



# **Oil and Hazardous Materials Response Reports**

**October 1992-September 1993**

**January 1994**

National Oceanic and Atmospheric Administration  
Office of Ocean Resources Conservation and Assessment  
Hazardous Materials Response and Assessment Division  
Seattle, Washington 98115

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## INTRODUCTION

**B**etween October 1, 1992 and September 30, 1993, NOAA's Hazardous Materials Response and Assessment Division Scientific Support Coordinators and scientific staff were notified of 91 spill incidents. These 91 incidents included potential spills, false alarms, and very minor spills for which reports were not prepared. Technical and operational assistance provided to the U.S. Coast Guard for 50 spill incidents in the Nation's coastal zone included 40 oil spills, 8 chemical spills, and 1 spill of unknown material. In addition to the spills listed, NOAA assisted the U.S. Coast Guard with 59 simulation exercises.

This volume of reports follows the format established for the Oil Spill Case Histories Report prepared in 1992 by the Division with U.S. Coast Guard Research and Development Center support so that major spills meeting the criteria for inclusion may be incorporated easily into updated case histories reports.

Each report in this volume is organized as follows:

- A list of headers that summarizes the spill name; location; product; size; use of dispersants, bioremediation, and *in-situ* burning; other special interests; shoreline types affected; and keywords.
- A brief *incident summary* including weather conditions and description of the overall spill response.
- A description of the behavior of the spilled material including movement, evaporation, mousse formation, and dispersion.
- A discussion of countermeasures and mitigation.
- A description of other *special interest issues* such as communication problems, unusual hazards encountered, and large losses of organisms.
- A list of *references* that document the response operations.

Although the master list on the following pages includes all of the incidents for which the Division provided support, only those incidents where the pollutant actually entered the environment are reported on in this volume. These reports are abbreviated and are meant to serve only as a summary of the Division's response to requests from Federal On-Scene Coordinators for each of the events.

Additional details on any of the responses may be obtained from the appropriate Scientific Support Coordinator or U.S. Coast Guard office.

## Spill Report Keys

**Name of Spill:**

**NOAA SSC:**

**Date of Spill (mmddyy):**

**Location of Spill:** text description

**Latitude:** degrees, minutes, N or S

**Longitude:** degrees, minutes, E or W

**Spilled Material:** specific product

**Spilled Material Type:**

Type 1 - Very Light Oils (jet fuels, gasoline)

Type 2 - Light Oils (diesel, No. 2 fuel oil, light crudes)

Type 3 - Medium Oils (most crude oils)

Type 4 - Heavy Oils (heavy crude oils, No. 6 fuel oil, bunker c)

Type 5 - Hazardous material

**Barrels (or weight in pounds if hazardous material):**

**Source of Spill:** tank vessel, non-tank vessel, barge, facility, pipeline, platform

**Resources at Risk:** See A

**Dispersants:** Yes or No

**Bioremediation:** Yes or No

***In-situ* Burning:** Yes or No

**Other Special Interest:**

Destruction of marshes, mangroves, or tidal flats

Extraordinarily successful salvage operations

Massive habitat loss

Massive wildlife impact

Oil/ice interactions and adverse weather conditions

Unusual, experimental, or innovative cleanup techniques

**Shoreline Types Impacted:** See B

**Keywords:** See C

**Incident Summary:**

Date and time of incident  
Location of incident  
Weather at time of incident  
Summary of events  
Actions of responsible party and response organizations  
Level of federal involvement  
Duration of response

**Behavior of Spilled Material:**

Formation of slicks, sheen, or mousse  
Movement on the water of spilled material  
Movement in the air of spilled material  
Areas impacted  
Amount spilled; amount recovered  
(land, sea, contaminated debris)  
Amount not recovered  
(sinking, evaporation, weathering, dissolution)

**Countermeasures and Mitigation:**

Control at incident site  
Offloading and lightering operations; movement of vessel  
Precautionary protection of sensitive areas  
Open water recovery  
Shoreline cleanup  
Removal and disposal of spilled material or  
contaminated debris

**Other Special Interest Issues:** See D

**NOAA Activities:**

Involvement in response (on-scene, by phone and fax)  
Support provided  
Participation in committees and special projects  
Unusual responsibilities  
Meetings attended/recommendations made  
Duration of NOAA support

**References:**

	<p style="text-align: center;"><b>Spill Report Keys</b></p> <p><b>A      Resources at Risk</b></p> <p><u>Habitats</u> (See <i>shoreline types</i> key below), eelgrass beds, submerged aquatic vegetation (SAV), kelp, coral reefs, worm beds</p> <p><u>Marine Mammals</u> Whales, dolphins, sea lions, seals, sea otters, manatees, walruses, polar bears, population concentration areas, haulouts, migration routes, seasonal use areas</p> <p><u>Terrestrial Mammals</u> Mustelids, rodents, deer, bears, population concentration areas, inter-tidal feeding areas</p> <p><u>Birds</u> Diving coastal birds, waterfowl, alcids, petrels, fulmars, shorebirds, wading birds, gulls, terns, raptors, rookeries, foraging areas, wintering areas, migration stopover areas, wintering concentration areas, nesting beaches, migratory routes, critical forage areas</p> <p><u>Fish</u> Anadromous fish, beach spawners, kelp spawners, nursery areas, reef fish (includes fish using hard-bottom habitats) spawning streams, spawning beaches, estuarine fish, demersal fish</p> <p><u>Mollusks</u> Oysters, mussels, clams, scallops, abalone, conch, whelk, squid, octopus, seed beds, leased beds, abundant beds, harvest areas, high concentration sites</p> <p><u>Crustaceans</u> Shrimp, crabs, lobster, nursery areas, high concentration sites</p> <p><u>Reptiles</u> Sea turtles, alligators, nesting beaches, concentration areas</p> <p><u>Recreation</u> Beaches, marinas, boat ramps, diving areas, high-use recreational boating areas, high-use recreational fishing areas, State Parks</p> <p><u>Management Areas</u> Marine Sanctuaries, National Parks, Refuges, Wildlife Preserves, Reserves</p>
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<b>B</b>	<p><u>Resource Extraction</u>  Subsistence, officially designated harvest sites, commercial fisheries, power plant water intakes, drinking water intakes, industrial water intakes, intertidal and subtidal mining leases, fish/shrimp/bivalve/plant aquaculture sites, log storage areas</p> <p><u>Cultural</u>  Archaeological sites, Native American Lands</p>
	<p><b>Shoreline Types Impacted</b></p> <p>brackish marshes  coarse gravel beaches  coarse sand beaches  coastal structures  consolidated seawalls  consolidated shores  cypress swamps  developed upland  eroding bluffs  exposed bedrock bluffs  exposed bluffs  exposed fine sand beaches  exposed riprap  exposed rocky platforms  exposed rocky shores  exposed scarps  exposed seawalls  exposed tidal flats  exposed tidal flats (low biomass)  exposed tidal flats (moderate biomass)  exposed unconsolidated sediment bluffs  extensive intertidal marshes  extensive salt marshes  extensive wetlands  fine sand beaches  flats  freshwater flat  freshwater marshes  freshwater swamps  fringing salt marshes  fringing wetlands  hardwood swamps  levees  low banks  mangroves  marshes  mixed sand and shell beaches</p>



	<p> mixed sediment beaches  piers  riprap  salt marsh  saltwater marshes  sand/gravel beaches  shell beaches  sheltered bedrock bluffs  sheltered fine-grained sand beaches  sheltered impermeable banks  sheltered mangroves  sheltered marshes  sheltered rocky shores  sheltered seawalls  sheltered tidal flats  shelving bedrock shores  spoil bank  supratidal marshes  swamp  tidal mudflat  unforested upland  unvegetated steep banks and cliffs  vegetated bluffs  vegetated low banks  vegetated riverbank  vertical rocky shores  wavecut platforms </p>
<b>C</b>	<p><b>Key words</b></p> <p> air activated pumps  bioremediation  Center for Disease Control  Clean Bay Inc.  containment boom  Corexit 9527  dispersant  endangered species  evaporation  exposed rocky shores  filter fences  Food and Drug Administration  ground truth  high-pressure warm-water washing  hydro-blasting  in-situ burning  International Bird Rescue and Research Center  International Tanker Owners Pollution Federation (ITOPF) </p>

	<p>low-pressure washing</p> <p>NAVSUPSALV</p> <p>NOAA National Marine Fisheries Laboratory</p> <p>Pacific flyway</p> <p>potential spill</p> <p>propane cannons</p> <p>remote sensing</p> <p>recoiling</p> <p>salvage</p> <p>seafood harvesting ban</p> <p>shallow water recovery</p> <p>siphon dams</p> <p>skimmers</p> <p>SLAR (side-looking airborne radar)</p> <p>smothering</p> <p>sorbent boom</p> <p>sorbent pompoms</p> <p>starshell-type device</p> <p>tourism losses</p> <p>vacuum trucks</p> <p>volunteers</p> <p>weed cutters</p> <p>weir/pump skimmer</p>
<b>D</b>	<p><b>Other Special Interest Issues</b></p> <p>Effects to tourism, recreation areas, or personal property</p> <p>Closure of commercial or recreational fishing areas and public lands</p> <p>Closure of shipping lanes and vehicle traffic routes</p> <p>Wildlife impacts and rehabilitation</p> <p>Ecological destruction and habitat loss due to spilled material impacts</p> <p>Ecological destruction and habitat loss due to cleanup operations</p> <p>Effects to human health and safety</p> <p>Bioremediation, dispersant, <i>in-situ</i> burning operations</p> <p>Unusual, experimental, or innovative cleanup techniques</p> <p>Complex successful salvage operations</p> <p>Logistical or operational problems (including adverse weather conditions)</p> <p>Interaction with foreign or Native authorities</p> <p>Media interest</p> <p>Volunteer response and organization</p> <p>Studies conducted; ongoing research</p>

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Date of Incident	No.	Report Name/Hotline Number	Commodity Involved	USCG District	NOAA Involvement
2010-01-01	1	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	2	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	3	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	4	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	5	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	6	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	7	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	8	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	9	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	10	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	11	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	12	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	13	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	14	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	15	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	16	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	17	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	18	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	19	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01
2010-01-01	20	2010-01-01 2010-01-01 2010-01-01 2010-01-01	2010-01-01 2010-01-01	2010-01-01	2010-01-01

Date of Incident	No.	Report Name/Hotline Number	Commodity Involved	USCG District	NOAA Involvement
10/10/18	1	1. 10/10/18 2. 10/10/18	1. 10/10/18 2. 10/10/18	1	10/10/18
10/10/18	2	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	3	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	4	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	5	10/10/18 <b>Miami, FL</b>	10/10/18	1	10/10/18
10/10/18	6	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	7	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	8	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	9	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	10	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	11	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	12	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	13	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	14	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	15	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	16	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	17	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	18	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	19	10/10/18 10/10/18	10/10/18	1	10/10/18
10/10/18	20	10/10/18 10/10/18	10/10/18	1	10/10/18



Date of Incident	No.	Report Name/Hotline Number	Commodity Involved	USCG District	NOAA Involvement
10/10/2018	1	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
10/10/2018	2	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018		10/10/2018
10/10/2018	3	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	1	10/10/2018
10/10/2018	4	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
10/10/2018	5	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	1	10/10/2018
10/10/2018	6	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
10/10/2018	7	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
10/10/2018	8	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
10/10/2018	9	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
10/10/2018	10	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
10/10/2018	11	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
10/10/2018	12	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
10/10/2018	13	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
10/10/2018	14	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
10/10/2018	15	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
10/10/2018	16	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
10/10/2018	17	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
10/10/2018	18	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
10/10/2018	19	1. 10/10/2018 10:00 AM 2. 10/10/2018 10:00 AM	10/10/2018	1	10/10/2018
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1. 本報告係根據本公司及子公司於民國109年12月31日止之財務資料編製，除特別註明外，係以未經審計之財務資料為基礎。  
 2. 本報告係根據本公司及子公司於民國109年12月31日止之財務資料編製，除特別註明外，係以未經審計之財務資料為基礎。  
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 9. 本報告係根據本公司及子公司於民國109年12月31日止之財務資料編製，除特別註明外，係以未經審計之財務資料為基礎。  
 10. 本報告係根據本公司及子公司於民國109年12月31日止之財務資料編製，除特別註明外，係以未經審計之財務資料為基礎。



















1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840.

1. 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043 2044 2045 2046 2047 2048 2049 2050 2051 2052 2053 2054 2055 2056 2057 2058 2059 2060 2061 2062 2063 2064 2065 2066 2067 2068 2069 2070 2071 2072 2073 2074 2075 2076 2077 2078 2079 2080 2081 2082 2083 2084 2085 2086 2087 2088 2089 2090 2091 2092 2093 2094 2095 2096 2097 2098 2099 2100 2101 2102 2103 2104 2105 2106 2107 2108 2109 2110 2111 2112 2113 2114 2115 2116 2117 2118 2119 2120 2121 2122 2123 2124 2125 2126 2127 2128 2129 2130 2131 2132 2133 2134 2135 2136 2137 2138 2139 2140 2141 2142 2143 2144 2145 2146 2147 2148 2149 2150 2151 2152 2153 2154 2155 2156 2157 2158 2159 2160 2161 2162 2163 2164 2165 2166 2167 2168 2169 2170 2171 2172 2173 2174 2175 2176 2177 2178 2179 2180 2181 2182 2183 2184 2185 2186 2187 2188 2189 2190 2191 2192 2193 2194 2195 2196 2197 2198 2199 2200 2201 2202 2203 2204 2205 2206 2207 2208 2209 2210 2211 2212 2213 2214 2215 2216 2217 2218 2219 2220 2221 2222 2223 2224 2225 2226 2227 2228 2229 2230 2231 2232 2233 2234 2235 2236 2237 2238 2239 2240 2241 2242 2243 2244 2245 2246 2247 2248 2249 2250 2251 2252 2253 2254 2255 2256 2257 2258 2259 2260 2261 2262 2263 2264 2265 2266 2267 2268 2269 2270 2271 2272 2273 2274 2275 2276 2277 2278 2279 2280 2281 2282 2283 2284 2285 2286 2287 2288 2289 2290 2291 2292 2293 2294 2295 2296 2297 2298 2299 2300 2301 2302 2303 2304 2305 2306 2307 2308 2309 2310 2311 2312 2313 2314 2315 2316 2317 2318 2319 2320 2321 2322 2323 2324 2325 2326 2327 2328 2329 2330 2331 2332 2333 2334 2335 2336 2337 2338 2339 2340 2341 2342 2343 2344 2345 2346 2347 2348 2349 2350 2351 2352 2353 2354 2355 2356 2357 2358 2359 2360 2361 2362 2363 2364 2365 2366 2367 2368 2369 2370 2371 2372 2373 2374 2375 2376 2377 2378 2379 2380 2381 2382 2383 2384 2385 2386 2387 2388 2389 2390 2391 2392 2393 2394 2395 2396 2397 2398 2399 2400 2401 2402 2403 2404 2405 2406 2407 2408 2409 2410 2411 2412 2413 2414 2415 2416 2417 2418 2419 2420 2421 2422 2423 2424 2425 2426 2427 2428 2429 2430 2431 2432 2433 2434 2435 2436 2437 2438 2439 2440 2441 2442 2443 2444 2445 2446 2447 2448 2449 2450 2451 2452 2453 2454 2455 2456 2457 2458 2459 2460 2461 2462 2463 2464 2465 2466 2467 2468 2469 2470 2471 2472 2473 2474 2475 2476 2477 2478 2479 2480 2481 2482 2483 2484 2485 2486 2487 2488 2489 2490 2491 2492 2493 2494 2495 2496 2497 2498 2499 2500 2501 2502 2503 2504 2505 2506 2507 2508 2509 2510 2511 2512 2513 2514 2515 2516 2517 2518 2519 2520 2521 2522 2523 2524 2525 2526 2527 2528 2529 2530 2531 2532 2533 2534 2535 2536 2537 2538 2539 2540 2541 2542 2543 2544 2545 2546 2547 2548 2549 2550 2551 2552 2553 2554 2555 2556 2557 2558 2559 2560 2561 2562 2563 2564 2565 2566 2567 2568 2569 2570 2571 2572 2573 2574 2575 2576 2577 2578 2579 2580 2581 2582 2583 2584 2585 2586 2587 2588 2589 2590 2591 2592 2593 2594 2595 2596 2597 2598 2599 2600 2601 2602 2603 2604 2605 2606 2607 2608 2609 2610 2611 2612 2613 2614 2615 2616 2617 2618 2619 2620 2621 2622 2623 2624 2625 2626 2627 2628 2629 2630 2631 2632 2633 2634 2635 2636 2637 2638 2639 2640 2641 2642 2643 2644 2645 2646 2647 2648 2649 2650 2651 2652 2653 2654 2655 2656 2657 2658 2659 2660 2661 2662 2663 2664 2665 2666 2667 2668 2669 2670 2671 2672 2673 2674 2675 2676 2677 2678 2679 2680 2681 2682 2683 2684 2685 2686 2687 2688 2689 2690 2691 2692 2693 2694 2695 2696 2697 2698 2699 2700 2701 2702 2703 2704 2705 2706 2707 2708 2709 2710 2711 2712 2713 2714 2715 2716 2717 2718 2719 2720 2721 2722 2723 2724 2725 2726 2727 2728 2729 2730 2731 2732 2733 2734 2735 2736 2737 2738 2739 2740 2741 2742 2743 2744 2745 2746 2747 2748 2749 2750 2751 2752 2753 2754 2755 2756 2757 2758 2759 2760 2761 2762 2763 2764 2765 2766 2767 2768 2769 2770 2771 2772 2773 2774 2775 2776 2777 2778 2779 2780 2781 2782 2783 2784 2785 2786 2787 2788 2789 2790 2791 2792 2793 2794 2795 2796 2797 2798 2799 2800 2801 2802 2803 2804 2805 2806 2807 2808 2809 2810 2811 2812 2813 2814 2815 2816 2817 2818 2819 2820 2821 2822 2823 2824 2825 2826 2827 2828 2829 2830 2831 2832 2833 2834 2835 283

1. 本報告係根據本公司及子公司之會計帳簿及相關資料，並參考獨立會計師事務所之查核報告而編製。

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1. 本報告係根據本公司及子公司於民國107年1月1日至12月31日止之財務資料編製，除特別註明外，係以新台幣表達。

1. 本報告係根據「證券交易法」第36條之規定，由本公司董事會編製，除提供本公司股東外，並提供社會大眾參考。  
 2. 本報告係根據「證券交易法」第36條之規定，由本公司董事會編製，除提供本公司股東外，並提供社會大眾參考。  
 3. 本報告係根據「證券交易法」第36條之規定，由本公司董事會編製，除提供本公司股東外，並提供社會大眾參考。

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The first set of blocks represents the number 123: one hundred block, two ten blocks, and three one blocks.

The second set of blocks represents the number 456: four hundred blocks, five ten blocks, and six one blocks.

The third set of blocks represents the number 789: seven hundred blocks, eight ten blocks, and nine one blocks.

1. 本報告係根據本公司及子公司之會計帳簿及相關資料，並參考其他可取得之公開資訊，由會計師執行查核程序後，出具查核報告。

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1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840.

1. 2019年12月31日，公司总资产为1,000,000,000.00元，净资产为500,000,000.00元，营业收入为1,200,000,000.00元，净利润为100,000,000.00元。









































1. 本報告係根據本公司及子公司於民國107年1月1日至12月31日止之財務資料編製，除特別註明外，係以一般公認會計原則為編製基礎，並經會計師查核簽證。

① 本報告は、本報告書作成時点での調査結果に基づき作成されたものであり、調査結果が変更される可能性があります。また、本報告書の内容は、調査結果に基づき作成されたものであり、調査結果が変更される可能性があります。

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The first diagram shows a single square representing 10. The second diagram shows a row of five squares, with the first square shaded, representing 10 as 1 + 5. The third diagram shows a row of four squares, with the first square shaded, representing 10 as 4 + 5.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840.

**QUESTION**      **ANSWER**















1. 2019 年 12 月 31 日，本公司在 2019 年度内未发生任何重大资产减值事项，亦不存在资产减值准备计提不充分的情况。

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840.





1. 2019 年 12 月 31 日，本公司 2019 年度股东大会审议通过《2019 年度利润分配预案》，以 2019 年 12 月 31 日总股本 100,000,000 股为基数，向全体股东每 10 股派发现金股利 1.00 元（含税），共计派发现金股利 10,000,000.00 元。

[illegible]

1. 本報告係根據「個人資料保護法」及「個人資料保護法施行細則」之規定，由本會自行蒐集、處理及利用個人資料，並經本會自行委託專業機構進行調查，其調查結果及分析，均屬本會之財產，除依法應予公開外，不得作為其他用途。

[illegible]

1. 本報告係根據本公司及子公司於民國109年12月31日之財務資料編製，其編製基礎係採用一般公認會計原則，並經本公司及子公司之會計師查核簽證。

[illegible]



[illegible][illegible]

1. 本報告係根據「證券交易法」第36條之規定，由本公司董事會編製，除提供本公司股東外，並提供社會大眾參考。

[illegible]

1. 本報告係根據「證券交易法」第36條之規定，由本公司董事會編製，除提供給股東外，尚應提供給其他利害關係人，以資參考。







## U.S. Coast Guard District 14

Mystery Spill.....101





















































[illegible]

1. 本報告係根據「證券交易法」第36條之1第1項及第36條之2第1項規定，由本公司董事會編製，除提供本公司股東外，並提供社會大眾參考。

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