Results of Beach, Purse, and Pole Seine Surveys at the Courtenay River Estuary and Baynes Sound, Courtenay, B.C., 2000

J.A. Jenkins, B.A. Bravender, C. Beggs, B. Munro, and D. Miller

Fisheries and Oceans Canada Science Branch, Pacific Region Pacific Biological Station Nanaimo, B.C. V9R 5K6

2001

Canadian Data Report of Fisheries and Aquatic Sciences 1077



Fisheries and Oceans Canada Pêches et Oceans Canada Science Sciences



#### Canadian Data Report of Fisheries and Aquatic Sciences

Data reports provide a medium for filing and archiving data compilations where little or no analysis is included. Such compilations commonly will have been prepared in support of other journal publications or reports. The subject matter of data reports reflects the broad interests and policies of the Department of Fisheries and Oceans, namely, fisheries and aquatic sciences.

Data reports are not intended for general distribution and the contents must not be referred to in other publications without prior written authorization from the issuing establishment. The correct citation appears above the abstract of each report. Data reports are abstracted in *Aquatic Sciences and Fisheries Abstracts* and indexed in the Department's annual index to scientific and technical publications.

Numbers 1 - 25 in this series were issued as Fisheries and Marine Service Data Records. Numbers 26 - 160 were issued as Department of Fisheries and the Environment, Fisheries and Marine Service Data Reports. The current series name was introduced with the publication of report number 161.

Data reports are produced regionally but are numbered nationally. Requests for individual reports will be filled by the issuing establishment listed on the front cover and title page. Out-of-stock reports will be supplied for a fee by commercial agents.

## Rapport statistique canadien des sciences halieutiques et aquatiques

Les rapports statistiques servent à classer et à archiver les compilations de données pour lesquelles il y a peu ou point d'analyse. Ces compilations auront d'ordinaire été préparées à l'appui d'autres publications ou rapports. Les sujets des rapports statistiques reflètent la vaste gamme des intérêts et des politiques du ministère des Pêches et des Océans, c'est-à-dire les sciences halieutiques et aquatiques.

Les rapports statisiques ne sont pas destinés à une vaste distribution et leur contenu ne doit pas être mentionné dans une publication sans autorisation écrite préalable de l'établissement auteur. Le titre exact paraît au-dessus du résumé de chaque rapport. Les rapports statisiques sont résumés dans la revue *Résumés des sciences aquatiques et halieutiques*, et ils sont classés dans l'index annuel des publications scientifiques et techniques du Ministère.

Les numéros 1 à 25 de cette série ont été publiés à titre de relevés statistiques, Services des pêches et de la mer. Les numéros 26 à 160 ont été publiés à titre de rapports statistiques du Service des pêches et de la mer, ministère des Pêches et de l'Environnement. Le nom actuel de la série a été établi lors de la parution du numéro 161.

Les rapports statistiques sont produits à l'échelon régional, mais numérotés à l'échelon national. Les demandes de rapports seront satisfaites par l'établissement auteur dont le nom figure sur la couverture et la page du titre. Les rapports épuisés seront fournis contre rétribution par des agents commerciaux.

Canadian Data Report of Fisheries and Aquatic Sciences 1077

2001

#### RESULTS OF BEACH, PURSE, AND POLE SEINE SURVEYS AT THE COURTENAY RIVER ESTUARY AND BAYNES SOUND, COURTENAY, B. C., 2000

by

## J.A. Jenkins, B.A. Bravender, C. Beggs<sup>1</sup>, B. Munro<sup>1</sup>, and D. Miller<sup>1</sup>

Fisheries and Oceans Canada Science Branch, Pacific Region Pacific Biological Station Nanaimo, B.C. V9R 5K6

<sup>1</sup>Fisheries and Oceans Canada Habitat and Enhancement Branch Puntledge River Hatchery Courtenay, B.C. V9N 5N3

© Her Majesty the Queen in Right of Canada, 2001, as represented by the Minister of Fisheries and Oceans Cat. No. Fs 97-13/1077E ISSN 0706-6465

Correct citation for this publication:

Jenkins, J.A., B.A. Bravender, C. Beggs, B. Munro, and D. Miller. 2001. Results of beach, purse, and pole seine surveys at the Courtenay River estuary and Baynes Sound, Courtenay, B. C., 2000. Can. Data Rep. Fish. Aquat. Sci. 1077: 39 p.

### LIST OF TABLES

Table 1.	GPS locations and descriptions of beach seine sites sampled
Table 2.	GPS locations and descriptions of purse seine sites sampled9
Table 3.	GPS locations and descriptions of pole seine sites sampled 10
Table 4.	Sampling schedule for the 2000 Courtenay River estuary and Baynes Sound beach seine survey11
Table 5.	Sampling schedule for the 2000 Courtenay River estuary and Baynes Sound purse seine survey
Table 6.	Sites sampled during the July 27 Courtenay River estuary pole seine survey
Table 7.	Species of fish captured and abbreviations
Table 8.	Temperature, salinity, and dissolved oxygen data 14
Table 9.	Fish captured during the beach seine survey
Table 10.	Fish captured during the purse seine survey 29
Table 11.	Fish captured during the pole seine survey
Table 12.	Lengths, weights, and K-factors for juvenile salmonids

## LIST OF FIGURES

Figure 1.	Map of the Courtenay River estuary showing the twenty-six sites sampled in the 2000 survey	37
Figure 2.	Map of Baynes Sound showing the twenty-one sites sampled in the 2000 survey	39

#### ABSTRACT

#### Jenkins, J.A., B.A. Bravender, C. Beggs, B. Munro, and D. Miller. 2001. Results of beach, purse and pole seine surveys at the Courtenay River estuary and Baynes Sound, Courtenay, B. C., 2000. Can. Data Rep. Fish. Aquat. Sci. 1077: 39 p.

This report gives data on the distribution and abundance of juvenile salmonids within the Courtenay River estuary and Baynes Sound, from a survey conducted between July and September, 2000.

In a total of 16 sampling trips, 350 juvenile salmonids were caught in 147 beach seine sets, 27 purse seine sets, and 7 pole seine sets. From these 350 fish, 156 juvenile salmonids were measured for length and weight, and condition factors were also calculated. Twelve thousand one hundred and ninety-nine non-salmonid fish were caught in addition to the juvenile salmonids.

There was a broad range of habitat types, including human modified areas, steep river banks and sandy mudflats. Vegetation at the sites included marsh grass, trees, shrubs, eelgrass and algae. Swift currents were measured at a few sites. Salinity, temperature, dissolved oxygen, and depth data were recorded at most sites.

#### RÉSUMÉ

Jenkins, J.A., B.A. Bravender, C. Beggs, B. Munro, and D. Miller. 2001. Results of beach, purse and pole seine surveys at the Courtenay River estuary and Baynes Sound, Courtenay, B. C., 2000. Can. Data Rep. Fish. Aquat. Sci. 1077: 39 p.

Le présent rapport fournit des données sur la distribution et l'abondance des salmonidés juvéniles dans l'estuaire de la Courtenay et la baie Baynes, données recueillies pendant une campagne menée entre juillet et septembre 2000.

Au cours des 16 opérations d'échantillonnage, 350 salmonidés juvéniles ont été capturés dans 147 coups de senne de plage, 27 coups de senne à poche et 7 coups de senne à perche. Parmi ces 350 salmonidés juvéniles, 156 spécimens ont été mesurés (longueur et poids), et on a calculé les coefficients de condition. Outre les salmonidés juvéniles, on a capturé 12 190 poissons autres que des salmonidés.

Les types d'habitat étaient très divers : zones modifiées par l'activité humaine, berges abruptes et battures. La végétation observée se composait de calamagrostis, d'arbres, d'arbustes, de zostère et d'algues. Les courants étaient rapides à certains endroits. La salinité, la température, l'oxygène dissous et la profondeur ont été mesurées à la plupart des stations.

#### INTRODUCTION

From July 11 to September 6, 2000, sixteen sampling trips were made to determine the distribution and abundance of juvenile salmonids in the Courtenay River estuary and Baynes Sound, located on the east coast of Vancouver Island. Sampling during these trips consisted of beach seines, purse seines and pole seines, and assessed forty-seven sites within and outside the estuary. This study is a follow-up to the field program implemented during the summer of 1998 (MacDougall et al. 1999).

The Puntledge and Tsolum rivers merge to form the Courtenay River approximately two and a half kilometers upstream of the river mouth. As the river empties into Comox Harbour, a two-layered estuarine system with a brackish water upper layer and marine water at deeper depths is formed. There is a net seaward flow of freshwater, due to the low salinity in Comox Harbour compared to the adjacent sea, into Baynes Sound (Morris et al. 1979). Located on the east side of Vancouver Island, Baynes Sound is a narrow trough that is sheltered from wind and wave action by the Comox Bar to the north and Denman and Hornby Islands to the southeast. Waldie (1951) mentions that Baynes Sound is also protected from strong currents because of the presence of a rich organic sand and mud substrate.

Anthropological changes in this area in the past have adversely impacted much of the foreshore. The Courtenay River estuary has been subjected to dredging for marina and wharf construction, log handling, sorting and dumping, and sewage disposal. These activities have had a significant impact on the vegetation, substrate, and the shape of the basin. Water quality of the estuary and Baynes Sound is affected mainly by logging, mining effluents and sewage disposal. Coal mining in Baynes Sound was active during the early 1900's, and the last mine was closed in 1966 (Prentice 1988). The pH of the water may be affected by the sulphuric acid and sodium sulphate leeching from these mines. Both Comox Harbour and Henry Bay on Denman Island have been closed to shellfish harvesting due to high faecal contamination associated with sewage pollution (Morris et al. 1979).

To celebrate the new millennium, the Town of Courtenay and the Canadian Millennium Partnership Program initiated the Millennium Community Park and Habitat Restoration Project in 1998. The completion of this park in March, 2000 provided new salmonid rearing habitat, and three sites were sampled in this area during this survey.

In September 1997, Fisheries and Oceans Canada initiated the development of the Courtenay River Estuary Management Plan. The goals of this plan are to designate types of appropriate activities within the estuary, establish a co-ordinated project review board to address specific proposals within the management plan area, and to promote transparency and public participation in the development and implementation of the plan. This study, in addition to the field program implemented in 1998, will augment the ecological information for this system by providing baseline data useful to the development of this plan.

#### MATERIALS AND METHODS

A total of forty-seven sites within the Courtenay River estuary and Baynes Sound were sampled on sixteen trips between July 11 and September 6, 2000. Descriptions and GPS co-ordinates of the sites may be found in Tables 1, 2, and 3. Locations of the sites are shown in Figures 1 and 2. Based on the results of the 1998 survey twelve new sites were added within the Courtenay River estuary, and eight sites were removed. Sampling was also carried out at twenty-one sites in Baynes Sound.

Beach seining in the Courtenay River estuary was done from July 11 to August 15 (Table 4). In Baynes Sound, beach seining began on July 13 and was finished on August 3. Each site was sampled with a beach seine 13.5 m long and 2.9 m deep with 4.5 m wings of 1 cm stretched mesh and a 4.6 m bunt of 0.6 cm stretched mesh. Rope bridles 15 m in length were fitted to each end of the net. The net was pulled offshore to the full length of the rope bridles, where possible, set in a circle back to shore, and retrieved by hand. Duplicate sets were done at each site. Beach seining in the estuary was done using an 18.5 foot aluminium craft, with a 150 hp jet drive. In Baynes Sound a 20 foot Marinex aluminium boat with a 100 hp outboard motor was used.

By late July, the chinook in Baynes Sound had moved offshore and could no longer be captured with the beach seine. On August 11 sampling began in this area with a purse seine 61.5 metres long and 6.2 metres deep, consisting of a 24.6 metre section of 1.8 cm stretched mesh, a 24.6 metre section of 1.25 cm stretched mesh and a 12.3 metre bunt section of 0.6 cm stretched mesh. The net was 6.2 metres deep with a lead line of 2 pounds/fathom. A sea anchor was attached to the bunt section and a purse line of 1.25 cm nylon rope along the lead line allowed the entire length of the net to be pursed. The net was set from a 5.5 metre long aluminium craft powered by a V8 engine equipped with a Hamilton jet drive, fitted with a table at the stern to carry the net. Sets were made by anchoring one end of the net with the buoy and sea anchor and forming a circle with the remainder of the net. The net was then pursed and retrieved until the catch was confined in a small enclosure at the side of the boat. Single sets were done at each site. Only one purse seine was done in the estuary, off of Goose Spit at site 46 (Table 5).

Pole seining was carried out on July 27. Single sets were completed at sites 41, 42, and 44 and duplicate sets were done at sites 43 and 45 (Table 6). The pole seine measured 5.2 metres long and 2.1 metres deep, with 3/8" mesh and poles 4.3 metres long. Where possible, the net was opened to span the full width and pulled the length of the site. At sites 42 and 45, the net was pulled along a portion of the shore.

At most sites the entire catch of non-salmonids was counted and identified to species where possible. Where necessary, the catch was randomly subsampled using a dipnet so as to try and sample all species present in the catch. These fish were then identified and counted and the results multiplied by the subsample proportion to estimate the total catch.

The catch of salmonids was counted and identified to species. Coho and chinook were further identified as marked (CWT) with a clipped adipose fin, unmarked or wild. All or a subsample of salmonids were then anaesthetised with Alka Seltzer<sup>™</sup> on shore at the site. The fork length of each fish to the nearest millimetre was recorded, and they were damp dried and weighed to the nearest 0.1g in water using an Ohaus Model No. C305 portable balance. The fish were then placed in a bucket of water from the sampling site to recover, and were released once they were actively swimming inside the bucket.

All sampling was terminated on September 6 as the catches of salmon had dropped off to zero in most areas.

A condition factor (K) for all salmonids was determined using the equation:  $K = \frac{W}{L^{3}} \times 10^{5}$ 

where K is the condition factor, W is the wet weight of the fish in grams, and L is the fork length of the salmon in millimetres (Meehan et al. 1978).

Tide heights for Tables 9, 10 and 11 were determined using the Canadian Tide and Current Tables (Canadian Hydrographic Service, Fisheries and Oceans Canada 2000).

A YSI 85 oxygen, conductivity, salinity and temperature meter was used in the Courtenay River estuary and Baynes Sound. Salinity and temperature were recorded at the surface, and then at 1 metre intervals to the bottom, or to 5 metres depth at each site, and dissolved oxygen levels were measured in mg/L  $\pm$  2%. Depth ranges were recorded in Baynes Sound using a Humminbird 100SX portable sounder. Two GPS units were used during the survey, an Eagle Explorer and a Motorola TRAXAR GPS Navigator.

#### RESULTS

Table 7 contains the abbreviated, scientific, and common names of captured fish species. Temperature, salinity, and dissolved oxygen levels may be found in Table 8. A total of 147 beach seines, 27 purse seines and 7 pole seines were completed (Tables 4, 5 and 6). In all catches combined there were 147 coho, 98 chinook, 39 steelhead, 22 rainbow, 43 cutthroat, and 1 chum for a total catch of 350

juvenile salmonids (Tables 9, 10 and 11). A total of 12199 non-salmonid fish were also caught in the seine sets. This included 5270 perch, 3329 sculpins, and 567 sticklebacks.

Lengths and weights were recorded and condition (K) factors were calculated for a total of 156 juvenile salmonids, including 93 chinook. Eighty-three of these fish were unmarked, 8 were wild, and 2 were marked (Table 12). Lengths, weights, and K-factors were also recorded for 62 coho (49 unmarked, 10 fry, 2 wild, and 1 marked). One chum salmon was also measured and weighed. The minimum K-factor (0.74) was calculated for a chinook salmon captured on July 20 at site 30. The maximum recorded K-factor was 1.70, calculated for a chinook salmon caught at site 11 on August 1.

The habitat types within the Courtenay River estuary were varied, from fine mud to sand substrate with little slope (e.g. sites 1 and 17), to very steep sloped gravel beaches covered in marsh grass (e.g. sites 12 and 14). Within Baynes Sound the sites ranged from shallow sloped banks with gravel and sand substrate (e.g. sites 28 and 27) to moderately sloped banks with boulders present midshore (e.g. site 34). Coal was located at sites 30 and 31, with site 31 containing the greatest proportion.

Sampling sites 8, 14, 21, 23, 39, 41 and 42 were located in areas which had been impacted by development, including the construction of large rip rap breakwaters, cement walls and pilings, dredged basins, and areas where foreshore vegetation had been removed or paved over. Vegetation at sites along the Courtenay River included marsh grass, shrubs, and trees. Sites within the estuary typically contained algal species, including *Fucus* sp. and *Ulva* sp., often with marsh grass and shrubs in the high intertidal or backshore.

Sites 21, 41, and 42 were constructed during the Millennium Community Park and Habitat Restoration Project in 1998. The goal was to produce new salmonid rearing habitat. During several sampling trips coho fry, juvenile coho, and juvenile chinook were found at sites 21 and 41. No salmonids were found at site 42, although it was sampled only once with a pole seine on July 27, 2000.

Some areas of the estuary were characterised by high currents including sites 1 and 12, both located along the river channel. Sites 6, located on the north side of Goose Spit, and 24, located in Baynes Sound, were also areas of very swift currents.

#### ACKNOWLEDGMENTS

Thanks are due to the staff at the Puntledge River Hatchery for their enthusiastic support including Dale Fetzner, Bob Addy, Laurent Frisson, Tony Galesloot, Jim Campbell, Sterling Stephens, and Christine Berg, who made the field sampling possible and contributed many suggestions to the project. Diane Duncan helped to co-ordinate staff and take care of managing expenses. Volunteers included Al Mitchell, Colin Glover, Neil Krassey, Terry O'Toole, Dale Peterson, Ms. Kwan, Ray Roberts, Jim Stirling, John Naylor, Reg Webber, Neil Brodie and Nairn Sutti. Paul Winchell, Science Branch, also assisted in the field work. Jim Van Tine, Habitat and Enhancement Branch, kindly provided the net and boat to carry out the purse seine sampling. Mel Sheng, Habitat and Enhancement Branch, Restoration Unit, provided assistance for the field sampling as well. Dr. Colin Levings provided comments on the manuscript.

#### REFERENCES

- Canadian Hydrographic Service. 2000. Canadian Tide and Current Tables 2000. Volume 5: Juan de Fuca Strait and Strait of Georgia. Fisheries and Oceans Canada, Ottawa, Ont. 163 p.
- MacDougall, L. A., B. A. Bravender, and L. R. Russell. 1999. Results of a beach seine survey at the Courtenay River estuary, Courtenay, B. C., 1998. Can. Data Rep. Fish. Aquat. Sci. 1054: 23 p.
- Meehan, W.R., and R.A. Miller. 1978. Stomach flushing: effectiveness and influence on survival and condition of juvenile salmonids. J. Fish. Res. Board Can. 35: 1359-1363.
- Morris, S., A.J. Leaney, L.M. Bell, and J.M. Thompson. 1979. The Courtenay River estuary: status of environmental knowledge to 1978. Report of the estuary working group. Fish. and Environ. Canada Special Estuary Ser. 8: 355 p.
- Prentice, A.C., and W.S. Boyd. 1988. Intertidal and adjacent upland habitat in estuaries located on the east coast of Vancouver Island – a pilot assessment of their historical changes. Technical Report Series 38. Canadian Wildlife Service, Pacific and Yukon Region, British Columbia. 75 p.
- Waldie, R.J. 1951. Winter oceanography of Baynes Sound and the Lazo Bight. Fish. Res. Board Can. Manuscr. Rep. 441: 24 p.

Table 1. GPS locations and descriptions of beach seine sites sampled.

-

Site	Description	GPS
No.		
1	Site located in the upper estuary at the mouth of dredged small boat slough. Moderate to steep slope, fine mud substrate. Riverbanks covered in marsh grasses and small shrubs near the water's edge, large trees less than 1 m back from the water. Swift currents. Salinity at 0.0 ‰.	49 40 55.87 124 58 31.12
1A	Site located in a man-made groove off the main river channel. Steep slope. Riprap at entrance, mud/gravel inside with large organic debris present. Marsh and shrubs at higher elevations. Connects at head through a culvert to pond in Millennium Park. Salinity ranges between 0.0 ‰ and 1.6 ‰ at the surface.	49 41 30.48 124 59 39.78
4	Site located where riprap breakwater intersects shoreline, west side of estuary. Rocky/gravel substrate, very gradual slope. <i>Fucus</i> sp., and large eelgrass bed offshore. Salinity ranges between 22.7‰ at the surface to 24.3 ‰ at 1 m depth.	N/A
6	Site sampled on the north side of Goose Spit. Sandy substrate, steep slope, some marsh grass on upper shore. Swift currents. Salinity ranges between 13.4 ‰ at the surface to 26.8 ‰ at 4 m depth.	49 39 45.80 124 55 24.70
8	Site sampled within the Comox Marina, at Grid #2. Large rocks, pebble and sand mix on shore, steep slope into the water. Little intertidal vegetation. Sheltered from wind and wave action. Salinity ranges between 20.6 ‰ at the surface to 27.0 ‰ at 1m depth.	49 40 13.21 124 55 37.10
11	Site located at the mouth of Duck Slough in upper estuary. Gravel substrate, moderate slope, and marsh grass on upper shore. Salinity ranges between 0.2 ‰ at the surface to 2.7 ‰ at 1 m depth.	N/A
12	Site sampled adjacent to airpark, on west side of river channel. Steep gravel beach, marsh grass in backshore. Swift current. Salinity ranges between 0.1 ‰ at the surface to 1.1 ‰ at 1m depth.	N/A
14	Site sampled within abandoned dredged boat basin on west side of river channel, north of boat launch. Very steep slope, tall marsh grass, trees to waterline. <i>Fucus</i> sp., <i>Ulva</i> sp. Salinity ranges between 0.4 ‰ at the surface to 7.3 ‰ at 1 m depth.	49 40 59.12 124 55 06.00
15	Site sampled on south side of Goose Spit. Gentle sloping mid-sized gravel, substrate became sandy at low intertidal/subtidal area, tall grasses and evergreens in backshore, about 5 m from shore. Exposed to wind and wave action. Salinity ranges between 20.9 ‰ at the surface to 27.6 ‰ at 4 m depth.	49 39 33.73 124 55 06.64
17	Site sampled on riverbank, across from Lewis Park. Moderately sloping river banks, sandy substrate covered with marsh grass. Swift current. Salinity at 0.0 ‰.	49 41 38.95 124 59 46.30

**t** ...

Site	Description	GPS
NO.		
18	Gravel/mud substrate. Marsh at higher elevation. Salinity at surface 0.2 %.	N/A
19	Site located on west side of island, shallow slope. Gravel/mud/sand substrate to marsh on upper shore. Salinity at surface 5.6 ‰.	N/A
20	Site located at head of slough in front of floodgate to Duck Slough. Steep slope, mud substrate. Salinity ranges between 0.3 ‰ at the surface to 9.0 ‰ at 2 m depth.	49 41 02.08 124 58 37.88
21	Site located in man-made bay in Millennium Park at the head of the boat slough. Steep slope, mud/gravel substrate, sparse marsh on upper shore. Heavy overgrowth of vegetation in water. Salinity ranges between 0.1 ‰ at the surface to 0.4 ‰ at 1 m depth.	49 41 34.18 124 59 33.93
22	Site located in airpark marina at confluence with main river channel. Steep slope. Gravel/mud substrate, sparse vegetation, and pilings on upper shore. Salinity ranges between 0.7‰ at the surface to 17.8 ‰ at 1 m depth.	N/A
23	Site located in abandoned man-made sewage treatment lagoon. Shallow to steep slope. Fine mud substrate. Thick marsh vegetation. Salinity ranges between 11.3 ‰ at the surface to 10.8 ‰ at 1 m depth.	N/A
24	Site located at the confluence of the Puntledge and Tsolum rivers. Shallow slope. Gravel/cobble/sand substrate. Riparian on upper shore. Very swift currents. Salinity at 0.0 ‰.	49 41 57.01 124 59 48.81
25	Site located on the western shore of Sandy Island. Moderate slope. Gravel/sand substrate. Eelgrass bed offshore. Sparse marsh vegetation, debris on upper shore. Salinity ranges between 24.6 ‰ at the surface to 27.1 ‰ at 3 m depth.	49 37 00.87 124 51 12.19
26	Site in Henry Bay on Denman Island. Sand/gravel. Moderate slope with large trees on upper shore. Eelgrass bed offshore. Salinity ranges between 24.7 ‰ at the surface to 27.1 ‰ at 4 m depth.	49 36 21.30 124 50 15.50
27	Site located north of Denman Point on Denman Island. Sand offshore with eelgrass bed. Gravel beach, riparian upshore, rocky with <i>Fucus</i> sp., slight slope. Salinity ranges between 24.7 ‰ at the surface to 25.9‰ at 2 m depth.	49 35 44.81 124 50 18.65
28	Site located at Denman Point on Denman Island. Shallow slope. Gravel/cobble/sand substrate. Riparian on upper shore. Salinity ranges between 24.8 ‰ at the surface to 26.9 ‰ at 4m depth.	49 33. 706 124 51. 321
29	Site located at Oyster Shop. Sand/eelgrass offshore, moderate slope. Gravel boulders higher, narrow riparian strip on upper shore. Shallow slope gravel. Gravel foreshore, fairly steep to riparian zone. Salinity ranges between 24.2‰ at the surface to 26.7 ‰ at 2 m depth.	49 33 54.64 124 52 25.71

.

Site	Description	GPS
No.		
30	Site at the mouth of Union Bay. Moderate slope. Gravel/sand/mud	49 35 07.02
	substrate. Coal on upper shore. Salinity ranges between 22.6 ‰ at	124 53 01.08
	the surface to 27.7 ‰ at 5 m depth.	
31	Site located at mouth of Hart Creek. Shallow slope. Coal dominated	
	substrate with mud/gravel on lower shore. Salinity ranges between	N/A
	23.9 ‰ to 24.5 ‰ at the surface.	
32	Site located at Willemar Bluff. Salinity ranges between 18.3 ‰ at the	49 40 16.60
	surface to 26.8 ‰ at 4 m depth.	124 53 35.28
33	Site sampled at Point Holmes. Gravel upper shore and midshore,	49 41 32.90
	with sand flat offshore. Moderately sloped with some algae present.	124 52 00.84
	Salinity ranges between 24.7 ‰ at the surface to 27.6 ‰ at 5 m	
	idepth.	
34	Site sampled at Kingfisher Inn. Moderate slope, boulders midshore,	49 37 15.67
	sand/boulder low shore, eelgrass and kelp offshore. Fucus sp.	124 54 18.02
	Present on the upper slope. Salinity ranges between 21.9 ‰ at the	
	surface to 26.7 ‰ at 5 m depth.	
39	Site located in man-made anchorage off main river channel. Shallow	
	slope, mud/gravel substrate. Cement walls and pilings on upper	N/A
	shore. Salinity ranges between 0.6 % to 20.0 % at the surface.	
40	Site located at mouth of Millard Creek. Shallow slope, mud	
	substrate. Thick marsh and riparian on upper shore. Salinity ranges	N/A
	between 21.5 ‰ at the surface and 21.9 ‰ at 1 m depth.	

Site No	Description	GPS
35	Offshore site located near Cape Lazo. Depth ranges between 17 and 18 m.	N/A
36	Offshore site located near Palliser Rock. Salinity ranges between 26.7 ‰ at the surface to 27.9 ‰ at 5 m depth. Depth ranges between 12 and 16 m.	49 37 48.01 124 50 02.51
37	Offshore site northeast of Sandy Island. Salinity ranges between 26.2 ‰ at the surface to 27.7 ‰ at 3 m depth. Depth ranges between 12 and 19 m.	N/A
46	Offshore site sampled on the north side of Goose Spit. Swift currents. Salinity ranges between 13.4 ‰ at the surface to 26.8 ‰ at 4 m depth. Depth ranges between 22 and 27 m.	49 39 45.694 124 55.656
47	Offshore site sampled on south side of Goose Spit. Exposed to wind and wave action. Salinity ranges between 20.9 ‰ at the surface to 27.6 ‰ at 4 m depth. Depth ranges between 7 and 18 m.	49 39. 477 124 54. 021
48	Offshore site located off the western shore of Sandy Island. Eelgrass bed. Salinity ranges between 24.6 ‰ at the surface to 27.1 ‰ at 3 m depth. Depth at approximately 12 m.	49 37 00.87 124 51 12.19
49	Offshore site in Henry Bay on Denman Island. Eelgrass bed. Salinity ranges between 24.7 ‰ at the surface to 27.1 ‰ at 4 m depth. Depth ranges between 33 and 35 m.	49 36.176 124 50. 998
50	Offshore site located at Denman Point on Denman Island. Salinity ranges between 24.8 ‰ at the surface to 26.9 ‰ at 4 m depth.	49 33. 706 124 51. 321
51	Offshore site located at Oyster Shop. Sand/eelgrass. Salinity ranges between 24.2 ‰ at the surface to 26.7 ‰ at 2 m depth.	49 33. 691 124 52. 574
52	Offshore site at the mouth of Union Bay. Salinity ranges between 22.6 ‰ at the surface to 27.7 ‰ at 5 m depth. Depth ranges between 22 and 25 m.	49 34 59.50 124 52 53.75
53	Offshore site located at Willemar Bluff. Salinity ranges between 18.3 ‰ at the surface to 26.8 ‰ at 4 m depth. Depth ranges between 12 and 23 m.	49 40. 315 124 52. 059
54	Offshore site sampled at Point Holmes. Salinity ranges between 24.7 ‰ at the surface to 27.6 ‰ at 5 m depth. Depth ranges between 9 and 29 m.	49 41.121 124 51.149
55	Offshore site sampled at Kingfisher Inn. Eelgrass and kelp. Salinity ranges between 21.9 ‰ at the surface to 26.7 ‰ at 5 m depth. Depth ranges between 19 and 21 m.	49 37. 058 124 54. 475

Table 2. GPS locations and descriptions of purse seine sites sampled.

et ...

	•	

Site	Description	GPS
No.		
41	Site located in a man-made groove off the main river channel. Steep	49 41 30.48
	slope. Riprap at entrance, mud/gravel inside with large organic	124 59 39.78
	debris present. Marsh and shrubs at higher elevations. Connects at	
	head through a culvert to pond in Millenium Park. Salinity ranges	
	between 0.0 ‰ and 1.6 ‰ at the surface.	
42	Site located in man-made pond in Millenium Park. Steep slope.	49 41 29.54
	Marsh and shrubs at higher elevations. Culvert at southern end to	124 59 34.86
	boat slough. Salinity at 0.0 ‰.	
43	Site located at the mouth of Duck Slough in upper estuary. Gravel	
	substrate, moderate slope, marsh grass on upper shore. Salinity	N/A
	ranges between 0.2 ‰ at the surface to 2.7 ‰ at 1 m depth.	
44	Site in small, shallow pothole in upper marsh near site 11. Sampled	49 40 55.95
	at low tide. Mud/debris. Steep slope. Heavy marsh vegetation.	124 58 33.26
	Salinity at 7.5 ‰ at the surface.	
45	Site located at head of slough in front of flood gate to Duck Slough.	49 41 02.08
	Steep slope, mud substrate. Salinity ranges between 0.3 ‰ at the	124 58 37.88
	surface to 9.0 ‰ at 2 m depth.	

Table 3. GPS locations and descriptions of pole seine sites sampled.

Date	Jul-	Jul-	Jul-	Jul-	Jul-	Aug-	Aug-	Aug-	Aug-	Total
Trin				20	25		03	09	10	Sets
Inp		2	3	4	5		Ø	9		
INO.			I		<u> </u>		I	L	l	
Stn					36	15				
No										
1	2	0	0	0	0	0	0	2	2	6
1A	0	0	2	0	0	0	0	0	0	2
4	0	0	0	0	0	2	0	0		2
6	2	0	2	0	2	2		2	0	10
8	2	0	2	0	2	2	0	2		10
11	2	0	0	0	2	2		2	0	8
12	0	0	0	0	0	2		2	2	6
14	0	0	2	0	2	0		0	0	0
15	0	2	0	2	0	0	2	0	0	6
17	2	0	0	0	2	0	0	0	2	6
18	2	0	0	0	0	0	0	0	0	2
19	2	0	0	0	0	0	0	0	0	2
20	2	0	2	0	0	0	0	2	0	6
21	2	0	0	0	2	2	0	2	0	8
22	0	0	2	0	0	2	0	0	2	6
23	0	0	3	0	0	0	0	0	0	3
24	0	0	2	0	2	0	0	2	0	6
25	0	0	0	2	0	0	2	0	0	4
26	0	2	0	2	0	0	2	0	0	6
27	0	2	0	2	0	0	2	0	0	6
28	0	2	0	0	0	0	0	0	0	2
29	0	2	0	2	0	0	2	0	0	6
30	0	2	0	2	0	0	0	0	0	4
31	0	2	0	0	0	0	2	0	0	4
32	0	2	0	2	0	0	2	0	0	6
33	0	0	0	2	0	0	2	0	0	4
34	0	0	0	0	0	0	2	0	0	2
39	0	0	2	0	2	0	0	2	2	8
40	0	0	0	0	0	2	0	0	0	2
Total Sets	18	16	19	16	16	16	18	18	10	147

# Table 4. Sampling schedule for the 2000 Courtenay River estuary and BaynesSound beach seine survey.

Date	Aug-	Aug-	Aug-	Aug-	Aug-	Sep-	Total
	11	17	22	24	29	06	Sets
Trip	10	12	13	14	15	16	
No.							
			Se	ets			
Stn.							
No.							
35	0	0	1	0	0	0	1
36	0	0	1	0	0	1	2
37	0	1	1	0	0	0	2
46	0	0	0	0	1	0	1
47-	1	0	1	0	1	0	3
48	0	1	0	1	0	0	2
49	0	1	0	1	0	1	3
50	0	0	0	1	0	0	1
51	0	1	0	1	0	0	2
52	0	0	0	0	0	1	· 1
53	1	0	0	0	1	0	2
54	1	0	1	0	1	1	4
55	0	1	0	1	1	0	3
Total Sets	3	5	5	5	5	4	27

-

Table 5. Sampling schedule for the 2000 Courtenay River estuary and BaynesSound purse seine survey.

 Table 6.
 Sites sampled during the July 27 Courtenay River estuary pole seine survey.

Stn.	41	42	43	44	45	<b>Total Sets</b>
No.						
Sets	1	1	2	1	2	7

Table 7. Species of fish captured and abbreviations.

•

Fish Species	Common name	Abbreviation
Ammodytes hexapterus	Pacific sandlance	PASA
Apodichthys flavidus	Penpoint gunnel	PEGU
Brachyistius frenatus	Kelp surfperch	KELP
Cymatogaster aggregata	Shiner surfperch	SHIN
Damalichthys vacca	Pile surfperch	PILE
Embiotoca jacksoni	Black surfperch	BLAC
Family Bathymasteridae	Unidentified ronquil	RONQ
Family Bothidae	Unidentified sanddab	SAND
Family Cottidae	Unidentified sculpin	UNSC
Family Embiotocidae	Unidentified perch	UNPE
Family Hexagrammidae	Unidentified greenling	UNGR
Family Pholididae	Unidentified gunnel	UNGU
Family Scorpaenidae	Unidentified rockfish	UNRO
Family Blenniidae	Unidentified blenny	UNBL
Gasterosteus aculeatus	Threespine stickleback	THST
Lumpenus sagitta	Pacific snake prickleback	SNPR
Oncorhynchus keta	Juvenile chum	CHUM
Oncorhynchus kisutch	Juvenile unmarked coho	СОНО
Oncorhynchus kisutch	Juvenile marked coho	MKCO
Oncorhynchus kisutch	Juvenile wild coho	WLCO
Oncorhynchus kisutch	Coho salmon fry	COFR
Oncorhynchus mykiss	Juvenile rainbow trout	RAIN
Oncorhynchus tshawytscha	Juvenile unmarked chinook	CHIN
Oncorhynchus tshawytscha	Juvenile marked chinook	MKCH
Oncorhynchus tshawytscha	Juvenile wild chinook	WLCK
Hippoglossus stenolepis	Pacific halibut	HALI
Order Pleuronectiformes	Unidentified flatfish	FLAT
Pholis laeta	Crescent gunnel	CRGU
Pholis ornata	Saddleback gunnel	SAGU
Platichthys stellatus	Starry flounder	STFL
Salmo clarki clarki	Cutthroat trout	CUTT
Salmo gairdneri	Juvenile steelhead	STHE
Syngnathus leptorhynchus	Bay pipefish	BAPI

Date/Site	Time	Depth	Temp	Salinity	Oxygen
	(PST)	(m)	(°C)	(‰)	(mg/L)
July 11/00					
Site 17	0900	surface	16.8	0.0	n/s
Site 1	0920	surface	16.9	0.0	n/s
		1	16.8	0.0	n/s
Site 18	1005	surface	17.2	0.2	n/s
Site 8	1045	surface	19.2	24.5	n/s
ι.		1	18.9	24.7	n/s
Site 6	1200	surface	19.1	24.9	n/s
11		1	18.8	24.8	n/s
Site 19	1237	surface	21.8	5.6	n/s
Site 20	1310	surface	18.8	0.3	n/s
"		1	18.7	0.3	n/s
11		2	20.4	9.0	n/s
Site 11	1400	surface	18.7	0.2	9.30
11		1	18.7	0.2	9.30
Site 21	1440	surface	19.2	0.1	n/s
££		1	18.6	0.1	n/s
<u></u>		2	18.1	0.1	n/s
July 13/00					
Site 32	0805	surface	18.1	18.3	8.17
"		1	18.5	21.5	7.88
Site 26	0900	surface	18.9	25.3	8.01
		1	18.8	25.3	7.57
Site 27	0959	surface	19.3	25.4	8.31
11		1	19.0	25.5	8.90
Site 28	1035	surface	18.8	25.6	7.84
"		1	18.7	25.6	7.69
Site 29	1130	surface	19.0	24.8	8.95
"		1	19.0	24.9	8.41
Site 30	1235	surface	19.4	24.5	7.15
"		1	19.3	24.6	7.36
Site 31	1310	surface	19.7	24.5	7.21
Site 15	1350	surface	19.4	20.9	7.82
"		1	19.1	23.8	8.44
July 17/00			-		
Site 22	1300	surface	20.2	0.7	7.47
"		1	20.4	17.8	6.84

Table 8. Temperature, salinity and dissolved oxygen data (n/s=not sampled).

. .

Date/Site	Time	Depth	Temp	Salinity	Oxygen
	(PST)	(m)	(°C)	(‰)	(mg/L)
July 17/00					
Site 23	1415	surface	28.3	11.3	9.47
Site 39	1440	surface	21.4	1.1	10.17
"		1	21.5	10.4	7.70
Site 6	1510	surface	20.1	23.7	8.91
"		1	19.8	23.8	9.40
Site 8	1605	surface	21.7	20.6	7.45
"		1	20.5	22.0	7.29
Site 20	1640	surface	22.3	1.2	10.50
"		1	22.5	1.5	10.30
Site 14	1715	surface	21.2	0.4	9.20
"		1	21.1	0.5	9.42
Site 24	1740	surface	21.1	0.0	8.38
"		1	21.0	0.0	8.35
Site 1A	1845	surface	21.3	0.0	7.93
"		1	21.3	0.0	7.59
Site 23	1920	surface	23.1	8.8	7.90
"		1	24.1	10.8	7.39
July 20/00					
Site 15	0825	surface	18.9	25.0	9.54
٤٢		1	18.1	25.7	9.98
Site 32	0855	surface	18.9	25.6	10.51
"		1	18.2	25.9	10.10
Site 33	0925	surface	17.8	26.6	10.46
"		1	17.0	26.5	9.69
55		2	16.8	26.5	10.09
Site 25	1000	surface	20.2	25.4	10.87
66		1	19.2	25.3	10.90
"		2	18.9	25.5	10.85
Site 26	1030	surface	20.0	25.3	11.05
66		1	19.5	25.4	12.10
"		2	19.0	25.4	11.38
Site 27	1155	surface	21.4	25.4	10.56
"		1	18.4	25.9	11.03
"		2	17.7	25.9	11.12
Site 29	1230	surface	21.1	25.1	10.00
"		1	19.5	25.3	10.76

Data/Sita	Timo	Donth	Tomp	Salinity	Ovygon
Dale/One		(m)		(%)	(mg/L)
	(F31)	(11)	(0)	(/00)	(119/1)
July 20/00	1000	. 0	10.0	05.0	10.00
Site 29	1230	2	19.3	25.6	10.83
Site 30	1300	surface	22.4	25.2	9.46
		1	20.1	25.3	11.35
July 25/00					
Site 39	0805	surface	n/s	n/s	n/s
Site 6	0835	surface	18.5	24.9	8.67
"		1	14.1	27.9	7.80
Site 8	0920	surface	18.6	26.0	7.09
"		1	16.5	27.0	7.40
Site 11	1010	surface	20.0	0.7	9.38
"		1	19.9	0.7	9.27
Site 14	1045	surface	20.9	1.7	10.70
"	- -	1	21.2	7.3	9.95
Site 24	1145	surface	20.6	0.0	9.68
"		1	20.5	0.0	9.60
Site 17	1240	surface	20.6	0.0	9.29
		1	20.6	0.0	8.88
\$6		2	20.6	0.0	9.02
Site 21	1310	surface	20.6	0.2	8.96
"	1010	1	20.5	0.4	8.64
		•	20.0		0.01
July 27/00			· · · · · · · · · · · · · · · · · · ·		
Site 41	0900	surface	16.4	1.6	3.37
Site 42	0925	surface	17.5	0.0	9.08
"		1	17.6	0.0	6.60
Site 45	0945	surface	16.7	2.6	8.40
Site 14	1010	surface	17.2	7.5	6.26
Site 42	1010	surface	16.6	7.5	0.20
Sile 45	1020	Sunace	10.0	0.0	9.40
August			· · ····		
Site 22	1220	curface	20.5	0.7	10.50
- OILE 22 	1020		20.0	1.6	0.50
1		1 1	L 70.2	0.1	9.30

ę

Date/Site	Time	Depth	Temp	Salinity	Oxygen
	(PST)	(m)	(°C)	(‰)	(mg/L)
August 1/00					
Site 8	1400	surface	18.6	23.7	8.00
"		1	17.9	24.2	8.60
Site 6	1445	surface	19.4	18.1	9.33
"		1	17.6	24.4	9.42
Site 12	1615	surface	21.8	0.4	9.88
u		1	21.6	0.5	10.45
Site 11	1640	surface	n/s	n/s	n/s
Site 4	1715	surface	19.1	22.7	9.00
- u		1	18.2	24.3	9.70
Site 40	1750	surface	26.1	21.5	7.71
11		1	25.8	21.9	6.00
Site 21	1820	surface	21.1	0.3	8.40
11		1	21.1	0.2	8.60
August 3/00					
Site 15	0820	surface	17.6	24.2	9.56
"		1	17.5	24.2	9.38
££		2	17.5	24.5	9.37
Site 32	0848	surface	17.1	24.6	9.41
11		1	16.9	24.7	9.16
		2	16.9	24.8	9.33
Site 33	0915	surface	17.1	24.7	9.24
"		1	17.1	24.7	9.19
Site 25	1000	surface	18.5	24.7	9.83
"		1	18.1	24.7	10.00
Site 26	1040	surface	18.8	24.7	9.80
"		1	18.1	24.7	9.28
Site 27	1140	surface	19.2	24.7	9.60
u		1	18.5	24.7	9.33
Site 29	1220	surface	20.3	24.2	9.51
"		1	19.7	24.2	8.94
Site 31	1255	surface	21.3	23.9	8.23
u		1	19.0	23.9	9.41
££		2	18.7	23.9	9.84
Site 34	1335	surface	21.5	23.9	11.10
u.		1	19.8	24.0	12.22

Date/Site	Time	Depth	Temp	Salinity	Oxygen
	(PST)	(m)	(°C)	(‰)	(mg/L)
August 9/00					
Site 12	0910	surface	18.9	0.1	10.00
"	-	1	18.9	0.2	10.21
Site 39	0945	surface	19.3	0.6	10.30
u		1	19.5	19.7	5.22
Site 6	1020	surface	19.0	23.9	9.55
u		1	18.7	24.5	9.48
Site 8	1050	surface	19.4	22.8	8.70
u		1	18.4	25.5	10.25
_ <b>11</b>		2	17.6	26.0	9.38
Site 11	1210	surface	19.9	0.3	10.30
"		1	19.8	2.7	10.40
Site 1	1230	surface	20.4	0.0	9.89
41		1	20.3	0.0	9.27
u		2	20.3	0.0	9.44
Site 21	1255	surface	20.4	0.2	8.80
ti .		1	20.3	0.3	9.40
Site 24	1330	surface	21.2	0.0	10.28
u		1	20.9	0.0	9.90
Site 20	1400	surface	21.4	0.7	10.40
u		1	21.3	6.5	9.98
August 11/00					
Site 54	1100	surface	n/s	n/s	n/s
Site 53	1145	surface	17.8	26.1	9.63
"		1	17.8	26.0	9.78
£5		2	17.4	26.2	10.04
Site 47	1230	surface	19.2	22.5	8.75
		1	19.0	24.5	10.04
ti.		2	19.2	24.8	10.08
August 15/00		•			
Site 17	0825	surface	18.2	0.0	9.83
"		1	18.2	0.0	10.10
Site 1	0900	surface	18.2	0.0	10.93
u		1	18.2	0.0	10.85
Site 12	0925	surface	18.4	1.1	10.88

Date/Site	Time	Depth	Temp	Salinity	Oxygen
	(PST)	(m)	(°C)	(‰)	(mg/L)
August 15/00					
Site 12	0925	1	18.4	1.1	10.40
Site 39	1000	surface	19.3	20.0	10.70
Site 22	1030	surface	18.7	1.1	9.90
"		1	18.6	1.6	9.65
August 17/00					
Site 37	0900	surface	17.4	26.2	11.20
- 11		1	16.5	26.8	10.80
Site 48	0935	surface	17.3	26.5	11.50
u		1	17.1	26.5	11.31
££		2	17.0	26.6	10.84
Site 49	1010	surface	17.5	26.4	9.26
"		1	17.5	26.5	10.64
"		2	17.4	26.5	10.43
Site 51	1035	surface	16.6	26.6	10.43
"		1	16.6	26.7	9.59
u		2	16.6	26.7	10.55
Site 55	1140	surface	16.9	21.9	9.17
u		1	17.4	24.4	9.86
		2	17.5	26.0	10.91
August 22/00					
Site 54	0830	surface	15.5	26.7	9.78
ti .		1	15.0	27.1	9.95
"		2	14.9	27.1	10.11
££		3	14.8	27.2	9.94
Site 35	0915	surface	n/s	n/s	n/s
Site 37	1000	surface	16.2	26.7	9.48
"		1	14.0	27.6	9.84
"		2	13.8	27.6	9.30
"		3	13.7	27.7	9.46
Site 36	1030	surface	15.3	27.2	9.59
"		1	14.8	27.3	9.56
"		2	14.3	27.5	9.06
u		3	14.0	27.5	9.20

Date/Site	Time	Depth	Temp	Salinity	Oxygen
	(PST)	(m)	(°C)	(‰)	(mg/L)
August					
22/00					
Site 47	1125	surface	16.3	26.9	9.32
ti .	-	1	16.0	27.0	9.12
"		2	15.6	27.1	9.47
"		3	15.6	27.1	9.46
August 24/00					
Site 48	0830	surface	17.9	24.6	9.48
		1	18.0	25.2	11.02
"		2	17.9	26.1	11.75
11		3	16.4	27.1	13.49
Site 49	0900	surface	18.4	25.0	10.36
tt.		1	17.6	25.8	10.42
		2	17.6	26.7	12.29
u		3	15.8	27.1	12.16
u		4	15.5	27.1	11.87
Site 50	0940	surface	18.3	24.8	9.76
u		1	17.7	25.3	9.58
u		2	17.8	25.9	9.50
LL LL		3	17.6	26.2	10.34
и		4	16.8	26.9	11.77
Site 51	1010	surface	18.7	24.2	9.13
¯ μ		1	18.2	25.3	9.46
11		2	18.0	25.5	9.28
41		3	17.7	25.9	10.15
u		4	17.4	26.0	9.24
Site 55	1040	surface	19.1	23.0	9.57
tt .		1	18.8	23.3	9.86
u	·····	2	18.7	24.4	10.03
u		3	18.4	24.9	10.04
u		4	18.1	25.3	10.15
August 29/00					
Site 54	0830	surface	15.9	26.1	9.38
u		1	16.0	26.1	9.22
"		2	15.5	26.5	9.93

Date/Site	Time	Depth	Temp	Salinity	Oxygen
	(PST)	(m)	(°C)	(‰)	(mg/L)
August 29/00	<b>b</b>				
Site 54	0830	3	15.5	26.6	9.72
"		4	15.4	26.7	9.37
Site 53	0900	surface	15.5	26.2	9.25
u		1	15.3	26.8	9.55
<i>u</i>		2	15.3	26.8	9.36
u		3	15.3	26.8	9.39
"		4	15.3	26.8	9.03
Site 47	0945	surface	15.9	26.0	9.60
- u		1	15.8	26.5	8.79
٤١		2	15.6	27.1	8.91
и		3	14.3	27.3	8.70
u		4	13.9	27.6	8.44
Site 55	0940	surface	16.1	22.9	8.63
"		1	16.0	25.1	8.75
61		2	15.9	25.6	8.08
£1		3	15.8	26.3	7.50
"		4	15.7	26.5	7.98
u		5	15.7	26.7	9.14
Site 46	1140	surface	16.6	13.4	10.29
	<u></u>	1	15.9	25.2	8.39
		2	15.6	26.4	8.67
<u> </u>		3	15.5	26.7	8.26
"		4	15.4	26.8	8.11
September 6/00					
Site 36	0915	surface	15.5	26.7	12.08
"		1	15.0	26.9	11.70
"		2	14.4	27.3	10.32
u		3	13.8	27.5	9.89
"		4	13.3	27.8	8.60
"		5	13.2	27.9	8.79
Site 54	1030	surface	15.2	27.2	9.34
"		1	14.7	27.4	9.23
11		2	14.3	27.5	9.14
		3	14.1	27.6	8.96
"		4	14.0	27.6	9.32

- -1

Date/Site	Time (PST)	Depth (m)	Temp (°C)	Salinity (‰)	Oxygen (mg/L)
September 6/00					
Site 54	1030	5	14.0	27.6	9.61
Site 49	1130	surface	15.7	26.4	12.37
u		1	15.1	26.7	12.24
u		2	14.9	26.9	12.90
u		3	14.9	27.0	12.77
tt.		4	14.8	27.1	12.88
"		5	14.8	27.1	13.01
Site 52	1210	surface	15.9	22.6	11.42
		1	15.5	24.0	11.03
u		2	15.8	25.9	11.36
"		3	14.7	27.3	11.39
u		4	14.0	27.6	11.66
u		5	13.8	27.7	12.49

Table 9. Fish captured during the beach seine survey (refer to Table 7 for abbreviations).

Date Set Time Tide PA PE KE SH PI BL RO SA UN UN UN UN UN UN TH SN CH CO MK WL CO RA CH MK WL HA FL CR SA ST CU ST BA

4

ਙ			0	0	0	0	0	0	-	-	0	0	0	0	0	0	0	0	0	0	7			0	7	57	46	55	45	25
빞			0	0	0	0	0	0	0	0	0	0	0	o	o	0	0	0	0	0				0	0	0	0	0	0	0
F			0	0	0	2	0	0	0	0	0	0	0	0	Ţ	0	4	ო	0	0	10			0	0	0	0	0	0	0
<u>ط</u>			0	0	4	0	ო	-	0	0	0	0	2	ფ	0	0	0	0	0	0	21			0	0	0	0	0	0	0
าย			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0
GU			0	0	0	0	0	~	0	2	0	0	0	0	0	0	0	0	0	0	m			0	0	0	0	0	0	0
AT			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	38	12	ო	ഹ	ო
-			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0
ð			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	o	0	0
윤			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				٥	0	0	0	0	0	0
z			10	ю	2	~	<b>~</b>	0	0	0	o	0	-	-	-	4	0	0	7	0	26			-	0	2	0	0	0	0
z			0	0	0	0	0	٥	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0
ц К			0	0	0	0	0	0	0	0	0	0	0	٥	0	0	0	0	0	0				0	0	0	0	0	0	0
8			ο	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0
8			0	0	0	0	0	0	0	0	0	0	0	0	0	Ţ	0	0	0	0				0	0	0	0	0	0	0
오			ο	0	0	2	0	0	0	0	0	0	0	0	0	ស	0	0	10	ო	20			0	0	0	0	0	0	0
N			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0
R			0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	-			0	0	0	0	0	0	0
sT			6	ŝ	ო	0	2	-	2	ო	0	~	*	ო	0	2		0	42	7	87			-	0	2	2	~	0	7
В			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				2	٠.	0	0	0	0	0
Ro			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				-	0	0	0	0	0	o
GU			0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	-			0	<del>~</del>	118	103	47	30	←
GR			0	0	0	0	0	0	<del></del>	0	0	0	~	0	0	0	0	0	0	0	5			0	0	~	0	0	0	0
Ъ			0	0	0	0	0	0	0	0	-	0	0	-	ស	ო	0	-	0	0	11			18	0	0	0	0	0	o
sc			-	0	ო	0	12	4	59	36	ŝ	9	28	16	ო	7	-	0	0	2	183			31	ស	72	20	35	40	185
Ģ			0	0	0	0	0	0	<del>.</del>	0	o	2	0	0	0	0	0	0	0	0	З			4	4	0	0	0	0	0
ğ			0	0	0	0	0	o	0	0	0	0	о	0	o	0	0	0	0	o				0	0	0	0	0	0	0
AC			0	0	0	0	0	0	0	0	0	0	0	0	0	0	o	0	0	o				0	0	0	0	0	0	0
Щ			0	0	0	0	0	0	0	0	0	0	0	0	o	0	0	0	0	0				0	0	0	0	33	0	0
Z			0	0	0	0	0	0	25	41	0	0	0	0	0	0	0	0	0	0	66			0	4	41	81	90	44	0
۹.			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	2	5	8	0	32	6
30 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	ò	0	0	0	0
SA G			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	<del></del>	0	Ξ	<del>~</del>	0
(			5	2	8		<del>-</del>		4	ი	ო	4	9		2	8			0					ი		ო		च		9
ц)			÷	÷	÷	=	6	÷	2	сi	ຕັ	ຕໍ	ຕີ	2	ς.	'n	2	÷	4	*				ò	=	-	Ħ	÷	3	÷
PST			0835	0060	0920	0690	1005	1015	1045	1100	1200	1210	1237	1245	1310	1325	1400	1415	1440	1500				0805	0815	0060	0918	0959	1010	1035
No.				2	⊷	2		3	*	2	<b>~</b>	2	÷	2	٠	2	~	2	<b>*</b>	2				۰.	2	۳	2	<del></del>	7	<del></del>
/Site	1	July	17	-	-	=	18	•	8	•	9	-	6	Ŧ	20	-	1	-	21	=	TOT	13	July	32	-	26	-	27	:	28

₽B			29	ო	7	0	2	0	0	0	0	271			o	0	0	0	0	0	0	0	0	0	0	o	0	0	0	0	0
片뀌			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3E			0	0	0	0	0	0	0	0	0					0	0	0	0	0	0	0	0	0	0	0	0	0	ო	0	0
ST FL			0	0	0	0	<del></del>	~	0	0	0	2			0	*	0	~	0	ы	<b>*</b>	0	0	0	0	0	0	0	0	0	0
SA GU			0	0	0	0	0	0	0	o	0				4	4	0	0	٥	0	~	~	0.	0	0	0	0	0	a	0	0
В С К			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AT			-	ო	0	-	0	0	0	-	ო	50			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Η			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
₽Ŗ			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
¥Р			0	0	0	0	0	0	0	0	0				٥	0	0	0	o	0	0	0	0	0	0	0	0	0	0	0	0
문로			0	0	2	2	0		0	~	0	14			0	0	0	ø	۳	0	0	0	0	0	~	0	2	ល	٠.	0	0
RA			0	0	٥	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	ហ	10	0	0
О. Е			0	0	0	0	0	0	0	0	0		1.		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	თ	4
38			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	٥	0	o	0	0	0	0	0
¥β			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	o	0	0	0	0	0	0
응문			0	0	0	0	0	0	0	0	0				0	0	0	~	0	0	0	0	0	0	0	0	4	0	0	0	0
요절			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N R			0	0	0	0	0	0	0	0	0				0	0	0	0	0	ო		~	0	0	0	0	0	0	0	0	0
T S			16	0	~	0	0	0	0	0	0	35			S	4	0	0	0	4	0	0	0	ო	G	-	4	4	0	0	0
ВЧ			0	0	0	0	0	0	0	0	0	e			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ч Ч С К			0	0	0	0	0	0	0	0	0	-			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ND			2	S	<del>1</del> 3	14	19	۳-	0	-	۰	356			0	~	0	0	0	0	<del>.</del>	0	-	0	0	0	0	0	0	0	0
N R			0	0	0	0	۴-	0	0	<del>~~</del>	0	e	and the second second		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
르꾼			0	0	0	0	0	0	0	0	0	18			0	0	0	28	32	34	ო	53		0	0	30	25	0	0	0	0
SCN			70	თ	g	18	13	32	ø	5	ო	602			22	24	0	<del>1</del> 5	20	77	82	19	თ	29	2	12	17	-	0	0	0
AS ND			0	0	0	0	o	ō	0	0	0	8			o	<b>~</b>	0	0	0	135	155	0	0	o	0	0	0	0	0	0	0
0 g Q g			0	-	0	0	0	0	0	0	٥	4			o	0	0	0	ο	0	0	0	0	0	0	0	0	0	0	0	0
AB			0	0	0	0	o	0	0	0	0				0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0
르빌			0	0	0	0	0	0	0	0	0	33	ł		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
문			S	0	25	-	9	3	45	62	107	684			129	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
쥬귱			0	*	S	0	0	0	0	0	0	17			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
н В В			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PA SA			0	0	0	0	0	0	0	0	0	13			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Tide (E)			1.7	2.0	2.2	2.8	=	3.1	3.3	3.4	3.6				1.3	1.4	2.0	2.3	2.9	3.2	:	3.6	3.8	3.9	4.1	4.1	4.2	4.4	4.5	4.7	4.8
Time PST			1050	1130	1140	1235	1245	1310	1320	1350	1400				1300	1310	1415	1440	1450	1510	1520	1605	1615	1640	1650	1715	1720	1740	1750	1845	1850
Set .			N	-	N	• •	~		2		N					N	<del>.</del>			, 	. ~		N		5				2	, 	N
Site N	13	luly	28	29	=	30	z	31	z	15	:	OT	17	luly	22	Ŧ	23	39	-	9	=	8	=	20		14	=	24	=	1A	=
<u>ц</u> <	1	2										1	lí –	2																	

P B			0	o				0	0	0	0	0	0	0	0	0	17	0	22	16	8	43	77	193			0	0	0	0	0
片비			0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0
3E			0	0	4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0
고의			2	0	2			2	<b>*</b>	0	0	0	2	0	0	÷	0	0	0	0	o		0	2			0	-	0	0	0
g S G			0	0	9			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0
មួទ			0	0				0	0	0	0	0	0	o	o	0	0	0	0	0	0	0	0				0	0	0	0	0
AT FI			7	-	ø			9	<del></del>	0	0	27	94	ø	0	-	15	0	0	0	0	12	2	168			0	0	0	0	~
₹⊐			0	0				0	0	0	0	0	0	÷	<del>.</del>	0	0	<b>~</b>	0	0	0	0	0	e			0	0	0	0	0
₹£			0	0				0	0	0	0	0	0	0	0	0	0	0	٥	0	0	0	0				0	0	0	0	0
₹₽			0	0				0	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0
문록			~	0	19			0	0	0	0	0	0	ო	0	0	0	0	0	0	0	-	0	4			0	-	0	2	0
₹Z			0	0	15			0	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	٥	0
8 E			0	0	13			٥	0	0	0	0	0	o	o	o	0	0	0	0	0	0	0				0	0	0	0	0
C K			0	o				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0
¥0 8			0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0
8 7 8 7 8			0	0	5			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0
55 7~			0	0				0	0	0	0	0	0	0	Ö	0	0	0	0	0	0	0	0				0	0	0	0	0
56			0	0	5			0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-			0	0	0	0	80
i≓ 'ω Z ⊐			~	<del>4</del> .	ž			0	0	0	0	0	0	0	0	3	₩	0	0	0	0	0	0	R			4	0	0	0	0
5ª zo			0	0				0	0	0	0	0	0	0	-	0	0	-	-	-	-	0	•				-	0	0	0	0
			_	-				0	0	0	0	0	U	0	0	U	~	Ű	ں س	-	۰ ۳	_	-				U	0	0	0	0
50			0	0	en la			0	0	0	0	0	0	3	4	a	З	0	Ж	'n	З	Ń	÷	20			<del>.</del>	£	0	0	~
50			0	o				0	o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	G			0	0	0	0	0
58			12	34	252			D	0	<u>5</u>	137	S	167	131	11	23	33	0	82	105	96	34	o,	103			80	0	0	ო	2
SCN			5	ъ	333			ŝ	0	ŝ	-	62	284	ø	0	÷	12	ო	6	48	120	79	465	1124			56	28	115	25	5
S D ND			0	0	291			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	78	18	0
õã			0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0
ACI			0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0
느낌			0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		-		0	0	0	0	0
₽ ਸ਼			0	0	144			9	69	0	0	0	0	0	0	0	0	0	0	o	0	0	0	75			0	0	0	0	0
ЩЧ			0	0				0	0	0	0	0	0	0	0	0	0	0	o	o	0	0	0				0	0	0	0	0
ы В			0	o				0	0	0	0	0	0	o	0	0	0	0	0	0	o	0	0				0	0	0	0	0
PA SA			0	0	2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	8	0	0
(m)			4.8	×				3.0	2.8	=	2.7	2.1	2.0	1.8	=	1.6	z	1.3	×	z	1.4	=	=				2.5	2.6	2.8	2.5	2.8
Time PST			1920	1930				1825	1830	1855	006(	)925	1935	000	1010	030	1040	155	1205	1230	1240	1300	1310				1805	1815	1835	1845	1920
Set .			÷	2				4	5	-	2	-	2 C	~	2		5		2	<u>ب</u>	2		2				-	2	1	2	10
ite N	2	Ą	ო		T	0	₹	<u>ں</u> `		2		e D		ហ		g	_	2	_	6	_	0		т	S	۲ ار	ŋ			_	<b>.</b>
<u>2</u> 20	5	ηſ	Ņ	-	Ч	2	n۲	÷	-	ю	-	'n	=	Ň	Ŧ	й	÷	'n	-	5	=	ตี	-	μ	5	٦u	ñ	=	9	=	ŝ

ΒA			0	o	o	0	0	0	0	0	0	0	0				0	0	0	0	2	0	0	0	0	0	0	0	o	0	0	0	2
片뷰			0	0	0	0	0	25	4	0	0	0	0	29			0	0	0	0	0	0	o	0	0	0	0	0	0	0	0	0	
3E			0	0	0	0	0	0	7	0	0	0	o	2			0	0	0	0	0	0	0	0	4	<del>1</del> 9	0	0	ο	0	0	0	53
sт ГГ			0	2	ო	2	0	0	0	0	0	0	0	8			~	4	0	0	0	0	0	0	0	0	<b>~</b>	0	2	0	0	0	ω
sA GU			0	0	0	0	0	0	0	0	0	0	o				o	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
В В			0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AT			~	0	0	~	0	0	0	0	0	0	0	ы			0	ŝ	0	ო	ŝ	9	0	0		0	0	0	0	2	0	0	52
Ψ⊐			0	0	0	0	0	0	0	0	0	0	0				0	0	0	ο	0	0	0	0	0	0	0	0	0	0	0	0	
₹¥			0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	ο	0	0	0	
≨£			0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	o	0	
문로			÷	0	-	0	0	0	0	0	0	0	-	9			0	0	0	0	0	4	0	0	0	ស	0	0	ο	0	0	0	5
₹ Z			0	0	٥	0	0	o	<b>~</b>	0	0	0	0	-			0	0	0	0	0	0	0	0	0	0	0	0	0	0	D	0	
8 F			0	0	0	0	0	ο	0	0	0	٥	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
¥8			0	0	o	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
¥8			0	0	o	0	0	ο	0	0	0	0	0				0	0	ο	0	0	0	0	0	0	0	0	0	0	0	D	0	
8			0	0	-	0	0	0	0	0	0	62	23	86			0	0	o	0	0	0	0	0	0	0	0	0	0	0	~	0	-
윤동			0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	٥	ο	0	0	0	
N R N R			20	0	0	0	0	0	0	0	0	0	0	28			0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
ST			0	4	დ	18	18	0	-	0	0	49	9	110			2	0	0	0	0	4	-	0	0	0	0	~	ი	37	0	0	54
ЪЧ			0	0	0	0	0	0	0	0	0	0	o				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NP			0	0	0	0	0	0	o	0	0	0	0				0	0	0	0	0	0	0	0	0	o	o	0	ο	0	0	0	
N D B N			0	0	0	0	0	0	0	0	0	0	0	2				g	3	4	ო	0	0	0	0	٥	<del></del>	0	0	0	0	0	73
ЧК			0	0	0	0	0	0	0	0	٥	0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ЫЩ			ß	0	<del></del>	30	24	٥	0	0	0	0	0	73			36	175	1115	99	153	75	2	<del></del>	-	0	10	5	10	0	0	0	1649
N N			7	31	14	12	12	٥	0	0	0	2	0	323			13	12	20	18	-	13	0	-	<del>~-</del>	0	0	-	ო	4		0	88
A C N			0	0	0	0	0	0	0	0	0	0	0	96			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
õãã			0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	ο	0	
AC B			0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
드 빌			0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	٥	0	0	0	0	0	0	
꼰로			0	0	0	0	0	0	0	0	0	0	٥				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
쥬 <i>긊</i>			0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	0	0	0	o	0	
ЧС			0	0	ο	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	0	ο	0	ο	0	0	
PA SA SA			0	0	0	0	0	0	0	0	0	0	0	8	ŀ		0	0	~	0	~	24	0	0	0	0	0	0	0	0	0	0	26
Tide (m)			2.8	<u>з.</u> 1	3.2	3.3	=	3.4	2	3.0	=	3.1	3.3		-		1:1	=	1.5	1.7	2.3	2.7	3.9	×	4.1	4.3	z	4.4	4.7	4.8	5.0	×	
lime SST			<b>1925</b>	1010	1020	1045	1050	145	1155	1240	1245	1310	1345				1320	1330	1400	1410	445	455	615	620	640	650	1715	725	1750	800	820	830	
Vo.			5		, N	• •	2		2		N		2					2	, 	2	, ,	N	,	2	、 ~	N	•	N	~	N	~	,- ,-	
ate S lite N	25	uly	ø	1	:	4	-	24	:	17	Ŧ	21	-	머	-	6n'	22	=	8		9		12	z	11	=	4		đ		11	-	OT
<u>0</u> 2	1 <sup></sup>	ſ				-		•••				•••			lí	٩.	•••						-		•				•		•••		۱F-

	БB			0	0	0	0	0	0	o	0	8	10	24	10	11	15	0	2	06	75	245			0	0	<del></del>	0	*	~	0	0	0
	片뀌			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0
	SF			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	٥				0	0	0	0	0	0	0	0	0
	년 고			0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0		0	ы			0	4	g	8	0	0	0	0	0
	sA GU			0	٥	0	0	0	0	0	o	0	0	o	o	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0
	RD			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	٥	0	0	0	0	0	0	٥
	AT AT			٠		o	0	9	32	13	13	7	17	0	0	2	0	ഹ	S	0	0	97			0	0	0	0	0	0	0	-	o
	Η			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	٥				0	0	0	0	0	0	0	o	0
	₹Ş			0	0	0	0	0	0	0	٥	0	0	0	0	o	0	0	0	0	0				0	0	0	0	0	0	0	0	0
	훚요			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0
-	₽⋜			0	0	0	0	0	0	-	0	0	-	0	0	0	0	0	<del>.</del>	0	0	m			0	0	0	0	0	o	0	0	0
	₽Z			0	0	0	0	0	0	0	0	0	0	0	o	0	0	0	0	0	0				ы	0	0	0	0	0	0	0	0
	0 K			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0
	₹0 S			0	0	0	0	0	0	0	0	0	0	0	0	0	D	0	0	0	٥				0	0	0	0	0	0	0	0	0
	¥Ο			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0
	응문			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	٥	0	0	0	0	0	0
	문공			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0
	N N N			0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	-			0	0	0	0	0	0	0	-	0
	T S			0	<b>~</b>	0	0	0	0	0	٥	0	4	0	15	2	0	0	0	<b>~</b>	<del>~~</del>	24			0	7	-	0	0	0	~	7	-
	58			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0
	52			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	o	0	0				0	0	0	0	0	0	0	0	0
	N N			0	0	0	0	0	0	7	15	19	104	48	ო	23	7	14	6	54	62	437			0	0	S	ŝ	Q	16	0	2	0
	N N U N			0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	2	-	0	4			0	0	0	0	0	0	0	0	0
	SH			100	0	0	2	44	12	ø	72	80	63	37	7	136	2	0	26	8	15	612			0	-	66	35	22	107	14	31	-
	NS			4	13	4		6	42	44	41	5	23	2	31	2	9	43	4	4	39	431			თ	13	20	7	41	22	0	<del></del>	-
	A DN			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	51	97	0	0	0
	0 g Q			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0
	ЧS			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0
	뜨고			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				0	o	٥	0	0	0	0	0	0
	₽S			0	0	0	0	0	0	0	0	0	0	0	0	0	0	٥	0	0	o				o	0	0	0	0	0	0	0	0
	쮸다			0	0	0	0	0	0	ο	-	0	0	0	o	0	0	0	0	0	0	-			0	o	0	0	0	0	0	0	0
	ЧО В			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0	-			0	0	0	0	0	0	0	0	0
	A S SA			0	0	٥	0	0	0	32	21	-	0	0	0	0	0	ŝ	0	0	ο	59			0	0	0	0	0	0	0	0	0
-	(m) (m)			4.2	=	4.0	=	3.8	3.7	3.3	3.2	2.9	2.7	2.1	2.0	1.7	1.6	1.4	1.3	1.2	=				2.3	2.4	2.7	э	3.0	2.5	2.8	=	3.5
) ) /	ST			820	825	848	855	915	925	000	015	040	050	140	150	220	230	255	305	335	345				910	920	945	955	020	030	050	100	210
)	Set 1 Vo. F			1	2	-	2	10	2		2	-	2	-	2		2	-	5	÷	7				۵ ۵	0 7	۲ 0	0 7	1	2	1	2	
2	ate Site N	m	bn	15	-	32		33		25	Ŧ	26		27		29	=	31		34		oT	5	ßn	12		66		9		80	:	-
•	しょ	I	∢	•						. 4				. 4		. 4		1.7		10		Г		∢	-,-		(-)		-		-		<b>~</b> -

PI BA			0	0	0	0	0	0	0	0	0	6			0	0	0	0	0	0	0	0	0	0	
гъ∄			ъ	٥	0	0	0	0	0	0	ъ	6			0	0	0	0	0	0	0	0	0	0	
35			<del>~</del>	o	0	0	ο	0	0	0	-	2			0	0	2	0	o	0	0	0	0	0	5
FL ST			0	0	0	0	o	0	0	0	0	18			0	0	0	ო	0	0	0	4	0	2	თ
SA G∪			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	
<u>ң</u> 9			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	
AT			0	0	0	0	o	0	0	0	0	-			0	0	0	0	0	0	-	14	0	0	15
Ξ			0	ο	0	0	0	0	0	0	o				ο	0	0	0	0	0	0	0	0	0	
₹Ş			0	0	0	٥	0	0	0	0	٥				0	0	0	0	0	0	0	0	0	0	
₹£			0	0	0	o	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	
문로			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	o	
RA			0	0	0	o	0	~	<b>~</b> ~~	0	0	4			0	0	0	0	0	2	0	0	0	0	7
С. К.			0	0	o	0	0	0	0	0	0				0	0	o	0	0	0	0	0	0	0	
¥8			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	
₹S			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	
응문			0	0	0	0	D	0	0	0	15	15			2	-	<b>~</b> ~~	0	0	0	0	0	0	0	4
문질			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	
N A A			0	0	0	0	0	0	o	0	0	-			0	0	0	0	0	0	0	0	0	0	
ST			-	~	0	50	50	<b>~</b> 7	-	2	G	119			0	0	o	2	<b>~</b>	0	0	o	0	0	ო
BLUN			0	ο	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	
N OS			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	
ΝD			0	0	0	0	0	0	0	0	0	34			0	0	0	0	0	o	14	44	2	-	સ
NN			0	0	0	0	0	ο	0	0	0				0	0	0	0	0	-	0	0	0	0	-
NH			9	0	0	o	ο	0	0	15	0	298			0	0	0	0	10	0	28	16	49	11	214
N NS			<del></del>	0	0	2	o		0	0	-	114			o	0	0	ო	თ	÷	34	20	4	0	81
SA ND			0	0	0	o	0	0	0	0	0	148			0	0	0	0	0	0	0	0	0	0	
02 Q			0	0	0	0	0	0	0	0	0				0	0	0	o	0	0	0	0	0	0	
ACBL			0	0	0	0	0	0	0	0	0				0	0	0	0	0	o	0	0	0	0	
ᆵ끨			o	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	
운로			0	0	0	0	0	0	0	0	21	5			0	0	0	٥	0	0	0	0	0	0	
쥬 라			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	0	
щD			0	0	0	0	0	0	0	0	٥				0	0	0	0	0	0	0	0	0	0	
PA			0	0	0	0	0	0	0	0	0				0	0	0	0	0	0	0	0	0	ο	
(m) (m)			3.5	3.7	=	3.9	3	4.1	=	4.2	=				2.8	2.7	2.4	2.3	2.1	1.9	1.8	=	1.6	1.5 1	
ime			215	230	240	255	300	330	340	400	410				825	830	006	905	925	950	00	005	030	035	
lo. F			2	~~~	5	-	5	<del></del>	2		2				5	2	~ 0	2	÷	5	-	2	-	5	
te S N		g	_									F		0											F
/Sit	ິ	Au	÷	-	-	ъ,	-	24	-	2(	-	P	12	Αu	1	=	~	=	11	=	Ř	=	22	=	P

i

	집			0	0	2	2			0	0	0	0	0				0	0	0	0	0				0	0	0	0	0	
	ЪЩ			0	0	0				o	0	0	0	0				0	0	0	0	0				0	0	0	0	0	
	SF			0	0	0				o	0	0	0	0				0	0	0	0	0				0	0	0	0	0	
	г ST			0	0	0				0	0	0	٥	0				0	0	0	0	0				0	0	0	o	0	
	SA GU			0	0	0				0	0	0	٥	0				0	0	0	0	0				0	0	0	0	0	
s).	ЯS			0	0	0				0	0	0	0	0				0	0	0	0	0				0	0	0	0	0	
o	ЧF			0	0	0				0	0	0	0	0				0	0	0	ο	0				0	0	0	0	0	
iati	ΞŦ			0	0	0				0	0	0	0	0				0	0	0	0	0				0	0	0	0	0	
é	₹Ş			0	0	٥				4	ო		0	0	œ			0	0	0	0	0				0	0	0	0	0	
do	₹£			0	0	0				0	0	-	0	0	-				0	0	0	0	-			0	0	٥	0	0	
ล	동르			-	2	0	ю			0	0	0	0	0					0	0	0	2	m			0	0	0	0	~	
ō	₽₽Ĩ			0	0	0	ļ			0	0	0	0	0				0	0	0	o	0				0	0	0	0	٥	
0	8 R			0	0	0				o	0	0	0	0				0	0	0	0	0				0	0	0	0	0	
ld	₹S			0	0	0				0	0	0	0	0				0	0	0	0	0				0	0	0	0	0	
Ĕ	¥8			0	0	0				0	0	o	0	0				0	0	0	0	0				0	0	0	0	0	
9	응우			0	0	0				0	0	0	0	0				ο	0	0	0	0				0	0	0	0	0	
fer	공질			0	0	0				0	0	0	0	0				0	o	o	0	*	-			0	0	0	0	0	
e)	N H			0	0	0				0	0	0	0	0				0	0	0	0	0				0	0	0	0	0	
еŚ	도망			0	0	10	6			٣-	0	0	0	-	2			0	0	0	0	0				0	0	0	0	0	
Ž	로픽			0	0	0				0	0	o	0	0				0	0	0	0	0				0	0	0	0	0	
ຣິ	ЧŠ			0	0	0				0	0	0	0	0				0	0	0	0	0				ο	0	o	0	0	
ine	39			0	0	0				0	0	0	0	0				0	0	0	0	0		-		0	0	0	0	0	
SO	Чß			0	0	0				0	0	0	0	٥				0	0	0	0	0				0	0	0	0	0	
Se	吕出			0	0	2	~			0	0	0	0	0				0	0	0	0	0				0	0	0	0	0	
JUC	ЧS			0	0	2	2			0	0	0	0	0				0	0	0	0	0				0	0	0	0	0	
ē	åВ			0	0	0				0	ο	0	0	0				0	0	0	0	0				0	0	0	o	0	
4	ßã			0	0	0				٥	0	0	o	0				0	0	0	0	0				0	0	0	0	0	
ing	뭑 S			0	0	0				0	0	0	0	0				0	٥	0	D	0				0	0	0	0	0	
qri	드 빌			0	0	0				0	0	0	0	0				0	0	0	0	0				0	0	0	0	0	
ð	운로			0	0	0				0	0	0	0	0				0	0	0	0	0				0	0	0	0	0	
ure	쮸리			0	0	0				0	0	0	0	0				0	0	0	0	0				0	0	0	0	0	
apt	щ <u>о</u>			0	0	0				0	0	0	0	0				0	0	0	0	0				0	0	0	0	0	
ö	A A S			0	0	0				ο	0	o	0	0				0	0	0	0	٥				0	0	0	0	0	
Fist	(m) (m)			2.1	2.6	3.0				2.3	1.8	1.5	1.4	1.2				2.9	3.5	=	a	3.4				2.1	2.4	2.7	2.9	3.2	
<u>.</u>	Time PST			1100	1145	1230				0060	0935	1010	1035	1140				0830	0915	1000	1030	1125				0830	0060	0940	1010	1040	
Ð	Set No.				-	-				-	-	-		<del></del>					-	-	<del>~ -</del>	-				~	-		-	-	
Tab	Date /Site	£	Aug	54	53	47	TOT	17	Aug	37	48	49	51	55	TOT	22	Aug	54	35	37	36	47	TOT	24	Aug	48	49	50	51	55	тот

PST         (m)         SA         CU         IN         LE         ACI         AN         CH         CK         LI         AT           0830         13         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	PST         (m)         SA         U         IN         Le         CN         DSC         FE         UM         HOC         CC         FN         IN         CH         CK         L1         AT         AU           0830         1:3         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	PST         (m)         SA         OU         IN         LE         AC         NO         DSC         FE         RI         L         AC         NO         N	Final         Columnation         Columnation <th< th=""><th>First         (m)         Sa ou         I         I         Act         No         Co         &lt;</th><th>Final (in)         Sa ou lo lo</th></th<>	First         (m)         Sa ou         I         I         Act         No         Co         <	Final (in)         Sa ou lo
	(m)       SA GU LP       IN       LE       ACI ND       SC PE       RR       ON       D       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0 <td>(m)         SA GU LP         IN         LE         ACI NO NO SC PE GR GU PO BL         ST         NUM PO         COO         N         N         CH CK         L1         AT         GU GU         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C</td> <td>(m)       SA GU       LP       IN       LP       NL       AC       NO       DS       ST       CU       D       C       D       C       D       C       D       C       D       C       D       C       D       C       D       C       D       C       D       C       D       D       C       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D</td> <td></td> <td>(m)       SA GU LP       IN       Let       AC       NO       SC       F       NU       MO       CO       P       N       CH       AT       GU       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P</td>	(m)         SA GU LP         IN         LE         ACI NO NO SC PE GR GU PO BL         ST         NUM PO         COO         N         N         CH CK         L1         AT         GU GU         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C	(m)       SA GU       LP       IN       LP       NL       AC       NO       DS       ST       CU       D       C       D       C       D       C       D       C       D       C       D       C       D       C       D       C       D       C       D       C       D       D       C       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D		(m)       SA GU LP       IN       Let       AC       NO       SC       F       NU       MO       CO       P       N       CH       AT       GU       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P
• SA GU LP         IN         LE         ACN ND         SC         PE         RUM HO         CO         P         P         IN         IN         CH         CK         LI         AT           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <t< td=""><td>• SA GU LP         IN         LE         AC         NO         DSC         PE         RK         IN         HC         CC         IN         IC         HC         KC         LI         AT         GU         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D</td><td>0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0</td><td>0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0</td><td>0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0</td><td>0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0</td></t<>	• SA GU LP         IN         LE         AC         NO         DSC         PE         RK         IN         HC         CC         IN         IC         HC         KC         LI         AT         GU         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D	0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0	0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0
A GU LP         IN         LE         AC NO ND SC PE GR GU RO BL ST PR UM HO CO CO FR IN         N CH CK LI         AT           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td< td=""><td>A GU         IN         LE         AC         NIN         NIC         AC         LI         AT         GU         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C</td><td>3 GU LP IN LE AC NO ND SC PE GR GU RO BL. ST PR UM HO CO CO FR IN IN CH CK LI AT GU GU         0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0</td><td>3 GU LP       NL E       AC NO ND SC PF GR CU RO BL ST PR UM HO CO CO FR IN       NL CH CK LI AT GU GU F       A GU GU P       NL CH CK LI AT GU GU P       NL GU GU P&lt;</td><td>3 GU LP       NL E       AC NO ND SC PE GR GU RO BL       ST       NL HD       CO       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0<!--</td--><td>A GU LP         IN         LE         AC         NO         DS         DE         DR         UN         HO         CO         D         I         I         L         AC         OU         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D</td></td></td<>	A GU         IN         LE         AC         NIN         NIC         AC         LI         AT         GU         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C	3 GU LP IN LE AC NO ND SC PE GR GU RO BL. ST PR UM HO CO CO FR IN IN CH CK LI AT GU GU         0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 GU LP       NL E       AC NO ND SC PF GR CU RO BL ST PR UM HO CO CO FR IN       NL CH CK LI AT GU GU F       A GU GU P       NL CH CK LI AT GU GU P       NL GU GU P<	3 GU LP       NL E       AC NO ND SC PE GR GU RO BL       ST       NL HD       CO       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0 </td <td>A GU LP         IN         LE         AC         NO         DS         DE         DR         UN         HO         CO         D         I         I         L         AC         OU         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D</td>	A GU LP         IN         LE         AC         NO         DS         DE         DR         UN         HO         CO         D         I         I         L         AC         OU         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D
U         U         IE         AC         NO         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D	U         LP         IN         LE         AC         NO         SC         FC         RC         NO         NC         CK         L1         AT         AU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	J         LP         IN         LE         AC         NO         DSC         PE         RC         NI         CC         CC         LI         AT         GU         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q	J         LP         IN         LE         AC         NO         DS         PE         RF         N         N         CH         CH         CH         AT         GU         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D	J         LF         IN         LE         AC         NN         NN         CH         CH </td <td>J LP         IN         LE         AC         NO         NO         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C</td>	J LP         IN         LE         AC         NO         NO         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C
IN         LE         AC         ND         SC         PE         RK         UM         HO         COC         CF         IN         CH         CK         LI         AT           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	IN         LE         AC         NO         SC         PE         RUM         HO         CO         CO         R         L         AT         CU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	N         LE         AC         NO         SC         PE<         GR         UN         HO         CC         CC         FR         IN         CH         CK         L         AT         GU         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q         Q	N         LE         AC         NO         DC         PC         NI         CC         CC         FI         AT         GU         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G         G </td <td>Image: Image: Image:</td> <td>0       10       1E       AC       NO       NO       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0</td>	Image:	0       10       1E       AC       NO       NO       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0
I         I         A         I         N         N         CH	If a color No No sc pe GR GU RO BL ST PR UM HO CO CO FR IN IN CH CK LI AT GU         IN C	4       LE       AC       NO       SC       PE       RC       NO       NC       AC       LI       AT       GU       CU	4       LE       AC       NO       SC       PE       RC       NO       NC       AC       L       AT       GU       QU       Q	4         LE         AC         NO         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D	4       LE       AC       NO       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D       D
Image: Column set of a	AC NOND SC PE GR GU RO BL ST PR UM HO CO CO FR IN IN CH CK LI AT GU         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0	AC NO ND SC PE GR GU RO BL ST PR UM HO CO CO FR IN IN CH CK LI AT GU GU         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0 <td>AC         NO         NC         RC         NI         NC         AC         LI         AT         AU         AC         AI         AI&lt;</td> <td>AC NO ND SC PE GR GU RO BL ST PR UM HO CO CO FR IN IN CH CK LI AT GU GU FL AT       AT GU GU GU FL AT       AT GU GU GU GU GU GU GU GU GU FL AT       AT GU GU</td> <td>Image: Image: Image:</td>	AC         NO         NC         RC         NI         NC         AC         LI         AT         AU         AC         AI         AI<	AC NO ND SC PE GR GU RO BL ST PR UM HO CO CO FR IN IN CH CK LI AT GU GU FL AT       AT GU GU GU FL AT       AT GU GU GU GU GU GU GU GU GU FL AT       AT GU GU	Image:
NO ND SC PE GR GU RO BL ST PR UM HO CO CO FR IN IN CH CK LI AT           NO ND SC PE GR GU RO BL ST PR UM HO CO CO FR IN IN CH CK LI AT           NO D         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	NO         ND         SC         FG         GU         RO         NL         AT         AU	NO ND SC FE GR GU RO BL ST PR UM HO CO CO FR IN         N CH CK         LI         AT         GU GU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Image: Normalize product of the condition o	Image: Norm	C NO ND SC FE GR GU RO BL ST FR UM HO COC CO FR IN IN CH CK LI AT GU GU FL TT HE         0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
NID         SC         RE         GU         RD         ST         FN         UM         ACC         CC         FN         N         CH         CK         LI         AT           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	OND SC PE GR GU RO BL ST PR UM HO CO CO FR IN         N CH CK LI         AT GU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	O         D         C         C         C         C         L         AT         GU         CU         CU <thcu< th=""> <thcu< th=""> <thcu< th=""></thcu<></thcu<></thcu<>	0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C         C	Colubre         Colubre <t< td=""></t<>
D         SC         FE         GR         UN         NI         CH         CK         LI         AT           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td< td=""><td>D         SC         F         R         UM         HO         CO&lt;         CO         N         N         CH         K         LI         AT         GU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         <t< td=""><td>D         SC         F         R         UM         HO         CO         F         I         AT         GU         GU</td><td>D SC PE         CR UR OBL         ST PR         UM HO CO         CF         IN         CH         L         AT         GU GU         FI           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0</td><td>D SC PE         GR GU RO         BL         ST         FU         UM         OC         CC         IN         IN         CH         IN         CH         CH</td><td>D SC PE GR GU RO BL ST PR UM HO CO CO FR IN         N CH CK LI         AT GU GU PL         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I</td></t<></td></td<>	D         SC         F         R         UM         HO         CO<         CO         N         N         CH         K         LI         AT         GU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <t< td=""><td>D         SC         F         R         UM         HO         CO         F         I         AT         GU         GU</td><td>D SC PE         CR UR OBL         ST PR         UM HO CO         CF         IN         CH         L         AT         GU GU         FI           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0</td><td>D SC PE         GR GU RO         BL         ST         FU         UM         OC         CC         IN         IN         CH         IN         CH         CH</td><td>D SC PE GR GU RO BL ST PR UM HO CO CO FR IN         N CH CK LI         AT GU GU PL         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I</td></t<>	D         SC         F         R         UM         HO         CO         F         I         AT         GU	D SC PE         CR UR OBL         ST PR         UM HO CO         CF         IN         CH         L         AT         GU GU         FI           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	D SC PE         GR GU RO         BL         ST         FU         UM         OC         CC         IN         IN         CH         IN         CH	D SC PE GR GU RO BL ST PR UM HO CO CO FR IN         N CH CK LI         AT GU GU PL         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I         C I
C         F         G         R         UN         HO         CO         C         F         IN         CH         K         LI         AT           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	C         F         C         F         IN         HO         CC         F         IN         CH         K         I         AT         GU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	C         PE         CN         N         CH         CK         LI         AT         GU         GU <td>C         PE         CH         OH         CH         CH<!--</td--><td>C         PE         CH         CH<!--</td--><td>C         PE         GR         U         D         1         C         PC         L         T         PL         UM         HO&lt;         CO&lt;         PC         L         T         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         <thd< th="">         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         <thd< td=""></thd<></thd<></td></td></td>	C         PE         CH         OH         CH         CH </td <td>C         PE         CH         CH<!--</td--><td>C         PE         GR         U         D         1         C         PC         L         T         PL         UM         HO&lt;         CO&lt;         PC         L         T         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         <thd< th="">         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         <thd< td=""></thd<></thd<></td></td>	C         PE         CH         CH </td <td>C         PE         GR         U         D         1         C         PC         L         T         PL         UM         HO&lt;         CO&lt;         PC         L         T         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         <thd< th="">         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         <thd< td=""></thd<></thd<></td>	C         PE         GR         U         D         1         C         PC         L         T         PL         UM         HO<         CO<         PC         L         T         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         L         T         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D <thd< th="">         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         <thd< td=""></thd<></thd<>
E         CR         CU         D         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O         O	E         GR         GL         GL </td <td>E       GR       GU       <thgu< th="">       GU       GU       G</thgu<></td> <td>E       CR       CR</td> <td>E       CR       CV       D       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C</td> <td>E         CR         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U</td>	E       GR       GU       GU <thgu< th="">       GU       GU       G</thgu<>	E       CR	E       CR       CV       D       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C       C	E         CR         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U
R CU RO BL         ST         FR         IM         HO         CO         R         I         IN         CH         CH         K         Li         AT           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0		R GU RO         BL         ST         FR         UM         HO         CO         CO         FR         I         AT         GU         GU </td <td>R GU RO BL ST         RY UN HO CO CO FR         IN         &lt;</td> <td>R GU RO BL ST PR UN HO CO CO FR IN IN CH CK LI AT GU GU FL TT         R GU RO BL ST PR UN HO CO CO FR IN IN CH CK LI AT GU GU FL TT         D 0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0&lt;</td> <td>R GU RO BL ST PR UM HO CO CO FR IN         N N CH CK LI AT GU GU FL TT HE           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0</td>	R GU RO BL ST         RY UN HO CO CO FR         IN         <	R GU RO BL ST PR UN HO CO CO FR IN IN CH CK LI AT GU GU FL TT         R GU RO BL ST PR UN HO CO CO FR IN IN CH CK LI AT GU GU FL TT         D 0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0<	R GU RO BL ST PR UM HO CO CO FR IN         N N CH CK LI AT GU GU FL TT HE           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0
U         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D         D	U         D         C         C         C         C         C         C         A         GU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	URO         R.         TR         UM         OC         CC         FR         IN         IN         CH         CK         LI         AT         GU	U RO BL         ST         RL         UM HO         CC         CC         RL         IN         CH         CK         LI         AT         CU         CL	U RO BL         ST         RI         MI HO CO         CO         RI         NI         CH         CK         LI         AT         GU	U RO BL ST PR UM HO CO CO FR IN         N CH CK         I AT CU CU CL         AT CU CU FL         TT HE           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0
0         BL.         ST         PR         UM         HO         CO         C         I         AT           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	0         BL. ST         RP. UM HO CO         CO         FR         IN         CH         CK         LI         AT         GU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 </td <td>BL         ST         PR         UM         HO         CO         CF         IN         IN         CH         CK         LI         AT         GU         GU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0</td> <td>BI. ST         RI. WI. HO. CO         CR         I         AT         GU         GU</td> <td>BI. ST PR UM HO CO CO FR IN         N         CH CK         LI         AT         CU CU         AT         CU CU         AT         CU CU         CL         AT         CU CU         CL         AT         CU CU         CL         AT         CU CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         <!--</td--><td>D         BL         ST         PR         UM         HO         CO         FI         IT         HE           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0</td></td>	BL         ST         PR         UM         HO         CO         CF         IN         IN         CH         CK         LI         AT         GU         GU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	BI. ST         RI. WI. HO. CO         CR         I         AT         GU	BI. ST PR UM HO CO CO FR IN         N         CH CK         LI         AT         CU CU         AT         CU CU         AT         CU CU         CL         AT         CU CU         CL         AT         CU CU         CL         AT         CU CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU         CU </td <td>D         BL         ST         PR         UM         HO         CO         FI         IT         HE           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0</td>	D         BL         ST         PR         UM         HO         CO         FI         IT         HE           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0
Image: strain brack         Image: straind brack         Image: straind brack <td>Image: strain black         Image: strain black          Image</td> <td>Image: ST         RI         UM         CO&lt;         R         IN         CH         CK         LI         AT         GU         GU</td> <td>Image: ST         RI         UM         HO         CO         FR         IN         CH         AT         CU         GU         CU         CU</td> <td>Image: strain brace         Image: strae         Image: strain brae</td> <td>Image: black of the order of the o</td>	Image: strain black          Image	Image: ST         RI         UM         CO<         R         IN         CH         CK         LI         AT         GU	Image: ST         RI         UM         HO         CO         FR         IN         CH         AT         CU         GU         CU	Image: strain brace         Image: strae         Image: strain brae	Image: black of the order of the o
I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I	I         R         IN         CH         K         I         AT         GU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td>I         RI         IN         CH         KI         AT         GU         GU<!--</td--><td>I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I</td><td>I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I</td><td>I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I</td></td>	I         RI         IN         CH         KI         AT         GU         GU </td <td>I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I</td> <td>I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I</td> <td>I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I</td>	I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I	I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I	I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I         I
R UM HO CO CO FR         IN         IN         CH CK         II         AT           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td>R UM HO CO CO FR         IN         IN         CH         K         I         AT         GU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0</td> <td>NUM HO CO CO FR         IN         N         CH         At         GU         At         At         GU         At         At</td> <td>R UM HO CO CO FR         IN         N         CH         CK         LI         AT         GU         GU</td> <td>R UM HO CO CO FR IN         N CH CK         LI         AT         GU GU GU GU GU CU         FI         TT           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0<!--</td--><td>NUM HO CO CO FR         N         N         CH         L         AT         GU GU FL         TT         HE           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0<!--</td--></td></td>	R UM HO CO CO FR         IN         IN         CH         K         I         AT         GU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	NUM HO CO CO FR         IN         N         CH         At         GU         At         At         GU         At	R UM HO CO CO FR         IN         N         CH         CK         LI         AT         GU	R UM HO CO CO FR IN         N CH CK         LI         AT         GU GU GU GU GU CU         FI         TT           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 </td <td>NUM HO CO CO FR         N         N         CH         L         AT         GU GU FL         TT         HE           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0<!--</td--></td>	NUM HO CO CO FR         N         N         CH         L         AT         GU GU FL         TT         HE           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 </td
Indecode FR         IN         CH CK         LI         AT           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	N HO CO CFR IN         IN CH CK         LI AT GU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	N HO CO CP R IN         N CH CX         I.I. AT CU CU           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	N HO CO CFR         N         N         CH CK         L         AT         GU CU         L           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	N HO CO CF R IN IN CH CK LI AT GU GU FL TT           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	Inductor
		OCCCCCC         FR         IN         IN         CH         AT         GU         <	OCOCOC         FR         IN         CH         CK         LI         AT         GU         GU         FL           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	OCCCCCC         IN         IN         CH CK         I         AT         CU CU C         F1         T1           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	COOCOD         RI         IN         CH         LI         AT         OU         CU         TH           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0
			CO FR IN         IN         CH CK         L         AT         GU CU         L           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	CO         FR         IN         CH         CK         LI         AT         GU         C         T           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	CO FR         IN         N         CH         LI         AT         GU         CU         TI         HE           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         <
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	FR         N         NN         CH         CK         LI         AT         GU           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0<	FR         IN         IN         CH CK         I         AT         CU GU           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           1         1         1         1         1         1         1         1         1         1           1         1         1         0         0         0         0         <	FR         IN         IN         CH         CH         AT         CU         CU<	FR         IN         IN         CH         IN         CH         IN         CH         IN         CH         CH         TH         CH         CH         TH         CH         CH         TH         CH         TH         CH         CH<	Image: Normal and Characterization
0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0<	IN         IN         CH         CK         LI         AT         GU           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0<	IN         IN         CH         CK         LI         AT         GU         GU<		Inv         Inv         CH         CK         LI         AT         CU         C	IN         IN         CH         CH         LI         AT         GU         GU         TI         HE           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <t< td=""></t<>
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	IN         CH         CK         LI         AT         GU           0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 </td <td>IN       CH       CK       L1       AT       CU       CU         0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         1       N       H       F       C       SA       SA       SA       SA         0       0       0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0</td> <td>IN         CH         CK         LI         AT         GU         GU         FL           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0</td> <td>IN         CH         CH&lt;</td> <td>IN         CH         CH         LI         AT         GU         CL         TT         HE           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         <td< td=""></td<></td>	IN       CH       CK       L1       AT       CU       CU         0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         1       N       H       F       C       SA       SA       SA       SA         0       0       0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0	IN         CH         CK         LI         AT         GU         GU         FL           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	IN         CH         CH<	IN         CH         CH         LI         AT         GU         CL         TT         HE           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 <td< td=""></td<>
CH CK     LI     AT       0     0     0     0       0     0     0     0     0       0     0     0     0     0       0     0     0     0     0       0     0     0     0     0       0     0     0     0     0       0     0     0     0     0       0     0     0     0     0       MK     ML     HA     FL       CH CK     LI     AT       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0	CH CK       L1       AT       GU         0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         MK       VL       HA       FL       CR       CR       CH       AT       GU         0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0	CH CK       LI       AT       GU GU         0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0       0         MK WL HA FL CK SA       MK WL HA FL CK SA       A       A       B       A         0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0	CH CK         LI         AT         GU         CI           0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           MK         ML         HA         FL         CR         SA         FL         FL           0         0         0         0         0         0         0         0         0           0         0         0         0	CH CK         LI         AT         CU GU         FL         TT           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         <	CH CK LI AT GU GU FL TT ME           0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 </td
CK     LI     AT       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0	CK     LI     AT     GU       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0       0     0     0     0	CK         LI         AT         GU         GU           0         0         0         0         0         0           0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0	CK         LI         AT         GU         GL         FL           0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0 </td <td>CK         LI         AT         GU         GU         FL         TT           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0&lt;</td> <td>CK         LI         AT         GU         CL         TT         HE           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0&lt;</td>	CK         LI         AT         GU         GU         FL         TT           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0<	CK         LI         AT         GU         CL         TT         HE           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0<
LLI AT       LLI AT       HA FL       LLI AT       LLI AT       ULI AT       ULI AT	LI AT GU 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	LI AT GU GU 0 0 0 0 0 0 0 0 14 FL CR SA LI AT GU GU 0 0 0 0 0 0 0 0 0 0 0 0	LI AT GU GU FL         0       0       0       0         0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         11       AT       GU GU FL       FL       CK SA ST         LI       AT GU GU FL       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0<	I: AT GU GU FL TT         0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         11       AT       GU GU FL TT       1       0       0       0         14       AT       GU GU FL TT       1       0       0       0         0       0       0       0       0       0       0       0         1       AT       GU GU FL TT       1       1       0       0         0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0 <td>II       AT       GU       GU       T       HE         0       0       0       0       0       0       0         0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0       0         1       1       1       1       1       1       1       1       1         1       1       1       1       1       1       1       1       1       1         1       1       1       1       1       1       1       1       1         1       1       1       1       1       1       1       1       1       1         &lt;</td>	II       AT       GU       GU       T       HE         0       0       0       0       0       0       0         0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0         0       0       0       0       0       0       0       0       0       0         1       1       1       1       1       1       1       1       1         1       1       1       1       1       1       1       1       1       1         1       1       1       1       1       1       1       1       1         1       1       1       1       1       1       1       1       1       1         <
	AT GU         AT GU           AT GU         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         <	AT GU GU 0 0 0 0 0	AT GU GU FL         0       0       0       0         0       0       0       0       0         0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         10       0       0       0       0       0         11       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0         0       0       0       0       0       0       0	AT au au au FL TT         AT au au au FL TT         0       0       0       0         0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         0       0       0       0       0       0         11       11       11       11       11         12       11       11       11       11         13       1       0       0       0       0         13       0       0       0       0       0       0         14       1       1       1       1       0       0	AT         GU         RI         TT         HE           0         0         0         0         0         0           0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           1         0         0         0         0         0         0         0         0           1         0         0         0         0         0         0         0         0         0           1         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0
		GU G	CR     SA     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C     C<	GU GU FL TT       GU GU FL TT       CR SA       CO 0       CR SA       CR SA       CR SA       CO 0       CO 0       CR SA       CR SA   <	GU GU FL         TT         HE           0         0         0         0         0           0         0         0         0         0         0           0         0         0         0         0         0         0           0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0           0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0

et ...

30

> 0 22

TOT

e

48 -

Date	Site	Time	Set	Fish Spp.	Length	Weight	K
		(PST)	No.		(mm)	(g)	Factor
11-Jul	17	0835	1	CHIN	86	6.9	1.08
11-Jul	17	0835	1	CHIN	85	6.7	1.09
11-Jul	17	0835	1	CHIN	74	4.5	1.11
11-Jul	17	0835	1	CHIN	77	5.0	1.10
11-Jul	17	0835	1	CHIN	81	5.4	1.02
11-Jul	17	0835	1	CHIN	82	6.0	1.09
11-Jul	17	0835	1	CHIN	80	5.6	1.09
11-Jul	17	0835	1	CHIN	87	6.6	1.00
11-Jul	17	0835	1	CHIN	81	5.4	1.18
11-Jul	17	0835	1	CHIN	69	4.0	1.22
11-Jul	1	0920	1	CHIN	76	4.6	1.05
11-Jul	1	0920	1	CHIN	81	5.7	1.25
11-Jul	1	0920	2	CHIN	80	5.8	1.13
11-Jul	1	0920	2	СОНО	70	3.8	1.11
11-Jul	1	0930	2	СОНО	64	3.1	1.18
11-Jul	18	1005	1	CHIN	82	6.2	1.12
11-Jul	8	1045	1	CHIN	72	4.8	1.29
11-Jul	19	1237	1	CHIN	81	5.0	1.10
11-Jul	19	1245	2	CHIN	85	6.1	0.99
11-Jul	20	1310	1	CHIN	80	4.4	0.86
11-Jul	20	1325	2	МКСО	105	10.1	0.87
11-Jul	20	1325	2	СОНО	81	6.1	1.34
11-Jul	20	1325	2	СОНО	60	2.6	1.20
11-Jul	20	1325	2	СОНО	64	2.8	1.07
11-Jul	20	1325	2	СОНО	87	7.2	1.09
11-Jul	20	1325	2	СОНО	93	9.0	1.12
11-Jul	20	1325	2	CHIN	92	8.4	1.08
11-Jul	20	1325	2	CHIN	86	6.2	0.97
11-Jul	20	1325	2	CHIN	74	4.4	1.09
11-Jul	21	1440	1	СОНО	57	2.2	1.19
11-Jul	21	1440	1	СОНО	62	3.0	1.26
11-Jul	21	1440	1	СОНО	64	3.2	1.22
11-Jul	21	1440	1	СОНО	56	1.9	1.08
11-Jul	21	1440	1	СОНО	61	2.5	1.10
11-Jul	21	1440	1	СОНО	54	1.2	0.76
11-Jul	21	1440	1	СОНО	63	2.6	1.04
11-Jul	21	1440	1	СОНО	69	3.0	0.91

Table 12. Lengths, weights and K-factors for juvenile salmonids (see Table 7 for abbreviations).

Date	Site	Time	Set	Fish Spp.	Length	Weight	K
		(PST)	No.		(mm)	(g)	Factor
11-Jul	21	1440	1	СОНО	59	2.2	1.07
11-Jul	21	1440	1	СОНО	62	3.2	1.34
11-Jul	21	1440	1	CHIN	73	3.6	0.93
11-Jul	21	1440	1	CHIN	87	7.2	1.09
13-Jul	32	0805	1	CHIN	90	7.6	1.04
13-Jul	26	0900	1	CHIN	113	14.7	1.02
13-Jul	26	0900	1	CHIN	134	27.2	1.13
13-Jul	29	1140	2	CHIN	110	11.9	0.89
13-Jul	29	1140	2	CHIN	78	4.8	1.01
13-Jul	29	1140	2	CHIN	75	4.2	1.00
13-Jul	29	1140	2	CHIN	85	7.6	1.24
13-Jul	29	1140	2	CHIN	90	8.2	1.12
13-Jul	29	1140	2	CHIN	75	4.5	1.07
13-Jul	29	1140	2	CHIN	78	5.8	1.22
13-Jul	30	1235	1	CHIN	74	3.6	0.89
13-Jul	30	1235	1	CHIN	92	8.7	1.12
13-Jul	31	1310	1	CHIN	85	6.7	1.09
13-Jul	15	1350	1	CHIN	90	6.9	0.95
17-Jul	39	1440	1	CHIN	79	5.2	1.05
17-Jul	39	1440	1	CHIN	76	4.6	1.05
17-Jul	39	1440	1	CHIN	79	5.3	1.07
17-Jul	39	1440	1	CHIN	80	6.0	1.17
17-Jul	39	1440	1	CHIN	75	4.7	1.11
17-Jul	39	1440	1	CHIN	89	7.4	1.05
17-Jul	39	1440	1	CHIN	71	3.9	1.09
17-Jul	39	1440	1	СОНО	70	3.7	1.08
17-Jul	39	1440	1	CHIN	74	4.1	1.01
17-Jul	39	1450	2	CHIN	80	5.7	1.11
17-Jul	20	1650	2	CHIN	81	5.7	1.25
17-Jul	14	1720	2	СОНО	70	3.8	1.12
17-Jul	14	1720	2	СОНО	65	3.1	1.13
17-Jul	14	1720	2	СОНО	65	2.8	1.02
17-Jul	14	1720	2	СОНО	60	2.5	1.16
17-Jul	14	1720	2	CHIN	81	5.7	1.25
17-Jul	14	1720	2	CHIN	94	7.9	0.95
17-Jul	24	1740	1	CHIN	80	5.9	1.15
17-Jul	24	1740	1	CHIN	82	5.7	1.03
17-Jul	24	1740	1	CHIN	88	7.0	1.03

ą

Date	Site	Time	Set	Fish Spp.	Lenath	Weight	K
		(PST)	No.		(mm)	(g)	Factor
17-Jul	24	1740	1	CHIN	79	5.1	1.03
17-Jul	24	1740	1	CHIN	90	8.0	1.10
17-Jul	1A	1845	1	COFR	61	2.6	1.15
17-Jul	1A	1845	1	COFR	61	2.9	1.28
17-Jul	1A	1845	1	COFR	60	2.7	1.25
17-Jul	1A	1845	1	COFR	63	2.6	1.04
17-Jul	1A	1845	1	COFR	62	2.4	1.01
17-Jul	1A	1850	2	COFR	55	2.1	1.26
17-Jul	1A	1850	2	COFR	65	3.3	1.20
17-Jul	1A	1850	2	COFR	61	2.6	1.15
17-Jul	1A	1850	2	COFR	58	2.0	1.03
17-Jul	1A	1850	2	COFR	57	2.3	1.24
17-Jul	23	1920	1	CHIN	88	7.3	1.07
20-Jul	25	1000	1	CHIN	125	22.3	1.14
20-Jul	25	1000	1	CHIN	141	36.1	1.29
20-Jul	25	1000	1	CHIN	127	24.1	1.18
20-Jul	30	1300	1	CHIN	80	3.8	0.74
25-Jul	39	0815	2	CHIN	94	8.9	1.07
25-Jul	6	0845	2	CHIN	83	5.9	1.03
25-Jul	6	0845	2	CHIN	97	9.3	1.02
25-Jul	8	0925	2	CHIN	88	7.3	1.07
25-Jul	11	1020	2	CHIN	85	6.3	1.03
25-Jul	11	1020	2	СОНО	75	4.5	1.07
25-Jul	21	1310	1	СОНО	63	3.0	1.20
25-Jul	21	1310	1	СОНО	62	2.4	1.01
25-Jul	21	1310	1	СОНО	66	3.3	1.15
25-Jul	21	1310	1	СОНО	64	2.5	0.95
25-Jul	21	1310	1	СОНО	66	3.5	1.22
25-Jul	21	1345	2	СОНО	76	4.9	1.12
25-Jul	21	1345	2	СОНО	61	2.7	1.19
25-Jul	21	1345	2	СОНО	65	3.4	1.24
25-Jul	21	1345	2	СОНО	63	2.6	1.04
25-Jul	21	1345	2	СОНО	57	2.2	1.19
25-Jul	21	1345	2	CHIN	82	5.8	1.05
1-Aug	6	1455	2	CHIN	128	22.9	1.10
1-Aug	6	1455	2 ·	CHIN	128	27.5	1.31
1-Aug	6	1455	2	CHIN	101	11.5	1.12
1-Aug	6	1455	2	CHIN	92	10.1	1.30

-----

Date	Site	Time	Set	Fish Spp.	Length	Weight	K
-		(PST)	No.		(mm)	(g)	Factor
1-Aug	11	1650	2	WLCO	73	4.8	1.23
1-Aug	11	1650	2	WLCO	75	4.6	1.09
1-Aug	11	1650	2	CHIN	94	8.6	1.04
1-Aug	11	1650	2	CHIN	80	8.7	1.70
1-Aug	11	1650	2	CHIN	85	7.1	1.16
1-Aug	11	1650	2	CHIN	86	6.8	1.07
1-Aug	11	1650	2	CHIN	86	6.8	1.07
1-Aug	21	1820	1	COHO	70	3.6	1.05
3-Aug	25	1000	1	CHIN	160	47.4	1.16
3-Aug	26	1050	2	CHIN	123	17.4	0.94
3-Aug	31	1305	2	CHIN	103	11.1	1.02
9-Aug	20	1410	2	СОНО	84	6.6	1.11
9-Aug	20	1410	2	СОНО	79	6.6	1.34
9-Aug	20	1410	2	COHO	79	5.8	1.18
9-Aug	20	1410	2	СОНО	70	3.7	1.08
9-Aug	20	1410	2	COHO	72	4.1	1.10
9-Aug	20	1410	2	COHO	79	5.8	1.18
9-Aug	20	1410	2	COHO	78	5.5	1.16
9-Aug	20	1410	2	COHO	88	7.9	1.16
9-Aug	20	1410	2	COHO	73	4.5	1.16
9-Aug	20	1410	2	COHO	75	4.6	1.09
9-Aug	20	1410	2	СОНО	88	7.2	1.06
11-Aug	53	1145	1	CHIN	175	65.0	1.21
11-Aug	53	1145	1	CHIN	115	17.5	1.15
15-Aug	17	0825	1	СОНО	57	1.8	0.97
15-Aug	17	0825	1	СОНО	70	3.9	1.14
15-Aug	17	0830	2	СОНО	57	2.2	1.19
15-Aug	1	0900	1	СОНО	57	1.8	0.97
17-Aug	37	0900	1	WLCK	145	29.8	0.98
17-Aug	37	0900	1	WLCK	150	44.0	1.30
17-Aug	37	0900	1	WLCK	140	30.7	1.12
17-Aug	37	0900	1	WLCK	135	28.9	1.18
17-Aug	48	0935	1	WLCK	138	28.9	1.10
17-Aug	48	0935	1	WLCK	154	42.2	1.16
17-Aug	48	0935	1	WLCK	124	21.8	1.14
17-Aug	49	1010	1	MKCH	135	27.7	1.13
17-Aug	49	1010	1	WLCK	140	30.9	1.13
22-Aug	54	0830	1	CHIN	218	131.0	1.26

Date	Site	Time	Set	Fish Spp.	Length	Weight	K
		(PST)	No.		(mm)	(g)	Factor
22-Aug	54	0830	1	MKCH	250	170.0	1.09
22-Aug	47	1125	1	CHIN	138	26.8	1.02
22-Aug	47	1125	1	CHIN	154	40.8	1.12
22-Aug	47	1125	1	CHUM	150	31.9	0.95
24-Aug	55	1040	1	CHIN	130	20.7	0.94





Figure 1. Map of the Courtenay River estuary showing the twenty-six sites sampled in the 2000 survey.





Figure 2. Map of Baynes Sound showing the twenty-one sites sampled in the 2000 survey.