

3-27-95

OIL CONSERVATION DIVISION
RECEIVED

'95 MAR 7 AM 8 52

AMERADA HESS CORPORATION

P.O. BOX 840
SEMINOLE, TX 79360
915-758-6700

February 22, 1995

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NM 87501

Re: REQUEST FOR EXCEPTION TO RULE 303-A
DOWNHOLE COMMINGLING
E. W. WALDEN WELL #6
UNIT M, SEC 15, T-22-S, R-37-E
TUBB AND DRINKARD FORMATIONS
DRINKARD FIELD
LEA COUNTY, NEW MEXICO

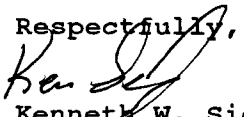
Dear Sir:

Amerada Hess Corporation respectfully requests approval for an exception to Rule 303-A to permit downhole commingling of the Tubb and Drinkard gas zones in the above mentioned well.

Currently the Tubb zone is perforated from 6100'-6150' and the Drinkard from 6200-6250. A production packer is set at 6175'. The Drinkard zone flows up the tubing; the Tubb is completed flowing up the tubing-casing annulus but has been temporarily abandoned since 1975. The gas production rate from both zones has decreased such that it is no longer sufficient to lift the produced liquids. If permission to downhole commingle is received, both zones will be flowed up the tubing, the combined flow rate is anticipated to be sufficient to prevent the well from loading up. Additional reserves will be produced and both zones will be produced longer to a lower final abandonment pressure. Also, if necessary, both zones can be swabbed to re-establish production if the well quits flowing.

Enclosed is the pertinent data supporting this application as outlined in Rule 303-C. If additional information is necessary, please contact me at (915) 758-6700.

Respectfully,


Kenneth W. Sigl
Senior Petroleum Engineer

Attachments:
XC: Division Director (2)
Hobbs District Office
Offset Operators
File

REQUEST FOR EXCEPTION TO RULE 303-A

E.W. WALDEN WELL #6
DRINKARD FIELD

A) Amerada Hess Corporation
PO Box 840
Seminole, TX 79360

B) E.W. Walden Well #6
Unit M, 731' FSL, 731' FWL
Section 15, T-22-S, R-37-E
Lea County, New Mexico
Commingled Zones: Tubb
Drinkard

C) A plat of the area is attached showing the lease and offset operations. Also attached is a C-102 for each formation.

D) The form C-116 for each of the formations is attached. Recently the Drinkard has had no production; therefore the allocated production for the Drinkard will be based upon recent current rate and historical production data. The allocated production for the Tubb will be based upon its rate, GOR and GWR prior to being TA'd.

E) Production curves for both the Tubb and Drinkard are attached.

F) Bottom hole pressure for each zone. Calculated from shut-in surface pressures and measured fluid levels (estimated fluid level on the Drinkard), adjusted to a common datum.

Tubb	559 psig
Drinkard	386 psig

G) Amerada Hess is commingling the fluids in other nearby wells and has not encountered any incompatibility problems.

H) The value of the commingled production will not be less than the sum of the values of the individual streams since Amerada Hess is receiving the same price for gas from the two zones.

I) Production allocation formula:

1) Gas production estimated from previous rates and offset production, historical gas-oil ratios (GOR) and gas-water ratios (GWR) are as follows:

Formation	Gas (mcf/d)	GOR (scf/stbo)	GWR (scf/stbw)
Drinkard	6	4,121	201,000
Tubb	1	28,000	Infinite- no water prod

2) Calculation of allocation percentages:

Drinkard gas % = $(6/(6 + 1)) * 100\% = 86\%$
Tubb gas % = $(1/(6 + 1)) * 100\% = 14\%$

Drinkard oil % = $(6/4121)/((6/4121)+(1/28,000)) * 100\% = 98\%$
Tubb oil % = $(1/28,000)/((6/4121)+(1/28,000)) * 100\% = 2\%$

Drinkard water = 100% since Tubb has never tested any water

3) Allocation percentages are tabulated below:

Formation	Gas (%)	Oil (%)	Water (%)
Drinkard	86%	98%	100%
Tubb	14%	2%	0%
Total	100%	100%	100%

(J) Ownership of the two pools to be commingled are in common and correlative rights will not be violated.

(K) By copy of this letter we are notifying all offset operators of the proposed commingling.



LAND PLAT
DRINKARD AREA
LEA COUNTY, NEW MEXICO

1"=3000'

☐ AMENDED REPORT

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-10274		Pool Code 60240	Pool Name TUBB OIL AND GAS
Property Code	Property Name E. W. WALDEN		Well Number 3406'
OGRID No.	Operator Name AMERADA HESS CORPORATION		Elevation 3406'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
M	15	20S	37E		731	SOUTH	731	WEST	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedic 1 Acre 40	12 Joint or Infill No	12 Consolidation Code No	12 Order No.						

**NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION**

16				17 OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i> <u><i>Kenn Steel</i></u> Signature <u>KENNETH W. STEEL</u> Printed Name <u>SR. PET. ENG.</u> Title <u>2/22/95</u> Date
				18 SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> _____ Date of Survey _____ Signature and Seal of Professional Surveyor: _____ Certificate Number
731' → ● #6 ↑ 731' ↓	SECTION 15			

District I
PO Box 1900, Hobbs, NM 88241-1900
District II
PO Drawer DD, Artesia, NM 88211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 10, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-10274		Pool Code 19190	Pool Name DRINKARD
Property Code	Property Name E.W. WALDEN		Well Number 6
OGRID No.	Operator Name AMERADA HESS CORP.		Elevation 3406'

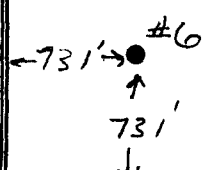
10 Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
M	15	20S	37E		731	SOUTH	731	WEST	LEA

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
Dudice Acres 40		Joint or Infill N	Consolidation Code N	Order No.					

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16					17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Signature KENNETH W. SEGL Printed Name SR. PET. ENG. Title 2/22/95 Date
					18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey Signature and Seal of Professional Surveyor: Certificate Number
					

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Submit 2 copies to Appropriate District Office.
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Drawer DD, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

GAS - OIL RATIO TEST

Operator Amerada Hess Corporation		Pool Tubb*		County Lea											
Address Drawer D, Monument, NM 88265		TYPE OF TEST - (X) ☒ Scheduled ☐ Completion		Special ☒ X											
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT/BBL.		
		U	S	T						R	WATER BBL.S.	GRAV. OIL		OIL BBL.S.	GAS M.C.F.
E. W. Walden	6	M	15	22	37	1-18-95	F	NA	NA	24	0	43.0	0	1	NA
Request downhole commingling allowable.															
Tubb zone: Oil - 2% Gas - 9%															
Drinkard zone: Oil - 98% Gas - 91% Water - 100%															
*Zone is currently TA'D. Estimated rates for information only.															

Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

(See Rule 301, Rule 1116 & appropriate pool rules.)

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

Kenneth W. Sigl
Signature
Kenneth W. Sigl Sr. Pet. Eng.
Printed name and title
2-27-95 (915) 758-6700
Date Telephone No.

Submit 2 copies to Appropriate District Office.
DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Drawer DD, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-116
Revised 1/1/89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

GAS - OIL RATIO TEST

Operator Amerada Hess Corporation		Pool Drinkard*		County Lea												
Address Drawer D, Monument, NM 88265		TYPE OF TEST - (X)		Completion ☐ Special ☒												
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	GR. EX. LG.	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU.FT/BBL.		
		U	S	T							R	WATER BBLs.	GRAV. OIL		OIL BBLs.	GAS M.C.F.
E. W. Walden	6	M	15	22	37	NA	F	NA	30	NA	24	0	42.0	0	6	NA
Request downhole commingling allowable:																
Drinkard zone:																
Oil - 98%																
Gas - 91%																
Water - 100%																
Tubb zone:																
Oil - 2%																
Gas - 9%																
*Zone is currently dead. Flowing no gas. Estimated Rates for information only.																

Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

(See Rule 301, Rule 1116 & appropriate pool rules.)

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

Signature

Keneth W. Sigl

Sr. Pet. Eng.

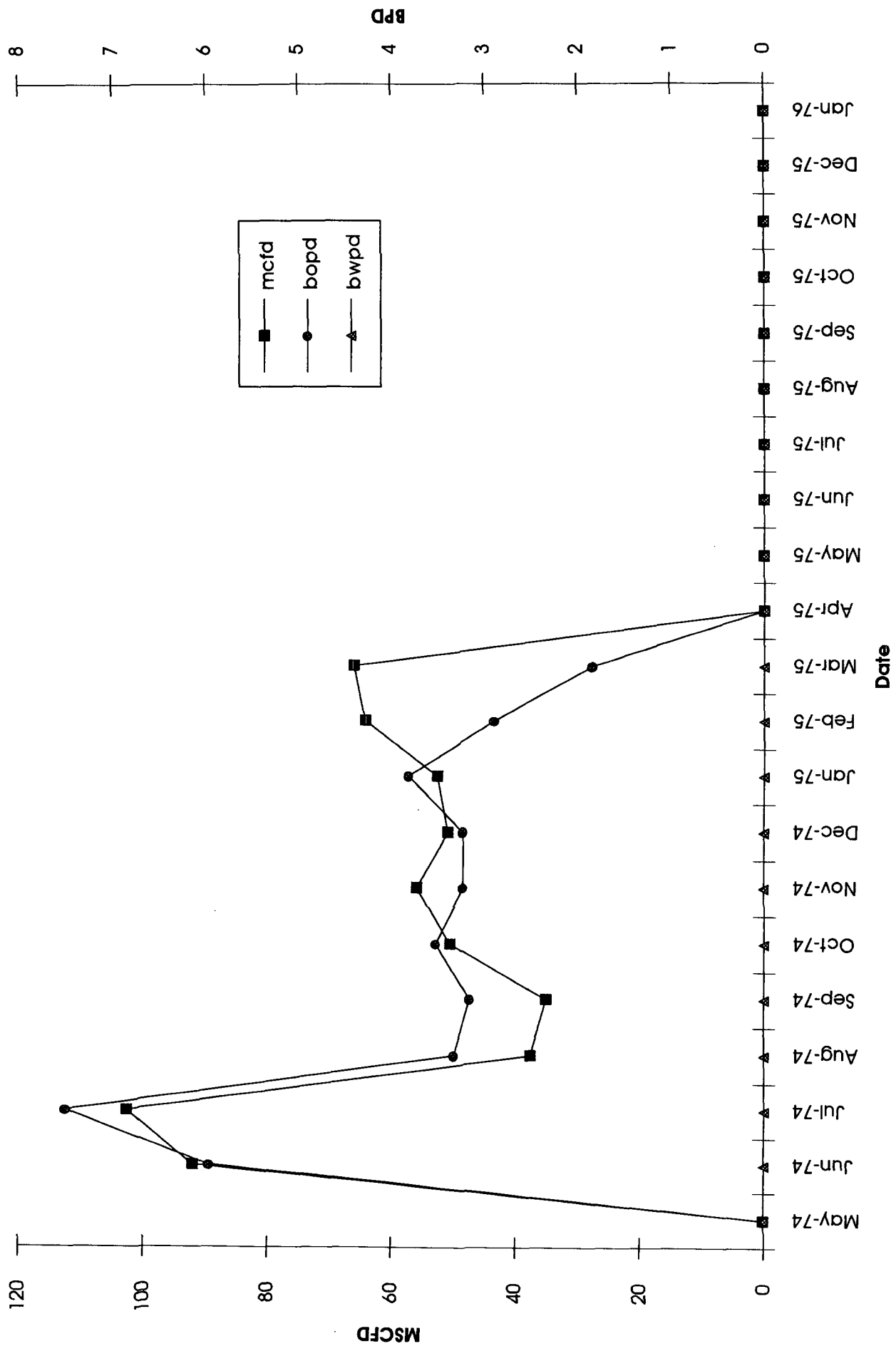
Printed name and title

Date

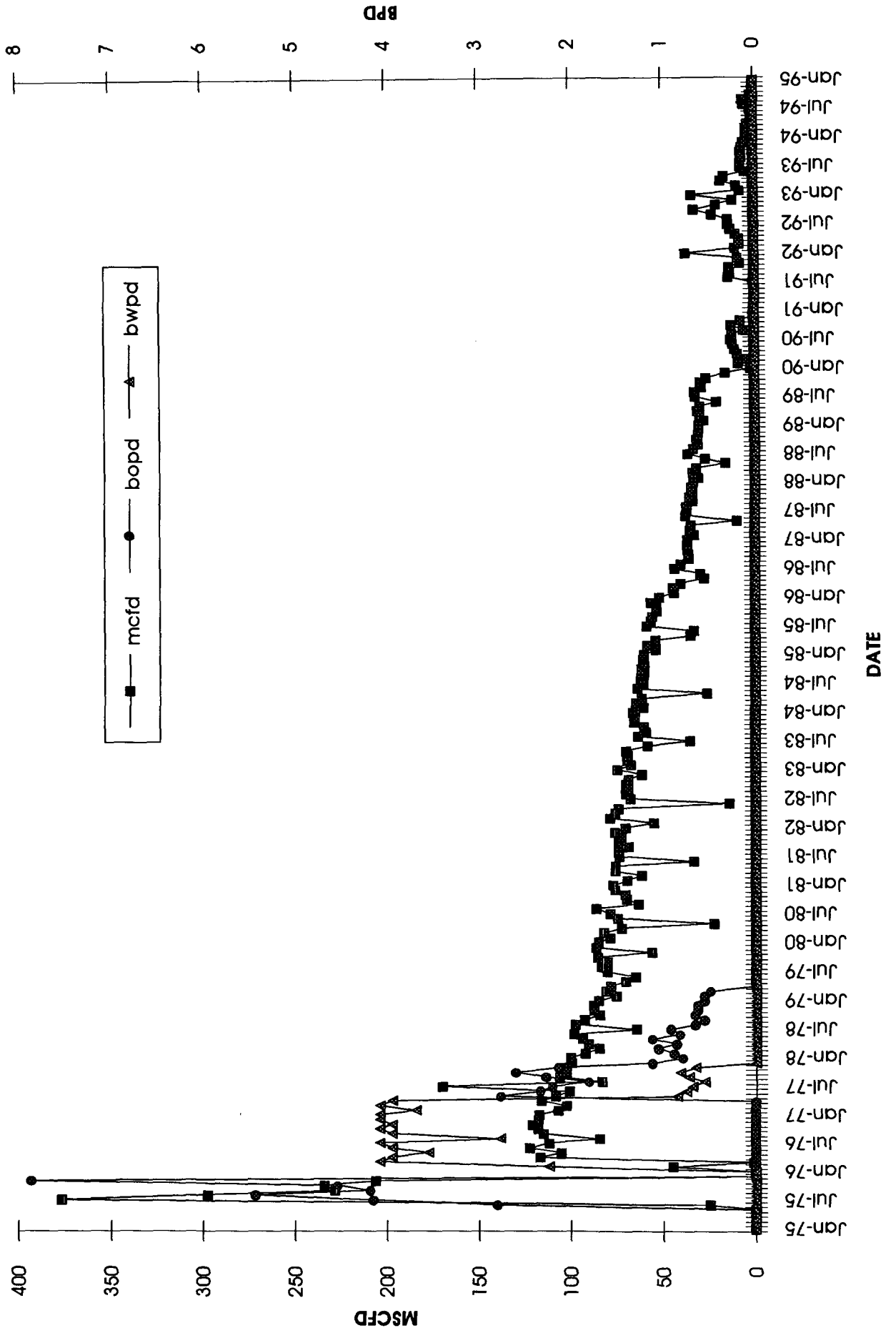
2-27-95

(915) 758-6700
Telephone No.

E.W. Walden #6 (Tubb)



E.W. WALDEN #6 (DRINKARD)



AMERADA HESS CORPORATION

**REQUEST FOR EXCEPTION TO RULE 303-A
DOWNHOLE COMMINGLING
TUBB OIL AND GAS POOL AND DRINKARD OIL AND GAS POOL
E.W. WALDEN #6
731' FSL AND 731' FWL, UNIT M,
SECTION 15, T22 S, R37E
LEA COUNTY, NEW MEXICO**

OFFSET OPERATORS

CHEVRON INC.
P.O. BOX 1150
MIDLAND, TX 79702

CONOCO INC
#10 DESTA DRIVE
MIDLAND, TX 79705-4500

JOHN H. HENDRIX CORP
223 WALL ST.
MIDLAND, TX 79701

TEXACO EXPLORATION AND PROD
P.O. BOX 3109
MIDLAND, TX 79702-3109
ATTN: LAND DEPT.

WAGNER AND BROWN
300 N MARIENFELD, SUITE 1100
MIDLAND, TX

HAWKINS OIL AND GAS
400 SOUTH BOSTON, SUITE 800
TULSA, OK 74103

LOUIS DREYFUS NATURAL GAS CORP.
14000 QUAIL SPRINGS PARKWAY
OKLAHOMA CITY, OK 73134