

HIGH VOLUME HYDRAULICALLY FRACTURED WELL COMPLETION ACTIVE PERMITS AND APPLICATIONS

(AS OF 07/14/2014)

HIGH VOLUME (>100,000 gallons) HYDRAULIC FRACTURING SINCE 2008 - ACTIVE PERMITS												
#	Permit #	Company Name	Well Name	Well No	County	Wellhead T R S	Pilot Boring	Comments	Target formation	Well Type	Well Status	Confidential
1	59112	BEACON EXPLORATION AND PRODUCTION CO LLC	SCHULTZ	1--36	SANILAC	12N 15E 36	NA	well completed Feb. 2012	A1 Carbonate	Oil	Shut-in	NO
2	59173	CIMAREX ENERGY CO	SOPER	1-25 HD1	OSCEOLA	17N 10W 25	ACOW	well completed Aug. 2008	Antrim	Gas	Plugging complete	NO
3	59979	ENCANA OIL AND GAS USA INC	PIONEER	1-3 HD1	MISSAUKEE	24N 7W 3	59919	well completed Feb 2010	Utica-Collingwood	Gas	Temporarily abandoned	NO
4	60041	MERIT ENERGY COMPANY	HUBBEL	2-22 HD/HD1	MONTMORENCY	29N 1E 22	NA	well completed June. 2010	Niagaran	Oil	Producing	NO
5	60041	MERIT ENERGY COMPANY	HUBBEL	2-22 HD1	MONTMORENCY	29N 1E 22	60041	well completed 2011	Niagaran	Oil	Producing	NO
6	60041	MERIT ENERGY COMPANY	HUBBEL	2-22 HD2	MONTMORENCY	29N 1E 22	60041	well completed 2012	Niagaran	Oil	Producing	NO
7	60161	ATLAS RESOURCES LLC	STATE NORWICH	1-6 HD1	MISSAUKEE	24N 6W 6	NA	well not hydraulically fractured to date.	Utica-Collingwood	Dry Hole	Temporarily abandoned	NO
8	60170	ENCANA OIL AND GAS USA INC	STATE KOEHLER & KENDALL	1-27 HD1	CHEBOYGAN	35N 2W 33	60133	well completed Oct 2010	Utica-Collingwood	Oil	Temporarily abandoned	NO
9	60198	ATLAS RESOURCES LLC	LUCAS	1-13 HD1	KALKASKA	26N 8W 13	60138	well not hydraulically fractured to date.	Utica-Collingwood	Not available	Temporarily abandoned	NO
10	60212	COUNTRYMARK RESOURCES INC	KELLY ET AL	1-26 HD1	HILLSDALE	6S 2W 26	NA	well completed Sept. 2011	Black River (Van Wert)	Oil	Producing	NO
11	60360	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	1-13 HD1	KALKASKA	27N 6W 24	60357	well completed Nov 2011	Utica-Collingwood	Gas	Producing	NO
12	54696	TIGER DEVELOPMENT LLC	STATE GARFIELD & TIGER	1-14	KALKASKA	25N 6W 14	NA	Well completed Oct. 2013	Collingwood	Gas	Temporarily abandoned	NO
13	60380	DEVON ENERGY PRODUCTION COMPANY LP	CRONK	1-24 HD1	GLADWIN	19N 1W 24	60379	well completed April/May 2012	A1 Carbonate	Dry Hole	Plugging complete	NO
14	60389	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	1-25 HD1	KALKASKA	26N 6W 1	NA	well completed Nov 2011	Utica-Collingwood	Gas	Producing	NO
15	60452	DEVON ENERGY PRODUCTION COMPANY LP	WILEY	1-18 HD1	GLADWIN	18N 2W 18	60451	well completed May/June 2012	A1 Carbonate	Gas	Plugging complete	NO
16	60537	CONTINENTAL RESOURCES INC	MCNAIR ET AL	1-26 HD1	HILLSDALE	6S 2W 26	60536	well completed August 2012	Black River (Van Wert)	Oil	Producing	NO
17	60545	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	2-25 HD1	KALKASKA	26N 6W 1	NA	well completed Oct 2012	Utica-Collingwood	Gas	Producing	NO
18	60546	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	3-25 HD1	KALKASKA	26N 6W 1	NA	well completed Oct 2012	Utica-Collingwood	Gas	Producing	NO
19	60560	DEVON ENERGY PRODUCTION COMPANY LP	STATE RICHFIELD	1-34 HD1	ROSCOMMON	22N 1W 27	60559	well completed Nov 2012	Collingwood	Gas	Plugging complete	NO
20	60575	ALTA ENERGY OPERATING LLC	RILEY	1-22 HD1	OCEANA	15N 18W 22	60574	Well completed Dec. 2012/May 2013	A1 Carbonate	Oil	Well complete	NO
21	60579	ENCANA OIL AND GAS USA INC	STATE GARFIELD	1-25 HD1	KALKASKA	25N 6W 36	NA	Well completed Dec. 2012	Utica-Collingwood	Gas	Producing	NO
22	60587	COUNTRYMARK ENERGY RESOURCES LLC	ARNO	1-25 HD1	HILLSDALE	6S 2W 25	NA	permit for horizontal well	Black River (Van Wert)	Location	Permitted Well	NO
23	60588	COUNTRYMARK ENERGY RESOURCES LLC	ARNO & TIMMONS	1-24 HD1	HILLSDALE	6S 2W 24	NA	permit for horizontal well	Black River (Van Wert)	Location	Permitted Well	NO
24	60601	ENCANA OIL AND GAS USA INC	WESTERMAN	1-32 HD1	KALKASKA	28N 8W 29	60600	Well completed May/June 2013	Utica-Collingwood	Location	Well complete	NO
25	60606	ENCANA OIL AND GAS USA INC	STATE MENTOR	1-17 HD1	CHEBOYGAN	34N 3W 17	NA	permit for horizontal well (60562)	Utica-Collingwood	Location	Permitted Well	YES
26	60615	ROSETTA RESOURCES OPERATING LP	STATE ORANGE & CHRISTENSEN	1-21 HD1	IONIA	6N 6W 21	60614	Well completed June 2013	A1 Carbonate	Dry Hole	Plugging complete	NO
27	60621	ENCANA OIL AND GAS USA INC	STATE BEAVER CREEK	1-23 HD1	CRAWFORD	25N 4W 11	60620	well completed May 2013	Utica-Collingwood	Gas	Well Complete	NO
28	60672	ENCANA OIL AND GAS USA INC	STATE ROSCOMMON	1-7 HD1	ROSCOMMON	21N 4W 17	60670	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
29	60674	MUZYL OIL CORPORATION	BURNS	A1-23 HD1	HILLSDALE	6S 2W 23	NA	permit for horizontal well	Black River (Van Wert)	location	Permitted Well	NO
30	60686	ENCANA OIL AND GAS USA INC	STATE GARFIELD	1-23 HD1	KALKASKA	25N 6W 26	60685	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
31	60718	JORDAN DEVELOPMENT CO. LLC	STATE JEROME & STARNES	15-8 HD1	MIDLAND	8N 1W 8	60717	well completed October 2013	Dundee	Oil	Well Complete	NO
32	60746	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	1-14 HD1	KALKASKA	27N 6W 24	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
33	60747	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	1-12 HD1	KALKASKA	27N 6W 24	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
34	60748	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	1-11 HD1	KALKASKA	27N 6W 24	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
35	60749	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	2-14 HD1	KALKASKA	27N 6W 24	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
36	60750	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	2-12 HD1	KALKASKA	27N 6W 24	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
37	60755	ROSETTA RESOURCES OPERATING LP	SWANSON TRUST	1-1 HD1	MUSKEGON	9N 14W 1	60754	permit for horizontal well	A1-Carbonate	Location	Permitted Well	YES
38	60765	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	3-12 HD1	KALKASKA	27N 6W 24	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
39	60766	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	4-12 HD1	KALKASKA	27N 6W 24	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
40	60767	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	5-12 HD1	KALKASKA	27N 6W 24	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
41	60788	UNION GAS OPERATING COMPANY	MERTEN	1-24 HD1	OCEANA	15N 17W 24	60787	permit for horizontal well	A1-Carbonate	Location	Permitted Well	NO
42	60809	WHITING OIL AND GAS CORPORATION	WALKER	11-25 HD1	SANILAC	12N 15E 25	60808	permit for horizontal well	A1-Carbonate	Location	Drilling complete	NO
43	60811	GEOSOUTHERN OPERATING LLC	SHERWOOD	1-22 HD1	LIVINGSTON	4N 3E 23	60804	permit for horizontal well	A-1 Carbonate	Location	Drilling complete	YES
44	60818	ENCANA OIL AND GAS USA INC	STATE OLIVER	3-13 HD1	KALKASKA	26N 6W 1	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
45	60819	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	4-25 HD1	KALKASKA	26N 6W 1	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
46	60820	ENCANA OIL AND GAS USA INC	STATE OLIVER	2-13 HD1	KALKASKA	26N 6W 1	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
47	60821	ENCANA OIL AND GAS USA INC	STATE OLIVER	1-13 HD1	KALKASKA	26N 6W 1	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
48	60822	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	5-25 HD1	KALKASKA	26N 6W 1	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
49	60826	WHITING OIL AND GAS CORPORATION	STATE WHEATLAND & REINELT	11-7 HD1	SANILAC	13N 14E 7	60825	permit for horizontal well	A1 Carbonate	Location	Drilling complete	NO
50	60848	ENCANA OIL AND GAS USA INC	STATE PIONEER	3-4 HD1	MISSAUKEE	24N 7W 3	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
51	60891	ENCANA OIL AND GAS USA INC	STATE NORWICH	3-12 HD1	KALKASKA	25N 6W 36	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
52	60892	ENCANA OIL AND GAS USA INC	BLACK RIVER CONSERVATION ASSN.	1-9 HD1	KALKASKA	27N 5W 28	NA	permit for horizontal well	Utica-Collingwood	Location	Permitted Well	YES
53	60922	O I L ENERGY CORP.	STATE CUSTER AND MUNN	D2-6	ANTRIM	29N 7W 6	NA	permit for directional well	Antrim	Location	Permitted Well	NO
54	60930	WHITING OIL AND GAS CORPORATION	RICH ET AL	11-33 HD1	SANILAC	12N 15E 4	60927	permit for horizontal well	A-1 Carbonate	Location	Permitted Well	YES
55	60955	WHITING OIL AND GAS CORPORATION	VAN DAMME	41-4 HD1	SANILAC	9N 13E 9	60954	permit for horizontal well	A-1 Carbonate	Location	Permitted Well	YES
56	60969	WHITING OIL AND GAS CORPORATION	RICH	14-9 HD1	SANILAC	12N 15E 4	60968	permit for horizontal well	A-1 Carbonate	Location	Permitted Well	YES
HIGH VOLUME (>100,000 gallons) HYDRAULIC FRACTURING PROPOSALS - ACTIVE APPLICATIONS												
#	App #	Company Name	Well Name	Well No	County	Wellhead T R S	Pilot Boring	target formation	comments			
1	A130152	ENCANA OIL AND GAS USA INC	BLACK RIVER CONSERVATION ASSN.	6-9 HD1	KALKASKA	27N 5W 28	NA	Utica-Collingwood	application for horizontal well			
2	A130164	O I L ENERGY CORP.	STATE CUSTER AND BGC	C3-31	ANTRIM	29N 7W 6	NA	Antrim	application for a directional well			
3	A140080	GEOSOUTHERN OPERATING LLC	MCKENNEY	1-27 HD1	SANILAC	9N 15E 27	A140070	A-1 Carbonate	application for horizontal well			