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GENERAL

E/ESCWA/SDPD/2007/8  
18 December 2007  
ORIGINAL: ARABIC

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18	.....	-3
18	.....	-1
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37	..... (2005-1980)	
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Enhanced Oil Recovery (EOR)	
Coupling alignment	
Well casing	
Discovery Well	
Exploration Well	
Development Well	( )
Disposal Well	
Appraisal Well	
Exploratory Well	
Derrick	
PCB	
Pump-off Controller	
Soft-Start Controller	
Variable Speed Drive (VSD)	
Blow out Preventor	
Mineral Scales	
Slim hole drilling	
Directional (Horizontal) Drilling	
Under Balance Drilling	
Drilling rig	
Cathodic Protection	
Aquifer	
Flow Line	
Corrosion Cell	
Pump impeller	
Artificial lift	
Gas Lift	
Power Factor	
Subsurface Pumping	( )
Kelly	
Radon Gas	

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Rotary Table	
Fragmentation strength	
Electrical Hollow Sucker Rod (EHSR)	
Upstream Sectors	
Multiphase flow-meters	
Drilling bit	( ) / ( )
Rotary Bit	
Magnetic Aerial Survey	
Seismic Survey	
Steam traps	
Electrical Hollow Sucker Rod (EHSR)	
Submersible pump	
Progressive Cavity Pump	
Rod pump / Pump jacks	
Multi-phase Pump	
Beam Pump	
Jet Hydraulic Pump	
Piston Hydraulic Pump	
Condensate	( )
Electrolytes	
Surfactants	
TENORM	
Success Ratio	
Real-time data	
Naturally Occurring Radioactive Materials (NORM)	( )

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	( )	49	2006		
				( )	53.5
52.3	2001		( )	46	
	.2007 27	"	"		(1)
	.2006		( )		(2)

186 2006-2001  
 283 2001 ( )  
 .( 388 ) 2006 )

48 370

(3) -

2006

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88 2006

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2.6 / 3.5  
 170 /<sup>3</sup> 127.4 .2008 /<sup>3</sup> ( )

/ 12.5 2009

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<sup>(5)</sup>1998

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Shihab-Eldin Adnan, New Energy Technologies: Trends in Development of Clean & Efficient Energy Technologies, (4)  
8th International Energy Forum, Osada, Japan, September 2005.

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<sup>(6)</sup>(Seismic Survey) \_\_\_\_\_ -1

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Directional (Horizontal) Drilling \_\_\_\_\_ ( )

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formation cuttings \_\_\_\_\_ ( )

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Gas injection ( )

.(Gas lift valve)

(Steam injection) ( )

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.Optimization of Electric Consumption in 2003, California, EPRI Report # 1006210, Marginal California Oilfields : \_\_\_\_\_

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steam traps

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Digital systems

(Multiphase flow-meters)

93

60-50

90-85

15

0.5

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3 000/

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variable speed)

(by-pass line)

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(control drive

( )

(coupling alignment)

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(oil seal)

(pump impeller)

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Optimization of Electric Energy Consumption in Marginal California Oilfields, EPRI Report # 1006210, California, (12) 2003.

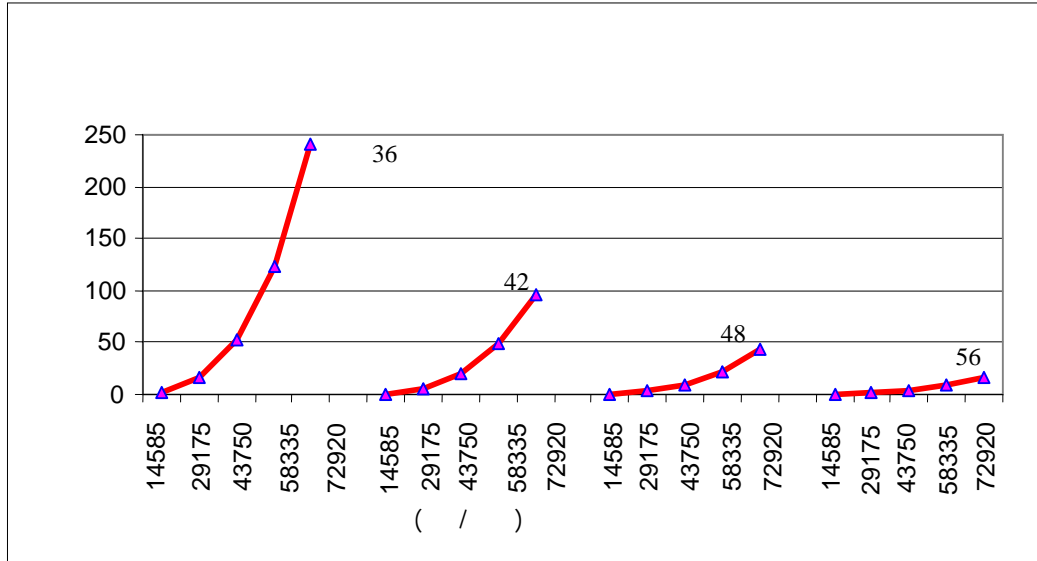
Guide to Energy Efficiency in the Oil Field, <http://www.naseo.org/>; National Association of State Energy Officials, (13) Alexandria, Virginia.

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56/42	598	
32/30/26	304	
48/42	213	
18/14	26	
36/31	135	
16/12	124	

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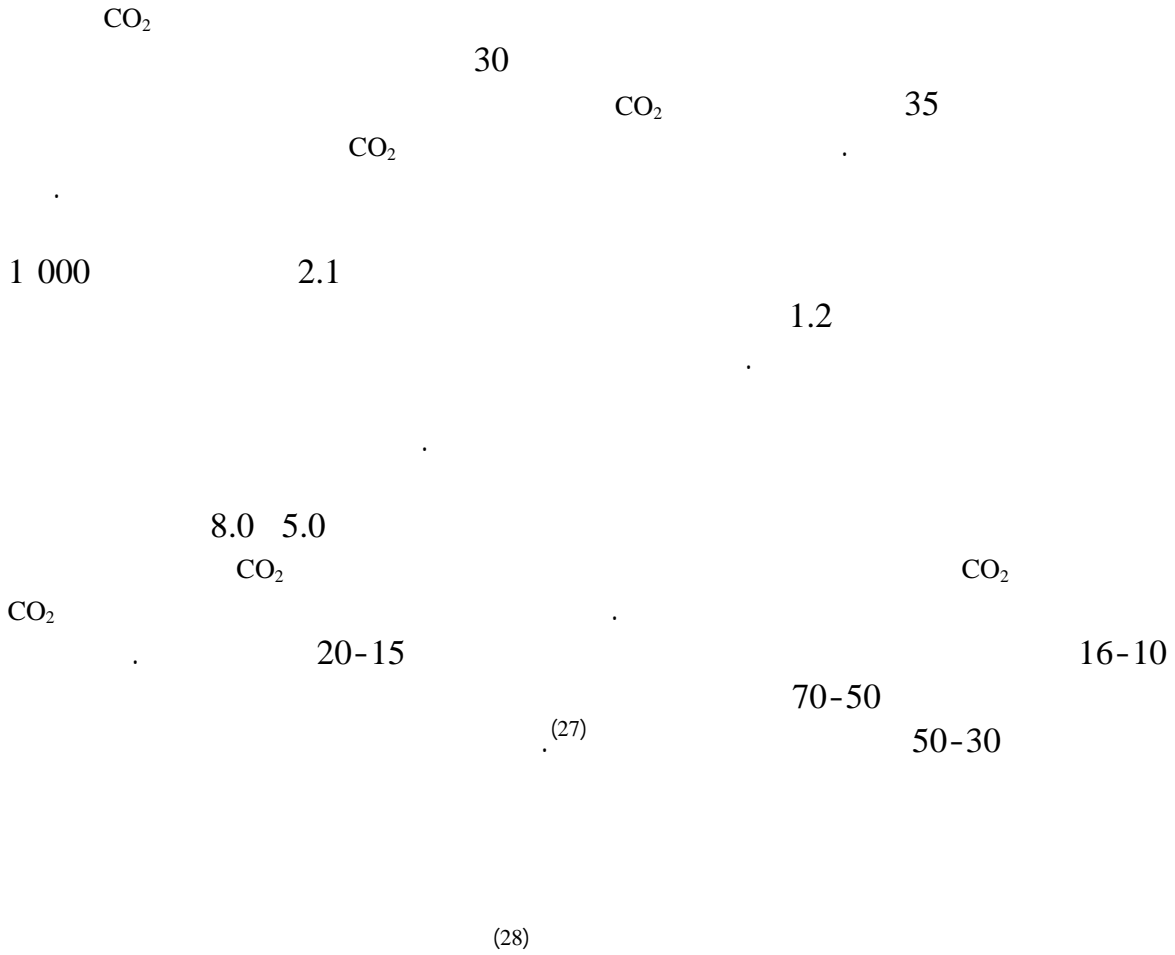
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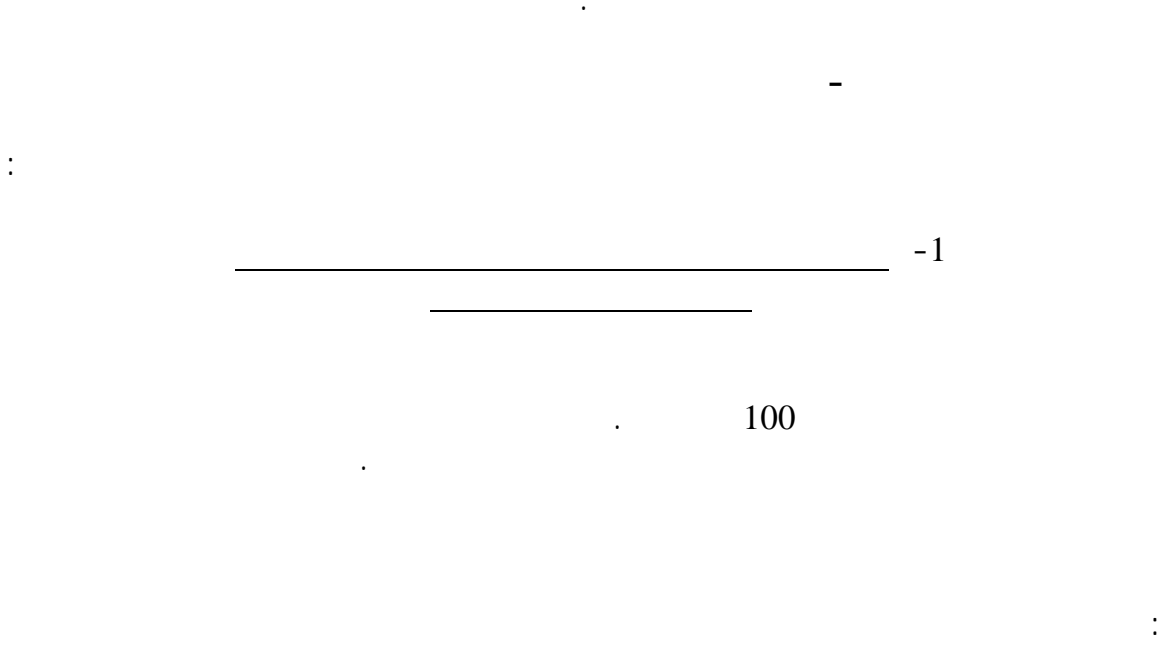


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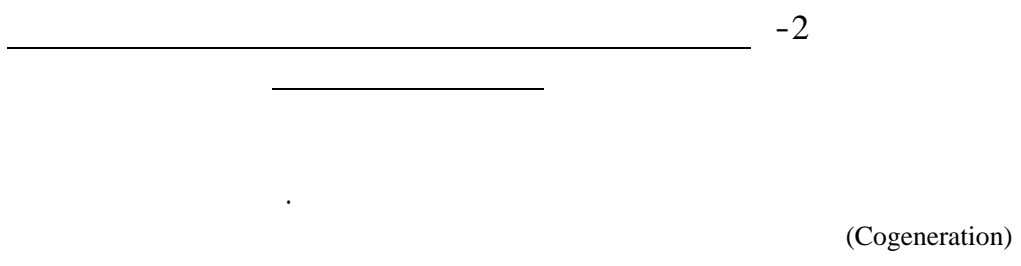
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G. Haarr: "CO<sub>2</sub> Capture and Storage – The StatoilHydro Experience"; OAPEC Workshop on Technologies of CCS, (28) Cairo, Egypt, October 2007.

2008



(Pump-off Controller) <sup>(29)</sup>0.95 0.85 25 (Variable Speed Drive)



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(Cathodic Protection)

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Enhanced Oil

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(EOR)

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Recovery (EOR)

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Parasitic Loads

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Lovins A.; "Energy End-Use Efficiency"; Part of the study: "Transitions to Sustainable Energy Systems." (33)  
InterAcademy Council, Amsterdam, 2005.

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(Soft Start)

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Artificial Lift  
(Electrical Submersible Pumps, ESP)  
(Beam Pumps)

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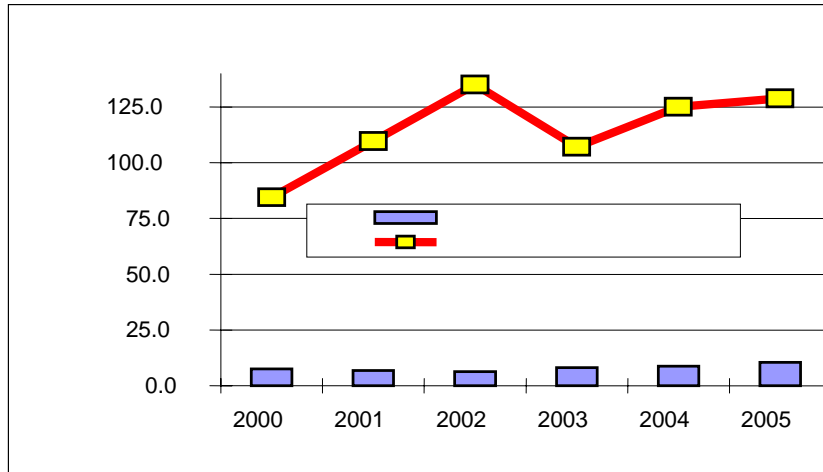
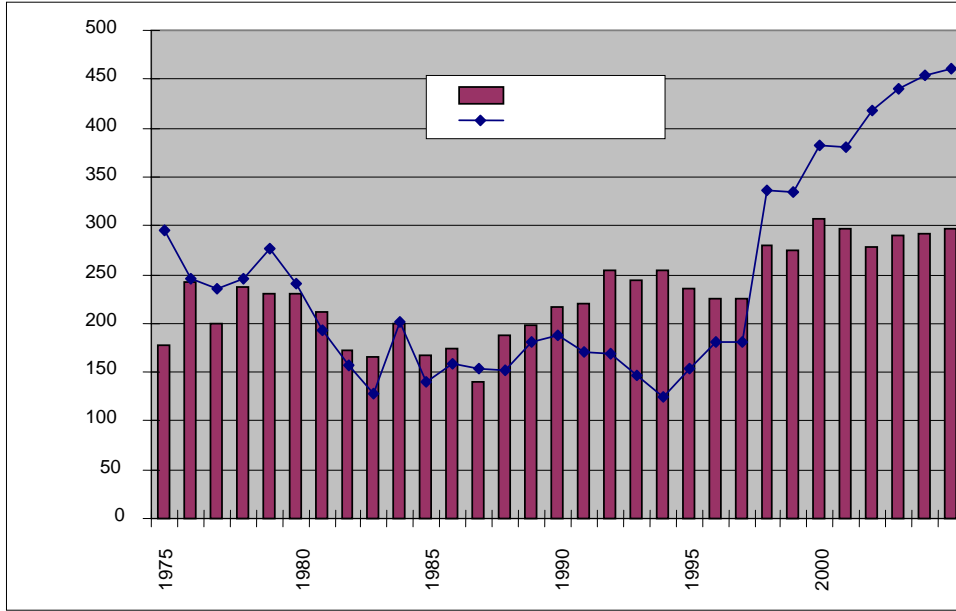
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(Naturally Occurring Radioactive Materials)

TENORM

NORM

Mineral Scales

228

226

Radon Gas

Scale

(39)

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gas flaring

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- .2006 (11)
- " " : .1998 85 (12)
- - .2006 / (12)
- .2006 (13)
- .2007 / " : " (14)
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