Submit 3 Copies to Appropriate District Office

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-103
Revised 1-1-89

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

OIL CONSERVATION DIVISION

2040 Pacheco St.
Santa Fe, NM 87505

WELL API NO.	30-025-09228
5 Indicate Type of Lease	STATE [X] FEE [ ]
6 State Oil & Gas Lease No.	B-3776

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1 Type of Well: OIL WELL [ ] GAS WELL [X] OTHER	7 Lease Name or Unit Agreement Name: Mexico "E" Com (Formerly Hobbs "L" No. 2)
2 Name of Operator: Doyle Hartman	8 Well No.: 5
3 Address of Operator: 500 N. Main St., Midland, TX 79701	9 Pool name or Wildcat: Jalmat / Langlie Mattix

4 Well Location

Unit Letter O : 660' Feet From The South Line and 1980' Feet From The East Line

Section 2 Township 23S Range 36E NMPM Lea County

10 Elevation (*Show whether DF, RKB, RT, GR, etc.*): 3450' RKB

11 Check Appropriate Box to Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	[ ]	PLUG AND ABANDON	[ ]	REMEDIAL WORK	[ ]	ALTERING CASING	[ ]
TEMPORARILY ABANDON	[ ]	CHANGE PLANS	[ ]	COMMENCE DRILLING OPNS.	[ ]	PLUG AND ANBANDONMENT	[ ]
PULL OR ALTER CASING	[ ]			Casing & Cement Repair	[X]		
OTHER:	[ ]			OTHER: Perforate, Acidize & Frac Y-7R			[X]

12 Describe Proposed or Completed Operations (*Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work*) SEE RULE 1103.

For details of completed wellbore repair and reserve enhancement operations, and review of upper long-string cementing and bond log results, please refer to pages 2 of 7 thru 7 of 7 attached hereto, and made a part hereof.

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

SIGNATURE [signature] TITLE Engineer DATE 03/22/2004

TYPE OR PRINT NAME Steve Hartman TELEPHONE NO. (432) 684-4011

(This space for State Use)

APPROVED BY [signature] TITLE PETROLEUM ENGINEER DATE JUN 25 2004

CONDITIONS OF APPROVAL, IF ANY:

Details of Completed Wellbore Repair and Reserve Enhancement Operations

Moved well service unit onto temporarily abandoned well, on 5-15-02. Pulled and laid down rods and pump. Freed stuck tubing. Pulled and laid down old 2 3/8" O.D. tubing. Ran new 2 3/8" O.D., 4.7 lb/ft, J-55, 8 Rd, EUE tubing equipped with 4 3/4" bit and 3 1/2" check valve. Landed tubing at 3529'.

Hooked up air unit. Commenced pumping air. When bottom-hole returns came to surface, fluid and air started blowing out around wellhead. Shut off air unit. Pulled 2 3/8" O.D. tubing.

Ran 5 1/2" Model "C" RBP and 5 1/2" Model "C" packer. Set 5 1/2" Model "C" RBP at 2800'. Set 5 1/2" Model "C" packer at 2778'. Pressure tested 5 1/2" Model "C" RBP to 1500 psi. Pressure held okay.

Moved 5 1/2" Model "C" packer up hole. Tested for location of defective casing. Located defective casing between 467' and 1047'.

Tested 5 1/2" O.D. casing, from 1047' to 2800', to 500 psi. Pressure held okay. Tested 5 1/2" O.D. casing, from surface to 467', to 500 psi. Pressure held okay.

Pulled and laid down 5 1/2" Model "C" packer. Poured 4 sx of frac sand on top of 5 1/2" Model "C" RBP.

Moved in trackhoe. Dug out around well. Cut off and replaced corroded 8 5/8" O.D. casing and 5 1/2" O.D. casing. Wrapped exposed casing with corrosion-resistant tape.

Installed 52" O.D. x 11' corrugated steel cellar can. Backfilled around cellar can.

Sealed 8 5/8" x 5 1/2" casing annulus with 8 5/8" x 5 1/2" x 1/2" welded steel seal ring. Welded 2" high-pressure threaded outlet to side of 8 5/8" O.D. casing.

Rigged up Halliburton, on 7-22-02. Installed 5 1/2" cementing head. Established circulation down 5 1/2" O.D. casing and back up 8 5/8" x 5 1/2" casing annulus.

Repaired defective 5 1/2" O.D. long string, between 467' and 1047', by squeeze cementing with 1200 cu. ft. (900 sx) of cement slurry, consisting of 500 sx of API Class "C" cement containing 2% $CaCl_2$, 5lb/sx Gilsonite, and 0.5 lb/sx Flocele, followed by 400 sx of API Class "C" cement containing 2.5% $CaCl_2$, 5lb/sx Gilsonite, and 0.5 lb/sx Flocele. After achieving cement returns to surface, allowed cement returns to flow out 8 5/8" O.D. casing side outlet and fill 52" O.D. x 11' cellar can.

Closed 8 5/8" O.D. casing side valve. Utilized remainder of cement slurry to squeeze and repair defective casing (between 467' and 1047'). Performed squeeze at an average pump rate of 7 BPM. While squeezing, pump pressure increased from 642 psi to 1017 psi. Displaced cement with 10.5 bbls of water, at 1.2 BPM, at 640 psi. ISIP = 524 psi. 5-min SIP = 31 psi.

Moved in well service unit. Removed 5 1/2" cementing head. Installed B & M Oil Tool 5 1/2" x 2 3/8" x 3" 3000-psi Type MR tubinghead.

Ran 396.26' bottom-hole drilling assembly. Tagged top of cement at 396'. Drilled cement to 1038'. Fell out of cement at 1038'. Circulated hole clean.

Lowered 2 7/8" O.D. work string. Tagged at 2719'. Cleaned out wellbore to 2800'. Unloaded water from hole, to blowdown tank. Recovered 5 1/2" Model "C" RBP.

Ran 356.42' bottom-hole drilling and cleanout assembly. Cleaned out wellbore to 3751'. Drilled 4 7/8" hole to 3775'.

Circulated hole clean. Tripped out of hole with 2 7/8" O.D. tubing and bottom-hole drilling and cleanout assembly.

Installed 4 3/4" button bit. Drilled 4 3/4" hole from 3775' to 3885'. Pulled and laid down 4 3/4" button bit.

Ran 199.89' string-mill assembly. Rotated 4 3/4" string-mill assembly from 3753' to 3885'. Circulated hole clean and dry. Pulled string-mill assembly.

Rigged up Schlumberger. Logged well with SAS-CNL-GR-CCL log and VDCBL-GR-CCL log. Found good cement bonding from 260' to 506' and from 920' to 1562', with a cement gap between 594' and 868'.

Ran and set 4 1/2" O.D., 11.6 lb/ft, J-55, FJ liner, from 3495' to 3883'. Ran 5 1/2" Model "C" packer. Squeeze cemented 4 1/2" O.D. flush-joint liner into place utilizing 1600 cu. ft. (1200 sx) of cement slurry, consisting of 1050 sx of API Class "C" cement containing 2.5% $CaCl_2$, 3 lb/sx Gilsonite, and 0.25 lb/sx Flocele, followed by 150 sx of API Class "C" cement containing 2.5% $CaCl_2$. Pumped cement at an average rate of 10 BPM, at 3800 psi. Displaced cement with 21 bbls of water, at a final displacement rate of 0.3 BPM, at 873 psi. 5-min SIP = 824 psi. 10-min SIP = 804 psi. Pulled 5 1/2" Model "C" packer.

Installed Halliburton 5 1/2" cementing head. Re-squeezed down 5 1/2" O.D. casing, with an additional 1800 sx of API Class "C" cement containing 3% $CaCl_2$, 5 lb/sx Gilsonite, and 0.5 lb/sx Flocele. Pumped cement at an average pump rate of 14 BPM and average pump pressure of 1250 psi. Displaced cement with 10.5 bbls of water, at a final displacement rate of 0.3 BPM, at 475 psi.

Ran 355.97' bottom-hole drilling assembly. Tagged cement at 429'. Drilled hard cement to 620', and junk cement to 660'. Fell out of cement at 660'. Circulated hole clean.

Lowered work string. Tagged cement at 3338'. Drilled cement from 3338' to 3495' (top of 4 1/2" O.D. liner). Circulated hole clean. Pulled and laid down 2 7/8" O.D. work string and large-bore bottom-hole drilling assembly.

Ran 177.75' small-bore bottom-hole drilling assembly equipped with 3 7/8" blade bit and (6) 3 1/8" drill collars. Drilled cement from top of 4 1/2" O.D. liner to 3875'. Circulated hole clean. Pulled and laid down small-bore bottom-hole drilling assembly.

Ran 4 7/8" bit and 5 1/2" casing scraper, to top of 4 1/2" O.D. liner. Circulated hole clean. Pulled 4 7/8" bit and 5 1/2" casing scraper.

Ran 3 7/8" bit and 4 1/2" casing scraper, to 3875'. Circulated hole clean. Pulled 3 7/8" bit and 4 1/2" casing scraper.

Ran and set 5 1/2" Model "C" packer at 3002'. Pressure tested 5 1/2" O.D. casing and 4 1/2" O.D. liner, between 3002' and 3875', to 3000 psi, for 15 minutes. Pressure held okay. Pulled 5 1/2" Model "C" packer.

Ran 2 3/8" O.D. tubing. Hooked up air unit. Unloaded water from hole, to blowdown tank. Pulled 2 3/8" O.D. tubing.

Select-fire perforated, with (32) 0.45" x 23" holes, with one shot each at:

3103	3138	3209	3223	3323	3410	3451
3110	3144	3212	3226	3383	3423	3453
3113	3154	3214	3271	3385	3425	
3124	3201	3216	3273	3405	3445	
3135	3203	3220	3275	3413	3449	

Ran 5 1/2" Model "C" RBP and 5 1/2" Model "C" packer. Set 5 1/2" Model "C" RBP at 3480'. Set

bottom of 5 1/2" Model "C" packer at 3470'. Pumped 150 gal of 15% MCA acid down tubing, followed by 0.5 bbls of 2% KCl water. Allowed acid to fall and equalize.

Raised and set 5 1/2" Model "C" packer at 3304'. Pumped an additional 250 gal of 15% MCA acid down tubing. Let acid soak for 15 minutes. Acidized perfs, from 3373' to 3453' (12 holes), with an additional 2000 gal (total of 2400 gal) of 15% MCA acid and 15 ball sealers, at an average treating rate of 4.0 BPM. Max treating pressure = 3000 psi (at ballout, on the 14th ball). Flushed acid with 15.9 bbls of 2% KCl water. ISIP = 0 psi.

Raised and set 5 1/2" Model "C" RBP at 3325'. Raised bottom of 5 1/2" Model "C" packer to 3304'. Pumped 250 gal of 15% MCA acid down tubing, followed by 0.5 bbls of 2% KCl water. Allowed acid to fall and equalize.

Raised and set 5 1/2" Model "C" packer at 3038'. Pumped 300 gal of 15% MCA acid down tubing. Allowed acid to soak for 15 minutes. Acidized perfs, from 3103' to 3275', with an additional 3500 gal (total of 4050 gal) of 15% MCA acid and 27 ball sealers, at an average treating rate of 4.0 BPM. Maximum treating pressure = 3152 psi (at ballout, on 27th ball). Flushed acid with 17.2 bbls of 2% KCl water. ISIP = 97 psi. 1-min SIP = 0 psi.

Pulled and laid down 5 1/2" Model "C" packer and 5 1/2" Model "C" RBP.

Ran and landed bottom of 2 3/8" O.D. tubing at 3779' RKB (113 jts @ 33.2'/jt + 1.1'SN + 18'MA - 2'AGL + 10'KBC = 3778.7'). Ran 3/4" API Class "KD" rod string and 2" x 1 1/4" x 12' RHAC insert pump. Started pumping well and recovering load, at 6:00 P.M., CDT, 8-6-02, at 7.5 Spm x 64" x 1 1/4".

Moved in and rigged up well service unit, on 11-19-02. Pulled rods and 2 3/8" O.D. tubing. Select-fire perforated with (5) 0.37" x 17" holes, with one shot each at:

3189	3540
3468	3543
3509	

Ran 3 1/2" O.D., 9.3 lb/ft, N-80 frac string and 5 1/2" PLS full-bore frac packer. Set 5 1/2" PLS frac packer at 3044'. Installed 3 1/2" 8 Rd heavy-duty frac valves. Shut in well for pressure buildup. 12.75-hr SITP = 31.25 psi.

Performed CO_2 foam frac down 3 1/2" O.D., N-80 frac string with 233,000 gal of gelled water and

CO_2 (52.8% CO_2) and 500,000 lb of frac sand (10% 20/40, 15% 10/20, 75% 8/16).

ISIP =	909 psi
5-min SIP =	700 psi
15-min SIP =	516 psi

Left well shut in for 85 minutes. Flowed well to blowdown tank for 17.5 hrs. Pulled and laid down 3 1/2" O.D. frac string. Removed heavy-duty frac valves. Installed 3" ball valves.

Ran 2 3/8" O.D. production tubing equipped with 1.1'SN and 18'MA. Tagged top of frac sand at 3487'. Cleaned out frac sand to 3875'. Made a total of fourteen (14) short trips to allow more frac sand (a total of 220') to influx into wellbore. Cleaned out frac sand after each short trip.

Circulated hole clean and dry. Raised and landed bottom of mud anchor at 3712' RKB (111 jts @ 33.2'/jt + 1.1'SN + 18'MA - 2'AGL + 10'KBC = 3712.3'). Ran 3/4" API Class "KD" rod string and 2" x 1 1/4" x 12' RHAC insert pump. Started pumping well on 11-24-02, at 7.5 Spm x 64" x 1 1/4". On 12-4-02, tested well through orifice tester, at a rate of 270 MCFPD + 9 BWPD. Orifice plate size = 0.625". PCP = 28.5 psig.

Total wellbore repair and reserve enhancement cost = $514,330.

Mexico "E" Com No. 5
Upper Long-String
Cementing and Bond Log Results

A review of the VDCBL bond log, that was run in the Mexico "E" Com No. 5 well, on 7-30-02, documents the placement of cement, on the outside of the 5 1/2" O.D. casing, from 256' to 1588', as a result of the 900-sx squeeze job that was performed on 7-22-02. The 7-30-02 VDCBL cement bond log also indicated the existence of a gap in cement coverage, from 594' to 868'. As to the non-logged interval, above 200', while performing the 900-sx cement job, cement returns were achieved back to surface, and the cellar can was filled with cement, before the remainder of the cement was squeezed away. After the cement set, hard cement was drilled, from 396' to 1038', indicating that a major cement slurry exit point, for the 900-sx squeeze job, was at approximately 1038'.

On 7-31-02, a followup squeeze job was performed down the 5 1/2" O.D. casing, at an average pump rate of 14 BPM, and average pump pressure of 1250 psi, utilizing an additional 1800 sx of cement. After the cement set, corresponding to the followup 1800-sx squeeze job, hard cement was drilled, from 429' to 620'. Fell out of cement at 660'.

The results of the drillout of the followup 1800-sx cement job, including the termination of hard cement at 620', strongly suggests that the cement slurry exit point, for the followup 1800-sx cement job, was at approximately 620', and that the prior cement gap, from 594' to 868', was thoroughly squeezed, as a result of the followup large-volume 1800-sx squeeze job.

The 7-30-02 VDCBL cement bond log found the top of the original long-string cement job at 2740'.

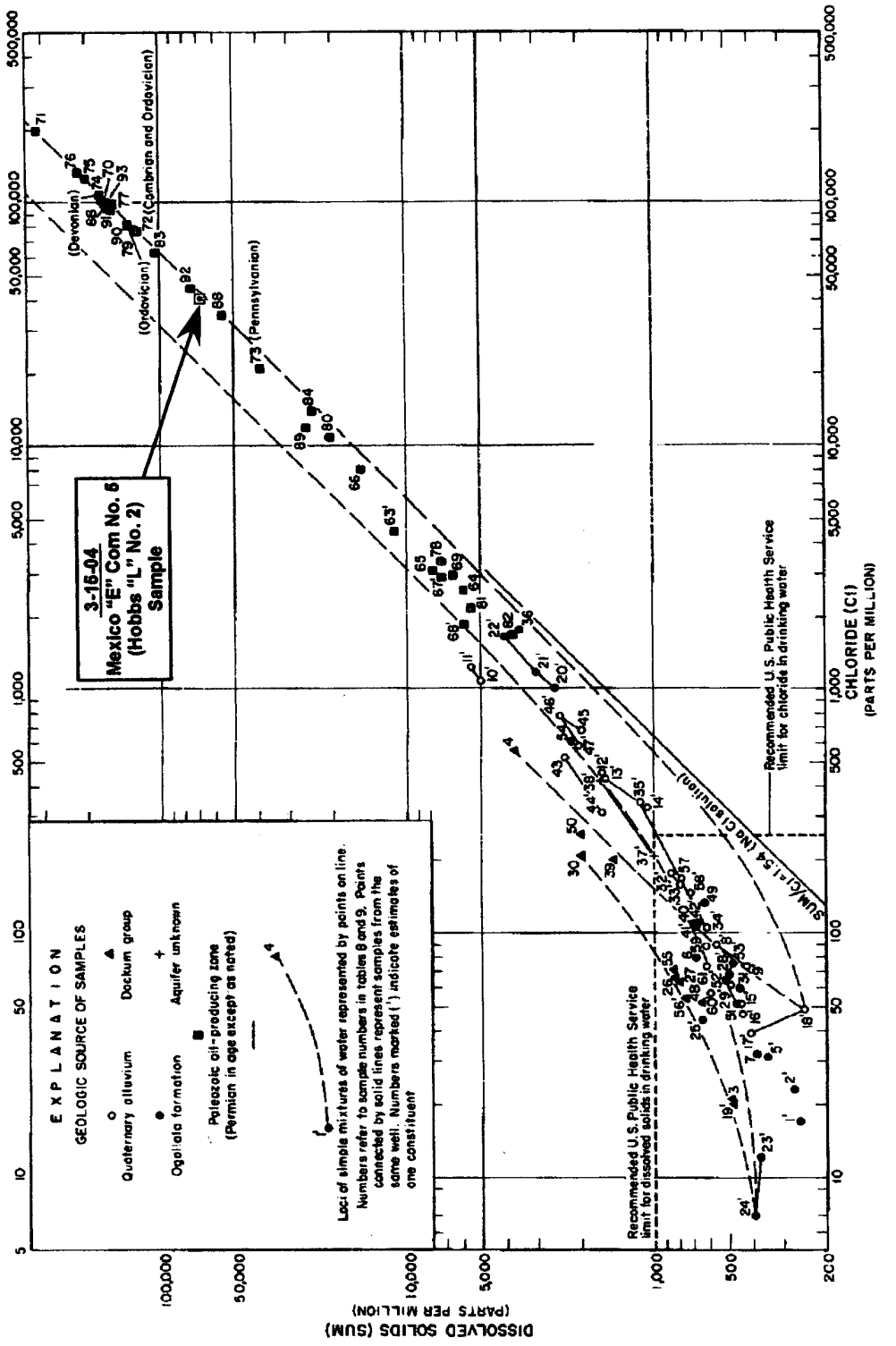
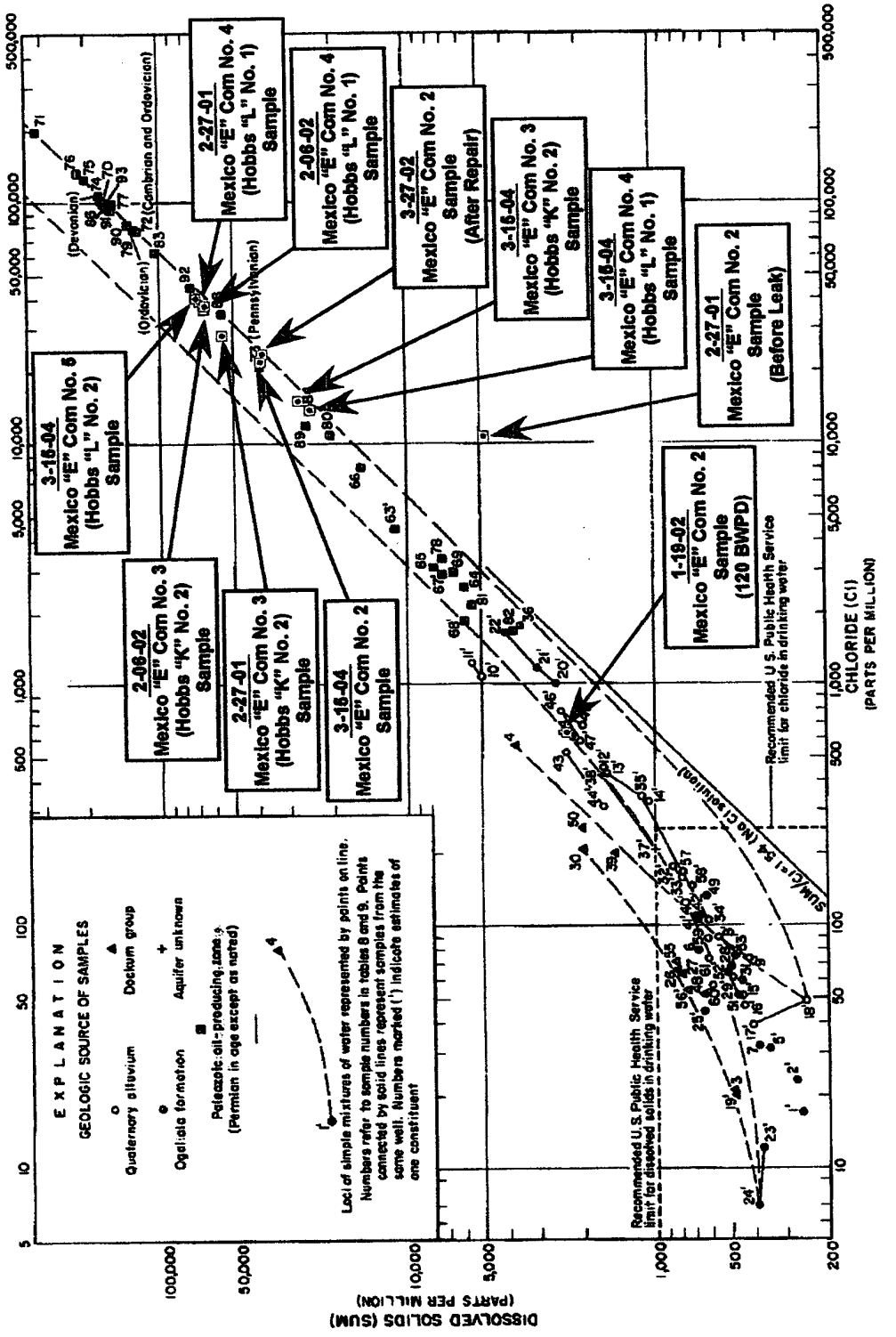


Figure 28

RELATION OF DISSOLVED SOLIDS TO CHLORIDE IN SAMPLES OF GROUND WATER FROM SOUTHERN LEA COUNTY, N. MEX.

(Graph from Ground-Water Report No. 6
"Geology and Ground-Water Conditions in Southern Lea County, New Mexico"
by Alexander Nicholson, Jr. and Alfred Clebsch, Jr
USGS)



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by Alexander Nicholson, Jr. and Alfred Clebsch, Jr
USGS)

WATER SAMPLE TAKEN 3-15-04

P. O. Box 1468 (915) 943-3234 or (915) 563-1040
Monahans, Texas 79756

MARTIN WATER LABORATORIES, INC.

709 W. Indiana (915) 683-4521
Midland, Texas 79701

RESULT OF WATER ANALYSES

TO: Mr. Don Mashburn
P.O. Box 10426
Midland, TX 79702

LABORATORY NO. 304-77
SAMPLE RECEIVED 3-15-04
RESULTS REPORTED 3-17-04

API WATER ANALYSIS REPORT FORM

Company			Sample No.	Date Sampled
Doyle Hartman Oil Operators				
Field	Legal Description		County or Parish	State
			Lea	NM
Lease or Unit	Well	Depth	Formation	Water, B/D
Hobbs L	#2			
Type of Water (Produced, Supply, etc.)		Sampling Point		Sampled By
Produced				

DISSOLVED SOLIDS

CATIONS	*mg/l*	*me/l*
Sodium, Na (calc.)	16,975	738.0
Calcium, Ca	2,640	132.0
Magnesium, Mg	4,666	384.0
Barium, Ba		

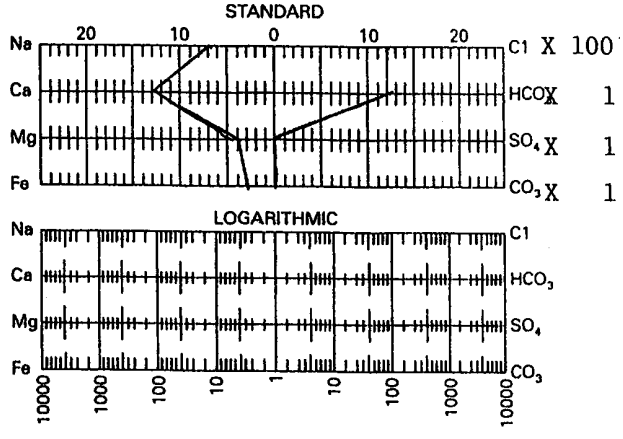
ANIONS			
Chloride, Cl	44,020	1,241.4	X100
Sulfate, So_4	11	0.2	X 10
Carbonate, Co_3	0	0.0	X100
Bicarbonate, HCO_3	756	12.4	X 10

Total Dissolved Solids (calc.)	69,068	
Iron, Fe (total)	839	33.5
Sulfide, as H_2S	95	

OTHER PROPERTIES

pH	6.26
Specific Gravity, 60/60 F.	1.0512
Resistivity (ohm-meters) @ 77° F.	0.118
Total Hardness	25,800

WATER PATTERNS – *me/l*



REMARKS & RECOMMENDATIONS: Please contact us if we can be of any assistance in interpreting these results.

Greg Ogden, B.S.

FAX: Doyle Hartman (214-520-1434)

NORTH

B

Structural Cross-Section

SOUTH

B'

Raptor Resources, Inc.
State "A" A/C-1 No. 30
I-03-23S-36E
Comp. Date: 10-23-51
Gas Cum: 4,983 MMCF

Doyle Hartman
Mexico "E" Com No. 3
(Hobbs "K" No. 2)
M-02-23S-36E
Comp. Date: 3-18-60
Repair & Recomp. Date: 12-05-02
Gas Cum: 2,099 MMCF

Squeezed upper casing hole(s) from 463'-527' w/1400 sx (525 sx + 875 sx = 1400 sx)

Doyle Hartman
Mexico "E" Com No. 2
(Hobbs "K" No. 1)
N-02-23S-36E
Comp. Date: 11-10-59
Repair & Recomp. Date: 3-18-02
Gas Cum: 1,493 MMCF

Squeezed defective long-string from 407'-1102' w/2000 sx

Raptor Resources, Inc.
State "A" A/C-1 No. 29
C-11-23S-36E
Comp. Date: 9-26-51
Gas Cum: 6,578 MMCF

Tansill

+600'

Yates

Seven Rivers

"CUQ" Mkr

Queen

Penrose

Gas Productive Interval

TD @ 3624'

4 1/2" O. D., 11.6 lb/ft FJL @ 3306'-3823' w/1500 sx

PBTD @ 3815'
NTD @ 3828'

4 1/2" O. D., 11.6 lb/ft FJL @ 2885'-3800' w/1100 sx

PBTD @ 3785'
NTD @ 3800'

DST (3175-3600')
F = 4,920 MCF
FP = 815-955#
SIP = 1205#
Date: 9-26-51

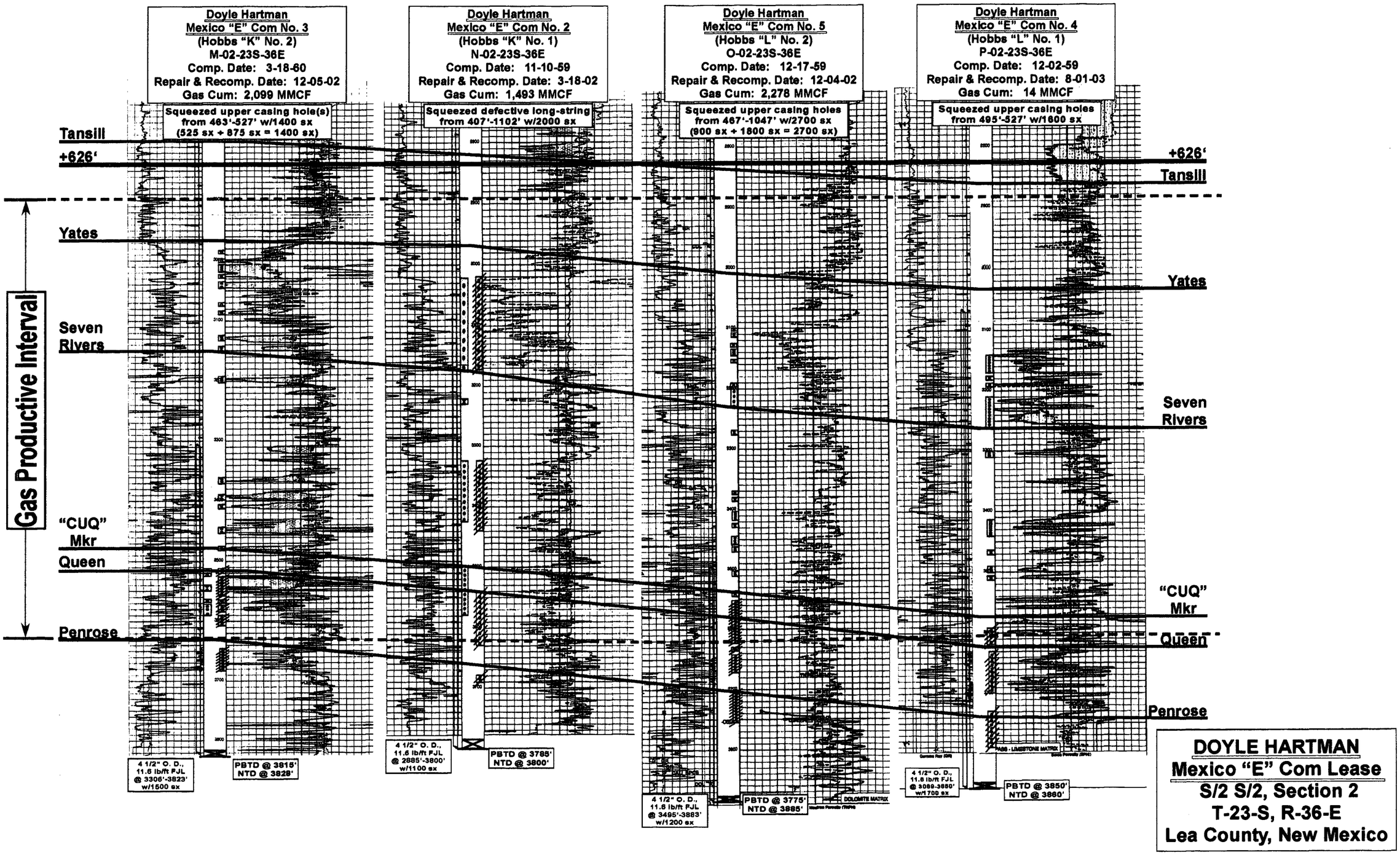
TD @ 3600'

DOCUMENTED GAS PRODUCTIVE INTERVAL
Sections 2, 3 & 11
T-23-S, R-36-E
Lea County, New Mexico

West
C

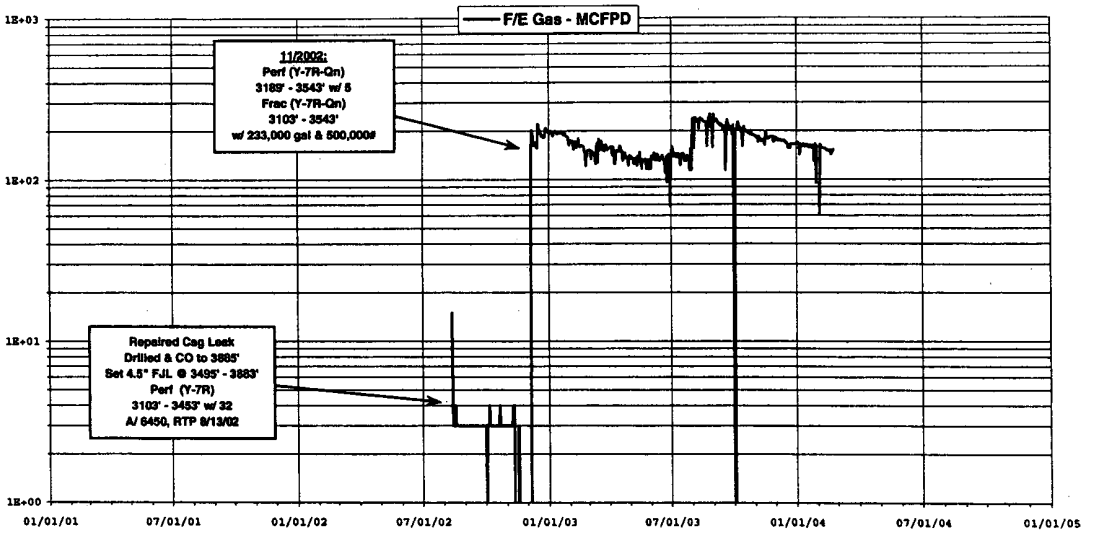
Structural Cross-Section

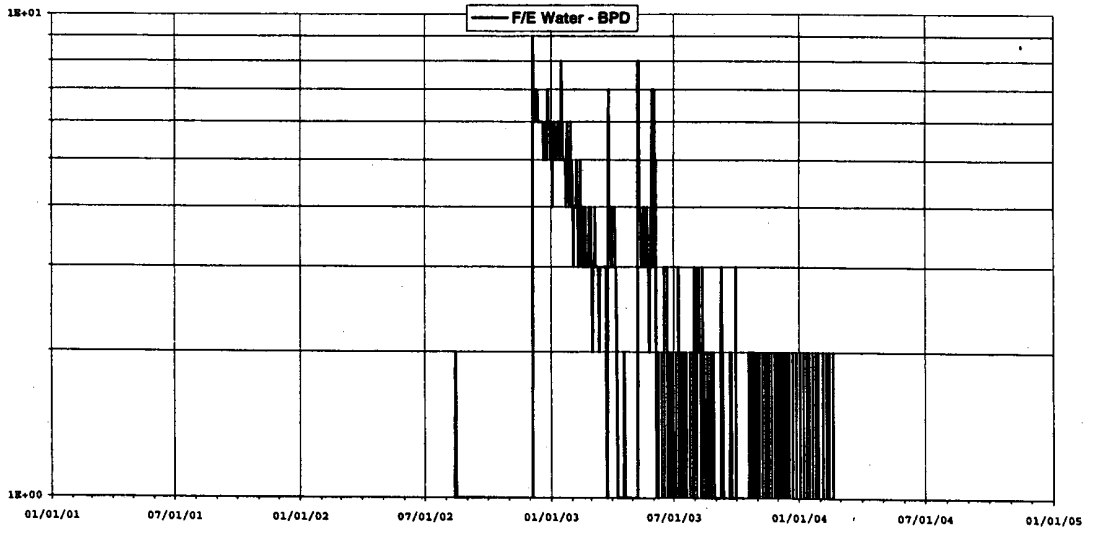
East
C'

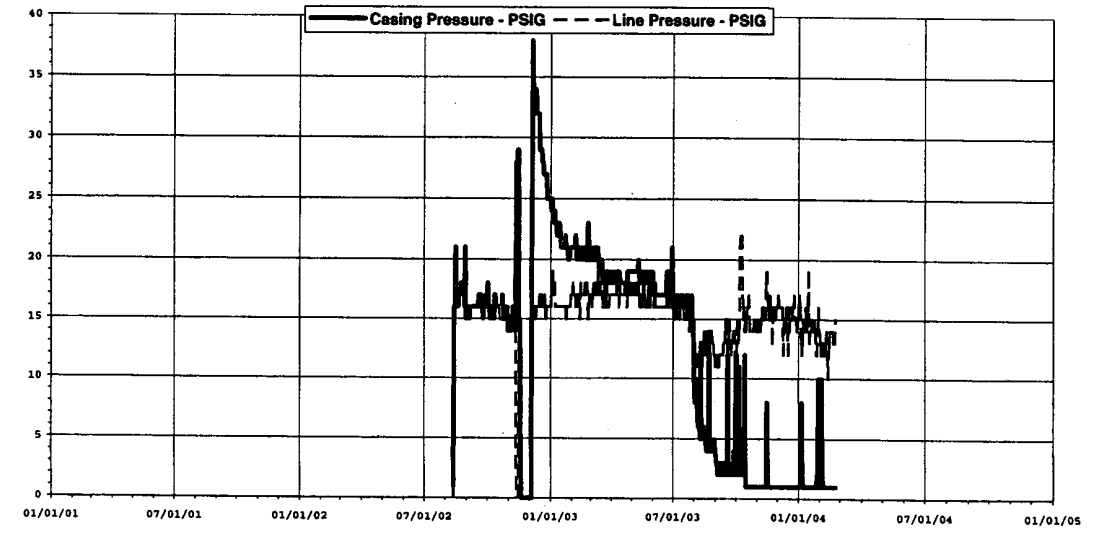


DOYLE HARTMAN
Mexico "E" Com Lease
S/2 S/2, Section 2
T-23-S, R-36-E
Lea County, New Mexico

Hobbs L #2 (Mexico E Com #5)
Jalmat / Langlie Mattix
O-2-23S-36E
Doyle Hartman



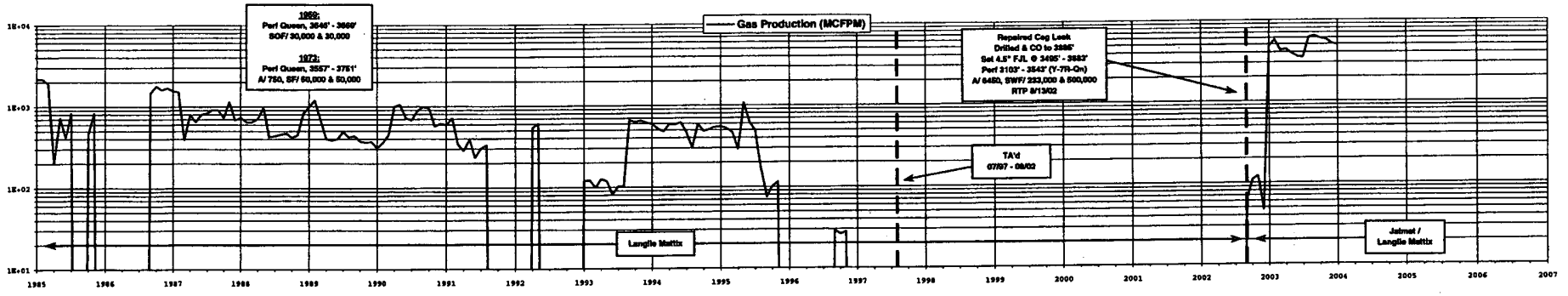


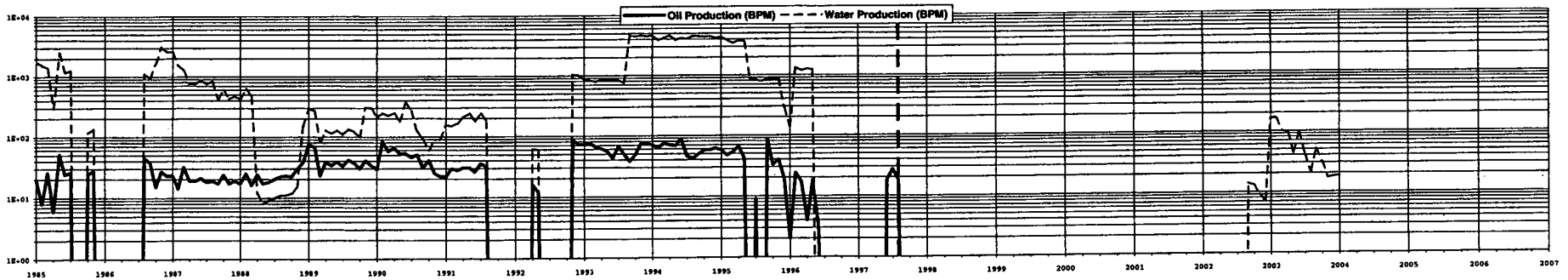


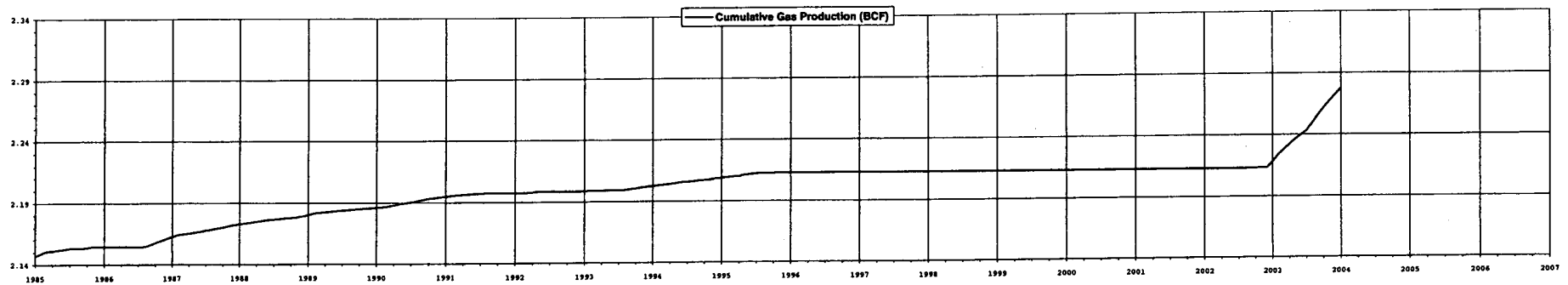
02/24/04: 2.286 BCF 38.5 MBO

Plot Format: C:\My Documents\Dly FE\g-w-cplp-3.plt Printed: 2/26/04

Hobbs L #2 (Mexico E Com #5)
Jalmat / Lagle Mattix
O-02-23S-36E
Doyle Hartman







12/03: 2.278 BCF 38.5 MBO