

WELL NUMBER 2751 / 20344 LOCATION Kanawha Co. W. Va
 UNIT Tuscarora SS APPENDIX I-Core description/

WELL NUMBER	LITHOLOGY	SAMPLE #	DESCRIPTION	THICKNESS
6768			Fale red (5R 6/2) to grayish red (5R 4/2) ss interbedded w/ shale, and sh rip-ups, hematitic, mottled, w/ vague, indistinct laminae, evidence of vertical burrows (Spiriferus) on bedding planes f-vt ss w/ hematitic shale laminae and clasts & 2" rip up (hematitic sh. clasts) zone	68.5
		7568.85	1.5" discontinuous, mottled, hematitic sh laminae burrowed horizontally and vert.	
6769			0.7" horiz. hematitic laminae, horiz. & vert burrows, dis ript lam.; hem. shale clasts	69.0
			1.0" sh. interbed at 69.0	69.1-3
			2.5" thin wavy laminae, highly disrupted (hematitic) burrowing, dish & pillar? many vert. fractures healed w/ qtz; aligned horiz	2"
			0.3" sh interbed (hem) up to 0.5" long vert. # 11	69.6
			0.9" ss, wavy, mottled burrowed hem. lamin.	
			0.4" hem sh interbed w/ green shale clast, soft sed. deformation into ss below	
		7570.0	4.8" hematitic pl. lam. wavy, disrupted mottled lam. lower upper 0.6" > hem. lam. mottled lam. a from drk red to white in appearance	6"
6770				70.0
6970.1			Lt. gray to light gray (N7-N8) v.f. ss, pl-lam; opaque & 1% horizontal fracture, sm. vert. fractures, limonite surface stain well cemented	70.1
			horiz. to sub-horiz. fractures, vertical fractures cementation may be different along fractures	2.8
			horiz. laminations (lighter in color)	70.3
				70.4
				25"
				70.6
				70.95
6771		7571.1	horiz. to sub-horiz. lamin.; more massive, lam. vague, mottled radiograph shows large burrow	
			horiz. & vert. fractures	
			troughs & voids @ base?	3.5"
6771.4				71.35
			v. H. gray (N8) to H. gray (N7), H. brownish gray 5YR 6/1 and drk. greenish gray 5GY 6/1, v.f. gr. ss, me v. thin lam. (limonite) very mottled; many fractures sub-horiz, sub-vert	71.8
			drk. greenish gray oilstone layer at base, distinctive contact	71.9
6771.9		7572.0	Lt. gray (N7) and pale red (5R 6/2) v. f. gr. ss, upper 1" faint, distinct lam. horiz. vertic. fractures, lower 3" very mottled, perhaps 2 burrows (0.5" wide) lam. and fractures vary in direction	71.97
				4.6"
				72.4

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 UNIT 2

LITHOLOGY	SAMPLE #	DESCRIPTION	THICKNESS
		top 1" mottled as above, broken w/ dark laminations, green area; lower 1" begin to see horiz lamin. (appear as difference in cementation, discontinuous, squashed green sh. clasts, fractures vary.	2"
	7572.9	diagonal fracture, horiz lam more abund., appear talice like limonite dots, vertical fracture diag fract. obsets lam (disk and pillar)	72.85
		Lt. gray (N7) v.f. ss, laminae well defined, discontinuous strange stone pipe feature, at base lam. show dip, less well defined as 72.6; red color lost	6"
		Lt gray (N7) laminae almost festoon type dipping in lower part, obset mechelom vertical fract. - climbing ripples (x-bed) - antidunes	73.35
	7573.9	End Box 1	73.65
		laminae looks white in core, dk in transmitted light	4.8"
		Start Box 2	74.0
	7575.3	Lt. gray v.f. gr. ss; upper 0.5" med L x-beds, sets 0.2"	74.52
		Middle 2.3" low L x-beds opposite direction from above scolithus burrow, laminae as such	5"
		lower 0.5" higher L x-beds, some laminae disrupted, opposite dir scolithus on bedding plane	74.75
	7575.6		74.8
		11 to bed	74.85
		Lty. to med H. gr. (N7, N6) v.f. gr. ss; laminae discontinuous set as above, more argill. looking, white gr. laminae assoc. L x-bedded, discontinuous, some unusual vertical features irregular fracture.	4 1/2"
	7576.1		74.9
		Lt to med gr. (N7, N6), wavy x-lam. (disrupted by burrowing) large round horiz. burrow, burrowed and mottled; lower part non-distinct x-lam; lower rt. corner cementation?	1.5"
		difference	75.0
		wavy, non-ll slightly discont. lam, disrupted, mottled by burrowing; pellets in center bottom; different color over lam.	2.5"
		Lt gr. massive, no structures; light colored dots - some more porous lim. stain in dots	75.05
	7577.0		75.1

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	LITHOLOGY	SAMPLE #	DESCRIPTION	THICK. NESS
6777				6777.1
6777.1				6777.25
			Lt. grey (N7) v.f. gr. vague x-bed, x-lam; mottled, scolithous on bedding plane, color diff in upper section (from burrowing?)	1.8"
				6777.4
			Lt. grey (N7) v.f. gr. x-bedded, x-lam (wavy, non-ll, slightly discont.) mottled, traces on lower bedding plane (bottom); lighter areas appear more porous, less cemented, ass. w/ lam. right edge, lam	6777.6
				3 p/inch
6778			beds very diffuse	6.5'
				6778.1
				6778.3
			Lt. grey (N7) v.f. gr. opaques, x-bedded, x-lam, lam wavy, non-parallel; in cleaner areas some mottling; x-beds below curved, non-parallel (Upper part lam. offset, fracture through x-beds planar beds	9"
6779		7670.9		6779
			Lt. gr. (N7) v.f. gr., vague bedding, broken by vert. burrow along which opaq. clay is concentrated, pass. fracture; horiz. burrow; lower part x-bedded (Strong color differences (cementation))	6779.65
6780		7680.0		4.5'
			Entire 2' section vert. frac.; Lt. gr. (N7) v.f. gr. low L (horiz on slab face) pl. bed; pl-lam; vert. fract. overprints;	6780
6781		7681.0		
			Another fract? > opaques, clays; L from main fract. Cons. of opaques, healed, darker	2'

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LITHOLOGY	SAMPLE #	DESCRIPTION	THICK-NESS
6782	7582.0	Lt. gr. (N7) x-bed, x-lam; high L fault ~ 1/2" displacement of beds, healed; vertical fracture continues; healed fault continues from above	6782 3" 6782.4
		Lt. gr. (N7) x-bed, x-lam. in center section vague. Vertical fracture continues altho not broken apart; healed fault continues, ends along laminae	4.5" 6782.8
6783	7582.9	do not have core piece	6783.1
		Lt. gr. (N7) x-bed on oppo direct. marked by concentration of opagues	5" 6783.5
		Lt. gr. (N7) x-bed, x-lam marked by conc. of opagues set ~ 1.5-2 cm thick (top); enechelon vert. fract (top)	6" 6784
6784	7584.0		6784.25
		Lt. gr. (N7) x-bed, x-lam, large clay, sh clast, sub-vert. fractures, faults - pass offset (small); vert. burrows (Skol.) break bedding, horz. & vert. burr distord lam. non-cont - cont. Trace fossil on bed plane	1.5" 6784.3
6785			7" 6785
		Lt. gr, v. f-gr, x-bed vag defined, small argill clasts; am-packed porous areas w/clays; fractures discontin. at various directions (near, stemming from clasts) Sub-horiz fractures along breaks massive m structures at base	6785.5 6785.7
6786	7585.1		

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	LITHOLOGY	SAMPLE #	DESCRIPTION	THICKNESS
6786		TS86.0	Lt. gr. (N7) v.f. gr. ss; md. dk gr (N4) to drk gr (N3) shale on upper surface; sh. clasts compacted and non-comp. comp. ones along bed. pl.; clasts dk gr to lt gr x-beds; x-lam. trunc.; lam gr red (10R4/2); iron CO_2 exdi. fracture sub vert and horiz, disarticin. Lt. gr w/ gr. red x-bed & spots; disrupt. (burrow?) at base; pyrite on top; > apog. in red areas; red areas @ base	1" 9.6" -6786.5 2" -6786.45 -6786.5
		TS86.9	Gr. rd, md. drk gr to lt gr (10R4/2, NA, N7) f. gr. ss, sharp contact b/w red-md drk gr, x-bedded, x-lam, wavy, crinkly lam. gradational w/ underlying lt. gr. ss, disarticin. lamin. > priority; lt gr. ss v. vague, pt-beds fractures of many orientat.	6" -6787.0
6787		TS87.0	Dk gr (N3) sh. parting; lt. gr to med lt. gr (N7, N6) v.f. gr. ss w/ f.-ss gr. ss. interbed, etc. w/ some sh. (argill) clasts. Horiz. fract. Grades into pale olive 10Y6/2 and pale red 10R6/2 mottled unit 0.1m thick. Irregular contact w/ med lt. gr to med dk gr N6 to N4 mottled and burrowed; v.f. gr. to v.s. gr. ss; bedding disrupted; 2 large vert. burrows; argill. areas (clash burrows)	-6787.3 -6787.4
		TS87.9	Sharp contact w/ shale, siltstone below & 5mm; below lt. to med gr v.f. gr. ss w/ dk gr. laminae, wavy, nonparallel becoming vague and wider spaced in lower section; shale at base sharp contact.	3.5" -6787.7 2.5" -6788
6788			Lt. gr (N7) v.f. gr. ss., x-bed. x-lam. v. vague, mottled, bitu/baked disrupted lam.; argillaceous mater. filling burrows; traces on upper surface. lower surf. not horiz fract w/ 2nd fract. Pyrite at base. limonite stain; horiz fract separates w/ below	-6788.4
			Lt. gr (N7) v.f. gr. to v. coarse gr. ss, x bed. w/ lam. of coarse gr. ss. fine upward seq w/ horiz fract. in coarse bed. Sev. fining up. e.g. ripple bedding above coarse bed; sm. clay clasts. Trail on top, burrow, clasts on bottom; Fractures horiz curving to vertical. Inversely graded beds	5" -6788.6 3.5" -6788.75 -6789.0
6789		TS89.1	Lt. gr (N7) v.f. gr. to coarse gr. ss x-bedded in sm. (2 cm) swing upward sequences. Grades into v.f. gr. ss w/ vague x-beds sub-vert. fract. at base; Argill. gr.; horiz fract at top inversely graded laminae sets as up?	7.5" -6789.05 -6790.0
6790		TS90.1	Lt. gr. to med. lt. gr (N7, N6) v.f. gr. ss wavy, non-ll contin. and disartic. lam. sh. clasts, some med to coarse sand gr.; color change around clay - lighter (more porous?) small disc. vert. fractures, horiz fract. b/w pieces. limonite stain. Grades into lt. gr, v.f. gr. ss w/ lower clasts. Contact w/ more homog v.f. gr. ss, x bedded below, fine lam. small horiz fractures; top shows clay impurities	2.5" -6790.2 9.5" -6790.5

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	LITHOLOGY	SAMPLE #	DESCRIPTION	THICKNESS
6790.5			Lt. gr (N7) v.f. gr ss; x-lam.; sm. horiz fract, discontinuous	1" -6790.6
6791		7591.1	Lt. gr (N7) v.f. gr. ss., burrowed, mottled, one irreg. disc. wavy lam. below x-beds, horiz. burrow (lim. stain) flattens out on other side; lam disrupted. (clay lam)	3.5" -6791.0
			(doesn't match)	-6791.35
			Lt. gr (N7) v.f. gr to coarse gr. ss in casing up sep., 2' bedded, sh. clay clasts w/ fracture horiz. vert; top and bottom fract (2nd cm) 3' as upward sequence 2-3 cm thick	2" -6791.5
6792		7592.3	Lt. gr (N7) v.f. gr ss, homogeneous, w/v. vague x-bedding one coarse gr. near base; Med. gr. sand on top and bottom	-6792.2
			homogeneous at base	4"
6793		7592.95	Lt. gr (N7) v.f. gr ss, homogeneous, limon stained lam. at top, ss. w/ Med. gr. sh; no visible sed. struct. in central portion; near base x-bed (lam); clay lam. lim. stain as above vertical fract. vague pl-beds	-6793.0
				-6793.25
				6"
				-6793.75
6794		7594.25	sm. fract. piece, Lt. gr. N7, sh. at top, clasts, iron (red) and lim. stain	0.5" -6794.2
			Lt. gr (N7) v.f. ^{fine grained or grain} gr ss; med. dk gr to dk gr sh at top (N4. N3) is sharp contact, irreg. surface (burrows clasts); grades in section where clay lam. shows soft sed det - distorted lam to more homogeneous layer w/ pos. burrows, hirsute, or mottling; fractures vertical, horiz, well dev. horiz fract. at base. (do not fit)	1" -6794.5
6795		7594.9	Lt. gr (N7) v.f. gr. ss, homogeneous, vague x-beds, small clay clasts in upper part; sub-horiz. fract. at base, limonite n/a.	-6795.0

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	LITHOLOGY	SAMPLE #	DESCRIPTION	THICKNESS
6795			Lt. gr. (N7) f. gr. ss, distorted clay lam. at top (compaction) horiz. burrows; lower layer more homogen. v.og. mottled, bioturb - one horiz bur. Horiz tract. continuous; discord sub vert. dub horiz trad; scattered med. cs gr. <i>disc. bit</i>	6795.1-6795.35
			Lt. gr. (N7) to med. dk. gr. (N4) f. gr. to coarse gr. ss; shale (dk gr. N5) at top; upper section bimodal, x-bed possible, vague; lower half grades in clay lam, darker in color, distorted lam. x-lam. bimodal; coarse fraction; vert. burrows possible; fract. horiz. vert. discontinuous; sh. at base	6795.65-6795.7
6796		TS 96.1	Lt. gr. to med. dk. gr. (N4-N4) v. f. gr. ss. sh. at top, center, dk. silt. at base; upper layer, mottled, bioturb. w/ dark ellipse, pink abund. along dark layer strongly distorted & burrowed. Sh. parting sharp contact. Lam. below distorted, finely lam, burrowed, grades into dk. silt. ; Small discontin. fract.	6796.0-6796.2
6796.3			Lt. gr. (N7) f. to coarse gr. ss, x-bedded in fining upward seq. dipping in opp. dir.; large, argill. clast at base, fract top, bot. vert. horiz. some very coarse sand gr. lam	6796.3-6796.7
			Lt. gr. (N7) f. to med. gr. ss, x-bed, x-lam, fining upward seq. clay lam. claston at base; dk. clay, silt. on top and bottom. burrows, trails in bottom; fractured.	6796.7-6796.9
6797		TS 97.15	Lt. gr. (N7) f. to coarse gr. ss, x-bedded in fining upward seq. (Colomile) Co. along fract along coarse gr.; structures horiz. vert. N/2nd. grs; pebbles along bottom	6797.0-6797.35
6797.8		TS 97.9	Lt. gr. f. to granular gr. ss, x-bedded in fining upward seq. in coarse and pebbly portion; clay/argill. clasts (dark) w/ white argill. caps above (white gr. coating) clay clasts on bottom; pebbles x-beds a direction w/ fining upward seq.; truncated x-beds; caps over pebbles at base; bottom fract.	6797.6-6797.9
6798			Lt. to med. lt. gr. (N7, N6) med. gr. to pebbly ss, x-bedded, porous zones (holes) iron coatings along porous zones; fract. horiz. vert. discord.	6798.0-6798.2
6799		TS 99.1	Lt. to med. lt. gr. (N7, N6) med. to pebbly gr. ss, x-bedded in vague fining upward seq.; banded appearance of colors, gr. size; coarse at top, silt. base; coloration variations - color, char.; clay coatings	6798.2-6798.75
		TS 99.7	Lt. to med. lt. gr. (N7, N6) fine to v. coarse gr. fining upward seq. vague, banded appearance, disc. argill. lam; coarse. variations - color, texture-like but more stringy; clay coatings.	6798.75-6799.1-6799.2-6799.5
	med. ss		break	

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LITHOLOGY	SAMPLE #	DESCRIPTION	THICKNESS
	TS00.2	lt. gr. to dk. gr. ... ss. gr. x-bedded; sequence f - as up cannot tell; cement variations; graded beds med to cs gr	6799.7
	TS00.7	lt. gr. to med. gr. (N7, N5) v.f. gr. x-lam. banded appearance cement variations; Sharp contact along clay lam. to lt. gr. ss to v. coarse gr. ss x-bedded, grains arched, cement variations, vert. burrows top	6800.5
	TS01.25	lt. to med. lt. gr. (N7, N6) v.f. gr. ss. x-bedded, x-lam.; clay lam. disrupted, distorted (burrowed?); structures small, discont. blk sh. slts on top and bottom.	6801.35
		lt. to med. gr. (N7, N6) v.f. gr. ss. low L' d. three beds; shale at top & bottom; fract. discont. horz. vert. burrowed; dark areas appear	6801.75
6801	TS02.1	lt. gray (N7) med to granule gr. ss., fining upward seq. clay coatings broken due to fract.	6802.0
		lt. gr. (N7) v.f. gr. ss. x-bedded, x-lam.; clay lam. disrupted; med. to coarse ss above lower lam; mottled appearance; similar in areas to cement variations; blk sh. at top; fract. horz.; discont. along lam	6802.25
		Med. lt. gr. to med. gr. (N4, N5) v.f. gr. ss. x-lam., clay lam. disrupted; shale at base blk & thick	6802.4
	TS02.74	(scattered med. gr.) lt. gr. (N7) v.f. gr. ss, mottled (no real structural apparent); clay lam. disrupted; disrupted; packets of clay arched gr. (primary) ss. w/ disrupt. lam. Sh. at base w/ pos. trail sand.; fract. unoriented.	6802.65
6802		lt. gr. (N7) v.f. gr. ss. x-bed. vague, mottled appearance, dk area delineates bed plane, lam; upper part. dat. small areas, discont. (dark pellets and. of trails? on top.; sh. at bottom; vert. fossils (look into)	6802.9
	TS03.5	lt. gr. (N7) v.f. gr. ss, homog., mottled, bioturb.; small dark pellets, disrupted, distorted clay, silty lam. at base; one ...; blk clay sh. at top and bottom; fract. vert. horz., discont.	6803.35
	TS03.7	in	6803.7
6803	TS04.0	(scattered med. gr.) lt. gr. to med. dk. gr. (N7, N4) v.f. gr. ss, upper layer vag. x-bedd. w/ offset lam., porous packets (clay clasts); some cs. to v. cs sand gr.; sh. present w/ thin clay lam. - banded appearance; wavy, continuous lam; structures unrounded; sh. at top & bottom.	6803.9
		Med. lt. gr. gr. br. dk. gr. (N6, 5VR 4/1) v.f. gr. ss w/ scattered v. cs. sand gr. v-beds disrupted by burrows, bioturb.; orange colored ocher of some	6804.1
6804	TS05.0		6804.7

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6804		areas w/cont. of cs. gr. fraction; lam broken, distorted	6804.1
	7505.5	v. H. gr to H. gr (N7, N1) ft. gr to v. cs. gr. x-bedd. in fining upward seq. interstitial clays (H. olivgr 5Y6/1); cs. gr. layers porous; cement variations	6804.5 2.5'
	7505.9	Some as above	6804.6 1'
6805		lt. gr to med. gr w/lt. ol. gr clasts (N1, N5, 5Y6/1); cs. to pebb. ss, x-bedded w/interbedded lg. (2-4cm) argill. clast.; cs. gr. fragments; clay coated; bimodal in places; hematite rims; bottom darker; slickensided on base.	6804.7 2.3' 6804.9
	7506.8	lt. gr to H. olive gr (N7, 5Y6/1) v. cs. ss w/argill. matrix, limonite areas. Slip. contact, clay laminae to cs-mixed ss w/argill. matrix, vague bedding? very friable	6805.7 3.0'
6806	7507.0	lt. gr, H. olive gr, greenish gr (N7, 5Y6/1, 5Y6/1) v. f. gr. ss w/some med to coarse sand gr.; x-bed marked by longer gr.; burrows vertical at top and base fract. vertical; blk sh. at base v. bedding	6805.75 6805.77 2" 6806.15
	7507.55	lt. to med gr. yell. gr. H. olivgr (N7, N5, 5Y6/1, 5Y6/1) med to v. cs. gr. ss, argill. matrix, x-bedded, areas of dark lines alternating cs to fine beds; cement variation at top; sh. sits blank at top porous at base	6806.4 2.5' 6806.7
6807			
6808	7507.45	lt. gr. yell. gr to H. olive gr (N7, 5Y6/1, 5Y6/1) en. to v. cs. gr. ss w/argill. matrix, cement variations, rims to limonite-bedding	6806.9

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	LITHOLOGY	SAMPLE #	DESCRIPTION	THICKNESS
		TS09.55		6808.55
6809		TS10.0	Lt to med gr, H olive gr (N7, N5, 5Y6/1) med to pebbly gr ss, x-bedded w/ cement variations, argill. matrix, coatings, coarser at base; iron coatings.	6808.9
		TS10.3		3.5"
		TS10.4		6809.1
		TS10.45	Lt to med dk gr, yell. gr (N7, N6, 5Y7/2) f. gr. to pebbly ss, argill. matrix, dk streaks at top; grad ex. of cement variations; becomes finer toward bottom; Sharp contact w H. olive gr. lam. bed below, lg. pebbles at base.	1"
				6809.45
6810		TS11.0	Lt. gr. to H. olive gr (N7, 5Y6/1) ss to pebbly ss, fining upward seq, argill. matrix, cement varied at top - sharp contact; hematite at bottom.	6809.7
		TS11.2	Lt. gr. to H. olive gr (N7, 5Y6/1), fine to pebbly gr., clay coated, matrix, fining upward seq. x-bedded, lamina. at base, good con. variations clasts, iron.	3"
				6810.1
				6810.35
6811		TS11.9	Lt. gr. to yell. gr (N7, 5Y7/2) v. f. to co. gr. ss, turning bluish in color, small clear areas, grains? bedding?; yell. clay clasts? silty? S.	6810.8
				2.5"
				6811.0
		TS12.65		6811.6
		TS12.80	Lt. med. gr, yell. gr - dusky yell (N7, N6, 5Y7/2, 5Y6/4) v. f. to co. gr. ss, x-bedded. Upper pt - co. gr. x-bedded w/ con. variations following lines of x-beds; fine-gr. below, darker, x-beds in two direct, one heterodirectional. Cement variations at bottom, broken; con. variations - bounding ripple drift lam.	4"
6812		TS13.2	Lt. med. gr, med. yell. brown (N7, N6, 10YR 5/4) pebbly to med. gr. ss; upper pebbly - co. gr. x-bedded, con. variations, sorted, along bedding & x-bed building. Below - color Δ x-beds in 2 directions, con. varied, bands along slipper set.	6811.9
		TS13.35		6812.5
				6812.45
6813		TS14.0	Lt. H. olive gr, yell. gr. (N6, 5Y6/1, 5Y7/2) ... coarser ss, x-bedded, x lam. co. upward, cement variations - banded along beds; lam.	6812.9

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	LITHOLOGY	SAMPLE #	DESCRIPTION	THICKNESS
6813.				6813.1-
		TS14.2	lt-med. gr (N7, N6) cs gr. ss, vague x-beds (2 directions?) fining-up seq. com. variations - color lvs to dk-gr along beds gr. bedded	6813.2
		TS14.3		35"
				6813.5
				6813.75
6814.		TS14.9	lt gr to yell gr (N7, S, Y 7/2) cs. ss; com. variation large yellowish and vertical areas; vague x-beds. gr. clay coated; grains, cemented and un cemented good exposure on top.	25"
		TS15.1	lt gr to pale orange (N7, 10 VR 9/2) cs. gr. clay coated ss w/ some cement variations	15"
		TS15.25	lt gr - pale yell br (N7, 10 VR 6/2) cs. gr. ss, x-bedded, clay coated grains w/ cement variations along and x-cutting beds.	6814.1-
		TS15.4	lt gr - Halim gr (N7, 5Y 6/1) cs. gr. ss, x-bed, gr. coated, com. variat. along x-beds, lam. 2nd at base	2"
				6814.5
				6814.8
		TS15.7	lt gr (N7) cs. gr. ss, x-bedded, com. var. along beds, grains coated.	25"
6815				6815.2
				6815.4
			same as above	6815.5
		TS16.6	lt to med gr to pale yellow brown (N7, N6, 10 VR 6/2) cs. to med gr, finer at top, thick bed, vague x-beds of cs. sand, good com. variations; gr. coated.	3"
				6815.8
6816				
				6817.1-
6817.		TS18.2	lt gr - Halim gr (N7, 5Y 6/1) med to cs. gr. ss, x-bedded, x-lam w/ser v. cs to pebbly gr.; good cement. variat. following beds and on top and bottom (clay coatings); cement - gray banded appearance	6817.25
			lt gr, pale yell br, Halim gr (N7, 10 VR 6/2, 5Y 6/1) granite to med. gr. ss, x- bedded x-lam, fining upward sequence, good cement variations along lam; lam. disrupted (burrowing?) hematite (graded bedding)	6817.5
6818.		TS18.9	lt gr (N7) v. gr, x-bed, x-lam, few porous pockets at top; sh on top - vertical burrows; vertical fract - white shell; horn fract.	