

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

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

Revised 1-1-65

5a. Indicate Type of Lease  
State ☒ Fee ☐

5. State Oil & Gas Lease No.  
E-5482

1a. TYPE OF WELL  
OIL WELL ☐ GAS WELL ☒ DRY ☐ OTHER \_\_\_\_\_

b. TYPE OF COMPLETION  
NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ OTHER \_\_\_\_\_

7. Unit Agreement Name  
Gallegos Canyon Unit

8. Farm or Lease Name

2. Name of Operator  
Energy Reserves Group, Inc.

3. Address of Operator  
P.O. Box 3280 - Casper, Wyoming 82602

9. Well No.  
327

10. Field and Pool, or Wildcat  
West Kutz Pictured Cliffs

4. Location of Well  
UNIT LETTER H LOCATED 1585 FEET FROM THE North LINE AND 960 FEET FROM THE East LINE OF SEC. 36 TWP. 29N RGE. 13W NMPM

12. County  
San Juan

15. Date Spudded  
3-25-81

16. Date T.D. Reached  
3-26-81

17. Date Compl. (Ready to Prod.)  
4-03-81

18. Elevations (DF, RKB, RT, GR, etc.)  
G.L. 5,426'; K.B. 5,428'

19. Elev. Casinghead  
-----

20. Total Depth  
1,385' K.B.

21. Plug Back T.D.  
1,338' K.B.

22. If Multiple Compl., How Many  
NA

23. Intervals Drilled By  
Rotary Tools  
0-1,385'

Cable Tools  
-----

24. Producing Interval(s), of this completion - Top, Bottom, Name  
Pictured Cliffs 1,274'-1,286' K.B.

25. Was Directional Survey Made  
NO

26. Type Electric and Other Logs Run  
Induction Electric Log - Density & Neutron Borehole Compensated

27. Was Well Cored  
NO

| 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 <sub>2</sub> & 1/4# Celloflake/sx          | -0-           |
| 4-1/2"                                         | 10.5#          | 1,378'    | 6-1/4"    | 200 sx 50-50 Pozmix w/2% Gel & 1/4# Celloflake/sx + 0.5% NFR-2 | -0-           |

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

31. Perforation Record (Interval, size and number)  
1,274'-78'  
1,283'-86'  
1 JSPF (9 holes)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.  
DEPTH INTERVAL  
1,274'-86' KB  
AMOUNT AND KIND MATERIAL USED  
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<br>4-03-81       | Hours Tested<br>24     | Choke Size<br>3/8"           | Prod'n. For Test Period<br>→ | Oil - Bbl.<br>0  | Gas - MCF<br>388    | Water - Bbl.<br>304             | Gas - Oil Ratio<br>NA |
| Flow Tubing Press.<br>100 psi | Casing Pressure<br>260 | Calculated 24-Hour Rate<br>→ | Oil - Bbl.<br>0              | Gas - MCF<br>388 | Water - Bbl.<br>304 | Oil Gravity - API (Corr.)<br>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

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 AC TITLE Production Engineer-RMD DATE 4-21-81

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**INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE**

### Southeastern New Mexico

### Northwestern New Mexico

|                          |                        |                                              |                         |
|--------------------------|------------------------|----------------------------------------------|-------------------------|
| T. Anhy _____            | T. Canyon _____        | T. Ojo Alamo _____                           | T. Penn. "B" _____      |
| T. Salt _____            | T. Strawn _____        | T. <del>Kirtland</del> -Fruitland <b>980</b> | T. Penn. "C" _____      |
| B. Salt _____            | T. Atoka _____         | T. Pictured Cliffs <b>1,270</b>              | 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. _____                |

## 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<br>in Feet | Formation                   |
|---------|--------|----------------------|-----------------------------|
|         |        |                      | Sample Description Attached |
| surface | 980'   | 980'                 | Kirtland                    |
| 980'    | 1,270' | 290'                 | Fruitland                   |
| 1,270'  | TD     | 112'                 | 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, NS  
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

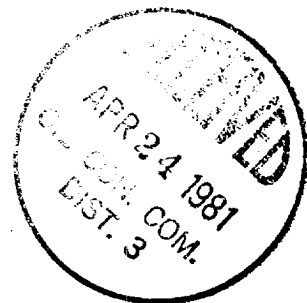
260-70 100% Sh: AA w/sm slty

270-80 30% Ss: grnsh gry, vf-fg, sbrnd, glauc incl, firm, sl.  
poros, NS  
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, NS  
50% Sh: AA  
Trace Chert: AA



310-20 40% Ss: AA  
50% Sh: dk grnsh gry, grash gry, dk gry, blk-y-plty, 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 80% Ss: vy lt grn, m-g, sbrnd, poorly sorted, carb incl, firm-brittle, mod clyfll, tite NS  
20% Sh: grnsh gry, dk gry, plty, soft

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

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, blk-y-plty, 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, blk-y, 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-pty, 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, 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, pty, 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-pty, 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, sof  
               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, d,  
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 gray, 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 clyfll, vy soft, tite, NS  
90% Sh: AA

1000-10 40% Ss: vy lt grn, vf-fg, sbrnd, carb incl, sl arkosic, vy clyfll, 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 clyfll, 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 clyfll, 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  
80% 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. aik, 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  
 clyflld, 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 clyflld, 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 clyflld, 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% Sltst: 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% Sltst: AA

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