

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL:		OIL WELL ☐	GAS WELL ☒	DRY ☐	Other ☐		
b. TYPE OF COMPLETION:		NEW WELL ☒	WORK OVER ☐	DEEP-EN ☐	PLUG BACK ☐	DIFF. RESVR. ☐	Other ☐
2. NAME OF OPERATOR Energy Reserves Group, Inc.						7. UNIT AGREEMENT NAME Gallegos Canyon Unit	
3. ADDRESS OF OPERATOR P.O. Box 3280 - Casper, Wyoming 82602						8. FARM OR LEASE NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1,455' FSL & 1,750' FEL (NW/SE) At top prod. interval reported below At total depth						9. WELL NO. 310	
10. FIELD AND POOL, OR WILDCAT West Kutz Pictured Cliffs						11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 9-T28N-R12W	
12. COUNTY OR PARISH San Juan						13. STATE New Mexico	
15. DATE SPURRED 3-11-81		16. DATE T.D. REACHED 3-14-81		17. DATE COMPL. (Ready to prod.) 5-30-81		18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 5,401' G.L.	
20. TOTAL DEPTH, MD & TVD. 1,500'		21. PLUG, BACK T.D., MD & TVD 1,447'		22. IF MULTIPLE COMPL., HOW MANY* 2		23. INTERVALS DRILLED BY 0-TD	
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* 1,268'-1,286' - Pictured Cliffs						25. WAS DIRECTIONAL SURVEY MADE NO	
26. TYPE ELECTRIC AND OTHER LOGS RUN Induction; Comp. Neutron-Form. Density						27. WAS WELL CORED NO	
28. CASING RECORD (Report all strings set in well)							
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD		AMOUNT PULLED	
7" O.D.	17#	124'	9-7/8"	60 sx 'B' w/2% CaCl ₂ & 1/4# Celloflake/sk.		-0-	
4-1/2" OD	10.5#	1,485'	6-1/4"	See Back of Page		-0-	
29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
		None			2-3/8"	1,288'	
31. PERFORATION RECORD (Interval, size and number) 1,268'-74', 1,281'-86' w/1 JSPF (13 perfs)				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
				DEPTH INTERVAL (MD)		AMOUNT AND KIND OF MATERIAL USED	
				1,268'-1,286'		BD w/500 gal 7 1/2% MCA Acid + additives + 26 ball sealers	
						Frac'd w/20,000 gal 70% Quality Foam w/22,500# 10-20 sand.	
33.* PRODUCTION							
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in) SI	
DATE OF TEST 5-30-81	HOURS TESTED 24	CHOKE SIZE 3/8"	PROD'N. FOR TEST PERIOD →	OIL—BBL. 0	GAS—MCF. 568	WATER—BBL. 155	GAS-OIL RATIO NA
FLOW, TUBING PRESS. 190	CASING PRESSURE 225	CALCULATED 24-HOUR RATE →	OIL—BBL. 0	GAS—MCF. 568	WATER—BBL. 155	OIL GRAVITY-API (CORR.) NA	
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) VENTED DURING TEST						TEST WITNESSED BY T.C. DURHAM	
35. LIST OF ATTACHMENTS SAMPLE DESCRIPTION ATTACHED							
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.							
SIGNED P. Wagner		TITLE Production Engineer-RMD		DATE 6-26-81		JUL 1 1981	

*(See Instructions and Spaces for Additional Data on Reverse Side)

NMOCC

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on Items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES :				38. GEOLOGIC MARKERS	
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF ; CORED INTERVALS ; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES				TOP	
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH
			<u>Sample Description Attached</u> Con't from front of page: 4-1/2" csg cementing - Cemented w/200 sx 50-50 Pozmiz w/2% Gel & 1/4# Flocele/sk & 0.5% CFR-2.	LOG TOPS	Surface
				Nacimienta	265'
				Ojo Alamo	375'
				Kirtland	965'
				Fruitland	1,255'
				Pictured Cliffs	1,468'
				Lewis	1,494'
				T.D. Logger	1,500'
				T.D. Driller	

LITH FOR GC PC # 310

150-60	70% Ss: clear, wht, cs-g, sbrnd, loose 30% Chert: yellow, brn, wht, cs-xln, ang-sbang, loose
160-70	80% Ss: AA 20% Chert: AA
170-80	70% Ss: clear, wht, cs-g, sbrnd, sme glauc incl., loose 30% Chert: AA w/grn,red
180-90	70% Ss :AA 10% Sh: grn blkly-plty, carb incl, silicified, firm 20% Chert: AA
190-200	40% SS: AA 30% sh: AA 30% Chert :AA
200-10	60% Ss: wht, clear, Cs-g, sbrnd, glauc and shly incl, loose 20% Sh: AA 20% Chert :AA
210-20	80% Ss: AA 10% Sh: grnsh gry, blkly, slty, silicified, firm-hard 10% Chert :AA
220-30	70% Ss: AA w/sme sl. arkosic 20% Sh: AA 10% Chert : orange, pink, lt. yellow, cs-xln, ang-sbang, loose, hard
230-40	50% Ss: AA 30% Sh: AA 20% Chert : AA
240-50	70% Ss: wht, clear, cs-mg, sbrnd, mod-vy clyflld, glauc and shly incl, firm 20% Sh: AA 10% Chert :AA
250-60	70% Ss: AA 10% Sh: grnsh gry, blkly-plty, sl. slty, firm 20% Chert : AA
260-70	80% SS: AA 20% Chert: lt yellow, orange, brn, cs-sln, ang-sbang, loose

270-80 70% Ss: wht, clear, cs-mg, sbrnd, shly and glauc incl, sl. ark,
 vy clyflld firm
 10% Sh: AA
 20% Chert: AA

280-90 60% Ss: AA
 20% Sh: AA
 20% Chert: AA

290-300 70% Ss: wht, cs-mg, sbrnd-sbang, shly incl, firm, mod-vy
 clyflld
 20% Sh:AA
 10% Chert: AA

300-10 30% Ss: AA
 60% Sh: grnsh gry, blkly-plty, sl. slty, firm
 10% Chert: clear, wht, cream, cs-xln, ang-sbang, loose

310-20 20% Ss: wht, cs-mg, sbang-sbrnd, well srted, vy clyflld, firm
 70% Sh: AA
 10% Chert: AA
 Trace Pyrite

320-30 40% Ss: wht, m-g, sbrnd, carb incl, vy clyflld, wll srted, firm,
 tite
 40% Sh: AA
 20% Chert: AA
 Trace Pyrite

330-40 30% Ss: AA
 40% Sh: AA
 30% Chert: AA

340-50 70% Ss: wht, m-g, sbrnd, wll sorted, carb incl, vy clyflld,
 firm, tite
 20% Sh: grnsh gry, dk grn, blkly-plty, firm, silicified
 10% Chert: AA

350-60 30% Ss: wht, lt gry, m-g, sbrnd, shly incl, vy clyflld, well
 srted, firm, tite
 50% Sh: AA
 20% Chert: AA

360-70 50% Ss: AA
 30% Sh: AA
 20% Chert: wht, orange, red, cs-xln, ang-sbang, loose

370-80 20% Ss: wht, m-fg, sbrnd, fair srt, mod-vy clyflld, firm, tite
 60% Sh: grnsh gry, blkly, mod slty-sl. sandy, firm
 20% Chert: AA

380-90	30% Ss: AA 50% Sh: AA 20% Chert: AA w/mostly wht Trace Pyrite
390-400	10% Ss: AA 80% Sh: AA 10% Chert: AA
400-10	20% Ss: wht, clear, m-g, sbrnd, mod-vy clyflld, carb incl., well srted, firm 60% Sh: grnsh gry, blkly, sl. sandy, soft 20% Chert: AA
410-20	10% Ss: AA 70% Sh: AA 20% Chert: wht, orange, grn, red, cs-xln, ang-sbang, loose
420-30	30% Ss: AA w/sme glauc incl. 60% Sh: AA 10% Chert: AA
430-40	30% Ss: AA 50% Sh: AA 20% Chert: AA w/mstly yellow-lt brn.
440-50	20% Ss: AA 60% Sh: AA 20% Chert :AA Trace Pyrite
450-60	20% Ss: clear, wht, m-g, sbrnd, sl. ark, sl.-mod clyflld, sl. ark firm 70% Sh: grnsh gry, blkly-plty, sl. sandy, firm 10% Chert: AA
460-70	60% Ss: AA 30% Sh: AA 10% Chert: wht, lt brn, cream, cs-xln, ang-sbang, loose
470-80	10% Ss: wht, m-fg, sbrnd, sl. clyflld, carb incl, firm 80% Sh: AA 10% Chert : AA
480-90	50% Ss: AA w/incr. amts of carb incl. 40% Sh: grnsh gry, blkly-plty, sme sl. sandy, carb incl, firm 10% Chert :AA
490-500	30% Ss: AA 60% Sh: AA 10% Chert : AA

500-10 20% Ss: wht, lt grn, lt gry, vf-fg, sbrnd, mod clyfll, carb and
 glauc incl, firm, tite, N-S
 60% Sh: grnsh gry, dk grn, blk, carb, incl, sme sl. sandy,
 firm
 10% Chert: AA

510-20 20% Ss: AA
 50% Sh: AA
 30% Chert: wht, cream, cs-xln, ang-sbang, loose

520-30 10% Ss: wht, f-g, sbrnd, mod clyfll, well sorted, glauc
 incl, firm, N-S
 70% Sh: AA w/sme gry
 20% Chert: lt yellow, clear, brown, cs-xln, ang-sbang, loose

530-40 30% Ss: wht, grn, f-g, sbrnd, mod clyfll, well srted, glauc
 incl, firm, N-S
 50% Sh: AA
 20% Chert: AA

540-50 10% Ss: wht, f-g, sbrnd, mod clyfll, glauc incl, well srted,
 firm, N-S
 70% Sh: grn, gry, blk, sl. sandy, sicified, firm
 20% Chert : AA
 Trace Pyrite

550-60 50% Ss: wht, grn, vf-fg, sbrnd, glauc and carb incl., vy sl-
 mod clyfll, firm, tite, N-S
 30% Sh: AA
 20% Chert :AA

560-70 20% Ss: AA
 60% Sh: grnsh gry, dk grnsh gry, blk-plty, mod slty, firm
 20% Chert: AA

570-80 40% Ss: wht, grn, f-g, sbrnd, mod clyfll, sme carb incl,
 well sorted, calc, tite, N-S
 40% Sh: AA
 20% Chert: AA

580-90 30% Ss: AA w/sme oxide (orange) stain
 50% Sh: AA w/brn, carbincl, and frags, firm
 20% Chert: lear, wht, pink, yellow, cs-xln, ang-sbang
 Trace Pyrite

590-600 40% Ss: AA w/o stain
 30% Sh: AA
 30% Chert :AA

810-20 10% Ss: AA
 70% Sh: AA w/sme carb staining
 20% Chert: lt yellow, clear, brown, cs-xln, sbang-sbrnd, loose

820-30 10% Ss: wht, f-g, sbrnd, mod clyflld, fair sorting, glauc and
 carb incl, firm, vy calc, tite, N-S
 60% Sh: grnsh gry, dk grnsh gry, brwn, blkylt, carb
 stringers and frags, sme sl. slty, firm
 30% Chert: AA
 Trace Coal: AA

830-40 20% Ss: AA
 40% Sh: AA
 40% Chert: wht, cream, red, orange, cs-xln, ang-sbang, loose
 Trace Pyrite

840-50 10% Ss: wht, vy lt grn, f-g, sbrnd, mod clyflld, glauc
 incl, firm, vy calc, tite N-S
 70% Sh: grnsh gry, dk grnsh gry, blkylt, sl. slty,
 carb frags, firm
 20% Chert: AA w/ mstly cream

850-60 100% Sh: grnsh gry, gry, blkylt, carb stringers and frags, fi.
 Trace Ss: AA w/sme grn

860-70 10% Ss: wht, f-g, sbrnd, mod clyflld, glauc incl, well sorted,
 firm, sl. poros, N-S
 90% Sh: AA w/sme dk grnsh gry

870-80 100% Sh:AA
 Trace Chert: AA

880-90 50% Ss: wht, f-g, sbrnd, mod-vy clyflld, amber and
 glauc incl, carb frags, vy soft, tite, N-S
 30% Sh: AA
 20% Chert: AA

890-900 20% Ss: AA w/lt grn, vf-g, sbrnd, glauc incl, firm-soft, N-S
 70% Sh: AA
 10% Chert: AA

900-10 20% Ss: wht, lt gry, f-g sbrnd, vy clyflld, vy calc, tite, N-S
 70% Sh: dk grnsh gry, gry, blkylt, carb incl, firm
 10% Chert: AA

910-20 10% Ss: AA
 70% Sh: AA
 20% Chert: AA

920-30 10% Ss: wht, lt. gry, vf-fg, sbrnd, sl. ark, glauc incl,
 firm, non-calc, sl. poros, N-S
 80% Sh: AA
 10% Chert: clear, lt. brn, cs-xln, ang, loose

930-40 20% Ss: AA w/carb incl.
 60% Sh: AA w/carb frags & strings
 10% Chert: AA
 10% Coal: blk, vitr, ang-blky, firm

940-50 100% Sh: dk grnsh gry, vy dk brn, plty-blky carb frags,
 poss. lignitic, firm
 Trace Chert: AA
 Trace Ss: AA

950-60 80% Sh: dk grnsh gry, blky-plty, firm
 20% Chert: cream, brn, wht, cs-xln, sbang-ang, loose

960-70 10% Ss: wht, m-g, sbrnd, mod clyflld, glauc incl, firm, N-S
 80% Sh: dk grnsh gry, gry, dk brn, blky, carb frags and
 stringers, firm
 10% Chert: AA

970-80 20% Ss: wht, grn, vf-fg, sbrnd, sl. clyfll, glauc incl,
 sl. poros, N-S
 80% Sh: AA

980-90 40% Ss: wht, lt gry, f-mg, sbrnd, glauc and carb incl, mod
 clyfll, vy calc, tite, N-S
 60% Sh: AA

990-1000 80% Ss: wht, lt gry, f-g sbrnd, glauc and carb incl., mod
 clyfll, soft, tite N-S
 20% Sh: AA
 Trace Coal: AA
 Trace Calcite:

1000-10 60% Ss: wht, f-g sbrnd, fair sort, glauc and carb incl.,
 mod clyfll, mod calc, firm, tite, N-S
 40% Sh: grnsh gry, dk gry, blky-plty, carb frags, soft
 Trace Chert: AA

1010-20 40% Ss: AA w/vf-fg and lesser amts of carb incls.
 50% Sh: AA
 10% Chert: wht, cream, opaque, cs-xln, ang-sbang, loose

1020-30 40% Ss: lt gry, grsh blue, vf-g, sbrnd, vy clyflld, carb incl,
 vy soft, tite, N-S
 50% Sh: AA w/sme vy dk brown
 10% Chert: AA

- 1120-30 30% Ss: wht, f-g, sbrnd, sl. clyfll, well sorted, firm,
 vy calc, tite, N-S
 60% Sh: dk grnsh gry-dk gry, blk-y-plty, carb stringers, soft
 10% Chert: AA
 Trace Coal: AA
- 1130-40 20% Ss: AA w/grn, vf-fg, sbrnd, glauc incl, firm
 70% Sh: AA
 10% Chert: wht, cream, opaque, cs-xln, ang-sbang, loose
 Trace Coal: AA
- 1140-50 20% Ss: lt gry, f-g, sbrnd, well srted, carb incl, friable,
 good poros, N-S
 70% Sh: grnsh gry-dk gry, brown, blk-y-plty, sme sl. slty,
 carb frags, soft
 10% Chert: AA
- 1150-60 60% Ss: wht, f-g, sbrnd, fair sort, mod. clyfll, sl. ark,
 sme glauc, firm, sl. poros, N-S
 30% Sh: AA
 10% Chert: AA
 Trace Coal: AA
- 1160-70 20% Ss: wht, lt gry, f-g, sbrnd, carb incl, sl. clyfll, firm,
 vy. cak
 60% Sh: grnsh gry, dk grnsh gry, dk gry, plty-blky, carb
 stringers, soft
 20% Chert : AA
 Trace Coal: AA
- 70-80 50% Ss: wht, lt. gry, f-g, sbrnd, sl. clyfll, carb and glauc
 incl, sl. ark, vy calc, tite, N-S
 40% Sh: AA
 10% Chert: AA
 Trace Pyrite
 Trace Coal: AA
- 1180-90 NS
- 1190-1200 60% Ss: AA
 20% Sh:AA
 10% Coal: blk, vitr, ang-blky, firm
 10% Chert: lt orange, clean, cs-xln, ang-sbrnd, loose
- 1200-10 20% Ss: wht, vy lt gry, f-g, sbrnd, well sorted, carb incl,
 vy clyfll, sl. calc, tite, N-S
 60% Sh: grnsh gry, dk brn, dk gry, plty-blky, sl. slty,
 carb frags
 20% Chert: wht, cream, lt brn, cs-xln, ang-sbang, loose
 Trace Coal: AA

1210-20 20% Ss: wht, grn, f-g, sbrnd, well sorted, glauc and carb
 incl, mod-vy clyfll, mod calc, tite, N-S
 60% Sh: AA
 20% Chert: AA
 Trace Coal: AA

1220-30 20% Ss: AA
 70% Sh: grnsh gry, lt gray-dk gry, plty, sme carb frags,
 soft
 10% Chert: AA

1230-40 20% Ss: wht, lt gry, f-g, sbrnd, glauc and carb incl, mod
 clyfll, sl. ark, soft, vy calc, tite, N-S
 70% Sh: AA
 10% Chert: AA w/orange

1240-50 20% Ss: AA
 60% Sh: AA
 20% Coal: blk, vitr, blk-ang, firm
 Trace Chert: AA

1250-60 10% Ss: wht, f-g, sbrnd, sl. ark, glauc and carb incl,
 vy calc, firm, tite, N-S
 70% Sh: AA w/sme gry, sl. slty-sandy, firm-soft
 20% Coal: AA

1260-70 10% Ss: AA
 50% Sh: AA
 30% Coal: AA
 10% Chert: wht, lt yellow, lt orange, cs-xln, ang-sbang, loose

1270-80 20% Ss: wht, lt gry, f-g, sbrnd, well sorted, carb incl,
 vy calc, tite, N-S
 70% Sh: grnsh gry, dk grnsh gry, dk gray, plty, firm
 10% Coal: AA
 Trace Chert: AA

1280-90 10% Ss: AA
 70% Sh: AA
 10% Coal: blk, vitr, blk, firm
 10% Chert: AA

1290-1300 20% Ss: wht, f-g, sbrnd, fair sorted, sl. clyfll, glauc
 incl, firm, sl. poros, N-S
 60% Sh: dk grnsh gry, dk brn, dk gry, plty-blky, carb frags
 and stringers, firm
 20% Chert: AA
 Trace Coal: AA

1300-10 30% Ss: wht, f-g, sbrnd, well sorted, mod-vy clyfll, sl. ark,
carb and glauc incl, firm, vy calc, tite, N-S
60% Sh: AA
10% Coal: AA
Trace Chert: AA

1310-20 40% Ss: AA w/grn, vf-fg, sbrnd, mod clyfll, non-calc
40% Sh:AA
20% Coal: AA
Trace Chert: AA w/mstly clear

1320-30 20% Ss: wht, f-g, sbrnd, sl. clyfll, fair sort, glauc and carb
incl, sl. ark, firm, non-calc, sl. poros
70% Sh: grnsh gry, dk gry, dk brown, plty, carb frags,
sl. slty, firm-soft
10% Coal: AA
Trace Chert: AA

1330-40 20% Ss: AA
40% Sh: AA
20% Coal: AA
20% Chert: lt yellow, clear, cs-xln, ang, loose

1340-50 20% Ss: AA
50% Sh: brn, dk grnsh gry, dk gry, clky-plty, carb incl, firm
20% Chert: lt yellow, orange, clear, cs-xln, ang-sbang
loose
Trace Coal: AA

1350-60 30% Ss: wht, fg, sbrnd, vy clyfll, sl. ark, glauc and carb
incl, sme vy calc, firm-hard, tite, N-S
40% Sh: AA
10% Chert:AA
20% Coal: AA

1360-70 30% Ss: AA w/sme vy sft, sme vy calc
40% Sh: grnsh gry, gry, brn, plty-blky, carb frags, soft
20% Coal: AA
10% Chert: AA

1370-80 30% Ss: AA
50% Sh:AA
10% Coal:blk, vitr, blky-ang, firm
10% Chert: yellow, orange, clean, cs-xln, ang, loose

1380-90 20% Ss: wht, f-g, sbrnd, mod-vy clyfll, fair sorting,
glauc and carb incl. firm, vy. calc, tite, N-S
50% Sh: grnsh gry, brn, blky-plty, carb frags, sl. slty, firm
20% Chert: AA
10% Coal: AA

1390-1400 20% Ss: AA w/sme med gry
50% Sh: AA
10% Coal: AA
20% Chert: AA w/mstly clear

1410-20 30% Ss:AA w/soft, vy calc, tite, N-S
60% Sh: AA
10% Chert: yellow, cream, wht, cs-xln, ang, loose

1420-30 30% Ss: wht, lt gry, vf-fg, sbrnd, mod-vy clyflld, glauc and
carb incl, firm, vy calc, tite, N-S
40% Sh: grnsh gry, dk brn, gry, plty-blky, carb incl, soft
20% Chert: AA
10% Coal: AA

1430-40 50% Ss: AA w/mstly gry
30% Sh: AA
20% Chert: AA

1440-50 50% Ss: wht, gry, vf-fg, sbrnd, glauc and carb incl,
mod clyflld, sl. calc, firm, tite, N-S
40% Sh: AA
10% Chert: AA

1450-60 40% Ss: AA
40% Sh: AA
20% Chert: AA

1460-70 60% Ss: wht, gry, f-g, sbrnd, glauc and carb incl, vy.
clyflld, sl-mod calc, soft-firm, tite, N-S
30% Sh: grnsh gry, dk brown, dk gry, blky-plty, carb frags and
stringers, firm
10% Chert: AA

1470-80 50% Ss: AA w/mod clyflld
40% Sh: AA
10% Chert: AA

1480-90 30% Ss: wht-lt gry, f-g, sbrnd, glauc incl, mod clyflld,
sl. calc, firm, sl. poros, N-S
60% Sh: AA
10% Chert: AA

1490-1500 40% Ss: AA
50% Sh: AA
10% Chert: AA