



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY - OFFICE OF OIL, GAS, AND MINERALS

APPLICATION FOR PERMIT TO:

DRILL DEEPEN CONVERT AND OPERATE A WELL

By authority of Part 615 or Part 625 of Act 451 PA 1994, as amended. Non-submission and/or falsification of this information may result in fines and/or imprisonment.

1a. Part 615 Supervisor of Wells
Oil and Gas
Brine Disposal
Hydrocarbon Storage
Injection for Secondary Recovery

1b. Part 625 Mineral Wells
Waste Disposal
Brine Production
Processed brine disposal
Storage
Test, fee sched. on rev.

1c. Fee enclosed
Yes
No, revision of application
No, leg of horz drainhole

2. List all previous permit numbers
3. Fed. ID. No. (do not use SSN) 25-1410539

4. Conformance bond
Blanket Single well
5. Attached On file
6. Bond number 022050763
7. Bond amount \$33,000

8. Applicant (name of permittee as bonded) Marathon Oil Company

9. Address 5555 San Felipe Houston, TX 77056
Phone 713-296-4684
I authorize DEQ 4 additional days to process this application. Yes No

10. Lease or well name (be as brief as possible) STATE BEAVER CREEK
Well number D4-11

11. Surface owner STATE OF MICHIGAN

12. Surface location SW 1/4 of SE 1/4 of SE 1/4 of Sec 11 T 25N R 4W
Township BEAVER CREEK County CRAWFORD

13. If directional, bottom hole location 1/4 of 1/4 of 1/4 of Sec T R
Township County

14. The surface location for this well is 293' feet from nearest (N/S) S section line AND 717' feet from nearest (E/W) E section line

15. Is this a directional well? No Yes
If yes, complete line 15. The bottom hole location for this well is feet from nearest (N/S) section line AND feet from nearest (E/W) section line

16. The bottom hole location (whether straight or directional) of this well is 293' feet from nearest (N/S) S drilling unit line AND 717' feet from nearest (E/W) E drilling unit line

17. Kind of tools Rotary Cable Combination
18. Is sour oil or gas expected? No Yes H2S Cont. plan enclosed
19. Base of lowest known fresh water aquifer Formation Glacial Drift Depth 500'

20. Intended total depth MD 4700' TVD 4700'
21. Formation at total depth AMHERSTBURG
22. Producing/injection formation(s) NA
23. Objective pool, field, or project NA

Table with 4 main columns: HOLE, CASING, CEMENT, MUD. Rows include depth (100', 917', 4700'), geol. formation (Glacial Drift, Coldwater, Amherstburg), bit dia., O.D. size, casing grade/condition, depth, sacks, T.O.C., W.O.C., weight, and viscosity.

25. DETAIL CEMENTING PROGRAM. IDENTIFY ALL CEMENT CLASSES, ADDITIVES, AND VOLUMES (IN CU. FT.) FOR EACH CASING STRING.
Surface 100% OH excess: 265 sx 65/35 Poz w/ 3% CaCl (447 cu ft) + 150 sx Class A (180 cu ft)

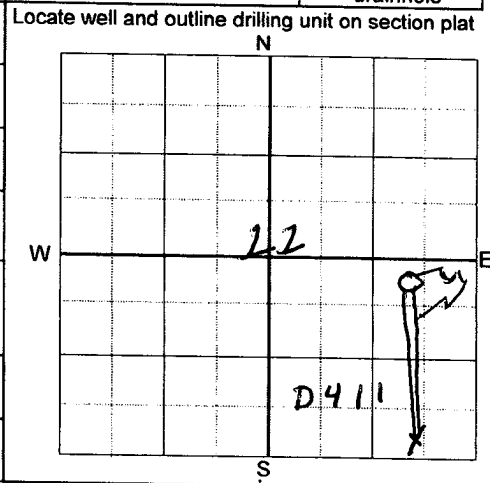
Intermediate
Production/Injection 50% OH excess: 550 sx 65/35 Poz w/ 12% NaCl (929 cu ft) + 525 sx Class A w/ 12% NaCl (645 cu ft)

26. Send correspondence and permit to Name Dennis Mendenhall E-mail DMendenhall@marathonoil.com
Address 5555 San Felipe, Houston, TX 77056 Phone 713-296-4684

CERTIFICATION "I state that I am authorized by said applicant. This application was prepared under my supervision and direction. The facts stated herein are true, accurate and complete to the best of my knowledge."
27. Application prepared by (print or type) Dennis Mendenhall Phone 713-296-4684

28. Signature Date 6/10/15

Office of Oil, Gas, and Minerals Use Only
Table with 4 columns: Permit number, API number, Date issued, Owner number





**INSTRUCTIONS FOR COMPLETING FORM 7200-1**

- Line 1a/b PART 615 SUPERVISOR OF WELLS or PART 625 MINERAL WELLS. Identify which statute this well will be permitted under and what type of well it will be.
- Line 1c PERMIT FEE. For Part 615, Supervisor of Wells, the permit fee for all drilling and deepening permits is \$300. For Part 625, Mineral Wells, different fees apply to different types of wells: The permit fee is \$2500.00 for a Waste Disposal well; and \$500 for a Brine Production, Processed Brine Disposal or Storage Well. Individual test well (greater than 250' deep) permit fees are \$500. Permit fees for blanket test well permits (between 50' and 250' deep) are \$75 for 1-24 wells, \$150 for 25-49 wells, \$300 for 50-74 wells, and \$600 for 75-200 wells. No fee is required if you are revising an existing application. Make checks payable to "State of Michigan", bank drafts are not accepted. An application to revise the surface location of an existing permit must be accompanied by the original permit and a new fee. If application is for a leg of a horizontal drainhole, check that box. No new fee is required. See line 14 of form EQC 7200 for further instructions.
- Line 2 PRIOR PERMITS. Identify all permit numbers of any wells drilled from the same surface location.
- Line 3 FEDERAL IDENTIFICATION NUMBER. Use a federal identification number. Do not use a Social Security Number.
- Lines 4-7 BOND. If the permittee as shown on line 8 is a partnership, all persons named share equal responsibility for the well. The bond submitted must be identical to and include all parties shown on line 8 as the permittee. Separate bonds for individuals in a partnership are not accepted. The bond number (line 6) is the Surety, Certificate of Deposit or Letter of Credit number which identifies that instrument. Refer to R 324.212 for bond amounts (line 7) under Part 615. Under Part 625, bonds for a disposal, storage, or brine wells are \$30,000 for a single well or \$400,000 for blanket coverage (50 wells maximum). Refer to R299.2332 for bond amounts for Part 625 test wells. For additional information regarding bonding options and amounts contact the Permits and Bonding Unit at (517) 241-1530.
- Line 8 APPLICANT. The permittee shall be the owner of the well or an authorized representative of the owner of the well. If you are a new applicant, have changed address, or changed officers, or changed corporate structure, submit form EQP 7200-13, Well Permittee Organization Report.
- Line 9 Provide the address and phone number of the permittee, this may be different than the address to mail the permit on Line 26. Check yes if the permittee authorizes the DEQ an additional 4 days to process the permit (per PA 325 of 2004). In some cases this may prevent a permit from being denied if there are corrections or revisions pending to make a permit decision. Otherwise check no.
- Line 10 LEASE or WELL NAME AND WELL NUMBER. Wherever possible a single word lease name is preferable. (1) Last names first. Use comma after the last name when a first name is used. (2) Use "&" to join names (e.g. Doe & Hall not Doe-Hall.) (3) Please do not include project names in the name of the well. Generally the first word should be chosen so that it will put the well name where one would expect to find it. (4) If the drilling unit contains State or Federally owned minerals, include "State" and Township name or "USA" in the well name (e.g. State Chester & Smith, or USA & Smith).
- Line 11 SURFACE OWNER. Identify the surface owner(s) at the well site.
- Line 12 SURFACE LOCATION. Identify the surface location of the well site by describing it in a quarter, quarter, quarter section (10 acre) spot within its township and range. Also identify the county and township name.
- Line 13 BOTTOM HOLE LOCATION. Fill in this line only if this is a directionally drilled well. Identify the location of the endpoint of the borehole in the same manner as on line 12.
- Line 14 Identify the surface location of the well measured from nearest section lines (as identified in line 2, form EQP 7200-2).
- Line 15 If the well is directionally drilled, identify the location of the endpoint of the well bottom hole location measured from the from nearest section lines (as identified in line 3 form EQP 7200-2).
- Line 16 Identify the bottom hole location of the well (same as surface location for straight holes) measured from the nearest drilling unit lines or property lines for Part 625 wells (as identified in line 4 form EQP 7200-2).
- Line 17 KIND OF TOOLS. Identify if the well will be drilled with Rotary, Cable, or Combination tools.
- Line 18 SOUR OIL OR GAS. Indicate if the well is located in an area where sour (containing hydrogen sulfide, H<sub>2</sub>S) oil and gas is likely to be encountered. If so drilling and operation of the well must follow special requirements. For details consult the Hydrogen Sulfide Management General Provisions, R324.1101-R 324.1129. Indicate if an H<sub>2</sub>S contingency plan is enclosed.
- Line 19 BASE OF LOWEST KNOWN FRESH WATER AQUIFER. Identify the formation and the depth where the base of the lowest known fresh water aquifer is expected to be encountered.
- Line 20 INTENDED TOTAL DEPTH. For straight holes show the total depth of the well as measured depth (MD). For directionally drilled wells identify the measured depth (MD) and true vertical depth (TVD) at total depth.
- Line 21 FORMATION AT TOTAL DEPTH. What is the geological formation at total depth of the well?
- Line 22 PRODUCING/INJECTING FORMATION. Identify the intended producing formation for oil, gas or brine wells. For injection wells, identify the intended injection interval. For storage wells, identify the storage formation. For test wells, identify the formation to be examined. Identify or discuss further in attachments if more than one target is anticipated
- Line 23 OBJECTIVE POOL, FIELD OR PROJECT. If this is an exploratory well, indicate "exploratory". If this is a development well, identify the producing field. If it is an Antrim project well identify the project or Uniform Spacing Plan (USP) name.
- Line 24 PROPOSED DRILLING, CASING, CEMENTING AND SEALING PROGRAM. Provide all casing and sealing data applicable to the proposed drilling. If the proposed program of drilling, casing, cementing, and sealing does not conform with those established by rule, or special order, then requests for exceptions must accompany an application for permit. For drilling through gas storage fields, refer to R 324.413 of Part 615. a) Depths: For directionally drilled wells use the measured depth to identify the depth of hole drilled and the depth where casing is set. b) Casing: For non-API grades of casing, provide data identifying rated or tested burst and collapse pressures. c) Cement: Identify the number of sacks of cement for each string of casing. Identify the expected depth of the top of cement behind each casing under T.O.C. Identify the number of hours cement will be left undisturbed before commencing drilling under W.O.C. d) Mud: Indicate weights and viscosities of drilling fluid during each phase of drilling. If drilling muds are not added and the drilling fluid is essentially water, indicate fresh water (FW) or salt water (SW).
- Line 25 DETAIL CEMENTING PROGRAM. Identify all cement classes, additives, and volumes (in cu. ft.) for each string of casing to be run. Identify the amount of excess cement (if any).
- Line 26 Identify the individual who can serve as a contact for the applicant and the mailing address to send the permit to.
- Line 28 At least one copy of form EQP7200-01 must have an original signature of the individual authorized by the applicant to file the application.

Permit fee is \$300 for all Part 615 wells; \$2,500 for a Part 625 waste disposal well; or \$500 for a brine production, processed brine disposal, or storage well: Part 625 Test wells are subject to the fee structure defined in Line 1C above.

<b>ONLINE PAYMENT*</b>	<b>CHECK PAYMENT</b>	<b>OVERNIGHT/EXPRESS DELIVERY</b>
<p>When paying online for Part 615 permits, go to: <a href="https://www.thepayplace.com/mi/deq/oilandgas">https://www.thepayplace.com/mi/deq/oilandgas</a></p> <p>When paying online for Part 625 permits, go to: <a href="https://www.thepayplace.com/mi/deq/welldrillprmt">https://www.thepayplace.com/mi/deq/welldrillprmt</a></p> <p>Please enclose the receipt of electronic payment, one ORIGINAL and one COPY of the entire application and documentation to this address:</p> <p>MDEQ OFFICE OF OIL, GAS, AND MINERALS PERMITS AND BONDING UNIT PO BOX 30256 LANSING, MICHIGAN 48909-7756</p> <p>*preferred method</p>	<p>Please mail a check payable to STATE OF MICHIGAN, one ORIGINAL and one COPY of the entire application and documentation to this address:</p> <p>MDEQ OFFICE OF FINANCIAL MANAGEMENT REVENUE CONTROL/CASHIER'S OFFICE PO BOX 30657 LANSING, MICHIGAN 48909-8157</p>	<p>Please send the online payment receipt or check payable to STATE OF MICHIGAN, one ORIGINAL and one COPY of the entire application and documentation to this address:</p> <p>MDOT ACCOUNTING SERVICES CENTER 425 WEST OTTAWA STREET LANSING, MICHIGAN 48933</p>

Please see further instructions on EQC 7200 for preparing a Part 615 application and EQC 7200-3 for preparing a Part 625 application.