

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.

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 1,190' FNL & 1,050' FEL (NE/NE)

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

15. DATE SHIPPED 4-21-81 16. DATE T.D. REACHED 4-25-81 17. DATE COMPL. (Ready to prod.) 7-24-81

18. ELEVATIONS (OF, RSR, RT, GR, ETC.) * 5,699 KB (GL + 2') 19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD 1,795' KB 21. PLUG BACK T.D., MD & TVD 1,749' KB 22. IF MULTIPLE COMPLET. HOW MANY * NA

23. INTERVALS DRILLED BY

ROTARY TOOLS 0-TD

CABLE TOOLS

24. PRODUCING INTERVAL(S) OF THIS COMPLETION: TOP, BOTTOM, NAME (MD AND TVD) *

1,624'-1,640' Pictured Cliffs

NO

26. TYPE ELECTRIC AND OTHER LOGS RUN

Dual Induction; Comp. Neutron-Formation 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#	125'	9-7/8"	65 sx 'B' w/2% CaCl ₂ &	-0-
4-1/2" OD	10.5#	1,790'	6-1/4"	1/4# Flocele/sx. 375 sx 50-50 Pozmix w/2% Gel & 1/4# Celloflake/sx	-0-

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
		none			2-3/8"	1,663'	-----

31. PERFORATION RECORD (Interval, size and number)

1,624'-30', 1,633'-40' w/1 JSPF (15 perfs)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
1,624'-1,640'	BD w/1000 gal 7 1/2% acid w/additives & ball sealers.
	Frac'd w/32,000 gal 70% Quality Foam w/55,000# 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	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO	
7-24-81	24	3/8"	→	NA	333	0	NA	
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)		
98 psi	SI 180 psi	→	NA	333	0	NA		
24. DISPOSITION OF GAS (GAL.)								

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

PWagner

TITLE

Production Engineer-RMD

DATE

AUG 5 1981

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

BY

FARMINGTON DISTRICT

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: "Stocks 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 POHOL'S ZONES:

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORREL INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING, AND SHUT-IN PRESSURE, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	MEAS. DEPTH	TRUE VERT. DEPTH
						
				LOG TOPS		
				Nacimientito	Surface	
				Ojo Alamo	600' Bst.	
				Kirtland	620' Bst.	
			Fruitland	1,425'		
			Pictured Cliffs	1,620'		
			TD Logger	1,792'		
			TD Driller	1,795'		

SAMPLE DESCRIPTION

150 - 60 90% Ss: wht, clr, cg, sbrnd-rndd, lse
10% Chert: org, grn, brn, cs-xln, ang-sbang, lse

60 - 70 80% Ss: AA
20% Chert: AA
Tr. Pyrite: nodular, as granular coatings

70 - 80 90% Ss: AA
10% Chert: AA, w/sme gry
Tr. Pyrite: AA

80 - 90 80% Ss: AA, w/sme org. staining
20% Chert: AA

90 - 200 70% Ss: AA, w/sme vy cg
20% Sh: grnsh gry, blk, clyey, sft
10% Chert: org, grn, cs-xln, ang-sbang, lse

200 - 10 40% Ss: AA
40% Sh: AA
20% Chert: AA
Tr. Pyrite: AA

10 - 20 10% Ss: wht, clr, vy cg, sbrnd, lse
90% Sh: grnsh gry, brn, blk, sl slty, clayey, swelling, sft
Tr. Chert: AA

20 - 30 20% Ss: AA
80% Sh: AA

30 - 40 100% Sh: brn, grnsh gry, blk, clayey, slty, sl swlg, sft
Tr. Ss: AA

40 - 50 100% Sh: AA
Tr. Ss: wht, vy fg, sbrnd, mod cly fld, sft, tite, N-S

50 - 60 40% Ss: wht, clr, cg, sbrnd, lse
60% Sh: grnsh gry, brn, blk, clyey, sl slty, sl swlg, sft

60 - 80 90% Ss: AA
10% Chert: grn, brn, org, cs-xln, ang-sbang, lse

80 - 90 80% Ss: AA
20% Chert: AA

90 - 300 70% Ss: wht, clr, cg, sbrnd, lse
10% Sh: grnsh gry, blk, clyey, sl swlg, vy sft
20% Chert: AA

300 - 10 90% Ss: AA
10% Chert: grn, brn, dk gry, cs-xln, ang, lse

10 - 20 90% Ss: wht, clr, cg, sbrnd, lse
10% Chert: AA
Tr. Sh: AA

20 - 30 80% Ss: AA
20% Chert: org, gry, grn, cs-xln, ang-sbang, lse

30 - 40 70% Ss: AA
20% Chert: AA
10% Pyrite: nodular

40 - 50 80% Ss: wht, clr, f-cg, sbrnd, glauc, sl-mod cly fld, sft
w/mst lse
10% Chert: AA
10% Sh: gry, blk, sl slty, clyey, sft



350 - 60 90% Ss: AA
 10% Sh: AA
 Tr. Pyrite: nodular
 60 - 70 80% Ss: wht, clr, cg, sbrnd, lse
 20% Chert: grn, gry, org, cs-xln, ang-sbang, lse
 70 - 80 80% Ss: wht, grn, gry, f-cg, sbrnd, sl cly fld, glauc, sft,
 mostly lse, N-S
 20% Chert: AA
 Tr. Pyrite: AA
 80 - 90 80% Ss: AA
 10% Sh: grnsh gry, blk, clyey, sft
 10% Chert: AA
 90 - 400 80% Ss: AA, w/sme clr
 20% Chert: AA
 Tr. Sh: AA
 400 - 10 80% Ss: wht, clr, cg, sbrnd, lse
 10% Sh: grnsh gry, blk, clyey, vy sft
 10% Chert: gry, grn, red, org, cs-xln, ang-sbang, lse
 Tr. Pyrite: AA
 10 - 20 80% Ss: AA
 10% Chert: AA
 10% Pyrite: AA
 20 - 30 80% Ss: wht, clr, lt grn, f-cg, sbrnd, sl cly fld, sft,
 mostly cg, lse
 10% Sh: AA
 10% Chert: AA
 30 - 40 70% Ss: AA
 10% Sh: grnsh gry, blk, clyey, sl swlg, sft, sl slty
 20% Chert: grn, gry, org, cs-xln, ang-sbang, lse
 40 - 50 80% Ss: wht, clr, cg, sbrnd, lse
 20% Chert: AA
 Tr. Pyrite: nodular
 50 - 60 60% Ss: AA
 30% Sh: grnsh gry, blk, waxy, sft
 10% Chert: grn, gry, org, cs-xln, ang, lse
 Tr. Pyrite: AA
 60 - 70 50% Ss: clr, grn, f-cg, sbrnd, sl-mod cly fld, glauc, sft,
 w/mostly lse
 50% Sh: AA
 Tr. Pyrite: AA
 70 - 90 90% Ss: clr, wht, cg, sbrnd, lse
 10% Chert: gry, org, cs-xln, ang, lse
 90 - 500 70% Ss: AA
 10% Sh: AA
 20% Chert: AA
 Tr. Pyrite: AA
 500 - 10 70% Ss: wht, clr, cg, sbrnd, lse
 20% Sh: grnsh gry, blk, clyey, sft
 10% Chert: grn, gry, org, cs-xln, ang-sbang, lse
 10 - 20 80% Ss: AA
 10% Sh: AA, w/sme lt grnsh gry
 10% Chert: AA
 Tr. Pyrite: AA
 20 - 30 70% Ss: AA
 20% Sh: AA, w/sme waxy
 10% Chert: AA

530 - 40 60% Ss: AA
 20% Sh: AA, w/sme rddsh brn
 20% Chert: grn, brn, grnsh gry, blk, waxy, frm-sft
 Tr. Coal: blk, vit, blk-sbang, frm
 40 - 50 60% Ss: wht, clr, cg, sbrnd, lse
 30% Sh: gry, grnsh gry, blk, waxy, clyey, sft
 10% Chert: AA
 Tr. Pyrite: AA
 50 - 60 60% Ss: AA
 30% Sh: AA
 10% Chert: AA, w/sme creme
 60 - 70 80% Ss: wht, clr, cg, sbrnd, lse
 10% Sh: grnsh gry, blk, waxy, clyey, sl swlg, sft
 10% Chert: AA
 70 - 80 80% Ss: AA
 10% Sh: AA
 10% Chert: lt brn, grn, cs-xln, ang-sbang, lse
 80 - 90 70% Ss: wht, clr, cg, sbrnd, lse
 10% Sh: lt brn, dk grnsh gry, blk-plty, waxy, sft
 20% Chert: AA
 90 - 600 60% Ss: AA
 10% Sh: AA
 30% Chert: pink, brn, lt org, cs-xln, ang-sbang, lse
 Tr. Coal: AA
 600 - 10 70% Ss: wht, clr, cg, sbrnd, lse
 10% Sh: grnsh gry, blk, clyey, sft
 20% Chert: AA, w/sme creme
 10 - 20 70% Ss: AA, w/m-cg
 10% Sh: AA
 20% Chert: pink, org, grn, gry, cs-xln, ang, lse
 20 - 30 80% Ss: AA
 10% Sh: dk grnsh gry, blk, clyey, sft
 10% Chert: AA
 Tr. Pyrite: nodular
 30 - 40 80% Ss: wht, clr, m-cg, sbrnd, lse
 10% Sh: AA, w/sme lt grnsh gry
 10% Chert: gry, pink, lt org, cs-xln, ang-sbang, lse
 Tr. Pyrite: AA
 40 - 50 90% Ss: AA
 10% Chert: AA
 50 - 60 90% Ss: wht, clr, m-cg, sbrnd, lse
 10% Chert: gry, org, lt red, cs-xln, ang-sbang, lse
 Tr. Sh: gry, blk, sl slty, clyey, sft
 Tr. Pyrite: AA
 60 - 70 90% Ss: AA, w/mostly mg
 10% Chert: AA
 70 - 80 80% Ss: AA
 10% Chert: AA
 10% Pyrite: AA
 80 - 90 70% Ss: AA
 20% Chert: lt org, dk gry, cs-xln, ang-sbang, lse
 10% Pyrite: AA
 90 - 700 50% Ss: wht, clr, f-cg, sbrnd, lse, cs-xln
 30% Sh: gry, grnsh gry, blk-sbang, silicic, frm-hard
 20% Chert: AA
 Tr. Pyrite: AA

850 - 60 50% Ss: wht,clr, cg, sbrnd, lse
 40% Sh: grnsh gry, lt grnsh gry, blk, sl slty, frm-sft
 10% Chert: pink, lt brn, lt org, cs-xln, ang-sbang, lse
 60 - 70 40% Ss: AA, w/sm mg
 50% Sh: AA, w/mstly lt grnsh gry, sl slty
 10% Chert: AA
 Tr. Pyrite
 70 - 80 30% Ss: AA, w/sme mg, sme cly fld
 60% Sh: grnsh gry, gry, brn, blk, sl slty, frm-sft
 10% Chert: AA
 80 - 90 20% Ss: AA
 80% Sh: AA
 90 - 900 20% Ss: AA, but all cg
 80% Sh: grnsh gry, blk, sl slty, sl swlg, sft
 Tr. Chert: AA
 900 - 10 10% Ss: wht, fg, sbrnd, cherty, frm, tite, N-S
 90% Sh: grnsh gry, blk, slty, silicified, frm-sft
 Tr. Chert: AA
 10 - 20 20% Ss: wht, blu grn, grn, vfn-fg, sl cly fld, frm, sl por, N-S
 80% Sh: AA
 20 - 30 10% Ss: AA
 90% Sh: grnsh gry, gry, blk, sl slty, sme waxy, frm-sft
 30 - 40 10% Ss: wht, vfn-g, sbrnd, sl cly fld, carb incl, frm,
 sl por, N-S
 90% Sh: AA
 40 - 50 20% Ss: wht, blu grn, grn, vfn-fg, sbrnd, sl cly fld, glauc,
 frm, sl por, N-S
 80% Sh: grnsh gry, gry, blk, sm carb frags, clayey, sl swlg,
 sft
 50 - 60 10% Ss: wht, fg, sbrnd, carb incl, sl-mod cly fill, firm, vy
 calc, tite, N-S
 90% Sh: AA
 60 - 70 10% Ss: AA
 90% Sh: AA, w/sl slty, frm-sft
 70 - 80 20% Ss: wht, lt gry, fg, sbrnd, carb incl, mod cly fill, firm,
 vy calc, tite, N-S
 80% Sh: AA, w/sme bluish grn
 80 - 90 10% Ss: AA
 90% Sh: grnsh gry, blk, sl slty, sl clayey, frm-sft
 90 - 1000 30% Ss: wht-lt gry, blu grn, grn, vfn-fg, sbrnd, sl cly fill,
 firm, wht is calc, others not
 70% Sh: AA
 1000 - 10 30% Ss: AA
 70% Sh: grnsh gry, blk, slty, sm carb frags, firm
 10 - 20 10% Ss: vy lt grn, fg, sbrnd, carb & glauc incl, sl cly fill,
 firm, vy calc, tite, N-S
 90% Sh: AA
 20 - 30 30% Ss: AA
 70% Sh: gry, grnsh gry, blk, sl-mod slty, carb incl, clayey,
 sft-frm
 30 - 40 40% Ss: lt gry, wht, vfn-fg, sbrnd, carb incl, mod cly fill,
 frm, sl por, N-S
 60% Sh: AA
 40 - 50 30% Ss: AA
 70% Sh: gry AA, blk, sl slty, clayey, frm
 50 - 60 40% Ss: AA, w/sme grn, sme glauc, incl, firm-sft, N-S
 60% Sh: AA

1060 - 70 20% Ss: AA
 80% Sh: grnsh gry, lt brn, blk, sm carb frags, clayey,
 w/sl swlg, sft
 Tr. Pyrite: nodular
 70 - 80 30% Ss: wht, lt gry, grn, vfn-fg, sbrnd, glauc & carb incl,
 sl cly fld, firm, sl por, N-S
 70% Sh: AA
 Tr. Pyrite: AA
 80 - 90 30% Ss: AA
 70% Sh: AA
 Tr. Pyrite: AA
 90 - 1100 20% Ss: grn, gry, blu grn, fg, sbrnd, mod cly fld, firm,
 vy sl por, N-S
 80% Sh: gry, grnsh gry, blk, carb, clayey, frm-sft
 1100 - 10 30% Ss: AA
 70% Sh: AA, w/blk-plty, sl clayey, sft
 Tr. Pyrite: nodules and coatings on grns
 10 - 20 10% Ss: AA, w/sme sl calc
 90% Sh: AA, w/sme sl slty, frm-sft
 20 - 30 20% Ss: AA, w/sme wht, sme glauc, sl calc, vy sl por, N-S
 80% Sh: AA, w/sme carb frags, clayey, sl swlg, soft
 Tr. Pyrite: sm nodules
 30 - 40 30% Ss: lt grnsh gry, wht, fg, sbrnd, mod cly fill, sl calc,
 frm, sl por, N-S
 70% Sh: AA, w/sme gry-dk gry
 Tr. Pyrite: sm nodules
 40 - 50 40% Ss: AA
 60% Sh: AA
 50 - 60 10% Ss: wht, lt gry, fg, sbrnd, mod cly fld, frm, sl por, N-S
 90% Sh: grnsh gry, blk, sl slty, sft
 60 - 70 20% Ss: AA
 80% Sh: AA
 70 - 80 30% Ss: wht, blu grn, fg, sbrnd, glauc, sl cly fld, firm,
 calc, tite, N-S
 70% Sh: color AA, w/sme /lt brn, blk, thin carb stringers,
 sl clayey, sft
 80 - 90 10% Ss: AA, w/mostly wht, mod cly fill
 90% Sh: AA, w/sl slty
 Tr. Pyrite: sm nodules
 90 - 1200 10% Ss: AA
 90% Sh: AA
 1200 - 10 30% Ss: wht, fg, sbrnd, wl srted, glauc & carb incl, sl cly
 fld, firm, mod calc, tite, N-S
 70% Sh: grnsh gry, dk grnsh gry, brn, blk, thin carb stringer
 sme sl slty, most soft
 Tr. Pyrite: as. coatings & sm. nodules
 10 - 20 30% Ss: AA, w/sm carb frags
 70% Sh: AA, w/sme vy dk brn, lignitic
 20 - 30 40% Ss: wht, fg, sbrnd, wl srted, sl cly fld, firm, sl calc,
 tite, N-S
 60% Sh: grnsh gry, blk, sl slty, sm carb frags, soft
 30 - 40 20% Ss: AA
 80% Sh: AA
 40 - 50 30% Ss: wht, lt grn, fg, sbrnd, glauc & carb incl, sl cly fld,
 firm, mod-vy calc, tite, N-S
 70% Sh: gry, grnsh gry, blk, carb frags & stringers, soft
 Tr. Pyrite: AA

1250 - 60 10% Ss: AA, w/mod cly fill, non-calc
 90% Sh: AA
 60 - 70 100% Sh: grnsh gry, gry, blk, clayey, soft
 Tr. Ss: AA
 70 - 80 10% Ss: wht, fg, sbrnd, glauc & carb incl, cly fld, soft,
 calc, tite, N-S
 90% Sh: AA
 80 - 90 100% Sh: AA, w/sl swlg
 Tr. Ss: AA
 90 - 1300 20% Ss: AA, but firm, N-S
 80% Sh: AA
 1300 - 10 10% Ss: AA
 90% Sh: AA, but waxy
 10 - 20 10% Ss: AA, w/sl por, N-S
 90% Sh: AA, w/sme brown, carb, soft
 20 - 50 100% Sh: grnsh gry, dk gry, brn, blk, sl slty, carb, soft,
 sme w/calcite as fracture fill
 50 - 60 100% Sh: AA, w/sme plty, carb frags
 60 - 80 100% Sh: AA, w/many vy dk brn, lignitic
 Tr. Ss: wht, grn, fg, sbrnd, sl cly fill, firm, sl por, N-S
 Tr. Coal: blk, vit, splintery, soft
 80 - 90 10% Ss: AA, but firm, N-S
 90% Sh: AA
 90 - 1400 100% Sh: grnsh gry, brn, gry, blk, carb frags & thin
 stringers, soft
 1400 - 10 30% Ss: AA, w/sme gry, blu grn, mod calc, N-S
 70% Sh: AA
 10 - 20 20% Ss: AA
 80% Sh: grnsh gry, brn, blk, slty, carb, soft
 20 - 30 10% Ss: AA, w/vy calc, tite, N-S
 90% Sh: AA, w/sme clayey, soft
 30 - 40 30% Ss: wht, fg, sbrnd, wl srted, carb incl, sl clay fill,
 firm, vy calc, tite, N-S
 70% Sh: AA
 Tr. Ls: tan, dense, ang, vy calc
 40 - 50 40% Ss: AA
 30% Sh: AA
 30% Coal: blk, vit, blk-ang, firm
 50 - 60 40% Ss: AA, N-S
 60% Sh: AA
 60 - 70 20% Ss: AA
 40% Sh: AA
 40% Coal: AA
 Tr. Chert: red, cs-xln, ang, lse
 70 - 80 50% Sh: AA
 50% Coal: blk, vit, blk-ang, firm, w/dissemin pyrite grns
 80 - 90 50% Sh: AA, w/sme slty
 50% Coal: AA
 90 - 1500 50% Sh: AA
 50% Coal: AA
 1500 - 10 80% Sh: AA
 20% Coal: AA
 10 - 20 20% Ss: wht-gry, fg, sbrnd, carb, firm, sl calc, tite, N-S
 60% Sh: AA
 20% Coal: AA
 20 - 30 10% Ss: AA
 70% Sh: buff, brn, blk, clayey, soft
 20% Coal: AA
 30 - 40 80% Sh: brn, gry, blk, clayey, soft
 20% Coal: blk, vit, blk-ang, firm

1540 - 50 80% Sh: AA
 20% Coal: AA
 Tr. Clystn: wht, plty, vy soft
 50 - 60 70% Sh: gry, grnsh gry, dk brn, blk, sme waxy, clayey, soft
 30% Coal: AA
 60 - 70 60% Sh: AA, w/carb frags & stringers
 40% Coal: blk, vit, blk-ang, firm
 Tr. Clystn: AA
 70 - 80 70% Sh: AA, w/mostly dk brn & gry
 30% Coal: AA
 80 - 90 60% Sh: AA
 40% Coal: AA
 90 - 1600 70% Sh: color AA, w/blk-plty, carb, slty, firm
 30% Coal: AA
 1600 - 10 20% Ss: wht, blu grn, fg, sbrnd, wl sorted, sl ark, carb incl,
 sl clay fill, firm, vy calc, tite, N-S
 60% Sh: AA
 20% Coal: AA
 10 - 20 30% Ss: AA
 50% Sh: AA, but clayey, non slty, soft
 20% Coal: AA
 Tr. Ls: tan-brn, dense, ang, vy calc
 20 - 30 20% Ss: AA, w/sm lg carb frags
 80% Sh: AA
 Tr. Clystn: creme-wht, plty, waxy, vy soft
 30 - 40 40% Ss: wht, fg, sbrnd, wl srted, AA, w/glauc
 60% Sh: brn, gry, blk, clayey, soft
 Tr. Coal: AA
 40 - 50 40% Ss: AA
 50% Sh: AA
 10% Coal: AA
 50 - 60 30% Ss: AA
 70% Sh: AA
 60 - 70 50% Ss: AA
 50% Sh: AA
 Tr. Calcite: wht, brn, cs-xln, cubic, vy calc, lse
 70 - 80 40% Ss: AA
 60% Sh: AA, w/sme slty, soft, waxy
 Tr. Calcite: AA
 80 - 90 20% Ss: AA, w/incr. cly content
 80% Sh: AA
 90 - 1700 30% Ss: AA
 70% Sh: AA
 1700 - 10 30% Ss: AA
 70% Sh: AA, w/sme sl slty
 10 - 20 50% Ss: AA, w/soft, wl sorted
 50% Sh: AA, w/carb, firm-sft
 20 - 30 50% Ss: AA
 50% Sh: AA
 30 - 50 40% Ss: AA, w/soft-friable, fair por, N-S
 60% Sh: AA
 50 - 60 30% Ss: AA, w/firm, N-S
 70% Sh: brn, gry, blk, carb, soft
 60 - 80 20% Ss: AA, w/decreasing carb
 80% Sh: AA
 80 - 95 30% Ss: AA
 70% Sh: AA
 TD 1795'