

NEW MEXICO OIL CONSERVATION COMMISSION
WELL COMPLETION OR RECOMPLETION REPORT AND LOG

DISTRIBUTION		
SANTA FE		
FILE		
U.S.G.S.		
LAND OFFICE		
OPERATOR		

5a. Indicate Type of Lease	
State ☒	Fee ☐
5. State Oil & Gas Lease No.	
E-5482	

13. TYPE OF WELL	
OIL WELL ☐ GAS WELL ☒ DRY ☐ OTHER ☐	
b. TYPE OF COMPLETION	
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ 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	

7. Unit Agreement Name	
Gallegos Canyon Unit	
8. Farm or Lease Name	
9. Well No.	
327	
10. Field and Pool, or Wildcat	
West Kutz Pictured Cliffs	

UNIT LETTER <u>H</u> LOCATED <u>1585</u> FEET FROM THE <u>North</u> LINE AND <u>960</u> FEET FROM	
THE <u>East</u> LINE OF SEC. <u>36</u> TWP. <u>29N</u> RGE. <u>13W</u> NMPM	
12. County	
San Juan	

15. Date Spudded	16. Date T.D. Reached	17. Date Compl. (Ready to Prod.)	18. Elevations (DF, RKB, RT, GR, etc.)	19. Elev. Casinghead
3-25-81	3-26-81	4-03-81	G.L. 5,426'; K.B. 5,428'	
20. Total Depth	21. Plug Back T.D.	22. If Multiple Compl., How Many	23. Intervals Drilled By	23. Intervals Drilled By
1,385' K.B.	1,338' K.B.	NA	Rotary Tools	Cable Tools
				0-1,385'
24. Producing Interval(s), of this completion - Top, Bottom, Name				25. Was Directional Survey Made
Pictured Cliffs 1,274'-1,286' K.B.				NO
26. Type Electric and Other Logs Run				27. Was Well Cored
Induction Electric Log - Density & Neutron Borehole Compensated				NO

28. CASING RECORD (Report all strings set in well)					
CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
7"	17#	123' KB	9-7/8"	65 sx "B" + 2% CaCl ₂	-0-
				& 1/4# Celloflake/sx	
4-1/2"	10.5#	1,378'	6-1/4"	200 sx 50-50 Pozmix w/2%	-0-
				Gel & 1/4# Celloflake/sx	+ 0.5% NFR-2

29. LINER RECORD					30. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET
					2-3/8"	1,287' K.B.	None

31. Perforation Record (Interval, size and number)		32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
1,274'-78'		DEPTH INTERVAL	
1,283'-86'		AMOUNT AND KIND MATERIAL USED	
1 JSPF (9 holes)		1,274'-86' KB	
		Brokedown w/500 gal 7 1/2% acid	
		+ additives & 12 ball sealers.	
		Frac 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 pump)				Well Status (Prod. or Shut-in)	
						SI	
Date of Test	Hours Tested	Choke Size	Prod'n. Per Test Period	Oil - Bbl.	Gas - MCF	Water - Bbl.	Gas - Oil Ratio
4-03-81	24	3/8"		0	388	304	NA
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API (Corr.)	
100 psi	260		0	388	304	NA	

34. Disposition of Gas (Sold, used for fuel, vented, etc.)		Test Witnessed By
VENTED DURING TEST		T.C. DURHAM

35. List of Attachments	
SAMPLE DESCRIPTION	

36. I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief.	
SIGNED <u>AC</u>	TITLE <u>Production Engineer-RMD</u> DATE <u>4-21-81</u>

This form is to be filed with the appropriate District Office of the Commission not later than 20 days after the completion of any newly-drilled or deepened well. It shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, Items 36 through 34 shall be reported for each zone. The form is to be filed in quintuplicate except on state land, where six copies are required. See Rule 1485.

Southeastern New Mexico

T. Anhy _____	T. Canyon _____	T. Ojo Alamo _____	T. Penn. "B" _____
T. Salt _____	T. Strawn _____	T. Kentland -Fruitland <u>980</u>	T. Penn. "C" _____
B. Salt _____	T. Atoka _____	T. Pictured Cliffs <u>1,270</u>	T. Penn. "D" _____
T. Yates _____	T. Miss _____	T. Cliff House _____	T. Leadville _____
T. 7 Rivers _____	T. Devonian _____	T. Menefee _____	T. Madison _____
T. Queen _____	T. Silurian _____	T. Point Lookout _____	T. Elbert _____
T. Grayburg _____	T. Montoya _____	T. Mancos _____	T. McCracken _____
T. San Andres _____	T. Simpson _____	T. Gallup _____	T. Ignacio Qtzite _____
T. Glorieta _____	T. McKee _____	Base Greenhorn _____	T. Granite _____
T. Paddock _____	T. Ellenburger _____	T. Dakota _____	T. _____
T. Blinebry _____	T. Gr. Wash _____	T. Morrison _____	T. _____
T. Tubb _____	T. Granite _____	T. Todilto _____	T. _____
T. Drinkard _____	T. Delaware Sand _____	T. Entrada _____	T. _____
T. Abo _____	T. Bone Springs _____	T. Wingate _____	T. _____
T. Wolfcamp _____	T. _____	T. Chinle _____	T. _____
T. Penn. _____	T. _____	T. Permian _____	T. _____
T. Cisco (Bough C) _____	T. _____	T. Penn. "A" _____	T. _____

Northwestern New Mexico

OIL OR GAS SANDS OR ZONES

No. 1, from 1,274'	to 1,286'	No. 4, from	to
No. 2, from	to	No. 5, from	to
No. 3, from	to	No. 6, from	to

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from to feet.

No. 2, from to feet.

No. 3, from to feet.

No. 4, from to feet.

FORMATION RECORD (Attach additional sheets if necessary)

From	To	Thickness in Feet	Formation
			Sample Description Attached
	surface	980'	Kirtland
	980'	1,270'	Fruitland
	1,270'	TD	Pictured Cliffs
			T.D. Logger 1,382'
			T.D. Driller 1,385'

LITH FOR ERG PC #327

160-70	100% Sh: grnsh gry, plty-blky, carb frags, soft
170-80	100% Sh: AA w/dk grnsh gry
180-90	70% Ss: lt grn, f-g, sbrnd, glauc incl, mod clyfll, soft, sme clac, sl. poros, <u>NS</u> 30% Sh: AA
190-200	50% Ss: AA 50% Sh: Dk grnsh gry, grnsh gry, dk gry, plty, carb incl, soft
200-10	70% Ss: lt grn, f-g, sbrnd, glauc and carb incl, sme amber; sl. clyfll, firm, fair poros, NS 30% Sh: AA Trace Chert: orange, cs-xln, ang-sbang, loose
210-20	60% Ss: AA w/m-g and mica 30% Sh: AA 10% Chert: AA w/sme clear
220-30	100% Sh: dk grnsh gry, plty, small carb incl, firm Trace SS: AA
230-40	100% Sh: AA w/grnsh gry, dk gry
240-50	100% Sh: AA
250-60	100% Sh: AA Trace Ss: AA
260-70	100% Sh: AA w/sm slty
270-80	30% Ss: grnsh gry, vf-fg, sbrnd, glauc incl, firm, sl. poros, <u>NS</u> 20% Sh: AA
280-90	100% Sh: dk grnsh gry, grnsh gry, blky-plty, sl slty, carb incl, firm
290-300	100% Sh: AA Trace Chert: lt orange, cs-xln, ang-loose
300-10	50% Ss: lt grnsh blue, f-mg, sbrnd, mod clyfll, sme glauc, soft, vy sl. poros, <u>NS</u> 50% Sh: AA Trace Chert: AA

310-20 40% Ss: AA
50% Sh: dk grnsh gry, grash gry, dk gry, blkyl-pty, sl.
slty, firm
10% Chert: AA

320-30 30% Ss: grnsh gry, f-g, sbrnd, vy clyfll, vy soft, tite,
NS
60% Sh: AA
10% Chert: clear, cs-xln, ang, loose

330-40 20% Ss: wht, grnsh gry, f-mg, sbrnd, carb incl, sl. ark,
mod clyfll, firm, tite, NS
80% Sh: AA

340-50 100% Sh: AA w/sandy-mod slty, firm
Trace Ss: AA

350-60 10% Ss: grn, f-g, sbrnd, carb and glauc incl, mod clyfll,
soft, tite, NS
90% Sh: AA

360-70 NS

370-80 30% Ss: vy lt grn, m-g, sbrnd, poorly sorted, carb incl,
firm-brittle, mod clyfll, tite NS
20% Sh: grnsh gry, dk gry, pty, soft

380-90 20% Ss: AA
80% Sh: AA w/mstly blkyl

390-400 40% Ss: grn, f-g, sbrnd, carb and glauc incl, sl. clyfll,
firm, sl. poros, NS
60% Sh: AA

400-10 70% Ss: AA
30% Sh: grnsh gry, gry, sl. slty, blkyl-pty, soft,
Trace Chert: AA

410-20 60% Ss: wht, lt gry, f-g, sbrnd, glauc and carb incl, sl.
ark, firm, vy calc, tite, NS
40% Sh: AA

420-30 90% Ss: AA w/f-g, vy sl. calc
10% Sh: AA

430-40 100% Sh: grnsh gry, grn, blkyl, vy slty-sl sandy, firm
Trace Ss: AA

440-50 20% Ss: lt gry, grn, f-mg, sbrnd, glauc and carb incl,
firm, sl. poros, NS
80% Sh: AA
Trace Chert: AA

450-60 10% Ss: lt gry, vf-fg, sbrnd, vy sm. carb incl. mod clyfll, firm-brittle, vy sl. poros, NS
90% Sh: AA

460-70 50% Ss: lt grn, f-mg, sbrnd, nvm, carb incl and frags, mod clyfll, firm-brittle, vy sl. poros, NS
50% Sh: grnsh gry, dk grnsh gry, sme sl-mod slty, firm-soft

470-80 30% Ss: AA
50% Sh: AA
20% Chert: red, orange, cs-xln, ang, loose

480-90 40% Ss: wht, lt gry, m-g, sbrnd, glauc incl, mod clyfll, sl. ark, firm, vy sl. poros, NS
50% Sh: grnsh gry, grn, blk-y-plty, sme slty, soft
10% Chert: AA

490-500 20% Ss: wht, lt gry, lt grn, vf-mg, sbrnd, mod-vy clyfll, vy soft, tite, NS
80% Sh: AA

500-10 40% Ss: wht, grn, lt gry, vf-mg, sbrnd, glauc and carb incl, sl-mod clyfll, firm, sl. poros, NS
60% Sh: AA
Trace Coal: blk, vitr, blk-y, firm w/pyrite coating

510-20 30% Ss: AA
70% Sh: AA
Trace Coal: AA
Trace Chert: AA

520-30 60% Ss: grn, wht, lt gry, f-mg, sbrnd, glauc and amber incl, mod clyfll, tite, NS
40% Sh: AA

530-40 10% Ss: lt grn, f-g, sbrnd, carb incl, mod clyfll, soft, Tite, NS
90% Sh: grnsh gry, dk gry, brn, clyey, carb frags, sm vy sft

540-50 20% Ss: AA
70% Sh: AA
10% Clyst: lt gry, plty, waxy, vy soft

550-60 10% Ss: lt gry, fg, sbrnd, glauc and carb incl, sl. cherty, mod clyfll, firm-brittle, tite, NS
90% Sh: grnsh gry, brn, dk gry, blk-y-plty, mod-vy slty, firm
Trace Chert: AA

560-70 40% Ss: wht-blue grn, f-g, sbrnd, glauc, amber and carb
incl, mod clyfll, firm-soft, poss. sl. poros, NS
60% Sh: AA
Trace Chert: AA w/mstly clear

570-80 80% Ss: AA
10% Sh: AA
10% Chert: wht, red, clear, cs-xln, ang, loose

580-90 80% Ss: AA
10% Sh: AA
10% Chert : AA

590-600 60% Ss: AA
30% Sh: AA
10% Chert: AA

600-10 30% Ss: wht-grn, f-g, sbrnd, sl. ark, carb and glauc incl,
sl-mod clyfll, firm-soft, tite, NS
70% Sh: grnsh gry, dk brn, gry, clky-plty, sl-mod slty,
firm, sme carb frags
Trace Pyrite
Trace Chert: AA

610-20 50% Ss: wht, lt gry, f-g, sbrnd, glauc incl, sme amber,
sl-mod clyfll, vy calc, tite, NS
50% Sh: AA

620-30 10% Ss: lt gry, vf-g, sbrnd-sbang, vy clyfll, firm-soft,
poss sl. poros, NS
90% Sh: AA w/sme lg carb frags
Trace pyrite

630-40 20% Ss: AA
80% Sh:AA w/sme siliceous

640-50 30% Ss: lt gry-lt grn, f-g, sbrnd, glauc incl, sl-mod
clyfll, firm, vy calc, tite, NS
60% Sh: AA
10% Chert: orange, clear, lt yellow, cs-xln, ang-sbang,
loose
Trace Pyrite

650-60 50% Ss: wht-lt gry, vf-fg, sbrnd, glauc incl, mod clyfll,
soft, sl. poros, NS
40% Sh: grnsh gry, brn, gry, blk-y-plty, sl slty, carb frags, so:
10% Chert: AA
Trace Coal: blk, vitr, blk-y, sl. shly, soft

660-70 60% Ss: AA w/grn
40% Sh: AA

670-80 40% Ss: lt grnsh gry, f-g, sbrnd, glauc incl, mod-clyfll, soft, tite, NS
60% Sh: AA w/mstly brn

680-90 50% Ss: AA w/sl arkosic, soft
50% Sh: grnsh gry, plty-blky, soft

690-700 60% Ss: AA w/sme lg carb frags
40% Sh: AA w/sme sl. slty

700-10 100% Sh: grnsh gry, blky-plty, carb frags, soft
Trace Ss: AA w/o carb frags

710-20 100% Sh: AA
Trace SS: AA

720-30 10% Ss: wht, f-g, sbrnd, carb incl, mod clyfll, firm, vy calc, tite, NS
80% Sh: grnsh gry, gry, blky-plty, sme slty, soft
10% Coal: blk, vitr, blky w/pyrite

730-40 No Sample

740-50 40% Ss: wht, f-g, sbrnd, carb and glauc incl, mod clyfll, mod calc, tite, NS
40% Sh: AA
20% Chert: wht, creme, lt yellow, cs-xln, ang, loose
Trace Pyrite

750-60 50% Ss: AA
40% Sh: AA
10% Chert: AA

760-70 50% Ss: wht, lt gry, gry, f-g, sbrnd, glauc and carb incl, sme amber, sme sl. ark, sl. clyfll, vy calc, tite, NS
30% Sh: grnsh gry, blky, sl silicieous, sl slty, firm
20% Chert: AA w/sme red, orange

770-80 70% Ss: AA w/o calc
20% Sh: grnsh gry, brn, blky-plty, sl. slty, firm
10% Chert: AA
Trace L.S.: gry, ang, dense, vy calc

780-90 30% Ss: wht, f-g sbrnd, glauc incl, sl. ark, sl. clyfll, firm, vy calc, tite, NS
70% Sh: AA w/mstly grnsh gry

790-800 100% Sh: grnsh gry, dk gry, blky-plty, carb frags, soft
Trace Ss: AA
Trace Coal: AA

800-10 100% Sh: AA
Trace Ss: bluish grn, f-g, sbrnd, glauc incl, firm, fair
poros, NS

810-20 10% Ss: bluish-gry grn, f-g, sbrnd, glauc incl, firm,
vy calc, tite, NS
90% Sh: AA
Trace Clyst: creme, blk, waxy, vy soft

820-30 100% Sh: grnsh gry, dk gry, plty-blky, soft, sl. carbonaceous
Trace Ss: gry, f-g, sbrnd, sl. clyfll, firm, vy calc, tite,
NS

830-40 20% Ss: gry, gry, fg, sbrnd, carb incl, mod clyfll, firm-
vy soft, tite, NS
70% Sh: AA
10% Coal: blk, vitr, blk, soft

840-50 100% Sh: grnsh gry, dk gry, plty-blky, sm carb frags, soft
Trace Chert: wht, creme, cs-xln, ang, loose

850-60 100% Sh: AA

860-70 100% Sh: AA

870-80 100% Sh: AA
Trace Calcite: wht, transl, cs-xln, blk, vy calc,

880-90 100% Sh: AA
Trace Coal: AA

890-900 10% Sh: wht, f-g, sbrnd, carb incl, sl. ark, sl clyfll,
firm, sl. poros, NS
90% Sh: AA

900-10 100% Sh: lt grnsh gry, gry, grnsh gry, blk-plty, soft,
sme sl sandy

910-20 20% Ss: lt grnsh gry, f-g, sbrnd, carb incl, firm, vy
calc, tite, NS
80% Sh: grnsh gry, dk gry, blk-plty, carb frags, vy soft

920-30 10% Ss: gry, vf-fg, sbrnd, carb incl, mod-vy clyfll,
vy soft, tite, NS
90% Sh: AA

930-40 30% Ss: AA w/lg and sm carb frags
70% Sh: AA 2/ sme vy dk gry, sl carb, soft
Trace Chert: AA

940-50 20% Ss: AA
80% Sh: grnsh gry, gry, vy dk gry, blk, numerous carb
frags and stringers, firm-soft
Trace Coal: AA

950-60 20% Ss: wht, bluish grn, lt grn, vf-fg, sbrnd, glauc and
shly incl, sme silicified, firm-hard, sl. calc, tite, NS
80% Sh: AA w/mstly dk gry

960-70 20% Ss: wht, gry, f-g sbrnd, carb and glauc incl, sl clyfll,
firm-soft, sl. poros, NS
80% Sh:AA
Trace Chert: AA

970-80 10% Ss: AA
90% Sh: dk brown, grnsh gry, blk-y-plty, carb frags and
stringers, soft
Trace Pyrite

980-90 10% Ss: AA
90% Sh: dk brn, grnsh gry, dk grnsh gry, blk-y-plty,
carb frags and stringers, soft
Trace Pyrite
Trace Coal: blk, vitr, ang, soft

990-1000 10% Ss: wht, lt gry, vy lt grn, vf-fg, sbrnd, vy clyflld,
vy soft, tite, NS
90% Sh: AA

1000-10 40% Ss: vy lt grn, vf-fg, sbrnd, carb incl, sl arkosic,
vy clyflld, vy soft, tite, NS
60% Sh: AA
Trace Coal: AA

1010-20 60% Ss: AA w/ sme wht
40% Sh: AA
Trace Coal: AA

1020-30 20% Ss:wht, f-g, sbrnd, amber incl, vy clyflld, vy soft,
tite, NS
80% Sh: AA

1030-40 10% Ss: AA
70% Sh: AA
20% Coal: blk, vitr, blk-y-ang, soft

1040-50 10% Ss: AA
30% Sh: AA
60% Coal: AA

1050-60 70% Sh: grnsh gry, gry, blk-y, carb incl, sme slty, soft
30% Coal: AA

1060-70 NS

1070-80 80% Sh: AA
20% Coal: AA
Trace Ss: lt grn-gry, f-g, sbrnd, carb incl, vy clyflld,
vy soft, tite, NS

1080-90 10% Ss: wht, gry, f-g, sbrnd, glauc and carb incl, mod-
 vy clyfll, soft, tite, NS
 50% Sh: dk brn, grnsh gry, dk gry, blk-y-plty, carb frags,
 soft
 40% Coal: AA

1090-1100 100% Sh: AA w/mstly dk brn, sl. carbonaceous,
 Trace Ss: AA

1100-10 10% Ss: gry, lt grn, f-g sbrnd, sl. ark, sl. clyfll,
 friable-soft, good poros, NS
 90% Sh: AA

1100-20 10% Ss: AA
 90% Sh: dk brn, grnsh gry, blk-y-plty, carb frags and
 stringers, clyey, soft, sl. slty
 Trace Clyst: lt grn, blk-y, waxy, vy soft

1120-30 20% Ss: AA
 30% Sh: AA

1130-40 20% Ss: lt gry, wht, f-g, sbrnd, sl. ark, carb incl,
 firm, vy calc, tite, NS
 70% Sh: AA
 10% Coal: AA

1140-50 30% Ss: wht, lt gry, gry, f-g, sbrnd, sl. ark, carb incl,
 firm, vy calc, tight, NS
 60% Sh: AA
 10% Coal: AA

1150-60 50% Ss: wht, f-g, sbrnd, sl. ark, sl. clyfll, firm, vy
 calc, tite, NS
 30% Sh: brown, grnsh gry, blk-y, sl. slty, carb frags,
 soft
 20% Sltst: lt brn, tan, tabular, firm, calc

1160-70 40% Ss: AA
 50% Sh: AA
 10% Sltst: AA w/sme blk-y
 Trace Calcite: creme, cs-xln, loose, ang, vy calc

1170-80 30% Ss: wht, grn, vf-fg, sbrnd, carb incl, sl. clyfll,
 firm, vy calc.
 50% Sh: brn, gry, blk-y, carb incl, sl. slty, calc
 20% Sltst: AA
 Trace Calcite: lt orange, transl, cs-xln, ang-sbang, loose,
 vy calc

1180-90 10% Ss: AA
70% Sh: AA w/grnsh gry, blk, soft
10% Coal: AA
10% Calcite: AA

1190-1200 10% Ss: AA
80% Sh: AA
10% Coal: AA
Trace Calcite: AA

1200-10 30% Ss: wht, gry, f-g, sbrnd, carb incl, firm, vy calc,
tite, NS
60% Sh: gry, grnsh gry, blk, carb incl, sl. slty, soft,
calc
10% Coal: AA
Trace Clyst: AA
Trace Calcite: wht, cs-xln, ang, loose, vy calc, fract fill

1210-20 60% Ss: AA
30% Sh: gry, dk brn, grnsh gry, blk-plty, sme slty,
carb frags and stringers, soft
10% Coal: AA
Trace Clyst: AA

1220-30 10% Ss: AA
80% Sh: AA w/mstly dk brn
10% Coal: AA
Trace Calcite: AA

1230-40 20% Ss: lt gry, vf-g, sbrnd, carb incl, vy clyflld, soft,
vy calc, tite, NS
20% Sh: AA
60% Coal: blk, vitr, ang, firm

1240-50 20% Sh: gry, blk, clyey, vy soft
80% Coal: AA

1250-60 50% Sh: dk brn-gry, blk, carb incl, soft
50% Coal: AA
Trace Ss: wht, blue-green, vf-fg, sbrnd, sl. alk, sme
silicified, firm, sl. poros
Trace Calcite: AA

1260-70 10% Ss: AA
50% Sh: AA
40% Coal: AA

1270-80 20% Ss: wht, lt gry, f-g, sbrnd, carb incl, mod-vy clyflld,
firm, tight, NS
60% Sh: dk brn, dk gry, carb incl, mod slty, firm-soft
20% Coal: AA
Trace Calcite: AA
Trace Clyst: AA

1280-90 50% Ss: wht, f-g, sbrnd, carb incl, sl. ark, mod-vy
 clyfllld, firm, tite, vy sl. poros, NS
 40% Sh: AA w/sme plty
 10% Coal: AA

1290-1300 50% Ss: AA
 30% Sh: brn, grnsh gry, blk, carb incl, soft
 20% Coal: AA

1300-10 40% Ss: wht, f-g, sbrnd, sl. ark, glauc and carb incl,
 mod-vy clyfllld, firm, vy sl. poros, NS
 60% Sh: dk brn, grnsh gry, carb frags and stringers,
 sl. slty, soft

1310-20 60% Ss: wht, gry, f-g, sbrnd, sl ark, glauc and carb incl,
 sl-mod clyfll, firm, vy sl poros, NS
 40% Sh: dk brn, grnsh gry, sl. slty, sl. carb, soft
 Trace Pyrite
 Trace Coal: AA

1320-30 30% Ss: AA
 50% Sh: AA w/mstly dk brn
 20% Coal: AA

1330-40 60% Ss: AA
 30% Sh: AA w/mstly grnsh gry
 10% Coal: AA

1340-50 70% Ss: AA
 20% Sh: AA
 10% Slstst: tan, tabular, firm

1350-60 60% Ss: wht, gry, f-g, sbrnd, sl arkosic, carb incl, clean,
 friable, good poros, NS
 40% Sh: AA

1360-70 50% Ss: AA
 50% Sh: AA

1370-80 60% Ss: AA w/sme med gry
 30% Sh: gry, grnsh gry, blk, mst mod slty, mod calc,
 10% Slstst: AA

1380-85 70% Ss: AA w/glauc incl
 30% Sh: AA
 Trace Calcite: AA w/poss fract fill