

**AVALON MORROW FIELD  
WELL PROPOSAL  
SEC. 15, T21S, R26E  
EDDY CO., NEW MEXICO**

**COST COMPARISON**

<b>DEVON</b>		<b>MEWBOURNE</b>
\$ 25,000	Site Preparation	\$ 16,500
\$ 304,000	Rig Cost	\$ 298,000
\$ 34,400	Materials and Supplies	\$ 29,500
\$ 8,750	General Services	\$ 8,000
\$ 99,900	Specialized Services	\$ 78,500
\$ 11,000	Power, Fuel, and Water	\$ 17,500
\$ 13,500	Completion and Cleanup	\$ 6,000
\$ 22,800	Supervision	\$ 14,000
\$ 20,150	Overhead	\$ 11,000
\$ 181,500	Well Equipment	\$ 188,300
\$ 0	Contingencies and Taxes	\$ 22,700
\$ 721,000	Total	\$ 690,000
8	Completion Days	4

**AUTHORIZATION FOR EXPENDITURE  
DRILLING/COMPLETION COST ESTIMATE**

DRILLING  \_\_\_\_\_  
COMPLETION  \_\_\_\_\_

FE No.: \_\_\_\_\_  
Well Name - Well #: Carlsbad 15 "J" Fed. Comm #1  
Legal Description: Sec. 15, T21S, R26E

County or Parish, State: Eddy County, New Mexico  
Field: Avalon (Morrow)  
Prepared By: W.M. Frank

AUTHORITY REQUESTED FOR:

Account Number	Tangible Costs Description	Dry Hole Costs	Completion Costs	Total Costs
<b>WELL EQUIPMENT</b>				
895	TAXES			0
901	SURFACE CASING	5,500		5,500
902	INTERMEDIATE CASING	25,000		25,000
903	PRODUCTION CASING		55,000	55,000
911	LINER			0
915	TUBING		32,000	32,000
921	SUCKER RODS			0
925	SUBSURFACE EQUIPMENT		7,500	7,500
931	WELLHEAD VALVES & EQUIPMENT		18,500	18,500
935	ARTIFICIAL LIFT EQUIPMENT			0
941	TANKS		11,000	11,000
945	TREATING VESSELS		27,000	27,000
951	COMPRESSORS			0
955	WATER DISPOSAL PUMPS			0
961	LINE PIPE, METERS & FITTINGS			0
985	OTHER TANGIBLE EQUIPMENT - SUBSURFACE			0
986	OTHER TANGIBLE EQUIPMENT - SURFACE			0
990	MATERIAL TRANSFER - SUBSURFACE			0
991	MATERIAL TRANSFER - SURFACE			0
<b>TOTAL TANGIBLES</b>		<b>\$30,500</b>	<b>\$151,000</b>	<b>\$181,500</b>
<b>TOTAL ESTIMATED COSTS</b>		<b>\$465,600</b>	<b>\$255,400</b>	<b>\$721,000</b>

Note: Costs and participations are generally estimates. Billings will be based on actual expenditures.

WORKING INTEREST OWNER APPROVAL

Company Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

6/25/97

**AUTHORIZATION FOR EXPENDITURE  
DRILLING/COMPLETION COST ESTIMATE**

DRILLING  \_\_\_\_\_  
RECOMPLETION  \_\_\_\_\_

AFE No.:

County or Parish, State: Eddy County, New Mexico

Lease Name - Well #: Carlsbad 15 "J" Fed. Comm #1

Field: Avalon (Morrow)

Legal Description: Sec. 15, T21S, R26E

Prepared By: W.M. Frank

AUTHORITY REQUESTED FOR:

Account Number	Intangible Costs Description	Dry Hole Costs	Completion Costs	Total Costs
<b>SITE PREPARATION</b>				
011	LAND AND LEGAL	5,000		5,000
012	SURFACE DAMAGES / RIGHT OF WAY	4,000		4,000
013	LOCATION, ROADS, PITS, FENCES	16,000		16,000
019	OTHER SITE PREPARATION			0
<b>DRILLING CONTRACTOR SERVICES</b>				
041	TURNKEY DRILLING COSTS			0
042	FOOTAGE	280,000		280,000
043	DAYWORK	12,000	12,000	24,000
044	MOBILIZATION / DEMOBILIZATION			0
049	OTHER DRILLING CONTRACTOR SERVICES			0
<b>MATERIALS AND SUPPLIES</b>				
101	DRILL BITS			0
102	DRILLING MUD, CHEMICALS, COMPLETION FLUIDS	22,400	3,500	25,900
103	RENTAL TOOLS & EQUIPMENT	3,000	2,000	5,000
109	OTHER MATERIALS AND SUPPLIES	3,500		3,500
<b>GENERAL SERVICES</b>				
201	WELDING & ROUSTABOUT	750	3,500	4,250
202	DIRT WORK & HEAVY EQUIPMENT			0
203	TRUCKING & HOTSHOT	1,500	3,000	4,500
204	PIPELINE INSTALLATION			0
209	OTHER GENERAL SERVICES			0
<b>SPECIALIZED SERVICES</b>				
251	CEMENT AND CEMENTING SERVICES	16,000	25,000	41,000
253	P&A COSTS	5,000		5,000
255	LOGGING, PERFORATING & WIRELINE	12,000	6,500	18,500
257	OPEN HOLE EVALUATION			0
259	CASING & TUBULAR SERVICES	3,700	5,500	9,200
261	FLUID SERVICES			0
263	SALT WATER DISPOSAL			0
265	STIMULATION & GRAVEL PACK		15,000	15,000
267	OFFSHORE TRANSPORTATION			0
269	CONSULTANTS	18,600	4,200	22,800
271	FISHING SERVICES			0
273	TESTING SERVICES		11,200	11,200
299	OTHER SPECIALIZED SERVICES			0
<b>POWER, FUEL, AND WATER</b>				
301	POWER & FUEL	1,000		1,000
302	WATER	7,500	2,500	10,000
<b>COMPLETION AND CLEANUP</b>				
501	PULLING & SWABBING UNIT		10,500	10,500
502	SNUBBING UNIT & COILED TUBING			0
503	BACKFILL PITS / RESTORE LOCATION	3,000		3,000
509	OTHER COMPLETION & CLEANUP			0
<b>ENVIRONMENTAL &amp; SAFETY</b>				
551	ENVIRONMENTAL RESTORATION			0
552	SAFETY EQUIPMENT			0
553	ENVIRONMENTAL & SAFETY TRAINING			0
554	ENVIRONMENTAL & SAFETY FINES			0
559	ENVIRONMENTAL & SAFETY MISCELLANEOUS			0
<b>MISCELLANEOUS</b>				
711	COMPANY SUPERVISION			0
721	DRILLING OVERHEAD	20150		20,150
731	CONSTRUCTION OVERHEAD			0
741	WELL CONTROL INSURANCE			0
802	GENERAL LABOR			0
831	VEHICLE EXPENSE			0
861	DISTRICT & FIELD OFFICE EXPENSE			0
865	COMPANY BENEFITS			0
895	TAXES			0
<b>TOTAL INTANGIBLES</b>		<b>\$435,100</b>	<b>\$104,400</b>	<b>\$539,500</b>

**MEWBOURNE OIL COMPANY  
AUTHORIZATION FOR EXPENDITURE**

Prospect: Carlsbad '15'  
Well Name and No.: Carlsbad '15' Federal Com. #1  
Section: 15 Block:  
County: Eddy

Field: Avalon Morrow  
Location: 1980' FSL & 1850' FWL  
Township: 21S Range: 28E  
Proposed Depth, ft: 11,200

DESCRIPTION		Cost To Casing Point APE NO.	Completion Cost APE NO.
<b>INTANGIBLE COST 180</b>			
300	Permits and Surveys	\$1,500	\$1,000
301	Location, Roads and Surveys	\$12,000	\$2,000
302	Footage or Turnkey Drilling	\$280,000	
303	Day Work	\$12,000	\$6,000
304	Fuel, Water and Other	\$17,600	
305	Completion/Workover Rig 4 days		\$6,000
306	Mud and Chemicals	\$22,000	
307	Cementing	\$20,000	\$10,000
308	Logging and Wireline	\$14,000	\$5,000
309	Casing-Tubing Services Vann gun	\$2,000	\$15,000
310	Mud Logging	\$5,000	
311	Testing		
312	Treating 1 breakdown		\$7,500
313	Coring		
320	Transportation	\$2,000	\$4,000
321	Welding and Construction Labor	\$2,000	
322	Contract Supervision		
330	Equipment Rental	\$6,000	\$1,500
334	Well/Lease Legal/Tax	\$4,500	\$2,000
336	Well/Lease Insurance	\$8,000	
350	Intangible Supplies		
360	Pipeline ROW and Easements		
367	Pipeline Interconnect		
375	Company Supervision	\$10,500	\$3,500
380	Overhead Fixed Rate	\$8,000	\$5,000
399	Contingencies 2%	\$8,700	\$1,500
	<b>Total Intangibles</b>	<b>\$431,700</b>	<b>\$70,000</b>
<b>TANGIBLE COST 181</b>			
	Conductor Casing		
	Surface Casing 13 3/8" @ 250'	\$3,700	
	Intermediate Casing 9 5/8" @ 2,600'	\$38,400	
	Production Casing 5 1/2" @ 11,200'		\$73,400
	Production Casing		
	Tubing 2 3/8" @ 11,000		\$24,100
860	Drilling Head	\$3,700	
865	Tubing Head		\$4,000
870	Upper Section		\$6,000
875	Sucker Rods		
880	Packer, Pump & Other Subsurface		\$7,500
885	Pumping Unit & Prime Mover		
890-1	Tanks (Steel & Fiberglass)		\$4,000
894-5	Separation Equipment (fired, Non-fired)		\$7,500
898	Metering Equipment		
900	Line Pipe		
905	Valves		
908	Miscellaneous Fittings & Accessories		\$10,000
910	Production Equipment Installation		\$8,000
920	Pipeline Construction		
	<b>Total Tangibles</b>	<b>\$43,800</b>	<b>\$144,500</b>
	<b>SUBTOTAL</b>	<b>\$475,500</b>	<b>\$214,500</b>
	<b>TOTAL WELL COST</b>	<b>\$690,000</b>	

Date Prepared: June 10, 1997  
Prepared By: Erik L. Hoover

Company Approval: *Erik L. Hoover*  
Date Approved: 6-24-97  
Joint Owner Approval:

Joint Owner Interest:  
Joint Owner Amount:

Drilling Cost, \$/ft	\$42.46
Completion Cost, \$/ft	\$19.15
<b>Total Well Cost, \$/ft</b>	<b>\$61.61</b>



105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210  
TELEPHONE (505) 748-1471

**AUTHORITY FOR EXPENDITURE**  
NEW DRILLING & RECOMPLETION

AFE NO. 97-075-0  
AFE DATE 3/20/97

AFE Type:		Well Objective:		Well Type:	
<input checked="" type="checkbox"/>	New Drilling	<input type="checkbox"/>	Oil	<input type="checkbox"/>	Development
<input type="checkbox"/>	Recompletion	<input checked="" type="checkbox"/>	Gas	<input type="checkbox"/>	Exploratory
		<input type="checkbox"/>	Injector		

AFE STATUS:

<input checked="" type="checkbox"/>	Original
<input type="checkbox"/>	Revised
<input type="checkbox"/>	Final

LEASE NAME	South Avalon AQY Fed. Com. #1	PROJ'D DEPTH	11,300'
COUNTY	Eddy	STATE	New Mexico
LEGAL DESC.	660' FSL & 1980' FWL	LOCATION	Section 11-21S-26E
FIELD		HORIZON	Morrow

DIVISION CODE	100	DIVISION NAME	Oil & Gas Division
DISTRICT CODE		DISTRICT NAME	
BRANCH CODE		BRANCH NAME	

PROGNOSIS: \_\_\_\_\_

INTANGIBLE DRILLING COSTS:		DRY HOLE	COMP'D WELL
920-100	Staking, Permit & Legal Fees	2,000	2,000
920-110	Location, Right-of-Way	20,000	20,000
920-120	Drilling, Footage 11,00' @ \$23.75/ft.	284,500	284,500
920-130	Drilling, Daywork 6 days @ \$5800/day	36,900	36,900
920-140	Drilling Water, Fasline Rental	40,000	40,000
920-150	Drilling Mud & Additives	65,000	65,000
920-160	Mud Logging Unit, Sample Bags	19,300	19,300
920-170	Cementing - Surface Casing	39,000	39,000
920-180	Drill Stem Testing, OHT 3 DST'S	15,900	15,900
920-190	Electric Logs & Tape Copies	31,500	31,500
920-200	Tools & Equip. Rntl., Trkg. & Welding	35,000	35,000
920-210	Supervision & Overhead	19,000	19,000
920-220	Contingency		
920-230	Coring, Tools & Service		
920-240	Bits, Tool & Supplies Purchase		2,500
920-350	Cementing - Production Casing		36,500
920-410	Completion Unit - Swabbing		47,000
920-420	Water for Completion		5,000
920-430	Mud & Additives for Completion		2,000
920-440	Cementing - Completion		
920-450	Elec. Logs, Testing, Etc. - Completion		20,200
920-460	Tools & Equip. Rental, Etc. - Completion		39,000
920-470	Stimulation for Completion		60,000
920-480	Supervision & O/H - Completion		6,000
920-490	Additional LOC Charges - Completion		1,200
920-510	Bits, Tools & Supplies - Completion		1,800
920-500	Contingency for Completion		
<b>TOTAL INTANGIBLE DRILLING COSTS</b>		<b>608,100</b>	<b>829,300</b>

TANGIBLE EQUIPMENT COSTS:		DRY HOLE	COMP'D WELL
930-010	Christmas Tree & Wellhead	2,000	29,000
930-020	Casing 13-3/8" @ 600'	11,500	11,500
	8-5/8" @ 2600'	37,500	37,500
	5-1/2" @ 11,500'		98,600
930-030	Tubing 2-7/8" @ 11,300'		36,000
930-040	Packer & Special Equipment		
940-010	Pumping Equipment		
940-020	Storage Facilities		15,000
940-030	Separation Equip., Flowlines, Misc.		28,000
940-040	Trucking & Construction Costs		14,600
<b>TOTAL TANGIBLE EQUIPMENT COSTS</b>		<b>51,000</b>	<b>270,200</b>

<b>TOTAL COSTS</b>	<b>659,100</b>	<b>1,099,500</b>
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APPROVAL OF THIS AFE CONSTITUTES APPROVAL OF OPERATOR'S OPTION TO CHARGE THE JOINT ACCOUNT WITH TUBULAR GOODS FROM THE OPERATOR'S WAREHOUSE STOCK AT THE RATES STATED ABOVE.

Prepared By	Al Springer	Operations Approval	
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OWNER		SHARE
YATES PETROLEUM CORPORATION		1.718875%
BY	DATE	
YATES DRILLING COMPANY		4.654438%
BY	DATE	
ABO PETROLEUM CORPORATION		1.270438%
BY	DATE	
MYCO INDUSTRIES, INC.		2.964375%
BY	DATE	