10-Jul-87

SANTA FE ENERGY COMPANY

Revised

WELL COST ESTIMATE

BEFORE EXAMINER STOGNER
OIL CONSERVATION DIVISION
Santa Fe EXHIBIT NO. 4
CASE NO. 9175

NAME: N.H. Fed. No. 2
LOC: 3456' FNL, 660' FEL, Sec. 5-16S-34E
DESC: Drill and complete 10,200' Wolfcamp Test

ACCOUNT	DESCRIPTION OF COSTS		DRY HOLE	(PUMPER) PRODUCER
511-000	TANGIBLE WELL COSTS			
-001	CONDUCTOR CSG		3,000	3,000
-002	SURFACE CSG	13-3/8" 48.0 ppf H-40 ST&C @ 500'	9,275	9,275
-003	PROTECTION CSG	8-5/8" 24.0 & 28.0 ppf S-80 @ 4600'ST&C	48,250	48,250
	DRILLING LINER			
-004	PROD CSG	5-1/2" 17.0 ppf N-80 LT&C @ 10,200'		86,190
-005	PROD LINER			
-012	CSG EQUIP		880	1,340
-015	TUBING	2-3/8" 4.7ppf N-80 EUE @ 10,200'		32,540
-021	TUBING EQUIP			1,000
-024	RODS			13,000
-026	ROD EQUIP			
-029	SUBSURFACE PMPS			2,500
-031	OTHER DWN HOLE EQUIP			
-038	WELLHEAD		1,500	25,000
-042	PMPG UNIT			35,000
-046	PRIME MOVER			3,000
-054	ELECTRICAL			5,000
-064	MISC. TANGIBLES			
	TOTAL TANGIBLE COSTS		62,905	265,095
54X-000	LEASE FACILITY COSTS			
-075	FLOW LINES			5,000
-079	TANK FACILITIES			10,000
	OTHER PROD EQUIP			11,500
	LABOR			7,600
	TOTAL LEASE FACILITY COSTS		0	34,100
521-000	INTANGIBLE WELL COSTS			
-127	LOCATION		15,000	15,000
-200	CONTRACTOR MOVING EXP		30,000	30,000
-201	CONT FOOTAGE OR TURNKEY			
-202	CONTRACTOR DAY WORK		120,000	120,000
-205	COMPLETION UNIT			10,700
-208	DRLG FLUID & ADDITIVES		15,000	15,000
-212	WTR & FUEL FOR RIG			
-215	BITS & REAMERS		26,770	26,770
-217	CORING & CORE ANALYSES			
-219	CEMENT		35,000	45,000
-221	OPEN HOLE LOGGING		25,000	25,000
-223	DRILL STEM TSTG		8,000	8,000
-225	MUD LOGGING		8,750	8,750
-227	DIRECTIONAL DRLG SURVEYS			
-229	COMPLETION TOOL RENTAL			500
-230	DRILLING EQUIP RENTAL		13,680	13,680
-231	TRANSPORTATION		5,000	5,000
-236	TESTING: BHP,GOR,4 PT.POT			2,500
-238	CASED HOLE LOGS & PERFING			4,500
-241	STIMULATION			4,500
-244	INSPECTION & TSTG OF TANG		2,000	3,000
-246	RIG SITE SUPERVISION	40 @ $300/d	9,000	12,000
-251	FENCING		500	500
-256	FSHG TOOLS & EXPENSES			
-664	ADMINISTRATIVE OVERHEAD		1,500	1,500
	ABANDONMENT COST		5,000	
	OTHER INTANGIBLES			
0	CONTINGENCY (5%)		16,010	17,595
	TOTAL INTANGIBLES		336,210	369,495
	TOTAL COSTS		399,115	668,690

Estimated By: Michael R. Benton Date: 7/10/87

SFEC Approved By: Thomas ... for HLB Date: 7-10-87

Non Operator Approval By: ____________ Date:

North Hume 5 Federal No. 1
Sec. 5, T16S, R34E
Lea County, New Mexico

I. Volumetrics

Data: BHT, 128°F
BHP, 3816 psia (original reservoir pressure, 12-11-86)
GOR, 968 MCF/B
Boi, 1.462 (from Standing's charts)
Oil, 35.9° API
Gas, 0.6762 s.g.
Ø, 6.73%
Sw, 21.78%
Perforations, 10,176-192' (16' net)
Estimated Recovery Factor, 20%

OSTOIP = 7758 x A x h x Ø x (1-Sw)/Boi

= 7758 x 80 Acre x 16 ft x 0.0673 x (1-0.2178)/1.462

= 357,557 STBO

Original Recoverable Reserves = 0.20 x OSTOIP

= 0.20 x 357,557

= 71,512 BO

II. Decline Curve Analysis

Cumulative production 7-12-87 15,759 BO

Remaining reserves

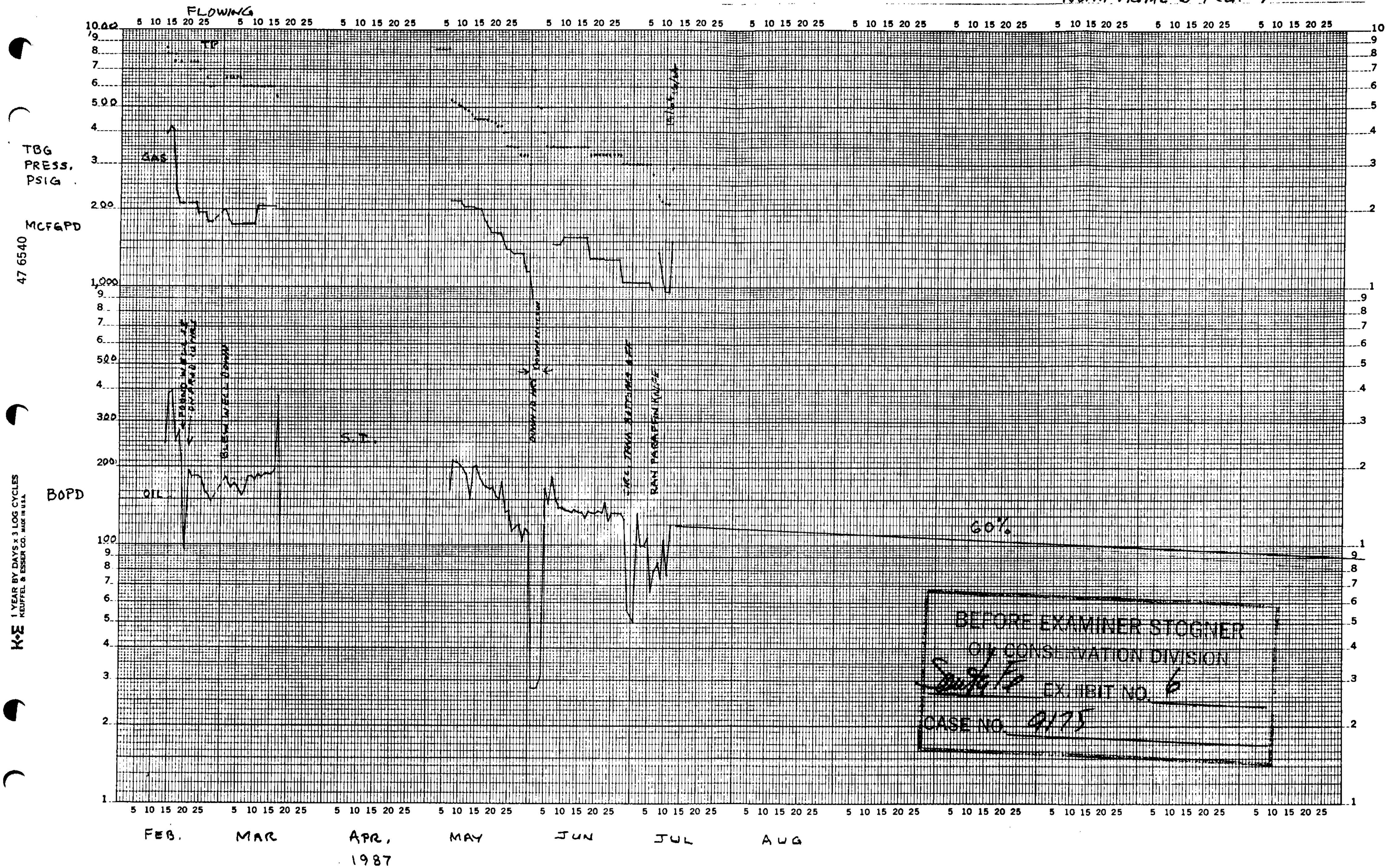
$$= \frac{(120-3)365}{\ln(1-.60)} = 46,606$$

Gross ultimate recovery 62,365 BO

BEFORE EXAMINER STOGNER
OIL CONSERVATION DIVISION
Santa Fe EXHIBIT NO. 5
CASE NO. 9175

NAG:sl-833

North Hume 5 Fed. #1



K+E 10 X 10 TO 5/6 INCH • 7 1/2 X 10 INCHES
KEUFFEL & ESSER CO. MADE IN U.S.A.

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