

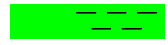



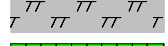













































Dynamic Legend prints only the Symbols on the printed Section of your log

	Anhydrite primary (Rock)		Minerals dark (Grain)
	Claystone colored (Rock)		50 percent (Oilshow)
	Dolomite (Rock)		25 percent (Oilshow)
	Marlstone dolomitic (Rock)		75 percent (Oilshow)
	Salt (Rock)		Anhydritic (Accessory)
	Shale medium gray (Rock)		Sandy (Accessory)
	Siltstone (Rock)		Argillaceous (Accessory)
	Sandstone (Rock)		Bituminous (Accessory)
	Anhydrite primary (Nodules)		Calcareous (Accessory)
	Anhydrite primary (Stringers)		Carbonaceous (Accessory)
	Claystone gray (Stringers)		Chloritic (Accessory)
	Coal (Stringers)		Cryptocrystalline (Texture)
	Dolomite (Stringers)		Dolomitic (Accessory)
	Marlstone calcareous (Stringers)		Ferruginous staining (Accessory)
	Marlstone dolomitic (Stringers)		Glauconitic (Accessory)
	Shale gray (Stringers)		Micaceous (Grain)
	Siltstone (Stringers)		Micromicaceous (Accessory)
	Anhydrite (Cement)		Microcrystalline (Texture)
	Calcareous (Cement)		Pyritic (Accessory)
	Dolomitic (Cement)		Silty (Accessory)
	Gypsum (Cement)		Very Good (reservoir quality)
	Pyrite (Cement)		Fair (reservoir quality)
	Argillaceous (Matrix)		Non (reservoir quality)
	Clay (Matrix)		Slide (Slides)
X	Intercrystalline - interfragmental - intergranular (Porosity)		
P	Pin point (Porosity)		
e	Earthy (Porosity)		
V	Vuggy (Porosity)		
	Feldspar (Grain)		

* Abundance: Trace  Occasional  Common  Abundant  No Indication 

Regular Legend

Rock Types and Thin Beds

Whole Bed	Stringer	Nodule	Breccia	Clast	Pebble	Grain	Rock Type
							Anhydrite - primary
							Anhydrite - secondary
							Argillite
							Barite
							Bentonite
							Breccia
							Cement
							Conglomerate - mixed
							Conglomerate - dark chert
							Conglomerate - light chert
							Conglomerate - varicolored chert
							Chert - dark
							Chert - fossiliferous
							Chert - light
							Chert - tripolitic
							Chert - varicolored
							Claystone - colored
							Claystone - gray
							Coal
							Dolomite
							Ferruginous
							Feldspar
							Gypsum
							Igneous - acidic
							Igneous - basic

Whole Bed	Stringer	Nodule	Breccia	Clast	Pebble	Grain	Rock Type
							Igneous - metamorphic
							Limestone - grain supported
							Limestone - mud supported
							Muddy Inclined Heterolithic Strata
							Marlstone - calcareous
							Marlstone - dolomitic
							Mud breccia
							Mudstone
							Paleosol
							Phosphate
							Quartz
							Salt
							Shale - black
							Shale - dark gray
							Shale - medium gray
							Shale - light gray
							Shale - brown
							Shale - green
							Shale - red
							Siderite
							Sandstone
							Siltstone
							Sandy Inclined Heterolithic Strata
							Till - glacial
							Volcanic (Tuff)
							Welded Volcanic (Tuff)

Accessories

	Anhydritic		Cherty - tripolitic		Illitic		Salt casts
	Argillaceous		Cherty - varicolored		Kaolinitic		Sandy
	Baritic		Chloritic		Lithic Fragment		Sideritic
	Bentonitic		Clayey		Marly - calcareous		Siliceous
	Bituminous		Dolomitic		Marly - dolomitic		Silty
	Calcareous		Ferruginous staining		Micromicaceous		Slickenside
	Carbonaceous		Fractures		Mixed layer clayey		Styolitic
	Cherty - dark		Glauconitic		Montmorillonitic		Tuffaceous
	Cherty - fossiliferous		Gypsiferous		Phosphate pellets		Zeolitic
	Cherty - light		Gibbsitic		Pyritic		

Miscellaneous Grains

	Biotite		Mineral crystal		Orthoclase
	Glauconite		Mineral - dark		Plagioclase
	Mica flakes		Muscovite		Sand grain

Matrix

	Argillaceous		Marl - calcareous
	Bafflestone		Marl - dolomitic
	Bentonite		Micrite
	Bindstone		Mixed Clay
	Bituminous		Montmorillonite
	Clay		Mudstone
	Chlorite		Packstone
	Floatstone		Rudstone
	Framestone		Sand
	Gibbsite		Silt
	Grainstone		Sparry Calcite
	Illite		Wackestone
	Kaolinite		Zeolite

Cement

	Anhydritic		Gypsiferous
	Baritic		Hematitic
	Bituminous		Limonitic
	Calcareous		Pyritic
	Chert - dark		Salt
	Chert - light		Sideritic
	Dolomitic		Siliceous
	Ferruginous		

Core Track

	Indicates Cored Interval
	Indicates Lost Core

Test Track

	Indicates Tested Interval
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Rounding Track

vA	Very Angular	r	Subrounded
A	Angular	R	Rounded
a	Subangular	wR	Well Rounded

Fossils (Rock Builders)

	Aggregate grains		Algae - laminations		Algae-non descript		Algae - ootoid
	Algae - skeletal		Amphipora		Amph / no central canal		
	Belemnite		Bioclast-Idiostroma		Bioclastic		Bivalve-Megalodont
	Bivalve		Brachiopod		Brachiopods Arti		Brachiopods Disarti
	Bryozoa		Bryozoan-Digitate Bioclasts		Bryozoan-Fenestrate		
	Calcs Red Alg Rhodophytes		Calciphaera		Cephalopod		
	Chaetetes		Charophyte		Coaly or Woody Fragments		
	Coated grain		Conodont		Coral		Coral Auloporid
	Coral - branching		Coral - Cerioid favositid		Coral - digitate coenites		
	Coral - Encrusting to massise Alveolitid		Coral - Halysitid		Coral - head		
	Coral - colonial		Coral -massive chaetetid		Coral - Rugose Cerioid		
	Coral - Rugose Fasciculate		Coral - solitary		Coral - Syringoporoid		
	Coral - Thamnoporoid		Crinoid		Crinoid-Pelmatozoan		
	Cyanobacterial material		Diatom		Echnoid		
	Echnoid - spine		Epiphyton		Fish Remains		Euryamphipora
	Foraminifera		Foram- benthic		Foram- pelagic		Fossil
	Fos Molds - undiff cylindrical		Fos Molds - undiff sb spher		Fragmental		
	Gastropod		Gast - high spired		Gast - low spired		Graptolite
	Hydrozoa		Intraclast		Lg Codiacean Alg		Mollusc
	Nautiloid - Orthoconic		Oncolite		Oolite		
	Ostracod		Ost - articulated		Pelecypod		Pellet
	Pisolite		Plant Remains		Plant Spores		Radiolarians
	Renalcis		Rudist - undiff		Scaphopod		S Codiacean Alg
	Spicule		Sponge - undiff		Sponge - Algal encrustations		
	Spg - lse spics		Spg - spicr network		Stachyodes		Stromatolite
	Stromatoporoid		Strom - bulbous		Stromatoporoid - hemispherical		
	Strom - irregularly shaped or encrusting		Strom - massive		Strom - tabular		
	Strom - wafer thin		Tentaculites		Thrombolite		Trilobite
	Vertebrates						

Porosity Type Track

	Earthy - low permeability - crystals / grains less than 1 / 16 mm		
	Fenestral - voids from gas bubbles - shrinkage cracks - birdseye texture		
	Intercrystalline - Interfragmental - Intergranular		
	Fracture		Organic - Bridged - Intrafossil
	Interoolitic - Interpelletoidal		Pinpoint - voids less than 1/ 16 mm
	Moldic		Vuggy - voids greater than 1 / 16 mm

Oil Show Track

	Even staining (75 - 100% of the rock is stained) - fluoresces in solvent
	Spotted staining (50 - 75% of the rock is stained) - fluoresces in solvent
	Spotted staining (25 - 50% of the rock is stained) - fluoresces in solvent
	Spotted staining (1 - 25% of the rock is stained) - fluoresces in solvent
	Questionable oil staining - No fluorescents in solvent
	Dead oil staining - asphaltic - bitumen - pyrobitumen etc.
	Fluoresces - no visible oil staining

Textures

	Chalky		Earthy		Microcrystalline
	Cryptocrystalline		Lithographic		Slickenside
	Mudstone		Grainstone		Bafflestone
	Wackestone		Floatstone		Bindstone
	Packstone		Rudstone		Framestone

Sedimentary Structures Bedding / Cross Bedding

	Centimeter bedding		Inverted graded bedding		Massive bedding
	Decimeter bedding		Normal graded bedding		Chevron cross-bedding
	Millimeter bedding		Herringbone cross-bedding		Sigmoidal cross-bedding
	Hummocky cross-bedding		Swaley cross-bedding		Planar/Tabular x-bedding
	Trough cross-bedding				

Sedimentary Structures

	Ball and pillow		Bioturb-churned		Bioturbated-slightly		Bioturb-moderate
	Bioturb-mod well		Bioturbated-well		Boudinage		Burrows
	Churned or chaotic bdg (bdg/cross bdg)		Clastic Dike		Clastic sill		
	Desiccation crack		Dish structure		Fault-Large scale		Fault-Small scale
	Flame structure		Flute mark		Geopetal		Groove casts
	Gutter casts		Imbricated clast fabric		Lamr Fenst Fabric		
	Inclined heteroolithic strata		Load casts		Mud chips		
	Mud drapes		Minor Cemented horizon		Neptunian dike		
	Pit marks		Pull-a-part		Rand Fenst Fabric		Reactivation Surface
	Rill marks		Rip up clasts		Roots / root trace		Scour and Fill
	Slump structure		Swash marks		Synersis crack		Teepee structure
	Tool marks		Water Escape				

Sedimentary Structures Laminations / Cross Laminations

	Climbing ripple cross-lams		Contorted / Slumped lams		Current ripple cross-lams
	Flaser laminations		High angle cross-lamination		High angle parallel lams
	Lenticular laminations		Low angle cross-lamination		Low angle parallel lams
	Parallel laminations		Trough cross-laminations		Varved laminations
	Wave ripple cross-lams		Wavy laminations		

Sorting Track

	Very poorly sorted - > 10 phi size grade classes
	Poorly sorted - 6-10 phi size grade classes
	Moderately sorted - 3-6 phi size grade classes
	Moderately well sorted - 2-3 phi size grade classes
	Well sorted - < 2 phi size grade classes

Framework Track

Framework is a ratio between clastic material greater than 1/16 mm and primary void filler less than 1/16 mm.
? indicates questionable interpretation