CALCULATIONS OF ARKANSAS WATER QUALITY-BASED EFFLUENT LIMITATIONS

For an Arkansas River/Stream

	(Reserved)	
STEP 1:	INPUT TWO LETTER CODE FOR ECOREGION (Use Code at Right)	GC
	Basin Name	Ouachita

FACILITY

Permittee & Date	Sheridan 1/10
NPDES Permit No.	AR0036498
Outfall No.(s)	1.00
Plant Ave Flow (MGD)	0.96
SIUs Ave Flow (MGD)	0.15
Domestic Flow (MGD)	0.67
Plant Design Flow (MGD)	0.96
Plant Design Flow (cfs)	1.48

RECEIVING STREAM

Is this a large river? (see list at right)(enter "1" if yes, "0" if no; make entry as a number)	0
Name of Receiving Stream:	Big Creek
Waterbody Segment Code No.	2C
Is this a lake or reservoir? (enter '1' if yes, ' 0 ' = no; make entry as a number)	0
Is seasonal critical flow applicable (1=yes, 0=no); see Reg 2 page 1-3 for details.	0
(Reserved) DO NOT INPUT DATA INTO CELL H22, H23 & H24....LEAVE BLANK	
(Reserved)	
(Reserved) (Reserved)	?
(Reserved) (Reserved)	?
(Reserved) (Reserved)	?
(Reserved) (Reserved)	?
Ecoregion TSS (mg/l) (For Large River, See List to Right)	5.50
Ecoregion Hardness (mg/l)	31.00
~~Critical 7Q10 (cfs)~~ mini stream flow (Reserved)	4.96
~~Long Term~~ Ave / Harmonic Mean Flow (cfs)	14.88
Using Diffusers (Yes/No)	No
pH (Avg)	7.00
Percent (%) of 7Q10 for Chronic Criteria	0.67
Percent (%) of 7Q10 for Acute Criteria	0.33
Water Effect Ration (WER)	1.00
EPA Statistical Factor for Data (enter 2.13 for <20; enter 1 for >20)	2.13
Ave Monthly Limit LTA Multiplier (Ref: page 103 TSD for WQ-Based Toxics Control)	1.55
Max Daily Limit LTA Multiplier (Ref: " " " ")	3.11

Codes & TSS for Ecoregions and Large Rivers

Ouachita Mts. Eco (OM) =	2.0 mg/l	Arkansas (Ft. Smith to Dardanelle Dam	12.0 mg/l
Ozark Highlands Eco (OH) =	2.5 mg/l	Arkansas (Dardanelle Dam to Terry L&	10.5 mg/l
Boston Mts. Eco (BM) =	1.3 mg/l	Arkansas (Terry L&D to L&D No. 5)	8.3 mg/l
Ark River Valley Eco (AV) =	3.0 mg/l	Arkansas (L&D No. 5 to Mouth)	9.0 mg/l
Gulf Coastal Eco (GC) =	5.5 mg/l	White (Above Beaver Lake)	2.5 mg/l
Delta Ecoregion (DL) =	8.0 mg/l	White (Below Bull Shoals to Black Riv)	3.3 mg/l
		White (From Black River to Mouth)	18.5 mg/l
		St. Francis River	18.0 mg/l
		Ouachita (Above Caddo River)	2.0 mg/l
		Ouachita (Below Caddo River)	5.5 mg/l
		Red River	33.0 mg/l

Total Hardness for:

Arkansas River = 125 mg/l	Red River = 211 mg/l
Ouachita River = 28 mg/l	St. Francis River = 103 mg/l
White River = 116 mg/l	
Gulf Coastal = 31 mg/l	Ouachita Mount = 31 mg/l
Ozark Highlands = 148 mg/l	Ark River Valley = 25 mg/l
Boston Mount = 25 mg/l	Delta = 81 mg/l

Large Rivers

Mississippi River, Arkansas River, Red River
White (Below confluence with Black River)
Ouachita (Below confluence with Little Miss. River)

WQ Levels not exceed for Sheridan 1/10

	Aquatic Life AML, ug/l
Cadmium Total	6.59
Chromium (hex)	29.20
Copper Total	27.48
Lead Total	12.30
Mercury Total	0.04
Nickel Total	426.32
Selenium Total	18.08
Silver Total	2.81
Zinc Total	243.22
Chromium (Tri)	1180.60
Cyanide Total	18.81
Beryllium Total	19.17
Arsenic	1177.92

Sheridan 1/10

Pollutant	% Rem***	Water Quality	Water Quality*	Sludge	Sludge ****	Inhibition**	Inhibition++	MAHL	MAHC	Domestic Allocation for %SF		MAIL	Max Inf Exceeded	Max Effluent
		mg/l	lbs/day	mg/kg	lbs/day	mg/l	lbs/day	lbs/day	mg/l	lbs/day	lbs/day^	lbs/day	MAHC	vs WQS(mg/l)
Cadmium Total	88	0.0066	0.4395	85	0.00	1.00	8.01	0.440	0.05490	0.00	0.396	0.395	No	No
Copper Total	90	0.0275	2.2006	4300	0.00	1.00	8.01	2.201	0.27485	0.13	1.981	1.848	0.3030	No
Lead Total	92	0.0123	1.2312	840	0.00	1.00	8.01	1.231	0.15377	0.00	1.108	1.105	No	No
Mercury Total	91	0.00004	0.0039	57	0.00	0.10	0.80	0.004	0.00048	0.0004	0.003	0.00308	No	No
Nickel Total	38	0.4263	5.5053	420	0.00	1.00	8.01	5.505	0.68761	0.01	4.955	4.946	No	No
Selenium Total	50	0.0181	0.2895	100	0.00	0.20	1.60	0.290	0.03616	0.00	0.261	0.259	No	No
Silver Total	42	0.0028	0.0387	0	0.00	0.25	2.00	0.039	0.00484	0.00	0.035	0.034	No	No
Zinc Total	82	0.2432	10.8183	7500	0.00	0.50	4.00	4.003	0.50000	0.21	3.603	3.397	No	No
Chromium Tota	88	1.1806	78.7695	3000	0.00	1.00	8.01	8.006	1.00000	0.01	7.206	7.196	No	No
Cyanide Total	69	0.0188	0.4857	0	0.00	0.10	0.80	0.486	0.06066	0.06	0.437	0.381	No	No
Arsenic	45	1.1779	17.1471	75	0.00	0.10	0.80	0.801	0.10000	0.00	0.721	0.716	No	No
Molybdenum	44	0.0000	0.0000	75	0.00	0.20	1.60	1.601	0.20000	0.02	1.441	1.422	No	No
Beryllium	65	0.019167	0.4385	0	0.00	0.10	0.80	0.4385	0.05476	0.00	0.395	0.393	No	No

Dry tons/day of sludge [0.00] Safety Factor [0.10]

* lbs/day = mg/l * 8.34 * average flow / (1-%Rem)

** Page 3-44 of EPA Guidance Mtrl. (Be est. @ 0.10 mg/l)

*** EPA Default Numbers from page 3-56 of TBLL guidance manual used for Se, CN & Ar

**** lbs/day = dry tons/day * 0.002 * CFR 503 criteria/ % removal from EPA Pret. Prog. Implementation workshop mtrl. ~ 6/93

++ lbs/day = mg/l * Flow * 8.34

^ lbs/day = (1 - SF) X MAHL

MAIL = Maximum allowable industrial loading = MAHL - Allocation for % SF - Domestic lb/day

Sheridan 1/10

Pollutant	% Rem***	Water Quality mg/l	Water Quality* lbs/day	Sludge mg/kg	Sludge **** lbs/day	Inhibition** mg/l	Inhibition++ lbs/day	MAHL lbs/day	MAHC mg/l	Domestic Allocation for %SF lbs/day	lbs/day^	MAIL lbs/day	Max Inf Exceeded MAHC	Max Effluent vs WQS(mg/l)
Cadmium Total	88	0.0066	0.4395	85	0.00	1.00	8.01	0.440	0.05490	0.00	0.396	0.395	No	No
Copper Total	90	0.0275	2.2006	4300	0.00	1.00	8.01	2.201	0.27485	0.13	1.981	1.848	0.3030	No
Lead Total	92	0.0123	1.2312	840	0.00	1.00	8.01	1.231	0.15377	0.00	1.108	1.105	No	No
Mercury Total	91	0.00004	0.0039	57	0.00	0.10	0.80	0.004	0.00048	0.0004	0.003	0.00308	No	No
Nickel Total	38	0.4263	5.5053	420	0.00	1.00	8.01	5.505	0.68761	0.01	4.955	4.946	No	No
Selenium Total	50	0.0181	0.2895	100	0.00	0.20	1.60	0.290	0.03616	0.00	0.261	0.259	No	No
Silver Total	42	0.0028	0.0387	0	0.00	0.25	2.00	0.039	0.00484	0.00	0.035	0.034	No	No
Zinc Total	82	0.2432	10.8183	7500	0.00	0.50	4.00	4.003	0.50000	0.21	3.603	3.397	No	No
Chromium Tota	88	1.1806	78.7695	3000	0.00	1.00	8.01	8.006	1.00000	0.01	7.206	7.196	No	No
Cyanide Total	69	0.0188	0.4857	0	0.00	0.10	0.80	0.486	0.06066	0.06	0.437	0.381	No	No
Arsenic	45	1.1779	17.1471	75	0.00	0.10	0.80	0.801	0.10000	0.00	0.721	0.716	No	No
Molybdenum	44	0.0000	0.0000	75	0.00	0.20	1.60	1.601	0.20000	0.02	1.441	1.422	No	No
Beryllium	65	0.019167	0.4385	0	0.00	0.10	0.80	0.4385	0.05476	0.00	0.395	0.393	No	No

Dry tons/day of sludge 0.00 Safety Factor 0.10

* lbs/day = mg/l * 8.34 * average flow / (1-%Rem)

** Page 3-44 of EPA Guidance Mtrl. (Be est. @ 0.10 mg/l)

*** EPA Default Numbers from page 3-56 of TBLL guidance manual used for Se, CN & Ar

**** lbs/day = dry tons/day * 0.002 * CFR 503 criteria/ % removal from EPA Pret. Prog. Implementation workshop mtrl. ~ 6/93

++ lbs/day = mg/l * Flow * 8.34

^ lbs/day = (1 - SF) X MAHL

MAIL = Maximum allowable industrial loading = MAHL - Allocation for % SF - Domestic lb/day

Domestic Calculations for Sheridan 1/10

Pollutants	EPA, P3-59 Avg	Reported	Loading	
	mg/l	mg/l	lbs/day	
Cadmium Total	0.0030	0.00012	0.001	All were detected except one. 1/2 mql used for it.
Copper Total	0.0607	0.02380	0.133	city data '08 & '09
Lead Total	0.0490	0.00059	0.003	All were detected except one. 1/2 mql used for it.
Mercury Total	0.0003	0.00007	0.000	city data '08 & '09
Nickel Total	0.0210	0.0015	0.0084	city data '08 & '09
Selenium Total	-	0.00031	0.002	All were detected except one. 1/2 mql used for it.
Silver Total	0.0050	0.00012	0.001	All were detected except one. 1/2 mql used for it
Zinc Total	0.1750	0.03693	0.206	All were detected except one. 1/2 mql used for it
Chromium Total	0.0500	0.00166	0.009	All were detected except one. 1/2 mql used for it
Cyanide Total	0.0410	0.01000	0.056	used 1/2 the MQL of 0.01 mg/l. All dom. were ND except one.
Arsenic	0.0030	0.00077	0.004	city data '08 & '09
Molybdenum	#########	0.00349	0.020	All were detected except one. 1/2 mql used for it
Beryllium	999999.00	0.00028	0.002	city data '08 & '09

Date	Cadmium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Zinc	Chromium	Cyanide	Arsenic	Molydenum	Beryllium
10/8/08	0.00006	0.08540	0.00108	0.000032	0.00214	0.00058	0.00016	0.08650	0.00054	0.01000	0.00072	0.00028	0.00012
12/8/08	0.00002	0.00402	0.00040	0.000095	0.00103	0.00020	0.00008	0.02440	0.00008	0.01000	0.00029	0.00010	0.00005
3/9/09	0.00014	0.00434	0.00063	0.000133	0.00224	0.00020	0.00001	0.02680	0.00101	0.01000	0.00107	0.00009	0.00005
5/9/09	0.00025	0.00142	0.00025	0.000036	0.00060	0.00025	0.00025	0.01000	0.00500	0.01000	0.00101	0.01350	0.00090
Quantitation Level (QL	0.0005	0.0005	0.0005	0.000005	0.0005	0.0050	0.0005	0.0200	0.0100	0.0100	0.0005	0.0100	0.0005
Average	0.00012	0.02380	0.00059	0.00007	0.00150	0.00031	0.00012	0.03693	0.00166	0.01000	0.00077	0.00349	0.00028
Maximum	0.0003	0.0854	0.0011	0.0001	0.0022	0.0006	0.0003	0.0865	0.0050	0.0100	0.0011	0.0135	0.0009
All Concs > QL (Yes/N	No	Yes	No	Yes	Yes	No	No	No	No	Yes	No	No	No

*EPA Default Numbers from guidance document

Sheridan 1/10

Influent (mg/l) No data entered when Non-detects < MQL

Date	Cadmium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Zinc	Chromium	Cyanide	Arsenic	Molydenu	Beryllium
12/8/09	0.00010	0.02640	0.00119	0.000015	0.00437	0.00020	0.00015	0.03940	0.00614		0.00065	0.00040	0.00014
1/9/09	0.00016	0.30300	0.02300	0.000048	0.11800	0.00024	0.00110	0.16300	0.15600		0.00062	0.00031	0.00023
2/9/09	0.00007	0.02200	0.00080	0.000018	0.00195	0.00020	0.00008	0.03400	0.00376		0.00048	0.00020	0.00012
3/9/09	0.00006	0.23200	0.00076	0.000031	0.01670	0.00040	0.00016	0.03220	0.01990		0.00128	0.00222	0.00016
4/9/09	0.00006	0.00460	0.00130	0.000008	0.05930	0.00040	0.00016	0.03730	0.02560		0.00110	0.00056	0.00018
5/9/09		0.01780		0.000009	0.00112			0.03460			0.00113		
6/9/09		0.07960		0.000036	0.00561			0.07410			0.00050		
7/9/09	0.00218	0.04640	0.01920	0.000110	0.01110			0.07680	0.03400	0.01600	0.00122		0.00051
8/8/08	0.00030	0.02430	0.00834	0.000049	0.15100	0.00100	0.00040	0.16800	0.04550		0.00115	0.00305	0.00020
9/8/08	0.00018	0.07430	0.00396	0.000049	0.01990	0.00040	0.00016	0.04510	0.03140		0.00070		0.00006
10/8/08	0.00016	0.08950	0.00234	0.000046	0.06080	0.00040	0.00016	0.07590	0.11400		0.00088	0.00032	0.00006
11/8/08	0.00020	0.10000	0.00474	0.000061	0.05420	0.00040	0.00028	0.12000	0.48000		0.00172	0.00118	0.00016
Quantitation Level (QL)	0.0005	0.0005	0.0005	0.000005	0.0005	0.0050	0.0005	0.0200	0.0100	0.0100	0.0005	0.0100	0.0005
Average	0.00035	0.08499	0.00656	0.00004	0.04200	0.00040	0.00029	0.07503	0.09163	0.01600	0.00095	0.00103	0.00018
Maximum	0.0022	0.3030	0.0230	0.0001	0.1510	0.0010	0.0011	0.1680	0.4800	0.0160	0.0017	0.0031	0.0005
All Concs > QL (Yes/No	No	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	No	No	No

Effluent (mg/l) No data entered when Non-detects < MQL

Date	Cadmium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Zinc	Chromium	Cyanide	Arsenic	Molydenu	Beryllium
8/8/08	0.00010	0.00885	0.00010	0.000008	0.01380	0.00100	0.00040	0.00645	0.00055		0.00075	0.00078	0.00015
9/8/08	0.00004	0.03320	0.00028	0.000002	0.07910	0.00040	0.00016	0.02870	0.00158		0.00094	0.00043	0.00006
10/8/08													
11/8/08	0.00004	0.00360	0.00034	0.000002	0.02560	0.00040	0.00016	0.00836	0.00446		0.00064	0.00062	0.00006
12/8/08	0.00002	0.00694	0.00058	0.000003	0.02820	0.00200	0.00008	0.00763	0.04080		0.00056	0.00071	0.00003
1/9/09													
2/9/09	0.00002	0.00812	0.00116	0.000006	0.02620	0.00020	0.00008	0.00646	0.01400		0.00058	0.00062	0.00003
3/9/09	0.00004	0.00384	0.00036	0.000004	0.01910	0.00040	0.00016	0.03420	0.00456		0.00112	0.00040	0.00006
4/9/09	0.00004	0.00658	0.00066	0.000002	0.01610	0.00040	0.00016	0.00530	0.01010		0.00102	0.00046	0.00006
5/9/09		0.00443		0.000003	0.01880						0.00091		
6/9/09													
7/9/09		0.00115		0.000002	0.00778								
Quantitation Level (QL)	0.0005	0.0005	0.0005	0.000005	0.0005	0.0050	0.0005	0.0200	0.0100	0.0100	0.0005	0.0100	0.0005
Average	0.00004	0.00852	0.00050	0.00000	0.02608	0.00069	0.00017	0.01387	0.01086	#DIV/0!	0.00082	0.00057	0.00006
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
All Concs > QL (Yes/No	No	Yes	No	No	Yes	No	No	No	No	Yes	Yes	No	No

	Cadmium	Copper	Lead	Mercury	Nickel	Selenium	Silver	Zinc	Chromium	Cyanide	Arsenic	Molydenu	Beryllium
Average % Removal rat	88	90	92	91	38	-70	42	82	88	#DIV/0!	14	44	65
EPA % REM	67	86	61	60	42	50	75	79	82	69	45	50	50
* use EPA default #s						*				*	*		*
Geometric Mean*	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.01	0.01	#NUM!	0.00	0.00	0.00

*Geometric Mean: The range in the geometric mean cannot contain a "zero" value; if less than 30 values are entered in each column, the user must either enter one-half the detection level or change the range of the geometric mean. The range of the geometric mean can be changed by specifying which rows have data (for example, B42:B62 has 20 data points).

MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT
REPORTING YEAR: Aug , 2008 **TO** Nov , 2008
TREATMENT PLANT: City of Sheridan **NPDES PERMIT #AR00** 34347
AVERAGE POTW FLOW: ___ **MGD** **% IU FLOW:** ___ **%**

METALS, CYANIDE and PHENOLS	MAHC (Total) (µg/l) (2)	INFLUENT DATES SAMPLED (µg/l) Once/quarter				WQ level/ limit (µg/l) (2)	EFFLUENT DATES SAMPLED (µg/l) Once/quarter — NO Discharge				LABORATORY ANALYSIS		
		Date	Date	Date	Date		Date	Date	Date	Date	EPA MQL (µg/l) (1)	EPA Method Used (1)	Detection Level Achieved (µg/l)
							8-08	9-08	10-08	11-08			
Antimony	N/A					N/A	0,150	0,800	N/A	0,500	60	200,8	
Cadmium							0,100	0,0400		0,0400	0.5		
Copper							8,85	33,2		3,60	0.5		
Lead							0,100	0,280		0,340	0.5		
Mercury							0,008	0,002		0,002	.005	1631E	
Nickel							13,8	79,1		25,6	0.5		
Selenium							1,00	0,400		0,400	5		
Silver							0,400	0,160		0,160	0.5		
Zinc							6,45	28,7		8,36	20		
Chromium							0,550	1,58		4,46	10		
Cyanide							<20	<20		<20	10	4500 CN E/9014	
Arsenic							0,750	0,940		0,640	0.5		
Molybdenum						N/A	0,775	0,431		0,620	--		
Phenols	N/A					N/A		17		6	5	420.1 9065	
Beryllium							0,150	0,0600		0,0600	0.5		
Thallium	N/A					N/A	0,250	0,100		0,100	0.5		
Flow, MGD	N/A					N/A							
(3)													
Hexavalent Chromium							<20	<20		<20		7196A 3500-CrB	

(1) It is advised that the influent and effluent samples are collected considering flow detention time through each plant.

MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT
REPORTING YEAR: Dec , 2008 **TO** March , 2009
TREATMENT PLANT: City of Sheridan **NPDES PERMIT #**AR00 34347
AVERAGE POTW FLOW: MGD **% IU FLOW:** %

METALS, CYANIDE and PHENOLS	MAHC (Total) (µg/l) (2)	INFLUENT DATES SAMPLED (µg/l) Once/quarter				WQ level/ limit (µg/l) (2)	EFFLUENT DATES SAMPLED (µg/l) Once/quarter NO Discharge				LABORATORY ANALYSIS		
		Date	Date	Date	Date		Date	Date	Date	Date	EPA MQL (µg/l) (1)	EPA Method Used (1)	Detection Level Achieved (µg/l)
							12-08	1-09	2-09	3-09			
Antimony	N/A					N/A	0.220		0.170	0.260	60	200.8	
Cadmium							0.0200		0.0200	0.0400	0.5	" "	
Copper							6.94		8.12	3.84	0.5	" "	
Lead							0.580		1.16	0.360	0.5	" "	
Mercury							0.0034		0.0058	0.0037	.005	1631E	
Nickel							28.2		26.2	19.1	0.5	" "	
Selenium							0.200		0.200	0.400	5	" "	
Silver							0.0800		0.0800	0.160	0.5	" "	
Zinc							7.63		6.46	34.2	20	" "	
Chromium							40.8		14.0	4.56	10	" "	
Cyanide							<20		<10	<20	10	4500-CN E/9014	
Arsenic							0.560		0.580	1.12	0.5	" "	
Molybdenum						N/A	0.710		0.620	0.400	--	" "	
Phenols	N/A					N/A	<5		<5	<5	5	H20.1 9065	
Beryllium							0.0300		0.0300	0.0600	0.5	" "	
Thallium	N/A					N/A	0.0500		0.0500	0.100	0.5	" "	
Flow, MGD	N/A					N/A							
(3)													
Hexavalent Chromium							<20		<10	<10		7196A 3500-Cr.B	

(1) It is advised that the influent and effluent samples are collected considering flow detention time through each plant.

MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT
REPORTING YEAR: April , 2009 **TO** July , 2009
TREATMENT PLANT: City of Sheridan **NPDES PERMIT #AR00** 34347
AVERAGE POTW FLOW: ___ **MGD** **% IU FLOW:** ___ **%**

METALS, CYANIDE and PHENOLS	MAHC (Total) (µg/l) (2)	INFLUENT DATES SAMPLED (µg/l) Once/quarter				WQ level/ limit (µg/l) (2)	EFFLUENT DATES SAMPLED (µg/l) Once/quarter EPA 200.8 ↓ NO Discharge				LABORATORY ANALYSIS		
		Date	Date	Date	Date		Date	Date	Date	Date	EPA MQL (µg/l) (1)	EPA Method Used (1)	Detection Level Achieved (µg/l)
							4-09	5-09	6-09	7-09			
Antimony	N/A					N/A	0.140	<60.0		<60.0	60	200.7 6010B	
Cadmium							0.0400	<0.500		<0.500	0.5	3113B 7131A	
Copper							6.58	4.43		1.15	0.5	3113B 7211	
Lead							0.660	<5.00		<0.500	0.5	3113B 7421	
Mercury							0.002	0.003		.00162	.005	1631E	.0002
Nickel							16.1	18.8		7.78	0.5	3113B 7521	
Selenium							0.400	<5.00		<5.00	5	3113B 7746	
Silver							0.160	<0.500		<0.500	0.5	3113B 7761A	
Zinc							5.30	<20.0		<20.0	20	200.7 6010B	
Chromium							10.1	<10.0		<10.0	10	200.7 6010B	
Cyanide							<10	<10		<10	10	4500CN E/9014	
Arsenic							1.02	0.910		<0.500	0.5	3113B 7041	
Molybdenum						N/A	0.460	<27		<27	--	200.7	
Phenolics	N/A					N/A	<5	<5		<50	5	420.1 9065	
Beryllium							0.0600	<0.500		<0.500	0.5	3113B 7091A	
Thallium	N/A					N/A	0.100	2.71		<0.500	0.5	3113B 7841	
Flow, MGD	N/A					N/A							
(3)													
Hexavalent Chromium							<10	<10		<10		7196A 3500:CrB	

(1) It is advised that the influent and effluent samples are collected considering flow detention time through each plant.

MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT
REPORTING YEAR: AUG , 2008 **TO** NOV , 2008
TREATMENT PLANT: City of Sheridan **NPDES PERMIT #AR00** 34347
AVERAGE POTW FLOW: MGD **% IU FLOW:** %

METALS, CYANIDE and PHENOLS	MAHC (Total) (µg/l) (2)	INFLUENT DATES SAMPLED (µg/l) Once/quarter				WQ level/ limit (µg/l) (2)	Influent [redacted] DATES SAMPLED (µg/l) Once/quarter				LABORATORY ANALYSIS		
		Date	Date	Date	Date		Date	Date	Date	Date	EPA MQL (µg/l) (1)	EPA Method Used (1)	Detection Level Achieved (µg/l)
							8-08	9-08	10-08	11-08			
Antimony	N/A					N/A	0.200	0.360	0.220	1.12	60	200.8	
Cadmium							0.300	0.180	0.160	0.200	0.5		
Copper							243	74.3	89.5	100	0.5		
Lead							8.34	3.96	2.34	4.74	0.5		
Mercury							0.0488	0.0490	0.0458	0.061	.005	1631 E	
Nickel							151	19.9	60.8	54.2	0.5		
Selenium							1.00	0.400	0.400	0.400	5		
Silver							0.400	0.160	0.160	0.280	0.5		
Zinc							168	45.1	75.9	120	20		
Chromium							45.5	31.4	114	480	10		
Cyanide							<20	<20	<20	<20	10	4500-CN E/9014	
Arsenic							1.15	0.700	0.880	1.72	0.5		
Molybdenum						N/A	3.05		0.320	1.18	--		
Phenols	N/A					N/A	20	7	19	24	5	420.1 9065	
Beryllium							0.200	0.0600	0.0600	0.160	0.5		
Thallium	N/A					N/A	0.250	0.100	0.100	0.100	0.5		
Flow, MGD	N/A					N/A							
(3)													
Hexavalent Chromium							<20	<20	<10	<20		7196A 3500-Cr B	

(1) It is advised that the influent and effluent samples are collected considering flow

Allen

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MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT
REPORTING YEAR: Dec , 2008 **TO** March , 2009
TREATMENT PLANT: City of Sheridan **NPDES PERMIT #**AR00 34347
AVERAGE POTW FLOW: ___ **MGD** **% IU FLOW:** ___ %

METALS, CYANIDE and PHENOLS	MAHC (Total) (µg/l) (2)	INFLUENT DATES SAMPLED (µg/l) Once/quarter				WQ level/ limit (µg/l) (2)	Influent [redacted] DATES SAMPLED (µg/l) Once/quarter				LABORATORY ANALYSIS		
		Date	Date	Date	Date		Date	Date	Date	Date	EPA MQL (µg/l) (1)	EPA Method Used (1)	Detection Level Achieved (µg/l)
							12-08	1-09	2-09	3-09			
Antimony	N/A					N/A	0.190	0.280	0.130	0.200	60	200.8	
Cadmium							0.100	0.160	0.0700	0.0600	0.5	" "	
Copper							26.4	302	22.0	23.2	0.5	" "	
Lead							1.19	23.0	0.820	0.760	0.5	" "	
Mercury							0.0151	0.0475	0.0176	0.0313	.005	1631E	
Nickel							4.37	118	1.95	16.7	0.5	" "	
Selenium							0.200	0.240	0.200	0.400	5	" "	
Silver							0.150	1.10	0.0800	0.160	0.5	" "	
Zinc							39.4	163	34.0	32.2	20	" "	
Chromium							6.14	156	3.76	19.9	10	" "	
Cyanide							<20	<10	<10	<20	10	4500 CN E/9014	
Arsenic							0.650	0.620	0.480	1.28	0.5	" "	
Molybdenum						N/A	0.400	0.310	0.200	2.22	--	" "	
Phenols	N/A					N/A	<10	<5	6	<5	5	420.1 9065	
Beryllium							0.140	0.230	0.120	0.160	0.5	" "	
Thallium	N/A					N/A	0.0500	0.0700	0.0500	0.100	0.5	" "	
Flow, MGD	N/A					N/A							
(3)													
Hexavalent Chromium							<20	<10	<10	<10		7196A 3500-Cr B	

(1) It is advised that the influent and effluent samples are collected considering flow detention time through the plant

MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT
REPORTING YEAR: APRIL , 2009 **TO** July , 2009
TREATMENT PLANT: City of Sheridan **NPDES PERMIT #**AR00 34347
AVERAGE POTW FLOW: ___ MGD **% IU FLOW:** ___ %

METALS, CYANIDE and PHENOLS	MAHC (Total) (µg/l) (2)	INFLUENT DATES SAMPLED (µg/l) Once/quarter				WQ level/ limit (µg/l) (2)	INFLUENT DATES SAMPLED (µg/l) Once/quarter EPA 200.8				LABORATORY ANALYSIS		
		Date	Date	Date	Date		Date	Date	Date	Date	EPA MQL (µg/l) (1)	EPA Method Used (1)	Detection Level Achieved (µg/l)
							4-09	5-09	6-09	7-09			
Antimony	N/A					N/A	0.280	<60.0	<60.0	<60.0	60	200.7 6010B	
Cadmium							0.0600	<0.500	<0.500	2.18	0.5	3113B 7131A	
Copper							46.0	17.8	79.6	46.4	0.5	3113B 7211	
Lead							1.30	<5.00	<0.500	19.2	0.5	3113B 7421	
Mercury							0.008	0.009	0.036	.11	.005	1631E	.0002
Nickel							59.3	1.12	5.61	11.1	0.5	3113B 7521	
Selenium							0.400	<5.00	<5.00	<5.00	5	31138 7746	
Silver							0.160	<0.500	<0.500	<0.500	0.5	3113B 7761A	
Zinc							37.3	34.6	74.1	76.8	20	200.7 6010B	
Chromium							25.6	<10.0	<10.0	34.0	10	200.7 6010B	
Cyanide							<10	<10	<10	16	10	4500-CN E/9014	
Arsenic							1.10	1.13	0.500	1.22	0.5	3113B 7041	
Molybdenum						N/A	0.560	<27	<27	<27	--	200.7	
Phenolics	N/A					N/A	<5	<5	13	<5	5	420.1 9065	
Beryllium							0.180	<0.500	<0.500	0.505	0.5	3113B 7091A	
Thallium	N/A					N/A	0.100	1.81	<0.500	<0.500	0.5	3113B 7841	
Flow, MGD	N/A					N/A							
(3)													
Hexavalent Chromium							<10	<10	<10	<10		7196A 3500-CrB	

(1) It is advised that the influent and effluent samples are collected considering flow detention time through each plant

MONITORING RESULTS FOR THE ANNUAL PRETREATMENT REPORT
REPORTING YEAR: OCT , 2008 **TO** May , 2009
TREATMENT PLANT: City of Sheridan **NPDES PERMIT #AR00** 34347
AVERAGE POTW FLOW: MGD **% IU FLOW:** %

METALS, CYANIDE and PHENOLS	MAHC (Total) (µg/l) (2)	INFLUENT DATES SAMPLED (µg/l) Once/quarter				WQ level/ limit (µg/l) (2)	Domestic [redacted] DATES SAMPLED (µg/l) Once/quarter				LABORATORY ANALYSIS		
		Date	Date	Date	Date		Date	Date	Date	Date	EPA MQL (µg/l) (1)	EPA Method Used (1)	Detection Level Achieved (µg/l)
							10-08	12-08	3-09	5-09			
Antimony	N/A					N/A	0.0600	0.0300	0.250	<60.0	60	200.8	
Cadmium							0.0600	0.0200	0.140	<0.500	0.5	" "	
Copper						ETG	85.4	4.02	4.34	1.42	0.5	" "	
Lead							1.08	0.400	0.630	<5.00	0.5	" "	
Mercury							0.0316	0.0946	0.133	0.036	.005	1631E	.0002
Nickel							2.14	1.03	2.24	0.600	0.5	" "	
Selenium							0.580	0.200	0.200	<5.00	5	" "	
Silver							0.160	0.0800	0.0800	<0.500	0.5	" "	
Zinc							86.5	24.4	26.8	<20.0	20	" "	
Chromium							0.540	0.0800	1.01	<10.0	10	" "	
Cyanide							<20	<20	<20	10	10	4500CN E/9014	
Arsenic							0.720	0.290	1.07	1.01	0.5	" "	
Molybdenum						N/A	0.280	0.100	0.0900	<27	--	" "	
Phenols	N/A					N/A	37	<5	<5	<5	5	420.1 9065	
Beryllium							0.0600	0.160	0.310	<0.500	0.5	" "	
Thallium	N/A					N/A	0.120	0.0500	0.0500	0.900	0.5	" "	
Flow, MGD	N/A					N/A							
(3)													
Hexavalent Chromium							<20	<20	<10	<10		7196A 3500-CrB	

(1) It is advised that the influent and effluent samples are collected considering flow