

ed l zegkohj feujYl

ckDl kbZ/ ekbDl

dk

l kãk'k

jS hM bZ vkbZ , - fj i kS/Z
(Rofjr i ; kôj.k l ek?kkr fu/kkZ .k
i fronu)

xk&nynyh] rgl hy & do/kkZ
(66] ekyoh; uxj] ftyk% nãZ & N-x-)

I kĵk'k

j\$ hM bZ vkbZ , - fj i k\$Z
(Rofjr i ; kĵ.k I ek?kkf fu/kkĵ .k
i fronu)

I kjkák

1-0 iLrkouk

ed lZ egkohj feujy] Jh dkr ikj [k th dh , d Lokfero l lFkk gA bl l lFkk ds vuq kj NYkhl x<+jkT; ds xkø nynyh] ftyk do/kkz ea ckDI kbV/ ds [kuu ds fy; s iLrkfor gA bl [knku dh mi ; ks vk; q30-12-2002 l s 29-12-2032 o"lz gA

bl ifj; kstuk ds vxr xkø nynyh] ftyk do/kkz NYkhl x<+ds ckDI kbV/ vkj ds [kuu ds fy; s 38-211 gDV s j Hkfe ea ckDI kbV/ dk mR[kuu dk; Z djuk pkgrh gA bl [knku dk mRiknu vuøfur 4]50]000 Vu ifr o"lz gA

bl [knku ds mR[kuu dk; Z ds }kjk lk; kbj.k iZdku dk; Z gsrq ed lZ egkohj feujyl ~ us "kh?kz okrkoj.k iHkko fu/kkz.k v/; ; u gsrq ed lZ fdz; fV0g bluk; ks l foZ d } Hkks ky dks vf/kdr fd; k gA

2-0 LFkku

NYkhl x<+ds xkø nynyh] ftyk do/kkz ea lFkr bl [knku] tks fd Vki kshV ua 64F/3 (i sekuk 1%0000) l keku in dk&

vk{kkák	%	20 ⁰ 23* 40**	N
nskkák	%	81 ⁰ 11* 40**	E

3-0 lkfjogu

; g [knku nqZ gM DokVj l s l ehi lFkr gA do/kkz jkT; ekxZ l s 125 fd-eh- dh njih ij lFkr g s vu; Fkk do/kkz l s ckjyk rd dh Mkej jkM+20 fd-eh- rd dh njih ij gA bl [knku ds l ehi ckjyk l s nynyh xkø] rkj xkø l s yxk gqk gS] tks fd WBM l s yxk gqk l kQ eks eh jkM+ l s 40 fd-eh- dh njih ij gA ; g [knku xkø nynyh l snf{k.k fn'kk ea lFkr gA

4-0 okrkoj.k iHkko fu/kkz.k dk dkj.k

bl [knku dk lk; kbj.k i Hkko tks fd fu/kkzjr gS ml ds LFkku ij vU; Fkk muds
g; eU l S/yeM] eS/kykStdy dUMh'ku] , Efc; BV ; j DokfyVh] okVj ckMhtj
, xhdYpjy , oa QkjLV yM bR; kfnA

vf/kdrj bl [knku dsfoijhr i Hkko dks i Hkfor rFkk bu i Hkoka ds fuokj.k gsrq
i f| kSxdh fu; æ.k vks l Hkh izdkj dh lk; kbj.k izdk dh 0; oLFkk bl [knku ds
mR[kuu }kjk izdk djuk gA bl fcUnq dks /; ku ea j [krs gq s 'kh?kz okrkoy.k i Hkko
fu/kkz.k 'kh?kz okrkoy.k i Hkko fu/kkz.k ifronu dFku dh r\$ kjh , oa bl
dFku dk vkKkuprhZvkpj.k NYkhl x<+ lk; kbj.k l j{k.k eMy **CECB** vFkok
lk; kbj.k , oa ou ea=ky; **MoEF**] ftl ds }kjk bl [knku dk fudkl h dk; jr
dj fn; k tk; A

5-0 ifj; kstuk o.ku

5-1 HkkofoKku

bl {k= ds HkkofoKku ds tkudkj dh vaxr MDdu yok dk cgko yS/jkbV dh
ijr fyFkketZ feVh xg.k djrh gS vks bl ckM kbV tku tksfd yS/jkbV
dh #ijs[kk r\$ kj djrh gA MDdu yok dk cgko tksfd f{kfrt ds lekUrj gsrk
gS ; g geskk nh?kzk; gsrk gA bl {k= ea ckM kbV dk fodkl iR; {k gS bl
lkBkj ea vFkok vU; mit bl {k= ea vR; r vkl ku gA

; g vupfur gSfd mPp Jskh dk ckM kbV fuf'pr gh nf{k.k vks i dZ (N &
E) e/; Hkx ij] tks fd fdl h izdkj dh Vks kskQh l s tMk ugha gA bl Åbh
l ery Hkfe ds e/; Hkx ea de ijUrq/; ku ; kx; y?kplj.k oS; qfl fydk dh gA
bl Hkfe ea VkbV/su; e vkM kbM dh ek=k cgqk; r ek=k ea bl MDdu dh ijr
dh Åijh l rg ij gsrk gA

bl {k= dk LV/hxtfQdy fl DoBl fuEkuq kj g&

fyFkksy/kWEh	fFkDud d (m)	fMfLdt'ku
feVVh	2.00	M/ xs x fMax MkmuoM/ buVwys/jkb/ I kb/zy
mijh yS/jkb/	1.00	fi I ksfyVd] ynt+ vks BUM; jS/8/] Ldkj; f'; I dlv8I vks ckDI kb/ ds cMs VndMka vks ckDI kb/ ijrksae feyrk gA
ckDI kb/	3.5 - 4.5	vf/kDrj fi I ksfyVd dMk vks Bkd] vf/kd ?kuRo okyk yS/jkb/ o8I dgyj vks fi VM] fMLIyd 'kMlk vkID ykb/ xs vks xaykch jxA
fupyk yS/jkb/	3.30	vf/kDrj ykdyh mfyfVd vks fi I ksfyVd ekMjS/yh gkMZ Vw I kIDV] oehdgyj vks dkj; f'; I] i k j I vks 'kkd Mkdj vkID yky] ihyk vks ckmu dyjA
fyFkkektZ	15.30	ykb/ xS fiyh vks yky feVVh] yfeus/M yfeukbz bEi jfl LV8/ vks gkbyh i k j I A
V8	0.50	o8hMZ , V nh dkIDV8V foFk nh fyFkkektZ QkSykM MkmuoM/ ck, Q8k vlvYVMZ V8

bl {ks= ds yS/jkb/ fMikstV edkyk j8t ghy dk , d e/; {ks= dgykrk gA bl
 {ks= ds vuq kj ukFk&o8Vuz fgLI k dFkb/ksyk] Xuhi kd s vks LphVkd pVVku ds
 I kFk] tgmfd I kmFk&bLV rkjxko I syxk] fQykb/4 Ly8/4 vks DokVztkbV4
 fpYih esku ds I kFk mtkxj gA bl {ks= ds fupys fgLI sea I adh.kz Hkxk yerkl
 izdkj dh] tks dSydsj; I fx8/h I M LVku vks fi ad vks I Qn feVVh ikbz tkrh
 g8 tksfd dukbz unh] dj dh ea gA ; g cd KYVhd M8du ykok dk cgko tehuh
 I rg ds I ekukUrj g8A vPNa mtkxj bl M8'ku V8k d8jk ikuh nynyh ?kkV
 {ks= ea ik; s x; s g8 cd KYVhd V8k , d fo" k; kud kj dh tkudkjh yS/jkb/ ds mijh

I rg ij gđ ; sVĐI 25 eh- ek/h yS/jkbV dh ijr l s <dk gqk gđ ckDI kbV mi jh yS/jkbV dh I rg ij feyrk gđ A

5-2 ykdy ft; ksykllh vkš [kfut ft; ksykllh

ckDI kbV , d jkl k; fud ; kšxd gš tks fd ikdfnd nco ds dkj .k dš KYV pVVku vkš vkšfI Mkbftak dh ifdz k l s DykbžV ds {ks= oš/ vkš 'ktd ekš e ea gkrk gš ckDI kbV dh mRi fRr dh ifdz k vR; r vl k/kkj .k gš bl ifdz k ds QyLo#lk yS/jkbV vkš ckDW kbV dk fuekZk gkrk gš A buea l s dkbZ , d ni j s ea 'kkfey gks l drk gš

ckDI kbV , Y; fefu; e dk , d gkbMkbV vkDI kbM gš tks fd pVVkuka dh bl [knku ads Vš gkus l s mRi l u gkrk gš ; s feJ .k nks ; k nks l s vf/kd gkbMks/ckDI kbM dk tš s fxCl kbV vkš cnekbV gš ; g ckDI kbV fMi klltV l s mRi l u gkrk gš

ckDI kbV , d jkl k; fud ; kšxd dš KYV pVVku dk [kfut gš l ekU; r% [kfut i Bkj ds Āijh I rg l s yxHkx 1 l s 3 eh - dh xgjkž ea ik; k tkrk gš nynyh {ks= dk ckDI kbV Hkh bl h rjg dk gš yšdu bl {ks= dh ckDI kbV J[kyk nks VdMæ ea forfjr gš dN Hkx ; gka ijrks ea gh feyrk gš

ckDI kbV [kfut ds l rgka ds chip ea ni j s [kfut tš s yS/jkbV cgrk; r ea feyrk gš ckDI kbV dh ijr ml ds jax]vkdj]?kuRo ds vk/kkj ij nš[kh tkrh gš vPNh DokfyVh dk ckDI kbV gYdsjax dk vf/kd ?kuRo dk gkrk gš

1. FeVvh yky vkš fiykiu] ffku eš/y] ekšVyh , cl š/A
2. YšVjkbš ykyiu fiyk] ikjI I še Bkd ckdI kbš cksMI Z ds
I kfk de vW; euk ckdI kbš ds cMs VrdMA
3. vW; šefu; e yky vkš I Qn i VVh] dMk vkš Bkd
yš/jkbš
4. ckdI kbš vf/kDrj Bkd I s de Bkd] eyk; e] I Qn cšuhj
xš; 'k] fl eš jx] fi I kšyVd , V lyd š
5. Dys Eyk; e] I Qn vkš xšykh u I Qn lykflVd
ckdI kbš
6. fyFkkkftšd xš i hškb'k] cšuhj eyk; e] lykflVd Dys bEi jfo; I]
fl fyf'k; I vkš cgr de yšeušM
7. cš KYVZ dMk] Bkd] gjk] xš jx dk] ošI dšj

5-3 fj tšZ

I R; kfi r Jskh

dš {ks=Qy	2]12]400 M ²
[kfut dh eks/kbš	2-0 m
ckdI kbš fMi kštšV dk ?kuRo	212400 X 2 = 424800 M ³
ckdI kbš dk fj tšZ	424800 X 2 = 849600 Vu

[kuu ; kš; Jskh

dš {ks=Qy [kuu ; kš;	1]15]100
ckdI kbš fMi kštšV dh eks/kbš	2-0 m
ckdI kbš fMi kštšV dk ?kuRo	115100 X 2 = 230200 M ³
ckdI kbš fMi kštšV dk fj tšZ	230200 X 2 = 460400 Vu

5-4 vušfur [knku dh vk; q

bl [knku dh vu~~ef~~fur vk; q mRiknu vks vkus okys o"kkā ij fuHkj djr h gA bl mR[kuu dh ifdz k ds vu~~d~~ kj bl [knku dk mRiknu 4]00]000 l s 4]50]000 Vu ifr o"kz gA tks fuHkj djr k gS ekd~~l~~ dh ek~~x~~ ij] bl [knku dh mi ; kxh vk; q 8 o"kz gA

5-5 ekbfuax ifdz k

; g vu~~d~~ j.k fd; k x; k g\$ fd vk~~o~~j cM~~U~~ dh eks/kbZ Nks/h gA bl {ks= dk fMi k~~l~~t~~v~~ vks bl l ery Hkfe dk fMi k~~l~~t~~v~~ ek~~m~~ upj dk g\$ rFkk ml s cgr gh vkl kuh l s vk~~o~~j cM~~U~~ dh l gk; rk l s gV~~k~~; k tk l drk gA bl {ks= dk fyl l e; dk vk~~o~~j cM~~U~~ nks cSpka ea fuEuku~~d~~ kj g&

b; j	vk o j cM U cSp		ck l kbZ cSp	
	Uk	gkbZ	Uk	gkbZ
1 st	1	1.5m	1	2.0m
2 nd	1	1.5m	1	2.0m
3 rd	1	1.5m	1	2.0m
4 th	1	1.5m	1	2.0m
5 th	1	1.5m	1	2.0m

5-6 mRiknu dk iLrkfor j~~v~~

[knku ds iw~~k~~z fodkl ds lk'pkr~bl [knku dk mRiknu yxHkx 4]50]000 Vu ifr o"kz fcdh ; kx; gkskA

5-7 yk~~s~~Max

l Hkh [k~~f~~ut dk ifjogu Vkyh@Vd ds mi; kx l s v~~r~~ rd fd; k tk; sk A vk~~o~~j cM~~U~~ dks gVkdj ,d l fu'fpr txg ij j[kk tk; skA ml h idkj ; s ,d LFkku l s gVkdj mi; kxh txg ij yhl ck~~m~~UMh ds LFkku ij tek dj fn; k tk; sk A

5-8 Vky~~y~~ax @Vkd iksZ

[kfut dks vdkkj vkj idkj ds vk/kkj ij vyx fd;k tkrk g\$ rnmijkar vPNs
ckNDI kbV ifjogu fd;k tkosk A

5-9 ekbZuax e'khujh vkj bD; i eV

t\$ k fd iNDZ ea crk; k x; k fd cNDI kbV [kuu vki udkLV ifdz k ds ek/; e l s
fd;k tk; sxAbI fdz k ds fy; s fd l h cM\$ vkSt kj dk mi ; ksx ugha g\$ A tks e'khujh
bl mi yC/k rFkk mi ; ksxh g\$ bl [knku ds fodkl g\$ rfuEukuq kj g\$ %&

1. , ; j dEid j vND 250 cfm ds \$ l Vh 02 no
2. dEidM , ; j vki j\$M t\$ d g\$ j Mhy 04 no.
3. ik\$Zy ex\$ftu vND 500 ds \$ l Vh 01 no
4. , DI lykMj 100 'kks/I 02 no
5. fVilZvND 10 Vul ds \$ l Vh 10 no
- 6 , DI ds\$ j de ykMj 02 no

5-10 ckM CykLVax ij kehVj

bl [knku dk mR[kuu ifdz k L\$ky Ldsy ea g\$ rFkk , o jst mRiknu bl [knku
dh 4]00]000 l s 4]50]000 Vu ifr o"KZ g\$ Hkfo"; ea bl [knku dk mRiknu Hkh bl h
j\$ t ea g\$ &

- cMZ : 0.9 m
- Li \$ l x : 1.00 m
- MSRFk vND Mhy gky : 2.0 m
- Mk; feVj vND CykLV gky : 32-34 mm
- pktZ ij gky : 500 gm – 600 gm vND

Li sky t\$ s/ hu vyk\$ xfoFk

MS/ks\$ j vkj , sMDos/ y\$ Fk vND

l QVh

ikoj QDVj : 10-12 t ij dsth- vND

, DI lyk\$ l o

DokufVVh vKND ,DI lyksl o ij gksy : 20 kg lkj jkmUM Qks 40 uþ
20&30 m vKND I QVh Q; nt+

iLrkfor gþ fd Mhy gksy dh xgjkþz 2-0 eh- vksj cþp dh yEckþz 1-5 eh- gþ A
CykflVax ml h CykLVj I sfd; k tk; sk A tks DokfyQkbV/ gks vU; Fkk ftI ds ikl
CykLVj I fVtQdV/ gks I rdhkiþd CykflVax vksj oV/ Mhyax I s mMeus okys iRFkja
ij fu; æ.k j [kdj fd; k tk; sk A ftI I sfd CykflVax ds nþi Hkko vki ikl ds
dFk Hkfe ij uk gka ekgokj mi ; kfxd yxHkx 300 fd-xke I s 150 eh- rd I g {kk
grq vU; Fkk 2000 uEj I s 5000 rd ds MS/ksV/ I z gþ A

5-11 ekbZu Mst

;g [knku {ks= ,d Vhyk ds : lk ea gþ]bl {ks= I s mi jh Hkx vksj <yku ds
vuq lk gþ A bl fy, bl fMi kntV ds : lk dk lyþ; jrtksfd , syovV/ gþ 20 eh- I s
vksj Hkry rkfydk 25 eh- I s 30 eh- rd {ks= ea gþ]fdI h Hk iþkj dk fl ist bl
ifdz k ea ugha gþ A vksj uk gh fdI h iþkj I s fl ist okVj dk Jkr bl [knku {ks=
ea ugha gþ I p; gþk ckfj'k dk ikuh bl [knku ea bDdBk gsrk gþ A ml dk
mi ; ks xhu cV ds fodkl ea fd; k trk gþ A

5-11 o"Kz okþ -fodkl

vxks iþb o"Kz grq o"Kkþ kj cNDI kbV dk mRi knu fuEukuþ kj gþ A

;g fu'fpr gþ fd Vks/y iþMD'ku ekdV/ dh vko'; drk ij fuHkþ gþ bl Mhi kntV
dh I jþuk bl iþkj gþ ftI I sfd 4]50]000 Vu ifr o"Kz dk mRi knu bl [knku
I sfudkyk tkuk gþ A tc bl [knku dk fodkl iwkz : lk I s gksk rks foxr vkus
okys iþb o"Kkþ ea vU; Fkk bl [knku dks xkþ/ dj fn; k tk; sk A ekbfuax ykst ds
fy; s rc ;g [knku ds mRi knu I s ekdV/ dh vko'; drk ds vuq lk gksk A
vuq ; þr inFkka dk j [kj [kko

bu inFkka ds j [kj [kko ds fy, vkbzch, e-)kj k vuþfnr ekbfuax lyku ea fn; s
x; s funþka ds vuq kj fd; k tkosk A iEke ikþ o"Kkþ rd yht ckAMh ds cfj; j
tku ea bl dks j [kk tkosk A

b; j	i kMD'ku vKND ckNDI kbV vkj (in MT)
1 st Year (2005-06)	100,000 T
2 nd Year (2006-07)	150,000 T
3 rd Year (2007-08)	200,000 T
4 Year (2008-09)	300,000 T
5 Year (2009-10)	450,000 T

5-12 t: jh I d k/kuka dh vko'; drk

[kuu dk; Z djus grqfu; ekuq kj tks Hkh I d k/ku vko'; d gksA crk; k tkoskA

b; j	DokfUVVh vKND oLV	Li d fjDok; MZ	ykdsku
Ist	7416 m3	2158 m2	LkkmFk bLVuZ LkbM vKND fyt+, fj; k
IIInd	5140 m3	1446 m2	LkkmFk bLVuZ LkbM vKND fyt+, fj; k
IIIrd	19870 m3	4430 m2	LkkmFk bLVuZ LkbM vKND fyt+, fj; k
IVth	18720 m3	7620 m2	LkkmFk bLVuZ LkbM vKND fyt+, fj; k
Vth	54430 m3	12920 m2	LkkmFk bLVuZ LkbM vKND fyt+, fj; k

5-15 ifj; kstuk ykxr

bl ifj; kstuk ea dgy 47 yk[k : lk; ka dh vko'; drk gksch A

i kstDV	, LVhesVM dkNDV bu yd vKND #lk; s
ekbfuax vKND ckNDI kbV	Rs. 47.00 yDI

5-16 fctyh ykbu

fctyh dh i firZ NRrhl x<+fo | r ckMZ l s dh tkosx]tkfd nynyh xte l s Vi fd;k tkosk A

5-17 ikuh dh i firZ

ikuheq; r% l Me ij fNMelko , oa /kny mRI Ztu dks jkdus ds fy, fNMelko ji hus dh vko'; drk dh i firZ]lyka/sku]vFkok xhu cYV ds fy, blreky fd;k tkosk A bl dk eq; Jkr vUMj xkmM ikuh gksk A

okVj cSyd vkND ekbfuax i kst DV

i kst d	DokfVVh fj Dok; MZ (bu fyVI z)	Vks/y
a) ekbZu l kbZ		
ekbfuax vks jsku vks MLV Li sku vks xhu cYV	1000.00	1000.00
b) MkeSfVd		
MNufdax vks okf'kax	600.00	600.00
Vks/y (A + B)	1600.00	1600.00
i kst d	DokfVVh t Sij S/M (bu fyVI z)	Vks/y
c) ekbZu l kbZ		
ekbfuax vks jsku vks MLV Li sku vks xhu cYV	Nil	Nil
d) MkeSfVd		
MNufdax vks okf'kax	300.00	300.00
Vks/y (C + D)	300.00	300.00

5-18 ifjogu

I Mēd ekxZ I s cM DI kbV dk ifjogu fd;k tkosk A

6-0 Okrēku lk; kbj.k

6-1 ekš e

bl {ks= dk ekš e o"kkZ __rq dks NkMēdj vf/kdre I v[kk jgrk gA rhuka __rq/ka dks
, d nW js I sfcYdy vyx ns[kk tk I drk gA xh"e __rq Qjoh I s tw rd]
o"kkZ __rqe/; tw I s fl rēj rd rFkk 'khr __rq vDVWēj I s tuojh rd egl W
dh tkrh gA bl {ks= ea yxHkx 600&800 fe-eh- o"kkZ ns[kh x; h gA vf/kdre o"kkZ
tw I s vxLr ekg ea gkrh gA

xeH 0; ure 8⁰c

vf/kdre 39⁰c

fjdkM fd;k x; k gA tuojh ekg I cl s BMk vkš ebZ I cl s xeZ eghuk lkk; k x; k
gA

vkxrk

o"kkZ __rqea vf/kdre vkxrk rFkk xh"e vkš 'khr __rqea gok ea dkbZ vkxrk ugha
ns[kh x; h A vf/kdre vkxrk 28 %]U; ure 12 % ns[kk x; k A

ok; q xfr rFkk ml dh fn'kk

I ož ds I e; gok dh fn'kk mRrj I s nf{k.k & iwZ tks I qg rFkk 'kke ds I e; lkk; k
x; k gA vf/kdre gok dh xfr 8fd-eh- @?k/k uki k x; k A
; g MkWk fjUVy ešV^a; ka ykftdy ukxi j I s iklr fjikM ds vk/kkj ij gA

6-2 ok; q DokfyVh

gok ea inkk.k tkbus ds fy, fyt ,fj;k ds vkl ikl 6 LVsku ij ekW fd;k x;k A ftl l s fuEufyf[kr ifj.kke l keus vk, WA fn, x, ifj.kke rFkk NRrhl x<+fuokj.k eMy l siLr rkydk fuEu g&%

ok; qeki u ifj.kke , oadsi zfu-cks dk rkydkRed rkydk

	A1	A2	A3	A4	A5	A6	A7	CPCB Norms	
								Indl. & Mixed used area	Residential & Rural Area
o"kk Jrq ds ckn (Sep2005-Nov 2005)									
SPM Concentration									
Minimum	104.0	98.0	87.0	89.0	83.0	86.0	82.0	500	200
Maximum	128.0	120.0	112.0	119.0	110.0	109.0	117.0		
Average	115.2	109.1	99.1	102.2	98.2	99.8	98.8		
RPM Concentration									
Minimum	24.4	21.4	20.4	20.0	21.4	21.2	17.2	150	100
Maximum	44.7	43.5	41.0	41.4	39.8	38.5	37.1		
Average	34.3	33.0	30.0	30.8	29.8	30.1	29.9		
SO2 Concentration									
Minimum	5.6	4.9	4.5	4.8	4.1	4.4	4.4	120	80
Maximum	7.7	7.3	6.9	7.0	6.8	6.7	6.6		
Average	6.5	6.1	5.5	5.7	5.6	5.5	5.5		
NOX Concentration									
Minimum	8.2	7.1	6.2	6.6	6.1	6.6	5.3	120	80
Maximum	14.9	16.7	9.5	9.6	9.7	9.0	9.2		
Average	9.7	9.5	7.7	8.0	7.7	7.7	7.6		

6-3 /ofu rhork

/ofu dh rhork dbZ txg ukih x;h ftlls ;g irk pyk fd /ofu Lrj NRrhl x<+fuokj.k eMy)kjk fn, x, Lrj l s de gA /ofu dk e[; L=kr]vkokxeu ;k xkfM+ ka dk vkokxeu l s g&A

6-4 okVj DokfyVh

bl {ks= ea i kuh fudkyus dk L=kr ed; r% pki kdy rFkk uydii gñ i kuh dh xqkoRrk fuEukuđ kj gñ&

I ñiy dkM	pH	Alkalinity mg/l	TH mg/l	TDS mg/l	Cl mg/l
SW1	7.77	196	340	1264	18.6
SW2	7.11	124	396	1688	21.2
SW3	7.16	156	284	1188	22.2

I ñiy dkM	PH	Alkalinity mg/l	TH mg/l	TDS mg/l	Cl mg/l
GW1	7.25	212	72	208	15
GW2	7.16	194	216	354	28
GW3	7.1	164	68	183	30
GW4	7.26	210	136	96	18.4

6-5 enk dh xqkoRrk

bl {ks= ea 6 txgka l s enk ds I ñiy fy, x, A bl ds , ukyfl l djus ds mijkUr lk; k x; k fd feVvh ed; r dkyh l syky &Hkjih gks tkrh gñ

6-6 Ñykyk vñ Qkmñk

Ñykyk %&bl i kst DV ds vkl ikl yxHkx 10 fd-eh- {ks= ea LVMh fd; k x; k gñ fd i kst DV {ks= ea fd l h Hkh idkj l s of tVsku ugha gñ bl {ks= ds cQjtku ea ed; r% ou rFkk dñk Hkñe gñ vkl ikl dh igkfM+ ka rFkk <yku ea l ñku ou gñ bl {ks= ea ed; r% vke]egok]uhe]ihi y]tkeu]mej bR; kfn ds o{k gñ A bl ds vykok bl {ks= Qy ea vi us vki mxus okys ?kkl rFkk Nk/s o{k ik, W tkrh gñ A

QkmWuk %& ikdfird : lk l s ik, tkus okys tho tš sfpfM+k Lyhfl fyi vks ykeMh [kj xksk]cnj]bR; kfn ik, tkrs gš]bl {ks= ea dkbz Hkh foylr gkus okys tho ; k tarq ugha ik, Wtkrs A

6-7 Hkrie mi ; ksx

Hkrie mi ; ksx dh LVMh bl {ks= ea eks/srkj ij fd; k x; k A eq; r % rgl hy cQjtku , fj; k ea bl dsfy, l bl l gšl cpl rFkk rgl hy i pk; r vkQhl ea feys fjdkMz ~dk mi ; ksx fd; k x; k A dchj/kke ftys dk Hkrie mi ; ksx fuEukuq kj gš A

ou l s vkD{kkkfnr tehu ftl dk Hkx 70 % gš cpl gvk {ks= vkcknh rFkk df"k {ks= gš A ikuh ds uhps dh tehu cjl kr rFkk xehz ds fnuka ea cMfh &?kVrh gš A l Mēl dh tehu yxHkx 1-1 % tks bl {ks= ea vkokxeu ds de l k/ku dk gksuk bñxr djrk gš]dkj tks ea dkbz Hkh taxy ugha gš] dcy 38-211 gšVš j {ks= l s 34-35 % ljdkh tehu rFkk ckdh 35-64 % Hkrie gd dh tehu gš Hkrlkeh gd dh tehu ea eq; r% [ksh gksh gš A

, ljdkl heš/ yšl ; d bu LVMh , fj; k

yšl ; d ds/sjh	, fj; k (Sq.km.)	ijl š, t
1. , fXkdYpjy yšl (bfjxš/šl + vubfjxš/šl)		
2. QkylšV , fj; k		
3. fcYV vi yšl (yšl vUMj foyst gVeš/Lk)		
4. xftx yšl		
5. ošV yšl (jklšh)		
6. okVj ckMh		
7. jkšl		
Total		

6-8 I kekftd JvkfFkd fLFkr

; g v/; ; u dchj/kke fodkl [kM ftyk dchj/kke ea fd; k x; k A bl ftye ea xkeh.k vkcknh (83%@tul d; k) cgrk; kr ea gA vud fpr tutkfr dh dgy vkcknh bl {ks= ea yxHkx 33% g} dchj/kke fodkl [kM ea dgy vkcknh dk 45%

Hkkx tu'kfDr ds : lk ea ntZ gA bl {ks= dh tul d; k dk ?kuRo 218fd-eh-@oxl gA bl {ks= ea l ?ku tul d; k of/n nj 19 % g} v/; ; u ds vud kj bl {ks= dh 92 % vkcknh d'k ; k d'k l s l cfi/kr Je ij vk/kkfjr gA vFkkZ- tul d; k dk vf/kdkak Hkkx d'k vk/kkfjr gA

, S fVeS/M cfi d LVS/fLVDI vkND nh LVMh , fj; k

1. gkml gkYMI	2628
2. i kWgy sku	14966
ey	7530
fQesy	7436
	9728
3. 'kS/gy VkbZ	15%
4. fyVjd h js/	54.1%
5. vkND; q skuy i S/uz	
(A) esu odZ l	82.4%
(% vkND Vks/y i kWgy sku)	15.5%
i) dYVhos/l l(%vkND Vks/y i kWgy sku)	2.1%
ii) , xfydYpjy ys l l(%vkND Vks/y i kWgy sku)	2.3%
iii) vny odZ l(%vkND Vks/y i kWgy sku)	56.4%
(B) eftZy odZ l	
(%vkND Vks/y i kWgy sku)	
Vks/y ofdZ i ki gy sku fMQjSv	
(%vkND Vks/y i kWgy sku)	

, feuhVhl bu dchj/kke Gykd

1.	Vks/y ua vkND foyst d	181
2.	, S/ndsku	

	i kbejh LdWI feMY LdWI gk; j I dBMh LdWI fMxb dkwyst	174 30 4 1
3.	<u>gYFk QfI fyVhl</u> gkMfi VVI Z P.H.Cs & Adl. P.H.Cs dE; quVh gYFk I dVI Z I CI hMs jh gYFk I dVI Z	1 1 1 23
4.	<u>ikfyI LVskul</u>	30
5.	<u>ikLVYk QfI fyfVt</u> ikLV vkMfI d VfyxtQ vkMfI d	41 1
6.	<u>jkM+</u> i Ddk jkM+ dPpk jkM+ foystd duDVM foFk jkM+	181.4 km 121.4 km 100%
7.	<u>bUMLVht+ (1997)</u> , xhdYpjy c.M , fuey gLcBMh c.M QkMfV c.M dlod'kuy bUMLVht+	86 180 6 1028

7 i Hkko fo'ySk.k

[kuu fdz k dk i Hkko bl {ks= ds lk; kbj.k ij ifrdy i Hkko n'kkzk gA bl nqi Hkko dks tkuus ds fy, fofHkuu vuq akkuka dh vko'; drk gA

8 i Hkko ifj{k.k

xgu lk; kbj.kh; eki nMka ds varxh ifjofr h eSVDI i/nfr)kjk x.kukRed , oa xqkkRed nqi fj.kke dks tkuus ds fy, ifj{k.k fd; k x; k gA lk; kbj.kh; ifj.kke dk tkuus ds fy, iLrkfor vrfjDr [kuu Hkko Hkko {ks= dk v/; ; u fd; k x; k A bl ifdz k ea ty]ok; Hkko , oa lk; kbj.kh; idkja dks l fEefyr fd; k x; k A

lk; kbj.kh; dkjd lk; kbj.kh; eki nMka o [kuu i fdz kvka l s l gl ædk n'kkzs gā A ; g
 l gl ædk ykHknk; h gā ; k foi jhr gā ; g vkxs oxhbr fd; k x; kA

iškfeVI l	oš PIU	cd ykbZ EIU (a)	foFkvkmV EMP EIU (b)	foFk EMP EIU ©	pšt EIU (c-b)	pšt EIU (c-a)
ck; ksykllt dy blok; jleš	300	195	184.25	197	10.75	2
blok; jleš/y i klywku	450	343	322	351	29	8
vbLFkšVd	100	77.25	66.25	75.85	9.6	-1.4
g; æu buVšV	150	114.75	111.75	127	15.25	12.5
xkšM Vks/y	1000	730	684.25	750.85	64.6	21.1

9 lk; kbj.kh; i ædk ; kst uk

9-1 Hkfe dk i qHkj.k

Hkfe dk i qHkj.k dk dk; Z vksjcmZu dk i qHkj.k) kjk fd; k tk; sk yš/jvkbš
 Dyhfi æ 0; ofLFkr : lk l s fd; k tk, WA , oa l eryhdj.k bl rjg fd; k tk; s fd
 Hkjko dh ÅškbZ l Hkh fn'kkvka ea , d l eku gks A i qHkj.k fdz k cšDI kbV dh i gh
 eks/vbz i klr djus rFkk vkbZch, e- dh vuæfr ds lk'pkr fd; k tkuk pkfg, A
 mijkšr vkšjcmZu dk Hkjko [kuu ds rgr fd; k tkuk pkfg, A

9-2 gfjr i VVh dk fodkl

o{kkjki .k ; kst uk ds rgr gfjr i VVh dk fodkl , d s {ks= ea fd; k tk; sk tgkš
 o{kka dh l æ; k l ?ku (75@750 oxl ifr o"kl) gksxh A ; g i kstšV ou l ank dks
 c<kus ds fy, dkQh egRoowkZ gā , oa uhps n'kkz-k x; k gā A fd vkxkeh 5 o"kkā ea
 fdl rjg ouHkfe dh dk; bkgh dh tk; sh A

fb; j	u a v k WQ Vhl	, fj; k doMZ bu m ²	I jokbby jV	ykdsku (7.5m cfj; j tkw)
1 st	75	750	80%	I kmFkbLVuZ bLV
2 nd	75	750	80%	I kmFkbLVuZ bLV
3 rd	120	1200	80%	I kmFkbLVuZ bLV
4 th	120	1200	80%	I kmFkbLVuZ bLV
5 th	120	1200	80%	I kmFkbLVuZ bLV

9-3 inllk.k fu; æ.k eki nM

iLrkfor [kuu ifdz kvka ea; g ugha n'kkz; k x; k gSfd dk; Z; kst uk ds foLrkj ds)kjk inllk.k dk gkfudkj d ea of/n gksxh A

vr% fuEukfdr ifdz kvka ds rgr inllk.k dkj dka dks fu; æ.k djus dk iz kl fd; k tk; xk A

- 1- /kny dh mRi fRr , oa ml ds QSyko dks jksdukA
- 2- ok; qngd /kny ds dkj.k mRi uu ok; q inllk.k dks jksduk A
- 3- ty inllk.k dks jksdus ds izak A
- 4- Hkud ty inllk.k dks jksdus ds izak
- 5- /ofu inllk.k dks jksdus ds izak A
- 6- HkudEi u dks de djus ds izak A

9-4 I kekftd] vkfFkd n'kk dks I qkkjus ds i zdk

v/; ; u {ks= ea I kekftd] vkfFkd okrkoj.k ij gksus okys i Hkkoks dk Hkh /; ku j [kk x; k gA bl dkj tksu ea dks xte ugha gA ,oa i Lrkfor i kstDV , fj; k ea fdl h Hkh foLFkkiu dh vko'; drk ughA vFkk i Lrkfor {ks= ea I dkj kRed fn'kk ea u dh udkj kRed fn'kk ea foHkku dkj dka tS s jkst xkj] vkokl] f'k{kk} fpdfRI k] vkokxeu I fo/kk] rsy miyC/krk] vFkd; oLFkk fLFkr LoLFk df'k ij i Hkko ux.; gA fd ; g iktDV Nks/k gA %&

1-bl i kstDV I s i kstDV , fj; k ea jkst xkj dh of/n gksch A

2-bl ifj; kstuk I s ykxka ds lyk; u ea deh vk tkrh gA D; kAd bl ifj; kstuk I s ykxka dks jkst xkj feysch A

3- bl ifj; kstuk I s f'k{kk dk fodkl gksch A

4- bl ifj; kstuk I s ykxka ds [kkui ku rFkk jgul gu ea cnyko vkus dh I Hkkouk gA A

5- bl ifj; kstuk I s i kja fjd [krh ea cgr vf/kd cnyko ugha gksch cfYd ykxka dks f'k{kk feyus I smUr [krh gksch A