

**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*  
DALLAS, TEXAS

CORE ANALYSTS REPORT

FOR

PHILLIPS PETROLEUM COMPANY

EUGSA UNIT NO. 2739-005  
EAST VACUUM  
LEA COUNTY, NEW MEXICO

**PRELIMINARY PRINT**

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 profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

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*Petroleum Reservoir Engineering*

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PHILLIPS PETROLEUM COMPANY  
 EUGSA UNIT NO. 2739-005  
 EAST VACUUM  
 LEA COUNTY, NEW MEXICO

DATE : 6-2-79  
 FORMATION : GRAYBURG/SAN ANDRES  
 DRG. FLUID: WATER BASE MUD  
 LOCATION : 1330' FSL & 1380' FWL, SEC 27, T-17-S, R-35-E

FILE NO : 3202-11170

ANALYSTS : GOUSEY  
 ELEVATION: 5940.5' (ft.)

DALLAS, TEXAS

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM* TO AIR (MD)	POR. MAXIMUM (%)	AIR DEG HE	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
CORE NO. 1 4345.0-4605.0 CUT 60' REC 60'								
5 1	4345.0-46.0	<0.1	<0.1	6.3	19.5	44.9	2.80	DOL,SL/ANHY,STY,SL/F,SL/U
5 2	4346.0-47.0	<0.1	<0.1	5.5	8.5	68.1	2.81	DOL,SL/ANHY,STY,SL/F,SL/U
5 3	4347.0-48.0	<0.1	<0.1	2.0	24.1	35.7	2.84	DOL,SL/ANHY,STY,SL/F,SL/U
5 4	4348.0-49.0	0.2	<0.1	1.7	29.8	37.2	2.85	DOL,SL/ANHY,STY,SL/U,V/F
5 5	4349.0-50.0	<0.1	<0.1	1.6	14.1	43.0	2.85	DOL,SL/ANHY,STY,F,SL/U
5 6	4350.0-51.0	<0.1	<0.1	1.7	20.5	56.8	2.83	DOL,SL/ANHY,STY,F
5 7	4351.0-52.0	<0.1	<0.1	2.8	4.8	79.4	2.82	DOL,SL/ANHY,STY,SL/F,SL/U
5 8	4352.0-53.0	0.1	<0.1	3.5	9.1	45.5	2.82	DOL,ANHY,STY,SL/F,SL/U
5 9	4353.0-54.0	<0.1	<0.1	4.8	13.2	37.9	2.84	DOL,ANHY,STY,SL/F
5 10	4354.0-55.0	<0.1	<0.1	6.2	13.4	42.1	2.81	DOL,SL/ANHY,SHY,STY
5 11	4355.0-56.0	<0.1	<0.1	4.9	15.3	48.7	2.78	DOL,SL/ANHY,SHY,STY
5 12	4356.0-57.0	<0.1	<0.1	3.7	6.4	61.8	2.85	DOL,ANHY,STY,F,SH LAM
5 13	4357.0-58.0	<0.1	<0.1	4.2	8.3	71.1	2.83	DOL,ANHY,STY,SL/F,SL/U
5 14	4358.0-59.0	0.1	<0.1	3.8	20.5	47.3	2.84	DOL,ANHY,STY,F,SL/U
5 15	4359.0-60.0	<0.1	<0.1	3.6	8.1	69.5	2.82	DOL,ANHY,STY,SL/F,SL/U
5 16	4360.0-61.0	0.3	<0.1	3.7	5.7	53.5	2.87	DOL,ANHY,STY,SL/F,SL/U
5 17	4361.0-62.0	<0.1	<0.1	2.5	36.4	28.9	2.83	DOL,SL/ANHY,STY,F,SL/U
5 18	4362.0-63.0	0.5	<0.1	3.5	18.4	57.8	2.87	DOL,ANHY,STY,F
5 19	4363.0-64.0	<0.1	<0.1	1.7	17.5	43.7	2.84	DOL,ANHY,STY,F,SL/U
5 20	4364.0-65.0	<0.1	<0.1	3.3	7.3	34.3	2.86	DOL,ANHY,STY,F,SL/U
5 21	4365.0-66.0	<0.1	<0.1	1.9	13.0	25.4	2.89	DOL,UV/ANHY,STY,F
5 22	4366.0-67.0	<0.1	<0.1	2.2	19.0	24.6	2.90	DOL,UV/ANHY,STY,F
5 23	4367.0-68.0	<0.1	<0.1	4.2	10.3	28.6	2.84	DOL,ANHY,STY,F,U
5 24	4368.0-69.0	<0.1	<0.1	3.8	6.4	23.0	2.86	DOL,SL/ANHY,STY,F,U
5 25	4369.0-70.0	<0.1	<0.1	4.1	31.9	2.84	2.84	DOL,ANHY,STY,F,U

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*Petroleum Reservoir Engineering*

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PHILLIPS PETROLEUM COMPANY  
 EUGSA UNIT NO. 2739-005

DATE : 6-2-79  
 FORMATION : GRAYBURG/SAN ANTONES  
 DALLAS, TEXAS

FILE NO. : 3202-11152  
 ANALYSTS : GODSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	TEMP. TO AIR (MU)	FGR. °C	FLUID SATS.	GRAIN DEN.	DESCRIPTION
6 26	4370.0-71.0	<0.1	<0.1	4.7	4.0	DOL, SL/ANHY, STY, SL/F, SL/U
6 27	4371.0-72.0	0.1	<0.1	2.9	3.5	DOL, SL/ANHY, STY, SL/F, SL/U
6 28	4372.0-73.0	<0.1	<0.1	4.7	7.6	DOL, ANHY, STY, SL/F, SL/U
6 29	4373.0-74.0	<0.1	<0.1	4.8	10.4	DOL, ANHY, STY, SL/F, SL/U
6 30	4374.0-75.0	<0.1	<0.1	3.1	19.4	DOL, ANHY, F, U
6 31	4375.0-76.0	<0.1	<0.1	2.9	11.4	DOL, ANHY, STY, SL/F, SL/U
6 32	4376.0-77.0	<0.1	<0.1	3.1	14.9	DOL, ANHY, STY, SL/F, SL/U
6 33	4377.0-78.0	<0.1	<0.1	3.8	15.0	DOL, ANHY, STY, SL/F, SL/U
6 34	4378.0-79.0	<0.1	<0.1	3.1	34.6	DOL, SL/ANHY, STY, F, SL/U, FOSS
6 35	4379.0-80.0	<0.1	<0.1	2.8	29.1	DOL, SL/ANHY, STY, SL/F, SL/U
6 36	4380.0-81.0	<0.1	<0.1	3.4	35.1	DOL, ANHY, STY, SL/F, SL/U
6 37	4381.0-82.0	<0.1	<0.1	1.1	35.1	DOL, ANHY, STY, SL/F
6 38	4382.0-83.0	<0.1	<0.1	1.6	39.0	DOL, V/ANHY, STY, SL/F
6 39	4383.0-84.0	<0.1	<0.1	2.9	23.6	DOL, V/ANHY, STY, F, SL/U
6 40	4384.0-85.0	0.3	0.2	5.8	10.0	DOL, V/ANHY, STY, SL/V
6 41	4385.0-86.0	0.1	<0.1	3.9	11.8	DOL, V/ANHY, STY, F, SL/U
6 42	4386.0-87.0	0.1	<0.1	5.8	4.5	DOL, V/ANHY, STY, F, OOL, SL/U
6 43	4387.0-88.0	<0.1	<0.1	4.6	24.2	DOL, V/ANHY, STY, SL/F, V, FOSS, OOL
6 44	4388.0-89.0	<0.1	<0.1	1.6	8.3	DOL, ANHY, STY, SL/F
6 45	4389.0-90.0	<0.1	<0.1	2.1	23.1	DOL, V/ANHY, STY, SL/F, OOL
6 46	4390.0-91.0	0.3	<0.1	7.1	12.2	DOL, V/ANHY, STY, SL/F, V, FOSS, OOL
6 47	4391.0-92.0	<0.1	<0.1	5.3	16.7	DOL, SL/ANHY, STY, SL/F, V, FOSS
6 48	4392.0-93.0	<0.1	<0.1	2.4	8.9	DOL, ANHY, STY, SL/F, V, FOSS, OOL
6 49	4393.0-94.0	<0.1	<0.1	5.2	12.3	DOL, ANHY, STY, SL/V, F, FOSS
6 50	4394.0-95.0	0.3	<0.1	5.8	18.9	DOL, SL/ANHY, STY, SL/V, F, FOSS
6 51	4395.0-96.0	0.1	<0.1	5.0	32.0	DOL, SL/ANHY, STY, F, FOSS
6 52	4396.0-97.0	0.3	4.8	19.7	34.1	DOL, SL/ANHY, STY, V/F, SL/U
6 53	4397.0-98.0	1.1	0.3	3.3	17.1	DOL, ANHY, STY, SL/F, V, FOSS
6 54	4398.0-98.5	0.1	<0.1	3.3	14.4	DOL, SL/ANHY, STY, V/F, FOSS
	4398.5-04.0					

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*Petroleum Reservoir Engineering*

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PHILLIPS PETROLEUM COMPANY  
EVGSA UNIT NO. 2739-005

DATE : 6-2-79  
FORMATION : GRAYBORG/SAN ANDREAS

FILE NO : 3202-11452  
ANALYSTS : GONSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MIN)	AIR MAXIMUM	TEMP. 90 DEG	POR. He	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
5	55	4404.0-05.0	<0.1	<0.1	1.0	20.5	51.1	2.87	DOL,SL/ANHY,STY,F,FOSS
		CORE NO. 2	4405.0-4465.0	CUT 60'	REC 60'				
5	56	4405.0-06.0	0.5	0.1	2.6	5.7	50.3	2.85	DOL,ANHY,V/F,SL/U
5	57	4406.0-07.0	1.0	0.5	2.8	11.8	52.3	2.82	DOL,SL/ANHY,V/F
5	58	4407.0-08.0	0.2	0.1	3.1	8.9	27.1	2.86	DOL,ANHY,V,F,V
5	59	4408.0-09.0	0.6	0.3	2.1	6.5	39.6	2.85	DOL,F,V
5	60	4409.0-10.0	0.1	0.1	2.4	15.3	42.4	2.87	DOL,SL/ANHY,V,SL/F
5	61	4410.0-11.0	0.8	0.2	1.3	32.9	42.7	2.87	DOL,ANHY,SL/F,V
5	62	4411.0-12.0	0.2	0.1	1.9	32.1	32.1	2.86	DOL,ANHY,F,SL/V
5	63	4412.0-13.0	1.2	0.5	1.9	18.4	45.9	2.84	DOL,SL/ANHY,V/F
5	64	4413.0-14.0	0.3	0.2	1.3	37.5	33.4	2.85	DOL,F,SL/V
5	65	4414.0-15.0	0.1	<0.1	4.6	41.9	19.4	2.85	DOL,SL/F,PP
5	66	4415.0-16.0	0.3	0.2	2.9	49.0	23.8	2.87	DOL,ANHY,SL/F,PP
5	67	4416.0-17.0	57.	1.5	5.7	22.8	22.5	2.88	DOL,ANHY,V/F,SL/U
5	68	4417.0-18.0	69.	9.3	10.8	15.3	35.3	2.84	DOL,SL/ANHY,V/F,SL/U
5	69	4418.0-19.0	12.	4.1	6.4	25.9	29.0	2.84	DOL,ANHY,V/F,SL/U
5	70	4419.0-20.0	23.	2.6	6.4	19.9	31.8	2.88	DOL,SL/ANHY,SL/F,PP
5	71	4420.0-21.0	57.	14.	10.5	32.8	30.7	2.88	DOL,ANHY,PP,SL/F,V/F
5	72	4421.0-22.0	26.	18.	14.6	18.2	35.6	2.86	DOL,ANHY,SL/F,PP
5	73	4422.0-23.0	5.4	2.6	10.0	19.7	32.8	2.83	DOL,ANHY,SL/V,SL/F
5	74	4423.0-24.0	13.	4.4	11.5	29.6	26.2	2.85	DOL,SL/F,SL/V
5	75	4424.0-25.0	8.9	0.8	6.7	26.0	30.7	2.84	DOL,ANHY,V/F,SL/V
5	76	4425.0-26.0	4.9	3.0	7.3	17.8	30.7	2.85	DOL,ANHY,V/F,V
5	77	4426.0-27.0	6.6	4.4	6.4	28.0	25.4	2.85	DOL,SL/ANHY,V/F,SL/U
5	78	4427.0-28.0	22.	1.6	5.5	20.5	39.8	2.85	DOL,SL/ANHY,SL/F,SL/U,STY
5	79	4428.0-29.0	6.8	1.3	6.3	28.0	25.4	2.85	DOL,SL/ANHY,V/F,SL/U
5	80	4429.0-30.0	1.6	0.3	2.4	15.9	55.3	2.84	DOL,SL/ANHY,V/F,STY
5	81	4430.0-31.0	0.6	2.3	19.9	44.2	2.85	DOL,SL/ANHY,V/F,V	

**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*  
 DALLAS, TEXAS

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PHILLIPS PETROLEUM COMPANY  
 EUGSA UNIT NO. 2739-005

DATE : 6-2-79  
 FORMATION : GRAYBURG/SAN ANDRES

FILE NO. : 3202-14152  
 ANALYSTS : GONSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MD)	AIR (MD)	FOR. (%)	FLUID	SATS.	GRAIN DEN	DESCRIPTION
82	4431.0-32.0	0.5	0.2	1.5	31.0	46.0	2.87	DOL, ANHY, V/F, STY
83	4432.0-33.0	56.0	50.0	19.4	11.9	40.2	2.85	DOL, ANHY, OOL, STY
84	4433.0-34.0	142.0	87.0	19.8	15.3	45.8	2.89	DOL, ANHY, OOL, V/F
85	4434.0-35.0	46.0	44.0	15.0	21.4	29.5	2.87	DOL, ANHY, SL/F, OOL
86	4435.0-36.0	37.0	32.0	15.1	23.0	26.5	2.87	DOL, SL/ANHY, V/F, OOL
87	4436.0-37.0	47.0	35.0	17.5	18.7	29.9	2.88	DOL, SL/ANHY, V/F, OOL
88	4437.0-38.0	51.0	42.0	20.3	29.4	23.6	2.88	DOL, SL/ANHY, V/F, OOL
89	4438.0-39.0	67.0	53.0	16.4	14.9	37.5	2.83	DOL, SL/ANHY, V/F, OOL
90	4439.0-40.0	51.0	8.5	12.2	27.7	20.7	2.86	DOL, ANHY, V/F, OOL
91	4440.0-41.0	69.0	54.0	14.0	31.7	26.9	2.85	DOL, SL/ANHY, V/F, OOL
92	4441.0-42.0	58.0	34.0	15.1	17.1	29.6	2.86	DOL, SL/F, OOL
93	4442.0-43.0	14.0	*	16.4	30.7	28.4	2.87	DOL, SL/ANHY, OOL, V/F
94	4443.0-44.0	94.0	82.0	15.0	18.8	27.8	2.83	DOL, SL/ANHY, V/F, OOL, STY
95	4444.0-45.0	80.0	55.0	12.7	24.0	25.1	2.64	DOL, SL/ANHY, STY, V/F, OOL
96	4445.0-46.0	91.0	76.0	16.8	19.3	27.1	2.85	DOL, SL/ANHY, OOL, SL/F
97	4446.0-47.0	81.0	64.0	19.1	24.1	22.6	2.86	DOL, SL/ANHY, SL/F, OOL
98	4447.0-48.0	125.0	57.0	17.3	27.5	21.8	2.87	DOL, SL/ANHY, SL/V, F, OOL
99	4448.0-49.0	33.0	19.0	9.4	34.2	26.3	2.88	DOL, SL/ANHY, V/F, SL/V
100	4449.0-50.0	167.0	99.0	13.7	23.9	23.0	2.87	DOL, ANHY, V/F, OOL
101	4450.0-51.0	62.0	37.0	14.1	13.3	30.9	2.84	DOL, ANHY, V/F, SL/V, OOL
102	4451.0-52.0	47.0	27.0	6.2	20.1	24.9	2.84	DOL, SL/ANHY, STY, V/F
103	4452.0-53.0	108.0	80.0	13.2	16.7	29.6	2.83	DOL, SL/ANHY, STY, V/F
104	4453.0-54.0	72.0	62.0	14.7	10.1	36.5	2.85	DOL, SL/F, SL/V, STY
105	4454.0-55.0	18.0	9.0	10.1	21.4	33.8	2.82	DOL, SL/ANHY, V/F, FOSS
106	4455.0-56.0	2.5	0.8	7.2	19.1	43.6	2.81	DOL, SL/ANHY, F, V
107	4456.0-57.0	2.9	2.1	5.8	14.7	39.7	2.82	DOL, SL/ANHY, FOSS, F, V
108	4457.0-58.0	1.1	1.0	3.1	23.1	55.6	2.84	DOL, SL/ANHY, V/F, SL/V
109	4458.0-59.0	0.9	0.8	4.5	49.7	26.0	2.86	DOL, SL/ANHY, V/F, V
110	4459.0-60.0	1.7	0.4	3.8	26.5	33.6	2.88	DOL, V/F, STY
111	4460.0-61.0	0.2	1.4	8.3	2.84	2.84	2.84	DOL, SL/F

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*Petroleum Reservoir Engineering*  
 DALLAS, TEXAS

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PHILLIPS PETROLEUM COMPANY  
 EUGSA UNIT NO. 2739-005

DATE : 6-2-79  
 FORMATION : GRAYBURG/SAN ANDRES

FILE NO : 3202-14153  
 ANALYSTS : GODSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	FERM. TO MAXIMUM	AIR (MI)	PUR. %O DEG	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
S 112	4461.0-62.0	0.1	<0.1	3.0	14.1	50.8	2.87	DOL, STY, SL/F
S 113	4462.0-63.0	1.3	0.5	2.6	31.0	34.5	2.85	DOL, SL/U, V/F
S 114	4463.0-64.0	1.1	1.1	7.3	26.8	27.5	2.84	DOL, V/F, STY
S 115	4464.0-65.0	2.1	1.6	7.5	26.0	27.3	2.84	DOL, V/F, V
CORE NO. 3 4465.0-4525.0 CUT 60' REC 60'								
S 116	4465.0-66.0	70.	69.	13.8	29.7	24.7	2.81	DOL, SL/F, SL/V
S 117	4466.0-67.0	0.5	0.4	7.1	46.9	30.6	2.77	DOL, SL/F, SL/V, SHR
S 118	4467.0-68.0	0.4	0.3	3.0	32.0	44.4	2.80	DOL, SL/F, SL/V, STY, SHR
S 119	4468.0-69.0	1.7	1.6	2.5	13.4	56.9	2.82	DOL, SL/F, SL/V
S 120	4469.0-70.0	1.1	1.0	1.4	8.3	73.4	2.83	DOL, SL/ANHY, SL/F, SL/V, STY
S 121	4470.0-71.0	0.9	0.8	2.3	24.7	51.4	2.82	DOL, SL/F, SL/V, STY
S 122	4471.0-72.0	3.5	0.4	3.2	13.5	48.9	2.81	DOL, SL/ANHY, SL/V, V/F
S 123	4472.0-73.0	1.8	0.8	2.9	31.0	45.3	2.83	DOL, SL/ANHY, V/F, SHR
S 124	4473.0-74.0	8.0	6.8	0.9	28.6	39.7	2.86	DOL, SL/V, STY, V/F
S 125	4474.0-79.0							DOL, ANHY, SHY, STY, INS
S 126	4480.0-81.0	38.	26.	7.5	29.1	36.4	2.81	DOL, ANHY, STY, SL/F
S 127	4481.0-82.0	154.	128.	16.1	24.5	26.1	2.86	DOL, SL/ANHY, FP, SL/F
S 128	4482.0-83.0	125.	116.	14.1	23.2	27.6	2.81	DOL, SL/ANHY, STY, DOL
S 129	4483.0-84.0	33.	31.	11.2	13.4	31.3	2.83	DOL, V/F, DOL
I 30	4484.0-85.0	40.	40.	5.2	35.3	37.3	2.82	DOL, SL/ANHY, V/F, SL/V
I 31	4485.0-86.0	0.6	*	3.2	12.9	65.2	2.82	DOL, ANHY, V/F, STY, SL/V
I 32	4486.0-87.0	75.	*	1.2	15.7	43.5	2.85	DOL, ANHY, V/F, SL/V
I 33	4487.0-88.0	77.	*	16.4	33.8	30.8	2.85	DOL, ANHY, V/F
S 134	4488.0-89.0	65.	*	13.6	42.1	26.1	2.84	DOL, SL/ANHY, V/F, DOL, STY
S 135	4489.0-90.0	76.	73.	20.4	21.6	27.6	2.86	DOL, SL/ANHY, FP
S 136	4490.0-91.0	61.	51.	16.5	28.7	33.2	2.81	DOL, STY, FP
S 137	4491.0-92.0	42.	37.	19.6	34.1	23.2	2.84	DOL, SL/ANHY, SL/V
		50.	41.	20.1	22.5	27.9	2.82	DOL, SL/ANHY, STY

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**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*

DALLAS, TEXAS

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PHILLIPS PETROLEUM COMPANY  
 EUGSA UNIT NO. 2739-005

DATE : 6-2-79  
 FORMATION : GRAYBURG/SAN ANDES

FILE NO : 3202-11152  
 ANALYSTS : GOOSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MD)	AIR 90 DEG	FOR. HE	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
1 138	4492.0-93.0	12*	*	15.9	20.8	49.1	2.80	DOL,SL/ANHY,V/F,SHR,SL/V
1 139	4493.0-94.0	54*	*	15.7	18.2	32.9	2.81	DOL,V/F,STY,SL/V
1 140	4494.0-95.0	39*	28*	14.4	48.3	20.1	2.75	DOL,SHR,FP,FOSS
1 141	4495.0-96.0	38*	3.5	6.6	20.3	29.8	2.78	DOL,SHR,STY,FOSS,SL/F,V
1 142	4496.0-97.0	6.2	4.7	7.7	25.8	37.6	2.79	DOL,SHR,SL/V,F
1 143	4497.0-98.0	45*	35*	6.5	40.1	42.8	2.80	DOL,SHR,SL/V,V/F
1 144	4498.0-99.0	2.5	2.1	3.6	32.9	42.7	2.86	DOL,SL/V,V/F
1 145	4499.0-00.0	1.1	0.7	1.2	20.5	56.8	2.83	DOL,SL/V,V/F
1 146	4500.0-08.0	3.2	3.0	3.5	33.3	37.0	2.84	DOL,ANHY,SHY,SH,LAM,DNS
1 147	4508.0-09.0	3.2	3.0	3.5	33.3	37.0	2.84	DOL,V/F
1 148	4528.0-29.0	0.4	0.3	2.7	45.4	46.2	2.85	DOL,SL/ANHY,SL/F,STY
1 149	4529.0-30.0	<0.1	*	2.6	42.7	49.4	2.82	DOL,STY,SL/F
1 150	4530.0-31.0	<0.1	*	1.3	33.3	55.6	2.81	DOL,STY,F
1 151	4531.0-32.0	0.1	<0.1	1.7	37.5	55.6	2.84	DOL,SL/F,SH,LAM
1 152	4532.0-36.5							DOL,SHY,STY,DNS
1 153	4536.5-37.0	0.4	0.3	2.4	34.0	34.5	2.89	DOL,SL/F,STY
1 154	4537.0-59.0							DOL,SL/SHY,STY,DNS
1 155	4559.0-60.0	1.0	0.9	2.5	34.6	34.6	2.84	DOL,STY,SL/F
1 156	4560.0-61.0	0.4	0.3	1.7	18.4	63.8	2.84	DOL,SL/ANHY,SL/F
1 157	4561.0-62.0	0.1	<0.1	2.1	7.3	64.5	2.86	DOL,SL/ANHY,SL/F
1 158	4562.0-63.0	<0.1	<0.1	1.5	9.1	50.5	2.86	DOL,ANHY,STY,SL/F
1 159	4563.0-64.0	0.2	0.2	2.2	17.5	32.4	2.85	DOL,SL/ANHY,STY,SL/F,SL/V
1 160	4564.0-65.0	0.4	0.3	6.0	7.2	28.9	2.85	DOL,SHR,STY,SL/F,OL
1 161	4565.0-66.0	0.4	0.3	5.5	2.3	29.2	2.86	DOL,SL/ANHY,F,SL/V

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**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*

DALLAS, TEXAS

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PHILLIPS PETROLEUM COMPANY  
 EVUSA UNIT NO. 2739-005

DATE : 6-2-79  
 FORMATION : GRAYBURG/SAN ANTONIO

FILE NO. : 3202-11153  
 ANALYSTS : GONSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MD)	FOR. °	FLUID SATS.	GRAIN DEN	DESCRIPTION
S 160	4566.0-67.0	<0.1	*	1.6	16.7	37.0
S 161	4567.0-68.0	0.3	0.3	2.0	27.8	30.9
S 162	4568.0-69.0	0.4	0.2	2.9	34.0	34.6
S 163	4569.0-70.0	0.4	0.3	3.5	18.7	38.1
S 164	4570.0-71.0	3.3	*	15.3	11.4	57.8
S 165	4571.0-72.0	3.9	3.4	15.3	29.3	19.6
S 166	4572.0-73.0	4.2	2.7	14.6	22.8	22.3
S 167	4573.0-74.0	1.5	1.3	12.7	27.0	21.2
S 168	4574.0-75.0	1.3	1.3	12.5	19.9	25.7
S 169	4575.0-76.0	1.2	1.1	9.1	21.9	21.7
S 170	4576.0-78.0	5.4	4.6	10.5	27.9	20.9
S 171	4577.0-78.0	6.0	5.9	10.9	20.7	23.7
S 172	4578.0-79.0	6.9	5.5	8.4	22.6	28.6
S 173	4579.0-80.0	7.2	0.4	4.7	18.4	69.7
S 174	4580.0-81.0	0.7	0.6	5.0	14.3	51.8
S 175	4581.0-82.0	1.9	*	11.9	40.8	31.5
S 176	4582.0-83.0	1.1	1.0	18.5	26.9	22.1
S 177	4583.0-84.0	1.7	*	9.9	23.9	54.5
S 178	4584.0-85.0	7.7	*	9.2	25.9	45.5
CORE NO. 5 4585.0-4645.0 CUT 60' REC 60'						
S 179	4585.0-86.0	5.1	4.8	9.0	27.5	25.4
S 180	4586.0-87.0	5.1	4.9	13.6	25.9	20.6
S 181	4587.0-88.0	3.4	3.4	15.6	10.6	36.5
S 182	4588.0-89.0	3.8	3.8	17.9	19.2	26.1
S 183	4589.0-90.0	3.6	7.3	20.3	17.9	26.0
S 184	4590.0-91.0	3.1	2.7	20.1	27.7	24.4
S 185	4591.0-92.0	3.8	*	11.8	37.2	40.4
186	4592.0-93.0	6.1	5.9	17.2	18.1	33.1
						2.84
						DOL, ANHY, SL/F
						DOL, SL/ANHY
						DOL, SL/ANHY, PP, STY
						DOL, PP, SL/F, STY
						DOL, SL/ANHY, PP, SL/U, STY
						DOL, STY, PP, SL/U
						DOL, SL/ANHY
						DOL, SL/F

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**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*

DALLAS, TEXAS

PHILLIPS PETROLEUM COMPANY  
 EUGSA UNIT NO. 2739-005

DATE : 6-2-79  
 FORMATION : GRAYBURG/SAN ANDES

FILE NO : 3202-1152  
 ANALYSTS : GOENSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MD)	AIR 90 DEG	FDR. He	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
187	4593.0-94.0	23.	*	16.8	29.8	22.4	2.81	DOL, SL/ANHY, PP
188	4594.0-95.0	7.4	5.9	14.7	28.4	34.0	2.84	DOL, SL/ANHY, SOY, SL/U
189	4595.0-96.0	2.8	2.8	12.5	24.3	32.4	2.85	DOL, SL/ANHY, U, FOSS
190	4596.0-97.0	1.2	1.2	10.0	16.5	28.0	2.84	DOL, SL/ANHY, U, STY, FOSS
191	4597.0-98.0	1.0	0.9	9.6	9.3	25.9	2.85	DOL, SL/ANHY, FOSS, SL/U, STY
192	4598.0-99.0	1.1	0.8	8.4	17.9	24.9	2.85	DOL, SL/ANHY, U, STY, FOSS
193	4599.0-00.0	0.8	*	6.5	15.6	42.2	2.85	DOL, SL/ANHY, SL/U, SL/F, STY
194	4600.0-01.0	0.7	0.6	3.2	6.0	33.6	2.87	DOL, SL/ANHY
195	4601.0-02.0	0.9	0.8	4.6	13.9	36.0	2.85	DOL, SL/ANHY, STY
196	4602.0-03.0	0.2	0.2	3.7	24.2	37.0	2.84	DOL, SL/ANHY, SL/F, STY
197	4603.0-04.0	0.4	0.4	4.2	3.1	51.0	2.85	DOL, STY
198	4604.0-05.0	0.5	0.3	4.9	3.2	43.0	2.85	DOL, SL/ANHY, STY, SL/F
199	4605.0-06.0	0.4	0.4	5.0	13.8	44.6	2.85	DOL, SL/ANHY, STY, PP
200	4606.0-07.0	0.4	0.3	5.4	6.6	36.4	2.84	DOL, SL/ANHY, STY
201	4607.0-08.0	0.4	0.4	5.6	26.5	36.8	2.85	DOL, SL/ANHY, STY
202	4608.0-09.0	0.1	0.1	5.3	17.8	51.5	2.83	DOL, SL/ANHY, STY
203	4609.0-10.0	0.1	0.1	4.9	14.4	56.1	2.84	DOL, SL/ANHY, STY
204	4610.0-11.0	0.1	0.1	2.7	5.3	59.2	2.85	DOL, SL/ANHY, STY
205	4611.0-12.0	0.6	0.1	3.7	14.3	47.6	2.86	DOL, ANHY, STY
206	4612.0-13.0	5.9	5.9	4.7	8.1	60.2	2.84	DOL, SL/U, STY
207	4613.0-14.0	0.8	0.2	4.5	31.0	25.9	2.86	DOL, SL/ANHY, SL/U, STY, SL/F
208	4614.0-15.0	0.6	0.5	4.7	21.4	44.5	2.83	DOL, SL/U, STY
209	4615.0-16.0	1.1	0.5	6.2	13.4	34.7	2.83	DOL, SL/F, U, STY
210	4616.0-17.0	0.9	0.2	3.2	9.1	60.6	2.83	DOL, SL/F, SL/U, STY
211	4617.0-18.0	0.1	*	2.8	4.1	36.5	2.84	DOL, SL/ANHY, STY, SL/U
212	4620.0-21.0	0.7	0.6	5.6	14.2	30.3	2.83	DOL, SL/ANHY, PP, STY
213	4621.0-24.0	0.3	0.2	3.2	14.1	39.1	2.87	DOL, ANHY, DNS
214	4625.0-26.0	4.5	1.4	5.6	5.9	38.0	2.84	DOL, ANHY, PP, STY

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**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*

DALLAS, TEXAS

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PHILLIPS PETROLEUM COMPANY  
 EUGSA UNIT NO. 2739-005

DATE : 6-2-79  
 FORMATION : GRAYBURG/SAN ANDRES

FILE NO. : 3202-14150  
 ANALYSTS : GOSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MM)	AIR MAXIMUM °O DEG	POR. He	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
9 215	4626.0-27.0	0.2	<0.1	2.8	11.4	44.3	2.84	DOL, SL/ANHY, SL/U, F, STY
9 216	4627.0-28.0	0.3	0.2	2.2	21.3	35.4	2.86	DOL, SL/ANHY, STY, SL/U
9 217	4628.0-29.0	1.1	0.4	3.3	19.7	51.1	2.85	DOL, ANHY, INS
9 218	4633.0-34.0	0.2	0.2	2.8	13.0	39.9	2.85	DOL, ANHY, STY
9 219	4634.0-35.0	0.1	0.1	2.7	4.8	60.8	2.88	DOL, ANHY, STY, SL/F
9 220	4635.0-36.0	3.9	1.1	7.9	17.3	25.2	2.86	DOL, SL/ANHY, STY, SL/F
9 221	4636.0-37.0	1.0	5.6	8.9	22.3	19.4	2.87	DOL, SL/ANHY, STY, SL/F, FP
9 222	4637.0-38.0	2.0	0.2	2.1	19.4	75.3	2.85	DOL, SL/ANHY, STY, SL/F
9 223	4638.0-39.0	0.2	<0.1	6.1	15.8	62.3	2.85	DOL, ANHY, STY, PP, SL/F
9 224	4639.0-40.0	2.8	0.3	5.0	4.1	2.8	2.85	DOL, SL/ANHY, SL/F, STY, SL/U
9 225	4640.0-41.0	5.5	5.2	7.6	4.5	67.0	2.84	DOL, SL/ANHY, SL/U, PP, SL/F, STY
9 226	4641.0-42.0	67.	67.	14.3	19.5	40.2	2.87	DOL, STY, PP
9 227	4642.0-43.0	52.	51.	11.8	14.9	39.6	2.83	DOL, SL/ANHY, STY, PP
9 228	4643.0-44.0	3.0	2.6	7.7	3.9	92.9	2.82	DOL, SL/ANHY, STY, SL/U, PP
9 229	4644.0-45.0	64.	*	15.2	24.4	18.6	2.82	DOL, PP, SL/U
CORE NO. 6 4645.0-4705.0 CUT 60' REC 60'								
9 230	4645.0-46.0	3.8	3.5	7.3	5.5	61.0	2.83	DOL, SL/ANHY, STY, SL/F, SL/U
9 231	4646.0-47.0	2.8	2.8	9.1	12.2	2.7	2.83	DOL, SL/ANHY, SL/U, STY, SL/F
9 232	4647.0-48.0	1.4	3.7	9.9	15.4	52.6	2.83	DOL, SL/ANHY, STY, SL/F, SL/U
9 233	4648.0-49.0	31.	14.	9.1	13.7	58.4	2.82	DOL, SL/ANHY, F, DOL, SHR
9 234	4649.0-50.0	<0.1	<0.1	6.6	4.2	87.8	2.85	DOL, SL/ANHY, STY
9 235	4650.0-51.0	1.4	1.3	4.0	10.3	68.7	2.86	DOL, SL/ANHY, SL/F, STY, PP
9 236	4651.0-52.0	1.9	1.9	8.1	16.7	67.1	2.88	DOL, ANHY, SL/F, STY, PP
9 237	4652.0-53.0	38.	19.	11.6	20.1	42.1	2.88	DOL, SL/ANHY, STY, PP
9 238	4653.0-54.0	1.4	1.4	9.6	5.4	52.2	2.86	DOL, STY, SHR, PP
9 239	4654.0-55.0	71.	51.	7.6	9.4	67.7	2.85	DOL, SL/ANHY, F, STY, PP
9 240	4655.0-56.0	12.	11.	10.1	15.4	45.5	2.84	DOL, SL/ANHY, SHR, SL/F, SL/U, DOL

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**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*

DALLAS, TEXAS

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PHILLIPS PETROLEUM COMPANY  
 EUGSA UNIT NO. 2739-005

DATE : 6-2-79  
 FORMATION : GRAYBURG/SAN ANDRES

FILE NO : 3202-11150  
 ANALYSTS : GUNSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO MAXIMUM	AIR (MM) 90 DEG	POR. He	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
241	4656.0-57.0	7.9	7.6	5.8	4.4	80.9	2.83	DOL,SL/ANHY,SL/F,SL/U,
5 242	4657.0-58.0	7.5	0.6	2.3	15.3	59.3	2.84	DOL,SHR,STY
5 243	4658.0-59.0	0.5	0.2	3.9	8.5	66.8	2.86	DOL,SL/ANHY,SL/F,SL/U,STY
5 244	4659.0-60.0	1.4	1.3	15.0	9.7	52.7	2.86	DOL,SL/ANHY,STY,SL/U,SL/F
245	4660.0-61.0	3.2	*	15.6	10.3	49.1	2.83	DOL,SL/ANHY,STY
246	4661.0-62.0	3.8	8.8	15.9	9.4	38.2	2.85	DOL,SL/ANHY,U/F,STY,FF
5 247	4662.0-63.0	9.8	8.3	14.4	12.5	33.5	2.87	DOL,SL/ANHY
5 248	4663.0-64.0	6.9	*	12.3	13.6	29.5	2.83	DOL,SL/ANHY,FF
5 249	4664.0-65.0	8.8	7.8	13.9	7.6	33.1	2.87	DOL,SL/ANHY,SL/F
5 250	4665.0-66.0	5.5	4.8	10.0	5.6	37.2	2.84	DOL,SL/ANHY,STY,SL/U,FF
5 251	4666.0-67.0	4.3	3.6	10.0	6.6	28.9	2.82	DOL,SL/ANHY,STY,SL/U,FF
252	4667.0-68.0	5.2	4.9	4.4	6.6	62.3	2.82	DOL,STY,F,SH LAM,PP
253	4668.0-69.0	1.3	0.1	5.5	1.2.7	42.5	2.85	DOL,SL/ANHY,SL/U,STY,F
254	4669.0-70.0	4.2	3.9	4.6	8.8	44.0	2.84	DOL,SL/ANHY,STY,SL/F,SL/U
255	4670.0-71.0	1.5	2.6	10.8	12.9	32.2	2.82	DOL,STY,SL/U,FF,UF
256	4671.0-72.0	6.5	5.8	9.9	9.9	34.3	2.82	DOL,SL/ANHY,STY,FF
5 257	4672.0-73.0	2.4	1.9	10.1	10.8	33.7	2.83	DOL,SL/ANHY,SL/U,SL/F
5 258	4673.0-74.0	1.6	1.4	10.0	7.7	36.2	2.83	DOL,SL/ANHY,STY,SL/U,SL/F
259	4674.0-75.0	2.0	1.8	8.9	14.3	32.5	2.84	DOL,SL/ANHY,STY,SL/F,SL/U
5 260	4675.0-76.0	1.9	1.6	9.3	15.9	36.1	2.85	DOL,SL/ANHY,STY,SL/F,U
261	4676.0-77.0	4.6	4.5	15.5	20.5	19.6	2.85	DOL,SL/ANHY,FF
262	4677.0-78.0	3.7	4.4	15.7	11.0	26.2	2.85	DOL,STY,FF
5 263	4678.0-79.0	1.1	1.0	16.4	18.9	30.9	2.87	DOL,FP
5 264	4679.0-80.0	1.3	1.2	15.2	21.4	25.5	2.85	DOL,SL/ANHY,SL/U
5 265	4680.0-81.0	1.6	1.5	17.3	17.6	30.1	2.86	DOL,SL/ANHY,STY,FF
5 266	4681.0-82.0	1.8	1.6	16.7	22.0	28.9	2.85	DOL,ANHY,FF,SL/F
267	4682.0-83.0	8.0	6.3	1.1.6	17.0	31.8	2.82	DOL,SL/ANHY,SL/F,STY,FF
5 268	4683.0-84.0	8.4	7.0	12.1	12.3	40.4	2.86	DOL,ANHY,FF,SL/F
5 269	4684.0-85.0	1.7	1.4	15.6	19.7	30.0	2.86	DOL,ANHY,FF

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**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*

DALLAS, TEXAS

PHILLIPS PETROLEUM COMPANY  
 EUGSA UNIT NO. 2739-005

DATE : 6-2-79  
 FORMATION : GRAYBURG/SAN ANDRES

FILE NO. : 3202-41152  
 ANALYSTS : GOSSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO MAXIMUM	AIR (MI)	PUR. %O DEG	FLUID He	SATS. OIL	GRAIN WTR	DEN	DESCRIPTION
S 270	4685.0-86.0	1.6	1.3	15.0	11.3	37.6	2.84	DOL,SL/ANHY,PP	
S 271	4686.0-87.0	3.9	3.9	16.0	9.4	39.4	2.82	DOL,SL/ANHY,P,STY	
S 272	4687.0-88.0	30.	27.	16.3	9.8	38.7	2.84	DOL,SL/ANHY,STY,SL/F,PP	
S 273	4688.0-89.0	8.8	8.2	10.0	10.8	43.4	2.82	DOL,SL/ANHY,STY,DOL,SHR,SL/F	
S 274	4689.0-90.0	1.9	1.7	7.4	5.0	51.2	2.82	DOL,SL/ANHY,STY,F,V	
S 275	4690.0-91.0	2.1	1.6	6.9	5.8	53.5	2.85	DOL,SL/ANHY,STY,SL/F,V	
S 276	4691.0-92.0	1.0	0.9	4.9	6.8	71.8	2.82	DOL,SL/ANHY,STY,SL/V,SL/F	
S 277	4692.0-93.0	1.9	<0.1	6.2	2.6	58.7	2.87	DOL,SL/ANHY,V/F,STY,SL/V	
S 278	4693.0-94.0	0.2	0.2	4.5	6.7	57.2	2.87	DOL,SL/ANHY,STY,SL/U	
S 279	4694.0-95.0	3.5	2.8	2.6	2.6	84.5	2.84	DOL,SL/ANHY,STY,SL/F	
S 280	4695.0-96.0	1.0	0.9	2.0	7.3	92.7	2.83	DOL,SL/ANHY,STY,SL/V	
S 281	4696.0-97.0	1.0	0.8	8.0	9.9	42.0	2.85	DOL,SL/ANHY,SL/F,PP	
S 282	4697.0-98.0	4.3	3.6	8.8	9.6	30.8	2.84	DOL,SL/ANHY,V,STY	
S 283	4698.0-99.0	2.4	2.3	10.7	7.6	44.0	2.82	DOL,SL/ANHY,V,SL/F,STY	
S 284	4699.0-00.0	42.	36.	14.7	7.6	40.3	2.83	DOL,SL/V	
S 285	4700.0-01.0	32.	27.	19.0	12.5	37.8	2.82	DOL,SL/V,STY	
S 286	4701.0-02.0	36.	35.	22.2	15.6	42.7	2.84	DOL,PP	
S 287	4702.0-03.0	44.	39.	21.2	16.9	44.8	2.83	DOL,PP	
S 288	4703.0-04.0	23.	19.	19.6	17.5	41.7	2.83	DOL,PP	
S 289	4704.0-05.0	43.	39.	20.4	17.0	36.4	2.85	DOL,PP	
CORE NO. 7 4705.0-4765.0 CUT 60' REC 60'									
290	4705.0-11.0	2.3	1.9	10.7	8.3	23.1	2.83	DOL,SL/ANHY,FOSS,SL/V,STY	
291	4705.0-06.0	1.9	1.7	18.2	12.5	43.9	2.85	DOL,SL/V,STY	
292	4706.0-07.0	3.2	3.2	14.2	16.1	29.9	2.83	DOL,SL/V	
293	4707.0-08.0	4.5	3.8	12.3	15.9	29.1	2.84	DOL,SL/ANHY,SL/V,SL/F	
294	4708.0-09.0	1.9	1.6	12.2	17.4	25.9	2.84	DOL,SL/ANHY,V,SL/F,FOSS	
S 295	4709.0-10.0	23.	21.	9.7	14.4	29.4	2.86	DOL,SL/ANHY,V,SL/F,FOSS	
S 296	4711.0-12.0	2.6	2.5	10.8	8.2	23.3	2.83	DOL,SL/ANHY,STY,FOSS,V	

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**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*

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PHILLIPS PETROLEUM COMPANY  
 EVUSA UNIT NO. 2739-005

DATE : 6-2-79  
 FORMATION : GRAYBURG/SAN ANDRES

FILE NO. : 3202-11152  
 ANALYSTS : GODSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	TEMP. TO AIR (MI)	MAXIMUM 90 DEG	FDR. He	FLUID	SATS.	GRAIN DEN	DESCRIPTION
297	4712.0-13.0	1.3	1.2	9.5	5.5	27.4	2.83	DOL,SL/ANHY,STY,SL/F,FOSS
298	4713.0-14.0	1.0	2	9.6	6.3	24.8	2.83	DOL,SL/ANHY,SL/F,U,STY,FOSS
299	4714.0-15.0	8.3	7.9	7.2	5.3	35.8	2.84	DOL,SL/ANHY,FOSS,STY,SL/V,SL/F
300	4715.0-16.0	7.4	5.7	2.9	15.3	50.8	2.82	DOL,SL/ANHY,STY,FOSS,SL/F,U
301	4716.0-17.0	1.3	1.2	2.7	9.5	61.9	2.85	DOL,SL/ANHY,SL/F,STY,U
302	4717.0-18.0	2.3	2.2	2.3	5.0	55.9	2.83	DOL,ANHY,SL/F,SL/V,FOSS,STY
303	4718.0-19.0	1.8	1.6	6.4	5.8	39.6	2.83	DOL,SL/ANHY,FOSS,STY,F,U
304	4719.0-20.0	0.7	0.6	7.9	4.9	32.8	2.83	DOL,FOSS,STY,SL/F,U
305	4720.0-21.0	7.9	7.4	6.9	8.8	33.3	2.83	DOL,SL/ANHY,STY,FOSS,SL/U
306	4721.0-22.0	7.1	6.9	7.9	11.3	34.1	2.84	DOL,SL/ANHY,STY,SL/F,SL/V,FOSS
307	4722.0-23.0	2.5	2.3	7.8	8.9	35.3	2.84	DOL,SL/ANHY,U,SL/F,FOSS
308	4723.0-24.0	2.0	1.7	8.7	7.6	33.9	2.84	DOL,SL/ANHY,FOSS,STY,V,SL/F
309	4724.0-25.0	1.4	1.3	9.0	5.6	36.2	2.83	DOL,SL/ANHY,STY,FOSS
310	4725.0-26.0	9.6	9.4	9.8	4.5	36.0	2.85	DOL,SL/ANHY,STY,SL/F,U,FOSS
311	4726.0-27.0	51.	50.	9.1	5.6	36.8	2.84	DOL,SL/ANHY,FOSS,SL/F,STY,U
312	4727.0-28.0	213.	61.	8.9	11.5	38.3	2.85	DOL,SL/ANHY,V,FOSS,STY
313	4728.0-29.0	1.9	1.6	9.6	9.7	39.6	2.82	DOL,SL/ANHY,F,U,STY
314	4729.0-30.0	1.0	9.2	12.6	9.4	31.8	2.83	DOL,SL/ANHY,V,STY,FOSS
315	4730.0-31.0	1.4	1.4	10.4	16.1	26.8	2.83	DOL,SL/U,STY
316	4731.0-32.0	3.8	3.6	12.7	22.0	29.3	2.88	DOL,SL/F,SL/U,STY
317	4732.0-33.0	1.6	1.4	14.1	21.2	27.0	2.85	DOL,SL/U,STY,F
318	4733.0-34.0	7.2	6.4	12.3	20.0	25.0	2.85	DOL,SL/ANHY,SL/SDY,STY,SL/F,PP
319	4734.0-35.0	1.0	0.8	10.1	15.1	30.1	2.84	DOL,SL/SDY,STY,SL/F,PP
320	4735.0-36.0	6.9	6.5	9.2	28.8	23.2	2.84	DOL,SL/ANHY,SL/F,STY,PP
321	4736.0-37.0	2.6	2.5	11.4	15.2	34.3	2.86	DOL,SL/ANHY,SL/V,SL/F,STY
322	4737.0-38.0	21.	18.	6.4	8.1	42.2	2.84	DOL,SL/ANHY,SL/F,U,STY,FOSS
323	4738.0-39.0	4.9	4.6	6.0	12.4	41.2	2.86	DOL,ANHY,SL/F,SL/V,FOSS,STY
324	4739.0-40.0	41.0	3.8	4.8	10.1	65.5	2.83	DOL,ANHY,SL/V,STY,U/F
325	4740.0-41.0	9.7	9.5	5.4	10.8	56.6	2.83	DOL,ANHY,SL/U,STY
326	4741.0-42.0	1.2.	1.1	7.7	53.0	2.83	DOL,ANHY,U,SL/F	

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**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*

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PHILLIPS PETROLEUM COMPANY  
 EUGSA UNIT NO. 2739-005

DATE : 6-2-79  
 FORMATION : GRAYEURG/SAN ANDRES

DALLAS, TEXAS

FILE NO. : 3202-11153  
 ANALYSTS : GOUSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TU	AIR (MM)	POR.	FLUID	SATS.	GRAIN DEN	DESCRIPTION
S 327	4742.0-43.0	12.	1.2.	9.2	8.6	35.2	2.61	DOL,SL/ANHY,F,SL/U,STY,PP
S 328	4743.0-44.0	136.	1.07.	14.2	14.8	29.6	2.82	DOL,STY,F,U,PP
S 329	4744.0-45.0	17.	1.7.	13.5	18.2	25.0	2.83	DOL,SL/ANHY,SL/U,SL/F,STY
S 330	4745.0-46.0	13.	1.3.	10.0	15.5	26.7	2.84	DOL,SL/ANHY,V,SL/F,STY
S 331	4746.0-47.0	1.7	1.6	7.9	12.7	35.3	2.82	DOL,ANHY,SL/U,F,STY,FOSS
S 332	4747.0-48.0	5.4	4.0	6.6	7.9	39.5	2.83	DOL,SL/ANHY,SL/F,STY,FOSS
S 333	4748.0-49.0	1.4	1.4	6.6	10.1	41.6	2.83	DOL,ANHY,V,F,STY
S 334	4749.0-50.0	7.0	6.6	9.5	9.6	32.2	2.85	DOL,ANHY,V,F,FOSS,STY
S 335	4750.0-51.0	8.6	8.0	10.4	7.1	33.9	2.83	DOL,ANHY,V,STY,FOSS
S 336	4751.0-52.0	1.3	1.2	8.0	12.1	39.4	2.83	DOL,SL/ANHY,STY,SL/U
S 337	4752.0-53.0	7.6	42.	9.2	14.5	35.2	2.85	DOL,SL/ANHY,STY,SL/U
S 338	4753.0-54.0	6.3	1.2	3.8	17.6	54.9	2.87	DOL,V/ANHY,SL/F,SL/U
S 339	4754.0-55.0	1.5	1.5	4.7	10.7	46.1	2.87	DOL,V/ANHY,SL/U,F
S 340	4755.0-56.0	2.0	18.	5.7	14.1	42.2	2.84	DOL,ANHY,SL/F,SL/U,STY,FOSS
S 341	4756.0-57.0	1.6	1.6	6.0	4.5	49.6	2.83	DOL,SL/ANHY,STY,SL/U,F
S 342	4757.0-58.0	243.	232.	9.4	9.3	35.1	2.83	DOL,ANHY,F,SL/U,STY
S 343	4758.0-59.0	95.	92.	6.9	10.9	37.8	2.84	DOL,SL/ANHY,SL/F,STY,PP
S 344	4759.0-60.0	1.6	1.5	12.7	18.0	26.5	2.82	DOL,SL/F,SL/U,STY
S 345	4760.0-61.0	4.6	4.4	13.5	20.7	21.1	2.84	DOL,SL/F,U,STY
S 346	4761.0-62.0	83.	82.	10.5	8.1	35.1	2.82	DOL,STY,F,U
S 347	4762.0-63.0	54.	52.	13.6	17.0	23.6	2.84	DOL,V,SL/F,STY,FOSS
S 348	4763.0-64.0	37.	36.	12.3	18.1	24.6	2.85	DOL,F,STY,SL/U
S 349	4764.0-65.0	35.	35.	12.2	16.8	24.8	2.85	DOL,ANHY,STY,F,FOSS
CORE NO. 8 4765.0-4825.0 CUT 60' REC 60'								
350	4765.0-66.0	20.	20.	9.8	10.1	31.8	2.83	DOL,SL/ANHY,SHY,STY,F,U
351	4766.0-67.0	13.	13.	9.8	21.0	24.7	2.84	DOL,SL/ANHY,SL/SHY,F,FOSS,STY
S 352	4767.0-68.0	1.2.	1.1.	9.6	16.8	27.3	2.83	DOL,SL/ANHY,SL/SHY,FOSS,STY,F,U
S 353	4768.0-69.0	1.5.	1.0.5	9.7	24.7	2.86	DOL,ANHY,STY,F,FOSS	

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**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*

DALLAS, TEXAS

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PHILLIPS PETROLEUM COMPANY  
 EUGSA UNIT NO. 2739-005

DATE : 6-2-79  
 FORMATION : GRAYBURG/SAN ANDRES

FILE NO : 3202-14152  
 ANALYSTS : GOSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MD)	FOR. 90 DEG	FLUID	SATS.	GRAIN DEN	DESCRIPTION
354	4769.0-70.0	7.1	6.7	8.4	10.1	25.0	2.84
355	4770.0-71.0	3.4	2.9	11.9	2.7	23.8	2.83
356	4771.0-72.0	6.6	6.2	9.5	6.0	36.2	2.82
357	4772.0-73.0	1.7	1.4	7.7	4.7	31.3	2.87
358	4773.0-74.0	4.4	2.4	6.4	5.7	32.2	2.83
359	4774.0-75.0	2.2	1.4	6.7	8.3	38.2	2.84
360	4775.0-76.0	3.6	3.2	6.4	8.7	36.8	2.83
361	4776.0-77.0	2.3	1.1	6.0	5.9	37.9	2.83
362	4777.0-78.0	0.1	<0.1	3.8	9.7	36.1	2.90
	4779.0-79.6						ANHY
S	363	4779.6-80.0	8.3	0.3	2.6	14.6	52.8
S	364	4780.0-81.0	1.9	1.2	3.4	14.9	53.9
S	365	4781.0-82.0	5.7	4.4	5.0	18.1	37.8
S	366	4782.0-83.0	4.4	4.0	5.4	17.9	39.8
S	367	4783.0-84.0	5.5	5.2	6.0	12.2	45.0
S	368	4784.0-85.0	1.4	1.2	7.8	13.5	38.3
S	369	4785.0-86.0	2.1	1.1	8.2	13.5	37.6
S	370	4786.0-87.0	0.2	0.1	4.2	3.3	60.2
S	371	4787.0-88.0	0.3	0.2	4.6	9.3	27.2
S	372	4788.0-89.0	0.7	0.7	2.1	1.6.2	74.9
S	373	4789.0-90.0	3.0	2.9	7.0	9.4	46.3
S	374	4790.0-91.0	8.1	7.8	6.2	7.7	45.3
S	375	4791.0-92.0	1.6	1.6	8.1	18.8	31.3
S	376	4792.0-93.0	4.0	3.7	7.7	16.2	34.4
S	377	4793.0-94.0	5.6	3.0	5.4	22.0	29.3
S	378	4794.0-95.0	5.2	4.1	8.3	6.9	32.6
S	379	4795.0-96.0	1.4	3.4	7.1	18.2	24.7
S	380	4796.0-97.0	2.1	1.8	4.7	14.4	36.1
S	381	4797.0-98.0	6.7	6.5	11.5	4.1	2.83

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**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*

DALLAS, TEXAS

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PHILLIPS PETROLEUM COMPANY  
 EUGSA UNIT NO. 2739-005

DATE : 6-2-79  
 FORMATION : GRAYBURG/SAN ANDRES

FILE NO. : 3202-11152  
 ANALYSTS : GOSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MD)	FOR. 90 DEG	FOR. He	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
5 382	4798.0-99.0	1651.	5.8	5.3	15.5	39.7	2.84	DOL,SL/ANHY,STY,F,U
5 383	4799.0-00.0	1.4	1.3	4.6	16.9	45.5	2.83	DOL,SL/ANHY,FOSS,STY,F,U
5 384	4800.0-01.0	3.8	2.7	5.9	10.5	53.5	2.83	DOL,ANHY,FOSS,STY,F,U
5 385	4801.0-02.0	4.8	4.7	6.2	18.4	29.5	2.86	DOL,ANHY,FOSS,STY,F,U
5 386	4802.0-03.0	3.6	9.8	5.1	10.7	37.7	2.87	DOL,ANHY,FOSS,STY,U,F
5 387	4803.0-04.0	7.8	7.2	6.5	10.2	31.8	2.86	DOL,SL/ANHY,FOSS,STY,U,F
5 388	4804.0-05.0	5.9	5.8	5.6	18.9	28.5	2.84	DOL,SL/ANHY,SHY,STY,U,F,U
5 389	4805.0-06.0	11.1	12.	8.8	18.2	21.3	2.84	DOL,SL/ANHY,SHY,SHR,U,F,STY
5 390	4806.0-07.0	5.2	11.	7.4	16.0	21.6	2.83	DOL,SL/ANHY,SHY,SHR,STY,U,F,FOSS
5 391	4807.0-08.0	13.4	25.	6.8	14.5	30.2	2.80	DOL,SL/ANHY,SHR,SHR,FOSS,F,U,STY
5 392	4808.0-09.0	6.2	42.	6.9	19.3	28.5	2.80	DOL,SL/ANHY,F,U,STY,FOSS,SHR
5 393	4809.0-10.0	2.4	16.	6.5	28.2	27.4	2.79	DOL,SL/ANHY,SHR,FOSS,STY,F,U
5 394	4810.0-11.0	9.3	6.7	2.6	4.9	62.5	2.83	DOL,ANHY,F,SL/U,STY,SHR
5 395	4811.0-12.0	1.3	1.2	3.0	7.1	69.2	2.85	DOL,SL/ANHY,V/F,STY,U
5 396	4812.0-13.0	25.	7.7	2.2	7.0	65.9	2.83	DOL,SL/ANHY,V/F,SL/U,STY
5 397	4813.0-14.0	1.0	6.7	3.0	7.6	44.1	2.82	DOL,SL/ANHY,V/F,SL/U
5 398	4814.0-15.0	2.8	2.6	2.2	15.3	48.0	2.83	DOL,SL/ANHY,STY,F,SL/U
	4815.0-16.0							DOL,ANHY,DNS
S 399	4816.0-17.0	1.7	0.9	0.6	18.4	71.4	2.83	DOL,SL/ANHY,STY,F
S 400	4817.0-18.0	<0.1	<0.1	1.1	7.1	85.7	2.82	DOL,SL/ANHY,STY,F
	4818.0-21.5							DOL,DNS
S 401	4821.5-22.0	3.8	3.7	2.3	27.9	61.9	2.83	DOL,SL/ANHY,STY,SL/F,SL/U
S 402	4822.0-23.0	3.9	3.8	2.1	26.5	58.8	2.82	DOL,SL/ANHY,STY,SL/F,SL/U
S 403	4823.0-24.0	0.4	<0.1	0.6	23.1	64.1	2.82	DOL,SL/ANHY,STY,U/F,SL/U
	4824.0-25.0							DOL,ANHY,DNS
S 404	4825.0-26.0	0.2	0.2	1.9	13.0	58.0	2.87	DOL,SL/ANHY,SL/SHY,STY,SL/F
S 405	4826.0-27.0	4.7	2.2	4.2	14.5	22.6	2.86	DOL,ANHY,STY,U,F
S 406	4827.0-28.0	1.3	8.1	5.0	12.2	27.0	2.87	DOL,ANHY,STY,U,F
S 407	4828.0-29.0	0.1	<0.1	5.4	11.8	41.2	2.84	DOL,SL/ANHY,F,SL/U
408	4829.0-30.0	5.1	3.9	4.4	13.8	44.8	2.83	DOL,SL/ANHY,U/F,STY,SL/U

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**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*

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PHILLIPS PETROLEUM COMPANY  
 EUGSA UNIT NO. 2739-005

DATE : 6-2-79  
 FORMATION : GRAYBURG/SAN ANTONIO

FILE NO : 3202-14452  
 ANALYSTS : GOTSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MM)	MAXIMUM 90 DEG	POR. %	FLUID	SATS. %	GRAIN DEN	DESCRIPTION
5 409	4830.0-31.0	1.5	1.0	9.0	22.2	24.2	2.82	DOL,SL/ANHY,STY,V/F,SL/U
5 410	4831.0-32.0	2.0	1.9	10.0	17.3	19.3	2.84	DOL,SL/ANHY,STY,SL/F,SL/U
5 411	4832.0-33.0	3.7	3.2	10.3	19.8	18.5	2.83	DOL,SL/ANHY,STY,SL/F,SL/U
5 412	4833.0-34.0	32.	11.	13.4	19.9	20.7	2.86	DOL,SL/ANHY,STY,SL/F,SL/U
5 413	4834.0-35.0	96.	86.	13.9	12.4	26.5	2.83	DOL,SL/ANHY,STY,SL/F,SL/U
5 414	4835.0-36.0	11.	11.	9.7	18.9	22.1	2.83	DOL,SL/ANHY,STY,SL/F,SL/U
5 415	4836.0-37.0	31.	21.	10.4	24.7	21.6	2.83	DOL,SL/ANHY,STY,SL/F,SL/U
5 416	4837.0-38.0	20.	11.	8.6	27.1	21.1	2.82	DOL,SL/ANHY,V/F,STY,SL/U,SHR
5 417	4838.0-39.0	44.	12.	9.3	17.6	26.1	2.81	DOL,SL/ANHY,V/F,STY,SL/U,SHR
5 418	4839.0-40.0	4.3	4.1	6.8	27.2	35.5	2.77	DOL,SL/ANHY,V,SL/F,STY,SHR
5 419	4840.0-41.0	5.1	4.7	9.0	42.7	23.7	2.79	DOL,SL/ANHY,STY,SL/F,SL/U,SHR
5 420	4841.0-42.0	9.6	1.3	6.6	17.5	36.4	2.80	DOL,SL/ANHY,STY,SL/F,SHR
5 421	4842.0-43.0	1.1	1.1	9.6	30.7	17.1	2.83	DOL,SL/ANHY,STY,SL/F,SHR
5 422	4843.0-44.0	<0.1	<0.1	6.5	28.9	27.6	2.82	DOL,SL/ANHY,STY,SL/V,U/F,SHR
5 423	4844.0-45.0	32.	8.1	6.0	26.5	32.1	2.82	DOL,SL/ANHY,STY,SL/F,SL/U
5 424	4845.0-46.0	4.2	4.1	3.7	51.2	40.7	2.79	DOL,SL/ANHY,STY,SL/F,SHR
5 425	4846.0-47.0	2.5	2.4	5.6	16.0	52.2	2.84	DOL,SL/ANHY,STY,F
5 426	4847.0-48.0	6.8	6.4	1.9	24.7	54.8	2.83	DOL,SL/ANHY,STY,F
5 427	4848.0-49.0	0.4	<0.1	6.4	3.3	78.5	2.85	DOL,SL/ANHY,SL/V,F,STY
5 428	4849.0-50.0	0.1	6.0	2.7	61.3	2.84	DOL,SL/F,STY	
5 429	4850.0-51.0	3.1	3.0	7.4	4.7	80.9	2.84	DOL,STY,F
5 430	4851.0-52.0	1.4	0.7	4.3	6.3	90.0	2.84	DOL,STY,SL/F
5 431	4852.0-53.0	4.6	17.	7.1	25.6	37.2	2.83	DOL,SL/ANHY,STY,F,SL/U
5 432	4853.0-54.0	6.0	6.0	12.0	20.1	23.8	2.84	DOL,SL/ANHY,STY,SL/F,SL/U
5 433	4854.0-55.0	6.8	6.5	12.0	10.0	26.0	2.83	DOL,SL/ANHY,SL/F,SL/U
5 434	4855.0-56.0	432.	21.	10.7	19.1	24.5	2.84	DOL,SL/ANHY,STY,V/F,SL/U
5 435	4856.0-57.0	12.	10.	10.9	20.0	19.8	2.84	DOL,SL/ANHY,STY,SL/F,V
5 436	4857.0-58.0	12.	13.1	22.3	24.7	2.85	DOL,SL/ANHY,STY,SL/F,SL/U	
5 437	4858.0-59.0	9.3	9.2	10.2	21.6	27.7	2.84	DOL,SL/ANHY,STY,SL/F,SL/U
5 438	4859.0-60.0	8.5	8.1	18.5	25.7	25.7	2.82	DOL,SL/ANHY,STY,SL/F,SL/U

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**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*

DALLAS, TEXAS

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PHILLIPS PETROLEUM COMPANY  
 EVGSA UNIT NO. 2739-005

DATE : 6-2-79  
 FORMATION : GRAYBURG/SAN ANDES

FILE NO. : 3202-11152  
 ANALYSTS : GONSEY

FULL DIAMETER ANALYSIS

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MD)	AIR 90 DEG	FOR. He	FLUID OIL	SATS. WTR	GRAIN DEN	DESCRIPTION
439	4860.0-61.0	6.3	4.6	7.5	15.6	28.4	2.83	DOL,SL/ANHY,STY,SL/F,V
440	4861.0-62.0	7.4	7.3	7.8	17.3	24.6	2.82	DOL,SL/ANHY,STY,SL/F,SL/V
441	4862.0-63.0	6.3	5.9	6.6	13.7	28.8	2.82	DOL,SL/ANHY,STY,SL/F,SL/V
442	4863.0-64.0	6.2	5.8	6.2	15.7	29.7	2.83	DOL,SL/ANHY,STY,F,V
443	4864.0-65.0	6.5	6.4	7.2	13.6	26.1	2.84	DOL,SL/ANHY,STY,SL/F,V
444	4865.0-66.0	5.8	5.6	6.9	18.2	29.6	2.84	DOL,SL/ANHY,STY,F,V
445	4866.0-67.0	1.4	1.3	8.8	19.6	25.9	2.84	DOL,SL/ANHY,STY,SL/F,SL/V
446	4867.0-68.0	1.9	1.9	10.5	20.9	22.7	2.82	DOL,SL/V,SL/F
447	4868.0-69.0	1.3	1.2	9.2	22.7	28.8	2.85	DOL,SL/ANHY,STY,SL/F,SL/V
448	4869.0-70.0	4.4	1.1	10.4	24.4	24.8	2.84	DOL,SL/ANHY,STY,SL/F,SL/V
449	4870.0-71.0	2.4	2.4	12.6	15.2	22.0	2.86	DOL,SL/ANHY,STY,SL/V
450	4871.0-72.0	2.2	2.0	9.1	12.8	29.3	2.81	DOL,SL/F,SL/V,STY
451	4872.0-73.0	1.4	1.3	10.8	16.7	34.4	2.85	DOL,SL/ANHY,STY,F,V
452	4873.0-74.0	1.3	1.1	9.1	10.7	34.2	2.84	DOL,SL/ANHY,STY,V,SL/F
453	4874.0-75.0	1.4	1.4	11.2	19.2	27.3	2.83	DOL,STY,V
454	4875.0-76.0	9.6	9.4	13.2	14.7	30.9	2.84	DOL,SL/ANHY,SL/V,STY,V/F
455	4876.0-77.0	4.3	3.9	17.0	27.9	23.6	2.85	DOL,SL/ANHY,STY,V/F,SL/V
456	4877.0-78.0	1.2	1.2	13.7	24.1	26.3	2.85	DOL,SL/ANHY,V/F,PP
457	4878.0-79.0	3.9	3.3	15.9	25.8	25.2	2.86	DOL,SL/ANHY,V/F,SL/V
458	4879.0-80.0	2.1	1.2	13.7	11.2	36.2	2.83	DOL,SL/ANHY,V/F,V
459	4880.0-81.0	1.3	1.1	13.5	16.8	31.8	2.82	DOL,SL/SHY,STY,V,SL/F
460	4881.0-82.0	1.0	0.4	8.6	9.0	45.0	2.83	DOL,STY,V,V/F
461	4882.0-83.0	0.8	0.7	1.1	10.2	41.3	2.82	DOL,STY,SL/F,SL/V
462	4883.0-84.0	4.8	4.6	1.4	10.7	38.2	2.83	DOL,STY,V
463	4884.0-85.0	1.1	3.8	13.1	5.1	33.1	2.82	DOL,SL/F,V/F

\* INDICATES PLUG PERM

S INDICATES PRESERVED SAMPLE

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