

### Pump Cast: Station 28 Deep Cast

Pump ID	Flow S/N	Prev. End	Start (l)	End (l)	Calc. Diff
1	19008653	57207.0	57206.9	58197.0	990.1
	21973472	12109.5	12109.6	12413.0	303.4
	19008655	84659.0	84659.0	86020.3	1361.3
2	19008629	95712.7	95712.8	96818.5	1105.7
	19008630	39355.4	39355.4	39729.9	374.5
	19008631	134919.3	134919.2	136400.0	1480.8
3	19008656	112328.8	112328.8	113460.5	1131.7
	19008657	53949.8	53949.8	54372.9	423.1
	19008658	174533.7	174533.7	176082.0	1548.3
4	19008638	61650.3	61650.2	62726.4	1076.2
	19008639	39439.4	39439.5	39821.5	382.0
	19008640	102452.8	102452.8	103921.6	1468.8
5	20007741	77347.2	77347.1	78464.2	1117.1
	20007742	53129.4	53129.4	53563.1	433.7
	20007743	131956.6	131956.6	133503.3	1546.7
6	20008125	50660.8	50660.9	51824.9	1164.0
	20008126	41229.7	41229.6	41664.4	434.8
	20008127	93051.2	93051.1	94650.1	1599.0
7	20007744	58557.1	58557.0	59577.0	1020.0
	20007745	30073.5	30073.5	30394.7	321.2
	20007746	96821.4	96821.4	98157.9	1336.5
8	20007747	54619.5	54619.5	55731.1	1111.6
	20007748	24024.4	24024.4	24413.9	389.5
	20007749	86741.8	86741.8	88246.9	1505.1
9	20008095		<b>39949.6</b>	39952.6	3.0
	20008096		<b>23179.6</b>	23180.0	0.4
	20008097		<b>62668.0</b>	62667.0	-1.0
10					
11					
12					

Dates Y/M/D and times in local time (and GMT)

GMT=LCL+ 9

Date 2013/12/06 to 07

Event 4366

Station 28

Cast 7

Water depth 4030

Delay duration 02:30:00

Pump duration 04:00:00

Trigger time 12:43 (21:43)

Pumps on 15:13 (00:13)

Pumps off 19:13 (04:13)

CTD/first pump in water 12:44 (21:44)

Last pump in water 14:52 (23:52)

Time at target depth 15:02 (00:02)

Water below pinger 8.9 m

Messenger drop 17:13

Recovery begins 19:20 (04:20)

All aboard 21:31 (06:31)

**Notes**

Extra pump (#9) deployed to pick up dropped depth at 340m (OMZ)  
 MAPRs on Pump 8 and Pump 1.  
 CTD not deployed on deep cast (instead, deployed via ODF deep cast)  
 Wire out: 4010 m  
 Pump 7: initial flow rate: 6.5L/min (?)  
 Pump 9: not triggered (GRRRRRRRR!!!!)

**Post deployment download information**

Pump ID	Nisk	Nom depth	GT#	Low (rest) voltage	Error msg	Vol pumped (l)
CTD		No CTD	NA			
1	1	4010	9591	26.2 (32.9)		1647
2	2	3900	9592	24.3 (31.2)	batt changed	1575
3	3	3500	9593	26.7 (33.2)		1647
4	4	3000	9594	24.1 (30.7)	batt changed	1556
5	5	2650	9595	29.8 (34.5)		1647
6	6	2550	9596	26.4 (32.6)		1649
7	7	2200	9597	27.6 (34.7)	initial flow: 6.5L/min	1237
8	8	860	9598	26.8 (33.1)		1631
9	9	340		(37.6)	stopped by user	0