USGS DATA SET PA COST OCS-CAL 78-174, WELL NO. 1

WELL LOG DATA FROM OCS LEASE SALE NO. 48

OFFSHORE CALIFORNIA, PT. CONCEPTION AREA

MGG 60945001

The following data set was released by the U.S. Geological Survey to the National Geophysical and Solar-Terrestrial Data Center (NGSDC) for public dissemination. This microfilm represents the best possible copy that NGSDC could make from the materials supplied by the USGS.

CORE LABORATORIES, INC. *Petroleum Reservoir Engineering*

COMPANY Exploration Services Co. Inc FIELD Point Conception FILE BI-2-1597

WELL OCS 78-164 #1 COUNTY Federal Offshore DATE 11-30-78

LOCATION OCS 58N-87W STATE California ELEV. 74'KB

CORE-GAMMA CORRELATION

These analyses, opinions or interpretations are based on observations and material 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 operation, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

SANTA BARBARA

VERTICAL SCALE: 5" = 100'

CORE-GAMMA SURFACE LOG
(PATENT APPLIED FOR)

GAMMA RAY
RADIATION INCREASE →

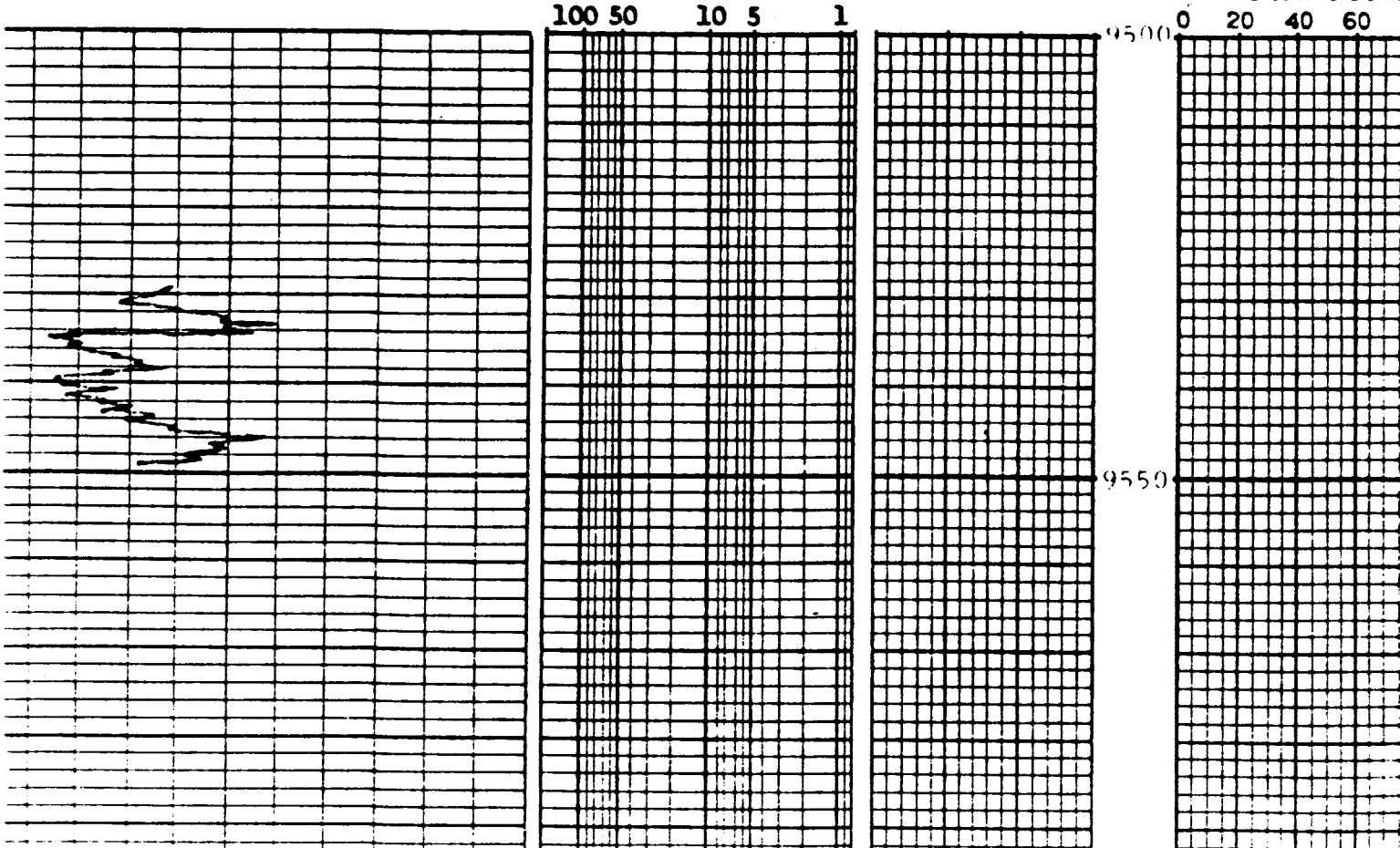
COREGRAPH

TOTAL WATER
PERCENT TOTAL WATER
80 60 40

PERMEABILITY
MILLIDARCYS
100 50 10 5 1

POROSITY
PERCENT

OIL SATURATION
PERCENT PORE SPACE
0 20 40 60



CORE LABORATORIES, INC. *Petroleum Reservoir Engineering*

COMPANY	Exploration Services Company, Inc.	DATE ON	11-2-78	FILE NO.	BP-2-159
WELL	CAL 78-164 #1	DATE OFF	12-20-78	ENGRS.	DK
FIELD	Point Conception	FORMATION		ELEV.	
COUNTY	Federal Offshore STATE CA	DRLG. FLD.	Water Base	CORES	Sidewall
LOCATION		REMARKS	Service #4		

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Side Wall Core Analysis Data

DEPTH, FEET	PERM., Md.	POR., %	% POR. SAT. OIL	% POR. SAT. TOTAL WATER	O/W		smpl. wt.	°API	DESCRIPTION
3064	494	30.5	0.0	93.4	---		11		sd; gy, fn grn, sl calc
3102	685	30.9	0.0	87.7	---		7		sd; gy, vf-fgr, sl calc
3199	253	34.0	0.0	82.2	---		7		some
3650	551	31.3	0.4	92.6	---		8		some
5054	345	28.0	0.5	97.6	---		8		sd; gy, vfgr, sl calc
10222	9.6	22.1	0.0	89.5	---		10		sd; gy, vfgr, sl slty, sl calc
10310	0.04	24.3	0.0	92.9	---		4		sd; gy, vfgr, vslty, calc
10318	1.1	24.8	0.1	97.7	---		5		sd; gy, vf-vcgr, slty, shy, calc
10353	4.2	22.0	0.2	76.1	---		8		siltstone; gy, vfgr, sdy, calc

CORE LABORATORIES, INC. *Petroleum Reservoir Engineering*

COMPANY Exploration Services Co, Inc. DATE ON 11-2-78 FILE NO. BP-2-1597

WELL CAL 78-164 #1 DATE OFF ENGRS. DK

FIELD Point Conception FORMATION ELEV.

COUNTY Offshore STATE CA DRLG. FLD. WB CORES SW

LOCATION REMARKS

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Side Wall Core Analysis Data

IN. REC.	DEPTH, FEET	PERM., Md.	POR., %	% POR. SAT. OIL	% POR. SAT. TOTAL WATER	PROB. PROD.	% OIL VOL.		°API	DESCRIPTION
	3064	494	30.5	0	93.4					Sd, gry, fn, s. calc.
	3102	685	30.9	0	87.7					Sd, gry, vf-fn, s. calc.
	3199	253	34.0	0	82.2					same
	3650	551	31.3	0.4	92.6					same
	5054	345	28.0	0.5	97.6					Sd, gry, vfn, s. calc.

NOV 16 1978

THIS REEL OF MICROFILM CONTAINS THE FOLLOWING INFORMATION:

Reports and Auxiliary Information:

Airgun seismic velocity survey, velocity log and log calibration, 1 pg.
Core analysis data, 6 pg.
Daily drilling report forms, 86 pg.

Dipmeter cluster calculation listing, 32 pg.
Dipmeter cluster calculation listing - high resolution, 66 pg.
General discussion of well by interval, 13 pg.
Geochemical service report, 110 pg. (no interpretation included)
Sample descriptions
Tabular listing of saraband sandstone analysis, 76 pg.
Well completion report (form 9-330), 2 pg.
Well history and summary, 4 pg.
Open file report number 79-1218

Well Logs:

Arrow plot from Cluster Program (2)
Borehole compensated sonic log 2"
Borehole compensated sonic log, variable density 5" (2)
Cement bond log, variable density
Compensated Neutron formation density log
Computer processed log
Continuous dipmeter (4-arm high resolution) (2)
Drilling data pressure log
Dual induction laterolog
Dual induction laterolog with linear correlation log
Formation factor log
Mud log
Pressure analysis log
Sonic log (long spaced 8' x 10') (2)
Temperature data log

CL-811-1

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

Page No._____

CORE ANALYSIS RESULTS

Company: Exploration Services Co., Inc. Formation: _____ File: BP-2-1597
Well: OCS 78-164 #1 Core Type: Conventional Date Report: 11-30-78
Field: Point Conception Drilling Fluid: Water Base Analysts: DM, DK
County: _____ State: CA Elev.: 73' KB Location: Federal Offshore OCS 56N-87W

Lithological Abbreviations

SAND-SD SHALE-SH LIME-LM	DOLOMITE-DOL CHERT-CH GYPSUM-GYP	ANHYDRITE-ANHY CONGLOMERATE-CONG FOSSILIFEROUS-FOSS	SANDY-SDY SHALY-SHY LIMY-LMY	FINE-FN MEDIUM-MED COARSE-CSE	CRYSTALLINE-XLN GRAIN-GRN GRANULAR-GRNL	BROWN-BRN GRAY-GY VUGGY-VGY	FRACTURED-FRAC LAMINATION-LAM STYLOLITIC-STY	SLIGHTLY- VERY-V/ WITH-W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE: OIL	RESIDUAL SATURATION PER CENT PORE: TOTAL WATER	SAMPLE DESCRIPTION AND REMARKS
1	9536	0.07	15.8		86.0	sd; gy, vfgr, vslty, sl calc
2	9541	0.23	17.9		80.3	sd; gy, vf-fgr, vslty, pbls, sl calc

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TABULAR LISTING

OF

S A R A B A N D

A SANDSTONE ANALYSIS

GEOLOGICAL SURVEY
RECEIVED
JAN 02 1979
LOS ANGELES

USGS

CONFIDENTIAL

COMPANY EXPLORATION SERVICES INC.

WELL ECS-OCS-CAL-78-164 #1

FIELD WILDCAT

COUNTY FEDERAL

STATE CALIFORNIA 10706,54422

DATE 21-DC-78

TAPE IDENT. 10706,54422 BWC 6 DEC 78

LS	LD	LN	LXO	LSN	LILM	LILD	LSP	LGR	LCAL
15	14	11	0	70	71	66	6	19	18

GEOLOGICAL SURVEY
RECEIVED
DEC 28 1978
SANTA BARBARA

SP BASE LINE SHIFT

NONE

CWSP ARRAY	65.	0.	0.	0.	0.	0.	0.	0.
RW ARRAY	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AT DEPTH	0.	0.	0.	0.	0.	0.	0.	0.
AT TEMP	75.	0.	0.	0.	0.	0.	0.	0.
TOP DEPTH	0.	0.	0.	0.	0.	0.	0.	0.

ROG ARRAY	2.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DTMA ARRAY	55.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ZSNMA ARRAY	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOP DEPTH	0.	0.	0.	0.	0.	0.	0.	0.

ISS -	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	0	2	0	1	0	2	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0

INPUT PARAMETERS FROM 5920. TO 5449.

WMUD	XLIT	BITSZ	BHT	BHTDEP	SUFT	RMF	RMFT	ROMFS	PHIMFS	DASIL
72.0	0.50	8.50	221.	9344.	80.	1.95	76.	1.000	0.996	0.850

SPCK	DSPCK	RODC	DELRGM	START	STOPLG	ZSPNL	BGN	ZSPDL	REC	RESH	CSS
0.	0.	2.98	0.20	9344.	5449.	0.000	1.00	0.000	6.00	10.00	0.1

WHY	PHILEV	BR	SLIM	AK	PK	SK	STOPIN	PHIMAX	PHINCL	PHIDCL
.200	0.000	.10	0.30	62500.	6.0	2.0	5449.	0.450	0.640	0.360

PHINSO	AR	PUN	DAX	DALIM	DAGA	DASH	DTSD	DTSH	CP	PSSH
0.300	.04	.110	88.	44.	40.	120.	150.	150.	1.50	.300

EDIAM	PNLIM	PDLIM	RLIM	GRLIM	VARMC	CONST	ROP	VARLIM	CSF
0.00	1.00	1.00	1000.0	1000.0	0.07	0.333	0.70	0.20	0.08

SP STATISTICS OVER ENTIRE INTERVAL

RESISTIVITY STATISTICS OVER ENTIRE INTERVAL

GAMMA - RAY STATISTICS OVER ENTIRE INTERVAL

SONIC STATISTICS OVER ENTIRE INTERVAL

GAMMARAY NOT USED IN CORRECTION OF DOUBTFUL POROSITY DATA
ANALYSIS BY QUASIP MODEL
PERMEABILITY BY TIMUR EQUATION
SP COEFF. FROM STATISTICS
GR COEFF. FROM STATISTICS
SONIC COEFF. FROM STATISTICS
WASAMP ROUTINE USED

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
5450.0	2000	52.0	58		16	438.90	60.06
5451.0	900	47.6	63	0.8*	18	438.40	59.85
5452.0	2000	39.6	70		24	437.95	59.70
5453.0	400	33.1	70		25	437.59	59.59
5454.0	600	34.8	68		21	437.26	59.49
5455.0	400	33.5	70		22	436.92	59.39
5456.0	1000	37.2	70		16	436.58	59.28
5457.0	300	32.2	73		23	436.21	59.17
5458.0	2000	39.9	73		10	435.88	59.08
5459.0	1000	38.2	71		14	435.49	58.97
5460.0	1000	37.1	68		13	435.11	58.86
5461.0	200	26.8	99		4	434.76	58.75
5462.0	200	26.1	93		0	434.49	58.74
5463.0	100	30.8	59		0	434.22	58.70
5464.0	200	32.8	53		0	433.90	58.56
5465.0	200	26.0	90		1	433.59	58.43
5466.0	600	32.9	68		11	433.33	58.41
5467.0	300	38.0	61		16	433.00	58.31
5468.0	400	40.9	65		18	432.61	58.16
5469.0	2000	40.9	68	0.8*	18	432.19	58.01
5470.0	3000	42.5	68	0.8*	18	431.78	57.88
5471.0	5000	44.8	68		14	431.34	57.75
5472.0	4000	43.6	68		16	430.89	57.60
5473.0	400	41.3	66		16	430.46	57.46
5474.0	300	39.2	65		18	430.05	57.32
5475.0	300	38.7	64		19	429.66	57.18
5476.0	300	38.4	63		19	429.27	57.04
5477.0	400	40.5	63		17	428.89	56.90
5478.0	600	43.5	65		17	428.47	56.75
5479.0	400	41.2	66	0.6	15	428.04	56.59
5480.0	2000	40.4	67	0.8*	15	427.62	56.45
5481.0	1000	38.1	67	0.8*	19	427.21	56.32
5482.0	400	41.0	66	0.8*	19	426.83	56.19
5483.0	500	42.1	66	0.8*	18	426.43	56.06
5484.0	400	39.6	66		21	426.01	55.92
5485.0	300	31.1	73		27	425.63	55.78
5486.0	20	22.2	100		36	425.35	55.74
5487.0	20	21.0	100		36	425.14	55.74
5488.0	20	21.2	100		39	424.91	55.74
5489.0	200	30.2	76		27	424.68	55.74
5490.0	400	33.3	72	0.7*	22	424.36	55.65
5491.0	100	28.6	83	0.5	26	424.03	55.56
5492.0	300	31.5	75	0.8*	23	423.75	55.51
5493.0	1000	38.1	68	0.8*	21	423.40	55.41
5494.0	1000	37.8	68		25	423.02	55.29
5495.0	1000	37.6	70	0.6	19	422.63	55.17
5496.0	1000	37.5	70	0.6	21	422.25	55.06

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
5497.0	900	37.1	70	0.8*	24	421.88	54.94
5498.0	1000	38.5	69	0.8*	26	421.50	54.83
5499.0	500	34.5	71		26	421.12	54.71
5500.0	600	34.9	69	0.8*	22	420.76	54.60
5501.0	200	29.1	76	0.8*	25	420.44	54.51
5502.0	200	28.8	75	0.8*	24	420.15	54.44
5503.0	70	25.6	83		33	419.87	54.37
5504.0	300	37.5	61	0.8*	23	419.57	54.29
5505.0	200	34.9	60	0.8*	25	419.19	54.14
5506.0	200	31.3	59		25	418.85	54.00
5507.0	400	36.4	54		19	418.51	53.85
5508.0	300	36.5	56	0.8*	16	418.16	53.70
5509.0	100	29.8	61		24	417.79	53.54
5510.0	1000	37.3	68		9	417.48	53.42
5511.0	200	32.5	65		23	417.14	53.30
5512.0	400	39.3	61	0.8*	20	416.79	53.17
5513.0	700	43.9	61	0.8*	19	416.39	53.02
5514.0	500	41.0	62		19	415.95	52.85
5515.0	200	34.6	65		24	415.55	52.70
5516.0	200	34.9	65		24	415.20	52.57
5517.0	200	35.4	64		25	414.84	52.44
5518.0	200	33.8	65		26	414.48	52.31
5519.0	300	31.6	68		24	414.14	52.19
5520.0	200	30.3	70		24	413.82	52.09
5521.0	200	35.5	64		21	413.50	51.99
5522.0	400	38.4	62		18	413.14	51.85
5523.0	400	40.5	63		15	412.75	51.70
5524.0	400	40.3	62		19	412.35	51.55
5525.0	500	41.6	63	0.8*	17	411.95	51.40
5526.0	500	41.8	62		18	411.54	51.25
5527.0	600	44.1	64	0.8*	14	411.11	51.09
5528.0	700	44.6	63	0.8*	13	410.68	50.93
5529.0	600	43.4	63		15	410.24	50.77
5530.0	400	39.7	63	0.8*	18	409.82	50.61
5531.0	300	38.2	67	0.7	15	409.43	50.47
5532.0	400	40.9	65	0.8*	15	409.05	50.35
5533.0	2000	39.8	67		17	408.64	50.21
5534.0	500	34.6	72		22	408.26	50.09
5535.0	200	30.0	83		24	407.92	50.00
5536.0	900	37.0	72		24	407.61	49.94
5537.0	5000	46.0	71	0.8*	19	407.22	49.84
5538.0	3000	42.9	77	0.8*	21	406.76	49.71
5539.0	1000	38.9	72		22	406.35	49.61
5540.0	2000	39.5	69		15	405.96	49.50
5541.0	400	29.1	100		0	405.59	49.41
5542.0	4	14.7	100		5	405.35	49.41
5543.0	1000	34.1	100		0	405.17	49.41
5544.0	6	18.0	100		49	404.86	49.41

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
5545.0	600	35.3	90		26	404.66	49.41
5546.0	1000	38.4	89		25	404.30	49.37
5547.0	2000	39.5	90		21	403.92	49.33
5548.0	6000	46.0	90		13	403.50	49.30
5549.0	4000	43.5	95		18	403.04	49.24
5550.0	8000	48.3	81	0.8*	16	402.59	49.20
5551.0	9000	49.2	79		12	402.11	49.11
5552.0	6000	46.6	83		13	401.62	49.01
5553.0	8000	48.7	75		17	401.15	48.92
5554.0	8000	48.7	74		16	400.66	48.78
5555.0	1000	39.3	85		19	400.19	48.69
5556.0	4000	44.7	83		19	399.81	48.63
5557.0	2000	56.1	66		16	399.32	48.52
5558.0	10000	57.3	67	0.8*	15	398.74	48.32
5559.0	10000	52.7	75		14	398.18	48.14
5560.0	6000	46.2	92		16	397.67	48.04
5561.0	4000	44.4	95		18	397.20	48.01
5562.0	3000	42.8	95		17	396.76	47.99
5563.0	2000	39.6	92		18	396.34	47.96
5564.0	1000	37.7	88		20	395.95	47.93
5565.0	700	35.6	87		21	395.58	47.88
5566.0	2000	39.4	83	0.5	15	395.21	47.82
5567.0	4000	43.7	78	0.6	18	394.80	47.74
5568.0	2000	41.7	77	0.8*	19	394.36	47.65
5569.0	1000	37.5	78	0.8*	19	393.95	47.55
5570.0	200	29.9	96		24	393.59	47.48
5571.0	500	34.4	85		22	393.28	47.46
5572.0	1000	38.3	79		19	392.92	47.39
5573.0	2000	39.6	80		17	392.54	47.31
5574.0	2000	40.1	87		14	392.14	47.25
5575.0	2000	40.9	87		15	391.74	47.21
5576.0	4000	43.5	92		14	391.32	47.16
5577.0	2000	40.9	91		17	390.90	47.13
5578.0	3000	42.0	94		14	390.49	47.09
5579.0	5000	45.2	94		13	390.06	47.07
5580.0	3000	42.9	94		13	389.61	47.04
5581.0	2000	39.7	92		16	389.19	47.02
5582.0	2000	41.3	92		14	388.79	46.99
5583.0	3000	42.1	92		15	388.37	46.95
5584.0	4000	43.6	97		12	387.94	46.93
5585.0	7000	47.1	94		6	387.50	46.92
5586.0	1000	38.9	87		19	387.03	46.89
5587.0	800	34.5	98		11	386.65	46.83
5588.0	200	25.9	100		0	386.34	46.83
5589.0	90	23.7	100		3	386.11	46.83
5590.0	600	34.0	81		14	385.83	46.83
5591.0	800	36.7	72		21	385.48	46.74
5592.0	400	32.5	92		24	385.12	46.65

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
5593.0	20	21.6	100		38	384.80	46.63
5595.0	0.5	12.4	100		50	384.49	46.63
5596.0	0.3	11.6	100		49	384.36	46.63
5602.0	2	15.1	100		47	383.80	46.63
5603.0	60	25.1	100		30	383.65	46.63
5604.0	500	33.7	91		20	383.36	46.62
5605.0	100	28.1	100		27	383.07	46.60
5606.0	100	27.2	100		32	382.80	46.60
5607.0	900	36.9	84		21	382.50	46.59
5608.0	1000	37.9	85		20	382.13	46.54
5609.0	2000	39.6	86		17	381.75	46.48
5610.0	1000	38.3	86		18	381.35	46.42
5611.0	1000	37.6	93		16	380.97	46.38
5612.0	1000	37.4	87		19	380.59	46.36
5613.0	2000	40.8	88		17	380.21	46.31
5614.0	4000	43.6	94		15	379.79	46.27
5615.0	2000	41.7	93		15	379.36	46.24
5616.0	2000	40.3	94		14	378.94	46.21
5617.0	1000	38.7	92		16	378.54	46.19
5618.0	600	35.5	90		21	378.16	46.15
5619.0	30	22.9	100		33	377.83	46.14
5620.0	10	20.4	100		32	377.63	46.14
5621.0	5	17.4	100		36	377.43	46.14
5622.0	0.7	13.1	100		43	377.29	46.14
5624.0	20	20.8	100		35	377.03	46.14
5625.0	100	27.9	100		25	376.77	46.13
5626.0	300	32.0	89		22	376.48	46.11
5627.0	20	21.8	100		30	376.19	46.09
5628.0	30	23.1	100		28	375.99	46.09
5629.0	40	23.4	100		28	375.75	46.09
5630.0	200	29.8	95		24	375.51	46.09
5631.0	300	31.8	91		23	375.19	46.06
5632.0	300	31.1	93		23	374.89	46.05
5633.0	600	35.0	83		21	374.57	46.02
5634.0	500	34.5	84		21	374.23	45.97
5635.0	100	28.5	100		24	373.90	45.93
5636.0	200	30.1	97		24	373.63	45.93
5637.0	800	36.4	85		20	373.30	45.90
5638.0	700	35.6	89		22	372.95	45.86
5639.0	2000	39.8	88		15	372.57	45.82
5640.0	900	37.1	89		19	372.16	45.78
5641.0	1000	38.4	85	0.8*	18	371.79	45.74
5642.0	1000	39.5	80	0.8*	18	371.40	45.67
5643.0	1000	39.5	75	0.6	17	371.00	45.59
5644.0	900	36.9	74	0.4	20	370.62	45.49

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
5645.0	800	36.4	75	0.5	21	370.26	45.40
5646.0	300	32.1	87		27	369.90	45.31
5647.0	300	31.6	92		26	369.57	45.27
5648.0	30	23.1	100		34	369.28	45.26
5649.0	6	17.9	100		45	369.06	45.26
5650.0	90	27.0	100		30	368.86	45.26
5651.0	8	18.9	100		43	368.60	45.26
5653.0	2	15.1	100		44	368.32	45.26
5654.0	2	15.4	100		45	368.17	45.26
5664.0	0.6	12.8	100		47	367.78	45.26
5665.0	0.7	13.1	100		49	367.64	45.26
5666.0	3	16.1	100		46	367.51	45.26
5667.0	40	23.7	100		32	367.34	45.26
5668.0	20	21.0	100		32	367.12	45.26
5669.0	0.4	12.2	100		49	366.94	45.26
5671.0	5	17.5	100		36	366.73	45.26
5672.0	70	25.6	100		26	366.53	45.26
5673.0	20	21.2	100		31	366.28	45.26
5674.0	9	19.1	100		35	366.07	45.26
5675.0	100	28.5	89		24	365.86	45.26
5676.0	60	25.4	100		26	365.56	45.22
5677.0	10	20.2	100		29	365.35	45.22
5678.0	10	20.2	100		30	365.16	45.22
5679.0	0.6	12.7	100		42	364.98	45.22
5681.0	0.3	11.5	100		45	364.78	45.22
5684.0	2	15.1	100		44	364.43	45.22
5685.0	4	17.0	100		40	364.28	45.22
5686.0	20	21.7	100		30	364.09	45.22
5688.0	2	15.7	100		43	363.78	45.22
5689.0	100	28.5	95		24	363.58	45.22
5690.0	100	28.7	96		24	363.32	45.21
5691.0	600	34.2	93		17	363.01	45.19
5692.0	500	34.0	93		18	362.67	45.16
5693.0	800	35.9	90		17	362.32	45.13
5694.0	800	35.9	91		17	361.96	45.10
5695.0	400	33.1	92		22	361.61	45.06
5696.0	700	35.9	89		19	361.27	45.04
5697.0	500	34.4	88		21	360.91	44.99
5698.0	50	24.5	100		28	360.57	44.95
5701.0	0.8	13.3	100		47	360.10	44.95
5704.0	2	15.0	100		37	359.83	44.95

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
5705.0	10	19.8	100		31	359.67	44.95
5706.0	10	19.5	100		33	359.48	44.95
5707.0	30	22.8	100		29	359.27	44.95
5708.0	300	31.7	94		25	359.02	44.95
5709.0	900	37.0	83		23	358.68	44.91
5710.0	1000	37.6	83		20	358.31	44.85
5711.0	800	36.5	88		18	357.94	44.79
5712.0	800	35.8	96		15	357.58	44.75
5713.0	700	35.2	89		19	357.23	44.74
5714.0	2000	40.6	76		14	356.86	44.68
5715.0	3000	41.9	72		13	356.45	44.58
5716.0	1000	38.4	72		14	356.04	44.47
5717.0	1000	36.5	79		11	355.66	44.37
5718.0	800	34.3	95		8	355.30	44.30
5719.0	1000	36.0	84		12	354.96	44.28
5720.0	900	36.7	83		16	354.60	44.22
5721.0	2000	38.4	95		11	354.24	44.16
5722.0	800	36.3	84		20	353.88	44.14
5723.0	400	33.7	90		23	353.52	44.08
5724.0	20	20.9	100		39	353.20	44.05
5725.0	4	17.0	100		39	353.00	44.05
5726.0	0.4	12.2	100		47	352.84	44.05
5743.0	300	31.1	70		19	352.63	44.05
5744.0	400	32.8	69		18	352.32	43.96
5745.0	600	34.3	70		15	351.99	43.86
5746.0	1000	37.7	70		9	351.63	43.75
5747.0	2000	40.3	69		7	351.25	43.63
5748.0	4000	42.0	69		3	350.84	43.51
5749.0	3000	41.0	70		3	350.42	43.38
5750.0	2000	38.4	72		6	350.01	43.26
5751.0	4000	42.1	69		2	349.62	43.14
5752.0	4000	42.5	68		3	349.20	43.01
5753.0	500	42.0	65		7	348.78	42.87
5754.0	400	40.7	65		8	348.36	42.73
5755.0	500	40.9	60		10	347.96	42.58
5756.0	300	35.9	63		13	347.55	42.42
5757.0	200	27.4	88		12	347.22	42.31
5758.0	400	31.7	70		12	346.94	42.28
5760.0	20	21.7	100		28	346.54	42.17
5761.0	100	32.1	65		18	346.28	42.12
5762.0	100	30.5	65		18	345.96	42.00
5763.0	50	25.7	65		26	345.66	41.89
5764.0	80	28.0	65		20	345.39	41.79
5765.0	60	26.2	65		22	345.11	41.69
5766.0	100	26.1	71		18	344.85	41.60
5767.0	200	28.8	68		14	344.59	41.53

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
5768.0	100	30.9	66		13	344.29	41.43
5769.0	100	30.7	62		17	343.98	41.31
5770.0	200	31.8	60		16	343.68	41.20
5771.0	100	29.7	64		16	343.36	41.07
5772.0	200	28.0	72		13	343.07	40.97
5773.0	300	30.5	69		12	342.77	40.88
5774.0	400	38.6	59		9	342.45	40.77
5775.0	1000	45.9	54		1	342.04	40.60
5776.0	1000	47.5	50		3	341.58	40.38
5777.0	1000	47.6	49		5	341.10	40.14
5778.0	1000	44.4	51		8	340.63	39.90
5779.0	700	41.1	53		8	340.20	39.69
5780.0	700	42.0	53		8	339.79	39.50
5781.0	1000	46.2	50	0.8*	6	339.36	39.29
5782.0	2000	48.4	48	0.8*	6	338.89	39.06
5783.0	2000	47.5	48		6	338.41	38.81
5784.0	1000	47.4	49		7	337.94	38.57
5785.0	2000	49.0	50		7	337.46	38.32
5786.0	1000	47.4	53	0.8*	8	336.97	38.08
5787.0	800	44.6	57	0.7	10	336.50	37.87
5788.0	600	41.5	57	0.6	12	336.07	37.68
5789.0	400	39.7	61	0.6	9	335.66	37.51
5790.0	400	39.3	60	0.6	9	335.26	37.35
5791.0	400	38.6	62	0.5	8	334.87	37.19
5792.0	300	37.4	63	0.5	7	334.49	37.05
5793.0	200	35.4	63	0.8*	11	334.12	36.91
5794.0	200	29.7	69		15	333.76	36.77
5795.0	8	18.3	100		21	333.50	36.71
5796.0	1	13.7	100		30	333.33	36.71
5797.0	0.6	12.9	100		32	333.19	36.71
5798.0	0.1	9.2	100		37	333.08	36.71
5799.0	1	13.8	100		28	332.99	36.71
5800.0	0.3	11.6	100		35	332.86	36.71
5801.0	3	15.9	100		28	332.74	36.71
5802.0	3	16.2	100		27	332.58	36.71
5803.0	3	16.0	100		29	332.42	36.71
5804.0	20	20.2	89		21	332.25	36.71
5805.0	10	19.1	97		21	332.06	36.70
5806.0	20	20.8	96		17	331.86	36.69
5807.0	10	18.5	100		20	331.66	36.69
5808.0	40	23.0	85		20	331.47	36.68
5809.0	70	24.6	95		15	331.24	36.66
5810.0	100	25.5	94		14	330.99	36.64
5811.0	100	26.3	94		14	330.73	36.62
5812.0	100	26.3	97		13	330.47	36.61
5813.0	200	28.4	90		12	330.20	36.60
5814.0	200	27.2	98		10	329.92	36.57
5815.0	200	26.8	100		7	329.65	36.57

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
5816.0	400	30.6	90		6	329.37	36.56
5817.0	300	29.8	85		11	329.07	36.53
5818.0	80	24.3	100		11	328.78	36.49
5819.0	20	19.9	100		8	328.55	36.49
5820.0	100	25.0	100		8	328.34	36.49
5821.0	2000	36.2	85		0	328.06	36.49
5822.0	1000	37.6	70	0.8*	11	327.70	36.42
5823.0	400	41.0	66	0.8*	10	327.31	36.29
5824.0	1000	37.3	71	0.8*	12	326.91	36.16
5825.0	2000	40.7	68	0.8*	11	326.52	36.04
5826.0	2000	41.0	68		11	326.11	35.91
5827.0	2000	39.5	69		12	325.70	35.78
5828.0	1000	37.5	74		12	325.31	35.66
5829.0	2000	39.0	73		11	324.94	35.56
5830.0	3000	41.5	69		10	324.54	35.45
5831.0	2000	40.7	68		12	324.12	35.32
5832.0	200	36.4	66		17	323.73	35.19
5833.0	100	32.6	66		20	323.37	35.07
5834.0	100	29.7	65		24	323.05	34.96
5835.0	20	20.8	100		29	322.75	34.86
5836.0	4	16.7	100		32	322.59	34.86
5837.0	90	28.8	64		22	322.39	34.83
5838.0	80	27.3	62		25	322.15	34.78
5839.0	2	15.6	100		35	321.92	34.72
5841.0	0.3	11.4	100		42	321.74	34.72
5843.0	0.1	10.4	100		38	321.54	34.72
5848.0	0.0	8.7	100		45	321.36	34.72
5849.0	0.0	8.4	100		47	321.27	34.72
5850.0	200	32.1	63		16	321.14	34.72
5851.0	300	35.3	60		17	320.80	34.59
5852.0	20	21.0	100		29	320.47	34.47
5853.0	9	19.2	100		30	320.23	34.42
5854.0	2	14.8	100		33	320.02	34.42
5855.0	200	30.1	80		17	319.82	34.41
5856.0	500	32.2	92		10	319.52	34.37
5857.0	500	31.2	98		5	319.20	34.36
5858.0	800	34.1	81		6	318.88	34.33
5859.0	200	26.6	100		2	318.57	34.30
5860.0	400	29.6	99		0	318.31	34.30
5861.0	200	25.9	100		3	318.03	34.30
5862.0	300	29.5	93		8	317.77	34.30
5863.0	300	29.6	94		11	317.48	34.28
5864.0	600	33.7	77		14	317.16	34.23
5865.0	400	32.6	81		15	316.82	34.16
5866.0	500	32.9	81		14	316.49	34.09

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
5867.0	900	35.5	74		12	316.15	34.01
5868.0	700	34.3	80		10	315.80	33.92
5869.0	500	33.6	72		16	315.45	33.85
5870.0	400	31.9	76		15	315.12	33.75
5871.0	600	33.0	79		11	314.80	33.68
5872.0	600	33.8	74		12	314.46	33.60
5873.0	500	33.3	73		14	314.12	33.51
5874.0	200	29.4	80		17	313.80	33.43
5875.0	400	31.7	74		16	313.51	33.38
5876.0	400	31.8	79		14	313.18	33.29
5877.0	200	28.2	94		14	312.88	33.25
5878.0	200	27.8	95		15	312.60	33.24
5879.0	500	32.8	80		12	312.31	33.22
5880.0	500	32.6	77		13	311.98	33.15
5881.0	300	31.0	78		15	311.66	33.08
5882.0	300	30.5	81		15	311.35	33.01
5883.0	200	28.9	87		16	311.05	32.96
5884.0	300	30.8	78		15	310.76	32.92
5885.0	90	26.4	78		23	310.46	32.85
5886.0	30	22.4	100		28	310.21	32.81
5887.0	0.4	12.1	100		35	309.97	32.79
5888.0	0.6	12.9	100		35	309.83	32.79
5889.0	0.0	5.2	100		49	309.69	32.79
5890.0	2	15.7	100		32	309.62	32.79
5891.0	9	19.2	100		30	309.42	32.77
5892.0	20	20.6	99		25	309.22	32.75
5893.0	200	28.2	83		12	309.00	32.75
5894.0	40	21.9	100		11	308.73	32.73
5895.0	30	21.9	99		17	308.52	32.73
5896.0	40	22.8	97		20	308.30	32.72
5897.0	70	25.6	77		24	308.06	32.70
5898.0	100	26.9	77		23	307.79	32.64
5899.0	90	26.0	91		19	307.53	32.59
5900.0	300	30.4	74		14	307.26	32.55
5901.0	600	32.9	68		10	306.95	32.46
5902.0	100	25.4	99		2	306.64	32.38
5903.0	200	26.9	78		8	306.39	32.38
5904.0	300	29.3	76		6	306.13	32.33
5905.0	90	25.0	99		10	305.86	32.30
5906.0	200	29.9	72		17	305.60	32.28
5907.0	80	26.2	74		25	305.30	32.19
5908.0	0.0	5.4	100		48	305.08	32.16

ISS -	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	0	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0

INPUT PARAMETERS FROM 6700. TO 5920.

WMUD	XLIT	BITSZ	BHT	BHTDEP	SUFT	RMF	RMFT	ROMFS	PHIMFS	DASIL
72.0	0.50	8.50	221.	9344.	80.	1.95	76.	1.000	0.996	0.850

SPCK	DSPCK	RODC	DELRGM	START	STOPLG	ZSPNL	BGN	ZSPDL	REC	RESH	CSS
0.	0.	2.98	0.20	9344.	5449.	0.000	1.00	0.000	6.00	10.00	0.3

WHY	PHILEV	BR	SLIM	AK	PK	SK	STOPIN	PHIMAX	PHINCL	PHIDCL
.200	0.000	.10	0.30	62500.	6.0	2.0	5920.	0.350	0.580	0.240

PHINSO	AR	PUN	DAX	DALIM	DAGA	DASH	DTSD	DTSH	CP	PSSH
0.290	.04	.026	88.	44.	40.	120.	150.	150.	1.00	.300

EDIAM	PNLIM	PDLIM	RLIM	GRLIM	VARMC	CONST	ROP	VARLIM	CSF
0.00	1.00	1.00	1000.0	1000.0	0.07	0.333	0.70	0.20	0.04

SP STATISTICS OVER ENTIRE INTERVAL

RESISTIVITY STATISTICS OVER ENTIRE INTERVAL

GAMMA - RAY STATISTICS OVER ENTIRE INTERVAL

SONIC STATISTICS OVER ENTIRE INTERVAL

ANALYSIS BY QUASIP MODEL
PERMEABILITY BY TIMUR EQUATION
SP COEFF. FROM STATISTICS
GP COEFF. FROM STATISTICS
SONIC COEFF. FROM STATISTICS
WASAMP ROUTINE USED

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
5926.0	0.1	8.9	100		38	305.02	32.16
5927.0	10	18.1	100		10	304.87	32.15
5928.0	20	20.7	95		23	304.69	32.15
5929.0	30	22.7	85		25	304.48	32.14
5930.0	60	24.7	92		23	304.25	32.11
5931.0	50	24.1	97		24	304.01	32.10
5932.0	40	23.4	100		22	303.77	32.09
5933.0	40	22.8	100		20	303.54	32.09
5934.0	100	25.5	99		14	303.31	32.09
5935.0	200	28.0	91		12	303.05	32.09
5936.0	500	32.2	73		10	302.75	32.04
5937.0	300	30.0	78		12	302.43	31.95
5938.0	50	24.0	93		21	302.14	31.91
5939.0	1	14.4	100		32	301.94	31.90
5940.0	10	20.3	100		27	301.81	31.90
5941.0	0.5	12.2	100		41	301.61	31.90
5942.0	0.2	10.9	100		44	301.49	31.90
5944.0	0.1	10.2	100		42	301.30	31.90
5945.0	0.1	9.3	100		48	301.20	31.90
5946.0	0.1	9.8	100		45	301.10	31.90
5949.0	0.0	7.4	100		42	301.00	31.90
5950.0	20	20.2	100		23	300.86	31.90
5951.0	4	16.5	100		23	300.66	31.90
5952.0	6	17.5	100		25	300.49	31.90
5953.0	40	23.4	97		21	300.29	31.90
5954.0	60	24.9	86		23	300.05	31.88
5955.0	2	14.8	100		34	299.82	31.86
5956.0	0.4	11.8	100		40	299.68	31.86
5957.0	3	16.1	100		31	299.56	31.86
5958.0	3	16.1	100		31	299.43	31.86
5959.0	7	18.3	100		29	299.28	31.86
5960.0	20	21.6	98		25	299.08	31.86
5961.0	90	25.7	91		17	298.86	31.86
5962.0	200	27.9	87		12	298.60	31.83
5963.0	30	21.7	100		15	298.33	31.81
5964.0	40	22.3	100		13	298.12	31.81
5965.0	200	27.4	98		9	297.87	31.80
5966.0	60	24.0	99		17	297.60	31.80
5967.0	0.5	12.4	100		37	297.39	31.80
5980.0	10	18.7	100		16	296.70	31.80
5981.0	0.3	11.3	100		28	296.55	31.80
5982.0	0.0	7.4	100		39	296.43	31.80
5983.0	0.1	10.2	100		44	296.37	31.80
5984.0	60	24.3	99		20	296.25	31.80
5985.0	100	26.0	100		13	296.00	31.80

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
5986.0	7	17.9	100		24	295.75	31.80
5987.0	3	16.3	100		30	295.58	31.80
5988.0	10	19.1	100		28	295.43	31.80
5989.0	50	24.0	95		25	295.21	31.79
5990.0	60	24.8	92		24	294.97	31.78
5991.0	20	21.6	100		26	294.75	31.77
5992.0	40	23.5	96		25	294.54	31.77
5993.0	10	19.4	100		30	294.30	31.76
5994.0	2	15.6	100		35	294.11	31.76
5995.0	0.5	12.2	100		45	293.96	31.76
5996.0	90	26.1	94		22	293.80	31.76
5997.0	100	26.4	90		22	293.54	31.74
5998.0	100	26.5	90		19	293.29	31.73
5999.0	400	30.4	91		8	293.02	31.70
6000.0	50	23.2	100		13	292.73	31.69
6001.0	20	20.3	100		21	292.51	31.69
6002.0	2	14.8	100		33	292.31	31.69
6003.0	30	21.9	100		26	292.15	31.69
6004.0	100	27.3	98		16	291.91	31.68
6005.0	200	27.3	100		11	291.64	31.68
6006.0	100	27.5	97		18	291.36	31.68
6007.0	200	28.8	94		16	291.09	31.67
6008.0	200	28.3	93		17	290.80	31.65
6009.0	90	25.8	96		18	290.52	31.63
6010.0	50	23.3	100		16	290.27	31.63
6011.0	40	23.1	100		20	290.05	31.63
6012.0	70	24.9	96		21	289.81	31.62
6013.0	100	27.4	93		18	289.55	31.61
6014.0	100	27.8	87		20	289.27	31.58
6015.0	60	24.0	100		18	289.00	31.55
6016.0	30	22.7	99		23	288.76	31.55
6017.0	10	20.1	100		28	288.55	31.55
6018.0	50	23.9	99		24	288.33	31.55
6019.0	60	24.4	100		22	288.10	31.55
6020.0	100	26.2	99		20	287.85	31.55
6021.0	80	25.4	100		20	287.60	31.55
6022.0	80	25.4	100		20	287.35	31.55
6023.0	80	25.5	99		21	287.09	31.55
6024.0	100	26.4	99		19	286.84	31.54
6025.0	200	28.1	98		16	286.57	31.54
6026.0	300	29.9	97		13	286.29	31.53
6027.0	200	29.1	98		13	285.99	31.53
6028.0	200	29.3	98		13	285.70	31.52
6029.0	200	27.7	100		13	285.41	31.52
6030.0	200	27.4	100		14	285.13	31.51
6031.0	60	24.2	100		18	284.86	31.51
6032.0	90	25.8	98		20	284.62	31.51
6033.0	80	25.6	97		21	284.36	31.51

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6034.0	60	24.7	96		23	284.11	31.50
6035.0	60	24.5	99		22	283.86	31.49
6036.0	80	25.5	98		20	283.61	31.49
6037.0	100	26.4	98		18	283.35	31.48
6038.0	100	27.1	97		17	283.08	31.47
6039.0	100	26.8	94		20	282.81	31.46
6040.0	100	27.5	92		19	282.54	31.45
6041.0	100	27.5	91		19	282.27	31.42
6042.0	100	26.3	95		20	281.99	31.40
6043.0	50	23.8	99		22	281.74	31.39
6044.0	40	23.1	100		22	281.50	31.39
6045.0	40	22.7	100		23	281.27	31.39
6046.0	40	23.2	100		22	281.04	31.39
6047.0	50	24.0	98		20	280.80	31.39
6048.0	60	23.9	100		14	280.57	31.38
6049.0	60	23.2	100		12	280.32	31.38
6050.0	40	22.1	100		14	280.09	31.38
6051.0	80	25.0	93		17	279.86	31.38
6052.0	80	25.5	92		19	279.61	31.36
6053.0	70	24.8	96		20	279.35	31.34
6054.0	40	23.3	95		24	279.11	31.33
6055.0	20	21.5	99		23	278.87	31.32
6056.0	70	23.0	100		5	278.66	31.32
6057.0	100	24.8	100		8	278.40	31.32
6058.0	60	24.3	98		19	278.16	31.32
6059.0	80	25.3	99		17	277.92	31.32
6060.0	100	27.0	98		17	277.66	31.31
6061.0	100	26.4	98		18	277.39	31.30
6062.0	70	24.9	97		21	277.13	31.30
6063.0	30	22.9	98		25	276.89	31.29
6064.0	10	19.3	100		28	276.69	31.29
6065.0	30	22.7	100		26	276.52	31.29
6066.0	80	25.5	94		22	276.28	31.28
6067.0	50	24.2	95		24	276.02	31.27
6068.0	60	24.6	99		20	275.79	31.26
6069.0	50	23.5	100		21	275.55	31.26
6070.0	30	22.7	97		26	275.31	31.26
6071.0	4	16.7	100		34	275.10	31.25
6072.0	60	23.5	100		14	274.92	31.25
6073.0	30	20.6	100		8	274.67	31.25
6074.0	10	19.1	100		28	274.48	31.25
6075.0	0.2	11.0	100		37	274.33	31.25
6076.0	0.2	10.6	100		39	274.23	31.25
6077.0	0.2	11.1	100		38	274.12	31.25
6078.0	0.8	13.3	100		33	274.02	31.25
6079.0	9	19.0	100		28	273.87	31.25
6080.0	0.3	11.7	100		44	273.69	31.25
6081.0	0.4	11.8	100		45	273.58	31.25

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6082.0	0.4	11.8	100		35	273.46	31.25
6083.0	10	19.7	100		27	273.33	31.25
6084.0	30	22.4	99		24	273.13	31.25
6085.0	100	26.2	96		19	272.90	31.25
6086.0	100	26.4	96		18	272.64	31.24
6087.0	100	26.0	96		18	272.38	31.23
6088.0	70	25.1	96		21	272.12	31.22
6089.0	30	22.3	98		24	271.88	31.21
6090.0	20	20.8	100		25	271.66	31.21
6091.0	30	21.9	94		25	271.47	31.21
6092.0	40	22.9	98		20	271.24	31.19
6093.0	60	23.8	98		17	271.02	31.18
6094.0	70	24.8	95		19	270.77	31.17
6095.0	50	23.9	99		19	270.53	31.16
6096.0	70	25.0	98		20	270.29	31.16
6097.0	60	24.3	97		21	270.04	31.15
6098.0	20	21.2	100		20	269.80	31.15
6099.0	100	24.3	100		5	269.58	31.15
6100.0	60	22.1	100		2	269.35	31.15
6101.0	10	18.8	100		13	269.15	31.15
6102.0	30	22.3	99		21	268.94	31.15
6103.0	20	21.0	100		27	268.71	31.13
6104.0	0.2	10.8	100		38	268.52	31.13
6105.0	30	22.0	100		25	268.40	31.13
6106.0	40	23.3	100		21	268.17	31.13
6107.0	30	22.5	100		22	267.94	31.13
6108.0	20	21.8	100		26	267.72	31.13
6109.0	2	14.8	100		32	267.52	31.13
6110.0	30	22.4	99		24	267.33	31.13
6111.0	30	22.8	98		24	267.11	31.13
6112.0	10	19.8	100		28	266.89	31.12
6113.0	10	19.9	100		28	266.70	31.12
6114.0	50	23.6	98		23	266.52	31.12
6115.0	40	22.8	100		22	266.29	31.12
6116.0	30	22.7	99		23	266.06	31.12
6117.0	40	23.1	98		24	265.84	31.12
6118.0	40	23.1	99		21	265.61	31.11
6119.0	5	17.4	100		30	265.38	31.11
6120.0	7	18.4	100		29	265.20	31.11
6121.0	20	20.8	100		27	265.04	31.11
6122.0	1	14.1	100		32	264.85	31.11
6123.0	0.3	11.4	100		38	264.72	31.11
6124.0	2	14.8	100		32	264.61	31.11
6125.0	0.2	10.8	100		36	264.49	31.11
6126.0	0.7	13.0	100		35	264.37	31.11
6127.0	0.3	11.6	100		39	264.24	31.11
6128.0	0.6	12.8	100		35	264.13	31.11
6129.0	3	16.2	100		31	263.96	31.11

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6130.0	0.2	11.1	100		39	263.82	31.11
6131.0	0.0	8.0	100		45	263.71	31.11
6132.0	0.1	9.3	100		44	263.63	31.11
6133.0	1	13.7	100		33	263.53	31.11
6134.0	4	16.5	100		30	263.38	31.11
6135.0	4	17.1	100		30	263.23	31.11
6136.0	20	20.7	100		27	263.05	31.11
6137.0	3	16.0	100		31	262.83	31.11
6138.0	2	15.6	100		31	262.69	31.11
6139.0	30	21.9	100		26	262.54	31.11
6140.0	20	20.6	100		27	262.34	31.11
6141.0	30	22.4	99		23	262.13	31.11
6142.0	7	18.4	100		29	261.91	31.11
6143.0	0.1	9.4	100		42	261.77	31.11
6144.0	0.1	10.4	100		41	261.68	31.11
6145.0	0.0	7.5	100		47	261.58	31.11
6146.0	0.0	8.7	100		47	261.50	31.11
6147.0	0.0	8.4	100		49	261.41	31.11
6151.0	0.1	9.9	100		42	261.10	31.11
6152.0	0.2	10.6	100		43	260.99	31.11
6153.0	20	20.0	100		17	260.88	31.11
6154.0	60	23.0	100		10	260.65	31.11
6155.0	30	21.8	97		22	260.43	31.11
6156.0	9	18.9	100		28	260.22	31.10
6157.0	80	25.8	91		20	260.00	31.10
6158.0	60	24.6	96		22	259.74	31.08
6159.0	90	25.9	96		18	259.49	31.07
6160.0	50	22.9	100		13	259.24	31.06
6161.0	40	22.2	100		18	259.01	31.06
6162.0	20	20.6	100		24	258.79	31.06
6163.0	8	18.4	100		29	258.60	31.06
6164.0	0.1	10.2	100		45	258.46	31.06
6165.0	0.1	8.9	100		44	258.36	31.06
6166.0	0.1	9.5	100		45	258.27	31.06
6169.0	0.2	10.6	100		48	258.04	31.06
6172.0	0.2	10.6	100		44	257.79	31.06
6174.0	20	20.2	100		24	257.60	31.06
6175.0	10	19.7	100		23	257.40	31.06
6176.0	80	24.9	99		14	257.18	31.06
6177.0	100	26.1	98		13	256.93	31.06
6178.0	90	25.7	94		16	256.67	31.05
6179.0	200	28.2	94		8	256.40	31.03
6180.0	200	25.7	100		0	256.12	31.01
6181.0	60	22.0	100		3	255.86	31.01

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6182.0	30	22.2	99		18	255.64	31.01
6183.0	100	27.2	74		21	255.41	30.99
6184.0	200	28.5	77		21	255.13	30.93
6185.0	70	25.1	96		21	254.86	30.88
6186.0	40	23.2	97		23	254.61	30.87
6187.0	30	22.5	100		21	254.37	30.86
6188.0	40	23.6	93		24	254.15	30.86
6189.0	50	23.9	90		28	253.92	30.85
6190.0	200	29.4	75		26	253.68	30.83
6191.0	60	24.5	92		29	253.41	30.77
6192.0	0.4	12.0	100		37	253.20	30.76
6193.0	1	14.5	100		32	253.08	30.76
6194.0	2	14.9	100		32	252.93	30.76
6195.0	0.0	6.2	100		48	252.81	30.76
6197.0	0.0	6.5	100		47	252.72	30.76
6198.0	0.5	12.5	100		36	252.65	30.76
6199.0	0.4	12.1	100		36	252.52	30.76
6200.0	20	20.7	90		30	252.36	30.76
6201.0	80	25.8	71	0.2	28	252.14	30.73
6202.0	30	22.7	79	0.5	26	251.91	30.69
6203.0	60	24.6	79		24	251.67	30.64
6204.0	200	29.2	73		23	251.41	30.57
6205.0	60	24.9	91		23	251.13	30.51
6206.0	20	21.7	100		25	250.89	30.49
6207.0	100	27.3	88		20	250.67	30.49
6208.0	200	28.4	87		18	250.39	30.45
6209.0	60	24.3	99		21	250.11	30.42
6210.0	50	23.9	95		24	249.87	30.42
6211.0	90	26.2	91		21	249.62	30.40
6212.0	80	25.6	94		21	249.36	30.38
6213.0	70	25.1	94		22	249.11	30.36
6214.0	20	20.8	100		25	248.87	30.35
6215.0	20	20.9	100		27	248.66	30.35
6216.0	30	22.4	99		24	248.45	30.35
6217.0	40	22.7	100		22	248.22	30.35
6218.0	30	21.7	100		24	248.00	30.35
6219.0	40	23.3	100		21	247.78	30.35
6220.0	20	20.5	100		21	247.55	30.35
6221.0	10	19.3	100		25	247.35	30.35
6222.0	20	20.7	100		25	247.16	30.35
6223.0	20	21.3	100		24	246.95	30.35
6224.0	20	21.3	100		22	246.74	30.35
6225.0	30	22.7	100		23	246.52	30.35
6226.0	100	26.5	95		21	246.28	30.35
6227.0	200	28.7	96		15	246.01	30.33
6228.0	200	27.5	100		14	245.72	30.33
6229.0	100	26.6	99		17	245.45	30.32

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6230.0	80	25.7	98		21	245.18	30.32
6231.0	30	22.5	100		25	244.93	30.31
6232.0	30	22.2	100		20	244.70	30.31
6233.0	20	20.3	100		20	244.48	30.31
6234.0	20	20.6	100		23	244.27	30.31
6235.0	50	23.5	100		20	244.06	30.31
6236.0	30	22.3	100		21	243.83	30.31
6237.0	0.4	12.2	100		34	243.62	30.31
6238.0	0.0	7.1	100		49	243.52	30.31
6240.0	0.0	8.4	100		40	243.40	30.31
6241.0	0.0	8.6	100		41	243.31	30.31
6242.0	0.0	7.9	100		45	243.23	30.31
6243.0	0.1	10.2	100		40	243.14	30.31
6244.0	0.5	12.3	100		34	243.02	30.31
6245.0	0.6	12.6	100		34	242.86	30.31
6246.0	2	14.6	100		32	242.75	30.31
6247.0	20	21.2	100		25	242.60	30.31
6248.0	10	19.4	100		28	242.40	30.31
6249.0	60	24.7	95		22	242.19	30.31
6250.0	50	23.9	97		20	241.94	30.30
6251.0	20	19.7	100		8	241.72	30.29
6252.0	10	17.6	100		0	241.54	30.29
6253.0	1	11.9	100		2	241.37	30.29
6254.0	0.8	12.9	100		26	241.25	30.29
6255.0	0.4	12.1	100		36	241.11	30.29
6256.0	40	23.1	77		24	240.97	30.29
6257.0	90	24.3	100		8	240.75	30.27
6258.0	30	20.8	100		11	240.54	30.27
6259.0	2	15.6	100		31	240.34	30.27
6260.0	6	17.7	100		29	240.18	30.27
6261.0	0.6	12.6	100		35	239.99	30.27
6262.0	0.3	11.4	100		35	239.86	30.27
6263.0	20	21.0	100		24	239.70	30.27
6264.0	10	19.2	100		27	239.49	30.27
6265.0	30	21.6	100		22	239.30	30.27
6266.0	50	23.7	100		18	239.08	30.27
6267.0	40	22.9	100		18	238.85	30.27
6268.0	20	21.4	100		21	238.62	30.27
6269.0	3	16.1	100		28	238.41	30.27
6270.0	9	17.0	100		7	238.25	30.27
6271.0	20	18.7	100		0	238.05	30.27
6272.0	4	16.0	100		19	237.88	30.27
6273.0	10	19.1	100		26	237.71	30.27
6274.0	0.0	6.5	100		46	237.55	30.27
6275.0	0.0	6.7	100		43	237.48	30.27
6276.0	0.0	4.3	100		48	237.42	30.27
6277.0	0.2	10.8	100		36	237.37	30.27

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6278.0	0.1	9.7	100		37	237.25	30.27
6283.0	0.1	8.8	100		44	237.04	30.27
6284.0	0.1	9.2	100		44	236.95	30.27
6287.0	3	16.0	100		31	236.75	30.27
6288.0	10	19.6	100		28	236.57	30.27
6289.0	50	24.1	99		21	236.36	30.27
6290.0	50	23.7	100		18	236.12	30.27
6291.0	40	22.6	100		20	235.89	30.27
6292.0	40	22.6	100		19	235.67	30.27
6293.0	40	21.4	100		9	235.44	30.27
6294.0	40	21.9	100		10	235.21	30.27
6295.0	30	21.6	100		19	234.99	30.27
6296.0	40	22.8	100		16	234.78	30.27
6297.0	40	22.5	100		16	234.55	30.27
6298.0	0.0	7.8	100		40	234.34	30.27
6299.0	0.0	6.7	100		45	234.27	30.27
6306.0	0.0	8.5	100		44	234.00	30.27
6308.0	0.0	8.1	100		49	233.85	30.27
6310.0	0.0	6.4	100		49	233.70	30.27
6315.0	200	27.4	97		13	233.32	30.26
6321.0	0.0	7.6	100		46	232.85	30.26
6322.0	0.0	5.1	100		49	232.77	30.26
6323.0	0.0	5.6	100		47	232.72	30.26
6324.0	0.1	8.9	100		42	232.66	30.26
6325.0	0.1	9.3	100		39	232.56	30.26
6326.0	10	19.6	100		24	232.41	30.26
6327.0	30	21.8	99		22	232.21	30.26
6328.0	50	23.5	98		19	231.99	30.26
6329.0	50	23.4	98		19	231.76	30.25
6330.0	50	23.6	98		19	231.53	30.25
6331.0	40	22.3	100		18	231.29	30.25
6332.0	6	17.7	100		26	231.08	30.25
6333.0	0.2	11.0	100		35	230.92	30.25
6334.0	0.0	8.2	100		40	230.82	30.25
6335.0	3	16.1	100		31	230.74	30.25
6336.0	6	17.9	100		29	230.57	30.25
6337.0	20	20.3	100		25	230.40	30.25
6338.0	40	23.2	99		21	230.19	30.25
6339.0	20	21.0	100		26	229.96	30.24
6340.0	40	22.9	100		19	229.75	30.24
6341.0	30	21.5	100		17	229.51	30.24

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6342.0	20	21.1	100		21	229.30	30.24
6343.0	20	21.2	100		26	229.09	30.24
6344.0	20	20.9	100		24	228.87	30.24
6345.0	20	21.0	100		23	228.66	30.24
6346.0	30	21.8	100		22	228.45	30.24
6347.0	0.0	8.2	100		38	228.29	30.24
6348.0	0.0	8.5	100		42	228.22	30.24
6351.0	0.0	6.9	100		45	228.05	30.24
6352.0	0.0	7.9	100		45	227.97	30.24
6353.0	0.0	8.1	100		46	227.89	30.24
6354.0	0.0	6.8	100		47	227.81	30.24
6355.0	0.0	7.8	100		40	227.75	30.24
6356.0	0.1	10.1	100		36	227.66	30.24
6357.0	8	18.5	100		29	227.53	30.24
6358.0	10	19.2	100		27	227.33	30.24
6359.0	1	14.0	100		33	227.16	30.24
6360.0	10	18.9	100		26	227.03	30.24
6361.0	20	21.0	100		25	226.83	30.24
6362.0	30	21.7	100		21	226.63	30.24
6363.0	40	22.6	100		14	226.41	30.24
6364.0	100	25.7	100		9	226.18	30.24
6365.0	90	24.8	100		12	225.93	30.24
6366.0	80	25.0	100		14	225.68	30.24
6367.0	90	25.4	98		15	225.43	30.24
6368.0	70	24.2	100		14	225.18	30.23
6369.0	40	22.7	100		18	224.95	30.23
6370.0	60	23.9	100		16	224.71	30.23
6371.0	40	22.3	100		17	224.48	30.23
6372.0	40	22.6	100		19	224.26	30.23
6373.0	60	24.0	100		15	224.04	30.23
6374.0	10	19.6	100		22	223.80	30.23
6375.0	0.0	8.6	100		38	223.63	30.23
6376.0	2	15.4	100		33	223.54	30.23
6377.0	3	16.0	100		31	223.39	30.23
6378.0	0.1	9.8	100		50	223.25	30.23
6379.0	0.1	9.2	100		41	223.16	30.23
6381.0	0.3	11.3	100		45	223.02	30.23
6382.0	7	18.3	100		35	222.89	30.23
6383.0	6	17.9	100		35	222.71	30.23
6384.0	80	25.8	88		23	222.52	30.23
6385.0	30	22.1	100		21	222.28	30.22
6386.0	40	22.6	100		18	222.06	30.22
6387.0	20	21.3	100		22	221.84	30.22
6388.0	8	18.5	100		27	221.65	30.22
6389.0	10	19.9	100		25	221.47	30.22
6390.0	30	22.2	100		20	221.27	30.22

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6391.0	50	23.7	100		17	221.04	30.22
6392.0	50	22.5	100		10	220.80	30.22
6393.0	70	23.2	100		6	220.58	30.22
6394.0	10	19.1	100		21	220.34	30.22
6395.0	0.0	5.7	100		44	220.15	30.22
6396.0	0.0	6.6	100		41	220.09	30.22
6397.0	0.0	8.6	100		41	220.03	30.22
6398.0	5	17.2	100		30	219.93	30.22
6399.0	20	21.7	100		26	219.77	30.22
6405.0	0.0	6.1	100		49	219.40	30.22
6406.0	0.2	10.6	100		47	219.33	30.22
6407.0	1	14.4	100		32	219.22	30.22
6408.0	10	19.8	100		28	219.08	30.22
6409.0	30	21.9	98		23	218.89	30.22
6410.0	60	24.0	98		16	218.66	30.21
6411.0	40	23.0	96		19	218.42	30.21
6412.0	30	21.1	100		17	218.19	30.20
6413.0	40	22.8	100		16	217.97	30.20
6414.0	30	21.5	100		21	217.75	30.20
6415.0	30	21.7	97		24	217.53	30.20
6416.0	1	13.8	100		35	217.37	30.20
6417.0	3	16.5	100		32	217.22	30.20
6418.0	6	17.6	100		29	217.06	30.20
6419.0	10	19.9	100		26	216.86	30.19
6420.0	0.9	13.5	100		35	216.69	30.19
6421.0	20	20.8	100		26	216.57	30.19
6422.0	0.1	9.5	100		45	216.43	30.19
6424.0	0.3	11.6	100		40	216.22	30.19
6427.0	10	19.9	100		28	215.89	30.19
6428.0	80	25.5	82		22	215.65	30.16
6429.0	50	23.7	97		19	215.40	30.13
6430.0	90	25.2	97		13	215.16	30.12
6431.0	100	25.2	98		12	214.91	30.11
6432.0	100	25.7	94		13	214.66	30.10
6433.0	100	26.2	93		12	214.40	30.09
6434.0	70	24.2	98		13	214.14	30.07
6435.0	30	21.4	100		18	213.90	30.07
6436.0	10	19.0	100		24	213.70	30.07
6437.0	0.1	10.0	100		37	213.52	30.07
6438.0	0.3	11.4	100		40	213.42	30.07
6439.0	0.2	11.1	100		50	213.31	30.07
6449.0	0.1	8.9	100		40	213.02	30.07
6450.0	0.0	6.2	100		46	212.94	30.07
6451.0	0.0	4.9	100		47	212.88	30.07

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6452.0	0.0	7.6	100		39	212.82	30.07
6453.0	0.0	7.6	100		45	212.74	30.07
6454.0	0.2	10.7	100		36	212.66	30.07
6455.0	0.0	6.1	100		47	212.56	30.07
6456.0	0.0	6.3	100		45	212.50	30.07
6459.0	0.1	8.9	100		42	212.34	30.07
6460.0	0.0	7.6	100		45	212.26	30.07
6461.0	0.0	6.2	100		50	212.19	30.07
6462.0	0.0	7.4	100		47	212.12	30.07
6463.0	0.0	8.5	100		41	212.04	30.07
6465.0	0.0	6.6	100		46	211.93	30.07
6466.0	0.9	13.5	100		33	211.85	30.07
6467.0	90	25.0	99		13	211.68	30.07
6468.0	50	22.0	100		6	211.44	30.07
6469.0	20	19.5	100		13	211.22	30.07
6470.0	30	20.8	100		13	211.03	30.07
6471.0	70	24.1	85		14	210.81	30.06
6472.0	30	22.0	84		20	210.57	30.02
6473.0	2	15.1	100		32	210.37	29.99
6474.0	0.1	10.1	100		36	210.24	29.99
6475.0	4	16.6	100		30	210.10	29.99
6483.0	0.2	10.4	100		37	209.73	29.99
6484.0	6	17.4	100		26	209.59	29.99
6485.0	4	16.9	100		28	209.41	29.99
6486.0	0.3	11.5	100		38	209.26	29.99
6487.0	0.8	13.3	100		44	209.14	29.99
6488.0	2	15.1	100		44	209.00	29.99
6490.0	50	24.3	77		49	208.72	29.99
6495.0	0.0	7.4	100		45	208.41	29.96
6496.0	0.1	9.7	100		41	208.32	29.96
6497.0	20	21.1	95		26	208.21	29.96
6498.0	0.5	12.3	100		34	208.00	29.96
6499.0	0.0	7.8	100		39	207.90	29.96
6507.0	0.1	9.0	100		37	207.69	29.96
6508.0	4	16.2	100		20	207.56	29.96
6518.0	0.1	9.2	100		38	207.13	29.96
6519.0	0.2	10.8	100		36	207.03	29.96
6520.0	0.3	11.5	100		41	206.92	29.96
6521.0	200	27.9	72		17	206.76	29.94
6522.0	10	20.2	93		27	206.49	29.86
6523.0	0.2	11.0	100		39	206.32	29.86

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6524.0	0.1	9.8	100		37	206.21	29.86
6525.0	0.2	10.8	100		36	206.12	29.86
6526.0	0.0	4.2	100		48	206.02	29.86
6528.0	0.0	7.5	100		45	205.92	29.86
6529.0	20	20.9	84		23	205.84	29.86
6530.0	100	23.8	100		1	205.63	29.84
6531.0	1	12.7	100		11	205.42	29.84
6532.0	0.1	9.9	100		35	205.30	29.84
6538.0	10	19.4	100		19	205.10	29.84
6539.0	100	25.1	96		0	204.90	29.84
6540.0	50	21.3	100		0	204.66	29.83
6541.0	40	20.9	100		0	204.45	29.83
6542.0	40	21.2	96		9	204.25	29.83
6543.0	3	16.3	100		29	204.04	29.82
6549.0	0.0	6.8	100		44	203.69	29.82
6550.0	0.0	4.1	100		46	203.64	29.82
6551.0	0.0	3.3	100		47	203.59	29.82
6552.0	0.0	5.9	100		45	203.54	29.82
6553.0	0.0	3.1	100		45	203.49	29.82
6559.0	0.1	10.0	100		47	203.37	29.82
6560.0	0.0	7.8	100		42	203.27	29.82
6561.0	6	17.5	100		28	203.19	29.82
6562.0	10	19.8	88		22	203.00	29.80
6563.0	1	13.6	100		33	202.80	29.78
6578.0	200	27.6	69		16	202.44	29.75
6592.0	0.0	4.8	100		46	202.22	29.70
6593.0	0.5	12.4	100		34	202.15	29.70
6594.0	0.9	13.6	100		33	202.00	29.70
6597.0	0.0	5.8	100		49	201.78	29.70
6598.0	0.0	6.4	100		44	201.72	29.70
6599.0	6	17.9	96		28	201.67	29.70
6600.0	0.0	6.3	100		41	201.50	29.70
6601.0	0.0	4.2	100		43	201.46	29.70
6609.0	0.4	11.7	100		32	201.29	29.70
6614.0	0.0	4.4	100		49	201.16	29.70
6615.0	0.1	9.9	100		36	201.11	29.70
6616.0	0.0	6.6	100		40	201.03	29.70
6623.0	0.0	4.9	100		49	200.89	29.70

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6624.0	0.0	7.3	100		43	200.83	29.70
6625.0	0.0	5.3	100		46	200.76	29.70
6634.0	0.0	4.8	100		48	200.54	29.70
6643.0	1	13.8	100		33	200.38	29.70
6649.0	0.0	6.4	100		42	200.15	29.70
6650.0	40	22.1	76		16	200.03	29.70
6651.0	20	19.2	99		13	199.81	29.66
6652.0	1	14.0	100		28	199.64	29.65
6653.0	0.0	5.0	100		42	199.53	29.65
6658.0	0.0	5.9	100		47	199.38	29.65
6659.0	0.1	9.8	100		37	199.31	29.65
6660.0	0.0	4.8	100		45	199.24	29.65
6667.0	0.0	8.2	100		34	199.06	29.65
6674.0	0.5	12.5	100		33	198.93	29.65
6675.0	20	20.7	86		14	198.80	29.65
6676.0	0.1	8.9	100		43	198.56	29.59
6682.0	0.1	9.3	100		40	198.45	29.59
6683.0	0.0	6.5	100		42	198.36	29.59
6698.0	0.0	5.9	100		41	198.25	29.59
6699.0	0.8	13.3	100		33	198.18	29.59
6700.0	60	26.4	66		6	198.00	29.56

ISS -	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	0	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0

INPUT PARAMETERS FROM 7972. TO 6700.

WMUD	XLIT	BITSZ	BHT	BHTDEP	SUFT	RMF	RMFT	ROMFS	PHIMFS	DASIL
72.0	0.50	8.50	221.	9344.	80.	1.95	76.	1.000	0.996	0.850

SPCK	DSPCK	RODC	DELRGM	START	STOPLG	ZSPNL	BGN	ZSPDL	REC	RESH	CSS
0.	0.	2.98	0.20	9344.	5449.	0.000	1.00	0.000	6.00	10.00	0.3

WHY	PHILEV	BR	SLIM	AK	PK	SK	STOPIN	PHIMAX	PHINCL	PHIDCL
.200	0.000	.10	0.30	62500.	6.0	2.0	6700.	0.310	0.540	0.180

PHINSO	AR	PUN	DAX	DALIM	DAGA	DASH	DTSD	DTSH	CP	PSSH
0.280	.04	.027	66.	32.	30.	90.	150.	150.	1.00	.300

EDIAM	PNLIM	PDLIM	RLIM	GRLIM	VARMC	CONST	ROP	VARLIM	CSF
0.00	1.00	1.00	1000.0	1000.0	0.07	0.333	0.70	0.20	0.04

SP STATISTICS OVER ENTIRE INTERVAL

RESISTIVITY STATISTICS OVER ENTIRE INTERVAL

GAMMA - RAY STATISTICS OVER ENTIRE INTERVAL

SONIC STATISTICS OVER ENTIRE INTERVAL

ANALYSIS BY QUASIP MODEL
PERMEABILITY BY TIMUR EQUATION
SP COEFF. FROM STATISTICS
GR COEFF. FROM STATISTICS
SONIC COEFF. FROM STATISTICS
WASAMP ROUTINE USED

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6701.0	0.3	10.9	100		23	197.78	29.52
6731.0	0.0	5.5	100		45	197.65	29.52
6732.0	0.0	6.7	100		35	197.59	29.52
6737.0	0.0	3.7	100		47	197.51	29.52
6746.0	0.0	4.1	100		46	197.42	29.52
6747.0	0.1	9.0	100		38	197.36	29.52
6763.0	0.1	9.3	100		41	197.27	29.52
6764.0	50	21.3	73		1	197.12	29.48
6765.0	0.4	11.3	100		18	196.93	29.44
6766.0	3	13.6	66		29	196.82	29.44
6768.0	0.6	12.7	98		33	196.71	29.42
6771.0	0.5	11.8	74		24	196.59	29.41
6772.0	0.0	7.3	100		18	196.49	29.40
6773.0	0.0	8.0	100		39	196.41	29.40
6780.0	0.0	1.2	100		49	196.36	29.40
6781.0	0.0	8.4	100		38	196.33	29.40
6784.0	0.8	13.2	83		34	196.27	29.40
6785.0	7	16.7	74		10	196.11	29.35
6786.0	0.2	10.0	100		20	195.96	29.32
6787.0	0.6	12.6	91		34	195.86	29.31
6788.0	0.1	9.0	100		38	195.74	29.31
6789.0	0.0	2.8	100		49	195.68	29.31
6790.0	0.4	11.9	100		34	195.62	29.31
6791.0	0.0	3.6	100		46	195.50	29.31
6793.0	0.7	12.5	72		26	195.45	29.31
6794.0	0.0	4.0	100		44	195.35	29.29
6796.0	5	14.5	59	0.5	32	195.28	29.29
6797.0	5	14.7	61		27	195.13	29.23
6798.0	0.0	8.2	100		39	194.99	29.18
6799.0	0.3	11.6	95		35	194.93	29.18
6800.0	4	13.7	58		29	194.81	29.15
6801.0	4	13.7	59		26	194.67	29.09
6802.0	4	13.6	58		26	194.53	29.03
6805.0	0.1	9.9	100		36	194.37	28.98
6806.0	0.2	10.5	99		36	194.27	28.98
6807.0	0.0	8.3	100		38	194.20	28.98
6808.0	4	14.2	61		23	194.09	28.96

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6809.0	0.8	12.3	78		18	193.95	28.91
6810.0	2	12.1	65		28	193.83	28.88
6813.0	0.0	3.5	100		48	193.70	28.86
6814.0	5	14.3	57	0.6	27	193.62	28.83
6815.0	3	12.9	62		26	193.47	28.77
6816.0	2	11.9	64		29	193.35	28.72
6817.0	4	14.0	57	0.6	29	193.22	28.67
6818.0	5	15.1	67		19	193.08	28.61
6819.0	4	14.5	61		28	192.93	28.57
6824.0	0.4	11.7	98		34	192.75	28.54
6825.0	0.3	11.3	85		32	192.63	28.52
6826.0	0.1	9.2	100		36	192.52	28.51
6827.0	2	12.7	62		32	192.42	28.51
6828.0	0.1	9.2	100		37	192.29	28.45
6834.0	0.2	10.4	99		36	192.19	28.45
6835.0	3	13.0	60		29	192.07	28.42
6836.0	0.1	9.3	100		37	191.96	28.39
6837.0	3	13.2	64		30	191.85	28.38
6839.0	0.1	9.7	100		37	191.67	28.33
6840.0	0.0	7.6	100		39	191.58	28.33
6841.0	0.0	7.5	100		39	191.53	28.33
6842.0	8	16.1	57	0.5	25	191.44	28.33
6843.0	6	16.0	73	0.6	7	191.28	28.27
6844.0	3	14.4	69		13	191.12	28.22
6845.0	1	11.8	66		33	190.99	28.18
6846.0	0.0	7.4	100		40	190.88	28.16
6847.0	0.0	7.0	100		40	190.82	28.16
6848.0	7	15.2	55	0.6	29	190.71	28.13
6850.0	0.0	7.1	100		40	190.55	28.06
6851.0	0.0	1.2	100		49	190.51	28.06
6859.0	0.0	6.9	100		40	190.49	28.06
6860.0	0.4	11.8	73		29	190.39	28.04
6861.0	0.9	13.0	69		23	190.27	28.01
6863.0	6	15.6	61		19	190.09	27.98
6864.0	0.9	12.3	86		13	189.93	27.93
6865.0	0.2	9.8	90		23	189.82	27.91
6866.0	0.0	6.9	100		40	189.72	27.91
6870.0	7	16.1	62		25	189.61	27.91
6871.0	2	14.2	75		19	189.46	27.86
6872.0	7	16.4	64		20	189.31	27.81

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6873.0	3	14.7	93		13	189.16	27.77
6874.0	7	16.9	75		15	189.00	27.75
6875.0	8	18.0	69		21	188.82	27.70
6876.0	5	15.9	94		15	188.65	27.66
6877.0	20	20.3	63		17	188.48	27.63
6878.0	3	14.6	91		16	188.29	27.56
6879.0	1	12.5	100		14	188.15	27.56
6880.0	2	13.4	100		8	188.03	27.56
6881.0	4	14.8	100		4	187.89	27.56
6882.0	7	17.1	97		14	187.73	27.56
6883.0	20	20.2	84		16	187.55	27.54
6884.0	50	22.8	78		15	187.34	27.50
6885.0	50	23.1	69		19	187.11	27.45
6886.0	10	18.2	86		18	186.89	27.38
6887.0	2	13.6	100		11	186.72	27.37
6888.0	0.5	11.2	100		14	186.59	27.37
6889.0	0.3	10.4	100		12	186.48	27.37
6890.0	0.9	12.4	100		14	186.37	27.37
6891.0	8	17.5	90		14	186.24	27.37
6892.0	10	19.0	78		18	186.06	27.34
6893.0	9	17.8	88		16	185.87	27.30
6894.0	8	17.7	76		17	185.69	27.27
6895.0	1	13.0	100		12	185.52	27.24
6896.0	0.2	10.0	100		12	185.40	27.24
6897.0	0.2	9.5	100		12	185.30	27.24
6898.0	0.8	11.8	99		9	185.21	27.24
6899.0	3	14.5	93		6	185.08	27.24
6900.0	10	17.1	81		7	184.93	27.22
6901.0	2	15.0	77		23	184.77	27.19
6902.0	9	17.4	66	0.6	28	184.61	27.15
6903.0	0.7	12.8	100		37	184.47	27.12
6904.0	2	14.8	97		31	184.34	27.12
6905.0	10	19.2	63	0.6	24	184.17	27.09
6906.0	10	17.9	80		9	183.98	27.02
6907.0	7	15.7	96		2	183.81	27.00
6908.0	2	13.5	87		11	183.65	26.99
6909.0	2	13.4	77		11	183.53	26.97
6910.0	3	14.1	88		5	183.39	26.94
6911.0	0.9	12.1	100		10	183.25	26.93
6912.0	0.0	5.8	100		22	183.14	26.93
6913.0	0.0	6.3	100		37	183.10	26.93
6914.0	0.2	10.7	100		40	183.04	26.93
6915.0	10	18.5	59		26	182.91	26.91
6916.0	4	15.5	91		11	182.73	26.84
6917.0	5	14.8	100		1	182.58	26.84
6918.0	0.2	9.6	100		13	182.44	26.84
6919.0	0.0	8.1	100		27	182.36	26.84
6920.0	0.0	2.1	100		48	182.27	26.84

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6921.0	0.4	11.7	99		33	182.23	26.84
6922.0	2	13.9	78		21	182.11	26.82
6923.0	1	13.8	67		25	181.97	26.79
6924.0	3	14.7	92		10	181.83	26.75
6925.0	3	15.7	67		21	181.68	26.73
6926.0	8	16.1	57	0.6	30	181.53	26.67
6927.0	6	15.7	64	0.6	24	181.37	26.61
6928.0	5	16.3	68		17	181.22	26.55
6929.0	5	15.8	74		10	181.06	26.50
6930.0	0.9	12.7	88		18	180.90	26.47
6931.0	0.1	9.3	100		17	180.79	26.46
6932.0	0.7	12.2	95		17	180.69	26.46
6933.0	0.7	12.8	85		32	180.56	26.44
6934.0	2	14.8	71		26	180.43	26.41
6935.0	4	16.0	75		21	180.27	26.36
6936.0	5	16.4	76		20	180.11	26.32
6937.0	0.2	10.5	100		36	179.96	26.29
6938.0	0.0	6.8	100		40	179.88	26.29
6939.0	0.6	12.8	100		33	179.80	26.29
6940.0	6	17.3	70		21	179.67	26.29
6941.0	20	18.9	76		8	179.49	26.24
6942.0	6	16.8	75		17	179.30	26.19
6943.0	8	16.9	92		8	179.14	26.16
6944.0	6	16.5	92		11	178.98	26.15
6945.0	1	13.7	77		30	178.82	26.13
6946.0	0.3	11.4	100		33	178.69	26.11
6947.0	1	13.6	73		29	178.57	26.11
6948.0	9	17.5	72		12	178.42	26.07
6949.0	7	16.5	77		8	178.25	26.02
6950.0	3	15.1	70		19	178.09	25.98
6951.0	4	15.6	76		14	177.93	25.94
6952.0	2	14.9	75		20	177.78	25.90
6953.0	0.7	12.7	79		27	177.64	25.86
6954.0	0.4	11.7	98		30	177.52	25.85
6955.0	6	16.0	66		24	177.39	25.83
6956.0	8	16.0	59		29	177.23	25.77
6957.0	3	13.8	65		28	177.07	25.71
6958.0	3	14.9	80		10	176.93	25.67
6959.0	5	15.2	83		5	176.78	25.64
6960.0	4	14.5	67		18	176.63	25.61
6961.0	0.1	9.5	100		34	176.50	25.57
6962.0	0.0	7.9	100		37	176.41	25.57
6963.0	1	13.1	76		18	176.32	25.56
6964.0	2	12.5	63		30	176.19	25.52
6966.0	0.0	3.5	100		45	176.10	25.50
6967.0	0.1	8.9	100		33	176.06	25.50
6968.0	0.5	11.7	79		24	175.96	25.48

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
6969.0	0.0	7.6	100		35	175.85	25.47
6971.0	0.1	10.3	100		35	175.77	25.47
6972.0	0.6	12.6	76		29	175.66	25.47
6973.0	5	15.0	66		26	175.53	25.43
6974.0	2	14.1	76		21	175.38	25.38
6975.0	1	13.7	85		20	175.24	25.35
6976.0	1	13.1	99		12	175.10	25.33
6977.0	1	12.5	93		15	174.97	25.33
6978.0	0.8	12.3	99		15	174.84	25.31
6979.0	0.7	11.1	100		0	174.73	25.31
6980.0	0.3	9.5	100		0	174.62	25.31
6981.0	2	13.3	100		6	174.52	25.31
6982.0	7	17.2	73		16	174.37	25.29
6983.0	6	16.0	81		8	174.21	25.25
6984.0	5	15.3	91		4	174.05	25.22
6985.0	2	13.3	100		0	173.90	25.21
6986.0	0.6	11.3	100		7	173.77	25.21
6987.0	0.2	10.2	99		16	173.66	25.21
6988.0	0.6	11.6	81		14	173.56	25.21
6989.0	8	16.1	58		18	173.43	25.17
6990.0	1	13.0	82		16	173.27	25.11
6991.0	2	13.1	100		3	173.14	25.10
6992.0	4	14.4	89		3	173.01	25.10
6993.0	6	16.3	72		10	172.87	25.07
6994.0	4	14.7	91		7	172.70	25.03
6995.0	4	15.1	84		8	172.56	25.01
6996.0	5	15.9	76		9	172.40	24.98
6997.0	5	15.9	72		11	172.24	24.94
6998.0	2	13.3	89		12	172.09	24.90
6999.0	2	13.6	84		12	171.96	24.89
7000.0	3	14.7	73		15	171.81	24.86
7001.0	0.9	12.5	90		16	171.67	24.82
7002.0	1	12.5	94		12	171.55	24.82
7003.0	4	15.6	67		16	171.42	24.79
7004.0	2	13.4	86		13	171.26	24.75
7005.0	3	15.1	69		12	171.13	24.72
7006.0	1	13.1	82		12	170.98	24.68
7007.0	0.8	12.0	93		12	170.86	24.67
7008.0	2	14.1	70		15	170.73	24.65
7009.0	1	12.6	84		15	170.59	24.61
7010.0	2	13.8	85		8	170.46	24.58
7011.0	0.9	12.5	83		15	170.33	24.57
7012.0	2	14.4	69		17	170.19	24.54
7013.0	1	13.3	74		16	170.05	24.50
7014.0	0.9	12.4	80		14	169.92	24.47
7015.0	1	13.1	74		16	169.80	24.44
7016.0	0.5	11.5	89		19	169.67	24.41

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7017.0	0.2	9.6	100		15	169.56	24.40
7018.0	0.1	8.6	100		13	169.47	24.40
7019.0	1	13.3	92		15	169.37	24.40
7020.0	5	16.4	72		15	169.23	24.37
7021.0	3	15.0	81		14	169.07	24.33
7022.0	4	15.5	73		14	168.91	24.30
7023.0	3	15.0	73		15	168.76	24.25
7024.0	0.8	12.0	94		14	168.62	24.22
7025.0	0.7	12.1	79		15	168.50	24.21
7026.0	3	13.1	64		19	168.37	24.18
7027.0	0.3	10.7	77		19	168.25	24.14
7028.0	0.8	11.8	86		11	168.14	24.12
7029.0	4	14.3	78		0	168.02	24.11
7030.0	0.4	10.9	80		14	167.88	24.08
7031.0	3	12.7	58		27	167.76	24.04
7032.0	0.5	11.8	79		20	167.64	24.00
7033.0	2	13.0	97		6	167.51	23.98
7034.0	2	13.9	71		15	167.39	23.97
7035.0	1	13.4	74		15	167.24	23.93
7036.0	0.5	11.2	97		13	167.12	23.90
7037.0	2	12.8	97		4	167.00	23.90
7038.0	3	14.1	98		0	166.86	23.89
7039.0	2	12.9	100		0	166.73	23.89
7040.0	2	13.8	88		6	166.59	23.89
7041.0	8	16.8	64		13	166.45	23.86
7042.0	3	15.0	72		15	166.28	23.80
7043.0	0.6	11.6	98		13	166.14	23.77
7044.0	0.5	11.2	97		11	166.03	23.77
7045.0	2	14.2	69		14	165.91	23.75
7046.0	0.6	11.3	97		9	165.77	23.71
7047.0	2	12.6	100		0	165.66	23.71
7048.0	3	14.1	93		0	165.53	23.71
7049.0	2	13.8	83		5	165.39	23.70
7050.0	9	16.7	59		15	165.25	23.67
7051.0	1	13.1	87		19	165.09	23.61
7052.0	0.1	9.0	100		13	164.97	23.60
7053.0	1	13.1	79		15	164.87	23.60
7054.0	2	14.2	72		15	164.74	23.56
7055.0	1	12.7	85		15	164.60	23.53
7056.0	1	12.8	91		8	164.47	23.51
7057.0	2	13.0	85		6	164.34	23.50
7058.0	3	14.2	70		10	164.21	23.47
7059.0	4	14.6	64	0.6	14	164.07	23.43
7060.0	3	13.5	65	0.7	15	163.92	23.37
7061.0	0.8	12.1	70		14	163.79	23.33
7062.0	0.4	10.9	78		15	163.67	23.29
7063.0	0.4	10.7	87		13	163.56	23.28
7064.0	0.6	11.4	76		13	163.46	23.26

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7065.0	1	12.5	69		13	163.34	23.23
7066.0	1	13.1	68		14	163.21	23.19
7067.0	0.6	11.6	87		13	163.08	23.15
7068.0	0.6	11.7	81		15	162.97	23.14
7069.0	0.6	11.9	82		16	162.85	23.11
7070.0	1	13.5	68		20	162.73	23.09
7071.0	0.5	11.5	85		19	162.60	23.05
7072.0	1	12.9	96		10	162.48	23.04
7073.0	2	14.4	84		13	162.34	23.03
7074.0	4	15.7	68		19	162.20	23.00
7075.0	4	16.0	69		19	162.04	22.95
7076.0	2	14.8	70		21	161.88	22.90
7077.0	3	14.4	91		10	161.74	22.86
7078.0	5	15.3	65	0.6	18	161.60	22.84
7079.0	1	13.8	67		21	161.44	22.78
7080.0	0.9	12.7	81		18	161.31	22.74
7081.0	4	16.0	68		17	161.17	22.71
7082.0	4	14.7	66		24	161.01	22.66
7083.0	1	13.5	78		21	160.87	22.62
7084.0	3	15.4	67		22	160.73	22.58
7085.0	20	18.6	71		6	160.56	22.53
7086.0	10	18.1	68	0.5	10	160.38	22.47
7087.0	5	16.1	67	0.5	17	160.20	22.41
7088.0	3	14.8	74		16	160.05	22.37
7089.0	3	14.9	74		17	159.90	22.33
7090.0	2	14.1	75		19	159.76	22.29
7091.0	3	14.6	77		15	159.62	22.26
7092.0	8	16.1	92		1	159.47	22.23
7093.0	3	14.8	74		14	159.31	22.21
7094.0	0.7	12.3	85		21	159.16	22.17
7095.0	2	13.8	75		20	159.04	22.16
7096.0	7	15.8	61		24	158.89	22.11
7097.0	3	14.7	92		9	158.74	22.06
7098.0	5	14.8	98		0	158.59	22.05
7099.0	1	12.7	94		12	158.45	22.05
7100.0	0.5	11.9	77		23	158.33	22.04
7101.0	0.1	9.2	100		28	158.22	22.02
7102.0	0.1	9.5	100		20	158.13	22.02
7103.0	0.6	11.9	87		19	158.02	22.02
7104.0	0.6	12.1	77		23	157.90	22.00
7105.0	0.1	9.9	100		28	157.79	21.98
7106.0	0.5	11.7	85		23	157.69	21.98
7107.0	4	15.6	71		16	157.56	21.95
7108.0	4	14.1	65		25	157.40	21.90
7109.0	0.0	3.2	100		46	157.29	21.88
7110.0	0.8	12.3	91		16	157.22	21.88
7111.0	0.9	12.7	84		18	157.09	21.86
7112.0	0.8	12.0	100		12	156.97	21.84

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7113.0	0.4	11.5	91		22	156.85	21.84
7114.0	0.9	12.9	75		23	156.73	21.82
7115.0	0.4	10.9	100		15	156.61	21.80
7116.0	0.3	10.6	100		19	156.51	21.80
7117.0	1	13.2	76		23	156.40	21.80
7118.0	2	13.9	85		17	156.26	21.77
7119.0	5	15.4	99		4	156.12	21.75
7120.0	0.7	12.1	100		17	155.97	21.75
7121.0	0.3	11.0	100		22	155.86	21.75
7122.0	0.4	11.3	100		20	155.75	21.75
7123.0	8	16.9	86		8	155.62	21.75
7124.0	20	18.5	74		8	155.45	21.72
7125.0	10	17.8	78		9	155.26	21.67
7126.0	20	19.5	76		6	155.08	21.63
7127.0	3	15.2	75		23	154.89	21.59
7128.0	6	16.8	74		19	154.74	21.55
7129.0	2	14.8	77		24	154.57	21.50
7130.0	0.1	9.9	100		35	154.44	21.48
7131.0	4	15.4	91		15	154.32	21.48
7132.0	3	15.5	78		18	154.17	21.46
7133.0	4	15.5	78		17	154.01	21.43
7134.0	4	15.5	85		16	153.86	21.39
7135.0	3	14.9	99		10	153.70	21.38
7136.0	0.5	11.9	99		22	153.57	21.38
7137.0	0.4	11.7	90		30	153.44	21.36
7138.0	0.3	11.0	99		24	153.33	21.36
7139.0	9	16.4	99		0	153.21	21.36
7140.0	2	13.7	95		14	153.04	21.35
7141.0	0.2	10.6	100		28	152.92	21.35
7142.0	2	14.4	76		21	152.81	21.34
7143.0	10	18.1	77		8	152.65	21.30
7144.0	0.8	12.9	76		29	152.48	21.26
7145.0	1	13.4	83		23	152.37	21.25
7146.0	0.3	10.9	98		25	152.24	21.23
7147.0	6	16.4	77		12	152.12	21.22
7148.0	9	17.5	68		14	151.94	21.18
7149.0	0.7	12.6	73		26	151.78	21.13
7150.0	0.1	9.7	100		28	151.67	21.11
7151.0	0.2	10.7	100		36	151.57	21.11
7152.0	3	14.9	76		19	151.46	21.11
7153.0	0.3	11.1	99		22	151.33	21.09
7154.0	1	13.8	69		31	151.22	21.09
7155.0	10	17.5	64	0.5	21	151.07	21.04
7156.0	3	15.2	69		24	150.90	20.98
7157.0	3	15.4	77		17	150.75	20.94
7158.0	6	15.4	60	0.6	28	150.59	20.89
7159.0	0.7	12.7	74		27	150.45	20.86
7160.0	0.2	10.1	100		27	150.35	20.84

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7161.0	3	15.3	71		18	150.23	20.82
7162.0	0.6	12.4	75		26	150.08	20.78
7163.0	0.4	11.9	75		30	149.95	20.75
7164.0	0.7	12.7	72		26	149.83	20.73
7165.0	10	17.5	77	0.7*	4	149.69	20.69
7166.0	3	15.4	71		16	149.52	20.65
7167.0	0.0	1.9	100		48	149.37	20.60
7169.0	10	18.9	64		14	149.31	20.60
7170.0	0.0	5.6	100		36	149.15	20.56
7171.0	0.9	12.9	70		25	149.08	20.56
7172.0	0.7	12.9	72		33	148.94	20.51
7173.0	0.0	2.8	100		49	148.87	20.49
7174.0	0.6	12.1	77		22	148.78	20.46
7175.0	0.7	12.4	72		23	148.67	20.44
7176.0	20	18.6	57		14	148.54	20.40
7178.0	0.2	10.5	99		36	148.35	20.31
7179.0	2	12.4	59		29	148.24	20.29
7180.0	0.1	10.3	97		36	148.12	20.26
7181.0	0.0	2.0	100		49	147.99	20.21
7183.0	0.0	4.2	100		44	147.98	20.21
7184.0	0.0	6.9	100		25	147.92	20.21
7185.0	4	13.2	53	0.5	28	147.83	20.19
7186.0	9	15.0	46		30	147.70	20.14
7187.0	0.3	11.2	86		35	147.62	20.10
7188.0	0.0	4.9	100		35	147.52	20.09
7193.0	0.0	8.5	100		36	147.44	20.09
7195.0	5	14.3	56		29	147.33	20.09
7196.0	1	11.8	67		29	147.20	20.04
7197.0	4	14.1	62		24	147.08	20.00
7198.0	7	15.7	60		18	146.93	19.94
7199.0	0.3	11.3	95		35	146.78	19.88
7200.0	7	14.9	53		26	146.65	19.84
7201.0	5	15.2	63		17	146.52	19.78
7202.0	0.0	3.5	100		39	146.41	19.75
7203.0	0.2	10.5	99		35	146.39	19.75
7204.0	8	16.1	57	0.4	21	146.26	19.72
7205.0	5	13.9	55	0.5	32	146.10	19.65
7206.0	0.0	2.1	100		49	145.94	19.57
7207.0	10	16.3	49		26	145.87	19.57
7208.0	0.1	9.2	88		24	145.74	19.51
7209.0	1	11.6	65		23	145.65	19.50
7210.0	3	13.1	56	0.6	24	145.52	19.45
7211.0	0.1	8.9	71		31	145.40	19.39

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7212.0	0.0	8.6	100		38	145.32	19.38
7213.0	4	12.6	48	0.6	33	145.22	19.36
7214.0	0.0	1.1	100		50	145.09	19.30
7215.0	0.0	3.9	100		47	145.08	19.30
7216.0	2	12.2	65		17	144.97	19.25
7217.0	0.0	1.4	100		49	144.90	19.23
7218.0	0.0	3.5	100		45	144.86	19.23
7221.0	0.0	4.4	100		39	144.82	19.23
7224.0	0.0	5.3	100		42	144.76	19.23
7227.0	0.0	4.3	100		42	144.72	19.23
7233.0	0.0	3.7	100		41	144.67	19.23
7235.0	0.0	5.4	100		39	144.65	19.23
7237.0	0.0	1.8	100		48	144.60	19.23
7238.0	0.0	5.5	100		39	144.56	19.23
7239.0	0.0	7.9	94		38	144.52	19.23
7240.0	0.0	7.2	98		39	144.44	19.22
7241.0	1	9.7	43		35	144.36	19.21
7242.0	0.6	8.3	46		30	144.26	19.15
7243.0	0.0	5.9	98		37	144.18	19.11
7244.0	0.0	8.2	96		39	144.14	19.11
7245.0	8	13.4	39	0.4	32	144.05	19.11
7246.0	3	11.9	47	0.6	28	143.92	19.03
7247.0	10	14.9	38	0.8*	27	143.80	18.97
7248.0	50	20.6	43		3	143.64	18.87
7249.0	0.3	9.4	100		0	143.46	18.78
7250.0	0.0	4.7	100		0	143.38	18.78
7251.0	0.0	2.8	100		9	143.34	18.78
7252.0	0.0	5.9	100		11	143.30	18.78
7253.0	0.0	6.2	100		10	143.24	18.78
7254.0	0.3	9.9	91		6	143.17	18.78
7255.0	1	12.1	71		5	143.07	18.76
7256.0	0.6	11.4	69		12	142.95	18.72
7257.0	0.1	8.9	92		14	142.84	18.69
7258.0	0.0	6.1	100		12	142.76	18.68
7259.0	0.5	11.1	71		12	142.69	18.68
7260.0	2	12.7	66	0.5	9	142.57	18.65
7261.0	7	14.8	53	0.6	10	142.44	18.60
7262.0	10	16.2	46		14	142.28	18.52
7263.0	0.7	11.1	94		0	142.13	18.45
7264.0	0.0	3.7	100		10	142.05	18.45
7265.0	0.1	8.5	88		11	142.00	18.45
7266.0	1	11.4	65		11	141.90	18.42

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7267.0	7	14.6	51	0.8*	12	141.78	18.37
7268.0	5	13.6	50		15	141.63	18.30
7269.0	0.1	9.4	71		16	141.51	18.24
7270.0	1	11.2	65		16	141.41	18.21
7271.0	4	13.3	52		18	141.30	18.17
7272.0	10	15.4	44	0.8*	21	141.16	18.10
7273.0	40	18.7	35	0.7*	24	141.00	18.01
7274.0	20	17.9	46		14	140.81	17.89
7275.0	0.1	8.7	95		11	140.64	17.81
7276.0	8	14.8	47		16	140.55	17.80
7277.0	100	22.8	31	0.5	19	140.38	17.69
7278.0	50	19.7	36	0.4	17	140.15	17.54
7279.0	40	18.5	35	0.8*	17	139.96	17.42
7280.0	80	20.7	32		17	139.77	17.28
7281.0	3	13.0	59	0.8*	5	139.57	17.15
7282.0	0.1	8.7	69		14	139.46	17.12
7283.0	3	11.9	47		19	139.36	17.08
7284.0	9	14.0	40		22	139.23	17.01
7285.0	20	16.0	38		23	139.09	16.92
7286.0	6	13.5	47	0.5	18	138.93	16.83
7287.0	1	10.6	62		20	138.80	16.76
7288.0	0.4	10.1	96		0	138.69	16.72
7289.0	0.0	4.8	100		15	138.59	16.72
7290.0	3	12.4	50		20	138.53	16.71
7291.0	10	15.0	43	0.7	21	138.39	16.63
7292.0	4	13.1	51	0.5	18	138.24	16.55
7293.0	4	12.7	51		23	138.12	16.49
7294.0	5	13.2	47		23	137.99	16.43
7295.0	10	15.4	44		19	137.85	16.35
7296.0	40	18.4	37		19	137.69	16.26
7297.0	10	17.4	56		0	137.49	16.14
7298.0	0.0	5.4	100		12	137.35	16.10
7299.0	8	14.5	46		18	137.28	16.09
7300.0	20	16.9	41	0.5	17	137.12	16.00
7301.0	20	16.4	40		21	136.96	15.91
7302.0	3	13.4	62		6	136.81	15.82
7303.0	0.0	7.5	99		14	136.70	15.80
7304.0	4	12.9	51		18	136.61	15.78
7305.0	20	15.9	36		27	136.47	15.70
7306.0	0.0	8.4	97		38	136.36	15.65
7307.0	3	11.6	46		25	136.26	15.62
7308.0	3	12.2	50		20	136.14	15.56
7309.0	6	13.7	45		19	136.01	15.49
7310.0	9	13.8	39	0.8*	27	135.88	15.42
7311.0	2	11.1	50		35	135.74	15.33
7312.0	30	17.6	35		22	135.59	15.23
7313.0	2	11.8	54	0.3	13	135.42	15.13
7314.0	3	12.1	49		10	135.31	15.08

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7315.0	6	12.8	39		20	135.19	15.02
7316.0	4	11.5	38		33	135.06	14.94
7317.0	3	11.4	43		34	134.96	14.90
7318.0	0.0	5.7	100		44	134.86	14.87
7319.0	20	16.9	37	0.4	29	134.75	14.81
7320.0	30	18.2	37	0.8*	27	134.58	14.71
7321.0	30	17.5	39	0.7	29	134.45	14.65
7322.0	40	19.2	39	0.5	25	134.27	14.54
7323.0	50	20.3	38	0.6	21	134.08	14.42
7324.0	70	21.9	39		12	133.87	14.29
7325.0	7	15.1	54	0.8*	10	133.66	14.16
7326.0	5	13.6	52		14	133.52	14.10
7327.0	3	13.5	66		3	133.37	14.03
7328.0	0.3	10.5	80		11	133.26	14.01
7329.0	90	22.2	35		17	133.12	13.95
7330.0	100	22.2	34	0.8*	18	132.90	13.81
7331.0	20	18.1	43	0.8*	14	132.69	13.67
7332.0	4	13.2	51	0.6	12	132.52	13.58
7333.0	4	12.4	48		10	132.39	13.52
7334.0	4	12.7	46	0.8*	12	132.26	13.45
7335.0	0.7	9.3	57		8	132.14	13.38
7336.0	0.0	5.2	100		0	132.05	13.35
7337.0	0.0	1.9	100		0	132.01	13.35
7338.0	0.0	4.2	100		0	131.99	13.35
7339.0	0.0	3.9	100		5	131.95	13.35
7340.0	5	11.5	33		23	131.90	13.35
7341.0	20	14.1	29		25	131.77	13.25
7342.0	1	9.7	47	0.8*	17	131.64	13.17
7343.0	2	9.8	42		19	131.54	13.11
7344.0	2	11.0	55		0	131.43	13.05
7345.0	0.1	8.4	72		0	131.33	13.01
7346.0	0.0	0.6	100		34	131.26	13.00
7347.0	0.0	4.5	100		44	131.24	13.00
7348.0	10	12.7	28		27	131.17	12.96
7349.0	0.8	8.7	46	0.6	14	131.06	12.88
7350.0	0.1	6.1	58		13	130.99	12.85
7351.0	0.0	6.0	89		7	130.92	12.82
7352.0	0.0	1.4	100		39	130.88	12.82
7353.0	0.3	7.6	59		38	130.86	12.82
7354.0	20	13.9	26		27	130.77	12.77
7355.0	30	15.0	27	0.8*	23	130.62	12.66
7356.0	2	10.1	40		23	130.48	12.56
7357.0	1	10.3	56		7	130.39	12.51
7358.0	2	10.4	43	0.8*	13	130.29	12.46
7359.0	2	10.0	45	0.8*	12	130.18	12.40
7360.0	0.7	9.3	55		12	130.08	12.34
7361.0	1	10.0	56		10	129.99	12.30
7362.0	4	12.0	44		10	129.88	12.25

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7363.0	8	13.5	39		11	129.76	12.18
7364.0	3	12.9	54		7	129.63	12.10
7365.0	0.1	8.2	100		0	129.50	12.06
7366.0	0.1	8.4	81		9	129.42	12.06
7367.0	9	14.7	46		13	129.32	12.02
7368.0	5	13.8	52		12	129.17	11.94
7369.0	30	17.6	40		13	129.03	11.87
7370.0	40	18.5	36	0.8*	13	128.84	11.76
7371.0	40	18.3	34	0.8*	11	128.66	11.64
7372.0	60	18.3	29	0.8*	12	128.47	11.51
7373.0	4	12.0	40	0.7	9	128.30	11.39
7374.0	2	10.7	42	0.6	8	128.19	11.32
7375.0	0.7	8.9	50		9	128.08	11.26
7376.0	0.1	8.1	68		1	127.99	11.22
7377.0	8	13.1	36		10	127.90	11.19
7378.0	100	19.7	23		14	127.75	11.08
7379.0	20	14.2	31		17	127.56	10.94
7380.0	0.0	6.4	70		9	127.44	10.86
7381.0	4	11.4	39		9	127.37	10.84
7382.0	100	18.2	20		19	127.23	10.74
7383.0	0.9	8.8	44		15	127.07	10.62
7384.0	2	10.4	42		15	126.99	10.57
7385.0	10	13.8	31	0.6	23	126.87	10.50
7386.0	0.0	5.6	100		42	126.73	10.40
7388.0	0.0	1.9	100		46	126.68	10.40
7389.0	0.6	7.8	42		30	126.64	10.40
7390.0	10	12.5	27	0.5	32	126.55	10.34
7391.0	20	13.8	25	0.7*	32	126.42	10.25
7392.0	10	13.4	33		23	126.28	10.14
7393.0	2	11.2	48	0.5	12	126.16	10.06
7394.0	9	13.8	39		13	126.04	10.00
7397.0	0.0	3.8	100		28	125.84	9.89
7399.0	0.2	9.2	100		0	125.76	9.87
7400.0	0.0	4.2	100		0	125.69	9.87
7401.0	0.0	5.0	100		6	125.65	9.87
7402.0	0.0	6.8	71		26	125.60	9.87
7403.0	2	13.0	77		8	125.51	9.84
7404.0	0.0	7.7	100		9	125.39	9.83
7405.0	0.0	0.1	100		48	125.35	9.83
7407.0	0.0	1.3	100		49	125.35	9.83
7410.0	0.1	8.7	100		4	125.30	9.83
7411.0	0.2	9.2	100		0	125.22	9.83
7412.0	0.0	7.9	100		20	125.12	9.83

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7415.0	0.0	5.7	100		44	125.02	9.83
7416.0	0.0	8.2	100		39	124.95	9.83
7417.0	0.0	7.9	100		39	124.87	9.83
7418.0	0.1	8.9	100		38	124.79	9.83
7419.0	0.1	9.8	100		33	124.69	9.83
7420.0	0.0	2.9	100		46	124.59	9.83
7422.0	0.2	10.6	100		28	124.57	9.83
7423.0	0.2	9.3	100		11	124.46	9.83
7424.0	0.0	4.2	100		21	124.39	9.83
7425.0	0.5	11.5	100		18	124.33	9.83
7426.0	0.2	10.1	100		31	124.21	9.83
7427.0	0.0	3.3	100		46	124.12	9.83
7429.0	0.0	6.9	100		39	124.04	9.83
7430.0	0.0	7.3	100		35	123.99	9.83
7436.0	0.0	8.4	100		38	123.83	9.83
7437.0	30	21.1	69		18	123.72	9.82
7440.0	30	21.8	57		30	123.47	9.79
7441.0	1	13.8	96		23	123.26	9.70
7442.0	0.0	1.0	100		50	123.16	9.70
7443.0	0.0	1.0	100		50	123.15	9.70
7444.0	0.0	6.0	100		41	123.13	9.70
7446.0	3	15.2	96		20	122.99	9.69
7447.0	0.9	13.3	100		29	122.85	9.68
7448.0	3	16.3	69		30	122.72	9.68
7449.0	0.4	11.7	100		26	122.56	9.64
7450.0	0.0	5.8	100		36	122.45	9.64
7452.0	2	14.6	93		17	122.36	9.64
7453.0	1	12.2	100		6	122.22	9.63
7454.0	1	12.8	100		15	122.10	9.63
7455.0	0.1	8.7	100		27	121.98	9.63
7456.0	0.0	1.2	100		48	121.92	9.63
7457.0	0.0	2.6	100		47	121.91	9.63
7458.0	0.0	7.9	100		41	121.87	9.63
7459.0	0.4	11.5	100		28	121.78	9.63
7460.0	3	14.4	100		10	121.66	9.63
7461.0	0.0	6.2	100		19	121.54	9.63
7462.0	0.0	3.1	100		36	121.49	9.63
7464.0	1	14.1	73		28	121.46	9.63
7465.0	2	14.1	99		15	121.31	9.59
7466.0	0.4	10.7	100		14	121.18	9.59

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CORE VOLUME %	CORE POROSITY FEET	CORE HYCARB FEET
7467.0	0.0	6.1	100		21	121.08	9.59
7468.0	0.0	2.7	100		46	121.04	9.59
7469.0	0.1	9.1	100		24	120.99	9.59
7470.0	0.0	5.9	100		30	120.91	9.59
7471.0	2	15.4	69		28	120.83	9.59
7472.0	3	15.4	88		17	120.66	9.54
7473.0	2	13.8	98		17	120.52	9.53
7474.0	9	17.4	80		10	120.36	9.51
7475.0	0.5	11.4	100		18	120.20	9.49
7476.0	0.1	9.2	100		34	120.10	9.49
7477.0	0.1	8.9	100		35	120.01	9.49
7478.0	0.8	13.0	100		27	119.91	9.49
7479.0	10	18.3	83		19	119.77	9.49
7480.0	3	16.1	75		30	119.59	9.44
7481.0	50	21.8	78		3	119.39	9.38
7482.0	1	12.5	100		2	119.20	9.36
7483.0	5	15.2	99		4	119.08	9.36
7484.0	5	14.8	100		0	118.92	9.35
7485.0	0.7	11.8	100		12	118.79	9.35
7486.0	0.9	13.3	95		34	118.62	9.32
7487.0	20	18.8	58		23	118.43	9.26
7488.0	0.6	11.9	100		19	118.27	9.21
7489.0	0.0	4.7	100		29	118.17	9.21
7490.0	0.0	1.3	100		47	118.15	9.21
7491.0	0.0	7.2	100		34	118.12	9.21
7492.0	0.1	9.6	100		34	118.04	9.21
7493.0	0.0	7.4	100		29	117.95	9.21
7494.0	0.6	12.0	99		19	117.87	9.21
7495.0	0.2	10.3	100		18	117.75	9.21
7496.0	0.0	3.2	100		36	117.66	9.21
7498.0	3	14.7	89		16	117.58	9.21
7499.0	1	12.1	100		5	117.43	9.20
7500.0	0.0	6.5	100		19	117.32	9.20
7501.0	1	12.7	85		17	117.24	9.20
7502.0	0.4	10.4	100		7	117.11	9.19
7503.0	0.0	3.9	100		27	117.04	9.19
7504.0	0.0	6.6	100		30	117.00	9.19
7505.0	0.1	8.7	100		26	116.93	9.19
7506.0	0.7	12.1	98		18	116.83	9.19
7507.0	2	13.9	97		8	116.70	9.18
7508.0	2	14.0	96		7	116.56	9.18
7509.0	0.6	11.4	100		11	116.42	9.17
7510.0	0.3	10.3	100		13	116.31	9.17
7511.0	0.6	11.5	100		9	116.21	9.17
7512.0	0.6	11.4	100		8	116.09	9.17
7513.0	0.4	10.8	100		10	115.99	9.17
7514.0	0.3	10.4	100		14	115.88	9.17

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7515.0	0.6	11.7	100		13	115.78	9.17
7516.0	6	15.6	92		3	115.65	9.17
7517.0	10	17.1	76		3	115.49	9.15
7518.0	2	14.0	93		7	115.33	9.12
7519.0	3	15.0	70		16	115.19	9.11
7520.0	8	16.2	89		4	115.04	9.06
7521.0	0.0	8.0	100		21	114.90	9.05
7522.0	0.0	6.1	100		39	114.83	9.05
7523.0	0.0	6.8	100		39	114.76	9.05
7524.0	0.0	1.0	100		50	114.70	9.05
7525.0	1	12.6	100		16	114.65	9.05
7526.0	0.1	8.6	100		16	114.52	9.05
7528.0	0.6	12.0	99		23	114.44	9.05
7529.0	0.1	9.0	100		16	114.33	9.05
7530.0	2	13.3	100		10	114.23	9.05
7531.0	0.4	10.6	100		11	114.10	9.05
7532.0	0.9	12.3	100		12	113.99	9.05
7533.0	0.2	9.8	100		18	113.87	9.05
7534.0	0.1	9.5	100		26	113.78	9.05
7535.0	0.0	8.4	100		31	113.69	9.05
7536.0	0.6	12.1	100		23	113.59	9.05
7537.0	0.5	11.8	100		24	113.48	9.05
7538.0	2	13.5	100		10	113.35	9.05
7539.0	0.2	9.7	100		11	113.23	9.05
7542.0	0.1	9.5	100		31	113.13	9.05
7543.0	0.0	6.1	100		36	113.03	9.05
7545.0	0.1	9.7	100		33	112.99	9.05
7546.0	0.1	9.2	100		28	112.90	9.05
7547.0	4	15.1	100		11	112.79	9.05
7548.0	4	14.8	100		3	112.63	9.05
7549.0	0.3	10.4	100		9	112.49	9.05
7550.0	0.3	10.9	100		19	112.39	9.05
7551.0	1	13.2	96		18	112.27	9.05
7552.0	0.5	11.8	100		19	112.14	9.04
7553.0	0.0	8.2	100		29	112.04	9.04
7554.0	0.0	6.9	100		36	111.95	9.04
7555.0	0.3	11.0	100		24	111.87	9.04
7556.0	0.0	8.0	100		26	111.76	9.04
7557.0	0.0	6.3	100		35	111.69	9.04
7558.0	0.3	10.9	100		26	111.61	9.04
7559.0	0.3	10.6	100		21	111.50	9.04
7560.0	0.8	12.2	100		17	111.39	9.04
7561.0	1	12.7	99		16	111.27	9.04
7562.0	2	13.5	100		10	111.14	9.04
7563.0	0.1	9.1	100		15	111.01	9.04

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7564.0	0.0	4.1	100		43	110.94	9.04
7567.0	0.0	2.6	100		47	110.91	9.04
7568.0	0.3	10.8	100		19	110.84	9.04
7569.0	0.0	7.4	100		23	110.73	9.04
7572.0	0.0	7.4	100		27	110.67	9.04
7573.0	5	15.6	100		6	110.56	9.04
7574.0	0.6	11.4	100		9	110.42	9.04
7575.0	0.1	9.6	100		19	110.31	9.04
7579.0	0.0	7.4	100		37	110.21	9.04
7580.0	0.2	9.6	100		18	110.12	9.04
7584.0	0.7	12.2	100		19	110.01	9.04
7585.0	4	15.0	100		4	109.87	9.04
7586.0	0.6	11.5	100		13	109.73	9.04
7587.0	0.2	10.0	100		27	109.62	9.04
7588.0	0.9	12.9	99		22	109.52	9.04
7589.0	1	13.1	100		20	109.39	9.04
7590.0	0.5	11.9	100		22	109.27	9.04
7591.0	2	14.2	99		17	109.14	9.04
7592.0	0.5	11.5	100		16	109.01	9.04
7593.0	0.2	10.7	100		30	108.89	9.04
7594.0	0.0	6.7	100		38	108.80	9.04
7595.0	0.0	5.4	100		36	108.74	9.04
7596.0	0.0	1.1	100		50	108.69	9.04
7598.0	0.4	11.9	100		31	108.68	9.04
7599.0	0.1	9.0	100		22	108.56	9.04
7601.0	0.2	10.6	100		26	108.48	9.04
7602.0	0.4	11.6	100		25	108.37	9.04
7603.0	10	19.2	66		20	108.24	9.02
7604.0	6	15.8	100		7	108.05	8.96
7605.0	0.4	11.1	100		14	107.91	8.96
7606.0	0.2	10.6	100		32	107.80	8.96
7607.0	4	16.3	78		22	107.68	8.96
7608.0	0.5	11.8	100		22	107.53	8.94
7609.0	10	18.6	81		20	107.41	8.94
7610.0	20	20.9	69	0.5	22	107.21	8.89
7611.0	10	19.6	81		21	107.00	8.84
7612.0	8	18.5	78		28	106.80	8.80
7613.0	0.2	10.4	100		36	106.63	8.78
7615.0	0.4	11.8	100		29	106.52	8.78
7616.0	20	19.1	94		8	106.38	8.78
7617.0	3	14.0	100		5	106.20	8.77

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7618.0	0.9	12.3	100		12	106.07	8.77
7619.0	2	14.2	95		17	105.94	8.77
7620.0	0.4	10.9	100		16	105.80	8.77
7621.0	0.0	6.7	100		29	105.70	8.77
7622.0	0.0	5.8	100		36	105.64	8.77
7623.0	0.2	10.8	100		32	105.57	8.77
7624.0	0.8	12.0	100		12	105.45	8.77
7625.0	0.0	5.9	100		23	105.35	8.77
7626.0	0.0	7.4	100		37	105.30	8.77
7627.0	1	14.2	100		29	105.20	8.77
7628.0	9	18.5	81		24	105.05	8.76
7629.0	9	18.6	73		27	104.86	8.72
7630.0	3	15.2	100		22	104.67	8.67
7631.0	1	13.6	100		24	104.54	8.67
7632.0	10	18.7	71		25	104.39	8.66
7633.0	2	15.1	91		27	104.21	8.62
7634.0	20	20.7	65		22	104.05	8.59
7635.0	4	15.4	100		10	103.85	8.53
7636.0	1	12.4	100		3	103.70	8.53
7637.0	1	13.5	100		16	103.57	8.53
7638.0	20	19.4	62		26	103.42	8.51
7639.0	20	19.0	94		12	103.22	8.44
7640.0	0.8	12.6	100		23	103.05	8.44
7641.0	20	21.0	74		21	102.91	8.43
7642.0	6	17.7	88		29	102.71	8.39
7643.0	3	15.8	100		30	102.53	8.36
7644.0	2	14.6	100		35	102.37	8.36
7645.0	0.2	10.6	100		36	102.23	8.36
7646.0	1	14.4	100		32	102.10	8.36
7647.0	20	21.3	68		26	101.94	8.34
7648.0	20	20.4	78		17	101.74	8.28
7649.0	3	15.3	100		16	101.55	8.26
7650.0	0.1	8.8	100		38	101.40	8.26
7651.0	10	18.3	95		14	101.28	8.25
7652.0	0.6	11.8	100		20	101.11	8.25
7655.0	0.0	1.6	100		49	100.98	8.25
7656.0	20	19.0	79		11	100.89	8.24
7657.0	0.3	10.3	100		15	100.71	8.21
7658.0	0.0	6.2	100		28	100.63	8.21
7659.0	0.1	10.0	100		31	100.56	8.21
7660.0	0.0	7.8	100		39	100.46	8.21
7661.0	5	16.3	94		19	100.36	8.21
7662.0	6	16.1	100		9	100.19	8.19
7663.0	2	13.7	100		10	100.04	8.19
7664.0	3	14.4	100		13	99.90	8.19
7665.0	1	13.1	100		20	99.76	8.19
7666.0	0.1	9.4	100		37	99.64	8.19

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7667.0	0.4	11.8	100		34	99.55	8.19
7668.0	4	16.4	99		23	99.41	8.18
7669.0	7	18.0	75		28	99.24	8.18
7670.0	30	22.5	64		24	99.07	8.16
7671.0	30	23.4	66	0.6	20	98.85	8.08
7672.0	30	21.4	74		18	98.62	8.01
7673.0	0.4	11.8	100		31	98.42	7.96
7675.0	1	13.7	100		26	98.35	7.96
7676.0	4	15.0	100		10	98.18	7.95
7677.0	0.4	11.6	100		31	98.04	7.95
7678.0	0.8	13.0	100		30	97.94	7.95
7679.0	20	19.8	75		11	97.77	7.92
7680.0	0.2	9.2	100		5	97.60	7.89
7681.0	0.2	9.7	100		19	97.52	7.89
7682.0	1	14.0	90		26	97.41	7.89
7683.0	5	16.9	85		23	97.26	7.88
7684.0	9	18.7	71		28	97.08	7.84
7685.0	5	17.1	80	0.5	29	96.90	7.79
7686.0	4	16.5	87		30	96.70	7.74
7687.0	5	17.4	74	0.5	29	96.55	7.73
7688.0	10	18.8	66	0.7	27	96.38	7.69
7689.0	10	18.4	74		17	96.18	7.62
7690.0	1	12.8	100		13	96.02	7.59
7691.0	0.0	8.0	100		17	95.90	7.59
7692.0	5	15.9	87		13	95.82	7.59
7693.0	20	19.5	58		24	95.64	7.55
7694.0	6	16.6	90		13	95.45	7.47
7695.0	7	17.1	79		18	95.30	7.47
7696.0	90	26.7	53	0.8*	13	95.10	7.40
7697.0	10	18.8	78		16	94.85	7.30
7698.0	2	14.7	100		31	94.67	7.26
7699.0	1	13.8	100		32	94.54	7.26
7700.0	1	14.2	100		32	94.39	7.26
7701.0	1	13.7	100		32	94.24	7.26
7702.0	0.7	12.9	100		33	94.10	7.26
7703.0	2	14.8	100		31	93.98	7.26
7704.0	5	17.2	100		29	93.83	7.26
7705.0	8	18.4	80	0.3	30	93.66	7.26
7706.0	4	16.4	100		30	93.48	7.22
7707.0	10	18.9	72		28	93.31	7.20
7708.0	40	23.8	66		16	93.08	7.12
7709.0	40	21.2	90		6	92.85	7.05
7710.0	2	14.2	100		15	92.67	7.04
7711.0	3	15.6	96		20	92.53	7.04
7712.0	9	18.2	72		23	92.36	7.02
7713.0	1	13.4	100		20	92.19	6.98
7714.0	3	14.8	100		18	92.06	6.98

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7715.0	5	17.1	74		27	91.90	6.97
7716.0	0.0	8.4	100		39	91.75	6.95
7717.0	0.0	6.9	100		41	91.66	6.95
7718.0	0.0	5.1	100		43	91.61	6.95
7719.0	0.3	11.2	100		35	91.56	6.95
7720.0	0.0	5.7	100		42	91.47	6.95
7721.0	0.0	6.1	100		42	91.42	6.95
7724.0	0.0	8.6	100		38	91.28	6.95
7725.0	0.0	3.5	100		45	91.23	6.95
7726.0	2	14.0	100		19	91.14	6.95
7727.0	0.4	11.6	100		25	91.01	6.95
7728.0	0.4	11.6	100		30	90.89	6.95
7729.0	0.0	1.3	100		49	90.83	6.95
7730.0	3	14.8	100		15	90.76	6.95
7731.0	50	21.9	87		7	90.60	6.95
7732.0	8	18.5	72		28	90.38	6.91
7733.0	0.1	10.1	100		41	90.20	6.87
7734.0	0.5	12.2	100		32	90.12	6.87
7735.0	10	18.0	99		16	89.98	6.87
7736.0	2	14.4	100		24	89.82	6.87
7737.0	2	15.5	100		31	89.68	6.87
7738.0	0.5	12.2	100		38	89.54	6.87
7739.0	0.2	10.8	100		36	89.43	6.87
7740.0	0.3	11.4	100		39	89.33	6.87
7741.0	1	13.8	100		32	89.20	6.87
7742.0	6	17.2	73		24	89.06	6.87
7743.0	0.0	7.4	100		40	88.91	6.84
7744.0	0.0	6.9	100		40	88.84	6.84
7745.0	0.0	1.5	100		49	88.77	6.84
7747.0	0.4	11.6	98		24	88.72	6.84
7748.0	0.0	1.9	100		39	88.64	6.84
7750.0	0.1	9.6	100		37	88.59	6.84
7751.0	0.4	11.9	100		33	88.48	6.84
7752.0	0.4	11.9	100		34	88.37	6.84
7753.0	0.0	2.2	100		47	88.25	6.84
7754.0	0.3	11.0	100		26	88.22	6.84
7755.0	0.9	12.7	100		21	88.11	6.84
7756.0	0.4	11.6	100		28	87.98	6.84
7757.0	0.3	11.7	100		35	87.87	6.84
7758.0	7	17.7	74		24	87.73	6.83
7760.0	0.0	6.9	100		47	87.58	6.80
7761.0	0.6	12.7	100		33	87.49	6.80
7762.0	0.0	8.5	100		38	87.37	6.80
7764.0	10	19.1	69		25	87.20	6.80

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7765.0	30	21.4	74		15	87.00	6.74
7766.0	9	18.5	69	0.6	26	86.80	6.70
7767.0	0.1	9.8	100		38	86.62	6.65
7768.0	0.0	5.8	100		49	86.54	6.65
7769.0	0.0	4.8	100		48	86.49	6.65
7770.0	4	16.7	75	0.5	30	86.41	6.65
7771.0	2	15.0	89		27	86.24	6.60
7772.0	2	15.1	96		31	86.09	6.59
7773.0	1	14.2	100		32	85.93	6.56
7774.0	0.0	8.3	100		40	85.80	6.56
7775.0	0.0	7.9	100		39	85.71	6.56
7776.0	2	14.8	100		31	85.59	6.56
7777.0	0.1	9.8	100		38	85.44	6.56
7778.0	0.3	11.6	100		35	85.25	6.50
7779.0	20	20.6	66		18	85.11	6.46
7780.0	0.2	10.0	100		24	84.92	6.42
7781.0	0.1	9.7	100		36	84.83	6.42
7782.0	0.0	2.2	100		50	84.77	6.42
7783.0	0.0	6.4	100		41	84.74	6.42
7784.0	7	18.1	74		28	84.64	6.42
7785.0	0.0	7.4	100		41	84.52	6.40
7786.0	0.0	7.0	100		40	84.43	6.40
7787.0	5	16.3	99		14	84.31	6.39
7788.0	0.3	11.1	100		30	84.17	6.39
7789.0	0.0	7.8	100		42	84.04	6.39
7794.0	0.6	12.6	100		47	83.78	6.39
7795.0	20	20.0	80		13	83.62	6.36
7796.0	0.1	9.4	100		18	83.44	6.34
7797.0	10	18.1	86		15	83.34	6.34
7798.0	0.0	5.2	100		44	83.15	6.29
7799.0	0.0	7.8	100		42	83.10	6.29
7800.0	0.0	7.6	100		42	83.02	6.29
7801.0	0.0	7.9	100		43	82.96	6.29
7802.0	0.0	5.4	100		50	82.88	6.29
7803.0	0.1	9.1	100		44	82.82	6.29
7804.0	0.0	8.5	100		39	82.74	6.29
7805.0	6	16.8	95		17	82.62	6.29
7806.0	0.0	8.6	100		36	82.49	6.29
7807.0	0.1	9.3	100		40	82.37	6.29
7808.0	0.1	9.0	100		42	82.29	6.29
7809.0	9	18.6	71	0.5	28	82.18	6.29
7810.0	0.1	9.7	100		41	82.00	6.24
7812.0	0.0	8.3	100		46	81.88	6.24
7813.0	5	17.3	69		29	81.77	6.24
7814.0	6	17.4	72		22	81.60	6.18
7815.0	9	17.2	92		10	81.42	6.14

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7816.0	0.1	9.1	100		13	81.27	6.13
7817.0	0.0	2.7	100		47	81.20	6.13
7818.0	0.0	6.6	100		44	81.17	6.13
7819.0	0.0	8.2	100		39	81.10	6.13
7820.0	0.0	5.6	100		42	81.02	6.13
7821.0	0.0	1.1	100		50	80.98	6.13
7823.0	0.0	3.3	100		45	80.96	6.13
7824.0	0.0	3.5	100		45	80.92	6.13
7826.0	0.0	7.6	100		39	80.89	6.13
7827.0	0.0	6.1	100		41	80.83	6.13
7828.0	0.0	5.3	100		42	80.78	6.13
7829.0	0.0	6.6	100		41	80.73	6.13
7830.0	0.3	11.2	100		35	80.66	6.13
7831.0	2	14.2	99		17	80.54	6.12
7832.0	0.2	10.0	100		19	80.41	6.12
7833.0	0.0	4.0	100		37	80.32	6.12
7835.0	0.0	5.3	100		42	80.29	6.12
7836.0	0.0	4.8	100		44	80.21	6.12
7838.0	0.0	8.2	100		39	80.09	6.10
7839.0	9	17.4	66		27	79.99	6.10
7840.0	4	15.4	100		9	79.82	6.06
7841.0	0.2	10.0	100		14	79.68	6.06
7842.0	0.1	9.2	100		28	79.59	6.06
7843.0	0.0	5.0	100		43	79.53	6.06
7844.0	9	18.4	69		24	79.46	6.06
7845.0	2	14.5	99		32	79.28	6.01
7846.0	5	17.4	70	0.6	29	79.12	5.98
7847.0	3	16.1	79	0.5	30	78.95	5.94
7848.0	8	18.5	70		28	78.78	5.90
7849.0	8	18.6	72		28	78.61	5.85
7850.0	0.3	11.2	100		38	78.44	5.83
7851.0	0.1	9.9	100		42	78.34	5.83
7852.0	2	15.2	93		40	78.24	5.83
7853.0	10	19.2	69		21	78.05	5.78
7854.0	3	14.4	100		12	77.88	5.75
7855.0	0.6	11.8	100		19	77.75	5.75
7856.0	2	15.2	72	0.4	31	77.60	5.73
7857.0	0.3	11.1	100		35	77.45	5.69
7858.0	0.3	11.4	100		35	77.34	5.69
7859.0	0.1	9.1	100		39	77.21	5.69
7860.0	0.0	5.9	100		45	77.13	5.69
7861.0	0.0	8.3	100		38	77.08	5.69
7862.0	4	16.7	77		29	76.98	5.69
7863.0	0.4	11.9	100		34	76.83	5.67

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7864.0	1	13.8	100		32	76.71	5.67
7865.0	30	22.6	60		20	76.53	5.62
7866.0	1	13.6	95		24	76.32	5.55
7867.0	0.0	5.6	100		35	76.21	5.55
7868.0	0.0	6.4	100		41	76.18	5.55
7869.0	3	15.8	72	0.4	30	76.08	5.54
7870.0	3	15.6	75		31	75.93	5.52
7871.0	2	15.4	76	0.7	31	75.80	5.50
7872.0	5	17.2	67		29	75.65	5.48
7873.0	0.2	11.0	100		35	75.50	5.45
7874.0	0.1	8.8	100		43	75.40	5.45
7875.0	0.1	9.5	100		37	75.31	5.45
7876.0	2	15.1	97		31	75.19	5.45
7877.0	8	18.5	67		28	75.04	5.45
7878.0	4	16.5	74		26	74.86	5.39
7879.0	9	18.4	70		22	74.69	5.35
7880.0	4	15.9	84		20	74.51	5.29
7881.0	0.4	11.3	100		18	74.36	5.28
7882.0	8	17.7	79		20	74.23	5.28
7883.0	5	17.4	71		31	74.03	5.22
7884.0	0.5	12.2	100		38	73.87	5.18
7885.0	10	19.1	77		22	73.71	5.16
7886.0	30	22.5	64	0.5	23	73.52	5.11
7887.0	1	14.3	100		32	73.32	5.05
7888.0	10	19.1	64		32	73.16	5.02
7889.0	7	17.2	88		18	72.93	4.93
7890.0	4	14.8	100		7	72.76	4.92
7891.0	8	17.3	91		16	72.62	4.92
7892.0	2	14.7	99		31	72.44	4.88
7893.0	2	15.4	99		32	72.30	4.88
7894.0	0.1	9.1	100		39	72.16	4.88
7895.0	20	20.2	71	0.5	25	72.07	4.88
7896.0	4	16.5	92		30	71.86	4.82
7897.0	0.4	12.0	100		36	71.71	4.82
7898.0	6	17.6	75	0.5	29	71.58	4.82
7899.0	4	16.4	78		33	71.38	4.76
7900.0	5	17.2	69		29	71.21	4.71
7901.0	8	17.3	88		14	71.04	4.68
7902.0	0.5	11.5	100		20	70.89	4.67
7903.0	0.1	8.8	100		37	70.78	4.67
7904.0	0.0	7.8	100		38	70.73	4.67
7907.0	0.0	6.8	100		39	70.69	4.67
7908.0	0.0	4.9	100		43	70.61	4.67
7910.0	0.0	1.5	100		49	70.54	4.67
7911.0	0.7	12.7	100		26	70.48	4.67
7912.0	1	13.1	100		18	70.36	4.67

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7913.0	10	17.7	97		5	70.22	4.67
7914.0	1	12.9	100		15	70.06	4.66
7915.0	0.4	11.8	100		27	69.93	4.66
7916.0	2	14.2	91		23	69.81	4.66
7917.0	2	14.3	93		22	69.67	4.65
7918.0	1	13.7	89		25	69.52	4.64
7919.0	0.6	11.9	100		20	69.39	4.62
7920.0	0.5	11.7	100		20	69.27	4.62
7921.0	2	14.5	80		26	69.14	4.62
7922.0	0.7	12.6	100		28	68.99	4.60
7923.0	1	13.6	97		24	68.87	4.60
7924.0	0.9	12.8	100		22	68.74	4.59
7925.0	2	13.7	100		16	68.60	4.59
7926.0	0.1	8.8	100		26	68.48	4.59
7927.0	0.0	8.1	100		33	68.39	4.59
7928.0	0.1	9.8	100		29	68.31	4.59
7929.0	0.7	12.6	93		26	68.20	4.59
7930.0	0.2	10.1	100		29	68.08	4.59
7931.0	0.1	9.3	100		29	67.98	4.59
7932.0	0.1	8.8	100		28	67.88	4.59
7933.0	0.1	9.4	100		24	67.79	4.59
7934.0	0.1	9.5	100		25	67.69	4.59
7935.0	0.1	8.9	100		28	67.60	4.59
7936.0	0.0	8.6	100		35	67.50	4.59
7937.0	0.4	11.6	100		23	67.41	4.59
7938.0	0.2	10.1	100		20	67.30	4.59
7939.0	0.1	8.6	100		25	67.20	4.59
7940.0	2	13.9	87		22	67.11	4.59
7941.0	8	16.8	66	0.6	25	66.96	4.55
7942.0	3	15.6	73		25	66.79	4.49
7943.0	0.3	10.8	100		25	66.65	4.47
7944.0	0.9	13.2	100		27	66.53	4.47
7945.0	1	13.6	100		26	66.40	4.47
7946.0	2	14.8	95		25	66.26	4.46
7947.0	7	17.7	76		24	66.11	4.45
7948.0	10	19.0	73		21	65.92	4.40
7949.0	4	16.5	79		24	65.74	4.36
7950.0	6	17.7	68		25	65.58	4.32
7951.0	0.7	12.3	100		21	65.41	4.28
7952.0	1	13.6	93		25	65.29	4.28
7953.0	6	16.8	86		17	65.14	4.26
7954.0	1	14.2	97		31	64.97	4.23
7955.0	1	14.2	100		30	64.83	4.21
7956.0	4	16.5	78		26	64.68	4.20
7957.0	3	15.7	82	0.6	30	64.50	4.15
7958.0	20	19.8	64		25	64.34	4.12
7959.0	80	26.0	54		19	64.11	4.02
7960.0	70	25.3	56	0.5	19	63.86	3.91

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7961.0	30	21.0	58		26	63.60	3.79
7962.0	0.5	12.4	100		34	63.44	3.75
7963.0	20	19.3	61		27	63.31	3.75
7964.0	60	23.9	54	0.5	23	63.13	3.68
7965.0	20	20.1	62	0.8*	23	62.89	3.57
7966.0	20	19.9	65		20	62.68	3.49
7967.0	9	18.1	75		19	62.50	3.44
7968.0	6	17.4	72		25	62.32	3.40
7969.0	100	28.4	56		12	62.16	3.35
7970.0	10	18.8	66		28	61.89	3.24
7971.0	0.0	2.0	100		48	61.78	3.20

ISS -	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
	0	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0

INPUT PARAMETERS FROM 9344. TO 7972.

WMUD	XLIT	BITSZ	BHT	BHTDEP	SUFT	RMF	RMFT	ROMFS	PHIMFS	DASIL
72.0	0.50	8.50	221.	9344.	80.	1.95	76.	1.000	0.996	0.850

SPCK	DSPCK	RODC	DELRGM	START	STOPLG	ZSPNL	BGN	ZSPDL	REC	RESH	CSS
0.	0.	2.98	0.20	9344.	5449.	0.000	1.00	0.000	6.00	10.00	0.6

WHY	PHILEV	BR	SLIM	AK	PK	SK	STOPIN	PHIMAX	PHINCL	PHIDCL
.200	0.000	.10	0.30	62500.	6.0	2.0	7972.	0.200	0.480	0.080

PHINSO	AR	PUN	DAX	DALIM	DAGA	DASH	DTSD	DTSH	CP	PSSH
0.240	.04	.080	63.	36.	20.	92.	150.	150.	1.00	.300

EDIAM	PNLIM	PDLIM	RLIM	GRLIM	VARMC	CONST	ROP	VARLIM	CSF
0.00	1.00	1.00	1000.0	1000.0	0.07	0.333	0.70	0.20	0.02

SP STATISTICS OVER ENTIRE INTERVAL

RESISTIVITY STATISTICS OVER ENTIRE INTERVAL

GAMMA - RAY STATISTICS OVER ENTIRE INTERVAL

SONIC STATISTICS OVER ENTIRE INTERVAL

ANALYSIS BY QUASIP MODEL
PERMEABILITY BY TIMUR EQUATION
SP COEFF. FROM STATISTICS
GR COEFF. FROM STATISTICS
SONIC COEFF. FROM STATISTICS
WASAMP ROUTINE USED

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
7973.0	0.0	4.9	100		50	61.74	3.20
7976.0	0.0	7.4	100		24	61.59	3.20
7977.0	0.0	0.5	100		48	61.51	3.20
7978.0	0.0	6.1	100		36	61.50	3.20
7979.0	0.0	3.5	100		43	61.43	3.20
7980.0	0.0	1.6	100		48	61.40	3.20
7981.0	0.0	7.1	100		30	61.39	3.20
7982.0	0.1	9.5	100		27	61.31	3.20
7983.0	0.0	4.0	100		42	61.24	3.20
7984.0	0.0	5.7	100		44	61.19	3.20
7988.0	0.0	2.0	100		50	61.07	3.20
7989.0	0.0	3.1	100		49	61.05	3.20
7990.0	0.0	4.1	100		47	61.01	3.20
7991.0	0.0	3.9	100		45	60.97	3.20
7992.0	0.0	1.2	100		48	60.92	3.20
7994.0	0.0	3.9	100		48	60.91	3.20
7995.0	0.0	2.9	100		48	60.87	3.20
7996.0	0.0	3.8	100		46	60.84	3.20
7997.0	0.0	5.9	100		40	60.79	3.20
7998.0	0.0	5.9	100		39	60.73	3.20
7999.0	0.0	5.7	100		41	60.67	3.20
8000.0	0.0	5.0	100		40	60.62	3.20
8001.0	0.0	5.3	100		37	60.57	3.20
8002.0	0.0	5.4	100		38	60.52	3.20
8003.0	0.0	4.6	100		46	60.46	3.20
8004.0	0.0	8.1	100		29	60.43	3.20
8005.0	0.0	3.3	100		41	60.34	3.20
8006.0	0.0	3.4	100		44	60.32	3.20
8007.0	0.0	4.6	100		44	60.28	3.20
8008.0	0.0	3.2	100		41	60.24	3.20
8009.0	0.0	3.4	100		41	60.19	3.20
8010.0	0.0	3.9	100		46	60.16	3.20
8011.0	0.0	3.3	100		47	60.12	3.20
8012.0	0.0	2.9	100		42	60.07	3.20
8013.0	0.0	4.5	100		46	60.04	3.20
8014.0	0.0	4.5	100		43	59.99	3.20
8015.0	0.0	3.5	100		46	59.95	3.20
8016.0	0.0	3.9	100		47	59.92	3.20
8017.0	0.0	4.3	100		41	59.88	3.20
8018.0	0.0	3.0	100		42	59.84	3.20
8019.0	0.0	3.5	100		49	59.80	3.20
8020.0	0.0	3.3	100		46	59.77	3.20
8021.0	0.0	3.6	100		43	59.74	3.20
8022.0	0.0	5.0	100		40	59.69	3.20
8023.0	0.0	4.4	100		46	59.65	3.20

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8024.0	0.0	5.1	100		42	59.60	3.20
8025.0	0.0	6.4	100		37	59.55	3.20
8026.0	0.0	8.1	100		35	59.48	3.20
8027.0	0.0	7.3	100		34	59.40	3.20
8028.0	0.1	9.9	100		28	59.32	3.20
8029.0	0.0	5.4	100		37	59.25	3.20
8030.0	0.0	5.1	100		38	59.20	3.20
8031.0	0.0	1.7	100		46	59.16	3.20
8032.0	0.0	2.6	100		45	59.15	3.20
8033.0	0.0	6.1	100		36	59.11	3.20
8034.0	0.0	6.5	100		37	59.04	3.20
8035.0	0.0	4.6	100		40	58.98	3.20
8036.0	0.0	2.7	100		45	58.94	3.20
8037.0	0.0	6.1	100		38	58.90	3.20
8038.0	0.0	5.2	100		41	58.84	3.20
8039.0	0.0	7.0	100		34	58.78	3.20
8040.0	0.0	2.4	100		44	58.73	3.20
8041.0	0.0	4.6	100		43	58.70	3.20
8042.0	0.0	4.5	100		40	58.65	3.20
8043.0	0.0	5.6	100		37	58.60	3.20
8044.0	0.0	8.5	100		32	58.54	3.20
8045.0	0.0	3.1	100		44	58.47	3.20
8046.0	0.0	2.8	100		47	58.45	3.20
8047.0	0.0	5.1	100		42	58.42	3.20
8048.0	0.0	4.2	100		41	58.37	3.20
8049.0	0.1	9.4	100		30	58.30	3.20
8050.0	0.0	2.2	100		48	58.24	3.20
8053.0	0.0	3.1	100		47	58.19	3.20
8054.0	0.0	5.5	100		44	58.15	3.20
8055.0	0.0	5.2	100		46	58.10	3.20
8056.0	0.0	7.7	100		32	58.03	3.20
8057.0	0.0	2.4	100		49	57.98	3.20
8060.0	0.0	3.6	100		48	57.88	3.20
8063.0	0.0	5.4	100		26	57.80	3.20
8072.0	0.0	7.1	100		20	57.57	3.20
8073.0	0.0	2.0	100		48	57.50	3.20
8081.0	0.0	6.3	100		23	57.34	3.20
8085.0	0.1	8.9	100		30	57.17	3.20
8090.0	0.0	5.0	100		22	56.99	3.20
8100.0	0.0	7.3	100		34	56.75	3.20

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8112.0	0.0	3.9	100		49	56.46	3.20
8113.0	0.0	6.1	100		43	56.41	3.20
8128.0	0.0	7.3	100		24	56.08	3.20
8144.0	0.0	3.0	100		48	55.78	3.20
8161.0	0.0	8.0	100		41	55.32	3.20
8162.0	0.0	4.8	100		45	55.25	3.20
8165.0	0.0	1.1	100		47	55.17	3.20
8167.0	0.0	5.0	100		44	55.13	3.20
8168.0	0.0	4.1	100		48	55.08	3.20
8169.0	0.0	4.0	100		49	55.04	3.20
8170.0	0.0	4.7	100		50	55.00	3.20
8171.0	0.0	5.6	100		41	54.95	3.20
8172.0	0.0	6.7	100		38	54.90	3.20
8173.0	0.0	6.7	100		38	54.83	3.20
8174.0	0.0	5.4	100		38	54.77	3.20
8175.0	0.0	6.5	100		41	54.71	3.20
8176.0	0.0	6.1	100		43	54.65	3.20
8177.0	0.0	4.7	100		46	54.59	3.20
8178.0	0.0	3.8	100		49	54.54	3.20
8180.0	0.0	5.0	100		43	54.47	3.20
8183.0	0.0	3.2	100		45	54.39	3.20
8184.0	0.0	5.9	100		38	54.35	3.20
8185.0	0.0	4.2	100		49	54.30	3.20
8191.0	0.0	2.8	100		46	54.14	3.20
8192.0	0.0	2.2	100		44	54.09	3.20
8193.0	0.0	4.1	100		45	54.07	3.20
8194.0	0.0	5.0	100		40	54.02	3.20
8195.0	0.0	4.5	100		42	53.98	3.20
8196.0	0.0	5.6	100		43	53.93	3.20
8197.0	0.0	3.2	100		48	53.87	3.20
8198.0	0.0	2.6	100		49	53.85	3.20
8199.0	0.0	4.2	100		45	53.82	3.20
8201.0	0.0	5.7	100		36	53.76	3.20
8203.0	0.0	4.4	100		49	53.71	3.20
8204.0	0.0	5.3	100		45	53.66	3.20
8207.0	0.0	3.4	100		48	53.58	3.20

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8208.0	0.0	4.5	100		45	53.54	3.20
8209.0	0.0	4.9	100		44	53.49	3.20
8210.0	0.0	5.8	100		42	53.44	3.20
8211.0	0.0	5.6	100		42	53.39	3.20
8212.0	0.0	4.3	100		43	53.34	3.20
8213.0	0.0	5.8	100		38	53.29	3.20
8214.0	0.0	5.6	100		41	53.23	3.20
8215.0	0.0	4.2	100		46	53.18	3.20
8216.0	0.0	5.0	100		40	53.14	3.20
8217.0	0.0	4.6	100		41	53.09	3.20
8222.0	0.0	6.1	100		23	52.93	3.20
8223.0	0.0	0.6	100		49	52.89	3.20
8225.0	0.0	3.5	100		49	52.86	3.20
8226.0	0.0	4.7	100		47	52.83	3.20
8227.0	0.0	4.4	100		48	52.78	3.20
8228.0	0.0	5.1	100		44	52.74	3.20
8229.0	0.0	5.3	100		43	52.69	3.20
8230.0	0.0	4.8	100		45	52.64	3.20
8231.0	0.0	4.9	100		47	52.59	3.20
8232.0	0.0	4.8	100		47	52.54	3.20
8235.0	0.0	2.0	100		48	52.42	3.20
8239.0	0.0	4.1	100		50	52.33	3.20
8244.0	0.0	4.3	100		46	52.23	3.20
8248.0	0.0	1.8	100		46	52.13	3.20
8249.0	0.0	4.7	100		44	52.10	3.20
8250.0	0.0	3.4	100		44	52.06	3.20
8251.0	0.0	4.7	100		42	52.03	3.20
8252.0	0.0	5.0	100		39	51.98	3.20
8254.0	0.0	2.7	100		48	51.91	3.20
8255.0	0.0	3.4	100		47	51.88	3.20
8256.0	0.0	4.2	100		49	51.85	3.20
8257.0	0.0	4.6	100		49	51.80	3.20
8258.0	0.0	2.7	100		45	51.76	3.20
8259.0	0.1	8.9	100		26	51.71	3.20
8260.0	0.0	1.7	100		50	51.64	3.20
8261.0	0.0	3.4	100		49	51.62	3.20
8263.0	0.0	4.7	100		46	51.55	3.20
8264.0	0.0	4.8	100		45	51.50	3.20
8265.0	0.0	4.5	100		47	51.45	3.20
8266.0	0.0	4.0	100		48	51.41	3.20

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8267.0	0.0	3.6	100		50	51.37	3.20
8269.0	0.0	3.8	100		50	51.31	3.20
8271.0	0.0	3.7	100		49	51.26	3.20
8272.0	0.0	4.6	100		42	51.21	3.20
8276.0	0.0	3.3	100		46	51.08	3.20
8281.0	0.0	3.2	100		48	51.01	3.20
8282.0	0.0	5.8	100		39	50.96	3.20
8283.0	0.0	5.1	100		43	50.91	3.20
8284.0	0.0	3.8	100		48	50.86	3.20
8286.0	0.0	5.3	100		37	50.81	3.20
8287.0	0.0	3.3	100		41	50.76	3.20
8288.0	0.0	5.4	100		41	50.72	3.20
8295.0	0.0	3.5	100		49	50.58	3.20
8299.0	0.0	1.7	100		46	50.50	3.20
8300.0	0.0	1.3	100		49	50.48	3.20
8301.0	0.0	5.2	100		43	50.46	3.20
8302.0	0.0	5.4	100		44	50.40	3.20
8303.0	0.0	4.9	100		46	50.35	3.20
8304.0	0.0	1.4	100		49	50.31	3.20
8306.0	0.0	3.6	100		50	50.28	3.20
8308.0	0.0	0.8	100		48	50.24	3.20
8309.0	0.0	3.7	100		47	50.23	3.20
8310.0	0.0	4.8	100		47	50.19	3.20
8311.0	0.0	5.4	100		47	50.14	3.20
8312.0	0.0	4.9	100		43	50.09	3.20
8313.0	0.0	6.5	100		39	50.04	3.20
8315.0	0.0	4.2	100		49	49.95	3.20
8317.0	0.0	5.8	100		47	49.86	3.20
8318.0	0.0	3.4	100		46	49.81	3.20
8319.0	0.0	3.5	100		48	49.78	3.20
8321.0	0.0	2.5	100		47	49.71	3.20
8322.0	0.0	4.3	100		43	49.68	3.20
8323.0	0.0	5.6	100		41	49.64	3.20
8324.0	0.0	3.7	100		47	49.58	3.20
8325.0	0.0	3.0	100		42	49.55	3.20
8326.0	0.0	3.1	100		42	49.52	3.20

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8327.0	0.0	3.6	100		46	49.49	3.20
8328.0	0.0	4.1	100		41	49.45	3.20
8329.0	0.0	5.1	100		43	49.41	3.20
8330.0	0.0	4.7	100		46	49.37	3.20
8331.0	0.0	5.2	100		45	49.32	3.20
8334.0	0.0	5.1	100		45	49.22	3.20
8335.0	0.0	5.6	100		44	49.17	3.20
8336.0	0.0	5.8	100		42	49.11	3.20
8337.0	0.0	2.5	100		45	49.06	3.20
8342.0	0.0	3.0	100		50	48.92	3.20
8343.0	0.0	4.1	100		45	48.89	3.20
8344.0	0.0	3.8	100		50	48.85	3.20
8345.0	0.0	7.3	100		26	48.82	3.20
8346.0	0.0	0.8	100		48	48.75	3.20
8350.0	0.0	3.6	100		50	48.69	3.20
8351.0	0.0	3.9	100		46	48.65	3.20
8352.0	0.1	8.8	100		25	48.59	3.20
8353.0	0.0	0.8	100		48	48.51	3.20
8355.0	0.0	3.8	100		48	48.49	3.20
8356.0	0.0	5.3	100		46	48.44	3.20
8357.0	0.0	4.8	100		48	48.39	3.20
8360.0	0.0	4.1	100		50	48.28	3.20
8363.0	0.1	8.5	100		25	48.16	3.20
8368.0	0.4	11.4	100		20	48.01	3.20
8369.0	0.1	9.5	100		24	47.89	3.20
8372.0	0.0	3.0	100		48	47.80	3.20
8373.0	0.0	6.7	100		36	47.76	3.20
8374.0	0.1	9.9	95		30	47.68	3.20
8375.0	0.0	5.1	100		41	47.60	3.20
8376.0	0.0	3.8	100		50	47.56	3.20
8377.0	0.0	6.3	100		35	47.51	3.20
8378.0	0.0	8.1	100		32	47.44	3.20
8379.0	0.0	4.9	100		41	47.38	3.20
8380.0	0.0	6.3	100		40	47.33	3.20
8381.0	0.0	5.8	100		41	47.27	3.20
8382.0	0.2	10.2	89		21	47.21	3.20
8383.0	0.1	9.4	91		23	47.10	3.19
8384.0	0.0	8.4	100		32	47.02	3.19
8385.0	0.0	5.6	100		39	46.94	3.19
8386.0	0.0	5.3	100		38	46.89	3.19

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8387.0	0.0	5.5	100		42	46.84	3.19
8388.0	0.0	5.6	100		42	46.78	3.19
8389.0	0.0	5.9	100		37	46.73	3.19
8390.0	0.0	7.3	100		34	46.67	3.19
8391.0	0.0	7.5	100		33	46.59	3.19
8392.0	0.0	8.1	100		32	46.51	3.19
8393.0	0.1	9.0	100		31	46.43	3.18
8394.0	0.0	7.5	100		33	46.34	3.18
8395.0	0.0	7.0	100		34	46.26	3.18
8396.0	0.0	5.7	100		36	46.20	3.18
8397.0	0.0	7.0	100		34	46.14	3.18
8398.0	0.1	8.7	100		34	46.07	3.18
8399.0	0.0	7.2	100		34	45.99	3.18
8400.0	0.4	11.0	93		18	45.89	3.17
8401.0	0.0	6.4	100		35	45.80	3.17
8402.0	0.0	8.2	100		35	45.73	3.17
8403.0	0.1	8.7	100		32	45.64	3.17
8404.0	0.0	7.5	100		38	45.56	3.17
8405.0	0.0	6.7	100		39	45.48	3.17
8406.0	0.4	11.4	80		22	45.39	3.15
8407.0	0.0	7.1	100		34	45.29	3.13
8408.0	0.0	6.6	100		35	45.22	3.13
8409.0	0.0	8.5	100		32	45.15	3.13
8410.0	0.0	7.0	100		36	45.06	3.13
8411.0	0.0	5.6	100		37	45.00	3.13
8412.0	0.0	6.6	100		35	44.93	3.13
8413.0	0.0	6.2	100		35	44.87	3.13
8414.0	0.0	3.1	100		43	44.81	3.13
8415.0	0.0	3.6	100		46	44.78	3.13
8416.0	0.0	4.5	100		42	44.74	3.13
8417.0	0.0	2.4	100		46	44.70	3.13
8418.0	0.0	3.3	100		45	44.68	3.13
8419.0	0.0	4.5	100		39	44.65	3.13
8422.0	0.0	3.6	100		48	44.57	3.13
8432.0	0.0	2.1	100		20	44.44	3.13
8438.0	0.0	5.2	100		45	44.31	3.13
8439.0	0.0	4.5	100		47	44.27	3.13
8440.0	0.0	4.2	100		39	44.23	3.13
8441.0	0.1	10.0	75		30	44.17	3.13
8442.0	1	11.4	65		28	44.06	3.10
8443.0	0.0	6.4	100		36	43.97	3.08
8444.0	0.0	7.7	100		34	43.91	3.08
8445.0	0.1	9.5	96		30	43.83	3.08
8446.0	0.0	7.7	100		33	43.74	3.08
8447.0	0.0	5.8	100		36	43.67	3.08

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8448.0	0.0	6.6	100		35	43.61	3.08
8449.0	0.0	4.7	100		41	43.54	3.08
8450.0	0.0	3.9	100		44	43.50	3.08
8451.0	0.0	4.1	100		43	43.46	3.08
8452.0	0.0	4.5	100		39	43.42	3.08
8453.0	0.0	3.5	100		43	43.38	3.08
8454.0	0.0	7.1	100		34	43.34	3.08
8455.0	0.1	9.5	90		30	43.26	3.08
8456.0	0.1	9.4	89		30	43.16	3.06
8457.0	0.0	4.6	100		40	43.08	3.06
8458.0	0.0	4.8	100		41	43.04	3.06
8459.0	0.0	6.8	100		36	42.98	3.06
8460.0	0.1	8.9	98		31	42.91	3.06
8461.0	0.0	5.5	100		42	42.82	3.05
8462.0	0.0	6.8	100		22	42.77	3.05
8463.0	0.0	5.1	100		37	42.69	3.05
8464.0	0.0	4.1	100		43	42.65	3.05
8465.0	0.0	7.2	100		34	42.60	3.05
8466.0	0.0	8.1	100		32	42.53	3.05
8467.0	0.0	5.6	100		37	42.46	3.05
8468.0	0.0	4.7	100		41	42.41	3.05
8469.0	0.0	6.2	100		38	42.36	3.05
8470.0	0.0	6.8	100		36	42.29	3.05
8471.0	0.0	6.6	100		37	42.23	3.05
8472.0	0.1	8.8	99		31	42.16	3.05
8473.0	0.0	6.7	100		35	42.07	3.05
8474.0	0.1	9.3	82		25	42.01	3.05
8475.0	0.0	8.3	100		29	41.93	3.04
8476.0	0.0	7.9	100		33	41.84	3.04
8477.0	1	11.5	65		27	41.75	3.03
8478.0	0.1	10.1	76		29	41.64	2.99
8479.0	0.4	11.6	67		27	41.54	2.98
8480.0	0.3	11.4	69		28	41.42	2.94
8481.0	0.0	6.8	100		35	41.32	2.92
8482.0	0.0	7.6	100		33	41.25	2.92
8483.0	0.5	11.5	90		17	41.15	2.90
8484.0	0.0	6.6	100		33	41.05	2.90
8485.0	0.0	3.9	100		41	41.00	2.90
8486.0	0.0	6.4	100		37	40.95	2.90
8487.0	0.1	9.1	100		31	40.88	2.90
8488.0	0.0	8.3	100		32	40.78	2.89
8489.0	0.0	5.2	100		42	40.71	2.89
8490.0	0.0	4.8	100		45	40.66	2.89
8491.0	0.0	4.8	100		40	40.61	2.89
8492.0	0.0	4.1	100		40	40.56	2.89
8493.0	0.0	3.8	100		42	40.52	2.89
8494.0	0.0	4.7	100		40	40.48	2.89
8495.0	0.0	4.3	100		47	40.44	2.89

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8496.0	0.1	8.6	100		18	40.39	2.89
8497.0	0.0	7.2	100		25	40.30	2.89
8498.0	0.0	3.4	100		41	40.23	2.89
8499.0	0.0	2.9	100		43	40.19	2.89
8500.0	0.0	6.9	100		34	40.15	2.89
8501.0	0.0	8.5	100		32	40.07	2.89
8502.0	0.0	7.9	100		33	39.99	2.89
8503.0	0.1	9.5	98		30	39.91	2.89
8504.0	0.1	8.9	100		31	39.81	2.88
8505.0	0.0	7.5	100		33	39.73	2.88
8506.0	0.2	9.8	95		20	39.64	2.87
8507.0	0.0	6.2	100		35	39.55	2.87
8508.0	0.0	5.9	100		39	39.49	2.87
8509.0	0.0	8.2	100		34	39.43	2.87
8510.0	0.0	8.4	100		32	39.34	2.86
8511.0	0.0	7.2	100		34	39.26	2.86
8512.0	0.0	7.6	100		33	39.18	2.86
8513.0	0.0	6.2	100		38	39.11	2.86
8514.0	0.0	6.4	100		35	39.05	2.86
8515.0	0.0	5.0	100		40	38.99	2.86
8516.0	0.0	4.9	100		45	38.94	2.86
8517.0	0.0	6.6	100		34	38.89	2.86
8518.0	0.0	5.0	100		35	38.81	2.86
8519.0	0.0	5.7	100		36	38.76	2.86
8520.0	0.0	7.9	100		35	38.69	2.86
8521.0	0.0	6.4	100		35	38.62	2.86
8522.0	0.1	9.3	99		31	38.55	2.86
8523.0	0.0	6.3	100		37	38.46	2.86
8524.0	0.0	4.1	100		40	38.40	2.86
8525.0	0.0	3.8	100		43	38.36	2.86
8526.0	0.0	4.3	100		44	38.32	2.86
8527.0	0.0	7.1	100		35	38.27	2.86
8528.0	0.0	7.8	100		34	38.19	2.86
8529.0	0.0	5.0	100		45	38.12	2.86
8530.0	0.0	5.3	100		44	38.07	2.86
8531.0	0.0	5.2	100		45	38.02	2.86
8532.0	0.0	7.7	100		37	37.96	2.86
8533.0	0.0	6.8	100		34	37.88	2.86
8534.0	0.4	11.6	72		26	37.80	2.86
8535.0	0.1	9.1	100		31	37.68	2.82
8536.0	0.0	1.4	100		47	37.60	2.82
8538.0	0.0	1.7	100		48	37.57	2.82
8539.0	0.0	2.5	100		45	37.55	2.82
8540.0	0.0	3.7	100		42	37.52	2.82
8542.0	0.0	3.0	100		42	37.48	2.82
8543.0	0.1	9.0	100		24	37.41	2.82

Preference Index (C.P.I.) is calculated from this analysis if a reliable calculation can be made. If necessary, a molecular sieve separation is carried out to isolate the normal paraffins prior to the C.P.I. calculation. In either case, the Carbon Preference Index is calculated using the following formula:

$$CPI = \frac{1}{2}\left[\frac{\sum_{25}^{33} \text{Odd-Carbon Paraffins}}{\sum_{26}^{34} \text{Even-Carbon Paraffins}} + \frac{\sum_{25}^{33} \text{Odd-Carbon Paraffins}}{\sum_{24}^{32} \text{Even-Carbon Paraffins}}\right]$$

These C.P.I. values provide valuable information for characterizing the maturity of the hydrocarbons being analyzed. The chromatograms (which can also be used as visual fingerprints) are reproduced and presented in this report.

Visual Kerogen Analysis

Visual examination of the kerogen provides another means of characterizing the organic matter type and provides a useful cross-correlation with elemental analysis. In this report kerogen is divided into four main groups; alginite, exinite, vitrinite and other.

The color of spore and pollen grains present can be used as an estimate of the level of thermal maturation. The technique is, however, quite crude and often unreliable because of such problems as those encountered with natural staining of the spores and pollen and with weathering.

For the visual kerogen analysis, standard palynological techniques are used to separate the kerogen from the rock matrix. The organic matter is then mounted on a glass slide and examined under a high power microscope.

Vitrinite Reflectance Measurements

Vitrinite reflectance provides a method for determining the thermal alteration history of a sediment. Vitrinite particles can be found dispersed in most sedimentary rock samples, and since the reflectivity of these vitrinite macerals increases regularly with increased thermal alteration, then the reflectance measurements can be used to determine the degree of thermal maturation of the sediment being examined.

The kerogen is isolated from the rock matrix, and a slide is prepared by imbedding this kerogen concentrate in a bioplastic. After hardening, the mount is polished, and the reflectance of individual vitrinite particles can be measured.

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8593.0	0.1	9.4	100		27	34.56	2.80
8594.0	0.0	6.8	100		22	34.47	2.80
8596.0	0.0	4.5	100		47	34.40	2.80
8597.0	0.0	5.8	100		42	34.36	2.80
8598.0	0.0	7.3	100		38	34.29	2.80
8599.0	0.0	8.1	100		32	34.22	2.80
8600.0	0.0	7.3	100		34	34.13	2.80
8601.0	0.0	6.0	100		36	34.06	2.80
8602.0	0.0	7.2	100		35	34.00	2.80
8603.0	0.0	7.3	100		36	33.93	2.80
8604.0	0.1	9.3	78		25	33.84	2.78
8605.0	0.0	6.9	100		34	33.76	2.77
8606.0	0.0	6.8	100		35	33.69	2.77
8607.0	0.0	6.5	100		35	33.62	2.77
8608.0	0.0	6.6	100		35	33.55	2.77
8609.0	0.0	6.0	100		37	33.48	2.77
8610.0	0.0	5.5	100		37	33.43	2.77
8611.0	0.0	6.5	100		35	33.37	2.77
8612.0	0.0	5.8	100		38	33.31	2.77
8613.0	0.0	6.7	100		37	33.25	2.77
8614.0	0.1	8.6	99		35	33.18	2.77
8615.0	0.0	8.5	99		32	33.09	2.77
8616.0	0.0	7.8	100		33	33.01	2.77
8617.0	0.0	6.6	100		35	32.94	2.77
8618.0	0.0	6.4	100		38	32.88	2.77
8619.0	0.0	7.2	100		34	32.81	2.77
8620.0	1	11.3	62		28	32.73	2.76
8621.0	0.1	8.9	96		31	32.63	2.73
8622.0	0.0	7.8	100		33	32.55	2.73
8623.0	0.1	9.0	97		31	32.47	2.73
8624.0	0.0	7.5	100		35	32.39	2.73
8625.0	0.7	12.0	75		15	32.30	2.71
8626.0	0.1	9.5	75		29	32.18	2.68
8627.0	0.1	8.7	100		33	32.09	2.67
8628.0	0.0	8.0	100		32	32.01	2.67
8629.0	0.3	10.9	73		28	31.93	2.67
8630.0	0.0	6.8	100		36	31.83	2.66
8631.0	0.0	6.0	100		38	31.77	2.66
8632.0	0.1	9.8	97		30	31.69	2.66
8633.0	0.2	10.3	77		29	31.59	2.65
8634.0	0.1	10.1	80		29	31.49	2.62
8635.0	0.1	8.8	100		32	31.39	2.61
8636.0	0.0	7.2	100		37	31.30	2.61
8637.0	0.1	9.1	100		19	31.22	2.60
8638.0	1	13.0	81		16	31.11	2.59
8639.0	0.0	8.6	100		32	30.98	2.56
8640.0	0.0	8.4	100		33	30.89	2.56

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8641.0	0.0	7.6	100		35	30.82	2.56
8642.0	0.6	12.3	73		26	30.73	2.56
8643.0	0.1	8.9	100		31	30.61	2.53
8644.0	0.1	9.1	99		31	30.52	2.53
8645.0	0.1	9.6	94		30	30.43	2.53
8646.0	0.3	11.2	67		28	30.33	2.51
8647.0	0.1	9.0	100		31	30.22	2.47
8648.0	0.1	9.0	100		31	30.13	2.47
8649.0	0.0	8.3	100		32	30.03	2.46
8650.0	0.0	7.3	100		34	29.95	2.46
8651.0	0.2	10.2	82		29	29.87	2.46
8652.0	0.0	8.1	100		32	29.76	2.44
8653.0	0.0	7.6	100		36	29.68	2.44
8654.0	0.0	8.3	100		36	29.60	2.44
8655.0	0.1	9.5	100		32	29.51	2.44
8656.0	0.0	7.8	100		33	29.42	2.44
8657.0	0.0	6.0	100		38	29.36	2.44
8658.0	0.1	8.7	100		31	29.29	2.44
8659.0	0.0	8.3	100		32	29.21	2.44
8660.0	0.0	6.8	100		36	29.13	2.44
8661.0	0.0	8.0	100		33	29.07	2.44
8662.0	0.0	3.9	100		40	29.00	2.44
8663.0	0.0	5.9	100		38	28.96	2.44
8664.0	0.0	8.1	100		32	28.89	2.44
8665.0	0.0	5.1	100		40	28.81	2.44
8666.0	0.0	3.2	100		45	28.77	2.44
8667.0	0.1	9.2	100		28	28.73	2.44
8668.0	0.0	5.3	100		11	28.64	2.44
8669.0	0.0	5.6	100		28	28.57	2.44
8670.0	0.0	4.1	100		43	28.54	2.44
8671.0	0.0	6.4	100		41	28.49	2.44
8672.0	0.0	6.2	100		41	28.42	2.44
8673.0	0.0	5.7	100		43	28.36	2.44
8674.0	0.2	10.1	99		20	28.31	2.44
8675.0	0.3	10.3	100		15	28.21	2.44
8676.0	0.0	3.7	100		43	28.12	2.44
8677.0	0.0	5.3	100		44	28.07	2.44
8679.0	0.0	6.1	100		36	28.00	2.44
8680.0	0.0	5.4	100		39	27.95	2.44
8681.0	0.0	6.0	100		36	27.89	2.44
8682.0	0.0	7.2	100		36	27.83	2.44
8683.0	0.0	7.0	100		37	27.76	2.44
8684.0	0.0	5.5	100		43	27.69	2.44
8685.0	0.0	5.6	100		28	27.65	2.44
8686.0	0.2	10.2	98		18	27.60	2.44
8687.0	0.0	7.9	100		33	27.50	2.44
8688.0	0.0	7.5	100		35	27.43	2.44

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8689.0	0.0	6.9	100		34	27.35	2.44
8690.0	0.0	6.2	100		36	27.29	2.44
8691.0	0.0	7.9	100		33	27.22	2.44
8692.0	0.0	7.4	100		35	27.14	2.44
8694.0	0.0	4.8	100		38	27.07	2.44
8695.0	0.0	0.8	100		48	27.02	2.44
8696.0	0.0	4.5	100		39	26.99	2.44
8697.0	0.0	5.0	100		44	26.94	2.44
8698.0	0.0	5.2	100		43	26.90	2.44
8699.0	0.0	7.8	100		35	26.84	2.44
8700.0	0.0	4.5	100		46	26.76	2.44
8702.0	0.0	7.4	100		22	26.69	2.44
8703.0	0.0	6.9	100		34	26.61	2.44
8704.0	0.0	5.3	100		42	26.55	2.44
8705.0	0.0	5.2	100		42	26.50	2.44
8706.0	0.0	6.1	100		39	26.45	2.44
8707.0	0.0	4.9	100		46	26.39	2.44
8708.0	0.0	5.5	100		39	26.33	2.44
8709.0	0.0	5.1	100		40	26.28	2.44
8710.0	0.0	5.5	100		43	26.23	2.44
8711.0	0.0	5.9	100		42	26.17	2.44
8712.0	0.0	4.8	100		47	26.11	2.44
8713.0	0.0	6.0	100		41	26.06	2.44
8714.0	0.0	5.7	100		41	26.00	2.44
8715.0	0.0	5.5	100		42	25.95	2.44
8716.0	0.0	6.0	100		40	25.89	2.44
8717.0	0.0	5.9	100		42	25.83	2.44
8718.0	0.0	7.4	100		34	25.77	2.44
8719.0	0.0	5.3	100		41	25.70	2.44
8722.0	0.4	11.3	87		21	25.62	2.44
8723.0	0.1	9.7	100		30	25.50	2.41
8724.0	0.0	7.3	100		37	25.41	2.41
8725.0	0.0	5.0	100		45	25.35	2.41
8726.0	0.0	4.0	100		48	25.30	2.41
8727.0	0.0	3.7	100		49	25.26	2.41
8728.0	0.0	6.6	100		37	25.22	2.41
8731.0	0.0	7.5	100		14	25.13	2.41
8732.0	0.6	12.1	69		23	25.03	2.40
8733.0	0.0	6.6	100		38	24.92	2.37
8734.0	0.0	5.4	100		41	24.86	2.37
8735.0	0.0	6.2	100		37	24.80	2.37
8736.0	0.0	4.3	100		41	24.75	2.37
8737.0	0.0	6.3	100		35	24.70	2.37
8738.0	0.0	6.0	100		39	24.64	2.37

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8739.0	0.0	3.9	100		42	24.59	2.37
8740.0	0.0	4.7	100		42	24.55	2.37
8741.0	0.0	5.6	100		43	24.50	2.37
8742.0	0.0	5.9	100		39	24.44	2.37
8743.0	0.0	5.7	100		41	24.38	2.37
8744.0	0.0	4.6	100		46	24.33	2.37
8745.0	0.0	5.3	100		44	24.28	2.37
8746.0	0.0	6.0	100		38	24.22	2.37
8747.0	0.0	4.0	100		46	24.17	2.37
8748.0	0.0	6.1	100		36	24.12	2.37
8749.0	0.0	1.1	100		48	24.07	2.37
8750.0	0.0	3.1	100		50	24.06	2.37
8752.0	0.0	6.6	100		39	23.99	2.37
8755.0	0.0	5.6	100		40	23.89	2.37
8756.0	0.0	4.5	100		47	23.83	2.37
8757.0	0.2	10.7	75		26	23.78	2.37
8759.0	0.0	3.3	100		41	23.66	2.35
8761.0	0.0	5.4	100		43	23.57	2.35
8762.0	0.0	4.6	100		44	23.52	2.35
8764.0	0.0	4.4	100		47	23.45	2.35
8765.0	0.0	6.2	100		39	23.40	2.35
8766.0	0.0	5.4	100		43	23.34	2.35
8767.0	0.0	4.9	100		47	23.29	2.35
8768.0	0.9	12.7	72		20	23.22	2.34
8769.0	0.0	7.6	100		32	23.09	2.31
8771.0	0.0	3.3	100		45	23.05	2.31
8772.0	0.0	5.0	100		41	23.00	2.31
8773.0	0.0	4.1	100		46	22.96	2.31
8774.0	0.1	8.1	100		16	22.89	2.31
8775.0	0.2	9.5	100		16	22.81	2.31
8776.0	0.0	0.1	100		50	22.74	2.31
8779.0	0.0	5.9	100		39	22.72	2.31
8780.0	0.0	5.5	100		41	22.66	2.31
8781.0	0.0	6.2	100		42	22.61	2.31
8782.0	0.0	6.6	100		35	22.55	2.31
8783.0	0.0	8.0	100		29	22.46	2.30
8784.0	0.0	7.5	100		33	22.38	2.30
8785.0	0.0	8.0	100		32	22.30	2.30
8786.0	0.0	8.2	100		33	22.22	2.30
8787.0	0.0	8.3	100		36	22.14	2.30
8788.0	0.0	7.8	100		33	22.07	2.30

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8789.0	0.0	4.1	100		39	21.99	2.30
8790.0	0.0	4.4	100		39	21.96	2.30
8791.0	0.0	7.0	100		34	21.91	2.30
8792.0	0.0	7.8	100		33	21.83	2.30
8793.0	0.0	6.4	100		37	21.76	2.30
8794.0	0.0	3.9	100		40	21.70	2.30
8795.0	0.0	5.1	100		38	21.65	2.30
8796.0	0.0	7.4	100		34	21.60	2.30
8797.0	0.0	7.5	100		33	21.53	2.30
8798.0	0.0	8.4	100		35	21.45	2.30
8799.0	0.0	6.7	100		40	21.37	2.30
8800.0	0.0	5.8	100		42	21.31	2.30
8801.0	0.0	6.5	100		40	21.25	2.30
8802.0	0.0	5.3	100		37	21.19	2.30
8803.0	0.0	4.6	100		40	21.14	2.30
8804.0	0.0	6.5	100		41	21.09	2.30
8805.0	0.0	7.1	100		34	21.02	2.30
8806.0	0.5	11.9	67		24	20.95	2.30
8807.0	0.4	10.9	93		14	20.83	2.26
8808.0	0.0	4.7	100		38	20.73	2.26
8809.0	0.0	4.6	100		42	20.69	2.26
8810.0	0.0	5.7	100		36	20.64	2.26
8811.0	0.0	8.1	100		33	20.58	2.26
8812.0	0.2	10.4	70		29	20.49	2.25
8813.0	0.1	8.6	100		32	20.39	2.23
8814.0	0.0	5.1	100		38	20.32	2.23
8815.0	0.0	5.9	100		36	20.27	2.23
8816.0	0.0	6.3	100		36	20.20	2.23
8817.0	0.0	7.5	100		33	20.13	2.23
8818.0	0.0	7.8	100		33	20.05	2.23
8819.0	0.0	6.1	100		36	19.98	2.23
8820.0	0.0	5.9	100		36	19.92	2.23
8821.0	0.0	6.6	100		35	19.86	2.23
8822.0	0.0	3.1	100		42	19.80	2.23
8823.0	0.0	6.0	100		36	19.77	2.23
8824.0	0.0	6.5	100		35	19.71	2.23
8825.0	0.0	6.0	100		36	19.64	2.23
8826.0	0.0	7.3	100		34	19.58	2.23
8827.0	0.0	5.9	100		37	19.51	2.23
8828.0	0.0	6.7	100		35	19.45	2.23
8829.0	0.0	4.7	100		43	19.38	2.23
8832.0	0.0	4.6	100		44	19.36	2.23
8833.0	0.0	6.9	100		37	19.30	2.23
8834.0	0.0	6.1	100		41	19.23	2.23
8835.0	0.0	5.4	100		42	19.17	2.23
8836.0	0.0	7.4	100		33	19.12	2.23
8837.0	0.2	10.0	85		17	19.02	2.21

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8838.0	0.0	4.9	100		38	18.94	2.20
8839.0	0.0	5.5	100		40	18.90	2.20
8840.0	1	11.5	66		27	18.83	2.20
8841.0	0.3	11.3	69		28	18.71	2.15
8842.0	0.0	8.1	100		34	18.60	2.13
8843.0	0.0	7.9	100		36	18.52	2.13
8844.0	0.1	9.3	98		31	18.44	2.13
8845.0	0.0	6.9	100		37	18.35	2.13
8846.0	0.0	6.2	100		38	18.28	2.13
8847.0	0.8	12.5	67		21	18.20	2.12
8848.0	0.0	7.6	100		33	18.09	2.09
8849.0	0.0	5.5	100		40	18.03	2.09
8850.0	0.0	6.0	100		39	17.97	2.09
8851.0	0.0	4.7	100		43	17.91	2.09
8852.0	0.0	5.4	100		41	17.86	2.09
8853.0	0.0	5.8	100		37	17.81	2.09
8854.0	0.0	4.7	100		39	17.75	2.09
8855.0	0.0	3.5	100		43	17.71	2.09
8856.0	0.0	5.6	100		41	17.67	2.09
8857.0	0.0	4.6	100		46	17.61	2.09
8858.0	0.0	1.9	100		45	17.58	2.09
8859.0	0.0	5.1	100		43	17.55	2.09
8860.0	0.0	5.4	100		42	17.50	2.09
8861.0	0.0	5.5	100		43	17.44	2.09
8862.0	0.0	4.6	100		47	17.39	2.09
8863.0	0.0	2.5	100		47	17.35	2.09
8864.0	0.1	9.4	79		24	17.29	2.08
8865.0	0.0	7.5	100		33	17.20	2.05
8866.0	0.0	6.2	100		39	17.12	2.05
8867.0	0.0	6.2	100		38	17.06	2.05
8868.0	0.0	6.3	100		39	17.00	2.05
8869.0	0.0	7.0	100		39	16.94	2.05
8870.0	0.0	7.4	100		37	16.87	2.05
8871.0	0.0	7.4	100		37	16.80	2.05
8872.0	0.0	8.0	100		35	16.72	2.05
8873.0	0.0	6.3	100		41	16.64	2.05
8874.0	0.0	5.5	100		41	16.58	2.05
8875.0	0.0	4.6	100		41	16.53	2.05
8876.0	0.0	4.9	100		42	16.49	2.05
8877.0	0.0	6.5	100		40	16.43	2.05
8878.0	0.0	6.5	100		19	16.38	2.05
8879.0	0.0	5.7	100		21	16.30	2.05
8880.0	0.1	9.5	75		30	16.25	2.05
8881.0	0.0	5.9	100		42	16.16	2.04
8882.0	0.0	6.8	100		35	16.10	2.04
8883.0	0.1	9.4	98		32	16.02	2.02
8884.0	0.0	7.5	100		38	15.93	2.02
8885.0	0.0	6.1	100		39	15.85	2.02

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8887.0	0.0	4.1	100		31	15.78	2.02
8888.0	0.1	8.4	100		18	15.75	2.02
8891.0	0.0	6.2	100		26	15.68	2.02
8892.0	0.0	6.7	100		25	15.63	2.02
8894.0	0.0	3.9	100		47	15.57	2.02
8895.0	0.0	3.4	100		45	15.53	2.02
8898.0	0.0	7.4	100		30	15.45	2.02
8899.0	0.0	1.7	100		47	15.38	2.02
8900.0	0.0	7.0	100		34	15.35	2.02
8901.0	0.1	8.8	98		31	15.26	2.00
8903.0	0.0	8.1	99		21	15.17	2.00
8904.0	0.0	2.2	100		44	15.09	2.00
8905.0	0.0	3.2	100		41	15.07	2.00
8906.0	0.1	9.5	68		29	15.02	2.00
8907.0	1	10.8	59		28	14.92	1.96
8908.0	0.0	6.3	100		35	14.82	1.92
8910.0	1	11.4	64		20	14.73	1.92
8911.0	1	10.9	59		25	14.62	1.88
8912.0	0.0	2.4	100		47	14.54	1.85
8913.0	0.1	9.2	74		23	14.48	1.84
8914.0	0.0	4.9	100		38	14.40	1.82
8915.0	0.0	7.2	88		26	14.36	1.82
8916.0	0.7	9.6	64		29	14.27	1.80
8917.0	1	11.0	59		27	14.17	1.76
8918.0	0.0	7.1	100		34	14.07	1.72
8919.0	0.2	10.1	67		29	14.00	1.72
8920.0	1	11.2	62		28	13.89	1.68
8921.0	0.1	9.4	74		33	13.78	1.64
8922.0	0.0	6.9	100		34	13.69	1.63
8923.0	0.7	10.0	66		25	13.61	1.61
8924.0	1	10.4	63		25	13.51	1.58
8925.0	0.0	7.3	95		28	13.41	1.55
8926.0	0.0	6.1	100		36	13.34	1.54
8927.0	0.1	8.7	94		31	13.28	1.54
8928.0	0.0	5.9	100		36	13.20	1.54
8929.0	0.0	5.9	100		36	13.14	1.54
8930.0	0.0	7.0	100		34	13.08	1.54
8931.0	0.0	6.0	100		38	13.01	1.54
8932.0	0.0	6.3	100		37	12.95	1.54
8933.0	0.0	5.8	100		42	12.88	1.54
8934.0	0.1	9.7	70		23	12.82	1.54
8935.0	0.0	4.6	100		32	12.73	1.52

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8936.0	0.0	1.6	100		46	12.68	1.52
8939.0	0.0	4.9	100		32	12.64	1.52
8940.0	0.0	5.0	100		38	12.60	1.52
8941.0	0.0	2.3	100		50	12.57	1.52
8943.0	0.0	4.6	100		38	12.52	1.52
8944.0	1	11.5	65		22	12.45	1.52
8945.0	0.4	11.2	71		19	12.34	1.48
8946.0	0.0	4.5	100		42	12.23	1.45
8947.0	0.0	2.1	100		49	12.19	1.45
8948.0	0.0	7.8	100		32	12.17	1.45
8949.0	0.6	12.0	67		20	12.09	1.44
8950.0	0.1	8.7	99		32	11.97	1.40
8951.0	0.1	9.0	96		31	11.89	1.40
8952.0	0.0	6.3	100		38	11.81	1.39
8953.0	0.0	7.4	100		35	11.74	1.39
8954.0	0.0	8.5	100		32	11.66	1.39
8955.0	0.1	9.3	91		31	11.58	1.39
8956.0	0.0	7.7	100		36	11.49	1.39
8957.0	0.0	8.5	95		34	11.42	1.39
8958.0	0.1	8.8	89		35	11.33	1.37
8961.0	3	12.9	55		24	11.24	1.37
8962.0	2	13.0	65		15	11.11	1.31
8963.0	0.0	5.9	100		37	10.99	1.27
8964.0	0.0	6.5	100		39	10.93	1.27
8965.0	0.0	5.3	100		44	10.86	1.27
8966.0	0.0	4.0	100		42	10.82	1.27
8967.0	0.0	5.6	100		37	10.78	1.27
8968.0	0.0	7.3	100		34	10.71	1.27
8969.0	0.0	6.3	100		41	10.64	1.27
8970.0	0.0	4.8	100		42	10.58	1.27
8971.0	0.0	7.0	100		40	10.53	1.27
8972.0	0.0	6.9	100		39	10.46	1.27
8973.0	0.3	10.7	67		21	10.37	1.25
8974.0	0.0	7.6	99		28	10.28	1.23
8975.0	0.0	7.3	100		37	10.20	1.22
8976.0	0.0	8.0	100		37	10.12	1.22
8977.0	0.1	9.3	72		31	10.04	1.22
8978.0	0.0	7.1	100		38	9.95	1.21
8979.0	0.0	6.3	100		38	9.89	1.21
8980.0	0.0	7.6	99		38	9.82	1.21
8981.0	0.0	6.4	100		41	9.75	1.21
8982.0	0.8	10.3	66		24	9.69	1.21
8983.0	0.0	3.6	100		37	9.59	1.18
8984.0	0.0	1.8	100		48	9.57	1.18
8985.0	0.0	7.4	100		38	9.53	1.18

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
8986.0	0.0	6.7	100		41	9.46	1.18
8987.0	0.0	4.5	100		47	9.40	1.18
8998.0	0.0	2.5	100		43	9.17	1.18
9000.0	0.0	3.3	100		49	9.14	1.18
9001.0	0.1	9.5	94		21	9.08	1.18
9002.0	0.0	1.3	100		46	8.99	1.17
9003.0	0.0	3.3	100		45	8.98	1.17
9004.0	0.0	4.2	100		39	8.94	1.17
9005.0	0.0	6.5	100		15	8.88	1.17
9006.0	0.0	5.2	100		14	8.83	1.17
9007.0	0.0	7.3	100		22	8.76	1.17
9014.0	0.0	3.9	100		48	8.62	1.17
9018.0	0.0	4.9	100		38	8.51	1.17
9019.0	0.0	4.4	100		40	8.47	1.17
9020.0	0.7	9.7	65		25	8.40	1.15
9021.0	0.0	2.1	100		44	8.31	1.13
9023.0	0.0	5.0	100		40	8.28	1.13
9024.0	0.0	5.4	100		39	8.23	1.13
9025.0	0.0	3.2	100		46	8.18	1.13
9026.0	0.5	9.0	64		28	8.13	1.13
9027.0	0.0	5.0	100		36	8.06	1.11
9028.0	0.0	2.2	100		48	8.02	1.11
9029.0	0.0	4.0	100		40	7.99	1.11
9030.0	0.0	2.6	100		44	7.96	1.11
9031.0	0.0	5.1	100		38	7.93	1.11
9033.0	0.0	3.2	100		48	7.86	1.11
9034.0	0.0	2.5	100		49	7.83	1.11
9035.0	0.0	1.7	100		49	7.81	1.11
9037.0	0.0	1.7	100		45	7.79	1.11
9038.0	0.0	1.8	100		45	7.76	1.11
9041.0	0.0	0.9	100		47	7.74	1.11
9042.0	0.0	1.6	100		45	7.72	1.11
9043.0	0.0	0.9	100		48	7.71	1.11
9044.0	0.0	5.1	100		37	7.70	1.11
9045.0	0.0	6.1	81		27	7.65	1.11
9046.0	0.0	6.1	87		24	7.60	1.11
9047.0	0.0	7.0	73		25	7.53	1.10
9048.0	0.0	4.1	100		37	7.47	1.09
9049.0	0.0	4.8	100		38	7.42	1.09
9050.0	0.0	4.9	100		39	7.37	1.09

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
9051.0	0.0	5.2	100		37	7.33	1.09
9052.0	0.4	8.4	61		29	7.26	1.07
9053.0	0.0	3.9	100		40	7.19	1.06
9054.0	0.0	5.2	100		42	7.14	1.06
9055.0	0.0	7.1	98		34	7.10	1.06
9056.0	0.2	7.4	66		29	7.02	1.05
9057.0	0.0	5.3	100		38	6.96	1.03
9058.0	0.0	8.0	78		33	6.91	1.03
9059.0	0.8	9.4	54		30	6.82	1.01
9060.0	2	10.8	49		26	6.73	0.96
9061.0	3	12.0	54		17	6.62	0.91
9062.0	1	10.6	52		24	6.50	0.86
9063.0	2	11.1	47		28	6.39	0.80
9064.0	2	11.1	50		25	6.28	0.75
9065.0	2	11.3	54		21	6.17	0.69
9066.0	1	10.3	53		27	6.07	0.64
9067.0	3	11.7	49	0.7	26	5.96	0.59
9068.0	2	10.6	51		28	5.84	0.53
9069.0	0.0	8.0	86		33	5.74	0.49
9070.0	0.7	9.4	57		27	5.65	0.46
9071.0	0.0	7.8	92		33	5.56	0.42
9072.0	0.0	7.8	95		33	5.47	0.40
9073.0	0.8	9.8	59		30	5.39	0.38
9074.0	0.0	8.3	92		32	5.28	0.33
9075.0	0.0	4.3	100		42	5.21	0.33
9076.0	0.0	5.2	100		39	5.17	0.33
9077.0	0.0	5.1	100		40	5.11	0.33
9078.0	0.0	7.4	95		33	5.07	0.33
9079.0	0.0	5.4	100		37	5.00	0.33
9080.0	0.0	1.3	100		46	4.95	0.33
9081.0	0.0	2.2	100		45	4.94	0.33
9082.0	0.0	5.0	100		43	4.91	0.33
9083.0	0.0	4.9	100		42	4.86	0.33
9084.0	0.0	3.8	100		48	4.81	0.33
9089.0	0.0	3.2	100		45	4.71	0.33
9090.0	0.0	4.9	100		45	4.68	0.33
9091.0	0.0	3.7	100		46	4.63	0.33
9097.0	0.0	2.8	100		33	4.54	0.33
9098.0	0.0	2.4	100		43	4.52	0.33
9116.0	0.0	2.3	100		43	4.36	0.33
9117.0	0.0	4.2	100		39	4.31	0.33
9118.0	0.0	3.0	100		43	4.27	0.33
9119.0	0.1	8.8	73		21	4.22	0.32
9120.0	0.0	6.1	100		33	4.13	0.29
9121.0	0.0	0.6	100		49	4.10	0.29

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
9129.0	0.0	4.2	100		39	4.02	0.29
9133.0	0.0	1.5	100		46	3.95	0.29
9135.0	0.0	2.5	100		43	3.94	0.29
9136.0	0.0	7.8	74		26	3.89	0.28
9137.0	0.0	4.1	100		38	3.83	0.27
9138.0	0.0	2.6	100		45	3.79	0.27
9139.0	0.0	7.9	96		33	3.76	0.27
9140.0	0.0	6.3	100		33	3.68	0.26
9141.0	0.0	2.8	100		42	3.62	0.26
9142.0	0.5	9.1	62		23	3.57	0.26
9143.0	0.0	1.5	100		45	3.49	0.23
9145.0	0.0	3.7	100		42	3.47	0.23
9146.0	0.0	4.7	100		38	3.42	0.23
9147.0	0.0	2.9	100		47	3.39	0.23
9148.0	0.0	4.1	100		44	3.35	0.23
9149.0	0.0	1.5	100		45	3.32	0.23
9150.0	0.0	1.4	100		48	3.31	0.23
9151.0	0.0	3.6	100		47	3.29	0.23
9152.0	0.0	4.6	100		47	3.25	0.23
9153.0	0.0	6.1	100		36	3.20	0.23
9154.0	0.0	2.5	100		43	3.15	0.23
9155.0	0.0	0.8	100		48	3.13	0.23
9158.0	0.0	1.2	100		48	3.10	0.23
9159.0	0.2	10.1	68		17	3.06	0.23
9160.0	0.0	6.4	78		27	2.96	0.20
9161.0	0.0	1.0	100		47	2.92	0.19
9163.0	0.0	0.8	100		47	2.91	0.19
9164.0	0.0	2.1	100		44	2.88	0.19
9165.0	0.0	0.7	100		49	2.86	0.19
9168.0	0.0	5.0	100		40	2.82	0.19
9169.0	0.0	5.1	100		42	2.77	0.19
9171.0	0.0	3.8	100		40	2.70	0.19
9172.0	0.0	1.1	100		47	2.66	0.19
9173.0	0.0	2.4	100		43	2.65	0.19
9174.0	0.0	4.4	100		39	2.62	0.19
9175.0	0.0	4.4	100		39	2.57	0.19
9176.0	0.0	1.7	100		47	2.54	0.19
9178.0	0.0	0.5	100		48	2.52	0.19
9179.0	0.0	4.9	100		38	2.51	0.19

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
9180.0	0.0	4.3	100		39	2.47	0.19
9181.0	0.0	4.3	100		39	2.43	0.19
9182.0	0.0	1.7	100		46	2.39	0.19
9183.0	0.0	1.7	100		49	2.38	0.19
9184.0	0.0	4.8	100		38	2.36	0.19
9185.0	0.0	1.4	100		48	2.32	0.19
9187.0	0.0	2.3	100		50	2.28	0.19
9189.0	0.0	2.3	100		47	2.23	0.19
9191.0	0.0	3.1	100		49	2.18	0.19
9192.0	0.0	2.8	100		49	2.15	0.19
9197.0	0.0	1.8	100		20	2.10	0.19
9198.0	0.0	7.4	96		21	2.05	0.19
9199.0	0.0	2.5	100		43	1.99	0.19
9222.0	0.0	1.3	100		48	1.85	0.19
9224.0	0.0	6.2	100		34	1.83	0.19
9225.0	0.5	8.7	59		26	1.76	0.18
9226.0	0.0	4.8	100		38	1.68	0.14
9227.0	0.0	5.8	100		36	1.63	0.14
9228.0	0.3	7.7	59		30	1.57	0.14
9229.0	0.2	7.5	63		32	1.49	0.11
9230.0	0.0	3.6	100		40	1.43	0.10
9231.0	0.0	3.0	100		42	1.38	0.10
9232.0	0.0	1.2	100		46	1.36	0.10
9233.0	0.2	7.1	63		30	1.32	0.08
9234.0	0.8	9.4	53		27	1.24	0.05
9235.0	0.0	6.3	100		35	1.16	0.01
9236.0	0.0	1.4	100		49	1.11	0.01
9237.0	0.0	1.3	100		46	1.10	0.01
9238.0	0.0	6.9	99		34	1.07	0.01
9239.0	0.0	6.3	100		35	1.00	0.01
9240.0	0.0	2.5	100		48	0.95	0.01
9241.0	0.0	1.3	100		50	0.93	0.01
9242.0	0.0	1.1	100		48	0.91	0.01
9243.0	0.0	2.1	100		47	0.90	0.01
9246.0	0.0	5.9	100		36	0.83	0.01
9255.0	0.0	1.2	100		46	0.77	0.01
9262.0	0.0	1.6	100		45	0.71	0.01
9263.0	0.0	0.6	100		49	0.70	0.01
9264.0	0.0	0.9	100		50	0.69	0.01

DEPTH FEET	PERM. MD	POROSITY %	WATER SAT. %	HYCARB DENS. GM/CC	CLAY VOLUME %	CUM. POROSITY FEET	CUM. HYCARB FEET
9265.0	0.0	0.3	100		49	0.69	0.01
9267.0	0.0	0.8	100		48	0.68	0.01
9268.0	0.0	2.9	100		42	0.64	0.00
9292.0	0.0	4.3	100		36	0.54	0.00
9318.0	0.0	0.2	100		50	0.38	0.00
9319.0	0.0	2.3	100		44	0.37	0.00
9320.0	0.0	1.7	100		49	0.35	0.00
9331.0	0.0	2.9	100		45	0.30	0.00
9332.0	0.0	4.5	100		39	0.27	0.00
9333.0	0.0	3.0	100		46	0.22	0.00
9339.0	0.0	3.0	100		47	0.18	0.00
9340.0	0.0	3.3	100		43	0.15	0.00
9341.0	0.0	2.7	100		48	0.11	0.00
9342.0	0.0	3.6	100		46	0.09	0.00
9343.0	0.0	4.8	100		43	0.04	0.00

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COST California Stratigraphic Test Participants

GENERAL DESCRIPTION OF CORE LABORATORIES ANALYSES

for

1978 PT. CONCEPTION STRATIGRAPHIC TEST

Air space Gas Analysis

The airspace gas analysis provides the ppm concentration of the light hydrocarbon gases in the range C_1 through C_7 that are present in the airspace above the unwashed samples. The analysis was performed by introducing a syringe through the sample container, withdrawing a sample of the gas present, and direct injection to the gas chromatograph. A six foot Chromasorb 102 column running isothermally at 160° C. was used for the separation, and the detection was performed by flame ionization.

Cuttings Gas Analysis

The cuttings gas analysis provides the ppm concentration of the light hydrocarbon gases in the range C_1 through C_7 that are present in the airspace above a measured volume of cuttings after they have been mechanically disaggregated. Sample cuttings, handpicked to remove obvious contamination and caving material, were introduced to a sample container and mechanically disaggregated for five (5) minutes. A sample of the evolved hydrocarbon gas was withdrawn by syringe and injected onto the same analytical system used for the airspace analysis.

C_4-C_7 Hydrocarbon Analysis

The C_4-C_7 hydrocarbon analysis provides the percent concentration and total ppm of 29 selected components in the C_4-C_7 hydrocarbon range. A measured volume of sample, handpicked wherever possible for fine grained lithology, were placed in a container and heated to 100° C. for ten minutes, then mechanically disaggregated for five minutes. The sample was again heated for ten minutes, at which time an aliquot of the airspace was withdrawn into a syringe and injected directly onto the column. The analytical system used consisted of a 0.01 ID 50 meter stainless steel WCOT capillary column coated with hexadecane + hexadecane + Kel-F-3 mounted in a Varian 3700. The analysis was carried out isothermally at 28° C. with detection by flame ionization.

Sample Washing and Handpicking

The samples are examined for contamination, and the final washing and solvent cleaning (if necessary) is carried out. Each sample is then examined under a binocular microscope, and a lithologic description is

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made. The cuttings are then handpicked to exclude obvious cave material and submitted for Total Organic Carbon analysis.

Total Organic Carbon (TOC) Analysis

The total organic carbon content of a rock is a measure of its organic richness; thus, TOC measurements provide a highly reliable and economical screening technique to determine which samples merit detailed analysis. The handpicked samples are dried, pulverized, and then treated with hot and cold hydrochloric acid to liberate carbonates. After acid treatment, the final determination is made by combustion of the sample in a LECO WR-12 Carbon Analyzer. Blanks, standards, and duplicates are routinely run for quality control purposes.

C_{15+} Extractable Organic Matter (EOM) and Hydrocarbon Determinations

The EOM content and composition indicates the extent of hydrocarbon generation, the source type, and the possible presence of nonindigenous hydrocarbons. The fractions obtained from the hydrocarbon determination can be submitted for further analysis, for example, carbon isotopic work, gas chromatography, and infrared analysis, etc.

Handpicked samples are ground and then extracted with benzene-methanol in thimbles using Soxhlet extractions. An aliquot of the extract is then stabilized by forced evaporation of the solvent at 40° C. in order to determine the C_{15+} EOM content. The stabilized extract residue is then separated by silica gel column chromatography into the following fractions: saturated hydrocarbons, aromatic hydrocarbons, and asphaltic (nonhydrocarbon) compounds.

Gas Chromatographic Analysis of the C_{10+} Saturated Hydrocarbons: Carbon Preference Index (CPI)

The molecular composition of the C_{10+} saturated hydrocarbons provides insight into original organic matter quality and type, the extent of thermal maturation, and the presence of nonindigenous hydrocarbons.

An aliquot of the extractable organic matter in benzene is subjected to a concentration step using isooctane in order to remove the benzene solvent without loss of the C_{10}-C_{20} (low boiling fraction) saturated hydrocarbons. The concentrate is then separated by silica gel column chromatography using a packed methyl silicone column. This technique whereby the C_{10+} saturated hydrocarbon fraction is analyzed by gas chromatography provides information that is not obtained by simply analyzing the C_{15+} saturated hydrocarbon fraction obtained from the column chromatography separation of the stabilized extractable organic matter. It provides insight into the original organic matter type, the thermal maturity, and evidence of certain types of contamination when present. The Carbon

Preference Index (C.P.I.) is calculated from this analysis if a reliable calculation can be made. If necessary, a molecular sieve separation is carried out to isolate the normal paraffins prior to the C.P.I. calculation. In either case, the Carbon Preference Index is calculated using the following formula:

$$CPI = \frac{1}{2}\left[\frac{\sum_{25}^{33} \text{Odd-Carbon Paraffins}}{\sum_{26}^{34} \text{Even-Carbon Paraffins}} + \frac{\sum_{25}^{33} \text{Odd-Carbon Paraffins}}{\sum_{24}^{32} \text{Even-Carbon Paraffins}}\right]$$

These C.P.I. values provide valuable information for characterizing the maturity of the hydrocarbons being analyzed. The chromatograms (which can also be used as visual fingerprints) are reproduced and presented in this report.

Visual Kerogen Analysis

Visual examination of the kerogen provides another means of characterizing the organic matter type and provides a useful cross-correlation with elemental analysis. In this report kerogen is divided into four main groups; alginite, exinite, vitrinite and other.

The color of spore and pollen grains present can be used as an estimate of the level of thermal maturation. The technique is, however, quite crude and often unreliable because of such problems as those encountered with natural staining of the spores and pollen and with weathering.

For the visual kerogen analysis, standard palynological techniques are used to separate the kerogen from the rock matrix. The organic matter is then mounted on a glass slide and examined under a high power microscope.

Vitrinite Reflectance Measurements

Vitrinite reflectance provides a method for determining the thermal alteration history of a sediment. Vitrinite particles can be found dispersed in most sedimentary rock samples, and since the reflectivity of these vitrinite macerals increases regularly with increased thermal alteration, then the reflectance measurements can be used to determine the degree of thermal maturation of the sediment being examined.

The kerogen is isolated from the rock matrix, and a slide is prepared by imbedding this kerogen concentrate in a bioplastic. After hardening, the mount is polished, and the reflectance of individual vitrinite particles can be measured.

Vitrinite reflectance measurements shown on histograms are for particles we believe to be indigenous to the samples. Limited amounts of vitrinite and caving caused problems in parts of the well, particularly in the section from 5590-7500 feet. Because of these problems, we were unable to obtain 125 reliable readings. The presence of recycled vitrinite, particularly in the zones above 5290 feet and below 7690 feet, was also a problem.

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DIPMETER

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CALCULATION

LISTING

EXPLORATION SERVICES, INC

ECS-DCS-CAL-78-164 #1

WILDCAT

FEDERAL , CALIFORNIA

RUN NO. ONE JOB NO. 2560

Well File

CORRELATION LENGTH 4 FT.

STEP LENGTH 2 FT.

SEARCH ANGLE 30 DEG. X2

3-NOV-78

USGS

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*--------SCHLUMBERGER-------*
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CLUSTER

CALCULATION

LISTING

EXPLORATION SERVICES, INC

ECS-OCS-CAL-78-164 #1

WILDCAT

FEDERAL , CALIFORNIA

RUN NO. ONE JOB NO. 2560

CORRELATION LENGTH 4 FT.

STEP LENGTH 2 FT.

SEARCH ANGLE 30 DEG. X2

3-NOV-78

USGS

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
3006.0	2.8	232	1.1	89	17.8	17.3	4
3008.0	0.6	235	1.0	89	17.8	17.5	4
3010.0	0.8	212	1.0	87	17.9	17.5	4
3012.0	3.3	170	1.1	85	17.6	17.3	4
3014.0	8.9	140	1.2	85	17.0	17.0	2
3016.0	0.7	357	1.2	85	17.1	16.8	4
3018.0	1.1	148	1.2	84	17.2	16.9	2
3020.0	3.2	254	1.1	82	17.1	16.9	4
3022.0	2.1	214	1.0	80	16.7	16.8	4
3024.0			1.0	76	16.2	16.5	
3026.0			1.0	73	16.0	16.2	
3028.0			0.9	72	15.7	15.8	
3030.0	4.3	183	1.0	71	15.7	15.5	4
3032.0	3.6	219	0.9	72	16.1	15.5	4
3034.0	2.4	211	0.9	71	16.3	15.5	4
3036.0	4.5	203	0.9	70	16.3	15.4	2
3038.0	3.5	204	0.9	70	16.3	15.2	4
3040.0			1.0	72	16.2	15.0	
3042.0	15.4	222	1.0	72	16.0	15.0	2
3044.0	5.3	238	1.0	73	15.8	14.8	4
3046.0	6.5	224	1.0	74	15.7	14.7	2
3048.0	7.5	236	1.0	75	16.2	15.0	2
3050.0	16.9	263	1.1	75	16.2	15.2	2
3052.0	6.1	224	1.2	76	16.5	15.4	2
3054.0			1.1	77	16.9	15.5	
3056.0	14.9	259	1.0	75	16.8	15.3	4
3058.0	13.2	253	0.9	71	16.6	15.2	2
3060.0	10.6	243	0.8	65	16.1	15.2	2
3062.0	5.7	227	0.7	60	15.8	15.0	4
3064.0	4.5	194	0.8	55	15.6	15.0	4
3066.0	7.1	216	0.8	53	15.6	15.1	4
3068.0	5.9	251	0.7	52	15.6	15.3	4
3070.0	4.5	232	0.7	52	16.2	15.7	4
3072.0	5.2	205	0.7	52	16.2	15.4	4
3074.0	5.9	223	0.7	51	15.2	14.7	4
3076.0	7.1	223	0.7	51	15.0	14.5	4
3078.0	4.5	205	0.6	51	14.9	14.6	4
3080.0	3.5	197	0.6	52	15.1	14.7	4
3082.0			0.7	53	15.5	14.8	
3084.0	10.0	219	0.8	50	15.6	14.8	2
3086.0			0.7	47	15.4	14.8	
3088.0	3.3	171	0.6	45	15.1	14.6	2
3090.0	4.3	315	0.6	45	14.9	14.5	4
3092.0	5.0	316	0.6	43	14.9	14.5	2
3094.0	5.5	192	0.6	42	15.0	14.4	2

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
3096.0	2.3	190	0.6	44	15.2	14.5	4
3098.0	1.2	181	0.6	43	15.5	14.6	4
3100.0	6.2	81	0.6	40	15.8	14.7	2
3102.0	3.3	228	0.6	39	16.0	14.8	4
3104.0	2.2	239	0.5	37	15.7	14.7	4
3106.0	3.3	241	0.4	35	15.3	14.6	4
3108.0			0.4	33	15.4	14.7	
3110.0			0.5	31	15.8	15.0	
3112.0			0.5	28	16.3	15.4	
3114.0	2.7	56	0.6	24	16.4	15.5	2
3116.0	2.4	63	0.6	21	16.0	15.1	2
3118.0	1.0	322	0.6	19	15.9	14.9	4
3120.0	4.9	239	0.6	19	15.8	14.7	4
3122.0	4.3	250	0.6	20	15.5	14.5	1
3124.0	6.3	137	0.6	22	15.3	14.5	1
3126.0			0.6	22	15.3	14.5	
3128.0			0.6	21	15.2	14.5	
3130.0	7.1	250	0.6	18	15.2	14.7	1
3132.0	12.9	269	0.7	14	15.3	14.7	3
3134.0	15.9	276	0.8	10	15.1	14.4	3
3136.0			0.8	7	14.9	14.3	
3138.0			0.8	6	15.2	14.4	
3140.0	11.3	261	0.8	6	15.5	14.5	1
3142.0	12.6	251	0.7	7	15.5	14.7	1
3144.0	12.5	260	0.7	6	15.5	15.1	1
3146.0	16.3	247	0.8	[illegible]	16.1	15.4	1
3148.0			0.8	[illegible]	16.4	15.6	
3150.0			0.8	35[illegible]	15.8	15.3	
3152.0			0.8	356	15.1	14.9	
3154.0			0.8	352	14.8	14.8	
3156.0			0.8	352	15.2	15.0	
3158.0			0.8	353	15.4	15.2	
3160.0			0.9	353	14.9	15.3	
3162.0			0.9	352	14.7	15.3	
3164.0	3.8	31	1.0	350	14.9	15.2	2
3166.0	11.1	204	1.0	346	14.8	15.2	2
3168.0	6.7	211	0.9	341	14.9	15.3	4
3170.0	4.1	223	0.9	339	14.9	15.3	4
3172.0	3.2	215	1.0	340	15.2	15.4	4
3174.0	2.5	219	1.0	341	16.1	15.9	4
3176.0	3.6	226	1.0	341	16.5	16.3	2
3178.0			1.0	339	16.0	15.9	
3180.0	2.4	158	1.0	336	15.2	15.4	2
3182.0	2.7	180	1.0	333	15.0	15.4	4
3184.0	11.0	162	1.0	331	15.0	15.4	4

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
3186.0	11.4	180	1.1	331	15.3	15.6	4
3188.0	15.2	185	1.1	332	15.5	15.7	2
3190.0	11.6	197	1.1	333	15.7	15.7	4
3192.0	8.6	193	1.0	334	15.7	15.7	4
3194.0	4.2	192	1.1	334	15.6	15.7	4
3196.0	2.9	214	1.2	333	15.5	15.6	4
3198.0	2.6	215	1.2	333	15.2	15.6	4
3200.0	5.6	169	1.2	332	15.1	15.6	4
3202.0	5.6	189	1.2	331	15.2	15.7	4
3204.0	4.3	215	1.2	330	15.3	15.7	4
3206.0	4.9	219	1.1	328	15.2	15.7	4
3208.0	8.3	198	1.0	328	15.2	15.7	4
3210.0	5.1	156	1.1	326	15.4	15.8	4
3212.0	3.4	115	1.1	325	15.6	16.0	4
3214.0	4.3	141	1.1	326	15.7	16.5	4
3216.0	8.6	164	1.1	328	15.8	16.3	4
3218.0	5.0	259	1.1	327	15.8	15.9	2
3220.0			1.0	323	15.6	15.9	
3222.0	3.5	214	1.0	323	15.5	15.8	4
3224.0	7.3	198	1.0	323	15.5	15.8	4
3226.0	5.3	167	1.0	319	15.7	15.9	4
3228.0	9.2	209	1.1	316	15.8	16.0	4
3230.0	9.3	208	1.2	317	16.0	16.1	1
3232.0	9.6	165	1.2	318	16.4	16.4	4
3234.0			1.2	320	16.9	16.7	
3236.0			1.2	322	17.5	17.3	
3238.0			1.2	320	17.6	17.5	
3240.0	9.5	219	1.2	314	16.9	16.8	2
3242.0	6.1	193	1.2	315	16.5	16.5	4
3244.0	7.6	206	1.2	317	16.6	16.4	4
3246.0	9.0	219	1.2	315	16.6	16.4	4
3248.0	7.5	205	1.2	315	16.3	16.5	4
3250.0	7.4	179	1.3	317	16.4	16.9	2
3252.0	9.7	191	1.3	315	16.7	17.4	2
3254.0	6.5	208	1.2	314	16.7	17.4	4
3256.0	7.4	151	1.2	314	16.7	17.2	2
3258.0	5.4	231	1.2	313	17.0	17.4	4
3260.0	4.1	215	1.3	313	17.6	17.7	4
3262.0	3.6	200	1.4	314	17.9	17.9	3
3264.0	3.8	186	1.3	315	18.0	18.0	1
3266.0	4.2	325	1.2	314	18.0	18.0	1
3268.0	4.5	207	1.2	312	18.0	18.0	3
3270.0	8.9	216	1.2	312	18.0	18.0	1
3272.0			1.2	310	18.0	18.0	
3274.0			1.2	306	18.0	18.0	

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
3276.0	3.8	171	1.2	303	18.0	18.0	3
3278.0	2.4	249	1.2	304	18.0	18.0	3
3280.0			1.2	307	18.0	18.0	
3282.0			1.2	309	18.0	18.0	
3284.0			1.3	308	18.0	18.0	
3286.0	6.8	255	1.3	305	18.0	18.0	1
3288.0	4.4	223	1.4	303	18.0	18.0	3
3290.0	4.1	261	1.4	302	18.0	18.0	3
3292.0			1.3	300	18.0	18.0	
3294.0			1.2	300	18.0	18.0	
3296.0			1.2	301	18.0	18.0	
3298.0			1.3	305	18.0	18.0	
3300.0	5.5	141	1.4	308	18.0	18.0	1
3302.0	5.7	147	1.4	306	18.0	18.0	4
3304.0	1.4	311	1.4	304	18.0	18.0	4
3306.0	2.4	234	1.4	305	18.0	18.0	4
3308.0	4.8	201	1.4	307	18.0	18.0	4
3310.0	4.4	179	1.4	305	18.0	18.0	4
3312.0	1.3	58	1.4	303	18.0	18.0	4
3314.0	4.2	223	1.4	302	18.0	18.0	4
3316.0	2.4	307	1.4	302	18.0	18.0	4
3318.0	1.4	295	1.4	301	18.0	18.0	4
3320.0	2.4	51	1.4	301	18.0	18.0	4
3322.0	9.5	116	1.4	301	18.0	18.0	2
3324.0	6.0	207	1.4	301	18.0	18.0	4
3326.0	5.8	225	1.4	298	18.0	18.0	4
3328.0	6.9	226	1.4	294	18.0	18.0	4
3330.0	10.3	216	1.4	292	18.0	18.0	4
3332.0	8.4	180	1.4	291	18.0	18.0	4
3334.0	8.7	178	1.4	289	18.0	18.0	2
3336.0			1.4	[illegible]	18.0	18.0	
3338.0	10.2	185	1.5	[illegible]	18.0	18.0	4
3340.0	5.2	213	1.6	297	18.0	18.0	4
3342.0	0.6	287	1.6	295	18.0	18.0	4
3344.0	1.5	354	1.6	294	18.0	18.0	4
3346.0	2.6	204	1.6	289	18.0	18.0	4
3348.0	8.2	202	1.6	286	18.0	18.0	4
3350.0	5.6	205	1.6	284	18.0	18.0	4
3352.0	2.7	219	1.6	283	18.0	18.0	4
3354.0	4.9	242	1.6	284	18.0	18.0	4
3356.0	2.3	249	1.7	286	18.0	18.0	4
3358.0	5.1	238	1.9	287	18.0	18.0	4
3360.0	1.5	65	2.0	287	18.0	18.0	4
3362.0	8.6	30	2.0	287	18.0	18.0	4
3364.0	1.8	144	2.0	287	18.0	18.0	4

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
3366.0	1.5	156	2.0	288	17.8	17.7	4
3368.0	2.5	183	2.0	288	17.4	17.3	4
3370.0	4.2	193	2.0	288	17.1	17.1	4
3372.0	4.9	226	2.0	288	17.0	17.3	4
3374.0	5.7	212	2.0	288	17.5	17.8	4
3376.0	2.0	140	2.0	287	17.9	18.0	2
3378.0			2.0	287	18.0	18.0	
3380.0			2.0	287	18.0	18.0	
3382.0	6.9	160	2.0	287	18.0	18.0	1
3384.0	2.1	94	2.0	286	18.0	18.0	1
3386.0			2.0	285	18.0	18.0	
3388.0			2.0	284	18.0	18.0	
3390.0			2.0	284	18.0	18.0	
3392.0			2.0	286	18.0	18.0	
3394.0			2.1	287	18.0	18.0	
3396.0	4.7	201	2.2	288	17.7	18.0	3
3398.0	4.6	204	2.2	288	17.4	18.0	3
3400.0	1.7	130	2.2	286	17.3	18.0	1
3402.0	8.0	262	2.3	284	17.3	18.0	1
3404.0	5.1	213	2.4	283	17.3	18.0	1
3406.0	5.0	195	2.4	284	17.3	18.0	3
3408.0	4.8	195	2.4	284	17.4	18.0	3
3410.0	5.6	135	2.4	283	17.6	18.0	1
3412.0	6.0	147	2.4	282	17.9	18.0	1
3414.0			[illegible]	283	18.0	18.0	
3416.0			[illegible]	284	18.0	18.0	
3418.0			2.[illegible]	283	18.0	18.0	
3420.0			2.5	28[illegible]	18.0	18.0	
3422.0	9.2	176	2.5	[illegible]	18.0	18.0	4
3424.0	3.5	159	2.4	282	18.0	18.0	4
3426.0			2.4	284	18.0	18.0	
3428.0			2.4	286	18.0	18.0	
3430.0			2.4	285	17.6	17.7	
3432.0			2.4	283	17.0	17.4	
3434.0	3.0	188	2.3	283	17.1	17.5	4
3436.0	3.6	182	2.2	284	17.7	17.8	2
3438.0	7.7	222	2.2	284	18.0	17.9	4
3440.0	5.9	227	2.2	283	18.0	18.0	4
3442.0	2.2	164	2.3	281	18.0	18.0	4
3444.0	3.1	141	2.3	281	18.0	18.0	2
3446.0			2.2	281	18.0	18.0	
3448.0	6.3	143	2.1	281	18.0	18.0	4
3450.0	6.0	145	2.0	281	18.0	18.0	4
3452.0	8.2	114	2.0	284	18.0	18.0	2
3454.0			2.2	291	18.0	18.0	

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
3456.0	4.4	259	2.2	294	17.9	16.6	2
3458.0			2.0	293	17.0	15.5	
3460.0			2.0	291	15.7	15.3	
3462.0			2.0	286	15.3	15.0	
3464.0	4.5	223	2.0	280	16.5	16.0	2
3466.0	1.5	89	2.0	278	17.8	17.5	4
3468.0	1.4	234	2.0	278	18.0	18.0	4
3470.0	2.4	167	2.0	276	18.0	18.0	4
3472.0	1.4	110	2.0	273	18.0	18.0	2
3474.0	1.2	69	1.9	270	18.0	18.0	4
3476.0	2.7	36	1.9	268	18.0	18.0	4
3478.0			2.0	268	18.0	18.0	
3480.0			2.0	270	18.0	18.0	
3482.0			2.0	271	18.0	18.0	
3484.0	4.3	149	2.0	272	18.0	18.0	4
3486.0	3.2	159	2.0	273	18.0	18.0	4
3488.0	4.2	251	2.0	273	17.9	17.7	4
3490.0	5.4	267	2.0	275	17.9	17.7	4
3492.0			2.0	276	18.0	18.0	
3494.0			2.0	278	18.0	18.0	
3496.0	5.3	252	2.0	278	18.0	18.0	2
3498.0	4.5	257	2.0	274	18.0	18.0	4
3500.0	7.1	207	2.0	270	18.0	18.0	4
3502.0	7.7	216	2.0	270	18.0	18.0	1
3504.0			2.0	274	18.0	18.0	
3506.0			2.0	283	16.1	17.4	
3508.0			1.9	268	14.0	15.2	
3510.0			1.8	[illegible]	13.1	14.0	
3512.0	4.5	201	1.8	[illegible]	13.0	15.2	1
3514.0	9.8	217	1.8	269	14.2	15.8	1
3516.0	9.7	205	1.8	26[illegible]	15.0	15.8	1
3518.0			1.9	267	14.9	15.7	
3520.0	15.6	216	1.9	272	14.5	14.6	1
3522.0			1.9	275	13.5	13.4	
3524.0	0.8	234	1.9	273	12.6	12.9	4
3526.0	2.9	253	1.9	273	12.5	13.3	4
3528.0	6.0	240	1.9	272	12.5	13.2	2
3530.0	5.6	188	1.8	272	12.6	12.5	4
3532.0	5.4	158	1.9	274	12.9	12.6	2
3534.0	10.1	174	2.0	276	13.3	12.7	2
3536.0			2.0	278	13.0	12.6	
3538.0			2.0	279	12.6	12.5	
3540.0			2.0	278	12.4	12.1	
3542.0	20.7	195	2.0	277	12.5	12.0	1
3544.0	16.0	203	2.0	277	13.1	12.0	1

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
3546.0			2.0	276	13.5	12.1	
3548.0			2.0	270	13.3	12.0	
3550.0			2.0	262	13.2	12.0	
3552.0			1.9	262	12.9	12.0	
3554.0	16.5	211	1.9	264	12.5	12.1	3
3556.0	17.6	208	1.9	264	12.5	12.3	3
3558.0			1.9	264	12.4	12.4	
3560.0			2.0	265	12.3	12.3	
3562.0			2.0	265	12.3	12.1	
3564.0			2.0	264	12.2	12.0	
3566.0			2.0	264	12.1	11.9	
3568.0			2.0	263	12.3	12.0	
3570.0			2.0	261	12.6	12.0	
3572.0			2.1	259	12.8	12.1	
3574.0	7.9	130	2.1	256	13.0	12.3	3
3576.0	4.0	88	2.1	255	12.8	12.3	3
3578.0	3.7	52	2.1	254	12.7	12.5	3
3580.0	5.3	9	2.1	253	12.6	12.5	1
3582.0			2.0	251	12.4	12.4	
3584.0			2.0	250	12.4	12.8	
3586.0	15.7	246	2.0	253	12.8	12.9	1
3588.0	14.6	235	2.0	256	13.1	12.6	1
3590.0	18.0	214	2.0	256	12.8	12.5	1
3592.0	14.6	316	2.0	257	12.5	12.2	1
3594.0	10.3	304	2.1	258	12.3	11.9	1
3596.0	11.4	302	2.1	259	12.1	11.8	3
3598.0	14.0	317	2.1	260	12.2	11.7	1
3600.0	14.9	224	2.1	260	12.3	12.2	1
3602.0	18.3	274	2.0	259	12.4	12.6	1
3604.0			2.1	256	12.5	12.4	
3606.0			2.3	254	12.6	12.1	
3608.0			2.3	254	12.6	12.1	
3610.0			2.2	255	12.6	12.1	
3612.0			2.1	256	12.4	11.9	
3614.0	22.8	291	2.1	256	12.4	11.7	1
3616.0	16.4	267	2.1	257	12.4	11.7	1
3618.0			2.1	258	12.2	11.7	
3620.0			2.1	257	12.5	11.8	
3622.0			2.2	258	12.8	11.9	
3624.0			2.1	258	12.6	11.9	
3626.0			2.0	257	12.3	12.0	
3628.0			2.0	257	12.2	12.0	
3630.0			2.0	256	12.2	11.8	
3632.0			2.0	255	12.3	11.8	
3634.0			2.0	256	12.4	12.0	

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
3636.0			2.0	257	12.6	12.3	
3638.0			2.0	257	12.9	12.6	
3640.0			2.2	255	13.2	12.9	
3642.0			2.2	255	13.1	12.9	
3644.0			2.1	255	12.7	12.2	
3646.0			2.0	256	12.3	11.8	
3648.0			2.0	255	12.2	11.8	
3650.0			2.0	255	12.3	11.9	
3652.0			2.0	256	12.3	12.0	
3654.0			2.0	257	12.6	12.2	
3656.0			2.0	256	13.0	12.4	
3658.0			2.0	255	13.1	12.3	
3660.0			2.0	255	12.7	12.2	
3662.0			2.0	254	12.4	12.3	
3664.0	13.0	179	2.0	254	12.4	12.4	1
3666.0	17.1	187	2.0	256	12.5	12.3	1
3668.0			2.0	256	12.6	12.2	
3670.0	40.3	60	2.0	256	12.7	12.2	3
3672.0	47.7	61	2.0	256	12.7	12.1	1
3674.0			2.0	256	12.7	12.2	
3676.0			2.0	256	12.6	12.2	
3678.0			2.0	256	12.6	12.3	
3680.0	11.1	174	2.0	258	13.0	12.5	1
3682.0			2.0	261	13.4	12.6	
3684.0			2.0	264	13.5	12.5	
3686.0			2.0	265	13.3	12.4	
3688.0			1.9	267	13.2	12.5	
3690.0			1.9	268	13.2	12.6	
3692.0			1.9	266	12.8	12.7	
3694.0			1.9	264	12.5	12.5	
3696.0			1.8	263	12.5	12.4	
3698.0			1.8	263	12.2	12.4	
3700.0			1.9	264	12.2	12.4	
3702.0	5.3	139	1.9	264	12.2	12.3	3
3704.0	9.1	125	2.0	263	12.3	12.6	3
3706.0			2.0	262	12.2	12.6	
3708.0			2.0	263	11.9	12.1	
3710.0	1.1	266	2.0	263	11.8	11.9	1
3712.0			2.0	263	11.9	12.0	
3714.0	10.8	118	2.0	263	12.2	12.1	1
3716.0	1.6	9	2.0	262	12.3	12.3	1
3718.0	6.6	303	2.0	261	12.3	12.3	1
3720.0			2.0	261	12.0	12.1	
3722.0	8.2	192	2.0	261	11.9	12.1	3
3724.0	4.6	214	1.9	260	12.1	12.2	3

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Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
3726.0	5.1	188	1.9	257	12.2	12.4	3
3728.0			1.9	257	12.3	12.4	
3730.0	8.5	183	1.9	257	12.2	12.4	1
3732.0	7.3	167	2.0	257	12.0	12.2	1
3734.0			1.9	257	12.0	12.2	
3736.0			1.9	259	12.2	12.3	
3738.0	4.9	194	2.0	260	12.2	12.2	1
3740.0	5.9	202	2.0	261	12.1	12.2	3
3742.0	7.9	211	2.0	262	12.0	12.2	4
3744.0	5.9	224	2.0	264	12.1	12.2	4
3746.0	5.6	234	1.9	264	12.2	12.3	2
3748.0	7.1	235	1.9	263	12.3	12.4	2
3750.0	21.7	180	1.9	264	12.2	12.2	2
3752.0			1.9	263	12.1	12.1	
3754.0	14.7	170	1.9	261	12.2	12.2	4
3756.0	8.4	180	1.8	261	12.5	12.4	4
3758.0	9.1	183	1.7	260	12.7	12.6	4
3760.0	7.3	192	1.6	258	12.6	12.7	2
3762.0	8.8	213	1.6	257	12.6	12.7	4
3764.0	6.3	192	1.7	257	12.7	12.6	2
3766.0			1.8	257	12.8	12.6	
3768.0			1.9	258	12.5	12.5	
3770.0	5.0	254	1.9	260	12.2	12.3	4
3772.0	4.4	243	1.9	262	12.0	12.2	4
3774.0	1.2	203	1.9	264	12.1	12.3	4
3776.0	6.7	199	2.0	264	12.3	12.6	4
3778.0	6.2	224	2.0	263	12.4	12.7	2
3780.0	4.6	261	2.0	263	12.5	12.5	2
3782.0	3.9	222	2.0	261	12.4	12.4	4
3784.0	2.0	312	1.9	261	12.4	12.6	3
3786.0	2.0	134	1.9	261	12.6	12.8	1
3788.0			1.8	262	12.7	12.8	
3790.0			1.7	262	12.5	12.6	
3792.0	1.6	88	1.8	262	12.3	12.4	3
3794.0	1.9	78	1.7	262	12.5	12.4	3
3796.0	14.1	247	1.7	263	12.4	12.5	3
3798.0	0.9	230	1.9	263	12.3	12.3	3
3800.0	10.8	240	2.0	264	12.2	12.3	1
3802.0	6.5	174	1.9	265	12.1	12.3	1
3804.0	2.5	14	1.8	267	12.3	12.5	3
3806.0	2.3	348	1.9	267	12.4	12.6	3
3808.0	3.7	352	2.0	266	12.6	12.7	3
3810.0	9.2	348	1.9	263	12.5	12.6	1
3812.0			1.9	262	12.1	12.3	
3814.0			1.9	261	11.8	12.2	

Schlumberger

11/1/78 Attempt to set 9 5/8" seal assy. Had trouble getting assy. through BOPE bags.
11/2/78 Attempt to set 9 5/8" seal assy. Could not set assy.
11/3/78 Attempt to squeeze annulus on 13 3/8" & 9 5/8" csgs. Attempt to fish bottom of seal assy. No good.
11/4/78 Attempt to fish 9 5/8" seal assy.
11/5/78 Attempt to fish 9 5/8" seal assy.
11/6/78 Test stack. POOH to log, rig & run Schl. logs. CBL.
11/7/78 Logging CBL log. RIH. Drill 20' new hole, leak off, test. Drill to 5515'. POOH.
11/8/78 Drill 8½" hole f/5515' to 5840'.
11/9/78 Drill 8½" hole f/5840'.
11/10/78 Drill 8½" hole.
11/11/78 To 6612'. RIH & set wear bushing.
11/12/78 Drill 8½" hole f/6612' to 6810'. RIH w/ Baker bridge plug & test BOPE stack, No good.
11/13/78 Drill 8½" hole f/6810' to 7061'.
11/14/78 Drill 8½" hole f/7061' to 7066'. Lost 3 cones off bit #12 SEC S84F. Attempt to run boll weevil test tool. Could not get below upper annular, RIH w/ Baker bridge plug. Set plug, and tested BOPE stack.
11/15/78 RIH w/reverse circ. junk basket. Make 2.5' hole. POOH w/junk basket, recovered 2 small pieces junk. RIH w/bit #13 HCS SVH. Drill 8½" hole f/7068' to 7138'.
11/16/78 Drill 8½" hole f/7831' to 7347'/
11/17/78 Drill 8½" hole f/7347' to 7460'. Trip, survey - 7415' 3°.
11/18/78 Drill 8½" hole f/7460' to 7605', bit #16.
11/19/78 Drill 8½" hole f/7605' to 7920'.
11/20/78 Drill 8½" hole f/7920' to 8020'. RIH w/Baker bridge plug.
11/21/78 Test BOPE stack, choke & kill lines - 200 low, 2,000 high. Drill 8½" hole f/8020' to 8110'.
11/22/78 Drill 8½" hole f/8110' to 8373' w/bit #17.
11/23/78 Drill 8½" hole f/8373' to 8618' w/bit #17.
11/24/78 Drill 8½" hole f/8618' to 8756' w/bit #17, and f/8756' to 8828' w/bit #18.
11/25/78 Drill 8½" hole f/8828' to 9147' w/bit #18.
11/26/78 Drill 8½" hole f/ 9147' to 9393' w/bit #18.
11/27/78 Drill 8½" hole f/9393' to 9529' w/bit #18. POOH.
11/28/78 RIH w/Baker bridge plug, test BOPE stack, choke & kill lines - low 200 PSI, high 2,000 PSI. RIH w/core barrel. Cut core #1 f/9529' to 9549'. POOH. 100% recvy. on core. Run Schl. logs.
11/29/78 Run Schl. logs.
11/30/78 RIH w/bit #20 HTC J8. Reamed f/9337' to 9549'. Drill 8½" hole f/9549' to 9685' w/bit #20.
12/1/78 Trip to chg. bits, drill 8½" hole f/9685' to 9826' w/bit #21 HTC J33.
12/2/78 Drill 8½" hole f/9826' to 10,030' w/bit #21.
12/3/78 Drill 8½" hole f/10,030' to 10,035'. Stuck pipe, work free, pump up 3 singles, circ. condition hole. POOH. Chg. bits, RIH. Ream f/9945' to 10,035', slug hole w/gel pills,hole very sticky. Drill 8½" hole f/10,035' to 10,072' w/bit #22.
12/4/78 Drill 8½" hole f/10,072' to 10,245' w/bit #22.
12/5/78 Drill 8½" hole f/10,245' to 10,403' w/bit #22. POOH. Did not circ. out hole, rough weather.
12/6/78 WOW 15½ hrs. RIH w/Baker bridge plug, set and test BOPE stack & choke & kill lines to low 200 PSI, high 2,000 PSI.

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
3906.0	4.8	222	1.8	254	12.0	12.1	4
3908.0	3.2	225	1.9	252	12.2	12.3	4
3910.0			2.0	251	12.3	12.4	
3912.0	4.5	225	2.0	252	12.3	12.4	4
3914.0	8.1	220	1.9	254	12.4	12.5	4
3916.0	0.3	114	1.9	254	12.5	12.5	4
3918.0	3.5	49	2.0	255	12.7	12.3	2
3920.0	7.1	42	2.0	257	12.7	12.2	2
3922.0	5.4	159	2.0	256	12.7	12.3	2
3924.0	10.1	237	2.0	255	12.8	12.6	1
3926.0	11.9	196	2.0	254	13.0	12.9	1
3928.0	5.3	190	2.0	254	13.0	13.0	3
3930.0	11.9	158	2.0	254	12.9	12.9	1
3932.0	5.9	264	2.0	254	12.8	12.6	1
3934.0	7.2	175	2.0	254	12.8	12.5	1
3936.0			2.0	254	12.8	12.5	
3938.0	3.5	231	2.0	255	12.9	12.6	3
3940.0	3.1	169	2.0	255	12.9	12.6	1
3942.0	2.5	200	2.0	254	13.1	12.7	3
3944.0			2.0	256	13.1	12.8	
3946.0			2.0	255	12.8	12.8	
3948.0			2.0	253	12.5	12.7	
3950.0			2.0	251	12.5	12.8	
3952.0			1.9	252	12.6	12.7	
3954.0			1.9	251	12.6	12.6	
3956.0			1.9	251	12.6	12.6	
3958.0			2.0	251	12.7	12.6	
3960.0			2.0	250	12.9	12.9	
3962.0			2.0	249	13.0	13.1	
3964.0			1.9	246	13.2	13.0	
3966.0			1.9	246	13.4	12.9	
3968.0			1.9	246	13.2	12.9	
3970.0			2.0	246	13.0	12.7	
3972.0	7.8	231	2.0	247	13.0	12.7	1
3974.0	1.2	112	2.0	247	12.9	12.8	3
3976.0	2.0	104	2.0	248	12.9	12.9	1
3978.0	2.6	75	2.0	249	12.9	12.8	1
3980.0	2.2	77	2.0	250	12.9	12.8	1
3982.0			2.0	250	12.9	12.8	
3984.0			2.0	249	12.9	12.8	
3986.0			2.0	250	12.8	12.5	
3988.0			2.1	250	12.8	12.4	
3990.0			2.1	250	12.7	12.5	
3992.0			2.0	249	12.6	12.5	
3994.0			2.0	247	12.6	12.4	

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
3996.0			2.0	246	12.6	12.4	
3998.0			2.0	246	12.6	12.4	
4000.0			2.0	245	12.5	12.6	
4002.0			2.0	244	12.4	12.5	
4004.0	2.7	89	2.0	243	12.4	12.4	1
4006.0	5.1	181	2.0	243	12.4	12.6	1
4008.0	2.2	62	2.0	242	12.5	12.8	1
4010.0			2.0	244	12.7	12.9	
4012.0	1.9	36	2.0	244	12.7	13.0	1
4014.0			2.0	243	12.7	13.1	
4016.0	2.5	23	2.0	243	12.8	12.8	1
4018.0	1.6	23	2.0	245	12.9	12.7	1
4020.0	2.5	86	2.0	247	12.9	12.8	1
4022.0	5.6	304	2.0	247	12.8	12.7	1
4024.0	2.2	75	2.0	246	12.8	12.6	3
4026.0			2.0	246	12.7	12.6	
4028.0			2.0	245	12.8	12.6	
4030.0			2.0	243	12.9	12.5	
4032.0	2.4	69	2.0	243	12.8	12.5	1
4034.0			2.0	243	12.8	12.6	
4036.0	8.0	182	2.0	243	12.8	12.6	1
4038.0	7.4	168	2.0	243	12.7	12.6	3
4040.0	7.1	176	2.0	243	12.7	12.6	3
4042.0	1.7	120	2.0	243	12.8	12.5	3
4044.0			2.0	243	12.8	12.3	
4046.0	7.6	176	2.0	241	12.5	12.2	1
4048.0	5.5	242	2.0	238	12.2	12.1	3
4050.0	5.3	254	2.0	238	12.4	12.1	3
4052.0			2.0	240	12.5	12.1	
4054.0			2.0	242	12.4	12.1	
4056.0			2.0	240	12.4	12.1	
4058.0	10.4	242	2.0	241	12.3	12.0	1
4060.0			2.0	238	12.4	12.2	
4062.0	2.4	185	2.0	237	12.4	12.3	3
4064.0	2.7	175	2.0	238	12.3	12.3	3
4066.0	2.2	62	2.0	240	12.4	12.4	1
4068.0	0.7	115	2.0	241	12.6	12.4	1
4070.0	2.2	77	2.0	243	12.6	12.4	3
4072.0	1.9	55	1.9	243	12.6	12.4	3
4074.0	2.1	59	1.8	243	12.5	12.3	1
4076.0			1.8	243	12.5	12.3	
4078.0	14.5	84	1.9	243	12.5	12.3	1
4080.0	20.9	93	1.9	243	12.5	12.3	3
4082.0	2.5	1	1.9	244	12.5	12.4	1
4084.0	8.3	279	1.8	243	12.4	12.3	3

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
4086.0	7.6	205	1.8	244	12.3	12.0	1
4088.0	13.0	183	1.9	245	12.4	12.1	3
4090.0	17.3	182	1.9	245	12.7	12.3	3
4092.0	17.1	304	1.8	243	12.7	12.4	1
4094.0	11.9	246	1.8	242	12.5	12.4	1
4096.0	14.9	196	1.8	243	12.4	12.4	1
4098.0			1.8	246	12.4	12.4	
4100.0	10.8	166	1.8	246	12.4	12.4	1
4102.0	5.9	177	1.8	244	12.5	12.5	1
4104.0	18.3	206	1.8	243	12.9	12.8	3
4106.0	3.3	38	1.8	245	13.2	13.1	3
4108.0	3.2	41	1.9	246	13.1	13.0	3
4110.0	0.4	19	1.9	246	13.1	13.0	1
4112.0	0.9	43	2.0	245	13.1	13.0	1
4114.0	1.7	111	2.0	245	13.2	13.1	1
4116.0	1.2	34	2.0	245	13.3	13.2	1
4118.0	14.9	203	1.9	246	13.3	13.1	1
4120.0			1.9	246	13.0	12.9	
4122.0			1.9	246	12.7	12.8	
4124.0			1.9	245	12.7	12.6	
4126.0			1.9	244	12.8	12.6	
4128.0	41.2	79	1.8	243	12.6	12.6	1
4130.0	45.0	75	1.7	241	12.5	12.3	1
4132.0			1.7	240	12.6	12.3	
4134.0			1.8	241	12.9	12.6	
4136.0			[illegible]	240	13.0	12.7	
4138.0			1.7	240	13.0	12.7	
4140.0			1.7	240	13.0	12.7	
4142.0			1.7	[illegible]	13.0	12.7	
4144.0	8.9	185	1.7	[illegible]	13.0	12.7	1
4146.0	20.6	228	1.7	241	12.9	12.7	3
4148.0	19.5	185	1.9	243	12.7	12.5	3
4150.0	28.7	175	1.9	244	12.6	12.3	3
4152.0	31.8	32	1.8	245	12.5	12.3	3
4154.0	32.8	28	1.8	245	12.5	12.4	1
4156.0	17.1	193	1.8	244	12.6	12.6	1
4158.0			1.8	244	12.6	12.6	
4160.0	9.7	216	1.8	244	12.4	12.4	3
4162.0	9.7	218	1.8	246	12.5	12.4	3
4164.0			1.8	247	12.7	12.4	
4166.0			1.7	246	12.8	12.5	
4168.0	27.2	28	1.8	246	12.8	12.7	3
4170.0	27.3	25	1.8	246	13.0	12.8	1
4172.0			1.7	246	13.0	12.7	
4174.0			1.7	244	12.6	12.4	

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
4176.0			1.7	244	12.6	12.5	
4178.0			1.7	245	13.0	12.5	
4180.0			1.6	246	13.4	12.5	
4182.0			1.6	246	13.2	12.5	
4184.0			1.6	246	12.5	12.4	
4186.0			1.6	246	12.5	12.4	
4188.0			1.6	245	12.5	12.4	
4190.0			1.6	245	12.5	12.4	
4192.0			1.6	245	12.5	12.3	
4194.0			1.5	247	12.6	12.1	
4196.0			1.4	250	12.7	12.0	
4198.0			1.5	252	12.6	12.2	
4200.0			1.5	255	12.7	12.3	
4202.0			1.5	257	12.6	12.2	
4204.0	10.9	137	1.4	259	12.5	12.2	4
4206.0	11.5	144	1.4	259	12.5	12.3	2
4208.0	2.8	164	1.4	258	12.5	12.4	4
4210.0	2.5	124	1.4	257	12.5	12.3	2
4212.0			1.4	256	12.5	12.3	
4214.0	5.3	178	1.4	256	12.5	12.3	4
4216.0	5.5	132	1.4	254	12.4	12.3	4
4218.0	8.8	157	1.5	253	12.4	12.3	2
4220.0	5.1	184	1.5	255	12.5	12.2	4
4222.0	1.3	230	1.5	255	12.4	12.2	4
4224.0	7.1	3	1.5	255	12.4	12.2	3
4226.0			1.5	256	12.5	12.2	
4228.0			1.5	257	12.6	12.3	
4230.0			1.4	257	12.6	12.3	
4232.0	8.7	242	1.5	258	12.5	12.4	1
4234.0			1.6	260	12.6	12.8	
4236.0	13.5	326	1.6	258	12.5	12.7	1
4238.0			1.5	[illegible]	12.4	12.3	
4240.0	10.9	310	1.5	[illegible]	12.4	12.4	3
4242.0	8.1	301	1.6	255	12.4	12.3	3
4244.0			1.6	257	12.7	12.3	
4246.0			1.5	258	13.0	12.5	
4248.0			1.4	258	13.0	12.6	
4250.0			1.4	256	12.6	12.7	
4252.0			1.4	255	12.3	12.9	
4254.0			1.4	254	12.3	13.0	
4256.0			1.4	254	12.5	13.0	
4258.0			1.6	252	13.7	12.9	
4260.0			1.9	249	16.3	12.3	
4262.0			2.0	249	17.1	12.1	
4264.0			2.0	250	16.5	12.3	

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
4266.0			1.8	251	14.8	12.5	
4268.0			1.6	250	13.3	12.6	
4270.0			1.6	249	12.9	12.6	
4272.0			1.6	248	12.9	12.5	
4274.0			1.6	248	13.2	12.5	
4276.0			1.5	247	13.5	12.5	
4278.0			1.4	246	13.8	12.4	
4280.0			1.4	247	13.9	12.4	
4282.0			1.4	247	13.2	12.4	
4284.0			1.4	247	12.5	12.5	
4286.0			1.4	249	12.4	12.5	
4288.0			1.4	248	12.5	12.5	
4290.0			1.4	247	12.7	12.4	
4292.0			1.4	247	12.8	12.4	
4294.0			1.5	248	12.8	12.5	
4296.0			1.5	249	12.9	12.5	
4298.0			1.5	250	12.9	12.5	
4300.0			1.5	252	12.9	12.5	
4302.0			1.6	254	12.9	12.5	
4304.0	1.5	178	1.6	256	12.7	12.4	4
4306.0	2.1	182	1.5	254	12.8	12.3	4
4308.0			1.4	254	12.9	12.3	
4310.0			1.4	254	12.9	12.4	
4312.0			1.4	254	12.7	12.4	
4314.0			1.4	253	12.6	12.3	
4316.0	1.4	158	1.4	252	12.5	12.3	4
4318.0	1.0	125	1.5	252	12.5	12.3	4
4320.0			1.5	251	12.7	12.4	
4322.0			1.5	249	12.8	12.4	
4324.0			1.4	247	12.4	12.2	
4326.0	3.3	181	1.2	246	12.2	12.2	1
4328.0	1.1	99	1.2	246	12.3	12.3	3
4330.0	0.5	60	1.3	247	12.4	12.3	3
4332.0	0.4	218	1.4	247	12.4	12.5	1
4334.0			1.4	248	12.7	12.6	
4336.0			1.4	249	12.7	12.6	
4338.0			1.3	249	12.4	12.5	
4340.0	0.6	282	1.2	249	12.3	12.4	1
4342.0			1.2	249	12.3	12.3	
4344.0	19.9	106	1.2	250	12.4	12.4	1
4346.0	24.0	107	1.2	248	12.5	12.4	1
4348.0	18.9	128	1.3	247	12.7	12.7	1
4350.0			1.3	249	12.9	12.9	
4352.0			1.3	250	12.9	12.8	
4354.0			1.3	250	12.6	12.6	

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
4356.0	4.3	110	1.3	249	12.5	12.7	3
4358.0			1.4	249	13.0	13.4	
4360.0	27.6	101	1.3	243	12.9	13.4	1
4362.0	4.4	123	1.2	237	12.5	12.6	1
4364.0			1.2	237	12.3	12.5	
4366.0	10.0	46	1.2	240	12.4	12.7	3
4368.0	11.9	37	1.2	242	12.4	12.6	3
4370.0			1.3	241	12.5	12.6	
4372.0			1.2	238	12.6	12.5	
4374.0			1.2	238	12.5	12.4	
4376.0			1.2	239	12.4	12.5	
4378.0			1.2	241	12.4	12.9	
4380.0			1.2	241	12.3	13.2	
4382.0			1.2	242	12.3	12.7	
4384.0	5.5	244	1.2	242	12.4	12.4	3
4386.0	3.2	173	1.2	243	12.3	12.3	3
4388.0	3.9	130	1.3	243	12.3	12.4	3
4390.0	4.8	325	1.3	243	12.3	12.7	1
4392.0			1.3	242	12.5	12.8	
4394.0			1.2	243	12.6	12.9	
4396.0			1.2	242	12.5	13.0	
4398.0			1.2	242	12.6	13.0	
4400.0			1.2	241	12.8	13.0	
4402.0			1.2	240	12.8	13.2	
4404.0			1.2	234	12.8	13.4	
4406.0			1.2	235	12.7	13.5	
4408.0			1.2	235	12.7	13.6	
4410.0			1.2	237	12.7	13.6	
4412.0			1.2	238	12.6	13.4	
4414.0			1.2	239	12.5	12.9	
4416.0			1.2	240	12.5	12.9	
4418.0			1.2	241	12.5	13.3	
4420.0			1.1	239	12.4	14.0	
4422.0			1.4	234	12.6	13.9	
4424.0			1.4	232	12.9	13.4	
4426.0			1.4	233	12.8	13.1	
4428.0			1.4	234	12.8	12.7	
4430.0			1.3	235	12.6	12.4	
4432.0	1.6	161	1.3	235	12.5	12.4	3
4434.0	1.0	173	1.3	236	12.6	12.5	3
4436.0			1.3	235	12.7	12.7	
4438.0			1.3	235	12.7	12.7	
4440.0			1.3	237	12.6	12.5	
4442.0			1.3	237	12.6	12.5	
4444.0			1.3	236	12.6	12.5	

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
4446.0			1.2	236	12.7	12.5	
4448.0	6.5	152	1.2	234	12.6	12.5	1
4450.0			1.2	233	12.5	12.4	
4452.0	24.4	10	1.2	232	12.5	12.4	1
4454.0	23.8	17	1.2	230	12.6	12.4	1
4456.0	10.8	170	1.2	229	12.7	12.5	1
4458.0	24.7	2	1.2	228	12.8	12.6	1
4460.0			1.2	225	12.7	12.6	
4462.0	16.4	165	1.2	223	12.6	12.5	1
4464.0	0.7	127	1.2	222	12.5	12.5	1
4466.0	1.6	96	1.3	222	12.5	12.6	1
4468.0	1.8	68	1.3	223	12.5	12.6	3
4470.0	3.0	66	1.3	225	12.6	12.4	1
4472.0			1.3	22[illegible]	12.6	12.3	
4474.0			1.3	228	12.7	12.3	
4476.0	8.8	206	1.3	228	12.7	12.3	1
4478.0	1.6	169	1.2	226	12.5	12.3	3
4480.0	1.3	85	1.2	224	12.4	12.5	1
4482.0	1.1	47	1.2	222	12.4	12.5	1
4484.0			1.2	221	12.4	12.4	
4486.0			1.2	220	12.5	12.5	
4488.0	5.0	115	1.2	220	12.5	12.7	1
4490.0	10.8	105	1.2	22[illegible]	12.4	12.5	1
4492.0	3.4	124	1.2	22[illegible]	12.4	12.4	3
4494.0	2.9	116	1.2	22[illegible]	12.3	12.4	3
4496.0	2.3	104	1.2	220	12.5	12.5	3
4498.0	0.7	40	1.2	220	12.7	12.5	1
4500.0	2.8	27	1.2	223	12.6	12.4	1
4502.0			1.3	224	12.6	12.5	
4504.0			1.3	225	12.6	12.7	
4506.0			1.2	227	12.6	12.6	
4508.0			1.2	226	12.7	12.7	
4510.0	9.4	64	1.2	222	12.9	12.7	1
4512.0			1.2	220	12.7	12.6	
4514.0			1.2	220	12.6	12.5	
4516.0	0.3	59	1.2	222	12.5	12.4	3
4518.0	0.7	17	1.2	226	12.4	12.3	1
4520.0	1.3	136	1.2	227	12.4	12.3	1
4522.0	1.4	172	1.2	228	12.5	12.4	3
4524.0	8.1	123	1.2	231	12.6	12.4	1
4526.0			1.1	233	12.6	12.3	
4528.0			1.1	233	12.7	12.3	
4530.0	6.2	210	1.1	233	12.7	12.2	1
4532.0	5.2	199	1.1	232	12.6	12.2	3
4534.0	7.2	203	1.1	233	12.4	12.3	3

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
4536.0	2.9	177	1.1	235	12.4	12.4	3
4538.0			1.1	235	12.5	12.4	
4540.0	4.5	205	1.2	237	12.6	12.4	3
4542.0			1.2	238	12.6	12.5	
4544.0			1.1	238	12.5	12.5	
4546.0			1.1	239	12.6	12.4	
4548.0			1.1	240	12.6	12.3	
4550.0			1.1	241	12.6	12.4	
4552.0			1.2	244	12.6	12.5	
4554.0			1.2	246	12.6	12.7	
4556.0			1.2	248	12.7	12.7	
4558.0			1.2	249	12.9	12.5	
4560.0			1.2	248	12.8	12.4	
4562.0			1.2	245	12.5	12.3	
4564.0			1.2	241	12.4	12.3	
4566.0	14.4	232	1.2	239	12.4	12.1	3
4568.0	15.7	229	1.1	238	12.5	12.1	3
4570.0			1.1	238	12.6	12.4	
4572.0			1.1	240	12.6	12.6	
4574.0			1.1	242	12.6	12.6	
4576.0			1.1	244	12.6	12.6	
4578.0			1.1	245	12.6	12.5	
4580.0			1.1	245	12.7	12.5	
4582.0			1.1	246	12.9	12.5	
4584.0			1.2	249	13.2	12.6	
4586.0			1.2	250	13.3	12.6	
4588.0			1.2	250	13.0	12.5	
4590.0	1.9	109	1.2	25[illegible]	12.6	12.4	1
4592.0	3.6	60	1.1	[illegible]	12.5	12.2	3
4594.0	3.4	62	1.1	249	12.4	12.2	3
4596.0	2.5	263	1.1	249	12.5	12.3	1
4598.0			1.0	251	12.5	12.6	
4600.0			1.0	249	12.7	12.7	
4602.0			1.0	246	13.2	12.7	
4604.0			1.1	242	13.8	12.7	
4606.0			1.0	244	13.7	12.7	
4608.0			1.1	247	13.1	12.6	
4610.0			1.1	249	12.7	12.4	
4612.0			1.2	251	12.5	12.3	
4614.0			1.2	252	12.4	12.2	
4616.0			1.1	255	12.4	12.1	
4618.0	10.3	11	1.0	257	12.4	12.1	1
4620.0	3.8	38	1.0	258	12.4	12.1	3
4622.0	6.2	48	1.0	259	12.4	12.1	3
4624.0	1.4	31	1.0	259	12.3	12.1	1

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
4626.0			1.0	259	12.4	12.1	
4628.0			1.0	258	12.5	12.2	
4630.0			1.0	256	12.5	12.2	
4632.0			1.4	255	12.4	12.3	
4634.0			1.4	255	12.4	12.3	
4636.0	0.5	50	1.4	256	12.4	12.3	1
4638.0	0.4	89	1.5	256	12.3	12.3	1
4640.0			1.5	256	12.3	12.3	
4642.0			1.5	257	12.3	12.3	
4644.0	0.8	43	1.5	259	12.3	12.2	3
4646.0	1.1	155	1.5	262	12.2	12.2	3
4648.0	0.8	142	1.5	263	12.2	12.1	3
4650.0			1.4	265	12.2	12.2	
4652.0	11.7	72	1.4	266	12.3	12.2	1
4654.0	1.2	125	1.4	267	12.3	12.3	1
4656.0			1.4	268	12.4	12.3	
4658.0	0.1	81	1.3	270	12.4	12.2	1
4660.0			1.4	270	12.4	12.2	
4662.0			1.4	269	12.4	12.3	
4664.0	1.5	120	1.3	268	12.4	12.2	2
4666.0	1.1	45	1.3	268	12.3	12.1	4
4668.0	1.0	46	1.3	268	12.3	12.2	4
4670.0	0.4	127	1.3	269	12.4	12.2	4
4672.0	0.7	321	1.3	[illegible]	12.3	12.2	4
4674.0	4.6	256	1.3	[illegible]	12.3	12.2	4
4676.0	4.3	251	1.4	261	12.4	12.2	4
4678.0	2.9	210	1.4	261	12.4	12.2	4
4680.0	1.7	114	1.4	262	12.4	12.3	4
4682.0	3.2	171	1.4	263	12.3	12.2	4
4684.0	3.3	198	1.4	264	12.3	12.1	4
4686.0			1.5	264	12.3	12.2	
4688.0	1.9	73	1.6	265	12.3	12.2	2
4690.0	0.9	53	1.5	265	12.3	12.2	4
4692.0	3.9	146	1.5	264	12.3	12.2	4
4694.0	2.9	132	1.6	265	12.4	12.2	4
4696.0	2.9	135	1.6	266	12.4	12.3	4
4698.0	5.6	51	1.6	267	12.4	12.3	4
4700.0	2.0	136	1.6	268	12.4	12.1	4
4702.0	3.7	146	1.6	271	12.4	12.1	4
4704.0	7.3	194	1.5	273	12.4	12.2	4
4706.0	1.1	120	1.5	273	12.4	12.1	4
4708.0	7.7	148	1.5	274	12.4	12.1	2
4710.0	7.3	229	1.5	273	12.4	12.1	4
4712.0	8.0	217	1.4	273	12.4	12.1	4
4714.0	10.8	182	1.4	273	12.4	12.2	2

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
4716.0	6.3	145	1.4	273	12.4	12.2	2
4718.0	5.0	122	1.3	272	12.4	12.1	2
4720.0	4.0	129	1.3	272	12.4	12.1	4
4722.0	1.9	138	1.3	271	12.4	12.1	4
4724.0	1.8	8	1.3	270	12.4	12.1	4
4726.0	1.5	113	1.4	269	12.4	12.1	4
4728.0			1.4	269	12.4	12.1	
4730.0	0.8	64	1.3	269	12.4	12.2	2
4732.0			1.3	269	12.4	12.2	
4734.0			1.3	269	12.5	12.2	
4736.0	1.5	96	1.4	269	12.4	12.2	4
4738.0	2.7	130	1.4	271	12.4	12.1	4
4740.0	2.4	125	1.4	272	12.5	12.2	4
4742.0	0.5	185	1.4	270	12.5	12.2	2
4744.0	2.0	71	1.5	271	12.5	12.2	4
4746.0	0.9	64	1.5	271	12.4	12.2	2
4748.0	1.1	70	1.5	273	12.4	12.2	2
4750.0	1.2	56	1.5	275	12.4	12.2	4
4752.0	1.2	54	1.5	275	12.3	12.1	4
4754.0	1.3	141	1.5	275	12.4	12.2	2
4756.0			1.5	275	12.4	12.2	
4758.0	1.9	76	1.5	275	12.4	12.2	1
4760.0			1.5	276	12.3	12.2	
4762.0	3.2	282	4.5	176	13.0	11.3	3
4764.0			8.5	310	14.7	10.6	
4766.0			5.5	26	14.1	11.4	
4768.0			1.6	276	12.4	12.1	
4770.0			1.6	276	12.3	12.1	
4772.0			1.5	275	12.3	12.1	
4774.0	1.8	108	1.5	276	12.3	12.0	1
4776.0			1.4	277	12.3	12.1	
4778.0			1.4	277	12.4	12.2	
4780.0			1.4	278	12.4	12.2	
4782.0			1.3	278	12.5	12.2	
4784.0			1.3	277	12.5	12.2	
4786.0			1.3	277	12.5	12.2	
4788.0			1.3	279	12.4	12.2	
4790.0			1.4	278	12.4	12.2	
4792.0			1.4	278	12.5	12.3	
4794.0			1.3	277	12.5	12.3	
4796.0			1.3	276	12.6	12.3	
4798.0	1.7	92	1.3	276	12.5	12.3	1
4800.0	2.6	112	1.4	277	12.4	12.3	1
4802.0	2.7	119	1.4	275	12.4	12.3	1
4804.0	52.3	128	1.3	275	12.4	12.2	1

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
4806.0	51.0	128	1.4	277	12.4	12.2	1
4808.0			1.4	277	12.4	12.2	
4810.0	16.5	105	1.4	278	12.4	12.1	1
4812.0	30.0	105	1.5	278	12.4	12.1	1
4814.0	19.2	233	1.5	277	12.4	12.0	3
4816.0			1.5	277	12.4	12.0	
4818.0	13.6	86	1.5	276	12.4	12.0	1
4820.0			1.5	276	12.4	12.2	
4822.0			1.6	277	12.4	12.2	
4824.0	7.9	55	1.6	277	12.4	12.3	1
4826.0	13.6	34	1.6	277	12.4	12.3	1
4828.0			1.6	277	12.3	12.2	
4830.0	2.0	76	1.6	277	12.4	12.2	1
4832.0	67.5	216	1.5	279	12.4	12.3	1
4834.0	0.9	138	1.5	280	12.4	12.2	1
4836.0	10.2	79	1.4	281	12.3	12.2	1
4838.0			1.4	281	12.4	12.2	
4840.0	35.0	87	1.3	281	12.4	12.2	1
4842.0	33.3	85	1.4	281	12.4	12.2	1
4844.0			1.4	282	12.5	12.3	
4846.0			1.4	283	12.4	12.3	
4848.0			1.4	284	12.4	12.3	
4850.0			1.3	283	12.4	12.2	
4852.0			1.3	283	12.3	12.0	
4854.0			1.3	283	12.3	12.0	
4856.0			1.3	282	12.4	12.1	
4858.0			1.3	281	12.4	12.2	
4860.0			1.4	281	12.4	12.1	
4862.0	17.9	79	1.3	283	12.4	12.1	1
4864.0	21.7	80	1.3	284	12.3	12.0	1
4866.0	25.7	85	1.4	284	12.4	12.1	1
4868.0			1.3	283	12.4	12.2	
4870.0			1.3	284	12.5	12.2	
4872.0			1.3	284	12.5	12.2	
4874.0			1.3	284	12.5	12.3	
4876.0	19.2	84	1.3	285	12.6	12.4	1
4878.0	1.2	150	1.2	285	12.6	12.4	2
4880.0	0.5	154	1.2	284	12.6	12.4	4
4882.0	0.6	108	1.2	284	12.6	12.3	4
4884.0	1.0	134	1.2	283	12.5	12.2	4
4886.0	26.0	73	1.2	282	12.4	12.2	1
4888.0			1.2	282	12.4	12.2	
4890.0			1.2	283	12.4	12.2	
4892.0			1.2	284	12.4	12.2	
4894.0	15.5	71	1.3	284	12.5	12.2	3

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
4896.0			1.4	284	12.5	12.2	
4898.0			1.4	284	12.5	12.2	
4900.0	18.8	62	1.3	284	12.5	12.3	1
4902.0			1.3	283	12.5	12.3	
4904.0			1.4	285	12.5	12.3	
4906.0	0.7	137	1.4	288	12.4	12.2	2
4908.0	0.9	118	1.3	288	12.4	12.2	2
4910.0	1.0	74	1.3	287	12.4	12.3	4
4912.0	1.1	77	1.3	287	12.4	12.3	4
4914.0			1.3	288	12.4	12.3	
4916.0			1.3	288	12.4	12.3	
4918.0			1.3	287	12.4	12.2	
4920.0	27.7	34	1.3	287	12.4	12.2	1
4922.0			1.2	287	12.4	12.2	
4924.0	0.6	148	1.2	286	12.4	12.2	1
4926.0			1.2	285	12.5	12.2	
4928.0	1.4	101	1.2	286	12.5	12.3	1
4930.0	1.1	134	1.3	287	12.5	12.3	1
4932.0			1.3	288	12.5	12.3	
4934.0			1.2	288	12.5	12.2	
4936.0	1.2	196	1.2	288	12.5	12.2	1
4938.0	0.7	77	1.2	288	12.5	12.2	3
4940.0	1.6	71	1.2	288	12.5	12.3	3
4942.0	1.0	162	1.2	288	12.6	12.3	1
4944.0	0.8	224	1.2	287	12.6	12.3	1
4946.0			1.2	286	12.6	12.3	
4948.0			1.2	287	12.5	12.3	
4950.0	7.9	180	1.3	287	12.5	12.3	3
4952.0	7.6	180	1.2	287	12.5	12.3	3
4954.0	1.1	116	1.2	286	12.5	12.3	1
4956.0	10.3	231	1.3	286	12.5	12.3	1
4958.0	12.3	211	1.3	286	12.5	12.3	1
4960.0			1.3	287	12.5	12.3	
4962.0	15.9	80	1.3	287	12.5	12.3	2
4964.0	1.3	109	1.2	285	12.5	12.3	2
4966.0	0.9	103	1.2	283	12.5	12.3	2
4968.0	1.2	99	1.2	283	12.5	12.3	4
4970.0	1.0	108	1.3	283	12.6	12.4	2
4972.0	0.8	120	1.3	284	12.7	12.4	4
4974.0	1.0	114	1.3	285	12.7	12.4	4
4976.0	5.2	105	1.3	284	12.7	12.4	4
4978.0	4.1	151	1.3	285	12.5	12.3	2
4980.0	6.9	73	1.3	287	12.4	12.2	2
4982.0			1.3	287	12.4	12.2	
4984.0	1.3	86	1.3	287	12.4	12.2	1

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
4986.0	4.8	84	1.3	287	12.5	12.3	3
4988.0	2.1	102	1.4	287	12.5	12.3	1
4990.0	2.2	99	1.4	287	12.5	12.3	1
4992.0	21.1	78	1.3	287	12.7	12.3	3
4994.0	1.4	129	1.3	287	12.7	12.4	3
4996.0	1.2	103	1.3	287	12.6	12.3	1
4998.0	11.1	131	1.3	288	12.4	12.2	1
5000.0	11.1	129	1.3	288	12.4	12.2	1
5002.0	1.6	96	1.2	288	12.4	12.2	4
5004.0	1.5	97	1.3	288	12.4	12.1	2
5006.0	1.1	121	1.3	287	12.4	12.1	4
5008.0	1.1	187	1.3	285	12.4	12.2	4
5010.0	0.4	49	1.2	281	12.4	12.2	3
5012.0	1.0	111	1.2	280	12.3	12.1	1
5014.0	1.5	141	1.3	281	12.3	12.2	1
5016.0			1.4	282	12.2	12.4	
5018.0			1.5	285	11.9	12.4	
5020.0			1.6	288	11.8	12.4	
5022.0	32.0	70	1.6	291	11.9	12.5	1
5024.0			1.6	292	12.0	12.4	
5026.0			1.6	293	11.9	12.2	
5028.0			1.5	293	12.0	12.1	
5030.0			1.4	291	12.2	11.9	
5032.0	2.5	125	1.3	289	12.3	11.9	1
5034.0	2.2	129	1.3	285	12.3	12.0	1
5036.0	1.5	96	1.2	[illegible]	12.4	12.1	1
5038.0			1.2	[illegible]	12.6	12.2	
5040.0			1.2	27[illegible]	12.5	12.2	
5042.0			1.2	277	12.2	12.2	
5044.0			1.1	275	12.0	12.1	
5046.0			1.0	273	11.9	12.0	
5048.0			1.0	273	11.9	12.0	
5050.0			0.9	274	11.8	11.8	
5052.0			0.9	273	11.7	11.7	
5054.0			1.0	272	11.9	11.8	
5056.0			1.0	273	12.0	12.0	
5058.0			1.0	273	12.1	12.2	
5060.0			1.1	273	12.1	12.2	
5062.0			1.1	276	12.2	12.2	
5064.0			1.1	276	12.2	12.3	
5066.0			1.2	276	12.3	12.3	
5068.0			1.1	277	12.3	12.3	
5070.0			1.1	276	12.4	12.4	
5072.0			1.1	274	12.4	12.3	
5074.0			1.0	268	12.2	12.1	

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
5076.0			0.9	260	12.2	12.1	
5078.0			0.9	251	12.4	12.1	
5080.0			0.9	250	12.5	12.1	
5082.0			0.9	251	12.4	12.2	
5084.0			0.9	253	12.4	12.2	
5086.0			0.8	256	12.4	12.5	
5088.0			0.8	260	12.4	12.4	
5090.0	2.3	188	0.8	261	12.5	12.2	3
5092.0	1.3	75	0.8	260	12.5	12.2	3
5094.0	38.6	338	0.8	259	12.4	12.3	3
5096.0	2.7	62	0.7	259	12.3	12.3	3
5098.0	1.0	55	0.8	259	12.4	12.4	3
5100.0	0.8	35	0.8	258	12.4	12.4	1
5102.0			0.8	256	12.4	12.4	
5104.0	1.1	37	0.7	255	12.4	12.4	2
5106.0	0.8	54	0.6	255	12.4	12.3	4
5108.0	0.5	55	0.6	255	12.4	12.4	2
5110.0	0.4	28	0.6	253	12.4	12.4	4
5112.0			0.6	252	12.4	12.4	
5114.0			0.6	251	12.4	12.4	
5116.0	0.5	81	0.7	250	12.4	12.4	1
5118.0			0.7	249	12.4	12.4	
5120.0	5.8	46	0.7	248	12.4	12.3	1
5122.0	5.4	51	0.8	247	12.4	12.4	1
5124.0	1.4	24	0.8	247	12.4	12.4	1
5126.0	0.9	64	0.9	246	12.3	12.3	4
5128.0	1.2	60	0.9	245	12.3	12.3	4
5130.0	2.8	64	1.0	245	12.3	12.3	4
5132.0	2.5	82	0.9	245	12.3	12.3	4
5134.0	2.5	51	0.8	246	12.3	12.3	4
5136.0	12.5	62	0.8	249	12.3	12.3	3
5138.0	25.3	222	0.8	251	12.3	12.3	3
5140.0	23.7	224	0.8	251	12.3	12.3	3
5142.0	0.7	21	0.8	248	12.3	12.4	2
5144.0	21.8	129	0.8	248	12.4	12.3	3
5146.0			0.8	247	12.4	12.3	
5148.0	0.6	11	0.8	245	12.4	12.3	4
5150.0	0.8	322	0.8	246	12.3	12.3	4
5152.0	0.9	12	0.8	248	12.3	12.3	4
5154.0	1.9	56	0.8	249	12.3	12.3	4
5156.0	1.6	43	0.8	249	12.3	12.3	4
5158.0	2.8	70	0.8	249	12.3	12.3	2
5160.0	4.0	165	0.8	250	12.3	12.3	4
5162.0	3.8	164	0.8	252	12.3	12.3	4
5164.0	3.2	159	0.7	253	12.3	12.3	4

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
5166.0	2.6	85	0.7	255	12.3	12.3	4
5168.0	3.2	82	0.8	256	12.3	12.3	4
5170.0	2.0	77	0.8	256	12.3	12.3	4
5172.0	1.6	78	0.8	256	12.4	12.3	4
5174.0	3.9	90	0.8	255	12.4	12.3	4
5176.0	4.0	87	0.8	254	12.4	12.4	4
5178.0	2.6	79	0.8	253	12.4	12.4	4
5180.0	1.6	66	0.8	254	12.4	12.4	4
5182.0	2.6	36	0.9	254	12.4	12.4	4
5184.0	2.5	34	0.8	254	12.4	12.4	4
5186.0	2.1	37	0.8	252	12.3	12.4	4
5188.0	2.1	36	0.8	253	12.3	12.4	4
5190.0	2.1	43	0.8	256	12.3	12.4	4
5192.0	2.0	40	0.8	257	12.3	12.4	4
5194.0	2.3	5	0.8	254	12.4	12.3	4
5196.0	2.3	6	0.8	251	12.3	12.3	4
5198.0	1.8	359	0.8	248	12.3	12.3	4
5200.0	1.9	347	0.8	247	12.3	12.4	4
5202.0	2.8	18	0.8	247	12.4	12.4	4
5204.0	1.1	75	0.8	247	12.4	12.4	2
5206.0	2.6	86	0.9	246	12.4	12.4	4
5208.0	2.6	75	0.9	247	12.4	12.3	4
5210.0	0.8	77	0.9	251	12.3	12.3	2
5212.0	1.0	72	0.9	251	12.3	12.3	2
5214.0	1.1	80	0.9	249	12.3	12.3	2
5216.0	1.0	47	0.9	247	12.4	12.3	2
5218.0			0.9	246	12.3	12.3	
5220.0			0.9	246	12.3	12.3	
5222.0	1.5	101	1.0	246	12.3	12.3	2
5224.0	2.4	98	1.0	245	12.3	12.3	4
5226.0	3.4	102	1.0	244	12.3	12.3	4
5228.0	3.0	104	1.1	243	12.3	12.3	4
5230.0	2.3	101	1.2	243	12.3	12.3	4
5232.0	1.7	102	1.2	245	12.3	12.3	4
5234.0	1.2	94	1.2	249	12.3	12.3	4
5236.0	1.1	38	1.2	250	12.3	12.2	4
5238.0	0.9	20	1.2	247	12.3	12.2	4
5240.0	1.6	273	1.1	247	12.3	12.3	4
5242.0	0.8	96	1.1	247	12.4	12.3	4
5244.0			1.2	247	12.4	12.4	
5246.0	1.1	102	1.2	246	12.4	12.4	2
5248.0	1.1	88	1.2	245	12.4	12.4	2
5250.0	2.0	136	1.2	244	12.4	12.3	4
5252.0	1.3	81	1.2	243	12.4	12.3	2
5254.0	4.0	105	1.2	243	12.4	12.3	4

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
5256.0	2.2	90	1.2	243	12.3	12.3	4
5258.0	1.2	53	1.2	243	12.3	12.3	2
5260.0	1.1	78	1.2	244	12.3	12.3	2
5262.0	1.3	128	1.2	243	12.2	12.2	4
5264.0	3.2	82	1.2	242	12.2	12.2	1
5266.0	3.0	85	1.2	244	12.1	12.1	1
5268.0			1.2	244	12.3	12.2	
5270.0	51.8	292	1.2	244	12.5	12.4	3
5272.0			1.2	245	12.5	12.4	
5274.0			1.2	244	12.3	12.3	
5276.0			1.2	242	12.2	12.3	
5278.0			1.2	240	12.2	12.3	
5280.0	3.6	94	1.2	239	12.2	12.2	1
5282.0			1.2	237	12.2	12.1	
5284.0	3.3	48	1.2	237	12.3	12.1	1
5286.0			1.2	239	12.3	12.2	
5288.0			1.2	240	12.3	12.3	
5290.0			1.2	241	12.4	12.4	
5292.0			1.2	243	12.3	12.4	
5294.0			1.2	246	12.3	12.3	
5296.0			1.2	247	12.3	12.2	
5298.0			1.3	246	12.4	12.2	
5300.0			1.3	246	12.6	12.4	
5302.0			1.2	246	12.8	12.6	
5304.0			1.2	245	12.7	12.5	
5306.0	1.6	77	1.2	246	12.5	12.3	4
5308.0	1.5	89	1.2	245	12.5	12.3	4
5310.0	1.4	82	1.3	244	12.5	12.3	4
5312.0	1.1	83	1.3	245	12.4	12.3	4
5314.0	1.2	76	1.2	245	12.4	12.2	4
5316.0	1.2	75	1.3	243	12.5	12.3	4
5318.0	1.5	83	1.4	241	12.5	12.3	4
5320.0	1.9	80	1.4	241	12.4	12.3	1
5322.0	3.7	80	1.4	242	12.4	12.3	1
5324.0	1.7	87	1.4	243	12.5	12.3	4
5326.0	1.6	85	1.4	244	12.5	12.3	4
5328.0	1.6	89	1.4	244	12.5	12.3	4
5330.0	1.3	83	1.5	245	12.5	12.3	4
5332.0	1.7	90	1.6	245	12.5	12.3	4
5334.0	1.9	95	1.6	245	12.5	12.3	4
5336.0	1.8	97	1.5	244	12.5	12.3	4
5338.0	1.7	87	1.5	244	12.5	12.3	4
5340.0	2.5	81	1.5	244	12.5	12.3	4
5342.0	1.7	87	1.6	243	12.5	12.2	4
5344.0	3.6	64	1.6	243	12.4	12.2	1

USGS

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
5346.0	8.4	45	1.7	242	12.4	12.2	3
5348.0	8.3	43	1.7	243	12.4	12.2	3
5350.0	8.9	25	1.8	243	12.4	12.3	3
5352.0	1.9	74	1.8	242	12.4	12.4	1
5354.0	1.8	100	1.8	242	12.4	12.3	1
5356.0			1.8	243	12.4	12.4	
5358.0			1.8	242	12.4	12.4	
5360.0	20.4	76	1.8	241	12.5	12.4	3
5362.0			1.8	241	12.5	12.3	
5364.0	2.6	78	1.7	240	12.4	12.2	1
5366.0			1.8	239	12.4	12.2	
5368.0			1.7	240	12.3	12.1	
5370.0	56.6	237	1.8	239	12.3	12.1	3
5372.0	57.3	237	1.9	238	12.3	12.2	3
5374.0	1.8	72	2.0	238	12.3	12.2	4
5376.0	1.8	79	2.0	238	12.4	12.2	4
5378.0	2.4	86	2.0	237	12.4	12.3	4
5380.0	1.8	92	2.0	238	12.4	12.4	4
5382.0	2.8	70	2.0	239	12.4	12.3	4
5384.0	3.1	70	2.0	239	12.4	12.3	4
5386.0	3.3	68	2.0	238	12.4	12.2	4
5388.0			2.0	238	12.3	12.2	
5390.0	5.6	70	2.0	238	12.3	12.2	4
5392.0	7.2	67	2.0	240	12.4	12.3	4
5394.0	4.4	77	1.9	240	12.5	12.4	4
5396.0	3.6	65	1.9	238	12.4	12.3	2
5398.0	5.2	63	1.9	238	12.3	12.2	4
5400.0	4.2	48	1.9	238	12.3	12.1	2
5402.0	3.2	66	1.9	238	12.4	12.1	4
5404.0	3.5	69	1.9	237	12.4	12.2	4
5406.0	2.9	66	1.9	235	12.4	12.1	4
5408.0	2.0	48	2.0	236	12.4	12.1	2
5410.0	2.0	60	2.0	236	12.4	12.1	4
5412.0	2.0	42	1.9	235	12.3	12.1	2
5414.0	2.2	29	2.0	237	12.3	12.2	4
5416.0	1.8	63	2.0	237	12.3	12.2	4
5418.0	2.1	62	2.0	237	12.3	12.2	4
5420.0	2.4	55	2.0	237	12.3	12.2	2
5422.0	2.3	57	2.0	235	12.3	12.2	4
5424.0	2.3	59	2.0	235	12.3	12.2	4
5426.0	2.3	74	2.0	235	12.3	12.2	4
5428.0	3.4	92	2.0	235	12.3	12.2	4
5430.0	3.6	88	2.0	236	12.3	12.3	4
5432.0	2.9	74	1.9	236	12.2	12.2	4
5434.0	3.4	66	1.9	235	12.2	12.1	4

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-4	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
4632.0	2.7	320	1.0	255	12.4	12.3	1
4634.0			1.0	255	12.4	12.3	
4636.0	1.9	40	1.0	255	12.4	12.3	1
4638.0	3.6	239	1.1	255	12.4	12.2	1
4640.0	9.5	236	1.1	255	12.4	12.1	3
4642.0	7.3	176	1.1	255	12.4	12.1	1
4644.0	2.3	45	1.0	256	12.4	12.1	1
4646.0	1.2	27	1.0	258	12.4	12.1	3
4648.0	1.4	132	1.0	261	12.4	12.1	3
4650.0			1.0	264	12.4	12.1	
4652.0	11.3	250	1.0	266	12.4	12.1	1
4654.0	2.0	71	1.0	266	12.4	12.2	3
4656.0	1.8	134	1.0	266	12.4	12.2	1
4658.0	4.1	246	1.0	266	12.4	12.2	4
4660.0			1.0	266	12.4	12.2	
4662.0			0.9	266	12.4	12.2	
4664.0			0.9	265	12.4	12.2	
4666.0	2.3	42	0.9	262	12.4	12.2	4
4668.0	1.3	43	0.9	260	12.4	12.2	4
4670.0	2.7	57	0.9	260	12.4	12.2	4
4672.0	1.9	5	0.9	260	12.4	12.2	4
4674.0	5.9	292	0.9	259	12.4	12.2	4
4676.0	3.8	266	0.9	259	12.4	12.2	4
4678.0	3.0	202	0.9	261	12.4	12.2	4
4680.0	2.3	129	0.9	261	12.4	12.1	4
4682.0	2.2	123	0.8	261	12.4	12.2	4
4684.0	2.4	116	0.9	262	12.4	12.2	4
4686.0			1.0	264	12.4	12.2	
4688.0	4.5	360	0.9	265	12.4	12.2	2
4690.0	3.2	309	0.9	265	12.4	12.2	2
4692.0	2.6	107	1.0	264	12.4	12.3	4
4694.0	0.8	137	1.0	266	12.4	12.2	4
4696.0	1.3	116	1.0	268	12.4	12.2	4
4698.0	4.1	128	1.1	271	12.4	12.3	4
4700.0	1.7	110	1.0	273	12.4	12.2	4
4702.0	1.1	51	0.9	273	12.4	12.2	4
4704.0	2.7	215	0.9	273	12.4	12.2	4
4706.0	1.7	45	1.0	274	12.4	12.2	4
4708.0	2.8	337	1.0	274	12.4	12.2	4
4710.0	4.6	234	0.9	273	12.4	12.2	4
4712.0	2.3	198	0.8	272	12.3	12.2	4
4714.0	8.1	74	0.8	271	12.3	12.2	2
4716.0			0.8	271	12.3	12.2	
4718.0	3.6	48	0.8	273	12.3	12.2	4
4720.0	3.4	103	0.8	272	12.3	12.2	4

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
4722.0	0.9	76	0.8	271	12.3	12.3	4
4724.0	3.4	37	0.8	271	12.4	12.3	4
4726.0	0.6	360	0.8	270	12.4	12.2	4
4728.0			0.8	269	12.4	12.2	
4730.0			0.8	270	12.4	12.2	
4732.0			0.8	270	12.4	12.2	
4734.0			0.8	269	12.4	12.2	
4736.0	1.3	44	0.8	268	12.4	12.2	4
4738.0	2.4	117	0.8	268	12.4	12.2	3
4740.0	6.3	347	0.8	269	12.4	12.2	1
4742.0			0.8	272	12.3	12.2	
4744.0			0.8	274	12.3	12.2	
4746.0			0.8	275	12.4	12.2	
4748.0	1.4	235	0.8	275	12.4	12.2	1
4750.0	2.5	36	0.8	275	12.4	12.2	3
4752.0	2.5	35	0.8	274	12.4	12.2	3
4754.0	4.4	58	0.8	274	12.4	12.2	1
4756.0	6.5	7	0.8	276	12.4	12.2	1
4758.0	10.6	167	0.9	276	12.4	12.3	1
4760.0			1.0	276	12.4	12.3	
4762.0	16.7	158	1.0	275	12.4	12.3	1
4764.0	12.4	169	0.9	[illegible]	12.4	12.3	1
4766.0	12.0	170	0.9	275	12.4	12.2	1
4768.0			1.0	274	12.4	12.2	
4770.0			1.0	273	12.4	12.2	
4772.0			1.0	274	12.4	12.2	
4774.0			0.9	272	12.4	12.2	
4776.0			0.9	269	12.3	12.2	
4778.0			0.9	268	12.3	12.2	
4780.0			0.9	270	12.3	12.2	
4782.0			0.9	270	12.3	12.2	
4784.0			0.9	270	12.3	12.2	
4786.0			1.0	270	12.3	12.2	
4788.0			1.0	271	12.3	12.1	
4790.0			1.0	271	12.3	12.1	
4792.0			1.0	271	12.3	12.2	
4794.0			1.0	270	12.3	12.2	
4796.0			1.0	270	12.4	12.3	
4798.0			2.0	266	12.3	12.2	
4800.0			2.0	264	12.2	12.1	
4802.0	26.4	152	1.0	267	12.3	12.1	1
4804.0	26.4	147	1.0	268	12.2	12.1	1
4806.0			1.0	268	12.3	12.1	
4808.0	8.3	165	1.0	269	12.3	12.1	1
4810.0			1.0	270	12.2	12.1	

USGS

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
4812.0			1.0	270	12.2	12.1	
4814.0			1.0	268	12.2	12.1	
4816.0	10.3	157	1.0	265	12.1	12.1	1

USGS

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =4
5436.0	5.3	59	2.0	236	12.2	12.2	4
5438.0	5.5	61	2.0	237	12.0	12.0	4
5440.0	2.1	316	2.0	236	11.9	11.8	2
5442.0			2.0	236	11.8	11.7	
5444.0	5.8	31	2.0	231	11.7	11.4	2

USGS

CORE DESCRIPTION SHEET

OPERATOR: EXPLORATION SERVICES CO., INC.

WELL NAME: ESC-OCS-CAL 78-164-1

CORE NO.: Junk Basket

INTERVAL CORED: 7066 - 7068

FOOTAGE CUT: 2'

FOOTAGE RECOVERED: 1'

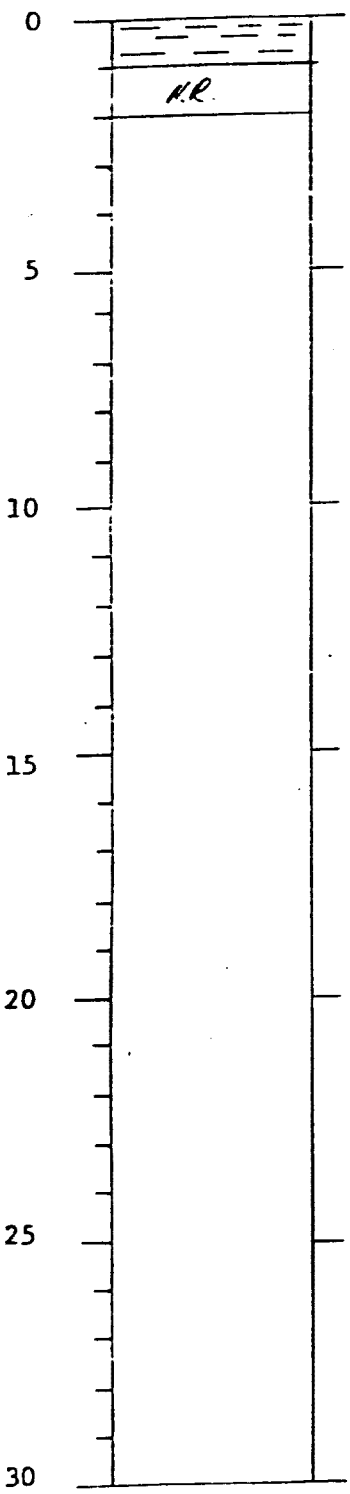
DRILLING SHIP: Glomar Atlantic

LOCATION: Cal OCS

WATER DEPTH:

DATE: 11/15

LITHOLOGY



1' shale, dk brown, hard, non-calcareous, fissile.
density = 2.3

GEOLOGICAL SURVEY
RECEIVED
NOV 22 1978
SANTA BARBARA

CONFIDENTIAL

GEOLOGICAL SURVEY
RECEIVED
NOV 28 1978
LOS ANGELES

DESCRIBED BY F.A.R

ESC, Inc. OCS Cal. 78-164 #1

SUMMARY

Operator: ESC, Inc. - Ventura, California

Permit No.: OCS Cal 78-164 #1 API #04-310-20001

Final Location: X=1,165,502' Y=369,005' Lambert Zone 5

Spud: 10/7/78 P&A: 12/20/78 Top plug at 1527'

Total Depth: 10,571' Water Depth: 1428' Derrick Floor: 37'
(all measurements were from D.F.)

Time Summary:

Drilling	462.0 hrs.
Coring	5.0
Repair	11.2
W.O.W.	45.5
Casing	54.0
Elogging	116.0
Anchoring	231.0
Misc.	1039.3
Total:	1964.0 hrs. or 81.83 days

Casing Points:
30" at 1618'
20" at 1965'
13 3/8" at 2991'
9 5/8" at 5440'

GEOLOGICAL SURVEY RECEIVED JAN 10 1979 LOS ANGELES

GEOLOGICAL SURVEY RECEIVED JAN 8 1979 SANTA BARBARA

Drilling Unit: Glomar Atlantic

Supply Vessel: Ocean Tarpon

Crew Boat: Harold T.

Standby Boat: Electric Marvel

Helicopter: Rotor-Aids S55T

Mud: Magcobar Mud Logging: Exploration Logging

Elogs: Schlumberger Velocity Survey: SSC-Birdwell Division

Geochemistry & Core Analyses: Core Lab Sample Handling: Anderson, Warren & Assoc.

HISTORY

9/29/78 Servicing Glomar Atlantic - off Port Hueneme.
9/30/78 In route to location.
10/1/78 1010 hrs. on location Point Conception. Started running #1 anchor, anchor on bottom at 2220 hrs.
10/2/78 Stand by, wait on repairs to Ocean Tarpon.
10/3/78 Stand by, wait on repairs to Ocean Tarpon. 1815 hrs. started running #5 anchor.
10/4/78 Run #8,7,4,2 anchors.
10/5/78 Run #2,6,1 anchors. #1 anchor slipping.
10/6/78 Reset anchor #1. Tensioned up #4,5,2. #1,2,3,4 anchors slipping.
10/7/78 Set peggyback anchors on #1,2,3,4 anchors. Tensioned up anchors to 210,000#. Final survey by Lewis & Lewis. Set template guide base. Spud in. Drill 36" hole. DF to mud line 1465' MSL to ML 1428' - DF to MSL 37'.
10/8/78 Drill 36" hole to 1640' DF. Spot 20bbls. mud.
10/9/78 Install guide lines & permanent guide base. Run 3 jts. 30" 310# J-1" wall w/Vetco squench jt. float shoe on bottom jt. & Regan 30" csg. hanger, landed in temp. guide base at 1462'. Top of permanent base plate at 1460'. Shoe at 1618' cemented w/700sx class H cmt. w/sea water & 2% $CaCl_2$.
10/10/78 Rig & run 21" Regan flotation riser.
10/11/78 Finish run riser, install diverter assy., nipple up flow line & tensioners, make up BHA.
10/12/78 Close diverter, establish circ. rate through dump valve. Drill 17½" hole from 1640'-1677'. Circ. rate through dump valve 840 gal./min. Drill f/1677' to 1997', circ.
10/13/78 Check well for flow, pump 200 bbls. gel mud in hole. Pull up to 1465', close dump valve, check well for flow. No flow, POOH. Down rig flow equipment, release & pull 21" riser.
10/14/78 RIH & open 17½" to 26" f/1618'-1997'. Spot 350 bbls. 70# mud in hole. POOH. Rig & running 20" csg. - 12 jts.
10/15/78 Ran 26 jts. HWDP landing string, landed 20" in 30" housing, pulled 30,000 # overwt. of string.
10/16/78 Running BOPE stack on 21" riser.
10/17/78 Running BOPE stack on 21" riser.
10/18/78 Running BOPE stack on 21" riser, landed & latched stack, installed riser tensioner slip jt., rig down.
10/19/78 RIH w/test plug to test all BOPE.
10/20/78 RIH w/BHA. Drill cmt. f/1919'-1997'. POOH. Change BHA. RIH. Displace hole w/mud. Drill to 2715'.
10/21/78 Drill f/2715' to 3015'. POOH. Rig & run Schlumberger logs. Make up BHA.
10/22/78 RIH. Open 12¼" hole to 17½" f/1997'-3015'. POOH. Rig to run 13 3/8" csg.
10/23/78 Run 38 jts. 13 3/8" K-55 61# csg. shoe at 1965'. Cemented w/840sx class G cmt.
10/24/78 Set csg. seal assy. Tested seal to 2,000#, OK. RIH w/BHA to 2872'. Drilling cmt. to 2996'. POOH.
10/25/78 Change BHA, RIH. Drill 12¼" hole f/3015' to 5463'. POOH.
10/26/78 Same.
10/27/78 Same.
10/28/78 Same.
10/29/78 Same.
10/30/78 Run Schl. logs. RIH. Drill on junk. POOH.
10/31/78 Retrieve BP. Rig & run 9 5/8" csg. shoe at 5440'. Cmtd. w/900sx class G cmt.

11/1/78 Attempt to set 9 5/8" seal assy. Had trouble getting assy. through BOPE bags.
11/2/78 Attempt to set 9 5/8" seal assy. Could not set assy.
11/3/78 Attempt to squeeze annulus on 13 3/8" & 9 5/8" csgs. Attempt to fish bottom of seal assy. No good.
11/4/78 Attempt to fish 9 5/8" seal assy.
11/5/78 Attempt to fish 9 5/8" seal assy.
11/6/78 Test stack. POOH to log, rig & run Schl. logs. CBL.
11/7/78 Logging CBL log. RIH. Drill 20' new hole, leak off, test. Drill to 5515'. POOH.
11/8/78 Drill 8½" hole f/5515' to 5840'.
11/9/78 Drill 8½" hole f/5840'.
11/10/78 Drill 8½" hole.
11/11/78 To 6612'. RIH & set wear bushing.
11/12/78 Drill 8½" hole f/6612' to 6810'. RIH w/ Baker bridge plug & test BOPE stack, No good.
11/13/78 Drill 8½" hole f/6810' to 7061'.
11/14/78 Drill 8½" hole f/7061' to 7066'. Lost 3 cones off bit #12 SEC S84F. Attempt to run boll weevil test tool. Could not get below upper annular, RIH w/ Baker bridge plug. Set plug, and tested BOPE stack.
11/15/78 RIH w/reverse circ. junk basket. Make 2.5' hole. POOH w/junk basket, recovered 2 small pieces junk. RIH w/bit #13 HCS SVH. Drill 8½" hole f/7068' to 7138'.
11/16/78 Drill 8½" hole f/7831' to 7347'/
11/17/78 Drill 8½" hole f/7347' to 7460'. Trip, survey - 7415' 3°.
11/18/78 Drill 8½" hole f/7460' to 7605', bit #16.
11/19/78 Drill 8½" hole f/7605' to 7920'.
11/20/78 Drill 8½" hole f/7920' to 8020'. RIH w/Baker bridge plug.
11/21/78 Test BOPE stack, choke & kill lines - 200 low, 2,000 high. Drill 8½" hole f/8020' to 8110'.
11/22/78 Drill 8½" hole f/8110' to 8373' w/bit #17.
11/23/78 Drill 8½" hole f/8373' to 8618' w/bit #17.
11/24/78 Drill 8½" hole f/8618' to 8756' w/bit #17, and f/8756' to 8828' w/bit #18.
11/25/78 Drill 8½" hole f/8828' to 9147' w/bit #18.
11/26/78 Drill 8½" hole f/ 9147' to 9393' w/bit #18.
11/27/78 Drill 8½" hole f/9393' to 9529' w/bit #18. POOH.
11/28/78 RIH w/Baker bridge plug, test BOPE stack, choke & kill lines - low 200 PSI, high 2,000 PSI. RIH w/core barrel. Cut core #1 f/9529' to 9549'. POOH. 100% recvy. on core. Run Schl. logs.
11/29/78 Run Schl. logs.
11/30/78 RIH w/bit #20 HTC J8. Reamed f/9337' to 9549'. Drill 8½" hole f/9549' to 9685' w/bit #20.
12/1/78 Trip to chg. bits, drill 8½" hole f/9685' to 9826' w/bit #21 HTC J33.
12/2/78 Drill 8½" hole f/9826' to 10,030' w/bit #21.
12/3/78 Drill 8½" hole f/10,030' to 10,035'. Stuck pipe, work free, pump up 3 singles, circ. condition hole. POOH. Chg. bits, RIH. Ream f/9945' to 10,035', slug hole w/gel pills,hole very sticky. Drill 8½" hole f/10,035' to 10,072' w/bit #22.
12/4/78 Drill 8½" hole f/10,072' to 10,245' w/bit #22.
12/5/78 Drill 8½" hole f/10,245' to 10,403' w/bit #22. POOH. Did not circ. out hole, rough weather.
12/6/78 WOW 15½ hrs. RIH w/Baker bridge plug, set and test BOPE stack & choke & kill lines to low 200 PSI, high 2,000 PSI.

12/7/78 RIH w/bit #23 HTC J33. Drill 8½" hole f/10,403' to 10,434'.

12/8/78 Drill 8½" hole f/10,434' to 10,540'. Survey.

12/9/78 Drill 8½" hole f/10,540' to 10,571' TD. Wiper trip, circ., cond. hole for Schl. logs.

12/10/78 Run Schl logs. Stopped at 6180'. RIH w/bit #23. Circ. & cond. mud going in hole. Clean out to bottom, 10,571'. POOH. Run Schl. logs to 10,562' - 9' fill.

12/11/78 Run Schl. logs.

12/12/78 Run Birdwell velocity log on Schl. line, stuck tool at 7420'. Work tool, could not work loose. Cut Schl line, strip over.

12/13/78 Strip over Schl. line. Pull line into over-shot. POOH. Lost Birdwell tool in hole. RIH w/BHA to 10,550'. Cond. hole. POOH.

12/14/78 Run Schl. side wall sample, & Birdwell velocity survey. RIH w/OEDP to 5900'. Mixed 100sx class G cmt. f/5900' to 5700'. CIP at 1205 hrs. Plug #2. Set HOWCO retainer at 5390'. USGS checked plug for wt. Squeezed 150 cu.ft. around shoe of 9 5/8" csg. w/2,000# final pressure. Left 100 cu.ft. on top of retainer. CIP at 1915 hrs. Plug #3 w/5" DP at 1665'. Mix & equalize 50 sx of class G cmt. to fill 156' in 9 5/8" csg. Pull to 50' below ocean floor & circ. clean w/sea water. CIP at 2310 hrs.

12/15/78 Lay down drill pipe & drill collars. Tag top cmt. plug at 1527'. RIH. Recv. boll weevil protector, rig down diverter, unlatch BOPE stack connector, pull stack off guide posts.

12/16/78 Pull BOPE & riser.

12/17/78 Ran JRC charge. Could not get charge to go down in well head, due to cuttings fallen out of riser. RIH w/OEDP. Wash well head. Run JRC charge #2 to 1480'. Blow well head. Hook into 20" well head & recovery perm. base, 9 5/8", 13 3/8", 20", 30" well head.

12/18/78 Hang off in moon pool. RIH w/30" J tool, latch into temp. guide base & pull same. All equipment removed from ocean floor. Started pulling piggyback anchors w/MV Defender.

12/19/78 MV Ocean Tarpon pulling primary anchors.

12/20/78 MV Ocean Tarpon finished pulling anchors at 1930 hrs. Released the ships: Glomar Atlantic, Ocean Tarpon, Harold T. and MV Defender at 2000 hrs. 12/20/78.

7501 STEMMONS FREEWAY BOX 47547 DALLAS TEXAS 75247 · 214 631-8270

CORE LABORATORIES, INC.

Source-Bed
Evaluation Services

February 26, 1979

Participants
Pt. Conception Stratigraphic Test

Subject: Hydrocarbon Source-Bed Report
Well: Pt. Conception Stratigraphic Test
Offshore California, USA
Our File Number: SBE/78156

Gentlemen:

Enclosed are geochemical data obtained for the stratigraphic section between 2000 and 10571 feet in the Pt. Conception Stratigraphic Test, Offshore California. A description of the analytical program and the analytical procedures used for this study are also enclosed. No interpretation of the data is provided.

All of the data related to this study are considered proprietary to the program participants. One (1) copy of this report containing the analytical results has been sent to each participant.

Thank you for the opportunity to be of service. Should you have any questions regarding these data, please feel free to contact us.

Very truly yours,

Core Laboratories, Inc.

for Paul J. Swetland, Manager
Source-Bed Evaluation Services

PJS:pt

GEOLOGICAL SURVEY
RECEIVED
DEC 28 1978
LOS ANGELES

****
* *
****
* SCHLUMBERGER *
****

HIGH RESOLUTION
DIPMETER
****

CLUSTER LISTING
****

USGS
CONFIDENTIAL

EXPLORATION SERVICES INC.

FCS-OCS- -CAL-78-164 # 1

WILDCAT

FEDERAL COUNTY, CALIFORNIA

RUN NO. THREE JOB NO. 2663

CLUSTER RESULTS ONLY

GEOLOGICAL SURVEY
RECEIVED
DEC 22 1978
SANTA BARBARA

4 FT. - CORR. - 2 FT. STEP

30 DEG.X2 SEARCH ANGLE

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5454	4.4	103	2.1	249	12.0	11.9	A
5456	4.5	328	1.3	245	12.3	12.2	A
5458	2.8	115	1.4	245	12.3	12.2	A
5460	4.7	104	1.4	244	12.2	12.2	A
5462	4.4	77	1.4	244	12.0	12.4	A
5464	4.4	80	1.4	245	12.0	12.4	A
5466	4.7	62	1.3	245	12.0	12.3	A
5468	5.7	68	1.3	245	11.6	12.0	A
5470	10.6	116	1.3	245	11.5	11.7	C
5472	5.7	94	1.3	247	11.4	11.5	C
5474	4.3	55	1.3	249	11.0	10.8	C
5476	12.1	77	1.3	250	10.3	10.4	A
5478	2.3	78	1.2	249	10.0	10.6	A
5480	3.8	54	1.3	245	10.0	10.7	C
5482			1.3	245	10.4	10.4	
5484	7.9	310	1.3	248	10.4	10.0	C
5486	5.5	42	1.3	251	9.9	10.0	A
5488	6.3	86	1.2	251	9.5	10.1	A
5490	9.7	208	1.2	250	9.5	10.3	C
5492			1.4	249	9.8	10.6	
5494	21.6	306	1.4	249	9.7	10.6	D
5496			1.3	248	9.7	10.6	
5498			1.3	249	9.7	10.8	
5500			1.4	250	9.8	11.1	
5502	0.3	337	1.3	249	9.9	10.9	B
5504	3.1	219	1.3	249	9.6	10.4	B
5506	7.1	150	1.3	251	9.4	10.3	D
5508			1.3	248	9.[illegible]	10.8	
5510			1.4	246	8.9	10.9	
5512	4.4	95	1.4	248	9.0	10.5	D
5514	3.4	196	1.4	249	8.9	10.4	B
5516	6.8	105	1.4	250	8.9	10.3	A
5518	9.6	88	1.4	252	9.0	10.3	A
5520	3.2	292	1.5	252	9.1	10.3	C
5522	4.3	73	1.5	252	9.2	10.3	C
5524	8.1	32	1.4	248	9.3	10.2	C
5526	4.5	58	1.3	248	9.4	10.1	A
5528	5.0	61	1.3	251	9.2	10.3	A
5530	7.1	38	1.5	251	8.9	10.3	A
5532			1.5	250	9.0	10.3	

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5534	7.8	50	1.5	252	9.1	10.2	C
5536	8.5	18	1.4	253	9.1	9.9	B
5538	2.0	56	1.4	251	9.0	9.8	B
5540	4.8	162	1.4	251	9.1	10.2	B
5542	2.8	63	1.5	251	9.0	10.2	D
5544	1.2	206	1.5	251	9.2	10.7	D
5546			1.5	251	9.3	11.4	
5548	0.7	17	1.6	252	9.7	11.2	D
5550	2.4	165	1.7	254	10.3	11.3	B
5552	6.5	149	1.6	253	10.4	13.0	D
5554			1.4	252	9.9	11.8	
5556	5.9	30	1.4	252	9.2	10.0	B
5558	2.7	63	1.4	250	9.0	9.7	D
5560			1.5	252	9.5	9.9	
5562			1.5	256	9.7	11.0	
5564	10.5	112	1.4	255	9.4	11.8	D
5566	9.0	318	1.4	253	9.4	11.0	D
5568			1.6	252	9.6	10.8	
5570	74.0	156	1.6	253	9.6	10.6	D
5572	3.4	360	1.4	253	9.5	10.1	D
5574	12.2	239	1.4	252	9.2	10.1	D
5576	2.9	88	1.4	253	8.9	10.2	A
5578	3.3	92	1.4	254	8.8	10.2	A
5580	3.5	96	1.4	253	8.9	10.2	A
5582	0.5	142	1.4	253	8.9	10.0	A
5584	3.2	50	1.3	253	8.9	9.7	B
5586			1.4	252	8.9	9.7	
5588	8.5	27	1.5	252	9.0	10.0	B
5590	3.0	67	1.4	252	9.0	10.1	B
5592	4.9	15	1.4	252	9.1	10.2	D
5594			1.4	252	9.1	10.2	
5596	2.2	48	1.5	252	9.1	10.2	D
5598			1.4	252	9.2	10.2	
5600	2.2	44	1.4	252	9.3	10.2	A
5602	2.2	69	1.5	252	9.3	10.2	A
5604	2.2	67	1.5	252	9.4	10.2	A
5606	1.9	66	1.5	253	9.4	10.2	A
5608	2.2	34	1.5	253	9.4	10.1	A
5610	4.7	39	1.4	254	9.4	9.9	C
5612	2.4	69	1.4	254	9.4	9.8	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5614	3.7	47	1.5	253	9.4	9.6	C
5616	7.1	39	1.5	253	9.4	9.5	A
5618	7.4	33	1.5	252	9.3	9.7	C
5620	2.8	33	1.5	251	9.3	9.8	A
5622	2.3	47	1.5	252	9.2	9.8	A
5624	4.4	69	1.5	252	9.1	9.8	A
5626	4.6	76	1.5	252	9.2	9.8	A
5628	3.1	77	1.5	252	9.2	9.8	A
5630	3.8	72	1.5	252	9.2	9.7	A
5632	3.5	64	1.5	251	9.2	9.6	A
5634	4.3	84	1.6	251	9.1	9.5	A
5636	4.5	84	1.6	253	9.2	9.5	A
5638	5.7	81	1.6	253	9.4	9.4	A
5640	5.2	81	1.6	252	9.6	9.3	A
5642	1.9	63	1.6	252	9.5	9.3	A
5644	1.9	67	1.6	252	9.2	9.2	C
5646	2.6	78	1.7	251	9.2	9.1	A
5648	4.0	85	1.7	250	9.3	9.1	A
5650	2.9	52	1.7	251	9.4	9.2	A
5652	4.0	63	1.7	251	9.4	9.3	A
5654	7.5	30	1.7	251	9.5	9.3	C
5656	3.0	70	1.7	250	9.6	9.4	C
5658	3.5	48	1.7	249	9.6	9.3	A
5660	4.6	39	1.7	250	9.5	9.2	A
5662	4.6	34	1.7	250	9.5	9.1	A
5664	4.1	30	1.7	248	9.5	9.1	A
5666	3.4	34	1.7	248	9.5	9.1	A
5668	2.2	53	1.7	247	9.4	9.1	A
5670	2.1	55	1.7	247	9.4	9.1	A
5672	1.9	50	1.7	248	9.4	9.3	A
5674	0.8	86	1.7	249	9.4	9.3	D
5676			1.8	249	9.4	9.4	
5678			1.8	248	9.3	9.2	
5680			1.8	247	9.3	9.0	
5682			1.8	247	9.2	9.3	
5684			1.8	248	9.2	9.4	
5686	6.4	105	1.8	249	9.3	9.3	D
5688	3.1	56	1.9	249	9.5	9.4	D
5690	2.4	57	1.9	248	9.4	9.6	D
5692	1.6	37	1.8	249	9.3	9.7	C

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5694	2.4	23	1.9	249	9.3	9.6	A
5696	2.4	34	1.9	250	9.3	9.7	A
5698	2.2	75	1.9	248	9.3	9.8	C
5700	1.1	105	1.9	247	9.2	9.9	C
5702	2.2	49	1.9	249	9.1	10.1	A
5704			2.0	250	9.2	10.1	
5706	1.9	39	2.0	249	9.2	10.2	C
5708	1.1	46	2.0	248	9.2	10.3	A
5710	1.0	66	2.0	249	9.3	10.3	A
5712	5.5	356	2.0	252	9.2	10.2	A
5714	5.4	357	2.0	252	9.2	10.3	A
5716	1.6	67	2.1	253	9.1	10.6	A
5718	1.0	63	2.1	253	9.1	10.8	A
5720	1.7	71	2.1	251	9.3	10.9	C
5722	4.0	121	2.1	251	9.5	11.3	C
5724	3.2	178	2.1	250	9.1	11.7	D
5726	2.7	40	2.1	250	8.8	11.7	B
5728	3.5	36	2.0	253	8.9	12.0	B
5730			1.9	253	8.8	12.6	
5732			1.9	252	8.4	12.7	
5734	6.8	44	2.0	253	8.5	12.8	B
5736			1.9	255	8.6	13.1	
5738	10.6	338	1.8	256	8.8	13.5	D
5740	8.9	342	1.9	256	8.8	13.7	D
5742			1.9	255	8.7	13.6	
5744			1.9	255	8.6	13.6	
5746			1.9	256	8.5	13.8	
5748			2.0	257	8.5	14.1	
5750	1.6	277	2.0	259	8.4	14.6	C
5752	7.6	105	2.0	259	8.6	15.2	A
5754	8.0	105	2.1	260	8.7	15.6	A
5756	6.6	94	2.1	261	8.4	15.9	A
5758	5.1	84	2.1	262	8.1	15.8	A
5760	14.6	140	2.1	261	7.8	15.6	C
5762			2.1	260	7.8	15.6	
5764	22.4	74	2.0	257	7.8	15.5	D
5766	23.6	79	1.9	256	7.7	15.4	D
5768	4.5	57	1.9	257	7.9	15.3	D
5770			1.8	256	8.1	14.9	
5772	21.4	64	1.9	252	8.0	14.3	D

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5774	23.3	68	1.9	251	8.1	14.0	D
5776			1.8	252	8.2	13.7	
5778	34.6	273	1.8	252	7.9	13.4	D
5780	36.4	277	1.8	250	7.6	13.1	D
5782			1.9	249	7.6	13.0	
5784			1.9	247	7.6	12.7	
5786			1.9	244	7.5	12.5	
5788			1.8	243	7.5	12.0	
5790			1.7	241	7.6	11.6	
5792			1.7	239	7.7	11.3	
5794			1.7	235	7.7	11.0	
5796			1.7	231	7.8	10.4	
5798			1.7	230	7.8	10.0	
5800			1.8	227	8.0	9.8	
5802			1.8	224	8.2	9.6	
5804			1.9	222	8.4	9.1	
5806			1.8	220	8.4	8.9	
5808			1.9	218	8.4	9.1	
5810			1.9	217	8.4	9.1	
5812			1.9	212	8.4	9.1	
5814			1.9	209	8.4	9.2	
5816			1.9	205	8.4	9.8	
5818			2.0	199	8.3	10.1	
5820			2.1	194	8.4	10.0	
5822			2.2	192	8.6	10.1	
5824	5.3	110	2.3	189	8.7	10.2	C
5826	5.2	111	2.3	188	8.7	10.2	A
5828	3.9	104	2.4	186	8.6	10.2	A
5830	4.2	103	2.4	184	8.6	10.3	A
5832	4.2	96	2.5	182	8.7	10.4	A
5834	2.9	72	2.6	181	8.7	10.3	A
5836	3.4	101	2.7	181	8.7	10.1	A
5838	2.4	75	2.8	181	8.7	10.0	A
5840	2.1	53	2.9	181	8.7	9.8	A
5842	2.0	40	2.9	180	8.8	9.5	A
5844	3.2	353	3.0	180	8.8	9.4	A
5846	3.6	345	3.0	179	8.7	9.3	A
5848	4.3	347	3.1	176	8.7	9.2	A
5850	4.5	1	3.2	176	8.8	9.2	A
5852	3.8	27	3.3	177	8.8	8.9	A

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5854	2.7	48	3.2	176	8.7	8.7	A
5856	3.4	98	3.3	176	8.7	8.7	A
5858	3.8	96	3.4	175	8.8	8.9	A
5860	6.4	112	3.4	172	8.9	9.0	A
5862	7.2	107	3.5	170	8.8	8.9	A
5864	6.6	98	3.5	170	8.8	8.9	A
5866	6.1	85	3.5	170	8.9	9.0	A
5868	5.1	72	3.6	170	9.1	9.1	A
5870	3.5	63	3.7	171	9.0	9.3	A
5872	3.5	64	3.7	172	8.9	9.4	A
5874	2.7	54	3.7	172	8.9	9.4	A
5876	2.4	43	3.7	171	9.1	9.4	A
5878	2.8	34	3.7	170	9.1	9.3	A
5880	2.9	19	3.7	166	8.9	9.1	A
5882	2.9	26	3.7	165	8.9	9.2	C
5884	2.6	26	3.7	167	8.9	9.3	A
5886	2.5	29	3.7	165	8.9	9.3	C
5888	6.2	40	3.6	163	8.8	9.2	A
5890	6.4	33	3.6	162	8.9	9.0	A
5892	5.8	39	3.7	164	9.0	9.1	A
5894	4.1	80	3.7	167	8.8	9.3	C
5896	7.7	94	3.8	170	8.6	9.2	A
5898	5.5	84	3.8	171	8.5	9.0	A
5900	3.6	69	3.8	167	8.5	9.2	A
5902	3.7	54	3.8	163	8.6	9.6	A
5904	2.9	32	3.8	166	8.8	9.8	D
5906			3.8	170	9.0	9.6	
5908			3.9	172	10.2	9.3	
5910	5.9	179	3.8	172	11.4	9.9	D
5912			3.7	168	11.5	9.8	
5914			3.7	166	10.8	9.8	
5916			3.6	167	9.8	10.7	
5918	4.4	10	3.7	165	8.9	10.6	D
5920	1.1	31	3.5	163	8.6	10.2	B
5922	0.8	135	3.7	164	8.6	10.2	B
5924	1.2	104	3.9	163	8.6	10.6	B
5926			3.9	164	8.6	10.7	
5928	3.4	3	3.9	167	8.4	10.6	D
5930			3.8	169	8.4	10.6	
5932	4.5	336	3.8	169	8.4	10.5	D

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
5934	4.8	7	3.7	167	6.5	10.6	D
5936			3.6	166	8.7	10.7	
5938			3.7	168	8.7	10.9	
5940	3.1	348	3.7	167	8.6	11.1	D
5942			3.6	164	8.7	10.9	
5944			3.5	164	9.3	10.4	
5946	3.2	353	3.5	166	9.6	10.1	C
5948	15.5	87	3.6	164	9.5	10.1	C
5950	8.1	58	3.6	162	9.3	10.3	A
5952	7.0	67	3.5	163	8.9	10.4	A
5954	5.4	59	3.6	165	8.5	10.4	C
5956	9.2	79	3.6	168	8.0	10.2	A
5958	9.9	79	3.5	171	7.9	9.5	A
5960			3.4	173	8.0	9.1	
5962	7.2	58	3.6	172	8.0	9.5	C
5964	3.5	18	3.6	168	8.0	9.9	B
5966			3.5	169	8.0	10.0	
5968			3.5	169	8.2	10.1	
5970			3.5	168	8.3	10.2	
5972			3.5	169	8.1	10.1	
5974	5.2	120	3.5	170	7.9	9.8	B
5976	7.0	49	3.5	168	8.0	9.7	B
5978	11.2	15	3.5	164	7.9	9.8	D
5980	14.7	65	3.4	166	7.8	9.7	D
5982	7.4	26	3.3	169	7.8	9.8	D
5984	14.2	57	3.5	168	7.9	10.2	D
5986	14.4	58	3.6	167	8.1	10.4	B
5988	11.5	63	3.5	168	8.4	10.4	D
5990			3.4	169	8.3	10.4	
5992	32.6	21	3.4	168	7.9	10.2	D
5994	28.3	22	3.3	168	7.8	10.0	B
5996	28.3	21	3.3	167	7.9	10.1	B
5998	15.0	66	3.4	169	7.8	10.5	B
6000	13.8	64	3.4	169	7.7	10.6	D
6002	12.9	66	3.3	168	7.8	10.4	B
6004	12.2	53	3.4	168	7.9	10.1	B
6006	12.2	54	3.4	167	7.9	9.9	B
6008	17.9	239	3.4	168	8.0	9.9	D
6010	18.1	253	3.4	169	8.0	9.7	B
6012	17.6	252	3.4	169	8.1	9.5	B

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
			3.3	169	8.2	9.5	
6014			3.3	170	8.2	9.8	
6016			3.3	169	8.1	10.0	
6018			3.3	168	8.1	10.0	
6020			3.4	168	8.2	10.1	
6022			3.3	170	8.1	10.1	
6024			3.3	170	7.9	10.1	B
6026	32.2	46	3.3	169	7.9	10.2	B
6028	29.5	55	3.3	170	8.0	10.3	
6030			3.2	169	8.0	10.3	B
6032	10.9	133	3.3	168	7.9	10.4	
6034			3.4	170	7.9	10.4	D
6036	33.6	43	3.4	170	7.9	10.4	
6038			3.3	169	8.1	10.5	
6040			3.4	166	8.2	10.3	
6042			3.4	166	8.3	10.0	
6044			3.3	169	8.3	10.1	
6046			3.5	170	8.3	10.4	D
6048	52.8	67	3.5	169	8.2	10.3	D
6050	39.4	112	3.5	171	8.0	10.1	D
6052	37.9	116	3.6	171	8.2	10.2	D
6054	28.3	66	3.3	170	8.5	10.6	D
6056	26.2	49	3.3	171	8.6	10.8	D
6058	33.9	45	3.3	170	8.7	10.9	B
6060	34.4	45	3.1	168	8.8	10.9	D
6062	51.0	67	2.9	167	8.8	10.8	D
6064	8.0	229	3.3	169	8.7	10.9	B
6066	17.3	157	3.5	171	8.6	11.0	B
6068	16.1	154	3.3	172	8.7	11.4	D
6070	19.8	146	3.2	170	8.8	11.5	D
6072	11.6	187	3.2	168	8.8	11.4	D
6074	7.9	210	3.2	169	8.7	11.3	
6076			3.2	170	8.8	11.2	
6078			3.2	171	8.8	11.0	
6080			3.2	172	8.7	10.9	
6082			3.1	169	8.7	10.8	
6084			3.1	167	8.7	10.8	C
6086	3.4	19	3.0	169	8.9	10.6	A
6088	1.9	172	3.1	170	8.9	10.4	A
6090	2.4	77	3.2	170	8.7	10.4	A
6092	4.7	98					

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6094	3.8	69	3.0	173	8.6	10.4	A
6096	6.2	65	3.1	170	8.8	10.5	A
6098	5.0	78	3.1	169	8.8	10.9	A
6100	2.2	47	3.0	172	8.5	11.2	C
6102	2.2	98	3.0	171	8.4	11.3	C
6104	2.1	49	3.0	171	8.5	11.4	A
6106	2.6	36	3.0	170	8.5	11.4	A
6108	2.2	41	3.0	170	8.5	11.4	A
6110	3.2	13	2.9	171	8.4	11.6	A
6112	1.0	319	3.0	172	8.4	11.9	A
6114	1.8	51	3.0	171	8.4	11.8	A
6116	3.2	68	2.9	169	8.4	11.7	A
6118			2.9	169	8.5	11.5	
6120	8.3	76	3.0	170	8.5	11.3	A
6122	5.6	71	2.9	171	8.3	11.3	A
6124	5.4	71	2.9	172	8.4	11.3	A
6126	5.8	67	3.0	173	8.5	11.4	C
6128	6.0	78	2.9	174	8.5	11.4	C
6130	4.6	79	2.9	174	8.4	11.4	A
6132	2.5	23	2.9	173	8.3	11.4	A
6134	3.0	31	2.9	173	8.3	11.5	A
6136			2.8	172	8.6	11.9	
6138			2.9	170	8.8	12.6	
6140			3.1	169	8.9	13.2	
6142			2.9	170	8.8	12.9	
6144	2.4	120	2.8	171	8.8	12.2	C
6146	2.6	89	2.8	172	8.7	11.7	C
6148	5.3	62	2.8	171	8.6	11.1	A
6150	5.5	60	2.8	171	8.5	10.4	A
6152	5.1	52	2.8	173	8.4	10.4	A
6154	2.5	13	2.7	175	8.4	10.7	C
6156	4.5	41	2.7	176	8.5	10.6	A
6158	4.3	41	2.7	175	8.7	10.6	A
6160			2.6	174	8.8	10.6	
6162			2.6	176	8.9	10.4	
6164			2.5	178	8.9	10.2	
6166			2.5	177	9.0	10.4	
6168			2.5	178	9.0	10.7	
6170	5.5	47	2.5	178	8.9	10.3	A
6172	5.2	49	2.4	178	8.9	9.9	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6174	13.6	343	2.3	179	8.9	9.7	C
6176	7.4	48	2.5	177	8.9	9.4	A
6178	7.0	34	2.6	174	8.8	9.6	A
6180	2.4	66	2.5	176	8.9	10.4	C
6182	2.2	15	2.6	179	8.9	10.8	C
6184			2.7	178	9.4	10.7	
6186	3.1	35	2.5	176	9.8	10.3	C
6188			2.5	177	9.7	9.7	
6190			2.5	175	9.4	9.7	
6192			2.4	175	9.0	9.9	
6194	3.7	86	2.2	179	8.8	9.9	D
6196			2.3	180	8.8	10.0	
6198			2.3	178	8.8	10.2	
6200	3.4	91	2.4	175	8.8	10.2	D
6202	4.5	125	2.5	178	8.8	9.8	D
6204	6.8	101	2.5	184	8.8	9.8	D
6206	5.3	101	2.5	182	8.7	9.8	D
6208	6.6	30	2.4	177	8.8	9.7	C
6210	5.5	30	2.6	179	8.9	9.6	A
6212	4.7	38	2.7	180	8.9	9.6	A
6214	4.1	40	2.7	181	8.8	9.7	A
6216	4.5	49	2.6	181	8.8	9.7	A
6218	4.3	46	2.8	178	8.8	9.8	A
6220			2.8	174	8.8	10.3	
6222			2.7	179	8.9	10.5	
6224			2.7	183	8.9	10.1	
6226			2.6	181	8.8	10.0	
6228	6.0	63	2.6	181	8.8	10.4	A
6230	7.2	75	2.5	179	8.8	10.5	A
6232	8.6	82	2.6	180	9.2	10.7	A
6234	10.0	95	2.6	182	9.5	11.1	C
6236			2.5	180	9.2	10.8	
6238	10.2	101	2.5	180	8.8	10.5	A
6240			2.6	180	8.9	10.2	
6242	7.6	7	2.7	179	8.9	9.8	C
6244			2.8	180	8.8	9.6	
6246	5.6	35	2.7	182	8.9	9.4	A
6248	5.7	63	2.6	183	8.9	9.6	A
6250	5.4	75	2.6	181	8.9	9.9	A
6252	6.2	70	2.7	178	8.8	9.8	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6254	6.4	66	2.7	179	8.8	9.8	A
6256	3.6	22	2.6	180	8.8	9.9	A
6258	4.1	33	2.6	182	8.8	9.7	A
6260	4.8	52	2.6	183	8.8	9.7	A
6262	4.6	50	2.6	183	8.8	9.8	C
6264	4.6	56	2.6	182	8.8	9.7	C
6266	6.9	58	2.6	180	8.8	9.6	A
6268	6.9	53	2.6	179	8.8	9.8	A
6270			2.7	179	8.8	10.0	
6272	11.7	93	2.5	181	9.0	10.4	C
6274			2.6	179	9.2	10.7	
6276	6.0	9	2.6	179	8.9	10.9	A
6278	4.0	16	2.5	178	8.7	10.8	C
6280	2.5	15	2.6	178	8.8	10.4	C
6282	3.1	39	2.6	180	8.7	10.2	C
6284	3.2	46	2.5	182	8.7	10.1	A
6286	3.6	64	2.6	184	8.6	10.1	C
6288	6.3	64	2.6	184	8.7	9.9	A
6290	5.1	43	2.5	182	8.9	9.7	A
6292	2.9	45	2.6	179	9.0	9.7	A
6294	2.9	74	2.7	178	9.0	10.1	D
6296			2.7	177	9.0	10.7	
6298			2.7	175	9.0	11.0	
6300			2.7	177	9.0	11.3	
6302			2.7	178	8.9	11.2	
6304			2.6	175	8.9	10.9	
6306			2.6	176	8.9	10.9	
6308			2.7	179	9.3	11.1	
6310			2.6	179	9.4	11.6	
6312			2.6	179	9.0	11.6	
6314	6.7	49	2.5	180	8.8	10.9	A
6316	6.7	52	2.5	181	8.7	10.4	A
6318	4.1	63	2.7	181	8.7	10.4	C
6320	4.6	39	2.7	181	8.6	10.3	C
6322			2.7	182	8.6	10.2	
6324	4.8	36	2.7	183	8.6	10.2	A
6326	5.8	46	2.7	181	8.6	10.2	A
6328	6.1	44	2.7	178	8.7	10.5	A
6330	7.6	25	2.7	180	8.8	10.7	C
6332	6.6	40	2.6	184	8.8	10.4	C

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6334	4.9	55	2.7	182	8.7	10.1	A
6336	5.0	44	2.7	181	8.7	9.9	A
6338	5.1	45	2.7	182	8.7	10.0	A
6340	4.1	44	2.6	183	8.7	10.2	A
6342	4.6	34	2.6	182	8.7	10.3	C
6344	3.3	27	2.5	181	8.7	10.3	C
6346	2.3	15	2.5	180	8.7	10.3	A
6348	3.2	10	2.6	181	8.7	10.3	A
6350			2.5	181	8.7	10.2	
6352	4.6	43	2.5	182	8.8	10.1	C
6354	4.3	52	2.5	183	8.8	10.0	C
6356	4.6	41	2.5	183	8.8	10.0	C
6358	5.0	46	2.4	183	8.8	10.0	A
6360	5.4	45	2.5	182	8.7	10.1	A
6362	5.2	39	2.6	182	8.7	10.1	A
6364	4.8	34	2.6	182	8.8	10.0	A
6366	4.6	32	2.5	181	8.8	9.9	A
6368	4.3	26	2.6	179	8.8	9.9	A
6370	4.0	28	2.5	180	8.7	10.2	A
6372			2.4	184	8.6	10.7	
6374			2.5	183	8.6	10.9	
6376			2.6	180	8.7	10.9	
6378			2.5	179	8.7	10.8	
6380	6.3	42	2.3	179	8.7	10.4	A
6382	5.6	43	2.4	180	8.7	10.2	A
6384	4.6	50	2.4	181	8.7	10.1	A
6386	4.7	56	2.4	182	8.7	10.0	A
6388	7.5	32	2.4	183	8.8	9.9	B
6390	8.2	27	2.5	182	8.7	10.0	B
6392	9.5	30	2.5	178	8.8	10.5	D
6394			2.7	176	8.9	11.5	
6396			2.9	180	9.0	11.9	
6398	4.1	3	2.8	181	9.0	11.5	D
6400			2.6	179	9.0	11.2	
6402	3.4	12	2.5	179	8.9	10.5	D
6404	3.8	21	2.5	180	8.7	10.0	B
6406	4.1	18	2.5	181	8.7	9.9	B
6408	4.7	10	2.3	181	8.6	10.0	B
6410	7.3	8	2.3	181	8.7	10.1	B
6412	6.7	10	2.4	183	8.8	10.4	D

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6414	12.1	324	2.6	182	8.9	10.6	D
6416			2.6	180	9.0	11.5	
6418			2.5	182	9.0	12.4	
6420			2.5	181	8.9	12.6	
6422	7.4	49	2.5	181	8.8	11.8	D
6424	5.8	39	2.5	182	8.8	10.5	A
6426	5.0	49	2.3	180	8.8	9.6	A
6428	5.4	59	2.5	180	8.8	9.4	A
6430	5.9	66	2.5	184	8.8	9.3	A
6432	5.7	73	2.7	184	8.8	9.5	A
6434			2.7	181	9.2	10.4	
6436	7.3	97	2.3	180	9.8	11.5	D
6438			2.4	179	9.6	11.7	
6440			2.4	182	8.8	11.1	
6442	12.5	157	2.3	184	8.5	10.3	D
6444	5.3	63	2.3	183	8.6	10.1	D
6446	6.4	79	2.3	184	8.8	10.1	B
6448	5.3	62	2.3	186	8.8	10.0	A
6450	5.1	55	2.3	187	8.8	9.9	A
6452	4.4	44	2.3	187	8.9	9.9	A
6454	3.7	30	2.5	185	8.9	9.9	C
6456	4.0	44	2.5	183	8.9	9.9	A
6458	3.6	34	2.4	184	8.9	9.6	A
6460	4.1	39	2.5	186	8.9	9.4	A
6462	4.4	41	2.5	186	8.9	9.3	A
6464	4.3	39	2.4	184	8.8	9.1	A
6466	5.3	51	2.4	184	8.7	9.0	A
6468	5.3	54	2.4	188	8.8	9.1	A
6470	4.4	50	2.4	188	8.9	9.4	C
6472	5.2	54	2.3	184	9.3	10.3	C
6474	6.5	34	2.7	184	9.6	11.3	A
6476	9.0	67	2.7	188	9.2	10.9	A
6478	5.1	67	2.3	191	8.8	10.0	A
6480	5.6	44	2.3	186	8.7	9.9	A
6482	5.6	33	2.5	186	8.8	10.5	A
6484	4.9	35	2.5	186	9.2	10.8	A
6486			2.3	188	9.5	11.1	
6488			2.3	191	9.7	11.6	
6490	30.3	29	2.1	190	10.0	11.2	D
6492	33.0	25	2.4	189	9.4	10.3	D

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6494			2.5	188	8.8	9.8	
6496			2.5	182	8.8	9.9	
6498			2.5	182	8.9	10.8	
6500			2.3	184	9.1	10.8	
6502	3.6	69	2.4	187	9.1	9.8	D
6504	4.7	48	2.7	188	9.1	9.4	B
6506	4.2	52	2.6	186	9.2	9.4	B
6508	2.9	23	2.5	188	9.3	9.3	D
6510			2.5	189	9.4	9.3	
6512			2.5	190	9.5	9.2	
6514	5.1	20	2.4	191	9.4	9.2	A
6516			2.2	192	9.3	9.1	
6518	9.1	135	2.3	189	9.1	9.0	A
6520	6.1	109	2.3	188	8.9	8.9	A
6522	5.6	73	2.2	188	8.9	8.9	A
6524	4.3	71	2.2	188	8.9	8.9	A
6526	2.8	89	2.3	189	8.9	8.8	A
6528	2.9	66	2.3	192	9.0	8.8	A
6530	6.9	110	2.3	192	9.2	8.9	A
6532	2.9	59	2.3	191	9.2	8.9	C
6534	6.0	45	2.4	191	9.0	8.8	A
6536	7.4	38	2.4	187	8.7	8.6	A
6538	6.2	21	2.2	188	8.6	8.6	A
6540	6.2	360	2.3	190	9.6	8.9	A
6542			2.5	190	10.2	9.2	
6544	5.3	22	2.4	192	9.5	9.3	C
6546	4.3	27	2.3	193	9.0	9.3	A
6548	4.7	28	2.3	191	8.9	9.2	A
6550	6.1	19	2.3	191	9.6	9.2	A
6552			2.4	193	10.5	9.2	
6554	5.5	26	2.4	193	9.9	9.2	B
6556	6.4	22	2.4	192	9.2	9.2	B
6558	8.4	16	2.4	191	9.3	9.1	B
6560	11.4	2	2.5	191	10.0	9.1	B
6562			2.6	193	11.0	9.2	
6564			2.5	193	11.2	9.2	
6566	3.8	60	2.5	192	10.3	9.2	D
6576	12.6	349	2.6	195	11.6	9.3	D
6578			2.5	191	11.2	9.2	
6580			2.7	189	10.2	9.1	

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6582			2.7	195	9.9	9.2	
6584	6.3	117	2.5	196	9.6	9.1	C
6586	5.7	52	2.4	193	9.4	9.1	A
6588	6.0	30	3.0	193	9.3	9.2	A
6590	6.2	14	3.1	193	10.2	9.3	A
6592	6.3	55	2.6	194	10.1	9.2	A
6594	7.9	29	2.5	195	9.2	9.1	A
6596	7.9	28	2.6	194	9.4	9.0	A
6598	5.7	42	2.7	193	10.3	9.1	A
6600	6.6	39	2.5	192	10.4	9.2	C
6602	10.8	29	2.5	193	9.4	9.3	A
6604	6.5	32	2.6	196	9.0	9.3	A
6606	14.2	48	2.6	197	9.1	9.1	C
6608	7.2	20	2.5	194	9.2	9.0	A
6610	5.8	21	2.5	191	9.0	9.0	A
6612	6.0	14	2.5	189	9.3	9.0	A
6614			2.6	191	10.0	9.1	
6616			2.6	195	9.9	9.2	
6618	7.2	36	2.6	196	9.2	9.3	A
6620	7.2	41	2.7	195	9.2	9.2	A
6622	7.1	24	2.7	192	9.8	9.2	C
6624			2.6	193	9.5	9.4	
6626	7.1	43	3.1	194	8.9	9.4	C
6628	6.6	43	3.1	195	8.9	9.4	A
6630	6.0	50	2.5	197	9.2	9.3	A
6632			2.5	194	9.9	9.2	
6634	6.0	33	2.6	194	9.7	9.3	C
6636	6.8	33	2.6	197	9.0	9.3	A
6638	5.1	32	2.5	194	9.0	9.1	C
6640	4.9	34	2.6	193	9.2	9.2	C
6642			2.6	193	9.1	9.3	
6644	4.6	34	2.6	195	8.9	9.3	A
6646	5.7	40	2.5	197	8.9	9.2	A
6648	6.9	31	2.6	197	8.9	9.3	A
6650	6.9	29	2.6	196	8.9	9.4	A
6652	6.9	28	2.6	194	8.9	9.5	A
6654	7.2	29	2.7	194	8.8	9.5	A
6656	7.2	34	2.6	195	8.8	9.5	A
6658	7.1	36	2.7	196	8.9	9.4	A
6660	6.7	35	2.7	197	8.9	9.3	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6662	7.8	43	2.7	196	9.2	9.1	A
6664	10.8	68	2.6	196	10.3	9.1	A
6666	9.9	58	2.6	193	10.4	8.9	A
6668	10.4	52	2.7	189	9.5	8.8	A
6670	11.8	75	2.7	191	9.9	9.2	C
6672			2.7	192	10.6	9.5	
6674	4.8	53	2.7	192	10.1	9.3	A
6676	4.7	64	2.8	192	9.4	9.2	A
6678	5.1	65	2.8	194	9.0	9.2	A
6680	7.2	22	2.7	196	9.0	9.2	C
6682	6.7	29	2.8	196	9.0	9.2	A
6684	6.6	33	2.8	196	8.9	9.1	A
6686	6.6	34	2.8	196	8.9	9.1	A
6688	6.3	37	2.7	196	9.0	9.1	A
6690	5.3	33	2.8	196	9.0	9.2	A
6692	6.4	30	2.8	194	9.0	9.2	A
6694	6.4	34	2.7	195	8.8	9.0	A
6696	6.0	43	2.7	197	8.7	8.9	A
6698	5.0	52	2.8	198	8.9	9.0	A
6700	5.9	50	2.8	197	9.0	9.3	A
6702	5.5	48	2.8	195	9.0	9.3	A
6704	5.5	43	2.8	194	8.9	9.3	A
6706	5.9	34	2.8	191	9.0	9.3	A
6708			2.7	189	9.0	9.2	
6710	3.9	36	2.8	191	9.0	9.0	A
6712	3.7	39	2.8	192	8.9	8.9	A
6714	4.1	41	2.7	193	8.9	8.8	A
6716	7.7	39	2.7	193	8.9	8.8	A
6718	8.3	35	2.7	192	8.9	8.8	A
6720	8.3	34	2.8	192	8.9	8.9	A
6722	8.1	37	2.8	190	8.9	9.0	A
6724	8.3	42	2.8	190	8.9	9.0	A
6726	10.7	60	2.8	192	8.9	9.0	A
6728	9.1	17	2.9	194	8.9	8.9	A
6730	8.9	30	2.8	194	9.0	8.8	A
6732	7.8	33	2.8	193	9.0	8.8	A
6734	5.0	41	2.9	194	9.0	8.8	A
6736	6.6	40	2.8	194	9.0	8.9	A
6738	7.1	39	2.8	193	9.0	8.9	A
6740	11.2	35	2.9	193	9.0	8.9	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6742	0.6	123	2.8	193	9.0	8.6	A
6744	0.9	227	2.8	192	9.1	8.8	A
6746	3.5	38	2.8	192	9.1	8.8	A
6748	5.3	61	2.8	192	9.1	8.8	C
6750	4.2	36	2.7	192	9.1	8.8	A
6752	4.8	33	2.7	192	9.1	8.8	A
6754	5.5	32	2.8	192	9.0	8.8	A
6756	6.2	33	2.8	192	9.0	8.8	A
6758	7.2	40	2.8	193	8.9	8.7	A
6760	7.5	47	2.8	193	8.8	8.6	A
6762	6.4	68	2.8	192	8.9	8.7	A
6764	3.3	95	2.8	192	8.9	8.8	A
6766	2.3	51	2.8	192	8.9	8.8	A
6768	5.7	96	2.8	194	9.0	8.9	A
6770	4.8	101	2.8	196	9.2	9.1	A
6772	5.3	100	2.8	194	9.2	9.1	A
6774	4.8	73	2.8	193	9.0	8.9	A
6776	4.9	65	2.8	192	9.0	8.8	A
6778	6.6	67	2.8	192	8.9	8.7	A
6780	7.1	64	2.7	194	8.8	8.5	A
6782	6.3	80	2.7	193	8.8	8.6	A
6784	6.3	70	2.8	192	8.9	8.8	A
6786	6.3	64	2.7	192	8.9	8.8	A
6788	5.9	64	2.7	192	9.0	8.8	A
6790	5.8	73	2.8	192	8.9	8.8	A
6792	5.9	71	2.8	192	9.0	8.8	A
6794	7.1	65	2.7	194	8.9	8.9	A
6796	7.3	62	2.8	194	8.9	8.9	A
6798	6.9	61	2.8	193	8.9	8.9	A
6800	5.8	44	2.8	193	8.9	8.9	A
6802	5.7	37	2.7	195	8.8	8.9	A
6804	0.8	298	2.8	195	8.8	8.8	A
6806	0.8	261	2.7	196	8.8	8.9	A
6808	8.2	86	2.7	198	8.8	8.9	A
6810	8.4	110	2.7	198	8.8	8.8	A
6812	5.6	103	2.7	196	8.8	8.8	C
6814	5.9	78	2.8	195	8.8	8.9	A
6816	6.0	56	2.8	194	8.9	8.9	A
6818	5.6	56	2.8	194	8.9	8.9	A
6820	6.5	54	2.8	194	8.8	8.9	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6822	7.4	64	2.8	193	8.8	8.9	A
6824	7.6	62	2.7	192	8.9	8.9	A
6826	8.0	44	2.8	193	8.9	8.9	A
6828	10.0	53	2.8	194	8.9	8.8	A
6830	9.6	50	2.7	194	8.8	8.7	A
6832	6.6	37	2.8	193	8.8	8.7	A
6834	7.2	40	2.8	194	8.9	8.6	A
6836	9.8	48	2.8	195	8.8	8.7	A
6838	9.7	54	2.8	194	8.8	8.5	A
6840	8.8	54	2.9	194	8.9	8.7	A
6842	9.5	46	2.8	197	9.0	8.8	A
6844	9.8	42	2.8	195	9.0	8.8	A
6846	9.6	36	2.9	193	9.0	8.8	A
6848	9.0	39	2.9	193	8.9	8.8	A
6850	9.2	37	2.8	194	8.9	8.8	A
6852	11.2	36	2.8	196	8.9	8.8	A
6854	11.0	28	2.8	197	8.8	8.7	A
6856	9.3	28	2.8	196	8.8	8.7	A
6858	7.2	70	2.8	197	8.7	8.6	A
6860	8.2	63	2.8	196	8.7	8.6	A
6862	9.0	46	2.9	196	8.8	8.8	A
6864	9.9	39	2.9	197	8.7	8.7	A
6866	11.3	30	2.8	197	8.6	8.5	A
6868	10.6	16	2.8	195	8.5	8.4	A
6870	8.4	16	2.8	193	8.5	8.4	A
6872	8.5	9	2.8	194	8.4	8.3	A
6874	1.6	197	2.8	195	8.4	8.3	A
6876	2.7	108	2.8	195	8.4	8.4	A
6878	6.6	19	2.8	196	8.5	8.4	A
6880	10.3	3	2.7	197	8.5	8.4	A
6882	11.8	358	2.8	196	8.5	8.4	A
6884	15.3	2	2.9	195	8.5	8.4	A
6886	15.0	354	2.9	197	8.5	8.4	A
6888	5.8	39	2.9	198	8.5	8.4	A
6890	6.6	45	3.1	199	8.5	8.4	A
6892	8.7	35	3.1	199	8.6	8.4	A
6894	4.7	26	2.9	198	8.7	8.4	A
6896	3.8	21	2.9	197	8.7	8.5	A
6898	9.0	23	3.0	196	8.7	8.5	A
6900	12.2	23	3.0	196	8.6	8.4	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6902	12.8	46	2.9	197	8.6	8.4	A
6904	10.0	37	2.9	198	8.6	8.4	A
6906	12.3	139	2.9	197	8.6	8.4	A
6908	10.9	128	3.0	196	8.8	8.6	A
6910	11.4	114	3.0	196	8.7	8.5	A
6912	12.1	97	3.0	194	8.6	8.4	A
6914	8.7	67	3.0	194	8.7	8.5	A
6916	6.1	54	3.0	195	8.6	8.5	A
6918	4.0	43	3.0	195	8.5	8.4	A
6920			3.1	194	8.6	8.5	
6922	3.9	240	3.1	196	8.6	8.5	C
6924	2.9	33	3.1	197	8.5	8.5	C
6926	3.1	27	3.1	195	8.6	8.7	A
6928	0.7	153	3.1	195	8.8	8.9	A
6930	3.1	200	3.2	193	8.8	8.9	A
6932	3.7	201	3.2	193	8.8	9.0	A
6934	4.4	197	3.1	192	8.8	8.8	A
6936	5.9	204	3.1	192	8.6	8.7	A
6938	3.9	220	3.1	194	8.7	8.7	A
6940	3.7	233	3.1	195	8.9	8.7	A
6942	4.0	238	3.1	196	8.8	8.6	A
6944	8.2	227	3.1	196	8.7	8.5	A
6946	8.1	218	3.1	196	8.8	8.7	A
6948	8.0	218	3.1	196	8.9	8.8	A
6950	8.4	225	3.1	197	8.9	8.8	A
6952	6.9	124	3.1	198	8.8	8.6	A
6954	6.2	148	3.0	197	8.8	8.6	A
6956	4.8	151	3.0	197	8.9	8.7	A
6958	2.7	126	3.1	197	9.0	8.7	A
6960	3.3	146	3.1	198	9.0	8.7	A
6962	4.6	152	3.0	199	9.0	8.7	A
6964	5.1	154	3.0	200	9.0	8.7	A
6966	7.1	157	3.1	201	8.9	8.7	A
6968	16.7	160	3.0	201	8.9	8.6	D
6970	18.0	151	2.9	199	8.7	8.5	D
6972	10.1	145	2.9	199	8.7	8.6	D
6974	9.3	135	3.0	198	8.7	8.6	D
6976			3.0	199	8.6	8.5	
6978	3.5	346	2.9	199	8.6	8.4	D
6980	0.9	230	3.0	197	8.6	8.4	B

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
6982	4.3	296	3.0	197	8.7	8.5	B
6984	2.8	1	2.9	196	8.8	8.5	B
6986	2.3	51	2.9	196	8.8	8.4	B
6988	3.1	234	2.9	196	8.7	8.4	B
6990	2.9	189	2.8	196	8.5	8.4	D
6992			2.8	200	8.4	8.3	
6994	14.7	169	2.7	198	8.5	8.3	A
6996	13.8	166	2.7	194	8.7	8.4	A
6998	13.8	154	2.7	196	8.6	8.3	A
7000	13.4	138	2.7	196	8.6	8.3	A
7002			2.6	197	8.6	8.4	
7004	8.4	335	2.6	198	8.6	8.4	A
7006	10.8	323	2.5	198	8.5	8.4	A
7008	7.1	294	2.5	198	8.5	8.4	C
7010	6.1	273	2.4	200	8.6	8.5	C
7012	6.7	272	2.4	202	8.7	8.7	A
7014	6.5	256	2.5	203	8.7	8.6	A
7016	6.9	234	2.5	203	8.6	8.5	A
7018	6.8	229	2.5	202	8.7	8.6	A
7020	6.6	214	2.5	202	8.8	8.6	A
7022	6.2	158	2.5	202	8.7	8.6	A
7024	6.1	134	2.4	202	8.6	8.6	A
7026	10.0	216	2.4	201	8.6	8.5	A
7028	11.1	217	2.4	201	8.5	8.5	A
7030	11.1	214	2.3	200	8.5	8.4	A
7032	8.7	220	2.3	199	8.4	8.4	A
7034	4.5	139	2.3	200	8.5	8.4	A
7036	3.8	171	2.3	200	8.5	8.4	A
7038	2.1	269	2.3	201	8.5	8.4	A
7040	3.6	284	2.3	202	8.4	8.4	A
7042	6.7	267	2.3	201	8.4	8.5	A
7044	7.1	255	2.3	201	8.4	8.5	A
7046	7.0	241	2.2	202	8.5	8.5	A
7048	8.3	246	2.2	202	8.5	8.5	C
7050	12.3	198	2.2	202	8.5	8.5	A
7052	24.4	225	2.2	203	8.5	8.6	C
7054	8.5	206	2.2	204	8.5	8.5	C
7056	8.1	233	2.2	204	8.4	8.5	A
7058	8.7	226	2.2	202	8.5	8.5	C
7060	10.3	241	2.2	202	8.5	8.4	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7062	10.6	301	2.1	203	8.6	8.4	C
7064	7.5	283	2.1	205	8.6	8.5	A
7066	5.8	243	2.1	208	8.6	8.4	A
7068	2.4	279	2.2	208	8.7	8.4	A
7070	2.2	267	2.2	208	8.7	8.4	A
7072	2.0	308	2.1	208	8.7	8.4	A
7074	3.7	352	2.1	208	8.8	8.5	A
7076	2.9	349	2.1	208	8.8	8.6	A
7078	2.8	340	2.1	209	8.8	8.5	A
7080	6.0	334	2.1	210	8.7	8.4	A
7082	3.3	187	2.1	207	8.7	8.4	C
7084	4.2	155	2.1	206	8.7	8.4	A
7086	2.2	205	2.1	207	8.6	8.4	A
7088	1.0	261	2.1	205	8.6	8.4	A
7090	0.8	195	2.1	205	8.7	8.4	A
7092	4.6	134	2.1	206	8.7	8.4	A
7094	2.4	127	2.2	207	8.7	8.6	A
7096	1.2	147	2.2	208	8.7	8.6	A
7098	1.2	201	2.2	208	8.7	8.6	A
7100	1.0	213	2.1	210	8.8	8.7	A
7102	1.1	343	2.2	210	8.8	8.7	A
7104	1.5	316	2.2	209	8.8	8.7	A
7106	1.6	264	2.2	210	8.8	8.6	A
7108	1.1	269	2.2	210	8.7	8.6	A
7110	1.2	265	2.2	210	8.7	8.6	A
7112	1.0	209	2.1	211	8.7	8.6	A
7114	2.9	190	2.1	210	8.7	8.6	A
7116	2.3	171	2.2	208	8.6	8.5	A
7118	0.7	154	2.2	208	8.5	8.5	A
7120	1.9	285	2.2	208	8.5	8.6	A
7122	2.6	280	2.2	208	8.6	8.7	A
7124	3.0	274	2.2	208	8.6	8.6	A
7126	4.2	268	2.2	208	8.5	8.6	A
7128	5.4	255	2.1	207	8.6	8.7	A
7130	4.7	240	2.1	209	8.7	8.7	A
7132	5.5	223	2.2	211	8.8	8.7	A
7134	11.3	205	2.2	209	8.9	8.8	A
7136	11.1	207	2.1	208	8.9	8.9	A
7138	3.0	278	2.1	209	8.9	8.9	C
7140	1.8	344	2.1	211	8.8	8.8	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7142	2.3	354	2.1	210	8.8	8.8	A
7144	2.0	346	2.1	211	8.9	8.8	A
7146	4.3	339	2.2	212	8.9	8.7	A
7148	4.7	342	2.1	211	8.9	8.7	A
7150	5.3	345	2.1	212	8.9	8.8	A
7152	5.3	340	2.1	214	8.9	8.7	A
7154	5.6	339	2.1	215	8.9	8.7	A
7156	6.5	338	2.1	216	9.0	8.7	A
7158	4.0	337	2.1	218	9.0	8.7	A
7160	3.6	337	2.1	220	9.1	8.8	A
7162	5.3	341	2.0	219	9.2	8.7	A
7164	6.2	349	2.1	219	9.2	8.7	A
7166	6.1	351	2.2	218	9.2	8.8	A
7168	7.2	356	2.2	217	9.2	8.8	A
7170	7.5	357	2.1	218	9.3	8.7	A
7172	7.3	355	2.1	219	9.4	8.8	A
7174	7.8	359	2.1	219	9.3	8.7	A
7176	8.7	2	2.1	219	9.2	8.7	A
7178	8.7	360	2.1	217	9.2	8.7	A
7180	8.3	360	2.1	217	9.3	8.8	A
7182	8.1	359	2.1	218	9.4	8.7	A
7184	9.8	359	2.1	217	9.4	8.7	A
7186	9.4	359	2.2	215	9.3	8.7	A
7188	9.8	8	2.2	216	9.1	8.6	A
7190	10.2	5	2.1	215	9.1	8.6	A
7192	11.0	1	2.1	214	9.1	8.6	A
7194	9.9	8	2.1	214	9.1	8.6	A
7196	11.4	14	2.1	214	9.1	8.6	A
7198	12.2	10	2.1	213	9.1	8.7	A
7200	13.5	3	2.1	213	9.1	8.7	A
7202	11.2	7	2.1	213	9.2	8.7	A
7204	11.6	2	2.1	212	9.4	8.8	A
7206	12.0	359	2.1	213	9.5	8.9	A
7208	17.0	23	2.1	213	9.5	8.9	A
7210	16.3	29	2.1	212	9.5	8.9	C
7212	20.6	30	2.1	211	9.6	8.8	C
7214	20.4	29	2.1	211	9.7	8.8	C
7216	17.8	22	2.1	211	9.7	8.8	C
7218	23.9	23	2.1	210	9.7	8.9	C
7220	24.7	12	2.2	210	9.7	9.0	C

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7222			2.2	210	9.6	9.0	
7224	19.0	40	2.2	211	9.7	8.8	A
7226	16.4	44	2.2	213	9.7	8.8	A
7228	17.3	46	2.3	213	9.6	8.8	A
7230	18.3	43	2.3	210	9.7	9.1	C
7232	23.7	49	2.3	209	10.0	9.4	A
7234	23.2	49	2.3	207	9.9	9.3	C
7236			2.3	207	9.8	9.2	
7238	6.1	52	2.2	210	9.4	9.0	A
7240	10.1	24	2.2	211	9.0	8.6	A
7242	16.2	31	2.3	211	8.9	8.5	A
7244	9.8	8	2.3	210	8.8	8.5	A
7246	11.0	1	2.3	209	8.8	8.4	A
7248	15.3	1	2.3	209	8.8	8.4	A
7250	18.0	5	2.3	206	8.8	8.5	A
7252	18.1	10	2.2	204	8.8	8.5	A
7254	18.7	19	2.2	203	8.9	8.5	C
7256			2.3	204	8.9	8.6	
7258	7.8	21	2.3	206	8.9	8.7	C
7260	10.0	52	2.4	206	8.8	8.6	B
7262			2.5	206	8.9	8.7	
7264	14.9	347	2.5	206	8.9	8.7	A
7266	11.0	339	2.5	202	8.8	8.7	A
7268	11.1	336	2.4	199	8.9	8.8	A
7270	19.2	331	2.5	196	8.8	8.7	A
7272	18.4	326	2.6	195	8.8	8.6	A
7274	15.2	339	2.6	193	8.8	8.6	C
7276	13.4	330	2.7	194	8.8	8.6	A
7278	13.8	326	2.7	197	8.9	8.6	A
7280	11.3	335	2.8	199	8.9	8.7	A
7282	7.9	339	2.8	198	8.9	8.8	A
7284	6.3	40	2.8	198	8.9	8.7	C
7286	7.1	8	2.9	197	8.9	8.8	A
7288	7.0	347	2.9	196	8.8	8.8	A
7290	5.3	349	2.9	196	8.8	8.8	A
7292	8.4	315	3.0	195	8.9	8.8	C
7294	9.9	323	3.0	194	8.9	8.8	A
7296	11.7	318	3.0	195	8.9	8.8	A
7298	15.2	284	3.0	194	8.9	8.8	A
7300	12.5	280	3.0	193	8.9	8.8	A

UGS

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7302	7.7	315	3.0	192	8.9	8.8	A
7304	28.5	343	3.0	192	8.9	8.8	B
7306	29.9	340	3.1	194	8.7	8.8	B
7308	25.1	343	3.1	194	8.6	8.8	D
7310	10.2	343	3.1	193	8.9	8.9	A
7312	9.8	331	3.1	192	9.0	9.0	A
7314	1.5	41	3.1	193	9.1	9.2	A
7316	3.1	357	3.1	193	9.1	9.2	A
7318	3.4	320	3.1	192	8.9	8.9	A
7320	11.0	15	3.1	189	8.7	8.8	C
7322	9.4	1	3.1	189	8.7	8.8	A
7324	9.0	358	3.2	190	8.7	8.8	A
7326			3.2	191	8.7	8.7	
7328	14.5	9	3.2	192	8.7	8.7	A
7330	17.2	10	3.1	190	8.8	8.8	A
7332			3.1	189	8.9	8.8	
7334	9.3	310	3.2	190	8.9	8.8	A
7336	8.7	303	3.2	190	8.9	8.8	A
7338	6.3	313	3.2	190	8.9	8.8	A
7340	9.1	213	3.2	192	8.9	8.8	A
7342	8.2	203	3.2	194	9.1	8.8	A
7344	4.1	14	3.2	195	9.3	8.8	C
7346	3.8	304	3.1	193	9.3	8.8	A
7348	1.1	19	3.2	191	9.0	8.8	A
7350	1.8	37	3.2	190	9.0	8.8	A
7352	12.6	192	3.2	191	8.9	8.7	B
7354			3.3	191	8.8	8.7	
7356	4.3	295	3.3	190	8.8	8.8	A
7358	4.8	282	3.4	190	8.9	8.8	A
7360	4.6	85	3.3	189	8.8	8.8	A
7362	5.0	77	3.3	189	8.7	8.7	A
7364	6.5	309	3.4	191	8.7	8.7	A
7366	8.6	311	3.4	191	8.7	8.7	A
7368	9.0	311	3.4	191	8.7	8.8	A
7370	1.7	65	3.4	189	8.7	8.8	C
7372	3.8	39	3.4	189	8.8	8.8	A
7374	3.6	29	3.4	191	8.8	8.8	A
7376	2.3	26	3.4	193	8.8	8.8	A
7378	15.0	345	3.4	192	8.9	8.7	A
7380	9.1	352	3.5	193	8.9	8.7	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7382	7.5	347	3.4	193	9.0	8.8	A
7384	3.3	293	3.3	191	9.0	8.8	A
7386	3.3	58	3.4	192	8.9	8.8	A
7388	3.9	64	3.5	191	8.9	8.8	A
7390	11.4	331	3.5	193	9.0	8.8	A
7392	8.6	336	3.4	194	9.0	8.7	A
7394	11.2	353	3.4	194	8.9	8.7	A
7396	8.7	335	3.4	196	9.0	8.7	A
7398	10.4	332	3.4	196	9.0	8.7	C
7400	12.0	330	3.4	196	9.1	8.8	C
7402	7.6	352	3.4	195	9.1	8.7	A
7404	4.2	25	3.5	198	9.2	8.7	C
7406	7.1	350	3.4	200	9.5	8.8	C
7408	12.3	15	3.3	199	9.9	9.0	C
7410	5.1	330	3.3	201	10.0	9.0	A
7412	4.7	357	3.3	202	9.6	8.9	A
7414	3.0	343	3.3	199	9.4	8.8	A
7416	3.2	342	3.4	199	9.3	8.8	A
7418	1.6	311	3.4	200	9.3	8.8	A
7420	1.9	5	3.4	199	9.6	8.8	A
7422	7.7	333	3.3	197	9.8	8.9	A
7424	9.4	323	3.3	199	10.[illegible]	8.9	A
7426	6.5	350	3.8	20[illegible]	11.0	9.0	A
7428	6.5	353	3.8	201	11.0	9.0	A
7430	5.3	356	3.6	198	10.5	9.0	A
7432	5.5	342	3.6	195	11.0	8.9	A
7434	5.4	325	3.3	198	11.0	8.9	A
7436	5.8	337	3.3	199	10.1	8.8	A
7438	6.0	10	3.3	198	10.5	8.8	A
7440	5.8	12	3.5	197	10.9	8.8	A
7442	4.4	18	3.6	196	10.1	8.8	A
7444	3.5	22	3.4	197	9.5	8.8	A
7446	4.2	36	3.4	198	9.4	8.8	A
7448	4.7	52	3.5	198	9.5	8.8	A
7450	4.7	70	3.4	198	9.9	8.9	A
7452	3.9	55	3.4	198	10.0	8.9	A
7454	3.4	54	3.3	197	9.7	8.8	A
7456	3.7	55	3.3	196	9.6	8.8	A
7458	4.1	60	3.4	196	9.8	8.8	A
7460	4.7	66	3.4	197	9.9	8.7	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7462	4.4	57	3.3	197	10.2	8.8	A
7464	4.0	38	3.2	197	10.6	8.8	A
7466	4.7	51	3.3	198	10.8	8.6	A
7468	6.6	71	3.3	200	10.9	8.6	A
7470	5.8	69	3.3	200	11.1	8.6	A
7472			3.3	200	11.4	8.7	
7474	4.4	322	3.2	200	10.8	8.7	A
7476	2.2	24	3.3	200	10.1	8.7	A
7478	4.2	86	3.5	198	10.1	8.6	A
7480	6.0	89	3.4	200	10.4	8.6	A
7482	2.0	22	3.2	200	10.3	8.6	A
7484	1.6	83	3.2	199	10.2	8.6	A
7486	6.9	87	3.4	200	10.4	8.7	A
7488	5.5	59	3.5	201	10.2	8.6	A
7490	5.2	37	3.3	200	10.6	8.7	A
7492	6.7	31	3.3	199	10.7	8.6	A
7494	3.8	50	3.3	200	10.3	8.4	A
7496	4.0	95	3.1	201	10.3	8.4	A
7498	4.6	105	3.1	201	10.4	8.6	A
7500	5.5	106	3.3	200	10.2	8.6	C
7502	18.9	133	3.3	200	9.8	8.5	B
7504	19.5	138	3.3	201	9.6	8.6	B
7506	8.7	350	3.3	201	9.6	8.6	C
7508			3.2	202	9.6	8.5	
7510			3.2	202	9.5	8.5	
7512	5.2	18	3.3	202	9.5	8.6	C
7514	9.3	131	3.3	203	9.5	8.7	C
7516	5.8	101	3.3	202	9.4	8.8	C
7518	3.4	53	3.3	201	9.6	8.8	A
7520	3.2	44	3.2	203	9.9	8.8	A
7522	1.6	55	3.1	205	9.9	8.8	A
7524	2.6	51	3.1	204	9.6	8.8	A
7526	2.8	26	3.2	204	9.5	8.8	A
7528	3.6	342	3.3	205	9.7	8.9	A
7530	3.9	343	3.2	206	9.8	8.8	A
7532	3.3	16	3.1	205	9.7	8.8	A
7534	3.6	21	3.0	206	9.6	8.9	A
7536	5.0	16	3.0	206	9.6	8.9	A
7538	5.0	51	3.1	205	9.6	8.8	A
7540	5.6	65	3.2	202	9.3	8.8	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7542	3.0	349	3.2	202	9.0	8.8	A
7544	2.9	335	3.2	202	8.9	8.8	A
7546	3.2	357	3.2	202	8.9	8.9	A
7548	3.5	1	3.1	202	8.8	8.9	A
7550	3.5	5	3.1	201	8.9	8.9	A
7552	2.4	27	3.2	201	8.9	8.9	A
7554	2.8	30	3.1	201	8.9	8.9	A
7556	3.1	28	3.2	200	8.9	8.9	A
7558	2.6	32	3.1	202	9.0	9.6	A
7560	1.3	154	3.1	204	9.1	10.1	A
7562	2.5	354	3.3	203	9.1	10.0	A
7564	4.5	343	3.3	202	9.2	10.3	A
7566	0.4	249	3.1	202	9.2	9.8	A
7568	0.8	35	3.1	202	9.2	9.0	A
7570	1.5	24	3.1	203	9.2	9.0	A
7572	2.2	2	3.1	203	9.2	9.1	A
7574	3.1	7	3.1	203	9.1	9.0	A
7576	3.5	8	3.1	203	9.1	9.0	A
7578	19.5	129	3.1	203	9.0	8.9	B
7580			3.1	202	9.0	8.9	
7582			3.0	203	9.0	8.9	
7584	6.4	86	3.1	202	9.0	8.9	A
7586	6.8	76	3.1	202	9.0	8.9	A
7588	6.5	72	3.0	203	9.0	9.0	A
7590	7.3	86	3.1	203	8.2	8.9	A
7592	7.3	78	3.0	204	8.0	8.9	C
7594	7.8	95	3.0	206	8.9	9.0	A
7596	8.1	114	3.1	208	9.3	9.0	A
7598	4.4	26	3.1	206	9.5	9.0	A
7600	5.6	46	3.1	204	9.3	9.1	A
7602	6.5	53	3.1	204	9.7	9.1	A
7604	5.6	52	3.1	206	10.4	9.3	A
7606	7.0	70	3.1	205	11.1	9.4	C
7608	4.6	45	3.1	208	10.7	9.3	A
7610	6.8	25	3.1	206	9.4	9.1	A
7612	6.5	29	3.2	205	9.0	9.0	A
7614	5.9	38	3.1	205	9.1	9.0	A
7616	5.8	46	3.1	205	9.2	9.1	A
7618	5.6	43	3.1	204	9.2	9.1	A
7620	5.3	54	3.2	205	9.8	9.1	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7622	6.3	46	3.2	206	10.1	9.2	A
7624	6.1	46	3.3	205	9.9	9.3	A
7626	5.5	75	3.3	205	9.8	9.2	A
7628	4.5	62	3.1	207	9.6	9.2	A
7630	4.9	55	3.3	207	9.6	9.1	A
7632	5.3	76	3.3	206	9.8	9.2	A
7634	6.8	82	3.2	206	10.7	9.5	A
7636	5.6	104	3.3	204	11.8	9.8	C
7638	6.5	88	3.3	205	12.2	9.8	A
7640	7.2	85	3.2	206	11.4	9.6	A
7642	7.0	87	3.1	205	10.2	9.3	A
7644	6.5	94	3.2	205	9.9	9.2	A
7646	6.1	97	3.2	206	10.1	9.4	A
7648	5.1	70	3.1	206	9.9	9.4	A
7650	6.7	78	3.3	206	9.1	9.2	A
7652	6.9	79	3.3	206	9.0	9.2	A
7654	6.8	74	3.3	206	9.1	9.2	A
7656	7.7	81	3.2	205	9.1	9.1	A
7658	8.3	86	3.3	208	9.3	9.2	A
7660	8.2	47	3.3	208	9.7	9.4	B
7662	6.2	60	3.4	208	10.0	9.3	B
7664	6.6	68	3.3	207	10.1	9.4	B
7666	15.3	98	3.2	207	10.0	9.7	D
7668			3.3	209	9.6	9.6	
7670	3.0	118	3.2	206	9.5	9.5	D
7672			3.2	203	9.5	9.3	
7674			3.2	204	10.1	9.2	
7676	7.8	81	3.3	207	11.6	9.6	D
7678	4.6	79	3.4	207	12.1	9.7	A
7680	3.2	105	3.3	205	11.2	9.5	A
7682	3.5	101	3.6	204	9.9	9.2	A
7684	4.5	112	3.6	204	9.8	9.1	A
7686	10.7	152	3.5	204	10.2	9.1	A
7688	10.7	128	3.3	204	10.3	9.1	A
7690	11.7	108	3.3	204	10.8	9.3	A
7692	18.2	130	3.5	204	11.2	9.8	C
7694	9.0	108	3.3	205	11.4	10.1	A
7696	8.1	125	3.4	205	11.5	10.2	A
7698	13.9	114	3.5	205	11.2	10.2	C
7700			3.4	205	10.5	10.0	

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7702			3.3	203	9.6	9.6	
7704	5.3	46	3.5	204	9.7	9.4	A
7706	3.6	50	3.6	204	9.8	9.4	A
7708	2.4	49	3.4	202	10.5	9.5	A
7710	7.0	86	3.4	203	11.1	9.7	A
7712	7.0	95	3.6	205	10.4	9.7	A
7714	6.8	76	3.6	202	10.4	9.6	A
7716	9.3	108	3.6	202	10.3	9.5	A
7718	6.0	98	3.5	204	9.7	9.3	A
7720	7.1	103	3.6	206	9.7	9.3	A
7722	10.1	114	3.5	208	10.0	9.6	A
7724	9.4	97	3.5	208	11.0	9.9	A
7726	10.6	99	3.5	206	11.1	10.0	A
7728	9.2	98	3.4	205	10.4	9.9	A
7730	8.9	94	3.6	206	11.7	9.9	A
7732			3.7	206	12.9	9.9	
7734	8.8	346	3.5	204	11.8	9.5	C
7736	21.1	301	3.6	203	10.6	9.3	B
7738	5.9	55	3.5	205	10.0	9.2	A
7740	6.7	49	3.5	206	9.7	9.1	A
7742	5.6	19	3.6	209	9.7	9.3	A
7744	6.5	41	3.5	209	9.6	9.4	A
7746	8.5	34	3.6	204	9.5	9.4	A
7748	9.0	36	3.6	202	9.7	9.3	A
7750	9.4	50	3.6	204	11.2	9.4	A
7752			3.6	205	12.9	9.8	
7754			3.7	206	13.9	10.0	
7756	11.4	87	3.9	206	13.6	9.9	A
7758	14.2	69	3.9	205	12.9	9.9	A
7760	15.0	44	3.6	207	14.9	9.9	C
7762	6.3	89	3.5	208	14.5	9.7	A
7764	6.6	85	3.4	207	13.4	9.4	A
7766	7.6	80	3.5	209	14.6	9.4	A
7768	8.3	94	3.5	209	14.0	9.2	A
7770	12.1	121	3.6	208	12.7	9.1	A
7772	10.8	140	3.6	203	11.2	9.1	A
7774	14.0	122	3.6	204	10.6	9.1	A
7776	11.3	119	3.7	208	11.4	9.3	C
7778	6.1	89	3.6	207	11.6	9.3	A
7780	8.0	95	3.6	206	11.4	9.3	A

USGS

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7782			3.6	205	11.7	9.5	
7784	8.7	44	3.7	207	12.4	9.5	C
7786	13.1	119	3.7	206	12.2	9.3	A
7788	10.4	133	3.6	204	10.8	9.2	A
7790	14.4	151	3.6	206	11.4	9.2	C
7792	4.4	70	3.6	206	12.6	9.4	D
7794			3.6	207	10.8	9.3	
7796	8.9	12	3.6	208	10.0	9.1	D
7798	12.3	333	3.7	208	11.3	8.9	D
7800	10.7	330	3.7	207	12.2	9.0	B
7802	15.3	118	3.8	208	12.4	9.1	D
7804	12.6	115	3.8	208	12.3	9.1	B
7806	10.2	111	3.8	208	11.4	9.0	B
7808	12.0	100	3.7	209	10.7	8.9	B
7810	12.2	101	3.7	210	11.0	8.9	B
7812	13.6	114	3.7	211	11.4	9.0	A
7814	12.0	116	3.7	210	11.3	9.1	A
7816	11.6	113	3.6	209	11.2	9.1	A
7818	10.9	112	3.7	208	11.2	9.1	A
7820	11.8	114	3.8	206	11.2	9.0	A
7822	3.5	78	4.1	206	11.1	9.0	D
7824	3.2	73	3.8	208	11.1	9.0	B
7826	3.1	76	3.5	212	11.3	8.8	B
7828			3.8	213	11.6	8.8	
7830	4.5	116	3.9	211	11.6	8.8	D
7832	8.7	115	3.8	211	11.3	8.9	A
7834	9.6	115	3.8	213	11.1	8.9	A
7836	14.6	123	3.8	215	11.5	9.0	A
7838			3.7	213	11.9	9.1	
7840	7.6	220	3.7	211	11.9	9.3	C
7842			3.7	215	12.7	9.5	
7844	7.4	232	3.9	215	12.3	9.5	A
7846	8.2	170	4.0	212	10.3	9.2	A
7848	10.9	162	3.8	211	10.8	9.1	A
7850	13.7	166	3.9	211	12.6	9.3	A
7852	11.0	136	3.9	213	12.9	9.3	B
7854	7.3	133	3.8	215	12.4	9.3	B
7856	10.8	141	4.2	212	11.6	9.2	B
7858	11.9	139	4.5	212	11.2	9.3	D
7860	9.8	144	4.2	216	11.5	9.3	D

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7862			4.0	218	11.6	9.3	
7864			3.9	213	11.3	9.3	
7866			3.7	218	11.6	9.4	
7868	14.3	104	2.9	277	12.2	9.3	D
7870	13.3	173	3.4	46	11.6	9.3	D
7872			5.0	132	10.2	9.3	
7874	6.5	52	4.6	214	8.9	9.0	B
7876			3.9	218	8.8	9.1	
7878			4.0	217	9.0	9.6	
7880			4.0	217	9.1	9.8	
7882	15.0	34	4.0	215	9.1	10.2	D
7884			4.1	214	9.3	11.1	
7886			4.3	215	9.4	11.9	
7888	11.7	28	4.2	215	9.4	12.2	D
7890			4.1	218	9.6	12.1	
7892	11.8	66	4.2	218	9.7	11.1	A
7894	12.0	69	4.1	213	9.6	9.8	A
7896	11.0	78	4.2	214	9.7	9.6	A
7898	11.5	81	4.3	216	9.8	9.6	A
7900	12.2	81	4.4	215	9.8	9.6	A
7902	12.3	82	4.6	214	9.7	9.5	A
7904	9.9	92	4.4	212	9.5	9.4	A
7906	8.8	113	4.4	210	9.2	9.2	A
7908	9.8	155	4.5	212	9.4	9.2	A
7910	8.1	88	4.3	211	9.5	9.2	A
7912	6.7	86	4.6	210	9.4	9.4	A
7914	15.6	162	4.5	213	9.4	9.6	B
7916	10.1	81	4.3	214	9.4	9.5	A
7918	10.8	84	4.3	215	9.4	9.5	A
7920	11.5	88	4.2	217	9.4	9.6	A
7922	8.5	93	4.3	215	9.5	9.5	A
7924	12.2	64	4.4	214	9.5	9.3	C
7926	10.9	101	4.2	215	9.5	9.2	C
7928	3.7	21	4.2	213	9.5	9.1	C
7930	12.7	73	4.2	213	9.4	9.4	A
7932	11.8	78	4.4	215	9.4	9.8	A
7934	14.1	57	4.5	214	9.5	10.0	A
7936	13.7	58	4.4	214	9.6	10.1	A
7938	12.3	56	4.4	216	9.8	10.4	A
7940	11.2	53	4.6	218	9.8	10.6	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
7942	12.7	74	4.5	218	9.8	10.4	A
7944	13.0	56	4.2	215	9.5	10.3	A
7946	20.6	52	4.3	212	9.7	10.4	A
7948			4.3	215	10.3	11.0	
7950	12.8	52	4.3	219	10.7	11.7	A
7952	14.3	58	4.6	217	10.3	11.6	A
7954	9.9	82	4.6	215	9.8	12.0	C
7956	19.5	46	4.6	216	9.7	12.0	A
7958	15.5	73	4.5	216	9.7	11.1	B
7960	14.3	78	4.7	215	9.8	11.6	B
7962			5.1	214	9.8	12.2	
7964	15.6	85	5.0	215	9.7	12.0	D
7966	17.8	71	4.6	217	9.7	12.1	D
7968	15.6	74	4.5	215	9.5	10.8	B
7970	15.9	74	4.6	215	9.3	9.7	B
7972	15.8	68	4.5	218	9.3	9.7	D
7974	11.5	43	4.6	218	9.3	9.2	D
7976			4.7	217	9.4	9.2	
7978	13.8	79	4.6	217	9.5	9.2	A
7980	14.1	77	4.7	216	9.6	9.1	A
7982	13.7	75	4.8	215	9.6	9.2	A
7984	13.0	76	4.7	216	9.6	9.3	A
7986	12.8	93	4.6	217	9.5	9.3	A
7988	13.0	94	4.6	217	9.4	9.3	A
7990	12.3	92	4.6	216	9.5	9.1	A
7992	12.4	88	4.6	214	9.4	9.1	A
7994	13.5	89	4.6	215	9.2	9.1	A
7996	15.3	92	4.6	218	9.1	9.3	A
7998	16.0	87	4.7	218	9.1	9.3	A
8000	14.9	85	4.7	218	9.1	9.1	A
8002	14.5	84	4.7	220	9.1	9.2	A
8004	14.9	87	4.9	221	9.1	9.2	A
8006	13.7	88	5.3	220	9.1	9.4	A
8008	12.9	94	5.1	220	9.1	9.5	A
8010	12.8	101	4.9	221	9.1	9.6	A
8012	13.8	98	5.0	221	9.1	9.7	A
8014			4.9	218	9.1	9.5	
8016	14.6	85	4.7	219	9.1	9.2	A
8018	13.7	84	4.9	222	9.1	9.0	A
8020	12.8	83	5.2	222	9.0	8.9	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8022	12.2	84	5.6	223	9.0	8.9	A
8024	12.9	85	5.5	223	9.0	8.9	A
8026	10.5	103	4.9	224	9.0	8.9	A
8028	10.6	97	4.7	224	9.0	8.9	A
8030	12.1	87	5.0	225	9.0	8.9	A
8032	13.4	88	5.0	225	9.0	9.0	A
8034	17.1	93	4.9	226	9.0	9.0	A
8036	15.7	89	4.8	226	9.0	8.9	A
8038	15.7	90	5.0	223	9.0	9.0	A
8040	15.9	88	5.2	224	9.0	9.1	A
8042	15.2	81	5.4	227	9.0	9.1	A
8044	8.0	73	5.3	227	9.0	9.3	A
8046	8.7	87	5.0	225	9.0	9.4	A
8048	10.5	83	5.0	226	9.0	9.6	A
8050	11.9	78	5.0	225	9.0	10.0	A
8052	20.4	74	5.0	224	9.0	10.3	C
8054	16.3	93	5.0	224	9.0	10.5	A
8056	13.7	88	4.9	225	9.0	10.5	A
8058	12.4	82	5.0	225	9.0	10.7	A
8060	9.1	82	5.1	224	9.0	11.1	A
8062	10.5	92	5.0	226	9.1	10.7	A
8064	15.3	98	5.0	225	9.1	10.3	A
8066	15.5	97	5.1	223	9.0	10.6	A
8068	15.1	101	5.1	226	9.0	11.0	A
8070	10.6	96	5.0	228	9.0	11.1	A
8072	11.7	102	5.0	226	9.0	11.5	A
8074	13.3	103	5.0	227	9.2	11.3	A
8076	10.9	90	5.2	231	9.3	11.2	A
8078	12.8	89	5.2	229	9.2	11.6	A
8080	18.7	68	5.1	225	9.3	11.9	C
8082	12.5	36	5.3	225	9.3	11.1	A
8084	12.5	37	5.2	227	9.2	10.9	A
8086			5.2	226	9.2	11.5	
8088			5.2	226	9.1	11.6	
8090	9.3	105	5.2	227	9.1	11.0	A
8092	6.9	80	5.1	228	9.1	10.8	A
8094			5.1	228	9.1	11.1	
8096	13.1	96	5.0	227	9.1	11.2	C
8098	14.3	103	5.1	227	9.0	11.3	A
8100	12.2	96	5.2	227	9.0	11.1	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8102	13.3	103	5.2	226	9.0	10.9	A
8104	16.9	102	5.5	225	9.0	10.8	A
8106	18.0	95	5.7	227	9.1	10.7	A
8108	7.6	80	5.7	228	9.1	11.3	D
8110	7.7	80	5.5	225	9.1	12.0	D
8112	12.9	107	5.2	223	9.2	12.3	A
8114	11.6	103	5.1	224	9.3	12.0	A
8116	11.4	101	5.1	224	9.3	11.7	A
8118	14.3	105	5.3	224	9.3	11.4	A
8120	11.9	89	5.2	226	9.2	11.1	A
8122	12.9	93	5.0	228	9.1	11.4	A
8124	17.0	102	5.1	227	9.1	11.8	A
8126	16.6	98	5.1	226	9.0	11.9	A
8128	22.4	101	5.2	227	9.0	11.6	A
8130	21.5	98	5.3	225	9.1	10.9	A
8132	18.5	97	5.2	224	9.1	10.5	A
8134	19.3	107	5.1	225	9.2	10.6	A
8136	17.4	103	5.2	225	9.1	10.3	A
8138	18.0	98	5.3	224	9.0	9.9	A
8140	13.8	106	5.3	226	9.0	10.3	A
8142	19.7	108	5.3	227	9.0	10.4	A
8144	16.1	108	5.5	226	9.1	10.3	A
8146	14.9	105	5.5	227	9.1	10.5	A
8148	18.2	107	5.4	226	9.1	10.7	A
8150	19.8	108	5.3	227	9.2	10.6	A
8152	20.3	102	5.5	229	9.2	10.5	A
8154	21.4	94	5.6	223	9.2	10.6	A
8156	13.1	84	5.7	223	9.1	10.6	A
8158	12.7	88	5.6	228	9.0	10.3	A
8160	12.6	95	5.7	227	9.0	10.0	A
8162	5.8	68	6.5	232	9.1	10.2	A
8164	5.7	65	6.3	233	9.1	10.0	A
8166	1.9	339	5.4	229	9.0	9.7	C
8168			5.0	229	9.0	9.8	
8170	3.6	343	5.0	227	9.0	10.0	C
8172	24.3	85	5.4	228	9.1	10.2	C
8174			5.4	229	9.1	10.2	
8176			5.5	230	9.1	10.5	
8178	20.9	112	5.7	230	8.9	10.6	C
8180			5.6	230	8.9	10.6	

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8182	26.3	116	5.6	229	9.1	10.8	C
8184	20.0	147	5.5	230	9.0	10.4	C
8186	20.3	149	5.5	231	8.9	10.0	C
8188	29.0	123	5.6	233	9.0	10.0	C
8190	18.9	125	5.5	234	9.0	9.8	A
8192	17.9	114	5.4	232	9.1	10.0	A
8194	13.8	103	5.5	227	9.1	10.1	B
8196	25.2	105	5.3	227	9.1	10.2	B
8198			5.3	232	9.1	10.2	
8200	24.8	107	5.4	234	9.1	9.9	D
8202			5.3	233	9.1	10.1	
8204			5.5	232	9.2	10.1	
8206	17.5	103	5.7	231	9.2	9.8	B
8208	35.1	104	5.7	234	9.2	9.5	D
8210	12.8	86	5.7	234	9.1	9.4	D
8212	12.9	96	5.7	233	9.1	9.5	B
8214	12.3	100	5.6	232	9.1	9.6	A
8216	13.3	92	6.1	230	9.1	9.7	A
8218	13.2	92	6.1	231	9.2	10.1	A
8220	12.3	92	5.6	233	9.3	10.3	A
8222	11.3	93	5.6	233	9.3	10.3	A
8224	10.6	91	5.6	233	9.3	10.2	A
8226	10.1	76	5.8	232	9.3	10.2	A
8228	9.5	78	5.9	232	9.3	9.9	A
8230	9.3	95	6.1	235	9.2	9.7	A
8232	9.7	84	6.1	236	9.2	10.0	A
8234	9.5	77	5.8	234	9.3	9.8	A
8236	9.6	80	5.7	234	9.3	9.5	A
8238	9.8	84	5.7	236	9.2	9.3	A
8240	9.6	87	5.7	236	9.1	9.1	A
8242	11.9	72	5.7	237	9.1	9.0	A
8244	11.9	68	5.8	236	9.1	9.1	A
8246	11.1	65	5.8	234	9.1	9.1	A
8248	11.1	66	5.8	235	9.2	9.2	A
8250	11.3	63	5.8	234	9.1	9.3	A
8252	10.4	69	5.9	235	9.1	9.2	A
8254	9.8	69	6.0	236	9.2	9.2	A
8256	10.4	63	6.0	234	9.2	9.4	A
8258	10.6	68	5.8	235	9.2	9.5	A
8260	10.8	68	6.1	237	9.2	9.6	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	SUPERHOLE DEV.	SUPERHOLE DEV. AZI.	DIAM 1-3	DIAM 2-4	QUAL. INDEX BEST =A
8262	11.7	70	5.3	236	9.1	9.4	A
8264	10.8	68	5.9	234	9.1	9.1	A
8266	10.9	61	5.7	234	9.1	9.2	A
8268	13.0	56	5.8	233	9.1	9.5	A
8270	12.8	61	5.7	235	9.1	9.9	A
8272	11.8	74	5.9	237	9.2	10.4	A
8274	12.7	80	6.6	233	9.1	10.1	C
8276	12.8	65	6.5	233	9.1	9.6	A
8278	13.8	63	6.0	237	9.1	9.4	A
8280	10.5	78	6.0	237	9.1	9.3	A
8282	10.0	76	6.0	235	9.2	10.1	A
8284	10.7	85	5.8	235	9.2	10.7	A
8286	10.6	88	5.8	234	9.3	10.2	A
8288	10.6	83	6.0	234	9.2	10.0	A
8290	9.3	80	6.0	235	9.1	10.1	A
8292	13.3	62	5.9	237	9.1	9.7	A
8294	12.7	68	6.0	239	9.1	9.7	C
8296	11.0	69	6.0	235	9.1	9.7	A
8298	12.3	65	6.2	233	9.1	9.4	A
8300	12.0	67	6.2	234	9.1	9.3	A
8302	11.6	69	6.0	235	9.2	9.3	A
8304	9.6	52	6.0	237	9.2	9.3	A
8306	9.9	55	5.9	241	9.1	9.6	A
8308	11.9	66	5.9	241	9.1	9.7	A
8310	12.0	60	6.1	237	9.1	9.2	A
8312	13.7	62	6.1	238	9.1	9.1	A
8314	14.7	64	6.1	237	9.0	9.2	A
8316	16.0	66	6.1	235	9.0	9.2	A
8318	14.5	68	6.0	236	9.1	9.1	A
8320	14.3	72	6.0	235	9.1	9.4	A
8322	12.1	74	6.1	236	9.1	9.5	A
8324	11.4	48	6.3	238	9.2	9.4	C
8326	11.1	59	6.2	237	9.2	9.9	A
8328	12.4	70	6.1	236	9.2	10.5	A
8330	10.8	70	6.0	236	9.2	10.6	A
8332	10.1	72	6.0	235	9.3	10.6	A
8334	11.1	66	6.2	236	9.3	10.7	A
8336	11.5	66	6.1	236	9.3	10.8	A
8338	10.3	51	6.1	236	9.2	10.3	A
8340	10.4	48	6.1	236	9.2	10.0	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8342	10.5	49	6.0	235	9.2	10.3	A
8344	9.6	52	6.1	236	9.3	10.1	A
8346	9.7	51	6.2	239	9.2	10.2	A
8348			6.2	238	9.3	11.1	
8350	11.5	66	6.3	239	9.2	11.5	A
8352	9.5	63	6.2	236	9.1	11.1	A
8354	8.6	70	6.3	235	9.2	11.0	A
8356	14.3	56	6.4	237	9.2	10.5	A
8358	13.9	70	6.2	236	9.2	10.5	C
8360	13.5	71	6.2	233	9.5	10.4	A
8362	17.6	41	6.3	230	9.5	9.4	A
8364	14.2	46	6.4	233	9.3	8.9	A
8366	11.7	56	6.5	234	9.2	8.9	A
8368	10.2	63	6.3	235	9.2	8.9	A
8370	14.1	53	6.5	236	9.1	8.8	A
8372	14.3	47	6.4	237	9.2	8.8	A
8374	11.7	43	6.3	238	9.1	8.8	A
8376	11.0	57	6.2	239	9.0	8.8	A
8378	10.2	61	6.1	239	9.0	8.9	A
8380	9.4	29	6.2	241	9.0	9.0	C
8382	9.0	75	6.4	243	8.9	9.0	A
8384	9.1	69	6.6	243	8.9	9.0	C
8386	11.6	17	7.2	242	8.9	9.0	A
8388	12.1	13	6.9	242	8.9	9.0	A
8390	7.5	353	6.1	241	9.0	9.1	A
8392	9.5	338	6.1	241	9.1	9.0	A
8394	10.1	338	6.3	243	9.1	9.0	A
8396	3.0	341	6.4	244	9.0	9.0	B
8398	5.0	351	6.2	244	9.0	8.8	D
8400	8.4	73	6.2	243	9.0	8.8	D
8402	55.0	309	6.2	243	9.1	8.9	D
8404	62.3	309	6.1	242	9.2	9.0	D
8406	62.1	310	5.9	241	9.4	9.0	B
8408			6.0	239	9.6	9.0	
8410			6.1	238	9.8	9.1	
8412	10.2	15	6.5	239	10.0	9.0	D
8414	9.5	14	6.3	240	10.5	9.1	D
8416	9.8	28	5.9	241	10.8	9.1	D
8418	18.1	42	6.5	242	11.0	9.1	A
8420	19.5	46	6.4	241	11.9	9.1	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8422	5.8	42	6.1	237	12.7	9.1	C
8424	11.8	54	6.2	240	11.8	9.1	A
8426	13.1	67	6.1	242	11.0	9.0	A
8428	12.3	58	6.2	239	10.9	9.1	A
8430	9.9	41	6.2	240	10.3	9.1	A
8432			6.1	239	9.8	9.0	
8434	17.8	55	6.1	239	9.5	9.0	C
8436	11.3	52	6.2	240	9.2	9.0	A
8438	11.3	50	6.3	240	9.1	9.0	A
8440	11.9	43	6.2	240	9.2	9.0	A
8442	11.2	28	6.2	240	9.4	9.0	A
8444	11.0	20	6.3	241	9.3	9.0	A
8446	10.9	15	6.3	240	9.1	9.0	A
8448	9.9	12	6.3	238	9.3	9.0	A
8450			6.3	239	9.3	9.0	
8452	10.2	24	6.2	239	9.2	9.0	A
8454	11.1	13	6.1	240	9.1	9.0	A
8456	12.5	13	6.2	240	9.2	9.0	A
8458	11.5	27	6.2	240	9.3	9.0	A
8460	11.0	31	6.2	240	9.2	9.0	A
8462	11.0	32	6.2	239	9.1	9.0	A
8464	11.1	35	6.2	238	9.1	8.9	A
8466	11.1	40	6.2	238	9.0	8.9	A
8468	10.6	32	6.2	238	9.0	8.9	A
8470			6.2	237	9.1	8.9	
8472	16.1	27	6.3	238	9.1	8.9	A
8474	18.0	32	6.3	239	9.1	8.9	C
8476	17.6	43	6.3	240	9.2	8.9	C
8478	15.1	36	6.3	240	9.1	8.9	A
8480	18.3	27	6.3	239	9.1	9.0	A
8482	16.8	29	6.3	239	9.1	9.0	A
8484	15.1	37	6.3	240	9.1	9.0	A
8486	20.1	32	6.4	239	9.1	9.0	A
8488	19.8	35	6.3	238	9.1	8.9	A
8490	14.1	41	6.3	238	9.1	8.9	A
8492	11.0	54	6.3	238	9.1	8.9	A
8494	12.6	54	6.3	238	9.1	8.9	A
8496	11.8	50	6.3	238	9.1	8.9	C
8498	12.3	45	6.3	238	9.2	8.9	A
8500	12.0	43	6.3	238	9.3	9.0	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8502	11.6	43	6.4	238	9.3	9.0	A
8504	11.2	47	6.4	237	9.3	9.0	A
8506	12.4	44	6.4	236	9.4	9.1	D
8508			6.5	236	9.4	9.1	
8510	9.8	248	6.5	236	9.2	9.1	B
8512	8.0	15	6.5	235	9.2	9.1	B
8514	10.4	16	6.5	234	9.3	9.1	B
8516			6.5	233	9.3	9.1	
8518	10.4	334	6.5	234	9.3	9.1	C
8520	16.7	360	6.5	236	9.3	9.1	A
8522	19.9	6	6.5	237	9.3	9.1	A
8524	24.1	9	6.5	238	9.2	9.1	A
8526	12.6	13	6.5	238	9.2	9.0	A
8528	14.1	358	6.6	236	9.5	9.0	C
8530	14.4	354	6.5	236	9.7	9.1	C
8532	14.6	352	6.5	236	9.4	9.1	C
8534	19.3	15	6.5	235	9.3	9.1	C
8536	14.5	356	6.6	234	9.4	9.1	C
8538	12.6	360	6.6	232	9.5	9.1	C
8540	11.8	351	6.5	233	9.5	9.1	C
8542	9.1	356	6.5	235	9.3	9.1	A
8544	8.6	357	6.5	234	9.3	9.1	A
8546	7.0	4	6.6	235	9.4	9.1	A
8548	8.8	60	6.5	234	9.6	9.1	C
8550	4.2	62	6.6	232	9.6	9.1	A
8552	5.2	25	6.5	234	9.5	9.1	A
8554	9.7	21	6.5	235	9.4	9.1	A
8556	11.2	20	6.5	235	9.3	9.1	A
8558	11.9	13	6.6	236	9.2	9.1	A
8560	4.2	16	6.6	236	9.4	9.1	A
8562	3.3	14	6.5	234	9.8	9.2	A
8564	10.1	22	6.5	232	9.9	9.3	A
8566	9.5	23	6.5	232	9.5	9.3	A
8578	11.8	26	6.5	235	9.3	9.1	A
8580	11.6	38	6.6	233	9.4	9.1	C
8582	9.7	312	6.6	232	9.4	9.1	C
8584			6.5	233	9.4	9.1	
8586	5.4	26	6.6	233	9.4	9.1	A
8588	6.4	32	6.5	232	9.4	9.1	A
8590	7.1	28	6.6	232	9.4	9.1	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8592	7.9	25	6.6	232	9.4	9.1	A
8594	7.9	21	6.6	232	9.4	9.1	A
8596	7.3	18	6.6	231	9.3	9.1	A
8598	5.6	20	6.6	231	9.3	9.1	C
8600	6.1	357	6.6	231	9.3	9.1	A
8602	6.7	355	6.6	231	9.4	9.1	A
8604	7.0	355	6.7	232	9.4	9.1	A
8606	7.2	357	6.6	232	9.4	9.1	A
8608	7.8	359	6.5	233	9.3	9.1	A
8610	8.4	2	6.6	233	9.3	9.1	A
8612	8.8	360	6.6	231	9.3	9.1	A
8614	8.6	352	6.6	231	9.3	9.1	A
8616	8.1	352	6.5	233	9.3	9.1	A
8618	7.5	353	6.5	232	9.3	9.1	A
8620	6.3	352	6.5	229	9.3	9.1	A
8622	7.1	350	6.6	228	9.2	9.1	A
8624	8.2	349	6.6	225	9.2	9.1	A
8626	8.2	360	6.6	224	9.2	9.1	A
8628	8.6	11	6.6	224	9.1	9.1	A
8630	8.9	6	6.5	224	9.1	9.0	A
8632	8.5	357	6.6	223	9.2	9.0	A
8634	7.3	3	6.6	224	9.3	9.1	A
8636	7.9	10	6.5	227	9.2	9.1	A
8638	8.3	21	6.6	227	9.2	9.1	A
8640	8.0	18	6.6	227	9.2	9.1	A
8642	7.8	10	6.6	225	9.2	9.1	A
8644	8.9	26	6.5	225	9.1	9.2	A
8646	8.8	24	6.5	224	9.1	9.3	A
8648	8.5	27	6.5	224	9.1	9.3	A
8650	9.1	24	6.6	223	9.1	9.3	A
8652	9.2	15	6.6	222	9.2	9.2	A
8654	9.1	14	6.5	222	9.2	9.1	A
8656	10.1	14	6.6	223	9.2	9.2	A
8658	9.3	14	6.6	224	9.4	9.3	A
8660	6.4	349	6.6	222	9.5	9.4	A
8662	4.8	331	6.6	223	9.5	9.4	A
8664	6.9	353	6.5	226	9.5	9.4	A
8666	7.1	340	6.6	225	9.5	9.4	A
8668	8.5	308	6.6	222	9.5	9.4	A
8670	7.4	290	6.6	221	9.5	9.4	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	DIAM 1-3	DIAM 2-4	QUAL. INDEX BEST =A
8672	5.7	285	6.6	219	9.5	9.4	A
8674	6.0	330	6.6	220	9.6	9.3	A
8676	3.9	324	6.5	221	9.7	9.3	A
8678	1.1	266	6.5	222	9.6	9.3	A
8680	2.4	189	6.5	223	9.5	9.3	A
8682	3.1	252	6.5	222	9.5	9.3	A
8684	6.5	279	6.5	220	9.5	9.3	B
8686	8.2	261	6.6	219	9.5	9.4	B
8688	8.5	292	6.6	220	9.6	9.4	D
8690			6.6	220	9.7	9.6	
8692			6.5	217	9.7	9.6	
8694	16.5	275	6.5	217	9.7	9.4	D
8696	8.8	247	6.5	219	9.6	9.4	D
8698	5.4	257	6.5	219	9.6	9.3	B
8700	5.7	323	6.5	220	9.7	9.4	B
8702	5.7	331	6.4	221	9.7	9.3	B
8704	0.2	299	6.4	222	9.7	9.3	A
8706	0.5	139	6.5	221	9.6	9.3	A
8708	10.8	85	6.5	219	9.5	9.3	A
8710	10.5	73	6.5	220	9.5	9.3	A
8712	4.8	94	6.5	222	9.5	9.3	A
8714	3.5	97	6.6	224	9.6	9.3	A
8716	3.8	121	6.5	227	9.6	9.3	A
8718	3.4	79	6.4	227	9.5	9.4	C
8720	4.8	60	6.5	227	9.5	9.4	A
8722	7.0	64	6.5	226	9.5	9.3	A
8724	9.8	48	6.4	226	9.5	9.3	A
8726	9.9	39	6.4	226	9.5	9.4	A
8728	11.1	37	6.4	225	9.5	9.4	A
8730	10.0	35	6.4	223	9.5	9.4	A
8732	9.5	30	6.4	222	9.5	9.4	A
8734	9.6	23	6.4	221	9.5	9.4	A
8736	10.0	22	6.4	221	9.4	9.5	A
8738	9.7	22	6.4	220	9.4	9.5	A
8740	9.5	28	6.4	221	9.4	9.4	A
8742	6.3	29	6.4	221	9.4	9.4	A
8744	6.9	28	6.5	221	9.4	9.5	A
8746	8.0	29	6.5	220	9.5	9.5	A
8748	8.2	29	6.5	219	9.5	9.5	A
8750	10.3	29	6.5	216	9.5	9.5	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8752	12.6	43	6.5	217	9.5	9.5	A
8754	11.6	34	6.5	219	9.6	9.5	A
8756	11.4	31	6.5	221	9.7	9.4	A
8758	11.5	29	6.5	221	9.7	9.4	A
8760	15.7	21	6.6	220	9.7	9.4	A
8762	10.4	25	6.5	221	9.6	9.3	A
8764	10.3	26	6.5	221	9.5	9.3	A
8766	10.5	30	6.5	221	9.5	9.3	A
8768	9.8	22	6.6	221	9.5	9.3	A
8770	10.0	24	6.6	220	9.5	9.3	A
8772	10.9	32	6.6	220	9.4	9.4	A
8774	10.3	29	6.7	220	9.4	9.3	A
8776	10.0	28	6.7	219	9.3	9.3	A
8778	10.2	32	6.7	219	9.3	9.3	A
8780	10.6	36	6.7	219	9.3	9.4	A
8782	14.0	43	6.7	218	9.3	9.5	A
8784	13.8	41	6.8	217	9.3	9.5	A
8786	12.9	37	6.8	216	9.3	9.5	A
8788	12.2	34	6.8	215	9.3	9.5	A
8790	11.0	30	6.8	215	9.4	9.5	A
8792	9.4	23	6.8	215	9.4	9.5	A
8794	10.8	27	6.8	215	9.4	9.5	A
8796	10.1	30	6.8	216	9.4	9.6	A
8798	9.5	33	6.9	215	9.4	9.6	A
8800	10.3	34	6.9	214	9.4	9.6	A
8802	10.2	30	6.9	215	9.4	9.5	A
8804	9.7	27	7.0	214	9.5	9.4	A
8806	9.3	27	7.0	215	9.5	9.3	A
8808	9.0	20	6.9	216	9.5	9.2	C
8810	21.1	279	6.9	217	9.5	9.2	D
8812	21.0	275	7.0	219	9.5	9.2	D
8814	5.6	314	7.0	221	9.5	9.2	C
8816	3.8	347	6.9	223	9.5	9.2	A
8818	8.6	32	6.9	224	9.5	9.2	A
8820	9.5	26	7.0	225	9.6	9.3	A
8822	9.5	21	7.0	225	9.7	9.4	A
8824	10.4	18	7.0	225	9.8	9.4	A
8826	10.5	18	7.0	225	9.7	9.4	A
8828	10.8	17	7.0	225	9.6	9.3	A
8830	10.5	8	7.0	223	9.5	9.3	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8832	8.9	8	7.0	224	9.6	9.3	A
8834	8.6	12	7.0	225	9.7	9.3	A
8836	9.0	19	6.9	224	9.7	9.4	A
8838	8.7	21	7.0	223	9.7	9.4	A
8840	8.2	10	7.0	222	9.7	9.4	A
8842	7.9	353	7.0	222	9.7	9.4	A
8844	8.3	341	7.0	220	9.7	9.5	A
8846	8.7	338	7.0	218	9.7	9.5	A
8848	10.6	341	7.0	216	9.6	9.6	A
8850	10.3	330	7.0	215	9.6	9.7	A
8852	10.0	330	7.0	214	9.5	9.7	A
8854	9.6	336	7.0	215	9.5	9.7	A
8856	8.7	346	6.9	216	9.5	9.7	A
8858	9.2	348	6.9	217	9.5	9.7	A
8860	9.3	356	7.0	218	9.5	9.7	A
8862	8.8	359	7.0	218	9.5	9.8	A
8864	8.3	351	7.0	217	9.6	9.8	A
8866	8.8	349	7.0	215	9.6	9.8	A
8868	8.8	349	7.0	215	9.7	9.7	A
8870	15.0	345	7.0	216	9.7	9.6	A
8872	15.2	339	7.0	218	9.7	9.5	A
8874	9.3	360	7.0	219	9.8	9.4	A
8876	11.3	352	7.0	217	9.9	9.5	A
8878	11.2	344	7.0	216	9.9	9.5	A
8880	12.1	2	7.0	218	10.0	9.5	A
8882	16.6	1	7.0	220	10.0	9.5	A
8884	17.5	341	7.1	218	10.1	9.5	A
8886	24.1	312	7.0	216	10.1	9.5	B
8888	11.5	11	7.0	217	10.1	9.6	A
8890	14.1	5	7.0	215	10.1	9.5	A
8892	19.7	350	7.0	209	10.0	9.5	A
8894	20.9	338	7.0	209	9.8	9.5	C
8896	15.1	342	7.0	211	9.6	9.5	A
8898	15.0	331	7.1	212	9.5	9.6	A
8900	8.7	342	7.1	213	9.4	9.5	A
8902	8.6	350	7.1	215	9.4	9.5	A
8904	9.0	336	7.1	215	9.3	9.5	A
8906	9.4	331	7.1	213	9.3	9.5	A
8908	10.8	337	7.1	213	9.3	9.5	A
8910	10.2	341	7.1	213	9.3	9.4	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8912	14.5	333	7.2	213	9.3	9.4	A
8914	15.9	331	7.2	212	9.3	9.4	A
8916	16.8	332	7.2	214	9.3	9.4	A
8918	15.9	335	7.2	213	9.3	9.5	A
8920	12.1	360	7.1	213	9.3	9.5	A
8922	10.8	8	7.2	214	9.3	9.6	A
8924	9.3	13	7.2	215	9.3	9.7	A
8926	9.5	10	7.2	216	9.3	9.7	A
8928	10.5	352	7.2	216	9.3	9.7	A
8930	10.7	353	7.2	216	9.3	9.6	A
8932	10.2	359	7.3	216	9.3	9.6	A
8934	10.0	9	7.3	215	9.3	9.6	A
8936	11.3	2	7.3	214	9.3	9.6	A
8938	13.1	22	7.3	214	9.3	9.6	C
8940	11.3	359	7.2	215	9.3	9.5	A
8942	11.1	16	7.3	216	9.3	9.5	A
8944	11.6	20	7.4	216	9.4	9.6	A
8946	12.2	12	7.4	215	9.4	9.7	A
8948	12.1	14	7.3	215	9.4	9.7	A
8950	12.0	17	7.3	215	9.4	9.7	A
8952	13.1	13	7.3	214	9.4	9.6	A
8954	13.6	11	7.3	211	9.4	9.6	A
8956	13.3	13	7.4	211	9.5	9.6	A
8958	12.0	16	7.4	211	9.5	9.7	A
8960	12.7	16	7.4	210	9.5	9.7	A
8962	12.8	14	7.4	210	9.4	9.6	A
8964	12.5	7	7.4	211	9.3	9.6	A
8966	12.9	6	7.5	212	9.4	9.7	A
8968	13.1	8	7.6	213	9.4	9.8	A
8970	12.7	9	7.6	212	9.4	9.8	A
8972	11.2	16	7.5	211	9.4	9.8	A
8974	11.8	21	7.5	211	9.4	9.8	A
8976	11.2	15	7.6	210	9.5	9.9	A
8978	11.2	12	7.6	210	9.6	10.1	A
8980	10.0	7	7.6	211	9.6	10.2	A
8982	9.1	15	7.6	214	9.7	10.5	A
8984	14.9	8	7.6	213	9.7	10.7	D
8986	16.3	12	7.7	211	9.6	10.5	B
8988	17.2	4	7.7	211	9.6	10.3	B
8990	17.2	354	7.7	210	9.6	10.3	B

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
8992			7.6	210	9.7	10.4	
8994			7.6	211	9.8	10.5	
8996	30.5	60	7.8	213	9.7	10.5	B
8998	33.1	61	7.7	212	9.8	10.4	B
9000	15.1	27	7.8	209	9.8	10.4	C
9002	14.5	23	7.7	208	9.8	10.3	A
9004	14.9	23	7.8	208	9.8	10.3	A
9006	15.1	23	7.8	209	9.7	10.2	A
9008	14.5	16	7.8	210	9.6	10.1	A
9010	14.1	16	7.8	209	9.5	10.0	A
9012	13.2	18	7.8	209	9.5	10.0	A
9014	13.0	17	7.9	209	9.5	10.0	A
9016	13.4	16	7.9	208	9.5	9.9	A
9018	14.4	19	8.0	209	9.5	9.9	A
9020	14.2	22	8.0	211	9.5	10.0	A
9022	13.9	35	7.9	212	9.5	10.2	A
9024	14.0	39	7.9	211	9.5	10.4	A
9026	12.8	30	8.0	210	9.5	10.4	A
9028	12.1	39	8.0	209	9.5	10.1	A
9030	13.1	48	8.0	211	9.5	10.1	A
9032	12.3	58	8.0	212	9.5	10.1	A
9034	14.7	51	8.1	213	9.5	10.2	C
9036	12.5	61	8.1	215	9.4	10.2	D
9038			8.0	216	9.4	10.2	
9040	21.6	55	8.1	214	9.5	10.0	D
9042	13.3	69	8.2	211	9.5	9.9	B
9044	11.5	60	8.2	210	9.4	9.8	B
9046	13.2	80	8.1	210	9.4	9.7	B
9048	13.3	77	8.2	211	9.4	9.7	B
9050			8.2	211	9.5	9.7	
9052			8.2	212	9.4	9.6	
9054	12.4	59	8.3	212	9.3	9.5	D
9056	6.5	360	8.3	211	9.3	9.5	A
9058	6.6	354	8.3	210	9.3	9.5	A
9060	7.4	358	8.3	210	9.3	9.5	A
9062	7.4	351	8.3	211	9.3	9.5	A
9064	6.7	343	8.3	210	9.3	9.6	A
9066	6.1	8	8.3	210	9.4	9.7	A
9068	9.1	45	8.3	211	9.4	9.8	A
9070	10.3	42	8.3	210	9.4	9.8	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9072	8.9	29	8.3	211	9.5	9.9	A
9074	7.7	29	8.3	211	9.6	10.0	A
9076	10.7	64	8.3	212	9.7	10.2	A
9078	12.2	68	8.3	213	9.8	10.3	A
9080	10.3	53	8.3	212	9.8	10.5	A
9082	10.7	57	8.2	212	9.8	10.6	A
9084	10.4	53	8.2	208	9.9	10.9	A
9086	14.4	58	8.3	209	9.9	11.2	C
9088	14.9	70	8.3	210	9.9	11.2	A
9090	18.3	77	8.3	209	9.9	11.0	A
9092	17.0	58	8.3	209	10.0	10.9	A
9094	17.9	64	8.3	209	9.9	10.8	A
9096	19.2	62	8.3	208	9.9	10.8	A
9098	16.3	51	8.4	207	9.9	10.8	A
9100	15.6	47	8.4	207	9.9	10.8	A
9102	16.3	45	8.6	207	9.9	10.7	A
9104	16.7	41	8.7	208	9.9	10.4	A
9106	15.7	31	8.6	208	9.8	10.1	C
9108	12.8	29	8.6	208	9.8	9.9	A
9110	13.8	37	8.6	208	9.8	9.8	A
9112	15.4	37	8.6	207	9.8	9.7	A
9114	17.4	41	8.6	208	9.8	9.7	A
9116	16.1	39	8.6	209	9.8	9.6	A
9118	15.5	37	8.6	208	9.8	9.5	A
9120	15.5	37	8.7	207	9.7	9.5	A
9122	15.5	44	8.7	208	9.7	9.4	A
9124	15.9	45	8.7	209	9.6	9.3	A
9126	11.1	50	8.8	209	9.5	9.3	A
9128	12.8	26	8.8	209	9.5	9.3	C
9130	11.2	28	8.8	209	9.4	9.3	A
9132	11.8	39	8.8	209	9.4	9.3	A
9134	12.7	41	8.8	209	9.4	9.4	A
9136	12.1	36	8.8	209	9.4	9.5	A
9138	11.1	34	8.8	209	9.5	9.5	A
9140	11.1	35	8.8	209	9.5	9.5	A
9142	10.9	47	8.8	210	9.4	9.5	A
9144	11.0	43	8.8	208	9.4	9.5	A
9146	10.2	33	8.8	208	9.4	9.4	A
9148	9.7	33	8.8	207	9.4	9.4	A
9150	9.6	31	8.8	207	9.3	9.3	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9152	10.3	31	8.8	207	9.4	9.3	A
9154	8.4	36	8.9	207	9.4	9.3	A
9156	8.7	37	8.9	208	9.5	9.3	A
9158	11.6	34	8.9	208	9.5	9.4	A
9160	11.5	36	8.9	208	9.5	9.4	A
9162	9.6	38	8.9	209	9.5	9.3	A
9164	7.9	39	8.9	208	9.5	9.3	A
9166	9.9	45	8.9	207	9.5	9.2	A
9168	9.1	48	8.9	209	9.5	9.2	A
9170	8.5	49	8.9	209	9.5	9.1	A
9172	9.2	50	8.9	210	9.4	9.1	A
9174	10.9	47	8.9	211	9.4	9.1	A
9176	10.9	47	8.9	210	9.5	9.2	A
9178	11.1	54	8.9	211	9.6	9.3	A
9180	11.1	54	9.0	213	9.8	9.4	A
9182	10.7	59	9.0	214	9.9	9.4	A
9184	11.2	61	9.0	211	10.1	9.4	A
9186	12.9	59	9.0	211	10.3	9.4	A
9188	13.2	59	9.0	213	10.4	9.4	A
9190	5.8	36	8.9	213	10.5	9.3	C
9192	7.6	29	9.0	214	10.6	9.3	A
9194	6.0	40	9.0	214	10.6	9.4	A
9196	4.7	40	9.0	214	10.6	9.4	A
9198	5.6	76	9.0	213	10.7	9.4	C
9200	8.3	61	9.0	213	10.8	9.5	C
9202	10.4	57	9.0	213	10.6	9.4	A
9204	6.3	41	9.0	212	10.4	9.4	A
9206	6.8	46	9.0	210	10.4	9.4	A
9208	9.9	57	9.0	205	10.2	9.4	A
9210	10.3	50	9.0	204	9.9	9.5	A
9212	10.4	51	9.1	205	9.7	9.6	A
9214	10.4	50	9.1	205	9.5	9.6	A
9216	10.7	50	9.0	207	9.3	9.6	A
9218	11.0	50	9.1	208	9.2	9.5	A
9220	11.2	52	9.2	208	9.1	9.5	A
9222	11.0	52	9.1	207	9.1	9.5	A
9224	10.7	50	9.2	206	9.1	9.5	A
9226	10.4	49	9.1	205	9.2	9.5	A
9228	10.6	49	9.2	206	9.3	9.5	A
9230	10.5	53	9.2	208	9.4	9.5	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9232	10.9	58	9.2	210	9.4	9.7	A
9234	10.2	61	9.2	210	9.4	9.7	A
9236	24.9	305	9.2	208	9.3	9.8	A
9238	26.5	302	9.2	207	9.3	9.8	A
9240	4.8	35	9.2	207	9.3	9.7	A
9242	7.8	29	9.2	209	9.4	9.9	A
9244	7.9	41	9.3	211	9.4	10.0	A
9246	8.0	51	9.2	211	9.3	10.0	A
9248	16.0	123	9.2	210	9.3	10.0	C
9250	14.7	117	9.3	210	9.3	10.1	C
9252	10.3	68	9.2	212	9.2	10.0	A
9254	10.8	71	9.2	210	9.1	9.9	A
9256	12.6	72	9.3	208	9.1	9.9	A
9258	12.6	73	9.2	208	9.1	9.9	A
9260	17.2	73	9.2	208	9.1	10.0	A
9262	12.3	95	9.3	211	9.2	10.2	A
9264	15.6	102	9.3	212	9.2	10.4	A
9266	15.6	103	9.2	212	9.1	10.4	A
9268	14.8	98	9.2	211	9.1	10.2	A
9270	14.8	95	9.2	210	9.1	10.1	A
9272	15.3	97	9.2	211	9.1	10.4	A
9274	16.7	101	9.2	212	9.2	10.8	A
9276	18.0	99	9.3	209	9.3	10.8	A
9278	18.5	99	9.2	209	9.3	10.8	A
9280	19.3	96	9.0	212	9.3	11.0	C
9282	24.8	101	9.1	212	9.4	11.0	C
9284	27.1	110	9.2	213	9.4	11.2	C
9286			9.4	211	9.4	11.4	
9288	19.9	104	9.4	211	9.4	11.0	A
9290	22.8	112	9.1	212	9.4	10.9	A
9292	22.1	115	9.1	211	9.5	11.0	A
9294	17.2	102	9.3	212	9.5	10.7	C
9296	15.9	101	9.5	212	9.5	10.9	C
9298	9.7	90	9.3	213	9.5	11.2	A
9300	7.9	76	9.3	213	9.4	11.0	A
9302	8.2	94	9.3	213	9.4	10.7	A
9304	11.5	55	9.2	215	9.4	10.7	A
9306	12.9	51	9.3	214	9.2	10.5	A
9308	14.7	50	9.4	212	9.1	10.2	A
9310	15.2	52	9.4	211	9.1	10.1	A

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9312	19.9	63	9.4	212	9.2	10.2	C
9314	18.1	81	9.4	210	9.2	10.1	C
9316			9.3	212	9.4	10.4	
9318			9.4	214	9.4	10.7	
9320			9.5	214	9.2	10.5	
9322			9.4	215	9.2	10.7	
9324	4.5	331	9.3	214	9.3	10.6	C
9326	7.0	334	9.3	212	9.2	10.3	D
9328	7.6	77	9.3	212	9.1	10.2	A
9330	9.3	83	9.4	212	9.1	10.3	A
9332	10.5	89	9.3	213	9.1	10.4	A
9334	11.0	95	9.4	215	9.2	10.5	A
9336	9.0	86	9.4	215	9.1	10.4	A
9338	8.7	80	9.3	214	9.0	10.3	A
9340	10.3	82	9.4	214	8.9	10.4	A
9342	9.9	84	9.4	214	8.9	10.4	A
9344	9.3	79	9.3	211	8.9	10.4	A
9346	10.1	77	9.3	211	9.1	10.6	A
9348	6.4	104	9.2	212	9.3	11.0	C
9350	12.8	109	9.4	214	9.4	11.2	A
9352	11.1	95	9.4	217	9.4	11.3	A
9354	9.3	92	9.3	216	9.4	11.2	A
9356			9.3	215	9.3	11.0	
9358	10.8	89	9.3	214	9.2	10.8	A
9360	8.5	99	9.4	214	9.1	10.8	C
9362	6.7	30	9.4	214	9.0	10.8	A
9364	6.8	7	9.4	212	9.0	10.8	A
9366	5.0	147	9.5	212	9.2	10.9	A
9368	9.4	149	9.5	212	9.2	11.0	A
9370	7.7	102	9.5	212	9.3	11.3	A
9372	2.5	99	9.4	214	9.4	11.5	A
9374	2.3	82	9.4	216	9.4	11.5	A
9376			9.6	216	9.4	11.8	
9378	15.1	138	9.4	214	9.3	11.4	C
9380	3.9	116	9.5	211	9.3	11.1	C
9382			9.5	212	9.6	11.3	
9384	6.6	41	9.4	216	9.6	11.6	A
9386	7.7	41	9.5	215	9.4	11.8	A
9388	5.8	19	9.6	214	9.4	11.7	A
9390	9.8	10	9.6	213	9.4	11.5	C

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9392	7.1	22	9.5	212	9.4	11.4	C
9394	6.4	29	9.6	214	9.5	11.7	A
9396	5.6	31	9.5	214	9.5	11.8	A
9398	10.9	15	9.4	214	9.5	11.7	A
9400	10.9	3	9.4	215	9.4	11.2	A
9402	9.3	24	9.3	214	9.3	10.8	A
9404	9.3	22	9.3	212	9.3	10.6	A
9406	9.6	12	9.3	211	9.4	10.6	A
9408	7.3	31	9.4	213	9.4	11.0	A
9410	7.6	17	9.7	212	9.5	11.4	A
9412	8.7	14	9.6	212	9.7	12.0	C
9414			9.3	214	9.8	12.7	
9416			10.0	212	9.7	12.6	
9418	4.9	10	10.0	211	9.8	12.5	C
9420	5.3	47	9.1	213	9.9	12.3	A
9422	3.5	51	9.1	214	9.9	12.1	A
9424	5.6	18	9.3	214	9.9	12.2	A
9426			9.4	215	9.8	11.6	
9428	10.1	28	9.4	215	9.6	10.8	C
9430			9.5	213	9.4	10.8	
9432			9.3	212	9.4	11.4	
9434	30.2	11	9.2	214	9.5	11.8	B
9436	10.0	18	9.6	212	9.5	11.6	A
9438	10.0	19	9.6	213	9.6	11.4	A
9440			9.4	216	9.7	11.6	
9442			9.4	216	9.7	11.7	
9444	9.0	14	9.4	214	9.5	11.3	A
9446	8.6	19	9.5	214	9.4	11.3	C
9448	14.3	31	9.5	218	9.3	11.4	C
9450			9.3	217	9.2	11.0	
9452	20.1	24	9.3	213	9.1	10.7	C
9454	12.3	9	9.4	211	9.0	10.6	A
9456	10.6	12	9.2	209	9.0	10.5	A
9458	7.1	21	9.3	211	9.1	10.7	A
9460	4.8	29	9.3	213	9.0	11.0	C
9462			9.3	214	9.0	11.2	
9464	28.9	31	9.4	213	9.1	11.2	D
9466	24.9	26	9.4	212	9.1	10.8	D
9468	17.3	49	9.3	213	9.1	10.9	D
9470	17.4	29	9.2	214	9.1	10.8	D

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9472	18.1	7	9.1	212	9.1	10.7	D
9474	16.8	27	9.1	214	9.1	10.9	B
9476	18.9	38	9.5	216	9.2	11.4	D
9478	33.2	78	9.4	216	9.4	11.8	B
9480	14.4	30	9.3	215	9.4	11.8	B
9482			9.4	214	9.3	12.0	
9484	23.1	214	9.3	212	9.2	12.1	D
9486	24.2	210	9.3	213	9.2	12.0	D
9488			9.3	213	9.2	12.5	
9490			9.3	212	9.1	13.2	
9492	27.9	216	9.4	213	9.1	13.5	D
9494			9.3	214	9.2	13.3	
9496	15.1	251	9.2	214	9.2	12.6	B
9498	16.6	249	9.2	213	9.1	12.0	B
9500	9.0	251	9.2	214	9.3	12.1	D
9502	12.1	30	9.3	214	9.4	12.3	A
9504	12.4	25	9.6	214	9.4	11.9	A
9506	8.7	27	9.4	213	9.5	11.3	C
9508	10.5	5	9.5	210	9.6	11.1	A
9510	6.8	62	9.4	211	9.6	11.2	A
9512	7.9	74	9.3	212	9.5	11.5	C
9514			9.5	213	9.5	11.7	
9516			9.4	214	9.7	11.6	
9518			9.2	215	9.8	11.4	
9520	8.3	65	9.3	213	9.6	11.3	A
9522	5.7	35	9.3	211	9.4	11.3	B
9524	7.8	43	9.2	214	9.5	11.4	D
9526	10.3	57	9.3	214	9.5	11.3	B
9528	11.7	52	9.3	212	9.4	11.0	B
9530	16.5	50	9.4	212	9.5	11.2	B
9532	8.7	113	9.5	212	9.4	11.6	D
9534	27.8	20	9.3	213	9.2	11.5	B
9536	29.0	17	9.3	213	9.3	11.3	D
9538	29.8	17	9.4	214	9.4	11.1	D
9540	28.3	24	9.4	214	9.4	11.3	D
9542	28.2	15	9.4	214	9.4	11.5	A
9544	25.8	7	9.5	212	9.3	11.2	A
9546			9.5	212	9.3	11.0	
9548	22.2	22	9.5	214	9.6	11.2	A
9550	22.3	21	9.3	214	9.6	11.2	A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9552	21.9	6	9.3	212	9.5	11.1	A
9554	21.6	2	9.5	213	9.6	11.0	C
9556	22.8	356	9.5	214	9.8	10.8	C
9558	21.3	13	9.4	215	9.9	10.7	A
9560	21.5	15	9.6	216	9.9	10.8	A
9562	22.1	345	9.5	215	9.7	10.9	A
9564	22.7	343	9.4	214	9.7	10.8	A
9566	21.0	347	9.6	213	9.7	10.8	A
9568	20.9	349	9.6	214	9.8	10.7	A
9570	22.6	339	9.6	213	9.6	10.5	A
9572	19.4	357	9.5	212	9.7	10.4	A
9574	19.0	355	9.4	213	9.8	10.6	A
9576	22.3	16	10.6	214	9.9	10.6	A
9578	21.8	12	10.5	214	10.1	10.4	A
9580	20.3	5	9.3	215	10.2	10.4	A
9582	21.0	2	9.5	215	10.1	10.5	A
9584	16.5	6	9.4	214	10.1	10.0	C
9586	16.6	359	9.5	215	10.2	9.7	C
9588			9.4	213	10.2	9.7	
9590			9.2	216	10.2	9.8	
9592	14.1	23	9.3	219	10.1	9.9	C
9594	11.0	27	9.3	217	10.0	10.0	D
9596			9.4	216	9.9	10.1	
9598			9.2	215	9.9	10.3	
9600	17.0	327	9.3	215	9.9	10.4	B
9602	13.0	325	9.4	214	9.8	10.1	B
9604	10.9	331	9.3	213	9.8	9.8	B
9606	6.9	313	9.2	213	9.9	10.0	D
9608			9.2	213	10.0	10.2	
9610			9.3	213	10.0	10.3	
9612			9.3	212	9.9	10.3	
9614	15.5	298	9.3	212	10.0	10.1	D
9616	18.3	301	9.2	215	9.9	10.2	E
9618			9.3	216	9.9	10.7	
9620			9.3	215	9.9	10.7	
9622			9.2	214	10.1	10.9	
9624	19.6	298	9.2	213	10.2	11.2	D
9626			9.2	213	10.2	11.0	
9628			9.3	213	9.9	10.2	
9630			9.3	214	9.8	10.0	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9632							
9634			9.2	213	9.8	10.3	
9636			9.2	213	9.8	10.5	
9638			9.2	211	9.8	10.7	
9640			9.2	212	9.9	10.8	
9642			9.4	214	9.9	10.6	
9644			9.3	212	10.0	10.2	
9646			9.2	211	10.3	10.0	
9648	35.8	235	9.3	211	10.5	9.6	
9650	37.0	242	9.3	211	10.5	9.3	D
9652	27.2	236	9.2	213	10.6	9.3	B
9654	20.7	228	9.2	214	10.6	9.4	B
9656	20.2	222	9.2	214	10.6	9.3	D
9658	16.8	239	9.3	216	10.5	9.3	D
9660	17.0	220	9.3	216	10.5	9.3	D
9662	18.1	208	9.4	214	10.6	9.4	B
9664			9.1	213	10.7	9.7	B
9666			9.2	213	10.7	9.9	
9668			9.3	213	10.5	9.6	
9670			9.2	212	10.4	9.4	
9672			9.3	212	10.4	9.3	
9674	9.3	182	9.3	213	10.2	9.0	
9676	8.4	179	9.3	213	10.1	8.9	C
9678	8.3	171	9.2	213	10.1	8.9	A
9680	8.7	165	9.2	214	10.1	8.9	A
9682	9.3	165	9.2	214	10.0	8.9	A
9684			9.2	213	9.9	8.8	A
9686	30.7	280	9.1	215	9.9	8.9	
9688	5.9	280	9.1	216	9.9	8.9	D
9690	5.2	282	9.1	213	9.9	9.0	C
9692	2.3	182	9.1	212	10.0	9.0	C
9694	4.6	164	9.0	214	10.1	8.9	A
9696	3.8	199	9.0	212	10.2	8.9	A
9698	9.2	324	9.1	213	10.1	8.9	A
9700	4.7	2	9.1	216	10.1	8.9	C
9702	3.7	16	9.1	217	10.0	8.9	A
9704	2.9	360	9.0	217	10.0	8.9	A
9706	1.6	9	8.9	216	10.0	9.0	A
9708	2.0	353	8.9	216	10.0	8.9	C
9710	3.2	9	9.0	216	9.9	8.9	A
							A

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9712	4.0	12	9.0	216	9.9	8.9	A
9714	4.2	8	8.9	215	9.9	9.0	A
9716			8.9	213	9.9	9.2	
9718	29.4	90	8.9	213	9.9	9.2	B
9720	8.5	331	8.8	214	10.0	9.1	D
9722	7.9	305	8.8	214	10.1	8.9	B
9724			8.8	215	10.0	9.0	
9726	19.1	105	8.9	218	9.8	9.3	D
9728			8.9	223	10.0	9.7	
9730			8.8	223	10.1	10.0	
9732	22.4	145	8.8	222	9.6	10.0	D
9734			8.8	222	9.5	10.0	
9736	14.0	120	8.8	226	10.0	10.1	D
9738	21.4	121	8.8	226	9.8	9.8	B
9740	19.8	120	8.9	223	9.5	9.7	B
9742			8.8	222	9.6	9.7	
9744			8.8	225	9.8	9.9	
9746			9.0	225	9.8	10.0	
9748			9.0	224	10.1	9.8	
9750	3.4	279	9.1	227	10.8	9.7	C
9752	5.9	47	9.1	229	10.5	9.7	C
9754	8.1	70	8.8	225	10.0	9.5	A
9756	1.7	135	8.8	224	10.4	9.5	A
9758	5.1	87	8.9	225	10.7	9.6	A
9760	3.0	249	8.8	224	10.5	9.8	C
9762	4.3	99	8.9	226	10.4	9.8	A
9764	5.3	136	8.8	228	10.4	9.8	A
9766			8.7	226	10.1	9.8	
9768			8.9	225	9.8	9.8	
9770	5.7	35	8.9	225	9.8	9.8	B
9772	4.6	353	8.8	225	10.4	9.9	B
9774	3.7	306	8.9	224	10.7	10.0	D
9776	8.1	338	8.9	225	10.3	10.0	D
9778			8.9	227	10.0	10.0	
9780	9.8	325	8.9	226	10.3	9.9	D
9782	9.9	327	8.9	226	10.3	9.9	D
9784			8.8	225	10.2	9.9	
9786			8.8	225	10.7	9.9	
9788			8.9	225	10.9	10.0	
9790			8.7	225	10.2	10.0	

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9792			8.9	226	9.6	9.9	
9794			8.7	226	9.8	9.9	
9796			8.8	225	10.1	10.0	
9798			9.0	225	10.0	10.1	
9800			8.9	227	10.1	10.1	
9802			8.9	228	10.2	10.1	
9804			8.8	227	10.4	10.0	
9806			8.8	228	10.3	9.9	
9808	15.4	343	8.9	228	10.0	9.9	D
9810	14.9	329	8.9	226	10.0	9.9	D
9812	8.2	4	8.7	227	10.0	9.9	B
9814	9.5	8	8.8	229	10.3	9.8	D
9816	9.2	355	8.8	228	10.1	9.8	B
9818	10.9	349	8.8	225	10.1	9.8	D
9820	8.4	328	8.9	226	10.1	9.9	B
9822	6.8	343	8.7	228	9.9	9.8	B
9824	11.2	358	8.7	228	9.9	9.7	B
9826			8.7	228	9.9	9.7	
9828	8.8	344	8.9	230	9.8	9.7	D
9830	10.1	348	8.8	229	9.9	9.7	D
9832	12.5	339	8.8	226	9.9	9.8	D
9834			8.8	228	10.1	9.7	
9836			8.6	231	10.3	9.8	
9838	4.4	334	8.7	230	10.2	9.8	D
9840	8.2	338	8.7	228	9.5	9.6	B
9842	7.6	313	8.7	229	9.4	9.5	B
9844	3.2	30	8.7	231	9.6	9.5	B
9846	3.9	37	8.6	228	9.7	9.5	A
9848			8.6	230	10.1	9.6	
9850			8.6	231	10.0	9.5	
9852	8.9	38	8.6	227	9.6	9.5	A
9854	7.5	41	8.5	229	10.2	9.6	A
9856	1.9	259	8.7	229	10.4	9.7	A
9858	0.7	219	8.7	228	10.3	9.8	C
9860	6.3	301	8.4	231	10.3	9.8	C
9862	4.9	354	8.5	231	10.7	9.8	A
9864	7.5	55	8.5	231	10.3	9.8	A
9866	8.2	55	8.3	231	10.1	9.7	D
9868	10.4	27	8.5	231	10.1	9.8	D
9870	1.9	65	8.6	233	9.8	9.9	B

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9872	2.9	61	8.5	231	10.0	9.9	B
9874			8.5	231	10.2	9.9	
9876			8.5	232	10.0	10.0	
9878			8.5	232	10.0	10.0	
9880			8.6	233	10.2	9.9	
9882	17.0	79	8.5	230	10.1	10.0	B
9884	20.9	77	8.5	228	10.0	10.2	D
9886	55.1	95	8.7	230	10.0	10.3	B
9888			8.5	232	10.0	10.4	
9890			8.4	232	10.7	10.6	
9892	9.0	6	8.8	231	12.4	10.9	B
9894	9.3	8	8.8	233	14.0	11.1	D
9896			8.7	233	14.7	11.1	
9898	10.6	52	8.6	232	13.5	10.8	D
9900			8.4	228	12.1	10.7	
9902			8.3	229	11.5	10.9	
9904			8.1	230	11.0	10.7	
9906	42.8	78	8.1	229	12.6	10.7	D
9908			8.6	230	15.0	10.9	
9910	36.0	66	8.9	232	14.9	11.2	D
9912	34.8	67	8.3	232	13.3	11.4	D
9914	37.3	65	8.3	233	12.3	11.2	B
9916	45.1	94	8.7	233	11.8	11.1	D
9918			8.6	230	11.4	11.3	
9920			8.8	231	12.4	11.4	
9922	42.7	94	8.8	234	12.2	11.3	B
9924	45.4	104	8.8	234	11.1	11.3	B
9926			8.8	233	11.0	11.4	
9928			8.7	233	11.5	11.5	
9930	20.1	101	8.8	232	11.5	11.5	B
9932	18.2	109	8.4	232	12.1	11.4	B
9934	14.6	84	8.4	234	12.8	11.5	D
9936	14.1	103	8.4	237	12.4	12.0	D
9938	20.3	120	8.3	236	11.8	12.1	D
9940	20.5	119	8.6	234	12.9	12.9	E
9942			8.7	234	14.8	13.9	
9944			8.7	235	14.7	13.7	
9946	29.7	46	8.5	235	13.3	13.0	B
9948	34.0	49	8.9	236	13.1	13.3	D
9950			9.1	237	14.3	14.1	

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
9952			8.5	236	16.4	14.4	
9954			8.6	237	17.8	14.5	
9956			8.7	238	17.8	14.5	
9958	26.3	21	8.6	236	16.5	14.3	D
9960			8.2	233	15.1	14.0	
9962			8.4	232	14.6	13.6	
9964			9.1	231	14.6	13.6	
9966			8.6	233	14.7	13.3	
9968			8.2	236	16.2	12.1	
9970			8.3	235	17.6	12.5	
9972			8.8	235	17.5	13.8	
9974			9.7	233	17.7	14.1	
9976			9.3	234	17.7	15.6	
9978			8.6	235	17.8	17.1	
9980			9.1	235	17.9	16.4	
9982			9.3	239	17.4	15.2	
9984			9.0	239	17.2	13.8	
9986			9.0	237	17.5	13.0	
9988			10.8	228	17.0	13.1	
9990			10.1	230	15.1	12.7	
9992			8.3	239	12.9	11.4	
9994			9.0	238	12.9	11.1	
9996			9.1	236	13.4	11.3	
9998			9.2	235	13.6	11.3	
10000			9.2	235	13.7	11.4	
10002			9.2	236	15.3	11.5	
10004			9.2	236	15.2	11.7	
10006			9.0	238	15.1	11.7	
10008			9.3	238	14.1	11.7	
10010			9.6	237	14.6	11.6	
10012			9.3	237	15.6	11.5	
10014			9.1	239	15.5	11.2	
10016			9.1	239	15.9	11.0	
10018			9.2	239	13.8	10.9	
10020			8.9	238	11.7	10.6	
10022			8.8	238	12.2	10.6	
10024			9.8	239	11.7	10.4	
10026	57.3	147	9.8	239	11.7	10.4	B
10028			9.1	240	12.4	10.4	
10030			8.9	237	12.2	10.4	

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10032			8.7	239	12.1	10.3	
10034	54.1	152	8.9	242	11.4	10.3	D
10036			8.8	240	11.0	10.4	
10038			8.8	241	11.9	10.4	
10040			9.1	242	12.5	10.4	
10042			9.1	240	12.6	10.5	
10044			8.1	239	12.3	10.7	
10046	43.9	161	7.9	238	12.1	10.9	D
10048			8.7	238	12.2	10.2	
10050			8.9	241	12.5	9.9	
10052			9.0	240	12.7	10.3	
10054			8.9	240	13.4	10.3	
10056			8.7	243	14.9	10.4	
10058			8.6	243	14.3	10.3	
10060			8.4	241	13.5	10.4	
10062			8.7	240	14.1	11.0	
10064			9.1	241	14.9	11.5	
10066			9.1	242	14.7	11.5	
10068			9.2	241	13.1	11.0	
10070			8.9	241	13.6	10.9	
10072			8.7	241	15.1	11.4	
10074			8.8	242	15.2	11.5	
10076			8.8	243	15.0	11.3	
10078			8.8	243	14.8	11.1	
10080			8.8	243	13.9	10.7	
10082			9.1	242	12.5	10.5	
10084			9.2	243	11.8	10.3	
10086			9.1	245	12.2	10.6	
10088			8.9	244	12.7	11.1	
10090			8.9	243	12.0	10.7	
10092			9.2	241	11.1	10.1	
10094			9.1	241	11.3	10.3	
10096			9.0	242	11.4	10.1	
10098			9.0	245	11.3	9.8	
10100			8.7	245	11.2	10.4	
10102			8.5	242	11.3	11.0	
10104			8.6	242	11.0	10.6	
10106			8.7	244	11.1	10.3	
10108			8.8	245	11.1	10.0	
10110			8.7	243	11.0	9.8	

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10112			8.8	241	11.3	9.7	
10114			8.8	242	11.5	9.7	
10116			8.9	245	11.4	9.7	
10118			8.7	246	11.3	9.6	
10120			8.5	245	10.9	9.5	
10122			9.0	243	10.4	9.5	
10124			8.7	243	10.5	9.4	
10126	8.2	102	8.5	243	10.6	9.5	B
10128			8.7	244	10.8	9.5	
10130			8.6	243	10.9	9.5	
10132	25.6	155	8.8	244	10.8	9.6	D
10134	27.7	155	8.9	245	10.4	9.6	B
10136	26.2	153	8.7	247	10.2	9.7	D
10138			8.6	246	10.2	9.6	
10140	28.7	148	8.7	245	10.2	9.5	D
10142	15.1	126	8.7	245	9.8	9.4	B
10144			8.6	244	9.6	9.4	
10146	20.5	152	8.7	244	9.7	9.3	A
10148	25.7	142	8.6	244	10.3	9.2	A
10150	24.2	138	8.7	246	10.8	9.1	C
10152			8.9	247	10.8	9.0	
10154	22.3	125	8.6	245	10.4	9.2	C
10156	17.1	121	8.4	244	10.4	9.3	C
10158	19.0	165	8.7	244	10.4	9.2	C
10160	22.4	161	8.6	245	10.1	9.2	A
10162	20.4	148	8.4	246	10.2	9.2	A
10164	28.8	152	8.4	247	10.3	9.3	C
10166	20.9	148	8.3	[illegible]	10.2	9.3	C
10168			8.6	243	10.1	9.4	
10170	22.1	154	8.5	244	10.2	9.3	C
10172	20.2	151	8.5	246	10.6	9.4	C
10174	18.9	139	8.6	248	10.7	9.3	C
10176	25.6	147	8.6	247	10.7	9.2	C
10178	26.6	146	8.5	246	10.3	9.3	A
10180	27.0	142	8.3	248	10.0	9.4	A
10182	23.4	138	8.6	249	9.8	9.4	A
10184	27.5	141	8.7	247	9.3	9.4	C
10186	16.8	144	8.7	245	9.3	9.4	C
10188	9.9	102	8.5	247	9.6	9.4	B
10190	8.6	103	8.5	249	9.8	9.4	B

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10192			8.6	249	9.8	9.4	
10194	19.3	148	8.8	248	9.9	9.4	A
10196	17.7	148	8.9	248	9.9	9.4	A
10198	18.0	146	8.7	247	10.0	9.4	A
10200	21.4	149	8.6	249	10.3	9.4	A
10202	18.0	151	8.3	250	10.2	9.4	C
10204	12.3	130	8.4	247	9.9	9.5	C
10206	22.6	177	8.6	247	9.9	9.4	C
10208			8.5	248	9.9	9.4	
10210	28.5	155	8.7	246	9.9	9.4	A
10212	27.5	163	8.4	247	10.0	9.3	A
10214	26.2	166	8.3	248	10.2	9.4	C
10216	28.5	156	8.5	247	10.2	9.4	C
10218	30.8	159	8.6	249	10.0	9.4	C
10220	21.8	157	8.8	248	9.5	9.4	A
10222	25.3	158	8.7	247	9.7	9.4	A
10224	29.8	162	8.4	248	10.0	9.4	A
10226	32.1	150	8.3	248	9.9	9.4	D
10228	20.5	157	8.6	249	9.9	9.3	D
10230			8.7	247	10.1	9.1	
10232	20.6	157	8.5	246	9.9	9.2	D
10234	42.7	163	8.5	247	10.0	9.3	B
10236	29.9	139	8.6	248	10.4	9.2	D
10238	29.9	150	8.5	249	10.1	9.2	D
10240	22.3	147	8.6	247	9.8	9.3	B
10242	27.3	152	8.7	246	9.6	9.3	B
10244	24.4	145	8.4	244	9.8	9.2	B
10246	22.2	159	8.4	243	9.9	9.1	A
10248	22.5	152	8.6	239	9.7	9.0	A
10250	26.5	149	8.6	240	9.5	9.0	A
10252	27.2	166	8.6	242	9.5	9.0	A
10254	25.9	147	8.6	242	9.5	9.0	A
10256	26.3	148	8.8	244	9.6	9.0	A
10258	34.5	171	8.8	243	9.6	9.4	C
10260			8.5	241	9.5	10.0	
10262			8.5	241	9.4	10.3	
10264			8.6	241	9.4	10.5	
10266	18.5	167	8.6	240	9.4	10.3	D
10268			8.5	242	9.2	9.5	
10270	21.5	157	8.4	245	9.1	9.2	D

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DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10272	22.5	152	8.5	243	9.0	9.2	D
10274	23.7	151	8.5	243	9.2	9.4	B
10276	30.4	147	8.6	244	9.9	9.5	D
10278	29.0	146	8.6	243	10.1	9.3	D
10280	21.6	144	8.4	243	10.2	9.4	D
10282			8.6	241	10.0	9.4	
10284			8.6	241	9.7	9.3	
10286			8.5	243	9.9	9.4	
10288			8.3	243	9.9	9.3	
10290	20.2	158	8.3	242	9.9	9.2	C
10292	19.1	155	8.3	240	9.7	9.1	C
10294	20.3	154	8.3	240	9.5	9.0	A
10296	21.7	145	8.5	241	9.5	9.0	A
10298	19.3	148	8.6	244	9.3	9.0	A
10300	18.3	143	8.6	245	9.3	9.1	A
10302	19.3	140	8.7	243	9.4	9.1	A
10304	19.4	146	8.6	241	9.4	9.1	A
10306	17.5	122	8.5	242	9.8	10.9	D
10308			8.5	243	10.5	12.5	
10310	20.6	129	8.6	240	10.0	10.8	B
10312	17.9	151	8.6	241	9.3	9.3	D
10314			8.6	243	9.7	10.2	
10316			8.5	244	9.7	10.5	
10318	19.8	118	8.4	236	9.3	9.7	D
10320			8.5	239	9.2	9.3	
10322			8.6	250	9.1	9.2	
10324			8.5	249	9.1	9.0	
10326	25.1	155	8.4	248	9.4	9.1	B
10328	22.0	154	8.2	252	10.5	9.4	D
10330			8.3	252	11.6	9.5	
10332	20.3	159	8.5	248	11.1	9.6	D
10334	32.0	162	8.4	247	9.8	9.4	D
10336			8.5	246	9.1	9.1	
10338			8.7	245	8.9	8.9	
10340			8.5	243	9.0	8.9	
10342			8.3	242	9.3	9.0	
10344			8.4	243	9.3	9.0	
10346	34.7	148	8.4	245	9.2	9.0	D
10348	33.7	141	8.4	246	9.5	9.8	D
10350	14.8	112	9.4	245	9.7	10.4	B

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10352	14.8	111	9.2	246	9.5	10.8	B
10354			8.2	247	9.5	11.1	
10356			8.5	247	9.5	11.1	
10358	30.4	135	8.6	248	9.5	11.1	D
10360	39.6	144	8.3	247	9.5	11.0	D
10362	39.5	146	8.2	247	9.5	11.4	D
10364			8.5	247	9.6	11.9	
10366	48.0	141	8.4	246	9.7	11.8	B
10368	40.0	132	8.3	245	9.6	11.3	D
10370	44.5	134	8.5	248	9.5	10.8	D
10372	45.4	130	8.4	249	9.6	10.3	D
10374	47.4	132	8.5	247	9.8	9.8	D
10376			8.7	246	10.1	9.8	
10378			8.7	249	10.8	10.6	
10380			9.1	248	12.2	10.9	
10382			8.9	247	12.9	10.8	
10384			8.4	246	11.9	10.8	
10386	29.6	64	8.6	245	10.7	10.1	A
10388	32.4	57	8.8	244	10.2	9.5	A
10390	34.2	49	8.7	244	9.8	9.4	C
10392	35.0	45	8.6	245	9.5	9.2	C
10394			8.6	245	9.2	9.1	
10396	29.1	81	8.6	246	9.1	9.1	D
10398	28.3	79	8.6	246	9.1	9.3	B
10400	27.7	61	8.7	246	9.4	10.1	D
10402			8.8	246	9.4	9.9	
10404			8.8	245	9.1	9.1	
10406	25.8	109	8.8	244	9.1	9.1	B
10408	25.7	106	8.7	245	9.1	9.1	B
10410			8.7	244	9.1	9.1	
10412	11.6	87	8.8	237	9.1	9.1	B
10414	13.7	74	8.7	237	9.1	9.0	B
10416	8.3	79	8.7	241	8.9	9.0	D
10418			8.7	241	8.9	9.0	
10420			8.7	240	8.9	9.0	
10422			8.6	242	9.1	9.0	
10424			8.8	244	9.3	9.0	
10426			8.9	243	9.2	9.1	
10428	47.4	75	8.8	245	9.2	9.1	D
10430	47.7	71	8.7	246	9.1	9.0	D

Schlumberger

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10432	43.3	79	8.6	247	9.1	9.1	D
10434	45.5	76	8.7	249	9.1	9.2	D
10436	39.7	81	8.6	250	9.0	9.2	B
10438	38.8	79	8.8	252	9.0	9.2	B
10440			8.9	252	9.2	9.5	
10442			8.8	252	9.5	9.6	
10444			8.8	253	9.6	9.7	
10446			8.7	252	9.5	9.6	
10448			8.7	251	9.3	9.2	
10450	6.2	140	8.7	250	9.1	9.1	D
10452	14.1	72	8.8	247	9.3	9.1	D
10454	11.0	69	8.8	247	10.0	9.2	D
10456			8.6	248	9.9	9.2	
10458	19.7	116	8.8	247	9.3	9.1	D
10460	11.1	115	8.8	244	9.3	9.1	B
10462	13.5	108	8.6	246	9.5	9.5	B
10464	13.0	79	8.7	248	9.5	10.2	D
10466			8.6	247	9.7	10.9	
10468			8.6	246	10.1	10.7	
10470			8.6	246	10.0	9.9	
10472			8.6	247	9.9	9.7	
10474			8.4	247	10.1	10.1	
10476			8.3	248	10.4	11.1	
10478			8.3	249	10.5	11.2	
10480			8.3	245	10.3	11.1	
10482			8.4	243	10.0	11.3	
10484			8.6	245	10.3	10.8	
10486			8.5	246	11.3	11.0	
10488			8.9	246	12.7	11.4	
10490			9.1	246	12.7	10.4	
10492			8.6	247	11.3	9.7	
10494			8.8	248	12.0	9.8	
10496			8.5	247	13.8	9.6	
10498			8.5	246	12.9	9.2	
10500			9.0	243	11.7	9.1	
10502			8.9	246	12.0	9.7	
10504			9.0	248	13.1	10.1	
10506			8.9	249	13.3	9.9	
10508			8.7	250	11.6	9.6	
10510			8.7	247	10.5	9.5	

UGG

DEPTH	FORMATION DIP	FORMATION DIP AZI.	BOREHOLE DEV.	BOREHOLE DEV. AZI.	BOREHOLE DIAM 1-3	BOREHOLE DIAM 2-4	QUAL. INDEX BEST =A
10512			8.5	245	10.3	9.4	
10514			8.5	248	11.2	9.4	
10516			8.8	245	12.5	10.0	
10518			8.7	242	12.9	11.1	
10520			8.7	247	13.0	12.3	
10522			8.9	246	11.4	11.4	
10524			9.1	246	9.2	9.5	
10526	58.1	145	9.2	247	8.9	9.5	D
10528	57.0	141	9.1	245	8.9	9.4	D
10530			8.9	245	8.9	9.1	
10532	61.5	146	9.8	249	9.0	9.6	D
10534			9.7	250	9.3	10.3	
10536			8.7	248	9.5	10.4	
10538			8.7	247	9.5	10.3	
10540			8.6	246	9.5	10.1	
10542	57.4	145	8.6	245	9.4	10.0	D
10544			8.6	245	9.3	9.6	

EXPLORATION SERVICES INC FEDERAL COUNTY, CALIFORN SUMMARY

DEPTH	DIP	DIP AZM	DEV	DEV AZM	DIAM 1-3	DIAM 2-4	QUAL
TOP							
5454.0	4.4	103.	2.1	249.	12.0	11.9	A
BOTTOM							
10544.0	19.2	111.	8.6	245.	9.3	9.6	*

USGC

ESC INC "OCS-CAL-78-164-1 Lith.

DEPTH	RECOVERY	LITHOLOGY: Gravel	Silt	Shale	Clay	Other	Sandy	Silty	Clayey	SECONDARY COMPOSITION: Calcareous	Siliceous	Carbonaceous	COLOR	GRAIN SIZE: Fine	Medium	Coarse	Pebbles	SORTING: Good	Fair	Poor	ANGULARITY: Angular	Subangular	Rounded	Polished	INDURATION: Friable	Firm	Hard	OIL SHOWS: Odor	Poor	Fair	Good	Stain: Color %	Cut: Color	Fluorescence: Color	Faint	Dull	Bright	Cut Fluorescence: Even	Spotty	Color	Faint	Dull	Bright	REMARKS
2050	1'h"				X		X						gy Green							X																										Soft
2145	1'h"				X		X						"							X																										Soft
2238	1'½"				X		X						"							X																										Soft
23	NR																																												
2454	1½"				X		X						"							X																										Soft
2550	NR																																												
2669	NR																																												
2847	1½"				X		X						"							X																										Soft
2927	NR																																												

CONFIDENTIAL

GEOLOGICAL SURVEY RECEIVED OCT 27 1978 LOS ANGELES

GEOLOGICAL SURVEY 1978

LEGEND
X = Feature Occurs
IP = In Part.
M = Moderately
V = Very
S = Slight
N = No

SERVICE CO. Schlumberger
DESCRIBED BY F. G. Reynolds
DATE 10/22/78

COMPANY ESC Inc.
WELL OCS-CAL-78-164-1
LOCATION

Shot 9 Rec 5

Geo Chem

DEPTH	RECOVERY	LITHOLOGY	SECONDARY COMPOSITION	COLOR	GRAIN SIZE	SORTING	ANGULARITY	INDURATION	OIL SHOWS	REMARKS
2006	1 1/2"									
2300	1 1/2"									
2600	1 1/2"									
2900	NR									

CONFIDENTIAL

GEOLOGICAL SURVEY
RECEIVED
OCT 31 1978
LOS ANGELES

GEOLOGICAL SURVEY
SANTA BARBARA

LEGEND
X - Feature Occurs
IP - In Part.
M - Moderately
V - Very
S - Slight
N - No

SERVICE CO. Schlumberger
DESCRIBED BY E.A. Reynolds
DATE 10/22/78

COMPANY ESC Inc
WELL OCS-CAL-78-16A-1
LOCATION

Shot 4 Rec 3

ESC Inc - OCS-CAL-78-164-1 Paleo

DEPTH	RECOVERY	LITHOLOGY: Sand	Silt	Shale	Clay	Other	Sandy	Silty	Clayey	SECONDARY COMPOSITION: Calcareous	Siliceous	Carbonaceous	COLOR	GRAIN SIZE: Fine	Medium	Coarse	Pebbles	SORTING: Good	Fair	Poor	ANGULARITY: Angular	Sub Angular	Rounded	INDURATION: Friable	Firm	Hard	Poor	Fair	Good	OIL SHOWS: Odor	Stain: Color	Cut: Color	Fluorescence: Color	Faint	Dull	Bright	Even	Spotty	Cut Fluorescence: Color	Faint	Dull	Bright	R O S C F	REMARKS
2006	NR																																											
2101	1½"			X			X						gray green										X																						
2194	1½"			X			X						"										X																						
2300	1½"			X			X						"										X																						
2400	1½"			X			X						"										X																						
2500	1½"			X			X						"										X																						
2600	1½"			X			X						"										X																						
2700	1½"			X			X						"										X																						
2804	1¼"	X			X								gray	X			X				X																								
2900	1½"			X																			X																						
3000	1½"			X									gray green										X																						

REMARKS

2101	Soft
2194	Soft
2300	Soft
2400	Soft
2500	Soft
2600	Soft
2700	Soft
2804	Soft
2900	Gray brown cast
3000	brown cast

GEOLOGICAL SURVEY RECEIVED OCT 27 1978 LOS ANGELES

SANTA BARBARA

LEGEND
- Feature Occurs
IP - In Part.
M - Moderately
V - Very
S - Slight
N - No

SERVICE CO. Schlumberger
DESCRIBED BY J. A. Rupnick
DATE 10/27/78

COMPANY ESC Inc
WELL OCS-CAL 78-164-1
LOCATION

Shot 11 Rec 10

CORE LAB

SOURCE - BED EVALUATION SERVICES

FIGURE ___ GEOCHEMICAL PROFILE

CLIENT: _____

WELL : _____

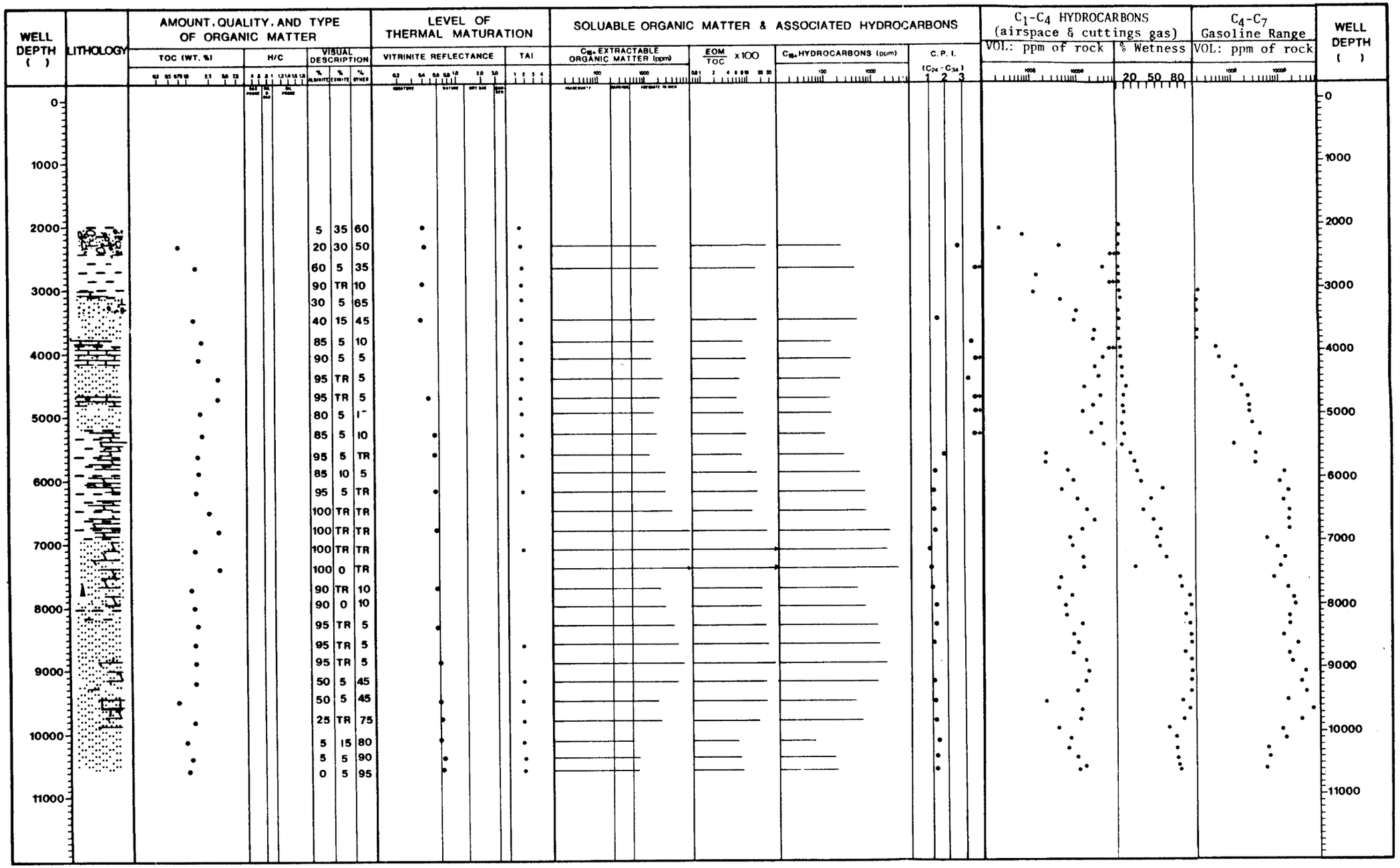

Table I

Total Organic Carbon Results and Gross Lithologic Descriptions

Depth (ft)	Sample Type	Gross Lithologic Description	TOC* (wt %)
2000-2030	ctgs	50% cgl, lt brn, m-c gr, pr srtg, sly calc, 50% cly, lt gy, calc, abnt contm, alum flks	--
2150-2180	ctgs	70% cly, lt gy, calc, 30% cgl, lt brn, m-c gr, pr srtg, sl calc, assoc shell frags & metal flks	0.59/0.60
2300-2330	ctgs	90% cly,m gn-gy, blky, sft, 10% cgl, rd-orng, v f-v c gr	0.66/0.66
2450-2480	ctgs	Cly, m gn-gy, blky, sft	0.66
2630-2660	ctgs	Cly, gn-brn	1.50
2780-2810	ctgs	Cly, m gn-gy, blky, sft	1.50
2900-2930	ctgs	Cly, m gn-gy, blky, sft	2.48
3040-3070	ctgs	Cly, v lt gy-m gn, blky, sft, v calc in pt	0.18
3160-3190	ctgs	Sltst, lt gy, calc, sdy/cly, lt gy	0.81
3340-3370	ctgs	Ss/cgl, f-c gr/ig & meta frag	--
3490-3520	ctgs	Sltst, lt gy-gn, blky, calc, v hd/ ls, lt gy-gn, blky, slty, v hd, highly contaminated with mica, pipe dope and metal chips	1.64

* TOC = Total Organic Carbon.

These analyses, opinions or interpretations are based on observations and material 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 operation, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

Table I (cont.)

Total Organic Carbon Results and Gross Lithologic Descriptions

Depth (ft)	Sample Type	Gross Lithologic Description	TOC* (wt %)
3640-3670	ctgs	90% sltst, lt gy-gn, blky, calc, v hd/ls, lt gy gn, blky, slty, v hd, 10% ss, wh-clr, f-occ c, sb ang-ang, Highly contaminated with mica, pipe dope and metal chips	1.85
3790-3820	ctgs	75% cly, brn, calc, blky, 25% ls, gy brn, xln, occ grdg to sltst, occ tary mat assoc abnd mica flake	1.83
3940-3970	ctgs	60% ls, gy grn, xln, occ grdg to sltst, occ tary mat assoc, abnd mica flake 40% sltst, brn, sft, blky, calc	1.79
4090-4100	ctgs	Ls, m-dk brn, f xln, blky, occ oil stn, Tr sltst, brn, sft, blky, calc	1.47
4240-4270	ctgs	85% sltst, brn, blky, n calc, 15% ls, m-dk brn, f xln, blky, occ oil stn, Tr ss, gy	2.93
4390-4420	ctgs	75% sltst, brn, blky, n calc, 25% ls, m-dk brn, f xln, blky, occ oil stn	3.39
4540-4570	ctgs	Sltst, brn, blky, n calc	4.88
4690-4720	ctgs	90% sltst, brn, blky, n calc, 10% ls, brn, blky, f xln	3.62
4840-4870	ctgs	Sltst, brn, blky, n calc	1.87

* TOC = Total Organic Carbon.

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Table I (cont.)

Total Organic Carbon Results and Gross Lithologic Descriptions

Depth (ft)	Sample Type	Gross Lithologic Description	TOC* (wt %)
4930-4960	ctgs	Sltst, brn-lt brn, blky, n calc	1.77
5140-5170	ctgs	Sltst, brn-lt brn, blky, n calc, Tr ss, gy	2.41
5290-5320	ctgs	Sh/cly, gy-gy brn, sb fis, n calc	2.02
5440-5463	ctgs	Clyst, lt brn, sl calc, blky	1.81
5590-5620	ctgs	Clyst, lt brn, sl calc, blky	1.65
5740-5770	ctgs	Clyst, lt gy, blky, occ carb, Tr ls	1.62
5890-5920	ctgs	Clyst, lt gy, blky, thn lam	1.72
6040-6070	ctgs	85% clyst, lt gy, blky, sl slty, 15% dol, m gy, sug, blky	1.53
6190-6220	ctgs	85% clyst, lt gy, blky, sl slty, 15% dol, m gy, sug, blky	1.72
6340-6370	ctgs	85% clyst, lt gy, blky, sl slty, 15% dol, m gy, sug, blky	2.74
6490-6520	ctgs	90% clyst, lt-m gy, blky, 10% dol, m gy, sug, blky	2.51
6640-6670	ctgs	90% clyst, lt-m gy, blky, 10% dol, m gy, sug, blky	3.55
6790-6820	ctgs	80% clyst, lt-m gy, blky, sft, 20% dol, m gy, sug, blky, hd	3.61

* TOC = Total Organic Carbon.

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Table I (cont.)

Total Organic Carbon Results and Gross Lithologic Descriptions

Depth (ft)	Sample Type	Gross Lithologic Description	TOC* (wt %)
6940-6970	ctgs	55% sltst, lt brn, gy, blky, sl dol, 45% dol, m gy, sug, blky, hd	1.96/1.92
7090-7120	ctgs	55% sltst, lt brn, gy, blky, sl dol, 45% dol, m gy, sug, blky, hd	1.66
7240-7270	ctgs	50% dol, m gy, sug, blky, hd, 50% sltst, m gy, blky, tary mat assoc	3.10
7390-7420	ctgs	35% sltst, lt gy, blky, occ pyr, 35% dol, m gy, sug, blky, hd, 30% cht, red brn, dk gy, vit, crpxln	3.29
7510-7540	ctgs	65% sltst, lt gy, blky, occ pyr, 25% dol, m gy, sug,blky, hd, 10% cht, red brn, dk gy, vit, crpxln	1.35
7690-7710	ctgs	90% sltst, lt gy, blky, occ pyr, 10% dol, m gy, sug, blky, hd	0.99
7840-7870	ctgs	60% sltst, lt gy, blky, m hd, occ pyr, 40% dol, m gy, sug, blky	1.32/1.33
7990-8020	ctgs	50% sltst, lt gy, blky, m hd, occ pyr, 50% clyst, lt gy, blky, sft, Tr dol	1.43
8140-8170	ctgs	50% sltst, lt gy, blky, m hd, occ pyr, 50% clyst, lt gy, blky, sft, Tr dol	1.54
8290-8320	ctgs	Sltst, lt-m gy, blky, arg in pt, occ pyr, occ carb, calc in pt	1.75/1.77
8440-8470	ctgs	Sltst, lt-m gy, blky, arg in pt, occ pyr, occ carb, calc in pt	1.61

* TOC = Total Organic Carbon.

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Table I (cont.)

Total Organic Carbon Results and Gross Lithologic Descriptions

Depth (ft)	Sample Type	Gross Lithologic Description	TOC* (wt %)
8590-8620	ctgs	Sltst, lt-m gy, blky, arg in pt, occ pyr, occ carb, calc in pt, Tr dol	1.76
8740-8770	ctgs	Sltst, lt-m gy, blky, arg in pt, occ pyr, occ carb, calc in pt, Tr dol	1.83
8890-8920	ctgs	50% sltst, lt-m gy, blky, arg in pt, occ pyr, occ carb, calc in pt, 50% dol, m gy, blky, sug	1.88
9040-9070	ctgs	90% sltst, lt-m gy, blky, arg in pt, occ pyr, occ carb, calc in pt, 10% dol, m gy, blky, sug	1.89
9190-9220	ctgs	90% sltst, m gy, blky, f lam, calc in pt, occ pyr, m hd, 10% dol, m gy, blky, sug, hd	1.73
9340-9370	ctgs	Sltst, m-dk gy, blky, occ carb, m hd, n calc	1.61
9490-9520	ctgs	60% sltst, m-dk gy, blky, occ carb, m hd, n calc, 40% ls/dol, wh-lt gy, f-m xln Tr pyr & glau	0.77
9640-9670	ctgs	90% sltst, m-dk gy, blky, occ carb, m hd, n calc 10% Ls/dol, lt-m gy, m xln, gran, assoc/pyr	1.21

* TOC = Total Organic Carbon.

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Table I (cont.)

Total Organic Carbon Results and Gross Lithologic Descriptions

Depth (ft)	Sample Type	Gross Lithologic Description	TOC* (wt %)
9790-9820	ctgs	80% sltst, m-dk gy, blky, occ carb, m hd, n calc, 20% dol, m gy brn, f xln, sug & gran, Tr glau & pyr	1.29
9940-9970	ctgs	95% sltst, dk gy, blky, wxy, occ carb, 5% dol, m gy brn, f xln, sug & gran	1.30
10090-10120	ctgs	Sltst, dk gy, blky, wxy, occ carb	0.92
10240-10270	ctgs	Sltst, dk gy, blky, wxy, occ carb	0.76
10390	ctgs	Sltst, dk gy, blky, wxy, occ carb	0.97
10500	ctgs	Sltst, m-dk gy, blky, occ wxy & carb, Tr ls	1.14
10540-10571	ctgs	Sltst, m-dk gy, blky, occ wxy & carb, Tr ls, glau	0.94/0.95

* TOC = Total Organic Carbon.

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Table II

Results of C_{15+} Extractable Organic Matter (EOM) Analysis

Depth (ft)	Sample Type	TOC (wt %)	EOM (ppm) w/s	EOM (ppm) w/o/s	HC (ppm)	Composition of C_{15+} Extractable Organic Matter (Percent of Organic Extract) F-1	F-2	F-3 & F-4	CPI
2300-2330	ctgs	0.73	1828	1750	238	3.2	10.4	86.4	2.64
2630-2660	ctgs	1.46	2117	1930	392	7.8	12.5	79.7	4.37
3490-3520	ctgs	1.25	1628	1579	429	14.4	12.8	72.8	1.46
3790-3820	ctgs	1.99	1612	1537	117	1.3	6.3	92.4	3.45
4090-4100	ctgs	1.62	1367	1343	329	6.3	18.2	75.5	5.40
4390-4420	ctgs	3.92	2491	2391	218	1.0	8.1	90.9	3.10
4690-4720	ctgs	3.65	1990	1890	138	1.0	6.3	92.7	5.77
4930-4960	ctgs	1.93	1553	1500	135	1.7	5.6	92.7	5.05
5290-5320	ctgs	2.05	1773	1703	92	1.6	3.8	94.6	4.94
5590-5620	ctgs	1.69	1312	1152	245	5.8	15.5	78.7	1.86
5890-5920	ctgs	1.76	2594	2530	524	7.0	13.7	79.3	1.33
6190-6220	ctgs	1.64	2464	2365	610	7.5	18.3	74.2	1.16
6490-6520	ctgs	2.56	3613	3456	757	5.5	16.4	78.1	1.24
6790-6820	ctgs	3.50	8231	8207	2167	4.5	21.9	73.6	1.38
7090-7120	ctgs	1.67	7941	7922	1822	1.1	21.9	77.0	0.90

TOC = Total Organic Carbon; EOM = Extractable Organic Matter (C_{15+}); HC = C_{15+} Hydrocarbons (saturates + aromatics); CPI = Carbon Preference Index (C_{24}-C_{34} carbon number range); F-1 = saturates; F-2 = aromatics; F-3 = asphaltics; F-4 = noneluted fraction; w/s = with sulfer; w/o/s = without sulfer.

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Table II (cont.)

Results of C_{15+} Extractable Organic Matter (EOM) Analysis

Depth (ft)	Sample Type	TOC (wt %)	EOM (ppm) w/s	EOM (ppm) w/o/s	HC (ppm)	Composition of C_{15+} Extractable Organic Matter (Percent of Organic Extract) F-1	F-2	F-3 & F-4	CPI
7390-7420	ctgs	3.35	12280	11659	3288	3.9	24.3	71.8	0.97
7690-7710	ctgs	1.10	2077	1933	410	3.4	17.8	78.8	1.01
7990-8020	ctgs	1.44	2581	2429	700	7.9	20.9	71.2	1.21
8290-8320	ctgs	1.80	4224	3829	1164	10.3	20.1	69.6	1.21
8590-8620	ctgs	1.72	4923	4197	1330	8.6	23.1	68.3	1.07
8890-8920	ctgs	1.83	5978	5744	1832	12.2	19.7	68.1	ND
9190-9220	ctgs	1.79	4731	4108	1191	12.1	16.9	71.0	1.11
9490-9520	ctgs	0.70	1641	1630	406	8.3	16.6	75.1	1.18
9790-9820	ctgs	1.33	2226	1988	537	8.9	18.1	73.0	1.25
10090-10120	ctgs	0.96	476	465	48	3.3	7.1	89.6	1.41
10390-10420	ctgs	1.07	711	638	165	6.3	13.4	81.1	1.31
10540-10571 (TD)	ctgs	0.95	658	623	197	9.7	22.0	68.3	1.24

TOC = Total Organic Carbon; EOM = Extractable Organic Matter (C_{15+}); HC = C_{15+} Hydrocarbons (saturates + aromatics); CPI = Carbon Preference Index (C_{24}-C_{34} carbon number range); F-1 = saturates; F-2 = aromatics; F-3 = asphaltics; F-4 = noneluted fraction; w/s = with sulfer; w/o/s = without sulfer.

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Table III

Significant Ratios

Depth (ft)	$\frac{EOM}{TOC} \times 100$	$\frac{HC}{TOC} \times 100$	$\frac{HC}{EOM} \times 100$
2300-2330	24.0	3.3	13.6
2630-2660	14.5	2.7	20.3
3490-3520	13.0	3.4	27.2
3790-3820	7.7	0.6	7.6
4090-4100	8.3	2.0	24.5
4390-4420	6.1	0.6	9.1
4690-4720	5.2	0.4	7.3
4930-4960	7.8	0.7	9.0
5290-5320	8.3	0.5	5.4
5590-5620	6.8	1.4	21.3
5890-5920	14.4	3.0	20.7
6190-6220	14.4	3.7	25.8
6490-6520	13.5	3.0	21.9
6790-6820	23.4	6.2	26.4
7090-7120	47.4	10.9	23.0
7390-7420	34.8	9.8	28.2
7690-7710	17.6	3.7	21.2
7990-8020	16.9	4.9	28.8
8290-8320	21.3	6.5	30.4
8590-8620	24.4	7.7	31.7
8890-8920	31.4	10.0	31.9
9190-9220	22.9	6.7	29.0

TOC = Total Organic Carbon (ppm); EOM = C_{15+} Extractable Organic Matter (ppm); HC = C_{15+} Hydrocarbons (ppm)

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Table III (cont.)

Significant Ratios

Depth (ft)	$\frac{EOM}{TOC} \times 100$	$\frac{HC}{TOC} \times 100$	$\frac{HC}{EOM} \times 100$
9490-9520	23.3	5.8	24.9
9790-9820	16.7	4.0	27.0
10090-10120	5.0	0.5	10.3
10390-10420	6.0	1.5	25.9
10540-10571	6.6	2.1	31.6

TOC = Total Organic Carbon (ppm); EOM = C_{15+} Extractable Organic Matter (ppm); HC = C_{15+} Hydrocarbons (ppm)

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Table IV

Results of Kerogen Analysis

Depth (ft)	Sample Type	H/C	Kerogen Description *				TAI	R_o (range)	R_o (mean)	N
			%Alginite	%Exinite	%Vitrinite	%Other				
2000-2030	ctgs		5	35	60	0	1.2	0.30-0.47	0.38	56
2300-2330	ctgs		20	30	50	TR	1.5	0.30-0.49	0.41	49
2630-2660	ctgs		60	5	35	TR	1.5	ND		
2900-2930	ctgs		90	TR	10	TR	1.5	0.30-0.47	0.39	37
3160-3190	ctgs		30	5	65	TR	1.5	ND		
3490-3520	ctgs		40	15	45	TR	1.5	0.30-0.43	0.37	32
3790-3820	ctgs		85	5	10	TR	1.5	ND		
4090-4100	ctgs		90	5	5	0	1.5	ND		
4390-4420	ctgs		95	TR	5	TR	1.5	ND		
4690-4720	ctgs		95	TR	5	0	1.5	0.39-0.51	0.46	29
4930-4960	ctgs		80	5	15	TR	1.7	ND		
5290-5320	ctgs		85	5	10	0	1.7	0.43-0.63	0.54	48
5590-5620	ctgs		95	5	TR	0	1.7	0.43-0.59	0.52	43
5890-5920	ctgs		85	10	5	TR	1.7	ND		
6190-6220	ctgs		95	5	TR	TR	1.7	0.45-0.64	0.54	36
6490-6520	ctgs		100	TR	TR	0	ND	ND		

H/C = atomic hydrogen to carbon ratio; *Alginite = algal debris + amorphous sapropels, Exinite = plant cuticle + spore & pollen exines + resins, Vitrinite = woody tissue altered in a wet anoxic environment; TAI = Thermal Alteration Index, R_o = vitrinite reflectance, N = number of points used to obtain R_o mean; ND = no data (recovery too low, no spores or pollen, bad sample quality, etc.), TR = less than 5%.

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Table IV (cont.)

Results of Kerogen Analysis

Depth (ft)	Sample Type	H/C	Kerogen Description *				TAI	R_o (range)	R_o (mean)	N
			%Alginite	%Exinite	%Vitrinite	%Other				
6790-6820	ctgs		100	TR	TR	0	ND	0.48-0.63	0.59	28
7090-7120	ctgs		100	TR	TR	0	1.7	ND		
7390-7420	ctgs		100	0	TR	0	ND	ND		
7690-7710	ctgs		90	TR	10	TR	ND	0.48-0.69	0.59	44
7990-8020	ctgs		90	0	10	TR	ND	ND		
8290-8320	ctgs		95	TR	5	0	ND	0.48-0.72	0.59	57
8590-8620	ctgs		95	TR	5	TR	1.7	ND		
8890-8920	ctgs		95	TR	TR	TR	1.7	0.51-0.71	0.62	50
9190-9220	ctgs		50	5	45	0	1.7	ND		
9490-9520	ctgs		50	5	45	0	1.7	0.51-0.74	0.62	53
9790-9820	ctgs		25	TR	75	0	1.7	0.55-0.73	0.65	47
0090-10120	ctgs		5	15	80	0	1.7	0.54-0.72	0.63	31
0390-10420	ctgs		5	5	90	0	1.7	0.56-0.72	0.65	18
0540-10570	ctgs		0	5	95	0	1.7	0.58-0.71	0.66	22

'C = atomic hydrogen to carbon ratio; *Alginite = algal debris + amorphous sapropels, Exinite = plant cuticle + spore & pollen kines + resins, Vitrinite = woody tissue altered in a wet anoxic environment; TAI = Thermal Alteration Index, R_o = vitrinite eflectance, N = number of points used to obtain R_o mean; ND = no data (recovery too low, no spores or pollen, bad sample qual-ty, etc.), TR = less than 5%.

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Table V

CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF C_1-C_7 HYDROCARBONS: In air space.

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
2000-2030	94.6	2.7	--	--	--	--	97.4	2.7	2.8	--
2150-2180	674	1.5	0.2	--	--	--	676	1.7	0.3	--
2300-2330	3978	26.5	5.0	--	--	--	4009	31.5	0.8	--
2450-2480	108061	101	11.0	--	--	--	108173	113	0.1	--
2630-2660	28732	45.9	2.7	--	--	--	28781	48.6	0.2	--
2780-2810	970	15.7	--	--	--	--	986	15.7	1.6	--
2900-2930	255267	385	41.0	--	--	--	255693	427	0.2	--
3040-3070	802	1.9	1.4	--	2.2	2.3	807	5.5	0.7	--
3160-3190	3620	10.2	4.3	--	8.4	25.3	3643	22.9	0.6	--
3340-3370	8453	31.1	13.4	--	15.8	22.3	8513	60.3	0.7	--
3490-3520	8203	23.2	29.8	--	4.7	28.8	8261	57.7	0.7	--
3640-3670	20941	98.8	2.4	0.3	9.4	24.6	21052	111	0.5	0.04
3790-3820	19704	170	119	11.4	22.5	35.9	20028	324	1.6	0.51
3940-3970	82620	680	542	178	180	145	84203	1582	1.9	0.99
4090-4120	28128	228	148	104	47.3	97.6	28657	529	1.9	2.22
4240-4270	18645	280	195	112	24.6	54.8	19259	613	3.2	4.57
4390-4420	24927	393	321	126	29.9	64.6	25798	870	3.4	4.23
4540-4570	11890	154	126	50.3	12.8	51.0	12234	344	2.8	3.91
4690-4720	26289	350	380	170	49.4	866	27240	950	3.4	3.46

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Table V (cont.)

CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF C_1-C_7 HYDROCARBONS: In air space.

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
4840-4870	18530	267	282	130	38.8	78.9	19250	719	3.7	3.36
4930-4960	11646	137	160	79.4	22.3	50.5	12046	399	3.3	3.56
5140-5170	27006	347	405	193	46.5	188	27998	991	3.5	4.15
5290-5320	15320	212	192	77.5	21.6	84.0	15823	503	3.2	3.59
5440-5463	31789	590	538	203	69.0	328	33191	1401	4.2	2.96
5590-5620	1589	19.9	35.8	20.6	7.8	69.2	1673	84.1	5.0	2.65
5740-5770	1507	48.9	85.6	52.6	21.1	3148	1715	208	12.1	2.49
5890-5920	4948	438	288	171	177	2109	6023	1075	17.8	0.96
6040-6070	5798	267	468	190	244	741	6967	1169	16.7	0.78
6190-6220	1488	126	380	205	323	982	2523	1035	41.0	0.64
6340-6370	5407	433	669	237	313	939	7062	1654	23.4	0.76
6490-6520	10913	936	837	341	318	1104	13346	2433	18.2	1.07
6640-6670	11015	1056	767	295	306	1058	13440	2424	18.0	0.96
6790-6820	4062	575	1085	462	467	1791	6652	2590	38.9	0.99
6940-6970	2761	341	769	473	789	1961	5136	2374	46.2	0.60
7090-7120	3342	376	1404	540	979	1852	6643	3301	49.6	0.55
7240-7270	3700	593	1619	428	714	2122	7056	3356	47.5	0.60
7390-7420	9391	439	481	172	229	897	10713	1321	12.3	0.75
7540-7570	573	242	870	538	654	2507	2879	2306	80.1	0.82

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Table V (c

CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF C_7 HYDROCARBONS : In air space.

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
7690-7720	463	177	710	366	633	2464	2352	1888	80.2	0.58
7840-7870	423	461	1867	542	1277	3343	4572	4149	90.7	0.42
7990-8020	266	284	1464	447	1088	2822	3552	3286	92.5	0.41
8140-8170	328	310	1219	383	883	3011	3125	2796	89.5	0.43
8290-8320	584	621	2984	765	1922	4593	6878	6293	91.5	0.40
8440-8470	272	339	1776	446	1169	2498	4004	3732	93.2	0.38
8590-8620	432	554	2823	601	1655	3302	6065	5633	92.9	0.36
8740-8770	527	354	1893	471	1269	2951	4515	3988	88.3	0.37
8890-8920	663	939	3788	671	1926	3098	7989	7325	91.7	0.35
9040-9070	834	1252	4747	848	2632	5265	10315	9480	91.9	0.32
9190-9220	334.3	547	2703	516	1574	3679	5676	5342	94.1	0.33
9340-9370	362	438	2020	444	1407	4806	4672	4310	92.3	0.32
9490-9520	89.2	54.1	337	107	317	2029	905	816	90.2	0.34
9640-9670	541	734	2365	465	1111	311	5217	4676	89.6	0.42
9790-9820	823	570	852	187	252	1356	2685	1862	69.3	0.74
9940-9970	1580	892	1032	226	273	978	4005	2425	60.5	0.83
10090-10120	1297	1021	1054	153	169	326	3696	2399	64.9	0.91
10240-10270	1112	813	1025	164	260	697	3377	2264	67.1	0.63
10390-10420	2299	1607	2383	408	629	1567	7328	5028	68.6	0.65

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Table V (cont.)

CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF C_1-C_7 HYDROCARBONS : In air space.

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
10500	2483	1887	1702	247	227	409	6548	4065	62.1	1.09
10540-10570	1284	899	1552	219	396	542	4351	3067	70.5	0.55

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Table

CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF C_1-C_7 HYDROCARBONS: In cuttings.

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
2000-2030	21.8	0.1	--	--	--	--	21.9	0.1	0.5	--
2150-2180	3.0	--	--	--	--	0.2	3.0	--	--	--
2300-2330	32.1	1.1	0.4	--	--	3.8	33.5	1.5	4.4	--
2450-2480	106	1.1	0.9	--	0.2	11.7	108	2.1	1.9	--
2630-2660	1370	7.8	2.3	--	0.3	4.9	1381	10.3	0.7	--
2780-2810	305	2.7	1.8	0.1	0.3	11.5	309	4.8	1.6	0.38
2900-2930	293	3.3	2.8	0.2	0.7	8.7	299	6.9	2.3	0.28
3040-3070	305	8.7	16.6	0.6	1.8	18.3	333	27.8	8.3	0.35
3160-3190	315	4.6	5.6	0.6	1.9	10.7	327	127	3.9	0.33
3340-3370	874	10.9	6.9	0.6	1.7	16.9	894	20.1	2.3	0.37
3490-3520	385	5.6	3.0	0.5	1.6	9.0	395	10.7	2.7	0.31
3640-3670	309	4.3	4.1	0.6	3.5	10.3	322	12.5	3.9	0.17
3790-3820	381	10.8	39.1	10.9	25.1	24.5	467	85.9	18.4	0.43
3940-3970	642	21.0	85.2	59.6	73.1	53.7	880	239	27.1	0.82
4090-4120	1142	70.1	214	209	147	250	1782	640	35.9	1.42
4240-4270	794	139	367	328	74.2	85.6	1703	908	53.3	4.42
4390-4420	391	109	463	308	71.9	89.6	1343	951	70.9	4.29
4540-4570	141	55.3	555	465	129	180	1346	1205	89.5	3.60
4690-4720	885	149	679	490	139	138	2342	1457	62.2	3.52

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Table (Cont.)

CONCENTRATION (VOL PPM OF TOTAL SOLIDS) C_1-C_7 HYDROCARBONS : In cuttings.

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
4840-4870	213	36.6	251	248	77.8	116	826	614	74.3	3.18
4930-4960	316	66.2	259	218	68.7	105	928	612	65.9	3.16
5140-5170	494	55.5	324	291	79.1	209	1244	750	60.3	3.68
5290-5320	383	73.8	383	355	116	438	1310	928	70.8	3.05
5440-5470	150	28.2	291	280	99.6	381	848	699	82.4	2.81
5590-5620	190	13.9	87.7	134	59.2	598	485	295	60.8	2.27
5740-5770	124	13.0	74.2	107	51.8	788	370	246	66.5	2.07
5890-5920	212	46.9	197	194	139	541	789	577	73.1	1.40
6040-6070	335	37.6	326	348	510	1762	1557	1222	78.5	0.68
6190-6220	193	23.4	239	447	764	3907	1665	1473	88.4	0.59
6340-6370	180	62.4	596	579	922	3108	2339	2159	92.3	0.63
6490-6520	156	182	919	737	715	2024	2709	2553	94.3	1.03
6640-6670	314	408	1700	2596	2836	5422	7854	7539	96.0	0.92
790-6820	1230	265	1338	1235	1433	7220	5501	4271	77.6	0.86
6940-6970	389	62.8	139	196	367	1487	1154	765	66.3	0.53
7090-7120	443	119	352	309	625	2367	1847	1404	76.0	0.49
7240-7270	1104	284	1346	803	1467	5688	5004	3900	77.9	0.55
7390-7420	421	103	416	290	462	2788	1691	1271	75.1	0.63
7540-7570	164	35.1	190	250	392	2883	1030	866	84.1	0.64

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Table VI (cont.)
CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF C_1-C_7 HYDROCARBONS : In cuttings.

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
7690-7720	174	30.6	196	264	556	3749	1222	1048	85.7	0.47
7840-7870	215	63.9	604	474	1380	5682	2737	2522	92.2	0.34
7990-8020	56.7	11.8	185	243	758	3650	1254	1198	95.5	0.32
8140-8170	373	120	379	382	1123	7562	2377	2004	84.3	0.34
8290-8320	255	58.5	668	612	1791	6234	3385	3129	92.5	0.34
8440-8470	176	43.3	719	597	1775	6331	3310	3134	94.7	0.34
8590-8620	192	45.1	739	636	1985	6288	3597	3405	94.7	0.32
8740-8770	517	115	454	448	1354	5564	2887	2370	82.1	0.33
8890-8920	216	56.0	1311	853	2787	8219	5223	5006	95.9	0.31
9040-9070	217	58.6	1266	819	2732	9592	5093	4875	95.7	0.30
9190-9220	616	153	1319	1100	3633	18898	6820	6205	90.9	0.30
9340-9370	311	85.5	878	602	1890	8625	3766	3456	91.8	0.32
9490-9470	286	45.1	135	110	421	5661	997	711	71.3	0.26
9640-9670	293	44.5	871	847	2811	12714	4866	4572	94.0	0.30
9790-9820	669	337	2044	1141	2400	11337	6590	5921	89.9	0.48
9940-9970	108	94.6	433	124	194	1462	953	846	88.7	0.64
10090-10120	298	259	1297	219	471	480	2544	2246	88.3	0.47
10240-10270	275	191	1015	229	558	1323	2267	1992	87.9	0.41
10390-10420	585	183	1968	496	1185	2179	4417	3833	86.8	0.42

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Table VI)

CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF -C_7 HYDROCARBONS : In cuttings.

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
10500	435	666	3058	441	955	699	5555	5120	92.2	0.46
10540-10570	287	421	1942	346	866	2039	3862	3575	92.6	0.40

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Ta VII

CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF C_1-C_7 HYDROCARBONS: Combined (air space & cuttings)

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
2000-2030	116	2.8	--	--	--	--	119	2.8	2.4	--
2150-2180	677	1.5	0.2	--	--	0.2	679	1.7	0.3	--
2300-2330	4010	27.6	5.4	--	--	3.8	4043	33.0	0.8	--
2450-2480	108167	102	11.9	--	0.2	11.7	108174	115	0.1	--
2630-2660	30102	53.7	5.0	--	0.3	4.9	30162	58.9	0.2	--
2780-2810	1275	18.4	1.8	0.1	0.3	11.5	1295	20.5	1.6	0.33
2900-2930	255560	388	43.8	0.2	0.7	8.7	255992	434	0.2	0.29
3040-3070	1107	10.6	18.0	0.6	4.0	20.6	1140	33.3	2.9	0.15
3160-3190	3935	14.8	9.9	0.6	10.3	36.0	3970	150	3.8	0.06
3340-3370	9327	42.0	20.3	0.6	17.5	39.2	9407	80.4	0.9	0.03
3490-3520	8588	28.8	32.8	0.5	6.3	37.8	8655	68.4	0.8	0.08
3640-3670	21250	103	6.5	0.9	12.9	34.9	21374	124	0.6	0.07
3790-3820	20085	181	158	22.3	47.6	60.4	20495	410	2.0	0.47
3940-3970	83262	701	627	238	254	199	85083	1821	2.1	0.94
4090-4120	29270	298	362	313	194	348	30439	1169	3.8	1.61
4240-4270	19439	419	562	440	98.8	140	20962	1521	7.3	4.45
4390-4420	25318	502	784	434	102	89.6	27141	1821	6.7	4.25
4540-4570	12031	209	681	514	142	231	13580	1549	11.4	3.62
4690-4720	27174	499	1059	660	188	1004	29582	2407	8.1	3.51

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CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF C_1-C_7 HYDROCARBONS : Combined (airspace & cuttings).

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
4840-4870	18743	304	533	378	117	195	20076	1333	6.6	3.23
4930-4960	11962	203	419	297	91.0	156	12974	1011	7.8	3.26
5140-5170	27500	403	729	484	126	397	29242	1741	5.9	3.84
5290-5320	15703	286	575	433	138	522	17133	1431	8.3	3.14
5440-5470	31939	618	829	483	169	709	34039	2100	6.2	2.86
5590-5620	1779	33.8	124	155	67.0	667	2158	379	17.6	2.31
5740-5770	1631	61.9	160	160	72.9	3936	2085	454	21.8	2.19
5890-5920	5160	484	485	365	316	2650	6812	1652	24.3	1.16
6040-6070	6133	305	794	538	754	2503	8524	2391	28.1	0.71
6190-6220	1681	149	619	652	1087	4889	4180	2508	59.9	0.60
6340-6370	5587	495	1265	816	1235	4047	9401	3813	40.6	0.66
6490-6520	11069	1118	1756	1078	1033	3128	16054	4986	31.1	1.04
6640-6670	11329	1464	2467	2891	3142	6480	21294	9963	46.8	0.92
6790-6820	5292	840	2423	1697	1900	9011	12153	6861	56.5	0.89
6940-6970	3150	404	908	669	1156	3448	6290	3139	49.9	0.58
7090-7120	3785	496	1756	849	1604	4219	8490	4705	55.4	0.53
7240-7270	4804	877	2965	1231	1181	7810	12060	7256	60.2	0.56
7390-7420	9812	542	527	462	691	3685	12404	2592	20.9	0.67
7540-7570	737	277	1060	788	1046	5390	3909	3172	81.1	0.75

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Table (cont.)

CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF C_1-C_7 HYDROCARBONS : Combined (airspace & cuttings).

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
7690-7720	637	208	906	630	1189	6213	3574	2936	82.1	0.53
7840-7870	638	525	2471	1016	2657	9025	7309	6671	91.2	0.38
7990-8020	323	296	1649	690	1846	6472	4806	4484	93.3	0.37
8140-8170	701	430	1598	765	2006	10573	5502	4800	87.2	0.38
8290-8320	839	680	3652	1367	3713	10827	10263	9422	91.8	0.37
8440-8470	448	382	2495	1043	2944	8829	7314	6866	93.9	0.35
8590-8620	624	599	3562	1237	3640	9590	9662	9038	93.5	0.34
8740-8770	1044	469	2347	919	2623	8518	7402	6358	85.9	0.35
8890-8920	879	995	5099	1524	4713	11317	13212	12331	93.3	0.32
9040-9070	1051	1310	6013	1667	5364	14860	15408	14355	93.2	0.31
9190-9220	950	700	4022	1616	5207	22577	12496	11547	92.4	0.31
9340-9370	673	524	2898	1046	3297	13431	8438	7766	92.0	0.32
9490-9470	375	99.2	472	217	738	7690	1902	1527	80.3	0.29
9640-9670	834	779	3236	1312	3922	13025	10083	9248	91.7	0.33
9790-9820	1492	907	2896	1328	2652	12693	9275	7783	83.9	0.50
9940-9970	1688	987	1465	350	467	2440	4958	3271	66.0	0.75
10090-10120	1595	1280	2351	372	640	806	6240	4645	74.4	0.58
10240-10270	1387	1004	2040	393	818	2020	5644	4256	75.4	0.48
10390-10420	2884	1790	4351	904	1814	3746	11745	8861	75.4	0.50

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CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF C_1-C_7 HYDROCARBONS : Combined (airspace & cuttings).

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
10500	2918	2553	4760	688	1182	1108	12103	9185	75.9	0.58
10540-10570	1571	1320	3494	565	1262	2581	8213	6642	80.9	0.45

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Table VI

CONCENTRATION (VOL PPM OF TOTAL SOLIDS) $_1$-C_7 HYDROCARBONS : In air space.

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
				Sidewall Cores						
3030	127240	65.5	58.9	5.1	3.6	233	127373	133	0.10	1.41
4200	16949	983	1679	1149	270	360	21030	4082	19.4	4.25
5100	54905	828	2491	1891	570	2695	60634	5779	9.52	3.32
5400	35869	1379	3008	1833	689	3476	42777	6909	16.2	2.66
*5600	122664	3257	5994	3571	1553	18047	137038	14376	10.5	2.30
*5900	3588	343	1509	3022	3930	161451	12392	8804	71.1	0.77
*6200	14519	1842	6590	4231	8449	53712	35631	21112	59.3	0.50
*6500	10181	51703	9598	5437	7433	41076	84352	74171	87.9	0.73
+6800	14213	13484	51674	32480	46198	309821	158047	143834	91.0	0.70
*7100	1493	764	1984	1161	3208	57279	8613	7118	82.6	0.36
*7400	5916	2353	3130	1116	3851	29023	16365	10449	63.9	0.29
7700	9354	2600	5842	2137	4988	32997	24921	15567	62.5	0.43
*8000	2253	916	4404	1970	5889	38583	15432	13179	85.4	0.33
8400	2849	2586	12974	4818	16604	88002	39831	36982	92.9	0.29
*8700	8612	15935	94281	24476	86294	255570	229597	220985	96.3	0.28
9000	8445	6657	31620	8373	31394	125558	86488	78043	90.2	0.27
*9300	5747	5813	30988	7958	30237	132821	80743	74996	92.9	0.26

*Solids volume less than 5cc.
+Solids volume less than 1cc.

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CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF C_1-C_7 HYDROCARBONS : In air space.

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
*9400	15664	14124	47788	10459	36694	175054	124727	109065	87.4	0.29
*9610	1856	778	2614	1099	3109	19853	9455	7600	80.4	0.35
9900	23340	13938	18260	1857	2619	2086	60015	36675	61.1	0.71
10207	4537	14925	58128	10698	20246	12996	108532	103995	95.8	0.53

*Solids volume less than 5 cc.

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Table IX

CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF C_1-C_7 HYDROCARBONS : In cuttings.

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
					Sidewall Cores					
3030	619	31.6	19.2	-	9.9	32.5	680	60.7	8.93	-
4200	188	45.5	145	229	49.9	68.7	658	469	71.4	4.59
5100	239	62.7	33.0	3.0	14.5	339	352	113	32.2	0.21
5400	756	195	89.8	5.7	35.3	387	1081	326	30.1	0.16
*5600	258	90.2	55.3	25.5	41.2	1010	470	212	45.2	0.62
*5900	403	115	70.4	8.3	62.0	1016	659	256	38.8	0.13
*6200	161	31.8	19.4	9.8	29.9	1750	252	90.8	36.1	0.33
*6500	1016	289	180	181	327	5952	1992	975	48.9	0.55
+6800	4233	1095	663	530	1122	65267	7643	3410	44.6	0.47
*7100	1756	284	428	246	229	8282	2943	1186	40.3	1.07
*7400	731	133	183	77.8	100	3917	1225	495	40.4	0.78
7700	559	107	60.2	6.4	55.0	4117	787	228	29.0	0.12
*8000	238	62.3	38.1	6.0	47.7	4674	392	154	39.2	0.13
8400	543	110	133	33.8	74.5	5672	895	352	39.3	0.45
*8700	2596	871	533	176	1125	59082	5301	2705	51.0	0.16
9000	213	50.0	60.4	46.4	279	13450	648	436	67.2	0.17
*9300	292	61.6	114	46.7	224	16003	738	446	60.5	0.21

*Solids volume less than 5 cc.
+Solids volume less than 1 cc.

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Table (cont.)

CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF C_1-C_7 HYDROCARBONS : In cuttings.

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
*9400	659	146	148	34.9	103	960	1091	432	39.6	0.34
*9610	598	88.7	65.5	17.6	831	3671	1601	1003	62.7	0.02
9900	344	94.0	626	120	296	429	1479	1135	76.8	0.40
10207	395	52.4	178	200	531	853	1356	961	70.9	0.38

*Solids volume less than 5 cc.

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Table

CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF C_1-C_7 HYDROCARBONS: Combined (airspace and cuttings).

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
				Sidewall Cores						
3030	127859	97.1	78.1	5.1	13.5	266	128053	194	0.15	0.38
4200	17137	1029	1824	1378	320	429	21688	4551	21.0	4.31
5100	55144	891	2524	1894	585	3034	61036	5892	9.65	3.24
5400	36625	1574	3098	1839	724	3863	43858	7235	16.5	2.54
*5600	122922	3347	6049	3597	1594	19057	137508	14588	10.6	2.25
*5900	3991	458	1579	3030	3992	162467	13052	9060	69.4	0.76
*6200	14680	1874	6609	4241	8479	55462	35883	21203	59.1	0.50
*6500	11197	51992	9778	5618	7760	47028	86344	75146	87.0	0.72
+6800	18446	14578	52337	33010	47320	375088	165690	147244	88.9	0.70
*7100	3251	1048	2412	1407	3437	65561	11556	8304	71.9	0.41
*7400	6647	2486	3313	1194	3951	32940	17590	10944	62.2	0.30
7700	9913	2707	5902	2143	5043	37114	25708	15797	61.4	0.42
*8000	2491	978	4442	1976	5937	43257	15824	13333	84.3	0.33
8400	3392	2696	13107	4852	16679	93674	40726	37334	91.7	0.29
*8700	11208	16806	94814	24652	87419	314652	234898	223690	95.2	0.28
9000	8658	6707	31680	8419	31673	139008	87136	78479	90.1	0.27
*9300	6039	5875	31102	8005	30461	148824	81481	75442	92.6	0.26

*Solids volume less than 5 cc.
+Solids volume less than 1 cc.

These analyses, opinions or interpretations are based on observations and material 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 operation, or profitableness of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

Table X (cont.

CONCENTRATION (VOL PPM OF TOTAL SOLIDS) OF C_1-C_7 HYDROCARBONS: Combined (airspace and cuttings).

Depth (ft)	C1 Methane	C2 Ethane	C3 Propane	iC4 Isobutane	nC4 Butane	Total C_{5+}	Total C_1-C_4	Total C_2-C_4	% Gas Wetness	iC4/nC4
*9400	16323	14270	47936	10494	36797	176014	125818	109497	87.0	0.29
*9610	2454	867	2680	1117	3940	23524	11056	8603	77.8	0.28
9900	23684	14032	18886	1977	2915	2515	61494	37810	61.5	0.68
10207	4932	14977	58306	10898	20777	13849	109888	104956	95.5	0.52

*Solids volume less than 5 cc.

These analyses, opinions or interpretations are based on observations and material 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 opera-

Table XI

NORMALISED PERCENTAGE DISTRIBUTION OF INDIVIDUAL HYDROCARBONS IN C_{4-7} MOLECULAR RANGE

DEPTH (ft)	ISOBUTANE	N-BUTANE	ISOPENTANE	N-PENTANE	2,2-DIMETHYLBUTANE	CYCLOPENTANE	2,3-DIMETHYLBUTANE	2-METHYLPENTANE	3-METHYLPENTANE	N-HEXANE	METHYLCYCLOPENTANE	2,2-DIMETHYLPENTANE	BENZENE	2,4-DIMETHYLPENTANE	2,2,3-TRIMETHYLBUTANE	CYCLOHEXANE	3,3-DIMETHYLPENTANE	1,1-DIMETHYLCYCLOPENTANE	2-METHYLHEXANE	2,3-DIMETHYLPENTANE	1,c,3-DIMETHYLCYCLOPENTANE	3-METHYLHEXANE	1,t,3-DIMETHYLCYCLOPENTANE	1,t,2-DIMETHYLCYCLOPENTANE	3-ETHYLPENTANE	N-HEPTANE	1,c,2-DIMETHYLCYCLOPENTANE	METHYLCYCLOHEXANE	TOLUENE	C_{4-7} ABUNDANCE (vol ppm of rock)	CH/MCP	MCP/MCH	RATIOS 2-MP/3-MP	IC_5/NC_5	A + B + C/D	A + B + D/C
	B	A	B	A	B	D	B	B	B	A	D	B	C	B	B	D	B	D	B	B	D	D	D	D	B	A	D	D	C							
2000-2030	NO C_4-C_7 HYDROCARBONS DECTECTED.																																			
2150-2180	NO C_4-C_7 HYDROCARBONS DECTECTED.																																			
2300-2330	NO ANALYSIS.																																			
2450-2480	NO ANALYSIS.																																			
2630-2660	NO C_4-C_7 HYDROCARBONS DECTECTED.																																			
2780-2810	NO ANALYSIS.																																			
2900-2930	NO C_4-C_7 HYDROCARBONS DECTECTED.																																			
3040-3070	0.7	2.0	2.4	1.7	2.0	-	-	4.3	-	7.0	-	-	15.7	4.2	-	7.6	-	-	-	-	-	8.5	-	-	-	5.3	-	14.2	24.4	53.1	-	-	-	1.34	3.53	2.08
3160-3190	11.4	22.2	15.1	24.4	-	-	3.9	8.7	5.5	8.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.7	-	-	-	0.61	-	69.3
3340-3370	-	28.6	9.5	61.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.1	-	-	-	0.13	-	-
3490-3520	NO C_4-C_7 HYDROCARBONS DECTECTED.																																			
3640-3670	10.7	38.5	8.2	9.8	2.5	-	18.9	5.7	-	5.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.2	-	-	-	0.86	-	-
3790-3820	18.9	50.0	3.7	4.0	2.8	3.6	9.2	3.1	1.5	2.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.5	-	-	2.11	0.94	24.0	-

A = normal paraffins B = isoparaffins C = aromatics D = naphthenes

Table XI (cont.) NORMALISED PERCENTAGE DISTRIBUTION OF INDIVIDUAL HYDROCARBONS IN C_{4-7} MOLECULAR RANGE

DEPTH (ft)	ISOBUTANE	N-BUTANE	ISOPENTANE	N-PENTANE	2,2-DIMETHYLBUTANE	CYCLOPENTANE	2,3-DIMETHYLBUTANE	2-METHYLPENTANE	3-METHYLPENTANE	N-HEXANE	METHYLCYCLOPENTANE	2,2-DIMETHYLPENTANE	BENZENE	2,4-DIMETHYLPENTANE	2,2,3-TRIMETHYLBUTANE	CYCLOHEXANE	3,3-DIMETHYLPENTANE	1,1-DIMETHYLCYCLOPENTANE	2-METHYLHEXANE	2,3-DIMETHYLPENTANE	1,c,3-DIMETHYLCYCLOPENTANE	3-METHYLHEXANE	1,t,3-DIMETHYLCYCLOPENTANE	1,t,2-DIMETHYLCYCLOPENTANE	3-ETHYLPENTANE	N-HEPTANE	1,c,2-DIMETHYLCYCLOPENTANE	METHYLCYCLOHEXANE	TOLUENE	C_{4-7} ABUNDANCE (vol. ppm of rock)	RATIOS CH/MCP	MCP/MCH	2-MP/3-MP	ICs/NCs	A + B + C/D	A + B + D/C
	B	A	B	A	B	D	B	B	B	A	D	B	C	B	B	D	B	D	B	B	D	B	D	D	B	A	D	D	C							
3940-3970	29.0	38.0	7.9	2.0	1.9	4.6	8.1	1.1	2.6	0.7	0.9	-	-	-	0.7	0.6	0.1	-	0.8	-	-	0.4	-	0.3	-	0.1	-	0.2	-	276	0.63	5.75	0.44	4.01	14.2	-
4090-4120	31.6	19.1	20.5	1.6	1.4	3.3	5.4	0.8	4.6	0.4	1.2	-	4.0	0.2	0.2	0.6	0.2	1.0	1.5	-	-	1.7	-	-	0.3	0.2	-	-	-	465	0.54	-	0.17	12.8	15.3	19.1
4240-4270	52.1	14.2	17.9	1.4	1.2	1.0	3.5	1.1	1.6	0.3	0.3	0.1	3.8	-	0.1	0.2	-	-	0.5	-	0.2	0.1	0.2	-	0.2	0.1	-	-	-	966	0.60	-	0.68	12.7	51.5	21.7
4390-4470	52.1	14.6	13.2	1.7	1.5	0.2	4.4	1.9	3.0	0.5	0.3	0.3	0.7	0.3	0.1	0.2	0.1	0.4	1.2	-	0.8	0.5	0.8	0.5	0.4	0.1	-	0.1	-	916	0.57	2.39	0.64	8.0	29.2	-
4540-4570	50.1	15.3	12.4	1.6	0.9	0.1	3.0	2.3	4.0	0.4	0.5	0.1	0.5	0.4	-	0.1	-	0.6	1.1	-	1.5	0.8	1.3	1.5	0.2	-	-	0.6	-	1539	0.24	0.77	0.59	7.89	14.9	-
4690-4720	46.5	16.4	18.1	3.1	0.6	0.3	1.8	3.6	1.8	1.0	1.1	-	0.5	0.1	-	0.4	-	0.1	0.2	0.3	1.0	0.5	1.0	0.5	-	0.3	-	0.5	-	2102	0.32	2.14	2.04	5.81	18.9	-
4840-4870	43.3	15.5	18.5	3.0	0.7	0.4	2.4	4.1	2.4	1.1	1.5	-	0.4	0.2	-	0.3	-	0.1	0.1	0.5	1.3	0.7	1.4	1.0	0.1	0.3	-	0.8	-	2096	0.21	1.72	1.72	6.09	13.8	-
4930-4960	35.3	13.9	19.9	3.7	0.6	0.4	2.1	4.6	2.6	1.5	2.4	0.1	0.1	0.2	0.1	0.5	-	0.4	0.4	0.9	1.8	1.0	1.9	2.0	0.3	0.7	0.3	2.4	-	2126	0.21	1.02	1.76	5.33	7.33	-
5140-5170	38.6	12.4	20.5	3.8	0.3	0.5	1.3	4.1	2.0	1.3	3.5	-	0.2	0.1	-	0.4	-	0.2	0.3	0.5	1.4	0.6	1.4	3.0	0.1	0.3	0.3	2.5	-	2609	0.11	1.42	2.05	5.36	6.54	-
5290-5320	23.2	9.2	19.4	4.6	0.2	1.1	1.1	4.7	2.6	1.6	7.3	-	1.0	0.1	-	0.9	-	0.2	0.6	0.5	2.3	1.0	2.5	8.3	0.2	0.5	1.0	6.3	-	3626	0.13	1.15	1.81	4.17	2.35	89.2
5440-5463	36.2	12.8	22.0	4.8	0.1	0.8	0.7	3.5	1.9	0.9	4.6	-	-	-	-	0.5	-	0.2	0.3	0.3	0.8	0.3	1.0	4.0	-	0.2	0.4	3.7	-	943	0.12	1.25	1.84	4.60	5.21	-
5590-5620	14.7	6.8	18.6	4.9	0.2	1.1	1.2	6.2	3.5	2.0	8.1	-	-	0.1	-	0.9	-	0.2	0.7	0.5	4.5	1.5	3.9	9.5	0.2	0.7	2.2	7.8	-	2931	0.11	1.04	1.81	3.79	1.62	-
5740-5770	11.3	5.5	16.6	4.8	0.2	0.9	1.1	6.5	3.7	2.3	8.4	-	-	0.1	-	0.7	-	0.1	0.9	0.5	5.9	1.8	4.8	10.8	0.2	1.1	2.9	8.7	-	2993	0.09	0.96	1.74	3.48	1.31	-

A = normal paraffins B = isoparaffins C = aromatics D = naphthenes

Table XI (cont.) NORMALISED PERCENTAGE DISTRIBUTION OF INDIVIDUAL HYDROCARBONS IN C_{4-7} MOLECULAR RANGE

DEPTH (ft)	ISOBUTANE	N-BUTANE	ISOPENTANE	N-PENTANE	2,2-DIMETHYLBUTANE	CYCLOPENTANE	2,3-DIMETHYLBUTANE	2-METHYLPENTANE	3-METHYLPENTANE	N-HEXANE	METHYLCYCLOPENTANE	2,2-DIMETHYLPENTANE	BENZENE	2,4-DIMETHYLPENTANE	2,2,3-TRIMETHYLBUTANE	CYCLOHEXANE	3,3-DIMETHYLPENTANE	1,1-DIMETHYLCYCLOPENTANE	2-METHYLHEXANE	2,3-DIMETHYLPENTANE	1,c,3-DIMETHYLCYCLOPENTANE	3-METHYLHEXANE	1,t,3-DIMETHYLCYCLOPENTANE	1,t,2-DIMETHYLCYCLOPENTANE	3-ETHYLPENTANE	N-HEPTANE	1,c,2-DIMETHYLCYCLOPENTANE	METHYLCYCLOHEXANE	TOLUENE	C_{4-7} ABUNDANCE (vol ppm of rock)	CH/MCP	MCP/MCH	2-MP/3-MP	IC_5/NC_5	A + B + C/D	A + B + D/C
	B	A	B	A	B	D	B	B	B	A	D	B	C	B	B	D	B	D	B	B	D	B	D	D	B	A	D	D	C							
5890-5920	5.9	6.4	13.3	7.2	0.1	0.8	0.7	6.4	4.3	6.0	8.8	0.1	0.1	0.2	-	2.1	-	0.5	1.6	0.8	4.8	2.8	3.6	6.9	0.3	3.7	2.9	8.7	0.9	11780	0.24	1.01	1.48	1.84	1.56	95.0
6040-6070	8.9	14.7	16.9	8.5	0.1	1.5	0.5	3.9	3.6	2.2	9.8	-	0.1	0.1	-	0.8	-	0.1	0.5	0.2	4.5	1.3	3.4	5.5	0.2	0.8	2.6	7.1	2.2	9735	0.08	1.38	1.10	2.00	1.83	36.6
6190-6220	4.6	9.9	15.8	11.4	0.1	1.1	0.8	6.8	5.6	5.9	8.6	-	-	0.2	-	1.4	-	0.3	1.2	0.8	3.8	2.5	3.0	5.7	0.3	2.4	1.8	5.4	0.4	14916	0.17	1.59	1.21	1.39	2.21	-
6340-6370	10.1	18.3	20.1	10.7	0.1	1.4	0.6	4.4	4.4	2.6	8.2	-	-	-	-	0.8	-	0.1	0.4	0.3	3.1	1.2	2.3	4.0	0.2	0.6	1.3	3.7	1.2	11175	0.09	2.25	1.00	1.88	3.03	66.0
6490-6520	12.5	14.4	21.3	8.3	-	1.1	0.6	4.3	5.1	1.9	9.7	-	0.1	0.1	-	0.6	-	-	0.4	0.3	3.5	1.4	2.8	5.3	0.3	0.5	1.5	3.6	0.3	13784	0.06	2.69	0.83	2.58	2.55	-
6640-6670	13.6	16.5	19.2	8.5	-	1.2	0.5	3.8	4.5	1.9	9.5	-	0.3	0.1	-	0.7	-	-	0.5	0.4	3.0	1.1	2.5	5.0	0.2	0.5	1.3	3.3	1.8	14800	0.07	2.87	0.84	2.52	2.77	39.9
6790-6820	9.3	12.3	19.8	7.9	-	1.5	0.6	0.7	5.5	2.9	11.6	-	0.2	0.2	-	0.7	-	0.1	0.9	1.3	3.9	3.0	3.5	7.1	0.2	1.1	1.0	2.7	1.7	15453	0.06	4.31	0.13	2.49	2.11	45.3
6940-6970	5.1	11.1	20.0	9.8	-	2.2	1.3	9.7	5.8	5.0	10.7	-	-	0.1	-	1.4	-	-	1.3	1.1	1.9	2.6	1.6	3.4	0.1	1.9	0.2	2.5	0.8	5904	0.13	4.26	1.68	2.03	3.17	-
7090-7120	4.9	10.9	18.7	9.2	-	1.7	1.6	8.3	6.4	5.9	8.2	-	0.1	0.1	-	1.6	-	-	1.6	1.2	1.8	3.3	1.5	3.2	0.3	3.3	0.5	3.3	2.3	8009	0.19	2.49	1.31	2.03	3.59	37.0
7240-7270	6.2	12.3	22.9	10.6	-	1.0	1.8	9.6	7.0	6.7	5.0	-	0.2	0.1	-	1.0	-	0.1	1.7	1.0	0.8	3.0	0.8	1.4	0.2	3.2	0.1	1.7	1.4	12308	0.19	2.95	1.37	2.16	7.34	54.9
7390-7420	4.5	7.7	19.5	9.4	-	1.0	1.9	11.7	8.2	7.8	6.4	-	-	0.2	-	1.2	-	0.1	2.4	1.4	1.3	4.1	1.2	2.2	0.2	4.3	0.2	2.5	0.6	9146	0.18	2.59	1.42	2.08	5.23	-
7540-7570	4.5	7.4	24.6	8.7	-	1.2	2.2	12.2	8.3	4.5	7.5	-	-	0.3	-	1.1	-	0.1	1.5	1.9	1.6	3.3	1.5	2.8	0.3	1.7	0.3	2.1	0.3	7666	0.14	3.58	1.47	2.84	4.49	-
7690-7720	2.3	5.8	13.4	7.6	-	1.4	0.8	7.5	6.3	3.5	12.1	-	0.8	0.2	-	1.1	-	0.2	1.2	1.6	5.4	3.5	5.1	11.4	0.6	1.7	1.3	4.1	1.0	13969	0.09	2.99	1.18	1.77	1.37	49.8

A = normal paraffins B = isoparaffins C = aromatics D = naphthenes

RATIOS

Table XI (cont.) NORMALISED PERCENTAGE DISTRIBUTION OF INDIVIDUAL HYDROCARBONS IN C_{4-7} MOLECULAR RANGE

DEPTH (ft)	ISOBUTANE	N-BUTANE	ISOPENTANE	N-PENTANE	2,2-DIMETHYLBUTANE	CYCLOPENTANE	2,3-DIMETHYLBUTANE	2-METHYLPENTANE	3-METHYLPENTANE	N-HEXANE	METHYLCYCLOPENTANE	2,2-DIMETHYLPENTANE	BENZENE	2,4-DIMETHYLPENTANE	2,2,3-TRIMETHYLBUTANE	CYCLOHEXANE	3,3-DIMETHYLPENTANE	1,1-DIMETHYLCYCLOPENTANE	2-METHYLHEXANE	2,3-DIMETHYLPENTANE	1,c,3-DIMETHYLCYCLOPENTANE	3-METHYLHEXANE	1,t,3-DIMETHYLCYCLOPENTANE	1,t,2-DIMETHYLCYCLOPENTANE	3-ETHYLPENTANE	N-HEPTANE	1,c,2-DIMETHYLCYCLOPENTANE	METHYLCYCLOHEXANE	TOLUENE	C4-7 ABUNDANCE (vol ppm of rock)	RATIOS CH/MCP	MCP/MCH	2-MP/3-MP	ICs/NCs	A + B + C/D	A + B + D
	B	A	B	A	B	D	B	B	B	A	D	B	C	B	B	D	B	D	B	B	D	B	D	D	B	A	D	D	C							
7840-7870	2.7	8.7	12.2	7.8	-	1.8	0.4	4.8	5.4	2.9	14.8	-	-	0.1	-	1.4	-	0.3	0.7	0.8	5.9	2.4	5.4	13.0	0.6	1.4	1.6	4.5	0.4	17189	0.10	3.33	0.90	1.56	1.05	-
7990-8020	2.4	8.8	11.9	8.4	-	2.1	0.4	4.5	4.9	3.1	14.7	-	-	0.1	-	1.6	-	0.3	0.8	0.6	6.0	2.4	5.8	13.4	0.6	1.5	1.5	4.2	-	18393	0.11	3.50	0.92	1.42	1.02	-
8140-8170	3.4	10.5	13.5	9.1	-	1.8	0.5	4.8	5.2	2.9	13.5	-	-	0.1	-	1.3	-	0.3	0.7	0.5	5.8	2.3	5.5	11.7	0.6	1.2	1.4	3.3	-	15337	0.10	4.07	0.92	1.49	1.24	-
8290-8320	5.9	19.6	17.1	12.9	-	2.2	0.4	4.2	4.6	2.6	11.0	-	-	0.1	-	1.0	-	0.2	0.4	0.3	3.5	1.2	3.1	6.6	0.3	0.6	0.6	1.5	-	14499	0.09	7.54	0.90	1.32	2.37	-
8440-8470	6.3	21.3	17.0	14.2	-	2.1	0.3	4.4	4.4	3.1	10.0	-	-	0.1	-	1.0	-	0.2	0.2	0.1	3.0	1.1	2.7	5.7	0.3	0.6	0.5	1.4	-	10155	0.10	7.20	1.00	1.20	2.75	-
8590-8620	4.6	16.6	13.2	13.4	-	2.1	0.4	4.9	4.5	4.1	11.1	-	-	0.1	-	1.5	-	0.3	0.7	0.4	3.8	1.6	3.5	8.0	0.4	1.3	0.8	2.7	-	21600	0.13	4.06	1.10	0.99	1.96	-
8740-8770	4.1	14.4	13.6	13.2	-	2.0	0.4	5.7	5.1	4.6	11.3	-	-	0.1	-	1.5	-	0.3	0.8	0.7	3.7	1.7	3.4	7.6	0.4	1.5	0.8	2.9	-	13341	0.13	3.87	1.13	1.03	1.98	-
8890-8920	5.2	18.8	13.1	14.0	-	2.1	0.4	5.0	4.3	4.4	10.3	-	-	0.1	-	1.4	-	0.3	0.6	0.6	3.0	1.5	2.8	7.1	0.5	1.4	0.6	2.5	-	17361	0.14	4.06	1.18	0.94	2.31	
9040-9070	4.8	17.0	12.4	13.0	-	2.1	0.4	4.9	4.3	4.5	10.6	-	-	0.1	-	1.5	-	0.3	0.7	0.6	3.6	1.7	3.4	7.9	0.4	1.8	0.9	3.1	-	33201	0.14	3.46	1.14	0.96	1.99	
9190-9220	4.0	14.1	12.0	11.8	-	1.9	0.4	4.9	4.5	4.3	11.1	-	-	0.1	-	1.6	-	0.5	0.7	0.5	4.8	1.8	4.5	10.1	0.4	1.7	1.1	3.2	0.1	25851	0.14	3.45	1.08	1.02	1.58	-
9340-9370	1.6	6.3	8.7	8.2	-	1.5	0.4	5.0	4.8	4.3	13.4	-	-	0.1	-	2.1	-	0.9	1.0	0.6	6.9	2.5	6.6	14.3	0.6	2.3	1.7	5.7	0.4	29616	0.16	2.36	1.03	1.06	0.88	-
9490-9520	0.6	2.5	5.1	5.5	-	0.9	0.3	4.5	4.5	4.6	12.5	0.1	-	0.2	-	2.1	-	1.1	1.4	0.8	8.5	3.4	8.2	18.3	0.8	3.7	2.1	8.0	0.4	11955	0.17	1.56	1.00	0.92	0.62	-
9640-9670	1.8	6.5	10.8	7.7	-	1.7	0.5	5.3	5.5	3.6	15.3	-	-	0.1	-	2.0	-	0.6	1.0	0.8	7.2	1.3	5.0	13.0	0.7	2.2	1.8	5.4	0.2	40564	0.13	2.83	0.95	1.39	0.92	-

A = normal paraffins B = isoparaffins C = aromatics D = naphthenes

Table XI (cont.) NORMALISED PERCENTAGE DISTRIBUTION OF INDIVIDUAL HYDROCARBONS IN C_{4-7} MOLECULAR RANGE

DEPTH (ft)	ISOBUTANE	N-BUTANE	ISOPENTANE	N-PENTANE	2,2-DIMETHYLBUTANE	CYCLOPENTANE	2,3-DIMETHYLBUTANE	2-METHYLPENTANE	3-METHYLPENTANE	N-HEXANE	METHYLCYCLOPENTANE	2,2-DIMETHYLPENTANE	BENZENE	2,4-DIMETHYLPENTANE	2,2,3-TRIMETHYLBUTANE	CYCLOHEXANE	3,3-DIMETHYLPENTANE	1,1-DIMETHYLCYCLOPENTANE	2-METHYLHEXANE	2,3-DIMETHYLPENTANE	1,c,3-DIMETHYLCYCLOPENTANE	3-METHYLHEXANE	1,t,3-DIMETHYLCYCLOPENTANE	1,t,2-DIMETHYLCYCLOPENTANE	3-ETHYLPENTANE	N-HEPTANE	1,c,2-DIMETHYLCYCLOPENTANE	METHYLCYCLOHEXANE	TOLUENE	C_{4-7} ABUNDANCE (vol. ppm of rock)	CH/MCP	MCP/MCH	2-MP/3-MP	IC_5/NC_5	A + B + C/D	A + B + D/C
	B	A	B	A	B	D	B	B	B	A	D	B	C	B	B	D	B	D	B	B	[illegible]	[illegible]	D	D	B	A	D	D	C							
9790-9820	3.4	11.3	10.5	8.3	-	1.9	0.5	4.7	4.9	3.2	13.3	-	0.3	0.1	-	1.8	-	0.5	1.0	0.9	[illegible]	[illegible]	6.8	9.4	0.6	1.7	1.7	4.9	0.3	23839	0.14	2.74	0.97	1.27	1.19	-
9940-9970	7.8	15.6	10.6	7.1	-	1.4	0.7	4.8	4.3	2.6	9.3	-	0.6	-	-	2.2	-	0.4	1.0	0.8	4.4	[illegible]	4.0	9.2	0.5	1.4	1.5	5.8	1.9	9876	0.24	1.61	1.12	1.49	1.62	33.1
10090-10120	13.9	28.1	10.2	10.1	-	1.7	0.4	3.0	1.7	2.4	5.2	-	0.5	-	-	5.5	-	0.2	0.3	-	[illegible]	[illegible]	1.0	2.0	0.1	0.9	0.2	8.8	1.9	11012	1.06	0.59	1.72	1.01	2.89	30.4
10240-10270	12.4	24.4	10.4	10.8	-	1.8	0.4	3.1	1.9	2.7	6.2	-	0.3	-	-	6.2	-	0.2	0.3	-	[illegible]	[illegible]	1.5	2.9	-	1.0	0.2	8.8	2.1	5721	0.99	0.71	1.62	0.97	2.40	31.6
10390-10420	11.4	25.0	11.5	10.8	0.1	1.5	0.5	3.6	2.4	2.7	6.1	-	0.2	-	-	6.5	-	0.3	0.3	-	[illegible]	[illegible]	1.5	3.0	0.1	0.9	0.3	7.9	0.8	6795	1.06	0.77	1.54	1.07	2.45	76.0
10540-10571	11.0	26.2	8.2	8.2	0.1	1.6	0.3	2.1	1.4	1.7	5.0	-	3.1	-	-	7.4	-	0.2	0.2	0.3	[illegible]	[illegible]	-	1.9	-	0.5	0.2	8.6	10.7	4172	1.49	0.58	1.51	1.00	2.96	5.14

A = normal paraffins B = isoparaffins C = aromatics D = naphthenes

RATIOS

Table XII NORMALISED PERCENTAGE DISTRIBUTION OF INDIVIDUAL HYDROCARBONS IN C_{4-7} MOLECULAR RANGE

SIDEWALL CORES

DEPTH (ft)	ISOBUTANE	N-BUTANE	ISOPENTANE	N-PENTANE	2,2-DIMETHYLBUTANE	CYCLOPENTANE	2,3-DIMETHYLBUTANE	2-METHYLPENTANE	3-METHYLPENTANE	N-HEXANE	METHYLCYCLOPENTANE	2,2-DIMETHYLPENTANE	BENZENE	2,4-DIMETHYLPENTANE	2,2,3-TRIMETHYLBUTANE	CYCLOHEXANE	3,3-DIMETHYLPENTANE	1,1-DIMETHYLCYCLOPENTANE	2-METHYLHEXANE	2,3-DIMETHYLPENTANE	1,c,3-DIMETHYLCYCLOPENTANE	3-METHYLHEXANE	1,t,3-DIMETHYLCYCLOPENTANE	1,t,2-DIMETHYLCYCLOPENTANE	3-ETHYLPENTANE	N-HEPTANE	1,c,2-DIMETHYLCYCLOPENTANE	METHYLCYCLOHEXANE	TOLUENE	C_{4-7} ABUNDANCE (Col. ppm of Rock)	CH/MCP	MCP/MCH	2-MP/3-MP	IC_5/NC_5	A + B + C/D	A + B + D/C
	B	A	B	A	B	D	B	B	B	A	D	B	C	B	B	D	B	D	B	B	D	B	D	D	B	A	D	D	C							
3030	8.9	42.2	29.4	19.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	72.7	-	-	-	1.51	-	-
4200	61.5	14.8	19.1	0.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	663	-	-	-	22.1	-	-
5100	0.4	0.7	1.1	6.0	0.8	0.3	0.9	6.7	6.1	10.1	1.1	0.1	4.4	-	-	-	-	-	1.4	-	-	1.1	-	-	-	-	-	-	58.9	2940	-	-	1.0	0.92	67.0	1.50
5400	1.5	2.9	6.2	2.5	1.0	-	1.5	12.5	10.2	15.4	2.7	-	2.2	-	-	1.8	-	-	0.7	-	-	2.2	-	1.8	-	-	-	-	35.0	1084	0.68	-	1.23	2.49	14.9	2.55
*5600	2.7	3.4	8.5	2.9	-	-	0.7	7.5	6.0	6.7	7.3	-	1.5	-	-	-	-	-	-	-	-	-	-	9.4	-	-	-	10.3	32.7	2050	-	0.71	1.24	2.90	2.68	2.78
*5900	0.1	0.6	2.3	1.3	-	0.2	0.4	4.5	3.6	2.5	8.4	-	0.4	-	-	0.7	-	0.7	0.7	0.5	8.7	4.4	7.3	14.9	0.6	2.8	8.1	26.3	-	17652	0.09	0.32	1.24	1.82	0.33	-
*6200	2.0	1.5	5.4	4.1	0.4	0.6	0.6	6.6	6.2	5.5	9.3	-	0.8	-	-	2.3	-	-	0.8	0.7	5.9	3.4	5.2	11.2	0.8	2.1	4.2	15.5	5.0	3957	0.25	0.60	1.05	1.30	0.85	17.0
*6500	2.1	3.5	10.7	4.2	0.1	1.0	0.5	4.2	5.6	1.4	14.3	-	0.4	0.1	-	0.9	-	-	0.5	0.4	7.4	1.8	6.2	12.1	0.3	0.4	4.3	11.8	5.8	12888	0.07	1.21	0.75	2.52	0.72	15.5
*6800	0.7	1.4	8.5	4.1	-	0.7	0.7	8.7	6.6	2.9	14.7	-	-	0.2	-	1.0	-	-	1.0	3.1	7.4	6.4	6.9	14.0	0.3	1.7	2.0	5.9	0.9	+	0.07	2.48	1.32	2.07	0.90	-
*7100	2.5	2.9	4.1	2.9	-	0.2	1.3	8.7	7.1	8.3	7.2	-	1.3	-	-	1.5	-	-	4.2	1.9	3.7	10.2	3.4	7.6	0.7	12.2	0.7	7.6	-	14149	0.20	0.95	1.23	1.42	2.15	75.6
*7400	2.4	2.6	5.1	4.1	-	0.3	0.8	6.1	5.4	5.7	7.6	-	-	-	-	1.2	-	-	2.6	1.8	7.1	7.2	7.2	14.2	1.5	5.9	1.8	9.3	-	4317	0.16	0.82	1.14	1.26	1.05	-
7700	0.5	2.1	2.9	3.6	-	0.8	0.1	4.5	5.0	3.7	11.8	-	-	-	-	1.1	-	-	1.6	1.6	10.3	5.8	9.2	20.9	1.2	2.6	2.3	8.2	-	3450	0.09	1.43	0.90	0.81	0.55	-
*8000	0.2	1.8	3.2	4.0	-	0.4	0.2	3.7	4.5	3.7	11.6	-	-	-	-	2.1	-	0.7	1.0	0.8	10.3	3.4	9.8	22.2	1.0	2.3	2.4	10.5	-	6423	0.18	1.11	0.83	0.80	0.43	-

*Less than 5cc of sample.
+Less than 1cc of sample.

A = normal paraffins B = isoparaffins C = aromatics D = naphthenes

Table XII (cont.) NORMALISED PERCENTAGE DISTRIBUTION OF INDIVIDUAL HYDROCARBONS IN C_{4-7} MOLECULAR RANGE

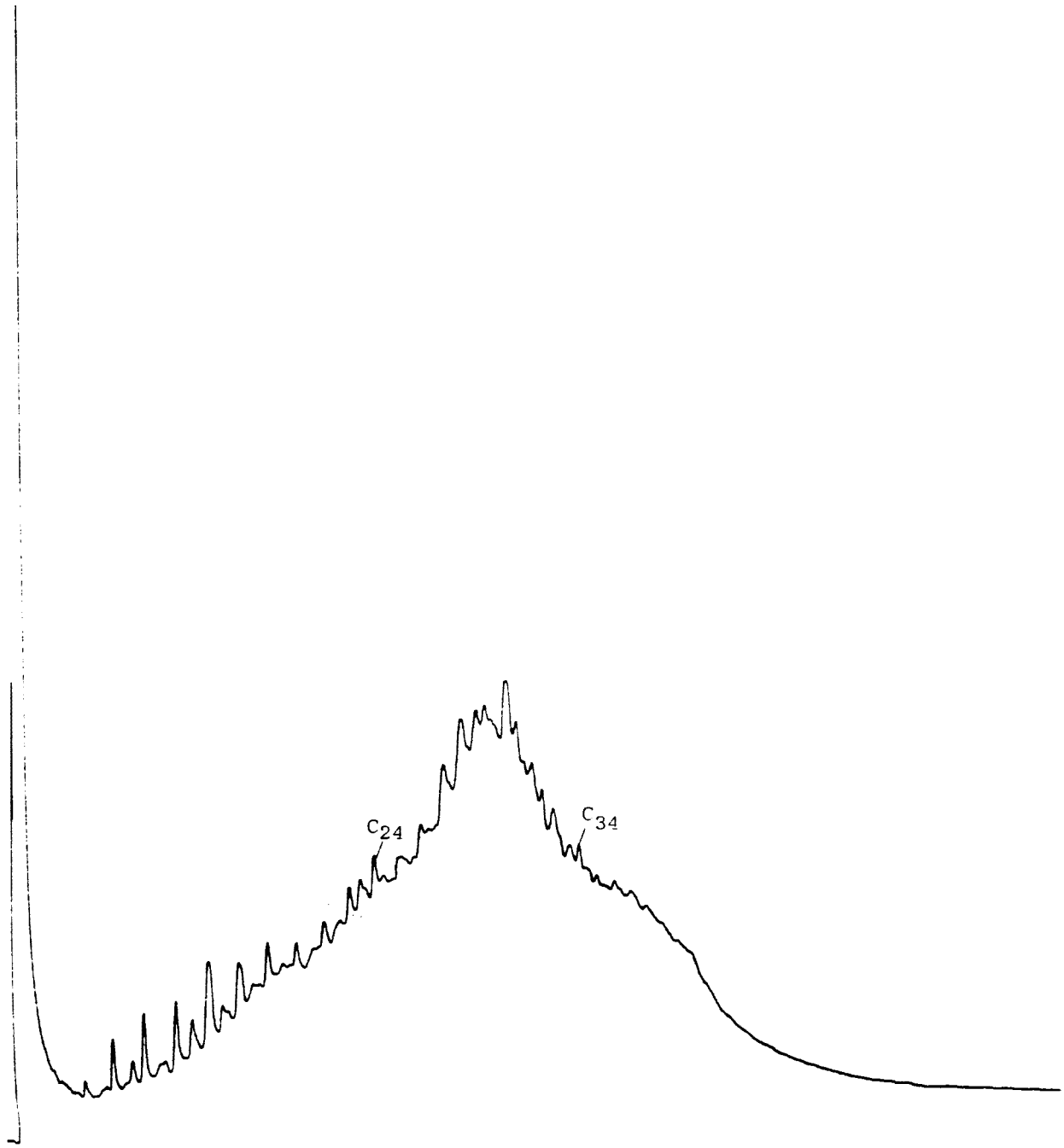
SIDEWALL CORES

DEPTH (ft)	ISOBUTANE	N-BUTANE	ISOPENTANE	N-PENTANE	2,2-DIMETHYLBUTANE	CYCLOPENTANE	2,3-DIMETHYLBUTANE	2-METHYLPENTANE	3-METHYLPENTANE	N-HEXANE	METHYLCYCLOPENTANE	2,2-DIMETHYLPENTANE	BENZENE	2,4-DIMETHYLPENTANE	2,2,3-TRIMETHYLBUTANE	CYCLOHEXANE	3,3-DIMETHYLPENTANE	1,1-DIMETHYLCYCLOPENTANE	2-METHYLHEXANE	2,3-DIMETHYLPENTANE	1,c,3-DIMETHYLCYCLOPENTANE	3-METHYLHEXANE	1,t,3-DIMETHYLCYCLOPENTANE	1,t,2-DIMETHYLCYCLOPENTANE	3-ETHYLPENTANE	N-HEPTANE	1,c,2-DIMETHYLCYCLOPENTANE	METHYLCYCLOHEXANE	TOLUENE	C_{4-7} ABUNDANCE (vol ppm of rock)	RATIOS CH/MCP	MCP/MCH	2-MP/3-MP	ICs/NCs	A + B + C/D	A + B + D/C
	B	A	B	A	B	D	B	B	B	A	D	B	C	B	B	D	B	D	B	B	D	B	D	D	B	A	D	D	C							
8400	1.0	2.1	2.1	2.4	-	0.3	0.2	3.0	3.4	2.7	9.5	-	-	0.2	-	0.9	-	0.4	0.8	0.6	11.7	5.0	11.3	25.2	1.3	3.4	3.3	9.1	-	10712	0.10	1.04	0.88	0.89	0.40	-
*8700	0.3	1.7	4.3	7.4	-	1.3	0.4	5.6	5.0	6.5	13.6	-	-	0.2	-	2.4	-	0.5	1.4	1.2	7.3	3.4	6.8	16.1	0.7	3.9	2.0	7.8	-	98947	0.18	1.74	1.11	0.58	0.73	-
9000	0.3	1.9	3.8	6.7	-	1.7	0.3	4.8	4.5	5.9	14.0	-	-	0.1	-	2.8	-	0.6	1.5	0.9	7.1	3.3	6.7	15.8	0.6	3.6	2.1	8.4	2.6	24727	0.20	1.67	1.06	0.57	0.69	36.9
*9300	0.3	1.4	2.6	4.6	-	1.2	0.3	4.0	3.9	5.0	13.6	-	0.1	0.1	-	2.7	-	0.9	0.7	0.6	9.2	3.1	8.7	18.7	0.6	3.5	2.7	10.0	1.5	36984	0.20	1.36	1.04	0.57	0.49	62.8
*9400	2.9	8.3	5.7	6.3	0.4	1.9	0.6	6.4	5.8	7.7	11.5	-	1.4	-	-	1.3	-	-	0.7	-	4.5	3.1	3.8	9.4	-	1.0	6.2	5.6	5.1	3698	0.12	2.06	1.09	0.91	1.25	13.7
*9610	1.4	5.3	5.0	5.8	-	0.6	0.2	4.2	4.7	3.7	9.6	-	-	-	-	2.4	-	-	2.4	-	8.3	4.6	7.5	16.0	1.0	3.6	2.4	11.3	-	9527	0.25	0.85	0.89	0.86	0.72	-
9900	18.4	32.3	9.7	10.4	0.2	1.3	0.3	3.0	1.7	2.3	4.1	-	0.7	-	-	3.9	-	-	0.4	-	1.0	0.2	0.3	1.6	-	0.7	-	6.0	1.6	7106	0.97	0.68	1.81	0.93	4.51	29.1
10207	10.0	17.2	10.0	9.7	0.1	2.8	0.3	2.3	1.5	2.2	6.5	-	2.4	-	-	11.7	-	-	-	0.1	0.6	0.2	0.6	1.0	-	0.4	-	9.6	10.6	10293	1.81	0.67	1.55	1.04	2.04	6.16

*Less than 5cc of sample.

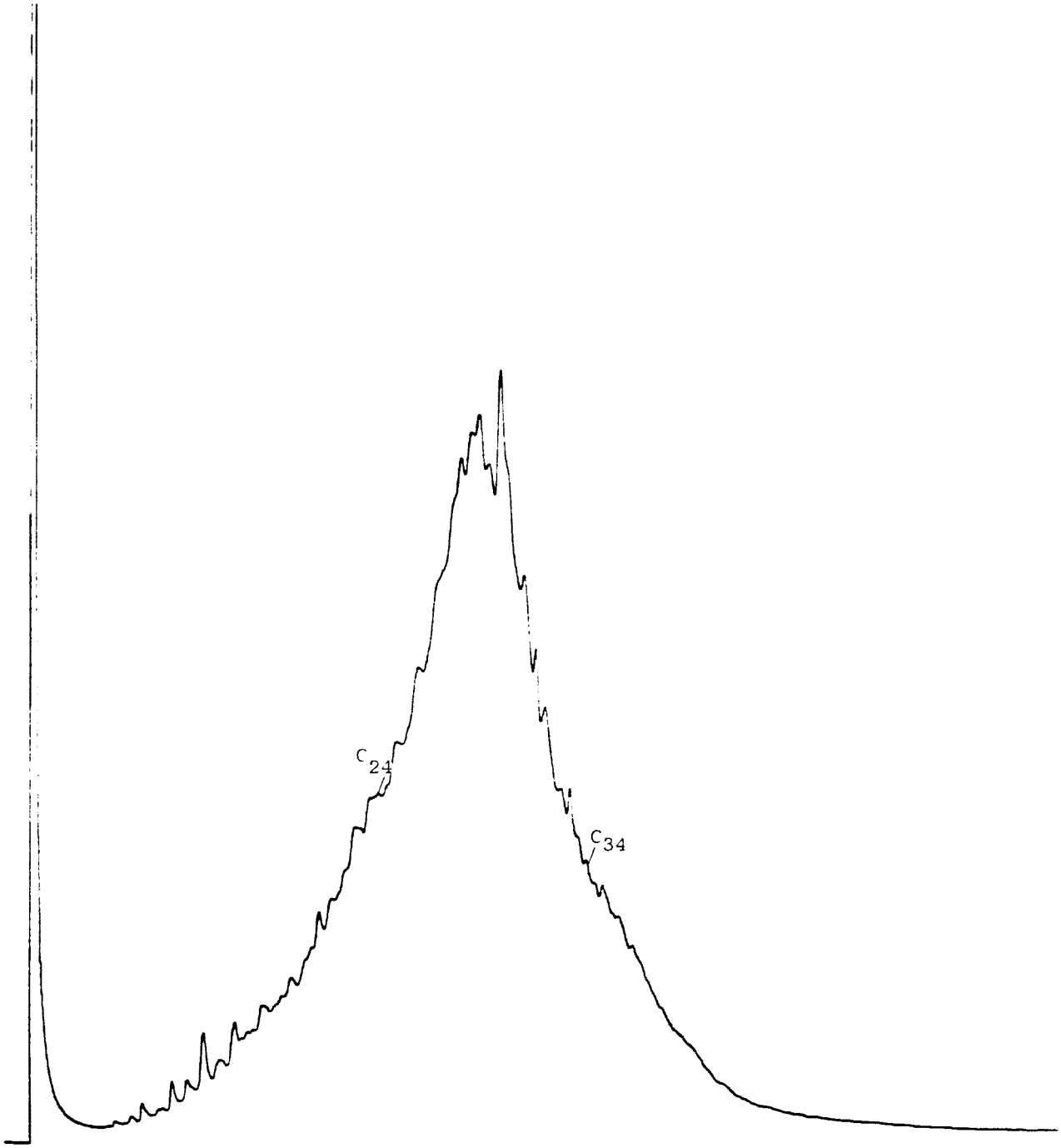
SATURATED HYDROCARBON FRACTION

2300-2330 feet



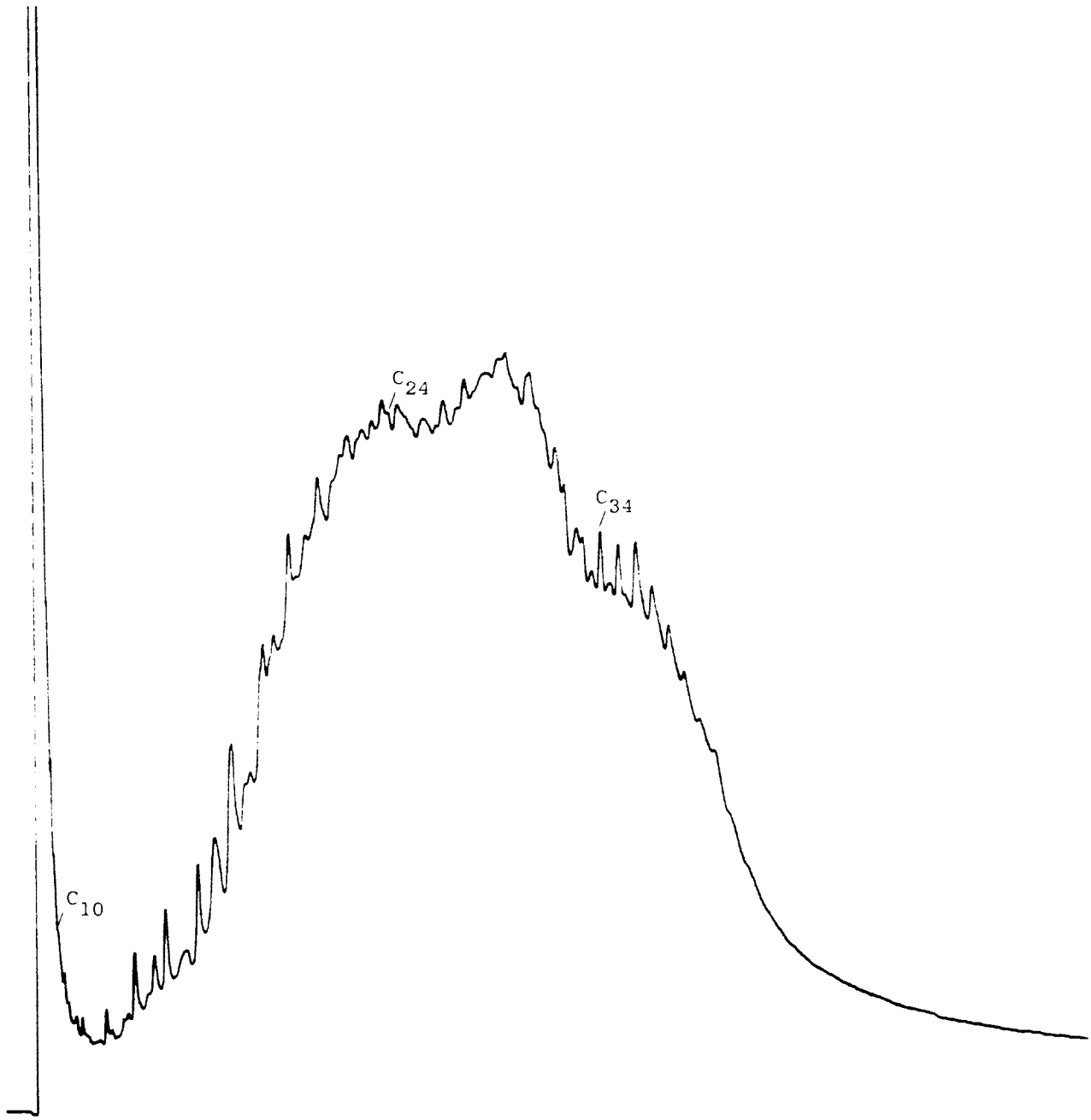
SATURATED HYDROCARBON FRACTION

2630-2660 feet



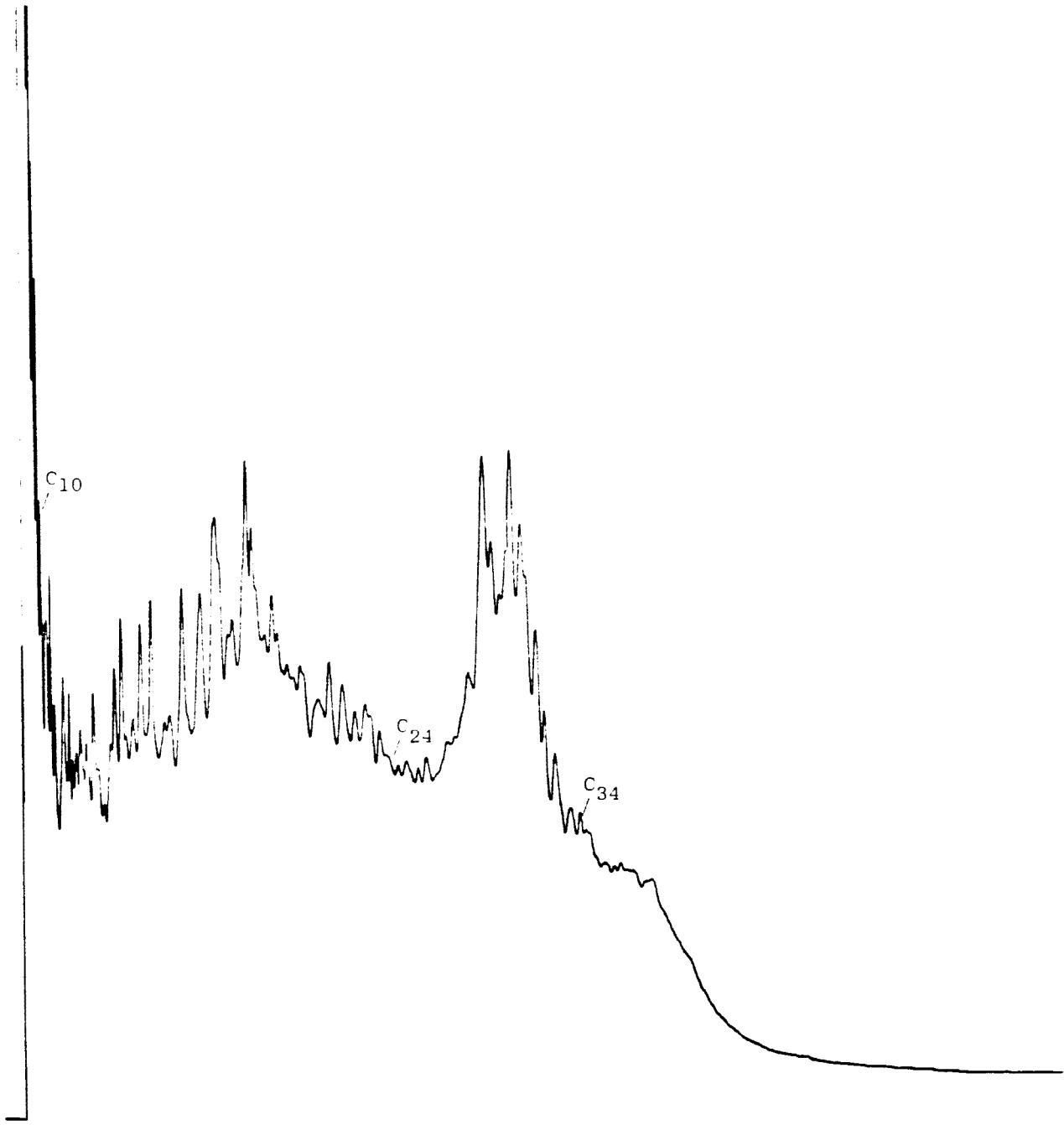
C_{10+} SATURATED HYDROCARBON FRACTION

3490-3520 feet



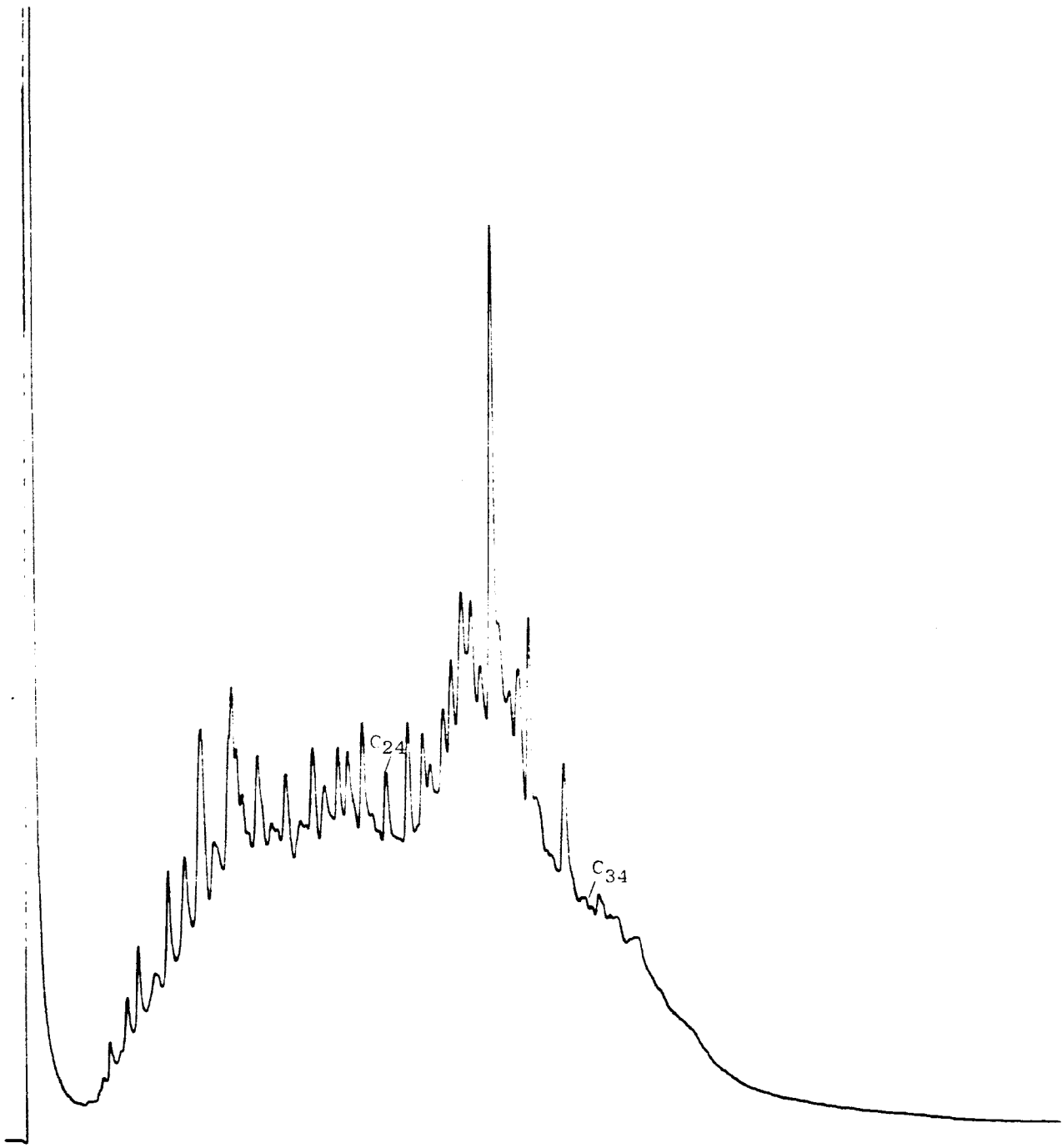
C_{10+} SATURATED HYDROCARBON FRACTION

4090-4120 feet



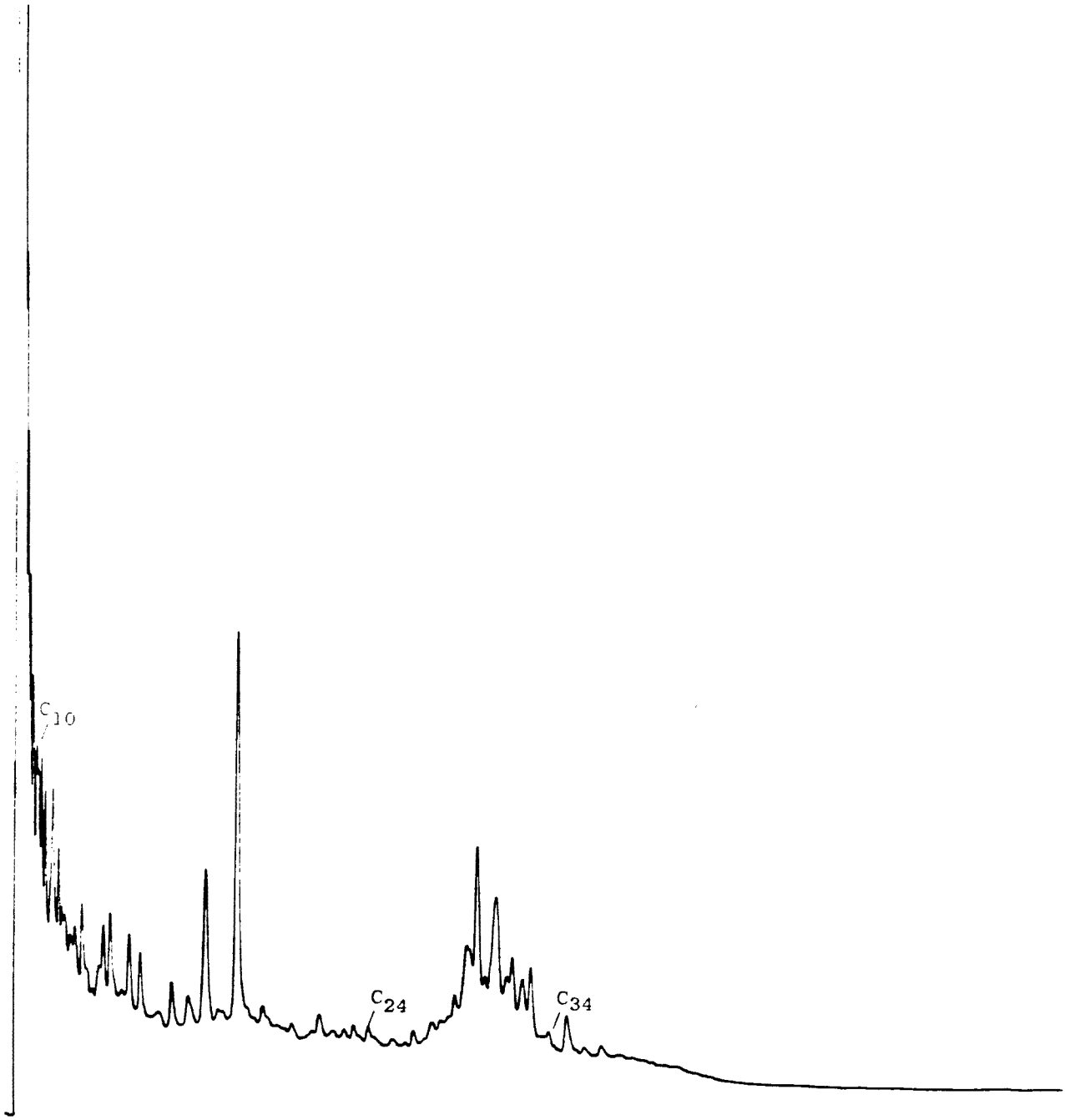
SATURATED HYDROCARBON FRACTION

3790-3820 feet



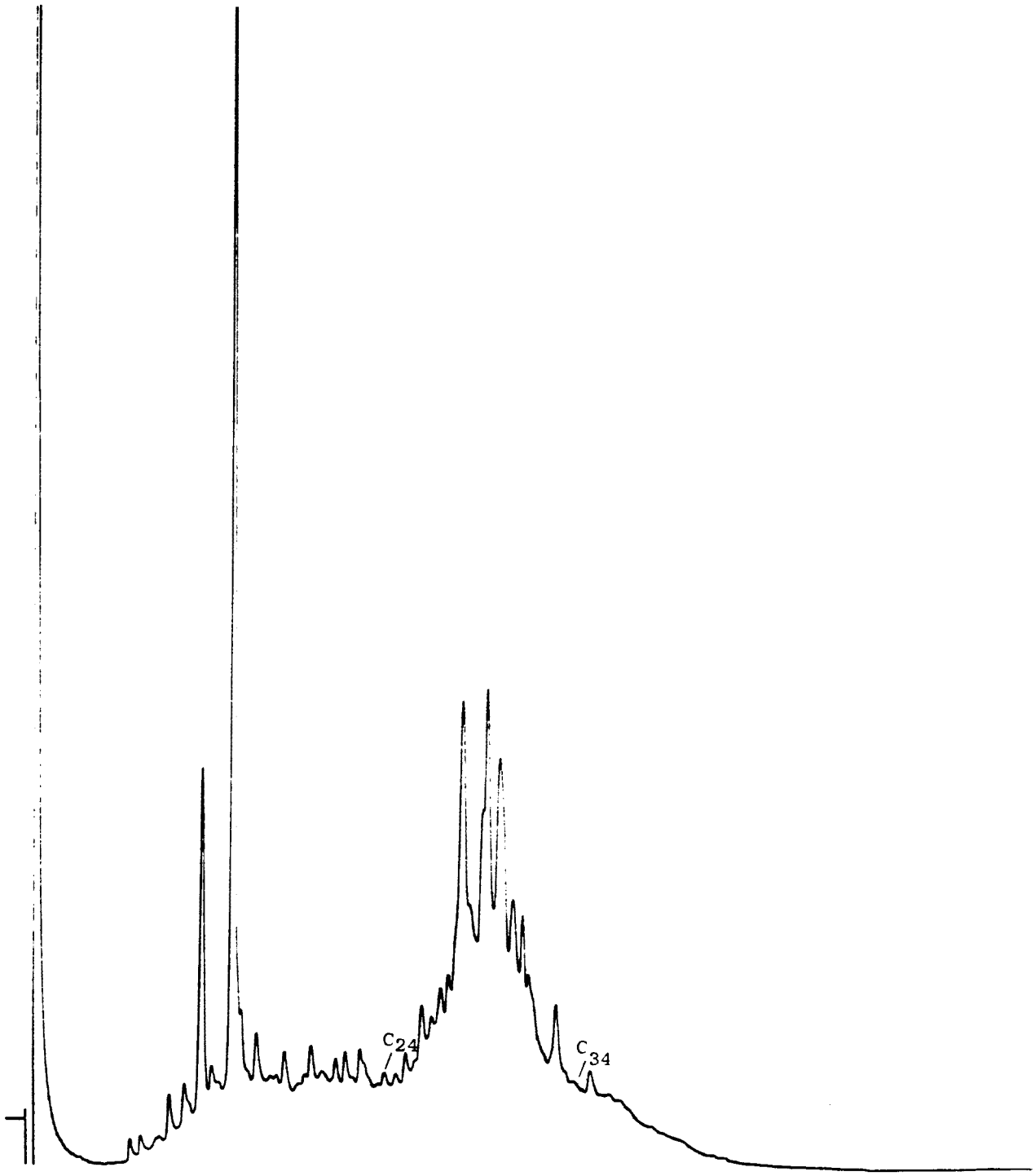
C_{10+} SATURATED HYDROCARBON FRACTION

4390-4420 feet



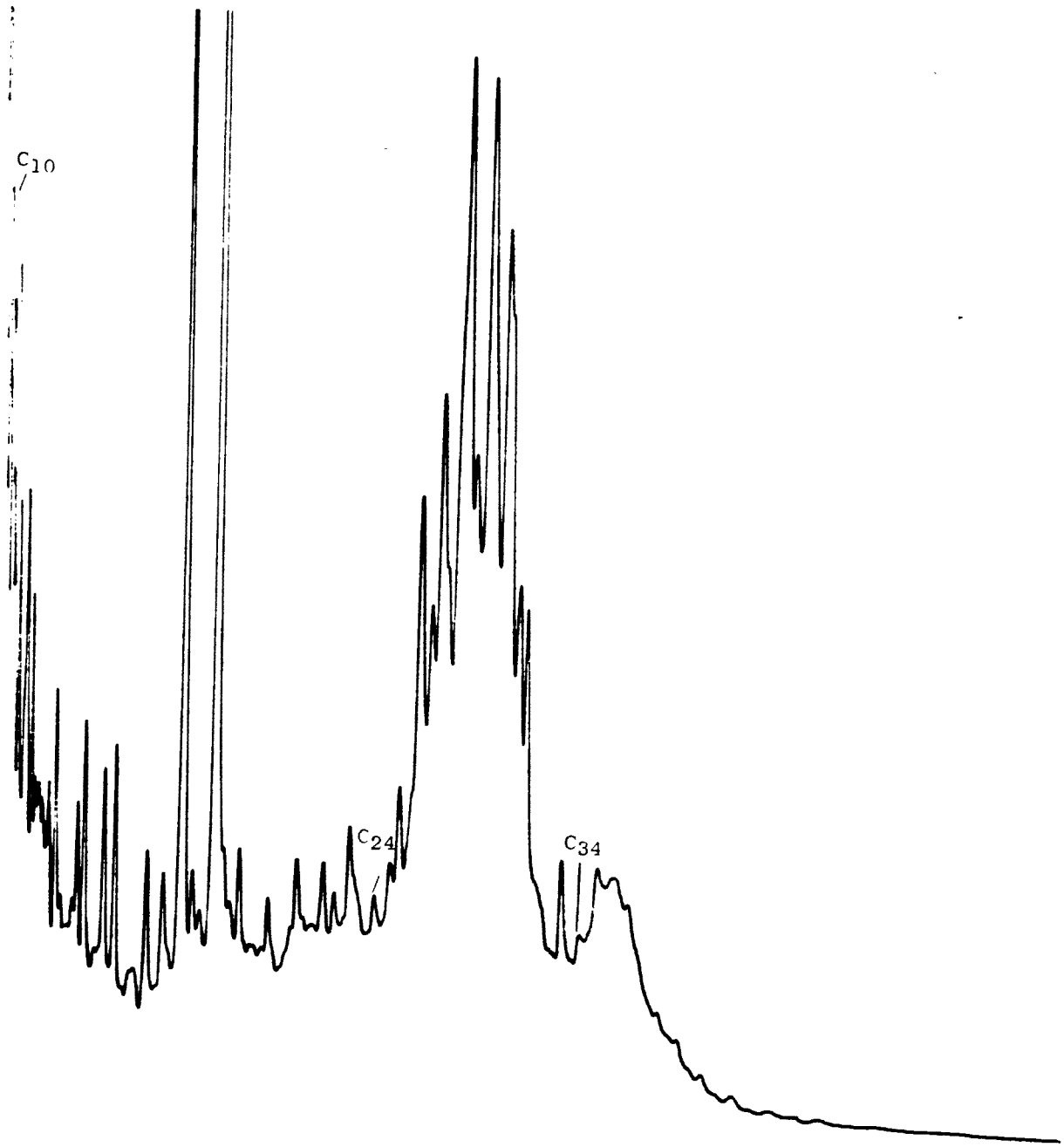
SATURATED HYDROCARBON FRACTION

4690-4720 feet



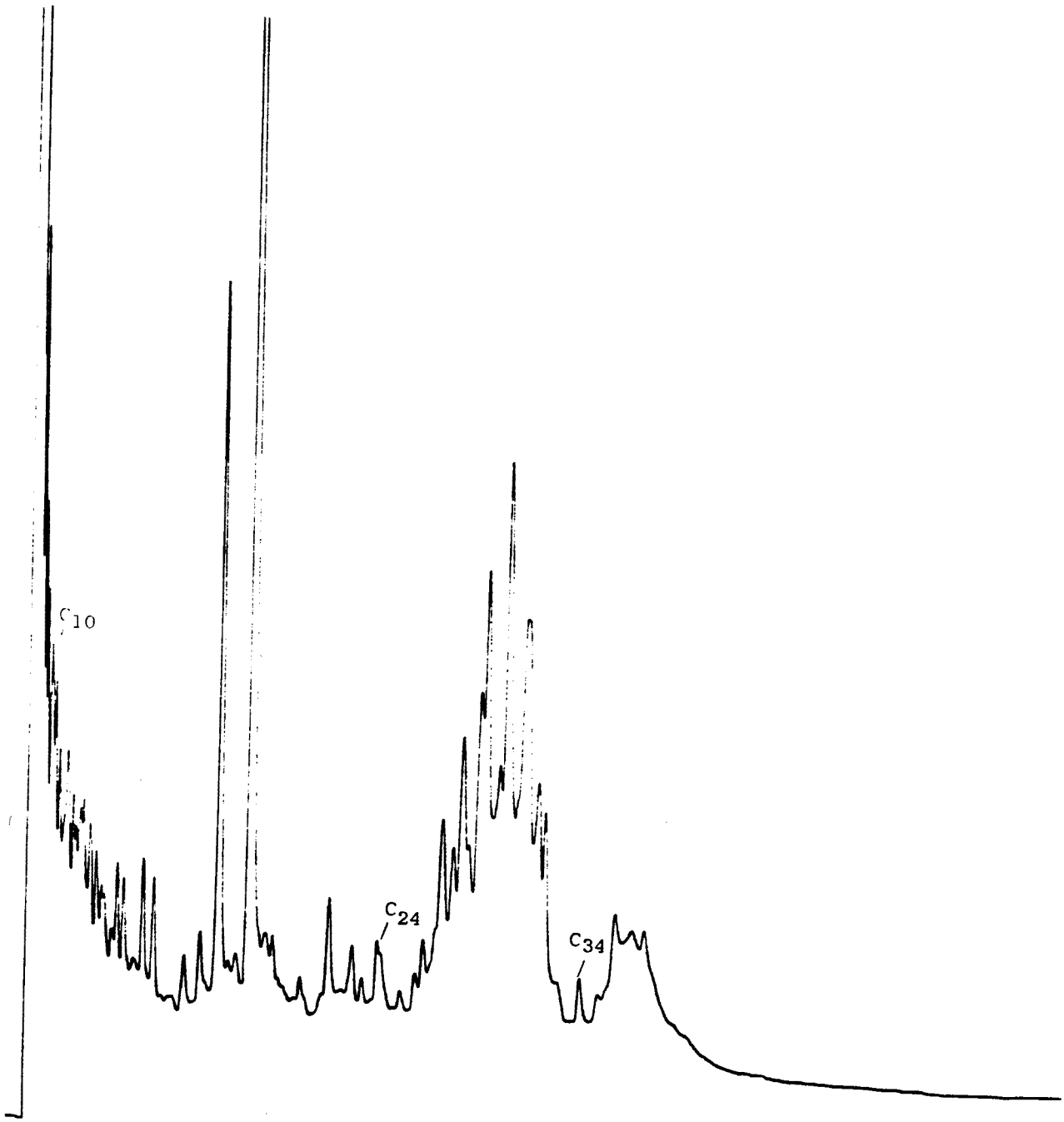
C_{10+} SATURATED HYDROCARBON FRACTION

4930-4960 feet



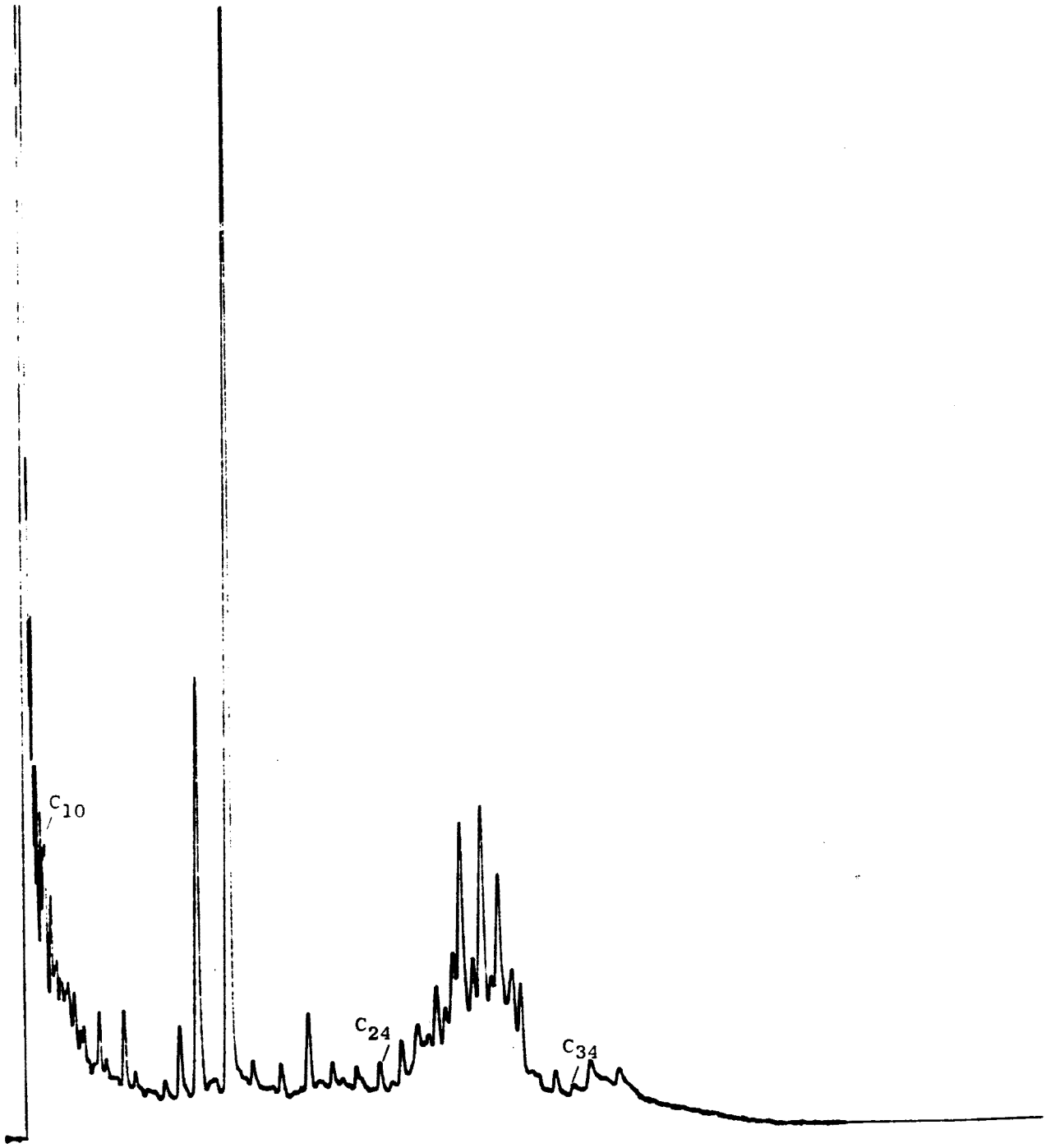
C_{10+} SATURATED HYDROCARBON FRACTION

5290-5320 feet



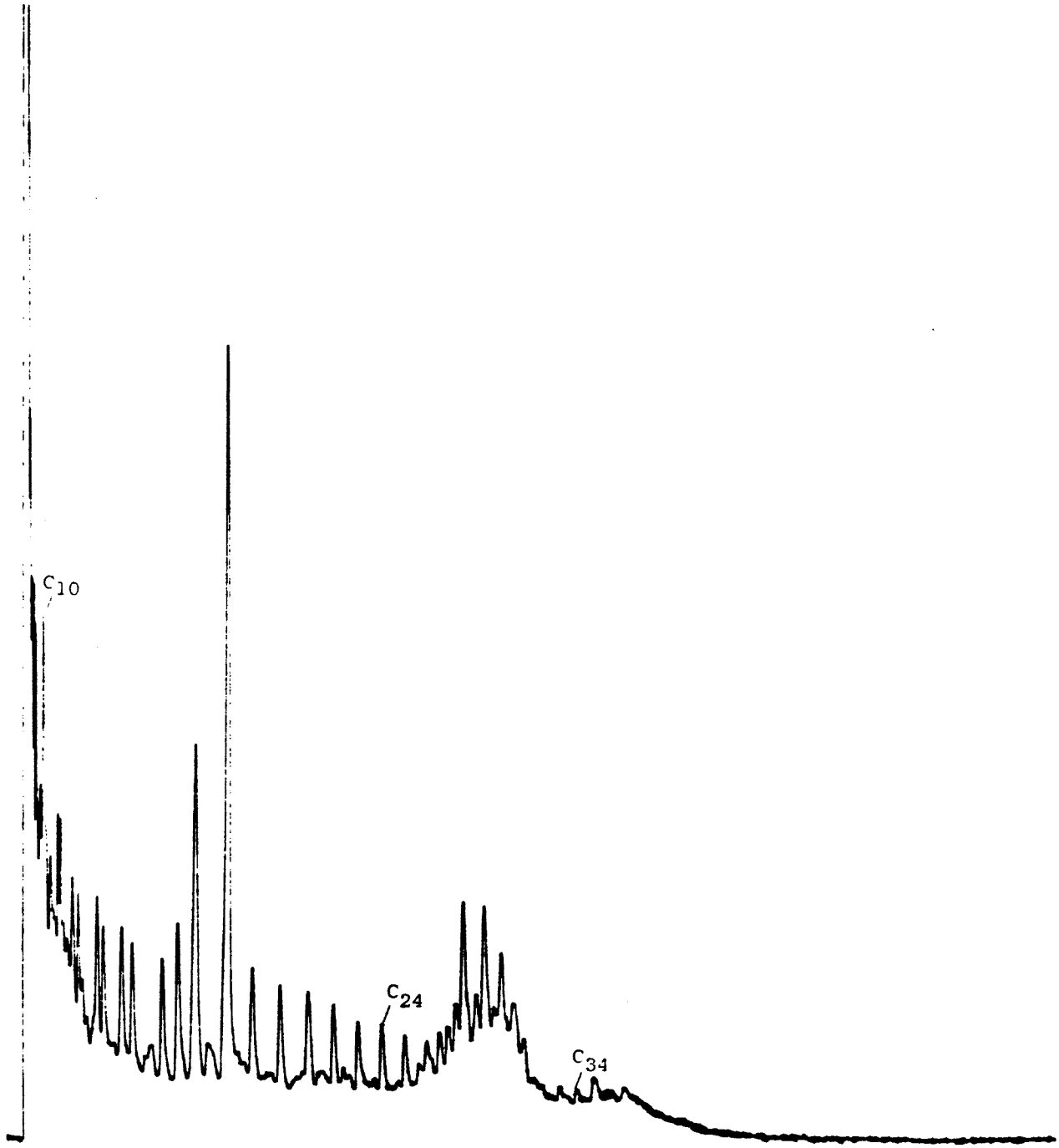
C_{10+} SATURATED HYDROCARBON FRACTION

5590-5620 feet



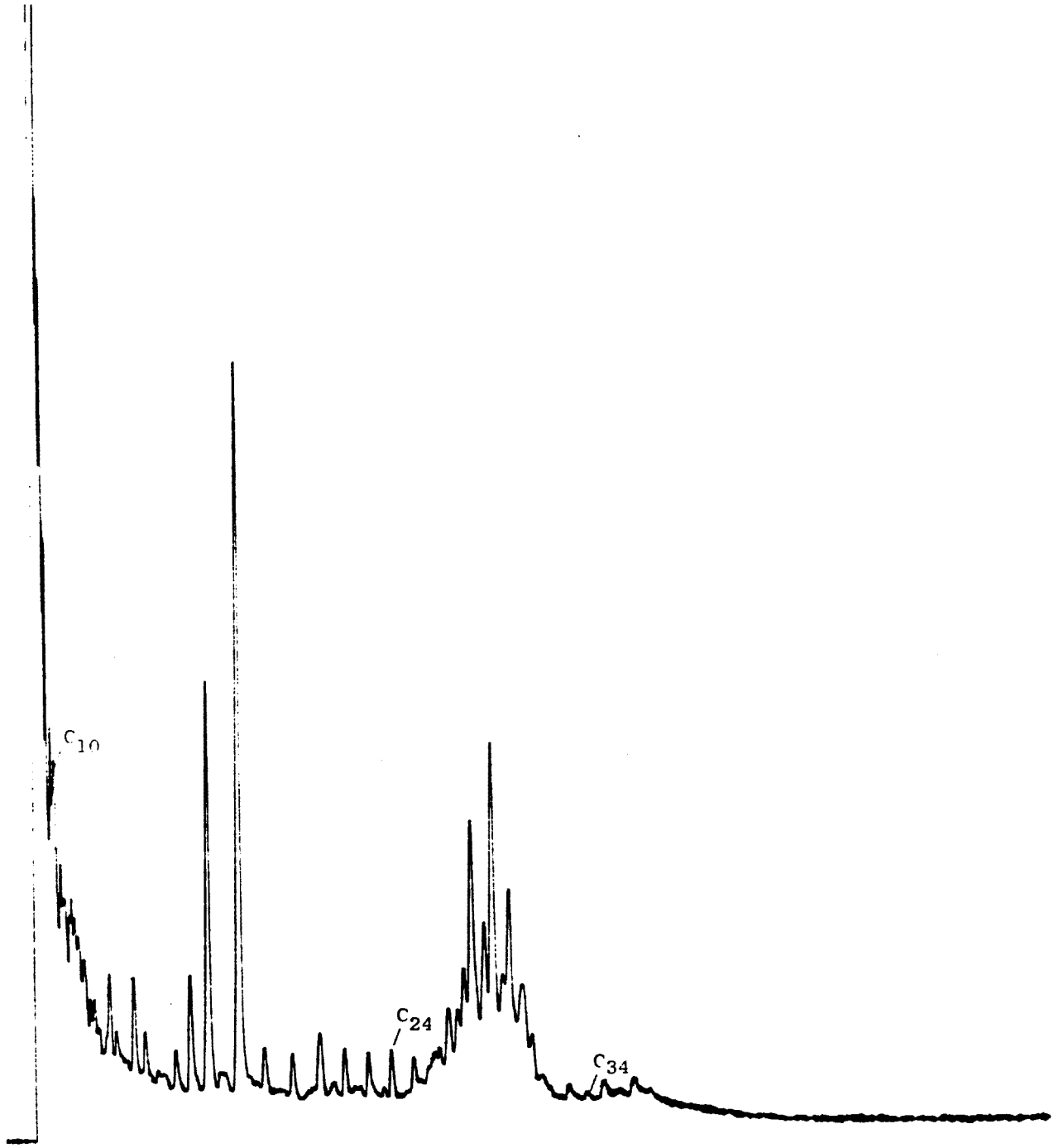
C_{10+} SATURATED HYDROCARBON FRACTION

6190-6220 feet



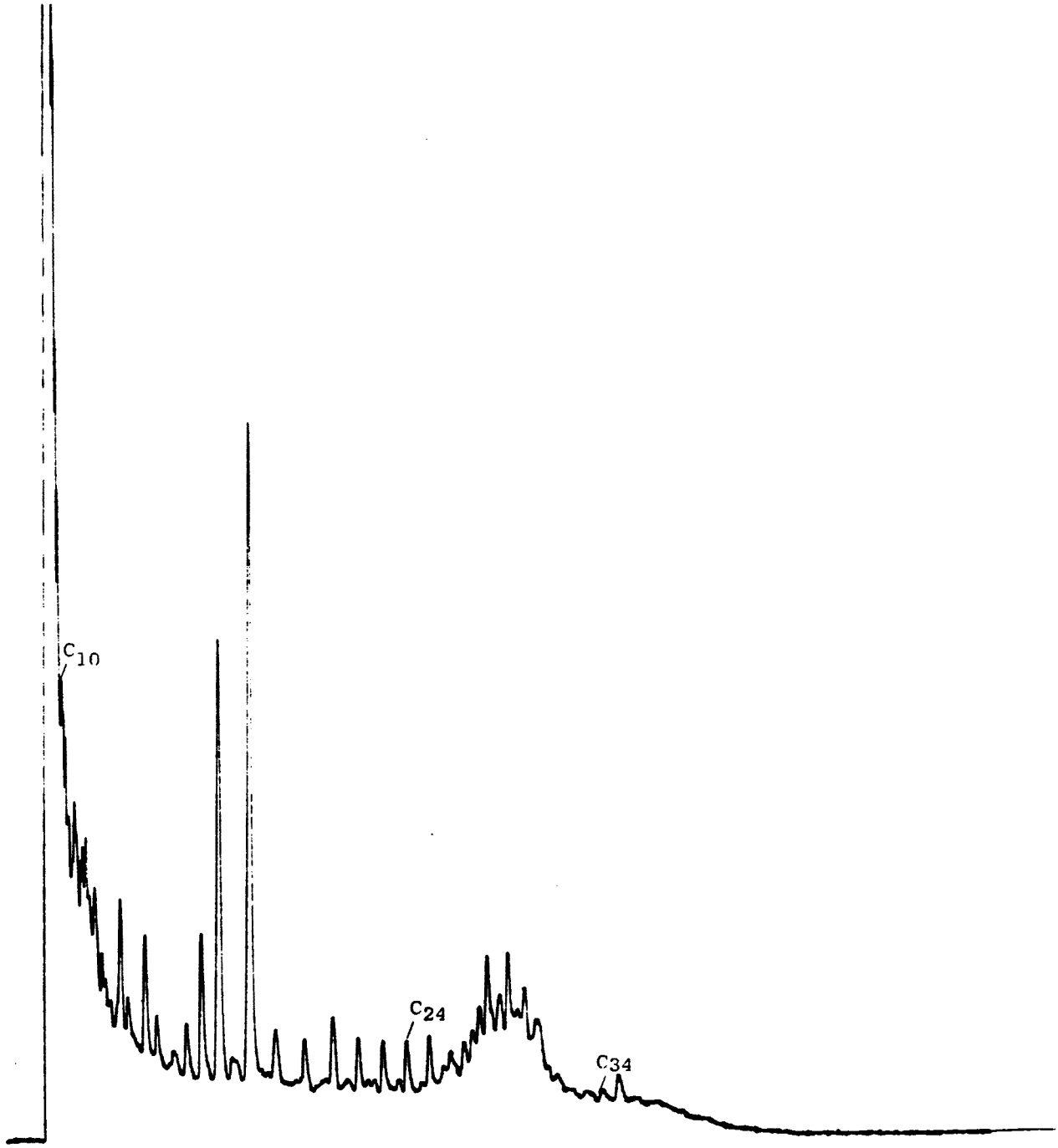
C_{10+} SATURATED HYDROCARBON FRACTION

6490-6520 feet



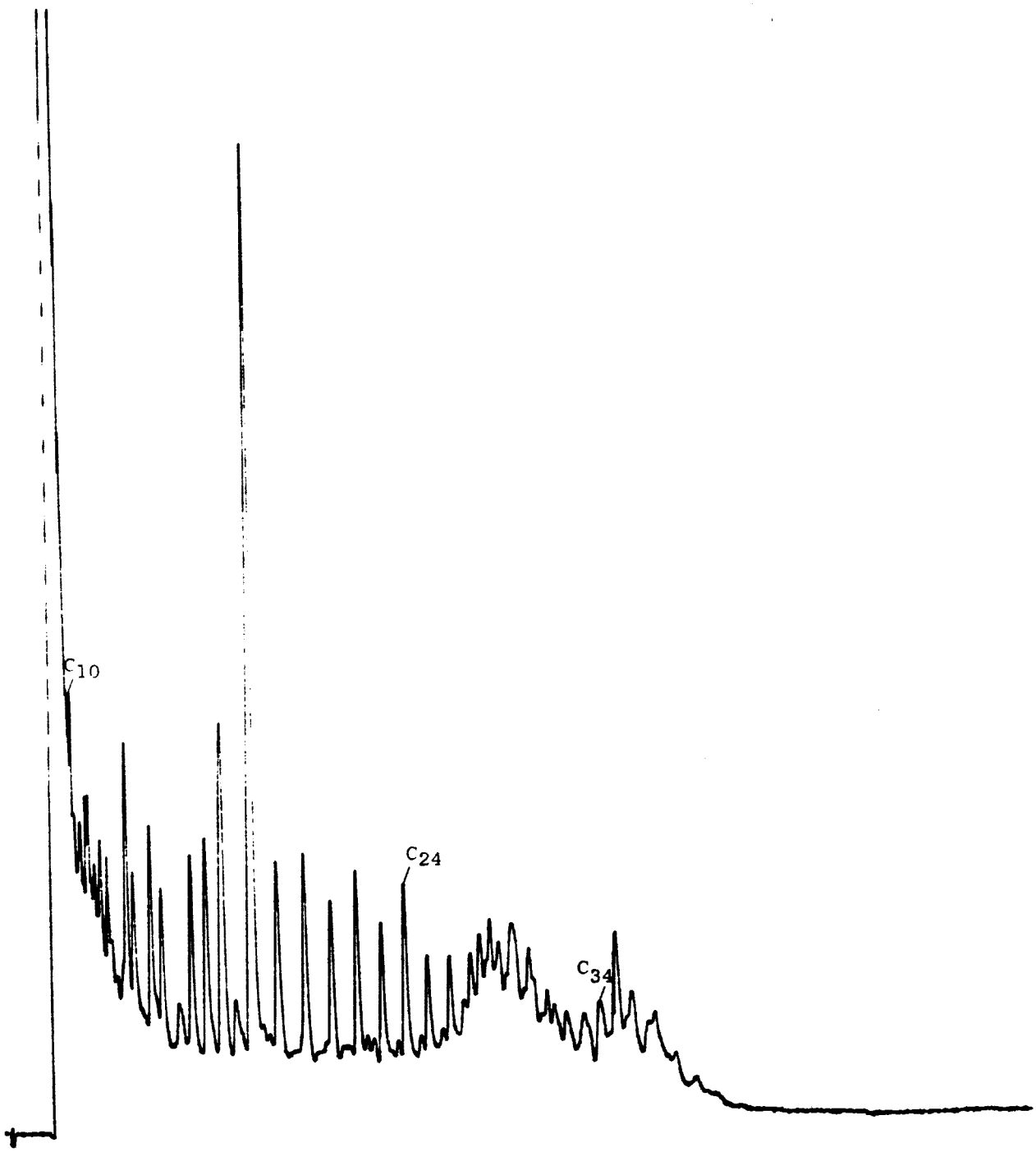
C_{10+} SATURATED HYDROCARBON FRACTION

6790-6820 feet



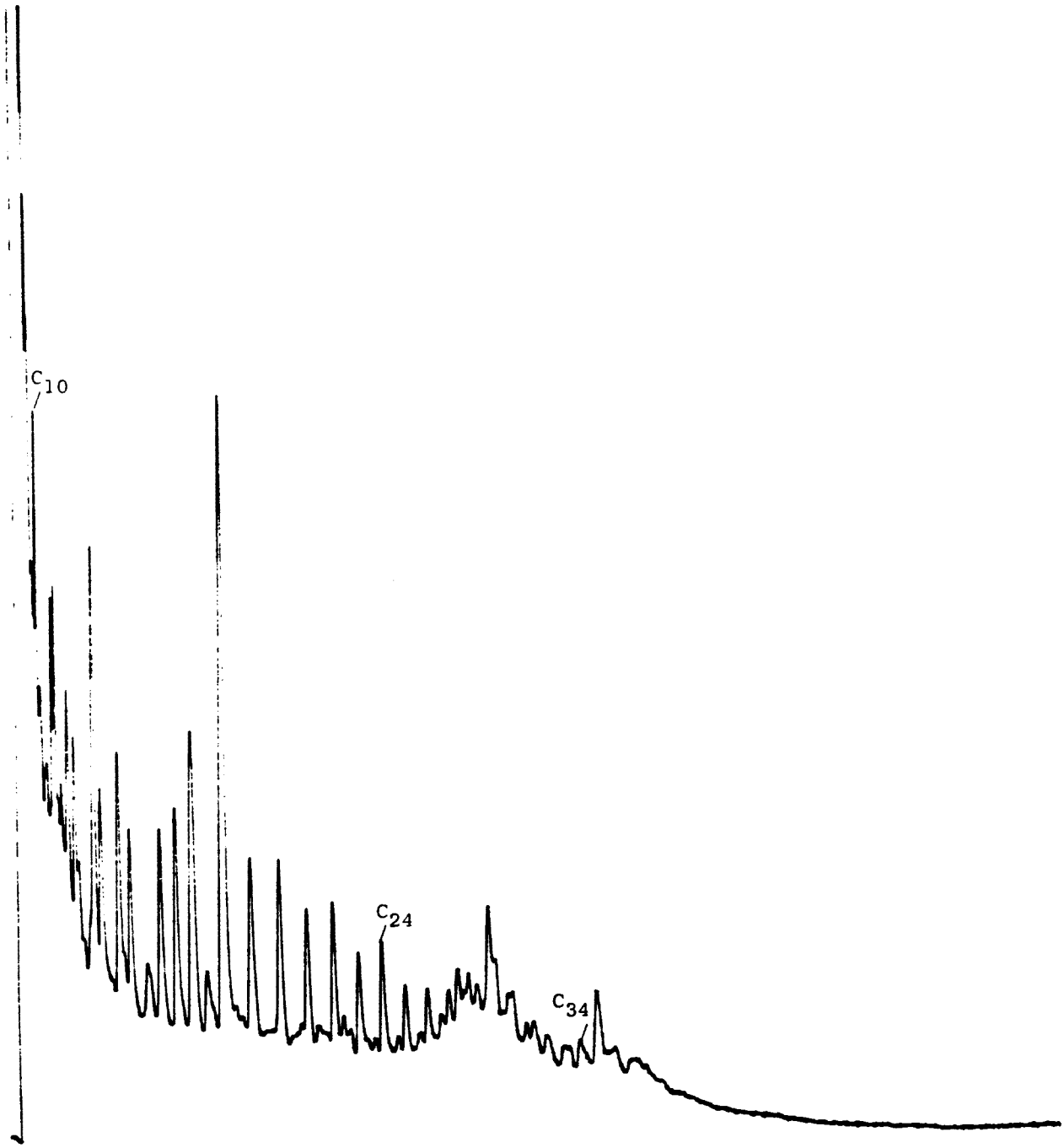
C_{10+} SATURATED HYDROCARBON FRACTION

7090-7120 feet



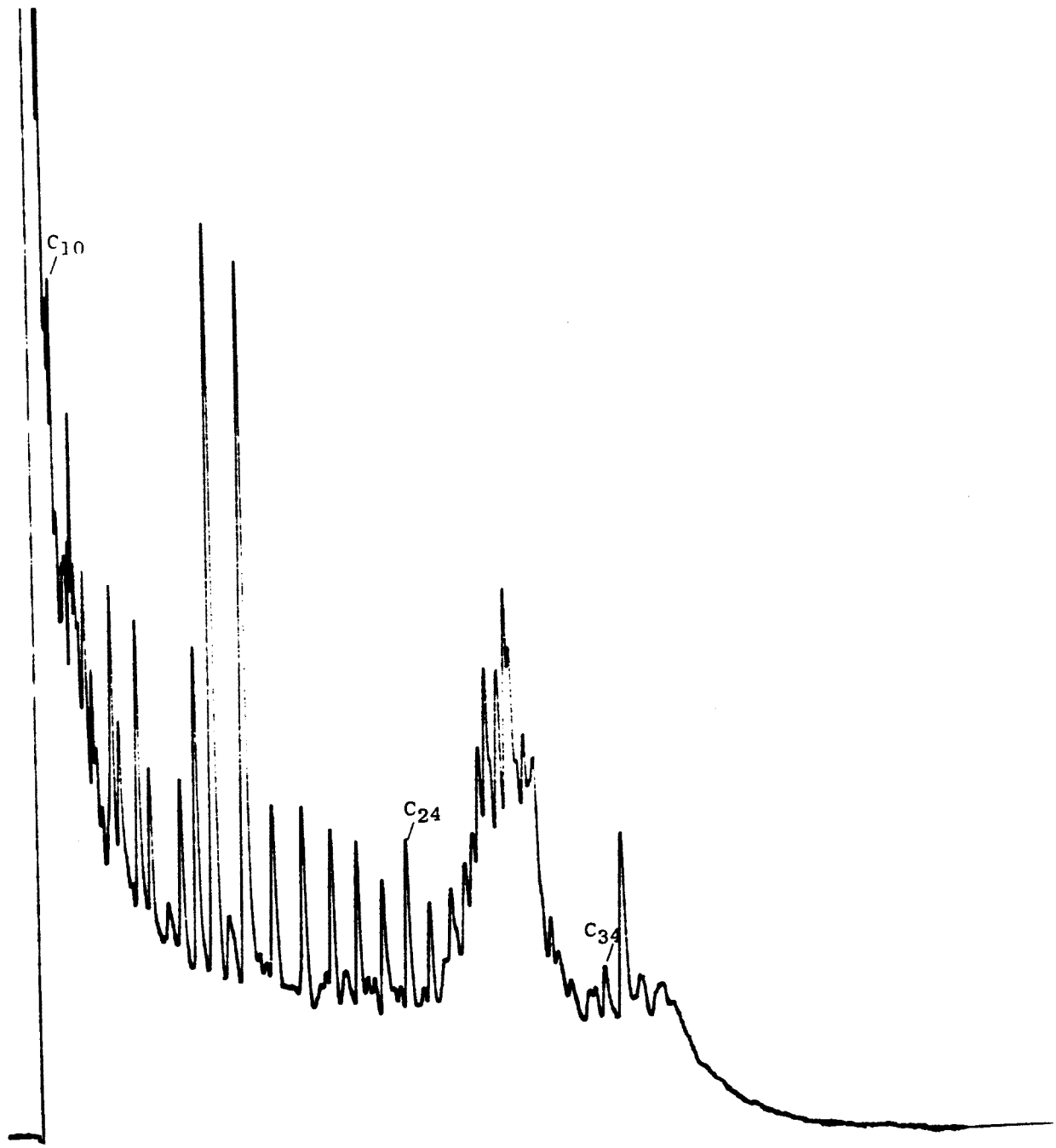
C_{10+} SATURATED HYDROCARBON FRACTION

7390-7420 feet



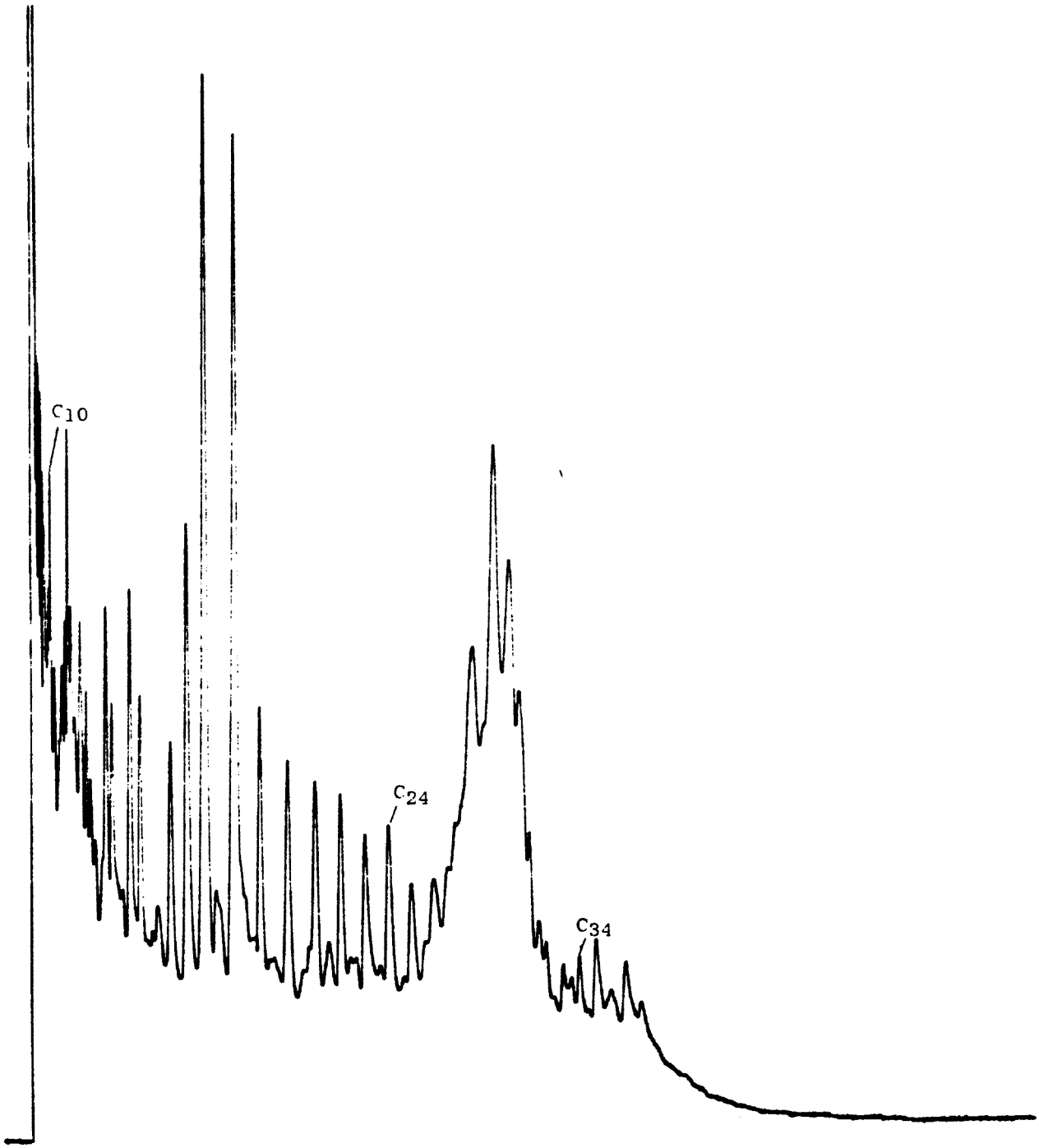
C_{10+} SATURATED HYDROCARBON FRACTION

7690-7710 feet



C_{10+} SATURATED HYDROCARBON FRACTION

7990-8020 feet

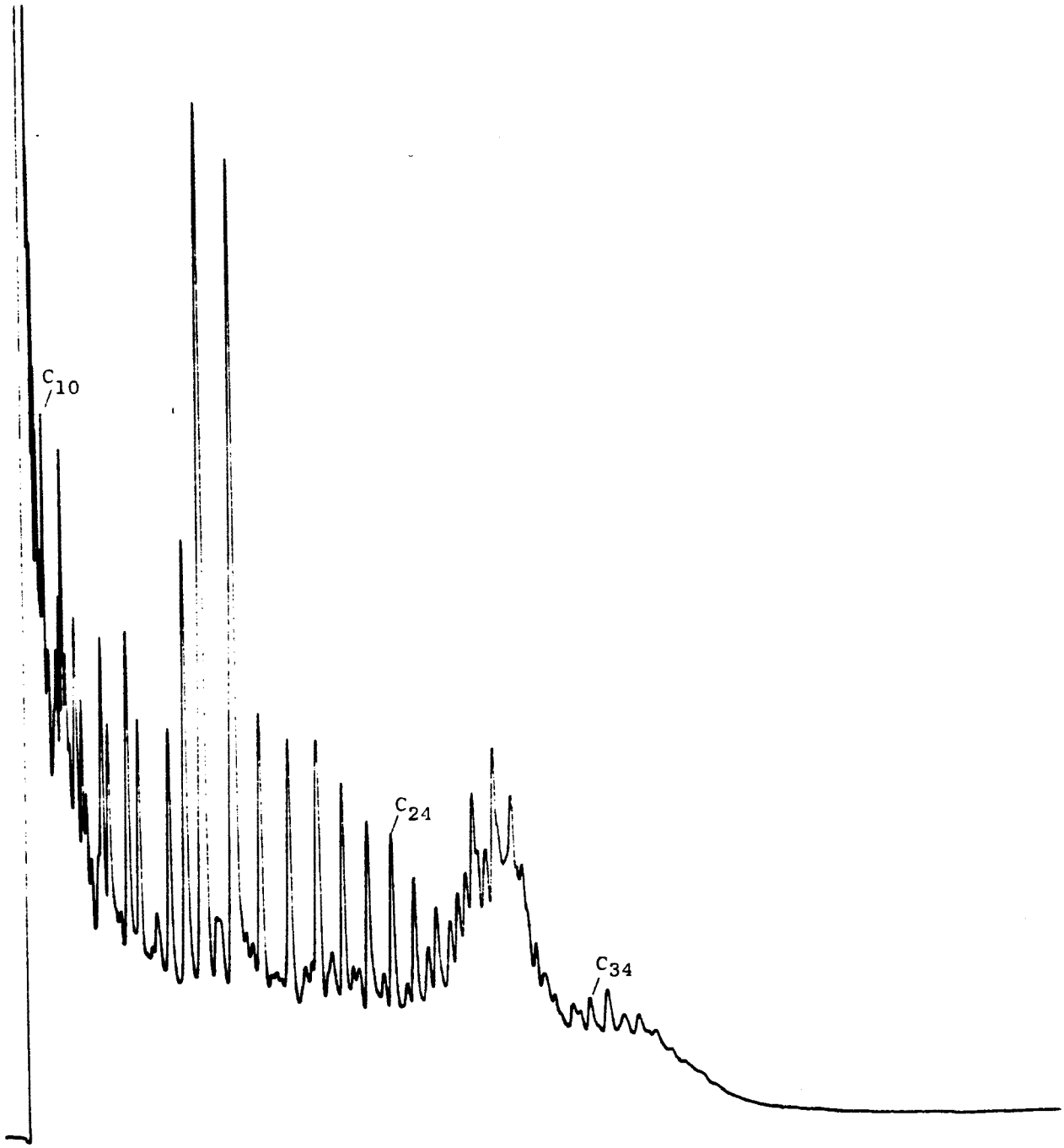


C_{10+} SATURATED HYDROCARBON FRACTION

8290-8320 feet

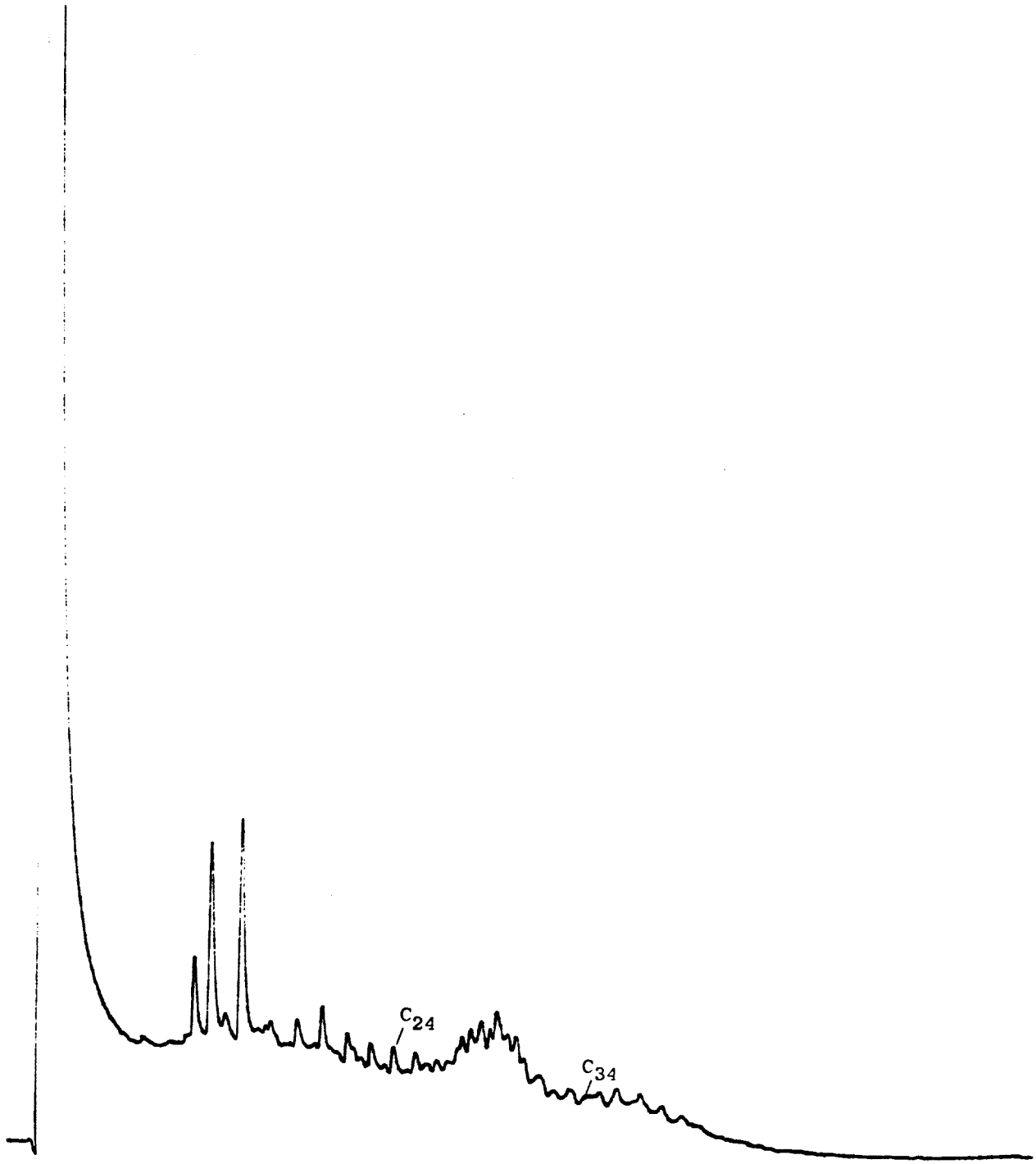
C_{10+} SATURATED HYDROCARBON FRACTION

8590-8620 feet



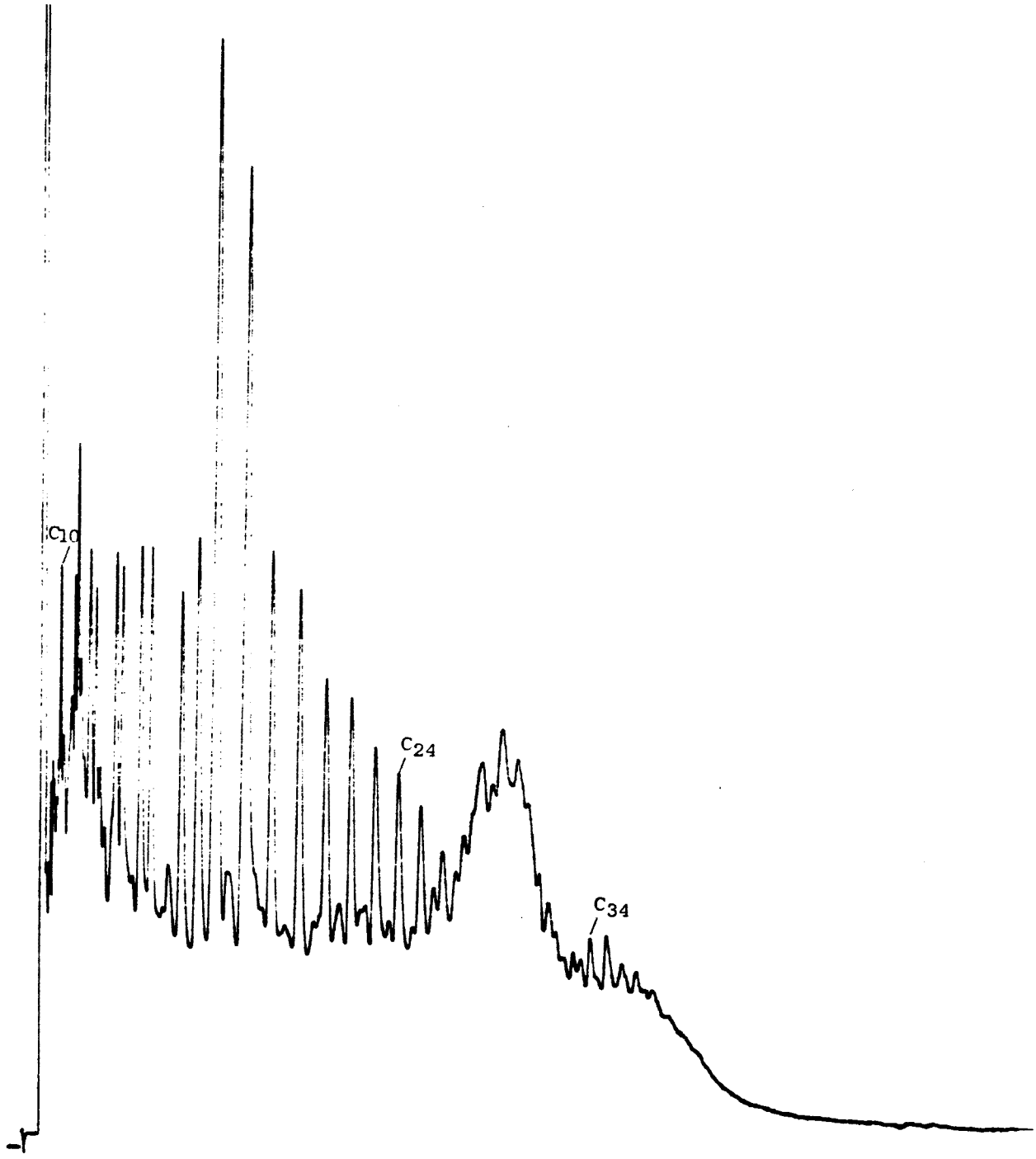
C_{10+} SATURATED HYDROCARBON FRACTION

8890-8920 feet



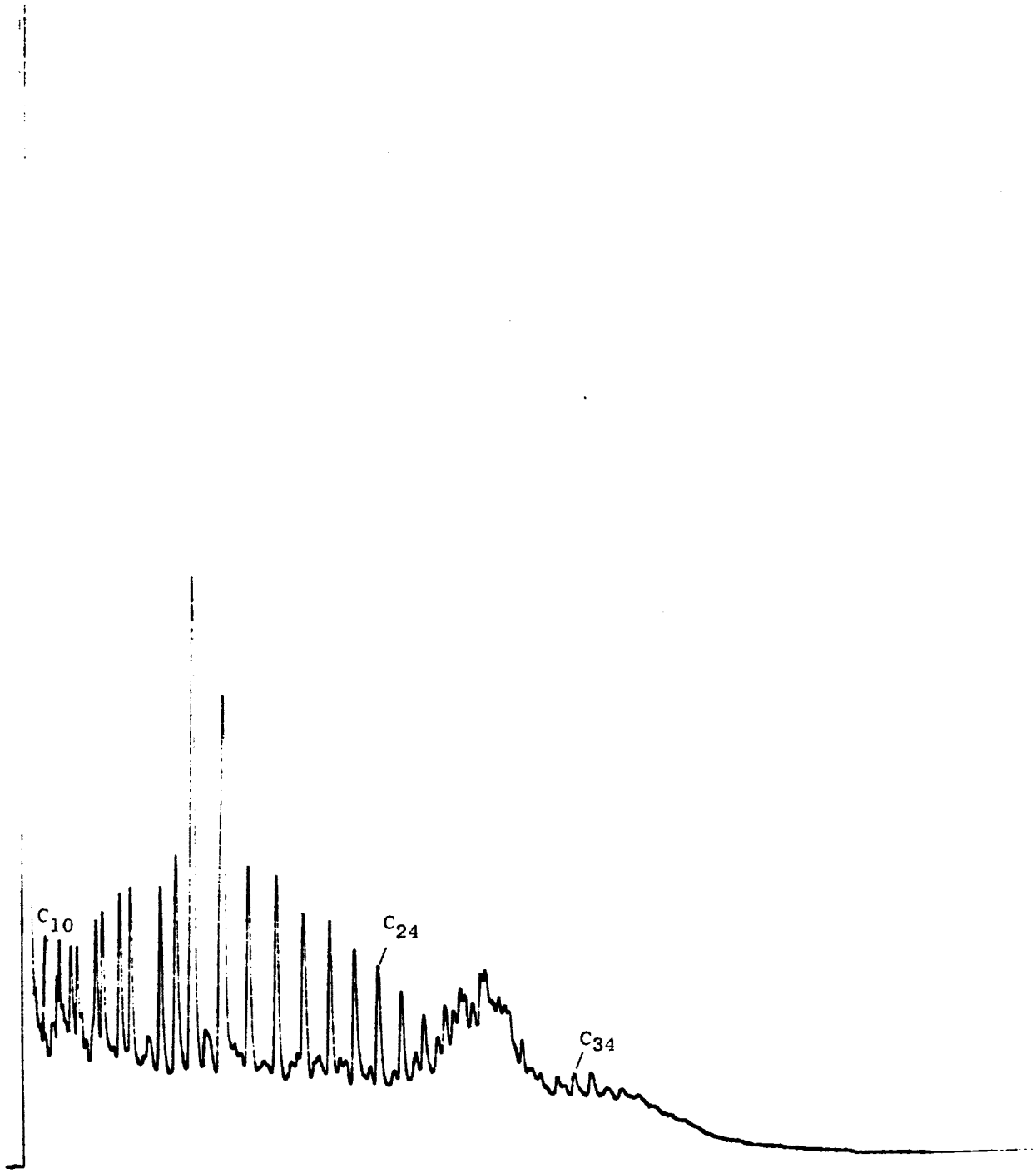
C_{10+} SATURATED HYDROCARBON FRACTION

9190-9220 feet



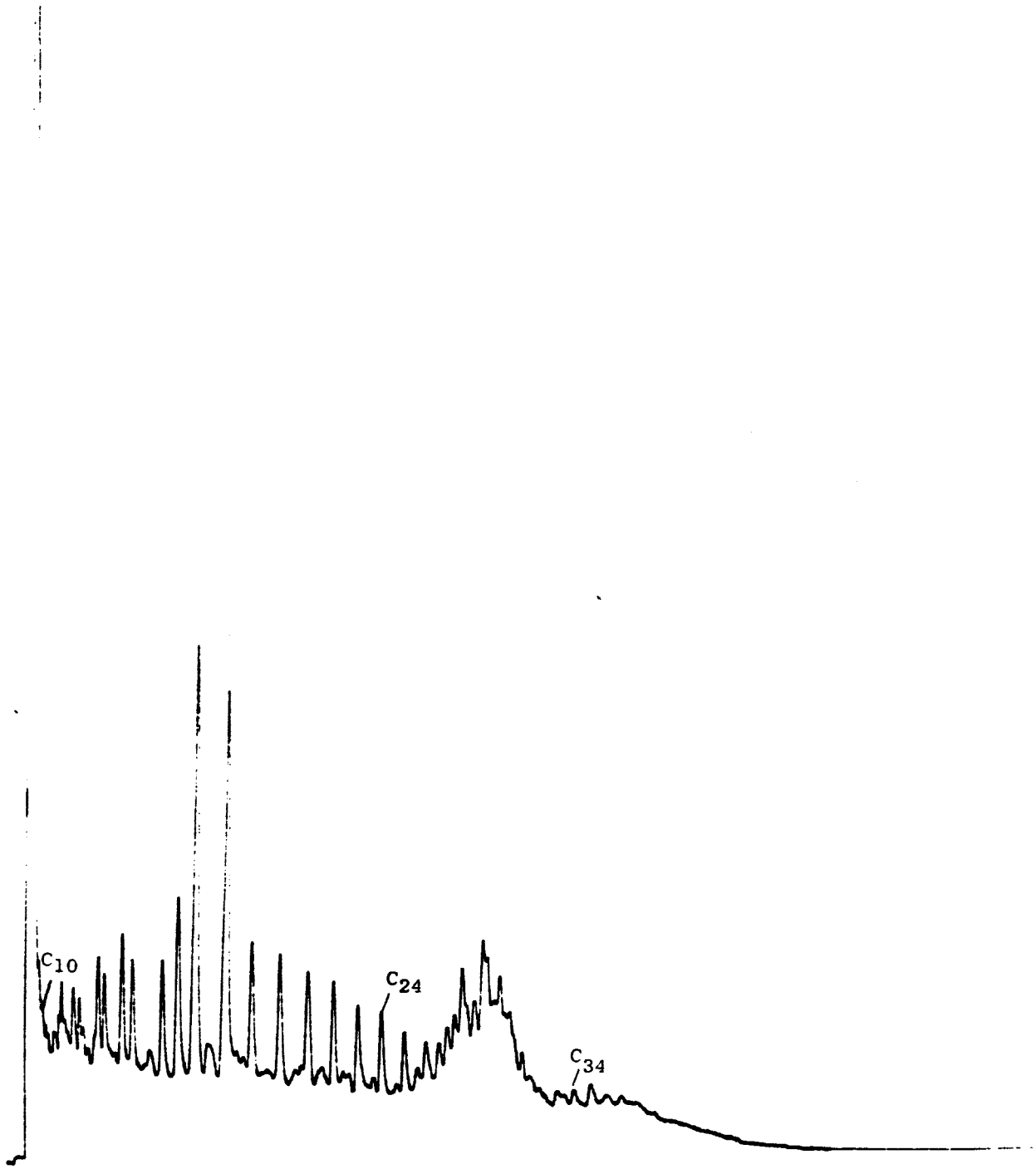
C_{10+} SATURATED HYDROCARBON FRACTION

9490-9520 feet



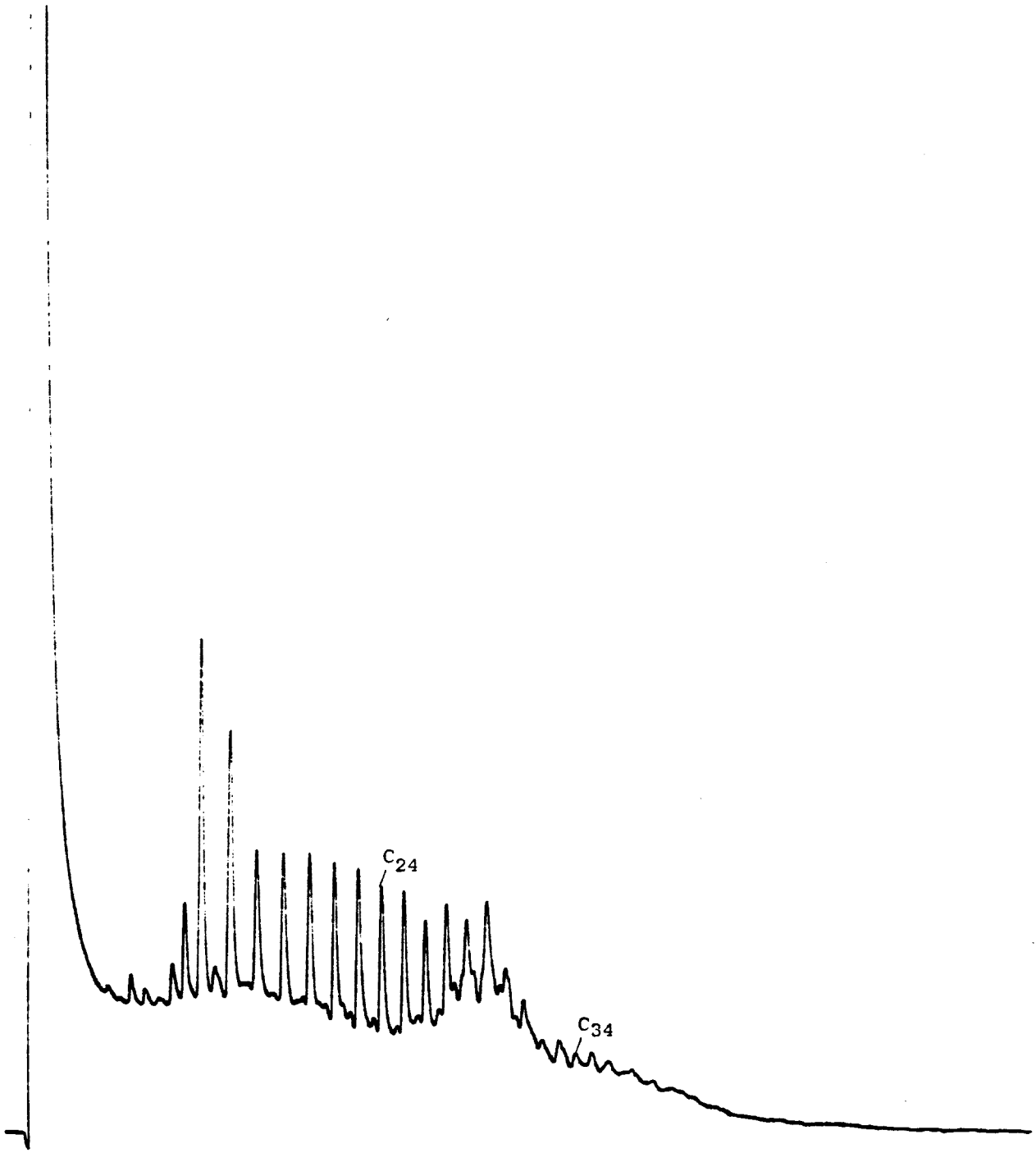
C_{10+} SATURATED HYDROCARBON FRACTION

9790-9820 feet



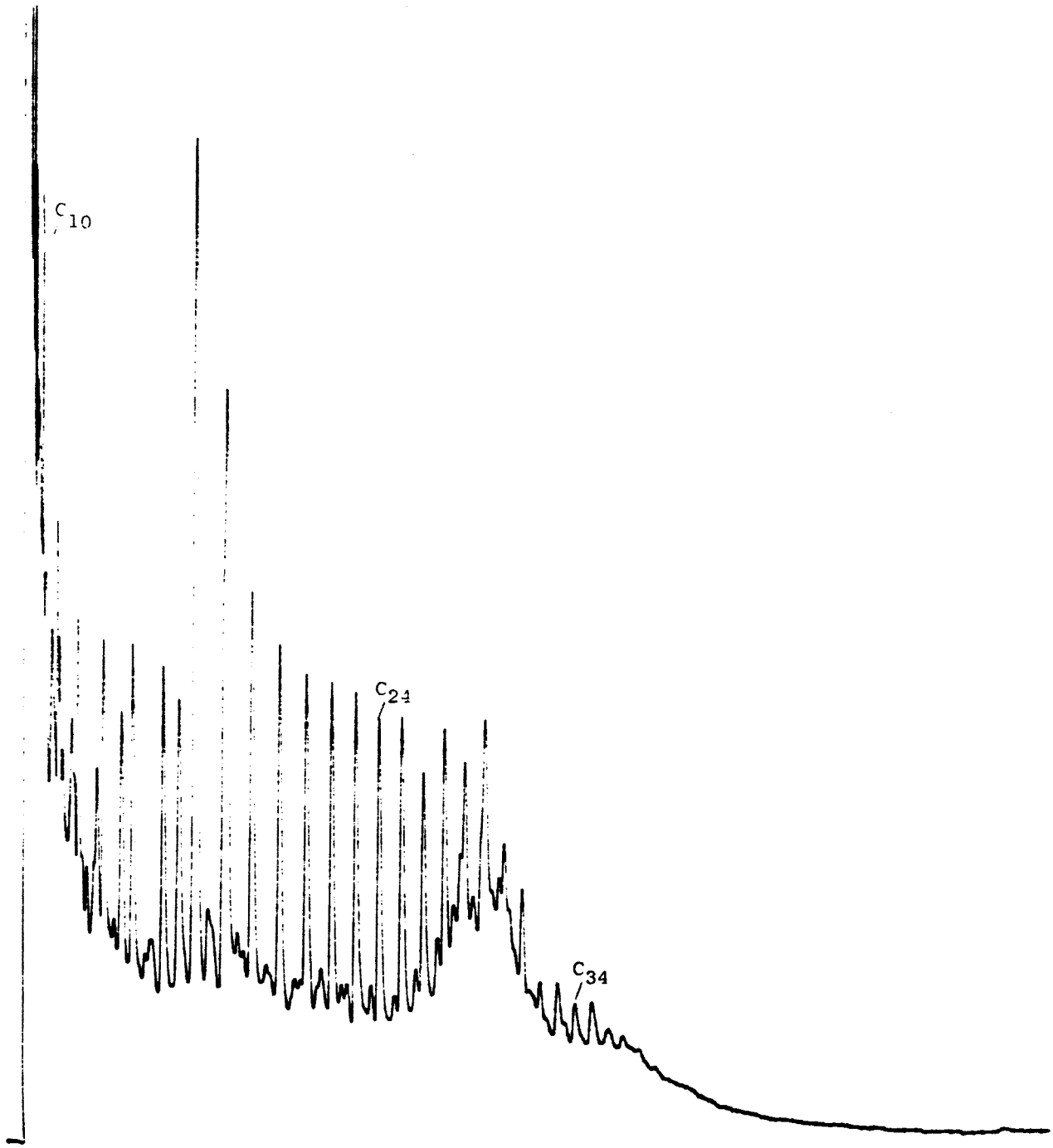
SATURATED HYDROCARBON FRACTION

10090-10120 feet



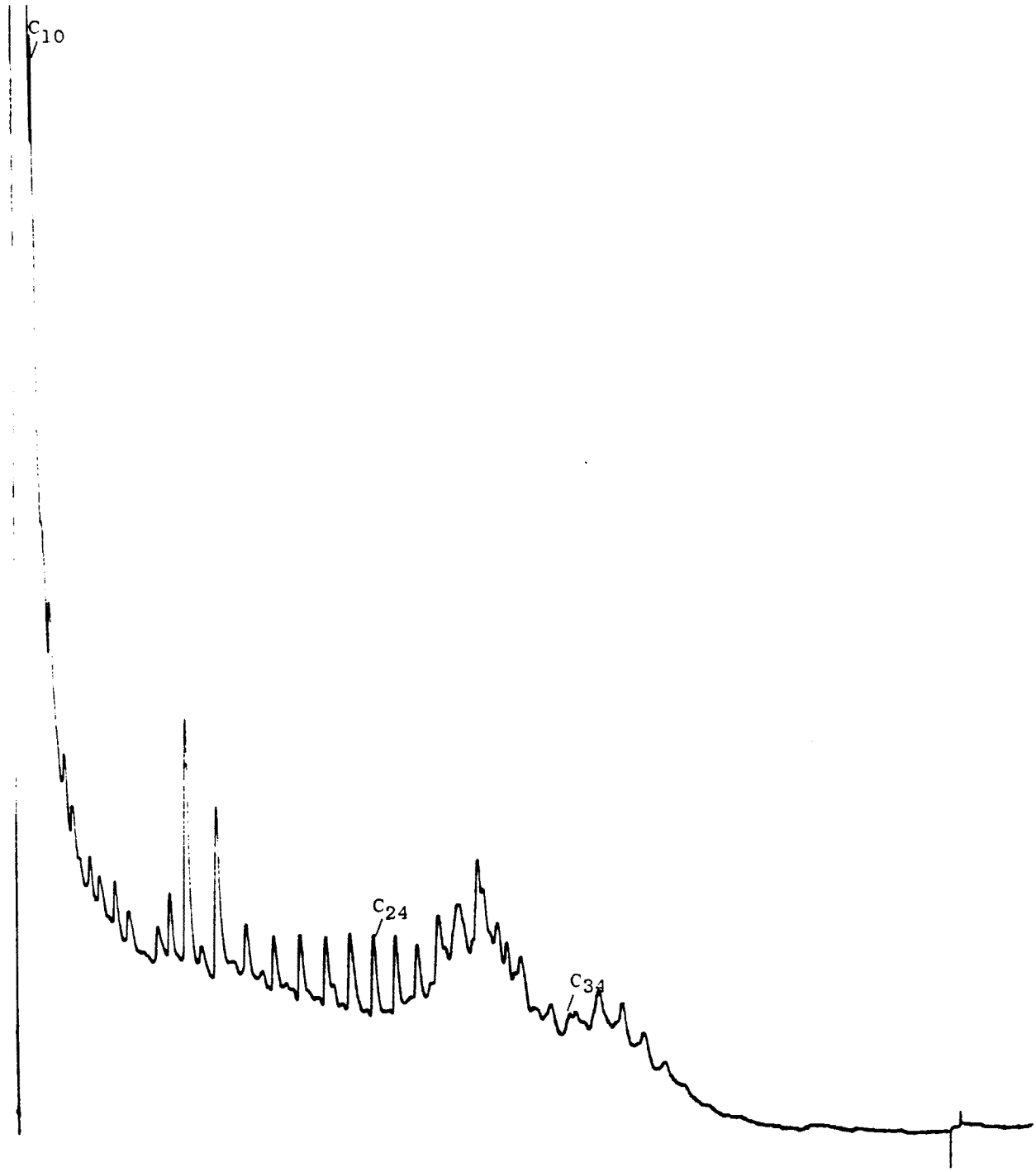
C_{10+} SATURATED HYDROCARBON FRACTION

10390-10420 feet



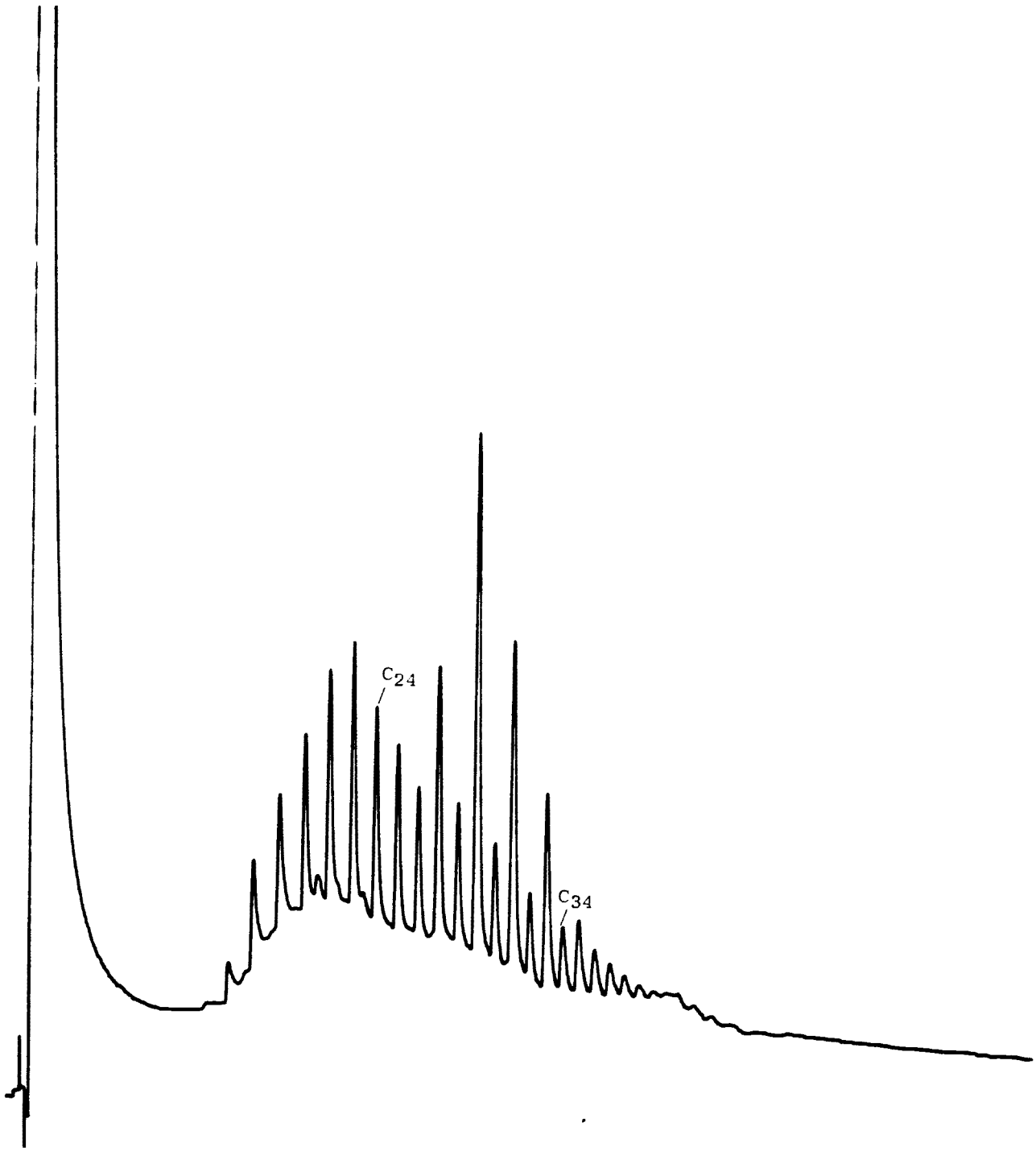
C_{10+} SATURATED HYDROCARBON FRACTION

10540-10570 feet



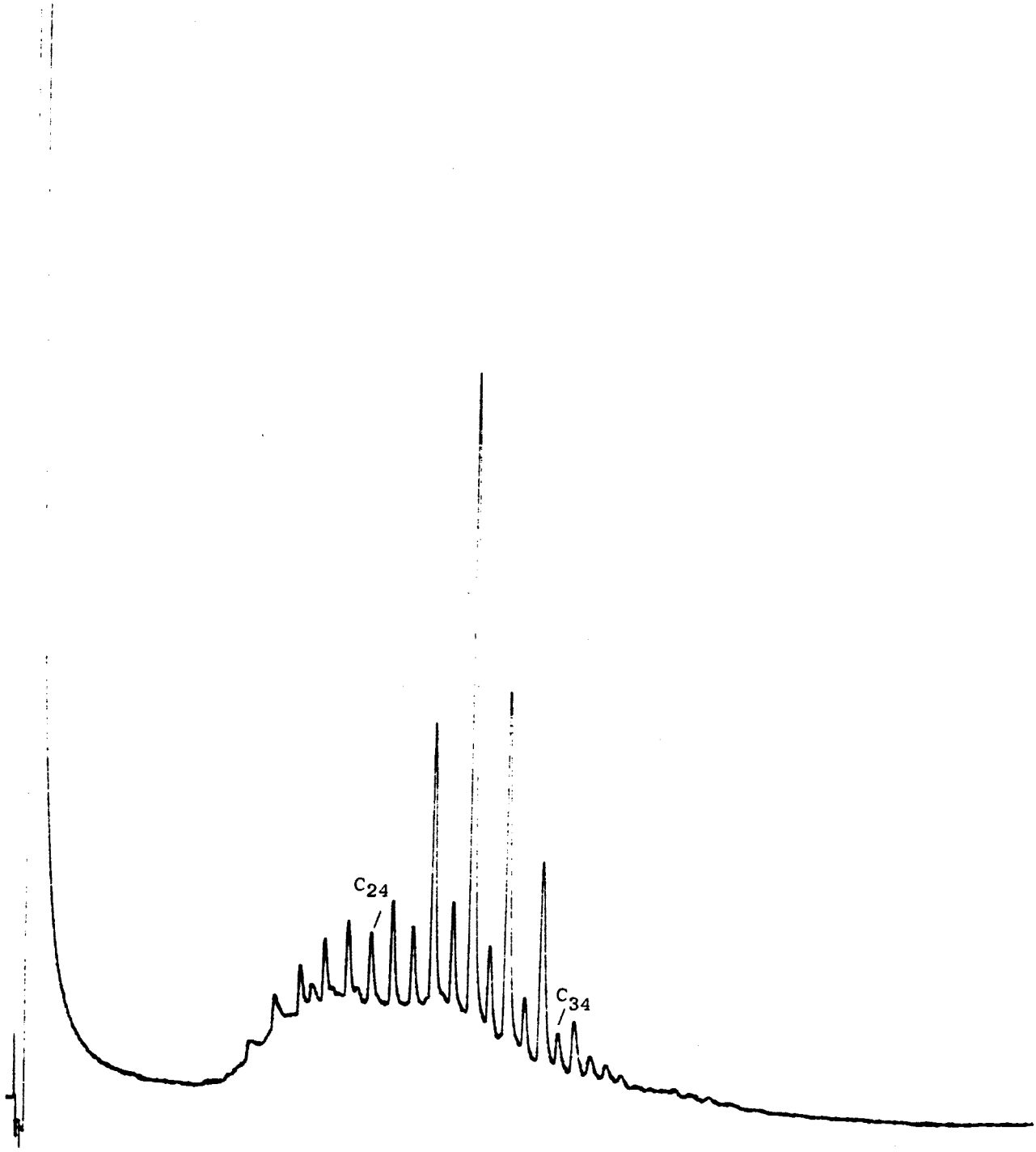
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

2300-2330 feet



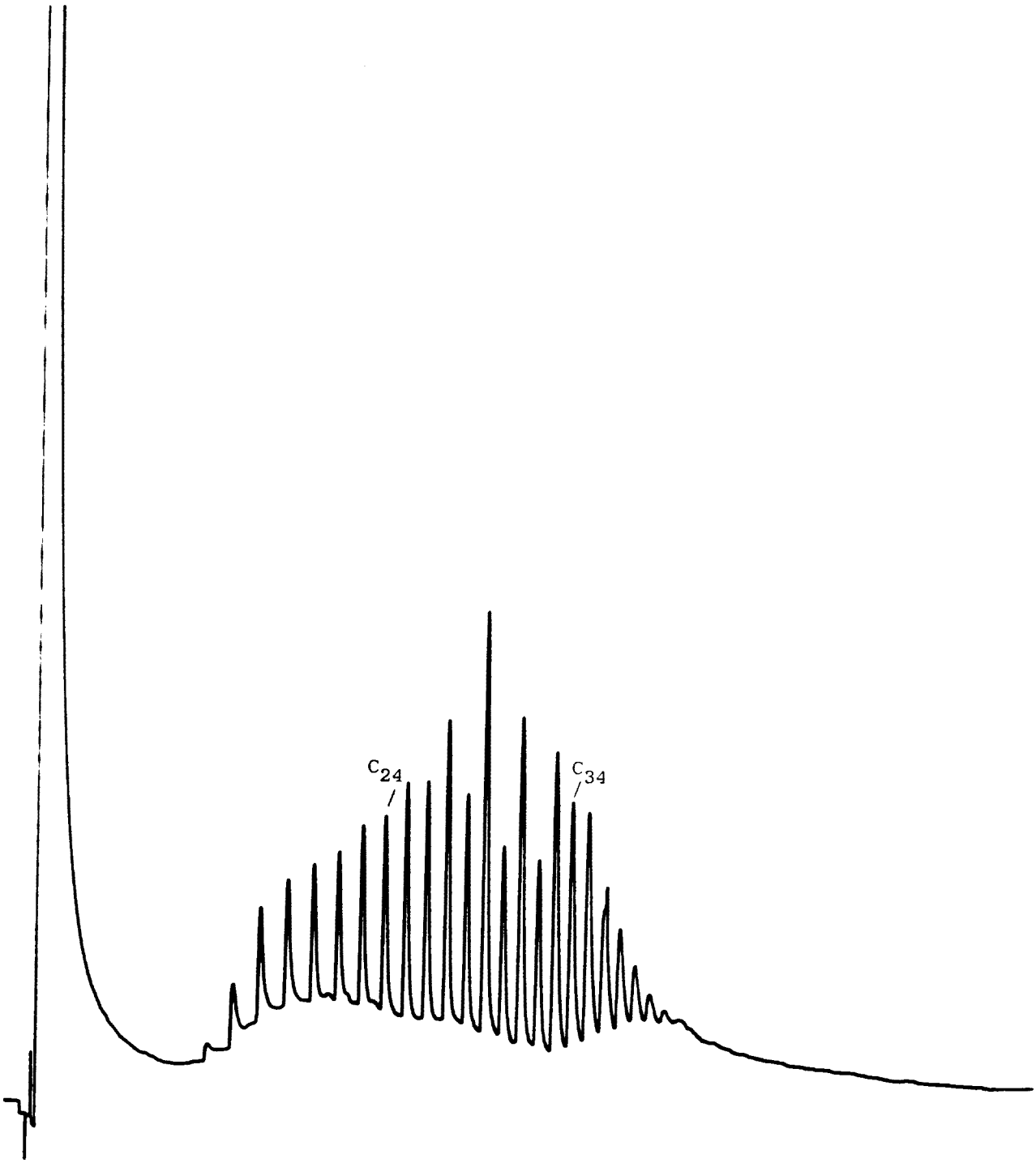
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

2630-2660 feet



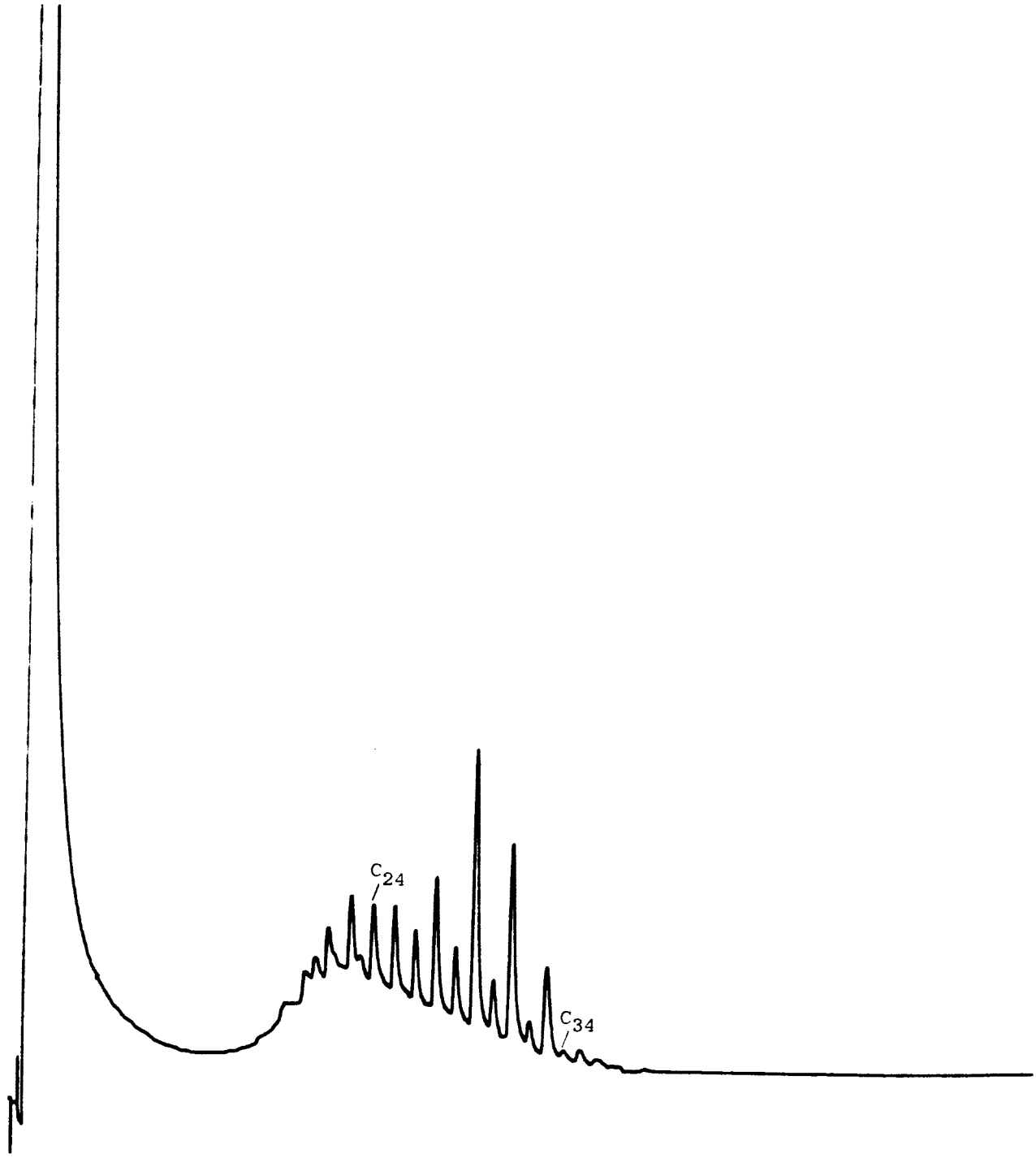
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

3490-3520 feet



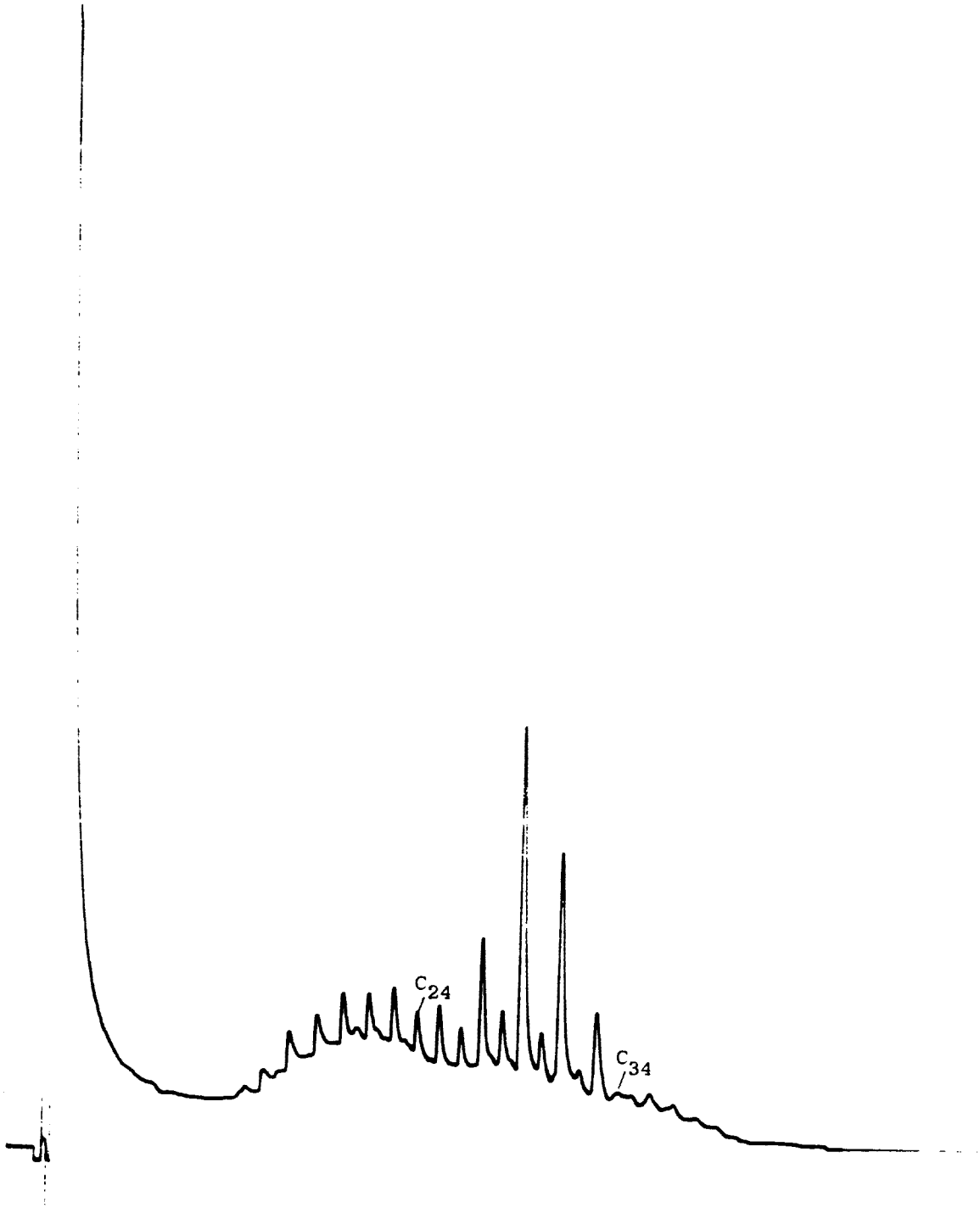
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

3790-3820 feet



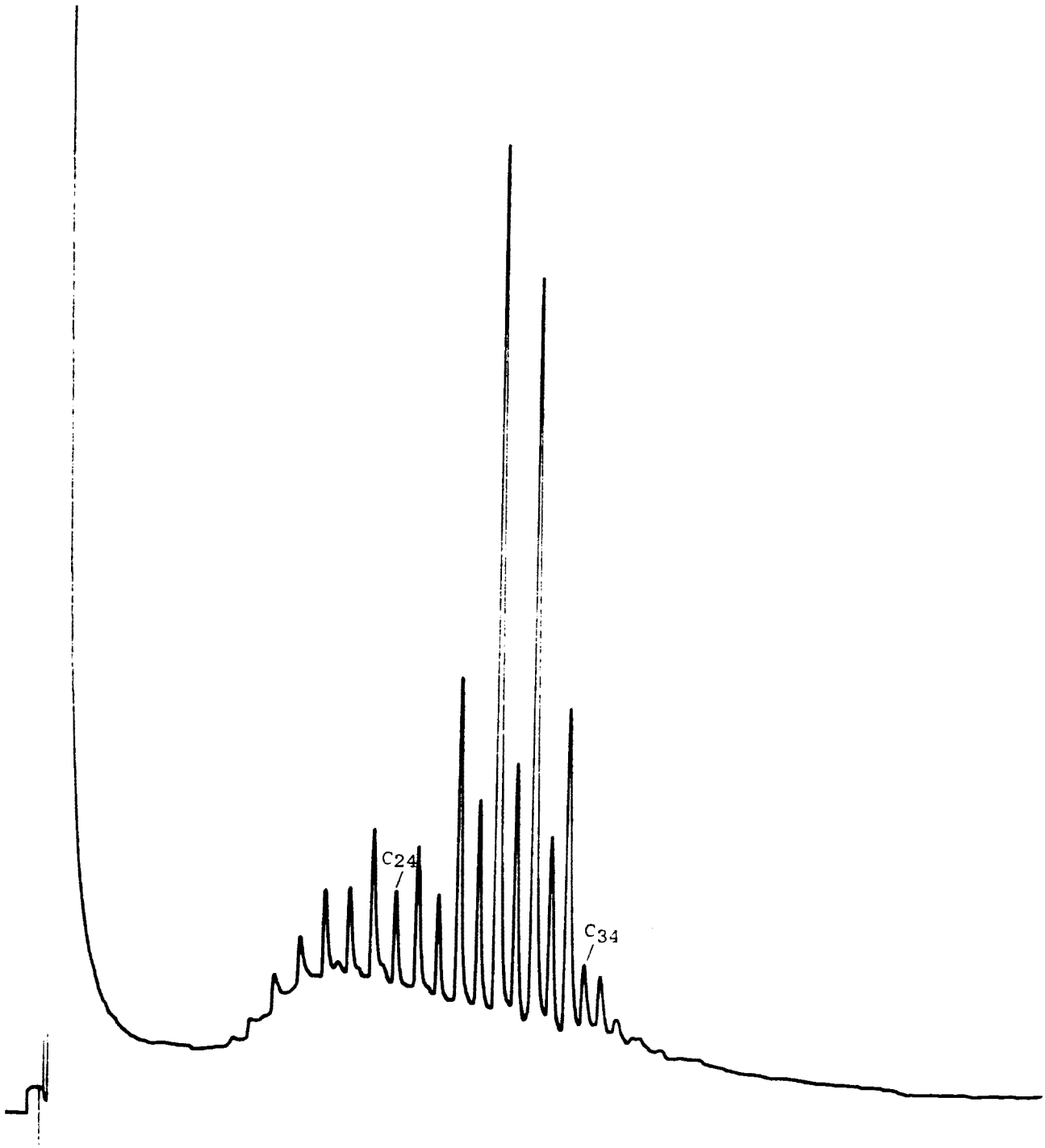
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

4090-4120 feet



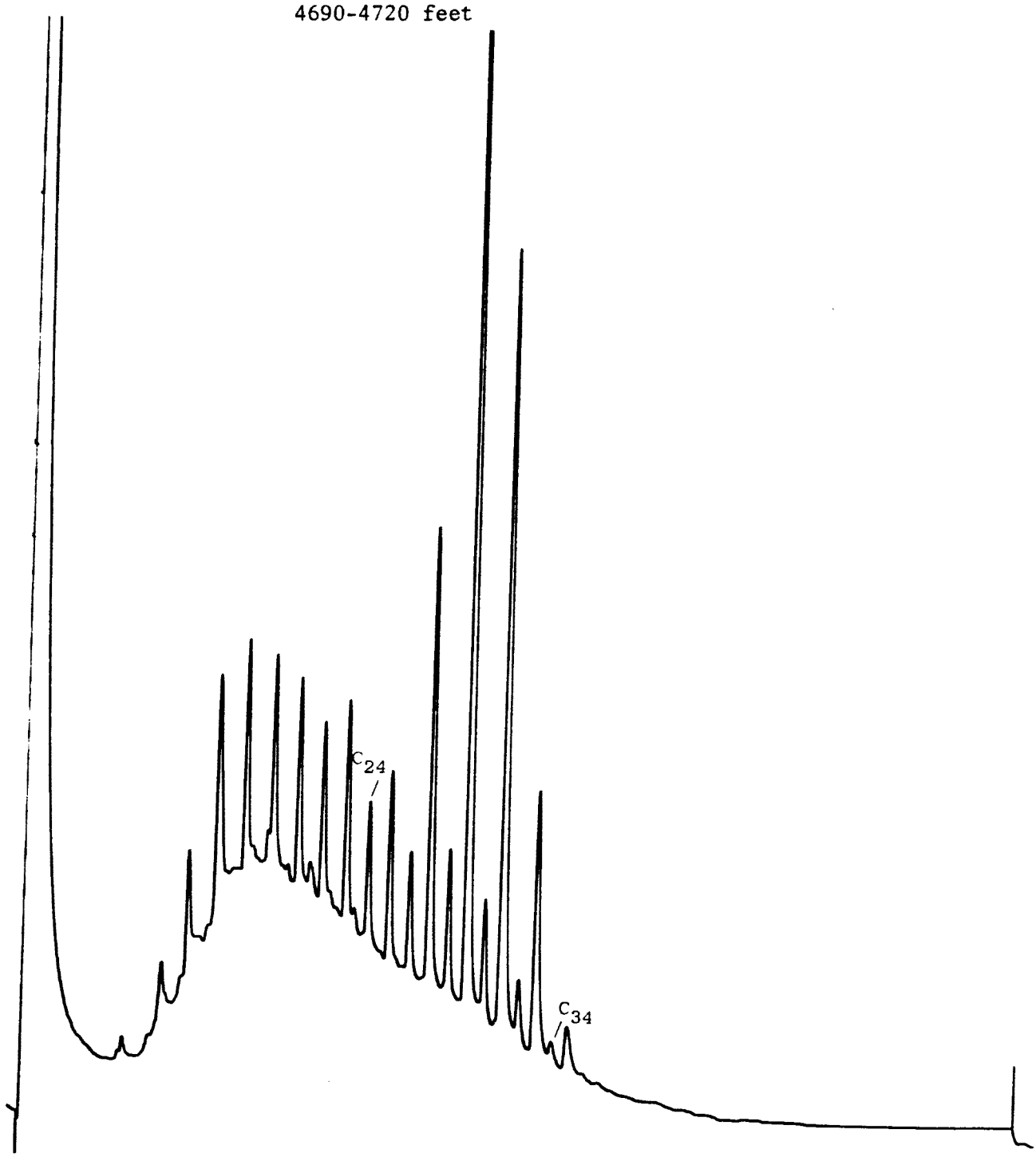
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

4390-4420 feet



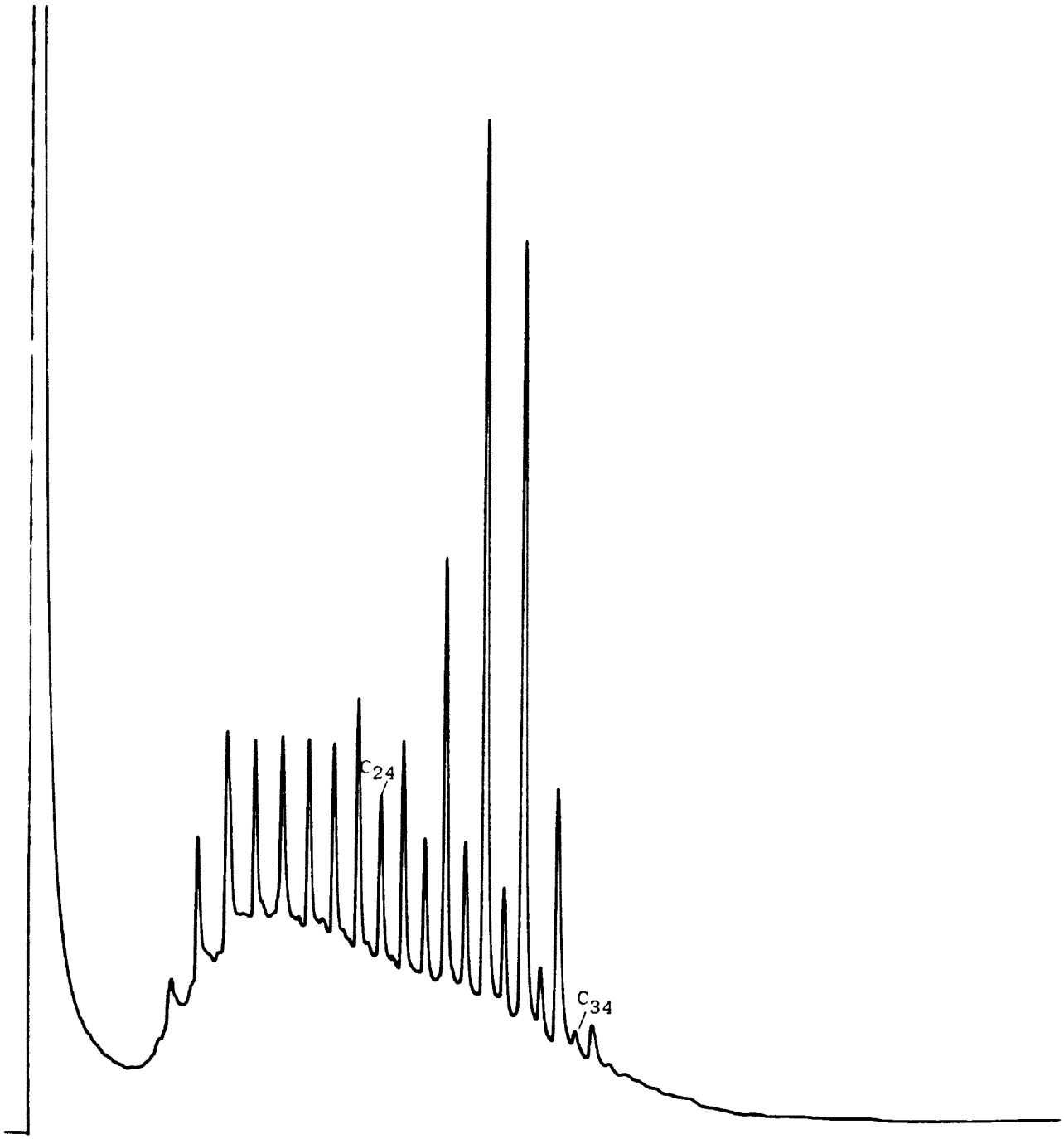
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

4690-4720 feet



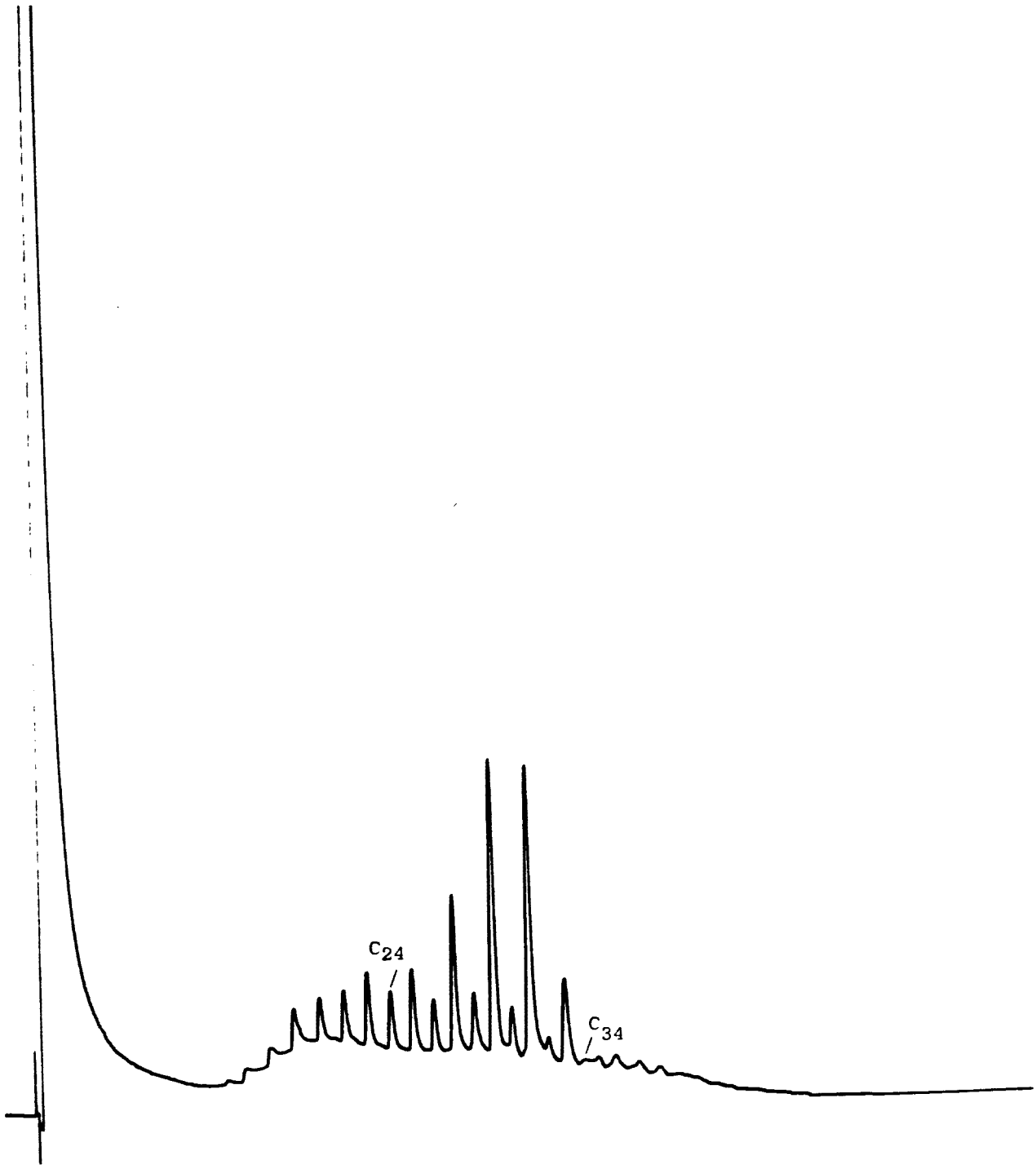
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

4930-4960 feet



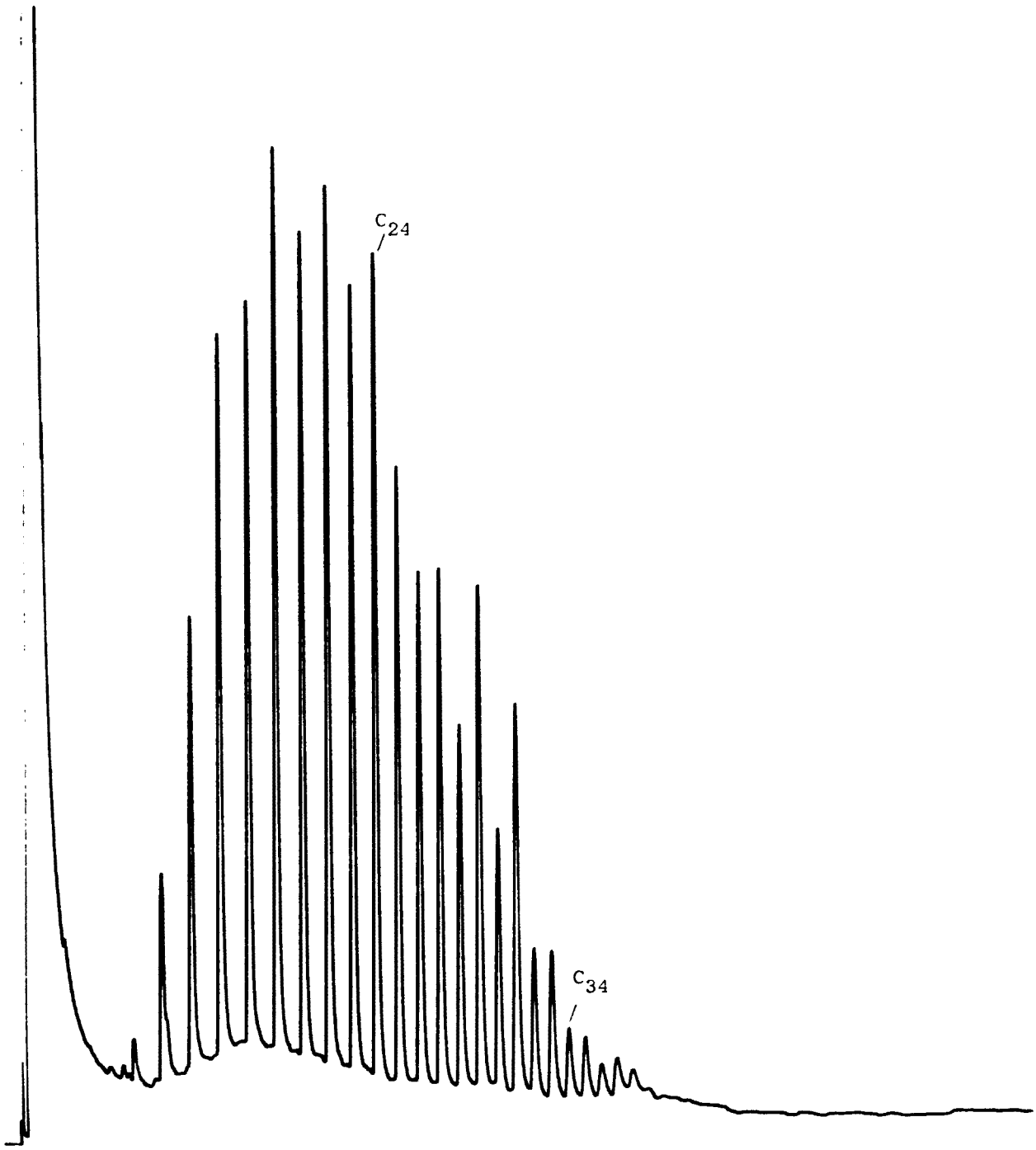
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

5290-5320 feet



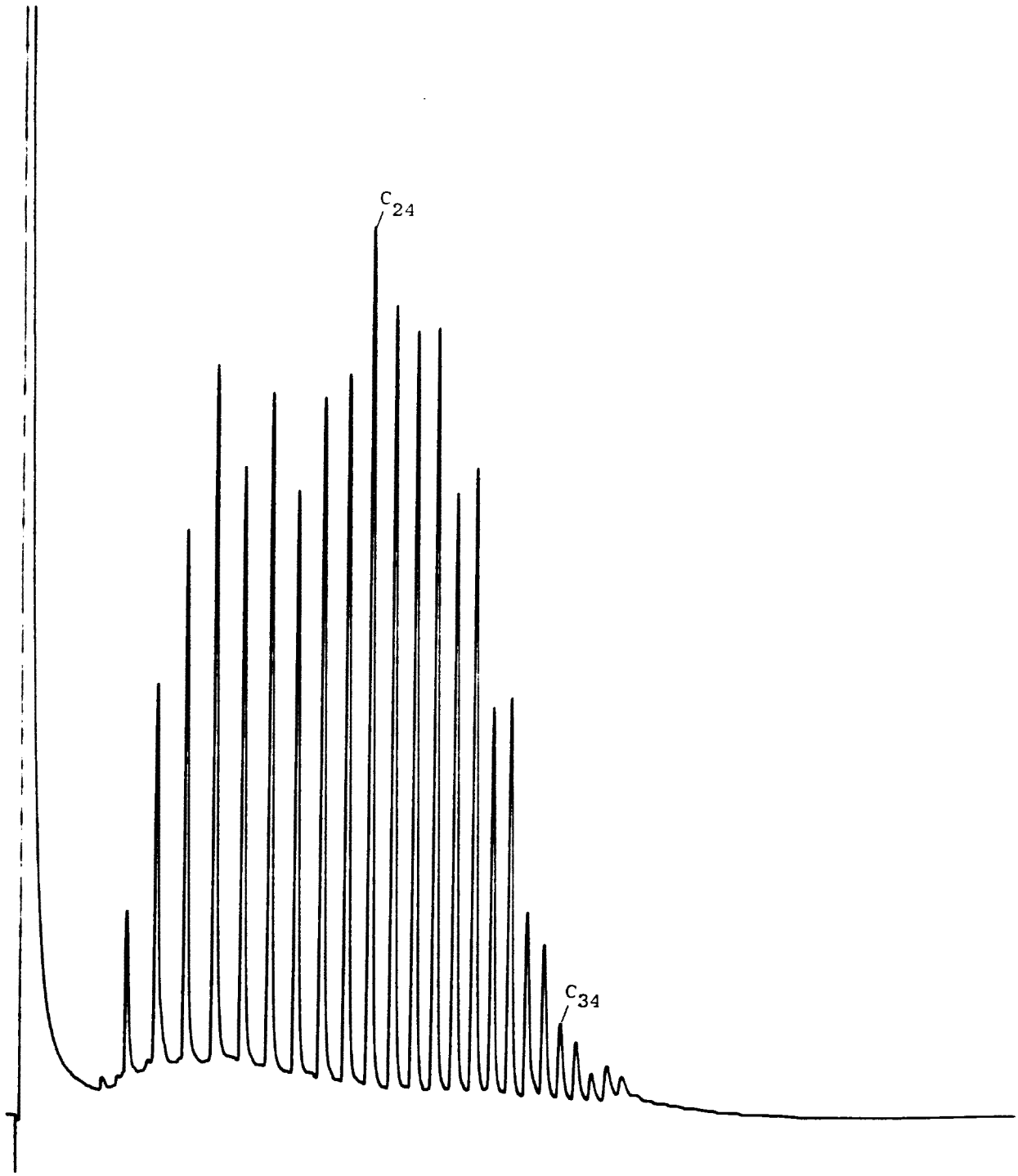
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

5890-5920 feet



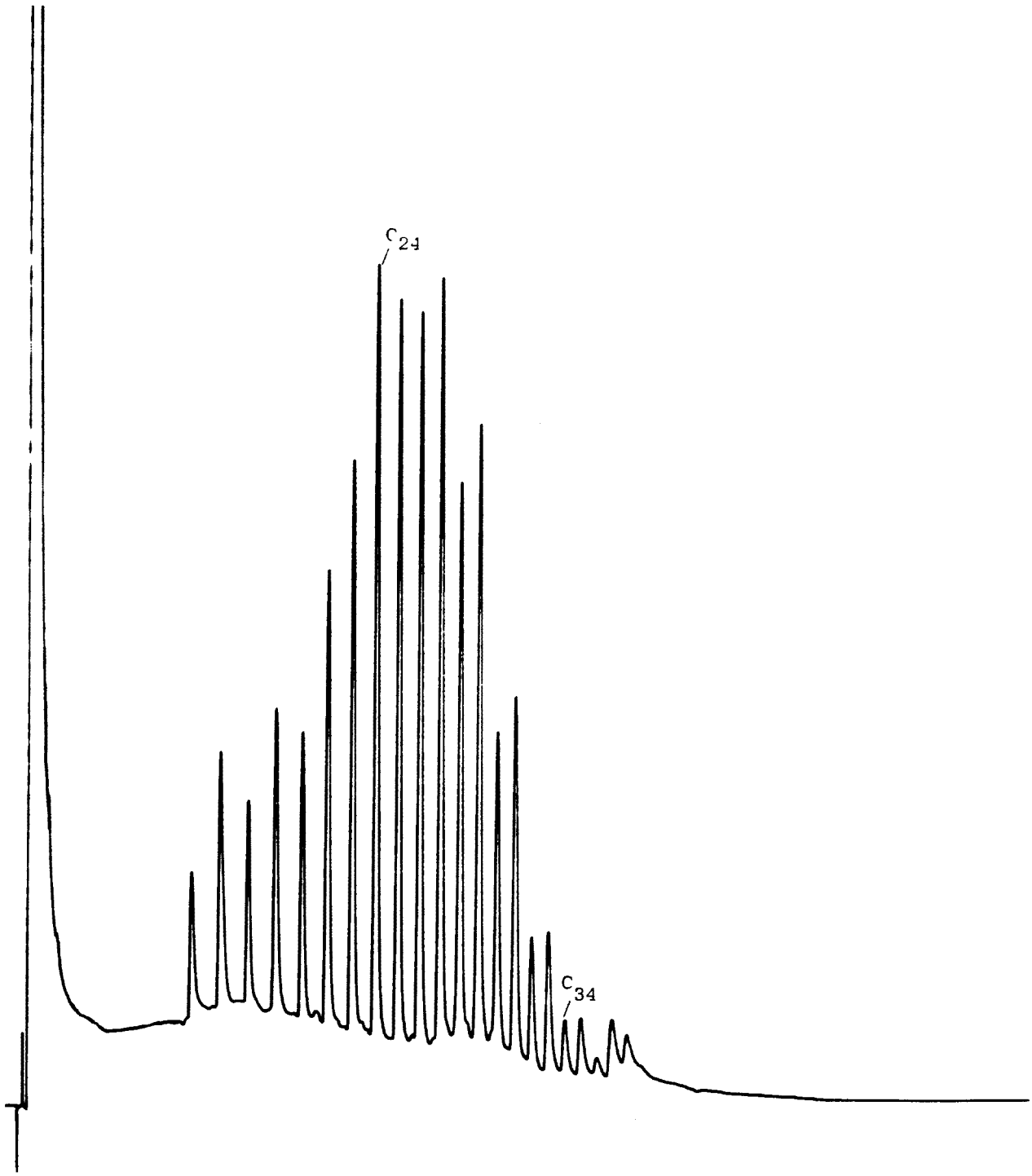
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

6190-6220 feet



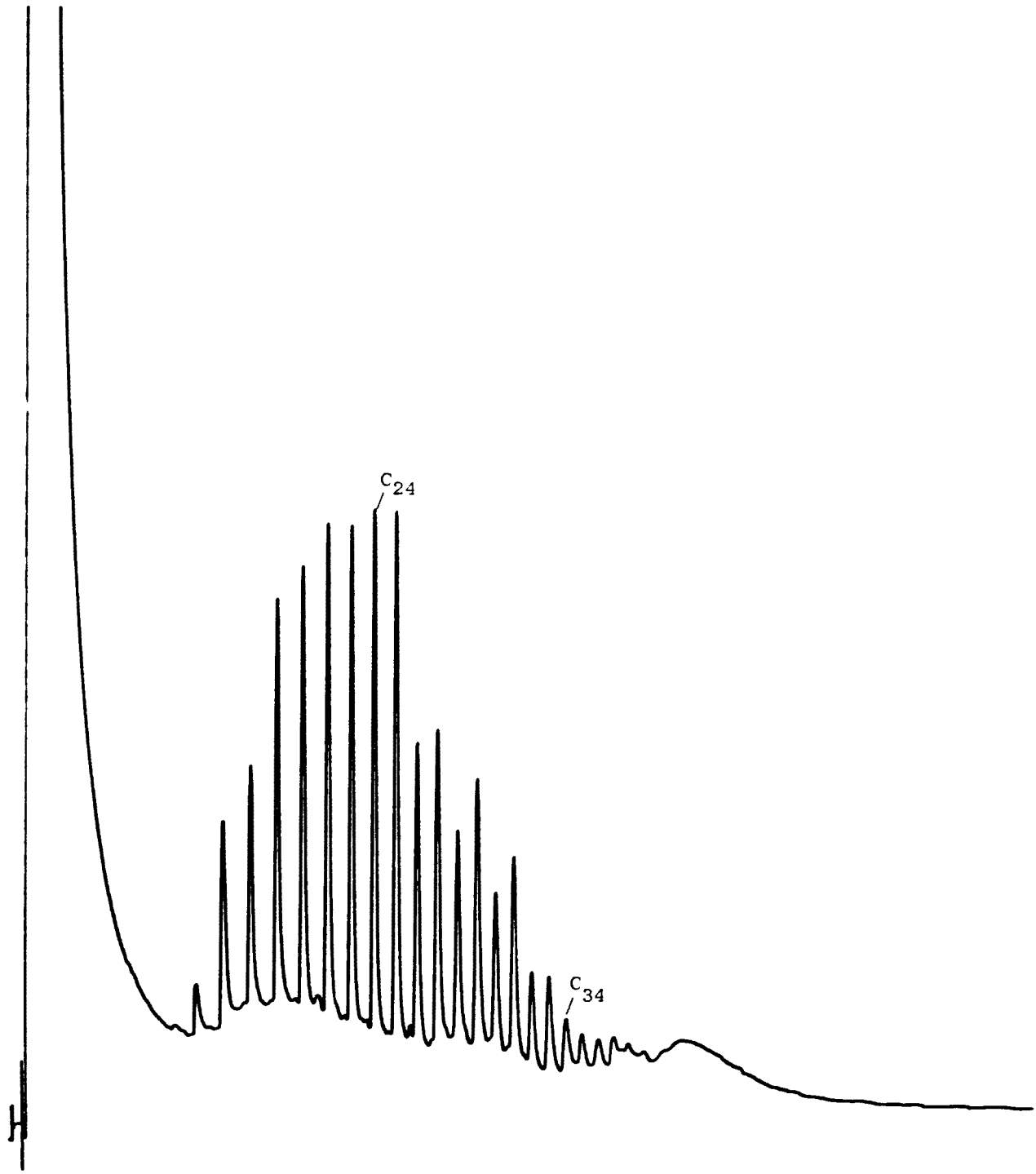
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

6490-6520 feet



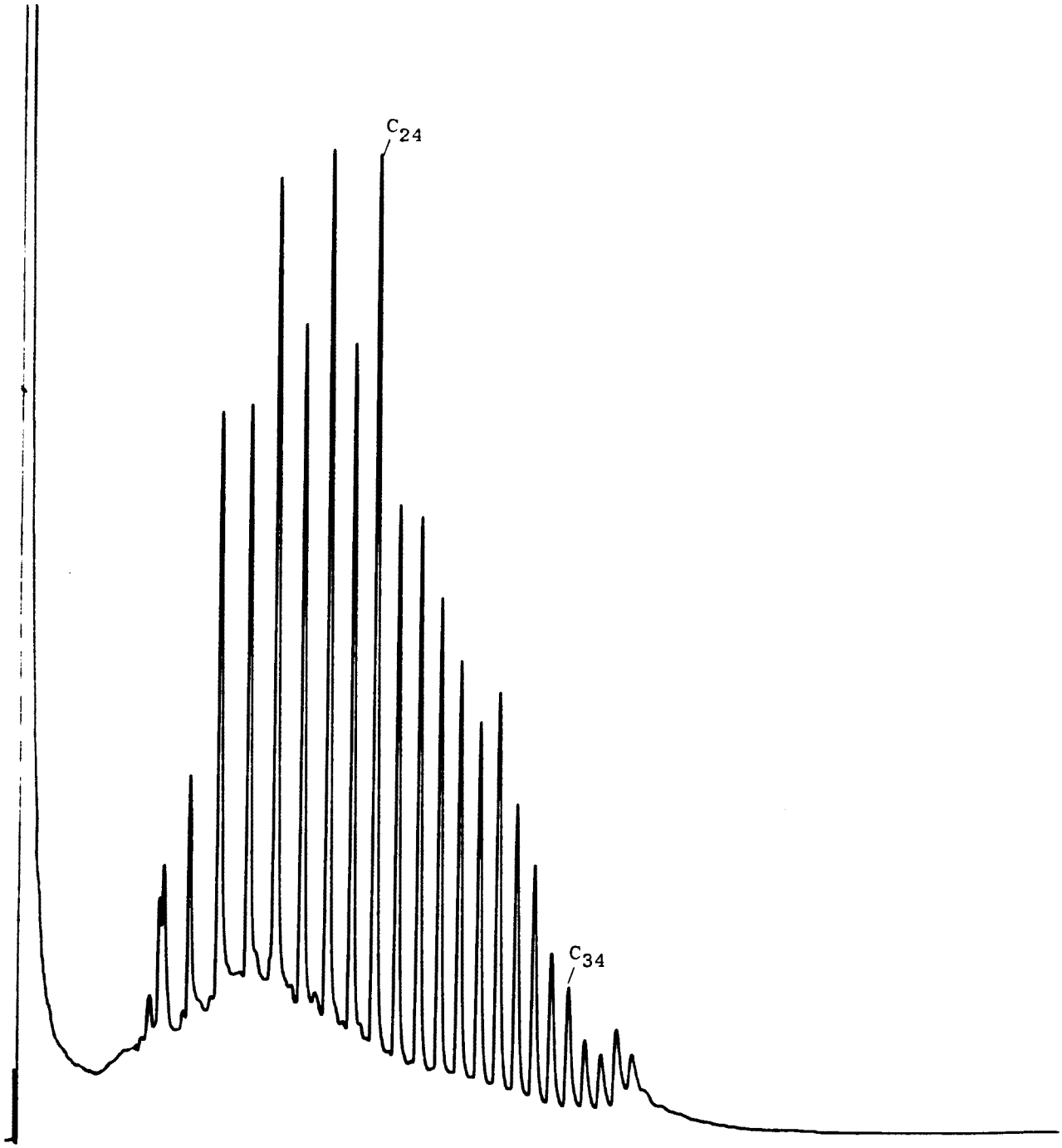
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

6790-6820 feet



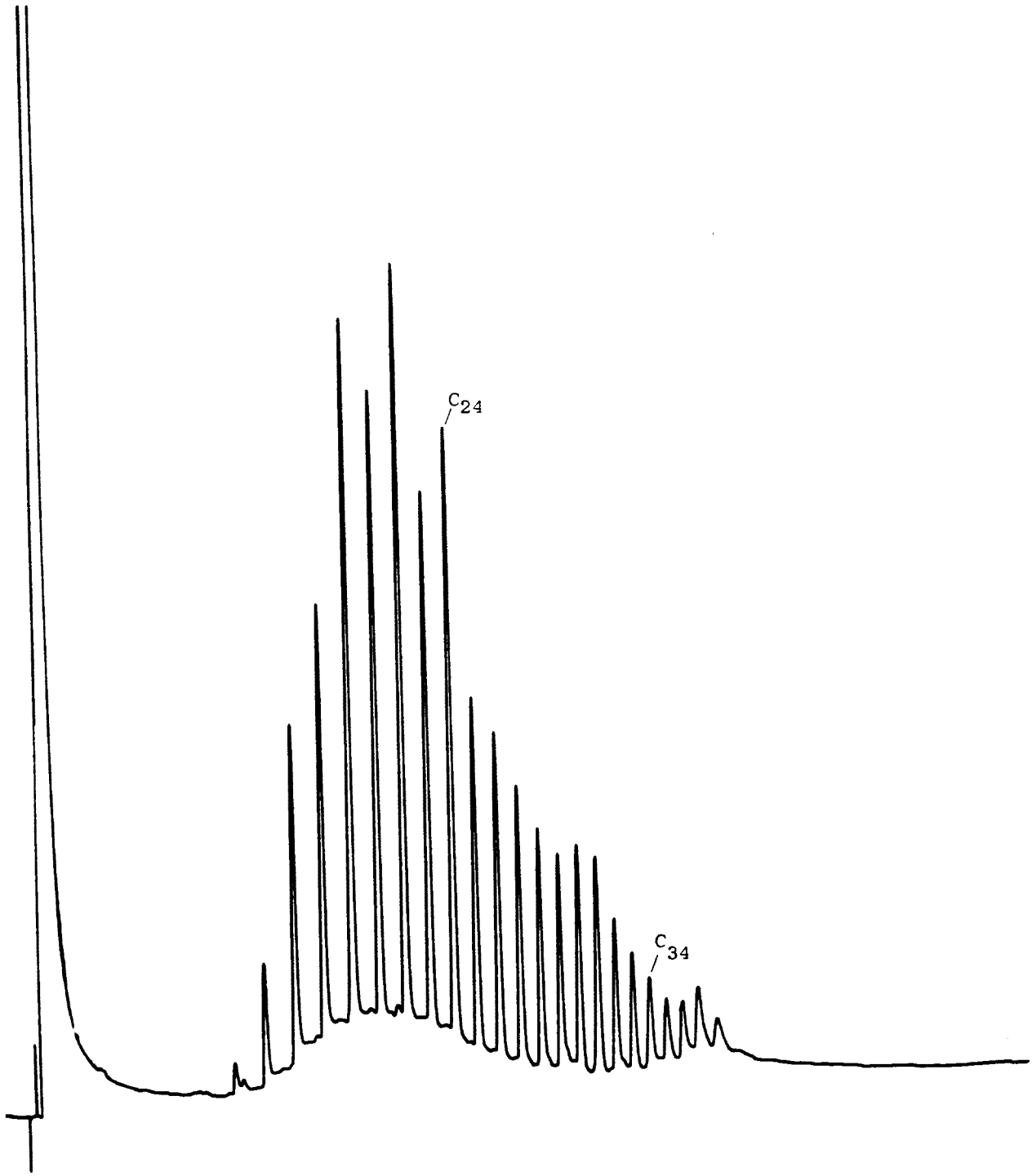
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

7090-7120 feet



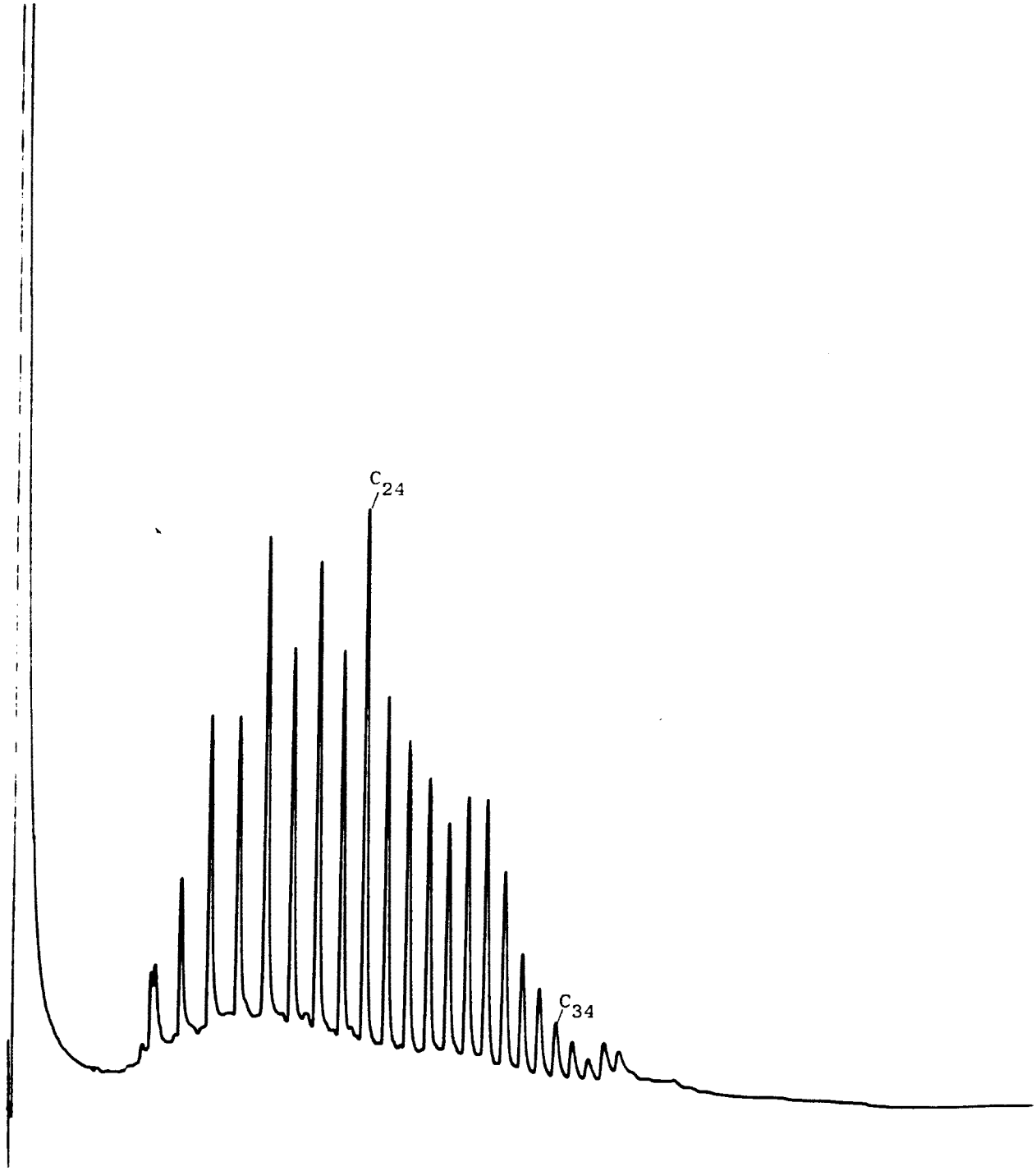
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

7390-7420 feet



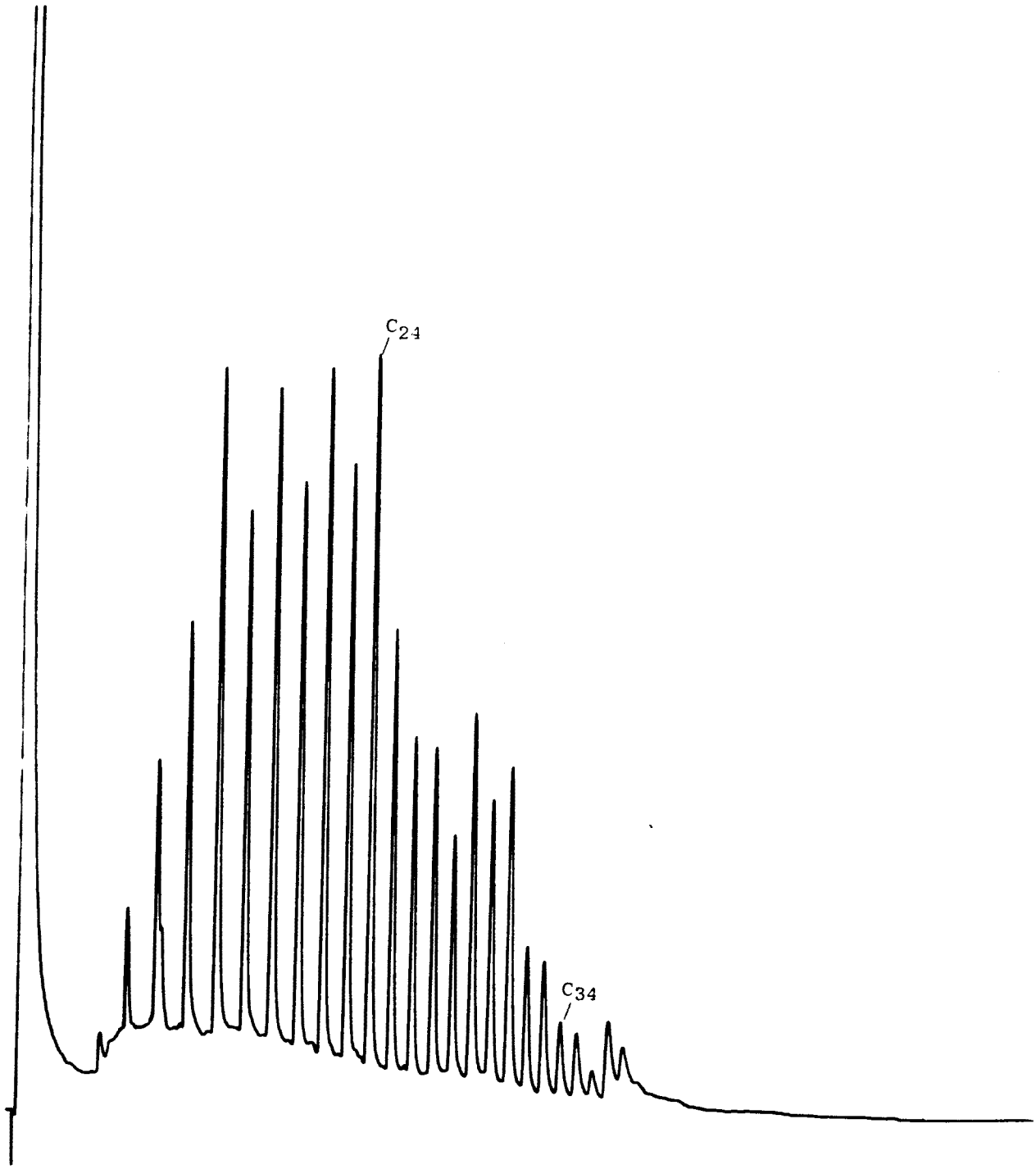
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

7690-7710 feet



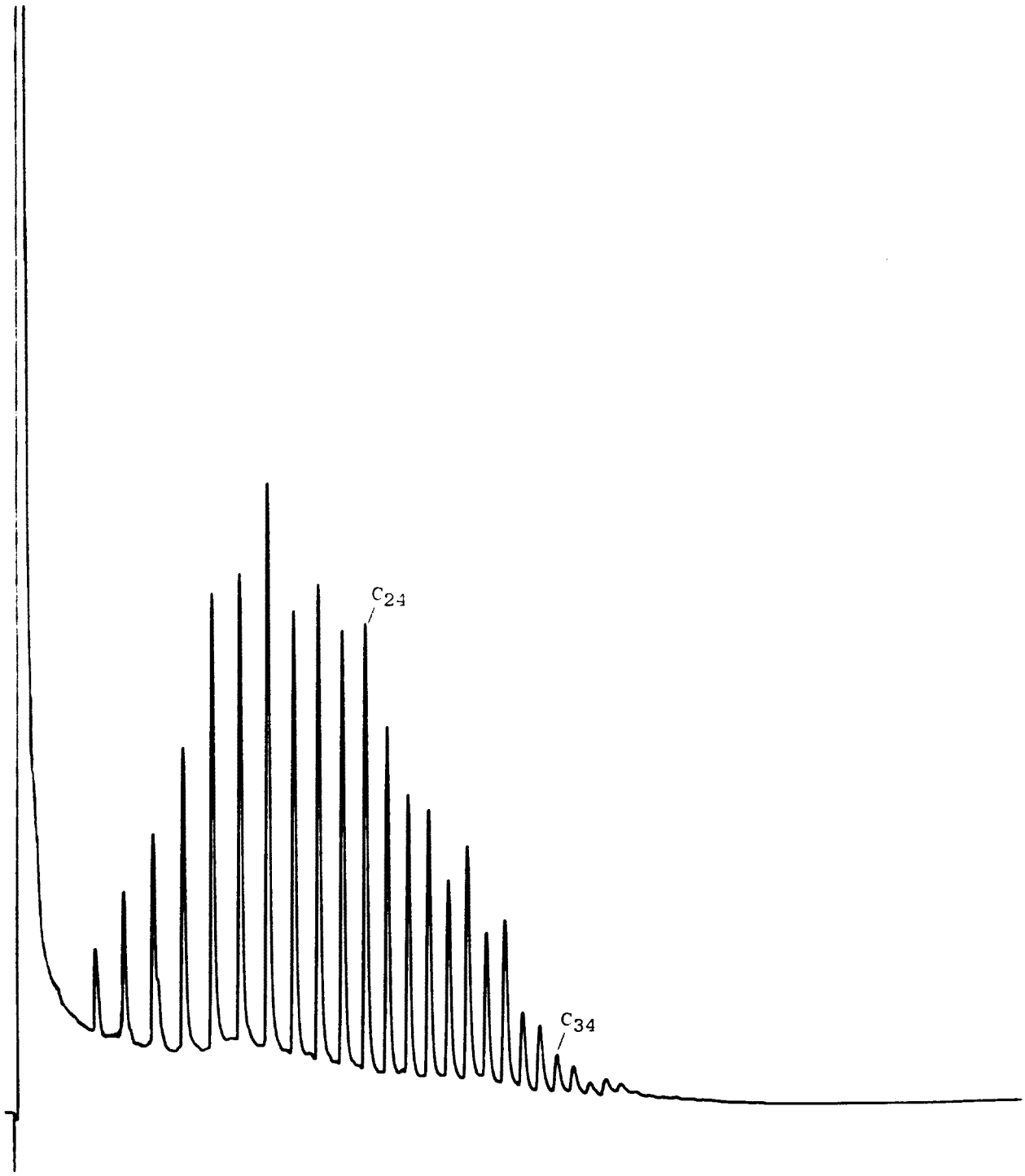
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

7990-8020 feet



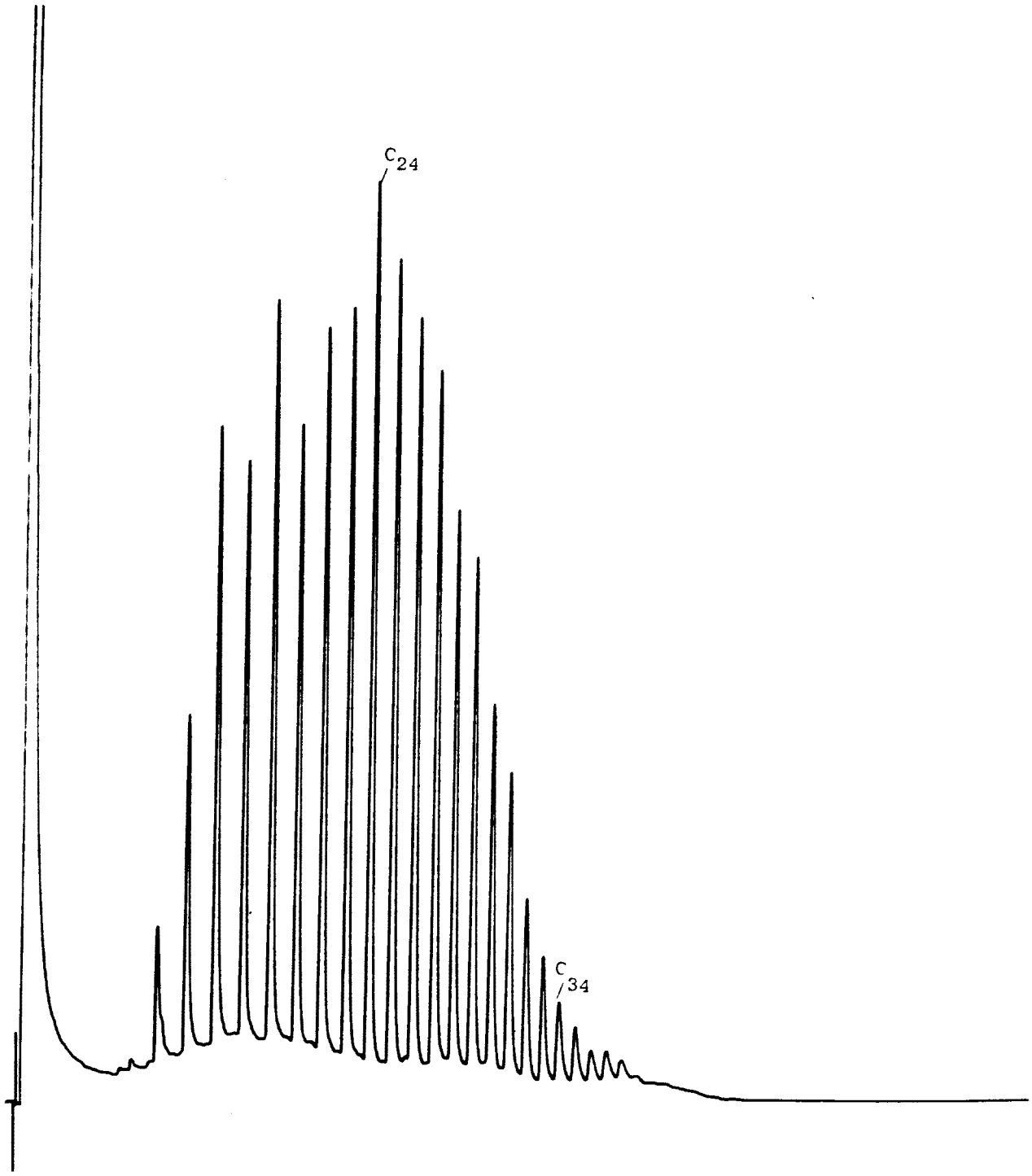
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

8290-8320 feet



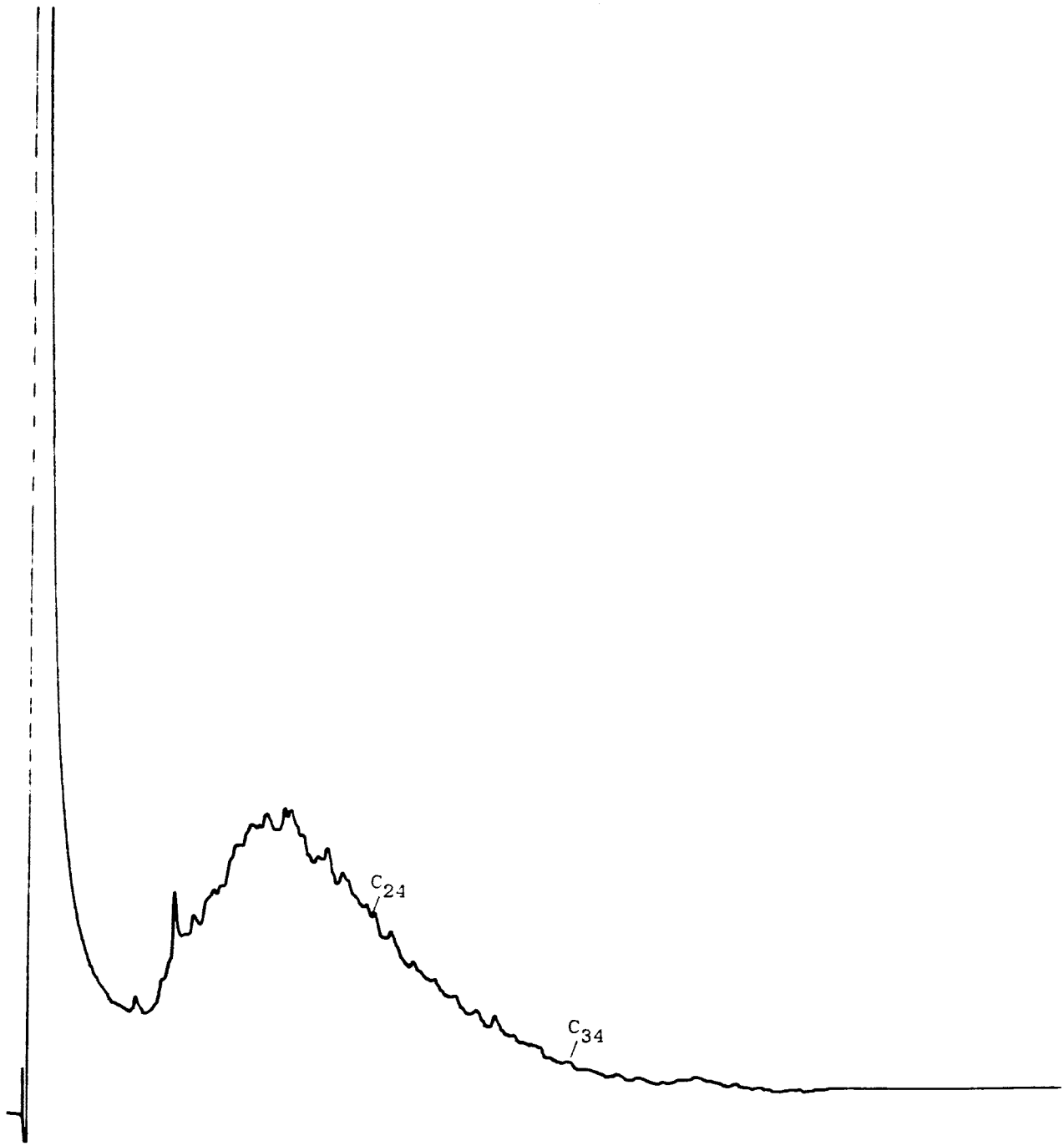
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

8590-8620 feet



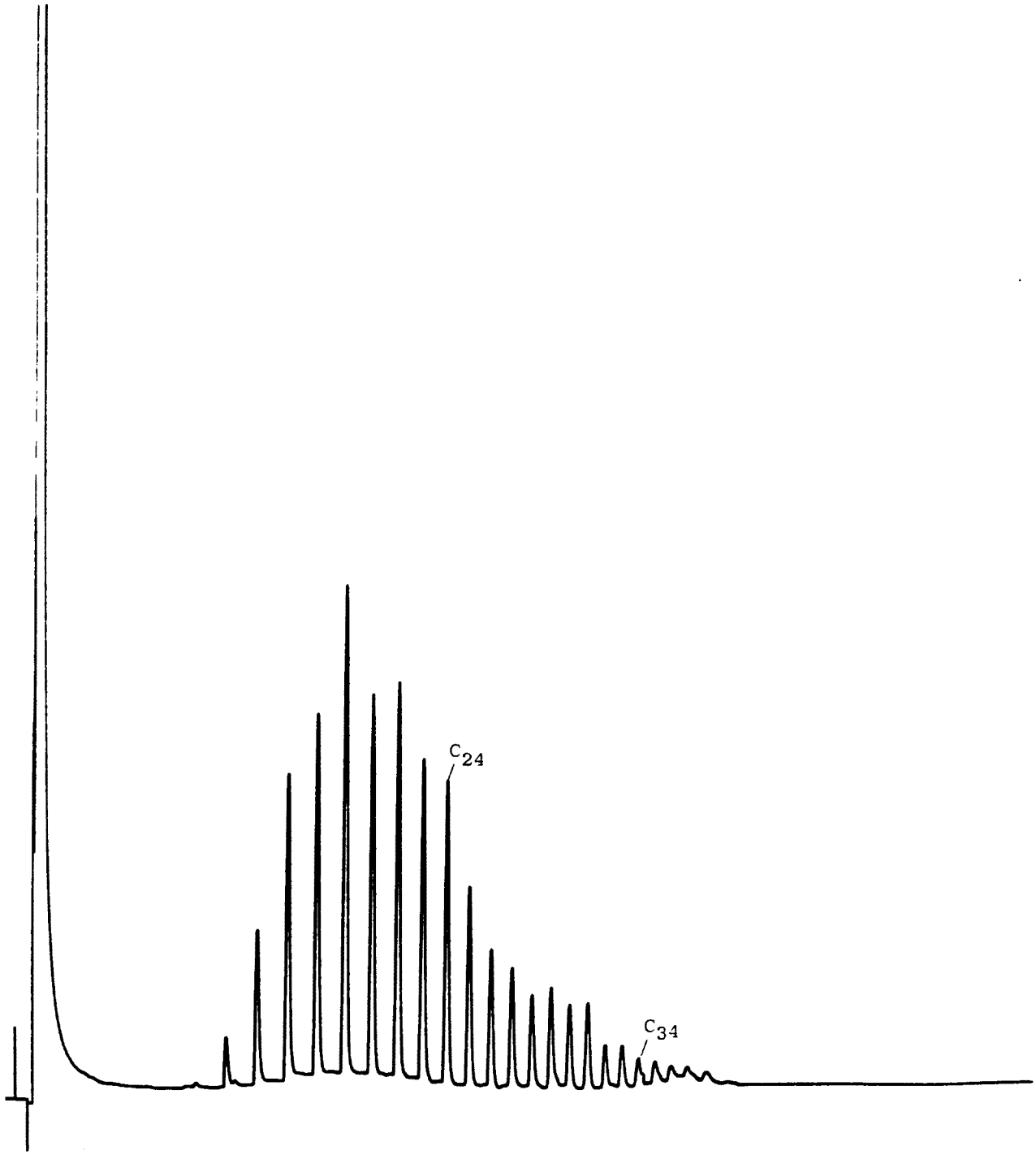
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

8890-8920 feet



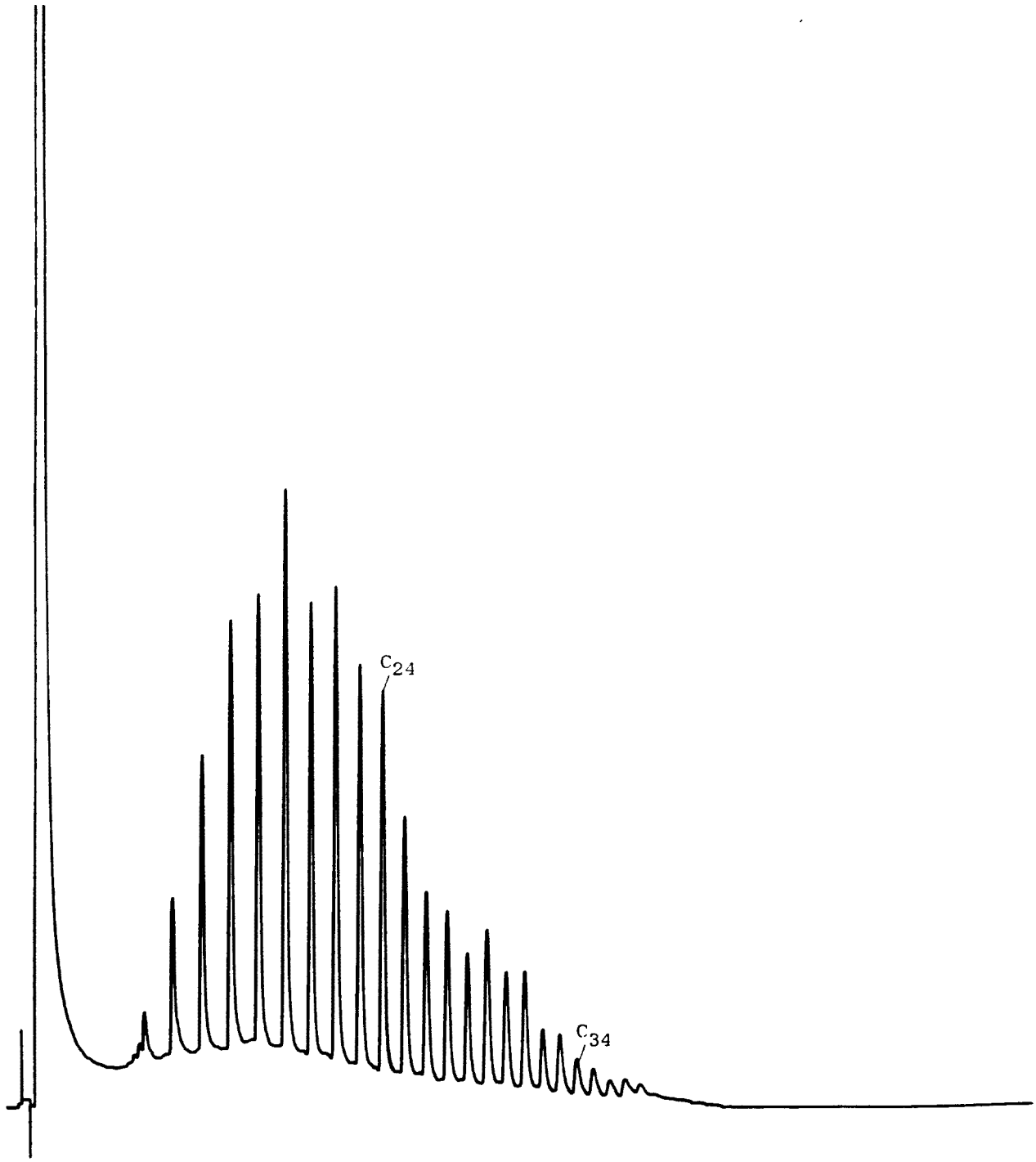
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

9190-9220 feet



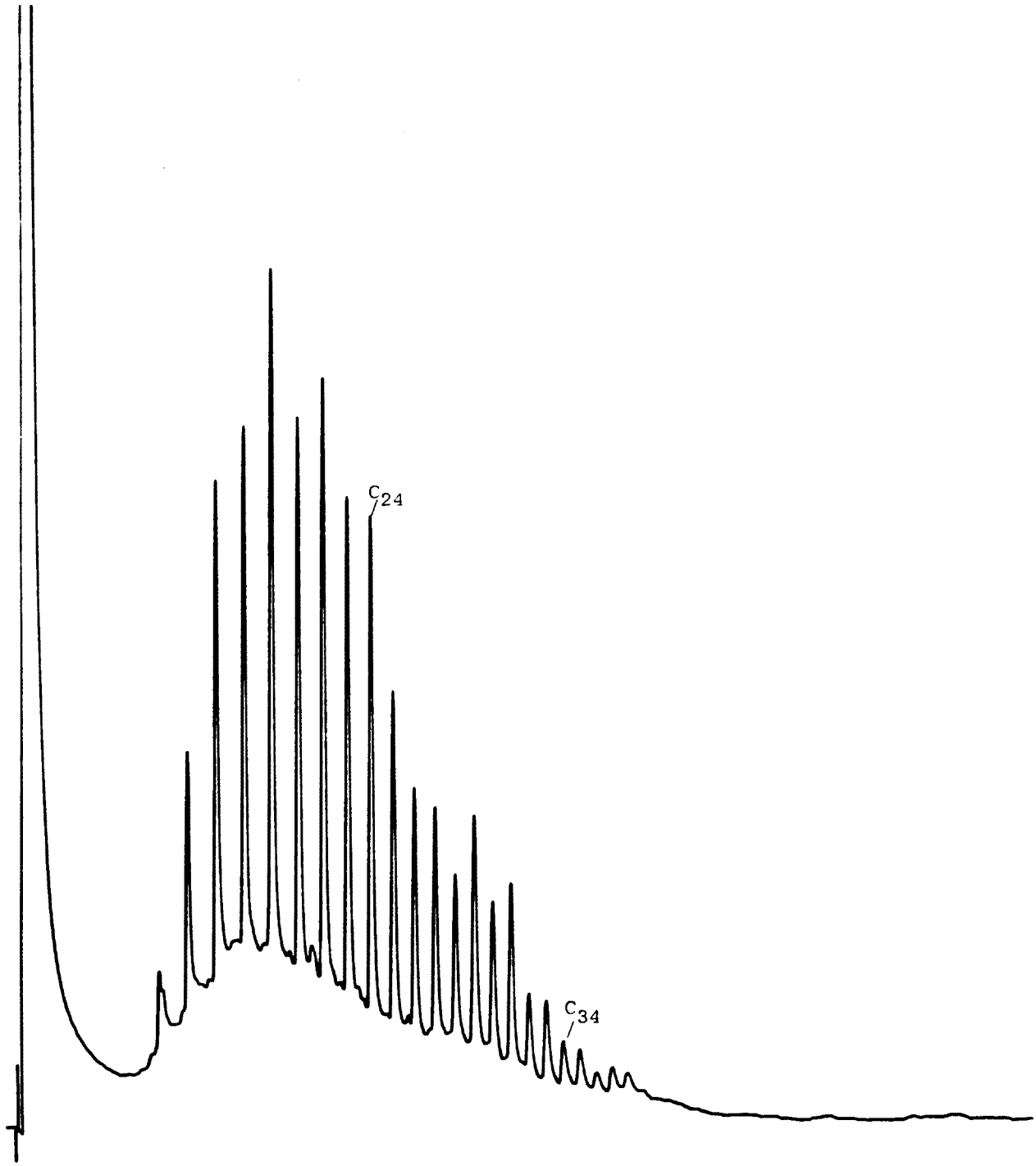
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

9490-9520 feet



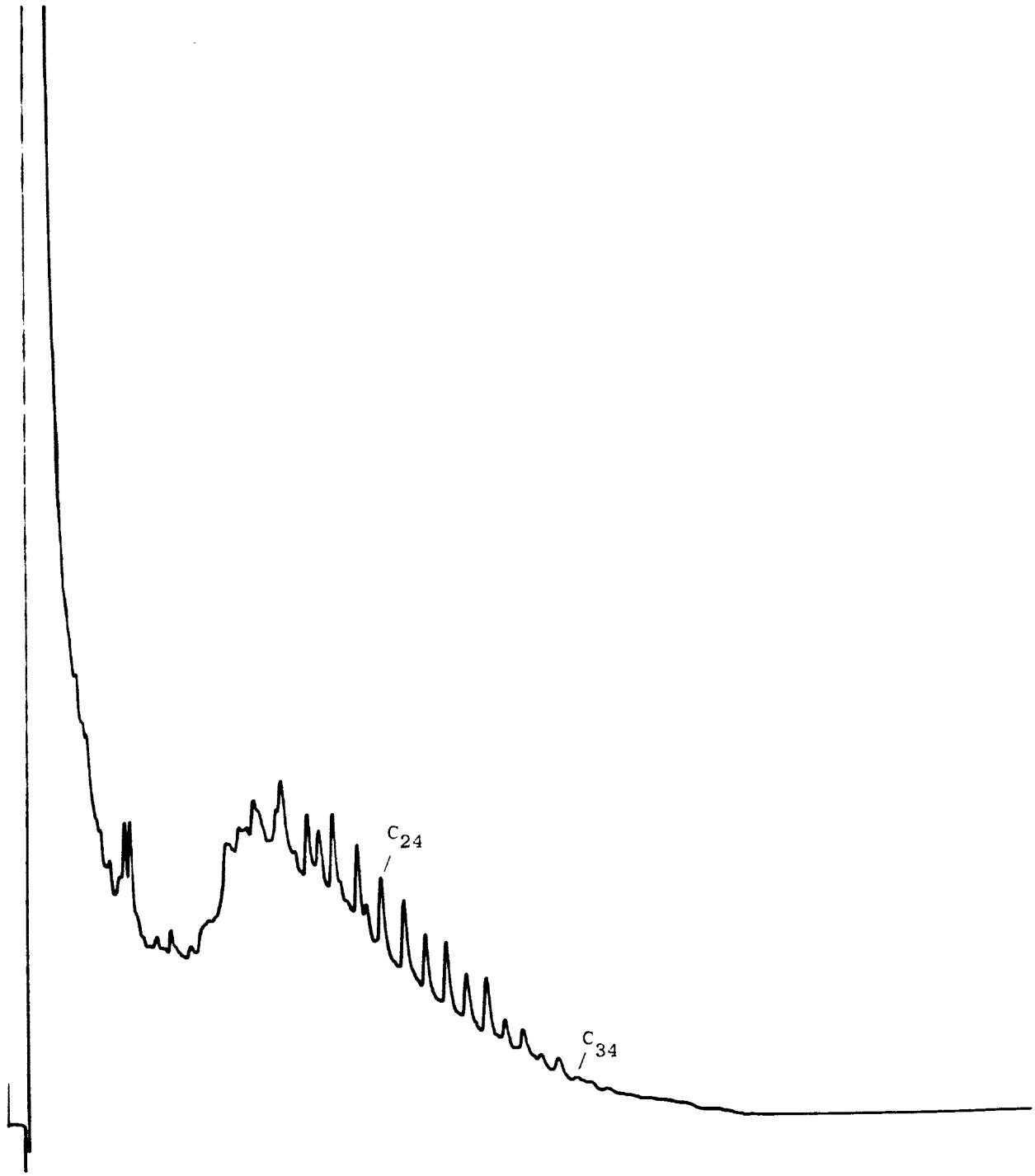
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

9790-9820 feet



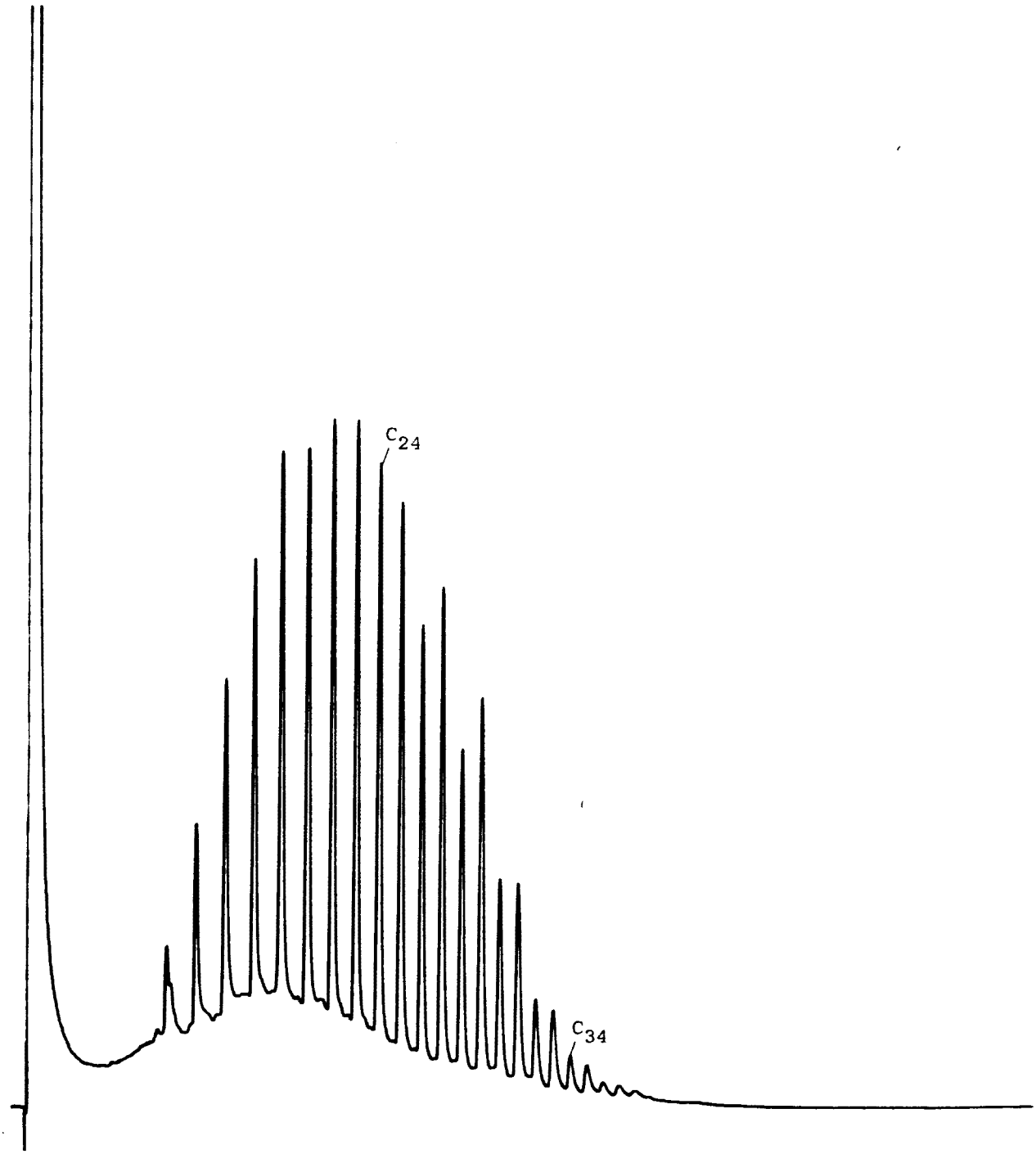
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

10090-10120 feet



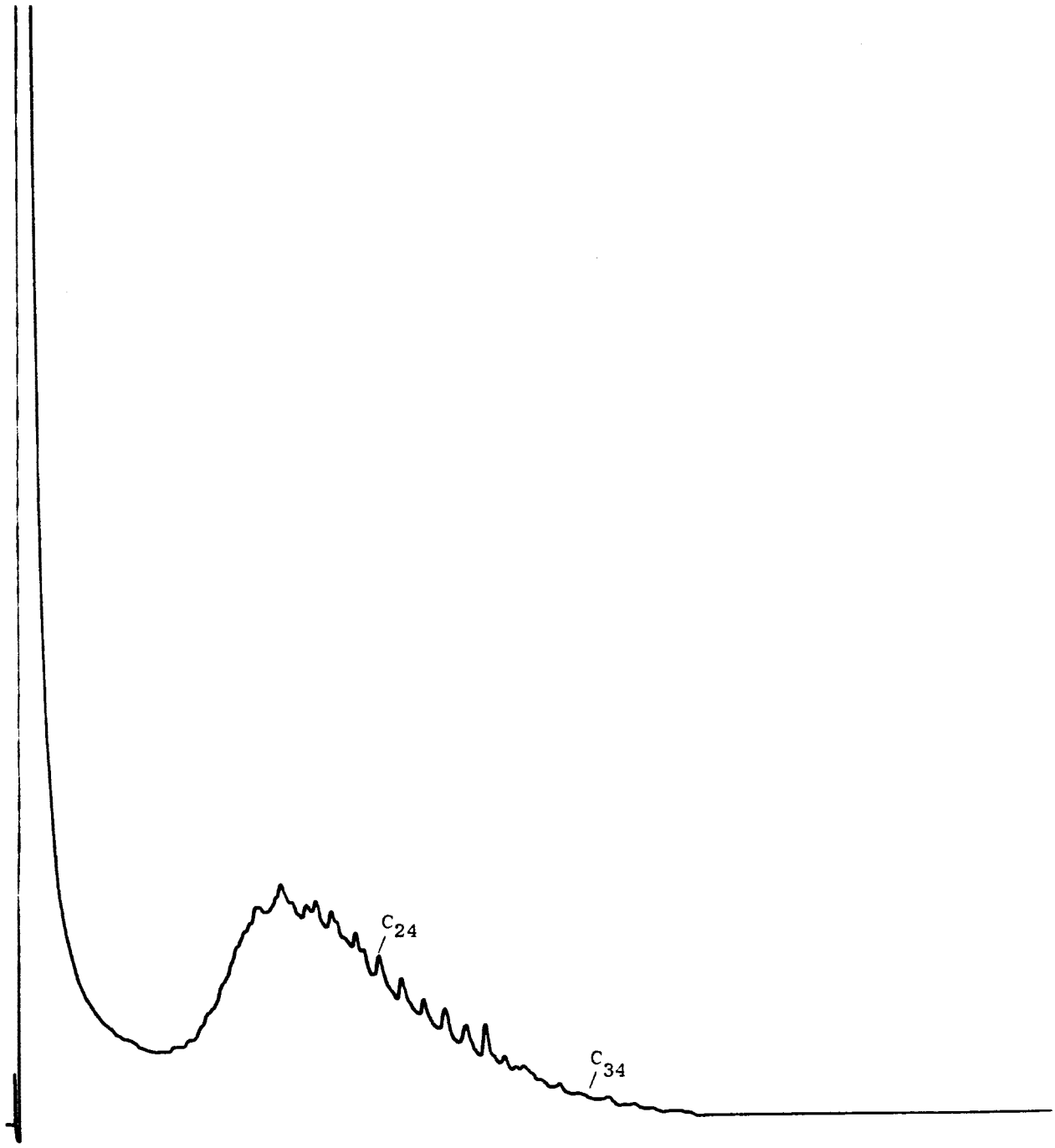
n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

10390-10420 feet



n-PARAFFINS FROM MOLECULAR SIEVE FRACTION

10540-10570 feet



POINT CONCEPTION C.O.S.T. WELL

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Ventura, CA 93003
(805) 659-0130

PT. CONCEPTION STRATIGRAPHIC TEST

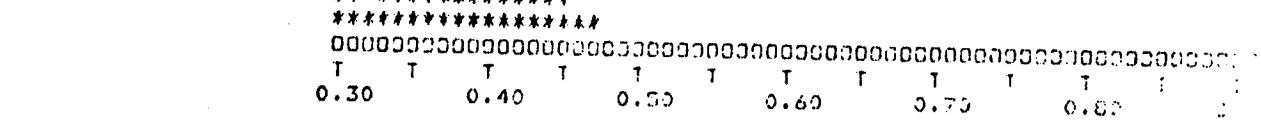
2000-2030 feet

ORDERED REFLECTANCE VALUES ARE:

0.30	0.30	0.30	0.31	0.31	0.32	0.33	0.33	0.33	[illegible]
0.34	0.35	0.35	0.36	0.36	0.36	0.36	0.37	[illegible]	[illegible]
0.37	0.37	0.37	0.37	0.37	0.38	0.38	0.38	0.38	[illegible]
0.38	0.39	0.39	0.39	0.39	0.39	0.39	0.41	0.41	[illegible]
0.41	0.41	0.42	0.42	0.42	0.43	0.43	0.43	0.43	[illegible]
0.44	0.44	0.45	0.45	0.46	0.47				

MEAN	VARIANCE	STD. DEV.	SKEWNESS	KURTOSIS	N
0.39	0.00	0.04	-0.05	-0.56	56

MINIMUM VALUE OF REFLECTANCE IS 0.30
MAXIMUM VALUE OF REFLECTANCE IS 0.47
MODE VALUE OF REFLECTANCE IS 0.37



CLASS WIDTH IS 0.01

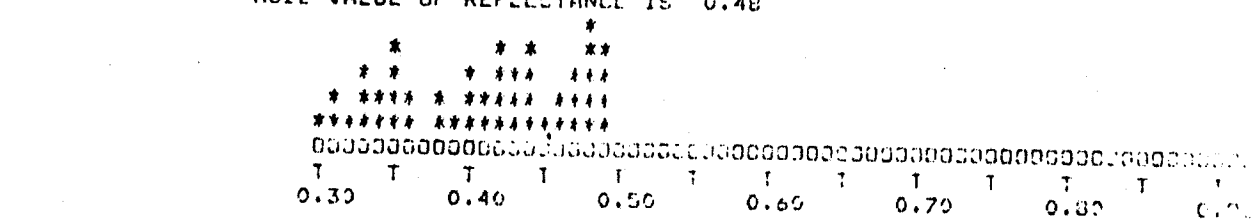
2300-2330 feet

ORDERED REFLECTANCE VALUES ARE:

0.30	0.31	0.31	0.32	0.33	0.33	0.33	0.34	0.34	[illegible]
0.35	0.35	0.35	0.36	0.36	0.36	0.38	0.39	0.40	[illegible]
0.40	0.41	0.41	0.42	0.42	0.42	0.42	0.43	0.43	[illegible]
0.43	0.44	0.44	0.44	0.45	0.46	0.46	0.47	[illegible]	[illegible]
0.48	0.48	0.48	0.48	0.48	0.49	0.49	0.49	[illegible]	

MEAN	VARIANCE	STD. DEV.	SKEWNESS	KURTOSIS	N
0.41	0.00	0.06	-0.25	-1.20	4[illegible]

MINIMUM VALUE OF REFLECTANCE IS 0.30
MAXIMUM VALUE OF REFLECTANCE IS 0.49
MODE VALUE OF REFLECTANCE IS 0.48



CLASS WIDTH IS 0.01

All samples contain low reflectant and partly flouorescent vitrinite particles.

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PT. CONCEPTION STRATIGRAPHIC TEST

2900-2930 feet

```
ORDERED REFLECTANCE VALUES ARE:
   0.30   0.31   0.32   0.33   0.33   0.34   0.34   0.35   0.36   0.36
   0.37   0.37   0.37   0.37   0.38   0.38   0.38   0.39   0.39   0.39
   0.39   0.39   0.39   0.40   0.40   0.41   0.41   0.41   0.42   0.43
   0.43   0.44   0.44   0.44   0.45   0.46   0.47
MEAN  VARIANCE  STD. DEV.  SKEWNESS  KURTOSIS  N
0.39    0.00      0.04      -0.04     -0.59    37
MINIMUM VALUE OF REFLECTANCE IS  0.30
MAXIMUM VALUE OF REFLECTANCE IS  0.47
   MODE VALUE OF REFLECTANCE IS  0.39
              *
             ***
             *** *  *
          ** ****** **
       ******************
       OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
       T    T    T    T    T    T    T    T    T    T    T    T    T
      0.30      0.40      0.50      0.60      0.70      0.80      0.90

CLASS WIDTH IS 0.01
```

3490-3520 feet

```
ORDERED REFLECTANCE VALUES ARE:
   0.30   0.30   0.31   0.31   0.32   0.32   0.32   0.32   0.32   0.32
   0.33   0.33   0.33   0.34   0.37   0.38   0.38   0.39   0.39   0.40
   0.40   0.40   0.41   0.41   0.41   0.41   0.42   0.42   0.42   0.42
   0.42   0.43
MEAN  VARIANCE  STD. DEV.  SKEWNESS  KURTOSIS  N
0.37    0.00      0.05      -0.13     -1.64    32
MINIMUM VALUE OF REFLECTANCE IS  0.30
MAXIMUM VALUE OF REFLECTANCE IS  0.43
   MODE VALUE OF REFLECTANCE IS  0.32
         *         *
         **       **
         **      ***
       ****    *****
       *****  *******
       OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO
       T    T    T    T    T    T    T    T    T    T    T    T    T
      0.30      0.40      0.50      0.60      0.70      0.80      0.90

CLASS WIDTH IS 0.01
```

All samples contain low reflectant and partly flouorescent vitrinite particles.

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PT. CONCEPTION STRATIGRAPHIC TEST

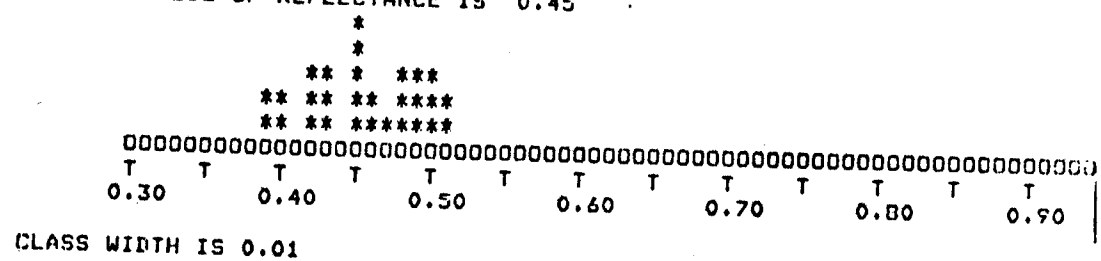
4690-4720 feet

ORDERED REFLECTANCE VALUES ARE:

0.39	0.39	0.40	0.40	0.42	0.42	0.42	0.43	0.43	0.43
0.45	0.45	0.45	0.45	0.45	0.46	0.46	0.47	0.48	0.48
0.48	0.49	0.49	0.49	0.50	0.50	0.50	0.51	0.51	

MEAN	VARIANCE	STD. DEV.	SKEWNESS	KURTOSIS	N
0.46	0.00	0.04	-0.21	-1.08	29

MINIMUM VALUE OF REFLECTANCE IS 0.39
MAXIMUM VALUE OF REFLECTANCE IS 0.51
MODE VALUE OF REFLECTANCE IS 0.45



CLASS WIDTH IS 0.01

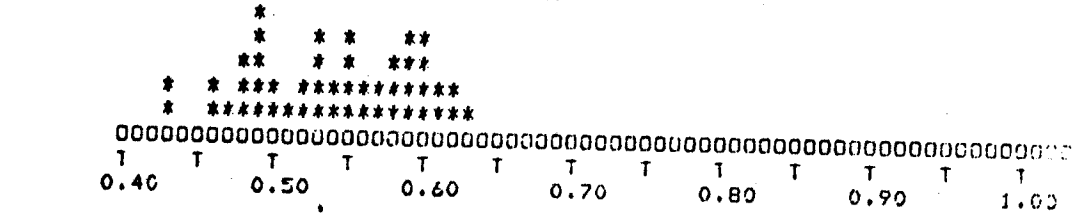
5290-5320 feet

ORDERED REFLECTANCE VALUES ARE:

0.43	0.43	0.46	0.46	0.47	0.48	0.48	0.48	0.49	0.49
0.49	0.49	0.49	0.50	0.50	0.51	0.52	0.52	0.53	0.53
0.53	0.53	0.54	0.54	0.55	0.55	0.55	0.55	0.56	0.56
0.57	0.57	0.58	0.58	0.58	0.59	0.59	0.59	0.59	[illegible]
0.60	0.60	0.60	0.61	0.61	0.62	0.62	0.63		

MEAN	VARIANCE	STD. DEV.	SKEWNESS	KURTOSIS	N
0.54	0.00	0.05	-0.22	-0.95	48

MINIMUM VALUE OF REFLECTANCE IS 0.43
MAXIMUM VALUE OF REFLECTANCE IS 0.63
MODE VALUE OF REFLECTANCE IS 0.49



CLASS WIDTH IS 0.01

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PT. CONCEPTION STRATIGRAPHIC TEST

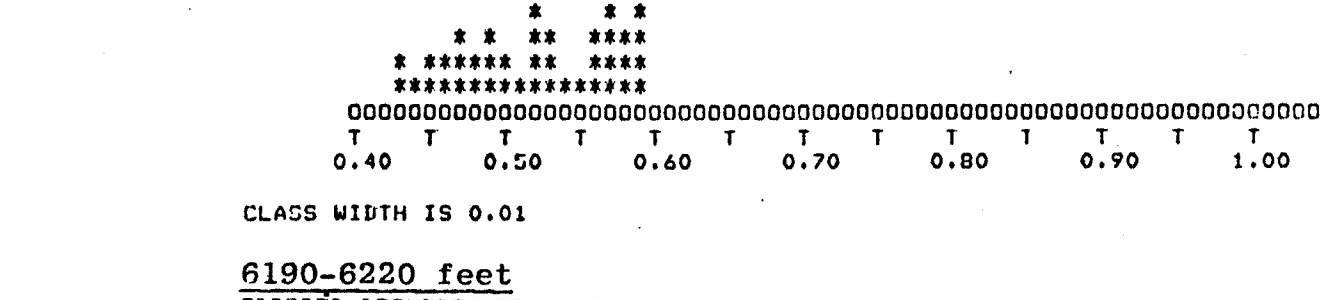
5590-5620 feet

ORDERED REFLECTANCE VALUES ARE:

0.43	0.43	0.44	0.45	0.45	0.46	0.46	0.47	0.47	0.47
0.48	0.48	0.49	0.49	0.49	0.50	0.50	0.51	0.52	0.52
0.52	0.52	0.53	0.53	0.53	0.54	0.55	0.56	0.56	0.56
0.57	0.57	0.57	0.57	0.57	0.57	0.58	0.58	0.58	0.59
0.59	0.59	0.59							

MEAN	VARIANCE	STD. DEV.	SKEWNESS	KURTOSIS	N
0.52	0.00	0.05	-0.23	-1.23	43

MINIMUM VALUE OF REFLECTANCE IS 0.43
MAXIMUM VALUE OF REFLECTANCE IS 0.59
MODE VALUE OF REFLECTANCE IS 0.57



CLASS WIDTH IS 0.01

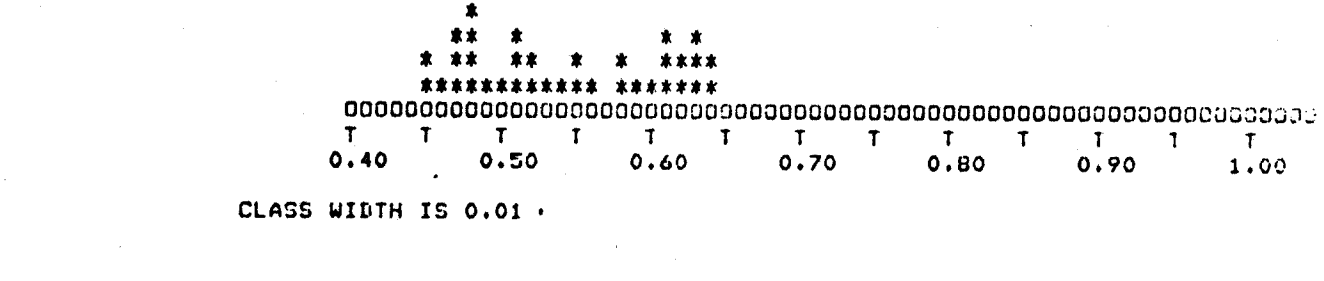
6190-6220 feet

ORDERED REFLECTANCE VALUES ARE:

0.45	0.45	0.46	0.47	0.47	0.47	0.48	0.48	0.48	0.48
0.49	0.50	0.51	0.51	0.51	0.52	0.52	0.53	0.54	0.55
0.55	0.56	0.58	0.58	0.59	0.60	0.61	0.61	0.61	0.62
0.62	0.63	0.63	0.63	0.64	0.64				

MEAN	VARIANCE	STD. DEV.	SKEWNESS	KURTOSIS	N
0.54	0.00	0.06	0.12	-1.44	36

MINIMUM VALUE OF REFLECTANCE IS 0.45
MAXIMUM VALUE OF REFLECTANCE IS 0.64
MODE VALUE OF REFLECTANCE IS 0.48



CLASS WIDTH IS 0.01

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PT. CONCEPTION STRATIGRAPHIC TEST

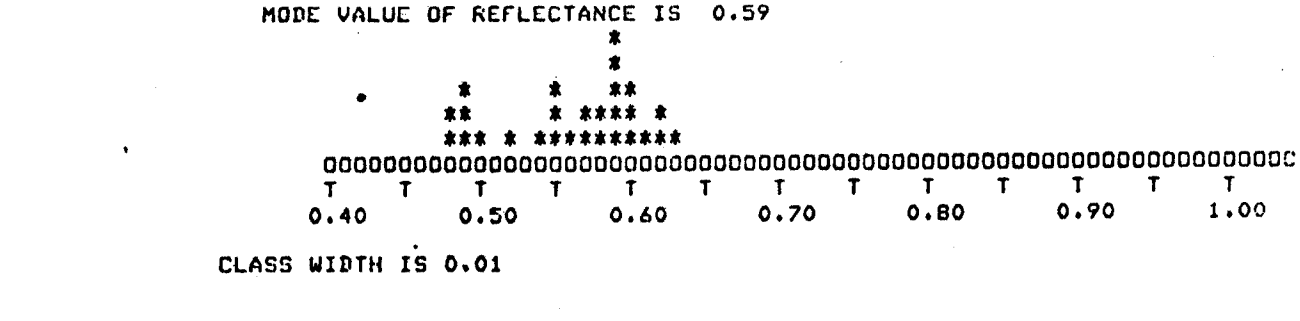
6790-6820 feet

ORDERED REFLECTANCE VALUES ARE:

0.48	0.48	0.49	0.49	0.49	0.50	0.52	0.54	0.55	0.55
0.55	0.56	0.57	0.57	0.58	0.58	0.59	0.59	0.59	0.59
0.59	0.60	0.60	0.60	0.61	0.62	0.62	0.63		

MEAN	VARIANCE	STD. DEV.	SKEWNESS	KURTOSIS	N
0.56	0.00	0.05	-0.53	-0.96	28

MINIMUM VALUE OF REFLECTANCE IS 0.48
MAXIMUM VALUE OF REFLECTANCE IS 0.63
MODE VALUE OF REFLECTANCE IS 0.59



CLASS WIDTH IS 0.01

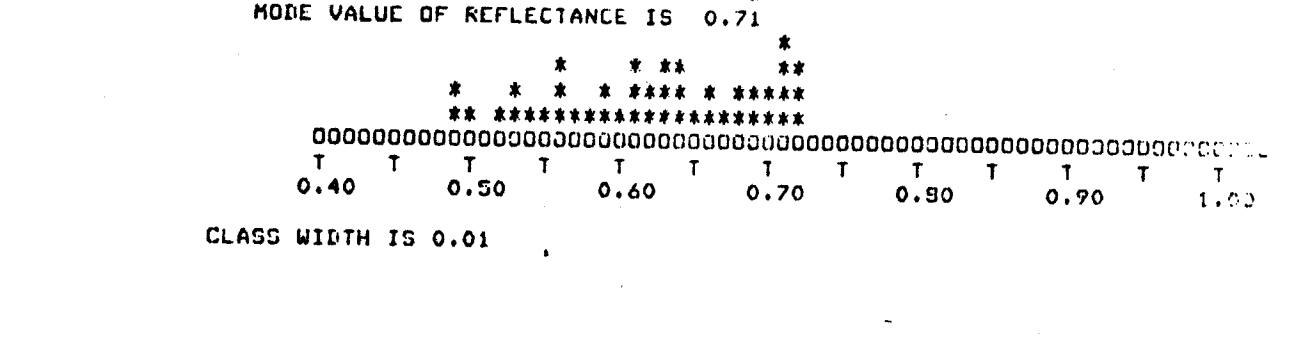
7390-7420 feet

ORDERED REFLECTANCE VALUES ARE:

0.49	0.49	0.50	0.52	0.53	0.53	0.54	0.55	0.56	[illegible]
0.56	0.57	0.58	0.59	0.59	0.60	0.61	0.61	0.61	[illegible]
0.62	0.63	0.63	0.63	0.64	0.64	0.64	0.65	0.66	[illegible]
0.67	0.68	0.68	0.69	0.69	0.70	0.70	0.71	0.71	[illegible]
0.71	0.72	0.72	0.72						

MEAN	VARIANCE	STD. DEV.	SKEWNESS	KURTOSIS	N
0.62	0.00	0.07	-0.28	-0.98	44

MINIMUM VALUE OF REFLECTANCE IS 0.49
MAXIMUM VALUE OF REFLECTANCE IS 0.72
MODE VALUE OF REFLECTANCE IS 0.71



CLASS WIDTH IS 0.01

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PT. CONCEPTION STRATIGRAPHIC TEST

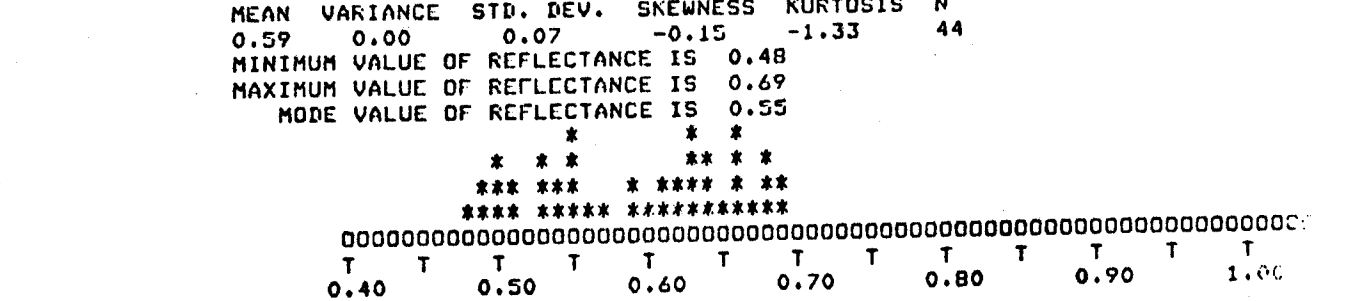
7690-7710 feet

ORDERED REFLECTANCE VALUES ARE:

0.48	0.49	0.49	0.50	0.50	0.50	0.51	0.51	0.53	[illegible]
0.53	0.54	0.54	0.55	0.55	0.55	0.55	0.56	0.57	[illegible]
0.59	0.60	0.61	0.61	0.62	0.62	0.63	0.63	0.63	[illegible]
0.64	0.64	0.64	0.65	0.66	0.66	0.66	0.66	0.67	[illegible]
0.68	0.68	0.69	0.69						

MEAN	VARIANCE	STD. DEV.	SKEWNESS	KURTOSIS	N
0.59	0.00	0.07	-0.15	-1.33	44

MINIMUM VALUE OF REFLECTANCE IS 0.48
MAXIMUM VALUE OF REFLECTANCE IS 0.69
MODE VALUE OF REFLECTANCE IS 0.55



CLASS WIDTH IS 0.01

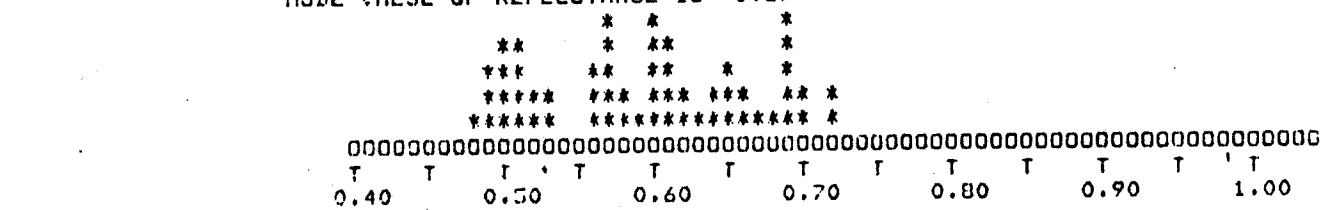
8290-8320 feet

ORDERED REFLECTANCE VALUES ARE:

0.48	0.49	0.49	0.49	0.50	0.50	0.50	0.50	0.51	0.51
0.51	0.51	0.52	0.52	0.53	0.53	0.56	0.56	0.56	0.57
0.57	0.57	0.57	0.57	0.58	0.58	0.59	0.60	0.60	0.60
0.60	0.60	0.61	0.61	0.61	0.61	0.62	0.62	0.63	0.64
0.64	0.65	0.65	0.65	0.66	0.66	0.67	0.68	0.69	0.69
0.69	0.69	0.69	0.70	0.70	0.72	0.72			

MEAN	VARIANCE	STD. DEV.	SKEWNESS	KURTOSIS	N
0.59	0.00	0.07	0.05	-1.13	57

MINIMUM VALUE OF REFLECTANCE IS 0.48
MAXIMUM VALUE OF REFLECTANCE IS 0.72
MODE VALUE OF REFLECTANCE IS 0.57



CLASS WIDTH IS 0.01

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PT. CONCEPTION STRATIGRAPHIC TEST

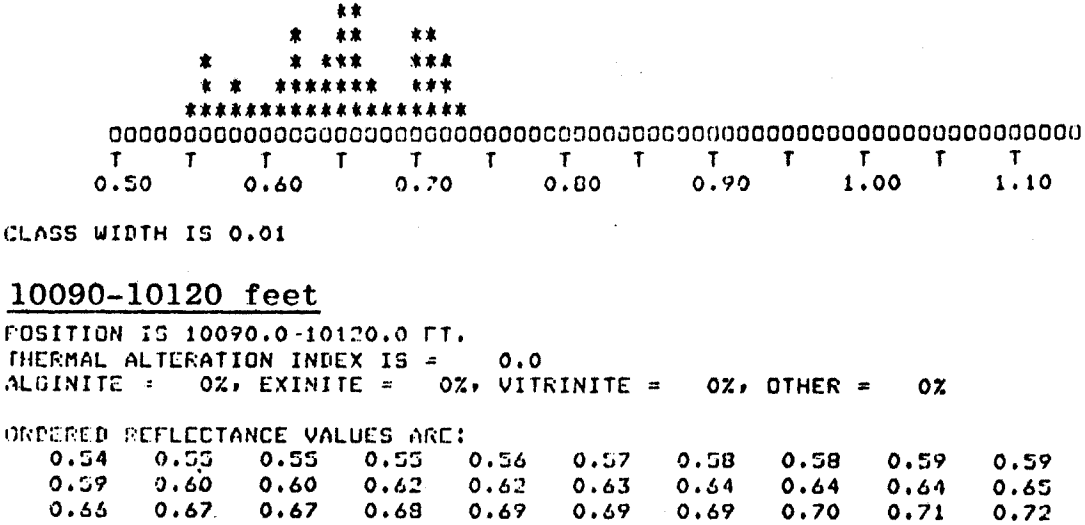
9790-9820 feet

ORDERED REFLECTANCE VALUES ARE:

0.55	0.56	0.56	0.56	0.57	0.58	0.58	0.59	0.60	0.61
0.61	0.62	0.62	0.62	0.62	0.63	0.63	0.64	0.64	0.64
0.65	0.65	0.65	0.65	0.65	0.65	0.66	0.66	0.66	0.66
0.66	0.67	0.67	0.68	0.69	0.70	0.70	0.70	0.70	0.71
0.71	0.71	0.71	0.72	0.72	0.72	0.73			

MEAN	VARIANCE	STD. DEV.	SKEWNESS	KURTOSIS	N
0.65	0.00	0.05	-0.25	-0.83	47

MINIMUM VALUE OF REFLECTANCE IS 0.55
MAXIMUM VALUE OF REFLECTANCE IS 0.73
MODE VALUE OF REFLECTANCE IS 0.65



CLASS WIDTH IS 0.01

10090-10120 feet

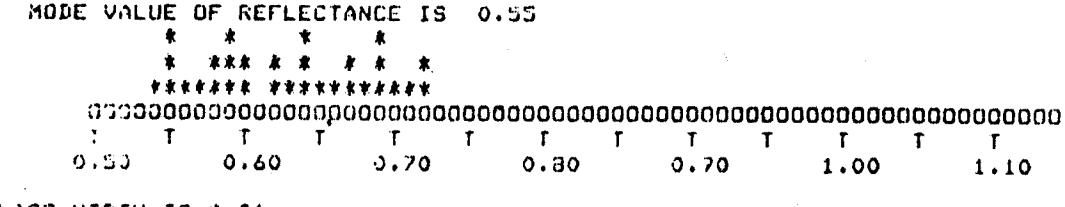
POSITION IS 10090.0-10120.0 FT.
THERMAL ALTERATION INDEX IS = 0.0
ALGINITE = 0%, EXINITE = 0%, VITRINITE = 0%, OTHER = 0%

ORDERED REFLECTANCE VALUES ARE:

0.54	0.55	0.55	0.55	0.56	0.57	0.58	0.58	0.59	0.59
0.59	0.60	0.60	0.62	0.62	0.63	0.64	0.64	0.64	0.65
0.66	0.67	0.67	0.68	0.69	0.69	0.69	0.70	0.71	0.72
0.72									

MEAN	VARIANCE	STD. DEV.	SKEWNESS	KURTOSIS	N
0.63	0.00	0.06	0.06	-1.23	31

MINIMUM VALUE OF REFLECTANCE IS 0.54
MAXIMUM VALUE OF REFLECTANCE IS 0.72
MODE VALUE OF REFLECTANCE IS 0.55



CLASS WIDTH IS 0.01

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PT. CONCEPTION STRATIGRAPHIC TEST

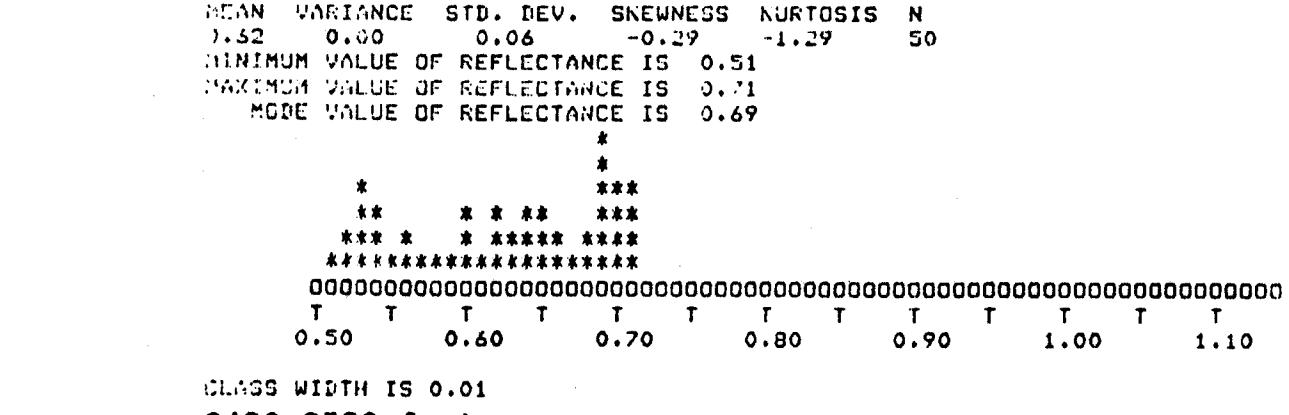
8890-8920 feet

ORDERED REFLECTANCE VALUES ARE:

0.51	0.52	0.52	0.53	0.53	0.53	0.53	0.54	0.54	0.54
0.55	0.56	0.56	0.57	0.58	0.59	0.60	0.60	0.60	0.61
0.62	0.62	0.62	0.63	0.63	0.64	0.64	0.64	0.65	0.65
0.65	0.66	0.66	0.67	0.68	0.68	0.69	0.69	0.69	0.69
0.69	0.69	0.70	0.70	0.70	0.70	0.71	0.71	0.71	0.71

MEAN	VARIANCE	STD. DEV.	SKEWNESS	KURTOSIS	N
0.62	0.00	0.06	-0.29	-1.29	50

MINIMUM VALUE OF REFLECTANCE IS 0.51
MAXIMUM VALUE OF REFLECTANCE IS 0.71
MODE VALUE OF REFLECTANCE IS 0.69



CLASS WIDTH IS 0.01

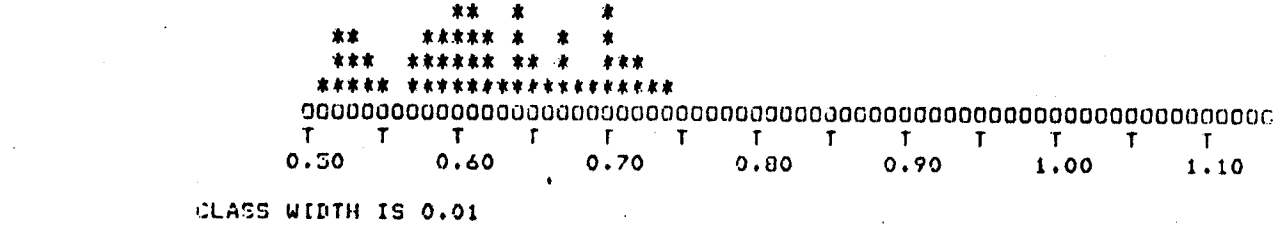
9490-9520 feet

ORDERED REFLECTANCE VALUES ARE:

0.51	0.52	0.52	0.52	0.53	0.53	0.53	0.54	0.54	0.55
0.57	0.57	0.58	0.58	0.58	0.59	0.59	0.59	0.60	0.60
0.60	0.60	0.60	0.61	0.61	0.61	0.61	0.62	0.62	0.62
0.63	0.64	0.64	0.64	0.64	0.65	0.65	0.66	0.67	0.67
0.67	0.68	0.69	0.70	0.70	0.70	0.70	0.71	0.71	0.72
0.72	0.73	0.74							

MEAN	VARIANCE	STD. DEV.	SKEWNESS	KURTOSIS	N
0.62	0.00	0.06	0.06	-0.95	53

MINIMUM VALUE OF REFLECTANCE IS 0.51
MAXIMUM VALUE OF REFLECTANCE IS 0.74
MODE VALUE OF REFLECTANCE IS 0.60



CLASS WIDTH IS 0.01

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PT. CONCEPTION STRATIGRAPHIC TEST

10390-10420 feet

```
ORDERED REFLECTANCE VALUES ARE:
   0.56   0.58   0.59   0.59   0.60   0.63   0.64   0.65   0.65   0.65
   0.66   0.67   0.70   0.70   0.71   0.71   0.71   0.72
MEAN   VARIANCE   STD. DEV.   SKEWNESS   KURTOSIS   N
0.65    0.00       0.05       -0.28      -1.23     18
MINIMUM VALUE OF REFLECTANCE IS  0.56
MAXIMUM VALUE OF REFLECTANCE IS  0.72
   MODE VALUE OF REFLECTANCE IS  0.65
                          *     *
                *     *    **
              * ***  ****  ****
        0000000000000000000000000000000000000000000000000000000000000000000
        T    T    T    T    T    T    T    T    T    T    T    T    T
      0.50      0.60      0.70      0.80      0.90      1.00      1.10

CLASS WIDTH IS 0.01
```

10540-10571 feet

```
ORDERED REFLECTANCE VALUES ARE:
   0.58   0.59   0.59   0.60   0.61   0.64   0.66   0.67   0.67   0.68
   0.68   0.68   0.68   0.69   0.69   0.69   0.70   0.70   0.70   0.70
   0.71   0.71
MEAN   VARIANCE   STD. DEV.   SKEWNESS   KURTOSIS   N
0.66    0.00       0.04       0.91       0.64      22
MINIMUM VALUE OF REFLECTANCE IS  0.58
MAXIMUM VALUE OF REFLECTANCE IS  0.71
   MODE VALUE OF REFLECTANCE IS  0.68
                          * *
                          ***
                *        *****
               ****   * ******
        0000000000000000000000000000000000000000000000000000000000000000000
        T    T    T    T    T    T    T    T    T    T    T    T    T
      0.50      0.60      0.70      0.80      0.90      1.00      1.10

CLASS WIDTH IS 0.01
```

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2 of 2

United States Department of the Interior

GEOLOGICAL SURVEY

Suite 240
1340 West Sixth Street
Los Angeles, California 90017

November 9, 1979

National Geophysical and Solar -
Terrestrial Data Center
NOAA/EDIS/NGSDC, Code D-621
Boulder, Colorado 80303

Re: USGS Data Set PA Cost
OCS-Cal 78-164 Well No. 1

Attention: Ms. Carla Potter

Gentlemen:

We are enclosing non-proprietary well information on a cost well spudded on October 7, 1978 in the Point Conception area with assigned geological permit number OCS Cal 78-164, issued on July 24, 1978. The APD was approved on October 2, 1978, and has API number 04-310-20001. This well information is available as the first lease from Lease Sale No. 48 (within 50 miles from the well) was issued on September 1, 1979, making well information available on November 1, 1979.

We are enclosing our best reproducible logs to you. As we are sending you our original copies, please return them within two weeks, if possible.

A copy of the well history and summary analysis are also enclosed for your use.

Please return all items per Instructural Memorandum No. 79-02-RE page 20, under "C. Material to be returned by NGSDC to originating OCS Area office."

We are also enclosing a copy of our draft Technical Announcement for OCS Cal 78-164 No. 1.

Sincerely yours,

F. J. Schambeck

F. J. Schambeck
Oil and Gas Supervisor
Pacific Area

Enclosures

ONE HUNDRED YEARS OF EARTH SCIENCE IN THE PUBLIC SERVICE

WELL NAME: ECS-OCS-CAL-78-164 no. 1

ITEM	TYPE LOG	RUN	DATE	LOG INTERVAL	LENGTH	SQ. FT.
1.	DIL	1	10-21-78	1962-3014	650"	54.17
		2	10-29-78	2989-5448		
		3	11-28-78	5447-9340		
		4	12-11-78	9096-10548		
2.	DIL	1	10-21-78	1962-3014	200"	16.67
		2	10-29-78	2989-5448		
		3	11-28-78	5447-9340		
		4	12-11-78	9100-10548		
3.	BHC	1	10-21-78	1962-3016	88"	7.33
4.	BHC	1	10-21-78	1962-3016	588"	49.
		2	10-29-78	2990-5452		
		3	11-29-78	5441-9350		
		4	12-11-78	9136-10553		
5.	BHC	1	10-21-78	1962-3016	200"	16.67
		2	10-29-78	2990-5452		
		3	11-29-78	5441-9350		
		4	12-11-78	9136-10553		
6.	CN-FD	1	10-21-78	1962-3016	725"	60.42
		2	10-29-78	2990-5453		
		3	11-29-78	5446-9344		
		4	12-11-78	9100-10553		
7.	Mud		10-07-78	1997-10571	182"	15.17
8.	DM	1	10-30-78	3007-5444	250"	20.83
9.	DM	3	12-11-78	5454-10542	400"	33.33
10.	CD	1	10-29-78	2990-5452	169"	14.08
11.	CD	2	12-11-78	5440-10547	438"	36.5
12.	CBL	1	11-06-78	1464-5069	238"	19.83
13.	SL	1	10-29-78	2990-5452	463"	38.58
		2	12-11-78	5442-10557		
14.	FF	1	10-21-78	1962-3016	538"	44.83
		2	10-29-78	2990-5453		
		3	11-29-78	5447-9344		
		4	12-11-78	9100-10553		
15.	CPL	1	10-21-78	1962-3011	663"	55.25
		2	10-29-78	2990-5446		
		3	11-28-78	5447-9345		
		4	12-11-78	9136-10553		

WELL NAME: ECS-OCS-CAL-78-164 no. 1

ITEM	TYPE LOG	RUN	DATE	LOG INTERVAL	LENGTH	SQ. FT.
16.	DDPL				48"	4.
17.	PAL				48"	4.
18.	TDL				48"	4.

TOTAL: 494.66 sq. ft.

United States Department of the Interior

GEOLOGICAL SURVEY

160 FEDERAL BUILDING
1340 W. SIXTH STREET
LOS ANGELES, CALIFORNIA 90017

December 18, 1979

National Geophysical and Solar-Terrestrial Data Center
NOAA/EDIS/NGSDC, Code D-621
Boulder, Colorado 80303

Attention: Ms. Carla Potter

Re: Deep Stratigraphic Test OCS Cal 78-164,
Well No. 1, Point Conception, California

Gentlemen:

In recent telephone conversations between Ms. Carla Potter of your office and Mr. Stephen Zane of this office on the submission of well records and data by USGS to National Geophysical and Solar-Terrestrial Data Center, was again discussed. This office will provide your office with the "best available" copies of well records and data. Also, it was determined that since well logs would be photographed on a continuous flow camera, the National Geophysical and Solar-Terrestrial Data Center prefers blackline prints; however, blueline prints are acceptable.

We are resubmitting the following data which are "best available" copies:

High resolution dipmeter
Dipmeter cluster calculation listing
Tabular listing of Saraband (a sandstone analysis)
Well summary
Form 9-330
Core analysis
Core description
General discussion of well by interval
Geochemical Service Report
Well logs

We would like the return of the submitted documents within two weeks. We appreciate your position in this cooperative effort between agencies and we will do our utmost to furnish your agency with the best data as you requested.

Sincerely yours,

F. J. Schambeck

F. J. Schambeck
Oil and Gas Supervisor
Pacific Region

last originals mailed 2/21/80

United States Department of the Interior

GEOLOGICAL SURVEY

160 FEDERAL BUILDING
1340 W. SIXTH STREET
LOS ANGELES, CALIFORNIA 90017

JAN 31 1980

January 17, 1980

Ms. Carla Potter
Marine Geology & Geophysics Branch
Code D 621
NOAA/EDIS/NGSDC
Boulder, Colorado 80303

Dear Ms. Potter:

Enclosed as you requested is a copy of Open File Report 79-1218 "Geologic Studies of the Point Conception Deep Stratigraphic Test Well, OCS-Cal 78-164 No. 1, Outer Continental Shelf, Southern California, United States." If you have any further questions regarding this or any other matter, please contact Mr. Richard Ensele of this office at (FTS) 798-2846.

Sincerely yours,

H. T. Cypher

H. T. Cypher
Acting Oil and Gas Supervisor
Pacific Region

Enclosure

ONE HUNDRED YEARS OF EARTH SCIENCE IN THE PUBLIC SERVICE