

WELL IW 330-3	COMPANY OREGON NATURAL GAS CORP.	AREA MIST	LOCATION 1,602.75'W & 2,377.21' W of SE cor; Sec 3; T6N; R5W W&M COLUMBIA COUNTY, OR	WESTERN GEO-ENGINEERS "A SERVICE TO THE OIL AND GAS INDUSTRY"	RECEIVED-PTLD JAN 23 1987 DEPT OF GEOLOGY & MINERAL INDUS.
LITHOLOGY SYMBOLS				REMARKS	
LEGEND				WELL ELEV. CL. 1,029.15' KB. 1,042.65' FILTRATE IN CO/30 MIN. GAS TRAP agitator type MUD BEAVER DRUG FLUIDS (11gto/KOL) TAYLOR DRUG CO. RIG #4	
MUD DATA				CASING	
DATE 12/21/86 to 1/12/87				DEPTH 50' to 2772'	
ENGINEERS J. Duvall G. Sandstrom					

DEPTH	LITHOLOGY	OIL IN MUD or CUTTINGS		REMARKS
		TOTAL DITCH GAS	CUTTING ANALYSIS	
00				Drill surface w/ 17 3/8" bit; spud w/ gel/water mud.
100				w 8.8 v 58
200				
300				w 8.8 v 65
400				occ slough
500				Set 13 3/8" csg 498' drl and w/ 12 1/2" bit
600				0 20' vis 50 lag 7mm 136 spm 100cc dur 9mm w 8.8 v 49
700				occ slough
800				NOTE: angle & direction are REAL; total coordinates, etc., are AVERAGED. ICF 8 743' w/ 12" sub. 1°45' N60W TVD 801.99(d=.01) sec 90' w 9.2, v 50, f 6.8, fc 2/32, pH 10.5, s 300, sd 1/8%, sol 7%
900				Trip for balled bit 1°45' N70W TVD 883.99(d=.11) sec 4.67 poh for drlg ass assume rot drlg 50 5.61' N69W TVD 940.72(d=.38) sec 9.01'
1000				5°15' N69W TVD 1003.46(d=.54) sec 14.64'
1100				0 6u vis 54 lag 15mm 130 spm 100cc dur 12mm w 9.3 v 54
1200				5°15' N70W TVD 1096'(d=.93) sec 23.15 change BHA w 9.2, v 48, f 6.6, fc 2/3, pH 10.0, s 300, sd 1/8%, sol 7%
1300				6°45' N64W TVD 1192.6'(d=1.4) sec 33.15' poh to ch bha w 9.3 v 46
1400				sl ant slough 7°30' N62W TVD 1343.44(d=2.6) sec 51.9'
1500				w 9.2, v 48, f 5.2, fc 2/32, pH 9.5, s 400, sd 1/8%, sol 7%
1600				mod slough 7°45' N59W TVD 1441.5'(d=3.5) sec 65.0'
1700				7°45' N60W TVD 1533.6'(d=4.4) sec 77.33' w 9.5 v 50
1800				0 30u vis 50 lag 28mm 130 spm 100cc dur 10mm 7°45' N59W TVD 1626.8'(d=5.2) sec 89.8'
1900				mod ant slough 7°45' N61W TVD 1719.9(d=6.1) sec 102.29'
2000				w 9.5, v 49, f 4.8, fc 2/32, pH 9.5, s 650, sd 1/8%, sol 9%
2100				wide hole; r/b bridges from 1500' to btm 5°45' N62W TVD 2023.5'(d=8.5) sec 140.33'
2200				0=44u 52 vis lag 29mm 136spm 100cc dur 11mm w 9.6+ v 50
2300				wide hole 6°45' N62W TVD 2185.5(d=9.5) sec 158.20'
2400				w 9.7, v 54, f 4.8, fc 2/32, pH 9.5, s 600, sd 1/8%, sol 10%
2500				wipe hole 6°50' N60W TVD 2302.7(d=10.7) sec 171.81'
2600				NOTE: DRESSER D.I. - CORES cut into 3' lengths; general core description in lith deap column; seal core descriptions by CORELABS available 6' later 7°45' N59W TVD 2368-2535' w/ 12" bit (RRB-4); run Dresser D. I. set 8 5/8" csg 8' to fill, pH 8.0, s 12,000, sd nil, sol 2% 7°45' N55.5W TVD 2531.0(d=2.0) sec 203.25'
2700				w 8.7, v 36, f 18, fc fill, pH 8.0, s 12,000, sd nil, sol 2% 6°45' N56.7W TVD 2630.6(d=12.4) sec 210.24'
2800				w 8.5, v 39, f 12, fc fill, pH 8.0, s 12,000, sd nil, sol 1%
2900				7°00' N56W TVD 2758.7(d=13.3) sec 225.44'
3000				-RUN DRESSER

OREGON NATURAL GAS, IW 330-3, Mist, Sec 3; T6N; R5W; W&M; Columbia County, Oregon

Core #1: 2368'-2398'; 30' cut in 8.5 hrs; 28.5' recovered.  
 Core #2: 2398'-2428'; 30' cut in 9 hrs; 15' recovered.  
 Core #3: 2428'-2458'; 30' cut in 12.75 hrs; 10.5' recovered.  
 Core #4: 2458'-2490'; 32' cut in 9.5 hrs; 31.5' recovered.  
 Core #5: 2490'-2520'; 30' cut in 8.75 hrs; 30.5' recovered.  
 Core #6: 2520'-2537'; 17' cut in 4.25 hrs; 17.5' recovered.  
 Core #7: 2539'-2569'; 30.5' cut in 1.75 hrs; 26' recovered.  
 Core #8: 2569'-2599'; 30' cut in 0.6 hrs; 28' recovered.  
 Core #9: 2599'-2629'; 30' cut in 1.0 hrs; 30.5' recovered.  
 Core #10: 2629'-2659'; 30' cut in 1.6 hrs; 22' recovered.  
 Core #11: 2659'-2689'; 30' cut in 0.75 hrs; 30' recovered.  
 Core #12: 2689'-2719'; 30' cut in 0.5 hrs; 30.5' recovered.