR 2004													
15...	--	--	--	--	--	--	--	--	.26	.20	49.9	11.3	
MAY													
11...	--	--	--	--	--	--	--	--	.06	.05	62.1	14.0	
14...	--	--	--	--	--	--	--	--	E.04n	--	--	--	
18...	--	--	--	--	--	--	--	--	<.08d	62.2	14.1		
24...	--	--	--	--	--	--	--	--	E.02n	--	--	--	
JUN													
14...	--	--	--	--	--	--	--	--	1.01	.78	121	27.4	

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CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Nitrite + nitrate water mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L (00613)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, water, fltrd, mg/L (00671)	Total gen, by anal (62854)	Manganese, water, fltrd, ug/L (01046)	1-Naphthalene, water, fltrd, ug/L (01056)	2,6-Diethyl-aniline, water, fltrd, ug/L (49295)	2-[(2-6methyl diethyl amino]2 oxoESA, ug/L (82660)	2-Chloroanilide, wat flt, ug/L (62850)	CIAT, water, fltrd, ug/L (61618)	acetophenyl) (04040)
413302097090530 VADOSE ZONE ACTVZ1-1A NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)													
APR 2004													
02...	3.28	.171	.052	3.12	1.02	26.6d	--	--	<.09	<.006	.51	<.005	<.006
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
10...	3.55	.033	.010	.294	.10oc	6.43d	E5n	37.5	<.09	<.006	.63	<.005	<.006
11...	4.14	.033	.010	.233	.08oc	5.63d	<6	21.3	<.09	<.006	.02	<.005	E.044
14...	4.30	.036	.011	.239	.08oc	6.01d	7	15.9	<.09	<.006	.43	<.005	E.055
24...	5.38d	.056	.017	.402	.13oc	8.85d	--	--	<.09	<.006	<.02	<.005	E.105
JUN													
22...	5.79d	--	<.008	.411	.13oc	9.52d	<6	11.4	<.09	<.006	--	<.005	E.118
JUL													
06...	6.81d	.030	.009	.297	.10oc	9.09d	E4n	7.0	<.09	<.006	--	<.005	E.105
22...	6.98d	--	E.005n	.184	.06	11.7d	<6	6.8	<.09	<.006	--	<.005	E.094
23...	6.36d	--	<.008	.258	.08oc	9.29d	E4n	3.7	<.09	<.006	--	<.005	E.101
413302097090531 VADOSE ZONE ACTVZ1-1B NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)													
APR 2004													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
413302097090532 VADOSE ZONE ACTVZ1-1C NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)													
APR 2004													
02...	7.73d	.338	.103	6.13	2.00doc	55.4d	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
14...	7.26d	.043	.013	.862	.28oc	21.2d	--	--	--	--	--	--	--
24...	6.90d	.460	.140	.797	.26oc	27.7d	--	--	--	--	--	--	--
JUL													
22...	6.94d	.082	.025	.714	.23	39.7d	--	--	--	--	--	--	--
23...	7.09d	.030	.009	.258	.08oc	16.8d	--	--	--	--	--	--	--
AUG													
25...	8.35d	.161	.049	.763	.25oc	84.6d	--	--	--	--	--	--	--
SEP													
22...	8.98d	.105	.032	.227	.074	51.8d	--	--	--	--	--	--	--
413302097090533 VADOSE ZONE ACTVZ1-1D NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)													
APR 2004													
02...	8.01d	.174	.053	.558	.18doc	10.4d	E5n	201	<.09	<.006	<.02	<.005	<.006
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)													
APR 2004													
15...	11.3d	.039	.012	.595	.19oc	16.4d	--	--	<.09	<.006	--	<.005	<.006
MAY													
11...	14.0d	.039	.012	.438	.14oc	17.7d	--	--	<.09	<.006	.55	<.005	<.006
14...	14.3d	--	E.006n	.322	.10oc	17.6d	--	--	<.09	<.006	.62	<.005	<.006
18...	14.1d	.079	.024d	.129	.04doc	16.6d	--	--	<.09	<.006	.77	<.005	<.006
24...	16.7d	--	E.004n	.245	.08oc	18.6d	--	--	<.09	<.006	.87	<.040	<.006
JUN													
14...	27.4d	.102	.031	.316	.10oc	33.8d	--	--	--	--	--	--	--

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VADOSE ZONE/SOIL—Continued

2-Ethyl
-6- 3,4-Di- 4Chloro Aceto- Aceto- Ala- Ala- Amino-
methyl- chloro- 2methyl chlor OA, chlor Aceto- chlor chlor chlor methyl-
aniline aniline phenol, water, water, SAA, chlor, ESA SA, water, water, SAA, chlor, phos-
water, water, water, filtrd, filtrd, water, water, water, water, water, water, chlor, phonic
filtrd, filtrd, filtrd, 0.7u GF 0.7u GF filtrd, filtrd, filtrd, 0.7u GF 0.7u GF filtrd, filtrd, water, acid,
ug/L
(61620) (61625) (61633) (61029) (61030) (62847) (49260) (62849) (50009) (61031) (62848) (46342) (62649)

413302097090530 VADOSE ZONE ACTVZ1-1A NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004													
02...	<.004	<.004	<.006	<.02	.02	<.02	<.006	<.02	<.02	<.02	<.02	--u	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
10...	<.004	<.004	<.006	.50	.34	.15	.180	<.02	<.02	<.02	.14	--u	.3
11...	<.004	<.004	<.006	.55	.45	.03	.211	.12	.53	<.02	.16	<.005	.3
14...	<.004	<.004	<.006	.48	.42	.17	.166	<.02	.02	<.02	.13	<.005	.5
24...	<.004	<.004	<.006	.72	.74	.46	.197	<.02	<.02	.02	.24	.077	.2
JUN													
22...	<.004	<.004	<.006	--	--	--	.086	--	--	--	--	.044	.6
JUL													
06...	<.004	<.004	<.006	--	--	--	.081	--	--	--	--	<.005	.2
22...	<.004	<.004	<.006	--	--	--	.070	--	--	--	--	<.005	1.3
23...	<.004	<.004	<.006	--	--	--	.046	--	--	--	--	<.005	.3

413302097090531 VADOSE ZONE ACTVZ1-1B NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090533 VADOSE ZONE ACTVZ1-1D NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

41 33 34N 096 32W VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

	Azin-	Azin-	Ben-			cis-		Desulf-				
	phos-	phos-	flur-	Car-	Chlor-	Per-		inyl	Diaz-			
Atra-	methyl	methyl	alin,	baryl,	pyrifos	Chlor-	methrin	Cyflu-	fipro-	ion		
zine,	oxon,	water,	water,	water,	oxon,	water	thrin,	methrin	water	oxon,		
water,	water,	filtrd	filtrd	filtrd	water,	water,	water,	filtrd	water,	water,		
Date	filtrd,	filtrd,	0.7u GF	0.7u GF	0.7u GF	filtrd,	filtrd,	0.7u GF	filtrd,	filtrd,		
	ug/L											
	(39632)	(61635)	(82686)	(82673)	(82680)	(61636)	(38933)	(82687)	(61585)	(82682)	(62170)	(61638)

413302097090530 VADOSE ZONE ACTVZ1-1A NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004														
02...	<.007	<.02	<.050	<.010	<.100	<.06	<.005	<.006	<.008	<.009	<.020	<.012	<.01	
12...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY														
10...	<.200	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	
11...	.243	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	
14...	.189	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	
24...	.318	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	--u	
JUN														
22...	.278	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	
JUL														
06...	.199	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	--u	
22...	.158	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	
23...	.218	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	<.01	

413302097090531 VADOSE ZONE ACTVZ1-1B NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090533 VADOSE ZONE ACTVZ1-1D NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004 02... < .007 < .02 < .050 < .010 < .060 < .06 < .005 < .006 < .008 < .009 < .003 < .012 < .01
 12... -- -- -- -- -- -- -- -- -- -- -- -- -- --

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

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VADOSE ZONE/SOIL—Continued

413302097090530 VADOSE ZONE ACTVZ1-1A NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004														
02...	<.005	--u	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	--u	--u	<.029	
12...	--	--	--	--	--	--	--	--	--	--	--	--	--	
MAY														
10...	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	
11...	<.005	<.08	<.009	<.02	.03	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	
14...	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	--u	<.03	<.029	
24...	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.029	
JUN														
22...	<.005	<.08	<.009	--	--	--	<.006	<.03	<.004	<.008	<.03	<.03	<.029	
JUL														
06...	--u	<.08	<.009	--	--	--	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	
22...	<.005	<.08	<.009	--	--	--	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	
23...	<.005	<.08	<.009	--	--	--	<.006	<.0020	<.004	<.049	<.04	<.03	<.029	

413302097090531 VADOSE ZONE ACTVZ1-1B NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090533 VADOSE ZONE ACTVZ1-1D NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004 02... < .005 --u < .009 < .02 < .02 < .02 < .006 < .03 < .004 < .008 --u < .03 < .029
 12... -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

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VADOSE ZONE/SOIL—Continued

Fipro-	Fipro-	Flufen-	Flufe-		Glufo-	Glypho-						
nil	nil	Fipro-	acet	nacet	Flufe-	Fonofos		sinate,	sate,	Hexa-	Ipro-	Isofen-
sulfide	sulfone	nil,	ESA,	OA,	nacet,	oxon,	Fonofos	water,	water,	zinone,	dione,	phos,
water,	water,	water,	water,	water,	water,	water,		filtrd,	filtrd,	water,	water,	water,
filtrd,	filtrd,	filtrd,	filtrd,	filtrd,	filtrd,	filtrd,	0.7u GF	0.7u GF	filtrd,	filtrd,	filtrd,	filtrd,
ug/L		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L		ug/L	ug/L	ug/L	ug/L	ug/L
(62167)	(62168)	(62166)	(61952)	(62483)	(62481)	(61649)	(04095)	(62721)	(62722)	(04025)	(61593)	(61594)

413302097090530 VADOSE ZONE ACTVZ1-1A NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004														
02...	<.013	<.024	--u	<.02	<.02	<.02	<.002	<.003	--	--	--	<.013	<1	<.003
12...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY														
10...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.1	.1	<.013	<1	<.003	
11...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.1	.2	<.013	<1	<.003	
14...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.1	.1	<.013	<1	<.003	
24...	<.013	<.024	<.016	<.02	<.02	<.02	<.002	--u	<.1	.1	<.013	<1	<.003	
JUN														
22...	<.013	<.024	<.016	--	--	--	<.002	<.003	<.1	.2	<.013	<1	<.003	
JUL														
06...	<.013	<.024	<.016	--	--	--	<.003	--u	<.1	<.1	<.013	<.387	<.003	
22...	<.013	<.024	<.016	--	--	--	<.003	<.003	<.1	<.1	<.013	<.387	<.003	
23...	<.013	<.024	<.016	--	--	--	<.003	<.003	<.1	<.1	<.013	<.387	<.003	

413302097090531 VADOSE ZONE ACTVZ1-1B NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090533 VADOSE ZONE ACTVZ1-1D NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

41 33 34N 096 32 53W VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

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CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

413302097090530 VADOSE ZONE ACTVZ1-1A NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004														
02...	<.200	<.027	<1.00	<.045	<.03	<.015	<.02	<.02	<.350	--u	<.008	<.022	<.10	
12...	--	--	--	--	--	--	--	--	--	--	--	--	--	
MAY														
10...	<.008	<.027	<.440	<.006	<.03	<.015	<.02	<.02	<.013	--u	<.008	<.022	<.10	
11...	<.008	<.027	--u	<.006	<.03	<.015	<.02	<.02	<.047	<.006	<.008	<.022	<.10	
14...	<.008	<.027	<.005	<.006	<.03	<.015	<.02	<.02	<.056	<.006	<.008	<.022	<.10	
24...	<.008	<.027	<.005	<.006	<.03	<.015	<.02	<.02	.103	<.006	<.008	<.022	<.10	
JUN														
22...	<.008	<.027	<.028	<.006	<.03	<.015	--	--	.055	<.006	<.008	<.022	<.10	
JUL														
06...	<.030	<.027	<.005	<.006	--u	<.015	--	--	.060	<.006	<.008	<.022	<.10	
22...	<.030	<.027	<.005	<.006	<.03	<.015	--	--	.065	<.006	<.008	<.022	<.10	
23...	<.030	<.027	<.080	<.006	<.03	<.015	--	--	.040	<.006	<.008	<.022	<.10	

413302097090531 VADOSE ZONE ACTVZ1-1B NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090533 VADOSE ZONE ACTVZ1-1D NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

41 33 34N 096 32W VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

413302097090530 VADOSE ZONE ACTVZ1-1A NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004														
02...	<.011	--u	--u	<.03	<.005	--u	<.05	<.02	<.200	<.02	<.07	<.02	<.01	
12...	--	--	--	--	--	--	--	--	--	--	--	--	--	
MAY														
10...	<.011	<.06	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	--u	<.02	--u	
11...	<.011	<.06	<.008	<.01	<.005	--u	.31	<.02	<.005	<.02	--u	<.02	--u	
14...	<.011	--u	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.07	<.02	--u	
24...	<.011	<.06	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.07	--u	--u	
JUN														
22...	<.011	<.06	<.008	<.01	<.005	<.004	--	--	<.005	<.02	<.07	<.02	<.01	
JUL														
06...	<.011	<.05	<.008	<.01	<.005	--u	--	--	<.005	<.02	<.07	--u	--u	
22...	<.011	<.05	<.008	<.01	<.005	<.004	--	--	<.005	<.02	<.07	<.02	<.01	
23...	<.011	<.05	<.008	<.01	<.005	<.004	--	--	<.005	<.02	<.22	<.02	<.01	

413302097090531 VADOSE ZONE ACTVZ1-1B NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090533 VADOSE ZONE ACTVZ1-1D NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004 **02...** **<.011** **--u** **--u** **<.03** **<.005** **--u** **<.05** **<.02** **<.005** **<.02** **<3.00** **<.02** **<.01**

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

	Tri-	2Chloro	4-	Azin-
flur-	-2',6'-	2-Ethyl	Chloro-	phos-
alin,	2,6-Di-	diethyl	3,4-Di-	Azin-
water,	1-Naph-	ethyl-	methyl-	alpha-
fltrd	thol,	acet-	chloro-	phos-
	aniline	anilide	methyl	Aceto-
Date	0.7u GF	solids,	chloro	Ala-
	ug/L	solids,	phenol,	HCH-d6,
	ug/kg	solids,	chlor,	Atra-
	(82661)	(63240)	aniline	methyl-
		(63243)	solids,	oxon,
		(63246)	solids,	methyl,
		(63247)	solids,	solids,
		(63248)	solids,	solids,
		(63255)	solids,	solids,
		(63257)	solids,	solids,
		(63258)	solids,	solids,
		(90739)	pct rcv	solids,
		(63262)	ug/kg	solids,
		(63264)	ug/kg	solids,
		(63263)	ug/kg	solids,

413302097090530 VADOSE ZONE ACTVZ1-1A NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090531 VADOSE ZONE ACTVZ1-1B NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004
 12... -- <10mc <30mc <1 <30mc <75mc <10mc <1 <1 69.7 <1 <30mc <5mc
 41330209709532 VADOSE ZONE ACTVZ1-1C NEAR SCHUYLER NF (LAT 41.33.02N LONG 097.09.05W)

413302097090532 VADOSE ZONE ACTVZ1-1C NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090533 VADOSE ZONE ACTVZ1-1D NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004
 02... <.009 -- -- -- -- -- -- -- -- -- -- -- --
 12... -- <10mc <30mc <1 <30mc <75mc <10mc <1 <1 64.4 <1 <30mc <5mc

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Chlor-	cis-											Desul-
Benflur	Car-	pyrifos	Chlor-	Perme-	Cyflu-	Cyper-						finyinyl-
alin,	baryl,	oxon,	pyrifos	thrin,	thrin,	methrin	DCPA,	CIAT,	amide,	nil	fipro-	Diazi-
solids,	nil	fipro-	non-dl0									
ug/kg	solids,	solids,	solids,	surrog,								
(63265)	(63269)	(63274)	(63273)	(63365)	(63279)	(63281)	(63282)	(63283)	(63317)	(63316)	(63284)	pct rcv

413302097090530 VADOSE ZONE ACTVZ1-1A NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090531 VADOSE ZONE ACTVZ1-1B NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004
12... <1 <2mc <30mc <1 <5 <20mc <20mc <1 <2 <1mc <1 <1 107
41330209709532 VADOSE ZONE ACTVZ1-1C NEAR SCHULYER NE (LAT 41 33.02N LONG 097 09.05W)

413302097090532 VADOSE ZONE ACTVZ1-1C NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090533 VADOSE ZONE ACTVZ1-1D NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004
 02... -- -- -- -- -- -- -- -- -- -- -- -- --
 12... <1 <2mc <30mc <1 <5 <20mc <20mc <1 <2 <1mc <1 <1 106

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004
15... -- -- -- -- -- -- -- -- -- -- -- -- --
MAY
11... -- -- -- -- -- -- -- -- -- -- -- --
14... -- -- -- -- -- -- -- -- -- -- -- --
18... -- -- -- -- -- -- -- -- -- -- -- --
24... -- -- -- -- -- -- -- -- -- -- -- --
JUN
14... -- -- -- -- -- -- -- -- -- -- -- --

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

	Di-				Fenam-				Fipro-		Fipro-	
Diaz-	Dichlor	croto-	Diel-	Dimeth-	Ethion	Fenam-	iphos	sulfox-	Fenam-	nil	nil	Fipro-
oxon,	vos,	phos,	drin,	oate,	monoxon	Ethion,	sulfone	ide,	iphos,	sulfide	sulfone	nil
solids,												
ug/kg												
(63285)	(63286)	(63288)	(63289)	(63291)	(63303)	(63302)	(63306)	(63307)	(63305)	(63314)	(63315)	(63313)

413302097090530 VADOSE ZONE ACTVZ1-1A NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090531 VADOSE ZONE ACTVZ1-1B NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090533 VADOSE ZONE ACTVZ1-1D NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004 02... -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

12... <5mc <30mc <3mc <2 <2 <2 <2 <10mc <10mc <30mc <1 <1 <1 <1mc

41 33 34 09 63 25 33 0 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004
15... -- -- -- -- -- -- -- -- -- -- -- -- --
MAY
11... -- -- -- -- -- -- -- -- -- -- -- --
14... -- -- -- -- -- -- -- -- -- -- -- --
18... -- -- -- -- -- -- -- -- -- -- -- --
24... -- -- -- -- -- -- -- -- -- -- -- --
JUN
14... -- -- -- -- -- -- -- -- -- -- -- --

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Fonofos	Hexa-	Ipro-	Isgfen-	Mala-	Mala-	Meta-	Methid-	Metola-	Metri-	Myclo-	Para-	
oxon, solids, ug/kg (63320)	Fonofos solids, solids, ug/kg (63319)	zinone, solids, ug/kg (63321)	dione, solids, ug/kg (63322)	phos, solids, ug/kg (63323)	oxon, solids, ug/kg (63326)	thion, solids, ug/kg (63327)	laxyl, solids, ug/kg (63328)	athion, solids, ug/kg (63329)	chlor, solids, ug/kg (63332)	buzin, solids, ug/kg (63333)	butanil, solids, ug/kg (63335)	methyl, solids, ug/kg (63349)

413302097090530 VADOSE ZONE ACTVZ1-1A NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090531 VADOSE ZONE ACTVZ1-1B NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004
12... <5mc <1 <1 <10mc <2 <5mc <2 <1 <2 <1 <4mc <1mc <5mc
41330209709532 VADOSE ZONE ACTVZ1-1C NEAR SCHUYLER NE (LAT 41 33.02N LONG 097 09.05W)

413302097090532 VADOSE ZONE ACTVZ1-1C NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090533 VADOSE ZONE ACTVZ1-1D NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004
02... -- -- -- -- -- -- -- -- -- -- -- -- --
12... <5mc <1 <1 <10mc <2 <5mc <2 <1 <2 <1 <4mc <1mc <5mc

41 33 34N 096 32 53W) VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004
15... -- -- -- -- -- -- -- -- -- -- -- -- -- --
MAY
11... -- -- -- -- -- -- -- -- -- -- -- -- --
14... -- -- -- -- -- -- -- -- -- -- -- -- --
18... -- -- -- -- -- -- -- -- -- -- -- -- --
24... -- -- -- -- -- -- -- -- -- -- -- -- --
JUN
14... -- -- -- -- -- -- -- -- -- -- -- --

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Methyl	Pendi-	Phorate	Phosmet	Prome-	Pro-	Propyz-	Sima-	ide +	Tebu-	Terbu-	
para-thion,	meth-	oxon,	Phorate	oxon,	Phosmet	Promet	metyrn,	amide,	sulfone	thiuron	fos,
solids,	solids,	solids,	solids,	solids,	solids,	ton,	solids,	zine,	solids,	solids,	solids,
ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
(63351)	(63353)	(63355)	(63354)	(63357)	(63356)	(63359)	(63360)	(63369)	(63370)	(63308)	(63376)

413302097090530 VADOSE ZONE ACTVZ1-1A NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090531 VADOSE ZONE ACTVZ1-1B NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004
 12... <2mc <1 <7mc <5mc <10mc <30mc <2mc <2 <2 <2 <50mc <3mc <3mc
 41330209709532 VADOSE ZONE ACTVZ1-1C NEAR SCHUYLER NF (LAT 41 33.02N LONG 097 09.05W)

413302097090532 VADOSE ZONE ACTVZ1-1C NEAR SCHUYLER, NE (LAT 41 33 02N LONG 097 09 05W)

413302097090533 VADOSE ZONE ACTVZ1-1D NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004 02... -- -- -- -- -- -- -- -- -- -- -- -- -- -- <2mc <5mc <10mc <30mc <2mc <2 <2 <2 <50mc <3mc <3mc

41 33 34 09 63 25 33 0 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004
15... -- -- -- -- -- -- -- -- -- -- -- -- -- --
MAY
11... -- -- -- -- -- -- -- -- -- -- -- -- --
14... -- -- -- -- -- -- -- -- -- -- -- -- --
18... -- -- -- -- -- -- -- -- -- -- -- -- --
24... -- -- -- -- -- -- -- -- -- -- -- -- --
JUN
14... -- -- -- -- -- -- -- -- -- -- -- --

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES
 CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
 VADOSE ZONE/SOIL—Continued

Date	Ter-bufo-s onon	Ter-butyl	trans-perme- azine, sulfone	Triflur-thrin,	chlor-alin,	Di-vos, water
	solids, ug/kg	solids, ug/kg	solids, ug/kg	solids, ug/kg	filtrd, ug/L	
	(63383)	(63384)	(63366)	(63390)	(38775)	

413302097090530 VADOSE ZONE ACTVZ1-1A NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004	02...	--	--	--	--	<.01
	12...	<5mc	<1	<5	<1	--
MAY	10...	--	--	--	--	<.01
	11...	--	--	--	--	<.01
	14...	--	--	--	--	<.01
	24...	--	--	--	--	<.01
JUN	22...	--	--	--	--	<.01
JUL	06...	--	--	--	--	<.01
	22...	--	--	--	--	<.01
	23...	--	--	--	--	<.01

413302097090531 VADOSE ZONE ACTVZ1-1B NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004	12...	<5mc	<1	<5	<1	--
----------	-------	------	----	----	----	----

413302097090532 VADOSE ZONE ACTVZ1-1C NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004	02...	--	--	--	--	--
	12...	<5mc	<1	<5	<1	--
MAY	14...	--	--	--	--	--
	24...	--	--	--	--	--
JUL	22...	--	--	--	--	--
	23...	--	--	--	--	--
AUG	25...	--	--	--	--	--
SEP	22...	--	--	--	--	--

413302097090533 VADOSE ZONE ACTVZ1-1D NEAR SCHULYER, NE (LAT 41 33 02N LONG 097 09 05W)

APR 2004	02...	--	--	--	--	<.01
	12...	<5mc	<1	<5	<1	--

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004	15...	--	--	--	--	<.01
MAY	11...	--	--	--	--	<.01
	14...	--	--	--	--	<.01
	18...	--	--	--	--	<.01
	24...	--	--	--	--	<.01
JUN	14...	--	--	--	--	--

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Time	UV					Noncarb						
		Depth of well, feet	absorb- ance, 254 nm, wat flt	SUVA, 254 nm, abs units/	pH, unfltrd units/	Specif. field,	Conduc- tance, wat unf	Hard- ness, water, lab,	Wat filt mg/L as CaCO ₃	Calcium mg/L as CaCO ₃	Magnes- ium, water, filtred,	Potas- sium, water, filtred,	Sodium water, adsorp- tion	Sodium, water, filtred,
(72008)	(50624)	(63162)	(00400)	(00095)	(00900)	(00905)	(00915)	(00925)	(00935)	(00931)	(00930)		

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

413334096325331 VADOSE ZONE ACT1-2B NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004														
05...	1110	28	--	--	--	--	--	--	--	--	--	--	--	--
15...	1035	28	--	--	--	8.0	1060	--	--	--	--	--	--	--
MAY														
11...	1405	28	--	--	--	7.7	1070	--	--	--	--	--	--	--
14...	1040	28	--	--	--	8.9	990	--	--	--	--	--	--	--
18...	1610	28	--	--	--	8.3	1190	--	--	--	--	--	--	--
24...	1240	28	--	--	--	8.5	970	--	--	--	--	--	--	--
JUN														
14...	1140	28	--	--	--	7.1	930	--	--	--	--	--	--	--
JUL														
06...	1245	28	--	--	--	8.2	970	--	--	--	--	--	--	--
17...	1150	28	--	--	--	7.9	988	--	--	--	--	--	--	--
23...	1040	28	--	--	--	7.9	790	--	--	--	--	--	--	--
AUG														
05...	1200	28	--	--	--	8.3	762	--	--	--	--	--	--	--
19...	1320	28	--	--	--	7.9	330	--	--	--	--	--	--	--

413334096325332 VADOSE ZONE ACT1-2C NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

413341096325501 18N 8W 5ACDC1 NAWQA WELL ACTFS1-2A (LAT 41 33 41N LONG 096 32 54W)

MAR 2004 01... 1110 81.1 -- -- -- -- -- -- -- -- -- -- -- --

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

JUL 2004														
06...	--	--	--	--	--	--	--	--	--	--	1.28	.99	196	44.2
17...	--	--	--	--	--	--	--	--	--	--	1.16	.90	252	56.9
23...	--	--	--	--	--	--	--	--	--	--	1.31	1.02	260	58.8
AUG														
05...	--	181@c	--	--	--	--	--	--	--	--	.84	.66	256	57.9
19...	--	--	--	--	--	--	--	--	--	--	.86	.74	255	56.6

41 33 34N 096 32 53W VADOSE ZONE ACT1-2B NEAR NICKERSON NE (LAT 41.3334N LONG 096.3253W)

APR 2004																
05...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	.14	.11	104		23.5	
MAY																
11...	--	--	--	--	--	--	--	--	--	--	--	E.04n	98.3		22.2	
14...	--	--	--	--	--	--	--	--	--	--	<.04	106		24.1		
18...	--	--	--	--	--	--	--	--	--	--	E.02n	112		25.3		
24...	--	--	--	--	--	--	--	--	--	--	E.02n	106		24.0		
JUN																
14...	--	--	--	--	--	--	--	--	--	--	--	E.02n	107		24.3	
JUL																
06...	--	--	--	--	--	--	--	--	--	--	--	E.02n	114		25.7	
17...	--	--	--	--	--	--	--	--	--	--	<.04	105		23.8		
23...	--	--	--	--	--	--	--	--	--	--	<.04	109		24.6		
AUG																
05...	--	--	--	--	--	--	--	--	--	--	<.04	113		25.4		
19...	--	--	--	--	--	--	--	--	--	--	<.04	110		24.8		

413334096325332 VADOSE ZONE ACT1-2C NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004																
05...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	27	165@c	.16	33.4	.5	64.0d	85.0	547	.74	.15	.12	65.6	14.8			
MAY																
14...	--	--	--	--	--	--	--	--	--	.09	.07	73.3	16.6			
JUL																
17...	--	319@c	--	--	--	--	--	--	--	--	<.04	81.0	18.3			
23	--	--	--	--	--	--	--	--	--	25	19	80.2	18.1			

41 13 34.1 096 32 55.01 18N 8W 5ACDC1 NAWOA WELL ACTFS1-2A (LAT 41 33 41N LONG 096 32 54W)

MAR 2004 01... -- -- -- -- -- -- -- -- -- -- -- -- -- --

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY	--	--	--	--	--	--	--	--	--	--	.10	.08d	160	36.2	
11...	--	--	--	--	--	--	--	--	--	--					

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Nitrite + nitrate water mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Ortho-phosphate, water, fltrd, mg/L (00613)	Ortho-phosphate, water, fltrd, mg/L (00660)	Total nitro- gen, by anal (00671)	Mangan- ese, water, fltrd, mg/L (62854)	1-Naph- thol, water, fltrd, ug/L (01046)	2,6-Di- ethyl- aniline, water, fltrd, ug/L (01056)	2-[(2- 6methyl diethyl amino]2 oxoESA (49295)	2-Chloro acet- anilide, wat flt, ug/L (82660)	2-Chloro diethyl CIAT, water, fltrd, ug/L (62850)	2-Chloro diethyl CIAT, water, fltrd, ug/L (61618)	2-Chloro diethyl CIAT, water, fltrd, ug/L (04040)
413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)													
JUL 2004													
06...	44.2d	.062	.019	.101	.03oc	44.7d	--	--	<.09	<.006	1.78	<.005	<.006
17...	56.9d	.177	.054	.061	.02oc	60.6d	--	--	<.09	<.006	1.67	<.005	<.006
23...	58.9d	.500	.152	.156	.05oc	63.7d	--	--	<.09	<.006	4.21	<.005	<.006
AUG													
05...	58.2d	1.07	.326	.061	.02oc	64.3d	--	--	<.09	<.006	4.52	<.005	<.006
19...	30.7d	.503	.153	.043	.014	34.5d	--	--	--	--	--	--	--
413334096325331 VADOSE ZONE ACT1-2B NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)													
APR 2004													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	23.6d	.141	.043	.635	.21oc	26.8d	--	--	<.09	<.006	<.02	<.005	<.006
MAY													
11...	22.2d	.059	.018	.604	.197	26.8d	--	--	<.09	<.006	<.02	<.005	<.006
14...	24.1d	.092	.028	.460	.15oc	25.5d	--	--	--	--	--	--	--
18...	25.4d	.279	.085	.530	.173	25.8d	--	--	--	--	--	--	--
24...	24.0d	.066	.020	.549	.18oc	26.4d	--	--	--	--	--	--	--
JUN													
14...	24.3d	.046	.014	.598	.20oc	23.7d	--	--	<.09	<.006	<.02	<.005	<.006
JUL													
06...	25.7d	.043	.013	.920	.30oc	22.5d	--	--	<.09	<.006	<.02	<.005	<.006
17...	23.8d	.046	.014	.595	.19oc	24.5d	--	--	<.09	<.006	<.02	<.005	<.006
23...	24.7d	.056	.017	.938	.306d	29.0d	--	--	--	--	--	--	--
AUG													
05...	25.5d	.043	.013	.662	.22oc	26.9d	--	--	<.09	<.006	<.02	<.005	<.006
19...	24.8d	.026	.008	.714	.23oc	27.0d	--	--	<.09	<.006	<.02	<.005	<.006
413334096325332 VADOSE ZONE ACT1-2C NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)													
APR 2004													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	15.0d	.641	.195	.665	.22oc	16.9d	<6	682	<.09	<.006	<.02	<.005	<.006
MAY													
14...	16.6d	.095	.029	1.32	.43oc	21.2d	--	--	--	--	--	--	--
JUL													
17...	18.4d	.302	.092	.874	.28oc	22.6d	--	--	<.09	<.006	<.02	<.005	<.006
23...	18.2d	.391	.119	1.05	.341d	26.8d	--	--	--	--	--	--	--
413341096325501 18N 8W 5ACDC1 NAWQA WELL ACTFS1-2A (LAT 41 33 41N LONG 096 32 54W)													
MAR 2004													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)													
MAR 2004													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	36.2d	.053	.016	4.49	1.47doc	75.9d	--	--	--	--	--	--	--

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

413334096325331 VADOSE ZONE ACT1-2B NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004																
05...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.004	<.004	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.07	<.02	<.02	--u	<.1		
MAY																
11...	<.004	<.004	<.006	<.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02	.02	--u	<.1		
14...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN																
14...	<.004	<.004	<.006	.02	<.02	<.02	<.006	<.02	.19	.02	<.02	<.005	.3			
JUL																
06...	<.004	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.13	<.02	<.02	<.005	<.1			
17...	<.010c	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.12	.02	<.02	--u	--			
23...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG																
05...	<.004	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.13	<.02	<.02	--u	--			
19...	<.004	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.18	<.02	<.02	--u	--			

413334096325332 VADOSE ZONE ACT1-2C NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

41 33 41 09 63 25 50 01 18N 8W 5ACDC1 NAWQA WELL ACTFS1-2A (LAT 41 33 41N LONG 096 32 54W)

MAR 2004 01... -- -- -- -- -- -- -- -- -- -- -- -- -- --

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004
01... -- -- -- -- -- -- -- -- -- -- -- -- -- --
MAY
11... -- -- -- -- -- -- -- -- -- -- -- -- --

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

41 33 34N 096 32 53W VADOSE ZONE ACT1-2B NEAR NICKERSON NE (LAT 41.3334N LONG 096.3253W)

APR 2004														
05...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	<.007	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
MAY														
11...	--	<.007	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
14...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	<.10	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN														
14...	--	<.007	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
JUL														
06...	--	<.007	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
17...	--	<.007	<.07	<.050	<.010	--u	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
23...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG														
05...	--	<.007	<.07	<.050	<.010	--u	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
19...	--	<.007	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	

413334096325332 VADOSE ZONE ACT1-2C NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004															
05...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	<.008	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012		
MAY															
14...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL															
17...	--	<.007	<.07	<.050	<.010	--u	<.06	<.005	<.006	<.008	<.009	<.003	<.012		
22...	--	<.007	<.07	<.050	<.010	--u	<.06	<.005	<.006	<.008	<.009	<.003	<.012		

413341096325501 18N 8W 5ACDC1 NAWQA WELL ACTES1-2A (LAT 41 33.41N LONG 096 32.54W)

MAR 2004 -- -- -- -- -- -- -- -- -- -- -- -- --

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004
01... -- -- -- -- -- -- -- -- -- -- -- -- -- --
MAY
11 -- -- -- -- -- -- -- -- -- -- -- -- -- --

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Diaz-	Diazi-	Dicro-	Diel-	Dimeth-	Dimeth-	Dimeth-	Fenami-
inon	non,	tophos,	drin,	enamid	enamid	oate,	phos
oxon,	water,	water,	water,	ESA,	OA,	water,	sulf-
water,	water,	water,	water,	water,	enamid	monoxon	Fenami-
Date	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	fltrd,	phos
(61638)	(39572)	(38454)	(39381)	(61951)	(62482)	(61588)	(82662)
	ug/L	ug/L	ug/L	ug/L	ug/L	0.7ug/L	ug/L
	(61644)	(82346)	(61645)	(61646)	(61591)		ug/L

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

413334096325331 VADOSE ZONE ACT1-2B NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004															
	05...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.03
MAY															
11...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.03
14...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN															
14...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03	<.03
JUL															
06...	--u	--u	<.08	<.009	<.02	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03	<.03
17...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03	<.03
23...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG															
05...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03	<.03
19...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03	<.03

413334096325332 VADOSE ZONE ACT1-2C NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

413341096325501 18N 8W 5ACDC1 NAWQA WELL ACTFS1-2A (LAT 41 33 41N LONG 096 32 54W)

MAR 2004 01... -- -- -- -- -- -- -- -- -- -- -- -- -- --

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004 -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
01... -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
MAY
11 -- -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Desulf-		Fipro-	Fipro-	Flufen-	Flufe-		Glufo-	Glypho-				
inyl-		nil	nil	Fipro-	acet	nacet	Flufe-	Fonofos	sinate,	sate,	Hexa-	Ipro-
		nil	sulfide	sulfone	nil,	ESA,	OA,	oxon,	Fonofos	water,	water,	zinode,
amide,		water,	filtrd	filtrd	water,	dione,						
wat	flt	filtrd,	0.7u GF	0.7u GF	filtrd,							
ug/L												
(62169)	(62167)	(62168)	(62166)	(61952)	(62483)	(62481)	(61649)	(04095)	(62721)	(62722)	(04025)	(61593)

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

JUL 2004													
06...	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003	--u	<.1	<.1	<.013	<.387
17...	--u	<.013	--u	<.016	<.02	<.02	<.02	<.003	--u	--	--	<.013	<.387
23...	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	--	--	<.013	<.387
AUG													
05...	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	--	--	<.013	<.387

412224006325321 - UNDOE ZONE ACT1 OR NEAR NICKERSON, NE (UNIT 41-22-34N LONG 886-32-53W)

APR 2004																
05...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1		
MAY																
11...	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1			
14...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN																
14...	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1			
JUL																
06...	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003	--u	<.1	<.1	<.013	<.387			
17...	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	--	--	<.013	<.387			
23...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG																
05...	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	--	--	<.013	<.387			
19...	<.029	<.013	<.024	<.016	<.02	<.02	<.02	<.003	<.003	--	--	<.013	<.387			

41 33 34 09 63 25 33 2 VADOSE ZONE ACT1-2C NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

413341096325501 18N 8W 5ACDC1 NAWQA WELL ACTFS1-2A (LAT 41 33 41N LONG 096 32 54W)

MAR 2004 01... -- -- -- -- -- -- -- -- -- -- -- -- -- --

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

JUL 2004													
06...	<.003	<.030	<.027	<.005	<.006	--u	<.015	6.26	9.13	--	.377	<.006	<.008
17...	<.003	<.030	<.150	<.005	<.006	<.03	<.015	5.33	9.44	--	.351	<.006	<.008
23...	<.003	<.030	<.027	<.005	<.006	<.03	<.015	9.80	13.0	--	.350	<.006	<.008
AUG													
05...	<.003	<.030	<.027	<.005	<.006	<.03	<.015	5.57	8.79	--	.350	<.006	<.008
10...										--			

413334096325331 VADOSE ZONE ACT1-2B NEAR NICKERSON, NE (LAT 41 33.34N LONG 096 32.53W)

APR 2004															
05...	--	--	--	--	--	--	--	<.03	<.015	.22	.33	--	<.550	--u	<.008
15...	<.003	<.008	<.027	<.005	<.006	<.03	<.015								
MAY															
11...	<.003	<.008	<.027	<.005	<.006	<.03	<.015	1.17	1.05	--	.994	--u	<.008		
14...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	1.2	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN															
14...	<.003	<.008	<.027	<.005	<.006	<.03	<.015	1.28	1.19	--	1.14	<.006	<.008		
JUL															
06...	<.003	<.030	<.027	<.005	<.006	--u	<.015	.98	1.03	--	<.013	<.006	<.008		
17...	<.003	--u	<.027	<.005	<.006	<.03	<.015	.68	.81	--	1.01	<.006	<.008		
23...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG															
05...	<.003	--u	<.027	<.005	<.006	<.03	<.015	1.11	.74	--	.897	<.006	<.008		
19...	<.003	<.030	<.027	<.150	<.006	<.03	<.015	1.54	.84	--	1.69	--u	<.008		

413334096325332 VADOSE ZONE ACT1-2C NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

413341096325501 18N 8W 5ACDC1 NAWQA WELL ACTFS1-2A (LAT 41 33 41N LONG 096 32 54W)

MAR 2004 -- -- -- -- -- -- -- -- -- -- -- -- -- --

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004
01... -- -- -- -- -- -- -- -- -- -- -- -- -- -- --
MAY
11 -- -- -- -- -- -- -- -- -- -- -- -- -- -- --

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

JUL 2004														
06...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.07	
17...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.07	
23...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	
AUG														
05...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.07	

413334086325331 VADOSE ZONE ACT1 3E NEAR NICKERSON NE (LAT 41.33, 34N LONG 096.32, E3W)

APR 2004																
05...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.02	<.07		
MAY																
11...	<.022	<.10	<.011	<.06	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.02	<.07		
14...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN																
14...	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.02	<.07		
JUL																
06...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.02	<.07		
17...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.02	<.07		
23...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG																
05...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.02	<.07		
19...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.02	<.07		

413334096325332 VADOSE ZONE ACT1-2C NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

413341096325501 18N 8W 5ACDC1 NAWQA WELL ACTES1-2A (LAT 41 33.41N LONG 096 32.54W)

MAR 2004 -- -- -- -- -- -- -- -- -- -- -- -- --

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004
01... -- -- -- -- -- -- -- -- -- -- -- -- -- --
MAY
11 -- -- -- -- -- -- -- -- -- -- -- -- -- --

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

		Tri-		2Chloro		4-							
Terbu-	Ter-	flur-		-2',6'-	2-Ethyl		Chloro-						
fos,	butyl-	alin,		2,6-Di-	diethyl	-6-	3,4-Di-						
water,	azine,	water,	1-Naph-	ethyl-	acet-	methyl-	chloro-	methyl-	Aceto-	Ala-	HCH-d6,	Atra-	
fltrd		fltrd	thol,	aniline	anilide	aniline	aniline	phenol,	chlor,	chlor,	surrog,	zine,	
Date	0.7u GF	fltrd,	0.7u GF	solids,	solids,	solids,	solids,	solids,	solids,	solids,	solids,	solids,	
	ug/L	ug/L	ug/L	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	pct rcv	ug/kg	
(82675)	(04022)	(82661)	(63240)	(63243)	(63246)	(63247)	(63248)	(63249)	(63255)	(63257)	(63258)	(90739)	(63262)

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

413334096325331 VADOSE ZONE ACT1-2B NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

413334096325332 VADOSE ZONE ACT1-2C NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

41 33 41 09 63 25 50 1 18N 8W 5ACDC1 NAWQA WELL ACTFS1-2A (LAT 41 33 41N LONG 096 32 54W)

MAR 2004 01... -- -- -- <10mc <30mc <1 <30mc <75mc <10mc <1 <1 <1 73.7 <1

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Azin-	Desul-											
phos-	finyl-											
methyl-	fipro-											
oxon,	finyl-											
Date	solid,	Azin-	Benflur	Car-	Chlor-	cis-	Cyflu-	Cyper-	DCPA,	CIAT,	amide,	nil,
	solids,	phos-	alin,	baryl,	pyrifos	Chlor-	Perme-	methrin	solids,	solids,	solids,	solids,
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
	(63264)	(63263)	(63265)	(63269)	(63274)	(63273)	(63365)	(63279)	(63281)	(63282)	(63283)	(63317)

41 33 34 096 325 330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

JUL 2004

06... -- -- -- -- -- -- -- -- -- -- -- -- --
17... -- -- -- -- -- -- -- -- -- -- -- --
23... -- -- -- -- -- -- -- -- -- -- --
AUG
05... -- -- -- -- -- -- -- -- -- -- -- --
10... -- -- -- -- -- -- -- -- -- -- --

41 33 34N 096 32W 331 VADOSE ZONE ACT1-2B NEAR NICKERSON NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004

413334096325332 VADOSE ZONE ACT1-2C NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004

413341096325501 18N 8W 5ACDC1 NAWQA WELL ACTFS1-2A (LAT 41 33 41N LONG 096 32 54W)

MAR 2004

412241086325520 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON NE (LAT 41.22 41N LONG 086.32 EEW)

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004

01... <30mc <5mc <1 <2mc <30mc <1 <5 <20mc <20mc <1 <2 <1mc <1

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

	Diazi-	Dia-	Fenam-								
Diaz-	non-d10	Diaz-	Dichlor	croto-	Diel-	Dimeth-	Ethion	iphos	sulfox-	Fenam-	Fipro-
inon,	surrog,	oxon,	vos,	phos,	drin,	oate,	monoxon	Ethion,	sulfone	ide,	iphos,
Date	solids,	sulfide									
	ug/kg	pct	ug/kg								
(63284)	(90740)	(63285)	(63286)	(63288)	(63289)	(63291)	(63303)	(63302)	(63306)	(63307)	(63314)

41 13334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

JUL 2004

06... -- -- -- -- -- -- -- -- -- -- --
17... -- -- -- -- -- -- -- -- -- -- --
23... -- -- -- -- -- -- -- -- -- -- --
AUG
05... -- -- -- -- -- -- -- -- -- -- --
19... -- -- -- -- -- -- -- -- -- -- --

41 33 34N 096 32 53W VADOSE ZONE ACT1-2B NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004

413334096325332 VADOSE ZONE ACT1-2C NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004

41 33 41 09 63 25 50 01 18N 8W 5ACDC1 NAWOA WELL ACTFS1-2A (LAT 41 33 41N LONG 096 32 54W)

MAR 2004

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

	Fipro-	nil	Fipro-	Fonofos	Hexa-	Ipro-	Isofen-	Mala-	Mala-	Meta-	Methid-	Metola-	Metri-
Date	sulfone	nil,	oxon,	Fonofos	zinone,	dione,	phos,	oxon,	thion,	laxyl,	athion,	chlor,	buzin,
	solids,												
	ug/kg												
	(63315)	(63313)	(63320)	(63319)	(63321)	(63322)	(63323)	(63326)	(63327)	(63328)	(63329)	(63332)	(63333)

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

JUL 2004

06... -- -- -- -- -- -- -- -- -- -- --
17... -- -- -- -- -- -- -- -- -- -- --
23... -- -- -- -- -- -- -- -- -- -- --
AUG
05... -- -- -- -- -- -- -- -- -- -- --
19... -- -- -- -- -- -- -- -- -- -- --

413334096325331 VADOSE ZONE ACT1-2B NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004

413334096325332 VADOSE ZONE ACT1-2C NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004

413341096325501 18N 8W 5ACDC1 NAWQA WELL ACTFS1-2A (LAT 41 33 41N LONG 096 32 54W)

MAR 2004

4122410963255E20 VADOSE ZONE ACTVZ1-2A NEAR NICKERSON NE (LAT 41.2241N LONG 096.325E)

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004
01

MAY
11... -- -- -- -- -- -- -- -- -- -- -- -- -- --

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

41 13334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

JUL 2004

06... -- -- -- -- -- -- -- -- -- -- -- -- --
17... -- -- -- -- -- -- -- -- -- -- -- --
23... -- -- -- -- -- -- -- -- -- -- --
AUG
05... -- -- -- -- -- -- -- -- -- -- -- --
10... -- -- -- -- -- -- -- -- -- -- --

413334096325331 VADOSE ZONE ACT1-2B NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004

413334096325332 VADOSE ZONE ACT1-2C NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004

413341096325501 18N 8W 5ACDC1 NAWQA WELL ACTFS1-2A (LAT 41 33 41N LONG 096 32 54W)

MAR 2004

01... <1mc <5mc <2mc <1 <7mc <5mc <10mc <30mc <2mc <2 <2 <2 <50mc
 413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)
 MAR 2004
 01... <1mc <5mc <2mc <1 <7mc <5mc <10mc <30mc <2mc <2 <2 <2 <50mc
 MAY
 11... -- -- -- -- -- -- -- -- -- -- -- -- -- --

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Tebu-	Terbu-	Ter-	trans-	Di-			
	thiuron	fos,	bufos	butyl	Perme-	chlors		
	solids, ug/kg	solids, (63376)	onon	sulfone	azine, solids, ug/kg	thrin, solids, ug/kg	alin, solids, ug/kg	water fltrd, ug/kg	vos, ug/L
	(63380)		(63383)	(63384)	(63366)	(63390)	(38775)	

413334096325330 VADOSE ZONE ACT1-2A NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

JUL 2004
 06... -- -- -- -- -- -- <.01
 17... -- -- -- -- -- -- <.01
 23... -- -- -- -- -- -- <.01
 AUG
 05... -- -- -- -- -- -- <.01
 19... -- -- -- -- -- -- --

413334096325331 VADOSE ZONE ACT1-2B NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004
 05... <3mc <3mc <5mc <1 <5 <1 --
 15... -- -- -- -- -- -- <.01
 MAY
 11... -- -- -- -- -- -- <.01
 14... -- -- -- -- -- -- --
 18... -- -- -- -- -- -- --
 24... -- -- -- -- -- -- --
 JUN
 14... -- -- -- -- -- -- <.01
 JUL
 06... -- -- -- -- -- -- <.01
 17... -- -- -- -- -- -- <.01
 23... -- -- -- -- -- -- --
 AUG
 05... -- -- -- -- -- -- <.01
 19... -- -- -- -- -- -- <.01

413334096325332 VADOSE ZONE ACT1-2C NEAR NICKERSON, NE (LAT 41 33 34N LONG 096 32 53W)

APR 2004
 05... <3mc <3mc <5mc <1 <5 <1 --
 15... -- -- -- -- -- -- <.01
 MAY
 14... -- -- -- -- -- -- --
 JUL
 17... -- -- -- -- -- -- <.01
 23... -- -- -- -- -- -- --

413341096325501 18N 8W 5ACDC1 NAWQA WELL ACTFS1-2A (LAT 41 33 41N LONG 096 32 54W)

MAR 2004
 01... <3mc <3mc <5mc <1 <5 <1 --

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004
 01... <3mc <3mc <5mc <1 <5 <1 --
 MAY
 11... -- -- -- -- -- -- --

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Time	UV				Noncarb						
		Depth of well, feet	absorb- ance, 254 nm, wat flt	SUVA, 254 nm, abs units	pH, unfltrd field,	Specif. conduct., wat unf units/	Hard- ness, wat filt std uS/cm	ness, water, lab, mg/L as	Magnes- ium, water, mg/L as	Potas- sium, water, mg/L as	Sodium adsorp- tion fltrd, mg/L	Sodium, water, ratio mg/L
(72008)	(50624)	(63162)	(00400)	(00095)	(00900)	(00905)	(00915)	(00925)	(00935)	(00931)	(00930)	

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAY 2004													
14...	1020	5.0	--	--	8.4	630	--	--	--	--	--	--	--
18...	1550	5.0	--	--	7.6	720	--	--	--	--	--	--	--
24...	1220	5.0	--	--	7.9	630	--	--	--	--	--	--	--
JUN													
14...	1200	5.0	--	--	7.1	660	--	--	--	--	--	--	--
JUL													
06...	1255	5.0	--	--	7.0	640	220	91	60.0	17.9	2.26	.7	23.1
17...	1130	5.0	--	--	7.4	688	--	--	--	--	--	--	--
23...	1020	5.0	--	--	7.7	600	--	--	--	--	--	--	--
AUG													
05...	1225	5.0	--	--	8.0	397	--	--	--	--	--	--	--
19...	1155	5.0	--	--	8.0	304	--	--	--	--	--	--	--

413341096325531 VADOSE ZONE ACTVZ1-3B NEAR NICKERSON, NE (LAT 41 33.41N LONG 096 32.55W)

MAR	2004															
01...	1110	28.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	1200	28.0	--	--	7.8	578	340	--	80.7	34.8	9.96	.6	25.1			
MAY																
11...	1430	28.0	--u	--u	7.5	520	250	--	60.5	23.3	9.12	.3	11.2			
14...	1015	28.0	--u	--u	7.6	410	160	57	40.5	13.1	19.9	.2	4.83			
18...	1555	28.0	--u	--u	7.1	570	210	55	57.6	16.8	22.9	.2	6.50			
24...	1225	28.0	--u	--u	6.9	370	130	36	37.0	8.45	18.6	.1	3.34			
JUN																
14...	1205	28.0	--	--	7.8	780	280	150	80.3	19.9	21.4	.1	5.72			
JUL																
06...	1300	28.0	--	--	7.3	780	--	--	--	--	--	--	--	--	--	--
17...	1135	28.0	--	--	7.4	750	--	--	--	--	--	--	--	--	--	--
23...	1025	28.0	--	--	7.1	500	--	--	--	--	--	--	--	--	--	--
AUG																
05...	1220	28.0	--	--	8.4	713	--	--	--	--	--	--	--	--	--	--
19...	1150	28.0	--	--	7.6	306	--	--	--	--	--	--	--	--	--	--
SEP																
22	1545	28.0	--	--	--	--	270	40	74.9	19.9	18.9	3	10.1			

413341096325532 VADOSE ZONE ACTVZ1-3C NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Alka-		Chlor-		Fluor-		Silica,		Sulfate		Residue		Ammonia		Nitrate	
	wat ftxd	wat flt end	Bromide	ide, lab	water, water,	water, water,	water, water,	water, water,	constituents	sum of tons/	water, fltrd,	water, fltrd,	water, fltrd,	water, fltrd,	water, fltrd,	water, fltrd,
	Sodium, percent	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	acre-ft	mg/L	mg/L	mg/L	mg/L	mg/L	
	(00932)	(29801)	(71870)	(00940)	(00950)	(00955)	(00945)	(00950)	(00945)	(70301)	(70303)	(71846)	(00608)	(71851)	(00618)	

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAY 2004															
14...	--	--	--	--	--	--	--	--	--	--	.26	.20	172	38.9	
18...	--	--	--	--	--	--	--	--	--	--	--	E.03n	182	41.1	
24...	--	--	--	--	--	--	--	--	--	--	.06	.05	166	37.5	
JUN															
14...	--	118@c	--	--	--	--	--	--	--	--	1.37	1.07	174	39.4	
JUL															
06...	18	133@c	.27	22.2	<.2	39.7	39.2	429	.58	1.80	1.40	142	32.0		
17...	--	--	--	--	--	--	--	--	--	2.56	1.99d	134	30.4		
23...	--	--	--	--	--	--	--	--	--	3.67	2.85d	141	31.9		
AUG															
05...	--	--	--	--	--	--	--	--	--	1.32	1.03	181	40.9		
19...	--	--	--	--	--	--	--	--	--	2.41	1.87d	190	43.0		

413341096325531 VADOSE ZONE ACTVZ1-3B NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004															
01...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	13	--	<.32d	7.06d	.3	60.2d	58.9d	--	--	.09	.07	--	--	--	--
MAY															
11...	9	257@c	<.03	1.91	.3	51.8	18.7	352	.48	.07	.05	20.3	4.58		
14...	6	98@c	.07i	1.14	.2	30.5	7.5	299	.41	3.73	2.90d	117	26.4		
18...	6	158@c	.03i	1.33	<.2	40.6	8.4	384	.52	5.01	3.89d	129	29.2		
24...	5	91@c	<.02	1.00	<.2	22.0	4.3	238	.32	2.78	2.16d	83.2	18.8		
JUN															
14...	4	137@c	.51d	1.08	<.2	39.6	13.2	510	.69	.33	.26	245	55.3		
JUL															
06...	--	146@c	--	--	--	--	--	--	--	1.11	.86	267	60.3		
17...	--	134@c	--	--	--	--	--	--	--	.74	.58	220	49.6		
23...	--	131@c	--	--	--	--	--	--	--	1.23	.95	204	46.1		
AUG															
05...	--	--	--	--	--	--	--	--	--	2.06	1.60d	62.7	14.2		
19...	--	--	--	--	--	--	--	--	--	.72	.56	105	23.7		
SEP															
22...	7	229@c	.09	--o	<.2	43.1	--o	--	--	1.96	1.52d	90.2	20.4		

413341096325532 VADOSE ZONE ACTVZ1-3C NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004															
01...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL															
17...	--	--	--	--	--	--	--	--	--	--	1.19	.92	42.6	9.63	
23...	--	--	--	--	--	--	--	--	--	--	1.16	.90	46.7	10.5	
SEP															
22...	--	304@c	--	--	--	--	--	--	--	--	1.74	1.35	69.2	15.6	

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Nitrite + nitrate water mg/L (00631)	Nitrite water, mg/L (71856)	Ortho-phosphate, water, mg/L (00613)	Ortho-phosphate, water, mg/L (00660)	Total nitro- gen, by anal (00671)	Mangan- ese, water, mg/L (62854)	Iron, water, mg/L (01046)	1-Naph- thol, water, ug/L (01056)	2,6-Di- ethyl- aniline, ug/L (49295)	2-[(2- 6methyl diethyl amino]2 oxoESA, ug/L (82660)	2-Chloro anilide, ug/L (62850)	CIAT, water, ug/L (61618)	water, ug/L (04040)
------	--------------------------------------	-----------------------------	--------------------------------------	--------------------------------------	-----------------------------------	----------------------------------	---------------------------	-----------------------------------	--------------------------------------	--	--------------------------------	---------------------------	---------------------

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAY 2004													
14...	39.0d	.062	.019	.929	.30oc	63.4d	--	--	--	--	--	--	--
18...	41.1d	.131	.040	.724	.236d	48.9d	--	--	--	--	--	--	--
24...	37.5d	.187	.057	.702	.23oc	47.9d	--	--	--	--	--	--	--
JUN													
14...	39.7d	1.03	.314	.754	.25oc	50.1d	--	--	<.09	<.006	.14	<.005	<.006
JUL													
06...	32.2d	.703	.214	.681	.22oc	37.7d	E5n	35.9	<.09	<.006	--	<.005	<.006
17...	30.5d	.348	.106	.343	.11oc	48.0d	--	--	<.09	<.006	--	<.005	<.006
23...	32.2d	.891	.271	.126	.04oc	48.7d	--	--	--	--	--	--	--
AUG													
05...	42.3d	4.62	1.41d	.196	.06oc	59.7d	--	--	--	--	--	--	--
19...	43.5d	1.54	.468	.083	.03oc	74.2d	--	--	--	--	--	--	--

413341096325531 VADOSE ZONE ACTVZ1-3B NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	11.9d	--	E.007n	3.22	1.05doc	38.8d	<6	39.8	<.09	<.006	<.02	<.005	<.006
MAY													
11...	4.61	.079	.024	.932	.30oc	10.0d	<6	11.4	<.09	<.006	.14	<.005	E.068
14...	26.6d	.789	.240	.733	.24oc	32.3d	9	7.3	<.09	<.006	.27	<.005	E5.69
18...	29.4d	.516	.157	.794	.26oc	36.8d	E6n	14.5	<.09	<.006	.21	<.005	E7.75
24...	19.1d	.881	.268	1.07	.35oc	26.8d	13	9.3	<.09	<.006	.17	<.005	E8.26
JUN													
14...	55.3d	.085	.026	1.44	.47oc	66.6d	28	4.8	<.09	<.006	.24	<.005	E7.00
JUL													
06...	60.5d	.559	.170	1.22	.40oc	62.9d	--	--	<.09	<.006	.28	<.005	E6.72
17...	49.6d	.135	.041	.954	.31oc	63.0d	--	--	<.09	<.006	.15	<.005	E8.82
23...	46.2d	.368	.112	.598	.20oc	52.2d	--	--	<.09	<.006	.33	<.005	E3.31
AUG													
05...	14.5d	1.02	.311	1.27	.41oc	36.5d	--	--	<.09	<.006	1.30	<.005	E.978
19...	23.9d	.753	.229	.855	.28oc	28.5d	--	--	<.40	<.006	.30	<.005	E33.6
SEP													
22...	20.6d	.546	.166	1.07	.35oc	27.6d	E4n	.9	<.09	<.006	.19	<.005	E1.73

413341096325532 VADOSE ZONE ACTVZ1-3C NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
17...	9.84d	.697	.212	3.52	1.15doc	41.5d	--	--	<.09	<.006	.08	<.005	E1.19
23...	10.8d	.697	.212	1.80	.588d	27.9d	--	--	--	--	--	--	--
SEP													
22...	15.7d	.200	.061	1.06	.34oc	37.0d	--	--	<.09	<.006	1.07	<.005	E1.18

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	2-Ethyl	Aceto-	Aceto-	Ala-	Ala-	Amino-					
	-6- methyl-aniline water, ug/L (61620)	3,4-Di-chloro-aniline water, ug/L (61625)	4Chloro phenol, water, ug/L (61633)	chlor ESA, OA, water, ug/L (61029)	chlor SAA, chlor water, ug/L (61030)	Aceto-SAA, chlor water, ug/L (62847)	chlor ESA SA, water, ug/L (49260)	chlor ESA, OA, water, ug/L (62849)	chlor SAA, chlor water, ug/L (50009)	chlor ESA, OA, water, ug/L (61031)	chlor SAA, chlor water, ug/L (62848)	methyl-phosphonic acid, wat flt ug/L (62649)

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAY 2004												
14...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
14...	<.039	<.004	<.006	.07	.02	<.02	<.006	<.02	.09	.07	<.02	<.005
JUL												
06...	<.004	<.004	<.006	--	--	<.006	--	--	--	--	<.005	<.1
17...	<.020c	<.004	<.006	--	--	<.006	--	--	--	--	--u	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
05...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--

413341096325531 VADOSE ZONE ACTVZ1-3B NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004												
01...	--	--	--	--	--	--	--	--	--	--	--	--
30...	<.004	<.004	<.006	<.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02	--u <.1
MAY												
11...	<.004	<.004	<.006	.03	.04	<.02	.148	<.02	<.02	.02	<.020	<.1
14...	<.004	<.004	<.006	.26	.41	.22	E.643	<.02	.04	.05	.17	E.058 .2
18...	<.004	<.004	<.006	.24	.36	.35	.608	<.02	.02	.04	.13	<.091c .1
24...	<.004	<.004	<.006	.16	.23	.21	.327	<.02	.04	.04	.12	.133 .1
JUN												
14...	<.004	<.004	<.006	.33	.48	.05	.170	<.02	.07	<.02	<.02	.116 .2
JUL												
06...	<.004	<.004	<.006	<.02	.36	<.02	.104	<.02	<.02	<.02	<.02	<.005 .2
17...	<.004	<.004	<.006	.21	.36	.18	.148	<.02	.03	.11	.02	<.005 --
23...	<.004	<.004	<.006	.11	.26	<.02	.122	<.02	<.02	.09	<.02	<.005 --
AUG												
05...	<.004	<.004	<.006	.04	.06	<.02	<.006	<.02	<.02	<.02	<.02	<.005 --
19...	<.004	<.004	<.006	.08	.13	.07	.860	<.02	<.02	<.02	<.02	<.005 <.1
SEP												
22...	<.004	<.004	<.006	<.02	.18	<.02	<.070c	<.02	<.02	<.02	<.02	--u --

413341096325532 VADOSE ZONE ACTVZ1-3C NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004												
01...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
17...	<.004	<.004	<.006	.06	.05	.04	.059	<.02	.02	.03	<.02	<.005 --
23...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
22...	<.004	<.004	<.006	<.02	<.02	<.02	<.006	<.02	.11	<.02	<.02	--u --

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Atra-zine, wat flt immuno-assay unadj. ug/L (99775)	Atra-zine, oxon, water, fltrd ug/L (39632)	Azin-phos- methyl oxon, water, fltrd ug/L (61635)	Azin-phos- methyl methyln, water, fltrd ug/L (82686)	Ben-flur-alin, water, fltrd ug/L (82673)	Car-baryl, water, fltrd ug/L (82680)	Chlor-pyrifos water, fltrd ug/L (61636)	Chlor-pyrifos water, fltrd ug/L (38933)	cis-methrin water, fltrd ug/L (82687)	Per-methrin water, fltrd ug/L (61585)	Cyflu-thrin, water, fltrd ug/L (61586)	Cyper-methrin water, fltrd ug/L (82682)	Desulf-inyl DCPA, water ug/L (62170)
------	--	---	---	--	--	--	---	---	---	---	--	---	--

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAY 2004													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	.05	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
14...	--	<.007	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	.073	<.012
JUL													
06...	--	<.007	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012
17...	--	<.007	<.07	<.050	<.010	--u	<.06	<.005	<.006	<.008	<.009	<.003	<.012
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--

413341096325531 VADOSE ZONE ACTVZ1-3B NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	<.007	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012
MAY													
11...	--	.344	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012
14...	--	E673	<.02	<.050	<.010	<.041	--u	<.005	<.006	<.008	<.009	<.003	<.012
18...	--	E745c	<.03c	<.050	<.010	<.041	--u	<.005	<.006	<.008	<.009	<.003	<.012
24...	--	139	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012
JUN													
14...	--	11.4	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012
JUL													
06...	--	2.46	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012
17...	--	3.28	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012
23...	--	1.52	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012
AUG													
05...	--	41.3	<.07	<.050	<.010	<.041	<.06	.142	<.006	<.008	<.009	<.003	<.012
19...	--	11.4	<.07	<.050	<.010	<.041	<2.00	<.005	<.006	<.008	<.009	<.200	<.012
SEP													
22...	--	.620	<.07	<.050	<.010	--u	<.18c	<.005	<.006	<.008	<.009	<.003	<.012

413341096325532 VADOSE ZONE ACTVZ1-3C NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
17...	--	72.0	<.07	<.050	<.010	<.041	<.06	.214	<.006	<.008	<.009	<.003	<.012
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
22...	--	13.4	<.07	<.050	<.010	--u	<.06	.112	<.006	<.008	<.009	<.003	<.012

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Diaz-inon oxon, water, ug/L (61638)	Diazi-non, water, ug/L (39572)	Dicrotophos, water, ug/L (38454)	Diel-drin, water, ug/L (39381)	Dimeth-enamid ESA, water, ug/L (61951)	Dimeth-enamid OA, water, ug/L (62482)	Dimeth-enamid water, ug/L (61588)	Dimeth-oate, water, ug/L (82662)	Ethion monoxon, water, ug/L (81644)	Fenami-phos sulfone, water, ug/L (82346)	Fenami-phos sulfone, water, ug/L (61645)	Fenami-phos sulfone, water, ug/L (61591)

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAY 2004												
14...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
14...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03
JUL												
06...	--u	--u	<.08	<.009	--	--	--	<.006	<.0020	<.004	<.049	<.04
17...	<.01	<.005	<.08	<.009	--	--	--	<.006	<.0020	<.004	<.049	<.04
23...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
05...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--

413341096325531 VADOSE ZONE ACTVZ1-3B NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004												
01...	--	--	--	--	--	--	--	--	--	--	--	--
30...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03
MAY												
11...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03
14...	<.01	<.005	<.08	<.009	.04	<.02	.13	<.006	<.03	<.004	<.008	--u <.03
18...	<.01	<.005	<.08	<.009	.04	<.02	<.02	<.006	<.03	<.004	<.008	<.03 <.03
24...	--u	<.005	<.08	<.009	.03	<.02	.08	<.006	<.03	<.004	<.008	<.03 <.03
JUN												
14...	<.01	<.005	<.08	<.009	<.02	.06	<.02	<.006	<.03	<.004	<.008	<.03 <.03
JUL												
06...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04 <.03
17...	<.01	<.005	<.08	<.009	.02	.06	<.02	<.006	<.0020	<.004	<.049	<.04 <.03
23...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04 <.03
AUG												
05...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04 <.03
19...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04 <.03
SEP												
22...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04 <.03

413341096325532 VADOSE ZONE ACTVZ1-3C NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004												
01...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
17...	--u	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04 <.03
23...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
22...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04 <.03

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Desulf- inyl- fipro- nil amide, wat ug/L (62169)	Fipro- nil sulfide water, water, water, ug/L (62167)	Fipro- nil sulfone water, water, water, ug/L (62168)	Flufen- acet ESA, OA, water, ug/L (62166)	Flufe- nacet nacet, water, water, ug/L (61952)	Fonofos oxon, water, water, ug/L (62483)	Glufo- sinate, water, filtrd, 0.7u GF ug/L (61649)	Glypho- sate, water, filtrd, 0.7u GF ug/L (04095)	Hexa- zinone, water, filtrd, filtrd, ug/L (62721)	Ipro- dione, water, filtrd, filtrd, ug/L (04025)	Glypho- sate, water, filtrd, filtrd, ug/L (61593)

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAY 2004	14...	--	--	--	--	--	--	--	--	--	--	--	--
	18...	--	--	--	--	--	--	--	--	--	--	--	--
	24...	--	--	--	--	--	--	--	--	--	--	--	--
JUN	14...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1
JUL	06...	<.029	<.013	<.024	<.016	--	--	<.003	--u	<.1	<.1	<.013	<.387
	17...	<.029	<.013	<.024	<.016	--	--	<.003	<.003	--	--	<.013	<.387
	23...	--	--	--	--	--	--	--	--	--	--	--	--
AUG	05...	--	--	--	--	--	--	--	--	--	--	--	--
	19...	--	--	--	--	--	--	--	--	--	--	--	--

413341096325531 VADOSE ZONE ACTVZ1-3B NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004	01...	--	--	--	--	--	--	--	--	--	--	--	--
	30...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1
MAY	11...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1
	14...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1
	18...	<.029	<.013	<.024	<.016	<.02	<.02	.02	<.002	<.003	<.1	<.013	<1
	24...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	<.002	--u	<.1	<.013	<1
JUN	14...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1
JUL	06...	<.029	<.013	<.024	<.016	<.02	<.02	<.003	<.003	<.1	<.1	<.013	<.387
	17...	<.029	<.013	<.024	<.016	<.02	<.02	<.003	<.003	--	--	<.013	<.387
	23...	<.029	<.013	<.024	<.016	<.02	<.02	<.003	<.003	--	--	<.013	<.387
AUG	05...	<.029	<.013	<.024	<.016	<.02	<.02	<.003	<.003	--	--	<.013	<.387
	19...	<.029	<.013	<.024	<.016	<.02	<.02	<.003	<.003	<.1	<.1	<.013	<.387
SEP	22...	<.029	<.013	<.024	<.016	<.02	<.02	<.003	<.003	--	--	<.013	<.387

413341096325532 VADOSE ZONE ACTVZ1-3C NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004	01...	--	--	--	--	--	--	--	--	--	--	--	--
JUL	17...	--u	<.013	--u	<.016	<.02	<.02	<.003	--u	--	--	<.013	<.387
	23...	--	--	--	--	--	--	--	--	--	--	--	--
SEP	22...	<.029	<.013	<.024	<.016	<.02	<.02	<.003	<.003	--	--	<.013	<.387

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Isofen-	Mala-	Mala-	Meta-	Methi-	Methyl	para-	Metola-	Metola-	Metola-	Metri-	Myclo-
	phos,	oxon,	thion,	laxyl,	althion	thion,	ESA,	chlor	chlor,	chlor,	buzin,	butanil
	water,	water,	water,	water,	water,	water,	OA,	water,	water,	water,	water,	water,
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
	(61594)	(61652)	(39532)	(61596)	(61598)	(61664)	(82667)	(61043)	(61044)	(82694)	(39415)	(82630)

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAY 2004												
14...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	.94	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
14...	<.003	<.008	<.027	<.005	<.006	<.03	<.015	3.83	4.30	--	.489	<.006
JUL												
06...	<.003	<.030	<.027	<.005	<.006	--u	<.015	--	--	.485	<.006	<.008
17...	<.003	--u	<.027	<.005	<.006	<.03	<.015	--	--	.438	<.006	<.008
23...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
05...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--

413341096325531 VADOSE ZONE ACTVZ1-3B NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004												
01...	--	--	--	--	--	--	--	--	--	--	--	--
30...	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.12	.29	--	.288	--u
MAY												
11...	<.003	<.008	<.027	<.005	<.006	<.03	<.015	2.17	3.19	--	1.65	--u
14...	<.003	<.008	<.027	E.039	<.006	<.03	<.015	8.45	14.0	--	E210	--u
18...	<.003	<.008	<.027	<.005	<.006	<.03	<.015	13.0	19.0	--	82.1	<.006
24...	<.003	<.008	<.730	<.005	<.006	<.03	<.015	8.36	17.0	--	84.7	<.006
JUN												
14...	<.003	<.008	<.360	<.005	<.006	<.03	<.015	12.0	29.0	--	20.1	<.006
JUL												
06...	<.003	<.030	<.027	<.005	<.006	<.03	<.015	7.28	27.0	--	E27.3	<.006
17...	<.003	<.030	<.250c	<.005	<.006	<.03	<.015	13.0	29.0	--	33.8	<.006
23...	<.003	<.030	<.370	<.005	<.006	<.03	<.015	15.0	29.0	--	29.5	<.006
AUG												
05...	<.003	<.030	<.027	<.005	<.006	<.03	<.015	7.44	7.16	--	4.38	<.006
19...	<.003	<.030	<.027	<.500	<.006	<.03	<.015	3.97	18.0	--	421	<.006
SEP												
22...	<.003	--u	<.027	<.005	<.006	<.03	<.015	5.42	12.9	--	20.7	--u

413341096325532 VADOSE ZONE ACTVZ1-3C NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004												
01...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
17...	<.003	<.030	<.100	<.005	<.006	<.03	<.015	12.0	12.0	--	5.74	<.006
23...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
22...	<.003	<.030	<.027	<.005	<.006	<.03	<.015	8.34	8.29	--	3.37	--u

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Pendi-meth-alin, water, ug/L (82683)	Phorate oxon, water, ug/L (61666)	Phorate oxon, water, ug/L (82664)	Phosmet water, ug/L (61668)	Phosmet water, ug/L (61601)	Prome-ton, water, ug/L (04037)	Prome-tryn, water, ug/L (04036)	Propy-zamide, water, ug/L (82676)	Propa-chlor-ESA, OA, water, ug/L (62766)	Propa-chlor-ESA, OA, water, ug/L (62767)	Tebu-thiuron oxon sulfone water, ug/L (04035)	Ter-bufos water, ug/L (61674)
	0.7u GF ug/L (82683)	0.7u GF ug/L (61666)	0.7u GF ug/L (82664)	0.7u GF ug/L (61668)	0.7u GF ug/L (61601)	0.7u GF ug/L (04037)	0.7u GF ug/L (04036)	0.7u GF ug/L (82676)	0.7u GF ug/L (62766)	0.7u GF ug/L (62767)	0.7u GF ug/L (04035)	0.7u GF ug/L (61674)

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAY 2004												
14...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
14...	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02
JUL												
06...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	--u	--	--	<.005	<.02
17...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	--u	--	--	<.005	<.02
23...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
05...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--

413341096325531 VADOSE ZONE ACTVZ1-3B NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004												
01...	--	--	--	--	--	--	--	--	--	--	--	--
30...	<.022	<.10	<.011	--u	--u	<.01	<.005	<.004	<.05	<.02	<.005	<.02
MAY												
11...	<.022	<.10	<.011	<.06	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02
14...	<.022	<.10	<.011	--u	<.008	<.01	<.005	--u	<.05	<.02	--u	<.02
18...	<.022	<.10	<.011	<.06	<.008	<.01	<.005	--u	<.05	<.02	--u	<.02
24...	<.022	<.10	<.011	<.06	<.008	<.01	<.005	--u	<.05	<.02	.450	<.02
JUN												
14...	<.022	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05	<.02	.157	<.02
JUL												
06...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004	<.05	<.02	.064	<.02
17...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	<.080c	<.02
23...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<3.50	<.05	<.02	.081	<.02
AUG												
05...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	.083	<.02
19...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004	<.05	<.02	<.250	<.02
SEP												
22...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	<.060	<.02

413341096325532 VADOSE ZONE ACTVZ1-3C NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004												
01...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
17...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	.186	<.02
23...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
22...	<.022	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	<.090c	<.02

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

		Tri-		2Chloro		4-							
Terbu-	Ter-	flur-		-2',6'-	2-Ethyl		Chloro-						
fos,	butyl-	alin,		2,6-Di-	diethyl	-6-	3,4-Di-						
water,	azine,	water,	1-Naph-	ethyl-	acet-	methyl-	chloro-	methyl-	Aceto-	Ala-	HCH-d6,	Atra-	
fltrd		fltrd	thol,	aniline	anilide	aniline	aniline	phenol,	chlor,	chlor,	surrog,	zine,	
Date	0.7u GF	fltrd,	0.7u GF	solids,	solids,	solids,	solids,	solids,	solids,	solids,	solids,	solids,	
	ug/L	ug/L	ug/L	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	pct rcv	ug/kg	
(82675)	(04022)	(82661)	(63240)	(63243)	(63246)	(63247)	(63248)	(63249)	(63255)	(63257)	(63258)	(90739)	(63262)

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAY 2004

14... -- -- -- -- -- -- -- -- -- -- -- --
 18... -- -- -- -- -- -- -- -- -- -- -- --
 24... -- -- -- -- -- -- -- -- -- -- -- --
 'UN
 14... <.02 <.01 <.009 -- -- -- -- -- -- -- -- -- --
 'UL
 06... --u --u <.009 -- -- -- -- -- -- -- -- -- --
 17... <.02 --u <.009 -- -- -- -- -- -- -- -- -- --
 23... -- -- -- -- -- -- -- -- -- -- -- -- --
 AUG
 05... -- -- -- -- -- -- -- -- -- -- -- --
 19... -- -- -- -- -- -- -- -- -- -- -- --

413341096325531 VADOSE ZONE ACTVZ1-3B NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004

413341096325532 VADOSE ZONE ACTVZ1-3C NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAY 2004

14... -- -- -- -- -- -- -- -- -- -- -- --
18... -- -- -- -- -- -- -- -- -- -- -- --
24... -- -- -- -- -- -- -- -- -- -- -- --
'UN
14... -- -- -- -- -- -- -- -- -- -- -- --
'UL
06... -- -- -- -- -- -- -- -- -- -- -- --
17... -- -- -- -- -- -- -- -- -- -- -- --
23... -- -- -- -- -- -- -- -- -- -- -- --
'UG
05... -- -- -- -- -- -- -- -- -- -- -- --
19... -- -- -- -- -- -- -- -- -- -- -- --

413341096325531 VADOSE ZONE ACTVZ1-3B NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004

413341096325532 VADOSE ZONE ACTVZ1-3C NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

	Diazi-	Dia-	Fenam-								
Diaz-	non-d10	Diaz-	Dichlor	croto-	Diel-	Dimeth-	Ethion	iphos	sulfox-	Fenam-	Fipro-
inon,	surrog,	oxon,	vos,	phos,	drin,	oate,	monoxon	Ethion,	sulfone	ide,	iphos,
Date	solids,	sulfide									
	ug/kg	pct	ug/kg								
(63284)	(90740)	(63285)	(63286)	(63288)	(63289)	(63291)	(63303)	(63302)	(63306)	(63307)	(63314)

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAY 2004

14... -- -- -- -- -- -- -- -- --
18... -- -- -- -- -- -- -- -- --
24... -- -- -- -- -- -- -- -- --
'UN
14... -- -- -- -- -- -- -- -- --
'UL
06... -- -- -- -- -- -- -- -- --
17... -- -- -- -- -- -- -- -- --
23... -- -- -- -- -- -- -- -- --
AUG
05... -- -- -- -- -- -- -- -- --
19

413341096325531 VADOSE ZONE ACTVZ1-3B NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004

413341096325532 VADOSE ZONE ACTVZ1-3C NEAR NICKERSON, NE (LAT 41 33.41N LONG 096 32.55W)

MAR 2004

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

	Fipro-												
	nil	Fipro-	Fonofos		Hexa-	Ipro-	Isofen-	Mala-	Mala-	Meta-	Methid-	Metola-	Metri-
Date	sulfone	nil,	oxon,	Fonofos	zinone,	dione,	phos,	oxon,	thion,	laxyl,	athion,	chlor,	buzin,
	solids,												
	ug/kg												
	(63315)	(63313)	(63320)	(63319)	(63321)	(63322)	(63323)	(63326)	(63327)	(63328)	(63329)	(63332)	(63333)

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAY 2004

14... -- -- -- -- -- --
18... -- -- -- -- -- --
24... -- -- -- -- -- --
UN
14... -- -- -- -- -- --
UL
06... -- -- -- -- -- --
17... -- -- -- -- -- --
23... -- -- -- -- -- --
UG
05... -- -- -- -- -- --
19 -- -- -- -- -- --

413341096325531 VADOSE ZONE ACTVZ1-3B NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004

413341096325532 VADOSE ZONE ACTVZ1-3C NEAR NICKERSON, NE (LAT 41 33.41N LONG 096 32.55W)

MAR 2004

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAY 2004

14... -- -- -- -- -- -- -- -- -- -- -- --
18... -- -- -- -- -- -- -- -- -- -- -- --
24... -- -- -- -- -- -- -- -- -- -- -- --
'UN
14... -- -- -- -- -- -- -- -- -- -- -- --
'UL
06... -- -- -- -- -- -- -- -- -- -- -- --
17... -- -- -- -- -- -- -- -- -- -- -- --
23... -- -- -- -- -- -- -- -- -- -- -- --
AUG
05... -- -- -- -- -- -- -- -- -- -- -- --
19

413341096325531 VADOSE ZONE ACTVZ1-3B NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004

413341096325532 VADOSE ZONE ACTVZL1-3C NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Tebu-	Terbu-	Ter-	trans-	Di-	
	thiuron	fos,	bufos	butyl	Perme-	chlors
	solids, ug/kg	solids, (63376)	onon	azine, ug/kg	thrin, (63384)	alin, (63366)	water ug/kg
					Triflur	vos, ug/L
					fltrd, (63390)	
						(38775)

413341096325530 VADOSE ZONE ACTVZ1-3A NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAY 2004
 14... -- -- -- -- -- -- --
 18... -- -- -- -- -- -- --
 24... -- -- -- -- -- -- --
 JUN
 14... -- -- -- -- -- -- <.01
 JUL
 06... -- -- -- -- -- -- <.01
 17... -- -- -- -- -- -- <.01
 23... -- -- -- -- -- -- --
 AUG
 05... -- -- -- -- -- -- --
 19... -- -- -- -- -- -- --

413341096325531 VADOSE ZONE ACTVZ1-3B NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004
 01... <3mc <3mc <5mc <1 <5 <1 --
 30... -- -- -- -- -- -- <.01
 MAY
 11... -- -- -- -- -- -- <.01
 14... -- -- -- -- -- -- <.01
 18... -- -- -- -- -- -- <.01
 24... -- -- -- -- -- -- <.01
 JUN
 14... -- -- -- -- -- -- <.01
 JUL
 06... -- -- -- -- -- -- <.01
 17... -- -- -- -- -- -- <.01
 23... -- -- -- -- -- -- <.01
 AUG
 05... -- -- -- -- -- -- <.01
 19... -- -- -- -- -- -- <.01
 SEP
 22... -- -- -- -- -- -- <.01

413341096325532 VADOSE ZONE ACTVZ1-3C NEAR NICKERSON, NE (LAT 41 33 41N LONG 096 32 55W)

MAR 2004
 01... <3mc <3mc <5mc <1 <5 <1 --
 JUL
 17... -- -- -- -- -- -- <.01
 23... -- -- -- -- -- -- --
 SEP
 22... -- -- -- -- -- -- <.01

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Time	UV						Noncarb								
		Depth of well, feet	absorbance, 254 nm, wat flt	SUVA, 254 nm, abs units	pH, water, unfltrd	Specif. conduc-	Hard-	hard-	Magnes-	Potas-	Sodium,	Sodium,				
LSD	/cm	mgC/L /meter	std units	field, wat unf	tance, wat unf	ness, water, lab	wat flt	ium, water, water,	water, adsorp-	water, filtrd,	water, filtrd,	water, filtrd,				
(72008)	(50624)	(63162)	(00400)	(00095)	(00900)	(00905)	(00915)	(00915)	(00925)	(00935)	(00931)	(00930)				
413350096324730 VADOSE ZONE ACTVZ1-4A NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)																
MAR 2004																
31...	0810	5.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY																
11...	1345	5.0	--	--	6.7	360	--	--	--	--	--	--	--	--	--	--
24...	1250	5.0	--	--	7.3	430	--	--	--	--	--	--	--	--	--	--
JUN																
14...	1120	5.0	--	--	7.2	380	--	--	--	--	--	--	--	--	--	--
JUL																
06...	1220	5.0	--	--	7.7	360	--	--	--	--	--	--	--	--	--	--
23...	1100	5.0	--	--	7.3	320	--	--	--	--	--	--	--	--	--	--
AUG																
05...	1240	5.0	--	--	8.0	270	--	--	--	--	--	--	--	--	--	--
19...	1400	5.0	--	--	7.7	276	--	--	--	--	--	--	--	--	--	--
413350096324731 VADOSE ZONE ACTVZ1-4B NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)																
MAY 2004																
24...	1255	7.0	--	--	7.3	860	--	--	--	--	--	--	--	--	--	--
JUN																
14...	1125	7.0	--	--	8.2	1190	--	--	--	--	--	--	--	--	--	--
JUL																
06...	1225	7.0	--	--	8.0	1180	--	--	--	--	--	--	--	--	--	--
23...	1105	7.0	--	--	7.3	1160	--	--	--	--	--	--	--	--	--	--
AUG																
05...	1235	7.0	--	--	7.9	1000	--	--	--	--	--	--	--	--	--	--
19...	1405	7.0	--	--	7.5	305	--	--	--	--	--	--	--	--	--	--
SEP																
22...	1614	7.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--
413350096324732 VADOSE ZONE ACTVZ1-4C NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)																
MAR 2004																
31...	0815	12.0	--u	--u	--	--	160	--	46.2	11.7	5.31	.5	15.8			
MAY																
11...	1355	12.0	--u	--u	7.2	380	160	--	44.2	12.0	4.84	.5	15.7			
14...	1120	12.0	--u	--u	7.6	370	160	8	43.0	11.9	4.93	.6	16.1			
24...	1300	12.0	--u	--u	7.3	420	170	9	48.0	12.9	5.93	.5	14.4			
JUN																
14...	1130	12.0	--	--	7.3	570	250	55	68.0	19.4	6.29	.7	25.8			
JUL																
23...	1110	12.0	--	--	7.1	490	220	16	61.2	17.3	5.83	.6	21.3			
AUG																
05...	1230	12.0	--	--	7.3	346	230	19	60.9	19.1	6.20	.7	23.1			
19...	1410	12.0	--	--	7.2	280	230	31	61.6	18.4	6.37	.6	21.1			

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Residue											
	Alka-	linity,	wat flt	Bromide	Chlor-	Fluor-	Silica	Sulfate	sum of	water,	Ammonia	Nitrate
	fxd end	lab, water,	water,	ide, water,	ide, water,	water,	water,	consti-	fltrd, water,	fltrd, water,	water, fltrd,	
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(tons/acre-ft)	(mg/L)	(mg/L)	(mg/L)
	Sodium, percent	CaCO ₃	(00932)	(29801)	(71870)	(00940)	(00950)	(00955)	(00945)	(70301)	(70303)	(71846)
												(00608)
												(71851)
												(00618)

413350096324730 VADOSE ZONE ACTVZ1-4A NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAR 2004												
31...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
11...	--	--	--	--	--	--	--	--	--	.15	.12	35.4
24...	--	--	--	--	--	--	--	--	--	.11	.09	37.3
JUN												
14...	--	--	--	--	--	--	--	--	--	.20	.15	40.3
JUL												
06...	--	--	--	--	--	--	--	--	--	.16	.13	39.1
23...	--	--	--	--	--	--	--	--	--	.11	.08	22.5
AUG												
05...	--	--	--	--	--	--	--	--	--	.11	.08	10.2
19...	--	--	--	--	--	--	--	--	--	.12	.10	2.21
												.50

413350096324731 VADOSE ZONE ACTVZ1-4B NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAY 2004												
24...	--	--	--	--	--	--	--	--	--	.13	.10	34.6
JUN												
14...	--	--	--	--	--	--	--	--	--	.07	.06	30.5
JUL												
06...	--	--	--	--	--	--	--	--	--	.06	.05	27.7
23...	--	318@c	--	--	--	--	--	--	--	.07	.06	25.3
AUG												
05...	--	365@c	--	--	--	--	--	--	--	--	E.04n	23.2
19...	--	--	--	--	--	--	--	--	--	.05	.04	21.9
SEP												
22...	--	--	--	--	--	--	--	--	--	.28	.21	3.92
												.89

413350096324732 VADOSE ZONE ACTVZ1-4C NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAR 2004												
31...	17	--	<.02	5.03d	.4	32.4	43.8d	--	--	--	<.04	--
MAY												
11...	17	164@c	<.02	4.86	.4	31.7	41.7	256	.35	--	E.03n	--
14...	18	148@c	E.01n	4.94	.5	32.0	44.7	250	.34	--	<.04	--
24...	15	164@c	.02	4.50	.4	28.0	42.0	259	.35	.11	.09	--
JUN												
14...	18	194@c	.02	8.55	.5	36.7	100	386	.52	--	E.02n	--
JUL												
23...	17	208@c	<.02	6.63	.5	35.4	84.7	361	.49	--	E.03n	--
AUG												
05...	17	212@c	<.08	6.54	.5	40.4	84.4	371	.50	--	E.03n	--
19...	16	199@c	.04	5.70	.4	44.4	74.9	355	.48	--	E.02n	--

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Nitrite + nitrate water mg/L as N (00631)	Nitrite water, mg/L (71856)	Ortho-phosphate, water, mg/L (00613)	Ortho-phosphate, water, mg/L (00660)	Total nitro- gen, by anal (00671)	Mangan- ese, water, mg/L (62854)	Iron, water, mg/L (01046)	1-Naph- thol, water, mg/L (01056)	2,6-Di- ethyl- aniline, ug/L (49295)	2-[(2- 6methyl diethyl amino]2 oxoESA, ug/L (82660)	2Chloro acet- anilide, ug/L (62850)	CIAT, water, fltrd, ug/L (61618)	
413350096324730 VADOSE ZONE ACTVZ1-4A NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)													
MAR 2004													
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	8.00d	.039	.012	2.47	.81doc	10.9d	--	--	<.09	<.006	<.02	<.005	<.006
24...	8.44d	.069	.021	2.55	.83oc	11.3d	--	--	<.09	<.006	<.02	<.005	<.006
JUN													
14...	9.15d	.177	.054	3.02	.98doc	12.9d	--	--	<.09	<.006	<.02	<.005	<.006
JUL													
06...	8.85d	.049	.015	2.85	.93oc	10.2d	--	--	<.09	<.006	--	<.005	<.006
23...	5.11d	.102	.031	2.71	.885d	7.21d	--	--	--	--	--	--	--
AUG													
05...	2.37	.197	.060	2.99	.97doc	4.33d	--	--	--	--	--	--	--
19...	.53	.105	.032	3.05	.99doc	<.03	--	--	--	--	--	--	--
413350096324731 VADOSE ZONE ACTVZ1-4B NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)													
MAY 2004													
24...	7.86d	.122	.037	1.82	.59oc	10.9d	--	--	<.09	<.006	<.02	<.005	<.006
JUN													
14...	6.92d	.046	.014	3.20	1.04doc	9.34d	--	--	<.09	<.006	<.02	<.005	<.006
JUL													
06...	6.26d	.026	.008	3.95	1.29doc	8.09d	--	--	<.09	<.006	<.02	<.005	<.006
23...	5.71d	.030	.009	5.31	1.73doc	8.50d	--	--	<.09	<.006	.04	<.005	<.006
AUG													
05...	5.26d	.043	.013	6.58	2.15doc	7.29d	--	--	<.09	<.006	<.02	<.005	<.006
19...	4.97d	.082	.025	6.96	2.27doc	6.82d	--	--	<.09	<.006	<.02	<.005	<.006
SEP													
22...	.92	.125	.038	1.41	.461d	2.43	--	--	--	--	--	--	--
413350096324732 VADOSE ZONE ACTVZ1-4C NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)													
MAR 2004													
31...	<.06	--	<.008	2.35	.77oc	1.56	<6	E.6n	<.09	<.006	<.02	<.005	<.006
MAY													
11...	<.06	--	<.008	2.43	.79oc	1.69	<6	E.6n	<.09	<.006	<.02	<.005	<.006
14...	<.06	--	<.008	2.82	.92oc	1.59d	E4n	E.6n	<.09	<.006	<.02	<.005	<.006
24...	.47	--	E.005n	2.22	.72oc	2.22	28	501	<.09	<.006	<.02	<.005	<.006
JUN													
14...	.13	--	<.008	3.04	.99doc	2.14	<6	16.6	<.09	<.006	<.02	<.005	<.006
JUL													
23...	<.06	--	<.008	3.01	.98doc	2.30	E4n	1.1	<.09	<.006	<.02	<.005	<.006
AUG													
05...	<.06	--	<.008	3.20	1.04doc	1.91	E4n	E.5n	<.09	<.006	<.02	<.005	<.006
19...	<.06	--	<.008	2.83	.92oc	<.03	E4n	1.0	<.09	<.006	<.02	<.005	<.006

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	2-Ethyl	Aceto-	Aceto-	Ala-	Ala-	Amino-							
	-6- methyl- aniline water, fltrd, ug/L (61620)	3,4-Di- chloro- aniline water, fltrd, ug/L (61625)	4Chloro- chloro- phenol, water, fltrd, ug/L (61633)	chlor, ESA, OA, water, fltrd, ug/L (61029)	chlor, chlor, SAA, water, fltrd, ug/L (61030)	Aceto- chlor SA, water, fltrd, ug/L (62847)	chlor, ESA, SA, water, fltrd, ug/L (49260)	chlor, ESA, OA, water, fltrd, ug/L (62849)	chlor, SAA, water, fltrd, ug/L (50009)	chlor, OA, water, fltrd, ug/L (61031)	chlor, SAA, water, fltrd, ug/L (62848)	chlor, water, acid, fltrd, ug/L (46342)	methyl- phos- phonic acid, wat flt ug/L (62649)

413350096324730 VADOSE ZONE ACTVZ1-4A NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAR 2004													
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	<.004	<.004	<.006	<.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02	--u	<.1
24...	<.004	<.004	<.006	<.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02	<.005	<.1
JUN													
14...	<.004	<.004	<.006	<.02	<.02	<.02	<.006	<.02	<.02	<.02	<.02	<.005	.3
JUL													
06...	<.004	<.004	<.006	--	--	--	<.006	--	--	--	--	<.005	--
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--

413350096324731 VADOSE ZONE ACTVZ1-4B NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAY 2004													
24...	<.004	<.004	<.006	<.02	.10	<.02	<.006	<.02	<.02	<.02	<.02	<.005	<.1
JUN													
14...	<.004	<.004	<.006	.21	.62	<.02	<.006	<.02	<.02	<.02	<.02	<.005	.2
JUL													
06...	<.004	<.004	<.006	.20	.59	<.02	<.006	<.02	<.02	<.02	<.02	<.005	<.1
23...	<.004	<.004	<.006	.27	.23	.04	<.006	<.02	<.02	<.02	<.02	<.005	--
AUG													
05...	<.004	<.004	<.006	.19	.08	.08	<.006	<.02	<.02	<.02	<.02	--u	--
19...	<.004	<.004	<.006	.25	.04	.10	<.006	<.02	<.02	<.02	<.02	--u	<.1
SEP													
22...	--	--	--	--	--	--	--	--	--	--	--	--	--

413350096324732 VADOSE ZONE ACTVZ1-4C NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAR 2004													
31...	<.004	<.004	<.006	.03	<.02	<.02	<.006	<.02	<.02	<.02	<.02	--u	<.1
MAY													
11...	<.004	<.004	<.006	.08	<.02	<.02	<.006	<.02	<.02	<.02	<.02	<.005	.1
14...	<.004	<.004	<.006	.06	<.02	<.02	<.006	<.02	<.02	<.02	<.02	--u	.2
24...	<.004	<.004	<.006	.09	.17	.09	<.006	<.02	<.02	<.02	<.02	<.005	<.1
JUN													
14...	<.004	<.004	<.006	.33	.21	<.02	<.006	<.02	<.02	<.02	<.02	<.005	.1
JUL													
23...	<.004	<.004	<.006	.53	.23	<.02	<.006	<.02	<.02	<.02	<.02	<.005	--
AUG													
05...	<.004	<.004	<.006	.34	.10	<.02	<.006	<.02	<.02	<.02	<.02	--u	--
19...	<.004	<.004	<.006	.58	.14	<.02	<.006	<.02	<.02	<.02	<.02	--u	.1

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Atra-zine, wat flt immuno-assay unadj. ug/L (99775)	Atra-zine, oxon, water, fltrd ug/L (39632)	Azin-phos- methyl oxon, water, fltrd ug/L (61635)	Azin-phos- methyl methyln, water, fltrd ug/L (82686)	Ben-flur-alin, water, fltrd ug/L (82673)	Car-baryl, water, fltrd ug/L (82680)	Chlor-pyrifos water, fltrd ug/L (61636)	Chlor-pyrifos water, fltrd ug/L (38933)	cis-Per-methrin water, fltrd ug/L (82687)	Cyflu-thrin, water, fltrd ug/L (61585)	Cyper-methrin water, fltrd ug/L (61586)	DCPA, water ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd ug/L (62170)	

413350096324730 VADOSE ZONE ACTVZ1-4A NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAR 2004														
31...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY														
11...	--	<.007	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
24...	--	<.007	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
JUN														
14...	--	.146	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
JUL														
06...	--	<.007	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
23...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG														
05...	.09	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--	--

413350096324731 VADOSE ZONE ACTVZ1-4B NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAY 2004														
24...	--	<.007	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
JUN														
14...	--	<.007	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
JUL														
06...	--	<.007	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
23...	--	<.007	<.07	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	.075	<.012	
AUG														
05...	--	<.007	<.07	<.050	<.010	--u	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
19...	--	<.007	<.07	<.050	<.010	--u	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
SEP														
22...	--	--	--	--	--	--	--	--	--	--	--	--	--	--

413350096324732 VADOSE ZONE ACTVZ1-4C NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAR 2004														
31...	--	<.007	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
MAY														
11...	--	<.007	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
14...	--	<.007	<.02	<.050	<.010	--u	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
24...	--	<.007	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
JUN														
14...	--	<.007	<.02	<.050	<.010	<.041	<.06	<.005	<.006	<.008	<.009	.029	<.012	
JUL														
23...	--	<.007	<.07	<.050	<.010	--u	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
AUG														
05...	--	<.007	<.07	<.050	<.010	--u	<.06	<.005	<.006	<.008	<.009	<.003	<.012	
19...	--	<.007	<.07	<.050	<.010	--u	<.06	<.005	<.006	<.008	<.009	<.003	<.012	

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Diaz-inon oxon, water, ug/L (61638)	Diazi-non, water, ug/L (39572)	Dicrotophos, water, ug/L (38454)	Diel-drin, water, ug/L (39381)	Dimeth-enamid ESA, water, ug/L (61951)	Dimeth-enamid OA, water, ug/L (62482)	Dimeth-enamid water, ug/L (61588)	Dimeth-oate, water, ug/L (82662)	Ethion monoxon, water, ug/L (81644)	Fenami-phos sulfone, water, ug/L (82346)	Fenami-phos sulf-oxide, water, ug/L (61645)	Fenami-phos sulf-oxide, water, ug/L (61646)	Fenami-phos sulf-oxide, water, ug/L (61591)

413350096324730 VADOSE ZONE ACTVZ1-4A NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAR 2004													
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03
24...	--u	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03
JUN													
14...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03
JUL													
06...	--u	--u	<.08	<.009	--	--	--	<.006	<.0020	<.004	<.049	<.04	<.03
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--

413350096324731 VADOSE ZONE ACTVZ1-4B NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAY 2004													
24...	--u	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03
JUN													
14...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03
JUL													
06...	--u	--u	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03
23...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03
AUG													
05...	<.01	--u	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03
19...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03
SEP													
22...	--	--	--	--	--	--	--	--	--	--	--	--	--

413350096324732 VADOSE ZONE ACTVZ1-4C NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAR 2004													
31...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03
MAY													
11...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03
14...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03
24...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03
JUN													
14...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.03	<.004	<.008	<.03	<.03
JUL													
23...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03
AUG													
05...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03
19...	<.01	<.005	<.08	<.009	<.02	<.02	<.02	<.006	<.0020	<.004	<.049	<.04	<.03

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Desulf- inyl- fipro- nil amide, wat ug/L (62169)	Fipro- nil sulfide water, water, water, fltrd, ug/L (62167)	Fipro- nil sulfone water, water, water, fltrd, ug/L (62168)	Flufen- acet ESA, OA, water, water, water, fltrd, ug/L (62166)	Flufe- nacet OA, water, water, water, fltrd, ug/L (61952)	Fonofos oxon, water, water, water, fltrd, ug/L (62481)	Glufo- sinate, water, water, water, fltrd, ug/L (61649)	Glypho- sate, water, water, water, fltrd, ug/L (04095)	Hexa- zinone, water, water, water, fltrd, ug/L (62721)	Ipro- dione, water, water, water, fltrd, ug/L (04025)	Glypho- sate, water, water, water, fltrd, ug/L (61593)	

413350096324730 VADOSE ZONE ACTVZ1-4A NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAR 2004												
31...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
11...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1
24...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	--u	<.1	<.1	<.013	<1
JUN												
14...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1
JUL												
06...	<.029	<.013	<.024	<.016	--	--	<.003	--u	--	--	<.013	<.387
23...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
05...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--

413350096324731 VADOSE ZONE ACTVZ1-4B NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAY 2004												
24...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	--u	<.1	<.1	<.013	<1
JUN												
14...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1
JUL												
06...	<.029	<.013	<.024	<.016	<.02	<.02	<.003	--u	<.1	<.1	<.013	<.387
23...	<.029	<.013	<.024	<.016	<.02	<.02	<.003	<.003	--	--	<.013	<.387
AUG												
05...	<.029	<.013	<.024	<.016	<.02	<.02	<.003	<.003	--	--	<.013	<.387
19...	<.029	<.013	<.024	<.016	<.02	<.02	<.003	<.003	<.1	<.1	<.013	<.387
SEP												
22...	--	--	--	--	--	--	--	--	--	--	--	--

413350096324732 VADOSE ZONE ACTVZ1-4C NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAR 2004												
31...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1
MAY												
11...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1
14...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1
24...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1
JUN												
14...	<.029	<.013	<.024	<.016	<.02	<.02	<.002	<.003	<.1	<.1	<.013	<1
JUL												
23...	<.029	<.013	<.024	<.016	<.02	<.02	<.003	<.003	--	--	<.013	<.387
AUG												
05...	<.029	<.013	<.024	<.016	<.02	<.02	<.003	<.003	--	--	<.013	<.387
19...	<.029	<.013	<.024	<.016	<.02	<.02	<.003	<.003	--	<.1	<.013	<.387

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

					Methyl	Methyl	Metola-	Metola-	Pendi-			
					para-	para-	chlor	chlor	meth-			
	Isofen-	Malic	Malic	Meta-	Methi-	thion,	ESA,	OA,	Metola-	Metri-	Myclo-	alin,
phos,	oxon,	oxon,	thion,	laxyl,	althion	oxon,	water,	water,	chlor,	buzin,	butanil	water,
water,												
Date	fltrd,	0.7u GF	0.7u GF	fltrd,	fltrd,	0.7u GF						
ug/L												
(61594)	(61652)	(39532)	(61596)	(61598)	(61664)	(82667)	(61043)	(61044)	(39415)	(82630)	(61599)	(82683)

413350096324730 VADOSE ZONE ACTVZ1-4A NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

41 13 35 00 96 32 47 31 VADOSE ZONE ACTVZ1-4B NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

413350096324732 VADOSE ZONE ACTVZ1-4C NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAR	2004													
31...	<.003	<.008	<.027	<.005	<.006	<.03	<.015	<.02	<.02	<.025	--u	<.008	<.022	
MAY														
11...	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.02	<.02	<.013	<.006	<.008	<.022	
14...	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.03	<.02	<.013	--u	<.008	<.022	
24...	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.03	<.02	<.013	<.006	<.008	<.022	
JUN														
14...	<.003	<.008	<.027	<.005	<.006	<.03	<.015	.10	.03	<.013	--u	<.008	<.022	
JUL														
23...	<.003	<.030	<.027	<.005	<.006	<.03	<.015	.07	.04	<.013	<.006	<.008	<.022	
AUG														
05...	<.003	--u	<.027	<.005	<.006	<.03	<.015	<.02	<.02	<.013	<.006	<.008	<.022	
10...	<.003	--u	<.027	<.005	<.006	--u	<.015	.02	.02	<.013	<.006	<.008	<.022	

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

Date	Phorate oxon, water, ug/L (61666)	Phorate water, fltrd, 0.7u GF (82664)	Phosmet oxon, water, ug/L (61668)	Phosmet water, fltrd, 0.7u GF (61601)	Prome-ton, fltrd, ug/L (04037)	Prome-tryn, fltrd, ug/L (04036)	Propy-zamide, fltrd, ug/L (82676)	Propa-chlor ESA, water, fltrd, ug/L (62766)	Propa-chlor OA, water, fltrd, ug/L (62767)	Tebu-thiuron Simazine, water, fltrd, ug/L (04035)	Ter-bufos oxon, water, fltrd, 0.7u GF (82670)	Terbu-fos, water, fltrd, 0.7u GF (61674)	Terbu-fos, water, fltrd, 0.7u GF (82675)

413350096324730 VADOSE ZONE ACTVZ1-4A NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAR 2004													
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	<.10	<.011	<.06	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.07	<.02
24...	<.10	<.011	<.06	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.07	--u
JUN													
14...	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
JUL													
06...	<.10	<.011	<.05	<.008	<.01	<.005	--u	--	--	<.005	<.02	<.07	--u
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--

413350096324731 VADOSE ZONE ACTVZ1-4B NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAY 2004													
24...	<.10	<.011	<.06	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.07	--u
JUN													
14...	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
JUL													
06...	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.07	--u
23...	<.10	<.011	<.05	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
AUG													
05...	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.07	<.02
19...	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.07	<.02
SEP													
22...	--	--	--	--	--	--	--	--	--	--	--	--	--

413350096324732 VADOSE ZONE ACTVZ1-4C NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAR 2004													
31...	<.10	<.011	--u	--u	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
MAY													
11...	<.10	<.011	<.06	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.07	<.02
14...	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
24...	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
JUN													
14...	<.10	<.011	<.06	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
JUL													
23...	<.10	<.011	<.05	<.008	<.01	<.005	<.004	<.05	<.02	<.005	<.02	<.07	<.02
AUG													
05...	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.07	--u
19...	<.10	<.011	<.05	<.008	<.01	<.005	--u	<.05	<.02	<.005	<.02	<.07	<.02

CHEMICAL ANALYSES FROM NATIONAL WATER-QUALITY ASSESSMENT PROGRAM SITES

CENTRAL NEBRASKA BASINS STUDY UNIT—AGRICULTURAL CHEMICAL TRANSPORT STUDY
VADOSE ZONE/SOIL—Continued

		Tri-	
	Ter-	flur-	Di-
	buthyl-	alin,	chlor-
	azine,	water,	vos,
	water,	fltrd	water
Date	fltrd,	0.7u GF	fltrd,
	ug/L	ug/L	ug/L
	(04022)	(82661)	(38775)

413350096324730 VADOSE ZONE ACTVZ1-4A NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAR 2004			
31...	--	--	--
MAY			
11...	--u	<.009	<.01
24...	--u	<.009	<.01
JUN			
14...	<.01	<.009	<.01
JUL			
06...	--u	<.009	<.01
23...	--	--	--
AUG			
05...	--	--	--
19...	--	--	--

413350096324731 VADOSE ZONE ACTVZ1-4B NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAY 2004			
24...	--u	<.009	<.01
JUN			
14...	<.01	<.009	<.01
JUL			
06...	--u	<.009	<.01
23...	<.01	<.009	<.01
AUG			
05...	--u	<.009	<.01
19...	--u	<.009	<.01
SEP			
22...	--	--	--

413350096324732 VADOSE ZONE ACTVZ1-4C NEAR NICKERSON, NE (LAT 41 33 50N LONG 096 32 47W)

MAR 2004			
31...	<.01	<.009	<.01
MAY			
11...	--u	<.009	<.01
14...	<.01	<.009	<.01
24...	<.01	<.009	<.01
JUN			
14...	<.01	<.009	<.01
JUL			
23...	<.01	<.009	<.01
AUG			
05...	--u	<.009	<.01
19...	--u	<.009	<.01

Remark codes used in this table:

< -- Less than
 E -- Estimated value

Value qualifier codes used in this table:

@ -- Holding time exceeded
 c -- See laboratory comment
 d -- Diluted sample: method hi range exceeded
 i -- Result may be affected by interference
 m -- Value is highly variable by this method
 n -- Below the LRL and above the LT-MDL
 o -- Result determined by alternate method
 Null value qualifier codes used in this table:
 o -- Insufficient amount of water
 u -- Unable to determine-matrix interference