STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

50 YEARS
1935 - 1985

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

March 18, 1986

Bass Enterprises Production Co.
First City Bank Tower
201 Main St.
Fort Worth, Texas 76102

Attention: Mark D. Chambers

Re: 1986 Plan of Development
James Ranch Unit
Poker Lake Unit
Eddy County, New Mexico

Gentlemen:

The above-referenced submittal has been approved by the New Mexico Oil Conservation Division effective this date. Such approval is contingent upon like approval by the New Mexico Commissioner of Public Lands and the Bureau of Land Management.

Sincerely,

ROY E. JOHNSON,
Senior Petroleum Geologist

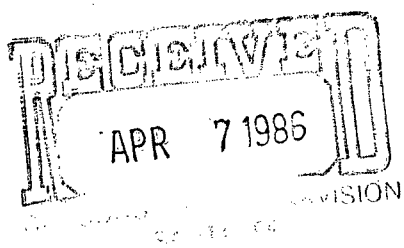
REJ/dr

cc: Commissioner of Public Lands - Santa Fe
Bureau of Land Management - Albuquerque
OCD District Office - Artesia

BASS ENTERPRISES PRODUCTION CO.
FIRST CITY BANK TOWER
201 MAIN ST.
FORT WORTH, TEXAS 76102
817/390-8400

#366

April 2, 1986



BUREAU OF LAND MANAGEMENT
P. O. Box 1397
Roswell, New Mexico 88201
Attention: Mr. Joe Lara

COMMISSIONER OF PUBLIC LANDS
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87504-1148
Attention: Mr. Floyd Prando

RE: Commercial Determinations
Poker Lake Unit Wells No. 61-66
Eddy County, New Mexico

Gentlemen:

Under cover letter dated November 8, 1985, Bass submitted its request for commercial determinations and participating areas for the captioned Poker Lake Unit wells (copy attached). As of this date, Bass has secured approval from the NMOCD by letter dated November 14, 1985 (copy attached). However, we have not yet received your recommendation of commercial determinations for the subject wells. Please review your records and advise this office of your decision. Should you require any additional information, please contact the undersigned at (817) 390-8584 so that we may promptly provide you with same. Your assistance in this matter is appreciated.

Sincerely,

Mark D. Chambers

MARK D. CHAMBERS
Landman

MDC:jh
Enclosures: November 8, 1985 letter from Bass to BLM, CPL, NMOCD
November 14, 1985 letter from NMOCD to Bass

cc: New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501
Attention: Mr. Richard Stamets

BASS ENTERPRISES PRODUCTION CO.
FIRST CITY BANK TOWER
201 MAIN ST.
FORT WORTH, TEXAS 76102
817/390-8400

October 7, 1986

BUREAU OF LAND MANAGEMENT
P. O. Box 1397
Roswell, New Mexico 88201

COMMISSIONER OF PUBLIC LANDS
State of New Mexico
P. O. ox 1148
Santa Fe, New Mexico 87504-1148

NEW MEXICO OIL CONSERVATION DIVISION
P. O. Box 2088
Santa Fe, New Mexico 87501

RE: Application for Commercial Determinations for Poker Lake Unit Wells No. 52 and 58
Poker Lake Unit
Eddy County, New Mexico

Gentlemen:

In accordance with the provisions of Section 11 of the Poker Lake Unit Agreement dated March 18, 1952, we hereby submit the attached materials covering the wells located as described below to support our recommendation that each of the wells be determined to be non-commercial, and thereby, not receive participating areas and be produced on a lease basis.

Poker Lake Unit Well No. 52 - Wolfcamp - located 660' FNL and 1980' FWL, Section 33, T25S-R31E, Eddy County, New Mexico

Poker Lake Unit Well No. 58 - Wolfcamp - located 1980' FSL and 1980' FWL, Section 27, T24S-R31E, Eddy County, New Mexico

If you should have any questions regarding the data submitted for commercial determinations on the above named wells, please contact Steve Rowland in our Midland office, whose telephone number is (915) 688-3300.

Sincerely,

JENS HANSEN
Division Landman

JH:jh
Enclosures

WORKSHEET FOR COMMERCIAL DETERMINATION AND PARTICIPATING AREA IN FEDERAL UNITS

WELL DATA

WELL Poker Lake Unit No. 52 FORMATION Wolfcamp

LOCATION C UNIT, 660 FEET FROM N LINE & 1980 FEET FROM W LINE,

SECTION 33 , RANGE 31E , TOWNSHIP 25S , COUNTY Eddy NEW MEXICO

SPUD DATE 7-8-82 COMPLETION DATE 2-21-83 INIT. PROD. DATE 7-9-85

PERFORATIONS 12462'-12469' (1 SPF)

STIMULATION:

ACID 2500 gallons 15% MS acid

FRACTURE 50964 gallons YF4PSD crosslinked treating fluid with 116892# 20/40 mesh sand

POTENTIAL CAOF 1586 MCFGPD

(ATTACH COPY OF C-122. ATTACH COPY OF WELLBORE SKETCH OF COMPLETED WELL.)

VOLUMETRIC CALCULATION

	FORMATION	
	SANDS PERFORATED	SANDS NOT PERFORATED BUT POTENTIALLY PRODUCTIVE
Area (A) proration unit size, acres	320	320
*Porosity (Ø), %	12.6	10.1
*Water saturation (Sw), %	10.3	24.2
*Net thickness (h) > 3% Ø & <40% Sw, ft	6	17
Temperature (T), °F	199°	194°

* See attached calculations

Bottomhole pressure (P), psia	7964	7964
NOTE: Mid-perf 16 hour final buildup press		
Recovery factor (RF), (80% assumed)	80%	80%
Recoverable gas, MCF (See eq. below)	2,630,096	5,047,739

*Recoverable gas, MCF = (43,560)(Ø)(1-Sw)(A)(h)(RF)(Bgi) where

* $Bgi = 0.03535 \frac{P}{ZT} \frac{MSCF}{Cu\ Ft}$

PERFORMANCE DATA

If sufficient history exists, attach plot of gas production rate vs time.

(Cumulative production to 8 / 1 /86 ; 39,973 MCF.

Initial rate (qi), 2750 MCF/mo

Economic limit (ql), 528 MCF/mo

Decline rate, dy 18 %

*Remaining gas (Q) = 134361 MCF

Ultimate recoverable gas 174334 MCF

$$Q = \frac{(qi - ql)\ 12\ mo/yr}{-\ln (1-dy)}$$

Attach plat showing proration unit and participating area.

RECOVERABLE GAS	GAS (MCF)		COND (BBLS)
Gas sand previously produced	0		0
Sand perforated	174334	(1)	18709
*Sand not perforated, but potentially productive	334586	(2)	35907
Total recoverable gas	508920		54616

(1) performance recoverable gas if available

(2) $\frac{\text{performance sand perforated}}{\text{volumetric sand perforated}}$ X volumetric sands not perforated = performance sands not perforated

Participating area size based on ratio of production history and volumetrics

320 acres---minimum area is proration unit.

ECONOMIC

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*Well Cost $ 1,632,253 (to the depth of formation completed)

Recompletion Cost $ 30,000

TOTAL COST $ 1,662,253

(Gas Price)(Net Revenue Interest)(1-Ad Valorem Taxes) - Production Tax + [(Oil Price)(Net Revenue Interest)(Cond. Yield, bbl/MCFG)(1 -Production and Ad Valorem Taxes)] - [(Oil Price - Base Price) WFPT %] NRI

*Net Gas Price = $3.24

*New Net Gas Price = $2.84

Operating Cost $1500/Month

BEPCO Net Income = (Gross Gas)(Net Gas Price)

YEAR	GROSS GAS	BEPCO NET INCOME	OPERATING COST	15% DISCOUNT FACTOR	DISCOUNTED CASH FLOW
Zero	---	---	---	1.0000	-1,632,253
1985	18,705	60,604	9,000	0.9325	48,121
1986	39,365	115,646	18,000	0.81087	79,178
1987	31,625	89,815	18,000	0.70511	50,637
1988	25,334	71,949	18,000	0.61314	33,078
1989	20,317	57,700	18,000	0.53316	21,167
*Remainder Perf'd Sands	38,988	110,726	86,400	0.46362	11,278
Recompletion Cost					-30,000
*Remainder Sands Not Perf'd	334,586	950,224	201,600	0.46362	347,077
					-1,071,717

If payout is five years or less, well is considered economical.

(BEPCO Net Income - Operating Expense) discount factor = -$1,071,717

discounted cash flow. UNECONOMICAL

POKER LAKE UNIT NO. 52
PERFORATED SANDS

INTERVALS	h	ØD	ØN	ØXP	Øh
12,465'-66'	1	13	8	11	11
66'-68'	2	22	10	17	34
68'-70'	2	14	12	13	26
70'-71'	1	6.5	3	5	5
TOTAL h	6			TOTAL Øh	76

AVERAGE Ø = $\frac{\text{TOTAL Øh}}{\text{TOTAL h}} = \frac{76}{6}$ = 12.6% Ø above 3% Ø

POKER LAKE UNIT NO. 52
PERFORATED SANDS

INTERVALS	LLD	LLS	MSFL	Rt	(Sw)(ØXP)(h) = Sw WEIGHTED
12465'-66'	220	200	20	242	(.165)(.110)(1)=.0182
66'-68'	320	250	100	420	(.081)(.170)(2)=.0275
68'-70'	1000	500	200	1300	(.060)(.130)(2)=.0156
70'-71'	200	150	100	300	(.327)(.050)(1)=.0164

TOTAL Sw WEIGHTED .0777

AVERAGE Sw = $\frac{\Sigma(h)(\emptyset)(Sw)}{(\emptyset)(h)} = \frac{.0777}{0.756}$ = 10.3% Sw below 40% Sw

VOLUMETRIC CALCULATIONS
RECOVERABLE GAS

PERFORATED SANDS

- -

Bgi CALCULATION

$Z = 1.2283$

$Bgi = 0.03535 \quad \frac{7964}{(1.2283)(199+460)}$

$Bgi = 0.3478$

VOLUME CALCULATION

$MCF = (43560)(\emptyset)(1-S_w)(A)(h)(RF)(Bgi)$

$MCF = (43560)(0.126)(1-0.103)(320)(6)(0.80)(0.3478)$

$MCF = 2{,}630{,}096$

PERFORMANCE DATA

- -

REMAINING GAS CALCULATION

$$Q = \frac{(qi-ql)12\ mo/yr}{-Ln(1-dy)}$$

$$Q = \frac{(2750-528)12}{-Ln(1-0.18)}$$

$Q = 134{,}361$

RECOVERABLE CONDENSATE = 18,709 Bbls

CURRENT GOR = 9318/1

RECOVERABLE GAS = 174,334 MCF

POKER LAKE UNIT NO. 52
SANDS NOT PERFORATED BUT POTENTIALLY PRODUCTIVE

INTERVALS	h	ØD	ØN	ØXP	Øh
*11560'-62'	2	6	2.5	4.5	
* 62'-63'	1	6	5	5.5	
11941'-42'	1	12	11	11.5	11.5
42'-44'	2	11.5	8	9.5	19
44'-46'	2	14	9.5	12	24
46'-48'	2	11.5	6	9	18
48'-50'	2	12.5	7	10	20
50'-52'	2	12.5	6	9.5	19
52'-54'	2	14	8	11.5	23
54'-56'	2	13	8.5	11	22
56'-58'	2	9	6	7.5	15
TOTAL h	17			TOTAL Øh	171.5

AVERAGE Ø = $\frac{\text{TOTAL Øh}}{\text{TOTAL h}} = \frac{171.5}{17}$ = 10.1% Ø above 3% Ø

*These intervals have been eliminated from the calculations due to Sw being 40% or greater.

POKER LAKE UNIT NO. 52
SANDS NOT PERFORATED BUT POTENTIALLY PRODUCTIVE

INTERVALS	LLD	LLS	MSFL	Rt	(Sw)(ØXP)(h) = Sw WEIGHTED
*11560'-62'	32	30	45	32	(1.111)
* 62'-63'	23	22	45	23	(1.070)
11941'-42'	75	45	30	122	(.223)(.115)(1)=.0256
42'-44'	110	70	60	218	(.202)(.095)(2)=.0384
44'-46'	100	50	30	160	(.186)(.120)(2)=.0446
46'-48'	160	90	70	295	(.183)(.090)(2)=.0329
48'-50'	120	75	45	183	(.209)(.100)(2)=.0418
50'-52'	100	80	70	181	(.221)(.095)(2)=.0420
52'-54'	50	45	40	55	(.332)(.115)(2)=.0764
54'-56'	50	42	35	81	(.286)(.110)(2)=.0629
56'-58'	110	100	90	121	(.343)(.075)(2)=.0515
					TOTAL Sw WEIGHTED .4161

AVERAGE $Sw = \frac{\Sigma(h)(\emptyset)(Sw)}{(\emptyset)(h)} = \frac{.4161}{1.720}$ = 24.2% Sw below 40% Sw

*These intervals have been eliminated from the calculations due to Sw being 40% or greater.

VOLUMETRIC CALCULATIONS
RECOVERABLE GAS

SANDS NOT PERFORATED BUT POTENTIALLY PRODUCTIVE

- -

VOLUME CALCULATION
Bgi = 0.3478

MCF = (43560)(Ø)(1-Sw)(A)(h)(RF)(Bgi)
MCF =(43560)(.101)(1-.242)(320)(17)(0.80)(0.3478)
MCF = 5,047,739

PERFORMANCE DATA

- -

Ultimate recoverable gas for sands not perforated

$$\frac{\text{PERFORMANCE SAND PERFORATED}}{\text{VOLUMETRIC SAND PERFORATED}} \times \text{VOLUMETRIC SANDS NOT PERFORATED} = \text{PERFORMANCE SANDS NOT PERFORATED}$$

$$\frac{174,334}{2,630,096} \times 5,047,739 = \underline{334,586} \text{ MCF}$$

RECOVERABLE CONDENSATE = 35,907 Bbls

CURRENT GOR = 9318/1

RECOVERABLE GAS = 334,586

ECONOMIC

Drilling Cost to 12,500'	$ 953,095
Logging, Casing & Cement Cost	649,558
Wolfcamp Completion Cost	30,000
TOTAL COST TO DEPTH OF FORMATION COMPLETED	$1,632,253
Recompletion Cost in Same Formation	30,000

Gas Price = June LIOR Production Tax = $\frac{\text{Production \& Severance Taxes, Net}}{\text{Total Bass Gross Revenues}}$

Oil Price = $15.00 Ad Valorem Tax = 2% WPT = 0

Net Gas Price = $[(2.89)(0.78066)(1-.02)-(\frac{5677.00}{65,910.86})]$
July, 1985 - March, 1986

$+ [(15.00)(0.78066)(\frac{4,278}{39,973})(1-.02-.086)]$

Net Gas Price = $3.24

Net Gas Price = $2.00/MMBTU @ 1179 BTU/$Ft^3$
Effective 4/86 ($2.00)(1.179 MCF) = $2.358/MCF

$= [(\$2.358)(.78066)(1-.02)-(\frac{5,677.00}{65,910.86})]$

$+ [(\$15.00)(.78066)(\frac{4,278}{39,973})(1-.02-.086)]$

Net Gas Price = $2.84
Effective 4/1/86

REMAINDER GROSS GAS
PERFORATED SANDS

Calculated 4.8 years to reach economic limit of 528 MCFPM with the remaining gas of 38,988 MCF and QI being 1361 MCFPM @ 18% dy

REMAINDER GROSS GAS
SANDS NOT PERFORATED

Calculated 11.2 years to reach economic limit of 528 MCFPM with the remaining gas of 334,586 MCF and QI being 6975 MCFPM, resulting in a calculated dy of 20.7%

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 2-15-83	
Company: Perry R. Bass	Connection: Air			
Pool: Widcat	Formation: Wolfcamp		Unit: C	
Completion Date: 2-15-83	Total Depth: 15700	Plug Back TD: 14171	Elevation: 3302.3GL	Farm or Lease Name: Poker Lake UNIT
Csg. Size: 7-5/8" / Wt.: / d: / Set At: 14725		Perforations: From 12462 To 12469		Well No.: 52
Tbg. Size: 2-3/8" / Wt.: 4.7 / d: / Set At: 12390		Perforations: From To		Unit: C / Sec.: 33 / Twp.: 25S / Rge.: 31E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single Gas		Packer Set At: 12390		County: Eddy
Producing Thru: TBG.	Reservoir Temp. °F: 199 @ 12465	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: N.M.

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
12465	12465	.6779	.285	1.227			4"	Flg.

NO.	FLOW DATA: Prover Line Size x Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					5880				72hrs
1.	4 x 1.000	600	5.0	62	5270				1hr
2.	4 x 1.000	600	12.0	94	4960				1hr
3.	4 x 1.000	600	15.0	94	4650				1hr
4.	4 x 1.000	600	29.0	84	4185				1hr
5.	4 x 1.000	600	27.0	68	2880				4hrs

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	4.753	55.37	613.2	.9981	1.214	1.071	342
2	4.753	85.78	613.2	.9688	1.214	1.057	507
3	4.753	95.91	613.2	.9688	1.214	1.057	567
4	4.753	133.35	613.2	.9777	1.214	1.062	799
5	4.753	128.67	613.2	.9924	1.214	1.070	788

NO.	P_t	Temp. °R	T_f	Z
1	.92	522	1.36	.871
2	.92	554	1.44	.895
3	.92	554	1.44	.895
4	.92	544	1.41	.887
5	.92	528	1.37	.874

Gas Liquid Hydrocarbon Ratio 8.282 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 58.2 @ 60 Deg.
Specific Gravity Separator Gas .6779 XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .996
Critical Pressure 669 P.S.I.A. 658 P.S.I.A.
Critical Temperature 385 R 491 R

P_c 5893.2 P_c^2 34729.8

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	7485.2	5334.4	28455.5	6274.3
2	7124.2	4998.0	24980.5	9749.3
3	6874.2	4766.9	22723.5	12006.3
4	6364.2	4309.6	18572.4	16157.4
5	5034.2	3107.7	9657.6	25072.2

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.149$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.985$

$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.586$

8234.2 S.I.P.

Absolute Open Flow 1,586 Mcfd @ 15.025 Angle of Slope θ 48.25 Slope, n .896

Remarks: Produced 27 BBLS of Oil during test

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Davis Services, Inc.	Rick Pagan	

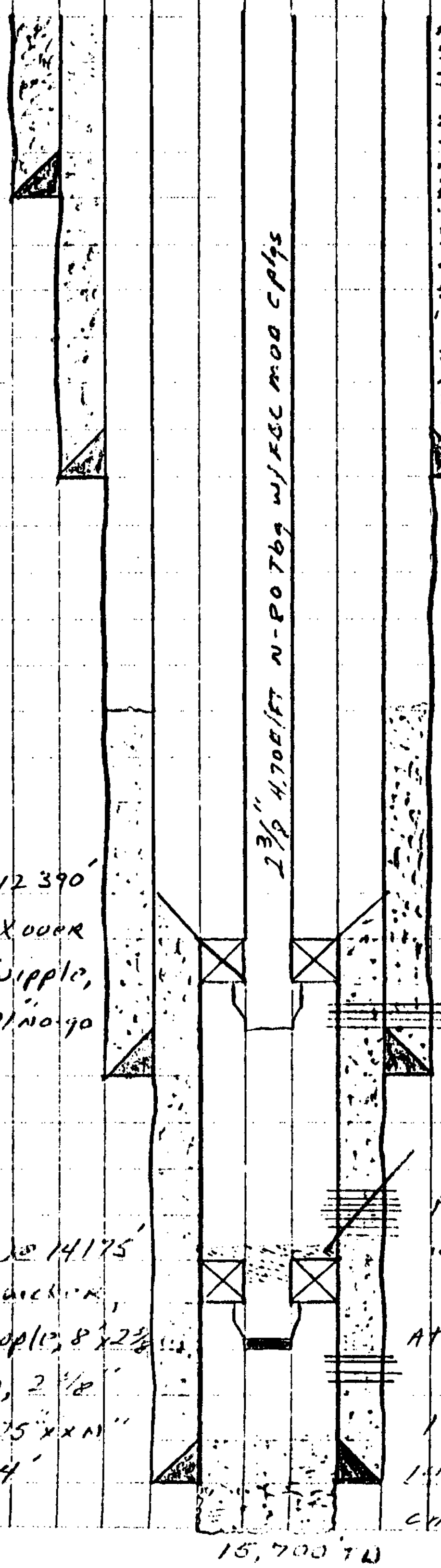
BASS ENTERPRISES PRODUCTION COMPANY

SUBJECT	DATE	DEPARTMENT	PREPARED BY
Well Bore Sketch	1/17/84	PROD	CDB

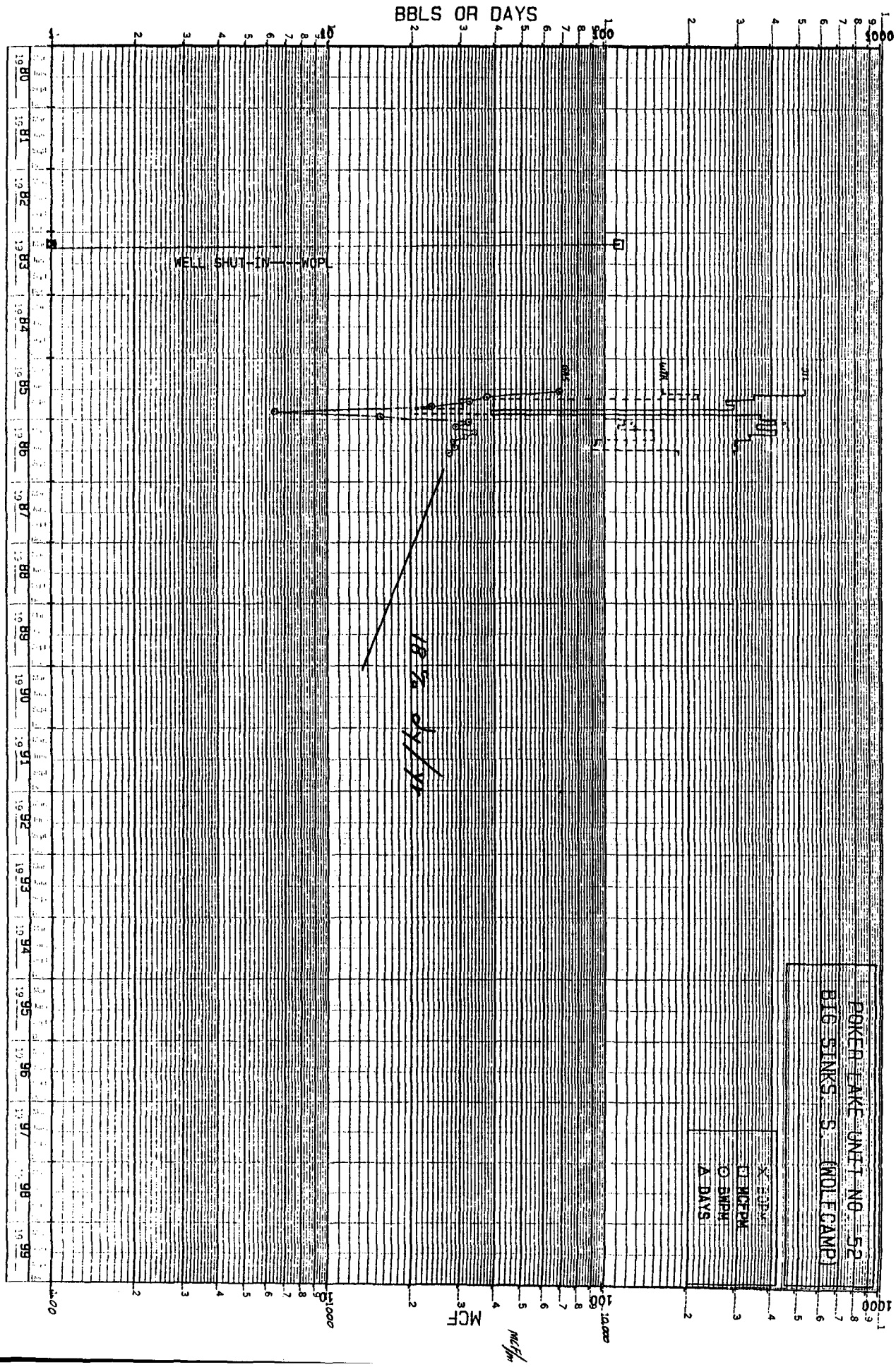
POKER LAKE UNIT NO 52
Big Sinks South Wolfcamp
Eddy County New Mexico

ELEV: 3302.3 GL
3326.5 KB

SPUD: 7/8/82
Comp: 2/15/83



BOPM BWPM


BBLS OR DAYS
MCF
WELL SHUT-IN---WOPL
POKER LAKE UNIT NO. 52
BIG STINKS, S. (WOLFCAMP)
MCFPM
BWPM
A DAYS

EW MEXICO OIL CONSERVATION COMM. ION

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C
Effective 1-1

All distances must be from the outer boundaries of the Section

Operator	Lease	Well No.
Perry R. Bass	Poker Lake Unit	52

Unit Letter	Section	Township	Range	County
C	33	25 South	31 East	Eddy

Actual Footage Location of Well:
660 feet from the north line and 1980 feet from the west line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3392.3'	Morrow	Wildcat	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

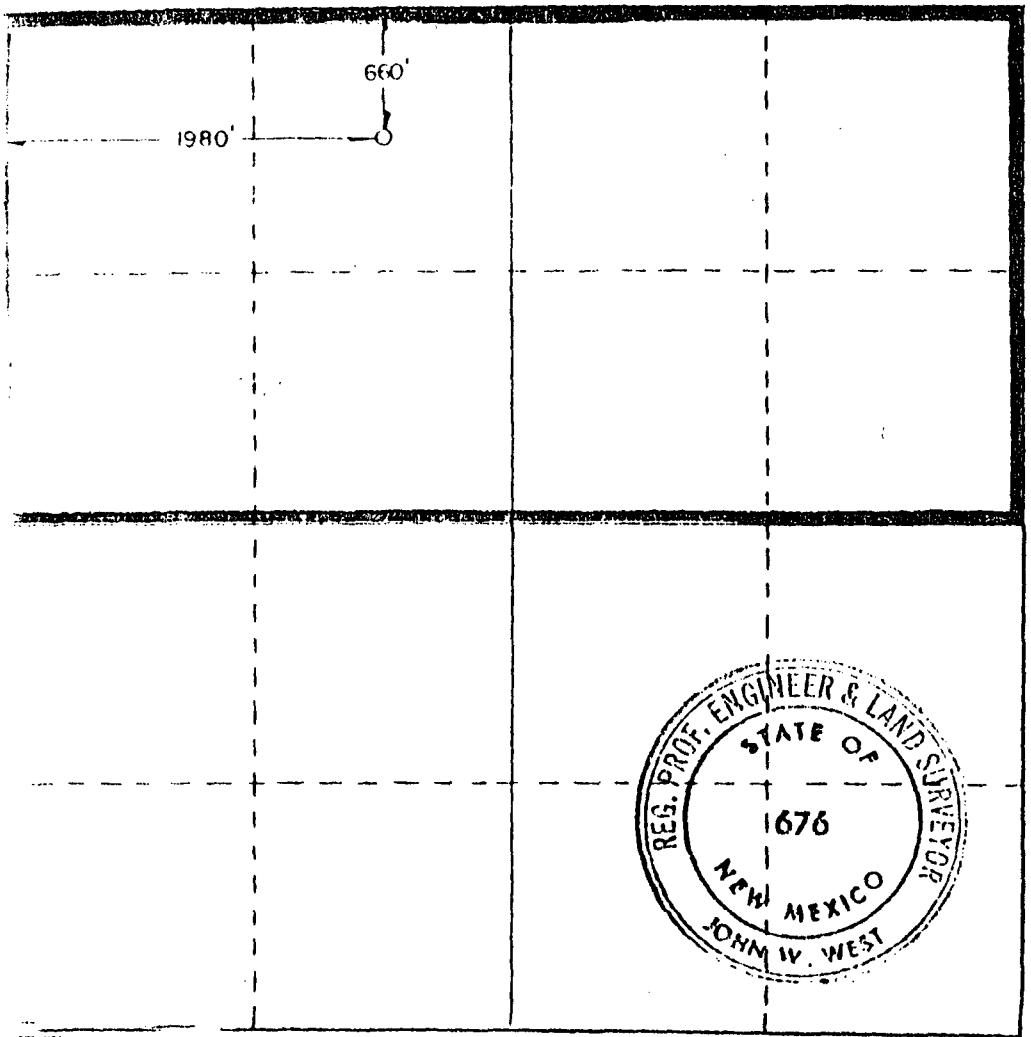
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 Unit

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Stephen D. Smith

Name: Stephen Smith

Position: Engineering Assistant

Company: Perry R. Bass

Date: January 18, 1982

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 knowledge and belief.

Date Surveyed: 1-14-82

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. JOHN W. WEST 67
PATRICK A. ROMERO 66
Ronald J. Eidson 323

WORKSHEET FOR COMMERCIAL DETERMINATION AND PARTICIPATING AREA IN FEDERAL UNITS

WELL DATA

WELL Poker Lake Unit No. 58 FORMATION Wolfcamp

LOCATION K UNIT, 1980 FEET FROM S LINE & 1980 FEET FROM W LINE,

SECTION 27 , RANGE 31E , TOWNSHIP 24S , COUNTY Eddy NEW MEXICO

SPUD DATE 7-27-82 COMPLETION DATE 10-14-82 INIT. PROD. DATE 7-10-85

PERFORATIONS 12108'-12111' (7 Shots)

STIMULATION:

ACID None

FRACTURE None

POTENTIAL CAOF 1658 MCFGPD

(ATTACH COPY OF C-122. ATTACH COPY OF WELLBORE SKETCH OF COMPLETED WELL.)

VOLUMETRIC CALCULATION

	FORMATION	
	SANDS PERFORATED	SANDS NOT PERFORATED BUT POTENTIALLY PRODUCTIVE
Area (A) proration unit size, acres	320	None
*Porosity (Ø), %	8.08	None
*Water saturation (Sw), %	14.85	None
*Net thickness (h) > 3% Ø & <40% Sw, ft	50	None
Temperature (T), °F	193°	None

* See attached calculations

Bottomhole pressure (P), psia	7047	None
NOTE: 40.5 hrs final buildup press @ 11,892'		
Recovery factor (RF), (80% assumed)	80%	None
Recoverable gas, MCF (See eq. below)	12,766,656	None

*Recoverable gas, MCF = (43,560)(Ø)(1-Sw)(A)(h)(RF)(Bgi) where

* Bgi = 0.03535 $\frac{P}{ZT}$ $\frac{MSCF}{Cu\ Ft}$

PERFORMANCE DATA

If sufficient history exists, attach plot of gas production rate vs time.

(Cumulative production to 8 / 1 /86 ; 36,216 MCF.

Initial rate (qi), 2415 MCF/mo

Economic limit (ql), 207 MCF/mo

Decline rate, dy 35 %

*Remaining gas (Q) = 61504 MCF

Ultimate recoverable gas 97720 MCF

$$Q = \frac{(qi - ql)\ 12\ mo/yr}{-\ln (1-dy)}$$

Attach plat showing proration unit and participating area.

RECOVERABLE GAS	GAS (MCF)		COND (BBLS)
Gas sand previously produced	0		0
Sand perforated	97720	(1)	47546
Sand not perforated, but potentially productive	0	(2)	0
Total recoverable gas	97720		47546

(1) performance recoverable gas if available

(2) $\frac{\text{performance sand perforated}}{\text{volumetric sand perforated}}$ X volumetric sands not perforated = performance sands not perforated

Participating area size based on ratio of production history and volumetrics

320 acres---minimum area is proration unit.

ECONOMIC

---

*Well Cost $ 2,000,000 (to the depth of formation completed)

Recompletion Cost $ 0

TOTAL COST $ 2,000,000

(Gas Price)(Net Revenue Interest)(1-Ad Valorem Taxes) - Production Tax + [(Oil Price)(Net Revenue Interest)(Cond. Yield, bbl/MCFG)(1 -Production and Ad Valorem Taxes)] - [(Oil Price - Base Price) WFPT %] NRI

*Net Gas Price = $7.72

*New Net Gas Price = $7.23

Operating Cost $1500/Month

BEPCO Net Income = (Gross Gas)(Net Gas Price)

YEAR	GROSS GAS	BEPCO NET INCOME	OPERATING COST	15% DISCOUNT FACTOR	DISCOUNTED CASH FLOW
Zero	---	---	---	1.0000	-2,000,000
1985	32,009	247,109	9,000	0.9325	222,037
1986	15,085	109,740	18,000	0.81087	74,389
1987	19,758	142,850	18,000	0.70511	88,033
1988	12,837	92,812	18,000	0.61314	45,870
1989	8,344	60,327	18,000	0.53316	22,567
Remainder	9,687	70,037	41,400	0.46362	13,277
					-1,533,827

If payout is five years or less, well is considered economical.

(BEPCO Net Income - Operating Expense) discount factor = -$1,533,827

discounted cash flow. UNECONOMICAL

POKER LAKE UNIT NO. 58
PERFORATED SANDS

INTERVALS	h	Δt	ØΔt	Øh
12,104'-06'	2	58	8.5	17
06'-08'	2	56	7	14
08'-10'	2	55	6.5	13
10'-12'	2	59	9.2	18.4
12'-14'	2	59.5	9.5	19
14'-16'	2	56	7	14
16'-18'	2	60	10	20
18'-20'	2	54	5.8	11.6
20'-22'	2	53.5	5.5	11
22'-24'	2	53.5	5.5	11
24'-26'	2	59	9.2	18.4
26'-28'	2	58	8.5	17
28'-30'	2	56	7	14
30'-32'	2	61	10.8	21.6
32'-34'	2	57	8	16
34'-36'	2	54	5.8	11.6
36'-38'	2	57	8	16
38'-40'	2	56	7	14
40'-42'	2	56.5	7.5	15
42'-44'	2	53	5	10
44'-46'	2	62	11.3	22.6
46'-48'	2	61	10.8	21.6
48'-50'	2	55	6.5	13
50'-52'	2	63.5	12.2	24.4
52'-54'	2	60	10	20
Total h	50		Total Øh	404.2

Average $\emptyset = \frac{\text{Total } \emptyset h}{h} = \frac{404.2}{50} = 8.08\%$ Ø above 3% Ø

NOTE: SV ma is assumed 22,000 (Ft/S)

POKER LAKE UNIT NO. 58
PERFORATED SANDS

INTERVALS	ILS	ILM	ILD	*Rt	(Sw)(ØΔt)(h) = Sw WEIGHTED
12104'-06'	100	110	300	300	(.192)(.085)(2)=.0326
06'-08'	140	2000	1400	1000	(.128)(.070)(2)=.0179
08'-10'	200	300	2000	1000	(.138)(.065)(2)=.0179
10'-12'	220	2000	2000	1000	(.097)(.092)(2)=.0178
12'-14'	270	100	2000	1000	(.094)(.095)(2)=.0179
14'-16'	280	2000	1800	1000	(.128)(.070)(2)=.0179
16'-18'	300	400	2000	1000	(.089)(.100)(2)=.0178
18'-20'	300	400	2000	1000	(.154)(.058)(2)=.0179
20'-22'	240	80	2000	1000	(.163)(.055)(2)=.0179
22'-24'	180	110	300	300	(.297)(.055)(2)=.0327
24'-26'	180	130	2000	1000	(.097)(.092)(2)=.0178
26'-28'	160	100	2000	1000	(.105)(.085)(2)=.0179
28'-30'	105	80	500	500	(.181)(.070)(2)=.0253
30'-32'	120	100	600	600	(.107)(.108)(2)=.0231
32'-34'	100	80	300	300	(.204)(.080)(2)=.0326
34'-36'	80	70	200	200	(.345)(.058)(2)=.0400
36'-38'	140	500	1000	1000	(.112)(.080)(2)=.0179
38'-40'	200	2000	2000	1000	(.128)(.070)(2)=.0179
40'-42'	200	100	2000	1000	(.119)(.075)(2)=.0179
42'-44'	130	90	600	600	(.231)(.050)(2)=.0231
44'-46'	170	130	500	500	(.112)(.113)(2)=.0253
46'-48'	120	90	500	500	(.117)(.108)(2)=.0253
48'-50'	90	80	260	260	(.270)(.065)(2)=.0351
50'-52'	100	100	280	280	(.139)(.122)(2)=.0339
52'-54'	100	90	210	210	(.195)(.100)(2)=.0390

TOTAL Sw WEIGHTED .6004

AVERAGE Sw = $\frac{\Sigma(h)(\emptyset)(Sw)}{(\emptyset)(h)} = \frac{.6004}{4.042}$ = 14.85% Sw below 40% Sw

* Rt = ILD if < 1000 and 1000 if > 1000 due to the questionability of the Dual Induction Laterolog Survey over the interval 12104'-54'.

OLUMETRIC CALCULATIONS
RECOVERABLE GAS

PERFORATED SANDS

- -

Bgi CALCULATION

Z = 1.1464

$$Bgi = 0.03535 \quad \frac{7047}{(1.1464)(193+460)}$$

Bgi = 0.3328

VOLUME CALCULATION

MCF = (43560)(Ø)(1-Sw)(A)(h)(RF)(Bgi)
MCF = (43560)(.0808)(1-.1485)(320)(50)(0.80)(0.3328)
MCF = 12,766,656

PERFORMANCE DATA

- -

REMAINING GAS CALCULATION

$$Q = \frac{(qi-ql)12\ mo/yr}{-Ln(1-dy)}$$

$$Q = \frac{(2415-207)12}{-Ln(1-0.35)}$$

Q = 61,504 MCF

ECONOMIC

Drilling Cost to 12,500'	$1,014,566
Logging, Casing & Cement Cost	750,510
Wolfcamp Completion Cost	234,924
TOTAL COST TO DEPTH OF FORMATION COMPLETED	$2,000,000

Gas Price = June LIOR   Production Tax = $\frac{\text{Production \& Severance Taxes, Net}}{\text{Total Bass Gross Revenues}}$

Oil Price = $15.00   Ad Valorem Tax = 2%   WPT = 0

Net Gas Price = $\left[(2.99)(0.81083)(1-.02)-\left(\frac{3,286.50}{41,266.82}\right)\right]$
July, 1985 - March, 1986

$+\left[(15.00)(0.81083)\left(\frac{17,990}{36,216}\right)(1-.02-.080)\right]$

Net Gas Price = $7.72

Net Gas Price = \$2.00/MMBTU @ 1186 BTU/Ft^3
Effective 4/86   (\$2.00)(1.186 MCF) = \$2.372/MCF

$= \left[(\$2.372)(.81083)(1-.02)-\left(\frac{3,286.50}{41,266.82}\right)\right]$

$+\left[(\$15.00)(.81083)\left(\frac{17,990}{36,216}\right)(1-.02-.080)\right]$

Net Gas Price = $7.23
Effective 4/1/86

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special	Test Date: 10-12-82		
Company: PERRY R. BASS	Lease: Air		
Pool:	Formation: Wolfcamp	Unit: K	
Completion Date: 10-8-82	Total Depth: 12700	Plug Back TD: 12566	Elevation: 3493GL
Csg. Size: 9 5/8 / Wt. / d / Set At: 12700	Perforations: From 12108 To 12111	Lease or Lease Name: Poker Lake UNIT	
Tbg. Size: 2 3/8 / Wt. / d / Set At: 11898	Perforations: From To	Well No.: 58	
		Unit: K Sec.: 27 Twp.: 24S Rge.: 31E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single Gas	Packer Set At: 11898	County: Eddy	
Producing Thru: Tbg.	Reservoir Temp. °F: 193 @ 11892	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2
			State: NM

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
11892	11892	.6762	.14	.828			4	Flg.

FLOW DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F
SI						
1.	4	X	.750	510	8.0	88
2.	4	X	.750	510	28.0	92
3.	4	X	.750	520	55.0	79
4.	4	X	1.750	500	12.0	80
5.						

TUBING DATA / CASING DATA

NO.	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI	4100				
1.	4025				24 hrs
2.	3560				2 hrs
3.	3000				2 hrs
4.	975				6 hrs
5.					

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	2.661	64.70	523.2	.9741	1.216	1.051	214
2	2.661	121.04	523.2	.9706	1.216	1.049	399
3	2.661	171.25	533.2	.9822	1.216	1.055	574
4	14.93	78.48	513.2	.9813	1.216	1.052	1471
5							

NO.	P_t	Temp. °R	T_r	Z
1	.78	548	1.42	.905
2	.78	552	1.43	.908
3	.80	539	1.40	.899
4	.77	540	1.40	.903
5				

Gas Liquid Hydrocarbon Ratio: 3.8425 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 54.6 @ 60° Deg.
Specific Gravity Separator Gas: .6762 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX 1.323
Critical Pressure: 669 P.S.I.A. 636 P.S.I.A.
Critical Temperature: 385 R 565 R

P_c^2 7085.2 P_c 50200.1

NO	BHP	P_w	P_w^2	$P_c^2 - P_w^2$
1	6768.2		45808.5	4391.6
2	6205.2		38504.5	11695.6
3	5596.2		31317.5	18882.6
4	2594.2		6729.9	43470.2
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.155$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.127$

$AOF = Q\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.658$

Absolute Open Flow: 1,658 Mcfd @ 15.025 Angle of Slope θ: 50.25° Slope, n: .833

Remarks: 172.5 Bbls of fluid produced during the test.
Bottom-hole pressures taken from a bomb set at 11892 ft.

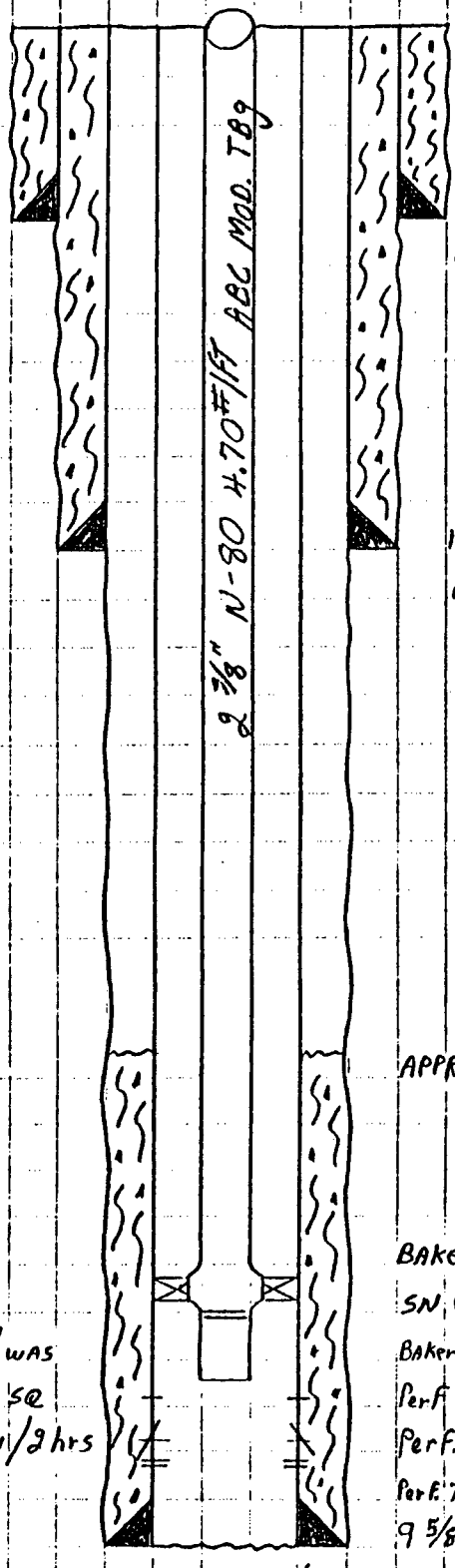
Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Davis Services, Inc.	Rick Pagan	

Test Book

BASS ENTERPRISES PRODUCTION COMPANY

PAGE NO. _____

SUBJECT	DATE	DEPARTMENT	PREPARED BY
Poker Lake Unit No. 58 Wildcat (Wolfcamp)	11/3/82	Production	M.J.E.



LOCATION

EDDY COUNTY, NEW MEXICO
SEC 27, T-24S, R-31E
1980'FSL, 1980'FWL

ELEV: GL 3493'
KB 3519'

20" 94.5# H-40 csg @ 812'
CMT w/400 sx Trinity Lite Wt, Tailed w/200 sx class "C", circ. 200 sx

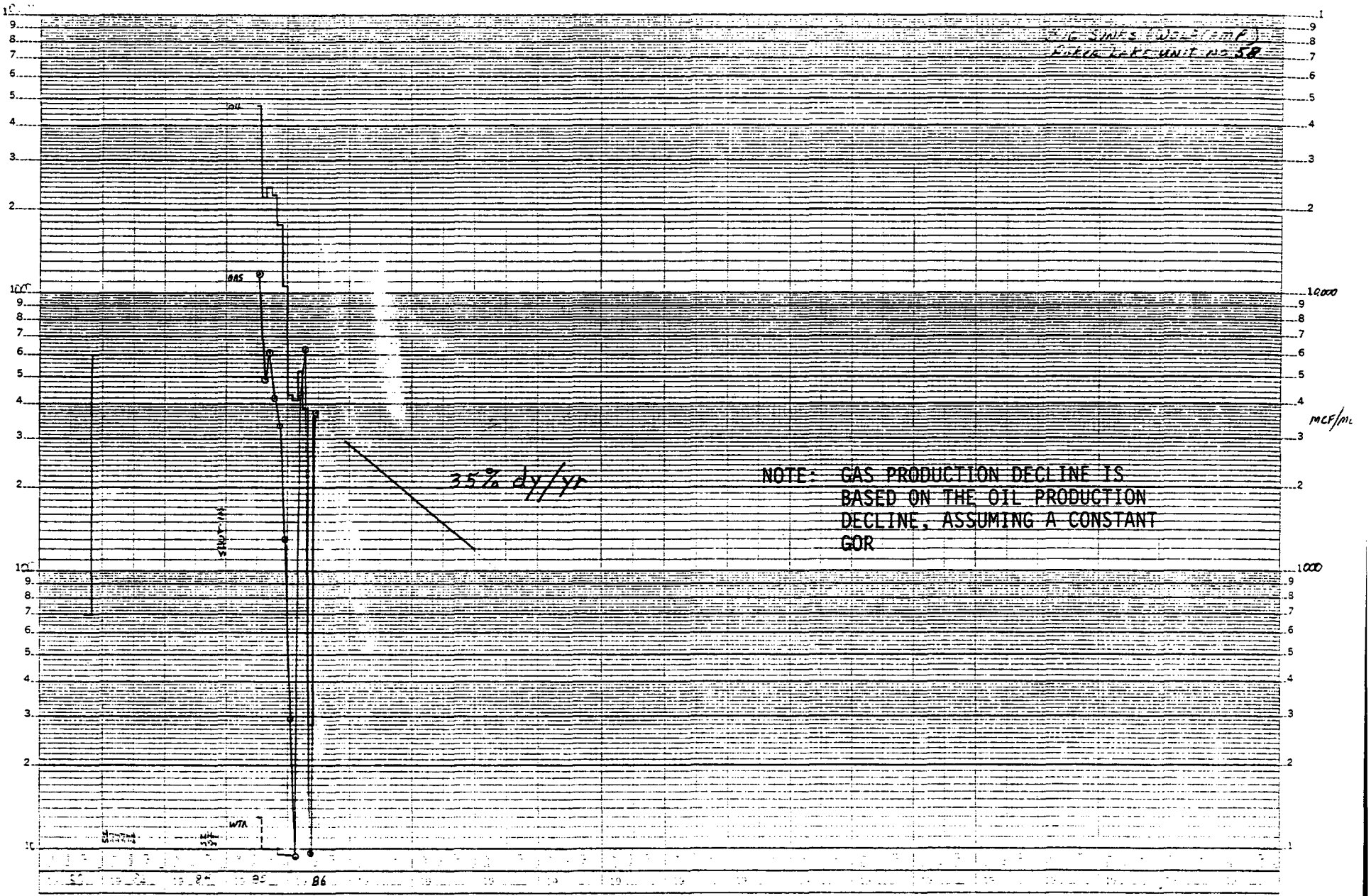
13 3/8", 68# & 61#, S-80, K-55 & J-55, csg. STC @ 4382'
CMT w/5300 sx Halco Lite Tailed w/150 sx class "C" circ. 150 sx

APPROX. TOC @ 10600'

Baker Model "D" Prod. Pkr. @ 11898' (10/6/82)
SN @ 11910', Baker Model "E" 22 Anchor Seal @ 11911',
Baker Type "E" Production Tube
Perf 2 holes 0° Phase 1 11/16" JRC 5SB-II @ 11954'
Perf 2 holes 0° Phase 1 11/16" JRC 5SB-II @ 12020' & sq. w/300 sx Cl "H" CMT
Perf 7 holes 1 11/16" JRC 5SB-II @ 12108'-111'
9 5/8", 40#, 43.5#, 47#, N-80, S-95, Buttress T&C & LT&C @ 12675'
CMT w/1000 sx class "H"

NOTE: PF @ 11954' was to press Test csg SQ Press to 5000 PSI/2 hrs ok.

TD 12675'


BIG SINKS (WOLFCAMP)
EUNICE LEAS UNIT NO 58
OIL
GAS
WTR
35% dy/yr
NOTE: GAS PRODUCTION DECLINE IS BASED ON THE OIL PRODUCTION DECLINE, ASSUMING A CONSTANT GOR
BOPM
BWPM
MCF/M
86

MEXICO OIL CONSERVATION COMMIS

WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-12
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
Perry R. Bass	Poker Lake Unit	58

Unit Letter	Section	Township	Range	County
K	27	24 South	31 East	Eddy

Actual Footage Location of Well: 1980 feet from the South line and 1980 feet from the West line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3493.0	Morrow	Big Sinks	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

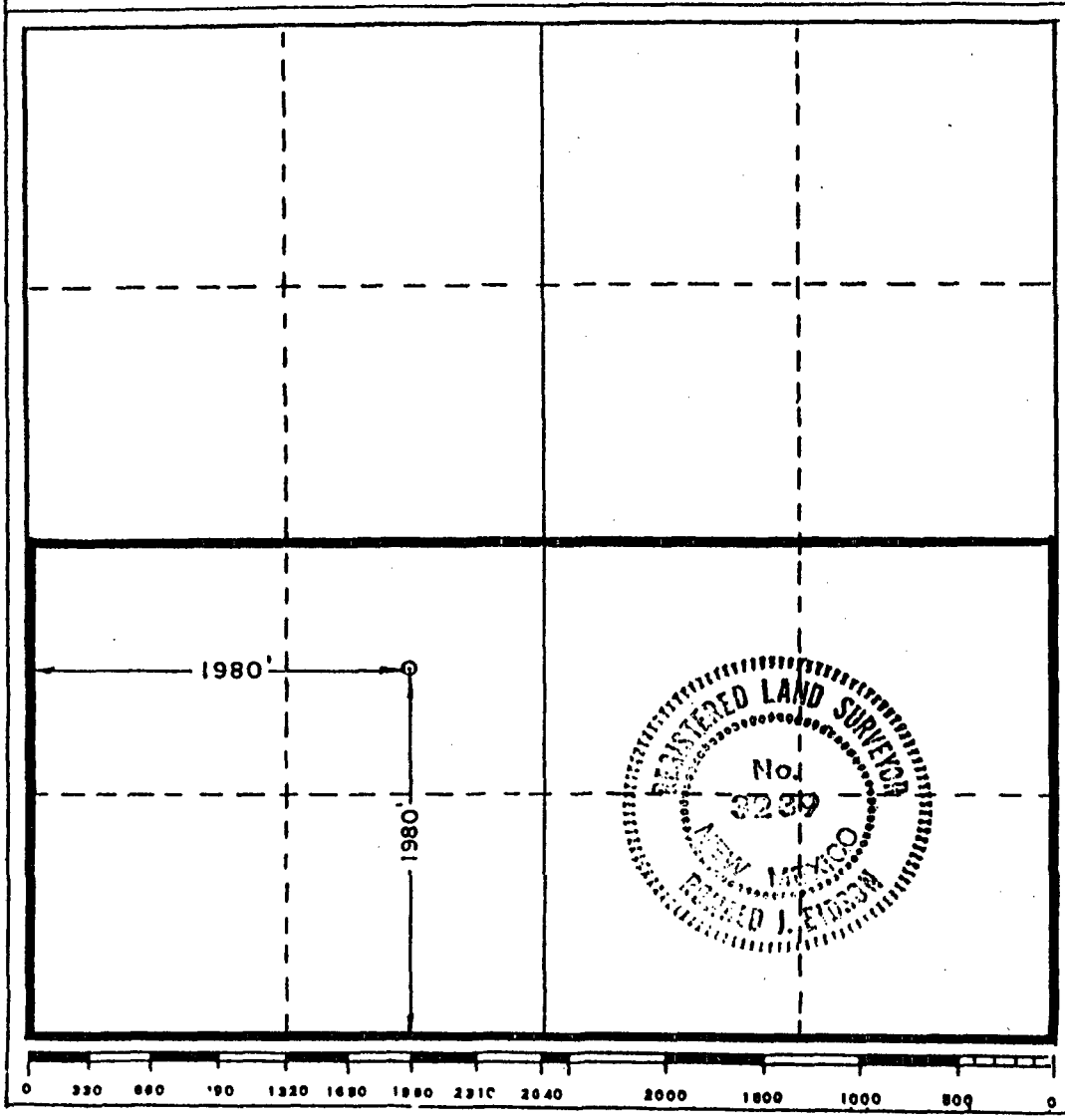
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 Unit

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

R S Doyle

Name R. S. Doyle

Position Drilling Engineer

Company Perry R. Bass

Date 6-23-82

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 knowledge and belief.

Date Surveyed 6-22-82

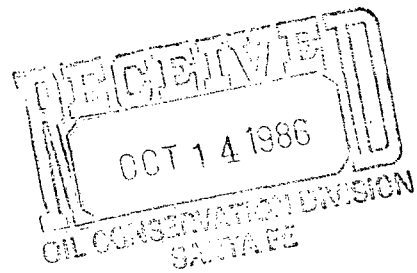
Registered Professional Engineer and/or Land Surveyor

Ronald J. Eidson

Certificate No. JOHN W. WEST 676
PATRICK A. ROMERO 6668
Ronald J. Eidson 3239

BASS ENTERPRISES PRODUCTION CO.
FIRST CITY BANK TOWER
201 MAIN ST.
FORT WORTH, TEXAS 76102
817/390-8400

October 7, 1986



BUREAU OF LAND MANAGEMENT
P. O. Box 1397
Roswell, New Mexico 88201

COMMISSIONER OF PUBLIC LANDS
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87504-1148

NEW MEXICO OIL CONSERVATION DIVISION
P. O. Box 2088
Santa Fe, New Mexico 87501

RE: Application for Approval of the Morrow Participating Area "A"
Poker Lake Unit Well No. 53
660' FNL and 1980' FEL
Section 9, T25S-R31E
Eddy County, New Mexico
Bass Lease No. 9175-Federal

Gentlemen:

Bass Enterprises Production Co., as unit operator for the Poker Lake Unit Agreement, pursuant to provisions of Section 11 thereof, respectfully submits for approval a selection of the following described lands to constitute the "A" Participating Area for the Morrow producing zone or formation, to-wit:

N/2 of Section 9, T25S-R31E, Eddy County, New Mexico, and containing 320 acres of land.

In support of this application, the following numbered items are attached hereto and made a part hereof.

1) An ownership map showing thereon the boundaries of the unit area and the proposed "A" Participating Area.

2) A schedule showing the lands entitled to participation and the unitized substances produced from the Morrow formation, with the percentage of participation of each lease or tract indicated thereon.

3) A geological and engineering report with accompanying geological map supporting and justifying the proposed selection of the participating area.

The proposed Morrow "A" Participating Area is predicated upon the knowledge and information first obtained upon completion in paying quantities under the terms of the Unit Agreement on June 1, 1982, of Unit Well No. 53, located in the NW/4 NE/4, Section 9, T25S-R31E, with an initial production of gas from the Morrow formation at a depth of 15,440' through 15,456'. The effective date of the Morrow "A" Participating Area is June 1, 1982, pursuant to Section 11 of the Unit Agreement.

Based upon the foregoing, applicant respectfully requests your approval of the hereinabove selection of lands to constitute the Morrow "A" Participating Area, to be effective June 1, 1982.

Sincerely,

JENS HANSEN
Division Landman

JH:jh
Enclosures

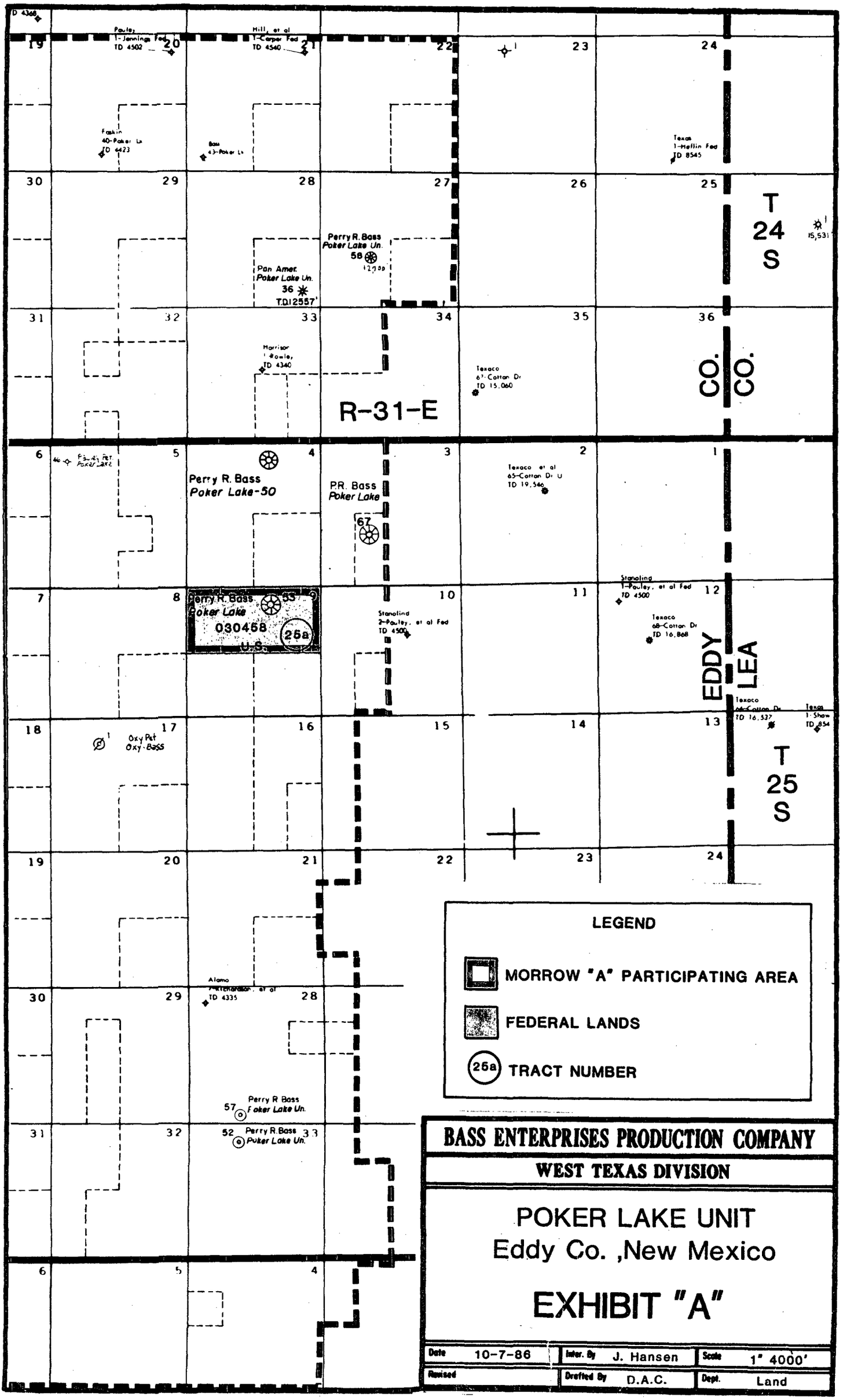
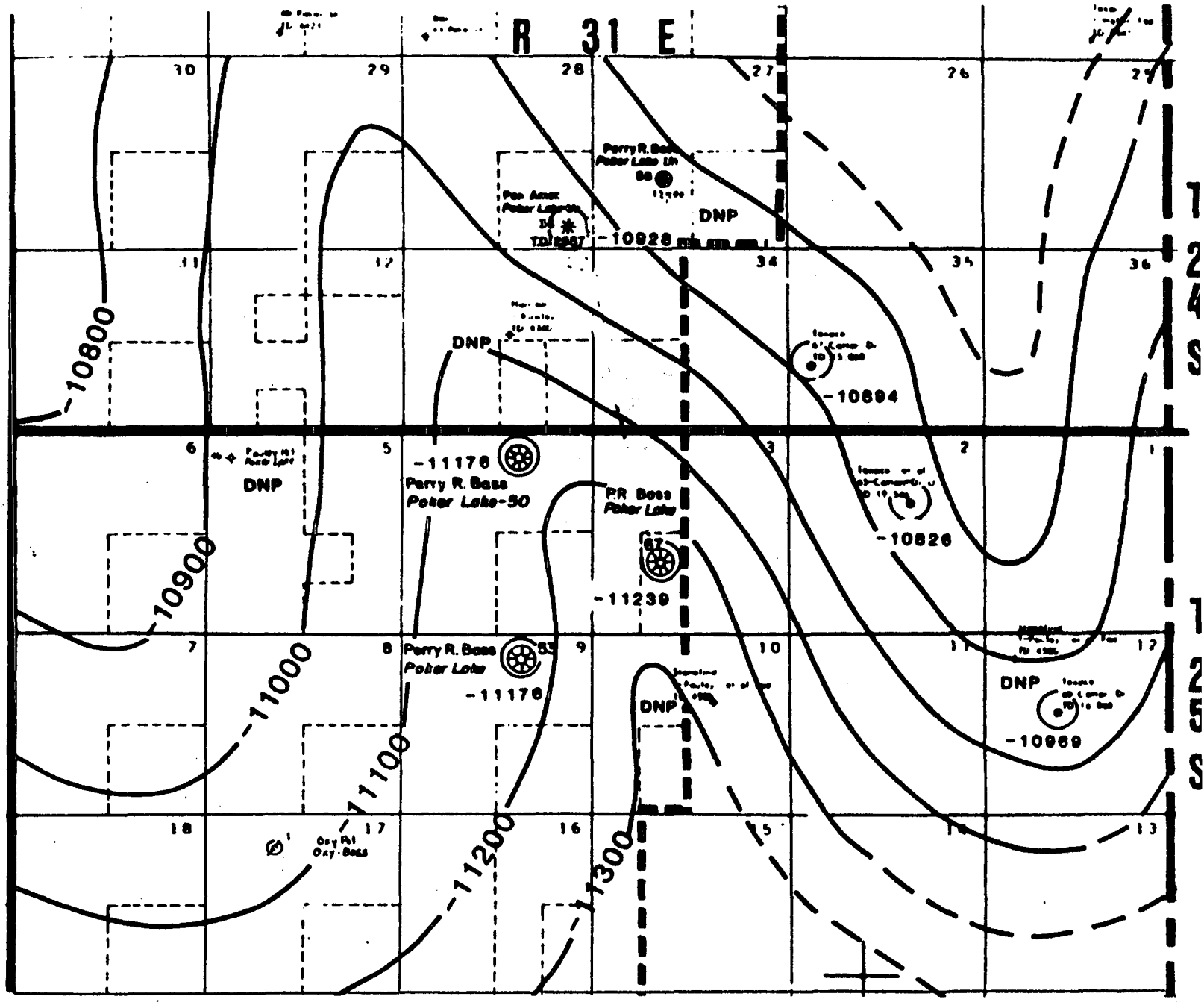

Pauley
1-Jennings Fed
TD 4502
Hill, et al
1-Carper Fed
TD 4540
Texas
1-Haflin Fed
TD 8545
Perry R. Bass
Poker Lake Un.
58
Pan Amer.
Poker Lake Un.
36
TD 12557'
T
24
S
Harrison
1-Rowle,
TD 4340
R-31-E
Texaco
67-Cotton Dr
TD 15,060
CO.
CO.
Texaco et al
65-Cotton Dr U
TD 19,546
Perry R. Bass
Poker Lake-50
P.R. Bass
Poker Lake
67
Perry R. Bass
Poker Lake
030458
25a
U.S.
Stanolind
2-Pauley, et al Fed
TD 4500
Stanolind
1-Pauley, et al Fed
TD 4500
Texaco
68-Cotton Dr
TD 16,868
EDDY
LEA
Texaco
66-Cotton Dr
TD 16,537
Texas
1-Shaw
TD 8541
T
25
S
Oxy Pet
Oxy-Bass
Alamo
TD 4335
Perry R Bass
57
Poker Lake Un.
52
Perry R. Bass
Poker Lake Un.
33
LEGEND
MORROW "A" PARTICIPATING AREA
FEDERAL LANDS
25a
TRACT NUMBER
BASS ENTERPRISES PRODUCTION COMPANY
WEST TEXAS DIVISION
POKER LAKE UNIT
Eddy Co. ,New Mexico
EXHIBIT "A"
Date 10-7-86
Revised
Inter. By J. Hansen
Drafted By D.A.C.
Scale 1" 4000'
Dept. Land

EXHIBIT "B"
Morrow "A" Participating Area
Poker Lake Unit
Eddy County, New Mexico

TRACT NO.	LEASE NO.	DESCRIPTION	PARTICIPATING ACRES	% OF WORKING INTEREST OWNERSHIP & UNIT OWNERSHIP	ROYALTY %
25-A	NM-030458	N/2 Section 9 T25S-R31E	320.0	Perry R. Bass - 19.7925 Sid R. Bass, Inc. - 14.844375 Lee M. Bass, Inc. - 14.844375 Thru Line Inc. - 14.844375 Robert M. Bass Group, Inc. - 14.844375 Tenneco Oil Company - 15.6225 Pauley Petroleum, Inc. - 5.2075	12.5

Total Federal Lands 320.0 Acres

EXHIBIT "C"
To Morrow "A" Participating Area
Poker Lake Unit
Eddy County, New Mexico



STRUCTURE MAP: TOP MORROW FORMATION

C.I. 100' Scale:1" 4000'

EXHIBIT "C"

WORKSHEET FOR COMMERCIAL DETERMINATION AND PARTICIPATING AREA IN FEDERAL UNITS

WELL DATA

WELL Poker Lake Unit No. 53 FORMATION Morrow

LOCATION B UNIT, 660 FEET FROM N LINE & 1980 FEET FROM E LINE,

SECTION 9, RANGE 31E, TOWNSHIP 25S, COUNTY Eddy NEW MEXICO

SPUD DATE 11-7-81 COMPLETION DATE 6-3-82 INIT. PROD. DATE 2-2-84

PERFORATIONS 15440'-15456' (8 SHOTS)

STIMULATION:

ACID 2500 gallons 7-1/2% acid + 750 SCF N_2/Bbl

FRACTURE None

POTENTIAL CAOF 2114 MCFGPD

(ATTACH COPY OF C-122. ATTACH COPY OF WELLBORE SKETCH OF COMPLETED WELL.)

VOLUMETRIC CALCULATION

	FORMATION	
	SANDS PERFORATED	SANDS NOT PERFORATED BUT POTENTIALLY PRODUCTIVE
Area (A) proration unit size, acres	320	320
*Porosity (Ø), %	9.4	7.4
*Water saturation (Sw), %	32	21.7
*Net thickness (h) > 6% Ø & <40% Sw, ft	6	20
Temperature (T), °F	228°	226°

* See attached calculations

Bottomhole pressure (P), psia	5387	5387
NOTE: 24 Hr press buildup @ 15433' Recovery factor (RF), (80% assumed)	80%	80%
Recoverable gas, MCF (See eq. below)	1,152,162	3,481,360

*Recoverable gas, MCF = (43,560)(Ø)(1-Sw)(A)(h)(RF)(Bgi) where

* $Bgi = 0.03535 \frac{P}{ZT} \frac{MSCF}{Cu\ Ft}$

PERFORMANCE DATA

If sufficient history exists, attach plot of gas production rate vs time.

(Cumulative production to 8 / 1 /86 ; 519,197 MCF.

Initial rate (qi), 9,308 MCF/mo

Economic limit (ql), 216 MCF/mo

Decline rate, dy 15 %

*Remaining gas (Q) = 671,331 MCF

Ultimate recoverable gas 1,190,528 MCF

$$Q = \frac{(qi - ql)\ 12\ mo/yr}{-\ln (1-dy)}$$

Attach plat showing proration unit and participating area.

RECOVERABLE GAS	GAS (MCF)		COND (BBLS)
Gas sand previously produced	0		0
Sand perforated	1,190,528	(1)	0
*Sand not perforated, but potentially productive	3,597,286	(2)	0
Total recoverable gas	4,787,814		0

(1) performance recoverable gas if available

(2) $\frac{\text{performance sand perforated}}{\text{volumetric sand perforated}}$ X volumetric sands not perforated = performance sands not perforated

Participating area size based on ratio of production history and volumetrics

320 acres---minimum area is proration unit.

ECONOMIC

---

*Well Cost $ 3,530,000 (to the depth of formation completed)

Recompletion Cost $ 49,000

TOTAL COST $ 3,579,000

(Gas Price)(Net Revenue Interest)(1-Ad Valorem Taxes) - Production Tax + [(Oil Price)(Net Revenue Interest)(Cond. Yield, bbl/MCFG)(1 -Production and Ad Valorem Taxes)] - [(Oil Price - Base Price) WFPT %] NRI

*Net Gas Price = $6.93

Operating Cost $1500/Month

BEPCO Net Income = (Gross Gas)(Net Gas Price)

YEAR	GROSS GAS	BEPCO NET INCOME	OPERATING COST	15% DISCOUNT FACTOR	DISCOUNTED CASH FLOW
Zero	---	---	---	1.0000	-3,530,000
1984	323,459	2,241,571	16,500	0.9325	2,074,879
1985	142,671	988,710	18,000	0.81087	787,120
1986	98,064	679,584	18,000	0.70511	466,489
1987	96,350	667,706	18,000	0.61314	398,360
1988	81,864	567,318	18,000	0.53316	292,874
*Remainder Perf'd Sands	448,120	3,105,472	417,600	0.46362	1,246,151
Recompletion Cost					-49,000
*Remainder Sands Not Perf'd	3,597,286	24,929,192	2,232,000	0.46362	10,522,872

If payout is five years or less, well is considered economical.

(BEPCO Net Income - Operating Expense) discount factor = $12,209,745

discounted cash flow. ECONOMICAL

POKER LAKE UNIT NO. 53
PERFORATED SANDS

INTERVALS	h	ØD	ØN	ØXP	Øh
15,439'-40'	1	8.5	7.5	8	8
40'-42'	2	9	6	7.5	15
42'-43'	1	8	7	7.5	7.5
54'-56'	2	14	11.5	13	26
TOTAL h	6			TOTAL Øh	56.5

AVERAGE Ø = $\frac{\text{TOTAL Øh}}{\text{TOTAL h}} = \frac{56.5}{6}$ = 9.4% Ø above 6% Ø

POKER LAKE UNIT NO. 53
PERFORATED SANDS

INTERVALS	LLD		***Rt	(Sw)(ØXP)(h) = Sw WEIGHTED
15,439'-40'	60	=	60	(.326)(.080)(1)=.0261
40'-42'	170	=	170	(.207)(.075)(2)=.0311
42'-43'	60	=	60	(.349)(.075)(1)=.0262
54'-56'	16	=	16	(.374)(.130)(2)=.0972

TOTAL Sw WEIGHTED .1806

AVERAGE Sw = $\frac{\Sigma(h)(\emptyset)(Sw)}{(\emptyset)(h)}$ = 32% Sw below 40% Sw

*** MSFL was turned off due to dragging in the wellbore. Therefore, it is assumed LLD = Rt for this interval

VOLUMETRIC CALCULATIONS
RECOVERABLE GAS

PERFORATED SANDS

- -

Bgi CALCULATION

$Z = 1.0273$

$Bgi = 0.03535 \quad \dfrac{5387}{(1.0273)(228+460)}$

$Bgi = 0.2694$

VOLUME CALCULATION

$MCF = (43560)(\emptyset)(1\text{-}Sw)(A)(h)(RF)(Bgi)$
$MCF = (43560)(0.094)(1\text{-}0.32)(320)(6)(0.80)(0.2694)$
$MCF = 1{,}152{,}162$

PERFORMANCE DATA

- -

REMAINING GAS CALCULATION

$$Q = \frac{(qi\text{-}ql)12\ mo/yr}{-Ln(1\text{-}dy)}$$

$$Q = \frac{(9308\text{-}216)12}{-Ln(1\text{-}0.15)}$$

$Q = 671{,}331$

POKER LAKE UNIT NO. 53
SANDS NOT PERFORATED BUT POTENTIALLY PRODUCTIVE

INTERVALS	h	ØD	ØN	ØXP	Øh
14650'-652'	2	7	5	6.2	12.4
*14656'-658'	2	6	5	5.5	
* 658'-660'	2	5	2.5	3.5	
*14698'-700'	2	2.5	1	1.5	
700'-702'	2	14	2	8.3	16.6
* 702'-703'	1	5	2.5	3.5	
*14784'-786'	2	7	1	4	
* 786'-788'	2	8	3	5.5	
* 788'-790'	2	5	1	2.5	
* 790'-792'	2	5.5	1	3	
* 792'-794'	2	5.5	1	3	
* 794'-796'	2	4.5	2	3.2	
* 796'-798'	2	5.5	1	3	
* 798'-800'	2	2.5	1	1.5	
* 800'-802'	2	2.5	1.5	1.5	
* 802'-804'	2	2.5	1.5	1.5	
14840'-842'	2	11	4	7.8	15.6
842'-844'	2	11.5	4	8	16
**14948'-950'	2	8	5.5	6.8	
950'-952'	2	10.5	4	7.5	15
952'-954'	2	10	3.5	6.8	13.6
954'-956'	2	10	4.5	7.5	15
* 956'-958'	2	9	2.5	6	
* 958'-960'	2	8.5	2.5	5.8	
* 960'-962'	2	8	2.5	5.3	
* 962'-964'	2	8	2.5	5.3	
* 964'-966'	2	6	3.5	5	
*15036'-038'	2	4	2	3	
* 038'-040'	2	1.5	1.3	1	
* 040'-042'	2	7	2.5	5	
15130'-132'	2	10	7.5	8.5	17
* 132'-134'	2	5	2	3.5	

POKER LAKE UNIT NO. 53
SANDS NOT PERFORATED BUT POTENTIALLY PRODUCTIVE

	INTERVALS	h	ØD	ØN	ØXP	Øh
**15	150'-152'	2	13.5	5	9.5	
**	152'-154'	2	12	5	9	
**	154'-156'	2	11.5	6	9	
**	156'-158'	2	12	7	9.8	
**	158'-160'	2	13	5.5	9.5	
**	160'-162'	2	13	6	9.8	
**	162'-164'	2	11	5.5	8.5	
	164'-166'	2	10	3	6.5	13
	166'-168'	2	8	4.5	6.5	13
*	168'-170'	2	8	4	6	
**	170'-172'	2	9	4	6.5	
**	172'-174'	2	10	6	8	
**	174'-176'	2	9	5	7	
*	176'-178'	2	9	2.5	6	
*	178'-180'	2	6.5	2	4.5	
**	180'-182'	2	8	5.5	6.5	
	TOTAL h	20			TOTAL Øh	147.2

AVERAGE Ø = $\frac{\text{TOTAL Øh}}{\text{TOTAL h}} = \frac{147.2}{20}$ = 7.4% Ø above 6% Ø

* These intervals have been eliminated from the calculations due to Ø being 6% or less.

**These intervals have been eliminated from the calculations due to Sw being 40% or greater.

POKER LAKE UNIT NO. 53
SANDS NOT PERFORATED BUT POTENTIALLY PRODUCTIVE

	INTERVALS	LLD	LLS	MSFL	Rt	(Sw)(ØXP)(h) = Sw WEIGHTED
	14650'-652'	170	160	100	187	(.243)(.062)(2)=.0301
*	14656'-658'	170	160	60		
*	658'-660'	700	600	500		
*	14698'-700'	600	700	200		
	700'-702'	1000	800	700	1813	(.057)(.083)(2)=.0095
*	702'-703'	16	10	7		
*	14784'-786'	75	70	20		
*	786'-788'	300	200	50		
*	788'-790'	300	250	200		
*	790'-792'	1000	700	300		
*	792'-794'	2000	1600	210		
*	794'-796'	300	250	190		
*	796'-798'	350	300	210		
*	798'-800'	300	270	210		
*	800'-802'	130	110	60		
*	802'-804'	300	270	200		
	14840'-842'	30	25	20	47	(.378)(.078)(2)=.0590
	842'-844'	310	170	100	485	(.115)(.080)(2)=.0184
**	14948'-950'	45	40	20	50	(.425)
	950'-952'	170	110	30	222	(.182)(.075)(2)=.0273
	952'-954'	24	26	120	222	(.202)(.068)(2)=.0275
	954'-956'	60	55	30	66	(.333)(.075)(2)=.0499
*	956'-958'	80	70	60		
*	958'-960'	200	110	40		
*	960'-962'	190	102	20		
*	962'-964'	150	100	27		
*	964'-966'	130	90	70		
*	15036'-038'	26	25	20		
*	038'-040'	1000	500	60		
*	040'-042'	1000	400	80		
	15130'-132'	90	70	30	119	(.216)(.085)(2)=.0367
*	132'-134'	130	70	40		

POKER LAKE UNIT NO. 53 (2)
SANDS NOT PERFORATED BUT POTENTIALLY PRODUCTIVE

	INTERVALS	LLD	LLS	MSFL	Rt	(Sw)(ØXP)(h) = Sw WEIGHTED
**15	150'-152'	20	8	1.5	26	(.411)
**	152'-154'	10.1	5	1.2	13	(.617)
**	154'-156'	10.1	5	1.7	14	(.594)
**	156'-158'	10	4	1.9	15	(.524)
**	158'-160'	9	4	1.7	13	(.582)
**	160'-162'	9	4	2	14	(.542)
**	162'-164'	20	6	3	32	(.417)
	164'-166'	35	12	10	75	(.364)(.065)(2)=.0473
	166'-168'	30	12	10	63	(.397)(.065)(2)=.0516
*	168'-170'	30	20	12		
**	170'-172'	20	9	6	35	(.533)
**	172'-174'	17	9	5	26	(.495)
**	174'-176'	22	12	7	34	(.499)
*	176'-178'	22	12	10		
*	178'-180'	55	26	40		
**	180'-182'	17	15	50	17	(.765)

TOTAL Sw WEIGHTED .3206

Average Sw = $\frac{\Sigma(h)(\emptyset)(Sw)}{(\emptyset)(h)}$ = 21.7% Sw below 40% Sw

* These intervals have been eliminated from the calculations due to Ø being 6% or less.

** These intervals have been eliminated from the calculations due to Sw being 40% or greater.

VOLUMETRIC CALCULATIONS
RECOVERABLE GAS

SANDS NOT PERFORATED BUT POTENTIALLY PRODUCTIVE

- -

VOLUME CALCULATION

Bgi = 0.2694

MCF = (43560)(Ø)(1-Sw)(A)(h)(RF)(Bgi)

MCF =(43560)(.074)(1-.217)(320)(20)(0.80)(0.2694)

MCF = 3,481,360

PERFORMANCE DATA

- -

Ultimate recoverable gas for sands not perforated

$$\frac{\text{PERFORMANCE SAND PERFORATED}}{\text{VOLUMETRIC SAND PERFORATED}} \times \text{VOLUMETRIC SANDS NOT PERFORATED} = \text{PERFORMANCE SANDS NOT PERFORATED}$$

$$\frac{1{,}190{,}528}{1{,}152{,}162} \times 3{,}481{,}360 = 3{,}597{,}286 \text{ MCF}$$

ECONOMIC

- -

Drilling Cost to 15,530'	$3,011,850
Logging, Casing & Cement Cost	427,366
Morrow Complation Cost	90,784
TOTAL COST TO DEPTH OF FORMATION COMPLETED	$3,530,000
Recompletion Cost in Same Formation	49,000

Gas Price = June LIOR

$$\text{Production Tax} = \frac{\text{Production \& Severance Taxes, Net}}{\text{Total Bass Gross Revenues}}$$

Oil Price = $15.00   Ad Valorem Tax = 2%   WPT = 0

$$\text{Net Gas Price} = \left[(8.39)(0.84974)(0.98)-\left(\frac{18{,}253.76}{310{,}190.97}\right)\right]$$

$$+ \left[(15.00)(0.84974)\left(\frac{0}{519{,}197}\right)(1-.0588-0.2)\right]$$

Net Gas Price = $6.93

NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: ☒ Initial ☐ Annual ☐ Special			Test Date: 6-7-82	
Company: Perry. R. Bass ~~Bass Enterprises~~	Connection: Air			
Pool	Formation: Morrow			Unit
Completion Date: 6-3-82	Total Depth: 15530	Plug Back TD: 15483	Elevation: 3390 GL	Farm or Lease Name: Poker Lake → WF
Csg. Size: 5" / Wt. / d / Set At: 15530	Perforations: From 15440 To 15456			Well No.: 53
Tbg. Size: 2 3/8 / Wt. / d / Set At: 15418	Perforations: From To			Unit: — Sec.: 9 Twp.: 25S Rge.: 31E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single Gas		Packer Set At: 15390		County: Eddy
Producing Thru: Tbg.	Reservoir Temp. °F: 228 @ 15418	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
15418	15418	.5862	1.993	2.256			4"	Flg.

	FLOW DATA				TUBING DATA		CASING DATA		
NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					6600				72 hr.
1.	4 X 1.000	570	11.0	126	5900				1 hr.
2.	4 X 1.000	570	24.0	126	5500				1 hr
3.	4 X 1.000	570	66.0	120	4600				1 hr.
4.	4 X 1.500	575	19.0	100	3675				1 hr.
5.	4 X 1.500	530	23.0	102	2490				4 hr.

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	4.753	80.09	583.2	.9420	1.306	1.030	482
2	4.753	118.31	583.2	.9420	1.306	1.030	713
3.	4.753	196.19	583.2	.9469	1.306	1.033	1191
4.	10.84	105.72	588.2	.9636	1.306	1.038	1497
5.	10.84	111.77	543.2	.9619	1.306	1.034	1574

NO.	P_t	Temp. °R	T_f	Z
1.	.87	586	1.66	.943
2.	.87	586	1.66	.943
3.	.87	580	1.64	.938
4.	.88	560	1.58	.929
5.	.81	562	1.59	.935

Gas Liquid Hydrocarbon Ratio: dry Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: .5862 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 672 P.S.I.A. P.S.I.A.
Critical Temperature: 354 R R

P_c 6613.2 P_c^2 43734.4

NO	BHP	P_w	P_w^2	$P_c^2 - P_w^2$
1	7587.2	5948.6	35386.3	8348.1
2	7147.2	5556.9	30879.1	12855.3
3	6141.2	4681.6	21917.1	21817.3
4	5054.2	3767.5	14193.9	29540.5
5	3643.2	2647.7	7010.4	36724.0
	8334.2	S.I.P.		

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.480$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.412$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.114$

Absolute Open Flow: 2,114 Mcfd @ 15.025 Angle of Slope θ: 48.75° Slope, n: .880

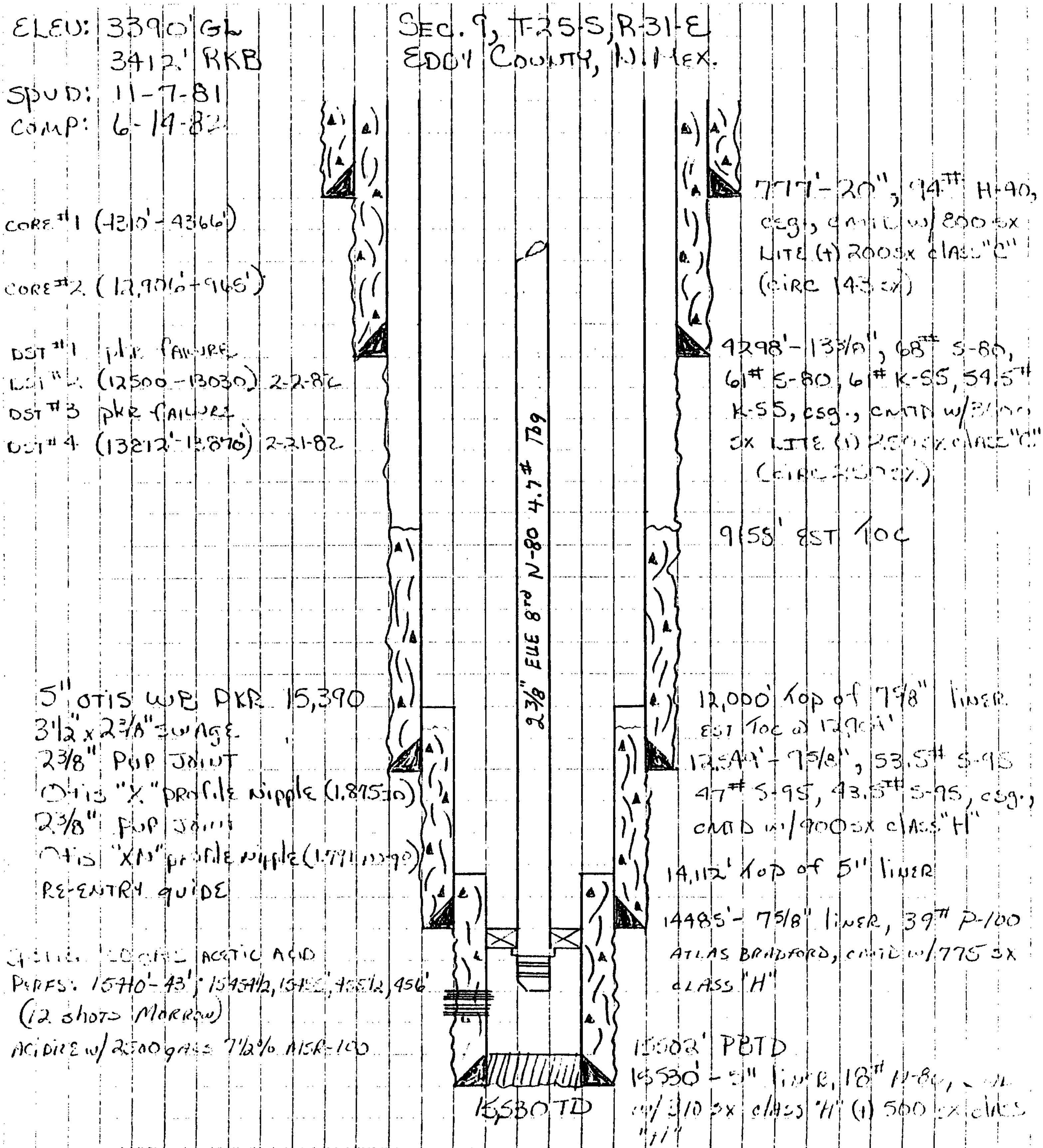
Remarks:

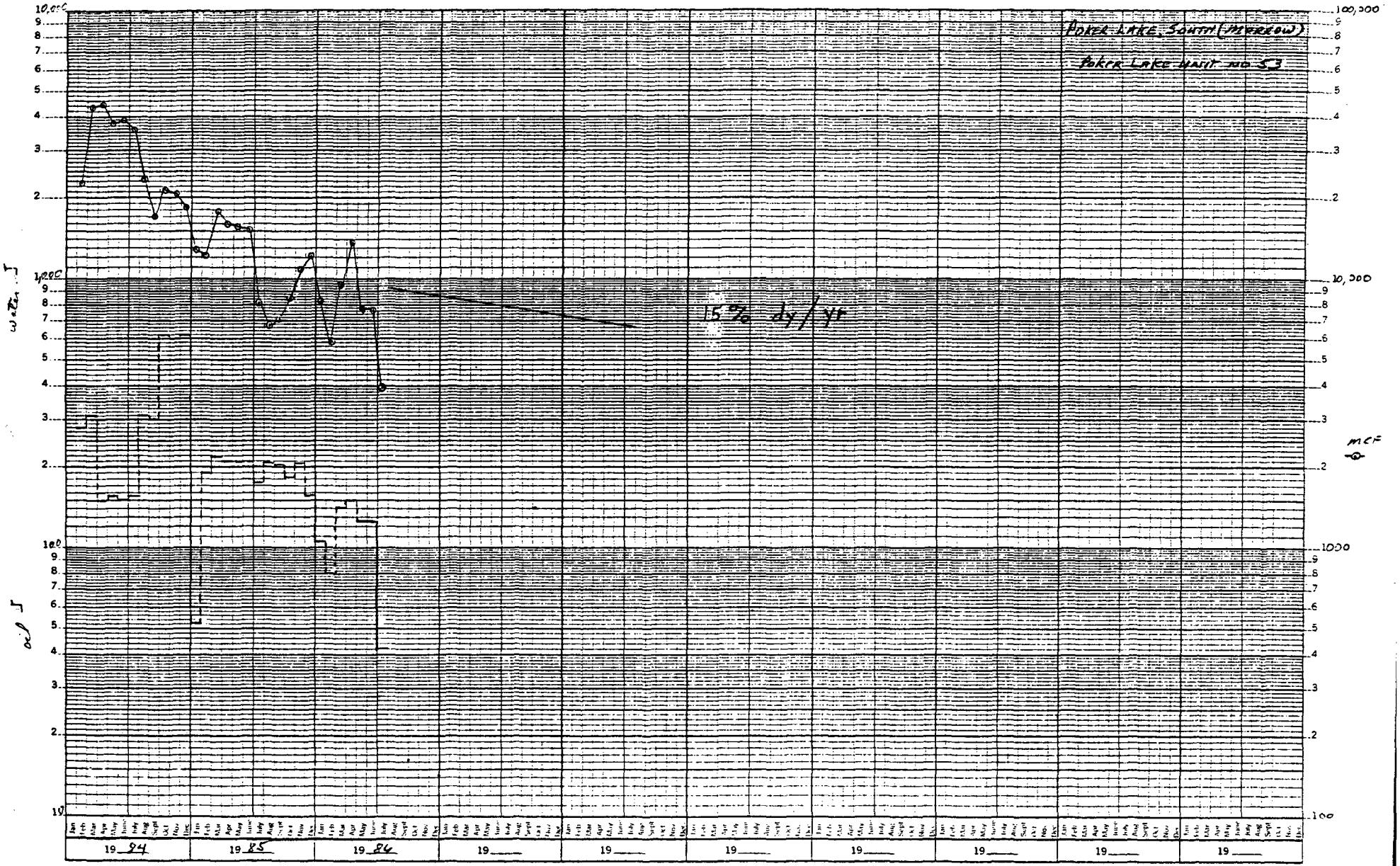
Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Davis Services, Inc.	Rick Pagan	

BASS ENTERPRISES PRODUCTION COMPANY

PAGE NO. ____

SUBJECT	DATE	DEPARTMENT	PREPARED BY
Poker Lake Unit #53	7-21-82	6-3-82	MJE




Boker Lake, South (Morrow)
Boker Lake Unit No 53
15% dy/yr
MCF
19 84
19 85
19 86

NEW MEXICO OIL CONSERVATION COMMISSION

WELL LOCATION AND ACREAGE DEDICATION PLAT

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

All distances must be from the outer boundaries of the Section.

Operator	Lease	Well No.
PERRY R. BASS	POKER LAKE UNIT	53

Unit Letter	Section	Township	Range	County
B	9	25 South	31 East	Eddy

Actual Footage Location of Well: 660 feet from the North line and 1980 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3389.9	Morrow	Wildcat	320 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

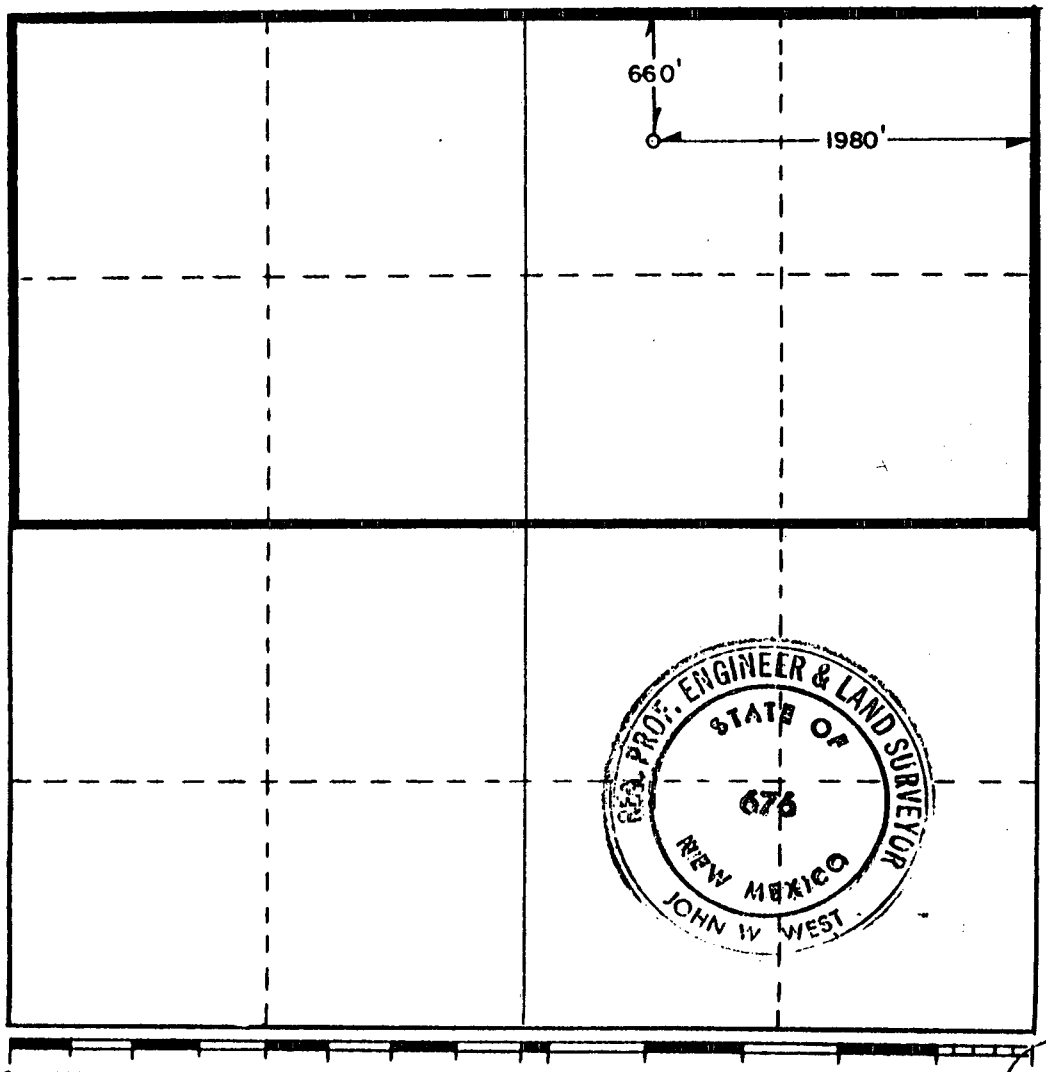
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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?

[X] Yes [ ] No If answer is "yes," type of consolidation Unit

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

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

Scott Doyle

Name: Scott Doyle

Position: Drilling Engineer

Company: Perry R. Bass

Date: 8-25-81

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 knowledge and belief.

Date Surveyed: 8/21/81

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No JOHN W. WEST 676
PATRICK A. ROMERO 6668
Ronald J. Eidson 3239

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

October 20, 1986

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

#3660

Bass Enterprises Production Co.
201 Main St.
First City Bank Tower
Fort Worth, Texas 76102

Attention: Jens Hansen

Re: Application for Commercial
Determinations for Poker Lake Unit
Wells Nos. 52 and 58
Poker Lake Unit
Eddy County, New Mexico

Gentlemen:

The above-referenced submittal has been approved by the New Mexico Oil Conservation Division effective this date. Such approval is contingent upon like approval by the New Mexico Commissioner of Public Lands and the Bureau of Land Management.

Sincerely,

ROY E. JOHNSON,
Senior Petroleum Geologist

REJ/dr

cc: Commissioner of Public Lands - Santa Fe
Bureau of Land Management - Albuquerque

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

October 20, 1986

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

Bass Enterprises Production Co.
First City Bank Tower
201 Main Street
Fort Worth, Texas 76102

Attention: Jens Hansen

Re: Application for Approval of the Morrow
Participating Area "A"
Poker Lake Unit Well No. 53
660' FNL and 1980' FEL of
Sec. 9, T-25-S, R-31-E, Eddy County
Bass Lease No. 9175-Federal

Gentlemen:

The above-referenced submittal has been approved by the New Mexico Oil Conservation Division effective this date. Such approval is contingent upon like approval by the New Mexico Commissioner of Public Lands and the Bureau of Land Management.

Sincerely,

ROY E. JOHNSON,
Senior Petroleum Geologist

REJ/dr

cc: Commissioner of Public Lands - Santa Fe
Bureau of Land Management - Albuquerque

BASS ENTERPRISES PRODUCTION CO.
FIRST CITY BANK TOWER
201 MAIN ST.
FORT WORTH, TEXAS 76102
817/390-8400

#366

December 2, 1986

BUREAU OF LAND MANAGEMENT
P. O. Box 1397
Roswell, New Mexico 88201

Attention: Mr. Joe Lara

RECEIVED
DEC 10 1986
OIL CONSERVATION DIVISION

COMMISSIONER OF PUBLIC LANDS
State of New Mexico
P. O. Box 1148
Santa Fe, New Mexico 87504-1148

Attention: Mr. Floyd Prando

NEW MEXICO OIL CONSERVATION DIVISION
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. Richard Stamets

RE: 1987 Plan of Development
Poker Lake Unit
Eddy County, New Mexico

Gentlemen:

In accordance with Section 10 of the Poker Lake Unit Agreement dated March 18, 1952, Bass Enterprises Production Co., operator of the referenced unit, hereby submits a Plan of Development for the Poker Lake Unit for the year 1987.

History of Past Development

We refer to our previous Plans of Development for a detailed description of the operations conducted in this unit in prior years.

1986 Activity

The following is the results of the well drilled during the year 1986:

Poker Lake Unit Well No. 67 - located 1980' FSL and 1980' FWL, Section 3, T25S-R31E, Eddy County, New Mexico. This well was drilled to a total depth of 15,610', plugged back to a depth of 14,906' and completed in the Morrow formation on July 29, 1986, with the perforated intervals being 14,894'-14,898'. The well is currently shut-in waiting on a pipeline connection.

Participating Areas

At such time as a sufficient production history can be obtained on the Poker Lake Unit Well No. 67, a commercial determination will be submitted along with a proposal for a participating area, if appropriate.

Future Development

In March of 1983, the Bureau of Land Management, Commissioner of Public Lands and the New Mexico Oil Conservation Division granted the operator, who represents the other working interest owners in the unit, relief from drilling several wells previously approved under the 1983 Plan of Development due to the deteriorating gas market in the Southeastern New Mexico area. In a letter dated March 15, 1983, Bass reported that it had invested in excess of $81,000,000 in drilling capital and equipment in new wells and workovers since 1977. This amount has increased from 1982, through November of 1986, to approximately $91,000,000 (see attached graph). When added to the money spent by other working interest owners in the Big Eddy, James Ranch and Poker Lake Units, the total expenditure since 1977 is well in excess of $100,000,000, which does not include lease operating expenses, major maintenance or production taxes. It is our belief that the $100,000,000 expenditure in the exploration and production of hydrocarbons from these federal units, notwithstanding the amount spent prior to 1977, demonstrates a diligent and good faith effort to develop these units.

Since 1983, the gas marketing problems in Southeastern New Mexico have grown progressively worse. Currently, the gas wells in this unit, at most, are only producing 10% of their deliverability due to gas company curtailments. This economic situation extends payout on our investments beyond the acceptable range. And when the poor oil and gas price factor is included, it becomes prohibitive to drill exploratory or development wells for oil or gas.

As a result, operator's plans for 1987 are to continue evaluating seismic and other subsurface data for future drilling when oil and gas prices, as well as the gas market, improve to provide adequate economic incentives for the investment of additional capital.

Offset Obligations

Appropriate and adequate measures will be taken to prevent drainage of unitized substances from the lands subject to the Poker Lake Unit Agreement or pursuant to applicable regulations.

Additional Development

This Plan of Development will constitute the activity to be conducted under the terms of the Poker Lake Unit Agreement for the period ending December 31, 1987. In the event economic conditions should change, resulting in the improvement of gas marketing and the price of oil and gas in this unit area, the operator will modify this Plan of Development to provide for additional activity.

Modifications

In accordance with the terms and provisions of the Poker Lake Unit Agreement, this Plan of Development may be modified from time to time as a result of changing conditions.

Effective Date

This Plan of Development shall be effective from January 1, 1987 to December 31, 1987.

If this Plan of Development meets with your approval, please so indicate by signing in the appropriate space provided below and return one signed signature letter to Bass for its records.

Sincerely,

JENS HANSEN
Division Landman

JH:jh

AGREED TO AND ACCEPTED this 12th day of December, 1986.

BUREAU OF LAND MANAGEMENT

By_____

COMMISSIONER OF PUBLIC LANDS

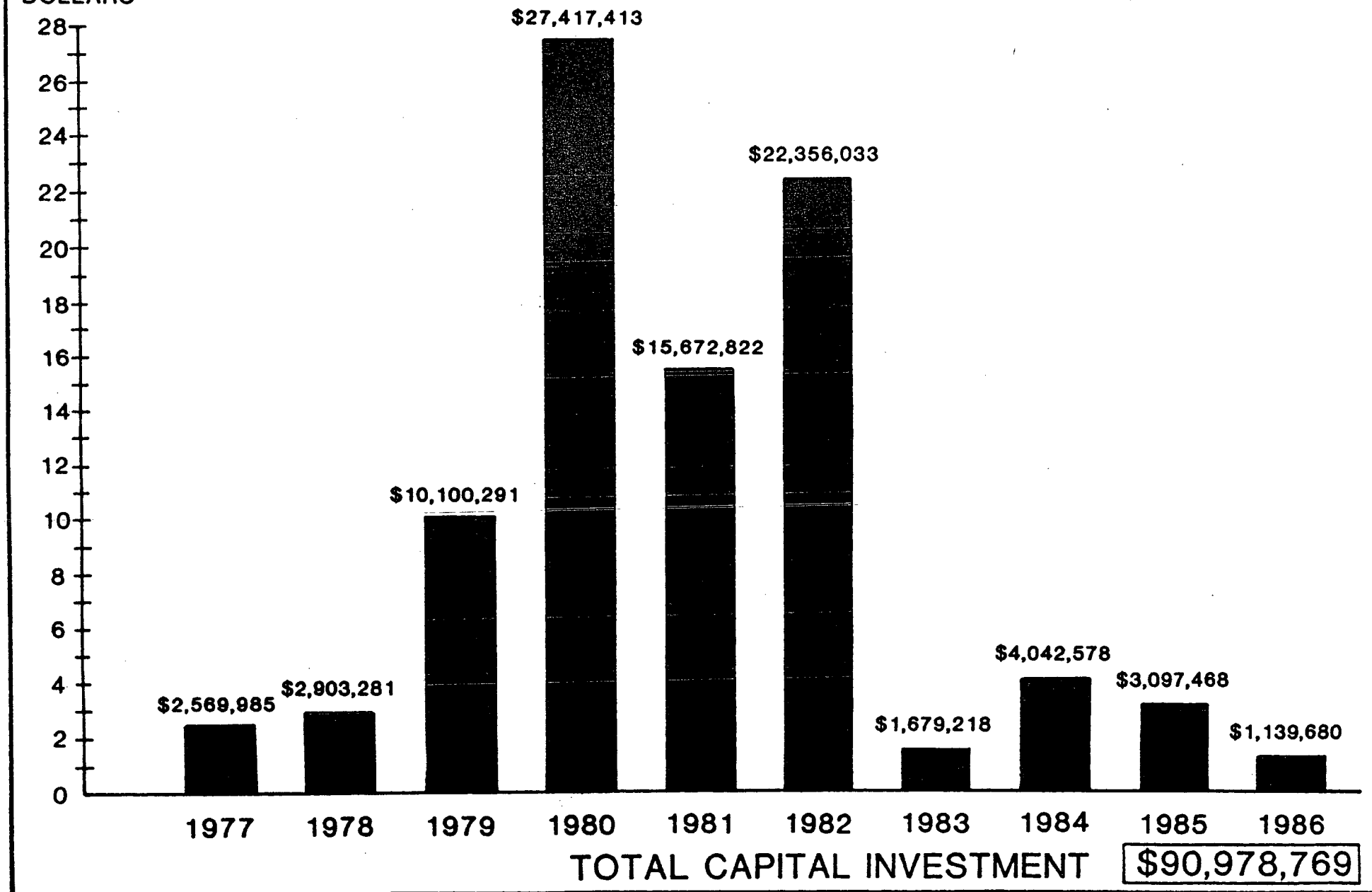
By_____

NEW MEXICO OIL CONSERVATION DIVISION

By_____

CAPITAL INVESTMENT

BIG EDDY ,POKER LAKE & JAMES RANCH FEDERAL UNITS
EDDY & LEA COUNTIES , NEW MEXICO



TOTAL CAPITAL INVESTMENT $90,978,769