

**APPLICATION CHECKLIST**

Portage County, Deerfield Twp.  
 Washington SWD #1, Permit #  
 SWCW #36

	Date	Initials
Enter on Agenda	12/23/11	[Signature]
Completeness Review	12/23/11	[Signature]
Date - Time Stamp	12/23/11	[Signature]
Area of Review	12/27/11	[Signature]
Site Evaluation	1/4/12	[Signature]
Permitting Section	12/23/11	[Signature]
Memo to Inspector	12/27/11	[Signature]
Public Notice	12/27/11	[Signature]
Letter	12/27/11	
Date Run	12/30/11	
15 Days	1/14/12	
Review Public Notice	1/20/12	[Signature]
Affidavit of Notification	12/23/11	[Signature]
Objections Received	Yes _____ No <u>X</u>	[Signature]
Public Hearing Date	NA	[Signature]
Chief's Order, if Required	NA	[Signature]
Schematic	12/27/11	[Signature]
Plot on Map	12/27/11	[Signature]
Review by Geologist		[Signature]
Permit Conditions (Same date as permit)		[Signature]
Enter on Computer (Same or later date than Chief's Order)		[Signature]
Enter on Master List	12/27/11	[Signature]
EPA Form	12/27/11	[Signature]
Mail Permit		[Signature]
Update Agenda		[Signature]
File		[Signature]

**RECORD OF CONVERSATION**

\* Mini string conditions

---



---



---



---



---



---

**PROPOSED CLASS II SALTWATER INJECTION WELL APPLICATION NO.  
APATT020307 – FORTIS ENERGY PARTNERS LLC**

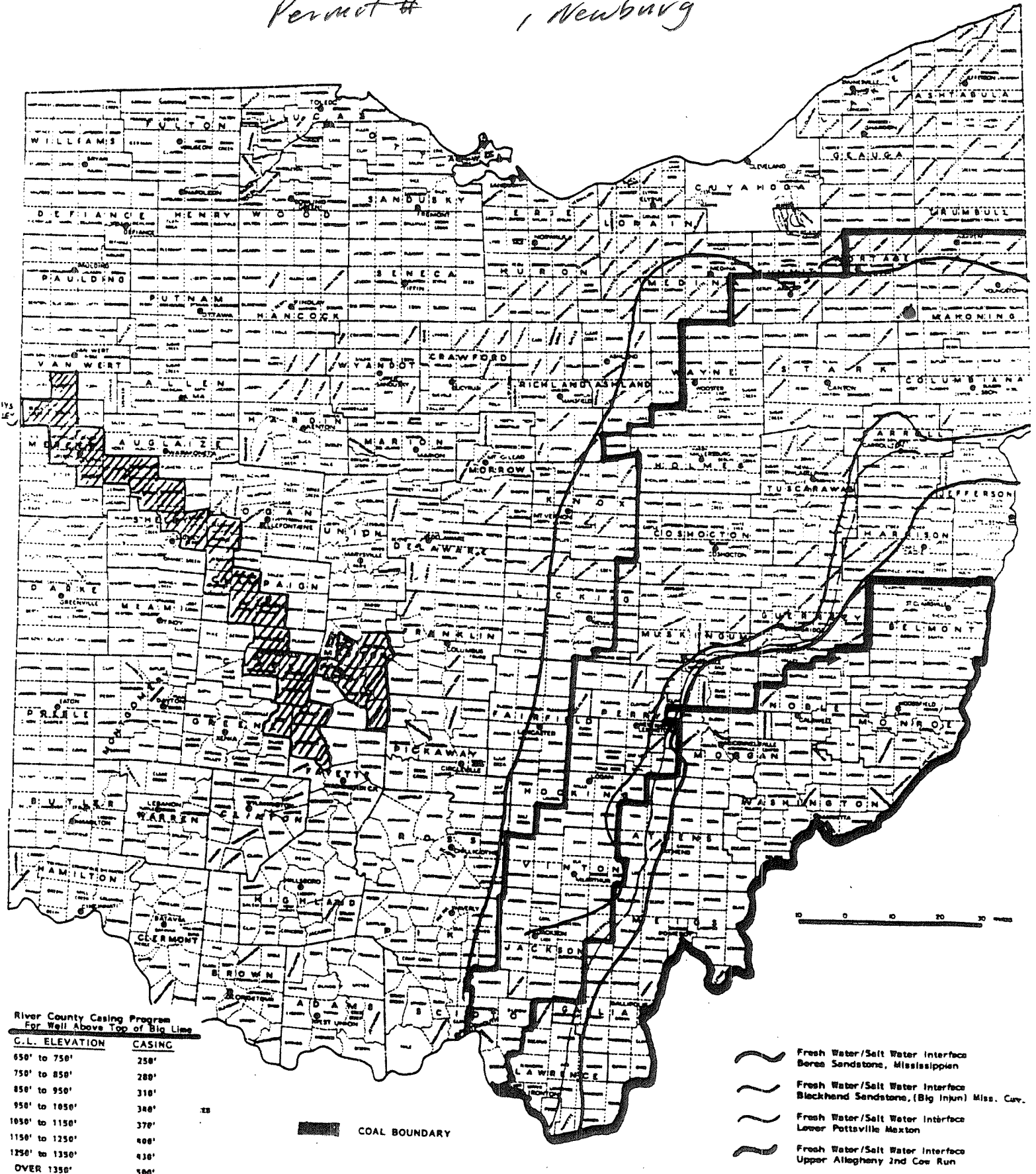
**COUNTY: Portage**  
**TOWNSHIP: Deerfield**  
**PERMIT NUMBER: New well**  
**LEASE NAME: Washington SWD #1**  
**PROPOSED INJECTION ZONE: Newburg dolomite**  
**PROPOSED TOTAL DEPTH: 4800 feet**  
**TOP OF PRECAMBRIAN ROCKS: approximately 7750 feet**

1. There are no known faults within a 2-1/2 mile radius of the proposed injection well location.
2. Proposed injection zone is approximately 2950 feet above the top of the Precambrian basement rocks.

**ADDITIONAL REQUIRED NEW UIC CONDITIONS TO THE PERMIT  
(PURSUANT TO GOVERNOR'S EXECUTIVE ORDER) ALONG WITH THE  
STANDARD SET OF DRILLING, CONSTRUCTION, AND OPERATIONAL  
CONDITIONS**

1. Requires continuous monitoring of the injection and annulus pressures.
2. Requires automatic shut-off device on the injection pump set to the maximum allowable surface injection pressure.
3. Shall run a minimum geophysical logging suite that includes: a gamma ray, compensated density-neutron and resistivity log.
4. Shall use Class A cement with bow-string or rigid centralizers to provide sufficient casing stand off and foster effective circulation of cement to isolate critical zones including aquifers, flow zones, voids, lost circulation zones, and hydrocarbon production zones.
5. Shall measure original bottomhole reservoir pressure with downhole pressure gauge prior to start of injection operation.
6. There is a potential for encountering an abandoned underground coal mine during the drilling of this well. Fortis Energy shall have contingency plans for running a mine string in the event that a abandon mine is encountered.

Portage County, Deerfield Twp., SW 1/4 #36,  
Permit # , Newburg



River County Casing Program  
For Well Above Top of Big Line

C.L. ELEVATION	CASING
650' to 750'	250'
750' to 850'	280'
850' to 950'	310'
950' to 1050'	340'
1050' to 1150'	370'
1150' to 1250'	400'
1250' to 1350'	430'
OVER 1350'	500'

COAL BOUNDARY

- ~~~~~ Fresh Water/Salt Water Interface  
Berea Sandstone, Mississippian
- ~~~~~ Fresh Water/Salt Water Interface  
Bleckhead Sandstone, (Big Injun) Miss. Cov.
- ~~~~~ Fresh Water/Salt Water Interface  
Lower Pottsville Maxton
- ~~~~~ Fresh Water/Salt Water Interface  
Upper Allegheny 2nd Cow Run

# DAILY ROUTE SLIP *Deerfield*

APPLICATION NO. aPATT020307

TYPE: Drill New Well

CONAME **FORTIS ENERGY PARTNERS L** API

WELL NAME /NO. **WASHINGTON SWD** 1

COUNTY **133 PORTAGE** INITIALS DATE

DATE APPLICATION REC'D PN 12/23/2011

PERMIT FEE AND CHECK NO. \$1,000.00 1004

RUSH AMOUNT RUSH CHECK NO. \$0.00 0

APPLICATION ENTERED PN 12/23/11

APPLICATIONS AND PLATS SENT FOR MINE APPROVAL

COAL APPROVAL RECEIVED

OIL/GAS AFFIDAVIT REC'D PN 12/23/11

URBANIZED AREA NOTIFICATION SENT PN NA

URBANIZED AREA NOTIFICATION SENT TO INSPECTOR/REC'D BACK PN NA

URBAN MAP REVIEW PN NA

SAMPLES: YES      /SPECIAL AREAS PN NA

GEOLOGIST APPROVAL PN     

DATA ENTRY /ISSUED PN     

PERMIT: TAKEN      MAILED      PN     

FAX TO:     

FINAL MAP CHECK          

COMMENTS:

## **Geologic Review for Class II Wells**

Application No. aPATT020307

SWIW: (Salt Water Injection Well)

Proposed Well Depth: 4800 feet

Proposed Injection Zone: Newburg

Faults and lineaments were reviewed in a 30 mile study area for the permit application. Gravity and magnetic maps were examined in a 60 mile study area for possible deep-seated Precambrian faults. The presence of mapped subsurface faults were examined from published studies and include the following structure maps in ascending stratigraphic order: top of Precambrian, top of Knox unconformity, top of Trenton Limestone, top of Onondaga Limestone, top of Berea Sandstone, Mississippian-Pennsylvanian unconformity, top of Middle Kittanning coal, top of Upper Freeport coal, and top of Pittsburgh coal. Bedrock topography, bedrock geology maps and published studies using surface topography were examined for lineaments that may reflect possible subsurface faulting. Published studies of interpreted surface lineaments also were included that were based on LANDSAT and aerial photos. All active and inactive class II wells and all known earthquake epicenters are shown within the study area on all maps.

Gravity and magnetic maps were reviewed with a 60 mile study area. No apparent gravity anomalies or magnetic trends are visible from the maps.

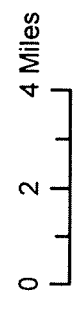
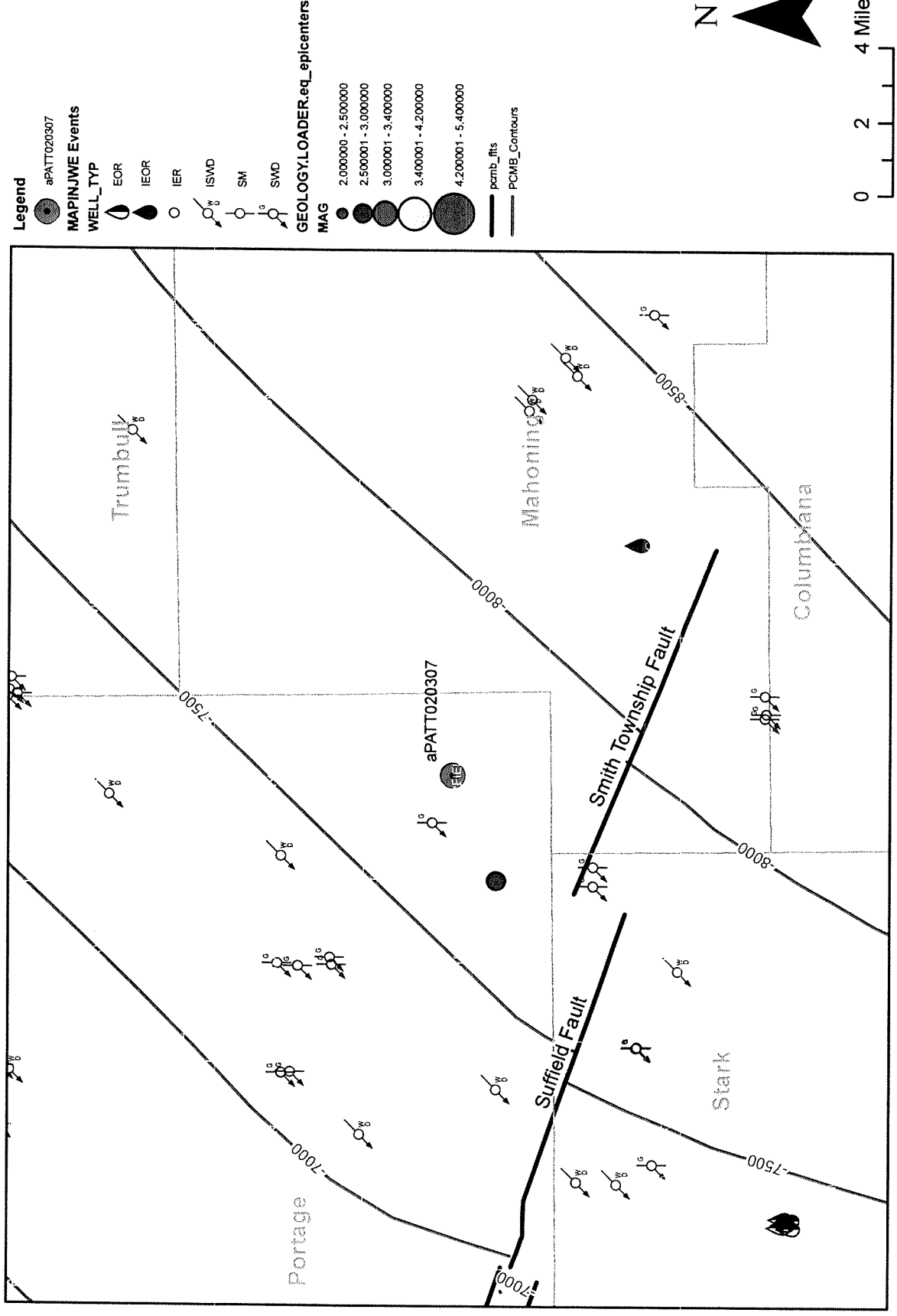
Approximately 4 miles south of the application permit the northwest-southeast trending Akron-Suffield-Smith fault system is present on structure maps on the top of Precambrian, top of Knox unconformity, top of Trenton, top of Onondaga, and top of Berea. None of the mapped coal units extended to the application permit and thus could not be used for fault identification.

A network of surface lineaments is interpreted within the 30 mile study area based on Mason (1999). One of these northwest-southeast trending lineaments, approximately 4 miles to the south of the permit application, coincides with the Akron-Suffield-Smith fault system that is present on the subsurface structure maps. The nearest interpreted lineament is approximately 2 miles to the west and trends northeast-southwest. Numerous lineaments from aerial photos have been interpreted by Gray and others (1982) over and in the immediate vicinity of the permit application. There are 2 dominant directions which are oriented northwest-southeast and northeast-southwest. The LANDSAT lineament map of Gray and others (1982) indicates a northeast-southwest trending lineament approximately 1 mile to the south trending northeast-southwest. The top of bedrock for the permit application is the Pennsylvanian Allegheny and Pottsville undivided. The bedrock topography map indicates two northeast-southwest trending lows to the east and west of the permit application.

Based on the RBDMS database, there are 13 ISWD (inactive salt water disposal) wells, 16 SWD (salt water disposal) wells, 5 EOR (enhanced oil recovery) wells, and 1 IEOR (inactive enhanced oil recovery) well within the 30 mile study area. The nearest injection well is a SM (solution mining) well approximately 1 mile to the northwest of the permit application. Only 1 earthquake epicenter has occurred within the 30 mile study area. It is approximately 3 miles to the southwest and had a magnitude of 3 which occurred in August of 2010.

There are strong northwest-southeast and northeast-southwest lineaments on the bedrock topography map south of the proposed well location. There are similar strong lineations on the Mississippian-Pennsylvanian structure map. These lineaments in conjunction with the known Akron-Suffield-Smith fault system which is about 4 miles south of the proposed location indicate the possibility of additional unknown faults that could be in the area. The only earthquake within the mapping area is located about 3 miles from the proposed location and 2 miles from a known fault and occurred in 2000.

# Precambrian Structure Contours (C.I. = 500 feet)



*a PATT 020307*

# Proof Sheet

**APPL NUMBER** aPATT020307  
**OWNER NUMBER** 8855  
**OWNER NAME** FORTIS ENERGY PARTNERS LLC  
**EXISTING WELL** 0  
**API PERMIT NO**  
**APPL TYPE** NW  
**TYPE OF WELL** SWD  
**VARIANCE REQUEST**  
**WELL NAME** WASHINGTON SWD (SUNCO)  
**WELL NUMBER** 1  
**PREV/PROPOSED TD** 4800  
**DRILL UNIT ACRES** 0  
**TYPE OF TOOL** RTAF  
**WELL CLASS** Swu  
**FIRE PHONE** ( ) - 911  
**MEDICAL PHONE** ( ) - 911  
**COUNTY CODE** 133  
**COUNTY NAME** PORTAGE  
**COAL (Y=-1/N=0)** -1  
**CIVIL TOWNSHIP** DEERFIELD  
**SURF QUAD** DEERFIELD  
**Nad 27 SURF ORIG X** 2,401,360  
**Nad 27 SURF ORIG Y** 498,900  
**GROUND ELEVATION** 1072  
**SURF SEC**  
**SURF LOT** 30  
**SURF QTR TWP**  
**SURF ALLOT**  
**SURF TRACT**  
**SURF FRACTION**

**URBANIZED AREA ?**   
**NAME**  
**DISPOSAL PLAN 1** ND  
**DISPOSAL PLAN 2**  
**DISPOSAL PLAN 3**  
**DISPOSAL PLAN 4**  
**DISPOSAL PLAN 5**  
**MP Check #** 0

### PROPOSED FORMATIONS

NEWBURG  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**TARG CIVIL TWP**  
**TARG QUAD**  
**Nad 27 TARG ORIG X**  
**Nad 27 TARG ORIG Y**  
**TARG ELEV** 0  
**TARG SECTION**  
**TARG LOT**  
**TARG QTR TWP**  
**TARG ALLOT**  
**TARG TRACT**  
**TARG FRACTION**



**PROPOSED CLASS II SALTWATER INJECTION WELL APPLICATION NO.  
APATT020307 – FORTIS ENERGY**

**COUNTY: Portage**

**TOWNSHIP: Deerfield**

**PERMIT NUMBER: New well**

**LEASE NAME: Washington SWD #1**

**PROPOSED INJECTION ZONE: Newburg dolomite**

**PROPOSED TOTAL DEPTH: 4800 feet**

**TOP OF PRECAMBRIAN DEPTH: (approximately) 7750 FEET**

1. Review of existing geologic data for known faults – **No known faults or seismic activity within a 2-1/2 mile radius of the proposed injection well location.**
2. Complete suite of geophysical logs – **A gamma ray, compensated density – neutron and resistivity geophysical logging suite will be required.**
3. Evaluation for potential requirement of a seismic survey – **The proposed injection zone is at least 2950 feet above the top of the Precambrian rocks, therefore there is no potential communication with the Precambrian or a need to conduct a seismic survey.**
4. Well penetrating the Precambrian or plug back from Precambrian – **This proposed injection well is at least 2950 feet above the Precambrian rocks, therefore there will be no penetration into the Precambrian rocks.**
5. Measurement or calculation of original downhole reservoir pressure – **Since this is a shallow proposed injection well, there is no reason to collect original bottomhole pressures.**
6. Conducting a pressure fall-off test or step-rate test – **Since the well does not penetrate into the deep geologic reservoirs, there is no need to perform these tests. Maximum allowable injection pressure will be set by the formula within the Ohio Administrative Code well below formation fracture pressures.**
7. Continuous pressure monitoring of the annulus and injection pressures – **This condition will be required. ~~and has been required on all injection well application since October of 2011.~~**
8. Installation of an automatic shut-off switch on the injection pump set to the maximum allowable surface injection pressure - **This condition will be required. ~~and has been required on all injection well application since October of 2011.~~**

**PROPOSED CLASS II SALTWATER INJECTION WELL APPLICATION NO.  
APATT020289 – OOGC Disposal Company**

**SUPPLEMENT TO APPLICATION**  
**PERMIT FOR A SALTWATER INJECTION WELL (Form 210)**

Ohio Department of Natural Resources, Division of Oil and Gas Resources Management  
2045 Morse Road, Bldg H3  
Columbus, OH 43229-6693

AREA OF REVIEW. An application for a saltwater injection well (SWIW) will be evaluated on the basis of an "area of review" surrounding the proposed well. The area of review for wells in which injection of greater than two hundred barrels per day is proposed shall be the area circumscribed by a circle with the center point at the location of the injection well and a radius of one-half mile. The area of review for wells in which a maximum injection of two hundred barrels per day or less is proposed shall be the area circumscribed by a circle with the center point at the location of the injection well and a radius of one-quarter mile.

31. **PROPOSED INJECTION ZONE**

Geological Formation: Newburg  
Injection Interval: From: 4300' feet to 4700'  
Geologic description of injection zone: dolomite

32. **WELL CONSTRUCTION AND OPERATION**

- A. Description of the proposed casing and cement program for new wells, or of the casing, cementing or sealing with prepared clay for existing wells to be converted:
- |  |
|--|
| <u>13 3/8" - 60' - cemented to surface</u> |
| <u>9 5/8" - 650' - cemented to surface</u> |
| <u>7" - 4300' - cemented to 2100'</u>      |
- B. Proposed method for testing the casing:  
Set tubing and packer at 4250' and pressure test to at least the maximum injection pressure of 1010 psi for 15 minutes with no more than a 5% decline.
- C. Description of the proposed method for completion and operation of the injection well:  
Drill to 4300', set and cement in 7" production casing. Then drill to 4800' and complete well open-hole in the Newburg.
- D. Description of the proposed unloading, surface storage, and spill containment facilities:  
Refer to attached surface facility sketch.

RECEIVED  
DEC 23 2011

33. **PROPOSED INJECTION VOLUMES**

- A. Indicate the estimated amount of saltwater to be injected into the proposed injection well per day:  
AVERAGE: 1000 MAXIMUM: 1500
- B. Indicate the method to be used to measure the actual amount of saltwater injected into the well:  
Volumetric meter or flow meter.

34. **PROPOSED INJECTION PRESSURES**

- A. Indicate the estimated pressure to be used for injection of saltwater into the proposed injection well:  
AVERAGE: 500 MAXIMUM: 1010 990 psi
- B. Indicate the method to be used to measure the actual daily injection pressure:  
Install continuous recorder or two-pen recorder to continuous record annulus and injection pressures.

35. **PROPOSED CORRECTIVE ACTION**

Explain any corrective action proposed for wells penetrating the proposed injection formation or zone within the area of review:  
None

OPERATOR FORTIS ENERGY PARTNERS, LLC

COUNTY Portage

TOWNSHIP Deerfield

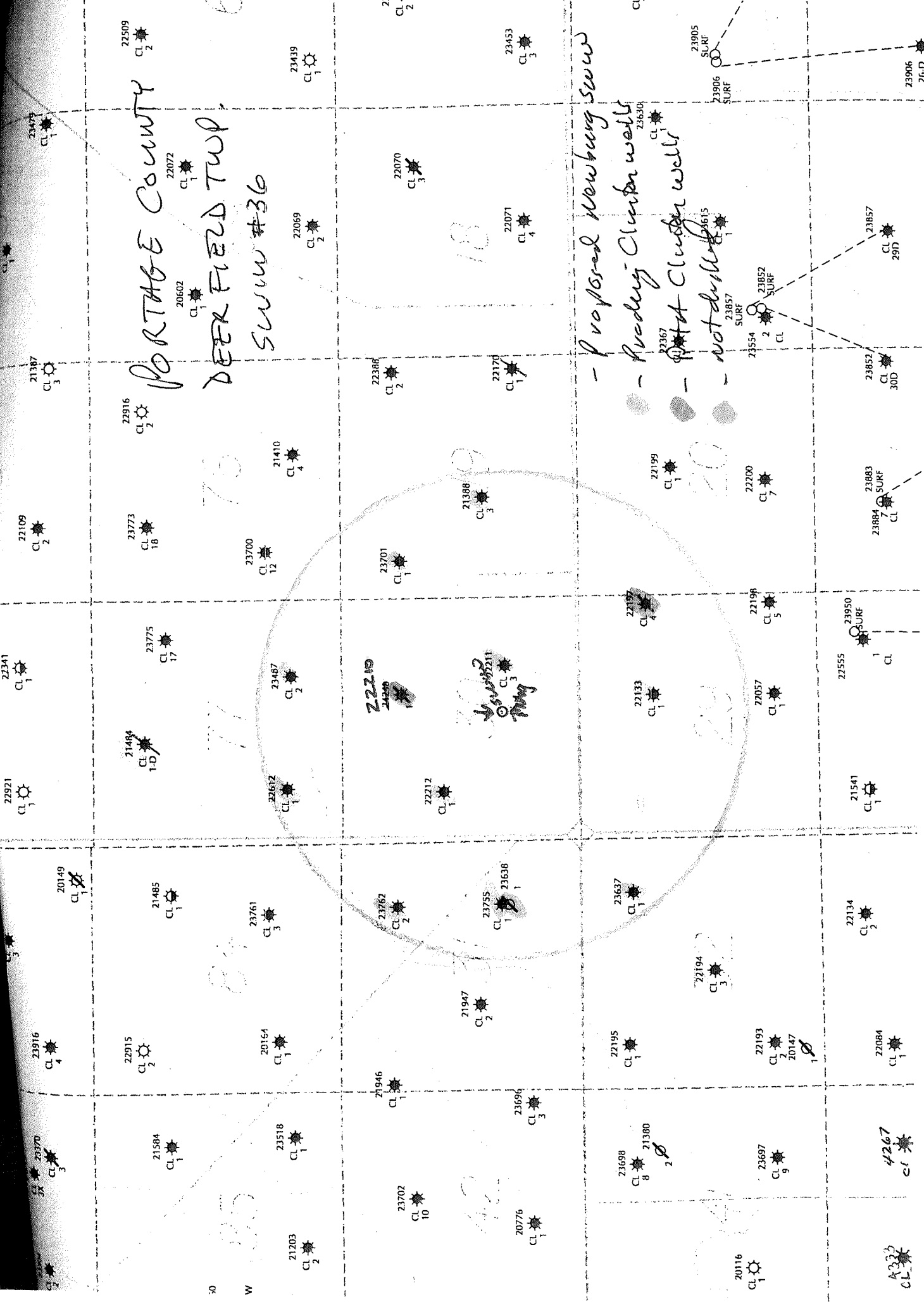
P & A	FM	Permit Number	Casing/Cement Program	Well Log and/or Method of Plug
<input type="checkbox"/>	Nbg	Newwell	Proposed:	9 5/8" - 650' - CTS - cemented to surface 7" - 4300' - cemented back to 2100 feet
<input type="checkbox"/>	CL	3762	8 5/8" - 522'	cemented to surface 4 1/2" - 4981' - cemented w/ 150 SKS, 50/50 P&Z Calculated fill-up = 790' (TDC = 4141')
<input type="checkbox"/>	CL	2612	8 5/8" - 508'	cemented w/ 225 SKS. 4 1/2" - 4968' - cemented w/ 140 SKS, - Calculated fill-up = 725' (TDC = 4243')
<input type="checkbox"/>	CL	3487	8 5/8" - 600'	cemented w/ 25 SKS. 4 1/2" - 4973' - cemented w/ 140 SKS, 50/50 P&Z Calculated fill-up = 737' (TDC = 4236')
<input checked="" type="checkbox"/>	CL	2197	8 5/8" - 567'	cemented w/ 225 SKS. 4 1/2" - 5012' - cemented w/ 140 SKS. (TDC = 4287') Hole collapsed at 3910' - TDC = 4200' on P+A
<input type="checkbox"/>	CL	2133	8 5/8" - 560'	cemented w/ 225 SKS. 4 1/2" - 4986' - cemented w/ 120 SKS RFE 10-2 (yield 1.61) Calculated fill-up = 848' (TDC = 4148')
<input type="checkbox"/>	CL	3755	8 5/8" - 553'	cemented w/ 275 SKS. 4 1/2" - 5047' - cemented w/ 150 SKS. - Calculated fill-up = 777' (TDC = 4270')
<input type="checkbox"/>	CL	3638	Not drilled - permit expired	
<input type="checkbox"/>	CL	2212	8 5/8" - 570'	cemented w/ 225 SKS. 4 1/2" - 5021' - cemented w/ 140 SKS. (TDC = 4296')
<input type="checkbox"/>	CL	2211	8 5/8" - 562'	cemented w/ 225 SKS. 4 1/2" - 5008' - cemented w/ 140 SKS. Calculated fill-up = 725' (TDC = 4283')
<input checked="" type="checkbox"/>	CL	2210	8 5/8" - 538'	cemented w/ 225 SKS. 4 1/2" - 4987' - cemented w/ 140 SKS. Calculated fill-up = 725' (TDC = 4252')

NOTE: Proposed injection well should be circumscribed with appropriate radius and all wells clearly labeled and identified. A legend depicting color code is required.

PORTAGE COUNTY  
DEERFIELD TWP.  
SUMM #36

Proposed Newburg Sewer  
- Existing Cluster wells  
- ~~Old Cluster wells~~  
- not drilled

30 W



A333  
CL

4267  
CL

22084  
CL 1

22134  
CL 2

21541  
CL 1

23950  
SURF  
CL 1

23864  
SURF  
CL 7

23852  
CL 300

23857  
CL 29D

23906  
SURF

23905  
SURF

20116  
CL 1

23697  
CL 5

22193  
CL 2  
20147  
CL 1

22194  
CL 3

22057  
CL 1

22198  
CL 5

22200  
CL 7

23554  
CL 2

23852  
SURF

23857  
SURF

23630  
CL 1

23698  
CL 8

21380  
CL 2

22195  
CL 1

23637  
CL 1

22133  
CL 1

22197  
CL 4

23657  
CL 1

22170  
CL 1

22071  
CL 4

23453  
CL 3

CL

20776  
CL 1

23696  
CL 3

21946  
CL 1

21947  
CL 2

23755  
CL 1

23762  
CL 2

22212  
CL 1

23701  
CL 1

21388  
CL 3

22070  
CL 3

23

23702  
CL 10

21203  
CL 2

21584  
CL 1

20164  
CL 1

23761  
CL 3

23487  
CL 2

21410  
CL 4

23773  
CL 18

22916  
CL 2

22509  
CL 2

23439  
CL 1

21203  
CL 2

23318  
CL 1

21946  
CL 1

21947  
CL 2

23755  
CL 1

23762  
CL 2

22212  
CL 1

23701  
CL 1

21388  
CL 3

22070  
CL 3

23

21584  
CL 1

20164  
CL 1

21946  
CL 1

21947  
CL 2

23755  
CL 1

23762  
CL 2

22212  
CL 1

23701  
CL 1

21388  
CL 3

22070  
CL 3

23

23916  
CL 4

21584  
CL 1

20164  
CL 1

21946  
CL 1

21947  
CL 2

23755  
CL 1

23762  
CL 2

22212  
CL 1

23701  
CL 1

21388  
CL 3

22070  
CL 3

23

23916  
CL 4

21584  
CL 1

20164  
CL 1

21946  
CL 1

21947  
CL 2

23755  
CL 1

23762  
CL 2

22212  
CL 1

23701  
CL 1

21388  
CL 3

22070  
CL 3

23



# Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

JAMES ZEHRINGER, DIRECTOR

## Division of Oil and Gas Resources Management

*Richard J. Simmers, Chief*

2045 Morse Road, Bldg. H-2

Columbus, OH 43229-6693

Phone: (614) 265-6633 Fax: (614) 265-7998

December 27, 2011

Ms. Amy Lang  
Fortis Energy Partners, LLC  
P.O. Box 340346  
Columbus, Ohio 43234

**RE: Public Notification for SWIW application for Portage County, Deerfield Twp.,  
new well, Fortis Energy Partners, LLC, Washington SWD #1 injection well**

Dear Ms. Lang:

As outlined in Rule 1501: 9-3-06 (E) (1) of the Ohio Administrative Code, please consider this letter as notification from the Division for you to proceed with the public notice. Enclosed, please find a copy of the notice you will need to have run in the newspaper of general circulation in the area of the proposed injection well. **The public notice must be run for only one day. After running this notice in the newspaper, please send me the original proof-of-publication from the newspaper as soon as possible.**

If you have any questions regarding this matter, please feel free to contact me at (614) 265-1032.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Tomastik", with a long horizontal flourish extending to the right.

Tom Tomastik, Geologist

UIC Section

Division of Oil and Gas Resources Management

2045 Morse Road, H-3

Columbus, Ohio 43229-6693

Cc: File

**APPLICATION FOR A PERMIT (Form 1)**  
 OHIO DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF OIL AND GAS RESOURCES MANAGEMENT  
 2045 Morse Road, Building H-3  
 COLUMBUS, OHIO 43229-6693  
 (614) 265-6633

#1004  
 \$1,000.00

*aPat 020307*

SEE INSTRUCTIONS ON PAGE 2 (BACK)

1. I, We (applicant) <u>Fortis Energy Partners, LLC</u>		2. Owner #: <u>8855</u>	
(address) <u>5929 N. May Avenue, Suite 512, Oklahoma City, OK 73112</u>		Phone #: <u>713-805-0308</u>	
hereby apply this date <u>20-Dec</u> , 20 <u>11</u> for a permit to:			
<input type="checkbox"/> Reissue (check appropriate blank)	<input type="checkbox"/> Revised Location	<input type="checkbox"/> Convert	
<input checked="" type="checkbox"/> Drill New Well	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Deepen	
<input type="checkbox"/> Drill Directionally	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Reopen	
<input type="checkbox"/> Drill Horizontally	<input type="checkbox"/> Orphan Well Program	<input type="checkbox"/> Temporary Inactive	
3. TYPE OF WELL:			
<input type="checkbox"/> Oil & Gas	<input type="checkbox"/> Annular Disposal	<input checked="" type="checkbox"/> Saltwater Injection	
<input type="checkbox"/> Stratigraphic Test	<input type="checkbox"/> Gas Storage	<input type="checkbox"/> Other (explain):	
<input type="checkbox"/> Solution Mining*	<input type="checkbox"/> Enhanced Recovery* (* if checked, select appropriate box below)		
<input type="checkbox"/> Input/Injection	<input type="checkbox"/> Water Supply	<input type="checkbox"/> Observation	<input type="checkbox"/> Production/Extraction
4. MAIL PERMIT TO:		20. TYPE OF TOOLS:	
Fortis Energy Partners, LLC 5929 N. May Avenue, Suite 512 Oklahoma City, OK 73112		<input type="checkbox"/> Cable	
		<input type="checkbox"/> Air Rotary	
		<input type="checkbox"/> Cable / Air Rotary	
		<input checked="" type="checkbox"/> Air / Fluid Rotary	
		<input type="checkbox"/> Cable / Fluid Rotary	
		<input type="checkbox"/> Fluid Rotary	
		<input type="checkbox"/> Cable / Air / Fluid Rotary	
		<input type="checkbox"/> Service Rig	
5. COUNTY: <u>Portage</u>		21. PROPOSED CASING PROGRAM:	
6. CIVIL TOWNSHIP: <u>Deerfield</u>		13 3/8" - 60' - cemented to surface	
7. SECTION: _____ 8. LOT: <u>30</u>		9 5/8" - 650' - cemented to surface	
9. FRACTION: _____ 10. QTR TWP: _____		7" - 4300' - cemented to 2100'	
11. TRACT / ALLOT: _____			
12. WELL #: <u>1</u>			
13. LEASE NAME: <u>Washington SWD</u>			
14. PROPOSED TOTAL DEPTH: <u>4800'</u>			
15. PROPOSED GEOLOGICAL FORMATION: <u>Newburg</u>		22. FIRE AND MEDICAL DEPARTMENT TELEPHONE NUMBERS: (closest to well site)	
16. DRILLING UNIT IN ACRES (must be same as acres indicated on plat): <u>Not applicable</u>		Fire: <u>911</u>	
		Medical: <u>911</u>	
17. IF PERMITTED PREVIOUSLY:		23. MEANS OF INGRESS & EGRESS:	
API #: _____		Township Road: _____	
OWNER: _____		County Road: _____	
WELL #: _____		Municipal Road: _____	
LEASE NAME: _____		State Highway: <u>224</u>	
TOTAL DEPTH: _____			
GEOLOGICAL FORMATION: _____		24. IS THE WELL LOCATION OR PRODUCTION FACILITIES WITHIN AN URBANIZED AREA AS DEFINED BY 1509.01(Y)?	
18. IF SURFACE RIGHTS ARE OWNED BY THE OHIO DEPARTMENT OF NATURAL RESOURCES		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Division Name: _____			
Division Phone: _____			
19. LANDOWNER ROYALTY INTEREST:			
Is There An Attached List? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Name: <u>Fortis Energy Partners, LLC</u>			
Address: <u>5929 N. May Avenue, Suite 512, Oklahoma City, OK 73112</u>			
Name: _____			
Address: _____			
Name: _____			
Address: _____			

RECEIVED

DEC 23 2011

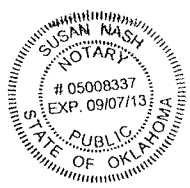
I, the undersigned, being first duly sworn, depose and state under penalties of law, that I am authorized to make this application, that this application was prepared by me or under my supervision and direction, and that the facts stated herein are true, correct, and complete, to the best of my knowledge.

I, the undersigned, further depose and state that I am the person who has the right to drill on the tract or drilling unit and to drill into and produce from a pool and to appropriate the oil or gas that I produce therefrom either for myself or others as described in this application. And furthermore, I the undersigned, being duly sworn, depose and state at this time that I am not liable for any final nonappealable order of a court for damage to streets, roads, highways, bridges, culverts, or drainage ways pursuant to Section 5577.12 of the Ohio Revised Code (ORC). I, the undersigned, further depose and state that all notices required by 1509.06 (A) (9) ORC for this application have been duly provided by me. If applying for a permit to plug and abandon a well, I hereby certify that the written notices, as required in Section 1509.13, ORC, have been given.

That I hereby agree to conform with all provisions of Chapter 1509., ORC, and Chapter 1501., OAC, and all orders and conditions issued by the Chief, Division of Oil and Gas Resources Management.

Signature of Owner/Authorized Agent [Signature]  
 Name (Type or Print) William RG Morgan Title member - manager

If signed by Authorized Agent, a certificate of appointment of agent must be on file.  
 Sworn to and subscribed before me this the 21<sup>st</sup> day of Dec, 2011.



[Signature]  
 (Notary Public)

09/07/13  
 (Date Commission Expires)



Ohio Department of Natural Resources  
Division of Oil & Gas Resources Management  
2045 Morse Rd. Bldg. F – Columbus OH 43229-6693



*VIC Permit Conditions*

<b>Application Number</b>	PATT20307	<b>Permit Number</b>		<b>Inspection Date</b>	1/4/2012	<b>Modification Date (if applicable)</b>	
<b>Company</b>		Fortis Energy Partners		<b>Lease Name/Well #</b>		Washington SWD	
<b>County</b>		Portage		<b>Township</b>		Deerfield	
<b>Section/Lot</b>		Lot 30		<b>Urban Area</b>			
<b>Inspected By</b>		Worstall					
<b>Accompanied By</b>							

**Directions to Location**     North side of US 224 approximately 0.25 miles east of the Deerfield circle

<b>ITEM</b>	<b>LEASE ROAD, WELL SITE CONSTRUCTION</b>	<b>Comments:</b>
1	<b>Tree/Brush Removal/Disposition</b>	None – location is in a pasture
2	<b>Topsoil Removal/Stockpiles/Placement</b>	Topsoil stockpiled on site west of the location.
3	<b>Erosion/Sediment Control (Silt Fence, Berms)</b>	Silt fence or other approved sediment control south of the well.
4	<b>Drainage Controls (Diversion Ditches, Culverts, Waterways, Crossings)</b>	Existing culvert on the existing lease road.
5	<b>Signage</b>	Posted at the entrance off of US 224.
6	<b>Apron/Culverts/Road Material</b>	Using existing entrance and driveway.
7	<b>Pull Off Area</b>	Can use the area near the existing farm outbuildings.
8	<b>Parking</b>	Use the lease road, the existing tank battery or the drilling location.
9	<b>GPS – Access Road</b>	
10	<b>GPS – Well Stake</b>	
11	<b>GPS – Tank Battery</b>	

ITEM	DRILLING CONSIDERATIONS	Comments:		
	<b>Noise Mitigation</b>			
12	(Mufflers, Extra Frac Tanks, Tarps)			All equipment to have working mufflers
	<b>Rig Type</b>			
13				RTAF will drill with air/soap to the top of the lime then convert to fluid to TD
14	Is a Blow-out Preventor required?	X	Yes	No
	If No, explain:			
	<b>Equipment Placement/ Orientation (Rig/ Frac Tanks/ etc.)</b>			
15				Rig oriented east to west.
16	<b>Drilling Pits (Placement/Orientation)</b>			Located north of the well.
17	<b>Fencing (Pits/Entire Location)</b>			Fence the drilling pits.
18	<b>Flood Plain</b>			None
				Yes. Known abandoned mine (PE-007) just east of the proposed well. Recommend drilling a pilot hole to verify mine and adjusting the casing program accordingly.
19	<b>Mine Voids</b>			
20	Verify Water Wells Within 300'			None
21	Verify Structures within 500'			Single family homes along US 224.
22	Verify Streams and Drainage			Drainage swale culverted and crossed by the existing lease road. Drainage to the east.

ITEM	RESTORATION	Comments:		
	<b>Pit Closure – (Standard/ Solidification/ Off-Site Disposal – state time frame)</b>			
23				Solidify within 14 days.
	<b>Site Specific Time Frame for Restoration</b>			
24				Preliminary restoration due within 6 months.
25	<b>Erosion/Sediment Control</b>			Silt fence to remain until the affected area is reclaimed.
26	<b>Drainage Control</b>			Culvert to remain for the life of the well.

ITEM	PRODUCTION	Comments:		
27	Is the Access Road Gate required?	X	Yes	No
	If No, explain:			
	<b>Landscaping/Screening (Wellhead, Tank Battery)</b>			
28	(Waiver Attached if applicable)			Not required.
	<b>Fencing (Wellhead, Tank Battery)</b>			
29	(Waiver Attached if applicable)			Security fencing to prevent unauthorized access.

WAIVERS	Comments:		
Is the Company required to submit a waiver?	Yes	X	No
If yes, submit the following waiver requests:			
Is the Company required to submit revised drawings?	Yes	X	No

THE FOLLOWING ITEMS HAVE BEEN CHANGED FROM THE ORIGINAL APPLICATION:



**INTER-OFFICE MEMO**

**TO: Bob Worstall, Mineral Resources Inspector** /  
**FROM: Tom Tomastik, Geologist**  
**SUBJECT: Application and Site Evaluation for a SWIW permit**  
**DATE: December 27, 2011**

The Division of Oil and Gas Resources Management has received an application for the proposed saltwater injection well as described below:

**OPERATOR:** Fortis Energy Partners, LLC  
**WELL NAME & NUMBER:** Washington SWD # 1  
**PERMIT NUMBER:** New well, SWIW #36  
**LOCATION:** 825' SL & 1400' WL of Lot 30, Deerfield Twp., Portage County  
**PROPOSED INJECTION ZONE:** Newburg dolomite  
**DATE RECEIVED:** December 23, 2011

Please inspect proposed site and evaluate for any potential water wells or surface bodies of water within close proximity that would require any additional permit conditions for the construction of the SWIW surface facilities. Please e-mail me a copy of the site inspection report with any recommendations.

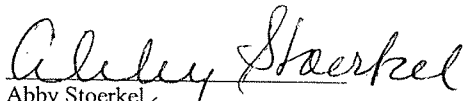
31166920

**Proof of Publication**

Record Publishing Company  
126 North Chestnut Street,  
Ravenna, OH 44266  
Phone (330) 673-3500  
Fax (330) 673-6363

I, Abby Stoerkel being first duly sworn depose and say that I am Assistant Bookkeeper of  
**Record Publishing Company**

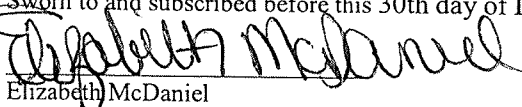
30 Record-Courier a newspaper printed and published in the city of Ravenna, and of General circulation in the County of Portage, State of Ohio, and personal knowledge of the facts herein stated and that the notice hereto annexed was Published in said newspapers for 1 insertions on the same day of the week from and after the 30th day of December, 2011 and that the fees charged are legal.

  
Abby Stoerkel

Name of Account: FORTIS ENGERGY PARTNERS, LLC  
Ad Number: 11275416  
No. of Lines: 24

Day(s) Published: 12/30,  
Printers Fee: \$17.10

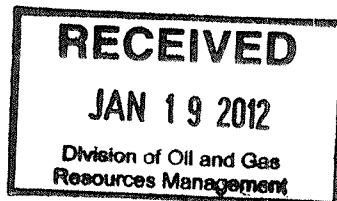
Sworn to and subscribed before this 30th day of December, 2011.

  
Elizabeth McDaniel  
Notary Public  
Commission Expires June 19, 2016

**PUBLIC NOTICE**

Fortis Energy Partners, LLC, 5929 N. May Avenue, Suite 512, Oklahoma City, Oklahoma (405) 204-5848 is applying to permit a well for the injection of brine water produced in association with oil and natural gas. The location of

the proposed injection well is the Washington SWD #1 well, New well, Lot 30, Deerfield Township, Portage County, Ohio. The proposed well will inject into Newburg dolomite at a depth of 4300 to 4800 feet. The average injection is estimated to be 1000 barrels per day. The maximum injection pressure is estimated to be 990 psi. Further information can be obtained by contacting Fortis Energy Partners, LLC or the Division of Oil and Gas Resources Management. The address of the Division is: Ohio Department of Natural Resources, Division of Oil and Gas Resources Management, 2045 Morse Road, Building H-3, Columbus, Ohio 43229-6693, (614) 265-6633. For full consideration, all comments and objections must be received by the Division, in writing, within fifteen calendar days of the date of this published legal notice.  
December 30 - 11275416



## PUBLIC NOTICE

Fortis Energy Partners, LLC, 5929 N. May Avenue, Suite 512, Oklahoma City, Oklahoma (713) 805-0308 is applying to permit a well for the injection of brine water produced in association with oil and natural gas. The location of the proposed injection well is the Washington SWD #1 well, New well, Lot 30, Deerfield Township, Portage County, Ohio. The proposed well will inject into Newburg dolomite at a depth of 4300 to 4800 feet. The average injection is estimated to be 1000 barrels per day. The maximum injection pressure is estimated to be 990 psi. Further information can be obtained by contacting Fortis Energy Partners, LLC or the Division of Oil and Gas Resources Management. The address of the Division is: Ohio Department of Natural Resources, Division of Oil and Gas Resources Management, 2045 Morse Road, Building H-3, Columbus, Ohio 43229-6693, (614) 265-6633. For full consideration, all comments and objections must be received by the Division, in writing, within fifteen calendar days of the date of this published legal notice.

**AUTHORITY AND ORGANIZATION FORM (Form 9)**  
OHIO DEPARTMENT OF NATURAL RESOURCES  
Division of Oil and Gas Resources Management, 2045 Morse Road, H-3, Columbus, Ohio 43229-6693  
(614) 265-6633

OWNER NO.: <b>8855</b>	
1. ORGANIZATION NAME AND STREET ADDRESS: Fortis Energy Partners, LLC 5929 N. May Avenue, Suite 512 Oklahoma City, OK 73112	4. PURPOSE OF FILING: <input type="checkbox"/> New Filing <input type="checkbox"/> Address and/or Telephone Change <input checked="" type="checkbox"/> Change of Authorized Agent <input type="checkbox"/> Change of Statutory Agent <input type="checkbox"/> Temporary Plug Only <input type="checkbox"/> Name Change <input type="checkbox"/> Other: _____
TELEPHONE NUMBER: <b>713-805-0308</b>	5. CURRENT ORGANIZATION: <input type="checkbox"/> Corporation <input type="checkbox"/> Limited Partnership <input checked="" type="checkbox"/> Limited Liability Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust <input type="checkbox"/> Sole Proprietorship <input type="checkbox"/> Joint Venture <input type="checkbox"/> Exempt Domestic Well Owner (# acres _____) (see criteria on back of form)
2. MAILING ADDRESS: Fortis Energy Partners, LLC 5929 N. May Avenue, Suite 512 Oklahoma City, OK 73112	
3. IF ORGANIZATION IS A SUBSIDIARY OR AN ASSUMED NAME (dba), GIVE NAME & ADDRESS OF ASSOCIATED COMPANY:	
6. IF A REORGANIZATION, GIVE NAME AND ADDRESS OF PREVIOUS ORGANIZATION:	
7. LIST NAME AND STREET ADDRESS OF AUTHORIZED AGENT AND ENCLOSE A COPY OF CERTIFICATE OF APPOINTMENT:  TELEPHONE NUMBER: _____	
8. LIST NAME AND STREET ADDRESS OF STATUTORY AGENT (Corporations only): L. Lang, P.O. Box 340346, Columbus, OH 43235 <span style="float: right;">Amy</span>	

I, the undersigned, being first duly sworn, depose and state under penalties of law, that I am authorized to complete this Authority and Organization Form on behalf of the organization listed above, that this form was prepared by me or under my supervision and direction, and that date and facts stated herein are true, correct, and complete to the best of my knowledge.

That I hereby agree to conform with all provisions of Chapter 1509., ORC, to all orders and rules issued by the Chief, Division of Oil and Gas Resources Mgt.

SIGNATURE OF OWNER/AUTHORIZED AGENT: \_\_\_\_\_

TITLE: \_\_\_\_\_

NAME (Typed or Printed): \_\_\_\_\_

SWORN to and subscribed before me this 22nd day of December, 2011

(SEAL)



\_\_\_\_\_  
(Notary Public)  
09/07/13  
(Date Commission Expires)

**NOTE:**

A certificate issued by an insurance company stating that the owner has in force a combined (general aggregate); \$1 million bodily injury coverage and property damage for well(s) located in non-urban areas or \$3 million bodily injury coverage and property damage for wells located in urban areas. The certificate MUST BE ATTACHED or on file at the Division of Oil and Gas Resources Management UNLESS YOU QUALIFY AS AN EXEMPT DOMESTIC WELL OWNER UNDER #5 ABOVE. IF SO, PROOF OF INSURANCE IS NOT REQUIRED.

\*Check the 2000 Census Information found at [www.ohiodnr.com/kabid10379/Default.aspx](http://www.ohiodnr.com/kabid10379/Default.aspx) to determine if your well is located in an urban area.

RECEIVED



## INTER-OFFICE MEMO

**TO:** Rick Simmers, Chief, DOGRM  
**FROM:** Tom Tomastik, Geologist 4, DOGRM *TET*  
**DATE:** February 22, 2012  
**SUBJECT:** Class II injection well review – Application No. aPATT020307, Portage County, Deerfield Twp., SWIW #36, New well, Washington SWD #1, proposed “Newburg” dolomite injection zone

The Division of Oil and Gas Resources Management is in receipt of comments from Ohio EPA and the Ohio Geological Survey on the above Class II saltwater injection well application. This is a new well to be drilled and completed for open-hole injection into the “Newburg” dolomite from depths of 4300 to 4800 feet. The “Newburg” is any porous zone within the Lockport Dolomite geologic formation. The maximum allowable surface injection pressure set by permit for this proposed well is 990 psi. Based upon MRI 3 Bob Worstall’s pres-site field review there is a possibility of encountering an abandoned underground coal mine. The applicant, Fortis Energy Partners, LLC, has been made aware of this potential situation and the possible need to run a mine string if in fact an underground coal mine is encountered during the drilling of this Class II injection well.

Ohio EPA’s only recommendation was the use of Class A cement with centralizers on the casing strings. The Ohio Geological Survey did an extended Class II injection well review which included a number of geologic maps and fault and lineament analysis. There are some lineament trends on the surface topography in the area, which is typical of the NE-SW and NW-SE shear joint set orientation encountered on the bedrock surface in Ohio. There is no evidence of faulting within the proposed “Newburg” dolomite injection zone within a two mile radius of this proposed well location.

Based upon the complete evaluation of this permit application, I would recommend issuance of this Class II saltwater injection well permit. Additional special permit conditions will be attached to this permit to address the continuous pressure monitoring requirement, automatic shut-off switch on the injection pump set at the maximum allowable surface injection pressure, cementing, centralizers, and potential mine string issues.

**Tomastik, Tom**

**From:** Amy L. Lang [Amy.Lang@formanenergy.com]  
**Sent:** Monday, March 05, 2012 12:43 PM  
**To:** Tomastik, Tom  
**Subject:** Fw: Fortis Energy Class II Permit

**From:** Buddy Morgan  
**Sent:** Thursday, February 09, 2012 2:43 PM  
**To:** stewart@ooga.org  
**Cc:** Amy Lang  
**Subject:** Fortis Energy Class II Permit

Tom –

I just got off the phone with Amy Lang of Forman Energy and she informed me of your conversation. I'd like to introduce myself, and our company. Fortis Energy is an Oklahoma company formed June 1<sup>st</sup>, 2011 in response to the increasing demand of injection resulting from the Marcellus and (in anticipation of) the Utica shale plays. The permit we have applied for will be the first well that we have developed and operated as a company.

It is my understanding that you have a meeting scheduled with the ODNR director tomorrow. If discussion of our permit arises, here are some factors that we consider favorable:

- 1) We were told on January 19<sup>th</sup>, that our permit has already been approved, and are now just waiting on the permit to be released.
- 2) We will own the land and minerals that the well is drilled on, therefore the risk of damaging property owned by someone other than us is much less than if we were to lease surface rights/injection rights.
- 3) Although we are an out of state company, we have been working with Don Kreager and Amy Lang, both native's of Ohio and highly respected throughout the industry.
- 4) Total Depth will not exceed 4,800' and the target formation is the Newberg.
  - a. There is currently a Mt Simon injection well roughly 1.1 mi to the West of us, with no known reports to us of related seismic activity
  - b. There are currently 2 commercial Newberg injection wells roughly 5.4 mi to the North West of us, with no known reports of related seismic activity.
- 5) We did not receive objection from the public during the permitting process.
- 6) We plan on voluntarily installing seismic and pressure monitoring/recording equipment on the well to ensure public safety.
- 7) It should also be noted that we have been working in Ohio since June of last year. We have evaluated 4 sites, and rejected 3 due to various factors. We are confident that our diligence has either met or exceeded most people's expectations and we firmly believe that we have done everything that we can do to protect the environment, surrounding properties, and

3/5/2012

the well being surrounding residents.

Because of our business model and our investor requirements, we must close on the purchase of the property by the end of February or be forced to walk away from the project. We cannot close on the property without a permit in hand. If we don't receive our permit by the end of the month, then we will go out of contract and the likelihood of our project being derailed will go up dramatically. Time is of the essence for us and we are very uncomfortable with the lack of clarity on how the situation is being rectified (i.e. who is in charge? Who gives the green light? What is the timeline? Was an actual moratorium legally enacted and is it enforceable? etc.).

Feel free to contact me via email or cell phone. I'll aid you in any way I can, and once this hole is in the ground... We look forward to being the latest OOGA members!

Regards,

Buddy Morgan  
*Director of Acquisitions*



FORTISEP ENERGY PARTNERS  
5929 N. May Ave. Ste 512 • Oklahoma City, OK 73112  
405.204.5848 (c) • [bmorgan@fortisep.com](mailto:bmorgan@fortisep.com)

**CONFIDENTIALITY NOTICE**  
THIS MESSAGE AND ANY ATTACHMENTS MAY CONTAIN INFORMATION THAT IS HIGHLY CONFIDENTIAL, PRIVILEGED, AND EXEMPT FROM DISCLOSURE. ANY RECIPIENT OTHER THAN THE INTENDED RECIPIENT IS ADVISED THAT ANY DISSEMINATION, DISTRIBUTION, COPYING, OR OTHER USE OF THIS MESSAGE IS STRICTLY PROHIBITED. IF YOU AVE RECEIVED THIS MESSAGE IN ERROR, PLEASE NOTIFY THE SENDER IMMEDIATELY AT 405.227.1100

3/5/2012

**APPLICATION FOR A PERMIT (Form 1)**  
 OHIO DEPARTMENT OF NATURAL RESOURCES  
 DIVISION OF OIL AND GAS RESOURCES MANAGEMENT  
 2045 Morse Road, Building H-3  
 COLUMBUS, OHIO 43229-6693  
 (614) 265-6633

#1004  
 \$1,000.00

aPaHo203.7

SEE INSTRUCTIONS ON PAGE 2 (BACK)

1. I, We (applicant) <u>Fortis Energy Partners, LLC</u>		2. Owner #: <u>8855</u>	
(address) <u>5929 N. May Avenue, Suite 512, Oklahoma City, OK 73112</u>		Phone #: <u>713-805-0308</u>	
hereby apply this date <u>20-Dec</u> , 20 <u>11</u> for a permit to:			
<input type="checkbox"/> Reissue (check appropriate blank)	<input type="checkbox"/> Revised Location	<input type="checkbox"/> Convert	
<input checked="" type="checkbox"/> Drill New Well	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Deepen	
<input type="checkbox"/> Drill Directionally	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Reopen	
<input type="checkbox"/> Drill Horizontally	<input type="checkbox"/> Orphan Well Program	<input type="checkbox"/> Temporary Inactive	
3. TYPE OF WELL:			
<input type="checkbox"/> Oil & Gas	<input type="checkbox"/> Annular Disposal	<input checked="" type="checkbox"/> Saltwater Injection	
<input type="checkbox"/> Stratigraphic Test	<input type="checkbox"/> Gas Storage	<input type="checkbox"/> Other (explain): _____	
<input type="checkbox"/> Solution Mining*	<input type="checkbox"/> Enhanced Recovery* (* if checked, select appropriate box below)		
<input type="checkbox"/> Input/Injection	<input type="checkbox"/> Water Supply	<input type="checkbox"/> Observation	<input type="checkbox"/> Production/Extraction
4. MAIL PERMIT TO:		20. TYPE OF TOOLS:	
Fortis Energy Partners, LLC 5929 N. May Avenue, Suite 512 Oklahoma City, OK 73112		<input type="checkbox"/> Cable	
		<input type="checkbox"/> Air Rotary	
		<input checked="" type="checkbox"/> Air / Fluid Rotary	
		<input type="checkbox"/> Fluid Rotary	
		<input type="checkbox"/> Service Rig	
5. COUNTY: <u>Portage</u>		21. PROPOSED CASING PROGRAM:	
6. CIVIL TOWNSHIP: <u>Deerfield</u>		13 3/8" - 60' - cemented to surface	
7. SECTION: _____ 8. LOT: <u>30</u>		9 5/8" - 650' - cemented to surface	
9. FRACTION: _____ 10. QTR TWP: _____		7" - 4300' - cemented to 2100'	
11. TRACT / ALLOT: _____		22. FIRE AND MEDICAL DEPARTMENT TELEPHONE	
12. WELL #: <u>1</u>		NUMBERS: (closest to well site)	
13. LEASE NAME: <u>Washington SWD</u>		Fire: <u>911</u>	
14. PROPOSED TOTAL DEPTH: <u>4800'</u>		Medical: <u>911</u>	
15. PROPOSED GEOLOGICAL FORMATION: <u>Newburg</u>		23. MEANS OF INGRESS & EGRESS:	
16. DRILLING UNIT IN ACRES (must be same as acres indicated on plat): <u>Not applicable</u>		Township Road: _____	
17. IF PERMITTED PREVIOUSLY:		County Road: _____	
API #: _____		Municipal Road: _____	
OWNER: _____		State Highway: <u>224</u>	
WELL #: _____		24. IS THE WELL LOCATION OR PRODUCTION FACILITIES WITHIN AN URBANIZED AREA AS DEFINED BY 1509.01(Y) ?	
LEASE NAME: _____		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
TOTAL DEPTH: _____			
GEOLOGICAL FORMATION: _____			
18. IF SURFACE RIGHTS ARE OWNED BY THE OHIO DEPARTMENT OF NATURAL RESOURCES			
Division Name: _____			
Division Phone: _____			
19. LANDOWNER ROYALTY INTEREST:			
Is There An Attached List? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Name: <u>Fortis Energy Partners, LLC</u>			
Address: <u>5929 N. May Avenue, Suite 512, Oklahoma City, OK 73112</u>			
Name: _____			
Address: _____			
Name: _____			
Address: _____			

**RECEIVED**  
 DEC 23 2011

I, the undersigned, being first duly sworn, depose and state under penalties of law, that I am authorized to make this application, that this application was prepared by me or under my supervision and direction, and that the facts stated herein are true, correct, and complete, to the best of my knowledge.

I, the undersigned, further depose and state that I am the person who has the right to drill on the tract or drilling unit and to drill into and produce from a pool and to appropriate the oil or gas that I produce therefrom either for myself or others as described in this application. And furthermore, I the undersigned, being duly sworn, depose and state at this time that I am not liable for any final nonappealable order of a court for damage to streets, roads, highways, bridges, culverts, or drainage ways pursuant to Section 5577.12 of the Ohio Revised Code (ORC). I, the undersigned, further depose and state that all notices required by 1509.06 (A) (9) ORC for this application have been duly provided by me. If applying for a permit to plug and abandon a well, I hereby certify that the written notices, as required in Section 1509.13, ORC, have been given.

That I hereby agree to conform with all provisions of Chapter 1509., ORC, and Chapter 1501., OAC, and all orders and conditions issued by the Chief, Division of Oil and Gas Resources Management.

Signature of Owner/Authorized Agent [Signature]  
 Name (Type or Print) William R.C. Morgan Title member - manager

If signed by Authorized Agent, a certificate of appointment of agent must be on file.

Sworn to and subscribed before me this the 21<sup>st</sup> day of Dec, 2011



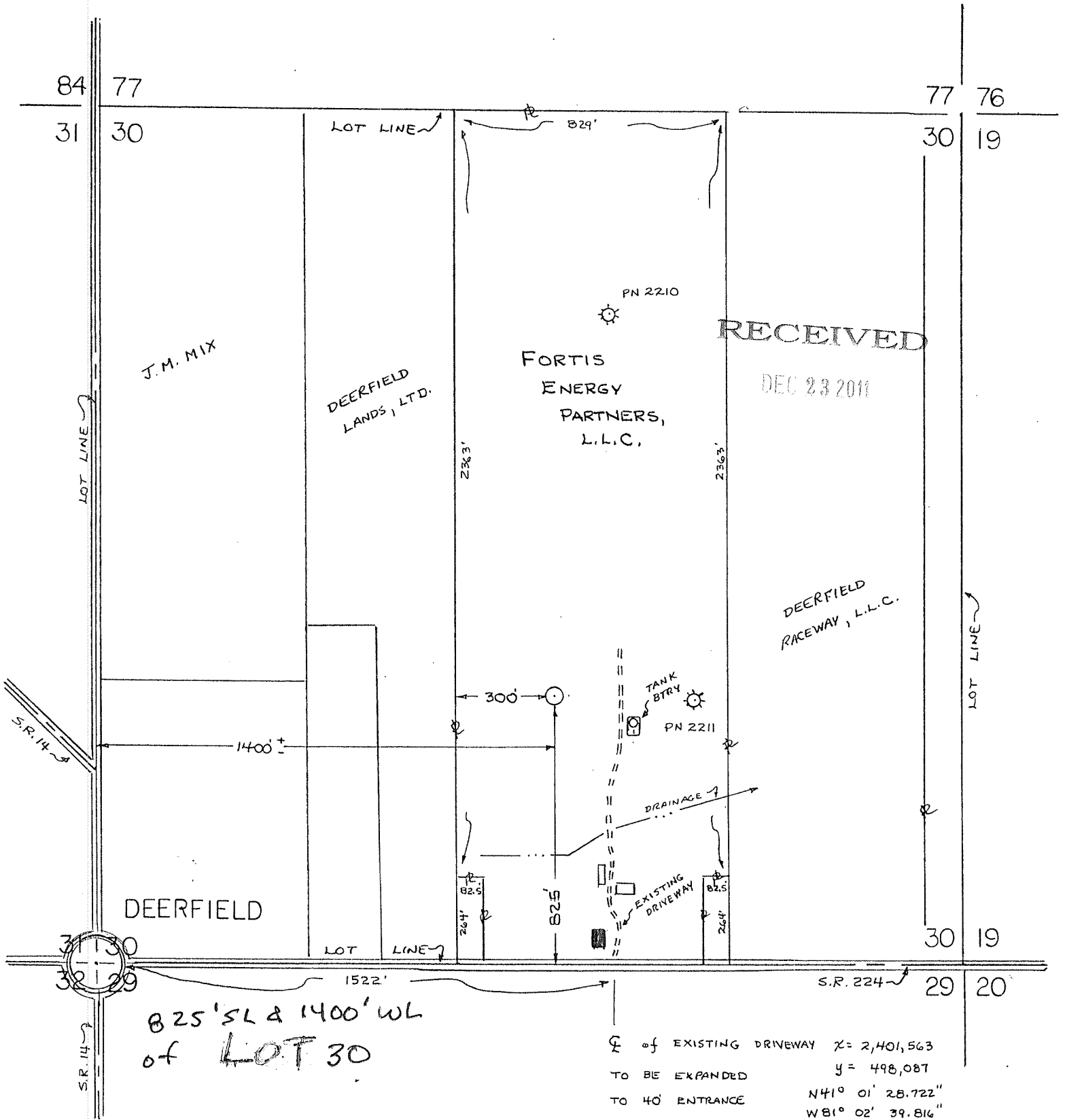
[Signature]  
 (Notary Public)

09/07/13  
 (Date Commission Expires)



WASHINGTON SWD No. 1

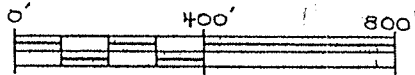
DISPOSAL WELL



I hereby certify that all drilling or producing wells within 1000 feet and all buildings and streams within 200 feet have been shown, there are no drilling unit lines nearer than NA feet, that this plat is true and correct and was prepared according to the current State of Ohio, Department of Natural Resources, Division of Oil and Gas Regulations.

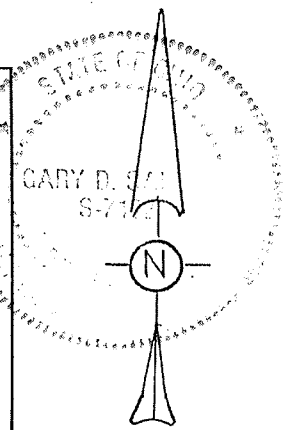
Gary D. Salinger 5-7192  
REG. SURVEYOR

SCALE: 1=400



OPERATOR FORTIS ENERGY PARTNERS, L.L.C.  
ADDRESS 5929 N. May Ave. Ste. 512 Oklahoma City, OK. 73112  
SURFACE FORTIS ENERGY PARTNERS, L.L.C.  
LANDOWNER  
MINERALS FORTIS ENERGY PARTNERS, L.L.C.  
WELL NO. 1 DRILLING UNIT AC. NA  
COUNTY PORTAGE  
TWP. DEERFIELD  
QUAD. DEERFIELD

SUBDIVISION CIVIL TWP.  
TWP. 1N  
RANGE 6W  
QUARTER TWP.  
SECTION 30 LOT 30  
TRACT  
ALLOTMENT  
FRACTION OTHER



OHIO PLANE COORDINATES (NAD 27)  
X 2,401,360 N41° 01' 36.900"  
Y 498,900 W81° 02' 42.186"

ELEV. 1072' DATE: 12.15.11

**SUPPLEMENT TO APPLICATION  
PERMIT FOR A SALTWATER INJECTION WELL (Form 210)**

Ohio Department of Natural Resources, Division of Oil and Gas Resources Management  
2045 Morse Road, Bldg H3  
Columbus, OH 43229-6693

AREA OF REVIEW. An application for a saltwater injection well (SWIW) will be evaluated on the basis of an "area of review" surrounding the proposed well. The area of review for wells in which injection of greater than two hundred barrels per day is proposed shall be the area circumscribed by a circle with the center point at the location of the injection well and a radius of one-half mile. The area of review for wells in which a maximum injection of two hundred barrels per day or less is proposed shall be the area circumscribed by a circle with the center point at the location of the injection well and a radius of one-quarter mile.

31. **PROPOSED INJECTION ZONE**

Geological Formation: \_\_\_\_\_ Newburg  
Injection Interval: From: 4300' feet to 4700'  
Geologic description of injection zone: \_\_\_\_\_ dolomite

32. **WELL CONSTRUCTION AND OPERATION**

A. Description of the proposed casing and cement program for new wells, or of the casing, cementing or sealing with prepared clay for existing wells to be converted:  
 \_\_\_\_\_ 13 3/8" - 60' - cemented to surface  
 \_\_\_\_\_ 9 5/8" - 650' - cemented to surface  
 \_\_\_\_\_ 7" - 4300' - cemented to 2100'

B. Proposed method for testing the casing:  
 \_\_\_\_\_ Set tubing and packer at 4250' and pressure test to at least the maximum injection pressure of 1010 psi for  
 \_\_\_\_\_ 15 minutes with no more than a 5% decline.

C. Description of the proposed method for completion and operation of the injection well:  
 \_\_\_\_\_ Drill to 4300', set and cement in 7" production casing. Then drill to 4800' and complete well open-hole  
 \_\_\_\_\_ in the Newburg.

D. Description of the proposed unloading, surface storage, and spill containment facilities:  
 \_\_\_\_\_ Refer to attached surface facility sketch.

RECEIVED

DEC 23 2011

33. **PROPOSED INJECTION VOLUMES**

A. Indicate the estimated amount of saltwater to be injected into the proposed injection well per day:  
 AVERAGE: \_\_\_\_\_ 1000 \_\_\_\_\_ MAXIMUM: \_\_\_\_\_ 1500  
 B. Indicate the method to be used to measure the actual amount of saltwater injected into the well:  
 \_\_\_\_\_ Volumetric meter or flow meter.

34. **PROPOSED INJECTION PRESSURES**

A. Indicate the estimated pressure to be used for injection of saltwater into the proposed injection well:  
 AVERAGE: \_\_\_\_\_ 500 \_\_\_\_\_ MAXIMUM: \_\_\_\_\_ 1010 990 psi  
 B. Indicate the method to be used to measure the actual daily injection pressure:  
 \_\_\_\_\_ Install continuous recorder or two-pen recorder to  
 \_\_\_\_\_ continuous record annulus and injection pressures.

35. **PROPOSED CORRECTIVE ACTION**

Explain any corrective action proposed for wells penetrating the proposed injection formation or zone within the area of review:  
 \_\_\_\_\_ None

**SUPPLEMENT TO APPLICATION**  
**PERMIT FOR A SALTWATER INJECTION WELL (Form 210)**

Ohio Department of Natural Resources, Division of Oil and Gas Resources Management  
2045 Morse Road, Bldg H3  
Columbus, OH 43229-6693

AREA OF REVIEW. An application for a saltwater injection well (SWIW) will be evaluated on the basis of an "area of review" surrounding the proposed well. The area of review for wells in which injection of greater than two hundred barrels per day is proposed shall be the area circumscribed by a circle with the center point at the location of the injection well and a radius of one-half mile. The area of review for wells in which a maximum injection of two hundred barrels per day or less is proposed shall be the area circumscribed by a circle with the center point at the location of the injection well and a radius of one-quarter mile.

**31. PROPOSED INJECTION ZONE**

Geological Formation: Newburg  
Injection Interval: From: 4300' feet to 4700'  
Geologic description of injection zone: dolomite

**32. WELL CONSTRUCTION AND OPERATION**

A. Description of the proposed casing and cement program for new wells, or of the casing, cementing or sealing with prepared clay for existing wells to be converted:

13 3/8" - 60' - cemented to surface  
9 5/8" - 650' - cemented to surface  
7" - 4300' - cemented to 2100'

B. Proposed method for testing the casing:

Set tubing and packer at 4250' and pressure test to at least the maximum injection pressure of 1010 psi for 15 minutes with no more than a 5% decline.

C. Description of the proposed method for completion and operation of the injection well:

Drill to 4300', set and cement in 7" production casing. Then drill to 4800' and complete well open-hole in the Newburg.

D. Description of the proposed unloading, surface storage, and spill containment facilities:

Refer to attached surface facility sketch.

RECEIVED

DEC 23 2011

**33. PROPOSED INJECTION VOLUMES**

A. Indicate the estimated amount of saltwater to be injected into the proposed injection well per day:

AVERAGE: 1000 MAXIMUM: 1500

B. Indicate the method to be used to measure the actual amount of saltwater injected into the well:

Volumetric meter or flow meter.

**34. PROPOSED INJECTION PRESSURES**

A. Indicate the estimated pressure to be used for injection of saltwater into the proposed injection well:

AVERAGE: 500 MAXIMUM: 1010 990 psi

B. Indicate the method to be used to measure the actual daily injection pressure:

Install continuous recorder or two-pen recorder to continuous record annulus and injection pressures.

**35. PROPOSED CORRECTIVE ACTION**

Explain any corrective action proposed for wells penetrating the proposed injection formation or zone within the area of review:

None

WASHINGTON SWD No. 1

SCALE: 1" = 100'

DISPOSAL FACILITY

FORTIS ENERGY PARTNERS, L.L.C.

5929 N. MAY AVE. STE. 512

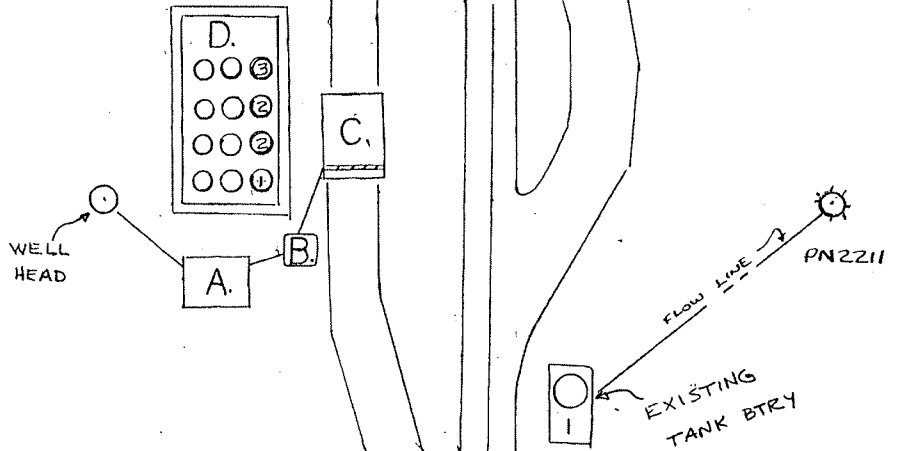
OKLAHOMA CITY, OK. 73112

PH. 405-204-5848

PORTAGE COUNTY

DEERFIELD TOWNSHIP

LOT 30



A. PUMP HOUSE (24'x36')

B. COLLECTION TANK FOR UNLOAD PAD / PUMP HOUSE DRAINAGE WITH SUMP PUMP

C. TRUCK UNLOAD PAD (32'x45') WITH DRAINAGE TO B.

D. TANK PAD (60'x100') WITH CONTAINMENT WALL (72" HIGH)

- ① WASH TANK
- ② UNLOAD TANKS
- ③ CLEAN WATER TANK
- ④ WATER STORAGE TANKS

w/ 30 mil liner  
PS

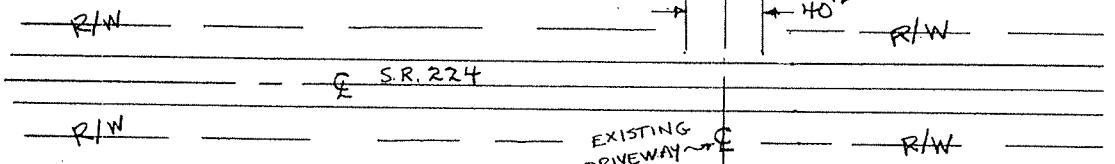
12 - 400 bbl. tanks  
= 4800 bbls. PS

60' x 100' x 0.0148  
= 88.8 x 72" =  
6394 bbls.  
Storage capacity.

RECEIVED

DEC 23 2011

Gary D. Sal  
 STATE OF OKLAHOMA  
 REG. SURVEYOR S-7192  
 12-15-11



NAD 27 X = 2,401,563 Y = 498,087  
 N 41° 01' 28.722" W 81° 02' 39.816"

LOT 50  
DEERFIELD TWP  
PORTAGE CO.

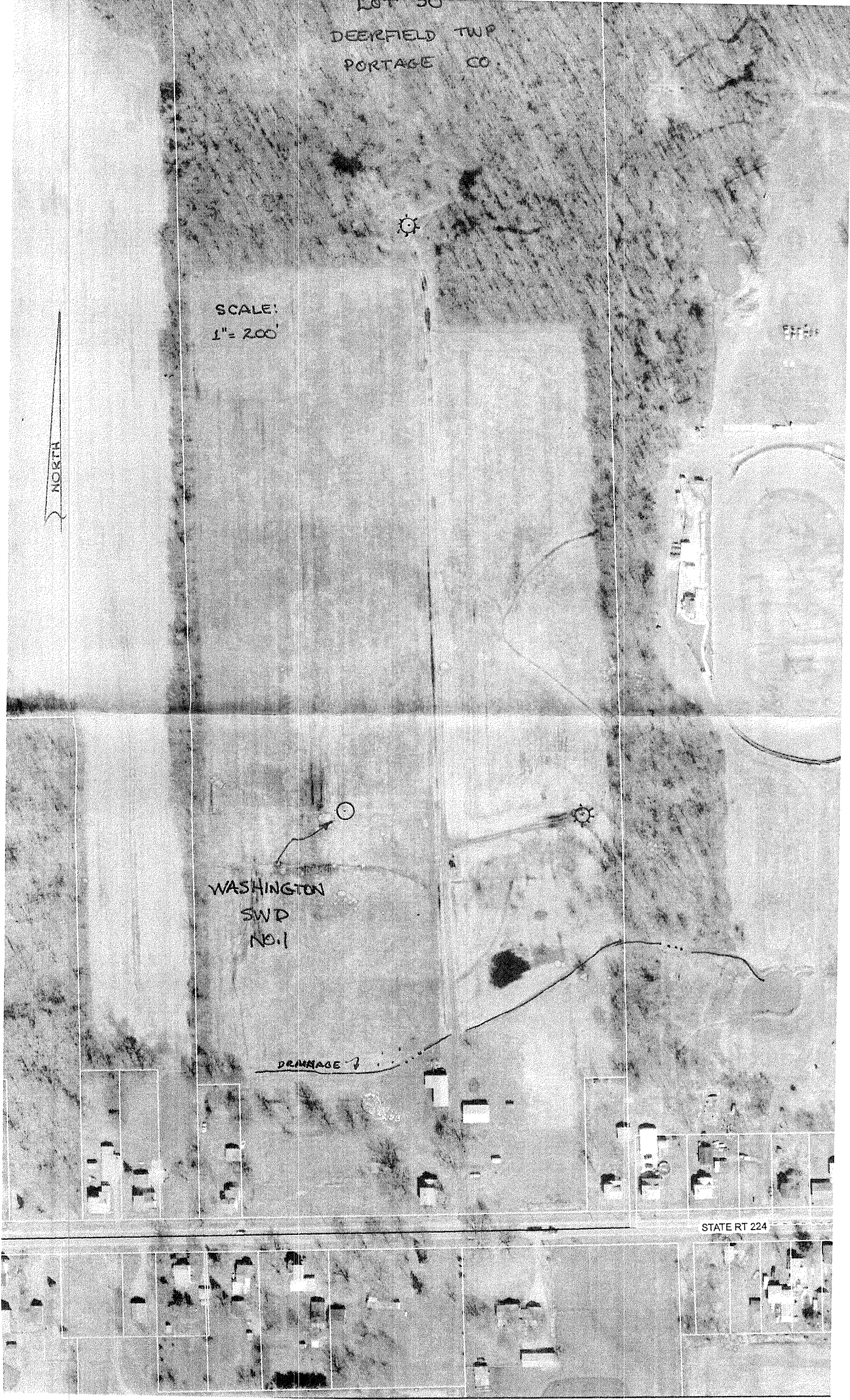
SCALE:  
1" = 200'



WASHINGTON  
SWP  
NO. 1

DRAINAGE

STATE RT 224



WASHINGTON SWD No. 1

SCALE:  
1" = 100'

DISPOSAL FACILITY

FORTIS ENERGY PARTNERS, L.L.C.

5929 N. MAY AVE. STE. 512

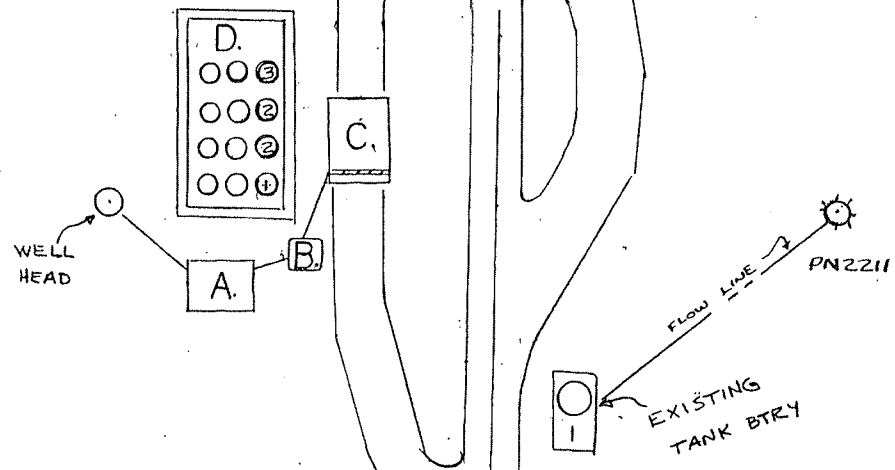
OKLAHOMA CITY, OK. 73112

PH. 405-204-5848

PORTAGE COUNTY

DEERFIELD TOWNSHIP

LOT 30



A. PUMP HOUSE (24'x36')

B. COLLECTION TANK FOR UNLOAD PAD / PUMP HOUSE DRAINAGE WITH SUMP PUMP

C. TRUCK UNLOAD PAD (32'x45') WITH DRAINAGE TO B.

D. TANK PAD (60'x100') WITH CONTAINMENT WALL (72" HIGH)

- ① WASH TANK
- ② UNLOAD TANKS
- ③ CLEAN WATER TANK
- WATER STORAGE TANKS

w/ 30 mil liner  
PS

12-400 bbl. tanks  
= 4800 bbls. PS

60' x 100' x 0.0148

= 88.8 x 72" =

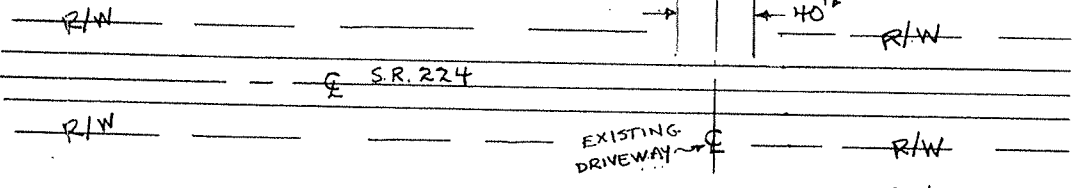
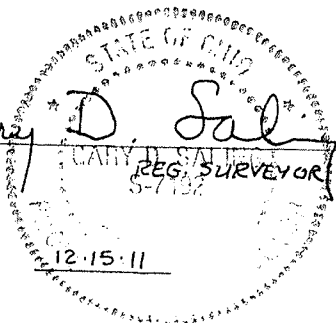
6394 bbls.

Storage capacity.

RECEIVED

DEC 23 2011

Gary D. Sal...  
REG. SURVEYOR S-7192



NAD 27 X = 2,401,563 Y = 498,087  
N 41° 01' 28.722" W 81° 02' 39.816"

DEERFIELD TWP  
PORTAGE CO.

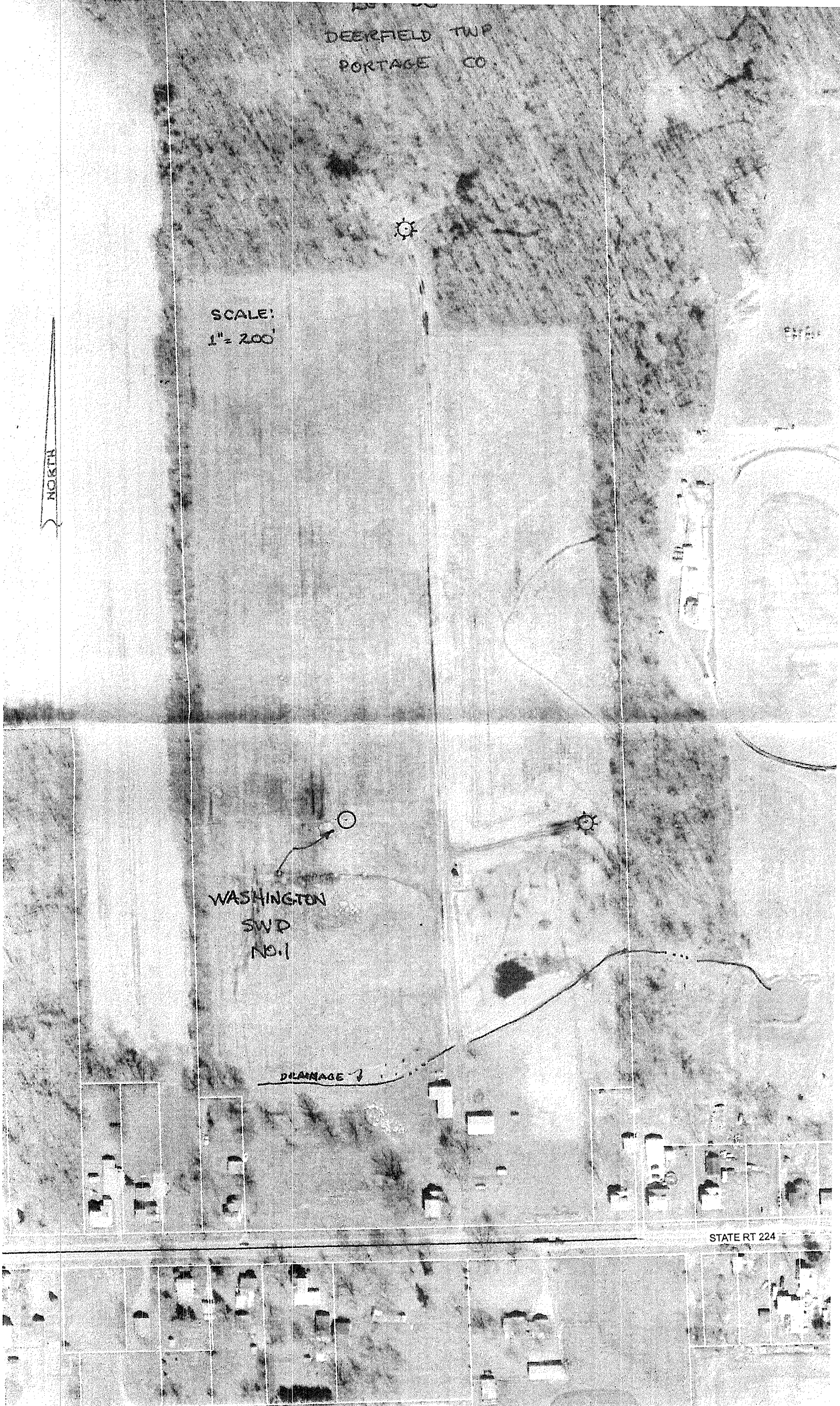
SCALE:  
1" = 200'

NORTH

WASHINGTON  
SWD  
NO. 1

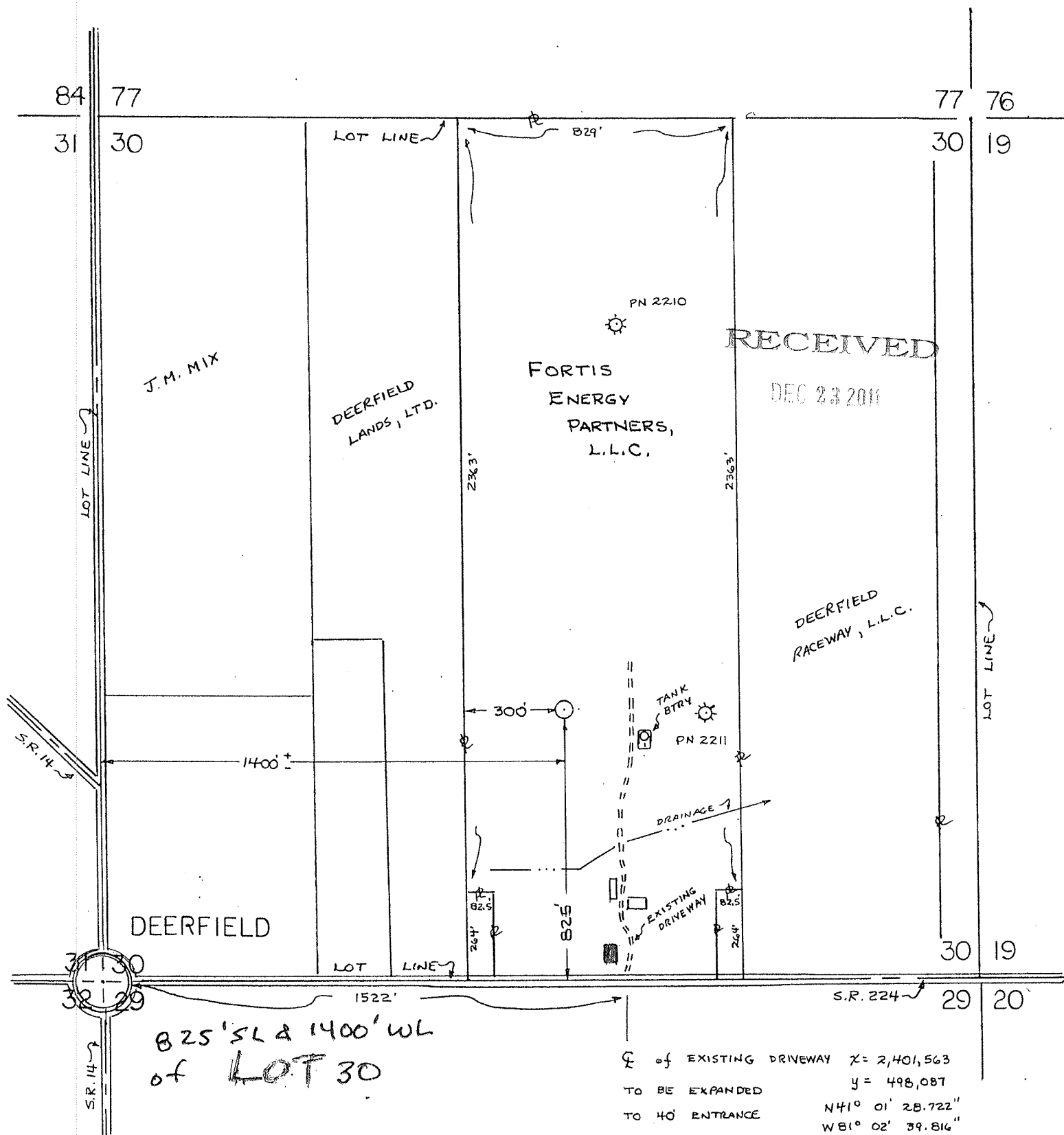
DRAINAGE

STATE RT 224



WASHINGTON SWD No. 1

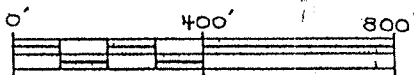
DISPOSAL WELL



I hereby certify that all drilling or producing wells within 1000 feet and all buildings and streams within 200 feet have been shown, there are no drilling unit lines nearer than NA feet, that this plat is true and correct and was prepared according to the current State of Ohio, Department of Natural Resources, Division of Oil and Gas Regulations.

Gary D. Salinger 5-7192  
REG. SURVEYOR

SCALE: 1 = 400

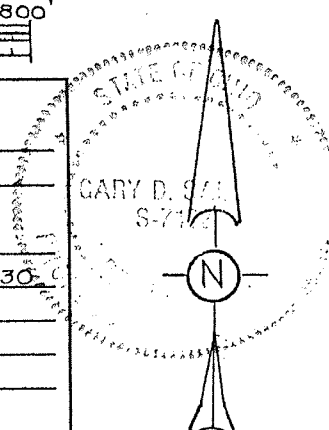


OPERATOR FORTIS ENERGY PARTNERS, L.L.C.  
ADDRESS 5929 N. May Ave. Ste. 512 Oklahoma City, OK. 73112  
SURFACE FORTIS ENERGY PARTNERS, L.L.C.  
LANDOWNER  
MINERALS FORTIS ENERGY PARTNERS, L.L.C.  
WELL NO. 1 DRILLING UNIT AC. NA  
COUNTY PORTAGE  
TWP. DEERFIELD  
QUAD. DEERFIELD

SUBDIVISION CIVIL TWP.  
TWP. 1N  
RANGE 6W  
QUARTER TWP.  
SECTION LOT 30  
TRACT  
ALLOTMENT  
FRACTION OTHER

OHIO PLANE COORDINATES  
(NAD 27) X 2,401,360 N41° 01' 36.900"  
Y 498,900 WB1° 02' 42.186"

ELEV. 1072' DATE: 12.15.11





WASHINGTON SWD No. 1

SCALE:  
1" = 100'

DISPOSAL FACILITY

FORTIS ENERGY PARTNERS, L.L.C.

5929 N. MAY AVE. STE. 512

OKLAHOMA CITY, OK, 73112

PH. 405-204-5848

PORTAGE COUNTY

DEERFIELD TOWNSHIP

LOT 30

A. PUMP HOUSE (24'x36')

B. COLLECTION TANK FOR UNLOAD PAD / PUMP HOUSE DRAINAGE WITH SUMP PUMP

C. TRUCK UNLOAD PAD (32'x45') WITH DRAINAGE TO B.

D. TANK PAD (60'x100') WITH CONTAINMENT WALL (72" HIGH)

- ① WASH TANK
- ② UNLOAD TANKS
- ③ CLEAN WATER TANK
- WATER STORAGE TANKS

w/ 30 mil liner  
PS

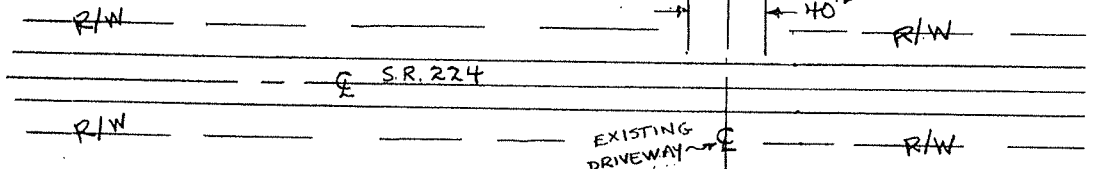
12 - 400 bbl. tanks  
= 4800 bbls. PS

60' x 100' x 0.0148  
= 88.8 x 72" =  
6394 bbls.  
Storage capacity.

RECEIVED

DEC 23 2011

Gary D. Sal  
 GARY D. SAL  
 REG. SURVEYOR S-7192  
 12.15.11



NAD 27 X = 2,401,563 Y = 498,087  
 N41° 01' 28.722" W81° 02' 39.816"

DEERFIELD TWP  
PORTAGE CO.

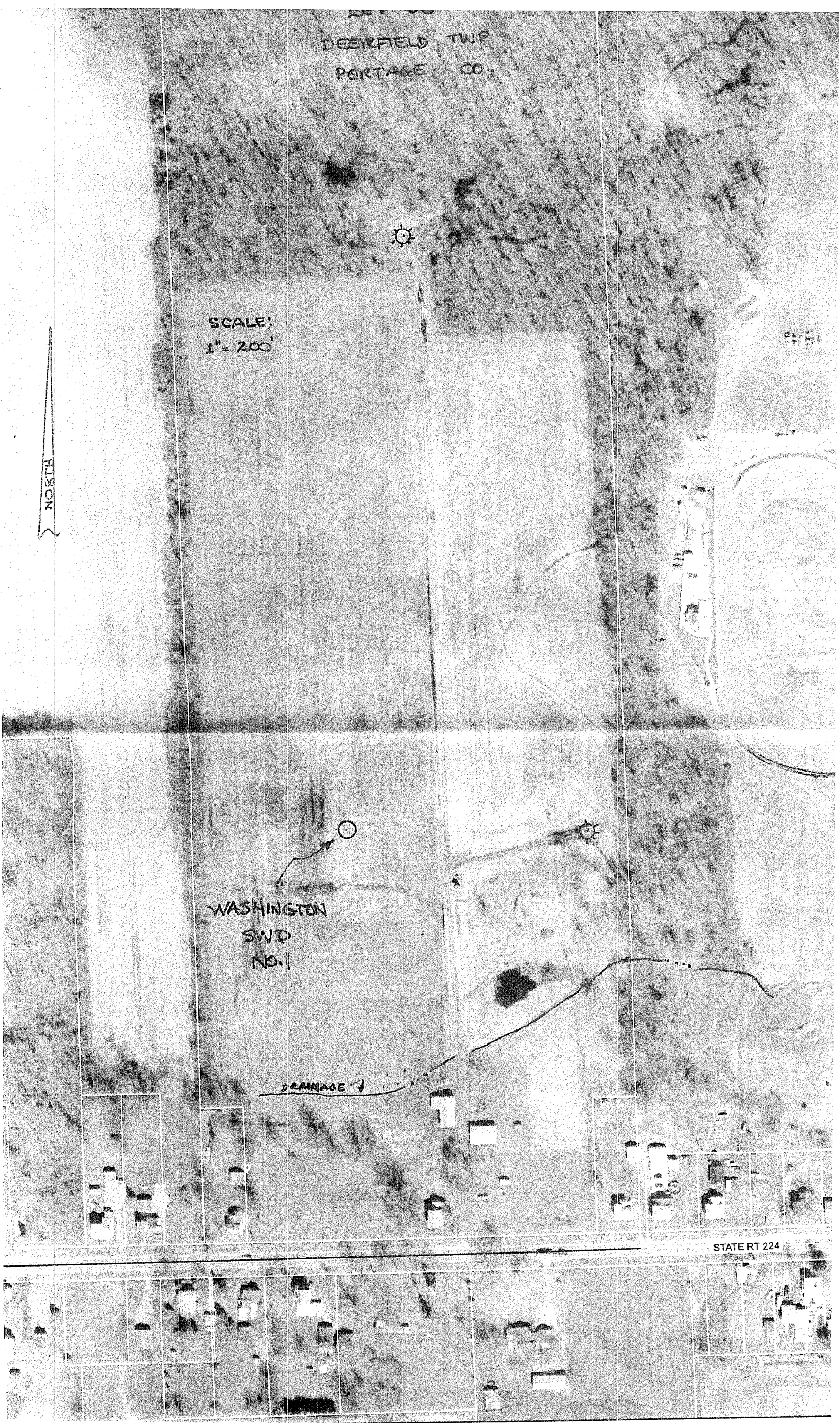
SCALE:  
1" = 200'

NORTH

WASHINGTON  
SWD  
NO. 1

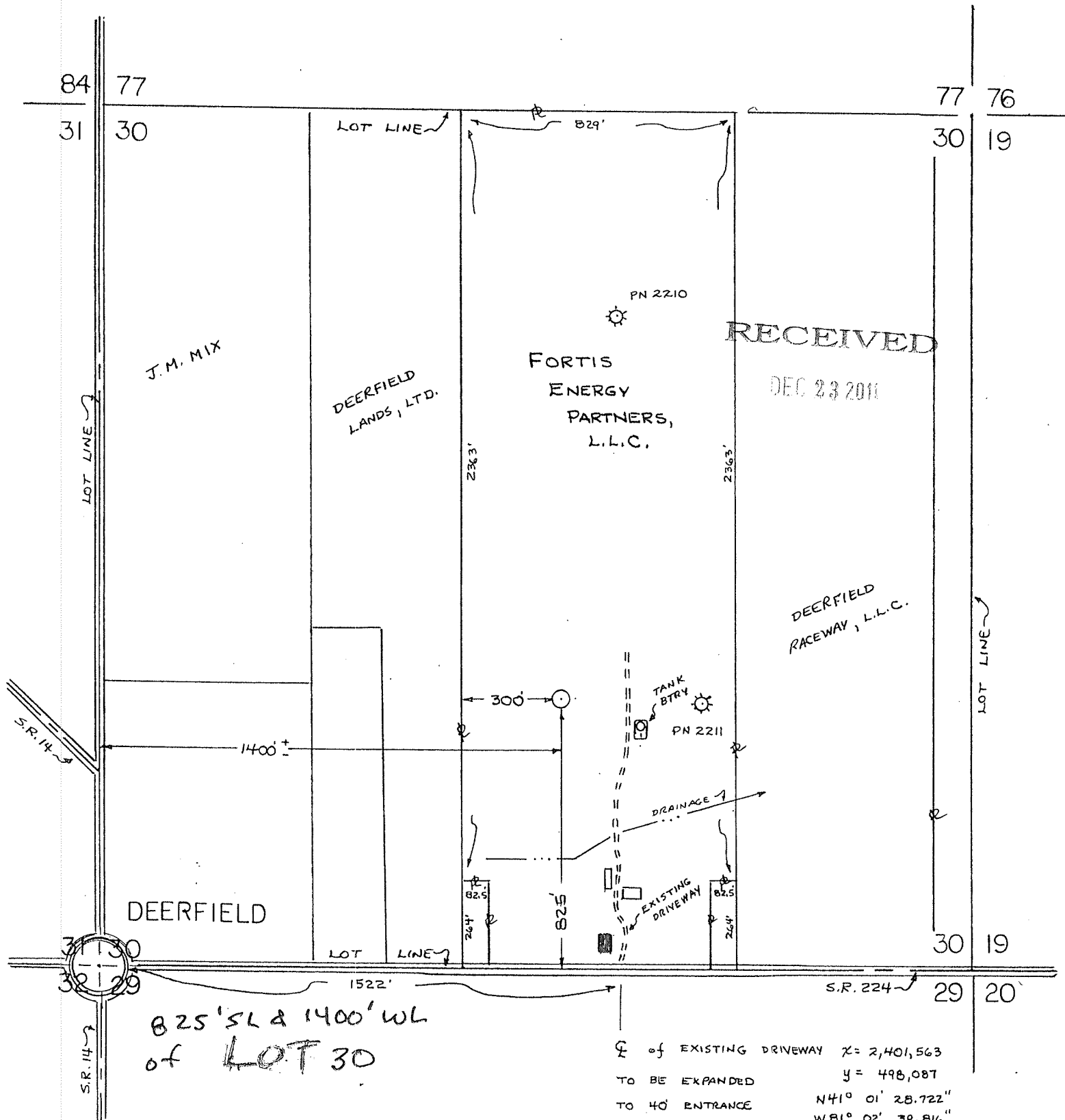
DRAINAGE

STATE RT 224



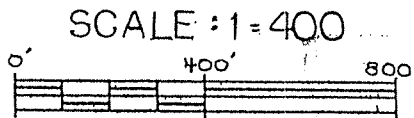
WASHINGTON SWD No. 1

DISPOSAL WELL



I hereby certify that all drilling or producing wells within 1000 feet and all buildings and streams within 200 feet have been shown, there are no drilling unit lines nearer than NA feet, that this plat is true and correct and was prepared according to the current State of Ohio, Department of Natural Resources, Division of Oil and Gas Regulations.

Gary D. Salas 5-7192  
REG. SURVEYOR

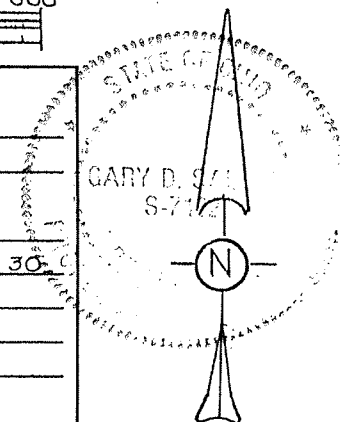


OPERATOR FORTIS ENERGY PARTNERS, L.L.C.  
ADDRESS 5929 N. May Ave. Ste. 512 Oklahoma City, OK. 73112  
SURFACE FORTIS ENERGY PARTNERS, L.L.C.  
LANDOWNER  
MINERALS FORTIS ENERGY PARTNERS, L.L.C.  
WELL NO. 1 DRILLING UNIT AC. NA  
COUNTY PORTAGE  
TWP. DEERFIELD  
QUAD. DEERFIELD

SUBDIVISION CIVIL TWP.  
TWP. 1N  
RANGE 6W  
QUARTER TWP. \_\_\_\_\_  
SECTION LOT 30  
TRACT \_\_\_\_\_  
ALLOTMENT \_\_\_\_\_  
FRACTION OTHER

OHIO PLANE COORDINATES  
(NAD 27) X 2,401,360  $N41^{\circ} 01' 36.900''$   
Y 498,900  $W81^{\circ} 02' 42.186''$

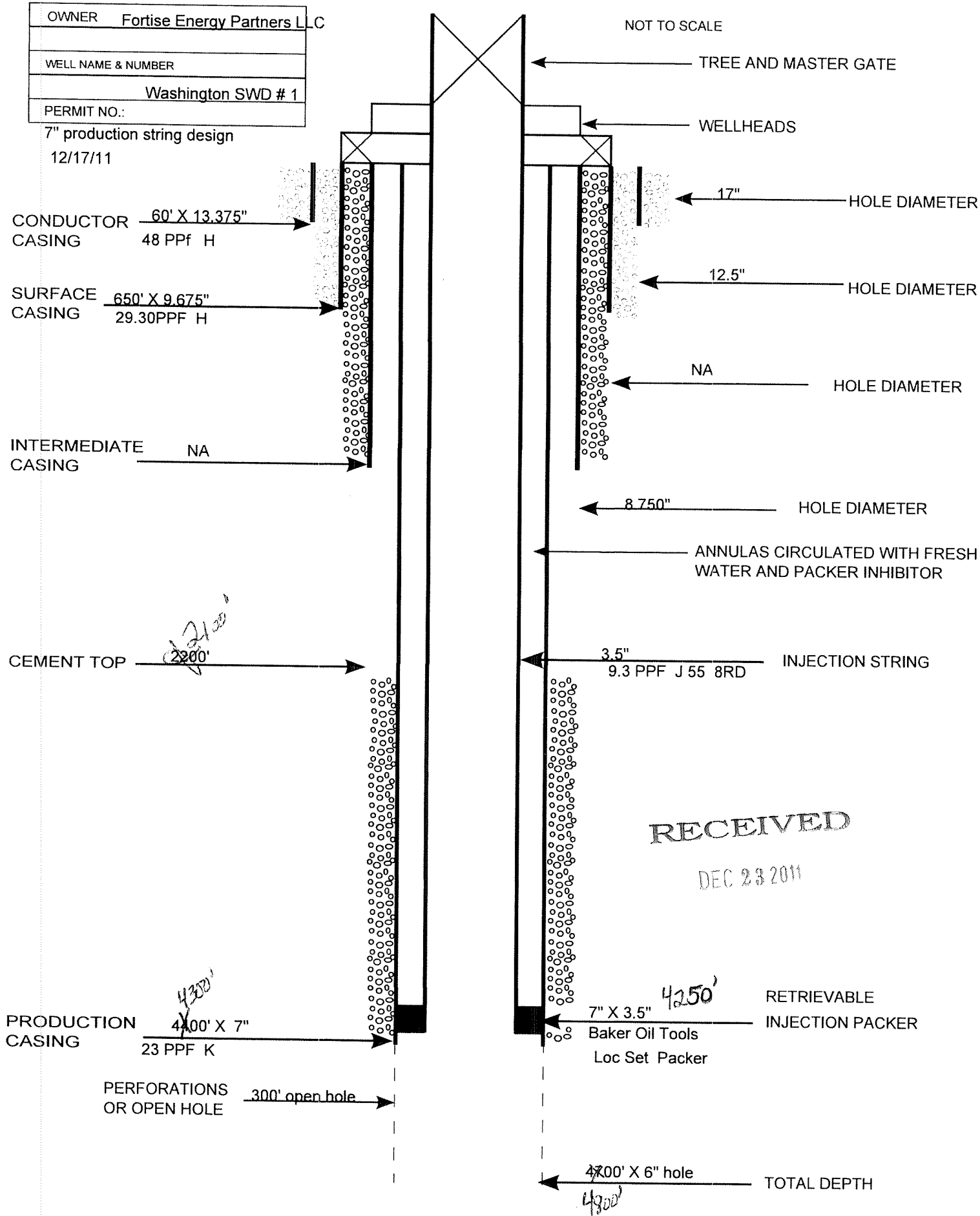
ELEV. 1072' DATE: 12-15-11



# WELL BORE DESIGN

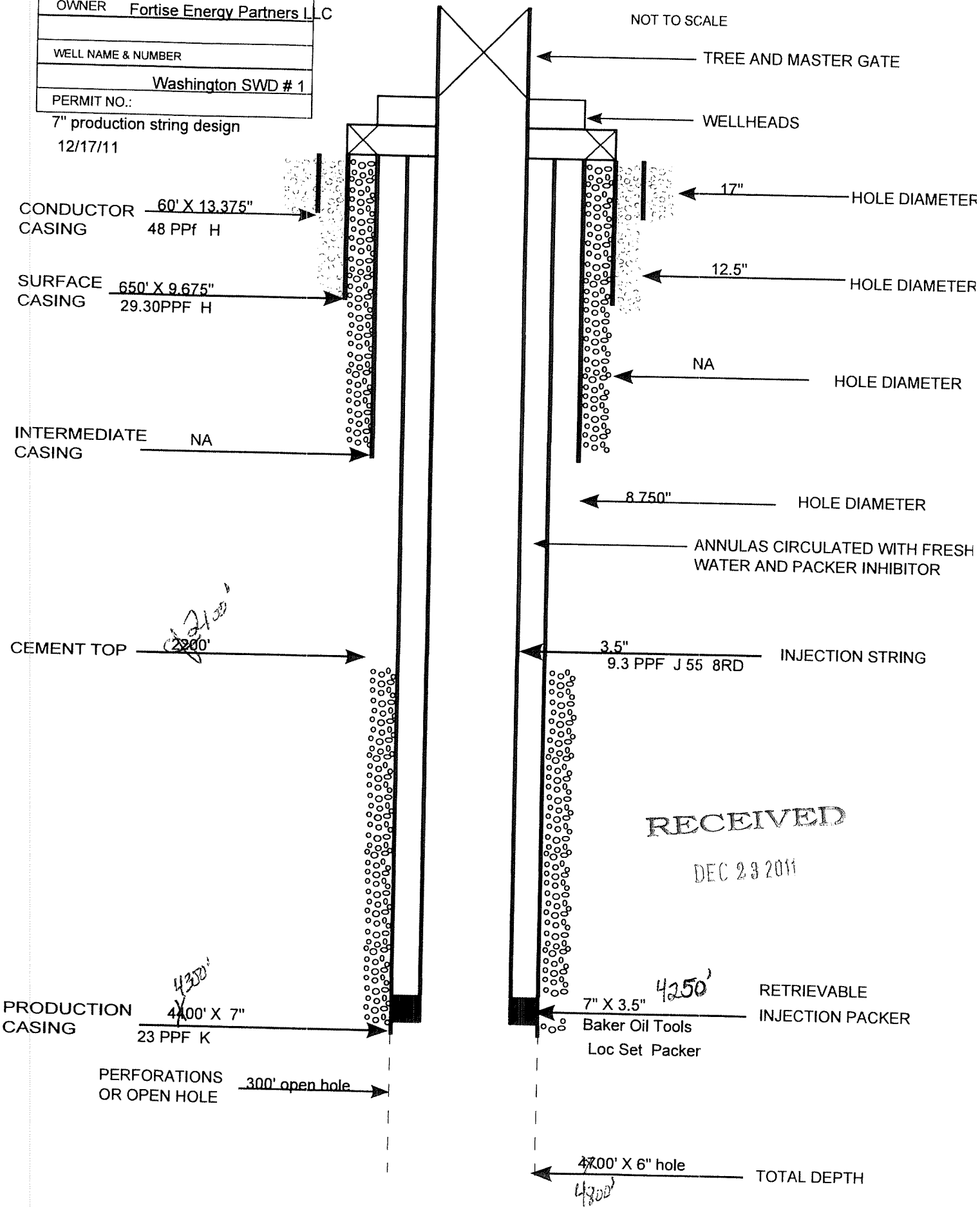
OWNER	Fortise Energy Partners LLC
WELL NAME & NUMBER	
PERMIT NO.:	Washington SWD # 1

7" production string design  
12/17/11



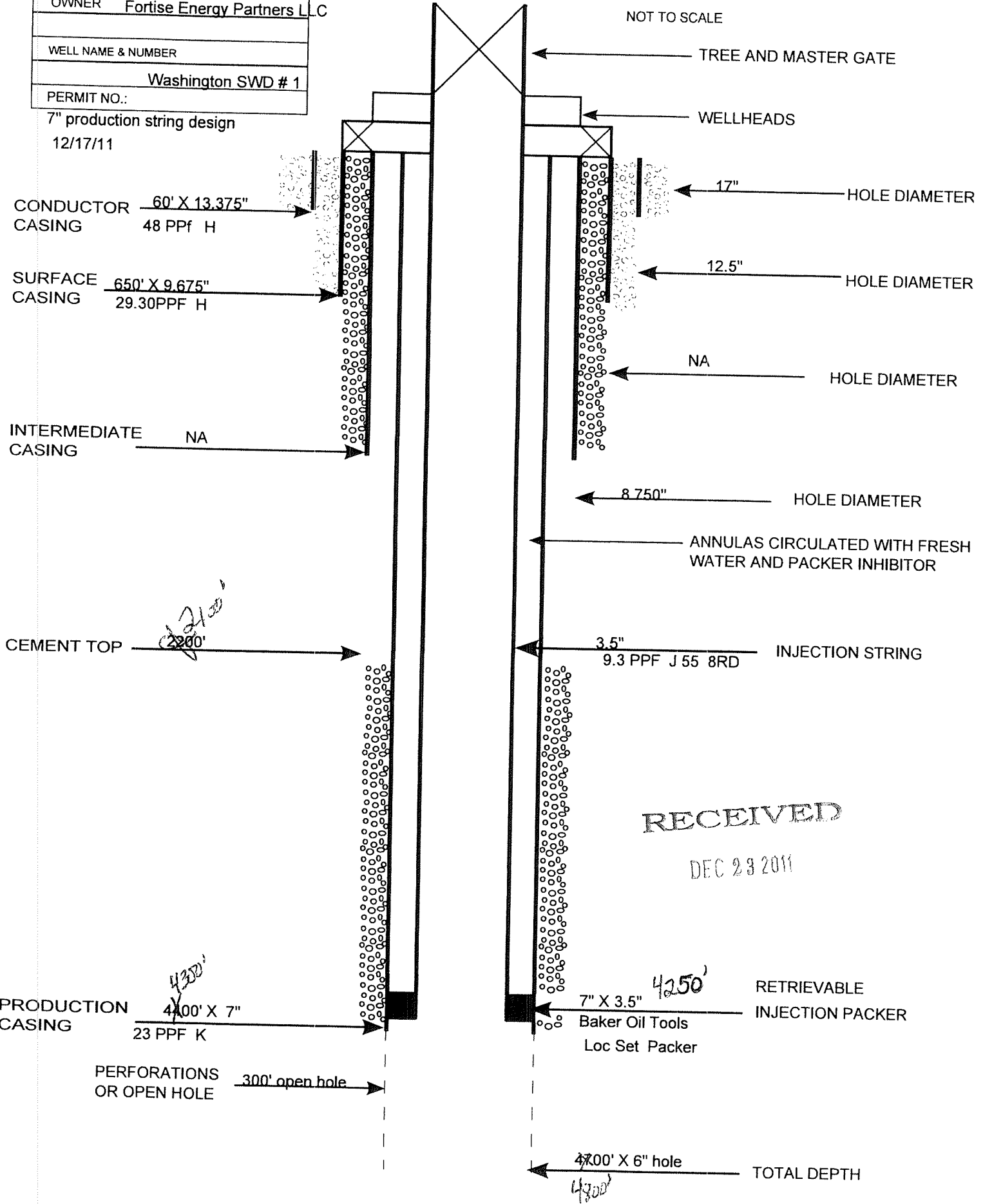
# WELL BORE DESIGN

OWNER	Fortise Energy Partners L.L.C
WELL NAME & NUMBER	Washington SWD # 1
PERMIT NO.:	7" production string design 12/17/11



# WELL BORE DESIGN

OWNER	Fortise Energy Partners LLC
WELL NAME & NUMBER	Washington SWD # 1
PERMIT NO.:	7" production string design 12/17/11

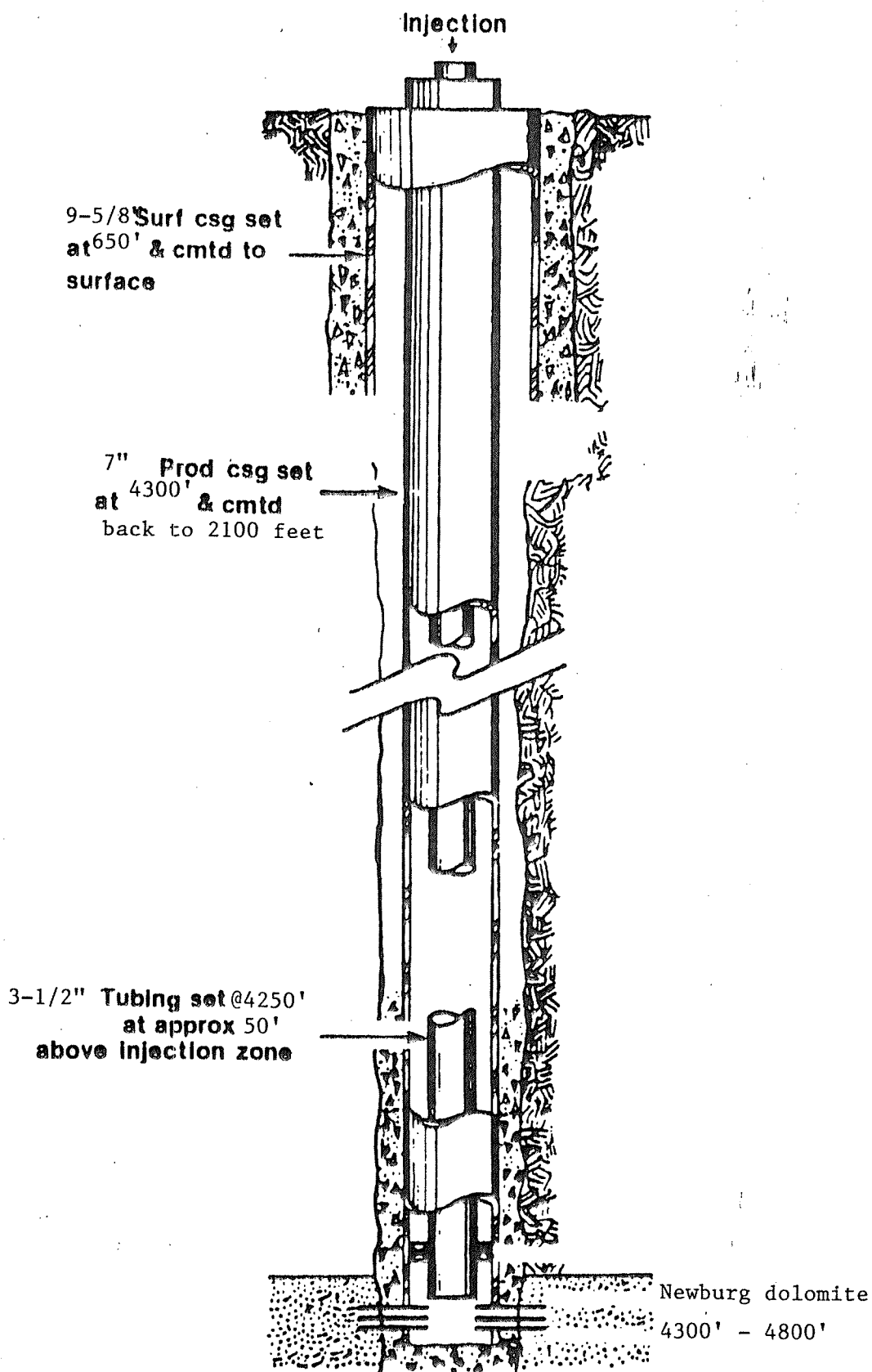


RECEIVED

DEC 23 2011

### Subsurface Construction For Injection Well

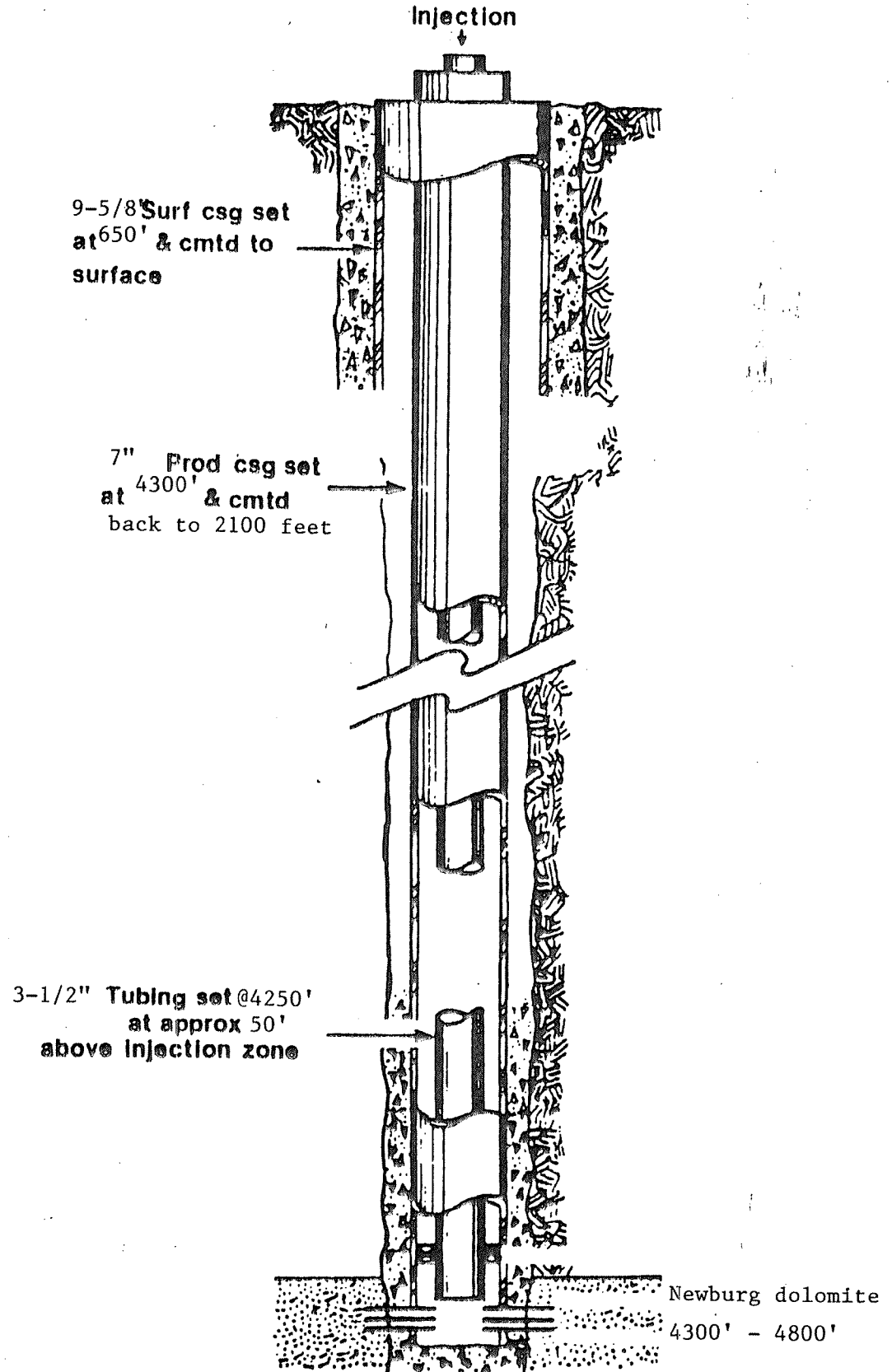
Maximum Injection Pressure: 990 psi



Total Depth: 4800 feet

### Subsurface Construction For Injection Well

Maximum Injection Pressure: 990 psi

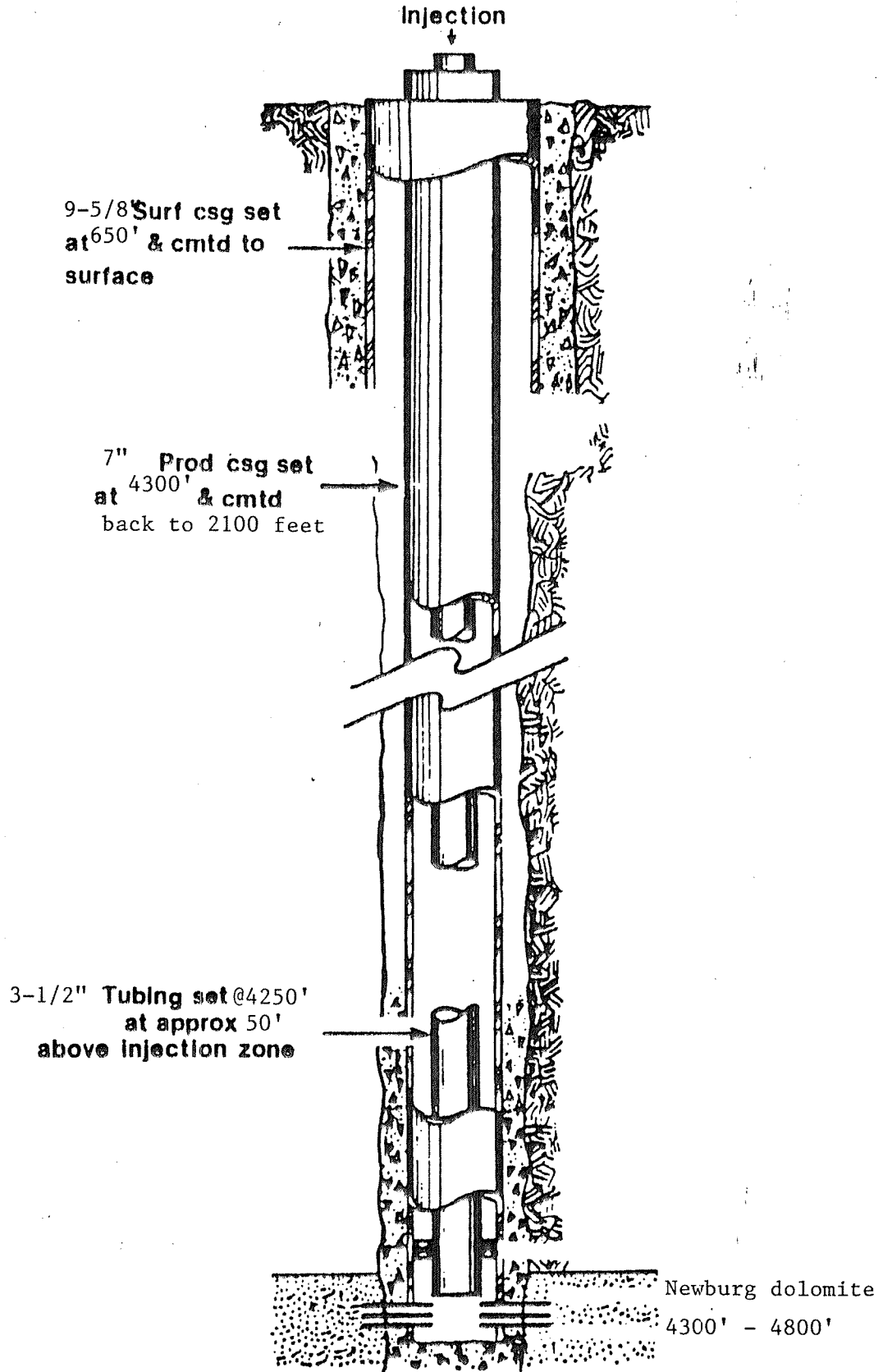


Total Depth: 4800 feet



**Subsurface Construction  
For Injection Well**

**Maximum Injection Pressure: 990 psi**



**Total Depth: 4800 feet**

LOT 30  
DEERFIELD TWP.  
PORTAGE CO.

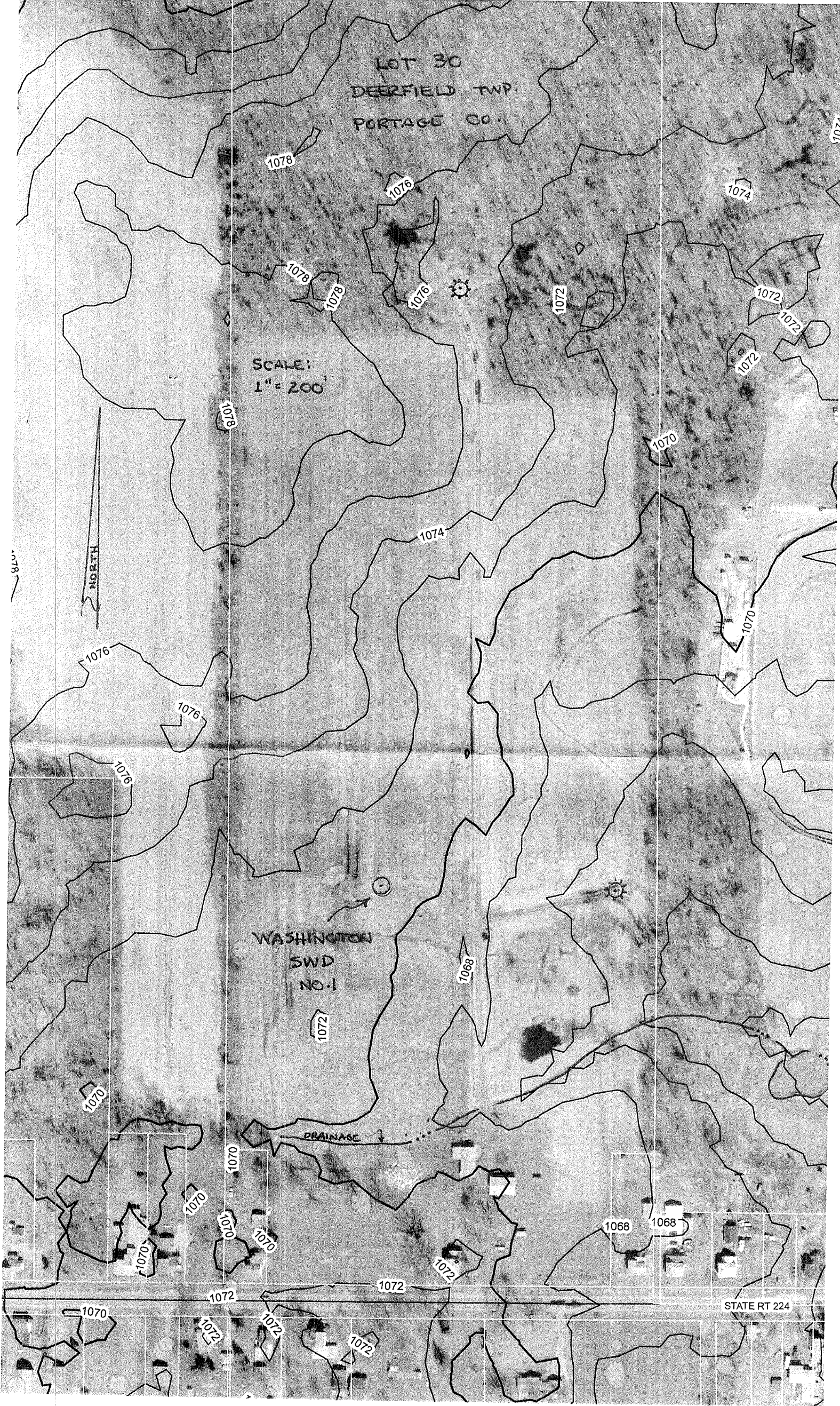
SCALE:  
1" = 200'

NORTH

WASHINGTON  
SWD  
NO. 1

DRAINAGE

STATE RT 224



LOT 50  
DEERFIELD TWP  
PORTAGE CO.

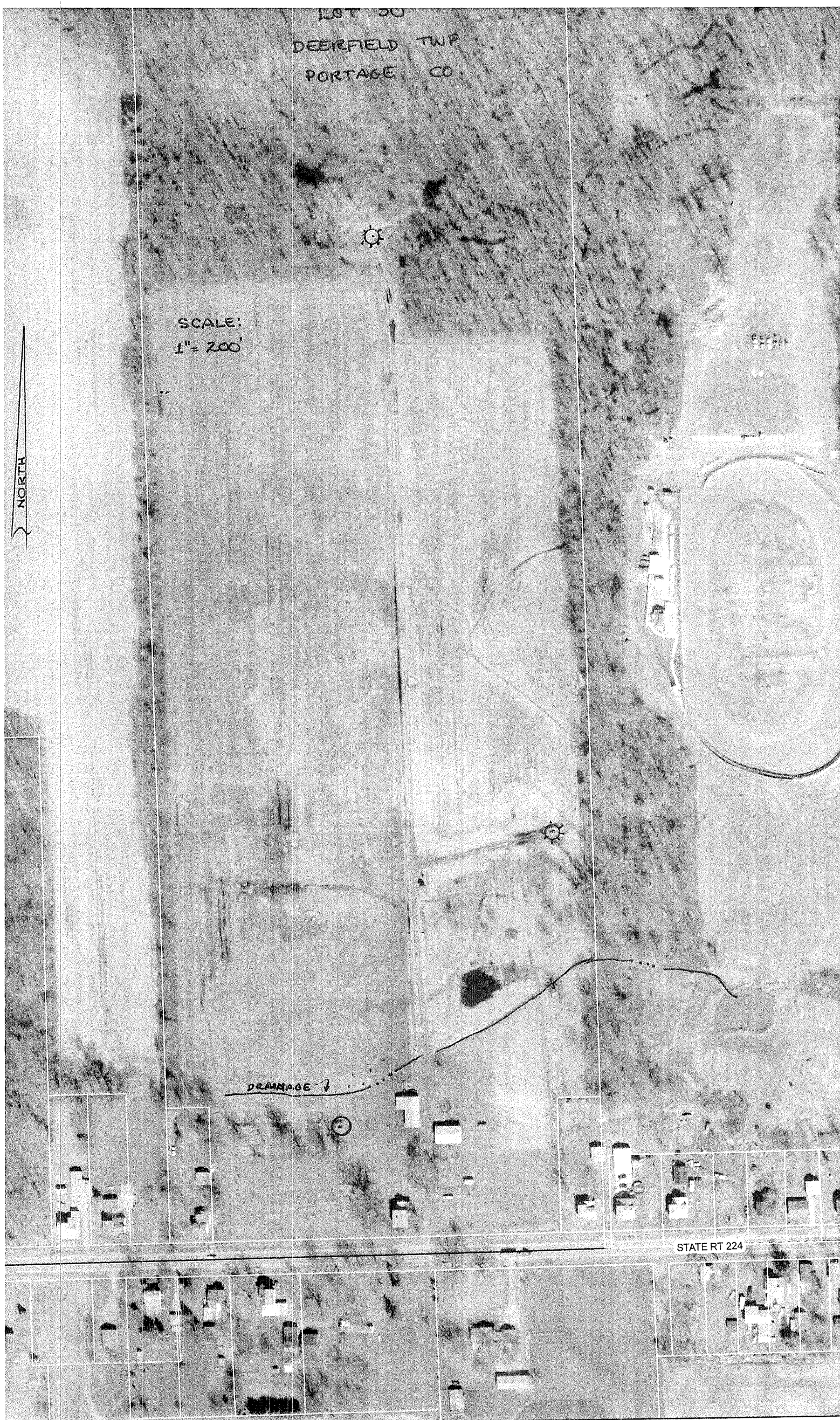
SCALE:  
1" = 200'

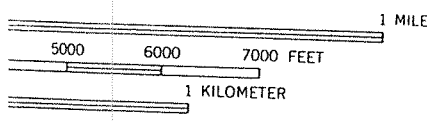
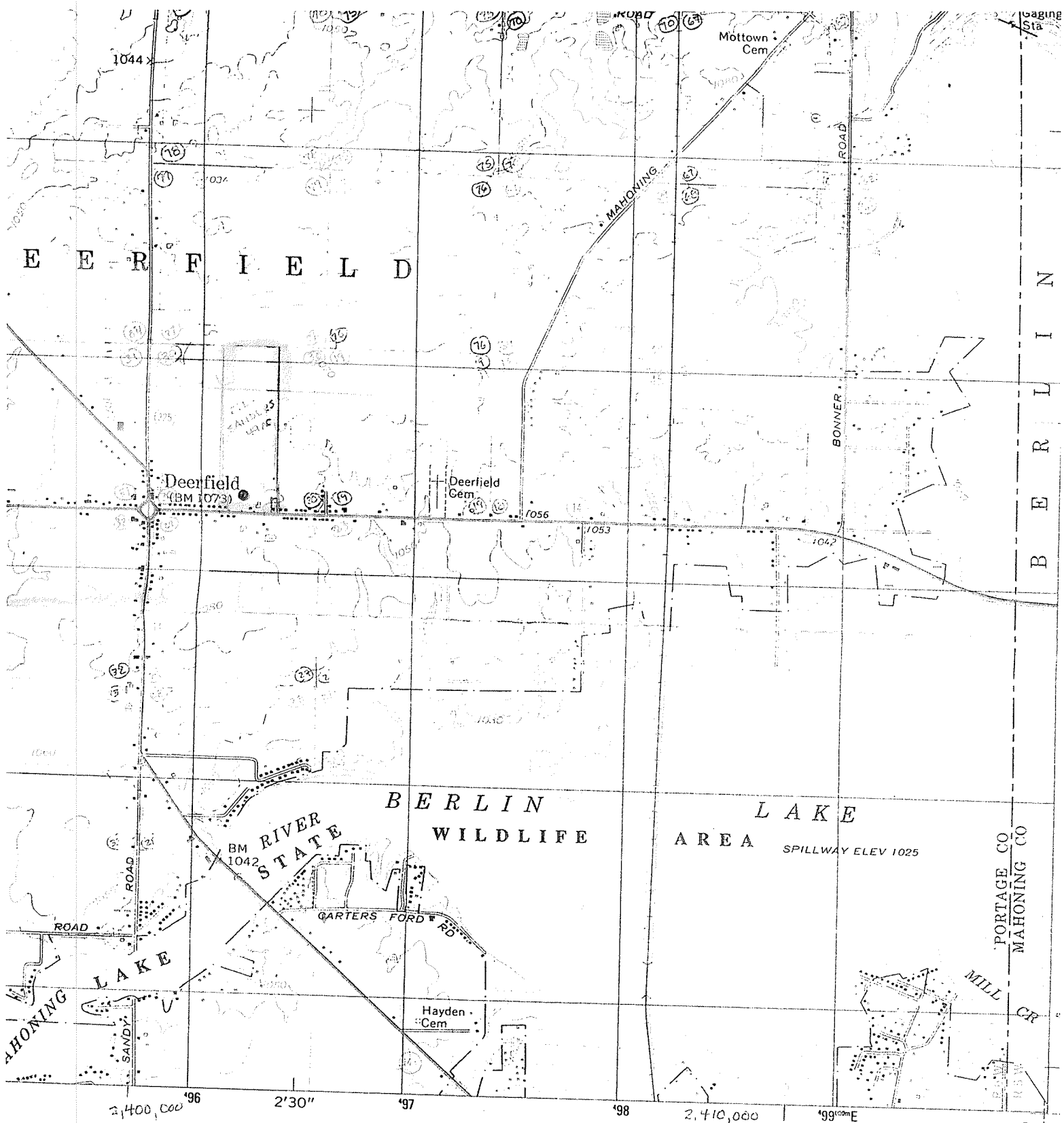
NORTH



DRAINAGE

STATE RT 224





EET  
 OF 1929  
 BY 0.3048



QUADRANGLE LOCATION

JRACY STANDARDS  
 6, DENVER, COLORADO 80225  
 IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION

Primary highway, hard surface	Light-duty road, hard or improved surface
Secondary highway, hard surface	Unimproved road
Interstate Route	U. S. Route
	State Route

DEERFIELD, OHIO

1994

NIMA 4766 II SE—SERIES V852

RECEIVED

DEC 23 2011

SCALE: 1" = 2000'

