

COMPANY ARCO EXPLORATION CO
 AREA N 1st
 LOCATION 2558'N & 2096'E of SW COFN
 Sec. 19; T6N; R5W; W4E:M
 COUNTY, STATE COLUMBIA COUNTY, OR.

WESTERN GEO-ENGINEERS
 "A SERVICE TO THE OIL AND GAS INDUSTRY"

REMARKS
 WELL ELEV. GL. 702.5
 KB. 713.5
 FILTRATE IN PPU CL
 GAS TRAP AGITATOR TYPE
 MUD LIGNITE/DESCO
 (WESTERN)
 TAYLOR DRILLING RIG 4

MUD DATA
 W WEIGHT
 V VISCOSITY
 F FILTRATE
 FC FILTER CAKE
 SD SAND IN %

SALINITY
 R RESISTIVITY
 RF FILTRATE RESISTIVITY

LEGEND
 CB CORE BIT
 WLC WIRE LINE
 TO TRIP GAS
 CG CONNECTION GAS
 C CARBIDE GAS

OTHER DATA
 CR CIRCULATE RETURNS
 NR NO RETURN
 DST DRILL STEM TEST
 [] CORE INTERVAL

DATE 7/1/85 to 7/7/85 DEPTH 30' to 3435' ENGINEERS BUTSEL VESSELY

DEPTH	LITHOLOGY	OIL IN MUD or CUTTINGS TRK Fair xx Good xxx V/Gd xxxx		REMARKS
		TOTAL DITCH GAS	CUTTING ANALYSIS	
50	GRAV. MED TO FM, SBR, REG TOY GRN, STICKY			DRILL OUT SURFACE WITH 12" BIT
100	CHROM=100%CI			
200	SAND, VFN TO CR, SBR, ABUND, MAR, VGL, PLASTIC, STICKY, SEMI SOL			
300	CLY, MD GRY, BL, STONY, PLASTIC, INSOL, SNO, CLR TO LT GRY, VFN TO W, POORLY SHT, ANG TO RND, TR PYRITE			MOD SLOUGH
400	CLY, MD GRY, SFT, INSOL, SBR, VFN TO MED, SBR, F, N, SBR			DRILL OUT CEMENT W/ 8 1/2" BIT
500	CLY, MED GRY, SFT, PLASTIC, SBR, SFT, MIN SAND, SBR, SFT, BRAN, ANG, CLR, SFT, MICR, OCC SHELL FRACS			W 8.6 V 35 C=20U 635VIB LAG 5WIN 130SPM DUR 4WIN 100CC
600	CLAY, LT GRY, SFT, SBR, VFN TO MED, SBR, F, N, SBR			W 9.10 V 38
700	SILTST, MED GRY, BRN, FRM, FRABLE, MIN PYRITE			W 9.5 V 39
800	CLAY, MED GRY, SFT, STICKY, MIN MICRO MIC, IMC, LIC			V 38
900	SILTST, DRK GRY, BRN, FRM, FRABLE, MIN VFN, DESTIM, PYRITE			0°00' WIPE HOLE
1000	SILTST, DRK GRY, BRN, SFT, FRABLE, MIN, SBR, SHELL FRACS			W 9.5 V 36
1100	SILTST, DRK GRY, SFT, FRM, FRABLE, MIN, SBR, SHELL FRACS			W 9.8 V 40
1200	SILTST, DRK GRY, BRN, FRM, FRABLE, MIN, SBR, SHELL FRACS			C=47U 40VIB LAG 8WIN 130SPM DUR 3WIN 100CC
1300	SILTST, DRK GRY, BRN, FRM, FRABLE, MIN, SBR, SHELL FRACS			WIPE HOLE
1400	SILTST, DRK GRY, BRN, FRM, FRABLE, MIN, SBR, SHELL FRACS			W 10.1 V 43 F 4.6 FC 2/32 S 50 SD 2 1/2 SOL 10
1500	SILTST, DRK GRY, BRN, FRM, FRABLE, MIN, SBR, SHELL FRACS			W 10.0 V 44
1600	SILTST, DRK GRY, BRN, FRM, FRABLE, MIN, SBR, SHELL FRACS			WIPE HOLE
1700	SILTST, DRK GRY, BRN, FRM, FRABLE, MIN, SBR, SHELL FRACS			W 10.0 V 56
1800	SILTST, DRK GRY, BRN, FRM, FRABLE, MIN, SBR, SHELL FRACS			
1900	SILTST, DRK GRY, BRN, FRM, FRABLE, MIN, SBR, SHELL FRACS			1°15' N34W
2000	SILTST, DRK GRY, BRN, FRM, FRABLE, MIN, SBR, SHELL FRACS			W 10.0 V 42 F 4.4 FC 2/32 S 700 SD 3 1/2 SOL 10
2100	SILTST, DRK GRY, BRN, FRM, FRABLE, MIN, SBR, SHELL FRACS			C=25U 42VIB LAG 17WIN 130SPM 100CC DUR 4WIN
2200	SILTST, DRK GRY, BRN, FRM, FRABLE, MIN, SBR, SHELL FRACS			W 10.0 V 43
2300	SILTST, MED GRY, BRN, FRM, FRABLE, MIN, SBR, SHELL FRACS			W 10.0 V 41
2400	SILTST, MED GRY, BRN, FRM, FRABLE, MIN, SBR, SHELL FRACS			0°00' WIPE HOLE
2500	SILTST, MED GRY, BRN, FRM, FRABLE, MIN, SBR, SHELL FRACS			W 10.1 V 42 F 4.2 FC 2/32 S 900 SD 2 1/2 SOL 11
2600	SILTST, MED GRY, BRN, FRM, FRABLE, MIN, SBR, SHELL FRACS			W 10.1 V 43
2700	SAND, VFN TO EN, SBR, ABUND, MAR, VGL, PLASTIC, STICKY, SEMI SOL			W 10.2 V 46
2800	SAND, VFN TO EN, SBR, ABUND, MAR, VGL, PLASTIC, STICKY, SEMI SOL			
2900	SAND, VFN TO EN, SBR, ABUND, MAR, VGL, PLASTIC, STICKY, SEMI SOL			W 10.3 V 49
3000	SAND, VFN TO EN, SBR, ABUND, MAR, VGL, PLASTIC, STICKY, SEMI SOL			W 10.4 V 44
3100	SAND, VFN TO EN, SBR, ABUND, MAR, VGL, PLASTIC, STICKY, SEMI SOL			2°20' S64
3200	SAND, VFN TO EN, SBR, ABUND, MAR, VGL, PLASTIC, STICKY, SEMI SOL			
3300	SAND, VFN TO EN, SBR, ABUND, MAR, VGL, PLASTIC, STICKY, SEMI SOL			W 10.2 V 42
3400	CLAY, LT GRY, SFT, SBR, VFN TO MED, SBR, F, N, SBR			DRILLER'S TOTAL DEPTH 3435'