



**APPENDIX B
SANITARY SURVEY**

Sample Number	DEP Malfunction Classification**	Reason	Field Inspection Completion Date	Water Supply	Well Type	Well Depth (ft)	Cased	Distance from Drain Field (ft)	Well Location from Septic	Water Treatment	Water Tested	Date	Results	Lot Size (acres)	Dwelling Units	# of OLDS	OLDS Type	Graywater Discharge	OLDS Age (years)	Permitted	Reported OLDS Problems	System Pumped
1	Potential Malfunction	Unknown Permitting, Soil Restrictions	5/23/2006	Well	Drilled	130	Yes	100+	Uphill	Softener	Yes	Unknown	No Bacteria	0.24	1	1	Septic Tank / Drain Field	Same as Sewage	35	Unknown	None	Yes
2	Potential Malfunction	Unknown Permitting, Soil Restrictions	5/23/2006	Well	Drilled	128	Yes	100+	Uphill	Softener	Yes	Unknown	No Bacteria	1.38	1	1	Septic Tank / Drain Field	Same as Sewage	51	No	None	Yes
3	Potential Malfunction	Unknown Permitting, Soil Restrictions	5/23/2006	Well	Drilled	120	Yes	Unknown	Uphill	None	Yes	1990	No Bacteria	0.69	1	1	Septic Tank / 2 Seepage Pits	Same as Sewage	43	No	None	Yes
4	Potential Malfunction	Unknown Permitting, Soil Restrictions	5/23/2006	Well	Unknown	Unknown	Unknown	100+	Uphill	Softener	No			Unknown	1	1	Septic Tank / Drain Field	Same as Sewage	Unknown	Unknown	None	Yes
5	Confirmed Malfunction	Graywater Discharge to Stone Pit, Unknown Permitting, Soil Restrictions	5/23/2006	Well	Drilled	180	Yes	50	Uphill	None	Yes	1986	No Bacteria	Unknown	1	2	Septic Tank / Drain Field	Stone Pit	28	Unknown	None	No
6	Confirmed Malfunction	Graywater Discharge to Pit, Unknown Permitting on Repair, Unknown Permitting, Soil Restrictions	5/23/2006	Well	Drilled	87	Yes	35	Uphill	UV Light	Yes	2002	Bacteria	1.15	1	1	Septic Tank / Drain Field	Same as Sewage	54	No	None	Yes
7	Potential Malfunction	Unknown Permitting, Permitted Repair, Soil Restrictions	5/23/2006	Well	Drilled	139	Yes	40	Uphill	UV Light	Yes	2002	No Bacteria	0.29	1	1	Septic Tank/Drain Field	Same as Sewage	25	Unknown	None	Yes
8	Potential Malfunction	Unknown Permitting, Soil Restrictions	5/23/2006	Well	Unknown	Unknown	Unknown	Unknown	Unknown	None	Yes	2002	No Bacteria	1.75	1	1	Septic Tank/Drain Field	Same as Sewage	Unknown	Unknown	None	Unknown
9	Potential Malfunction	Unknown Permitting, Soil Restrictions	5/24/2006	Well	Drilled	325	Yes	100+	Uphill	None	Yes	Unknown	No Bacteria	69	1	1	Septic Tank/Seepage Pit	Same as Sewage	48	No	None	Yes
10	Potential Malfunction	Unknown Permitting, Permitted Repair, Soil Restrictions	5/24/2006	Well	Unknown	Unknown	Unknown	100+	Uphill	None	No		No Bacteria	3	1	1	Septic Tank/Drain Field	Same as Sewage	Unknown	Unknown	None	Unknown
11	Potential Malfunction	Unknown Permitting, Soil Restrictions	5/24/2006	Well	Drilled	100	Yes	Unknown	Unknown	UV Light	Yes	Unknown	Bacteria	2	1	1	Septic Tank / Drain Field	Same as Sewage	Unknown	Unknown	None	Yes
12	Potential Malfunction	Unknown Permitting on Repair, Unknown Permitting, Soil Restrictions	5/24/2006	Well	Drilled	89	Yes	50+	Uphill	Softener	Yes	1972	Bacteria	0.34	1	1	Septic Tank / Drain Field	Unknown	58	No	None	Yes
13	Potential Malfunction	Unknown Permitting on Repair, Unknown Permitting, Soil Restrictions	5/25/2006	Well	Drilled	60	Yes	Unknown	Unknown	None	No			0.73	1	1	Septic Tank / Drain Field	Same as Sewage	52	No	None	Yes
14	Confirmed Malfunction	Holding Tank/Graywater Borehole Disposal, Soil Restrictions	5/25/2006	Well	Drilled	80	Yes	63	Uphill	Chlorine	No			1	1	2	2000 gal Holding Tank	Old Well	10	Yes	N/A	Yes
15	Potential Malfunction	Unpermitted Repair, Unknown Permitting, Soil Restrictions	5/25/2006	Well	Drilled	68	Yes	100	Uphill	None	No			26	1	1	Septic Tank / Drain Field	Same as Sewage	23	Unknown	None	Unknown
16	Potential Malfunction	Unknown Permitting, Soil Restrictions	5/25/2006	Well	Drilled	80	Yes	50+	Uphill	Softener	Yes	Unknown	No Bacteria	1	1	1	Septic Tank / Drain Field	Same as Sewage	35	Unknown	None	Yes
17	Confirmed Malfunction	Graywater Discharge to Ditch, Unknown Permitting, Soil Restrictions	5/25/2006	Well	Drilled	350	Yes	120	Uphill	Air Injection for Sulfur	Yes	2005	No Bacteria	0.93	1	2	Septic Tank / Drain Field	Terra Cota Pipe to Ditch	19	Unknown	None	Yes
18	Potential Malfunction	Unknown Permitting, Soil Restrictions	5/25/2006	Well	Drilled	Unknown	Yes	70+	Uphill	None	No			Unknown	1	1	Septic Tank / Drain Field	Same as Sewage	Unknown	Unknown	None	Yes
19	Potential Malfunction	Soil Restrictions	5/25/2006	Well	Drilled	140	Yes	50	Uphill	None	Yes	Unknown	Unknown	0.89	1	1	Septic Tank / Drain Field	Same as Sewage	38	Yes	None	Yes

*Sewer Surveys completed by FPE Consulting Engineers.
**DEP Malfunction Determination completed by HRG.

Sample Number	DEP Malfunction Classification**	Reason	How Often Pumped	Last Time	OLDS Repair	When Repaired	Repair Permitted	Part Repaired/Replaced	Nitrate Results (mg/L)	Total Coliform (bacteria/100 ml)	Fecal Coliform (bacteria/100 ml)	Notes from On-lot Inspection
1	Potential Malfunction	Unknown Permitting, Soil Restrictions	Unknown	2005	No				3.4	1	0	Occupants do not drink the water. Water is high in iron and lead.
2	Potential Malfunction	Unknown Permitting, Soil Restrictions	Every 2-3 years	2005	No				3.0	0	0	Water is high in iron.
3	Potential Malfunction	Unknown Permitting, Soil Restrictions	Every 1.5 -2 Years	2004	No				1.8	0	0	
4	Potential Malfunction	Unknown Permitting, Soil Restrictions	Every 2-3 Years	Unknown	Unknown				0.7	0	0	
5	Confirmed Malfunction	Graywater Discharge to Stone Pit, Unknown Permitting, Soil Restrictions			No				2.2	1	0	Water is high in minerals.
6	Confirmed Malfunction	Greywater Discharge to Pit, Unknown Permitting on Repair, Unknown Permitting, Soil Restrictions	Every 2-3 Years	2005	Yes	Unknown	Unknown	Line Repaired/Replaced	2.7	0	0	Water "not fit for human consumption." Outhouse down by river.
7	Potential Malfunction	Unknown Permitting, Permitted Repair, Soil Restrictions	Every 2 Years	2004	Yes	Unknown	Yes	Drainfield Lines Replaced Due to Clogging	1.2	0	0	
8	Potential Malfunction	Unknown Permitting, Soil Restrictions	Unknown	Unknown	No				2.0	0	0	Purchased home in 2002.
9	Potential Malfunction	Unknown Permitting, Soil Restrictions	Every 2-3 Years	2002-2003	No				<.5	0	0	Three wells.
10	Potential Malfunction	Unknown Permitting, Permitted Repair, Soil Restrictions	Unknown	Unknown	Yes	2006	Yes	Tank Replaced	5.1	0	0	Drain field is located in weeded area making it difficult to distinguish problem area. Inspected by Madden (SEO)-seems No Malfunction.
11	Potential Malfunction	Unknown Permitting, Soil Restrictions	Every 3 Years	2005	No				2.0	0	0	
12	Potential Malfunction	Unknown Permitting on Repair, Unknown Permitting, Soil Restrictions	Every 2-3 Years	2005	Yes	1976	Unknown	Drainfield Expanded	2.9	0	0	
13	Potential Malfunction	Unknown Permitting on Repair, Unknown Permitting, Soil Restrictions	Every 2-3 Years	2003	Yes	1980	Unknown	Tank Replaced	2.4	0	0	
14	Confirmed Malfunction	Holding Tank/Graywater Borehole Disposal, Soil Restrictions	Every 3 months	2006	N/A				<0.5	0	0	Occupants do not drink the water. Occupants live in New Mexico and use the property only during the summer. They add a gallon of bleach to well before using. Occupants pump the holding tank at the end of every summer.
15	Potential Malfunction	Unpermitted Repair, Unknown Permitting, Soil Restrictions	Unknown	Unknown	No	2006	No	Tank and Line Replaced	2.2	0	0	Occupant does not drink the water.
16	Potential Malfunction	Unknown Permitting, Soil Restrictions	Every 5 Years	2001	No				<0.5	0	0	
17	Confirmed Malfunction	Graywater Discharge to Ditch, Unknown Permitting, Soil Restrictions	Unknown	2004	No				<0.5	0	0	OLDS only pumped out once.
18	Potential Malfunction	Unknown Permitting, Soil Restrictions	Unknown	2005	No				5.4	0	0	Purchased home about one year ago.
19	Potential Malfunction	Soil Restrictions	Unknown	2000	No				4.8	74	X	

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20	Confirmed Malfunction	Best Technical Guidance Repair, Unknown Permitting, Soil Restrictions	5/30/2006	Well	Drilled	400+	Yes	65	Uphill	UV Light	Yes	2001	No Bacteria	0.5	1	1	Septic Tank / Drain Field	Same as Sewage	Unknown	Unknown	None	Yes
21	Confirmed Malfunction	Graywater Discharge to Surface, Unknown Permitting, Soil Restrictions	5/30/2006	Well	Drilled	197	Yes	100+	Uphill	None	No			40	1	1	Septic Tank / Drain Field	Pipe to surface	59	No	None	Yes
22	Potential Malfunction	Unknown Permitting, Soil Restrictions	10/29/2004	Well	Drilled	245	Yes	250	Uphill	None	Yes	2004	No Bacteria	110	1	1	Septic Tank / Drain Field	Same as Sewage	Unknown	Unknown	None	Yes
23	No Malfunction		5/30/2006	Well	Drilled	174	Yes	Unknown	Uphill	Softener	Yes	2006	Unknown	1	1	1	Septic Tank / Drain Field	Same as Sewage	32	Yes	None	Yes
24	Confirmed Malfunction	Best Technical Guidance Repair, Unknown Permitting, Soil Restrictions	5/30/2006	Well	Drilled	250	Yes	150	Uphill	None	Yes	1979	No Bacteria	47	2	2	2 Septic Tanks / 1 Drain Field	Same as Sewage	30	Unknown	None	Unknown
25	Potential Malfunction	Unknown Permitting, Soil Restrictions	5/30/2006	Well	Drilled	Unknown	Yes	75+	Uphill	UV Light	Yes	2002	Bacteria	1.5	1	1	Septic Tank / Drain Field	Same as Sewage	13	Unknown	None	Yes
26	Potential Malfunction	Unknown Permitting, Soil Restrictions	6/1/2006	Well	Drilled	125	Yes	75	Uphill	None	Yes	2002	No Bacteria	2	1	1	Septic Tank / Drain Field	Same as Sewage	42	No	None	Yes
27	Potential Malfunction	Unknown Permitting, Soil Restrictions	6/1/2006	Well	Drilled	150+	Yes	70	Uphill	None	Yes	2003	Unknown	2.6	1	1	Septic Tank / Drain Field	Same as Sewage	32	Unknown	None	Yes
28	Potential Malfunction	Unknown Permitting, Soil Restrictions	6/1/2006	Well	Drilled	125	Yes	50	Uphill	None	No			1.3	1	1	Septic Tank / Drain Field	Same as Sewage	17	Unknown	None	Yes
29	Potential Malfunction	Unknown Permitting, Soil Restrictions	6/1/2006	Well	Drilled	67	Yes	58	Uphill	UV Light	Yes	Unknown	Bacteria	Unknown	1	1	Septic Tank / Drain Field	Same as Sewage	21	Unknown	None	Yes
30	Potential Malfunction	Soil Restrictions	6/5/2006	Well	Unknown	Unknown	Unknown	Unknown	Unknown	None	Yes	2000	No Bacteria	13	1	1	Septic Tank / Drain Field	Same as Sewage	27	Yes	Unknown	Yes
31	Potential Malfunction	Unknown Permitting, Soil Restrictions	6/5/2006	Well	Unknown	Unknown	Unknown	Unknown	Uphill	None	No			Unknown	1	1	Unknown	Unknown	Unknown	Unknown	Unknown	Yes
32	No Malfunction		6/5/2006	Well	Drilled	Unknown	Yes	Unknown	Uphill	Iron & Acidity	Yes	Unknown	No Bacteria	Unknown	1	1	Septic Tank / Drain Field	Unknown	25	Yes	None	Yes
33	No Malfunction		6/5/2006	Well	Unknown	80	Unknown	Unknown	Uphill	Sediment Removal	No			1.6	1	1	Septic Tank / Drain Field	Unknown	31	Yes	Unknown	Yes
34	Potential Malfunction	Unknown Permitting, Soil Restrictions	6/5/2006	Well	Drilled	210	Yes	100+	Uphill	None	Yes	2004	No Bacteria	3	1	1	Septic Tank / Tile Drain Field	Same as Sewage	24	Unknown	None	Yes
35	Potential Malfunction	Unknown Permitting on Repair, Unknown Permitting	6/5/2006	Spring	N/A	Unknown	Unknown	100+	Unknown	Softener	Yes	Unknown	Unknown	Unknown	Unknown	Unknown	Septic Tank / Drain Field	Same as Sewage	82	No	None	Yes
36	Potential Malfunction	Unknown Permitting, Soil Restrictions	6/5/2006	Well	Unknown	250	Yes	Unknown	Uphill	None	No			Unknown	1	1	Septic Tank / Drain Field	Unknown	39	No	Unknown	No
37	Potential Malfunction	Unknown Permitting	8/3/2006	Well	Drilled	450+	Yes	300+	Uphill	Softener/Air Injection	Yes	Unknown	Unknown	1.98	1	1	Septic Tank / Drain Field	Same as Sewage	33	Unknown	None	Yes
38	Potential Malfunction	Unknown Permitting, Permitted Repair	8/3/2006	Well	Drilled	200	Yes	100+	Uphill	Softener	Yes	2004	No Bacteria	1	1	1	Elevated Sand Mound	Same as Sewage	22	Unknown	None	Yes
39	Potential Malfunction	Soil Restrictions	8/3/2006	Well	Drilled	230	Yes	250+	Uphill	None	Yes	1994	No Bacteria	3	1	1	Septic Tank / Drain Field	Same as Sewage	19	Yes	None	Yes
40	Potential Malfunction	Unknown Permitting, Soil Restrictions	8/3/2006	Well	Drilled	210	Yes	125	Uphill	None	No			50	1	1	Septic Tank / Drain Field	Same as Sewage	53	No	None	Yes
41	Potential Malfunction	Unknown Permitting on Repair	8/3/2006	Well	Drilled	185	Yes	150+	Uphill	None	No			0.25	1	1	Septic Tank / Drain Field	Same as Sewage	35	Yes	None	No
42	No Malfunction		9/20/2006	Well	Drilled	400+	Yes	100+	Uphill	Softener	Yes	1996	Bacteria	200	1	1	Elevated Sand Mound	Same as Sewage	13	Yes	None	Yes
43	No Malfunction		9/20/2006	Well	Drilled	198	Yes	150	Uphill	Softener & Neutralizer	Yes	1982	No Bacteria	>1.33	1	1	Septic Tank / Drain Field	Same as Sewage	27	Yes	None	No
44	No Malfunction		9/20/2006	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Septic Tank / Inground Trench	Same as Sewage	26	Yes	N/A	N/A

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20	Confirmed Malfunction	Best Technical Guidance Repair, Unknown Permitting, Soil Restrictions	Unknown	2001	Yes	2000	Unknown	Tank and Drainfield Replaced. Line Repaired.	1.0	0	0	
21	Confirmed Malfunction	Graywater Discharge to Surface, Unknown Permitting, Soil Restrictions	Unknown	1989	No				4.7	20	X	
22	Potential Malfunction	Unknown Permitting, Soil Restrictions	Every 2-3 Years	2004	No					<1	<1	Dairy farm who has the water tested every three years.
23	No Malfunction		Unknown	1988	No				4.9	0	0	
24	Confirmed Malfunction	Best Technical Guidance Repair, Unknown Permitting, Soil Restrictions	Unknown	Unknown	Yes	1980	Unknown	Drainfield Leveled	1.8	0	0	2 wells and 2 septic tanks but one tile drain field.
25	Potential Malfunction	Unknown Permitting, Soil Restrictions	Unknown	2002	No				4.3	8	X	Occupants do not drink the water.
26	Potential Malfunction	Unknown Permitting, Soil Restrictions	Every 10-15 Years	Unknown	No				<0.5	0	0	
27	Potential Malfunction	Unknown Permitting, Soil Restrictions	Unknown	1994	No				6.5	6	X	Occupants have a UV light water treatment system, but the bulb burned out and hasn't been replaced.
28	Potential Malfunction	Unknown Permitting, Soil Restrictions	Every 3 Years	2003	No				<0.5	0	0	House was built in 1800's.
29	Potential Malfunction	Unknown Permitting, Soil Restrictions	Every 3 Years	2004	No				<0.5	0	0	
30	Potential Malfunction	Soil Restrictions	Unknown	2004	No				1.4	0	0	
31	Potential Malfunction	Unknown Permitting, Soil Restrictions	Unknown	2004	Unknown				4.5	3	X	Could not find well head to determine distance. Occupants purchased home only 1-1/2 years ago and doesn't know much about the OLDS.
32	No Malfunction		Unknown	1991	No				1.8	0	0	Occupants treat water for iron and acidity.
33	No Malfunction		Unknown	2004	No				4.5	68	X	
34	Potential Malfunction	Unknown Permitting, Soil Restrictions	Unknown	2004	No				<0.5	0	0	
35	Potential Malfunction	Unknown Permitting on Repair, Unknown Permitting	Unknown	1996	Yes	1996	Unknown	Line Replaced	<0.5	83	X	Lateral Only.
36	Potential Malfunction	Unknown Permitting, Soil Restrictions			No				<0.5	0	0	Water only gets turned on 4 or 5 times a year.
37	Potential Malfunction	Unknown Permitting	Annually	2005	No				<0.5	100	X	
38	Potential Malfunction	Unknown Permitting, Permitted Repair	Every 2 Years	2005	Yes	1992	Yes	Drainage Bed Replaced, New Dosing Tank, and New 500 gal Septic Tank	<0.5	9	0	Float on pump replaced shortly after they moved in.
39	Potential Malfunction	Soil Restrictions	Every 7-8 Years	2001	No				<0.5	80	0	
40	Potential Malfunction	Unknown Permitting, Soil Restrictions	Every 6-7 Years	2002	No				3.7	2	X	
41	Potential Malfunction	Unknown Permitting on Repair			Yes	1980	Unknown	Line Repaired/Replaced	5.4	1	0	
42	No Malfunction		Every 5 Years	2002	No				<0.5	0	0	Occupants do not drink the water.
43	No Malfunction				No				6.5	104	X	
44	No Malfunction		N/A	N/A	N/A				5.5	0	0	

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**DEP Malfunction Determination completed by HRG.

45	Potential Malfunction	Unknown Permitting, Soil Restrictions	9/20/2006	Artisan Well	Drilled	505	Yes	300	Unknown	Softener	Yes	Unknown	Unknown	7	1	1	Septic Tank / Drain Field	Same as Sewage	Unknown	Unknown	None	Yes
46	Potential Malfunction	Unknown Permitting, Soil Restrictions	9/20/2006	Well	Drilled	100	Yes	75	Uphill	None	Yes	1978	No Bacteria	197	1	1	Septic Tank / Drain Field	Same as Sewage	40	No	None	Yes
47	Potential Malfunction	Soil Restrictions	4/23/2010	Well	Drilled	62	Yes	150+	Uphill	None	Yes	1980	No Bacteria	0.5	1	1	Septic Tank / Drain Field	Same as Sewage	37	Yes	None	No
48	Potential Malfunction	Unknown Permitting, Soil Restrictions	4/23/2010	Well	Drilled	120	Yes	75	Uphill	UV Light	Yes	2008	No Bacteria	0.5	1	1	Septic Tank / Drain Field	Same as Sewage	65+	No	None	Yes
49	Potential Malfunction	Unknown Permitting, Soil Restrictions	4/23/2010	Well	Drilled	Unknown	Yes	100+	Uphill	None	No			1	1	1	Septic Tank / Drain Field	Same as Sewage	Unknown	Unknown	None	Yes
50	Suspected Malfunction	Cesspool, Unknown Permitting, Soil Restriction	4/23/2010	Well	Drilled	Unknown	Yes	75	Uphill	None	Unknown			Unknown	1	1	Cesspool / Drain Field	Same as Sewage	Unknown	Unknown	None	Yes
A	Potential Malfunction	Unknown Permitting	A	Public	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	1	1	Septic Tank / Drain Field	Same as Sewage	54	No	None	Yes
B	Confirmed Malfunction	Best Technical Guidance Repair, Unknown Permitting	B	Public	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Unknown	Unknown	Unknown	Septic Tank / Drain Field	Same as Sewage	21	Unknown	None	Yes

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 **DEP Malfunction Determination completed by HRG.

45	Potential Malfunction	Unknown Permitting, Soil Restrictions	Unknown	1993	No				<0.5	0	0	Unable to identify well head during inspection.
46	Potential Malfunction	Unknown Permitting, Soil Restrictions	Every 3 Years	2006	No				5.0	78	0	
47	Potential Malfunction	Soil Restrictions			No				4.2	2	0	
48	Potential Malfunction	Unknown Permitting, Soil Restrictions	Every 2 Years	2008	No				1.6	0	0	Owner identified seasonally wet area in vicinity of drain field, however, Owner commented that it was not caused by OLDS.
49	Potential Malfunction	Unknown Permitting, Soil Restrictions	Once	2009	No				<1	1	0	Owner has only lived in the house since 2007. Drainage area as identified by the Owner is submerged during high water levels in the Juniata River.
50	Suspected Malfunction	Cesspool, Unknown Permitting, Soil Restriction	Once	2009	No				<1	<1	<1	Neighbor's well is approximately 50-feet down slope of drainfield and less than 100-feet down slope of cesspool.
A	Potential Malfunction	Unknown Permitting	Unknown	1966	Unknown	Unknown	Unknown	Unknown				Occupants added "a pipe" when they moved in.
B	Confirmed Malfunction	Best Technical Guidance Repair, Unknown Permitting	Unknown	2005	Yes	Unknown	Unknown	Drainfield Expanded				

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