

Former Ducane Site; Voluntary Cleanup Contract 16-5848-RP; File #401356, Receptor Survey

File # 401356

Carol Northern <cnorthern@earthcon.com>

Thu 2/28/2019 5:23 PM

SCANNED

To Kuhn, Kimberly M. <kuhnkm@dhec.sc.gov>;

Cc 'Mark Yohman' <Mark.Yohman@lennoxintl.com>; David Richardson <drichardson@earthcon.com>; Tim Goist <tgoist@earthcon.com>;

📎 1 attachments (2 MB)

Former Ducane Co. Site, Blackville, SC BLWM File #401356 Receptor Survey 02 28 19.pdf;

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Hi Kim,

As you requested in your letter dated October 22, 2018 and we discussed during our meeting on November 30, attached is the receptor survey for the Former Ducane Company Site in Blackville, SC. For the receptor survey, we evaluated the presence of water supply wells within a 1-mile radius of the Site. One paper copy is being sent to you via Federal Express. Please accept the attached pdf as the electronic copy. If that is not acceptable, let me know and I will send another on disc.

We are planning to conduct the 4th groundwater sampling event the week of March 25, 2019. If you have any questions regarding the well survey results, the groundwater sampling event, or the project in general, please let me know.

Thanks,
Carol

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MAR 01 2019

February 28, 2019

**SITE ASSESSMENT,
REMEDICATION &
REVITALIZATION**

Ms. Kimberly Kuhn
South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management
2600 Bull Street
Columbia, South Carolina 29201

SCANNED

Subject: **Receptor Survey**
Former Ducane Company Site
Blackville, Barnwell County, South Carolina
BLWM File #401356

Dear Ms. Kuhn:

On behalf of our client Lennox International Inc. (Lennox), EarthCon Consultants, Inc. (EarthCon) is providing this receptor survey for the former Ducane Company Site located in Blackville, Barnwell County, South Carolina (BLWM File # 401356) (the Site). The survey was requested in a letter dated October 22, 2018 and discussed during a meeting with South Carolina Department of Health and Environmental Control (SCDHEC) on November 30, 2018. During that meeting, you indicated that although a receptor survey had previously been provided for the Site, SCDHEC would like updated information particularly as it relates to groundwater usage.

The Site is located at 118 West Main Street in Blackville, South Carolina. EarthCon conducted a search for water supply wells located within a one-mile radius of the Site. The information summarized in this report was obtained from the following sources:

- South Carolina Well Inventory
- USGS National Water Information System database
- Mr. Greg Withycombe, SCDHEC, Bureau of Water
- Mr. Earhel Walker, Town of Blackville, South Carolina, Water Department Supervisor

Both the South Carolina Well Inventory and the USGS National Water Information System databases were reviewed to identify water supply wells located within a one-mile radius of the Site. A total of 12 wells were identified from the database review including the City of Blackville public water supply wells.

A list of private and irrigation wells in Barnwell County was obtained from Mr. Greg Withycombe with the SCDHEC Bureau of Water. Mr. Withycombe indicated that the list is based on historical

well permits received by SCDHEC and information regarding the active or inactive status of each well is not tracked. The list of wells was mapped to identify those wells located within a one-mile radius of the Site. A total of 26 additional wells were identified.

Mr. Earthel Walker with the Town of Blackville was contacted to confirm the number and location of the Town of Blackville water supply wells. Mr. Walker stated that the Town maintains four (4) public water supply wells. Mr. Walker stated that the water supply wells are named Lartigue, Green, Bank, and Hope, with the well names corresponding to their general location (e.g., street name, local landmark, etc.).

Based on the information obtained from the sources described above, a total of 38 water supply wells were identified within a one-mile radius of the Site. Eight (8) of the 38 wells are either abandoned or inactive. The usage of the remaining 30 wells is as follows:

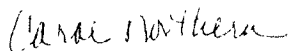
- Four (4) Town of Blackville public water supply wells
- Six (6) residential wells
- Thirteen (13) irrigation wells
- One (1) industrial supply well
- Six (6) unknown usage

A summary of the well information is provided in Table 1 and the well locations, relative to the Site, are shown on Figure 1. As shown on Figure 1, the majority of the identified wells are located east of the Site.

As shown on Figure 2, the direction of groundwater flow at the Site is to the northwest. Based on the direction of groundwater flow, it appears that the majority of water supply wells identified within the one-mile radius are upgradient or side-gradient of the Site (Figure 1). One well (map location 35) is potentially within the Site flow path; however, this well was identified as a test well installed by the Town of Blackville that is currently inactive. Based on usage of the identified wells and their location relative to Site groundwater flow direction, no groundwater receptors were identified.

Please free to call us at (770) 973-2100 if you have any questions or if we can provide any additional information.

Respectfully submitted,
EARTHCON CONSULTANTS, INC.



Carol D. Northern
Project Manager



David Richardson, P.G. (SC#2084)
Principal Geologist

Cc: Mr. Mark Yohman, Director of Environmental Affairs, Lennox International, Inc.

Table 1: Wells within a One-Mile Radius

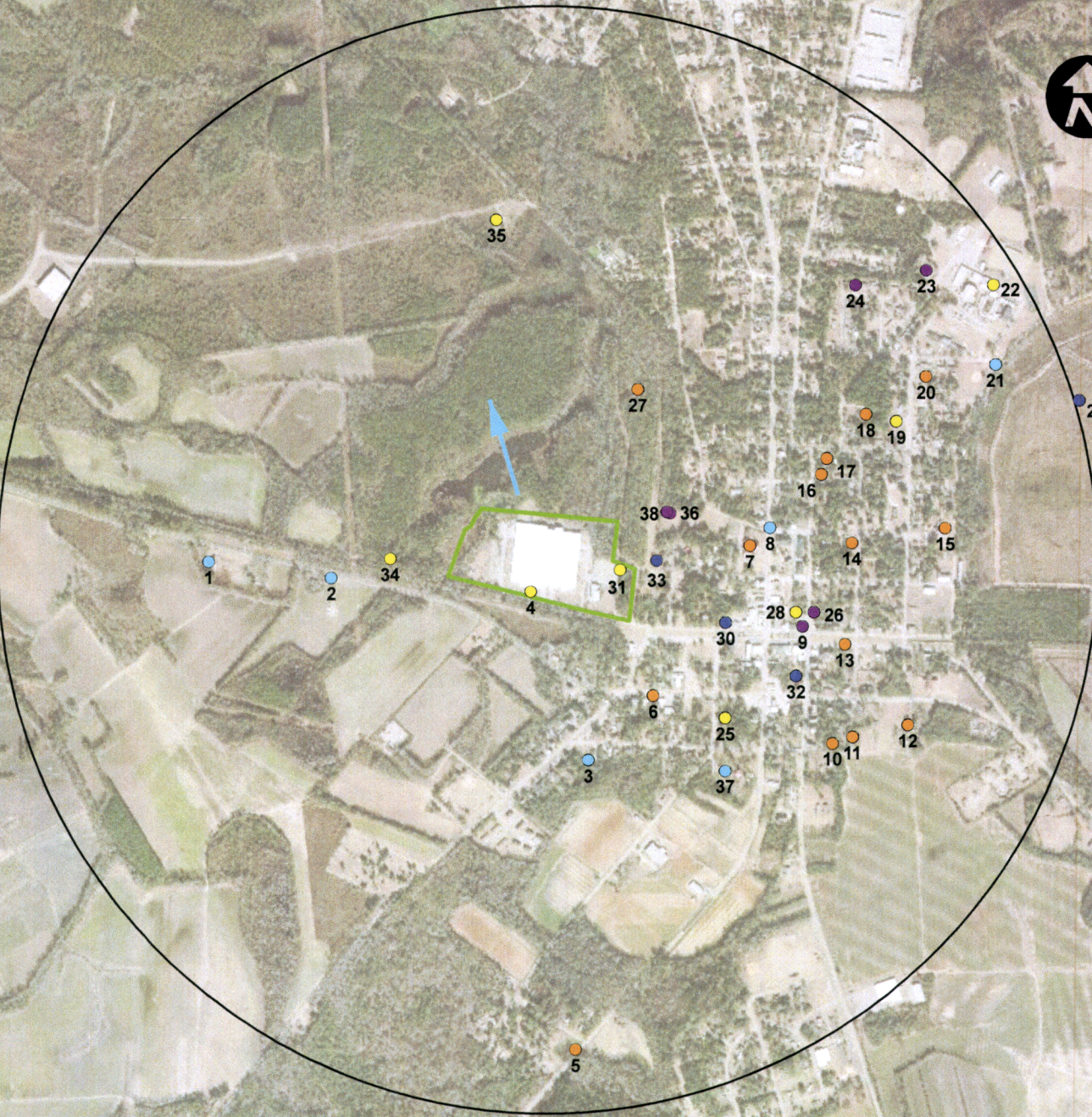
Well Location	Reference Code	Well Permit #	Well Type / Activity	Address / Location	Latitude	Longitude	Owner	Depth	Diameter
1	A	SCW06116495	Residential	4465 Dexter Street	33.35701000	-81.28832000	Chad Grambling	--	--
2	A	6023716	Residential	4271 Dexter Street	33.35659000	-81.28447000	Judy Walton	115	4
3	A	6065326	Residential	375 Hampton Ave.	33.35181000	-81.27637000	Lamont Holloway	--	--
4	A	--	Abandoned	118 West Main St.	33.35624000	-81.27818000	Ducane Heating Corp.	180	4
5	A	SCW06078436	Irrigation / Active	18369 Soloman Blatt	33.34423000	-81.27674000	Wallace Nixon	--	--
6	A	6012590	Irrigation	Hwy 78	33.35351000	-81.27432000	Edisto Rec Center	130	4
7	A	6012917	Irrigation	19449 Soloman Blatt	33.35745000	-81.27128000	First Baptist Church	180	4
8	A	SCW06082076	Residential	92 Humble Acres Ln. Solomon Blatt Ave and Reynolds St. / PO Box 302	33.35792000	-81.27066000	Kevin McCormick	--	--
9	A	--	Unknown		33.35534000	-81.26962000	Bill Owens	120	4
10	A	SCW06117092	Irrigation / Active	505 S Boundary St.	33.35227000	-81.26868000	Thomas Scott	--	--
11	A	SCW06137302	Irrigation / Active	506 S Boundary St.	33.35243000	-81.26805000	JD Goforth	--	--
12	A	SCW06105229	Irrigation / Active	3151 Dexter St.	33.35276000	-81.26631000	Donald Rivers / Randy Pritchard	--	--
13	A	6030658	Irrigation	406 Main St.	33.35487000	-81.26829000	Riley Shelton Greg Still /	63	4
14	A	SCW06098063	Irrigation / Active	288 Reynolds St.	33.35753000	-81.26808000	Jacque Usery	--	--
15	A	6059392	Irrigation	201 Valley Rd.	33.35793000	-81.26515000	Darwood Cromer	65	4
16	A	6024436	Irrigation	6114 Lartique St.	33.35932000	-81.26904000	Charles Bonnette	60	4
17	A	6024435	Irrigation	6140 Lartique St.	33.35974000	-81.26887000	Rev. Thomas Terry	60	4
18	A	SCW06076880	Irrigation / Active	60 Country Club Rd.	33.36089000	-81.26764000	Fannie Johnson	--	--
19	A	SCW06111456	Inactive	499 N Baker St.	33.36071000	-81.26669000	Martin Jennings	--	--
20	A	6053056	Irrigation	588 Baker St.	33.36188000	-81.26576000	Betsy Grainger	65	4
21	A	6053314	Residential	2395 Izlar St.	33.36220000	-81.26357000	Mary Green	130	4
22	A	SCW06113923	Inactive	Hilda Hwy	33.36429000	-81.26365000	Joseph Swearingen / Kelly Craig Farms	--	--

Table 1: Wells within a One-Mile Radius

Well Location	Reference Code	Well Permit #	Well Type / Activity	Address / Location	Latitude	Longitude	Owner	Depth	Diameter
23	A	--	Unknown	373 Country Club Rd.	33.36468000	-81.26575000	Donald Ingram	170	4
24	A	--	Unknown	120 Cedar St.	33.36429000	-81.26798000	Elsie Pettibone	63	4
25	B	BRN-5	Abandoned	Under water tower	33.35292967	-81.27204960	Town of Blackville	200	6
26	B	BRN-6	Unknown	Lartigue Street	33.35570747	-81.26927179	--	300	--
27	B	BRN-7	Industrial	Blackville	33.36154058	-81.27482740	Southern Railroad	300	6
28	B	BRN-74	Abandoned	Dexter and Lartigue Streets	33.35570746	-81.26982740	Town of Blackville	345	12
29	B, C	BRN-75	Public Supply / City of Blackville	Water tower east of Hope Street	33.36126315	-81.26093830	Town of Blackville	620	12
30	B, C	BRN-140	Public Supply / City of Blackville	N. Railroad Ave. between Clark & Campbell St.	33.35542960	-81.27204960	Town of Blackville	290	12
31	B	BRN-145	Abandoned	Ducane Plant	33.35681840	-81.27538300	Town of Blackville	413	8
32	B, C	BRN-225	Public Supply / City of Blackville	Dexter and Lartigue Streets	33.35404080	-81.26982740	Town of Blackville	--	6
33	B, C	BRN-226	Public Supply / City of Blackville	Ducane Street	33.35709619	-81.27566070	Town of Blackville	367	16
34	B	BRN-940	Abandoned	Blackville, 1 mile West	33.35709600	-81.28260520	The Ducane Co.	270	4
35	B	BRN-1008	Abandoned	Blackville, 3/4 miles NW	33.36598485	-81.27927180	Town of Blackville	405	--
36	B	94501100003	Unknown	East of Hope Street	33.35833330	-81.27388889	Town of Blackville	--	--
37	A	--	Residential	486 Healing Spring	33.35154700	-81.27205600	Leslie Keadle	--	--
38	A	--	Unknown	East of Hope Street	33.35833300	-81.27388900	Town of Blackville	--	--

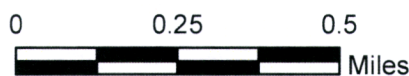
Notes / References:

- Data not available
- A - Private & irrigation wells, SC DHEC Bureau of Water
- B - USGS National Water Information System database, SC Well Inventory
- C - City of Blackville, SC Public supply drinking water wells



LEGEND:

- RESIDENTIAL
- PUBLIC SUPPLY
- IRRIGATION/ INDUSTRIAL
- ABANDONED/ INACTIVE
- UNKNOWN USE
- ➔ GROUNDWATER FLOW DIRECTION
- 1 MILE RADIUS
- APPROXIMATE PARCEL BOUNDARY



Source: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

File: S:\Premier\Projects\Lennox International\Blackville, SC\Drawings\GIS\WELL_SEARCH.mxd 2/25/2019 2:39:01 PM hpham

FORMER DUNCANE COMPANY SITE
BLACKVILLE, BARNWELL COUNTY, SC
BLWM FILE # 401356

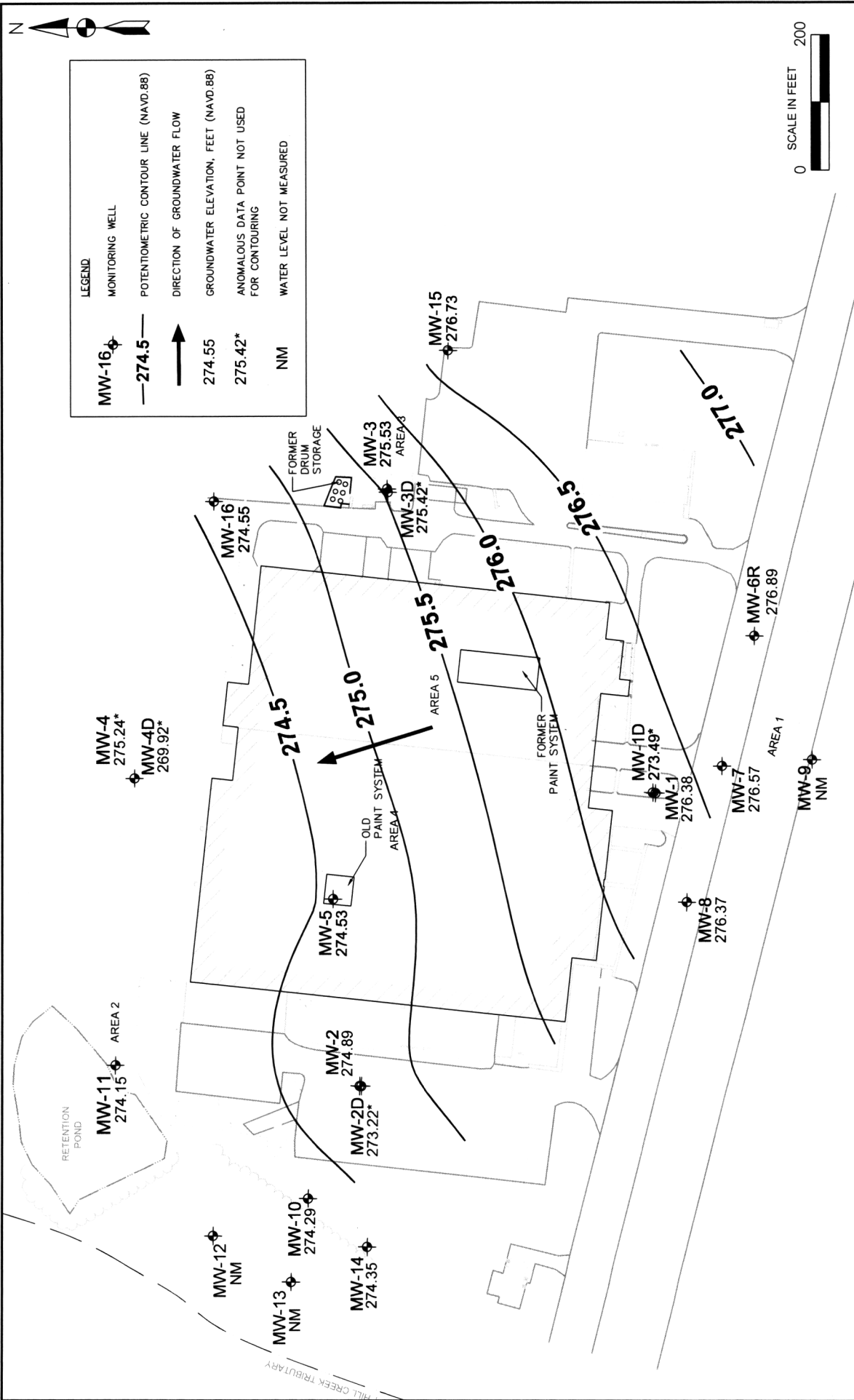
PROJECT NO. 02.20160378



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**1 MILE RADIUS
WATER WELL SURVEY RESULTS**

DRAWN HVP	CHECKED CDN	DATE FEB 2019	FIGURE 1
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POTENTIOMETRIC SURFACE MAP
OCTOBER 1, 2018

DRAWN: HVP CHECKED: CDN DATE: OCT 23, 2018 FIGURE: 2

EARTHCON®

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FORMER DUNCANE COMPANY SITE
 BLACKVILLE, BARNWELL COUNTY, SOUTH CAROLINA
 BLWM FILE # 401356

PROJECT NO. 02.20160378.00