

COLEMAN, O. G., INC.  
Petroleum Reservoir Engineering  
DALLAS, TEXAS

PHILLIPS PETROLEUM CO.  
E. VACUUM GRAYBURG S.A. UNIT 3229-005  
E. VACUUM GRAYBURG SAN ANDRES FIELD  
LEA COUNTY, NEW MEXICO

DATE : 5-6-79  
FORMATION : GRAYBURG  
DRILL. FLUID : SALT BASE MUD  
LOCATION : 1110' FSL & 1290' FWL

FILE NO : 3202-11118  
ANALYSTS : NEFF  
ELEVATION: 3965' GL  
SEC. 32, T-17-S, R-35-E, SUR

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO MAXIMUM	AIR (MD) 90 DEG	FOR. He	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
148	4315.0-16.0	0.3	0.2	11.1	12.7	38.0	2.81	DOL, ANHY
149	4316.0-17.0	<0.1	<0.1	3.5	17.8	29.6	2.82	DOL, ANHY
150	4317.0-18.0	0.5	0.5	8.0	18.9	28.5	2.81	DOL, ANHY
151	4318.0-19.0	0.2	<0.1	4.2	42.9	47.6	2.85	DOL, ANHY
152	4319.0-20.0	2.3	0.2	2.2	17.5	72.8	2.86	DOL, ANHY, F
153	4320.0-21.0	0.2	0.1	6.2	25.0	23.6	2.84	DOL, ANHY, STY
154	4321.0-22.0	0.8	0.4	3.6	19.7	58.4	2.86	DOL, ANHY, SL/F
155	4322.0-23.0	18.	0.2	3.5	26.5	51.5	2.85	DOL, ANHY, F
156	4323.0-24.0	3.8	<0.1	4.2	18.4	45.9	2.85	DOL, ANHY, STY
157	4324.0-25.0	22.	21.	12.0	24.7	33.3	2.88	DOL, ANHY, DOL
158	4325.0-26.0	2.1	1.9	5.3	16.7	27.3	2.86	DOL, ANHY, DOL, STY
159	4326.0-27.0	2.2	1.3	5.2	8.9	57.1	2.86	DOL, ANHY, DOL, STY
160	4327.0-28.0	0.4	0.4	4.3	8.2	30.6	2.86	DOL, ANHY, DOL
161	4328.0-29.0	0.7	0.1	3.9	14.3	34.3	2.79	DOL, ANHY, SDY, V/F
162	4329.0-30.0	51.	<0.1	5.4	3.5	70.2	2.79	DOL, ANHY, SDY
163	4330.0-31.0	<0.1	<0.1	6.1	7.3	61.8	2.78	DOL, ANHY, SDY, V/F
164	4331.0-32.0	<0.1	<0.1	7.1	6.6	47.5	2.76	DOL, ANHY, SDY
165	4332.0-33.0	0.1	*	11.2	18.8	37.5	2.69	DOL, ANHY, SDY
166	4333.0-34.0	0.4	*	11.6	30.4	21.9	2.83	DOL, ANHY, SL/F, STY
167	4334.0-35.0	<0.1	*	9.5	12.8	51.3	2.83	DOL, ANHY, SL/F, STY
CORE NO. 6 4335.0-4394.0 CUT 59' REC 59'								
168	4335.0-36.0	0.7	0.5	12.4	20.2	46.2	2.80	DOL, DOL, SHR
169	4336.0-37.0	0.1	<0.1	5.5	15.9	69.3	2.80	DOL, SHR, DOL
170	4337.0-38.0	0.4	0.3	9.3	4.1	83.3	2.81	DOL
171	4338.0-39.0	0.1	<0.1	2.7	17.8	69.1	2.84	DOL, STY
172	4339.0-40.0	0.1	<0.1	7.1	9.3	68.7	2.85	DOL

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 made or used.