MWO900053

DEQ

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY - OFFICE OF GEOLOGICAL SURVEY

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

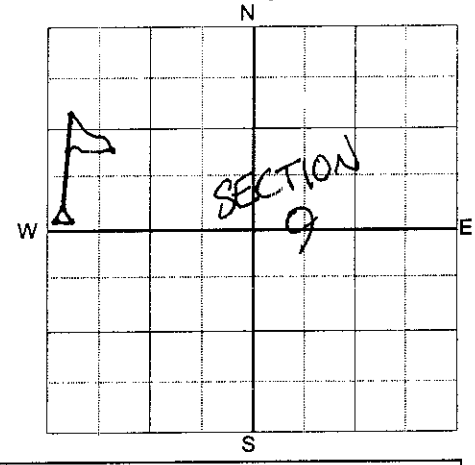
1b. Part 625 Mineral Wells
☐ Waste Disposal
☐ Brine Production
☒ Processed brine disposal
☐ Storage
☐ Test, fee sched. on rev.

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

2. List all previous permit numbers
57783

3. Fed. Employer ID No or Soc Security No
38-2439926

Locate well and outline drilling unit on section plat



4. Conformance bond
☐ Blanket ☒ Single well

5 ☒ Attached ☐ On file

6 Bond number
Letter of Credit

7 Bond amount
$33,000.00

8. Applicant (name of permittee as bonded)
O.I.L. Energy Corp.

9. Address
954 Business Park Drive
Suite 5
Traverse City, MI. 49686

Phone
231-933-3600

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

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

Well number
B1-9 SWD

11 Surface owner
WRS Holdings LLC.

12 Surface location
SW 1/4 of SW 1/4 of NW 1/4 of Sec 9 T 28N R 9W
Township: Whitewater
County: Grand Traverse

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
2618 feet from **nearest** (N/S) NORTH section line AND 506 feet from **nearest** (E/W) WEST section line

15. Is this a directional well? ☒ No ☐ Yes If yes, complete line15. 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
_____ feet from **nearest** (N/S) _____ drilling unit line AND _____ feet from **nearest** (E/W) _____ drilling unit line

17. Kind of tools
☒ Rotary ☐ Cable ☐ Combination

18. Is sour oil or gas expected?
☒ No ☐ Yes ☐ H_2S Cont. plan enclosed

19. Base of lowest known fresh water aquifer
Formation Drift Depth 385'

20. Intended total depth
MD 2118' TVD 2118'

21. Formation at total depth
Det. River Anhydrite

22. Producing/injection formation(s)
Dundee/Det. River

23. Objective pool, field, or project
Whitewater 9/Mineral Well

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.
37'	Drift	---	---	EXISTING	37'	---	---			
494'	Coldwater Sh.	---	8 5/8"	EXISTING	494'	---	0'			
1926'	Dundee	---	5 1/2"	EXISTING	1926'	---	0'			
2118'	Det. River	---		open hole	2118'	---	---			

25. DETAIL CEMENTING PROGRAM. IDENTIFY ALL CEMENT CLASSES, ADDITIVES, AND VOLUMES (IN CU. FT.) FOR EACH CASING STRING
Surface EXISTING
Intermediate N.A.
Production/Iniection EXISTING

26. Send correspondence and permit to
Name Ben Croftchik E-mail bcroftchik@oilenergy.us
Address 954 Business Park Drive, Suite 5, Traverse City, MI. 49686 Phone 231-933-3600

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)
Ben Croftchik
Phone
231-933-3600

28. Signature
Date 3/2/09

DEQ Cashier use only

RECEIVED
MAR 03 2009
OFFICE OF GEOLOGICAL SURVEY
PERMITS & BONDING

Office of Geological Survey Use Only

Permit number	API number	Date issued	Owner number
			47777

EQP 7200-1 (rev 1/2009) SEE INSTRUCTIONS FOR MAILING ON REVERSE

DEQ MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY - OFFICE OF GEOLOGICAL SURVEY GCA#2006.491.01

SURVEY RECORD OF WELL LOCATION

This information is required by authority of Part 615 Supervisor of Wells, or Part 625 Mineral Wells, of Act 451 PA 1994 as amended in order to obtain a drilling permit

Applicant: **O.I.L. ENERGY CORP.**

Well name and number: HUBBELL No. B1-9 SWD

1a Surface location: SW 1/4 of SW 1/4 of NW 1/4 of section 9 T 28N R 9W — Township: WHITEWATER — County: GRAND TRAVERSE

1b. If this is a directional well bottom hole location will be: ____ 1/4 of ____ 1/4 of ____ 1/4 of section ____ T ____ R — Township: ____ — County: ____

Instructions: Outline drilling unit for oil/gas wells (Part 615) or property boundary for mineral wells (Part 625) and spot well location on plat shown Locate the well in two directions from the **nearest** section, quarter section, and unit (or property, Part 625) lines.

2. **The surface location is**

2618 ft. from nearest (N/S) NORTH section line

506 ft. from nearest (E/W) WEST section line

and

30 ft. from nearest (N/S) SOUTH quarter section line

~~506~~ 506 ft. from nearest (E/W) WEST quarter section line

3. **Bottom hole will be** (if directional)

_____ ft. from nearest (N/S) _____ section line

_____ ft. from nearest (E/W) _____ section line

and

_____ ft. from nearest (N/S) _____ quarter section line

_____ ft. from nearest (E/W) _____ quarter section line

4. **Bottom hole will be** (directional or straight)

_____ ft. from nearest (N/S) _____ drilling unit line

_____ ft. from nearest (E/W) _____ drilling unit line

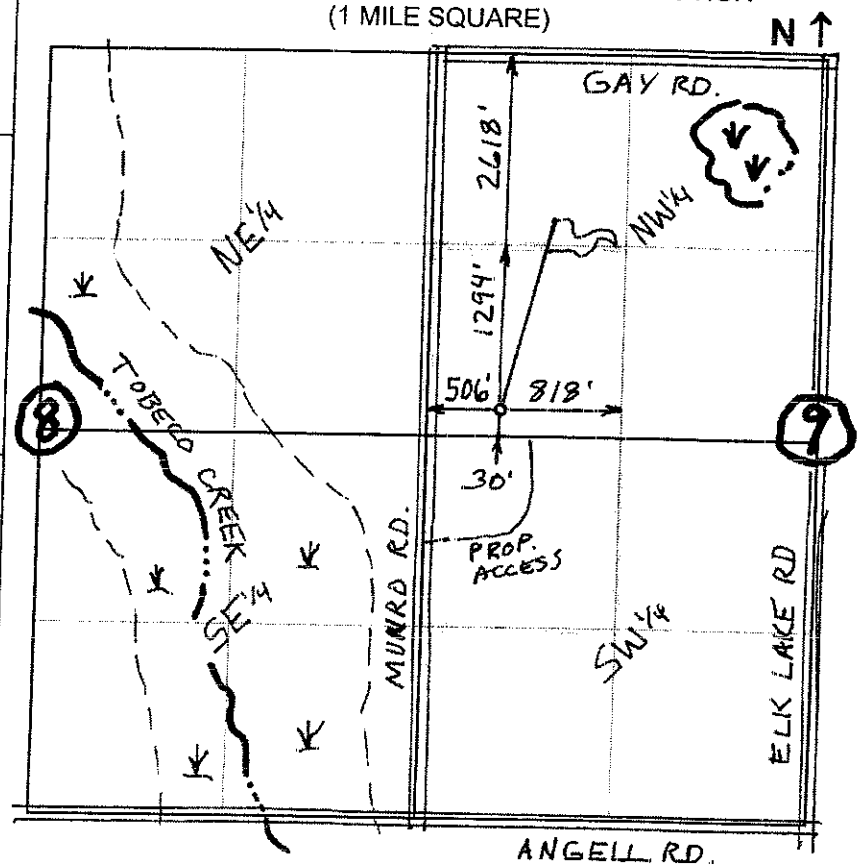
5. Show access to stake on plat and describe if it is not readily accessible. See attached well site review.

6. Zoning ☐ Residential effective date _____

Initial date of residential zoning _____

☒ Other Agricultural

PLAT BELOW REPRESENTS ONE FULL SECTION
(1 MILE SQUARE)



ON SEPARATE PLAT OR PLOT PLAN, LOCATE, IDENTIFY AND SHOW DISTANCES TO:

A. All roads, power lines, buildings, residences, fresh water wells, and other man-made features, within 600 feet of the stake

B. All lakes, streams, wetlands, drainage-ways, floodplains, environmentally sensitive areas, natural rivers, critical dune areas, and threatened or endangered species within 1320 feet of the stake.

C. All type I and IIa public water supply wells within 2000 feet and all type IIb and III public water supply wells within 800 feet of the well stake

Name of individual who surveyed site: **Gosling Czubak Engineering Sciences Inc.** — Company — Date of survey: 19 April 2006

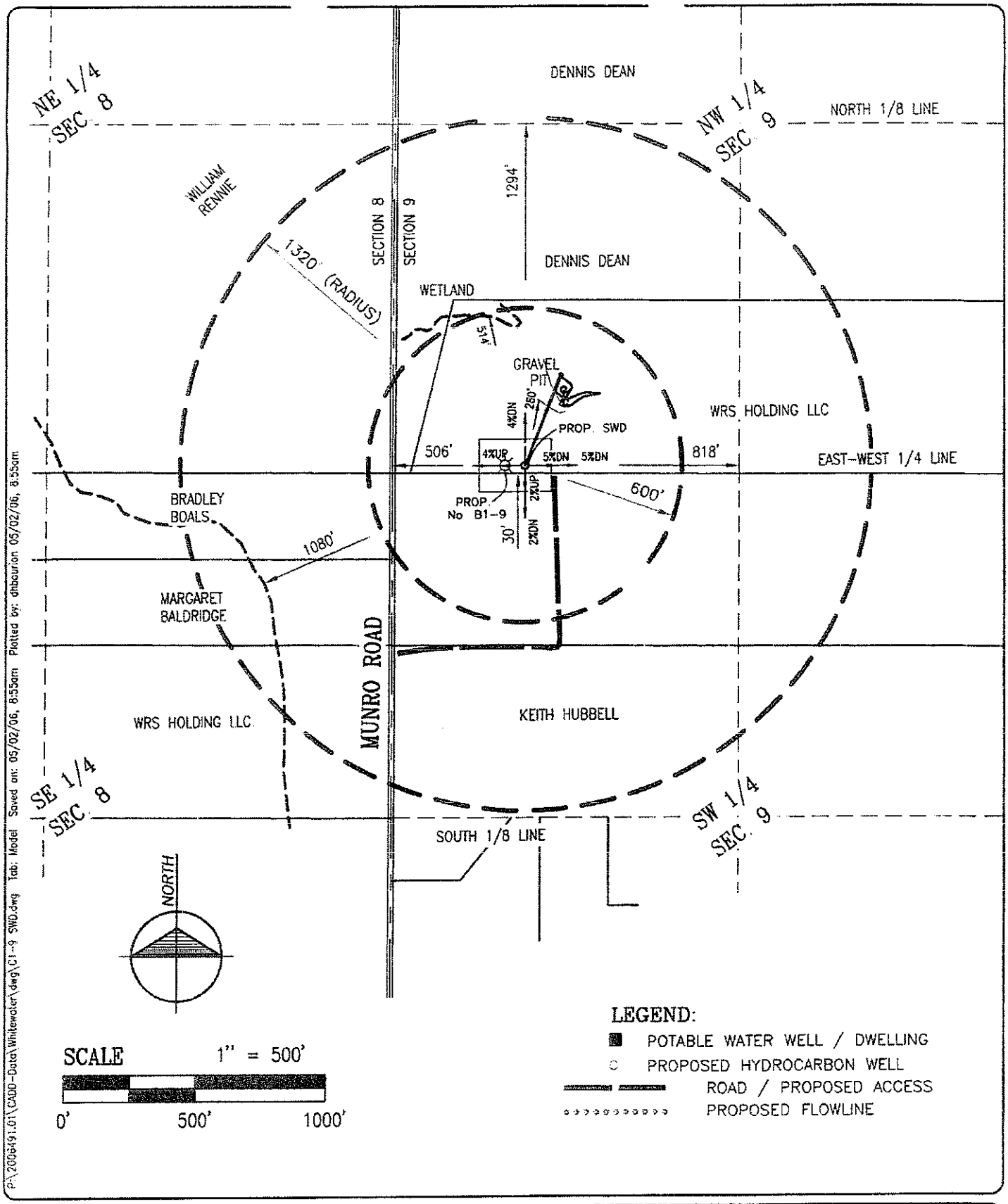
Address: 1280 Business Park Drive, Traverse City, MI 49686 — Phone: (231) 946-9191

I CERTIFY THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

Signature of licensed surveyor (affix seal): David D. Heydlauff — Date: 2 MAY 2006

STATE OF MICHIGAN DAVID D. HEYDLAUFF LAND SURVEYOR No. 32337 LICENSED LAND SURVEYOR

EQP 7200-2 (rev 18/2004) ENCLOSE WITH APPLICATION TO DRILL OR DEEPEN



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Client: O.I.L. ENERGY CORP.

Sheet 1 OF 1

HUBBELL No. B1-9 SWD

30' FROM THE S LINE AND 506' FROM THE W LINE OF THE NW 1/4, SECTION 9, T28N, R9W, WHITEWATER TWP, GRAND TRAVERSE CO., MICHIGAN

Job:	2006.491.01-3
Date:	04-28-2006
Scale:	1" = 500'
Drawn:	DHB
Chk'd.:	DGH
Rev:	

Gosling Czubak engineering sciences inc
1280 Business Park Drive
Traverse City, MI 49686-8607
231-946-9191 800-968-1052
Fax: 231-941-4603

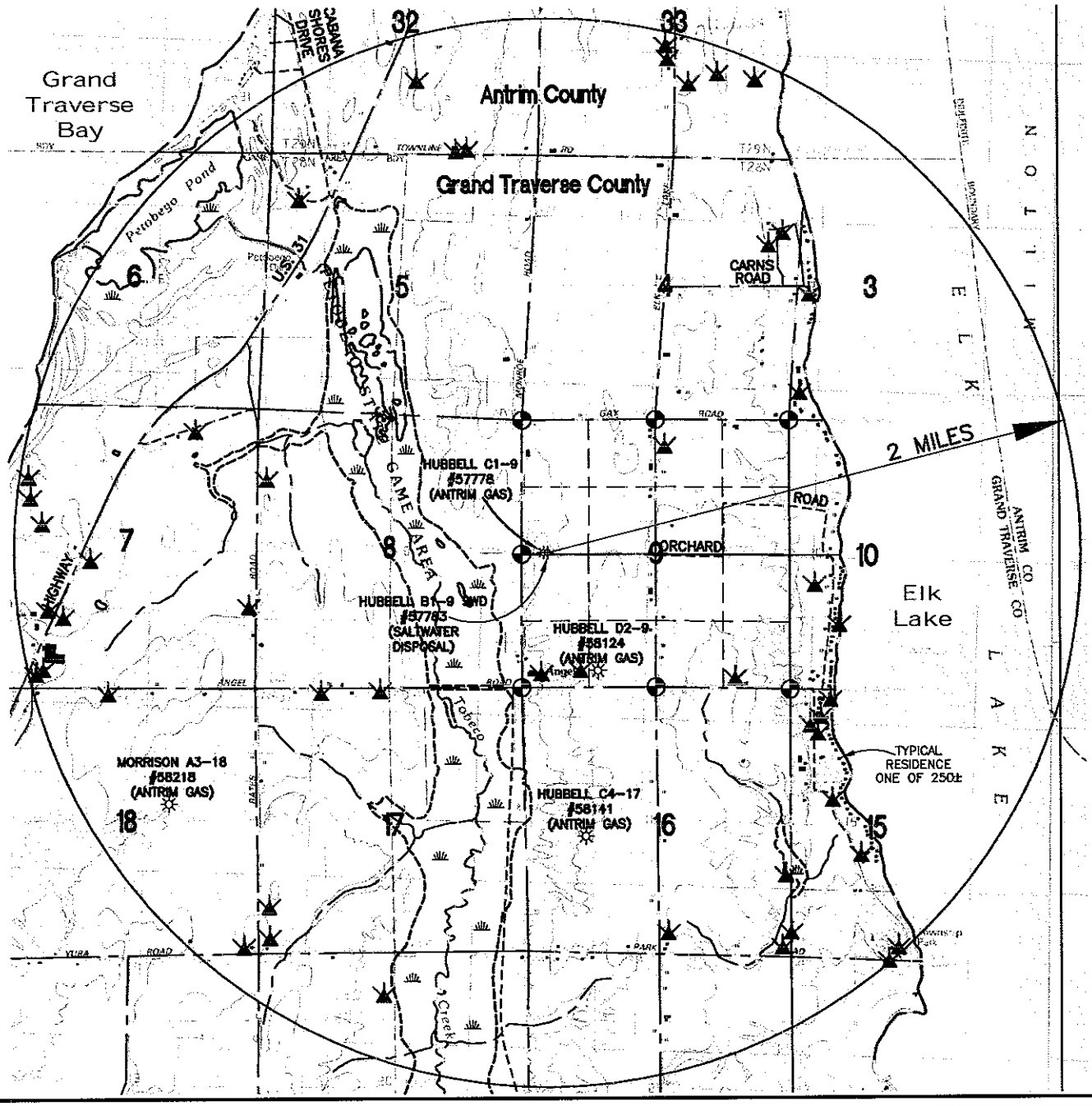
Engineers
Surveyors
Planners
Environmental Services
Landscape Architecture

2-Mile Radius Area of Review

NOTES:

1. OIL & GAS WELL DATA WAS RETRIEVED FROM THE MICHIGAN GSD OIL & GAS ONLINE DATA: HTTP://WW2.DEQ.STATE.MI.US/MIR/ USING THE WELL SEARCH FOR T28N-R9W. THIS DATA WAS FIELD VERIFIED.
2. WATER WELL DATA AT 1/4 MILE IS FROM FIELD OBSERVATION; AT 2 MILES IS FROM THE DEQ WEBSITE HTTP://WELLVIEWER.RSGIS.MSU.EDU/START.HTM.
3. THERE ARE NO RESIDENCES WITHIN 1/4 MILE. RESIDENCES WITHIN 2 MILES ARE SHOWN FROM THE U.S.G.S. QUAD MAP.
4. NAMES AND ADDRESSES AT 1/4 MILE ARE FROM THE GRAND TRAVERSE COUNTY WEBSITE: HTTP://GIS.CO.GRAND-TRAVERSE.MI.US/GIS/MAPFRAME.CFM?MAPTOPIC=DEFAULT USING THE 2007 ACTIVE G.I.S. SEARCH.

= WATER WELL = RESIDENCES (TYPICAL) = EXISTING GAS WELL



P:\2008491.01\CADD-Data\O.I.L. Energy Corporation Surveys\dwg\2 Mile Radius AOR Plan.dwg Tab: 2 Mile Radius Plan Saved by: wwanderson 08/25/08, 10:01am Plotted by: wwanderson 08/25/08, 1:42pm

Client: O.I.L. Energy Corporation

Sheet 1 of 2

Hubbell No. B1-9 SWD

SW 1/4 OF THE NW 1/4 OF SECTION 9, T 28 N, R 9 W, WHITEWATER TOWNSHIP, GRAND TRAVERSE COUNTY, MICHIGAN

Job No:	2008.491.01
Date:	07/25/2008
Scale:	1" = 3000'
Drawn:	W.W.A.
Chk'd:	J.F.K.
Rev:	

Gosling Czubak engineering sciences Inc
1280 Business Park Drive
Traverse City, MI 49686-8607
231-946-9191 800-968-1062
Fax: 231-941-4603

• Engineers
• Surveyors
• Environmental Services
• Landscape Architecture

DEQ

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY - OFFICE OF GEOLOGICAL SURVEY

ENVIRONMENTAL IMPACT ASSESSMENT FOR MINERAL WELLS AND SURFACE FACILITIES

To be submitted with an application for a well permit pursuant to Part 625, 1994 PA 451, as amended (The Act) or prior to construction of associated surface facilities located more than 300 feet from the proposed well.

Check all boxes and fill in all blanks that apply to the proposed well(s) or proposed surface facility.

Submit a *Soil Erosion and Sedimentation Control Plan* (EQP 7200-18) for each drill site, surface facility and flowline identified in the EIA.

This EIA is for (check one)

- ☒ Well only. Complete Parts A, B, D, E, and F
- ☐ Surface facility only (to be constructed more than 300 feet from the well). Complete Parts A1, A2, C, D, E, and F
- ☐ Well and surface facility. Complete all Parts.

A. PROJECT DESCRIPTION

1. Applicant

O.I.L. Energy Corp.

2. Well name and number

Hubbell B1-9 SWD, existing permit # 57783

3. Well type

- ☐ Artificial brine production well
- ☐ Natural brine production well
- ☐ Test well greater than 250' deep or penetrating below deepest freshwater aquifer
- ☐ Blanket test well(s) Number of proposed wells __ Anticipated maximum depth _____
- ☐ Processed brine disposal well
- ☐ Single-source, non-commercial, waste disposal well
- ☒ Multi-source commercial non-hazardous waste disposal well
- ☐ Multi-source commercial hazardous waste disposal well
- ☐ Storage well

4. ☐ Yes ☒ No Is this well a replacement for an existing well?

If Yes, list

- Existing well name and number
- Current owner
- Existing well type and status
- Existing well location
- Reason for replacement
- Disposition of existing well

5. ☒ Yes ☒ No Is this well a reentry of an existing well?

If Yes, list

- Existing well name and number Hubbell B1-9 SWD
- Current owner O.I.L. Energy Corp.
- Existing well type and status Existing SWD, on-line and used as area Antrim wells are tested.

Reason for reentry Application is for a conversion of the existing permit.

6. ☐ Yes ☒ No Is the well expected to encounter hydrogen sulfide (H_2S)?

If Yes, list formations expected to contain H_2S and anticipated depths to tops of formations

7. ☐ Yes ☒ No Is the well expected to encounter oil or gas?

If Yes, list formations expected to contain oil or gas and anticipated depths to tops of formations

8. ☐ **Yes** ☒ **No** **Will the well be drilled from an existing drill pad?**
If Yes, list well name, number, permit number and status of all existing wells on the drill pad (if no wells, write "none")
Well is drilled and has been used for Antrim brine disposal from area wells.

Show proposed well and all existing wells on accompanying scale map identified as applying to Part A1 of the EIA.

B. DRILLSITE

1. **Drill site access route dimensions** N.A. feet x _____ feet.
Provide a detailed description of topography, drainage, soil type(s), direction and percentage of slopes, land cover and present land use for the drill site access route. Show route on accompanying scale map labeled **Part B1**. Already drilled.

2. **Drill site dimensions** N.A. feet x _____ feet.
Provide a detailed description of topography, drainage, soil types(s), direction and percentage of slopes, land cover and present land use for the drill site. Show well site on accompanying scale map labeled **Part B2** Already drilled.

NOTE: If any "Yes" box in items B3, B4, B5, B6, B7 or B8 is checked, the corresponding feature(s) must be identified on an accompanying scale map identified as applying to Part B of the EIA.

3. ☐ **Yes** ☒ **No** **Are drain tiles present on the drill site?**
If Yes, how they will be handled if they are encountered?

4. **Are any of the following located within 600 feet of the proposed wellhead?**
- ☒ Yes ☐ No Buildings
- ☐ Yes ☒ No Domestic fresh water wells
- ☒ Yes ☐ No Public roads
- ☐ Yes ☒ No Railroads
- ☒ Yes ☐ No Power lines
- ☒ Yes ☐ No Pipelines
- ☒ Yes ☐ No Other man-made features (list individual features)

Buildings will be located on-site once CPF construction is complete.
Munro Road and it's utilities (power line) are approximately 506' to the West.
The well is located at our future Central Processing Facility so there are gathering lines in the vicinity.
Central Processing Equipment and buildings exist/will exist on location.
***See drawing and supplemental plat enclosed.

5. **Are any of the following located within 800 feet of the proposed wellhead?**
- ☐ Yes ☒ No Type IIB public water wells Type II is a non-community water supply with ≥ 15 service connections or ≥ 25 individuals for not less than 60 days per year.
- ☐ Yes ☒ No Type III public water wells Type III is a public water supply which is neither Type I nor type II.

6. **Are any of the following located within 1320 feet of the proposed wellhead?**
- ☐ Yes ☒ No Surface waters and other environmentally sensitive areas
- ☐ Yes ☒ No Floodplains associated with surface waters
- ☒ Yes ☐ No Wetlands, as identified by sections 30301 to 30323 of the Act
- ☐ Yes ☒ No Natural rivers, as identified by sections 30501 to 30515 of the Act
- ☐ Yes ☒ No Threatened or endangered species as identified by sections 36501 to 36507 of the Act

7. **Are any of the following located within 2000 feet of the proposed wellhead?**
☐ Yes ☒ No Type I public water wells
Type I is a community water supply with year-round service, ≥ 15 living units or ≥ 25 residents
☐ Yes ☒ No Type IIA public water wells Type II is a non-community water supply with ≥ 15 service connections or ≥ 25 individuals for not less than 60 days per year.

8. ☐ **Yes** ☒ **No** **Are Great Lakes shorelines located within 1500 feet of the proposed wellhead?**

9. ☐ **Yes** ☐ **No** **Will fresh water be used to drill this well?**
If Yes, will the water be supplied from
☐ A "permanent" water well, to be retained after final completion OR used for drinking water (to be drilled and installed pursuant to Part 127 of 1979 PA 368, as amended) **OR**
☐ A "temporary" water well, to be plugged upon final completion and not used for drinking water **OR**
☐ Another source (identify)
If No, identify the drilling fluid to be used. N.A. Well is drilled and completed.

10. **Drilling fluid pit location and handling and disposal of drill cuttings, muds and fluids**
Anticipated depth to groundwater N.A. Depth determined by ____
Pit type
☐ On site in-ground pit. Anticipated dimensions: L ___ W ___ D ___
Show proposed pit location on accompanying scale map labeled **Part B10**.

☐ Remote in-ground pit. Anticipated dimensions: L ___ W ___ D _____
Attach approval of landowner and show remote pit location on accompanying scale map labeled **Part B10**
☐ On-site steel tanks with no in-ground pits (complete 10a and 10d below, do not complete 10b and 10c)

a. ☐ **Yes** ☐ **No** **Will the well be drilled into or through bedded salt deposits?**
If Yes,
☐ Yes ☐ No Will the drill cuttings contain solid salt?
If Yes, describe plans for handling and disposing of drill cuttings.

b. ☐ **Yes** ☐ **No** **Will the drilling fluid pit contents be solidified after drilling?**
If Yes, identify the pit solidification contractor and pit solidification method.

c. ☐ **Yes** ☐ **No** **Will the drilling fluid pit contents be removed after drilling?**
If Yes, identify the site for disposal of the removed material

d. ☐ **Yes** ☐ **No** **Will any pit fluid be disposed by a licensed liquid waste hauler?**
If Yes, identify the waste hauler.

If No, describe disposal plans for pit fluids.

C. SURFACE FACILITY

1. ☐ **Yes** ☐ **No** **Will the well have associated surface facilities?**
   If No, Do not complete the remainder of Part C
   If Yes,
   ☐ **Yes** ☐ **No** **Does a surface facility currently exist?**
   If Yes, show facility location relative to the wellhead on a scale map labeled Part C1. Do not complete the remainder of Part C.
   If No,
   ☐ **Yes** ☐ **No** **Has a location for the surface facility been chosen?**
   If Yes, complete Parts C2 through C10
   If No, at least 60 days prior to beginning construction, submit an EIA for the Surface Facility (this form), a facility plan, and a Soil Erosion and Sedimentation Control Plan (EQP 7200-18) to the Office of Geological Survey District Supervisor.

2. ☐ **Yes** ☐ **No** **Is the proposed surface facility site more than 300 feet from the wellhead?**
   If Yes, complete Parts C3 through c10 and submit a map showing the location of the surface facility site relative to the wellhead.
   If No, do not complete the remainder of Part C.

3. **Dimensions of surface facility access road:** _____feet x _____feet.
   Describe the topography, drainage, soil type(s), direction and percentage of slopes, land cover and present land use:

4. **Dimensions of surface facility site:** _____feet x _____feet.
   Describe the topography, drainage, soil type(s), direction and percentage of slopes, land cover and present land use:

NOTE: If any "Yes" box in items C5, C6, C7, C8, C9, or C10 is checked, the corresponding feature(s) must be identified on an accompanying scale map identified as applying to the appropriate section of Part C of the EIA.

5. ☐ **Yes** ☐ **No** **Are drain tiles present on the proposed surface facility site?**
   If Yes, discuss how they will be handled if they are encountered?

6. **Are any of the following located within 600 feet of the proposed surface facility site?**
   ☐ Yes ☐ No Buildings
   ☐ Yes ☐ No Domestic fresh water wells
   ☐ Yes ☐ No Public roads
   ☐ Yes ☐ No Railroads
   ☐ Yes ☐ No Power lines
   ☐ Yes ☐ No Pipelines
   ☐ Yes ☐ No Other man-made features (list individual features)

7. **Are any of the following located within 800 feet of the proposed surface facility site?**
   ☐ Yes ☐ No Type IIB public water wells Type II is a non-community water supply with ≥ 15 service connections or ≥ 25 individuals for not less than 60 days per year.
   ☐ Yes ☐ No Type III public water wells. Type III is a public water supply which is neither Type I nor type II.

8. **Are any of the following located within 1320 feet of the proposed surface facility site?**

☐ Yes ☐ No Surface waters and other environmentally sensitive areas
☐ Yes ☐ No Floodplains associated with surface waters
☐ Yes ☐ No Wetlands, as identified by sections 30301 to 30323 of the Act.
☐ Yes ☐ No Natural rivers, as identified by sections 30501 to 30515 of the Act
☐ Yes ☐ No Threatened or endangered species as identified by sections 36501 to 36507 of the Act

9. **Are any of the following located within 2000 feet of the proposed surface facility site?**

☐ **Yes** ☐ **No** Type I public water wells Type I is a community water supply with year-round service, ≥ 15 living units or ≥ 25 residents

☐ **Yes** ☐ **No** Type IIA public water wells Type II is a non-community water supply with ≥ 15 service connections or ≥ 25 individuals for not less than 60 days per year.

10. ☐ **Yes** ☐ **No** **Are Great Lakes shorelines located within 1500 feet of the proposed surface facility site?**

D. FLOWLINE

☒ **Yes** ☐ **No** **Will the well have an associated flow line?**

If Yes,

Flow line rout dimensions 2400 feet x 10

Show flow line route from well to the surface facility, junction with an existing flowline or gathering system, on a scale map labeled **Part C2**.

Anticipated maximum operating pressure (psig): USEPA permit maximum of 552 psig.

Describe leak detection program, including schedules of periodic pressure testing and periodic flowline patrols.

Flowline will be maintained per MDEQ regulations, pressure tested every three years.

Flow line material: SDR 11 (size TBD)

Describe the topography, drainage, soil type(s), direction and percentage of slopes, land cover and present land use along the flow line route. The line will travel through an existing cherry orchard. The route is fairly level with slopes less than 5% There is no apparent drainage pattern but eventually would drain toward the West. The soil is a sandy loam.

☒ **Yes** ☐ **No** **Will the flowline be buried?**

If Yes

Burial depth: 4 feet

Describe flowline route marking scheme.

None at this time.

If No, describe measures to protect flowline from vehicular damage.

Flowline route is along all private owners and through a cherry orchard. A map of the route will be on hand at Cherry Blossom LLC and another given to the owners of the other privately owned land (all related to management of Cherry Blossom LLC).

E. MITIGATION OF IMPACTS FROM DRILLING AND/OR OPERATION

Describe measures to be taken to protect environmental and/or land use values at the well/surface facility sites(s)

The well is currently permitted as a Part 615 disposal well by the USEPA and the MDEQ. The Whitewater 9 CPF is an approved CPF location.

F. CERTIFICATION

"I state that I am authorized by said applicant to prepare this document. It was prepared under my supervision and direction. The facts stated herein are true, accurate and complete to the best of my knowledge."

Ben Croftchik — Name and title (printed or typed)

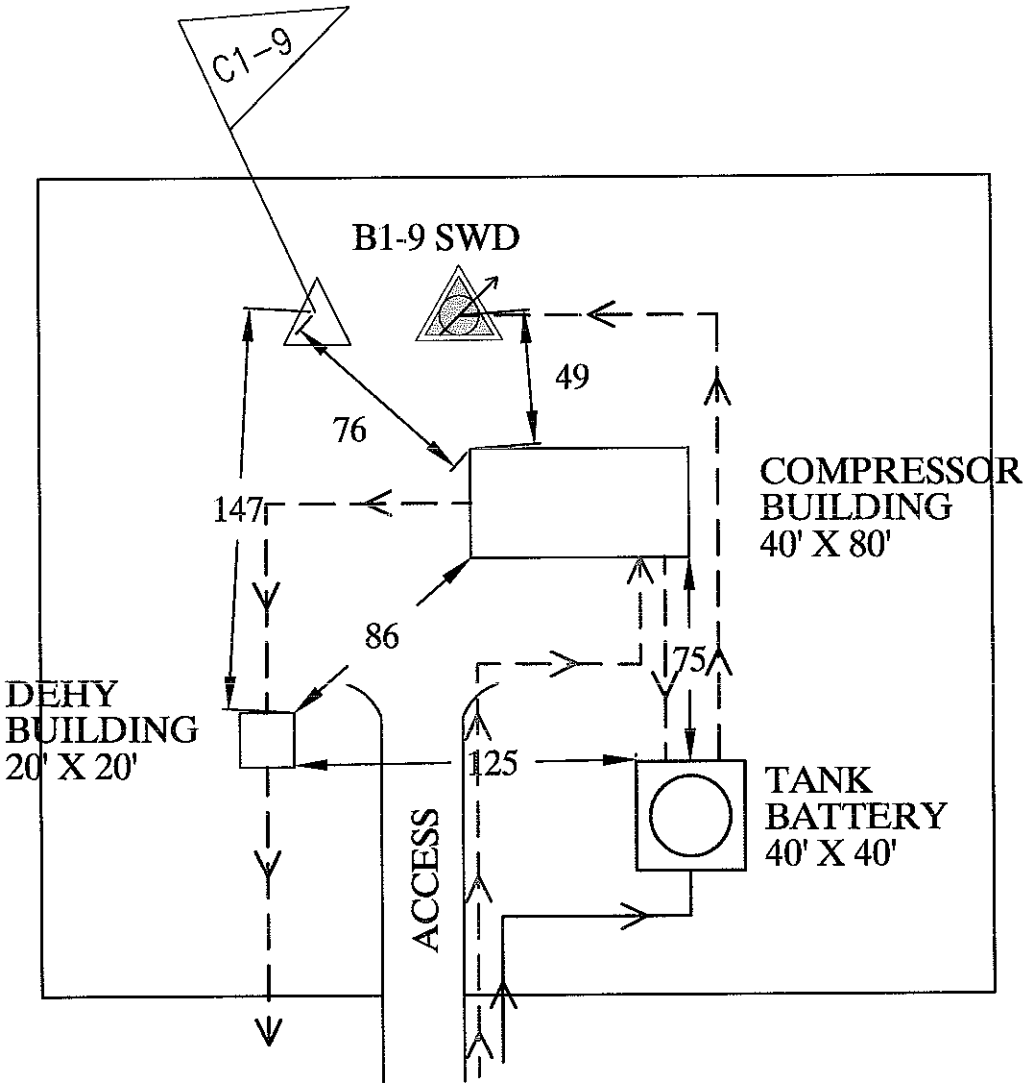
Authorized Signature

3/2/09 — Date

Enclose with *Application For Permit To Drill*

MINERAL WELL APPLICATION
PART B, C & C2 ATTACHMENT

WHITEWATER 9 CPF
WHITEWATER TOWNSHIP
GRAND TRAVERSE COUNTY
T28N-R9W, SECTION 9



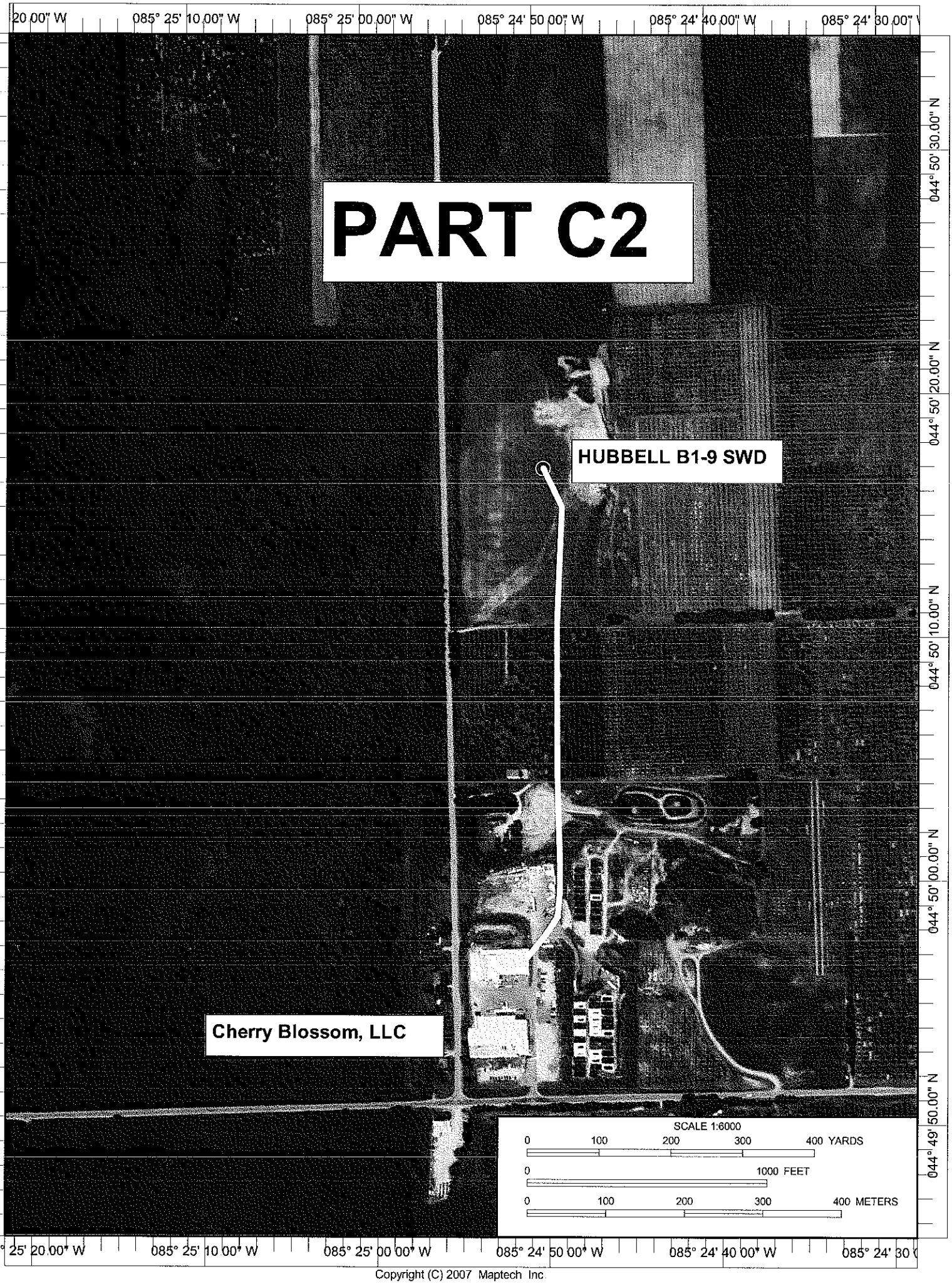
— — — FLOWLINE ANTRIM GAS (READY FOR SALES)

— — — FLOWLINE ANTRIM GAS AND WATER (FROM PRODUCTION WELLS)

— — — FLOWLINE ANTRIM WATER (AFTER SEPERATORS AND READY FOR DISPOSAL)

——— FLOWLINE FRUIT WASH WATER (DEDICATED LINE FROM CHERRY BLOSSOM LLC)

BSC021609
OIL ENERGY CORP.



DEQ MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY – OFFICE OF GEOLOGICAL SURVEY

SOIL EROSION & SEDIMENTATION CONTROL PLAN

By authority of Part 91, and 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

☒ Part 615 Oil/Gas Well ☐ Part 625 Mineral Well

1 Name and address of applicant
O.I.L. Energy Corp
954 Business Park Drive
Suite 5
Traverse City, MI. 49686
Phone: (231)933-3600 Fax: (231) 941-8386

2 Well or project name:
Hubbell B1-9 SWD

3 Well or project location:
Section(s) 9 T28N R9W

4 Name and address of County or local Enforcement Agent (CEA)
Kevin P McElyea
Drain Commission Office
2650 LaFranier Rd
Traverse City, MI. 49686
Phone: (231)995-6042 Fax: (231) 995-6052

5 Township
Whitewater

6 County
Grand Traverse

7 Date earth changes expected to start
Within 90 days of permit issuance

8 Date of expected completion
Within one year of issuance

9 Name and address of person responsible for earth change:
O.I.L. Energy Corp., Attn: Pat Thon
954 Business Park Drive
Suite 5
Traverse City, MI. 49686
Phone: (231)933-3600 Fax: (231) 941-8386

10 Name and address of person responsible for maintenance:
O.I.L. Energy Corp., Attn: Pat Thon
954 Business Park Drive
Suite 5
Traverse City, MI. 49686
Phone: (231)933-3600 Fax: (231) 941-8386

11 Send copies of supplemental plat required by Part 615, R 324.201(2)(b) or R 324.504(4), and this form and all attachments, to CEA

Date sent to CEA 5-26-06

EARTH CHANGE ACTIVITIES

12 Project description: (Project activities may be permitted sequentially)

a. Number of well sites 1, 1.26 acres
b. Number of surface facility sites ____, ____ acres
c. New access roads Existing ____ feet, ____ acres
d. Flow line(s) trenched in off well site* 75 feet, .03 acres
e. Flow line(s) plowed in off well site* ____ feet, ____ acres
*Contact CEA for fee schedule

13 Describe sites for which permits are being sought under Part 301 (Inland Lakes & Streams) none
Describe sites for which permits are being sought under Part 303 (Wetlands) none
List file numbers if known ____

14 Areas requiring control structures

Will earth changes occur in areas with slopes of 10% or greater; areas where runoff water is likely, such as runs greater than 500' of moderate slope (5% to 10%), narrow valley bottoms, etc ; areas within 500' of a lake or stream; or other areas where sedimentation to a wetland or drainage way may occur?

☐ Yes Attach detail map at scale of 1"=200' or larger, with contour lines at a minimum of 20' intervals OR percent slope descriptions
Also indicate any of the following erosion control structures that will be utilized Identify location on map and attach detail plan
Indicate on plan whether erosion control structures are temporary or permanent.
☐ Diversions ☐ Culverts ☐ Sediment basins ☐ Silt fences ☐ Rip-rap ☐ Berms ☐ Check dams ☐ Other ____

☒ No

15 Site restoration

☒ Topsoil will be segregated from subsoil and stockpiled OR ☐ No topsoil on site
☒ Recontour and revegetate as soon as weather permits Seed mix Michigan DNR mix
☐ Describe other proposed methods of restoration ____

16 Application prepared by (name) Patrick J. Thon
Signature
Date 5-26-06

FOR USE OF COUNTY OR LOCAL ENFORCING AGENT

INSTRUCTIONS TO COUNTY OR LOCAL ENFORCMENT AGENT: Return this form to the applicable field or district office of the Office of Geological Survey within 30 days of receipt. Explain reasons for recommendation or disapproval and conditions required for approval. Include copies of any revisions to the plan

17 Comments

☐ Conducted on site inspection Date ____
☐ Inspected site with representative of applicant Date ____

18 ☐ Approved ☐ Disapproved

CEA signature ____ Date ____

DEQ

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY - OFFICE OF GEOLOGICAL SURVEY

INJECTION WELL DATA

Supplemental information for drilling or converting to an injection 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.

Applicant
O.I.L. Energy Corp
954 Business Park Dr , Suite 5
Traverse City, MI. 49686

Well name and number
Hubbell B1-9 SWD

INSTRUCTIONS: Complete all portions of form which apply to this well. **Attach supplemental documents as needed.**

1. File a separate plat which identifies the depth and location of this proposed well and all producing, abandoned, or drilling wells within 1320 feet of it. Also identify the permittee of each producing well within 1320 feet of this proposed well
2. Enclose a copy of the completion reports for all wells and the plugging records for all plugged wells shown on the plat. Identify what steps will be necessary to prevent injected fluids from migrating up or into inadequately plugged or completed wells.
3. If this is an existing well to be converted to an injection well, enclose this form with an Application To Change Well Status (form EQP 7200-6). Also enclose a copy of the completion report and geologic description and electric logs for this well
4. Injection wells (except for gas storage) must receive a mechanical integrity test every 5 years pursuant to Rule 324.805

5. Type of fluids to be injected
☒ Brine ☐ Natural Gas (omit #7 & #12)
☐ Fresh Water (omit #12) ☒ Other Fruit Wash Water/Brine

6. Maximum expected injection rate 6000 bbl

7. Specific gravity of injected fluid 1.023 and 1.113 as tested

8. Maximum expected injection pressure 552 psi

9 Maximum bottom hole injection pressure 828 psi
Show calculations .433 psi/ft x 1913' = 828 psi

10 Fracture pressure of confining formation 1446 psi
Show calculations 0.8 x 1808 ft. = 1446 psi

11 Fracture pressure of injection formation 1530 psi
Show calculations 0 8 x 1913 ft = 1530 psi

12. Chemical analysis of representative samples of injected fluid
Specific conductance SEE ATTACHMENTS

Cation (mg/l)		**Anions** (mg/l)	
Calcium		Chloride	
Sodium		Sulfate	
Magnesium		Bicarbonate	
Potassium			

What was the source of this representative sample? Hubbell C1-9 and from a tank at Cherry Blossom LLC

13 Is this well to be completed in a potential or previous oil or gas producing formation? ☐ Yes ☒ No
If yes provide a list of all offset permittees and proof of service of notification of this application to all permittees by certified mail.

14 Attach proposed plugging and abandonment plan. OR
Briefly list depths volumes and types of cement and mechanical plugs and depths where casing will be recovered
SEE ATTACHMENT

Schematic of wellbore construction

Complete bottom of diagram as needed to conform with proposed construction (e.g show rat hole below casing, open hole completion, packer loc etc.)

Fresh water fms., name & depth
DRIFT
385 FEET

Base of freshwater, name & depth
DRIFT 385 FEET

Surface casing 8 5/8 "x 494 '
Amount of cement 275 sacks
T O C. 0 feet

Intermediate casing (if applicable)
N.A. 'x N.A. '
Amount of cement N.A. sacks
T O C N.A.

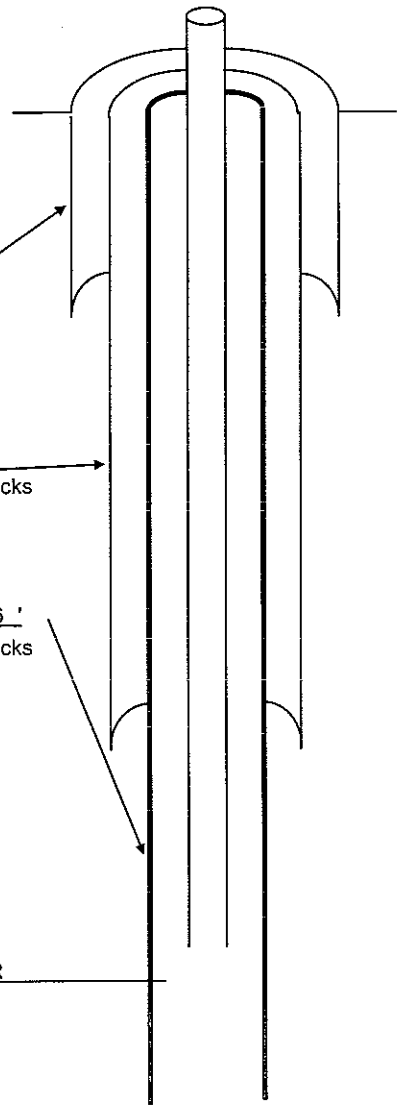
Long string casing 5 1/2 "x 1926 '
Amount of cement 390 sacks
T.O C 0 feet

Confining formation(s) BELL SHALE
Depth to top 1808 FEET
Depth to base 1913 FEET

Injection formation(s) DUNDEE/DET RIVER
Depth to top 1913 FEET
Depth to base 2118 FEET

Tubing 2 7/8 ' x 1908'
Packer Depth 1900'

Bottom TD or PBTD 2118 ft



15. Application prepared by (print or type): Ben Croftchik

Date 3/2/09

EQP 7200-14 (rev. 8/2004) Enclose with *APPLICATION FOR PERMIT TO DRILL* or *APPLICATION TO CHANGE WELL STATUS*

SPL Inc
499 Hughes Dr
Traverse City MI 49686
Phone: 231.947.5777
Fax: 231.947.1456

GENERAL WATER ANALYSIS

WorkOrder T08080219 WRS

Lab ID: T08080219001 Date/Time Received 8/14/2008 13:56 Matrix Water
Sample ID WRS Date/Time Collected 8/14/2008 00:00

Method	Parameters	Results	Analyzed
	ANION		
EPA 310.1	Alkalinity CO32- as CaCO3	ND mg/l	08/15/2008 12:47 by MD
EPA 310.1	Alkalinity HCO3- as CaCO3	ND mg/l	08/15/2008 12:47 by MD
EPA 325.2	Chloride	1470 mg/l	08/18/2008 12:14 by MD
EPA 375.4	Sulfate	564 mg/l	08/15/2008 18:37 by MD
EPA 376.2	Sulfide	ND mg/l	08/16/2008 12:29 by MD
	CATION		
EPA 200.8	Calcium	496 mg/l	08/18/2008 12:36 by JS
EPA 200.8	Magnesium	22 mg/l	08/18/2008 12:36 by JS
EPA 200.8	Potassium	131 mg/l	08/18/2008 12:36 by JS
EPA 200.8	Sodium	390 mg/l	08/18/2008 12:36 by JS
EPA 200.8	Barium	ND mg/l	08/18/2008 12:36 by JS
EPA 200.8	Iron	ND mg/l	08/18/2008 12:36 by JS
	OTHER		
EPA 150.1	pH	4.5 SU	08/15/2008 13:34 by MD
EPA 120.1	Resistivity	1.1 ohm-meter	08/15/2008 12:33 by MD
ASTM D1429	Specific Gravity	1.023	08/15/2008 09:39 by MD
	Total dissolved solids (calculated) =	3073	

SPL Inc
459 Hughes Drive
Traverse City MI 49686
Phone: (231) 947-5777
Fax: (231) 947-7455

GENERAL WATER ANALYSIS

WorkOrder: T07090404 WHITE WATER 9 -

Lab ID: **T07090404001** Date/Time Received: 9/25/2007 16:58 Matrix: Water
Sample ID: **HUBBELL C1-9** Date/Time Collected: 9/24/2007 11:00

Method	Parameters	Results	Analyzed
	ANION		
EPA 310.1	Alkalinity, CO32- as CaCO3	ND mg/l	10/05/2007 13:43 by MD
EPA 310.1	Alkalinity, HCO3- as CaCO3	340 mg/l	10/05/2007 13:43 by MD
EPA 325.2	Chloride	114000 mg/l	10/11/2007 14:28 by MD
EPA 375.4	Sulfate	ND mg/l	10/11/2007 11:17 by MD
EPA 376.2	Sulfide	ND mg/l	10/09/2007 10:33 by MD
	CATION		
EPA 200.8	Calcium	7230 mg/l	10/07/2007 00:00 by JS
EPA 200.8	Magnesium	3860 mg/l	10/07/2007 00:00 by JS
EPA 200.8	Potassium	323 mg/l	10/07/2007 00:00 by JS
EPA 200.8	Sodium	48800 mg/l	10/07/2007 00:00 by JS
EPA 200.8	Barium	43 mg/l	10/07/2007 00:00 by JS
	OTHER		
EPA 150.1	pH	6.0 SU	10/05/2007 10:51 by MD
EPA 120.1	Resistivity	0.054 ohm-meter	10/10/2007 00:00 by TR
ASTM D1429	Specific Gravity	1.113	10/08/2007 12:02 by JS
	Total dissolved solids (calculated) =	174596	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D C 20460

PLUGGING & ABANDONMENT PLAN

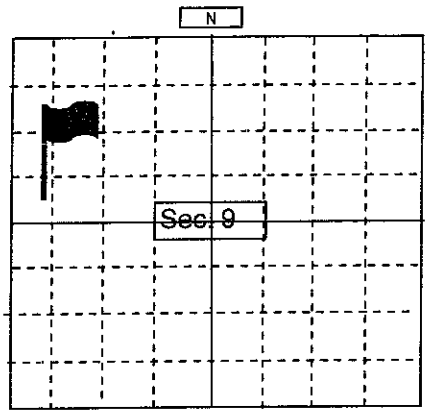
WELL NAME & NUMBER, FIELD NAME, LEASE NAME & NUMBER

HUBBELL B1-9 SWD

NAME, ADDRESS, & PHONE NUMBER OF OWNER / OPERATOR

O I L. Energy Corp
954 Business Park Dr., Suite #5
Traverse City, MI 49636

Locate Well & Outline Unit on Section Plat - 640 Acres



STATE	COUNTY	STATE PERMIT NUMBER
MI	Grand Traverse	57783

SURFACE LOCATION DESCRIPTION

SW 1/4 of SW 1/4 of NW 1/4 of Section 9 Township T28N Range R9W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION & DRILLING UNIT

Surface Location 2618 ft. From (N/S) NORTH Line of Quarter Section
& 506 ft. From (E/W) WEST Line of Quarter Section

TYPE OF AUTHORIZATION

- [x] Individual Permit
- [ ] Rule
- [ ] Area Permit

Number of Wells in Area Permit ____

US EPA Permit Number MI-055-2D-0037

WELL ACTIVITY

- [ ] Class I
  - [ ] Hazardous
  - [ ] Nonhazardous
- [x] Class II
  - [x] Brine Disposal
  - [ ] Hydrocarbon Storage
  - [ ] Enhanced Recovery
- [ ] Class III
- [ ] Class IV

CASING/TUBING/CEMENT RECORD AFTER PLUGGING & ABANDONMENT

Size	Wt (lb/ft) TBG/CSG	Original Amount (CSG)	CSG to be Left in Well	Hole Size	Sacks Cement Used	Type
13 3/8"	Conductor	37'	37'	Driven	Driven	none
8 5/8"	23#	494'	494'	12 1/4"	C to S	Cl A/Lite
5 1/2"	15.5#	1926'	1926'	7 7/8'	C to S	Cl A/Lite

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- [x] Balance Method
- [ ] Dump Bailer Method
- [ ] Two Plug Method
- [ ] Other

CEMENT TO PLUG & ABANDON DATA	Plug # 1	Plug #	Plug # 2	Plug# 3	Plug # 4	Plug #	Plug #
Size of Hole or Pipe in Which Plug Will Be Placed (inches)	4 3/4" &	5 1/2"	5 1/2"	5 1/2"			
Calculated Top of Plug (ft.)	1900'		1650'	0'			
Measured Top of Plug (ft.)	-------		-------	-------			
Depth to Bottom of Plug (ft.)	2118'		1900'	544'			
Sacks of Cement to be Used	27		29	63			
Slurry Volume to be Used (cu. Ft.)	31.92		34.25	74.53			
Slurry Weight (lb./gal.)							
Type of Cement, Spacer or Other Material Used	Class A		Class A	Class A			
Type of Preflush Used	FW		FW	FW			

DESCRIPTION OF PLUGGING PROCEDURE

Pull tubing & packer, TIH to total depth 2118' & circulate 27sx Class A. cement to a depth of 1900' TOOH w/tubing & pick up Cmt. Ret. TIH & set Ret. 1900' Release from Cmt. Ret , circulate 29sx Class A cmt to 1650' Trip up hole to 544' Circulate 63sx Class A cmt to Surface Cut casing off 4' below ground level & weld 1/2" steel plate in stub with permit number welded on it. Back fill & restore location

ESTIMATED COST OF PLUGGING & ABANDONMENT

Cement	$ 700.00	Cast Iron Bridge Plug	$ -
Logging	$ -	Cement Retainer	$ 1,000.00
Rig or Pulling Unit	$ 3,000.00	Miscellaneous	$ 1,300.00
	$ -	Total	$ 6,000.00

CERTIFICATION

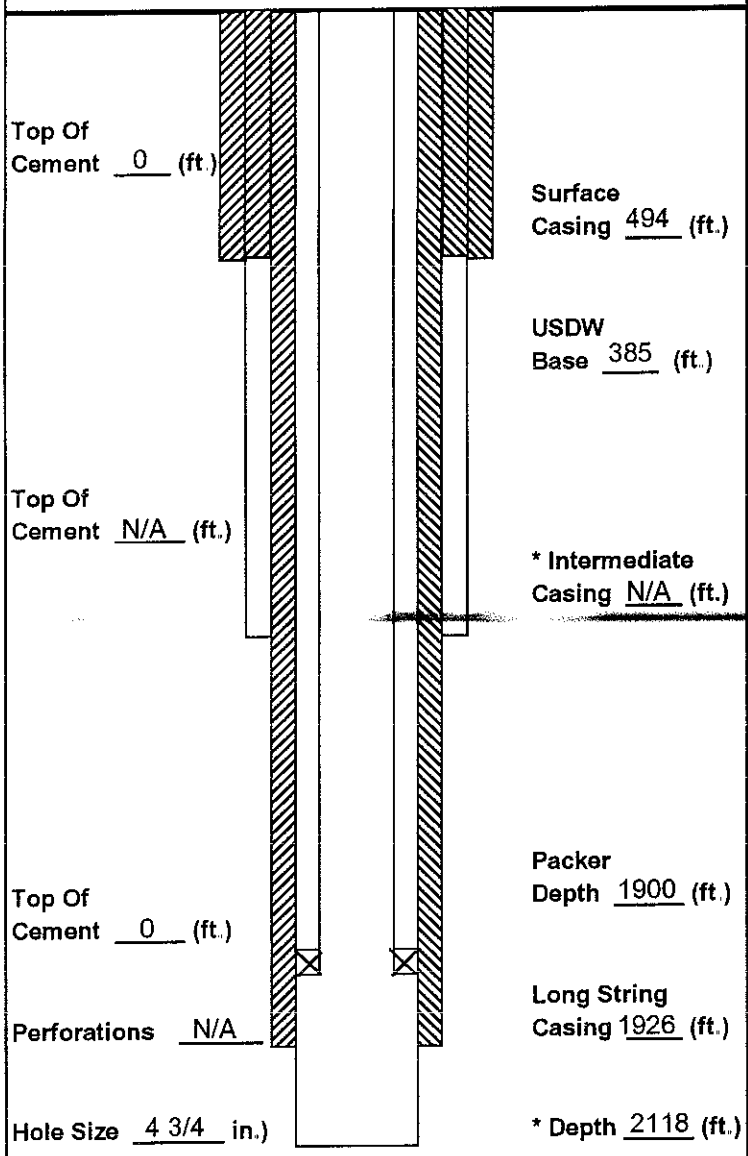
I certify under the penalty of law that I have examined & am familiar with the information submitted in this document & all attachments & that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, & complete I am aware that there are significant penalties for submitting false information, including the possibility of fine & imprisonment. (Ref.40 CFR 144 32)

NAME & OFFICIAL TITLE	SIGNATURE	DATE SIGNED
Michael N. Coy President	Mich N. Coy	8/27/07

EPA Form 7520-14

ORIGINAL WELL CONSTRUCTION DRILLING OPERATION

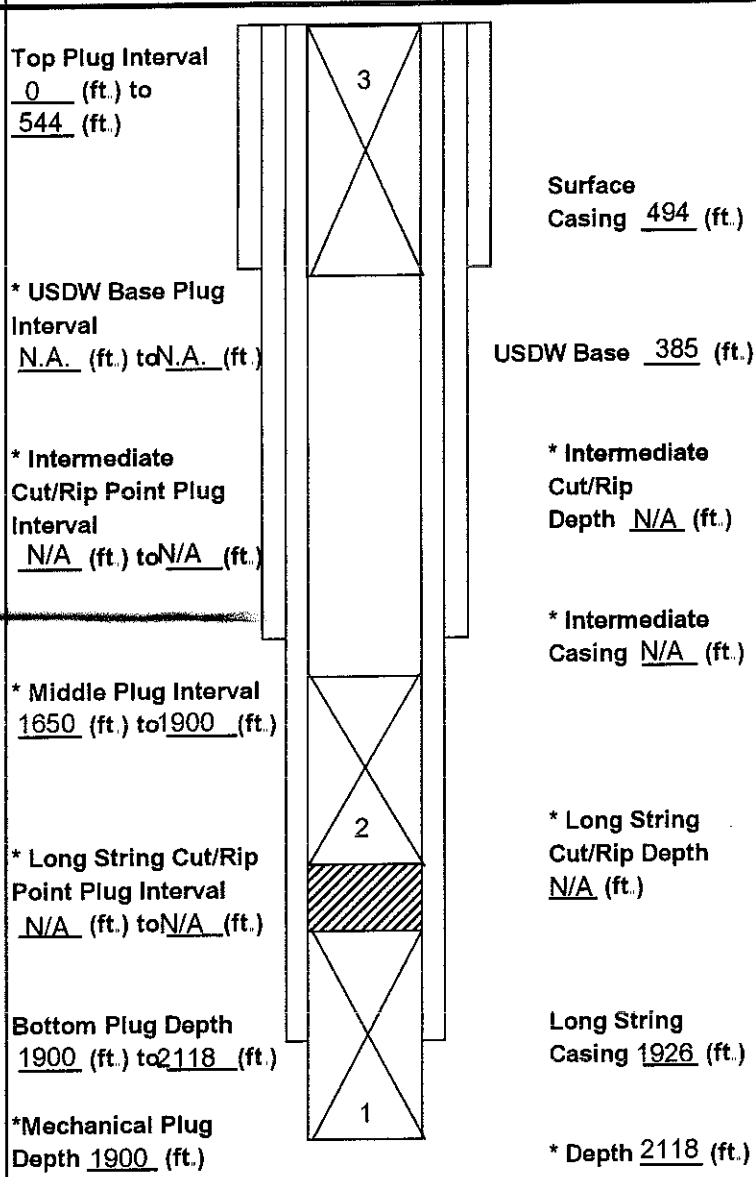
Hubbell B1-9 SWD



** Add Any Additional Information
* May Not Apply

PLUGGING AND ABANDONMENT CONSTRUCTION

Hubbell B1-9 SWD



** Add Any Additional Information
* May Not Apply

LIST OF ALL OPEN AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED

Open Hole/Perforated or Varied Casing	From	To	Formation Name
OPEN HOLE	1926'	2110'	DUNDEE FORMATION
OPEN HOLE	2110'	2118'	DETROIT RIVER ANHYDRITE

O.I.L. ENERGY CORPORATION
ATTACHMENTS TO EPA PERMIT APPLICATION
HUBBELL B1-9 SWD
Class I, Type I, Non-Hazardous Industrial Disposal Well

ATTACHMENT A: AREA OF REVIEW

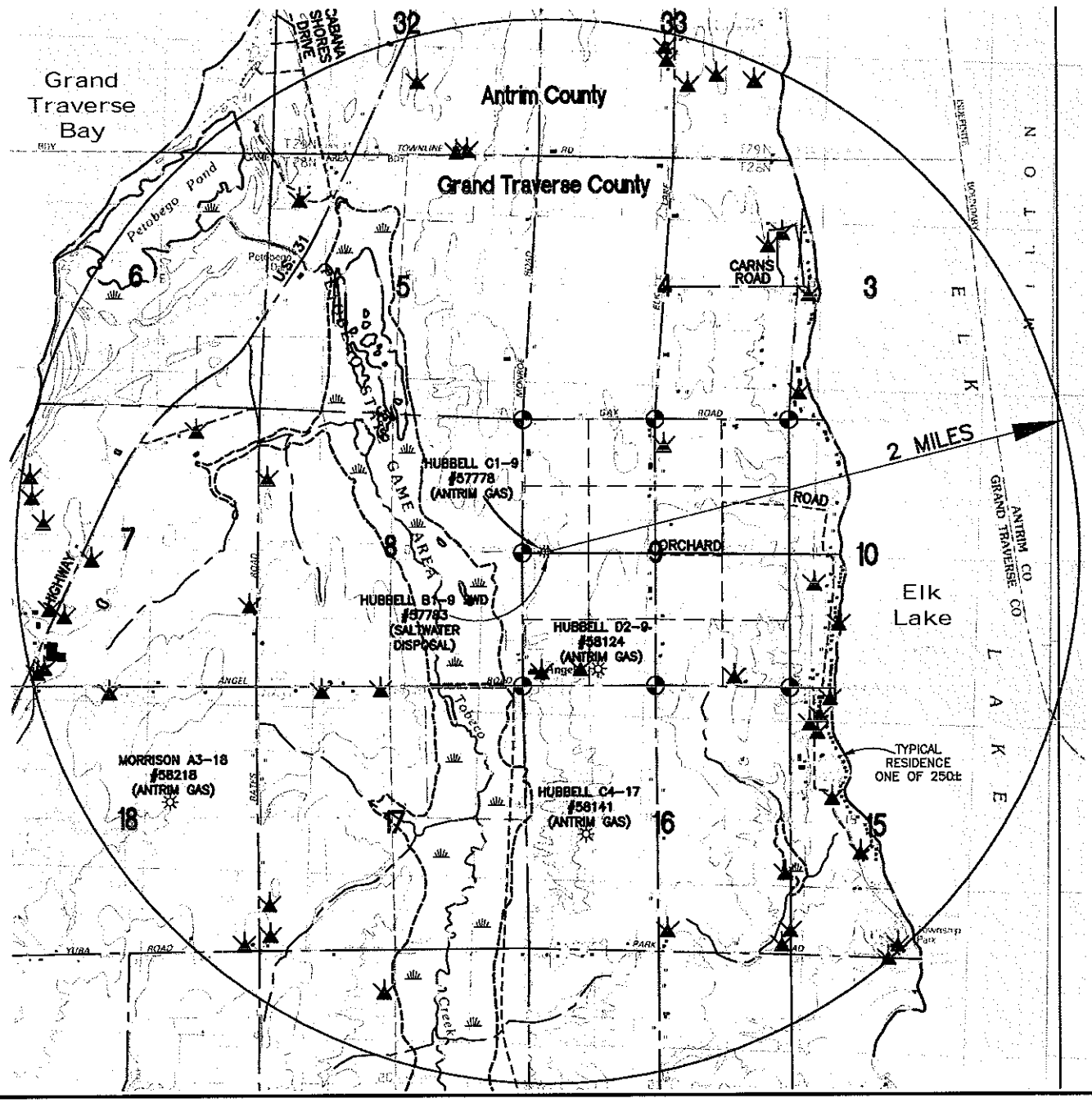
The Area of Review (AOR) is a 2-mile fixed radius from the well bore.

2-Mile Radius Area of Review

NOTES:

1. OIL & GAS WELL DATA WAS RETRIEVED FROM THE MICHIGAN GSD OIL & GAS ONLINE DATA: HTTP://WW2.DEQ.STATE.MI.US/MIR/ USING THE WELL SEARCH FOR T28N-R9W. THIS DATA WAS FIELD VERIFIED.
2. WATER WELL DATA AT 1/4 MILE IS FROM FIELD OBSERVATION; AT 2 MILES IS FROM THE DEQ WEBSITE HTTP://WELLVIEWER.RSGIS.MSU.EDU/START.HTM.
3. THERE ARE NO RESIDENCES WITHIN 1/4 MILE. RESIDENCES WITHIN 2 MILES ARE SHOWN FROM THE U.S.G.S. QUAD MAP.
4. NAMES AND ADDRESSES AT 1/4 MILE ARE FROM THE GRAND TRAVERSE COUNTY WEBSITE: HTTP://GIS.CO.GRAND-TRAVERSE.MI.US/GIS/MAPFRAME.CFM?MAPTOPIC=DEFAULT USING THE 2007 ACTIVE G.I.S. SEARCH.

= WATER WELL = RESIDENCES (TYPICAL) = EXISTING GAS WELL



P:\2008491.01\CADD-Data\O.I.L. Energy Corporation Surveys\dwg\2 Mile Radius AOR Plan.dwg Tab: 2 Mile Radius Plan Saved by: wwanderson 08/25/08, 10:01am Plotted by: wwanderson 08/25/08, 1:42pm

Client: O.I.L. Energy Corporation

Sheet 1 of 2

Hubbell No. B1-9 SWD

SW 1/4 OF THE NW 1/4 OF SECTION 9, T 28 N, R 9 W, WHITEWATER TOWNSHIP, GRAND TRAVERSE COUNTY, MICHIGAN

Job No.:	2008.491.01
Date:	07/25/2008
Scale:	1" = 3000'
Drawn:	W.W.A.
Chk'd:	J.F.K.
Rev.:	

Gosling Czubak engineering sciences, Inc
1280 Business Park Drive
Traverse City, MI 49686-8607
231-946-9191 800-968-1062
Fax: 231-941-4603

• Engineers
• Surveyors
• Environmental Services
• Landscape Architecture

O.I.L. ENERGY CORPORATION
ATTACHMENTS TO EPA PERMIT APPLICATION
HUBBELL B1-9 SWD
Class I, Type I, Non-Hazardous Industrial Disposal Well

ATTACHMENT B: MAPS OF WELL/AREA AND AREA OF REVIEW

The map of the AOR is attached and identified as 2-Mile Radius Area of Review. MDEQ EQP 7200-2 – Record of Well Location is also attached. The AOR map includes locations of water wells, surface water bodies, residences, roads, etc., situated within the AOR (2-mile fixed radius from well bore).

Four (4) Antrim Gas Wells were identified within the AOR and are depicted on the map. No other producing wells, injection wells, abandoned wells, plugged wells, or dry holes were identified within the AOR.

The following information sources were utilized to locate producing wells, injection wells, abandoned wells, plugged wells, and dry holes within the AOR as of August 2008:

- Michigan Online Oil and Gas Information System located at: http://ww2.deq.state.mi.us/mir/
- Mineral Lease Information and DNR Ownership Grand Traverse County, dated 8/21/08, located at: http://www.dnr.state.mi.us/spatialdatalibrary/pdf_maps/mineral_lease_information/grand_traverse_lease_information.pdf

Numerous water wells were identified within the AOR. The following information sources were utilized to locate water wells within the AOR:

- MDEQ Water Well Viewer located at: http://wellviewer.rsgis.msu.edu/viewer.htm

The names and addresses of all owners of record of land within ¼-mile of the facility boundary is depicted and included on the attached Quarter-Mile Radius AOR Map. The names and addresses of land owners are also included on an attached table.

No intake or discharge structures for liquid waste or hazardous waste treatment, storage, or disposal facilities were identified within the AOR.

No known or suspected faults were identified or known to exist within the AOR.

No springs, mines, or quarries were identified or known to exist within the AOR.

2-Mile Radius Area of Review

NOTES:

1. OIL & GAS WELL DATA WAS RETRIEVED FROM THE MICHIGAN GSD OIL & GAS ONLINE DATA: HTTP://WW2.DEQ.STATE.MI.US/MIR/ USING THE WELL SEARCH FOR T28N-R9W. THIS DATA WAS FIELD VERIFIED.
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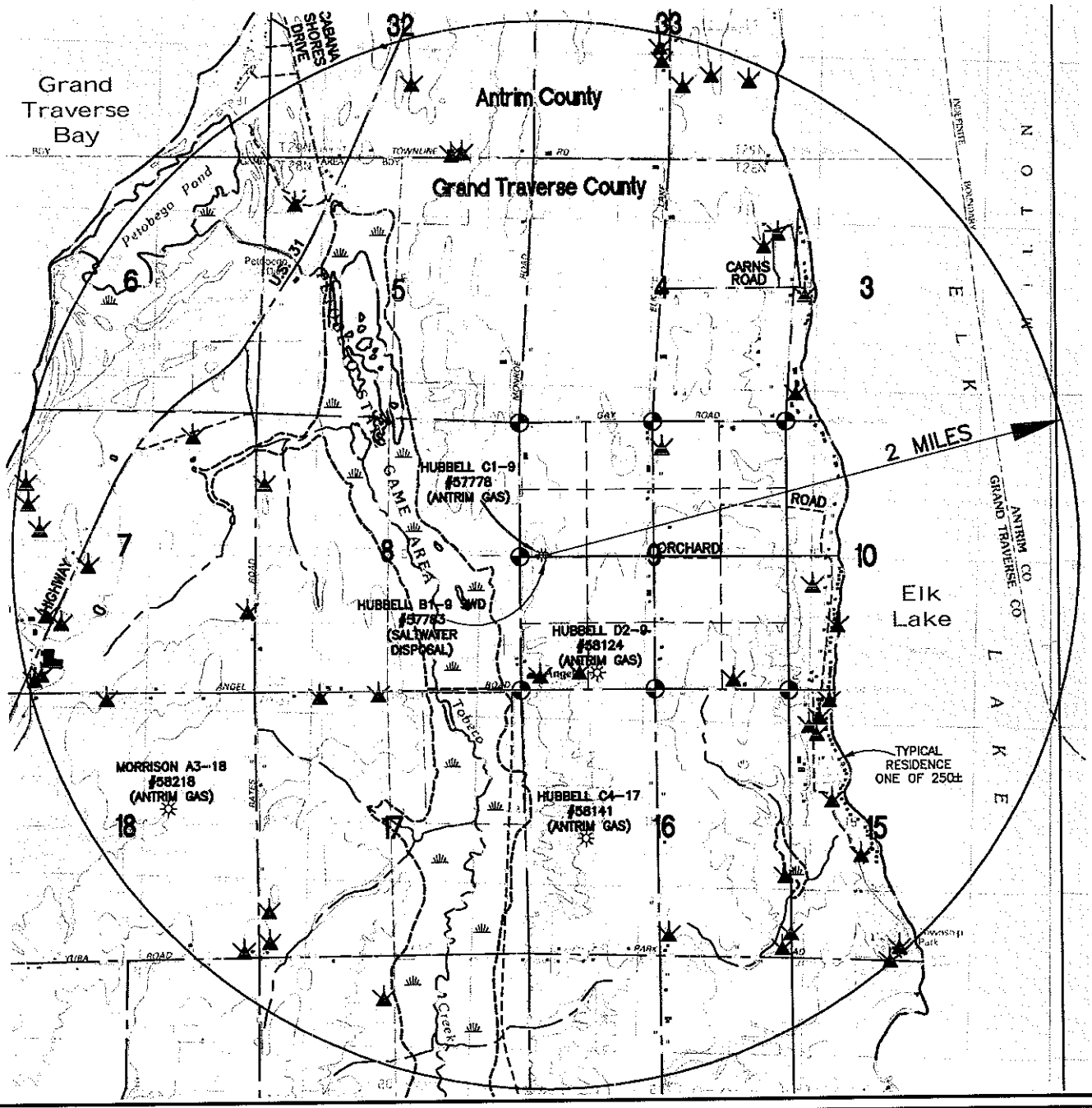
= WATER WELL = RESIDENCES (TYPICAL) = EXISTING GAS WELL



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Client: O.I.L. Energy Corporation

Sheet 1 of 2

Hubbell No. B1-9 SWD

SW 1/4 OF THE NW 1/4 OF SECTION 9, T 28 N, R 9 W, WHITEWATER TOWNSHIP, GRAND TRAVERSE COUNTY, MICHIGAN

Job No.:	2008.491.01
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Chk'd.:	J.F.K.
Rev.:	

Gosling Czubak engineering sciences, Inc.
1280 Business Park Drive
Traverse City, MI 49686-8607
231-946-9191 800-968-1062
Fax: 231-941-4603

• Engineers
• Surveyors
• Environmental Services
• Landscape Architecture

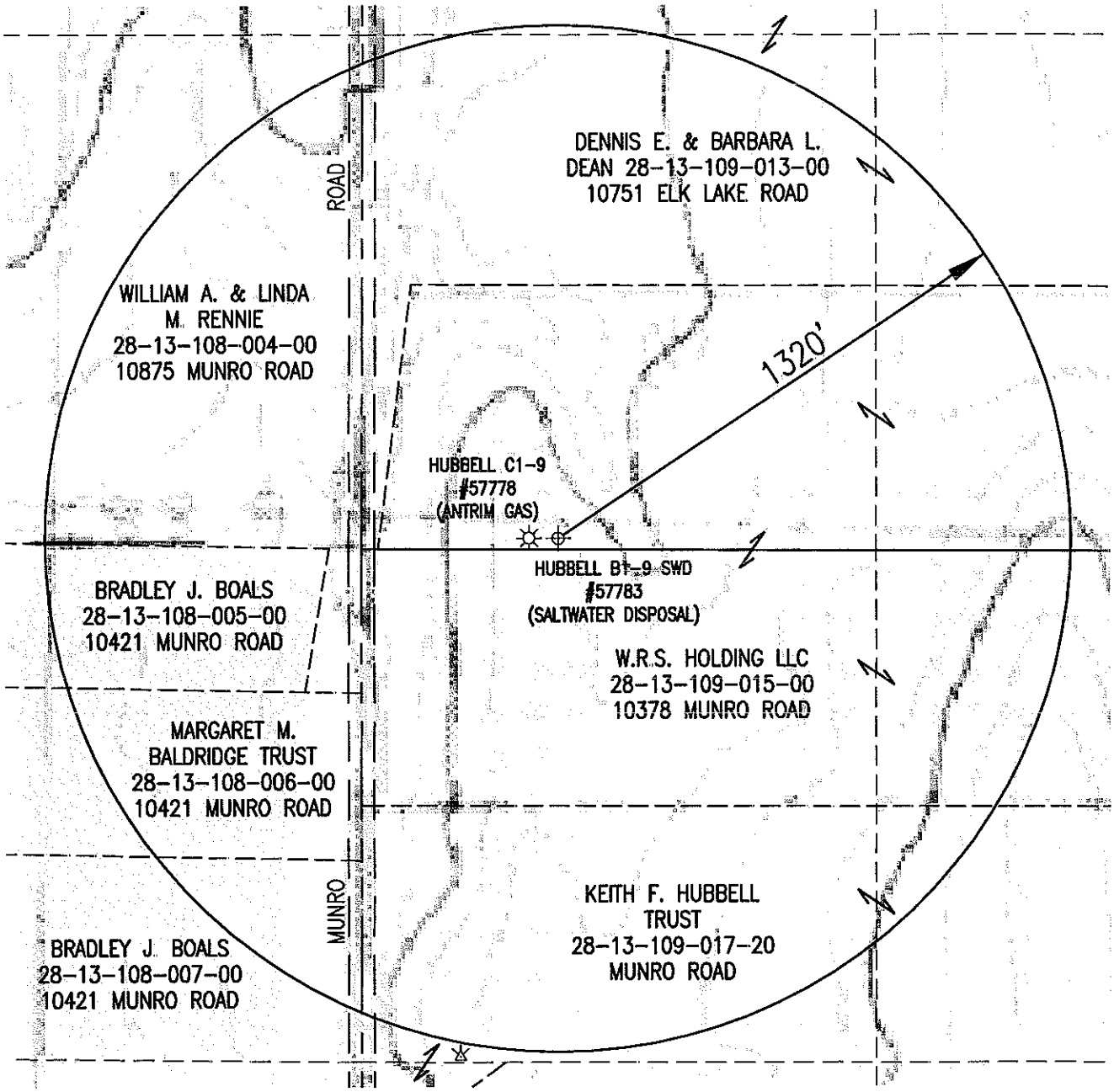
Quarter-Mile Radius Area of Review

- OIL / GAS WELL
- OIL WELL
- GAS WELL
- DRY HOLE
- ABANDONED/PLUGGED OIL WELL
- ABANDONED/PLUGGED GAS WELL
- SALT WATER DISPOSAL WELL
- WATER WELL OF PUBLIC RECORD

SCALE 1" = 400'

0' 400' 800'

NORTH



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Client: O.I.L. Energy Corporation
Hubbell No. B1-9 SWD
SW 1/4 OF THE NW 1/4 OF SECTION 9, T 28 N, R 9 W, WHITEWATER TOWNSHIP, GRAND TRAVERSE COUNTY, MICHIGAN

Sheet 2 of 2

Job No:	2008.491.01
Date:	07/25/2008
Scale:	AS NOTED
Drawn:	W.W.A.
Chk'd:	J.F.K.
Rev:	

Gosling Czubak engineering sciences, inc
1280 Business Park Drive
Traverse City, MI 49686-8807
231-946-9191 800-968-1062
Fax: 231-941-4603

- Engineers
- Surveyors
- Environmental Services
- Landscape Architecture

...RONMENTAL QUALITY - OFFICE OF GEOLOGIC SURVEY GCA#2006.491.01

SURVEY RECORD OF WELL LOCATION

This information is required by authority of Part 615 Supervisor of Wells, or Part 625 Mineral Wells, of Act 451 PA 1994, as amended, in order to obtain a drilling permit.

Applicant: **O.I.L. ENERGY CORP.**

Well name and number: HUBBELL No. B1-9 SWD

1a. Surface location

								Township	County
SW	1/4 of	SW	1/4 of	NW	1/4 of section	9	T 28N	R 9W	WHITEWATER	GRAND TRAVERSE

1b. If this is a directional well, bottom hole location will be

							Township	County
	1/4 of		1/4 of		1/4 of section	T	R	

Instructions: Outline drilling unit for oil/gas wells (Part 615) or property boundary for mineral wells (Part 625) and spot well location on plat shown. Locate the well in two directions from the nearest section, quarter section, and unit (or property, Part 625) lines.

2. The surface location is

2618 ft. from nearest (N/S) NORTH section line

506 ft. from nearest (E/W) WEST section line

and

30 ft. from nearest (N/S) SOUTH quarter section line

506 ft. from nearest (E/W) WEST quarter section line

3. Bottom hole will be (if directional)

_____ ft. from nearest (N/S) _____ section line

_____ ft. from nearest (E/W) _____ section line

and

_____ ft. from nearest (N/S) _____ quarter section line

_____ ft. from nearest (E/W) _____ quarter section line

4. Bottom hole will be (directional or straight)

40 ACRE

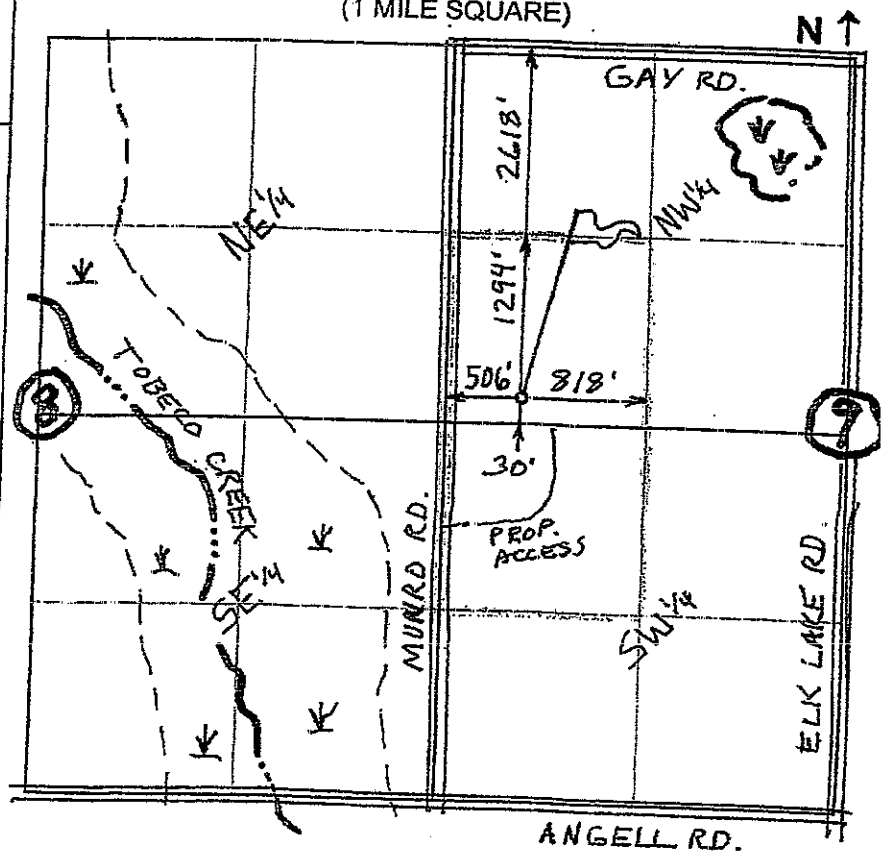
30 ft. from nearest (N/S) SOUTH drilling unit line

40 ACRE

506 ft. from nearest (E/W) WEST drilling unit line

Show access to stake on plat and describe if it is not readily accessible. See attached well site review.

PLAT BELOW REPRESENTS ONE FULL SECTION
(1 MILE SQUARE)



Zoning ☐ Residential, effective date _____
Initial date of residential zoning _____
☒ Other Agricultural

ATTACH SEPARATE PLAT OR PLOT PLAN, LOCATE, IDENTIFY AND SHOW DISTANCES TO:

A. All roads, power lines, buildings, residences, fresh water wells, and other man-made features, within 600 feet of the stake
B. All lakes, streams, wetlands, drainage-ways, floodplains, environmentally sensitive areas, natural rivers, critical dune areas, and threatened or endangered species within 1320 feet of the stake.
C. All type I and IIa public water supply wells within 2000 feet and all type IIb and III public water supply wells within 800 feet of the well stake.

Name of individual who surveyed site: **...sling Czubak**

Company: **Engineering Sciences Inc.**

Date of survey: 19 April 2006

Address: ...0 Business Park Drive, Traverse City, MI 49686

Phone: (231) 946-9191

I CERTIFY THE ABOVE INFORMATION IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

Signature of licensed surveyor (affix seal): David G. Heydlauff

Date: 2 MAY 2006

STATE OF MICHIGAN DAVID G. HEYDLAUFF LAND SURVEYOR No. 32337 LICENSED LAND SURVEYOR

...7200-2 (rev. 18/2004) ENCLOSE WITH APPLICATION TO DRILL OR DEEPEN

O.I.L. ENERGY CORP.

Harvesting Michigan's Natural Resources

954 BUSINESS PARK DR., STE #5 TRAVERSE CITY, MI 49686
(231) 933-3600

March 2, 2009

WRS Holding, LLC.
10190 Munro Rd
Williamsburg, MI 49690

O.I.L. Energy Corp
Whitewater Project
Hubbell B1-9 SWD, located in
Sec. 9, T28N-R9W, Whitewater Twp.,
Grand Traverse County, MI.

Dear WRS Holding, LLC.,

Please find enclosed the first page of the drilling permit application for the above mentioned application filed by O.I.L. Energy Corp.

Contingent upon the Department of Environmental Quality granting a Permit to Drill the above well will be converted to a mineral well. Prior to any activity, a company representative will discuss the conversion with you.

In compliance with Supervisor of Wells Part 625, Well Identification and Project Description #2, O.I.L. Energy Corp. hereby notifies you, as surface owner of record, that Michigan law provides certain rights to surface owners of lands. If you have questions regarding these rights, you may wish to consult an attorney.

Should you have any questions regarding this letter, please our land representative Ben Croftchik at 231-933-3600.

Thank you for your cooperation.

Sincerely,

Ben Croftchik
Field Representative

Enclosures:

O.I.L. ENERGY CORP.

Harvesting Michigan's Natural Resources

954 BUSINESS PARK DR., STE. #5 TRAVERSE CITY, MI 49686
(231) 933-3600

March 2, 2009

Grand Traverse County Courthouse
C/O County Clerk
Linda Coburn
400 Boardman Ave.
Traverse City, MI. 49684

RE: O.I.L. Energy Corp.: Mineral Well Permit Application, Located in T28N-R9W, Section 9, Whitewater Township, Grand Traverse County, Michigan.

Dear Ms. Coburn:

In accordance with Supervisor of Wells instructions, Part 625, Well Identification and Project Description #2, please find one copy of an Application for Permit to Drill for the below application.

Hubbell B1-9 SWD

Should you have any questions, please do not hesitate to contact me at 231-933-3600.

Sincerely,

Ben Croftchik
Field Representative

Enclosures:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

STANDARD ANNULAR PRESSURE TEST

Operator O.I.L. Energy Corp. State Permit No. 57783

Address 954 Business Park Dr. Suite 5 USEPA Permit No. MI-055-2D-0037

Traverse City, MI. 49686 Date of Test : 8-22-07

Well Name Hubbell B1-9SWD Well Type Brine Disposal

LOCATION INFORMATION SW Quarter of the SW Quarter of the NW Quarter

Section 9 ; Range 9W ; Township 28N ; County Grand Traverse

Company Representative Pat Chesmore ; Field Inspector _____;

Type of Pressure Gauge Barton inch face; _____ psi full scale; _____ psi increments;

New Gauge? Yes ☐ No ☒ If no, date of calibration 11-20-2006

Calibration certification submitted? Yes ☒ No ☐

TEST RESULTS

5-year or annual test on time? Yes ☐ No ☐

After rework? Yes ☐ No ☐

Newly permitted well? Yes ☒ No ☐

Time	Pressure (in psig) Annulus	Tubing
3:15 PM	400	
3:20	400	
3:25	400	
3:30	400	
3:35	400	
3:40	400	
3:45	400	

Casing size 5 1/2"

Tubing size 2 7/8"

Packer type AD-L

Packer set @ 1900'

Fluid return (gal.) 2.25 gal

Comments:

Test Pressures: Max. Allowable Pressure Change: Initial test pressure x .03 _____ psi

Half Hour Pressure change _____ psi

Test Passed ☐ Test Failed ☐

If failed test, well must shut in, no injection can occur, and USEPA must be contacted within 24 hours. Corrective action needs to occur, the well retested, and written authorization received before injection can recommence.

Signature of Company Representative — Date: 8-22-07

UNWITNESSED MECHANICAL INTEGRITY TEST FORM

July 23, 2001

TREND

311 MAPLE • P O BOX 458 • KALKASKA MICHIGAN 49646 • (231) 258 9951 • FAX (231) 258 9751

CERTIFICATION

We certify that the instrument identified below has been tested and calibrated in the vertical position using precision test equipment (the accuracy of which is traceable to th National Institute of Standards and Technology) and that this instrument is accurate to within +/- 1% of full scale

Make & Model: BARTON PRESSURE

Serial Number: 26510464

Range: 0-500

Calibrated By: ANDREW BABCOCK

Date: 11/20/2006

Traceable to NIST:

CHANDLER MODEL 2-001 Q-B SN:19496
BASED ON STANDARD GRAVITY @ 60F AND
40% RELATIVE HUMIDITY

Double Check SERVICES

D 7496502

1489 U.S. 31 NORTH
TRAVERSE CITY, MICHIGAN 49686
24 Hr Phone 616-947-1632 Fax 616-947-2351

DELIVERY TICKET 4490 – S

RENTED TO: Oil

DATE 8-22-07

ORDER NO

LEASE Hubbell B1-9 SWD

ORDERED BY

RIG No Rig

Rental Day begins at midnight - part day charged as full day - Rental starts when tools leave our warehouse and continues until returned to our warehouse

DOUBLE CHECK Blowout Preventer Pressure Testing Service To Test

Blind Rams	Kelly Cock Upper	Csg
Pipe Rams	Kelly Cock Lower	Choke Line
Annular BOP	Spare Lower K C	Choke Manifold
	Internal BOP	Mud Sys

DRILLING WELLS:	Regular Test Period	$
	Overtime Test Period	$
WORKOVER WELLS	First Two Hours of Testing	$
	Each Add'l Hour	$
MISC TESTING	Tubing - Testing	$
	Other	$
TRANSPORTATION	To and From Job Site min	$ 75.00
RENTAL EQUIPMENT	Baker Hookwall Csg. Packer	$
	Subs	$
	Cup Packer – Size	$
	Test Plug – Size 6" Workover Bop.	$
REPAIR SERVICE	To	
	Labor ____ Hrs at ____ per Hour	$
	Parts	$
		$
MISCELLANEOUS	Pressure up on well to 400ps. And Hold For 30 min on chart	$ 295.00
		$
		$
		$
	State Tax	$
	TOTAL	$ 370.00

THANK YOU

TERMS: NET CASH — NO DISCOUNT. (PRICES SUBJECT TO CHANGE WITHOUT NOTICE): Terms and Conditions Under Which Tools and Other Equipment Are Rented: Lessor exercises precaution to keep its tools and other equipment in good condition but does not guarantee its condition. All tools and other equipment rented from Lessor is used at Lessee's sole risk. Lessee agrees that Lessor shall not be liable for any damages for personal injuries to any persons or for any damage to Lessor's property or the property of other persons that may be caused by any of such tools or other equipment, or that may be caused by its failure during use, and Leesee hereby agrees to hold harmless and indemnify Lessor against all persons for all personal injuries and/or property damage. Well conditions which prevent satisfactory operation of equipment do not relieve Lessee of his responsibility for rental charges. Lessee assumes all responsibility for equipment while out of possession of the Lessor and promises to return such equipment to the Lessor in as good condition as it was at the effective date of the lease, natural wear and tear from reasonable use thereof excepted. All equipment lost or damaged beyond repair will be paid for by the Lessee at the market price and all damaged equipment which can be repaired will be repaired and the repairs paid for by the Lessee. Accrued rental charges cannot be applied against the purchase price or cost of repairs of such damaged or lost equipment. All transportation charges must be borne by the Lessee. Rental begins when equipment leaves Lessor's yard and continues until returned thereto. ALL TOOLS AND EQUIPMENT SHALL REMAIN the sole property of Lessor. This lease is made and shall be effective when the equipment is delivered to the carrier selected by the Lessee.

TERMS: Net Cash – No Discount. All charges are due and payable at the office of Lessor in Traverse City, Michigan, on the 20th of the month following date of invoice. Interest will be charged at the rate of 1½%/Mo. Interest charged after 60 days from date of invoice.

Delivered By: Ken Coffelt Unit 4

By

OWNER OR OWNER'S REPRESENTATIVE

By

Hubbell 81-9SWD
60min clock

OIL
8-22-07

DEQ

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY – OFFICE OF GEOLOGICAL SURVEY

Permit Application Instructions for Disposal, Storage, or Brine Production Wells

Part 625, Mineral Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended

Well Identification and Project Description

1. Describe in detail the purpose of the well and its anticipated life expectancy. **O.I.L. Energy Corporation has an existing MDEQ permit, # 57783, allowing O.I.L. Energy Corp. to dispose of non-commercial brine water from Antrim production wells in the area into the Dundee Limestone at depths between 1,913 feet and 2,118 feet. O.I.L. Energy Corp. is proposing to modify the existing permit to accept fruit wash water, in addition to brine from Antrim production wells, for disposal into said zone. The Hubbell B1-9 SWD is drilled and completed and has been used for disposal while OIL tested area wells. The well is taking fluids on a vacuum. It is anticipated that this well will have a life expectancy of at least 25 years or more.**

2. Notification: At the same time as submitting the permit application, mail via first-class United States mail, a copy of the first page of the permit application and cover letter to the clerk of the township and the surface owner of record of the land on which the well is to be located. **The letter and application page were submitted to the County Clerk and the land owner. Copies are enclosed for MDEQ records.**

3. Form EQP 7200-1, Application for Permit to Drill, Deepen, Operate, with an original signature from the applicant or the applicant's agent. See instructions on reverse of form. **Enclosed.**

4. EQP 7200-2, Survey Record of Well Location signed and sealed by a surveyor licensed in the state of Michigan which identifies: **Was originally submitted with the application for a permit to drill for the Hubbell B1-9 SWD as a Part 615 well. A copy of that information has been attached for completeness.**

   A. A readily visible stake or marker must be set at the well location. If the well will be directionally drilled also identify the bottom hole location.
   B. A flagged route or explanation of how the well location may be reached.
   C. Footages of the surface location (and if directionally drilled, the bottom hole location) from the nearest property and section lines.
   D. Identification of the existing local zoning designation of the surface location of the well.
   E. The surveyor must include an attached plat that shows all of the following information relative to the approximate distances and directions from the stake or marker to special hazards or conditions, including all of the following:
      i. Surface waters and other environmentally sensitive areas within 1,320 feet of the proposed well.
      ii. Floodplains associated with surface waters within 1,320 feet of the proposed well.
      iii. Wetlands, as identified by the provisions of Part 303 of the NREPA, within 1,320 feet of the proposed well.
      iv. Natural rivers, as identified by the provisions of Part 305 of the NREPA, within 1,320 feet of the proposed well.
      v. Threatened or endangered species, as identified by the provisions of Part 365 of the NREPA, within 1,320 feet of the proposed well.
      vi. All buildings, recorded fresh water wells and reasonably identifiable fresh water wells utilized for human consumption, public roads, railroads, pipelines, power lines and other man-made objects that lie within 600 feet of the proposed well location.
      vii. All public water supply wells identified as type I and IIa that lie within 2,000 feet of the proposed well location and type IIb and III that lie within 800 feet of the proposed well location, as defined in Act No. 399 of the Public Acts of 1976, as amended, being §325.1001 et seq. of the Michigan Compiled Laws.

5. Form EQP 7200-4, Wellhead Blowout Control System. **Does not apply – well has already been drilled. However, this information was submitted with the original application for a permit to drill.**

6. Form EQP 7500-3, Environmental Impact Assessment for Mineral Wells Surface Facilities. **Enclosed.**

7. Form EQP 7200-18, Soil Erosion and Sedimentation Control Plan. **This form was submitted when the well was originally drilled as a Part 615 well. A copy of that submission has been attached.**

8. Provide a conformance bond. For information regarding bonding options see the link to mineral well bonds at http://www.michigan.gov/deqogs and click on Mineral Wells or contact David Davis at 517-241-1529 Mineral Well bond amounts are as follow:

- Individual bond for a disposal, storage, or brine production well $ 33,000.00
- Blanket bond for disposal, storage, or brine production wells $ 440,000.00

A Letter of Credit #169, The Bank of Northern Michigan, in the amount of $33,000 has been enclosed.

9. The permit application fee as specified by statute:

- Disposal well for disposal of waste products $ 2,500.00
- Disposal well for processed brine $ 500.00
- Storage well $ 500.00
- Natural or artificial brine production well $ 500.00

The permit application fee of $2,500, check #078023, has been enclosed.

10. An organization report, form EQP 7200-13, if a current organization report is not on file with the supervisor. **An organizational report is presently on file with the Supervisor.**

11. Description of the drilling program, including the drilling fluid and mud program, how the fluids will be handled and ultimate disposition of the drilling fluids. Include a discussion of whether overpressured zones are anticipated and how the mud program will be modified to accommodate such a condition. **This well has been drilled and completed and during that process, no overpressured zones were encountered. The mud program that was used was adequate for the drilling of the well. The drilling fluids from this well were properly disposed of in accordance with the Part 615 rules that the well was originally drilled under.**

12. Description of the cementing program including the type, properties and compressive strength of cement to be used on each casing string. Indicate if DV tools will be used. **This information was submitted with the original Application for a Permit to Drill and confirmed on the Record of Well Drilling or Deepening. Copies of each are enclosed. However, the following slurries were used on the 8-5/8" and 5-1/2" casings:**

Casing	Lead Cement and Additives	Tail Cement and Additives	Amount Circulated to Pit
8-5/8"	175 sx lite w/ 3% $CaCl_2$	100 sx Type 1 w/ 3% $CaCl_2$	8 bbls cement
5-1/2"	145 sx lite w/ 3% $CaCl_2$	245 sx Type 1 w/ 3% $CaCl_2$	11 bbls cement

13. Description of the proposed wireline logging program. **This information was submitted with the original Record of Well Drilling or Deepening and consists of a Dual Induction Focused/Gamma Ray log, which was submitted previously.**

14. Description of the testing program, including pressure tests on casing strings, and any planned drill stem tests. **The 8-5/8" surface casing was tested to 500 psi for 20 minutes prior to drill out when the well was originally drilled. Also, a mechanical integrity test was run on the well prior to its being used for injection. This test insures the integrity of the 5-1/2" casing. A copy of the MIT is attached. No drill stem tests were run, nor are any planned.**

15. Description of any planned coring program. **No coring was done when this well was drilled and none is planned for the future.**

Additional information required for an application for a permit to drill and operate a disposal well or to convert a previously drilled well to such a well:

1. Form EQP 7200-14, Injection Well Data. **Enclosed**

2. A calculation of the area of review in the injection interval over the anticipated life of the well. "Area of review" means either of the following:

   A. For a well disposing of non-hazardous waste, that area the radius of which is the greater of 1/4 mile or the lateral distance in which the pressures in the injection zone are sufficient to increase hydrostatic head in the injection zone above the base of the lowermost underground source of drinking water, but not more than 2 miles.

B. For a well disposing of hazardous waste that area the radius of which is the greater of 2 miles or the lateral distance in which the pressures in the injection zone are sufficient to increase hydrostatic head in the injection zone above the base of the lowermost underground source of drinking water.

A fixed Area of Review of 2 miles was used in preparation of the EPA UIC permit. That AOR is being used for this application as well. A copy of that information from the EPA application is attached.

3. A discussion of the affect of injection on the present and potential mineral resources in the area of review. **At present, there is no mineral resource associated with the Dundee in the Area of Review. Within the area of review, the Dundee is not known to be a hydrocarbon-producing zone, nor is it a mineral brine zone. To date, its usage has solely consisted of being a brine disposal interval for Antrim Shale wells.**

4. A plat which shows the location and total depth of the proposed well, shows each abandoned, producing, or dry hole within the area of influence, and each operator of a mineral or oil and gas well within the area of influence. **Enclosed as part of #2 (A.O.R. map).**

5. If a well is proposed to be converted to a disposal well, a copy of the completion report, together with the written geologic description log or record and borehole and stratum evaluation logs for the well. **Enclosed is the original completion report from the well. There will not be any further activity needed at this time to convert this well to disposal.**

6. Plugging records of all abandoned wells and casing, sealing, and completion records of all other wells and artificial penetrations within the area of influence of the proposed well location and a map identifying all such artificial penetrations. An applicant shall also submit a plan reflecting the steps or modifications believed necessary to prevent proposed injected waste products from migrating up, into, or through inadequately plugged, sealed, or completed wells. **Within the area of review, there are no known abandoned wells that penetrate the injection zone. The Hubbell B1-9 SWD is the only well within the area of review that penetrates the injection zone. It is not possible for fluids to migrate up, into or through inadequately plugged, sealed or completed wells. However, in the event that there is evidence of upward fluid migration, the Hubbell B1-9 SWD would be immediately shut-in. Additionally, if wells are drilled at some time in the future within the area of review and those wells penetrate the injection zone, the completion records of those wells will be reviewed for adequacy. It should be noted that the Hubbell well and most other wells that are drilled in Antrim operations are normally cemented to surface on all strings of casing. This improves the wellbore integrity dramatically and lessens the likelihood of an issue.**

7. A map showing the vertical and areal extent of surface waters and subsurface aquifers containing water with less than 10,000-ppm total dissolved solids. A summary of the present and potential future use of the waters must accompany the map. **Attached is a map that shows the area of review and the surface water features within that area of review (see A.OR. map). Additionally, a map has been attached that shows an isopach of the glacial drift within the area of review. While this is not technically the total thickness of subsurface waters (some of the drift is above the water table, thus making dry land), it gives an idea as to the extent of the subsurface waters where the tds is less than 10,000 ppm within the area of review. Present use of the surface waters in the area are primarily recreational. Subsurface waters are used for public consumption and agriculture. It is not anticipated that these uses will change significantly in the future.**

8. Geologic maps and stratigraphic cross sections of the local and regional geology. **Enclosed are a map and cross section that were submitted to the USEPA and show the Dundee structure in the vicinity of the Hubbell B1-9 SWD as well as the variability of the glacial drift in cross section. The location of the cross section is highlighted on the map. Also included is a column that shows the stratigraphy of the Hubbell B1-9 SWD both in the Glacial Drift and from surface to TD.**

9. Chemical, physical and bacteriological characterizations of the waste stream before and after treatment and/or filtration. Include a characterization of the compatibility of the injectate with the injection zone and the fluid in the injection zone along with a characterization of the potential for multiple waste streams to react in the well bore or in the injection zone. **The source of the injection fluid is a combination of production water from Antrim Shale producers and fruit wash water. Analyses of each fluid have been enclosed with this application. The fruit wash water is comprised of water from a Type III public water supply well and a mixture of chemicals used to soak fruit in prior to further fruit processing. The fruit wash water is similar to the brine water from the Antrim production wells; except that many of the concentrations are lower in the wash water. It is not anticipated that there will be any compatibility issues between the two fluids or their interaction with the native brine in the Dundee and the Dundee itself.**

10. Information to characterize the proposed injection zone, including:

A. The geological name of the stratum or strata making up the injection zone and the top and bottom depths of the injection zone. **Dundee Limestone between 1,913' and 2,118'**

B. An isopach map showing thickness and areal extent of the injection zone. **The map showing the top of the Dundee is enclosed. Although there is minimal well control in the vicinity of the Hubbell B1-9 SWD, the thickness measured at this well of 205' seems typical. If an isopach map were to be prepared, it would not have any contours, due to uniform thickness.**

C. Lithology, grain mineralogy and matrix cementing of the injection zone. **The Dundee is generally a finely granular limestone or dolomite, based on a description from the Amoco St. Acme 1-11 (PN29362). No mudlog or open hole logs were ran across the Dundee when the Hubbell well was drilled.**

D. Effective porosity of the injection zone including the method of determination. **The porosity of the injection zone is unknown, as no logs were run when it was drilled. The nearest logs are from the Amoco State Acme 1-11, which is about 7.5 miles to the south-southwest of the Hubbell B1-9 SWD. Analysis of the open hole logs from that well yielded average porosity of 5.54%.**

E. Vertical and horizontal permeability of the injection zone and the method used to determine permeability. Horizontal and vertical variations in permeability expected within the area of influence. **The horizontal and vertical permeability of the injection zone is not known and no tests have been undertaken to date to determine this. However, the Hubbell B1-9 SWD has accepted fluid at high rates on a surface vacuum, indicating that this well has very good permeability. Any horizontal and vertical variations in permeability are unknown. The horizontal variations could only be assessed by well control, and there are no other nearby penetrations of the injection zone. Likewise, the vertical variation could only be assessed by a core of the interval and no core was taken in this well when it was drilled. The widespread use of the Dundee as a disposal zone for Antrim production water indicates that there is little reason to believe there is significant variation in porosity or permeability.**

F. The occurrence and extent of natural fractures and/or solution features within the area of influence. **Unknown, but not indicated.**

G. Chemical and physical characteristics of the fluids contained in the injection zone and fluid saturations. **The fluid in the injection zone is normal Dundee brine, at 100% saturation. The specific chemical composition of this brine is unknown because no samples were taken from it prior to commencing injection of Antrim brine.**

H. The anticipated bottom hole temperature and pressure of the injection zone and whether these quantities have been affected by past fluid injection or withdrawal. **The bottom hole pressure is unknown in the Dundee, but is expected to be normally-pressured (0.433 psi/ft*1,913 yields approx 828 psi). The bottom hole temperature is estimated at 73°F, based on the enclosed geothermal gradient plot taken from bottom hole temperature of wells in the area of the Hubbell B1-9 SWD.**

I. Formation fracture pressure, the method used to determine fracture pressure and the expected direction of fracture propagation. **The estimated fracture pressure (bottom hole) for the Hubbell B1-9 SWD is estimated at 1530 psi. This is calculated from the USEPA Region 5 UIC Regional Guidance #7, revised January, 1994 – Determination of Maximum Injection Pressure for Class I Wells. That document specifies a fracture pressure gradient of 0.8 psi/ft. When this is multiplied by the depth to the top of the Dundee (1,913'), the fracture pressure of 1530 psi is obtained. At this depth, it is anticipated that any fractures that could be created would be vertical. From other studies of regional tectonic stresses, it is anticipated that the orientation any induced fractures would likely be NW/SE. However, no testing to confirm this has been undertaken at this site. The Hubbell B1-9 SWD has accepted fluid at high rates on a vacuum at surface and it is suspected that it is very unlikely enough fluid can be delivered to this wellbore to raise the injection pressure sufficiently to fracture the formation.**

J. The vertical distance between the top of the injection zone from the base of the lowest fresh water strata. **The top of the injection zone is at 1,913' and the base of the Glacial Drift is at 385'. Therefore, there is 1,528' between the top of the injection zone and the base of the lowest fresh water strata.**

K. Other information the applicant believes will characterize the injection zone. **Nothing further to add at this time.**

11. Information to characterize the proposed confining zone, including:

A. The geological name of the stratum or strata making up the confining zone and the top and bottom depths of the confining zone. **The confining zone is the Bell Shale between 1,808' and 1,913'.**

B. An isopach map showing thickness and areal extent of the confining zone. **Enclosed is a structure map of the Bell Shale. Although there is minimal well control in the vicinity of the Hubbell B1-9 SWD, the thickness measured at this well of 105' seems typical. If an isopach map were to be prepared, it would not have any contours, due to uniform thickness.**

C. Lithology, grain mineralogy and matrix cementing of the confining zone. **The Bell Shale is a shale lithology that is dark brown to grey in color. It has been noted to have abundant crinoids, ostracods and pyrite near its base. While it is precisely unknown, it is suspected that the cementing material is the clay in the formation and some carbonate materials.**

D. Effective porosity of the confining zone including the method of determination. **The effective porosity of the Bell Shale is considered negligible. This was determined from examining a number of well logs and samples over years of experience throughout the Michigan Basin.**

E. Vertical and horizontal permeability of the confining zone and the method used to determine permeability. Horizontal and vertical variations in permeability expected within the area of influence. **It is anticipated that the vertical and horizontal permeability of the Bell Shale is negligible, as this formation forms the seal for a number of hydrocarbon reservoirs throughout the state. It is not anticipated that the horizontal or vertical permeability will vary within the area of influence.**

F. The occurrence and extent of natural fractures and/or solution features within the area of influence. **None are known or suspected.**

G. Chemical and physical characteristics of the fluids contained in the confining zone and fluid saturations. **As there is negligible porosity in the Bell Shale, it likewise follows that there would be negligible fluid in the pore spaces of this formation. Any fluids contained within the shale are likely to be brine similar to Dundee brine, held in place by capillarity and thus immobile.**

H. Formation fracture pressure, the method used to determine fracture pressure and the expected direction of fracture propagation. **The estimated fracture pressure (bottom hole) for the Hubbell B1-9 SWD is estimated at 1446 psi. This is calculated from the USEPA Region 5 UIC Regional Guidance #7, revised January, 1994 – Determination of Maximum Injection Pressure for Class I Wells. That document specifies a fracture pressure gradient of 0.8 psi/ft. When this is multiplied by the depth to the top of the Bell Shale (1,808'), the fracture pressure of 1446 psi is obtained. At this depth, it is anticipated that any fractures that could be created would be vertical. From other studies of regional tectonic stresses, it is anticipated that the orientation any induced fractures would likely be NW/SE. However, no testing to confirm this has been undertaken at this site.**

I. The vertical distance between the top of the confining zone from the base of the lowest fresh water strata. **The top of the injection zone is at 1,808' and the base of the Glacial Drift is at 385'. Therefore, there is 1,423' between the top of the injection zone and the base of the lowest fresh water strata.**

J. Other information the applicant believes will characterize the confining zone. **Nothing further to add at this time.**

12. Information demonstrating injection of liquids into the proposed zone will not exceed the fracture pressure gradient and information showing injection into the proposed geological strata will not initiate fractures through the confining zone. Information showing the anticipated dispersion, diffusion and/or displacement of injected fluids and behavior of transient pressure gradients in the injection zone during and following injection. **All testing done to date has shown that the well is capable of accepting fluids on a surface vacuum. Therefore, there is a margin of safety in that a pump will not likely be needed to inject into the well. If a pump were to be installed, a pressure relief system can and would be installed at the discharge of the pump whereby the injection pressure cannot increase above a pre-set level – something below the maximum allowable injection pressure. Using the porosity from the St. Acme 1-11 well of 5.54%, its net/gross ratio of 79%, the 205' thickness of the Dundee at this well, average injection rate of 2,000 bbl/day and a 25 year well life, the displacement of native fluids from the Dundee over the entire well life is anticipated to be approximately 262 acres. This is a radius of 1,906' from the well.**

13. Proposed operating data including all of the following data:

A. The anticipated daily injection rates and pressures. **The anticipated average daily rate is estimated at 2,000 bbl/day with maximum rate of 6,000 bbl/day. The average injection pressure is anticipated to be a vacuum at surface, as testing to date has confirmed. In fact, no surface pump is planned at this time. However, if it becomes necessary to install an injection pump, it will have a pressure relief device installed such that injection pressure can never exceed the maximum allowable injection pressure of 552 psig at the surface.**

B. The types of fluids to be injected. **OIL plans to continue disposal of produced brine from Antrim gas wells as well as fruit wash water.**

C. A plan for conducting mechanical integrity tests. **Mechanical Integrity Tests will be performed as required by the USEPA in Section G of the USEPA Underground Injection Control Permit, Class I Non-Hazardous, Permit #MI-055-1I-C002.**

14. For a proposed disposal well to dispose of waste products into a zone that would likely constitute a producing oil or gas pool or natural brine pool, a list of all offset operators and certification that the person making application for a well has notified all offset operators of the person's intention by certified mail. If within 21 days after the mailing date an offset operator files a substantive objection with the supervisor, then the application

shall not be granted without a hearing pursuant to part 12 of these rules. A hearing may also be scheduled by the supervisor to determine the need or desirability of granting permission for the proposed well. **There are no offsetting producing wells in the Dundee Lime. As such, this does not apply.**

15. A proposed plugging and abandonment plan. **Enclosed is the plugging and abandonment plan that was submitted to the USEPA.**

16. Identify the source or sources of proposed injected fluids. Identify if injected fluids will be considered hazardous or non-hazardous as defined by Part 111, Hazardous Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)
A. Non-commercial brine from Antrim production in the area
B. Fruit wash water from Cherry Blossom LLC, 8055 Angell Road, Williamsburg, MI 49690, MIK892827924

17. Whether the well is to be a multisource commercial hazardous waste disposal well. **Does not apply. This well is going to be a non-hazardous disposal well.**

Additional information required for an application for a permit to drill and operate a storage well or to convert a previously drilled well to such a well: Does not apply

For an application to drill storage well or to convert a previously drilled well to a storage well, also submit the following information in addition to that submitted in the previous section for a disposal well. In the previous sections instructions, replace the term 'disposal' with 'storage' and 'waste' with 'stored product.'

1. The name and chemical formula of the product to be stored, and a characterization of the physical, chemical, and hazardous or toxic properties of the product.

2. The anticipated vertical and horizontal dimensions and volume of the completed underground storage cavity.

3. The anticipated operating life of the underground storage cavity.

4. The method to be used to create the underground storage cavity.

5. The name of the geological stratum in which the underground storage cavity will be created.
6. A schematic diagram of the well bore showing the proposed arrangement and specifications of the down hole well equipment.

7. If the underground storage cavity is to be formed by solution mining bedded salt, then all of the following information shall be included:

8. The plan for disposal of brine produced during solution mining of the underground storage cavity and for the operating life of the underground storage cavity.

9. The expected starting and ending dates of the solution mining.

10. The range of anticipated operating pressures of the underground storage cavity.

11. The anticipated range of operating injection pressure.

12. The proposed method of displacing stored product.

13. A plan for testing the mechanical integrity of the underground storage cavity as provided in R 299.2392 and R 299.2393.

Additional information required for an application for a permit to drill and operate a well for the production of artificial brine or to convert a previously drilled well to such a well: Does not apply

For an application to drill and operate a brine well for production of artificial brine or to convert a previously drilled well to a well for production of artificial brine, submit in addition to the information in the first section, all of the following proposed information:

1. If the well will be drilled into an existing cavern, the number of wells in the cavern, the present extent of the cavern, and the purpose of the proposed well.

2. The name of the geological stratum or strata to be mined, the top and bottom depths of the mined zone, the gross and net mineable thickness, and the mineral or minerals to be recovered by solution mining

3. An isopach map showing thickness and areal extent of the strata to be mined.

4. A sketch showing the extent of the planned mine area.

5. The geological strata to be left in place for roof support.

6. A diagram showing the well bore with the proposed casing program and its relationship to the stratum or strata to be mined.

7. A plan for conducting subsidence monitoring as required in R 299.2407 or a rationale for not conducting subsidence monitoring.

A public hearing may be scheduled by the Supervisor of Mineral Wells to take public comment on the proposed well. If such a hearing is scheduled, the applicant will be responsible for the scheduling and preparation and publication of the notice.

Please collate the above documents into a set and mail the original and two copies of the application (total of 3 sets) plus 3 additional copies of form EQP 7200-1 to:

Department of Environmental Quality
Office of Geological Survey
P.O. Box 30256
Lansing, Michigan 48909

O.I.L. ENERGY CORP.

Harvesting Michigan's Natural Resources

954 BUSINESS PARK DR., STE. #5 TRAVERSE CITY, MI 49686
(231) 933-3600

COPY

March 2, 2009

Mr. Rex Tefertiller
M.D.E.Q.
Geological Survey Division
Permits and Bonding Unit
525 W. Allegan Street
South Tower, 1st Floor
Lansing, MI. 48933

RE: O.I.L. Energy Corp.; Hubbell B1-9 SWD Mineral Well Application, Located in T28N-9W, Whitewater Township, Grand Traverse County, Michigan

Dear Mr Tefertiller:

Enclosed please find 1 original and 2 copies of an "Application For Permit To Drill", as well as 3 copies of form 7200-1 for the below mentioned application.

Hubbell B1-9 SWD, existing permit # 57783.

Enclosed is a check totaling $2500.00 for fees associated with this filing. Should you have any questions regarding this application, please feel free to contact me at 231-933-3600.

Sincerely,

Ben Croftchik
O.I.L. Energy Corp.

Enclosures

RECEIVED
MAR 0 3 2009
OFFICE OF GEOLOGICAL SURVEY
PERMITS & BONDING UNIT