Santa Fe Energy Resources

09/01/97 10:44:19

Lease : OLD RANCH KNOLL 8 02
St, Cnty : NM EDDY
Field : EAST INDIAN BASIN
Reservoir: UPPER PENN (ASSOC)
Operator : SFER
Location : 22S 24E 08N Lag: 476 Act: 476

OIL
Qal=DEFAULT
Ref= 09/97
Cum= 84.366
Rem= 87.171
EUR= 171.537
Yrs= 4.583
Qi= 3576.7
De= 42.188
n= .500
Qab= 703.6

GAS
Qal=DEFAULT
Ref= 09/97
Cum= 398.866
Rem= 209.963
EUR= 608.829
Yrs= 4.583
Qi= 16202.0
De= 75.646
n= .500
Qab= 912.5

WIN
Qal=DEFAULT
Ref= 09/97
Cum= .000
Rem=3464.976
EUR=3464.976
Yrs= 4.583
Qi= 77407.4
De= 8.866
n= .000
Qab= 50600.2

BHP (psi) Wtr (b/d) Gas (m/d) Oil (b/d)

Gas (m/d)

Oil (b/d)

Wtr (b/d)

ESP Changeout Sept '96

BHP (psi)

Declining prod BHP corresponds to increased oil + gas rates

GAS

M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A
1994 1995 1996 1997 1998 1999

NEW MEXICO
OIL CONSERVATION DIVISION

EXHIBIT 4

CASE NO. 11848