DOYLE HARTMAN
Oil Operator
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HAND-DELIVERED AND U.S. MAIL

April 19, 1996

Texaco Exploration and Production Inc.
500 N. Loraine
P.O. Box 3109
Midland, TX 79702

Attn: Ronald W. Lanning

Re: Drilling and Completion Costs
Dublin-Rhodes Federal "Com" No. 1
Lea County, New Mexico
SW/4 Section 23, T-26-S, R-37-E, N.M.P.M.
(160-acre Spacing Unit)

Case 11476

Gentlemen:

Reference is made to Texaco's letter of April 18, 1996, and in particular to Texaco's expressed concern about our estimated drilling and completion cost for the proposed Dublin-Rhodes Federal "Com" No. 1 Rhodes-Yates gas well. In this regard, we would like to assure Texaco that, at all times, every reasonable effort will be made to minimize the cost of drilling and completing the subject well. Moreover, all joint interest billings (JIB's) will be performed in accordance with COPAS accounting procedures that specify that JIB's MUST consist of only vendor-invoiced amounts and not AFE'd amounts. Consequently, if the actual achievable footage drilling price for the subject well is less than the presently estimated footage price, Texaco will be billed only the vendor-invoiced amount.

From the enclosed comparison of Texaco's AFE with our proposed AFE for drilling and completing a Rhodes-Yates gas well in the SW/4 Section 23, T-26-S, R-37-E, it is obvious that a substantial portion of the bottom-line difference between the two AFE's pertains to two items:

1) Fracture Stimulation Cost
2) Provisions for Pumping Equipment

In computing the anticipated well economics for a Yates well to be drilled in the SW/4 Section 23, two equations can be relied upon for mathematically estimating anticipated gas recovery and gas deliverability. These equations are:

1) Volumetric Gas Recovery Equation
(Shut-in Pressure versus Cumulative Recovery)

2) Rawlins and Shellhardt Gas Deliverability Equation
(Bureau of Mines Monograph No. 7)

In designing a gas well, it is critical to understand these two basic mathematical relationships and in particular to focus on those variables over which we have control. Our proposed drilling and completion procedures and estimated investment cost for the Dublin-Rhodes Federal "Com" No. 1 carefully consider the variables that can be realistically improved and attempts to provide a well completion that achieves maximum reservoir potential.

Past drilling and completion experience has proven that the incremental financial investment required to achieve these goals provides a substantially more favorable economic return than can be achieved by focusing only on minimum investment cost; i.e., a larger frac job, rod pumping equipment, and an adequately-sized vertical flow path all contribute to maximization of gas recovery and optimization of economic return.

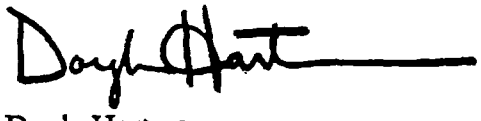
A good example of this approach is the J.W. Sherrell No. 9 Jalmat-Yates gas well (J-31-24S-37E). After the Sherrell No. 9 well had reached Texaco's economic limit, we acquired the well and installed pumping equipment and performed a second and larger frac job. Between 1979 and September, 1989, Texaco's recovery from the Sherrell No. 9 was 332.9 MMCF. Since acquiring the well and making the necessary incremental investment, an additional 620.9 MMCF has been recovered (performance plots enclosed). From 1979 to 1989, Texaco's volumetric gas recovery was 3171 MCF/psi with a corresponding abandonment pressure of 105 psia. Since 1989, the volumetric recovery has been 8624 MCF/psi for a 172% increase in volumetric recovery efficiency.

Therefore, as to the Dublin-Rhodes Federal "Com" No. 1, and in order to PREVENT WASTE, we believe that it is imperative that all parties focus on what should be the true objectives, which are maximized gas recovery and optimum economics, and recognize that these goals are infrequently synonymous with minimized investment cost. That is, the goal at all times should be minimized unit

reserve cost and maximized reserve recovery and not just minimized investment cost while sacrificing significant potentially recoverable reserves.

Yours very truly,

DOYLE HARTMAN, Oil Operator



Doyle Hartman

enclosures (7)

rcp
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Carolyn M. Sebastian, Landman
Jefferson D. Massey, Controller
Don L. Mashburn, Engineer
Steve Hartman, Engineer
Cindy Brooks, Engineering Tech
Sheila Potts, Geologist

DOYLE HARTMAN
OIL OPERATOR

AUTHORIZATION FOR EXPENDITURE AND DETAIL WELL ESTIMATE

LEASE NAME Dublin Rhodes Fed. Com. WELL NO. 1 W.I. 100%
COUNTY Lea STATE New Mexico FIELD Rhodes Yates-Seven Rivers
LOCATION: NW/4 SW/4 Section 23, T-26-S, R-37-E

DRILLING & COMPLETION INTANGIBLES:	DOYLE HARTMAN	TEXACO
1. Stake Location 700 Archeological Study	700	
2. Surface Damages and Right-of-Way	5,000	4,000
3. Roads 9,800 Location 5,000 Pits 1,000	15,800	10,000
4. Pit Lining	1,000	
5. Drilling Rig:		
Footage 3,325 Feet @ 14.00 Per Foot	46,550	38,000
Daywork: 1.5 Days @ 4,600 Per Day	6,900	
6. Bits and Reamers Rotating Head 1,500	1,500	
7. Cementing: Cmt. 4,200 Equip. 900	5,100	9,000
Cmt. 7,200 Equip. 1,100	8,300	
Cmt. Equip.		
8. Mud System: Build 2,600 Maintain 1,400	4,000	
9. Water (Drilling): Fresh 3,600 Brine 2,200	5,800	6,000
10. Open Hole Logging & Testing:		
Logs 5,200 Mud Logging 1,700		
DST 2,600 Coring Other	9,500	4,000
11. Completion Unit 6 days @ 1,300 per/day anchors - 600	8,400	6,000
12. Wireline (CH): Log 800 Perforate 2,400 Other	3,200	4,000
13. Stimulation: Acidize 5,500 Frac. 82,000	87,500	40,000
14. Water (Comp): Fresh 2,400 Treated 500	2,900	
15. Rental: BOP 500 Tools 1,500		
Frac Tanks 1,800 Other	3,800	6,000
16. Production Testing 1,000 BHP Surveys 700	1,700	
17. Trucking	2,000	3,000
18. Plugging		
19. Waste Disposal 2,000 Surface Restoration 1,500	3,500	3,000
20. Labor 1,500 Supervision 2,000	3,500	4,000
21. Legal & Prof: Hearings Other		
22. Abstracts Title Opinions		
23. Other		11,000
Total Intangibles	226,650	148,000
WELL EQUIPMENT		
24. Casing 550 Ft. of 8 5/8", 24# @ 7.35 Per Ft.	4,043	4,000
3,325 Ft. of 5 1/2", 15.5 # @ 4.50 Per Ft.	14,963	16,000
Ft. of @ Per Ft.		
25. Tubing 3,250 Ft. of 2 3/8" @ 2.10 Per Ft.	6,850	7,000
26. Heads: Surf. 800 Int. Tbg. 600	1,400	10,000
27. Xmas Tree or Pumping Connections	800	
28. Unit 6,850 Base 500 Install 900	8,250	
29. Prime Mover:		
Engine/Motor 1,200 Controller 450 Transformer(s) 1,400		
Belts & Sheaves 300 Other Labor 2,250	5,600	
30. Power System	7,550	
31. Rods 8,600 Pump 1,700 Misc. 550	10,850	
32. Storage & Treating:		
Tanks 3,500 Sep./Dehy. 1,500 Treater		
Valves 1,000 Connections 2,000 Labor 1,500	9,500	12,000
33. Metering Equip. 3,500 Surf. Pumps	3,500	
34. Lines: Prod 300 Gas 1,200 Disposal 400	1,900	2,220
35. Guards 1,200 Fences 1,500 Culverts	2,700	
36. Other		
Total Tangibles	77,906	51,220
Sub-Total	304,556	199,220
Tax - 6%	18,273	11,953
TOTAL COST OF WELL	322,829	211,173

Remarks:

Company @ %

Approved by: Title Date

COMPANY Doyle Hartman
(Texaco)

WELL J.W. Sherrell No. 9

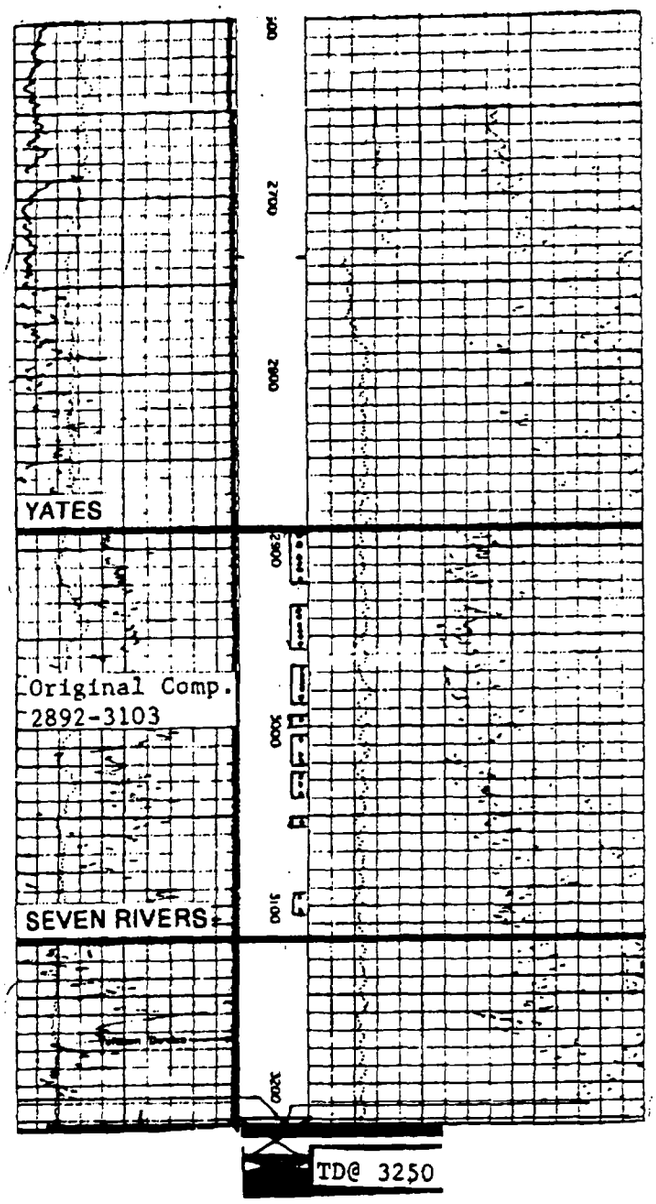
FIELD Jalmat

LOCATION 2250' FSL & 1650' FEL (J)
Section 31, T-24-S, R-37-E

COUNTY Lea

STATE New Mexico

ELEVATIONS: KB 3234'
DF
GL 3224'



COMPLETION RECORD

SPUD DATE 9-1-78 COMP. DATE 9-16-78

TD 3250' PBTD

CASING RECORD 8 5/8" @ 496' w/400 sx.
5 1/2" @ 3247' w/720 sx.

PERFORATING RECORD 2892 - 3103' w/20

STIMULATION A/2000

IP IPF = 375 MCFPD

GOR GR

TP 50 CP

CHOKE 2" TUBING 2 3/8" @ 2781'

REMARKS 11/18/80:
SF/34,000 + 36,000. (2892 - 3103'). Choke 12/64".
TP 330#. CP 285#. F/395 MCF. No fluid.

9/01/89:
Doyle Hartman acquired lease. Cum Gas: 332,914 MCF.

11/15/89:
Add perfs 2908 - 3016'. A/3000. PBTD @ 3219'.
2 3/8" @ 3171' RKB. Pp/257 MCFPD + 29 BWPD. Choke
32/64". FCP 36# SICP 86#. Trace of oil. (2892 -
3101').

11/20/89:
SWF/157,200 + 336,000. F/980 MCFPD + 40 BFPD.
Choke 64/64". FCP 40#.

3/96 CUM GAS = 953,805 MCF

J-31-24S-37E

DOYLE HARTMAN

SHERRELL, J.W. # 9

JALMAT TANSILL YATES 7 RVRS-G

LEA COUNTY, NM

J-31-24S-37E

(AS OF 0396)

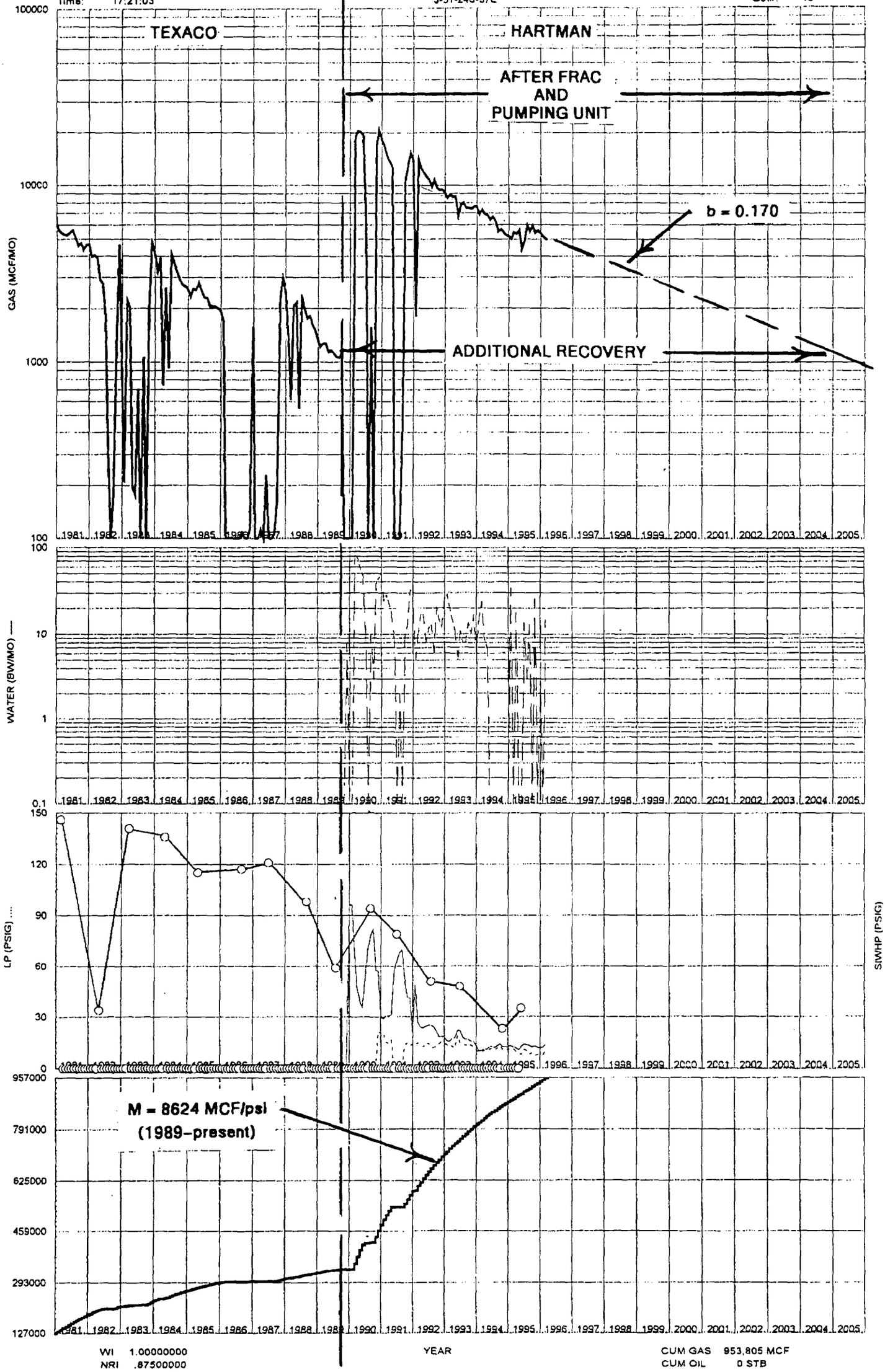
Date: 04/18/96

Time: 17:21:03

LEASE # 418

File: HART20YR

Get#: 19



WI 1.00000000

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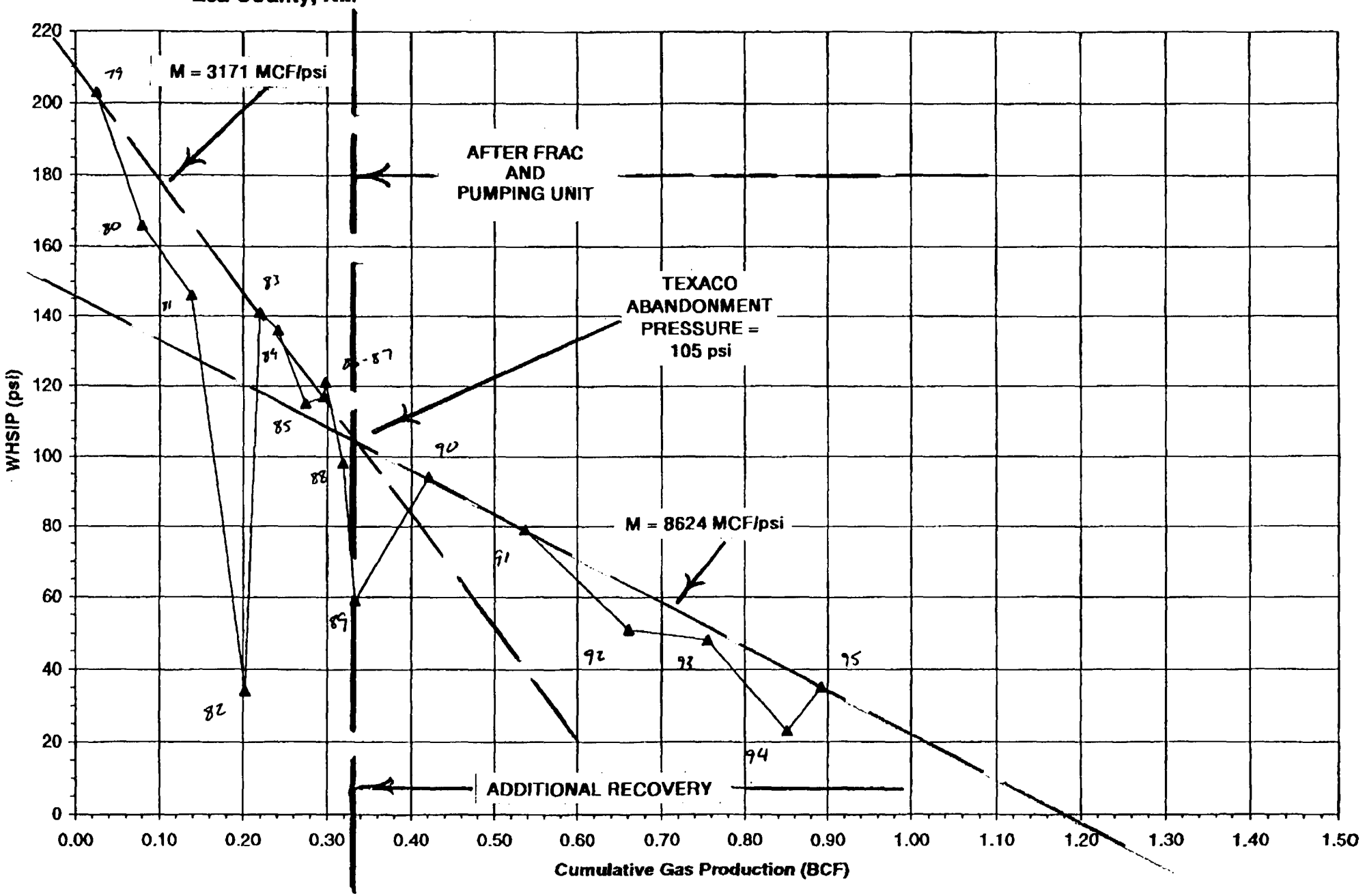
YEAR

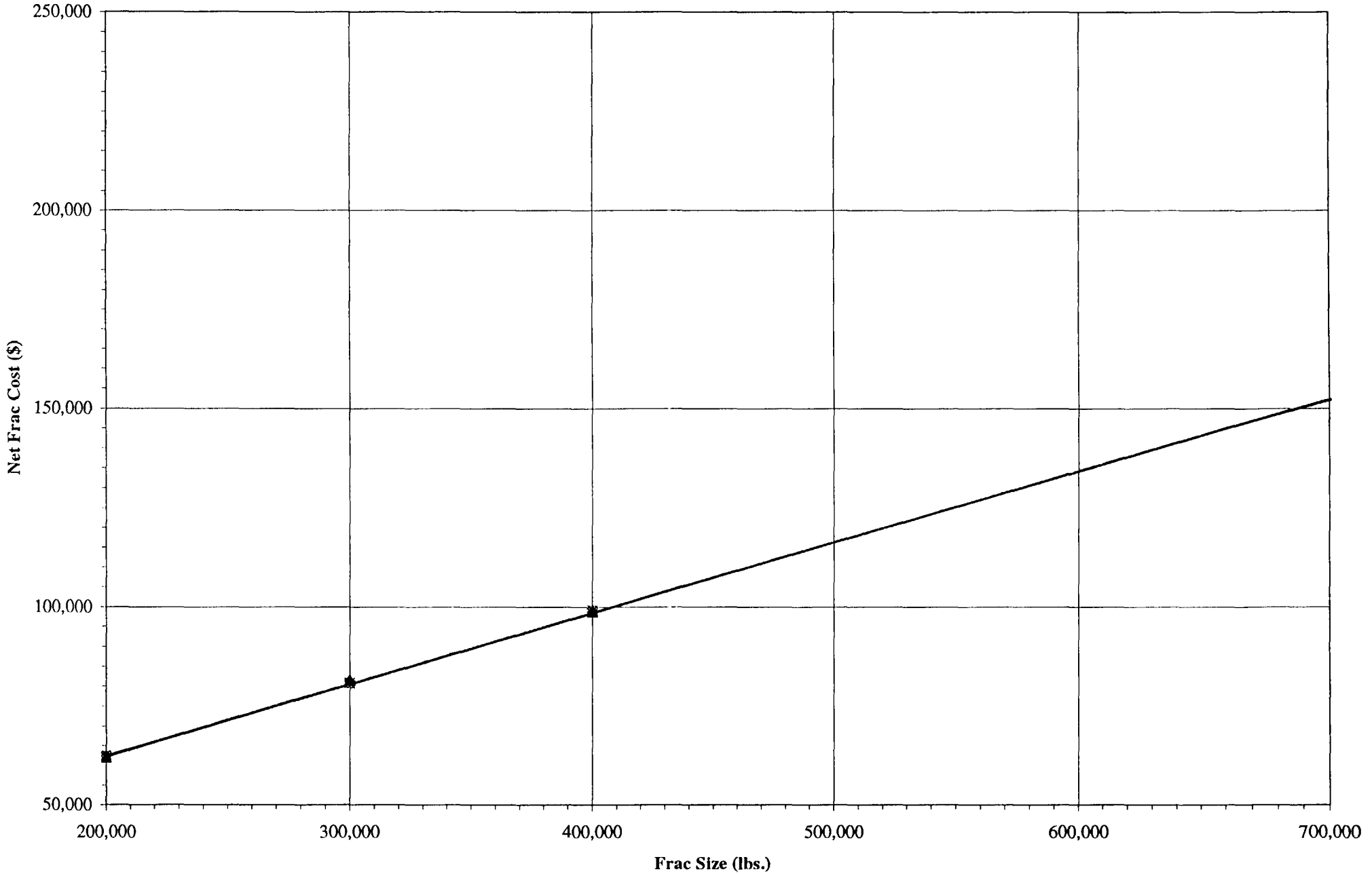
CUM GAS 953,805 MCF

CUM OIL 0 STB

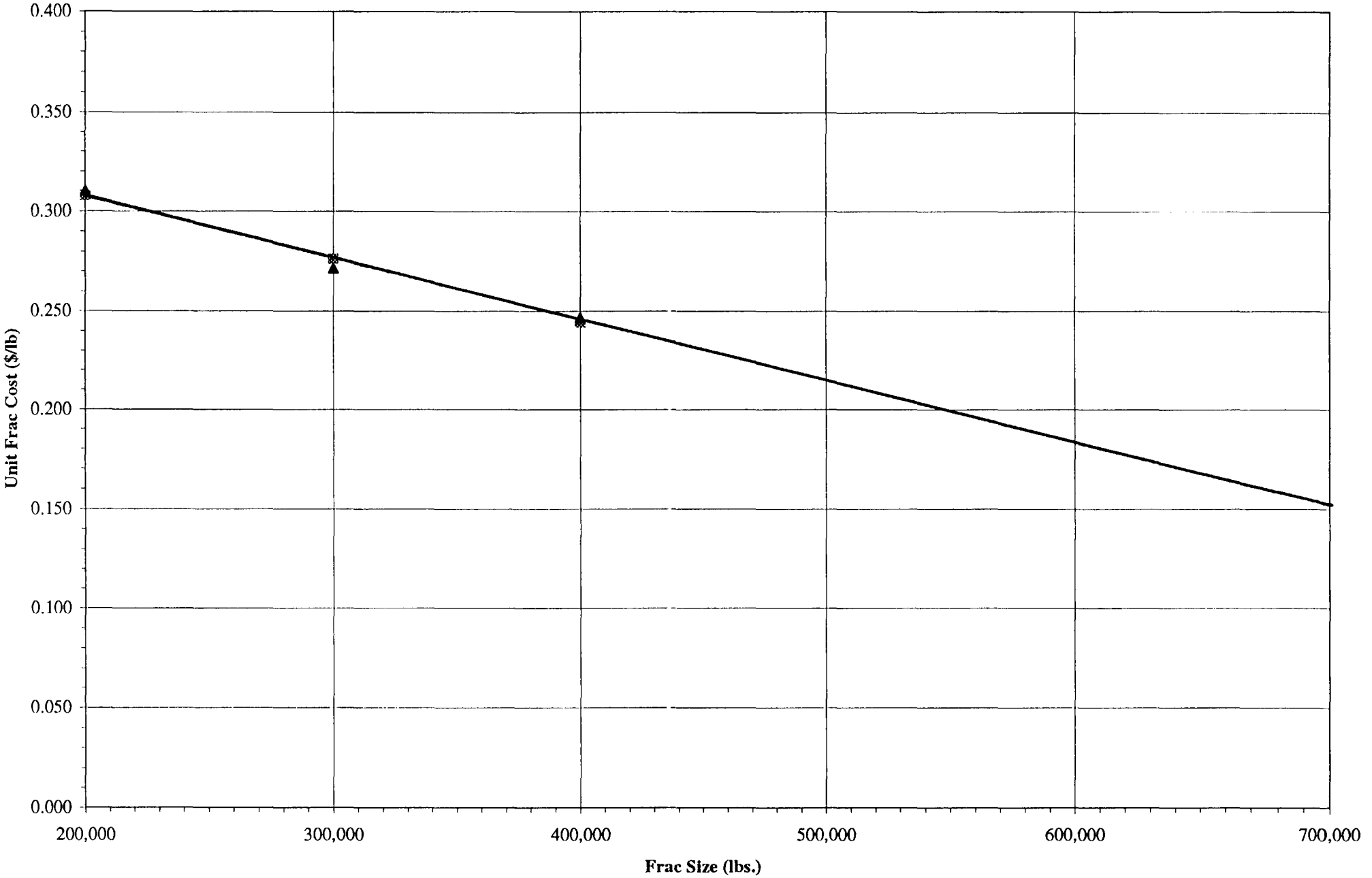
J W Sherrell No. 9
Operator: Doyle Hartman
Field: Jalmat
Location: J-31-24S-37E
Lea County, NM



Net Frac Cost vs. Frac Size
Jalmat & Eumont Pools
Lea County, New Mexico
Halliburton's Estimate 12/20/95



Unit Frac Cost vs. Frac Size
Jalmat & Eumont Pools
Lea County, New Mexico
Halliburton's Estimate 12/20/95



Halliburton's Estimated
Frac Job Cost
Jalmat & Eumont Pool Completions
12/20/95

Frac Size (#)	Gross Frac Cost ($)	Discount ($)	Net Frac Cost ($)	Discount (%)	Unit Frac Price ($/lb)
200,000	103,714.95	41,659.18	62,055.77	40.17%	0.310
300,000	134,835.03	53,356.82	81,478.21	39.57%	0.272
400,000	163,056.97	64,343.35	98,713.62	39.46%	0.247