Layne
WATER · MINERAL · ENERGY

75539

LETTER OF TRANSMITTAL

Ranney Collector Wells
6360 Huntley Road
Columbus, OH 43229
PHONE 614.888.6263
FAX 614.888.9208

TO Iowa Department of Natural Resources
109 Trowbridge Hall
Iowa City, Iowa 52242

DATE	JOB NO.
1/4/2013	
ATTENTION	
SUBJECT:	Horizontal Collector Well No. 6
SUBMITTAL #	

WE ARE SENDING YOU ☐ Attached ☐ Under Separate Cover Via _____ the following items:

☐ Shop Drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of Letter ☐ Change Order ☐ _____

COPIES	DATE	Specification #	DESCRIPTION
1			Well Record Form, for new Horizontal Collector Well

THESE ARE TRANSMITTED as checked below:

☐ For Approval ☐ Approved as Submitted ☐ Resubmit ____ Copies for Approval
☒ For Your Use ☐ Approved as Noted ☐ Submit ____ Copies for Distribution
☐ As Requested ☐ Returned for Correction ☐ Return ____ Corrected Prints
☐ For Review and Comment ☐ _____
☐ **FOR BIDS DUE** _____

REMARKS _____

COPY TO _____

SIGNED _____
Contractor

DNR Iowa Department of Natural Resources

WELL RECORD FORM

Geological and Water Survey

PWTS No. or PWS No. _____ | PWTS Permit No. _____ | GEOSAM Well No. (DNR use only) 75538

Site Identification

Property owner CITY of CEDAR RAPIDS Other ID CW 6

Address SEMINOLE VALLEY WELL FIELD City CED. RAP. IOWA

Tenant _____

Well depth 63 ft Date completed 12/10/2012

Location

County LINN

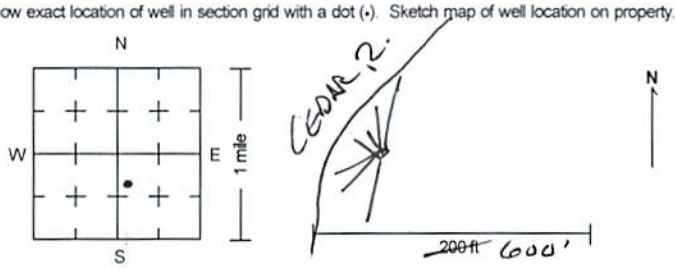
GPS coordinates (NAD83 datum)

42° 00' 35.45" N Latitude 91° 44' 40.60" W Longitude

☐ Decimal Degrees ☐ Degrees, Decimal Minutes ☒ Degrees, Minutes, Seconds

NW 1/4 of the SW 1/4 of the SE 1/4 of Sec 11 TWP 83N RNG 8 E/W

Show exact location of well in section grid with a dot (•). Sketch map of well location on property.



Drill Method

☐ Rotary ☐ Auger ☐ Cable ☒ Other DUG

CAISSON 16' 10

Hole size

234 inch	from 0 ft	to 63 ft	228 inch	from +17 ft	to -58 ft
____ inch	from ____ ft	to ____ ft	234 inch	from -58 ft	to -63 ft

~~Casing or Loop Pipe~~ HORIZONTAL WELL SCREENS

Record all depth measurements from ground level (GL). Use + for above GL measurements.

Size (in)	Material	Depth Top	Depth Bottom	Perforated	Slotted	Screen
12"	304 SS	54	55	☐	☐	☐ slot size 30
				☐	☐	☐ slot size
	MOSTLY 60 - 80			☐	☐	☐ slot size
	SLOT			☐	☐	☐ slot size
				☐	☐	☐ slot size 100

Casing Grout

Placement method GRAVITY / PUMPED

Type	Depth top	Depth bottom
BENTONITE GROUT GRAVITY	3'	5'
BENTONITE FLUID PUMPED	5'	58'
☐ Gravel packed variety _____		
☐ Seals/packers		

Formation Log

From	To	Color	Hardness	Formation description
0	6	BRN	LOOSE	F-M SAND W/ SILT & ORGANICS
6	15	L.BRN	"	F-M SAND, CLEAN
15	21	"	"	M SAND W/ GRAVEL
21	25	BRN		F-M SAND
25	26	D.BRN		SILTY SAND & GRV.
26	34	BRN	LOOSE	SAND & GRAVEL
34	35	"	"	F-M SAND, CLEAN
35	36	"	"	SAND & GRAVEL
36	39	"	"	F-M SAND
39	43	"	"	SAND & GRAVEL
43	50	"	"	F-M SAND
50	58	"	"	M-CRS SAND & F-C GRAV
58	63	"		SILTY CLAY & SAND
				(use additional sheets as needed)

RECEIVED JAN 10 2013 By _____

Pump Installation

Date ~~12/8/12~~

Type of pump BY OTHERS Depth to intake _____ ft

Pump diameter _____ in Rated capacity _____ GPM

Water Information

Date 12/9/12

Use + for above GL measurements.

Static Water Level	Pumping Water Level	Yield	Duration
12' ft	33.9 ft	7050 GPM	72 hrs

Water level measurement: ☐ Sonic ☒ Tape ☐ Airline ☐ E-line ☐ Estimate

Water yield measurement: ☒ Orifice ☐ Volumetric ☐ Estimate

Main water-supply zone from 12' ft to 58' ft below GL

Well Development

☒ Physical explain: BORE BLAST

☐ Chemical explain: _____

Remarks (including depth of lost drilling fluids, materials, or tools)

THIS IS A HORIZONTAL COLLECTOR WELL
16'x19' CAISSON W/ 1200' of SCREEN IN 7 LATERALS

Well Use

☐ Domestic ☐ Public supply ☐ Livestock

☐ Heat pump ☐ Commercial ☐ Irrigation

# of borehole(s) ____ ☐ Monitoring ☐ Other _____

Contractor

Company RANNEY COLLECTOR WELLS

Address 6360 HUNTLEY RD; COLUMBUS, OH 43229

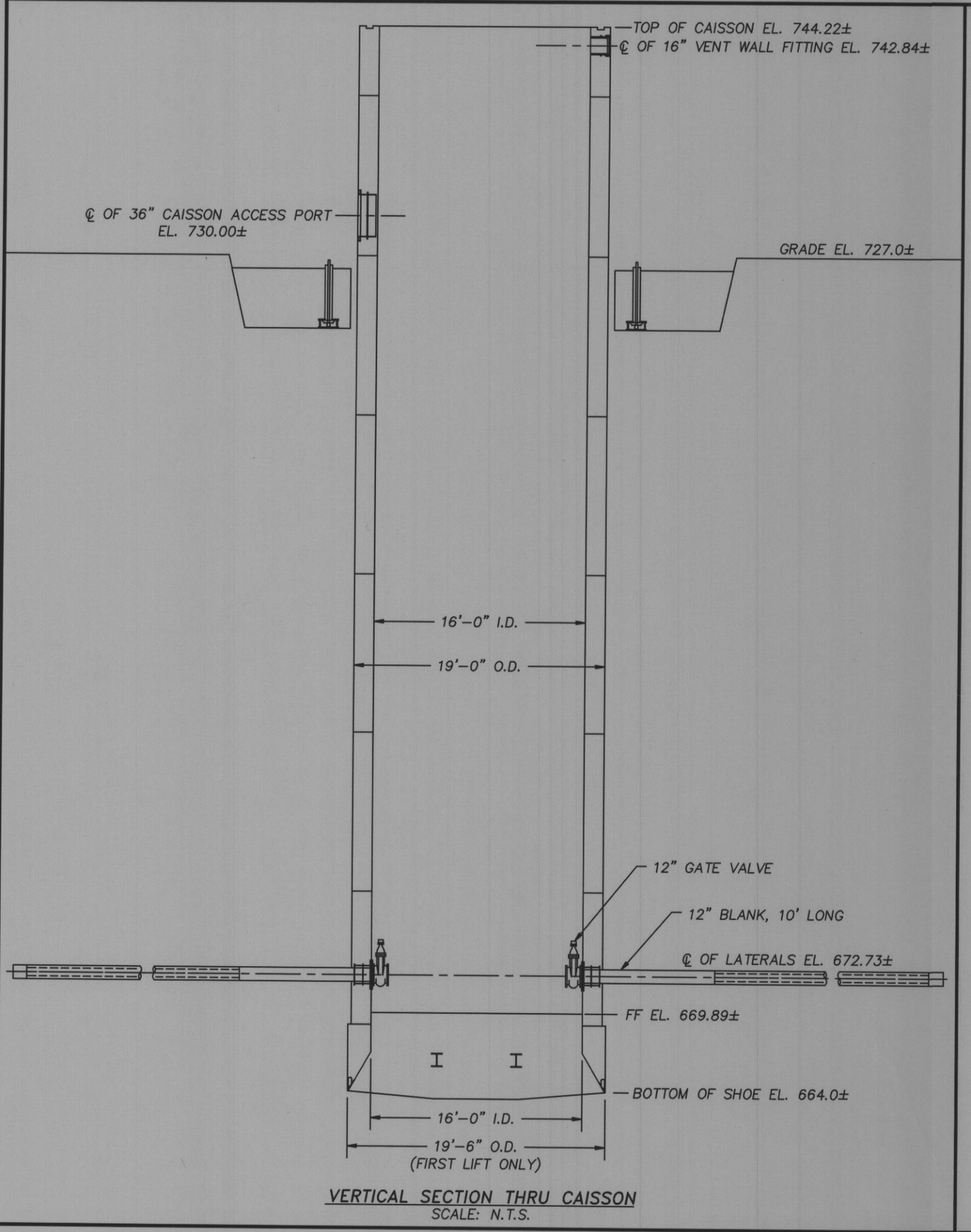
Driller _____ Certification no. 5171

Revision Date: 10/2011

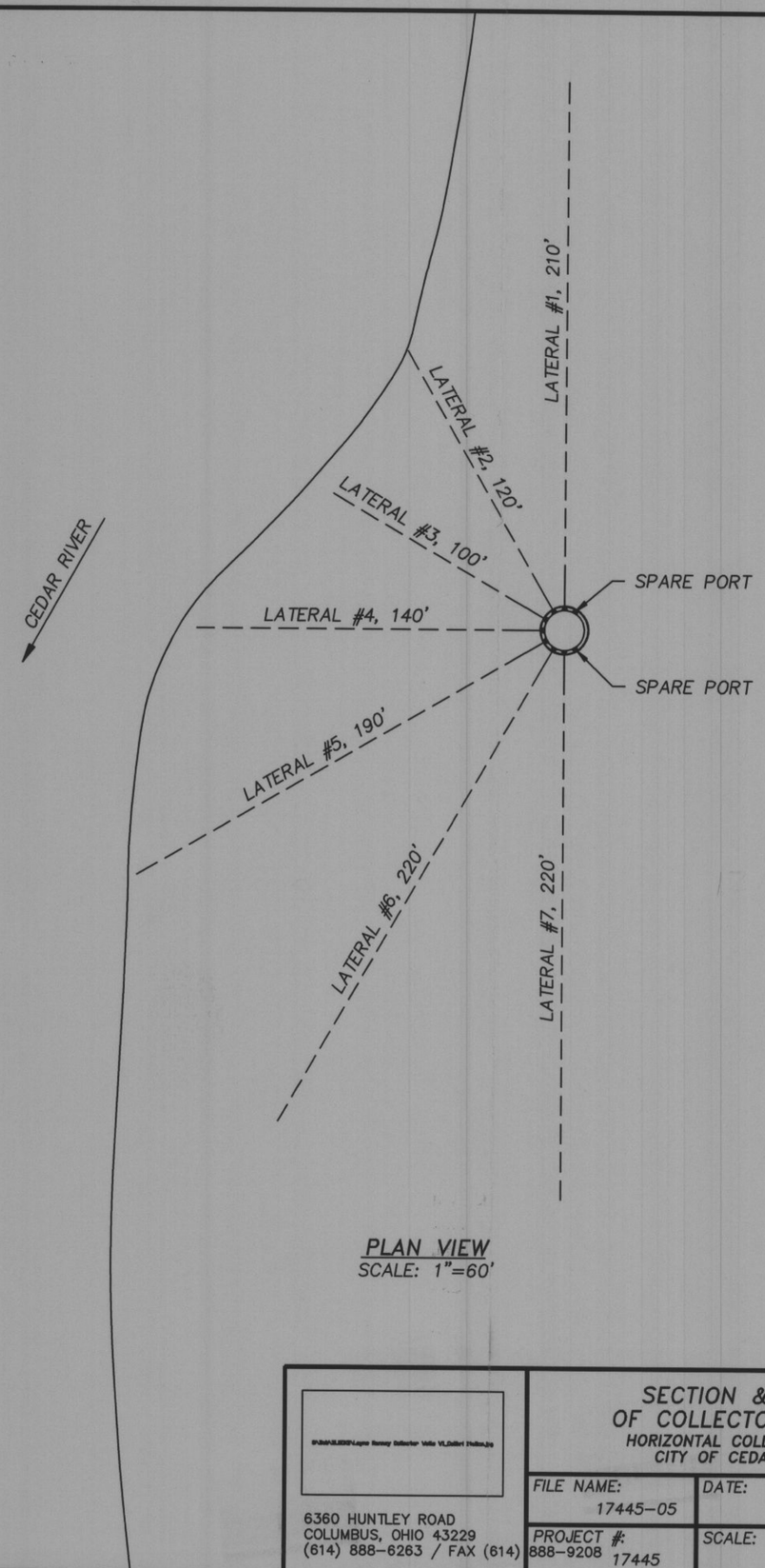
Send form to **Iowa Department of Natural Resources – Geological and Water Survey**
109 Trowbridge Hall, Iowa City, IA 52242-1319 PH 319-335-1575 FAX 319-335-2754

Make photocopies for:
well contractor, customer, and county health department

75538



VERTICAL SECTION THRU CAISSON
SCALE: N.T.S.



PLAN VIEW
SCALE: 1"=60'

6360 HUNTLEY ROAD
COLUMBUS, OHIO 43229
(614) 888-6263 / FAX (614)

SECTION & PLAN VIEW
OF COLLECTOR WELL NO. 6
HORIZONTAL COLLECTOR WELL NO. 6
CITY OF CEDAR RAPIDS, IOWA

FILE NAME:	DATE:	FIGURE
17445-05	11/16/12	1
PROJECT #: 888-9208 17445	SCALE: 1"=60'	