



The Complete Solution

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CON 12-15
Doc #31665

December 22, 2015

Mr. Thomas Kelly
130 2nd Avenue South
Clinton, Iowa 52732

Subject: 2015 Site Monitoring Report / Free Product Report
Kelly Heating and Oil
130 2nd Avenue South, Clinton, Iowa
Registration # 8603141
Seneca Project # 6031503

Dear Mr. Kelly:

SENECA Environmental Services, Inc. is submitting two copies of the above referenced reports for your review and signature. We will continue to recover free product monthly with sampling and reporting each year. If these reports are acceptable, please forward one copy to IDNR at:

Greg Fuhrmann
Iowa Department of Natural Resources
Contaminated Sites Section
Wallace Building, 502 East 9th Street
Des Moines, Iowa 50319-0034

The originals as well as other pertinent field notes and observations made at the time of sampling will be kept in our files. Please do not hesitate to contact us if you require any copies or additional information regarding your site. Seneca has appreciated this opportunity to serve your environmental compliance needs. If you have any questions regarding these reports please contact me at (563) 332-8000.

Sincerely,
SENECA Environmental Services, Inc.

Todd Felderman
Project Manager

enclosures

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**Site Monitoring Report for
Leaking Underground Storage Tank Sites
Iowa Department of Natural Resources**

SITE IDENTIFICATION

LUST No.

UST Registration No.

8603141

Site Name: Kelly Heating & Oil Company

Site Address: 130 2nd Avenue South

City: Clinton

RESPONSIBLE PARTY IDENTIFICATION

Name: Kelly Heating and Oil Company

Street: 130 2nd Avenue South

City: Clinton

State: Iowa

Zip Code: 52732

Check the appropriate box(es): ☐ Initial Site Monitoring Report

☐ Bedrock: Non-granular	☐ Bedrock: Granular	☐ High Risk: Remediation	☐ High Risk: Interim
☐ Low Risk	☐ Exit	☒ Pre-RBCA High or Low Risk Monitoring	

STATEMENT OF CERTIFICATION

I, Mark Diehl, Groundwater Professional Certification No. 1630, am familiar with all applicable requirements of Iowa Code § 455B.474 and all rules and procedures adopted thereunder including, but not limited to, Chapter 567-135 and the Department of Natural Resources' Site Monitoring Report guidance. Based on my knowledge of those documents and information I have prepared and reviewed regarding this site, UST Registration No. 8603141, I certify that this document is complete and accurate as provided in 567 IAC 135.9(11)"c" and meets the applicable requirements of the Site Monitoring Report.

Print: Name/Address of Certified Groundwater Professional

Mark Diehl

Signature: 

Seneca Environmental Services

7241 Gaines St Ct

Date: 12/22/15

Davenport, IA 52806

I certify that I have reviewed this document, appendices and attachments for submittal to the Iowa Department of Natural Resources.

W. Thomas Kelly

Print Name of Responsible Party

Signature – Responsible Party: 

Official IDNR Use Only

Date Received:

Comment Letter Date:

Reviewer:

Approved:

Y / N

Site monitoring report checklists		
Bedrock: Non-granular Bedrock: Granular High risk: Interim Low risk Exit	High risk: Remediation Quarterly sampling Semi-annual SMR submittal after the 2 nd & 4 th Quarters	Pre-RBCA high or low risk
☐ Cover sheet ☐ SMR checklist page ☐ Receptor summary tables ☐ Potential receptor summary ☐ Receptor status change• ☐ Site reclassification• ☐ Monitoring summary ☐ Soil analytical data• ☐ Soil gas analytical data• ☐ Groundwater monitoring summary ☐ Evaluation of analytical data ☐ Site plan map ☐ Site vicinity map ☐ Soil summary corrective action / Soil gas contamination map(s) ☐ Groundwater summary corrective action map ☐ Groundwater flow direction map ☐ Analytical data sheets ☐ Best management practices♦ ☐ Monitoring plans from T2 SCR♦ ☐ Tank/Line tightness tests• ☐ Documentation• ☐ Boring log/Well const. Diagram• ☐ Legal description•	☐ Cover sheet ☐ SMR checklist page ☐ Receptor summary tables ♣ ☐ Potential receptor summary ♣ ☐ Receptor status change• ♣ ☐ Site reclassification• ♣ ☐ Remediation monitoring tables ☐ Gallons of treated water table ☐ Soil analytical data• ☐ Soil gas analytical data• ☐ Groundwater monitoring summary ☐ Evaluation of analytical data ☐ Progress summary ☐ Site plan map ☐ Site vicinity map ☐ Soil summary corrective action / Soil gas contamination map(s) ☐ Groundwater summary corrective action map ☐ Groundwater flow direction map ☐ Analytical data sheets ☐ Best management practices♦ ☐ Monitoring plans from T2 SCR♦ ☐ Construction documentation♦ ☐ Tank/Line tightness tests• ☐ Documentation• ☐ Boring log/Well const. Diagram• ☐ Legal description•	☒ Cover sheet ☒ SMR checklist page ☒ Potential receptor summary ☒ Receptor status change• ☒ Site reclassification• ☐ Soil analytical data• ☐ Soil gas analytical data• ☒ Groundwater monitoring summary ☒ Evaluation of analytical data ☒ Site plan map ☒ Site vicinity map ☐ Soil summary corrective action / Soil gas contamination map(s) ☒ Groundwater summary corrective action map ☒ Groundwater flow direction map ☒ Analytical data sheets ☐ Best management practices♦ ☐ Monitoring plans from T2 SCR♦ ☐ Tank/Line tightness tests• ☒ Documentation• ☐ Boring log/Well const. Diagram• ☐ Legal description• ☒ Free Product Report•
• Optional/Site-specific	♦ Initial SMR only	♣ Submit at least annually

Potential receptor summary				
Receptor questions	Yes / No	Contact Name/Company Name/ Complete Address	Contact Phone #	Date
New drinking water well(s)? [1,000']	No	Jordan Cornilsen via IGSB website http://facilityexplorer.iowadnr.gov/FacilityExplorer/WellSearch.aspx	(319) 335-1575	12/10/15
New non-drinking water well(s)? [1,000']	No	Jordan Cornilsen via IGSB website http://facilityexplorer.iowadnr.gov/FacilityExplorer/WellSearch.aspx	(319) 335-1575	12/10/15
Plugged drinking water well(s)? [1,000']	No	Jordan Cornilsen via IGSB website http://facilityexplorer.iowadnr.gov/FacilityExplorer/WellSearch.aspx	(319) 335-1575	12/10/15
Plugged non-drinking water well(s)? [1,000']	No	Jordan Cornilsen via IGSB website http://facilityexplorer.iowadnr.gov/FacilityExplorer/WellSearch.aspx	(319) 335-1575	12/10/15
New plastic water line(s)? [200']	No	Iowa American Water 2020 Manufacturing Court Gerry Freudenberg, (563) 242-0973	(563) 242-9231	12/10/15
Replaced/relocated plastic water line(s)? [200']	No	Iowa American Water 2020 Manufacturing Court Gerry Freudenberg, (563) 242-0973	(563) 242-9231	12/10/15
New sanitary sewer(s)? [200']	No	City of Clinton Leah Woods, Engineering Department	(563) 244-3423	12/10/15
Replaced or relocated sanitary sewer(s)? [200']	No	City of Clinton Leah Woods, Engineering Department	(563) 244-3423	12/10/15
New buildings with basements? [200']	No	Seneca Environmental Services Todd Felderman	(563) 332-8000	10/22/15
Building(s) with basement(s) removed? [200']	No	Seneca Environmental Services Todd Felderman	(563) 332-8000	10/22/15
Zoning changes? [200']	No	City of Clinton Leah Woods, Engineering Department	(563) 244-3423	12/10/15
New surface water body(ies)? [200']	No	Seneca Environmental Services Todd Felderman	(563) 332-8000	10/22/15
Any surface water body(ies) eliminated? [200']	No	Seneca Environmental Services Todd Felderman	(563) 332-8000	10/22/15

Groundwater analytical data – Pre-RBCA monitoring only											
Boring/ Well #	Date Sampled	Elevations (ASL)			Group 1				TEH		Type-S T/G/ Sen
		Ground	TOS	SWL	B	T	E	X	D	W	
MW1	4/12/91	590.40	580.40	NR	10,000	110	380	1100			
MW1	6/3/96	590.40	580.40	577.50	17,000	190	2500	1000			
MW1	1/22/97	590.40	580.40	576.40	16,000	130	2300	330			
MW1	12/02/97	590.40	580.40	576.80	15,000	280	3200	900	28,000	<4000	
Boring/ Well #	Date Sampled	Elevations (ASL)			Group 1				TEH		Type-S T/G/ Sen
		Ground	TOS	SWL	B	T	E	X	D	W	
MW2	4/12/91	589.0	579.0	NR	400	<100	290	<100			
MW2	1/22/97	Could	Not	Locate	Well						
MW2	12/02/97	Could	Not	Locate	Well						
Boring/ Well #	Date Sampled	Elevations (ASL)			Group 1				TEH		Type-S T/G/ Sen
		Ground	TOS	SWL	B	T	E	X	D	W	
MW3	5/14/91	590.0	580.0	NR	130	220	130	540			
MW3	12/02/97	590.0	580.0	577.70	270	24	31	55	820,000	<80,000	
MW3	6/18/98	590.0	580.0	578.8	N/S	N/S	N/S	N/S	21,000,000	N/A	
MW3	6/18/98	590.0	580.0	578.8	N/S	N/S	N/S	N/S	21,000,000	N/A	
MW3	11/23/99	590.0	580.0	575.95	N/S	N/S	N/S	N/S	9,800,000	<400	
MW3	7/21/00	590.0	580.0	579.7	N/S	N/S	N/S	N/S	4,400,000	<20,000	
MW3	1/23/01	590.0	580.0	577.55	N/S	N/S	N/S	N/S	19,000,000	<350,000	
MW3	8/20/01	590.0	580.0	576.85	N/S	N/S	N/S	N/S	140,000	<4000	
MW3	1/15/02	590.0	580.0	576.90	N/S	N/S	N/S	N/S	560,000	<10,000	
MW3	08/01/02	590.0	580.0	579.48	N/S	N/S	N/S	N/S	375,000	12,400	
MW3	04/21/03	590.0	580.0	575.80	N/S	N/S	N/S	N/S	8,200,000	<100,000	
MW3	11/13/03	590.0	580.0	577.20	N/S	N/S	N/S	N/S	4,140,000	165,000	
MW3	5/17/04	590.0	580.0	578.88	N/S	N/S	N/S	N/S	544,000	21,400	
MW3	05/23/05	590.0	580.0	578.05	N/S	N/S	N/S	N/S	402,000	11,100	
MW3	07/06/06	590.0	580.0	577.80	N/S	N/S	N/S	N/S	736,000	17,400	
MW3	09/19/07	590.0	580.0	576.90	N/S	N/S	N/S	N/S	1,490,000	28,000	
MW3	12/18/08	590.0	580.0	576.44	N/S	N/S	N/S	N/S	14,800,000	462,000	
MW3	12/16/09	590.0	580.0	576.44	N/S	N/S	N/S	N/S	2,460,000	81,100	
MW3	09/30/10	590.0	580.0	579.17	N/S	N/S	N/S	N/S	600,000	18,500	
MW3	10/03/11	590.0	580.0	578.15	N/S	N/S	N/S	N/S	776,000	28,100	
MW3	09/12/12	590.0	580.0	576.95	N/S	N/S	N/S	N/S	466,000	13,200	
MW3	11/3/13	590.0	580.0	577.37	N/S	N/S	N/S	N/S	8,470,000	140,000	
MW3	9/18/14	590.0	580.0	579.89	N/S	N/S	N/S	N/S	11,700,000	<1390	
MW3	10/22/15	590.0	580.0	577.68	N/S	N/S	N/S	N/S	2,080,000	<417	

Boring/ Well #	Date Sampled	Elevations (ASL)			Group 1				TEH		Typ e-S
		Ground	TOS	SWL	B	T	E	X	D	W	T/G/Se n
MW7	5/14/91	589.0	579.0	NR	<2.0	<2.0	<2.0	<2.0			
MW7	1/22/97	589.0	578.60	575.0	<2.0	<2.0	<2.0	<3.0			
MW7	12/02/97	589.0	578.60	575.20	<2.0	<2.0	<2.0	<3.0	<1000	<400	

Boring/ Well #	Date Sampled	Elevations (ASL)			Group 1				TEH		Typ e-S
		Ground	TOS	SWL	B	T	E	X	D	W	T/G/Se n
MW8	1/22/97	589.60	579.60	576.40	11,000	40,000	5100	26,000			
MW8	12/02/97	589.60	579.60	576.22	12,000	31,000	4700	19,000	20,000	<4000	

Boring/ Well #	Date Sampled	Elevations (ASL)			Group 1				TEH		Typ e-S
		Ground	TOS	SWL	B	T	E	X	D	W	T/G/Se n
MW9	1/22/97	589.20	579.20	577.70	990	700	850	2500			
MW9	12/02/97	589.20	579.20	577.56	870	1200	1400	2700	94,000	<20,000	
MW9	6/18/98	589.20	579.20	580.38	N/S	N/S	N/S	N/S	820000	NR	
MW9	7/21/00	589.20	579.20	580.10	N/S	N/S	N/S	N/S	15,000	<2500	
MW9	1/23/01	589.20	579.20	575.95	N/S	N/S	N/S	N/S	11,000,000	<500	
MW9	8/20/01	589.20	579.20	578.10	N/S	N/S	N/S	N/S	26,000	<500	
MW9	1/15/02	589.20	579.20	576.71	N/S	N/S	N/S	N/S	7,400	<400	
MW9	08/01/02	589.20	579.20	579.86	N/S	N/S	N/S	N/S	13,400	731	

Boring/ Well #	Date Sampled	Elevations (ASL)			Group 1				TEH		Typ e-S
		Ground	TOS	SWL	B	T	E	X	D	W	T/G/Se n
MW10	1/22/97	589.50	579.50	576.0	110	360	1800	7000			
MW10	12/02/97	589.50	579.50	575.52	41	350	1700	3400	22,000	<4000	
MW10	6/18/98	589.50	579.50	577.89	N/S	N/S	N/S	N/S	130000	NR	
MW10	5/04/99	589.50	579.50	579.75	N/S	N/S	N/S	N/S	<1000	<400	
MW10	11/23/99	589.50	579.50	575.09	N/S	N/S	N/S	N/S	99,000	<400	
MW10	7/21/00	589.50	579.50	577.70	N/S	N/S	N/S	N/S	120,000	<10,000	
MW10	2/12/01	589.50	579.50	576.09	N/S	N/S	N/S	N/S	280,000	<5000	
MW10	8/20/01	589.50	579.50	576.15	N/S	N/S	N/S	N/S	48,000	<1000	
MW10	1/15/02	589.50	579.50	575.50	N/S	N/S	N/S	N/S	1,100,000	<20,000	
MW10	08/01/02	589.50	579.50	577.65	N/S	N/S	N/S	N/S	31,000	1,800	
MW10	04/21/03	589.50	579.50	575.56	N/S	N/S	N/S	N/S	310,000	<5000	
MW10	11/13/03	589.50	579.50	574.76	N/S	N/S	N/S	N/S	371,000	17,200	
MW10	5/17/04	589.50	579.50	577.38	N/S	N/S	N/S	N/S	97,500	6,280	
MW10	05/23/05	589.50	579.50	576.51	N/S	N/S	N/S	N/S	59,100	6,180	
MW10	07/06/06	589.50	579.50	576.51	N/S	N/S	N/S	N/S	70,700	8,850	
MW10	09/19/07	589.50	579.50	575.10	N/S	N/S	N/S	N/S	75,000	4,390	
MW10	12/18/08	589.50	579.50	574.23	N/S	N/S	N/S	N/S	111,000	18,000	
MW10	2/8/10	589.50	579.50	575.82	N/S	N/S	N/S	N/S	85,100	10,500	
MW10	10/25/10	589.50	579.50	578.72	N/S	N/S	N/S	N/S	29,600	2,940	
MW10	10/03/11	589.50	579.50	577.05	N/S	N/S	N/S	N/S	20,100	5,410	
MW10	09/12/12	589.50	579.50	574.47	N/S	N/S	N/S	N/S	5,740	2,540	
MW10	12/10/13	589.50	579.50	574.47	N/S	N/S	N/S	N/S	72,300	10,800	
MW10	9/18/14	589.50	579.50	577.74	N/S	N/S	N/S	N/S	142,000	<278	
MW10	10/22/15	589.50	579.50	575.70	N/S	N/S	N/S	N/S	54,800	<333	

Boring/ Well #	Date Sampled	Elevations (ASL)			Group 1				TEH		Typ e-S
		Ground	TOS	SWL	B	T	E	X	D	W	T/G/Sen
MW11	1/22/97	588.90	578.90	578.30	51	340	430	2300			
MW11	12/02/97	588.90	578.90	579.10	21	62	140	790	75,000	<8000	
MW11	6/18/98	588.90	578.90	583.7	Did	not	sample				

Boring/ Well #	Date Sampled	Elevations (ASL)			Group 1				TEH		Typ e-S
		Ground	TOS	SWL	B	T	E	X	D	W	T/G/Sen
MW12	1/22/97	588.30	578.30	577.60	3.7	49	32	210			
MW12	12/02/97	588.30	578.30	NR	9.6	39	35	230	1700	<400	
MW12	6/22/98	588.30	578.30	581.22	N/S	N/S	N/S	N/S	<500	NR	
MW12	5/04/99	588.30	578.30	582.19	N/S	N/S	N/S	N/S	<1000	<400	
MW12	7/12/00	588.30	578.30	580.20	N/S	N/S	N/S	N/S	<1000	<400	
MW12	1/23/01	588.30	578.30	575.96	N/S	N/S	N/S	N/S	<1000	<400	
MW12	8/20/01	588.30	578.30	577.70	N/S	N/S	N/S	N/S	<1000	<1000	
MW12	1/15/02	588.30	578.30	577.35	N/S	N/S	N/S	N/S	<1000	<400	
MW12	08/01/02	588.30	578.30	579.82	N/S	N/S	N/S	N/S	<380	<380	

Boring/ Well #	Date Sampled	Elevations (ASL)			Group 1				TEH		Typ e-S
		Ground	TOS	SWL	B	T	E	X	D	W	T/G/Sen
MW15	12/28/98	585.3	576.3	574.42	N/S	N/S	N/S	N/S	<100		
MW15	5/04/99	585.3	576.3	578.65	N/S	N/S	N/S	N/S	<1000	<400	
MW15	11/23/99	585.3	576.3	574.50	N/S	N/S	N/S	N/S	<1000	<400	
MW15	04/21/03	585.3	576.3	574.89	N/S	N/S	N/S	N/S	<1000	<400	
MW15	11/13/03	585.3	576.3	574.65	N/S	N/S	N/S	N/S	<380	<380	
MW15	05/17/04	585.3	576.3	576.30	N/S	N/S	N/S	N/S	<380	<380	
MW15	05/23/05	585.3	576.3	576.47	N/S	N/S	N/S	N/S	<380	<380	
MW15	09/19/07	585.3	576.3	575.98	N/S	N/S	N/S	N/S	<300	529	
MW15	02/13/09	585.3	576.3	574.82	N/S	N/S	N/S	N/S	675	2120	
MW15	10/25/10	585.3	576.3	578.67	N/S	N/S	N/S	N/S	<300	307	
MW15	10/03/11	585.3	576.3	575.39	N/S	N/S	N/S	N/S	<300	<300	
MW15	09/12/12	585.3	576.3	574.98	N/S	N/S	N/S	N/S	<300	307	
MW15	11/6/13	585.3	576.3	574.79	N/S	N/S	N/S	N/S	<227	<227	
MW15	9/18/14	585.3	576.3	576.93	N/S	N/S	N/S	N/S	<278	<278	
MW15	10/22/15	585.3	576.3	575.30	N/S	N/S	N/S	N/S	<278	<278	

Boring/ Well #	Date Sampled	Elevations (ASL)			Group 1				TEH		Typ e-S
		Ground	TOS	SWL	B	T	E	X	D	W	T/G/Sen
MW16	12/28/98	584.57	575.57	574.50	N/S	N/S	N/S	N/S	<100		
MW16	11/23/99	584.57	575.57	NA	N/S	N/S	N/S	N/S	<1000	<400	
MW16	04/21/03	584.57	575.57	573.97	N/S	N/S	N/S	N/S	<1000	<400	
MW16	11/13/03	584.57	575.57	573.59	N/S	N/S	N/S	N/S	<380	<380	
MW16	05/17/04	584.57	575.57	575.33	N/S	N/S	N/S	N/S	<380	<380	
MW16	05/25/05	584.57	575.57	575.60	N/S	N/S	N/S	N/S	<380	<380	
MW16	07/06/06	584.57	575.57	575.60	N/S	N/S	N/S	N/S	<300	<300	
MW16	09/19/07	584.57	575.57	574.57	N/S	N/S	N/S	N/S	<300	<300	
MW16	1/8/09	584.57	575.57	574.32	N/S	N/S	N/S	N/S	355	<300	
MW16	12/16/09	584.57	575.57	574.32	N/S	N/S	N/S	N/S	2200	452	
MW16	09/30/10	584.57	575.57	575.74	N/S	N/S	N/S	N/S	2170	376	
MW16	10/03/11	584.57	575.57	574.26	N/S	N/S	N/S	N/S	<300	363	
MW16	09/12/12	584.57	575.57	573.72	N/S	N/S	N/S	N/S	<300	<300	
MW16	11/6/13	584.57	575.57	574.00	N/S	N/S	N/S	N/S	393	500	
MW16	9/18/14	584.57	575.57	575.57	N/S	N/S	N/S	N/S	<278	<278	
MW16	10/22/15	584.57	575.57	574.16	N/S	N/S	N/S	N/S	<278	<278	

Boring/ Well #	Date Sampled	Elevations (ASL)			Group 1				TEH		Type-S T/G/Sen
		Ground	TOS	SWL	B	T	E	X	D	W	
MW17	3/11/14	589.65	579.65	574.91	N/S	N/S	N/S	N/S	78,000	4,150	
MW17	9/18/14	589.65	579.65	578.35	N/S	N/S	N/S	N/S	855	<278	
MW17	10/22/15	589.65	579.65	575.17	N/S	N/S	N/S	N/S	29,900	<278	

Soil Analytical Data

[illegible]

Receptors: Status change

List and describe all receptors whose status has changed since the previous receptor evaluation (e.g., Private Well A was plugged/water supply notification form was sent to the proper authorities; new houses were built; newly constructed lake, etc.).

There have not been any receptor changes for the 2015 SMR.

Site reclassification

Should the site be reclassified? ☒ no ☐ yes If yes, the site should be reclassified as:

☐ High Risk

☐ Low Risk

☐ No Action Required

If reclassification is recommended, provide the justification for reclassification and provide all necessary documentation in Appendix 11.

Site reclassification is not recommended at this time.

Currently the pathways above target levels for groundwater are Groundwater Ingestion and Groundwater to Waterline Pathways. TEH levels decreased below the Groundwater Vapor to Enclosed Space Pathways.