



## City of Southfield

26000 Evergreen Rd. • P.O. Box 2055 • Southfield, MI 48037-2055 • [www.cityofsouthfield.com](http://www.cityofsouthfield.com)

November 13, 2015

Ms. Jennifer A. Ferrigan  
Geologist – Permit Coordinator  
Permits & Bonding Unit  
Office of Oil, Gas, and Minerals  
Michigan Department of Environmental Quality  
P.O. Box 30256  
Lansing, Michigan 48909-7756

Re: Jordan Development Company Application A150095: Word of Faith 16-27

Dear Ms. Ferrigan:

The City of Southfield is in receipt of a cover sheet (only) of an Application for Permit to Drill filed by Jordan Development Company, which you forwarded to Southfield Mayor Donald Fracassi, on or about November 4, 2015 (copy attached). The City of Southfield would assert that this application to drill be denied. There are several issues that support the City's position of denial. Some of these issues include the following:

- (1) Drilling is not a permitted use in the R-2, Single Family Residential zoning district in which the subject property is located.
- (2) There is currently a moratorium in effect through April 28, 2016 prohibiting drilling or mining in the City of Southfield (copy of City Council resolution establishing the moratorium is attached).
- (3) This application, if approved, would have an adverse impact on the public health, safety, and welfare of this community.
- (4) What we have been provided in the application is incomplete and ambiguous.
- (5) There are potential issues/impacts in terms of the City's Woodlands and/or Wetlands ordinances.
- (6) There may be other considerations that the City cannot fully address until this matter is fully analyzed and evaluated.

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**Acting Mayor**  
Donald F. Fracassi

**Acting Council President**  
Sylvia Jordan

**City Clerk**  
Nancy L. M. Banks

**City Treasurer**  
Irv M. Lowenberg

**City Council**  
Lloyd C. Crews

Myron A. Frasier

Sidney Lantz

Michael A. Mandelbaum

Joan Seymour

Ms. Jennifer A. Ferrigan  
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If I can provide any further information, please do not hesitate to contact me.

Sincerely

A handwritten signature in black ink that reads "Terry Croad". The signature is fluid and cursive, with a long horizontal line extending from the end of the name.

Terry Croad, AICP, ASLA  
Director of Planning  
(248) 796-4154

ENCLOS.

Cc: J. Mayes; D. Fracassi; S. Ward-Witkowski; F. Zorn; J. Michrina; R. Acho



## MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY - OFFICE OF GEOLOGICAL SURVEY

## APPLICATION FOR PERMIT TO:

☒ DRILL ☐ DEEPEN ☐ CONVERT  
AND OPERATE A WELLBy 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  
Recovery1b. 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  
drainhole2. List all previous permit numbers  
3. Fed. Employer ID. No. or Soc. Security No.  
38-32511294. Conformance bond  
☒ Blanket ☐ Single well  
5. ☐ Attached ☒ On file  
6. Bond number  
LOC #147  
7. Bond amount  
\$250,000

8. Applicant (name of permittee as bonded)

Jordan Development Company

9. Address

1503 Garfield Road North  
Traverse City, MI 49696

Phone

231-935-4220

I authorize DEQ 4 additional days  
to process this application.☐ Yes ☒ No

10. Lease or well name (be as brief as possible)

Word of Faith

Well number

#16-27

11. Surface owner

Word of Faith International Christian Center, Inc.

12. Surface location

SE 1/4 of SE 1/4 of SE 1/4 of Sec 27 T 01N R 10E Township Southfield County Oakland

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

330 feet from nearest (N/S) South section line AND 670 feet from nearest (E/W) East 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

330 feet from nearest (N/S) South drilling unit line AND 670 feet from nearest (E/W) East drilling unit line

17. Kind of tools

☒ Rotary ☐ Cable ☐ Combination

18. Is sour oil or gas expected?

☒ No ☐ Yes ☐ H<sub>2</sub>S Cont. plan enclosed

19. Base of lowest known fresh water aquifer

Formation Drift Depth 130'

20. Intended total depth

MD 2900' TVD 2900'

21. Formation at total depth

Gray Niagaran

22. Producing/injection formation(s)

Niagaran

23. Objective pool, field, or project

Exploratory

## 24. PROPOSED DRILLING, CASING AND CEMENTING AND SEALING PROGRAM

| HOLE       |                 |          | CASING    |       |                  | CEMENT     |       |        | MUD    |          |
|------------|-----------------|----------|-----------|-------|------------------|------------|-------|--------|--------|----------|
| Depth (MD) | Geol. Formation | Bit Dia. | O.D. Size | Wt/Ft | Grade Condition  | Depth (MD) | Sacks | T.O.C. | W.O.C. | Wt. Vis. |
| 50'        | Drift           | Driven   | 16"       | 65#   | H-40 New         | 50'        |       |        |        |          |
| 300'       | Antrim          | 14-3/4"  | 11-3/4"   | 42#   | H-40 New         | 300'       | 199   | Surf   | 12 hr  | 8.4 60   |
| 1200'      | Bass Island     | 10-5/8"  | 8-5/8"    | 24#   | J-55 New         | 1200'      | 269   | Surf   | 12 hr  | 8.8 var  |
| 2900'      | Gray Niagaran   | 7-7/8"   | 5-1/2"    | 15.5# | J-55 Used/Tested | 2900'      | 291   | 1300'  | 12 hr  | 9 var    |

## 25. DETAIL CEMENTING PROGRAM. IDENTIFY ALL CEMENT CLASSES, ADDITIVES, AND VOLUMES (IN CU. FT.) FOR EACH CASING STRING.

Surface 49 sx 65/35 Poz/Type I (83 CF) + 150 sx Class A (177 CF)

Intermediate 119 sx 65/35 Poz/Type I (201 CF) + 150 sx Class A (177 CF)

Production/Injection 142 sx 65/35 Poz/Type I (239) + 150 sx Class A (177 CF)

26. Send correspondence and permit to

Name Jordan Development Company, L.L.C.

E-mail troym@jordanex.com

Address 1503 Garfield Road North, Traverse City, MI 49696

Phone 231-935-4220

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."

Enclose permit fee of \$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. Make checks payable to State of Michigan.

27. Application prepared by (print or type)

Troy E. Molby, P.E., Authorized Agent

Phone

231-935-4220

28. Signature

Date

10/30/15

Office of Geological Survey Use Only

Permit number API number Date issued Owner number

## RESOLUTION

WHEREAS, oil and gas wells and ancillary uses and extraction activities create local public health, safety, and welfare effects that are incompatible with nearby residential districts, residential uses and natural resources, leading to risks and concerns regarding adverse impacts resulting from uncontrolled exploration and extraction activities within the City; and

WHEREAS, the City has existing ordinances addressing environmental concerns, however the City has not previously been faced with the prospect of any significant oil and gas exploration activity, and the City's Zoning Ordinance and other ordinances may not satisfactorily regulate such activities to address the local public health, safety, and welfare concerns; and

WHEREAS, Michigan cities have broad police power to adopt resolutions and ordinances to protect the local public health, safety, general welfare, and property in the City; and

WHEREAS, the Michigan Zoning Enabling Act authorizes cities to regulate land for the purposes of ensuring the land is situated in appropriate locations and relationships, but also contains some limitation on the City's ability to regulate and control the drilling, completion, or operation of oil or gas wells or other wells drilled for oil or gas exploration purposes; and

WHEREAS, the City needs to conduct additional investigation into the likely effects of oil and gas extraction, mining, or operations on the local public health, safety, and welfare, including hydraulic fracturing or fracking operations, in order to review the effectiveness of existing regulation and to determine the extent to which existing and/or additional or amended zoning and other ordinance provisions can or should regulate oil and gas operations in a manner consistent with City authority to address the local public health, safety, and welfare effects of the oil and gas operations; and

WHEREAS, Michigan statutes and law impose a substantive duty on the City to take reasonable action to prevent or minimize likely degradation of the air, water, and natural resources or the public trust in those resources; and

WHEREAS, certain aspects of oil and gas operations remain subject to City regulation; and

WHEREAS, now in light of the reporting of potential exploratory oil and gas activities in the City, the City now recognizes that applicable State of Michigan statutes and regulations are likely not sufficient to protect, among other things, local effects of oil and gas operations on the health, safety, and wellbeing of City residents, so certain aspects and activities associated with oil and gas development remain or must be subject to City regulation; and

WHEREAS, in order to allow the City an opportunity to investigate and develop appropriate regulations upon those aspects of oil and gas operations which the City is authorized to regulate, it is in the public interest to adopt a moratorium upon the issuance of permits and other approvals by the City or use of land for oil and gas extraction activities; and

WHEREAS, this moratorium is a temporary measure designed to preserve the status quo and will last only as long as necessary to investigate, develop and enact the comprehensive regulatory system.

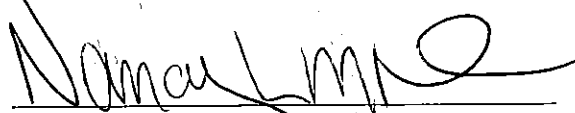
**NOW THEREFORE, BE IT HEREBY RESOLVED:**

1. That effective upon adoption of this Resolution and for a period of six (6) months from the date hereof, a moratorium is hereby established on the consideration, review or action by all City entities, officials, employees and/or agents on applications, proposals, requests, permits, approvals, zoning compliance or certificates regarding any oil and/or natural gas drilling, mining, or other extraction operations in the City that might be proposed or presented to the City, including hydraulic fracturing or fracking operations, and that during the moratorium period, no drilling, mining, or other extraction operations, including hydraulic fracturing or fracking operations, shall be allowed in the City.
2. That this moratorium is not intended to infringe upon the jurisdiction to the extent it has been reserved and sufficiently implemented by state or federal agencies that have concurrent jurisdiction over such subjects.
3. That the City shall proceed promptly in due course to investigate likely effects of oil and gas extraction operations on the local public health, safety, and welfare; and consider appropriate regulations upon oil and gas extraction activities within the City.

**BE IT FURTHER RESOLVED**, an aggrieved property owner or business petitioner may request and be entitled to a hearing before the City Council for the purpose of attempting to demonstrate that the moratorium will preclude all viable economic use of their property or otherwise violate applicable provisions of state or federal law and/or conduct a comprehensive analysis of its activities and demonstrate that there are no detrimental effects from the operation on local public, health and safety, and welfare. Said petitioner shall, in writing and directed to the City Clerk, request a hearing that describes the grounds for the request. The hearing shall be held at a regular City Council meeting within forty five (45) days of receipt of the request. Upon concluding a hearing, the City Council shall determine whether the petitioner has made the required demonstration and if so, shall grant relief from the moratorium to the extent necessary to cure the violation.

I, Nancy L. M. Banks, the duly elected City Clerk of the City of Southfield, County of Oakland, State of Michigan, do hereby certify that the above resolution was adopted by the Southfield City Council at their Regular Council Meeting held on Monday, October 19, 2015 at 7:00 pm in the Council Chambers of the Municipal Building, 26000 Evergreen Road, Southfield, Michigan.

Dated: November 13, 2015

  
Nancy L. M. Banks, MMC  
Southfield City Clerk