GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING

LIESL EICHLER CLARK
DIRECTOR

VIA E-MAIL

TO: Members of the Michigan Legislature

FROM: Liesl Eichler Clark, Director

DATE: April 3, 2019

SUBJECT: Orphan Well Fund Annual Report and Orphan Well List

In accordance with Sections 61604 and 61607 of Part 616, Orphan Well Fund, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, attached is the Department of Environmental Quality's (DEQ) Orphan Well Fund Annual Report for fiscal year 2018 and Orphan Well List for 2019.

If you need further information, please contact Adam W. Wygant, Director, Oil, Gas, and Minerals Division, at 517-284-6823; or you may contact me at 517-284-6710.

Attachment
cc/att: Chris Harkins, Director, Senate Fiscal Agency
Mary Ann Cleary, Director, House Fiscal Agency
Chris Kolb, Director, State Budget Office
Greg Bird, Legislative Director, Governor's Office
Emily Laidlaw, Policy Director, Governor's Office
Abbey Frazier, Senate Fiscal Agency
Austin Scott, House Fiscal Agency
Jacques McNeely, State Budget Office
Jennifer Harrison, State Budget Office
Aaron B. Keatley, Chief Deputy Director, DEQ
Amy Epkey, Administration Deputy Director, DEQ
Sarah M. Howes, Director of Policy and Legislative Affairs, DEQ
David Fiedler, Regulatory Affairs Officer, DEQ
Harold R. Fitch, DEQ
Adam W. Wygant, DEQ
Kathy Tetzlaff, DEQ
Rick Henderson, DEQ

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

Legislative Report

Orphan Well Fund Annual Report for Fiscal Year 2018 and Orphan Well List for 2019

Authority:

Part 616, Orphan Well Fund, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as Amended

For more information on the Orphan Well Program, please contact:
Michigan Department of Environmental Quality
Oil, Gas, and Minerals Division
P.O. Box 30256, Lansing, Michigan 48909-7756
517-284-6823

ORPHAN WELL FUND ANNUAL REPORT
FISCAL YEAR 2018

Fund Overview

The Orphan Well Fund provides a funding source for carrying out plugging, response activity, and site restoration at abandoned or improperly closed oil or gas wells for which no owner or operator is known, for which all owners or operators are insolvent, or at which the Supervisor of Wells determines there exists an imminent threat to public health and safety.

Expenditures

Fiscal Year 2018

Plugging and Site Restoration (see Table I for detail)	$675,079
Response Activity (see Table II for detail)	$22,909
Administrative Costs (i.e., Wages, Supplies, Travel, Supervision)	$302,370
TOTAL Expenditures	$1,000,358

Accomplishments

Six orphaned oil wells were plugged. Two required re-entry and/or reconstruction to successfully accomplish the abandonment. One of those (Torrent #3) was done as an emergency action in cooperation with the U.S. Environmental Protection Agency (USEPA) and Department of Environmental Quality (DEQ), Remediation and Redevelopment Division (RRD).

The groundwater remediation system (installed during fiscal year [FY] 2012) at the Leacock & Hubbard & Underwood Unit #1, although decommissioned last FY, was monitored for residual elements. Remediation actions there are proving very successful.

Aside from the above-mentioned remediation site, seven other Category III sites were also investigated for potential site closure. Three of those sites indicated no further environmental impact and were subsequently removed from the Category III list. The DEQ, Oil, Gas, and Minerals Division (OGMD), Geo-probe unit continued to be an asset and was used successfully at one of these sites to aid in the investigation for a considerable cost saving.

Also, of noteworthy mention, is the delisting and remediation of a perennial listed Category I well, the C.P. Damm #4. Years of consultation and investigation failed to result in a safe and effective work plan. Several issues proved to be impediments to a direct search and re-entry of this suspected well.

Subsequently, and following substantial efforts by multiple divisions of the DEQ, including the Water Resources Division, the OGMD, and the RRD as well as the USEPA, federal dollars were leveraged to perform response activities at the site. These included a $41,400 feasibility study grant from the Great Lakes Restoration Initiative and $947,700 of Pollution Removal Funding Authorization from the federal Oil Spill Liability Trust Fund.

The DEQ worked with the USEPA and others to design and construct the oil cap-and-trap system, which collects the venting oil and prevents it from entering the surface water. The oil is contained in the structure until it naturally biodegrades or is manually removed and disposed of. The cap was installed at the same elevation as the current base of the canal, so boat access and recreational use is not impacted. Construction commenced in June 2018 and also included the removal of contaminated sediment from the area. The capping system was completed in August 2018 and has shown to be effective at keeping oil out of the canal.

Additional information on this project may be obtained by contacting David Bandlow, RRD, at 616-745-5337 or bandlowd@michigan.gov.

2019 Orphan Well List

The Orphan Well List (List), prepared by the OGMD is a compiled listing of oil or gas wells scheduled to be plugged and those at which interim response, remedial investigation, remediation, or site restoration should be performed with money from the Orphan Well Fund. The List is arranged in order of priority using the score assessment determined for each well or project. Estimated costs are given for the total cost of each well or project and the cost of each phase of the project (plugging costs, interim responses, etc.).

Abandoned oil and gas wells that qualify for plugging under Part 616 must be scored prior to being added to the List. All wells are scored (prioritized) utilizing a Well Assessment Program. The Well Assessment Program was developed by the OGMD. This system factors in: presence and type of contaminants in soils or ground water from spills, potential for future contamination, sensitivity of drinking water supplies, degree to which ground water is protected by geology, age of the well, presence of hydrogen sulfide gas, potential for public exposure to contaminants, and the environmental sensitivity of the area.

The score values are only applicable within their respective category. All Category I wells have priority over Category II wells. However, special considerations may necessitate temporarily bypassing a well with a higher score in favor of a well with a lower score. Such considerations include assessment of risk and available technology to successfully resolve a situation, the inability to obtain access to the location, or the need to obtain auxiliary permits.

TABLE I: ORPHAN WELL FUND EXPENDITURES FOR FISCAL YEAR 2018
CATEGORY I & II WELLS

COUNTY	PERMIT NUMBER	YEAR	COMPANY	WELL NAME & NUMBER	CATEGORY	PLUGGING COSTS	SITE RESTORATION	EVALUATION	REMEDIAL ACTION	TOTAL COSTS	STATE HOUSE	STATE SENATE
Clare	7991	1940	Sun Oil Company	Second National Bank & Trust Co of Saginaw, TR #1 (1 well– 0 TB)	IB	$122,150	$14,251	$522	$0	$136,923	97	33
Muskegon	151	1929	Muskegon Oil Company	Torrent #3 (1 well – 0 TB)	IB	$253,492	$0	$0	$0	$253,492	91	34
Saint Clair	21703 22944 21104 21184	1959 1961 1958 1958	Northeastern Energy Corp.	Burmann 0-1 Burmann 0-2 Desgrandchamp et al 1 Uppleger #1 (4 wells – 2 TB)	II	$210,114	$69,446	$261	$843	$280,664	32	25
Orphan Well Program Category I & II Costs:						$585,756	$83,697	$783	$843	$671,079		

TB = Tank Battery
CATEGORY IB = wells are abandoned oil and gas wells that are leaking oil, resulting in contamination of soils, surface water resources, or the ground water where water wells used for public consumption are not yet contaminated.
CATEGORY II = wells are abandoned, non-leaking wells.

TABLE II: ORPHAN WELL FUND EXPENDITURES FOR FISCAL YEAR 2018
CATEGORY III WELLS

COUNTY	PERMIT NUMBER	YEAR	COMPANY	WELL NAME & NUMBER	CATEGORY	PLUGGING COSTS	SITE RESTORATION	EVALUATION*	REMEDIAL ACTION	TOTAL COSTS	STATE HOUSE	STATE SENATE
Gladwin	19368	1955	Lakeland Oil Co.	Connolly #B-1 (aka 5135 School Rd.)	III	$0	$0	$1,824	$0	$1,824	97	36
Missaukee	21979	1959	McBain Ventures Inc.	Kuipers, Wilbert #2	III	$0	$0	$255	$0	$255	103	35
Montcalm	10922	1944	Stewart, Fred	Paris #1	III	$0	$0	$6,137	$0	$6,137	70	33
Montcalm	11919	1946	Kill, James dba Kill Drilling Co.	Douglas #1	III	$0	$0	$4,880	$0	$4,880	70	33
Ottawa	20899	1958	J & T Distributing	Kneibel #1	III	$0	$0	$3,382	$0	$3,382	88	30
Ottawa	20219	1956	J & T Distributing	Reed #1	III	$0	$0	$2,293	$0	$2,293	88	30
Ottawa	7051	1939	J & T Distributing	Sims #1	III	$0	$0	$3,103	$0	$3,103	88	30
**Otsego	29028	1973	Saba Energy of Texas	Leacock & Hubbard & Underwood Unit #1 (ongoing remediation project)	III	$0	$0	$1,035	$0	$1,035	105	36
Orphan Well Program Category III Costs:						$0	$0	$22,909	$0	$22,909		

* Costs supporting evaluation activities were incurred to support the Orphan Well Program, although not charged to the fund in Fiscal Year 2018.
** = Continuing Ground Water Remediation Project
CATEGORY III wells have been plugged; however, site remediation has not yet been completed.

TABLE III: ORPHAN WELL LIST FOR 2019
CATEGORY I WELLS

COUNTY	PERMIT NUMBER	YEAR	COMPANY	WELL NAME & NUMBER	SCORE	PLUGGING COSTS	INTERIM RESPONSE	EVALUATION	REMEDIAL ACTION	SITE RESTOR-ATION	TOTAL COSTS	STATE HOUSE	STATE SENATE
CATEGORY IA: Wells are leaking significant volumes of gas or that, as a result of leaking oil or brine, are contaminating the ground water used for public consumption.													
None													
TOTAL ESTIMATED COSTS:													
CATEGORY IB: Wells are leaking oil, resulting in contamination of soils, surface water resources, or the ground water where water wells used for public consumption are not yet contaminated.													
Isabella	1057	1930	Gibson Johnson & Borden Inc	Brophy #1	12	$200,000	$0	T.B.D.	T.B.D.	$15,000	$215,000	99	33
Midland	767	1929	Geneva Oil Co.	Henry #1	16	$170,000	$0	T.B.D.	T.B.D.	$25,000	$195,000	99	33
Midland	2076	1934	Turner, Fred	Eugene St. John B #2	19	>$300,000	$0	T.B.D.	T.B.D.	T.B. D	>$300,000	99	36
TOTAL ESTIMATED COSTS:						>$670,000	$0	T.B.D.	T.B.D.	$40,000	>$710,000		
CATEGORY IC: Wells are leaking gas or brine, resulting in contamination of soils, surface water resources, or the ground water where water wells used for public consumption are not yet contaminated.													
St. Clair	None	<1929	Unknown	"Buckland Industries" 835 24th Street	22	$300,000	$0	$0.	T.B.D.	$50,000	$350,000	81	25
TOTAL ESTIMATED COSTS:						$300,000	$0	$0.	T.B.D.	$50,000	$350,000		

TABLE III: ORPHAN WELL LIST FOR 2019
CATEGORY II WELLS – PRIORITIZED

Projects are delineated by the alternately shaded and nonshaded groups.

COUNTY	PERMIT NUMBER	YEAR	COMPANY	WELL NAME & NUMBER	CAT II WELL SCORE	CAT II PROJ. SCORE	PLUGGING COSTS	INTERIM RESPONSE	EVALUA-TION	REMEDIAL ACTION	SITE RESTORA-TION	TOTAL COSTS	STATE HOUSE	STATE SENATE
Gladwin	4568	1937	Schnell, Louis	LaFurgey #1	18	18	$85,000	$0	$0	T.B.D.	$50,000	$135,000	97	36
Gladwin	4864	1938	Schnell, Louis	LaFurgey #2	18	18	$85,000	$0	$0	T.B.D.	$50,000	$135,000	97	36
Gladwin	4856	1938	Schnell, Louis	Snellenerger #1	18	18	$85,000	$0	$0	T.B.D.	$50,000	$135,000	97	36
Saint Clair	21221	1958	Northeastern Energy Corp.	Baumgarten & Rewalt 1	18	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	20895	1958	Northeastern Energy Corp.	Baumgarten & Waltos 1	14	17	$65,000	$0	$0	T.B.D.	$5,000	$70,000	32	25
Saint Clair	21188	1958	Northeastern Energy Corp.	Kaminski-Desgrandchamp Unit 1	17	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	25956	1965	Northeastern Energy Corp.	Rewalt-Teltow 1	18	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	19780	1955	Northeastern Energy Corp.	Teltow 1	18	17	$65,000	$0	$0	T.B.D.	$20,000	$85,000	32	25
Saint Clair	21203	1958	Northeastern Energy Corp.	Teltow 1	18	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	20994	1958	Northeastern Energy Corp.	Waltos 2	19	17	$65,000	$0	$0	T.B.D.	$20,000	$85,000	32	25
Saint Clair	20551	1957	Northeastern Energy Corp.	Waltos Et Al 1	17	17	$65,000	$0	$0	T.B.D.	$20,000	$85,000	32	25
Saint Clair	22154	1960	Northeastern Energy Corp.	Karolak 0-1	20	17	$65,000	$0	$0	T.B.D.	$20,000	$85,000	32	25
Saint Clair	22822	1960	Northeastern Energy Corp.	Llindke 0-4	15	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	22807	1960	Northeastern Energy Corp.	Lindke & Smith B-01	18	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	22847	1960	Northeastern Energy Corp.	Lindke & Smith B-02	15	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	22614	1960	Northeastern Energy Corp.	Lindke 0-3	19	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	22958	1961	Northeastern Energy Corp.	Lyszczk 04	15	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	22823	1960	Northeastern Energy Corp.	Lyszczyk 0-2	19	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	22774	1961	Northeastern Energy Corp.	Shissler 1	18	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	22956	1961	Northeastern Energy Corp.	Shissler 2	16	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	22666	1960	Northeastern Energy Corp.	Smith Et Ux 1	17	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	22784	1961	Northeastern Energy Corp.	Smith Et Ux 2	19	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	22824	1960	Northeastern Energy Corp.	Smith Et Ux 3	16	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	23093	1961	Northeastern Energy Corp.	Smith Et Ux 4	16	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25

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COUNTY	PERMIT NUMBER	YEAR	COMPANY	WELL NAME & NUMBER	CAT II WELL SCORE	CAT II PROJ. SCORE	PLUGGING COSTS	INTERIM RESPONSE	EVALUA-TION	REMEDIAL ACTION	SITE RESTORA-TION	TOTAL COSTS	STATE HOUSE	STATE SENATE
Saint Clair	23124	1961	Northeastern Energy Corp.	Voight B-01	20	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	22591	1960	Northeastern Energy Corp.	Chudy 0-1	18	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	22661	1960	Northeastern Energy Corp.	Chudy 0-2	17	17	$55,000	$0	$0	T.B.D.	$20,000	$75,000	32	25
Saint Clair	21266	1959	Northeastern Energy Corp.	Czarnota 1	19	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	21111	1958	Northeastern Energy Corp.	Kammer 1	19	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	21197	1958	Northeastern Energy Corp.	Kammer 1	17	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	21259	1958	Northeastern Energy Corp.	Kammer 2	17	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	21368	1959	Northeastern Energy Corp.	Kammer 2	15	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	21704	1960	Northeastern Energy Corp.	Lindke 0-2	17	17	$65,000	$0	$0	T.B.D.	$20,000	$85,000	32	25
Saint Clair	21231	1958	Northeastern Energy Corp.	Lindke 1	14	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	22715	1960	Northeastern Energy Corp.	Schultz Et Ux 1	17	17	$65,000	$0	$0	T.B.D.	$20,000	$85,000	32	25
Saint Clair	22772	1961	Northeastern Energy Corp.	Schulz Et Ux 2	16	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	21397	1959	Northeastern Energy Corp.	Baumgarten B-1	17	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	21879	1959	Northeastern Energy Corp.	Baumgarten C-0-1	19	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	21718	1959	Northeastern Energy Corp.	Blaszcak B0-1	14	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	21374	1959	Northeastern Energy Corp.	Blazczak 1	17	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	23884	1962	Northeastern Energy Corp.	Ignasiak-Matuja 1	19	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	24126	1962	Northeastern Energy Corp.	Ignasiak-Matuja 2	16	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	23355	1961	Northeastern Energy Corp.	Jablonski 01	17	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	25404	1964	Northeastern Energy Corp.	Jablonski 2	16	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	21570	1959	Northeastern Energy Corp.	Reske Et Al 0-1	15	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	17534	1952	Northeastern Energy Corp.	Rlingel Comm 1	15	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	21319	1960	Northeastern Energy Corp.	Rlingel 0-3	15	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	21899	1959	Northeastern Energy Corp.	Ringel 0-2	17	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25

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Saint Clair	22718	1960	Northeastern Energy Corp.	Taetz 02	18	17	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	17717	1959	Northeastern Energy Corp.	Weiss Comm B-1	17	17	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	23958	1962	Northeastern Energy Corp.	Edge & Schlottman Et Al 1	15	16	$65,000	$0	$0	T.B.D.	$5,000	$70,000	32	25
Saint Clair	23845	1962	Northeastern Energy Corp.	Fish 2	19	16	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	23345	1961	Northeastern Energy Corp.	Kammer 1	18	16	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	22964	1961	Northeastern Energy Corp.	Schomburg & Bousson Unit 1	15	16	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	23151	1961	Northeastern Energy Corp.	Schomburg & Bousson Unit 2	17	16	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	23097	1961	Northeastern Energy Corp.	Smith 5	17	16	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	23041	1961	Northeastern Energy Corp.	Smith Et Ux 6	17	16	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	23012	1961	Northeastern Energy Corp.	Spurlock 1	18	16	$45,000	$0	$0	T.B.D.	$20,000	$65,000	32	25
Saint Clair	23040	1961	Northeastern Energy Corp.	Spurlock 2	16	16	$45,000	$0	$0	T.B.D.	$5,000	$50,000	32	25
Saint Clair	23081	1961	Northeastern Energy Corp.	Teutsch 1	19	16	$65,000	$0	$0	T.B.D.	$5,000	$70,000	32	25
Saint Clair	23463		Northeastern Energy Corp.	Thueme 1	PLC	16	$0	$0	$0	T.B.D.	$3,500	$3,500	32	25
Calhoun	58342	2007	Rainbow Oil & Gas, Inc.	Martin 1-12	15	15	$50,000	$0	$0	T.B.D.	$10,000	$60,000	63	19
Calhoun	59013	2008	Rainbow Oil & Gas, Inc.	Warner 2-7	15	15	$50,000	$0	$0	T.B.D.	$75,000	$125,000	62	19
Hillsdale	37796	1984	Rainbow Oil & Gas, Inc.	Arco & Winner 1-27	15	13	$50,000	$0	$0	T.B.D.	$7,500	$57,500	58	16
Hillsdale	37797	1984	Rainbow Oil & Gas, Inc.	Carpenter 2-22	15	13	$50,000	$0	$0	T.B.D.	$100,000	$150,000	58	16
Hillsdale	37942	1984	Rainbow Oil & Gas, Inc.	Flick 1-16	12	13	$50,000	$0	$0	T.B.D.	$7,500	$57,500	58	16
Hillsdale	37888	1984	Rainbow Oil & Gas, Inc.	Flick 1-21	12	13	$50,000	$0	$0	T.B.D.	$250,000	$300,000	58	16
Hillsdale	38407	1984	Rainbow Oil & Gas, Inc.	Flick 2-16	12	13	$50,000	$0	$0	T.B.D.	$7,500	$57,500	58	16
Hillsdale	38651	1985	Rainbow Oil & Gas, Inc.	Flick 6-16	12	13	$50,000	$0	$0	T.B.D.	$7,500	$57,500	58	16
Hillsdale	41457	1988	Rainbow Oil & Gas, Inc.	Fort 6-17	12	13	$50,000	$0	$0	T.B.D.	$7,500	$57,500	58	16
Hillsdale	40120	1986	Rainbow Oil & Gas, Inc.	Kimble & Sharp 2-21A	14	13	$50,000	$0	$0	T.B.D.	$5,000	$55,000	58	16
Hillsdale	39614	1986	Rainbow Oil & Gas, Inc.	Kimble & Mayo 4-21	16	13	$50,000	$0	$0	T.B.D.	$5,000	$55,000	58	16

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COUNTY	PERMIT NUMBER	YEAR	COMPANY	WELL NAME & NUMBER	CAT II WELL SCORE	CAT II PROJ. SCORE	PLUGGING COSTS	INTERIM RESPONSE	EVALUA-TION	REMEDIAL ACTION	SITE RESTORA-TION	TOTAL COSTS	STATE HOUSE	STATE SENATE
Hillsdale	39227	1985	Rainbow Oil & Gas, Inc.	Mayo & Smith 1-21A	14	13	$50,000	$0	$0	T.B.D.	$5,000	$55,000	58	16
Hillsdale	42270	1989	Rainbow Oil & Gas, Inc.	Morgan 2-17	10	13	$50,000	$0	$0	T.B.D.	$5,000	$55,000	58	16
Hillsdale	41482	1988	Rainbow Oil & Gas, Inc.	Warner 1-17	11	13	$50,000	$0	$0	T.B.D.	$5,000	$55,000	58	16
Hillsdale	42219	1989	Rainbow Oil & Gas, Inc.	Warner 2-17	10	13	$50,000	$0	$0	T.B.D.	$5,000	$55,000	58	16
Newaygo	40936	1988	Country Boy Oil Company, Inc.	Walch #1-32	13	13	$40,000	$0	$0	T.B.D.	$10,000	$50,000	100	34
Newaygo	54728	2002	Country Boy Oil Company, Inc.	Walch #4-4	14	13	$40,000	$0	$0	T.B.D.	$10,000	$50,000	100	34
Newaygo	54852	2002	Country Boy Oil Company, Inc.	Walch #5-4	14	13	$40,000	$0	$0	T.B.D.	$10,000	$50,000	100	34
Newaygo	26015	1968	Beck, George	Peets #1	12	13	$65,000	$0	$0	T.B.D.	$5,000	$70,000	34	100
Washtenaw	1051	1930	Viloette, Alfred	Atchinson #1	12	12	$90,000	$0	$0	T.B.D	$20,000	$110,000	97	36
Bay	1016	1930	Eureka Oil Corp	Lambert-Cloverleaf #1	11	11	$125,000	$0	$0	T.B.D.	$5,000	$130,000	98	31
Saginaw	3996	1937	T.F Caldwell Inc.	Birch Run State Bank #1	11	11	$125,000	$0	$0	T.B.D	$25,000	$150,000	94	32
Sanilac	966	1930	K-Bar Oil & Gas	Kolodziej #1	11	11	$125,000	$0	$0	T.B.D.	$5,000	$130,000	83	25
Tuscola	64	1928	Murphy Oil Co.	Gottler, Adam #1	11	11	$150,000	$0	$0	T.B.D.	$25,000	$175,000	84	31
Isabella	471	1929	McCandless, J.	Bufford #1	11	11	$150,000	$0	$0	T.B.D.	$15,000	$165,000	99	33
St. Clair	506	1929	Patterson, BP Trustee	Routley #1	11	11	$185,000	$0	$0	T.B.D.	$45,000	$230,000	83	25
Wexford	N/A	1931	Unknown	Cummer Diggins Location	11	11	$95,000	$0	$0	T.B.D.	$5,000	$100,000	102	35
Lake	60949	2014	Sibley, Larry Oil and Gas Co LLC	State Peacock et al 1-17	10	11	$45,000	$0	$0	T.B.D.	$5,000	$50,000	100	35
Lapeer	28086	1970	Kern, Yvonne	Kern #1	10	10	*PC	$0	$0	T.B.D.	$45,000	$45,000	82	25
Manistee	39990	1986	Alumni Petroleum and Resource Management Corp.	Marshall Enterprises #1-23C	7	7	*PC	$0	$0	T.B.D.	$20,000	$20,000	101	35
Manistee	N/A	N/A	Manistee Gas LLC	Brown CPF	6	7	*PC	$0	$0	T.B.D.	$125,000	$125,000	101	35
Otsego	44355	1991	Duff Oil Company	Forterra #1-15	6	6	*PC	$0	$0	T.B.D.	$30,000	$30,000	105	36
Estimated Costs Remaining:							$5,035,000	$0	$0	T.B.D.	$1,856,000	$6,891,000		
Current Number of Category II Orphan Wells:							93							

*PC = Plugging Complete CATEGORY II = wells are abandoned, non-leaking wells.

TABLE III: ORPHAN WELL LIST FOR 2019
CATEGORY III WELLS

COUNTY	PERMIT NUMBER	YEAR	COMPANY	WELL NAME & NUMBER	SCORE	TOTAL COSTS TO DATE	ESTIMATED EVALUATION	ESTIMATED REMEDIAL ACTION	ESTIMATED FUTURE COSTS	STATE HOUSE	STATE SENATE
Allegan	17150	1951	Michigan Pipe Co.	Busk # 3	Monitoring	$55,083	$0	$0	$15,000	88	20
Allegan	15891	1950	Michigan Pipe Co.	Maude Mesick #1	Monitoring	$46,953	$10,000	$50,000	$60,000	88	20
Genesee	28458	1971	Richter, Ervin	Elliot-Sammons Unit #1	*PC	$0	$10,000	$50,000	$60,000	48	26
Gladwin	18112	1953	Lakeland Oil Corp.	Kobetich #L-2	25	$60,820	$10,000	$75,000	$85,000	97	36
Gladwin	19368	1955	Lakeland Oil Corp.	Connolly #B-1 (aka 5135 School Rd)	Monitoring	$214,585	$100,000	$200,000	$300,000	97	36
Kent	6056	1939	Bauman, M.H.	Burgess #1	20	$35,322	$5,000	$75,000	$80,000	74	28
Manistee	30540	1975	Whitney Oil & Gas Corp.	Hadaway #2-2A	*PC	$0	$10,000	$20,000	$30,000	101	35
Midland	2382	1935	Oryx Energy	Mary Jacobs #1	Monitoring	$1,051	$5,000	$5,000	$10,000	99	36
Montcalm	11919	1945	Kill Drilling Co.	Douglas #1	Monitoring	$249,252	$50,000	$35,000	$85,000	70	33
Montcalm	10816	1944	Stewart, Fred	Charnley - Witherall # 1	44	$64,900	$1,500	$7,000	$8,500	70	33
Montcalm	10922	1944	Stewart, Fred	Paris #1	Monitoring	$368,746	$35,000	$35,000	$70,000	70	33
Montcalm	27876	1969	Stewart, James	Graham, H. #1	43	$42,396	$50,000	$150,000	$200,000	70	33
Montcalm	28170	1970	Stewart, James	Marzig #1	16	$51,661[1]	$5,000	$50,000	$55,000	70	33
Muskegon	92	1928	Continental Motors Corp.	Continental #1	47	$67,155	$50,000	$200,000	$250,000	92	34
Muskegon	85	1928	Muskegon Oil Corp.	Heinz, H. #3	38	$53,943	$10,000	$35,000	$45,000	92	34
Muskegon	114	1928	W. J. Simon	Reeths #1-D	37	$86,724	$20,000	$50,000	$70,000	92	34
Muskegon	17673	1952	McCallister, Bernard	Beroza #1	19	$50,616[1]	$5,000	$50,000	$55,000	91	34
Muskegon	10425	1943	McCallister, Bernard	Neubeck #1	19	$50,616[1]	$10,000	$50,000	$60,000	91	34
Muskegon	33024	1979	McCallister, Bernard	Harmsen #1	23	$56,662[1]	$10,000	$75,000	$85,000	92	34
Muskegon	12248	1946	McCallister, Bernard	Zelinka #3	*PC	$19,575[1]	$10,000	$75,000	$85,000	91	34
Oceana	33493	1980	Adams, Frank Jr.	Lauber #1-6 BDW	14	$158,683	$100,000	$200,000	$300,000	100	34
Otsego	29028	1973	Saba Energy of TX	Leacock, Hubbard Underwood Unit #1	Monitoring	$181,693	$6,000	$0	$6,000	105	36
Ottawa	20899	1958	J & T Distributing	Kneibel #1	19	$31,951	$5,000	$50,000	$55,000	88	30
					Total Costs:	$1,948,387	$537,500	$1,637,000	$2,189,500		
					Total Category III Sites Remaining:	23					

*PC = Plugging Complete
[1] = average cost
CATEGORY III wells have been plugged; however, site remediation has not yet been completed.