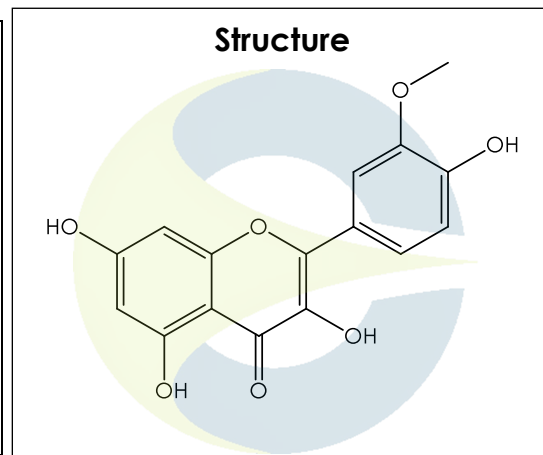


# Certificate of Analysis

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<b>PRODUCT NAME</b>	Isorhamnetin
<b>PART NUMBER</b>	00009520
<b>STANDARD TYPE</b>	Primary (P)
<b>LOT NUMBER</b>	00009520-01B
<b>REPORT NUMBER</b>	CDXA-RSS-9801-00
<b>SAMPLE NUMBER</b>	CDXP-22-00453
<b>DATE OF SAMPLE</b>	05/13/2022
<b>DATE OF REPORT</b>	06/10/2022



<b>CHEMICAL NAMES</b>	3,4',5,7-Tetrahydroxy-3'-methoxy-flavone; 3'-Methoxyquercetin
<b>CHEMICAL FORMULA</b>	C <sub>16</sub> H <sub>12</sub> O <sub>7</sub>
<b>MOLECULAR WEIGHT (MW)</b>	316.26
<b>CHEMICAL FAMILY</b>	Flavonoids
<b>CAS NUMBER</b>	[480-19-3]
<b>EC#(EINECS)</b>	207-545-5
<b>RTECS</b>	LK9275450

## ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	98.4%
HPLC	0.700.10.2.METH22	≥ 90%	98.8%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	0.700.12.27	Conforms	Conforms
Residual Solvent*	USP <467>	NA	Methanol: 3590 ppm
Water	0.700.12.37	NA	ND
Appearance	NA	NA	Light yellow powder

\*Testing performed at an ISO 17025 accredited subcontracted laboratory.

ADJUSTED PURITY: 98.4% IS BASED ON (100 - 0.4 SOLVENTS - 0.0 WATER) X 98.8% HPLC

## STORAGE CONDITIONS

<b>STORAGE</b>	Room Temperature in a dry place.
<b>EXPIRATION DATE</b>	05/2027 under the above conditions.

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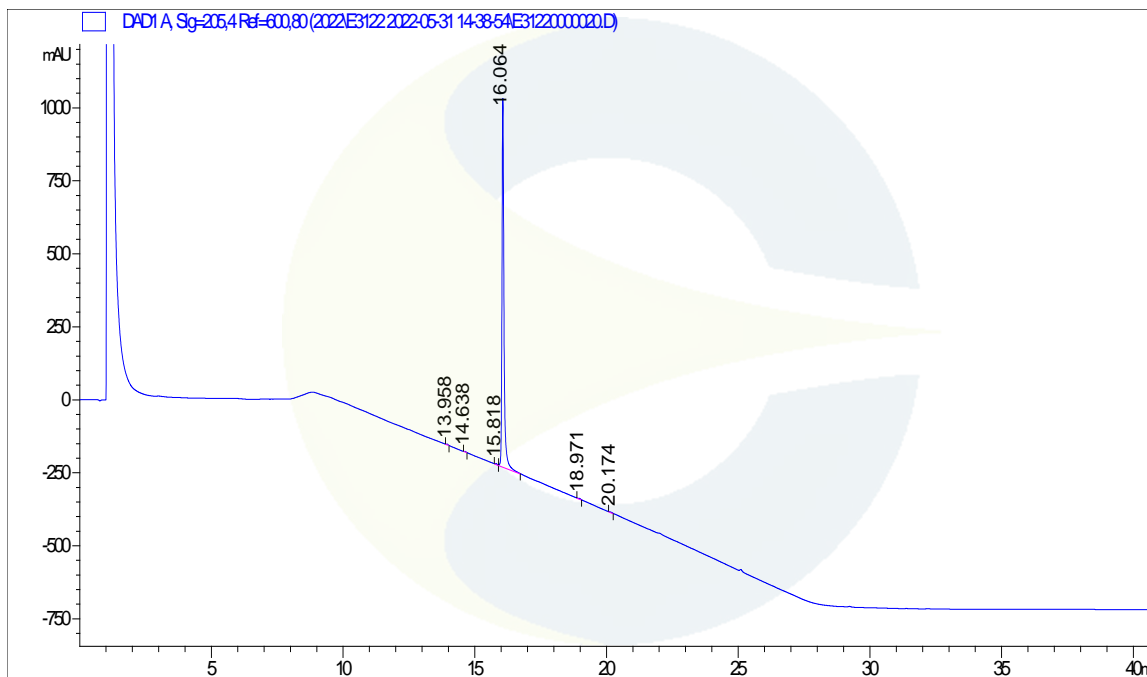
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## ANALYTICAL CONDITIONS

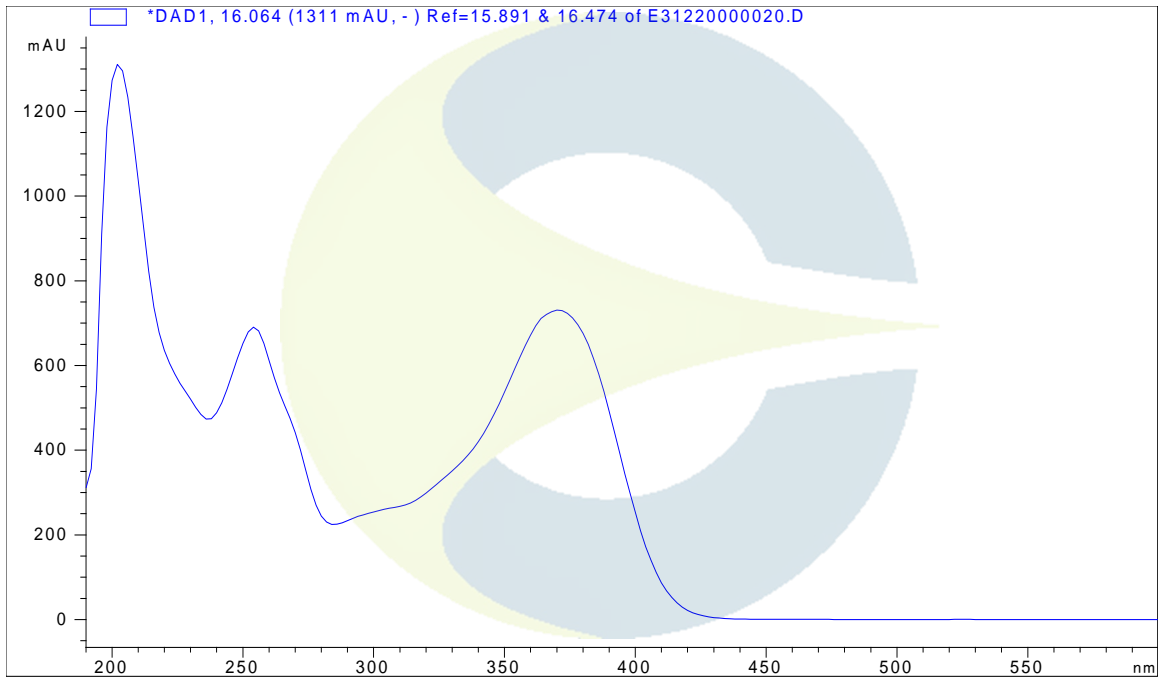
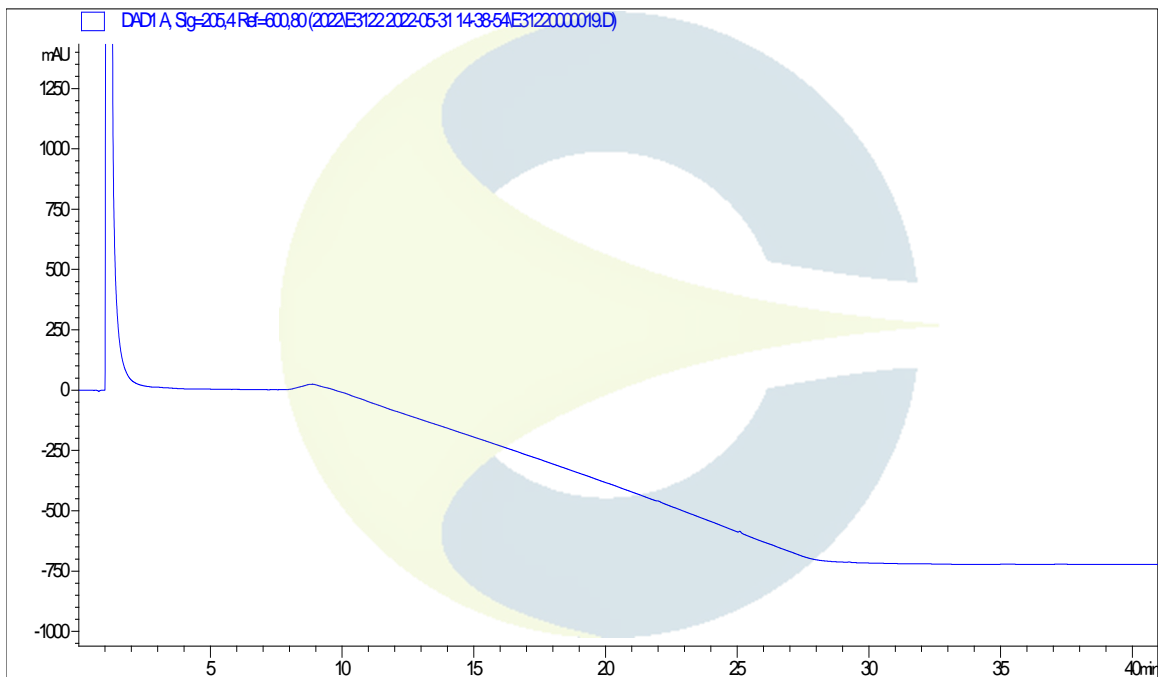
<b>INSTRUMENT</b>	AGILENT 1260 HPLC UV-VIS (DAD); AB-SCIEX 6600 TRIPLE TOF
<b>COLUMN</b>	Phenomenex Luna C18(2) 150 x 2.00 mm, 5 µm particle size
<b>MOBILE PHASE</b>	A - 0.1% Trifluoroacetic acid in Ultrapure water, B - Acetonitrile; Isocratic 5% B for 5 minutes, then increasing to 95% B over 20 minutes. Hold at 95% B for 15 minutes, then decreasing to 5% B over 1 minute.
<b>COLUMN TEMP.</b>	60 °C
<b>FLOW RATE</b>	0.4 mL/minute
<b>INJECTION VOL.</b>	0.4 µL
<b>INJECTION CONC.</b>	1.0 mg/mL in Dimethyl sulfoxide
<b>DETECTION</b>	205 ± 2 nm

## HPLC CHROMATOGRAM OF ISORHAMNETIN (CDXP-22-00453)



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**UV SPECTRUM AT RT = 16.1 MINUTES**

**HPLC CHROMATOGRAM OF DILUENT BLANK**


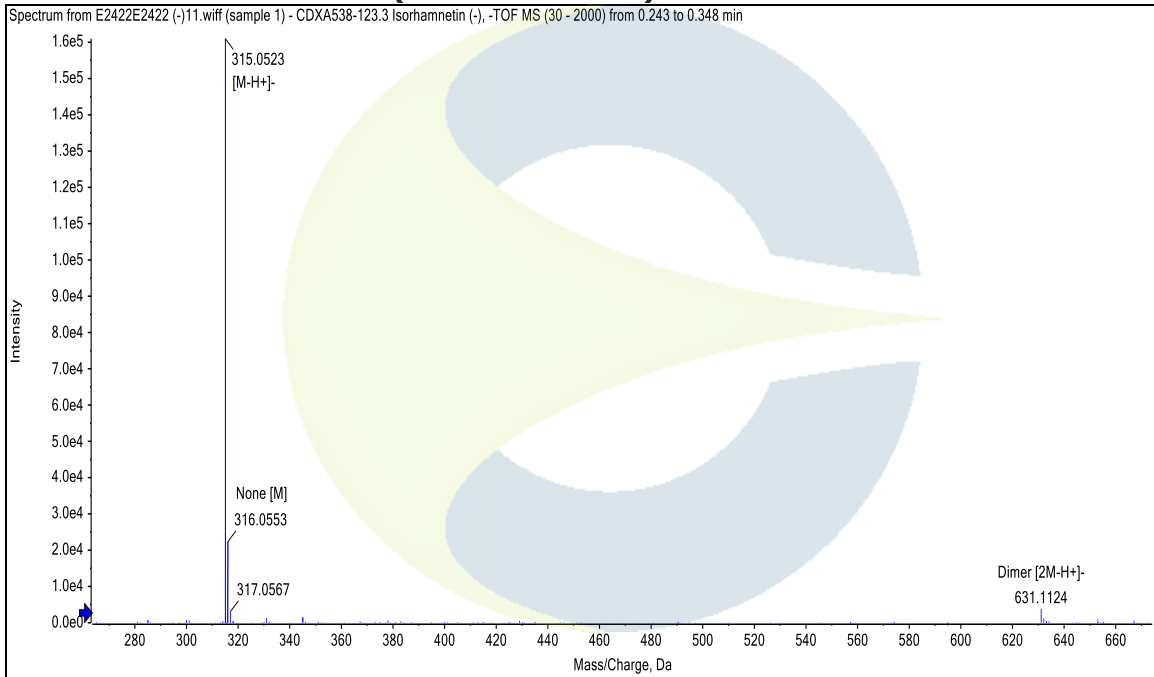
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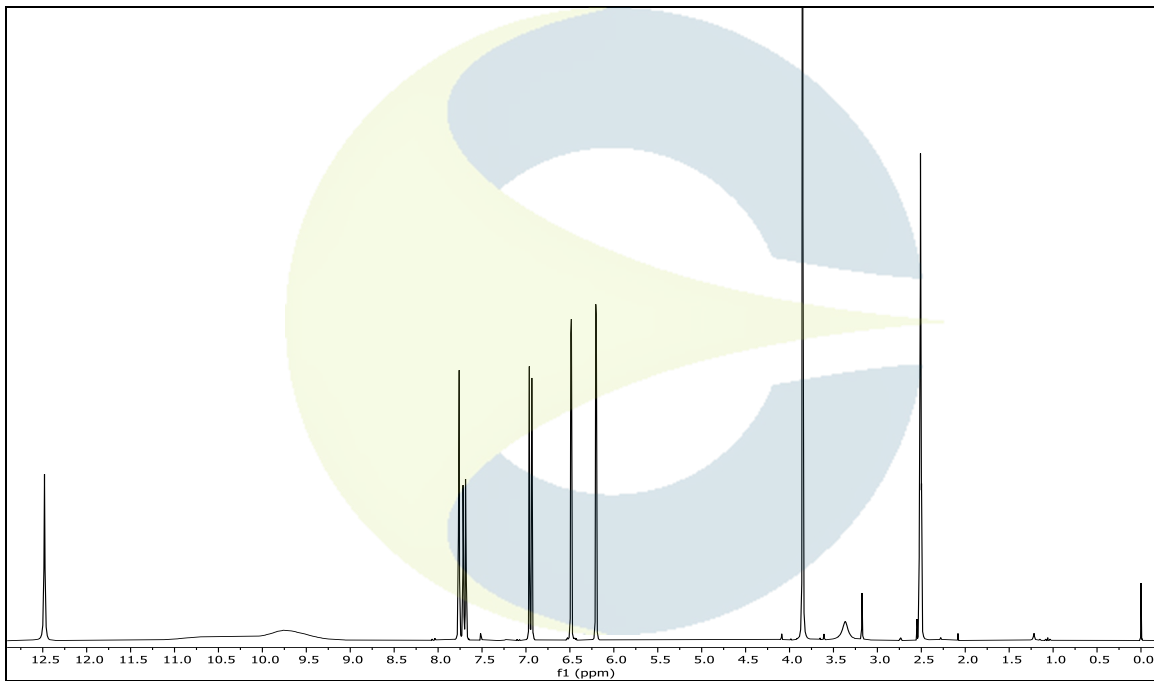
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**MASS SPECTRUM OF ISORHAMNETIN (CDXP-22-00453)**



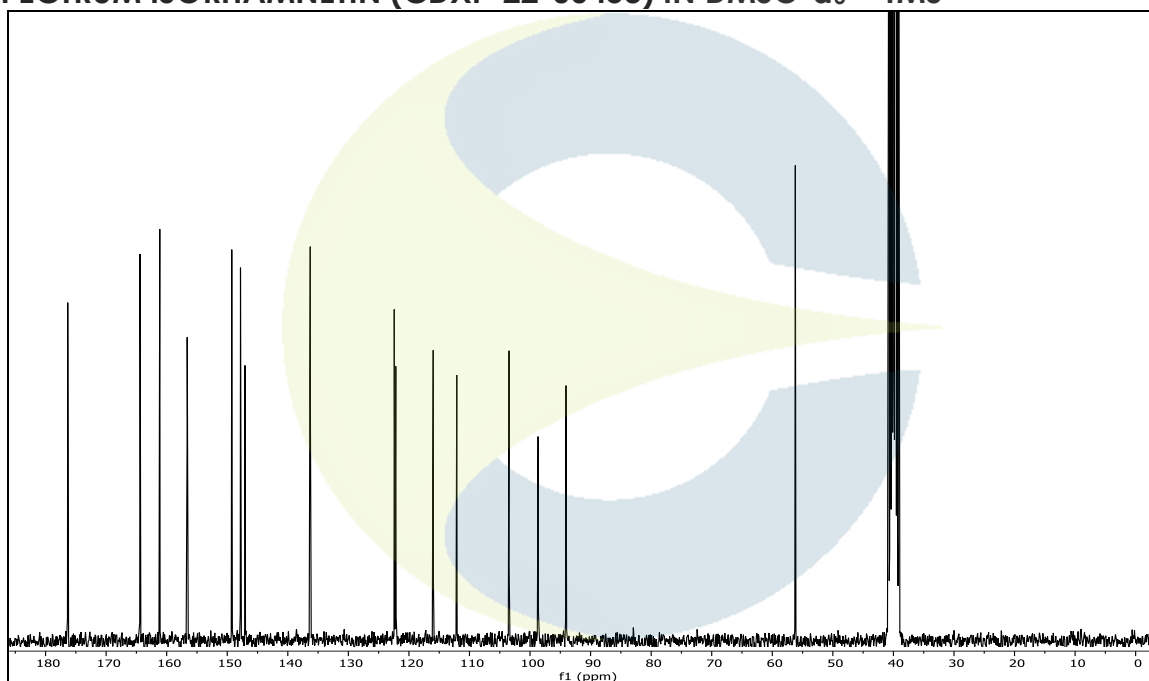
**<sup>1</sup>H-NMR SPECTRUM OF ISORHAMNETIN (CDXP-22-00453) IN DMSO-d<sub>6</sub> + TMS**



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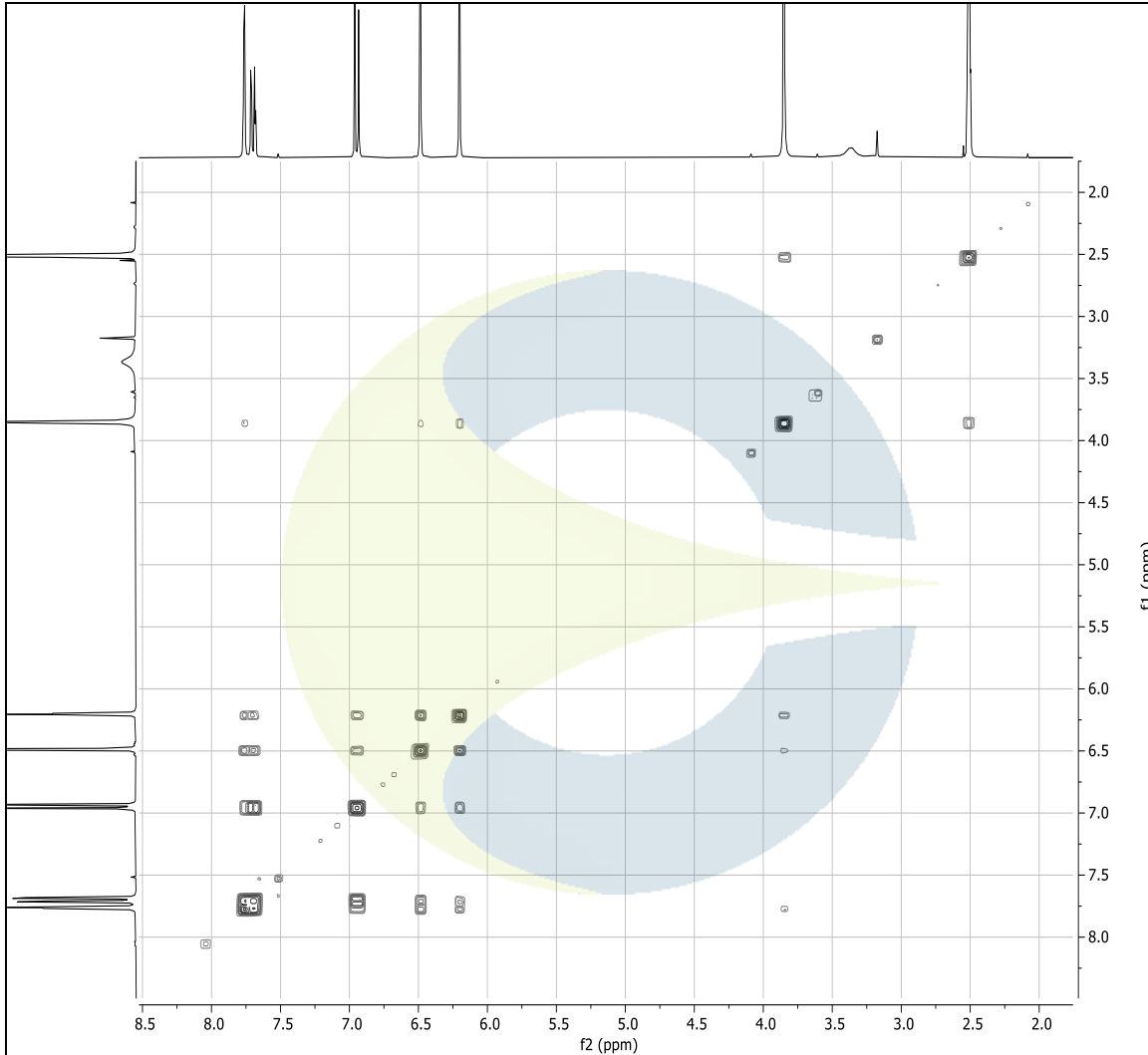
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 Email: [customerservice@lifetechindia.com](mailto:customerservice@lifetechindia.com) Website: [www.lifetechindia.com](http://www.lifetechindia.com)

**<sup>13</sup>C-NMR SPECTRUM ISORHAMNETIN (CDXP-22-00453) IN DMSO-*d*<sub>6</sub> + TMS**

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Email: [customerservice@lifetechindia.com](mailto:customerservice@lifetechindia.com) Website: [www.lifetechindia.com](http://www.lifetechindia.com)

**COSY-NMR SPECTRUM OF ISORHAMNETIN (CDXP-22-00453) IN DMSO-d<sub>6</sub> + TMS**

**REVISION HISTORY**

<u>Revision History</u>	<u>Date of Revision</u>	<u>Document/Changes</u>
00	06/10/2022	New report

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