602102

Document # 21444

CORNISH

WIRELINE SERVICES, INC.
P.O. DRAWER H
CHANUTE, KANSAS
PHONE 431-9306

CEMENT BOND — VARIABLE DENSITY

FILING NO.

COMPANY CARMEL ENERGY, INC.
WELL LINNEMAN NO. N-11
FIELD
COUNTY VERNON STATE MISSOURI

MO. OIL & GAS COUNCIL
FEB 14 1984
CORPORATION

LOCATION 2124' FWL, 1016' FSL

Sec. 34 Twp. 36N Rge. 33W

OTHER SERVICES:

Permanent Datum: GROUND LEVEL Elev. 765.8'
Log Measured from G.L. Ft. Above Perm. Datum
Drilling Measured From G.L.

Elev.: K.B. D.F. G.L. 765.8'

Date	2-9-84	Type Fluid in Hole	WATER
Run No.	1 NW	Dens. / Visc.	
Depth—Driller	154.6'	Max. Rec. Temp.	
Depth—Logger	146.0'	Est. Cement Top	
Btm. Log Interval	8.0'	Equip. / Location	
Top Log Interval		Recorded By	GORMLEY, R.
Open Hole Size		Witnessed By	YOUNG, V.

CASING REC.	Size	Wt/Ft	Grade	Type Joint	Top	Bottom
Surface String						
Prot. String						
Prod. String	4½"				0	135.5'
Liner						

PRIMARY CEMENTING DATA

STRING	Surface	Protection	Production	Liner
Vol. of cement				
Type of cement				
Additive				
Additive by %				
Retarder				
Retarder by %				
Wt. of slurry				
Water loss				
Drill. mud type				
Drilling mud wt.				

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COMPRESSIVE STRENGTH (p.s.i. | Curing Temp.)

Time Elapsed	Surface		Protective		Production		Liner	
24 hrs.		°F		°F		°F		°F
48 hrs.		°F		°F		°F		°F
72 hrs.		°F		°F		°F		°F

PRIMARY CEMENTING PROCEDURE

	Hour — date	Hours from start of operation
Started pumping cement		
Plug on bottom		
Release pressure		
Start Cement Bond Log		
Finish Cement Bond Log		

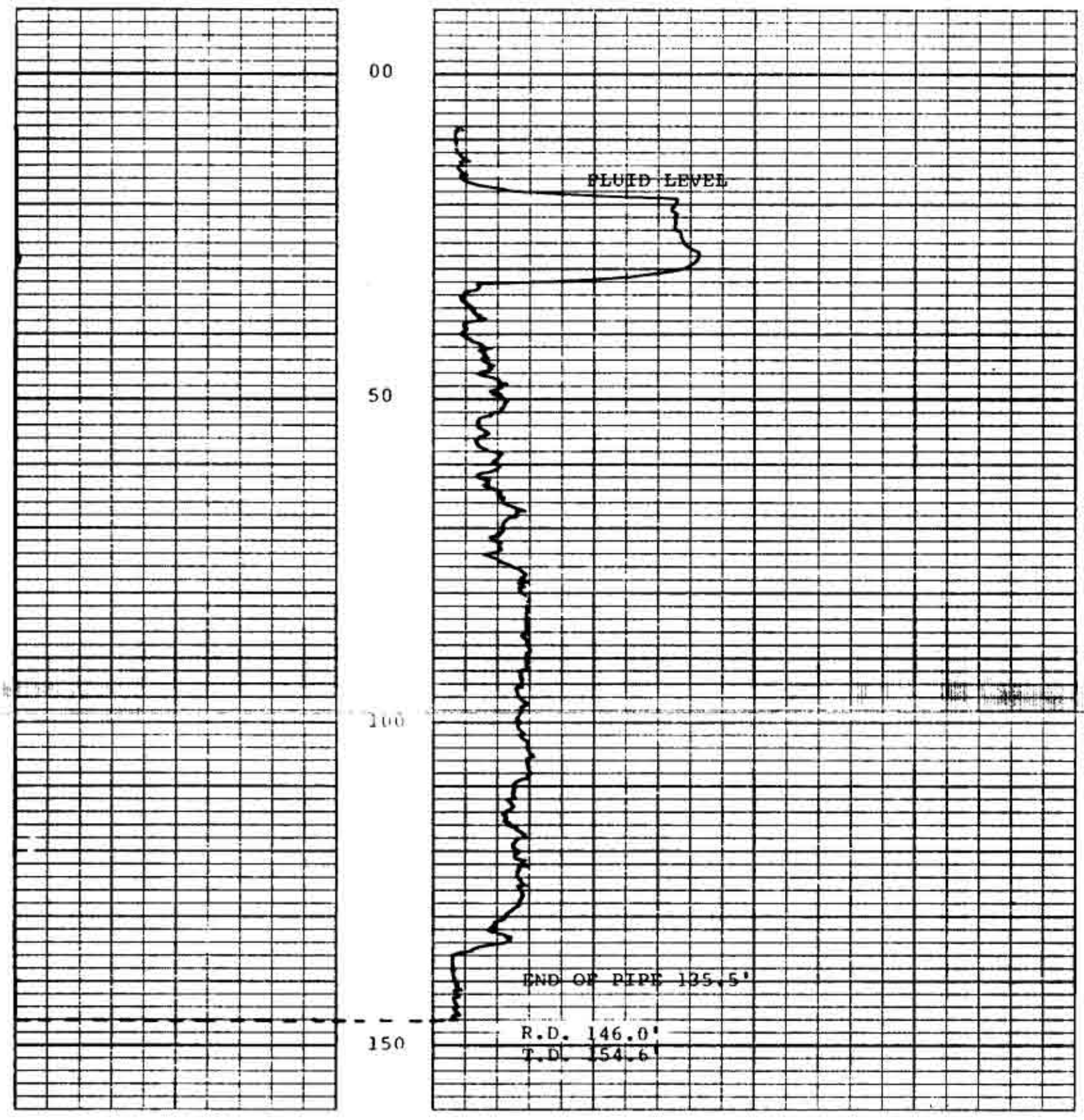
Equipment Data

Type standoff	
Logging speed	
Bias: Max.	
Cartridge No.	
Spacing	

Preceding fluid _____ Volume _____ bbls.
Returns: Full _____ Partial _____ None _____

Pipe reciprocated during Pumping: Yes _____ No _____
Pipe reciprocated after plug down: Yes _____ min., No _____

CASING BOND	DEPTH	TRANSIT TIME	VARIABLE DENSITY
BOND INCREASES ← 100% 0%		640 140 MICROSECONDS	200 1000 MICROSECONDS
		CASING COLLARS	



LINNEMAN NO. N-11

CARMEL ENERGY, INC.

VERNON, MISSOURI

FEBRUARY 9, 1984

BOND LOG

34/36N/33W