

STATE OF OREGON
DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
800 NE Oregon Street #28, Portland OR 97232

WELL SUMMARY REPORT
(In compliance with rules and regulations pursuant to ORS 520)

NW Natural (Company or Operator)	Northwest Natural Gas (Lease)	IW 22H-22-65 (Well No.)
Sec. 22 T. 6N R. 5W	Surveyed Coordinates (if directional, BHL & SHL): SHL; N03°03'15"E 2291.54' & S86°56'45"E 1907.87' from the SW corner of section 22, T6N, R5W; BHL; 695.1' N & 648.91' E from surface location	
Wildcat:	(or) Field Name: Calvin Creek Storage Field	County: Columbia
Date: <u>2/20/98</u>		Signature: <u><i>Bob A. Gloung</i></u> Position: Storage Development Engineer

Commenced drilling: 10/14/97	Completed drilling: 11/13/97	P&A: yes
Total depth: MD 1825' TVD 1285'	Redrill depth:	
Logs run: DIL, GR, SP, FDCN, Sonic, CET		

	Size of hole	Size of casing	Wt. in lbs. per ft.	Grade Type	Depth	Amount of cement
CASING RECORD	17 1/2"	13 3/8"	48#/ft	H-40	332'	216 sx
	12 1/4"	8 5/8"	32#/ft	J-55	1764'	1016 cu. ft.

	Geological Marker	Depth
Plugs	Cement plug f/ 495' t/ surface	Keasey 652' MD
		Cowlitz 1298' MD
Junk	Baker packer, 4 jts of 4 1/2" drill pipe Inside 8 5/8" casing f/ 635' t/ 498'	Clark & Wilson 1767' MD

	Size of Casing	From	To	Shots/ft.	Method of Perforating		
					Jet	Bullet	Slotted Liner
Perforations or Liner							

	Clean Oil bbl/day	Gravity	Percent Water	F.T.P.	F.C.P.	S.I.T.P.	S.I.C.P.
Initial Production							