

W 42-10
 DEEPEN NATURAL GAS
 DEVELOPMENT CORP.
 MIST FIELD
 221'N & 451'W of E 1/4
 CORNER, SEC. 10; T 6 N,
 R 5 W, WBM
 STATE COLUMBIA, OREGON

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

LITHOLOGY SYMBOLS

□	Shale	□	Clay	□	Silt	□	Sand	□	Gravel	□	Coarse	□	Medium	□	Fine	□	Very Fine	□	Very Coarse	□	Very Fine	□	Very Coarse
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REMARKS

WELL ELEV. 804.38'
 KB. 815.78'
 SALINITY IN PPM CL
 FILTRATE IN CG/30 MIN.
 GAS TRAP AGITATOR TYPE
 MUD GEL/DRISPAQ
 (BEAVER DRILLING FLUIDS)
 TAYLOR RING #5

CASING

13-5/8" TO 532'
 8-5/8" TO 2070'

DATA

SALINITY RESISTIVITY
 R FILTRATE RESISTIVITY
 BIT DATA
 NB NEW BIT
 RRB REGRIND BIT

LEGEND

CB CORE BIT
 WCB WIRE LINE CB
 OTHER DATA
 TC TRIP GAS
 CG CONNECTION GAS
 C CARBIDE GAS

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

DATE 7/26/88
 DEPTH 0' to 2769'

ENGINEERS J. DUVALL
 B. PORTWOOD

DEPTH	LITHOLOGY	MUD ANALYSIS		CUTTING ANALYSIS	REMARKS
		PET. VAP.	BLENDER		
0	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				NOTE: ANGLE AND DIRECTION ARE REAL; TOTAL COORDINATES, ETC., ARE AVERAGED
100	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				SPUD w/17 1/2" BIT & GEL/WATER SPUD MUD v 8.8 v 42
200	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 8.8 v 43
300	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				PLUGGED PITCHER NIPPLE
400	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 9.3 v 44
500	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				9.6, v 42, PV 18, YP 12, FC 2.8, SD 1%, SOL 9%
600	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				SET 13-3/8" CSG 532'; DRILL OUT w/ 12 1/2" BIT 0.15' N120°W 0.12'N 0.03'W TVD=590' (d=0') SEC=0.13'
700	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 9.3, v 35, PV 13, YP 8, PH 8.5, F 8.0, SD 2%, SOL 7%
800	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				MOD AMT SLOUGH
900	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				C=11v 47 VIS LAG=16 MIN 100cc 94 SPH DUR=3 MN
1000	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 9.2 v 43
1100	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				8.15' N16°W 1.7'N 0.4'W TVD=957' (d=0') SEC = -1.7'
1200	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				RUN MAGNADRILL; KICK OFF @ 1000'; w/ 2° KICK SUB 2.15' S0°W 1.4'N 2.2'W TVD=1037' (d=0') SEC = -1.8'
1300	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 9.3 v 43
1400	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				4.05' S40°E 2.3'S 2.0'W TVD=1100' (d=0') SEC = 1.7'
1500	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				5.05' S8°E 4.7'S 1.8'W TVD=1131' (d=0') SEC = 4.3'
1600	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				6.45' S8°E 7.8'S 1.3'W TVD=1161' (d=0') SEC = 7.4'
1700	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 9.2 v 41 10° S120°E 22.9'S 1.3'E TVD=1266 (d=1.5') SEC=22.7
1800	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				C=17v VIS=44 LAG=13MN SPH=96 100cc DUR=5MN
1900	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				POW TO CHNG BHA OCC SLOUGH
2000	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				9.45' S14°E 33.2'S 3.72'E TVD=1328 (d=2.4') SEC=33.3
2100	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 9.2 v 42
2200	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				8.30' S8°E 20.02'S 5.37°E TVD=1452 (d=4.2) SEC=34.7
2300	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 9.7 v 43
2400	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				8.30' S21°E 71.6'S 15.2'E TVD=1570 (d=6') SEC = 73'
2500	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				WIPE HOLE; TIGHT @ 1080' IN & OUT C=40v VIS=42 LAG=15MN SPH=108 100 CC DUR=5MN
2600	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				8.45' S15°E 84.5'S 19.4'E TVD=1659' (d=7') SEC=87'
2700	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 10.0 v 44
2800	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				9.45' S20°E 96'S 24'E TVD=1751' (d=8') SEC=101'
2900	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				WIPE HOLE
3000	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 10.2 v 50
3100	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				9° S18°E 112'S 28'E TVD=1843' (d=9') SEC=115'
3200	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				WIPE HOLE
3300	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 10.2 v 60
3400	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				PISTON HOLE; PLOW BIT; PLUGGER; REAM GAS CURVES
3500	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				8.15' S18°E 162'S 45'E TVD=1993' (d=11') SEC=137'
3600	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				REAM 50' TO BOTTOM
3700	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 10.0 v 42
3800	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				7.45' S19°E 142'S 36'E TVD=1056' (d=11') SEC=146'
3900	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				SET 8-5/8" CSG 3 2070'; DRILL OUT w/ 7-7/8" BIT
4000	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 9.3 v 55
4100	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				8.15' S18°E 162'S 45'E TVD=2209' (d=13') SEC=168'
4200	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 9.3 v 62
4300	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 9.4, v 43, PV 16, YP 12, FC 2.8, SD 1%, SOL 9%
4400	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				9° S16°E 189'S 53'E TVD=2394' (d=15') SEC=195'
4500	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 9.5 v 42
4600	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 9.5 v 43
4700	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				10°00' S18°E 223'S 64'E TVD=2607' (d=18') SEC=231'
4800	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				v 9.5 v 38
4900	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				10.45' S18°E 248'S 72'E TVD=2750' (d=20') SEC=257'
5000	SLTSTN, MD GRV, SPKLD, ARG, FRM-BRIT, OCC CALC				RUN ATLAS