

Document Information Form

Mine Number: C1007/006

File Name: Incoming

To: DOGM

From:

Person N/A

Company STATE OF UTAH.

Date Sent: N/A

Explanation:

Bond.

cc:

File in: C1007, 006, Incoming

- Refer to:
- Confidential
 - Shelf
 - Expandable

Date _____ For additional information

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116

THE MINED LANDS RECLAMATION ACT

BOND

Star Point Mine - Plateau
Mining Company,
a Subsidiary

KNOW ALL MEN BY THESE PRESENCE, that the undersigned Mining Co.
of Getty Oil Company as principal, and Seaboard Surety Company as
surety, are held and firmly bound unto the State of Utah, Division of Oil, Gas,
and Mining, in the penal sum of Two Million Three Hundred Forty Thousand
Eighty Two Dollars & No/100 dollars (\$2,340,082.00)
for the payment of which sum, will and truly be made, we hereby jointly and
severally bind ourselves, our heirs, administrators, executors, successors, and
assigns.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH that whereas the above
named principal did on the 20th day of February 19 81, file with the
Division of Oil, Gas, and Mining a "Notice of Intention to Commence Mining
Operations" and a "Mining and Reclamation Plan", to secure authorization to en-
gage in mining operations in the State of Utah, under the terms and provisions
of the Mined Land Reclamation Act; that in said Notice the principal estimated
that approx. 300 acres of land will be affected by mining. Said lands ^{included in the} de- lands
scribed as follows in Exhibit "A" attached hereto.

NOW, if the said principal shall satisfactorily reclaim the above men-
tioned lands affected by mining by said principal in accordance with the Mining
and Reclamation Plan and shall faithfully perform all requirements of the Mined
Land Reclamation Act, and comply with the Rules and Regulations adopted in ac-
cordance therewith, then this obligation shall be void; otherwise it shall re-
main in full force and effect until the reclamation is completed as outlined in
the approved Mining and Reclamation Plan.

If the said approved plan provides for reclamation of the land affected
on a piecemeal or cyclic basis, and said land is reclaimed in accordance with
such plan, then this bond may be reduced periodically.

In the converse, if the said plan provides for a gradual increase in
the area of the land affected or increased reclamation work, then this bond may
accordingly be increased with the written approval of the surety company.

NOTE: Where one signs by virtue of Power of Attorney for a surety
company, such Power of Attorney must be filed with this bond. If the principal
is a corporation, the bond shall be executed by its duly authorized officers with
the seal of the corporation affixed. Star Point Mine - Plateau Mining Company

Date: January 19, 1982

By: [Signature] Principal (Company)
on

Date: January 19, 1982

File in:
 Confidential
 Shelf
 Expandable
Refer to Record No. 0069 Date
In C/ 007, 006, Incoming
For additional information tion

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116

THE MINED LANDS RECLAMATION ACT

BOND

Star Point Mine - Plateau
Mining Company,
a Subsidiary

KNOW ALL MEN BY THESE PRESENCE, that the undersigned Star Point Mine - Plateau Mining Company of Getty Oil Company as principal, and Seaboard Surety Company as surety, are held and firmly bound unto the State of Utah, Division of Oil, Gas, and Mining, in the penal sum of Two Million Three Hundred Forty Thousand Eighty Two Dollars & No/100 dollars (\$2,340,082.00) for the payment of which sum, will and truly be made, we hereby jointly and severally bind ourselves, our heirs, administrators, executors, successors, and assigns.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH that whereas the above named principal did on the 20th day of February 19 81, file with the Division of Oil, Gas, and Mining a "Notice of Intention to Commence Mining Operations" and a "Mining and Reclamation Plan", to secure authorization to engage in mining operations in the State of Utah, under the terms and provisions of the Mined Land Reclamation Act; that in said Notice the principal estimated that approx. 300 acres of land will be affected by mining. Said lands ^{included in the} de- lands scribed as follows in Exhibit "A" attached hereto.

NOW, if the said principal shall satisfactorily reclaim the above mentioned lands affected by mining by said principal in accordance with the Mining and Reclamation Plan and shall faithfully perform all requirements of the Mined Land Reclamation Act, and comply with the Rules and Regulations adopted in accordance therewith, then this obligation shall be void; otherwise it shall remain in full force and effect until the reclamation is completed as outlined in the approved Mining and Reclamation Plan.

If the said approved plan provides for reclamation of the land affected on a piecemeal or cyclic basis, and said land is reclaimed in accordance with such plan, then this bond may be reduced periodically.

In the converse, if the said plan provides for a gradual increase in the area of the land affected or increased reclamation work, then this bond may accordingly be increased with the written approval of the surety company.

NOTE: Where one signs by virtue of Power of Attorney for a surety company, such Power of Attorney must be filed with this bond. If the principal is a corporation, the bond shall be executed by its duly authorized officers with the seal of the corporation affixed. Star Point Mine - Plateau Mining Company

Date: January 19, 1982

Principal (Company)
By: H.E. Wendt
Company Official - position
H.E. Wendt, President
Seaboard Surety Company

Date: January 19, 1982

Surety (Company)
By: Katherine R. Kemp
Official of Surety - Position
K.R. Kemp, Attorney-In-Fact

EXHIBIT "A"

Federal Coal Lease No. U 13097 issued May 1, 1974

Salt Lake Meridian

T 15S, R 7E, Sec. 14S-1/2; Sec. 23 all;

Sec. 25 W-1/2 NW-1/4; Sec. 26 N-1/2

Federal Coal Lease SL 031286 issued September 4, 1923.

Salt Lake Meridian

T 15 S, R 7E, Sec. 1 S-1/2; Sec. 12, all; Sec. 13
N-1/2

T 15 S, R 8 E, Sec. 7 W-1/2; Sec. 8 SW-1/4 NW-1/4

Federal Coal Lease U 7949 issued September 1, 1970.

Salt Lake Meridian

T 15 S, R 8 E, Sec. 17 S-1/2 NE-1/4, SE-1/4; Sec. 20
NE-1/4; Sec. 21 E-1/2 NW-1/4; Sec. 8 SE-1/4 SE-1/4

State of Utah Coal Lease 22729, issued March 1965.

Salt Lake Meridian

T 15 S, R 8 E, Sec. 16, S-1/2 NW-1/4; S-1/2

Federal Coal Lease U-37045, issued April 1, 1980.

Salt Lake Meridian

T 15 S, R 8 E, Sec. 5, Lots 4, 5, 12, NW-1/4SW-1/4;

Sec. 6, Lots 2, 3, 6, 7, 9, 11, 14, E-1/2, SW-1/4,

SE-1/4, Sec. 7, NE-1/4 NE-1/4; Sec. 8, NW-1/4NW-1/4.

State of Utah Special Use Lease Agreement No. 288, issued November 1, 1972.

Salt Lake Meridian

T 15 S, R 8 E, Sec. 16 all.

State of Utah Notice of Intention to Commence Mining No.

ACT/007/006

Right of Way Description, Exhibit R.

N-1/2 NW 1/4 NW-1/4 NE-1/4, SW-1/4 NW 1/4 NW 1/4 NE-1/4,

N-1/2 NE-1/4 NW-1/4 NW-1/4, of SE-1/4 NE-1/4 NW-1/4

NW-1/4, North 800 feet NE-1/4 NW-1/4, Sec. 15, T 15 S, R 8 E,

Salt Lake Base and Meridian.

Rider to Bond

No. 915701

It is hereby agreed and understood that the Obligee under this bond is amended to read as follows:

State of Utah, Division of Oil, Gas and Mining or
U.S. Department of Interior, Office of Surface Mining.

All other terms and conditions of this bond are unchanged.

Star Point Mine - Plateau Mining Company

Dated:

January 19, 1982

Principal

By

H.E. Wendt
H.E. Wendt, President

Seaboard Surety Company

Surety

By

X. R. Kemp
X. R. Kemp, Attorney-In-Fact

It is hereby understood and agreed that the coverage under Bond No. 915701 is extended to the following:

1. The amount of the performance bond may be adjusted by the Division of Oil, Gas, and Mining pursuant to UMC Part 805. The Division shall notify the principal of any proposed bond adjustment 30 days prior to the effective date of the adjustment. The surety upon receipt of notice of adjustment from the principal shall issue an endorsement to this bond to adjust the aggregate amount of the bond to reflect the adjustment. The Division shall provide the principal and the surety with an opportunity for an informal conference on the amount.
2. The performance bond shall not be cancellable by the surety except as provided by UMC 806.12(e) (1). However, the surety bond coverage for permitted lands not disturbed may be cancelled with the consent of the Division; provided, the surety gives at least sixty days' notice to both the permittee and the Division of the intent to cancel prior to cancellation. Such notice shall be by certified mail and shall not be effective until received by both the permittee and the Division. Cancellation shall not be effective for lands subject to bond coverage which are disturbed after receipt of notice, but prior to approval by the Division as provided by UMC 806.12(e) (1).
3. The period of liability of the performance bond shall commence with the issuance of the permit and extend until all reclamation, restoration, and abatement work under the provisions of the permit have been completed, and the bond released in accordance with UMC Part 807 or replaced in accordance with UMC 801.13(b). Continuous bond coverage shall be provided by the surety and the bond shall be conditioned to extend, replace, or pay the full amount of the bond 120 days prior to the expiration of the bond term pursuant to UMC 801.13(b).
4. The performance bond shall be conditioned upon compliance with all the requirements of State and Federal law.

This endorsement is effective on the First day of February, 1982. Nothing herein contained shall be held to vary, alter, waive, or extend any of the terms, conditions, agreements, or limitations of the attached bond other than as above state.

Attached to and forming a part of Bond No. 915701.

Dated:

February 1, 1982

Star Point Mine - Plateau Mining Company,

By *H. E. Wendt* Principal
H. E. Wendt, President

Seaboard Surety Company,

By *Katherine R. Kemp* Surety
Katherine R. Kemp, Attorney-In-Fact

SEABOARD SURETY COMPANY

HOME OFFICE: NEW YORK, N. Y.

RIDER No. 3

To be attached to and form a part of Bond No. 915701 in the amount of \$ 2,340,082.00 (Two Million Three Hundred Forty Thousand Eighty Two Dollars and No/100) issued by SEABOARD SURETY COMPANY, Surety on behalf of Star Point Mine - Plateau Mining Company /a Subsidiary of GETTY MINING COMPANY, Principal in favor of State of Utah, Division of Oil, Gas and Mining, Obligee. or U.S. Department of Interior, Office of Surface Mining

It is understood and agreed that the bond described above is hereby modified so as to state the name of the Principal therein as

Plateau Company, DBA Plateau Leasing Company,
in the State of Utah.

It is further expressly understood and agreed that the aggregate liability of the Surety under said bond shall not exceed the amount stated above.

Nothing herein contained shall be held to vary, alter, waive or extend any of the terms, agreements, conditions, or limitations of the above mentioned bond other than as above stated.

This rider shall become effective as of the 26th day of August, 1982.

Signed, sealed and dated this 30th day of December, 1982.

PLATEAU COMPANY, DBA
PLATEAU LEASING COMPANY in the
State of Utah
By *John A. Nichols*
Vice President

SEABOARD SURETY COMPANY
(Surety)
By *Katherine R. Kemp*
Katherine R. Kemp Attorney-In-Fact

STATE OF California }
COUNTY OF Los Angeles } ss.:

On this 30th day of December, 1982, before me personally came

Katherine R. Kemp

to me known to be an Attorney-in-Fact of SEABOARD SURETY COMPANY, the corporation described in the within instrument, and he acknowledged that he executed the within instrument as the act of the said SEABOARD SURETY COMPANY in accordance with authority duly conferred upon him by said Company.



OFFICIAL SEAL
HELEN VETOYANIS
NOTARY PUBLIC-CALIFORNIA
LOS ANGELES COUNTY

My Commission Expires Jan. 10, 1988

Helen Vetojanis
Notary Public.

SPECIAL STIPULATION 6-14-82-4-LK

Response

1.

INTRODUCTION

The Topsoil Reference Area was inspected and flagged under the supervision of Division personnel on June 8, 1982. It was subsequently sampled on July 7, 1982 and the report submitted to the Division on August 18, 1982 as required under Stipulation 6-14-82-4(LK). The following description, methodology, and results for the Topsoil Reference Area is designed to clarify the information submitted on August 18, 1982.

METHODS

The Topsoil Reference Area is representative of the pinyon-juniper plant community found in the area of the mining operation. It was divided into east and west aspects for sampling purposes. Field data was collected on plant cover and woody plant density from randomly placed 50 meter transects. Cover data was estimated from a 10 point frame positioned every 5 meters along the transect. A total of 100 hits were recorded for each transect. Woody plant density was determined by counting the total number of woody plant for each species occurring within one meter of the 50 meter tape thus resulting in a 2 x 50 meter belt transect. The average plant cover per transect and the total number of woody plants rooted within the 2 x 50 meter belt transect were used a one datum for determining sampling adequacy. Sampling for both cover and density was performed to within 10% of the true mean with an 80% statistical confidence. The statistical level of sampling was verified by applying the following formula as presented on page 5 of the Vegetation Information Guidelines prepared by the Division.

$$Nm = \left(\frac{(\text{Std. Dev.} \times t\text{-tab})}{(.10 \times \text{Mean})} \right)^2$$

RESULTS

A review of the field and summary sheets presented in the August 18, 1982 submission revealed discrepancies between them and the results presented in the narrative. Corrections were made by recalculating all of the data beginning with the field sheets and generating new summaries and statistical analysis. The results are presented in the attached Tables 1 through 4. A new species list is presented in Table 5.

A vegetation map is attached showing the locations of established reference areas. (Map 2)

A summary of the vegetation data and the statistical analysis is as follows:

<u>PARAMETER</u>	<u>EAST ASPECT</u>	<u>WEST ASPECT</u>
<u>Cover (%)</u>		
Mean	32.53	12.83
Std. Dev.	9.152	3.521
Nmin	14	13
N	17	23
<u>Woody Plant Density (S1/100m²)</u>		
Mean	60.00	24.36
Std. Dev.	15.519	5.692
Nmin	11	9
N	20	14
\$/acre	2.428	986

TABLE 1
PERCENT COVER
TOPSOIL REFERENCE AREA, EAST ASPECT

	Transects														
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
<u>Grasses</u>															
Agtr	1	0	1	0	4	1	0	5	3	4	5	0	5	0	6
Elsa	3	13	2	0	10	1	22	25	3	20	20	23	14	11	15
Kocr	0	1	0	15	0	6	0	0	0	1	1	0	0	0	0
Orhy	1	0	0	2	0	4	0	0	2	0	0	0	0	0	0
SUB-TOTAL	5	14	3	17	14	12	22	30	8	25	26	23	19	11	21
<u>Forbs</u>															
Asco	0	3	0	3	3	0	3	0	2	4	15	6	0	2	6
Eriog	1	0	5	0	0	0	0	0	0	3	0	1	0	0	0
Grsq	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
SUB-TOTAL	1	3	5	3	3	0	3	0	2	8	15	7	0	2	6
<u>Shrubs</u>															
Amal	5	12	0	0	0	0	1	5	0	0	0	0	0	2	0
Artr	0	2	0	9	7	4	3	0	0	0	0	9	2	4	3
Cemo	4	0	9	1	0	0	0	0	3	0	0	0	0	7	0
Chvi	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0
Pied	8	3	6	2	0	0	2	2	7	0	0	0	0	5	0
Phru	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Syor	0	7	0	1	0	0	15	9	0	0	0	0	0	0	5
Yuwh	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0
SUB-TOTAL	18	24	15	13	7	10	21	16	10	1	0	9	2	18	8
TOTAL	24	41	23	33	24	22	46	46	20	34	41	39	21	31	35

Mean = 32.52941

N min = 14

Std. Dev. = 9.152306

N = 17

TABLE 1
 PERCENT COVER
 TOPSOIL REFERENCE AREA, EAST ASPECT

	Transects				
	(16)	(17)	TOTAL	AVERAGE	COMP.
<u>Grasses</u>					
Agtr	12	7	54	3.18	9.76
Elsa	20	10	212	12.47	38.35
Kocr	2	2	28	1.65	5.06
Orhy	1	0	10	.59	1.81
SUB-TOTAL	35	19	304	17.88	54.97
<u>Forbs</u>					
Asco	3	5	55	3.24	9.95
Eriog	0	0	10	.59	1.81
Grsq	0	0	1	.06	.18
SUB-TOTAL	3	5	66	3.88	11.93
<u>Shrubs</u>					
Amal	0	0	25	1.47	4.52
Artr	2	4	49	2.88	8.86
Cemo	2	0	26	1.53	4.70
Chvi	1	0	4	.24	.72
Pied	1	0	36	2.12	6.51
Phru	0	1	2	.12	.36
Syor	0	0	37	2.18	6.69
Yuwh	0	0	4	.24	.72
SUB-TOTAL	6	5	183	10.76	33.09
TOTAL	44	29	553	32.53	100.00

TABLE 2
 WOODY PLANT DENSITY
 TOPSOIL REFERENCE AREA, EAST ASPECT
 July 7, 1982

	Transects (stems/100m ²)														
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Amal	1	13	5	4	4	2	8	2	10	8	3	4	10	4	4
Arno	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Artr	9	50	47	46	33	17	33	21	17	12	31	37	50	31	40
Cemo	8	12	0	2	0	7	1	11	1	2	2	7	3	15	5
Chvi	0	3	6	15	1	5	2	0	1	6	0	1	1	0	1
Eriog	16	2	0	0	0	1	0	4	0	6	3	3	0	2	2
Pied	0	2	5	12	4	2	4	8	0	2	3	1	4	3	25
Syor	0	0	0	3	0	8	38	0	27	6	13	8	1	5	1
Juos	0	0	0	0	0	0	1	0	1	0	0	1	1	1	0
Chna	0	0	0	0	0	0	2	0	0	0	7	0	0	0	1
Prvi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	39	82	63	82	42	42	59	46	57	42	62	62	70	61	79

Mean = 60

Std. Dev. = 15.51909

Nmin = 11

N = 20

TABLE 2
 WOODY PLANT DENSITY
 TOPSOIL REFERENCE AREA, EAST ASPECT
 July 7, 1982

	Transects (stems/100m ²)							
	(16)	(17)	(18)	(19)	(20)	TOTAL	AVERAGE	COMP.
Amal	4	6	1	8	0	101	5.05	8.42
Arno	0	0	1	0	0	6	.30	.50
Artr	42	18	0	35	23	592	29.60	49.33
Cemo	4	12	12	0	0	104	5.20	8.67
Chvi	1	1	1	2	2	49	2.45	4.08
Erigo	2	18	1	3	0	80	4.00	6.67
Pied	1	4	4	4	5	93	4.65	7.75
Syor	14	1	1	8	20	154	7.70	12.83
Juos	2	0	0	2	1	10	.50	.83
Chna	0	0	0	0	0	10	.50	.83
Prvi	0	1	0	0	0	1	.05	.08
TOTAL	70	61	38	62	51	1,200	60.00	100.00

TABLE 3
 PERCENT COVER
 TOPSOIL REFERENCE AREA, WEST ASPECT

	Transects														
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
<u>Grasses</u>															
Agtr	6	2	4	6	0	1	2	2	1	0	0	1	1	3	0
Elsa	1	4	6	5	7	5	6	8	2	6	7	0	4	11	3
Kocr	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orhy	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0
SUB-TOTAL	7	6	10	11	7	6	8	10	3	8	7	1	7	14	3
<u>Forbs</u>															
Astra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asco	4	0	0	0	1	4	0	0	0	0	0	0	0	0	0
Amal	0	7	0	0	4	0	0	0	0	0	4	0	0	0	0
SUB-TOTAL	4	7	0	0	5	4	0	0	0	0	4	0	0	0	0
<u>Shrubs</u>															
Artr	0	1	2	0	0	5	6	5	0	0	0	3	0	0	6
Cemo	6	0	0	0	0	1	0	0	6	0	0	3	9	0	2
Eriog	0	0	4	4	2	0	0	0	0	0	0	0	2	0	0
Pied	0	0	0	2	0	0	0	3	4	5	0	0	0	0	0
Syor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yuwh	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
SUB-TOTAL	6	2	6	6	2	6	6	8	10	5	0	7	11	0	8
TOTAL	17	15	16	17	14	16	14	18	13	13	11	8	18	14	11

Mean = 12.82609

Std. Dev. = 3.524617

Nmin = 13

N = 23

TABLE 3

PERCENT COVER

TOPSOIL REFERENCE AREA, WEST ASPECT

	Transects								TOTAL	AVERAGE	COMP.
	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)			
<u>Grasses</u>											
Agtr	0	2	0	2	2	0	1	0	36	1.57	12.20
Elsa	2	5	3	2	6	10	5	0	108	4.70	36.61
Kocr	0	0	0	2	0	0	0	1	3	.13	1.02
Orhy	0	0	0	0	0	0	0	3	7	.30	2.37
SUB-TOTAL	2	7	3	6	8	10	6	4	154	6.70	52.20
<u>Forbs</u>											
Astra	0	0	0	1	0	0	0	0	1	.04	.34
Asco	0	4	0	0	0	0	0	0	13	.57	4.41
Amal	0	0	0	0	0	0	2	5	22	.96	7.46
SUB-TOTAL	0	4	0	1	0	0	2	5	36	1.57	12.20
<u>Shrubs</u>											
Artr	0	4	0	5	0	0	0	0	37	1.61	12.54
Cemo	3	0	3	0	0	0	4	0	37	1.61	12.54
Eriog	1	0	0	0	0	0	0	1	14	.61	4.75
Pied	1	0	0	0	0	0	0	0	15	.65	5.08
Syor	0	0	0	0	0	0	0	0	0	.00	.00
Yuwh	0	0	0	0	0	0	0	0	2	.09	.68
SUB-TOTAL	5	4	3	5	0	0	4	1	105	4.57	35.59
TOTAL	7	15	6	12	8	10	12	10	295	12.83	100.00

TABLE 4

WOODY PLANT DENSITY
 TOPSOIL REFERENCE AREA, WEST ASPECT

July 7, 1982

	Transects (stems/100m ²)													
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Amal	2	1	0	0	8	2	4	1	3	1	1	0	3	0
Artr	8	6	1	0	3	11	2	10	8	1	2	21	1	7
Cemo	12	10	7	1	6	6	2	10	5	3	3	4	12	5
Chna	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Eriog	4	0	4	21	4	4	6	8	4	12	9	3	3	4
Juos	0	0	1	0	1	0	0	0	0	0	0	5	0	0
Pied	3	4	3	2	5	3	5	4	4	2	3	1	7	2
Syor	1	1	0	0	2	1	0	0	0	0	1	0	0	0
TOTAL	30	22	16	24	29	27	19	33	24	19	19	34	26	19

Mean = 24.35714

Std. Dev. = 5.692196

Nmin = 9

N = 14

TABLE 4
 WOODY PLANT DENSITY
 TOPSOIL REFERENCE AREA, WEST ASPECT
 July 7, 1982

Transects (stems/100m ²)			
	TOTAL	AVERAGE	COMP.
Amal	26	1.86	7.62
Artr	81	5.79	23.75
Cemo	86	6.14	25.22
Chna	1	.07	.29
Eriog	86	6.14	25.22
Juos	7	.50	2.05
Pied	48	3.43	14.08
Syor	6	.43	1.76
TOTAL	341	24.36	100.00

TABLE 5

PLANT SPECIES IDENTIFIED ON TOPSOIL REFERENCE AREA

<u>PLANT SYMBOL</u>	<u>SCIENTIFIC NAME</u>	<u>COMMON NAME</u>
<u>Grasses</u>		
Agtr	Agropyron trachycaulum	slender wheatgrass
Elsa	Elymus salina	salina wildrye
Kocr	Koaleria cristata	Junegrass
Orhy	Oryzopsis hymenoides	Indian ricegrass
<u>Forbs</u>		
Asco	Astragalus convallarius	narrowleaf vetch
Astra	Astragalus spp.	locoweed
Eriog	Eriogonum spp.	buckwheat
Grsq	Grindelia squarrosa	gunweed
<u>Shrubs</u>		
Amal	Amelanchier alnifolia	serviceberry
Arno	Artemisia nova	black sagebrush
Artr	Artemisia tridentata	sagebrush
Cemo	Cercocarpus montanus	true mountain mahogany
Chna	Chrysothamnus nauseosus	rubber rabbitbrush
Chvi	Chrysothamnus viscidiflorus	green rabbitbrush
Eriog	Eriogonum sp.	buckwheat
Juos	Juniperus osteosperma	Utah juniper
Pied	Pinus edulis	pinyon pine
Prvi	Prunus virginiana	chokecherry
Syor	Symphoricarpos oreophilus	snowberry
Yuwh	Yucca harrimaniae	yucca

SPECIAL STIPULATION 6-14-82-4LK

Response

2. Field data was collected and originally analyzed under the supervision of Dave McMIndes, Range Scientist with Getty Oil Company, Environmental Services Group, Coal Department. The field crew was made up of temporary staff members employed for the summer field season by Getty Oil Company. Their names and professional status are as follows:

<u>NAME</u>	<u>TITLE</u>	<u>DEGREE</u>	<u>YEARS FIELD EXPERIENCE</u>
Dave McMIndes	Range Scientist	BS Range Science	5
Claire Semmer	Range Technician	BS Botany	4
Carol Taylor	Range Technician	BS Range Science	2
Connie Roberts	Range Technician	Senior, Range Science	1
Brenda Becker	Range Technician	Senior, Wildlife Mgmt.	1
Sue Kalso	Range Technician	BS Wildlife Management	2
Kenneth Carlson	Range Technician	MS Soil Science	3
Larry Germain	Range Technician	MS Range Science	4
Tod Zechiel	Range Technician	Junior, Range Science	3
Steve Price	Range Technician	BS Biology	1
Becky Gillan	Range Technician	Senior, Range Science	2

3. A map showing the reference area is included as Map 2.
4. Plant species identified on the Topsoil Reference Area are listed on Table 5.
5. The Soil Conservation Service (SCS) has provided a new letter giving productivity for east and southwest facing slopes; this letter is included as Exhibit B.

EXHIBIT "A"

VEGETATION-TOPSOIL TEST PLOTS

REFUSE PILE

SYNOPSIS OF IMPLEMENTATION

1. Topsoil and subsoil were dumped at the top of the slope and spread downward by a crawler tractor. The surface was left with cleat marks from the crawler tracks - horizontal direction approximately 2.5 inches deep. This aids in seed penetration and moisture retention. Refer to Map 1 for plot layout.
2. The seed mix shown on Table 1 (attached) was applied to the surface by hydromulch sprayer.
3. Mulch (Conwed 2000), Tackifier (Terratack) and 16-16-8 fertilizer were applied at the rates shown on Table 2.

EXHIBIT A

TABLE 1

VEGETATION-TOPSOIL TEST PLOTS

REFUSE PILE

SEED MIX

POUNDS PLS/ACRE

GRASSES

Slender Wheatgrass - <u>Agropyron trachycaulum</u>	3
Western Wheatgrass - <u>A. smithii</u>	3
Tall Fescue - <u>Festuca Arundinaceae</u>	2
Great Basin Wildrye - <u>Elymus cinereus</u>	3
Blue Bunch Wheatgrass - <u>A. spicatum</u>	3

FORBS

Scarlet Globemallow - <u>Sphaeralcea grossulariaefolia</u>	0.5
Palmer Penstemon - <u>Penstemon palmeri</u>	0.5
Cicer Milkvetch - <u>Astragalus Cicer</u>	1
Yellow Sweetclover - <u>Melilotus officinalis</u>	1

SHRUBS

Whitestem Rubber Rabbitbrush - <u>Chrysothamnus nauseosus</u>	0.5
<u>SSP. alibicaulis</u>	
Basin Big Sagebrush - <u>Artemisia tridentata var.</u>	0.1
<u>tridentata</u>	
Green Ephedra - <u>Ephedra viridis</u>	2
Four-wing Saltbush - <u>Atriplex canescens</u>	1

EXHIBIT A

TABLE 2

VEGETATION-TOPSOIL TEST PLOTS

REFUSE PILE

APPLICATION RATES

<u>PLOT</u>	<u>SOIL DEPTH INCHES</u>	<u>FERTILIZER LBS/ACRE</u>
A1	No Soil	100
A2	No Soil	200
B1	20 Subsoil	200
B2	20 Subsoil	100
C1	10 Topsoil - 10 Subsoil	100
C2	10 Topsoil - 10 Subsoil	200
D1	10 Subsoil	200
D2	10 Subsoil	100
E1	20 Topsoil	100
E2	20 Topsoil	200
F1	10 Topsoil	200
F2	10 Topsoil	100
G	10 Subsoil	100

EXHIBIT A
 TABLE 3
 SEEDLINGS/1/4M²,
 1983 GERMINATION AND SURVIVAL,
 VEGETATION-TOPSOIL TEST PLOTS,
 REFUSE PILE

<u>PLOT</u>	<u>TREATMENT</u>	<u>FERTILIZER</u>	
		<u>100/ACRE</u>	<u>200/ACRE</u>
A	No soil	1.92	---
B	20" subsoil	9.62	11.46
C	10" top/10" sub	5.42	6.89
D	10" subsoil	7.56	8.63
E	20" topsoil	3.01	4.59
F	10" topsoil	2.44	3.13
G*	10" topsoil	6.78	---

* All plots are north aspect except #G, which is south aspect.