

Applicant	:	Spector & Co
Address	:	/
Sample Description	:	BALLPOINT PEN
Product Type / End Use	:	WRITING INSTRUMENT
PO / Order No.	1	4 COLOR SET N/A
Item No.	:	G1198
Style No.	/:	BRODY
Supplier	:	USS049
Buyer	:	N/A
Country of Origin	÷	CHINA
Country of Destination	:	CANADA & U.S.A
Test Sample Receipt Date, Location	:	2020-01-08, 2020-03-11, Shenzhen
Test Period, Location	:	From 2020-01-08 to 2020-03-13, Shenzhen
Test Result(s)	:	Refer to Section 3

Laboratory:

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Building 12&13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, 518052, P. R. China Phone : +86 755 8828 6998 Fax: +86 755 8828 5299 E-mail: toys_hardline@tuvsud.com Web : http://www.tuvsud.cn Regd. Office: TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch Building 12&13, Zhiheng Wisdomland Business Park, Nantou Checkpoint Road 2, 518052, P. R. China Page 1 of 20 TTIN®



Purpose Of Examination / Conclusion:

No.	Test Item(s)	Conclusion
1.	US California Proposition 65 - Total Cadmium Content Test - Substrate	Pass*
1.	Materials	F 855
2.	US California Proposition 65 - Total Cadmium Content Test - Paint and	Pass*
۷.	Similar Surface-Coating Materials	1 855
3.	US California Proposition 65 - Total Lead Content Test - Substrate	Pass*
0.	Materials	1 033
4.	US California Proposition 65 - Total Lead Content Test - Paint and Similar	Pass*
	Surface-Coating Materials	1 455
5.	Canadian Consumer Products Containing Lead Regulations SOR/2018-	Pass
0.	83 - Total Lead Content Test	1 000
6.	Canadian Surface Coating Materials Regulations SOR/2016-193 –	Pass
0.	Total Lead Content Test	1 400
7.	Phthalates Content (11P)	Pass*
8.	US California Proposition 65 - Phthalates Content (6P)	Pass*
9.	U.S. CFR Title 16 Part 1307 - Toys and Childcare Articles - Phthalates	Pass
5.	Content (8P)	1 035
10.	Tungsten Content Test	Report As Is
11.	Canadian Surface Coating Materials Regulations SOR/2016-193 -	Pass
	Total Mercury Content Test	1 000

Remarks:

(1) The results relate only to the items tested.

(2) Samples are tested as received.

(3) "*" denotes the conclusion was drawn according to the client's specification.

(4) The test item and samples were specified by the client.

(5) "Pass" means the measured result is within a limit, even when extended by expanded uncertainty. "Fail" means the measured result is beyond a limit, even when extended by expanded uncertainty. "Inconclusive" means the measured result can be within or beyond a limit when extended by expanded uncertainty. The confidence level of the expended uncertainty for "pass", "Fail" and "Inconclusive" is 95%.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch TÜV SÜD Group

Prepared by:

Reviewed by:

Laboratory:

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Ken

<Cara Xiang> <Senior Project Coordinator> <Ken Chen> <Project Manager>

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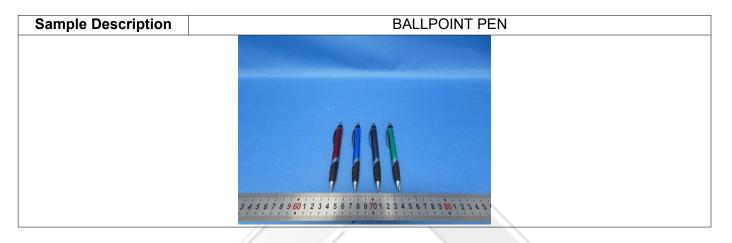


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1. Description of the Test Sample:



2. List of Materials as identified by the Laboratory:

T. No.	Sample No.	Colour and Description	Photograph
T1	001	Silvery plated metal (Top, end & sleeve of the pen)	
T2	002	Off white plastic (Top, end & sleeve of the pen)	
Т3	003	Black plastic (End of the pen)	
T4	004	Silvery metal (Ring on the end of the pen)	
Т5	005	Silvery metal (Clip of the pen)	
Т6	006	Shiny blue coating (Body of pen)	<i>3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 70 1 2 3 4 5 6 7 8 9 80 1 2 3 4 5 6 7 8 9 80 1 2 3 4 5 6 7 8 9 80 1 2 3 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</i>
Т7	007	White plastic (Body of pen)	
Т8	008	Black soft plastic (Sleeve of the pen)	

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T. No.	Sample No.	Colour and Description	Photograph
Т9	009	White plastic (Part of the pen)	
T10	010	Silvery metal (Big spring of the pen)	
T11	011	Silvery metal (Small spring of the pen)	
T12	012	Grey plastic (Core of the pen)	
T13	013	Blue ink (Ink)	Rassage -
T14	014	Silvery metal (Tip of the core of the pen)	
T15	015	Silvery metal (Ball of the core of the pen)	
T16	016	Shiny red coating (Body of pen)	
T17	017	Shiny black coating (Body of pen)	1111
T18	018	Shiny green coating (Body of pen)	<i>3 4 5 6 7 8 9 60 1 2 3 4 5 6 7 8 9 70 1 2 3 4 5 6 7 8 9 80 1 2 3 4 5 6 7 8 9 70 1 2 3 4 5 6 </i>

Laboratory:

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3. Test Result

3.1 US California Proposition 65 - Total Cadmium Content Test - Substrate Materials Test method: Acid digestion/Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

		Results [mg/kg]			
Test item	Sample 001	Sample 002+003+007	Sample 004	Specification [mg/kg]	
Cadmium	N.D.	N.D.	N.D.	<75	
Conclusion	Pass	Pass	Pass	-	

		Results [mg/kg]		
Test item	Sample 005	Sample 008	Sample 009+012	Specification [mg/kg]
Cadmium	N.D.	N.D.	N.D.	<75
Conclusion	Pass	Pass	Pass	-

		Results [mg/kg]			
Test item	Sample	Sample	Sample	Specification	
	010	011	014	[mg/kg]	
Cadmium	N.D.	N.D.	N.D.	<75	
Conclusion	Pass	Pass	Pass	-	

	Results [mg/kg]	Client's
Test item	Sample	Specification
	015	[mg/kg]
Cadmium	N.D.	<75
Conclusion	Pass	-

Note:

- "mg/kg" denotes milligram per kilogram
- "<" denotes less than

- "N.D." denotes Not Detected with Detection Limit 10.0mg/kg

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3.2 US California Proposition 65 - Total Cadmium Content Test - Paint and Similar Surface-Coating Materials

Test method: Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

		Results [mg/kg]			
Test Item	Sample 006	Sample 013	Sample 016	Specification	
Cadmium	N.D.	N.D.	N.D.	[mg/kg] <75	
Conclusion	Pass	Pass	Pass	-	

	Result	Results [mg/kg]		
Test Item	Sample 017	Sample 018	Specification [mg/kg]	
Cadmium	N.D.	N.D.	<75	
Conclusion	Pass	Pass	-	

Note:

- "mg/kg" denotes milligram per kilogram
- "<" denotes less than
- "N.D." denotes Not Detected with Detection Limit 10.0mg/kg

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US California Proposition 65 - Total Lead Content Test - Substrate Materials 3.3

Test method: Acid digestion or Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

		Client's		
Test Item	Sample 001	Sample 002+003+007	Sample 004	Specification [mg/kg]
Lead	N.D.	N.D.	N.D.	<100
Conclusion	Pass	Pass	Pass	-

	Results [mg/kg]			Client's
Test Item	Sample	Sample	Sample	Specification
	005	008	009+012	[mg/kg]
Lead	N.D.	N.D.	N.D.	<100
Conclusion	Pass	Pass	Pass	-

		Results [mg/kg]			
Test Item	Sample 010	Sample 011	Sample 014	Specification [mg/kg]	
Lead	N.D.	N.D.	46.1	<100	
Conclusion	Pass	Pass	Pass	-	

Test Item	Results [mg/kg] Sample 015	Client's Specification [mg/kg]
Lead	N.D.	<100
Conclusion	Pass	-

Note:

- "mg/kg" denotes milligram per kilogram
- "<" denotes less than
- "N.D." denotes Not Detected with Detection Limit 10.0mg/kg _

Laboratory:

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3.4 US California Proposition 65 - Total Lead Content Test - Paint and Similar Surface-Coating Materials

Test method: Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

		Results [mg/kg]			
Test Item	Sample	Sample	Sample	Specification	
	006	013	016	[mg/kg]	
Lead	N.D.	N.D.	N.D.	<90	
Conclusion	Pass	Pass	Pass	-	

		Results	Client's	
Test Item		Sample 017	Sample 018	Specification [mg/kg]
Lead		N.D.	N.D.	<90
Conclusion		Pass	Pass	-

Note:

- "mg/kg" denotes milligram per kilogram
- "<" denotes less than
- "N.D." denotes Not Detected with Detection Limit 10.0mg/kg

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3.5 Total Lead Content Test

Consumer Products Containing Lead Regulations SOR/2018-83 Acid digestion / Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

	Result [mg/kg]					
Analyte	Sample	Sample	Sample			
	001	001 002+003+007 005				
Lead	N.D.	N.D.	N.D.			
Limit		<90				
Conclusion	Pass	Pass Pass Pass				

	Result [mg/kg]				
Analyte	Sample 006	Sample 008	Sample 009+012		
Lead	N.D.	N.D.	N.D.		
Limit		<90			
Conclusion	Pass	Pass	Pass		

		Result [mg/kg]	
Analyte	Sample 010	Sample 011	Sample 013
Lead	N.D.	N.D.	N.D.
Limit		<90	
Conclusion	Pass	Pass	Pass

		Result [mg/kg]				
Analyte	Sample 014	Sample 015	Sample 016			
Lead	46.1	N.D.	N.D.			
Limit		<90				
Conclusion	Pass	Pass Pass Pass				

Note 1. "mg/kg" denotes milligram per kilogram

- 2. "<" denotes less than
- 3. "N.D." denotes Not Detected with Detection Limit 10.0mg/kg

Laboratory:

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3.5 Total Lead Content Test

Consumer Products Containing Lead Regulations SOR/2018-83 Acid digestion / Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

	Result	[mg/kg]
Analyte	Sample	Sample
	017	018
Lead	N.D.	N.D.
Limit	<;	90
Conclusion	Pass	Pass

Note 1. "mg/kg" denotes milligram per kilogram

- 2. "<" denotes less than
- 3. "N.D." denotes Not Detected with Detection Limit 10.0mg/kg

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3.6 Total Lead Content Test

Surface Coating Materials Regulations SOR/2016-193

Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

	Result [mg/kg]				
Analyte	Sample		Sample		
	006 013 0 ⁴				
Lead	N.D.	N.D.	N.D.		
Limit	<90				
Conclusion	Pass	Pass	Pass		

		Result	[mg/kg]
Analyte		Sample	Sample
		017	018
Lead	/	N.D.	N.D.
Limit		<(90
Conclusion		Pass	Pass

Note 1. "mg/kg" denotes milligram per kilogram

2. "<" denotes less than

3. "N.D." denotes Not Detected with Detection Limit 10.0mg/kg

Laboratory:

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3.7 Phthalates Content (11P)

Test method: In-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS). [Reporting limit: 0.005%]

		F	Results [%	b]	Client's
Test Items	CAS No.	Sample 002+003 +007	Sample 006	Sample 008	Specification [%]
Di-(2-ethylhexyl)-phthalat (DEHP)	117-81-7	N.D.	N.D.	N.D.	<0.1
Dibutylbenzylphthalat (DBP)	84-74-2	N.D.	N.D.	N.D.	<0.1
Diethyl phthalate (DEP)	84-66-2	N.D.	N.D.	N.D.	<0.1
Butylbenzylphthalat (BBP)	85-68-7	N.D.	N.D.	N.D.	<0.1
Di-iso-butylphthalat (DIBP)	84-69-5	N.D.	N.D.	N.D.	<0.1
Di-isononyl phthalate (DINP)	28553-12-0 , 68515-48-0	N.D.	N.D.	N.D.	<0.1
Di-isodecylphthalat (DIDP)	26761-40-0 , 68515-49-1	N.D.	N.D.	N.D.	<0.1
Di-n-octylphthalat (DNOP)	117-84-0	N.D.	N.D.	N.D.	<0.1
Di-n-hexyl phthalate (DnHP)	84-75-3	N.D.	N.D.	N.D.	<0.1
Dicyclohexyl phthalate (DCHP)	84-61-7	N.D.	N.D.	N.D.	<0.1
Di-n-pentyphthalat (DNPP)	131-18-0	N.D.	N.D.	N.D.	<0.1
Conclusion		Pass	Pass	Pass	-

Note 1. "%" denotes percentage by weight

- 2. "<" denotes less than
- 3. "N.D." denotes Not Detected with Detection Limit 0.005%

Laboratory:

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3.7 Phthalates Content (11P)

Test method: In-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS). [Reporting limit: 0.005%]

		Results [%]			Client's
Test Items	CAS No.	Sample 009+012	Sample 013	Sample 016+017 +018	Specification [%]
Di-(2-ethylhexyl)-phthalat (DEHP)	117-81-7	N.D.	N.D.	N.D.	<0.1
Dibutylbenzylphthalat (DBP)	84-74-2	N.D.	N.D.	0.013	<0.1
Diethyl phthalate (DEP)	84-66-2	N.D.	N.D.	N.D.	<0.1
Butylbenzylphthalat (BBP)	85-68-7	N.D.	N.D.	N.D.	<0.1
Di-iso-butylphthalat (DIBP)	84-69-5	N.D.	N.D.	N.D.	<0.1
Di-isononyl phthalate (DINP)	28553-12-0 , 68515-48-0	N.D.	N.D.	N.D.	<0.1
Di-isodecylphthalat (DIDP)	26761-40-0 , 68515-49-1	N.D.	N.D.	N.D.	<0.1
Di-n-octylphthalat (DNOP)	117-84-0	N.D.	N.D.	N.D.	<0.1
Di-n-hexyl phthalate (DnHP)	84-75-3	N.D.	N.D.	N.D.	<0.1
Dicyclohexyl phthalate (DCHP)	84-61-7	N.D.	N.D.	N.D.	<0.1
Di-n-pentyphthalat (DNPP)	131-18-0	N.D.	N.D.	N.D.	<0.1
Conclusion		Pass	Pass	Pass	-

Note 1. "%" denotes percentage by weight

- 2. "<" denotes less than
- 3. "N.D." denotes Not Detected with Detection Limit 0.005%

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3.8 US California Proposition 65 - Phthalates Content (6P)

Test method: In-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS). [Reporting limit: 0.005%]

		Results [%]			Client's
Test Items	CAS No.	Sample 002+003 +007	Sample 006	Sample 008	Specification [%]
Dibutyl phthalate, (DBP)	84-74-2	N.D.	N.D.	N.D.	<0.1
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	N.D.	N.D.	N.D.	<0.1
Benzyl butyl phthalate, (BBP)	85-68-7	N.D.	N.D.	N.D.	<0.1
Di-isodecyl phthalate, (DIDP)	26761-40-0, 68515-49-1	N.D.	N.D.	N.D.	<0.1
Di-n-hexyl phthalate (DNHP)	84-75-3	N.D.	N.D.	N.D.	<0.1
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	N.D.	N.D.	N.D.	<0.1
Conclusion		Pass	Pass	Pass	-

Note 1. "%" denotes percentage by weight

2. "<" denotes less than

3. "N.D." denotes Not Detected with Detection Limit 0.005%

Laboratory:

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3.8 US California Proposition 65 - Phthalates Content (6P)

Test method: In-house method, solvent extracted and analyzed by Gas Chromatography and Mass Spectrometry (GC-MS). [Reporting limit: 0.005%]

		Results [%]			Client's
Test Items	CAS No.	Sample 009+012	Sample 013	Sample 016+017 +018	Specification [%]
Dibutyl phthalate, (DBP)	84-74-2	N.D.	N.D.	0.013	<0.1
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	N.D.	N.D.	N.D.	<0.1
Benzyl butyl phthalate, (BBP)	85-68-7	N.D.	N.D.	N.D.	<0.1
Di-isodecyl phthalate, (DIDP)	26761-40-0, 68515-49-1	N.D.	N.D.	N.D.	<0.1
Di-n-hexyl phthalate (DNHP)	84-75-3	N.D.	N.D.	N.D.	<0.1
Di-isononyl phthalate, (DINP)	28553-12-0, 68515-48-0	N.D.	N.D.	N.D.	<0.1
Conclusion	JUL	Pass	Pass	Pass	-

Note 1. "%" denotes percentage by weight

2. "<" denotes less than

3. "N.D." denotes Not Detected with Detection Limit 0.005%

Laboratory:

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3.9 U.S. CFR Title 16 Part 1307 - Toys and Childcare Articles - Phthalates Content (8P) CPSC-CH-C1001-09.4 – Standard Operating Procedure for Determination of Phthalates [Reporting Limit = 0.005%]

		Results [%]			
Phthalates	CAS No.	Sample 002+003 +007	Sample 006	Sample 008	Limit [%]
Dibutyl phthalate, (DBP)	84-74-2	N.D.	N.D.	N.D.	<0.1
Benzyl butyl phthalate, (BBP)	85-68-7	N.D.	N.D.	N.D.	<0.1
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	N.D.	N.D.	N.D.	<0.1
Diisobutylphthalate, (DIBP)	84-69-5	N.D.	N.D.	N.D.	<0.1
Di-n-hexyl phthalate (DHEXP)	84-75-3	N.D.	N.D.	N.D.	<0.1
Dicyclohexyl phthalate (DCHP)	84-61-7	N.D.	N.D.	N.D.	<0.1
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	N.D.	N.D.	N.D.	<0.1
Di-n-pentyl phthalates (DPENP)	131-18-0	N.D.	N.D.	N.D.	<0.1
Conclusion		Pass	Pass	Pass	_

Note 1. "%" denotes percentage by weight

2. "<" denotes less than

3. "N.D." denotes Not Detected with Detection Limit 0.005%

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3.9 U.S. CFR Title 16 Part 1307 - Toys and Childcare Articles - Phthalates Content (8P) CPSC-CH-C1001-09.4 – Standard Operating Procedure for Determination of Phthalates [Reporting Limit = 0.005%]

		Results [%]			
Phthalates	CAS No.	Sample 009+012	Sample 013	Sample 016+017 +018	Limit [%]
Dibutyl phthalate, (DBP)	84-74-2	N.D.	N.D.	0.013	<0.1
Benzyl butyl phthalate, (BBP)	85-68-7	N.D.	N.D.	N.D.	<0.1
Bis (2-ethylhexyl) phthalate, (DEHP)	117-81-7	N.D.	N.D.	N.D.	<0.1
Diisobutylphthalate, (DIBP)	84-69-5	N.D.	N.D.	N.D.	<0.1
Di-n-hexyl phthalate (DHEXP)	84-75-3	N.D.	N.D.	N.D.	<0.1
Dicyclohexyl phthalate (DCHP)	84-61-7	N.D.	N.D.	N.D.	<0.1
Di-isononyl phthalate, (DINP)	28553-12-0 , 68515-48-0	N.D.	N.D.	N.D.	<0.1
Di-n-pentyl phthalates (DPENP)	131-18-0	N.D.	N.D.	N.D.	<0.1
Conclusion		Pass	Pass	Pass	-

Note 1. "%" denotes percentage by weight

2. "<" denotes less than

3. "N.D." denotes Not Detected with Detection Limit 0.005%

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3.10 Tungsten Content Test

Test method: EPA 3050B:1996, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

	Results [mg/kg]	Client's
Test Item	Sample 005	Specification [mg/kg]
Tungsten	N.D.	-
Conclusion	Report As Is	-

Note:

- "mg/kg" denotes milligram per kilogram
- "<" denotes less than
- "N.D." denotes Not Detected with Detection Limit 10.0mg/kg



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3.11 Total Mercury Content Test

Surface Coating Materials Regulations SOR/2016-193 Microwave Digestion, analyzed by Inductively Coupled Plasma Optical Emission Spectrometer (ICP-OES). [Reporting Limit: 10.0mg/kg]

		Results [mg/kg]			
Test Item	Sample 006	Sample 013	Sample 016	Limit [mg/kg]	
Mercury	N.D.	N.D.	N.D.	<10	
Conclusion	Pass	Pass	Pass	-	

	Res	Results [mg/kg]			
Test Item	Sample 017	Sample 018	Limit [mg/kg]		
Mercury	N.D.	N.D.	<10		
Conclusion	Pass	Pass	-		

Note 1. "mg/kg" denotes milligram per kilogram

- 2. "<" denotes less than
- 3. "N.D." denotes Not Detected with Detection Limit 10.0mg/kg

-- END OF TEST REPORT--

Laboratory:

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