

Colorado
New Mexico

Barker Dome

Durango

Aztec

Farmington

Exploration Well

Mesa Verde
Production

San Juan Basin

Pennsylvanian Wells

120 mi.

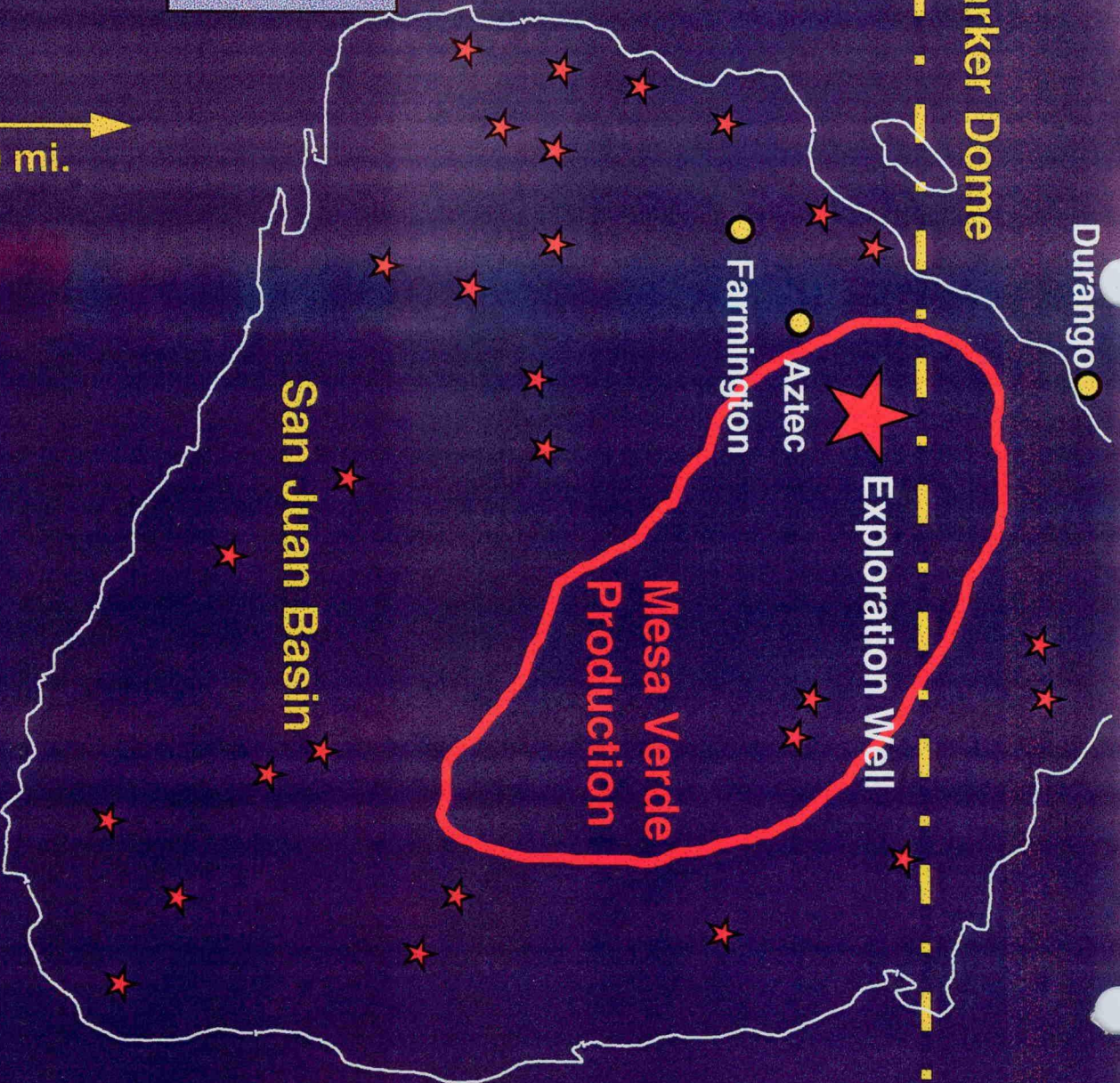
75 mi.

Utah

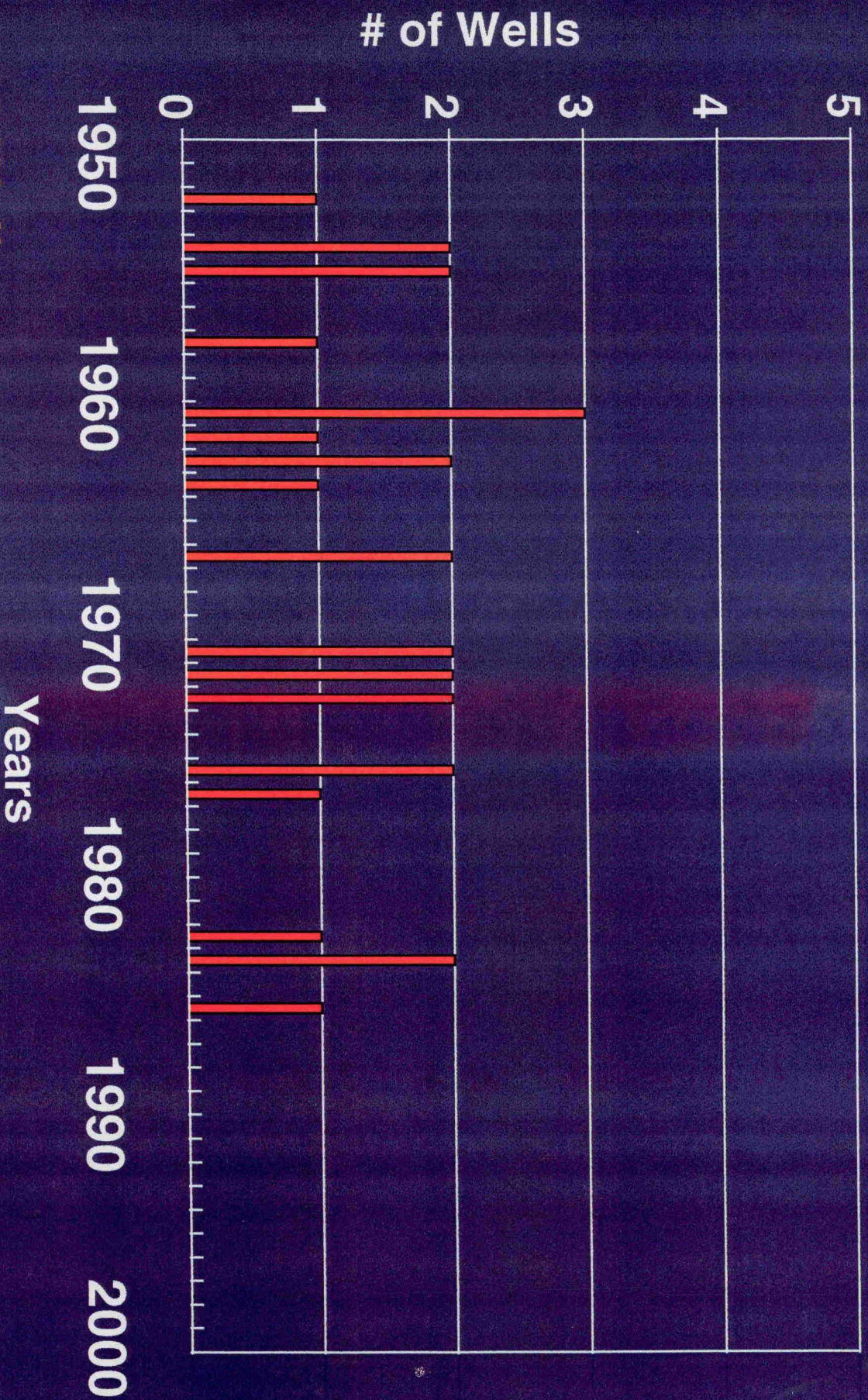
Colorado

Arizona

New
Mexico



Pennsylvanian Exploration Well Histogram San Juan Basin



Well Profile

Challenges

Wet - Ojo Alamo & Fruitland

Lost Circulation

Depleted - Mesa Verde

2.0 ppg

Wet - Morrison

Lost Circulation

20" @ 500'

13-3/8" @ 3135'

Air Drilling

9-5/8" @ 7425'

26" Hole

17-1/2" Hole

12-1/4" Hole

Contingency

8-1/2" Hole

7" @ 12,000'

5" @ 14,225'

6-1/8" Hole

Pennsylvanian

H₂S - 1%, CO₂ - 1%

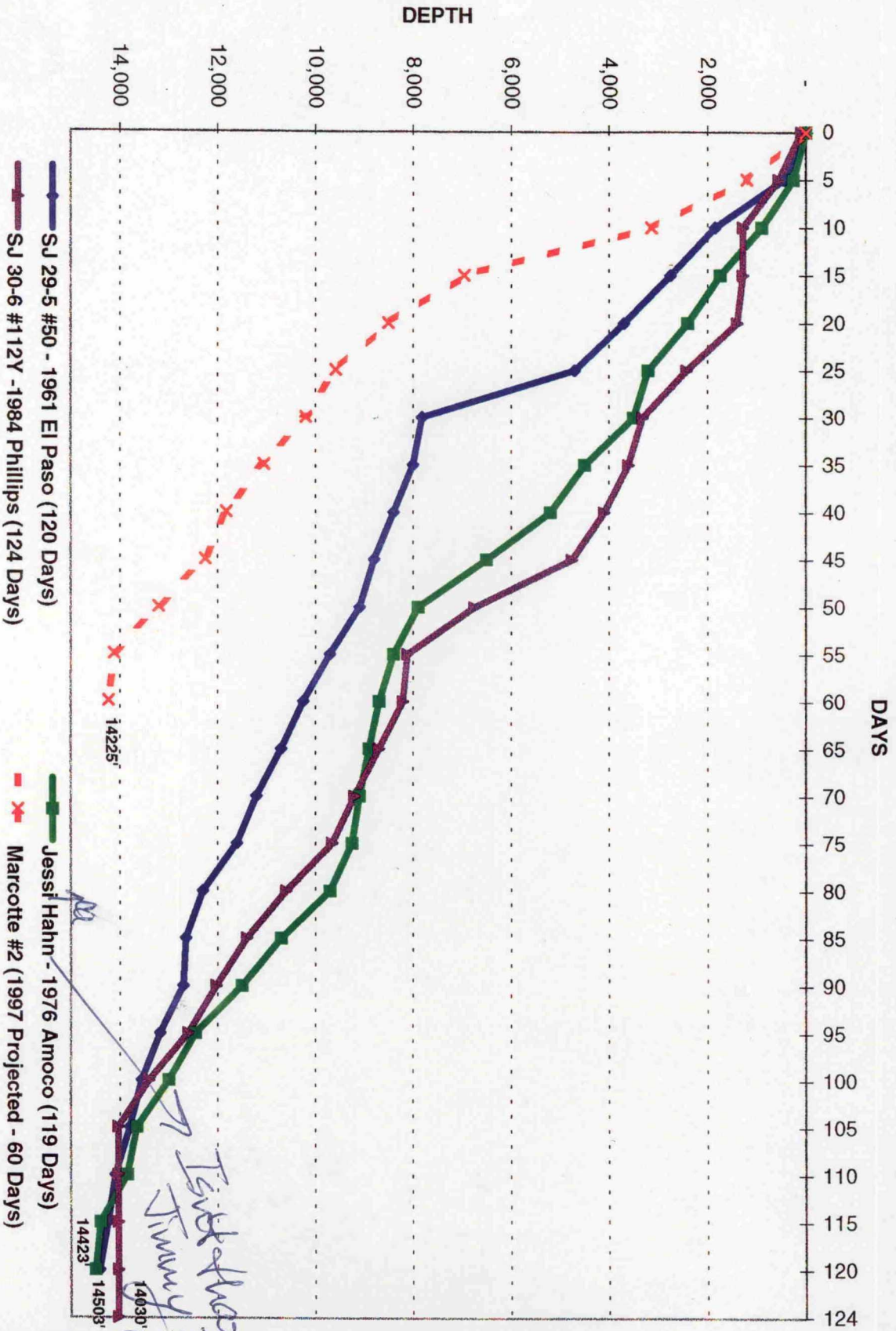
BHT @ 350 Deg. F

BHP @ 6700 psi

Stim: 10,000 psi BHTP

5-1/2" @ 14,225'

MARCOTTE #2 - DAYS VS DEPTH COMPARISON



Logistical Challenges

- Regulatory Requirements
- Remote Location
- Deep Well Experience
- Drilling Equipment
- Materials
- Close Proximity to Residences

Farmington Region
Post Office Box 4289
Farmington, New Mexico, 87499
(505) 326-9700

AFE No.: 3544 Property Number: 012580204 Date: 2/20/97
Lease/Well Name: Marcotte #2 DP Number: 61923A
Field Prospect: San Juan Basin Penn Operator: Burlington Resources Region: Farmington
Location: Sec. 8, T31N, R10W County: San Juan State: NM
AFE Type: 1 - New Drill Original: X Supplement: Addendum: API Well Type:
Objective Formation: Pennsylvanian Authorized Total Depth (Feet): 14,000'
Project Description: Pennsylvanian test in San Juan Basin - Exploratory well - Arch Rock Prospect

Prepared By: C. E. Lane

Estimated Completion Date: 2nd Qtr 1997

	Drilling		Workover/ Completion	Construction Facility	Total
Days:	Dry Hole	Suspended			
	58	2	12	0	72
This AFE:	\$1,713,800	\$77,100	\$407,073	\$119,000	\$2,316,973
Prior AFE's:	0				\$0
TOTAL COSTS:	\$1,713,800	\$77,100	\$407,073	\$119,000	\$2,316,973

	Working Interest		
<u>Company:</u>	<u>Percent</u>	<u>Dry Hole \$</u>	<u>Completed \$</u>
Burlington Resources:	9.310450%	\$ 109,286	\$ 215,721
Trust:	0.00%	0	\$0
Others :	90.689550%	\$1,064,514	\$2,101,252
AFE TOTAL:	100.00%	\$1,713,800	\$2,316,973

Approved: BP Kane Title: Reg. Dir II Date: 4/10/97
Approved: Robert J. Kennedy Title: Land Manager Date: 4-14-97
Approved: Sunny W. Hill Title: Manager Date: 4/1/97
Approved: Mark L. Hill Title: Manager Date: 4/1/97

Company Name: _____ Date: _____

Authorized By: _____ Title: _____

Burlington Resources
Cost Estimate

Well Name:	Marcotte #2			Prepared By:	Kurt A. Shipley
Location:	1540' FSL, 935' FEL Section 8, T-31-N, R-10-W			Date:	2/26/97
AFE Type:	(02) Exploration			Approved by:	
Formation:	Pennsylvanian			Date:	
Proposed TD:	14,225'	Intermediate TD:	3100', 7425'	Area Team:	Penn
Comments:	OH Logs 7425' - 12,000': AIT-SP-GR, Micro-SP-GR, Dens-Neut-Cal-GR-SP, Dipole Sonic			Cost/ft:	\$125.90/ft
	OH Logs 12,000' - 14,225': AIT-SP-GR, Micro-SP-GR, Dens-Neut-Cal-GR-SP, Dipole Sonic, Sidewall Cores				

Intangible Costs

Account Number		Estimated Days:	Dry Hole Cost 58	Suspended Cost 2	Total Estimated Cost 60
248					
03	Location Cost	4.9 Acre location w/ 30" Conductor Pipe.	35,000	0	35,000
05	Move-in, Move-out	Move in and move out.	200,000	0	200,000
07	Rig Cost	@ \$7000/day.	430,000	15,000	445,000
08	Safety Equipment	H2S Monitor 10,500' to TD @ \$600/day.	19,000	1,300	20,300
10	Drilling Fluid	LSND, Solids Control, Air Drilling.	137,500	0	137,500
16	Fresh/Salt Water, Fluids		50,000	0	50,000
17	Bits		141,900	0	141,900
18	Cementing	HES Cost Estimate.	98,000	17,000	115,000
22	Coring and Analysis	Sidewall Core Analysis.	20,000	0	20,000
23	Fuel	Air Package Fuel.	22,500	3,000	25,500
25	Rentals	BOP: 10 days @ \$500/day, 3-1/2" D.P. + Misc.	18,500	0	18,500
26	Fishing		0	0	0
28	Other Rentals		5,000	0	5,000
29	Transportation		20,000	0	20,000
32	Directional Services		0	0	0
33	Inspection		7,200	0	7,200
34	Logging Services	OH Logs, Sidewall Cores, Mud Log.	110,000	0	110,000
36	Production Testing		0	0	0
37	Swabbing, Snubbing, Coiled Tubing		0	0	0
39	Stimulation		0	0	0
43	Consultants		0	0	0
44	Technical Contract Services		0	0	0
45	Roustabout Labor	Casing Crews, Welders.	15,000	2,000	17,000
46	Miscellaneous		5,000	0	5,000
49	Packer Rental		0	0	0
53	Environmental Cost		5,000	0	5,000
54	Disposal Cost	Trash Baskets, Toilets.	2,000	0	2,000
60	District Tools	Company Owned Equipment.	5,000	0	5,000
72	Overhead Rig Days	@ \$141/day.	8,500	300	8,800
	Total Intangible Cost		\$1,355,100	\$38,600	\$1,393,700

Tangible Costs

80	Casing	80'	30" Conductor	3,200	315,700	27,500	343,200
		500'	20"	23,000			
		3100'	13-3/8"	86,000			
		7425'	9-5/8"	153,500			
		4775'	7"	50,000			
		2625'	5"	27,500			
81	Tubing				0	0	0
84	Casing & Tubing Equipment				13,000	11,000	24,000
86	Wellhead Equipment		20"X13-3/8"X9-5/8" (10,000 psi)		30,000	0	30,000
	Total Tangible Cost				\$358,700	\$38,500	\$397,200
	Total Cost				\$1,713,800	\$77,100	\$1,790,900

All Costs include tax where applicable.

**Meridian Oil Inc.
Facilities Estimate**

Well Name: Marcotte #2
Location: Sec 8, T31N R10W
AFE Type: 01-Exploration
Formation: Pennsylvanian

Prepared By: C.E. Lane *CEL*
Date: 3/17/97
Approved By: _____
Date: _____

Tangible Costs

Account Number	Estimated Days:	Total Estimated Cost
247		
02	Labor-Contract, Roustabout, Consultants	15,000
03	Company Vehicles	0
08	Location, Roads & Canals	0
12	Overhead	0
17	Damages, Property Losses	0
20	Equip. Coating and Insulation	0
26	SWD Filtering	0
27	Separators	0
28	Gas Sweetening	0
29	Pumping Units	0
31	Prime Mover	0
32	Tanks	9,500
33	Metering Equipment	15,000
34	Flow Line	0
35	Compressors	0
36	Building	0
39	Flowlines, Piping, Valves & Fittings	11,000
43	Safety	0
44	Technical Contract Svc.	0
47	Rental Compressors & Maintenance	0
48	Rental Equipment	0
49	Cathodic Protection	12,000
50	Right Of Way	2,500
51	Minor Pipelines	0
53	Surface Pumps	0
54	Electrical Accessories	0
55	Miscellaneous-Facility Expense	0
57	Pulling Unit Costs	0
60	Oper. Owned Equip/Facilities	0
62	Env. Compliance-Assessment	0
63	Env. Compliance (Remediation)	0
68	Direct Labor	0
69	Benefits	0
70	Payroll Taxes and Insurance	0
72	Overhead (Contingency 5%)	0
73	Freight/Transportation	0
81	Tubing	0
82	Rods	0
83	Downhole Pumps	0
84	Alternative Artificial Lift Equip.	0
86	Convent Artificial Lift Wellhead Equip.	0
88	Communication Systems	0
95	Employee Meals	0
96	Gas Dehydrator	54,000
Total Facility Cost		119,000

Meridian Oil Inc.
Completion Estimate

Well Name: Marcotte #2
Location: 31N-10W-Sec. 8
AFE Type: New Drill - 01
Formation: Pennsylvanian

Prepared By: C. E. Lane
Date: 3/17/97
Approved By: _____
Date: _____

C. E. Lane

Intangible Costs

Account Number	Estimated Days: 15	Total Estimated Cost
249		
02	Location, Roads or Canals	\$100
03	Construction and Maintenance	\$5,000
04	Surface Restoration	\$9,000
05	Move-in, Move-out	\$6,250
06	Fees of Contractor - Footage	\$0
07	Fees of Contractor - Daywork	\$59,950
08	Fire and Safety Equip.	\$8,500
09	Drilling Fluid System - Liquids	
10	Gas and Air Drilling	\$25,000
11		
12	Specialty Fluids and Chemicals	\$500
14	Salt/Brine Water	\$2,500
15	Onsite Disposal Svc.	
16	Fresh Water	\$15,000
17	Bits	\$750
18	Primary Cement & Svc's	\$0
19	Remedial Cementing	\$2,000
23	Fuel / Electricity	\$2,250
24	BOP & Wellhead Rentals(Surface)	\$6,000
25	Drill Work String Rentals	\$1,500
26	Fishing Tool Rentals	\$0
27	Tank Rentals	\$4,000
28	Other Rental	\$3,500
29	Transportation	\$2,250
30	Offsite Disposal Service	
33	Tubular Inspection	\$1,000
34	Cased Hole Services	\$30,000
36	Production Testing	
37	Swabbing & Coiled Tubing	
38	Stimulation	\$10,000
39	Fracturing	\$50,000
40	Casing Crews and Laydown	
41	Gravel Pack/Sand Control	
42	BOP Testing	
43	Consultants	\$10,650
44	Technical Contract Svc.	
45	Roustabout Labor	\$3,000
46	Miscellaneous	\$450
48	Communication Systems	\$500
49	Packer Rental	\$2,200
50	Pumping Charges	
60	Oper. Owned Equip/Facilities	
62	Env. Compliance-Assessment	
63	Env. Compliance (Remediation)	
65	Company Vehicles	
68	Direct Labor	
69	Benefits	
70	Payroll Taxes and Insurance	
72	Company Supervisor	
74	Employee Expense	
79	Employee Meals	
	Total Intangibles	\$261,850
	Tangible Costs	
80	Casing	\$0
81	Tubing and Tiebacks	\$72,225
82	Packers and Bridge Plugs	\$25,000
84	Casing/Liner Equipment	
85	Tubing Equipment	\$3,000
86	Wellhead Equipment & Tree Tbg spool, flange, and tree	\$45,000
	Total Tangibles	\$145,225

Total Completion Cost \$407,073