



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (Nº cel/L)

1ra Semana



Semana: 03 al 09 de mayo de 2015

Fechas: 05, 08 y 09 de mayo de 2015

ZONAS	002 GUAYNUNA															004 ISLA TORTUGAS			009 SALINAS			010 NONURA								
ESTACION	01-A-GUA**			01-B-GUA**			01-C-GUA**			02-D-GUA**			02-E-GUA**			01-A-TOR			01-A-SAL**			01-A-NON*			01-B-NON*			01-C-NON*		
PROFUNDIDAD (m)	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15
TEMPERATURA (°C)	21.5	20.4	19.4	20.9	20.5	19.4	20.7	20.2	19.3	21.8	21.5	21.0	21.7	21.5	21.4	....	....	....	20.9	20.8	20.6	23.0	22.3	22.0	23.2	22.3	22.0	23.0	22.2	22.0
DIATOMEAS																														
Grupo <i>Pseudo-nitzschia delicatissima</i>	1360	240	120	840	640	520	0	0	0	680	880	1080	2160	2400	2160	S/M	S/M	S/M	2320	400	240	119040	104800	81680	235680	274320	258080	249760	192480	150320
Grupo <i>Pseudo-nitzschia seriata</i>	2720	440	840	1320	1600	360	560	80	0	390438	352865	339795	240961	316925	236877	S/M	S/M	S/M	233609	222174	197669	19200	13760	4800	37600	53360	53120	40800	68400	84560
DINOFLAGELADOS																														
<i>Alexandrium minutum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium monilatum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium ostenfeldii</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium peruvianum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium</i> sp.	0	40	0	0	0	0	0	0	0	40	40	40	0	0	0	S/M	S/M	S/M	0	40	0	0	0	0	0	0	0	0	0	0
<i>Azadinium spinosum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cochlodinium polykrikoides</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis acuminata</i>	0	40	0	80	80	0	0	0	0	40	80	0	200	160	40	S/M	S/M	S/M	160	40	40	0	0	0	0	0	0	0	0	0
<i>Dinophysis caudata</i>	0	0	0	0	80	0	0	0	0	0	0	0	40	0	0	S/M	S/M	S/M	0	40	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis rotundata</i>	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis tripos</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Gonyaulax spinifera</i>	0	0	0	40	40	0	0	0	0	0	0	0	40	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Karenia</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Karlodinium</i> cf. <i>veneficum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Lingulodinium polyedrum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum lima</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum minimum</i>	7920	240	40	2240	400	80	880	80	160	4560	3040	1880	3520	3280	760	S/M	S/M	S/M	3000	600	1800	80	80	40	0	0	0	80	120	0
<i>Protoceratium reticulatum</i>	40	40	0	0	0	0	0	0	0	40	40	0	40	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Protoperidinium crassipes</i>	0	0	0	40	0	0	0	0	0	0	0	40	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	40
FITOFLAGELADOS																														
<i>Heterosigma akashiwo</i>	11840	640	160	1480	680	280	400	80	120	4320	69000	6800	1120	1280	640	S/M	S/M	S/M	800	840	840	0	0	0	0	0	0	0	0	0

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (Nº cel/L)

1ra Semana



Semana: 03 al 09 de mayo de 2015

Fecha: 09 de mayo de 2015

ZONAS	002 GUAYNUNA															004 I. TORTUGAS			009 SALINAS			010 NONURA								
ESTACION	01-A-GUA			01-B-GUA			01-C-GUA			02-D-GUA**			02-E-GUA**			01-A-TOR			01-A-SAL			01-A-NON			01-B-NON			01-C-NON		
PROFUNDIDAD (m)	....	....	....	....	....	....	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
TEMPERATURA (°C)	....	....	....	....	....	....	....	....	....	19.9	19.8	19.6	19.6	19.5	19.1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	
DIATOMEAS																														
Grupo <i>Pseudo-nitzschia delicatissima</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	160	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Grupo <i>Pseudo-nitzschia seriata</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	320	160	0	0	80	80	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
DINOFLAGELADOS																														
<i>Alexandrium minutum</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Alexandrium monilatum</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Alexandrium ostenfeldii</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Alexandrium peruvianum</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Alexandrium sp.</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Azadinium spinosum</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Cochlodinium polykrikoides</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Dinophysis acuminata</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	40	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Dinophysis caudata</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	40	40	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Dinophysis rotundata</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Dinophysis tripos</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Gonyaulax spinifera</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Karenia sp.</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Karlodinium cf. veneficum</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Lingulodinium polyedrum</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Prorocentrum lima</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Prorocentrum minimum</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	1680	80	360	720	320	160	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Protoceratium reticulatum</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	40	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
<i>Protoperidinium crassipes</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	0	0	0	0	0	0	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
FITOFLAGELADOS																														
<i>Heterosigma akashiwo</i>	NC	NC	NC	NC	NC	NC	NC	NC	NC	2480	800	640	1040	440	240	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.



ORGANISMO NACIONAL DE SANIDAD ACUÍCOLA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (Nº cel/L)

1ra Semana



Semana: 03 al 09 de mayo de 2015

Fechas: 06, 08 y 09 de mayo de 2015

ZONAS	017 CULEBRAS			011 BAHIA SAMANCO															012 BAHIA DE SECHURA				
ESTACION	01-A-CUL			01-B-SAM**						01-C-SAM*			02-A-SAM**			02-B-SAM**			12-B-SECH**			13-A-SECH	
PROFUNDIDAD (m)	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....	....
TEMPERATURA (°C)	....	....	....	23.4	21.9	20.8	22.8	21.8	20.7	22.5	21.7	19.7	21.9	21.6	21.4	22.0	21.9	21.9	22.0	21.7	21.3	....	....
DIATOMEAS																							
Grupo <i>Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	80	240	1320	0	0	0	0	0	0	0	0	0	0	0	0	320	160	240	S/M	S/M
Grupo <i>Pseudo-nitzschia seriata</i>	S/M	S/M	S/M	1560	680	2520	160	240	280	0	160	40	0	0	160	200	0	280	560	1160	720	S/M	S/M
DINOFLAGELADOS																							
<i>Alexandrium minutum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M
<i>Alexandrium monilatum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M
<i>Alexandrium ostenfeldii</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M
<i>Alexandrium peruvianum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M
<i>Alexandrium</i> sp.	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M
<i>Azadinium spinosum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M
<i>Cochlodinium polykrikoides</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M
<i>Dinophysis acuminata</i>	S/M	S/M	S/M	240	160	0	0	320	80	40	0	40	80	80	0	80	0	0	0	0	0	S/M	S/M
<i>Dinophysis caudata</i>	S/M	S/M	S/M	240	40	0	0	40	40	200	160	40	0	40	0	0	0	0	0	0	0	S/M	S/M
<i>Dinophysis rotundata</i>	S/M	S/M	S/M	40	0	0	0	0	80	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M
<i>Dinophysis tripos</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M
<i>Gonyaulax spinifera</i>	S/M	S/M	S/M	80	0	0	40	0	40	40	40	0	0	40	0	120	120	80	0	0	0	S/M	S/M
<i>Karenia</i> sp.	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M
<i>Karlodinium</i> cf. <i>veneficum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M
<i>Lingulodinium polyedrum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M
<i>Prorocentrum lima</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M
<i>Prorocentrum minimum</i>	S/M	S/M	S/M	2040	0	0	2720	800	560	4640	2560	400	200	80	0	240	120	0	200	80	80	S/M	S/M
<i>Protoceratium reticulatum</i>	S/M	S/M	S/M	2120	360	0	1200	2080	1440	800	880	800	160	160	40	120	80	80	0	0	0	S/M	S/M
<i>Protoperidinium crassipes</i>	S/M	S/M	S/M	240	200	40	160	320	160	120	80	320	80	0	0	0	40	40	0	0	0	S/M	S/M
FITOFITAGELADOS																							
<i>Heterosigma akashiwo</i>	S/M	S/M	S/M	80	680	240	0	0	0	0	0	0	200	160	120	360	240	200	0	0	0	S/M	S/M

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (N° cel/L)

2da Semana



Semana: 10 al 16 de mayo de 2015

Fechas: 13, 15 y 16 de mayo de 2015

ZONAS	002 GUAYNUNA															004 ISLA TORTUGAS			009 SALINAS			010 NONURA								
ESTACION	01-A-GUA**			01-B-GUA**			01-C-GUA**			02-D-GUA**			02-E-GUA**			01-A-TOR			01-A-SAL**			01-A-NON*			01-B-NON*			01-C-NON*		
PROFUNDIDAD (m)	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15
TEMPERATURA (°C)	20.2	19.9	19.0	19.7	19.7	19.7	19.8	19.7	19.5	20.5	20.2	19.8	20.7	20.3	19.7	....	....	....	20.6	19.7	19.1	23.4	23.2	23.2	23.5	23.1	22.9	23.9	23.0	22.6
DIATOMEAS																														
Grupo <i>Pseudo-nitzschia delicatissima</i>	1120	1920	2560	800	1520	2560	1040	960	1360	7040	10400	4320	10800	18240	3360	S/M	S/M	S/M	3840	1840	2120	6320	5840	6680	3320	1440	2080	2880	960	1520
Grupo <i>Pseudo-nitzschia seriata</i>	560	360	680	480	240	1280	2120	880	240	880	1360	1000	2520	2240	1480	S/M	S/M	S/M	3120	1240	720	160	240	280	0	0	0	80	0	0
DINOFLAGELADOS																														
<i>Alexandrium minutum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium monilatum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium ostenfeldii</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium peruvianum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium</i> sp.	0	0	0	0	0	0	0	0	0	0	40	0	80	80	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Azadinium spinosum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cochlodinium polykrikoides</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis acuminata</i>	0	0	0	0	0	0	0	0	0	0	0	0	80	40	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis caudata</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis rotundata</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis tripos</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Gonyaulax spinifera</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Karenia</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Karlodinium</i> cf. <i>veneficum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Lingulodinium polyedrum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum lima</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum minimum</i>	80	0	0	160	0	0	40	0	0	600	840	400	1680	720	40	S/M	S/M	S/M	280	40	0	40	40	0	40	0	160	0	0	0
<i>Protoceratium reticulatum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Protoperidinium crassipes</i>	0	0	0	40	0	0	40	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
FITOFLAGELADOS																														
<i>Heterosigma akashiwo</i>	0	0	0	0	0	0	120	0	0	320	640	800	1000	480	320	S/M	S/M	S/M	3360	440	280	0	0	0	0	0	0	0	0	0

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (Nº cel/L)

2da Semana



Semana: 10 al 16 de mayo de 2015

Fechas: 15 y 16 de mayo de 2015

ZONAS	017 CULEBRAS			011 BAHIA SAMANCO												012 BAHIA DE SECHURA			
ESTACION	01-A-CUL			01-B-SAM**			01-C-SAM*			02-A-SAM**			02-B-SAM**			12-B-SECH**			13-A-SECH
PROFUNDIDAD (m)	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....
TEMPERATURA (°C)	....	....	....	23.5	55.8	21.4	23.1	22.5	19.6	22.1	20.3	19.3	21.0	20.9	20.7	22.7	22.7	22.8	....
DIATOMEAS																			
Grupo <i>Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	400	2080	360	0	0	0	400	160	0	720	1520	1440	640	120	640	S/M
Grupo <i>Pseudo-nitzschia seriata</i>	S/M	S/M	S/M	880	6400	800	120	0	0	480	0	0	14720	7680	4320	0	0	80	S/M
DINOFLAGELADOS																			
<i>Alexandrium minutum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium monilatum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium ostenfeldii</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium peruvianum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium</i> sp.	S/M	S/M	S/M	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Azadinium spinosum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Cochlodinium polykrikoides</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis acuminata</i>	S/M	S/M	S/M	280	120	0	80	0	0	240	40	0	0	0	0	0	0	0	S/M
<i>Dinophysis caudata</i>	S/M	S/M	S/M	40	0	0	40	0	0	240	0	0	240	40	40	0	0	0	S/M
<i>Dinophysis rotundata</i>	S/M	S/M	S/M	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis tripos</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	S/M
<i>Gonyaulax spinifera</i>	S/M	S/M	S/M	40	0	0	0	0	0	80	40	0	0	0	0	0	0	0	S/M
<i>Karenia</i> sp.	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Karlodinium</i> cf. <i>veneficum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Lingulodinium polyedrum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum lima</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum minimum</i>	S/M	S/M	S/M	6400	160	0	1920	320	0	1080	120	80	160	0	0	440	40	0	S/M
<i>Protoceratium reticulatum</i>	S/M	S/M	S/M	80	40	80	560	320	40	120	160	0	0	0	0	0	0	0	S/M
<i>Protoperidinium crassipes</i>	S/M	S/M	S/M	760	40	40	320	240	40	320	120	0	0	0	80	0	0	0	S/M
FITOFLAGELADOS																			
<i>Heterosigma akashiwo</i>	S/M	S/M	S/M	0	0	0	0	0	0	80	80	40	0	0	0	0	0	0	S/M

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (N° cel/L)

3ra Semana



Semana: 17 al 23 de mayo de 2015

Fechas: 19, 21 y 22 de mayo de 2015

ZONAS	002 GUAYNUNA															004 I. TORTUGAS			009 SALINAS			010 NONURA								
ESTACION	01-A-GUA**			01-B-GUA**			01-C-GUA**			02-D-GUA**			02-E-GUA**			01-A-TOR			01-A-SAL**			01-A-NON*			01-B-NON*			01-C-NON*		
PROFUNDIDAD (m)	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15
TEMPERATURA (°C)	21.5	21.3	21.0	21.4	21.4	21.3	21.4	21.3	21.3	21.7	21.6	21.5	21.5	21.6	21.7	....	....	....	21.1	20.9	19.9	23.1	22.6	22.8	23.7	22.6	22.4	23.0	22.4	22.0
DIATOMEAS																														
Grupo <i>Pseudo-nitzschia delicatissima</i>	480	360	720	160	400	480	640	320	1200	720	160	480	720	480	800	S/M	S/M	S/M	360	1280	1560	132880	171120	164160	178720	228400	189040	151200	140080	207520
Grupo <i>Pseudo-nitzschia seriata</i>	20560	18560	6880	16000	15680	15680	12880	20240	27760	6640	6800	7360	10320	18480	23040	S/M	S/M	S/M	8800	13200	12720	16160	24400	23040	26960	33600	19920	18680	13720	16640
DINOFLAGELADOS																														
<i>Alexandrium minutum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium monilatum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium ostenfeldii</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium peruvianum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium</i> sp.	0	0	0	0	0	0	40	40	40	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Azadinium spinosum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cochlodinium polykrikoides</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis acuminata</i>	0	40	40	0	0	0	0	0	0	480	80	120	320	80	80	S/M	S/M	S/M	120	40	0	0	0	80	0	0	120	0	80	0
<i>Dinophysis caudata</i>	120	40	0	0	0	40	0	0	0	320	160	40	640	160	320	S/M	S/M	S/M	0	120	40	0	0	0	0	0	0	0	0	0
<i>Dinophysis rotundata</i>	0	0	0	0	0	40	0	0	0	0	40	40	0	0	0	S/M	S/M	S/M	40	40	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis tripos</i>	0	0	80	40	0	0	0	0	0	80	80	0	80	0	40	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Gonyaulax spinifera</i>	0	40	80	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Karenia</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Karlodinium</i> cf. <i>veneficum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Lingulodinium polyedrum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum lima</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum minimum</i>	80	360	960	80	0	0	160	0	0	1120	0	0	560	0	0	S/M	S/M	S/M	120	40	120	160	80	160	40	160	320	80	120	80
<i>Protoceratium reticulatum</i>	0	0	0	0	0	0	120	0	40	120	80	80	560	240	0	S/M	S/M	S/M	0	40	0	0	0	0	0	0	0	0	0	0
<i>Protoperidinium crassipes</i>	0	0	0	0	0	40	0	0	0	240	240	320	160	0	40	S/M	S/M	S/M	80	0	0	0	0	0	0	0	0	0	0	0
FITOFLAGELADOS																														
<i>Heterosigma akashiwo</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (Nº cel/L)

3ra Semana



Semana: 17 al 23 de mayo de 2015

Fechas: 21 y 23 de mayo de 2015

ZONAS	017 CULEBRAS			011 BAHIA SAMANCO												012 BAHIA DE SECHURA			
ESTACION	01-A-CUL			01-B-SAM**			01-C-SAM*			02-A-SAM**			02-B-SAM**			12-B-SECH**			13-A-SECH
PROFUNDIDAD (m)	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....
TEMPERATURA (°C)	....	....	....	22.5	22.3	22.1	23.0	20.8	18.5	21.3	20.8	19.9	21.1	20.6	20.2	21.5	21.3	21.0	....
DIATOMEAS																			
Grupo <i>Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	720	320	960	80	0	0	80	240	80	840	720	160	11600	22400	10400	S/M
Grupo <i>Pseudo-nitzschia seriata</i>	S/M	S/M	S/M	3600	5840	8920	360	1760	1520	1360	1360	440	3160	2240	3720	1120	1560	1440	S/M
DINOFLAGELADOS																			
<i>Alexandrium minutum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium monilatum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium ostenfeldii</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium peruvianum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium</i> sp.	S/M	S/M	S/M	0	40	0	0	0	80	80	0	0	0	0	0	0	0	0	S/M
<i>Azadinium spinosum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Cochlodinium polykrikoides</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis acuminata</i>	S/M	S/M	S/M	0	40	0	0	0	80	40	0	80	0	0	0	0	0	0	S/M
<i>Dinophysis caudata</i>	S/M	S/M	S/M	240	0	0	80	40	0	200	600	160	0	0	0	0	0	0	S/M
<i>Dinophysis rotundata</i>	S/M	S/M	S/M	0	0	0	120	200	120	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis tripos</i>	S/M	S/M	S/M	0	0	0	0	0	0	80	0	0	0	0	0	0	0	0	S/M
<i>Gonyaulax spinifera</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Karenia</i> sp.	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Karlodinium</i> cf. <i>veneficum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Lingulodinium polyedrum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum lima</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum minimum</i>	S/M	S/M	S/M	160	0	0	480	280	160	0	80	80	0	0	0	0	0	0	S/M
<i>Protoceratium reticulatum</i>	S/M	S/M	S/M	80	0	40	120	120	40	0	0	40	40	0	0	0	0	0	S/M
<i>Protooperidinium crassipes</i>	S/M	S/M	S/M	0	0	40	160	80	280	120	160	40	0	0	0	0	0	0	S/M
FITOFLAGELADOS																			
<i>Heterosigma akashiwo</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

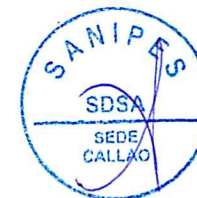
Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (N° cel/L)

4ta Semana



Semana: 24 al 30 de mayo de 2015

Fechas: 26, 29 y 30 de mayo de 2015

ZONAS	002 GUAYNUMA															004 ISLA TORTUGAS	009 SALINAS			010 NONURA								
ESTACION	01-A-GUA**			01-B-GUA**			01-C-GUA**			02-D-GUA**			02-E-GUA**			01-A-TOR	01-A-SAL**			01-A-NON*			01-B-NON*			01-C-NON*		
PROFUNDIDAD (m)	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15
TEMPERATURA (°C)	22.4	21.9	21.7	22.0	21.8	21.6	22.1	21.9	21.9	20.9	20.6	20.0	20.8	20.5	20.2	....	22.4	22.2	22.1	22.8	22.5	22.2	23.2	22.7	22.4	22.8	22.6	22.2
DIATOMEAS																												
Grupo <i>Pseudo-nitzschia delicatissima</i>	1040	600	1280	680	1440	1520	960	1920	6320	40	240	400	80	40	80	S/M	200	240	400	7240	19080	20480	14040	15200	12960	28720	31120	19520
Grupo <i>Pseudo-nitzschia seriata</i>	240	0	0	80	80	0	0	40	120	40	40	160	0	80	80	S/M	160	120	200	3840	8240	5440	8360	8880	7840	10880	8480	7240
DINOFLAGELADOS																												
<i>Alexandrium minutum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium monilatum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium ostenfeldii</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium peruvianum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Azadinium spinosum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cochlodinium polykrikoides</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis acuminata</i>	40	40	0	40	80	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	40	0	40	0	0	0
<i>Dinophysis caudata</i>	0	80	0	40	40	0	0	0	0	0	80	80	80	80	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis rotundata</i>	0	0	0	120	80	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis tripos</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Gonyaulax spinifera</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	40	0	0	0	0	0
<i>Karenia</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Karlodinium</i> cf. <i>veneficum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Lingulodinium polyedrum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum lima</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum minimum</i>	160	40	0	0	0	0	0	0	0	120	80	0	0	40	40	S/M	0	0	0	0	0	0	160	0	40	0	0	0
<i>Protoceratium reticulatum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	40	0	0	0	0	0	0	0	0	0	0	0
<i>Protoperdinium crassipes</i>	0	0	40	0	0	0	0	0	0	0	40	40	0	0	0	S/M	40	0	0	0	0	0	0	0	0	0	0	0
FITOFLAGELADOS																												
<i>Heterosigma akashiwo</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (Nº cel/L)

4ta Semana



Semana: 24 al 30 de mayo de 2015

Fechas: 28 y 30 de mayo de 2015

ZONAS	017 CULEBRAS			011 BAHIA SAMANCO												012 BAHIA DE SECHURA			
ESTACION	01-A-CUL			01-B-SAM*			01-C-SAM*			02-A-SAM**			02-B-SAM**			12-B-SECH**			13-A-SECH
PROFUNDIDAD (m)	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....
TEMPERATURA (°C)	....	....	....	22.9	23.2	23.0	22.8	21.3	19.5	22.6	22.3	21.7	22.3	22.0	22.0	22.9	22.5	22.1	....
DIATOMEAS																			
Grupo <i>Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	1880	5280	4320	0	320	160	89850	80048	7440	2720	1760	1440	80	80	120	S/M
Grupo <i>Pseudo-nitzschia seriata</i>	S/M	S/M	S/M	120	200	40	0	0	0	960	560	120	240	0	0	0	0	0	S/M
DINOFLAGELADOS																			
<i>Alexandrium minutum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium monilatum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium ostenfeldii</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium peruvianum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium</i> sp.	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Azadinium spinosum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Cochlodinium polykrikoides</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis acuminata</i>	S/M	S/M	S/M	40	0	0	80	0	80	40	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis caudata</i>	S/M	S/M	S/M	680	240	80	160	320	160	80	80	0	200	80	40	0	0	0	S/M
<i>Dinophysis rotundata</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis tripos</i>	S/M	S/M	S/M	80	0	0	0	0	0	0	0	0	40	0	40	0	0	0	S/M
<i>Gonyaulax spinifera</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Karenia</i> sp.	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Karlodinium</i> cf. <i>veneficum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Lingulodinium polyedrum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum lima</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum minimum</i>	S/M	S/M	S/M	2520	360	560	160	160	40	80	0	0	160	80	0	0	0	0	S/M
<i>Protoceratium reticulatum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Protoperdinium crassipes</i>	S/M	S/M	S/M	320	40	120	40	40	160	280	80	0	200	120	0	0	0	0	S/M
FITOFLAGELADOS																			
<i>Heterosigma akashiwo</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (Nº cel/L)

5ta Semana



Semana: 31 de mayo al 06 de junio de 2015

Fechas: 02, 04, 05 y 06 de junio de 2015

ZONAS	002 GUAYNUMA															004 ISLA TORTUGAS			009 SALINAS			010 NONURA								
ESTACION	01-A-GUA**			01-B-GUA**			01-C-GUA**			02-D-GUA**			02-E-GUA**			01-A-TOR**			01-A-SAL**			01-A-NON*			01-B-NON*			01-C-NON*		
PROFUNDIDAD (m)	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15
TEMPERATURA (°C)	22.7	22.7	21.9	22.6	22.5	22.0	22.6	22.5	22.2	20.4	20.1	19.9	20.5	20.2	19.9	21.2	21.1	20.8	21.6	21.2	19.9	22.3	22.2	21.9	22.2	21.9	21.7	22.2	22.0	21.9
DIATOMEAS																														
Grupo <i>Pseudo-nitzschia delicatissima</i>	0	0	80	200	80	280	80	440	240	1160	560	1040	480	960	360	280	200	480	1520	960	1920	9400	5480	4200	5720	5200	2960	6560	4800	3600
Grupo <i>Pseudo-nitzschia seriata</i>	0	80	80	120	80	360	40	480	400	640	280	320	160	80	160	240	0	240	80	80	40	1120	80	240	1080	160	0	0	0	0
DINOFLAGELADOS																														
<i>Alexandrium minutum</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	0	0	0	0	0
<i>Alexandrium monilatum</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	0	0	0	0	0
<i>Alexandrium ostenfeldii</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	0	0	0	0	0
<i>Alexandrium peruvianum</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	0	0	0	0	0
<i>Alexandrium</i> sp.	0	0	0	0	0	0	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>Azadinium spinosum</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	0	0	0	0	0
<i>Cochlodinium polykrikoides</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	0	0	0	0	0
<i>Dinophysis acuminata</i>	40	0	0	80	40	0	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>Dinophysis caudata</i>	0	0	0	0	0	0	0	0	0	0	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis rotundata</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	0	0	0	0	0
<i>Dinophysis tripos</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	0	0	0	0	0
<i>Gonyaulax spinifera</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	40	0	0	0	0	0
<i>Karenia</i> sp.	0	0	0	0	0	0	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>Karlodinium</i> cf. <i>veneficum</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	0	0	0	0	0
<i>Lingulodinium polyedrum</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	0	0	0	0	0
<i>Prorocentrum lima</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	0	0	0	0	0
<i>Prorocentrum minimum</i>	80	0	0	80	80	0	80	40	120	600	800	160	1120	760	120	200	40	0	160	40	40	0	0	0	160	120	160	120	80	80
<i>Protoceratium reticulatum</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	0	0	0	0	0
<i>Protoperidinium crassipes</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	0	0	0	0	0
FITOFLAGELADOS																														
<i>Heterosigma akashiwo</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	0	0	0	0	0

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (Nº cel/L)

5ta Semana



Semana: 31 de mayo al 06 de junio de 2015

Fechas: 05 y 06 de junio de 2015

ZONAS	017 CULEBRAS			011 BAHIA SAMANCO												012 BAHIA DE SECHURA			
ESTACION	01-A-CUL			01-B-SAM*			01-C-SAM*			02-A-SAM**			02-B-SAM**			12-B-SECH**			13-A-SECH
PROFUNDIDAD (m)	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....
TEMPERATURA (°C)	....	....	....	22.8	22.7	22.8	22.8	22.0	20.9	21.2	21.2	21.0	21.1	21.0	21.0	20.8	21.0	20.9	....
DIATOMEAS																			
Grupo <i>Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	720	1120	2240	1880	880	1360	240	320	800	160	400	960	2880	4320	5440	S/M
Grupo <i>Pseudo-nitzschia seriata</i>	S/M	S/M	S/M	440	1560	17840	6080	5680	9200	80	280	280	1920	3440	4400	7600	4160	2960	S/M
DINOFLAGELADOS																			
<i>Alexandrium minutum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium monilatum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium ostenfeldii</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium peruvianum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium</i> sp.	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Azadinium spinosum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Cochlodinium polykrikoides</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis acuminata</i>	S/M	S/M	S/M	0	40	0	40	80	0	0	0	0	0	40	0	0	0	0	S/M
<i>Dinophysis caudata</i>	S/M	S/M	S/M	80	240	160	640	560	240	120	0	0	120	80	0	0	0	0	S/M
<i>Dinophysis rotundata</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis tripos</i>	S/M	S/M	S/M	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Gonyaulax spinifera</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Karenia</i> sp.	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Karlodinium</i> cf. <i>veneficum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Lingulodinium polyedrum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum lima</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum minimum</i>	S/M	S/M	S/M	12080	11760	2960	23760	21920	2640	320	400	200	160	240	160	0	0	80	S/M
<i>Protoceratium reticulatum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Protoperidinium crassipes</i>	S/M	S/M	S/M	0	160	0	120	80	40	40	0	0	40	160	160	0	0	0	S/M
FITOFLAGELADOS																			
<i>Heterosigma akashiwo</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.