CAMPBELL, CARR, BERGE & SHERIDAN, P.A.

LAWYERS

MICHAEL B. CAMPBELL WILLIAM F. CARR BRADFORD C. BERGE MARK F SHERIDAN WILLIAM P. SLATTERY

ANNIE-LAURIE COOGAN PATRICIA A. MATTHEWS MICHAEL H. FELDEWERT

JACK M. CAMPBELL OF COUNSEL

Catanach JEFFERSON PLACE

SUITE I - IIO NORTH GUADALUPE

POST OFFICE BOX 2208

SANTA FE, NEW MEXICO 87504-2208

TELEPHONE: (505) 988-4421 TELECOPIER: (505) 983-6043

October 29, 1991 ACE /1025 3

Case RECEIVED

JUN 1 0 1992

OIL CONSERVATION DIVISION

**HAND-DELIVERED** 

Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources 310 Old Santa Fe Trail, Room 206 Santa Fe, New Mexico 87501 Attn: William J. LeMay, Director

Re:

Statutory Unitization of the North Monument Grayburg/San Andres Unit,

Oil Conservation Division Order No. R-9494

#### Gentlemen:

By Order No. R-9494 entered on May 1, 1991, the New Mexico Oil Conservation Division approved the application of Amerada Hess Corporation for statutory unitization of the North Monument Grayburg/San Andres Unit located in Lea County, New Mexico. Order Paragraph 7 of this order provides that statutory unitization will be effective on approval of the plan for unit operations by the owners of seventy-five percent (75%) of the working interest and seventy-five percent (75%) of the royalty interest in the proposed North Monument Grayburg/San Andres Unit Area.

Amerada Hess Corporation, operator of this unit, has received ratifications from the required percentages of the owners of working interest and royalty interest, including final approvals from the Bureau of Land Management and the New Mexico Commissioner of Public Lands, to make Order No. R-9494 effective thereby unitizing the North Monument Grayburg/San Andres Unit Area. Copies of the Certificate-Determination of the Bureau of Land Management, the Final Approval of the Commissioner of Public lands and an Affidavit with copies of the most recent working interest and royalty interest Ratification and Joinder Summary Reports are enclosed for your information.

Oil Conservation Division
New Mexico Department of
Energy, Minerals and Natural Resources
Attn: William J. LeMay, Director
October 29, 1991
Page Two

It is the intention of Amerada Hess Corporation for this unitization to be effective at 7:00 a.m. on January 1, 1992 and for unitized operation and management of this unit to be effective at that date and time.

Enclosed is the Certificate of Effectiveness for the North Monument Grayburg/San Andres Unit which we request you execute on behalf of the Division. Following execution of this Certificate, it will be filed by Amerada Hess in the records of Lea County, New Mexico and conformed copies returned to the Division for its files.

Your attention to this matter is appreciated.

Very truly yours,

WILLIAM F. CARR

ATTORNEY FOR AMERADA HESS CORPORATION

WFC:mlh Enclosures

cc w/enc.:

New Mexico State Land Office

310 Old Santa Fe Trail

Santa Fe, New Mexico 87501

Attn: Mr. Floyd Prando

Ms Jami Bailey

Bureau of Land Management 1717 W. 2nd Street

Roswell, New Mexico 88201

Attn: Mr. Joe Lara

Mr. Armando Lopez

Mr. J. C. Hefley
Manager of CO<sub>2</sub> Supply
and Unitization
Amerada Hess Corporation
218 West 6th Street
Tulsa, Oklahoma 74119



# United States Department of the Interior

#### **BUREAU OF LAND MANAGEMENT**

Roswell District Office P.O. Box 1397 Roswell, New Mexico 88202-1397



IN REPLY REFER TO: NMNM85324X 3180 (065)

RECEIVED
AUG 29 1991
CAMPBELL & BLACK

AUG 23 1991

Campbell & Black, P. A. Attention: Mr. William F. Carr P. O. Box 2208 Santa Fe, New Mexico 87504-2208

#### Gentlemen:

One approved copy of the North Monument Grayburg/San Andres Unit, Lea County, New Mexico, filed on behalf of Amerada Hess Corporation, is enclosed. Such agreement has been assigned No. NMNM85324X and will become effective upon submittal of a Certificate of Effectiveness pursuant to section 24 of the unit agreement. Approval is subject to the NMOCD order authorizing a waterflood project.

Approval of the agreement does not warrant or certify that the operator thereof, and other working interest owners hold legal or equitable title to the leases which are committed hereto.

You are requested to furnish all interested principals with appropriate evidence of this approval.

Sincerely,

Armando A. Lopez

Assistant District Manager,

Minerals

Enclosure

### CERTIFICATION--DETERMINATION

Pursuant to the authority vested in the Secretary of the Interior, the act approved February 25, 1920, 41 Stat. 437, as amended, 30 U.S.G., secs. 181, et seq., and delegated to the District Manager, Bureau of Land Management, I do hereby:

- A. Approve the attached agreement for the development and operation of the North Monument Grayburg/San Andres unit area, State of New Mexico. This approval shall be invalid ab initio if the public interest requirement under §3183.4 (b) of this title is not met.
- B. Certify and determine that the unit plan of development and operation contemplated in the attached agreement is necessary and advisable in the public interest for the purpose of more properly conserving the natural resources.
- C. Certify and determine that the drilling, producing, rental, minimum royalty, and royalty requirements of all Federal leases committed to said agreement are hereby established, altered, changed, or revoked to conform with the terms and conditions of this agreement.

Armando A. Lopez, ADM Minerals Bureau of Land Management

<u> 8/23/9/</u> Date

NMNM85324X
Contract No.



### State of New Mexico

OFFICE OF THE

## Commissioner of Public Lands

Santa Fe

P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148

October 28, 1991

Amerada Hess Corporation P. O. Box 2040 Tulsa, Oklahoma 74102

Attn: Mr. J. C. Hefley

Re: North Monument Grayburg/San Andres Unit

Lea County, New Mexico

Final Approval

Dear Mr. Hefley:

Please be advised that the Commissioner of Public Lands this date October 28, 1991, has granted final approval for the Waterflood North Monument Grayburg/San Andres Unit and the Initial Plan of Operation, Lea County New Mexico.

We concur with OCD Case No. 10253, Order No. R-9494 dated May 1, 1991 and Case No. 10252, Order No. R-9596 dated October 15, 1991. Enclosed are five (5) Certificates of Approval and one (1) copy of the approved North Monument Grayburg/San Andres Unit. Your filing fee in the amount of Eight Hundred Seventy dollars (\$870.00) was received.

The effective date of this agreement is November 1, 1991. As per section 24 of the Unit agreement, you will be required to submit a certificate of effectiveness within the next 30 days.

If you have any questions regarding this matter please contact Pete Martinez at (505) 827-5791.

Sincerely,

JIM BACA

COMMISSIONER OF PUBLIC LANDS

BY: Though to Phan Floyd O. Prando, Director Oil, Gas & Minerals Division

JB/FOP/PM/baf

cc: TRD - Oil & Gas Accounting Division

BLM - Amando Lopez

Royalty Management

Campbell & Black, P. A.



### **NEW MEXICO STATE LAND OFFICE**

### CERTIFICATE OF APPROVAL

### COMMISSIONER OF PUBLIC LANDS, STATE OF NEW MEXICO

North Monument Grayburg San Andres Unit

Amerada Hess Corporation Lea County, New Mexico

There having been presented to the undersigned Commissioner of Public Lands of the State of New Mexico for examination, the attached Agreement for the development and operation of acreage which is described within the attached Agreement, dated May 1, 1991, which has been executed, or is to be executed by parties owning and holding oil and gas lesses and royalty interests in and under the property described, and upon examination of said Agreement, the Commissioner finds:

- (a) That such agreement will tend to promote the conservation of oil and gas and the better utilization of reservoir energy in said area.
- (b) That under the proposed agreement, the State of New Hexico will receive its fair share of the recoverable oil or gas in place under its lands in the area.
- (c) That each beneficiary Institution of the State of New Mexico will receive its fair and equitable share of the recoverable oil and gas under its lands within the area.
- (d) That such agreement is in other respects for the best interests of the State, with respect to state lands.

NOW, THEREFORE, by virtue of the authority conferred upon me under Sections 19-10-45, 19-10-46, 19-10-47, New Mexico Statutes Annotated, 1978 Compilation, I, the undersigned, Commissioner of Public Lands of the State of New Mexico, for the purpose of more properly conserving the oil and gas resources of the State, do hereby consent to and approve the said Agreement, and any leases embracing lands of the State of New Mexico within the area shall be and the same are hereby amended to conform with the terms thereof, and shall remain in full force and effect according to the terms and conditions of said Agreement. This approval is subject to all of the provisions of the aforesaid statutes.

IN WITNESS WHEREOF, this Certificate of Approval is executed, with seal affixed, this 28TH day of October , 19 91

COMMISSIONER OF PUBLIC LANDS of the State of New Mexico

### BEFORE THE

### OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES

IN THE MATTER OF THE APPLICATION OF AMERADA HESS CORPORATION FOR STATUTORY UNITIZATION OF THE NORTH MONUMENT GRAYBURG/SAN ANDRES UNIT, LEA COUNTY, NEW MEXICO.

CASE NOS. 10252 ORDER NO. R-9494

	<u>AFFIDAVIT</u>
STATE OF NEW MEXICO	)
COUNTY OF SANTA FE	)ss. )

- J.C. Hefley, authorized representative of Amerada Hess Corporation, the Applicant herein, being first duly sworn, upon oath, states:
- 1. New Mexico Oil Conservation Division Order No. R-9494 dated May 1, 1991, pursuant to the New Mexico Statutory Unitization Act, granted the application of Amerada Hess Corporation for unitization of the North Monument Grayburg/San Andres Unit Area comprised of 13,385 acres, more or less, in the Eunice Monument Grayburg-San Andres Pool, Lea County, New Mexico.
- 2. Order No. R-9494 provides that statutory unitization of the North Monument Grayburg/San Andres Unit will become effective upon approval of the plan for unit operations by the owners of seventy-five percent (75%) of the working interest and by the owners of seventy-five percent (75%) of the royalty interest in the proposed unit area.

- 3. Amerada Hess, as operator of this Unit, subsequent to the entry of Order No. R-9494 has sought and obtained the ratification and approval of the plan for unit operations from the owners of the required percentages of interests in the North Monument Grayburg/San Andres Unit Area in accordance with Division rules, regulations and Order No. R-9494 as evidenced by the Working Interest and Royalty Interest Ratification and Joinder Summary Reports attached hereto as Exhibits "A" and "B" to this Affidavit.
- 4. Amerada Hess has also obtained the Final Approval of the North Monument Grayburg/San Andres Unit from the New Mexico Commissioner of Public Lands and a Certification-Determination from the Bureau of Land Management.

J. C. HEFLEY

SUBSCRIBED AND SWORN to before me this 200 day of October, 1991.

Notary Public

My Commission Expires:

1941 19, 1995

## EXHIBIT A

# ROYALTY RATIFICATION & JOINDER SUMMARY REPORT NORTH MONUMENT GRAYBURG/SAN ANDRES UNIT

PAGE NO.: 1
REPORT DATE: 10/24/91
R&JROYSU.FRM/R&JROYIN.QBE

ROYALTY PERCENTAGE WITHIN TRACT			ROYALTY PERCENTAGE RATIFIED	PERCENTAGE RATIFIED WITHIN TRACT	PERCENTAGE RATIFIED WITHIN UNIT
UNIT TRACT NO: 17.5000000%	1	OPERATOR: CON	16.7368100%	95.6389143%	1.1455337%
UNIT TRACT NO: 17.5000000%	2	OPERATOR: CON	16.7159700%	95.5198286%	0.2854559%
UNIT TRACT NO: 23.1250000%	3	OPERATOR: GWD	20.6793500%	89.4242162%	1.0689580%
UNIT TRACT NO: 20.0000000%	4	OPERATOR: TEX	17.8601800%	89.3009000%	1.0674839%
UNIT TRACT NO: 17.5062500%	5	OPERATOR: AHC	: 16.5438300%	94.5024206%	0.2824154%
UNIT TRACT NO: 22.7343700%	6	OPERATOR: AHC	20.7937000%	91.4637177%	0.2733344%
UNIT TRACT NO: 17.5062500%	7	OPERATOR: AHC	16.5438300%	94.5024206%	0.2824154%
UNIT TRACT NO: 12.5000000%	8	OPERATOR: CHE	12.5000000%	100.000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	9	OPERATOR: TEX	12.5000000%	100.000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	10	OPERATOR: AHC	12.5000000%	100.000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	11	OPERATOR: AHO	12.5000000%	100.0000000%	0.2988447%
UNIT TRACT NO: 12.5000000%	12	OPERATOR: AHO	12.5000000%	100.000000%	0.2988447%
UNIT TRACT NO: 12.5000000%	13	OPERATOR: CON	12.5000000%	100.0000000%	1.7930680%
UNIT TRACT NO: 12.5000000%	14	OPERATOR: CON	12.5000000%	100.0000000%	0.2887587%
UNIT TRACT NO: 12.5000000%	15	OPERATOR: AHC	12.5000000%	100.0000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	16	OPERATOR: SHE	12.5000000%	100.0000000%	0.2988447%

# ROYALTY RATIFICATION & JOINDER SUMMARY REPORT NORTH MONUMENT GRAYBURG/SAN ANDRES UNIT

PAGE NO.: 2
REPORT DATE: 10/24/91
R&JROYSU.FRM/R&JROYIN.QBE

ROYALTY PERCENTAGE WITHIN TRACT			ROYALTY PERCENTAGE RATIFIED		PERCENTAGE RATIFIED WITHIN UNIT
UNIT TRACT NO: 12.5000000%	17	OPERATOR: TEX	12.5000000%	100.0000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	18	OPERATOR: AHC	12.5000000%	100.0000000%	0.3007872%
UNIT TRACT NO: 12.5000000%	19	OPERATOR: MOB	12.5000000%	100.0000000%	1.1981430%
UNIT TRACT NO: 12.5000000%	20	OPERATOR: WIS	12.5000000%	100.0000000%	0.2988447%
UNIT TRACT NO: 12.5000000%	21	OPERATOR: AHC	12.5000000%	100.0000000%	0.2988447%
UNIT TRACT NO: 12.5000000%	22	OPERATOR: AHC	12.5000000%	100.0000000%	0.2988447%
UNIT TRACT NO: 12.5000000%	23	OPERATOR: GRM	12.5000000%	100.0000000%	0.2988447%
UNIT TRACT NO: 12.5000000%	24	OPERATOR: AHC	12.5000000%	100.0000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	25	OPERATOR: AHC	12.5000000%	100.0000000%	1.1953787%
UNIT TRACT NO: 12.5000000%	26	OPERATOR: CHE	12.5000000%	100.0000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	27	OPERATOR: AHC	12.5000000%	100.0000000%	0.5769196%
UNIT TRACT NO: 12.5000000%	28	OPERATOR: GRC	12.5000000%	100.0000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	29	OPERATOR: GRC	12.5000000%	100.0000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	30	OPERATOR: GRC	12.5000000%	100.0000000%	0.2988447%
UNIT TRACT NO: 12.5000000%	31	OPERATOR: CHE	12.5000000%	100.0000000%	0.2988447%
UNIT TRACT NO: 12.5000000%	32	OPERATOR: CHE	12.5000000%	100.0000000%	0.2988447%

PAGE NO.: 3
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ROYALTY PERCENTAGE WITHIN TRACT			ROYALTY PERCENTAGE RATIFIED		PERCENTAGE RATIFIED WITHIN UNIT
UNIT TRACT NO: 12.5000000%	33	OPERATOR: CHE		100.000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	34	OPERATOR: CHE	12.5000000%	100.000000%	0.8965340%
UNIT TRACT NO: 12.5000000%	35	OPERATOR: AHC	: 12.5000000%	100.000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	36	OPERATOR: OXY	12.5000000%	100.0000000%	1.1750572%
UNIT TRACT NO: 12.5000000%	37	OPERATOR: AHO	; 12.5000000%	100.0000000%	1.1953787%
UNIT TRACT NO: 12.5000000%	38	OPERATOR: CHE	12.5000000%	100.0000000%	1.1953787%
UNIT TRACT NO: 12.5000000%	39	OPERATOR: CHE	12.5000000%	100.0000000%	1.1953787%
UNIT TRACT NO: 12.5000000%	40	OPERATOR: CHE	12.5000000%	100.0000000%	1.1953787%
UNIT TRACT NO: 12.5000000%	41	OPERATOR: CHE	12.5000000%	100.0000000%	1.1953787%
UNIT TRACT NO: 12.5000000%	42	OPERATOR: CHE	12.5000000%	100.0000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	43	OPERATOR: TEX	12.5000000%	100.0000000%	1.1953787%
UNIT TRACT NO: 12.5000000%	44	OPERATOR: TEX	12.5000000%	100.0000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	45	OPERATOR: AHO	12.5000000%	100.0000000%	0.8965340%
UNIT TRACT NO: 12.5000000%	46	OPERATOR: DUR	12.5000000%	100.000000%	0.2988447%
UNIT TRACT NO: 12.5000000%	47	OPERATOR: AHO	12.5000000%	100.0000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	48	OPERATOR: AHC	12.5000000%	100.0000000%	1.1969476%

# ROYALTY RATIFICATION & JOINDER SUMMARY REPORT NORTH MONUMENT GRAYBURG/SAN ANDRES UNIT

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ROYALTY PERCENTAGE WITHIN TRACT			ROYALTY PERCENTAGE RATIFIED	PERCENTAGE RATIFIED WITHIN TRACT	PERCENTAGE RATIFIED WITHIN UNIT
UNIT TRACT NO: 12.5000000%	49	OPERATOR: TEX		100.000000%	1.1953787%
UNIT TRACT NO: 12.5000000%	50	OPERATOR: AHC	12.5000000%	100.000000%	1.1953787%
UNIT TRACT NO: 12.5000000%	51	OPERATOR: ORY	12.5000000%	100.000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	52	OPERATOR: TEX	12.5000000%	100.000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	53	OPERATOR: MAR	12.5000000%	100.000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	54	OPERATOR: AHC	12.5000000%	100.000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	55	OPERATOR: SHE	12.5000000%	100.000000%	0.3047468%
UNIT TRACT NO: 12.5000000%	56	OPERATOR: SHE	12.5000000%	100.000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	57	OPERATOR: SHE	12.5000000%	100.0000000%	0.2988447%
UNIT TRACT NO: 12.5000000%	58	OPERATOR: SHE	12.5000000%	100.000000%	0.2988447%
UNIT TRACT NO: 12.5000000%	59	OPERATOR: SHE	12.5000000%	100.0000000%	1.1953787%
UNIT TRACT NO: 12.5000000%	60	OPERATOR: TEX	12.5000000%	100.0000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	61	OPERATOR: CON	12.5000000%	100.0000000%	1.1755802%
UNIT TRACT NO: 12.5000000%	62	OPERATOR: AHC	12.5000000%	100.0000000%	1.1953787%
UNIT TRACT NO: 12.5000000%	63	OPERATOR: TEX	12.5000000%	100.0000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	64	OPERATOR: TEX	12.5000000%	100.000000%	0.5878275%

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ROYALTY PERCENTAGE WITHIN TRACT			ROYALTY PERCENTAGE RATIFIED	PERCENTAGE RATIFIED WITHIN TRACT	PERCENTAGE RATIFIED WITHIN UNIT
UNIT TRACT NO: 12.5000000%	65	OPERATOR: AHC	12.5000000%	100.000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	66	OPERATOR: AHC	12.5000000%	100.000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	67	OPERATOR: AHC	12.5000000%	100.000000%	0.2988447%
UNIT TRACT NO: 12.5000000%	68	OPERATOR: TEX	12.5000000%	100.000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	69	OPERATOR: PHI	12.5000000%	100.000000%	0.2988447%
UNIT TRACT NO: 12.5000000%	70	OPERATOR: SHE	12.5000000%	100.000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	71	OPERATOR: CHE	12.5000000%	100.000000%	0.5976893%
UNIT TRACT NO: 12.5000000%	72	OPERATOR: MAR	12.5000000%	100.000000%	1.1953787%
UNIT TRACT NO: 16.6666600%	73	OPERATOR: WIS	15.7407400%	94.4444778%	0.5644846%
UNIT TRACT NO: 12.5000000%	74	OPERATOR: AHC	12.5000000%	100.000000%	0.2988447%
UNIT TRACT NO: 14.5000000%	75	OPERATOR: AHC	14.5000000%	100.000000%	0.2988447%
UNIT TRACT NO: 12.5000000%	76	OPERATOR: CHE	12.5000000%	100.000000%	1.1855168%
UNIT TRACT NO: 20.0000000%	77	OPERATOR: AHC	20.0000000%	100.000000%	0.2988447%
UNIT TRACT NO: 23.4375000%	78	OPERATOR: AHC	20.0842500%	85.6928000%	0.2560884%
UNIT TRACT NO: 12.5000000%	79	OPERATOR: CHE	8.5841700%	68.6733600%	0.4104533%
UNIT TRACT NO: 12.5000000%	80	OPERATOR: CHE	11.1654000%	89.3232000%	0.5338752%

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ROYALTY PERCENTAGE WITHIN TRACT			ROYALTY PERCENTAGE RATIFIED	PERCENTAGE RATIFIED WITHIN TRACT	PERCENTAGE RATIFIED WITHIN UNIT
UNIT TRACT NO: 25.0000100%	81	OPERATOR: AHC		38.2812647%	0.1107979%
UNIT TRACT NO: 12.5000000%	82	OPERATOR: TEX	0.000000%	0.0000000%	0.000000%
UNIT TRACT NO: 12.5000000%	83	OPERATOR: TEX	8.4418200%	67.5345600%	0.2018234%
UNIT TRACT NO: 12.5000000%	84	OPERATOR: TEX	8.4418200%	67.5345600%	0.2018234%
UNIT TRACT NO: 12.5000000%	85	OPERATOR: TEX	8.5372100%	68.2976800%	0.6123119%
UNIT TRACT NO: 12.5000000%	86	OPERATOR: ORY	8.1250000%	65.0000000%	0.1942490%
UNIT TRACT NO: 12.5000000%	87	OPERATOR: PHI	10.1844800%	81.4758400%	0.2348424%
UNIT TRACT NO: 12.5000000%	88	OPERATOR: CHE	9.5480300%	76.3842400%	1.5899592%
UNIT TRACT NO: 12.5000000%	89	OPERATOR: TEX	6.3880400%	51.1043200%	0.6108901%
UNIT TRACT NO: 19.6940000%	90	OPERATOR: AHC	6.3199600%	32.0907891%	0.0959016%
UNIT TRACT NO: 10.9375000%	91	OPERATOR: AHC	5,8586300%	53.5646171%	0.6403000%
UNIT TRACT NO: 12.5000000%	92	OPERATOR: TEX	9.2057400%	73.6459200%	0.4401738%
UNIT TRACT NO: 12.5000000%	93	OPERATOR: CHE	8.7294500%	69.8356000%	0.2087000%
UNIT TRACT NO: 11.8099000%	94	OPERATOR: AHC	5.1432400%	43.5502417%	0.1301476%
UNIT TRACT NO: 54.6875000%	95	OPERATOR: AHC	46.6662900%	85.3326446%	0.2550121%
UNIT TRACT NO: 12.5000000%	96	OPERATOR: CHE	4.9479000%	39.5832000%	0.1182923%

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REPORT DATE: 10/24/91
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ROYALTY PERCENTAGE WITHIN TRACT		ROYALTY PERCENTAGE RATIFIED	PERCENTAGE RATIFIED WITHIN TRACT	PERCENTAGE RATIFIED WITHIN UNIT
UNIT TRACT NO: 12.5000000%	97	OPERATOR: TEX 9.2057400%		0.4401738%
UNIT TRACT NO: 12.5000000%	98	OPERATOR: AHC 8.7384100%	69.9072800%	0.2089142%
UNIT TRACT NO: 12.5000000%	99	OPERATOR: TEX 5.8593800%	46.8750400%	0.1400836%
UNIT TRACT NO: 12.5000000%	100	OPERATOR: CHE 5.1236000%	40.9888000%	0.3674785%
UNIT TRACT NO: 12.5000000%	101	OPERATOR: CHE 7.5735000%	60.5880000%	0.1810640%
UNIT TRACT NO: 12.5000000%	102	OPERATOR: CHE 7.5735000%	60.5880000%	0.1810640%
UNIT TRACT NO: 12.5000000%	103	OPERATOR: AHC 8.3789000%	67.0312000%	0.2003192%
UNIT TRACT NO: 12.5000000%	104	OPERATOR: SHE 11.2237400%	89.7899200%	0.5366648%
UNIT TRACT NO: 12.5000000%	105	OPERATOR: AHC 9.6676500%	77.3412000%	1.3867803%
UNIT TRACT NO: 12.5000000%	106	OPERATOR: ORY 6.5155000%	52.1240000%	0.9346188%
UNIT TRACT NO: 12.5000000%	107	OPERATOR: CHE 8.7294500%	69.8356000%	0.2087000%
UNIT TRACT NO: 12.5000000%	108	OPERATOR: AHC 10.1662400%	81.3299200%	0.4861003%
UNIT TRACT NO: 12.5000000%	109	OPERATOR: AHC 10.5119300%	84.0954400%	0.9878554%
UNIT TRACT NO: 12.5000000%	110	OPERATOR: CHE 8.1331300%	65.0650400%	0.3888868%
UNIT TRACT NO: 12.5000000%	111	OPERATOR: AHC 8.3178500%	66.5428000%	0.3977192%
UNIT TRACT NO: 12.5000000%	112	OPERATOR: AHC 10.3036000%	82.4288000%	0.9681545%

# ROYALTY RATIFICATION & JOINDER SUMMARY REPORT NORTH MONUMENT GRAYBURG/SAN ANDRES UNIT

PAGE NO.: 8
REPORT DATE: 10/24/91
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ROYALTY PERCENTAGE WITHIN TRACT		ROYALTY PERCENTAGE RATIFIED	PERCENTAGE RATIFIED WITHIN TRACT	PERCENTAGE RATIFIED WITHIN UNIT
		OPERATOR: CHE 9.5480300%		0.6848107%
UNIT TRACT NO: 12.5000000%	114	OPERATOR: AHC 9.6543000%	77.2344000%	0.2308109%
UNIT TRACT NO: 12.5000000%	115	OPERATOR: AHC 8.5040200%	68.0321600%	0.8132419%
UNIT TRACT NO: 12.5000000%	116	OPERATOR: TEX 9.8117800%	78.4942400%	0.2345758%
UNIT TRACT NO: 11.8227000%	117	OPERATOR: GWD 7.9990600%	67.6584875%	0.2021938%
UNIT TRACT NO: 10.6250000%	118	OPERATOR: AHC 7.0742700%	66.5813647%	0.1989749%
UNIT TRACT NO: 23.4375000%	119	OPERATOR: CON 1.2734700%	5.4334720%	0.0162376%
UNIT TRACT NO: 12.5000000%	120	OPERATOR: MAR 5.7674200%	46.1393600%	0.2757700%
UNIT TRACT NO: 12.5000000%	121	OPERATOR: CHE 7.7753300%	62.2026400%	0.3717785%
UNIT TRACT NO: 12.5000000%	122	OPERATOR: AHC 10.9677200%	87.7417600%	0.5244231%
UNIT TRACT NO: 12.5000000%	123	OPERATOR: CHE 5.5832600%	44.6660800%	0.2669644%
UNIT TRACT NO: 25.0000000%	124	OPERATOR: AHC 21.7571000%	87.0284000%	1.5604784%
UNIT TRACT NO: 12.5000000%	125	OPERATOR: AHC 8.4895900%	67.9167200%	0.4059310%
UNIT TRACT NO: 12.5000000%	126	OPERATOR: AHC 5.4687500%	43.7500000%	0.1307445%
UNIT TRACT NO: 23.4375000%	127	OPERATOR: AHC 18.4458600%	78.7023360%	0.4703955%
UNIT TRACT NO: 18.7500000%	128	OPERATOR: AHC 16.6297200%	88.6918400%	0.5301017%

ROYALTY PERCENTAGE WITHIN TRACT		ROYALTY PERCENTAGE RATIFIED	PERCENTAGE RATIFIED WITHIN TRACT	PERCENTAGE RATIFIED WITHIN UNIT
UNIT TRACT NO: 12.5000000%	129			0.2329213%
UNIT TRACT NO: 12.5000000%	130	OPERATOR: TEX 7.3208500%	58.5668000%	0.6903375%
UNIT TRACT NO: 12.4218700%	131	OPERATOR: AHC 5.8519000%	47.1096542%	0.5644410%
UNIT TRACT NO: 12.5000000%	132	OPERATOR: MAR 5.7674200%	46.1393600%	0.6913555%
UNIT TRACT NO: 12.5000000%	133	OPERATOR: TEX 9.2054100%	73.6432800%	0.8851578%
UNIT TRACT NO: 12.5000000%	135	OPERATOR: ORY 11.0801200%	88.6409600%	0.2648988%
UNIT TRACT NO: 12.5000000%	136	OPERATOR: GRM 9.8442000%	78.7536000%	0.4707019%
UNIT TRACT NO: 12.5000000%	137	OPERATOR: SHE 7.0959900%	56.7679200%	0.5138211%
UNIT TRACT NO: 12.5000000%	138	OPERATOR: SHE 6.6389700%	53.1117600%	0.1613406%
UNIT TRACT NO: 12.5000000%	139	OPERATOR: AHC 8.1399700%	65.1197600%	0.1980612%
UNIT TRACT NO: 12.5000000%	140	OPERATOR: TEX 10.6950700%	85.5605600%	0.5113863%
UNIT TRACT NO: 12.5000000%	141	OPERATOR: AHC 11.2712900%	90.1703200%	1.3473460%
UNIT TRACT NO: 18.7500000%	142	OPERATOR: AHC 9.8003900%	52.2687467%	0.1562024%
UNIT TRACT NO: 12.5000000%	143	OPERATOR: ORY 11.0801200%	88.6409600%	0.2648988%
UNIT TRACT NO: 18.7500000%	144	OPERATOR: AHC 10.3558700%	55.2313067%	0.3301116%
UNIT TRACT NO: 12.5000000%	145	OPERATOR: AHC 10.0570400%	80.4563200%	0.2449477%

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ROYALTY PERCENTAGE WITHIN TRACT		ROYALTY PERCENTAGE RATIFIED	PERCENTAGE RATIFIED WITHIN TRACT	PERCENTAGE RATIFIED WITHIN UNIT
UNIT TRACT NO: 18.7500000%	146	OPERATOR: AHC 15.9164200%	84.8875733%	0.2585019%
UNIT TRACT NO: 24.2187500%	147	OPERATOR: AHC 13.1527400%	54.3080877%	0.1654616%
UNIT TRACT NO: 12.5000000%	148	OPERATOR: AHC 9.0137000%	72.1096000%	0.2154957%
UNIT TRACT NO: 18.7500000%	149	OPERATOR: AHC 15.9164200%	84.8875733%	0.2536820%
UNIT TRACT NO: 18.7500000%	150	OPERATOR: AHC 9.4697000%	50.5050667%	0.1509317%
UNIT TRACT NO: 25.1584100%	151	OPERATOR: AHC 6.0286500%	23.9627624%	0.0716114%
UNIT TRACT NO: 12.5000000%	152	OPERATOR: GRM 9.8442000%	78.7536000%	0.2353509%
UNIT TRACT NO: 12.5000000%	153	OPERATOR: AHC 12.5000000%	100.0000000%	0.8965340%
UNIT TRACT NO: 12.5000000%	154	OPERATOR: MAR 9.3750000%	75.000000%	0.8965340%

TOTAL RATIFIED WITHIN UNIT

=========

84.2598569%

### EXHIBIT B

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	WORKING INTEREST PERCENTAGE RATIFIED	RATIFIED WITHIN TRACT	PERCENTAGE RATIFIED WITHIN UNIT
UNIT TRACT NO: 1 OPERATO 100.0000000%		75.0000000%	0.8983271%
UNIT TRACT NO: 2 OPERATO 100.0000000%		75.0000000%	0.2241335%
UNIT TRACT NO: 3 OPERATO 100.0000000%		100.000000%	1.1953787%
UNIT TRACT NO: 4 OPERATO 100.0000000%	OR: TEX 100.0000000%	100.0000000%	1.1953787%
UNIT TRACT NO: 5 OPERATO 100.0000000%	OR: AHC 100.0000000%	100.0000000%	0.2988447%
UNIT TRACT NO: 6 OPERATO 100.0000000%		100.0000000%	0.2988447%
UNIT TRACT NO: 7 OPERATO 100.0000000%		100.0000000%	0.2988447%
UNIT TRACT NO: 8 OPERATO 100.0000000%		100.0000000%	0.5976893%
UNIT TRACT NO: 9 OPERATO 100.0000000%		100.0000000%	0.5976893%
UNIT TRACT NO: 10 OPERATO 100.0000000%		100.0000000%	0.5976893%
UNIT TRACT NO: 11 OPERATO 100.0000000%	OR: AHC 100.0000000%	100.0000000%	0.2988447%
UNIT TRACT NO: 12 OPERATO 100.0000000%	DR: AHC 100.0000000%	100.0000000%	0.2988447%
UNIT TRACT NO: 13 OPERATO 100.0000000%	DR: CON 100.0000000%	100.000000%	1.7930680%
UNIT TRACT NO: 14 OPERATO 100.0000000%	DR: CON 100.0000000%	100.000000%	0.2887587%
UNIT TRACT NO: 15 OPERATO 100.0000000%	OR: AHC 100.0000000%	100.0000000%	0.5976893%

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WO PERCE	ORKING INTEREST INTAGE WITHIN TR	ACT	WORKING INTEREST PERCENTAGE RATIFIED	WORKING INTEREST PERCENTAGE RATIFIED WITHIN TRACT	WORKING INTEREST PERCENTAGE RATIFIED WITHIN UNIT
UNIT	TRACT NO: 16	OPERATOR:		100.0000000%	0.2988447%
	TRACT NO: 17 100.0000000%		TEX 100.0000000%	100.0000000%	0.5976893%
	TRACT NO: 18 100.0000000%		AHC 100.0000000%	100.0000000%	0.3007872%
	TRACT NO: 19 100.0000000%		MOB 100.0000000%	100.0000000%	1.1981430%
	TRACT NO: 20 100.0000000%		WIS 100.0000000%	100.0000000%	0.2988447%
	TRACT NO: 21 100.0000000%		AHC 100.0000000%	100.000000%	0.2988447%
	TRACT NO: 22 100.0000000%		AHC 100,0000000%	100.0000000%	0.2988447%
	TRACT NO: 23 100.0000000%		GRM 100.0000000%	100.000000%	0.2988447%
	TRACT NO: 24 100.0000000%		AHC 100.0000000%	100.000000%	0.5976893%
	TRACT NO: 25 100.0000000%		AHC 100.0000000%	100.0000000%	1.1953787%
	TRACT NO: 26 100.0000000%		CHE 100.0000000%	100.0000000%	0.5976893%
	TRACT NO: 27 100.0000000%	OPERATOR:	AHC 100.0000000%	100.0000000%	0.5769196%
	TRACT NO: 28 100.0000000%		GRC 100.0000000%	100.0000000%	0.5976893%
	TRACT NO: 29 100.0000000%	OPERATOR:	GRC 100.0000000%	100.0000000%	0.5976893%
	TRACT NO: 30 100.0000000%	OPERATOR:	GRC 100.0000000%	100.000000%	0.2988447%

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		RATIFIED WITHIN TRACT	PERCENTAGE RATIFIED WITHIN UNIT
UNIT TRACT NO: 31 OPERATO 100.0000000%		100.000000%	0.2988447%
UNIT TRACT NO: 32 OPERATO 100.0000000%		100.000000%	0.2988447%
UNIT TRACT NO: 33 OPERATO 100.0000000%	R: CHE 100.0000000%	100.0000000%	0.5976893%
UNIT TRACT NO: 34 OPERATO 100.0000000%	R: CHE 100.0000000%	100.000000%	0.8965340%
UNIT TRACT NO: 35 OPERATO 100.0000000%		100.0000000%	0.5976893%
UNIT TRACT NO: 36 OPERATO 100.0000000%		100.0000000%	1.1750572%
UNIT TRACT NO: 37 OPERATO 100.0000000%	R: AHC 100.0000000%	100.0000000%	1.1953787%
UNIT TRACT NO: 38 OPERATO 100.0000000%	R: CHE 100.0000000%	100.0000000%	1.1953787%
UNIT TRACT NO: 39 OPERATO 100.0000000%	R: CHE 100.0000000%	100.0000000%	1.1953787%
UNIT TRACT NO: 40 OPERATO 100.0000000%		100.0000000%	1.1953787%
UNIT TRACT NO: 41 OPERATO 100.0000000%	R: CHE 100.0000000%	100.0000000%	1.1953787%
UNIT TRACT NO: 42 OPERATO 100.0000000%	R: CHE 100.0000000%	100.0000000%	0.5976893%
UNIT TRACT NO: 43 OPERATO 100.0000000%	R: TEX 100.0000000%	100.000000%	1.1953787%
UNIT TRACT NO: 44 OPERATO 100.0000000%	R: TEX 100.0000000%	100.000000%	0.5976893%
UNIT TRACT NO: 45 OPERATO 100.0000000%	R: AHC 100.000000%	100.0000000%	0.8965340%

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				WORKING INTEREST PERCENTAGE RATIFIED WITHIN TRACT	PERCENTAGE RATIFIED WITHIN UNIT
UNIT	TRACT NO: 46 100.0000000%	OPERATOR:		100.000000%	0.2988447%
	TRACT NO: 47 100.0000000%		AHC 100.0000000%	100.000000%	0.5976893%
	TRACT NO: 48 100.0000000%		AHC 100.0000000%	100.000000%	1.1969476%
	TRACT NO: 49 100.0000000%		TEX 100.0000000%	100.000000%	1.1953787%
	TRACT NO: 50 100.0000000%		AHC 100.0000000%	100.000000%	1.1953787%
	TRACT NO: 51 100.0000000%		ORY 100.0000000%	100.000000%	0.5976893%
	TRACT NO: 52 100.0000000%		TEX 100.0000000%	100.000000%	0.5976893%
	TRACT NO: 53 100.0000000%		MAR 0.0000000%	0.000000%	0.000000%
	TRACT NO: 54 100.0000000%		AHC 100.0000000%	100.0000000%	0.5976893%
			100.0000000%	100.000000%	0.3047468%
	TRACT NO: 56 100.0000000%		100.0000000%	100.000000%	0.5976893%
	TRACT NO: 57		100.0000000%	100.000000%	0.2988447%
	TRACT NO: 58		100.0000000%	100.000000%	0.2988447%
	TRACT NO: 59		100.0000000%	100.0000000%	1.1953787%
UN.L I	TRACT NO: 60 100.0000000%	UPEKATUR:	100.0000000%	100.000000%	0.5976893%

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PERCENTAGE WI	THIN TRACT		RATIFIED WITHIN TRACT	PERCENTAGE RATIFIED WITHIN UNIT
	: 61 OPERATOR		100.000000%	1.1755802%
UNIT TRACT NO	: <b>62 OPERATOR</b> 000%	: AHC 100.000000%	100.000000%	1.1953787%
UNIT TRACT NO 100.0000	: <b>63 OPERATOR</b> 000%	: TEX 100.0000000%	100.0000000%	0.5976893%
UNIT TRACT NO 100.0000	: 64 OPERATOR	: TEX 100.0000000%	100.0000000%	0.5878275%
UNIT TRACT NO 100.0000	: <b>65 O</b> PERAT <b>O</b> R 000%	: AHC 100.0000000%	100.000000%	0.5976893%
UNIT TRACT NO 100.0000	: 66 OPERATOR 000%	: AHC 100.0000000%	100.000000%	0.5976893%
UNIT TRACT NO 100.0000	: 67 OPERATOR 000%	: AHC 87.5000000%	87.5000000%	0.2614891%
UNIT TRACT NO 100,0000	: <b>68 O</b> PERATOR 000%	100.000000%	100.0000000%	0.5976893%
	: <b>69 OPERATOR</b> 000%	0.000000%	0.000000%	0.000000%
	: 70 OPERATOR 000%	100.000000%	100.000000%	0.5976893%
UNIT TRACT NO 100.0000	: 71 OPERATOR 000%	: CHE 100.0000000%	100.000000%	0.5976893%
UNIT TRACT NO 100.0000		0.000000%	0.000000%	0.000000%
UNIT TRACT NO 100.0000		94.000000%	94.0000000%	0.5618280%
UNIT TRACT NO 100.0000	: 74 OPERATOR 000%	100.000000%	100.0000000%	0.2988447%
UNIT TRACT NO 100.0000	: 75 OPERATOR 000%	100.0000000%	100.0000000%	0.2988447%

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		PERCENTAGE RATIF	FIED	PERCENTAGE RATIFIED WITHIN TRACT	WORKING INTEREST PERCENTAGE RATIFIED WITHIN UNIT
 TRACT NO: 76 100.0000000%				100.0000000%	1.1855168%
TRACT NO: 77 100.0000000%		AHC 100.0000000%		100.0000000%	0.2988447%
TRACT NO: 78		AHC 100.0000000%		100.0000000%	0.2988447%
TRACT NO: 79 100.0000000%		CHE 100.0000000%		100.0000000%	0.5976893%
TRACT NO: 80 100.0000000%		CHE 100.0000000%		100.0000000%	0.5976893%
 TRACT NO: 81 100.0000000%	_	AHC 100.0000000%		100.0000000%	0.2894311%
TRACT NO: 82 100.0000000%		TEX 100.0000000%		100.0000000%	0.2988447%
		100.0000000%		100.0000000%	0.2988447%
		100.0000000%		100.0000000%	0.2988447%
		100.0000000%		100.0000000%	0.8965340%
TRACT NO: 86 100.0000000%		100.0000000%		100.0000000%	0.2988447%
100.0000000%	OPERATOR:	0.0000000%		0.0000000%	0.000000%
100.0000000%	OPERATOR:  OPERATOR:	100.0000000%		100.0000000%	2.0815278%
100.0000000%	OPERATOR:	100.0000000%		100.0000000%	1.1953787%
100.0000000%	OF EIGHT UNA	100.0000000%		100.0000000%	0.2988447%

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			WORKING INTEREST PERCENTAGE RATIFI	ED	WORKING INTEREST PERCENTAGE RATIFIED WITHIN TRAC	PERCENTAGE
	TRACT NO: 91 100.0000000%				100.0000000%	 1.1953787%
	TRACT NO: 92 100.0000000%		TEX 100.0000000%		100.0000000%	0.5976893%
	TRACT NO: 93 100.0000000%		CHE 100.0000000%		100.0000000%	0.2988447%
	TRACT NO: 94 100.0000000%		<b>AHC</b> 39.5833400%		39.5833400%	0.1182927%
	TRACT NO: 95 100.0000000%		AHC 100.0000000%		100.0000000%	0.2988447%
	TRACT NO: 96 100.0000000%		CHE 100.0000000%		100.0000000%	0.2988447%
	TRACT NO: 97 100.0000000%		TEX 100.0000000%		100.0000000%	0.5976893%
	TRACT NO: 98 100.0000000%		AHC 100.0000000%		100.0000000%	0.2988447%
7	TRACT NO: 99 100.0000000%		100.0000000%		100.0000000%	0.2988447%
•	TRACT NO: 100 100.0000000%		100.0000000%		100.0000000%	0.8965340%
	TRACT NO: 101 100.0000000%		100.0000000%		100.0000000%	0.2988447%
	TRACT NO: 102 100.0000000%		100.0000000%		100.0000000%	0.2988447%
	TRACT NO: 103 100.0000000%		100.0000000%		100.0000000%	0.2988447%
	TRACT NO: 104 100.0000000%		100.0000000%		100.0000000%	0.5976893%
	TRACT NO: 105 100.0000000%	OPERATOR:	AHC 100.0000000%		100.0000000%	1.7930680%

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W( PERCE	ORKING INTEREST ENTAGE WITHIN TR	ACT		TED	WORKING INTEREST PERCENTAGE RATIFIED WITHIN TRAC	T RATIF	PERCENTAGE IED WITHIN UNIT
	TRACT NO: 106 100.0000000%	OPERATOR:			100.0000000%		1.7930680%
	TRACT NO: 107		CHE 100.0000000%		100.0000000%		0.2988447%
	TRACT NO: 108 100.0000000%		AHC 100.0000000%		100.0000000%		0.5976893%
	TRACT NO: 109 100.0000000%		AHC 100.0000000%		100.0000000%		1.1746837%
	TRACT NO: 110 100.0000000%		CHE 100.0000000%		100.000000%		0.5976893%
-	TRACT NO: 111 100.0000000%		AHC 100.0000000%		100.0000000%		0.5976893%
	TRACT NO: 112 100.0000000%		AHC 100.0000000%		100.0000000%		1.1745343%
	TRACT NO: 113 100.0000000%		CHE 100.0000000%		100.0000000%		0.8965340%
	TRACT NO: 114 100.0000000%		AHC 100.0000000%		100.0000000%		0.2988447%
	TRACT NO: 115 100.0000000%				87.5000000%		1.0459563%
	TRACT NO: 116 100.0000000%		TEX 100.0000000%		100.0000000%		0.2988447%
	TRACT NO: 117 100.0000000%		91.2858000%		91.2858000%		0.2728027%
	TRACT NO: 118 100.0000000%		100.0000000%		100.0000000%		0.2988447%
	TRACT NO: 119 100.0000000%		100.0000000%		100.0000000%		0.2988447%
	TRACT NO: 120 100.0000000%	OPERATOR:	MAR 0.0000000%		0.000000%		0.0000000%

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WC PERCE	ORKING INTEREST ENTAGE WITHIN TR	ACT	WORKING INTEREST PERCENTAGE RATIFIED	WORKING INTEREST PERCENTAGE RATIFIED WITHIN TRACT	WORKING INTEREST PERCENTAGE RATIFIED WITHIN UNIT
	TRACT NO: 121 100.0000000%		CHE 100.0000000%	100.000000%	0.5976893%
	TRACT NO: 122 100.0000000%			100.000000%	0.5976893%
	TRACT NO: 123 100.0000000%			100.000000%	0.5976893%
	TRACT NO: 124 100.0000000%			100.000000%	1.7930680%
	TRACT NO: 125 100.0000000%			100.000000%	0.5976893%
	TRACT NO: 126 100.0000000%			100.000000%	0.2988447%
	TRACT NO: 127 100.0000000%			100.000000%	0.5976893%
	TRACT NO: 128 100.0000000%			100.000000%	0.5976893%
	TRACT NO: 129 100.0000000%			100.000000%	0.3011607%
	TRACT NO: 130 100.0000000%			100.000000%	1.1787181%
	TRACT NO: 131 100.0000000%		AHC 100.0000000%	100.000000%	1.1981430%
UNIT	TRACT NO: 132 100.0000000%	OPERATOR:	MAR 0.0000000%	0.000000%	0.000000%
	TRACT NO: 133 100.0000000%	OPERATOR:	TEX 100.0000000%	100.000000%	1.2019532%
UNIT	TRACT NO: 135 100.0000000%	OPERATOR:	ORY 100.0000000%	100.000000%	0.2988447%
TINU	TRACT NO: 136 100.0000000%	OPERATOR:	GRM 100.0000000%	100.000000%	0.5976893%

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PERC	entage within tr	ACT	WORKING INTEREST PERCENTAGE RATIF	PERCENTAGE	T WORKING INTEREST PERCENTAGE RACT RATIFIED WITHIN UNIT
	TRACT NO: 137	OPERATOR:	SHE 190.0000000%	100.0000000%	0.9051258%
UNIT	TWACT #0: 138 100,00000001		SHE 100.0000000%	160.00 <b>00000</b>	0.3037756%
UNIT	TRACT NO: 139 100.000000005		AHC 100.000000%	100.000000%	0.3041492%
UNIT	TRACT NO: 140 100,0000000%		100.0000000%	100.00 <b>00000</b> %	0.5976893≰
Unit	TRACT NO: 141 100.00000000%		AHC 100.0000000%	160.0000000%	1.4942233%
UNIT	TRACT NO: 142 100.0000000%		AHC 100.00000005	100.000000%	0.2998447%
UNIT	TRACT NO: 143 100.000000002		100,0000000%	100.9000005	0.2988447%
UNIT	TRACT NO: 144 100.0000000%		•	100.0000000%	0.5976893%
UNIT	TRACT NC: 145 100.0000000%		,	100.000000%	0.3044480%
UNIT	TRACT NG: 148 100.00000000%			100.0000000%	0.3045227%
UNIT	TRACT NO: 147		AHC 100.0000000%	100.000000	0.3046721%
UWIT	TRACT NO: 148 100.0000000%	OPERATOR:	AHC 100.00000008	190.3000000 <b>%</b>	0.2988447%
UNIT	TRACT NO: 149 100.0000000%		A+C 100,0900000%	100.0000000%	0.2988447%
TINU	TRACT NO: 150 160.0000000%		AHC 100.0000000%	199.0090000%	0.2988447%
UNIT	TRACT MO: 151 100.0000000%	OPERATOR:	AHC 94.444400%	94.4444400%	0.2822422%

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WORKING INTEREST PERCENTAGE WITHIN TRACT	WORKING INTEREST PERCENTAGE RATIFIED	WORKING INTEREST PERCENTAGE RATIFIED WITHIN TRACT	WORKING INTEREST PERCENTAGE RATIFIED WITHIN UNIT
UNIT TRACT NO: 152 OPERATOR 100.0000000%	R: GRM 100.0000000%	100.000000%	0.2988447%
UNIT TRACT NO: 153 OPERATOR 100.0000000%	R: AHC 100.0000000%	100.000000%	0.8965340%
UNIT TRACT NO: 154 OPERATOR 100.0000000%	0.000000%	0.0000000%	0.000000%

TOTAL RATIFIED WITHIN UNIT

---------

93.5083873%

# CAMPBELL, CARR, BERGE 8 SHERIDAN, P.A.

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October 29, 1991

### **HAND-DELIVERED**

Oil Conservation Division
New Mexico Department of
Energy, Minerals and Natural Resources
310 Old Santa Fe Trail, Room 206
Santa Fe, New Mexico 87501
Attn: William J. LeMay, Director

RECEIVED

JUN 1 2 1992

OIL CONSERVATION DIVISION

Re: Statutory Unitization of the North Monument Grayburg/San Andres Unit, Oil Conservation Division Order No. R-9494

#### Gentlemen:

By Order No. R-9494 entered on May 1, 1991, the New Mexico Oil Conservation Division approved the application of Amerada Hess Corporation for statutory unitization of the North Monument Grayburg/San Andres Unit located in Lea County, New Mexico. Order Paragraph 7 of this order provides that statutory unitization will be effective on approval of the plan for unit operations by the owners of seventy-five percent (75%) of the working interest and seventy-five percent (75%) of the royalty interest in the proposed North Monument Grayburg/San Andres Unit Area.

Amerada Hess Corporation, operator of this unit, has received ratifications from the required percentages of the owners of working interest and royalty interest, including final approvals from the Bureau of Land Management and the New Mexico Commissioner of Public Lands, to make Order No. R-9494 effective thereby unitizing the North Monument Grayburg/San Andres Unit Area. Copies of the Certificate-Determination of the Bureau of Land Management, the Final Approval of the Commissioner of Public lands and an Affidavit with copies of the most recent working interest and royalty interest Ratification and Joinder Summary Reports are enclosed for your information.

Oil Conservation Division
New Mexico Department of
Energy, Minerals and Natural Resources
Attn: William J. LeMay, Director
October 29, 1991
Page Two

It is the intention of Amerada Hess Corporation for this unitization to be effective at 7:00 a.m. on January 1, 1992 and for unitized operation and management of this unit to be effective at that date and time.

Enclosed is the Certificate of Effectiveness for the North Monument Grayburg/San Andres Unit which we request you execute on behalf of the Division. Following execution of this Certificate, it will be filed by Amerada Hess in the records of Lea County, New Mexico and conformed copies returned to the Division for its files.

Your attention to this matter is appreciated.

Very truly yours,

WILLIAM F. CARR

ATTORNEY FOR AMERADA HESS CORPORATION

WFC:mlh Enclosures

cc w/enc.:

New Mexico State Land Office

310 Old Santa Fe Trail

Santa Fe, New Mexico 87501

Attn: Mr. Floyd Prando

Ms Jami Bailey

Bureau of Land Management 1717 W. 2nd Street

Roswell, New Mexico 88201

Attn: Mr. Joe Lara

Mr. Armando Lopez

Mr. J. C. Hefley
Manager of CO<sub>2</sub> Supply
and Unitization
Amerada Hess Corporation
218 West 6th Street
Tulsa, Oklahoma 74119



# United States Department of the Interior

### **BUREAU OF LAND MANAGEMENT**

Roswell District Office P.O. Box 1397 Roswell, New Mexico 88202-1397



IN REPLY REFER TO: NMNM85324X 3180 (065)

RECEIVED
AUG 29 1991
CAMPBELL & BLACK

AUG 23 1991

Campbell & Black, P. A. Attention: Mr. William F. Carr P. O. Box 2208 Santa Fe, New Mexico 87504-2208

#### Gentlemen:

One approved copy of the North Monument Grayburg/San Andres Unit, Lea County, New Mexico, filed on behalf of Amerada Hess Corporation, is enclosed. Such agreement has been assigned No. NMNM85324X and will become effective upon submittal of a Certificate of Effectiveness pursuant to section 24 of the unit agreement. Approval is subject to the NMOCD order authorizing a waterflood project.

Approval of the agreement does not warrant or certify that the operator thereof, and other working interest owners hold legal or equitable title to the leases which are committed hereto.

You are requested to furnish all interested principals with appropriate evidence of this approval.

Sincerely,

Armando A. Lopez

Assistant District Manager,

and a. hore

Minerals

Enclosure

### CERTIFICATION--DETERMINATION

Pursuant to the authority vested in the Secretary of the Interior, the act approved February 25, 1920, 41 Stat. 437, as amended, 30 U.S.G., secs. 181, et seq., and delegated to the District Manager, Bureau of Land Management, I do hereby:

- A. Approve the attached agreement for the development and operation of the North Monument Grayburg/San Andres unit area, State of New Mexico. This approval shall be invalid ab initio if the public interest requirement under §3183.4 (b) of this title is not met.
- B. Certify and determine that the unit plan of development and operation contemplated in the attached agreement is necessary and advisable in the public interest for the purpose of more properly conserving the natural resources.
- C. Certify and determine that the drilling, producing, rental, minimum royalty, and royalty requirements of all Federal leases committed to said agreement are hereby established, altered, changed, or revoked to conform with the terms and conditions of this agreement.

Armando A. Lopez, ADM Minerals Bureau of Land Management

8/23/9/

NMNM85324X Contract No.



### State of New Mexico

OFFICE OF THE

## Commissioner of Public Lands

Santa Fe

P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148

October 28, 1991

Amerada Hess Corporation P. O. Box 2040 Tulsa, Oklahoma 74102

Attn: Mr. J. C. Hefley

Re: North Monument Grayburg/San Andres Unit

Lea County, New Mexico

Final Approval

Dear Mr. Hefley:

Please be advised that the Commissioner of Public Lands this date October 28, 1991, has granted final approval for the Waterflood North Monument Grayburg/San Andres Unit and the Initial Plan of Operation, Lea County New Mexico.

We concur with OCD Case No. 10253, Order No. R-9494 dated May 1, 1991 and Case No. 10252, Order No. R-9596 dated October 15, 1991. Enclosed are five (5) Certificates of Approval and one (1) copy of the approved North Monument Grayburg/San Andres Unit. Your filing fee in the amount of Eight Hundred Seventy dollars (\$870.00) was received.

The effective date of this agreement is November 1, 1991. As per section 24 of the Unit agreement, you will be required to submit a certificate of effectiveness within the next 30 days.

If you have any questions regarding this matter please contact Pete Martinez at (505) 827-5791.

Sincerely,

JIM BACA

COMMISSIONER OF PUBLIC LANDS

BY: Floyd ce than

Floyd O. Prando, Director Oil, Gas & Minerals Division

JB/FOP/PM/baf

cc: TRD - Oil & Gas Accounting Division

OCE

BLM - Amando Lopez

Royalty Management

Campbell & Black, P. A.

### **NEW MEXICO STATE LAND OFFICE**

### CERTIFICATE OF APPROVAL

### COMMISSIONER OF PUBLIC LANDS, STATE OF NEW MEXICO

North Monument Grayburg San Andres Unit

Amerada Hess Corporation Lea County, New Mexico

There having been presented to the undersigned Commissioner of Public Lands of the State of New Mexico for examination, the attached Agreement for the development and operation of acreage which is described within the attached Agreement, dated  $\frac{\text{May 1, 1991}}{\text{May 1, 1991}}$ , which has been executed, or is to be executed by parties owning and holding oil and gas leases and royalty interests in and under the property described, and upon examination of said Agreement, the Commissioner finds:

- (a) That such agreement will tend to promote the conservation of oil and gas and the better utilization of reservoir energy in said area.
- (b) That under the proposed agreement, the State of New Mexico will receive its fair share of the recoverable oil or gas in place under its lands in the area.
- (c) That each beneficiary Institution of the State of New Mexico will receive its fair and equitable share of the recoverable oil and gas under its lands within the area.
- (d) That such agreement is in other respects for the best interests of the State, with respect to state lands.

NOW, THEREFORE, by virtue of the authority conferred upon me under Sections 19-10-45, 19-10-46, 19-10-47, New Mexico Statutes Annotated, 1978 Compilation, I, the undersigned, Commissioner of Public Lands of the State of New Mexico, for the purpose of more properly conserving the oil and gas resources of the State, do hereby consent to and approve the said Agreement, and any leases embracing lands of the State of New Mexico within the area shall be and the same are hereby amended to conform with the terms thereof, and shall remain in full force and effect according to the terms and conditions of said Agreement. This approval is subject to all of the provisions of the aforesaid statutes.

IN WITNESS WHEREOF, this Certificate of Approval is executed, with seal affixed, this  $\frac{28\mathrm{TH}}{}$  day of  $\frac{0\mathrm{ctober}}{}$ , 19

COMMISSIONER OF PUBLIC LANUS of the State of New Hexico

### NORTH MONUMENT GRAYBURG/SAN ANDRES UNIT LEA COUNTY, NEW MEXICO

### CERTIFICATE OF EFFECTIVENESS

The Oil Conservation Division of the Energy, Minerals and Natural Resources

Department, State of New Mexico, hereby certifies as follows:

- 1. In accordance with the provisions of the New Mexico Statutory Unitization Act (N.M.Stat.Ann. § 70-7-1 through 70-7-21 (1978)), the Oil Conservation Division entered Order No. R-9494, dated May 1, 1991, which granted the application of Amerada Hess Corporation for statutory unitization of the North Monument Grayburg/San Andres Unit Area comprised of 13,385 acres, more or less, of Federal, State and Fee lands, in the Eunice Monument Grayburg-San Andres Pool, Lea County, New Mexico.
- 2. Order No. R-9494 provides that statutory unitization of the North Monument Grayburg/San Andres Unit will become effective upon approval of the plan for unit operations by the owners of seventy-five percent (75%) of the working interest and seventy-five percent (75%) of the royalty interest in the proposed unit area.
- 3. Amerada Hess Corporation, operator of the North Monument Grayburg/San Andres Unit, has provided the Division with documentation which verifies that the persons owning the required percentages of working interest and royalty interest in the North Monument Grayburg/San Andres Unit Area have ratified and approved the plan for unit operations in accordance with the rules and regulations of the Division and Order No. R-9494.
- 4. Accordingly, Division Order No. R-9494 is now in full force and effect and the unit agreement and unit operating agreement for the North Monument Grayburg/San

Andres Unit shall become effective as of January 1, 1992 at 7:00 a.m. Mountain Standard Time for the area known as the North Monument Grayburg/San Andres Unit Area.

5. The horizontal limits of this unit area shall be comprised of the following described Federal, State and Fee lands in Lea County, New Mexico:

### TOWNSHIP 19 SOUTH, RANGE 36 EAST, N.M.P.M.

Section 13: E/2 SE/4

Section 23: S/2 SE/4; SE/4 SW/4

Section 24: E/2; E/2 SW/4; SW/4 SW/4

Section 25: All

Section 26: E/2; SW/4; E/2 NW/4

Section 34: E/2 E/2; SW/4 SE/4

Sections 35 and 36: All

### TOWNSHIP 19 SOUTH, RANGE 37 EAST, N.M.P.M.

Section 7: SE/4; E/2 SW/4

Section 8: W/2 SW/4; SW/4 NW/4

Section 17: W/2 NE/4; SE/4; W/2

Section 18: E/2; E/2 W/2; W/2 W/2 (Lots 1, 2, 3 & 4)

Section 19: E/2; E/2 W/2; W/2 W/2 (Lots 1, 2, 3 & 4)

Section 20: All

Section 21: W/2 NW/4; SW/4

Section 28: W/2

Section 29: All

Section 30: E/2; E/2 W/2; W/2 W/2 (Lots 1, 2, 3 & 4)

Section 31: E/2; E/2 W/2; W/2 W/2 (Lots 1, 2, 3 & 4)

Section 32: All

Section 33: All

Section 34: SE/4; S/2 SW/4

### TOWNSHIP 20 SOUTH, RANGE 36 EAST, N.M.P.M.

Section 1: SW/4; S/2 NW/4; N/2 NW/4 (Lots 3 & 4)

Section 2: S/2; S/2 N/2; N/2 N/2 (Lots 1, 2, 3 & 4)

Section 3: E/2 SE/4; S/2 NE/4; NE/4 NE/4 (Lot 1)

### TOWNSHIP 20 SOUTH, RANGE 37 EAST, N.M.P.M.

Section 3: SW/4 NE/4; S/2 NW/4; NW/4 SW/4; N/2 N/2 (Lots 1, 2, 3 & 4)

Section 4: S/2; S/2 N/2; N/2 N/2 (Lots 1, 2, 3 & 4)

Section 5: NE/4 SE/4; S/2 SE/4; NW/4 SW/4; S/2 N/2; N/2 N/2

(Lots 1, 2, 3 & 4)

Section 6: S/2 N/2; N/2 N/2 (Lots 1, 2, 3 & 4)

Section 8: NE/4 NE/4

Section 9: S/2 NE/4; NW/4 NE/4; NW/4

6. The vertical limits of the Unit Area shall comprise the interval containing the Grayburg and San Andres formations as found from a depth of 3,642 feet to a depth of 5,050 feet on the Gamma Ray Formation Compensated Density Log run on the Amerada Hess Corporation Monument Abo Unit Well No. 1 located in the NE/4 NW/4 of Section 2, Township 20 South, Range 36 East, N.M.P.M., Lea County, New Mexico.

IN WITNESS WHEREOF, THIS CERTIFICATE IS EXECUTED THIS \_\_\_\_\_\_

DAY OF MAY, 1991.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY DIRECTOR

# UNIT NAME: NORTH MONUMENT GRAYBURG / SAN ANDRES UNIT

OPERATOR: AMERADA HESS CORPORATION COUNTY: LEA COUNTY, NEW MEXICO

	DATE APPROVED
	DATE OCD CASE NO. APPROVED ORDER NO.
11/1/91	EFFECTIVE DATE
13,384.88	TOTAL ACREAGE
6,349.49	STATE
640.32	FEDERAL-
6,395.07	FEE
All leases sharing in royalty from unit will be extended	SEG CLAUSE

8 Case No. 10253, Order No. R-9494 5/1/91 Case No. 10252, Order No. R-9596 10/15/91

CPL: October 28, 1991

August 23, 1991

### UNIT AREA:

### TOWNSHIP 19 SOUTH, RANGE 36 EAST, NNIPM

Section 13: E/2 SE/4 Section 23: S/2 SE/4, SE/4 SW/4 Section 24: E/2, E/2 SW/4, SW/4 SW/4

Section 25:

Sections 35 and 36: All Section 26: E/2, SW/4, E/2 NW/4 Section 34: E/2 E/2, SW/4 SE/4

# TOWNSHIP 19 SOUTH, RANGE 37 EAST, NIMINI

Section 7: SE/4, E/2 SW/4

Section 8: W/2 SW/4, SW/4 NW/4
Section 17: W/2, SE/4, W/2 NE/4
Sections 18 through 20: All
Section 21: SW/4, W/2 NW/4

Section 28: W/2

Sections 29 through 33: All Section 34: SE/4, S/2 SW/4

### TOWNSHIP 20 SOUTH, RANGE 36 EAST, NNIPNI

Section 1: **¥**/2

Section 2: All Section 3: E/2 E/2, SW/4 NE/4

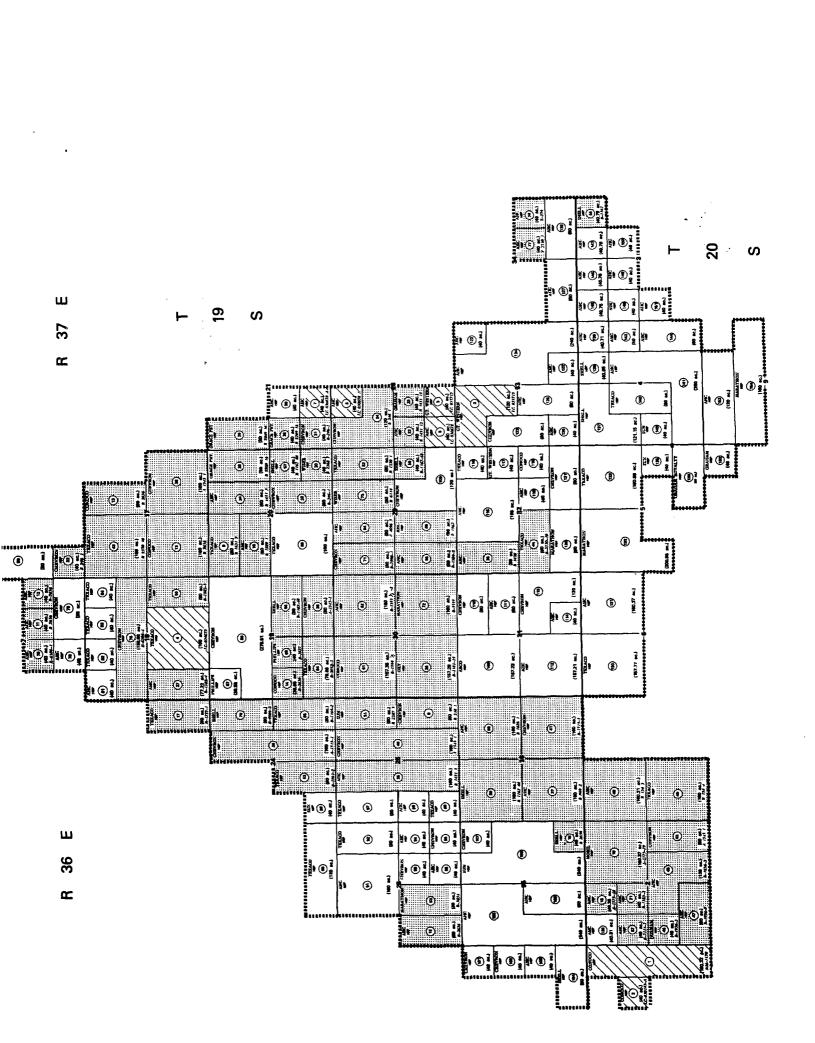
## TOWNSHIP 20 SOUTH, RANGE 37 EAST, NMPM

Section 4: Section 3: N/2 N/2, S/2 NW/4, SW/4 NE/4, NW/4 SW/4

Section 5: N/2, NE/4 SE/4, S/2 SE/4, NW/4 SW/4

Section 8: Section 6: NE/4 NE/4

Section 9: NW/4, S/2 NE/4, NW/4 NE/4



NORTH MONUMENT GRAYBURG, SAN ANDRES UNIT LEA COUNTY, NEW MEXICO

EXHIBIT "A"

AMERADA HESS CORPORATION

### CAMPBELL & BLACK, P.A. LAWYERS

JACK M. CAMPBELL BRUCE D. BLACK MICHAEL B. CAMPBELL WILLIAM F. CARR BRADFORD C. BERGE MARK F. SHERIDAN WILLIAM P. SLATTERY

ANNIE-LAURIE COOGAN

JEFFERSON PLACE SUITE I - 110 NORTH GUADALUPE POST OFFICE BOX 2208 SANTA FE, NEW MEXICO 87504-2208 TELEPHONE: (505) 988-4421

TELECOPIER: (505) 983-6043

February 15, 1991

### HAND-DELIVERED

William J. LeMay, Director Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources State Land Office Building Santa Fe, New Mexico 87503

RECEIVED

FEB 15 1991 OIL CONSERVATION DIV. SANTA FE

Re: Oil Conservation Division Case No. 10252

> In the Matter of the Application of Amerada Hess Corporation for a Waterflood Project, Lea County, New Mexico

Oil Conservation Division Case No. 10253

In the Matter of the Application of Amerada Hess Corporation for Statutory

Unitization, Lea County, New Mexico

Dear Mr. LeMay:

Amerada Hess Corporation hereby requests that the above-referenced cases which are currently set for hearing on February 21, 1991 be continued to the Examiner hearings on April 4, 1991.

Your attention to this request is appreciated.

Very truly yours,

lark for WILLIAM F. CARR

WFC:mlh

W. Thomas Kellahin, Esq. cc:

Ron Sponberg, Esq.

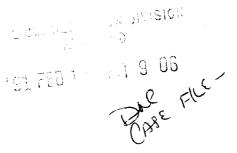
Mr. J. C. Hefley

Telecopied and Mailed Telecopied and Mailed

### E.M. GORENCE

Oil & Gas Properties 301 N. Colorado #340 Midland, Texas 79701

February 12, 1991



Oil Conservation Division State of New Mexico Energy, Minerals, and Natural Resources Department P. O. Box 2088 Santa Fe, New Mexico 87504

Attention: Mr. David Catanach, Division Examiner

Re: Case No. 10253, Application of Amerada Hess Corporation for Statutory Unitization, North Monument Grayburg/San Andres Unit, Lea County, New Mexico - Hearing set for February 21, 1991

### Gentlemen:

I have a small working interest in Tract 151 of subject proposed unit. I have no objection to such proposed unitization; however, I do not desire to have a working interest in such unitization.

Therefore, I intend to sell such working interest to one of the other working interest owners; negotiations for such a sale are now underway.

Yours very truly,

E. M. Gorence Phone 915 686 9544

cc: Mr. Dan C. Foland Amerada Hess Corporation P. O. Box 2040

Tulsa, Oklahoma 74102



### United States Department of the Interior

### BUREAU OF LAND MANAGEMENT

Roswell District Office P.O. Box 1397 Roswell, New Mexico 88202-1397



IN REPLY REFER TO:

North Monument Grayburg/San Andres Unit 3180 (065)

Campbell & Black, P. A. Attention: Mr. William F. Carr P. O. Box 2208
Santa Fe, NM 87504-2208

JAN 09 199

### Gentlemen:

Your application of December 18, 1990, filed with the BLM on behalf of Amerada Hess Corporation requests the designation of the North Monument Grayburg/San Andres Unit area, embracing 13,464.88 acres, more or less, Lea County, New Mexico, as logically subject to secondary operations under the unitization provisions of the Mineral Leasing Act as amended.

Pursuant to unit plan regulations 43 CFR 3180, the land requested as outlined on your plat marked Amerada Hess Corporation, North Monument Grayburg/San Andres Unit, Lea County, New Mexico, is hereby designated as a logical unit area for the purpose of conducting secondary recovery operations. Waterflooding will be limited to the following interval: From the top of the Grayburg to the base of the San Andres consisting of five major subdivisions which are identifiable and correlatable across the unit area. This designation is valid for a period of one year from the date of this letter.

Your basis for allocation of unitized substances and your proposed form of unit agreement are acceptable. Corrections requested by the Bureau of Land Management are shown in red on the Form of Agreement and on Exhibits A and B.

If conditions are such that further modification of said standard form is deemed necessary, three copies of the proposed modifications with appropriate justification must be submitted to this office for preliminary approval.

In the absence of any type of land requiring special provisions or any objections not now apparent, a duly executed agreement identical with said form, modified as outlined above, will be approved if submitted in approvable status within a reasonable period of time. However, notice is hereby given that the right is reserved to deny approval of any executed agreement submitted which, in our opinion, does not have the full commitment of sufficient lands to afford effective control of operations in the unit area.

When the executed agreement is transmitted to the BLM for approval, include the latest status of all acreage. In preparation of Exhibits "A" and "B", follow closely the format of the sample exhibits attached to the reprint of the aforementioned form.

### State of New Mexico





JIM BACA COMMISSIONER

### Commissioner of Public Lands

P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148

January 14, 1991

Campbell & Black, P.A. P.O. Box 2208
Santa Fe, NM 87504-2208

Attn: Mr. William F. Carr

Re: North Monument Grayburg/San Andres Unit Operator: Amerada Hess Corporation Preliminary Unit Approval

Dear Mr. Carr:

This office has reviewed the proposed agreement and accompanying data and we find that the general requirements of the Commissioner of Public Lands have been met. However, we do require the following data for reference purposes.

- 1. A cross-reference of the old well numbers to the new well numbers with legal descriptions, including TA, and P & A Wells.
- 2. A cross-reference of the old tract numbers to the new tract numbers.

We concur with the changes required by the Bureau of Land Management in their letter designation.

When submitting your agreement for final approval, please include the following items.

- 1. Application for final approval by the Commissioner of Public Lands setting forth the tracts that have been committed and those that are not committed.
- 2. All ratifications from the Lessee of Record and Working Interest Owners, all signatures should be acknowledged by a Notary Public and one set must contain original signatures.
- 3. Order of the New Mexico Oil Conservation Division. Our approval will be contingent upon subsequent favorable approval by the New Mexico Oil Conservation Division.
- 4. An original and one copy of both the Unit Agreement and the Unit Operating Agreement for our files. Again, the original set must contain original signatures.

### KELLAHIN, KELLAHIN AND AUBREY CONSER. ON DIVISION REDE JED

ATTORNEYS AT LAW

EL PATIO BUILDING

117 NORTH GUADALUPE POST OFFICE BOX 2265 91 Flede Hobuel 1859 982 9285 TELEFAX (505) 982 2047

W THOMAS KELLAHIN KAREN AUBREY

CANDACE HAMANN CALLAHAN

SANTA FE, NEW MEXICO 87504-2265

JASON KELLAHIN OF COUNSEL

February 18, 1991

Mr. William J. LeMay Oil Conservation Division Post Office Box 2088 Santa Fe, New Mexico 87504

Re: OCD Case No. 10252

Application of Amerada Hess Corporation for Approval of the North Monument Grayburg-San Andres Unit Waterflood, Lea County, New Mexico

OCD Case No. (10253) Application of Amerada Hess Corporation for Statutory Unitization of the North Monument Grayburg-San Andres Unit, Lea County, New Mexico

Dear Mr. LeMay:

On behalf of ARCO Oil & Gas Company, please enter my appearance and that of Mr. Ron Sponberg, Esq. in the referenced cases.

Very truly

Thomas Kell

WTK/tic

cc: William F. Carr, Esq. Ron Sponberg, Esq.

### STATE OF NEW MEXICO

### ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

Case 1	No.	10253	
Order	No.	R-	

APPLICATION OF AMERADA HESS CORPORATION FOR STATUTORY UNITIZATION, LEA COUNTY, NEW MEXICO.

### ORDER OF THE DIVISION

### **BY THE DIVISION**:

This cause came on for hearing at 8:15 a.m. on April 4, 1991, at Farmington, New Mexico, before Examiner David R. Catanach.

NOW, on this \_\_\_\_\_ day of April, 1991, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

### FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Amerada Hess Corporation ("Amerada Hess"), seeks the statutory unitization, pursuant to the "Statutory Unitization Act", Sections 70-7-1 through 70-7-21, NMSA, (1978), of 13,385 acres, more or less, within the Eunice Monument Grayburg-San Andres Pool comprised of the following described acreage in Lea County, New Mexico:

Case No. 10253 Order No. R-\_\_\_\_\_ Page 2

### TOWNSHIP 19 SOUTH, RANGE 36 EAST, N.M.P.M.

Section 13: E/2 SE/4

Section 23: S/2 SE/4; SE/4 SW/4

Section 24: E/2; E/2 SW/4; SW/4 SW/4

Section 25: All

Section 26: E/2; SW/4; E/2 NW/4

Section 34: E/2 E/2; SW/4 SE/4

Sections 35 and 36: All

### TOWNSHIP 19 SOUTH, RANGE 37 EAST, N.M.P.M.

Section 7: SE/4; E/2 SW/4

Section 8: W/2 SW/4; SW/4 NW/4

Section 17: W/2 NE/4; SE/4; W/2

Section 18: E/2; E/2 W/2; W/2 W/2 (Lots 1, 2, 3 & 4)

Section 19: E/2; E/2 W/2; W/2 W/2 (Lots 1, 2, 3 & 4)

Section 20: All

Section 21: W/2 NW/4; SW/4

Section 28: W/2

Section 29: All

Section 30: E/2; E/2 W/2; W/2 W/2 (Lots 1, 2, 3 & 4)

Section 31: E/2; E/2 W/2; W/2 W/2 (Lots 1, 2, 3 & 4)

Section 32: All

Section 33: All

Section 34: SE/4; S/2 SW/4

### TOWNSHIP 20 SOUTH, RANGE 36 EAST, N.M.P.M.

Section 1: SW/4; S/2 NW/4; N/2 NW/4 (Lots 3 & 4)

Section 2: S/2; S/2 N/2; N/2 N/2 (Lots 1, 2, 3 & 4)

Section 3: E/2 SE/4; S/2 NE/4; NE/4 NE/4 (Lot 1)

Case No. 10253 Order No. R-\_\_\_\_ Page 3

### TOWNSHIP 20 SOUTH, RANGE 37 EAST, N.M.P.M.

Section 3: SW/4 NE/4; S/2 NW/4; NW/4 SW/4; N/2 N/2 (Lots 1, 2, 3 & 4)

Section 4: S/2; S/2 N/2; N/2 N/2 (Lots 1, 2, 3 & 4)

Section 5: NE/4 SE/4; S/2 SE/4; NW/4 SW/4; S/2 N/2; N/2 N/2 (Lots 1, 2, 3 & 4)

Section 6: S/2 N/2; N/2 N/2 (Lots 1, 2, 3 & 4)

Section 8: NE/4 NE/4

Section 9: S/2 NE/4; NW/4 NE/4; NW/4

Applicant further seeks approval of the Unit Agreement and the Unit Operating Agreement for the North Monument Grayburg-San Andres Unit.

- (3) The proposed unit shall be known as the North Monument Grayburg-San Andres Unit and the Unit Area should be designated the North Monument Grayburg-San Andres Unit Area ("the Unit Area").
- (4) The vertical limits of the Unit Area should comprise the interval containing the Grayburg and San Andres formations as found from a depth of 3,642 feet to a depth of 5,050 feet on the Gamma Ray Formation Compensated Density log of the AHC-Monument Abo Unit No. 1 Well located in the NE/4 NW/4 of Section 2, Township 20 South, Range 36 East, N.M.P.M., Lea County, New Mexico in the Eunice Monument Grayburg-San Andres Pool.
- (5) No interested party appeared in opposition to the unitization nor to the vertical limits of the proposed Unit Area.
- (6) The Unit Area contains 153 separate tracts owned by 48 different working interest owners.
- (7) As of the date of hearing, the owners of over 78.8% of the working interest (and over 52% of the royalty interest) were effectively committed to the unit or have balloted to join the unit.
- (8) Amerada Hess will seek authority to institute an enhanced recovery project, for the recovery of oil and associated gas, condensate, and all associated liquefiable hydrocarbons, within and to be produced from the proposed Unit Area in Case No. 10252.

- (9) Enhanced recovery operations by waterflood should result in additional recovery from the Unit Area of approximately 44 Million barrels of oil.
- (10) The unitized management, operation and further development of the Unit Area, as proposed, is reasonable and necessary to effectively and efficiently carry on enhanced recovery operations and will substantially increase the ultimate recovery of oil and gas from the unitized formation.
- (11) The proposed unitized method of operation as applied to the Unit Area is feasible and will result with reasonable probability in the increased recovery of substantially more oil from the unitized portion of the pool than would otherwise be recovered without unitization.
- (12) The estimated additional cost of the proposed unitized operations within the Unit Area will not exceed the estimated value of the additional oil and gas plus a reasonable profit.
- (13) The applicant, designated operator of the Unit Area pursuant to the Unit Agreement and Unit Operating Agreement, has made a good faith effort to secure voluntary unitization within the Unit Area.
- (14) The Phase I and Phase II participation formulas contained in the Unitization Agreement, allocate the produced and saved unitized substances to the separately owned tracts in the Unit Area, on a fair, reasonable and equitable basis.
- (15) A wellbore usable for production or injection in the unitized interval must be made available for proration units within the Unit Area which are to participate in the proposed waterflood operations.
- (16) It is not unreasonable to penalize the owners of certain proration units on which there is no such wellbore, and upon which the unit operator must drill a well.
  - (17) The proposed method of wellbore assessment is fair and reasonable.
- (18) Unitization and the adoption of the proposed unitized methods of operation will benefit the working interest owners and the royalty interest owners of the oil and gas rights within the Unit Area.

- (19) The North Monument Grayburg-San Andres Unit Agreement and Unit Operating Agreement, as applied to the Unit Area, provide for unitization and unit operation of the Unit Area upon terms and conditions that are fair, reasonable and equitable and which include:
  - (a) An allocation to the separately owned tracts in the Unit Area of all oil and gas that is produced from the Unit Area and which is saved, being the production that is not used in the conduct of unit operations or not unavoidably lost;
  - (b) A provision for the credits and charges to be made and the adjustment among the owners in the Unit Area for their respective investments in wells, tanks, pumps, machinery, materials and equipment contributed to the unit operations;
  - (c) A provision governing how the costs of unit operations, including capital investments, shall be determined and charged to the separately owned tracts and how said costs shall be paid, including a provision providing when, how, and by whom the unit production allocated to an owner who does not pay his share of the costs of unit operations shall be charged to such owners, of the interest of such owners, and how his interest may be sold and the proceeds applied to the payment of his costs;
  - (d) A provision for carrying any working interest owner on a limited, carried or net profits basis, payable out of production, upon such terms and conditions which are just and reasonable, and which allow an appropriate charge for interest for such service payable out of production, upon such terms and conditions determined by the Division to be just and reasonable, and allowing an appropriate charge for interest for such service

payable out of such owner's share of production, providing that any non-consenting working interest owner being so carried shall be deemed to have relinquished to the unit operator all of his operating rights and working interests in and to the unit until his share of the costs, service charge and interest are repaid to the unit operator;

- (e) A provision designating the unit operator and providing for the supervision and conduct of the unit operations, including the selection, removal or substitution of an operator from among the working interest owners to conduct the unit operations;
- (f) A provision for a voting procedure for the decision of matters to be decided by the working interest owners in respect to which each working interest owner shall have a voting interest equal to his unit participation; and
- (g) The time when the unit operations shall commence and the manner in which, and the circumstances under which, the unit operations shall terminate and for the settlement of accounts upon such termination.
- (20) The statutory unitization of the North Monument Grayburg-San Andres Unit Area is in conformity with the above findings, and will prevent waste and will protect the correlative rights of all owners of interest within the proposed Unit Area, and should be approved.

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### IT IS THEREFORE ORDERED THAT:

- (1) The North Monument Grayburg-San Andres Unit Area comprising 13,385 acres, more or less, in the Eunice Monument Grayburg-San Andres Pool, Lea County, New Mexico, is hereby approved for statutory unitization pursuant to the Statutory Unitization Act, Sections 70-7-1 through 70-7-21, NMSA, (1978).
- (2) The lands included within the North Monument Grayburg-San Andres Unit Area shall comprise:

### TOWNSHIP 19 SOUTH, RANGE 36 EAST, N.M.P.M.

Section 13: E/2 SE/4

Section 23: S/2 SE/4; SE/4 SW/4

Section 24: E/2; E/2 SW/4; SW/4 SW/4

Section 25: All

Section 26: E/2; SW/4; E/2 NW/4

Section 34: E/2 E/2; SW/4 SE/4

Sections 35 and 36: All

### TOWNSHIP 19 SOUTH, RANGE 37 EAST, N.M.P.M.

Section 7: SE/4; E/2 SW/4

Section 8: W/2 SW/4; SW/4 NW/4

Section 17: W/2 NE/4; SE/4; W/2

Section 18: E/2; E/2 W/2; W/2 W/2 (Lots 1, 2, 3 & 4)

Section 19: E/2; E/2 W/2; W/2 W/2 (Lots 1, 2, 3 & 4)

Section 20: All

Section 21: W/2 NW/4; SW/4

Section 28: W/2

Section 29: All

Section 30: E/2; E/2 W/2; W/2 W/2 (Lots 1, 2, 3 & 4)

Section 31: E/2; E/2 W/2; W/2 W/2 (Lots 1, 2, 3 & 4)

Section 32: All

Section 33: All

Section 34: SE/4; S/2 SW/4

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### TOWNSHIP 20 SOUTH, RANGE 36 EAST, N.M.P.M.

Section 1: SW/4; S/2 NW/4; N/2 NW/4 (Lots 3 & 4) Section 2: S/2; S/2 N/2; N/2 N/2 (Lots 1, 2, 3 & 4) Section 3: E/2 SE/4; S/2 NE/4; NE/4 NE/4 (Lot 1)

### TOWNSHIP 20 SOUTH, RANGE 37 EAST, N.M.P.M.

Section 3: SW/4 NE/4; S/2 NW/4; NW/4 SW/4; N/2 N/2 (Lots 1, 2, 3 & 4)

Section 4: S/2; S/2 N/2; N/2 N/2 (Lots 1, 2, 3 & 4)

Section 5: NE/4 SE/4; S/2 SE/4; NW/4 SW/4; S/2 N/2; N/2 N/2 (Lots 1, 2, 3 & 4)

Section 6: S/2 N/2; N/2 N/2 (Lots 1, 2, 3 & 4)

Section 8: NE/4 NE/4

Section 9: S/2 NE/4; NW/4 NE/4; NW/4

- (3) The vertical limits of the North Monument Grayburg-San Andres Unit Area shall comprise the interval containing the Grayburg and San Andres formations as found from a depth of 3,642 feet to a depth of 5,050 feet on the Gamma Ray Formation Compensated Density log of the AHC-Monument Abo Unit No. 1 Well located in the NE/4 NW/4 of Section 2, Township 20 South, Range 36 East, N.M.P.M., Lea County, New Mexico in the Eunice Monument Grayburg-San Andres Pool.
- (4) The applicant shall not institute a waterflood project for the secondary recovery of oil, gas and all associated liquefiable hydrocarbons within and produced from the Unit Area, until the enhanced recovery project, which is currently the subject of Case No. 10252, has been approved by the Division.
- (5) The Unit Agreement and the Unit Operating Agreement for the North Monument Grayburg-San Andres Unit, presented as evidence in this case, are hereby incorporated by reference into this Order.
- (6) The Unit Agreement and the Unit Operating Agreement for the North Monument Grayburg-San Andres Unit provide for unitization and unit operation of the Unit Area upon terms and conditions that are fair, reasonable and equitable and include:

- (a) An allocation to the separately owned tracts in the Unit Area of all oil and gas that is produced from the Unit Area and which is saved, being the production that is not used in the conduct of unit operations or not unavoidably lost;
- (b) A provision for the credits and charges to be made and the adjustment among the owners in the Unit Area for their respective investments in wells, tanks, pumps, machinery, materials and equipment contributed to the unit operations;
- (c) A provision governing how the costs of unit operations, including capital investments, shall be determined and charged to the separately owned tracts and how said costs shall be paid, including a provision providing when, how, and by whom the unit production allocated to an owner who does not pay his share of the costs of unit operations shall be charged to such owners, of the interest of such owners, and how his interest may be sold and the proceeds applied to the payment of his costs;
- (d) A provision for carrying any working interest owner on a limited, carried or net profits basis, payable out of production, upon such terms and conditions which are just and reasonable, and which allow an appropriate charge for interest for such service payable out of production, upon such terms and conditions determined by the Division to be just and reasonable, and allowing an appropriate charge for interest for such service payable out of such owner's share of production, providing that any non-consenting working interest owner being so carried shall be deemed to have relinquished to the unit operator all of his operating rights and working interests in and

to the unit until his share of the costs, service charge and interest are repaid to the unit operator;

- (e) A provision designating the unit operator and providing for the supervision and conduct of the unit operations, including the selection, removal or substitution of an operator from among the working interest owners to conduct the unit operations;
- (f) A provision for a voting procedure for the decision of matters to be decided by the working interest owners in respect to which each working interest owner shall have a voting interest equal to his unit participation; and
- (g) The time when the unit operations shall commence and the manner in which, and the circumstances under which, the unit operations shall terminate and for the settlement of accounts upon such termination.
- (7) This Order shall not become effective unless and until seventy-five (75) percent of the working interest owners and seventy-five (75) percent of the royalty interest owners in the Unit Area have approved the plan for unit operations as required by Section 70-7-8 NMSA, (1978) Comp.
- (8) If the persons owning the required percentage of interest in the Unit Area as set out in Section 70-7-8 NMSA, (1978) Comp., do not approve the plan for unit operations within a period of six (6) months from the date of entry of this Order, this Order shall cease to be of further force and effect and shall be revoked by the Division, unless the Division shall extend the time for ratification for good cause shown.
- (9) When the persons owning the required percentage of interest in the Unit Area have approved the plan for unit operations, the interests of all persons in the Unit Area are unitized whether or not such persons have approved the plan of unitization in writing.

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(10) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

WILLIAM J. LeMAY Director

SEAL