

 WSPRLWA2009
 BERECHNUNG STATIONAERER WASSERSPIEGELLAGEN

DATUM : 3.06.2009
 STARTZEIT : 14h 57' 5"
 EINGABEDATEI : STWS0001.001
 ERGEBNISDATEI : Ster0001.001
 BEWUCHSSDATEI : Stbe0001.001
 QPLOTT-DATEI : Stqp0001.001
 PLOTT-DATEI : Stlp0001.001

ICL Ingenieur Consult Dr.-Ing. A. Kolbmueller GmbH
 Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0

STATIONAERE WASSERSPIEGELLAGEN
 PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT Kl-Strieg
 ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
 VARIANTE HQ 100 Ist
 DATEI Ster0001

SEITE 1

STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m	m3/s	m^0.33/s	m	m	m2	m/s	m	NN+m	IE o/oo	ALPHAS		
0 +	1.00	241.80	17.0	0.00	0.00	0.00	0.00	0.000	242.07	0.454	1.000	1	0
	101.00	2.86	101.00	17.19	21.66	44.28	2.28	0.00	242.07	4.14	1.000		
			0.00	0.00	0.00	0.00	0.00						
0 +	10.00	242.04	17.0	0.00	0.00	0.00	0.00	0.000	242.09	0.142	1.000	12	0
	38.40	3.10	38.40	22.0	27.96	40.41	0.95	0.00	242.09	1.14	1.000		
			0.00	0.00	0.00	0.00	0.00						

Seite 1

 Energieleitungsfaelle negativ
 iii Datensatz ueberpruefen iii

0 +	81.00	242.12	0.00	17.0	0.00	0.00	0.00	0.000	242.26	0.503	1.291	0	0
	38.40	2.32	33.34	20.3	9.14	11.29	1.78	0.035	242.26	3.93	1.109		
			5.06	17.0	13.67	13.71	0.70						
0 +	181.00	242.53	0.00	17.0	0.00	0.00	0.00	0.003	242.71	0.641	1.192	0	0
	37.14	1.68	35.70	22.0	12.96	13.80	1.92	0.00	242.71	5.15	1.080		
			1.44	17.0	11.30	11.34	0.49						
0 +	297.00	243.70	0.00	17.0	0.00	0.00	0.00	0.000	244.37	1.000	1.000	4	0
	37.14	2.19	37.14	22.0	7.76	9.08	3.61	0.000	244.37	22.77	1.000		
			0.00	17.0	0.00	0.00	0.00						

+++++++ Engstelle mit Flieswechsel, Energieminimum > EH(UW)
 iii Profiltabstand zum Ow ueberpruefen iii ++++++

0 +	364.50	244.52	0.00	17.0	0.12	0.12	0.00	0.06	244.73	0.568	1.041	0	0
	37.14	2.72	36.97	22.0	10.10	12.30	2.07	0.000	244.73	5.41	1.019		
			0.17	17.0	3.32	3.33	0.35						
0 +	441.00	244.94	0.14	17.0	4.66	4.67	0.27	0.000	245.13	0.594	1.052	0	0
	37.14	1.97	36.97	22.0	12.63	13.68	1.93	0.000	245.13	4.94	1.024		
			0.03	17.0	1.06	1.09	0.27						
0 +	503.00	245.28	0.00	17.0	0.00	0.00	0.00	0.000	245.39	0.436	1.002	0	0
	37.14	1.79	37.13	22.0	21.19	21.93	1.48	0.000	245.39	3.78	1.001		
			0.01	17.0	0.18	0.36	0.19						

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 VARIANTE HQ 100 Ist
 DATEI Ster0001

SEITE 2

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ⁰ .33/s	BREITE m	UMFANG m	FLAECH m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	FRUDE IE o/oo	ALPHA ALPHAS	KZW KZD
0 + 583.00 37.14	245.60 1.45	1.20 0.00	17.0 17.0	13.08 11.86 0.00	13.11 12.99 0.00	2.14 14.03 0.00	0.56 2.56 0.00	0.000	245.92	1.000 12.24	1.205 1.087	4 0
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) !!! Profiltabstand zum Ow ueberpruefen !!!												
0 + 689.00 37.14	246.31 1.56	8.54 28.45 0.15	17.0 17.0	31.55 14.11 1.37	31.55 14.72 1.46	13.07 16.99 0.34	0.65 1.67 0.44	0.000	246.42	0.595 4.78	1.505 1.174	0 0
0 + 796.00 37.14	246.79 1.79	0.63 36.51 0.00	17.0 17.0	11.25 13.42 0.00	11.25 14.67 0.00	1.79 19.56 0.00	0.35 1.87 0.00	0.014	246.96	0.636 4.91	1.133 1.058	0 0
0 + 891.00 37.14	247.25 2.18	0.05 37.09 0.00	17.0 17.0	9.52 13.91 0.00	9.52 15.17 0.00	0.36 19.94 0.00	0.14 1.86 0.00	0.000	247.43	0.638 4.97	1.032 1.016	0 0
0 + 990.00 37.14	247.77 2.07	0.00 37.14 0.00	17.0 17.0	0.00 13.53 0.00	0.00 14.73 0.00	0.00 18.47 0.00	0.00 2.01 0.00	0.002	247.98	0.550 6.18	1.000 1.000	0 0
0 + 998.00 37.14	247.80 1.92	0.00 37.14 0.00	17.0 17.0	0.00 17.28 0.00	0.00 21.39 0.00	0.00 16.10 0.00	0.00 2.31 0.00	0.004	248.08	0.763 16.07	1.000 1.000	31 5
1 + 6.00 37.14	247.91 1.99	0.06 37.07 0.00	17.0 17.0	7.21 12.22 1.48	7.21 13.05 1.48	0.33 16.03 0.03	0.20 2.31 0.13	0.000	248.18	0.834 8.40	1.040 1.019	0 0
1 + 25.00 37.14	248.10 2.13	0.60 36.40 0.14	17.0 17.0	17.80 12.22 4.48	17.81 13.05 4.50	1.99 12.65 0.49	0.30 2.06 0.30	0.000	248.31	0.854 5.87	1.224 1.098	0 0
1 + 96.00 37.14	248.50 1.92	0.00 37.14 0.00	17.0 17.0	0.00 14.02 2.16	0.00 15.48 2.16	0.00 22.70 0.00	0.00 1.64 0.01	0.000	248.64	0.441 3.32	1.000 1.000	0 0
1 + 166.00 37.14	248.80 1.61	0.00 37.14 0.00	17.0 17.0	0.53 12.62 0.05	0.53 13.57 0.05	0.02 16.52 0.00	0.16 2.25 0.00	0.019	249.05	0.641 8.03	1.002 1.001	0 0

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Seite 3

STATIONAERE WASSERSPIEGELLAGEN Ster0001.001
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009
PROJEKT Kl-strieg Station 0 + 1.00 bis 0 + 23380.00 m
ZUSTAND Station 0 HQ 100.1st
VARIANTE Station 0 HQ 100.1st
DATEI Ster0001

ERGEBNISSE

SEITE 3

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ⁰ .33/s	BREITE m	UMFANG m	FLAECH m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	FRUDE IE o/oo	ALPHA ALPHAS	KZW KZD
1 + 222.20 37.14	249.25 1.57	0.06 36.67 0.42	17.0 17.0	9.97 12.86 6.81	10.07 13.39 6.82	0.34 16.22 0.99	0.16 2.26 0.42	0.000	249.50	0.932 8.18	1.127 1.057	0 0
1 + 226.00 37.14	249.42 1.82	3.10 30.76 3.27	17.0 17.0	19.24 13.36 10.07	19.58 13.66 10.13	6.74 19.81 5.35	0.46 1.55 0.61	0.000	249.52	0.529 3.03	1.511 1.184	0 0
1 + 273.00 37.14	249.33 1.48	0.12 37.01 0.01	17.0 17.0	3.30 10.97 0.45	3.33 11.58 0.46	0.29 12.60 0.02	0.42 2.94 0.27	0.000	249.77	1.000 15.93	1.039 1.018	4 0

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)
!!! Profiltabstand zum Ow ueberpruefen !!!

1 + 349.00 37.14	250.06 1.97	0.13 37.01 0.00	17.0 17.0	2.59 11.38 0.00	2.63 12.27 0.00	0.34 16.35 0.00	0.37 2.26 0.00	0.000	250.32	0.660 7.22	1.032 1.014	0 0
1 + 421.00 37.14	250.59 2.27	2.27 34.81 0.06	17.0 17.0	20.91 11.24 0.55	20.91 12.10 0.75	4.61 16.32 0.14	0.49 2.13 0.44	0.000	250.80	0.823 6.31	1.377 1.151	0 0
1 + 541.00 37.14	251.43 1.91	0.02 37.11 0.00	17.0 17.0	2.03 11.24 0.16	2.03 12.10 0.22	0.09 12.32 0.01	0.28 3.01 0.33	0.000	251.89	1.000 18.29	1.014 1.007	4 0
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)												
1 + 545.00 37.14	251.27 1.72	0.00 37.14 0.00	17.0 17.0	0.00 5.27 0.00	0.00 9.42 0.00	0.00 9.34 0.00	0.00 3.98 0.00	0.050	252.08	0.954 33.05	1.000 1.000	12 0
1 + 551.00	251.98	0.00	17.0	0.00	0.00	0.00	0.00	0.000	252.19	0.571	1.122	0 0

Seite 4

STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	FROUDE	ALPHA	KZW	KZD
ABFLUSS	NN+M/m	m3/s	mNo.33/s	m	m	m2	m/s	m	NN+M	IE o/oo	ALPHAS	KZW	KZD
37.14	2.25	1.05	17.0	5.52	5.57	1.87	0.56			4.71	1.052		
1 + 600.50	252.29	2.80	17.0	26.74	26.75	8.89	0.31			0.377	1.790	0	0
37.14	2.27	9.38	17.0	33.50	33.67	20.15	0.47			1.49	1.253	0	0
1 + 695.00	252.45	17.12	17.0	24.41	24.55	23.42	0.73			0.326	1.283	0	0
37.14	1.90	0.85	17.0	10.17	10.57	15.33	1.25	0.002	252.50	1.97	1.092	0	0
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PROJEKT K1-strieg Station 0 + 1.00 bis 0 + 23380.00 m													
ZUSTAND HQ 100 Ist													
VARIANTE Ster0001													
DATEI Ster0001													
ERGEBNISSE													
1 + 789.00	252.69	0.06	17.0	3.63	3.63	0.28	0.20			0.536	1.050	0	0
37.14	1.58	36.97	22.0	21.87	22.23	24.29	1.52	0.017	252.80	4.25	1.023	0	0
1 + 865.00	253.10	0.00	17.0	0.00	0.00	0.00	0.00			0.614	1.000	0	0
37.14	1.39	0.00	17.0	0.00	0.00	0.00	0.00	0.007	253.27	8.02	1.000	0	0
1 + 940.00	254.57	10.55	17.0	12.15	13.06	6.22	1.70			1.000	1.390	4	0
37.14	2.24	14.77	22.0	3.12	7.13	5.12	2.89	0.000	254.81	26.78	1.117	0	0
+++++++ Engstelle mit Fluesswechsel, Energieminimum > EH(UW) ++++++													
1 + 944.00	254.76	0.04	17.0	1.02	1.08	0.18	0.22			0.347	1.485	0	0
37.14	2.28	25.43	22.0	12.82	15.32	21.71	1.17	0.000	254.81	1.78	1.161	0	0
2 + 14.00	254.90	0.00	17.0	0.00	0.00	0.00	0.00			0.458	1.000	0	0
37.14	2.34	0.00	17.0	0.00	0.00	0.00	0.00	0.068	255.10	4.78	1.000	0	0

STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	FROUDE	ALPHA	KZW	KZD
ABFLUSS	NN+M/m	m3/s	mNo.33/s	m	m	m2	m/s	m	NN+M	IE o/oo	ALPHAS	KZW	KZD
2 + 23.00	254.89	0.00	17.0	0.00	0.00	0.00	0.00			0.593	1.000	31	5
37.14	2.04	0.00	17.0	9.79	11.96	15.77	2.36	0.007	255.17	7.93	1.000	31	5
2 + 26.00	254.92	0.31	17.0	2.02	2.09	0.56	0.56			0.618	1.065	0	0
37.14	2.01	36.72	22.0	8.96	10.34	15.92	2.31	0.000	255.19	6.19	1.028	0	0
2 + 28.00	254.96	0.00	17.0	0.47	0.57	0.02	0.16			0.546	1.003	31	5
37.14	2.09	0.00	17.0	10.06	11.97	12.06	2.18	0.000	255.20	6.11	1.001	31	5
2 + 30.00	255.03	2.24	17.0	17.28	17.35	4.63	0.48			0.811	1.695	0	0
37.14	2.07	32.93	22.0	10.52	11.66	16.96	1.94	0.000	255.20	4.72	1.258	0	0
2 + 33.00	255.05	2.29	17.0	17.29	17.36	4.72	0.49			0.799	1.701	0	0
37.14	2.07	32.81	22.0	10.52	11.66	17.03	1.93	0.000	255.21	4.63	1.259	0	0

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PROJEKT K1-strieg Station 0 + 1.00 bis 0 + 23380.00 m

ZUSTAND HQ 100 Ist

VARIANTE Ster0001

DATEI Ster0001

ERGEBNISSE

STATION WSPLAGE/H ABFLUSS K-WERT BREITE UMFANG FLAECHE GESCHW HZV E-HOEH FROUDE ALPHA KZW KZD

ABFLUSS NN+M/m m3/s mNo.33/s m m m2 m/s m NN+M IE o/oo ALPHAS KZW KZD

2 + 81.10 255.26 9.83 17.0 12.63 13.04 9.17 1.07 0.008 255.49 6.681 1.430 0 0

37.14 2.06 0.22 17.0 11.81 1.92 0.44 0.51 0.68 255.70 0.410 1.259 0 0

2 + 131.00 255.60 31.82 22.0 11.32 12.00 20.99 1.52 0.000 255.70 2.25 1.097 0 0

37.14 2.26 0.22 17.0 2.67 2.80 0.70 0.32 0.56 255.86 0.601 1.604 0 0

2 + 181.10 255.71 29.00 22.0 9.35 9.17 15.19 1.91 0.000 255.86 3.84 1.209 0 0

37.14 2.27 6.04 17.0 15.16 15.29 8.49 0.71 0.71 255.86 3.84 1.209 0 0

STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+M/m	m ³ /s	m ³ /s	m	m	m ²	m/s	m	NN+M	IE o/oo	ALPHAS		
Stero001.001													
2 + 250.00	255.98	5.76	17.0	16.52	16.66	9.60	0.60	0.000	256.08	0.504	1.705	0	0
37.14	2.31	3.65	17.0	9.06	10.62	17.62	1.57	0.47	256.08	2.60	1.236	0	0
2 + 309.00	256.12	0.08	17.0	3.94	3.96	0.40	0.21	0.011	256.27	0.617	1.223	0	0
37.14	2.12	0.89	17.0	12.98	13.96	21.24	1.70	0.32	256.27	3.42	1.096	0	0
2 + 375.00	256.37	2.73	17.0	24.99	25.03	5.97	0.46	0.000	256.54	0.728	1.422	0	0
37.14	2.01	0.11	17.0	13.13	13.85	18.41	1.86	0.37	256.54	4.90	1.166	0	0
2 + 445.00	256.74	9.29	17.0	28.28	28.31	13.83	0.67	0.000	256.85	0.562	1.659	0	0
37.14	1.99	2.16	17.0	10.51	11.26	14.90	1.69	0.000	256.85	4.03	1.213	0	0
2 + 499.00	257.04	2.25	17.0	13.41	13.42	3.32	0.68	0.000	257.32	1.000	1.369	4	0
37.14	1.88	0.47	17.0	11.75	12.39	14.14	2.43	0.45	257.32	10.27	1.147	0	0
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++													
2 + 557.00	257.50	2.28	17.0	14.37	14.40	3.74	0.61	0.000	257.77	0.863	1.335	0	0
37.14	1.92	0.16	17.0	10.29	10.95	14.74	2.35	0.48	257.77	7.71	1.134	0	0
2 + 617.00	257.98	0.00	17.0	0.00	0.00	0.00	0.00	0.035	258.38	0.679	1.000	0	0
37.14	1.93	0.00	17.0	7.66	10.46	13.27	2.80	0.00	258.38	11.79	1.000	0	0

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DATUM : 3.06.2009

PROJEKT Kl.-striefg
ZUSTAND Station 0
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 6

ERGEBNISSE

2 + 654.00	258.40	0.00	17.0	0.00	0.00	0.00	0.00	0.001	258.84	0.709	1.000	0	0
37.14	2.10	0.21	17.0	7.39	9.81	12.73	2.92	0.001	258.84	0.709	1.000	0	0
Stero001.001													
37.14	2.39	0.00	17.0	0.00	0.00	0.00	0.00	0.00	12.41	1.000			
2 + 681.00	258.71	0.00	17.0	0.00	0.00	0.00	0.00	0.010	259.29	0.684	1.000	12	0
37.14	2.26	0.00	22.0	4.46	9.78	11.03	3.37	0.00	259.29	19.92	1.000	0	0
2 + 689.00	259.12	0.00	10.0	0.00	0.00	0.00	0.00	0.000	259.39	0.563	1.037	0	0
37.14	2.26	0.11	10.0	8.03	10.97	16.08	2.30	0.00	259.39	6.58	1.017	0	0
2 + 774.70	259.65	0.16	10.0	1.44	1.65	0.53	0.31	0.000	259.85	0.508	1.058	0	0
37.14	2.28	0.03	10.0	9.99	11.06	18.42	2.01	0.21	259.85	4.21	1.027	0	0
2 + 832.00	259.90	0.12	10.0	1.47	1.57	0.43	0.28	0.000	260.10	0.549	1.091	0	0
37.14	2.10	0.21	10.0	10.80	11.44	18.16	2.03	0.34	260.10	4.58	1.041	0	0
2 + 881.00	260.16	0.43	10.0	3.04	3.52	1.37	0.31	0.000	260.30	0.527	1.571	0	0
37.14	2.18	0.26	10.0	12.12	13.18	19.86	1.71	0.38	260.30	3.50	1.220	0	0
2 + 974.00	260.71	0.35	10.0	1.46	1.61	0.55	0.64	0.000	261.19	1.000	1.108	4	0
37.14	1.63	0.16	10.0	10.20	10.55	11.79	3.11	0.49	261.19	17.22	1.048	0	0
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++													
3 + 18.00	261.31	1.47	10.0	7.80	7.94	2.86	0.52	0.000	261.65	0.890	1.344	0	0
37.14	1.71	0.12	10.0	9.89	10.46	13.43	2.65	0.36	261.65	10.37	1.143	0	0
3 + 96.00	262.10	5.71	10.0	9.66	10.82	11.17	0.51	0.000	262.16	0.344	2.097	0	0
37.14	1.57	21.82	10.0	10.45	11.18	15.76	1.38	0.44	262.16	2.51	1.321	0	0
3 + 134.00	262.18	0.40	10.0	7.63	7.66	2.22	0.18	0.000	262.24	0.423	1.800	0	0
37.14	1.66	2.74	10.0	21.51	21.82	30.25	1.12	0.20	262.24	1.69	1.302	0	0

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Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0

STATIONAERE WASSERSPIEGELLAGEN
PROGRAMM WSPR2009 (C.) Knauf 2009

DATUM : 3.06.2009

PROJEKT Kl.-striefg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m

Seite 8

VARIANTE HQ 100 Ist
DATEI Ster0001

Ster0001.001
SEITE 7

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ 0.33/s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEH NN+m	FRUDE IE o/oo	ALPHA	KZW KZD
3 + 209.50	262.39	0.08	12.0	0.99	1.13	0.26	0.30	0.076	262.61	0.605	1.042	0 0
37.14	1.86	37.01	10.0	13.08	17.85	12.85	2.07	0.23	6.16	6.16	1.020	0 0
3 + 297.00	262.89	7.14	10.0	32.12	32.40	22.89	0.31	0.000	262.95	0.368	2.404	0 0
37.14	2.36	28.22	10.0	11.88	12.42	22.17	1.27	0.28	1.55	1.55	1.441	0 0
3 + 390.00	263.06	0.13	10.0	1.40	1.55	0.47	0.27	0.052	263.24	0.516	1.155	0 0
37.14	2.20	36.59	10.0	10.53	11.35	19.47	1.88	0.29	3.55	3.55	1.069	0 0
3 + 477.00	263.40	6.23	10.0	23.04	23.15	16.72	0.37	0.000	263.48	0.422	2.141	0 0
37.14	2.23	29.46	10.0	11.88	12.42	20.64	1.43	0.29	2.14	2.14	1.377	0 0
3 + 481.00	263.31	0.00	10.0	0.00	0.00	0.00	0.00	0.164	263.68	0.607	1.000	31 5
37.14	2.12	37.14	10.0	7.04	10.52	13.91	2.67	0.00	10.16	10.16	1.000	0 0
3 + 485.00	263.57	4.54	10.0	24.18	24.24	13.00	0.35	0.000	263.70	0.534	1.967	0 0
37.14	2.34	32.40	10.0	10.51	11.39	19.47	1.66	0.21	2.80	2.80	1.345	0 0
3 + 488.00	263.54	3.19	10.0	26.97	27.00	9.74	0.33	0.002	263.71	0.698	1.881	0 0
37.14	2.18	33.87	10.0	10.51	11.39	17.74	1.91	0.20	4.17	4.17	1.329	0 0
3 + 565.00	264.17	3.09	10.0	26.38	26.41	8.07	0.38	0.000	264.43	1.000	2.137	4 0
37.14	2.45	33.58	10.0	9.02	10.05	14.30	2.35	0.24	7.11	7.11	1.411	0 0
0.47	0.47	0.47	10.0	12.24	12.27	1.91	0.24	0.000	264.43	1.000	2.137	4 0
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++												
!!! Profllabstand zum Ow ueberpruefen !!!												
3 + 661.00	264.56	5.43	10.0	19.89	20.06	13.99	0.39	0.000	264.67	0.464	1.908	0 0
37.14	2.39	31.46	10.0	10.51	11.39	19.94	1.58	0.21	2.44	2.44	1.320	0 0
0.25	0.25	0.25	10.0	4.48	4.52	1.22	0.21	0.311	265.08	0.000	1.219	11 0
3 + 664.00	264.30	0.00	10.0	0.00	0.00	0.00	0.00	0.311	265.08	0.000	1.219	11 0
37.14	2.12	1.00	10.0	8.79	8.83	1.37	0.73	0.002	266.44	0.667	1.000	0 0
0.02	0.02	0.02	10.0	0.31	0.74	0.10	0.19	0.002	266.44	0.667	1.000	0 0

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Zwitsckauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0

STATIIONAERE WASSERSPIEGELLAGEN
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT k1-strieg
ZUSTAND Station 0
VARIANTE HQ 100 Ist
DATEI Ster0001

ERGEBNISSE
SEITE 8

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ 0.33/s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEH NN+m	FRUDE IE o/oo	ALPHA	KZW KZD
3 + 667.00	264.98	0.02	10.0	0.31	0.74	0.10	0.19	0.000	265.19	0.543	1.108	9 0
37.14	2.86	36.82	10.0	8.50	11.21	17.85	2.06	0.27	4.72	4.72	1.049	0 0
0.30	0.30	0.30	10.0	4.25	4.28	1.08	0.27	0.000	265.21	0.493	1.157	0 0
3 + 672.00	265.03	0.03	10.0	0.37	0.91	0.16	0.19	0.000	265.21	0.493	1.157	0 0
37.14	3.02	36.60	10.0	8.50	11.21	19.24	1.90	0.29	3.64	3.64	1.070	0 0
0.51	0.51	0.51	10.0	5.24	5.28	1.76	0.29	0.17	0.001	0.418	1.019	0 0
3 + 694.00	265.11	0.04	10.0	1.30	1.51	0.22	0.17	0.001	265.29	0.418	1.019	0 0
37.14	2.96	37.10	10.0	8.08	11.53	19.52	1.90	0.00	5.70	5.70	1.009	0 0
0.00	0.00	0.00	10.0	0.00	0.00	0.00	0.00	0.061	265.69	0.638	1.168	0 0
3 + 869.00	265.50	0.12	10.0	1.27	1.43	0.42	0.29	0.000	265.41	0.238	1.241	0 0
37.14	2.06	36.74	10.0	8.56	11.93	18.68	1.97	0.19	4.40	4.40	1.076	0 0
0.28	0.28	0.28	10.0	8.80	8.88	1.41	0.19	0.002	266.20	0.786	1.121	0 0
3 + 955.00	265.96	0.22	10.0	10.71	10.72	1.15	0.19	0.002	266.20	0.786	1.121	0 0
36.13	1.87	35.91	10.0	13.04	13.78	16.76	2.14	0.00	7.31	7.31	1.056	0 0
0.00	0.00	0.00	10.0	0.00	0.00	0.00	0.00	0.002	266.44	0.667	1.000	0 0
3 + 984.00	266.18	0.00	17.0	0.00	0.00	0.00	0.00	0.002	266.44	0.667	1.000	0 0
31.85	22.0	31.85	22.0	12.60	13.27	14.31	2.23	0.002	266.44	0.667	1.000	0 0

Ster0001.001

4 + 619.00	271.15	2.82	10.0	27.39	27.41	9.00	0.31	0.001	271.30	0.689	2.626	0
31.85	2.30	24.97	22.0	7.51	8.35	12.89	1.94	0.51	271.30	4.35	1.511	0
4 + 711.00	271.55	1.34	10.0	15.75	16.09	3.92	0.34	0.000	271.89	1.000	1.696	4
31.85	1.97	30.06	22.0	6.96	7.21	11.44	2.63	0.51	271.89	7.72	1.276	0

+++++++ Engstelle mit Flüsswechsel, Energieminimum > EH(UW)
!!! Profllabstand zum Ow ueberpruefen !!!

4 + 814.00	272.14	0.42	10.0	17.43	17.58	2.45	0.17	0.000	272.30	0.687	1.307	0
31.85	1.73	31.22	22.0	11.67	12.15	17.53	1.78	0.32	272.30	4.02	1.134	0
4 + 914.00	272.57	0.06	10.0	3.68	3.76	0.37	0.16	0.010	272.79	0.661	1.098	0
31.85	1.77	31.65	22.0	10.09	10.83	15.21	2.08	0.28	272.79	5.68	1.045	0
5 + 15.00	273.17	0.28	10.0	5.85	5.86	1.11	0.25	0.000	273.38	0.668	1.134	0
31.85	1.98	31.54	22.0	10.92	11.67	15.41	2.05	0.22	273.38	5.98	1.061	0
5 + 95.00	273.63	0.15	10.0	2.46	2.53	0.56	0.28	0.000	273.86	0.623	1.097	0
31.85	1.84	31.59	22.0	10.04	11.17	14.96	2.11	0.31	273.86	5.82	1.044	0
5 + 182.00	274.17	0.01	10.0	0.70	0.72	0.06	0.17	0.007	274.47	0.669	1.023	0
31.85	1.73	31.81	22.0	8.99	9.92	13.19	2.41	0.27	274.47	8.22	1.011	0

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

ERGEBNISSE SEITE 11

Seite 13

Ster0001.001

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ 0.33/s	BREITUE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHUE NN+m	FRUDE IE o/oo	ALPHA	KZW KZD
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+++++++ Engstelle mit Flüsswechsel, Energieminimum > EH(UW) ++++++++

5 + 267.00	275.32	2.83	10.0	10.65	10.69	4.16	0.68	0.000	275.65	1.000	1.516	4
31.85	1.18	28.77	22.0	11.08	11.65	10.80	2.66	0.53	275.65	16.23	1.198	0
5 + 274.00	275.44	1.57	10.0	20.85	21.28	5.11	0.31	0.000	275.73	1.000	2.018	4
31.85	1.92	29.45	22.0	6.88	6.93	11.80	2.49	0.43	275.73	6.32	1.381	0
5 + 358.00	276.25	0.46	10.0	2.25	2.64	1.01	0.45	0.000	276.59	1.000*	2.043	4
31.85	2.09	28.97	22.0	6.08	6.25	10.70	2.71	0.41	276.59	7.40	1.382	0
5 + 428.00	276.71	1.38	14.0	5.83	6.26	2.44	0.56	0.000	276.99	0.752	1.503	0
31.85	1.98	29.42	11.2	4.45	4.95	2.16	2.42	0.49	276.99	5.70	1.197	0
5 + 434.00	276.89	0.61	10.0	1.07	1.36	1.13	0.54	0.000	277.03	0.603	1.282	0
31.85	2.11	30.52	15.3	13.39	13.58	18.40	1.66	0.27	277.03	7.81	1.118	0
5 + 448.00	277.03	1.11	10.0	9.39	9.43	3.78	0.29	0.000	277.10	0.403	1.761	0
31.85	1.95	23.63	18.0	10.03	11.17	17.80	1.33	0.49	277.10	2.92	1.254	0
5 + 501.00	277.18	1.12	10.0	4.51	4.79	2.34	0.48	0.027	277.36	0.620	1.399	0
31.85	1.78	30.01	18.0	9.09	9.26	15.40	1.95	0.33	277.36	5.96	1.162	0
5 + 592.00	277.85	0.06	10.0	0.61	0.84	0.18	0.34	0.011	278.07	0.596	1.079	0
31.85	1.86	31.76	18.0	10.71	11.39	15.07	2.11	0.25	278.07	9.43	1.013	0
5 + 662.00	278.46	1.49	10.0	11.93	11.95	4.03	0.37	0.000	278.61	0.651	1.488	0
31.85	2.03	29.96	18.0	10.93	11.59	16.96	1.77	0.24	278.61	5.79	1.196	0
5 + 778.00	279.43	0.17	10.0	1.10	1.27	0.35	0.48	0.060	279.76	0.706	1.050	0
31.85	1.84	31.66	18.0	8.25	8.90	12.38	2.56	0.28	279.76	12.99	1.023	0

ICL Ingenieur Consult Dr.-Ing. A. Kolbmuehler GmbH
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STATIONAERE WASSERSPIEGELLAGEN Ster0001.001
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009
PROJEKT Kl-strieg Station 0 + 1.00 bis 0 + 23380.00 m
ZUSTAND Station 0
VARIANTE HQ 100 Ist
DATEI Ster0001
ERGEBNISSE
SEITE 12

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m3/s	K-WERT m/0.33/s	BREITE m	UMFANG m	FLAECHE m2	GESCHW m/s	HZV m	E-HOEHIE NN+m	FRUDE IE o/oo	ALPHA ALPHAS	KZW KZD
5 + 876.00	280.56	4.70	10.0	29.42	29.43	11.04	0.43	0.000	280.73	0.718	2.078	0 0
31.85	1.98	26.88	18.0	8.32	8.93	13.72	1.96	0.000	280.73	6.69	1.372	0 0
0.27	0.27	10.0	10.0	1.46	1.70	0.63	0.42	0.000	281.19	0.652	1.951	0 0
5 + 943.00	281.02	6.38	10.0	20.71	20.80	11.28	0.57	0.000	281.19	7.22	1.320	0 0
31.85	2.07	25.19	18.0	7.72	8.30	12.52	2.01	0.000	281.19	0.652	1.951	0 0
0.28	0.28	10.0	10.0	3.00	3.09	0.81	0.35	0.000	281.19	7.22	1.320	0 0
6 + 9.00	281.47	3.28	10.0	19.90	19.91	7.80	0.42	0.000	281.64	0.684	1.788	0 0
31.85	2.15	28.29	18.0	8.99	9.70	14.99	1.89	0.000	281.64	6.15	1.291	0 0
0.28	0.28	10.0	10.0	5.50	5.59	1.08	0.26	0.000	281.64	6.15	1.291	0 0
6 + 71.00	281.83	0.90	10.0	10.91	10.93	3.10	0.29	0.000	281.97	0.542	1.401	0 0
31.53	2.17	29.74	18.0	9.97	10.85	17.70	1.68	0.000	281.97	4.54	1.163	0 0
0.89	0.89	10.0	10.0	3.76	3.91	2.04	0.44	0.000	281.97	4.54	1.163	0 0
6 + 102.00	281.97	0.54	10.0	8.79	8.80	1.97	0.27	0.001	282.13	0.581	1.311	0 0
30.43	2.06	29.20	18.0	9.97	10.85	16.56	1.76	0.001	282.13	5.46	1.130	0 0
0.69	0.69	10.0	10.0	3.57	3.69	1.62	0.43	0.001	282.13	5.46	1.130	0 0
6 + 110.00	281.98	0.00	10.0	0.00	0.00	0.00	0.00	0.008	282.17	0.386	1.000	12 0
30.43	2.11	30.43	18.0	6.36	4.68	15.91	1.91	0.000	282.17	2.21	1.000	0 0
0.00	0.00	10.0	10.0	0.00	0.00	0.00	0.00	0.000	282.17	2.21	1.000	0 0
6 + 122.00	282.01	0.00	10.0	7.84	0.00	0.00	0.00	0.001	282.23	0.481	1.000	0 0
30.43	2.64	30.43	18.0	10.45	10.45	14.73	2.07	0.001	282.23	8.34	1.000	0 0
0.00	0.00	10.0	10.0	0.00	0.00	0.00	0.00	0.001	282.23	8.34	1.000	0 0
6 + 230.00	282.67	0.22	10.0	1.82	2.02	0.80	0.28	0.000	282.83	0.562	1.178	0 0
30.43	2.45	30.07	20.0	9.31	10.38	16.80	1.79	0.000	282.83	2.70	1.081	0 0
0.13	0.13	10.0	10.0	7.01	7.02	0.96	0.14	0.000	282.83	2.70	1.081	0 0
6 + 343.00	282.99	0.93	10.0	10.77	10.82	3.70	0.25	0.000	283.13	0.577	1.503	0 0
30.43	1.89	29.15	25.0	10.80	11.55	17.36	1.68	0.000	283.13	2.62	1.207	0 0
0.36	0.36	10.0	10.0	5.83	5.87	1.63	0.22	0.000	283.13	2.62	1.207	0 0

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Zwittcker Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0

STATIONAERE WASSERSPIEGELLAGEN
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009
PROJEKT Kl-strieg Station 0 + 1.00 bis 0 + 23380.00 m
ZUSTAND Station 0
VARIANTE HQ 100 Ist
DATEI Ster0001
ERGEBNISSE
SEITE 13

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m3/s	K-WERT m/0.33/s	BREITE m	UMFANG m	FLAECHE m2	GESCHW m/s	HZV m	E-HOEHIE NN+m	FRUDE IE o/oo	ALPHA ALPHAS	KZW KZD
6 + 589.00	284.46	0.78	10.0	18.90	18.94	3.23	0.24	0.000	284.71	1.000	1.537	4 0
30.43	1.85	29.52	25.0	10.31	10.99	13.29	2.22	0.000	284.71	6.13	1.225	0 0
0.14	0.14	10.0	10.0	6.13	6.14	0.72	0.19	0.000	284.71	6.13	1.225	0 0
6 + 730.00	285.35	0.00	10.0	0.19	0.19	0.00	0.07	0.010	285.64	0.729	1.001	0 0
30.43	1.50	30.43	25.0	11.50	12.18	12.75	2.39	0.000	285.64	8.58	1.000	0 0
0.00	0.00	10.0	10.0	0.00	0.00	0.00	0.00	0.010	285.64	8.58	1.000	0 0
6 + 740.00	285.46	0.00	10.0	0.00	0.00	0.00	0.00	0.000	285.73	0.707	1.000	0 0
30.43	1.62	30.43	22.0	12.42	13.21	13.29	2.29	0.000	285.73	10.74	1.000	0 0
0.00	0.00	10.0	10.0	0.00	0.00	0.00	0.00	0.000	285.73	10.74	1.000	0 0
6 + 757.00	285.69	0.00	10.0	0.00	0.00	0.00	0.00	0.000	285.87	0.667	1.146	0 0
30.43	1.73	30.12	22.0	13.18	14.06	16.21	1.86	0.000	285.87	5.91	1.066	0 0
0.31	0.31	10.0	10.0	9.25	9.29	1.41	0.22	0.000	285.87	5.91	1.066	0 0

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STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m	m ³ /s	m ³ /s	m	m ²	m ²	m/s	m	NN+m	IE o/oo	ALPHAS	KZW	KZD
Ster0001.001													
6 + 834.00	286.27	0.00	10.0	4.01	4.01	0.03*	0.04	0.020	286.55	0.845	1.005	0	0
30.43	1.78	0.00	12.0	12.26	12.85	12.90	2.36	0.00	286.55	11.42	1.002	0	0
6 + 918.00	287.06	1.01	10.0	9.65	9.69	3.64	0.28	0.000	287.15	0.470	1.380	0	0
30.43	2.00	0.45	10.0	6.95	6.98	1.97	0.23	0.000	287.15	2.80	1.156	0	0
6 + 920.00	286.93	0.00	10.0	0.00	0.00	0.00	0.00	0.115	287.29	0.677	1.000	31	5
30.43	1.83	0.00	10.0	0.00	0.00	0.00	0.00	0.000	287.29	11.35	1.000	0	0
6 + 922.00	287.45	1.97	10.0	12.58	12.60	4.18	0.47	0.000	287.78	1.000	2.172	4	0
30.43	2.24	2.02	10.0	5.11	6.94	3.76	0.54	0.000	287.78	9.66	1.409	0	0
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)													
6 + 935.00	287.64	3.72	10.0	14.26	14.30	7.59	0.49	0.000	287.85	0.672	2.141	0	0
30.43	2.49	24.76	10.0	5.11	6.94	11.05	2.24	0.000	287.85	5.58	1.382	0	0
30.43	2.49	1.95	10.0	4.04	4.50	3.24	0.60	0.000	287.85	5.58	1.382	0	0
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STATIONAERE WASSERSPIEGELLAGEN													
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009													
PROJEKT Kl-strieg													
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m													
VARIANTE HQ 100 Ist													
DATEI Ster0001													
ERGEBNISSE													
SEITE 14													

STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m	m ³ /s	m ³ /s	m	m ²	m ²	m/s	m	NN+m	IE o/oo	ALPHAS	KZW	KZD
Ster0001.001													
30.43	2.72	4.14	10.0	4.59	4.97	4.69	0.88	0.000	288.12	0.574	1.375	0	0
6 + 966.00	287.91	0.04	10.0	0.61	0.78	0.15	0.27	0.000	288.17	0.569	1.408	0	0
30.43	2.72	26.71	10.0	4.89	7.30	11.22	2.38	0.000	288.17	6.61	1.154	0	0
30.43	2.80	3.68	10.0	4.59	4.97	4.69	0.78	0.000	288.17	6.61	1.154	0	0
7 + 34.00	288.34	2.57	10.0	15.72	15.93	8.46	0.30	0.000	288.47	0.493	2.133	0	0
30.43	2.80	26.07	10.0	6.60	7.29	15.47	1.68	0.000	288.47	2.15	1.393	0	0
30.43	2.80	1.79	10.0	5.32	5.36	4.47	0.40	0.000	288.47	2.15	1.393	0	0
7 + 90.00	288.47	2.38	10.0	23.48	23.63	9.30	0.26	0.000	288.59	0.541	2.251	0	0
30.43	2.64	26.50	10.0	8.17	8.89	16.65	1.59	0.000	288.59	2.27	1.434	0	0
30.43	2.64	1.55	10.0	8.10	8.20	4.72	0.33	0.000	288.59	2.27	1.434	0	0
7 + 161.00	288.66	7.47	10.0	32.43	32.44	24.64	0.30	0.000	288.71	0.334	2.386	0	0
30.43	2.45	22.65	10.0	9.59	10.24	18.84	1.20	0.000	288.71	1.33	1.432	0	0
30.43	2.45	0.31	10.0	2.46	2.68	1.35	0.23	0.000	288.71	1.33	1.432	0	0
7 + 253.00	288.79	0.21	10.0	4.94	5.04	1.10*	0.19	0.032	288.92	0.468	1.174	0	0
30.43	2.12	29.96	10.0	2.00	2.22	0.92	0.29	0.000	288.92	2.64	1.077	0	0
30.43	2.12	0.26	10.0	10.38	10.93	18.59	1.61	0.000	288.92	2.64	1.077	0	0
7 + 364.00	289.14	0.09	10.0	12.44	12.44	0.94	0.09	0.000	289.22	0.458	1.581	0	0
30.43	1.91	21.51	10.0	9.21	10.27	14.64	1.47	0.000	289.22	2.78	1.197	0	0
30.43	1.91	8.83	10.0	15.90	16.18	14.33	0.62	0.000	289.22	2.78	1.197	0	0
7 + 458.00	289.47	0.15	10.0	1.11	1.31	0.39	0.37	0.069	289.75	0.671	1.138	0	0
30.43	1.73	29.92	10.0	8.45	8.92	12.76	2.34	0.000	289.75	7.04	1.061	0	0
30.43	1.73	0.37	10.0	1.85	2.04	0.81	0.45	0.000	289.75	7.04	1.061	0	0
7 + 567.50	290.21	0.02	10.0	8.54	8.54	0.35*	0.06	0.000	290.30	0.457	1.442	0	0
30.43	1.86	9.20	10.0	15.83	16.09	13.48	0.68	0.000	290.30	3.01	1.150	0	0
30.43	1.86	9.20	10.0	15.83	16.09	13.48	0.68	0.000	290.30	3.01	1.150	0	0
ICL Ingenieur Consult Dr.-Ing. A. Kolbmüller GmbH Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0													
STATIONAERE WASSERSPIEGELLAGEN													
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009													
PROJEKT Kl-strieg													
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m													
VARIANTE HQ 100 Ist													
DATEI Ster0001													
ERGEBNISSE													
SEITE 15													

ABFLUSS	NN+m/m	m ³ /s	m ¹⁰ .33/s	m	m	m ²	m/s	m	NN+m	IE o/oo	ALPHAS	KZW	KZD
7 + 571.00	290.14	0.00	10.0	0.00	0.00	0.00	0.00	0.00	290.39	0.631	1.000	31	5
30.43	1.77	30.43	22.0	10.74	12.25	13.65	2.23	0.066	290.39	8.89	1.000		
		0.00	10.0	0.00	0.00	0.00	0.00						
7 + 574.50	289.99	0.00	10.0	0.00	0.00	0.00	0.00	0.00	290.59	1.000	1.000	4	0
30.43	1.57	30.43	22.0	7.54	8.70	8.93	3.41	0.000	290.59	23.18	1.000		
		0.00	16.0	0.00	0.00	0.00	0.00						
+++++++	Engstelle mit Fließwechsel, Energieminimum > EH(UW)						+++++++						
7 + 577.00	290.07	0.00	10.0	0.00	0.00	0.00	0.00	0.00	290.64	0.966	1.000	0	0
30.43	1.60	30.43	22.0	7.60	8.79	9.16	3.32	0.000	290.64	21.58	1.000		
		0.00	16.0	0.00	0.00	0.00	0.00						
7 + 587.00	290.50	0.00	10.0	0.00	0.00	0.00	0.00	0.000	290.80	0.481	1.000	12	0
30.43	2.59	30.43	22.0	5.07	10.93	12.75	2.39	0.000	290.80	9.58	1.000		
		0.00	22.0	0.00	0.00	0.00	0.00						
7 + 596.00	290.52	0.00	10.0	0.00	0.00	0.00	0.00	0.005	290.90	0.651	1.000	0	0
30.43	2.34	30.43	22.0	6.39	9.57	11.25	2.70	0.000	290.90	12.17	1.000		
		0.00	10.0	0.00	0.00	0.00	0.00						
7 + 675.00	291.42	0.00	10.0	0.00	0.00	0.00	0.00	0.000	291.74	0.637	1.002	0	0
30.43	2.58	30.43	22.0	7.30	9.27	12.10	2.51	0.000	291.74	9.16	1.001		
		0.00	10.0	0.33	0.34	0.01	0.12						
7 + 744.00	292.03	3.12	10.0	17.19	17.32	10.59	0.29	0.000	292.12	0.478	2.225	0	0
30.05	2.62	28.10	22.0	8.07	9.98	18.94	1.38	0.000	292.12	1.67	1.426		
		0.84	10.0	21.77	21.86	5.28	0.16						
7 + 778.00	292.09	0.00	10.0	0.23	0.74	0.08	0.05	0.000	292.15	0.296	1.096	0	0
27.74	2.50	27.59	40.0	15.48	17.41	25.12	1.10	0.000	292.15	0.46	1.045		
		0.15	10.0	3.31	3.45	1.32	0.11						
7 + 784.00	292.08	0.00	10.0	0.00	0.00	0.00	0.00	0.003	292.17	0.000	1.000	11	0
27.74	2.45	27.74	40.0	16.00	33.44	21.30	1.30	0.000	292.17	1.94	1.000		
		0.00	10.0	0.00	0.00	0.00	0.00						
7 + 790.00	292.13	0.01	10.0	0.54	0.67	0.11	0.06	0.000	292.18	0.261	1.018	9	0
27.74	2.50	27.72	40.0	16.78	17.81	27.51	1.01	0.000	292.18	0.36	1.009		
		0.01	10.0	0.91	0.98	0.16	0.06						

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009
 Datum : 3.06.2009
 Ster0001.001

PROJEKT Kl-strieg
 ZUSTAND Station 0
 VARIANTTE HQ 100 Ist
 DATEI Ster0001

SEITE 16

ERGEBNISSE

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ¹⁰ .33/s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	PROUDE IE o/oo	ALPHA	KZW	KZD
7 + 795.00	292.08	0.00	10.0	0.00	0.00	0.00	0.00	0.018	292.21	0.000	1.000	11	0
27.74	2.44	27.74	40.0	10.75	24.13	17.45	1.59	0.000	292.21	2.43	1.000		
		0.00	10.0	0.00	0.00	0.00	0.00						
7 + 801.00	292.13	0.04	10.0	1.38	1.48	0.37	0.11	0.000	292.23	0.533	1.265	9	0
27.74	2.51	27.53	40.0	12.30	13.09	19.33	1.42	0.000	292.23	0.75	1.121		
		0.17	10.0	16.69	16.70	2.28	0.07						
7 + 852.00	292.07	0.00	10.0	0.00	0.00	0.00	0.00	0.000	292.37	1.000	2.057	4	0
27.74	2.15	26.46	40.0	6.53	8.27	10.65	2.49	0.000	292.37	2.76	1.407		
		1.28	10.0	20.72	20.77	5.74	0.22						
+++++++	Engstelle mit Fließwechsel, Energieminimum > EH(UW)						+++++++						
7 + 900.00	292.24	0.00	10.0	0.00	0.00	0.00	0.00	0.000	292.47	0.833	2.061	0	0
27.74	2.08	26.19	40.0	8.45	9.36	11.92	2.20	0.000	292.47	2.19	1.403		
		1.55	10.0	19.40	19.45	6.73	0.23						
7 + 934.00	292.38	0.00	10.0	0.00	0.00	0.00	0.00	0.000	292.52	0.558	2.310	0	0
27.74	2.33	24.99	40.0	8.80	9.79	14.01	1.78	0.000	292.52	1.23	1.464		
		2.75	10.0	17.59	17.78	10.86	0.25						
7 + 937.00	292.28	0.00	10.0	0.00	0.00	0.00	0.00	0.154	292.70	0.000	1.010	11	0
27.74	2.24	27.71	40.0	6.41	8.27	10.65	2.87	0.000	292.70	9.57	1.004		
		0.03	10.0	15.57	15.58	0.66	0.45						
7 + 941.00	292.61	0.00	10.0	0.00	0.00	0.00	0.00	0.000	292.72	0.500	2.151	9	0
27.74	2.60	25.78	40.0	10.17	11.31	17.00	1.52	0.000	292.72	0.83	1.476		
		1.96	10.0	21.67	21.71	10.82	0.18						
7 + 948.00	292.63	0.00	10.0	0.00	0.00	0.00	0.00	0.000	292.73	0.471	2.405	0	0
27.74	2.66	25.34	40.0	10.28	11.43	17.65	1.44	0.000	292.73	0.72	1.498		
		2.40	10.0	25.85	25.88	13.68	0.18						
7 + 987.00	292.63	0.00	10.0	0.00	0.00	0.00	0.00	0.006	292.77	0.636	1.891	0	0
		26.53	40.0	9.91	11.00	15.36	1.73						

Seite 20

27.74	2.44	1.21	10.0	21.43	21.45	7.21	0.17		1.20	1.351	
7 + 990.00	292.68	0.00	10.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
27.74	2.47	0.00	10.0	6.19	16.19	12.35	2.25	0.053	292.94	0.000	1.000
											11
											0

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Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0

STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT Kl-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 1st
DATEI Ster0001

SEITE 17

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ^{0.53} /s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	FRUDE IE o/oo	ALPHA	KZW	KZD
7 + 993.00	292.90	0.00	10.0	0.00	0.00	0.00	0.00	0.000	293.06	0.362	1.000	9	0
27.74	2.65	0.00	10.0	0.00	10.87	15.64	0.00	0.000	293.06	1.21	1.000	9	0
8 + 27.00	292.93	0.00	10.0	0.00	0.00	0.00	0.00	0.000	293.10	0.384	1.000	0	0
27.74	2.56	0.00	10.0	0.00	0.00	0.00	0.00	0.000	293.10	1.35	1.000	0	0
8 + 34.00	292.81	0.00	10.0	0.00	0.00	0.00	0.00	0.035	293.18	0.000	1.000	11	0
27.74	2.41	0.00	10.0	6.43	15.62	10.38	0.00	0.000	293.18	7.69	1.000	11	0
8 + 41.00	293.06	0.01	10.0	1.40	1.40	0.10	0.06	0.000	293.21	0.709	2.475	9	0
27.74	2.63	26.02	10.0	33.64	33.64	10.53	0.16	0.000	293.21	1.25	1.532	9	0
8 + 89.00	293.12	0.00	10.0	0.04	0.04	0.00	0.00	0.043	293.33	0.516	1.011	0	0
27.74	2.49	27.74	10.0	6.22	10.18	13.67	0.04	0.000	293.33	1.74	1.005	0	0
8 + 95.00	292.97	0.00	10.0	0.00	0.00	0.00	0.00	0.045	293.42	0.000	1.000	11	0
27.74	2.31	0.00	10.0	6.28	15.26	9.37	0.00	0.000	293.42	10.51	1.000	11	0
8 + 101.00	293.30	0.38	10.0	6.49	6.71	2.22	0.17	0.000	293.46	0.573	1.677	9	0
		26.74	10.0	6.29	10.50	14.77	1.81	0.000	293.46	0.573	1.677	9	0

Seite 21

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ^{0.53} /s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	FRUDE IE o/oo	ALPHA	KZW	KZD
27.74	2.73	0.62	10.0	7.83	8.27	3.21*	0.19		1.30	1.276			
8 + 150.00	293.37	0.00	10.0	0.00	0.00	0.00	0.00	0.000	293.53	0.546	1.886	0	0
27.74	2.65	1.83	10.0	6.09	13.52	7.25*	0.25	0.000	293.53	1.46	1.339	0	0
8 + 206.00	293.46	0.00	10.0	0.00	0.00	0.00	0.00	0.000	293.60	0.581	2.272	0	0
27.74	2.48	25.91	10.0	6.57	10.13	15.25	1.70	0.000	293.60	1.05	1.467	0	0
8 + 243.00	293.50	0.02	10.0	1.36	1.39	0.20	0.10	0.025	293.67	0.473	1.052	0	0
27.74	2.36	27.70	10.0	7.02	10.49	15.08	0.09	0.000	293.67	1.30	1.025	0	0
8 + 253.00	293.48	0.00	10.0	1.63	1.63	0.01*	0.02	0.003	293.69	0.544	1.009	0	0
27.74	2.44	0.00	10.0	6.33	10.43	13.73	2.02	0.000	293.69	2.03	1.004	0	0

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT Kl-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 1st
DATEI Ster0001

SEITE 18

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ^{0.53} /s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	FRUDE IE o/oo	ALPHA	KZW	KZD
8 + 274.00	293.47	0.00	10.0	0.00	0.00	0.00	0.00	0.006	293.76	0.712	1.053	0	0
27.74	2.52	27.71	10.0	5.40	9.31	11.53	2.40	0.000	293.76	3.47	1.026	0	0
8 + 300.00	293.56	0.00	10.0	0.25	0.25	0.00	0.03	0.000	293.83	0.570	1.060	0	0
27.74	2.53	27.66	10.0	5.73	9.52	11.89	0.19	0.000	293.83	2.51	1.028	0	0
8 + 309.00	293.58	0.00	10.0	6.40	6.40	0.09	0.03	0.000	293.86	0.744	1.015	0	0
27.74	2.52	40.71	10.0	5.77	9.71	11.96	2.32	0.000	293.86	2.55	1.008	0	0
8 + 341.00	293.64	0.00	10.0	0.00	0.00	0.00	0.00	0.001	293.95	0.559	1.000	0	0
		27.74	10.0	5.76	9.51	11.30	2.45	0.001	293.95	0.559	1.000	0	0

Seite 22

STATION	WSPERGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	PROUDE	ALPHA	KZW	KZD
ABFLUSS	NN+M/m	m ³ /s	m ³ /s	m	m	m ²	m/s	m	NN+M	IE o/oo	ALPHAS		
27.74	2.41	0.00	10.0	0.00	0.00	0.00	0.00	0.00					
8 + 347.00	293.78	27.74	10.0	0.00	0.00	0.00	0.00	0.00					
	2.51	0.00	40.0	7.61	18.98	14.23	1.95	0.000	293.97	0.000	1.000	11	0
8 + 27.74	0.00	0.00	10.0	0.00	0.00	0.00	0.00	0.00					
8 + 353.00	293.84	27.66	10.0	7.53	11.59	15.75	1.76	0.000	293.99	0.534	1.106	9	0
	2.55	0.08	40.0	7.58	7.60	0.88	0.09	0.000		1.128	1.051		
8 + 357.00	293.84	27.68	10.0	7.53	11.58	15.71	1.76	0.000	294.00	0.533	1.096	0	0
	2.55	0.06	40.0	7.31	7.33	0.79	0.08	0.000		1.129	1.046		
8 + 398.00	293.85	27.74	10.0	7.49	10.83	12.92	2.15	0.000	294.09	0.522	1.000	0	0
	2.18	0.00	10.0	0.00	0.00	0.00	0.00	0.011		2.28	1.000		
8 + 402.00	293.74	27.74	10.0	7.25	16.78	10.02	2.77	0.020	294.14	0.000	1.000	11	0
	2.03	0.00	40.0	0.14	0.14	0.06	0.04			9.53	1.000		
8 + 406.00	293.97	27.69	10.0	7.17	10.68	14.04	1.97	0.000	294.17	0.697	1.107	9	0
	2.30	0.05	10.0	8.44	8.53	0.65	0.07	0.000		1.69	1.051		
8 + 410.00	293.98	27.62	10.0	7.73	12.86	14.51	2.08	0.000	294.17	0.599	1.150	0	0
	2.37	0.10	40.0	5.40	5.55	0.87	0.11	0.000		1.53	1.070		

Sterp001.001

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT Kl.-strieg
 ZUSTAND Station 0
 VARIANTE HQ 100 Ist
 DATEI Ster0001

ERGEBNISSE

STATION	WSPERGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	PROUDE	ALPHA	KZW	KZD
ABFLUSS	NN+M/m	m ³ /s	m ³ /s	m	m	m ²	m/s	m	NN+M	IE o/oo	ALPHAS		
8 + 459.00	294.04	27.74	10.0	6.27	8.27	7.89	3.51	0.000	294.67	1.000	1.000	4	0

Seite 23

27.74 1.48 0.00 10.0 0.00 0.00 0.00 0.00 0.00 Sterp001.001

++++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)
 !! Profilabstand zum 0w ueberpruefen !!

++++++++

8 + 511.00	294.57	27.72	10.0	6.29	9.42	8.64	3.21	0.000	295.09	1.000	1.022	4	0
	1.57	0.00	10.0	0.00	0.00	0.00	0.00	0.000		7.22	1.010		
8 + 560.00	294.92	27.74	10.0	6.91	9.47	9.11	3.04	0.000	295.40	0.892	1.006	0	0
	1.64	0.00	10.0	0.52	0.52	0.01	0.04	0.000		6.10	1.003		
8 + 572.00	294.91	27.74	10.0	6.22	8.90	7.87	3.52	0.000	295.54	1.000	1.000	4	5
	1.56	0.00	40.0	0.00	0.00	0.00	0.00	0.000		9.14	1.000		

++++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)
 !! Profilabstand zum 0w ueberpruefen !!

++++++++

8 + 578.00	295.18	27.74	10.0	6.54	9.77	10.10	2.75	0.000	295.56	0.706	1.000	0	0
	1.99	0.00	10.0	0.00	0.00	0.00	0.00	0.000		4.51	1.000		
8 + 604.00	295.34	27.74	10.0	6.55	10.02	10.94	2.54	0.000	295.66	0.627	1.000	0	0
	2.12	0.00	10.0	0.00	0.00	0.00	0.00	0.000		3.58	1.000		
8 + 605.00	295.35	27.74	10.0	7.01	17.16	11.18	2.48	0.000	295.67	0.000	1.000	11	0
	2.14	0.00	40.0	0.00	0.00	0.00	0.00	0.000		6.81	1.000		
8 + 606.00	295.37	27.74	10.0	6.49	10.01	11.06	2.51	0.000	295.69	0.616	1.000	9	0
	2.15	0.00	10.0	0.05	0.05	0.00	0.00	0.000		3.44	1.000		
8 + 610.00	295.38	27.74	10.0	6.49	10.02	11.11	2.50	0.000	295.70	0.629	1.000	0	0
	2.16	0.00	40.0	0.44	0.45	0.00	0.02	0.000		3.39	1.000		
8 + 624.00	295.40	27.74	10.0	6.01	9.54	10.58	2.62	0.001	295.75	0.648	1.001	0	0
	2.12	0.00	10.0	0.33	0.56	0.01	0.03	0.001		3.74	1.001		

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009
 Seite 24

PROJEKT Kl-strieg + 1.00 bis 0 + 23380.00 m
 ZUSTAND Station 0
 VARIANTE HQ 100 1st
 DATEI Ster0001

SEITE 20

=====													
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m	m ³ /s	m ³ /s	m	m	m ²	m/s	m	NN+m	IE o/oo	ALPHAS		
8 + 625.00	295.30	0.00	10.0	0.00	0.00	0.00	0.00	0.009	295.77	0.000	1.000	11	0
27.74	1.95	0.00	40.0	6.00	15.06	9.15	3.03	0.00		11.17	1.000		
			10.0	0.00	0.00	0.00	0.00						
8 + 626.00	295.41	0.00	10.0	0.00	0.00	0.00	0.00	0.000	295.79	0.739	1.054	9	0
27.74	2.04	0.07	10.0	1.44	1.66	0.31	0.21			4.25	1.026		
			10.0	0.00	0.00	0.00	0.19						
8 + 630.00	295.44	0.06	10.0	1.63	1.90	0.31	0.19	0.000	295.80	0.790	1.095	0	0
27.74	2.04	0.04	40.0	6.04	9.38	10.30	2.69			3.98	1.045		
			10.0	1.56	1.71	0.22	0.16						
8 + 631.00	295.30	0.00	10.0	0.00	0.00	0.00	0.00	0.024	295.84	0.000	1.003	11	0
27.74	1.89	0.00	40.0	6.04	14.83	8.52	3.25			13.85	1.001		
			10.0	0.46	0.47	0.01	0.10						
8 + 632.00	295.52	0.04	10.0	1.40	1.54	0.22	0.17	0.000	295.86	0.748	1.071	9	0
27.74	2.11	0.02	40.0	6.04	9.51	10.71	2.59			3.57	1.034		
			10.0	1.70	1.86	0.19	0.13						
8 + 643.00	295.58	0.03	10.0	1.55	1.59	0.19	0.13	0.000	295.89	0.739	1.062	0	0
27.74	2.13	0.02	40.0	6.37	9.71	11.29	2.45			3.08	1.030		
			10.0	2.46	2.67	0.18	0.09						
8 + 644.00	295.44	0.00	10.0	0.00	0.00	0.00	0.00	0.024	295.93	0.000	1.005	11	0
27.74	1.99	0.00	40.0	6.12	14.86	9.02	3.07			11.49	1.002		
			10.0	0.81	0.89	0.02	0.09						
8 + 645.00	295.66	0.04	10.0	1.71	1.76	0.27	0.15	0.000	295.94	0.752	1.121	9	0
27.74	2.20	0.06	40.0	6.37	9.78	11.72	2.36			2.73	1.057		
			10.0	4.38	4.66	0.48	0.12						
8 + 659.00	295.69	0.08	10.0	6.05	6.11	0.67	0.12	0.000	295.98	0.839	1.243	0	0
27.74	2.12	0.16	40.0	5.98	9.66	11.44	2.40			2.88	1.111		
			10.0	3.53	3.76	0.81	0.19						
8 + 661.00	295.56	0.00	10.0	0.00	0.00	0.00	0.00	0.041	296.04	0.000	1.000	12	0
			40.0	0.00	14.25	9.10	3.05						

Seite 25

27.74 1.99 0.00 40.0 0.00 0.00 0.00 0.00 Ster0001.001 10.56 1.000

8 + 663.00 295.84 0.98 10.0 11.67 12.37 4.30 * 0.23 0.000 296.06 0.825 2.296 9 0

27.74 2.27 0.72 40.0 5.99 9.98 12.27 * 2.12 0.000 296.06 0.825 2.114 1.477

10.0 10.0 14.66 15.07 3.87 * 0.19

ICL Ingenieur-Consult-Dr.-Ing. A. Kolbmueller GmbH
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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Kauf 2009 DATUM : 3.06.2009

PROJEKT Kl-strieg
 ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
 VARIANTE HQ 100 1st
 DATEI Ster0001

SEITE 21

=====													
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m	m ³ /s	m ³ /s	m	m	m ²	m/s	m	NN+m	IE o/oo	ALPHAS		
8 + 680.00	295.88	0.94	10.0	11.65	12.00	4.08	0.23	0.000	296.10	0.814	2.091	0	0
27.74	2.25	0.55	40.0	5.99	9.94	12.15	2.16			2.23	1.414		
			10.0	10.45	10.88	2.86	0.19						
8 + 687.00	295.91	0.38	10.0	8.88	9.12	2.22	0.17	0.000	296.11	0.744	1.809	0	0
27.74	2.27	0.71	40.0	6.52	10.55	13.04	2.04			1.97	1.323		
			10.0	9.83	10.24	3.37	0.21						
8 + 688.00	295.73	0.00	10.0	0.00	0.00	0.00	0.00	0.043	296.16	0.000	1.449	11	0
27.74	2.10	1.02	40.0	6.48	15.82	9.07	2.95			11.41	1.187		
			10.0	9.45	10.35	2.47	0.41						
8 + 689.00	295.99	0.44	10.0	5.98	6.30	2.14	0.20	0.000	296.18	0.638	1.682	9	0
27.74	2.35	0.65	40.0	6.32	10.66	13.54	1.97			1.76	1.276		
			10.0	7.42	7.88	2.96	0.22						
8 + 711.00	296.04	0.00	10.0	0.15	0.16	0.00	0.02	0.000	296.21	0.543	1.291	0	0
27.74	2.32	0.44	40.0	7.30	11.00	14.66	1.88			1.48	1.129		
			10.0	6.98	7.35	2.39	0.16						
8 + 718.00	295.84	0.00	10.0	0.00	0.00	0.00	0.00	0.125	296.41	0.000	1.087	11	0
27.74	2.10	0.06	40.0	7.15	16.38	8.30	3.33			17.19	1.041		
			10.0	9.11	9.18	0.38	0.16						
8 + 721.00	296.38	0.05	10.0	5.09	5.10	0.66	0.07	0.000	296.48	0.426	1.648	9	0
			40.0	7.68	11.97	17.63	1.49						

Seite 26

STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	PROUDE	ALPHA	KZW	KZD
ABFLUSS	NN+M/m	m3/s	m^0.33/s	m	m	m2	m/s	m	NN+M	IE o/oo	ALPHAS		
27.74	2.55	1.46	10.0	8.14	8.74	6.31	0.23			0.83	1.259		
8 + 772.00	296.42	0.00	10.0	0.00	0.00	0.00	0.00			0.310	1.000	0	0
27.74	2.67	0.00	40.0	7.56	12.51	18.33	1.51	0.008	296.53	0.86	1.000	0	0
8 + 778.00	296.34	0.00	10.0	0.00	0.00	0.00	0.00			0.435	1.000	12	0
27.74	2.60	0.00	40.0	5.89	11.15	13.47	2.06	0.015	296.56	2.06	1.000		
8 + 784.00	296.38	0.00	10.0	0.00	0.00	0.00	0.00			0.429	1.000	0	0
27.74	2.62	0.00	10.0	7.00	11.17	14.40	1.93	0.000	296.57	1.65	1.000	0	0
8 + 787.00	296.38	0.00	10.0	0.00	0.00	0.00	0.00			0.430	1.000	0	0
27.74	2.62	0.00	40.0	7.00	11.16	14.38	1.93	0.000	296.57	1.66	1.000	0	0
ICL Ingenieur Consult Dr.-Ing. A. Kolbmueller GmbH Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0													
STATIONAERE WASSERSPIEGELLAGEN													
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009													
PROJEKT Kl-strieg													
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m													
VARIANTE HQ 100 Ist													
DATEI Ster0001													
ERGEBNISSE													
SEITE 22													
+++++++ Engstelle mit Fluesswechsel, Energieminimum > EH(UW) ++++++													
8 + 852.00	296.21	0.00	10.0	0.00	0.00	0.00	0.00			0.000	1.000	11	0
27.74	1.92	0.00	40.0	5.99	14.07	6.81	4.07	0.255	297.06	0.000	1.000		
8 + 858.00	296.91	0.00	10.0	0.00	0.00	0.00	0.00			0.857	1.812	9	0
27.74	2.70	0.98	10.0	4.93	9.81	5.01	2.25	0.000	297.16	2.44	1.326		

STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	PROUDE	ALPHA	KZW	KZD
ABFLUSS	NN+M/m	m3/s	m^0.33/s	m	m	m2	m/s	m	NN+M	IE o/oo	ALPHAS		
8 + 862.00	296.96	0.00	10.0	0.00	0.00	0.00	0.00			0.747	2.484	0	0
27.74	2.80	2.21	10.0	4.93	9.92	12.44	2.05	0.000	297.16	1.95	1.526		
8 + 897.00	297.11	0.25	10.0	10.69	10.95	2.20	0.11			0.470	3.172	0	0
27.74	2.97	5.59	10.0	5.16	9.92	13.59	1.61	0.000	297.21	1.07	1.652		
8 + 898.00	297.11	0.00	10.0	0.00	0.00	0.00	0.00			0.000	1.154	11	0
27.74	2.97	0.63	10.0	7.05	8.12	2.11	0.30	0.000	297.22	5.39	1.067		
8 + 899.00	297.15	0.11	10.0	5.16	6.58	1.14	0.09			0.397	3.649	9	0
27.74	3.01	20.14	10.0	5.19	10.19	13.83	1.46	0.000	297.23	0.88	1.731		
8 + 921.00	297.14	0.43	10.0	13.04	13.07	3.31	0.13			0.566	3.592	0	0
27.74	2.89	3.87	10.0	5.57	9.90	14.18	1.65	0.001	297.25	1.06	1.781		
8 + 922.00	296.82	0.00	10.0	0.00	0.00	0.00	0.00			0.000	1.628	11	0
27.74	2.58	2.00	10.0	5.42	13.44	7.05	3.65	0.195	297.46	0.000	1.245		
8 + 923.00	297.42	1.87	10.0	21.07	21.24	12.23	0.15			0.338	4.492	9	0
27.74	3.17	5.62	10.0	5.42	9.63	16.21	1.25	0.000	297.48	0.49	1.908		
ICL Ingenieur Consult Dr.-Ing. A. Kolbmueller GmbH Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0													
STATIONAERE WASSERSPIEGELLAGEN													
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009													
PROJEKT Kl-strieg													
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m													
VARIANTE HQ 100 Ist													
DATEI Ster0001													
ERGEBNISSE													
SEITE 23													
8 + 931.00	297.42	1.53	10.0	21.35	21.37	15.54	0.15			0.364	4.500	0	0
27.74	3.09	5.76	10.0	5.42	9.63	15.77	1.30	0.000	297.49	0.54	1.915		

STATION	WSPRUNG/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+M/m	m ³ /s	m ³ /s	m	m	m ²	m/s	m	NN+M	IE o/oo	ALPHAS		
8 + 976.00	297.45	1.94	10.0	25.56	25.61	12.64	0.15	0.000	297.52	0.412	4.531	0	0
27.74	3.08	4.28	10.0	26.30	27.37	20.85	0.21	0.000	297.52	0.61	1.945	0	0
9 + 15.00	297.47	1.52	10.0	24.24	24.25	8.36	0.18	0.002	297.56	0.515	3.286	0	0
27.74	2.91	3.64	10.0	21.57	21.76	13.49	0.27	0.000	297.56	1.37	1.691	0	0
9 + 18.00	297.39	0.00	10.0	0.00	0.00	0.00	0.00	0.057	297.64	0.000	1.481	11	0
27.74	2.82	7.19	10.0	8.60	8.69	7.06	1.02	0.000	297.64	13.69	1.164	0	0
9 + 21.00	297.56	0.74	10.0	11.17	11.38	3.90	0.19	0.000	297.67	0.495	2.641	9	0
27.74	3.05	23.29	10.0	17.69	17.85	14.64	1.50	0.000	297.67	1.50	1.535	0	0
9 + 26.00	297.59	1.08	10.0	12.53	12.57	5.45	0.20	0.000	297.68	0.433	2.884	0	0
27.74	3.17	4.28	10.0	19.72	19.89	15.00	0.29	0.000	297.68	1.18	1.586	0	0
9 + 79.00	297.68	3.36	10.0	29.65	29.67	19.92	0.17	0.000	297.72	0.271	4.259	0	0
27.74	3.02	17.87	10.0	6.86	8.83	17.29	1.03	0.000	297.72	0.48	1.811	0	0
9 + 149.00	297.71	6.05	10.0	26.07	26.13	22.12	0.27	0.002	297.77	0.373	3.635	0	0
27.74	2.56	19.65	10.0	18.68	18.92	14.84	0.20	0.000	297.77	0.93	1.719	0	0
9 + 181.00	297.71	2.77	10.0	17.81	17.81	10.06	0.27	0.004	297.82	0.534	3.021	0	0
27.74	2.50	22.90	10.0	16.67	17.05	14.02	1.63	0.000	297.82	1.62	1.629	0	0
9 + 186.00	297.82	3.04	10.0	16.00	16.01	4.95	0.61	0.000	298.06	1.000	2.461	4	0
27.74	0.85	16.06	10.0	10.03	10.40	5.85	2.74	0.000	298.06	18.01	1.412	0	0

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)

ICL Ingenieur Consult Dr.-Ing. A. Kolbmueller GmbH
Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0

STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Krauf 2009 DATUM : 3.06.2009

PROJEKT Kl-strieg Station 0 + 1.00 bis 0 + 23380.00 m

VARIANTE HO_100 IStr

DATEI Ster0001

SEITE 24
Seite 29

Ster0001.001

=====													
ERGEBNISSE													
STATION	WSPRUNG/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+M/m	m ³ /s	m ³ /s	m	m	m ²	m/s	m	NN+M	IE o/oo	ALPHAS		
9 + 191.00	297.99	1.84	10.0	16.59	16.61	9.33	0.20	0.000	298.06	0.359	2.773	0	0
27.74	2.93	22.59	10.0	16.02	16.49	13.28	1.26	0.000	298.06	0.83	1.559	0	0
9 + 195.00	298.00	1.81	10.0	17.62	17.68	10.01	0.18	0.000	298.06	0.330	2.808	0	0
27.74	3.05	22.35	10.0	15.92	16.38	14.63	0.25	0.000	298.06	0.70	1.566	0	0
9 + 214.00	297.99	0.68	10.0	14.96	15.35	4.54	0.15	0.001	298.08	0.455	2.632	0	0
27.74	2.76	23.64	10.0	19.30	19.77	13.19	1.41	0.000	298.08	1.15	1.538	0	0
9 + 215.00	297.94	0.00	10.0	0.00	0.00	0.00	0.00	0.020	298.11	0.000	1.541	11	0
27.74	2.69	20.10	10.0	7.44	12.19	9.51	2.02	0.000	298.11	8.98	1.182	0	0
9 + 216.00	298.04	0.31	10.0	11.16	11.23	2.72	0.12	0.000	298.12	0.431	2.360	9	0
27.74	2.78	24.60	10.0	7.67	9.85	18.26	1.35	0.000	298.12	0.88	1.473	0	0
9 + 235.00	298.01	0.46	10.0	13.84	14.48	3.13	0.15	0.010	298.16	0.632	1.761	0	0
27.74	2.75	26.66	10.0	9.84	9.34	15.53	1.72	0.000	298.16	1.66	1.306	0	0
9 + 236.00	297.89	0.00	10.0	0.00	0.00	0.00	0.00	0.024	298.19	0.000	1.514	11	0
27.74	2.62	23.69	10.0	8.69	8.96	4.99	2.59	0.000	298.19	14.30	1.188	0	0
9 + 237.00	298.07	0.65	10.0	14.49	14.92	4.04	0.16	0.000	298.21	0.583	1.898	9	0
27.74	2.81	26.31	10.0	9.68	9.72	3.78	0.21	0.000	298.21	1.48	1.349	0	0
9 + 243.00	298.05	0.33	10.0	13.45	13.69	2.31	0.14	0.002	298.22	0.679	1.797	0	0
27.74	2.80	30.17	10.0	5.52	8.88	13.77	1.90	0.000	298.22	2.24	1.312	0	0
9 + 248.00	297.96	0.00	10.0	0.00	0.00	0.00	0.00	0.023	298.29	0.000	1.506	11	0
27.74	2.72	23.74	10.0	7.91	7.97	4.72	2.70	0.000	298.29	14.44	1.185	0	0
9 + 253.00	298.20	0.90	10.0	17.53	17.57	4.96	0.18	0.000	298.34	0.632	2.503	9	0
27.74	2.91	25.00	10.0	5.52	8.88	7.24	1.74	0.000	298.34	1.76	1.522	0	0

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ICL Ingenieur Consult Dr.-Ing. A. Kolbmue|ler GmbH
Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0

STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 25

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STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ /s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	FRUDE IE o/oo	ALPHA	KZW	KZD
9 + 270.00	298.24	2.12	10.0	20.61	20.68	9.00	0.24	0.000	298.37	0.590	2.761	0	0
27.74	2.77	24.27	30.0	5.59	8.67	14.22	1.71	0.000	298.37	1.67	1.583	0	0
1.36	10.0	12.33	10.0	12.36	12.36	5.61	0.24	0.000	298.37	1.67	1.583	0	0
9 + 271.00	298.11	0.00	10.0	0.00	0.00	0.00	0.00	0.065	298.44	0.000	1.463	11	0
27.74	2.64	23.01	30.0	5.55	7.26	4.86	2.75	0.000	298.44	16.11	1.167	11	0
4.73	10.0	0.00	10.0	0.00	0.00	0.00	0.97	0.000	298.44	16.11	1.167	11	0
9 + 272.00	298.35	2.43	10.0	19.81	19.84	10.16	0.24	0.000	298.46	0.517	2.869	9	0
27.74	2.87	23.62	30.0	5.59	8.67	14.78	1.60	0.000	298.46	1.40	1.601	9	0
1.69	10.0	12.72	10.0	12.72	12.77	6.88	0.25	0.000	298.46	1.40	1.601	9	0
9 + 280.00	298.35	1.75	10.0	20.38	20.41	8.23	0.21	0.001	298.48	0.562	2.260	0	0
27.74	2.86	25.40	30.0	5.95	9.36	15.53	1.64	0.000	298.48	1.51	1.455	0	0
0.59	10.0	0.59	10.0	7.29	7.44	2.85	0.21	0.000	298.48	1.51	1.455	0	0
9 + 281.00	298.27	0.00	10.0	0.00	0.00	0.00	0.00	0.026	298.51	0.000	1.499	11	0
27.74	2.78	23.34	30.0	5.67	8.41	10.01	2.33	0.000	298.51	0.000	1.499	11	0
4.40	10.0	8.35	10.0	8.35	8.41	5.72	0.77	0.000	298.51	9.92	1.181	11	0
9 + 282.00	298.40	1.42	10.0	16.69	16.91	6.86	0.21	0.000	298.52	0.544	2.165	9	0
27.74	2.91	25.60	30.0	5.92	9.19	15.79	1.62	0.000	298.52	1.42	1.427	9	0
0.73	10.0	0.73	10.0	8.67	8.82	3.54	0.21	0.000	298.52	1.42	1.427	9	0
9 + 307.00	298.44	2.90	10.0	20.93	21.45	11.97	0.24	0.000	298.55	0.493	2.463	0	0
27.74	2.94	24.55	30.0	5.68	8.36	15.31	1.60	0.000	298.55	1.27	1.503	0	0
0.30	10.0	0.30	10.0	3.50	3.91	1.54	0.19	0.000	298.55	1.27	1.503	0	0
9 + 308.00	298.34	0.00	10.0	0.00	0.00	0.00	0.00	0.044	298.61	0.000	1.457	11	0
27.74	2.84	22.67	30.0	5.68	14.02	9.13	2.48	0.000	298.61	12.13	1.163	11	0
5.07	10.0	7.32	10.0	7.32	7.40	5.57	0.91	0.000	298.61	12.13	1.163	11	0

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ICL Ingenieur Consult Dr.-Ing. A. Kolbmue|ler GmbH
Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0

STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 26

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STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ /s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	FRUDE IE o/oo	ALPHA	KZW	KZD
9 + 338.00	298.57	0.30	10.0	16.89	16.95	2.26	0.13	0.000	298.76	0.786	1.415	9	0
27.74	2.84	27.32	30.0	6.01	9.81	14.08	1.94	0.000	298.76	2.59	1.182	9	0
0.12	10.0	0.12	10.0	5.08	5.09	0.79	0.15	0.000	298.76	2.59	1.182	9	0
9 + 352.00	298.68	0.75	10.0	11.34	11.73	4.48	0.17	0.000	298.78	0.403	1.492	0	0
27.74	2.72	26.82	30.0	7.80	11.25	19.47	1.38	0.000	298.78	1.02	1.206	0	0
0.17	10.0	0.17	10.0	3.52	3.03	1.06	0.16	0.000	298.78	1.02	1.206	0	0
9 + 354.00	298.65	0.00	10.0	0.00	0.00	0.00	0.00	0.020	298.81	0.000	1.038	11	0
27.74	2.65	27.63	30.0	11.05	24.94	15.57	1.77	0.000	298.81	6.56	1.018	11	0
0.11	10.0	0.11	10.0	1.37	1.91	0.39	0.28	0.000	298.81	6.56	1.018	11	0
9 + 356.00	298.74	1.64	10.0	15.30	16.01	8.36	0.20	0.000	298.82	0.379	1.782	9	0
27.74	2.76	25.94	30.0	7.80	11.40	19.82	1.31	0.000	298.82	0.91	1.303	9	0
0.17	10.0	0.17	10.0	2.80	2.80	1.06	0.16	0.000	298.82	0.91	1.303	9	0
9 + 371.00	298.76	0.90	10.0	22.00	22.09	6.86	0.13	0.000	298.83	0.404	1.569	0	0
27.74	2.94	26.84	30.0	8.82	12.59	21.70	1.24	0.000	298.83	0.82	1.236	0	0
0.00	10.0	0.00	10.0	0.00	0.00	0.00	0.00	0.000	298.83	0.82	1.236	0	0

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9 + 372.00	298.76	DH	27.60	0.14	10.0	30.0	0.00	30.38	64.43	22.16	0.00	1.25	0.003	298.85	0.000	7.16	1.031	11	0
27.74	2.95		0.14		10.0	10.0	2.68	2.71	0.50	0.50	0.28	0.28		298.85	0.000	1.014	1.014	11	0
9 + 373.00	298.78		26.93	0.00	10.0	30.0	18.58	12.60	21.79	0.00	0.13	1.24	0.000	298.86	0.386	1.492	1.207	9	0
27.74	2.95		0.00		10.0	10.0	0.00	0.00	0.00	0.00	0.00	0.00		298.86	0.82	1.207	1.207	9	0
9 + 381.00	298.79		26.86	0.00	10.0	30.0	18.45	18.67	6.39	0.00	0.14	1.22	0.000	298.86	0.377	1.513	1.513	0	0
27.74	2.97		0.00		10.0	10.0	0.00	0.00	0.00	0.00	0.00	0.00		298.86	0.79	1.215	1.215	0	0
9 + 407.00	298.95		27.74	0.00	10.0	10.0	50.06	54.41	37.91	0.00	0.73	0.73	0.000	298.98	0.268	1.000	1.000	65	0
27.74	2.94		0.00		10.0	10.0	0.00	0.00	0.00	0.00	0.00	0.00		298.98	8.66	1.000	1.000	65	0
9 + 408.00	298.81	DH	21.69	6.05	10.0	30.0	5.65	14.10	9.27	0.00	2.34	0.83	0.045	299.04	0.000	1.579	1.200	11	0
27.74	2.79		6.05		10.0	10.0	10.02	10.11	7.30	0.00	0.83	0.83		299.04	10.64	1.200	1.200	11	0
9 + 409.00	298.95		2.76	23.57	10.0	30.0	20.58	20.68	11.75	0.00	0.23	0.23	0.000	299.05	0.463	2.777	1.575	9	0
27.74	2.95		1.41		10.0	10.0	9.09	9.27	5.71	0.00	0.25	0.25		299.05	1.17	1.575	1.575	9	0

ICL Ingenieur Consult Dr.-Ing. A. Kolbmueller GmbH
Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0

STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT Kl-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 27

ERGEBNISSE

STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITTE	UMFANG	FLAECH	GESCHW	HZV	E-HOEHE	FROUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m	m ³ /s	m ³ /s	m	m	m ²	m/s	m	NN+m	IE o/oo	ALPHAS		
9 + 432.00	298.94	0.71	10.0	20.38	22.38	5.41	0.13	0.007	299.09	0.707	2.067	0	0
27.74	3.13	26.77	30.0	5.62	6.60	15.17	1.76	0.007	299.09	1.14	1.416	0	0
		0.26	10.0	11.53	13.36	2.42	0.11						
9 + 438.00	298.86	0.00	10.0	0.00	0.00	0.00	0.00	0.037	299.17	0.000	1.401	11	0
27.74	3.11	26.48	30.0	5.86	15.64	10.63	2.49		299.17	11.55	1.165	11	0
		1.26	10.0	10.72	10.84	2.85	0.44						

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9 + 442.00	299.13		1.01	20.25	20.28	6.69	0.15	0.000	299.21	0.458	2.892	9	0
27.74	3.22	23.81	30.0	6.04	10.42	11.62	1.35		299.21	1.01	1.611	9	0
		2.92	10.0	23.00	23.16	13.31	0.22						
9 + 477.00	299.13	0.49	10.0	18.34	18.52	3.78	0.13	0.008	299.27	0.634	2.055	0	0
27.74	2.92	26.33	30.0	5.95	8.57	15.70	1.68		299.27	1.39	1.404	0	0
		0.92	10.0	11.62	13.41	4.85	0.19						
9 + 481.00	299.13	0.00	10.0	0.00	0.00	0.00	0.00	0.005	299.30	0.000	1.464	11	0
27.74	2.90	22.46	30.0	10.62	10.93	11.62	1.93		299.30	8.65	1.165	11	0
		5.28	10.0	8.39	20.17	7.38	0.72						
9 + 485.00	299.21	1.50	10.0	16.64	16.65	7.25	0.21	0.000	299.32	0.514	2.064	9	0
27.74	2.96	25.75	30.0	6.09	9.96	16.78	1.53		299.32	1.31	1.397	9	0
		0.49	10.0	9.16	9.25	0.17	0.17						
9 + 513.00	299.24	0.16	10.0	10.76	10.77	1.47	0.11	0.001	299.37	0.631	1.844	0	0
27.74	2.85	26.42	30.0	6.08	10.36	15.92	1.66		299.37	1.73	1.332	0	0
		1.16	10.0	17.78	17.86	5.86	0.20						
9 + 541.00	299.29	0.87	10.0	13.65	13.73	4.53	0.19	0.000	299.41	0.557	2.262	0	0
27.74	2.80	25.21	30.0	6.07	10.15	15.65	1.61		299.41	1.62	1.452	0	0
		1.66	10.0	15.26	15.27	6.96	0.24						
9 + 547.00	299.20	0.00	10.0	0.00	0.00	0.00	0.00	0.055	299.51	0.000	1.436	11	0
27.74	2.68	26.01	30.0	6.20	15.31	10.22	2.55		299.51	12.34	1.175	11	0
		1.73	10.0	9.80	9.80	3.25	0.53						
9 + 555.00	299.50	1.87	10.0	13.22	13.25	9.82	0.19	0.000	299.56	0.308	2.325	9	0
27.74	2.98	24.15	30.0	9.24	10.71	21.67	1.11		299.56	0.54	1.456	9	0
		1.72	10.0	12.28	12.38	9.10	0.19						
9 + 612.00	299.53	0.64	10.0	6.21	6.44	3.53	0.18	0.001	299.60	0.348	2.037	0	0
27.74	2.74	24.79	30.0	10.34	11.33	20.45	1.21		299.60	0.74	1.375	0	0
		2.30	10.0	14.54	14.56	10.50	0.22						

ICL Ingenieur Consult Dr.-Ing. A. Kolbmueller GmbH
Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0

STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT Kl-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 28

Seite 34

Ster0001.001

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ERGEBNISSE													
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	PROUDE	ALPHA	KZW	KZD
ABFLUSS	NN+M/m	m ³ /s	m ³ 0.33/s	m	m	m ²	m/s	m	NN+M	IE o/oo	ALPHAS		
9 + 648.00	299.52	0.08	10.0	7.06	7.06	0.77	0.11	0.017	299.67	0.685	1.519	0	0
27.74	2.27	26.96	30.0	10.34	11.33	15.56	1.73	0.017	299.67	2.18	1.218	0	0
		0.70	10.0	14.21	14.22	5.68	0.19						
9 + 650.00	299.29	0.00	10.0	0.00	0.00	0.00	0.00	0.102	299.81	0.000	1.293	11	0
27.74	2.01	27.06	30.0	6.99	16.06	8.40	3.22	0.45	299.81	27.33	1.127	0	0
		0.68	10.0	10.69	10.70	1.51	0.45						
9 + 652.00	299.76	1.07	10.0	10.25	10.32	5.29	0.20	0.000	299.85	0.441	1.905	9	0
27.74	2.65	25.85	30.0	9.90	11.55	19.29	1.34	0.000	299.85	1.00	1.345	0	0
		0.81	10.0	13.55	13.56	4.99	0.16						
9 + 656.00	299.77	1.09	10.0	11.48	11.53	5.58	0.19	0.000	299.85	0.440	1.888	0	0
27.74	2.66	25.92	30.0	9.90	11.53	19.37	1.34	0.16	299.85	1.00	1.340	0	0
		0.74	10.0	12.01	12.03	4.50	0.16						
9 + 708.00	299.81	0.08	10.0	3.56	3.58	0.57	0.13	0.024	299.96	0.471	1.062	0	0
27.74	2.75	27.66	30.0	9.68	11.81	16.49	1.68	0.00	299.96	2.00	1.029	0	0
		0.00	10.0	0.00	0.00	0.00	0.00						
9 + 722.00	299.80	0.00	10.0	0.40	0.40	0.01	0.04	0.007	300.01	0.533	1.001	0	0
27.74	2.47	27.74	30.0	9.15	11.21	13.81	2.01	0.00	300.01	3.40	1.001	0	0
		0.00	10.0	0.00	0.00	0.00	0.00						
9 + 733.00	299.79	0.00	10.0	0.00	0.00	0.00	0.00	0.010	300.10	0.000	1.000	11	0
27.74	2.29	27.74	30.0	6.13	15.85	11.30	2.45	0.00	300.10	10.52	1.000	0	0
		0.00	10.0	0.00	0.00	0.00	0.00						
9 + 738.00	299.99	0.12	10.0	11.40	11.41	1.09	0.11	0.000	300.18	0.657	1.143	9	0
27.74	2.53	27.62	30.0	6.27	10.16	14.35	1.92	0.000	300.18	2.60	1.067	0	0
		0.00	10.0	0.02	0.09	0.00	0.03						
9 + 795.00	300.19	0.01	10.0	2.25	2.26	0.14	0.06	0.000	300.29	0.390	1.215	0	0
27.74	2.69	27.08	10.0	5.14	11.47	19.39	1.40	0.25	300.29	1.55	1.094	0	0
		0.65	10.0	5.24	5.24	2.62	0.25						
9 + 845.00	300.27	0.00	10.0	0.00	0.00	0.00	0.00	0.014	300.44	0.573	1.042	0	0
27.74	2.57	27.70	10.0	10.34	11.57	15.23	1.82	0.00	300.44	3.67	1.020	0	0
		0.04	10.0	4.81	4.82	0.35	0.11						
9 + 900.00	300.47	0.00	10.0	0.00	0.00	0.00	0.00	0.000	300.64	0.459	1.000	0	0
27.74	2.76	27.74	10.0	9.44	11.20	15.21	1.82	0.00	300.64	3.53	1.000	0	0
		0.00	10.0	0.00	0.00	0.00	0.00						

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Ster0001.001

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ERGEBNISSE													
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	PROUDE	ALPHA	KZW	KZD
ABFLUSS	NN+M/m	m ³ /s	m ³ 0.33/s	m	m	m ²	m/s	m	NN+M	IE o/oo	ALPHAS		
9 + 957.00	300.68	0.00	10.0	0.00	0.00	0.00	0.00	0.000	300.85	0.484	1.000	0	0
27.74	2.30	27.74	10.0	10.68	11.93	15.29	1.81	0.00	300.85	3.78	1.000	0	0
		0.00	10.0	0.00	0.00	0.00	0.00						
9 + 997.00	300.82	0.00	10.0	0.00	0.00	0.00	0.00	0.006	301.05	0.604	1.000	0	0
27.74	2.06	27.74	10.0	9.85	10.97	12.84	2.16	0.00	301.05	6.05	1.000	0	0
		0.00	10.0	0.00	0.00	0.00	0.00						
10 + 2.00	300.76	0.00	10.0	0.00	0.00	0.00	0.00	0.015	301.14	0.000	1.000	11	0
27.74	2.02	27.74	10.0	5.84	14.98	10.26	2.70	0.00	301.14	19.34	1.000	0	0
		0.00	10.0	0.00	0.00	0.00	0.00						
10 + 9.00	300.95	0.00	10.0	0.00	0.00	0.00	0.00	0.000	301.21	0.626	1.285	9	0
27.74	2.16	26.70	10.0	5.64	9.46	11.51	2.32	0.00	301.21	6.62	1.120	0	0
		1.04	10.0	4.60	5.51	2.30	0.45						
10 + 57.00	301.32	0.01	10.0	2.40	2.40	0.22	0.07	0.000	301.39	0.294	1.129	0	0
27.74	2.23	27.34	10.0	11.32	13.71	23.82	1.15	0.000	301.39	1.01	1.057	0	0
		0.39	10.0	3.11	3.32	1.82	0.21						
10 + 65.00	301.65	0.05	10.0	2.60	2.61	0.26	0.21	0.000	301.90	1.000	1.337	4	0
27.74	1.12	27.10	10.0	12.72	13.36	2.12	2.24	0.000	301.90	9.11	1.146	0	0
		0.58	10.0	13.79	13.81	2.12	0.27						
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++													
10 + 70.00	301.79	0.01	10.0	0.67	0.69	0.06	0.12	0.000	301.91	0.587	1.707	0	0
27.74	1.62	25.24	10.0	13.28	13.67	15.65	1.61	0.000	301.91	3.47	1.268	0	0
		2.49	10.0	19.55	19.56	7.80	0.32						
10 + 112.00	301.92	0.00	10.0	2.96	2.96	0.06	0.06	0.050	302.17	0.692	1.010	0	0
		27.74	10.0	25.0	25.0	12.74	2.18						

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009

DATUM : 3.06.2009

PROJEKT Kl-strieg
 ZUSTAND Station 0
 VARIANTE HQ 100 Ist
 DATEI Ster0001

SEITE 29

27.74	1.70	0.00	10.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.12	1.005				
10 + 163.00	302.33	0.16	10.0	3.34	3.43	0.56	0.29	0.00	302.73	1.000	1.249	4	0				
27.74	2.25	0.23	10.0	5.09	5.10	0.82	0.28	0.00	9.30	1.111							
++++++++	Engstelle mit Fließwechsel, Energieminimum > EH(UW) !!!						++++++++										
10 + 200.00	302.75	0.01	10.0	1.13	1.13	0.05	0.15	0.023	303.27	0.913	1.012	0	0				
27.74	2.08	0.00	10.0	5.38	7.75	8.69	3.19	0.05	14.00	1.006							
ICL Ingenieur Consult Dr.-Ing. A. Kolbmueller GmbH Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0																	
STATIONAERE	WASSERSPIEGELLAGEN			STER001.001													
PROGRAMM	WSPR2009 (C.) Knauf 2009			DATUM : 3.06.2009													
PROJEKT	Kl-strieg Station 0 + 1.00 bis 0 + 23380.00 m			SEITE 30													
ZUSTAND	HQ 100 1st																
VARIANTE	Ster0001																
DATEI																	
===== ERGEBNISSE =====																	
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	FRUDE	ALPHA	KZW	KZD				
ABFLUSS	NN+M/m	m ³ /s	m ³ /s	m	m	m ²	m/s	m	NN+M	IE o/oo	ALPHAS						
10 + 207.00	303.68	2.71	10.0	19.70	19.71	4.00	0.68	0.000	303.87	1.000	1.861	4	0				
27.74	0.59	10.03	25.0	8.26	8.32	12.05	2.80	1.24	38.51	1.239							
++++++++	Engstelle mit Fließwechsel, Energieminimum > EH(UW)						++++++++										
10 + 214.00	303.85	1.51	10.0	19.22	19.30	10.66	0.14	0.000	303.88	0.252	2.160	0	0				
27.74	3.04	24.42	25.0	13.12	14.44	29.05	0.84	0.000	0.44	0.44	1.409						
10 + 218.00	303.85	2.53	10.0	25.11	25.19	17.13	0.15	0.000	303.88	0.217	2.715	0	0				
27.74	3.03	21.93	25.0	13.12	14.44	28.91	0.76	0.000	0.36	0.36	1.534						
10 + 253.00	303.83	1.95	10.0	47.53	47.56	10.79	0.18	0.017	303.94	0.708	2.367	0	0				
27.74	3.26	25.61	25.0	6.93	5.52	1.10	1.58	0.17	2.36	1.491							
		0.18	10.0	5.51	5.52	1.10	0.17	0.90									
		8.46	10.0	21.08	21.09	9.41	0.90										
														Seite 37			

10 + 258.00	304.05	19.24	25.0	14.65	14.71	7.70	2.50	0.000	304.28	1.000	1.765	4	0			
27.74	0.73	0.03	10.0	1.08	1.10	0.11	0.33	0.000	23.73	1.247						
++++++++	Engstelle mit Fließwechsel, Energieminimum > EH(UW)						++++++++									
10 + 267.00	304.26	4.90	10.0	30.41	30.74	28.26	0.18	0.000	304.29	0.214	2.180	0	0			
27.74	3.33	22.75	25.0	12.04	14.27	28.26	0.80	0.000	0.42	0.42	1.396					
10 + 320.00	304.29	8.62	10.0	25.56	25.64	24.08	0.36	0.001	304.34	0.339	2.966	0	0			
27.74	3.26	17.12	25.0	4.33	13.32	8.94	1.29	0.22	1.39	1.538						
10 + 335.00	304.33	4.75	10.0	28.13	28.15	23.02	0.21	0.000	304.35	0.170	2.198	0	0			
27.74	3.10	15.55	25.0	13.17	16.32	21.74	0.71	0.000	0.36	0.36	1.341					
10 + 340.00	304.33	6.57	10.0	20.08	20.10	15.60	0.42	0.003	304.36	0.282	1.748	0	0			
27.74	1.25	12.12	25.0	12.19	12.21	10.65	1.14	0.51	2.49	1.212						
10 + 345.00	304.35	5.20	10.0	24.26	24.36	24.61	0.21	0.000	304.37	0.193	2.998	0	0			
27.74	2.99	16.90	25.0	7.76	10.40	20.49	0.82	0.20	0.44	1.537						
		5.64	10.0	29.93	29.94	28.04	0.20									
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STATIONAERE	WASSERSPIEGELLAGEN			STER001.001												
PROGRAMM	WSPR2009 (C.) Knauf 2009			DATUM : 3.06.2009												
PROJEKT	Kl-strieg Station 0 + 1.00 bis 0 + 23380.00 m			SEITE 31												
ZUSTAND	HQ 100 1st															
VARIANTE	Ster0001															
DATEI																
===== ERGEBNISSE =====																
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	FRUDE	ALPHA	KZW	KZD			
ABFLUSS	NN+M/m	m ³ /s	m ³ /s	m	m	m ²	m/s	m	NN+M	IE o/oo	ALPHAS					
10 + 349.00	304.34	5.04	10.0	24.39	24.45	22.02	0.23	0.000	304.37	0.235	2.952	0	0			
27.74	2.87	18.29	25.0	7.76	10.40	19.56	0.94	0.22	0.60	0.60	1.545					
10 + 413.00	304.38	2.32	10.0	24.40	24.44	13.06	0.18	0.001	304.42	0.278	2.289	0	0			
27.74	3.17	22.64	25.0	12.72	15.06	12.31	0.93		0.73	1.426						
		2.78	10.0	16.02	16.02	12.31	0.23									
														Seite 38		

Ster0001.001

10 + 478.00	304.43	3.79	18.24	25.0	19.61	19.62	17.07	0.22	0.000	304.46	0.242	3.011	0
27.74	2.78	5.72	10.0	24.81	24.88	24.04	18.61	0.24	0.000	0.59	1.558	0	0
10 + 530.00	304.46	3.29	19.46	25.0	20.00	20.00	11.42	0.29	0.002	304.53	0.433	3.188	0
27.74	2.74	4.98	10.0	25.14	25.13	16.05	13.67	1.42	0.000	1.73	1.615	0	0
10 + 534.00	304.51	3.30	6.91	25.0	12.22	12.22	3.66	0.90	0.035	304.65	0.787	1.228	0
27.74	0.72	17.53	10.0	18.34	18.34	11.74	11.74	2.25	0.000	40.44	1.073	1.228	0
10 + 538.00	304.70	3.26	18.97	25.0	22.77	22.79	17.34	0.19	0.000	304.73	0.208	2.590	0
27.74	2.94	5.51	10.0	25.75	25.80	24.94	23.45	0.81	0.000	0.51	1.467	2.590	0
10 + 543.00	304.71	2.91	18.06	25.0	21.33	21.34	15.91	0.18	0.000	304.73	0.202	2.734	0
27.74	2.90	6.77	10.0	35.00	35.00	32.19	32.19	0.21	0.000	0.49	1.492	1.492	0
10 + 600.00	304.74	5.54	22.20	25.0	22.36	22.83	15.53	0.36	0.011	304.81	0.383	1.911	0
27.74	2.42	0.00	10.0	0.00	0.00	0.00	17.01	1.31	0.000	2.13	1.309	1.309	0
10 + 664.00	304.90	1.57	26.17	25.0	25.19	25.21	5.33	0.30	0.000	305.16	1.000	1.824	4
27.74	2.63	0.00	10.0	0.00	6.77	9.60	11.29	2.32	0.000	6.92	1.321	1.321	4

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++

10 + 691.00 305.13 0.00 27.74 25.0 6.77 9.59 10.20 0.00 0.00 305.50 0.729 1.001 0 0

27.74 2.47 0.00 10.0 0.42 0.42 0.00 7.98 0.04 0.056 10.89 1.000 1.000 0 0

ICL Ingenieur Consult Dr.-Ing. A. Kolbmüller GmbH
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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT K1-Strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

ERGESNISSE

SEITE 32

Seite 39

STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	PROUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m	m ³ /s	m ³ 0.33/s	m	m	m ²	m/s	m	NN+m	IE o/oo	ALPHAS		

Ster0001.001

10 + 694.00	305.56	4.32	17.95	25.0	15.68	15.69	5.86	0.74	0.000	305.76	1.000	2.327	4
27.74	0.62	5.47	10.0	23.79	23.79	7.98	7.98	0.69	0.000	20.17	1.391	1.391	4

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++

10 + 697.00	305.70	2.46	23.82	25.0	28.38	28.38	12.57	0.20	0.000	305.76	0.415	2.561	0
27.74	2.95	1.46	10.0	21.02	21.05	8.15	8.15	0.18	0.000	1.14	1.519	1.519	0

10 + 702.00	305.70	2.06	24.61	25.0	23.45	23.45	9.82	0.21	0.001	305.77	0.465	2.307	0
27.74	2.87	1.07	10.0	20.08	20.09	6.22	19.68	1.25	0.001	1.41	1.457	1.457	0

10 + 752.00	305.78	1.86	16.42	25.0	6.24	7.98	14.78	0.35	0.000	305.82	0.271	2.757	0
27.74	2.77	9.46	10.0	21.38	21.38	27.30	27.30	0.35	0.000	0.87	1.487	1.487	0

10 + 780.00	305.81	4.41	14.82	25.0	21.31	21.32	17.75	0.25	0.000	305.84	0.231	2.788	0
27.74	2.69	8.51	10.0	6.24	7.98	14.31	14.31	1.04	0.000	0.79	1.470	1.470	0

10 + 794.00	305.83	1.66	6.65	25.0	14.67	14.68	5.61	0.30	0.000	305.86	0.260	1.287	0
27.74	1.35	19.43	10.0	23.23	23.24	29.44	29.44	0.66	0.000	3.18	1.094	1.094	0

10 + 800.00	305.84	2.66	15.39	25.0	15.61	15.66	10.75	0.25	0.001	305.88	0.260	2.668	0
27.74	2.63	9.69	10.0	24.43	24.44	27.88	27.88	0.35	0.001	1.01	1.451	1.451	0

10 + 851.00	305.85	1.00	25.46	25.0	6.02	9.08	13.94	0.21	0.019	306.00	0.778	2.353	0
27.74	2.64	1.27	10.0	20.25	20.26	5.52	5.52	1.83	0.019	3.01	1.485	1.485	0

10 + 860.00	305.88	0.00	27.74	25.0	7.63	17.75	12.61	0.00	0.057	306.14	0.000	1.000	11
27.74	2.68	0.00	10.0	0.00	0.00	0.00	0.00	2.20	0.000	12.22	1.000	1.000	11

10 + 867.00	306.10	0.12	26.34	25.0	7.36	7.43	0.98	0.12	0.000	306.21	0.588	1.728	9
27.74	2.72	1.28	10.0	24.12	24.22	6.57	6.57	1.47	0.000	2.18	1.289	1.289	9

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STATIONAERE WASSERSPIEGELLAGEN

Seite 40

PROGRAMM WSPR2009 (C.) Krauf 2009

DATUM : 3.06.2009

PROJEKT K1-strieg
 ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
 VARIANTE HQ 100 Ist
 DATIET Ster0001

SEITE 33

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ o.33/s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	FROUDE IE o/oo	ALPHA ALPHAS	KZW KZD
10 + 926.00	306.26	0.10	12.0	10.74	10.82	0.99 *	0.10	0.000	306.32	0.461	1.116	0 0
	27.74	2.65	12.0	22.89	23.74	25.73 *	1.07	0.000	306.32	0.461	1.116	0 0
		0.04	12.0	16.13	16.13	0.65 *	0.06	0.000	306.32	1.65	1.054	0 0
11 + 6.00	306.74	0.25	12.0	6.13	6.14	0.99	0.25	0.000	306.96	1.000	1.982	4 0
	27.74	2.90	12.0	5.86	8.60	11.77	2.19	0.000	306.96	5.06	1.370	4 0
		1.69	12.0	27.87	27.90	5.70	0.30	0.000	306.96	1.000	1.982	4 0

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)

11 + 10.00	307.23	2.80	12.0	16.48	16.48	3.07	0.91	0.000	307.42	1.000	1.251	4 0
	27.74	0.69	12.0	4.53	4.91	11.67	1.75	0.000	307.42	54.48	1.081	4 0
		20.44	12.0	23.60	23.61	11.67	1.75	0.000	307.42	54.48	1.081	4 0
11 + 14.00	307.40	2.08	12.0	20.52	20.54	12.60	0.16	0.000	307.42	0.208	2.307	0 0
	27.74	3.70	12.0	7.91	13.73	28.26	0.77	0.000	307.42	0.36	1.421	0 0
		3.92	12.0	26.79	26.80	20.54	0.19	0.000	307.42	0.36	1.421	0 0
11 + 66.00	307.41	4.88	12.0	22.26	22.28	17.85	0.27	0.001	307.45	0.288	2.525	0 0
	27.74	3.12	12.0	7.37	9.66	19.28	1.05	0.001	307.45	0.70	1.464	0 0
		2.66	12.0	18.98	18.98	11.64	0.23	0.001	307.45	0.70	1.464	0 0
11 + 119.00	307.45	0.29	12.0	9.91	9.92	2.15	0.13	0.002	307.50	0.342	1.672	0 0
	27.74	3.09	12.0	13.85	15.21	23.81	1.04	0.002	307.50	0.96	1.253	0 0
		2.57	12.0	18.18	18.18	10.17	0.25	0.002	307.50	0.96	1.253	0 0
11 + 172.00	307.50	0.00	12.0	0.00	0.00	0.00	0.00	0.000	307.55	0.317	1.399	0 0
	27.74	2.77	12.0	17.76	20.14	27.30	0.96	0.000	307.55	0.99	1.162	0 0
		1.46	12.0	21.31	21.48	7.67	0.19	0.000	307.55	0.99	1.162	0 0
11 + 221.00	307.56	0.09	12.0	2.95	2.98	0.62	0.14	0.000	307.60	0.251	1.030	0 0
	27.74	2.68	12.0	23.40	26.16	31.79	0.87	0.000	307.60	1.12	1.014	0 0
		0.00	12.0	0.17	0.23	0.00	0.03	0.000	307.60	1.12	1.014	0 0
11 + 257.00	307.61	0.00	12.0	0.00	0.00	0.00	0.00	0.149	307.95	0.575	1.000	0 0
		27.74	12.0	5.30	9.01	10.80	2.57	0.149	307.95	0.575	1.000	0 0

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27.74	2.66	0.00	12.0	0.00	0.00	0.00	0.00	10.32	1.000			
11 + 262.00	307.67	0.00	12.0	0.00	0.00	0.00	0.00	0.000	308.00	0.365	1.000	12 0
	27.74	2.71	12.0	2.24	10.47	10.97	2.53	0.000	308.00	9.61	1.000	12 0
		0.00	12.0	0.00	0.00	0.00	0.00	0.000	308.00	9.61	1.000	12 0

Ster0001.001

ICL Ingenieur-Consult-Dr.-Ing. A. Kolbmueller GmbH
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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Krauf 2009

DATUM : 3.06.2009

PROJEKT K1-strieg
 ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
 VARIANTE HQ 100 Ist
 DATIET Ster0001

SEITE 34

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ o.33/s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	FROUDE IE o/oo	ALPHA ALPHAS	KZW KZD
11 + 266.00	307.84	0.00	12.0	0.23	0.31	0.02	0.15	0.000	308.02	0.445	1.003	0 0
	27.74	2.82	12.0	7.94	11.33	14.78	1.88	0.000	308.02	4.74	1.001	0 0
		0.00	12.0	0.00	0.00	0.00	0.00	0.000	308.02	4.74	1.001	0 0
11 + 270.00	307.86	0.02	12.0	1.71	1.72	0.15	0.17	0.000	308.04	0.498	1.018	0 0
	27.74	2.78	12.0	7.93	11.26	14.44	1.92	0.000	308.04	5.08	1.008	0 0
		0.00	12.0	0.00	0.00	0.00	0.00	0.000	308.04	5.08	1.008	0 0
11 + 315.00	308.08	0.23	12.0	10.76	10.77	1.42	0.16	0.000	308.22	0.593	1.278	0 0
	27.74	2.12	12.0	8.10	11.26	16.57	1.64	0.000	308.22	2.59	1.123	0 0
		0.26	12.0	6.07	6.08	1.24	0.21	0.000	308.22	2.59	1.123	0 0
11 + 319.00	308.55	0.74	12.0	13.38	13.39	2.40	0.31	0.000	308.77	1.000	1.672	4 0
	27.74	1.50	12.0	9.70	11.38	12.32	2.13	0.000	308.77	6.55	1.267	4 0
		0.72	12.0	16.14	16.16	2.55	0.28	0.000	308.77	6.55	1.267	4 0

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)

11 + 330.00	308.69	2.52	12.0	15.13	15.18	7.08	0.36	0.000	308.79	0.559	2.408	0 0
	27.74	2.08	12.0	9.20	10.58	14.58	1.53	0.000	308.79	2.44	1.456	0 0
		2.91	12.0	23.86	25.87	9.55	0.31	0.001	308.93	3.50	1.597	0 0
11 + 375.00	308.78	2.88	12.0	20.03	20.05	7.68	0.37	0.001	308.93	0.780	2.929	0 0
	27.74	2.29	12.0	6.49	7.98	11.71	1.91	0.001	308.93	3.50	1.597	0 0
		2.50	12.0	29.03	29.06	8.20	0.31	0.001	308.93	3.50	1.597	0 0

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STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ /0.33/s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	PROUDE IE o/oo	ALPHA	KZW	KZD
11 + 421.00	308.94	0.27	12.0	11.38	11.40	8.93	0.38	0.001	310.92	0.377	2.525	0	0
26.50	1.95	2.37	23.0	5.73	6.99	12.74	1.38			1.36	1.452	0	0
11 + 483.00	309.23	0.86	12.0	14.50	23.32	10.89	0.33	0.002	311.01	0.526	2.525	0	0
25.53	1.87	0.28	12.0	6.89	7.07	12.11	0.44			2.06	1.479	0	0
11 + 538.00	309.57	1.22	12.0	8.60	28.70	5.77	0.33	0.000	310.58	1.000	2.893	4	0
25.53	2.29	0.08	12.0	13.06	29.02	7.14	0.37			6.29	1.594	0	0
11 + 595.00	309.90	3.83	12.0	20.60	29.88	13.82	0.87	0.000	310.77	0.422	1.007	0	0
25.53	2.01	0.38	12.0	5.21	3.47	0.10	0.29			14.56	1.003	0	0
11 + 627.00	310.73	11.97	12.0	29.80	29.88	13.82	0.87	0.000	310.77	0.422	1.007	0	0
25.53	0.74	0.03	12.0	3.46	3.47	0.10	0.29			14.56	1.003	0	0
11 + 640.00	310.84	2.09	12.0	19.64	20.53	10.60	0.20	0.000	310.87	0.245	1.553	0	0
25.53	3.58	0.46	12.0	18.72	21.31	29.17	0.79			0.65	1.210	0	0

Seite 43

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ /0.33/s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	PROUDE IE o/oo	ALPHA	KZW	KZD
11 + 687.00	310.85	3.36	12.0	11.38	11.40	8.93	0.38	0.001	310.92	0.377	2.525	0	0
25.53	2.61	17.56	23.0	5.73	6.99	12.74	1.38			1.36	1.452	0	0
11 + 738.00	310.91	3.57	12.0	23.23	23.32	10.89	0.33	0.002	311.01	0.526	2.525	0	0
25.53	2.28	19.74	25.0	6.45	7.03	12.11	0.44			2.06	1.479	0	0
11 + 793.00	311.02	0.04	12.0	1.36	1.53	0.19	0.22	0.020	311.24	0.711	1.822	0	0
25.53	2.24	21.56	25.0	4.87	7.17	9.62	2.24			5.43	1.291	0	0
11 + 842.00	311.31	4.92	12.0	25.15	25.36	10.54	0.47	0.000	311.49	0.742	2.311	0	0
25.53	2.02	20.56	25.0	5.41	7.49	9.83	2.09			4.86	1.429	0	0
11 + 876.00	311.47	0.08	14.6	3.44	3.46	0.36	0.22	0.026	311.68	0.639	1.058	0	0
25.53	2.10	25.44	25.0	8.73	9.82	12.66	2.01			4.61	1.027	0	0
11 + 908.00	311.79	0.00	14.6	0.00	0.00	0.00	0.00	0.000	311.80	0.208	1.000	65	0
25.53	2.33	25.53	12.0	76.39	79.17	49.01	0.52			3.57	1.000	0	0
11 + 939.00	311.79	0.04	14.2	5.49	5.50	0.29	0.14	0.047	311.99	0.806	1.805	0	0
25.53	2.17	22.15	25.0	7.50	8.37	10.43	2.12			5.39	1.291	0	0
11 + 962.00	311.89	0.00	25.0	0.00	0.00	0.00	0.00	0.002	312.14	0.858	1.775	0	0
25.53	2.13	23.05	23.0	5.16	5.12	9.94	2.32			6.57	1.290	0	0

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

ERGEBNISSE
SEITE 36

Seite 44

STATION	WSPLAGE/H NN+M/m	ABFLUSS m ³ /s	K-WERT m ³ 0.33/s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHEN NN+M	PROUDE IE o/oo	ALPHA	KZW	KZD
11 + 974.00	312.09	0.00	25.0	0.00	0.00	0.00	0.00	0.00	312.19	0.435	2.018	0	0
25.53	2.57	19.19	25.0	5.65	21.22	8.55	1.55	0.44	312.19	2.33	1.330	0	0
11 + 975.00	311.89	0.00	12.0	0.00	0.00	0.00	0.00	0.170	312.38	0.000	1.210	11	0
25.53	2.39	24.94	12.0	6.13	9.17	8.05	3.10	0.53	312.38	32.18	1.091	0	0
11 + 976.00	312.34	1.75	12.0	15.20	15.38	6.94	0.25	0.000	312.40	0.392	2.150	9	0
25.53	2.75	21.23	12.0	9.73	20.89	18.16	1.17	0.26	312.40	1.27	1.390	0	0
11 + 979.00	312.33	1.16	12.0	12.62	12.79	4.29	0.27	0.002	312.41	0.489	1.989	0	0
25.53	2.60	21.60	12.0	9.73	12.03	15.57	1.39	0.34	312.41	2.18	1.345	0	0
12 + 31.00	312.42	1.12	12.0	14.19	14.20	4.24	0.26	0.001	312.54	0.611	2.227	0	0
25.53	2.54	22.03	12.0	8.81	18.15	13.54	1.63	0.32	312.54	2.42	1.423	0	0
12 + 45.00	312.52	0.33	12.0	19.97	19.97	1.92	0.17	0.000	312.72	1.000	1.788	4	0
25.53	2.31	24.10	12.0	7.81	8.91	11.73	2.06	0.32	312.72	4.69	1.309	0	0
12 + 47.00	312.90	7.94	12.0	14.60	14.64	7.76	1.02	0.000	313.14	1.000	2.092	4	0
25.53	0.83	15.22	12.0	7.56	7.59	5.67	2.68	0.64	313.14	16.96	1.326	0	0
12 + 49.00	313.08	4.41	12.0	14.16	14.26	9.41	0.47	0.000	313.14	0.400	2.352	0	0
25.53	2.93	13.61	12.0	7.51	24.26	9.15	1.49	0.47	313.14	2.65	1.370	0	0
12 + 56.00	313.12	3.31	12.0	14.85	15.13	11.53	0.29	0.000	313.15	0.213	1.687	0	0
25.53	3.03	9.26	12.0	3.23	5.66	9.29	1.00	0.49	313.15	0.82	1.198	0	0
12 + 111.00	313.16	0.55	12.0	6.71	7.03	2.90	1.11	0.000	313.20	0.261	2.338	0	0
25.53	2.77	14.83	12.0	5.83	6.84	13.35	1.19	0.36	313.20	0.81	1.381	0	0

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

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PROJEKT Kl-strieg
ZUSTAND Station 0
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 37

STATION	WSPLAGE/H NN+M/m	ABFLUSS m ³ /s	K-WERT m ³ 0.33/s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHEN NN+M	PROUDE IE o/oo	ALPHA	KZW	KZD
12 + 160.00	313.20	7.65	12.0	26.97	27.00	19.54	0.39	0.001	313.26	0.376	2.675	0	0
25.53	2.35	14.83	12.0	5.06	6.19	10.39	1.43	0.41	313.26	1.64	1.457	0	0
12 + 207.00	313.31	0.26	12.0	15.43	15.43	1.39	0.19	0.000	313.53	1.000	2.389	4	0
25.53	2.21	21.31	12.0	5.09	7.51	9.36	2.28	0.49	313.53	6.18	1.463	0	0
12 + 216.00	313.47	0.33	12.0	16.25	16.25	1.65	0.20	0.000	313.68	1.000	2.605	4	0
25.53	2.23	21.07	12.0	5.09	7.51	9.44	2.23	0.000	313.68	5.87	1.520	0	0
12 + 220.00	313.67	1.01	12.0	6.93	6.95	1.63	0.62	0.000	313.75	0.569	1.111	0	0
25.53	0.79	4.96	12.0	9.36	9.44	3.08	1.61	1.14	313.75	18.57	1.037	0	0
12 + 224.00	313.74	0.54	12.0	5.99	6.36	2.12	0.26	0.000	313.79	0.324	1.796	0	0
25.53	2.87	14.74	12.0	7.80	9.92	11.79	1.25	0.11	313.79	1.99	1.243	0	0
12 + 227.00	313.75	0.94	12.0	7.77	8.24	3.51	0.27	0.000	313.80	0.304	1.998	0	0
25.53	2.96	14.26	12.0	5.25	8.12	11.47	1.24	0.47	313.80	1.56	1.294	0	0
12 + 276.00	313.79	2.31	12.0	12.65	12.69	7.27	0.32	0.002	313.88	0.419	2.087	0	0
25.53	2.34	21.01	12.0	7.79	8.78	15.21	1.38	0.33	313.88	1.47	1.368	0	0
12 + 320.00	313.84	0.01	12.0	2.33	2.34	0.13	0.11	0.037	314.04	0.728	1.310	0	0
25.53	2.06	24.83	12.0	7.79	9.13	12.38	2.01	0.30	314.04	4.29	1.133	0	0
12 + 328.00	313.86	0.00	12.0	0.00	0.00	0.00	0.00	0.026	314.17	0.000	1.000	11	0
25.53	2.06	25.53	12.0	0.00	0.00	0.00	0.00	0.00	314.17	18.96	1.000	0	0

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12 + 336.00	314.07	25.53	25.0	9.09	11.63	12.84	1.99	0.000	314.27	0.534	1.000	9	0
25.53	2.20	0.00	12.0	0.00	0.00	0.00	0.00	0.000	314.27	5.55	1.000	9	0
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STATIONAERE WASSERSPIEGELLAGEN													
PROGRAMM WSPR2009 (C.) Knauf 2009													
DATUM : 3.06.2009													
PROJEKT K1-str1rieg													
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m													
VARIANTE HQ 100 Ist													
DATEI Ster0001													
SEITE 38													
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STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m	m3/s	m^0.33/s	m	m	m2	m/s	m	NN+m	IE o/oo	ALPHAS		
12 + 381.00	314.33	0.00	12.0	0.96	0.96	0.03	0.06	0.000	314.45	0.593	1.797	0	0
25.53	2.50	23.42	25.0	6.86	9.50	14.28	1.64	0.000	314.45	2.50	1.302	0	0
		2.11	12.0	22.54	23.01	7.45 *	0.28						
12 + 385.00	314.28	0.00	12.0	0.00	0.00	0.00	0.00	0.063	314.55	0.000	1.000	11	0
25.53	2.39	0.00	12.0	0.00	0.00	0.00	0.00			12.23	1.000		
		25.53	25.0	5.70	14.85	11.17	2.29						
12 + 389.00	314.49	0.49	12.0	2.19	2.57	1.46	0.34	0.000	314.59	0.517	1.675	9	0
25.53	2.58	23.91	25.0	9.09	10.26	16.89	1.42			1.65	1.266		
		1.13	12.0	22.32	22.34	5.75	0.20						
12 + 453.00	314.58	1.39	12.0	5.98	6.13	3.95	0.35	0.001	314.69	0.418	1.507	0	0
25.53	2.68	23.62	25.0	7.01	8.06	15.56	1.52			1.53	1.199		
		0.53	12.0	4.19	4.28	1.92	0.27						
12 + 519.00	314.73	2.92	10.0	16.82	16.86	7.89	0.37	0.000	314.87	0.658	2.024	0	0
25.53	2.17	22.31	25.0	10.01	10.71	12.86	1.73			3.77	1.365		
		0.31	10.0	9.04	9.04	1.59	0.19						
12 + 535.00	314.77	0.00	10.0	0.00	0.00	0.00	0.00	0.067	315.04	0.690	1.000	0	0
25.53	2.05	25.53	25.0	9.89	11.13	11.14	2.29			8.40	1.000		
		0.00	10.0	0.00	0.00	0.00	0.00						
12 + 542.00	314.67	0.00	10.0	0.00	0.00	0.00	0.00	0.035	315.16	0.829	1.000	31	5
25.53	1.89	25.53	25.0	5.67	8.52	8.18	3.12			16.42	1.000		
		0.00	10.0	0.00	0.00	0.00	0.00						
		0.00	10.0	0.00	0.00	0.00	0.00						
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12 + 549.00	314.85	25.53	25.0	5.40	8.16	9.09	2.81	0.000	315.25	0.691	1.000	0	0
25.53	2.20	0.00	10.0	0.00	0.00	0.00	0.00			10.93	1.000		
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12 + 590.00	315.41	2.35	10.0	20.96	20.99	9.70	0.24	0.000	315.51	0.489	2.324	0	0
25.53	2.50	0.87	10.0	7.64	8.81	15.26	1.46			1.64	1.456		
		0.87	10.0	7.03	7.09	3.46	0.25						
12 + 629.00	315.70	2.76	10.0	16.54	16.61	5.65	0.49	0.000	315.95	1.000	2.506	4	0
25.53	2.92	21.24	25.0	4.55	4.33	8.81	2.41			10.03	1.494		
		1.53	10.0	15.40	15.43	3.85	0.40						
+++++++ Engstelle mit Fl1esswechsel, Energiem1nimum > EH(UW)													
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STATIONAERE WASSERSPIEGELLAGEN													
PROGRAMM WSPR2009 (C.) Knauf 2009													
DATUM : 3.06.2009													
PROJEKT K1-str1rieg													
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m													
VARIANTE HQ 100 Ist													
DATEI Ster0001													
SEITE 39													
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STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m	m3/s	m^0.33/s	m	m	m2	m/s	m	NN+m	IE o/oo	ALPHAS		
12 + 632.00	315.83	12.93	10.0	16.05	16.05	7.74	1.67	0.000	316.02	1.000	1.289	4	0
25.53	0.50	5.85	25.0	7.71	7.75	2.07	2.82			73.95	1.084		
		6.75	10.0	16.75	16.79	5.33	1.27						
12 + 635.00	315.97	12.06	10.0	26.83	26.85	24.05	0.50	0.000	316.03	0.388	2.278	0	0
25.53	3.09	13.29	25.0	3.18	7.82	8.98	1.48			2.91	1.356		
		0.18	10.0	10.22	10.38	1.32 *	0.14						
12 + 640.00	315.92	4.38	10.0	20.69	20.70	10.99	0.40	0.006	316.06	0.573	2.248	0	0
25.53	2.66	20.87	25.0	9.22	9.22	11.71	1.78			3.70	1.415		
		0.28	10.0	2.15	2.62	0.92	0.30						
12 + 642.00	315.73	0.00	10.0	0.00	0.00	0.00	0.00	0.154	316.26	0.000	1.288	11	0
25.53	2.41	24.77	25.0	5.04	13.17	7.63	3.25			34.95	1.123		
		0.76	10.0	9.29	9.31	1.43	0.54						
12 + 644.00	316.25	7.17	10.0	24.21	24.21	21.91	0.33	0.000	316.30	0.304	2.447	9	0
25.53	2.99	17.49	25.0	7.06	8.92	14.48	1.21			1.22	1.431		
		0.87	10.0	3.21	3.69	2.91	0.30						
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Ster0001.001

12 + 646.00	316.25	8.10	10.0	25.55	25.56	24.75	0.33	0.000	316.30	0.294	2.625	0
25.53	2.96	16.64	25.0	5.94	7.71	13.62	1.22	0.000	316.30	1.12	1.466	0
		0.80	10.0	3.16	3.63	2.82	0.28					
12 + 669.00	316.28	11.05	10.0	33.02	33.06	28.19	0.39	0.000	316.33	0.325	2.487	0
25.53	2.92	14.46	25.0	4.26	8.82	11.01	1.31	0.000	316.33	1.90	1.410	0
		0.02	10.0	1.84	1.86	0.22	0.11					
12 + 673.00	316.33	0.00	10.0	0.00	0.00	0.00	0.00	0.045	316.47	0.000	1.061	11
25.53	2.86	22.84	25.0	33.19	70.14	13.47	1.69	0.000	316.47	41.47	1.023	0
		2.69	10.0	6.99	7.02	2.58	1.04					
12 + 677.00	316.53	8.16	10.0	29.91	29.95	29.64	0.28	0.000	316.56	0.254	2.485	9
25.53	2.99	17.29	25.0	7.44	9.84	17.20	1.01	0.000	316.56	0.77	1.440	0
		0.08	10.0	5.42	5.43	0.97	0.09					
12 + 680.00	316.53	8.17	10.0	31.99	32.05	29.72	0.27	0.000	316.57	0.265	2.534	0
25.53	2.94	17.30	10.0	7.44	9.96	16.85	1.03	0.000	316.57	0.84	1.452	0
		0.06	10.0	4.71	4.72	0.73	0.08					
12 + 710.00	316.55	8.82	10.0	32.08	32.15	30.77	0.29	0.000	316.59	0.257	2.469	0
25.53	2.87	16.68	25.0	7.44	9.95	16.29	1.02	0.000	316.59	0.87	1.429	0
		0.03	10.0	3.57	3.58	0.42	0.07					

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 40

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ERGEBNISSE

STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREIT[E	UMFANG	FLAECH[E	GESCHW	HZV	E-HOEHE	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m	m3/s	m^0.33/s	m	m	m2	m/s	m	NN+m	IE o/oo	ALPHAS		
12 + 717.00	316.52	0.00	10.0	0.00	0.00	0.00	0.00	0.175	316.91	0.000	1.340	11	0
25.53	2.81	24.11	25.0	7.99	19.91	8.48	2.84	0.65	316.91	40.35	1.138	0	
		1.42	10.0	12.04	12.06	2.20	0.20						
12 + 724.00	317.05	6.64	10.0	25.05	25.12	33.76	0.20	0.000	317.07	0.160	2.498	9	0
25.53	3.27	17.92	25.0	9.72	10.79	25.21	0.71	0.000	317.07	0.26	1.451	0	
		0.98	10.0	11.41	11.49	7.82	0.12						

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12 + 773.00	317.06	7.07	10.0	28.62	28.72	33.63	0.21	0.000	317.08	0.180	3.018	0	0
25.53	3.12	15.42	25.0	7.31	8.01	18.58	0.83	0.000	317.08	0.36	1.540	0	
		3.04	10.0	13.83	14.01	15.20	0.20						
12 + 824.00	317.08	3.57	10.0	22.70	22.71	17.95	0.20	0.000	317.11	0.250	2.962	0	0
25.53	2.66	18.49	25.0	9.55	10.15	20.13	0.92	0.000	317.11	0.54	1.571	0	
		3.46	10.0	22.66	22.71	17.62	0.20						
12 + 875.00	317.10	1.76	10.0	15.10	15.16	7.77	0.23	0.002	317.16	0.404	2.926	0	0
25.53	2.26	19.91	25.0	8.90	9.37	15.85	1.26	0.000	317.16	1.25	1.584	0	
		3.86	10.0	26.47	26.47	15.55	0.25						
12 + 902.00	317.11	1.18	10.0	22.62	22.63	5.51	0.21	0.012	317.24	0.661	1.949	0	0
25.53	2.11	22.21	25.0	8.37	9.43	13.04	1.70	0.000	317.24	3.02	1.345	0	
		2.13	15.0	6.42	6.51	3.75	0.57						
12 + 905.00	317.18	0.00	10.0	11.46	11.46	0.00	0.00	0.000	317.25	0.000	1.000	12	0
25.53	2.22	25.53	25.0	0.00	0.00	23.97	0.00	0.000	317.25	2.01	1.000	0	
		0.00	10.0	0.00	0.00	0.00	0.00						
12 + 908.00	317.12	1.02	10.0	22.89	22.89	4.82	0.21	0.000	317.26	0.716	1.659	9	0
25.53	2.09	24.34	25.0	10.29	11.33	14.19	1.72	0.000	317.26	3.57	1.265	0	
		0.17	10.0	1.88	1.99	0.61	0.27						
12 + 916.00	317.11	1.93	10.0	25.68	25.70	6.95	0.28	0.000	317.30	0.830	2.094	0	0
25.53	2.04	23.44	25.0	7.17	8.66	11.62	2.02	0.000	317.30	4.41	1.403	0	
		0.16	10.0	1.56	1.70	0.52	0.30						
12 + 974.00	317.37	0.00	10.0	0.00	0.00	0.00	0.00	0.028	317.60	0.600	1.025	0	0
25.53	2.07	25.51	25.0	7.73	9.48	12.09	2.11	0.000	317.60	5.15	1.012	0	
		0.02	10.0	2.01	2.02	0.17	0.14						
13 + 29.00	317.70	0.00	10.0	0.00	0.00	0.00	0.00	0.000	317.88	0.788	2.098	0	0
25.53	2.15	22.73	25.0	7.39	9.64	11.25	2.02	0.000	317.88	5.33	1.393	0	
		2.80	10.0	24.89	24.90	8.11	0.35						

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Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0

STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 41

Seite 50

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ERGEBNISSE

STATION ABFLUSS	WSPLAGE/H NN+M/m	ABFLUSS m ³ /s	K-WERT m ³ /0.33/s	BREITHE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHIE NN+M	PROUDE IE o/oo	ALPHA ALPHAS	KZW KZD
13 + 86.00	318.00	0.00	10.0	0.00	0.00	0.00	0.00	0.00	318.22	0.570	1.000	0 0
13 + 25.53	1.90	25.53	10.0	0.00	10.48	12.40	2.06	0.028	318.22	5.43	1.000	0 0
13 + 113.00	318.15	0.00	10.0	0.00	0.00	0.00	0.00	0.000	318.36	0.551	1.000	0 0
13 + 25.53	1.93	25.53	10.0	0.00	10.60	12.73	2.01	0.000	318.36	5.05	1.000	0 0
13 + 118.00	317.87	0.00	10.0	0.00	0.00	0.00	0.00	0.000	318.58	1.000	1.000	4 5
13 + 25.53	1.63	25.53	10.0	0.00	4.86	6.86	3.72	0.000	318.58	22.69	1.000	0 0
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)												
13 + 123.00	318.45	0.00	10.0	0.07	0.07	0.00	0.00	0.000	318.59	0.738	1.178	0 0
13 + 25.53	2.16	25.39	10.0	10.84	11.76	15.01	1.69	0.000	318.59	3.31	1.083	0 0
13 + 176.00	318.66	0.23	10.0	10.24	10.52	1.83	0.12	0.000	318.72	0.380	2.063	0 0
13 + 25.53	2.27	20.49	10.0	14.19	14.74	18.05	1.14	0.30	318.72	1.58	1.358	0 0
13 + 228.00	318.74	0.81	10.0	16.87	16.87	3.41	0.24	0.020	318.90	0.827	1.752	0 0
13 + 25.53	1.67	24.16	10.0	11.73	12.06	13.21	1.83	0.24	318.90	4.74	1.296	0 0
13 + 248.00	318.99	3.91	10.0	28.29	28.29	9.66	0.40	0.000	319.20	1.000	2.891	4 0
13 + 25.53	1.92	21.09	10.0	7.70	8.53	9.49	2.22	0.23	319.20	6.86	1.597	0 0
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)												
13 + 251.00	319.12	13.07	10.0	24.44	24.46	9.37	1.40	0.000	319.29	1.000	1.363	4 0
13 + 25.53	0.46	7.19	10.0	10.93	10.97	2.74	2.62	1.17	319.29	69.99	1.103	0 0
13 + 254.00	319.22	6.11	10.0	22.10	22.42	16.67	0.37	0.000	319.30	0.458	2.830	0 0
13 + 25.53	2.01	18.32	10.0	7.77	8.38	12.54	1.46	0.000	319.30	1.99	1.540	0 0
13 + 258.00	319.23	4.51	10.0	22.75	22.96	14.04	0.32	0.000	319.30	0.416	3.015	0 0
13 + 25.53	1.85	16.66	10.0	7.77	8.22	11.76	1.42	0.35	319.30	1.99	1.557	0 0
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)												
13 + 305.00	319.39	0.00	10.0	0.00	0.00	0.00	0.00	0.030	319.53	0.701	1.388	0 0
13 + 25.53	1.70	24.06	10.0	17.28	17.71	13.89	1.73	0.37	319.53	6.65	1.157	0 0
13 + 327.00	319.69	3.63	10.0	19.17	19.37	7.04	0.52	0.000	319.99	1.000	2.239	4 0
13 + 24.14	1.90	20.51	10.0	5.35	7.34	7.79	2.63	0.000	319.99	10.24	1.422	0 0
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)												
13 + 331.00	319.60	0.00	10.0	0.00	0.00	0.00	0.00	0.223	320.31	0.649	1.000	12 0
13 + 24.14	1.78	24.14	10.0	1.94	8.76	6.49	3.72	0.000	320.31	32.98	1.000	0 0
13 + 335.00	320.33	2.23	10.0	18.64	18.91	10.44	0.21	0.000	320.37	0.304	2.896	0 0
13 + 24.14	2.50	16.62	10.0	10.19	11.17	16.30	1.02	0.25	320.37	1.00	1.543	0 0
13 + 341.00	320.34	2.29	10.0	19.65	20.14	12.14	0.19	0.000	320.38	0.293	3.482	0 0
13 + 24.14	2.50	16.37	10.0	7.27	7.66	13.48	1.06	0.000	320.38	0.70	1.671	0 0
13 + 391.00	320.38	1.73	10.0	21.82	22.04	8.52	0.20	0.000	320.43	0.328	2.934	0 0
13 + 24.14	2.49	13.01	10.0	4.57	4.97	10.40	1.25	0.38	320.43	1.47	1.510	0 0
13 + 440.00	320.45	0.83	10.0	15.27	15.47	3.96	0.21	0.006	320.54	0.559	2.328	0 0
13 + 24.14	2.35	20.23	10.0	10.21	11.13	13.61	1.49	0.33	320.54	2.71	1.446	0 0
13 + 498.00	320.60	0.00	10.0	1.73	1.73	0.04	0.05	0.011	320.75	0.689	1.549	0 0
13 + 24.14	2.91	22.91	10.0	11.55	13.12	13.12	1.75	0.011	320.75	0.689	1.549	0 0

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT Kl-strieg
ZUSTAND Station 0
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 42

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ERGEBNISSE

STATION ABFLUSS	WSPLAGE/H NN+M/m	ABFLUSS m ³ /s	K-WERT m ³ /0.33/s	BREITHE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHIE NN+M	PROUDE IE o/oo	ALPHA ALPHAS	KZW KZD
13 + 305.00	319.39	0.00	10.0	0.00	0.00	0.00	0.00	0.030	319.53	0.701	1.388	0 0
13 + 25.53	1.70	24.06	10.0	17.28	17.71	13.89	1.73	0.37	319.53	6.65	1.157	0 0
13 + 327.00	319.69	3.63	10.0	19.17	19.37	7.04	0.52	0.000	319.99	1.000	2.239	4 0
13 + 24.14	1.90	20.51	10.0	5.35	7.34	7.79	2.63	0.000	319.99	10.24	1.422	0 0
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)												
13 + 331.00	319.60	0.00	10.0	0.00	0.00	0.00	0.00	0.223	320.31	0.649	1.000	12 0
13 + 24.14	1.78	24.14	10.0	1.94	8.76	6.49	3.72	0.000	320.31	32.98	1.000	0 0
13 + 335.00	320.33	2.23	10.0	18.64	18.91	10.44	0.21	0.000	320.37	0.304	2.896	0 0
13 + 24.14	2.50	16.62	10.0	10.19	11.17	16.30	1.02	0.25	320.37	1.00	1.543	0 0
13 + 341.00	320.34	2.29	10.0	19.65	20.14	12.14	0.19	0.000	320.38	0.293	3.482	0 0
13 + 24.14	2.50	16.37	10.0	7.27	7.66	13.48	1.06	0.000	320.38	0.70	1.671	0 0
13 + 391.00	320.38	1.73	10.0	21.82	22.04	8.52	0.20	0.000	320.43	0.328	2.934	0 0
13 + 24.14	2.49	13.01	10.0	4.57	4.97	10.40	1.25	0.38	320.43	1.47	1.510	0 0
13 + 440.00	320.45	0.83	10.0	15.27	15.47	3.96	0.21	0.006	320.54	0.559	2.328	0 0
13 + 24.14	2.35	20.23	10.0	10.21	11.13	13.61	1.49	0.33	320.54	2.71	1.446	0 0
13 + 498.00	320.60	0.00	10.0	1.73	1.73	0.04	0.05	0.011	320.75	0.689	1.549	0 0
13 + 24.14	2.91	22.91	10.0	11.55	13.12	13.12	1.75	0.011	320.75	0.689	1.549	0 0

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m³/s	K-WERT m³/0.33/s	BREITHE m	UMFANG m	FLAECHE m²	GESCHW m/s	HZV m	E-HOEHE NN+m	FROUDE IE o/do	ALPHA	KZW	KZD
13 + 501.00	320.91	0.53	10.0	9.37	9.39	1.26	0.42	0.000	321.11	1.000	1.653	4	0
24.14	0.62	8.13	10.0	14.86	14.87	7.80	1.04	0.000	321.11	25.74	1.213		
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)													
13 + 504.00	321.04	0.77	10.0	12.00	12.04	4.02	0.19	0.000	321.11	0.421	2.286	0	0
24.14	2.36	3.74	10.0	16.14	16.17	11.64	0.32	0.000	321.11	1.60	1.426		
ICL Ingenieur Consult Dr.-Ing. A. Kolbmueller GmbH Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0													
STATIONAERE WASSERSPIEGELLAGEN													
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009													
PROJEKT Kl-strieg Station 0 + 1.00 bis 0 + 23380.00 m													
ZUSTAND HQ 100 Ist													
VARIANTE Ster001													
DATEI Ster001													
===== ERGEBNISSE =====													
STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m³/s	K-WERT m³/0.33/s	BREITHE m	UMFANG m	FLAECHE m²	GESCHW m/s	HZV m	E-HOEHE NN+m	FROUDE IE o/do	ALPHA	KZW	KZD
13 + 515.00	320.98	0.82	10.0	14.96	14.97	3.17	0.26	0.006	321.16	0.798	2.763	0	0
24.14	2.46	4.23	10.0	17.67	17.68	9.03	0.47	0.000	321.16	5.37	1.549		
13 + 517.00	321.06	1.58	10.0	14.87	14.90	3.72	0.42	0.000	321.17	0.653	1.829	0	0
24.14	0.79	9.71	10.0	17.56	17.57	11.81	0.82	0.000	321.17	11.49	1.252		
13 + 519.00	321.11	1.29	10.0	16.00	16.04	5.45	0.24	0.000	321.18	0.440	2.444	0	0
24.14	2.66	5.41	10.0	18.35	18.35	13.60	0.40	0.000	321.18	2.36	1.444		
13 + 522.00	321.14	1.45	10.0	26.70	26.81	9.07	0.16	0.000	321.18	0.318	3.037	0	0
24.14	2.75	8.55	10.0	23.92	23.95	23.08	0.34	0.000	321.18	1.09	1.549		
13 + 566.00	321.20	5.30	10.0	21.26	21.37	18.38	0.29	0.000	321.22	0.249	2.574	0	0
24.14	2.45	4.99	10.0	24.88	24.88	18.84	0.26	0.000	321.22	1.02	1.432		
Ster001.001													
13 + 624.00	321.23	3.63	10.0	9.77	9.93	8.07	0.45	0.011	321.35	0.508	2.557	0	0
24.14	1.93	2.50	10.0	13.83	13.84	7.37	0.34	0.000	321.35	2.67	1.479		
13 + 650.00	321.25	2.90	10.0	11.38	11.56	4.85 *	0.60	0.048	321.58	0.941	1.792	0	0
24.14	1.64	0.00	10.0	0.00	0.00	0.00	0.00	0.000	321.58	11.35	1.289		
13 + 654.00	321.23	0.01	10.0	0.07	1.27	0.05	0.15	0.000	321.93	1.000	1.014	4	0
24.14	1.57	0.00	10.0	0.00	0.00	0.00	0.00	0.000	321.93	19.20	1.007		
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)													
13 + 658.00	321.83	6.95	10.0	20.13	20.20	15.91	0.44	0.000	321.94	0.474	2.693	0	0
24.14	2.14	0.50	10.0	3.08	3.25	1.59	0.32	0.000	321.94	2.62	1.495		
13 + 661.00	321.84	7.17	10.0	17.96	18.02	15.49	0.46	0.000	321.95	0.456	2.543	0	0
24.14	2.13	0.48	10.0	3.04	3.20	1.54	0.31	0.000	321.95	2.63	1.455		
ICL Ingenieur Consult Dr.-Ing. A. Kolbmueller GmbH Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0													
STATIONAERE WASSERSPIEGELLAGEN													
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009													
PROJEKT Kl-strieg Station 0 + 1.00 bis 0 + 23380.00 m													
ZUSTAND HQ 100 Ist													
VARIANTE Ster001													
DATEI Ster001													
===== ERGEBNISSE =====													
STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m³/s	K-WERT m³/0.33/s	BREITHE m	UMFANG m	FLAECHE m²	GESCHW m/s	HZV m	E-HOEHE NN+m	FROUDE IE o/do	ALPHA	KZW	KZD
13 + 716.00	322.00	4.84	10.0	17.15	17.16	10.91	0.44	0.002	322.12	0.531	2.014	0	0
24.14	2.16	0.00	10.0	0.09	0.09	0.00	0.03	0.000	322.12	3.59	1.340		
13 + 769.00	322.37	2.09	10.0	18.83	18.85	5.77	0.36	0.000	322.61	1.000	2.727	4	0
24.14	1.85	1.26	10.0	6.17	6.96	8.88	0.34	0.000	322.61	6.33	1.567		
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)													
!!!!!!! Profilabstand zum Ow ueberpruefen!!!!													
Seite 54													

Seite 53

Ster0001.001

13 + 821.00	322.79	1.17	10.0	6.80	6.86	2.86	0.41	0.000	323.02	1.000	2.087	4 0
24.14	1.99	22.23	25.0	5.91	7.72	10.11	2.20	0.000	323.02	5.41	1.403	0 0
		0.74	10.0	23.52	23.53	3.54	0.21					
13 + 835.00	322.98	4.72	10.0	25.02	25.03	15.72	0.30	0.000	323.04	0.413	3.166	0 0
24.14	2.33	16.83	10.0	21.14	8.97	12.91	1.30	0.000	323.04	1.67	1.609	0 0
		2.59	10.0	21.15	21.99	10.41	0.25					
13 + 838.00	323.14	14.38	10.0	26.01	26.02	11.46	1.25	0.000	323.33	1.000	1.514	4 0
24.14	0.58	9.71	10.0	10.57	10.65	3.65	2.66	0.000	323.33	46.97	1.150	0 0
		0.05	10.0	3.13	3.13	0.17	0.31					

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)

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13 + 841.00	323.27	6.52	10.0	28.30	28.31	19.69	0.33	0.000	323.34	0.440	2.838	0 0
24.14	2.72	17.33	25.0	6.33	8.42	12.58	1.38	0.000	323.34	1.78	1.542	0 0
		0.29	10.0	12.43	12.43	2.19	0.13					
13 + 844.00	323.26	6.20	10.0	27.52	27.56	17.42	0.36	0.001	323.35	0.499	2.682	0 0
24.14	2.60	17.85	10.0	8.70	8.71	11.80	1.51	0.001	323.35	2.34	1.509	0 0
		0.09	10.0	8.70	8.71	0.89	0.11					
13 + 897.00	323.39	5.54	10.0	30.03	30.04	18.50	0.30	0.000	323.45	0.391	2.358	0 0
24.14	2.03	18.60	25.0	10.24	11.02	14.78	1.26	0.000	323.45	1.71	1.431	0 0
		0.00	10.0	0.00	0.00	0.00	0.00					
13 + 943.00	323.47	0.39	10.0	21.36	21.40	3.46	0.11	0.000	323.53	0.427	1.815	0 0
24.14	2.00	21.49	25.0	13.53	14.47	18.93	1.14	0.000	323.53	1.44	1.303	0 0
		2.26	10.0	11.86	11.95	7.87	0.29					
13 + 997.00	323.67	0.57	10.0	22.07	22.07	2.81	0.20	0.000	323.74	0.500	1.941	0 0
24.14	2.01	11.66	18.0	6.19	7.07	7.69	1.52	0.000	323.74	6.36	1.277	0 0
		11.91	10.0	26.83	26.90	18.90	0.63					

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Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0

STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009

DATUM : 3.06.2009

PROJEKT K1-Strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 45

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Seite 55

STATION ABFLUSS	WSPLAGE/H NN+M/m	ABFLUSS m ³ /s	K-WERT m ⁰ .33/s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEH NN+M	PROUDE IE o/oo	ALPHA	KZW KZD
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Ster0001.001

14 + 47.00	323.99	0.00	10.0	0.00	0.00	0.00	0.00	0.005	324.13	0.678	2.246	0 0
24.14	2.56	17.20	18.0	4.20	6.99	8.65	1.99	0.000	324.13	9.20	1.385	0 0
		6.94	10.0	28.72	28.78	12.57	0.55					
14 + 78.00	324.28	2.23	10.0	15.08	15.09	4.19	0.53	0.019	324.53	0.955	1.650	0 0
24.14	2.25	21.82	18.0	5.42	8.38	9.23	2.36	0.000	324.53	15.66	1.247	0 0
		0.09	10.0	3.70	3.76	0.34	0.25					
14 + 79.00	324.49	19.80	10.0	23.87	23.87	11.17	1.77	0.000	324.64	1.000	1.098	4 0
24.14	0.45	3.39	18.0	9.26	9.30	1.87	1.82	0.000	324.64	86.56	1.040	0 0
		0.94	10.0	13.23	13.23	1.42	0.66					

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)

+++++++

14 + 80.00	324.54	5.65	10.0	21.63	21.63	10.77	0.52	0.000	324.65	0.671	2.130	0 0
24.14	2.47	18.11	18.0	5.42	8.58	10.52	1.72	0.000	324.65	6.97	1.367	0 0
		0.39	10.0	17.92	18.19	2.01	0.19					
14 + 92.00	324.61	3.59	10.0	20.29	20.30	7.40	0.48	0.001	324.75	0.739	2.031	0 0
24.14	2.75	19.84	18.0	6.17	9.69	10.80	1.84	0.000	324.75	9.03	1.352	0 0
		0.71	10.0	12.61	12.61	2.31	0.31					
14 + 98.00	324.74	13.24	10.0	15.89	15.89	7.20	1.84	0.000	324.91	1.000	1.095	4 0
24.14	0.41	5.17	18.0	9.56	9.59	2.35	2.20	0.000	324.91	97.16	1.032	0 0
		5.73	10.0	15.81	15.82	4.35	1.32					

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)

+++++++

14 + 106.00	324.88	1.90	10.0	14.26	14.28	6.91	0.27	0.000	324.93	0.339	2.247	0 0
24.14	2.57	17.17	18.0	8.56	9.79	15.66	1.10	0.000	324.93	1.98	1.386	0 0
		5.07	10.0	26.42	26.43	15.95	0.32					
14 + 170.00	325.01	1.48	10.0	4.87	5.07	3.58	0.41	0.003	325.08	0.374	1.743	0 0
24.14	2.58	19.36	18.0	8.33	9.34	15.01	1.29	0.000	325.08	2.73	1.256	0 0
		3.29	10.0	14.03	14.05	8.68	0.38					
14 + 258.00	325.24	0.93	10.0	9.29	9.58	3.53	0.26	0.000	325.32	0.423	1.783	0 0
24.14	2.16	20.84	18.0	8.41	9.17	15.72	1.33	0.000	325.32	2.64	1.283	0 0
		2.37	10.0	12.11	12.17	6.79	0.35					
14 + 369.00	325.63	0.17	10.0	5.00	5.01	0.60	0.28	0.000	325.88	1.000	1.469	4 0
24.14	1.80	23.06	18.0	8.28	8.93	10.18	2.27	0.000	325.88	13.31	1.193	0 0
		0.91	10.0	13.10	13.11	2.43	0.37					

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009

DATUM : 3.06.2009

PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 46

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ERGEBNISSE												
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITTE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	PROUDE	ALPHA	KZW
ABFLUSS	NN+m/m	m ³ /s	m ³ /s	m	m	m ²	m/s	m	NN+m	IE o/oo	ALPHAS	KZD
14 + 390.00	325.92	0.00	10.0	0.00	0.00	0.00	0.00	0.015	326.20	0.658	1.000	0 0
24.14	2.05	24.14	18.0	7.65	9.00	10.17	2.37	0.00	326.20	14.78	1.000	0 0
		0.00	10.0	0.00	0.00	0.00	0.00					
14 + 397.00	326.55	0.34	10.0	3.55	3.56	0.46	0.74	0.000	326.73	1.000	1.139	4 0
24.14	0.51	8.06	18.0	11.34	11.36	3.45	2.34	0.000	326.73	82.59	1.045	
		15.73	10.0	24.05	24.06	9.90	1.59					
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)												
14 + 404.00	326.68	0.59	10.0	10.04	10.07	2.72	0.22	0.000	326.75	0.473	2.052	0 0
24.14	2.54	20.70	18.0	8.67	10.06	16.09	1.29	0.000	326.75	2.73	1.368	
		2.84	10.0	25.56	25.56	10.10	0.28					
14 + 597.00	327.42	0.00	10.0	0.05	0.05	0.00	0.00	0.006	327.52	0.547	1.500	0 0
24.14	1.86	22.24	18.0	11.59	12.21	5.73	1.48	0.000	327.52	5.17	1.195	
		1.90	10.0	18.23	18.24	17.19	0.33					
14 + 658.00	327.80	1.10	10.0	2.26	2.62	1.50	0.74	0.035	328.06	0.698	1.258	0 0
24.14	1.60	22.57	18.0	7.36	7.44	9.79	2.31	0.000	328.06	11.40	1.104	
		0.47	10.0	1.93	2.11	0.82	0.57					
14 + 743.00	328.68	1.21	10.0	5.17	5.38	2.51	0.48	0.000	328.82	0.596	1.930	0 0
24.14	1.56	18.78	18.0	6.68	6.72	9.98	1.88	0.000	328.82	6.45	1.310	
		4.14	10.0	12.79	13.06	7.48	0.55					
14 + 813.00	329.41	1.89	10.0	17.18	17.19	4.04	0.47	0.000	329.61	1.000	1.755	4 0
24.14	1.54	21.70	18.0	11.03	11.43	10.43	2.08	0.000	329.61	15.11	1.282	
		0.55	10.0	12.52	12.52	1.70	0.33					
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)												
!!! ProfiIabstand zum Ow ueberpruefen !!!												
Seite 57												

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009

DATUM : 3.06.2009

PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 47

=====												
ERGEBNISSE												
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITTE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	PROUDE	ALPHA	KZW
ABFLUSS	NN+m/m	m ³ /s	m ³ /s	m	m	m ²	m/s	m	NN+m	IE o/oo	ALPHAS	KZD
15 + 39.00	331.67	2.92	10.0	24.18	24.22	8.24	0.35	0.000	331.76	0.560	1.891	0 0
24.14	1.62	20.20	18.0	12.00	12.16	14.04	1.44	0.000	331.76	5.28	1.311	
		1.02	10.0	7.76	7.78	2.78	0.37					
15 + 88.00	331.94	2.32	10.0	18.79	18.82	6.23	0.37	0.000	332.03	0.596	2.296	0 0
24.14	1.70	17.87	18.0	8.35	9.27	11.24	1.59	0.000	332.03	6.04	1.406	
		3.95	10.0	20.88	20.89	8.95	0.44					
15 + 114.50	332.10	2.58	10.0	23.58	23.65	8.45	0.31	0.000	332.17	0.481	2.390	0 0
24.14	1.75	17.37	18.0	8.17	8.96	12.64	1.37	0.000	332.17	3.68	1.427	
		4.19	10.0	19.66	19.67	10.50	0.40					
15 + 147.50	332.23	6.45	10.0	16.99	17.06	12.75	0.51	0.000	332.29	0.402	2.126	0 0
24.14	1.76	14.22	18.0	7.28	7.62	10.44	1.36	0.000	332.29	3.77	1.330	
		3.47	10.0	18.95	18.99	9.17	0.38					
15 + 213.50	332.50	0.57	10.0	5.92	5.95	1.72	0.33	0.006	332.61	0.583	1.798	0 0
24.14	1.78	20.49	18.0	9.97	10.51	7.42	1.58	0.000	332.61	5.81	1.284	
		3.07	10.0	18.51	18.54	7.42	0.41					
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Ster0001.001														
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITTE	UMFANG	FLAECH	GESCHW	HZV	E-HOEHE	FROUDE	ALPHA	KZW	KZD	
ABFLUSS	NN+M/m	m ³ /s	m ⁰ .33/s	m	m	m ²	m/s	m	NN+M	IE o/oo	ALPHAS			
15 + 240.00	332.65	0.34	10.0	5.73	5.75	1.39	0.24	0.000	332.73	0.482	1.735	0	0	
24.14	1.84	20.81	18.0	11.08	12.19	15.58	1.34	0.000	332.73	3.97	1.266	0	0	
		2.99	10.0	20.57	20.57	8.53	0.35							
15 + 326.00	332.99	0.82	10.0	12.41	12.54	3.27	0.25	0.000	333.07	0.502	2.112	0	0	
24.14	1.84	19.48	18.0	9.50	10.44	14.36	1.36							
		5.85	10.0	25.02	25.03	10.95	0.35			3.72	1.372	0	0	
15 + 363.00	333.14	7.55	10.0	19.57	19.61	13.72	0.55	0.000	333.22	0.495	2.043	0	0	
24.14	1.84	15.92	18.0	6.70	7.47	10.25	1.55			4.88	1.324	0	0	
		0.66	10.0	11.54	11.61	2.59	0.26							
15 + 419.00	333.44	2.25	10.0	18.26	18.27	5.41	0.42	0.004	333.61	0.860	2.287	0	0	
24.14	1.93	20.35	18.0	7.05	8.24	10.36	1.97			8.79	1.435			
		1.53	10.0	19.25	19.30	4.39	0.35							
15 + 467.00	333.85	8.35	10.0	24.75	24.76	17.24	0.48	0.000	333.91	0.394	2.090	0	0	
24.14	2.16	14.37	18.0	5.68	6.99	10.11	1.42			3.80	1.320			
		1.42	10.0	5.66	5.81	3.34	0.43							
15 + 510.50	333.98	2.54	10.0	10.32	10.48	6.76	0.38	0.000	334.06	0.396	1.916	0	0	
24.14	2.16	19.40	18.0	7.58	8.05	14.47	1.34			2.54	1.311			
		2.20	10.0	10.93	11.06	6.33	0.35							

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT Kl-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 48

ERGEBNISSE

15 + 566.50	334.16	1.48	10.0	12.83	12.92	4.31	0.34	0.000	334.27	0.578	2.453	0	0	
24.14	1.91	17.07	18.0	6.00	6.48	9.97	1.71			5.10	1.440			
		5.58	10.0	20.89	20.89	11.59	0.48							
15 + 618.00	334.47	0.25	10.0	7.02	7.04	0.96	0.26	0.006	334.64	0.805	2.088	0	0	
24.14	1.94	19.77	18.0	6.11	7.66	9.68	2.04			9.43	1.369			
		4.12	10.0	21.34	21.40	8.11	0.51							

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Ster0001.001

15 + 649.00	334.78	6.60	10.0	24.02	24.14	21.17	0.31	0.000	334.81	0.215	2.364	0	0	
24.14	2.08	10.55	18.0	6.01	6.41	11.60	0.91			1.16	1.351			
		6.99	10.0	34.01	34.11	25.18	0.28							
15 + 688.00	334.83	1.05	10.0	23.55	23.58	5.31	0.20	0.004	334.88	0.430	2.163	0	0	
24.14	1.91	18.46	18.0	11.18	12.13	16.01	1.15			2.83	1.378			
		4.63	10.0	25.94	25.96	13.47	0.34							
15 + 747.00	335.05	0.60	10.0	6.73	6.77	1.80	0.33	0.006	335.16	0.607	2.160	0	0	
24.14	1.73	17.71	18.0	7.31	7.40	11.54	0.51			6.55	1.368			
		5.83	10.0	23.38	23.40	11.54	0.51							
15 + 830.00	335.62	2.78	10.0	6.20	6.33	4.32	0.64	0.000	335.72	0.489	2.116	0	0	
24.14	1.74	11.76	18.0	4.00	4.64	6.38	1.85			6.88	1.306			
		9.60	10.0	22.01	22.09	14.99	0.64							
15 + 884.00	335.93	2.68	10.0	12.50	12.58	7.70	0.35	0.000	335.97	0.284	1.978	0	0	
24.14	1.95	11.46	18.0	6.00	6.40	9.88	1.16			2.33	1.274			
		10.01	10.0	23.88	23.91	21.97	0.46							
15 + 928.00	336.05	0.09	10.0	1.26	1.41	0.40	0.23	0.000	336.08	0.285	1.560	0	0	
24.14	1.50	14.11	18.0	12.10	12.35	13.74	1.03			2.82	1.175			
		9.94	10.0	27.56	27.58	21.86	0.45							
15 + 988.00	336.33	0.13	10.0	2.70	2.72	0.46	0.28	0.004	336.41	0.519	1.882	0	0	
24.14	1.50	14.03	18.0	8.36	8.83	8.73	1.61			8.08	1.265			
		9.98	10.0	30.28	30.29	16.59	0.60							
16 + 43.00	336.69	3.33	10.0	6.60	6.80	5.77	0.58	0.000	336.75	0.382	2.003	0	0	
24.14	1.61	12.74	18.0	6.78	7.03	9.20	1.38			4.13	1.287			
		8.08	10.0	27.33	27.35	17.15	0.47							
16 + 99.00	337.01	0.30	10.0	2.22	2.28	0.67	0.44	0.006	337.15	0.664	2.251	0	0	
24.14	1.67	14.89	18.0	5.22	6.03	7.28	2.04			10.04	1.365			
		8.95	10.0	27.17	27.21	13.95	0.64							

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT Kl-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 49

Seite 60

STER0001.001

STATION ABFLUSS	WSPLAGE/H NN+M/m	ABFLUSS m ³ /s	K-WERT m ³ 0.33/s	BREITTE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEH NN+M	PROUDE IE o/oo	ALPHA ALPHAS	KZW KZD
16 + 135.00 24.14	337.34 1.83	2.55 13.03 8.56	10.0 18.0 10.0	15.39 7.38 27.16	15.43 8.09 27.16	8.32 12.03 21.60	0.31 1.08 0.40	0.000	337.38	0.291 2.13	2.110 1.316	0 0
16 + 220.00 24.14	337.67 1.72	0.24 17.89 6.01	10.0 18.0 10.0	8.84 10.66 25.85	8.85 11.31 25.88	1.17 11.88 12.23	0.21 1.51 0.49	0.007	337.75	0.564 6.55	1.909 1.299	0 0
16 + 303.50 24.14	338.23 1.84	0.59 14.52 9.03	10.0 18.0 10.0	10.88 6.09 23.51	10.89 7.48 23.54	2.09 8.67 14.67	0.28 1.68 0.62	0.000	338.32	0.545 7.11	2.034 1.312	0 0
16 + 359.00 24.14	338.56 1.89	2.65 9.33 12.16	10.0 18.0 10.0	16.57 5.52 31.40	16.60 6.39 31.41	8.55 8.74 27.55	0.31 1.07 0.44	0.000	338.59	0.259 2.32	1.896 1.243	0 0
16 + 429.00 24.14	338.90 1.70	0.12 11.81 12.21	10.0 18.0 10.0	1.76 4.59 29.87	1.80 5.78 29.89	0.36 6.43 18.03	0.33 1.84 0.68	0.010	338.99	0.529 9.00	1.989 1.277	0 0
16 + 514.00 24.14	339.45 1.62	0.07 11.44 12.63	10.0 18.0 10.0	1.40 10.09 26.33	1.50 10.81 26.34	0.37 12.05 25.96	0.19 0.95 0.49	0.000	339.48	0.235 2.41	1.394 1.121	0 0
16 + 546.50 24.14	339.57 1.60	1.70 8.92 13.53	10.0 18.0 10.0	9.88 4.32 27.01	9.95 4.32 27.01	3.83 5.22 19.85	0.44 1.71 0.68	0.002	339.63	0.440 7.00	1.938 1.250	0 0
16 + 583.00 24.14	339.79 1.69	0.00 9.27 14.87	10.0 18.0 10.0	0.56 5.79 29.69	0.58 6.57 29.75	0.04 7.75 26.78	0.10 1.20 0.56	0.000	339.83	0.280 3.54	1.517 1.148	0 0
16 + 618.00 24.14	339.89 1.64	0.01 11.96 12.17	17.0 22.0 17.0	0.63 8.28 29.85	0.65 8.86 29.86	0.05 10.13 19.42	0.16 1.18 0.63	0.001	339.94	0.345 2.41	1.337 1.105	0 0
16 + 696.50 24.14	340.12 1.54	5.63 8.36 10.15	17.0 22.0 17.0	25.10 4.81 28.85	25.15 5.20 28.86	10.16 5.87 15.29	0.55 1.42 0.66	0.000	340.17	0.428 3.56	1.613 1.169	0 0
16 + 757.50 24.14	340.36 1.52	2.45 12.15 9.54	17.0 22.0 17.0	20.85 6.39 29.16	20.86 6.70 29.17	5.06 7.19 13.07	0.48 1.69 0.73	0.002	340.44	0.616 5.37	1.839 1.246	0 0

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STER0001.001

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Zwitschauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0
STATIONAERE WASSERSPIEGELLAGEN
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009
PROJEKT Kl-strieg
ZUSTAND Station 0
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 50

STATION ABFLUSS	WSPLAGE/H NN+M/m	ABFLUSS m ³ /s	K-WERT m ³ 0.33/s	BREITTE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEH NN+M	PROUDE IE o/oo	ALPHA ALPHAS	KZW KZD
16 + 807.00 24.14	340.59 1.54	6.08 7.02 11.04	17.0 22.0 17.0	27.91 5.76 37.81	27.93 6.79 37.82	14.94 7.93 24.14	0.41 0.89 0.46	0.000	340.61	0.238 1.32	1.386 1.109	0 0
16 + 892.50 24.14	340.78 1.66	3.61 16.90 3.63	17.0 22.0 17.0	19.72 6.16 28.42	19.76 6.69 28.48	5.46 7.67 6.35	0.66 2.20 0.57	0.000	340.96	1.000 8.38	2.289 1.394	4 0
+++++++ Engstelle mit Fluesswechsel, Energieminimum > EH(UW) !!! Profilabstand zum Ow ueberpruefen !!!												
16 + 962.00 24.14	341.11 1.92	2.03 12.51 9.60	17.0 22.0 17.0	25.52 14.61 33.62	25.52 15.75 33.62	6.15 12.93 17.44	0.33 0.97 0.55	0.000	341.14	0.356 2.52	1.407 1.132	0 0
17 + 18.50 24.14	341.30 1.57	0.00 20.12 4.02	17.0 22.0 17.0	0.00 8.88 25.49	0.00 9.80 25.50	0.00 10.00 6.51	0.00 2.01 0.62	0.033	341.47	0.854 8.15	1.608 1.217	0 0
17 + 86.00 21.82	341.80 1.45	6.10 8.80 6.93	17.0 22.0 17.0	20.66 5.38 31.37	20.66 6.01 31.37	10.59 6.90 13.51	0.58 1.28 0.51	0.000	341.84	0.396 2.80	1.678 1.190	0 0
17 + 209.50 21.82	342.63 1.35	0.32 16.19 5.31	17.0 22.0 17.0	3.34 7.81 23.43	3.36 8.26 23.44	0.55 7.14 6.48	0.58 2.27 0.82	0.000	342.83	1.000 12.91	1.680 1.228	4 0
+++++++ Engstelle mit Fluesswechsel, Energieminimum > EH(UW) !!! Profilabstand zum Ow ueberpruefen !!!												
17 + 284.00	343.09	1.77 5.82	17.0 22.0	21.11 5.18	21.11 5.73	4.60 4.78	0.38 1.22	0.000	343.13	0.430	1.577	0 0

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17.10	1.25	9.51	17.0	38.10	38.10	15.99	0.59			3.89	1.165		
17 + 424.00	344.17	3.00	17.0	24.61	24.61	4.46	0.67						
17.10	1.11	7.51	22.0	3.95	4.42	3.33	2.25	0.000	344.30	1.000	2.149	4	0
17.10	1.11	6.59	17.0	30.57	30.57	7.80	0.85		15.29	1.307			
++++++++	Engstelle mit Fließwechsel, Energieerhaltung												
17 + 466.00	344.70	5.06	17.0	32.08	32.08	6.90	0.73						
17.10	1.33	8.55	22.0	3.95	4.97	3.84	2.23	0.000	344.84	1.000	2.143	4	0
17.10	1.33	3.49	17.0	17.13	17.14	4.30	0.81						
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STATIONAERE	WASSERSPIEGELLAGEN												
PROGRAMM	WSPR2009 (C.) Knauf 2009												
PROJEKT	K1-strieg												
ZUSTAND	Station 0 + 1.00 bis 0 + 23380.00 m												
VARIANTE	HQ 100 Ist												
DATEI	Ster0001												
ERGEBNISSE													
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m	m ³ /s	m ³ /s	m	m	m ²	m/s	m	NN+m	IE o/oo	ALPHAS		
17 + 469.00	344.92	6.85	17.0	19.68	19.69	4.72	1.45						
17.10	0.51	3.21	22.0	7.28	7.29	1.73	1.86	0.000	345.04	1.000*	1.034	4	0
17.10	0.51	7.05	17.0	21.39	21.45	4.97	1.42	*	48.74	1.010			
17 + 472.00	345.02	5.50	17.0	21.89	21.90	10.22	0.54						
17.10	1.48	6.52	22.0	7.08	7.78	6.41	1.02	0.000	345.05	0.333	1.355	0	0
17.10	1.48	5.09	17.0	21.77	22.16	9.79	0.52						
17 + 550.00	345.23	6.38	17.0	19.34	19.34	11.17	0.57						
17.10	1.28	4.45	22.0	3.75	4.48	4.29	1.04	0.000	345.25	0.300	1.340	0	0
17.10	1.28	6.27	17.0	28.18	28.21	12.85	0.49						
17 + 587.00	345.61	0.09	17.0	3.75	3.76	0.27	0.35	0.000	345.79	1.000	1.809	4	0
17.10	1.50	10.95	22.0	3.72	5.71	4.77	2.30	0.000	345.79	1.000	1.809	4	0
17.10	1.50	6.06	17.0	24.69	24.73	7.01	0.86						
++++++++	Engstelle mit Fließwechsel, Energieerhaltung												
0.00		17.0	0.00	0.00	0.00	0.00	0.00						
Seite 63													

17 + 593.00	345.78	0.02	22.0	1.82	1.84	0.05	0.42	0.000	345.95	1.000	1.007	4	0
17.10	0.68	17.08	17.0	25.06	25.08	9.25	1.85						
17 + 598.00	345.90	0.37	17.0	14.95	14.95	1.53	0.24	0.000	345.98	0.611	1.821	0	0
17.10	1.83	10.29	22.0	4.78	5.95	6.70	1.54	0.63	4.16	1.257			
17.10	1.83	6.44	17.0	23.13	23.16	10.17	0.63						
17 + 700.00	346.32	6.45	17.0	28.73	28.82	11.69	0.55	0.000	346.37	0.453	1.812	0	0
17.10	1.36	6.39	22.0	3.61	3.86	4.46	1.43	0.000	346.37	3.51	1.218	0	0
17.10	1.36	4.26	17.0	16.06	16.10	7.22	0.59						
17 + 799.00	347.08	0.00	17.0	0.00	0.00	0.00	0.00	0.000	347.27	1.000	1.353	4	0
17.10	1.12	11.71	22.0	8.84	9.11	5.20	2.25	0.000	347.27	22.08	1.118		
17.10	1.12	5.39	17.0	17.08	17.45	4.95	1.09						
++++++++	Engstelle mit Fließwechsel, Energieerhaltung												
0.03		17.0	2.01	2.01	0.09	0.28	0.28	0.000	347.81	1.000	1.794	4	0
17 + 828.00	347.63	9.24	22.0	3.43	4.81	3.84	2.41	0.000	347.81	16.17	1.236		
17.10	1.55	7.83	17.0	28.18	28.19	8.23	0.95						
17 + 832.00	347.79	0.02	17.0	1.04	1.05	0.08	0.27	0.000	347.84	0.453	1.026	0	0
17.10	0.69	1.50	22.0	7.79	7.81	1.98	0.76	0.000	347.84	7.40	1.010		
17.10	0.69	15.58	17.0	26.26	26.30	15.29	1.02						
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STATIONAERE	WASSERSPIEGELLAGEN												
PROGRAMM	WSPR2009 (C.) Knauf 2009												
PROJEKT	K1-strieg												
ZUSTAND	Station 0 + 1.00 bis 0 + 23380.00 m												
VARIANTE	HQ 100 Ist												
DATEI	Ster0001												
ERGEBNISSE													
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m	m ³ /s	m ³ /s	m	m	m ²	m/s	m	NN+m	IE o/oo	ALPHAS		
17 + 836.00	347.80	0.11	17.0	2.87	2.88	0.41	0.28	0.000	347.87	0.477	1.565	0	0
17.10	1.45	9.97	22.0	6.32	7.23	7.34	1.36	0.000	347.87	3.74	1.177		
17.10	1.45	7.01	17.0	25.91	25.92	11.55	0.61						
17 + 909.00	348.07	1.62	17.0	20.54	20.55	4.52	0.36	0.000	348.13	0.486	1.512	0	0
17.10	1.21	13.37	22.0	12.42	13.42	11.60	1.15	0.000	348.13	3.33	1.180		
17.10	1.21	2.12	17.0	10.27	10.63	4.08	0.52						
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17 + 975.00	349.00	3.92	17.0	34.67	34.67	6.07	0.65	0.000	349.16	1.000	1.710	4 0
17.10	1.52	0.00	18.0	6.94	7.92	6.72	1.96	0.000	14.78	1.241	1.241	
+++++++	Engstelle mit Fließwechsel, Energieminimum > EH(UW)	+++++++										
17 + 982.00	349.25	17.08	17.0	31.11	31.18	11.41	1.50	0.000	349.37	0.812	1.007	0 0
17.10	0.07	0.00	18.0	1.81	1.82	0.05	0.29	0.000	29.61	1.003	1.003	
17 + 989.00	349.46	9.57	17.0	31.46	31.48	14.70	0.65	0.000	349.49	0.391	1.228	0 0
17.10	1.89	0.53	18.0	7.58	9.46	7.27	0.25	0.000	4.05	1.080	1.080	
18 + 19.00	349.64	9.05	17.0	29.30	29.31	10.52	0.86	0.004	349.71	0.603	1.226	0 0
17.10	1.64	0.16	17.0	7.88	7.17	5.82	1.35	0.24	10.06	1.077	1.077	
18 + 49.00	349.95	9.48	17.0	29.57	29.58	10.70	0.89	0.000	350.01	0.618	1.237	0 0
17.10	1.52	7.33	17.8	6.77	8.13	5.33	1.38	0.000	10.54	1.081	1.081	
18 + 74.00	350.15	12.67	17.0	30.66	30.72	24.28	0.52	0.000	350.17	0.214	1.134	0 0
17.10	1.42	3.10	18.0	5.14	5.80	5.17	0.60	0.24	1.29	1.29	1.051	
18 + 110.00	350.45	9.24	17.0	29.07	29.08	7.61	1.21	0.000	350.59	1.000	1.278	4 0
17.10	1.14	7.80	17.8	5.73	6.60	3.70	2.11	0.33	30.43	1.089	1.089	
+++++++	Engstelle mit Fließwechsel, Energieminimum > EH(UW)	+++++++										
	!!! Profiltabstand, zum Ow ueberpruefen !!!											
18 + 140.00	350.88	10.65	17.0	29.95	29.98	11.23	0.95	0.000	350.94	0.617	1.228	0 0
17.10	1.14	5.76	17.8	5.43	6.15	4.01	1.44	0.43	11.53	1.077	1.077	
		0.70	17.0	14.54	14.55	1.64	0.43					
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STATIONAERE WASSERSPIEGELLAGEN												
PROGRAMM WSPR2009 (C.) Krauf 2009			DATUM : 3.06.2009									
PROJEKT K1-strieg			Station 0 + 1.00 bis 0 + 23380.00 m									
VARIANTE HO_100 Ist			SEITE 53									
DATEI Ster0001			Seite 65									

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ /33/s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEH NN+m	FRUDE IE o/oo	ALPHA	KZW KZD
18 + 171.00	351.22	10.75	17.0	30.07	30.12	11.95	0.90	0.000	351.28	0.573	1.259	0 0
17.10	1.04	5.12	18.0	4.93	5.52	3.75	1.36	0.45	9.61	1.086	1.086	
		1.23	17.0	19.96	19.96	2.75	0.45					
18 + 173.00	351.23	14.40	17.0	18.41	18.43	8.05	1.79	0.000	351.37	1.000	1.180	4 0
17.10	0.42	0.04	18.0	1.83	1.85	0.10	0.46	0.91	33.38	1.066	1.066	
17.10	2.66	2.66	17.0	18.21	18.25	2.91	0.91					
+++++++	Engstelle mit Fließwechsel, Energieminimum > EH(UW)	+++++++										
18 + 175.00	351.35	8.28	17.0	23.20	23.20	14.70	0.56	0.000	351.37	0.248	1.136	0 0
17.10	1.33	3.46	18.0	3.74	4.11	4.21	0.46	0.000	2.01	1.041	1.041	
17.10	5.37	17.0	24.57	24.57	11.60	11.60	0.46					
18 + 177.00	351.35	8.67	17.0	26.29	26.30	17.37	0.50	0.000	351.37	0.213	1.119	0 0
17.10	1.37	3.16	18.0	3.74	4.11	4.36	0.72	0.42	1.50	1.036	1.036	
17.10	5.27	17.0	25.13	25.13	12.66	12.66	0.42					
18 + 226.00	351.48	9.11	17.0	25.35	25.35	7.21	1.26	0.000	351.66	1.000	1.349	4 0
17.10	1.22	7.99	18.0	3.66	4.84	3.32	2.41	0.00	29.53	1.107	1.107	
17.10	0.00	0.00	17.0	0.00	0.00	0.00	0.00					
+++++++	Engstelle mit Fließwechsel, Energieminimum > EH(UW)	+++++++										
18 + 229.00	351.70	14.24	17.0	24.18	24.20	8.36	1.70	0.000	351.83	1.000	1.100	4 0
17.10	0.26	0.61	18.0	6.51	6.52	0.72	0.84	0.000	41.38	1.036	1.036	
17.10	2.25	17.0	11.20	11.21	2.03	2.03	0.72					
18 + 232.00	351.81	9.29	17.0	22.75	22.80	13.36	0.70	0.000	351.85	0.325	1.156	0 0
17.10	1.52	4.54	18.0	3.65	4.46	4.37	1.04	0.000	3.41	1.048	1.048	
17.10	3.27	17.0	13.82	13.82	5.85	5.85	0.56					
18 + 234.00	351.82	10.06	17.0	20.98	21.42	13.96	0.72	0.000	351.85	0.328	1.192	0 0
17.10	1.49	4.48	18.0	3.65	4.21	4.33	1.03	0.47	3.18	1.062	1.062	
17.10	2.56	17.0	15.80	15.82	5.44	5.44	0.47					
18 + 274.00	352.06	10.58	17.0	29.06	29.11	11.34	0.93	0.007	352.14	0.583	1.218	0 0
17.10	1.71	6.51	18.0	3.50	5.39	4.17	1.56	0.007	10.57	1.068	1.068	
17.10	0.01	17.0	2.90	2.90	0.08	0.08	0.16					
18 + 277.00	352.22	17.02	17.0	28.29	28.33	11.92	1.43	0.005	352.33	0.759	1.026	0 0
17.10	0.05	0.08	18.0	5.50	5.51	0.23	0.33	0.005	22.41	1.011	1.011	
17.10	0.00	0.00	17.0	0.00	0.00	0.00	0.00					

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 54

ERGEBNISSE												
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	FRUDE	ALPHA	KZW
ABFLUSS	NN+m/m	m ³ /s	m ³ 0.33/s	m	m	m ²	m/s	m	NN+m	IE o/oo	ALPHAS	KZD
18 + 280.00	352.33	8.63	17.0	22.52	22.52	14.37	0.60	0.000	352.36	0.291	1.253	0 0
17.10	2.03	6.11	18.0	5.16	6.22	6.75	0.90	0.000	352.36	2.27	1.081	0 0
		2.37	17.0	18.07	18.24	6.08	0.39	*				
18 + 282.00	352.34	8.01	17.0	23.10	23.20	14.99	0.53	0.000	352.36	0.257	1.247	0 0
15.60	2.04	5.44	18.0	5.16	6.22	6.78	0.80	0.000	352.36	1.77	1.079	0 0
		2.14	17.0	18.27	18.44	6.20	0.35	*				
18 + 297.00	352.37	7.18	17.0	24.47	24.51	14.18	0.51	0.000	352.39	0.260	1.256	0 0
13.86	1.35	4.89	18.0	5.16	6.04	6.04	0.81	0.000	352.39	1.84	1.080	0 0
		1.78	17.0	13.99	14.01	4.92	0.36					
18 + 366.00	352.85	0.00	17.0	0.00	0.00	0.00	0.00	0.000	353.35	1.000	1.000	4 0
13.86	1.25	13.86	18.0	4.44	5.82	4.43	3.13	0.000	353.35	43.49	1.000	4 0
		0.00	17.0	0.00	0.00	0.00	0.00					
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)												
18 + 377.00	353.46	13.82	17.0	25.71	25.74	10.83	1.28	0.000	353.55	0.660	1.017	0 0
13.86	0.11	0.04	18.0	3.15	3.20	0.14	0.30	0.000	353.55	17.86	1.008	0 0
		0.00	17.0	0.00	0.00	0.00	0.00					
18 + 380.00	353.50	3.87	17.0	21.22	21.32	6.14	0.63	0.002	353.59	0.601	1.483	0 0
13.86	1.84	9.99	18.0	4.66	6.78	6.62	1.51	0.000	353.59	7.24	1.163	0 0
		0.00	17.0	0.00	0.00	0.00	0.00					
18 + 421.00	354.04	2.21	17.0	26.29	26.31	4.02	0.55	0.000	354.20	1.000	1.665	4 0
13.86	1.72	11.65	18.0	4.60	6.65	6.07	1.92	0.000	354.20	12.84	1.238	4 0
		0.00	17.0	0.00	0.00	0.00	0.00					
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)												
Seite 67												

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Zwittkauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0

STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 55

ERGEBNISSE												
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	FRUDE	ALPHA	KZW
ABFLUSS	NN+m/m	m ³ /s	m ³ 0.33/s	m	m	m ²	m/s	m	NN+m	IE o/oo	ALPHAS	KZD
18 + 622.00	356.13	0.12	17.0	2.21	2.22	0.23	0.52	0.005	356.39	0.794	1.049	0 0
13.86	1.80	13.74	18.0	5.34	7.09	6.04	2.27	0.000	356.39	19.78	1.022	0 0
		0.00	17.0	0.00	0.00	0.00	0.00					
18 + 632.00	356.35	0.00	17.0	0.00	0.00	0.00	0.00	0.009	356.70	0.256	1.000	12 0
13.86	1.94	13.86	18.0	0.49	8.64	5.26	2.63	0.000	356.70	41.44	1.000	12 0
		0.00	17.0	0.00	0.00	0.00	0.00					
18 + 638.00	356.88	3.77	17.0	28.51	28.70	10.37	0.36	0.000	356.91	0.323	1.509	0 0
13.86	2.21	10.09	18.0	6.79	8.91	11.33	0.89	0.000	356.91	1.77	1.172	0 0
		0.01	17.0	0.95	0.95	0.05	0.10					
18 + 682.00	357.02	2.92	17.0	9.53	9.58	3.92	0.74	0.005	357.09	0.544	1.528	0 0
13.86	2.03	7.53	18.0	3.30	4.98	5.15	1.46	0.000	357.09	6.32	1.164	0 0
		3.41	17.0	18.11	18.14	5.56	0.61					
		3.47	17.0	18.21	18.24	5.20	0.67					
Seite 68												

18 + 685.00	357.06	5.79	18.0	7.77	7.77	4.85	1.19	0.000	357.11	0.496	1.204	0	
13.86	0.67	4.60	17.0	16.54	16.56	5.92	0.78	0.000	8.23	1.064	1.064	0	
18 + 688.00	357.10	3.10	17.0	16.32	16.54	7.94	0.39	0.000	357.12	0.239	1.335	0	
13.86	2.06	5.63	17.0	17.33	17.42	11.59	0.49	0.000	1.440	1.101	1.101	0	
18 + 690.00	357.10	2.73	17.0	14.31	14.38	6.66	0.41	0.000	357.13	0.261	1.356	0	
13.86	2.04	5.70	17.0	17.72	17.82	11.28	0.51	0.000	1.63	1.107	1.107	0	
18 + 756.00	357.40	0.01	17.0	1.71	1.71	0.06	0.16	0.023	357.48	0.514	1.066	0	
13.86	1.26	6.60	18.0	4.77	5.36	4.49	1.12	0.000	8.45	1.023	1.023	0	
18 + 814.00	358.33	1.87	17.0	15.00	15.05	2.85	0.65	0.000	358.51	1.000	1.606	4	
13.86	1.54	0.40	17.0	4.77	6.44	5.71	0.50	0.000	13.59	1.217	1.217	0	
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++++													
18 + 817.00	358.66	9.37	17.0	15.39	15.39	5.92	1.58	0.000	358.79	1.000	1.184	4	
13.86	0.41	3.41	18.0	4.95	4.98	1.99	1.72	0.000	31.05	1.071	1.071	0	
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STATIONAERE WASSERSPIEGELLAGEN													
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009													
PROJEKT Kl-strieg Station 0 + 1.00 bis 0 + 23380.00 m													
ZUSTAND HQ 100 Ist													
VARIANTE Ster001													
DATEI Ster001													
===== ERGEBNISSE =====													
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECH	GESCHW	HZV	E-HOEHE	FROUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m	m ³ /s	m ^{0.33} /s	m	m	m ²	m/s	m	NN+m	IE o/oo	ALPHAS		
18 + 820.00	358.77	7.19	17.0	29.50	29.50	15.36	0.47	0.000	358.79	0.261	1.321	0	
13.86	1.95	4.86	18.0	4.40	5.44	5.97	0.81	0.000	1.81	1.097	1.097	0	
18 + 876.00	358.96	3.78	17.0	27.06	27.12	7.15	0.53	0.003	359.00	0.483	1.464	0	
13.86	1.27	5.68	18.0	4.64	5.20	4.56	1.25	0.000	5.72	1.139	1.139	0	
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18 + 942.00	360.17	2.29	17.0	13.78	13.78	3.32	0.69	0.000	360.32	1.000	1.548	4
13.86	1.81	11.45	18.0	4.64	6.30	6.15	1.86	0.000	11.04	1.200	1.200	0
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++++												
18 + 947.00	360.43	9.48	17.0	16.42	16.44	5.93	1.60	0.000	360.56	1.000	1.082	4
13.86	0.33	4.12	18.0	7.83	7.83	2.58	0.59	0.000	34.43	1.035	1.035	0
18 + 952.00	360.55	4.04	17.0	20.41	20.43	10.48	0.39	0.000	360.57	0.253	1.511	0
13.86	1.85	7.03	18.0	5.98	6.52	8.94	0.79	0.000	1.25	1.155	1.155	0
19 + 4.00	360.67	3.64	17.0	21.87	21.88	6.87	0.53	0.006	360.73	0.526	1.643	0
13.86	1.55	9.19	18.0	5.98	6.52	7.13	1.29	0.000	4.56	1.207	1.207	0
19 + 5.00	360.66	10.37	17.0	21.02	21.03	6.45	1.61	0.000	360.79	1.000	1.065	4
13.86	0.45	2.86	18.0	5.73	5.76	1.71	1.67	0.000	43.21	1.025	1.025	0
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++++												
19 + 6.00	360.72	7.47	17.0	21.58	21.58	7.71	0.97	0.000	360.80	0.652	1.274	0
13.86	1.58	5.78	18.0	3.56	5.49	3.69	1.50	0.000	12.80	1.089	1.089	0
19 + 16.00	360.85	8.73	17.0	32.77	32.84	15.81	0.55	0.000	360.87	0.297	1.181	0
13.86	1.61	4.73	18.0	5.14	6.65	5.58	0.85	0.000	2.79	1.058	1.058	0
19 + 19.00	360.86	11.97	17.0	31.62	31.63	14.76	0.81	0.001	360.89	0.400	1.045	0
13.86	0.31	1.73	18.0	9.05	9.09	2.72	0.64	0.000	6.29	1.017	1.017	0
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STATIONAERE WASSERSPIEGELLAGEN												
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009												
PROJEKT Kl-strieg Station 0 + 1.00 bis 0 + 23380.00 m												
ZUSTAND HQ 100 Ist												
VARIANTE Ster001												
DATEI Ster001												

Ster0001.001

ERGEBNISSE

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ 0.33/s	BREITHE m	UMFANG m	FLAECHHE m ²	GESCHW m/s	HZV m	E-HOEHHE NN+m	FRUDE IE o/oo	ALPHA ALPHAS	KZW KZD
19 +	22.00	360.88	8.27	17.0	30.57	13.53	0.61	0.000	360.90	0.355	1.219	0 0
	13.86	1.57	0.53	17.0	9.78	1.63	0.32			3.83	1.071	
19 +	61.00	361.28	6.30	17.0	29.80	6.81	0.93	0.000	361.44	1.000	1.660	4 0
	13.86	1.40	0.02	17.0	2.68	4.50	2.19			21.28	1.200	
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) !!! Profiltabstand zum Ow ueberpruefen !!!												
19 +	64.00	361.36	12.74	17.0	25.91	25.91	7.76	0.000	361.49	1.000	1.033	4 0
	13.86	0.30	0.02	17.0	5.90	5.91	0.96			46.48	1.012	
19 +	67.00	361.47	6.97	17.0	27.05	27.07	11.36	0.000	361.51	0.452	1.529	0 0
	13.86	1.59	6.14	17.0	3.93	4.86	5.12			4.14	1.162	
19 +	123.00	362.01	1.50	17.0	18.57	18.59	2.61	0.000	362.15	1.000	1.824	4 0
	13.86	1.31	8.01	17.0	4.01	4.40	3.86			15.79	1.253	
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) !!! Profiltabstand zum Ow ueberpruefen !!!												
19 +	180.00	362.98	0.00	17.0	0.00	0.00	0.00	0.000	363.20	1.000	1.476	4 0
	13.86	1.72	10.96	18.0	4.01	5.28	2.29			18.56	1.167	
19 +	185.00	363.34	7.58	17.0	14.88	14.90	4.69	0.000	363.49	1.000*	1.061	4 0
	13.86	0.60	5.84	18.0	8.77	9.01	3.17			42.08	1.023	
19 +	190.00	363.48	5.68	17.0	21.07	21.07	10.90	0.000	363.50	0.286	1.290	0 0
	13.86	1.91	2.91	17.0	2.98	4.82	5.58			2.26	1.087	
19 +	224.00	363.56	5.11	17.0	19.09	19.12	8.44	0.001	363.60	0.391	1.423	0 0
	13.86	1.79	6.08	18.0	2.98	4.82	5.21			3.78	1.127	
19 +	228.00	363.58	8.16	17.0	17.00	17.05	6.73	0.008	363.65	0.652	1.065	0 0
	13.86	0.44	3.92	18.0	8.10	8.13	3.12			17.57	1.024	
Seite 71												

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009

DATUM : 3.06.2009

PROJEKT K1-strieg
ZUSTAND Station 0
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 58

ERGEBNISSE

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ 0.33/s	BREITHE m	UMFANG m	FLAECHHE m ²	GESCHW m/s	HZV m	E-HOEHHE NN+m	FRUDE IE o/oo	ALPHA ALPHAS	KZW KZD
19 +	232.00	363.65	4.81	25.0	14.56	14.72	6.89	0.000	363.69	0.383	1.235	0 0
	13.86	1.71	5.93	25.0	3.86	4.87	1.09			2.14	1.074	
19 +	274.00	363.81	4.23	25.0	18.34	18.45	4.02	0.000	363.96	1.000	1.417	4 0
	13.86	0.96	6.80	25.0	3.65	3.94	3.11			13.47	1.128	
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) !!! Profiltabstand zum Ow ueberpruefen !!!												
19 +	311.00	364.72	1.13	25.0	7.59	7.59	1.38	0.000	364.94	1.000	1.372	4 0
	13.86	1.68	11.74	22.0	3.65	5.20	5.21			10.46	1.136	
19 +	315.00	364.81	5.39	25.0	15.98	16.05	3.82	0.000	364.96	1.000*	1.075	4 0
	13.86	0.52	4.22	25.0	4.05	4.05	2.05			21.59	1.024	
19 +	323.00	364.93	4.72	25.0	20.05	20.06	6.72	0.000	364.99	0.505	1.322	0 0
	13.86	1.87	7.08	22.0	3.62	4.70	5.19			3.38	1.102	
19 +	369.00	365.11	6.92	25.0	22.09	22.09	8.70	0.000	365.15	0.441	1.130	0 0
	13.86	1.48	4.14	22.0	3.04	4.09	3.51			5.51	1.040	
19 +	455.00	365.46	4.23	25.0	19.34	19.34	3.58	0.000	365.59	1.000	1.131	4 0
	11.65	0.73	7.42	25.0	9.38	9.49	4.08			21.14	1.044	
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+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)																
iiii Profiltabstand zum Ow ueberpruefen iii																
19 + 556.00	367.36	10.30	0.00	25.0	22.0	6.89	7.33	4.21	0.00	2.45	0.000	367.66	1.000	1.000	4	0
10.30	1.22	0.00	25.0	25.0	0.00	0.00	0.00	0.00	0.00	0.00	0.000	25.96	1.000	1.000	4	0
19 + 560.00	367.32	10.30	0.00	25.0	22.0	2.22	5.35	2.89	0.00	3.57	0.061	367.97	1.000*	1.000	4	0
10.30	1.13	0.00	25.0	25.0	0.00	0.00	0.00	0.00	0.00	0.00	0.000	59.96	1.000	1.000	4	0

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STATIONAERE WASSERSPIEGELLAGEN
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009
PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Istf
DATEI Ster0001 SETTE 59

ERGEBNISSE																
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	FROUDE	ALPHA	KZW	KZD			
ABFLUSS	NN+m/m	m3/s	m/0.33/s	m	m	m2	m/s	m	NN+m	IE o/oo	ALPHAS	KZW	KZD			
19 + 564.00	367.63	10.30	0.00	25.0	22.0	2.77	5.06	3.39	0.00	3.04	0.000	368.10	0.877	1.000	0	0
10.30	1.31	0.00	25.0	25.0	0.00	0.00	0.00	0.00	0.00	32.48	1.000	1.000	0	0	0	0
19 + 587.00	368.46	10.30	3.09	25.0	15.65	15.77	6.66	0.46	0.00	0.253	0.000	368.48	0.253	1.154	0	0
10.30	1.91	3.05	25.0	22.0	3.98	5.78	0.72	0.46	0.00	1.09	0.000	368.48	1.09	1.048	0	0
19 + 611.00	368.49	10.30	2.66	25.0	16.89	16.95	7.82	0.34	0.00	0.172	0.000	368.50	0.172	1.074	0	0
10.30	1.68	4.72	25.0	22.0	4.48	5.54	0.51	0.40	0.00	0.52	0.000	368.50	0.52	1.024	0	0
19 + 626.00	368.50	10.30	2.34	25.0	17.67	17.72	8.31	0.28	0.00	0.143	0.000	368.50	0.143	1.066	0	0
10.30	1.53	5.44	25.0	22.0	4.79	5.83	0.43	0.35	0.00	0.33	0.000	368.50	0.33	1.022	0	0
19 + 641.00	368.50	10.30	2.16	25.0	17.77	17.84	8.89	0.24	0.00	0.120	0.000	368.51	0.120	1.060	0	0
10.30	1.38	5.87	25.0	22.0	5.32	6.10	0.37	0.31	0.00	0.24	0.000	368.51	0.24	1.020	0	0
			0.67	25.0	10.93	10.94	1.23	0.54								

Ster0001.001
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Ster0001.001																
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)																
19 + 726.00	369.10	10.30	9.04	22.0	5.78	6.24	5.07	1.78	0.000	369.24	1.000	1.443	4	0		
10.30	1.16	0.59	25.0	25.0	8.94	8.94	1.06	0.56		8.66	1.000	1.166	4	0		
19 + 752.00	369.41	10.30	0.35	25.0	5.92	5.93	0.63	0.56	0.000	369.58	1.000	1.316	4	0		
10.30	1.15	0.51	25.0	22.0	5.78	7.84	0.89	0.58	0.000	9.83	1.000	1.124	4	0		
19 + 753.00	369.31	10.30	0.00	25.0	0.00	0.00	0.00	0.00	0.052	0.969	0.000	369.66	24.24	1.000	11	0
10.30	1.04	0.00	25.0	22.0	5.50	6.08	3.99	2.58	0.000	0.00	1.000	1.000	11	0		
19 + 756.00	369.49	10.30	0.05	25.0	4.43	4.43	0.17	0.28	0.000	0.951	1.123	1.123	0	0		
10.30	1.27	0.10	25.0	22.0	6.44	7.02	5.53	1.83	0.000	9.54	1.055	1.055	0	0		
19 + 835.00	370.26	10.30	0.00	25.0	0.00	0.00	0.00	0.00	0.000	1.000	1.000	1.000	4	0		
10.30	1.20	0.00	25.0	25.0	4.58	5.40	0.00	2.80	0.000	27.16	1.000	1.000	4	0		

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)
iiii Profiltabstand zum Ow ueberpruefen iii

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STATIONAERE WASSERSPIEGELLAGEN
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009
PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Istf
DATEI Ster0001 SETTE 60

ERGEBNISSE														
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	FROUDE	ALPHA	KZW	KZD	
ABFLUSS	NN+m/m	m3/s	m/0.33/s	m	m	m2	m/s	m	NN+m	IE o/oo	ALPHAS	KZW	KZD	
19 + 869.00	370.97	10.30	0.00	25.0	0.00	0.00	0.00	0.00	0.000	371.26	0.819	1.000	0	0
10.30	1.33	0.00	25.0	25.0	4.91	5.82	4.29	2.40	0.000	17.84	1.000	1.000	0	0
19 + 871.00	370.90	10.30	0.00	25.0	0.00	0.00	0.00	0.00	0.013	371.34	1.000	1.000	4	0
10.30	1.22	0.00	25.0	25.0	3.95	5.11	3.50	2.95	0.000	29.75	1.000	1.000	4	0

Ster0001.001
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Ster0001.001														
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++														
STATION	WSPERGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	FRUDE	ALPHA	KZW	KZD	
ABFLUSS	NN+m/m	m ³ /s	m ^{0.33} /s	m	m	m ²	m/s	m	NN+m	IE o/oo	ALPHAS			
19 + 873.00	371.12	0.06	25.0	1.41	1.42	0.12	0.54	0.000	371.36	0.795	1.032	0	0	
10.30	1.39	10.24	25.0	4.79	5.73	4.67	2.19	0.000	13.06	1.014				
19 + 877.00	371.28	0.09	25.0	1.82	1.83	0.20	0.46	0.000	371.39	1.000	1.786	4	0	
10.30	1.43	1.96	25.0	5.09	5.95	5.11	1.62	0.000	6.62	1.270				
10.30	1.43	1.96	25.0	36.33	36.36	4.12	0.48							
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++														
!!! ProfiLabstand, Zum Ow ueberpruefen !!!														
19 + 938.00	371.94	0.94	17.0	10.13	10.14	1.94	0.48	0.000	372.06	1.000	1.941	4	0	
10.30	1.24	8.71	22.0	5.85	6.36	5.24	1.66	0.000	7.36	1.331				
19 + 978.00	372.24	1.07	17.0	10.51	10.52	2.09	0.51	0.004	372.37	0.815	1.431	0	0	
10.30	1.25	0.01	17.0	1.69	1.69	0.07	0.19	0.000	7.82	1.165				
19 + 983.00	372.26	0.00	17.0	0.00	0.00	0.00	0.00	0.155	372.76	0.000	1.000	11	0	
10.30	1.29	0.00	17.0	4.37	9.61	3.30	3.12	0.000	83.76					
19 + 988.00	372.97	3.72	17.0	22.60	22.61	12.04	0.31	0.000	372.98	0.238	1.632	9	0	
10.30	1.97	6.39	22.0	6.15	7.17	9.02	0.71	0.000	0.76	1.202				
20 + 34.00	373.17	0.00	17.0	0.00	0.00	0.00	0.00	0.116	373.37	0.662	1.000	0	0	
10.30	1.35	0.00	17.0	5.78	6.71	5.22	1.97	0.000	11.23	1.000				
20 + 35.00	373.18	0.00	17.0	0.00	0.00	0.00	0.00	0.000	373.40	0.000	1.146	11	0	
10.30	1.35	0.00	17.0	6.17	13.03	4.88	2.07	0.000	32.72	1.064				
10.30	1.35	0.21	17.0	10.13	10.13	0.51	0.42							

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PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT k1-strieg
 ZUSTAND Station 0
 VARIANTE HQ 100 Ist
 DATEI Ster0001 SEITE 61

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 Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0

STATIONAERE WASSERSPIEGELLAGEN

Ster0001.001

ERGEBNISSE

STATION	WSPERGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEH	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m	m ³ /s	m ^{0.33} /s	m	m	m ²	m/s	m	NN+m	IE o/oo	ALPHAS		
20 + 36.00	373.37	0.51	17.0	11.83	11.83	2.01	0.25	0.000	373.42	0.644	1.807	9	0
10.30	1.55	9.33	22.0	7.77	8.37	8.55	1.09	0.000	2.39	1.303			
20 + 41.00	373.38	0.58	17.0	12.76	12.76	2.34	0.25	0.000	373.43	0.577	1.915	0	0
10.30	1.58	9.05	22.0	7.77	8.37	8.76	1.03	0.000	2.07	1.330			
20 + 105.00	373.66	0.01	17.0	2.32	2.32	0.08	0.16	0.052	373.81	0.729	1.041	0	0
10.30	1.45	10.28	22.0	6.46	7.16	5.88	1.75	0.000	8.25	1.019			
20 + 188.00	374.51	0.00	17.0	0.00	0.00	0.00	0.00	0.012	374.76	0.735	1.000	0	0
10.30	1.24	0.00	17.0	5.16	6.14	0.00	0.00	0.000	14.22	1.000			
20 + 214.00	375.14	0.00	17.0	0.00	0.00	0.00	0.00	0.000	375.53	1.000	1.000	4	0
10.30	1.04	0.00	17.0	4.74	5.36	3.72	2.77	0.000	27.15	1.000			

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++

20 + 218.00	375.60	0.72	17.0	1.00	1.42	0.57	1.26	0.000	376.06	1.000	1.242	4	5
10.30	1.38	9.30	22.0	2.47	2.77	2.97	3.13	0.000	18.51	1.094			
20 + 222.00	375.98	0.38	17.0	8.25	8.26	1.13	0.34	0.000	376.08	0.611	1.199	0	0
10.30	1.78	9.92	22.0	9.37	9.37	7.20	1.38	0.000	5.58	1.083			
20 + 247.00	376.11	0.02	17.0	0.86	0.88	0.08	0.22	0.001	376.20	0.445	1.016	0	0
10.30	1.58	10.28	22.0	7.16	8.02	7.57	1.36	0.000	4.12	1.007			
20 + 251.00	375.97	0.00	17.0	0.00	0.00	0.00	0.00	0.118	376.43	1.000	1.000	4	0
10.30	1.38	0.00	17.0	3.69	5.03	3.42	3.01	0.000	31.36	1.000			

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++

20 + 255.00	376.38	2.42	12.0	8.63	8.67	5.41	0.45	0.000	376.44	0.450	2.364	0	0
10.30	1.83	6.67	22.0	3.56	4.45	5.29	1.26	0.000	2.62	1.407			

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STATIONAERE WASSERSPIEGELLAGEN

DATUM : 3.06.2009

PROGRAMM WSPR2009 (C.) Krauf 2009
PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 62

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STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ 0.33/s	BREITTE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	FRUDE IE o/oo	ALPHA	KZW	KZD
20 + 300.00 10.30	376.76 1.28	0.59 3.78	12.0 12.0	9.24 2.47 15.06	3.86 2.59 15.07	1.32 2.59 4.91	0.44 2.29 0.77	0.000	376.92	1.000	1.392	2.380	4 0
+++++++	Engstelle mit Fließwechsel, !!! Profiltabstand zum Ow ueberpruefen !!!						+++++++						
20 + 320.00 10.30	376.98 1.04	0.87 1.50	12.0 12.0	8.32 5.15 14.37	8.35 5.27 14.39	1.93 4.20 3.33	0.45 1.89 0.45	0.000	377.12	0.914	1.429	2.352	0 0
20 + 328.00 10.30	377.35 1.23	0.00 2.24	12.0 12.0	0.00 7.92 8.19	0.00 51.39 8.19	0.00 5.88 1.88	0.00 1.37 1.19	0.000	377.44	0.000	1.003	1.010	11 0
20 + 330.00 10.30	377.73 1.55	2.50 4.92	12.0 12.0	16.50 3.18 25.83	16.57 3.21 25.90	11.68 4.59 20.98	0.21 0.63 0.23	0.000	377.74	0.136	1.229	1.935	9 0
20 + 332.00 10.30	377.73 1.48	0.85 3.25 6.20	12.0 12.0	16.44 4.99 33.00	16.44 5.40 33.00	5.94 5.93 25.90	0.14 0.55 0.24	0.000	377.74	0.139	1.207	1.766	0 0
20 + 385.00 10.30	377.83 1.13	0.47 2.65	12.0 12.0	14.84 4.21 14.50	14.84 3.63 14.54	1.59 3.63 4.46	0.29 1.98 0.59	0.000	377.98	1.000	1.181	2.498	4 0
+++++++	Engstelle mit Fließwechsel, !!! Profiltabstand zum Ow ueberpruefen !!!						+++++++						
20 + 428.00	378.74	1.25 8.59	12.0 12.0	16.11 4.60	16.11 5.29	3.28 4.64	0.38 1.85	0.000	378.88	1.000	2.445	2.445	4 0

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Ster0001.001

10.30 1.48 0.45 12.0 11.51 11.52 1.56 0.29
20 + 431.00 378.88 1.92 12.0 14.65 14.65 3.53 0.54
10.30 0.55 3.44 12.0 20.3 7.32 2.77 1.24 0.000 378.92 0.510 1.289 1.289 0 0
4.94 12.0 14.64 14.65 6.23 0.79 0.79 0.79
20 + 434.00 378.92 0.63 12.0 15.46 15.50 3.32 0.19
10.30 1.57 5.63 12.0 5.03 5.51 5.67 0.99
1.57 4.04 12.0 20.64 11.33 11.33 0.36

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STATIONAERE WASSERSPIEGELLAGEN

DATUM : 3.06.2009

PROGRAMM WSPR2009 (C.) Krauf 2009
PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 Ist
DATEI Ster0001

SEITE 63

=====

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ 0.33/s	BREITTE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	FRUDE IE o/oo	ALPHA	KZW	KZD
20 + 436.00 10.30	378.93 1.54	0.26 5.64 4.41	12.0 12.0	6.02 6.08 20.74	6.04 6.62 20.74	1.52 7.01 13.75	0.17 0.80 0.52	0.000	378.95	0.245	1.863	1.863	0 0
20 + 499.00 10.30	379.31 0.84	0.00 6.53 3.77	12.0 12.0	0.00 4.19 16.44	0.00 4.55 16.52	0.00 2.81 4.87	0.00 2.33 0.77	0.000	379.50	1.000	1.310	2.026	4 0
+++++++	Engstelle mit Fließwechsel, !!! Profiltabstand zum Ow ueberpruefen !!!						+++++++						
20 + 558.00 10.30	379.83 1.04	0.00 5.34 4.96	12.0 12.0	0.00 3.00 32.43	0.00 4.18 32.46	0.00 2.41 7.53	0.00 2.22 0.66	0.000	379.97	1.000	1.415	2.568	4 0
20 + 598.00 10.30	380.86 1.36	0.00 6.50 3.80	12.0 12.0	0.00 3.05 33.61	0.00 4.54 33.61	0.00 3.15 7.32	0.00 2.06 0.52	0.000	381.01	1.000*	1.517	2.875	4 0
20 + 603.00 10.30	381.20 0.41	0.01 0.53 9.75	12.0 12.0	0.82 6.81 28.88	0.83 6.83 28.88	0.03 0.47 6.86	0.40 1.14 1.42	0.000	381.30	1.000*	1.004	1.012	4 0

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Ster0001.001

20 + 608.00	381.29	0.81	12.0	6.34	6.37	1.97	0.41	0.000	381.33	0.479	2.407	0
10.30	1.66	4.19	22.0	1.97	3.80	2.99	1.40	0.000	381.33	5.56	1.353	0
20 + 674.00	381.75	2.05	12.0	15.12	15.13	3.89	0.53	0.000	381.89	1.000	3.040	4
10.30	1.15	1.55	12.0	16.90	16.91	3.43	2.08	0.000	381.89	11.83	1.562	0

+++++++ Engstelle mit Flüsswechsel, Energieminimum > EH(UW)
!!! Profllabstand zum Ow ueberpruefen !!!

20 + 722.00	382.62	0.25	12.0	7.00	7.00	0.81	0.31	0.000	382.78	1.000	2.646	4
10.30	1.37	2.29	12.0	3.60	4.53	5.22	2.05	0.000	382.78	12.09	1.490	0
20 + 725.00	382.85	0.05	12.0	5.01	5.01	0.16	0.30	0.000	382.97	0.900	1.036	0
10.30	0.53	0.01	12.0	0.46	0.47	0.02	0.69	0.000	382.97	62.26	1.016	0

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 1st
DATEI Ster0001

SEITE 64

ERGEBNISSE

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ /0.33/s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	FRUDE IE o/oo	ALPHA	KZW	KZD
20 + 728.00	383.04	0.56	12.0	9.48	9.50	2.49	0.23	0.000	383.06	0.301	2.246	0	
10.30	1.67	3.85	22.0	2.76	3.87	3.82	1.01	0.000	383.06	2.14	1.316	0	
20 + 733.00	383.03	0.72	12.0	13.26	13.26	2.55	0.28	0.002	383.09	0.531	2.697	0	
10.30	1.53	4.89	12.0	2.76	3.87	3.43	1.43	0.000	383.09	4.92	1.436	0	
20 + 753.00	383.51	1.51	12.0	21.86	21.92	4.07	0.37	0.000	383.66	1.000	3.387	4	
10.30	1.59	7.17	12.0	3.87	3.87	3.60	1.99	0.000	383.66	9.02	1.658	0	

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+++++++ Engstelle mit Flüsswechsel, Energieminimum > EH(UW)
Ster0001.001

20 + 758.00	383.66	4.09	12.0	22.75	22.76	7.37	0.56	0.000	383.70	0.495	1.661	0
10.30	0.51	3.85	22.0	6.30	6.30	2.95	1.30	0.000	383.70	9.65	1.182	0
20 + 763.00	383.70	4.14	12.0	21.36	21.37	9.83	0.42	0.000	383.74	0.371	2.257	0
10.30	1.80	3.91	12.0	2.25	3.66	3.26	1.20	0.000	383.74	3.47	1.316	0
20 + 832.00	384.04	0.10	25.0	4.18	4.18	0.29	0.34	0.010	384.10	0.577	1.090	0
10.30	1.01	7.58	25.0	3.00	3.45	2.07	1.27	0.000	384.10	6.54	1.031	0
20 + 891.00	384.98	1.04	25.0	8.94	8.95	1.32	0.79	0.000	385.11	1.000	1.483	4
10.30	1.17	5.15	25.0	3.00	3.45	2.34	2.03	0.000	385.11	12.79	1.148	0

+++++++ Engstelle mit Flüsswechsel, Energieminimum > EH(UW)

20 + 893.00	385.20	0.00	25.0	0.00	0.00	0.00	0.00	0.049	385.47	0.000	1.001	11
10.30	1.36	10.27	22.0	15.84	32.78	4.50	2.29	0.000	385.47	152.57	1.000	0
20 + 895.00	385.62	0.38	25.0	11.27	11.29	2.15	0.18	0.000	385.63	0.175	1.130	9
10.30	1.79	2.75	25.0	4.04	4.83	5.42	0.51	0.000	385.63	0.46	1.045	0
20 + 899.00	385.62	0.39	25.0	13.68	13.70	2.41	0.16	0.000	385.63	0.170	1.137	0
10.30	1.81	2.69	25.0	4.04	4.83	5.51	0.49	0.000	385.63	0.41	1.049	0

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT K1-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 1st
DATEI Ster0001

SEITE 65

ERGEBNISSE

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ /0.33/s	BREITE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	FRUDE IE o/oo	ALPHA	KZW	KZD
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		Ster0001.001															
		1.48	25.0	12.58	12.60	1.89*	0.78						386.10	1.000	1.489	4	0
20 + 933.00	385.97	6.22	22.0	4.74	3.27	2.80	1.91	0.000	386.10	1.000	1.489	4	0				
10.30	1.26	2.60	25.0	14.43	2.80	0.93	0.93										
+++++++		Engstelle mit Fließwechsel, Energieminimum > EH(UW)															
20 + 936.00	386.11	0.00	25.0	0.00	0.00	0.00	0.00	0.000	386.23	0.000	1.011	11	0				
10.30	1.36	10.26	22.0	25.02	51.81	6.84	1.50	0.000	386.23	0.000	69.33	1.005	11	0			
20 + 941.00	386.41	0.81	17.0	17.28	17.28	1.84	0.44	0.000	386.53	1.000	2.094	4	0				
10.30	1.59	5.75	17.0	2.69	4.37	2.95	0.76										
+++++++		Engstelle mit Fließwechsel, Energieminimum > EH(UW)															
		!!! ProfIabstand zum Ow ueberpruefen !!!															
21 + 11.00	386.89	1.40	17.0	16.54	16.54	3.25	0.43	0.000	386.93	0.471	1.511	0	0				
10.30	0.88	3.02	17.0	3.23	3.78	2.45	1.23	0.000	386.93	5.63	1.143	0	0				
21 + 75.00	387.71	0.16	17.0	3.02	3.12	0.28	0.55	0.000	387.85	1.000	1.501	4	0				
10.30	1.11	3.87	17.0	2.03	3.01	1.64	2.35	0.000	387.85	25.58	1.146	4	0				
+++++++		Engstelle mit Fließwechsel, Energieminimum > EH(UW)															
21 + 77.00	387.78	0.22	17.0	1.61	1.65	0.29	0.75	0.000	387.89	0.823	1.424	0	0				
10.30	1.16	3.44	17.0	1.77	2.79	1.64	2.09	0.000	387.89	19.51	1.121	0	0				
21 + 79.00	387.85	0.32	17.0	1.70	1.77	0.35	0.92	0.000	388.00	1.000	1.546	4	0				
10.30	1.13	3.79	17.0	2.59	2.09	5.44	1.14										
+++++++		Engstelle mit Fließwechsel, Energieminimum > EH(UW)															
21 + 82.00	387.91	0.31	17.0	3.99	4.00	0.58	0.53	0.000	388.05	1.000	2.145	4	0				
10.30	0.97	6.00	17.0	3.91	26.69	5.75	2.06	0.000	388.05	12.87	1.332	4	0				
21 + 107.00	388.67	0.51	17.0	1.98	2.38	0.78	0.65	0.000	388.81	1.000*	2.179	4	0				
10.30	1.40	8.37	17.0	4.05	4.22	4.52	1.85	0.000	388.81	6.45	1.395	4	0				

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 STATIONAERE WASSERSPIEGELLAGEN

Ster0001.001

PROGRAMM WSPR2009 (C.) Krauf 2009

DATUM : 3.06.2009

PROJEKT K1-Strieg + 1.00 bis 0 + 23380.00 m
 ZUSTAND Station 0
 VARIANTE HQ 100 Ist
 DATEI Ster0001

SEITE 66

ERGEBNISSE

STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECH	GESCHW	HZV	E-HOEH	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+M/m	m3/s	m/0.33/s	m	m	m2	m/s	m	NN+M	IE o/oo	ALPHAS		

21 + 132.00	388.89	0.00	17.0	0.00	0.00	0.00	0.00	0.000	389.06	0.588	1.000	0	0
8.64	1.29	8.64	17.0	5.12	6.10	4.83	1.79	0.022	389.06	9.03	1.000	0	0
21 + 137.00	389.03	0.00	17.0	0.00	0.00	0.00	0.00	0.000	389.09	0.302	1.012	12	0
8.64	1.37	3.96	17.0	5.74	6.54	4.89	0.96	0.000	389.09	4.67	1.004	12	0
21 + 142.00	389.02	0.04	17.0	5.02	5.02	4.23	0.19	0.000	389.12	1.000	2.082	4	0
8.64	1.19	7.07	17.0	5.39	5.94	4.43	1.59	0.000	389.12	7.76	1.366	4	0

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)

21 + 146.00	389.11	0.39	17.0	9.36	9.36	1.11	0.35	0.000	389.18	1.000	2.611	4	0
5.47	1.14	4.16	17.0	4.16	4.84	3.02	1.38	0.000	389.18	7.32	1.496	4	0
21 + 268.00	391.82	0.00	17.0	0.00	0.00	0.00	0.00	0.000	391.96	1.000*	1.183	4	0
5.47	1.14	5.36	17.0	5.34	5.98	3.15	1.70	0.000	391.96	13.98	1.080	4	0

+++++++ ungewoehnlicher Wasserspiegelanstieg
 !!! ProfIabstaende ueberpruefen !!!

21 + 272.00	391.92	0.00	17.0	0.44	0.44	0.02	0.10	0.000	391.97	0.583	1.440	0	0
5.47	1.34	5.18	17.0	5.43	6.29	5.02	1.03	0.000	391.97	2.97	1.179	0	0
21 + 276.00	391.94	0.03	17.0	3.09	3.09	0.12	0.21	0.000	392.02	1.000	2.409	4	0
5.47	0.76	3.44	17.0	3.06	4.15	2.22	1.55	0.000	392.02	11.38	1.408	4	0

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)
 !!! ProfIabstand zum Ow ueberpruefen !!!

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Ster0001.001

21 + 404.00	394.53	0.54	17.0	10.67	10.67	1.19	0.46	0.000	394.65	1.000	1.495	4	0
5.47	0.80	0.08	17.0	6.01	6.26	3.06	1.58	0.38		13.40	1.187		

+++++++ ungewoehnlicher Wasserspiegelanstieg ++++++++
 !!! Profitabstaende ueberpruefen !!!

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT K1-strieg
 ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
 VARIANTE HQ 100 Ist
 DATIET Ster0001

SEITE 67

===== ERGEBNISSE =====

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ /s	BREITTE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	FRUDE IE o/oo	ALPHA	KZW	KZD
21 + 512.00	397.17	2.19	17.0	18.76	18.76	2.98	0.73	0.000	397.28	1.000*	1.593	4	0
5.47	0.60	0.00	17.0	4.71	0.00	1.90	0.00		21.74	1.186			
+++++++ ungewoehnlicher Wasserspiegelanstieg ++++++++ !!! Profitabstaende ueberpruefen !!!													
21 + 611.00	399.53	1.95	17.0	18.76	18.76	2.78	0.70	0.000	399.63	1.000*	1.625	4	0
5.09	0.59	0.00	17.0	4.70	0.00	1.85	0.00		21.63	1.197			
+++++++ ungewoehnlicher Wasserspiegelanstieg ++++++++ !!! Profitabstaende ueberpruefen !!!													
21 + 616.00	399.84	4.07	17.0	1.02	3.52	1.20	3.39	0.000	400.43	1.000*	1.000	4	0
4.07	0.78	0.00	22.0	0.00	0.00	0.00	0.00		99.98	1.000			
21 + 621.00	400.41	0.82	17.0	6.72	6.77	3.05	0.27	0.000	400.43	0.217	1.352	0	0
4.07	1.24	0.05	17.0	5.46	5.74	5.54	0.58		0.72	1.126			
21 + 722.00	401.75	0.00	17.0	0.00	0.00	0.00	0.00	0.000	402.01	1.000	1.000	4	0
4.07	0.72	0.00	4.07	22.0	4.01	1.80	2.26	0.00	30.53	1.000	1.000	4	0
Seite 83													

Ster0001.001

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)
 !!! Profitabstand zum 0w ueberpruefen !!!

21 + 833.00 404.46 0.11 17.0 4.19 4.19 0.31 0.34 0.000 404.59 1.000 1.375 4 0

4.07 0.82 0.18 17.0 3.99 4.25 2.29 1.65 0.46 12.88 1.150

+++++++ ungewoehnlicher Wasserspiegelanstieg ++++++++
 !!! Profitabstaende ueberpruefen !!!

21 + 926.00 405.98 0.11 17.0 4.16 4.17 0.31 0.34 0.000 406.11 1.000* 1.373 4 0

4.07 0.82 0.17 17.0 3.99 4.25 2.29 1.66 0.46 12.97 1.149

21 + 938.00 406.14 0.00 17.0 0.00 0.00 0.00 0.00 0.000 406.79 1.000* 1.000 4 0

4.07 1.08 0.00 17.0 0.88 0.88 2.99 3.57 0.00 37.64 1.000

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 Zwickauer Str. 16a * 09112 Chemnitz * Tel. 0371-69024-0

STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT K1-strieg
 ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
 VARIANTE HQ 100 Ist
 DATIET Ster0001

SEITE 68

===== ERGEBNISSE =====

STATION ABFLUSS	WSPLAGE/H NN+m/m	ABFLUSS m ³ /s	K-WERT m ³ /s	BREITTE m	UMFANG m	FLAECHE m ²	GESCHW m/s	HZV m	E-HOEHE NN+m	FRUDE IE o/oo	ALPHA	KZW	KZD
21 + 942.00	406.72	0.00	25.0	0.00	0.00	0.00	0.00	0.000	406.82	0.538	1.000	0	0
4.07	1.20	0.00	25.0	0.00	0.00	0.00	1.42		8.33	1.000			
21 + 943.00	406.84	0.00	25.0	0.00	0.00	0.00	0.00	0.000	407.08	1.000	1.000	4	0
4.07	0.99	0.00	22.0	0.00	0.00	1.85	2.19		30.23	1.000	1.000	4	0
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)													
21 + 951.00	407.08	0.03	25.0	2.51	2.52	0.17	0.18	0.000	407.10	0.331	1.099	0	0
4.07	0.98	2.46	25.0	3.12	3.53	2.18	0.72		2.05	1.034			
Seite 84													

Ster0001.001														
STATION	WSP	PLAGE/H	ABFLUSS	K-WERT	BREITTE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m		m3/s	m/0.33/s	m	m	m2	m/s	m	NN+m	IE o/oo	ALPHAS		
22 + 16.00	407.79		0.22	25.0	4.73	4.73	0.36	0.61	0.000	407.86	1.000	1.366	4	0
	4.07	0.57	1.57	22.0	2.43	2.70	1.01	1.56	0.000	407.86	18.71	1.109		
			2.29	25.0	22.75	22.75	2.74	0.83	0.000					
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) !! Profiltabstand zum Ow ueberpruefen !!														
22 + 92.00	409.42		0.00	25.0	0.00	0.00	0.00	0.00	0.000	409.66	1.000	1.000	4	0
	4.07	0.63	4.07	22.0	3.94	4.44	1.88	2.16	0.000	409.66	30.44	1.000		
			0.00	25.0	0.00	0.00	0.00	0.00	0.000					
22 + 140.00	410.56		0.00	25.0	0.00	0.00	0.00	0.00	0.000	410.84	1.000*	1.000	4	0
	4.07	0.90	4.07	22.0	3.13	3.73	1.74	2.34	0.000	410.84	31.18	1.000		
			0.00	25.0	0.00	0.00	0.00	0.00	0.000					
22 + 146.00	410.74		0.00	25.0	0.00	0.00	0.00	0.00	0.000	411.05	0.566	1.000	10	0
	4.07	1.35	4.07	22.0	0.89	3.75	1.68	2.43	0.000	411.05	35.63	1.000		
			0.00	22.0	0.00	0.00	0.00	0.00	0.000					
22 + 152.00	411.02		0.28	25.0	5.73	5.73	0.52	0.54	0.000	411.15	1.000	1.313	4	0
	4.07	1.03	3.70	22.0	3.19	3.71	2.21	1.67	0.000	411.15	11.49	1.122		
			0.09	25.0	2.23	2.23	0.18	0.50	0.000					
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) !! Profiltabstand zum Ow ueberpruefen !!														
22 + 210.00	411.96		0.00	25.0	0.00	0.00	0.00	0.00	0.000	412.12	1.000	1.191	4	0
	4.07	0.76	3.56	22.0	3.48	3.88	1.93	1.84	0.000	412.12	17.76	1.071		
			0.51	25.0	4.82	4.83	0.61	0.84	0.000					
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STATIONAERE WASSERSPIEGELLAGEN														
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009														
PROJEKT Kl-strieg Station 0 + 1.00 bis 0 + 23380.00 m														
VARIANTE HO_100 Ist														
DATEI Ster0001														
===== ERGEBNISSE =====														
STATION	WSP	PLAGE/H	ABFLUSS	K-WERT	BREITTE	UMFANG	FLAECHE	GESCHW	HZV	E-HOEHE	FRUDE	ALPHA	KZW	KZD
ABFLUSS	NN+m/m		m3/s	m/0.33/s	m	m	m2	m/s	m	NN+m	IE o/oo	ALPHAS		
22 + 241.00	413.02		4.07	22.0	2.56	3.49	1.63	2.50	0.000	413.34	1.000*	1.000	4	0
	4.07	1.01	0.00	25.0	0.00	0.00	0.00	0.00	0.000	413.34	35.50	1.000		
Ster0001.001														
22 + 255.00	413.47		0.00	25.0	0.00	0.00	0.00	0.00	0.085	414.20	1.000*	1.000	4	0
	4.07	1.08	4.07	22.0	0.73	2.99	1.07	3.80	0.000	414.20	22.75	1.000		
			0.00	50.0	0.00	0.00	0.00	0.00	0.000					
22 + 261.00	414.20		1.49	25.0	22.82	22.84	12.02	0.12	0.000	414.20	0.059	1.086	0	0
	4.07	1.58	0.83	22.0	3.19	3.47	4.31	0.19	0.000	414.20	0.06	1.026		
			1.75	25.0	19.57	19.61	12.43	0.14	0.000					
22 + 317.00	414.75		1.74	25.0	26.36	26.36	2.85	0.61	0.000	414.83	1.000	1.736	4	0
	4.07	0.78	1.87	22.0	1.98	2.15	1.18	1.59	0.000	414.83	11.57	1.219		
			0.46	25.0	1.08	1.33	0.39	1.18	0.000					
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) !! Profiltabstand zum Ow ueberpruefen !!														
22 + 394.00	416.24		0.73	25.0	18.34	18.58	1.72	0.43	0.000	416.32	1.000	1.879	4	0
	4.07	0.89	3.15	22.0	2.98	3.20	2.21	1.43	0.000	416.32	6.92	1.294		
			0.19	25.0	5.30	5.30	0.46	0.41	0.000					
22 + 447.00	417.21		0.00	25.0	0.00	0.00	0.00	0.00	0.000	417.50	1.000*	1.000	4	0
	4.07	0.96	4.07	22.0	2.96	3.61	1.71	2.38	0.000	417.50	31.65	1.000		
			0.00	25.0	0.00	0.00	0.00	0.00	0.000					
22 + 453.00	417.37	DH	0.00	25.0	0.00	0.00	0.00	0.00	0.076	418.03	0.000	1.000	10	0
	4.07	1.20	4.07	22.0	0.00	0.00	0.00	0.00	0.000	418.03	25.79	1.000		
			0.00	50.0	0.00	0.00	0.00	0.00	0.000					
22 + 459.00	418.10		0.50	25.0	12.43	12.44	2.07	0.24	0.000	418.12	0.306	1.520	9	0
	4.07	1.46	2.41	22.0	3.58	4.27	3.73	0.65	0.000	418.12	1.04	1.166		
			1.16	25.0	14.52	14.52	3.63	0.32	0.000					
22 + 509.00	418.52		0.00	25.0	0.00	0.00	0.00	0.00	0.000	418.80	1.000	1.000	4	0
	4.07	0.93	4.07	22.0	3.03	3.66	1.72	2.36	0.000	418.80	31.36	1.000		
			0.00	25.0	0.00	0.00	0.00	0.00	0.000					
+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) !! Profiltabstand zum Ow ueberpruefen !!														
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STATIONAERE WASSERSPIEGELLAGEN														
PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009														
PROJEKT Kl-strieg														

Seite 85

ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 1st
DATEI Ster0001

STATION WSPLAGE/H ABFLUSS K-WERT BREITE UMFANG FLAECHGE GESCHW HZV E-HOEHE FROUDE ALPHA KZW KZD
ABFLUSS NN+m/m m3/s m3/0.33/s m m m2 m/s m NN+m IE o/oo ALPHAS

ERGEBNISSE

22 + 529.00	419.04	0.00	25.0	0.00	0.00	0.00	0.00	0.00	0.00	0.095	419.77	1.000	1.000	1.000	4	0
4.07	1.08	0.00	50.0	0.00	0.00	0.00	0.00	0.00	3.80	0.00	419.77	22.75	1.000	1.000		
22 + 533.00	419.76	0.16	25.0	4.04	4.06	0.82	0.20	0.00	0.52	0.000	419.77	0.202	1.284	1.096	0	0
4.07	1.58	2.69	22.0	4.34	5.01	5.18	0.32	0.29	0.52	0.00		0.53				
22 + 593.00	420.28	0.00	25.0	0.00	0.00	0.00	0.00	0.00	2.43	0.000	420.58	1.000	1.000	1.000	4	0
4.07	0.84	4.07	25.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00		32.45				

+++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)
!!! Profiltabstand zum Ow ueberpruefen !!!

22 + 648.00	422.01	0.00	25.0	0.00	0.00	0.00	0.00	0.00	1.60	0.000	422.09	1.000	1.468	1.468	4	0
4.07	0.76	2.03	25.0	2.35	2.87	1.27	0.77	0.00	0.77	0.000		15.80	1.142			
22 + 655.00	422.14	0.00	25.0	0.00	0.00	0.00	0.00	0.00	0.00	0.000	422.22	1.000*	1.468	1.468	4	0
4.07	0.76	2.03	25.0	2.35	2.87	1.27	0.77	0.00	0.77	0.000		15.80	1.142			
22 + 702.00	423.21	0.00	25.0	0.00	0.00	0.00	0.00	0.00	5.21	0.000	424.59	1.000*	1.000	1.000	4	5
4.07	0.98	4.07	50.0	0.00	0.00	0.00	0.00	0.00	0.00	0.000		61.03	1.000			
22 + 707.00	424.59	2.75	23.5	17.37	17.47	17.24	0.16	0.06	0.16	0.000	424.59	0.055	1.060	1.023	0	0
4.07	2.21	1.25	22.0	4.15	5.05	6.82	0.18	0.06	0.18	0.000		0.05	1.060	1.023		
22 + 745.00	424.59	2.56	23.5	14.66	14.72	10.08	0.25	0.00	0.25	0.001	424.59	0.098	1.023	1.007	0	0
4.07	1.76	1.51	22.0	4.13	5.03	4.96	0.30	0.00	0.30	0.000		0.19	1.007			
22 + 764.00	425.46	0.00	22.9	0.00	0.00	0.00	0.00	0.00	3.24	0.000	425.46	0.000	1.000	1.000	30	5
4.07	2.39	2.54	22.0	0.00	0.00	0.79	0.24	0.00	0.24	0.000		137.42	1.000			
0.49	UE	1.53	24.4	3.02	4.01	1.49	1.03	1.03	1.03				1.000			

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STATIONAERE WASSERSPIEGELLAGEN

PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT Kl-strieg
ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
VARIANTE HQ 100 1st
DATEI Ster0001

STATION WSPLAGE/H ABFLUSS K-WERT BREITE UMFANG FLAECHGE GESCHW HZV E-HOEHE FROUDE ALPHA KZW KZD
ABFLUSS NN+m/m m3/s m3/0.33/s m m m2 m/s m NN+m IE o/oo ALPHAS

ERGEBNISSE

22 + 769.00	425.46	0.70	25.0	8.59	8.64	5.67	0.12	0.00	0.12	0.000	425.47	0.051	1.052	1.017	9	0
4.07	2.03	1.25	22.0	4.07	4.89	6.94	0.18	0.00	0.18	0.000		0.04	1.052	1.017		
22 + 793.00	425.47	1.66	22.0	16.14	16.14	9.43	0.21	0.00	0.21	0.038	425.52	0.096	1.149	1.049	0	0
4.07	1.73	1.95	25.0	16.14	16.14	14.22	0.21	0.00	0.21	0.000		0.14	1.049			
22 + 795.00	425.46	0.00	25.0	0.00	0.00	0.00	0.00	0.00	1.08	0.000	425.52	0.000	1.000	1.000	11	0
4.07	1.57	4.07	22.0	7.56	11.59	3.76	0.00	0.00	0.00	0.038		10.85	1.000			
22 + 797.00	425.53	0.06	25.0	3.40	3.41	0.56	0.10	0.00	0.10	0.000	425.54	0.105	1.061	1.061	9	0
4.07	1.57	1.32	22.0	4.49	4.99	4.60	0.29	0.23	0.29	0.000		0.19	1.022			
22 + 802.00	425.53	0.01	25.0	1.66	1.66	0.13	0.11	0.00	0.11	0.000	425.54	0.172	1.102	1.102	0	0
4.07	1.40	1.63	22.0	4.49	4.99	3.83	0.43	0.30	0.43	0.000		0.53	1.034			
22 + 867.00	426.52	0.39	25.0	5.11	5.11	0.58	0.67	0.00	0.67	0.000	426.64	1.000	1.378	1.378	4	0
4.07	0.89	3.23	22.0	2.92	3.32	1.88	1.71	0.76	1.71	0.000		12.92	1.134			
0.89	0.89	0.46	25.0	4.27	4.28	0.60	0.76	0.76	0.76	0.000			1.134			

+++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW)
!!! Profiltabstand zum Ow ueberpruefen !!!

22 + 936.00	427.90	0.11	25.0	3.26	3.26	0.24	0.47	0.00	0.47	0.000	428.00	1.000	1.311	1.311	4	0
2.69	0.80	2.46	22.0	2.92	3.32	1.64	1.50	0.45	1.50	0.000		11.86	1.122			
0.80	0.80	0.12	25.0	3.90	3.90	0.26	0.45	0.00	0.45	0.000			1.122			

22 + 964.00	428.50	2.69	22.6	2.81	3.23	1.27	2.11	0.000	428.73	1.000*	1.000	4
2.69	0.73	0.00	25.0	0.00	0.00	0.00	0.00	0.00	30.16	1.000	1.000	0
22 + 993.00	429.30	2.69	50.0	0.00	3.14	0.79	3.43	0.088	429.90	0.000	1.000	10
2.69	1.00	0.00	50.0	0.00	0.00	0.00	0.00	0.00	29.79	1.000	1.000	0
22 + 998.00	429.97	0.00	25.0	0.00	0.00	0.00	0.00	0.000	429.98	0.222	1.081	9
1.62	1.38	0.00	25.0	0.00	3.24	3.27	0.49	0.11	0.83	1.036	1.036	0
23 + 46.00	430.23	0.00	25.0	0.00	0.00	0.00	0.00	0.000	430.43	1.000	1.000	4
1.62	0.62	0.00	25.0	0.00	2.51	0.82	1.97	0.00	35.38	1.000	1.000	0

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++

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STATIONNAERE WASSERSPIEGELLAGEN
 PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT Kl-strieg
 ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
 VARIANTE HQ 100 Ist
 DATEI Ster0001

ERGBNISSE												
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECH	GESCHW	HZV	E-HOEHE	PROUDE	ALPHA	KZW
ABFLUSS	NN+m/m	m3/s	mA0.33/s	m	m	m2	m/s	m	NN+m	IE o/oo	ALPHAS	KZD
23 + 49.00	430.41	0.00	25.0	0.00	0.00	0.00	0.00	0.000	430.76	1.000	1.000	4
1.62	0.73	0.00	22.0	0.88	2.06	0.62	2.62	0.00	70.53	1.000	1.000	0
23 + 52.00	430.74	0.00	25.0	0.25	0.25	0.00	0.04	0.000	430.77	0.374	1.020	0
1.62	0.97	0.00	25.0	0.71	0.71	0.03	0.16	0.00	3.30	1.009	1.009	0
23 + 61.00	430.77	0.00	25.0	0.00	0.00	0.00	0.00	0.002	430.82	0.439	1.000	0
1.62	0.85	0.00	22.0	3.05	3.61	1.62	1.00	0.00	6.04	1.000	1.000	0
23 + 73.00	430.84	0.00	25.0	0.00	0.00	0.00	0.00	0.000	431.19	1.000	1.000	4
1.62	0.73	0.00	50.0	0.88	2.06	0.62	2.62	0.00	13.66	1.000	1.000	0

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+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++

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ERGBNISSE												
STATION	WSPLAGE/H	ABFLUSS	K-WERT	BREITE	UMFANG	FLAECH	GESCHW	HZV	E-HOEHE	PROUDE	ALPHA	KZW
ABFLUSS	NN+m/m	m3/s	mA0.33/s	m	m	m2	m/s	m	NN+m	IE o/oo	ALPHAS	KZD
23 + 81.00	431.18	0.07	25.0	2.19	2.20	0.14	0.54	0.000	431.30	1.000	1.139	4
1.62	0.61	0.00	22.0	2.35	2.68	0.99	1.56	0.00	18.74	1.057	1.057	0
23 + 128.00	432.33	0.07	25.0	2.19	2.20	0.14	0.54	0.000	432.45	1.000*	1.139	4
1.62	0.61	0.00	25.0	2.36	2.68	0.99	1.56	0.23	18.74	1.057	1.057	0
23 + 130.00	432.57	0.00	25.0	0.00	0.00	0.00	0.00	0.030	432.66	0.000	1.000	31
1.62	0.74	0.00	22.0	2.04	4.35	0.61	2.33	0.00	154.08	1.000	1.000	5
23 + 132.00	432.80	0.08	25.0	1.01	1.07	0.19	0.41	0.000	432.83	0.420	1.211	9
1.62	0.96	0.12	22.0	2.40	2.79	1.70	0.84	0.34	2.81	1.079	1.079	0
23 + 135.00	432.79	0.03	25.0	0.56	0.60	0.06	0.49	0.010	432.86	0.646	1.084	0
1.62	0.80	0.01	22.0	2.40	2.79	1.30	1.22	0.30	8.52	1.035	1.035	0
23 + 157.00	433.10	0.00	25.0	0.00	0.00	0.00	0.00	0.000	433.30	1.000	1.000	4
1.62	0.69	0.00	22.0	2.09	2.54	0.82	1.97	0.00	35.76	1.000	1.000	0

+++++++ Engstelle mit Fließwechsel, Energieminimum > EH(UW) ++++++

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STATIONNAERE WASSERSPIEGELLAGEN
 PROGRAMM WSPR2009 (C.) Knauf 2009 DATUM : 3.06.2009

PROJEKT Kl-strieg
 ZUSTAND Station 0 + 1.00 bis 0 + 23380.00 m
 VARIANTE HQ 100 Ist
 DATEI Ster0001

Seite 90

													Stero001.001				
	1.62	0.73	0.00	50.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.66	1.000
23 +	165.00	433.75	0.00	25.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	433.90	1.000*
	1.62	0.58	0.00	25.0	0.00	2.92	3.18	0.92	0.00	1.76	0.00	0.00	0.00	0.00	0.000	33.40	1.000
23 +	214.00	434.06	0.00	25.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	434.09	0.386
	1.62	0.89	0.01	25.0	0.01	4.24	4.61	0.74	0.03	0.78	0.18	0.00	0.00	0.00	0.000	3.73	1.009
23 +	224.00	435.39	0.00	25.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	435.74	1.000
	1.62	0.73	0.00	22.0	0.00	0.88	2.06	0.62	0.00	2.62	0.00	0.00	0.00	0.00	0.000	70.53	1.000
+++++++ Engstelle mit Fluesswechsel, Energieminimum > EH(UW) ++++++																	
23 +	228.00	435.74	0.09	25.0	3.82	3.83	0.59	0.14	0.00	0.14	0.000	435.74	0.134	1.074	0.00	0.00	
	1.62	1.02	1.47	22.0	12.66	12.99	5.72	0.26	0.15	0.26	0.000	0.41	0.41	1.028	0.00	0.00	
			0.07	25.0	2.87	2.89	0.46	0.00	0.00	0.00	0.000	0.00	0.00	0.000	0.00	0.00	
23 +	249.00	436.28	0.00	25.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	436.50	0.000
	1.62	1.30	1.62	22.0	0.00	3.14	0.79	2.06	0.00	2.06	0.169	55.82	55.82	1.000	10.00	1.000	
23 +	256.00	436.70	0.21	25.0	6.71	6.73	1.75	0.12	0.00	0.12	0.000	436.70	0.093	1.186	9.00	1.186	
	1.62	1.21	0.63	25.0	2.91	3.21	2.70	0.23	0.16	0.23	0.000	0.14	0.14	1.059	0.00	1.059	
			0.77	25.0	13.37	13.38	4.99	0.16	0.00	0.16	0.000	33.10	33.10	1.000	4.00	1.000	
23 +	309.00	437.27	0.00	25.0	0.00	0.00	0.00	0.00	0.00	0.00	0.000	437.43	1.000	1.000	4.00	1.000	
	1.62	0.55	1.62	25.0	2.75	3.01	0.90	1.79	0.00	1.79	0.000	1.000	1.000	1.000	4.00	1.000	
+++++++ Engstelle mit Fluesswechsel, Energieminimum > EH(UW) ++++++																	
!!! Profilaabstand zum Ow ueberpruefen !!!																	
23 +	380.00	440.15	0.00	25.0	0.12	0.13	0.00	0.36	0.000	0.36	0.000	440.30	1.000	1.004	4.00	1.004	
	1.62	0.42	1.62	25.0	3.05	3.23	0.95	1.70	0.00	1.70	0.000	30.57	30.57	1.002	4.00	1.002	
+++++++ ungewoehnlicher Wasserspiegelanstieg ++++++																	
!!! Profilaabstaende ueberpruefen !!!																	

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