'90 DEC 13 6A 8 54

December 10, 1990

Jun 5

Certified Return Receipt Requested

Mr. Michael Stogner
Oil Conservation Division
P. O. Box 2088

Santa Fe, New Mexico 87504-2088

ase 9966

RE: Compulsory Pooling Order #R-9209
Milky Way State #1
Lea County New Movice

Lea County, New Mexico



Dear Mr. Stogner:

Pursuant to the terms of the captioned Compulsory Pooling Order, enclosed please find an itemized schedule of actual well costs for the Milky Way State #1 Well through October 31, 1990. Under separate cover, we are sending this same schedule of well costs to both Texaco Inc. and Rowan Petroleum, Inc. the known working interest owners in this well.

Call me if there are any questions.

Sincerely,

MITCHELL LEWERGY CORPORATION

Steven J. Smith Senior Landman

SJS/jm

Enclosure

MILKY WAY STATE #1

AFE B3882

CAPITAL COSTS INCURRED AS OF 10/31/90

DRILLING COS	rs		Amount
INTANG			Aniogra
10	Dry Hole Abandonment	\$	
11	Rig Mobilization & Demobilization	•	
12	Power & Fuel		**************************************
13	Water		10,654.84
14	Solids Control Equipment Rental		10,001,01
15	Directional Equipment & Services		
16	Fishing Tools & Services		
17	Subsurface Casing Equipment		
18	Contract Labor & Services		4,734.02
19	Supervision - Company and / or Contract		18,199.84
50	Road & Site Preparation		18,428.11
51	Footage Contract Fee		90,237.20
52	Daywork Contract Fee		23,987.10
53	Mud & Chemicals		13,073.69
54	Bits & Reamers		
55	Drilling Tools & Equipment Rental		5,890.78
56	Cement & Cement Services		23,883.33
57	Open Hole Logging-Testing		40,689.59
58	Drill Stem Testing		5,081.54
59	Coring & Analysis		700.00
60	Transportation		1,644.81
61	Air/Marine Transportation		
63	Overhead		4,283.40
64	Insurance		
65	Company Labor & Services		
6 6	Prospect Generation		15,646.27
67	Miscellaneous Services & Contingency		2,385.71
	TOTAL INTANGIBLE COSTS	\$	279,520.23
			:
TANGIB	L <u>E</u>		
21	Casing-Drive Pipe & Conductor		
40	Casing - Surface 400' - 13 3/8" 48# K-S		11,194.48
41	Casing - Intermediate 3,350' - 8 5/8" 32# K-S		45,592.04
42	Casinghead Equipment (Including Valves) (3000 psi)		6,056.71
43	Casing Spool (Including Valves) (3000 psi)		2,936.25
44	Miscellaneous Equipment		
	TOTAL TANGIBLE COSTS	\$	65,779.48
	The state of the s	₩	00,170.40

MILKY WAY STATE #1

AFE B3882

CAPITAL COSTS INCURRED AS OF 10/31/90

COMPLETION	COSTS	<u>Amount</u>
INTAN	GIBLE	
22	Overhead	\$ 2,564.10
23	Company Labor & Services	
24	Contract Labor & Services	24,765.14
25	Air/Marine Transportation	
26	Other Transportation	2,919.49
27	Plugging & Abandonment	
28	Rig Mobilization & Demobilization	
29	Supervision - Company and / or Contract	
30	Site Preparation & Clean-up	285.27
31	Subsurface Casing Equipment	1,042.09
32	Squeeze Cement & Service	
33	Completion Fluids	3,087.92
34	Pump Truck Services	1,036.81
35	Rental Tools	6,256.63
36	Bits & Reamers	
37	Insurance	
38	Wireline Services	
53	Tertiary Injectants	
68	Fencing	
83	Daywork Contract Fee	18,847.93
84	Cement & Cement Services - Primary	9,343.57
85	Acidizing & Fracturing	29,372.40
8 6	Cased Hole Logging & Perforating	7,855.49
93	Reimbursement Meals & Entertainment	221.00
94	Miscellaneous Services & Contingency	1,189.73
TANGI	TOTAL INTANGIBLE COSTS	\$ 108,767.57
69	Tubinghead Equipment (Including Valves)	0.404.00
70	Casing-Production &/or Liner 6700' - 5 1/2" 17# K-55	3,404.63
70	Tubing 6600' - 2 7/8" J-55	44,828.89
72	Packers & Subsurface Equipment	20,910.05
73	Production Tree (Including Valves)	
74	Storage Tanks 2 - 400 bbl steel & 1 - 400 bbl fiberglass	^ 00E E0
75	Seperating Equipment	9,805.50
76	Treating Equipment 4x20 Heater Treater	7 007 50
79 77		7,927.50
	Artificial Lift Equipment C-320-305-100 w/76 rod string & pump	41,250.21
78	Line Pipe	1,437.98
79	Valves & Fittings Beyond Wellhead	2,523.81
80	Miscellaneous Equipment	7,786.10
81	Platform & Structures	
82	Metering Equipment	
87	Pumps Classification and	635.25
90	Electrical Equipment	
91	Instrumentation Equipment	
96	Dehydrators & Dryers	
	TOTAL TANGIBLE COSTS	\$ 140,509.92
TOTAL	COMPLETION COSTS	\$ 249,277.49
TOTAL	COST AS OF 10/31/90 FOR MILKY WAY STATE #1	\$ 594,577.20

CHLOUGHER DIVISION

'90 JUL 23 AM 9 49

July 17, 1990

Mr. Michael Stogner
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

PF.

COMPULSORY POOLING ORDER #R9209 MILKY WAY STATE WELL NO. 1 LEA COUNTY, NEW MEXICO Congallos



Dear Mr. Stogner:

Enclosed you will find a copy of Form C-101 and Form C-102 which have been filed for the permitting of the subject well. As you will notice upon your review of these forms, the location of our Milky Way State No. 1 well has changed. The original surface location had to be moved due to numerous pipelines and electrical line easements in the area. The new well location is still a standard location for our Wildcat Delaware test well.

Should you require any additional information or if I can be of any further help, kindly advise.

Very truly yours,

MITCHELL ENERGY CORPORATION

George Mullen

Regulatory Affairs Specialist

GM:mtb 3gMilkyNol

Enclosures

CC: Mr. David Sleeper - Texaco

Submit to Appropriate District Office State Lease — 6 copies Fee Lease — 5 copies

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-101 Revised 1-1-89

DISTRICT I P.O. Box 1980, Hobbs, NM 88240

OIL CONSERVATION DIVISION

P.O. Box 2088

API NO. (assigned by OCD on New Wells) 30-025-30941

5.	Indicate Type of	Lease	=	
		CT ATT	IX I	T-T-T-

, ,	C	Santa Fe, New Mexico	97504 2099				
DISTRICT II P.O. Drawer DD, Artesia,		Saina re, New Mexico	67304-2066	5. Indicate	Type of Lease	TATE X FEE	
DISTRICT III				6. State Oil	& Gas Lease		<u>. L </u>
1000 Rio Brazos Rd., Azte	c, NM 87410			V-156			
APPLICA [*]	TION FOR PERMIT	TO DRILL, DEEPEN, C	R PLUG BACK				
1a. Type of Work:		,		7. Lease Na	une or Unit A	greement Name	
DRIL	L X RE-ENTER	DEEPEN	PLUG BACK				
b. Type of Well: OIL GAS WELL X WELL		SINGLE	MULTIPLE ZONE		ilky Way	, State	
	OTHER	ZONE	A ZONE				
2. Name of Operator Mitchell En	nergy Corporatio	nn -		8. Well No.			
3. Address of Operator	ergy corporation	JII		1	e or Wildcat		
•	000, The Woodlar	nds, TX 77387-400	0	W	ildcat		
4. Well Location	1,700 Feet F	_ south	330	_	6	east	
Unit Letter	Feet F	from The	Line and	Feet	From The _	· · · · · · · · · · · · · · · · · · ·	_ Line
Section 17	Town	ship 18S Ran	ige 35E	NMPM	Lea	Con	unty
		10. Proposed Depth		Formation		12. Rotary or C.T.	
		6.700		elaware		Rotary	
13. Elevations (Show wheth 3938 GR	er DF, KT, GR, etc.)	14. Kind & Status Plug. Bond Blanket on file	15. Drilling Contractor	r	16. Approx. 7/20	Date Work will start	
17.	PF	ROPOSED CASING AN	ID CEMENT PROG	RAM			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF	CEMENT	EST. TOP	
17-1/2"	13-3/8"	54.50	400'	445		Surface	
12-1/4"	8-5/8"	32.00	3,350'	2,000		Surface	
7-7/8"	5-1/2"	15.50	6,700'	955		Surface	
If production be plugged and Blowout presented	ve, 5-1/2" casing and abandoned in venter schmatic	to a depth suffing will be cement a manner consist attached as Atta	ed at TD. If intent with State chment 1.	non-produ e of New	ctive,	the well wil	l1
AMENDED PERI	MIT: LOCATION	n has been moved	333. TO THE SOL	ucn.			

7/13/90 SIGNATURE . George Mullen TELEPHONE NO. TYPE OR PRINT NAME (This space for State Use) DATE APPROVED BY CONDITIONS OF APPROVAL, IF ANY:

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

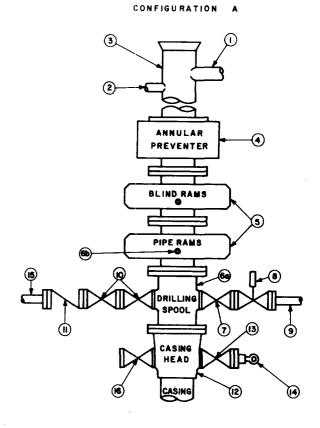
Milky Way State Well No. 1 NE/4 SE/4 Sec. 17, T18S R35E Lea County, New Mexico

3,000 psi Working Pressure

3 MWP

STACK REQUIREMENTS

No.	Item		Min. I.D.	Min. Nominal
1	Flowline			
2	Fill up line			2"
3	Drilling nipple			
4	Annular preventer			
5	Two single or one dual hydoperated rams	draulically		
6a	Drilling spool with 2" min. 3" min choke line outlets	kill line and		
6b	2" min. kill line and 3" mir outlets in ram. (Alternate t	n. choke line		
7	Valve	Gate □ Plug □	3-1/8"	
8	Gate valve—power operat	ed	3-1/8"	
9	Line to choke manifold			3″
10	Valves	Gate □ Plug □	2-1/16"	
11	Check valve		2-1/16"	
12	Casing head			
13	Valve	Gate □ Plug □	1-13/16"	
14	Pressure gauge with need	le valve		
15	Kill line to rig mud pump n	nanifold		2"



OPTIONAL				
16	Flanged valve	1-13/16"		

CONTRACTOR'S OPTION TO FURNISH:

- All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
- Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
- BOP controls, to be located near drillers position.
- 4.Kelly equipped with Kelly cock.
- Inside blowout prevventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
- Kelly saver-sub equipped with rubber casing protector at all times.
- 7.Plug type blowout preventer tester.
- Extra set pipe rams to fit drill pipe in use on location at all times.
- 9. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

- 1.Bradenhead or casinghead and side valves.
- 2. Wear bushing, if required.

GENERAL NOTES:

- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- 2.All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke. Valves must be full opening and suitable for high pressure mud service.
- Controls to be of standard design and each marked, showing opening and closing position.
- 4.Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- 5.All valves to be equipped with handwheels or handles ready for immediate
- 6. Choke lines must be suitably anchored.

- Handwheels and extensions to be connected and ready for use.
- Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
- All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
- Casinghead connections shall not be used except in case of emergency.
- Do not use kill line for routine fill-up operations.

Submit to Appatigate District Office State Lease - 4 copies Fee Lease - 3 copies

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised 1-1-89

OIL CONSERVATION DIVISION

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

DISTRICT II P.O. Drawer DD, Asteolo, NM 88210

DISTRICT I P.O. Box 1980, Hobbs, NM 88240

DISTRICT III
1000 Rio Breses Rd., Axes, Ned 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

	ELL ENERGY CO	RPORATION	MILKY WAY	STATE	#1
I S	ection 17	T.18S.	R.35E.	NMPM	LEA
Pootage Lecution	a of Well:	732k 1. V.	330	feet from the FE	ZL .
I lovel Blov.	FSL Producing	2169 6428	Pool	feet from the	Dedicated Acreage:
3938	DELAWAR		WILDCAT		40 Acres
1. Outline ti	so acronge dedicated to	the subject well by colored pa	acil or hachuse marks on the	plot below.	
2. If more th	una casa lenas ia dedica	ted to the well, outline each an	identify the ownership ther	sof (both as to working interes	it and royalty).
If answer is this form if	n, force-pooling, etc.? fee	nd tract descriptions which have he well until all interests have b	pe of consolidationFo	rce-Pooling (Ord	er #R9209)
or until a no	n-standard unit, elimin	acting such interest, has been ap	proved by the Division.	OPE	ERATOR CERTIFICATIOn or the information of the info
	700 30			centained	harein in true and complete phowledge and belief.
				Signature	me Mille
	100.00		i,	Printed N	orge 1 wo
					rge Mullen
	100				Regulatory
				Company	rs Specialist
	17 9		į ·		hell Energy Corp.
			į.	Date	13, 1990
	10 200		!		
			,	SUR	VEYOR CERTIFICATION
				I hareby	certify that the well location
	i	CTION 17 M 100	DOSE NADA		plat was platted from field n www.ye made by me or und
		SECT. 17, T.18S	K.JOE. W.M.P.I	supervise	m, and that the same is tr
				330' correct ballef.	to the best of my knowled
				Dete Sur	would
					7/10/90
	i			Signatur	& Soul Cl
					SON W MARION SO
				1700,	2 Fem Walich a
	100		1 4	II la	In Caro Sagua
	- 1				
				1 / 62	Son wood in

Br55 PG 30

CERTIFIED RETURN RECEIPT

Texaco Inc.
P. O. Box 2100
Denver, CO 80201

Attn: Mr. David L. Sleeper

RE: Proposed Delaware Test
06213-01 - Milky Way State #1
SE/4 Section 17, T-18-S, R-35-E
Lea County, New Mexico
MILKY WAY PROSPECT
MEC Lease #40007-1



Gentlemen:

On June 28, 1990, the State of New Mexico Oil Conservation Division issued a Compulsory Pooling Order effecting Texaco Inc.'s interest in the captioned acreage, a copy of which is attached. Pursuant to said Order, enclosed herewith are duplicate copies of the AFE Cost Estimates for dry hole costs and completed well costs for the captioned well.

If you elect to participate in the drilling of the subject well, please execute and return one (1) copy each of the enclosed AFE Cost Estimates and one (1) original signature page to the Operating Agreement which was sent to you by letter dated May 3, 1990.

As you are aware, the lease on which we are attempting to drill will expire on August 1, 1990, unless extended by drilling operations or production. Accordingly, we ask that you advise the undersigned as to your intent in this matter at your earliest possible convenience.

Thank you for your cooperation.

Sincerely,

MITCHELL ENERGY CORPORATION

Steven D Smith Senior Landman

SJS/tl Attachments

xc: Rowan Petroleum, Inc.

New Mexico Oil Conservation Division w/Attachments

MITCHELL ENERGY & DEVELOPMENT CORP. - ENERGY DIVISION

AUTHORITY FOR EXPENDITURE (AFE) COST ESTIMATE

Type Project (che	ek l only)	
☐ Exploratory ☐ Injection	☐ Water Supply	
Development Disposal	Depth 6700'	
Form B-1	Group Code	
AFE Number	Location Code	
Property/Well NameMilky Way Fed No. 1	Department Number 712	
Project Description	County Lea St.	NM
Net Working Interest	Operator MEC	
Estimated Date Project Will Be Complete	ed (Mo./Yr.)
DRILLING COSTS INTANGIBLE	A	mount
10 Dry Hole Abandonment		
Rig Mobilization and Demobilization Power and Fuel	***************************************	
13 Water	**************************************	
*15 Directional Equipment and Services	1	0.000
16 Fishing Tools and Services 17 Subsurface Casing Equipment	***************************************	
17 Subsurface Casing Equipment 18 Contract Labor and Services		2,500 0,000
19 Supervision - Company and/or Contract	(15 days @ \$500/day)	7,500
SO Koad and Site Preparation	25	5,000
51 Footage Contract Fee (6700' @ \$13.50/ 52 Daywork Contract Fee (2 days @ \$3800/	tt) 90	0,500 7,600
53 Mud and Chemicals (mud-up 5500')	20	0,00.0
54 Bits and Reamers 55 Drilling Tool and Equipment Rental		3,000
56 Cement and Cement Services		2,000
*57 Open Hole Logging-Testing (incl 12 da	ys ML @ \$350/day)	4,200
*58 Drill Stem Testing 59 Coring and Analysis		
60 Transportation		4,500
61 Air/Marine Transportation		
63 Overhead 64 Insurance		5,000
65 Company Labor and Services		
*66 Prospect Generation 67 Miscellaneous Services and Contingency		0,000
67 Miscellaneous Services and Contingency	1	0,000
TOTAL INTANGIBLE COSTS	\$23	1,800
TANGIBLE 21 Casing-Drive Pipe & Conductor		
40 Casing - Surface 400' - 13 3/8" 48# K	-s @ \$23.62/ft	9,450
40 Casing - Surface 400' - 13 3/8" 48# K 41 Casing - Intermediate 3.350' - 8 5/8"	32# K-S @ \$14.00/ft 4	6,900
42 Casinghead Equipment (Including Valves) 43 Casing Spool (Including Valves) (3000	3) (3000 psi)	3,500 5,000
43 Casing Spool (Including Valves) (3000 44 Miscellaneous Equipment	har)	<u> </u>
TOTAL TANGIBLE COSTS	\$6	54,850
TOTAL DRILLING (DRY HOLE) COSTS	\$25	96,650
* Invalid for disposal and water supply wells.	9 _M	
MEDC 252-02 APPROVED - TEXACO INC.	Prepared By: G. W. Tul	los
Rev. 4/29/85 BY:	Date Prepared: 3/9/90	

G.W.I. - 0.2775000

MITCHELL ENERGY & DEVELOPMENT CORP. - ENERGY DIVISION AUTHORITY FOR EXPENDITURE (AFE) COST ESTIMATE

Type Projec	et (check l only)
- '	Change Only)
☐ Development ☐ Plug and Abandon (Pr	reviously Producing Well) Depth 6700'
☐ Injection ☐ Water Supply	
Form B-2 Add Change	Delete Group Code
AFE Number	Location Code
Property/Well Name <u>Milky Way Fed. #1</u>	Department Number 730
Project Description <u>Complete</u>	County Lea St. NM
Net Working Interest 5 0 0 0	Operator <u>MEC</u>
Estimated Date Project Will Be C	Completed(Mo./Yr.)
COMPLETION COSTS	Amount
<u>INTANGIBLE</u> 22 Overhead	\$2,000
23 Company Labor and Services 24 Contract Labor and Services	
24 Contract Labor and Services 25 Air/Marine Transportation	10,000
26 Other Transportation	2,000
 Plugging and Abandonment Rig Mobilization and Demobilizat 	tion
29 Supervision - Company and/or Co	
30 Site Preparation and Clean-up	1,000
31 Subsurface Casing Equipment 32 Squeeze Cement and Service	2,000
32 Squeeze Cement and Service 33 Completion Fluids	1,000
34 Pump Truck Services	2,000
35 Rental Tools	4,000
36 Bits and Reamers	
37 Insurance 38 Wireline Services	
39 Fishing Tools and Services	
*53 Tertiary Injectants	
68 Fencing	
83 Daywork Contract Fee 84 Cement and Cement Services - Pri	6,000
84 Cement and Cement Services - Pri 85 Acidizing and Fracturing	imary 15,000 40,000
*86 Cased Hole Logging and Perforat:	
94 Miscellaneous Services and Cont	ingency 2,000
TOTAL INTANGIBLE COSTS TANGIBLE	\$96,000
69 Tubinghead Equipment (Including	(Valves) \$3,500
70 Casing-Production and/or Liner	
72 Packers and Subsurface Equipmen	
73 Production Tree (Including Valv	ves)
74 Storage Tanks 2-400 bb1 steel &	1-400 bb1 fiberglass 13,000
75 Separating Equipment 76 Treating Equipment 4x20 Heater	treater 7,900
77 Artificial Lift Equipment C-320	0-305-100 w/76 rod string & pump 39,000
78 Line Pipe	1,000
79 Valves and Fittings Beyond Well 80 Miscellaneous Equipment	
80 Miscellaneous Equipment 81 Platform and Structures	1,300
82 Metering Equipment	1
87 Pumps	
90 Electrical Equipment 91 Instrumentation Equipment	
96 Dehydrators and Dryers	
TOTAL TANGIBLE COSTS	146,000
TOTAL COMPLETION COSTS	\$242,000
* Invalid for disposal and water supply w	wells.
MEUC 252-03 APPROVED - TEXACO INC.	Prepared By: Jim Blount Add
Rev. 4/29/85 BY:	Date Prepared: 3/8/90

CERTIFIED RETURN RECEIPT

Rowan Petroleum, Inc. 1900 Post Oak Tower 5051 Westheimer Road Houston, TX 77056

Attn: Mr. Jeff Boucher

RE: Proposed Delaware Test
Milky Way State #1
MILKY WAY PROSPECT
Lea County, New Mexico



Dear Jeff:

As you are aware, the New Mexico Oil Conservation Division recently issued a Compulsory Pooling Order for the captional test well. Pursuant to said order, enclosed herewith are copies of the AFE Cost Estimates for dry hole costs and completed well costs for the captioned well.

In that Rowan has already executed AFE Cost Estimates covering its interest in the captioned well, no action is necessary on your part regarding the enclosed AFE Cost Estimates.

Call me if you have any questions.

Sincerely,

MITCHELL ENERGY CORPORATION

Steven Smith Senior Landman

SJS/tl Attachments

xc: New Mexico Oil Conservation Division

MITCHELL ENERGY & DEVELOPMENT CORP. - ENERGY DIVISION

AUTHORITY FOR EXPENDITURE (AFE) COST ESTIMATE

Type Project (check	l only)
	☐ Water Supply
☐ Development ☐ Disposal	Depth 6700'
Form B-1	Group Code
AFE Number	Location Code
Property/Well Name Milky Way Fed No. 1	Department Number 712
Project DescriptionDrill	County Lea St. NM
Net Working Interest	Operator MEC
Estimated Date Project Will Be Completed	(Mo./Yr.)
DRILLING COSTS INTANGIBLE	Amount
10 Dry Hole Abandonment	***************************************
Rig Mobilization and Demobilization Power and Fuel	**************************************
13 Water 14 Solids Control Equipment Rental	
 14 Solids Control Equipment Rental *15 Directional Equipment and Services 	10,000
16 Fishing Tools and Services	
17 Subsurface Casing Equipment 18 Contract Labor and Services	2,500
19 Supervision - Company and/or Contract (15	10,000 days @ \$500/day) 7,500
50 Road and Site Preparation	25,000
51 Footage Contract Fee (6700' @ \$13.50/ft)	90,500
52 Daywork Contract Fee (2 days @ \$3800/day	
53 Mud and Chemicals (mud-up 5500') 54 Bits and Reamers	20,000
55 Drilling Tool and Equipment Rental	3,000
56 Cement and Cement Services	22,000
*57 Open Hole Logging-Testing (incl 12 days	ML @ \$350/day) 4,200
*58 Drill Stem Testing	- The state of the
59 Coring and Analysis 60 Transportation	4,500
61 Air/Marine Transportation	4,300
63 Overhead	5,000
64 Insurance	
65 Company Labor and Services	10.000
*66 Prospect Generation 67 Miscellaneous Services and Contingency	10,000
TOTAL INTANGIBLE COSTS	\$231,800
TANGIBLE 21 Casing-Drive Pipe & Conductor	
40 Casing - Surface 400' - 13 3/8" 48# K-S	a \$23.62/ft \$9,450
41 Casing - Intermediate 3.350' - 8 5/8" 32	
42 Casinghead Equipment (Including Valves) 43 Casing Spool (Including Valves) (3000 ps	
43 Casing Spool (Including Valves) (3000 ps: 44 Miscellaneous Equipment	i) 5,000
TOTAL TANGIBLE COSTS	\$64,850
TOTAL DRILLING (DRY HOLE) COSTS	\$296,650
* Invalid for disposal and water supply wells.	94
MEDC 252-02 APPROVED - ROWAN PETROLEUM, INC. Pr	epared By: G. W. Tullos
Pour 4/29/85 PM.	to Prepared: 3/9/90

MITCHELL ENERGY & DEVELOPMENT CORP. - ENERGY DIVISION AUTHORITY FOR EXPENDITURE (AFE) COST ESTIMATE

	Type Project	(check l only)		
🛚 Explo	ratory Recompletion (Zone Cha			sposal
☐ Devel	opment Plug and Abandon (Prev	iously Produci	ng Well)	Depth 6700'
☐ Injec	tion		,	
Form B-2	☐ Add ☐ Change ☐ De	elete Gr	oup Code	
AFE Number		Lo	cation Code	
Property/W	Well Name Milky Way Fed. #1	De	partment Nu	mber 730
Project De	escription <u>Complete</u>	Со	unty <u>Lea</u>	St. NM
Net Workin	ng Interest <u>. 5 0 0 0</u>	Ор	erator	MEC
	Estimated Date Project Will Be Comp	oleted		_ (Mo./Yr.)
COMPLETION		***************************************		Amount
INTANG 22	Overhead			\$2,000
23	Company Labor and Services			
. 24 25	Contract Labor and Services Air/Marine Transportation			10,000
26	Other Transportation			2,000
27 28	Plugging and Abandonment	_		
29	Rig Mobilization and Demobilizatio Supervision - Company and/ or Cont			2,000
30	Site Preparation and Clean-up			1,000
31	Subsurface Casing Equipment			2,000
32	Squeeze Cement and Service			1 000
33 34	Completion Fluids Pump Truck Services			1,000 2,000
35	Rental Tools			4,000
36	Bits and Reamers			
37	Insurance			
38	Wireline Services			
39 *5 3	Fishing Tools and Services			
^33 68	Tertiary Injectants Fencing			
83	Daywork Contract Fee			6,000
84	Cement and Cement Services - Prima	.ry		15,000
85	Acidizing and Fracturing			40,000
*86	Cased Hole Logging and Perforating			7,000
94	Miscellaneous Services and Conting	ency		2,000
TANGIBLE	TOTAL INTANGIBLE COSTS			\$96,000
69	Tubinghead Equipment (Including Va	lves)		\$3,500
70	Casing-Production and/or Liner_67	00' - 5 1/2" 1	7# K-55	54,300
71 72	Tubing 6600' - 2 7/8" J-55			26,000
72 73	Packers and Subsurface Equipment Production Tree (Including Valves))		
74	Storage Tanks 2-400 bbl steel & 1-		lass	13,000
75	Separating Equipment			
76. ·		ater		7,900
7 <i>7</i> 78	Artificial Lift Equipment C-320-30 Line Pipe)5-100 w/76 rod	string & p	
. 79	Valves and Fittings Beyond Wellher	ad	· · · · · · · · · · · · · · · · · · ·	1.000
80	Miscellaneous Equipment	· ·		1,300
81	Platform and Structures			
82 87	Metering Equipment Pumps	1		
90	Electrical Equipment			
91	Instrumentation Equipment			
96	Dehydrators and Dryers			•
mumi in the	TOTAL TANGIBLE COSTS			146.000
	APLETION COSTS	· ·		\$242,000
* Invalid	d for disposal and water supply wel			A 1 14
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Rev. 4/29	9/85 BY:	Date Prepa	red:	3/8/90
	GWI - 0.2225000			

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

June 29, 1990

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

Mr. Thomas Kellahin Kellahin, Kellahin & Aubrey Attorneys at Law Post Office Box 2265 Santa Fe, New Mexico

Florene Clavidson

Re: CASE NO. 9966 ORDER NO. R-9209

Applicant:

Mitchell Energy Corporation

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Sincerely,

FLORENE DAVIDSON OC Staff Specialist

Copy of order also sent to:

Hobbs OCD x
Artesia OCD x
Aztec OCD

Other____

1	STATE OF NEW MEXICO
2	ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
3	OIL CONSERVATION DIVISION
4	
5	
6	
7	EXAMINER HEARING
8	
9	IN THE MATTER OF:
10	
11	Application of Mitchell Energy
12	Corporation for compulsory Case 9966
13	pooling, Lea County, New Mexico
14	i
15	
16	TRANSCRIPT OF PROCEEDINGS
17	
18	BEFORE: MICHAEL E. STOGNER, EXAMINER
19	
20	STATE LAND OFFICE BUILDING
21	SANTA FE, NEW MEXICO
22	June 13, 1990
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CUMBRE COURT REPORTING (505) 984-2244

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INDEX 1 2 Page Number 2 3 Appearances STEVEN SMITH Direct Examination by Mr. Kellahin 5 Cross-Examination by Hearing Examiner 6 2. TED GAWLOSKI Direct Examination by Mr. Kellahin 15 Cross-Examination by Hearing Examiner 28 7 | Certificate of Reporter 31 9 EXHIBITS 6 10 Exhibit No. 1 Exhibit No. 2 8 9 11 Exhibit No. 16 Exhibit No. 21 12 Exhibit No. Exhibit No. 6 22 24 13 Exhibit No. 7 Exhibib No. 8 27 27 14 Exhibit No. 9 Exhibit No. 10 27 15 16 17 18 19 20 21 22 23 24 25

1	HEARING EXAMINER: Call next case, No.
2	9966, which is the application of Mitchell Energy
3	Corporation for compulsory pooling, Lea County, New
4	Mexico.
5	I'll call for appearances.
6	MR. KELLAHIN: Mr. Examiner, I'm Tom
7	Kellahin of the Santa Fe law firm of Kellahin,
8	Kellahin & Aubrey, appearing on behalf of the
9	applicant, and I have two witnesses to be sworn.
10	HEARING EXAMINER: Are there any other
11	appearances?
12	Will the witnesses please stand and be
13	sworn.
14	(Witnesses sworn.)
15	HEARING EXAMINER: Mr. Kellahin, I show on
16	the prehearing statement you have three witnesses.
17	Which two do I have today?
18	MR. KELLAHIN: Mr. Smith is the landman
19	sitting at the table. Mr. Gawloski is the geologist
20	sitting to my left. Mr. Carl Richards is here. He's
21	the petroleum engineer and the drilling engineer to
22	justify the AFE, and we believe that's not an issue
23	between the parties; and so I propose not to present
24	him, but he is available.
25	HEARING EXAMINER: With this new procedure,

- I'm trying to kind of fit it in with what I'm doing 1 2 here. I appreciate that, Mr. Kellahin. MR. KELLAHIN: We anticipated it might be 3 contested and therefore brought Mr. Richards. 4 5 HEARING EXAMINER: So he got a nice trip to 6 Santa Fe. Thank you, Mr. Kellahin. 7 STEVEN SMITH, 8 the witness herein, after having been first duly sworn 9 upon his oath, was examined and testified as follows: 10 DIRECT EXAMINATION 11 BY MR. KELLAHIN: Mr. Smith, for the record, would you please 12 Q. state your name and occupation. 13 My name is Steven J. Smith, and I'm a 14 Α. 15 senior landman with Mitchell Energy Corporation. 16 Q. Mr. Smith, on prior occasions have you testified before the Division as a petroleum landman? 17 18 No, I have not. Α. 19 Summarize for us your educational 0. 20 background and your employment experience. I have a Bachelor of Business 21 Α.
 - A. I have a Bachelor of Business

 Administration Degree from the University of Oklahoma

 with a major in petroleum land management.
 - Q. In what year, sir?

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A. May of 1980. I worked as an independent

- 1 landman in the western part of the United States for
- 2 | five years after that date. I went to work for
- 3 Mitchell Energy Corporation about five years ago, and
- 4 I have worked the Permian Basin area for Mitchell
- 5 Energy Corporation since then.
- 6 Q. Has your work included portions of Lea
- 7 County, New Mexico, that you have described as your
- 8 | Milky Way prospect?
- 9 A. Absolutely.
- 10 Q. Have you been dealing with the various
- 11 interest owners in order to obtain voluntary agreement
- 12 for the drilling of the well that's on the docket
- 13 today in Case 9966?
- 14 A. Yes, I have.
- 15 MR. KELLAHIN: We tender Mr. Smith as an
- 16 expert petroleum landman.
- 17 HEARING EXAMINER: Mr. Smith is so
- 18 qualified.
- 19 Q. (BY MR. KELLAHIN) If you'll turn, sir, to
- 20 what is marked as Exhibit No. 1; I believe the exhibit
- 21 numbers are on the back of that display. Orient us as
- 22 to what your company is proposing to do, Mr. Smith.
- A. Basically, we proposed to the participants
- 24 the formation of working interest unit in anticipation
- 25 of drilling 6700-foot Delaware test in the northeast

- southeast of Section 17, 18 south, 35 east, Lea
 County. The land plat shows the acreage which is the
- 3 subject of this case, and as indicated by the yellow
- 4 | hatching, which represents Mitchell's 50 percent
- 5 interest in that lease.
- Q. What is your understanding of the principal objective for the well?
- A. Again, I believe the principal objective is the Delaware. It's at a depth of approximately 6700 feet.
- 11 Q. And is that anticipated to be gas or oil 12 production?
- 13 A. Oil.

- Q. Are you familiar with and do you know what the potential spacing is for oil production at that depth?
- A. At that depth statewide, I believe is 40
 lacres, and currently we're not aware of any pools that
 would rule in this area.
- Q. If it is 40-acre oil spacing versus 160-21 acre shallow gas spacing for the southeast quarter, 22 will any of the parties or their percentages change?
 - A. No, they will not.
- Q. So regardless then of the spacing in the southeast quarter in the 40's up to 160's, we're

1 dealing with the same parties?

- A. That's correct.
- Q. As of today, would you identify for the Examiner what working interest owners have not yet committed their interest to the well?
- A. Currently, Texaco, Inc., is the only
 potential participant which has not committed, and
 they own 27.75 percent interest in the lease.
- 9 Q. At the time of the filing of the 10 application, were there any other parties?
- 11 A. There was another party, Rowan Petroleum,
- 12 | Inc., which has since committed. They own 22.25
- 13 percent.

- 14 Q. In dealing with both Rowan Petroleum and
- 15 Texaco, have you made both companies the same offers
- 16 for participation?
- 17 A. Absolutely.
- Q. Sent them the same AFE's and the same
- 19 proposed terms for drilling and producing the well?
- 20 A. That's correct.
- 21 Q. Let's turn to the specifics of what you
- 22 proposed. Starting with what is marked as Exhibit No.
- 23 2, which is an exhibit containing various
- 24 correspondence and documents numbered pages 1 through
- 25 13?

- 1 A. That's correct.
- 2 D. This represents what?
- A. All of the written correspondence with

 Rowan Petroleum, Inc. regarding our efforts to secure

 their participation in this effort.
 - Q. And you have advised us now that they are contractually committed on a voluntary basis to the well whether it's based on 40's or 160's?
 - A. That's correct.
- Q. Let's pass then to Exhibit No. 3 and deal with your involvement with Texaco.
- 12 A. Okay.

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- Q. Does this package of documents represent your written correspondence with that company?
- 15 A. That's correct.
- 16 Q. What was your first proposal to them in 17 writing for this particular well?
 - A. It was an offer or a request for their participation dated April 25th for formation of 160-acre working interest unit and for the drilling of a 6700-foot Delaware test to be located in the northeast southeast of Section 17.
 - We requested they either participate in the well based upon the AFE's that were enclosed. We also offered to purchase their interest outright, if they

so chose to do that. And we also made them an offer to farm out based upon Mitchell earning the proration unit and them retaining an override equal to the difference by which 25 percent exceeds lease burdens, with us also earning 50 percent of their acreage outside of the proration unit, limited to 100 feet below total depth drilled.

- Q. Did you receive any response from Texaco?
- A. We did receive a letter stating that they had received our proposal and that they were reviewing, and that letter is dated --
- 12 Q. May 3rd?

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- 13 A. May 3rd.
- Q. That's found on page 4?
- 15 A. I have it on page 9 on mine.
- Q. Yes, I'm sorry. I have it on page -- maybe
 mine is misnumbered. It's the last page of the
 exhibit is the Texaco response?
 - A. That's correct.
 - Q. Have you received any other written response from Texaco with regards to the proposal for the initial southeast quarter working interest unit or, subsequently, for the 40-acre Delaware oil space?
 - A. No written responses.
 - Q. What has been the general content of any

1 oral communications with Texaco?

- A. I've talked with Mr. Sleeper, who is the landman handling this for Texaco, numerous times.
- 4 He's basically informed me that Texaco, because of
- 5 | their method of doing business, can't move fast enough
- 6 to make a decision in a timely manner; that he
- 7 personally saw nothing wrong with the AFE or the Joint
- 8 Operating Agreement; however, they simply could not
- 9 logistically get to a decision in time.
- Q. In your initial letter, you also advised them that the spacing unit for the Delaware would be
- 13 A. That's correct.
- Q. Texaco, to the best of your knowledge, has not objected to you as the operator, meaning Mitchell?

the northeast of the southeast, that 40-acre tract?

- 16 A. That's correct.
- 17 Q. No objection to the AFE?
- 18 A. None.

- 19 Q. It's just that they haven't been able to 20 get around to it?
- 21 A. That's my understanding.
- Q. In your opinion as a landman, Mr. Smith,
- 23 will further efforts on your behalf to obtain a
- 24 voluntary agreement on Texaco's part likely be
- 25 | successful?

- There's a good chance of it. However, 1 Α. they've not -- from my conversations with Mr. Sleeper, 2 indications are they've looked favorably on the 3 project. However, they have not given any indication as to whether or not they intend to participate. 5 At this point are you in need of the forced 7 pooling order? The lease in question expires August 1 of Α. 8 this year, and without it we're in danger of losing 1.0 the lease. So you've waited as long as you can for 11 0. Texaco, and you must have the assistance of a pooling 12 order or you run the risk of losing your lease? 13 14 Α. That's correct. 15 MR. KELLAHIN: That concludes my examination of Mr. Smith. We would move the 16 introduction of his Exhibits 1, 2 and 3. 17 18 HEARING EXAMINER: Exhibits 1, 2 and 3 will
- 21 BY HEARING EXAMINER:

20

Q. Mr. Smith, I know you're not an expert on

CROSS-EXAMINATION

23 Texaco, but you do live in Midland; right?

be admitted into evidence at this time.

- A. That's correct.
- Q. This is the first one I've seen like this;

so bear with me. Texaco in Denver?

- A. They have moved their exploration land group to Denver.
- Q. Did Mr. Sleeper say when or how long have you dealt with Texaco in Denver as opposed to your dealings with Texaco in Midland?
 - A. Well, we have started off dealing with Texaco in Denver because we knew when we began our negotiations that that is where they were. So they've been there ever since we started this project, and Mr. Sleeper has, again, acknowledged the receipt of the papers sent them and has indicated they're moving as fast as they can to make a decision.
 - Q. In talking with Mr. Sleeper, is it your observation that this move has probably halted some of their decision-making process?
 - A. There is the likelihood -- the move was somewhat immediately before our efforts to put this project together, and it is a chance that their move has entered into the problem in making a decision.
 - Q. This is more out of curiosity, and I'm trying to realize -- in the industry as of this point, your dealings with Texaco with Texas, do you still deal with them in Midland or do you deal with them in Denver?

- 1 A. No. All of their Permian Basin exploration 2 group is in Denver.
 - Q. The Texas company has moved out of Texas?
 Okay.
 - A. They may be back. You never know.
 - Q. I was looking at your AFE's on both of your Exhibits 2 and 3. Maybe I'm anticipating. Should I wait and ask particulars about the AFE of your next witness, Mr. Kellahin?
- MR. KELLAHIN: I don't know if Mr. Smith

 11 has had much involvement in it, but let's ask him and

 12 see. If not, we do have an engineer that can respond

 13 if you do have some specifics.
- Q. (BY HEARING EXAMINER) I'm a little

 15 confused. You have, Type of Project, check 1 -- they

 16 seem to be for the same AFE but two different
- 17 figures. What am I looking at here?
- 18 A. One is dry hole and one is completion cost.
- 19 Q. It appears you have this on a computer 20 program?
- 21 A. We do.

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- HEARING EXAMINER: I have no other
 questions of Mr. Smith. Are there any other questions
 of this witness?
- MR. KELLAHIN: No, sir.

- 1 HEARING EXAMINER: He may be excused. 2 MR. KELLAHIN: I'd like to call Mr. 3 Gawloski at this time. TED GAWLOSKI, 5 the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows: 6 7 DIRECT EXAMINATION BY MR. KELLAHIN: 9 Mr. Gawloski, would you please state your Q. 10 name and occupation? 11 Α. My name is Ted Gawloski, and I'm a staff 12 geologist for Mitchell Energy. 13 Mr. Gawloski, on prior occasions have you 14 testified as a petroleum geologist before the 15 Division? 16 Α. Yes, I have. 17 Have you made a geologic study of this 0. particular prospect? 18 19 Α. Yes, I have. 20 Have you reached geologic opinions with 21 regards to your proposed risk factor penalty to be 22 applied against Texaco's interest in the event they
- 25 A. Yes, I have.

24

order?

ultimately elect not to participate pursuant to the

- MR. KELLAHIN: We tender Mr. Gawloski as an expert petroleum geologist.
- HEARING EXAMINER: Mr. Gawloski is so qualified.
- Q. (BY MR. KELLAHIN) I direct your attention to Exhibit No. 4. Identify that for us, please.
- A. Exhibit No. 4 is essentially a production plat of the area around our Milky Way Prospect, which is in the southeast quarter of Section 17, essentially dealing with the production that is shallower,
- 11 including the Delaware and shallower horizons.
- I would make a notation that there is some
- 13 shallower production in Section 5 and 6 associated
- 14 with the Vacuum Grayburg/San Andres, but that is
- 15 really not close enough for me to put on this
- 16 particular map.
- 17 Q. Let's look at the southeast quarter of 17.
- 18 There is a red dot. That's for the proposed well
- 19 location?
- 20 A. That's the approximate proposed well
- 21 location.
- Q. That's a standard location for a 40-acre
- 23 oil well?
- A. Yes, it is.
- 25 Q. The crosshatched yellow shading is what?

- A. That's Mitchell's leasehold in the area.
- Q. When we see that crosshatched shading in other sections on the display, that's what that represents?
 - A. That's correct.

- Q. What is the significance of the well symbols that are circled in red?
- A. The well symbols in red are the Queen production in the area. Essentially, the Queen production lies to the south and southwest of the proposed location. And I've made some notations on some of the wells surrounding the proposed location, and most of them did not have any tests whatsoever within the Queen. Some to the south to the north did, but they did not encounter any commercial quantities of hydrocarbons and did not warrant a production test.
 - Q. In. Analyzing the geology and looking at other than potential Delaware or potential Queen, is there any other potential production that might be available for this well at this location?
 - A. No. The Queen and the Delaware are essentially the only shallow producers within the area.
 - Q. Anything else would be more speculative?
- 25 A. Correct.

- 0. Define for us what you assess to be the 2 risk and the potential for Queen production.
- The Queen production in here, and we'll get 3 Α. into that with a little display later on, but 4 essentially it's lying to the south, and there really 5 hasn't been any significant test or production until 6 you get way up to the Vacuum Grayburg/San Andres Field 7 where there's some associated Queen production, but 8 9 other than that, all the production lies to the south 10 southeast.
- In your opinion, does the absence of the 11 immediate Queen production in the area justify in your 12 opinion the maximum penalty for the Queen production 13 of 200 percent? 14
- 15 Yes, it did. Α.

- 16 Primary, then, objective is the potential Q. 17 for Delaware oil?
- That's correct. 18 Α.
- Summarize for us what is your opinion about 19 0. 20 the percentage risk involved under the pooling orders 21 for the Delaware oil production.
- 22 Α. As you note on this map here, there are 23 only three Delaware producers in the area. 24 them is a little hard to see in Section 11. That well 25 has only made somewhere around 100 barrels of oil, and

1 | it has already been temporarily abandoned.

There's a well in Section 14 that has made approximately 9,000 barrels, and it's also a very poor producer.

The only other Delaware well is the well in Section 16, which is the Maralo well, which is the well that Mitchell plans to offset. This well is in a different zone than the other two Delaware producers farther to the east, and it essentially is the only Delaware producer in this three, four-mile area around our lease. You can see by the notations, really nobody has DST'd or tested the Delaware in hardly any of the wells out here. It has essentially not produced until the Maralo well was recompleted in February of this year.

- Q. Have you concluded that it justifies the maximum 200 percent penalty?
- 18 A. Yes.

- Q. Tell us a little bit about the production rates on the Maralo well in Section 16.
 - A. The Maralo well was potentialed in February for an initial flow rate of 69 barrels of oil per day, and that is a typo in there. It should be 64 barrels of water after that. And the well flowed for several weeks, and then essentially the oil rate had dropped

- 1 off to where the company then put it on pump. When
- 2 | the well was put on pump, the rates increased upwards
- 3 of 200 barrels a day. And our last report, which is
- 4 probably early May, was that the well was currently
- 5 making 85 to 90 barrels of oil a day.
- 6 Q. So the production is declining during the
- 7 period of pumping the well?
- 8 A. That's correct.
- 9 Q. What was the original prospect by which you
- 10 acquired the southeast quarter of 17? What were you
- 11 looking for?
- 12 A. We acquired this lease essentially five
- 13 years ago, and it was essentially Devonian prospect in
- 14 here. Subsequent to our acquiring the lease, Maralo
- 15 just soon after that drilled their well to the
- 16 Devonian and made a Delaware producer; however, it was
- 17 a relatively poor producer, and it was making quite a
- 18 bit of water. We then subsequently shot several lines
- 19 of seismic over the prospect and determined that we
- 20 didn't have the structure sufficient enough to drill
- 21 the Devonian test.
- 22 So essentially our deep prospect was
- 23 essentially in jeopardy, and we did not pursue it
- 24 further. We didn't pursue the prospect any further
- 25 until Maralo recompleted their well in February of

1 this year. We then pursued it looking for the
2 shallower Delaware horizon.

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- Q. The Maralo well then did create some opportunity for you to develop the lease and look for the Delaware oil?
 - A. That's correct. They did have a drill stem test in the well, but it was still a lot of question marks, and it wasn't enough yet for us to go and pursue and drill a well.
- 10 Q. Let's turn to Exhibit No. 5 and have you ll identify and describe that exhibit.
- A. Exhibit No. 5 is essentially a type log of the Maralo well, a porosity log and essentially a 14 resistivity log. It shows the recompleted pay zone in the Delaware down in there in yellow, and I've colored the porosity greater than 10 percent in red.
 - You can see that one of the things I wanted to point out about this is that this particular Delaware pay is very unique, and I've looked at several Delaware fields in Lea County, and it's unique in that it's much cleaner in the gamma ray than most of them. The porosity is extremely high for the Delaware that's in the northern part of Lea County. It approaches 28 percent.

25 And another factor in there is that it has

- 1 very low resistivities. It gets down to less than 1
- 2 ohm of resistivity, which also puts some of our data
- 3 as to whether or not the well would have produce oil
- 4 until they actually completed it.
- 5 These factors will come into the risk
- 6 factor as far as being upstructure and having
- 7 sufficient enough porosity to be able to produce the
- 8 well.
- 9 Did you attempt to correlate the Delaware
- 10 'sand that's being produced in the Maralo to see
- ll whether or not you could use that available data and
- 12 extend the sand into your spacing unit?
- 13 A. Yes, sir, I did, and it's a very difficult
- 14 correlation in the area.
- 15 Q. Let's turn to Exhibit 6 and see your
- 16 correlation. When we look at the cross-section, this
- 17 is the Maralo well we've been discussing is where on
- 18 the cross-section?
- 19 A. It's the second well from the right.
- 20 . Have you found that -- you've called it
- 21 Brushy Canyon Pay?
- 22 A. Right. And using -- it's a correlation,
- 23 it's the lower part of the Delaware. There really
- 24 isn't any good correlations in here, and most of us
- 25 (call it the Delaware Sand Section, but I put it in the

- 1 lower part of the Delaware, which would be in the 2 Brushy Canyon.
- Q. It appears you've correlated the Maralo/
 Brushy Canyon Pay with a well to the south and east?
- 5 A. That's correct. It is a little bit of a
- 6 difficult correlation in here. One of the things that
- 7 the cross-section illustrates is that there's numerous
- 8 interfingering here with a lot of carbonate lenses
- 9 through the entire Delaware section, which could
- 10 immediately cut off any particular sand in the area.
- ll Within the Maralo well, there's three
- 12 different carbonate lenses within the Delaware Sand
- 13 Section itself. And these particular zones come and
- 14 go really at random, and it is very difficult to
- 15 correlate in the area.
- 16 Q. Let's look at the wells on the
- 17 cross-section in which any of the Delaware has been
- 18 | perforated.
- 19 A. That is just the Maralo well is the only
- 20 | well that's been tested.
- 21 Q. If anyone else took the logs and made the
- 22 correlation and decided where to perforate,
- 23 apparently, they decided not perforate these wells
- 24 with the exception of the Maralo well?
- 25 A. That's correct.

- When we go from the Maralo well to the next 1 2 well to the west, that's the next available wellbore for the correlation? 3 That's correct. Α. 5 0. You don't show it. The sand does not appear to be present 6 there at all. 7 It appears then that the sand is going to Q. 8 pinch out, disappear, or otherwise cease to exist 10 somewhere between the control to the east and the control to the west? 11 12 That's correct. Α. And you don't know where? 13 Q. 14 That's correct. Α. 15 That represents part of the risk, doesn't 0.
- 17 A. Um-hm.

it?

- 18 Q. Have you attempted to, even with the
 19 sketchy data available for the correlation, have you
 20 attempted to create an isopach map of that particular
 21 Brushy Canyon Sand?
- 22 A. Yes, I have.
- Q. Turn to Exhibit 7. Is that your 24 correlation of the -- is that your isopach map?
- 25 A. That's correct.

- Q. Describe for us what assumptions you were making, what data you used in filing, what conclusions you've reached.
- I used all the available log information within essentially a mile or two radius of the lease, 5 and I took an arbitrary porosity cutoff of 6 approximately 10 to 12 percent, and that is a very --7 8 it's an optimistic cutoff for production because I didn't really know what the cutoff was because there was on really only one well control, and I essentially 10 used that so I could get some kind of orientation to 11 12 the sand. If I used too strict a porosity cutoff, it could have eliminated the rest of the well control. 13 So I use add rather liberal porosity cutoff so I could 14 15 get an orientation for the sand.
 - The one thing of note here is, I have a red line drawn across the thick part of that isopach, and the wells to the south and west of that line essentially are either not deep enough or do not have the sand present at all; so as we move to the west and southwest of that Maralo well, the risk increases rather greatly.

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Q. There are some other things on the display. There's some dots, open circles, running in straight lines. Those are your shot points for

- l seismic lines?
- 2 A. That's correct.
- Q. Seismic is not a useful geologic device to help you with the Delaware, is it?
- 5 A. Not when your isopaching a very small sand 6 like this. It's beyond its resolution.
- 7 Q. The hope then is that the sand for the 8 Maralo well is extensive enough to move over into the 9 southeast quarter of 17, but you have absence of any 10 data to the south and west to tell you how far it may 11 extend?
- 12 A. That's correct.
- Q. You lack sufficient production information from the Maralo well to have the engineering staff
- 15 confirm for you any volumetrics based upon your
- 16 isopach?
- 17 A. That's correct.
- Q. So we don't know how big the reservoir is
- 19 necessarily from an engineering aspect of the oil
- 20 being produced by the Maralo well?
- 21 A. That's correct.
- Q. Summarize for us then, Mr. Gawloski, the
- 23 principal geologic points that support your conclusion
- 24 about the maximum risk involved.
- 25 A. From the isopach map?

1	Q. From any of your data.
2	A. All the data supports that, as you proceed
3	to the west and southwest from the Maralo well, the
4	risk increases both from an isopach thickness and a
5	structural relationship, both for the Delaware and for
6	any up-hole potential horizons, being that Queen
7	formation.
8	MR. KELLAHIN: That concludes my
9	examination of Mr. Gawloski.
10	We move the introduction of his exhibits.
11	There are some additional exhibits, and perhaps we
12	need to touch on them, Mr. Examiner. I don't intend
13	to go through them in detail. We've confined our
14	principal presentation to the Delaware. He has
15	provided you a structure map on the top of the Bone
16	Springs to complete the analysis.
17	Exhibit 9 is his Queen map. Obviously,

- Exhibit 9 is his Queen map. Obviously,
- 18 that's still a high risk.
- Exhibit 10 is the cross-section on the Queen information that supports his ultimate
- 21 conclusions about the Queen risk.
- 22 At this time we would move the introduction 23 of his engineering study, which is found from Exhibits 24 4 through Exhibit No. 10.
- 25 HEARING EXAMINER: Exhibits 4 through 10

1	will be admitted into evidence.
2	CROSS-EXAMINATION
3	BY HEARING EXAMINER:
4	Q. Mr. Gawloski, in looking at the spot that
5	you chose to put your well, do you know what the
6	location of that is?
7	A. It's a 1,980 from the south and 330 from
8	the east.
9	Q. That's an unorthodox gas well location, is
10	it not?
11	A. Yes, it would be.
12	Q. Have you made application for that
13	unorthodox location?
14	A. No, we have not.
15	Q. What is the reason for the location? Is it
16	due to geology or topography?
17	A. It's due primarily to the geology. We did
18	not want to get too far to the west of the Maralo well
19	because of our general lack of information and
20	negative information in that direction. And also it
21	would be to be in our best structural position, we
22	didn't look at that exhibit, but that's also one of
23	the reasons we want to be in that location as well.
24	(Thereupon, a discussion was held
25	off the record.)

MR. KELLAHIN: Mr. Examiner, you've raised
a question about the potential for an unorthodox
location in the Queen. We think the Queen is highly
speculative. It is productive on Exhibit No. 4 but
certainly not in the immediate area.

The primary prospect is Delaware oil, which would be below the Queen. The Delaware oil is on statewide 40-acre spacing. The well location would be a standard well location. We have sought to include the southeast quarter for Queen gas spacing. In the unlikely event the Delaware is nonproductive, and the Queen is, then we will have pooled Texaco on that spacing unit. We recognize that we will have to come back before producing the Queen gas and obtain further orders from the Division approving that as an unorthodox location. However, the primary objective would be the 40-acre oil.

The documentation we've introduced addresses both the Delaware, and the exhibits that Mr. Gawloski did not describe in detail are those exhibits that looked at the Queen where you can conclude for yourself that it is very speculative.

HEARING EXAMINER: Thank you, Mr.

24 Kellahin. I have no further questions of this

25 | witness.

1	One last thing, what were the overhead
2	charges.
3	MR. SMITH: \$470 for producing and \$4,700
4	for drilling.
5	MR. KELLAHIN: They're out of the Ernst &
6	Young report.
7	HEARING EXAMINER: I missed writing them
8	down.
9	MR. KELLAHIN: I think I missed asking
10	him. We're using the Ernst & Young.
11	HEARING EXAMINER: I have no further
12	questions of either of the witnesses. Is there
13	anything further in Case No. 9966?
14	MR. KELLAHIN: No, sir.
15	HEARING EXAMINER: In not, this case will
16	be taken under advisement, and let's take a lunch
17	recess until 1:30.
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CERTIFICATE OF REPORTER 1 2 3 STATE OF NEW MEXICO SS. COUNTY OF SANTA FE 5 I, Deborah O'Bine, Certified Shorthand 6 Reporter and Notary Public, HEREBY CERTIFY that the 7 8 foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I 10 caused my notes to be transcribed under my personal supervision; and that the foregoing is a true and 11 12 accurate record of the proceedings. I FURTHER CERTIFY that I am not a relative 13 or employee of any of the parties or attorneys 14 15 involved in this matter and that I have no personal interest in the final disposition of this matter. WITNESS MY HAND AND SEAL July 15, 1989. 17 18 DEBORAH O'BINE 19 CSR No. 127 20 My commission expires: August 10, 1990 21 22 I do harney certify that the foregoing is a complete record of the proceedings in 23 the Examiner hearing of Case No. 9966 heard by me on 13 24 25 Examiner Oil Conservation Division

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