

**A Synergistic  
 Log System  
 CASED HOLE  
 RESERVOIR  
 ANALYSIS\***

The following logs were used: TD1/ER - GRV 1031

COMPANY: BELCHHOLD ENERGY CORPORATION  
 WELL: COLUMBIA COUNTY #33-3  
 FIELD: H1ST1 NICHLEM BASIN  
 COUNTY PROV: COLUMBIA STATE COUNTY: OREGON  
 LOCATION: 16991N S 3851E SEC 3 T19N 6W RGE 5W  
 DATE LOGGED ON: CH 6-9-82  
 DATE COMPUTED ON: CH 6-27-82  
 ELEVATION: 88 1049 DF 1039 AR NO

The well name, location and borehole reference data were furnished by the customer.

BORE HOLE RECORD				CASING & TUBING RECORD			
BIT	FROM	TO	SIZE	WGT	FROM	TO	
6.25	407	2749	2-3/8	4.7	SURFACE	2419	
			4.5	10.5		2749	
			7	20		407	

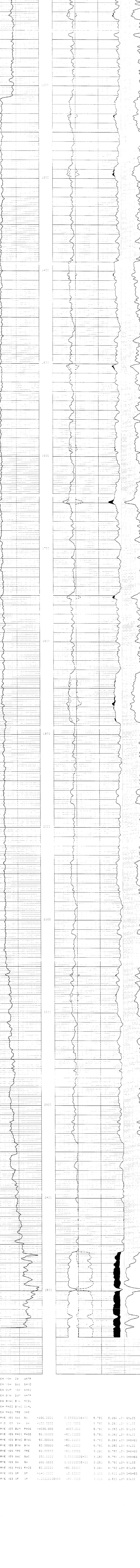
Field Report: Engineer: MOFFETT      Field No: 5774      Station: 4405  
 Office Recording: Computer: PCCC      Program: NPS 114      Station: JPMST01A      Computing Center Job No: 62606  
 Log depths of these records refer to:      Open hole      Bore hole      Casing top

COMPUTATION PARAMETERS

1000	2420	60	50	10	10.10	20/31	0/40
2420	2220	60	50	10	10/10	14/31	0/40

UNITS:      CUMULATES

FORMATION CHARACTERISTICS	DEPTH	BASE RESISTIVITY (OHM-CM)	PERCENTAGE OF CLAY (VOLUME)	FLUID RESISTIVITY (OHM-CM)	FLUID RESISTIVITY (OHM-IN)
GAMMA RAY GRANTS	150				
POTENTIALS	50				
POTENTIALS	50				



AREA HSH SH SH4  
 AREA HSH SH SH4  
 AREA DUM SH SH4  
 AREA BUN DUM SH4  
 AREA BUN BUN SH4  
 AREA PHIE TPE SH4  
 CURVE YES SHI SW -100.0000 0.000000E+00 0.000 0.000 LSH SOLID  
 CURVE YES SW SW -100.0000 0.000000E+00 0.000 0.000 LSH SOLID  
 CURVE YES DUM PHIE -4000.0000 4000.0000 0.000 0.000 LSH SOLID  
 CURVE YES PHIE PHIE 50.000000 -50.000000 0.000 0.000 LSH SOLID  
 CURVE YES BUN BUN 50.000000 -50.000000 0.000 0.000 LSH DASHED  
 CURVE YES BUN BUN 50.000000 -50.000000 0.000 0.000 LSH SOLID  
 CURVE YES TPE TPE 50.000000 -50.000000 0.000 0.000 LSH DASHED  
 CURVE YES SWC SWC 200.000000 0.000000E+00 0.000 0.000 LSH DASHED  
 CURVE YES SW SW 200.000000 0.000000E+00 0.000 0.000 LSH SOLID  
 CURVE YES PHIE PHIE 50.000000 -50.000000 0.000 0.000 LSH SOLID  
 CURVE YES SP SP -140.000000 0.000000E+00 0.000 0.000 LSH DASHED  
 CURVE YES SP SP 0.000000E+00 0.000000E+00 0.000 0.000 LSH SOLID