

HIGH VOLUME HYDRAULICALLY FRACTURED WELL COMPLETION ACTIVE PERMITS AND APPLICATIONS (AS OF 9/17/2012)

HIGH VOLUME (>100,000 gallons) HYDRAULIC FRACTURING SINCE 2008 - ACTIVE PERMITS											
#	Permit #	Company Name	Well Name	Well No	County	Wellhead T R S	comments	target formation	Well type	Well status	Confidential
1	59112	BEACON EXPLORATION AND PRODUCTION CO LLC	SCHULTZ	1-36	SANILAC	12N 15E 36	well completed Feb. 2012	A1 Carbonate	Oil	Shut-in	NO
2	59173	CIMAREX ENERGY CO	SOPER	1-25 HD1	OSCEOLA	17N 10W 25	well completed Aug. 2008	Antrim	Gas	Plugging complete	NO
3	59449	O I L NIAGARAN LLC	HENKEL	D4-24	MISSAUKEE	21N 6W 24	proposed deepening of Antrim permit	Collingwood	Not available	Temporarily abandoned	NO
4	59979	ENCANA OIL AND GAS USA INC	PIONEER	1-3 HD1	MISSAUKEE	24N 7W 3	well completed Feb 2010	Collingwood	Gas	Shut-in	NO
5	60041	MERIT ENERGY COMPANY	HUBBEL	2-22 HD1	MONTMORENCY	29N 1E 22	well completed June. 2011	Niagara	Oil	Producing	NO
6	60133	ENCANA OIL AND GAS USA INC	KENDALL	1-33	CHEBOYGAN	35N 2W 33	permit for vertical well	Collingwood	Dry hole	Well complete	NO
7	60137	ATLAS RESOURCES LLC	STATE MANCELONA	1-28	ANTRIM	29N 5W 28	permit for vertical well	pilot - Not to be Hydraulic Fractured	Dry Hole	Temporarily abandoned	NO
8	60138	ATLAS RESOURCES LLC	LUCAS	1-13	KALKASKA	26N 8W 13	permit for vertical well	pilot - Not to be Hydraulic Fractured	Dry Hole	permitted	NO
9	60161	ATLAS RESOURCES LLC	STATE NORWICH	1-6 HD1	MISSAUKEE	24N 6W 6	permit for horizontal well	Collingwood	Dry Hole	Temporarily abandoned	NO
10	60170	ENCANA OIL AND GAS USA INC	STATE KOEHLER & KENDALL	1-27 HD1	CHEBOYGAN	35N 2W 33	well completed Oct 2010	Collingwood	Oil	Temporarily abandoned	NO
11	60183	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	1-24	KALKASKA	27N 6W 24	permit for vertical well	pilot - Not to be Hydraulic Fractured	Dry Hole	drilled	NO
12	60186	CHEVRON MICHIGAN LLC	GERBER & STALEY	1-12	KALKASKA	28N 7W 12	permit for vertical well	pilot - Not to be Hydraulic Fractured	Location	Permitted Well	YES
13	60198	ATLAS RESOURCES LLC	LUCAS	1-13 HD1	KALKASKA	26N 8W 13	permit for horizontal well (60138)	Collingwood	Not available	Temporarily abandoned	NO
14	60212	CONTINENTAL RESOURCES INC	KELLY ET AL	1-26 HD1	HILLSDALE	6S 2W 26	well completed Sept. 2011	Black River (Van Wert)	Oil	Producing	NO
15	60271	ATLAS RESOURCES LLC	STATE MANCELONA	1-28 HD1	ANTRIM	29N 5W 28	permit for horizontal well (60137)	Collingwood	Location	Permitted Well	YES
16	60305	ENCANA OIL AND GAS USA INC	STATE WILMOT	1-21	CHEBOYGAN	33N 3W 21	well completed July 2011	Collingwood	Oil	Shut-in	NO
17	60328	ENCANA OIL AND GAS USA INC	STATE TUSCARORA	1-34	CHEBOYGAN	35N 5W 34	permit for vertical well	Collingwood	Location	Permitted Well	YES
18	60357	ENCANA OIL AND GAS USA INC	STATE OLIVER	1-1	KALKASKA	26N 6W 1	permit for vertical well	pilot - Not to be Hydraulic Fractured	Dry Hole	Well complete. HD drilled	NO
19	60360	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	1-13 HD1	KALKASKA	27N 6W 24	well completed Nov 2011	Collingwood	Gas	Producing	NO
20	60379	DEVON ENERGY PRODUCTION COMPANY LP	CRONK	1-24 P	GLADWIN	19N 1W 24	permit for vertical well	pilot - Not to be Hydraulic Fractured	Dry Hole	Well Complete	NO
21	60380	DEVON ENERGY PRODUCTION COMPANY LP	CRONK	1-24 HD1	GLADWIN	19N 1W 24	permit for horizontal well	A1 Carbonate	Not available	Temporarily abandoned	NO
22	60389	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	1-25 HD1	KALKASKA	26N 6W 1	well completed Nov 2011	Collingwood	Gas	Producing	NO
23	60536	CONTINENTAL RESOURCES INC	MCNAIR ET AL	1-26 P	HILLSDALE	6S 2W 26	permit for vertical well	Black River (Van Wert)	Other	Well Complete	NO
24	60537	CONTINENTAL RESOURCES INC	MCNAIR ET AL	1-26 HD1	HILLSDALE	6S 2W 26	permit for horizontal well	Black River (Van Wert)	Location	Drilling Complete	NO
25	60451	DEVON ENERGY PRODUCTION COMPANY LP	WILEY	1-34 P	GLADWIN	18N 2W 18	permit for vertical well	Not to be Completed	Other	Well Complete	NO
26	60452	DEVON ENERGY PRODUCTION COMPANY LP	WILEY	1-34 HD1	GLADWIN	18N 2W 18	well completed may/june 2012	A1 Carbonate	Location	Permitted Well	NO
27	60545	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	2-25 HD1	KALKASKA	26N 6W 1	permit for horizontal well	Collingwood	Location	Permitted Well	YES
28	60546	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	3-25 HD1	KALKASKA	26N 6W 1	permit for horizontal well	Collingwood	Location	Permitted Well	YES
29	60559	DEVON ENERGY PRODUCTION COMPANY LP	STATE RICHFIELD	1-27P	ROSCOMMON	22N 1W 27	permit for vertical well	pilot - Not to be Hydraulic Fractured	Location	Permitted Well	YES
30	60560	DEVON ENERGY PRODUCTION COMPANY LP	STATE RICHFIELD	1-34 HD1	ROSCOMMON	22N 1W 27	permit for horizontal well (60559)	Collingwood	Location	Permitted Well	YES
31	60562	ENCANA OIL AND GAS USA INC	STATE MENTOR	1-17	CHEBOYGAN	34N 3W 17	permit for vertical well	Collingwood	Location	Permitted Well	YES
32	60579	ENCANA OIL AND GAS USA INC	STATE GARFIELD	1-36	KALKASKA	25N 6W 36	permit for vertical well	pilot - Not to be Hydraulic Fractured	Location	Permitted Well	YES
33	60580	ENCANA OIL AND GAS USA INC	STATE GARFIELD	1-25 HD1	KALKASKA	25N 6W 36	permit for horizontal well	Collingwood	Location	Permitted Well	YES
34	60581	DEVON ENERGY PRODUCTION COMPANY LP	DAVID'S ACRES, LLC	1-19 P	OGEAW	22N 4E 19	permit for vertical well	pilot - Not to be Hydraulic Fractured	Location	Permitted Well	NO
35	60582	DEVON ENERGY PRODUCTION COMPANY LP	DAVID'S ACRES, LLC	1-19 HD1	OGEAW	22N 4E 19	permit for horizontal well	A1 Carbonate	Location	Permitted Well	NO
36	60587	CONTINENTAL RESOURCES INC	ARNO & FRENCH	1-25 HD1	HILLSDALE	6S 2W 25	permit for horizontal well	Black River (Van Wert)	Location	Permitted Well	NO
37	60588	CONTINENTAL RESOURCES INC	ARNO & TIMMONS	1-24 HD1	HILLSDALE	6S 2W 24	permit for horizontal well	Black River (Van Wert)	Location	Permitted Well	NO
38	60600	CHEVRON MICHIGAN LLC	WESTERMAN	1-29	KALKASKA	28N 8W 29	permit for vertical well	pilot - Not to be Hydraulic Fractured	Location	Permitted Well	NO
39	60601	CHEVRON MICHIGAN LLC	WESTERMAN	1-32 HD1	KALKASKA	28N 8W 29	permit for horizontal well	Collingwood	Location	Permitted Well	NO
40	60606	ENCANA OIL AND GAS USA INC	STATE MENTOR	1-17 HD1	CHEBOYGAN	34N 3W 17	permit for horizontal well	Collingwood	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	target formation	comments			
1	A100241	CHEVRON MICHIGAN LLC	GERBER & STALEY	1-12 HD1	KALKASKA	28N 7W 12	Collingwood	application for horizontal well (re-entry of 60186)			
2	A110068	MERIT ENERGY COMPANY	STATE MANCELONA	8-33	ANTRIM	29N 5W 33	Collingwood	tolled - needs more information			
3	A120046	ENCANA OIL AND GAS USA INC	STATE WILMONT	1-6	CHEBOYGAN	33N 3W 6	Collingwood	application for vertical well			
4	A120047	ENCANA OIL AND GAS USA INC	STATE GARFIELD	1-17	KALKASKA	25N 5W 17	Collingwood	application for vertical well			
5	A120073	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	1-34 HD1	KALKASKA	26N 6W 10	Collingwood	application for horizontal well (re-entry of proposed A120042)			
6	A120074	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	2-34 HD1	KALKASKA	26N 6W 10	Collingwood	horizontal well on same well pad as A120042/73/74			
7	A120075	ENCANA OIL AND GAS USA INC	STATE EXCELSIOR	3-34 HD1	KALKASKA	26N 6W 10	Collingwood	horizontal well on same well pad as A120042/73/74			
8	A120093	DEVON ENERGY PRODUCTION COMPANY LP	YOUNKMAN	1-29 HD1	MISSAUKEE	21N 8W 29	Utica	application for horizontal well			
9	A120105	ROSETTA RESOURCES OPERATING LP	CHRISTENSEN	1-21 P	IONIA	6N 6W 21	A1 Carbonate	application for vertical well			
10	A120106	ROSETTA RESOURCES OPERATING LP	CHRISTENSEN	1-21 HD1	IONIA	6N 6W 21	A1 Carbonate	application for horizontal well (re-entry of proposed A120105)			
11	A120123	ENCANA OIL AND GAS USA INC	STATE BEAVER CREEK	C3-11	CRAWFORD	25N 4W 11	Collingwood	application for vertical well			
12	A120124	ENCANA OIL AND GAS USA INC	STATE BEAVER CREEK	1-23 HD1	CRAWFORD	25N 4W 11	Collingwood	application for horizontal well (re-entry of proposed A120123)			
13	A120131	ENCANA OIL AND GAS USA INC	STATE ROSCOMMON	D1-17	ROSCOMMON	21N 4W 17	Collingwood	application for vertical well			
14	A120132	ENCANA OIL AND GAS USA INC	STATE ROSCOMMON	1-8 HD1	ROSCOMMON	21N 4W 17	Collingwood	application for horizontal well (re-entry of proposed A120131)			
15	A120132	CONTINENTAL RESOURCES INC	STEVERSON & FRENCH	1-24 HD1	HILLSDALE	6S 2W 26	Black River (Van Wert)	application for horizontal well			