NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS GEOTECHNICAL UNIT

SUBSURFACE INVESTIGATION

SOIL AND ROCK LEGEND, TERMS, SYMBOLS, AND ABBREVIATIONS

 ID
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					VECCOUNTION	TEDMO AND DEFINITIONS
SOIL DESCRIPTION GRADATION			HARD COST CO	ROCK L	DESCRIPTION WHEN TESTED WOULD VIELD SPT REFLISAL, AN INFERRED	TERMS AND DEFINITIONS
SOIL IS CONSIDERED TO BE THE UNCONSOLIDATED, SEMI-CONSOLIDATED OR WEATHERED EARTH MATERIALS	WELL GRADED- INDICATES A GOOD REPRESENTATION OF PARTICLE SIZES FROM FINE	1	HARD ROCK IS NON-COASTAL PLAIN MATERIAL THAT WHEN TESTED, WOULD YIELD SPT REFUSAL. AN INFERRED ROCK LINE INDICATES THE LEVEL AT WHICH NON-COASTAL PLAIN MATERIAL WOULD YIELD SPT REFUSAL.			ALLUVIUM (ALLUV.) - SOILS WHICH HAVE BEEN TRANSPORTED BY WATER.
WHICH CAN BE PENETRATED WITH A CONTINUOUS FLIGHT POWER AUGER, AND WHICH YIELDS LESS THAN	UNIFORM- INDICATES THAT SOIL PARTICLES ARE ALL APPROXIMATELY THE SAME SIZE. GAP-GRADED- INDICATES A MIXTURE OF UNIFORM PARTICLES OF TWO OR MORE SIZES		SPT REFUSAL IS PENETRATION BY A SPLIT SPOON SAMPLER EQUAL TO OR LESS THAN 0.1 FOOT PER 60 BLOWS. IN NON-COASTAL PLAIN MATERIAL, THE TRANSITION BETWEEN SOIL AND ROCK IS OFTEN REPRESENTED BY A ZONE			AQUIFER - A WATER BEARING FORMATION OR STRATA.
100 BLOWS PER FOOT ACCORDING TO STANDARD PENETRATION TEST (AASHTO T206, ASTM D-1586). SOIL CLASSIFICATION IS BASED ON THE AASHTO SYSTEM AND BASIC DESCRIPTIONS GENERALLY SHALL INCLUDE:	ANGULARITY OF GRAINS		OF WEATHERED ROO	CK.		ARENACEOUS - APPLIED TO ROCKS THAT HAVE BEEN DERIVED FROM SAND OR THAT CONTAIN SAND.
CONSISTENCY, COLOR, TEXTURE, MOISTURE, AASHTO CLASSIFICATION, AND OTHER PERTINENT FACTORS SUCH	THE ANGULARITY OR ROUNDNESS OF SOIL GRAINS ARE DESIGNATED BY THE TERMS; A	ANGULAR,		RE TYPICALLY DIVIDED AS FOLOWS		ARGILLACEOUS - APPLIED TO ALL ROCKS OR SUBSTANCES COMPOSED OF CLAY MINERALS, OR HAVING A NOTABLE PROPORTION OF CLAY IN THEIR COMPOSITION, AS SHALE, SLATE, ETC.
AS MINERALOGICAL COMPOSITION, ANGULARITY, STRUCTURE, PLASTICITY, ETC. EXAMPLE: VERY STIPP. GRAY SILTY CLAY. MOIST WITH INTERBEDDED PINE SAND LAYERS, HIGHLY PLASTIC, A-7-6	SUBANGULAR, SUBROUNDED, OR ROUNDED.		WEATHERED ROCK (WR)		PLAIN MATERIAL THAT YIELDS SPT N VALUES > 100 BLOWS	ARTESIAN - GROUND WATER THAT IS UNDER SUFFICIENT PRESSURE TO RISE ABOVE THE LEVEL
	MINERALOGICAL COMPOSITION	T	ROCK (WR)	PERFOUI.	E GRAIN IGNEOUS AND METAMORPHIC ROCK THAT	AT WHICH IS IS ENCOUNTERED, BUT WHICH DOES NOT NECESSARILY RISE TO OR ABOVE THE
SOIL LEGEND AND AASHTO CLASSIFICATION GENERAL GRANULAR MATERIALS SILT-CLAY MATERIALS ORGANIC MATERIALS	MINERAL NAMES SUCH AS QUARTZ, FELDSPAR, MICA, TALC, KAOLIN, ETC. ARE USED IN		CRYSTALLINE ROCK (CR)	WOULD YIELD SP	PT REFUSAL IF TESTED. ROCK TYPE INCLUDES GRANITE,	GROUND SURFACE.
GENERAL GRANULAR MATERIALS SILT-CLAY MATERIALS ORGANIC MATERIALS (>35% PASSING #200) (>35% PASSING #200)	WHENEVER THEY ARE CONSIDERED OF SIGNIFICANCE.			GNEISS, GABBRO	O, SCHIST, ETC.	CALCAREOUS (CALC.) - SOILS WHICH CONTAIN APPRECIABLE AMOUNTS OF CALCIUM CARBONATE.
GROUP A-1 A-3 A-2 A-4 A-5 A-6 A-7 A-1, A-2 A-4, A-5	COMPRESSIBILITY		NON-CRYSTALLINE	SEDIMENTARY ROCK THAT WOOLD TELLO SET REPOSAL IT TESTED. ROCK THE		COLLUVIUM - ROCK FRAGMENTS MIXED WITH SOIL DEPOSITED BY GRAVITY ON SLOPE OR AT BOTTOM
CLASS. A-1-a A-1-b A-2-4 A-2-5 A-2-6 A-2-7 A-7-6 A-3 A-6, A-7	SLIGHTLY COMPRESSIBLE LIQUID LIMIT LESS TO	THAN 30	ROCK (NCR)	INCLUDES PHYLLI	LITE, SLATE, SANDSTONE, ETC.	OF SLOPE.
SYMBOL POODBOODS	MODERATELY COMPRESSIBLE LIQUID LIMIT 31-50 HIGHLY COMPRESSIBLE LIQUID LIMIT GREATI	TER THAN 50	COASTAL PLAIN SEDIMENTARY ROCK	SPT REFUSAL. RO	SEDIMENTS CEMENTED INTO ROCK, BUT MAY NOT YIELD ROCK TYPE INCLUDES LIMESTONE, SANDSTONE, CEMENTED	CORE RECOVERY (REC.) - TOTAL LENGTH OF ALL MATERIAL RECOVERED IN THE CORE BARREL DIVIDED BY TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.
6550005550	PERCENTAGE OF MATERIAL		(CP)	SHELL BEDS, ETC	<u>C.</u>	DIKE - A TABULAR BODY OF IGNEOUS ROCK THAT CUTS ACROSS THE STRUCTURE OF ADJACENT
% PASSING SILT-GRANULAR CLAY MUCK, CLAY MUCK,	OPGANIC MATERIAL GRANULAR SILT-CLAY	D MATERIAL	WEATHERING			ROCKS OR CUTS MASSIVE ROCK.
# 40 30 MX 50 MX 51 MN SOILS SOILS PEAT	ORGANIC MATERIAL SOILS SOILS OTHE	ER MATERIAL			OINTS MAY SHOW SLIGHT STAINING. ROCK RINGS UNDER	DIP - THE ANGLE AT WHICH A STRATUM OR ANY PLANAR FEATURE IS INCLINED FROM THE
# 200 15 MX 25 MX 10 MX 35 MX 35 MX 35 MX 36 MN 36 MN 36 MN 36 MN 36 MN	LITTLE ORGANIC MATTER 3 - 5% 5 - 12% LITTLE	1 - 10% 10 - 20%	1	ER IF CRYSTALLINE. Generally edesh-liqints stainf	ED SOME JOINTS MAY SHOW THIN O AY COATINGS IF OREN	HORIZONTAL.
LIQUID LIMIT 40 MX 41 MN 40 MX 41 MN 40 MX 41 MN 40 MX 41 MN SOILS WITH	MY 10 MY 11 MN 11 MN HIGHLY ORGANIC >10% >20% HIGHLY 35% AND AROVE			GENERALLT PRESH, JOINTS STAIN: ALS ON A BROKEN SPECIMEN FACE	IED, SOME JOINTS MAY SHOW THIN CLAY COATINGS IF OPEN, CE SHINE BRIGHTLY. ROCK RINGS UNDER HAMMER BLOWS IF	<u>DIP DIRECTION (DIP AZIMUTH)</u> - THE DIRECTION OR BEARING OF THE HORIZONTAL TRACE OF THE LINE OF DIP, MEASURED CLOCKWISE FROM NORTH.
HIGHLY			OF A CF	RYSTALLINE NATURE.		FAULT - A FRACTURE OR FRACTURE ZONE ALONG WHICH THERE HAS BEEN DISPLACEMENT OF THE
AMOUNTS OF SOILS 57				GENERALLY FRESH, JOINTS STAINL	NED AND DISCOLORATION EXTENDS INTO ROCK UP TO AY. IN GRANITOID ROCKS SOME OCCASIONAL FELDSPAR	SIDES RELATIVE TO ONE ANOTHER PARALLEL TO THE FRACTURE.
USUAL TYPES STONE FRAGS OF MALOR GRAVEL AND FINE SILTY OR CLAYEY SILTY CLAYEY ORGANIC	WATER LEVEL IN BORE HOLE IMMEDIATELY AFTER DRILLING.	Ì			. CRYSTALLINE ROCKS SOME OCCASIONAL PELDSPAR	FISSILE - A PROPERTY OF SPLITTING ALONG CLOSELY SPACED PARALLEL PLANES.
MATERIALS SAND SAND GRAVEL AND SAND SOILS SOILS	STATIC WATER LEVEL AFTER 24 HOURS.	į	MODERATE SIGNIFIC	CANT PORTIONS OF ROCK SHOW I	DISCOLORATION AND WEATHERING EFFECTS. IN	FLOAT - ROCK FRAGMENTS ON SURFACE NEAR THEIR ORIGINAL POSITION AND DISLODGED FROM
GEN. RATING ASA EXCELLENT TO GOOD FAIR TO POOR POOR UNSUITAB	PERCHED WATER, SATURATED ZONE OR WATER BEARING STRA	ATA	(MOD.) GRANIT	OUND UNDER HAMMER BLOWS AND	IRE DULL AND DISCOLORED, SOME SHOW CLAY. ROCK HAS ND SHOWS SIGNIFICANT LOSS OF STRENGTH AS COMPARED	PARENT MATERIAL.
AS A EXCELLENT TO GOOD FAIR TO POOR POOR UNSUITAB		Ì	WITH FRESH ROCK.			FLOOD PLAIN (F.P.) - LAND BORDERING A STREAM, BUILT OF SEDIMENTS DEPOSITED BY THE STREAM.
P.I. OF A-7-5 ≤L.L 30 : P.I. OF A-7-6 >L.L 30					D OR STAINED. IN GRANITOID ROCKS, ALL FELDSPARS DULL	FORMATION (FM.) - A MAPPABLE GEOLOGIC UNIT THAT CAN BE RECOGNIZED AND TRACED IN
CONSISTENCY OR DENSENESS PANGE OF STANDARD PANGE OF UNICONFINED	MISCELLANEOUS SYMBOLS				DW KAOLINIZATION. ROCK SHOWS SEVERE LOSS OF STRENGTH DGIST'S PICK. ROCK GIVES "CLUNK" SOUND WHEN STRUCK.	THE FIELD.
PRIMARY SOIL TYPE COMPACTNESS OR PENETRATION RESISTENCE COMPRESSIVE STRENGTH	ROADWAY EMBANKMENT WITH SOIL DESCRIPTION SPT CPT DPT DMT TEST BORING VST PMT		IF TES	STED. WOULD YIELD SPT REFU	PUSAL	JOINT - FRACTURE IN ROCK ALONG WHICH NO APPRECIABLE MOVEMENT HAS OCCURRED.
CONSISTENCY (N-VALUE) (TONS/FT ²)	WITH SOIL DESCRIPTION VST PMT	REF SPT REFUSAL		OCKS EXCEPT QUARTZ DISCOLORE	ED OR STAINED, ROCK FABRIC CLEAR AND EVIDENT BUT REDUCED	LEDGE - A SHELF-LIKE RIDGE OR PROJECTION OF ROCK WHOSE THICKNESS IS SMALL COMPARED TO
GENERALLY VERY LOOSE <4	SOIL SYMBOL AUGER BORING	SAMPLE		RENGTH TO STRONG SOIL. IN GRAN IT. SOME FRAGMENTS OF STRONG	NITOID ROCKS ALL FELDSPARS ARE KAOLINIZED TO SOME G ROCK USUALLY REMAIN.	ITS LATERAL EXTENT.
GRANULAR MEDIUM DENSE 4 10 10 N/A	ARTIFICIAL FILL OTHER THAN BULK SAMPLE	DESIGNATIONS	IF TES	STED, YIELDS SPT N VALUES	S > 100 BPF	LENS - A BODY OF SOIL OR ROCK THAT THINS OUT IN ONE OR MORE DIRECTIONS.
MATERIAL DENSE 30 TO 50	ROADWAY EMBANKMENTS LOCATION	S - BULK SAMPLE		OCK EXCEPT QUARTZ DISCOLORED	D OR STAINED. ROCK FABRIC ELEMENTS ARE DISCERNIBLE BUT	MOTTLED (MOT.) - IRREGULARLY MARKED WITH SPOTS OF DIFFERENT COLORS. MOTTLING IN SOILS USUALLY INDICATES POOR AERATION AND LACK OF GOOD DRAINAGE.
VERT DENGE >50	- INFERRED SOIL BOUNDARIES - CORE BORING	SS - SPLIT SPOON			D SOIL STATUS, WITH ONLY FRAGMENTS OF STRONG ROCK E OF ROCK WEATHERED TO A DEGREE SUCH THAT ONLY MINOR	PERCHED WATER - WATER MAINTAINED ABOVE THE NORMAL GROUND WATER LEVEL BY THE PRESENCE OF AN
VERY SOFT <2 <0.25 GENERALLY SOFT 2 TO 4 0.25 TO 0.5	WITT-77: NIECODED DOCVING	SAMPLE ST - SHELBY TUBE			RIC REMAIN. IF TESTED. YIELDS SPT N VALUES < 100 BPF	INTERVENING IMPERVIOUS STRATUM.
SILT-CLAY MEDIUM STIFF 4 TO 8 0.5 TO 1	U MONTONIA VELE	ST - SHELBY TUBE SAMPLE	COMPLETE ROCK R	REDUCED TO SOIL. ROCK FABRIC	NOT DISCERNIBLE, OR DISCERNIBLE ONLY IN SMALL AND	RESIDUAL SOIL - SOIL FORMED IN PLACE BY THE WEATHERING OF ROCK.
MATERIAL STIFF 8 TO 15 1 TO 2 (COHESIVE) VERY STIFF 15 TO 30 2 TO 4	TTTTTT ALLUVIAL SOIL BOUNDARY PIEZOMETER INSTALLATION	RS - ROCK SAMPLE		ERED CONCENTRATIONS. QUARTZ AN EXAMPLE.	Z MAY BE PRESENT AS DIKES OR STRINGERS. SAPROLITE IS	ROCK QUALITY DESIGNATION (R.Q.D.) - A MEASURE OF ROCK QUALITY DESCRIBED BY: TOTAL LENGTH OF
(CORESIVE) VERT STIPF 13 10 30 2 10 4 HARD >30 >4	25/025 DIP/DIP DIRECTION OF	RT - RECOMPACTED	ALSO A		CK HARDNESS	ROCK SEGMENTS EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE TOTAL LENGTH OF CORE RUN AND EXPRESSED AS A PERCENTAGE.
TEXTURE OR GRAIN SIZE	ROCK STRUCTURES SCOPE INDICATOR TRIAXIAL SAMPLE					SAPROLITE (SAP.) - RESIDUAL SOIL WHICH RETAINS THE RELIC STRUCTURE OR FABRIC OF THE
	270 O SOUNDING ROD SPT N-VALUE CBR - CBR SAMPLE			NOT BE SCRATCHED BY KNIFE OR S ERAL HARD BLOWS OF THE GEOLOG	SHARP PICK. BREAKING OF HAND SPECIMENS REQUIRES DGISTS PICK.	PARENT ROCK.
U.S. STD. SIEVE SIZE 4 10 40 60 200 270 OPENING (MM) 4.76 2.0 0.42 0.25 0.075 0.053			HARD CAN BE SCRATCHED BY KNIFE OR PICK ONLY WITH DIFFICULTY. HARD HAMMER BLOWS REQUIRED			SILL - AN INTRUSIVE BODY OF IGNEOUS ROCK OF APPROXIMATELY UNIFORM THICKNESS AND RELATIVELY THIN COMPARED WITH ITS LATERAL EXTENT, WHICH HAS BEEN EMPLACED PARALLEL
COARSE FINE SHIT CLAY	ABBREVIATIONS AR-AUGER REFUSAL		TO DETACH HAND SPECIMEN.			TO THE BEDDING OR SCHISTOSITY OF THE INTRUDED ROCKS
BOULDER	BT - BORING TERMINATED PMT - PRESSUREMETER TEST SD - SAND, SANDY			MODERATELY CAN BE SCRATCHED BY KNIFE OR PICK. GOUGES OR GROOVES TO 0.25 INCHES DEEP CAN BE HARD EXCAVATED BY HARD BLOW OF A GEOLOGISTS PICK. HAND SPECIMENS CAN BE DETACHED		SLICKENSIDE - POLISHED AND STRIATED SURFACE THAT RESULTS FROM FRICTION ALONG A FAULT OR
(OUL) (OUL)	CLCLAY SLSILT, SILTY			AVATED BY HARD BLOW OF A GEOL IODERATE BLOWS.	PLOGIO 13 FION. MAND SPECIMENS CAN BE DETACHED	SLIP PLANE.
GRAIN MM 305 75 2.0 0.25 0.05 0.005 SIZE IN. 12" 3"	CSE COARSE TCR - TRICONE REFUSAL		MEDIUM CAN E	BE GROOVED OR GOUGED 0.05 INC	ICHES DEEP BY FIRM PRESSURE OF KNIFE OR PICK POINT.	STANDARD PENETRATION TEST (PENETRATION RESISTANCE) (SPT) - NUMBER OF BLOWS (N OR B.P.F.) OF A 140 LB. HAMMER FALLING 30 INCHES REQUIRED TO PRODUCE A PENETRATION OF 1 FOOT INTO SOIL WITH
CT - CORING TERMINATED		our tu	HARD CANE	BE EXCAVATED IN SMALL CHIPS TO	TO PEICES 1 INCH MAXIMUM SIZE BY HARD BLOWS OF THE	A 2 INCH OUTSIDE DIAMETER SPLIT SPOON SAMPLER. SPT REFUSAL IS LESS THAN 0.1 FOOT PENETRATION
DOT DONAMIC DENETRATION TEST Y PROMITE THE PROMITE TO THE PROMITE TO THE PROMITE TO THE PROMITE THE PROMITE TO THE PROMITE THE		HT	1	IT OF A GEOLOGISTS PICK. RE GROVED OR GOUGED READILY	' BY KNIFE OR PICK. CAN BE EXCAVATED IN EDACMENTS	WITH 60 BLOWS.
(ATTERBERG LIMITS) DESCRIPTION GUIDE FOR FIELD MOISTURE DESCRIPTION	(ATTERBERG LIMITS) DESCRIPTION GUIDE FOR FIELD MOISTURE DESCRIPTION 6 - VOID RATIO W. MOISTURE CONTENT		FROM	FROM CHIPS TO SEVERAL INCHES IN SIZE BY MODERATE BLOWS OF A PICK POINT. SMALL, THIN		STRATA CORE RECOVERY (SREC.) - TOTAL LENGTH OF STRATA MATERIAL RECOVERED DIVIDED BY TOTAL LENGTH OF STRATUM AND EXPRESSED AS A PERCENTAGE.
- SATURATED - USUALLY LIQUID; VERY WET, USUALLY	FOSS FOSSILIFEROUS V VERY		i .	ES CAN BE BROKEN BY FINGER PR		STRATA ROCK QUALITY DESIGNATION (S.R.Q.D.) - A MEASURE OF ROCK QUALITY DESCRIBED BY:
(SAT.) SOURCE LIQUID VERY WEI, GOULD WATER TABLE	FRAC FRACTURED VSI - VANE SHEAR TE	FRAC FRACTURED VS1 - VANCE SHEAR TEST		VERY CAN BE CARVED WITH KNIFE. CAN BE EXCAVATED READILY WITH POINT OF PICK. PIECES 1 INCH SOFT OR MORE IN THICKNESS CAN BE BROKEN BY FINGER PRESSURE. CAN BE SCRATCHED READILY BY		TOTAL LENGTH OF ROCK SEGMENTS WITHIN A STRATUM EQUAL TO OR GREATER THAN 4 INCHES DIVIDED BY THE
LL LIQUID LIMIT	MED MEDIUM FIAD - FILLED IMMEDI	DIATELY AFTER DRILLING	FINGE	ERNAIL.		TOTAL LENGTH OF STRATA AND EXPRESSED AS A PERCENTAGE.
PLASTIC SEMISOLID; REQUIRES DRYING TO ATTAIN OPTIMUM MOISTURE	EQUIPMENT USED ON SUBJECT PR	ROJECT	FRACT	URE SPACING	BEDDING	TOPSOIL (T.S.) - SURFACE SOILS USUALLY CONTAINING ORGANIC MATTER.
(PI) PL PLASTIC LIMIT		HAMMER TYPE:	TERM	SPACING	TERM THICKNESS	BENCH MARK: ELEVATIONS DETERMINED BY NCDOT LOCATIONS AND SURVEYS UNIT
	DRILL UNITS: ADVANCING TOOLS:	AUTOMATIC X MANUAL	VERY WIDE	MORE THAN 10 FEET	VERY THICKLY BEDDED > 4 FEET THICKLY BEDDED 1.5 - 4 FEET	
OM → OPTIMUM MOISTURE	MOBILE B CLAY BITS		WIDE MODERATELY CLC	3 TO 10 FEET OSE 1 TO 3 FEET	THINLY BEDDED 0.16 - 1.5 FEET	
SL — SHRINKAGE LIMIT ———————————————————————————————————	6" CONTINUOUS FLIGHT AUGER C	CORE SIZE:	CLOSE	0.16 TO 1 FEET	VERY THINLY BEDDED 0.03 - 0.16 FEET THICKLY LAMINATED 0.008 - 0.03 FEET	NOTE(S):
- DRY - (D) ATTAIN OPTIMUM MOISTURE			VERY CLOSE	LESS THAN 0.16 FEET	THINLY LAMINATED < 0.008 FEET	
PLASTICITY		X-N_Q			IDURATION	-
PLASTICITY PLASTICITY (NDEX (PI) DRY STRENGTH			FOR SEDIMENTARY RC	OCKS, INDURATION IS THE HARDEN	NING OF THE MATERIAL BY CEMENTING, HEAT, PRESSURE, ETC.	ROADWAY EMBANKMENT FILL: SILT (A-4), SAND (A-2-4/A-1-b)
NONPLASTIC 0-5 VERY LOW			FRIABLE		NG WITH FINGER FREES NUMEROUS GRAINS;	WITH METAGRAYWACKE AND QUARTZITE GRAVEL, COBBLES
LOW PLASTICITY 6-15 SLIGHT	A CASING A W/ADVANCER	HAND TOOLS:			E BLOW BY HAMMER DISINTEGRATES SAMPLE.	AND BOULDERS
MED. PLASTICITY 16-25 MEDIUM HIGH PLASTICITY 26 OR MORE HIGH	PORTABLE HOIST X TRICONE 3" AND 4" STEEL TEETH	POST HOLE DIGGER	MODERATE		S CAN BE SEPARATED FROM SAMPLE WITH STEEL PROBE; (S EASILY WHEN HIT WITH HAMMER.	
COLOR	TRICONE*TUNGCARB.	HAND AUGER				
	X OTHER D-50 ATV X CORE BIT	SOUNDING ROD	INDURATE		IS ARE DIFFICULT TO SEPARATE WITH STEEL PROBE; BULT TO BREAK WITH HAMMER.	
DESCRIPTIONS MAY INCLUDE COLOR OR COLOR COMBINATIONS (TAN, RED, YEL-BRN, BLUE-GRAY) MODIFIERS SUCH AS LIGHT, DARK, STREAKED, ETC. ARE USED TO DESCRIBE APPEARANCE.	OTHER OTHER	VANE SHEAR TEST	EALDERIE	LY INDURATED SHARP	P HAMMER BLOWS REQUIRED TO BREAK SAMPLE;	
MODIFIERS SOUR AS LIGHT, DARM, STREARED, ETO. ARE USED TO DESCRIPE APPEARANCE.		OTHER	LAIREMEL		LE BREAKS ACROSS GRAINS.	