



USGS Hanna Draw - Core

Measured by: *6/4/202*
Date: *6/4/202*

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Leg/Recovery	Biot?	Soil	Cobble	Granule	Very coarse	Coarse	Medium	Fine	Very fine	Silt	Shale	MD (ft)	Notes
								<i>n</i>				142	yellow / gray
								<i>n</i>				143	abundant burrowing and organic rich m. gray siltstone cm-scale relationships
								<i>n</i>				144	heterolithic l. gray ss - org rich some charcoal
								<i>n</i>				145	slightly inclined heterolithic, discontinuous abundant burrows + org. parting
								<i>n</i>				146	ribbed, m
								<i>n</i>				147	ripple org rich partings d. gray to gray siltst isolated
								<i>n</i>				148	d. gray siltstone heterolithic concrete horn, yellowish cm-scale pencil burrows
								<i>n</i>				149	heterolithic up to 5 cm and org. bands isolated ripples local burrows
								<i>n</i>				150	micro fractures / drying out wavy org. drapes of mudstone? mm scale burrows at base
								<i>n</i>				151	l. gray / tan siltstone med. gray l. / gray alternating layers d. gray siltstone dry out -> torn upper banding mm scale
								<i>n</i>				152	ripples + burrows burrowed lam org partings on ripples d-m. gray siltstone



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Measured by: ^{MD}
Date: 6/5/2024

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												152	org matter, scattered / burrows d. grey shale with burrows
												153	disrupted bedding charcoal, abundant small flake org. mats in upper ss
												153	SSD - bioturbated before
												154	abundant charcoal flakes charcoal / root burrows charcon
												154	roots, SSD, bioturbated coal w shikher side
												155	white vitric black coal + shikher - ^{large} mm scale d. grey more clayey black, internally deformed coal shikher
												156	d. brown leaf mats black coal d. brown leaf mats
												157	
												158	crumbly, shikher fragments cuticle flakes, plant fragments d. grey shale
												159	d. grey - black shale
												160	wavy isolated ripples flaky d. grey black shale
												161	d. grey black (lamated) coal abundant cuticle
												162	grey silted d. brown d. grey shale

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												162	
												163	yellow org. material
												164	heterolithic ss-shale w/ burrows, org/black coal fragm
												165	m grey heterolithic ss with abundant burrowing and distorted laminae
												166	SSD CRL multi-dia ripples med grey shale coal fragments
												168	orange abundant
												169	med grey shale v. regular beds/burrows coal fragm. 1cm burrows
												170	orange lining around clasts faint ripples 3mm - 1cm burrows SSD - base
												171	
												172	distorted fracture CaCO3 filled CRL
												173	m grey siltstone disrupted, irregular bedding in fine lenses org. fragm



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Measured by: *WSP*
Date: *6/7/2024*

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												192	loaded base og. drapes
												193	
												194	1 cm burrows
												195	d. brown SSD
												196	drying cracks d. grey carb shale
												197	
												198	d. brown - grey carb shale with some l. grey silt/clt ripple beds
												199	0.5 cm ripples + SSD
												200	0.8 cm - 1 cm alternating ^{grey} ss - ^{d. grey} silt/clt with ripples + burrows cloudy - concretions
												201	
												202	d. grey shale w. shifer beds, some ripples



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									N			202	pencil burrows - top of bed d. grey silt
									N			203	
												204	
												205	d. grey fine carb shale d. grey fine carb shale
												206	ms scale pencil burrows
												207	org. drapes on ripples
												208	crumbles w. slickensides d. grey mudstone (f. d. brown/grey carb shale)
												209	
												210	
												211	d. fm
					green?							212	SSD



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							<i>N</i>					212	<i>1.2 cm brown abundant org. material</i> <i>org. drapes</i> <i>inclined</i> <i>fracture w. calcite fill</i> <i>vert. fractures</i>
		<i>l. orange</i>				<i>a</i>						213	<i>gray w. abundant org</i> <i>high flakes</i>
							<i>N</i>					214	<i>charcoal lined ripples</i>
												215	<i>CRL</i>
												216	<i>Charcoal lined ripple</i> <i>charcoal w mica</i> <i>in gray siltstone</i>
		<i>orange small conch</i>										217	<i>CRL</i> <i>SSD + bur rows</i>
												218	
							<i>N</i>					219	
												220	<i>org. charcoal drapes</i> <i>CRL with</i> <i>broken laminae</i> <i>SSD</i>
												221	
							<i>N</i>					222	<i>abundant org draps</i> <i>1 cm smooth yellow concretion</i>



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												222	org. charcoal drapes
												223	
												224	orange charcoal, draped, SSD. faint SSD
												225	faint SSD
												226	SSD org drapes
												227	cross-bedded ss w. (org) charcoal drapes on forests + mica flakes
												228	flood plain rippled ss w charcoal drapes
												229	green-bluish discoloration smells like Sulphur orange concret
												230	clayey/clayey petrolithic
												231	d. brown / carb shale d. grey carb shale w stick-sides black coal anthracite coal
												232	coal in pyrite



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												232	Coal, brittle
												233	black clay?
												234	
												235	
												236	almond + pyrite
												237	d. brown - black coal with white layers
												238	waxy
												239	d. brown - black waxy
												240	
												241	
												242	

◇ P

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◇ P

▷ siderite

gypsum vvv

◇ siderite

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												242	
												243	
												244	SSD abundant coal frags. in silty coal
												245	vert fracturing black coal
												246	
												247	d. brown / black shale / coal
												248	silty w. coal fragments d. brown
												249	int. coal
												250	bone coal
												251	shiny coal silty blob w. yellow lining (sulphur) w. gypsum
												252	bone coal

V

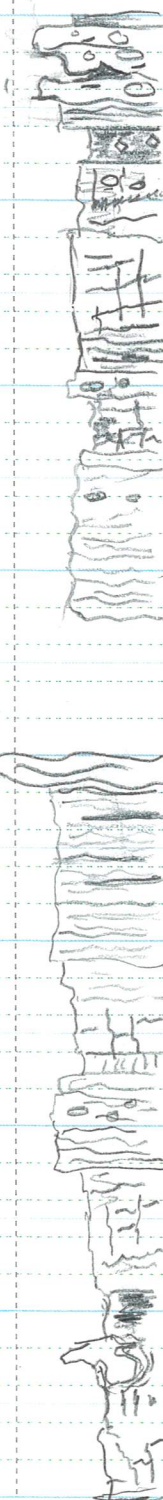
side

side

side

side

around blob
smells like Sulphur
SSD silty w





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												252	
												253	bone coal
												254	
												255	
												256	
												257	
												258	
												259	black coal
												260	gypsum vv silt
												261	o siderite
												262	