Drinking Water Well Investigations Conducted by CCDOH Potentially Impacted by Gas and Oil Well Activity

Abbreviations: petro-petroleum by-products; 503.1=VOCs; Cl=chloride; IOC=primary drinking water inorganics; oil & gas indicators=Na,Ca,K,Cl1,Fe,Mg,Mn,pH,SO4,Alk,TDS,Pb,Sr,Ba,meth/eth,bact;

Abbreviations, pe	Complaint & Investiga		-primary drink	ing water inorgan	cs; oil & gas indicators=Na,Ca,K,Cl1,Fe,M	g,wiri,pn,504,Aik,105,Pb,						
Township	Complaint Date	Complaint	Investigation	Water Sampled	Analyses	Results		Well Info	Year Drilled	Depth	Depth to Rock Comme	ients
		water cloudy ever since gas well										
	9/21/1961	drilled 1 y.a.; odor and grit		yes	TC and HPC	<1 TC; 5700 HPC						
Chautaugua	E/1/1002	Gas and Oil oder and taste	6/30/1986	3 400	petro,503.1	negative for parameters tested	inconclusive	driven	1952	5.0	No obn	normal levels for parameters tested
Chautauqua	3/1/1903	Gas and On oder and taste	0/30/1980	l yes	petro,303.1	lesieu	Inconclusive	unven	1932	. 50		em reportedly impacted 12 homes in area: Short residence
												orst. This is a very large file containing several consultant
												s and a report by Dr. Harrison, hydrogeologist. Homeowner
												cted NYDEC,Local, State and Federal representatives.
												Public meetings held. Methane tests show National Fuel
												are not the source of problem. Soil around house and in nent and well casing was vented to resolve problem. Data
		Methane gas in water well and										ed no abnormal levels for parameters tested except
Poland)	11/1/1983		11/1/1983	3 yes	petro,503.1, methane - numerous times	high methane	Methane contamination				methar	·
		Possible Gas well contamination in				negative for parameters						
Ellicott	11/18/1983	water well	11/18/1983	3 yes	petro,503.1	tested	inconclusive					ed to contact NYDEC for further investigation
Ellicott	E/10/100 <i>1</i>	Gas in water	5/18/1986	3 400	chloride,turbidity, bact, methane	positive for chloride and methane	inconclusive	drilled		113		tested in May and Nov. Both times chloride levels were MCL (412 and 396)
EIIICOLL	5/16/1904	Gas III water	3/10/1900	yes	Chloride, turbidity, bact, methane	negative for parameters	inconclusive	urilleu		116	above	MCL (412 and 390)
Ellington	5/29/1984	Methane gas in water	5/29/1984	yes	petro,503.1	tested	inconclusive	drilled	1960	113	No abn	normal levels for parameters tested
		-				Mn-2.0to4.0mg/l,Fe-						geo study Phase 1&2 by Dr. Sam Harrison. Very large file,
						3.9mg/l,Ba-1.4mg/l,						testing many different times. Inorganic testing found high
		Odor, bad taste. <mark>Methane Gas in</mark>			petro,503.1,fe/mn,bact,Clorides,loc's	benzene, toluene & other VOCs present in low	well impacted by minerals in					Fe,Mn. Harrison report concludes Mn is from soil. Owner cted many different agencies for resolution. HD smapled
Gerry		spring supply	1/21/1987	ves	(numerous)	levels		dug		,		987-1993.
Cony	3/1/1001	cpinig cappiy	1/21/100/	jee	(Harrier Gas)	negative for parameters	0011	aag		Ì	11011111	307 1000.
Ellington	7/16/1984	Odor, taste and color problems	7/16/1984	yes	bact, chloride, iron, turbidity, methane	tested	no methane detected	drilled	1967	100		normal levels for parameters tested
												of concern written to NYDEC(Robert Wozniak) on 11/30/84.
Harmony	11/30/1084	Brine spreading on Stevens Road		no			inconclusive				Of Hari	and by saying any complaints must be directed to the Town
ria mony	1170071001	Possible Gas well contamination in		110			moonoidoivo				OT FIGURE	
Carroll	7/16/1985	water well		no			inconclusive				No inve	restigation on this complaint
01	40/0/4005		40/0/4005		la de	negative for parameters	be a small color				N	a constitue de forma constitue to the d
Cherry Creek	12/9/1985	gas in water	12/9/1985	yes	loc's	tested Positive for	inconclusive				ino abn	normal levels for parameters tested
						chloride,calcium, sodium	well possibly impacted by				Barium	n, Hardness and Chloride levels (very high 968mg/L) all
Clymer	1/13/1986	Brine in well	2/5/1986	yes	Chloride and loc's	and Hardness,	<mark>brine</mark>					d NY State MCL's
	4/00/4000	Cloudy water that tastes like gas	44/00/400		. 500.4	negative for parameters					ļ., ,	1
Ellery Hanover		which burns his mouth Methane gas in water	11/30/1986 2/4/1986		petro,503.1	tested	inconclusive None					normal levels for parameters tested
Tianovei	2/4/1000	Water water	2/4/1000	7110		negative for parameters	140110				140 Wat	ter test, no condusions, no answers
Cherry Creek		Taste and oder problems	2/10/1986	yes	petro,503.1	tested	inconclusive				No abn	normal levels for parameters tested
-		Odor in well water, possible gas well	0/0=//00/			negative for parameters						
Ripley	2/11/1986	contamination	2/25/1986	yes	bact	tested	inconclusive	drilled		42	No abn	normal levels for parameters tested
		Experiencing a bubbling, foamy and					Advised to boil water used					
Sheridan		scum problems with their water well	2/25/1986	yes	bact	Bacteria Levels high	for consumption				Disinfe	ection need of well
		Drinking water contamination from										
Sheridan	2/21/1986	local gas well drilling	2/25/1986	yes	bact	Bacteria levels high negative for parameters	inconclusive					ection need of well normal level for parameter tested. Next door neighbors
Arkwright	2/24/1986	Water turbid with oily sheen	2/25/1986	Sives	bact	tested	inconclusive					no problems with water
· · · · · · · · · · · · · · · ·				.,,		negative for parameters						
Poland	3/12/1986	Oily film on surface of water	3/13/1986	yes	petro,503.1	tested	inconclusive	drilled			No abn	normal levels for parameters tested
		Petroleum smell to water. Faucets				negative for parameters					No obn	normal layela for narameters tested. Upon inspection
Poland		spit and sputter	4/8/1986	Sves	petro,503.1.bact	tested	inconclusive	drilled	pre-1950	100		normal levels for parameters tested. Upon inspection, bwner said that there was an oil spill around the well pump
1 Glaria	0/01/1000	opit and opation	4/0/1000	, , , , ,	petro,000.1,500t	tested	Advised to boil water used	armea	pre 1000	100	Homeo	When said that there was all on spin dround the wen pump
Pomfret	4/11/1986	Water tasting terrible	5/5/1988	3 yes	bact	Bacteria levels high	for consumption				Disinfe	ection need of well
	4/4.4/4.000		4/4.4/4.00		l	negative for parameters			40.401		ļ., ,	1
Ellery	4/14/1986	Water contains clay contamination	4/14/1986	yes	bact	tested negative for parameters	inconclusive	drilled	1940's	147	No abn	normal levels for parameter tested
Poland	4/25/1986	Problems with water	4/29/1986	S yes	bact	tested	inconclusive	drilled	1967	170	No abn	normal levels for parameters tested
						Ca-72mg/L, Na-840mg/L	,					·
		Salty taste in well water possible gas	=1011001			TDS-2613mg/L, Cl-						commendation given to the homeowner about what to do
<u>Sherman</u>	4/25/1986	well contamination	5/9/1986	yes	Ca, Na, TDS, Cl,petro,503.1,Fe/Mn	1270mg/L Bacteria Levels high,	well impacted by brine					ell water file. Homeowner contacted NYDEC(Allen Alexander),
						Negative for other	Surface contamination					or Moynihan & Present.CCDOH recommended that a
Villenova	5/5/1986	Water has bad oder	5/21/1986	yes	petro,503.1,bact	parameters		drilled	1923	30		nation system be installed
							Advised to boil water used					•
Stockton	5/7/1986	Gas odor and taste from well water	6/9/1987	/ yes	bact	Bacteria Levels high	for consumption				Disinfe	ection need of well

						Benzene-140mcg/L	No inpact from the				Large file. Homeowner contacted NYDEC(Allen Alexander), along with the CCDOH. Well tested again 2/23/1987 w/ no presence of
Villenova	5/20/1986	Water has bad odor	5/29/1986	yes	petro,503.1,bact	Toluene-1mcg/L	surrounding gas wells	drilled	1977	50	Benzene or Toluene
Chautauqua	6/2/1986	Salty taste to water possible due to local gas drilling	6/2/1986	S yes	chloride,loc's	CI-309mg/L,Ca- 66mg/L,TDS's-744mg/L	well possibly impacted by brine	drilled	1976	106	CI and other IOC's very high which exceed NY State MCL's
Villenova	6/10/1986	Possible well water contamination from local gas well drilling	6/30/1986	ives	petro,503.1	negative for parameters tested	inconclusive	drilled		30	No abnormal levels for parameters tested
Villenova		Possible Gas well contamination	6/12/1986	ĺ	petro.503.1	negative for parameters tested	inconclusive	uou			No abnormal levels for parameters tested
Villeriova		Possible well water contamination			petro,500.1	negative for parameters					The abilitimal levels for parameters tested
Villenova	6/12/1986	from local gas well drilling Possible well water contamination	6/30/1986	yes	petro,503.1	tested negative for parameters	inconclusive	drilled		60	No abnormal levels for parameters tested
Villenova	6/12/1986	from local gas well drilling	6/30/1986	g yes	petro,503.1	tested	inconclusive	driven		32	No abnormal levels for parameters tested
Ellery	6/26/1986	grey water coming to ground surface in her yard	6/30/1986	g yes	petro,503.1,bact	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
Clymer	7/7/1986	brown color of water and particles in it since gas well fractured on adjoining property	7/7/1986) yes	petro, purgeable aromatics	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
Portland	7/11/1986	Gasoline tasting water	7/21/1986	S yes	petro,503.1,bact	negative for parameters tested	inconclusive	drilled	1974	93	No abnormal levels for parameters tested
Busti	7/22/1986	Gas in water	7/22/1986	Sives	petro,503.1	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
Chautauqua	7/24/1986	Water is cloudy and dirty. Drilling rights has just pulled out of the area earlier	7/24/1986	s yes	petro,503.1,bact	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
Gerry	8/18/1986		8/18/1986	Sives	petro,503.1	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
Dunkirk		Sulfer smell	8/22/1986		petro.503.1	negative for parameters tested	H2S problem				No abnormal levels for parameters tested
Dulkirk						negative for parameters					·
Chautauqua	8/29/1986	Taste and oder problems Water has oily sheen and foul odor	8/29/1986	3 yes	petro,503.1, loc's and chlorides	tested	inconclusive	drilled	1980	74	No abnormal levels for parameters tested No noticable color, odor, sheen when water is drawn into a clear
Sherman	9/18/1986		9/18/1986	no		nogative for peremeters	inconclusive				glass, Not strong enough to sample
Ellery	9/24/1986	Oil in water	9/24/1986	s yes	petro,503.1	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
Busti	10/6/1986	Gas in water	10/7/1986	Syes	petro,503.1	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
		Water is cloudy, smells and tastes funny. Gas well located 200 feet				negative for parameters					·
Busti	10/15/1986	from water well	10/20/1986	yes	petro,503.1,bact	tested	inconclusive	drilled	1984	178	No abnormal levels for parameters tested
Carroll	10/20/1986	Oil noted in drinking water	10/20/1986	S yes	petro,503.1,bact	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
Gerry	11/7/1986	Water has bad smell	11/10/1986	Sives	petro,503.1,bact	negative for parameters tested	inconclusive	drilled	1961	70	No abnormal levels for parameters tested. Neighbors with similar problems
COLLY	1 117 1000	Tracor rido bad orrion	11/10/100	, , , , ,	pour,000.1,000t	Bacteria levels high,		dimod	1001		prosenie
Westfield	12/9/1986	Oily and blackish color to water	12/30/1986	Syes	petro,503.1,TDS's and chlorides	Negative for other parameters	Advised to boil water used for consumption	drilled	1968	40	Disinfection need of well
Ellington	12/18/1986	Brown oily film on water	12/28/1986	S ves	petro,503.1,bact	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
		Oily film on water and smells like		ĺ		negative for parameters					· ·
Busti	1/6/1987		1/13/1987		petro,503.1,bact	tested negative for parameters	inconclusive				No abnormal levels for parameters tested
Stockton	1/14/1987	Water taste like it has petroleum in it	1/13/1987	yes	petro,503.1	tested negative for parameters	inconclusive				No abnormal levels for parameters tested
Gerry	1/21/1987	Petroleum smell to water	1/21/1987	yes	petro,503.1,bact	tested	inconclusive				No abnormal levels for parameters tested
Chautauqua	1/26/1987	Gas and Oil oder and taste	1/28/1987	yes	petro,503.1,bact	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
Pomfret	1/28/1987		1/28/1987	yes	petro,503.1,bact	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
Ripley	1/28/1987	Odor in well water, possible gas well contamination	2/11/1987	ves	petro,503.1	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
Busti		Oily film on water in humidifer pan and strong oder of water	2/12/1987		petro,503.1	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
North		Water smells like Oil City, children at				negative for parameters					·
Harmony	2/3/1987	residence ill	2/5/1986	yes	petro,503.1	tested Elevated levels of	inconclusive		+		No abnormal levels for parameters tested Inspector suggest oil was coming from submersible pump. On
Ellery	2/12/1027	Oil in water supply	2/13/1987	7 ves	petro,503.1	Hydrocarbons found in test results	Thin layer of oil found during inspection	g drilled		104	2/17/1987 homeowner confirmed that he contacted well driller and that there was oil in pump
j		,		ĺ		negative for parameters	·			_	·
Stockton	2/17/1987	Kerosene oder in water Increase sulfur smell and changes is	2/17/1987	yes	petro,503.1,bact	tested negative for parameters	inconclusive	drilled	+	120	No abnormal levels for parameters tested
Carroll	2/18/1987	•	2/23/1987	yes	petro,503.1,bact	tested negative for parameters	inconclusive				No abnormal levels for parameters tested.
Gerry	2/24/1987	Oil in water	3/19/1987	yes	petro,503.1	tested	inconclusive	drilled			No abnormal levels for parameters tested

						negative for parameters	1	1				<u> </u>
Gerry	2/24/1987	Oily film on water	3/19/1987	yes	petro,503.1	tested	inconclusive					No abnormal levels for parameters tested
Ellington	3/10/1987	Odor and taste, black stain in sink and dishes	3/10/1987	yes	petro,503.1,bact	negative for parameters tested	inconclusive	drilled	1970's	90		No abnormal levels for parameters tested
Stockton	3/19/1987	No complaint form in file	3/19/1987	yes	petro,503.1	negative for parameters tested	inconclusive					No abnormal levels for parameters tested
Chautauqua			3/27/1987	7 yes	petro,503.1	negative for parameters tested	inconclusive					No abnormal levels for parameters tested. No dead fish observed and duck's observed swimming on pond
Ripley	3/30/1987	Fish dying in pond possible gas well contamination	4/13/1987	yes	petro,503.1	negative for parameters tested	inconclusive					No abnormal levels for parameters tested
Chautauqua	3/30/1987	Water is foul tasting	4/9/1987	⁷ yes	petro,503.1,fe/mn,OCSS-1	negative for parameters tested	inconclusive					No abnormal levels for parameters tested
Stockton	4/6/1987	problems with drinking water	4/9/1987	⁷ yes	petro,503.1,bact	negative for parameters tested	inconclusive					No abnormal levels for parameters tested
Harmony	4/17/1987	Suspect brine from nearby gas well is contaminating their well	4/21/1987	yes	petro,503.1,bact	negative for parameters tested	inconclusive	drilled		9		No abnormal levels for parameters tested
Chautauqua	4/23/1987	Rilley water with Methane in water. Can light faucet with match.	4/27/1987	7 yes	petro,503.1,bact	negative for parameters tested	inconclusive	drilled	1971	107		No abnormal levels for parameters tested
Ellery	5/26/1987	Oily taste in water	5/27/1987	yes	petro,503.1,bact	negative for parameters tested	inconclusive					No abnormal levels for parameters tested
Mina	5/28/1987	Possible oil in water	6/4/1987	yes	petro,503.1,PCB's	negative for parameters tested	inconclusive					No abnormal levels for parameters tested
Gerry	6/9/1987		6/9/1987	⁷ yes	petro,503.1	negative for parameters tested	inconclusive					No abnormal levels for parameters tested
Ellery	6/10/1987	Blackish water	6/10/1987	yes	petro,503.1,bact	negative for parameters tested	inconclusive					No abnormal levels for parameters tested
		Problems with salt and sulphur in				Bacteria levels high, Cl- 244mg/L,TDS- 575mg/L,Na-200mg/L, Ca	a well possibly impacted by					Bacteriological sample was unsatisfactory(disinfection of well recommended), TDS slightly over recommended levels, Na and
Ripley	6/25/1987	water well	7/13/1987	yes	Ca, Na, TDS, CI	9.7mg/L Positive for Bact.	brine					Cl- high, Treatment reccommendations given to homeowner.
Ellicott	6/26/ <mark>1987</mark>	oil in water and oder	8/17/1987	yes	petro,503.1,bact	Negative for othe parameters tested Bacterial levels high, all	inconclusive					Advised to boil water for consumption until corrective measures have been taken
Poland	6/30/1987	Petroleum smell to water	8/5/1987	7 yes	petro,503.1,bact	other parameters tested were negative	inconclusive					Advised to boil water for consumption until corrective measures have been taken. Disinfecting the well
North Harmony		Strange oder. Would like it tested for Bacteria, Gas/Oil and other chemicals	8/5/1987	7 yes	petro,503.1,bact	negative for parameters tested	inconclusive					No abnormal levels for parameters tested
Harmony	7/29/1987	Gas/Oil in water due to neighbors gas well	8/5/1987	7 yes	petro,503.1,bact	Low levels of hydrocarbon contamination	Not safe for water consumption					Low levels of hydrocarbon contamination, not recommended for human consumption
Gerry	8/3/1987	Sediment in water, oder & tastes bad	8/5/1987	yes	petro,503.1,fe/mn,bact	negative for parameters tested	inconclusive					No abnormal levels for parameters tested
						Na-2140mg/L,Ca- 620mg/L, TOC's-						Advised not to use water - recommended that they contact the
Westfield)	8/3/1987	Having problems with water Water appears contaminated by	8/6/1987	yes	petro,503.1, TDS's and chlorides	8675mgL, CI-5250mg/L	well impacted by brine Advised to boil water used					NYSDEC for further advice
Stockton	8/10/1987	leachate- Red in color Turbidity in water (for 2 weeks)	8/17/1987	yes	petro,503.1,fe/mn,bact	Bacteria Levels high	for consumption					No abnormal levels for other parameters tested
Ellington	8/10/1987	maybe due to gas well contamination	8/10/1987	7 yes	petro,503.1	negative for parameters tested	inconclusive					No abnormal levels for parameters tested
						Cl-725mg/L,Na- 490mg/L,Ca-33mgL,TDS	-					Recommended that continuous chlorination be installed. No
Stockton	8/24/1987	Salty taste to water	8/25/1987	yes	petro,503.1,bact,IOC's, Chlorides	1460mg/L Fe/Mn high,negative for	well impacted by brine					recommendation on how to remedy the high levels of IOC's No abnormal levels for parameters tested except Fe & Mn. Water
Gerry	8/31/1987	Staining in sink and tub	9/1/1987	yes	petro,503.1,fe/mn,bact	petro & 503.1 Fe/Mn high, Bact level	inconclusive					treatment advised
Gerry	8/31/1987	Staining in sink	9/1/1987	yes	petro,503.1,fe/mn,bact	248,negative for petro & 503.1	inconclusive	spring				No abnormal levels for parametes tested except Fe & Mn. Water treatment advised
Gerry	8/31/1987	Sulfer smell	9/1/1987	yes	petro,503.1,fe/mn,bact	negative for parameters tested	inconclusive	drilled		75	3	8 No abnormal levels for parameters tested
Gerry	9/1/1987		9/1/1987		petro,503.1,fe/mn,bact	negative for parameters tested	inconclusive					No abnormal levels for parameters tested
Ellery	9/8/1987	Water smells and appears bad	9/14/1987	yes	petro,503.1,bact	No results in file	inconclusive					No results in file
Stockton	10/22/1987	Cattle getting sick from creek water being consumed Salty taste in well water maybe from	10/22/1987	yes	petro,503.1,bact,TDS	negative for parameters tested	inconclusive					No abnormal levels for parameters tested
Sheridan	11/2/1987	runoff from salt piles located at town	12/7/1987	yes	Ca, Na, TDS, CI	Ca-60mg/L, Na-330mg/L	inconclusive					No abnormal levels for parameters tested. Recommeded that individuals on low Na diets should use caution if drinking water

							T				
						Ca-170mg/L, Na-					No abnormal levels for parameters tested. Recommeded that
Sheridan	11/2/1987	Salty taste in well water	11/2/1987	yes	Ca, Na, TDS, CI	230mg/L	inconclusive	drilled		36	individuals on low Na diets should use caution if drinking water
Stockton	11/12/1987	Oil or kerosene in well	11/12/1987	ves	petro,503.1,bact	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
\\\46: -1-l		Gas or oil entering well serving barn	40/00/400			negative for parameters	la a a a a b a b a a	1	40001-	50	No share well to the form of the standard
Westfield	12/22/1987	and house trailer	12/28/1987	yes	petro,503.1,bact	tested negative for parameters	inconclusive	drilled	1960's	58	No abnormal levels for parameters tested
Stockton	1/21/1988	Oily smell in the water	1/26/1988	yes	petro,503.1,bact	tested	inconclusive				No abnormal levels for parameters tested
North Harmony	3/7/1988	Taste and oder of gas in well water	12/14/1989	yes			unable to contact homeowner				No contact with homeowner
		Well water yellowish in color				Ba-0.12mg/l,Fe- 0.35mg/l,Mn-					
		possible contamination from local				0.06mg/l,Strontium-					
Ripley	3/10/1988	gas well drilling	3/10/1988	yes	petro,503.1,fe/mn,IOC's	0.11mg/l negative for parameters	inconclusive				No abnormal levels for parameters tested
Clymer	3/22/1988		3/22/1988	yes	petro,503.1	tested	inconclusive				No abnormal levels for parameters tested
Ellery	3/22/1988	Water tap gives off strong gas smell	4/11/1988	l ves	petro,503.1	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
		Gas in water, can light faucet with a	17 17 17 17 17 17 17 17 17 17 17 17 17 1	, , , , ,	potro,000.1	100104					·
Busti	3/23/1988	match Water has slight chemical odor and		no			inconclusive				Called to set time to investigate, no answer
		taste, possible gas well				negative for parameters					
Poland	3/28/1988	<u>contamination</u>	4/12/1988	B yes	petro,503.1	tested negative for parameters	inconclusive				No abnormal levels for parameters tested
Mina	4/4/1988	No complaint written in file	4/4/1988	yes	petro,503.1	tested	inconclusive				No abnormal levels for parameters tested
Ripley	4/11/1988	Smell of gas coming from faucet	4/11/1988	B ves	petro,503.1	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
, ,						negative for parameters			4007		Suspect surface water infiltration. Well cap is present but loose.
Busti	5/24/1988	Oily sheen on tap water Water tastes very salty, killing the	11/28/1988	yes	bact	tested	inconclusive	drilled	1967		Significant pooling of surface water around casing Na and Ca were higher than recommended. Given info on how to
Westfield	6/1/1988	house plants	6/1/1988	yes	petro,503.1,bact,TDS, Na,Ca,Cl	Ca-77mg/L, Na-410mg/L	inconclusive			80	treat water
		Wants water sampled for Pb per her				Bacteria Levels high, Negative for other	Advised to boil water used				
Mina	7/18/1988	doctor	7/18/1988	yes	petro,503.1,bact, Pb	parameters	for consumption	drilled	1969	110	Disinfection need of well
						Ba-2.1mg/I,Fe- 0.345mg/I,Mn-					Also investigated by NYDEC(Allen Alexander). TDS slightly over
Ripley	7/20/1088	Possible well water contamination form local gas well drilling	7/28/1988	RVAS	Ca, Na, TDS, Cl.petro,503.1,bact,Fe/Mn,bact	0.05mg/l,Na-160mg/L,Ca 64mg/L	inconclusive				recommeded levels, high Na.) No direct link in local gas well to homeowners well
Tupicy	1123/1300	Torri local gas well drilling	7720/1300	ycs	Oi,petto,ooo. I,baet,i e/wiii,baet	Ba-0.25mg/l,Cu-	Inconcidence				
		Oily black film with strong petroleum				0.068mg/l,Fe- 1.66mg/l,Mn-0.128mg/l,					Large file. Homeowner contacted NYDEC,Local, State and Federal representatives. CCDOH sent 2 informational packets
Poland	9/7/1988		12/5/1988	yes	petro,503.1,fe/mn,IOC's	Strontium-0.095mg/IL	Methane contamination				regarding Iron
Chautauqua	10/25/1988	Water smells like lighter fluid	10/26/1988	Rives	petro,503.1	negative for parameters tested	inconclusive				No abnormal levels for parameters tested
oaataaqaa	10/20/1000		10.20.100	,,,,,,	pono,000	Ba-260mg/L,Fe-					
Pomfret	2/2/1989	Water smells like petroleum, staining of sinks and toilet	2/6/1989) ves	petro,503.1.fe/mn	663mg/L,Mn-404mg/L,Zn 241mg/L	inconclusive Fe+MN				Fe and Mn is what is staining sinks and toilet. Other parameters meet State Drinking Water Standards
		Retesting water for bacteria and				negative for parameters					· ·
Ripley	5/8/1989	investigate chemical test in water	5/25/1989	yes	Ca, Na, TDS, Cl,petro,503.1,bact,Fe/Mn	tested	inconclusive Needs water treatement				No abnormal levels for parameters tested No water test done. Given options of idendifying and/or correcting
Harmony	8/23/1989	Gas oder and taste from well water		no			system				the problems such as filtration
											No samples taken. When homeowner was talked to, they stated
Poland North	12/13/1989	Oil in well and in pond		no		negative for parameters	inconclusive	driven		14	that there was no problem with the well water put with the pond
Harmony	5/24/1990	Gas and oil complaint	5/24/1990	yes	petro,503.1,fe/mn, Chlorides	tested	inconclusive				No abnormal levels for parameters tested
Sheridan	7/5/2001	Terrible odor coming from neighbor's gas well, possible spill	7/5/2001	lino			Chemical spill				Neighbor spilled Cl2 on wood floor of his trailer. Upon inspection odor greatly reduced
Sheridan	113/2001	gas well, possible spill	113/200	IIIO			abandoned well in				out greatly reduced
Ellicott	1/14/2003	Deisel odor in tap water	1/22/2003	Bino			basement thought to allow SW to contaminate GW				Advised to properly disinfect and cap abandoned well
		Unusual taste suddently appeared in			BL NOO NOO D. C. OV. V.	all good except chlorides	-		1		Only source of CI- in area are gas wells located upgrade ~750 ft;
Pomfret	5/19/2003 1/18/2004	tap water Pre-Gas well drilling analysis	1/22/2003	yes	Pb, NO3, NO2, Bact, Chlorides	<mark>5,670mg/I</mark>	well impacted by brine		+ -		water well drilled into bedrock
Corre			0/47/000	l voo	No Fo Mp De Chleside	all good except chlorides-	-				need water well info
Gerry	2/1//2004	Unusual taste in tap water	2/17/2004	yes	Na, Fe, Mn, Ba, Chlorides	(<mark>1,880mg/l</mark>)	raod salt		+		need water well info
Ellinatos	0/00/0005	Dro Coo wall drilling analysis	10/6/000		pH, Hardness, TDS, Bact, Cl,	Levels for all parameters	•				No obnormal loyals for parameters toots
Ellington	9/28/2005	Pre-Gas well drilling analysis	10/6/2005	yes	Methane/Ethane,IOC	tested were below MCL's CI:2550-3140mg/l, Ba:4.4		1	+		No abnormal levels for parameters tested
		New well has stong odor and bad			petro,VOC,SOC,IOC, PCBs,Chlorides,	5.2mg/l, TDS:3290- 4280mg/l, Na:1070-	well impacted by brine; odo	r			Extensive testing and chemical fingerprinting completed that
Ellery	8/11/2006		7/20/2006	yes	metals	1200mg/l	is H2S	drilled	2006	100	 16.5 shows well is contaminated with brine.

	Possible Gas well contamination in				negative for parameters	No impact from the			125&77.		
	1/16/2007 two water wells	1/16/200	yes	TDS, CI, Fe/Mn,503.1	tested	surrounding gas wells			5		Homeowner has good water quality
	Contaminants in water including				CI-800mg/I, Na-50mg/I,						
<u>Hanover</u>	5/11/2007 methane causing skin iritation/rash		yes	Chloride,Na, TDS,	TDS-1600mg/I	well impacted by brine					Tested and investigated by Diefenbach Water Systems
	Possible Gas well contamination in										
	water well. Water causing skin				TDS-1200-1600mg/L, Cl	well possibly impacted by					
Hanover Hanover	5/11/2007 irritation and burning		yes	TDS, CI, Na	800mg/L, Na-500mg/L	brine brine					RO is the only way to remove Na and Cl from water
	Possible Gas well contamination in				Levels for all parameters						
	water well.Sample taken before and			pH, Hardness, TDS, Bact, Cl,	tested increased after ga		l				
Kiantone -:-	5/14/2007 after gas well	1/9/2008	3 yes	Methane/Ethane	well was drilled	Gas well impact	drilled	2/2/2005	85		Contact the gas drilling company for additional samples
Ellery	6/6/2008 Pre-Gas well drilling analysis										
					pH-7.51,Hardness-						
					268,TDS-372mg/L,Cl-						
				pH, Hardness, TDS, Bact, CI,	79mg/L, No bact or						
	7/7/2008 Pre-Gas well drilling analysis	7/7/2008	yes	Methane/Ethane	Methane/Ethane						No abnormal levels for parameters tested
					pH-7.77,Hardness-						
		1			138,TDS-182mg/L,Cl-						
				pH, Hardness, TDS, Bact, Cl,	18mg/L, No bact or						
	7/7/2008 Pre-Gas well drilling analysis	7/7/2008	yes	Methane/Ethane	Methane/Ethane	4	ļ			ļ	No abnormal levels for parameters tested
		1					1				
					pH-7.09,Hardness-	1	1				
					254,TDS-382mg/L,Cl-						
				pH, Hardness, TDS, Bact, CI,	79mg/L,bact-Present,No						Advised to boil water for consumption until corrective measures
	7/7/2008 Pre-Gas well drilling analysis	7/7/2008	3 yes	Methane/Ethane	Methane/Ethane						have been taken. Disinfecting the well
					pH-7.48,Hardness-						
					142,TDS-163mg/L,Cl-						
				pH, Hardness, TDS, Bact, CI,	11mg/L,bact-Present,No						Advised to boil water for consumption until corrective measures
	7/7/2008 Pre-Gas well drilling analysis	7/7/2008	yes	Methane/Ethane	Methane/Ethane						have been taken. Disinfecting the well
											Recommed to contact Oil and Gas drilling company and request
Hanover	8/7/2008 Rotten egg smell to water		no								water testing
											Presence of gas bubbles in the water. Referring complaint to the
											NY Dept. of Conservation Mineral Resource Division for further
Poland Poland	8/8/2008 Gas in water	8/8/2008	3 no		low methane	Methane contamination	drilled	1967			investigation
											when tap first opened it pops a little methane but does not ignite;
											this case is associated with Marring (next door) and with Knapp
	5/40/0000	F /00 /000			normal-reviewed results	low amount of methane in	l	4000			across street who had to evaculate due to extremely high
Poland Poland	5/13/2009 methane in water	5/20/2009	yes	oil&gas indicators	over phone	water	drilled	1988			methane levels.
											W. () 1 1 1 1 1 1 1 1 1
1											Water well located 100 ft from small creek that was dammed up to
						pond dug by gas well driller					provide source of frac water for gas well located upstream. DEC
						upstream of water well cut					ECO Gowan phoned in complaint to CCDOH and to Div Minerals.
	0/45/0000	0/40/000/				off recharge and caused	4.20 - 4	400			Pond removed and water eventually restored. Gas drilling co.
Hanover	6/15/2009 well went dry	6/16/2009	110	+		well to go dry	drilled	~100 yo	46		offered to pay for cleaning water well.
Chautaus	Rotten egg smell to water coincident	1	l _{no}			U2S problem					Discussed situation, recommended testing
Chautauqua	10/9/2009 to nearby gas drilling	1	no	+		H2S problem	-				Discussed situation - recommended testing
		1								1	before and after tests similar; water observed to contain biofilm
		1								1	masses, met US Energy rep on site during investigation; sample
	well dry-what little water there is is	1			normal except contains						collected for microscopic exam of microbes on 4/5/11, anal
Poland	10/12/2010 black and plugging fixtures	10/13/10) ves	oil&gas indicators	low methane	severe iron bacteria	drilled	1990	103		12 reported 1 amoeba/100 ml and confimed iron bacteria.
ı Jianu		unable to se		Unagas mulcators	low memane	Severe non pacteria	uriileu	1990	103		12 10 2011.cu amoeba/100 mi and committed non bacteria.
Chautaugua	1/13/2011 past 7 years	up appt	1								
Chadiadqua	17 10/2011 pact 1 yours	ap appt		<u> </u>			1			 	water containes lots of gas but could not ignite; problem started
						1	1				~1 y.a. and gradually getting worse; well is drilled into shale rock;
		1								1	discussed treatment of methane and recommended sampling for
		1		flame tested tap and sampled for	would not ignite; TC	visually confimed gas in					standrad list of O&G indicators. Referred to DEC for further
Gerry	5/5/2011 via DEC R9 - gas in water	5/10/201	ves	bacteria	bacteria pos	water	drilled	~1990	100	unknown	investigation 5/31/11
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