Form 2800-14: (August 1985)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Issuing Office

Dixie Resource Area

RIGH	T-OF-WAY GRANT/TEN	PORARY USE PERMIT	Serial Manie	0-62308	
A (right-of-way) (pern	nit) is hereby granted pursuant to:	Δ.			
a. Title V of the 43 U.S.C. 176		ment Act of October 21, 1976 190	Stat. 2776;		
b. XX Section 28 of t	the Mineral Leasing Act of 1920.	as amended (30 U.S.C. 185):			c S
c. Other (describe	e) 💮				. 8. 5.
2. Nature of Interest:  a. By this instrument,	) the holder Mountail	n Fuel Supply Compar	ıy	rec	eives a
righto construct.	operate, maintain, and terminate, Federal land for MLA Rights-of/		peline		
	As described in Exh	ibit D, attached.			
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		50 73,	318	34.16	
	r permit area granted herein is _ acility, the facility contains	feet wide,	feet long and contain		ore or
c. This instrument shall	terminate on September	7,02018 30	years from its effective date u	inless, prior thereto, it is relinqu	uished.
d. This instrument XX	may I may not be renewed. If ren	ewed, the right-of-way or permit s	hall be subject to the regulations		al and
	^ 4	icer deems necessary to protect the		n, the provisions of this instru	iment,
to the extent applica	able, shall continue in effect and s	hall be binding on the holder. its so of the expiration, or prior terminal	diccessors, or assigns, until they		
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officer unless s	specifically exempted from such pay	holder agrees to pay the Bureau of La rment by regulation. Provided, howe tal value as determined by the applic	ver that the rental may be adjus	ited by the authorized officer, w	vhenever
and teasible, in  4. Terms and Condi  a. This grant or pe  b. Upon grant tei disposed of as  c. Each grant isse the end of the reviewed at an  d. The stipulation	rmination by the authorized officer provided in paragraph (4)(d) or as a paragraph (4)(d) or as a paragraph (5) by the authority of paragraph (6) by time deemed necessary by the authority of paragraph (7) by time deemed necessary by the authority of paragraph (8) by time deemed necessary by the authority of paragraph (8) by time deemed necessary by the authority of paragraph (8) by time deemed necessary by the authority of paragraph (8) by time deemed necessary by the authority of paragraph (8) by the authority of paragraph (9) by the authority	compliance with all applicable regulation all improvements shall be remove directed by the authorized officer.  Ingraph (Tital for a term of 20 years hereafter now to exceed 10 years. Provinced officer.	ons contained in Title 43 Code of d from the public lands within or more shall, at a minimum, hovided, however, that a right-o	Federal Regulations parts 2800 a  90 days, or other  be reviewed by the authorized of f-way or permit granted herein	nd 2880. erwise officer of may be
f. The holder sha	ll perform all operations in a good a	r any provision of this right-of-way gr nd workmanlike manner so as to ens	ne protection of the environment	t and the health and safety of the	e public.
Mt Fuel	(Signature of Holder)  President & CEO  (Title)	terms and conditions of this right-o	f-wal grant or permit.  (Signature of Au  Area Manag	ler (le)	Approved: Property 12 on the Common C
September	(Date)	GPO: 1985 O - 483-2		66876 BK 110	
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RIGHT-OF-WAY GRANT STIPLIATIONS MOUNTAIN FUEL SUPPLY PIPELINE U-62308 GENERAL Design standards, as furnished by Mountain Fuel Supply Company and included as Exhibit B are incorporated into and made a stipulation of this grant. These standards will be followed unless modified by any term, condition or stipulation of this right-of-way grant. Construction activities are authorized outside the right-of-way boundary, as specified on Exhibit C. Any additional needs shall be approved by the authorized officer prior to use. The construction access road from the Pintura freeway interchange northwest to the existing Pintura Seeding road shall be left as an access road and not reclaimed. The holder shall be liable for all injury, loss, or damage, including, but not limited to fire suppression costs, to the extent such injury or damage results from or is caused by the holder's use and occupancy of the area covered by the right-of-way grant, and provided further that the holder shall not be liable when such injury, loss, or damage results from the acts of the United States, or a third party. The pipeline right-of-way grant is subject to all valid existing rights at the time of the grant. Pipeline construction or associated activities will not be allowed to interfere with those rights, Mining claim markers, test holes, points of discovery, etc., will not be disturbed or destroyed if avoidable. If disturbance is unavoidable, 1.6 all markers, test holes, points of discovery, etc., will be re-established at their former location and to their former condition. Nothing in this grant shall be construed to imply permission to build or maintain any structure not specifically named on the face of this grant, or approved by the authorized officer in the form of a new grant or grant amendment. This right-of-way grant is issued on the condition that the holder has secured, or will secure, the consent of any person having valid claim to the land. 00566876 BK 1103

All stipulations in this right-of-way grant shall be completed to the satisfaction of the appropriate authorized of the appropriate authorized. 'Q≒xie Resource Area Frank Rowley Area Manager 225 N. Bluff St. George, Utah 847次) (801) 673-4654 1.10 The holder shall designate a representative for field operations who will be the sole field representative of the holder or the holder's contractors in dealing with the authorized officer or his delegate. Said representative shall be empowered on behalf of the holder and the holder's contractors to communicate with the authorized officer and to receive and comply with all directions, communications, and decisions of the authorized officer. The holder shall keep the authorized officer informed of any change in the name of the holder's contact representative for field operations during construction and rehabilitation of the nineline and accommunication of the nineline and accommunications. rehabilitation of the pipeline and associated facilities. The holder shall minimize disturbance to existing fences and other improvements on federal lands. When it is necessary to pass through a 1.11 fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. Stress panels or rock jacks will be constructed and installed according to standards approved by the authorized officer. Gates shall be installed during construction. These gates shall be closed at all times when not in Use. When construction has been completed, the authorized officer will identify which gates the holder will replace with a stationary section of fence, or permanent metal gate. All facilities damaged or disturbed by construction activities under this grant shall be repaired within 24 hours of when they are damaged or disturbed≿ Powerlines telephone lines, cables and other utilities which are paralleled or crossed by the pipeline right-of-way shall be protected from damage or disturbance. If accidental damage or disturbance occurs 1.13 to existing utilities, the holder shall be responsible for the immediate repair of any damaged or disturbed lines or cables. All damaged lines or cables shall be repaired to at least the same condition as existed prior to damage or disturbance. The holder shall be totally responsible for all costs associated with the repairs. No construction work may commence prior to the issuance of a Notice(s) to Proceed (NTP). This NTP will be issued for specific portions of the right-of-way as determined necessary by the authorized officer. The holder shall pack out or otherwise remove from Federal lands and waters all refuse resulting from operations under this grant, including waste materials, garbage, and rubbish of all kinds, and shall dispose such in an approved sanitary landfill. 00566876 BK1103 PGO 189 Harassment of livestock and wildlife by the holder or any of its contractors will not be allowed. State wildlife laws will be strictly followed.

# 1.17 Bonds, Performance

As a further guarantee of the faithful performance of the provisions of this right-of-way grant, the holder agrees to require their contractor to obtain a surety bond in the amount of one hundred thousand dollars (\$100,000). Should the sureties or the bonds delivered under this grant become unsatisfactory to the BLM, the holder shall, within thirty (30) days of demand, furnish a new bond with surety, solvent and satisfactory to the BLM. In lieu of surety bond, the holder may deposit into a Federal depository, as directed by the BLM, and maintain therein, cash in the amounts provided for above or negotiable securities of the United States having a market value at time of deposit of not less than the dollar amounts provided above.

The holder's surety bond will be released, or deposits in lieu of bond, will be returned thirty (30) days after certification by the BLM that terms and conditions, and stipulations under this grant have been satisfactory met, and upon furnishing by the holder of proof satisfactory to the BLM that all claims for labor and material on installations have been paid or released and satisfied. The holder agrees that all monies deposited under this grant may, upon failure on his part to fulfill all and singular the requirements herein set forth or made a part hereof, be retained by the United States to be applied to satisfy obligations assumed hereunder, without prejudice whatever to any rights and remedies of the United States.

Prior to undertaking additional construction or alteration work not provided for in the above terms and conditions or when the improvements are to be removed and the area restored, the holder shall deliver and maintain a surety bond in an amount set by the BLM, which amount shall not be in excess of the estimated loss which the Government would suffer upon default in performance of this work.

- 2.0 WILDFIRE PROTECTION
- 2.1 All vehicles, equipment, etc., will have adequate mufflers or spark arrestors.
- 2.2 Only electronic detonators small be used for blasting
- CLEARING STIPULATIONS AND MITIGATION MEASURES
- The proposed right of-way shall not be cleared of vegetation and the soil surface exposed unless it is not practical to traverse an area without first constructing a temporary foad. All areas which can be traversed without blading the construction line shall be traveled by driving over the existing vegetation.

- 3.2 The denuded linear effect created by grading and removing all surface vegetation shall be minimized by keeping grading and clearing to a minimum and not to exceed the specified width of the right-of-way.
- 3.3 Unless otherwise directed by the authorized officer, top soil removed along the right-of-way will be stripped and stockpiled separately for later use during rehabilitation. The top soil shall be stored in windrows along the right-of-way where it will be undisturbed and not covered nor mixed with other materials or soil until replaced along the right-of-way during rehabilitation. The holder will strip topsoil along the right-of-way to a depth not to exceed 6 inches, unless otherwise authorized by the authorized officer. To the extent possible, roots and stumps will be removed and excluded from the windrowed topsoil.
- In areas which must be cleared of vegetation, it shall be stockpiled and spread back over the right-of-way following redistribution of the topsoil and seeding. Wetland grass sod shall be maintained in a condition to be used in rehabilitation of the disturbed area.
- 4.0 EROSION CONTROL, REVEGETATION AND RESTORATION MEASURES
- 4.1 Large rock material removed from the right-of-way and/or trench will be placed back on the right-of-way in such a way as to blend in with the surroundings.
- 4.2 In the highly visible areas over-turned or exposed rocks with white coated surfaces shall be removed from the right-of way or turned over if required by the authorized officer.
- A green hydromulch shall be sprayed on those sections of the right-of-way visible from I-15. This should be done as soon as possible after the surface has been restored. Planting of small pinyon will also be required within these visible areas.
- In areas of continuous vegetation pattern which are visible from 1-15, the contrast will be minimized by feathering straight line clearings. This will be accomplished by overclearing in some locations, removing less width in other locations, and transplanting of small pinyon to simulate natural vegetative patterns.
- 4.5 Waterbars shall be constructed according to the following table unless therwise approved in writing by the authorized officer:

<u>Slope</u>		Spacing	(feet)
2-5%		100	)
6-10%		75	5
10% or Gr	eater>	50	) 💠

Waterbars shall be constructed within three days following refilting of the pipeline trench.

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- Appropriate measures shall be required along the pipeline right-of-way to prevent and control surface runoff and soft erosion. In areas where it is apparent that soils are highly erosive and/or slopes are 10% or greater, mulch shall be applied until seeding can be completed. It necessary, this mulch will be removed prior to application of seed. Surface runoff and erosion control measures to control and minimize on-site erosion and off-site sedimentation may include hay bale fences, mulching and netting, terracing, silt fences, and placement of erosion control mats.
- 4.7 Earth berms shall be eliminated from the edges of graded areas of the right-of-way.
- 4.8 All areas which are cleared of vegetation, or where vegetation is significantly disturbed or damaged, with the exception of the Purgatory Flat area and established roadways, will be reseded. The seed mixtures to be used are:

Dixie Resource Area

### Species

Lbs. of Pure Live Seed/Acre

From Washington County Line to Anderson Junction

Pubescent Wheatgrass Crested Wheatgrass Small Burnet Yellow Sweet Clover

3 0.5 1 7.5 Lbs/Acre

Below Anderson Junction

Small Burnet Yellow Sweet Clover Sand Dropseed

0.5 1 3 4.5 Lbs Acre

- 4.9 Seeding will occur in the fall, no earlier than October 1.
- 4.10 Ninety percent certified pure live seed shall be used where seeding is required. Labels will be furnished by the holder to the authorized officer.

Total

Tota]

Reseeding will be accomplished utilizing a range and drill in all areas which are not too excessive in slope or otherwise unreasonable terrain for a drill. In areas where the rangeland drill cannot be used, seed will be hand broadcast and then the seed will be covered with soil by hand raking or some other suitable method.

- In areas of particularly steep slopes or highly erosive areas, as determined by the authorized officer, special rehabilitation measures may be required by the authorized officer. In areas where equipment cannot be used, seedbed preparation, seeding, and raking the seed into the soil by hand may be required. Other special treatments such as mats, netting, tackifier, hydromulch, hydroseeding, fertilizing, etc., may be required as directed by the authorized officer.
- 4.13 The placing of adequate rip rap shall be required in areas where the proposed pipeline crosses existing drainages, if it is determined by the authorized officer to be needed to stabilize the disturbed channel, banks, or bottom.
- The holder will be required to establish an adequate vegetation cover on all disturbed areas based on the potential of the site. A minimum of two growing seasons is necessary before long-term establishment of vegetation can be properly evaluated. Subsequent reseedings, mulching etc., may be required if determined by the authorized officer to be necessary.
- 4.15 After reseeding, barriers shall be constructed to prevent off-road vehicle use of the right-of-way where specified by the authorized officer. If barriers do not effectively prevent travel, additional work shall be performed by the holder to accomplish this.
- 4.16 The holder will be responsible for controlling the establishment and spread of Scotch thistle, halogeton, and other undestrable and noxious weeds which occur as a result of operations under authority of this right-of-way grant.
- All road surfaces which are trenched for pipeline installation, will be restored to their former state and condition. Adequate compaction of the pipeline trench will be accomplished to prevent settling or subsidence. Disturbances to borrow ditches and road shoulders will be reshaped. All trenching and pipeline installation across roads and highways will be accomplished during daylight hours. No open trenches across road surfaces will be permitted overnight. The complete closure of roads to public use will be minimized. If the road provides access to a residence, alternative access will be provided at all times. At all times, appropriate signs, flagmen, etc., will be provided along the pipeline right-of-way to ensure the safety and protection of the general public.
- 4.18 After completion of initial construction activities, any subsequent maintenance activities on the right-of-way which causes surface disturbance, will be subject to rehabilitation as required by the right-of-way stipulations.
- 4.19 The holder shall repair and restore all areas along the right-of-way where subsidence and settling of the pipeline trench occurs.
- 4.20 Unless otherwise approved in writing by the authorized officer all cuts made in sidehills to accommodate pipeline construction will be reshaped back to original contours after the pipeline is installed.

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- 5.0 TRANSPORTATION
- 5.1 The holder shall be required to adequately control dust and equipment pollutant emission during construction of the pipeline.
- 5.2 Vehicular or machinery activity shall not be permitted in any areas off the right-of-way, except for existing roads.
- Use of other existing roads and trails outside the limits of the 50-foot right-of-way is permitted as long as the use does not result in resource damage or involve grading or improvement of the existing road or trail. If grading or improvement is required authorization will be obtained from the authorized officer prior to grading or improvement. Any damage resulting from this use will be adequately repaired.
- 6.0 FLAGGING
- 6.1 The holder shall stake and clearly mark the exterior limits of the pipeline right of-way. The stakes and markings shall be protected and maintained until completion of construction and cleanup.
- 7.0 CULTURAL RESOURCES
- 7.1 Cultural Site 42Ws 2284 shall be avoided by relocating the corridor 75 meters to the west.
- 7.2 There shall be no slope cuts in the vicinity of site 42Ws 959 to reduce potential impacts.
- The holder's personnel and contractors will not collect artifacts or otherwise disturb cultural resources in the vocinity of the pipeline right-of-way.
- 7.4 If, prior to or during excavation work, items of archaeological, paleontological, or historic value are reported or discovered, or an unknown deposit of such items is disturbed, the holder will immediately cease construction activities in the area so affected. Holder will then notify the authorized officer and will not resume excavation until written approval is given by the authorized officer.

If he deems it necessary or desirable, the authorized officer may require the holder to have performed recovery, excavation, and preservation of the site and its artifacts at the holder's expense. At the option of the authorized officer, this authorization may be terminated at no liability by the United States when such termination is deemed necessary or desirable to preserve or protect archaeological paleontological or historic sites and artifacts.

7.5 Should it be necessary to deviate from the authorized right-of-way, a cultural resource investigation will be conducted by the holder of to any disturbance. Construction work shall not proceed until approval is given by the authorized officer.

- 8.0 BLASTING
- 8.1 The holder shall exercise the utmost care in the use of explosives not to endanger life or property and shall comply with the requirements of the Federal Government.
- 8.2 The holder shall be responsible for any and all damages resulting from the use of explosives.
- 8.3 The holder shall furnish and erect special signs to warn the public of blasting operations. Such signs shall be placed and maintained so as to be clearly evident to the public during all critical periods of the blasting operations, and shall include a warning statement to have radio transmitters turned off.
- 8.4 No storage of explosives will be permitted on public lands.
- When using explosives, the holder shall adopt precautions which will prevent damage to landscape features and other surrounding objects. When directed by the authorized officer in charge, trees within an area designated to be cleared shall be left as a protective screen for surrounding vegetation during blasting operations. Trees so left shall be removed and disposed of after blasting has been completed. When necessary, and at any point of special danger, the holder shall use suitable mats or some other approved method to smother blasts.
- 9.0 MEALTH AND SAFETY
- The holder shall comply with the applicable Federal and State laws and regulations concerning the use of pesticides (ie., insecticides, herbicides, fungicide, rodenticides, and other similar substances) in all activities/operations under this Grant. The holder shall obtain from the authorized officer approval of a written plan prior to the use of such substances. The plan must provide the type and quantity of material to be used; the pest, insect fungus, etc., to be controlled; the method of application; the location of or storage and disposal of containers, and other information that the authorized officer may require. The plan should be submitted no later than December of any calendar year that covers the proposed activities for that fiscal year (ie., December 1, 1988, deadline for a fiscal year 1989 action). If a need for emergency use of pesticides is identified, the use must be approved by the authorized officer. The use of substances on or near the right-of-way shall be in accordance with the approved plan. A pesticide shall not be used if the Federal Government has prohibited its use. A pesticide shall be used only in accordance with its registered uses and within other limitations if the government has imposed limitations. Pesticides shall not be permanently stored on public lands.
- 9.2 The holder shall inform the appropriate authorized officer within 48 hours, of any accidental breaks or leaks in the pipeline which occurs on or adjacent to public lands.

- 9.3 In areas where the pipeline crosses drainages, it shall be buried at least five feet below the existing wash bottom to minimize scouring action during high run-off periods.
- 10.0 WATER QUALTTY
- Hydrostatic test water will not be obtained from or discharged on Federal lands. This grant confers no right to the use of water by the holder. All stipulations contained in the "Nationwide General Permit" for river crossings will be followed as applicable.
- 10.2 A Channel Alteration Permit shall be obtained from the State of Utah prior to ditching through perennial streams. A copy of this permit shall be furnished to the authorized officer prior to construction.
- Material removed from stream crossings will be stockpiled on the stream banks during construction to prevent excessive downstream sedimentation. Stream banks will be reinforced if necessary and vegetation restored to the satisfaction of the authorized officer.
- 10.4 Except for the Virgin River crossings, the area disturbed when crossing perennial streams shall be limited to 30 feet or less. Cutting of stream banks and slopes shall be minimized. Stream banks shall be restored to the original slope and configuration.
- 10.5 Crossings shall be perpendicular, where possible, to the stream; backfilling of trenches shall be undertaken slowly to minimize the agitation and sediment loading; and ensure adequate backfilling of trench.
- 10.6 Construction times implemented in stream channel crossings should be kept as short as possible. Upon installation and placement of the pipeline in the trench, the channel bed and bank will be restored immediately to Nowing construction.
- 10.7 No waste or byproduct shall be discharged into any water.
- 10.8 No chemicals, fuel, or lubricating oil storage areas will be permitted on public lands.
- 10.9 All used crankcase and any other oil will be collected in containers and disposed of in an authorized disposal facility.

NOISE

All vehicles, equipment, etc., will have adequate mufflers. Except for testing operations, all pipeline construction work should be confined to daylight hours in residential zones.

# EXHIBIT B

Company Proposed Design
Standards and Instructions of the Contractor

# Design Standards

It is not anticipated that significant amounts of oil or chemicals will be present on the job site (with the exception of vehicle crankcase oil). Any spills will be cleaned up, and removed in an approved container for disposal. A sterilizing agent will be used at above ground valve assembly sites.

All open trenches will have appropriate signs, barricades and warning lights. The contractor shall have the responsibility of protecting the public. Qualified flag persons will be utilized during construction along roadways. The contractor will contact all livestock owners to advise them when he will be working in specific areas. Existing fences will be maintained during construction as best possible. When it is necessary to cross a fence line, an acceptable gate will be installed at the opening and will be kept closed when not in actual uses when permanent access through the fence needs to be maintained, a cattle guard will be installed. Trenches will be kept open for the minimum amount of time necessary to complete the work.

No significant cuts and recontouring are proposed.

If blasting occurs near areas of human habitation or utilities, the blasting area will be matted. Prior to blasting, the area would be checked to insure no individuals are endangered. Blasting will not be permitted within 500 feet of ive springs, reservoirs or water wells without prior consent from the authorized officer.

In areas of continuous vegetation pattern, the contrast will be minimized by feathering straight line clearings. This will be accomplished by over-clearing in some locations and removing less width in other locations to simulate natural vegetative patterns.

Large trees removed will be cut to within six inches of ground level

If required, straw or mulch will be used to control surface erosion and promote land stabilization.

The contractor will be required to perform all work within the 50-foot right of way.

In the area where the route traverses public lands, construction access will be by existing trails and roads and along the pipeline eight-of-way. No improvements will be made to existing roads or trails except grading extremely rough or bumpy areas if required. It is not anticipated that we will be building new roads.

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During construction, access or vehicular traffic will be regulated to protect the public, wildlife and livestock from hazards associated with construction. After construction, the return to a natural environment implies free and open access. However, after reseeding, barriers will be constructed to prevent off-road vehicle use of the right-of-way where necessary.

Top soil or surface soil will be removed and stockpiled separately or public land and at the request of private property owners.

Signs and danger lights shall be placed 500 ft. from areas under construction. Flagmen will control traffic through construction zones on public highways.

After the pipeline has been certified for maximum allowable operating pressure and operation, the right-of way will be cleared of unsightly debris and restored to its original state as nearly as practicable.

The backfill shall be leveled so that the backfill crown, compared to the normal surface of the ground shall not exceed twelve (12") inches. The land will be returned to as near its original condition as possible. Any excessive spoil which cannot be distributed on the right of-way will be removed.

Revegetation success will be monitored and seeding repeated as necessary.

All ditches, fences, survey markers, etc. will be restored to the satisfaction of the owner or government agency involved.

A line marker will be placed and maintained as close as practical over each buried main at each crossing of a public road and railroad and whenever recessary to identify the location of the main to reduce the possibility of damage or interference.

The right-of-way will be creared of shrubs, stumps, brush and trees if required for construction. Blading will be minimized. Debris will be buried, spread, stacked or haused to designated areas at the discretion of the private land owners or BLM. Most rock will be reburied. Rock that is not reburied will be spread on the right-of-way to blend in with the surrounding area Minimum clearing is anticipated on private lands and along highway rights-of-way.

The main line would consist of 8 inch pipe. The lateral lines would consist of 4 inch pipe. The pipe would be coated with a protective nontoxic cover. It is proposed to use API 5L-X42 219 wall coated steel pipe. The design pressure would be 720 psi.

The pipeline would be buried so as to allow a minimum cover of 40 inches except where bedrock is encountered at a lesser depth. Where bedrock is found, the top of the pipe would be 24 inches below the surface of the bedrock. Where the pipe ine crosses dry washes the minimum would be 10 ft. as measured from the bed of the wash to the top of the pipe. This will be done to minimize scouring action during high run off periods. Where irrigation ditches or canals are crossed, the pipe would be buried at least 60 inches below the bottom of the structure. The width of the trench would vary between 24 and 18 inches depending upon the size of the pipe used.

River crossings would be made through the use of arched spans, suspension bridges hanging adjacent or under existing bridges or burying in the river becomes

Public highways would be crossed by boring under them when possible so as to not interrupt traffic flows.

BLM will be consulted for specific reseeding requirements.

Ninety percent pure live seed will be used on disturbed surfaces. The seed will be applied by drill seeding and/or surface broadcasting.

Above ground facilities will be painted with a finish that blends with the natural surroundings.

It is anticipated that material excavated from the pipeline trench will be reused as backfill. In extremely rocky conditions non-native material (sand or other bedding material, obtained from local sources) will be used for a distance of one foot above the pipe. The remaining native material, excluding any large rocks or unreasonable backfill, will be placed above this. Excess fill would be disposed of at an appropriate location. Only minor amounts are anticipated.

Hydrostatic test water will come from various municipal and private sources and, in one case, a river. In general, one section of pipeline will be filled with water. This water will then be pushed from section to section disposing of any extra water in nearby creeks or irrigation canals as required. Sources, discharge points and volumes are shown on the attached sheets. A 6-mile section between Ash Creek and Pintura will be tested with natural gas. No gas will be permitted to escape to the atmosphere except during required purping of air prior to the pressure test and at final tie-in.

The contractor will be requested to use a pad master type machine for backfilling the trench in all terrains where it can feasibly be used.

No fuel storage areas or construction camps are anticipated.

All Mountain Fuel supply vehicles and equipment used in the construction will be equipped with fire extinguishers. Long handled shovels will be available on the site. All welding or use of oxyacetylene torches will be done in areas free from flammable materials. Each welder will be provided with a helper to oversee the work and extinguish any sparks produced.

Rented portable sanitary facilities will be provided along the pipeline route and will be maintained in a manner consistent with Federal State and local ordinances by the companies supplying the facilities.

If a weed control problem develops and is brought to our attention, we will consult with local county weed and pest supervisors and use their recommendations of the most appropriate control measures.

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The pipeline will be designed, tested and operated under standards developed by the U.S. Department of Transportation (Title 49 of the Code of Federal Regulations, Part 192). These regulations also give requirements for long term protection measures (i.e., corrosion control, leak survey, pipeline markers).

The pipeline will be pressure tested to approximately 100% of minimum yield strength before natural gas is introduced into the line. Rectifier stations will provide long term cathodic protection and corrosion control.

The pipeline patrol will be scheduled quarterly with a leak survey being performed yearly.

Because of this, there is only a very remote chance of rupture. If a rupture were to occur, a source of ignition is also required to cause a fire. If individuals, livestock or wildlife were in the immediate vicinity of a rupture or fire, death or injury could occur. If a line rupture or fire occurs, valves will be closed to solate the segment of pipe. Employees qualified to do this will be permanently located within various area communities and will be in continuous contact with supervisory and engineering personnel through mobile radios. Remote pressure sensing by our Gas Control Department would identify the approximate rupture location.

If required, waterbars will be constructed in drainages paralleled to prevent excessive erosion. They will be constructed according to the following table:

<u>Grade</u>	Spacing (fee
2% - 5%	200
6% - 10%	75
< 10%	50 <

Material removed from stream crossings will be stockpiled on the banks during construction to prevent excessive downstream sedimentation. Stream banks will be reinforced if necessary and vegetation restored to simulate an undisturbed condition.

Pipeline markers will consist of a six foot post with sign as indicated on the two attached drawings. The statements "WARNING GAS PIPELINE", "CAUTION GAS PIPELINE", or "DANGER GAS PIPELINE" will be at least one inch high with a one-quarter inch stroke. Markers will be installed as close to practical over the pipeline at the following locations:

- . At each public road crossing.
- 2. At each active rational crossing.
- 3. At whatever points necessary to identify the pipeline location or reduce the possibility of damage or interference.
- 4. At all above ground locations in areas accessible to the public.
- 5. No further than one mile apart.

00566876 Bk1103 PG0200

## INSTRUCTIONS TO CONTRACTOR

As construction work is completed, the right-of way and surrounding ground shall be cleaned of all extra materials, rubbish and debris remaining from the work and the premises shall be left in a neat and presentable condition to the satisfaction of the governing agency, property owners and the company representative, as applicable.

In cases where shrubbery, trees or valuable growing timber are encountered in the right-of-way, and in any location where, in the opinion of the company, the use of ditching equipment may result in unnecessary damage or injury to property crossed by the right-of-way, the company may require the ditch to be excavated by hand.

Disposal of hydrostatic test water shall be in compliance with all permit stipulations. If required by governing authority the contractor shall filter, sample and test water as required. The test water shall be discharged from the pipeline in such manner as to not cause erosion of the ground surface.

Road crossings will be bored wherever practicable. If the road is open cut, the contractor shall take every precaution to maintain traffic flow through the area in a safe manner. The contractor shall compact the backfill to a minimum density of 96% proctor density and will replace the oil mat to at least match the depth of existing asphalt. If the asphalt depth exceeds four (4) inches, the contractor shall compact replacement asphalt in lifts having maximum depth of four (4) inches.

The contractor shall, if necessary, and after approval by the company representative, install substantial temporary bridge work over the full width of the road, of adequate strength and properly constructed to insure the safety of traffic.

The contractor shall tamp all streets, roads and driveways to ninety-six percent (96%) proctor density to a point eight (8) inches below the roads surface, and replace the balance with prepared asphalt or concrete conforming to the surface portion of said highway, street, road, or driveway as required by the controlling authorities. The contractor shall haul away any debris or spoil left on any portion of highway, street, road, or driveway. The contractor shall furnish and haul water to set the backfill, if directed by the company representative, to obtain the proper degree of compaction.

In streets and roadways where the ditch spoils are unsuitable for proper compaction, the contractor shall haul these spoils from the streets and haul in suitable compaction materials that will compact to 96 percent standard proctor density.

The backfill of all roads or highways mentioned above shall be maintained by the contractor until the final completion and acceptance of the pipeline.

The contractor shall provide and maintain in a safe condition temporary approaches and crossings of public roads, private roads, and entrances that may be opened for construction. The contractor shall comply with any city, county, state, or federal regulations as to placing danger signals and

flares. In the absence of such regulations, the contractor shall, at a minimum, place danger signals visible during construction to be located at crossing and boring excavations, and also 500 feet in both directions therefor. Danger signs must be readable at 100 feet and lights, lanterns or flares shall be kept burning from 30 minutes before sundown until 30 minutes after sunrise. The contractor shall take any and all other precautions as required by the governing agency or as prudently required under the conditions prevailing.

The construction of all highway or county road crossings shall comply with all the requirements of the highway department or agency under whose jurisdiction the permit was issued. Care shall be taken not to block traffic while such crossings are being installed. Appropriate signs and danger lights shall be installed at an approximate distance of 500 feet (or as required by the governing authority) from both sides of all road crossings while they are under construction, calling the public's attention to the fact that caution is necessary. Lights shall be maintained as signals at night at all points of danger. At major highway crossings, whenever heavy equipment moves on or across the highway, the pavement shall be protected from damage by suitable methods.

The company will procure easement permits for the highway crossings but the contractor shall perform no excavation on the highway or right-of-way without prior approval by the company representative. The contractor shall familiarize himself with the requirements and restrictions of all crossing permits and shall conduct the work in strict accordance with such requirements and restrictions, including notification of highway representatives. The contractor shall not cut into any highway or road surface, concrete, asphalt, gravel, oil, or any binding material without written permission from the authority under whose jurisdiction the permit is issued.

In all cases where it is necessary for a pipeline to cross public or private highways or roads, the contractor shall, after the pipe is laid and approved by the company representative, immediately backfill that portion of the ditch which crosses said highway or road so that the traveling public is not inconvenienced.

Where timber is encountered, the right-of-way shall be cleared to the right-of-way width stated in the right-of-way easement, subject to and in conformity with any special provisions applying to the tract of land involved and all rules of any federal, state or municipal authority that may apply.

Across cultivated fields, the contractor shall cut gaps or openings in the spoil bank so that precipitation will not cause water to back up and flood cultivated sections. The contractor shall exercise extreme care in keeping open and useful all drain ditches and water courses. The contractor shall carefully remove the top six (6) inches of top soil when crossing cultivated fields. Top soil shall be segregated from underlying soil for replacement after construction is completed.

In clearing the right-of-way and in the performance of the work, the contractor shall give due consideration to the interest and property of landowners and tenants wherever involved and shall carry out and perform its work in a manner which shall cause the minimum of inconvenience, injury or damage.

Solid rock so classified by the company representative shall be blasted and removed to a depth of six (6) inches below the finished ditch depth. The ditch so excavated shall then be padded to a minimum thickness of six (6) inches with earth or sand, whichever is available.

When blasting is necessary for ditch excavation, such blasting shall not be done until occupants of nearby buildings, stores, residences, places of business, or places of public gathering, and farmers have been notified by the contractor sufficiently in advance to protect personnel, property and livestock. The contractor shall use blasting mats on all shots to prevent the scattering of loose rock onto adjacent property as well as damage to nearby structures, telephone, telegraph or power lines. Care shall be exercised by the contractor to prevent damage to underground structures, such as cables, conduits, and pipelines, or to springs and other water sources.

All necessary permits for blasting shall be secured by the contractor

Blasting near adjacent structures must be controlled so that ground vibrations are within the safe particle velocity of rock being shot. The company reserves the right to supervise any and all blasting.

If blasting is required, the contractor shall submit a blasting plan, prepared by recognized authority on blasting, to the company prior to start of blasting. Blasting plan shall include such information as charge size, timing, sequence, depth of charge and spacing. No blasting shall be permitted without the company's prior approval. No blasting shall be permitted without the presence of the company's representative.

At the discretion of the company representative, ditch may be shallow through shot rock sections; but must have a minimum of twenty-four (24) inches cover over the pipe in all cases measured from the top of pipe to the top of eltch.

When authorized by the property owner, the contractor may cut through drainage tile with the ditching machine, except tile in locations where prohibited by the company. At any time such tile is cut, ditching machine operators shall carefully and immediately mark the location of such damaged tile in a prominent manner by a lath securely staked in the backfill and a bright yellow cloth attached thereto. The ends of the drain tile, cut by the contractor, shall be plugged with sacks to prevent the tile from becoming clogged with dirt or rock. Such markers shall be kept in place and shall not be removed except for the tile repair crew after the tile has been repaired and such repair has been inspected and approved by the landowner and the company representative.

The contractor shall repair all drainage tile at its own expense. Upon the completion of drainage tile repairs, the contractor shall backfill and compact any and all ditches opened or left open for tile repairs.

All stumps and roots encountered in the ditch shall be cut back far enough so that in no instance shall they come in contact with the pipe. No chips or parts of stumps and roots or other foreign material shall be left in the ditch.

When the ditch is excavated through lands where livestock is confined or through cultivated fields where it is desirable for the landowner or tenant to have a passageway across the ditch, the contractor shall provide safe, temporary bridges for crossing the ditch.

The contractor shall conduct operations so as not to hinder the water flow.

The gradient of the stream bed shall be maintained by not leaving spoil banks or excavated material or other objects in the stream bed.

Stream banks shall be restored to the original grade and density and cleared of any foreign objects.

The contractor shall not allow equipment or personnel to travel beyond right-of-way limits.

Before proceeding with the cutting of fences, installation of gates or gaps, or any other right of way, the contractor shall ascertain the staked location of the pipeline from the company's authorized representative and secure permission from the property owners.

The contractor shall furnish suitable materials for and shall install a suitable, substantial gate or gap to conform with the existing fence. Before cutting the fences to make these gates or gaps, the contractor shall brace and reinforce the fences for at least 50 feet on each side of the gap to be opened. Gates or gaps shall be so constructed that they can be securely closed and where necessary, the contractor shall furnish a watchman to maintain gates to prevent livestock from entering or leaving the property and also shall furnish watchmen in all other instances where required to do so by the company. The contractor shall use only such roads through farms, as are designated by property owners. Upon completion of construction of the line, all fences or roads shall be restored by the contractor to the satisfaction of the property owners and the company.

The contractor shall furnish equipment and labor to level out the backfill so that the backfill crown, compared to the normal surface of the ground, shall not exceed twelve (12) inches. Where designated by the company representative, openings shall be made in the backfill to prevent passage of surface water through the backfill crown. Land should be restored to as near its original condition as possible, including restoration of top soil on all condition as possible, including restoration of top soil on all condition as possible, including restoration of top soil on all condition as possible, including restoration of top soil on all condition as possible, including restoration of top soil on all condition as possible, including restoration of top soil on all condition as possible, including restoration of top soil on all conditions.

The contractor shall two-tone (construct a bi-level ther on very steep terrain) in the right-of-way if required.

Prior to blasting, the contractor shall exhaust all other methods of excavation.

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Rock sections shall be construed to mean solid rock in its original formation which cannot be removed by ditching machines, backhoe, clamshell, rock plow, or other mechanical means, but must be removed only by drilling and blasting.

In cases where rock or other undesirable material is encountered, the ditch shall be bedded with one (1) inch clay or sand material furnished and installed by the contractor. Bedding shall be continuous and a minimum of six (6) inches below the pipeline. Bedding shall be approved by the company representative.

When the company allows the use of polyurethane foam for bedding in lieu of soil bedding, foam shall be furnished and installed by the contractor continuously along the ditch a minimum of six (6) inches under the pipe. All foam bedding shall be approved by the company representative.

unless otherwise authorized by the company representatives, machine excavation shall not be performed closer than five (5) feet from any under ground structures or utility lines encountered in the right-of-way. When it is required to expose an existing pressured pipeline for tie-ins or other work machine excavation shall maintain a minimum clearance of five (5) feet from the existing line.

The contractor shall build terraces in those locations where washes may be caused by water following equipment tracks or other breaks of any nature in the surface of the soil. (Terraces shall have fall not to exceed one foot in fifty feet, and shall be feathered at each end.)

Particular care shall be exercised in order that all drain ditches shall be maintained and left unobstructed to prevent the backing up of water against the spoil bank or backfill, thereby flooding cultivated areas or diverting said water.

To expedite and adjust right-of-way damage claims quickly and economically, the contractor shall, at all times, keep the completed clean up, including fence replacement drainage, and terraces, to within two miles of the completed backfill.

Where the work interferes with farming operations, the contractor, after completing the backfill as above specified, shall furnish equipment and labor to level out and compact the backfill so the difference in elevation between the top of such backfill and the normal surface of the ground shall not exceed six (6) inches. Openings shall be made in the backfill to permit passage of surface water through the backfill. Where necessary, the right-of-way shall be loosened by the use of a chisel or other suitable equipment. In farmland and irrigated pasture, all exposed rock shall be hauled from the right-of-way and dumped in a spot designated by the company representative and/or landowner.







