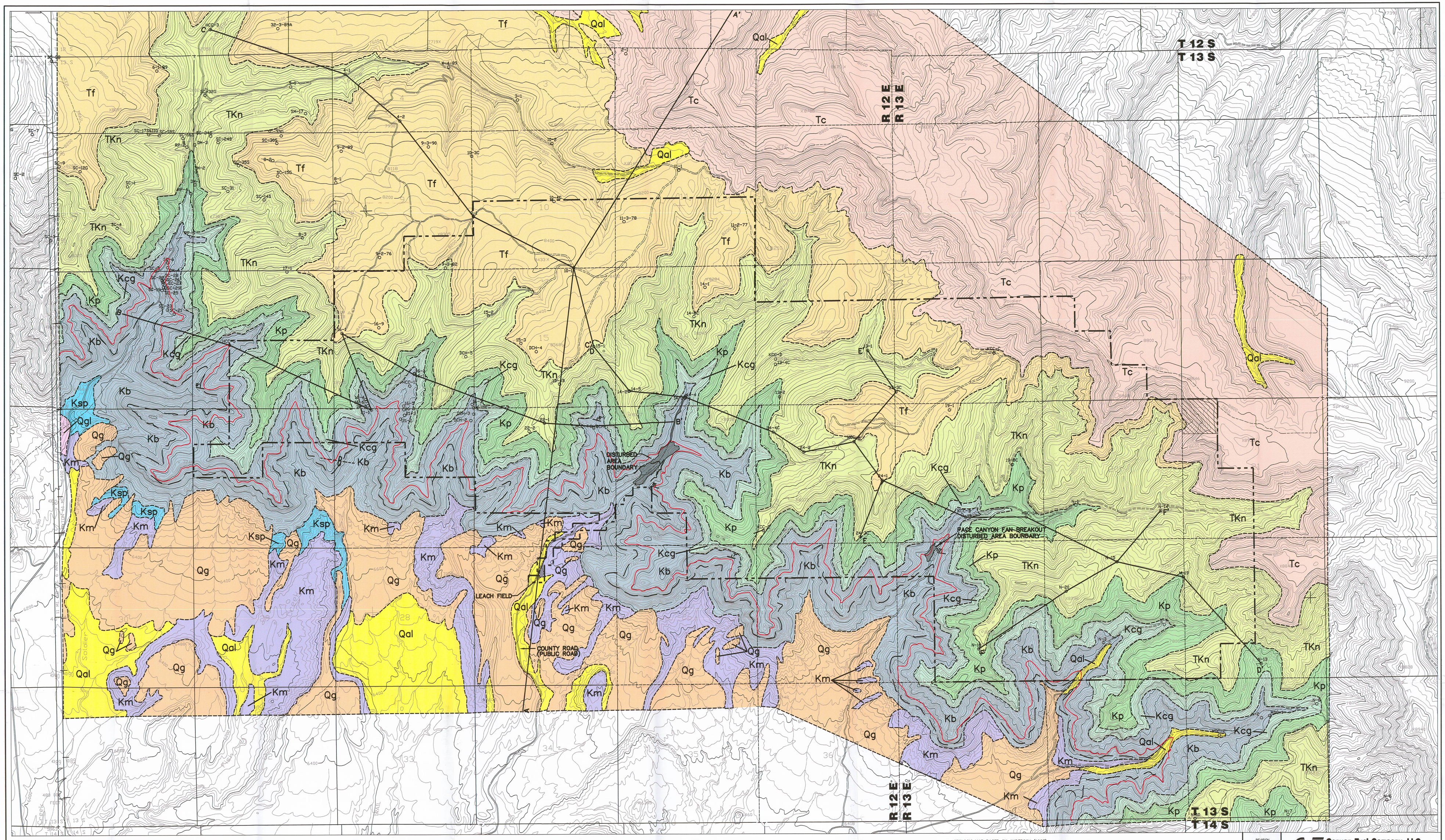


GEOLOGIC MAP BASED ON ANDERSON (1983) & INTRASEARCH (1998).

**NOTES:**

1. REFER TO REFUSE PILE AMENDMENT AND METHANE DEGASSIFICATION AMENDMENT FOR INFORMATION PERTAINING TO THEIR AREAS.
2. SEE FIGURE 6-1 FOR A-A' CROSS SECTION.
3. SEE PLATE 6-3 FOR B-B' AND C-C' CROSS SECTIONS.
4. SEE PLATE 6-3A FOR D-D' CROSS SECTION.
5. SEE PLATE 6-3B FOR E-E' AND F-F' CROSS SECTIONS.

**LEGEND**

- PERMIT AREA BOUNDARY
- 16° STRIKE AND DIP
- 9-2 / 0 DRILL HOLE LOCATION
- APPROXIMATE LOCATION OF THE ROCK CANYON COAL SEAM
- ADDITION TO PERMIT AREA
- U / D NORMAL FAULT, DASHED WHERE INFERRED. U, UPTHROWN SIDE D, DOWNTHROWN SIDE
- APPROXIMATE LOCATION OF THE TOP OF THE KENILWORTH SANDSTONE MEMBER OF THE BLACKHAWK FORMATION

**QUATERNARY**

- Qal ALLUVIUM
- Qg PEDIMENT GRAVELS
- Qgl GRAVELS

**TERTIARY**

- Tc COLTON FORMATION
- Tf FLAGSTAFF FORMATION

**TERTIARY–CRETACEOUS**

- TKn NORTH HORN FORMATION

**CRETACEOUS**

- Kp PRICE RIVER FORMATION
- Kcg CASTLEGATE SANDSTONE
- Kb BLACKHAWK FORMATION
- Ksp STAR POINT SANDSTONE
- Km MANCOS SHALE

REGISTERED PROFESSIONAL ENGINEER No. 161610 DAVID G. SPILMAN 1/29/03 STATE OF UTAH

0' 1000'

| REVISION | |
|---|---|
| DATE | BY |
| 12/29/03 | RR |
| 01/26/07 | JKS |

**Canyon Fuel Company, LLC**
Soldier Canyon & Dugout Canyon Mines

RECEIVED JAN 25 2007 DIV. OF OIL, GAS & MINING

# GEOLOGY OF DUGOUT CANYON MINE PERMIT AREA

**Dugout Canyon Mine**

FILE IN Executive 0134.360 Refer to Record No. 0017 for CONTRACT, DOCT. CORRESP. or additional information

| | | | |
|---|---|---|---|
| DRAWN BY: JLP | DATE: MAY 7, 1999 | D-444.PCP | SCALE: 1" = 1000' |
| APPROVED BY: MWS | FILE NAME: X:\DGM\Working Files\Dugout\Title\Plate 6-1.dwg | | DRAWING OR MAP NUMBER: PLATE 6-1 |