

United States
Department of
Agriculture

Forest
Service

Manti-La Sal
National Forest

mine file Pan
Price Ranger District
599 West Price River Dr.
Price, Utah 84501

UB 007-002 #2

0055

Reply to: 2820

Date: March 27, 1991

Lowell Braxton
Utah Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Traid Center, Suite 350
Salt Lake City, Utah 84180-1203

Dear Lowell:

The Manti-La Sal National Forest is currently evaluating an application filed by Cyprus-Plateau Mining Corporation (Cyprus) with the Bureau of Land Management (BLM) to modify their existing Federal Coal Lease UTU-64263 by adding 50 acres of adjacent unleased lands. The proposed 50 acre tract lies just east of Wild Cattle Hollow on Gentry Mountain about 17 miles WSW of Price in Emery County, Utah. The surface of the subject lands are managed by the Price Ranger District of the Manti-La Sal National Forest. The lands have been determined to be suitable for leasing pursuant to the Forest's Land Management Plan.

The lease modification would allow Cyprus to mine an additional 173,000 tons of in-place coal that would otherwise be bypassed and irretrievably lost. No surface facilities are planned for the subject lands as Cyprus would utilize existing portal facilities associated with the Starpoint Mines.

Please review the attached scoping document and map. Further information can be obtained from this office at the above address or by calling (801) 637-2817. Public comments on the proposal will be accepted at this office until April 12, 1991.

Sincerely,



IRA W. HATCH
District Ranger

Enclosure

RECEIVED

MAR 29 1991

DIVISION OF
OIL GAS & MINING

MANTI-LA SAL NATIONAL FOREST
PROJECT SCOPING DOCUMENT / ENVIRONMENTAL ASSESSMENT

DATE: 03/27/91

DISTRICT NAME: Price

FILE CODE: 2820

1. PROJECT NAME: Modification to Federal Coal Lease UTU-64263 (CVR)
2. RESPONSIBLE OFFICIAL: Gray Reynolds, Regional Forester
3. PROPOSAL: Cyprus-Plateau Mining Corporation (Cyprus) has submitted an application to the BLM to modify Federal Coal Lease UTU-64263 by approximately 50 acres to allow mining of approximately 173,000 tons of inplace Federal coal reserves which would be bypassed. Cyprus projects mining in the area of the modification to occur in May of 1991. The subject modification area is located about 17 miles WSW of Price on Gentry Ridge in Emery County, Utah (see attached map).
4. TIERING AND REFERENCING OPPORTUNITIES: Manti-La Sal National Forest Land And Resource Management Plan and FEIS, 1986; EA, FONSI/DN Coal Lease Application UTU-64263 (CVR), 7/89; EA for Modification of Federal Coal Lease U-13097, 8/83; EA Readjustment of Federal Coal Lease SL-031286, 6/83; EA Modification of Federal Coal Lease SL-031286, 9/82; Tract Delineation Review Report, Leasing By Application UTU-64263, 2/89; Situation Statement, Castle Valley Ridge Tract, 3/80; EA Proposed Coal Exploration Drilling, CVR and Gentry Mountain, Getty Mineral Resources Company, 9/81; Site-specific Analysis, Castle Valley Ridge Proposed Coal Lease Tract, 5/82; Lindskov, K.L., 1986. Potential Effects of Anticipated Coal Mining on Salinity of the Price, San Rafael, and Green Rivers, Utah, U.S. Geological Survey, Water-Resources Investigations Report 86-4019; Seiler, R.L. and Baskin, R.L., 1988, Hydrology of Alkalai and Castle Valley Ridge Coal Lease Tracts, Central Utah, and Potential Effects of Coal Mining, U.S. Geological Survey, Water-Resources Investigations Report 87-4186; Star Point Mines, Mining and Reclamation Plan, Plateau Mining Company, 9/86.
5. OTHER AGENCIES OR PUBLICS INVOLVED: BLM (Approving and Cooperating Agency) and OSM (Cooperating Agency). News releases regarding this modification will be submitted to the Sun Advocate and the Emery County Progress. Letters will be sent to identified interested publics inviting comment on the proposal.
6. EFFECTS ON THE ENVIRONMENT: Effects to the environment would not occur as a result of issuance of the modification, but could result from mining-induced subsidence as described in the analysis in the EA for the Castle Valley Ridge Coal Lease Tract UTU-64263.
7. ISSUES: a) Public issues - none have been identified to date. b) The Forest Service Interdisciplinary Team evaluated the proposal and identified the same issues described in the EA for the CVR Coal Lease Tract which are

area resources such as visuals, surface and ground water, soils, land uses, vegetation, wildlife, and livestock. 1. Subsidence caused by underground mining could adversely affect surface and ground water, visual resources, land uses, soils, vegetation, wildlife, and livestock. No new issues have been identified for this proposal.

- 8. SUGGESTED ALTERNATIVES: 1) No Action - waive the right to recommend approval to modify Federal Coal Lease UTU-64263. 2) Proposed Action - recommend that the modification be approved with the application of Forest Service Special Stipulations from Appendix B of the Forest Plan.
- 9. ANALYSIS AND DECISION CRITERIA: The analysis for this proposal is adequately documented in the EA for the Castle Valley Ridge Coal Lease Tract (UTU-64263). Management decisions and guidelines as defined in the Forest Plan and FEIS identify the decision criteria.

10. ANALYSIS SKILLS:

SPECIALTY	SPECIALIST	ROLE (team leader, team member consultant, other)
Geology	Walt Nowak	Team Leader
District Ranger	Ira Hatch	Team Member
Hydrology	Dennis Kelly	Consultant
T&E/Wildlife	Rod Player	Consultant
OSM Representative	Floyd McMullen	Consultant

11. SCHEDULE:

- a. Functional Status Report: ___/___/___
- b. Initial Meeting: 03/07/91
- c. Field Review: ___/___/___
- d. ID Team Meeting: 03/11/91
- e. ID Team Review S. D.: 03/27/91
- f. Review Draft Meeting: ___/___/___
- g. EA Final: 07/13/89
- h. DFR Decision Notice: ___/___/___
- i. R. O. Decision Notice: 04/91
- j. Project Implementation: 05/91

12. RANGER DECISION:

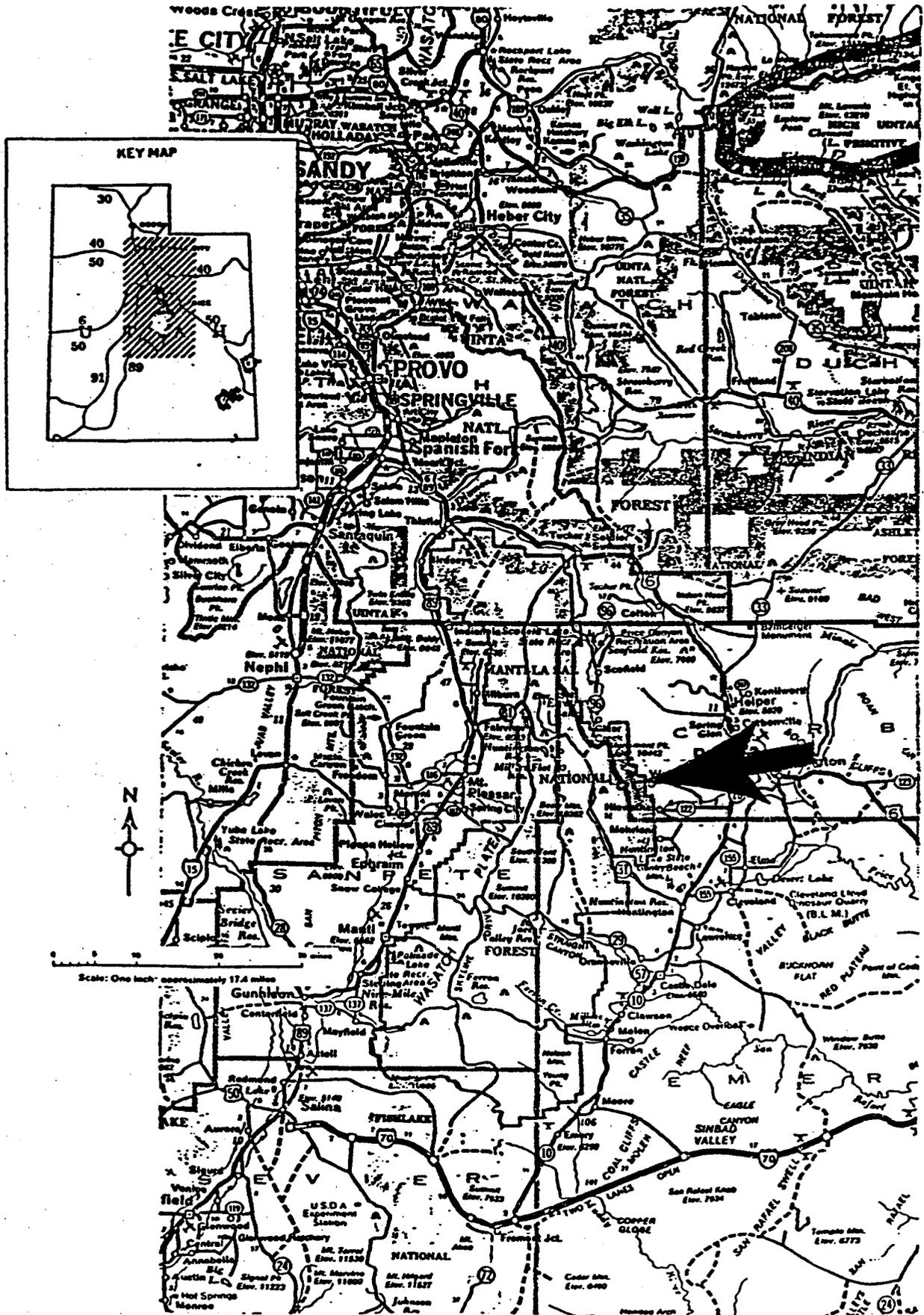
- Requires further assessment: _____
- Requires no further assessment: ✓
- Categorical Exclusion: _____

Ira W Hatch
District Ranger

3/27/91
Date

GENERAL LOCATION OF PROJECT

UTU-64263



MAP 1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



R7E R8E

STATE OF UTAH
UTAH GEOLOGICAL AND MINERAL SURVEY

WATTS QUADRANGLE 4
UTAH
7.5 MINUTE SERIES (TOPOGRAPHIC)
1:250,000 SCALE

CASTLE VALLEY
RIDGE
TRACT

COAL LEASE
APPLICATION
FOR MODIFICATION TO
UTU-64263

MODIFICATION

UTU-64263

UTU-031286
UTU-31045
UTU-13097
CPMC'S
FEDERAL
COAL LEASES

STAR
POINT
MINE

T145
T155

Material, edited, and published by the Geological Survey
Cover by 2500, 2500A, 2500B, and 10 5 Feet Series
Topographic to photorecognition made from aerial photographs
May 1970. First edition 1964. Map scale 1:250,000
Projection and 14,000-foot grid system. UTM
100,000-meter (328,084 feet) interval between adjacent
100,000-meter (328,084 feet) intervals and 500,000
meter (1,640,420 feet) interval between adjacent
100,000-meter (328,084 feet) intervals.
This map does not guarantee within the boundaries of the
Federal or State boundaries shown on this map.

SCALE 1:250,000
CONTOUR INTERVAL 50 FEET
NATIONAL GEODETIC MEASUREMENT SYSTEM OF 1983

ROAD CLASSIFICATION
Primary highway: Light duty road, hard or
hard surface; Improved surface
Secondary highway: Unimproved road
Access road: U.S. Route; State Road

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR DATA BY U.S. GEOLOGICAL SURVEY BENCH MARK COORDINATE DATA ON FEDERAL VERTICAL TIES
A PAPER REPRODUCING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

WATTS, UTAH
APPD-111105/73
1970

Q

FINDING OF NO SIGNIFICANT IMPACT/DECISION NOTICE/RATIONALE

CYPRUS-PLATEAU MINING CORPORATION COAL LEASE APPLICATION UTU-64263
CASTLE VALLEY RIDGE TRACT, CARBON AND EMERY COUNTIES, UTAH

U.S.D.A. FOREST SERVICE
PRICE RANGER DISTRICT, MANTI-LASAL NATIONAL FOREST
INTERMOUNTAIN REGION

U.S.D.I. BUREAU OF LAND MANAGEMENT, MOAB DISTRICT
UTAH STATE OFFICE

An Environmental Assessment (EA) which discusses the effects of leasing the Castle Valley Ridge Coal Lease Tract is available for public review at the respective offices of the Bureau of Land Management and Forest Service. The decision recorded in this document is based on the cooperative environmental analysis documented in the referenced Environmental Assessment and in the Uinta-Southwestern Utah Coal Region Round Two Final Environmental Impact Statement (EIS), 1983. The EA updates and amends the 1983 EIS for leasing of the Castle Valley Ridge tract. The EIS addresses the cumulative impacts of further coal leasing.

The proposed action is subject to the following authorities: Mineral Leasing Act of 1920, as amended; Federal Coal Leasing Amendments Act of 1976⁵(FCLAA); Federal Land Policy and Management Act of 1976 (FLPMA); Surface Mining Control and Reclamation Act of 1977 (SMCRA); Multiple-Use Sustained Yield Act of 1960; National Environmental Policy Act of 1969 (NEPA); and Federal Regulations 43 CFR 3400. Development of the lease is subject to these actions, Federal Regulations 30 CFR 700 to End (SMCRA Regulations), and the State of Utah Coal Mining and Reclamation Regulatory Program.

The Bureau of Land Management lease decision and Forest Service consent decision are to offer the tract for competitive lease with standard coal lease stipulations and the special lease stipulations which are included as Appendix C of the EA. This selected alternative was identified in the EA as Alternative 2 - Offer the Tract for Leasing with Application of Management Requirements. This alternative best meets the management objectives of the Bureau of Land Management and Forest Service as outlined in the respective Land Management Plans and the needs of the general public. It provides for logical development of the coal resource within environmental thresholds and will provide economic benefits to the Federal and State Governments and to local governments and communities.

It has been determined by the undersigned officials that the proposal is not a major Federal action that would significantly affect the quality of the human environment; therefore, an Environmental Impact Statement is not needed. This determination was made based on the following considerations:

1. No public issues beyond management concerns were identified during project scoping, which involved public notices of the proposal and a public comment period, nor during the public meeting held in Price, Utah on June 15, 1989.

- 2. The anticipated adverse effects of the proposal can be effectively mitigated by special lease stipulations and proper implementation of the SMCRA Regulations (30 CFR 700 to End) and the State of Utah Coal Mining and Reclamation Regulatory Program.
- 3. The leasing action and anticipated lease development should have no significant adverse affect to cultural or paleontological resources, floodplains, or Threatened, Endangered or Sensitive plant and animal species. Lease stipulations, the SMCRA Regulations (30 CFR 700 to End) and the State of Utah Mining and Reclamation Regulatory Program provide for adequate protection of such resources.
- 4. There will be no adverse impacts to prime or unique rangelands, farmlands, timberlands, alluvial valley floors, or wetlands.
- 5. The proposed action is consistent with objectives and direction of the Manti-LaSal National Forest Land and Resource Management Plan, 1986.

The Forest Service consent decision is subject to appeal in accordance with Secretary of Agriculture Appeal Regulations 36 CFR 217. A written notice of appeal must be filed with F. Dale Robertson, P.O. Box 96090 Attention: Room 42115, Washington, D.C. 20090-6090 within 45 days of the date of this decision with a copy simultaneously sent to J. S. Tixier, 324 25th Street, Ogden, Utah 84401. This notice of appeal must also include the information described in 36 CFR 217.9.

Compliance with the terms and conditions of the lease and other administrative actions associated with the lease contained in Federal Regulations 43 CFR 3400 are the responsibility of the Bureau of Land Management. The review, approval and enforcement of mining operations within the lease is the responsibility of the Department of Interior, Office of Surface Mining Reclamation and Enforcement under Federal Regulations 30 CFR 700 to End. As required under the Federal Coal Leasing Amendments Act of 1976 and the above regulations, actions pursuant to the lease which could affect surface resources require consultation and consent of the Forest Service.

The lease shall be offered under the procedures set forth for competitive coal lease sales in 43 CFR 3422.

Consent by: J. S. Tixier Date: 7/6/89
 J. S. TIXIER, Regional Forester
 U.S.D.A. Forest Service, Intermountain Region

Approved by: James M. Parker Date: 7/13/89
 JAMES M. PARKER, Utah State Director
 U.S.D.I. Bureau of Land Management

ENVIRONMENTAL ASSESSMENT

CYPRUS-PLATEAU MINING CORPORATION COAL LEASE APPLICATION UTU-64263
CASTLE VALLEY RIDGE TRACT
1989

USDA, FOREST SERVICE, MANTI-LASAL NATIONAL FOREST
USDI, BUREAU OF LAND MANAGEMENT, MOAB DISTRICT
CARBON AND EMERY COUNTIES, UTAH

Responsible Officials:

J.S. Tixier, Regional Forester
USDA, Forest Service
Intermountain Region
Federal Building
324 25th Street
Ogden, Utah 84401

James M. Parker, State Director
USDI, Bureau of Land Management
Utah State Office
324 South State, Suite 301
Salt Lake City, Utah 84111-2303

For Further Information Contact:

George A. Morris, Forest Supervisor
USDA - Forest Service
Manti-LaSal National Forest
599 West Price River Dr.
Price, Utah 84501

Gene Nodine, District Manager
USDI, Bureau of Land Management
Moab District
P.O. Box 970
Moab, Utah 84532

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I. INTRODUCTION

A. Purpose and Need for Action

On July 7, 1988, Cyprus-Plateau Mining Corporation submitted Coal Lease Application UTU-64263 to the Bureau of Land Management (BLM), Utah State Office. Cyprus-Plateau has indicated a need for the coal in their application to acquire a much needed recoverable reserve base; to be more competitive in marketing coal; to extend mine life so as to more favorably amortize the cost of equipment, portal facilities, and underground development; reduce production costs;..."and to maintain 42 additional employees for 17 years..."

Pursuant to 43 CFR 3425.3 an environmental assessment (EA) must be prepared in order for the BLM, who has jurisdiction over the coal resources, to process the application. The proposed lease tract, known as the Castle Valley Ridge (CVR) Tract, encompasses Federal lands within the Manti-LaSal National Forest, Price Ranger District. Since this proposed tract contains Federal minerals administered by the BLM and lands administered by the Forest Service (FS), an environmental analysis was conducted jointly between the two agencies. This EA will evaluate the proposed tract pursuant to the National Environmental Policy Act process and Coal Lease Unsuitability Criteria (43 CFR 3461) and will develop management requirements needed to mitigate impacts.

B. Authorizing Actions

This coal lease application was submitted and will be processed and evaluated under the following authorities: Minerals Leasing Act of 1920, as amended; National Environmental Policy Act of 1969 (NEPA); Multiple-Use Sustained Yield Act of 1960; Federal Land Policy and Management Act (FLPMA) of 1976; National Forest Management Act (NFMA) of 1976; Federal Coal Leasing Amendments Act (FCLAA) of 1976, as amended; Surface Mining Control and Reclamation Act (SMCRA) of 1977; Federal Regulations 43 CFR 3400 and the Manti-LaSal National Forest Land and Resource Management Plan (Forest Plan) and Final Environmental Impact Statement (FEIS) of 1986.

The lease application will be processed under the procedures set forth under Federal regulations 43 CFR 3425, Leasing on Application.

C. History, Tract Delineation and Potential Mining Scenario

The current lands defined in the tract being evaluated were originally nominated by Plateau Mining Company (PMC) as "Tract No. 20" under the old Energy Minerals Allocation Recommendation System (EMARS) lease sale procedure. Additional acreage was added and in 1981, Getty Mining Company, who then owned PMC, proposed the Castle Valley Ridge Tract under a Call for Expression of Interest for the Round Two Coal-System Leasing Effort of the Uinta-Southwestern Utah Coal Region. The tract was evaluated in the Forest Service 1980 Situation

Statement, a Site Specific Analysis approved in 1982 and in the Uinta-Southwestern Utah Coal Region Round Two Final Environmental Impact Statement which was completed on October 7, 1983. The Round Two leasing effort evaluated 27 tracts in Utah and Colorado. The CVR Tract was one of 22 tracts recommended for competitive leasing under the preferred alternative (Alternative Two, High Level). Due to a re-evaluation and major changes in the Federal coal management program in 1984, the CVR tract was not offered for leasing.

In January of 1988, the Uinta-Southwestern Utah Coal Region was decertified and as a result, new coal leasing within the Region will be conducted under the Lease on Application Process set forth in Federal Regulations 43 CFR 3425. Coal Lease Application UTU-64263 was the second application submitted in the Region under this process since decertification of the Region.

Cyprus-Plateau Mining Corporation's (CPMC) 1988 application covered only the southern half of the CVR Tract evaluated in 1982. The Tract Delineation Team, consisting of personnel from the BLM and FS, evaluated the tract configuration as submitted in CPMC's 1988 application. Based on the uncertainty of existing geologic data, the team recommended in it's Tract Delineation Review Report of February 1, 1989, that an additional 161.63 acres be added to UTU-64263 pursuant to 43 CFR 3425.1-9 (see Appendix A for report).

The tract under application as modified is legally described as:

T. 14 S., R. 7 E., SLM, Utah
Sec. 34, lots 3 and 4, N2SE4;

161.63 acres.

T. 15 S., R. 7 E., SLM, Utah
Sec. 2, lots 2-7, and 10-12, SW4, W2SE4;
Sec. 3, lots 1, 2, and 7-10, E2SE4, E2W2SE4;
Sec. 10, E2E2, E2NW4NE4;
Sec. 11, W2, W2E2;
Sec. 14, NW4, NW4NE4;
Sec. 15, E2E2NE4;

1,825.83 acres.

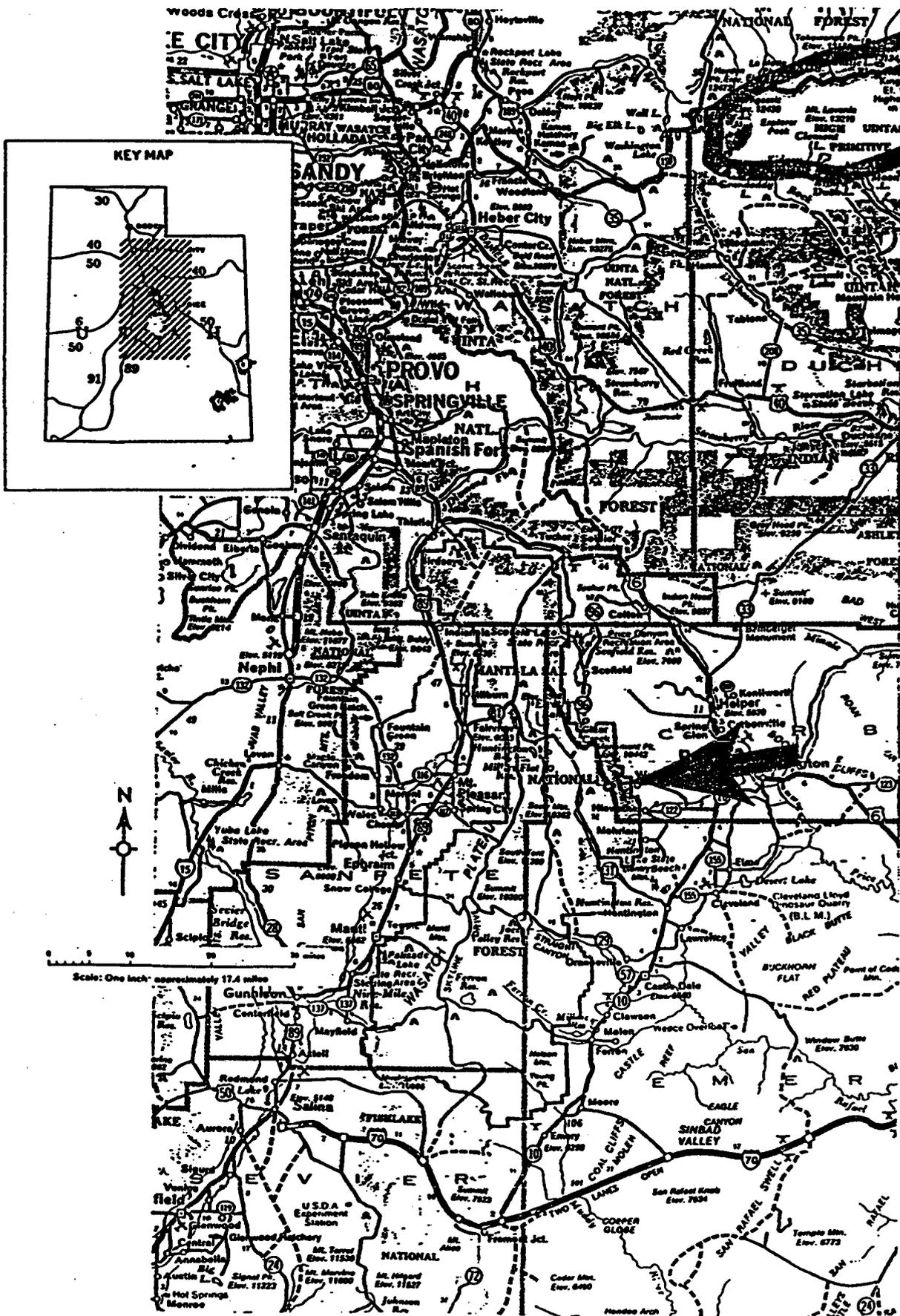
Total Acreage: 1,987.46 acres
Carbon and Emery Counties, Utah

For general location, please refer to Maps 1 and 2.

Pursuant to the Manti-LaSal National Forest Land and Resource Management Plan and Final Environmental Impact Statement (Forest Plan and FEIS), an initial analysis was conducted and it was determined that the tract is suitable for further consideration for coal leasing, subject to site-specific analysis and application of the coal lease unsuitability criteria.

GENERAL LOCATION OF PROJECT

UTU-64263



MAP 1

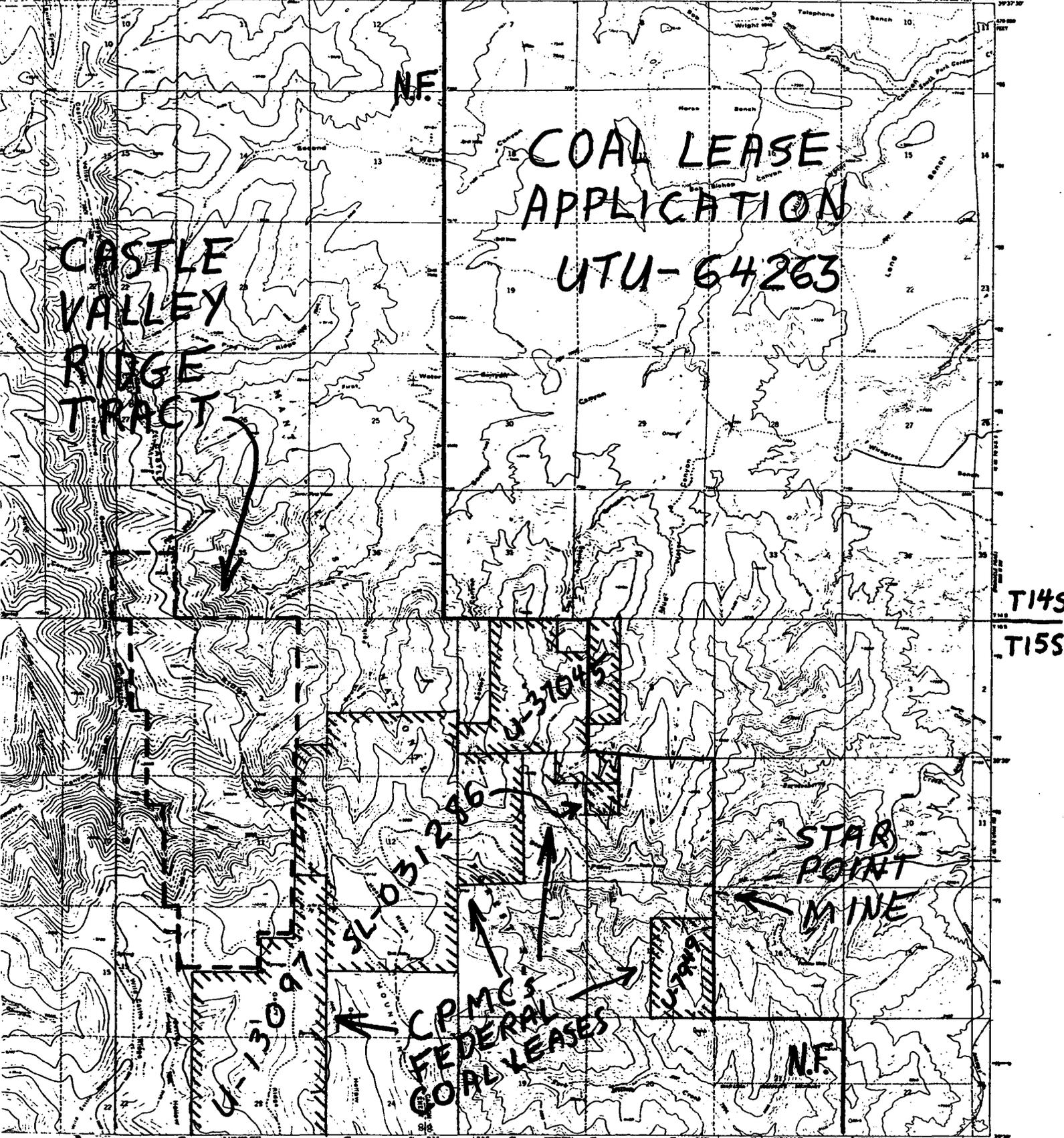
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



R7E R8E

STATE OF UTAH
UTAH GEOLOGICAL AND MINERAL SURVEY

WATTIS QUADRANGLE 4
UTAH
7.5 MINUTE SERIES (TOPOGRAPHIC)

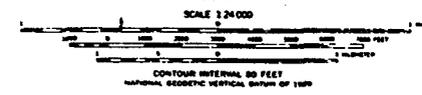


T14S
T15S

Mapped, revised, and published by the Geological Survey

Control by 1908, 1916, 1924, and U. S. Coast Survey
Photographic base from aerial photographs
taken 1929. First edition 1924. Map since 1929
Projection and 30,000-foot grid scale. U.S.
Standard datum, unless otherwise indicated.
1983 revised. Photographic base from
aerial photographs taken 1967. U.S. Coast Survey.
First and second editions selected from this
map.

There may be private holdings within the boundaries of the
Bureau or their successors shown on this map.



ROAD CLASSIFICATION

Primary highway, hard surface	Light-duty road, hard or improved surface
Secondary highway, hard surface	Unimproved road
Interstate Route	U.S. Route / State Route

THIS MAP COMPLES WITH NATIONAL MAP AGENCY AGREEMENTS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80262, OR FORTSON, VIRGINIA 22044
A PALM BEACHES TOPOGRAPHIC MAPS AND SERIES IS AVAILABLE ON REQUEST

WATTIS, UTAH
1924-1911007.5
1979
DMS 3749 B 88-08000 1007

Q

It was also determined on 3/21/89, by the Forest Service, that there is sufficient information available to generally meet the Data Adequacy Standards for Federal Coal leasing adopted by the Uinta-Southwestern Utah Regional Coal Team and that it is consistent with the Manti-LaSal National Forest Land and Resource Management Plan.

The above information was provided to the Regional Coal Team and it was decided to proceed with further evaluation of the proposed tract as modified for leasing.

The Coal Lease Unsuitability Criteria (43 CFR 3461) have been applied to the tract and have been evaluated on a site-specific basis; no areas within the tract have been determined to be unsuitable for leasing.

The only existing coal lease holdings adjoining the tract include the applicant's leases in the Star Point Mine permit area which lies to the south and east of the tract. The Tract Delineation Team has determined that due to geologic conditions, the tract has potential economic access only from the existing mine workings in the applicant's leases to the south.

D. Public Issues, Management Concerns and Opportunities

General public comments were solicited by a news release, while specific public comments were solicited by letter dated 3/29/89 (see Public Involvement in Appendix B). Comments were received from the Utah Division of Wildlife Resources (DWR) and the Office of Surface Mining Reclamation and Enforcement (OSMRE). OSMRE has expressed a desire to participate in the NEPA process for the proposed tract. Their scoping comments, review of the final EA and participation in the upcoming public meeting have been invited. The issues addressed by the DWR have also been identified by the I.D. Team and will be discussed as management concerns. DWR's and OSMRE's letters are included in Appendix B. Comments on the unsuitability criteria were also solicited from the Utah Division of State History and the U.S. Fish and Wildlife Service regarding Cultural Resources and Threatened and Endangered floral and faunal species respectively. Comments have been received from the Utah Division of State History (see Appendix B) and they have essentially identified no problems with leasing at this time and that any consultation for Section 106 purposes will be conducted at the time that future surface disturbing activities are proposed and fully surveyed for cultural resources. Although comments have been solicited from U.S. Fish and Wildlife Service (See Appendix B), no comments have been received to date.

1. Public Issues and Management Concerns

Underground mining and mining induced subsidence could result in changes to ground water and surface water flow on and adjacent to the undermined area. This could result in the alteration of soil moisture, vegetation and wildlife habitat on the surface, above and adjacent to the mined area. In addition, mining operations

could affect water quality of ground water in aquifers which lie within and below the mine workings. Operations could also affect water quality in drainages downstream of the facilities. The DWR and Forest Service are concerned that subsidence could decrease the flow or dry up springs which are used by wildlife for watering.

2. Opportunities

a. Leasing and production of coal reserves from the tract would result in increased rent and royalties paid to the Federal Government and will supplement State and Local Government revenues.

b. The coal reserves in the tract would be mined and made available for energy production and industrial use.

c. If the tract is mined through the existing Star Point Mine, the life of the mine would be extended approximately 5 years at their current rate of production by providing additional coal reserves.

E. Negative Declaration

The ID Team determined that this action, after mitigation, would cause no significant impacts on the following: prime or unique rangelands, wetlands, timberlands, or farmlands; floodplains; known cultural or paleontological resources; alluvial valley floors; known Threatened, Endangered, or Sensitive plant or animal species.

The Coal Lease Unsuitability Criteria (Federal Regulations 43 CFR 3461) have been applied on a site-specific basis and no areas within the tract have been determined to be unsuitable for leasing.

II. ALTERNATIVES

A. Alternative One - No Action

Consideration of the "No Action" alternative is required by Federal regulations contained at 43 CFR 1502.14(d). If the course of this alternative were adopted, this tract would be eliminated from further leasing consideration and the application would be denied. The coal resource would not be developed and the site-specific environment of the subject area would in no way be affected.

B. Alternative Two - Offer the Tract for Leasing with Application of Management Requirements

Under this alternative, the tract would be offered for competitive leasing subject to standard and special lease stipulations. The

boundaries of the tract would remain unchanged from the configuration submitted in CPMC's applications as modified by the Tract Delineation Review Report which lie totally within the tract boundary as identified and evaluated in the Round Two leasing effort.

The required mitigations which are attached as Appendix C will be included in the lease as special stipulations in addition to standard BLM lease stipulations. They are consistent with the Forest Plan and require necessary special measures for protection of and/or coordination with the affected resources and mitigation of impacts.

III. AFFECTED/EXISTING ENVIRONMENT

The affected environment of the subject area has been generally described in numerous environmental documents and resource reports prepared for coal leasing, exploration and development in this and surrounding areas. These documents are listed for reference in Section VI, Selected Tiering and Reference Documents. There are several resources on the lease for which concerns were identified. These resources are essentially unique to the proposal and are evaluated in this document.

A. Topography/Physiography/Geology

The Wasatch Plateau lies within the Basin and Range-Colorado Plateau Transition Physiographic Province. The east flank rises almost 3,000 feet above Castle Valley. The upper 1,500 to 2,000 feet of this rise is a near vertical erosional escarpment or cliff. The sedimentary rock layers dip gently to the northwest throughout the central and eastern portions of the plateau. The plateau top is dissected by north-south trending fault zones which form north-south trending ridges and canyons.

Along the west flank of the plateau, the rock layers bend downward, dipping steeply to the west, and form the west flank. The west flank slope is controlled by the dip of the rock layers and is not as steep and abrupt as the east flank. This monoclinial fold of the rock layers is known as the Wasatch Monocline. Both the east and west flanks are deeply incised by east-west trending drainages and their canyons. North-south trending normal faults and extensive fault zones are common.

The tract area is located within the east-central portion of the Wasatch Plateau. Elevations range from approximately 8,800 to 10,100 feet above mean sea level. The southern portion of the lease is situated along the flat-lying northern portion of Gentry Mountain and is separated from the narrow, north-south trending Castle Valley Ridge to the north by a drop in elevation near mid-tract known as The Steeps. More than half of the tract has slopes that exceed 50%.

Rock formations exposed on the tract, in ascending order, are Mancos Shale, Blackhawk Formation, Price River Formation and North Horn Formation. These formations range in age from Cretaceous to Tertiary.

The coal seams of interest on the tract occur within the lower 150 feet of the Blackhawk Formation. There are numerous coal seams within the Blackhawk; however, only three coal seams (Wattis, Third, and Hiawatha) are continuous across the tract and obtain a thickness of four feet or greater. Of these three seams, only the Wattis is known to be minable. It may be possible to recover a small portion of the Third bed; however, this will have to be determined at a later time.

Outcrops of coal occur along the west edge of the tract which is the east side of Nuck Woodward Canyon and the head of Little Nuck Canyon, the northeast end of the tract at the head of North Fork of Corner Canyon and the east side of the tract at the head of South Fork of Corner Canyon. A 500-foot burn zone was used around all outcrops. Two major faults adjacent to the tract's east and west boundaries are constraints to mining. The strata on the tract dips approximately 3 degrees to the south-southwest. The overburden thins to the north of the tract. The apparent rank is high-volatile B bituminous coal. The preliminary recoverable reserve base for the Wattis seam is estimated by BLM to be 7,730,000 tons.

The tract has limited access based on faulting and economic value due to the relatively small amount of reserves present; therefore, only one mining scenario is considered practical. Access will be from CPMC's underground workings planned for U-13097 which lie within the Star Point Mine permit area adjacent to the southern and eastern boundaries of the tract. No additional surface facilities other than the possibility of ventilation breakouts should be needed since the Star Point #2 Mine facility will handle the additional tonnage that would be produced.

B. Hydrology and Climate

Annual precipitation from an area of comparable aspect, elevation and dominant vegetation was found to be 28 inches. A station summary of 12 years of record, illustrated that only 2.93 inches, or 10.4 percent, of the total average precipitation falls during the July through August growing season (Straight Canyon Barometer Watershed). Rainfall during the summer months often occurs in the form of intense thunderstorms. The nature of these storms can generate substantial surface runoff, possibly creating a significant increase in erosion rates, depending on soil type, plant basal area, slope, storm intensity, and duration. The freeze-free season of Castle Valley Ridge is 0-40 days. Average temperatures range from a minimum of 8 degrees in January to a maximum of 82 degrees Fahrenheit in July.

The Castle Valley Ridge Coal Tract is located on Castle Valley Ridge which forms the drainage divide between the Huntington Canyon and Price River Watersheds. Huntington Creek is tributary through the San Rafael and Green Rivers to the Colorado River. The Price River is tributary to the Colorado River through the Green River. Four stream channels drain the west side of the tract into Nuck Woodward Canyon which then drains to the south and west into Huntington Creek. The east side of the tract is drained by the North and South Forks of Corner Canyon which flow through Gordon Creek to the Price River. The southern tip of the tract is drained by Wild Cattle Hollow and Gentry

Hollow which flow to Tie Fork then into Huntington Creek. Data indicates that the South Fork of Corner Canyon and Little Park Creek are perennial. Little Park Creek is the southernmost drainage which drains the west side of the tract. Both drainages are fed by springs which emerge from within the tract boundary. The remaining drainages within the tract are intermittent, however, some short reaches are perennial immediately below springs.

Beneficial use standards for waters on and near the tract are 1c, 3a and 4 (Standards for Quality of Water for the State of Utah, 1987). All waters within the outer boundaries of National Forests are considered to be antidegradation segments for water quality. Category 1c is protected for domestic purposes with prior treatment by standard complete treatment processes as required by the Utah Department of Health. Category 3a is protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain. Category 4 is protected for agricultural uses including irrigation of crops and stock watering.

Continuous stream flow records are not available for any of the streams that drain the tract. Seiler and Baskin (1988) completed a study of the hydrology of the Castle Valley Ridge and Alkali Creek Coal-Lease Tracts and the potential effects of coal mining (U.S. Geological Survey Water Resources Investigation Report 87-4186). Since continuous streamflow records are not available for any of the drainages on the tract, Seiler and Baskin (1988) computed the flows in the South Fork of Corner Canyon using regression equations. They estimated the 10-year peak flow to be 60 cubic feet per second and the average flow to be 0.74 cubic feet per second at its confluence with the North Fork. Seiler and Baskin report that the predominant chemical constituents of water sampled from this location in the South Fork are magnesium, calcium, bicarbonate and sulfate. The water quality changes from high flows (snowmelt runoff) in the spring to low flows in late summer and fall when springs contribute a greater percentage of the flow. As streamflow decreases, the concentration of major ions and the proportion of magnesium and sulfate increases. Examination of data presented by CPMC in the application shows that flow in Little Park Creek exhibits similar characteristics. CPMC's data (1980-1987) show that Total Dissolved Solids (TDS) concentrations in the South Fork of Corner Canyon, measured just above the confluence with the North Fork, range from 445 mg/l to 1,400 mg/l with an average concentration of 648 mg/l. CPMC's data for Little Park Creek sampled just above the confluence with Nuck Woodward Creek in September of 1987 and June of 1988 showed a TDS concentration of 280 mg/l and 258 mg/l respectively. For parameters which have been tested, water quality is generally consistent with numeric standards for the beneficial uses. Phosphate is an exception. The values for phosphate on this tract and the Wasatch Plateau often exceed the standard for cold water fish (3a). The phosphates are believed to be naturally occurring.

Twelve springs have been mapped within or directly adjacent to the tract boundary by CPMC and Seiler and Baskin (1988). Ten of these springs issue from the Star Point Sandstone or Blackhawk Formation. One issues from the Price River Formation and the remaining spring

issues from the Castlegate Sandstone at the contact with the Blackhawk Formation. Four of the springs within the tract have been developed for livestock and wildlife watering. There is one small stockpond.

Water samples from 17 springs in the area were analyzed. The predominant ions in water from springs in the North Horn Formation, Castlegate Sandstone and Price River Formation are calcium and bicarbonate. The predominant ions in water from the Blackhawk Formation are calcium, bicarbonate and magnesium. The predominant ions in water from the Star Point Sandstone are calcium, bicarbonate, magnesium and sulfate. TDS concentrations were highest in springs from the Star Point Sandstone, ranging from 383 to 579 mg/l (Seiler and Baskin, 1988).

Ground water movement, both volume and direction, is controlled by geologic conditions and structure. Lithology, faulting, jointing and dip of the rock layers influence ground water movement and recharge. The Star Point Sandstone and lower Blackhawk Formation form a localized aquifer as indicated by the number of springs which flow from these units. Perched aquifers also occur in the discontinuous sandstone lenses of the upper Blackhawk Formation and other overlying formations. Recharge occurs at the higher elevations from snowmelt and runoff. Water infiltrates the ground water regime through porous rock, joints and faults. The dip of the rock layers is approximately 3 degrees to the southwest. The water flows down-dip until it encounters faults or joints and is diverted to lower units or is trapped in discontinuous perched sandstone lenses. Flow in the Blackhawk-Star Point aquifer is probably controlled by Bear Canyon fault (Seiler and Baskin, 1988). Faults probably form major conduits for water flow especially where downward flow is impeded by shales. This is indicated by the close correlation between spring and fault locations. The flow of water in the faults is probably to the south as indicated by the emergence of springs along the north slopes of drainages at fault locations.

C. Soils

Several soils reports are available for this area. It was mapped at the Order 4 intensity level in the Land Systems Inventory of the Ferron-Price Planning Unit by Dale Rapin, 1977. This inventory designates four land-type associations present in the area. They are land-type associations A, J, M, and N. Reference should also be made to two reports by Jim Iaquina. These are: (1) "Soil Resource Evaluation for Getty Oil Coal Exploration Proposed on Castle Valley Ridge", 12/15/80, and (2) a supplement to the preceding report, 2/9/81. The soils on the steep slopes are sensitive to disturbance but would not be considered "unreclaimable".

Natural soil erosion rates are quite high on the west facing steep slopes, however, the erosion rates have not been calculated. This would need to be done prior to disturbance if they were identified in a plan of operations. There are few limitations for activities on soils at the south end of the lease tract (Unit A on the land-type association map), but the northern 3/4 of the tract is limited by steep slopes and sensitive soils.

D. Range and Wildlife

The tract is within two cattle allotments. There are 1,440 head that graze the Gentry Mountain C&H Allotment to the south from approximately June 27 to September 30; while 246 head that graze the Castle Valley Ridge C&H Allotment to the north from June 21 to September 30.

The general area is heavily used for calving by elk. Elk use the area in the spring and early summer and then again in the late fall. It is important to the productivity of the elk herd to have areas such as Castle Valley Ridge where they find seclusion (undisturbed by man) for calving and during the early part of the young calf's life. Some studies have shown that a cow will return to the same vicinity to drop her calf when she has been successful in past years in raising her young. This accounts for the heavy calving use we find in some areas such as the Castle Valley Ridge area.

The diversity of vegetative types on the lease tract supports a diverse wildlife population. Besides deer and elk, other game and furbearing species include: black bear, cougar, bobcat, badger, coyote, snowshoe hare, and occasionally moose have been seen. Avifauna of the area may include several species of raptors, jay and sparrow. Because of the diversity of habitat components, there are many small mammals and songbirds found on the lease which are too numerous to list in detail in this report.

There are no fisheries within the tract. Surface water from the tract does drain into Huntington Creek which is considered a valuable fishery. Bald eagles, an endangered species, are annual visitors in the region between November and March, however, no critical habitat has been identified within the tract. No other Threatened, Endangered or Sensitive species are known to inhabit the tract.

E. Vegetation

Trees such as Douglas fir, Englemann spruce, Subalpine fir and some White fir are scattered throughout the tract area, but are mostly found in stands occurring on the north and east facing slopes. Quaking aspen are found mostly on the more gentle slopes and somewhat wetter sites on the south and west slopes. Mountainbrush types occur on the dryer exposed slopes and are mostly dominated by mountain sagebrush, oakbrush, snowberry, serviceberry and some mahogany. A grass type occurs on the tops of the high ridges and windy upper slopes of the area. The dominant species are Salina wild ryegrass and western wheatgrass. There are several plant communities within each of the broad vegetative zones occurring in the tract. These are: Douglas fir - snowberry - carex; White fir - common juniper - bluegrass; Englemann spruce - Alpine fir - wild gooseberry; Aspen - snowberry - slender wheatgrass; Aspen - Oregon grape - bluegrass; big mountain sagebrush - western wheatgrass; mixed mountainbrush - slender wheatgrass; Salina wildrye - Coltons locoweed; Salina wildrye - low rabbitbrush types. Other types or phases of the above types do occur within this area. Each of these vegetative types and phases have

different environmental requirements and each will require different considerations for reclamation of disturbed areas.

F. Recreation and Visual Resources

Recreation Resource - Generally, the landscape is characterized by a natural appearing environment. The setting contains subtle modifications which would be noticeable, but would not seem to draw attention to the observer wandering through the area.

Recreation in the lease area includes dispersed camping, fuelwood gathering, hunting and sight seeing during the spring/summer/fall seasons. The greatest recreation use is in the fall during the big-game hunting seasons. There are no developed or inventoried recreation sites on the tract.

Scenic Quality is considered to be "common" or average. Landforms are distinctive while vegetative and water forms appear minimal.

The visual quality objective on the northern portion of the area and part of the southern portion is "Modification". Modification means that the result of man's activities may dominate the natural landscape but should borrow natural appearing line, form, color and texture from the natural landscape.

The visual quality objective for the remaining southern portion is "Partial Retention". Partial Retention means that the result of man's activities should remain subordinate to the natural landscapes.

G. Socioeconomics

The area of influence for the Castle Valley Ridge Tract, whether developed as an existing mine extension or an independent operation, is Carbon and Emery Counties which will be referred to as the study area.

The study area had an estimated population of 33,300 in 1988. Since 1980, population in the area has declined by 700 or about 2%. Population peaked in 1982 at 37,600 from which it has declined by 4,300 or about 12% in the 6 year period.

Other factors even more dramatically indicate the decline of the study area's economy over the last 5 years including:

Employment decline	-6,831 Jobs (38%)
Non Ag. Payroll decline	-\$77,100,000 (26%)
Personal Income decline	-\$19,100,000 (5%)
Unemployment (1982 - 6.5%)	(1987 - 13%)

Considering 1987 data, mining is the dominant industry in the study area accounting for about 40% of the non agriculture payroll. The second most important sector is transportation/communication/public

utility which account for 17% of payroll and is dominated by the 3 large electric power generating facilities in the area powered by coal mined in the area.

Other industries in the area contribute on the following basis: Farming (2 1/2%), Construction (5%), Manufacturing (1.5%), Trade (9%), Services (10%), Government (15%).

Population projections for the study area by the Utah Office of Planning and Budget show a very modest population increase of +1,500 or about 4.5% by the year 2000.

A major factor in the study area is what has happened in Utah coal mining industry employment (all operating coal mines in the state are in the study area except the SUFCO mine in Sevier County). Coal mine employment peaked in 1982 at 5,151 when 16,912,000 tons of coal production occurred. Within a period of one year from this peak, employment fell to 3,163 in 1983. Moderate decline has continued in recent years to the present level of 2,577. It is particularly significant that in the period from 1983 to 1987, coal production went from 12,182,000 tons to 16,200,000 tons, a 33% increase while employment went from 3,163 to 2,577, a 19% reduction. The productivity of Utah coal mining has increased significantly in the last 4 years due to longwall installation and other efficiency factors yielding a peak in 1988 of 18,200,000 tons.

IV. EFFECTS OF IMPLEMENTATION

A. Alternative One - No Action

Under this alternative the tract would not be offered for lease, therefore, the tract would not be mined.

There would be no environmental consequences to the tract area and surrounding vicinity and there would be no economic benefit to the Federal, State and local governments from coal lease fees and coal royalties. In addition, there would be no boost to the local economics and to the present unemployment rates in the area and the Star Point Mines would close sooner without the additional reserves.

B. Alternative Two - Offer the Tract for Leasing with Application of Management Requirements

Under Alternative Two, the stipulations contained in Appendix C would be included for the entire tract and anticipated impacts would be mitigated to an acceptable level.

1. Short-term and Residual Impacts

Development of the tract will logically follow leasing. Both short-term and residual impacts to Forest resources can be expected to result from development of the property. No surface

developments are proposed for the tract. Any proposal for future exploration or development on the tract will be evaluated as separate actions.

Longwall mining of the Wattis seam will result in fracturing of the overburden and subsidence of the ground surface above the underground workings. Temporary surface cracks may occur; however, these will generally heal themselves over time. Subsidence begins soon after mining and may continue for years afterwards. The rate, extent and amount will vary with geologic conditions and mining operations, but the amount may approximate 70% of the extracted coal height. Subsidence could increase the instability of the slopes especially in the northern portion of the lease, due to shallow overburden, thus resulting in increased erosion or slope failures. It is estimated that the average angle-of-draw for subsidence for the Wastach Plateau Coal field would fall between 15 and 22 degrees (measured from vertical), but has yet to be determined for the tract.

Most surface effects of subsidence are expected to occur toward the northern portion of the area due to shallow overburden. Some cracking is expected, however, the cracks are expected to fill in and appear natural within 5 years.

The result of the activity is expected to remain visually subordinate.

It is expected that mining and subsidence will have an effect upon the natural ground water flow, which may in turn alter the location and flow of seeps and springs above mined areas. Flow of some springs could be reduced and new springs could be created. Subsidence induced fracturing could divert surface waterflow directly underground if surface cracks intersect a stream channel or remain open. There is some evidence that cracks in the Blackhawk Formation seal themselves when they become wet due to expanding clays. The amount of water which could be diverted from the surface and perched aquifers to lower units or into the mine workings would depend on the extent of cracks which occur and the amount and rate of healing. Surface water diverted underground would not be lost from the hydrologic system and may or may not be lost from the subbasin in which it originates. Any resultant changes in the patterns of surface water occurrences could be expected to affect vegetation, wildlife or other surface resources depending upon the changes in soil moisture.

According to Seiler and Baskin (1988), diversion of water from the Price River Basin through the mine workings to the Huntington River Basin could occur since ground water encountered in the Star Point Mines is presently being discharged to the Price River Basin. If diversion is determined to be significant, it could be mitigated by construction of a breakout for mine water discharge on the west side of the divide. Flow distribution to the two watersheds will probably be restored after abandonment of the mine and pumping to the discharge location is discontinued.

Water quality could be altered due to changes in the route of flow and location of convergence of springs which feed surface drainages. The dissolved constituents of the water may be altered due to changes in contact time with specific rock formations. These changes, however, are not considered to be significant or quantifiable at this time.

Water quality may be altered by discharging mine water into drainages. Due to the volume of discharge water, dilution could occur resulting in improvement of water quality for some parameters. The discharged water could also result in decreased water quality due to the introduction of additional amounts of dissolved constituents. As water flows through mine workings it could become contaminated with with oil and grease, metals, coal dust, sulfates and other materials. Total Dissolved Solids (TDS) could increase, however, NPDES permits require treatment to meet State standards for discharge. Seiler and Baskin (1988) indicate that discharge from abandoned and reclaimed mine areas could increase the concentration of dissolved solids and decrease the pH of the receiving drainages. They also indicate that water may still meet Utah's drinking-water standards. Lindskov (1986) completed a study of the potential effects of coal mining on the salinity of the Price, San Rafael and Green Rivers. He concluded that anticipated mining in the Price and San Rafael River basins is not expected to cause a detectable change in the quantity and quality of flow in the Green River.

2. Short-term Use vs. Long-term Productivity

The only reasonable assumption for development of the CVR tract is through acquisition and access by the applicant. Cyprus-Plateau indicates that the tract will "allow the company to maintain a high annual production level for the balance of its existence." They also indicate the tract will allow the company to "maintain 42 additional employees for a 17 year period." These are not new employees but existing employees who would have jobs as the mine life is extended for an equivalent 5 years. In 1987 and 1988, the Star Point Mines produced about 1.8 million tons (gross) and 1.6 million tons (net) with an estimated 225 employees.

In summary, the leasing and development of the tract will not have significant additional socioeconomic impact on the study area. The main factor will be prevention of lay-offs and extension of mine life. The applicant indicates 34.25 million dollars of direct and indirect wages will be created and 13.6 million dollars of royalties will be paid to the Federal government which will return 50% to the state government.

Most of the short-term effects on surface resource productivity result from facilities such as portals, conveyors, powerplants, etc., which are all located off the tract area. If any surface facilities are proposed they will be evaluated in a separate environmental assessment.

Underground mining and subsidence could involve long-term alteration of the ground water flow and associated effects to surface resources. The long-term productivity could be altered as drainages, soils and vegetation gradually adjust to any modified ground water conditions. The surface resource productivity could decrease or increase depending on the amount of available water.

3. Irreversible and Irretrievable Commitment of Resources

Development of the lease tract will irreversibly and irretrievably commit any coal that is mined to the purpose for which it is eventually used, in this case presumably steam generation of electricity. Any coal that remains in place after the lease is mined will be, for all practical purposes, committed to non-use. This commitment will probably be irreversible and irretrievable. Any resources, labor and materials that are utilized for development of the tract will be irreversibly and irretrievably committed to that use. Those aquifers that are disturbed during mining or subsidence become irretrievably and irreversibly altered.

4. Cumulative Impacts

Historically, man's activities in the Castle Valley Ridge vicinity include livestock grazing, timber sales, recreation and mineral exploration and development. The impacts discussed for the proposed action would be added to those impacts which already exist from these other activities.

Livestock grazing since the late 1800's combined with range improvements, timber sales, fire control and watershed improvement projects have caused change in vegetation types present in the area and plant diversity and density. Some decrease in soil productivity and watershed conditions have also occurred. Range and watershed improvements are resulting in improvement of conditions.

The construction of roads to meet access needs and off-road travel from recreation activities have resulted in removal of some vegetation and increased erosion.

Mineral exploration in the area includes coal and oil and gas exploration drill holes and geophysical exploration. All of the roads and drill pads associated with these activities have been successfully reclaimed. The only mineral production in the area at present is coal mining.

Cumulative effects of current activities, including the proposed leasing action, are expected to be within the thresholds established in the Forest Plan.

V. PERSONNEL AND PUBLIC INVOLVEMENT

A. Interdisciplinary Team

<u>SPECIALTY</u>	<u>SPECIALIST</u>	<u>ROLE</u>
Engineering	Brent B. Barney	Member
District Ranger	Ira W. Hatch	Consultant
Visual Quality/Rec.	James Jensen	Consultant
Hydrology	Dennis Kelly	Member
Soils & Reclamation	Dan Larsen	Member
Minerals/Geology	Terry McParland	Member Rep. BLM - Moab District
Socio-Economics	Max Nielson	Member BLM Utah State Office
Minerals/Geology	Walter Nowak	ID Team Leader
Wildlife/T.E.&S. Animals	Rod Player	Member
T.E.&S. Plants/Range	Bob Thompson	Member
Cultural Resources	Les Wikle	Consultant

B. Other Organizational and Public Involvement

In addition to the news release requesting comments, from the general public there were 15 solicitations from specific, interested publics. Copies of these documents are contained in Appendix B. Based on comments received, public interest is considered to be low. See section I-D, Public Issues, Management Concerns and Opportunities of this EA for a discussion of responses.

VI. SELECTED TIERING AND REFERENCE DOCUMENTS

- 1) E.A. for Modification of Federal Coal Lease U-13097, 8/17/83.
- 2) E.A. Readjustment of Federal Coal Lease SL-031286, 6/24/83.
- 3) Application for Federal Coal Lease Tract UTU-64263, Castle Valley Ridge, Cyprus-Plateau Mining Corp.
- 4) E.A. Modification of Federal Coal Lease SL-031286, 9/3/82.
- 5) Tract Delineation Review Report, Leasing on Application UTU-64263, 2/1/89.
- 6) Situation Statement, Castle Valley Ridge Tract 3/80.
- 7) E.A. Proposed Coal Exploration Drilling, CVR and Gentry Mountain, Getty Mineral Resources Company, 9/11/81.
- 8) Site Specific Analysis Castle Valley Ridge Proposed Coal Lease Tract, 5/25/82.
- 9) Manti-LaSal National Forest Land and Resource Management Plan and Final EIS, 11/86.

- 10) Uinta-Southwestern Utah Region Round Two Final EIS, 1983.
- 11) Lindskov, K.L., 1986. Potential effects of Anticipated Coal Mining on Salinity of the Price, San Rafael and Green Rivers, Utah; U.S. Geological Survey, Water-Resources Investigations Report 86-4019.
- 12) Seiler, R.L. and Baskin, R.L., 1988. Hydrology of Alkalai Creek and Castle Valley Ridge Coal-Lease Tracts, Central Utah, and Potential Effects of Coal Mining, U.S. Geological Survey, Water-Resources Investigations Report 87-4186.
- 13) Star Point Mines, Mining and Reclamation Plan, Plateau Mining Company, September, 1986.

APPENDICES

- A. Tract Delineation Review Report**
- B. Public Involvement Documents**
- C. Special Lease Stipulations**

Appendix A - Tract Delineation Review Report

UINTA-SOUTHWESTERN UTAH COAL REGION
BUREAU OF LAND MANAGEMENT

TRACT DELINEATION REVIEW REPORT

Leasing by Application - U-64263
- Cyprus-Plateau Mining Corporation

I. APPLICATION DATA

Date Filed: July 7, 1988

Legal Description:

T. 14 S., R. 7 E.,
sec. 34, lots 3 and 4, N $\frac{1}{2}$ SE $\frac{1}{4}$;
161.63 acres.

T. 15 S., R. 7 E.,
sec. 2, lots 2-7, and 10-12, SW $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 3, lots 1, 2, and 7-10, E $\frac{1}{2}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ W $\frac{1}{2}$ SE $\frac{1}{4}$;
sec. 10, E $\frac{1}{2}$ E $\frac{1}{2}$, E $\frac{1}{2}$ NW $\frac{1}{2}$ NE $\frac{1}{4}$;
sec. 11, W $\frac{1}{2}$, W $\frac{1}{2}$ E $\frac{1}{2}$;
sec. 14, NW $\frac{1}{4}$, NW $\frac{1}{2}$ NE $\frac{1}{4}$;
sec. 15, E $\frac{1}{2}$ E $\frac{1}{2}$ NE $\frac{1}{4}$;
1,825.83 acres.

Acreage: 1,987.46 acres

Surface Ownership
All Federal

Surface Administration
Manti-LaSal National Forest - 100%

Preliminary Coal Resource Information

Minable Seams - Wattis
In-place Coal Reserve Base - 24,100,000 tons
Minable Reserve Base - 15,300,000 tons
Recoverable Reserves - 8,900,000 tons

An additional 3.1 million tons have been identified for the Hiawatha bed and 5.7 million tons for the Third bed. Neither bed is considered minable at present.

II. ANALYSIS FOR ENHANCING COMPETITION

A. Tract Configuration

1. Comparison with Prior Delineated Tracts.

The tract applied for is reduced somewhat from a parcel delineated in 1982, by the Minerals Management Service as the "Castle Valley Ridge Tract" for Round II regional coal lease consideration. The original configuration was based on: expressions of interest, land use planning considerations, available coal data, access considerations to the tract, and the extent of unleased coal. Subsequent drilling on the northern part of the original tract indicates that the Wattis seam thins and splits to the north and contains no minable reserves. Based on this information, the applicant has only applied for the southern half of the original tract. To cover the uncertainty as to where the Wattis seam becomes unminable, the Tract Delineation Team recommends adding an additional 161.63 acres to the applicant's tract.

2. Size Consideration

The tract under application is relatively small with limited reserves that are likely to be accessible only from mine workings planned for Federal leases south of the tract. With the limited potential reserves of unleased coal in the area and the limited number of economic access points to the reserve, it does not appear that there are sufficient potential reserves in the area to support an independent mining operation.

3. Industry Interest

The tract was originally delineated in 1982, in response to an expression of interest submitted by Getty Mineral Resources Co. Getty and their successor in interest, Cyprus-Plateau Mining Corp. have conducted exploration drilling and geophysical surveys on the property. The applicant appears to be the only existing operation to have interest in the area with reasonable access to the tract.

4. Planning/Environmental Considerations

The land on the tract has been determined to be suitable for further consideration for coal leasing by the Manti-LaSal National Forest (FLRMP, 11/86).

5. Captive/Bypass Situation

Due to the limited access because of faulting, the tract under application may be considered a captive or bypass situation. However, the tract configuration does not create a new captive or bypass situation for other unleased coal.

B. Ownership Pattern/Control

1. Surface/Minerals

The surface and minerals on the tract are all controlled by the Federal Government with the surface administered by the US Forest Service. Existing coal holdings adjoining the tract include the Cyprus-Plateau Mining Corp. property to the south and east of the tract which include the workings of the Star Point Mine.

2. Access

The tract under application has been determined to have potential economic access only from mine workings projected on the applicant's leases south of the tract.

3. Extent of Unleased Coal

The potentially minable reserves in the Castle Valley Ridge Tract occur in a narrow fault block known as the Gentry Ridge Horst. This block is bounded on the east by the Bear Canyon Graben and on the west by the Pleasant Valley Graben. The Gentry Mountain Horst terminates to the north of the tract where the Bear Canyon and Pleasant Valley Graben systems appear to merge. The tract reserves are also stratigraphically limited to the north due to splitting and thinning of the Wattis seam.

C. Marketability

The minable seam in the tract has high-volatile B bituminous rank coal with a high heating value (12,100-12,450 Btu/lb) and low sulfur content (0.4-0.6%). The coal quality appears to be no different from coal presently being produced in the area.

III. CONCLUSION

The tract as applied for includes the bulk of potentially minable coal in the area. However, some additional lands may have mining potential and should be added to help eliminate a possible bypass situation or need for an additional application. The Castle Valley Ridge tract has limited competitive interest for the following reasons: (1) The tract reserves are relatively limited with less than 9 million tons of recoverable reserve; (2) Access to the coal other than through the existing operation does not appear feasible; (3) Interest in the tract in recent years has been limited to one company.

The tract is important to the applicant because it will increase reserves to the operation by 35%, reduce capital investment per ton for the mine by 27%, and provide for greater productivity for the mine life.

Tract Delineation Team

Date

James F. Kohler
James F. Kohler, Geologist
BLM, Utah State Office

Jan. 24, 1989

Terry McParland
Terry McParland, Geologist
BLM, Moab District Office

Jan. 27, 1989

Shannon Hoefler
Shannon Hoefler, Mining Engineer
BLM, Moab District Office

January 27, 1989

Max Nielson
Max Nielson, Economist
BLM, Utah State Office

Jan 24, 1989

Walter E. Novak
Walter Novak, Geologist
Manti-LaSal National Forest

FEB. 1, 1989

Appendix B - Public Involvement

~~Revised 3/29/89~~

Date: March 29, 1989

ADDRESS TO BE MERGED USING
A MAILING LIST SET UP AS
A MERGE DOCUMENT MERGE DOCUMENT
WILL BE A LIST OF INTERESTED PUBLICS
FOR THE CVR PROPOSED LEASE TRACT

The Bureau of Land Management and Forest Service will be evaluating an application by Cypress-Plateau Mining Corporation to lease Federal lands in Carbon and Emery Counties for coal development. The proposed lease tract, known as the Castle Valley Ridge Tract, lies adjacent to the north and west boundaries of Cypress-Plateau's existing Starpoint Mines Permit Area, as shown on the enclosed map. Cypress-Plateau's application states that they intend to mine the proposed lease using existing portal facilities associated with the Starpoint Mines.

The application will be processed under the Lease By Application procedure recently adopted by the Uinta-Southwestern Utah Coal Region. The proposed tract encompasses 1987.46 acres of Federal coal lands. The surface of the lease area is under Federal management administered by the USDA Forest Service, Manti-LaSal National Forest.

The subject lands have been determined to be suitable for further consideration for coal leasing under existing Bureau of Land Management and Forest Service Land Use Plans. The Bureau of Land Management and Forest Service will jointly evaluate the tract on a site-specific basis for leasing in accordance with the requirements of Federal Regulations 43 CFR 3400 and the National Environmental Policy Act of 1969 (NEPA). If offered for lease, the tract will be leased on a competitive basis.

Further information can be obtained at the Bureau of Land Management, Moab District Office in Moab, Utah, and the Manti-LaSal National Forest Supervisor's Office in Price, Utah.

Public comments will be accepted at the Manti-LaSal National Forest, Supervisor's Office, 599 West Price River Drive, Price, Utah 84501, until April 18, 1989.

Sincerely,

/s/ Ira W. Hatch

IRA W. HATCH
District Ranger

Enclosures
WNewak:tm

m01nSoutheastern Utah Assoc. of l Governments

ATTN: Bill Howell
P.O. Drawer 1106
Price, Utah 84501-0881
m02nBill:

m01nEmery County Commissioners
Emery County Courthouse
Castle Dale, Utah 84513
m02nSir:

m01nCarbon County Commissioners
Courthouse Building
Price, Utah 84501
m02nSir:

m01nDiv. of Wildlife Resources
ATTN: Larry Dalton
455 W. Railroad Ave.
Price, Utah 84501
m02nLarry:

m01nUtah Wilderness Association
Attn: Dick Carter
455 East 400 South, #306
Salt Lake City, Utah 84111
m02nDick:

m01nKay Jensen

Cleveland, Utah 84518
m02nKay:

m01nLee Lemmon
Box 1183
Huntington, Utah 84528
m02nLee:

m01nPrice Municipal Corp.
Attn: Art Lee Martinez, Mayor
P.O. Box 893
Price, Utah 84501
m02nArt:

m01nSlickrock Country Council
ATTN: Brent Griggs
Rt. 1, Box 144H
Price, Utah 84501
m02nBrent:

m01nDivision of Oil Gas & Mining
Attn: Ron Daniels
355 W. North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84180-1203
m02nRon:

m01nU.S. Fish & Wildlife Services
Attn: Robert Ruesink-State Supervisor
1745 W. 1700 S.

Salt Lake City, Utah 84104-5111

m02nRobert:

m01nHuntington Cleveland Irrigation

Attn: Varden Wilson

P.O. Box 327

Huntington, Utah 84528

m02nVarden

m01nPrice River Water Improvement Dist.

265 Fairgrounds Road

Price, Utah 84501

m02nSir:

m01nUtah State Division of Water Rights

Attn: Mark Page

P.O. Box 718

Price, Utah 84501

m02nMark:

m01nOffice of Surface Mining

Attn: Floyd McMullen

1020 15th Street

Denver, Colorado 80202

m02nFloyd: