MONTANA DEPARTMENT OF TRANSPORTATION - GEOTECHNICAL SECTION
SUMMARY OF SOIL INDEX TEST RESULTS

Name: Townsend - South **Project Number:** NH - F 8-4(16)78 **CN:** 1420

BORING NO	DEPTH Feet	DEPTH Meters	FOR SC	JAR ID	M/C %	LL %	PL %	PI	LI	% -200.0	GRAIN SIZE DISTRIBUTION - mm D10	D30	D50	D60	D85	D100	AASHTO CLASS	GI	Qu kPa	Initial DD kN/m^3
1	4	1.22		a	7.8															
" " "	6.5	1.98		a	34.6															
" " "	7.5-9.0	2.29-2.74	COMP	a&b	35.6	66	35	31	0.02	sample	was	lost	in	the	wash					
" " "	10-11.5	3.05-3.51	COMP	a&b	34.6	73	32	41	0.06	88.00						0.42	A-7-5	40+		
" " "	14	4.27		a	36.2															
" " "	16.5	5.03		a	34.0															
" " "	21.5	6.55		a	2.4															
2	4.0	1.22		a	4.1															
" " "	5-6.5	1.52-1.98	COMP	a&b	25.9	39	24	15	0.13	71.10					0.28	4.80	A-6	10		
" " "	7.5-9.0	2.29-2.74	COMP	a&b	30.9	30	22	8	1.11	62.50					0.54	4.80	A-4	3		
" " "	10-11.5	3.05-3.51	COMP	a&b	36.2	46	23	23	0.57	79.70					0.12	4.80	A-7-6	19		
" " "	14	4.27		a	29.6															
" " "	15-16.5	4.57-5.03	COMP	a&b	57.5			NP		34.70			0.26	0.74	18.65	38.00	A-2-4	0		
" " "	21.5	6.55		a	5.4															
" " "	26.5	8.08		a	23.9															
" " "	30-31.5	9.14-9.60	COMP	a&b	4.8			NP		2.80	0.21	0.53	1.14	1.68	8.11	25.40	A-1-b	1		
3	4	1.22		a	16.1															
" " "	5-6.5	1.52-1.98	COMP	a&b	26.7	33	20	13	0.52	74.80					0.23	12.70	A-6	8		
" " "	7.5-9.0	2.29-2.74	COMP	a&b	22.4	38	21	17	0.08	87.90						4.80	A-6	15		
" " "	10-11.5	3.05-3.51	COMP	a&b	28.7	47	25	22	0.17	87.40						4.80	A-7-6	21		
" " "	14	4.27		a	6.8															
" " "	15-16.5	4.57-5.03	COMP	a&b	1.7			NP		5.10	0.21	1.30	5.84	8.77	21.24	38.00	A-1-a	1		
" " "	21.5	6.55		a	6.4															
4	4	1.22		a	18.9															
" " "	6.5	1.98		a	21.7															
" " "	7.5-9.0	2.29-2.74	COMP	a&b	61.7	48	35	13	2.05	68.70					0.24	4.80	A-7-5	10		
" " "	10-11.5	3.05-3.51	COMP	a&b	82.0			NP		66.50					0.18	4.80	A-4	0		
" " "	14	4.27		a	32.0															
" " "	16.5	5.03		a	8.1															
" " "	21.5	6.55		a	10.1															
5	8-10	2.44-3.05	UCS	shelby	57.5	48	35	13	1.73	84.10					0.08	4.80	A-7-5	14	49.2	10.17
" " "	8-10	2.44-3.05	consol	shelby	32.6															11.37
" " "	10-12	3.05-3.66	UCS	shelby	55.4			NP		74.50					0.12	4.80	A-4	0	46	10.64
" " "	10-12	3.05-3.66	consol	shelby	84.8															7.56
" " "	12-14	3.66-4.27	UCS	shelby	33.3			NP		20.80		0.16	0.32	0.45	1.17	4.80	A-2-4	0	32.5	13.81
6	4	1.22		a	2.1															
" " "	6.5	1.98		a	4.3															

MONTANA DEPARTMENT OF TRANSPORTATION - GEOTECHNICAL SECTION
SUMMARY OF SOIL INDEX TEST RESULTS

Name: Townsend - South **Project Number:** NH - F 8-4(16)78 **CN:** 1420

BORING NO	DEPTH Feet	DEPTH Meters	FOR SC	JAR ID	M/C %	LL %	PL %	PI	LI	% -200.0	GRAIN SIZE DISTRIBUTION - mm D10	D30	D50	D60	D85	D100	AASHTO CLASS	GI	Qu kPa	Initial DD kN/m^3
" " "	9	2.74		a	26.0															
" " "	10-11.5	3.05-3.51	COMP	a&b	5.7			NP		2.30	0.24	2.22	6.54	9.67	18.63	25.40	A-1-a	1		
" " "	14	4.27		a	4.7															
" " "	15-16.5	4.57-5.03	COMP	a&b	3.9			NP		4.30	0.20	1.21	5.56	8.05	16.39	25.40	A-1-a	1		
" " "	19	5.79		a	4.6															
" " "	20-21.5	6.10-6.55	COMP	a&b	5.7			NP		4.40	0.19	0.36	0.87	1.40	12.53	25.40	A-1-b	1		
" " "	26.5	8.08		a	4.8															
" " "	30-31.5	9.14-9.60	COMP	a&b	5.1			NP		4.90	0.17	0.35	0.97	1.75	10.13	25.40	A-1-b	1		
7	4	1.22		a	3.8															
" " "	6.5	1.98		a	18.9															
" " "	9	2.74		a	5.4															
" " "	10-11.5	3.05-3.51	COMP	a&b	7.6			NP		3.90	0.23	1.53	8.10	12.77	22.98	38.00	A-1-a	1		
" " "	14	4.27		a	5.2															
" " "	16.5	5.03		a	7.0															
" " "	20-21.5	6.10-6.55	COMP	a&b	19.8			NP		3.10	0.17	0.32	0.82	1.51	13.93	38.00	A-1-b	1		
8	4	1.22		a	32.5															
" " "	5-6.5	1.52-1.98	COMP	a&b	52.4	38	29	9	2.60	83.20					0.08	4.80	A-4	8		
" " "	7.5-9	2.29-2.74	COMP	a&b	111.9	87	63	24	2.04	95.40						2.00	A-7-5	38		
" " "	11.5	3.51		a	57.0															
" " "	12.5-14	3.81-4.27	COMP	a&b	4.4			NP		5.70	0.12	0.32	1.42	4.09	16.94	25.40	A-1-b	1		
" " "	15-16.5	4.57-5.03	COMP	a&b	N/A				sample	does	not	exist								
" " "	21.5	6.55		a	23.9															
" " "	26.5	8.08		a	17.3															
" " "	30-31.5	9.14-9.60	COMP	a&b	8.1			NP		8.30	0.11	0.67	2.26	4.12	12.87	25.40	A-1-a	1		
9	5-7	1.52-2.13	triax	shelby	48.6	46	28	18	1.15	80.90					0.11	2.00	A-7-6	16		12.2,9.3
" " "	7-9	2.13-2.74	triax	shelby	63.1															7.1
" " "	9-11	2.74-3.35	COMP	shelby	nt															
10	2.5-4	0.76-1.22	COMP	a&b	42.1	51	28	23	0.61	90.70						2.00	A-7-6	24		
" " "	6.5	1.98		a	27.8															
" " "	7.5-11	2.29-3.35	COMP	a&b	7.1			NP		3.10	0.24	1.44	5.96	8.92	16.90	25.40	A-1-a	0		
" " "	12.5-14	3.81-4.27	COMP	a&b																
" " "	16.5	5.03		a	13.8															
" " "	21.5	6.55		a	4.4															
" " "	26.5	8.08		a	5.3															
" " "	31.5	9.60		a	7.9															

MONTANA DEPARTMENT OF TRANSPORTATION - GEOTECHNICAL SECTION
SUMMARY OF SOIL INDEX TEST RESULTS

Name: Townsend - South **Project Number:** NH - F 8-4(16)78 **CN:** 1420

BORING NO	DEPTH Feet	DEPTH Meters	FOR SC	JAR ID	M/C %	LL %	PL %	PI	LI	% -200.0	GRAIN SIZE DISTRIBUTION - mm D10	D30	D50	D60	D85	D100	AASHTO CLASS	GI	Qu kPa	Initial DD kN/m^3
11	4	1.22		a	5.6															
" " "	6.5	1.98		a	7.0															
" " "	9	2.74		a	8.5															
" " "	10-11.5	3.05-3.51	COMP	a&b	4.9	nt		NP		13.50		0.74	10.60	15.39	27.65	38.00				
" " "	14	4.27		a	6.3															
" " "	16.5	5.03		a	6.4															
" " "	21.5	6.55		a	5.2															
" " "	26.5	8.08		a	7.5															
" " "	31.5	9.60		a	6.0															
12	2.5-4	0.76-1.22	COMP	a	29.6	41	20	21	0.46	52.50				0.13	0.95	9.50	A-7-6	8		
" " "	5-6.5	1.52-1.98	COMP	a	37.2	58	30	28	0.26	53.30				0.11	0.36	2.00	A-7-5	12		
" " "	7.5-9.0	2.29-2.74	COMP	a&b	47.4	57	26	31	0.69	87.10						2.00	A-7-6	30		
" " "	11.5	3.51		a	25.8															
" " "	12.5-14	3.81-4.27	COMP	a&b	3.4			NP		6.40	0.18	1.05	4.87	7.33	17.81	38.00	A-1-a	0		
" " "	16.5	5.03		a	4.7															
" " "	21.5	6.55		a	7.8															
" " "	31.5	9.60		a	6.3															
13	5.0-7.0	1.52-2.13	COMP	shelby	36.0	28	17	11	1.73	19.60		0.29	3.01	5.67	25.98	38.00	A-2-6	0	127	12.72
" " "	7-9	2.13-2.74	COMP	shelby	33.7	51	25	26	0.33	79.00					0.14	4.80	A-7-6	21	43.8	12.95
" " "	7-9	2.13-2.74	consol	shelby	38.8															12.65
14	4	1.22		a	2.1															
" " "	5-6.5	1.52-1.98	COMP	a&b	24.0	35	23	12	0.08	68.30					0.61	19.00	A-6	7		
" " "	7.5-9.0	2.29-2.74	COMP	a&b	41.1	41	26	15	1.01	89.50						2.00	A-7-6	15		
" " "	11.5	3.51		a	27.9															
" " "	12.5-14	3.81-4.27	COMP	a&b	5.5			NP		9.70	0.08	0.53	4.28	7.62	23.57	38.00	A-1-a	0		
" " "	16.5	5.03		a	9.8															
" " "	21.5	6.55		a	4.6															
" " "	26.5	8.08		a	21.7															
" " "	31.5	9.60		a	14.2															
15	5-7	1.52-2.13	consol	shelby	22.9	34	28	6	-0.85	45.90			0.10	0.23	2.23	19.00	A-4	1		14.81
" " "	7-9	2.13-2.74	COMP	shelby	22.9	29	24	5	-0.22	57.80				0.08	0.16	4.80	A-4	1		
16	4	1.22		a	3.9															
" " "	6.5	1.98		a	10.1															
" " "	7.5-9.0	2.29-2.74	COMP	a&b	31.1	28	23	5	1.62	56.10				0.09	0.35	25.40	A-4	1		
" " "	10-12	3.05-3.66	COMP	shelby	55.3	41	34	7	3.04	51.90				0.13	0.60	19.00	A-5	2	46.3	10.32
" " "	10-12	3.05-3.66	consol	shelby	38.0															10.59
" " "	12.5-13.5	3.81-4.11	COMP	shelby	38.0	34	28	6	1.67					0.09	0.34	4.80	A-4	2		

MONTANA DEPARTMENT OF TRANSPORTATION - GEOTECHNICAL SECTION
SUMMARY OF SOIL INDEX TEST RESULTS

Name: Townsend - South **Project Number:** NH - F 8-4(16)78 **CN:** 1420

BORING NO	DEPTH Feet	DEPTH Meters	FOR SC	JAR ID	M/C %	LL %	PL %	PI	LI	% -200.0	GRAIN SIZE DISTRIBUTION - mm D10	D30	D50	D60	D85	D100	AASHTO CLASS	GI	Qu kPa	Initial DD kN/m^3
" " "	15	4.57		a	6.5															
" " "	15-16.5	4.57-5.03	COMP	a&b	4.9			NP		5.30	0.21	1.51	7.33	11.10	23.56	38.00	A-1-a	0		
" " "	21.5	6.55		a	3.4															
" " "	26.5	8.08		a	5.6															
" " "	31.5	9.60		a	9.6															
17	1.5	0.46		a	40.2															
" " "	2.5-4.0	0.76-1.22	COMP	a&b	27.3	49	21	28	0.23	84.30					0.08	2.00	A-7-6	25		
" " "	6.5	1.98		a	34.6															
" " "	7.5-9.0	2.29-2.74	COMP	a&b	34.3	81	32	49	0.05	99.20						0.18	A-7-5	40+		
" " "	11.5	3.51		a	31.3															
18	1.5	0.46		a	36.3															
" " "	2.5-4.0	0.76-1.22	COMP	a&b	37.3	39	31	8	0.79	88.10						2.00	A-4	9		
" " "	5-6.5	1.52-1.98	COMP	a&b	31.2	57	24	33	0.22	83.90					0.08	2.00	A-7-6	30		
" " "	9	2.74		a	34.4															
" " "	11.5	3.51		a	37.1															
" " "	14	4.27		a	32.0															
" " "	15-16.5	4.57-5.03	COMP	a&b	30.9	31	26	5	0.98	63.10					0.16	2.00	A-4	2		
" " "	21.5	6.55		a	1.9															
19	1.5	0.46	nosampl	a&b																
" " "	2.5-4.0	0.76-1.22	COMP	a&b	30.3	58	27	31	0.11	83.80					0.08	2.00	A-7-6	29		
" " "	6.5	1.98		a	36.6															
" " "	9	2.74		a	36.9															
" " "	10-11.5	3.05-3.51	COMP	a&b	33.2	68	31	37	0.06	90.80						0.42	A-7-5	39		
" " "	14	4.27		a	41.1															
" " "	16.5	5.03		a	35.0															
" " "	21.4	6.52		a	2.0															
20	1.5	0.46		a	22.8															
" " "	2.5-4.0	0.76-1.22	COMP	a&b	21.5	60	28	32	-0.20	94.30						2.00	A-7-6	35		
" " "	5-6.5	1.52-1.98	COMP	a&b	25.8	74	33	41	-0.18	97.90						0.42	A-7-5	40+		
" " "	9	2.74		a	29.3															
" " "	11.5	3.51		a	32.8															
" " "	12.5-14.0	3.81-4.27	COMP	a&b	32.8	82	33	49	0.00	99.80						0.18	A-7-5	40+		
" " "	16.5	5.03		a	33.6															
21	0.0-4.0	0.00-1.22	COMP	a&b	37.5	63	29	34	0.25	93.80						2.00	A-7-6	37		
" " "	6.5	1.98		a	38.6															

MONTANA DEPARTMENT OF TRANSPORTATION - GEOTECHNICAL SECTION
SUMMARY OF SOIL INDEX TEST RESULTS

Name: Townsend - South **Project Number:** NH - F 8-4(16)78 **CN:** 1420

BORING NO	DEPTH Feet	DEPTH Meters	FOR SC	JAR ID	M/C %	LL %	PL %	PI	LI	% -200.0	GRAIN SIZE DISTRIBUTION - mm D10	D30	D50	D60	D85	D100	AASHTO CLASS	GI	Qu kPa	Initial DD kN/m^3
" " "	9	2.74		a	37.1															
" " "	11.5	3.51		a	35.9															
" " "	12.5-14.0	3.81-4.27	COMP	a&b	37.1	55	30	25	0.28	93.00						2.00	A-7-5	28		
" " "	16.5	5.03		a	2.5															
22	1.5	0.46		a	33.4															
" " "	2.5-6.5	0.76-1.98	COMP	a&b	35.2	62	31	31	0.13	98.40						4.80	A-7-5	37		
" " "	9	2.74		a	36.8															
" " "	11.5	3.51		a	36.3															
" " "	12.5-14.0	3.81-4.27	COMP	a&b	35.2	72	34	38	0.03	98.60						2.00	A-7-5	40+		
" " "	16.5	5.03		a	2.6															
23	1.5	0.46		a	28.2															
" " "	2.5-4.0	0.76-1.22	COMP	a&b	22.5	56	32	24	-0.40	96.70						2.00	A-7-5	29		
" " "	6.5	1.98		a	28.8															
" " "	9	2.74		a	32.9															
" " "	11.5	3.51		a	36.5															
24	0.0-1.5	0.00-0.46	COMP	a&b	35.8	57	26	31	0.32	96.00						2.00	A-7-6	34		
" " "	4	1.22		a	14.7															
" " "	5-6.5	1.52-1.98	COMP	a&b	38.0	69	33	36	0.14	99.30						0.42	A-7-5	40+		
" " "	9	2.74		a	35.5															
" " "	11.5	3.51		a	29.3															
" " "	14	4.27		a	1.1															
" " "	16.5	5.03		a	4.6															
25	0.0-1.5	0.00-0.46	COMP	a&b	27.8	58	28	30	-0.01	80.30					0.15	12.70	A-7-6	26		
" " "	4	1.22		a	22.6															
" " "	6.5	1.98		a	29.9															
" " "	7.5-9.0	2.29-2.74	COMP	a&b	34.3	71	34	37	0.01	99.50						0.42	A-7-5	40+		
" " "	11.5	3.51		a	32.4															
" " "	12.5-14.0	3.81-4.27	COMP	a&b	22.2			NP		76.60					0.11	2.00	A-4	0		
" " "	16.4	5.00		a	1.7															
26	0.0-1.5	0.00-0.46	COMP	a&b	30.4	58	27	31	0.11	91.90						2.00	A-7-6	33		
" " "	2.5-6.5	0.76-1.98	COMP	a&b	37.3	58	30	28	0.26	92.20						2.00	A-7-5	30		
" " "	9	2.74		a	32.8															
" " "	11.5	3.51		a	26.5															
27	3-5	0.91-1.52	COMP	shelby	34.8	67	35	32	-0.01	92.00						4.80	A-7-5	36		
" " "	5-7	1.52-2.13	COMP	shelby	34.9	39	26	13	0.68	92.30						2.00	A-6	13		

MONTANA DEPARTMENT OF TRANSPORTATION - GEOTECHNICAL SECTION
SUMMARY OF SOIL INDEX TEST RESULTS

Name: Townsend - South **Project Number:** NH - F 8-4(16)78 **CN:** 1420

BORING NO	DEPTH Feet	DEPTH Meters	FOR SC	JAR ID	M/C %	LL %	PL %	PI	LI	% -200.0	GRAIN SIZE DISTRIBUTION - mm D10	D30	D50	D60	D85	D100	AASHTO CLASS	GI	Qu kPa	Initial DD kN/m^3
" " "	7-9	2.13-2.74	COMP	shelby	NT ?	41	28	13	####	87.30						4.80	A-7-6	13		
28	0.0-1.5	0.00-0.46	COMP	a&b	22.1	43	23	20	-0.04	79.60					0.15	4.80	A-7-6	16		
" " "	2.5-4.0	0.76-1.22	COMP	a&b	30.0	54	27	27	0.11	82.90					0.09	4.80	A-7-6	24		
" " "	6.5	1.98		a	33.8															
" " "	9	2.74		a	1.2															
" " "	11.4	3.47		a	1.9															
29	1.0-3.0	0.30-0.91	triax	shelby	34.3	48	24	24	0.43	56.30				0.11	0.60	9.50	A-7-6	11		13.3,13.5
" " "	3.0-5.0	0.91-1.52	triax	shelby	31.0	47	23	24	0.33	74.00					0.22	4.80	A-7-6	17		13.5
30	0.0-4.0	0.00-1.22	COMP	a&a	28.1	58	30	28	-0.07	54.00				0.13	5.45	12.70	A-7-5	13		
" " "	5-6.5	1.52-1.98	COMP	a&b	34.5	75	31	44	0.08	87.50						9.50	A-7-5	40+		
" " "	9	2.74		a	27.1															
" " "	11.5	3.51		a	37.4															
" " "	12.5-14.0	3.81-4.27	COMP	a&b	33.8	69	33	36	0.02	84.80					0.08	2.00	A-7-5	35		
" " "	16.5	5.03		a	33.2															
" " "	21.4	6.52		a	1.7															
31	0.0-1.5	0.00-0.46	COMP	a&b	17.8	43	24	19	-0.33	78.50					0.15	9.50	A-7-6	15		
" " "	4	1.22		a	16.1															
" " "	5-6.5	1.52-1.98	COMP	a only	3.4	25	19	6	-2.60	15.30		0.50	1.32	2.07	3.79	9.50	A-1-b	0		
" " "	9	2.74		a	5.9															
" " "	10-11.5	3.05-3.51	COMP	a&b	2.5			np		9.30	0.09	0.90	3.46	5.68	12.93	25.40	A-1-a	0		
32	0.0-1.5	0.00-0.46	COMP	a&b	22.7	45	26	19	-0.17	72.30					0.19	19.00	A-7-6	14		
" " "	4	1.22		a	14.0															
" " "	5-6.5	1.52-1.98	COMP	a&b	18.4	35	20	15	-0.11	75.80					0.17	12.70	A-6	10		
" " "	9	2.74		a	18.5															
" " "	10-11.5	3.05-3.51	COMP	a&b	24.9	27	24	3	0.30	68.10					0.33	9.50	A-4	1		
" " "	12.5-14.0	3.81-4.27	COMP	a&b	34.8	34	15	19	1.04	91.80						4.80	A-6	17		
" " "	15-16.5	4.57-5.03	COMP	a&b	49.7	42	25	17	1.45	90.40						9.50	A-7-6	17		
" " "	21.5	6.55		a	6.6															
33	1.5	0.46		a	12.2															
" " "	4	1.22		a	3.9															
" " "	6.5	1.98		a	3.3															
" " "	7.5-9.0	2.29-2.74	COMP	a&b	15.2	29	22	7	-0.97	81.10					0.10	4.80	A-4	5		
" " "	11.5	3.51		a	32.5															
" " "	14	4.27		a	18.0															
" " "	16.5	5.03		a	1.0															

MONTANA DEPARTMENT OF TRANSPORTATION - GEOTECHNICAL SECTION
SUMMARY OF SOIL INDEX TEST RESULTS

Name: Townsend - South **Project Number:** NH - F 8-4(16)78 **CN:** 1420

BORING NO	DEPTH Feet	DEPTH Meters	FOR SC	JAR ID	M/C %	LL %	PL %	PI	LI	% -200.0	GRAIN SIZE DISTRIBUTION - mm D10	D30	D50	D60	D85	D100	AASHTO CLASS	GI	Qu kPa	Initial DD kN/m^3
34	1.5	0.46	nosample	a&b																
" " "	2.5-4.0	0.76-1.22	COMP	a&b	22.4	31	22	9	0.04	81.80					0.10	4.80	A-4	7		
" " "	6.5	1.98		a	20.8															
" " "	9	2.74		a	8.8															
" " "	10-11.5	3.05-3.51	COMP	a&b	31.7			NP		71.30					0.16	4.80	A-4	0		
" " "	12.5-14.0	3.81-4.27	COMP	a&b	31.8	30	23	7	1.26	82.80					0.09	4.80	A-4	5		
" " "	15-16.5	4.57-5.03	COMP	a&b	37.5	35	27	8	1.31	89.70						0.42	A-4	8		
" " "	21.5	6.55		a	8.9															
" " "	26.5	8.08		a	6.6															
" " "	31.5	9.60		a	7.3															
35	0.0-1.5	0.00-0.46	COMP	a only	18.1	NT	NT	ERR	####	30.30			3.47	6.34	14.05	25.40				
" " "	4	1.22		a	4.0															
" " "	6.5	1.98		a	31.9															
" " "	7.5-9.0	2.29-2.74	COMP	a&b	35.1			NP		76.30					0.10	2.00	A-4	0		
" " "	11.5	3.51		a	22.6															
" " "	14	4.27		a	8.4															
" " "	16.5	5.03		a	8.4															
" " "	21.5	6.55		a	10.1															
" " "	26.5	8.08		a	19.4															
" " "	31.5	9.60		a	3.3															
36	1.5	0.46		a	18.3															
" " "	4	1.22		a	11.9															
" " "	5-6.5	1.52-1.98	COMP	a&b	16.5	47	23	24	-0.27	67.10					0.23	2.00	A-7-6	15		
" " "	7.5-9.0	2.29-2.74	COMP	a&b	26.6	35	21	14	0.40	88.80						4.80	A-6	12		
" " "	11.5	3.51		a	7.7															
" " "	14	4.27		a	5.2															
" " "	16.5	5.03		a	9.0															
37	1.5	0.46		a	4.9															
" " "	4	1.22		a	14.3															
" " "	5-6.5	1.52-1.98	COMP	a&b	6.8			NP		4.00	0.21	1.69	8.77	12.07	21.87	38.00	A-1-a	1		
" " "	9	2.74		a	12.4															
" " "	11.5	3.51		a	9.4															
38	0.0-1.5	0.00-0.46	COMP	a&b	119.9	61	50	11	6.35	61.70					0.27	4.80	A-7-5	9		
" " "	6.5	1.98		a	18.8															
" " "	9	2.74		a	8.0															

MONTANA DEPARTMENT OF TRANSPORTATION - GEOTECHNICAL SECTION
SUMMARY OF SOIL INDEX TEST RESULTS

Name: Townsend - South **Project Number:** NH - F 8-4(16)78 **CN:** 1420

BORING NO	DEPTH Feet	DEPTH Meters	FOR SC	JAR ID	M/C %	LL %	PL %	PI	LI	% -200.0	GRAIN SIZE DISTRIBUTION - mm D10	D30	D50	D60	D85	D100	AASHTO CLASS	GI	Qu kPa	Initial DD kN/m^3
39	1.5-3.5	0.46-1.07	triax	shelby	60.5	49	40	9	2.28	82.90					0.09	4.80	A-5	11		10.3,8.0
" " "	3.5-5.5	1.07-1.68	triax	shelby	69.6															9.4
" " "	3.5-5.5	1.07-1.68	consol	shelby	69.6			NP		46.90			0.08	0.11	0.25	4.80	A-4	0		8.28
" " "	5.0	1.52	consol	shelby	58.5															10.17
40	0.0-1.5	0.00-0.46	COMP	a&b	28.4	39	24	15	0.29	67.70					0.18	4.80	A-6	9		
" " "	2.5-4.0	0.76-1.22	COMP	a&b	27.4	38	25	13	0.18	92.40						2.00	A-6	13		
" " "	6.5	1.98		a	29.6															
" " "	9	2.74		a	11.0															
" " "	11.5	3.51		a	7.6															
" " "	14	4.27		a	26.9															
" " "	15-16.5	4.57-5.03	COMP	a&b	38.2	27	23	4	3.80	67.30					0.13	2.00	A-4	1		
" " "	21.5	6.55		a	6.6															
41	1.5	0.46		a	17.5															
" " "	4	1.22		a	3.1															
" " "	6.5	1.98		a	24.4															
" " "	7.5-9.0	2.29-2.74	COMP	a&b	25.7			NP		81.50					0.10	4.80	A-4	0		
" " "	10-11.5	3.05-3.51	COMP	a&b	42.9	56	26	30	0.56	92.80						2.00	A-7-6	32		
" " "	14	4.27		a	39.4															
" " "	16.5	5.03		a	31.5															
" " "	21.5	6.55		a	11.3															
42	1.5	0.46		a	22.5															
" " "	4	1.22		a	32.3															
" " "	5-6.5	1.52-1.98	COMP	a&b	27.1	32	22	10	0.51	77.10					0.18	9.50	A-4	7		
" " "	7.5-9.0	2.29-2.74	COMP	a&b	34.6	37	23	14	0.83	96.10						4.80	A-6	15		
" " "	10-11.5	3.05-3.51	COMP	a&b	36.3	50	23	27	0.49	85.30						4.80	A-7-6	25		
" " "	14	4.27		a	6.1															
" " "	16.5	5.03		a	6.8															
47	1.5	0.46		a	52.9															
" " "	2.5-4.0	0.76-1.22	COMP	a&b	37.1	35	24	11	1.19	86.00						9.50	A-6	10		
" " "	5-6.5	1.52-1.98	COMP	b-only	38.7	38	20	18	1.04	78.70					0.13	4.80	A-6	13		
" " "	5-6.5	1.52-1.98	COMP	a-only	25.9	29	23	6	0.48	75.50					0.12	2.00	A-4	3		
" " "	9	2.74		a	16.3															
" " "	11.5	3.51		a	7.1															
" " "	14	4.27		a	4.0															
" " "	16.5	5.03		a	5.9															
48	0.0-1.5	0.00-0.46	COMP	a-only	43.9	44	29	15	0.99	90.80						2.00	A-7-6	16		
" " "	2.5-4.0	0.76-1.22	COMP	b-only	27.8	27	21	6	1.13	81.50					0.09	0.42	A-4	4		

MONTANA DEPARTMENT OF TRANSPORTATION - GEOTECHNICAL SECTION
SUMMARY OF SOIL INDEX TEST RESULTS

Name: Townsend - South **Project Number:** NH - F 8-4(16)78 **CN:** 1420

BORING NO	DEPTH Feet	DEPTH Meters	FOR SC	JAR ID	M/C %	LL %	PL %	PI	LI	% -200.0	GRAIN SIZE DISTRIBUTION - mm D10	D30	D50	D60	D85	D100	AASHTO CLASS	GI	Qu kPa	Initial DD kN/m^3
" " "	2.5-4.0	0.76-1.22	COMP	a-only	40.3	49	25	24	0.64	94.40						4.80	A-7-6	26		
" " "	5-6.5	1.52-1.98	COMP	a&b	37.8	39	25	14	0.91	95.70						4.80	A-6	15		
" " "	7.5-9.0	2.29-2.74	COMP	a&b	44.6	50	25	25	0.78	99.60						2.00	A-7-6	29		
" " "	11.5	3.51		a	37.7															
" " "	14	4.27		a	18.5															
49	3.0-5.0	0.91-1.52	consol	shelby	30.9	45	24	21	0.33	83.90					0.09	4.80	A-7-6	19		11.81
" " "	3.0-5.0	0.91-1.52	triax	shelby	30.9															13.7,12.9
" " "	3.0-5.0	0.91-1.52	triax	shelby	30.9															13.5
" " "	7.0-9.0	2.13-2.74	consol	shelby	37.9	48	25	23	0.56	97.90						4.80	A-7-6	26		12.31
50	1.5	0.46		a	85.8															
" " "	4	1.22		a	5.8															
" " "	6.5	1.98		a	6.4															
" " "	9	2.74		a	6.4															
" " "	11.5	3.51		a	9.2															
43	0.0-1.5	0.00-0.46	COMP	a&b	23.7	41	25	16	-0.08	66.80					0.21	4.80	A-7-6	10		
" " "	4	1.22		a	22.0															
" " "	6.5	1.98		a	22.7															
" " "	7.5-9.0	2.29-2.74	COMP	a&b	33.8	50	23	27	0.40	81.30					0.12	4.80	A-7-6	23		
" " "	10-11.5	3.05-3.51	COMP	b-only	31.3	61	24	37	0.20	87.00						4.80	A-7-6	35		
" " "	14	4.27		a	23.4															
" " "	16.5	5.03		a	8.5															
44	1.5	0.46		a	26.7															
" " "	2.5-4.0	0.76-1.22	COMP	a&b	29.8	48	24	24	0.24	81.40					0.11	4.80	A-7-6	20		
" " "	6.5	1.98		a	19.0															
" " "	7.5-9.0	2.29-2.74	COMP	a&b	35.4	60	24	36	0.32	77.30					0.20	4.80	A-7-6	29		
" " "	10-11.5	3.05-3.51	COMP	a&b	35.7	54	24	30	0.39	80.80					0.14	4.80	A-7-6	26		
" " "	12.5-14.0	3.81-4.27	COMP	a&b	33.6	41	26	15	0.51	95.80						4.80	A-7-6	17		
" " "	15-16.5	4.57-5.03	COMP	a&b	34.9	31	26	5	1.78	71.50					0.12	2.00	A-4	3		
" " "	21.5	6.55		a	10.8															
45	1.5	0.46		a	23.8															
" " "	4	1.22		a	13.2															
" " "	5-6.5	1.52-1.98	COMP	a&b	21.6	28	22	6	-0.07	77.90					0.12	4.80	A-4	3		
" " "	7.5-9.0	2.29-2.74	COMP	a&b	24.5			NP		77.20					0.11	2.00	A-4	0		
" " "	10-11.5	3.05-3.51	COMP	a&b	29.1			NP		75.70					0.11	4.80	A-4	0		
" " "	12.5-14.0	3.81-4.27	COMP	a&b	13.4			NP		23.90		0.14	0.71	2.69	12.44	25.10	A-1-b	0		
" " "	15-16.5	4.57-5.03	COMP	a&b	32.3	30	18	12	1.19	40.40			0.28	2.15	9.89	25.40	A-6	1		

MONTANA DEPARTMENT OF TRANSPORTATION - GEOTECHNICAL SECTION
SUMMARY OF SOIL INDEX TEST RESULTS

Name: Townsend - South **Project Number:** NH - F 8-4(16)78 **CN:** 1420

BORING NO	DEPTH Feet	DEPTH Meters	FOR SC	JAR ID	M/C %	LL %	PL %	PI	LI	% -200.0	GRAIN SIZE DISTRIBUTION - mm D10	D30	D50	D60	D85	D100	AASHTO CLASS	GI	Qu kPa	Initial DD kN/m^3
" " "	21.5	6.55		a	4.3															
46	1.5	0.46		a	21.6															
" " "	4	1.22		a	1.3															
" " "	6.5	1.98		a	4.6															
" " "	9	2.74		a	4.9															
" " "	11.5	3.51		a	9.7															
51	0.0-1.5	0.00-0.46	COMP	a&b	51.9	56	37	19	0.78	73.70					0.14	2.00	A-7-5	16		
" " "	2.5-4.0	0.76-1.22	COMP	a&b	29.8	34	23	11	0.62	87.60						4.80	A-6	10		
" " "	6.5	1.98		a	30.4															
" " "	9	2.74		a	8.4															
" " "	11.5	3.51		a	4.6															
52	0.0-1.5	0.00-0.46	COMP	a&b	36.0	41	25	16	0.69	80.50					0.10	4.80	A-7-6	13		
" " "	2.5-4.0	0.76-1.22	COMP	a&b	27.9	38	23	15	0.33	93.60						4.80	A-6	15		
" " "	6.5	1.98		a	25.2															
" " "	9	2.74		a	48.1															
" " "	11.5	3.51		a	8.0															
" " "	14	4.27		a	14.7															
" " "	16.5	5.03		a	5.3															
53	2.5-4.0	0.76-1.22	COMP	a&b	24.3	25	21	4	0.83	62.80					0.20	4.80	A-4	1		
" " "	6.5	1.98		a	29.7															
" " "	7.5-9.0	2.29-2.74	COMP	a&b	22.0			NP		5.70	0.14	0.29	0.55	0.82	9.95	25.40	A-1-b	1		
" " "	11.5	3.51		a	21.9															
" " "	14	4.27		a	20.3															
" " "	16.5	5.03		a	6.5															
54	1.5	0.46		a	83.0															
" " "	6.5	1.98		a	12.6															
" " "	9.0	2.74		a	36.3															
" " "	11.5	3.51		a	57.7															
" " "	14.0	4.27	nosample	a&b																
" " "	16.5	5.03		a	23.8															
" " "	21.5	6.55		a	7.2															
55	1.0-3.0	0.30-0.91	COMP	shelby	38.0	41	26	15	0.80							9.50	A-7-6	16	31.9	11.76
" " "	2.5	0.76	consol	shelby	42.0															12.18
" " "	3.0-5.0	0.91-1.52	COMP	shelby	72.2	47	28	19	2.33							9.50	A-7-6	21	34.1	11.23
" " "	4.5	1.37	consol	shelby	58.3															10.04
" " "	2	0.61	UU	shelby	43.7														31.9	11.76
" " "	4.0	1.22	UU	shelby	49.5														34.1	11.23
56	1.5	0.46		a	47.4															
" " "	4.0	1.22		a	4.2															

MONTANA DEPARTMENT OF TRANSPORTATION - GEOTECHNICAL SECTION
SUMMARY OF SOIL INDEX TEST RESULTS

Name: Townsend - South **Project Number:** NH - F 8-4(16)78 **CN:** 1420

BORING NO	DEPTH Feet	DEPTH Meters	FOR SC	JAR ID	M/C %	LL %	PL %	PI	LI	% -200.0	GRAIN SIZE DISTRIBUTION - mm D10	D30	D50	D60	D85	D100	AASHTO CLASS	GI	Qu kPa	Initial DD kN/m^3
" " "	6.5	1.98		a	9.2															
" " "	9.0	2.74		a	19.2															
57	1.5	0.46		a	22.3															
" " "	4.0	1.22		a	14.4															
" " "	6.5	1.98		a	8.7															
" " "	9.0	2.74		a	4.6															
" " "	11.5	3.51		a	23.0															
58	1.5	0.46		a	8.9															
" " "	4.0	1.22		a	1.9															
" " "	6.5	1.98		a	5.9															
" " "	9.0	2.74		a	9.3															
" " "	11.5	3.51		a	6.5															
59	0-1.5	0.00-0.46	COMP	a&b	33.4			NP		64.80					0.14	2.00	A-4	0		
" " "	4.0	1.22		a	10.6															
" " "	6.5	1.98		a	8.0															
" " "	9.0	2.74		a	6.9															
" " "	11.5	3.51		a	7.9															
60	0-1.5	0.00-0.46	COMP	a&b	35.8	32	25	7	1.54	69.50					0.17	4.80	A-4	4		
" " "	2.5-4.0	0.76-1.22	COMP	a&b	39.1			NP		65.40					0.13	4.80	A-4	0		
" " "	9.0	2.74		a	7.5															
" " "	11.5	3.51		a	7.5															
61	0-1.5	0.00-0.46	COMP	a&b	30.0	40	23	17	0.41	72.10					0.19	2.00	A-6	11		
" " "	2.5-4.0	0.76-1.22	COMP	a&b	35.5	43	21	22	0.66	74.10					0.15	2.00	A-7-6	15		
" " "	5-6.5	1.52-1.98	COMP	a&b	41.9	34	19	15	1.53	68.80					0.24	4.80	A-6	8		
" " "	9.0	2.74		a	68.5															
" " "	11.5	3.51		a	22.9															
62	2.5-4.0	0.76-1.22	COMP	a&b	30.6	37	21	16	0.60	85.10						4.80	A-6	13		
" " "	5.0-6.5	1.52-1.98	COMP	a&b	20.2	30	21	9	-0.09	56.90				0.09	0.39	4.80	A-4	3		
" " "	7.5-9.0	2.29-2.74	COMP	a&b	40.8	50	36	14	0.34	77.20					0.16	4.80	A-7-5	13		
" " "	11.5	3.51		a	41.3															
" " "	14.0	4.27		a	9.4															
" " "	15-16.5	4.57-5.03	COMP	a&b	21.5	30	18	12	0.29	71.90					0.21	2.00	A-6	7		
" " "	19.0	5.79		a	18.0															
" " "	21.5	6.55		a	14.4															
" " "	26.5	8.08		a	13.4															

MONTANA DEPARTMENT OF TRANSPORTATION - GEOTECHNICAL SECTION
SUMMARY OF SOIL INDEX TEST RESULTS

Name: Townsend - South **Project Number:** NH - F 8-4(16)78 **CN:** 1420

BORING NO	DEPTH Feet	DEPTH Meters	FOR SC	JAR ID	M/C %	LL %	PL %	PI	LI	% -200.0	GRAIN SIZE DISTRIBUTION - mm D10	D30	D50	D60	D85	D100	AASHTO CLASS	GI	Qu kPa	Initial DD kN/m^3
" " "	31.4	9.57		a	5.8															
" " "	37.5	11.43		a	11.4															
" " "	41.0-47.5	12.50-14.48	COMP	a&b	18.9	41	22	19	-0.17	18.50		0.46	2.82	5.62	16.96	38.00	A-2-7	0		
" " "	51-52.5	15.54-16.00	COMP	a&b	86.5	40	39	1	47.50	72.00					0.55	4.80	A-4	2		
" " "	57.5	17.53		a	9.7															
" " "	61-62.5	18.59-19.05	COMP	a&b	9.9	NT	NT	ERR	####		0.08	0.97	4.04	6.69	17.71	38.00				
" " "	66-67.5	20.12-20.57	COMP	A	10.0	NT	NT	ERR	####			1.37	5.61	7.27	17.82	38.00				
" " "	71-72.5	21.64-22.10	COMP	a&b	26.2			NP		52.80				0.10	0.51	4.80	A-4	0		
" " "	76-77.5	23.16-23.62	COMP	a&b	17.1	44	21	23	-0.17	27.60		0.10	0.73	1.43	6.07	19.00	A-2-7	2		
" " "	82.5	25.15		a	12.1															
" " "	86-87.5	26.21-26.67	COMP	a&b	12.0	NT	NT	ERR	####	18.10		0.51	2.52	4.41	13.99	25.40				
" " "	92.5	28.19		a	9.8															
" " "	97.5	29.72		a	12.1															
" " "	102.5	31.24		a	13.0															
" " "	106-107.5	32.31-32.77	COMP	a&b	9.1	25	19	6	-1.65	12.60		0.58	1.90	2.96	8.76	19.00	A-1-b	0		
" " "	111-112.5	33.83-34.29	COMP	a&b	27.5	60	35	25	-0.30	30.20			0.88	2.58	11.44	19.00	A-2-7	2		
63	2.5-4.0	0.76-1.22	COMP	a&b	30.3	40	26	14	0.31	76.90					0.14	4.80	A-6	11		
" " "	5-6.5	1.52-1.98	COMP	a&b	22.2	39	23	16	-0.05	81.30					0.10	4.80	A-6	13		
" " "	9.0	2.74		a	33.2															
" " "	10-11.5	3.05-3.51	COMP	a&b	35.0	49	44	5	-1.80	85.60						4.80	A-5	9		
" " "	12.5-14.0	3.81-4.27	COMP	a&b	39.2	50	23	27	0.60	79.90					0.13	4.80	A-7-6	22		
" " "	16.5	5.03		a	32.3															
" " "	19.0	5.79		a	8.7															
" " "	21.5	6.55		a	6.8															
" " "	27.5	8.38		a	6.6															
" " "	32.5	9.91		a	18.1															
" " "	37.5	11.43		a	6.2															
" " "	42.5	12.95		a	2.6															
" " "	46-47.5	14.02-14.48	COMP	a&b	26.2	48	20	28	0.22	32.90			0.30	0.72	5.31	19.00	A-2-7	3		
" " "	51-52.5	15.54-16.00	COMP	a&b	10.2	NT	NT	ERR	####	9.40	0.09	1.18	4.34	6.60	24.05	38.00				
" " "	57.4	17.50		a	13.7															
" " "	61-62.5	18.59-19.05	COMP	a&b	10.3	37	17	20	-0.34	24.90		0.14	1.53	3.99	13.12	25.40	A-2-6	1		
" " "	66-67.5	20.12-20.57	COMP	a&b	11.0	37	20	17	-0.53	16.10		0.58	2.99	5.41	16.17	38.00	A-2-6	0		
" " "	71-72.5	21.64-22.10	COMP	a&b	51.4	39	24	15	1.83	44.90			0.11	0.28	3.31	25.40	A-6	3		
" " "	77.5	23.62		a	12.5															

MONTANA DEPARTMENT OF TRANSPORTATION - GEOTECHNICAL SECTION
SUMMARY OF SOIL INDEX TEST RESULTS

Name: Townsend - South **Project Number:** NH - F 8-4(16)78 **CN:** 1420

BORING NO	DEPTH Feet	DEPTH Meters	FOR SC	JAR ID	M/C %	LL %	PL %	PI	LI	% -200.0	GRAIN SIZE DISTRIBUTION - mm D10	D30	D50	D60	D85	D100	AASHTO CLASS	GI	Qu kPa	Initial DD kN/m^3
" " "	81-82.5	24.69-25.15	COMP	a&b	18.9	51	23	28	-0.15	22.90		0.17	1.64	3.44	19.43	38.00	A-2-7	1		
" " "	87.4	26.64		a	9.8															
" " "	92.5	28.19		a	7.2															
" " "	96-97.5	29.26-29.72	COMP	a&b	8.1	NT	NT	ERR	####	17.80		0.55	3.46	6.06	14.35	19.00				
" " "	101-102.5	30.78-31.24	COMP	a&b	12.7	30	15	15	-0.15	15.50		0.52	2.54	4.83	11.46	25.40	A-2-6	0		
" " "	107.5	32.77		a	9.3															
1420-64	4.0	1.22		a	4.4															
" " "	6.5	1.98		a	20.4															
" " "	7.5-9.0	2.29-2.74	COMP	a&b	42.2	42	22	20	1.01	90.00						4.80	A-7-6	19		
" " "	10-11.5	3.05-3.51	COMP	a&b	34.3	37	19	18	0.85	96.10						4.80	A-6	18		
" " "	14.0	4.27		a	6.3															
" " "	16.5	5.03		a	6.4															
1420-65	2.5-4.0	0.76-1.22	COMP	a&b	25.1	37	22	15	0.21	83.10					0.10	4.80	A-6	12		
" " "	6.5	1.98		a	29.7															
" " "	7.5-9.0	2.29-2.74	COMP	a&b	29.7	44	22	22	0.35	94.50						4.80	A-7-6	23		
" " "	11.5	3.51		a	26.9															
" " "	12.5-14.0	3.81-4.27	COMP	a&b	38.0	48	21	27	0.63	96.10						4.80	A-7-6	28		
" " "	16.5	5.03		a	31.3															
" " "	19.0	5.79		a	15.1															
" " "	21.5	6.55		a	8.8															
" " "	26.5	8.08		a	14.2															
1420-66	0.0-1.5	0.00-0.46	COMP	a&b	28.0	52	24	28	0.14	87.00						4.80	A-7-6	26		
" " "	1.5-3.0	0.46-0.91	COMP	a&b	36.9	59	24	35	0.37	97.20						2.00	A-7-6	39		
" " "	3.5-5.0	1.07-1.52	COMP	a&b	46.6	47	23	24	0.98	91.60						4.80	A-7-6	24		
" " "	6.5	1.98		a	8.3															
1420-67	0.0-1.5	0.00-0.46	COMP	a&b	43.0	42	25	17	1.06	88.00						4.80	A-7-6	16		
" " "	3.5	1.07		a	15.4															
1420-67-0-2a	0.0-2.0	0.00-0.61	triax	shelby	44.0	42	27	15	1.13	73.50					0.18	4.80	A-7-6	11		11.3
1420-67-0-2b	0.0-2.0	0.00-0.61	triax	shelby	44.0	41	21	20	1.15	75.30					0.23	4.80	A-7-6	14		12
1420-67-0-2c	0.0-2.0	0.00-0.61	triax	shelby	44.8	41	23	18	1.21	63.70					0.33	4.80	A-7-6	10		11.6
1420-67-0-2b	1.0	0.30	consol	shelby	33.2															13.83
1420-68	2.0-3.5	0.61-1.07	COMP	a&b	13.5	NT	NT	ERR	####	3.50	0.29	6.04	11.31	13.44	27.51	38.00				
1420-69	0.0-1.5	0.00-0.46	COMP	a&b	25.4			NP		57.80				0.08	0.18	4.80	A-4	0		
	1.5-3.0	0.46-0.91	COMP	b only	28.5	NT	NT			84.10					0.08	2.00				
" " "	4.5	1.37			27.2															
1420-70	0.0-1.5	0.00-0.46	COMP	a&b	33.8	39	22	17	0.69	87.50						2.00	A-6	15		
" " "	3.5	1.07		a	42.3															

MONTANA DEPARTMENT OF TRANSPORTATION - GEOTECHNICAL SECTION
SUMMARY OF SOIL INDEX TEST RESULTS

Name: Townsend - South **Project Number:** NH - F 8-4(16)78 **CN:** 1420

BORING NO	DEPTH Feet	DEPTH Meters	FOR SC	JAR ID	M/C %	LL %	PL %	PI	LI	% -200.0	GRAIN SIZE DISTRIBUTION - mm D10	D30	D50	D60	D85	D100	AASHTO CLASS	GI	Qu kPa	Initial DD kN/m^3
1420-70-0-2a	0.0-2.0	0.00-0.61	triax	shelby	66.7															11.9
1420-70-0-2b	0.0-2.0	0.00-0.61	triax	shelby	55.6															13.1
1420-70-0-2c	0.0-2.0	0.00-0.61	triax	shelby	56.3															13
1420-70-0-2a	0.0-2.0	0.00-0.61	consol	shelby	56.4															10.64
1420-70-ABC	0-2	0.00-0.61	COMP	Tubes	59.5	48	24	24	1.50	80.40					0.12	4.80	A-7-6	20		
1420-77	0.0-1.0	0.00-0.30	consol	shelby	57.1	49	26	23	1.35	79.20					0.13	12.70	A-7-6	19		11.15
1420-78-2a	0.0-2.0	0.00-0.61	triax	shelby	52.0	55	31	24	0.88							4.80	A-7-5	26		9.9
1420-78-2b	0.0-2.0	0.00-0.61	triax	shelby																12.6
1420-78-2c	0.0-2.0	0.00-0.61	triax	shelby																11.3
1420-78-2c	0.0-2.0	0.00-0.61	consol	shelby	62.7															9.39
1420-84-a	0.0-1.5	0.00-0.46	Con	shelby	81.0	56	36	20	2.25	59.40				0.08	0.91	38.00	A-7-5	11		10.03
1420-84-b	0.0-1.5	0.00-0.46	Con	shelby	54.9	58	38	20	0.85	49.10			0.08	0.15	0.94	19.00	A-7-5	7		10.51
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				

MONTANA DEPARTMENT OF TRANSPORTATION - GEOTECHNICAL SECTION
SUMMARY OF SOIL INDEX TEST RESULTS

Name: Townsend - South **Project Number:** NH - F 8-4(16)78 **CN:** 1420

BORING NO	DEPTH Feet	DEPTH Meters	FOR SC	JAR ID	M/C %	LL %	PL %	PI	LI	% -200.0	GRAIN SIZE DISTRIBUTION - mm D10	D30	D50	D60	D85	D100	AASHTO CLASS	GI	Qu kPa	Initial DD kN/m^3
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				
" " "																				