

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.

5. LEASE DESIGNATION AND SERIAL NO.

SF-078109

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Gallegos Canyon Unit

8. FARM OR LEASE NAME

9. WELL NO.

308

10. FIELD AND POOL, OR WILDCAT

West Kutz Pictured Cliffs

11. SEC., T., R., M., OR BLOCK AND SURVEY
OR AREA

Sec. 7-T28N-R12W

12. COUNTY OR
PARISH

San Juan

13. STATE

New Mexico

WELL COMPLETION OR RECOMPLETION REPORT AND LOGS*

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.

3. ADDRESS OF OPERATOR

P.O. Box 3280 - Casper, Wyoming 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface 1,000' FSL & 810' FEL (SE/SE)

At top prod. interval reported below

At total depth

14. PERMIT NO. DATE ISSUED

15. DATE SPUDDED 3-22-81	16. DATE T.D. REACHED 3-25-81	17. DATE COMPL. (Ready to prod.) 6-3-81	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* GL 5,605'; KB 5,607'	19. ELEV. CASINGHEAD -----
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20. TOTAL DEPTH, MD & TVD 1,578' K.B.	21. PLUG BACK T.D., MD & TVD 1,535' K.B.	22. IF MULTIPLE COMPL., HOW MANY* NA	23. INTERVALS DRILLED BY → o-TD	ROTARY TOOLS CABLE TOOLS -----
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24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

1,421'-1,433' 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" OD	17#	123' KB	9-7/8"	60 sx 'B' w/2% CaCl ₂ & 1/4# Celloflake/sx.	-0-
4-1/2" OD	10.5#	1,574' KB	6-1/4"	See Back of Page	-0-

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
		None			2-3/8"	1,424'	

31. PERFORATION RECORD (Interval, size and number)

1,421'-26', 1,431'-33' w/1 JSPF (9 perfs)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
1,421'-1,433'	BD w/500 gal 7-1/2% MCA and 12 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
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DATE OF TEST 6-3-81	HOURS TESTED 24	CHOKE SIZE 3/8"	PROD'N. FOR TEST PERIOD →	OIL—BBL. NA	GAS—MCF. 170	WATER—BBL. 351	GAS-OIL RATIO NA
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FLOW. TUBING PRESS. 110 psi	CASING PRESSURE SI 200 psi	CALCULATED 24-HOUR RATE →	OIL—BBL. NA	GAS—MCF. 170	WATER—BBL. 351	OIL GRAVITY-API (CORR.) NA
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34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

VENTED DURING TEST

TEST WITNESSED BY

T.C. DURHAM

35. LIST OF ATTACHMENTS

SAMPLE DESCRIPTIONS

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

6-25-81

*(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:

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

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	38. GEOLOGIC MARKERS		
				NAME	MEAS. DEPTH	TRUE VERT. DEPTH
			LOG TOPS			
			Sample Description Attached			
			Con't from front page			
			4-1/2" casing cementing - Cemented w/225 sx of 50-50 Pozmix w/2% Gel, 1/4# Celloflake/sk + 0.5% D-33.	Nacimientto	Suface	
				Ojo Alamo	120' (est)	
				Kirtland	233'	
				Fruitland	1,012'	
				Pictured Cliffs	1,420'	
				T.D. Logger	1,574'	
				T.D. Driller	1,580'	

SAMPLE DESCRIPTION

130 - 50 90% Sh: lt-med gry, plty, sme fissile, sme vy sl carb, few clay incls, sft
10% Clystn: buff-lt gry, blk, sl carb, vy sft, swlg.
Tr. Calcite: clr, vy crs-xln, sbang, transl, lse
Tr. Pyrite

50 - 70 10% Ss: clr-org, cg, sbrnd, wl srted, lse, good por, N-S
70% Sh: AA
20% Clystn: AA

70 - 80 10% Ss: AA, but crs-vy cg
70% Sh: AA, w/incr. cly incls
20% Clystn: wht, buff, lt gry, blk, sl carb, vy sft, some swlg

80 - 200 10% Ss: AA
60% Sh: med-lt gry, plty, sl carb, clyincls, sme pyrite incls, sft-frm
30% Clystn: AA

200 - 10 N.S.

10 - 20 10% Ss: clr-yel, cg-vy cg, sbang-sbrnd, lse, good por, N-S
70% Sh: AA
20% Clystn: AA, some w/scat. qtz. grns

20 - 30 70% Sh: med gry-grn-rd brn, blk-plty, sl carb, some slty, few cly incls, some bent, frm-sft
30% Clystn: buff-wht, blk, carb, vy sft, swlg

30 - 50 70% Sh: AA, but few sndy
30% Clystn: AA

50 - 60 80% Sh: med-dk gry, sl carb, plty, cly incls, sme slty, vy few sndy, frm-sft
20% Clystn: AA

60 - 70 90% Sh: AA, but none sndy, vy few slty
10% Clystn: AA
Tr. Ss: wht, mg, sbrnd, wl srted, mod cly fld, sl carb, friable, vy sl por, N-S

70 - 80 10% Ss: AA, sme clean and gd por, N-S
60% Sh: AA
30% Clystn: AA, all wht

80 - 90 70% Sh: AA
30% Clystn: AA

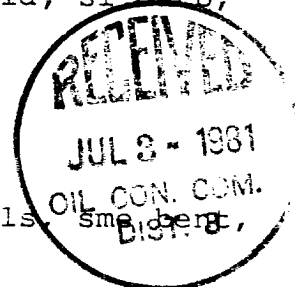
90 - 300 80% Sh: med gry-grn-gry, plty, few cly incls, few slty, few sndy & mottled, frm-sft
20% Clystn: AA
Tr. Ss: wht, f-mg, sbrnd, fair srtg, sl-mod cly fld, cly incls, vy sl carb, sft, tite, N-S

300 - 10 20% Ss: wht, vfn-fg, sbrnd-sbang, gd srtg, mod cly fld, sl carb, cly incls, vy sft, tite, N-S
80% Sh: AA

10 - 20 50% Ss: wht-lt gry, vfn-f-mg, sbang, vy sl-mod-hvy cly fill, some sl carb, cly incls, friable, sme fair por, N-S
50% Sh: AA, sme wxy

20 - 30 60% Ss: AA
30% Sh: AA
10% Pyrite

30 - 40 60% Ss: wht, gry, grn, f-mg, sbang-sbrnd, sl-hvy cly fill, few mafic incls, few cly incls, vy sl carb, frm-sft and shly, vy sl por, N-S
40% Sh: med-dk gry, grn-gry, plty-blk, sme vy carb, slty-sndy, sme chrty, cly incls, hard-sft



340 - 50 70% Ss: AA, w/sme clean, sme cg & lse
 30% Sh: AA
 Tr. Pyrite
 50 - 60 20% Ss: clr-wht, f-mg, sbang, fair srtg, clean to sl
 cly fill, cly incls, frm, some gd por, N-S
 80% Sh: AA, also some rd-brn, fewer sndy or slty
 60 - 70 20% Ss: AA, vy sl carb
 70% Sh: AA
 10% Clystn: wht, blk, vy sft, sl swlg
 70 - 80 40% Ss: wht-clr, f-m-cg, sbrnd, poorly srted, sme sl-mod
 to hvy cly fill, sme lse, cly incls, vy sl carb,
 sft, sme gd por, sme tite, N-S
 40% Sh: AA
 20% Clystn: AA
 80 - 90 20% Ss: AA
 70% Sh: AA
 10% Clystn: AA
 90 - 400 10% Ss: AA, some calc
 90% Sh: med gry, rd-brn, blk-plty, vy sl carb, slty-sndy,
 frm
 Tr. Clystn: AA
 400 - 10 40% Ss: wht-lt gry, f-mg, sbrnd-sbang, fair srtg, carb, sl
 to hvy cly fill, sme lse, vy sl carb, cly incls,
 friable-sft, tite, N-S
 60% Sh: AA
 10 - 30 20% Ss: AA
 80% Sh: AA, but w/few slty or sndy
 Tr. Clystn: wht, blk, scat. qtz. grns included, vy sft,
 vy swlg
 30 - 40 10% Ss: wht-clr, mg, sbang, wl srted, carb, ark, calc,
 clean-vy sl cly fill, hard, sl por, N-S
 90% Sh: AA, few pyrite incls
 40 - 50 30% Ss: AA, some w/mod cly fill
 70% Sh: AA
 50 - 60 30% Ss: wht, f-m-cg, sbrnd, fair srtg, vy sl-mod cly fill,
 calc, ark, vy sl carb, fri-hard, sl por, N-S
 70% Sh: lt-med gry, med brn, plty, some sl fissile,
 few pyrite ctgs, sft
 Tr. Clystn: AA
 60 - 70 30% Ss: AA
 60% Sh: AA
 10% Pyrite
 70 - 80 40% Ss: AA, w/sme cg-vy cg, lse
 40% Sh: AA
 20% Clystn: buff-lt brn-wht, blk, sl carb, vy sft,
 some swlg
 80 - 500 60% Ss: AA
 30% Sh: AA
 10% Clystn: AA
 500 - 10 20% Ss: wht, mg, sbrnd-sbang, wl srted, sl calc, mod cly
 fld, sft, tite, N-S
 80% Sh: med gry, med-dk brn, grn-gry, plty, carb, sme
 pyrite incls, most slty, few cherty, frm
 10 - 20 10% Ss: AA
 90% Sh: AA
 Tr. Clystn: wht, blk, sme scat. qtz. grns, vy sft

520 - 30 70% Ss: lt gry-wht, f-mg, sbrnd, fair srtg, sl-mod cly
 fill, cly incls, fri-sft, vy sl por, N-S
 30% Sh: AA
 Tr. Clystn: AA
 30 - 40 80% Ss: AA
 20% Sh: AA
 Tr. Pyrite
 40 - 50 60% Ss: AA, w/incr. shlyness
 30% Sh: AA
 10% Clystn: AA
 50 - 60 80% Sh: med gry-brn, blk, sl carb, some sl sndy,
 cly incls, frm
 20% Clystn: buff, blk, vy sft, swlg
 60 - 80 10% Ss: wht, mg, sbang, wl srted, sl cly fill, cly incls,
 sft, vy sl por, N-S
 80% Sh: AA
 10% Clystn: AA
 80 - 90 20% Ss: wht, f-mg, sbrnd, fair srtg, vy sl to mod cly
 fill, few clean, hard, vy sl por, N-S
 70% Sh: AA
 10% Clystn: AA
 Tr. Pyrite
 90 - 610 10% Ss: AA
 80% Sh: med gry, vy plty, vy sl carb, sme fissile, sme
 wxy, vy few slty, frm
 10% Clystn: AA
 10 - 20 30% Ss: wht, vfn-f-mg, sbrnd, poorly srted, sl-mod-hvy
 cly fill, vy sl carb, sme calc, fri, sl por, N-S
 70% Sh: AA
 Tr. Pyrite
 20 - 30 10% Ss: AA
 90% Sh: gry-brn-rd brn, blk, plty, sl carb, cly incls,
 most slty, sme sndy, frm
 30 - 40 80% Ss: wht, mg, sbrnd, wl srted, vy sl-sl cly fill,
 carb, ark, sl glauc, hard, vy sl por, N-S
 20% Sh: AA
 40 - 50 70% Ss: AA
 30% Sh: AA, sme laminated
 Tr. Pyrite
 50 - 60 70% Ss: wht-clr, m-c-vy cg, sbrnd-sbang, poor srtg,
 clean-mod cly fill, lse, sl carb, h ard, sme gd por, N-S
 20% Sh: gry, plty, sl carb, few sl slty, frm
 10% Pyrite
 60 - 80 60% Ss: AA
 30% Sh: AA, w/sme rd-brn
 10% Pyrite
 80 - 90 40% Ss: wht, f-mg, sbrnd, sl-mod cly fill, sl carb, sl ark,
 sme calc, sme shly, hard-sft, sme sl por, N-S
 60% Sh: gry-rd brn, plty, sl carb, cly incls, sme slty,
 sme wxy, frm
 Tr. Pyrite
 90 - 700 60% Ss: AA
 40% Sh: AA
 700 - 10 40% Ss: wht-clr, f-m-cg, sbrnd-sbang, vy sl-mod cly fill,
 sme lse, sl carb, cly incls, vy calc, sme shly,
 hard-sft, sme sl por, N-S
 60% Sh: AA, sme cherty
 10 - 30 20% Ss: AA
 80% Sh: gry-brn, plty-blk, sme lam, sl slty, pyritic,
 hard-frm

730 - 40 100% Sh: med-dk gry, grn-gry, plty, sl carb, few pyrite
 ctgs, many cherty, sndy-sltly, frm
 40 - 50 10% Ss: wht, fg, sbrnd, wl srted, sl cly fill, vy glauc,
 calc, few cly incls, fri, sme fair por, N-S
 90% Sh: AA
 50 - 60 30% Ss: AA, but f-mg
 60% Sh: AA
 10% Clystn: wht, blk, vy sft, vy sl swlg
 Tr. Pyrite
 60 - 70 AA, but no pyrite
 Tr. Coal: blk, blk, vit, hard
 70 - 80 20% Ss: wht, f-mg, sbrnd, sl to mod cly fill, many shly,
 sl carb, sme calc, glauc, hard-sft, sl por, N-S
 60% Sh: AA
 20% Clystn: AA, sme w/scat. qtz. grns
 Tr. Pyrite
 80 - 90 30% Ss: AA
 50% Sh: AA
 10% Clystn: AA
 10% Pyrite
 Tr. Coal: AA, but earthy
 90 - 800 30% Ss: wht, f-mg, sbrnd, fair srtg, mod cly fill, calc,
 sl carb, few cly incls, sme shly, frm-sft, most tite,
N-S
 50% Sh: AA
 10% Clystn: AA
 10% Pyrite
 Tr. Coal: blk, vit, pyrite ctng, hard
 800 - 10 20% Ss: AA
 80% Sh: AA
 Tr. Pyrite
 10 - 20 20% Ss: wht, fg, sbrnd, wl srted, sl cly fld, sl carb,
 sl ark, calc, pyrite incl, hard, vy sl por, N-S
 80% Sh: lt-med gry, brn, plty, cly incls, sl carb,
 sme sndy-sltly, frm
 Tr. Pyrite
 20 - 40 40% Ss: AA
 60% Sh: AA
 40 - 50 40% Ss: AA, w/sme mg, sme sl glauc
 50% Sh: AA
 10% Pyrite
 50 - 60 40% Ss: wht, f-mg, sbrnd, sl-mod cly fld, few cly incls,
 calc, hard, sme sl por, N-S
 60% Sh: AA
 60 - 80 50% Ss: AA
 50% Sh: gry-brn-grn, plty, sl carb, few pyrite incls,
 cly incls, sme lam, frm
 80 - 90 40% Ss: wht, f-mg, sbrnd, fair srtg, sme clean, sme
 cly fld, few sl carb, calc, few pyrite incls, hard-fr
 sme fair por, N-S
 60% Sh: AA
 Tr. Pyrite
 90 - 900 30% Ss: AA
 70% Sh: AA, w/many slty, sme sndy

900 - 10 30% Ss: wht, mg, sbang-sbrnd, wl srted, sl cly fld, calc, hard-friable, vy sl por, N-S
 70% Sh: AA, also sme rd-brn
 10 - 40 20% Ss: AA
 80% Sh: lt-med gry, plty, vy sl carb, few pyrite ctgs, sme slty, cly incls, frm-sft
 40 - 50 10% Ss: AA
 90% Sh: AA
 50 - 70 30% Ss: wht, f-m-cg, sbang-sbrnd, poorly srted, vy sl glauc, calc, sl carb, sl ark, friable-sft, clean-sl cly fld, sl por, N-S
 70% Sh: AA
 70 - 80 40% Ss: wht, f-mg, sbrnd-sbang, fairly srted, sl-mod cly fill, sl carb, sl ark, calc, hard-fri, sl por, N-S
 60% Sh: AA
 80 - 90 50% Ss: AA
 50% Sh: med gry, grn, gry, brn, plty-blky, carb, sme slty, sme wxy, frm
 90 - 1000 50% Ss: AA
 40% Sh: AA
 10% Pyrite
 1000 - 20 40% Ss: AA, w/sl glauc, friable, sme fair por, N-S
 60% Sh: AA, w/incr. carb material
 20 - 50 30% Ss: AA
 70% Sh: AA
 Tr. Coal: Blk, vit, blky, few cly ctgs, hard
 Tr. Clystn: wht-buff, plty, sl carb, vy sft, sl swlg
 Tr. Pyrite
 50 - 60 20% Ss: AA
 80% Sh: med-dk gry, dk brn, plty, few fissile, sl carb, few cly incls, few slty, frm
 Tr. Coal: AA
 60 - 80 30% Ss: wht, vfn-fg, sbang-sbrnd, fair srtg, clean-cly fld carb, ark, sme calc, hard, sme sl por, N-S
 60% Sh: AA
 10% Pyrite
 80 - 90 30% Ss: AA, w/mod cly fill
 70% Sh: AA, w/sme sndy, few cherty
 90 - 1100 10% Ss: AA
 80% Sh: AA
 10% Clystn: brn, blky, carb, vy sft, vy sl swlg
 1100 - 10 40% Ss: wht, f-mg, sbrnd, wl srted, sl-mod cly fld, many calc, sl carb, vy sl ark, hard, poss sl por, N-S
 60% Sh: AA, sme sl swlg
 Tr. Coal: AA and Tr. Pyrite
 10 - 20 30% Ss: AA
 60% Sh: AA
 10% Coal: AA, w/many cly ctgs & incls
 Tr. Pyrite
 20 - 30 20% Ss: AA
 80% Sh: gry-brn, plty, sme fissile, sl carb, few cly incls sme wxy, few sndy, frm-sft
 Tr. Coal: AA
 30 - 40 20% Ss: AA, many sbang, few cg & lse
 70% Sh: AA
 10% Pyrite

1140 - 50 20% Ss: AA
 80% Sh: AA
 Tr. Coal: blk, vit-earthly, blk, cly incls, hard
 Tr. Pyrite
 50 - 60 20% Ss: wht, f-mg, sbrnd-sbang, fair srtg, sl-mod cly
 fill, sl carb, sme calc, hard, vy sl por, N-S
 80% Sh: AA
 60 - 70 10% Ss: AA
 70% Sh: AA
 20% Clystn: buff-brn, blk, carb, vy sft, swlg
 70 - 90 N.S.
 90 - 1200 20% Ss: wht, fg, sbrnd, wl srtg, vy sl-hvy cly fill,
 sme shly, sl carb, calc, most hard, tite, N-S
 80% Sh: AA
 Tr. Clystn: AA
 1200 - 10 10% Ss: AA
 70% Sh: med-gry-dk brn, plty, vy carb, frm
 10% Coal: blk, vit, blk, hard
 10% Pyrite
 10 - 20 20% Ss: AA
 50% Sh: AA
 10% Coal: AA
 20% Pyrite
 20 - 30 20% Ss: AA. w/few pyrite incls, sl por, N-S
 60% Sh: AA
 20% Coal: AA, w/a few pyrite ctgs
 Tr. Pyrite
 30 - 50 40% Ss: AA, sme vy sl glauc
 50% Sh: gry, brn, plty, many slty, few sndy, sl carb, frm
 10% Coal: AA, w/many cly incls
 50 - 60 30% Ss: AA, w/incr. shlyness
 70% Sh: AA
 60 - 70 30% Ss: wht, f-mg, sbrnd, fair srtg, sme clean, sme sl-mod
 cly fld, sl carb, vy sl glauc, sl ark, calc, hard,
 vy sl por, N-S
 60% Sh: AA
 10% Coal: AA
 Tr. Pyrite
 70 - 80 20% Ss: AA
 70% Sh: med-dk brn, med-dk gry, vy plty, carb, sme fissile
 cly incls, few slty, frm
 10% Pyrite
 Tr. Coal: AA
 80 - 90 40% Ss: AA
 50% Sh: AA
 10% Pyrite
 Tr. Coal: AA
 90 - 1300 50% Ss: AA, sme shly
 50% Sh: AA, sme sndy
 1300 - 10 20% Ss: wht, f-mg, sbrnd, wl srtg, sl-mod cly fld, sl
 carb, calc, vy sl ark, hard-friable-frm, poss
 sl por, N-S
 70% Sh: AA
 10% Coal: blk, blk, vit-earthly, cly incls
 10 - 30 30% Ss: AA
 50% Sh: AA
 10% Clystn: buff, blk, carb, vy sft, vy swlg
 10% Coal: AA
 Tr. Pyrite

1330 - 40 20% Ss: wht, vfn-mg, sbrnd, fair srtg, sl-mod-hvy cly fill
 sme shly, sl carb, calc, hard-sft, poss vy sl por, N-S
 60% Sh: AA
 10% Coal: AA
 10% Pyrite
 40 - 50 20% Ss: AA
 70% Sh: med-d-grn-gry, plty, carb, cly inclcs, few sl
 slty, frm
 10% Coal: AA
 50 - 70 10% Ss: AA, w/wl srted, sme clean, hard-friable, sme sl
 por, N-S
 80% Sh: AA
 10% Coal: AA
 Tr. Pyrite
 70 - 80 N.S.
 80 - 90 10% Ss: AA
 80% Sh: AA
 10% Coal: AA
 90 - 1400 10% Ss: AA
 70% Sh: dk-med brn-blk-dk gry, plty-blky, sme fissile,
 vy carb, cly inclcs, sl slty, sme frm, most sft,
 sme sl swlg
 20% Coal: blk, vit, blky, hard
 1400 - 20 20% Ss: wht, mg, sbrnd-sbang, wl srted, mod cly fld, carb,
 ark, calc, hard-friable, sl por, N-S
 70% Sh: AA
 10% Coal: AA
 Tr. Pyrite
 20 - 30 30% Ss: wht, f-mg, sbrnd, wl srted, sl carb, ark, calc,
 sl cly fld, hard-fri, sl por, N-S
 50% Sh: gry, brn, grn, plty, sl carb, cly inclcs, sme bent,
 sme slty, sft-frm
 20% Coal: blk, vit, blky, hard
 Tr. Pyrite
 30 - 50 20% Ss: AA, sme clean
 60% Sh: AA
 20% Coal: AA
 Tr. Pyrite
 50 - 60 60% Ss: wht, mg, sbrnd, wl srted, carb, sl-mod cly fld, ark
 sl glauc, vy calc, hard, sl por, N-S
 20% Sh: AA
 10% Coal: AA
 10% Pyrite
 60 - 70 70% Ss: AA
 30% Sh: brn, gry, rd-brn, plty-blky, carb, sme lam, sme
 slty, frm
 Tr. Coal: AA and Tr. Pyrite
 70 - 80 60% Ss: AA
 30% Sh: AA
 10% Pyrite
 80 - 90 N.S.
 90 - 1500 60% Ss: wht, f-mg, sbrnd, fair srtg, sl-mod cly fld, vy
 calc, sl glauc, carb, ark, hard-fri, vy sl por, N-S
 40% Sh: AA
 Tr. Coal: AA and Tr. Pyrite

