

WILLIAMS PETROLEUM CO.  
VACUUM GRAYBURG S.A. UNIT 3229-005

DATE : 5-6-79  
FORMATION : GRAYBURG

FILE NO : 3202-11118  
ANALYSTS : NEFF

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO MAXIMUM	90 DEG	POR. He	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
441	4633.0-34.0	14.	6.2	9.5	14.7	36.5	2.87	DOL,SL/ANHY,STY,V/F
442	4634.0-35.0	2.6	2.4	5.7	13.7	45.0	2.87	DOL,ANHY,SL/V,V/F
443	4635.0-36.0	3.5	2.1	4.0	9.0	47.7	2.88	DOL,ANHY,F,SL/V
444	4636.0-37.0	7.7	6.9	16.6	18.9	41.7	2.84	DOL,SL/CALC,STY,F,SL/V
445	4637.0-38.0	14.	11.	17.9	23.1	41.6	2.87	DOL,SL/CAL,SL/V,V/F,STY
446	4638.0-39.0	6.2	5.2	15.0	28.2	34.8	2.84	DOL,SL/ANHY,SL/F
447	4639.0-40.0	3.3	3.0	9.7	27.6	25.8	2.88	DOL,SL/ANHY,DOL,STY
448	4640.0-41.0	3.5	3.4	10.6	28.1	25.8	2.88	DOL,SL/ANHY,DOL,STY
449	4641.0-42.0	13.	11.	12.9	22.9	22.9	2.89	DOL,SL/STY,FOSS,SL/F
450	4642.0-43.0	7.1	6.3	12.0	34.7	19.2	2.86	DOL,SL/ANHY,DOL,STY,FOSS
451	4643.0-44.0	7.2	5.7	11.7	13.2	31.8	2.84	DOL,SL/ANHY,STY,SL/V
452	4644.0-45.0	5.9	*	11.6	17.5	29.1	2.86	DOL,SL/ANHY,STY,V/F
453	4645.0-46.0	12.1	16.	13.7	28.6	23.1	2.86	DOL,SL/ANHY,FOSS,SL/V
454	4646.0-47.0	9.4	8.5	12.8	25.6	26.4	2.84	DOL,SL/ANHY,SL/V,SL/F
455	4647.0-48.0	17.	16.	13.7	16.9	23.5	2.84	DOL,SL/ANHY,STY,SL/V
456	4648.0-49.0	4.7	3.0	10.5	17.6	26.7	2.79	DOL,SL/CHT,SL/V,STY
457	4649.0-50.0	15.	12.	8.0	12.2	24.4	2.86	DOL,ANHY,PP,SL/F
458	4650.0-51.0	59.	39.	13.4	17.3	26.9	2.85	DOL,SL/ANHY,CHT,SL/V,SL/F,STY
459	4651.0-52.0	7.6	8	9.7	13.8	34.0	2.84	DOL,ANHY,STY,F,SL/V
460	4652.0-53.0	4.1	*	12.0	27.6	24.7	2.88	DOL,SL/ANHY,STY,V/F,SL/V
461	4653.0-54.0	4.1	1.0	6.8	11.3	43.2	2.84	DOL,ANHY,CHT,F,SL/V,STY
462	4654.0-55.0	3.2	1.3	6.4	8.2	38.8	2.85	DOL,SL/ANHY,CHT,SL/V
463	4655.0-56.0	1.5	1.1	5.0	29.6	31.5	2.87	DOL,SL/ANHY,CHT,SL/F,STY
464	4656.0-57.0	0.5	0.2	3.5	14.8	42.5	2.87	DOL,SL/ANHY,V/F,STY
465	4657.0-58.0	4.3	2.0	6.0	17.3	45.2	2.84	DOL,SL/ANHY,STY,SL/V
466	4658.0-59.0	0.8	*	9.3	15.9	36.2	2.85	DOL,SL/ANHY,V/F,STY
467	4659.0-60.0	0.1	*	6.7	17.6	52.9	2.85	DOL,SL/ANHY,V/F
468	4660.0-61.0	0.3	*	8.2	14.5	30.2	2.84	DOL,SL/ANHY,V/F,STY,SL/V
469	4661.0-62.0	3.3	2.0	6.8	10.9	34.1	2.85	DOL,SL/ANHY,STY,SL/F,SL/V
470	4662.0-63.0	3.4	0.8	9.0	17.6	35.3	2.86	DOL,ANHY,STY,V,SL/F

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted), but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.