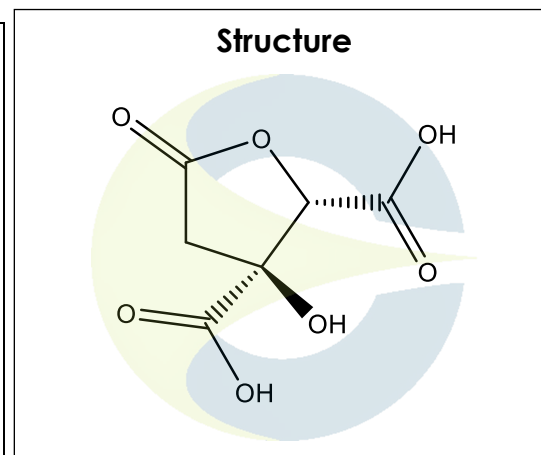


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<b>PRODUCT NAME</b>	(-)-Hydroxycitric Acid Lactone
<b>PART NUMBER</b>	00008385
<b>STANDARD TYPE</b>	Primary (P)
<b>LOT NUMBER</b>	00008385-0030
<b>REPORT NUMBER</b>	CDXA-RSS-9771-00
<b>SAMPLE NUMBER</b>	CDXP-22-00294
<b>DATE OF SAMPLE</b>	03/30/2022
<b>DATE OF REPORT</b>	05/04/2022



<b>CHEMICAL NAMES</b>	3-C-Carboxy-2-deoxy-D-erythro-pentamic acid-1,4-lactone; Garcinia lactone
<b>CHEMICAL FORMULA</b>	C <sub>6</sub> H <sub>6</sub> O <sub>7</sub>
<b>MOLECULAR WEIGHT (MW)</b>	190.11
<b>CHEMICAL FAMILY</b>	Organic acids
<b>CAS NUMBER</b>	[27750-13-6]
<b>EC#(EINECS)</b>	635-780-7
<b>RTECS</b>	NA

## ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	≥ 85%	92.9%
HPLC	0.700.10.2.METH46	≥ 90%	94.0%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	0.700.12.27	Conforms	Conforms
Residual Solvent*	USP <467>	NA	Ethyl Acetate – 3780 ppm
Water	0.700.12.37	NA	0.8%
Appearance	NA	NA	White powder

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

ADJUSTED PURITY: 92.9% IS BASED ON (100 - 0.4 SOLVENTS - 0.8 WATER) X 94.0% HPLC

## STORAGE CONDITIONS

<b>STORAGE</b>	+4 °C in a dry place.
<b>EXPIRATION DATE</b>	03/2027 under the above conditions.

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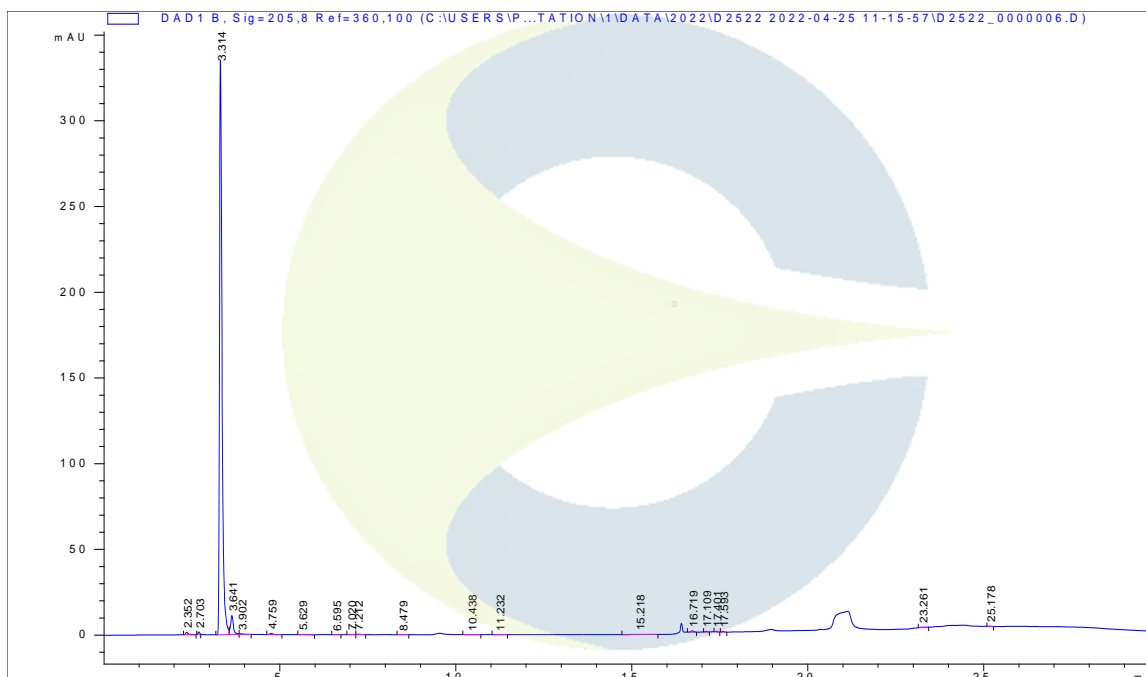
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## ANALYTICAL CONDITIONS

<b>INSTRUMENT</b>	AGILENT 1260 HPLC UV-VIS (DAD); AB-SCIEX 6600 TRIPLE TOF
<b>COLUMN</b>	Phenomenex Synergi Hydro-RP 250 x 4.6 mm, 4 µm particle size
<b>MOBILE PHASE</b>	A – 10mM KH <sub>2</sub> PO <sub>4</sub> in Ultrapure water, pH 2.90; B - Acetonitrile; Isocratic 0% B for 10 minutes, then increase to 30% B over 10 minutes. Hold at 30% B for 4 minutes, then decrease to 0% B over 0.1 minutes.
<b>COLUMN TEMP.</b>	22 °C
<b>FLOW RATE</b>	1.0 mL/minute
<b>INJECTION VOL.</b>	5.0 µL
<b>INJECTION CONC.</b>	3.0 mg/mL in Water
<b>DETECTION</b>	205 ± 4 nm

## HPLC CHROMATOGRAM OF (-)-HYDROXYCITRIC ACID LACTONE (CDXP-22-00294)

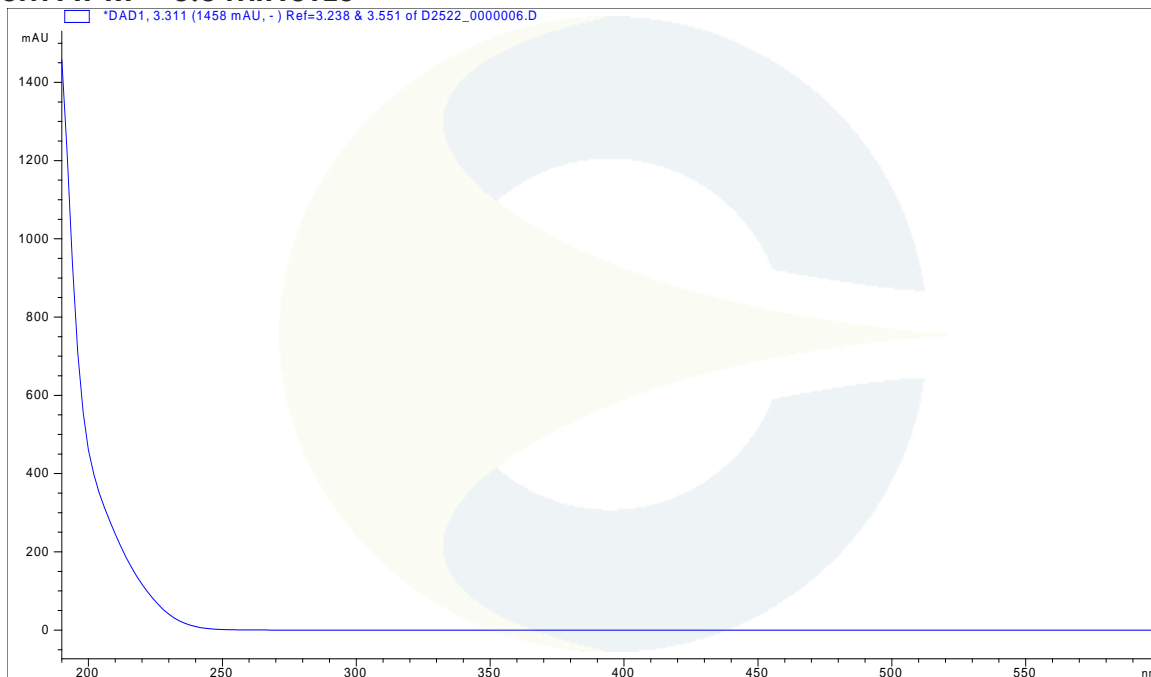


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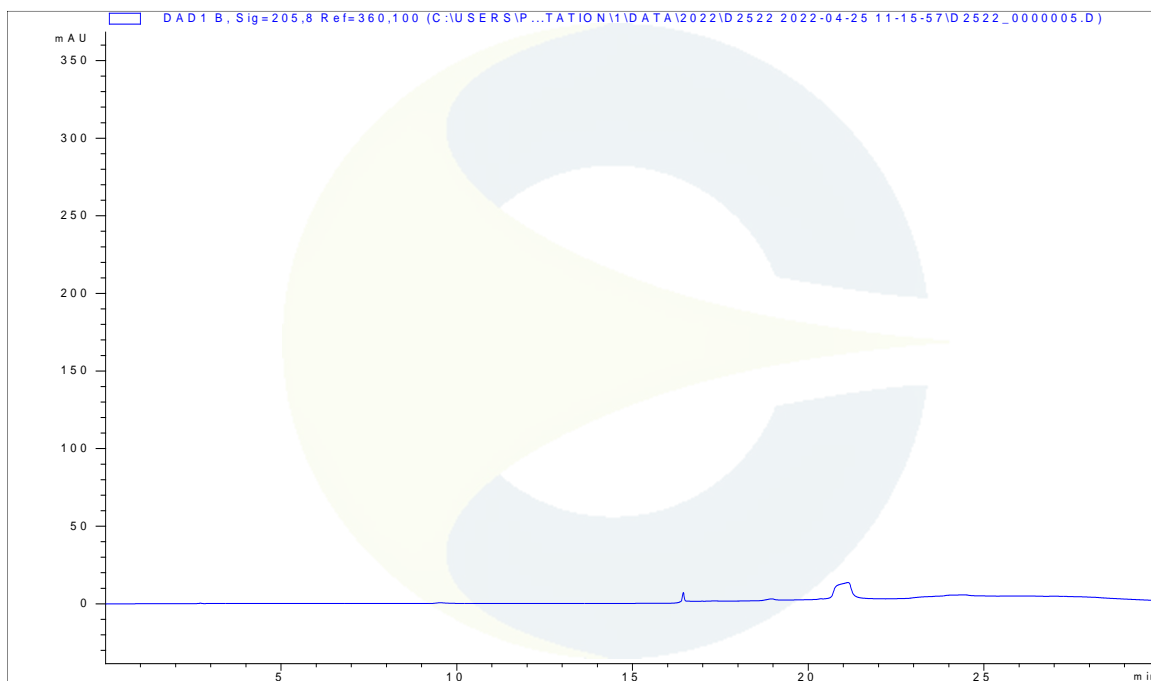
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### UV SPECTRUM AT RT = 3.3 MINUTES



### HPLC CHROMATOGRAM OF DILUENT BLANK

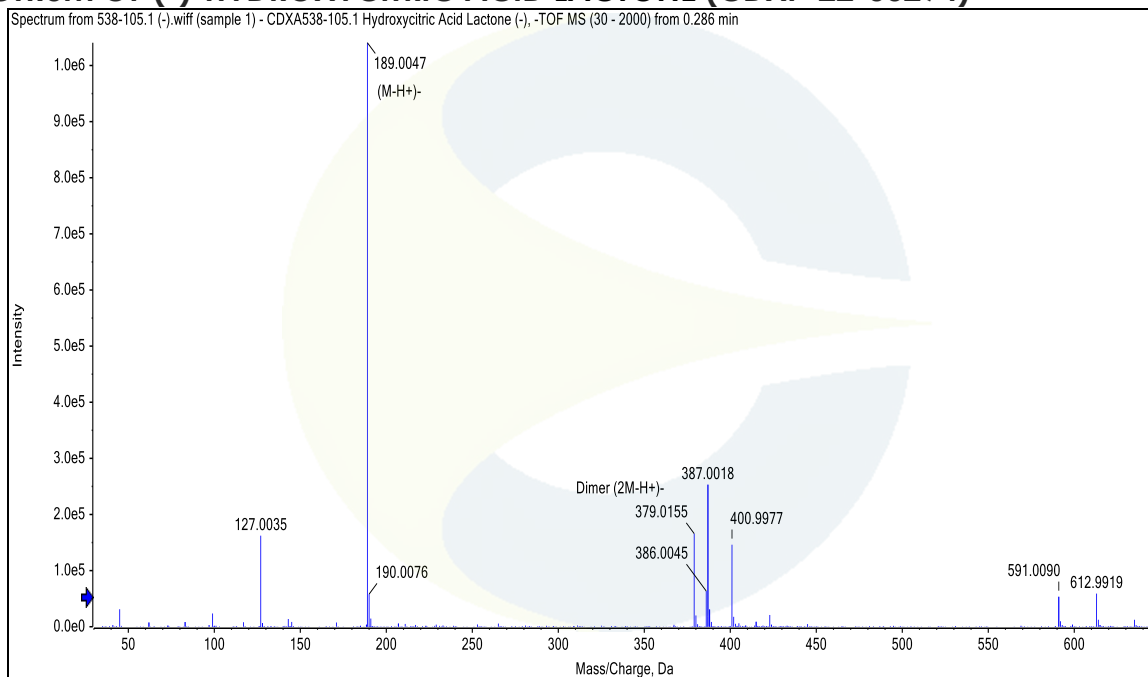


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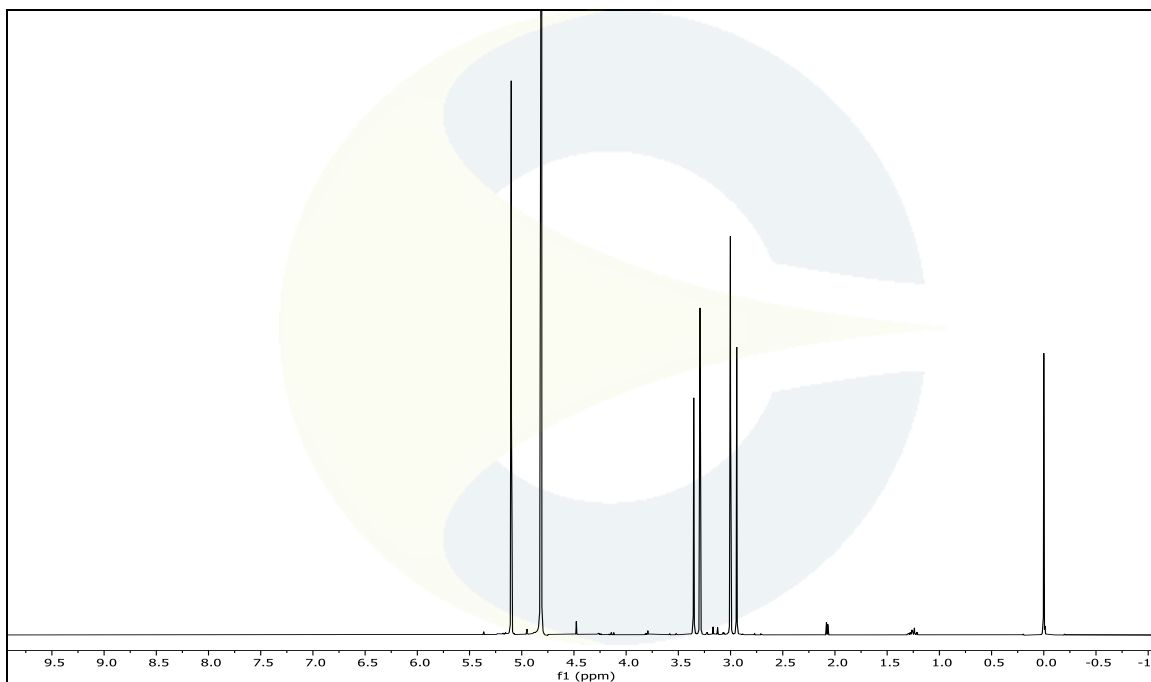
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## MASS SPECTRUM OF (-)-HYDROXYCITRIC ACID LACTONE (CDXP-22-00294)



## <sup>1</sup>H-NMR SPECTRUM OF (-)-HYDROXYCITRIC ACID LACTONE (CDXP-22-00294) IN D<sub>2</sub>O + TMSP

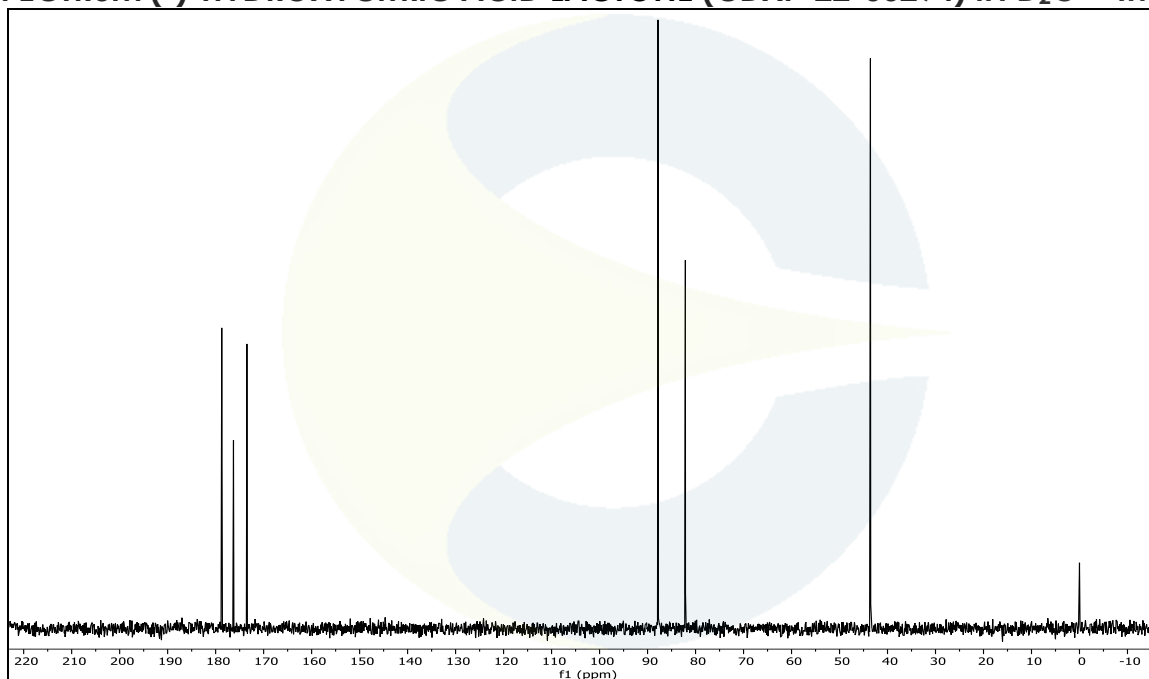


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**$^{13}\text{C}$ -NMR SPECTRUM (-)-HYDROXYCITRIC ACID LACTONE (CDXP-22-00294) IN  $\text{D}_2\text{O}$  + TMSP**



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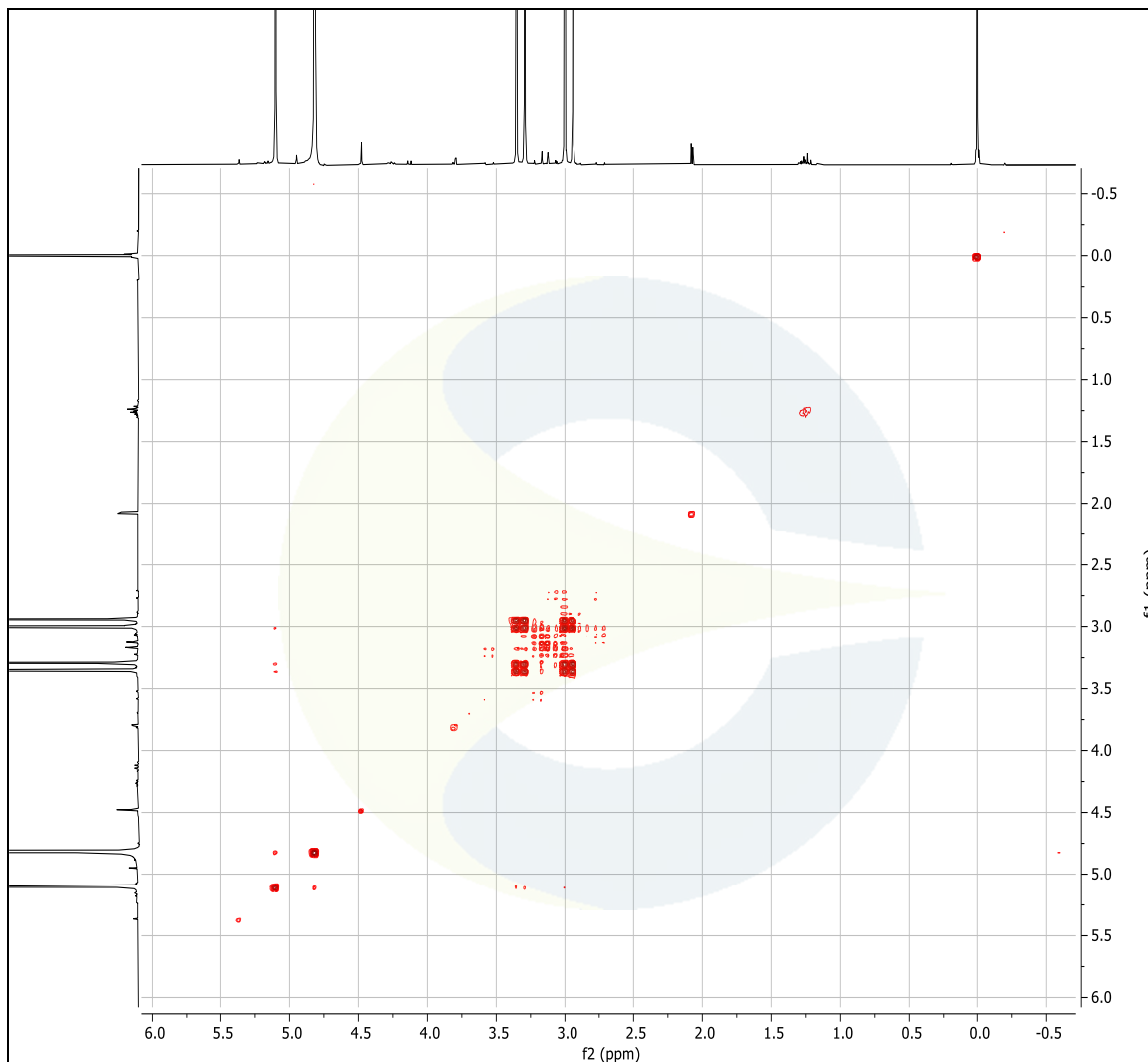
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## COSY-NMR SPECTRUM OF (-)-HYDROXYCITRIC ACID LACTONE (CDXP-22-00294) IN D<sub>2</sub>O + TMSP



## REVISION HISTORY

Revision History	Date of Revision	Document/Changes
00	05/04/2022	New report

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