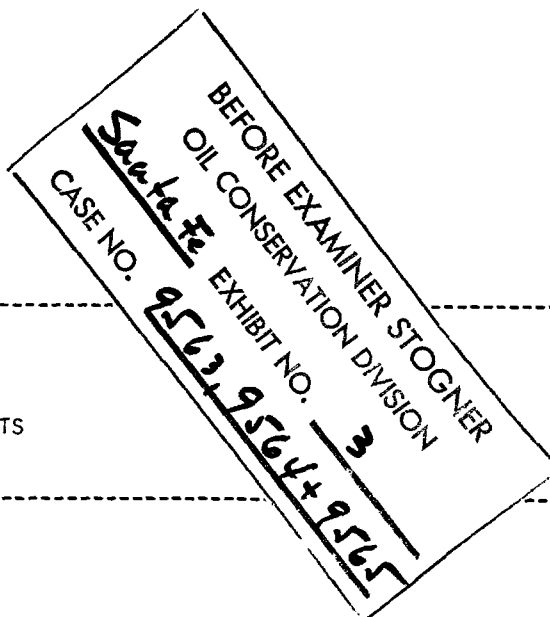


SANTA FE ENERGY COMPANY
GENERALIZED WELL COST ESTIMATE

NAME: Shinnery 14 Federal No. 2
LOC: 330' FSL & 660' FEL, Section 14-18S-32E Lea County, New Mexico
DESC: Drill and complete a 10,200' Bone Springs Well

ACCOUNT	DESCRIPTION OF COSTS	DRY HOLE	PRODUCER
501-000	TANGIBLE WELL COSTS		
-41	CONDUCTOR CSG 20" @ 40'	3,000	3,000
-41	SURFACE CSG 13-3/8" @ 400'	8,515	8,515
-41	PROTECTION CSG 8-5/8" @ 2850'	32,205	32,205
-41	DRILLING LINER		
-41	PROD CSG 5-1/2" @ 10,200'		98,635
-41	PROD LINER		
-42	TUBING 2-7/8" N-80 @ 10,000'		51,000
-43	WELLHEAD	1,000	12,000
-44	PMPG UNIT		30,000
-45	PRIME MOVER		2,200
-50	OTHER DWN HOLE EQUIP		
-50	RODS		20,800
-50	SUBSURFACE PMPS		1,250
-55	CSG EQUIP	3,090	5,260
-55	ELECTRICAL		10,000
-55	MISC. TANGIBLES		1,250
-55	ROD EQUIP		1,300
-55	TUBING EQUIP		1,300
	TOTAL TANGIBLE COSTS	47,810	277,415
541-000	LEASE FACILITY COSTS		
-50	FLOW LINES		1,000
-50	LABOR		22,500
-50	OTHER PROD EQUIP		10,100
-50	TANK FACILITIES		17,700
	TOTAL LEASE FACILITY COSTS	0	51,300
511-000	INTANGIBLE WELL COSTS		
-21	LOCATION	11,000	11,000
-22	FENCING	1,000	1,000
-26	WTR & FUEL FOR RIG		
-31	CONTRACTOR MOVING EXP	20,000	20,000
-32	CONT FOOTAGE OR TURNKEY		
-32	CONTRACTOR DAY WORK 30 @ \$4000/d	120,000	120,000
-33	DRLG FLUID & ADDITIVES	11,000	11,000
-34	BITS & REAMERS	19,700	19,700
-36	CORING & CORE ANALYSES	15,000	15,000
-37	CEMENT	9,300	20,100
-39	INSPECTION & TSTG OF TANG	5,000	5,000
-41	DIRECTIONAL DRLG SURVEYS		
-42	DRILLING EQUIP RENTAL	13,630	13,630
-43	OPEN HOLE LOGGING	11,500	11,500
-44	DRILL STEM TSTG	5,000	5,000
-45	MUD LOGGING	8,400	8,400
-51	TRANSPORTATION	5,000	9,000
-52	COMPLETION UNIT 18 @ \$1200/d		21,600
-53	COMPLETION TOOL RENTAL		3,900
-54	CASED HOLE LOGS & PERFING		8,000
-55	STIMULATION		60,000
-56	RIG SITE SUPERVISION	10,500	15,900
-72	ADMINISTRATIVE OVERHEAD	3,520	7,040
-99	FSHG TOOLS & EXPENSES		
-99	TESTING: BHP, COR, 4 PT. POT		4,000
	ABANDONMENT COST		
	OTHER INTANGIBLES		
0	CONTINGENCY (10%)	26,955	39,077
	TOTAL INTANGIBLES	296,505	429,847
	TOTAL COSTS	344,315	758,562



Estimated By: Michael R. Benton for JWC Date: 11-16-88
SFEC Approved By: Thomas E. Gentry for HLB Date: 11-16-88
Non Operator Approval By: _____ Date: _____

SANTA FE ENERGY COMPANY
GENERALIZED WELL COST ESTIMATE

NAME: Shinnery 14 Federal No. 3
LOC: 1980' FSL & 1980' FEL, Section 14-18S-32E Lea County, New Mexico
DESC: Drill and complete a 10,200' Bone Springs Well

ACCOUNT	DESCRIPTION OF COSTS	DRY HOLE	PRODUCER
501-000	TANGIBLE WELL COSTS		
-41	CONDUCTOR CSG 20" @ 40'	3,000	3,000
-41	SURFACE CSG 13-3/8" @ 400'	8,515	8,515
-41	PROTECTION CSG 8-5/8" @ 2850'	32,205	32,205
-41	DRILLING LINER		
-41	PROD CSG 5-1/2" @ 10,200'		98,635
-41	PROD LINER		
-42	TUBING 2-7/8" N-80 @ 10,000'		51,000
-43	WELLHEAD	1,000	12,000
-44	PMPG UNIT		30,000
-45	PRIME MOVER		2,200
-50	OTHER DWN HOLE EQUIP		
-50	RODS		20,800
-50	SUBSURFACE PMPS		1,250
-55	CSG EQUIP	3,090	5,260
-55	ELECTRICAL		10,000
-55	MISC. TANGIBLES		
-55	ROD EQUIP		1,250
-55	TUBING EQUIP		1,300
	TOTAL TANGIBLE COSTS	47,810	277,415
541-000	LEASE FACILITY COSTS		
-50	FLOW LINES		1,000
-50	LABOR		22,500
-50	OTHER PROD EQUIP		10,100
-50	TANK FACILITIES		17,700
	TOTAL LEASE FACILITY COSTS	0	51,300
511-000	INTANGIBLE WELL COSTS		
-21	LOCATION	11,000	11,000
-22	FENCING	1,000	1,000
-26	WTR & FUEL FOR RIG		
-31	CONTRACTOR MOVING EXP	20,000	20,000
-32	CONT FOOTAGE OR TURNKEY		
-32	CONTRACTOR DAY WORK 30 @ \$4000/d	120,000	120,000
-33	DRLG FLUID & ADDITIVES	11,000	11,000
-34	BITS & REAMERS	19,700	19,700
-36	CORING & CORE ANALYSES	15,000	15,000
-37	CEMENT	9,300	20,100
-39	INSPECTION & TSTG OF TANG	5,000	5,000
-41	DIRECTIONAL DRLG SURVEYS		
-42	DRILLING EQUIP RENTAL	13,630	13,630
-43	OPEN HOLE LOGGING	11,500	11,500
-44	DRILL STEM TSTG	5,000	5,000
-45	MUD LOGGING	8,400	8,400
-51	TRANSPORTATION	5,000	9,000
-52	COMPLETION UNIT 18 @ \$1200/d		21,600
-53	COMPLETION TOOL RENTAL		3,900
-54	CASED HOLE LOGS & PERFING		8,000
-55	STIMULATION		60,000
-56	RIG SITE SUPERVISION	10,500	15,900
-72	ADMINISTRATIVE OVERHEAD	3,520	7,040
-99	FSHG TOOLS & EXPENSES		
-99	TESTING: BHP, COR, 4 PT.POT		4,000
	ABANDONMENT COST		
	OTHER INTANGIBLES		
0	CONTINGENCY (10%)	26,955	39,077
	TOTAL INTANGIBLES	296,505	429,847
	TOTAL COSTS	344,315	758,562

Estimated By: Michael R. Benton for JMC Date: 11-16-88
SFEC Approved By: Thomas L. Benton for JMC Date: 11-16-88
Non Operator Approval By: _____ Date: _____

17-Nov-88

SANTA FE ENERGY COMPANY
GENERALIZED WELL COST ESTIMATE

NAME: Shinnery 14 Federal No. 4
LOC: 1980' FSL & 660' FEL, Section 14-18S-32E Lea County, New Mexico
DESC: Drill and complete a 10,200' Bone Springs well

ACCOUNT	DESCRIPTION OF COSTS	DRY HOLE	PRODUCER
501-000	TANGIBLE WELL COSTS		
-41	CONDUCTOR CSG 20" @ 40'	3,000	3,000
-41	SURFACE CSG 13-3/8" @ 400'	8,515	8,515
-41	PROTECTION CSG 8-5/8" @ 2850'	32,205	32,205
-41	DRILLING LINER		
-41	PROD CSG 5-1/2" @ 10,200'		98,635
-41	PROD LINER		
-42	TUBING 2-7/8" N-80 @ 10,000'		51,000
-43	WELLHEAD	1,000	12,000
-44	PMPG UNIT		30,000
-45	PRIME MOVER		2,200
-50	OTHER DWN HOLE EQUIP		
-50	RODS		20,800
-50	SUBSURFACE PMPS		1,250
-55	CSG EQUIP	3,090	5,260
-55	ELECTRICAL		10,000
-55	MISC. TANGIBLES		
-55	ROD EQUIP		1,250
-55	TUBING EQUIP		1,300
	TOTAL TANGIBLE COSTS	47,810	277,415
541-000	LEASE FACILITY COSTS		
-50	FLOW LINES		1,000
-50	LABOR		22,500
-50	OTHER PROD EQUIP		10,100
-50	TANK FACILITIES		17,700
	TOTAL LEASE FACILITY COSTS	0	51,300
511-000	INTANGIBLE WELL COSTS		
-21	LOCATION	11,000	11,000
-22	FENCING	1,000	1,000
-26	WTR & FUEL FOR RIG		
-31	CONTRACTOR MOVING EXP	20,000	20,000
-32	CONT FOOTAGE OR TURNKEY		
-32	CONTRACTOR DAY WORK 30 @ \$4000/d	120,000	120,000
-33	DRLG FLUID & ADDITIVES	11,000	11,000
-34	BITS & REAMERS	19,700	19,700
-36	CORING & CORE ANALYSES	15,000	15,000
-37	CEMENT	9,300	20,100
-39	INSPECTION & TSTG OF TANG	5,000	5,000
-41	DIRECTIONAL DRLG SURVEYS		
-42	DRILLING EQUIP RENTAL	13,630	13,630
-43	OPEN HOLE LOGGING	11,500	11,500
-44	DRILL STEM TSTG	5,000	5,000
-45	MUD LOGGING	8,400	8,400
-51	TRANSPORTATION	5,000	9,000
-52	COMPLETION UNIT 18 @ \$1200/d		21,600
-53	COMPLETION TOOL RENTAL		3,900
-54	CASED HOLE LOGS & PERFINC		8,000
-55	STIMULATION		60,000
-56	RIG SITE SUPERVISION	10,500	15,900
-72	ADMINISTRATIVE OVERHEAD	3,520	7,040
-99	FSHG TOOLS & EXPENSES		
-99	TESTING: BHP, COR, 4 PT. POT		4,000
	ABANDONMENT COST		
	OTHER INTANGIBLES		
0	CONTINGENCY (10%)	26,955	39,077
	TOTAL INTANGIBLES	296,505	429,847
	TOTAL COSTS	344,315	758,562

EX 3

Estimated By: Michael R. BurtonDate: 11/17/88

SFEC Approved By: _____

Date: _____

Non Operator Approval By: _____

Date: _____