

WELL CROWN ZELLERBACH #31-16  
 COMPANY REICHHOLD ENERGY CORP.  
 AREA PITTSBURG

- W E G E -  
**WESTERN GEO-ENGINEERS**  
 "A SERVICE TO THE OIL AND GAS INDUSTRY"

LOCATION 948.63'S & 2479.46' W OF  
 NE CORNER, SEC 16 T5N R4W  
 COUNTY, STATE COLUMBIA CO., OREGON

**LITHOLOGY SYMBOLS**

--	--	--	--	--	--	--	--	--	--

**REMARKS**  
 WELL ELEV. GL. 828.20'  
 KB. 849.69'  
 SALINITY IN PPM CL-  
 FILTRATE IN CC/30 MIN.  
 GAS TRAP AGITATOR TYPE  
 MUD LIGNOSULFONATE  
 (BEAVER DRILLING FLUIDS)  
 TAYLOR URG. CO. RIG #5

DATE 7/18/85 to 7/26/85 DEPTH 45' to 2867' ENGINEERS J. JUVALL, S. PORTWOOD

DEPTH	LITHOLOGY	MUD ANALYSIS		CUTTING ANALYSIS	REMARKS
		TOTAL DITCH GAS	BLENDER GAS		
00		10	20	25	DRL SURFACE W/ 12 1/2" BIT. SPUD W/ GEL/WATER MUD.
100	C BNS				LOSE CIRC; MNR CAVE-IN AROUND CELLAR; INSTALL BRADEN HEAD; CMT CONDCTR; DRL AMD W/ SL LOST CIRC.
150	C BN				W 8.7 V 70
200	CALC BN				W 8.6 V 100
300	WHG 5U				WIPE HOLE HOLE SLOUGH; REAM DOWN SINGLE AFTER CONNECTION
400	C BN				Set 8-5/8" CSG = 403' DRL OUT W/ 7-7/8" BIT.
500	C BN				W 8.8 V 45
600	C BN				C=68u VIS 45 LAG 3MN SPM 60 100CC DUR 3MN
700	C BN				W 8.9 V 43
800	C BN				SL SLOUGH
900	WHG 9U				WIPE HOLE
1000	CG 2U				W 9.1 V 45 F 6.4 FC 11.0 PH 11.2 S 550 SD 1/2% SOL 9%
1100	CG 5U				MOD TO HVY SLOUGH
1200	CG 5U				C=78u 46 VIS LAG 7MN SPM 60 100CC DUR 5MN
1300	WHG 18U				CONT. SLOUGH; HVY AT TIMES; BLD WT
1400	CG 2U				W 9.3 V 53
1500	WHG 10USS				WIPE HOLE; PULLED TITE 8 STDS OUT, HIT BRIDGE 3 1/2 STDS OUT
1600	CG 1U				W 9.6 V 55 F 5.9 FC 2/32 PH 10.5 S 550 SD 1/2% SOL 10%
1700	CG 1U				CONT. SL SLOUGH
1800	CG 3U				W 9.8 V 47
1900	WHG 35U				WIPE HOLE; PULLED TIGHT 1460-1908; REAMED TO BOTTOM FROM 1276
2000	CG 1U				W 9.5 V 50
2100	CG 1U				W 9.7 V 54 F 6.1 FC 2/32 PH 10.0 S 550 SD 1/2% SOL 10%
2200	C BN				W 9.9 V 60
2300	WHG 511U				WIPE HOLE; BRIDGE (1908')
2400	CALC SS BN				W 10.0 V 55
2500	CG 2U				C=24u VIS 53 LAG 20MN SPM 60 100CC DUR 10MN
2600	WHG 14U				W 10.0 V 53
2700	C BN				WIPE HOLE; RM BRID- GE @ 2275'
2800	C BN				W 10.0 V 56 F 6.2 FC 2/32 PH 9.0 S 800 SD 1/2% SOL 11%
2867					TOTAL DRILLER'S DEPTH: 2867'