DINERO OPERATING COMPANY

Application for Hardship Gas Well Classification

RECEIVED

MAY 11 1984

OIL CONSERVATION DIVISION

DINERO P. O. DRAWER 10505 MIDLAND, TEXAS 79702

May 9, 1984

Case 8218

State of New Mexico Energy and Minerals Department Oil Conservation Commission Post Office Box 2088 Santa Fe, New Mexico 87501

Gentlemen:

Dinero Operating Company respectfully submits an application for Hardship Gas Well Status for the following wells in the Dublin Ranch (Morrow) Field in Eddy County, New Mexico:

- 1. Big Chief Comm. No. 1 Well
- 2. Big Chief Comm. No. 4 Well
- 3. Little Squaw Comm. No. 1 Well
- 4. Dinero State Comm. No. 1 Well

We are also asking for emergency Hardship Gas Well Status until we receive final approval of our application.

Thank you for your consideration in this matter.

Sincerely Yours,

DINERO OPERATING COMPANY

∅. M. Beikque Petroleum Engineer

JMB/ln

Enclosures

cc: Oil Conservation Commission Artesia, New Mexico El Paso Natural Gas Company All offset operators

OPERATOR DINERO OPERATING COMPANY CONTACT MITCH BEIQUE ADDRESS P. O. DRAWER 10505, MIDLAND, TEXAS 79702 PHONE NO (915) 684-5544 LEASE BIG CHIEF COMM. WELL NO 1 UT F SEC. 22 TWP-22-S RGE-28-E POOL NAME DUBLIN RANCH MORROW MINIMUM RATE REQUESTED 115 MSCF/DAY EL PASO NATURAL GAS COMPANY TRANSPORTER & PURCHASER ARE YOU SEEKING EMERGENCY "HARDSHIP" CLASSIFICATION FOR THIS WELL? X YES NO

STATE OF TEXAS Ş COUNTY OF MIDLAND §

VERIFICATION

I, J. M. BEIQUE, certify that all the information submitted with this application is true and correct to the best of my knowledge; that one copy has been submitted to the Artesia district office and that notice of the application has been sent to the purchaser, EL PASO NATURAL GAS COMPANY, and that notice of this application has been sent to each offset operator.

J. M. Beique, Engineer for

DINERO OPERATING COMPANY

Subscribed and Sworn to before me, a Notary Public in and for Midland County, Texas, this _____ day of _____

1-28-88

 OPERATOR
 DINERO OPERATING COMPANY
 CONTACT
 MITCH BEIQUE

 ADDRESS_P.O. DRAWER 10505, MIDLAND, TX. 79702
 PHONE NO_ (915) 684-5544

 LEASE_BIG CHIEF COMM.
 WELL NO_4
 UT_N_SEC. 15_TWP_22-S_RGE_28-E

 POOL NAME_DUBLIN RANCH MORROW
 MINIMUM RATE REQUESTED_115_MSCF/DAY

 TRANSPORTER & PURCHASER_EL PASO NATURAL GAS COMPANY

 ARE YOU SEEKING EMERGENCY "HARDSHIP" CLASSIFICATION FOR THIS WELL?
 X_YES_NO

STATE OF TEXAS §

COUNTY OF MIDLAND §

VERIFICATION

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Beique, Engineer for

DINERO OPERATING COMPANY

Subscribed and Sworn to before me, a Notary Public in and for Midland County, Texas, this \underline{Pth} , day of \underline{May} , 1984.

Norman, Notar

1-28-88

 OPERATOR
 DINERO OPERATING COMPANY
 CONTACT
 MITCH BEIQUE

 ADDRESS
 P. O. DRAWER 10505, MIDLAND, TX. 79702
 PHONE NO
 (915) 684-5544

 LEASE
 LITTLE SQUAW COMM.
 WELL NO
 1
 UT F
 SEC. 27 TWP-22-S
 RGE-28-E

 POOL
 NAME
 DUBLIN
 RANCH MORROW
 MINIMUM
 RATE
 REQUESTED
 500
 MMSCF/DAY

 TRANSPORTER & PURCHASER
 EL
 PASO
 NATURAL GAS
 COMPANY

 ARE
 YOU
 SEEKING
 EMERGENCY "HARDSHIP"
 CLASSIFICATION
 FOR THIS
 WELL?
 X
 YES
 NO

STATE OF TEXAS §
COUNTY OF MIDLAND §

VERIFICATION

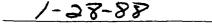
I, J. M. BEIQUE, certify that all the information submitted with this application is true and correct to the best of my knowledge; that one copy has been submitted to the Artesia district office and that notice of the application has been sent to the purchaser, EL PASO NATURAL GAS COMPANY, and that notice of this application has been sent to each offset operator.

W. Beique / Engineer for

DINERO OPERATING COMPANY

Subscribed and Sworn to before me, a Notary Public in and for Midland County, Texas, this \underline{PH} day of \underline{PH} , 1984.

Notary Norman.



 OPERATOR
 DINERO
 OPERATING COMPANY
 CONTACT
 MITCH BEIQUE

 ADDRESS
 P. O. DRAWER 10505, MIDLAND, TX. 79702
 PHONE NO. (915) 684-5544

 LEASE
 DINERO STATE COMM.
 WELL NO
 1
 UT_C_SEC. 16
 TWP_22-S_RGE_28-E

 POOL
 NAME
 DUBLIN RANCH MORROW
 MINIMUM RATE REQUESTED
 60
 MCF/DAY

 TRANSPORTER & PURCHASER
 EL PASO NATURAL GAS COMPANY

 ARE YOU SEEKING EMERGENCY "HARDSHIP" CLASSIFICATION FOR THIS WELL?
 X_YES____NO

STATE OF TEXAS §
COUNTY OF MIDLAND §

VERIFICATION

I, J. M. BEIQUE, certify that all the information submitted with this application is true and correct to the best of my knowledge; that one copy has been submitted to the Artesia district office and that notice of the application has been sent to the purchaser, EL PASO NATURAL GAS COMPANY, and that notice of this application has been sent to each offset operator.

J. MU Beique, UEngineer for DINERO OPERATING COMPANY

Subscribed and Sworn to before me, a Notary Public in and for Midland County, Texas, this $\underline{\mathbf{96}}$, day of $\underline{\mathbf{76}}$, 1984.

Norman, Notary Public

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Dinero Operating Company Dublin Ranch Morrow Wells, Eddy County, New Mexico

ITEM NO. I

1. In July of 1980, El Paso Natural Gas Company (Pipeline Company) shut in our Big Chief Comm. No. 3 Well due to the Market demand of the July 4th. weekend. This well had consistently been flowing over one million standard cubic foot of gas per day from the Morrow formation prior to this period. Subsequent to the five day shut in period, the well produced no significant amount of gas relative to its past history, and a great deal of time and money was spent in an attempt to return production to normal. All of this work was to no avail, and the well was eventually plugged in the Morrow formation and recompleted in the Atoka formation.

The Big Chief Comm. No. 2 Well was originally completed in the Morrow in late 1978. It tested for 2.6 million SCFPD. It was necessary to shut this well in following the acid treatment and subsequent cleanup due to an incomplete pipeline connection. When the line was finally completed over 30 days later, the well could sustain a rate of only 300 MSCFPD. This well was later plugged back in the Morrow formation and recompleted in the Atoka formation.

The estimated loss of production from just these two wells because they had been shut in is over 1500 MMSCF.

We believe that the Morrow production was lost due to the quality of sandstone and associated bentonitie clay material present in the Morrow and Atoka formation in this area. Studies of the Pennsylvanian sandstones in this area indicate an average composition of 85% fine grained quartz, 10% total clay minerals, and 5% other minerals. It is the 10% clay content that exposes these wells to the danger of lost production. This clay is composed of 95% chlorite and 5% illite. Chlorite is a very water sensitive mineral, and it occupies some of the pore space in the sandstone matrix. It has a high irreducible water saturation, and fluid retention of the chlorite during drilling, completion, or as in this case, temporary shut in periods, can lower the relative gas permeability.

These wells produce very little water, but as in the case of the Big Chief Comm No. 3 Well, enough water entered the wellbore to cover the perforations. A swabbing unit was placed on the well and 6 days were spent trying to swab back the well. All the water was recovered from the wellbore, but the damage had been done.

Therefore, we ask that the following wells be classified as HARDSHIP GAS WELLS, so that we will avoid the possibility of losing another Morrow gas well to formation damage.

BIG CHIEF COMM. NO. 1 WELL, BIG CHIEF COMM. NO. 4 WELL, LITTLE SQUAW COMM. NO. 1 WELL, and DINERO STATE COMM. NO. 1 WELL.

Dinero Operating Company Dublin Ranch Morrow Wells Eddy County, New Mexico

ITEM NO. 2

2. Attached are the well histories showing the attempts to rectify production problems in the Morrow zones of the Big Chief No. 2 and Big Chief No. 3 wells. Since the wells which we are applying for hardship gas well status have not as yet been damaged by being shut-in, we are using these two wells to justify our case for the remaining four Morrow wells in this field.

Attached are well hisitories of the Big Chief Comm No. 2 Well and the Big Chief Comm. No. 3 Well. Also attached are wellbore sketches of the Big Chief Comm. No. 1 Well, Big Chief Comm. No. 4 Well, Little Squaw No. 1 Well, and the Dinero State Comm. No. 1 Well. January 15, 1979

Rigged D.A. & S. Well Service. Prep to run Gamma Correlation Log.

January 15, 1979

Rigged up Schlumberger and ran Gamma Ray Corr. Log from plug back total depth of 12,655-10,800. Unloaded 404 jts. of tub. on rack, ran 100 jts. of tub. in hole open ended.

January 17, 1979

Ran 401 jts. of tub. in hole open ended. Displaced fresh water with 275 bbls of 2% KCL waer. Pulled 2" tub. Perf. Lower Morrow formation: 12,455-464' 9 shots, 12,360-68' 8 shots, 12,346-56' 10 shots.

January 18, 1979

Ran Tub. with disc. and Otis Packer set @ 12,288'. Dropped bar @ 3:45 p.m. well kicked off, was flowing @ 300,000 cf/day. Shut well in last night. Will flow today and check with swab for fluid and give it acid wash.

January 19, 1979

SITP 2250, flowed well to pit and ran swab to bottom of tubing. No fluid in hole. Well stabilized on 3/4" choke @ 20 PSI , rate 500 MCF/day. Acidized Morrow form. with 3000 gal. MS acid & 5000 SCS of Nitro. Break down press. 9100. Treated @ 6700 PSI @ 5 bbls/min. ISIP 5000 15 min SIP 4300. Flowed well to pit , rate increased to 1.5 MMCF/Day. Still making water.

January 20, 1979

Flowed and cleaned up.

January 21, 1979

Flowed and cleaned up.

January 22, 1979 *NB* Will run Otis Plug in Packer set @12,288'. Prep to perf. upper Morrow Zones.

January 23, 1979

SITP 3400 PSI, flowed to pit and ran Otis Blanking Plug and set in packer @ 12,280. Released on-off tool and pulled tubing out of hole. Perf. upper Morrow formation from 12,232-42 12,170-75 12,160-64' total of 19 shots.

COMPLETION HISTORY ON BIG CHIEF #2

January 24, 1979

Ran Otis Perma Latch Packer and on-off tool in hole with 387 jts. of 2" tub. Bottom of Packer 12,255'. Spotted 200 gal of 7½% MS acid over perfs. Pulled 8 jts. of tub. and set Packer @ 12,021'. Acidized formation with 200 gal. acid. Break down press. 4900. Pumped into pay @ 4800 @ 2/bbls min. ISIP 3800, 5 min SIP 2200. Swabbed load and acid water to pit for 2 hours, fluid level 7200. Well kicked off and flowed gas and water to pit. Stabilized on 3/4" choke @ 100 psi, rate 1.6 MMCF/day.

January 25, 1979

SITP 3000#, flowed well to pit. unloaded water and stabilized @ 200 psi on 3/4" choke, rate 3 MMCF/day. Flowed well on 7/16" choke @ 550 psi, rate 2.6 MMCF/day. Rigged up Otis and attempted to pull blanking plug out of bottom of packer but have not.

January 26, 1979

Otis cont fishing for blanking plug, retreived plug @ 10:30 PM. Flowed well to pit on 3/8" choke, flowed water and gas. No rate.

January 27, 1979

Waiting on Tie in.

January 28, 1979

Waiting on Tie in.

January 29, 1979

Waiting on Tie in.

January 30, 1979

Waiting on gas line connection (El Paso Nat. Gas.)

January 31, 1979

Waiting on Gas Line Connection.

February 1, 1979

Waiting on Gas Line Connection.

February 2 thru March 24, 1979 Waiting on ElPaso Gas Line connection. March 24, 1979 Tied in well to ElPaso Line @ 12:00 noon 3500# Shut In press. @ time well was turned on. Flowing 1.871 MMCF. March 26, 1979 Tied in & flowing. March 27, 1979 Flowing to ElPaso Line, will have rate later today. Unloading water and waiting on well to stabilize to start 4 point test. March 28, 1979 Flowing into ElPaso line. Start 4 pt. test if well is stabilized. March 29, 1979 Open up and flow on larger choke and attempt to unload water. March 30, 1979 Flow TP 600#, 950 MCF. Crew lay to blow down well. Lease operator will attempt to unload water. April 1, 1979 Flowing no report April 2, 1979 Flowing no report. April 3, 1979 Closed in for pressure buildup and attempting to unload water. April 4, 1979 TP 450#, Gas 320 MCF. Opened well to atomsphere & blow down for 2 hours & rec. an est. 3 bbl of water. Closed well in for press. build up. April 5, 1979 Closed in 24 hrs. press. built up to 1300# in 24 hrs. Lease operator left closed for cont. press build up.

April 6, 1979 Left well closed for 48 hrs. Built up to 1500#. Opened well to pit and blow down, recovering 0 water. well will probably have to be swabbed off. April 7, 1979 Shut In. April 8, 1979 Shut In. April 9, 1979 Shut In. April 10, 1979 West Texas Consulting Service ran BHP. Surface press 1777# BHP @ 12,300' 2299#, no fluid. April 11, 1979 SI BHP 2229# surface tub. press. 1777# Western Co. making up recommendation for treatment. April 12, 1979 Prep. to acidize well. April 13, 1979 Re-treat upper zone 6000 gal. 71/2% Gelled acid 9000 Cu. ft. Nit. 72 balls Av. treat press. 8500#, 8.4 BPM. Good ball action - ISDP 4800# FST 10 min. 4250# flow to pit, well died, rig up to swabb. Shut Down. April 14, 1979 Swabbing load back, released unit, well not coming back. April 15, 1979 Attempting to flow well back. April 16, 1979 T.P. 2060# flow to pit, unload very little water. Stabilized on $\frac{1}{2}$ " choke, 160# TP, Rate 850 MCF. April 17, 1979 Shut In.

April 18, 1979 Shut In, tie back into ElPaso line this AM. April 19, 1979 TP 2210#, open well to sales line, press came down to 500#, open to 3/4" Choke. April 20, 1979 On line, flowing 583 MCF. April 21, 1979 Flowing. April 22, 1979 509 MCF 6 bbls. of fluid, TP 500#. April 23, 1979 501 MCF 6 bbls. of fluid, TP 450#. April 24, 1979 On Line. April 25, 1979 Flow to line, est. 371 MCF. April 26, 1979 Flowing to sales line. April 27, 1979 Flowing 401 MCF. April 28, 1979 Flowing into line. April 29, 1979 Flowing into line. May 1, 1979 Flowing ElPaso to run 4 pt. test as soon as possible start 24 hrs. Shut In. 5/1/79 28th - 29th 376 MCF.

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May 2, 1979

Starting 4 pt. test @ 9:30 am.

May 3 1979

Run 4 pt. test by ElPaso .

COMPLETION HISTORY BIG CHIEF NO. 3

1980 June Produced and sold 34,000 MSCF gas, approx. 1130 MCF/day. July 4, 1980 ElPaso Pipeline called to inform us Bug Chief #3 had to be shut in. July 5, 1980 Shut In. July 6, 1980 Shut In. July 7, 1980 Shut In. July 8, 1980 Shut In. July 9, 1980 Shut In. July 10, 1980 Well back on line. July 11, 1980 No Production. . July 12, 1980 No Production. July 13, 1980 No Production. July 14, 1980 No Production.

July 15, 1980 No Production. July 16, 1980 No Production. July 17, 1980 RU Mack Chase Swab Unit. Ru blow down line and started swabbing. July 18, 1980 Bled well down. Run swab to 11,500'. Fluid level approx. 9000'. Swabbed dry, then made one swab run every hour. Shut Down. July 19, 1980 Bled well down, ran swabb, swabbed well dry and shut down. July 20, 1980 Shut Down. July 21, 1980 Bled well down. Started swabbing. July 22, 1980 Bled well down, swabbed well dry, shut down. July 23, 1980 Bled well down, swabbed well dry. Acidized with 3500 gallons 7.5% MS acid. with corrosion inhibitor and clay stabilizers. Maximum pressure 7000 psig. Min. pressure 3400 psig. Avg. pressure 5000 psig. Average rate 3.0 BPM. ISIP 2200# 15 min. SIP 500##. 134 bb1s. of load to recover. Good ball action indicated. Start swabbing, recovered, 30 bbls load. 104 bbls to recover. July 24, 1980 Swabbing initial fluid level 7700'. Recovered 66 bbls. some gas. Final fluid level 11,800'. Rec. 66 bbls. 38 bbls to recover. July 25, 1980 450 psig on tubing. Bled well down. Swabbed dry.

July 26, 1980 Tubing pressure 750 psig. Bled well down. Initial fluid level at 6000'. Swabbed dry. July 28, 1980 Bled well down. Swabbed dry. Total load recovered/ Put on line at 300#. Tubing pressure up to 900% 2 hours later, decreasing to 350%. Zero sales that night. July 29, 1980 Tubing pressure 400 psig. Bled well down in 10 min. Initial fluid level at 6000'. Fluid level stayed around 7500' all day. July 30, 1980 Tubing pressure 1400 psig. Bled well down. Initial fluid level at 6000' Swabbed all day with fluid level around 7500'. Shut Down. July 31, 1980 Swab all day. Shut Down. August 1, 1980 Swab all day. Shut Down. August 2, 1980 Bled well down, swabbed well dry. put well on line, Shut Down. August 3, 1980 Well on line. August 4, 1980 Tub. pressure 400 psi. Bled well down. Initial fluid level 6000'. Swabbed well dry. Shut down. Rig down. August 5, 1980 Tubing pressure 1500 psig. Bled well down. Made two swab runs. Shut Down. August 6, 1980 Tub. press. 400 psi. Bled well down. Swabbed well dry. Rig Down, Cleaned location. Put well back on line.

OPERATOR DINERD OPERA	TING COMPANY
LEASE BIG CHIEF	WELL NO FIELD WILDCAT- MORROW
LOCATION 1980 FNL 6	1980 FWL SEC 22 BLK 22-S SURVEY 28-E
COUNTY EDDY	STATE NEWMEXICO
ELEVATION DF	GL 2095' TD'/2733' PBTD COMPL /9
CURRENT COMPLETION INTE	RVAL /2/50-/2/67/
	AVAILABLE DATA
	LOGS. DUAL LATERAL, COMPENSATED NEUTRON,
1,3 ³ /8" 340'	SAMPLE LOGS.
	CORE: SIDEWALL - DELAWARE DST:
	PVT: BHP:
	DRF:
- <u> </u>	13 318-54 # Sat@ 340' - 375 5x. Class C Cement
	10314"-40.5# Sat@ 2560'-750 SX. Cement
	5/12" - 17-20# Set @ 12,733' -14505X. Cement
	Perfs: 12150-59 7 shots 12551-56 4 shots
	12216-26 8 shots /2652-64 12 Shots 12270-74 4 shots /2670-71 4 Shots
	12322-36 14 shots
	/ 2507-14 7 Shots
	Acio: 12150-59 1500 gals. 71/290 12216-26 Frac. F10. 20.000 Gals.
	12270-74 2000 9A1. 1070 12322-36 2000 9A1. 1070
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	Packer Set @ 12106.
238 Tubing @ 238 Tubing @ 238 Tubing @ 238 Tubing @ 238 Tubing @	
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	(FUTURE WELL WORK)
	OPERATOR: DINERO OPERATING COMPANY
	LEASE NAME. BIG CHIEF WELL NO
	IP: <u>AOF 1.310 MMCFPO</u>
	CURRENT STATUS: FLOWING GAS-Sold to El Paso Natural Gas Company

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			OPERATINE COMPANY	
				FIELD DUGLIN RANCH - MORROW
			660 FSL	•
		EDOY		STATE NEW MEXICO
		,	ar 3101	TD 12,720' PETD 12,425' COMPL
		COMPLETION INT		(Da
	CURRENT		AVA ILABLE	DATA
			LOGS. GAMMA Ray -	SONIC - BUNG LATEROLOG
		13 78 Set at 437	SAMPLE LOGS.	0
-		437'	CORE: NONE DST:	
			PVT: BHP:	
-				
			// 27' Davil - P /2	30" casus 10 # 5-1 11 500 m
-			40/ Depth of 13	38" Casing - 48 # - Set with 550 5x 270 c.c.
			200 class C.	60'-40.5# - Set with 415 5X. Lite,
	_	1074"set	Lite Bon Cl	97' - 29-33#- Set with 1600 Malb.
-		L≥at 2460	4/2"- Set at /2 Class H.	,720'-11.6#-Set with 250 Sacks
			PERFS: 12,000-008	- 8 Shots 12,406-10 - 4 Shots
_			12.126-44	18 Shots 12,408-18 - 10 Shots 4 Shots
			12.248-54	U Shots 1 Shot per Ft. 54-114" U Shots boles.
-			Ac. 10; 12,000-12,415	
			<u> </u>	8,000 Gal. OC.D-2 2,900 #0 Sand
-				3.000 gal. ACIO.
	\equiv	7578" Set at		
-		11,197'		
			······································	
-		Packerand		
	·····	238" Tubing at 11,713'		
		$\frac{1}{2}$		
J.		PERFS: E12000-08-85hots		
			(FUTURE WELL WORK)	
0	°	412126-44-18shots		
		1-2-1-10-45hots		
<u>o</u>	<u> </u>	Pocker	> This Packer is a O.	Tis W.B. Perma Packer.
		612248-54-65hots =12260-64-45hots		
2)		OPERATOR: DINERD	OPERATING COMPANY
ار ا	0	12406-10-45hots 12408-18-105hots	LEASE NAME. BIG CH	
-		AAAA 12,425' PBTO	IP: AOF 2.505	MMCF/DAY
-	<i>L</i>	AAA 412" T.D. AAA at 12,720'	CURRENT STATUS: Flou	NATURAL GAS COMPANY

OPERATOR DINERO DOERATING CO. FIELD DUBLIN RANCH MORCOW LEASE <u>Little Squaw Comm</u> Well NO #/ R-28-E SEC 27. T-22-5 1980 FNL 1980 FWL 6 LOCATION New Mexico STATE COUNTY Aug. 15 TD . 12.745 PBTD COMPL JO74 DF ELEVATION (Da 12,198-12,490 CURRENT COMPLETION INTERVAL AVAILABLE DATA LOCS. Density & Jonic (Johlumberger) 13 78 SAMPLE LOGS. 39' CORE: SIDEWALL / Delaware DST: PVI: BHP: MORROW FORMATION 13 3/8" -54# 39'- 300 5xs. Closs "C" cement sof a 85/8m-24-32# 40+ @ 3752/- 1450 5x5 cement. 17-20 # 50+ @ 12.745' -512"-1450 SXS COMENT Veres: 12213 <u>shots</u> 12198 to12232 shots 10 to12490 12483 to Shots <u>8%</u>" ZB holes shot Der F fcid: 3752' 7 12 % Acid 500 GAL anta PACKER 12094 307 W 23/8 TUD @ X 12,094 + PACKER K12,198-213 ii shots +12,222 - 232 10 shots (FUTURE WELL WORK) K-12,483-490 7 Shots DINERO DEROTING CO. OPERATOR: Little Square Comm LEASE NAME. WELL NO Aof 5.360 MMCFPD IP: 51/2" CURRENT STATUS: FIC NATURAL Clas-S QLD 70 Τ.D. GAS COMPAN 12,1745

relating CC 1097 OPERATOR , Hinkanch-Mberry FIELDH state MM WELL NO nppn LEASE 28-E 1980FWL T-22 SEC /6 -660 FNL 6 LOCATION d MEXICO STATE FW COUNTY NOV. : COMPL /98 a 3082.6' TD . 12.690 PBTD 2450 DF ELEVATION CURRENT COMPLETION INTERVAL AVAILABLE DATA Ray Neutron Gamma LOGS . **purp** Pay Later 10 SAMPLE LOGS. Gamma **'**الا 500 CORE: NO 450' DST: PVI: BHP: 450'-2% rc circ 550 sx (1) (\bigcirc) .C. 10-3/4 TT HALD. Lt. 200.5x (1 -40 SX Lt. 6 1600250 75/8"-26.40 + ct. - 39 + c0 10 .727 71 350 <u>w</u>. 103/4 at 39 HOLES 1281 0,09 PORT J25'95' 128' - 9000 gals ACID: 11.951 2 128' - 19,000 9AS + 19,300 "SANG FRAC 12 PACKER: 11,55,5 778 at 700 /19727 Tubing and Packer 11,555 ø 1800 606 PERFS : + 11.951-54-£ 11,961-62'-£ 11,976-78--12026-39', -12090-91 (FUTURE WELL WORK) 2100 E12106-107 612126-128 39 Shots 2200 Plug Back To 12,450 444 noeatin PPN $(\mathbf{\hat{n}})$ 1 **OPERATOR:** 000 000 000 000 000 4 12 set at \boldsymbol{C} state YPP C <u>Comm</u> LEASE NAME [] WELL NO . _____/2,677' IP: 12,690' CURRENT STATUS: Flowing EL Paso NATURAL Eas-Sold to T.D. Gas COMPANY

Dinero Operating Company Dublin Ranch Morrow Wells Eddy County, New Mexico

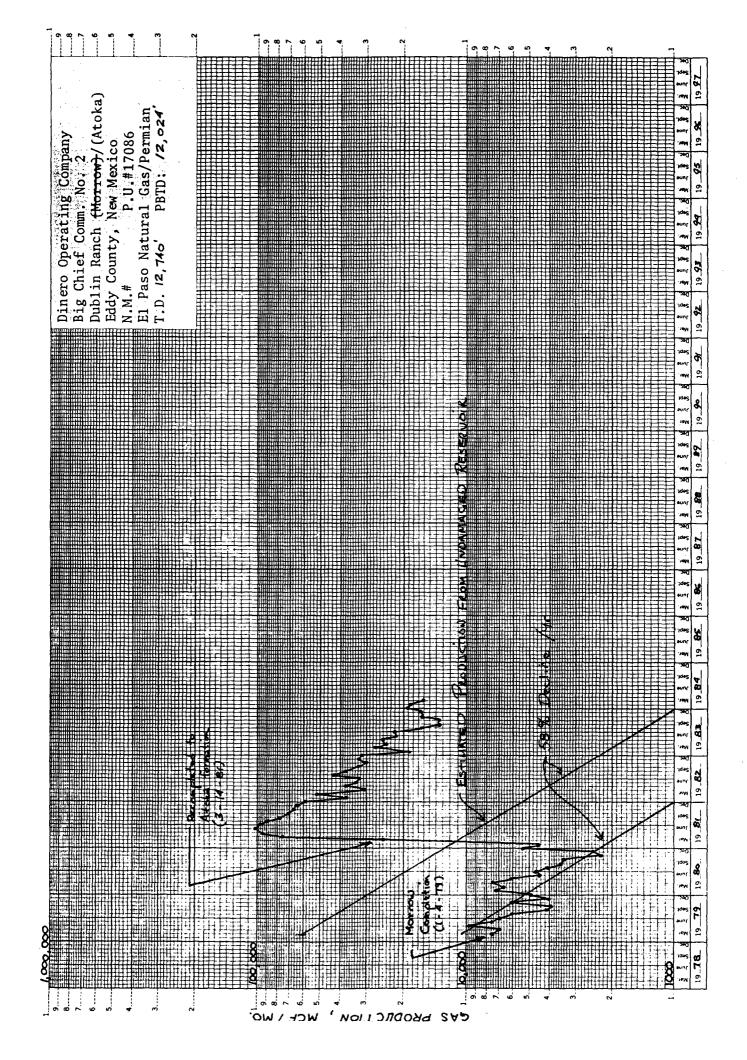
ITEM NO. 3

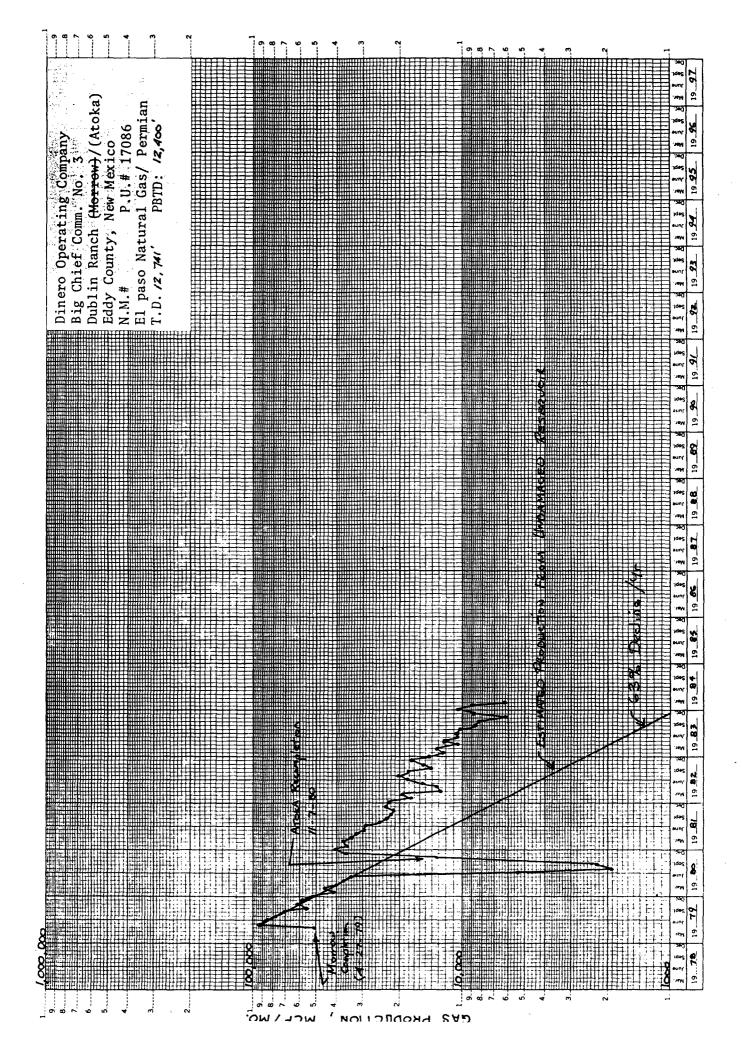
3. Assuming that the Big Chief Comm. No. 2 would have produced at 75 percent of its maximum flowing rate of 2.6 MMCFPD, prior to being shut in for lack of a pipe line connection, it would have produced a total of 1.18 BCF more gas than the actual production from that zone. This represents not only a loss of energy reserves, but also a loss of over four million dollars in gross revenue from this one well.

The waste of production from the Big Chief Comm. No. 3 Well is not as dramatic, but still considerable. If production had not been so drastically curtailed in the Morrow zone due to damage occuring while the well was shut in, an additional 416 million cubic feet of gas could have been produced.

The production curves for these wells are also attached, showing the Morrow production and the basis for estimating lost reserves.

The completion history of these two example wells shows that no amount of swabbing or acidizing will return the original rate of production once the damage is done. The wells will not return to normal produciton if for any reason the formation has been damaged because of encroaching water.



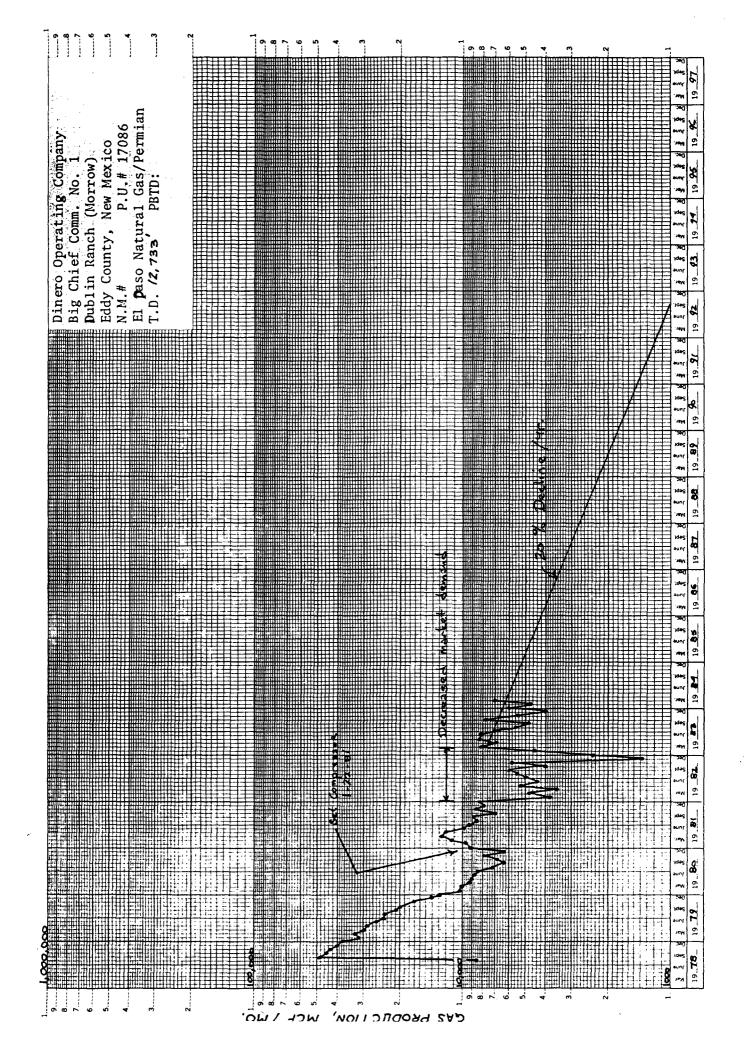


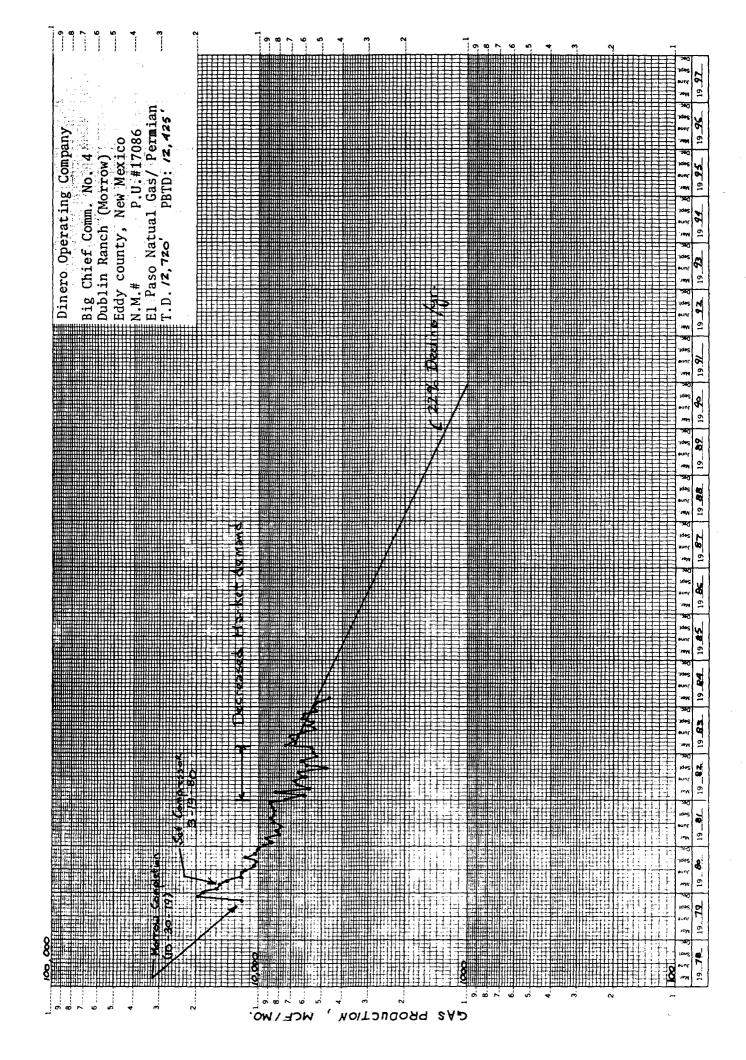
APPLICATION FOR CLASSIFICATION AS HARDSHIP GAS WELLS Dinero Operating Company Dublin Ranch Morrow Wells Eddy County, New Mexico

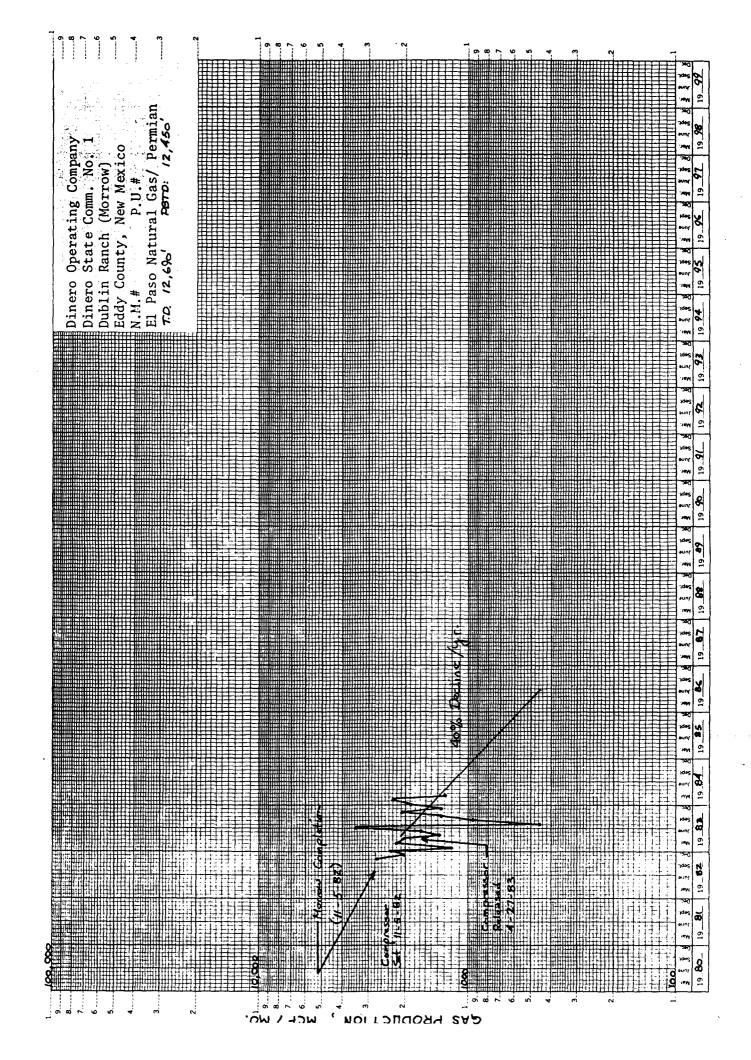
ITEM NO. 4

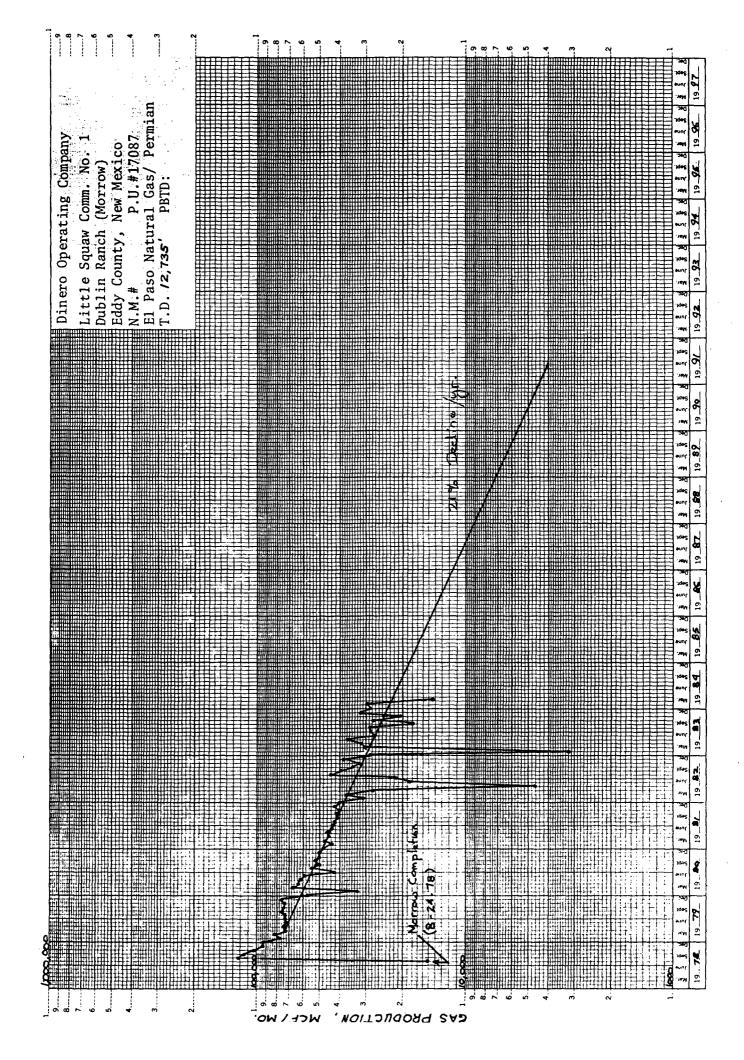
4. Failure to obtain a HARDSHIP GAS WELL status for the Morrow wells in question would lead to premature abandonment and loss of reserves as follows:

BIG CHIEF COMM. NO. 1	304 MMCF
BIG CHIEF COMM NO. 4	225 MMCF
LITTLE SQUAW COMM. NO. 1	1065 MMCF
DINERO STATE COMM. NO. 1	21 MMCF









Dinero Operating Company Dublin Ranch Morrow Wells Eddy County, New Mexico

ITEM NO. 5

5. Minimum sustainable producing rate as determined by well production history:

BIG CHIEF COMM NO. 1 WELL 115 MSCF/DAY The production curve for this well shows that when the well produced less than 3000 MCF/MONTH or 100 MCF/DAY, it took more than two months for the well to recover its full production capability.

BIG CHIEF COMM. NO. 4 This well, along with the Big Chief Comm. No. 1 Well, require a compressor to overcome El Paso's high line pressure. This rate maintains the minimun economic justification for this well.

LITTLE SQUAW COMM. NO. 1 500 MMSCF/DAY This well is the last of our successful Morrow completions. Lowering the rate less than 500 MSCF/DAY would jeopardize successful drainage of this zone.

DINERO STATE COMM. NO. 1 MAX. RATE This well produces about 40-50 MCF/DAY and is barely economical to operate as it is. Any cutback would render this well uneconomical.

WEL LOCATION AND ACREAGE DEDICATION PLAT

J

		All distances must be	from the outer	boundaries of	the Section.		·····
1 + 4+31+H			L.ectee	-			Wall No.
J. C. Barnes O:		·····		hief Com			One
	tion	Township	Range		County	-	
l.		22-5	2	8-E	Eddy	County,	New Mexico
A mult Footage Location						_	
	~	orth line and		tont	t from the	West	line
24 und Level Eleve	Producing For		Pool				Dedicated Acreage:
3095*	.1	Morrow	l Unde	signated			320 Actes
	one lease is	led to the subject w dedicated to the we					ne plat below. hereof (both as to working
dated by comm [X] Yes [If enswer is " this form if ne	nunitization, u] No Ifar 'no;' list the o ccssary.)	nitization, force-pool newer is "yes," type owners and tract des	ing. etc? of consolide criptions wb	ation <u>Comm</u> sich have ac	nunitiza tually bee	tion n consolid	all owners been consoli- ated. (Use reverse side of
	-					•	munitization, unitization, a approved by the Commis-
	1 4	r	T				CERTIFICATION
	980	1 1	0.0	RICH. Bass	£	tained he	certify that the information con- trein is true and complete to the by knowledge and belief.
	+	Schneder	OHMADA.SP -		4	Russee	eRansland.
J.C.I 4 980	BARNES)				Company	Barnes Oil Company
	1	22		U.S.		1	0
		26				shown ar notes of under my is true	certify that the well location this plat was plotted from field octual surveys mode by me or supervision, and that the same and correct to the best of my je and belief.
	- + 					Date Surve Drig, Si	gned by-W. D. Watson Professional Engineer
	Pecos	Irrigation 6	co.			395	9
L		.3					
3.50 080 990	1320 1680 198	G 2310 2640 200	0 1600	1000		Contilicate	NO.

NEW M. ...CO OIL CONSERVATION COMMISSION (WELL LOCATION AND ACREAGE DEDICATION PLAT

101			Lease	er boundaries of			Well No.			
J. C. Barnes 011 Company				lg Chief	4					
t Leiter Sect	ion 15	Township 22S	Rang	Range County 28E Eddy						
ual Footage Location										
	t from the Wes	t line d	and 660	lect	from the	South	line			
und Level Elev.	Producing Forms	ation	Pool				Dedicated Acreage:			
 Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 										
 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? XX Yes No If answer is "yes," type of consolidation <u>Comm</u>. If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)										
• EXXON	AMOCO	RICHARI	DSON	I BASS	T		CERTIFICATION			
·	J229	\$R2	8E	FEDERAL O.	<u>क्ष</u> <u>G.</u>	tained her best of my Nama Field Position J. C. Company	eriify that the information con- ein is true and complete to the knowledge and belief. <u>MCCC</u> Supt. BARNES OIL COMPANY y 25, 1979			
EXXON OPERATOR: 1980'	PECOS IRF J. C. BAR PECOS IRRI	RNES OIL COMP. GRI IGATION EAST	AMOCO ANY FFETH LAND OIL CO.	RICHARDSON BASS FEDERAL 0 069142			Watson, Jr. Prolessional Engineer			
	660' H! C	GRANDI FEDE	RAL	 		Certificate N	Outator			

NEW MEXICO OIL, CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102 Supersedes C-128 Effective 14-65

	All distan	ces must be from the outer	boundaries of	the Section.	·····	
ge tator	Compagn	[Well No.	
I. C. Barnes OI1		Li Hunge	ttle Squa	W Comm.	On (8
F	27 22		28-E	Eddy County,	New Mexico	
tual Footage Location of 1980 test		line and 1980		from the Northh	14	
mund Lyvel Elev.	Producing Formation	Pool		Rom the HOLLII	line Dedicated Acreage:	
3074 '	Morrow	Und	esignated		320	Acres
	cage dedicated to the ne lease is dedicated valty).	•			•	o working
dated by commi [X] Yes ["]	o;' list the owners and	force-pooling. etc? es?' type of consolide	ation Com	munitization		
No allowable wi	ill be assigned to the wo					
- 1980 UNION & J C BARNES	UNION & J.C. BARNES	UNIO J. C BA		rained he best of m Ruiss Name Pr Position J. C Company	CERTIFICATION certify that the infor orein is true and com my knowledge and bel cel Jacom esident . Barnes Oil Quany	plete to the lef. <u>cland</u> <u>Company</u>
	2;			shown on notes of under my is true knowledg Date Survey Orig. S	igned by W. Professional Engine	d from field by me or of the some best of my D. Watsc
330 600 190 1	1.1 E. Carter	3 Uitar Tr E- Rur 2000 1800			3959	

NEW MEXICO OIL CONSERVATION COMMISSION WELL CATION AND ACREAGE DEDICATION

Form C-102 Supersedes C-128 Effective 1-1-65

		All distances must	be from the outer	boundaries of	the Section			
/ perator			Lease				Well	24
Dinero	Operating (Co		Dinero S	State c	omm.		1
r_t_etter		whist.lp	Frange		~ inty		·····	
C	1	22 South	25	East		Ec	ldy	
A tuil Foctage Location	n of Well:		1000					
660 <u>re</u>	et tom the NOIL	h line (and 1980	1001	from the	west	111.44	
Print evel Elev.	Froducing Formats		Pogl		••		Dedizates A	
3082.6	MO	rrow	WWON DUD	lin Ranch	Morrow	1		320
1. Outline the a	creage dedicated	to the subject	well by color	red pencil o	r hachure	marks on th	e plat belo	ow.
2. If more than	one lease is dec	dicated to the	well, outline e	ach and ide	ntify the	ownership th	iereof (bot	h as to working
interest and r	oyalty).							· · ·
	one lease of diffe nunitization, uniti			to the well, l	have the	interests of	all owner	s been consoli-
X Yes	No If answ	er is "ves." typ	e of consolide	ation <u>Comm</u>	unitiza	tion		
If answer is " this form if ne	"no," list the own	ers and tract d	escriptions wh	nich have ac	tually be	en consolida	ited (Use	reverse side of
	will be assigned t	o the well until	all interests	have been o	oneolida	tad (by your		
	, or otherwise) or i							
sion.		Litter & non-blan	and unit, cith		a micics	nas peen	approved	uv the Commis-
	t _		1				CERTIFIC	ATION
I		INERO OPERA	TING COMPAN	NY				
•	9 -				Í	I hereby c	ertify that il	he information can-
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	I D	INERO STATE	COPER. NO.	Т		best of my	knowledge	and belief
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LG-0018)		L-7012			FIELD SU	PT.	· · · · · · · · · · · · · · · · · · ·
	• • •	_	· · · ·				PERALIN	G COMPANY
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			. 1		l	Jule 15,	1301	
		INERO OPERA	TING COMPAI	NY				
1	i -		1		ł	1 heraby	certify that	the well location
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	I		ENUT			is true o	nd correct	to the best of my
	1		//S/ 4	ALC O		know ledge	and belief.	
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DINERO OPERATING COMPANY, DUBLIN RANCH MORROW WELLS, EDDY COUNTY, NEW MEXICO, OFFSET OPERATORS AND PURCHASER:

Amoco Production Company

Houston, Texas 77001

P. O. Box 3092

OFFSET OPERATORS:

- Bass Enterprises Production Company First City National Bank Tower 201 Main Street Ft. Worth, Texas 76102
- 2. Amoco Production Company & P. O. Drawer A Levelland, Texas 79336
- Santa Fe Minerals
 731 W. Wadley
 Midland, Texas 79701
- 4. Exxon Company, U.S.A.
 P. O. Box 1547
- Houston, Texas 77001
- Union Oil Company of California P. O. Box 671 Midland, Texas 79702
- HCW Exploration Company 601 N. Loraine Midland, Texas 79701

TRANSPORTER & PURCHASER:

1. El Paso Natural Gas Company P. O. Box 1492 El Paso, Texas 79978