



Gesellschaft für Bohrlochmessungen mbH

Anlage: 1a

Bohrlochverlaufsmessung / Ergebnisse

Projekt:	Halde IV Wintershall	Datum:	19.11.2014
Bohrung:	B 72/2014 WI	Meßingenieur:	Heß / Schwieger
Auftraggeber:	K + S Kali GmbH	Meßzug:	JL-AX161
Auftragsnr:	1312514	Besonderh.:	horizontale Bohrung

lfd. Nr.	Bohrungslänge [m]	Neigung [Grad]	Richtung [Grad]	vertik. Abweich. [m]	Xi [m]	Yi [m]	horiz. Abweich. [m]
1	0.00	96.05	325.00	0.00	0.00	0.00	0.00
2	1.00	95.97	325.00	-0.10	-0.57	0.81	0.99
3	2.00	96.21	325.00	-0.21	-1.14	1.63	1.99
4	3.00	96.59	325.00	-0.33	-1.71	2.44	2.98
5	4.00	96.04	325.00	-0.43	-2.28	3.26	3.98
6	5.00	95.68	325.00	-0.53	-2.85	4.07	4.97
7	6.00	95.88	325.00	-0.63	-3.42	4.89	5.97
8	7.00	95.77	325.00	-0.73	-3.99	5.70	6.96
9	8.00	95.86	325.00	-0.84	-4.56	6.52	7.96
10	9.00	95.96	325.00	-0.94	-5.13	7.33	8.95
11	10.00	95.97	325.00	-1.04	-5.70	8.15	9.95
12	11.00	95.86	325.00	-1.15	-6.27	8.96	10.94

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13	12.00	96.08	325.00	-1.25	-6.85	9.78	11.93
14	13.00	96.35	325.00	-1.36	-7.42	10.59	12.93
15	14.00	96.12	325.00	-1.47	-7.99	11.40	13.92
16	15.00	96.17	325.00	-1.58	-8.56	12.22	14.92
17	16.00	96.25	325.00	-1.69	-9.13	13.03	15.91
18	17.00	96.12	325.00	-1.79	-9.70	13.85	16.91
19	18.00	95.98	325.00	-1.90	-10.27	14.66	17.90
20	19.00	95.97	325.02	-2.00	-10.83	15.48	18.89
21	20.00	96.06	325.06	-2.11	-11.39	16.30	19.89
22	21.00	95.96	325.07	-2.21	-11.96	17.12	20.88
23	22.00	95.88	325.05	-2.31	-12.53	17.93	21.88
24	23.00	95.91	325.04	-2.41	-13.11	18.74	22.87
25	24.00	95.98	325.02	-2.52	-13.68	19.56	23.87
26	25.00	96.04	325.01	-2.62	-14.26	20.37	24.86
27	26.00	96.05	325.00	-2.73	-14.83	21.18	25.86
28	27.00	96.13	324.99	-2.84	-15.41	21.99	26.85
29	28.00	96.09	324.97	-2.94	-15.98	22.80	27.84
30	29.00	96.10	324.95	-3.05	-16.56	23.61	28.84
31	30.00	96.19	324.93	-3.16	-17.14	24.42	29.83
32	31.00	96.13	324.92	-3.26	-17.72	25.23	30.83
33	32.00	96.19	324.90	-3.37	-18.30	26.04	31.82
34	33.00	96.14	324.89	-3.48	-18.87	26.84	32.82
35	34.00	96.09	324.88	-3.58	-19.45	27.65	33.81
36	35.00	96.05	324.86	-3.69	-20.03	28.46	34.80
37	36.00	95.99	324.85	-3.79	-20.61	29.27	35.80
38	37.00	96.14	324.85	-3.90	-21.18	30.08	36.79
39	38.00	96.12	324.85	-4.01	-21.76	30.90	37.79
40	39.00	96.00	324.84	-4.11	-22.33	31.71	38.78
41	40.00	96.02	324.85	-4.22	-22.90	32.52	39.78

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42	41.00	96.11	324.85	-4.32	-23.47	33.33	40.77
43	42.00	96.09	324.85	-4.43	-24.05	34.15	41.77
44	43.00	96.06	324.85	-4.53	-24.62	34.96	42.76
45	44.00	96.12	324.85	-4.64	-25.19	35.77	43.75
46	45.00	96.26	324.85	-4.75	-25.76	36.59	44.75
47	46.00	96.23	324.85	-4.86	-26.33	37.40	45.74
48	47.00	96.15	324.85	-4.97	-26.91	38.21	46.74
49	48.00	96.14	324.84	-5.07	-27.48	39.02	47.73
50	49.00	96.13	324.84	-5.18	-28.06	39.84	48.72
51	50.00	96.11	324.84	-5.29	-28.63	40.65	49.72
52	51.00	96.04	324.84	-5.39	-29.20	41.46	50.71
53	52.00	95.85	324.83	-5.49	-29.78	42.27	51.71
54	53.00	95.84	324.83	-5.60	-30.36	43.08	52.70
55	54.00	96.06	324.82	-5.70	-30.93	43.89	53.70
56	55.00	96.05	324.82	-5.81	-31.51	44.70	54.69
57	56.00	96.02	324.82	-5.91	-32.08	45.52	55.69
58	57.00	96.03	324.82	-6.02	-32.65	46.33	56.68
59	58.00	95.99	324.82	-6.12	-33.23	47.14	57.68
60	59.00	96.05	324.82	-6.23	-33.80	47.96	58.67
61	60.00	96.08	324.82	-6.33	-34.37	48.77	59.66
62	61.00	96.07	324.82	-6.44	-34.95	49.58	60.66
63	62.00	96.12	324.82	-6.54	-35.52	50.39	61.65
64	63.00	96.13	324.82	-6.65	-36.10	51.20	62.65
65	64.00	96.17	324.82	-6.76	-36.67	52.01	63.64
66	65.00	96.18	324.81	-6.87	-37.25	52.83	64.64
67	66.00	96.14	324.81	-6.97	-37.82	53.64	65.63
68	67.00	96.11	324.81	-7.08	-38.40	54.45	66.62
69	68.00	96.13	324.80	-7.19	-38.97	55.26	67.62
70	69.00	96.15	324.80	-7.29	-39.55	56.07	68.61

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71	70.00	96.13	324.80	-7.40	-40.13	56.88	69.61
72	71.00	96.20	324.80	-7.51	-40.70	57.69	70.60
73	72.00	96.18	324.79	-7.62	-41.28	58.50	71.60
74	73.00	96.12	324.79	-7.72	-41.85	59.31	72.59
75	74.00	96.13	324.79	-7.83	-42.43	60.12	73.58
76	75.00	96.15	324.79	-7.94	-43.00	60.93	74.58
77	76.00	96.07	324.78	-8.04	-43.58	61.74	75.57
78	77.00	96.05	324.78	-8.15	-44.16	62.55	76.57
79	78.00	96.15	324.78	-8.25	-44.73	63.36	77.56
80	79.00	96.19	324.78	-8.36	-45.31	64.17	78.56
81	80.00	96.23	324.78	-8.47	-45.88	64.98	79.55
82	81.00	96.06	324.77	-8.58	-46.46	65.79	80.54
83	82.00	96.04	324.77	-8.68	-47.04	66.60	81.54
84	83.00	96.16	324.77	-8.79	-47.61	67.41	82.53
85	84.00	96.15	324.77	-8.90	-48.19	68.22	83.53
86	85.00	96.24	324.77	-9.00	-48.76	69.04	84.52
87	86.00	96.17	324.77	-9.11	-49.34	69.85	85.52
88	87.00	96.13	324.76	-9.22	-49.91	70.66	86.51
89	88.00	96.38	324.77	-9.33	-50.48	71.47	87.50
90	89.00	96.30	324.77	-9.44	-51.05	72.29	88.50
91	90.00	96.12	324.76	-9.55	-51.63	73.09	89.49
92	91.00	96.13	324.76	-9.65	-52.21	73.91	90.49
93	92.00	96.10	324.76	-9.76	-52.78	74.72	91.48
94	93.00	96.11	324.76	-9.86	-53.36	75.53	92.47
95	94.00	96.15	324.76	-9.97	-53.93	76.34	93.47
96	95.00	96.11	324.76	-10.08	-54.51	77.15	94.46
97	96.00	96.00	324.75	-10.18	-55.09	77.96	95.46
98	97.00	96.09	324.75	-10.29	-55.66	78.77	96.45
99	98.00	96.35	324.76	-10.40	-56.23	79.58	97.45

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100	99.00	96.37	324.76	-10.51	-56.80	80.40	98.44
101	100.00	96.27	324.76	-10.62	-57.37	81.21	99.43
102	101.00	96.31	324.76	-10.73	-57.94	82.02	100.43
103	102.00	96.06	324.76	-10.84	-58.52	82.83	101.42
104	103.00	96.01	324.76	-10.94	-59.10	83.64	102.42
105	104.00	96.15	324.76	-11.05	-59.67	84.46	103.41
106	105.00	95.72	324.75	-11.15	-60.26	85.26	104.41
107	106.00	95.66	324.75	-11.25	-60.84	86.07	105.40
108	107.00	96.25	324.75	-11.35	-61.41	86.88	106.39
109	108.00	96.13	324.75	-11.46	-61.98	87.69	107.39
110	109.00	95.98	324.74	-11.57	-62.56	88.50	108.38
111	110.00	96.15	324.74	-11.67	-63.14	89.32	109.38
112	111.00	96.12	324.74	-11.78	-63.71	90.13	110.37
113	112.00	96.17	324.74	-11.89	-64.29	90.94	111.37
114	113.00	96.21	324.74	-11.99	-64.86	91.75	112.36
115	114.00	96.16	324.74	-12.10	-65.43	92.56	113.35
116	115.00	96.12	324.74	-12.21	-66.01	93.38	114.35
117	116.00	96.13	324.74	-12.32	-66.58	94.19	115.34
118	117.00	96.08	324.74	-12.42	-67.15	95.00	116.34
119	118.00	96.05	324.75	-12.53	-67.73	95.81	117.33
120	119.00	95.99	324.75	-12.63	-68.30	96.63	118.33
121	120.00	95.97	324.75	-12.74	-68.87	97.44	119.32
122	121.00	95.98	324.75	-12.84	-69.45	98.25	120.32
123	122.00	95.92	324.74	-12.94	-70.02	99.06	121.31
124	123.00	95.96	324.74	-13.05	-70.60	99.87	122.30
125	124.00	96.00	324.74	-13.15	-71.17	100.68	123.30
126	125.00	95.93	324.74	-13.25	-71.75	101.50	124.29
127	126.00	95.87	324.74	-13.36	-72.32	102.31	125.29
128	127.00	95.81	324.74	-13.46	-72.89	103.12	126.28

lfd. Nr.	Bohrungslänge [m]	Neigung [Grad]	Richtung [Grad]	vertik. Abweich. [m]	Xi [m]	Yi [m]	horiz. Abweich. [m]
129	128.00	95.73	324.74	-13.56	-73.47	103.93	127.28
130	129.00	95.73	324.74	-13.66	-74.05	104.74	128.27

Ergebnisse bzgl. lfd. Nr. 1:

Die Abweichung im letzten Meßpunkt beträgt 128.27 m
im Winkel von 324.74 Grad.