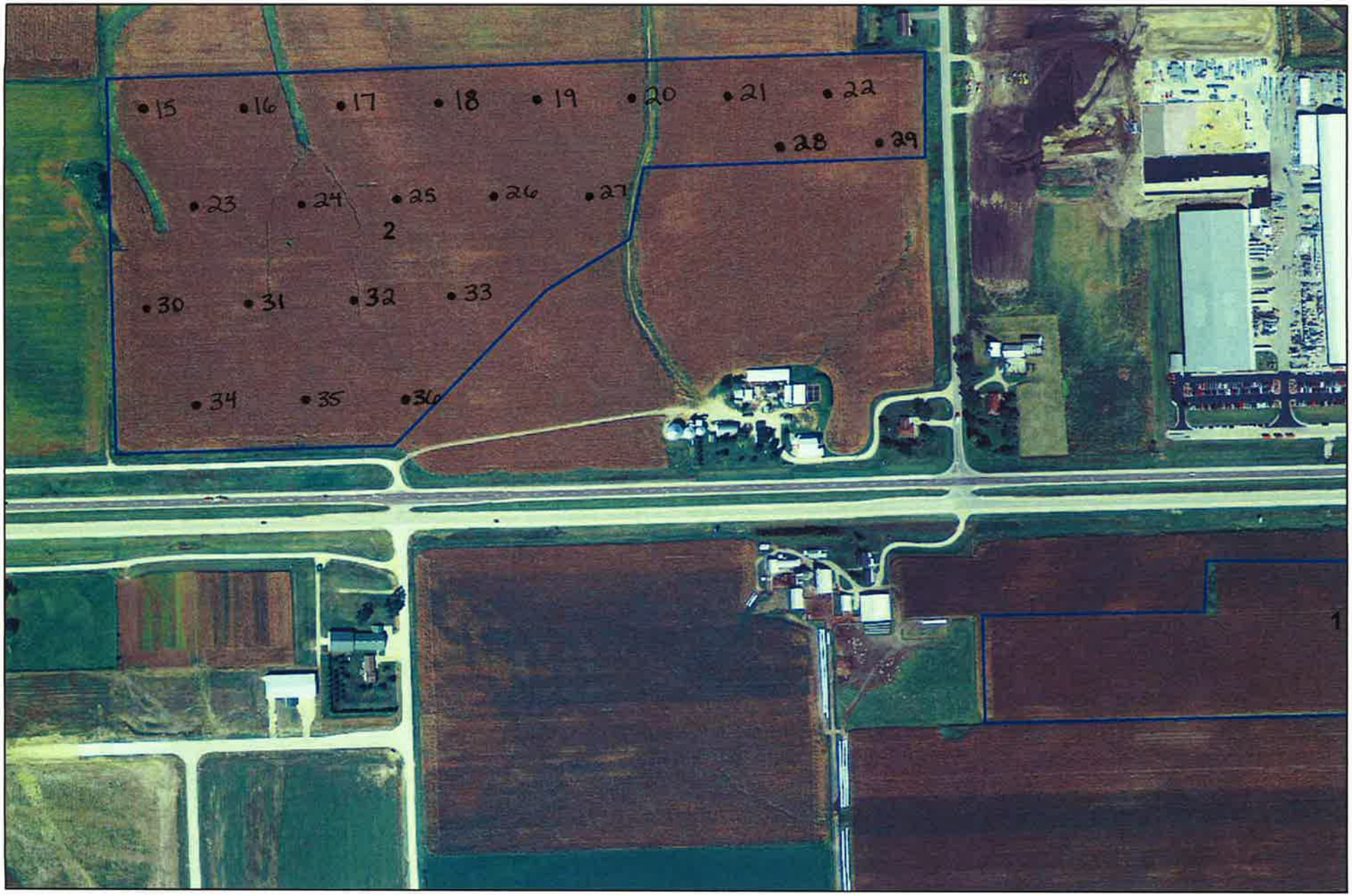
NHSN-20-9(195)- -2R-31
S1 Review

S1 Potential Borrow

NORTH

0 100 200 300 400 500
Feet

NHSN-20-9(195)- -2R-31
S1 Review



S1 Potential Borrow

NORTH

0 100 200 300 400 500
Feet

NHSN-20-9(195)- -2R-31
S1 Review

S1 Potential Borrow

NORTH

0 100 200 300 400 500

Feet

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
15	Dig 26	Borrow		Moist	Sample	1	A: Top Soil
			S: 5 to 7	Moist	Sample	9	B: Brown Glacial Till
			S: 10 to 12	Moist	Sample	25	C: Gray Glacial Till
						26*	D: Highly Weatheed Limestone
						H_20: 23' (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
16	Dig 31	Borrow		Moist	Sample	1	A: Top Soil
				Moist	17B	9	B: Brown Glacial Till
				Moist	17C	30	C: Gray Glacial Till
						31*	D: Highly Weathered Limestone
						H_20: 27' (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
17	Dig 20.5	Borrow		Moist	16A	0.2	A: Top Soil
			S: 5 to 7	Moist	Sample	8	B: Brown Glacial Till
			S: 10 to 12	Moist	Sample	17.5	C: Gray Glacial Till
						20.5*	D: Highly Weathered Limestone
						H_20: None (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
18	Dig 3.5	Borrow		Moist	Sample	1	A: Top Soil
				Moist	Sample	3	B: Brown Fine Sand
						3.5*	C: Highly Weathered Limestone
						H_20: None (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
19	Dig 15	Borrow		Moist	20A	0.3	A: Top Soil
				Moist	Sample	8	B: Brown Fine Sand
				Moist	20B	13.5	C: Brown Glacial Till
						15*	D: Highly Weathered Limestone
						H_20: None (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
20	Dig 15	Borrow		Moist	Sample	4	A: Top Soil
			S: 10 to 12	Moist	Sample	14	B: Brown Glacial Till
					Sample	15*	C: Highly Weathered Limestone
					H_20: None (24 hr.)		

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
21	Dig 14	Borrow		Moist	22A	1	A: Top Soil
				Moist	22B	4	B: Brown Fine Sand
				Moist	22C	10	C: Brown Glacial Till
				Moist	22D	12	D: Gray Glacial Till
						14*	E: Highly Weathered Limestone
					H_20: None (24 hr.)		

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
22	Dig 21	Borrow		Moist	Sample	1	A: Top Soil
				Moist	Sample	4	B: Brown Fine Sand
			S: 4 to 6	Moist	Sample	7	C: Brown Glacial Till
			S: 10 to 12	Moist	Sample	19	D: Gray Glacial Till
						21*	E: Highly Weathered Limestone
					H_20: None (24 hr.)		

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
23	Dig 31	Borrow		Moist	24A	1	A: Top Soil
				Moist	24B	8	B: Brown Glacial Till
				Moist	24C	27	C: Gray Glacial Till
						31*	D: Highly Weatheed Limestone
					H_20: None (24 hr.)		

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
24	Dig 22	Borrow		Moist	Sample	1	A: Top Soil
			S: 5 to 7	Moist	Sample	9	B: Brown Glacial Till
			S: 10 to 12	Moist	Sample	21	C: Gray Glacial Till
						22*	D: Highly Weatheed Limestone
						H_20: 18' (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
25	Dig 17.5	Borrow		Moist	24A	0.5	A: Top Soil
				Moist	24B	8	B: Brown Glacial Till
				Moist	24C	16	C: Gray Glacial Till
						17.5*	D: Highly Weatheed Limestone
						H_20: None (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
26	Dig 10	Borrow		Moist	Sample	0.5	A: Top Soil
			S: 5 to 7	Moist	Sample	8.5	B: Brown Glacial Till
						10*	C: Highly Weathered Limestone
						H_20: None (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
27	Dig 15	Borrow		Moist	26A	1	A: Top Soil
				Moist	26B	12	B: Brown Glacial Till
						15*	C: Highly Weathered Limestone
						H_20: None (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
28	Dig 13.5	Borrow		Moist	Sample	1.5	A: Top Soil
			S: 5 to 7	Moist	Sample	11	B: Brown Glacial Till
						13.5*	C: Highly Weathered Limestone
						H_20: None (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
29	Dig 4	Borrow		Moist	28A	1	A: Top Soil
				Moist	28B	3	B: Brown Glacial Till
						4*	C: Highly Weathered Limestone
						H_20: None (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
30	Dig 32	Borrow		Moist	31A	1	A: Top Soil
				Moist	31B	9	B: Brown Glacial Till
			S: 10 to 12	Moist	Sample	21	C: Gray Glacial Till
						32*	D: Highly Weathered Limestone
						H_20: None (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
31	Dig 20	Borrow		Moist	Sample	1	A: Top Soil
			5 to 7	Moist	Sample	9	B: Brown Glacial Till
				Moist	30C	17	C: Gray Glacial Till
						20*	D: Highly Weathered Limestone
						H_20: None (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
32	Dig 16.5	Borrow		Moist	33A	1	A: Top Soil
				Moist	33B	9	B: Brown Glacial Till
			S: 10 to 12	Moist	Sample	15	C: Gray Glacial Till
						16.5*	D: Highly Weathered Limestone
						H_20: None (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
33	Dig 19	Borrow		Moist	Sample	1	A: Top Soil
			S: 5 to 7	Moist	Sample	17	B: Brown Glacial Till
						19*	C: Highly Weathered Limestone
						H_20: None (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
34	Dig 9	Borrow		Moist	Sample	2	A: Top Soil
			S: 5 to 7	Moist	Sample	8	B: Brown Glacial Till
						9*	C: Highly Weathered Limestone
						H_20: None (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
35	Dig 18.5	Borrow		Moist	34A	2	A: Top Soil
				Moist	34B	12	B: Brown Glacial Till
						18	C: Brown Fat Clay
						18.5*	D: Highly Weathered Limestone
						H_20: None (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
36	Dig 10	Borrow		Moist	Sample	1	A: Top Soil
			S: 5 to 7	Moist	Sample	8	B: Brown Glacial Till
						10*	C: Highly Weathered Limestone
						H_20: None (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
37	Dig 25	Borrow		Moist	Sample	1	A: Top Soil
			S: 3 to 5	Moist	Sample	7	B: Brown Glacial Till
			S: 8 to 10	Moist	Sample	24.5	C: Gray Glacial Till
						25*	D: Highly Weathered Limestone
						H_20: 11' (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
38	Dig 30	Borrow		Moist	39A	1	A: Top Soil
				Moist	Sample	7	B: Brown Glacial Till with Sand Seams
				Moist	39C	30	C: Gray Glacial Till
						H_20: 14.5' (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
39	Dig 30	Borrow		Moist	Sample	1	A: Top Soil
			S: 6 to 8	Moist	Sample	11	B: Brown Glacial Till
			S: 15 to 17	Moist	Sample	30	C: Gray Glacial Till
						H_20: 14.5' (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
40	Dig 21	Borrow		Moist	41A	1	A: Top Soil
				Moist	41B	7.5	B: Brown Glacial Till
				Moist	41C	20.5	C: Gray Glacial Till
						21*	D: Highly Weathered Limestone
						H_20: 14.5' (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
41	Dig 30	Borrow		Moist		1	A: Top Soil
			S: 5 to 7	Moist	Sample	5	B: Brown Glacial Till
			S: 10 to 12	Moist	Sample	30	C: Gray Glacial Till
						H_20: 12.5' (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
42	Dig 30	Borrow		Moist	Sample	1	A: Top Soil
			S: 2 to 4	Moist	Sample	6	B: Brown Glacial Till
				Moist	Sample	12	C: Fine Sand
				Moist	Sample	30	D: Silty Sand
						H_20: 14.5' (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
43	Dig 40	Borrow		Moist	46A	1.5	A: Top Soil
				Moist	46B	6	B: Brown Glacial Till
				Moist	46C	40	C: Gray Glacial Till
						H_20: 17.5' (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
44	Dig 21	Borrow		Moist	Sample	1	A: Top Soil
			S: 5 to 7	Moist	Sample	7	B: Brown Glacial Till with Sand Seams
			S: 12 to 14	Moist	Sample	32.5	C: Gray Glacial Till with Sand Seams
						33*	D: Highly Weathered Limestone
						H_20: 5' (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
45	Dig 60	Borrow		Moist	44A	1.5	A: Top Soil
				Moist	44B	8	B: Brown Glacial Till
				Moist	44C	59	C: Gray Glacial Till with Sand Seams
						60*	D: Highly Weathered Limestone
						H_20: 9' (24 hr.)	

Hole #	Type	Station	CSM	Moisture	Same As	Depth to Bottom of Layer (ft)	Description
46	Dig 30	Borrow		Moist	Sample	1.5	A: Top Soil
			S: 5 to 7	Moist	Sample	10	B: Brown Glacial Till with Sand Seams
			S: 15 to 17	Moist	Sample	30	C: Gray Glacial Till
						H_20: 11' (24 hr.)	

BORING NUMBER	SHELBY TUBE DEPTH Feet	ATTERBERG LIMITS			PERCENT				STANDARD PROCTOR		AASHTO CLASS	TEXTURE CLASS	USCS CLASS	PERCENT PASSING				CUT (IN SITU)		WATER LEVEL ft.	BORING DEPTH ft.
		LIQUID LIMIT Percent	PLASTIC LIMIT Percent	PLASTICITY INDEX Percent	GRAV Per.	SAND Per.	SILT Per.	CLAY Per.	OPTIMUM MOISTURE Percent	MAXIMUM DENSITY pcf				#4 SIEVE Per.	#10 SIEVE Per.	#40 SIEVE Per.	#200 SIEVE Per.	MOIST. Percent	DENS. pcf		
15A	–	–	–	–	–	–	–	–	17	105	–	–		–	–	–	–	–	–	23	26
15B	5 to 7	37	21	16	0	37	35	28	15	113	A-6(8)	CL LO	CL	100	100	89	63	14	115	23	26
15C	10 to 12	–	–	–	0	40	35	25	14	116	–	LO	CL?	100	97	87	60	15	118	23	26
16A	–	–	–	–	0	35	41	24	23	98	–	LO	CL?	100	100	90	65	–	–	27	31
17B	5 to 7	39	18	21	2	39	31	28	12	118	A-6(10)	CL LO	CL	98	97	87	59	18	105	Dry	20.5
17C	10 to 12	35	17	18	0	38	39	23	13	114	A-6(9)	LO	CL	100	99	88	62	16	117	Dry	20.5
18A	–	–	–	–	0	39	41	20	16	111	–	LO		100	100	91	61	–	–	Dry	3.5
18B	–	23	16	7	1	49	30	20	14	113	A-4(3)	LO	CL-ML	99	99	87	50	–	–	Dry	3.5
19B	–	NP	NP	NP	0	81	12	7	11	122	A-2-4	LO SA	SM	100	98	87	19	–	–	Dry	15
20A	–	–	–	–	0	31	40	29	18	102	–	CL LO		100	99	94	69	–	–	Dry	15
20B	10 to 12	33	17	16	0	37	35	28	15	114	A-6(8)	CL LO	CL	100	99	89	63	20	114	Dry	15
22A	–	NP	NP	NP	0	69	20	11	13	114	A-2-4	SA LO	SM	100	100	90	31	–	–	Dry	21
22B	–	24	15	9	0	58	24	18	12	119	A-4(1)	SA LO	SC	100	100	89	42	–	–	Dry	21
22C	4 to 6	33	17	16	1	42	30	27	13	114	A-6(7)	CL LO	CL	99	98	87	57	8	–	Dry	21
22D	10 to 12	33	16	17	0	38	35	27	14	113	A-6(9)	CL LO	CL	100	98	89	62	14	120	Dry	21
24A	–	NP	NP	NP	0	28	44	28	26	93	A-4	LO	ML	100	100	94	72	–	–	18	22
24B	5 to 7	34	15	19	0	38	27	35	16	115	A-6(10)	CL LO	CL	100	100	90	62	22	104	18	22
24C	10 to 12	33	19	14	2	46	31	21	14	117	A-6(5)	LO	CL	98	96	81	52	16	117	18	22
26A	–	–	–	–	–	–	–	–	17	109	–	–		–	–	–	–	–	–	Dry	10
26B	5 to 7	31	19	12	1	44	30	25	18	109	A-6(5)	LO	CL	99	97	85	55	17	112	Dry	10
28A	–	–	–	–	0	58	30	12	13	115	–	SA LO	SC?	100	99	89	42	–	–	Dry	13.5
28B	5 to 7	–	–	–	1	37	37	25	15	115	–	LO	CL?	99	97	87	62	16	114	Dry	13.5
30C	10 to 12	–	–	–	1	37	33	29	13	117	–	CL LO	CL?	99	97	87	62	14	119	Dry	32
31A	–	NP	NP	NP	1	41	37	21	18	106	A-4	LO	ML	99	99	89	58	–	–	Dry	20
31B	5 to 7	–	–	–	0	35	34	31	17	111	–	CL LO	CL?	100	100	90	65	18	114	Dry	20
32C	10 to 12	–	–	–	0	38	34	28	15	114	–	CL LO	CL?	100	98	88	62	16	117	Dry	16.5
33A	–	NP	NP	NP	0	57	29	14	15	110	A-4	SA LO	SM	100	99	88	43	–	–	Dry	19
33B	5 to 7	32	16	16	0	40	25	35	12	118	A-6(8)	CL LO	CL	100	100	89	60	18	114	Dry	19
34A	–	–	–	–	1	60	27	12	13	113	–	SA LO		99	96	76	39	–	–	Dry	9
34B	5 to 7	27	13	14	0	47	31	22	13	117	A-6(5)	LO	CL	100	98	85	53	12	120	Dry	9
36A	–	NP	NP	NP	0	40	42	18	18	104	A-4	LO	ML	100	99	91	60	–	–	Dry	10
36B	5 to 7	–	–	–	–	–	–	–	14	117	–	–		–	–	–	–	14	120	Dry	10
37A	–	28	13	15	1	50	27	22	21	108	A-6(5)	SA CL LO	SC	99	96	84	49	–	–	11	25
37B	3 to 5	28	15	13	0	45	29	26	16	113	A-6(5)	LO	CL	100	100	89	55	15	116	11	25
37C	8 to 10	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	18	109	11	25
38B	–	NP	NP	NP	9	81	7	3	10	117	A-2-4	SA	SP-SM	91	80	55	10	–	–	14.5	30
39A	–	27	18	9	0	46	33	21	20	100	A-4(4)	LO	CL	100	94	84	54	–	–	14.5	30
39B	6 to 8	28	15	13	1	44	27	28	13	119	A-6(5)	CL LO	CL	99	97	84	56	14	113	14.5	30
39C	15 to 17	30	16	14	0	49	31	30	14	113	A-6(7)	LO	CL	100	100	91	61	15	119	14.5	30
41A	–	–	–	–	–	–	–	–	–	–	–	–		–	–	–	–	–	–	12.5	30
41B	5 to 7	30	18	12	1	39	26	34	14	113	A-6(6)	CL LO	CL	99	99	87	60	17	114	12.5	30
41C	10 to 12	–	–	–	0	47	29	24	13	115	–	LO		100	98	83	53	15	–	12.5	30
42A	–	NP	NP	NP	0	67	18	15	12	111	A-2-4	SA LO	SM	100	99	82	33	–	–	14.5	30
42B	2 to 4	–	–	–	–	–	–	–	9	127	–	–		–	–	–	–	11	122	14.5	30
42C	–	NP	NP	NP	4	78	11	7	10	124	A-2-7	SA LO	SM	96	91	71	18	–	–	14.5	30
42D	–	–	–	–	–	–	–	–	12	118	–	–		–	–	–	–	–	–	14.5	30
44A	–	–	–	–	0	37	38	25	22	98	–	LO	CL?	100	99	91	63	–	–	5	33
44B	5 to 7	29	15	14	1	41	31	27	13	115	A-6(6)	CL LO	CL	99	98	87	58	13	117	5	33
44C	12 to 12	NP	NP	NP	0	40	37	23	13	117	A-4	LO	ML	100	99	89	60	13	126	5	33
46A	–	–	–	–	1	45	32	22	15	107	–	LO	CL?	99	94	83	54	–	–	11	30
46B	5 to 7	28	15	13	0	50	27	23	13	117	A-6(4)	SA CL LO	CL	100	97	80	50	7	–	11	30