

11-5-2008

Ex. 280-US-484

Unknown

Follow this and additional works at: <https://digitalcommons.law.uidaho.edu/all>

---

### Recommended Citation

Unknown, "Ex. 280-US-484" (2008). *Hedden-Nicely Collection, All*. 522.  
<https://digitalcommons.law.uidaho.edu/all/522>

This Expert Report is brought to you for free and open access by the Hedden-Nicely at Digital Commons @ UIdaho Law. It has been accepted for inclusion in Hedden-Nicely Collection, All by an authorized administrator of Digital Commons @ UIdaho Law. For more information, please contact [annablaine@uidaho.edu](mailto:annablaine@uidaho.edu).

Stream: Sprague River  
 Site: 647  
 Date: 4/10/2004  
 Habitat: Run

Flow: High

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	4.08	104.08		100.00
BM-2			0.51	103.57
TR1 WP			0.46	103.62
TR1 WP	0.75	104.37	0.79	
BM-2			0.79	103.58
BM			4.37	100.00

Comment: No HP's placed, Use BM elev's

Date: 6/27/2004  
 Habitat: Run

Flow: Mid

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM-2	1.87	105.44		103.57
WP1			1.83	103.61
WP1	1.69	105.30		
BM 2			1.74	103.56
BM 2	1.66	105.22		103.56
WP1			1.61	103.61
WP3			3.78	101.44

Comment: BM 1 had moved, using BM 2 elev.  
 Use BM = 103.57

Date: 8/17/2004  
 Habitat: Run

Flow: Low

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM2	1.22	104.79		103.57
WP1			1.17	103.62
WP1	1.09	104.71		
BM2			1.13	103.58
BM1			4.74	99.97
WP3			3.43	101.28

Comment: Use BM2 elevation, not BM 1.  
 Bed elevations seem to work

(2) Water Surface Elevation (WSE) Survey

TR	Station		HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
	L/R bank (ft)	Ave (ft)						
1-L	0	0	104.37	8.23	0.90	97.04	97.11	520.3
1-R	0	0	104.37	8.30	1.10	97.17		
2-L	86	66	104.37	8.09	0.80	97.08	97.06	
2-R	46	46	104.37	7.90	0.57	97.04		
3-L	174	147	104.37	7.85	0.59	97.11	97.11	
3-R	119	119	104.37	7.83	0.56	97.10		

Note: 4 transects set in field, Only entered first 3 in spreadsheet.  
 WSE slope = 0.000%

Ave Q= 520.3

(2) Water Surface Elevation (WSE) Survey

TR	Station		HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
	L/R bank (ft)	Ave (ft)						
1-L	0	0	105.22	12.09	1.20	94.33	94.34	82.2
1-R	0	0	105.22	10.88	0.00	94.34		
2-L	86	66	105.22	12.60	1.81	94.43	94.44	84.3
2-R	46	46	11.02	11.02	0.24	94.44		
3-L	174	147	105.22	10.90	0.21	94.53	94.52	84.3
3-R	119	119	11.36	11.36	0.64	94.50		

Note: WSE slope = 0.123%

Ave Q= 83.6

(2) Water Surface Elevation (WSE) Survey

TR	Station		HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
	L/R bank (ft)	Ave (ft)						
1-L	0	0	104.71	10.70	0.00	94.01	94.01	45
1-R	0	0	104.71	10.71	0.00	94.00		
2-L	86	66	104.71	10.69	0.00	94.02	94.02	50.4
2-R	46	46	10.69	10.69	0.00	94.02		
3-L	174	147	104.71	10.66	0.00	94.05	94.06	48.1
3-R	119	119	10.65	10.65	0.00	94.06		

Note: TR4 LWSE FS=10.65; RWSE FS=10.64  
 WSE slope = 0.034%

Ave Q= 48.0

(3) Meter and propeller ID for Velocity Correction

Meter ID: 0068  
 Propeller ID: NA

(3) Meter and propeller ID for Velocity Correction

Meter ID: 0068  
 Propeller ID: NA

(3) Meter and propeller ID for Velocity Correction

Meter ID: 0068  
 Propeller ID: NA







Run											MID	TRANSECT 1	
IOC	1100000100001000101000												
QARD	30.0												
QARD	48.0												
QARD	60.0												
QARD	80.0												
QARD	83.6												
QARD	100.0												
QARD	110.0												
QARD	120.0												
QARD	130.0												
QARD	140.0												
QARD	150.0												
QARD	160.0												
QARD	170.0												
QARD	180.0												
QARD	190.0												
QARD	200.0												
QARD	220.0												
QARD	240.0												
QARD	260.0												
QARD	280.0												
QARD	300.0												
QARD	325.0												
QARD	350.0												
QARD	375.0												
QARD	400.0												
QARD	425.0												
QARD	450.0												
QARD	475.0												
QARD	500.0												
QARD	520.3												
XSEC	0.0	0.00	1.0	91.64	0.00123								
	0.0	1.01	01.0	4.3	99.9	7.8	97.5	12.1	94.5	13.5	93.7	15.0	93.2
	0.0	17.0	92.9	19.0	92.9	21.0	92.7	23.0	92.7	25.0	92.5	27.0	92.4
	0.0	29.0	92.2	31.0	92.1	33.0	91.9	35.0	91.8	37.0	91.8	39.0	91.9
	0.0	41.0	91.8	43.0	91.7	45.0	91.7	47.0	91.9	49.0	92.1	51.0	92.6
	0.0	53.0	92.6	55.0	92.8	57.0	92.7	59.0	93.0	61.0	93.5	63.1	94.3
	0.0	63.7	95.3	66.7	96.7	68.0	99.7	78.1	99.6				
NS	0.0	1.1	1.1	1.1	1.7	6.7	7.6	7.6					
NS	0.0	0.30	6.7	5.4	5.4	5.6	5.6	5.4					
NS	0.0	6.5	5.4	5.4	5.4	5.4	5.4	5.4					
NS	0.0	5.6	4.3	3.4	3.2	3.2	0.12	3.2					
NS	0.0	3.2	3.2	3.2	2.3	0.2	2.1	2.1					
NS	0.0	1.1	1.1	1.1	1.1								
WSL	0.0	93.73	93.99	94.14	94.33	94.37	94.54						
WSL	0.0	94.64	94.74	94.83	94.91	95.00	95.08						
WSL	0.0	95.15	95.23	95.30	95.37	95.50	95.63						
WSL	0.0	95.75	95.87	95.98	96.12	96.24	96.37						
WSL	0.0	96.48	96.60	96.71	96.82	96.92	97.00						
CAL1	0.0	94.33	83.6										
VEL1	0.0	0.00	0.23	0.29	0.05	0.79	0.74	0.92	0.96	1.01			
VEL1	0.0	1.02	0.95	1.01	1.04	1.05	1.07	1.14	1.12	1.00	1.06	0.98	0.40
VEL1	0.0	0.94	0.89	0.56	0.34	0.08	0.00						
CAL2	0.0	97.04	520.3										
VEL2	0.0												
VEL2	0.0												
VEL2	0.0												
CAL3	0.0	94.01	48.0										
VEL3	0.0												
VEL3	0.0												
VEL3	0.0												
ENDJ													

```

Run                               MID                               TRANSECT 2
IOC      1100000100001000101000
QARD 30.0
QARD 48.0
QARD 60.0
QARD 80.0
QARD 83.6
QARD 100.0
QARD 110.0
QARD 120.0
QARD 130.0
QARD 140.0
QARD 150.0
QARD 160.0
QARD 170.0
QARD 180.0
QARD 190.0
QARD 200.0
QARD 220.0
QARD 240.0
QARD 260.0
QARD 280.0
QARD 300.0
QARD 325.0
QARD 350.0
QARD 375.0
QARD 400.0
QARD 425.0
QARD 450.0
QARD 475.0
QARD 500.0
QARD 520.3
XSEC 0.0      0.00 1.0      91.64  0.00123
0.0  1.0 98.8  5.5 98.8  7.2 96.8 11.0 96.6 14.3 94.6 16.0 93.4
0.0 19.0 92.1 22.0 91.9 25.0 91.2 28.0 90.4 31.0 90.1 34.0 90.2
0.0 37.0 90.6 40.0 90.7 43.0 91.1 46.0 91.4 49.0 91.6 52.0 91.6
0.0 55.0 91.3 58.0 91.7 61.0 91.9 64.0 92.5 67.0 92.7 70.0 92.5
0.0 72.0 92.9 74.5 94.1 74.9 94.4 76.3 95.5 78.0 96.6 89.0 98.7
0.0101.1 99.9
NS 0.0      1.3      1.3      1.3      1.3      1.2      2.1
NS 0.0      2.3      2.3      2.3      2.7 1.0  6.2 0.8  3.2
NS 0.0 0.4  3.2      3.2      3.2      3.2      3.2      3.2
NS 0.0      3.2      3.2      4.3      4.2      4.2      2.4
NS 0.0 0.2  2.3 0.3  2.1      2.1      1.1      1.1      1.1
NS 0.0      1.1
WSL 0.0      93.75  94.02  94.17  94.37  94.40  94.58
WSL 0.0      94.68  94.78  94.87  94.96  95.04  95.13
WSL 0.0      95.20  95.28  95.35  95.42  95.56  95.69
WSL 0.0      95.82  95.93  96.05  96.18  96.32  96.44
WSL 0.0      96.56  96.68  96.79  96.90  97.01  97.09
CAL1 0.0      94.43  83.6
VEL1 0.0      0.00 0.01-0.09-0.12-0.12-0.06 0.02 0.07
VEL1 0.0 0.16 0.84 1.06 1.08 1.07 1.08 1.04 0.98 0.99 0.81 0.78 0.45
VEL1 0.0-0.05-0.08 0.00
CAL2 0.0      97.08  520.3
VEL2 0.0
VEL2 0.0
VEL2 0.0
CAL3 0.0      94.02  48.0
VEL3 0.0
VEL3 0.0
VEL3 0.0
ENDJ

```

```

Run                MID                TRANSECT 3
IOC                1100000100001000101000
QARD 30.0
QARD 48.0
QARD 60.0
QARD 80.0
QARD 83.6
QARD 100.0
QARD 110.0
QARD 120.0
QARD 130.0
QARD 140.0
QARD 150.0
QARD 160.0
QARD 170.0
QARD 180.0
QARD 190.0
QARD 200.0
QARD 220.0
QARD 240.0
QARD 260.0
QARD 280.0
QARD 300.0
QARD 325.0
QARD 350.0
QARD 375.0
QARD 400.0
QARD 425.0
QARD 450.0
QARD 475.0
QARD 500.0
QARD 520.3
XSEC 0.0          0.00 1.0          91.64   0.00123
0.0  1.0 98.8  7.5 98.7 10.0 99.2 13.1 98.2 15.0 96.6 18.3 95.7
0.0 21.0 94.5 23.0 94.2 25.0 93.5 27.0 92.5 29.0 92.6 31.0 92.1
0.0 33.0 92.4 35.0 92.5 37.0 92.5 39.0 92.7 41.0 92.9 43.0 92.9
0.0 45.0 93.0 47.0 93.0 49.0 93.0 51.0 92.9 53.0 92.8 55.0 92.5
0.0 57.0 92.3 59.0 92.1 61.0 91.8 63.0 91.6 65.0 91.1 67.0 91.1
0.0 69.0 92.1 71.0 92.2 72.2 93.6 72.9 94.5 74.7 97.0 78.3100.9
0.0 83.9101.1
NS 0.0          1.2          1.2          1.2          1.2          1.2          2.1
NS 0.0          2.3 0.5    2.3 0.4    2.3 0.30   2.3 0.11   3.2 0.2    3.2
NS 0.0          3.2          3.2          3.2          3.4          3.4          4.3
NS 0.0          4.3          4.3          4.3          4.3          4.3          3.4
NS 0.0          4.3          4.3          4.3          2.4          2.4          2.3
NS 0.0          2.3          2.3          2.3          2.3          3.2          1.3
NS 0.0          1.3
WSL 0.0          93.82         94.10         94.24         94.45         94.48         94.66
WSL 0.0          94.76         94.86         94.95         95.04         95.12         95.20
WSL 0.0          95.28         95.36         95.43         95.50         95.64         95.77
WSL 0.0          95.89         96.01         96.12         96.26         96.39         96.52
WSL 0.0          96.64         96.75         96.87         96.98         97.08         97.16
CAL1 0.0          94.53         83.6
VEL1 0.0
VEL1 0.0 0.81 1.04 1.02 1.02 1.09 1.06 1.21 1.15 1.09 1.16 1.07 1.13
VEL1 0.0 1.14 1.16 0.99 0.96 0.63 0.58 0.33 0.34 0.43 0.00
VEL1 0.0
CAL2 0.0          97.11         520.3
VEL2 0.0
VEL2 0.0
VEL2 0.0
VEL2 0.0
CAL3 0.0          94.05         48.0
VEL3 0.0
VEL3 0.0
VEL3 0.0
VEL3 0.0
ENDJ

```