KOCH
KOCH NITROGEN COMPANY LLC

June 21, 2013

UPS Tracking # ***1Z 693 661 03 9999 2501***

Chief - RCRA Corrective Action & Permits Branch
Air, RCRA and Toxic Division
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Chief of the Hazardous Waste Permits Section
Bureau of Waste Management
Kansas Department of Health and Environment
1000 SW Jackson, Suite 320
Topeka, Kansas 66612-1366

RE **Response to KDHE June 6, 2013 and EPA May 22, 2013 Comments to the RCRA Post-Closure Permit Renewal Application – Groundwater Recovery System Upgrades Supplement**
Koch Nitrogen Company, LLC
Dodge City, Kansas
EPA RCRA ID No. KSD044625010

Dear Regulatory Officials:

This letter and associated attachments are provided to address comments on Koch Nitrogen Company, LLC's (KNC's) RCRA Post-Closure Permit Application – Groundwater Recovery System Upgrades

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Dodge City, Kansas 67801-1337

Supplement (Supplement), dated February 28, 2013, which comments were provided by the Kansas Department of Health and Environment (KDHE) and the U.S. Environmental Protection Agency (EPA), in a letter from KDHE dated June 6, 2013.

Per KDHE's request, the purpose of this letter is to transmit the information and document edits requested by the KDHE, and in the EPA Geologist comments #3 and #8. As indicated in that request, KNC's response to the remainder of the EPA comments will be provided separately by no later than July 9, 2013.

Comments from KDHE's June 6, 2013 letter and EPA Geologist comments #3 and #8, and KNC's responses to these comments, are provided in Attachment A. Figure and table revisions are provided in Attachments B and C, respectively. Groundwater isoconcentration maps from the 4th quarter of 2012 and corresponding cross-sections, per EPA Geologist Comment #3, are provided in Attachment D.

We trust that the information we have provided will address the corresponding comments. Please call Cory Zellers of KNC at (620) 371-7914 if you have any questions or would like to discuss any of these items further.

In accordance with Section I.F of the Part I permit and Section B.22 of the Part II permit, I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or other persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Very Truly Yours,

Michael J. Sherbak II
Plant Manager
Koch Nitrogen Company, LLC

Cc w/Attachments:

Tom Siegrist, KF, Wichita, Kansas (electronic)
Warren Brady, Geosyntec, Baton Rouge, Louisiana

ATTACHMENT A

KDHE 6 JUNE 2013
COMMENTS AND KNC RESPONSES

KDHE Comment 1 - Section 3, Third Paragraph, Page 7: The last sentence states that water from TW-26 is piped directly to the wastewater system. However, Figure 13 depicts water from this well is piped to the reverse osmosis unit. Please correct this discrepancy.

KNC Response: Comment noted. Figure 13 has been revised to reflect that TW-26 groundwater is transferred directly to the wastewater system. The revised Figure 13 is included in Attachment B.

KDHE Comment 2 - Figure 13: For clarity, indicate in the title that the flow schematic shown in Figure 13 is for the existing groundwater recovery system, not the proposed recovery system.

KNC Response: The title on the revised Figure 13 provided in Attachment B has been revised to read, "Existing Groundwater Recovery System Flow Schematic."

KDHE Comment 3 - Section 6: The first sentence of this section mentions that the current groundwater recovery system consists of 61 active wells, but does not identify these wells. Please include a table identifying the current groundwater recovery system.

KNC Response: Table 1 of the Groundwater Sampling and Analysis Plan (Appendix E-1 of the Permit Renewal) identified the current groundwater recovery system active wells. This table has been revised to incorporate the data requested above and by EPA Geologist Comment 3 and is provided in Attachment C.

KDHE Comment 4 - Table 5 and Figure 4: Table 5 includes TW-18 as a recovery well while Figure 4 depicts this well as a monitoring well. Please rectify this discrepancy or otherwise include a sentence in the text to explain the status of TW-18.

KNC Response: Recovery well TW-18 was inadvertently listed in Table 5 as having a model simulated flow rate of 5 gallons per minute (GPM). TW-18 is included in the Supplemental Monitoring Well Network and is not proposed for integration into the groundwater recovery system. Table 5 has been revised to reflect the removal of TW-18 from the groundwater recovery network and is included as Attachment C.

KDHE Comment 5 - Figure 13: This figure does not include TW-90 in the groundwater recovery system although it is shown as a recovery well in all of the figures depicting pumping wells. Please explain or otherwise rectify this discrepancy.

KNC Response: Comment noted. TW-60 was incorrectly referenced in the Figure as TW-90. This typographic error has been addressed in the revised Figure 13 (Attachment B).

EPA Geologist Comment 3 - Page 7, Section 3, Current Groundwater Recovery System. The Supplement needs to present more information regarding the current recovery system relative to the current configuration of the COC plumes. It should present figures at a suitable scale such as that used for Figure 3 (approximately 1" = 800'). These figures should show (1) the

locations of the recovery wells, (2) the most recent water level elevation contours produced from water level data collected during the most recent groundwater sampling event, and (3) illustration of the plume of one of the COCs showing isoconcentration contours from the fourth quarter 2012 data (a figure should be produced for each of the COCs). Next, from each of these figures, an appropriate number of cross sections should be prepared to show views through the contaminant plume which depict it in several directions. Each cross section should show (1) the entire thickness of the unconsolidated zone from ground surface down to the Graneros Shale, (2) the groundwater surface, (3) the recovery wells through which the section was prepared including the screened intervals, (4) the monitoring wells through which the section was prepared including the screened intervals, and (5) the plume of the COC showing isoconcentration contours. Completion of these figures and cross sections will provide a clear three-dimensional depiction of the current groundwater COC plumes along with the configuration of the monitoring and recovery wells.

If not done previously, the following information should be put into a table both to assist in the preparation of the cross sections and to provide for future reference: for each well, (1) designate whether it is for monitoring or recovery purposes, (2) present elevations of the top and bottom of the screened interval, (3) present the elevation of the base of the unconsolidated aquifer at the well location, and (4) present static water level elevations of the water table collected during September 2012.

KNC Response: Per EPA request the 4th quarter isoconcentration maps for Nitrate + Nitrite as N and total chromium previously presented in Figure 6 of the Supplemental Report have been provided at the scale requested in Attachment D. These two COCs are the most prevalent and widely distributed in groundwater within the study area and encompass the area of other potential COCs and thus encompass laterally and vertically the extent of known COCs at the Site and adjacent areas. These figures and cross-sections are provided in Attachment D. The water table elevation contours during the 4th quarter 2012 monitoring event are also included on these figures.

The cross-sections include Nitrate + Nitrite as N and total chromium from the 4th Quarter 2012 monitoring event and water table elevations from the September 2012 gauging event, per EPA's request. Please note that the water table depicted in these sections is estimated and dry wells are identified in the cross-sections adjacent to the well screen. Per EPA's request, the cross-sections include: i) the entire thickness of the unconsolidated zone from ground surface down to the Graneros Shale, where available; ii) the groundwater surface; iii) the recovery wells through which the section was prepared including the screened intervals (identified as R on cross-sections); iv) the monitoring wells through which the section was prepared including the screened intervals; and v) the COC concentration associated with each well.

Attachment C provides a table with updated information previously provided in Table 1 of the GWSAP submitted for the Permit Renewal. The table includes a column that identifies: i) the designated use of wells under the existing monitoring and recovery configuration; ii) the depth (feet below ground surface [ft bgs] and feet mean sea level [ft msl]) for the top and bottom of the screened intervals; iii) the elevation of the base of

the unconsolidated aquifer (where these data exist) for each well; and iv) the static water level elevations reported during September 2012. The information utilized to populate the columns on well screens and the bottom of the unconsolidated deposits was obtained from the boring logs provided in Appendix E-2 of the Permit Renewal Application.

EPA Geologist Comment 8 - Page 11, Section 4.3.3. There is no indication that consideration was given to the interval of the unconsolidated aquifer that was tested, since hydraulic conductivity can vary with depth. The screened interval of the well being tested should be matched up with its drilling log, and only wells that are screened across approximately the same zones should be averaged together. This process of ensuring that similarly screened wells are grouped together for averaging may be useful in locating zones of higher permeability, if present, in the unconsolidated aquifer.

KNC Response: The horizontal hydraulic conductivity testing results were reviewed to determine if grouping would identify zones of higher permeability. In the original submittal, Table 2 included the lithology of the entire screened interval. In order to refine the table and to perform additional analysis of the distribution of hydraulic conductivity, Table 2 was updated to only include the lithology of the saturated screened section. A revised Table 2 is included in Attachment C.

The testing results from each well were compared to determine if hydraulic conductivity coincided with saturated lithology material and/or saturated screen interval elevation. The range of horizontal hydraulic conductivity results ranged from 0.1 and 19.5 ft/day (excluding MW-19S which had a result of 0.0012 feet per day [ft/day]) and a geometric mean of 1.0 ft/day.

A review of the material adjacent to the screen and small range of hydraulic conductivities measured does not suggest that there are zones of higher permeability based on lithology. For instance, the highest reported hydraulic conductivity was from TW-71 and the screened unit was described as a clayey sand. A recovery well screened in a "medium sand" (TW-86) yielded a hydraulic conductivity of 0.1 ft/day. Further example of this tight range in reported hydraulic conductivity is apparent in sandy clay material where one well had a hydraulic conductivity of 0.3 ft/day (TW-09) and another well screened in similar material (TW-55) had a reported hydraulic conductivity of 4.6 ft/day.

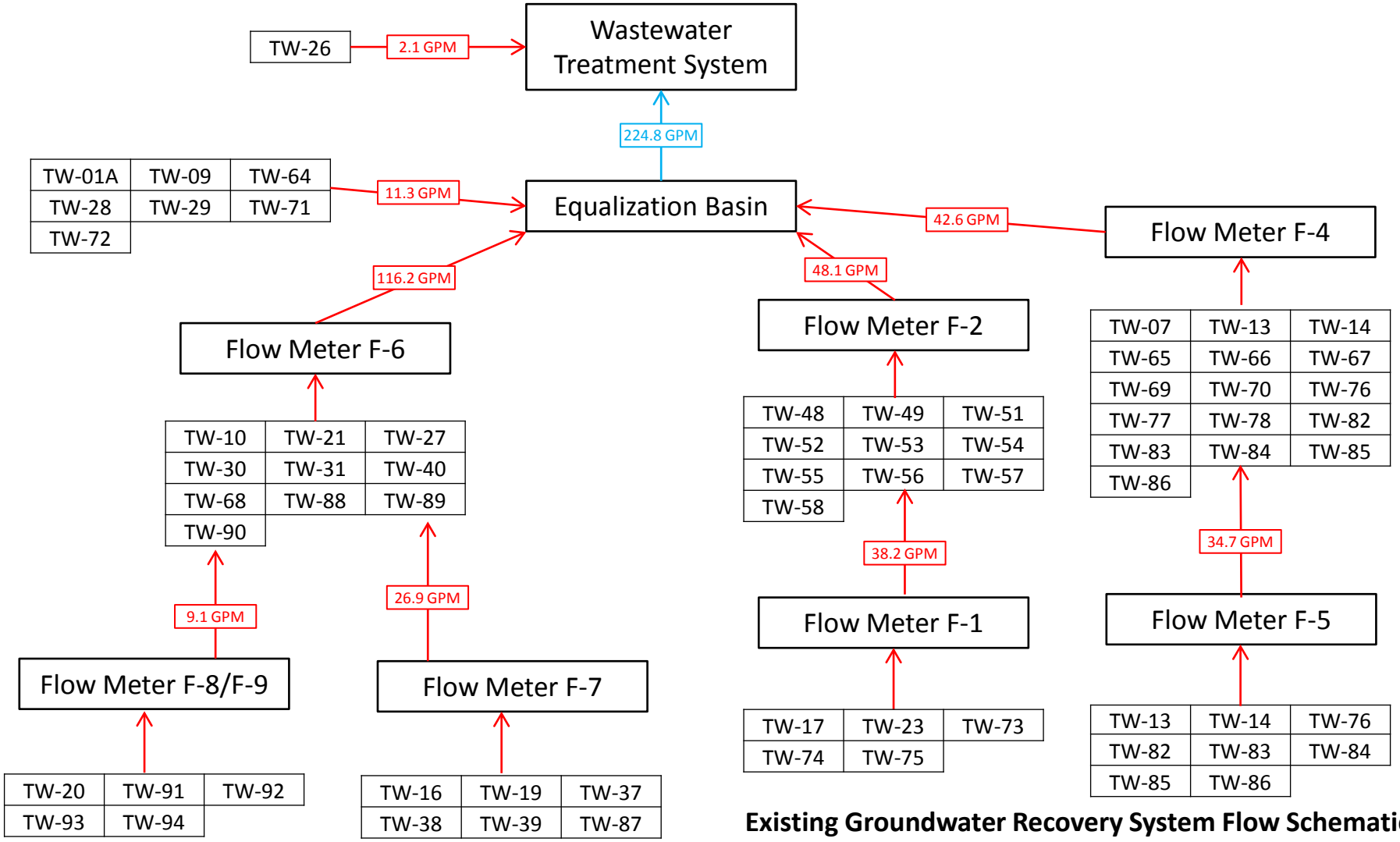
These results were similar to previous slug testing and aquifer performance testing completed by Woodward Clyde Consultants (WCC) at the site in 1988 which indicated a range of horizontal hydraulic conductivity between 0.9 and 13 ft/day. Both the 1988 and 2012 results are similar to the range of horizontal hydraulic conductivity reported by the Kansas Geologic Survey Open File Report 2010-18, as noted in the Permit Renewal Submission.

The majority of the recovery wells are screened over the entire saturated thickness and thus the estimate of horizontal hydraulic conductivity includes the entire saturated

thickness of the unconsolidated aquifer. Due to the consistency of the 2012 and historical results and the small variability, as described above, grouping of hydraulic conductivity estimates based on lithology or screen interval does not appear warranted.

ATTACHMENT B

REVISED FIGURE 13



Existing Groundwater Recovery System Flow Schematic

Note: Flow readings provided obtained on November 10th 2012

PREPARED BY:

KOCH NITROGEN COMPANY, LLC

PROJECT NO.	FIGURE NO. 13
DATE. June 2013	FILE NO.

ATTACHMENT C

REVISED TABLES

Table 1
Proposed Groundwater Recovery and Monitoring Network
Koch Nitrogen Company, LLC, Dodge City, KS

Well ID	Completion Date	Top of Casing (ft msl)	Ground Surface (ft msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Top of Screen (ft msl)	Bottom of Screen (ft msl)	Screen Length (ft)	Well Diameter (inches)	Hydrogeologic Position (Upgradient/ Downgradient)	Well Use	Depth to Water Measured (Yes/No)	Analytical Parameters	Water Level (ft btoc) September 2012	Water Level (ft msl) September 2012	Elevation Base of Unconsolidated Deposits (ft bgs)	Elevation Base of Unconsolidated Deposits (ft msl)	Total Boring Depth (ft bgs)	Total Boring Depth (ft msl)
B-1	3/28/1988	2511.79	2509.69	108	113	2401.69	2396.69	5	2	Upgradient	M	Yes	C N	88.31	2423.48	Not Available	Not Available	115	2395
A-3B	3/25/1988	2527.30	2525.15	115	120	2410.15	2405.15	5	2	Upgradient	M	Yes	C N	106.25	2421.05	Not Available	Not Available	122	2403
C-3B	3/29/1988	2526.71	2524.96	94	114	2430.96	2410.96	20	2	Downgradient	M	Yes	C N	114.53	2412.18	Not Available	Not Available	133	2392
MW-01	5/18/2011	2536.09	2533.39	117	122	2416.39	2411.39	5	2	Upgradient	M	Yes	C N	110.76	2425.33	133	2400	135	2398
MW-02	5/20/2011	2526.23	2523.70	114	119	2409.70	2404.70	5	2	Upgradient	M	Yes	C N	101.62	2424.61	120	2404	125	2399
MW-03	5/22/2011	2520.84	2518.50	105	110	2413.50	2408.50	5	2	Upgradient	M	Yes	C N	96.35	2424.49	114	2405	125	2394
MW-17	6/20/2011	2562.83	2560.03	165	170	2395.03	2390.03	5	2	Downgradient	M	Yes	C N	152.37	2410.46	151	2409	185	2375
MW-18D	7/10/2011	2543.06	2540.35	140	145	2400.35	2395.35	5	2	Upgradient	M	Yes	C N	113.08	2429.98	148.5	2392	155	2385
MW-18S	7/10/2011	2543.07	2540.25	119	124	2421.25	2416.25	5	2	Upgradient	M	Yes	C N	113.16	2429.91	Not Encountered	Not Encountered	125	2415
MW-19D	7/8/2011	2548.22	2545.01	154	159	2391.01	2386.01	5	2	Upgradient	M	Yes	C N	121.88	2426.34	169	2376	170	2375
MW-19S	7/8/2011	2548.02	2545.04	129	134	2416.04	2411.04	5	2	Upgradient	M	Yes	C N	121.86	2426.16	Not Encountered	Not Encountered	135	2410
MW-22D	5/24/2011	2507.37	2505.03	126	131	2379.03	2374.03	5	2	Downgradient	M	Yes	C N	86.31	2421.06	139	2366	145	2360
MW-22S	5/24/2011	2507.28	2504.58	84	89	2420.58	2415.58	5	2	Downgradient	M	Yes	C N	Not Available	Not Available	Not Encountered	Not Encountered	90	2415
MW-23D	6/18/2011	2557.59	2554.69	171	176	2383.69	2378.69	5	2	Downgradient	M	Yes	C N	139.81	2417.78	185	2370	195	2360
MW-23S	6/18/2011	2557.43	2554.58	142	147	2412.58	2407.58	5	2	Downgradient	M	Yes	C N	139.60	2417.83	Not Encountered	Not Encountered	147	2408
SIT-RG-01	5/4/2006	2540.98	2538.08	132	152	2406.08	2386.08	20	2	Downgradient	M	Yes	C N	114.20	2426.78	161	2377	170	2368
SIT-RG-02	5/6/2006	2544.14	2541.36	130	160	2411.36	2381.36	30	2	Downgradient	M	Yes	C N	121.24	2422.90	177	2364	180	2361
SIT-RG-03	5/21/2006	2546.86	2543.84	143	153	2400.84	2390.84	10	2	Downgradient	M	Yes	C N	127.90	2418.96	165	2379	186	2358
SIT-RG-04	5/20/2006	2555.53	2552.44	142	152	2410.44	2400.44	10	2	Downgradient	M	Yes	C N	145.90	2409.63	158	2394	176	2376
SIT-RG-05	5/22/2006	2542.87	2539.92	140	150	2399.92	2389.92	10	2	Downgradient	M	Yes	C N	141.47	2401.40	157	2383	172	2368
SIT-RG-06	6/1/2006	2521.87	2519.00	112	122	2407.00	2397.00	10	2	Downgradient	M	Yes	C N	115.54	2406.33	136	2383	166	2353
SIT-RG-08	5/8/2006	2533.77	2530.87	98	128	2432.87	2402.87	30	2	Downgradient	M	Yes	C N V	114.16	2419.61	Not Encountered	Not Encountered	143	2388
TW-01A	11/14/1994	2538.56	2535.91	95	140	2440.91	2395.91	45	5	Downgradient	M R	No	C N	118.70	2419.86	160	2376	200	2336
TW-05	6/24/1982	2542.50	2540.56	125	145	2415.56	2395.56	20	5	Downgradient	M	Yes	C N V	115.00	2427.50	170	2371	170	2371
TW-07	6/26/1982	2527.28	2525.40	120	140	2405.40	2385.40	20	5	Downgradient	M R	No	C N	114.49	2412.79	Not Encountered	Not Encountered	140	2385
TW-09	9/22/1982	2526.03	2523.32	95	125	2428.32	2398.32	30	5	Downgradient	M R	No	C N	107.47	2418.56	Not Encountered	Not Encountered	130	2393
TW-10	7/13/1982	2541.33	2539.10	120	140	2419.10	2399.10	20	5	Downgradient	M R	No	C N V	Not Available	Not Available	Not Encountered	Not Encountered	140	2399
TW-11	7/18/1982	2509.30	2505.56	100	120	2405.56	2385.56	20	5	Downgradient	M	Yes	C N	82.25	2427.05	120	2386	140	2366
TW-12	7/21/1982	2508.66	2505.75	100	120	2405.75	2385.75	20	5	Downgradient	M	Yes	C N	Not Available	Not Available	110	2396	125	2381
TW-13	7/22/1982	2506.15	2503.50	90	110	2413.50	2393.50	20	5	Downgradient	M R	No	C N	82.68	2423.47	Not Encountered	Not Encountered	110	2394
TW-14	7/23/1982	2515.42	2512.87	105	125	2407.87	2387.87	20	5	Downgradient	M R	No	C N	97.85	2417.57	Not Encountered	Not Encountered	125	2388
TW-16	8/4/1982	2534.44	2532.29	110	130	2422.29	2402.29	20	5	Upgradient	M R	No	C N	103.16	2431.28	Not Encountered	Not Encountered	140	2392
TW-17	8/16/1982	2510.73	2508.09	90	120	2418.09	2388.09	30	5	Upgradient	M R	No	C N	83.95	2426.78	115	2393	120	2388
TW-18	8/17/1982	2500.51	2498.54	90	120	2408.54	2378.54	30	5	Downgradient	M	No	C N	Not Available	Not Available	Not Encountered	Not Encountered	125	2374
TW-19	8/27/1982	2528.41	2525.56	110	140	2415.56	2385.56	30	5	Upgradient	M R	No	C N	93.53	2434.88	Not Encountered	Not Encountered	140	2386
TW-20	8/28/1982	2543.34	2541.49	142	172	2399.49	2369.49	30	5	Downgradient	M R	No	C N	126.08	2417.26	Not Encountered	Not Encountered	175	2366
TW-21	8/30/1982	2543.66	2542.66	130	160	2412.66	2382.66	30	5	Downgradient	M R	No	C N V	123.96	2419.70	160	2383	160	2383
TW-22	9/27/1982	2499.82	2496.21	95	125	2401.21	2371.21	30	5	Upgradient	M	Yes	C N	69.23	2430.59	125	2371	140	2356
TW-23	10/22/1982	2508.82	2506.77	110	140	2396.77	2366.77	30	5	Upgradient	M R	No	C N	80.02	2428.80	140	2367	140	2367
TW-26	11/16/1982	2541.54	2539.27	120	140	2419.27	2399.27	20	5	Downgradient	M R	No	C N	120.38	2421.16	180	2359	185	2354
TW-27	11/17/1982	2543.88	2541.42	120	150	2421.42	2391.42	30	5	Downgradient	M R	No	C N	124.71	2419.17	Not Encountered	Not Encountered	170	2371
TW-28	11/18/1982	2529.09	2527.72	100	130	2427.72	2397.72	30	5	Downgradient	M R	No	C N	111.20	2417.89	Not Encountered	Not Encountered	150	2378
TW-29	12/7/1982	2543.79	2539.84	110	140	2429.84	2399.84	30	5	Downgradient	M R	No	C N V	122.15	2421.64	Not Encountered	Not Encountered	155	2385
TW-30	12/8/1982	2536.75	2533.77	110	140	2423.77	2393.77	30	5	Downgradient	M R	No	C N V	117.72	2419.03	Not Encountered	Not Encountered	140	2394
TW-31	12/10/1982	2535.42	2532.01	110	140	2422.01	2392.01	30	5	Downgradient	M R	No	C N	116.06	2419.36	Not Encountered	Not Encountered	140	2392
TW-37	3/8/1983	2530.98	2529.70	105	135	2424.70	2394.70	30	5	Upgradient	M R	No	C N	98.79	2432.19	135	2395	145	2385
TW-38	1/11/1983	2532.76	2531.68	105	135	2426.68	2396.68	30	5	Downgradient	M R	No	C N	103.08	2429.68	Not Encountered	Not Encountered	165	2367

Table 1
Proposed Groundwater Recovery and Monitoring Network
Koch Nitrogen Company, LLC, Dodge City, KS

Well ID	Completion Date	Top of Casing (ft msl)	Ground Surface (ft msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Top of Screen (ft msl)	Bottom of Screen (ft msl)	Screen Length (ft)	Well Diameter (inches)	Hydrogeologic Position (Upgradient/ Downgradient)	Well Use	Depth to Water Measured (Yes/No)	Analytical Parameters	Water Level (ft btoc) September 2012	Water Level (ft msl) September 2012	Elevation Base of Unconsolidated Deposits (ft bgs)	Elevation Base of Unconsolidated Deposits (ft msl)	Total Boring Depth (ft bgs)	Total Boring Depth (ft msl)
TW-39	3/14/1983	2536.87	2534.18	105	135	2429.18	2399.18	30	5	Downgradient	M R	No	C N V	110.00	2426.87	Not Encountered	Not Encountered	155	2379
TW-40	3/16/1983	2537.80	2535.75	115	145	2420.75	2390.75	30	5	Downgradient	M R	No	C N V	117.32	2420.48	Not Encountered	Not Encountered	150	2386
TW-48	5/17/1983	2532.27	2529.99	120	150	2409.99	2379.99	30	5	Upgradient	M R	No	C N	113.15	2419.12	160	2370	165	2365
TW-49	8/15/1983	2521.92	2519.86	95	125	2424.86	2394.86	30	5	Upgradient	M R	No	C N	102.09	2419.83	140	2380	160	2360
TW-51	8/19/1987	2545.38	2543.54	140	170	2403.54	2373.54	30	5	Upgradient	M R	No	C N	119.12	2426.26	Not Encountered	Not Encountered	170	2374
TW-52	3/22/1983	2520.12	2518.37	75	105	2443.37	2413.37	30	5	Upgradient	M R	No	C N	91.12	2429.00	120	2398	125	2393
TW-53	8/24/1983	2527.52	2524.75	108	115	2416.75	2409.75	7	5	Upgradient	M R	No	C N	103.75	2423.77	Not Encountered	Not Encountered	115	2410
TW-54	8/25/1983	2535.19	2533.41	100	130	2433.41	2403.41	30	5	Upgradient	M R	No	C N	110.33	2424.86	140	2393	140	2393
TW-55	9/9/1983	2527.52	2525.77	95	125	2430.77	2400.77	30	5	Upgradient	M R	No	C N	99.16	2428.36	Not Encountered	Not Encountered	130	2396
TW-56	9/10/1983	2534.90	2532.96	103	133	2429.96	2399.96	30	5	Upgradient	M R	No	C N	105.15	2429.75	133	2400	140	2393
TW-57	9/19/1983	2527.11	2525.06	95	125	2430.06	2400.06	30	5	Upgradient	M R	No	C N	107.90	2419.21	Not Encountered	Not Encountered	135	2390
TW-58	9/21/1983	2538.88	2536.33	105	135	2431.33	2401.33	30	5	Upgradient	M R	No	C N	116.59	2422.29	135	2401	135	2401
TW-63	10/10/1983	2547.36	2543.86	102	132	2441.86	2411.86	30	5	Upgradient	M	Yes	C N	116.84	2430.52	Not Encountered	Not Encountered	140	2404
TW-64	10/11/1983	2540.48	2538.85	105	135	2433.85	2403.85	30	5	Downgradient	M R	No	C N	119.28	2421.20	Not Encountered	Not Encountered	140	2399
TW-65	2/3/1984	2527.79	2525.71	110	150	2415.71	2375.71	40	5	Downgradient	M R	No	C N V	Not Available	Not Available	165	2361	168	2358
TW-66	2/6/1984	2522.86	2520.33	100	140	2420.33	2380.33	40	5	Downgradient	M R	No	C N	114.75	2408.11	Not Encountered	Not Encountered	155	2365
TW-67	2/9/1984	2513.18	2510.18	90	130	2420.18	2380.18	40	5	Downgradient	M R	No	C N	101.77	2411.41	145	2365	145	2365
TW-68	2/11/1984	2529.50	2526.72	100	140	2426.72	2386.72	40	5	Downgradient	M R	No	C N V	117.63	2411.87	Not Encountered	Not Encountered	150	2377
TW-69	9/5/1984	2526.21	2524.10	100	140	2424.10	2384.10	40	5	Downgradient	M R	No	C N V	118.08	2408.13	Not Encountered	Not Encountered	150	2374
TW-70	9/6/1984	2518.03	2515.04	95	135	2420.04	2380.04	40	5	Downgradient	M R	No	C N	109.00	2409.03	Not Encountered	Not Encountered	140	2375
TW-71	5/8/1985	2534.64	2532.88	100	140	2432.88	2392.88	40	5	Downgradient	M R	No	C N	115.84	2418.80	Not Encountered	Not Encountered	140	2393
TW-72	5/9/1985	2527.14	2525.03	90	130	2435.03	2395.03	40	5	Downgradient	M R	No	C N	109.07	2418.07	Not Encountered	Not Encountered	130	2395
TW-73	8/5/1985	2516.00	2514.04	90	130	2424.04	2384.04	40	5	Upgradient	M R	No	C N	91.75	2424.25	Not Encountered	Not Encountered	130	2384
TW-74	8/6/1985	2520.44	2518.06	80	125	2438.06	2393.06	45	5	Upgradient	M R	No	C N V	100.73	2419.71	Not Encountered	Not Encountered	130	2388
TW-75	8/7/1985	2514.95	2512.74	80	125	2432.74	2387.74	45	5	Upgradient	M R	No	C N	92.62	2422.33	Not Encountered	Not Encountered	125	2388
TW-76	12/7/1989	2509.30	2506.97	71	131	2435.97	2375.97	60	4	Downgradient	M R	No	C N	93.72	2415.58	131	2376	140	2367
TW-77	9/4/1990	2525.12	2521.84	80	140	2441.84	2381.84	60	5	Downgradient	M R	No	C N	119.42	2405.70	131	2391	130	2392
TW-78	3/26/1991	2523.19	2521.71	92	142	2429.71	2379.71	50	5	Downgradient	M R	No	C N	128.90	2394.29	143	2379	148	2374
TW-79	3/26/1991	2513.96	2511.39	71	141	2440.39	2370.39	70	5	Downgradient	M	Yes	C N	111.54	2402.42	142	2369	148	2363
TW-80	3/26/1991	2555.58	2551.96	113	173	2438.96	2378.96	60	5	Downgradient	M	Yes	C N	141.03	2414.55	173	2379	183	2369
TW-82	12/7/1993	2511.15	2508.80	70	110	2438.80	2398.80	40	5	Downgradient	M R	No	C N	90.20	2420.95	118	2391	122	2387
TW-83	12/7/1993	2519.63	2517.36	82	132	2435.36	2385.36	50	5	Downgradient	M R	No	C N	100.73	2418.90	139	2378	142	2375
TW-84	12/7/1993	2520.95	2518.66	82	132	2436.66	2386.66	50	5	Downgradient	M R	No	C N	105.98	2414.97	138	2381	142	2377
TW-85	12/7/1993	2514.99	2512.50	71	121	2441.50	2391.50	50	5	Downgradient	M R	No	C N	100.20	2414.79	128	2385	142	2371
TW-86	12/7/1993	2506.99	2505.16	71	131	2434.16	2374.16	60	5	Downgradient	M R	No	C N	86.29	2420.70	130	2375	140	2365
TW-87	4/23/1993	2536.80	2534.95	79	139	2455.95	2395.95	60	5	Downgradient	M R	No	C N	108.46	2428.34	142	2393	148	2387
TW-88	4/23/1993	2541.18	2539.70	108	148	2431.70	2391.70	40	5	Downgradient	M R	No	C N	117.09	2424.09	148	2392	157	2383
TW-89	4/23/1993	2543.55	2541.86	99	149	2442.86	2392.86	50	5	Downgradient	M R	No	C N V	125.65	2417.90	155	2387	163	2379
TW-90	4/23/1993	2544.10	2542.30	99	159	2443.30	2383.30	60	5	Downgradient	M R	No	C N V	126.31	2417.79	160	2382	173	2369
TW-91	4/23/1993	2544.25	2542.36	101	161	2441.36	2381.36	60	5	Downgradient	M R	No	C N	128.02	2416.23	163	2379	174	2368
TW-92	7/20/1995	2546.26	2545.13	112	162	2433.13	2383.13	50	5	Downgradient	M R	No	C N	131.59	2414.67	159	2386	162	2383
TW-93	7/20/1995	2542.34	2540.85	102	162	2438.85	2378.85	60	5	Downgradient	M R	No	C N V	129.47	2412.87	159	2382	162	2379
TW-94	7/20/1995	2542.25	2540.08	100	170	2440.08	2370.08	70	5	Downgradient	M R	No	C N	122.74	2419.51	166	2374	170	2370
A-1	3/26/1988	2527.51	2525.19	75	80	2450	2445	5	2	Upgradient	Dry	No	Not Sampled	Not Available	Not Available	Not Available	Not Available	83	2442
A-2	3/26/1988	2527.48	2525.21	95	100	2430	2425	5	2	Upgradient	Dry	No	Not Sampled	Not Available	Not Available	Not Available	Not Available	103	2422
B-2	3/27/1988	2511.74	2509.55	170	175	2340	2335	5	2	Upgradient	Dry	No	Not Sampled	Not Available	Not Available	Not Available	Not Available	178	2332
C-1	NA	2526.56	2524.96	125	130	2400	2395	5	2	Downgradient	Dry	No	Not Sampled	Not Available	Not Available	Not Available	Not Available	75	2450
C-2	3/30/1988	2526.77	2525.00	94	114	2431	2411	20	2	Downgradient	Dry	No	Not Sampled	Not Available	Not Available	Not Available	Not Available	103	2422

Table 1
Proposed Groundwater Recovery and Monitoring Network
Koch Nitrogen Company, LLC, Dodge City, KS

Well ID	Completion Date	Top of Casing (ft msl)	Ground Surface (ft msl)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Top of Screen (ft msl)	Bottom of Screen (ft msl)	Screen Length (ft)	Well Diameter (inches)	Hydrogeologic Position (Upgradient/ Downgradient)	Well Use	Depth to Water Measured (Yes/No)	Analytical Parameters	Water Level (ft btoc) September 2012	Water Level (ft msl) September 2012	Elevation Base of Unconsolidated Deposits (ft bgs)	Elevation Base of Unconsolidated Deposits (ft msl)	Total Boring Depth (ft bgs)	Total Boring Depth (ft msl)
CP-1	12/6/1996	2543.11	2540.29	94	114	2446	2426	20	2	Downgradient	Dry	No	Not Sampled	Not Available	Not Available	Not Encountered	Not Encountered	114	2426
CP-2	11/21/1996	2541.96	2538.71	94	114	2445	2425	20	2	Downgradient	Dry	No	Not Sampled	Not Available	Not Available	Not Encountered	Not Encountered	114	2425
CP-3	12/3/1996	2542.03	2538.88	94	114	2445	2425	20	2	Downgradient	Dry	No	Not Sampled	Not Available	Not Available	Not Encountered	Not Encountered	114	2425
CP-4	11/26/1996	2542.50	2539.99	110	150	2430	2390	40	2	Downgradient	Dry	No	Not Sampled	Not Available	Not Available	Not Encountered	Not Encountered	114	2426
CP-5	12/4/1996	2542.70	2539.34	110	150	2429	2389	40	2	Downgradient	Dry	No	Not Sampled	Not Available	Not Available	Not Encountered	Not Encountered	114	2425
MW-24	6/26/2011	2546.28	2543.48	156	161	2387	2382	5	2	Downgradient	Dry	No	Not Sampled	Not Available	Not Available	165	2378	190	2353
MW-25	6/10/2011	2531.26	2528.60	142	147	2387	2382	5	2	Downgradient	Dry	No	Not Sampled	Not Available	Not Available	151	2378	155	2374
MW-26	6/7/2011	2523.02	2520.33	167	172	2353	2348	5	2	Downgradient	Dry	No	Not Sampled	Not Available	Not Available	174	2346	175	2345
SIT-RG-07	5/19/2006	2543.70	2543.59	131	141	2413	2403	10	2	Downgradient	Dry	No	Not Sampled	Not Available	Not Available	156	2388	175	2369
TW-02	6/22/1982	2526.86	2524.17	90	102	2434	2422	12	5	Downgradient	Dry	No	Not Sampled	Not Available	Not Available	Not Encountered	Not Encountered	105	2419
TW-04	6/23/1982	2523.36	2521.38	90	102	2431	2419	12	5	Downgradient	Dry	No	Not Sampled	Not Available	Not Available	Not Encountered	Not Encountered	105	2416
TW-08	7/12/1982	2525.30	2523.06	120	140	2403	2383	20	5	Downgradient	Not Sampled	No	Not Sampled	105.49	2419.81	Not Encountered	Not Encountered	155	2368
TW-15	8/3/1982	2520.71	2517.00	120	140	2397	2377	20	5	Downgradient	Not Sampled	No	Not Sampled	99.65	2421.06	Not Encountered	Not Encountered	145	2372
TW-24	11/10/1982	2510.73	2509.55	91	121	2419	2389	30	5	Upgradient	Not Sampled	No	Not Sampled	71.65	2439.08	180	2330	200	2310
TW-25	11/11/1982	2504.92	2503.11	95	125	2408	2378	30	5	Upgradient	Not Sampled	No	Not Sampled	71.72	2433.20	125	2378	140	2363
TW-36	3/7/1983	2519.59	2517.21	80	110	2437	2407	30	5	Downgradient	Dry	No	Not Sampled	Not Available	Not Available	Not Encountered	Not Encountered	125	2392
TW-46	5/13/1983	2542.06	2539.99	115	145	2425	2395	30	5	Downgradient	Not Sampled	No	Not Sampled	118.83	2423.23	Not Encountered	Not Encountered	150	2390
TW-47	5/17/1983	2535.94	2534.15	120	150	2414	2384	30	5	Downgradient	Not Sampled	No	Not Sampled	102.56	2433.38	150	2384	150	2384
TW-50	NA	2520.30	2518.65	110	150	2409	2369	40	NA	Downgradient	Dry	No	Not Sampled	Not Available	Not Available	Not Available	Not Available	Not Available	Not Available
TW-59	10/7/1983	2523.58	2519.91	95	125	2425	2395	30	5	Upgradient	Not Sampled	No	Not Sampled	88.18	2435.40	125	2395	140	2380
TW-60	10/8/1983	2529.97	2526.94	95	125	2432	2402	30	5	Upgradient	Not Sampled	No	Not Sampled	94.83	2435.14	Not Encountered	Not Encountered	140	2387
TW-61	10/8/1983	2535.24	2532.69	95	125	2438	2408	30	5	Upgradient	Not Sampled	No	Not Sampled	99.78	2435.46	Not Encountered	Not Encountered	135	2398
TW-62	10/8/1983	2544.19	2542.30	95	125	2447	2417	30	5	Upgradient	Not Sampled	No	Not Sampled	Not Available	Not Available	Not Encountered	Not Encountered	140	2402

Notes:
M - Monitoring
R - Recovery
C - Total Chromium and Hexavalent Chromium
N - Nitrate + Nitrite as N
V - Volatile organic compounds
Well elevations surveyed by BHC Rhodes in May 2012
ft msl - feet mean sea level
ft bgs - feet below ground surface
ft btoc - feet below top of casing

Table 2
Summary of Slug test Results
Koch Nitrogen Company LLC, Dodge City, Kansas

Well	Trial	Test Type	Hydraulic Conductivity (ft/day)			TOC Elevation (NAVD)	Static Water Level BTOC	Static Water Level Elevation (NGVD)	Saturated Screen Elevation (NGVD)	Lithologic Description of Saturated Section (NGVD)
			SOLUTION: Unconfined - Hvorslev (1951) (ft/day)	Percent Difference from Previous Slug Test	Geometric Mean of Analyses (ft/day)					
MW-02	1st Trial	RH	0.6	--	0.4	2526.23	100.4	2425.83	2410-2405	V. Fine Sand to Silty Sand, Poorly Graded
	2nd Trial	RH	0.4	-27%						
	3rd Trial	RH	0.3	-19%						
	4th Trial	RH	0.3	-11%						
	5th Trial	RH	0.3	-10%						
MW-18D	1st Trial	RH	0.2	--	0.3	2543.06	115.17	2427.89	2400-2395	V. Fine Silty Sand, Trace fine gravel caliche, Transition to clay and silt
	2nd Trial	RH	0.3	63%						
	3rd Trial	RH	0.5	54%						
MW-18S	1st Trial	RH	0.6	--	0.3	2543.07	114.94	2428.13	2421-2416	V. Fine Silty Sand, Some clays, firm
	2nd Trial	RH	0.2	-74%						
	3rd Trial	RH	0.4	121%						
	4th Trial	RH	0.2	-49%						
	5th Trial	RH	0.5	174%						
MW-19D	1st Trial	RH	0.6	--	0.6	2548.22	123.7	2424.52	2391-2386	Fine to V. Fine Sand, Some silts and clays, Transition to sandy clay
	2nd Trial	RH	0.6	2%						
	3rd Trial	RH	0.4	-32%						
MW-19S	1st Trial	FH	0.0012	--	0.0	2548.02	123.27	2424.75	2416-2411	Fine to V. Fine Sand, Some silts and clays
MW-22D	1st Trial	RH	0.7	--	0.6	2507.37	87.4	2419.97	2379-2374	Fine to V. Fine Sand, Some silts and clays (2420-2379) Caliche (2379-2377.5) to Sandstone (2377.5-2375.5), Sandstone contains some gravel, to Clay (2375.5-2374)
	2nd Trial	RH	0.7	-5%						
	3rd Trial	RH	0.4	-36%						
SITRG-01	1st Trial	RH	0.7	--	0.2	2540.98	117.6	2423.38	2410-2386	Clayey Sand (2423-2399) to V. Fine Sand (2399-2389), to Sandy Clay (2389-2386)
	2nd Trial	RH	0.2	-77%						
	3rd Trial	RH	0.1	-34%						
SITRG-02	1st Trial	RH	0.3	--	0.4	2544.14	122.4	2421.74	2413-2381	Sandy Clay (2422-2397), to V. Fine Sand (2397-2389), to Clayey Sand (2389-2381)
	2nd Trial	RH	0.4	29%						
	3rd Trial	RH	0.5	12%						
TW-01A	1st Trial	RH	1.1	--	1.1	2538.56	123	2415.56	2416-2396	Sandy Clay (2416-2396)
	2nd Trial	RH	1.0	-1%						
TW-07	1st Trial	RH	1.5	--	1.5	2527.28	NA	2412*	2412-2385	Sandy Clay (2412-2400) to V. Fine Sand (2400-2390) to Sandy Clay (2390-2385)
TW-08	1st Trial	RH	0.5	--	0.5	2525.30	105.4	2419.90	2420-2383	Sandy Clay (2420-2383)
TW-09	1st Trial	RH	0.3	--	0.3	2526.03	107.5	2418.53	2419-2398	Sandy Clay (2419-2398)
TW-14	1st Trial	RH	2.6	--	2.6	2515.42	103	2412.42	2412-2388	V. Fine Sand (2412-2388) with some clay
	2nd Trial	RH	2.6	-3%						
TW-16	1st Trial	RH	1.7	--	1.7	2534.44	104.3	2430.14	2430-2402	V. Fine Sand (2430-2402)
	2nd Trial	RH	1.7	2%						
TW-17	1st Trial	RH	2.3	--	2.3	2510.73	90	2420.73	2421-2388	V. Fine Sand (2421-2393) to Clay with Shale (2393-2388)
	2nd Trial	RH	2.4	2%						
TW-19	1st Trial	RH	1.2	--	1.2	2528.41	94.4	2434.01	2434-2386	Clay (2434-2416) to Clayey Sand (2416-2386)
	2nd Trial	RH	1.2	5%						
TW-20	1st Trial	RH	1.3	--	1.4	2543.34	126.2	2417.14	2417-2369	Sandy Clay (2417-2369)
	2nd Trial	RH	1.4	9%						
TW-21	1st Trial	RH	1.2	--	1.2	2543.65	152	2391.65	2392-2383	Sandy Clay (2392-2383)
	2nd Trial	RH	1.2	-1%						
TW-23	1st Trial	RH	1.0	--	2.2	2508.82	82.22	2426.60	2427-2367	V. Fine Sand (2427-2407) to Clay (2432-2377) to Sandy Clay (2377-2367)
	2nd Trial	RH	4.5	326%						
TW-26	1st Trial	RH	2.7	--	1.8	2541.54	121.83	2419.71	2420-2399	Sandy Clay (24120-2399)
	2nd Trial	RH	1.2	-55%						
TW-27	1st Trial	RH	2.0	--	1.9	2543.88	126.07	2417.81	2418-2391	Sandstone (2418-2416) to V. Fine Sand (2416-2391)
	2nd Trial	RH	1.8	-9%						
TW-28	1st Trial	RH	1.3	--	2.0	2529.09	112.95	2416.14	2416-2398	V. Fine Sand (2416-2398)
	2nd Trial	RH	1.3	-2%						
	3rd Trial	RH	4.7	252%						
TW-29	1st Trial	RH	1.2	--	1.4	2543.79	122.85	2420.94	2421-2400	Clay (2421-2420) to Sandy Clay (2420-2400)
	2nd Trial	RH	1.5	24%						
TW-30	1st Trial	RH	1.6	--	1.8	2536.75	132.5	2404.25	2404-2394	Sandy Clay (2404-2394)
	2nd Trial	RH	2.1	32%						
TW-31	1st Trial	RH	1.6	--	1.8	2535.42	115.31	2420.11	2420-2392	Sandy Clay (2420-2392)
	2nd Trial	RH	1.9	19%						
TW-37	1st Trial	RH	1.1	--	1.9	2530.98	99.2	2431.78	2432-2395	Clay (2432-2420) to Sandy Clay (2420-2395)
	2nd Trial	RH	2.5	120%						
	3rd Trial	RH	2.4	-4%						

Table 2
Summary of Slug Test Results
Koch Nitrogen Company LLC, Dodge City, Kansas

Well	Trial	Test Type	Hydraulic Conductivity (ft/day)			TOC Elevation (NAVD)	Static Water Level BTOC	Static Water Level Elevation (NGVD)	Saturated Screen Elevation (NGVD)	Lithologic Description of Saturated Section (NGVD)
			SOLUTION: Unconfined - Hvorslev (1951) (ft/day)	Percent Difference from Previous Slug Test	Geometric Mean of Analyses (ft/day)					
MW-02	1st Trial	RH	0.6	--	0.4	2526.23	100.4	2425.83	2410-2405	V. Fine Sand to Silty Sand, Poorly Graded
	2nd Trial	RH	0.4	-27%						
	3rd Trial	RH	0.3	-19%						
	4th Trial	RH	0.3	-11%						
	5th Trial	RH	0.3	-10%						
MW-18D	1st Trial	RH	0.2	--	0.3	2543.06	115.17	2427.89	2400-2395	V. Fine Silty Sand, Trace fine gravel caliche, Transition to clay and silt
	2nd Trial	RH	0.3	63%						
	3rd Trial	RH	0.5	54%						
MW-18S	1st Trial	RH	0.6	--	0.3	2543.07	114.94	2428.13	2421-2416	V. Fine Silty Sand, Some clays, firm
	2nd Trial	RH	0.2	-74%						
	3rd Trial	RH	0.4	121%						
	4th Trial	RH	0.2	-49%						
	5th Trial	RH	0.5	174%						
MW-19D	1st Trial	RH	0.6	--	0.6	2548.22	123.7	2424.52	2391-2386	Fine to V. Fine Sand, Some silts and clays, Transition to sandy clay
	2nd Trial	RH	0.6	2%						
	3rd Trial	RH	0.4	-32%						
MW-19S	1st Trial	FH	0.0	--	0.0	2548.02	123.27	2424.75	2416-2411	Fine to V. Fine Sand, Some silts and clays
MW-22D	1st Trial	RH	0.7	--	0.6	2507.37	87.4	2419.97	2379-2374	Fine to V. Fine Sand, Some silts and clays (2420-2379) Caliche (2379-2377.5) to Sandstone (2377.5-2375.5), Sandstone contains some gravel, to Clay (2375.5-2374)
	2nd Trial	RH	0.7	-5%						
	3rd Trial	RH	0.4	-36%						
SITRG-01	1st Trial	RH	0.7	--	0.2	2540.98	117.6	2423.38	2410-2386	Clayey Sand (2423-2399) to V. Fine Sand (2399-2389), to Sandy Clay (2389-2386)
	2nd Trial	RH	0.2	-77%						
	3rd Trial	RH	0.1	-34%						
SITRG-02	1st Trial	RH	0.3	--	0.4	2544.14	122.4	2421.74	2413-2381	Sandy Clay (2422-2397), to V. Fine Sand (2397-2389), to Clayey Sand (2389-2381)
	2nd Trial	RH	0.4	29%						
	3rd Trial	RH	0.5	12%						
TW-01A	1st Trial	RH	1.1	--	1.1	2538.56	123	2415.56	2416-2396	Sandy Clay (2416-2396)
	2nd Trial	RH	1.0	-1%						
TW-07	1st Trial	RH	1.5	--	1.5	2527.28	NA	2412*	2412-2385	Sandy Clay (2412-2400) to V. Fine Sand (2400-2390) to Sandy Clay (2390-2385)
TW-08	1st Trial	RH	0.5	--	0.5	2525.30	105.4	2419.90	2420-2383	Sandy Clay (2420-2383)
TW-09	1st Trial	RH	0.3	--	0.3	2526.03	107.5	2418.53	2419-2398	Sandy Clay (2419-2398)
TW-14	1st Trial	RH	2.6	--	2.6	2515.42	103	2412.42	2412-2388	V. Fine Sand (2412-2388) with some clay
	2nd Trial	RH	2.6	-3%						
TW-16	1st Trial	RH	1.7	--	1.7	2534.44	104.3	2430.14	2430-2402	V. Fine Sand (2430-2402)
	2nd Trial	RH	1.7	2%						
TW-17	1st Trial	RH	2.3	--	2.3	2510.73	90	2420.73	2421-2388	V. Fine Sand (2421-2393) to Clay with Shale (2393-2388)
	2nd Trial	RH	2.4	2%						
TW-19	1st Trial	RH	1.2	--	1.2	2528.41	94.4	2434.01	2434-2386	Clay (2434-2416) to Clayey Sand (2416-2386)
	2nd Trial	RH	1.2	5%						
TW-20	1st Trial	RH	1.3	--	1.4	2543.34	126.2	2417.14	2417-2369	Sandy Clay (2417-2369)
	2nd Trial	RH	1.4	9%						
TW-21	1st Trial	RH	1.2	--	1.2	2543.65	152	2391.65	2392-2383	Sandy Clay (2392-2383)
	2nd Trial	RH	1.2	-1%						
TW-23	1st Trial	RH	1.0	--	2.2	2508.82	82.22	2426.60	2427-2367	V. Fine Sand (2427-2407) to Clay (2432-2377) to Sandy Clay (2377-2367)
	2nd Trial	RH	4.5	326%						
TW-26	1st Trial	RH	2.7	--	1.8	2541.54	121.83	2419.71	2420-2399	Sandy Clay (24120-2399)
	2nd Trial	RH	1.2	-55%						
TW-27	1st Trial	RH	2.0	--	1.9	2543.88	126.07	2417.81	2418-2391	Sandstone (2418-2416) to V. Fine Sand (2416-2391)
	2nd Trial	RH	1.8	-9%						
TW-28	1st Trial	RH	1.3	--	2.0	2529.09	112.95	2416.14	2416-2398	V. Fine Sand (2416-2398)
	2nd Trial	RH	1.3	-2%						
	3rd Trial	RH	4.7	252%						
TW-29	1st Trial	RH	1.2	--	1.4	2543.79	122.85	2420.94	2421-2400	Clay (2421-2420) to Sandy Clay (2420-2400)
	2nd Trial	RH	1.5	24%						
TW-30	1st Trial	RH	1.6	--	1.8	2536.75	132.5	2404.25	2404-2394	Sandy Clay (2404-2394)
	2nd Trial	RH	2.1	32%						
TW-31	1st Trial	RH	1.6	--	1.8	2535.42	115.31	2420.11	2420-2392	Sandy Clay (2420-2392)
	2nd Trial	RH	1.9	19%						
TW-37	1st Trial	RH	1.1	--	1.9	2530.98	99.2	2431.78	2432-2395	Clay (2432-2420) to Sandy Clay (2420-2395)
	2nd Trial	RH	2.5	120%						
	3rd Trial	RH	2.4	-4%						

Table 2
Summary of Slug Test Results
Koch Nitrogen Company LLC, Dodge City, Kansas

Well	Trial	Test Type	Hydraulic Conductivity (ft/day)			TOC Elevation (NAVD)	Static Water Level BTOC	Static Water Level Elevation (NGVD)	Saturated Screen Elevation (NGVD)	Lithologic Description of Saturated Section (NGVD)
			SOLUTION: Unconfined - Hvorslev (1951) (ft/day)	Percent Difference from Previous Slug Test	Geometric Mean of Analyses (ft/day)					
TW-40	1st Trial	RH	1.7	--	1.6	2537.80	115.3	2422.50	2423-2391	Clay (2423-2416) to Sandy Clay (2416-2404) to V. Fine Sand (2404-2391)
	2nd Trial	RH	1.5	-13%						
TW-48	1st Trial	RH	2.4	--	2.8	2532.27	124.15	2408.12	2408-2380	V. Fine Sand (2408-2400) to Sand with Sandstone (2400-2380)
	2nd Trial	RH	3.4	40%						
TW-49	1st Trial	RH	1.1	--	1.1	2521.92	119.6	2402.32	2402-2395	Sandy Clay (2402-2395)
TW-51	1st Trial	RH	0.3	--	0.3	2545.38	116	2429.38	2429-2374	Clay (2429-2374)
	2nd Trial	RH	0.2	-30%						
TW-52	1st Trial	RH	3.2	--	1.4	2520.12	100.3	2419.82	2420-2413	Sandy Clay (2420-2418) to Clay with Shale (2418-2413)
	2nd Trial	RH	0.6	-80%						
TW-53	1st Trial	RH	3.0	--	2.7	2527.52	110.5	2417.02	2417-2410	V. Fine Sand (24172410)
	2nd Trial	RH	2.5	-17%						
TW-54	1st Trial	RH	2.9	--	3.1	2535.19	119.9	2415.29	2415-2403	Sandy Clay (2415-2403)
	2nd Trial	RH	3.3	16%						
TW-55	1st Trial	RH	7.0	--	4.6	2527.52	108.25	2419.27	2419-2401	Sandy Clay (2419-2401)
	2nd Trial	RH	2.4	-66%						
	3rd Trial	RH	5.6	134%						
TW-56	1st Trial	RH	3.3	--	3.1	2534.90	113.23	2421.67	2422-2400	Clay with Caliche layers (2422-2418) to Sandy Clay (2418-2400)
	2nd Trial	RH	3.0	-10%						
TW-57	1st Trial	RH	1.6	--	1.5	2527.11	108.82	2418.29	2418-2400	Sandy Clay (2418-2400)
	2nd Trial	RH	1.4	-12%						
TW-58	1st Trial	RH	2.6	--	2.6	2538.88	121.1	2417.78	2418-2401	Sandy Clay (2418-2401)
TW-65	1st Trial	RH	0.6	--	0.6	2527.79	117.6	2410.19	2410-2376	V. Fine Sand (2410-2386) to Clay (2386-2381) to V. Fine Sand (2381-2376)
TW-68	1st Trial	RH	2.3	--	2.7	2529.50	124.32	2405.18	2405-2387	V. Fine Sand (2405-2392) to Clay (2392-2387)
	2nd Trial	RH	3.1	31%						
TW-70	1st Trial	RH	1.9	--	1.9	2518.03	109.55	2408.48	24082380	Clay (2408-2405) to V. Fine Sand (2405-2390) to Clay (2390-2380)
	2nd Trial	RH	1.9	3%						
TW-71	1st Trial	RH	2.9	--	7.5	2534.64	131	2403.64	2404-2393	Clayey Sand (2404-2396) to Clay (2396-2393)
	2nd Trial	RH	7.7	167%						
	3rd Trial	RH	19.5	155%						
TW-72	1st Trial	RH	0.3	--	0.3	2527.14	109.74	2417.40	2417-2395	Sandy Clay (2417-2415) to Fine Sand (2415-2400) to Clay (2400-2395)
TW-73	1st Trial	RH	0.4	--	0.2	2516.00	94.27	2421.73	2422-2384	Sandy Clay (2422-2419) to V. Fine Sand (2419-2401) to Clay (2401-2384)
	2nd Trial	RH	0.1	-73%						
TW-74	1st Trial	RH	1.0	--	0.3	2520.44	101.9	2418.54	2419-2393	V. Fine Sand (2419-2403) to Clay (2403-2393)
	2nd Trial	RH	0.1	-91%						
TW-75	1st Trial	RH	2.2	--	1.8	2514.95	100.6	2414.35	2414-2388	V. Fine Sand (2414-2398) to Clay (2398-2388)
	2nd Trial	RH	2.1	-4%						
	3rd Trial	RH	1.2	-46%						
TW-85	1st Trial	RH	1.5	--	1.6	2514.99	100.6	2414.39	2414-2392	Fine Sand (2414-2392)
	2nd Trial	RH	1.7	15%						
TW-86	1st Trial	RH	0.1	--	0.1	2506.99	88.2	2418.79	2419-2374	Medium Sand (2419-2434)
	2nd Trial	RH	0.1	-21%						
TW-87	1st Trial	RH	2.3	--	2.5	2536.80	91.65	2445.15	2445.15-2395	Fine Sand (2445.15-2395) with some clay
	2nd Trial	RH	2.8	22%						
TW-88	1st Trial	RH	1.6	--	0.9	2541.18	99.91	2441.27	2441-2391	Medium Sand (2441-2412) to Gravel with some Clay (2412-2407) to Ochre (2407-2391)
	2nd Trial	RH	0.5	-69%						
TW-90	1st Trial	RH	1.0	--	1.0	2544.10	151.7	2392.40	2392-2382	Sandy Clay (2392-2382)
	2nd Trial	RH	1.0	-6%						
TW-92	1st Trial	RH	2.1	--	2.1	2546.26	134.23	2412.03	2412-2383	Fine Sand with some Clay (2412-2386) to Shale (2386-2383)
TW-93	1st Trial	RH	1.0	--	1.0	2542.34	122.43	2419.91	2420-2379	Sandy Clay (2420-2419) to Fine Sand (2419-2389) to Clay (2389-2382) to Shale (2382-2379)
TW-94	1st Trial	RH	4.1	--	4.1	2542.25	98.43	2443.82	2444-2370	Clay (2444-2438) to Fine Sand (2438-2384) to Sandy Clay (2384-2374) to Shale (2374-2370)

Notes: ft/day = feet per day
-- = calculation not possible
RH = Rising Head Analysis
FH = Falling Head Analysis
ft. NGVD = feet national geodetic vertical datum 1929
* = Static water not collected and was estimated by surrounding water levels

Table 5
Summary of Recovery Well Input Parameters
Koch Nitrogen Company LLC, Dodge City, Kansas

Well ID	Flow Rate (ft^3/day)	Flow Rate (gpm)	Top Screen Elevation (ft. NGVD 1929)	Bottom Screen Elevation (ft. NGVD 1929)
TW-01A	311	1.6	2,444.43	2,434.43
TW-07	308	1.6	2,408.14	2,388.14
TW-09	311	1.6	2,431.96	2,401.96
TW-10	1,540	8.0	2,422.17	2,402.17
TW-13	953	4.9	2,416.98	2,396.98
TW-14	953	4.9	2,411.30	2,391.30
TW-16	866	4.5	2,425.33	2,405.33
TW-17	1,463	7.6	2,421.59	2,391.59
TW-19	866	4.5	2,419.25	2,389.25
TW-20	346	1.8	2,402.28	2,372.28
TW-21	1,540	8.0	2,414.49	2,384.49
TW-23	1,463	7.6	2,399.61	2,369.61
TW-26	404	2.1	2,422.02	2,402.02
TW-27	1,540	8.0	2,424.80	2,394.80
TW-28	311	1.6	2,430.00	2,400.00
TW-29	311	1.6	2,434.71	2,404.71
TW-30	1,540	8.0	2,427.62	2,397.62
TW-31	1,540	8.0	2,426.32	2,396.32
TW-36	616	3.2	2,440.44	2,410.44
TW-37	866	4.5	2,426.82	2,396.82
TW-38	866	4.5	2,428.73	2,398.73
TW-39	866	4.5	2,432.70	2,402.70
TW-40	1,540	8.0	2,423.62	2,393.62
TW-48	192	1.0	2,413.16	2,383.16
TW-49	443	2.3	2,427.72	2,397.72
TW-51	192	1.0	2,406.28	2,376.28
TW-52	192	1.0	2,445.95	2,415.95
TW-53	192	1.0	2,420.40	2,413.40
TW-54	192	1.0	2,436.07	2,406.70
TW-55	192	1.0	2,433.47	2,403.47
TW-56	192	1.0	2,432.70	2,402.70
TW-57	192	1.0	2,432.94	2,402.94
TW-58	192	1.0	2,434.68	2,404.68
TW-64	311	1.6	2,436.33	2,406.33
TW-65	308	1.6	2,418.67	2,378.67
TW-66	308	1.6	2,423.71	2,383.71
TW-67	308	1.6	2,424.00	2,384.00
TW-68	1,540	8.0	2,430.37	2,390.37

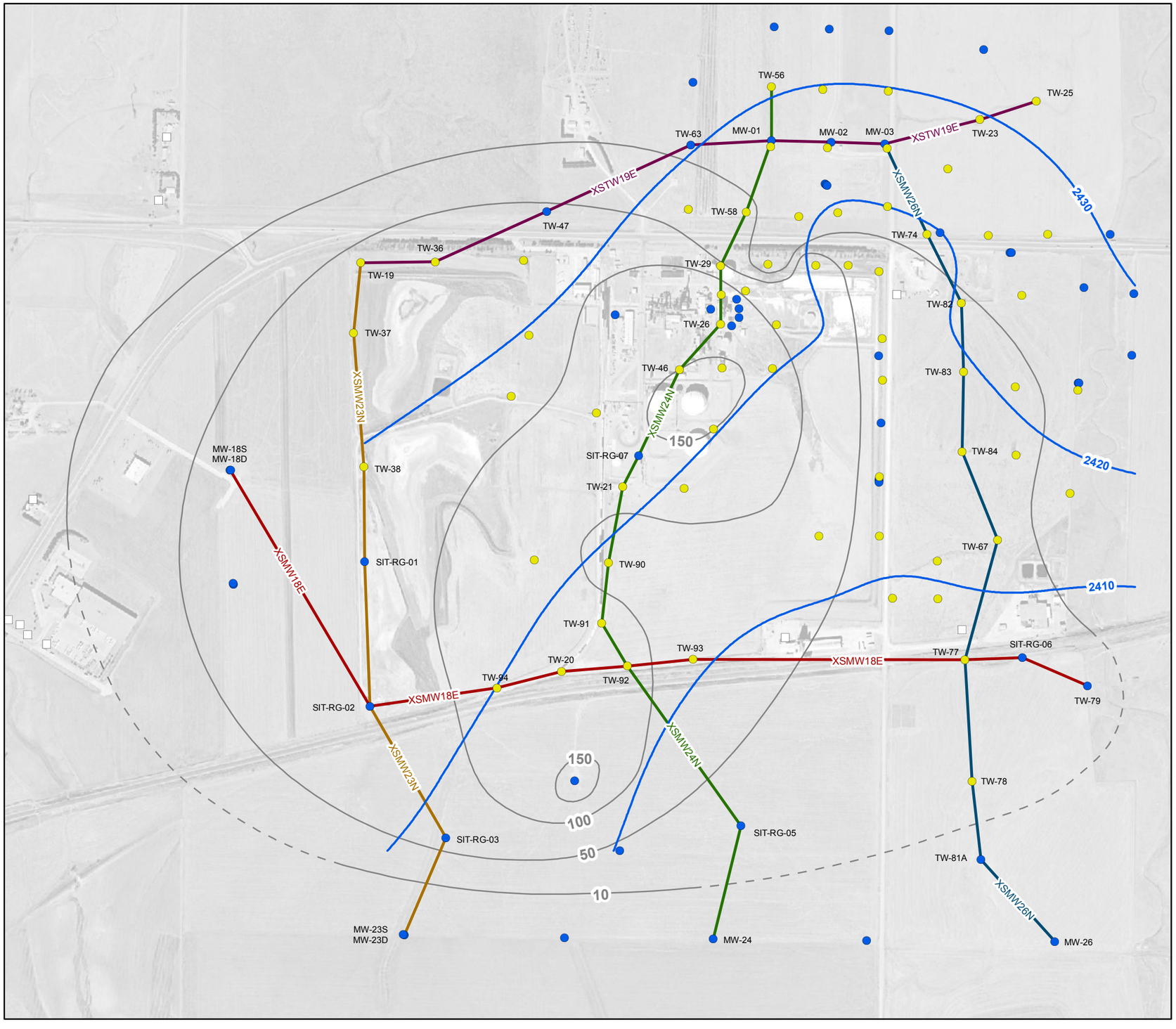
Table 5
Summary of Recovery Well Input Parameters
Koch Nitrogen Company LLC, Dodge City, Kansas

Well ID	Flow Rate (ft^3/day)	Flow Rate (gpm)	Top Screen Elevation (ft. NGVD 1929)	Bottom Screen Elevation (ft. NGVD 1929)
TW-69	308	1.6	2,424.08	2,387.08
TW-70	308	1.6	2,423.89	2,383.89
TW-71	311	1.6	2,435.55	2,395.55
TW-72	311	1.6	2,438.02	2,398.02
TW-73	1,463	7.6	2,426.81	2,386.81
TW-74	1,463	7.6	2,441.30	2,396.30
TW-75	1,463	7.6	2,435.81	2,390.81
TW-76	953	4.9	2,435.97	2,375.97
TW-77	308	1.6	2,445.85	2,385.85
TW-78	308	1.6	2,432.00	2,382.00
TW-82	953	4.9	2,442.01	2,402.01
TW-83	953	4.9	2,438.47	2,388.47
TW-84	953	4.9	2,439.83	2,389.83
TW-85	953	4.9	2,444.89	2,394.89
TW-86	953	4.9	2,436.85	2,386.85
TW-87	866	4.5	2,458.66	2,408.66
TW-88	1,540	8.0	2,434.04	2,394.04
TW-89	1,540	8.0	2,445.32	2,395.32
TW-90	1,540	8.0	2,445.94	2,385.94
TW-91	346	1.8	2,444.12	2,384.12
TW-92	346	1.8	2,435.21	2,385.21
TW-93	346	1.8	2,445.30	2,385.30
TW-94	346	1.8	2,443.23	2,373.23

Notes: ft^3/day = cubic feet per day
gpm = gallons per minute
ft. NGVD 1929 = feet national geodetic vertical datum 1929

ATTACHMENT D

UPDATED ISOCONCENTRATION MAPS AND CROSS-SECTIONS



LEGEND

- MONITORING WELL
- RECOVERY WELL
- PRIVATE WELL
- NITRATE+NITRITE (as N) CONCENTRATION ISO-CONTOUR (mg/L) FROM FOURTH QUARTER 2012 (DASHED WHERE INFERRED OR UNKNOWN)
- GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION ISO-CONTOUR (ft above mean sea level) FROM FOURTH QUARTER 2012

-N-

1,000 0 1,000

Feet

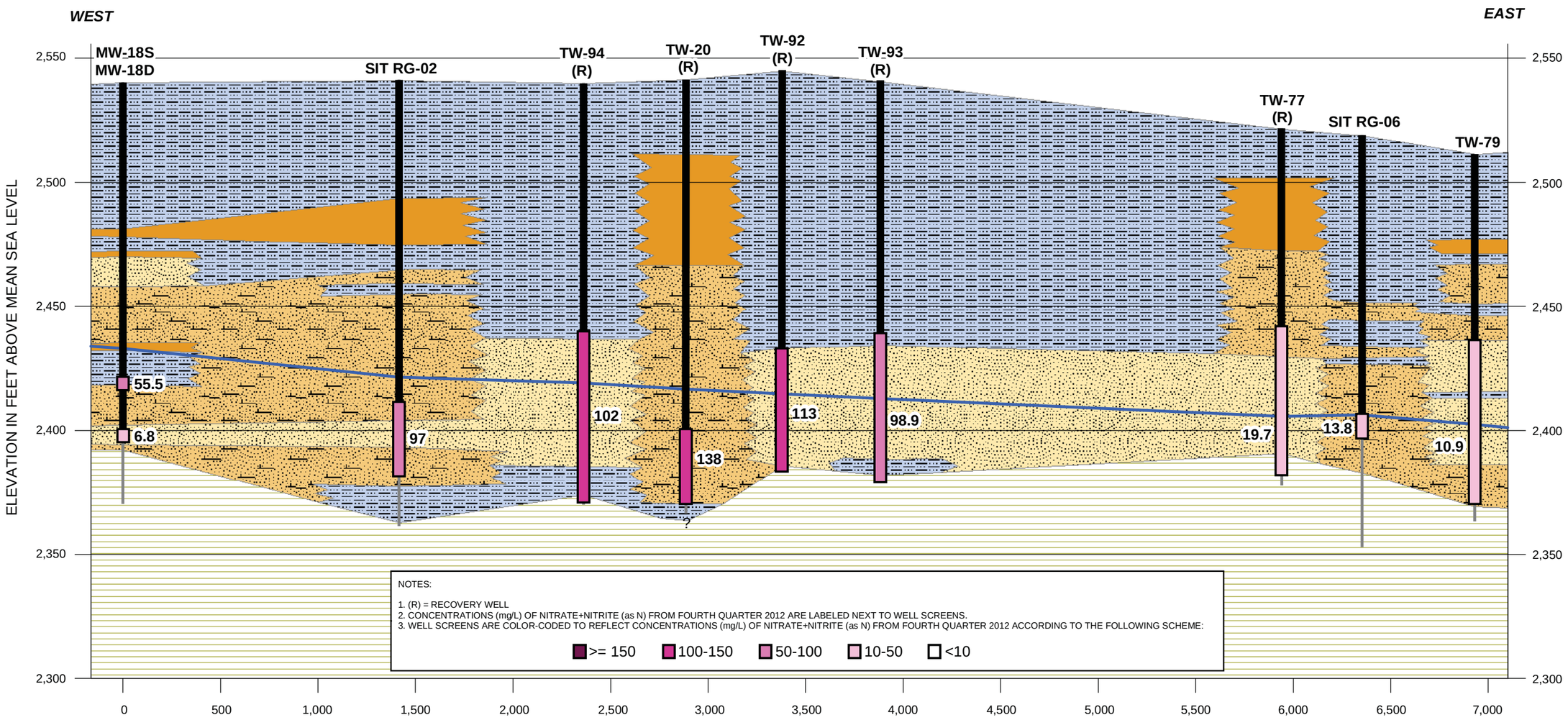
CROSS SECTION TRANSECTS AND NITRATE+NITRITE (as N) IN GROUNDWATER - FOURTH QUARTER 2012

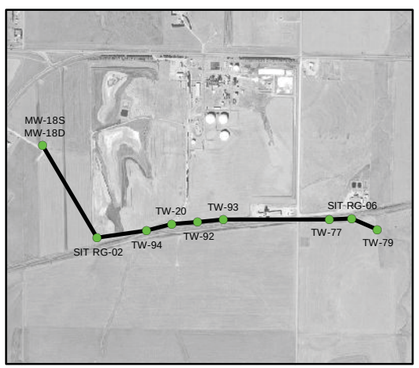
PREPARED BY:

KOCH™

KOCH NITROGEN COMPANY, LLC

PROJECT.	FIGURE NO.
DATE. JUNE 2013	FILE NO.





LEGEND

- WELL CASING
- WELL SCREEN (SEE COLOR SCHEME ABOVE)
- BOREHOLE EXTENDING BELOW WELL SCREEN
- WATER LEVEL 9/2012
- ? BEDROCK NOT ENCOUNTERED
- CLAY WITH MINOR SILT AND SAND
- ASSORTED CLAY, SAND, AND SILT
- SAND WITH MINOR SILT AND CLAY
- CALICHE
- GRANEROS FORMATION

GEOLOGIC CROSS SECTION XSMW18E

PREPARED BY:
KOCH
KOCH NITROGEN COMPANY, LLC

PROJECT.	FIGURE NO. XSMW18E
DATE. JUNE 2013	FILE NO.

SOUTH

NORTH

MW-23S
MW-23D

SIT RG-03

SIT RG-02

SIT RG-01

TW-38 (R)

TW-37 (R)

TW-19 (R)

ELEVATION IN FEET ABOVE MEAN SEA LEVEL

2,550
2,500
2,450
2,400
2,350
2,300

1.0

ND (0.1)

99

97

201

75.3

95.6

51.5

?

?

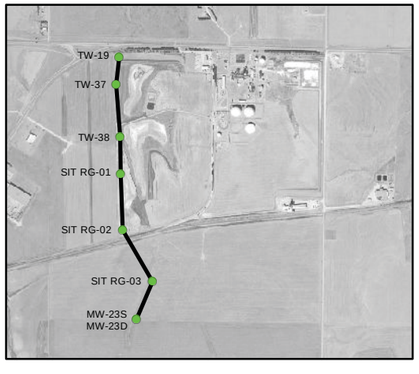
NOTES:

1. (R) = RECOVERY WELL
2. CONCENTRATIONS (mg/L) OF NITRATE+NITRITE (as N) FROM FOURTH QUARTER 2012 ARE LABELED NEXT TO WELL SCREENS.
3. WELL SCREENS ARE COLOR-CODED TO REFLECT CONCENTRATIONS (mg/L) OF NITRATE+NITRITE (as N) FROM FOURTH QUARTER 2012 ACCORDING TO THE FOLLOWING SCHEME:

>= 150 | 100-150 | 50-100 | 10-50 | <10

0 500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500 5,000

DISTANCE IN FEET



LEGEND

- WELL CASING
- WELL SCREEN (SEE COLOR SCHEME ABOVE)
- BOREHOLE EXTENDING BELOW WELL SCREEN
- WATER LEVEL 9/2012
- ? BEDROCK NOT ENCOUNTERED
- CLAY WITH MINOR SILT AND SAND
- ASSORTED CLAY, SAND, AND SILT
- SAND WITH MINOR SILT AND CLAY
- CALICHE
- GRANEROS FORMATION

GEOLOGIC CROSS SECTION XSMW23N

PREPARED BY:

KOCH™
KOCH NITROGEN COMPANY, LLC

PROJECT.	FIGURE NO. XSMW23N
DATE. JUNE 2013	FILE NO.

SOUTH

NORTH

ELEVATION IN FEET ABOVE MEAN SEA LEVEL

2,550
2,500
2,450
2,400
2,350
2,300

MW-24
SIT RG-05
TW-92 (R)
TW-91 (R)
TW-90 (R)
TW-21 (R)
SIT RG-07
TW-46 (R)
TW-26 (R)
TW-29 (R)
TW-58 (R)
MW-01
TW-56 (R)

DRY
115
113
113
56
88.7
DRY
150
120
73.6
10.2
ND(0.1)
1.2

?
?

NOTES:

1. (R) = RECOVERY WELL
2. CONCENTRATIONS (mg/L) OF NITRATE+NITRITE (as N) FROM FOURTH QUARTER 2012 ARE LABELED NEXT TO WELL SCREENS.
3. WELL SCREENS ARE COLOR-CODED TO REFLECT CONCENTRATIONS (mg/L) OF NITRATE+NITRITE (as N) FROM FOURTH QUARTER 2012 ACCORDING TO THE FOLLOWING SCHEME:

>= 150 | 100-150 | 50-100 | 10-50 | <10 OR DRY

0 500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500 5,000 5,500 6,000 6,500 7,000

DISTANCE IN FEET

LEGEND

- WELL CASING
- WELL SCREEN (SEE COLOR SCHEME ABOVE)
- BOREHOLE EXTENDING BELOW WELL SCREEN
- WATER LEVEL 9/2012
- ? BEDROCK NOT ENCOUNTERED

- CLAY WITH MINOR SILT AND SAND
- ASSORTED CLAY, SAND, AND SILT
- SAND WITH MINOR SILT AND CLAY
- CALICHE
- GRANEROS FORMATION

GEOLOGIC CROSS SECTION XSMW24N

PREPARED BY:

KOCH
KOCH NITROGEN COMPANY, LLC

PROJECT.	FIGURE NO. XSMW24N
DATE. JUNE 2013	FILE NO.

SOUTH

NORTH

ELEVATION IN FEET ABOVE MEAN SEA LEVEL

2,550
2,500
2,450
2,400
2,350
2,300

MW-26
TW-81A
TW-78 (R)
TW-77 (R)
TW-67 (R)
TW-84 (R)
TW-83 (R)
TW-82 (R)
TW-74 (R)
MW-03

DRY
DRY
?
13.1
19.7
NS
37
NS
NS
4.9
?
0.7

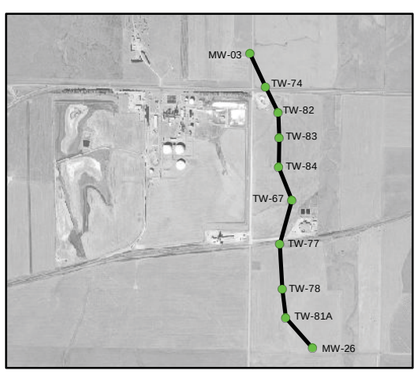
NOTES:

1. (R) = RECOVERY WELL
2. NS = NOT SAMPLED
3. CONCENTRATIONS (mg/L) OF NITRATE+NITRITE (as N) FROM FOURTH QUARTER 2012 ARE LABELED NEXT TO WELL SCREENS.
4. WELL SCREENS ARE COLOR-CODED TO REFLECT CONCENTRATIONS (mg/L) OF NITRATE+NITRITE (as N) FROM FOURTH QUARTER 2012 ACCORDING TO THE FOLLOWING SCHEME:

>= 150 | 100-150 | 50-100 | 10-50 | <10, DRY OR NS

0 500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500 5,000 5,500 6,000 6,500

DISTANCE IN FEET



LEGEND

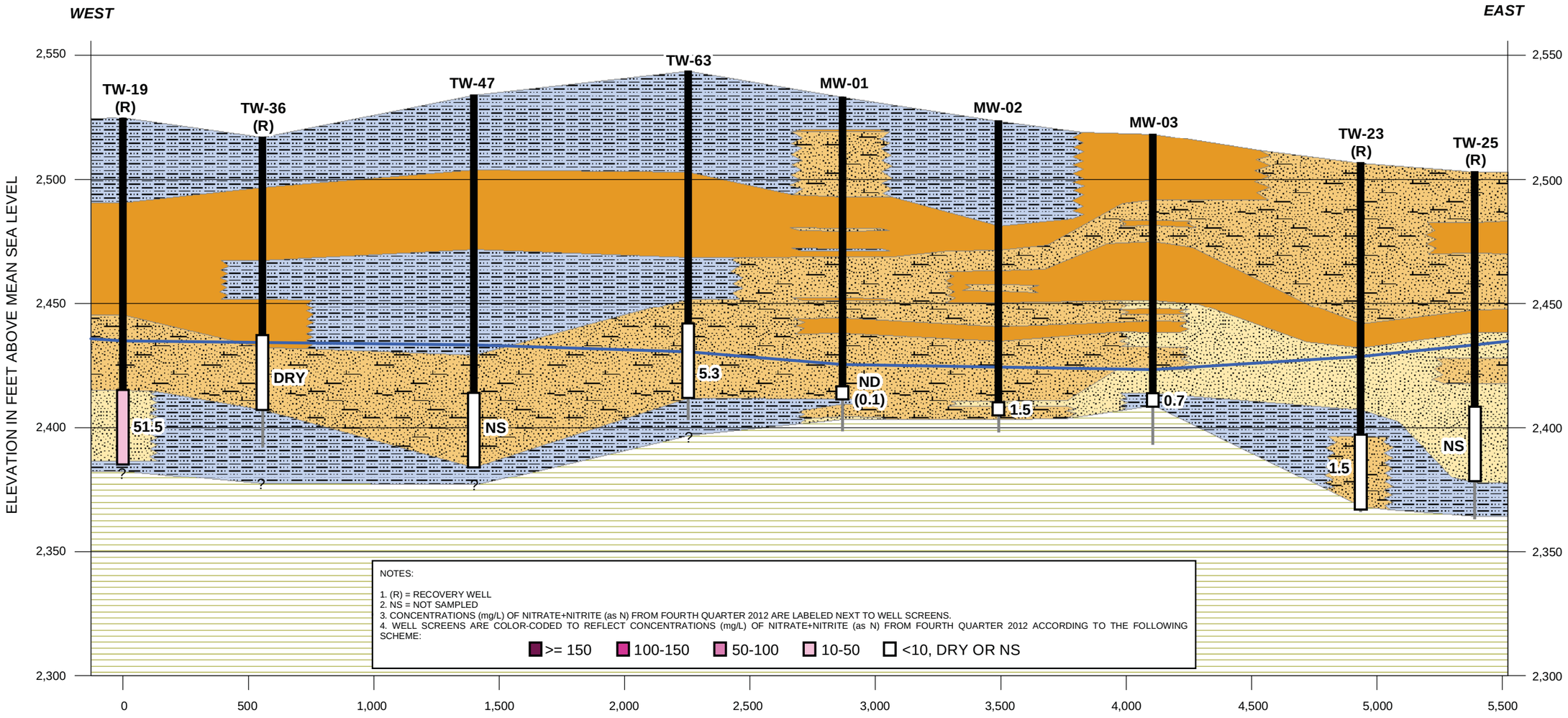
- WELL CASING
- WELL SCREEN (SEE COLOR SCHEME ABOVE)
- BOREHOLE EXTENDING BELOW WELL SCREEN
- WATER LEVEL 9/2012
- ? BEDROCK NOT ENCOUNTERED
- CLAY WITH MINOR SILT AND SAND
- ASSORTED CLAY, SAND, AND SILT
- SAND WITH MINOR SILT AND CLAY
- CALICHE
- GRANEROS FORMATION

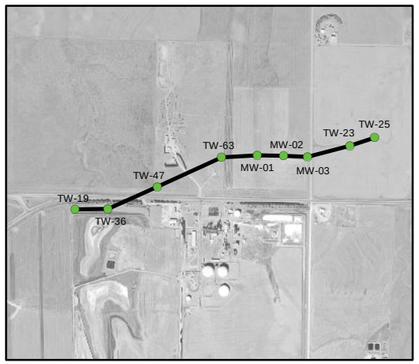
GEOLOGIC CROSS SECTION XSMW26N

PREPARED BY:

KOCH™
KOCH NITROGEN COMPANY, LLC

PROJECT.	FIGURE NO. XSMW26N
DATE. JUNE 2013	FILE NO.





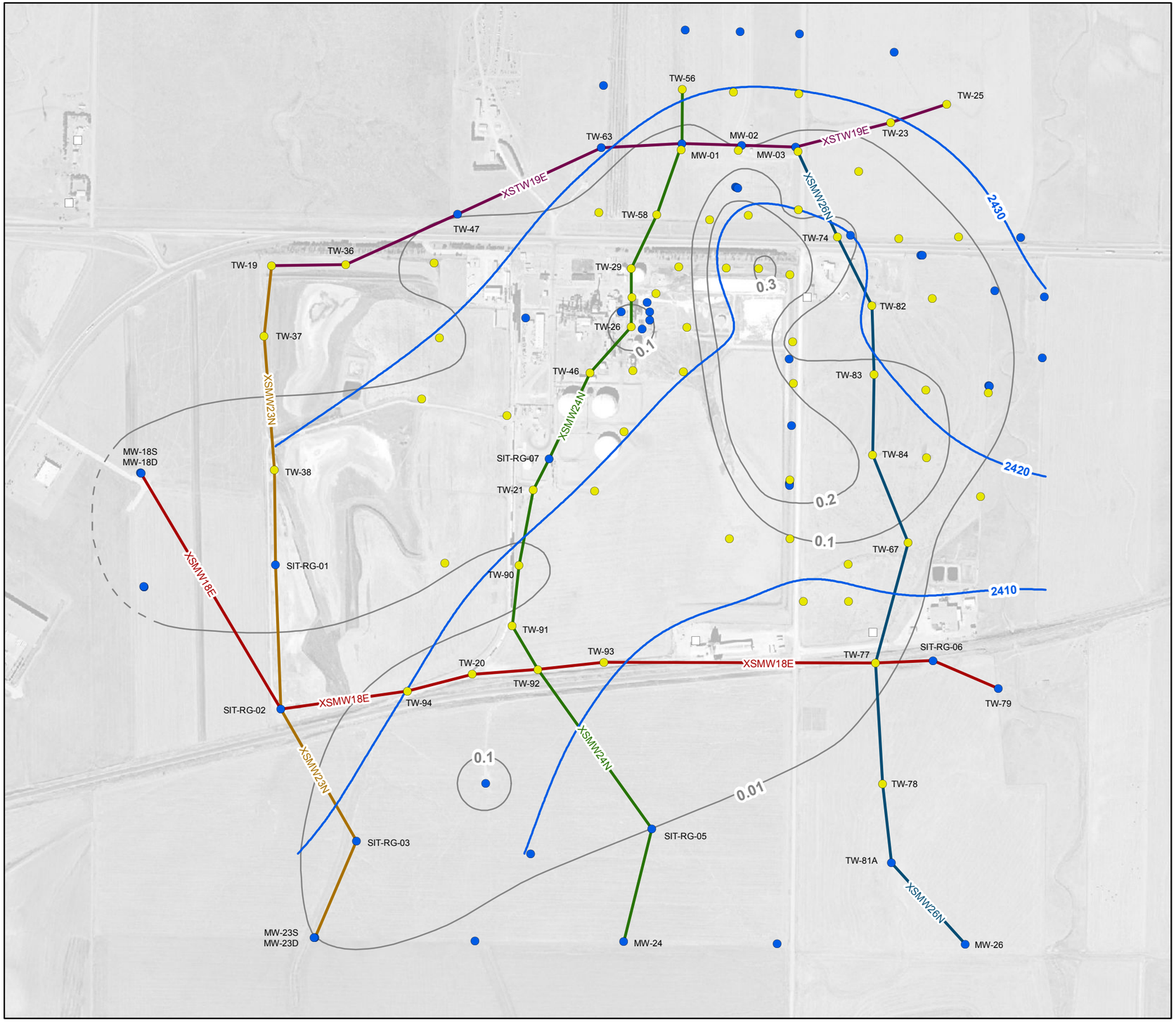
LEGEND

- WELL CASING
- WELL SCREEN (SEE COLOR SCHEME ABOVE)
- BOREHOLE EXTENDING BELOW WELL SCREEN
- WATER LEVEL 9/2012
- ? BEDROCK NOT ENCOUNTERED
- CLAY WITH MINOR SILT AND SAND
- ASSORTED CLAY, SAND, AND SILT
- SAND WITH MINOR SILT AND CLAY
- CALICHE
- GRANEROS FORMATION

GEOLOGIC CROSS SECTION XSTW19E

PREPARED BY:
KOCH
KOCH NITROGEN COMPANY, LLC

PROJECT.	FIGURE NO. XSTW19E
DATE. JUNE 2013	FILE NO.



LEGEND

- MONITORING WELL
- RECOVERY WELL
- PRIVATE WELL
- TOTAL CHROMIUM CONCENTRATION ISO-CONTOUR (mg/L) FROM FOURTH QUARTER 2012 (DASHED WHERE INFERRED OR UNKNOWN)
- GROUNDWATER POTENTIOMETRIC SURFACE ELEVATION ISO-CONTOUR (ft above mean sea level) FROM FOURTH QUARTER 2012

-N-

1,000 0 1,000

Feet

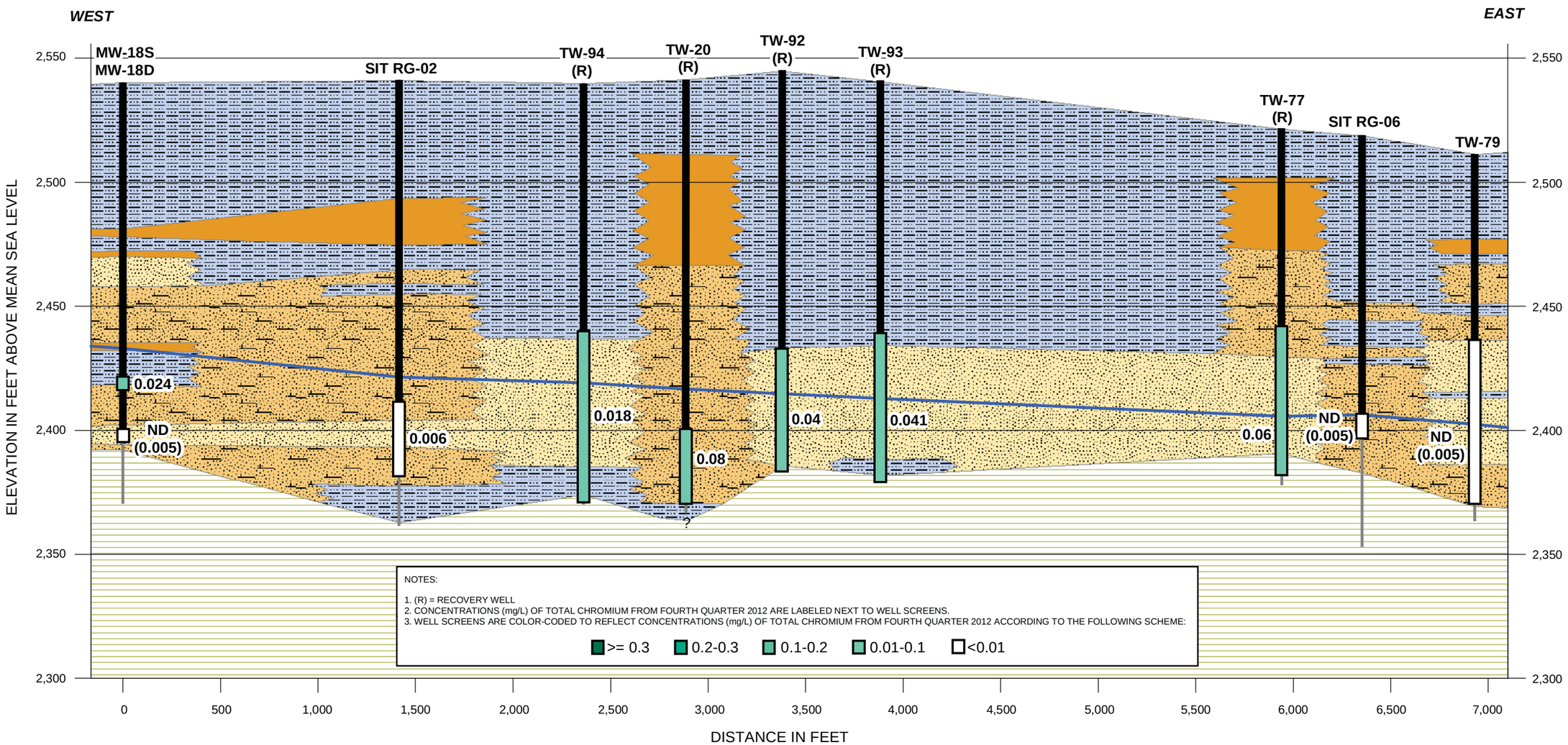
CROSS SECTION TRANSECTS AND TOTAL CHROMIUM IN GROUNDWATER - FOURTH QUARTER 2012

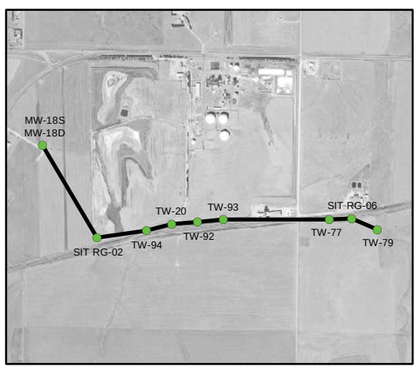
PREPARED BY:

KOCH™

KOCH NITROGEN COMPANY, LLC

PROJECT.	FIGURE NO.
DATE. JUNE 2013	FILE NO.





LEGEND

- WELL CASING
- WELL SCREEN (SEE COLOR SCHEME ABOVE)
- BOREHOLE EXTENDING BELOW WELL SCREEN
- WATER LEVEL 9/2012
- ? BEDROCK NOT ENCOUNTERED
- CLAY WITH MINOR SILT AND SAND
- ASSORTED CLAY, SAND, AND SILT
- SAND WITH MINOR SILT AND CLAY
- CALICHE
- GRANEROS FORMATION

GEOLOGIC CROSS SECTION XSMW18E

PREPARED BY:
KOCH
KOCH NITROGEN COMPANY, LLC

PROJECT.	FIGURE NO. XSMW18E
DATE. JUNE 2013	FILE NO.

SOUTH

NORTH

MW-23S
MW-23D

SIT RG-03

SIT RG-02

SIT RG-01

TW-38
(R)

TW-37
(R)

TW-19
(R)

ELEVATION IN FEET ABOVE MEAN SEA LEVEL

2,550
2,500
2,450
2,400
2,350
2,300

ND
(0.005)

0.01

0.008

0.006

ND
(0.005)

0.024

0.008

ND
(0.005)

?

?

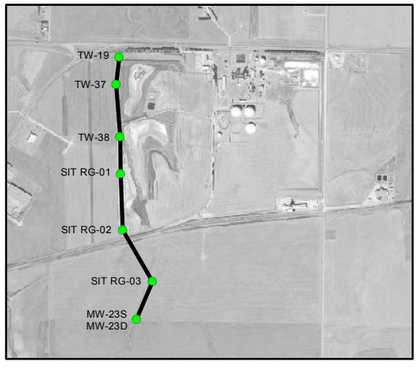
NOTES:

1. (R) = RECOVERY WELL
2. CONCENTRATIONS (mg/L) OF TOTAL CHROMIUM FROM FOURTH QUARTER 2012 ARE LABELED NEXT TO WELL SCREENS.
3. WELL SCREENS ARE COLOR-CODED TO REFLECT CONCENTRATIONS (mg/L) OF TOTAL CHROMIUM FROM FOURTH QUARTER 2012 ACCORDING TO THE FOLLOWING SCHEME:

>= 0.3 | 0.2-0.3 | 0.10-0.2 | 0.01-0.1 | <0.01

0
500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
4,500
5,000

DISTANCE IN FEET



LEGEND

- WELL CASING
- WELL SCREEN (SEE COLOR SCHEME ABOVE)
- BOREHOLE EXTENDING BELOW WELL SCREEN
- WATER LEVEL 9/2012
- ? BEDROCK NOT ENCOUNTERED
- CLAY WITH MINOR SILT AND SAND
- ASSORTED CLAY, SAND, AND SILT
- SAND WITH MINOR SILT AND CLAY
- CALICHE
- GRANEROS FORMATION

GEOLOGIC CROSS SECTION
XSMW23N

PREPARED BY:

KOCH™
KOCH NITROGEN COMPANY, LLC

PROJECT.	FIGURE NO. XSMW23N
DATE. JUNE 2013	FILE NO.

SOUTH

NORTH

ELEVATION IN FEET ABOVE MEAN SEA LEVEL

2,550
2,500
2,450
2,400
2,350
2,300

MW-24 SIT RG-05 TW-92 (R) TW-91 (R) TW-90 (R) TW-21 (R) SIT RG-07 TW-46 (R) TW-26 (R) TW-29 (R) TW-58 (R) MW-01 TW-56 (R)

DRY 0.021 0.04 0.041 0.007 0.015 DRY 0.023 0.16 0.075 0.02 0.045 ND (0.005)

?

NOTES:

1. (R) = RECOVERY WELL
2. CONCENTRATIONS (mg/L) OF TOTAL CHROMIUM FROM FOURTH QUARTER 2012 ARE LABELED NEXT TO WELL SCREENS.
3. WELL SCREENS ARE COLOR-CODED TO REFLECT CONCENTRATIONS (mg/L) OF TOTAL CHROMIUM FROM FOURTH QUARTER 2012 ACCORDING TO THE FOLLOWING SCHEME:

>= 0.3 | 0.2-0.3 | 0.1-0.2 | 0.01-0.1 | <0.01 OR DRY

0 500 1,000 1,500 2,000 2,500 3,000 3,500 4,000 4,500 5,000 5,500 6,000 6,500 7,000

DISTANCE IN FEET

LEGEND

- WELL CASING
- WELL SCREEN (SEE COLOR SCHEME ABOVE)
- BOREHOLE EXTENDING BELOW WELL SCREEN
- WATER LEVEL 9/2012
- ? BEDROCK NOT ENCOUNTERED

- CLAY WITH MINOR SILT AND SAND
- ASSORTED CLAY, SAND, AND SILT
- SAND WITH MINOR SILT AND CLAY
- CALICHE
- GRANEROS FORMATION

GEOLOGIC CROSS SECTION XSMW24N

PREPARED BY:

KOCH NITROGEN COMPANY, LLC

PROJECT.	FIGURE NO. XSMW24N
DATE. JUNE 2013	FILE NO.

SOUTH

NORTH

ELEVATION IN FEET ABOVE MEAN SEA LEVEL

2,550
2,500
2,450
2,400
2,350
2,300

MW-26
TW-81A
TW-78 (R)
TW-77 (R)
TW-67 (R)
TW-84 (R)
TW-83 (R)
TW-82 (R)
TW-74 (R)
MW-03

DRY
DRY
ND (0.005)
0.06
NS
0.195
NS
NS
0.173
0.018

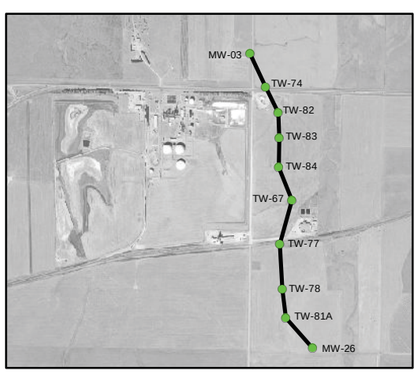
0
500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
4,500
5,000
5,500
6,000
6,500

DISTANCE IN FEET

NOTES:

1. (R) = RECOVERY WELL
2. NS = NOT SAMPLED
3. CONCENTRATIONS (mg/L) OF TOTAL CHROMIUM FROM FOURTH QUARTER 2012 ARE LABELED NEXT TO WELL SCREENS.
4. WELL SCREENS ARE COLOR-CODED TO REFLECT CONCENTRATIONS (mg/L) OF TOTAL CHROMIUM FROM FOURTH QUARTER 2012 ACCORDING TO THE FOLLOWING SCHEME:

>= 0.3 | 0.2-0.3 | 0.1-0.2 | 0.01-0.1 | <0.01, DRY OR NS



LEGEND

- WELL CASING
- WELL SCREEN (SEE COLOR SCHEME ABOVE)
- BOREHOLE EXTENDING BELOW WELL SCREEN
- WATER LEVEL 9/2012
- ? BEDROCK NOT ENCOUNTERED
- CLAY WITH MINOR SILT AND SAND
- ASSORTED CLAY, SAND, AND SILT
- SAND WITH MINOR SILT AND CLAY
- CALICHE
- GRANEROS FORMATION

GEOLOGIC CROSS SECTION XSMW26N

PREPARED BY:

KOCH™
KOCH NITROGEN COMPANY, LLC

PROJECT.	FIGURE NO. XSMW26N
DATE. JUNE 2013	FILE NO.