STATE LEASE
ML-42648
TOTAL TONS:
1,277,566

FEE FISH CREEK
TOTAL TONS:
570,237

FEDERAL LEASE
U-07064-027821
TOTAL TONS:
232,125

TOTAL TONS
MINED FOR THE
YEAR 2002:
2,079,928

ML-42649

FEE – FISH CREEK

FEE – FISH CREEK
ML-42649

SPLAY THICKNESS

Splay Exploration Drill Holes

RC-4A

RC-4B

RC-3

RC-2

RC-1

4th WEST

3rd WEST

2nd WEST

1st WEST

LONGWALL RECOVERY

NORTH MAINS

EAST MAINS

WEST MAINS

2002 PRODUCTION

2002 PRODUCTION

2002 PRODUCTION

NOVEMBER 2001

DECEMBER 2001

APRIL 2001

MAY 2001

JUNE 2001

JULY 2001

AUGUST 2001

SEPTEMBER 2001

OCTOBER 2001

FEE – FISH CREEK

FEE – DUGOUT CANYON

ML-42648

ML-42648

ML-42648

U-07064-027821

FISH CREEK

5/8" STEEL PIN

RECEIVED
MAR 2 7 2003
DIV. OF OIL, GAS & MINING

REGISTERED PROFESSIONAL ENGINEER
No. 151010
DAVID G. SPILLMAN
3/14/03
STATE OF UTAH

NOTES

1. PRIMARY CONTROL POINTS

BASIS OF BEARINGS BASED UPON LOCAL COORDINATE SYSTEM

2. THERE ARE NO KNOWN EXISTING OIL OR GAS WELLS LOCATED ON PROPERTY

3. THERE ARE NO KNOWN AREAS OF ACTIVE OR INACTIVE UNDERGROUND MINE WORK WITHIN 500 FEET OF ANY LEASE BOUNDARY

4. THERE ARE NO KNOWN AREAS SUBJECT TO MINE PROPERTY DAMAGE DUE TO THE MINE PROPERTY BEING LOCATED IN A SUBSIDENCE VULNERABLE ZONE

5. THE MINE PROPERTY INFORMATION SHOWN ON PLANTS THE REQUIREMENTS OF R645-301-521.150 AND R645-301-521.151 OF THE UTAH COAL MINING RULES

6. MAP
MINE GRID SYSTEM
NAD 27 UTAH SOUTH ZONE
MINE GRID ORIGIN: X=1,000,000 Y=500,000
MINE GRID ORIGIN: 39°-30'-00" N LATITUDE 111°-00'-00" W LONGITUDE
ELEVATIONS ARE GIVEN IN FEET ABOVE MEAN SEA LEVEL
NAD 27 UTAH SOUTH ZONE
Elevation: 6,000 Feet
Grid Bearing: 0°
Grid Distance: Mine Grid

MINE GRID SYSTEM
NAD 27 UTAH SOUTH ZONE
MINE GRID ORIGIN: X=1,000,000 Y=500,000
MINE GRID ORIGIN: 39°-30'-00" N LATITUDE 111°-00'-00" W LONGITUDE
ELEVATIONS ARE GIVEN IN FEET ABOVE MEAN SEA LEVEL
NAD 27 UTAH SOUTH ZONE
Elevation: 6,000 Feet
Grid Bearing: 0°
Grid Distance: Mine Grid

TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION 11°-00'-00" EAST
ROCK CANYON SEAM

DUGOUT PROJECT
ROCK CANYON SEAM

ROCK CANYON SEAM

LEGEND
SANDSTONE
SILTSTONE
SHALE
COAL
GILSON SEAM

GENERALIZED STRATIGRAPHIC MAJOR SEAM STRATIGRAPHY
NOT TO SCALE

VENTILATION MEASUREMENT POINTS

WATER STUDY:
AT WATER QUALITY & QUANTITY SAMPLING POINT, 1 MILE UPSTREAM FROM THE MINE PROPERTY BOUNDARY
AT WATER QUALITY & QUANTITY SAMPLING POINT, 1 MILE DOWNSTREAM FROM THE MINE PROPERTY BOUNDARY
AT WATER QUALITY & QUANTITY SAMPLING POINT, 1 MILE UPSTREAM FROM THE MINE PROPERTY BOUNDARY
AT WATER QUALITY & QUANTITY SAMPLING POINT, 1 MILE DOWNSTREAM FROM THE MINE PROPERTY BOUNDARY

VENTILATION STUDY:
AT VENTILATION SAMPLING POINT, 1 MILE UPSTREAM FROM THE MINE PROPERTY BOUNDARY
AT VENTILATION SAMPLING POINT, 1 MILE DOWNSTREAM FROM THE MINE PROPERTY BOUNDARY

VENTILATED FIRED-OFF AREAS:

SEEPAGE SYSTEMS:

MINE PROGRESS MAP
DUGOUT CANYON MINE
P.O. BOX 1029
WELLINGTON, UT. 84542
M.S.H.A. I.D. No. 42-01890
LEASE: STATE ML-42648 & ML-42649
FEDERAL U-07064-027821
UDOGM MPR PERMIT No. M/007/0029
0 150' 300' 600'

LEGEND

HISTORIC BOUNDARY	ANNULUS
PROPERTY LINES	SPRINGS
OTHER LINES	
OTHER AIR DIRECTION	STATIONS / SAMPLE
BATTERY AIR DIRECTION	STATIONS / SAMPLE TOXIC GAS
HEAT AIR DIRECTION	PERMANENT SEAL
CONTOUR LINES	MINE CARBON STATIONS
LEASE BOUNDARY	
VERTICAL DRILL HOLE	FIRE BARRICADE
	FIRE BARRICADE
CO SENSOR	FIRE BARRICADE
CO2 SENSOR	FIRE BARRICADE
PRESSURE CONTROL	FIRE BARRICADE
AIR STOPPING	FIRE BARRICADE
AIR DOOR	FIRE BARRICADE
AIR DOOR	FIRE BARRICADE
PRESSURE VENTILATION STOPPING	EMERGENCY EQUIPMENT
	EMERGENCY EQUIPMENT
	TELEPHONE
EXPLOSION DOOR	BOTTOM CLEANOUT BATTERY
PRESSURE SEAL	BOTTOM CLEANOUT
	BOLT ANCHOR
	VENTILATION MEASUREMENT PT.
	BOLT ANCHOR
	BOLT ANCHOR
	5" HOLE DRILL HOLES
	ROCK CANYON SEAM PINCHING
	GILSON SEAM
	GILSON SEAM PINCHING

Canyon Fuel Company, LLC
Dugout Canyon Mine

TITLE: Rock Canyon Seam
2002 Production Map

DATE: 02/06/03	SCALE: 1" = 500'
REVISIONS:	DRAWN BY: R. RICHEY
FILE NAME: C:\Autocad\Dugout\Dugout 02 prod. map.dwg	DRAWING NO.: 2002 RC prod.