طي

طي1 ᵝ طي

طي2 طي

طي3 طي

طي4 ᵝ طي

طي5 № طي

طي6 ƚ ᵔᵒ ᵝ ᷉ طي

طي7 ᵝ طي

Đ

(1)

(2) ȇ ᷉ ᠬ ᠄ ȝ ᠬ ᴇ

Ȉ ᷀ ᠆ [2010]714 ˜

(3) ȇ ᷉ ᠯ᠄ ȝ ᠬ Ȉ

[2012]138 ˘ ᠠ طى ˘ 2012.5.24˜

(4) طى ȇ طى ᷉ ᠯ᠄ ȝ ᠬ

Ȉ Ȑ 2011 ȓ 2875 ˘ 2011.12.8˜

(5) ȇ طى ᷉ ᠯ᠄ ȝ ᠬ ᠭ

Ȉ Ȑ 2012 ȓ 1914 ˘ 2012.6.28˜

(6) ȇ ᷉ ᠯ᠄ ȝ ᠬ

Ȉ [2012]600 ˘ 2012.11.7˜

(7) ȇ ᷉ ᠯ᠄ ȝ ᠬ Ȉ طى

[2012]88 ˘ 2012.4.28˜

(8) ȇ ᷉ ᠯ᠄ ȝ ᠬ Ȉ

[2011]156 ˘ 2011.5.30˜

(9) ȇ ᠆ ᷉ ᠠ ᠯ᠄ ȝ ᠬ ˆ ˜

Ȉ ᠭ [2016]251 ˘ 2016.9.30˜

(10) ȇ Ӈ ᷉ ᠬ ᠄ ȝ ᠬ

Ȉ 2010.7.6˜

(11) ȇ ᷉ ᠯ᠄ ȝ ᠬ ǚ ᷉

Ȉ [2010]100 ˘ 2010.10.19˜

(12) ȇ ҭ ȝ ⅂ Ȉ ⅂

[2010]224 ˘ 2010.10.19˜

(13) ᵝ ƀ ĭ ȆE ⅂ ⅂

(14) ⅂

(15) ᵝ ƀ ⅂ ⅂

(16) Ձ ȁ

(17) ˆ ⅂ ˜

(18) ҭ ȝ ⅂

ˆ ⅂ ȆE ˘ 2018.7˜

(19) ȆE ʌ ƀ

(20)

(21)

(22)

Ŀ Ձ Ŀ

2013 3

2015 12 4 5000DWT 10000

563×30m 3

74 TEU 45.36

13 4

4

2018 6

2018 7 19

1.1

1.1.1

ˆ 1˜ ê ا ط Ì 2014 4 24 ˘ 2015 1 1 ~’

ˆ 2˜ ê ا ط Ì 2017 6 27 ˘ 2018 1 1 ~’

ˆ 3˜ ê ا ط ˆÌ 2015 8 29 ˘ 2016 1 1 ~’

ˆ 4˜ ê ا ط Ì 1997 3 1 ~’

ˆ 5˜ ê ا ط ˆÌ 2016 11 7 ˘ 2016 11 7 ~’

ˆ 6˜ ê ا ط E Ì 2016 7 2 ˘ 2016 9 1 ~’

ˆ 7˜ ê Ì 2017 7 16 ˘ 2017 10 1 ~’

ˆ 8˜ ê ˈ Ì ط [2017]4-¨ ˘ 2017 11 22 ˜

ˆ 9˜ ê ˝ ˝ Ì [2000]38-¨ ˘ ط ˘ 2000.2˜’

ˆ 10˜ ê ˈ Ì ƥ 2003 5-¨ ˘ 2003 6 1 ~’

ˆ 11˜ ê ا ط ’ Ì 2015 ~’

ˆ 12˜ ê ا ط Ì 2017 10 7 ˘ 2017 10 7 ~’

ˆ 13˜ ê ˝ Ь ˝ Ћ ˆÌ ˈ [2016]1493 -¨ ˘ ˈ ‘E ˧˘ 2016 8 11 ˜

ˆ 14˜ ê E ‘E ˄ Ь ˈ Ì [2006]28 -¨ ˘ ط ˘ 2006 3 ~’

ˆ 15˜ ê ˇ ˦ ê ȝ Ƕ ȝ ᵝ Ƕ ᴆ ˧ ˆ ˜ Ȉ

Ȉ [2015]4-" ˘ ط ˘ 2015 1 9 ˜'

ˆ 16˜ [2012]77 -" ê ˇ ˗ ᴇ

Ȉ

ˆ 17˜ [2012]98 -" ê ˇ ℗ ˗ Ƕ ᴇ Ȉ

ˆ 18˜ פ 39-" ê ط ˥ Ⴂ Ȉ 2016 3 30

˩ ˘ 2016 8 1 ˜'

ˆ 19˜ ê ˦ ط Ȉ (2005

11-" פ˘ 2005 8 20)'

ˆ 20˜ ˦ ط [2004]314 -" ê ˇ

Ȉ

ˆ 21˜ ê ˭ Ȉ 1997 12 3 ˜'

ˆ 22˜ ê ˧ ˋE ˧ ˇ ˭ ˝ ˥ Ȉ

ˆ ˧ [2000]10-" ˜'

ˆ 23˜ ê ˧ ˋE ˧ ˇ ˝ ˥

˥ ˇ Ȉ ˧ [2000]74-" ˜'

ˆ 24˜ ê ˧ ˋE ˧ ˇ ˦ ˭ ⵎ ˥

№ Ȉ ˧ [2011]130-" ˜'

ˆ 25˜ ê ˧ ˋE ˧ ˇ ˝ ˥

Ȉ ˧ [2013]129-" ˜'

ˆ 26˜ ê ˧ ˋE ˧ ˇ ˦ ˝ ˥ Ȉ

ˆ ˧ [2013]135-" ˜ Â

1.1.2

ˆ 1˜ ê ᴇ ↕ - ↕ Ȉ HJ2.1-2011˜'

ˆ 2˜ ê ᴇ ↕ - Ȉ HJ2.2-2008˜'

ˆ 3˜ ê ᴇ ↕ - Ȉ HJ/T2.3-93˜'

ˆ 4˜ ê ᴇ ↕ - Ȉ HJ2.4-2008˜'

ˆ 5˜ ê ᴇ ↕ - Ȉ HJ19-2011˜'

ˆ 6˜ ê - Ȉ HJT394-2007˜'

ˆ 7˜ ê - ' Ȉ HJ436-2008˜'

1.1.3

1.1.3.1

ˆ 1˜ ê ˜ ˆ ʒ ˆ Ì [2012]138 ˘ ˇ ˆ 2012.5.24˜’
ˆ 2˜ ê ˜ ˆ ʒ ˆ Ì Ř 2011 ř 2875 ˘ 2011.12.8˜’
ˆ 3˜ ˇ ê ˜ ˆ ʒ ˆ Ì Ř 2011 ř 97 ˜’
ˆ 4˜ ê ˜ ˆ ʒ ˆ ¬ Ì Ř 2012 ř 1914 ˘ 2012.6.28˜’
ˆ 5˜ ˇ ê ˜ ˆ ʒ ˆ ¬ Ì Ř 2012 ř 119 ˜’
ˆ 6˜ ê ˜ ˆ ʒ ˆ Ì [2012]600 ˘ 2012.11.7˜’
ˆ 7˜ ê Ч ˜ ˆ ˆ ʒ ˆ Ì 2010.7.6˜’
ˆ 8˜ ê ˜ ˆ ʒ ˆ ў ˜ Ì [2010]100 ˘ 2010.10.19˜’
ˆ 9˜ ê ˜ ˆ ʒ ˆ Ì ¬ [2010]224 ˘ 2010.10.19˜’
ˆ 10˜ ê ˜ ˆ ʒ ˆ Ì ê [2012]88 ˘ 2012.4.28˜’
ˆ 11˜ ê ˜ ˆ ʒ ˆ Ì [2011]156 ˘ 2011.5.30˜’

ˆ 12˜ ê ˤ ˇ ˬ ˆ ʒ ˥ ˆ

˜ Ì ˧ [2016]251_ ˇ 2016.9.30˜’

ˆ 13˜ ê ˤ ˆ ʒ ˥ ˇ

Ì ¨ ˤ˘ [2017]18_ ˇ 2017.1.18˜

1.1.3.2

ˆ 1˜ ê ˆ ʒ ˥ Ì Ʉ ˫

ˈE ˇ 2011.12˜’

ˆ 2˜ ê ˆ ʒ ˥ Ì

ˇ 2011.3˜’

ˆ 3˜ ê ˆ ʒ ˥ ˧ Ì Ʉ

˫ ˈE ˇ 2011.6˜’

ˆ 4˜ ê ˆ ʒ ˥ ˧ Ì

ˆ Ʉ ˫ ˈE ˇ 2011.12˜’

ˆ 5˜ ê ˆ ʒ ˥ Ì

Ʉ ˫ ˈE ˇ 2012.9˜’

ˆ 6˜ ê ˆ ʒ ˥ ط Ì

Ʉ ˫ ˈE ˇ 2013.12˜’

ˆ 7˜ ê ˆ ʒ ˥

Ì ˥ ˇ 2013 2015˜’

ˆ 8˜ ê ˆ ʒ ˥

Ì ط ˚ ˚ ˇ 2016.8˜

ˆ 9˜ ê ˆ ʒ ˥

Ì ط ˚ ˚ ˇ 2018.7˜

ˆ 10˜ ê ˆ ʒ ˥

Ì ˇ 2016.6˜’

ˆ 11˜ β ˆ 2015.12˜

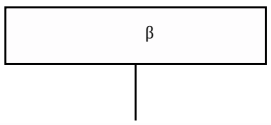
ˆ 12˜ ê ˆ ʒ ˥ Ʉ Ð

Ì

ˆ 13˜ ê ˆ ʒ ˥ Ì 2016.11˜’

ˆ 14˜ ê ˆ ʒ ˥ Ì

طي1.3-1 Â



طي 1.3-1 ’

˥ ˘ ч pH ầ ầ ầ

ầ COD ầ BOD_5 ầ ầ Â

ƀ

Ŋ ’

˘ ч TSP ầ PM10 ầ SO2 ầ NO2 Â

Ɓ

ч ’

ч ầ ɣ ΰ̋

Â

Б

Ŋ ’

˥ ΰ̋ A Â

ƅ

˥ ΰ̋ Â

1.4

1.4.1

ſ ˝ ˥

ˈ Ȅ ˧ ˈ Ȑ 2013 ȑ 129 ê ˈ Ȅ ˧

˝ ˥ Ȉ ˥

Ƕ ˥˘ ê Ȉ GB3095-2012˜ Ƕ Â

ƀ ˝ ˥

[2000]10 ê ˈ Ȅ ˧

˝ Ȉ ˈ Ȅ ˧ ˈ [2000]74 ê

ˈ Ȅ ˧ ˝ ˥

Ȉ ΰ̋ ˆ ˜ № ч ê

Ȉ GB3838-2002˜ ŉ Â

Ɓ ˝ ˥

ˈ Ȅ ˧ ˈ Ȑ 2013 ȑ 135 ê ˈ Ȅ ˧ ˥

˝ ˥ Ȉ β ʒ ˥ ˘ ˥

3 ˝ ˥ Â

1.4.2

ȁ ı

Ꭓ ˥ ı ˘ Ѣ ˘ Ŧ̓ ê Ҏ

Ȉ GB/T 18920-2002˜ ı Â ȉ

ɫ꙳ ê Ꮭ꙳ ʒ ˥ Ȉ

˘ Ꭓ ˜Ḥ ˘ ↕ Â

ч 1.4-1 Â

1.4-1 ᴇ

	ᴇ	⁻ᵻ	Ꞁ ǜ №	
	˥	GB3095-2012	ê Ȉ	Ꮒ
		GB16297-1996	ê Ȉ	
		GB3838-2002	ê Ȉ	ʼn
	ᵒᵒ	GB8978-1996	ê Ȉ	꙳
		GB/T18920-2002	ê Ҏ Ȉ	ı
		GB3552-1983	ê Ȉ	Ѣ ˥
		GB3096-2008	ê Ȉ	4a ȁ 2

1.4-2

1.5.2.2

ſ

ŵ

ê Ì (GB3552-83) ˜ Â

1.4-5 Â

1.4-5 ê Ì GB3552-83˜

-		ŏ
1		≤15 mg/L
2	ı	BOD_5≤50 mg/L
3		SS≤150 mg/L
4	ŏ ì	

‘ Â

Ŷ ˆ °

à ı

Ƈ ˆ ı ˘ Þ ˘ Ŧ’ ê ‘P

Ì GB/T 18920-2002˜ “ ı ” Â ˆ ° ŏ

Ƈ ê Ì (GB8978-1996)ˆ Ƈ˜

ˆ ˘ Ƈ Â 1.4-6 Â

1.4-6 ê Ì GB8978-1996˜

-		ê Ì ˆ GB8978-1996˜ˆ ˆ mg/L˜	ê ‘P Ì GB/T 18920-2002˜ˆ mg/L˜
1	pH	6~9	6~9
2	COD	500	
3	BOD_5	300	20
4	SS	400	-
5		20	-
6		-	20

Þ

˘ E ê ³ ³ Ì

(GB12348-2008)3 ˘ ê Ì (GB12523-90) Â

ê Ì (GB12523-2011) 2012 7 1 ˘

Ƣ ê Ì (GB12523-90) ê Ì (GB1

2524-90) ˘ 2013 3 ˘ ˘ ê

Ì GB12523-2011˜ ˜ ˘ 70dB(A)˘ 5

5dB(A)Â е ê ʒ ʒ Ì (GB12348-2

008)3 ˘ ч 65dB(A)˘ 55dB(A)Â

ĺ 1.4-7 1.4-8Â

1.4-7 ê ʒ ʒ Ì (GB12348-2008)

Ղ		ˆ / ˜
ê ʒ ʒ Ì(GB12348-2008)	3	65dB(A) / 55dB(A)

1.4-8 ê Ì (GB12523-2011)

Ղ	ˆ / ˜
ê Ì GB12523-2011˜	70dB(A) / 55dB(A)

1.5

1.5.1

˘ à Ղ ŭ β Ь

1.5-1Â ı ı № ˙ ҷ ҷ ч

ө қ ө ˘ ҳ ҷ

ҳ ҷ 8 β 4 β˘ Й 5#~8# β ŭ ŀ

Ƶ ˘ ҷ ҷ Ь Â

1.5-1

	Ղ	β	Ղ	β	
	ҭ ҷ	10m ө	ҭ ҷ	170m ө	˘ ˘ 2 6 ч h˘ 1842 4296 Â
	ҳ ҷ	25m қ ө	ҳ ҷ	10m қ ө	˘ 2 3 ч h˘ ŀ ч 9 14 δ ҷ˘ 2000 4100 Â
	ҷ	50m ө	ҷ	540m қ ө	˘ Ь ч
	ҷ	50m қ ө	ҷ	400m қ ө	˘ Ь ч
	ҷ	180m ө	ҷ	60m қ ө	˘ 3~6 ч h˘ 3000 9000 Â ˘ ҷ˘ ҳ ч ҷ Â
	ҷ	200m қ ө			

1.5.2

ˇ à Ղ ŭ β Ь

1.5-1 Â ı ı h ʒ

Ղ ʒ Ղ 8 β 4 β ˇ

Ì ˇ ì Ь Â

1.5-2

	Ղ	β	Ղ	β	
	¯ Ղ	10m ơ	¯ Ղ	170m ơ	ˇ ˇ 2 6 ч h ˇ 1842 4296 Â
	Ì Ղ	25m қ ơ	Ì Ղ	10m қ ơ	ˇ 2 3 ч h ˇ ì ч 9 14 δ Ղ ˇ 2000 4100 Â
	Ղ	50m ơ	Ղ	540m қ ơ	ˇ ˇ 2 3 ч h ˇ 810 2800 Â
	Ղ	50m қ ơ	Ղ	400m қ ơ	ˇ ˇ 2 3 ч h ˇ 3200 8800 Â
	Ղ	180m ơ	Ղ	60m қ ơ	ˇ 3~6 ч h ˇ 3000 9000 Â
	Ղ	200m қ ơ			
		500m қ¯ ơ		850m қ¯ ơ	ˇ ˇ 3 4 ч h ˇ 430 1400 Â
	ĭ Ղ	1200m қ ơ	ĭ Ղ	1250m қ¯ ơ	ˇ ˇ 3 4 ч h ˇ 1020 3200 Â
	қ Ղ	400m қ ơ	қ Ղ	800m қ ơ	ˇ ˇ 3 4 ч h ˇ 704 2300 Â
	‖ Ղ	650m қ ơ	‖ Ղ	1490m қ¯ ơ	ˇ ˇ 3 4 ч h ˇ 711 2300 Â
	Ղ	1530m қ ơ	Ղ	1750m қ¯ ơ	ˇ ˇ 3 4 ч h ˇ 806 2500 Â
	′ Ղ	900m қ ơ	′ Ղ	1400m қ ơ	ˇ ˇ 3 4 ч h ˇ 798 3000 Â
	Ղ	900m қ ơ	Ղ	1300m қ ơ	ˇ ˇ 2 3 ч h ˇ 703 2200 Â
	Ղ	500m қ ơ	Ղ	1100m қ ơ	ˇ ˇ 2 3 ч h ˇ 1105 3500 Â

1.5.3

1.5-3 Â

1.5-3 ŋ ʾ №

ŋ ʾ Ղ	Ƅ β	β	(t/d) ů	ŋ ʾ Ղ	Ƅ β	β	(t/d) ů	
ı ŋ	Й Й 12.2km		6 8 ȝ ȁ ŋ	ı ŋ	Й Й 12.8km		10 ȝ ȁ ŋ	β 0.6km˘ ŋ
ŋ	Й Й 13.8km		2 ŋ	ˀ ŋ	Й Й 26.2km		10 ȝ ȁ ŋ	˥ ч ˀ ŋ
˥ ŋ	Й Й 15.3km		2 ȝ ȁ ŋ					
ı ŋ ŋ			15 ȝ ȁ ŋ	ı 80 ŋ	1 β		16 ȝ ȁ ŋ	
Ḩ ŋ	Й Й 16.3km		0.5 ŋ	Ḩ ŋ	Й Й 16.9km		3 ŋ	β 0.6km˘ ŋ

1.5.4

ч 15km˘ Й

28km˘ ẗ ч 1.6% Â Й

2.1km˘ ˥ 16.1km˘

0.6km Â ẗ ı ı ħ ȝ ˥

ȝ ˥ 8 β 4 β˘ Й Ƅ

Â

ч ᴇ ˥ ˀ ȁ ȁ ˘

ɣ ů ˘ Ƅ Â

1.6

ᴇ └ ȁ Ð ȁ ȁ

ȁ Ð Ŧ ů ẗ № ˘

ı ȁ ı ı ɣ ů ı

ı ı Ѐ ʌ Â

˘ Ŧ Â

ꞁ ȁ ˝ ꞁ № ȁ ΰ № ˘

ҹ ̔

ʃ ı ۲ ΰı ı l ’

ƀ ı ’

Ɓ ΰ ȉ Ð ȁ ῃ№ Ŧ

ΰ ȉ № ’

Б ˘ ̀Ε ʌ ’

Ϭ ΰ № ’

Ѣ ΰ Â

2.1

1 2011 12 8 2011 2875

8 5000

140

4 70

2 2011 5 30 2011 156

2011 58

3 2011 12

2012 5 2012 138

5000D

8 10000 1034 99.6

37.8 144

TEU

4

2012 1914

4 5000

563m 74

5 2012 11 7 2012 600

˘ ҹ˛ 4 5000 ᵝ ǜ

˘ ҹ 563m˘ ҹ 74 Â

6 ä ﻁ ᆨ

Ð ˘ ̀E̤ 2013 3 ˘

2015 12 Â

7 ä 2016 11 ˘ ̀E̤

̀E̤ └ ê Ἶ᷄ ʒ ᢉ

Ȉ 2017.1.18˘ ‗ ᠷ ɣ [2017]18 ê ᠷ ̃

Ἶ᷄ ʒ ᢉ ̃ Ȉ Ŧ ί Â

2.2

Ἶ᷄ ʒ ᢉ ᵝ ˘

̃ 29.5km˘ Ӣ 1.9km˘ Ӣ ҹ

1013.5km Â ҹ ķ 114°32′59″˘ ‗ 30°39′28″ Â ᵡ S111 ä S109

ǜ ᆨ ᢉ ǜ ˘ № Â ᵝ ﻁ ﻁ

1 Â

̀E̤ 2013 3 ˘ 2015

12 ˘ 4 5000DWT ᵝ ̂ ̀I 10000

˜ ǜ ˘ ᆨ ҹ 563×30m˘ ᆨ 3 ƀ ᵡ

˘ ҹ 74 TEU̓ ᢉ ᠷ ҹ 45.36 ̀E ˘ 13

̂ ȉ ˜ ä 4 ˘ ˘ ä

ä ä ä ί ä ä ä ä ä

Â

ᢉ ̓

ᢉ

ǚ

ר

2.3

2.3.1

ˆ 1˜

4 5000 ᵦ˘ ᆩ 563m˘ 30m˘

˘ ˘ ᆩ ч 10m˘ 36 ˘ ᆩ

Φ1800/Φ1650 ˘ 4 ˘ 144 Â

ᆩ 3 ƀ Ϫ ˘ ч ˘ ч 75.5 ˘

1# ҉ ᵒ˘ 15m˘ ἳ 18m Â 3# ᵒ #1₁ ˘

ἳ ᆩ ч 22×15m Â

ˆ 2˜

ገ № ገ ˘ Ნ ҝ ầ ᵒ Ნ ᵒ ч ᵒᵒ ገ ầ

ᵒᵒ ገ ᵒᵒ ገ Â

ŵ ᵒᵒ ገ

ᵒᵒ ገ ɦ ầ ɤ ǚ Â ἳ

ገ ᵒ˘ ᵒ ’ ҝ ᵒ ч ’

ҝ Â 11# № #3 #4₁ Â

ჳ˘ ч 40m˘ ч 5 ˘

Ნ 5 ჳ Â 13

ᵦ˘ ң ᵒ 2 ᵦ˘ 17 ˘

63m Â ჳ ɤ 9m 12m Ნ № ˘ Ნ ɤ 3 ɦ

№ ˘ ᵦ 5846 Â ҝ ч Ғ ˘

˝ 40m ˘ ᵦ 169 Â

/ +¿(ª é pĐ 0 ķ ʊ˘ ȝ˘

7 ˘ ᵝ 1197 Â

Ŷ ᵅᵖ ꞁ

ꞁ 10 ˘ ɬ 1326m²˘ 16067m²˘

ᵝ ꞁ ʊ˘ ƀ ⁼ Â

ŷ ᵅᵖ ‸ ꞁ

ᵅᵖ ‸ ꞁ ħ ȁ ȁ ΐ ȁ ȁ ꟷ ȁ1 ȁ

Â ΐ ˘

ķ ʊ ȁ ⁼ ʊ˘ ɬ ч 12900m² Â ΐ ȁ ȁ ꟷ

ɣ ΰ ᵅᵖ ↕ ꞁ ķ ˘ ˘ ΐ

2574m² Â ʊ˘ ⁼ ʊ˘ #1 1 ȁ

ΰ Â

Ÿ

ꞁ 3 Ⴑ ħ ˘ ΐ ⁼ ʊ ч 20m ħ ħ

˘ Ⴑ ķ Â ķ ʊ 4 4 Ŧ ˘ ΐ

ң Ⴑ ħ ч 15m Â

Ⴑ 5 ˘ ΐ ч 9m 12m Â

ɣ 20m Ⴑ ħ № ˘ Ⴑ 2 12m P

ź % D wýC

← →

Ŷ ← →

← → ← → ← → ← →

ŷ ← → h

← → ← → ← → h

Ÿ ← →

← → ← → ← → ŭ ← →

Ź ← → h

← → ŭ ← → ← → h

ˆ 3˜ ʅ

h ʅ 2.4-1 Â

2.4-1 h ʅ

	ʕ	β				
			-ш		-ш	
1		╕	40t-35m̆ Lk=16m	2	35t-35m̆ Lk=16m	1
2		╕	35t-28m̆ Lk=16m	14	40t-26m̆ Lk=16m	3
3		╕	35t-40m̆ 7	28	35t-40m̆ 7	6
4		╕	40t-40m̆ 7	4	40t-40m̆ 7	4
5		╕	40’	80	40’	16
6		╕	40’	80	40’	16
7		╕	Q=8ť 7	8	Q=8ť 7	2
8	ŭ	╕	3t	16	3t	3
9		╕	80t	16	80t	8
10	˚	╕		1		
11		╕		1		
12				1		1
13				16		

2.3.3

ˆ 1˜

ħ ˛ ˘ ˘ ˘ Â

ƀ ɺ ˘ 10/0.4kV ı Â#1 ı β ˘ 800kVA

ı ɺ ꞔ ꞁ ʾ #2 ı β ˘ 1600kVA ı ɺ ꞔ ꞁ ʾ #3

ı β ˘ 1600kVA ı ɺ ꞔ ꞁ ʾ #4 ı β

˘ 2000kVA ı ɺ ꞔ ꞁ ʾ #1 ı #2 ı № ꞔ 10kV

ɺ ˘ ɺ № Â#3 ı ȁ#4 ı № ꞔ

10kV ɺ ˘ ɺ ƀ № Â

35m 15m ˘

10m Â

ˆ 2˜ ȕ ˪

ꞁ ȁ ȁ ȁ ȁ

ȁ ˘ β ꞁ Â

ˆ 3˜ ȕ

ŵ

ꞁ ˘ ȁ ˘ ƀ

Â Ŋ ˘ β № ˘

DN150˘ ɺ ≥0.35Mp˘ ≥5.2L/s Â ꞁ ˘

˘ Â ˘ DN150˘ ˘ Â

Ŷ

ꞁ ˘ ˘ Ŋ

˘ ɺ ˘ β ɺ ˘ DN250˘

ɺ ≥0.58Mp˘ ≥50L/s Â ˘

ȕ Q˘ ꞁ ȁ ȁ ˘

Â

ŷ

ꞁ № ˪ Â ȕ ꞁ

Â ꞁ

˘ ꞁ

Ꭓ ꞁ ı ˘ ꞁ ı

Ꭓ˘ ꞁ Â

ˆ 4˘

ȁ

ȁ ı ȁ ᵞ

ȁ ı ᵞ Â

ȉ ȁ ȁ ȁ № № ˘

ı Â

2.4

2.4.1

ꞁ᷊̂ ȝ ꞁ ч 5000DWT

ᵝ 8 ˘ Ȝ ч 144 TEU˘ ꞁ ч 1034×30m˘ ꞁ 5

ƅ ˘ ꞁ ч 99.6 ̀E ˘ ꞁ ȁ ꞁ ꞁ Â

ꞁ᷊̂ ȝ ꞁ ˘ Ꭓ

˘ Ձ ꞁ ꞁ ƅ Ȝ ˘

ꞁ᷊̂ ȝ ꞁ № ˘ ῷ 1~4# ᵝ ΰ

Â

˘ 4 5000DWT ᵝ ˆ

̀I 10000 ˜ ΰ ˘ ꞁ ч 563×30m˘ ꞁ 3

ƅ Ꭓ ˘ ч 74 TEU Â ꞁ ꞁ ч 45.36

̀E ˘ 13 ˆ ȉ ˜ 4 ˘ ˘

ȁ ȁ ȁ ı ȁ ȉ ȁ ȁ ȁ ȁ

Â

ꞁ᷊̂ ȝ ꞁ طي ꞁ ˘

1~4# ȁ 3 ˘ Ꭓ

13 4 ˘ ΰ ħ ȁ ˆ

ˉ ȁ ȁ ȁ ȉ ȁ ȁ ȁ ȁ ȁ ı

ȁ Â

ƅ 2.4-1 Â

2.4-1 [illegible]

				[illegible] 1~4# [illegible]
	[illegible]	8 [illegible]	4 [illegible]	1
	[illegible]	5000DWT	5000DWT	1
	[illegible]	8 [illegible] 144 TEU	74 TEU	2 TEU
	[illegible]	1034m [illegible] 1~4# [illegible] 563m	563m	1
		1034m×30m 8 [illegible] 563m×30m 1~4# [illegible]	563m×30m	1
				1
		5 [illegible] 1# 75.5×15m 2~5# 75.5*18m [illegible] 1~4# [illegible] 1~3#	3 [illegible] 1# 75.5×15m 2~3# 75.5*18m	1
		99.6hm² [illegible] 1~4# [illegible] 45.36hm²	45.36hm²	1
		23 30.6 m² [illegible] 1~4# [illegible] 13 11.50 m² 1	13 1 11.50 m²	[illegible] 8# 3# [illegible] 1
		20 7.2 m² [illegible] 1~4# [illegible] 3 3.07 m²	4 4.27 m²	1 [illegible] 1.2 m²
[illegible]	[illegible]	[illegible] 31182m²	[illegible] 39154m²	[illegible] Â
		110kV [illegible] 5 10kV Â	4 , 110KV	[illegible]
		[illegible] Â	[illegible] Â	
		[illegible] № № Â	[illegible] № № Â	
		[illegible] 1 Â	[illegible] 1 Â	

[illegible] WIT

				Ь 1~4# ß
		1 à ı	1 à ı	
		ơ 150m 3m	/	8 ß 4 ß˘ ˥ ơ ч 5~8# ß ˥ ˘
		₼ 20	₼ 10	
	ı	1.5hm²	1.99hm²	ı ˙ 0.49hm²
		ŭ ‘ 3520m à 8 ╕ à 8 à 8t à № 1.2t à № 8 à 8 à 2 à Â	ŭ ‘ 400m à 1 ╕ à 1 à 0.2t à № 0.11t à № 1 à 1 à à 2 à 1 Â	
ỉ		338687.86 ″Ḥ	223934.93 ″Ḥ	/
		2005.89 ″Ḥ	815.11 ″Ḥ	/
	ß	330	330	
		360	360	
	ʒ └	4 3 └ ʒ	4 2 └ ʒ	
	₼	1304 ^ 1~8# ß ~	163 ^ 1~4# ß ~	
		99.6 m2	66.66 m²	

2.4.2

№ ╕ ˘ Ь 1~4# ß ŭ Ⱪ ˘

à ß ß à ß à ɻ à ╕ à Ⱪ

ı ı Â ı ı Ⱨ ‘

ŵ Ȝ 74 TEU̇ 144 TEU 72 TEU ˙ 2 TEU̇ ˙ № ч 2.7% Â

Ŷ Ⱪ ß 8# 3# ˘ ỉ

Ь ’ ˙ 1.2 m² Â

ŷ ^ ˥ ~ à à Â

Ÿ ₰ ^ ˥ Ⱨ ß ĸ ơ à ˥ ĸ ơ˘ Ь

˥ ß ˘ à ₼ à à à

ĭ ˘ طي2 طي3 Â

Ź ĭ 1 ה

˘ ı Ƶ ٦ ı Â

[2015]52 ê ˇ √ № ʒ ı

Ì ˇ ˘ à à à 5

ı ˘ ı № Ь ı ˘ ה ץ

Â

2.4.3

ˆ 1˜ h ı ı №

ɜ ٦ Ь 1~4# β ŭ Ƶ

˘ β β à β à ٨ à ה

ı ı’ Ȝ 74 TEU 144 TEU 72 TEU ˙ 2

TEU ˙ 2.7%’ Ƶ ٨ Ь1 ˘ β

8# 3# ì Ь ˘

˙ 1.2 m² ה ɾ à à Ь

ı ı Ь Â ˘ ה Ƣ ʒ

Â

1˜

ʒ ʒ ˘ Â

٨ ˘ β ˘ β ˘

ʒ˘ – h ˘ ŭ

h à Â

ч ĭ Ь Ƣ Й ٦ ˘ ٦

˘ ה Ƣ ʒ ʒ Ь ң

Â

ŵ ʒ

4 β˘ ʒ 2 β Ƣ ʒ ˘ β

1 ה ʒ˘ Ƶ ʒ Ь ٦ Â

٦‘ 2 ה Ƣ ʒ’

‘ 5 ה +8 ה Ƣ ʒ’

1

4 4

4

10 +16

2

2

2.4-2

2.4-3

2.4-2

		(m)	150	80	480	/	/	
		[dB(A)]	51.5	52.5	22.4	55.0	54.6	0.4
		(m)	780	290	30	/	/	
		[dB(A)]	37.2	41.3	46.5	48.0	49.0	-1.0
		(m)	260	170	125	/	/	
		[dB(A)]	46.7	46.0	34.1	49.5	58.6	-9.1
		(m)	280	190	140	/	/	
		[dB(A)]	46.1	45.0	33.1	48.7	53.2	-4.5
		(m)	785	300	50	/	/	
		[dB(A)]	37.1	41.0	42.0	45.3	46.2	-0.9

2.4-3

		(m)	150	80	480	/	/	/
		[dB(A)]	54.5	56.1	25.4	**58.4**	65.9	-7.5
		(m)	780	290	30	/	/	
		[dB(A)]	40.2	44.9	49.5	51.1	56.3	-5.2
		(m)	260	170	125	/	/	
		[dB(A)]	49.7	49.5	37.1	52.8	70.2	-17.4
		(m)	280	190	140	/	/	
		[dB(A)]	49.1	48.6	36.1	**52.0**	64.4	-12.4
		(m)	785	300	50	/	/	
		[dB(A)]	40.1	44.6	45.0	48.5	52.6	-4.1

2.3-2 2.3-3 GB12348-2008 3 GB3096-2008 2

GB12348-2008 3 3.4 dB(A) GB12348-2008 3 GB3096-2008 2 2.2 dB(A) GB3096-2008 2

0.4 dB(A)

-4.1~17.4 dB(A)

2

˭ ᢉ Й ȁ ˘ Ѣ ê

Ȉ GB3096-2008˜ 2 ˘ ч 2.2 dB(A) Â

˭ ᢉ Ѣ ˗ ȁ ᢉ ˘

Й ˭ ᢉ ˘ ᢋ Ѣ Ῑ ˘

˗ ˘ Ѣ ˘ ΰ Ŋ ˘ ῭ ȁ

ȁ Â

2.5

Ἶ῀ ȝ ᢉ ч 338687.86 Ῑ

ч 2005.89 Ῑ ᡰ 0.59% Â

Ἶ῀ ȝ ᢉ 223934.93 Ῑ

ȉ 815.11 Ῑ ᡰ 0.36% Â ˘

ȋ 2.5-1 Â

2.5-1

ˉ		β			
			/ Ῑ	/ Ῑ	
Ň №			**238.00**	**27.00**	
1			86.50	20.00	
2			131.50	7.00	
3			20.00		
ň № ΰ			**1319.80**	**482.56**	
1			143.00	50.41	
2	+		45.00		8 β ῭ 4 β˘ ᢉ ᵕ ч 5~8# β ᢉ ˘
3	ꭃ		1.00	1.00	
4	ı	m²	102.00	334.00	
5			18.00	11.80	
6	ı		20.00	20.00	
7	Ꮒ ΰ		950.80	45.35	
8			1424.66	685.12	˘ Ѣ
9			30.00	20.00	
ŉ №			**122.70**	**112.45**	

			/	/	
1			3.00	2.00	
2			5.00	5.00	
3			5.00	5.00	
			10.00	10.00	
			10.00	10.00	
1			59.70	33.35	2016 6 2018 7
2			20.00	20.00	
3				43.8	
			10.00	10.00	
			211.85	**116.50**	
			67.22	30.00	
			30.00	30.00	
			84.03	35.00	
			26.40	20.00	
			4.20	1.5	
			1892.30	738.51	
			113.54	50.00	
			2005.89	**815.11**	

2.6

2.6-1 [2017]4 8

[2017]4	

ʒ	[2015]52
[2017]4	

2011 12 ˘ ҥ ˩ ̀Ȩ ˪ ê

ʾ̇ ȝ ˥ ȉÂ 2012 5 ˘ ˧ ط

٢ Є 2012 Э 138 ̚ ê ̃ ʾ̇ ȝ ˥

ȉ Â

3.1

3.1.1

1˜

˥ 3 TSP à PM_{10} à SO_2 à NO_2 ê

ȉ (GB3095-1996) ҥ Â

2˜

˘ pH à à à COD à

BOD_5 à à 7 ê ȉ (GB3838-2002) ʼn

ʼ Ґ ˘ pH à 2 ê

ȉ (GB3838-2002) ʼn ˘ ɦ ₀ Â

3˜

˘ ˥ ˘ ˘ ɦ

˘ ᴇ ˥ Â

4˜

˘ à à à à à 5

ê ȉ GB15618-1995˜ ҥ ˆ 6.5≤pH ≤7.5˜ Â

5˜

˘ ᴇ 7 56 ˆ ˜ʼ ˽ 43 ( )˘

ὶ ч ˘ ч 16 ˘ ˽ 10 ˘ 10 ˘ 7 ʼ

˽ 27 ˘ ὶ ˽ 10 à ˽ 12 ˘ ˽ 5 ʼ 8

15 57 Â

ˆ à à à ˜ ɦ à Â Ӣ

ᵒᵒ 1.5km˘ ᵒᵒ ˥ 15.5km Â

6、

3.1.2

1、

2、

100m 12km

5.6t/d

15mg/L

3、

(GB12523-90)

(GB12523-90)

4、

5、

47572 47672 200

300 47153 219

3.1.3

1

2

3

GB12348-2008 3

3.6dB(A)

GB3096-2008

3

GB12348-2008 3

GB12348-2008 3

GB3096-2008 3

GB3096-2008 3

4

Â

5˜

ѫ ч 103.68t/ă ч 38.4t/ă ὶ

ʎ ˘ ч 1t/a᾽

ʗ ѫ ч 157.68t/a᾽

ᵒᵒ ч 57.6t/ ᾽

ầ ᵒᵒ ч 31.4t/ă ὶ ˆ ɣ ŭ

˜ ʎ ˘ ч 1t/a Â

ʗ ᵒᵒ ˆ ʎ ˜˜ ὶ ч 2.7t/a ầ

ч 3.3t/a Â

3.1.4

33 ˝Ḫ˝ № №

˘ ɜ Ł ɜ Â ᵒᵒ Ƶ˘ 1300

˘ ˆ ʗ ɜ Â ŭ ˘ Ʊ

˘ Ь Â ˆ

˘ ˆ ɜ ˘ ʗ

˘ ⇔ Â

3.1.5

˘ ₮ ἳ ˘ ˚ ầ

˘ Â ἱ ʌ ˘

˘ ὲ ʌ Â

ὲ ʌ ₮ ˘ β ầ β ầ β ɣ Â

3.1.6

SO_2 ˘ Ł ч Â

Ҥ Â

ʗ ᵒᵒ Ƶ˘ ʗ ˘

Ƶ ˘ ʗ Ł Â

3.1.7

Ҥ h ч Ҥ Â Ҥ 160t ˘

NNE 2.4m/s
4.9 №
5.3 5.7 6.0 4.0
0.70 5.45
(NW 10m/s) 3.5
№ 3.95 4.4
7.48 2.1
0.47
4.21
NNE 2.4m/s
2.0 №
2.2 2.4 2.5 1.55
0.29 2.29
(NW 10m/s) 1.68
№ 1.89 2.14
3.39 1.23
0.25
2.05

3.2

3.2.1

3.2.1.1

2.5 3.0m

350m

300m

3.2.1.2

SS

Ь β Ь β Ƣ ˘

ť Â

Ь δ ч˙ ˙E ˘ ˘

Â

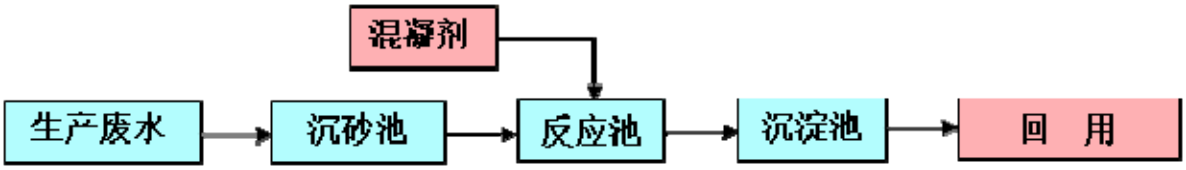
Ɔ ˘ ‖ Ƶ Â

C˝ h L ˆ˚˚ à

à ‖ ˘ h ŭ Â

˛ ˘ Â

˘ ˀ ч h ˘ ť ظ 3.2-1 Â



ظ 3.2-1

3.2.1.3

ʃ ˠ ˘ ˙ Ī˘

˘ Â ˘ ì ˙ ˥ ˘

ˀ ˠ ì Â

Ь ʒ ˘ 22 6 à ˀ ŭ

ʒ˘ ˥ Â

Ɓ ê Ì (GB12523-90) ˘

Ʊ h ₮ ˘ Ƶ ˥ Â

Б˙ ˆ ˘ ˙ Â

Б Â ˘ Ð

Ð ˆ 19:00 21:00˘ ˘ 21:00 ˀ Ƶ ˆ˘

ˆ Â

Ь β ˙ ˘ Ƶ˘ β ˥ ˘

Â

Ь ˘ ˚˚ ˘ Ƣ ӟ

˘ ˥ Â

3.2.1.4

ſ à ʔ Â

ƀ ʜ Â

Ɓ ˇ ˇ ǐ ˇ

Ƶ˘ ʜ Â

Б ʔ à à № Ƶ˘ à

Â

б à ʔ à ˇ ƴ ŭ

Ⴍ ˇ ʔ Ь ˇ Ɛ

3.2.1.5

ˆ 1˜

ŵ ˇ Ⱶ ʒ

Â

Ŷ β Ь β Ƣ ˇ

ť Â

ŷ Й ˇ

ʔ ˇ L ˇ Ɗρ ŭ Â

Ÿ ˇ à № à ѽ

ˇ L Â

Ź β ˇ Ⅵ ˇ

Â

ź ˇ Â ˇ

Й ŭ ˆ 4 6 ˜ ƴ ŭ

ˆ 5 8 ˜ 12 2 ˇ

Â à ť ʒ β

Â

Ⅵ ˇ Ⅵ

ʔ ˇ ť Ʊ ˇ Ɗρ ˇ

Ⅵ ˇ Ƶ Ɂ ˇ ƴ ʜ

Â ˘ ↕ ˘ Ծ ˀ

h ˘ Â

Ż ч ˘ β п ı ˘

Ļ ʒ à Â ˘ ʒ Â

ż ˘ Þ Â

Ž ˆ ˜˜ ɾ Ƶ ʜ ˘ ˘ ˘

Ƶ ʔ ʒ ˘ Â ĺ

ʒ ŭ̆ ʽE Â

ž 3 ɛ ʔ à ˍ à ˍ

ŭ̆

ˆ 2˜

ŵ ˘ ƴ Â

Ŷ ˚˚ ʔ ˘ Ƣ ơ Þ ˙˙ à ˘

ƴ ı Â

ŷ ʔ ˩ ˘ ˘

Â

Ÿ ˘ 51158m˘ 22.8hm²

1.19 m³ ı 4.95 m³ 4000 à 14200

˘ 6.62hm² 10.18hm² 14085m˘ 19

˘ 5 ˘ 1287m³ 5.62hm² Â

ˆ 3˜ ı

ŵ ê ˊ Ỉ ı Þ ʔ ı 85% Â

ı 15000m² Â

Ŷ ˘ ˘ № ˍ ˘ ʔ

˘ Ƣ ӟ Ƣ ˘ Â

ŷ ʔ ɳ ơ ı Â ƴ ч h˘ ˘

ч h Â ı ˘ Þ Â

Ÿ ʔ ˆ ʔ ı ˊ ˘ ɾ

ŭ̆ Ғ ˘ Þ Ƣ Â

Ź ʔ ı Ƣ ˘ Ŧ ŭ̆ Þ Ƣ ʔ

3.2.3

3.2.3.1

15000m²

3.2.3.2

8m³/h

Q 1 … 1 … 100m³ … 1 … 10m³

№ 2 … 8m³/h

2

3.2.3.3

ŵ ˘ ˥ ˦ ȝ ˭ ˥ ˘

˥ ʊ ̇ 3m ˆ 150m ˘ 45 ̋Ḫ˜ Â

Ŷ ˘ ˥ ʊ ƀ 18m ˘

№ ı˘ ˘ ˠ ˦

˭ ˥ Â

ŷ ˥

- ˠ ˘ Ŋ Â
- ˥ ˘ ˥ `E ȁ ˥˘ ˥ ȝ˘ ̃Ḫ№ ˘ ˠ ȝ Â
- ̇ Ī ȁ ȁ ˘ ˠ Â
- ˥ ʊ̋ ˥ ̇ ı ˘ ˥ ˠ ˘ ʊ̋ ı Â

3.3

ʃ ˪ Ƕ ȝ ˪ ˘ Ƕ Â

ƌ Ŧ ˘ Ŧ

ȝ ˘ Ŋ Â

Ɓ ˘ ̇

Â

Б Ƕ ˘ Ŋ ˘ Ƕ Â

ʊ̋ β Â

Б Ƕ ȝ β ȝ ˥˘ Ƕ ȝ

Â

Ƅ ȁ ʊ̋ ˘ Ƕ Â

ƅ ˪ Ŧ ˘ ˥ Ŧ Ƕ Â

Ɔ ˪ ˘ ˘ ȝ Â

Ƈ ȁ ȁ ˘ 3520m ȁ

8 ˥ ȁ 8 ȁ 8t ȁ № 1.2t ȁ № 8 ȁ

8 ȁ 2 ȁ Â

3.4

3.5

2012 5 24 [2012]138

5000

8 (10000) 1034

99.6 37.8 144

((4 -6) (5 -8) 12

2

ˇ ˇ Â
( ) “ № à № ” ↕ˇ à Â Н
ˇ ° ˥ (8 /)
Ƶˇ Ь ˥ Ƶ Â
( ) п ѽ ɣ à ˇ Ɒ à à
Â ˥ σ ± 3 Â Н └ Ŧ ˇ
ê ʒ ʒ Ì GB12348 2008)3 ˇ
Â
(Л) ˇ └ Нʊ ˇ Ь
˥ Â ˇ ± ˇ
Нʊ Â Ь ˩ ˩ ˇ ˩ ˇ Ь
˩ ˩ Â
(Ѐ) п ı ı ˇ
ѡ ŭ Â ɒ à Ƣ ɒ
ˇ β ˇ Ч
ˇ ч
Â
à Н Ь h Ƣ à Ƣ à
Ƣ ” └ Â Ƶˇ β Ч ¨
˩ ˇ Ƣ Ƶ ¬ Â ˇ
Ч Â Ƶˇ ¬ Â ĭ
ˇ Â
à ɛ ɒ Ƶˇ à à
à ѡ 1 ˍ ˇ β
ɛ ɒ Â
Л à ˥ ¨ ˩ˇ № ” Ƣ
Â
Ѐ à È„ Ƶ 2 ˇ Ƶ №
˥ à ¨ ˩ ŭ à ˥ ˇ
0 Ь Â

4.1

4.1.1

4 1

4.1-1

	2.5 3.0m 350m 300m	(1) (2) (3) 350m (4) (5) (6) (7) (8) (9) (10)
		(1) (2) (3)

	Ŧ ĺ	Ŋ

Ɐ Ӣ ѣ à à№ ѽ ˘ ғ
ѽ ˘ ғ ˘ ƴ Â
‖ Ɗρ ѣ ˘ (4)
Ł SS ≐ Â
Б Ӣ ĺ ˘
Ь ˘ ғ Ƛ°°
Ь ǐ Â
Б Ҥ Â Ь
ŭ ˘ ˘ Ʉ
Â
Ь β Ь β Ƣ
˘ ĺ Â
Ь δ ч ˩ ʿE ˘
˘
Â
Ɔ ˘ ‖
Ƛ Â
Ƈ Ь Ł ʔ°°
à à ‖ ˘
Ь ŭ Â

	Ŧ ĺ	Ɒ
	ŵ ˇ Ƞ ʒ ▪ Â Ŷ β Ь β Ƣ ˇ ĺ Â ŷ Й ˇ ˥ ˇ L ˇ ◦◦ Ɗρ ŭ Â Ÿ ˇ ▪ à ˥ Â № à ѽ ˇ L Â Ź β ˇ Ɯ ˇ ▪ Â ź ˇ ˆ Â ˇ Й ◦◦ ŭ ^ 4 6 ~ ˇ ƴ ŭ ▪ ^ 5 8 ~ ˇ ▪ ▪ ^ 5 8 ~ ˇ 12 2 ˇ ▪ Â à ĺ ʒ β Â Ɯ ▪ ▪ ˇ Ɯ ˥ ˇ ĺ Ɒ ˇ Ɗρ ˇ Ɯ ˇ Ƶ Ƥ ˇ ƴ Ҥ Â ˇ ↕ ˇ Ʊ ˇ h ˇ Â Ż ч ˇ β п ı ˇ L ʒ à Â ˇ ◌ ʒ Â ż ˇ Ь Â Ž ^ ~ ˇ ɾ Ƶ Ҥ ˇ ˇ ◌ ˇ Ƶ ˥ ʒ ˇ Â ĺ ʒ ŭ Ɛ Â ž 3 ᴇ ˥ à ▪ à ▪ ŭ Â	(1) ˇ ◌ ʒ ▪ Â (2) β Ь β Ƣ ˇ ĺ Â (3) Й Ɒ ˇ à ˥ Â (4) L ˇ ▪ à № ѽ Â (5) 2013 3 ˇ h 2013 9 ~2014 3 ˇ ◦◦ ŭ ^ 4 6 ~ ƴ ŭ ▪ ^ 5 8 ~ ’ ғ Й Ɒ ˇ ▪

	ı 4.95 m³ 4000 à 14200 6.62hm² 10.18hm² 14085m 19 5 1287m³ 5.62hm² Â	2016 9 Â
	ŵ ê Ì ı Þ ĥ ı 85% Â ı 15000m² Â Ŷ № Â	(1) ı 1.99hm² ı ĥ ı 93% Â (2) № Ø 3 Ø Â

4.1.2

β Ŧ 4̇ 2Â

4.1-2

	Ŧ ΐ	Ꝺ
ʃ	π ῷ	

Ŧ ĺ

4.2

ط 4.2-1 Â

4.2-1 ط

		Ɒ
1	(1) Â Ь Ъ ŭ à Â (2) Й Й à № à Â (3) ŭ à ŭ Â	(1) ˘ β ̛ , , (2) Й Й à № à ˘ Ь Â (3) ˘ ˘ ˇ Â
2	(1) Â Й ŭ ŭ ((4 6) ŕ ŭ }5 -8) 12 - 2 Â (2) Ɒ ˘ ŕ à à à ч ˘ Ғ ʒ ˘ ˘ Â	(1) 2013 3 ˘ h 2013 9 ~2014 3 ˘ ŭ ^ 4 6 ˜ ŕ ŭ ^ 5 8 ˜ , Ғ Й Ɒ ˘ Й Ғ Â Ω β ط ˘ ŭ ˘ à0 à ŕ ŭ ì ^ à ˜ Â (2) 2016 6 20 ˘ 2018 7 à ʒ ʔ 2 ʒ ˘ № 23.5 2000kg à43.97 ˘ 33.25 ˝Ң Â ʔ ʒ Â
3	(1) “ № à № ” ↕˘ à Â (2) Н ˘ ʔ (8 /) Ƶ˘ Ь ʔ Ƶ Â	(1) ʔ № Ꞁ Â ʔ ˛ Ƶ Â (2) ʔ ^ ч 8m³/h˜ ˘ à à № Ƶ ˘ ʔ ˘ Ƶ , (3) ˘ à à ı ^ 3t/h˜ Ƶ ʔ ı ˘ ʔ ı Ƶ˘ ʔ ˘ Ƶ Â
4	(1) п ̛ ɣ à ˘ Ɒ à à Â (2) ʔ ʊ 3 Â	(1) ˘ ˚ ɣ ˘ Ī , (2) 8 β 4 β˘ ʔ ʊ ч 5~8# β ʔ ˘

		[illegible]
	(3) [illegible] GB12348-2008 [illegible] 3 [illegible]	[illegible] GB3096-2008 [illegible] (3) [illegible]
5	(1) [illegible] (2) [illegible] (3) [illegible]	(1) [illegible] (2) [illegible] (3) [illegible]
6	(1) [illegible] (2) [illegible]	(1) [illegible] (2) [illegible]
7	[illegible]	[illegible]
8	[illegible] 1 [illegible]	1 [illegible]

4.3 [illegible]

[illegible]

5.1

2013 3 2015 12

2013 3 2013 9 ~2014 3

2014 10

11

5.2

11

5.3

5.3.1

1 ầ ŋ

ħ ɥ ΰ ầ

ΰ ầ Â ΰ

ŋ ħ

(1) Й Й ȝ

Й ȝ Â

(2)

ᴥ Â

(3) Й ầ № ῴ ғ

Â

(4) ΐ ѣ ȝ ѣ ѣ ΐ Â

(5) ѣ ΰ Â

(6)

(7) ᴥ

ı ᴥ Â

(9) ᴥ ѣ Â

Ὲ ʌ Ն

Ƕ

ᴆ 20 Â

2 ầ

2013 3 2014 3

0.5km Й Й 1.8km

SS ầ COD 3 1 / 2 ầ Й 1

Â

2013 3 ~2014 3 SS ầ COD

ê Ȉ GB/T3838-2002 ŉ

Â

5.3.2

ħ ȉ ħ

(1)

(2)

(3)

(4)

(5)

350m

(6)

(7)

20

2

TSP 1 / 2

TSP

(GB3095-1996)

5.3.3

(1)

Ī Â

(2) ˘ ˚ ˘ 22:00-06:00

ʒ Â

(3) ˘ ˘ ɣ

Â

(4) ˘ ˘ ʅ Â

(5) Ƶ ˘

Â

(7) Â

ŭ ʻE ʌ ˥ ˘ ĭ 22ʻ 00~6ʻ

00 Ь ˘ ĭ Â

˘ ʜ ƀˆ ƀ 20˜˘ ˘

Â

2 à

β ʅ β ˭ ʅ à ˘ ʅˆ

˜ ʅ ˘ ʻ 1 / ˘

2 ˘ 1 ˘ 20min Â

ʻ ˭ ʅ à ˘ ʅˆ ˜ ê

ˆÌ GB3096-2008˜ 2 ˘ ˘ ч 0.2~9.7dB A˜˘

ч 76% Â ʅ ˘ ʅ Ь ˘

ĭ h ₀ Â

5.3.4

h Â

h Й ѣ ˘ ʅ ѣ ’

h ч ѡ˘ Â β Ʊ

h ʻ

(1) ˚ ˘ ʻE ʌ ˘

˘ ʒ ѣ Â

(2) Й Ʊ ˘ ʅ Â

(3) Ĺ ˘ ѣ à № ѽ Â

(4) Ӎ 2013 3 ˘ ħ 2013 9 ~2014 3 ˘ ΰ ч 2014 10 Â Ӎ ᵒᵒ ΰ ˆ 4 6 ˜˜ ϒ ΰ ˆ 5 8 ˜' ғ Ӎ Ŋ ˘ Ӎ β Ƒ Ӷ ˘ Â ȁ0 ȁ ϒ ΰ ȉ ˆ ȁ ˜ Â

(5) β ῴ ˘ ˘ ʒ ˘ Ӷ ᒪ ˘ ᒪ Ӎ ʒ ˘ ˥ Â

(7) ʒ ' ˘ Â

(8) ʿ 2016 6 2018 7 2 ʒ ˘ № 23.5 2000kg ȁ 43.97 ˘ 33.25 ˝Ḥ Â

ȉ ˘ 2016 6 20 ˘ ȁ ʒ ʒ ˘ 23.5 ˘ ȉ 5 ȁ 5 ȁ 3 ȁ 3 ȁ 2 ȁ 1 ȁ 2 ȁ 2 ȁ 0.5 ˘ ȁ ȁ ˦ 2000kg˘ 20.45 ˝Ḥ Â ˥ ˥ Ѐ ȁ Ѐ Â

2018 7 6 ˘ ꞁ ʒ ˥ ȁ ʒ ˥ ʜ ʒ ˘ 43.97 ˘ ȉ 10.4 ȁ 11.38 ȁ 10.37 ȁ 11.82 ˘ 12.8 ˝Ḥ Â

(9) β ط ᵒᵒ ᵒᵒ ȁ ȁ ΰ ȁ ᵒᵒ Â

(10) ˘ ϒ Â Ŋ ȁ ȁ ΰ ȁ ı ȁ ȁ ȁ ˘

2016 9

5.3.5

(1)

(2)

(3)

(4)

(5)

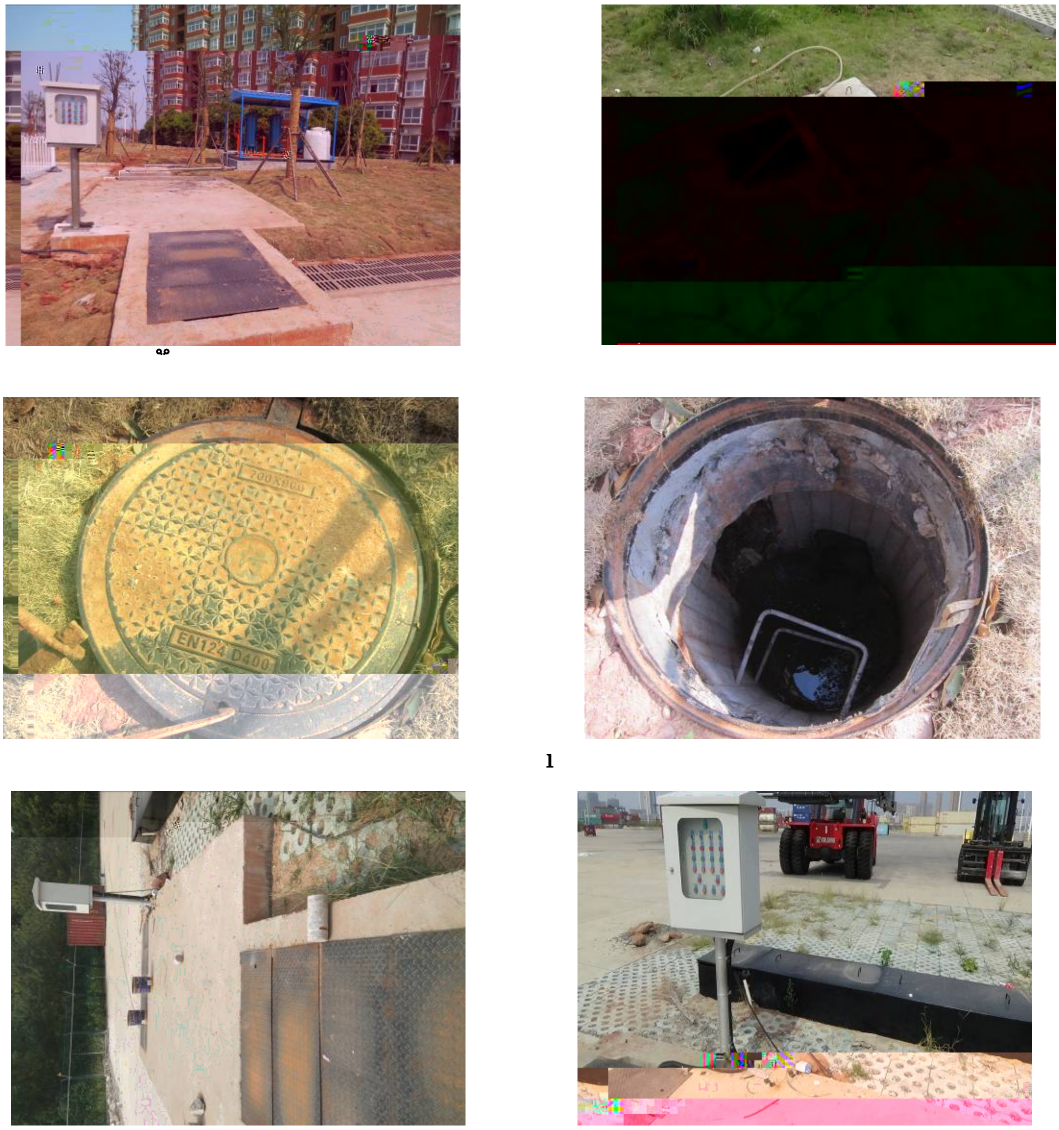
(6)

5.4

6.1

6.1.1

6.1.2

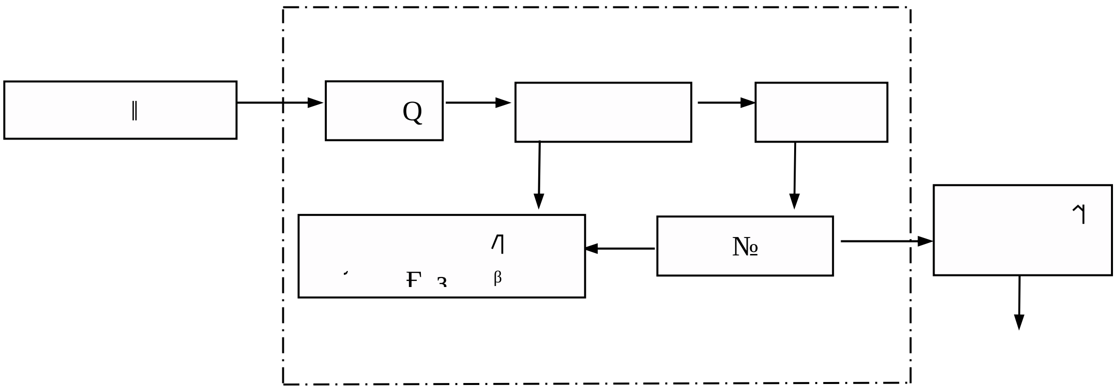


طي 6.1-1

6.1.2.1 ºº

ገ ºº Ҹ 8m³/h˘ Q 1 à 1 ˆ

50m³˜ à 1 ˆ 5m³˜˜ № 1 Â طي 6.1-2 Â



طي 6.1-2 ºº طي

6.1.2.2

Ɣ ˘ à ˆ 50m³˜ à

ı ˆ 3t/h˜ à ˆ 90m³˜ Ƶ Ɣ ı

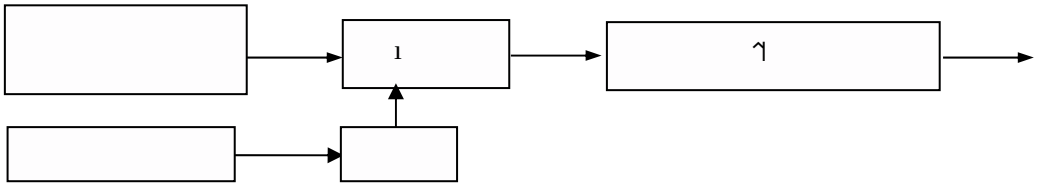
,

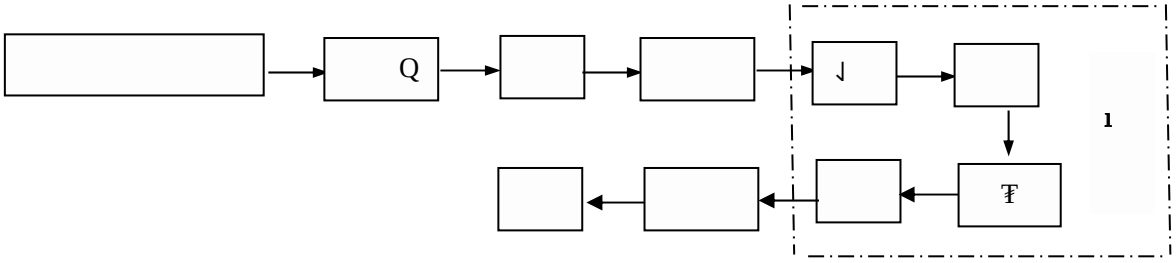
Ƶ Ь ὶ ı

Ƶ˘ Ɣ ˘ Ƶ

Â

ط 6.1-3 Â





ط 6.1-3 **ط**

6.1.3

ɣ ˋE„ 2018 7 6 ~7 ºº

Ŧ˙ Â

1.

ºº à Ŧ ˙ Â

2.

ºº ‘ pH à COD à BOD5 à SS à à ’

‘ pH à COD à BOD5 à SS à Â

3. ‘ 2 ˘ ;‘; Й ɣ Â

4. ‘ ê Ì GB8978-1996˜ Â

5. ŭ №

6.2-1

	Ň-Ň	ˆ WIT˜ Й	0.5km
	ň-ň		/
	ʼn-ʼn	100m	Й Й 2.4km

2.

ˆ Ň-Ň à ň-ň à ʼn-ʼn ˜ ˙ pH à à à

à COD à BOD_5 à à 8 Â

3.

2018 7 6 ~7 2 ˘ Â

4. ŭ №

à à 1 ˘ ˆ Й 0.5m ˜

ŭ 1 ˘ Ŋ Â

ŭ № Â

5. ŭ №

6.2-2 Â

˘ ˘ ʔ 3

ê Ì GB3838-2002˜ ʼn Â

6.2-2 **№** mg/L pH

		pH	DO	COD	BOD				
E		6~9	≥5	20	4	1	0.05	6	—
		7.70	7.70	19.00	3.80	0.25	0.03	4.20	29.60
-		0.35	0.02	0.95	0.95	0.25	0.60	0.70	
		7.68	7.80	16.00	3.70	0.35	0.04	4.20	28.60
-		0.34	0.01	0.80	0.93	0.35	0.80	0.70	
		7.69	7.80	14.00	2.80	0.28	0.04	2.90	28.70
-		0.35	0.01	0.70	0.70	0.28	0.80	0.48	
		7.88	7.90	18.00	3.80	0.48	0.04	4.20	29.60
-		0.44	0.10	0.90	0.95	0.48	0.80	0.70	
		7.89	7.90	12.00	2.40	0.50	0.04	2.80	31.60
-		0.45	0.21	0.60	0.60	0.50	0.80	0.47	
		7.89	8.00	14.00	2.70	0.48	0.03	2.90	31.80
-		0.45	0.26	0.70	0.68	0.48	0.60	0.48	
		7.90	7.80	11.00	2.20	0.32	0.04	2.40	29.70
-		0.45	0.06	0.55	0.55	0.32	0.80	0.40	
		7.91	7.80	16.00	3.00	0.48	0.04	3.20	29.70
-		0.46	0.06	0.80	0.75	0.48	0.80	0.53	
		7.93	7.90	14.00	2.80	0.43	0.04	2.90	29.90
-		0.47	0.11	0.70	0.70	0.43	0.80	0.48	

2

6.3

(1) ˚˚ à Ƶ

ê Ì GB8978-1996˜ ˇ

ˆ ˥ Â

(2) ˆ ı Ƶ˜

ˆ ’ ˇ à

à ı ^ 3t/h˜ Ƶ ˆ ı ˥ Â

(3) ˇ

Â

7.1

˘ ħ ŭ̋

ᵒᵒ ˘ ħ TSP à PM_{10} à SO_2 à NO_2 Â

7.2

ŋ ἱ ч˛

ˆ 1˜ ᛋ à ᵤ ˘

˘ Â

ˆ 2˜ ˘ ᛋ Â

ˆ 3˜ ᛋ ⁻ᵫ Â

ˆ 4˜ Ն Ն ˘ ˘ à

Â

ˆ 5˜ ᥣ ˥ ˘ Â

ˆ 6˜ ᥣ ı˘ ı 1.99hm² Â

ˆ 7˜ ч ˘ ı Ճ

Ғ Â

ᒪ ᥣ

طي 7.2-1

7.3

ч ˘ ˘

Ճ Â

ˆ 1˜

№ ˘ Ӣ 7.3-1 Â

7.3-1

		m)			
1#		15	E	TSP、PM_{10}、SO_2、NO_2	

2

2018 7 6~7 2 TSP、PM_{10}、SO_2、NO_2

SO_2、NO_2 PM_{10} 20 TSP 24h

TSP、PM_{10}、SO_2、NO_2 4

7.3-2

7.3-2

1	TSP		GB/T15432—1995
2	PM_{10}		HJ618—2011
3	SO_2	—	HJ482 2009
4	NO_2		HJ479 2009

3

7.3-3 7.3-4

7.3-3

		m/s		KPa
2018 7 6		1.2	28.2	99.96
2018 7 7		1.2	29.6	99.92

7.3-4 **ug/m³**

				%		
1#	TSP	166-175	300	58%	0	
	PM_{10}	89-92	150	617%	0	
	SO_2	13-14	150	9%	0	
	NO_2	27-29	80	36%	0	

4

TSP、PM_{10}、SO_2 NO_2 (GB3095-2012)

7.4

ʔ ʔ ʔ ~ TSP à PM_{10} à SO_2

NO_2 ê Ì (GB3095-2012) ʜ ˘

Ь ° Â

8.1

(1) Ɦ ɥ ɻ ɜ à Ŧ

Â

(2) ɜ ɻ ɜ ɻ 8 β

4 β˘ ɻ à ɻ Ь ˘

Ь ɛ ˘ ɛ ˘ Ɦ ɥ ɻ ɻˆ

˜ à ¨ ɻ ɻ Â

(3) ɻ ɣ ʊ ɥ ˘ ¨ ʊ ɥ ط

ˆ WIT˜˜ ɒ WIT ɐɐ Â

8.2

ɻ Ь Ƣ Ɒ L ˘ ĺ ɥ‘

(1) ɻ ˘ ɻ ɜ˘ ʊ ɻ

ˆ ɻ’

(2) ˘ ɐɐ ɣ ¨ ,

(3) ˚ Ī˘ ĭ ˘ ɾ ,

(4) ɻ ˚ ˘ ɲ ,

(5) ˚ ɻ ɪ˘ ɳ ʊ˘ ɻ ɪ Â

˘ ˘ Ɒ ɻ ʊ 150m 3m

ʊ 18m ɣ ɻ ¨ ɻ Â

ɜ 8 β

4 β˘ ɻ ʊ ɥ 5~8# β ɻ ˘

’ ɬ ‘E˳˳ ˘

ɻ ê Ì GB3096-2008˜ ɧ

Â Ƶ 5~8# β Ƶ Ɒ ɪ

Â

˘ ˘ Ь ˘ ŭ Ɒ ˘

à Â

8.3

1. β

ΰ ˘ 1m 4 ˘

¨ ϡ ϡ ϡ ~ 2 β˘ Ϙ

1 β˘ ΐ β 8.3-1 ظ 7 Â

8.3-1 β

		-¨	β	

		dB(A)			dB(A)		
	2018.7.6	65	61.7		55	51.5	
	2018.7.7		59.9			50.1	
˭ ʊ	2018.7.6	65	61.1		55	50.7	
	2018.7.7		60.5			49.3	
˭ ˥	2018.7.6	60	55.2		50	46.5	
	2018.7.7		55.4			46	
˝ ˥ ˜	2018.7.6	60	55.3		50	46.4	
	2018.7.7		54.6			45.3	
ˆ ˇ ˝ ˥ ˜	2018.7.6	70	63.8		55	53.6	
	2018.7.7		63.1			52.9	

˘ ˘ ˥ à ê ʒ ʒ

Ì GB12348-2008˜ 3 Â ˭ ˥

˝ ˥ˆ ˜ à ê Ì (GB3096-2008) 2

Â

˘ ˘ Ь ˘ ŭ Ŋ

˘ ˝ Â

8.4

(1) Ŋ ˥ à ɣ à˚ Ī

˘ ɣ ʎ ʒ ŭ Â

(2) ˘ ˥ à ê ʒ ʒ

ˆÌ GB12348-2008˜ 3 Â ˭ ˥ ˝ ˤ

˜ à ê Ì (GB3096-2008) 2 Â

(3) ˋ

ˆ˥ ʒ ˥ 8

β ˝ 4 β˘ ˥ ʊ ɥ 5~8# β ˥ ˘

ˇ Â Ƶ 5~8# β

Ƶ Ŋ ɪ Â

˘ β˚ ˘ Ŋ ʒ˘ ʜ Ꮮ Ŧ

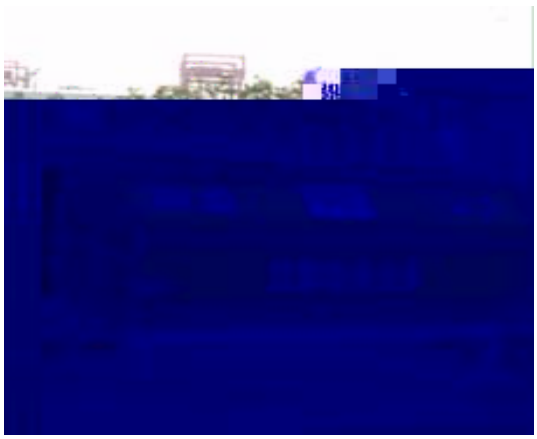
˘ ʜ ˘ Ϙ ˘ Ь ˘

ŭ Ŋ ˘ ˝ à Â

9.1

9.2

1.



طي 9.2-1

2.

(1) Ɒ ˘ ɪ Ѝ Ɣ 5mm +50mm +20mm ˘ ť 9.2-3 Â

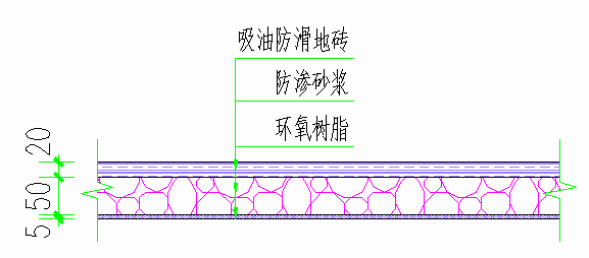
(2) ‘ ơ 75mm ť Â

(3) ‘ ⅃ ˘ Â

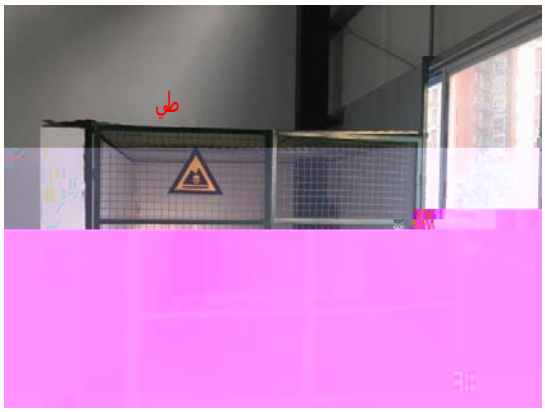
(4) ‘ ơ 20cm ˘ Â

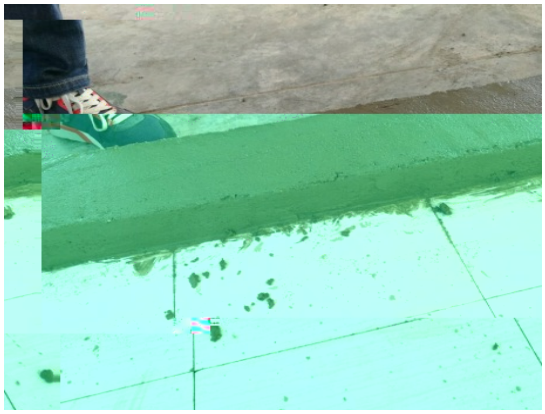
(5) ‘ ⅂ ơ ˘ 1.8m × 1.0m × 0.4m Â

(6) ‘ ’ ך ⅂ Ь Â

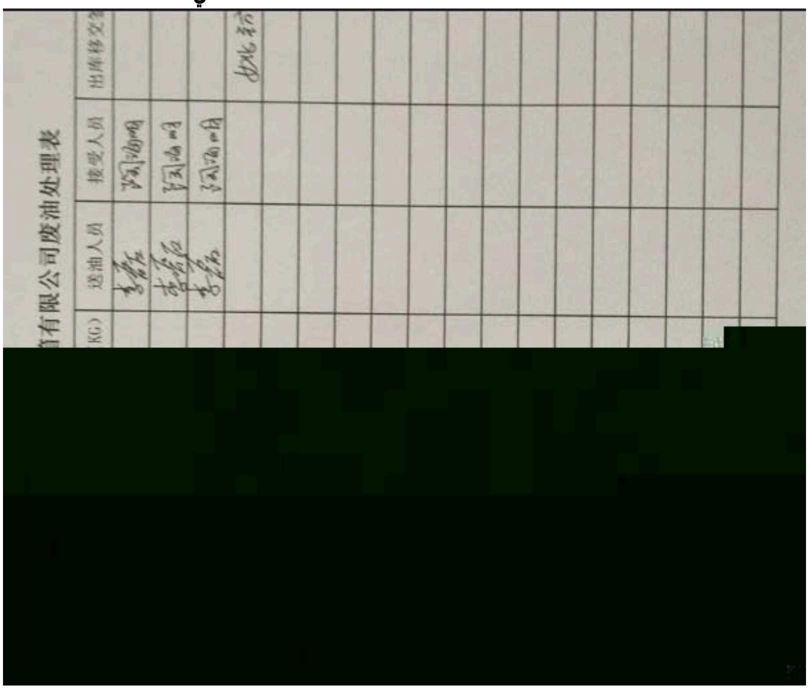


طي 9.2-2





طي 9.2-3 ⅂



طي 9.2-4 ⅂ Ŧ ╕

9.3

(1) └ ˘ ˘ مخه

Â

(2) № Ϫ ⅂ مخه

ʼ ȁ ⅂ ĭ ̀E ˘

⅂ └ ˘ Â

10.1

ʒ ٦ ٦

99.6 m² ч 66.66

m² 685m Â

№ h

ɣ ŭ ٦ Ȣ Â ٩ ʒ

Ь ŭ ʒ Â β

Ŋ ٦ Â

(1) β 2012 4 28 ٧ طى

طى طى [2012]88



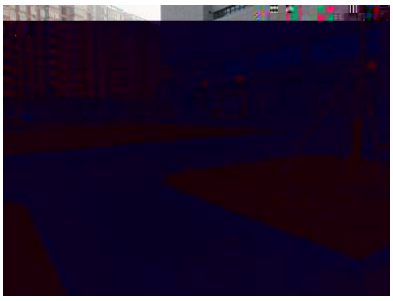


ه ا

طي 10.1-1


ا ا

ا ا




ا ا

ا ا

طي 10.1-2 ا

10.2

10.2.1

1.

100m 1600 1800m

2.

A.

9~10

4~6 10~12

B.

2010

C.

3.

10.2.2

(1)

(2)

(3)

(4) 2013 3 2013 9 ~2014 3 4 6 5 8

(5) ᵝ ῷ ˘ ˘ ҉ ʒ ˘

Ή └ ˘ └ Ӣ ʒ ˛ ˘ ˥

Â

(7) ʒ ,

˘ Â

(8) ᵝ ﻁ ᵒᵒ ᵒᵒ

˛ ȁ ˛ ȁ ˛ ΰ ȁ ᵒᵒ Â

(9) ˥ ı ˘ ᵒᵒ

ᵒᵒ ê Ȉ GB8978-1996˜ ҉ Ҳ˘

˘ ˥ ˘ Ҳ ˘ Ђ

ᵒᵒ Â Ҳ

˥ ı Ђ ˘ Ђ ᵒᵒ Â

(10)

ч ʒ ʒ ˘ ᵝ

ΰ Ð ˛ Â ᵝ Ђ ˥ ʒ

Ձ ˘ ˥ ʒ Â 2016

6 2018 7 2 ʒ ˛ ˘ № 23.5

˛ 2000kg ȁ 43.97 ˘ 33.25 ˝Ḩ Â

2016 6 20 ˘ ᵝ ȁ ˥ ʒ

ʾ ʒ ˛ ˘

23.5 ˘ ȉ 5 ȁ 5 ȁ 3 ȁ 3 ȁ 2

ȁ ʾ 1 ȁ 2 ȁ 2 ȁ 0.5 ˘

ȁ ȁ ˥ ˛ 2000kg Â 20.45 ˝Ḩ˘ ȉ

18.45 ˝Ḩ ȁ 1.0 ˝Ḩ ȁ ΰ 1.0 ˝Ḩ Â ˥

˥ Ȅ ˛ ȁ Ȅ Â

2018 7 6 ˘ ҭ҉ ʒ ˥ ȁ

ʒ ˥ ҥ ʒ ˛ ˘

43.97 ˘ ȉ 10.4 ȁ 11.38 ȁ 10.37 ȁ 11.82 ˘

12.8 ˝Ḩ Â ˥ ˥ Ȅ

˛ ȁ Ȅ Â

10.2.3

ᵝ ﻁ ᵔᵔ ᵔᵔ ᖶ

ȁ ᖶ ȁ ᖶ ΰ ȁ ᵔᵔ Â

10.2.3.1

ᵝ ﻁ ᵔᵔ ᵔᵔ ᖶ

ȁ ᖶ ȁ ᖶ ΰ ȁ ᵔᵔ Â 2013 3

˘ 2015 12 ħ ˘ ȉ Ҋ 2013 3

˘ ħ 2013 9 ~2014 3 ˘ ΰ ч

2014 10 Â

(1) ᵝ ˓ ⁛ 100m̂ Ň˜ ȁ ˆ ň˜ ȁ

Ҋ 100m̂ ʼn˜ Â

(2) ˓ Â

(3) ˓ 2012 9 ȁ 2013 4 ȁ 2014 4 ȁ 2015 4 2016 3 ȁ

2018 4 6 Â

(4) ˓ ê Ȉ ᖶ № Â

(5)

ŵ ᖶ ΰ

ȁ ȁ Ϫ Ŧ 10.2-1 Â

10.2-1 Ղ

Ղ												Ճ						
	2012 9			2013 4			2014 4			2015 4			2016 3			2018 4		
	Ň	ň	ŉ	Ň	ň	ŉ	Ň	ň	ŉ	Ň	ň	ŉ	Ň	ň	ŉ	Ň	ň	ŉ
Ň **Bacillariophyta**																		

1. *Melosira*

g

꜊										Ꭓ								
	2012 9			2013 4			2014 4			2015 4			2016 3			2018 4		
	Ň	ň	ʼn	Ň	ň	ʼn	Ň	ň	ʼn	Ň	ň	ʼn	Ň	ň	ʼn	Ň	ň	ʼn
31. *Oscillatoria formosa*	–	–		–			–	–		–		–		–			–	
32. *Spirulina jenneri*	–		–			–			–		–	–	–		–	–		–
33. *Raphidiopsis* sp.		–		–				–		–			–	–		–	–	
34. *Phormidium tenue*	–			–	–	–	–		–	–					–	–		–
35. Ꝁ *Lyngbya* sp.		–	–			–		–				–		–				–
36. *Dactylococcopsis* sp.	–		–			–	–	–			–		–			–		
37. *Cylindrospermopsis* sp.	–			–	–				–	–				–			–	
38. *Homoeothrix* sp.		–	–	–			–					–			–			–
ŋ **Chlorophyta**																		
39. *Closterium* sp.		–		–	–		–	–		–			–	–	–	–	–	–
40. *Microspora* sp.	–	–	–			–			–									
41. *Pleurotaenium* sp.					–		–						–			–		
42. *Scenedesmus* sp.				–		–		–	–	–					–			–
43. *Schroederia* sp.									–		–			–			–	
44. *Pediastrum* sp.	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–		–
45. *Ankistrodesmus* sp.			–		–				–	–								
46. *Selenastrum* sp.						–					–		–	–	–	–	–	–
47. *Spirogyra* sp.	–	–				–			–			–						
48. Ꝁ *Ulotrichales* sp.			–	–			–	–			–	–		–			–	
49. *Staurastrum* sp.		–		–				–		–					–			–
50. ꞽ *Cladophora* sp.					–		–		–			–	–			–		
51. *Chlorella* sp.						–			–		–		–			–		
52. *Closteriopsis longissima*					–			–	–					–	–		–	–
53. *Selenastrum bibraianum*		–	–	–			–	–					–			–		
54. *Tetraedron minimum*			–		–	–				–			–			–		
Ō **Euglenophyta**																		
55. *Phacus* sp.	–	–		–				–			–			–			–	
56. *Euglena* sp.			–		–				–			–			–			–
57. *Trachelomonas* sp.	–	–		–		–	–			–				–			–	
ō **Cryptophyta**																		
58. *Chroomonas caudata*		–			–			–	–	–	–		–	–		–	–	
56. *Cryptomonas* sp.				–		–	–					–	–		–	–		–

ʽ "+" ꜹ Ŧ Â

10.2-2 ΰ

														Ϫ				
	2012 9			2013 4			2014 4			2015 4			2016 3			2018 4		
	Ň	ň	ȵ	Ň	ň	ȵ	Ň	ň	ȵ	Ň	ň	ȵ	Ň	ň	ȵ	Ň	ň	ȵ
	14	10	14	11	15	12	13	12	10	14	14	12	14	14	14	14	13	14
	4	6	6	6	7	7	6	7	9	6	5	4	8	6	6	8	5	6
	5	4	4	5	2	4	4	4	3	4	2	4	3	4	3	4	3	4
	2	3	1	1	2	2	2	2	1	1	3	2	1	2	1	1	1	1
	2	2	1	2	1	1	1	1	1	1	1	1	0	2	1	0	2	1
	0	1	0	1	1	1	1	1	1	1	1	1	2	1	1	2	1	1
	27	26	26	26	28	27	27	27	25	27	26	24	28	29	26	29	26	27
10^4ind/L	7.87			11.61			12.67			11.72			10.65			11.33		
	1.13			2.66			2.89			2.54			2.34			2.61		
π	ằ ằ			ằ ằ ı			ằ ằ			ằ ằ ı			ı ằ ằ			ằ ằ		

ꞁ ˘ Ŧ 6 56 ˆ ˜ ˘ ằ ằ Ϫ ΰ Ŧ ˘ ı ı Ƅ ˘ ɣ ˘ ὶ ˘ ꙰ ч ˘ ч ˘ Ƕ π Ƕ ч ằ ằı ằ ˘ ı ı Â Ϫ ằ ᴇ ı ı Ƅ ˘ Ϫ ı ˘ π Ƅ ı ı ˘ Ƅ ˘ ꞁ ᵒᵒ Â

10.2.3.2 ꞊

(1) ᵝ ʿ ꙰ 100m̂ Ň˜ ằ ˆ ň˜ ằ Ӣ 100m̂ ȵ˜ Â

(2) ʿ ꞊ Â

(3) ʿ 2012 9 ằ 2013 4 ằ 2014 4 ằ 2015 4 ằ 2016 3 2018 4 6 Â

(4) ʿ ê Ȉ ꞊ № Â

(5)

ằ ằ Ϫ Ŧ ꞊ 10.2-3 Â

10.2-3

	2012 9			2013 4			2014 4			2015 4			2016 3			2018 4		
Protozoa																		
1. *Difflugia* sp.		–			–	–	–		–		–			–		–	–	–
2. *Arcella vulgaric*	–			–				–				–			–			–
3. *Strombidium* sp.		–	–			–				–			–	–		–		
4. *Litonofus* sp.	–			–	–		–					–		–				–
5. *Halteria grandinella*			–		–				–		–				–		–	
6. *Colpoda cucullus*		–				–	–	–		–			–			–		
7. *Didinium* sp.	–			–				–	–	–				–		–		
8. *Tintinnopsis Sinensis*	–		–	–					–		–		–				–	
9. *Cextropyxis aculeata*			–		–	–	–	–				–			–		–	–
10. *Strobilidium gyrans*		–		–				–		–			–			–		
Rotatoria																		
11. *Branchionus forficula*		–	–	–		–	–		–	–	–	–	–	–		–	–	–
12. *Branchionus calyciflorus*			–		–			–	–		–			–	–	–	–	–
13. *Branchionus diversicornis*	–	–			–		–			–		–	–	–	–	–		–
14. *Lepadella* sp.	–		–	–	–		–		–						–			
15. *Notholca* sp.		–	–			–		–		–	–		–			–	–	
16. *Kerafella valga*	–			–				–			–	–		–	–		–	–
17. *Kerafella quadrata*		–	–		–	–	–		–	–	–	–	–	–		–		–
18. *Euchlanis* sp.	–		–	–					–				–		–			
19. *Lepadella* sp.		–				–	–			–			–		–	–		
20. *Lecane luna*	–				–				–			–		–				–
21. *Asplanchna priodonta*		–	–	–			–	–	–	–	–	–	–		–	–	–	–
22. *Trichocerca longisrta*	–		–			–				–	–		–	–		–	–	
23. *Trichocerca cylindrica*	–	–		–			–				–	–		–	–			–
24. *Filinia* sp.	–	–			–	–		–		–			–		–	–		
25. *Schizocerca diversicornis*		–	–	–			–		–		–	–			–		–	–
26. *Polyarthra* sp.	–				–		–			–		–	–			–		–
		–																
27. *Sida crystallina*	–		–	–	–		–		–	–		–	–		–	–		–

	2012 9	2013 4	2014 4	2015 4	2016 3	2018 4

ˢ ˘ ꞁ ꞁ ˆ Protozoan˜ ȁ ˆ Rotifer˜ ȁ ˆ Cladocera˜ ȁ ˆ Copepods˜˘ Ŧ ꞁ 43 ˆ ˜ Â ȁ ȁ Ϫ ȍ Ŧ ꞁ ˘ ꞁ ı ı Ƅ ˘ ɣ ˘ ȉ ˘ ꙰ ч ꞁ ˘ ч ˘ ɦ п ı ı˘ ɦ ч ȁ ȁ Â 2013 4 2014 4 ˘ 2012 9 Ϫ 2015 4 Ӎ ˘ ɦ ƅ Ӎ ˜˘ Ӎ ˘ 2015 4 ꞁ Â 2016 3 ˠ ˥ ɦ ˠ Â 2018 4 ꞁ ɣ ȍ ˗ ˘ п Ƅı ˘ ɣ ȍ Ī Â

№ ˥ ˘ ꞁ ˚˚ ˘ ꙳ ˠ ꞁ ˘ Â

10.2.3.3

(1) ᵝ ʿ ꙳ 100㎡ Ň˜ ȁ ˆ ň˜ ȁ Ӎ 100㎡ ŉ˜ Â

(2) ʿ Â

(3) ʿ 2012 9 ȁ 2013 4 ȁ 2014 4 ȁ 2015 4 ȁ 2016 3 2018 4 6 Â

(4) ʿ ê Ȉ № Â

(5)

ȁ ȁ Ϫ 10.2-5 Â

10.2-5 ▪ ʔʟ

ʔʟ																		
	2012 9			2013 4			2014 4			2015 4			2016 3			2018 4		
▪																		
1. *Branchiura sp.*		–	–	–				–	–	–		–		–	–	–		–
2. *Branchiura sowerbyi*			–		–		–	–			–	–	–		–			–
3. Ⱪ *Limnodrilushoffmeisteri*	–	–	–	–	–	–	–		–	–	–		–	–	–	–	–	
4. Ⱪ *Limnodrilus* sp.	–					–		–	–			–		–				–
5. *Tubifex* sp.			–		–		–		–		–		–			–	–	
6. *Nais inflata*		–		–				–		–		–				–		–
7. Ⱪ *Telmatodrilusvejdovsky*	–	–	–	–	–	–	–		–	–		–	–	–	–	–		–
8. *Chaetogaster* sp.	–	–				–		–			–	–	–				–	–
9. Ⱪ *Bothrioneurum* sp.			–		–		–		–	–	–		–		–	–	–	
10. *Aulophorus* sp.		–		–			–	–						–	–			
▪																		
11. *Limnoperna lacustris*	–		–		–		–	–	–		–	–		–			–	–
12. *Lamprotula leai*					–	–				–			–			–		
13. *Cuneopsis pisciculus*		–		–			–	–			–	–		–		–	–	–
14. *Hyriopsis cumingii*	–		–			–	–		–			–			–			–
15. *Unio dauglasiae*		–			–			–		–	–		–	–		–		
16. *Corbicula fluminea*	–	–		–	–		–	–	–		–	–		–	–	–	–	–
17. ▫ *Oncomelania hupensis*	–	–	–	–		–	–				–	–	–	–		–	–	–
18. ∖ *Parafossarulus sinensis*	–			–	–			–	–	–			–		–	–		
19. *Parafossarulus striatulus*	–	–				–	–	–		–	–			–		–	–	
20. *Radix plicatula*		–	–	–	–			–		–		–		–	–	–		–
21. ∖ *Cipangapaludina cathayensis*		–	–	–					–		–		–		–		–	
22. *Cipangapaludina* sp.	–		–		–	–	–	–	–					–	–			
▪ **Arthropoda**																		
23. *Caridina nilotica gracilipes*	–		–	–	–			–		–		–	–		–	–		–
24. *Aeschna* sp.		–				–	–		–	–	–	–	–	–		–	–	–
25. *Limnochironomus* sp.	–	–	–	–	–	–	–	–	–		–	–		–	–		–	–
26. *Chironomidae*		–	–	–	–		–	–		–	–	–	–		–	–	–	–
27. *Heptagenia* sp.	–	–	–		–	–			–	–	–		–	–		–	–	

ʽ “+” ʔ Ŧ Â

10.2-7

					Χ			
	2012.3	2013.3	2013.10	2014.8	2015.3	2015.10	2016.2	2018.7
ᵒᵖ	15.23	8.65	6.67	6.38	5.81	5.03	3.8	11.7
	105	89	110	69	105	97	46	211
	13	17	20	17	20	14	8	18

Ь ầ ầ ầ

2.1km 16.1km

0.6km

2008 5 15 7 24

71 7310min

108 88419

1.37×10^{11}

7.64×10^{10}

4.23×10^{10} 1.03×10^{10} 1.96×10^{9} 2.52×10^{9} 2.71×10^{9} 1.04×10^{9}

68.75% 0.38×10^{8} 0.02

292.72 km

2012 5 28 7 5 N

29°50'35. 5"E 115°32'51.3" N 30°37'42. 2"E 114°49'38.4"

238 9280

№ 5 9 26 30 9.4 /100m³

190×10^{5} 485×10^{7}

243×10^{4} 380km —

20km 500km

130km 17km 2012

2008

2012

-

2.

10.2-8 ᥉ ꟹ ṻ

	ɣ						ȉ̀	
2010	0	0	0	0	0	68	0	0
2011	0	0	0	0	0	70	0	0
2012	0	0	0	0	0	50	0	0
2013	0	0	0	0	0	130	0	0
2014	0	0	0	0	0	90	0	0
2015	0	0	0	0	0	101	0	0
2016	0	0	0	0	0	67	0	0
2018	0	0	0	0	0	17	0	0

ʿ 2016 Ч ̋Ḥ 7 ˘ 2018 Ч ̋Ḥ 5 Â

ŵ ᥉ ꟹ ˧ ᣏ ṻ ı ı

ṻ ˧ ᣏ ˘ 19 80 ᢒ

ɣ ˘ 2009 ɣ ˘ 200ˋE ˘ 2010 ɣ ∆

ɣ ʾ 19 80 ᢒ ˘

2009 ĭ Й ˘ 3~5 ˘ 2010 ∆

ɣ ȁ ˘ Ч ɣ Â

˘ 2010 6.5ˋE ˘ 2010 2016

8~15cm 10~50 ꜰ ˘

Ч ħ Ч Â 2010

2016 ȉ̀ ᥉ ꟹ Â

Ŷ ᥉ ꟹ ṻ ı ı

ṻ ˘ ṻ ȁ 0 ȁ

ɣ ṻ ȉ̀ ꟹ ˆ ȁ ˜ ɣ ȁ ᥉ ꟹ Â

2018 ꟹ ʿ ɣ ȁ

ꟹ ꟹ ˘ 8~15cm 10~50 ˘

Ч ħ Ч Â

10.3

ſ ᵝ "ɣ Ч ħ˘ ȁ ȁ ȁ " ↕˘ ᢎ

ı ˘ ê ˃ Ȉ ı Â

ƀ Ŋ ℗ ˘ ɣ

ṻ ᢒ ˘ ṻ ṻ

Â

Ɓ β Ì ʒ Â 2016

6 20 2018 7 6 ˘ β à Ì ʒ

˛ 2 ʒ ˛ ˘ №

23.5 ˛ 2000kg à 43.97 ˘ 33.25 ˝Ḥ Â

11.1

11.1.1

99.57

66.66 m²

2012 4 28

[2012]88

2010 224

2010 100

11.1.2

2011 1

1000

11.2

10330m 8050m

48 7005m

5368 391 TEU

2365m 2185m

17 13 289 TEU

848 1760m 264.4 m² 22.6 m²

11.3

11.4

11.5

12.1

(1)

(2)

12.2.2

(1) GB8978-1996

(2)

(3) 1.99hm²

(4)

(5)

12.2.3

12.3

12.4

13

˘ β Ʉ ŭ ì Ʉ Ь ˘ L ê

ʔ ʒ ʔ Ʉ Ð Ǐ ʔ

Â β ˘

L˘ Â ƴ ʅ

Ʉ Â

13.1

ʔ ʒ ʔ 4 5000DWT

β^ `I 10000DWT ˜˜ Ɜ ч 74 TEU/ Â

h à à à ı à ‘ ˚˚ ˘ Ь ʅ à ʅ Â

Ь ˙ ʒ˘ Ʉ ㄱ Â ˘

Ь ˚˚ Ʉ Â № ˘ ˚˚ Ʉ h

ч‘ ^ ˜ ˘ ’ ^ ˜

Ь ˛ ˘ № ^ ㄷ˜ Â

№ ʅ ʒ

Ʉ ˘ Ʊ 135ť h NNE^ 2.4m/s˜ à

Ь Ъ NW^ 10 m/s˜˜ 90% ч 7650m³/s’

10% ч 32600m³/sˇ 19.6 Ƶ˘

ㄱ 44.96km² 19.6 Ƶ ˘ Ƶ Â

˘ Ʉ Â

13.2

13.2.1

`E„ ч ˚˚ à à ʒ à

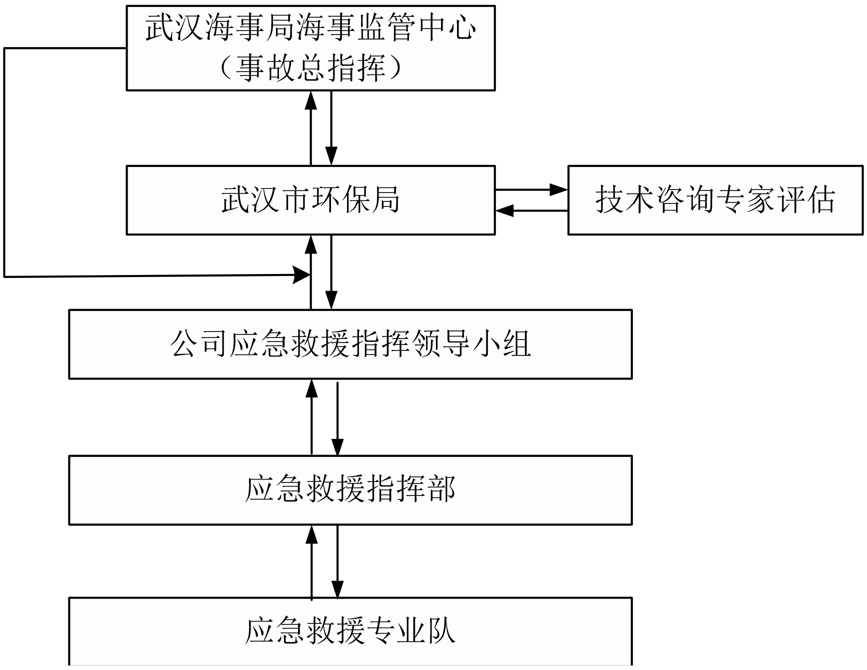
˘ `E„ ˘ ط ˘ `E„

˚˚ à ʒ à Â `E„

˘ Ʉ ˘ à ˘

Â

Ʉ ظ 13.2--1 Â



13.2-1

13.2.2

1\.

13.2-1

13.2-1

		027-59102777
		027-59102766
		027-59102700
		027-59102822
		027-59102800
		027-59102822
		027-59102833
		027-59102833
		027-59102833
		027-59102788
		027-59102866
		027-59102799
		027-59102727
		027-86961297

2.

3. Ғ ʒ

ч Ңʊ ð № ˘ ˘ Й

Ғ ʒ Â ˘ ˘ ˩ à

˘ à ˩ à Â Ғ ʒ

˘ Ƶ˘ à ŭ ˘

à Ғ ʒ ŭ ˀ β à à ˘

β ŭ ˘ Ʊ ˘ Ңʊ ˘ Й

ɒ Â ʜ ˘ Ƶ˘ ˘ à

ʒ ˘ ˥ ˘ Ⓟ Ңʊ Â

Й 2 ɒ˘ β à L Ңʊ ˘ ˠ Â

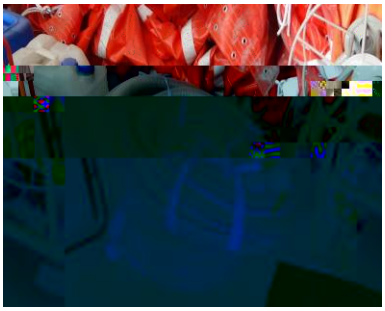
$ È Ä O † ŁЬ » °š. 6„CO№ Ct ` Ŏ § p,¼˜ \Ñ !` 1Ѳu‰y$ é \Ñ 0 ˥ M ϟ ¥

2ÀSÐJ Í

13.2-2 ß

‑	Н ß	β	ˆ 8 β ~	ˆ 4 β ~	
					β
1		m	3520	400	‑
2		┐	8	1	‑
3			8	1	‑
4		t	8.0	0.2	‑
5	№	t	1.2	0.11	‑
6	№		8	1	‑
7			8	1	‑
8			1	1	
9				2	‑
10				1	‑
11			2	Н β β Й, 200m˘ Н ┐ Н Н Ѵ ˆ	

№



№

13.2.3.2

ˆ 1˜ ƀ ê ˀ Ꞩ Ȉ

ê ˀ Ꞩ Ȉ JT/T451-2017˜˜

JT/T451-2017 ľ 5 ỉ ȁ ȁ

Ŀ ˜ ˘ ƀ JT/T451-2017

13.2-3 Â

13.2-2 ȕ

-ₘ	Ꞩ ȕ	ᵦ	JT/T451-2017		
1		m	ƀ ᵧ 3	400	
2		ꞁ	1m3/h	1 ꞁ ȁ 5t/h	
3			1	1	
4		t	0.2	0.2	
5	№	t	0.11	0.11	
6		m3	1m3	1 /1m3	
7	№			1	
8				1	
9				2	
10				1	

ꞁ ˘ ˆ ˜ ê ˀ Ꞩ

Ȉ JT/T451-2017˜ ˜ ˘ Ꞩ

Й Â

˘ Ң ˘ ˥

Â ĺ ‘

ŵ ˥ 100% “153040” ĭ ˘ ľ Ŀ Ƶ ˥ 15 № à ˥ 30 № à ŀ 40 № Ң ŭ ˘ Â

Ŷ ˆ ı ˘ à № à Ң ĿĴ Ĕ à № à Ң à ˆ ˜ ľ Ŀ ĭ Ĺ 116 ˆ ’ 10 ⁚ 37 № ’ à à à ˥ ⁚ ˥ ĭ Ĺ’ ĭ Ĺ ’ Ĺ ’ ˆ à ˆ ’ ⁚ = Ĺ Â

ŷ ƴ ľ 12395 Ŀ ⁚ F ч h à VHF ƴ ŭ ч ’ ƴ ľ ı Ŀ ľ ŋ ı Ŀ ч ˘ ƴ ľ GPS à ’ VTS à CCTV ˘ ƴ ŭ Ң Ŀ ⁚ = ˘ ч = ŋ Â Ÿ Ʊ ь Ĺ˘ ˆ ˜ à 300 ˘ ⁚ ˥ 150 ľ Ĕ ľ № à Ŀ ˘ ˝Ң Ң Ĺ Â Ң ŭ Ӣ № ⁚ ˫ Â ˘ Ң à ĸ ˘ ˥ 100% “153040” ĭ ˘ ˥ 15 № à ˥ à 30 № à 40 № Ң ’ “ ”Ƶ 5 № ₹ ’ ˆ ь ˠ 91% Â ĭ Ĺ ĺ 50t ⁚ Ĺ Â

1) Ң Ң

β Ң Ң ˥˘ ŭ 13.2-3 Â Ң Ң ’ ˆ β Ӣ 200m˘ Ң Ң Â

13.2-3 ˥ Ꞗ

Ꞗ		ꟷ	Ꞑ	β ˆ ˜		
Ꞗ Ꞗ	027-86980835	1	˃ ˆ	Ӥ 1012 Ȅ	Ӥ 1016-1004	027-86980823
		2	ˆ	Ӥ 1001 Ȅ	Ӥ 1004-984	027-87605011

2) Ꞗ ˆ

Ꞗ ˆ β ˥ ˥ ˃ ꞌ

ʊ˘ ʎ 48.81 Â Ꞗ ˆ

ˆ ˘ ˆ ȁ ȁ ˆ ʎ

ʒ˘ Ꞗ ˆ ȁ Ȉ ȁ ’ ꞷ

ˆ ˘ ȁ ű

ȁ ȁ ȁ Ī ɣ ű ɴ Â

Ꞗ ˆ 13.2-4 Â

˘ Ꞗ ˆ β ꞌ 2.7km˘

Ꞗ ˘ ˆ 10 № ˥ ˘ ɩ

ƀ 15 № ˘ ˘ Ꞗ ꞷ Ŋ Â

13.2-4

ꟷ	Ꞑ	β	
1			
1.1	Ḩ		600
1.2			400
1.3			200
1.4			1
1.5			200
1.6			
2			
2.1	˩		1
2.2			1
2.3	ꟷ		1
2.4			2
2.5			1
2.6	ʎ		1
2.7	ʎ		2
3	ƀ		

3.1			5
3.2			800
3.3			3
3.4			2
3.5			2
3.6			5
3.7			3
3.8			4
4			
4.1			1
4.2			1
4.3			1
5			
5.1			1
5.2			1
5.3			3
5.4			1
6			
6.1			50
6.2			1
6.3			1
6.4			2
6.5			2

Â Ĥ Ì JT/T451-2017 Ĥ Ĥ Ĥ Ĥ 200m Ĥ 2.7km Ĥ Ĥ Â Ĥ Ĥ Ì Â

13.2.4

1

Ì Ì à Ĥ à à

Ꞗ ȁ Ꞗ ȁ ƅ ȁ Ꞗ ʊ̏ Ꞗ

Â

ˆ 2˜

ŵ Ꞁ ꓡ ˘ ɣ ʊ̏ ɅꞀ ʒ ꓶ

Ꞗ ƅ ˘ ʊ̏ Ꞇ Ꞁ ɅꞀ ʒ

˘ ʊ̏ Ŋ ˘ Ꞗ Đ Â

Ŷ Ꞁ Ƒ ˘ ȁ

ʊ̏ ˘ Ч Â

ŷ ˘ Ꞗ ȁ ˘

Â

ˆ 3˜

Ŧ ꓶ Ŧ Ꞗ ˘ Ꞁ ʊ̏

Ꞇ Â Ꞗ Ɑ˜

˘ ʊ̏ Ҋ Ŋ ˘

Â

Ꞗ Ɑ˜ = Â Ꞗ

˘ ȁ ỉ ˘ ȁ ˘

ȁ ƅ ỉ ˘ Â

ȉ ỉ Ꞇ ħ ɣ ʊ̏ ƅ Ꞗ

ħ ȁ Ȅ ȁ Ꞗ ȁ Â

Ŋ ˘ ꓡ ƅ ˘

Â Ջ ˘ Ꞗ Ҋ ˘ β Ŋ

˘ ˘ Ŋ Â

ȉ طي طي 13-2 Â

Ꞗ ȁ Đ ȁ ˘

Ꞗ ˆ ˘ ỉ Ꞗ

ȁ Â

ˆ 4˜

Ȅ Ȅ ˘ Ȅ

˘ № Â

ˆ 5˜

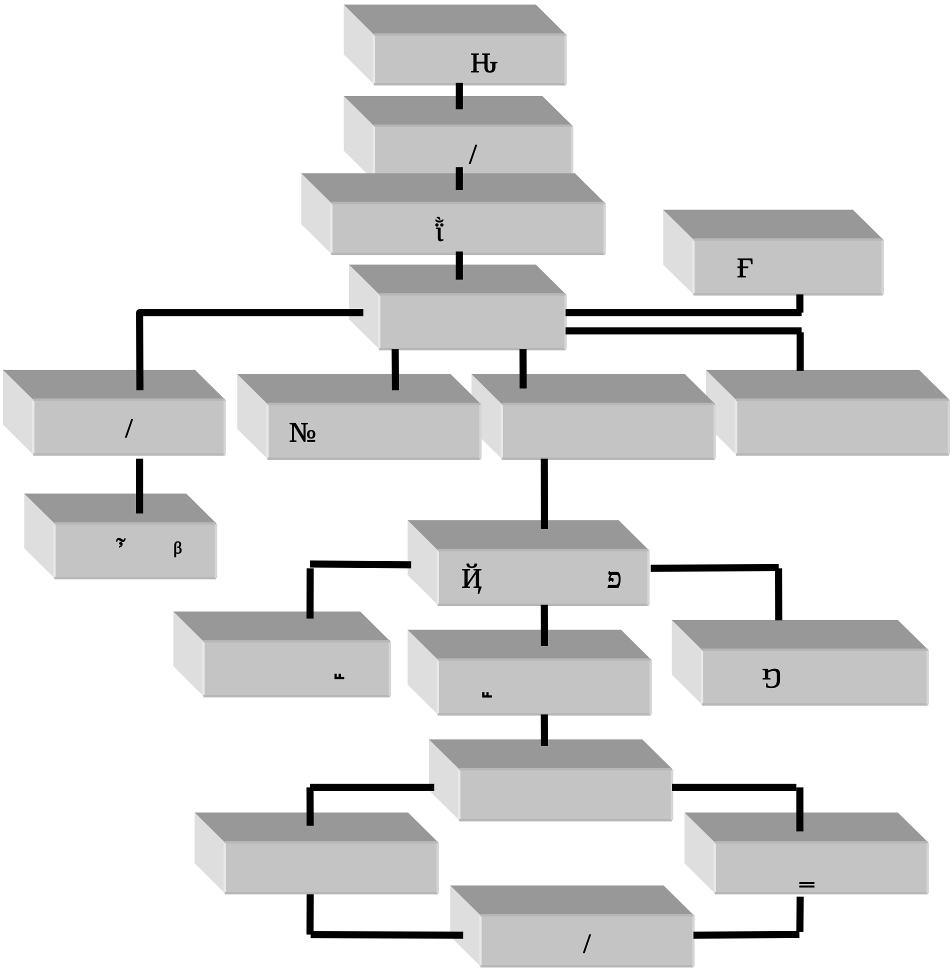
Ꞥ Ꞁ˘ Ȅ Ꞽ פ Â ˜

˘ ל פ˘ Ȅ β ˘

Ꭓ Â

Ꭓ˘ Ȅ ˘ Ꭓ

Â



ط 13-2 ἰ ꟷ ط

13.2.5

ˆ 1˜ ꟷ

Ŧ ך Ŧ Ꞥ ˘ Ꞁ ΰ

Ꞁ Â Ꞥ Ꭓ˘

˘ ΰ Ꞽ Ŋ ˘

Â

Ꞥ Ꭓ˘ = ꟷ Â Ꞥ

Â

13.2.6

ǐ ˀ à à Ғ ʒ

˘ ì ˀ ˘ ǐ ˸ ˘

ǐ ǐ Ꮮ ŭ Â

13.2.7

Ȅ à à № ˘

˘ Â

Ь ˘ ì Â

à à ŭ à à

˘ Ƶ˘ ˀ à

à Ɋ à à ŭ à à à

Â

13.2.8

ˀ ʹY˘ ғ ˘ ŭ

ŭ ì Â

13.3

Ȅ Ʉ ŭ ì Ʉ Ь

˘ Ꮮ ê Ɣ ʒ ٦ Ʉ Ð

Ǐ ٦ Â β ˘

Ꮮ˘ Â ɣ

Ꮧ Ꝭ Â

Ꝭ ȁ ȕ ˘ ᵝ Ꞡ

˪ ꝝ ˘ ˗ ɣ Ҋ ʿ

(1) ˘ Ꝭ Â

(2) ƀ ˘ Â

(3) Ꝭ ˘ Ꝭ Â

(4) Ꮧ ˘ ȁ ȁ

˘ ȉ ȋ Ꝭ Â

14.1

14.2

11

14.2.1

2

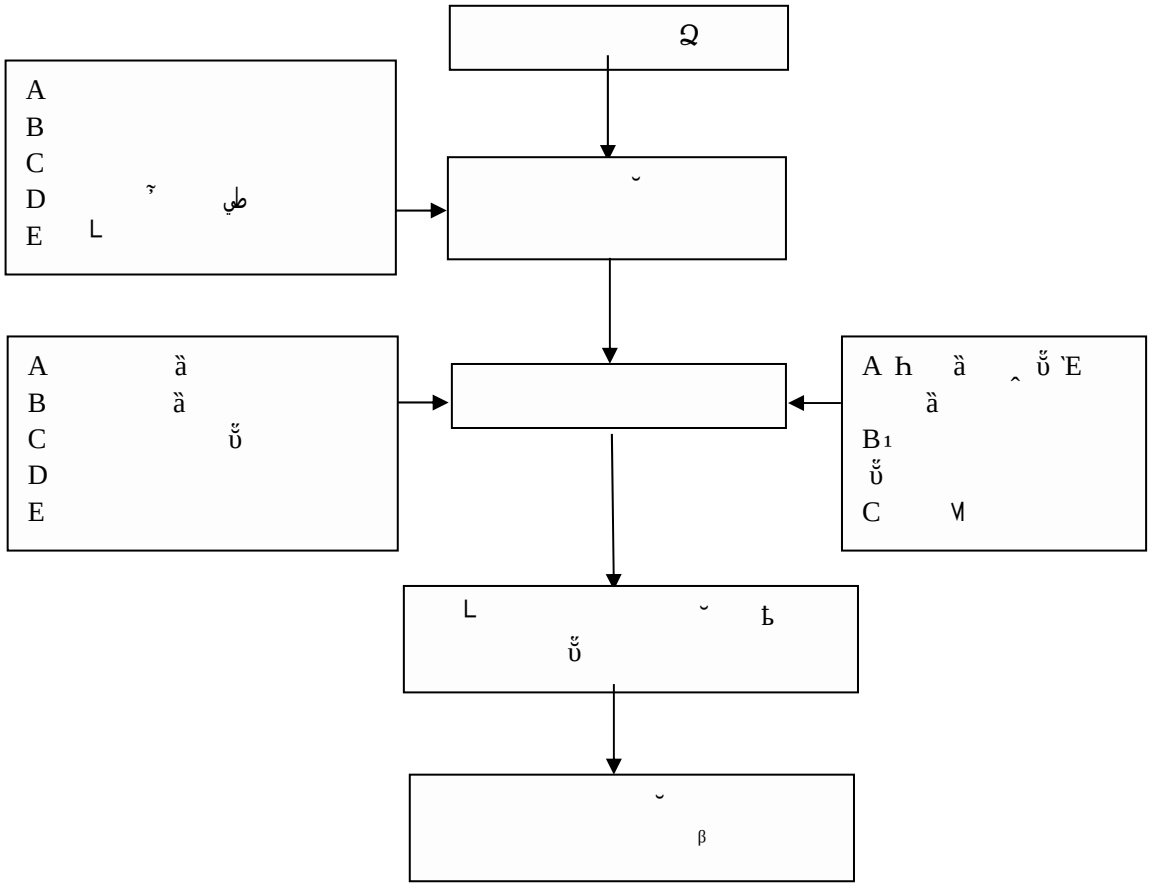
14.2.2

14.2.3

β ’

ˆ 4˜ Ь Â

طي ΐ طي 14.2-1 Â



طي 14.2-1 **طي**

14.2.3

β ˇ L L ˇ ϒ à

ˇ h ‘ L à Ð L à L à L à Ð

L à ㄱ L à Ь L Â

ϒ ŭ ˇ ˜ ˇ

Ʊ h ‘ à à à Ь à

Ð Â

14.2.4

ſ

‘ E à β à β

14.3

14.3.1

14.3.2

(1)

(2) ȝ № Ӊ˘ ط ȁ̀ Ћ ȁ̀

˘ ȝ ȝ ȁ̀ Â

(3) ȝ ˘ ˘ ˘

Â

(4) ȁ̀ ˘ ˘

β Â

14.4

14.4.1

˘ ȁ̀ ȁ̀

˘ 2 Â

14.4.2

ꭓ β ˘

№ ˘ 14.4-1 Â

14.4-1

ȁ̀ ȁ̀ ȁ̀ Ꝅ ȁ̀ ˥ ȁ̀ ˥ ȁ̀ ˥	ȁ̀ ȁ̀ ȁ̀ Ꝅ ȁ̀ ˥ ȁ̀ ˥		1 /	2 ˘ 1 Â	β
˥	˥	COD ȁ̀ BOD_5 ȁ̀ ȁ̀ SS ȁ̀	1 /		

14.5

ΰ β ˘ ˘

ȁ̀ Â

˘ Ŧ Ӊ

(1) ˘

(2) β ˘ ˥

Ŧ Â

15.1

ˋE ʌ ƀ˘ Ꭓ ˋE ʌ Ꭓ ƀ ˘

Â

ȝ ˘ ˘

Ӟ ƀ ꞁ Â ˋE ʌ ƀ ˘

Ꭓ ˋE ʌ Ꭓ ˘ ǘ

ˋE ʌ ƀ ˘ ˋE ʌ ˘ ℗ 0 Â Ω ˘

№ ˋE ʌ ˘ Ꞷ Ŧ

Â

15.2

ħ Ꞷ0 ȁ

ȁ ħ ˘ ƀ Ω ȁ ı ȁ ȝ Â

ᴇ ˋE ʌ ƀ ˋE ʌ ƀ ƀ ˋE ʌ

˘ Ⴑ ˘ ץ ǘ

ˋE ʌ ˘ ê ꞁ᷊̀ ȝ ꞁ

ˋE ʌ Ȉ˘ Ꭓ ȁ № Â

ˋE ʌ ᴆ 21 Â

15.3

15.3.1

ˋE ʌ ħ ꞁ ꞁ ʌ ˘ ꞁ 54

˘ 54 ˘ 100% Â ƀ Ω ȁ ȁ ȝ

ı ˘ ˋE ʌ ƀ ḯ ꞁ Â

15.3.2

ˋE ʌ 15.3-2 Â

15.3-2 Ɛ ʌ

▬				ˆ ˜
1	ɛ		48	88.9
			6	11.1
		Ь	0	0
		Ь	0	0
2	h		0	0
			21	38.9
			32	59.3
		ỉ	1	1.9
3		Ғ	0	0
			2	3.7
			49	90.7
		Ь	3	5.6
4	22:00 6́ 00		0	0.0
			4	7.4
			50	92.6
		Ь	0	0.0
5	ʅ β		52	96.3
			0	0.0
		Ь	2	3.7
6	Ʊ		0	0.0
			47	87.0
		Ь	7	13.0
7	ч ˙ h		29	53.7
			4	7.4
		ѽ	0	0.0
		ʊ̋	21	38.9
			0	0.0
8	à ѽ		0	0.0
			50	92.6
		Ь	4	7.4
9		Ғ	0	0.0
			18	33.3
			36	66.7
		Ь	0	0.0
10		Ғ	0	0.0
			14	25.9
			39	72.2
		Ь	1	1.9
11	Ŧ ʃ Ҥ		0	0.0
			52	96.3
		Ь	2	3.7
12	ʕ		18	33.3
			35	64.8
		Ь	0	0.0
		Ь	1	1.9

ſ 88.9% ч е ˘ 11.1%

Â

ƀ 39.8% ч ч h ºº

˘ 59.3% ч ˘ h Â

Ɓ 90.7 ч ˘ ɻ

3.7 Â

Ƃ 7.4% ˘

˘ Ь ˘ ỉ ↕ Â

ƃ 96.3% ɻ Ɠ

˘ ỉ ↕ Ь Â

Ь 87.0% Ъ

˘ ỉ ↕ Ь Â

ƀ ˘ ч 53.7%˜ 7.4%

ч ˥ ˘ ỉ ↕ Â

Ɔ 92.6% à ˘ ỉ

↕ Ь ’

C̓ 33.3% ºº ˘ 66.7%

↕ Â

(10) ˘ 25.9% ч ˘ 72.2%

˘ ỉ 1.9% Ь Â

(1) 96.3 ч Ŧ ſ Ћ ˘ 3.7

Ь Â

(12) 33.3% ч Ь ˘ 64.8

ч ˘ ỉ Ь Â

˘ Ѐ ʌ Ɠ ˧ ˘ Ѐ ʌ h ч˭

˥ ɜ Ĺ à˭ Ĺ ˘ ˭ ˘

ʏ Â

15.4

№ ˘ Ѐ ʌ h ˭ Ĺ à Ӊ ɜ ƴ

Â Ѐ ʌ Ь Ŧ ˘ β Ѐ ʌ

ɣ Ḫ№ ˘ ħ Ŋ Й ʿ

ŵ ˥ ˨ ˘ ˘ Â

Ŷ ᵞ ˘ ∸ ȁ Ħ └ Ŧ

˘ └ ˘ Ħ ˘ ∸ Ī ˘ ˥ ᵞ ᵒᵒ ȝ

Â

˘ ˘ ˘ Ѣ ˘ ű

Ŋ ˘ ȁ Â

16.1

29.5km 1.9km
1013.5km 114°32′59″ 30°39′28″
2011 12
2012 5 2012 138
5000D 8
10000 1034 99.6
37.8 144
TEU

2012 1914
4 5000
563m 74 2012 11
[2012]600

2013 3
4 5000DWT 10000
563×30m 3
74 TEU 45.36 13
4 2015 12

223934.93 815.11 0.36%

16.2

16.2.1

(1)

(2)

(3) 2016

6 20 2018 7 6

2 №

23.5 2000kg 43.97 33.25

16.2.2

16.2.3

ч COD à BOD5 Â ˇ ‖ °°

Â

(1) °° à Ƶ

ê Ì GB8978-1996˜ ˇ

ˀ ˧ Â

(2) ˀ ı Ƶ˜

ˀ ’ ˇ à

à ı ^ 3t/h˜ Ƶ ˀ ı ˧ Â

(3) ˇ

Â

16.2.4

(1) Ɒ ˀ à ɣ à Ī

ˇ ɣ °° ʒ Â

(2) ˇ ˇ ˀ à ê ʒ

ʒ Ì GB12348-2008˜ 3 ’

¨ ˀ ˀ ˜ à ê Ì(GB3096-2008)

2 Â

16.2.5

h № ч ˥ ˇ h

ˀ ɔ à ˇ ˥ h ч °° à °°

ˇ Ь ˇ °° Â

(1) L ˇ ˇ ɔ

Â

(2) № Ƶ ˀ ɔ

’ à ˥ ĭ ‘E ˇ

Â

16.3

ê Ì ŭ ĭ˝ β˘ Â

16.4

16.5

16.6

88.9%

11.1%

16.7

(1)

(2)

(3)

(4)

˘ ˊ ˥ ₮ Â

(5) ˚ ŭ ь ˆ ₩ ˘

˭ Â

(6) ʜ ˘ ʜ Â ˆ

˜ ˘ ˜ à à ˘ ˋ ˊ

ʜ Â

(7) ê Ƶ ᴇ ˈ ˆ ˜ Ì ɒ 37˭ ˜

ط ˋ ˜ ˘ Ƶ ᴇ˘ ᵒᵒ ɣ ŭ

à ᴇ˘

ь ˘ ₮ à ɣ ŭ Â

16.8

ˌˌˌ ˘ ط ˜ ˘ ɾ à

ᵒᵒ ˘ Ɒ ˘

˘ ŭ ˘ Ḫ Ǫ Ŀ ˪ Â

ˊ ᵶ˘ ɣ Â