

*Business Notes*

**WELLWORTH**

*Book 6*



*Well Sample*

*Keep*  
**STENOGRAPHER'S  
NOTE BOOK**

BOOK No. \_\_\_\_\_



From \_\_\_\_\_ To \_\_\_\_\_

- Cleburne Co
- ① D. Finnelly et al #1 Donighan - 1  
33-11N-9W - (3790')
- ② W.S. King et al #1 Lee Barre Co  
24-18N-22W (0-1451')
- ③ City of Tontitown Washington Co  
1-17N-31W (60-1416')
- ④ J.W. Eddington #1 McElroy Washington Co  
5-15N-32W (65-580')
- ⑤ Plymouth Oil Co. #1 Spies Washington Co  
24-14N-30W (1695-2121')
- ⑥ ~~Baxter~~  
Mountain Home #2 Baxter Co  
9-19N-13W (300-1505')
- ⑦ Phillips University Carroll Co  
15? - 20N-27W (850-1000')

⑧ Baker Hospital ~~75~~ Carroll Co  
15-20N-26W (130-333')

⑨ City of Green Forest Carroll Co  
4-19N-23W (6-1587)

⑩ Frank Andrews Boone Co  
26-21N-21W (55-310)

⑪ Carnation Milk Benton Co  
18-19N-29W (6-458')

⑫ City of Mammoth Springs - Fulton Co.  
7-21N-5W (50-350')

⑬ Independent Gravel Co, Benton Co  
14-21N-33W (5-265')

⑭ Roney Hard Marion Co  
5-18N-16W (35-77')

⑮ Boyd Williams Marion Co  
27-19N-15W (10-120')

①⑥ Vic Rakowski # 3 Washington Co  
25-14N-33W (0-414)

①⑦ Vic Rakowski # 5 Washington Co  
24-14N-33W (0-410)

①⑧ Vic Rakowski # 7 Washington Co 237'  
Top } # 9 233'  
only } # 12 284'

①⑨ City of Yellville Marion Co  
9-18N-16W (35-755)

②① Cecil Barnes Boone Co  
30-21N-20W (560')

Sept

②② City of cotter

# 5106 Jerry upp & M. Corrokin Orig - 2165 to 4471  
disagree on age of f/bk Res - 2811 to 4475  
15- Mic some pp. 059  
Euc. Emeneh. Potosi!

2165 - NR - Shgy to buff silty ls;  
v fossiliferous; abundant limonite? and  
brecc, cephalopods

2171 - Silty, sh limy argular f-ss  
M-gy sh limy mic silt sh  
some large qtz granules

2170-80 argular f-c sh - dila free  
trace m-gy sh glauconite

2190 as above

2200 as above - qtz granules

2210 M-gy f-mic sh

2220 as above

2230 as above

2240 M-gy f-mic sh; f-m argular sh; trace  
of limonite as in 2165 - - osts

2250 as above (this sample is probably 1/2 gy sh)

5406

2260 M-gy & f-mic sh - change from upth hole

2270 as above

2280 .. ..

2290 as above but 2285-88 fine cr f- angular ss

2300 ~~dk~~ M-gy & mic sh; red-buff limy silt; f-m angular ss

2310 as above sd & sl 50-50

2320 cr - dirty limy ~~sd~~ f-csd & sly ls with limonite? oolites; ~~coprolites~~   
 limonite;  $\frac{1}{3}$  m-gy f-mic sh  
2315-18 v f to f sultry ss

2330 as above sh & sl 50-50

2340 as above

2347 - dk gy sdy silty ls - limonite? oolites - two glass

2350 M-gy f-mic sh

# 5406

2357 Buff f-angular sd

2350-60 mostly m-gy sh - some fine sd; brack

2370 M-dk gy sh trace f-c sd in bottom of  
limy

2370 - 2470 - M-dk gy sh w/ trace ( $\frac{1}{10}$ - $\frac{1}{4}$ ) f.m  
fine angular sd & some lumps of  
limy sd - probably <sup>limy</sup> sd streaks in sh.

2480 Fine lt gy f-c angular sd - some granules -  
to

2570 a few lumps of limy - forams?  $\nabla$   
trace dk gy sh - probably st limy sd  
w/ sh streaks

2580 Sand and shale is about 50-50

2590 Fine f-c angular sd - some pebbles to  $\frac{1}{2}$ "  
lumps of limy ss: 50% <sup>m-</sup> dk gy siltst

2600 as above f lt gy silty <sup>v-micaceous</sup> glauconitic  
ls - 40% sample - osts; probably  
forams - impression only - ~~much m~~

#5406

2610 as above and definite forams

2620 M-gy f-mic sh;  $\frac{1}{2}$  f-c<sup>lims</sup> sd - some  
to  
2650 granules; sh

2660 1/2 gy f-m angular ss; drls free  
 $\frac{1}{3}$  ~~sh~~<sup>m</sup> gy f-mic sh -

2670 as above but sl limy sd  
2680

2690 M-gy f-mic sh;  $\frac{1}{4}$  f-m sd w/ some  
qty granules; forams definite

2700 as above sl more sh

2710 m-gy f-mic sh - trace f-sd

2710-50 M-gy sh - f-mic - trace calc<sup>+ sh</sup> ls  
(probably sl limy sh)

2760 as above

2770 as above <sup>sl limy</sup> - forams definite - ostra

2780 M-gy mic ~~sl limy~~ sh - forams  
V silty ls - glauc = marl  
(see next sample)



5406

2790 M-gy mic - ~~not~~ silty ls - looks like marl - v active in acid - brack? No forams visible, but looks like K.

2800 M-gy mud as above - still K

2806 as above

2806-11 Res - only 5% m-gy silt - ~~Probably~~ orig is like above ???

K  
Paleozoic

2811-2820 - Res 20% (No orig for this)

Res 90% m-gy sh - trace (to) m-br to m-gy trans ch - trace glauconitic f-on sand - one glauconite granule; lissomite? or - probably slump

2820 Orig + Res - Res 50%

Res - 90% dk gy sh - trace m-dk br ch (looks like broken ch pebbles) trace wh ch w/ blk oil trace f-sd to sd granules;

Orig dk gy sh - 50% - dk gy f-gran ls - trace glauconite grains in limy matrix.

(At K/Paleo boundary must be about 2815 +)

5406

~~2227~~

2820-30 R-40%

Br-gy f-gran ls - trace  
sdy ls - m-dkgy sh - f-m irregular fms  
Res sh & f-m sd

2835 R-30%

Br-gy f-gran ls - trace sdy ls  
1/4 dk-gy f-mic ch - trace f-m sd  
R - f-m sd - s sh; trace dk  
gy br to blk ch - could be broken  
pebbles, but not too likely

2840 R-40%

M-gy + dk br-gy f-gran ls  
trace sdy ls; living glauconite sd masses  
(shiny?)  
Res 1/2 m-gy sh - f-m sd -  
trace or s dk br sm ch) or ch w/  
br ool; trace of granules - some of  
th ch looks like polished pebbles

2845 R-50%

Dk br-gy f-gran ls; m-gy sl sdy ls  
w/ dk<sup>m</sup> oolites (shanty);  
Res 95% dkgy sh - very little sd - two dk<sup>br</sup> ch

5406  
2850 R - 40%

as above sl more of ls - <sup>10%</sup> fine fine sd  
and limy sd - (branch - slump??)

R - mostly sh <sup>over</sup> a of m-gy sm ch;  
~~small~~ <sup>1/3</sup> dk f-m sd - orig had  
about 10% sand - some ch pebbles

2855 R - 40% - ~~mostly sh & m-gy~~

m - dk gy <sup>fine</sup> ~~sh~~ limy sh; ~~trace~~  
~~ls as above~~ <sup>1/3</sup> ls as above  
<sup>1/3</sup> dk f - gran ls & dk gy sd, ls  
R as dk gy sh & trace sd - trace ch

2860 R - 40%

dk gy ~~with~~ <sup>fine</sup> ls - <sup>1/3</sup> dk gy <sup>fine</sup> ~~sh~~  
~~trace of m-gy~~ - trace sh ls -  
(branch - maybe slump)

2865 R - 40%

As above - sl more sh -  
(branch - maybe slump)

540c

2870 R-30%

M-gy sdy ls w/ <sup>m.c</sup> <sup>1/4</sup> dk br ool; ~~dk~~ dk  
gy f-gran ls; m-gy f-mic sh;  
m-angular sand; ~~trace~~ glauconite grains  
in silty matrix

Rz f-c sd with some granules; ~~dk~~  
m-gy sh; trace w to br sm ch  
(Probably sand lenses & lime layers)

2875 - R-40%

As above -  $\phi$  echinoid spines

2880 - R-30%

As above

2885 - R-40%

dk gy f-gran ls & dk gy f-mic sh;  
trace sd.

Rz sh & trace sd

2890 - R-25%

dk gy f-gran ls - trace ool & sdy  
dk gy ls; dk f-mic sh - trace cr ch

4428

3406

4430

OR - Trace

↓  
4475 - Res only

✓ slight trace of res in any  
of these samples - some  
dash - trace in gtzost ch -  
some gtz that may or may  
not be fine st - an occasional  
rd of f r sd gv, but not  
enough to be counted

4328

orig -

↓  
4455

St br - gy f - m x 1/4 dol  
(~~gy~~ drill fee and may  
be that x 1/5 are broken)

orig

4455

St gy - (sl. pink) m-c x 1/4

↓  
4471

dol -

4475 - No orig

#5406

2895 R-40%

Dk gy f-gran ls + m-gy ls w/dk  
gy m-ord - sl sh; dk gy sh  
R - dk gy sh - f-m sd (3)  $\frac{1}{2}$  trace  
a ch.

2896 - R-40%

It to m-gy <sup>sl sh</sup> sl ord ls  
R - f-m angular sd - no sh

2898 - R-40%

as above  $\frac{1}{2}$  trace bright coal

2902 - R-15%

~~as above~~ Dk gy f-gran ls -  
R - f-m sd -  $\frac{1}{2}$  trace bright coal

2904 - R-10%

m-gy  $\frac{1}{2}$  ls - gy f-gran ls  
R - f-m sd with trace dk gy sh  
 $\frac{1}{2}$  cr llt gy sm ch.

2907 R 10%

M-gy ls w/dk gy ord  
R 90% milled a  $\frac{1}{2}$  m-br sm ch. trace sd

5406

4368 - R - trace

orig as above

R - cu ~~small~~ size masses

v long gy x/1/5 - looks at first

like f - sd - abt some larger gln x/1/5

4372 - R - trace

lt br - gy m - a x/1/5 dot

R - as above - trace dk sh

4376 - R - trace

lt br - gy m - x/1/5 dot

R - as above

4380 R - trace

↓  
To 4394

M - c x/1/5 dot - ~~lt br~~

lt br - gy generally - some m - gy

R - as above

4394

4397 R - trace

↓ lt br - gy m - x/1/5 dot - trace

wh of v dk gy m - x/1/5 dot - x/1/5

4428 generally drill free - occasional pink tongue -

R - almost none - tiny lines

cu gtzou ch of dk gy sh

73406

2909

R- 8%

M-dk gy f-x/ln lining delomite

Res as above

2910

R- 3%

~~A~~ Br-gy f-x/ln <sup>limy dol</sup> ~~to~~ - larker silt

su

R- trace cr & br mottled ch; trace dl/gy sh

2911

R- 3%

lt gy & dk gy f-gran ~~to~~ limy dol

Res - lt gy & dk gy silt; trace br ch

2914

R- 3%

M-dk gy f-x/ln dol <sup>dk gy</sup>  $\frac{2}{3}$  -  $\frac{1}{3}$  f-gran ls.

R- br-gy ~~to~~ juvenile ls f. dolomitic ch

(40% f-in angular sd grs)

2915

R- 3%

as above - some coarse sd grs

2918

R- trace

dk br-gy f-gran ls; trace f-x/ln dol -

R- br-gy f-dolomitic silt

cr ch w/ br rd



5A06

4355 - R-12

It<sup>br</sup> gy dirty t-m xlls dol

R - trace It gy & dd gy silt -

trace with gtzore ch; It br tural ch

4357 - R-12

It br - gy t-m xlls dol

R - as above

4347 - R-12

M - br - gy t-m xlls dol

R - It br tural ch - ~~It gy~~

blk sh. tra

4365 - R-12

It - m br - gy m-c xlls dol

R It br tural to gtzore ch - two blk sh.

4366 - R - trace

It br - gy m - xlls dol

R - <sup>two</sup> blk sh gtzore ch - dk sh; f sil

#5406

2920 - R - trace - 17.

as above

2923 - R - 17 -

Dk br gy f-xlln sl lying dol

R - dk gy f-dolomite silt; trace  
or ch w/br dol; trace f-m sd

2928 R - 12

Br - gy f-gran ls; <sup>dk gy</sup> trace f-xlln dol  
R - dk gy porous silt; lt br sm ch -  
to ptzose ch; (50% Br f-m sd - the  
larger grs are rd & fr)

2930 R - 2%

as above but ~~at~~ dol

2934 R - 30%

M - gy f-xlln sl lying dolomite

It gy sm ch with scattered m  
dolomite - trace bright f-sd -

2938 R - 25%

Br - gy f-xlln dol;

a to lt br sm sl m-dolomite ch; large grs xlls

5406 -

4335 - R - trace

It gy (slt dirty looking) m-c x 1/2 dol  
(x 1/2 drill fine and may be broken)

R - v sl trace + sl - look ch,

It be transit ch - could it be  
shung?

4337 as above R - trace

4342 - No res available

m-gy + x 1/2 dol

4345 - R - 37

dirty It gy m-c x 1/2 dol - some  
v c wth x 1/2

R - dull m-br v f detritus  
of trace ch - pyrite

4349 - R - 2%

m-br - gy c-x 1/2 dol

R - m-br silt

4354 - R - No res available

orig as above

5406

2942 - R - 57

R - gy f - gran ls - trace f - xlln dol  
cr - lt br sm ch; trace forms dk gy sil

2945 - R - 27 as above

2950 R - ~~307~~ P

DK gy f - xlln ling dol &  
lt gy ls w/ br sol - (probably mostly ls in sample)  
Residue - not run - same as sing -

2955 R - 207

lt gy to m - gy ls w/ abundant large  
dk gy rd ~~as~~ and br sol; some  
f - br sol. Slightly m - rd ga

R. - mostly f - m rd & fr sd ga -  
traces in glauc ch; dk gy sil

2960 R - 357

lt gy v f xlln <sup>sls</sup> dol

R - f - m sd - rd & fr on larger ga  
traces in sm ch

2963 R - 357

as above - sand is angular - crushed

4298 - R 37a

M-gy to <sup>as above?</sup> l<sub>1</sub> - gy to gran l<sub>3</sub> - dirty

R - dirty full of tan - not  
conclusive probably #m-l<sub>1</sub> ch

4300 - R-56

M-gy to l<sub>1</sub> l<sub>2</sub> gy to gran l<sub>3</sub>

R - <sup>dull</sup> crypta x l<sub>1</sub> n g type ch -  
sl f dolocastri

4305 - R-17

wh c<sup>vc</sup> x l<sub>1</sub> n dol - silt between x l<sub>1</sub> &  
as above & dk silt

4309 - R-207

Orig as above

R - blk sh, cr crypta x l<sub>1</sub> n g type ch.  
trace m-gy greasy l<sub>1</sub> ch

<sup>09</sup>  
~~4311~~ - R - trace

4332 Orig wh to dirty c - x l<sub>1</sub> n dol  
R - trace blk sh, m - dk l<sub>1</sub> n sm ch  
& tan on rd & l<sub>1</sub> rd gr - very few  
trace pyrite (tan in res & some  
in orig - from orig??)

#5406

2964

R-258

dk gy f-x/1/4 dol - red keratite

Res - m - br zones to f-

decolorative silt  $\frac{1}{4}$  bright f-sd - low  
m-br ch.

2968

R-208

as above & with some to grey ch

2972

R-258

Br-gy t-gran ls  $\frac{1}{2}$  f-x/1/4 dol

m-br ds ch; trace lt br f

decolorative silt; trace f-m br sd

2975

R-58

dk Br-gy t-gran ls

R - m-br ds ch; trace f-2m red  $\frac{1}{4}$  ss

2979

R-28

as above

Res t-m sd - some lt br ds ch

2985

R-208

~~dk gy t-gran ls (1/2) & dk f-x/1/4 dol~~ <sup>limy</sup>

Res dk br f-zones to f-decolorative  
silt

4290 - R-107

Mixture - c wh dolomite - 60%

M-xlln m-gy ls 40%

R-M-lr sm ch; trace ddt

c granular gypose ch

4291 - R-37

lt to m-gy + gran ls

B-M-lr sm to gypose ch - trace ddt

c granular d; blk + dolomite  
ch.

4293 R-37

M-dk gy + gran ls

R-as above -

4297 - R-27

M-gy - dirty tuffaceous <sup>m-</sup>xlln dol  
trace wh c-xlln dolR-llb v open m-dolomite  
gypose ch; trace blk ch

5406

2992 R-258

~~M-gy~~ ca t-gran 15 1/2 m-gy  
t-x 1/4 dol 1/2

Res wh dull ch; dk gy t-gran  
to f doleritic silt; trace t-m sl grs

2999 R-302

M ~~dk~~ gy to dk gy t-gran 15 1/2 dk gy  
t-x 1/4 dol;

R- br-gy t-gran to f doleritic  
silt - ca to dk br sm ch - waxy in part

~~B~~

3003 - R-58

dk br t-gran <sup>silt</sup> la

It gy trace to dk br ch; sl trace  
t-m sh

3008 R-59

dk gy t-x 1/4 dol

R- a trace to m-br sm ch  
dk gy t-doleritic silt

3014 R-58

dk gy t-gran <sup>sl doleritic</sup> silt 15

R- m-br sl granitic silt



4277 - R - 1%

as above - looks like igneous texture

R - ~~dk~~ blk - sh - ~~etc~~

It br - gy earths silt w/ pyrite  
L - pyrite; trace m - br sm ch

4279 - R - trace

Mostly all wh v c xlls dol -

trace of blk coloration between xlls

R - as above

4281 R - trace

as above

R - lt & dk silt & trace

v lt br pyrite ch

4284 - R - 1%

lt c - xlls dol & to lt gy

t m - gy t - gran ls -

R - lt & dk gy silt & trace msd.

4287 - R - 10%

m - gy t - gran ls & trace to wh c xlls dol

R - dk br sm to pyrite ch

5406

3018 R-32

M-gy f-gran ls

R-m dk br wavy ch - v. sl.ool

br-m-gy silt

3024 - M. Res available

as above

3027 - R-52

dk gy f-gran ls

lt br gtyose sm to gran ch

sl trace f-sd

3030-3034 R-trace

dk gy f-gran ls

R-f-sl - trace - 1 lb silt + 1 lb ch

3035-3037 R-12

as above

3038 R-12

as above

5406

4260 - R-18

M-gy t-gum 15

trac cr - gtyre ch or silk

4263 - R-108

M-br - gy f-m x/1/3 dol

R-trac cr to blk f-dobroctis ch

4265 - R-208

M-gy t-gum st dotis 15

R-M-dkbr <sup>sm</sup> ch; trac

17 br gtyre ch,

blk f-dobroctis ch

4267 - R-48

wh v c x/1/n dol (508) & 17 gy

c-x/1/n dol - looks as if there is a

trac of dk silk between wh x/1/s

R-br & blk gray sm ch.

trac f-sd

4272 - R-17

wh v.c. x/1/n dol - dk <sup>sm</sup> between x/1/s

R-br gray ch & dk gy f-silk is

f-"quins"; much f- pyrite

5406

3041 - R-57

m-gy to dk gy t-gran ls

R- Stgy transitional ch - lt br porous silt  
tuss t-m ool.

3046 R 60%

dk gy t-gran ls

R- dk ls to dk gy sm sil waxy ch

3050 R-59

dk gy t-gran ls - red hematite

R- m-ls waxy ch - ~~dk~~ dk sil

porous brittle ch - may be

siliceous sh but looks cherty

3052 R-80

as above

3054 R-58

br-gy t-gran ls - red hematite

on-br gtyose ch - gty granules

(slump??)

5406

4236 - R - 10%

Lk br-gy t-gran sl dolie ls  
R - Lk br sm greasy looking ch

4240 - R - 5%

as above & trace dk gy sh

4241 - R - 3%

M-gy t-gran ls <sup>no dol</sup> - some w/ calcite  
R - m-dk br greasy sm ch  
trace blk sh

4245 - R - 3%

as above

4250 - R - 2%

M-gy t-xlln sl limy bed  
R - m-br sm ch; <sup>trace</sup> cr + dolomite ch

4254 - R - 2%

M-gy t-gran + t-xlln dolie ls  
trace calcite & calcite  
R - as above

5406

3057 - R-32

dk gy + gran ls - sl dolie

R - br-gy + dolerated silt

3059 - R-82

M-gy + gran dol

lt br-gy + dolerated silt

3062 R-58

as above

3063 R-54

br-gy + gran limy dol

R - wh to v lt gy s-porous silt (silice)

3064 R-48 as above - sh more limy

3066 R-trace

R-gy + dk gy 5 gran dolie ls

R - m. br gtzose ch, dk gy ~~to~~ silt;

trace s - bright sd grs i v small

elongated br grs xlls

5406

4216 R-50%

M - dk gy + gran sl ~~to~~ limy dol

R - f- dolomitic silty looking but  
probably pyro ch - gran now  
probably una cr.

4223 - R-10%

M - br - gy + gran ls - sl dolie

R - cr porous dull ch; <sup>thin</sup> lt gy  
trans ch;

4226 - R-4%

M - br - gy + gran dolie ls

R - as above

4228 - R-2%

as above

4232 - R-2%

M - dk gy + gran dolie ls

R - cr porous ch; <sup>lith ch;</sup>  
trans lt gy trans ch.

5406

3070 - R trace

dk br-gy f-gran ls  
m-br sm ch - dk gy silt - trace  
f-bright sd; tiny ~~to~~ long quartz

3072 - R - trace

~~dk~~ Br-gy f-gran ls & v'l xlls dol - 50-50  
(log as dolie ls)

R. 1+ br sm to quartz ch; f-sd - <sup>is in</sup>  
on larger qtz; m-gy silt on sh - glauco trace

3074 R - trace

dk Br-gy f-gran dolie ls

R - mostly f. bright sd <sup>may be broken qtz.</sup> & trace wh

qtz ch; 1+ br sm ch - glauco trace

in <sup>trace</sup> ~~small~~ grains - trace long tiny qtz xlls

3076 R - 1?

Br-gy f-gran to v'l xlls. tiny dol

R - m-br trace ch; bright qtz

which looks like broken qtz mass

and not sand - v tiny; <sup>thin</sup> glauco green!

trace long qtz grains; dk sh



5406

4204 - R-57

Lk gy t-gran to t-x/1/2 dolie ls

R- Lk gy sh; lt br dull

gtzose ch - m - dk br ch

trace t-m sd & several chur

gtz granules - polished but stn

irregular

4205 - R-47

m-br - gy t-gran<sup>dolie</sup> ls

R - as above

4207 - R-207

Lk br - gy t-gran sl dolie ls

R - buff t lt br silt

4209 - R-58

as above

4213 - R-59

Lk gy t-gran to t-x/1/2 dolie ls

R - m-br t - dolie sil or ch

gtz granules - slump?

trace m-br sm ch

5406

3077- R - trace

Br - gy f-~~gy~~ <sup>limy</sup> xlln/dol

R - as above

3080 R - 53

Dk br - gy f-gran ls

R - black sh or silt - trace f-m sd

3082 R - 53

Dk br - gy f-gran ls & trace f-xlln/dol

Dk gy f-gran ls & f-dolomite sh

Dk br dull dk ch; f-m sd

3086-90 R - 153

M. br - gy f-gran ls

R - f ~~angular~~ silt f-m sd - 90% -

on earthy silt; trace pyrite

3094 R - 583

St gy v limy f-m sd

Res 99% f-m sd - secondary growth

v sl trace blk sh ch

5406

4189 - R-203

20k - gy f gran to f x 1/2

v delie 15 - trace with calcite

R - m-br ~~reddish~~ v dull

dirty f-dolomite silt; blk ch.

4192 - R-203

No. 000.

Rec as above

4197 - R-5?

m-gy silty f gran 15

R - blk sh; 17 br quartz -

crystalloids ch; m<sup>sh</sup> br an ch

4200 - R-5?

m-br-gy f gran silty? 15

a f-dolomite to f gran quartz ch

m-br an ch;

5406

3097 - R 3%

Dk br - gy t-gran ls

R - mostly t bright sd.

3101 - R - 5%

Dk br - gy t-gran ls

R - cr porous ch; lt br sm ch;  
trace t sd -

3104 R - 4%

Br-gy tdk t-gran ls

R - m-gy dach; cr t porous ch

dk gy st t doleritic ch; trace m

3108 R - 1%

Dk gy t-gran silty ls

R - lt br sm ch; bright t sd

dk gy silt,

3113 R - 1%

M t dk gy t-gran silty ls

R - dk gy porous silt  $\frac{1}{2}$ ; t c

rd t fr sd - trace lt br sm ch

5404

4173 - R-307

Lk gy + gum to t x 1/4 ~~del~~ long del

R - as above - weather del m - dull  
doloresite silt or ch

4176 - R-307

Lk gy to gum to t x 1/4 long del  
as above of alk ch

4180 - R-57

M-gy + igne ls

R - as above

4182 - R-107

Wh c-x 1/4 del <sup>+ calcite</sup> (50%) - still looks  
like vein material - m-gy 5-  
gum too del ls,

R - m-gy <sup>to R</sup> dull gypose ch

4184 - R-4%

Orig - as above

R - duller t-doloresite ch -

It be gypose ch;

alk ch - cool - strange??

18406

3116 - R-5806

wh v siliceous f-m sd - looks  
same like quartz then sty ch -  
almost no free grains - sometimes is sig  
but probably none in the quartz bed

3122 R-58

Dark grey to blk f-gran ls

R-59. bright f-sd - ~~50%~~

m-br earthy silt; Lt br sand

3126 R-207

Blk f-gran silty ls

R br earthy silt

3131 R-1070

M-br-gy f-gran ~~to~~ dolie ls

R-m-br silt - two wh muscovite

3133 R-1070

as above of base f-m sd

3137 R-58

as above

~~4158~~ 5406

4158 - R-257

dk br-gy f-gran ls  
R - lt br basal ch -  
trace alk sh

4159 - R-102

20 k gy f-gran ls  
R - as above

4161 - R-257%

dk br-gy f-gran<sup>to dolie</sup> ls  
R - m-br-gy f-dolomitic silt ch  
sh ch - trace br - ~~gy~~ wry ch

4165 - R-59

as above - see more carbon than  
observed

4170 - R-157%

dk br-gy f-~~thin~~ gran dolie ls  
R - m-br dull f-dolomitic silt or ch;  
or dull crypto xllr ch; trace  
alk sh; trace lt br gyzol ch

5406

3140 -R-207

Dk gy f-gran ls

R - blk ds ch - ch w/ dk br

to blk f-ool in ~~sd~~ lt gy matrix

3145 R-38

M-gy f-gran ls

R - lt gy silt - trace ch as above - -

f-m sd

3150 R-58

M-gy f-gran ls - 2/3 of it is

v ool - c-dk gy ool in light grey ts

some scattered rd gr

R - f-m rd & fr sd

3156 R-507

M-gy limy f-m ss w/ bright

sand - secondary growth - Resalt sd

3160 R-507

M-gy v sdgy f-gran ls

R - 60% f-light sd - 40%

lt br ptzose ch



5406

4143 - R-27

M-gy f-gran ls

R-as above

4146 - R-107

M-gy f-gran st dolite ls.

R- dull br-gy earth f-dolomite

ch; blk sh; or quartz, dull  
cryptocrystalline, ch; trace 17h

traced ch

4148 - R-307

m-dk gy v.f. xlla lim<sup>3</sup> dol -

R- lit br-gy f-dolomite ch

or silt; trace dk gy sh; trace

wh quartz ch,

4154 - R-357

M-br-gy f-gran ls

R- 17h-gy traced, to dk gy sm ch

trace blk sh

# 5406

3166 - R-507

Jt - m gy t-gran v chuta ls  
Bkk dull h am ch - trace  
t-m sd

3170 R-357

M-gy t-gran ls  
Dk br ~~gy~~ dull da ch -  
trace vt sd

3177 R-207

M-br gy t-gran ls  
R-m-br am ch - dk br dull ch  
D

3181 R-57

M-br gy limg vt- vlla dol  
R-907 ll br am h dull da ch  
lt gy on ch ; t-m sd sd h tr in junk

3182 R-207

M-dk gy t- xll q limg dol  
R-cr am ch - sibacura srmst -  
trace lt gy t-dolocastic ch

5406

4130 - R - 10%

M - gy + - gran ls  $\frac{1}{2}$  ft x  $\frac{1}{2}$  in dol -

partially dolie ls - wh calcite

R - dk br to blk sand ch w/

scattered dolocasts - 75% 1/2 in

gyro ch; blk sh

4134 R - 10%

Drng - as above

R - 1/2 in - gy dull earthy, + dolocasts

silt; blk sh; br - waxy ch;

wh gyro ch

4137 - R - 20%

M - br - gy ds, at bot f - gran ls

some fine br bot

R - m - br - gy waxy bot ch

trou blk sh

4140 - R - 5%

M - gy + - gran dolie ls

R - blk sh; cr gyro - rough ch;

to br bot ch; dk br - gy

f dolocasts ch.

5406

3188 - R-27

M-gy t-gran sl dolie ls  
R - wh sm ch - tree br an ch  
lt br f - dolomite ch - trees t-m sd

3191 R-17

M-gy t-gran sl dolie ls  
R - mottled m-br & lt br ch w/  
scattered f-dolomite - vt ord in part  
tree t-m rd & fr sd - tree wh sm ch.

3196 R-107

M-gy t-gran ls  
R as above

3200 R-157

M - br-gy vt x lls limy dol  
R - Bright t-m sd w/secondary grml  
tree dk br ch

3207 R-33

M - br-gy t-gran sl ord, sl dolie ls  
R - m-br silt; m-br sm sl  
mottled ch; t-bright sd

4114 R-207

m-lr - gy t-~~gr~~<sup>gr</sup> ls; <sup>silt</sup> 1/3 wh calcite -  
either c'11 or ls or probably thin calcite  
R - m-lk lr - ~~blk~~ waxy ch  
w/ scattered ~~st~~ - dolerite; trace  
blk sh

4119 - R-157

m-gy t-gran ls - wh calcite  
R - calcite or dull quartz ch -  
cryptic xls - <sup>trace</sup> blk - trace micaceous  
ch.

4123 - R-107

m-gy t-gran ls - looks silty  
R - wh quartz ch; lt br dull  
t-doleritic quartz?; dk gy sh;  
m-lr sm ch

4124 - R-107

m-gy t-gran st dolerite ls -  
R - Blk sh  $\approx$  50%; m-lr t-  
doleritic quartz ch; lt gy t. lt  
m sm ch; trace vt sd -

5406

3211 - R-259

M-gyrt xlln dol  
It br gy ~~B~~ porous h r t doloresia  
ch; bright t-sd - traugjynte

3215 R-57

M-gy t-gran ls  
R-lt e br-gy silt - chon  
open gty - bright t-m sd

3218 R-258

Lk gy t-xlln lining dol  
It to dk br t-doloresia ch;  
lt br waxy ch; bright t-m sd

3224 R-357

M-br-gy rd - xlln lining <sup>ply</sup> dol  
R- t-c sd - rd & br in part;  
It br silt; <sup>rand</sup> rlt gy en ch

\*3227 R-207

xll  
removed  
+ traces

as above

5406

4102 - R-302

M - dk gy t-gran dolie ls  
R - lt br - gy silt to ch - some  
is soft & mat is definitely dull  
ch - scapolite (weak)

4104 - R-302

M - br - gy lining v + xln dol  
R - lt - br - gy t-dolomite qtz ch.  
trace lt gy & dk gy silt; trace  
lt br to dk br qtz ch to am ch

4109 - R-202

M - br - gy t-gran <sup>sl. dolie</sup> ls - <sup>trace</sup> wh calcite  
R - as above - <sup>trace</sup> quartz in sig  
does not show in res.

4111 - R-202

M - gy t-gran sl dolie? ls  
lt gy - br siliceous silt - 90% -  
trace dk gy sh; wh qtz ch;  
m - br qtz ch

5406

3230 - R-17

Lk gy t-gran ls

R-t-m sl rd s fr rd - mdk  
gn silt - tree sn ch

3233 R-107

Lk gy vt x 1/2 thin dol

R-dk br gy t-dolomite silt  
trace f m sd

3236 R-207

Lk gy vt x 1/2 thin dol

m-br dull ds ch

3240 R-59

Lk gy t-gran ls

m-br dull ds ch & dk gy ch

3245 R-27

M-gy t-gran ls

M-br sn t dull ch - 1 t br silt

trace wh gta

3248 R-37 M-gy t-gran ls

R-rd s fr t-m sd; dk gy silt



5A06

4080 R-257

M-gy t-gran ls - deltic?

R-507. 1+br gtyose ch; 1+br-gy  
silt 307; v dk gy t dk br  
sm ch; 1+br trond ch

4093 - R-507

M-gy t-gran sl deltic ls.

R- 1+br-gy silt-50 - 2+br br  
sm ch 50

4094 - R-257

ls above & has t-m sd - rounded,  
but more polished than I recalled

4098 - R-257

M-br gy t-gran ls - v. sl deltic

R- 1+br-gy silt - grades into  
1+br-gy gtyose granule ch - 507.  
m-br sm ~~trond~~ ch;  
trace t-m sd;

Rounded & polished <sup>br</sup> ch granules -  
this is a conglomerate zone or  
shump -

43706

3253 - R-27

DK gy f-gran ls  
R DK gy silt - many elongated gtz xlls  
trace f-m sl

3258 - R-107

M-dkgy ~~ool~~ f-gran ls  
dkgy silt - mostly f-m rd & fr  
in part sd gra

3263 - R-258

M-gy f-gran sdy ls; trace large  
blk ool  
R - f-m silicious to rd & fr sd

3265 R-52

M-dkgy f-gran ls  
R - f-m ~~ool~~ bright st; f-gy to dkgy silt

3270 R-52

M-gy to blk gy f-gran ls  
M-blk sm to dull ch; trace f-blk  
rough ool ch; f-m bright sd

3406

4075 - R-157

M-gy f-gran ls

R- m-br-gy silt; trace m-bronch  
It br-glyose ch

4076 - R-207

M-gy t-br-gy t-gran ls

R- as above

4080 - R-257

Dk gy t-gran ls - sl dolie

It br-gy silt; trace It gy t m-br<sup>am</sup> ch

4084 - R-207

Dk gy t-gran sl dolie ls

R- as above

4086 - R-307

Dk gy t-gran t r f r l l n dolie ls

R- It br-gy silt (maybe  
cryptocrystalline silica?) ; trace cr  
glyose ch & It br sam wavy ch.

# 3406

3273 - R-42

M-gy t dk gy f-gm sl dotis 1s

R- m l<sup>er</sup> da son to dull ch

f m l<sup>er</sup> sl

3278 - R-17

M-gy f-gm 1s - snow wh calcite masses

R- g<sup>low</sup> p<sup>low</sup> ch; 1t to dk gy silt  
trac f-m bright sl

3281 - R-52

M-gy t-gm dotis 1s,

R- lt gy to m-gy porous ch.

trac f-m sl - pyrit, trac

3284 Q-32

M-gy t-gm 1s

R- lt l<sup>er</sup> son ch; St gy porous ch

3288 R-252

M-gy f-gm sdy 1s - free st

grains in generally coated - ool??

R clear to wh v sdy ch w/ numerous

br ool

5406

4051 - R-10%

M-br-gy + gran ls

R- Smoky gy almost transparent ch (50%)

lt br + blk sh

4052 - R-20%

M-dk gy + gran ls

R- as above but only thin ch

4060 - R-5%

M-br-gy + gran ls

R- lt br-gy + dk gy silt

4061 R-20%

M-br-gy + gran ls

R- as above

4067 - R-25%

M-gy + gran ls

R- as above

4069 - R-38%

M-dk gy + gran ls

R- m-br silt + thin m-gy sand

5406

3271 - R - 207

It is in gy f-gran ls with abundant vol of coated sd gra

R - f-m bright sd with rough f-glyca? coating -

3297 - R - 507

It gy /ing - ~~sd~~ f-m ss; - sand grains are coated & appear more like rds.

R - fine rd & very frosted sd - or coating on them

3300 R - 707

It is f-~~ss~~ rd & ls from ss.

R - f-c rd & ls rd & cr glyca ch

3304 R - 357

It is ss as above & dk gy f-gran matrix ls chunks - 50-50

R - f-m coated - (<sup>fine f-m</sup> glyca cont) sd - cr glyca ch masses - pyrite

5406 R-58

4027 - M-gy t-gran ls - dolie?

R - m-br-gy t-dolomite silt or ch  
dk gy sh; trace with gyzose ch

4033 - R-2%

M-dk gy t-gran ls - dolie?

R - m-br-gy - t-dolomite silt or ch  
 $\frac{3}{4}$  dk gy sh; trace with gyzose ch  
lens + clay partls - trace pyrite

4034 R-3%

M-gy t-gran ls - dolie?

R as above

4036 - R-2%

M-gy t-gran ls - st dolie

R - as above & dk m wavy ch  
No pyrite

4042 - R-1%

M-gy t-gran ls

R - as above - no pyrite

4045 R-5%

M-gy t-gran ls - probably not dolie

R - a silt & blksh (70%); m-br sm ch; trace t-rod

5406

3307 R-207

M-dkgy t-gran ls  
Cn ptzore sdy ch & f-m ad &  
f-a ad;  $\frac{1}{3}$  waxy m-lr ch

3311 R-257

M-dkgy t-gran ls -  
DKgy t-dk in always ds ch  
r-f not in part; trace a ptzore ch  
& f-m ad.

3315 R-32

M-dkgy t-gr ls  
R-f-m rd & br sd; m-lr sm ch  
m-dkgy silt.

3321 R-107a

DKgy t-gran ls; trace lt-mgy vsky  
ls w/ a few ~~dkgy~~<sup>mool</sup>

R, f-m siliceous - (argill) ad -  
trace br sm ch



-5406 -

4008 - R-20%

It m gy 80 oil 1s

R- blk sh; sl trace w/ glycerol ch

4012 - R-5%

M-gy t-gran 1s w/ trace oil (silly 1s)

R- as above

4017 - R-10%

M-gy t-gran 1s w/ br oil that  
generally break free - many fine smooth  
(almost greasy looking oil)

R- M-dk gy sh - (98%) - m-br trace

# trace w/ glycerol ch; few almost dissolved  
free oil,

4019 R-10%

M-gy t-gran sl oil 1s - trace free oil

R- cr & blk slth (5150)

trace w/ glycerol ch & m-br sm ch

4022 - R-5%

No orig

R- as above & delimitation, open

It gy to 1 m glycerol ch

5404

3325 - R - 37

Lk gy t-gran ls

R - Iron rd f. to contact sd

m-br transitional ch; trace dk gy ch

3331 R - 57

Lt gy to m-gy t-gran sd 15 in

m-dk gy mat; some of the m-gy

sds are redial;

R, cr glauca ch & t-m contact

sd. Lt br silt; large chunk

of coal (slump ???)

3335 R - 12

M-gy t-gran ls

R - cr glauca f. to sd - often

contact - trace lt gy silt

3340 - R - 102

M-gy t-gran ls

R - Lt br transitional ch - contact

f. sd.

5406

3989 - R-25%

M-gy t-gran dolie ls

R- Blk sh w/ slight trace

• a to dk ls sm ch

3998 - R-25%

M-dk gy t-gran dolie ls

R-dk gy sh 5' & 5' m-gy-dm

t-dolomite sh; trace wh gyp to

sm ch

4001 - R-20%

M-gy t-gran ls - sl dolie?

R-lm-gy t-dolomite sh - 75%

trace wh gyp ch; lt gy trace ch &

dk gy sh

4004 - R-30%

lt gy t-gran ls w/ large dk gy &  
lm ool & trace wh calcite

R-dk gy sh - sl trace wh

gyp ch; trace dk smoky gy

sm ch

5406

3343 - R-58

M Br-gy t-x 1/4 dot

R Lt br basal ch; cr gtzose ch.

Btk r shiny cool stunje??

3350 - R-19

M-gy t-gran ls

R - cr gtzose ch & coated sd gr

Lt br basal ch

3352 - R-57

~~Lt~~ gy t-gran silt, ls

Lt br sl porous gtzose ch;

cr to Lt br basal ch; base l-mid

3355 R-

br gy t-gran silt, ls

R - dk gy sl porous dull ch

cr to wh gtzose ch

3358 R-19

Lt gy t-gran ls

R - t-m coated sd, trace H

gy & dk gy silt

-5406-

3975 - R-50%

as above

3978 - R-50%

Dk gy + gran ls - ~~large~~<sup>many</sup> wh  
calcite - all masses -

R Blk sh & trace wh quartz ch

3981 - R-40%

M-dk gy + gran ls - wh calcite

R - Blk sh & v slight trace wh quartz  
& dk ls sm ch,

3983 - R-40%

M-gy + gran ls - trace wh calcite

R - Blk sh; large clusters of dk ls  
sm ch - sil trace wh quartz ch

3987 - R-35%

M-gy + gran ls

R - blk sh; sil trace wh quartz ch  
& 11 ls & 11 gy sm ch

5406

3363 R-50%

Lik gy ~~at~~ <sup>v chub</sup> st km v f x 11m dol  
~~dark~~ t-gran ls

Pres dull gy-br t-dolomitic  
to sm ch

Lt br sm ch

Monday

3367 R-45%

Lik gy t-gran <sup>dark</sup> ls

M-dk br-gy sm waxy ch - 50% - m-br-gy

qtzose sl porous t-dolomitic ch

3372 - R-20%

M-dk gy t-gran ls w/ indistinct  
ool that are sl darker than matrix

R-as above & less t-m sl -

3377 - R-30%

Lt m-gy t-gran sdy ls

R-t-m bright ss - w 5% in part  
ool with <sup>thin</sup> qtzose coating

3381 - R-30%

As above w/ few dk so m br ool

Pres as above & few free br ool

5406

3960 - R-358

Dk gy t-gran ~~sh~~ dol & silty ls

R-Dk gy silt & sh

3961 - R-258

M-gy t-gran ls; clear calcite

R-Dk gy sh - trace wh glauc ch

3963 - R-258

as above

3968 - R-400

M-gy t-gran ls - clear calcite

R-Dk gy sh - trace ~~wh~~ wh glauc

ch & ~~lt~~ lt br trace ch

3970 - R-358

as above & trace blk sm ch

3973 - R-358

Dk gy t-gran ls - trace wh calcite -

this is vein calcite - in between sh layers -

R-Blk sh - trace wh glauc ch

5406

3386 - R-10%

M-gy f-gran silty looking ls.  
R-m-br. trans ch; <sup>trac</sup> 1/2 br earthy ch  
1/2 f-m bright sd

3391 - R-25%

M-gy f-gran ls

M-gy silt; dk br sm ch; trans-m sd

3395 - R-20%

as above but ~~no~~ pyrite

3398 - R-4%

M-gy f-gran silty ls

R-1/2 gy ~~gr~~ earthy silt;  
m-br sm ch; trans f-sd

3402 R-5%

M-gy f-gran ls

R-m-br trans sd ch; trace pyrite  
f-f-m sd

3408 - R-3%

20% gy f-gran <sup>silty</sup> ls

It to dk gy earthy silt trace m-br ch



5406

3940 - R - 458

M - dk gy 1mm ~~dot~~ f-gran dot  
R - dk gy silk  $\frac{1}{2}$  dk br waxy ch  $\frac{1}{2}$ ;  
lt. br glaze ch  $\frac{1}{3}$

3945 R - 252

~~M~~ M - gy f-gran dot 1/3  
R - as above

3949 - R - 307

M - gy f-gran dot 1/5  
R - as above

3951 - R - 407

20 k gy v f x 1/4 dot - 1mm  
R - dk gy silk - 90%  
two m-br waxy ch

3954 - R - 458

as above

3959 - R -

M - dk gy f-gran dot silk 1/3  
R - m-dk gy silk

5406

3411 - R-176

Dk gy t-gran ls

Res dk t lt gy silt; <sup>mt</sup> br sl soil ch;

trans t-m sd

3417 - R-102

~~M-gy~~ Dk gy t-gran ls

R-M-gy silt; trans t-m sd

3422 - R-58

Dk gy t-gran ls;  $\frac{1}{2}$  lt t-m-gy

soil ls (dull br soil)

R-m-br trans ch

3427 - R-156

as above

3430 - R-27

m-dk gy t-gran ls

R-m-br trans ch - f-m sd

3432 - R-57

m-dk gy t-gran ls

lt br trans ch; dk br ch

5406

3920 - R-207

M-gy t-gran delia 1s

R - plk sh, 1/2 gy silk (50)

M-br glyose to sm ch; wire  
wh glyose ch

3924 - R-407

M-gy t-gran delia 1s

R - Lk by <sup>aluminum</sup> dull glyose ch  
wire ltk sh

3930 R-207

M-dk gy t-gran 1s

R - dk gy sh

3935 R-207

M-gy t-gran ~~1s~~ 1s

R - dk gy sh

3938 - R-207

Dk r f-xllh dot -

R - dk gy sh; dull 1/2 br glyose ch

#5406

3437 - R-37

Lk gy f-gran ls

lt gy silt; 1 lb glyose ch; dk gy dull ch

3441 - R-107

Lk gy root ls - some with st centers

R - f-m r g coated sd

3447 - R-152

Lk gy f-gran ls

Blk sm ch; trace f-m sd

3451 R-56

M - dk gy st root ls - f-gran

R - m - dk ls sm ch - trace f-m sd

3457 - R-32

M - br - gy de ls; trace lt gy f-gran  
ls w/ dk gy sd

R - Lt br coated sd gcs; trace m - ch

3461 - R-33

M - br gy de ls

R - lt br coated f-sd - trace lt br ch;  
trace lt gy silt.

3406

3898 - R - 20%

M - gy t-gran sl debris ls

R - dk gy sh

3902 - R - 35%

M - gy t-gran ls

m-dk gy silt;  $\frac{1}{3}$  v dk ls waxy ch

3906 - R - 25%

M - gy t-gran ls - wh calcite

R - as above

3909 - R - 20%

M - gy mottled to solidified S gran ls

R - lt br gyps ch; m-br waxy

ch; blk sh

3910 R - 20%

M - gy t-gran ls

R - m-dk gy sh; dk br waxy ch

3915 - R - 20%

M - gy t-gran ls

R as above & trace wh gyps ch

3406

3467 R-176

20 k gy f-gran ls

R as above

3472 - R-58

20 k gy f-gran ls

1 k br wavy ch; m-dk gy silt; trace  
vt-f sh.

3478 - R-58

M-br-gy ds ls

f-m ss ftr sd; m-br wavy ch

3482 - R-106

M-gy f-gran ls

f-m ss & ls sd; lt gy zone ch;

lt br wavy ch

R-58

3487 - M-br ds ls

lt gy zone silt

trace f-med

3491 - R-58

m-dk gy f-gran ls

R as above

3871 - R-58.

M-gy vool f-gran ls; many frun-ol  
R- v dkl br waxy ch; trace blk sh  
é/t br gtyose ch,

3876 - R-207

20k gy t-gran ls  
R v dkl br waxy ch; ~~fr~~ gy oilt

3880 - R-107

20k gy t-gran ls  
R-as above

3887 - R-257.

m-dkgy t-gran ls - dolie  
R- lt gy & dkgy sh - trace  
dk br waxy ch

3893 - R-207.

M-gy t-gran ls - dolie  
R-as above

3896 - R-58

M-gy vt xlls dol - strong  
Res as above

5406

3497 - R-17%

M-dk gy t-gran ls

R-m-br silt

3498 - R-30%

M-dk gy silty - v dolie ls

R-m-br silt

3500 - R-20%

M-dk gy t-gran<sup>sl dolie</sup> ls

R-m-br silt

3505 R-3%

M-dk gy t-gran sl rd ls

R-m-br silt; trace m-br ch / t-mal

3508 - R-2%

M-dk gy t-gran ls

R-as above

3511 - R-8%

M-gy t-gran ls

R-m-br gyps ~~ch~~ to sm ch

1/2 br earthy silt



5406

3858 - R - 2%

lt gy to m gy ool ls - fine m-d ool  
Blk ool lt gy silt; ~~to~~ 40% wh gtz ch

3862 - R - 2%

~~lt~~ M-gy v sl ool ls - fine m-d (thin)  
R - blk sh; lt gy silt; dk br  
waxy ch; foliated gtz granule (slump?)

3865 - R - 1%

M-gy t-gran ls  
R - as above

3866 R - 2%

M-br-gy ool ls - fine m-d ool  
R - dk gy sh; trace wh gtz ch;

3868 R - 2%

as above (v-ool)  
R - lt br gtz ool ch & quartz preserved  
br-gtz ool; blk sh.

5406

3517 - R-257

M-gy t-gran ls

R - from rd of Cr. & siliceous silt, 31.

507 lt br silt

3520 - R-52

M-dk gy t-gran ls

R - lt br silt; lt br sand

traces t-m sd

3524 - R-59

M-gy t-gran ls

R - from rd (west) ; lt gy silt

3529 - R-458

Be-gy t-gran to ds ls; dk gy t-gran dol  
w/ calcite veins

R - lt br gran ~~silt~~ ch; ~~lt~~

blk sl & dolomitic ch; m-br

waxy ch; t-m sd

3532 - R-52

M-gy t-gran ls w/ much wt calcite (veins)

R - m-dk br sl & dolomitic ch

lt gy silt

5406

3838 - R-40%

M - dk gy r f x lla ~~l~~ lomy dol

R - dirty <sup>m</sup> h - gy f - delocative

ch?; dk gy i l t gy silt

3841 - R-57

M - dk gy t - gram lomy dol

R - dull dk br am to gtyoe sl

t - delocative ch;

3845 - R-15%

M - gy t gram ool / s w / m - cool

R - dk gy i l t gy sh; dk br

gtyoe to am ch

3848 R-18%

M - gy t - gram / s

as above

3851 R-3%

M - gy t - gram / s

l t gy t dk gy silt; trac br gtyoe ch

5406

3533 - R-47

M-gy t-gran ls w/ wh calc.  
R - m-lr wavy ch; lt gy silt;  
trace f-m sd

3535 - R-37a

lt k gy t-gran <sup>static</sup> 1/2 - wh calc.  
R m-lr ch; lt gy silt; trace  
+ imp long gtz x 1/2,

3536 R-37a

as above

3539 - R-37

as above

3540 R-57a

M-lr-gy t-gran ls; (50% wh calcite (veins?))  
R - m-lr gtyoz to sm ch; trace  
f-m sd.

3544 - R-47

as above & has flk for dull ch

548

3818 - R-207

M-gy t-gran 15 -  
R-as above

3821 - R-307

M-dk gy t-gran 15  
R-1 to gy & dk gy silt 50 - 507 -  
m-lr gtyrre ch

3827 - R-107

M-dk gy t-gran 15  
R-lt gy & dk gy silt - trace  
m-lr gtyrre to sam ch

3831 R-87

M-lr gy t-gran to de 15  
R-wh gtyrre ch; lt-lr gtyrre  
sl m-lr wati ch; dk gy ch

3833 R-57

M-lr-gy t-gran 15  
R-lt-lr wati ch<sup>1/2</sup>; wh gtyrre ch -  
wh & dk gy silt

5A06

3547 - R - 105%

Dk gy dolie f-gran ls; much  
wh calcite & some wh dol; trace  
dk gy dol ls

R - f-m siliceous sd; dk gy dull ch

3548 - R - 107%

M-br gy f-gran ls; trace wh calcite  
R - f-m siliceous sd

3551 R - 58

Dk br-gy f-gran<sup>dolie</sup> ls; trace wh calcite  
R - f-m bright sd; 1 f br  
juv ~~ch~~ ~~sd~~ ch & ~~sd~~ <sup>sd</sup> clusters;  
blk ch

3553 - R - 4%

Dk gy f-gran to int. x/l's limy dol  
R - f-m rd & frosted sd; blk ch

3557 - R - 20%

M-dk gy v dolie f-gran ls  
R - f-m ~~sd~~ siliceous sd

5406

3803 - R-307

M-gy t-gran ls - sl dolie  
~~It~~ dk gy silt; trace ra-br  
qlyroo ch

3805 - R-208

M-gy t-gran ls  
It gy silt (getting close to  
qlyroo ch) & dk gy sh

3810 - R-207

M-gy t-gran v dolie ls  
R- It gy silt; dk br wafy ch

3813 - R-258

M - dk gy S-gran dolie ls  
It gy silt 90% ; trace dk gy sh;  
trace dd br wafy ch

3816 - R-357

M - dk gy t-gran dolie ls  
R-M-br wafy to qlyroo ch (85%) -  
two It gy & dk gy silt

3426

3560 - R-5%

Lk gy vt x 1/2 fine dol - w/wh  
dol of calcite

R - f-m siliceous sd

3564 - R4%

m-lk-gy f-gran sl dol ls

R - f-m siliceous sd & trace dk silt

3568 - R-2%

Lk gy f-x 1/2 dol

It ls f-lenticular ch; trace f-m sd

3571 - R-10%

M-gy f-gran ls

It ls m-lk trace ch; f-m sd

trace dk gy sd

3575 - R-10%

M-gy & br-gy - f-gran sl dol ls

R - It ls trace impy ch; f-m sd  
& few trace millerite;



3406

3795 - R-258

M-br-gy t-gran ls

R, m-gy to dk gy silt - ( $\frac{1}{4}$  Hls  
on limst ch)

3798 - R-258

Lt gy t-gran ls - v ool w/ dk  
gy m-ool - many ool fine

R - Lt gy silt  $\frac{1}{2}$ ; Lt gy ch  
w/ br<sup>o</sup>ool - show many rings

3800 - R-307.

m-gy t-gran ls w/ fine br ool -  
(not so abundant as above & best sample  
is killed finer)

R - Lt gy earthy silt - 90%  
trace br ool ~~to~~ ch & fine ool.

3801 - R-258

as above - many <sup>fine</sup> ool

R - ~~lt~~ <sup>lt</sup> silt; dk br gyra ch;  
trace lt br ool ch

3406

3580 - R-20%

M-gy vit. xlls det

R- Very dull m- to ~~stagnant~~, oil, sky ch.  
f-m sd

3581 - R-2%

Dk gy f-gran 13(50) / (50) w/ calcite<sup>c-xlls</sup>

R- dull br ch; blk sh; trace  
gts xlls - some clear, some in g/ps.

3585 - R-10%

Dk gy f-gran 13; much w/ calcite

R- f-m siliceous sd

3588 - R-4%

M-dk gy f-gran sd w/ <sup>abundant</sup> large d/ps  
& br oil.

R- f-m siliceous sd; trace  
f-long br gts xlls

3592 - R-5%

m-gy oil 15-f-gran; f-gran 1 f-br xlls  
w/ calcite ~~at~~.

R- f-m siliceous sd; blk f-oil ch

5400

3770 - R-57

M-gy t-gran shoot ls

R- m-dk gy silt; trace br ool ch;  
trace t-sd

3776 - R-57

M-gy t-gran ls

R- dk gy to dk gy silt

3778 - R-207

M-gy v t x 1/4 sl limy det

R- 17 gy<sup>or</sup> silt, trace dk gy sd;  
trace dk br sm ch;

3781 - R-207

as above

3785 - R-57

M-gy t-gran ls

R- m-dk gy silt - limy slender  
qly x 1/2

3788 - R-107

M-gy t-gran ls - shoot

R- as above

5406

3575 - R - 37.

It gy f-xlln dol

R - f-in slw/ chn gzyou counting

Dk gy sh

3500 - R - 17

It h m-gy f-gm ls w/ <sup>shw</sup> dk gy col

R - f - ad f' two dk gy sh

3603 - R - two

Wh c-xlln calcite f dolomite - probably  
mostly dolomite; 1/3 dk gy f-gm ls

R - f - ad f' dk sh

3618 - R - 27

Dk-gy f-gm ls; lines with calcite

R - cr gzyou ch; two dk gy sh

3615 - R - 19

M-gy x f xlln dol - 1/3 wh xlln dol

R - as above

3619 - R - 12

M-gy f-xlln dol - two wh <sup>c-xlln</sup> dol

cr two gzyou ch - dk sh

5406

3758 - R-107

M-dk gy ~~sl~~ tmy f-gran dol  
It br-gy porous to f dolomite  
silt a glaze ch; blk sh

3758 - R-107

M-gy f-gran sl dolc dol ls;  
m-c br dol free in part  
R- as above

3760 R-58

M-gy f-gran sl dolc ls  
R It br-gy & blk silt; trace f-dol

3765 R-103

It tm-gy f-gran ls  
R- as above & trace ~~of~~ m-c dol ch & free  
br wood.

3766 R-107

It to m-gy f-gran ls  
as above

5406

3622 - R-107

Lk gy to m-gy t-gran ~~dot~~ / simple  
ool in part

Cu to / t-lr glycose + brass ch  
line t-m red to ad

3630 - R-357

Dk gy t-gran v cherty, <sup>all mag</sup> dot

R. ~~lt-lr-gy~~ glycose, dull, v l  
journes ch;

3632 R-307

Dk lr-gy v t xlln dot - 3

$\frac{1}{2}$  m-gy t-gran ls

R- dk gy to ldk sm ch w/ scattens

C - dolomite; m-lr-gy glycose ch

3634 - R-37

M-gy t-gran ls - sl dotie

R. azabard  $\frac{1}{2}$  <sup>var</sup> t-m ad

3635 R-307

M-lr-gy t-gran ls

R- ~~lt~~ <sup>m</sup> lr-gy glycose ch - (vt xlln gly)

5406

3734 - R-25%

M-gy f-gran ls

R- m-br mpy ch; lt br-gy gtyzse  
jull ch; trce blk sh

3736 R-10%

M-gy f-gran ls

R lt br son t gtyzsd ch

blk sh; trce f-m sd

3741 R-5%

M-gy vt xlla sl lny dol

R- blk sh; cr t br gtyzse t am  
ch; trce vt sd

3745 - R-20%

M-gy vt xlla sl lny dol

R- blk sh

3748 R-20%

M-dkgy vt xlla sl lny dol

R- blk sh; trce cr gtyzse  
prouz ool, sly ch;

5406

3640 - R - 187

M-gy t-gran ls

R - as above & dk sh

3641 - R - ~~207~~

M-gy t-gran ls

R - dull dk in ~~to~~ gtyose to sm

ch w/ scathes t. f. b. scale

3645 - R - 37

M-gy t-gran ls

dk in gtyose to sm ch; lt gy silt;

dk gy sh.

3646 - R - 57

M-gy t-gran sl ool ls

R - dk in ch; open, lt gy gtyose ch;

3650 - R - 37

m - dk gy t-gran ls

R - lt gy & dk gy silt

3653 - R - 47

M-gy to dk gy t-gran ls - sl ool - dk ool

as above & wh ~~to~~ gtyose ch



#5406

3720 R-58

M-gy f-gran ls

a gtzose chi; blk sh; f-m sd

3721 R-37

M-gy f-gran ls

blk gy sh f-m sd & trace granules

3723 - R-20

M-gy f-gran ls

as above

3728 - R-258

M-gy f-gran ls, dol - trace  
w/ calcite

R - blk br <sup>dull</sup> gtzose to sm chi;  
trace blk gy sh

3730 R-258

blk gy to m-gy f-gran sl ~~blk~~ od ls

R - blk br gy dull gtzose chi;

trace w/ gtzose chi; trace blk sh -

5406

3657 - R-83

M-gyt-gran od ls - many tree  
1+ br od

R - wh gytze ch; many tree br  
gytze od; two 1+ gy <sup>1</sup>dkgs silt

3660 - R-103

M-gy f-gran od ls - tree 11 brood

R - 1+ f.dkgs silt;

two can gytze od; two br od;

3664 - No Rec available

M-gy v od ~~ls~~ ls; (1+ gy material  
dkgs<sup>100</sup>)

R -

3669 - R-403

M-dk gy delie f-gran ls

R - m-dk br gytze dell to am  
mxy ch - gytze part is v sb  
m-delieatic

3671 R-103

M-dk gy f-gran liing dd

~~1+~~ 1+ br gytze ch - m-br am ch

5406

3703 - R-37

M-dk gy t gran ls

as above but  $\frac{1}{3}$  dk gy sh

3709 - R-87

M-gy t-gran ls

R-m-br way ch; two blk sh

sl two from sl

3713 R-37

M-gy t-gran ls w/ br to blk mool

R-It br trace ch - two blk sh; sl two m-2d

~~3~~

3715 R-207

M-gy v.f x/ls dol - trace ad ls as above

R-It br trace ch; blk sh  $\frac{1}{3}$ ;

~~not clear g/yose ch or gts  $\frac{1}{2}$ ;~~

two t-in ad

3717 - R-22

It gy to m-gy v sl ad t-gran ls

blk br t con g/yose to sm ch; dk gy

sh; t-m sl ( $\frac{1}{2}$ )

5406

3673 - R-37

20 lb gy f-grass <sup>delic</sup> 15  
R - or glycerol ch; dkgy sh

3678 R-57

20 lb gy f-grass sl delic 15  
dk gy to m-gy silt; ~~to~~

3680 R-207

M-gy vt xlln sl lining del  
R - 11 lb - gy glycerol ch - porous -  
(vt xlln gly - or silt)

3682 - R-157

as above

3686 - R-17

M-gy vt <sup>porous</sup> xlln sl lining del  
11 lb glycerol ch ~~(silt)~~; Dk gy sh;  
two dk li ch

3688 - R 27

m-gy vt xlln sl lining del  
dk li por ch; 11 lb porous glycerol ch  
two f-m sd

5406

3691 - R-19

It gy f-gran dol

B - wh + in gtyre ch + trace blk sh

3694 - R-39

It gy t-gran dol; trace mgys ls

R - It gy & dk gy silt; wh gtyre ch

3695 R-707

~~M~~ la-gy t-gran to t-xll n sl / mgys dol  
trace oil

R - buff gtyre ch - trace dk gy sh

3698 R-158

M-gy t-gran sl ~~fine~~ dolie ls

R - dk la wavy ch w/ v fur

f - dolocasts - trace wh gtyre ch

3701 R-89

m-dk g t-gran ls

R - v dull ~~dk~~ m-ls sl f-  
dolocasts ch; dk gy sh