Authorization #5602567

DELAWARE
DIVISION OF WATER RESOURCES
Working for YOU to Provide "Clean Water for Today and Tomorrow"

PERMIT
251048 through 251059

Tax Map Number: 26-030.00-064 **DRILLER COPY**

Pursuant to provisions of Title 7, Delaware Code, Chapter 60, permission is hereby granted to:

Amtrak
4001 Vandever Avenue, Wilmington, DE 19801 US

to construct, operate and maintain 12 Standard Monitor Well(s) in a total of 12 boring(s)

This permit is only valid for construction upon obtaining an Authorization Number from Delaware DNREC.

Construction must be completed on or before 6/22/2016, one year from permit issuance date.

A permit extension can be obtained on or before the date above by contacting Delaware DNREC.

Construction must be done by a person duly licensed by the Delaware DNREC for such activity.

All current regulations governing well construction shall be followed.

All attached permit conditions shall be complied with.

The applicant is responsible for obtaining all additionally required permits and approvals.

Should the well identifcation tag become detached and irrecoverable from the well(s), the property owner is responsible to contact the Water Supply section of DNREC at 302-739-9944 for a replacement.

6/22/2015

AUTHORIZED SIGNATURE DATE

SEE PERMIT CONDITIONS Authorization Number:

To obtain authorization please call toll free: 1-866-276-2353

DELAWARE

DIVISION OF WATER RESOURCES

Working for YOU to Provide "Clean Water for Today and Tomorrow"

PERMIT
251048 through 251059

Well Driller Responsible Conditions

§16 The well(s) shall be adequately developed.

§18 The driller is responsible for decontaminating drilling equipment to prevent cross-contamination.

§63 A well completion report shall be submitted to the Water Supply Section within 30 days of completion of well construction.

§87 The well driller or well driver is required to have at the drilling site an approved authorization number that must accompany the approved well permit.

§89 No well shall be placed on highway travel lanes, on auxiliary travel lanes, or on roadway shoulders.

§104 The well driller or well driver is required to have at the drilling site a copy of the signed well permit or, in the case of verbal permits, the permit number.

§105 The top of the gravel pack shall extend at least 1 foot above the top of the well screen. If the well is influenced by the water table, a minimum of 2 feet of a dry, granular or pelleted bentonite plug placed above the gravel pack is recommended. An approved cement and bentonite mix shall be used to grout either the top of the gravel pack or from the top of the bentonite plug to the ground surface.

Owner/Well Driller Combined Responsibility Conditions

§1 The approval of this permit does not relieve the responsible party from the requirement for obtaining all permits that are required by federal, state, county, and local governments. The responsible party shall comply with any and all federal, state, county, and local statutes, ordinances, zoning procedures, orders, regulations, rules.

§2 The issuance of this permit does not guarantee the performance of the permitted well to the standards required by the project. The Department has no knowledge of subsurface conditions or of the constructability of the proposed well.

§3 This permit is valid only for the specific operations and processes applied for and indicated on the application form and attached drawings. Any unauthorized deviations from the approved project or violations of permit conditions may constitute grounds for revocation. Upon revocation, the well will be ordered abandoned.

DELAWARE

DIVISION OF WATER RESOURCES

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PERMIT
251048 through 251059

Owner/Well Driller Combined Responsibility Conditions

§52 If identifiable contamination is detected during construction, and the contamination was not anticipated or evaluated during the permit application and approval process, the well driller shall cease work and notify the Emergency Response Hotline immediately by calling 1-800-662-8802.

§54 Representatives of DNREC, the Delaware Geological Survey or the U.S. Geological Survey may inspect the well and/or conduct tests such as but not limited to geophysical logging and sampling, at any reasonable time after serving advance notice.

§72 The well(s) shall not be chlorinated.

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-3665
FAX: 302-739-2296

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION.

WELL COMPLETION REPORT

PAGE 1 OF 2 PAGES

PLEASE PRINT OR TYPE - ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED Authorization #5625687

PERMIT NO. 251048 LOCAL ID VEP-1

TAX MAP # 26-030.00-064

PROPERTY OWNER Amtrack

WELL CONTRACTOR East Coast Drilling, Inc.

LIC# 5249 CONSTRUCTION DATE 8-7-15

WELL CONSTRUCTION METHOD

☒ AUGERED ☐ BORED ☐ CABLE TOOL
☐ DRIVEN ☐ JETTED ☐ AIR ROTARY
☐ MUD ROTARY ☐ REVERSE ☐ WASHED
☐ OTHER _____ (Specify)

TOTAL DEPTH OF EXCAVATION: 5.5

CASING INSTALLATION

	INNER CASING(S)						OUTER CASING
CASING TOP	0						
CASING BOTTOM	3						
CASING DIAMETER	2						
CASING MATERIAL	PVC						

SCREEN INSTALLATION

	INNER CASING(S)					
SCREEN TOP	3					
SCREEN BOTTOM	5.5					
SCREEN DIAMETER	2					
SCREEN MATERIAL	PVC					

GRAVEL PACK FROM 2.5 TO 5.5 FEET

GROUT TYPE: ☒ CEMENT (c) Bentonite ☐ BENTONITE CLAY (b)

OTHER (o) _____

FROM 0 (ft.) TO 2.5 FROM _____ (ft.) TO _____ FEET

NON-GROUT BACKFILL OF WELL ANNULUS

TYPE _____ FROM _____ TO _____

STATIC WATER LEVEL OF (DATE) 8/17A

_____ FT. (Below, Above) GROUND SURFACE

PUMPING WATER LEVEL _____ FT. ON _____ (DATE)

AFTER 0 HOURS AT 0 GPM.

WAS A GEOPHYSICAL LOG TAKEN? ☒ YES ☐ NO

WELL HEAD COMPLETION:

TYPE: ☐ PITLESS ADAPTER ☐ STANDARD "T"
☐ WELL PIT ☒ PAD MOUNT
☐ OTHER _____

_____ INCHES ABOVE GRADE

WAS THE WELL TAG ATTACHED? ☒ YES ☐ NO
IF "NO", EXPLAIN _____

TYPE OF PERMANENT PUMP INSTALLED:

PUMP MANUFACTURE _____

RATED CAPACITY (GPM) _____

PUMP INTAKE SETTING _____ FT. BELOW GRADE _____

THE LOCATION AND CONSTRUCTION OF THIS WELL IS IN COMPLIANCE WITH ALL PERMIT CONDITIONS AND WITH ALL APPLICABLE WELL CONSTRUCTION REGULATIONS. ☒ YES ☐ NO

If "no," attach a copy of the approved well permit which has the revised location clearly marked.

NOTE: Completed Formation Log must be attached.

COMMENTS: _____

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

Steve Malan
Signature of Well Driller in Charge

5328 8/28/15
License# Date

White - DNREC • Canary - Contractor • Pink - Owner

Doc No. 40-08/78/01/03 - EC 7

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-9944
FAX:302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION DATE

FORMATION LOG

PAGE 2 OF 2 PAGES

PLEASE PRINT OR TYPE – ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

PERMIT #: 251048 **LOCAL ID#:** VEP-1

PROPERTY OWNER: Amtrack

WELL CONTRACTOR: East Coast Drilling, Inc. **WC LIC #:** 5249

DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
Concrete & Historic Fill	0	1
Brown Silty Sand	1	5.5

COMMENTS:

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT

Steve Malan — Signature of Well Driller in Charge of Construction

5328 — WD License #

8/28/15 — Date

White - DNREC • *Canary - CONTRACTOR* • *Pink - Owner*

Doc No. 40-08-82-12-11

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-3665
FAX: 302-739-2296

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION.

WELL COMPLETION REPORT

PAGE 1 OF 2 PAGES

PLEASE PRINT OR TYPE - ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED Authorization# 5625687

PERMIT NO. 251049 LOCAL ID VEP-2

TAX MAP # 26-030.00-064

PROPERTY OWNER Amtrack

WELL CONTRACTOR East Coast Drilling, Inc.

LIC# 5249 CONSTRUCTION DATE 8-7-15

WELL CONSTRUCTION METHOD

- [x] AUGERED
- [ ] BORED
- [ ] CABLE TOOL
- [ ] DRIVEN
- [ ] JETTED
- [ ] AIR ROTARY
- [ ] MUD ROTARY
- [ ] REVERSE
- [ ] WASHED
- [ ] OTHER _____ (Specify)

TOTAL DEPTH OF EXCAVATION: 7.5

CASING INSTALLATION

	INNER CASING(S)						OUTER CASING
CASING TOP	0						
CASING BOTTOM	3.5						
CASING DIAMETER	2						
CASING MATERIAL	PVC						

SCREEN INSTALLATION

	INNER CASING(S)					
SCREEN TOP	3.5					
SCREEN BOTTOM	7.5					
SCREEN DIAMETER	2					
SCREEN MATERIAL	PVC					

GRAVEL PACK FROM 3 TO 7.5 FEET

GROUT TYPE: [x] CEMENT (c) Bentonite [ ] BENTONITE CLAY (b)

OTHER (o) _____

FROM _____ (ft.) TO _____ FROM _____ (ft.) TO _____ FEET

NON-GROUT BACKFILL OF WELL ANNULUS

TYPE _____ FROM _____ TO _____

STATIC WATER LEVEL OF (DATE) N/A

_____ FT. (Below, Above) GROUND SURFACE

PUMPING WATER LEVEL 0 FT. ON 0 (DATE)

AFTER _____ HOURS AT _____ GPM.

WAS A GEOPHYSICAL LOG TAKEN? [x] YES [ ] NO

WELL HEAD COMPLETION:

TYPE:
- [ ] PITLESS ADAPTER
- [ ] STANDARD "T"
- [ ] WELL PIT
- [x] PAD MOUNT
- [ ] OTHER _____

_____ INCHES ABOVE GRADE

WAS THE WELL TAG ATTACHED? [x] YES [ ] NO

IF "NO", EXPLAIN _____

TYPE OF PERMANENT PUMP INSTALLED:

PUMP MANUFACTURE _____

RATED CAPACITY (GPM) _____

PUMP INTAKE SETTING _____ FT. BELOW GRADE _____

THE LOCATION AND CONSTRUCTION OF THIS WELL IS IN COMPLIANCE WITH ALL PERMIT CONDITIONS AND WITH ALL APPLICABLE WELL CONSTRUCTION REGULATIONS. [x] YES [ ] NO

If "no," attach a copy of the approved well permit which has the revised location clearly marked.

NOTE: Completed Formation Log must be attached.

COMMENTS: _____

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

Steve Mylan

Signature of Well Driller in Charge

5328 — License#

8/28/15 — Date

White - DNREC • Canary - Contractor • Pink - Owner

Doc No. 40-08/78/01/03 - EC 7

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-9944
FAX:302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION DATE

FORMATION LOG

PLEASE PRINT OR TYPE – ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

PERMIT #: 251049 **LOCAL ID#:** VEP-2

PROPERTY OWNER: Amtrack

WELL CONTRACTOR: East Coast Drilling, Inc **WC LIC #:** 5249

DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
Concrete & Historic Fill	0	1
Brown Silty Sand	1	7.5

COMMENTS:

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT

Steve Moylan — Signature of Well Driller in Charge of Construction

5328 — WD License #

8/28/15 — Date

White - DNREC • Canary - CONTRACTOR • Pink - Owner

Doc No. 40-08-82-12-11

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-3665
FAX: 302-739-2296

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION.

WELL COMPLETION REPORT

PAGE 1 OF 2 PAGES

PLEASE PRINT OR TYPE - ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED Authorization# 5625687

PERMIT NO. 251050 LOCAL ID VEP-3

TAX MAP # 26-030.00-004

PROPERTY OWNER Amtrack

WELL CONTRACTOR East Coast Drilling, Inc.

LIC# 5249 CONSTRUCTION DATE 8-6-15

WELL CONSTRUCTION METHOD

- [x] AUGERED
- [ ] DRIVEN
- [ ] MUD ROTARY
- [ ] OTHER _____ (Specify)
- [ ] BORED
- [ ] JETTED
- [ ] REVERSE
- [ ] CABLE TOOL
- [ ] AIR ROTARY
- [ ] WASHED

TOTAL DEPTH OF EXCAVATION: 8

CASING INSTALLATION

	INNER CASING(S)						OUTER CASING
CASING TOP	0						
CASING BOTTOM	3						
CASING DIAMETER	2						
CASING MATERIAL	PVC						

SCREEN INSTALLATION

	INNER CASING(S)					
SCREEN TOP	3					
SCREEN BOTTOM	8					
SCREEN DIAMETER	2					
SCREEN MATERIAL	PVC					

GRAVEL PACK FROM 2.5 TO 8 FEET

GROUT TYPE: [x] CEMENT (c) Bentonite [ ] BENTONITE CLAY (b)

OTHER (o) _____

FROM 0 (ft.) TO 2.5 FROM _____ (ft.) TO _____ FEET

NON-GROUT BACKFILL OF WELL ANNULUS

TYPE _____ FROM _____ TO _____

STATIC WATER LEVEL OF (DATE) N/A

_____ FT. (Below, Above) GROUND SURFACE

PUMPING WATER LEVEL 0 FT. ON 0 (DATE)

AFTER _____ HOURS AT _____ GPM.

WAS A GEOPHYSICAL LOG TAKEN? [x] YES [ ] NO

WELL HEAD COMPLETION:

TYPE:
- [ ] PITLESS ADAPTER
- [ ] WELL PIT
- [ ] OTHER _____
- [ ] STANDARD "T"
- [x] PAD MOUNT

_____ INCHES ABOVE GRADE

WAS THE WELL TAG ATTACHED? [x] YES [ ] NO

IF "NO", EXPLAIN _____

TYPE OF PERMANENT PUMP INSTALLED:

PUMP MANUFACTURE _____

RATED CAPACITY (GPM) _____

PUMP INTAKE SETTING _____ FT. BELOW GRADE _____

THE LOCATION AND CONSTRUCTION OF THIS WELL IS IN COMPLIANCE WITH ALL PERMIT CONDITIONS AND WITH ALL APPLICABLE WELL CONSTRUCTION REGULATIONS. [x] YES [ ] NO

If "no," attach a copy of the approved well permit which has the revised location clearly marked.

NOTE: Completed Formation Log must be attached.

COMMENTS: _____

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

Steve Matan

Signature of Well Driller in Charge

License# 5328 Date 8/28/15

White - DNREC • Canary - Contractor • Pink - Owner

Doc No. 40-08/78/01/03 - EC 7

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-9944
FAX:302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION DATE

FORMATION LOG

PLEASE PRINT OR TYPE – ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

PERMIT #: 251050 **LOCAL ID#:** VEP-3

PROPERTY OWNER: Amtrack

WELL CONTRACTOR: East Coast Drilling, Inc. **WC LIC #:** 5249

DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
Concrete & Historic Fill	0	1
Brown Silty Sand	1	8

COMMENTS:

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT

Signature of Well Driller in Charge of Construction: [signature] WD License #: 5328 Date: 8/28/15

White - DNREC • *Canary - CONTRACTOR* • *Pink - Owner*

Doc No. 40-08-82-12-11

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-3665
FAX: 302-739-2296

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION.

WELL COMPLETION REPORT

PAGE 1 OF 2 PAGES

PLEASE PRINT OR TYPE - ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED Authorization# 56255687

PERMIT NO. 251051 LOCAL ID VEP-4

TAX MAP # 26-030.00-004

PROPERTY OWNER Amtrack

WELL CONTRACTOR East Coast Drilling, Inc

LIC# 5249 CONSTRUCTION DATE 8-6-15

WELL CONSTRUCTION METHOD

- [x] AUGERED
- [ ] BORED
- [ ] CABLE TOOL
- [ ] DRIVEN
- [ ] JETTED
- [ ] AIR ROTARY
- [ ] MUD ROTARY
- [ ] REVERSE
- [ ] WASHED
- [ ] OTHER _____ (Specify)

TOTAL DEPTH OF EXCAVATION: 8

CASING INSTALLATION

	INNER CASING(S)						OUTER CASING
CASING TOP	0						
CASING BOTTOM	3						
CASING DIAMETER	2						
CASING MATERIAL	PVC						

SCREEN INSTALLATION

	INNER CASING(S)					
SCREEN TOP	3					
SCREEN BOTTOM	8					
SCREEN DIAMETER	2					
SCREEN MATERIAL	PVC					

GRAVEL PACK FROM 2.5 TO 8 FEET

GROUT TYPE: [x] CEMENT (c) Bentonite [ ] BENTONITE CLAY (b)

OTHER (o) _____

FROM _____ (ft.) TO _____ FROM _____ (ft.) TO _____ FEET

NON-GROUT BACKFILL OF WELL ANNULUS

TYPE _____ FROM _____ TO _____

STATIC WATER LEVEL OF (DATE) N/A

_____ FT. (Below, Above) GROUND SURFACE

PUMPING WATER LEVEL 0 FT. ON 0 (DATE)

AFTER _____ HOURS AT _____ GPM.

WAS A GEOPHYSICAL LOG TAKEN? [x] YES [ ] NO

WELL HEAD COMPLETION:

TYPE:
- [ ] PITLESS ADAPTER
- [ ] STANDARD "T"
- [ ] WELL PIT
- [x] PAD MOUNT
- [ ] OTHER _____

_____ INCHES ABOVE GRADE

WAS THE WELL TAG ATTACHED? [x] YES [ ] NO

IF "NO", EXPLAIN _____

TYPE OF PERMANENT PUMP INSTALLED:

PUMP MANUFACTURE _____

RATED CAPACITY (GPM) _____

PUMP INTAKE SETTING _____ FT. BELOW GRADE _____

THE LOCATION AND CONSTRUCTION OF THIS WELL IS IN COMPLIANCE WITH ALL PERMIT CONDITIONS AND WITH ALL APPLICABLE WELL CONSTRUCTION REGULATIONS. [x] YES [ ] NO

If "no," attach a copy of the approved well permit which has the revised location clearly marked.

NOTE: Completed Formation Log must be attached.

COMMENTS: _____

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

Steve Maylan

Signature of Well Driller in Charge

5328 — License#

8/28/15 — Date

White - DNREC • Canary - Contractor • Pink - Owner

Doc No. 40-08/78/01/03 - EC 7

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-9944
FAX:302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION DATE

FORMATION LOG

PAGE 2 OF 2 PAGES

PLEASE PRINT OR TYPE – ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

PERMIT #: 251051 **LOCAL ID#:** VEP-4

PROPERTY OWNER: Amtrack

WELL CONTRACTOR: East Coast Drilling, Inc. **WC LIC #:** 5249

DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
Concrete & Historic Fill	0	1
Brown Silty Sand	1	8

COMMENTS:

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT

Steve Moylan — Signature of Well Driller in Charge of Construction

5328 — WD License #

8/28/15 — Date

White - DNREC • Canary - CONTRACTOR • Pink - Owner

Doc No. 40-08-82-12-11

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-3665
FAX: 302-739-2296

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION.

WELL COMPLETION REPORT

PAGE 1 OF 2 PAGES

PLEASE PRINT OR TYPE - ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED Authorization # 51625687

PERMIT NO. 251052 LOCAL ID VEP-5

TAX MAP # 26-030.00-064

PROPERTY OWNER Amtrak

WELL CONTRACTOR East Coast Drilling, Inc.

LIC# 5249 CONSTRUCTION DATE 8-6-15

WELL CONSTRUCTION METHOD

- [x] AUGERED
- [ ] BORED
- [ ] CABLE TOOL
- [ ] DRIVEN
- [ ] JETTED
- [ ] AIR ROTARY
- [ ] MUD ROTARY
- [ ] REVERSE
- [ ] WASHED
- [ ] OTHER _____ (Specify)

TOTAL DEPTH OF EXCAVATION: 8

CASING INSTALLATION

	INNER CASING(S)						OUTER CASING
CASING TOP	0						
CASING BOTTOM	3						
CASING DIAMETER	2						
CASING MATERIAL	PVC						

SCREEN INSTALLATION

	INNER CASING(S)					
SCREEN TOP	3					
SCREEN BOTTOM	8					
SCREEN DIAMETER	2					
SCREEN MATERIAL	PVC					

GRAVEL PACK FROM 2.5 TO 8 FEET

GROUT TYPE: [x] CEMENT (c) [ ] BENTONITE CLAY (b) Bentonite

OTHER (o) _____

FROM _____ (ft.) TO _____ FROM _____ (ft.) TO _____ FEET

NON-GROUT BACKFILL OF WELL ANNULUS

TYPE _____ FROM _____ TO _____

STATIC WATER LEVEL OF (DATE) N/A

_____ FT. (Below, Above) GROUND SURFACE

PUMPING WATER LEVEL 0 FT. ON 0 (DATE)

AFTER _____ HOURS AT _____ GPM.

WAS A GEOPHYSICAL LOG TAKEN? [x] YES [ ] NO

WELL HEAD COMPLETION:

TYPE:
- [ ] PITLESS ADAPTER
- [ ] STANDARD "T"
- [ ] WELL PIT
- [x] PAD MOUNT
- [ ] OTHER _____

_____ INCHES ABOVE GRADE

WAS THE WELL TAG ATTACHED? [x] YES [ ] NO

IF "NO", EXPLAIN _____

TYPE OF PERMANENT PUMP INSTALLED:

PUMP MANUFACTURE _____

RATED CAPACITY (GPM) _____

PUMP INTAKE SETTING _____ FT. BELOW GRADE _____

THE LOCATION AND CONSTRUCTION OF THIS WELL IS IN COMPLIANCE WITH ALL PERMIT CONDITIONS AND WITH ALL APPLICABLE WELL CONSTRUCTION REGULATIONS.

[x] YES [ ] NO

If "no," attach a copy of the approved well permit which has the revised location clearly marked.

NOTE: Completed Formation Log must be attached.

COMMENTS: _____

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

Steve Moylan

Signature of Well Driller in Charge

5328 License#

8/28/15 Date

White - DNREC • Canary - Contractor • Pink - Owner

Doc No. 40-08/78/01/03 - EC 7

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-9944
FAX:302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION DATE

FORMATION LOG

PAGE 2 OF 2 PAGES

PLEASE PRINT OR TYPE – ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

PERMIT #: 251052 | **LOCAL ID#:** VEP-5

PROPERTY OWNER: Amtrack

WELL CONTRACTOR: East Coast Drilling, Inc. | **WC LIC #:** 5249

DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
Concrete & historic Fill	0	1
Brown Silty Sand	1	8

COMMENTS:

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT

Signature of Well Driller in Charge of Construction: Steve Mayhum

WD License #: 5328

Date: 8/28/15

White - DNREC • Canary - CONTRACTOR • Pink - Owner

Doc No. 40-08-82-12-11

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-3665
FAX: 302-739-2296

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION.

WELL COMPLETION REPORT

PAGE 1 OF 2 PAGES

PLEASE PRINT OR TYPE - ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED Authorization # 56251687

PERMIT NO. 251053 LOCAL ID VEP-6

TAX MAP # 26-030.00-064

PROPERTY OWNER Amtrack

WELL CONTRACTOR East Coast Drilling Inc.

LIC# 5249 CONSTRUCTION DATE 8-6-15

WELL CONSTRUCTION METHOD

- [x] AUGERED
- [ ] BORED
- [ ] CABLE TOOL
- [ ] DRIVEN
- [ ] JETTED
- [ ] AIR ROTARY
- [ ] MUD ROTARY
- [ ] REVERSE
- [ ] WASHED
- [ ] OTHER _____ (Specify)

TOTAL DEPTH OF EXCAVATION: 8

CASING INSTALLATION

	INNER CASING(S)						OUTER CASING
CASING TOP	0						
CASING BOTTOM	3						
CASING DIAMETER	2						
CASING MATERIAL	PVC						

SCREEN INSTALLATION

	INNER CASING(S)					
SCREEN TOP	3					
SCREEN BOTTOM	8					
SCREEN DIAMETER	2					
SCREEN MATERIAL	PVC					

GRAVEL PACK FROM 2.5 TO 8 FEET

GROUT TYPE: [x] CEMENT (c) Bentonite [ ] BENTONITE CLAY (b)

OTHER (o) _____

FROM _____ (ft.) TO _____ FROM _____ (ft.) TO _____ FEET

NON-GROUT BACKFILL OF WELL ANNULUS

TYPE _____ FROM _____ TO _____

STATIC WATER LEVEL OF (DATE) N/A

_____ FT. (Below, Above) GROUND SURFACE

PUMPING WATER LEVEL 0 FT. ON 0 (DATE)

AFTER _____ HOURS AT _____ GPM.

WAS A GEOPHYSICAL LOG TAKEN? [x] YES [ ] NO

WELL HEAD COMPLETION:

TYPE:
- [ ] PITLESS ADAPTER
- [ ] STANDARD "T"
- [ ] WELL PIT
- [x] PAD MOUNT
- [ ] OTHER _____

_____ INCHES ABOVE GRADE

WAS THE WELL TAG ATTACHED? [x] YES [ ] NO

IF "NO", EXPLAIN _____

TYPE OF PERMANENT PUMP INSTALLED:

PUMP MANUFACTURE _____

RATED CAPACITY (GPM) _____

PUMP INTAKE SETTING _____ FT. BELOW GRADE _____

THE LOCATION AND CONSTRUCTION OF THIS WELL IS IN COMPLIANCE WITH ALL PERMIT CONDITIONS AND WITH ALL APPLICABLE WELL CONSTRUCTION REGULATIONS.

[x] YES [ ] NO

If "no," attach a copy of the approved well permit which has the revised location clearly marked.

NOTE: Completed Formation Log must be attached.

COMMENTS: _____

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

Steve Moylan
Signature of Well Driller in Charge

5328 8/28/15
License# Date

White - DNREC • Canary - Contractor • Pink - Owner

Doc No. 40-08/78/01/03 - EC 7

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-9944
FAX:302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION DATE

FORMATION LOG

PAGE 2 OF 2 PAGES

PLEASE PRINT OR TYPE – ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

PERMIT #: 251053 | **LOCAL ID#:** VEP-6

PROPERTY OWNER: Amtrack

WELL CONTRACTOR: East Coast Drilling, Inc. | **WC LIC #:** 5249

DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
Concrete & Historic Fill	0	1
Brown Silty Sand	1	8

COMMENTS:

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT

Steve Maylan — Signature of Well Driller in Charge of Construction

5328 — WD License #

8/28/15 — Date

White - DNREC • Canary - CONTRACTOR • Pink - Owner

Doc No. 40-08-82-12-11

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

PHONE: 302-739-9944
FAX: 302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURE RESOURCES
AND ENVIRONMENTAL CONTROL

http://www.dnrec.state.de.us/

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION. A WELL FORMATION LOG MUST BE INCLUDED WITH THIS REPORT.

WELL COMPLETION REPORT

-Authorization Number-

5625687

ILLEGIBLE OR INCOMPLETE FORMS WIIL BE RETURNED

PLEASE PRINT OR TYPE - USE BLUE OR BLACK INK ONLY

Permit #: 251054 Local ID: VEP-7
Tax Map/Parcel #: 26-030.00-064
Property Owner: Amtrack
Water Well Contractor: East Coast Drilling WC Lic #: 5049
Well Driller In Charge During Construction: Steve Moylan

DRILLING / EXCAVATION METHOD

☒ Auger ☐ Bored ☐ Mud Rotary
☐ Driver ☐ Jetted ☐ Air Rotary
☐ Cable Tool ☐ Washed ☐ Reverse Rotary
☐ Other (Specify):
Total Depth Of Excavation (Feet BGS): 7
Construction Date: 9-21-2015

CASING INSTALLATION:

	INNER	OUTER (1)	(2)	(3)
Casing Top (Inches AGS):	0			
Casing Bottom (Feet BGS):	3			
Casing Diameter (Inches):	2			
Casing Material:	PVC			

Gravel Pack Size (#): #0 AGS=Above Ground Surface BGS=Below Ground Surface

SCREEN INSTALLATION:

Screen Top (Feet BGS): 3
Screen Bottom (Feet BGS): 7
Screen Diameter (Inches): 2
Screen Material: PVC
Screen Slot Size (1000 of an Inch): .010

WELL USE:

☐ Domestic ☐ Industrial ☐ Heat Pump Supply
☐ Irrigation ☐ Public ☐ Heat Pump Recharge
☐ Agricultural ☐ Misc. Public ☐ Closed Loop Heat Pump
☐ Agricultural/Lawn Irrigation
☒ Other (Specify) Soil Vapor Extraction

TYPE OF PERMANENT PUMP INSTALLED:

Pump Manufacturer: N/a Horsepower:
Rated Capacity: (GPM) Pump Intake Setting(ft. BGS):
Pump Type: ☐ Submersible ☐ Jet ☐ Vertical Turbine Pump
Pump Installed By: ☐ Others Date:

Gravel Pack: From: 2 Feet To: 7 Feet
Grout Type: ☐ Bentonite Clay ☒ Cement ☐ Bentonite Clay Plug
Other: From: 0 Feet To: 2 Feet
Type Of Non-Grout Backfill Of Well Annulus:
From: Feet To: Feet
Static Water Level: N/a Feet ☐ Below ☐ Above Ground Surface
Pumping Water Level: 0 Feet On (Date): N/a
After: 0 Hours Pumping Rate: 0 GPM
Pumping Method /Device: ☐ Airlift ☐ Mechanical (Pump) Other:
Was A Geophysical Log Taken? ☒ Yes ☐ No If "Yes", By:

WELL HEAD COMPLETION:

Type: ☐ Pitless Adapter ☐ Standard "T"
☐ Well Pit ☒ Pad Mount
☐ Other - Specify:
Well Head Completed: Flush ~~Inches~~ ☐ Above ☐ Below Ground Surface
Was The Well Tag Attached In Accordance With Current Regulations?
☒ YES ☐ NO If "NO", Please Explain:

Site Plan - **If different from original application, *must*** note changes such as distances from well to house, property lines, nearest road, **and all nearby septic systems and central sewer lines** (included suitable plot plan if available).

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

Steve Moylan
Signature - **Well Driller in Charge of Well Construction**

5328 10/8/15
Well Driller License # Date

White - DNREC • *Canary - Contractor* • *Pink - Owner*

Doc No. 40-08/07/01/10 - CRR 1

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-9944
FAX: 302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION DATE

FORMATION LOG

PLEASE PRINT OR TYPE - ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

PERMIT #: 251054 | LOCAL ID#: VEP-7

PROPERTY OWNER: Amtrack

WELL CONTRACTOR: East Coast Drilling | WC LIC #: 5249

DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
Concrete & Historic Fill	0	1
Brown Silty Sand	1	7

COMMENTS:

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT

Steve Moylan | 5328 | 10/8/15

Signature of Well Driller in Charge of Construction | WD License # | Date

White - DNREC • Canary - *CONTRACTOR* • *Pink - Owner*

Doc No. 40-08-82-12-11

MAIL TO:
WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

PHONE: 302-739-9944
FAX: 302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURE RESOURCES
AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT

http://www.dnrec.state.de.us/

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION. A WELL FORMATION LOG MUST BE INCLUDED WITH THIS REPORT.

-Authorization Number-

56025687

ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

PLEASE PRINT OR TYPE - USE BLUE OR BLACK INK ONLY

Permit #: 251055 Local ID: VEP-8
Tax Map/Parcel #: 2-00-030.00-004
Property Owner: Amtrack
Water Well Contractor: East Coast Drilling WC Lic #: 5249
Well Driller In Charge During Construction: Steve Moylan

DRILLING / EXCAVATION METHOD

☒ Auger ☐ Bored ☐ Mud Rotary
☐ Driver ☐ Jetted ☐ Air Rotary
☐ Cable Tool ☐ Washed ☐ Reverse Rotary
☐ Other (Specify):

Total Depth Of Excavation (Feet BGS): 7
Construction Date: 9-21-2015

CASING INSTALLATION:

	INNER	OUTER (1)	OUTER (2)	OUTER (3)
Casing Top (Inches AGS):	0			
Casing Bottom (Feet BGS):	3			
Casing Diameter (Inches):	2			
Casing Material:	PVC			

Gravel Pack Size (#): #0
AGS=Above Ground Surface BGS=Below Ground Surface

SCREEN INSTALLATION:

Screen Top (Feet BGS): 3
Screen Bottom (Feet BGS): 7
Screen Diameter (Inches): 2
Screen Material: PVC
Screen Slot Size (1000 of an Inch): .010

WELL USE:

☐ Domestic ☐ Industrial ☐ Heat Pump Supply
☐ Irrigation ☐ Public ☐ Heat Pump Recharge
☐ Agricultural ☐ Misc. Public ☐ Closed Loop Heat Pump
☐ Agricultural/Lawn Irrigation
☒ Other (Specify) Soil Vapor Extraction

TYPE OF PERMANENT PUMP INSTALLED:

Pump Manufacturer: N/A Horsepower:
Rated Capacity: (GPM) Pump Intake Setting(ft. BGS):
Pump Type: ☐ Submersible ☐ Jet ☐ Vertical Turbine Pump
Pump Installed By: ☐ Others Date:

Gravel Pack: From: 2 Feet To: 7 Feet
Grout Type: ☐ Bentonite Clay ☒ Cement (Bentonite) ☐ Bentonite Clay Plug
Other: From: 0 Feet To: 2 Feet
Type Of Non-Grout Backfill Of Well Annulus:
From: Feet To: Feet
Static Water Level: N/a Feet ☐ Below ☐ Above Ground Surface
Pumping Water Level: 0 Feet On (Date): N/a
After: 0 Hours Pumping Rate: 0 GPM
Pumping Method /Device: ☐ Airlift ☐ Mechanical (Pump) Other:
Was A Geophysical Log Taken? ☒ Yes ☐ No If "Yes", By:

WELL HEAD COMPLETION:

Type: ☐ Pitless Adapter ☐ Standard "T"
☐ Well Pit ☒ Pad Mount
☐ Other - Specify:
Well Head Completed Flush inches ☐ Above ☐ Below Ground Surface
Was The Well Tag Attached In Accordance With Current Regulations?
☒ YES ☐ NO If "NO", Please Explain:

Site Plan - **If different from original application, *must*** note changes such as distances from well to house, property lines, nearest road, **and all nearby septic systems and central sewer lines** (included suitable plot plan if available).

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

Steve Moylan
Signature - **Well Driller in Charge of Well Construction**

5398 10/8/15
Well Driller License # Date

White - DNREC • Canary - Contractor • Pink - Owner

Doc No. 40-08/07/01/10 - CRR 1

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-9944
FAX: 302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION DATE

FORMATION LOG

PAGE 2 OF 2 PAGES

PLEASE PRINT OR TYPE - ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

PERMIT #: 251055 | LOCAL ID#: VEP-8

PROPERTY OWNER: Amtrack

WELL CONTRACTOR: East Coast Drilling | WC LIC #: 5249

DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
Concrete & Historic Fill	0	1
Brown Silty Sand	1	7

COMMENTS:

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT

Steve Moylan — Signature of Well Driller in Charge of Construction

5328 — WD License #

10/8/15 — Date

White - DNREC • Canary - *CONTRACTOR* • *Pink - Owner*

Doc No. 40-08-82-12-11

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

PHONE: 302-739-9944
FAX: 302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURE RESOURCES
AND ENVIRONMENTAL CONTROL

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WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION. A WELL FORMATION LOG MUST BE INCLUDED WITH THIS REPORT.

WELL COMPLETION REPORT

-Authorization Number-

56251087

ILLEGIBLE OR INCOMPLETE FORMS WIIL BE RETURNED

PLEASE PRINT OR TYPE - USE BLUE OR BLACK INK ONLY

Permit #: 251056 Local ID: VEP-9
Tax Map/Parcel #: 36-030.00-004
Property Owner: Amtrak
Water Well Contractor: East Coast Drilling WC Lic #: 5249
Well Driller In Charge During Construction: Steve Moylan

DRILLING / EXCAVATION METHOD

☒ Auger ☐ Bored ☐ Mud Rotary
☐ Driver ☐ Jetted ☐ Air Rotary
☐ Cable Tool ☐ Washed ☐ Reverse Rotary
☐ Other (Specify):

Total Depth Of Excavation (Feet BGS): 5
Construction Date: 9-21-2015

CASING INSTALLATION:

	INNER	OUTER (1)	OUTER (2)	OUTER (3)
Casing Top (Inches AGS):	0			
Casing Bottom (Feet BGS):	2			
Casing Diameter (Inches):	2			
Casing Material:	PVC			

Gravel Pack Size (#): #0 AGS=Above Ground Surface BGS=Below Ground Surface

SCREEN INSTALLATION:

Screen Top (Feet BGS): 2
Screen Bottom (Feet BGS): 5
Screen Diameter (Inches): 2
Screen Material: PVC
Screen Slot Size (1000 of an Inch): .010

WELL USE:

☐ Domestic ☐ Industrial ☐ Heat Pump Supply
☐ Irrigation ☐ Public ☐ Heat Pump Recharge
☐ Agricultural ☐ Misc. Public ☐ Closed Loop Heat Pump
☐ Agricultural/Lawn Irrigation
☒ Other (Specify) Soil Vapor Extraction

TYPE OF PERMANENT PUMP INSTALLED:

Pump Manufacturer: N/a Horsepower:
Rated Capacity: (GPM) Pump Intake Setting(ft. BGS):
Pump Type: ☐ Submersible ☐ Jet ☐ Vertical Turbine Pump
Pump Installed By: ☐ Others Date:

Gravel Pack: From: 1 Feet To: 5 Feet
Grout Type: ☐ Bentonite Clay ☒ Cement (Bentonite) ☐ Bentonite Clay Plug
Other: From: 0 Feet To: 1 Feet
Type Of Non-Grout Backfill Of Well Annulus:
From: Feet To: Feet
Static Water Level: N/a Feet ☐ Below ☐ Above Ground Surface
Pumping Water Level: 0 Feet On (Date): N/a
After: 0 Hours Pumping Rate: 0 GPM
Pumping Method /Device: ☐ Airlift ☐ Mechanical (Pump) Other:
Was A Geophysical Log Taken? ☒ Yes ☐ No If "Yes", By:

WELL HEAD COMPLETION:

Type: ☐ Pitless Adapter ☐ Standard "T"
☐ Well Pit ☒ Pad Mount
☐ Other - Specify:
Well Head Completed: Flush ~~Inches~~ ☐ Above ☐ Below Ground Surface
Was The Well Tag Attached In Accordance With Current Regulations?
☒ YES ☐ NO If "NO", Please Explain:

Site Plan - **If different from original application, *must*** note changes such as distances from well to house, property lines, nearest road, **and all nearby septic systems and central sewer lines** (included suitable plot plan if available).

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

Steve Moylan
Signature - **Well Driller in Charge of Well Construction**

5328 10/8/15
Well Driller License # Date

White - DNREC • *Canary - Contractor* • *Pink - Owner*

Doc No. 40-08/07/01/10 - CRR 1

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-9944
FAX: 302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION DATE

FORMATION LOG

PAGE 2 OF 2 PAGES

PLEASE PRINT OR TYPE - ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

PERMIT #: 251056 | LOCAL ID#: VEP-9

PROPERTY OWNER: Amtrack

WELL CONTRACTOR: East Coast Drilling, Inc. | WC LIC #:

DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
Concrete & Historic Fill	0	1
Brown Silty Sand	1	5

COMMENTS:

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT

Steve Moylan — 5328 — 10/8/15

Signature of Well Driller in Charge of Construction — WD License # — Date

White - DNREC • Canary - *CONTRACTOR* • *Pink - Owner*

Doc No. 40-08-82-12-11

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

PHONE: 302-739-9944
FAX: 302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURE RESOURCES
AND ENVIRONMENTAL CONTROL

http://www.dnrec.state.de.us/

WELL COMPLETION REPORT

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION. A WELL FORMATION LOG MUST BE INCLUDED WITH THIS REPORT.

-Authorization Number-

51025087

ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

PLEASE PRINT OR TYPE - USE BLUE OR BLACK INK ONLY

Permit #: 251057 Local ID: VEP-10
Tax Map/Parcel #: 26-030.00-064
Property Owner: Amtrak
Water Well Contractor: East Coast Drilling WC Lic #: 5249
Well Driller In Charge During Construction: Steve Moylan

DRILLING / EXCAVATION METHOD

☒ Auger ☐ Bored ☐ Mud Rotary
☐ Driver ☐ Jetted ☐ Air Rotary
☐ Cable Tool ☐ Washed ☐ Reverse Rotary
☐ Other (Specify):
Total Depth Of Excavation (Feet BGS): 7
Construction Date: 11-2-2015

CASING INSTALLATION:

	INNER	OUTER (1)	(2)	(3)
Casing Top (Inches AGS):	0			
Casing Bottom (Feet BGS):	5			
Casing Diameter (Inches):	2			
Casing Material:	PVC			

Gravel Pack Size (#): #0
AGS=Above Ground Surface BGS=Below Ground Surface

SCREEN INSTALLATION:

Screen Top (Feet BGS): 5
Screen Bottom (Feet BGS): 7
Screen Diameter (Inches): 2
Screen Material: PVC
Screen Slot Size (1000 of an Inch): .010

WELL USE:

☐ Domestic ☐ Industrial ☐ Heat Pump Supply
☐ Irrigation ☐ Public ☐ Heat Pump Recharge
☐ Agricultural ☐ Misc. Public ☐ Closed Loop Heat Pump
☐ Agricultural/Lawn Irrigation
☒ Other (Specify) Soil Vapor Extraction

TYPE OF PERMANENT PUMP INSTALLED:

Pump Manufacturer: N/A Horsepower:
Rated Capacity: (GPM) Pump Intake Setting(ft. BGS):
Pump Type: ☐ Submersible ☐ Jet ☐ Vertical Turbine Pump
Pump Installed By: ☐ Others Date:

Gravel Pack. From: 4 Feet To: 7 Feet
Grout Type: ☐ Bentonite Clay ☒ Cement (Bentonite) ☐ Bentonite Clay Plug
Other: From: 0 Feet To: 4 Feet
Type Of Non-Grout Backfill Of Well Annulus:
From: Feet To: Feet
Static Water Level: N/A Feet ☐ Below ☐ Above Ground Surface
Pumping Water Level: 0 Feet On (Date): N/A
After: 0 Hours Pumping Rate: 0 GPM
Pumping Method /Device: ☐ Airlift ☐ Mechanical (Pump) Other:
Was A Geophysical Log Taken? ☒ Yes ☐ No If "Yes", By:

WELL HEAD COMPLETION:

Type: ☐ Pitless Adapter ☐ Standard "T"
☐ Well Pit ☒ Pad Mount
☐ Other - Specify:
Well Head Completed: Flush Inches ☐ Above ☐ Below Ground Surface
Was The Well Tag Attached In Accordance With Current Regulations?
☒ YES ☐ NO If "NO", Please Explain:

Site Plan - **If different from original application, *must*** note changes such as distances from well to house, property lines, nearest road, **and all nearby septic systems and central sewer lines** (included suitable plot plan if available).

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

Steve Moylan
Signature - **Well Driller in Charge of Well Construction**

5328 11/11/2015
Well Driller License # Date

White - DNREC • *Canary - Contractor* • *Pink - Owner*

Doc No. 40-08/07/01/10 - CRR 1

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-9944
FAX: 302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION DATE

FORMATION LOG

PLEASE PRINT OR TYPE - ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED Authorization# 5625687

PERMIT #: 251057 | LOCAL ID#: VEP-10

PROPERTY OWNER: Amtrack

WELL CONTRACTOR: East Coast Drilling | WC LIC #: 5249

DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
Concrete & Historic Fill	0	1
Brown Silty Sand	1	7

COMMENTS:

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT

Luke Moylan — 5328 — 11-11-2015

Signature of Well Driller in Charge of Construction — WD License # — Date

White - DNREC • Canary - *CONTRACTOR* • *Pink - Owner*

Doc No. 40-08-82-12-11

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

PHONE: 302-739-9944
FAX: 302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURE RESOURCES
AND ENVIRONMENTAL CONTROL

http://www.dnrec.state.de.us/

WELL COMPLETION REPORT

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION. A WELL FORMATION LOG MUST BE INCLUDED WITH THIS REPORT.

-Authorization Number-

56256087

ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

PLEASE PRINT OR TYPE - USE BLUE OR BLACK INK ONLY

Permit #: 251058 Local ID: VEP-11
Tax Map/Parcel #: 26-030.00-064
Property Owner: Amtrack
Water Well Contractor: East Coast Drilling WC Lic #: 5249
Well Driller In Charge During Construction: Steve Moylan

DRILLING / EXCAVATION METHOD

☒ Auger ☐ Bored ☐ Mud Rotary
☐ Driver ☐ Jetted ☐ Air Rotary
☐ Cable Tool ☐ Washed ☐ Reverse Rotary
☐ Other (Specify):

Total Depth Of Excavation (Feet BGS): 7
Construction Date: 11-2-2015

CASING INSTALLATION:

	INNER	OUTER (1)	(2)	(3)
Casing Top (Inches AGS):	0			
Casing Bottom (Feet BGS):	5			
Casing Diameter (Inches):	2			
Casing Material:	PVC			

Gravel Pack Size (#): #0 AGS=Above Ground Surface BGS=Below Ground Surface

SCREEN INSTALLATION:

Screen Top (Feet BGS): 5
Screen Bottom (Feet BGS): 7
Screen Diameter (Inches): 2
Screen Material: PVC
Screen Slot Size (1000 of an Inch): .010

WELL USE:

☐ Domestic ☐ Industrial ☐ Heat Pump Supply
☐ Irrigation ☐ Public ☐ Heat Pump Recharge
☐ Agricultural ☐ Misc. Public ☐ Closed Loop Heat Pump
☐ Agricultural/Lawn Irrigation
☒ Other (Specify) Soil Vapor Extraction

TYPE OF PERMANENT PUMP INSTALLED:

Pump Manufacturer: N/A Horsepower:
Rated Capacity: (GPM) Pump Intake Setting(ft. BGS):
Pump Type: ☐ Submersible ☐ Jet ☐ Vertical Turbine Pump
Pump Installed By: ☐ Others Date:

Gravel Pack: From: 4 Feet To: 7 Feet
Grout Type: ☐ Bentonite Clay ☒ Cement (Bentonite) ☐ Bentonite Clay Plug
Other: From: 0 Feet To: 4 Feet
Type Of Non-Grout Backfill Of Well Annulus:
From: Feet To: Feet
Static Water Level: N/A Feet ☐ Below ☐ Above Ground Surface
Pumping Water Level: 0 Feet On (Date): N/A
After: 0 Hours Pumping Rate: 0 GPM
Pumping Method /Device: ☐ Airlift ☐ Mechanical (Pump) Other:
Was A Geophysical Log Taken? ☒ Yes ☐ No If "Yes", By:

WELL HEAD COMPLETION:

Type: ☐ Pitless Adapter ☐ Standard "T"
☐ Well Pit ☒ Pad Mount
☐ Other - Specify:
Well Head Completed N/A ~~Inches~~ ☐ Above ☐ Below Ground Surface
Was The Well Tag Attached In Accordance With Current Regulations?
☒ YES ☐ NO If "NO", Please Explain:

Site Plan - **If different from original application, *must*** note changes such as distances from well to house, property lines, nearest road, **and all nearby septic systems and central sewer lines** (included suitable plot plan if available).

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

Steve Moylan
Signature - **Well Driller in Charge of Well Construction**

5328 11/11/2015
Well Driller License # Date

White - DNREC • Canary - Contractor • Pink - Owner

Doc No. 40-08/07/01/10 - CRR 1

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901
PHONE: 302-739-9944
FAX: 302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION DATE

FORMATION LOG

PLEASE PRINT OR TYPE - ILLEGIBLE OR INCOMPLETE FORMS WILL BE RETURNED

Authorization # 5162257.87

PERMIT #: 251058 | LOCAL ID#: VEP-11

PROPERTY OWNER: Amtrack

WELL CONTRACTOR: East Coast Drilling | WC LIC #: 5249

DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
Concrete & Historic Fill	0	1
Brown Silty Sand	1	7

COMMENTS:

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT

Steve Moylan — Signature of Well Driller in Charge of Construction

5328 — WD License #

11/11/2015 — Date

White - DNREC • Canary - *CONTRACTOR* • *Pink - Owner*

Doc No. 40-08-82-12-11

MAIL TO:

WATER SUPPLY SECTION
DIVISION OF WATER RESOURCES
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

PHONE: 302-739-9944
FAX: 302-739-7764

STATE OF DELAWARE
DEPARTMENT OF NATURE RESOURCES
AND ENVIRONMENTAL CONTROL

http://www.dnrec.state.de.us/

WELL COMPLETION REPORT

WELL COMPLETION REPORT MUST BE RETURNED WITHIN 30 DAYS OF CONSTRUCTION. A WELL FORMATION LOG MUST BE INCLUDED WITH THIS REPORT.

-Authorization Number-

5625687

ILLEGIBLE OR INCOMPLETE FORMS WIIL BE RETURNED

PLEASE PRINT OR TYPE - USE BLUE OR BLACK INK ONLY

Permit #: 251059 Local ID: VEP-12
Tax Map/Parcel #: 26-030.00-004
Property Owner: Amtrack
Water Well Contractor: East Coast Drilling WC Lic #: 5249
Well Driller In Charge During Construction: Steve Moylan

DRILLING / EXCAVATION METHOD

☒ Auger ☐ Bored ☐ Mud Rotary
☐ Driver ☐ Jetted ☐ Air Rotary
☐ Cable Tool ☐ Washed ☐ Reverse Rotary
☐ Other (Specify):
Total Depth Of Excavation (Feet BGS): 7
Construction Date: 11-2-2015

CASING INSTALLATION:

	INNER	OUTER (1)	(2)	(3)
Casing Top (Inches AGS):	0			
Casing Bottom (Feet BGS):	5			
Casing Diameter (Inches):	2			
Casing Material:	PVC			

Gravel Pack Size (#): #0 AGS=Above Ground Surface BGS=Below Ground Surface

SCREEN INSTALLATION:

Screen Top (Feet BGS): 5
Screen Bottom (Feet BGS): 7
Screen Diameter (Inches): 2
Screen Material: PVC
Screen Slot Size (1000 of an Inch): .010

WELL USE:

☐ Domestic ☐ Industrial ☐ Heat Pump Supply
☐ Irrigation ☐ Public ☐ Heat Pump Recharge
☐ Agricultural ☐ Misc. Public ☐ Closed Loop Heat Pump
☐ Agricultural/Lawn Irrigation
☒ Other (Specify) Soil Vapor Extraction

TYPE OF PERMANENT PUMP INSTALLED:

Pump Manufacturer: N/A Horsepower:
Rated Capacity: (GPM) Pump Intake Setting(ft. BGS):
Pump Type: ☐ Submersible ☐ Jet ☐ Vertical Turbine Pump
Pump Installed By: ☐ Others Date:

Gravel Pack: From: 4 Feet To: 7 Feet
Grout Type: ☐ Bentonite Clay ☒ Cement Bentonite ☐ Bentonite Clay Plug
Other: From: 0 Feet To: 4 Feet
Type Of Non-Grout Backfill Of Well Annulus:
From: Feet To: Feet
Static Water Level: N/A Feet ☐ Below ☐ Above Ground Surface
Pumping Water Level: 0 Feet On (Date): N/A
After: 0 Hours Pumping Rate: 0 GPM
Pumping Method /Device: ☐ Airlift ☐ Mechanical (Pump) Other:
Was A Geophysical Log Taken? ☒ Yes ☐ No If "Yes", By:

WELL HEAD COMPLETION:

Type: ☐ Pitless Adapter ☐ Standard "T"
☐ Well Pit ☒ Pad Mount
☐ Other - Specify:
Well Head Completed: Flush ~~Inches~~ ☐ Above ☐ Below Ground Surface
Was The Well Tag Attached In Accordance With Current Regulations?
☒ YES ☐ NO If "NO", Please Explain:

Site Plan - **If different from original application, *must*** note changes such as distances from well to house, property lines, nearest road, **and all nearby septic systems and central sewer lines** (included suitable plot plan if available).

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT.

Steve Moylan
Signature - **Well Driller in Charge of Well Construction**

5328 11/11/15
Well Driller License # Date

White - DNREC • *Canary - Contractor* • *Pink - Owner*

Doc No. 40-08/07/01/10 - CRR 1

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FORMATION LOG

PAGE 2 OF 2 PAGES

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Authorization# 56251687

PERMIT #: 251059 | LOCAL ID#: VEP-12

PROPERTY OWNER: Amtrack

WELL CONTRACTOR: East Coast Drilling | WC LIC #: 5249

DESCRIPTION	TOP OF STRATA	BOTTOM OF STRATA
Concrete & Historic Fill	0	1
Brown Silty Sand	1	7

COMMENTS:

I HEREBY AFFIRM THE INFORMATION I HAVE SUBMITTED IS ACCURATE AND CORRECT

Steve Maytan — 5328 — 11/11/2015

Signature of Well Driller in Charge of Construction — WD License # — Date

White - DNREC • Canary - *CONTRACTOR* • *Pink - Owner*

Doc No. 40-08-82-12-11