Form 9-330
(Rev. 5-63)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE* (See other instructions 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 1820' FNL, 1710' FEL (SW NE)
At top prod. interval reported below
At total depth

RECEIVED
JUL 14 1980
U. S. GEOLOGICAL SURVEY
FARMINGTON, N. M.

5. LEASE DESIGNATION AND SERIAL NO.: NM-03153

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: O.H. Randel

9. WELL NO.: 6

10. FIELD AND POOL, OR WILDCAT: Basin Dakota

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: Sec. 15-T26N-R11W

14. PERMIT NO. | DATE ISSUED

12. COUNTY OR PARISH: San Juan | 13. STATE: New Mexico

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
4-09-80	4-21-80	7-10-80	GRD 6,366' - KB 6,379'	----------

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
6,375' KB	6,336' KB	NA	→	0-TD	----------

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
Dakota 6,295' - 6,306' KB

25. WAS DIRECTIONAL SURVEY MADE: NO

26. TYPE ELECTRIC AND OTHER LOGS RUN
Dual Induction - SFL, Comp. Neutron - Form. Density

27. WAS WELL CORED: NO

JUL 17 1980
OIL CON. COM.
DIST. 3

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	853' KB	12-1/4"	500 sks "B" + 2% $CaCl_2$ + 1/4#/sk Flocele	-0-
4-1/2"	9.5# & 10.5#	6,371' KB	7-7/8"	See Page 2	-0-

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
		None		

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8"	6,292'	none

31. PERFORATION RECORD (*Interval, size and number*)
6,295' - 6,306' w/1 JSPF
6,295' - 6,306' w/1 JSPF

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
6,295' - 6,306'	B.D. w/1000 gal 7½% HCl + 10% Methanol, 500 SCF N_2/bbl. + 25 RCNB B.D. w/1500 gal 7½% HCl + 10% Methanol + 40 RCNB. Frac - See back of Page

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
7-10-80	24	1/2"		10	1269	3(Frac Fluid)	126,900 SCF/STB

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)
450	525		10	1269	3(Frac Fluid)	50°

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)
VENTED DURING TESTING

TEST WITNESSED BY: T.C. DURHAM

35. LIST OF ATTACHMENTS
SAMPLE DESCRIPTION

ACCEPTED FOR RECORD
JUL 17 1980

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [signature] TITLE Prod. Engr. - RMD DATE July 10, 1980

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

FARMINGTON DISTRICT
BY [signature]

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.
			SEE ATTACHED Cementing 4-1/2" 1st Stage - 325 sx 50-50 Pozmix + 2% gel + 1/4#/sk Flocele followed w/165 sks "G" + 10% salt + 1/4#/sk Flocele. Stage Collar @ 4,474' 2nd Stage - 390 sx "Lite" + 10#/sk Gilsonite followed w/700 sks 50-50 Pozmix + 2% gel + 12-1/2#/sk Gilsonite. Temp Survey Cement Top @ 800' ± Frac: 60,000 gal 70% Quality Foam w/60,000# 20-40 sand.

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
LOG TOPS		
Fruitland	1,502'	
Pictured Cliffs	1,727'	
Lewis	2,012'	
Chacra	2,995'	
Cliff House	3,274'	
Menefee	3,350'	
Point Lookout	4,140'	
Mancos	4,428'	
Gallup	5,279'	
Greenhorn	6,130'	
Graneros	6,188'	
Dakota	6,248'	
TD Driller	6,375'	
Logger	6,366'	

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GPO 680-378

SAMPLE DESCRIPTION

1700 - 10	70% Ss bn vfg-slt s&p shly carb
	30% Sh gy-bn carb
10 - 20	30% Ss aa,sm lt gy fg s&p shly
	70% Sh aa,sm lt gy slty carb
20 - 30	40% Ss lt tn s&p vfg s rdd,sm lt gy
	60% Sh aa
30 - 40	AA
40 - 50	tr Ss aa
	Sh lt crm bent sdy ip
50 - 60	30% Ss wht fg s rdd clay flld abdt uncons
	70% Shlt gy slty,tn slty
60 - 70	30% Ss aa,sm lt gy vfg s&p carb
	70% Sh aa,sm dk gy-bn carb
70 - 80	60% Ss aa
	30% Sh aa
	10% Coal
80 - 90	20% Ss aa
	80% Sh dk bn carb slty,sm tn carb
90 - 1800	70% Ss wht-tn fg s rdd abdt uncons clay flld
	30% Sh aa
1800 - 10	70% Ss wht fg s&p clay flld s rdd,sm lt gy vfg shly
	30% Sh aa,sm tn sdy sft
10 - 20	10% Ss aa
	90% Sh gy,dk gy,dk gy-bn carb
20 - 30	20% Ss wht-tn fg clay flld
	80% Sh aa
30 - 40	90% Ss wht fg s&p clay flld,sm glauc,sm lt tn fg shly
	10% Sh aa
40 - 50	50% Ss aa
	50% Sh tn carb,gy,dk gy
50 - 60	AA
60 - 70	70% Ss aa
	30% Sh tn slty carb
70 - 80	AA
80 - 90	70% Ss aa,sm tn shly fri
	30% Sh aa
90 - 1900	AA
1900 - 10	80% Ss wht fg s&p s rdd clay flldx
	20% Sh gy,dk bn slty
10 - 20	90% Ss aa,occ gy vfg s&p clay flld shly
	10% Sh gy carb
20 - 30	70% Ss aa
	30% Sh aa
30 - 40	90% Ss aa
	10% Sh aa
40 - 50	80% Ss aa
	20% Sh gy slld,dk bn carb
50 - 60	90% Ss wht-lt gy fg clay flld,sm lt gy vfg s&p sl shly
	10% Sh aa
60 - 70	80% Ss aa,occ tn vfg s&p shly
	20% Sh gy slty
70 - 80	80% Ss aa
	20% Sh bn carb,sm aa
80 - 90	90% Ss lt gy fg s&p shly,sm gy-tn vfg s&p shly
	10% Sh gy,bn carb
90 - 2000	80% Ss aa,tr bn vfg shly carb
	20% Sh aa

2000 - 10 70% Ss lt gy vfg s&p sl shly,sm aa
30% Sh aa
10 - 20 AA
20 - 30 70% Ss aa,
30% Sh gy slty,bn slty carb
30 - 40 AA
40 - 50 60% Ss lt gy,tn vf-fg s&p sl shly,sm lt bn vfg shly
40% Sh aa
50 - 60 AA
60 - 70 60% Sltst bn s&p shly carb
10% Ss aa
30% Sh aa
70 - 80 AA
80 - 90 100% Sh bn carb slty,gy slty
90 - 2100 AA
2100 - 10 20% Ss tn vfg s&p shly
80% Sh gy slty carb
10 - 20 AA
20 - 30 AA
30 - 40 tr Ss aa
Sh gy slty,gy bn slty carb
40 - 50 AA
50 - 60 AA
60 - 70 60% Ss gy-bn vfg slty-shly
40% Sh gy-bn slty carb
70 - 80 AA
80 - 90 AA
90 - 2200 90% Ss gy-bn dk gy fg s&p shly,sm clay flld,tr tnLs
10% Sh gy-bn slty
2200 - 10 AA
10 - 20 AA
20 - 30 90% Ss dk gy-bn fg s&p shly calc
10% Sh aa
30 - 40 AA
40 - 50 AA
50 - 60 90% Ss gy-bn vfg s&p shly calc
10% Sh gy-bn slty
tr tn-yell Ls dns
60 - 70 AA
70 - 80 AA
80 - 90 70% Ss aa
30% Sh aa
90 - 2300 AA
2300 - 10 AA
10 - 20 60% Ss dk gy-bn vffg shly calc carb ip
40% Sh gy,dk gy slty carb
20 - 30 AA
30 - 40 AA
40 - 50 20% Ss aa
80% Sh gy slty,dk gy-bn carb
50 - 60 AA
60 - 70 AA
70 - 80 10% Ss lt gy fg s&p clay flld
90% Sh aa
80 - 90 AA
90 - 2400 AA
2400 - 10 80% Ss bn,dk bn vfg shly carb calc
20% Sh dk gy,gy-bn slty carb
10 - 20 AA
20 - 30 AA

2430 - 40 60% Ss aa,sm wht-lt gy fg s&p sl glauc
40% Sh aa,sm gy

40 - 50 AA

50 - 60 AA

60 - 70 70% Ss tn-clr frost cg s rdd uncons,sm lt tn mg s rdd calc
30% Sh dk gy,dk gy-bn slty carb

70 - 80 AA

80 - 90 AA

90 - 2500 20% Ss tn-lt gy vfg sl shly carb
80% Sh aa,sm blk slty

2500 - 10 AA

10 - 20 AA

20 - 30 20% Ss aa,sm dk gn fg shly
80% Sh dk gy-blk slty ip
tr Coal

30 - 40 AA

40 - 50 AA

50 - 60 tr Ss lt gy vfg s&p shly
Sh gy-bn carb,dk bn carb slty

60 - 70 AA

70 - 80 AA

80 - 90 tr Ss tn vfg carb shly
Sh aa,tr Coal

90 - 2600 AA

2600 - 10 AA

10 - 20 tr Ss tn vfg shly carb strks
Sh gy slty,dk bn carb
30% Coal

20 - 30 AA

30 - 40 AA

40 - 50 tr Ss aa
tr Lign
tr Coal
Sh aa

50 - 60 AA

60 - 70 AA

70 - 80 tr Ss gy vfg shly
Sh bn slty,dk bn carb,gy slty
tr Coal

80 - 90 AA

90 - 2700 AA

2700 - 10 20% Ss wht f-mg s rdd clay flld
80% Sh tn,lt bn,occ dk bn carb

10 - 20 AA

20 - 30 AA

30 - 40 100% Sh aa,sm bn slty

40 - 50 AA

50 - 60 AA

60 - 70 100% Sh gy-bn slty, dk bn carb

70 - 80 AA

80 - 90 AA

90 - 2800 100% Sh aa,sm lt bn slty

2800 - 10 AA

10 - 20 AA

20 - 30 AA

30 - 40 AA

40 - 50 AA

50 - 60 100% Sh lt bn carb slty ip,bn carb,dk gy-blk lign

60 - 70 AA

70 - 80 AA

90 - 2900 AA
2900 - 10 AA
10 - 20 100% Sh aa,occ bn slty
20 - 30 AA
30 - 40 AA
40 - 50 AA,tr Coal
50 - 60 AA
60 - 70 AA
70 - 80 100% Sh bn carb,dk bn carb,tr Coal
80 - 90 AA
90 - 3000 AA
3000 - 10 100% Sh lt bn slty,bn carb,occ dk bn lign
10 - 20 AA
20 - 30 AA
30 - 40 100% Sh aa,sm lt bn bent,tr Coal
40 - 50 100% Sh bn slty,occ bn carb
50 - 60 100% Sh aa,occ tn sft
60 - 70 tr Ss wht vfg s rdd clay fild
Sh aa
70 - 80 100% Sh lt bn carb,bn slty
80 - 90 AA
90 - 3100 AA
3100 - 10 AA
10 - 20 100% Sh bn slty,gy-bn carb slty ip
20 - 30 10% Ss tn vfg shly glauc ip
90% Sh aa
30 - 40 100% Sh aa occ dk bn carb
40 - 50 100% Sh gy,bn slty,dk gy-bn carb
50 - 60 100% Sh aa,abdt dk gy-bn carb
60 - 70 10% Ss tn vfg s&p shly
90% Sh bn slty carb,dk bn carb,tr Coal
70 - 80 tr Ss aa
Sh aa
80 - 90 100% Sh bn carb,sm dk bn calrb slty
90 - 3200 AA
3200 10 10% Coal
90% Sh aa
10 - 20 100% Sh aa,abdt dk gy-bn carb
20 - 30 100% Sh gy slty,tn slty,dk gy-bn carb,tr Coal
30 - 40 AA
40 - 50 AA
50 - 60 100% Sh bn carb,slty ip,dk bn carb
60 - 70 AA
70 - 80 AA
80 - 90 AA
90 - 3300 100% Sh bn carb,dk bn carb
3300 - 10 AA
10 - 20 AA
20 - 30 AA
30 - 40 AA
40 - 50 AA,abdt dk bn carb
50 - 60 tr Ss wht vfg s rdd clay fild
Sh bn carb,dk bn carb
60 - 70 100% Sh aa,occ dk gy-bn carb
70 - 80 AA,sm bn sft slty
80 -90 100% Sh bn slty,dk bn carb
90 - 3400 100% Sh aa,tr tn slty carb
3400 - 10 100% Sh tn slty carb,bn slty
10 - 20 AA
20 - 30 100% Sh aa,occ dk gy slty,tr Coal

3430 - 40 AA
40 - 50 AA
50 - 60 tr Ss lt gy vfg s&p; sm clay fkkd
Sh aa
60 - 70 100%Sh aa
70 - 80 tr Ss lt gy vfg s&p sl shly clay flld
Sh aa
80 - 90 AA
90 - 3500 N S
3500 - 10 N S
10 - 20 tr Ss bn vfg shly-slty
Sh bn carb,dk gy-bn carb,sm dk gy
20 - 30 tr Ss lt gy S&p vfg s rdd
Sh aa
30 - 40 AA
40 - 50 tr Ss lt gy-gy vfg s&p sl shly
Sh aa
50 - 60 100% Sh bn slty carb,sm lt bn carb
60 - 70 tr Ss wht fg clay flld
Sh aa
70 -80 10% Ss wht fg s rdd clay flld
90% Sh aa
80 - 90 tr Ss aa,Sh aa
90 - 3600 100% Sh bn carb slty ip
3600 - 10 100% Sh aa,sm gy carb,tn slty
10 - 20 100% Sh aa,abdt dk gy-bn carb
20 - 30 100% Sh tn carb,bn carb,occ dk gy-bn carb
30 - 40 10% Ss wht fg s rdd clay flld
90% Sh aa
40 - 50 10% Ss frost m-cg s rdd uncons
90% Sh aa
50 - 60 N S
60 - 70 10% Ss bn vfg-slt shly
90% Sh bn slty carb,occ dk bn slty carb,tr Coal
70 - 80 100% Sh aa,tr Coal
80- 90 100% Sh aa,sm dk gy-bn carb,tr Coal
90 - 3700 10% Ss tn vfg-slt s&p shly
90% Sh aa
3700 - 10 10%zSs gy-tn vfg shly
90% Sh bn slty carb
10 - 20 tr Ss aa
Sh ss,sm dk bn carb
20 - 30 10% Ss tn vfg s&p sl shly
90% Sh aa,tr Coal
30 - 40 AA
40 - 50 10% Ss gy vfg s&p shly,occ tn vfg s&p shly
90% Sha aa
50 - 60 100% Sh aa,sm dk gy-bn carb
60 - 70 100% Sh bn carb,dk bn slty carb,tr Coal
70 - 80 20% Ss clr m-cg s ang uncons
80% Sh aa,sm tn slty sft
80 - 90 tr Ss aa,Sh aa
90 - 3800 10% Ss wht f-,mg s sang clay flld,sm uncons
90% Sh aa
3800 - 10 80% Ss lt tn vfg s&p shly
90% Sh aa
10 - 20 20% Ss lt gy vfg s&p shly,sm aa,sm fri
80% Sh aa
20 - 30 tr Ss aa
Sh aa

3830 - 40	tr Ss tn-lt bn vfg fri sjly,sm aa,carb ip
	Sh gy,bn slty dk bn carb
40 - 50	100% Sh gy slty,dk bn carb
50 - 60	20% Ss lt gy vfg s&p shly
	80% Sh bn carb slty ip
60 - 70	100% Sh aa
70 - 80	tr Ss wht fg s ang clay fild
	Sh lt bn carb,bn slty carb
80 - 90	tr Ss lt gy vfg s&p clay fild
	Sh aa
90 - 3900	100% Sh aa
3900 - 10	AA
10 - 20	AA
20 - 30	100% Sh bn carb slty,dk bn carb
30 - 40	AA
40 - 50	AA
50 - 60	AA
60 - 70	Sh tn sft sdy,bn carb,occ dk gy-bn carb
70 - 80	tr Ss wht fg s&p clay fild
	Sh aa
80 - 90	100% Sh gy slty,tn sft,gy-bn slty carb
90 - 4000	AA
4000 - 10	100% Sh gy-tn,gy slty,dk bn carb
10 - 20	AA,tr Coal
20 - 30	AA
30 - 40	100% Sh aa,abdt dk bn carb
40 - 50	AA
50 - 60	100% Sh bn carb slty ip
	tr Ss gy vfg shly
60 - 70	100% Sh tn carb
70 - 80	100% Sh aa,gy-bn carb,tr Coal
80 - 90	AA
90 - 4100	100% Sh gy-bn carb,sm tn sft carb,tr Coal
4100 - 10	N S
10 - 20	80% Sh aa
	20% Coal
20 - 40	70% Sh aa
	30% Coal
30 - 40	60% Sh aa
	40% Coal
40 - 50	70% Sh aa,smgy slty
	30% Coal
50 - 60	100% Sh aa
60 - 70	AA
70 - 80	tr Ss lt tn vfg s&p clean
	Sh tn slty,gy slty,gy-bn carb
80 - 90	AA
90 - 4200	10% Coal
	90% Sh gy-bn carb
4200 - 10	N S
10 - 20	N S
20 -30	N S
30 - 40	N S
40 - 50	N S
50 - 60	N S
60 - 70	N S
70 - 80	N S
80 - 90	N S
90 - 4300	N S -

4300 - 10 100% Sh gy carb,tn slty carb ip,bn carb
10 - 20 AA,tr Coal
20 - 30 trSs lt gy vfg s&p sl shly
Sh aa
30 - 40 AA
40 - 50 100% Sh bn carb slty ip,dk gy-bn carb
50 - 60 AA,tr Coal
60 - 70 10% Coal
90% Sh bn carb,dk gy-bn carb
70 - 80 AA
80 - 90 AA
90 -4400 100% Sh aa
4400 - 10 100% Sh aa,sm lt gy sft
10 - 20 100% Sh gy carb,bn carb slty ip,tr Coal
20 - 30 AA
30 - 40 AA
40 - 50 tr Ss tn vfg s&p sl shly
Sh aa
50 - 60 tr Ss lt gy vfg-slt s&p
Sh gy slty carb,bn slty
60 - 70 10% Coal,AA
70 - 80 AA
80 - 90 Sh aa sm lt tn sft slty,tr Coal
90 - 4500 AA
4500 - 10 AA
10 - 20 100% Sh aa,occ wht-lt tn bent
20 - 30 AA
30 - 40 AA
40 - 50 100% Sh aa,tr Coal
50 - 60 AA
60 - 70 AA
70 - 80 10% Coal
90% Sh gy slty,tn,bn slty carb
80 - 90 AA
90 - 4600 AA
4600 - 10 100% Sh aa sm lt tn bent
10 - 20 AA
20 - 30 AA
30 - 40 AA
40 - 50 AA
50 - 60 AA
60 - 70 tr Ss lt gy vfg s&p slm shly
Sh gy slty,bn carb
70 - 80 AA
80 - 90 AA
90 - 4700 100% Sh aa,sm lt gy,tn bent
4700 - 10 AA
10 - 20 AA
20 - 30 100% Sh bn carb,gy bent,sm dk gy-bn carb
30 - 40 AA
40 - 50 AA
50 - 60 100% Sh gy slty carb ip,sm bn slty
tr Ss lt bn s&p vfg shly
60 - 70 AA
70 - 80 AA
80 - 90 100% Sh aa,sm gy-bn carb
90 - 4800 AA
4800 - 10 AA
10 - 20 100% Sh bn carb,gy-bn slty carb ip,sm lt bn slty

3820 - 30 AA
30 - 40 AA
40 - 50 AA
50 - 60 AA
60- 70 AA
70 - 80 100% Sh aa,tr Ss lt gy vfg shly
80 - 90 AA
90 - 4900 AA
4900 - 10 100% Sh bn carb,gy-bn slty
10 - 20 AA
20 - 30 AA
30 -40 AA
40 - 50 AA
50 - 60 AA
60 - 70 AA
70 - 80 AA
80 - 90 AA
90 - 5000 100% Sh gy-bn carb slty ip
5000 - 10 AA
10 - 20 AA
20 - 30 AA
30 - 40 AA
40 - 50 AA
50 - 60 100% Sh gy-bn slty carb,gy slty
60 - 70 AA
70 - 80 AA
80 - 90 Sh aa,sm bn slty
90 - 5100 AA
5100 - 10 AA,tr Ss gy vfg s&p shly
10 - 20 AA
20 - 30 AA
30 - 40 AA
40 - 50 AA
50 - 60 AA
60 - 70 AA
70 - 80 100% Sh gy-bn carb,gy slty
80 - 90 AA
90 - 5200 AA
5200 - 10 100% Sh aa,occ lt bn slty sft
10 - 20 AA
20 - 30 AA
30 -40 AA
40 - 50 Sh aa,occ dk gy-bn carb
50 - 60 tr Ss lt gy vfg-slt shly
Sh aa
60 - 70 100% Sh aa,abdt dk gy-bn carb
70 - 80 100% Sh dk gy slty carb ip,gy slty dk gy-bn carb
80 - 90 tr Ss gy vfg shly slty
Sh aa
90 - 5300 Sh aaa,tr Ss aa

5500 - 10 N S
10 - 20 N S
20 - 30 N S
30 - 40 100% Sh gy-dk gy frm blky sm slty w/occ carb incl
40 - 50 AA
50 - 60 100% Sh gy-bn frm blky slty w/carb incl
60 - 70 20% Ss wht vfg s rdd mod clay fild sl shly tite calc
70 - 80 tr Ss aa,Sh aa
80 - 90 AA
90 -5400 10% Ss wht fg s rdd clay fild frm-hard tt occ carb incl calc
90% Sh aa
5400 - 10 10% Ss aa
90% Sh gy-bn frm blky,sm slty w/carb incl
10 - 20 10% Ss
90% Sh aa
20 - 30 20% Ss wht-gy vyt-fg s rdd clay fild hard tt calc
80% Sh aa
30 - 40 10% Ss aa
90% Sh aa
40 - 50 20% Ss wht fg s ang sl-mod clay fild sl poros calc
80% Sh aa Tr inoceramas pris
50 - 60 20% Ss wht fg s ang mod clay fild frm poss sl poros calc
80% Sh aa
60 - 70 10% Ss aa,sm gy shly tt
90% Sh gy-dk gy frm blky slty w/carb incl scat pyrt
70 - 80 10% Ss wht fg s ang clay fild tt calc
90% Sh aaa
80 - 90 AA
90 - 5500 100% Sh aaa
5500 - 10 AA
10 - 20 AA
20 - 30 10% Ss wht fg s ang clay fild tt calc s&p
90% Sh aa
30 - 40 10% Ss wht fg s rdd mod clay fild poss sl poros hard s&p
90% Sh aa
40 - 50 20% Ss buff f-mg s rdd clay fild frm sl shlyy tt w/carb incl
80% Sh aa
50 - 60 20% Ss wht fg s rdd clay fild frm tt calc
80% Sh aaa
60 - 70 10% Ss wht-buff fg s rdd-s ang clay fild tt calc
90% Sh aa,sm bl gy clayey,scat pyrt
70 - 80 100% Sh gy-bn frm blky slty w/carb incl
tr Coal
80 - 90 AA
90 - 5600 100% Sh aa,sm bl gy clayey
5600 - 10 AA
10 - 20 10% Ss wht fg s ang clay fild tt calc s&p
90% Sh gy-dk gy frm blky-platy w/carb incl
20 - 30 AA
30 - 40 100% Sh aa,tr Coal
40 - 50 N S
50 - 60 20% Ss wht fg s ang clay fild hard tt calc
80% Sh aa
60 - 70 10% Ss aa
90% Sh aa
70 - 80 20% Ss aa
80% Sh aa
80 - 90 100% Sh a
90 - 5700 100% Sh gy-dk gy frm blky slty w/carb incl sl calc
5700 - 10 AA
10 - 20 AA

5700 - 30 AA
30 - 40 AA
40 - 50 AA
50 - 60 100% Sh gy-dk gy frm blky sl slty w/occ carb incls
60 - 70 AA
70 - 80 AA
80 - 90 AA
90 - 5800 AA
5800 - 10 100% Sh gy-dk gy frm blk sm bl gy clayey
10 - 20 AA
20 - 30 AA
30 - 40 AA
40 - 50 AA
50 -60 AA
60 - 70 AA
70 - 80 100% Sh dk gy frm blky slty sl calc w/carb incl
80 - 90 AA
90 - 5900 N S
5900 - 10 100% Sh dk gy frm blky sl slty w/carb incl sl carb
10 - 20 AA
20 - 30 AA
30 - 40 100% Sh dk gy frm blky sl slty sl carb sl calc w/carb incl
40 - 50 AA
50 - 60 AA
60 - 70 tr Ss bl gy fg s ang clay flld glauc sl feld calc
Sh aa
70 - 80 AA
80 - 90 AA
90 - 6000 AA
6000 - 10 AA
10 - 20 10% Ss wht fg s ang clay flld hard tt w/occ carb incl
90% Sh aa,tr inoceramas prisms
20 - 30 30% Ss aa
70% Sh aa
30 - 40 10% Ss aa
90% Sh aa
40 - 50 20% Ss gy-wht f-mg s ang mod-w clay flld frm poss sl pores
80% Sh aa
50 - 60 10% Ss wht vf-fg s rdd clay flld tt sl glauc w/occ carb incl
90% Sh aa
60 - 70 100% Sh dk gy frm blky-slty carb mod calc
70 - 80 N S
80 - 90 N S
90 - 6100 N S
6100 - 10 N S
10 - 20 100% Sh dk gy frm blky sl clayey-sl slty calc
20 - 30 AA
30 - 40 10% Ss wht fg s rdd clay flld frm-hard tt occ carb incl
40 - 50 100% Sh aa
50 - 60 AA
60 - 70 AA
70 - 80 AA
80 - 90 100% Sh dk gy frm blky limy
90 - 6200 AA
6200 - 10 AA
10 - 20 AA
20 - 30 100% Sh aa,slslty limy
30 - 40 10% Ss wht fg s ang clay flld hard tt sl glauc w/occ carb incl
90% Sh aa,mod calc
40 - 50 AA

6250 - 60 30% Ss wht fg s rdd hard poss sl poros clean-sl clayey calc sl glauc
70% Sh dk gy-gy frm blky sl slty carb incl sl calc

60 - 70 20% Ss wht f-mg s rdd psrt frm fair poros sl clay fllld calc sl glauc
80% Sh aa

x 70 - 80 10% Ss aa
90% Sh aa

80 - 90 50% Ss wht fg s rdd hard mod clay flld poss sl poros sl glauc w/occ carb flks
50% Sh aa

90 - 6300 30% Ss aa
70% Sh aa

6300 - 10 40% Ss wht fg s rdd sl clay flld fair poros sl poros

10 - 20 AA

20 - 30 30% Ss aa
70% Sh aa

30 - 40 AA

6300 - TD N S