**Application of imaging spectroscopy for mineral exploration in Alaska: A study over porphyry Cu deposits in the eastern Alaska Range**

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This section is the command file (for digital release only)

Command File:

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; MICA Command File for 2-Micron Minerals - Adapted for HyMap 2014 126 channels

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; HISTORY:

; ASDfs4\_18011-5 std res - had to remove the tremolite doublet feature, split the weighting with the other two features

; - adjusted the continuum endpoints for the talc doublet feature

; - adjusted continuum endpoints for the calcite80%+kaolinite20% 2.34 micron feature

; - adjusted continuum endpoints for the CU93-65A Chlorite+Muscovite 2.34 micron feature

; - changed the depth thresholds for NOT alunite 1440 nm feature to absolute from relative for all invocations

;

; ASD FieldSpec4 Hi-Res NG - adjusted continuum end points

; - replaced grass\_dry+green with rangeland spectrum

;

; v1a - added clinochlore

;

; Adjusted continuua for AVIRIS 2013 waves

; MINFIT threshold increased to 0.6000 from 0.5750

; MINDEPTH\_SINGLEFEAT threshold increased to 0.0075 from 0.0050

; MINDEPTH threshold increased to 0.0150 from 0.0100

; MINFIT\_NOTFEAT threshold increased to 0.6500 from 0.6400

;

; Precursor history: Optimized for AVIRIS 1995 224 channels

; v6 added aragonite to echo addition of nontronite (Bernard's change in lab analysis)

; v5 edited to echo addition of nontronite (Bernard's change in lab analysis)

; MINFIT threshold decreased to 0.5750 from 0.6000

; MINDEPTH\_SINGLEFEAT threshold decreased to 0.0060 from 0.0075

; MINDEPTH threshold decreased to 0.0100 from 0.0150

; Afghan Ver 9c replaced alunite+pyrophyllite record 490 with record 491 to match published Tetracorder cmd file

; Adapted from 2 micron minerals ver 9b for HyMap 124 channels

; MINFIT threshold increased to 0.6000 from 0.5750

; MINDEPTH\_SINGLEFEAT threshold increased to 0.0075 from 0.0050

; MINDEPTH threshold increased to 0.0150 from 0.0100

; Continuum endpoints adjusted for AVIRIS wavelength positions & deleted channels

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FILE\_DN\_COLORS: C:\USGS\MICA\_cmdfiles\HyMap2\_2014\mica\_colors\_group2\_hymap2\_2014\_v6.txt

;

SCALEFACTOR\_OBSERVED: 20000.

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SCALEFACTOR\_REFERENCE: 1.0

;

NODATA\_VALUE\_IMAGE: -1

;

CHECK\_SIGNS\_OF\_DEPTHS: 1

;

TETRACORDER\_OPTIONS: 0

;

WAVELENGTHS: C:\USGS\MICA\_cmdfiles\HyMap2\_2014\splib06b\_cv\_hymap2\_2014\_126ch 5

;

DELETED\_CHANNELS: 22,31,34,35,36,37,47,48,49,50,62,63,64,65,66,93,94,95,96,100,126

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; Setup Aliases

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;

NUM\_ALIAS: 26

ALIAS: [splib06b\_convolved] C:\USGS\MICA\_cmdfiles\HyMap2\_2014\splib06b\_cv\_hymap2\_2014\_126ch

ALIAS: [MINFIT] 0.6400

ALIAS: [MINFIT\_WEAKFEAT] 0.6500

ALIAS: [MINFIT\_NOTFEAT] 0.6500

ALIAS: [MINFIT\_SERP2] 0.6400

ALIAS: [MINFIT\_SERP3AND4] 0.5000

ALIAS: [MINDEPTH] 0.0200

ALIAS: [MINDEPTH\_SINGLEFEAT] 0.0100

ALIAS: [MINDEPTH\_MUSCOVITE\_2340NM] 0.0150

ALIAS: [MINDEPTH\_SERP\_TREM] 0.0350

ALIAS: [MINDEPTH\_DOLO\_MIXES] 0.0250

ALIAS: [MINDEPTH\_ALUNITE] 0.0300

ALIAS: [MINDEPTH\_ALUNITE\_MIXES] 0.0700

ALIAS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT] 0.0200

ALIAS: [MINDEPTH\_ILLITE\_CLINO\_2250NM] 0.0100

ALIAS: [MINDEPTH\_MUSC\_KAOLJARO\_MIXES] 0.0500

ALIAS: [MINDEPTH\_KAOL\_SMECT\_MIX] 0.0300

ALIAS: [MINDEPTH\_BUDDINGTONITE] 0.0300

ALIAS: [MINDEPTH\_DICKITE] 0.0500

ALIAS: [MINDEPTH\_PYROPH] 0.0300

ALIAS: [MINDEPTH\_TOPAZ] 0.0500

ALIAS: [MIN\_REFL\_MID] 0.0400

ALIAS: [MIN\_REFL\_MID\_VEG] 0.0300

ALIAS: [MINFD] 0.0250

ALIAS: [MINFD\_CALCITE] 0.0300

ALIAS: [MINFD\_2\_3MICRON] 0.0450

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; Setup Not Features

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;

NUM\_NOT\_FEATURES: 14

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;............................................Not material title = "Engelmann-Spruce ES-Needls-1 W1R1Fa CONV" Feature 1

NOT\_FEATURE\_ID: 1

NOT\_FEATURE\_SPECPR\_RECORD:[splib06b\_convolved] 6456

CONTINUUM\_ENDPTS: 0.5220 0.5520 0.7400 0.7800

;

;

;............................................Not material title = "Muscovite GDS113 Ruby W9R4Nbbb CONV" Feature 2

NOT\_FEATURE\_ID: 2

NOT\_FEATURE\_SPECPR\_RECORD:[splib06b\_convolved] 3212

CONTINUUM\_ENDPTS: 2.2750 2.3150 2.3860 2.4150

;

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;............................................Not material title = "Alunite GDS96 K Syn (250C) W2R4Na CONV" Feature 2

NOT\_FEATURE\_ID: 3

NOT\_FEATURE\_SPECPR\_RECORD:[splib06b\_convolved] 281

CONTINUUM\_ENDPTS: 1.4400 1.4700 1.5000 1.5240

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;............................................Not material title = "Alunite RES-3 Na Syn (450C) W2R4Na CONV" Feature 2

NOT\_FEATURE\_ID: 4

NOT\_FEATURE\_SPECPR\_RECORD:[splib06b\_convolved] 317

CONTINUUM\_ENDPTS: 1.4630 1.4800 1.5150 1.5460

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;............................................Not material title = "Gypsum HS333.3B (Selenite) W9R4Naaa CONV" Feature 2

NOT\_FEATURE\_ID: 5

NOT\_FEATURE\_SPECPR\_RECORD:[splib06b\_convolved] 1877

CONTINUUM\_ENDPTS: 1.6800 1.7100 1.7650 1.7950

;

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;............................................Not material title = "CU93-65A Chlorite+Muscovite 1838 CONV" Feature 1

NOT\_FEATURE\_ID: 6

NOT\_FEATURE\_SPECPR\_RECORD:[splib06b\_convolved] 7775

CONTINUUM\_ENDPTS: 0.7810 0.8150 1.2760 1.3400

;

;

;............................................Not material title = "Epidote GDS26.a 75-200um W9R4Nbbb CONV" Feature 1

NOT\_FEATURE\_ID: 7

NOT\_FEATURE\_SPECPR\_RECORD:[splib06b\_convolved] 1594

CONTINUUM\_ENDPTS: 2.1900 2.2250 2.2680 2.2900

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;............................................Not material title = "Grass\_Golden\_Dry GDS480 W1R1Fa CONV" Feature 2.1 micron

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_SPECPR\_RECORD:[splib06b\_convolved] 6538

CONTINUUM\_ENDPTS: 2.0200 2.0600 2.1980 2.2280

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;............................................Not material title = "Lodgepole-Pine LP-Needles-3 W1R1Fa CONV" Feature 2.1 micron

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_SPECPR\_RECORD:[splib06b\_convolved] 6632

CONTINUUM\_ENDPTS: 2.0200 2.0600 2.1980 2.2280

;

;

;............................................Not material title = "Grass\_Golden\_Dry GDS480 W1R1Fa CONV" Feature 2.3 micron

NOT\_FEATURE\_ID: 10

NOT\_FEATURE\_SPECPR\_RECORD:[splib06b\_convolved] 6538

CONTINUUM\_ENDPTS: 2.2100 2.2400 2.380 2.4150

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;............................................Not material title = "Lodgepole-Pine LP-Needles-3 W1R1Fa CONV" Feature 2.3 micron

NOT\_FEATURE\_ID: 11

NOT\_FEATURE\_SPECPR\_RECORD:[splib06b\_convolved] 6632

CONTINUUM\_ENDPTS: 2.2100 2.2400 2.3900 2.4250

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;............................................Not material title = "WS272 Calcite white powder 1838 CONV" Feature 2.15 micron

NOT\_FEATURE\_ID: 12

NOT\_FEATURE\_SPECPR\_RECORD:[splib06b\_convolved] 7777

CONTINUUM\_ENDPTS: 2.0900 2.1200 2.1800 2.2050

;

;............................................Not material title = "HS102-3B Dolomite 74-250um 1838 CONV" Feature 2.14 micron

NOT\_FEATURE\_ID: 13

NOT\_FEATURE\_SPECPR\_RECORD:[splib06b\_convolved] 7815

CONTINUUM\_ENDPTS: 2.0600 2.1000 2.1600 2.1850

;

;............................................Not material title = "Clinochlore GDS158 Flagst W5R4Nbb\_ CONV" Feature 2.26 micron

NOT\_FEATURE\_ID: 14

NOT\_FEATURE\_SPECPR\_RECORD:[splib06b\_convolved] 1140

CONTINUUM\_ENDPTS: 2.1900 2.2200 2.2800 2.3100

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;;............................................Not material title = "IMt-1.bIllite(CMS)<2umGrnPowder1838 CONV" Feature 2.256 micron

;NOT\_FEATURE\_ID: 15

;NOT\_FEATURE\_SPECPR\_RECORD:[splib06b\_convolved] 7763

;CONTINUUM\_ENDPTS: 2.2360 2.2400 2.2760 2.2800

;

;

; Setup Materials and Features

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;

NUM\_REFERENCE\_ENTRIES: 77

;

;.....................................................................Material SPECPR Title = "Engelmann-Spruce ES-Needls-1 W1R1Fa CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 6456

OUTPUT\_NAME: vegetation\_green

NUM\_FEATURES: 3 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.8500

CONTINUUM\_ENDPTS: 0.5220 0.5520 0.7400 0.7800

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID\_VEG] -99.99 -99.99 -99.99 0.9000 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0500

CONTINUUM\_ENDPTS: 0.8800 0.9200 1.0630 1.0930

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 0.0600 -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.1000

CONTINUUM\_ENDPTS: 1.0900 1.1310 1.2700 1.3000

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 0.0600 -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] 0.200 -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

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;............................................................Material SPECPR Title = "Rangeland C04-170 S30% G24% W1R1Fa CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7221

OUTPUT\_NAME: vegetation\_npv\_and\_green

NUM\_FEATURES: 3 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.7000

CONTINUUM\_ENDPTS: 0.5220 0.5520 0.7300 0.7750

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID\_VEG] -99.99 -99.99 -99.99 0.9000 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.1000

CONTINUUM\_ENDPTS: 1.0800 1.1310 1.2700 1.3000

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 0.0600 -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.2000

CONTINUUM\_ENDPTS: 2.2050 2.2400 2.3850 2.4160

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 0.0150 -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: [MINDEPTH\_SINGLEFEAT] -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] 0.0700 -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Melting\_snow mSnw1a W1R1Fa CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 5827

OUTPUT\_NAME: snow\_melting

NUM\_FEATURES: 2 1

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.3500

CONTINUUM\_ENDPTS: 0.8950 0.9460 1.0800 1.1100

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 0.0800 -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.6500

CONTINUUM\_ENDPTS: 1.0850 1.1780 1.3050 1.3450

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 0.9091

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 1

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.5000

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] 0.0500 -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Melting\_snow mSnw9 (slush) W1R1Fa CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 5875

OUTPUT\_NAME: snow\_slush

NUM\_FEATURES: 2 1

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.3500

CONTINUUM\_ENDPTS: 0.8700 0.9200 1.0800 1.1100

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] 0.5000 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.6500

CONTINUUM\_ENDPTS: 1.0800 1.1300 1.3050 1.3450

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 0.0300 -99.99 -99.99 -99.99 -99.99 0.9091

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 1

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.5000

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] 0.0500 -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Seawater\_Coast\_Chl SW1 W1R1Ba CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 5890

OUTPUT\_NAME: water

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.9000

CONTINUUM\_ENDPTS: 0.5400 0.5850 2.1900 2.2800

CONTINUUM\_CONSTRAINTS: 0.0000 0.1900 -99.99 -99.99 0.0000 0.0800 -99.99 1.0000

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.1000

CONTINUUM\_ENDPTS: 0.4200 0.4800 0.6100 0.6400

CONTINUUM\_CONSTRAINTS: 0.0000 0.1400 -99.99 -99.99 0.0000 0.1400 -99.99 1.5000

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] 0.0300 -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Water+Montmor SWy-2+5.01g/l W1R1Fa CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 5915

OUTPUT\_NAME: water\_sediment\_high

NUM\_FEATURES: 3 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.8000

CONTINUUM\_ENDPTS: 0.8700 0.9130 1.0550 1.0850

CONTINUUM\_CONSTRAINTS: 0.0000 0.2800 -99.99 -99.99 0.0000 0.2400 -99.99 1.1000

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.1000

CONTINUUM\_ENDPTS: 0.6850 0.7250 0.7920 0.8220

CONTINUUM\_CONSTRAINTS: 0.0000 0.4200 -99.99 -99.99 0.0000 0.3500 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.1000

CONTINUUM\_ENDPTS: 0.7300 0.7600 0.8500 0.8850

CONTINUUM\_CONSTRAINTS: 0.0000 0.3200 -99.99 -99.99 0.0000 0.3200 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] 0.0300 -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

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;

;............................................................Material SPECPR Title = "Water+Montmor SWy-2+0.5g/l W1R1Fa CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 5900

OUTPUT\_NAME: water\_sediment\_low

NUM\_FEATURES: 3 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.8000

CONTINUUM\_ENDPTS: 0.8700 0.9110 1.0520 1.0820

CONTINUUM\_CONSTRAINTS: 0.0000 0.1400 -99.99 -99.99 0.0000 0.1200 -99.99 1.1000

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.1000

CONTINUUM\_ENDPTS: 0.6800 0.7100 0.7960 0.8260

CONTINUUM\_CONSTRAINTS: 0.0000 0.1800 -99.99 -99.99 0.0000 0.1500 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.1000

CONTINUUM\_ENDPTS: 0.7250 0.7600 0.8350 0.8700

CONTINUUM\_CONSTRAINTS: 0.0000 0.1400 -99.99 -99.99 0.0000 0.1400 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] 0.0300 -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Grass\_Golden\_Dry GDS480 W1R1Fa CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 6538

OUTPUT\_NAME: dry\_veg\_grass

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.50

CONTINUUM\_ENDPTS: 2.0200 2.0600 2.1980 2.2280

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 0.1000 -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: [MINDEPTH\_SINGLEFEAT] -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.50

CONTINUUM\_ENDPTS: 2.2100 2.2400 2.380 2.4150

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 0.1000 -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: [MINDEPTH\_SINGLEFEAT] -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Grass\_Golden\_Dry GDS480 W1R1Fa CONV" 2.3 micron

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 6538

OUTPUT\_NAME: dry\_veg\_grass\_2\_3um

NUM\_FEATURES: 1 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.00

CONTINUUM\_ENDPTS: 2.2100 2.2400 2.3800 2.4150

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 0.1000 -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: [MINDEPTH\_SINGLEFEAT] -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Lodgepole-Pine LP-Needles-3 W1R1Fa CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 6632

OUTPUT\_NAME: dry\_veg\_nongrass

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.50

CONTINUUM\_ENDPTS: 2.0200 2.0600 2.1980 2.2280

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 0.1000 -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: [MINDEPTH\_SINGLEFEAT] -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.50

CONTINUUM\_ENDPTS: 2.2100 2.2400 2.3900 2.4250

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 0.1000 -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: [MINDEPTH\_SINGLEFEAT] -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Lodgepole-Pine LP-Needles-3 W1R1Fa CONV" 2.3 micron

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 6632

OUTPUT\_NAME: dry\_veg\_nongrass\_2\_3um

NUM\_FEATURES: 1 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.00

CONTINUUM\_ENDPTS: 2.2100 2.2400 2.390 2.4250

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 0.1000 -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: [MINDEPTH\_SINGLEFEAT] -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Muscovite CU93-1 low-Al Phyl W2R4Nb CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 3164

OUTPUT\_NAME: muscovite\_lowAl

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.7500

CONTINUUM\_ENDPTS: 2.1300 2.1650 2.2658 2.2900

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.2500

CONTINUUM\_ENDPTS: 2.2700 2.3050 2.3950 2.4200

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: [MINDEPTH\_MUSCOVITE\_2340NM] -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Muscovite CU91-250A med Al W2R4Nb CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 5574

OUTPUT\_NAME: muscovite\_medAl

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.7500

CONTINUUM\_ENDPTS: 2.1284 2.1510 2.2600 2.2900

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.2500

CONTINUUM\_ENDPTS: 2.2800 2.3050 2.3800 2.4100

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: [MINDEPTH\_MUSCOVITE\_2340NM] -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

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;............................................................Material SPECPR Title = "Muscovite GDS113 Ruby W9R4Nbbb CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 3212

OUTPUT\_NAME: muscovite\_medhighAl

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.7500

CONTINUUM\_ENDPTS: 2.1180 2.1510 2.2670 2.2960

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.2500

CONTINUUM\_ENDPTS: 2.2750 2.3150 2.3860 2.4150

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: [MINDEPTH\_MUSCOVITE\_2340NM] -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

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;............................................................Material SPECPR Title = "Muscovite GDS116 Tanzania W9R4Naaa CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 3236

OUTPUT\_NAME: muscovite\_Fe-rich

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.7500

CONTINUUM\_ENDPTS: 2.1300 2.1650 2.2770 2.3060

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.2500

CONTINUUM\_ENDPTS: 2.2800 2.3100 2.4050 2.4400

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: [MINDEPTH\_MUSCOVITE\_2340NM] -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

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;............................................................Material SPECPR Title = "IMt-1.bIllite(CMS)<2umGrnPowder1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7763

OUTPUT\_NAME: illite\_imt1

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.7500

CONTINUUM\_ENDPTS: 2.1300 2.1650 2.2660 2.3000

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.2500

CONTINUUM\_ENDPTS: 2.2800 2.3060 2.3850 2.4150

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: [MINDEPTH\_MUSCOVITE\_2340NM] -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

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;............................................................Material SPECPR Title = "GDS4.4 Illite Marblehead, WI 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7765

OUTPUT\_NAME: illite\_gds4

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.7500

CONTINUUM\_ENDPTS: 2.1300 2.1650 2.2660 2.3000

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.2500

CONTINUUM\_ENDPTS: 2.2750 2.3060 2.3850 2.4150

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: [MINDEPTH\_MUSCOVITE\_2340NM] -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

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;............................................................Material SPECPR Title = "Kaolinite CM9 W9R4Nbbb CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 2600

OUTPUT\_NAME: kaolinite\_wxl

NUM\_FEATURES: 1 3

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.0700 2.1150 2.2370 2.2670

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 2

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 3

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 4

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

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;............................................................Material SPECPR Title = "Kaolinite KGa-2 (pxl) W9R4Nbbb CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 2642

OUTPUT\_NAME: kaolinite\_pxl

NUM\_FEATURES: 1 3

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.0700 2.1150 2.2400 2.2750

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 2

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 3

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 4

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

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;............................................................Material SPECPR Title = "Halloysite NMNH106237 W9R4Naaa CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 1923

OUTPUT\_NAME: kaolinite+clay\_mica\_or\_halloysite

NUM\_FEATURES: 1 3

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.0700 2.1150 2.2500 2.2800

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 2

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 3

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 4

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

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;............................................................Material SPECPR Title = "Dickite NMNH106242 W5R4Nbb\_ CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 1453

OUTPUT\_NAME: kaolinite\_or\_dickite

NUM\_FEATURES: 1 3

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.0700 2.1150 2.2300 2.2650

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 2

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 3

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 4

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_DICKITE] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

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;............................................................Material SPECPR Title = "GDS85 BuddingtoniteD-206powder 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7767

OUTPUT\_NAME: buddingtonite

NUM\_FEATURES: 1 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 1.9300 2.0500 2.2770 2.3060

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 10

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0500

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 11

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0500

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_BUDDINGTONITE] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Buddingtnt+Na-Mont CU93-260B W2R4Nb CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 5187

OUTPUT\_NAME: buddingtonite+montmorillonite\_mix\_intimate

NUM\_FEATURES: 1 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.0400 2.0800 2.2650 2.3000

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: [MINDEPTH\_SINGLEFEAT] -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 10

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0500

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 11

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0500

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_BUDDINGTONITE] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Alunite GDS96 K Syn (250C) W2R4Na CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 281

OUTPUT\_NAME: alunite\_K\_250C

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 1.4400 1.4700 1.5000 1.5240

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: [MINDEPTH\_SINGLEFEAT] -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.0000

CONTINUUM\_ENDPTS: 2.0250 2.0750 2.2350 2.2600

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_ALUNITE] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Alunite RES-3 Na Syn (450C) W2R4Na CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 317

OUTPUT\_NAME: alunite\_Na\_450C

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 1.4630 1.4800 1.5150 1.5460

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: [MINDEPTH\_SINGLEFEAT] -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.0000

CONTINUUM\_ENDPTS: 2.0200 2.0750 2.2400 2.2700

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: [MINDEPTH\_SINGLEFEAT] -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_ALUNITE] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Pyrophyllite PYS1A <850um W2R4Na CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 4021

OUTPUT\_NAME: pyrophyllite

NUM\_FEATURES: 1 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.1000 2.1350 2.2100 2.2400

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: [MINDEPTH\_PYROPH] -99.99

;FEATURE\_TYPE: Not

;NOT\_FEATURE\_ID: 3

;NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

;NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

;FEATURE\_TYPE: Not

;NOT\_FEATURE\_ID: 4

;NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

;NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_PYROPH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Pyrophyl.25+wxlKaol0.75 arealMix Ni CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7737

OUTPUT\_NAME: pyrophyllite.25+kaolinite.75

NUM\_FEATURES: 1 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.0900 2.1280 2.2200 2.2550

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: [MINDEPTH\_PYROPH] -99.99

;FEATURE\_TYPE: Not

;NOT\_FEATURE\_ID: 3

;NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

;NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

;FEATURE\_TYPE: Not

;NOT\_FEATURE\_ID: 4

;NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

;NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_PYROPH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Jarosite GDS24 Na W9R4Nbbb CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 2471

OUTPUT\_NAME: jarosite\_Na

NUM\_FEATURES: 1 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.0690 2.0990 2.3270 2.3570

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Jarosite GDS99 K 200C Syn W2R4Na CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 2496

OUTPUT\_NAME: jarosite\_K

NUM\_FEATURES: 1 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.0690 2.0990 2.3270 2.3570

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Montmorillonite SWy-1 W9R4Nbcc CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 3144

OUTPUT\_NAME: montmorillonite\_Na

NUM\_FEATURES: 1 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.1180 2.1550 2.2550 2.2870

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 2

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 5

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Montmorillonite SAz-1 W5R4Nbb\_ CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 3097

OUTPUT\_NAME: montmorillonite\_Ca

NUM\_FEATURES: 1 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.1400 2.1780 2.2550 2.2870

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 2

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 5

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Nontronite NG-1.b <2um fr W5R4Nbb\_ CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 3415

OUTPUT\_NAME: nontronite

NUM\_FEATURES: 1 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.2300 2.2650 2.3200 2.3500

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Hectorite SHCa-1.Ac-B W5R4Nbb\_ CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 1948

OUTPUT\_NAME: hectorite

NUM\_FEATURES: 2 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.2500 2.2700 2.3350 2.3600

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 2.3300 2.3650 2.4150 2.4400

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Gypsum HS333.3B (Selenite) W9R4Naaa CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 1877

OUTPUT\_NAME: gypsum

NUM\_FEATURES: 3 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0

CONTINUUM\_ENDPTS: 1.5000 1.5200 1.5800 1.6000

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: 0.50

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.35

CONTINUUM\_ENDPTS: 1.6800 1.7100 1.7650 1.7950

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.65

CONTINUUM\_ENDPTS: 2.0600 2.1000 2.2900 2.3250

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

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;............................................................Material SPECPR Title = "GypsumHS333.3B\*.6+MontmorilloniteSWy1\*.4"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7723

OUTPUT\_NAME: gypsum.6+montmorilloniteNa.4

NUM\_FEATURES: 3 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0

CONTINUUM\_ENDPTS: 1.5000 1.5200 1.5800 1.6100

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.35

CONTINUUM\_ENDPTS: 1.6800 1.7100 1.7650 1.7950

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.65

CONTINUUM\_ENDPTS: 2.0600 2.1000 2.2800 2.3200

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

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; \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* NEED TO REPLACE WITH ASD18388-1 MEASUREMENT

;

;............................................................Material SPECPR Title = "Chlorite SMR-13.a 104-150 W5R4Naa\_ CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 1015

OUTPUT\_NAME: chlorite\_lowFe

NUM\_FEATURES: 3 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 2.1900 2.2200 2.2580 2.2900

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.7000

CONTINUUM\_ENDPTS: 2.1600 2.2000 2.4100 2.4450

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.3000

CONTINUUM\_ENDPTS: 0.5100 0.5500 1.6900 1.7400

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

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;............................................................Material SPECPR Title = "Clinochlore GDS158 Flagst W5R4Nbb\_ CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 1140

OUTPUT\_NAME: clinochlore

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 2.1900 2.2200 2.2800 2.3100

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.0000

CONTINUUM\_ENDPTS: 2.1600 2.1900 2.4150 2.4400

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

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;............................................................Material SPECPR Title = "Clinochlore\_Fe SC-CCa-1.a W5R4Naa\_ CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 1214

OUTPUT\_NAME: clinochlore\_Fe

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 2.1900 2.2250 2.2900 2.3250

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.0000

CONTINUUM\_ENDPTS: 2.1750 2.2000 2.4100 2.4450

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

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;............................................................Material SPECPR Title = "Thuringite SMR-15.c 32um W5R4Naa\_ CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 4673

OUTPUT\_NAME: thuringite

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 2.1900 2.2250 2.2950 2.3250

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.0000

CONTINUUM\_ENDPTS: 2.1900 2.2250 2.4300 2.4550

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

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;............................................................Material SPECPR Title = "Epidote GDS26.a 75-200um W9R4Nbbb CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 1594

OUTPUT\_NAME: epidote

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.1000

CONTINUUM\_ENDPTS: 2.1900 2.2250 2.2680 2.2900

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.9000

CONTINUUM\_ENDPTS: 2.1900 2.2300 2.4100 2.4450

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

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;

;............................................................Material SPECPR Title = "GDS222aluniteWNS366+pyrophPYS1A 50/ CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7769

OUTPUT\_NAME: pyrophyllite.5+alunite.5\_mix\_intimate

NUM\_FEATURES: 3 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 1.4400 1.4700 1.5050 1.5300

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.0000

CONTINUUM\_ENDPTS: 2.0400 2.0800 2.2280 2.2580

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.000

CONTINUUM\_ENDPTS: 2.2450 2.2800 2.3440 2.3740

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_ALUNITE\_MIXES] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

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;............................................................Material SPECPR Title = "Alunite\*0.5+KaolKGa1\*0.5 ArealMixNi CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7703

OUTPUT\_NAME: alunite.5+kaolinite.5

NUM\_FEATURES: 3 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 1.4400 1.4700 1.5050 1.5240

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.0000

CONTINUUM\_ENDPTS: 2.0680 2.0990 2.2300 2.2680

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 2.2680 2.2980 2.3400 2.3750

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_ALUNITE\_MIXES] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Alunite\*0.25 + KaolCM9\*0.75 ArealMi CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7707

OUTPUT\_NAME: alunite.25+kaolinite.75

NUM\_FEATURES: 3 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 1.4400 1.4700 1.5050 1.5240

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.0000

CONTINUUM\_ENDPTS: 2.0680 2.0990 2.2300 2.2680

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 2.2500 2.2800 2.3450 2.3750

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_ALUNITE\_MIXES] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

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;............................................................Material SPECPR Title = "KaolKGa-1\*0.5+MuscCU91-250A\*0.5 Are CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7741

OUTPUT\_NAME: kaolinite.5+muscoviteMedAl.5

NUM\_FEATURES: 2 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.1080 2.1380 2.2480 2.2780

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.000

CONTINUUM\_ENDPTS: 2.2650 2.2950 2.3900 2.4200

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: [MINDEPTH\_MUSCOVITE\_2340NM] -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 3

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 4

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_MUSC\_KAOLJARO\_MIXES] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

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;............................................................Material SPECPR Title = "KaolCM9\*0.5+MuscGDS113\_Ruby\*0.5 Are CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7745

OUTPUT\_NAME: kaolinite.5+muscoviteMedhighAl.5

NUM\_FEATURES: 2 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.1050 2.1350 2.2480 2.2780

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 2.2650 2.2950 2.3900 2.4200

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: [MINDEPTH\_MUSCOVITE\_2340NM] -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 3

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 4

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_MUSC\_KAOLJARO\_MIXES] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "CU93-5C Kaol+Musc intimate mix 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7771

OUTPUT\_NAME: kaolinite+muscovite\_mix\_intimate

NUM\_FEATURES: 2 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.1050 2.1380 2.2530 2.2870

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.000

CONTINUUM\_ENDPTS: 2.2800 2.3100 2.3900 2.4200

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: [MINDEPTH\_MUSCOVITE\_2340NM] -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 3

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 4

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_MUSC\_KAOLJARO\_MIXES] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Kaolin\_Smect H89-FR-2 .5K W5R4Nbb\_ CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 5488

OUTPUT\_NAME: kaolinite+smectite\_mix\_intimate

NUM\_FEATURES: 1 4

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.0980 2.1350 2.2500 2.2850

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 2

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 3

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 4

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ALUNITE\_1440NM\_AS\_NOTFEAT]

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 5

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_KAOL\_SMECT\_MIX] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "CU93-314 Musc+Jarosite coating 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7773

OUTPUT\_NAME: jarosite+muscovite\_mix\_intimate

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.4000

CONTINUUM\_ENDPTS: 0.7060 0.7380 1.2750 1.3300

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.6000

CONTINUUM\_ENDPTS: 2.1050 2.1450 2.2950 2.3250

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

;FEATURE\_TYPE: Diagnostic

;FEATURE\_WEIGHT: 0.0000

;CONTINUUM\_ENDPTS: 2.3100 2.3350 2.3550 2.3850

;CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

;FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

;DEPTH\_CONSTRAINTS: [MINDEPTH\_MUSCOVITE\_2340NM] -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_MUSC\_KAOLJARO\_MIXES] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "CU93-65A Chlorite+Muscovite 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7775

OUTPUT\_NAME: chlorite+muscovite\_mix\_intimate

NUM\_FEATURES: 3 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0500

CONTINUUM\_ENDPTS: 0.7810 0.8150 1.2760 1.3400

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 0.4000 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.9000

CONTINUUM\_ENDPTS: 2.1230 2.1570 2.2740 2.3080

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0500

CONTINUUM\_ENDPTS: 2.2750 2.3100 2.3820 2.4150

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: [MINDEPTH\_MUSCOVITE\_2340NM] -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "ClinochloreFe\*0.3 + MuscoviteCU93-1 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7749

OUTPUT\_NAME: clinochlore\_Fe.3+muscovite.7

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.9000

CONTINUUM\_ENDPTS: 2.1400 2.1650 2.2650 2.2900

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

;FEATURE\_TYPE: Diagnostic

;FEATURE\_WEIGHT: 0.1000

;CONTINUUM\_ENDPTS: 2.2800 2.2350 2.2740 2.2780

;CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

;FIT\_CONSTRAINTS: -99.99

;DEPTH\_CONSTRAINTS: [MINDEPTH\_ILLITE\_CLINO\_2250NM] -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.1000

CONTINUUM\_ENDPTS: 2.2800 2.3050 2.4000 2.4250

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "WS272 Calcite white powder 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7777

OUTPUT\_NAME: calcite\_abundant

NUM\_FEATURES: 2 4

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.0000

CONTINUUM\_ENDPTS: 2.1780 2.2080 2.3770 2.4060

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 2.0900 2.1200 2.1800 2.2050

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 6

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.2000

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 7

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_RELATIVE\_DEPTH\_CONSTRAINTS: 1 0.0800

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD\_CALCITE]

END\_REFERENCE\_ENTRY:

;

; Feature weight set very slightly above 1.0 in order to have this supersede "\_abundant"

; when the 2.15 micron feature is not present

;

;............................................................Material SPECPR Title = "WS272 Calcite white powder 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7777

OUTPUT\_NAME: calcite

NUM\_FEATURES: 1 5

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000001

CONTINUUM\_ENDPTS: 2.1780 2.2080 2.3770 2.4060

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 6

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.2000

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 7

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_RELATIVE\_DEPTH\_CONSTRAINTS: 1 0.0800

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 12

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0015

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD\_CALCITE]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "HS102-3B Dolomite 74-250um 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7815

OUTPUT\_NAME: dolomite\_abundant

NUM\_FEATURES: 2 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.0001

CONTINUUM\_ENDPTS: 2.1580 2.1880 2.3570 2.3870

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 1.2000

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 2.0600 2.1000 2.1600 2.1850

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD\_2\_3MICRON]

END\_REFERENCE\_ENTRY:

;

; Feature weight set very slightly above 1.0 in order to have this supersede "\_abundant"

; when the 2.14 micron feature is not present

;

;............................................................Material SPECPR Title = "HS102-3B Dolomite 74-250um 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7815

OUTPUT\_NAME: dolomite

NUM\_FEATURES: 1 3

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000001

CONTINUUM\_ENDPTS: 2.1580 2.1880 2.3570 2.3870

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 1.2000

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 13

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0015

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD\_2\_3MICRON]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "0.5\*CalciteWS272 + 0.5\*DolomiteHS10 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7821

OUTPUT\_NAME: calcite.5+dolomite.5

NUM\_FEATURES: 1 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.1800 2.2050 2.3700 2.3950

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 1.2000

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 0.0000

END\_REFERENCE\_ENTRY:

;;

;;

;;............................................................Material SPECPR Title = "Aragonite STex FineWhitePowder 1838 CONV"

;REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7819

;OUTPUT\_NAME: aragonite

;NUM\_FEATURES: 1 2

;FEATURE\_TYPE: Diagnostic

;FEATURE\_WEIGHT: 1.000

;CONTINUUM\_ENDPTS: 2.1900 2.2200 2.3700 2.4000

;CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 1.2000

;FIT\_CONSTRAINTS: -99.99

;DEPTH\_CONSTRAINTS: -99.99 -99.99

;FEATURE\_TYPE: Not

;NOT\_FEATURE\_ID: 8

;NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

;NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

;FEATURE\_TYPE: Not

;NOT\_FEATURE\_ID: 9

;NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

;NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

;WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD\_2\_3MICRON]

;END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "HS271-3B Siderite 74-250micron 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7779

OUTPUT\_NAME: carbonate\_Fe\_bearing

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.1980 2.2280 2.3860 2.4160

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 0.7300 0.7850 1.6750 1.7250

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: [MINDEPTH] -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Calcite\*0.18+Dolomite\*0.22+MontmorN CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7781

OUTPUT\_NAME: calcite.18+dolomite.22+montmorilloniteNa.6

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.1250 2.1600 2.2480 2.2780

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.2400 2.2700 2.3700 2.4000

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_DOLO\_MIXES] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Calcite\*0.18+Dolomite\*0.22+MontmorC CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7811

OUTPUT\_NAME: calcite.18+dolomite.22+montmorilloniteCa.6

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.1500 2.1850 2.2500 2.2850

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.2500 2.2800 2.3600 2.3950

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_DOLO\_MIXES] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "GDS212 Calcite80%+Montmoril20% 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7785

OUTPUT\_NAME: calcite.8+montmorilloniteNa.2\_mix\_intimate

NUM\_FEATURES: 2 3

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.1250 2.1550 2.2500 2.2770

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.2480 2.2780 2.3760 2.4060

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 14

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ILLITE\_CLINO\_2250NM]

;FEATURE\_TYPE: Not

;NOT\_FEATURE\_ID: 15

;NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

;NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ILLITE\_CLINO\_2250NM]

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Calcite\*0.25 + Mont\_SAz-1\*0.75 Are CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7787

OUTPUT\_NAME: calcite.25+montmorilloniteCa.75

NUM\_FEATURES: 2 3

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.1300 2.1650 2.2500 2.2770

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.2550 2.2900 2.3700 2.4050

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 14

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ILLITE\_CLINO\_2250NM]

;FEATURE\_TYPE: Not

;NOT\_FEATURE\_ID: 15

;NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

;NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ILLITE\_CLINO\_2250NM]

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Calcite\*0.25 + Mont\_SWy-1\*0.75 Are CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7791

OUTPUT\_NAME: calcite.25+montmorilloniteNa.75

NUM\_FEATURES: 2 3

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.1250 2.1550 2.2500 2.2770

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.2550 2.2900 2.3760 2.4060

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 14

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ILLITE\_CLINO\_2250NM]

;FEATURE\_TYPE: Not

;NOT\_FEATURE\_ID: 15

;NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

;NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: [MINDEPTH\_ILLITE\_CLINO\_2250NM]

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "CalciteWS272 \*0.5 + MuscoviteGDS113 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7795

OUTPUT\_NAME: calcite.5+muscoviteMedHiAl.5

NUM\_FEATURES: 2 1

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.1250 2.1580 2.2270 2.2570

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.2270 2.2570 2.3760 2.4060

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 7

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_RELATIVE\_DEPTH\_CONSTRAINTS: 1 0.0800

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "CalciteWS272\*0.5 +MuscoviteCU91-250 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7799

OUTPUT\_NAME: calcite.5+muscoviteMedAl.5

NUM\_FEATURES: 2 1

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.1250 2.1580 2.2270 2.2570

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.2400 2.2700 2.3760 2.4060

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 7

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_RELATIVE\_DEPTH\_CONSTRAINTS: 1 0.0800

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "CalciteWS272 \*0.3 + MuscoviteCU93-1 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7803

OUTPUT\_NAME: calcite.3+muscoviteLowAl.7

NUM\_FEATURES: 2 1

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.1250 2.1580 2.2400 2.2750

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.2400 2.2750 2.3760 2.4060

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 7

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_RELATIVE\_DEPTH\_CONSTRAINTS: 1 0.0800

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Dolomite\*0.5+Mont\_SWy-1\*0.5 ArealMi CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7711

OUTPUT\_NAME: dolomite.5+montmorilloniteNa.5

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.1400 2.1700 2.2480 2.2780

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.2400 2.2700 2.3500 2.3850

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_DOLO\_MIXES] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Dolomite\*0.5+Mont\_SAz-1\*0.5 ArealMi CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7715

OUTPUT\_NAME: dolomite.5+montmorilloniteCa.5

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.1500 2.1850 2.2480 2.2780

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.5000

CONTINUUM\_ENDPTS: 2.2400 2.2700 2.3500 2.3850

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_DOLO\_MIXES] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "GDS213 Calcite80%+Kaolinite20% 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7807

OUTPUT\_NAME: kaolinite.2+calcite.8\_mix\_intimate

NUM\_FEATURES: 2 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.500

CONTINUUM\_ENDPTS: 2.0900 2.1400 2.2250 2.2550

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.500

CONTINUUM\_ENDPTS: 2.2290 2.2580 2.3900 2.4200

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "CU91-6A Chalcedony whitePebble 18388-1AR"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7809

OUTPUT\_NAME: chalcedony

NUM\_FEATURES: 1 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.1190 2.1550 2.3580 2.3900

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Opal TM8896 (Hyalite) W5R4Naa\_ CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 3672

OUTPUT\_NAME: hydrated\_silica

NUM\_FEATURES: 1 0

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.1160 2.1550 2.3700 2.3900

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Tremolite HS18.3B W9R4Nccc CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 4889

OUTPUT\_NAME: tremolite\_or\_talc

NUM\_FEATURES: 2 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.0000

CONTINUUM\_ENDPTS: 2.2100 2.2500 2.3240 2.3550

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

;FEATURE\_TYPE: Diagnostic

;FEATURE\_WEIGHT: 0.200

;CONTINUUM\_ENDPTS: 2.2760 2.2800 2.3060 2.3100

;CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

;FIT\_CONSTRAINTS: [MINFIT]

;DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 2.3240 2.3550 2.4050 2.4450

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0400

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0400

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_SERP\_TREM] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "Talc GDS23 74-250um W9R4Naaa CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 4578

OUTPUT\_NAME: talc\_or\_tremolite

NUM\_FEATURES: 3 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.2300 2.2600 2.3300 2.3650

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 2.2500 2.2750 2.3050 2.3350

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 2.3300 2.3550 2.3900 2.4200

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_WEAKFEAT]

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0600

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0600

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_SERP\_TREM] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "NMNH96917A Antigorite>250umGrn 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7827

OUTPUT\_NAME: serpentine\_antigorite\_or\_calcite+dolomite

NUM\_FEATURES: 1 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.1750 2.2000 2.3800 2.4200

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.020

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_SERP\_TREM] -99.99 [MINFD\_2\_3MICRON]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "HS323-1B Chrysotile <5um white 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7823

OUTPUT\_NAME: serpentine\_chrysotile

NUM\_FEATURES: 1 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.1850 2.2300 2.3900 2.4300

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.020

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_SERP\_TREM] -99.99 [MINFD\_2\_3MICRON]

END\_REFERENCE\_ENTRY:

;

; Total feature weight set very slightly above 1.0 in order to have this supersede

; "serpentine\_antigorite\_or\_calcite+dolomite" when the 1 micron iron-bearing mineral feature is present

;

;............................................................Material SPECPR Title = "NMNH96917A Antigorite>250umGrn 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7827

OUTPUT\_NAME: serpentine\_antigorite\_withironfeat

NUM\_FEATURES: 2 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 0.7900 0.8300 1.3000 1.3500

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_SERP2]

DEPTH\_CONSTRAINTS: [MINDEPTH] -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000001

CONTINUUM\_ENDPTS: 2.1750 2.2000 2.3800 2.4200

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.020

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_SERP\_TREM] -99.99 [MINFD\_2\_3MICRON]

END\_REFERENCE\_ENTRY:

;

; Total feature weight set very slightly above 1.0 in order to have this supersede

; "serpentine\_chrysotile" when the 2.115 micron serpentine feature is present

;

;............................................................Material SPECPR Title = "HS323-1B Chrysotile <5um white 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7823

OUTPUT\_NAME: serpentine\_chrysotile\_withsecondfeat

NUM\_FEATURES: 2 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.0000

CONTINUUM\_ENDPTS: 2.0500 2.0800 2.1600 2.1850

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_SERP3AND4]

DEPTH\_CONSTRAINTS: 0.002 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000001

CONTINUUM\_ENDPTS: 2.1850 2.2300 2.3900 2.4300

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.020

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_SERP\_TREM] -99.99 [MINFD\_2\_3MICRON]

END\_REFERENCE\_ENTRY:

;

; Total feature weight set very slightly above 1.0 in order to have this supersede

; "serpentine\_antigorite\_or\_calcite+dolomite" and "serpentine\_antigorite\_withironfeat" when

; the 2.115 micron serpentine feature is present

;

;............................................................Material SPECPR Title = "NMNH96917A Antigorite>250umGrn 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7827

OUTPUT\_NAME: serpentine\_antigorite\_withsecondfeat

NUM\_FEATURES: 2 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 0.000

CONTINUUM\_ENDPTS: 2.0500 2.0800 2.1600 2.1850

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: [MINFIT\_SERP3AND4]

DEPTH\_CONSTRAINTS: 0.002 -99.99

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000002

CONTINUUM\_ENDPTS: 2.1750 2.2000 2.3800 2.4200

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 8

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0200

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 9

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.020

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_SERP\_TREM] -99.99 [MINFD\_2\_3MICRON]

END\_REFERENCE\_ENTRY:

;

;

;............................................................Material SPECPR Title = "HS184-3B Topaz 74-250um white 1838 CONV"

REFERENCE\_SPECPR\_RECORD:[splib06b\_convolved] 7817

OUTPUT\_NAME: topaz

NUM\_FEATURES: 1 2

FEATURE\_TYPE: Diagnostic

FEATURE\_WEIGHT: 1.000

CONTINUUM\_ENDPTS: 2.0000 2.0600 2.1000 2.1400

CONTINUUM\_CONSTRAINTS: -99.99 -99.99 [MIN\_REFL\_MID] -99.99 -99.99 -99.99 -99.99 -99.99

FIT\_CONSTRAINTS: -99.99

DEPTH\_CONSTRAINTS: -99.99 -99.99

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 10

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0500

FEATURE\_TYPE: Not

NOT\_FEATURE\_ID: 11

NOT\_FEATURE\_FIT\_CONSTRAINTS: [MINFIT\_NOTFEAT]

NOT\_FEATURE\_ABSOLUTE\_DEPTH\_CONSTRAINTS: 0.0500

WEIGHTED\_FIT\_DEPTH\_CONSTRAINTS: [MINFIT] [MINDEPTH\_TOPAZ] -99.99 [MINFD]

END\_REFERENCE\_ENTRY:

;

END\_CMDFILE: