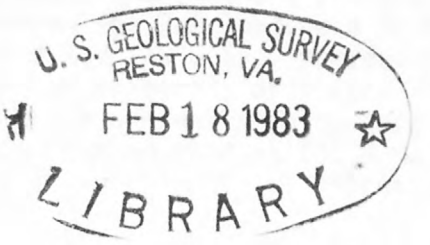

DESCRIPTION AND PRELIMINARY INTERPRETATION OF CORE CL-80-2, CLEAR LAKE, LAKE COUNTY, CALIFORNIA

by

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ABSTRACT

Coring operations in the west basin of Clear Lake produced a regional Quaternary reference section to augment and extend a previous study of cores from Clear Lake. This report concerns 165.8-m-long core CL-80-2, which was continuously cored in 8.0 m of water and has a 65.0 percent recovery. The sediments in core CL-80-2 are composed primarily of clayey and silty sapropelic mud that is similar to those presently being deposited in the lake. The core ended in coarse CO_2-charged sand at 165.8 m. The age of sediment at the bottom of the core is inferred to be approximately 175,000 years.

INTRODUCTION

Clear Lake is located about 120 km north of San Francisco and lies in a fault-bounded, seismically active intermontane valley north of the Geysers geothermal field (fig. 1). Two cores, 177.0 and 165.8 m long, were taken in the lake in July and August 1980 for multidisciplinary studies to determine the stratigraphic, tectonic, paleontologic, and paleoclimatic history of the Clear Lake basin (Sims and Rymer, 1981). The objectives of these studies are (1) to determine the stratigraphic characteristics useful for developing a reference section for correlation with other late Quaternary continental and marine deposits and (2) to characterize the late Quaternary paleoclimatic record and tectonic framework of the area. This report is concerned with the detailed description and results of preliminary analyses of CL-80-2. A brief description of the geomorphology, geology, and geologic history of the Clear Lake basin is summarized by Sims, Rymer and Perkins (1981).

Prior to the current coring operations eight cores, ranging in length from 13.9 to 115.2 m, were taken in Clear Lake in 1973 (fig. 1, table 1). Analyses of these cores yielded a continuous lithostratigraphic and biostratigraphic record from which a history of volcanic activity, sedimentation, tectonism, and paleoclimate was reconstructed (Sims and Rymer, 1975a; Sims, 1976; Casteel and others, 1977; Sims, 1981a; Sims and White, 1981; Adam and others, 1981). The longest of these cores, core CL-73-4 (table 1), allowed the determination of the major part of this history from the present to about 130,000 years ago (Sims, Adam, and Rymer, 1981; Adam and others, 1981).

Analysis of the earlier cores shows that sedimentation in Clear Lake has varied significantly from the sapropelic mud that is presently being deposited. Kelsey Creek was a major source of sediment influx to the lake throughout the late Pleistocene and Holocene. In late Pleistocene time Kelsey Creek carried coarse clastic debris into the lake to form a delta-like wedge-shaped mass of sediments (Sims, 1976). These coarse deltaic sediments extend northward from the mouth of Kelsey and Adobe Creeks into the lake, and were deposited between 40,000 and 10,000 years ago (Sims, 1976). Following deposition of this coarse clastic wedge, deposition of sapropelic mud characteristic of present-day open-lake conditions resumed. Similarly, but to a lesser extent, creeks in the Upper Lake area have periodically brought sand and gravel into the lake. The two arms of the lake (fig. 1) contain abundant peat beds that accumulated in water <2 m deep. Peat deposition terminated in the arms about 11,000 years ago when the water depth abruptly increased to <2 m and sediment dominated by sapropelic mud began accumulating (Sims, 1976). The youngest peat deposits cored in the Highlands Arm of Clear Lake are overlain by 6.9 m of sapropelic mud and 12.5 m of water, suggesting that about 17 m of vertical movement has occured since about 10,000 yr B.P. (Sims and Rymer, 1975b).

Sediments in 177.0-m-long core CL-80-1 consist of clayey to silty sapropelic mud interbedded with clayey silt, sand, and minor gravel, all interbedded with thin ash beds. Coarse sand and gravel occur between 151.8 and 159.3 m and below 165.8 m in core CL-80-1 (Sims, Rymer, and Perkins, 1981). Preliminary palynological analyses by Heusser and Sims (1981) and stratigraphic correlations with the earlier cores suggest that core CL-80-1 is approximately 175,000 years old at its base (Sims, Rymer, and Perkins, 1981).

Pleistocene lacustrine deposits older than those in cores from Clear Lake taken in 1973 and 1980 (Sims, 1976; Sims and Rymer, 1981) are found in isolated outcrops and in water wells dug in alluviated valleys near the lake. These older lacustrine deposits, referred to as the Lower Lake and Kelseyville

Formations (Rymer, 1981), are present near the south end of the Highlands Arm and in Big Valley. The Lower Lake and Kelseyville Formations were presumably deposited in separate subbasins of the same lake, and are possibly in part correlative with sediment beneath Clear Lake (Rymer, 1981). Pleistocene and Holocene lacustrine deposits are also present in the Upper Lake area, north of the west basin of the lake (Lake County Flood Control and Water Conservation District, 1978).

Core CL-80-2 was taken using rotary, wireline, continuous-coring methods from a barge-mounted drill rig anchored in the lake. The core is 6 cm in diameter and was removed in 3.05-m-long segments. Recovered core segments were transported to Menlo Park for later subsampling. Prior to subsampling

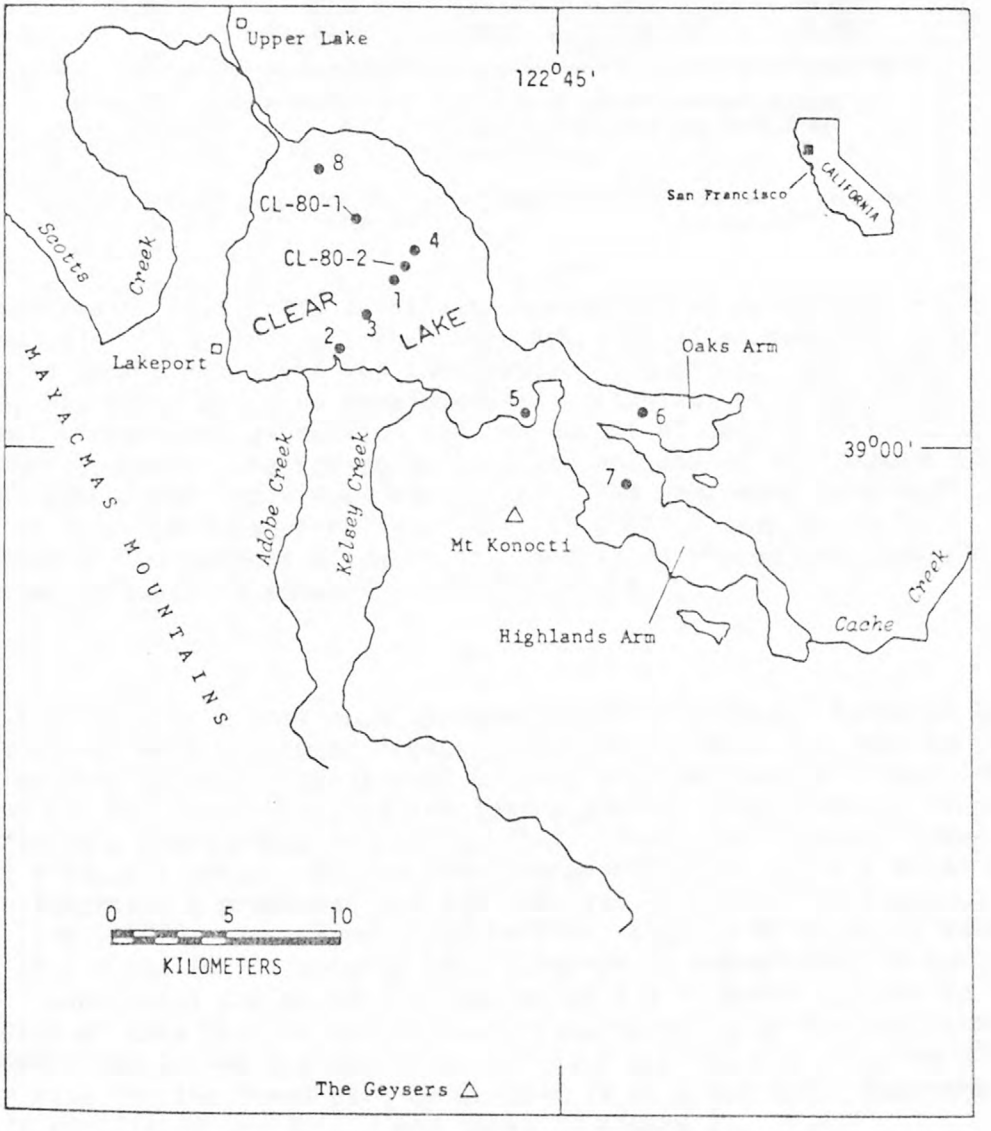

Figure 1. Map showing the location of cores CL-80-1 and CL-80-2 in Clear Lake, California. Core sites with single-digit numbers are from the 1973 coring program (Sims, 1976) and have prefixes CL-73. See table 1 for lengths and recovery rates of the various cores.

Table 1. Total length, recovery percent, number of ash beds, and estimated maximum age for cores from Clear Lake, Calif. (modified from Sims, 1976).

Core No.	Water Depth (meters)	Core Length (meters)	Recovery (percent)	Number of ash beds	Estimated age of core bottom (yr)
80-1	7.5	177.0	66.7	54	175,000
80-2	8.0	165.8 1/	65.0 2/	23	175,000
73-1	8.8	52.6	35.0	6	40,000
73-2	4.3	13.9	88.0	0	10,000-15,000
73-3	8.4	69.0	96.0	43	36,000
73-4	8.4	115.2	92.0	56	130,000
73-5	7.6	22.6	94.0	7	28,000
73-6	12.2	21.6	99.0	8	36,000
73-7	12.8	27.4	94.9	26	40,000
73-8	5.2	20.5	99.6	5	24,000

1/ Core length for core CL-80-2 calculated from top of sediment column to lowest attempted coring depth, even though the intervals from 0 to 53.42 m and 77.20 to 98.68 m were drilled out.

2/ Recovery percent calculated for cored segments of lake sediment and does not include drilled out segments.

each segment was first split lengthwise, photographed using both black-and-white and color film, and described (see Appendix A for detailed descriptions). An 8-mm-thick slice was then removed from one of the segment halves and X-ray radiographed. The developed radiograph was examined to determine the extent of sediment disruption and the amount of debris included in the top of the core segment. The radiographed slice and one of the segment halves were then cut up for individual subsamples. The remaining core half was sealed in a 6-mil polyethylene bag as an archive sample. A full description of the methods of sampling, laboratory procedures, and a catalog of the samples taken is summarized in Appendix B.

RESULTS

Two intervals were continuously cored at site CL-80-2. Parts of the sediment column were not cored because: (1) site CL-80-2 is close to site CL-73-4 and the uncored intervals of CL-80-2 are represented in the latter core, and (2) the procedure used was less expensive than complete recoring of those intervals represented in core CL-73-4. Thus, the interval between 0.0 and 53.4 m was not cored. The interval between 53.4 m and 78.2 m was cored in order to intercept a prominent ash bed that was recovered in cores CL-73-4 and CL-80-1 (Sims, 1976; Sims, Rymer, and Perkins, 1981). No core was taken between 78.2 m and 98.7 m because this interval is represented in core CL-73-4. Continuous coring was resumed at 98.7 m in order to overlap the lowest part of core CL-73-4 and to facilitate matching up the two cores. Coring continued to the maximum depth at 165.8 m (fig. 2). The overall recovery rate for the cored part of CL-80-2 is 65.0 percent. Recovered intervals are listed in table 2 and shown in figure 2.

Sediments in core CL-80-2 consist of dark-olive-gray clayey to silty sapropelic mud to a depth of 165.7 m (table 3). At 165.8 m CO-charged sand was encountered and coring operations were terminated. Twenty-three ash beds were recovered in core CL-80-2 (table 4). The marker ash bed sought when

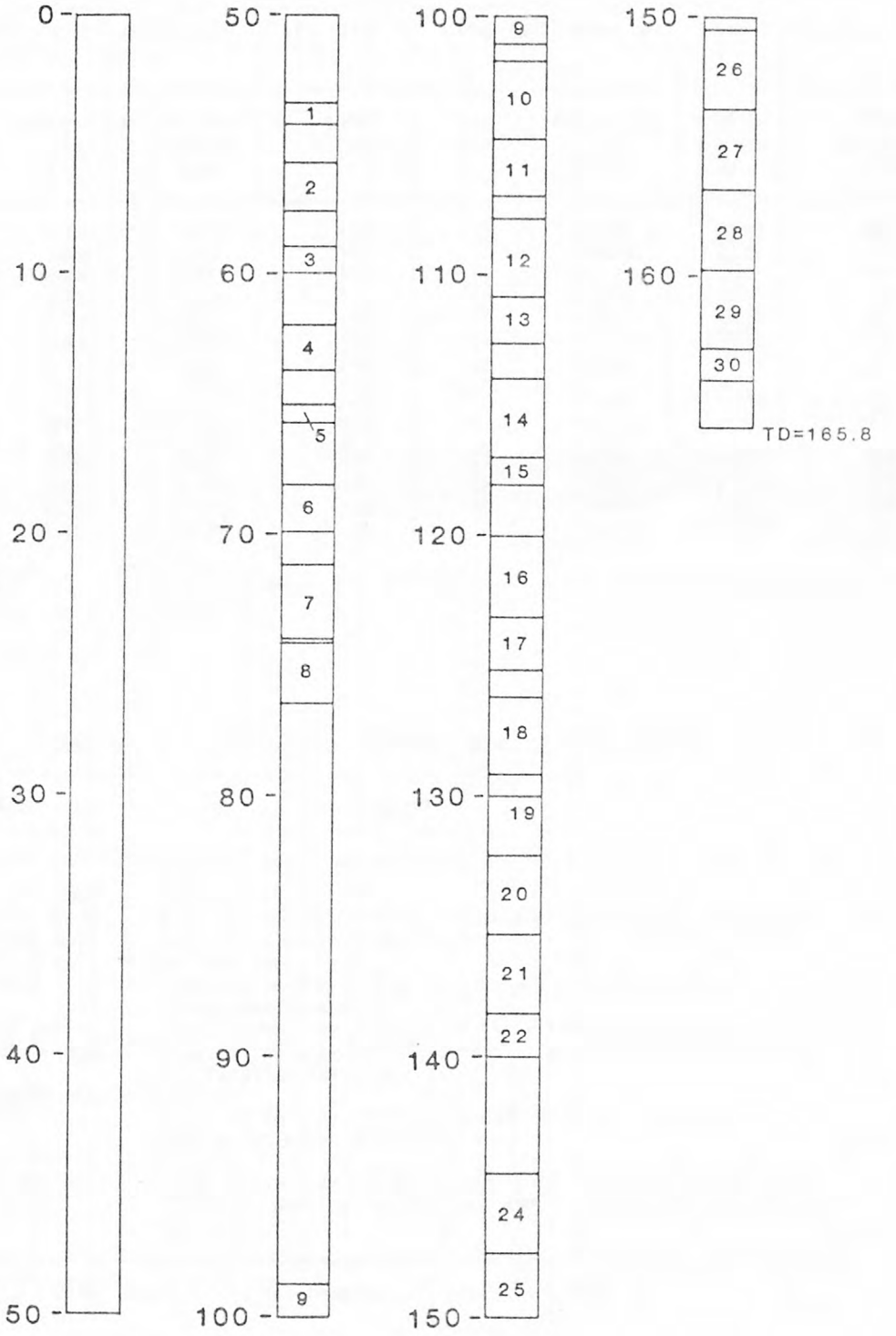

Figure 2. Recovered intervals for core CL-80-2. Numbered sections represent recovered intervals and correspond to segment numbers in the detailed graphic log (Appendix A). Unnumbered sections represent intervals in which no coring was attempted or of no recovery. Total recovery for the intervals for which sampling was attempted is 65 percent.

Table 2. Recovered intervals from Clear Lake core CL-80-2. Depth intervals not represented by an entry are missing sections or intervals that were not cored.

Segment	Recovered Top (cm)	Interval Bottom (cm)	Total Recovery (cm)	Segment	Recovered Top (cm)	Interval Bottom (cm)	Total Recovery (cm)
1	5342	5462	120	16	12002	12309	307
2	5586	5757	171	17	12309	12582	273
3	5890	5993	103	18	12613	12915	302
4	6195	6366	171	19	12918	13006	88
5	6500	6565	65	20	13223	13528	305
6	6805	6985	180	21	13528	13755	227
7	7110	7389	279	22	13822	14089	267
8	7415	7645	230	23	-	[1]	-
9	9868	10113	245	24	14443	14748	305
10	10173	10482	309	25	14748	14918	170
11	10478	10591	113	26	-	[2]	-
12	10782	11087	305	27	15358	15663	305
13	11087	11259	172	28	15663	15810	147
14	11392	11695	303	29	15968	16252	284
15	11697	11796	99	30	16273	16403	130
							5975

1/ No sample recovered

2/ Segment missing

Table 3. Summary of lithology of Clear Lake core CL-80-2.

Depth Interval (cm)	Lithology
0-5342	Drilled out.
5342-6805	Mud, olive-gray (5Y 4/2), faintly wavy-laminated to massive.
6805-7645	Mud, olive-gray (5Y 4/2), massive, carbonaceous throughout.
7645-9868	Drilled out.
9868-11259	Clay, olive-gray (5Y 4/2), massive, contains abundant carbonaceous material.
11393-12513	Clay, olive-gray (5Y 4/2), massive and bioturbated.
12613-14089	Clay, olive-gray (5Y 4/2), massive and bioturbated to 13528 cm, parallel lamination to 14139 cm.
14089-14443	Missing.
14443-14912	Clay, olive-gray (5Y 4/2) to dark-gray (5Y 4/1), has lenticular wavy lamination.
14912-15358	Missing.
15358-16403	Clay, olive-gray (5Y 4/2), has lenticular wavy lamination to 15663 cm, massive to 16050 cm, and wavy to parallel lamination to bottom.

1/ Color designations are from Munsell Products (1973).

coring the interval 53.4-78.2 m was not found; however, it may lie in an unrecovered part of that interval.

Volumetric samples were taken at about 2 m intervals for analysis of bulk density, water content, and organic and inorganic carbon content. Cylindrical samples for these analyses were taken using a piston-type sampler with a calibrated volume of 1.7 cm^3 (Beaver and others, 1976). The samples were

Table 4. Ash bed depth, thickness, and identification criteria in core CL-80-2.

Ash No. 1/	Depth to Top (cm)	Thickness (cm)	Confidence 2/
1	5453 3/	1	-
2	10351	3	-
3	10510	4	+
4	10581	3	+
5	10860	3	+
6	10459	2	-
7	12089	6	+
8	13462	1	-
9	13539	2	+
10	14479	4	+
11	14610	8	-
12	14748	7	+
13	15553	3	-
14	15591	4	-
15	15632	2	-
16	15780	3	-
17	16005	3.5	-
18	16038	0.5	+
19	16099	4	-
20	16123	4	+
21	16173	1	=
22	16326	3	-
23	16374	3	-

1/ Ashes numbered serially from the top of the core.
2/ + = Definite ash bed, identified on texture, color, and megascopic properties.
- = Probable ash identified from radiographic properties.
= = Possible ash, identified from radiographic properties.
3/ No ashes are reported from intervals 0 to 53.42 m and 78.20 to 98.68 m because these intervals were not cored.

weighed, dried at 105°C for 8 hr, and ashed at 550°C and 950°C for 4 hr each for the respective analyses. Weight loss on drying at 105°C records water content of the sediment. However, these determinations are not reliable because of desiccation of the core before subsampling. Determinations of organic and inorganic carbon contents are reliable and vary from 0.8 to 12 percent for organic carbon and from 0.5 to 14 percent for inorganic carbon (fig. 3). Extreme values are probably due to samples taken in localized slightly organic-rich horizons such as at 114.48 m. One series of samples between 110 and 122 m shows consistently high organic and inorganic carbon contents (fig. 3).

Quantitative clay mineralogy of samples at <1 m intervals from core CL-80-2 using the methods of Schultz (1963) show little systematic variation (fig. 4). Values for smectite content vary from 11 to 29 percent and average 18 percent, chlorite ranges from 0 to 45 percent, with an average of 31 percent, kaolinite ranges from 0 to 16 percent with an average of 7 percent, illite ranges from 11 to 39 percent with an average of 28 percent, and mixed layer clay minerals range from 0 to 54 percent with an average of 16 percent (table 5).

Grain size analyses were not done on core CL-80-2 because these analyses

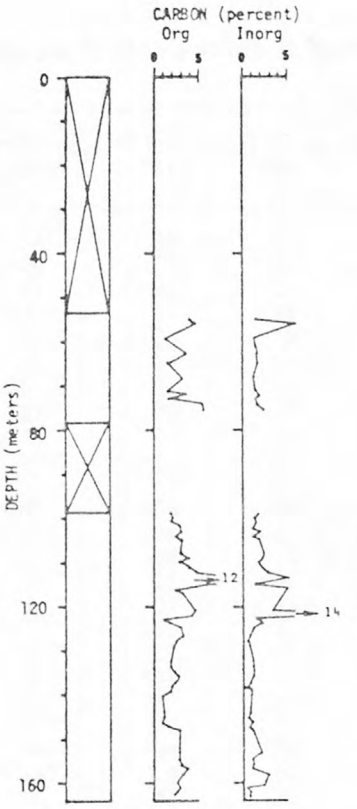

Figure 3. Plot of organic and inorganic carbon contents. Sections of no data represent drilled out intervals.

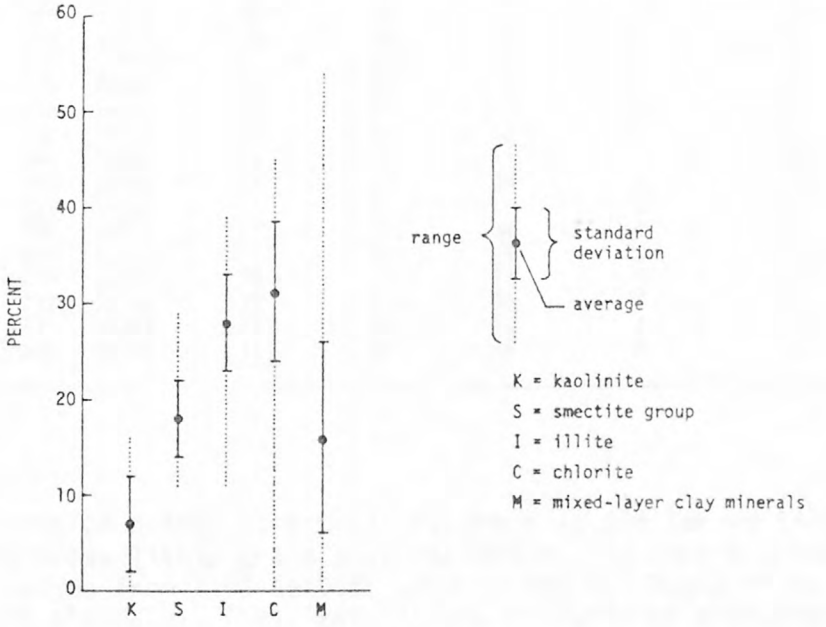

Figure 4. Quantitative clay mineral analytical data for various species of clay minerals present in core CL-80-2.

Table 5. Quantitative clay mineralogy, core CL-80-2.

Sample No.	Depth (cm)	Smectite (%)	Chlorite (%)	Illite (%)	Kaolinite (%)	Mixed Layer (%)	Total (%)
004	5607	14	34	29	1	21	99
008	5707	20	30	22	9	19	100
012	5942	21	25	27	14	14	102
016	6284	17	31	24	16	12	100
020	6540	21	32	20	8	19	100
023	6857	21	24	29	14	12	100
028	7132	21	30	23	0	26	100
044	7551	23	30	23	9	15	100
048	9874	18	30	24	5	22	99
052	9974	21	30	29	7	13	100
056	10074	17	30	30	6	16	99
060	10243	15	39	28	2	16	100
064	10343	16	34	26	6	17	99
068	10443	20	35	30	0	17	102
072	10538	16	25	38	16	5	100
080	10929	17	31	29	8	16	100
084	11029	16	39	33	2	10	100
092	11230	17	29	20	6	27	99
106	11780	16	39	30	0	17	102
110	12090	27	45	31	2	0	105
114	12190	21	32	27	13	5	99
118	12290	29	19	25	13	14	100
122	12390	25	0	22	0	54	101
126	12505	16	41	37	6	0	100
134	12823	16	30	25	7	22	100
138	12931	18	33	29	12	8	100
142	13276	17	32	30	12	9	100
146	13376	10	34	29	15	13	101
150	13476	13	31	30	9	17	100
154	13580	20	32	29	2	17	101
158	13680	15	36	25	7	17	100
162	13837	18	37	36	8	2	101
166	13937	25	35	28	2	9	99
169	14057	12	31	25	11	22	100
170	14447	15	25	30	16	14	100
174	14547	12	27	24	15	22	100
178	14647	17	31	32	10	11	100
180	14725	16	28	33	10	13	100
184	14825	11	26	11	6	46	100
188	15378	24	41	39	0	0	104
192	15503	12	27	25	3	32	100
196	15603	22	34	34	0	12	102
200	15703	15	26	25	13	20	99
208	16043	19	24	21	5	31	100
212	16143	18	31	36	11	4	100
216	16243	17	28	26	6	23	100
220	16354	11	40	35	6	8	100

were performed on nearby core CL-73-4, which is similar in lithology to core CL-80-2 and shows little grain size variation. In core CL-73-4 the phi mean size ($\bar{X}_\phi$) ranges from 7.93 to 9.21 (Sims, 1982). There is no systematic variation in the data. These results are at variance with those of Sims, Adam, and Rymer (1981). The reason for the discrepancy is that the grain size analyzer used for determining the data in Sims, Adam, and Rymer had unknowingly malfunctioned.

DISCUSSION

The dating of core CL-80-2 is difficult because no radiometric dates are available from it nor have pollen analyses been performed on its samples. Thus, the precise age of the core can not be determined. However, age assignments for cores CL-80-1 and CL-73-4 have been made using a variety of dating methods, and correlations with core CL-80-2 can be made. Pollen analyses from cores CL-73-4 and CL-80-1 show that pollen zones are correlative with ^{18}O stages from deep-sea cores (Sims, Adam, and Rymer, 1981; Heusser

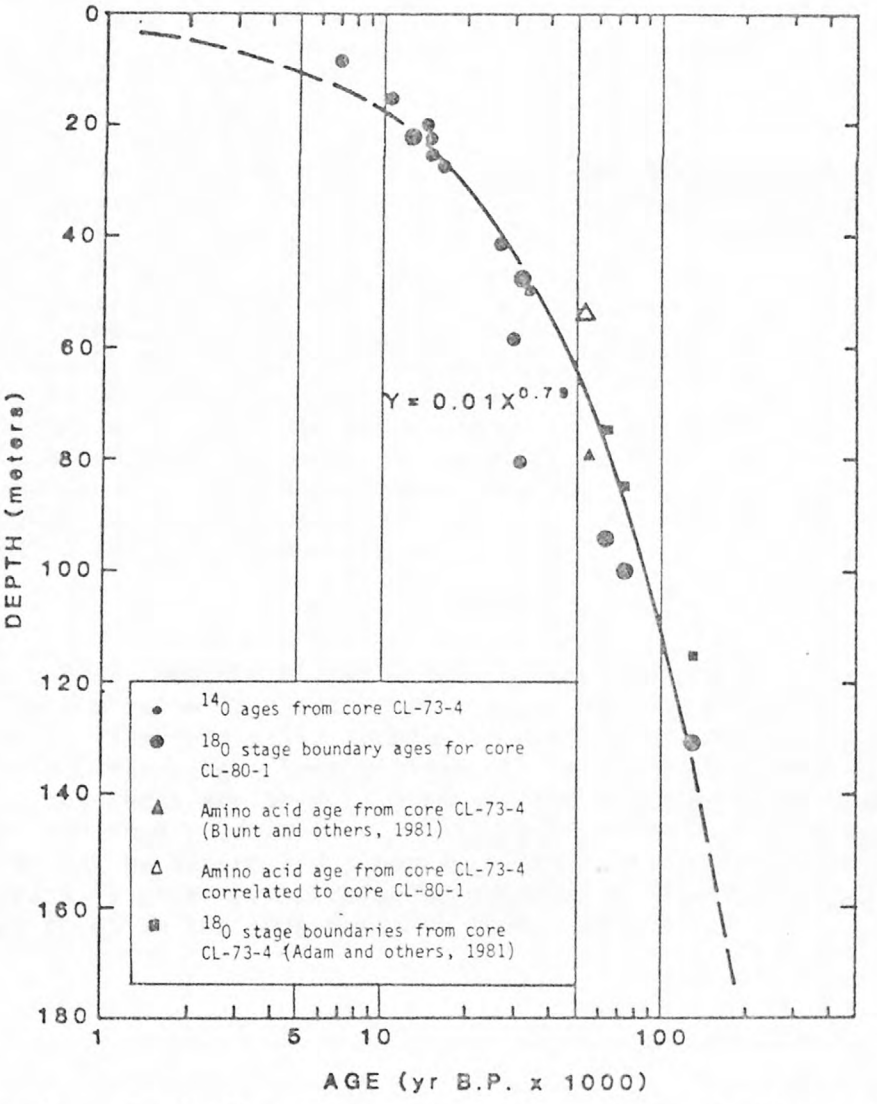

Figure 5. Age-depth relations in core CL-80-1 and other cores from Clear Lake. Regression line $Y = 0.01 X^{0.79}$ is drawn for core CL-80-1 data points only. All other data are for comparison purposes. Two radiocarbon dates from core CL-73-4, at 58 and 80 m depth, do not fall in a rational sequence with other radiocarbon dates from that core and are suspect (Sims and others, 1981). ^{18}O-stage boundaries for core CL-73-4 were determined from palynological analysis (Sims and others, 1981; Adam and others, 1981) and those for core CL-80-1 were estimated from preliminary correlations with core CL-73-4 (L. E. Heusser, written commun., 1981).

and Sims, 1981; and Adam and others, 1981). The younger pollen zones in core CL-73-4 are dated by radiocarbon methods (Sims, 1976; Sims, Adam, and Rymer, 1981), and the older zones are dated by amino acid racemization techniques (Blunt and others, 1981). These dates calibrate the pollen data, in particular the raw oak-pollen frequency curve that is correlated with the ^{18}O curves from deep-sea cores (fig. 5).

Physical properties of the sediments in core CL-80-1 have also been determined and correlated with pollen analyses and stages (Sims, Rymer, and Perkins, 1981). In core CL-80-1 high water and organic carbon contents are found from 0 to 23 m and high water, organic carbon, and inorganic carbon contents are found from 125 to 130 m (Sims, Rymer, and Perkins, 1981). These two parts of the core correspond with zones of high oak pollen frequency which are correlative with ^{18}O stages 1 and 5e (Heusser and Sims, 1981; Sims, Rymer, and Perkins, 1981). Analysis of organic and inorganic carbon contents in core CL-80-2 shows that high values occur from 110 to 122 m (fig. 3). The similarity of depth and thickness of these zones of high organic and inorganic carbon contents suggests that the interval 110-122 m in core CL-80-2 corresponds with the similar zone in core CL-80-1 and with a zone of high oak pollen, which is correlated to ^{18}O stage 5e (Heusser and Sims, 1981). All this places a tentative age of 130,000 years for the base of the interval. The depth of the zone of high organic and inorganic carbon contents correlates well in cores CL-80-1 and CL-80-2, and pollen zones are well correlated between cores CL-73-4 and CL-80-1; therefore, sedimentation rates are inferred to be similar in these cores, and within the west basin of Clear Lake as a whole. By assuming a sedimentation rate for CL-80-2 similar to those of CL-80-1 and CL-73-4 a tentative age estimate for the bottom of core CL-80-2 is about 175,000 to 200,000 years (fig. 5). Confirmation of this speculation awaits pollen analysis of core CL-80-2.

SUMMARY

Core CL-80-2 consists of two cored sediment intervals: 53.4 to 78.2 m and 98.7 to 165.8 m below lake bottom (fig. 2). Both intervals are composed primarily of clayey and silty sapropelic mud similar to that presently being deposited in Clear Lake. Twenty-three ash beds are also present in the core (table 3), but these are thin (3.3 cm average thickness) and comprise only 1.3 percent of the recovered section. The age of sediment at the bottom of core CL-80-2 can not be determined directly, rather an inferred age of 175,000 to 200,000 years is given by correlating sediment properties with nearby well-dated cores in the same basin of Clear Lake.

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APPENDIX A

GRAPHIC NOTATIONS USED IN CORE DESCRIPTIONS

Core descriptions of 1-m-long parts of each segment are shown on individual sheets. Graphic notations used in the core descriptions and radiographic interpretations are modified from Bouma (1962). The conventions and symbols used follow:

Lithology

The lithologic descriptions are given in words rather than symbols such as used by Bouma (1962), because so few lithologic variants occur. The letter "V" denotes the presence of vivianite. Symbols marked by "*" are also used to describe features cited in the Radiographic column (see below).

Bedding Plane Type*

———— Sharp flat contact

— — — Distinct flat contact

------ Transition (range of transition <0.5 cm)

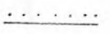
..... Gradual transition (range of transition 0.5-1.0 cm)

.. .. Hardly visible gradual transition (range of transition >1.0 cm)

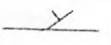
 Undulating contact, gradations as above

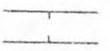
 Irregular contact, gradations as above

Structure

 Graded bedding*

 Load cast*

 Cross bedding*

 Interval in which structure occurs*

( ) Indistinct structure (a modifier to a structure symbol)*

Layer Properties

Parallel lamination (<0.5 cm thick)*:

 Coarse laminae predominate

 Fine laminae predominate

 Coarse and fine laminae in about equal frequency

Disturbed parallel lamination (coarse and fine modifiers above apply)


Slightly disturbed


Strongly disturbed


Parallel wavy lamination*:
(Predominating thickness and degree of disturbance as noted above)


Lenticular wavy Lamination*:
(Predominating thickness and degree of disturbance as noted above)


Interval in which a property occurs*:

( ) Indistinct property*:

(( )) Very indistinct property*:

Color

Color designations are taken from the Munsell Soil Color Chart (Munsell Products, 1973). The conventions used in depicting the relationships between different colors in a segment are as follows:

$\frac{10Y\ 5/4}{5YR\ 2/3}$ Distinct color break between two units.

Fossils


Fish scale*


Fish bone*


Gastropod*


Clam*


Wood fragment oriented parallel to bedding plane


Wood fragment not oriented parallel to bedding plane

Plant fragment oriented parallel to bedding plane


Plant fragment not oriented parallel to bedding plane


Leaf or leaf fragment

Photograph Number

Numbers in this column refer to the index number assigned serialy to both the color and black-and-white photos taken of the cut surface of the core segment. Example: 1-1 refers to segment one, photo one. There are four photos for each meter of core. Each photo covers approximately 30 cm of segment length with 2 to 3 cm of overlap with adjacent photos. These photos

may be examined, and copies may be made at the requestor's expense by contacting:

John D. Sims
Branch of Earthquake Tectonics and Risk Analysis
U.S. Geological Survey, MS-77
345 Middlefield Road
Menlo Park, CA 94025.

Radiographic

This column contains supplementary information derived from the analysis of X-ray radiographs of 8-mm-thick slices of each core segment. The radiographs are negative images so that high film density means high X-ray transparency of the material and the contrary for low film density. The notations used in this column are a combination of those marked by "*" under the headings Bedding Plane Type, Structure, Layer Properties, and Fossils, plus some additional symbols not shown under these headings, which include:

GRANULE: An X-ray opaque body <1 mm in diameter.

GRANULE CLUSTER: an irregularly to regularly shaped mass or cluster of granules.

PEBBLE: A large (>3 mm) opaque body.

MOTTLING: Irregularly shaped areas of low X-ray film density of unknown origin.

BIOTURBATION: Disruption of the sediment caused by the activities of animals (foraging, living, burrowing, nesting etc.). The degree of sediment disturbance is also generally noted (slight, moderate, heavy).

$\Delta\delta$: A difference in emulsion density on the radiograph between stratigraphic subunits owing to ease of transmission of the X-rays to the film. The transmission characteristics of the sediments are due to compositional, grain size, or other physiochemical variations in the deposits. This symbol is accompanied by a plus (+) or minus (-) sign to indicate the direction of the density change. Plus indicates change from less dense to more dense emulsion, and minus indicates the reverse.

FRACTURED: Physical breaking of the indicated portion of the segment or radiographed slice. Most such breaks occurred when preparing the slice of the core segment for radiography.

UXO: Unidentified X-ray Opaque object. Estimates of the origin of the object are commonly suggested.

GAS BUBBLES: Circular to irregular areas of low sediment density caused by expanding gas trapped in the sediment. Most common in the more water-saturated and less-cohesive sediments.

DEBRIS: Material that has been scraped from the core hole wall, caved in and fallen down the hole, or that fell from the core barrel during retrieval of the previous segment.

GAP: A minor portion of a segment that is missing.

VEINLETS: X-ray opaque structures that have the form of delicate veinlets.

X-ray radiographs were made on 11 x 17 in (28 x 43 cm) Kodak AA Industrial X-ray film. Each sheet of film accomodates four pieces of a core segment each up to 40 cm long. Two sheets of X-ray film are required for a 3.05-m-long segment of core. The boundaries between pieces of a segment and

between the two sheets of film where required is noted in the radiographic column as below:

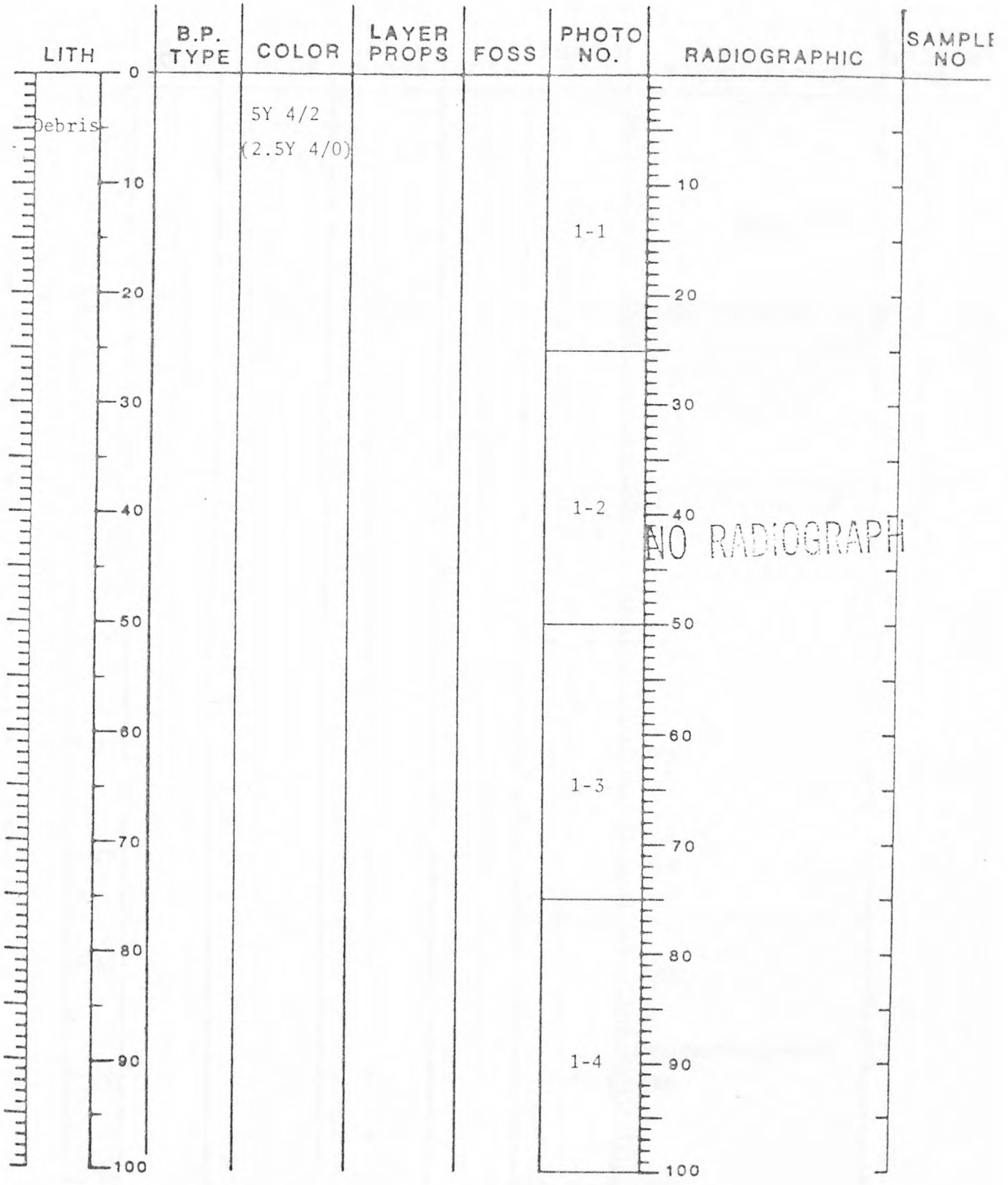
$\frac{\text{I}}{\text{II}}$	Marks the boundary between individual slices on the radiograph.
$\frac{\text{film 1,IV}}{\text{film 2,I}}$	Marks the boundary between the two films required to radiograph an entire core segment 3.05 m long. Roman numeral refer to the boundary between individual slices of core segment.

Sample Number

Two types of sample numbers are used to identify samples taken for specific tests, analyses, or supplementary data. All samples except those taken for "special" analyses have four-digit numbers without a letter prefix. Three-digit numbers preceeded by an "S" refer to samples taken for "special" analyses. Analyses and their sample intervals are discussed in Appendix B.

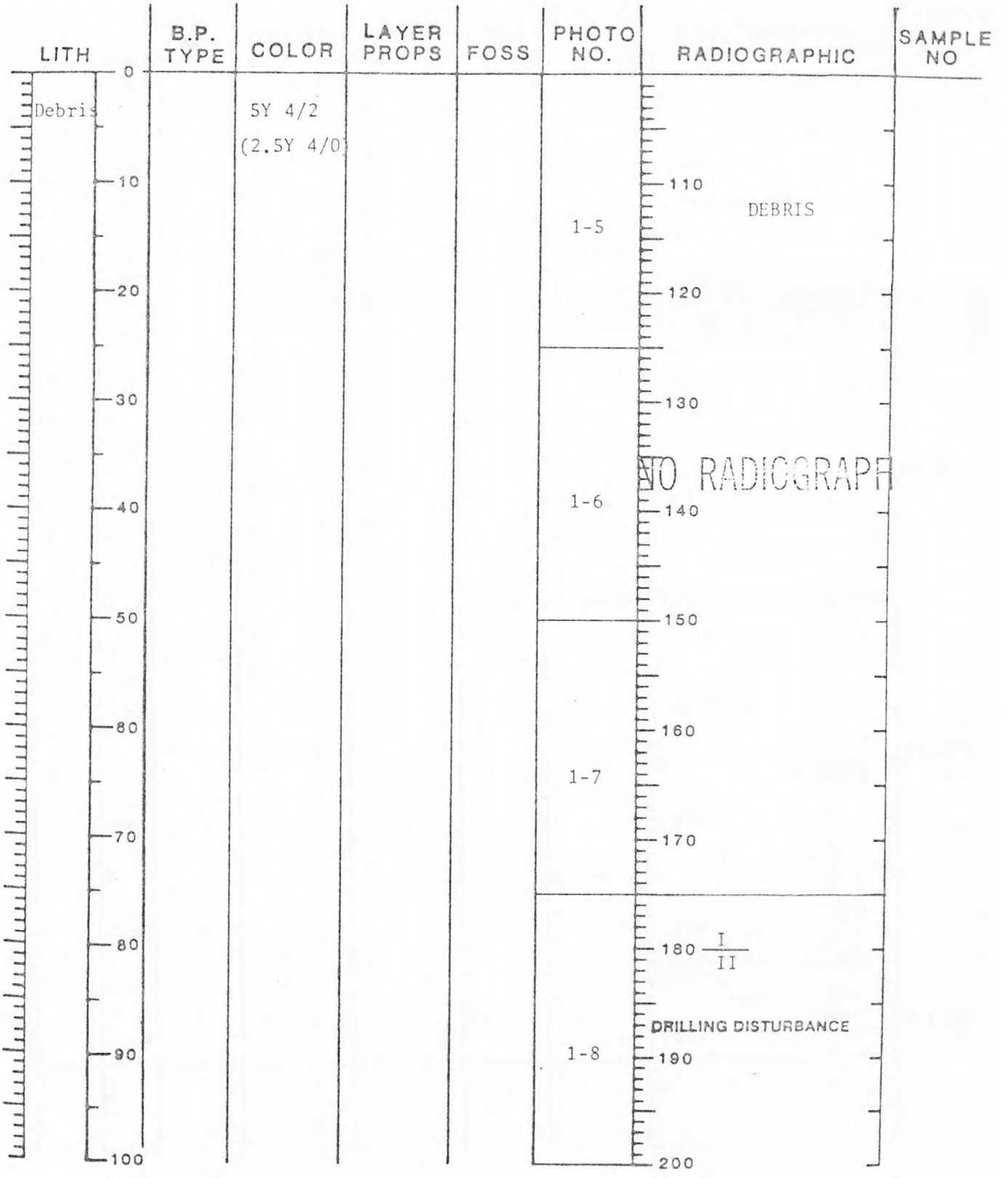
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 1 DEPTH ____ to ____ cm

DESCRIBED BY LAF and JDS DATES JAN 8 1981 and MAR 2 1981 SHEET 1 of 3



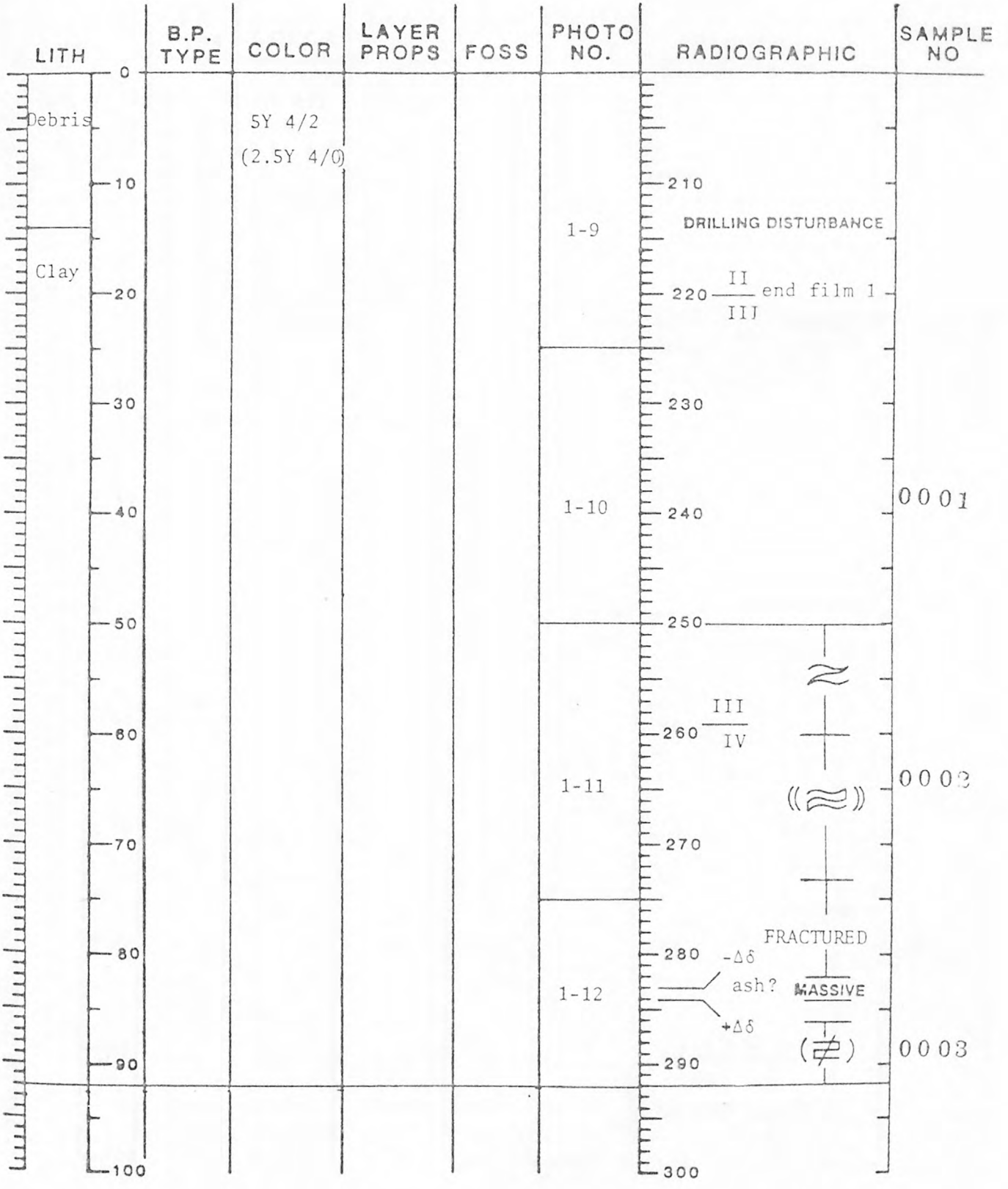
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 1 DEPTH 5342 to 5367 cm

DESCRIBED BY LAF and JDS DATES JAN 8 1981 and MAR 2 1981 SHEET 2 of 3



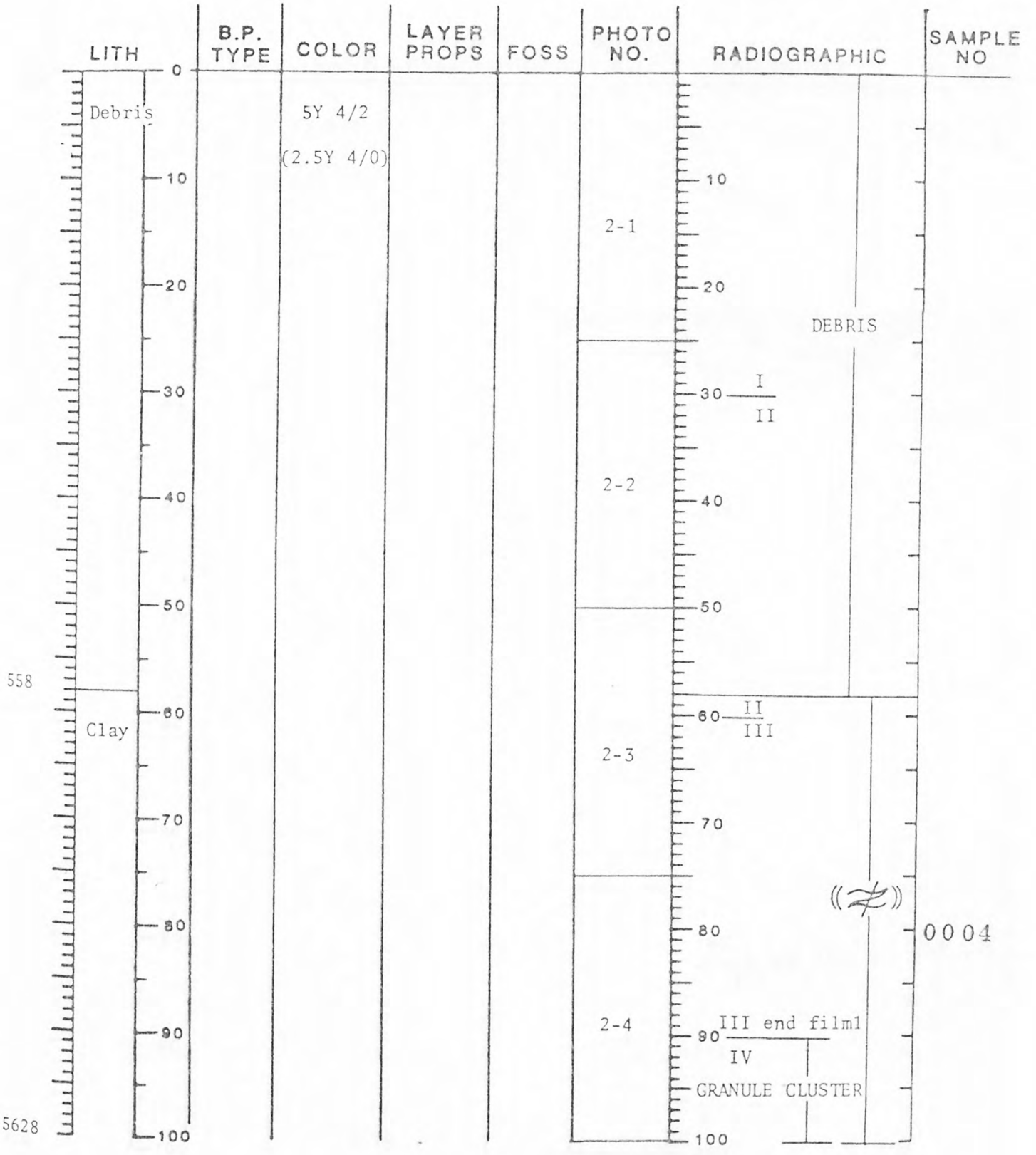
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 1 DEPTH 5367 to 5462 cm

DESCRIBED BY LAF and JDS DATES JAN 8 1981 and MAR 2 1981 SHEET 3 of 3



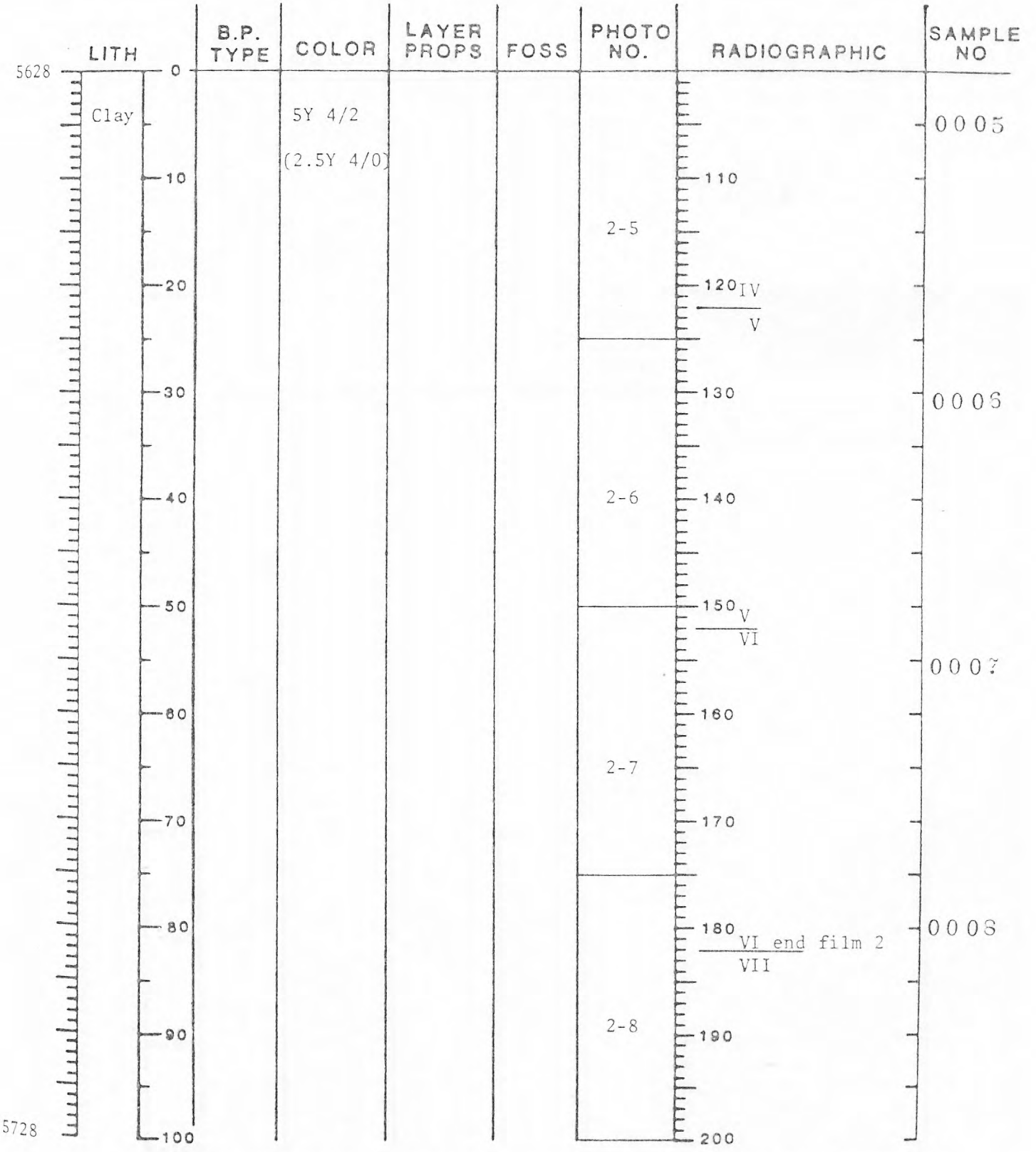
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 2 DEPTH 5586 to 5628 cm

DESCRIBED BY LAF and JDS DATES JAN 8 1981 and [illegible] SHEET 1 of 3



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 2 DEPTH 5628 to 5728 cm

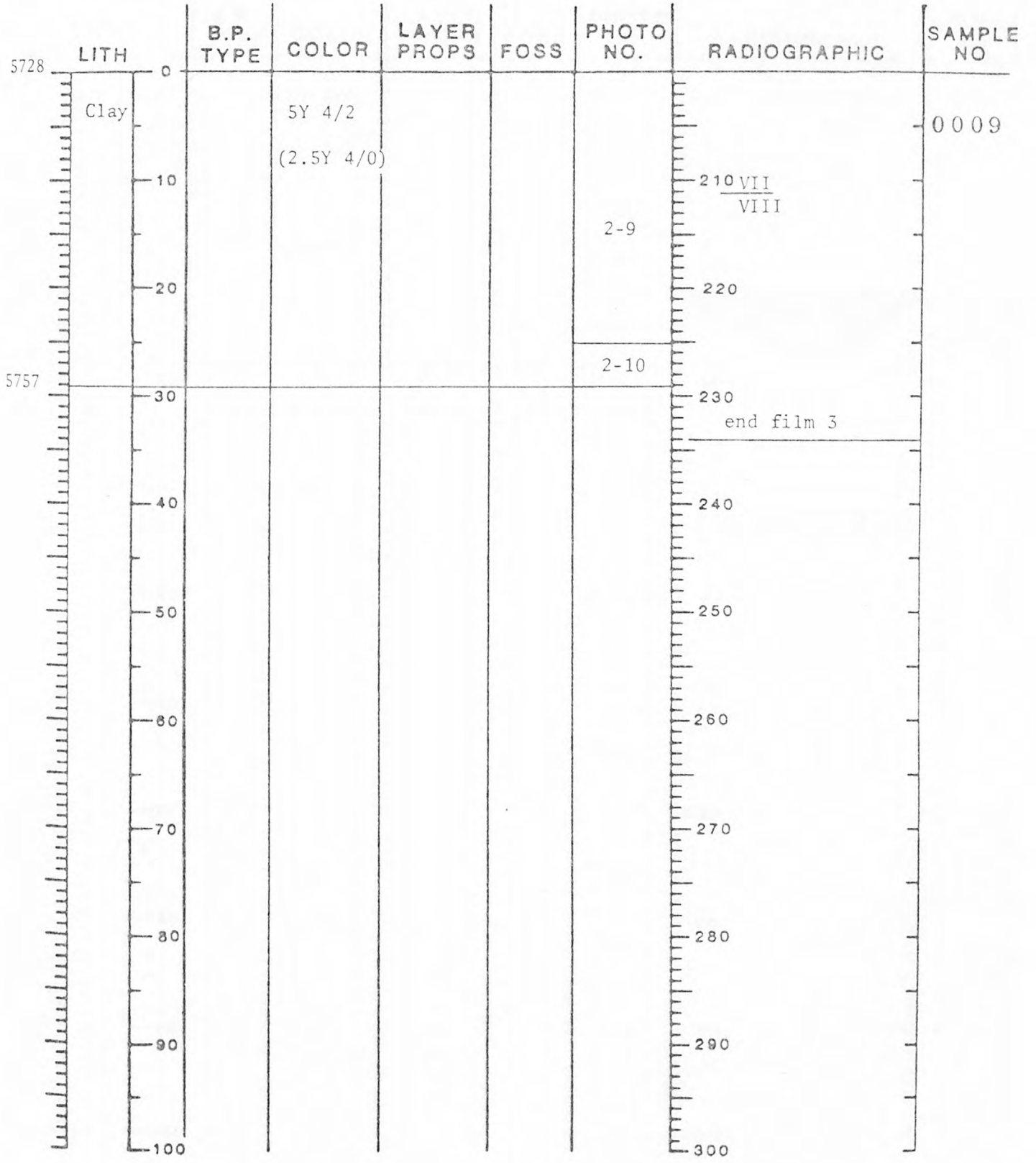
DESCRIBED BY LAF and JDS DATES [illegible] 9 1981 and [illegible] 2 1981 SHEET 2 of 3



SLIGHTLY DISTURBED, INDISTINCT, LENTICULAR WAVY LAMINATIONS THROUGHOUT

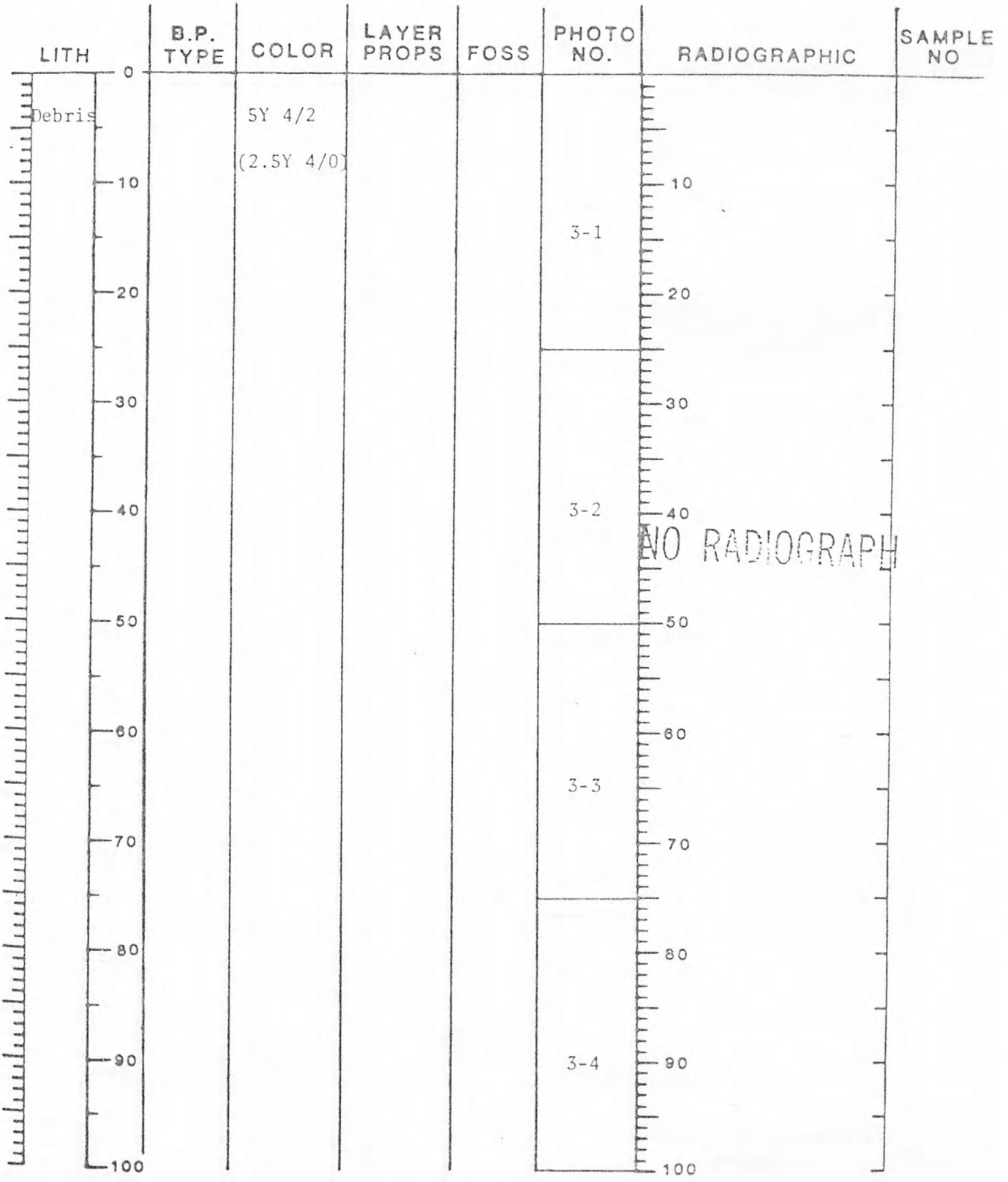
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 2 DEPTH 5728 to 5757 cm

DESCRIBED BY LAF and JDS DATES JAN 9 1981 and [illegible] 2 1981 SHEET 3 of 3



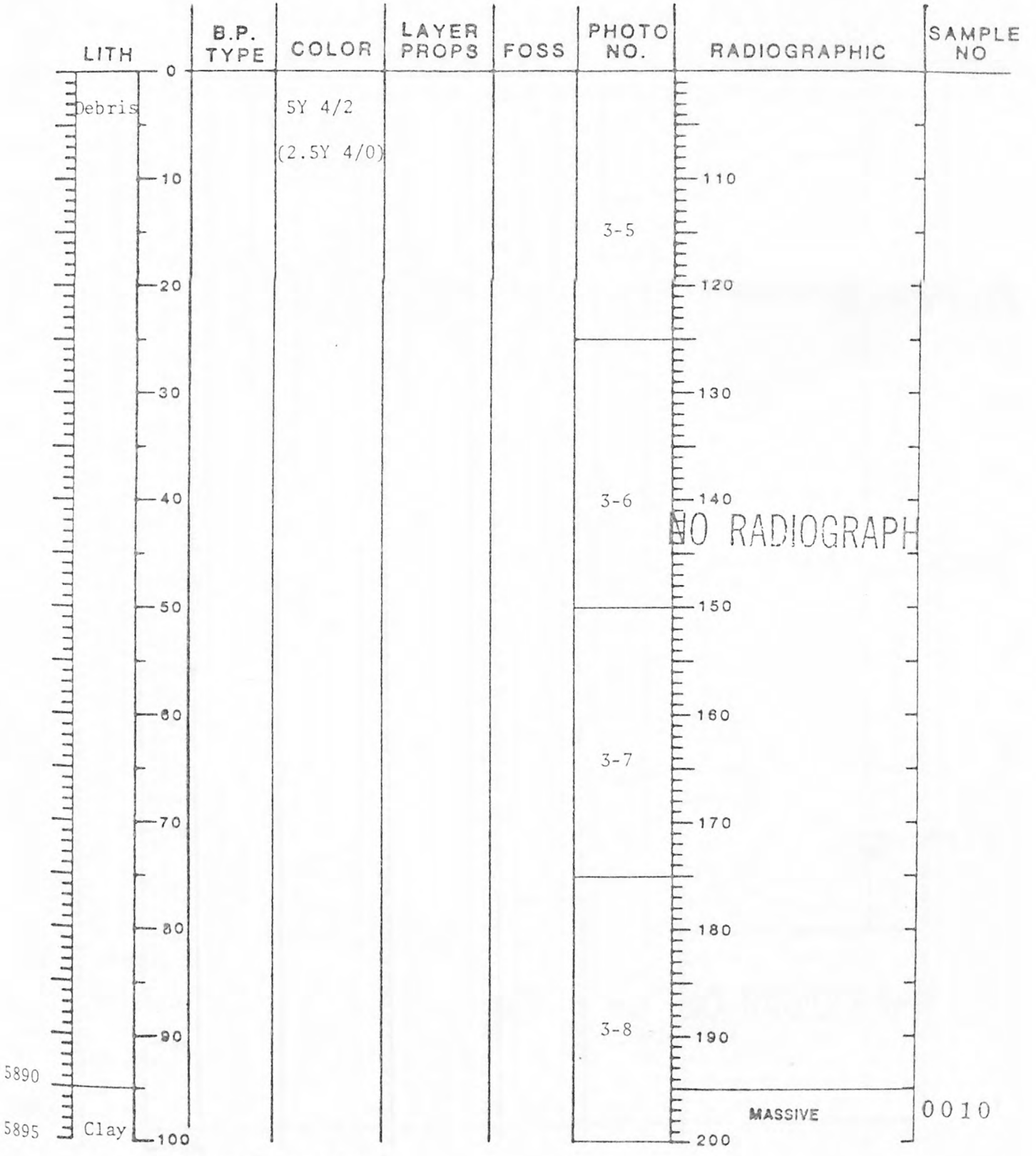
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 3 DEPTH _____ to _____ cm

DESCRIBED BY LAF and JDS DATES JAN 16 1981 and MAR 2 1981 SHEET 1 of 3



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 3 DEPTH 5890 to 5895 cm

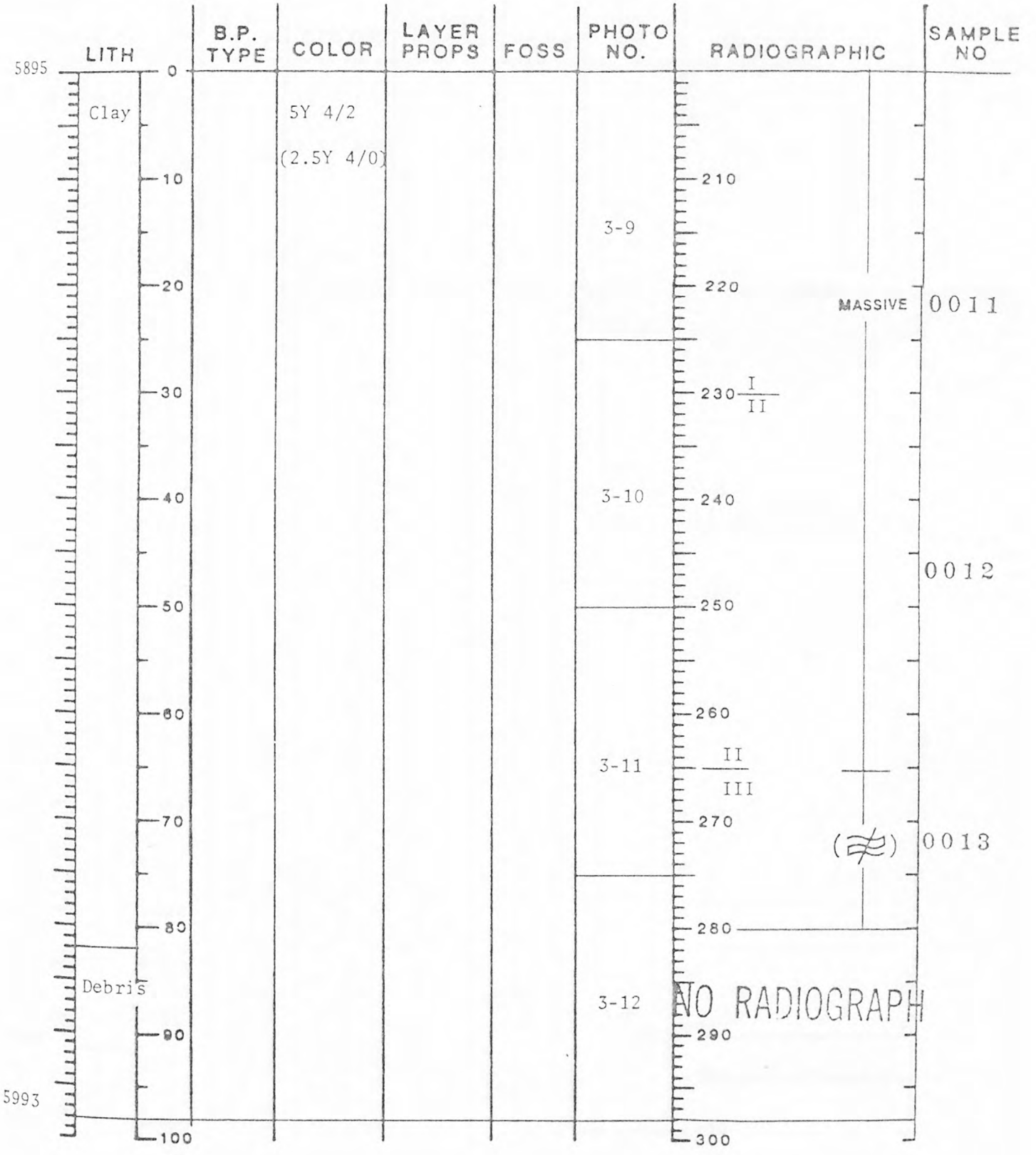
DESCRIBED BY LAF and JDS DATES JAN 1 0 '8' and . . . SHEET 2 of 3



GRANULES THROUGHOUT.

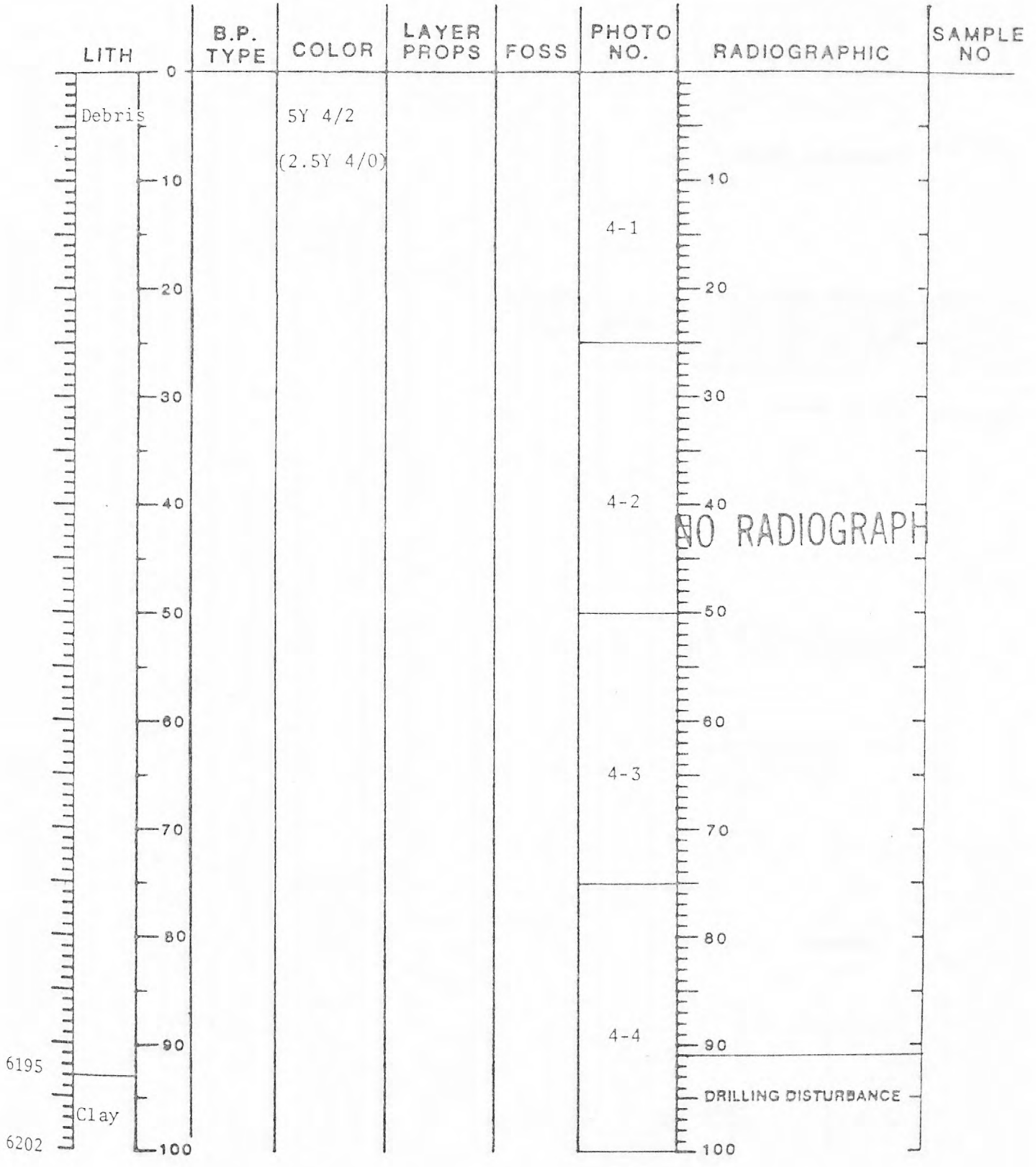
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 3 DEPTH 5895 to 5993 cm

DESCRIBED BY LAF and JDS DATES JAN 16 '81 and MAR 2 1981 SHEET 3 of 3



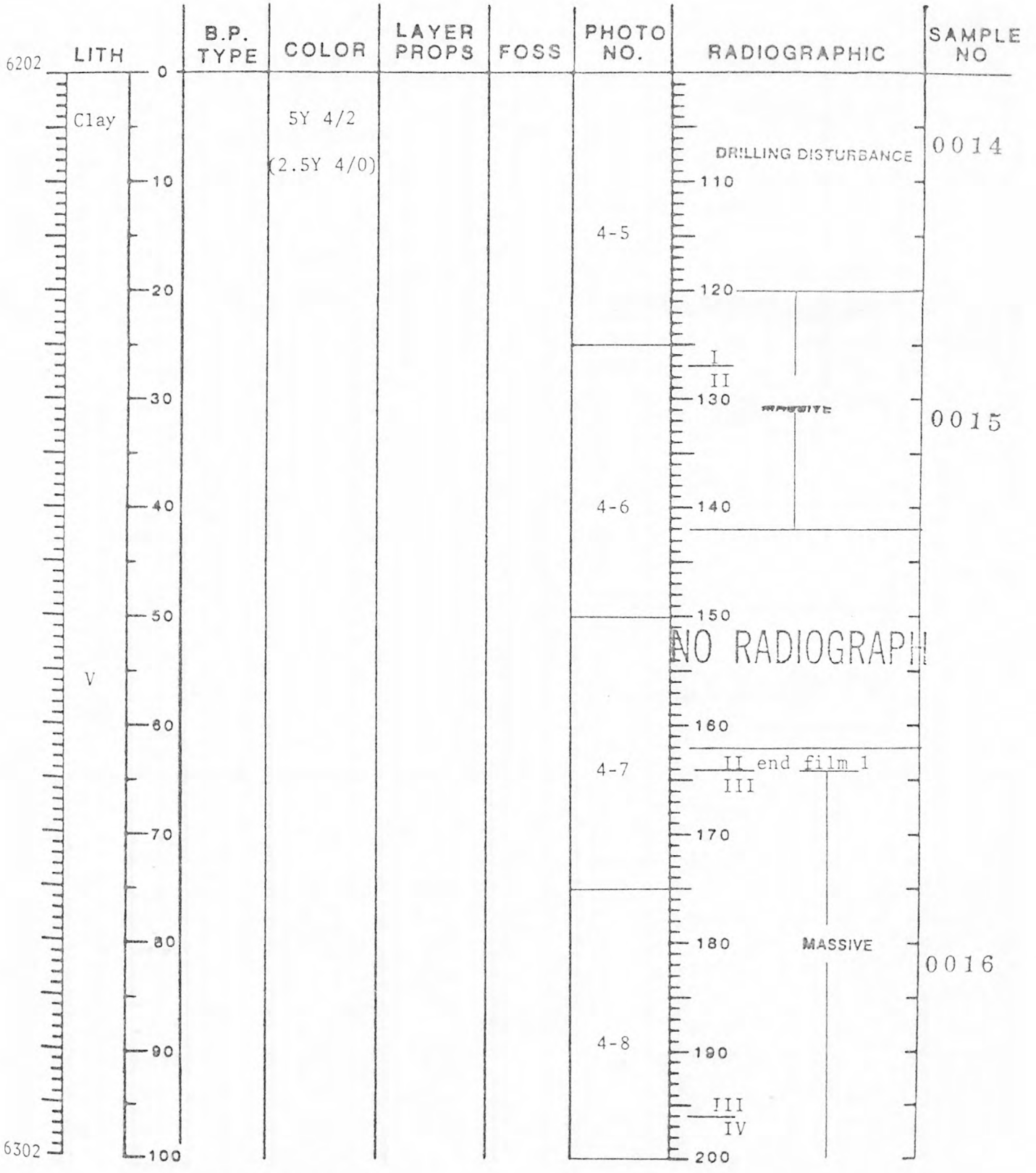
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 4 DEPTH 6195 to 6202 cm

DESCRIBED BY LAF and JDS DATES JAN 19[illegible] and MAR 3 1981 SHEET 1 of 3



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 4 DEPTH 6202 to 6302 cm

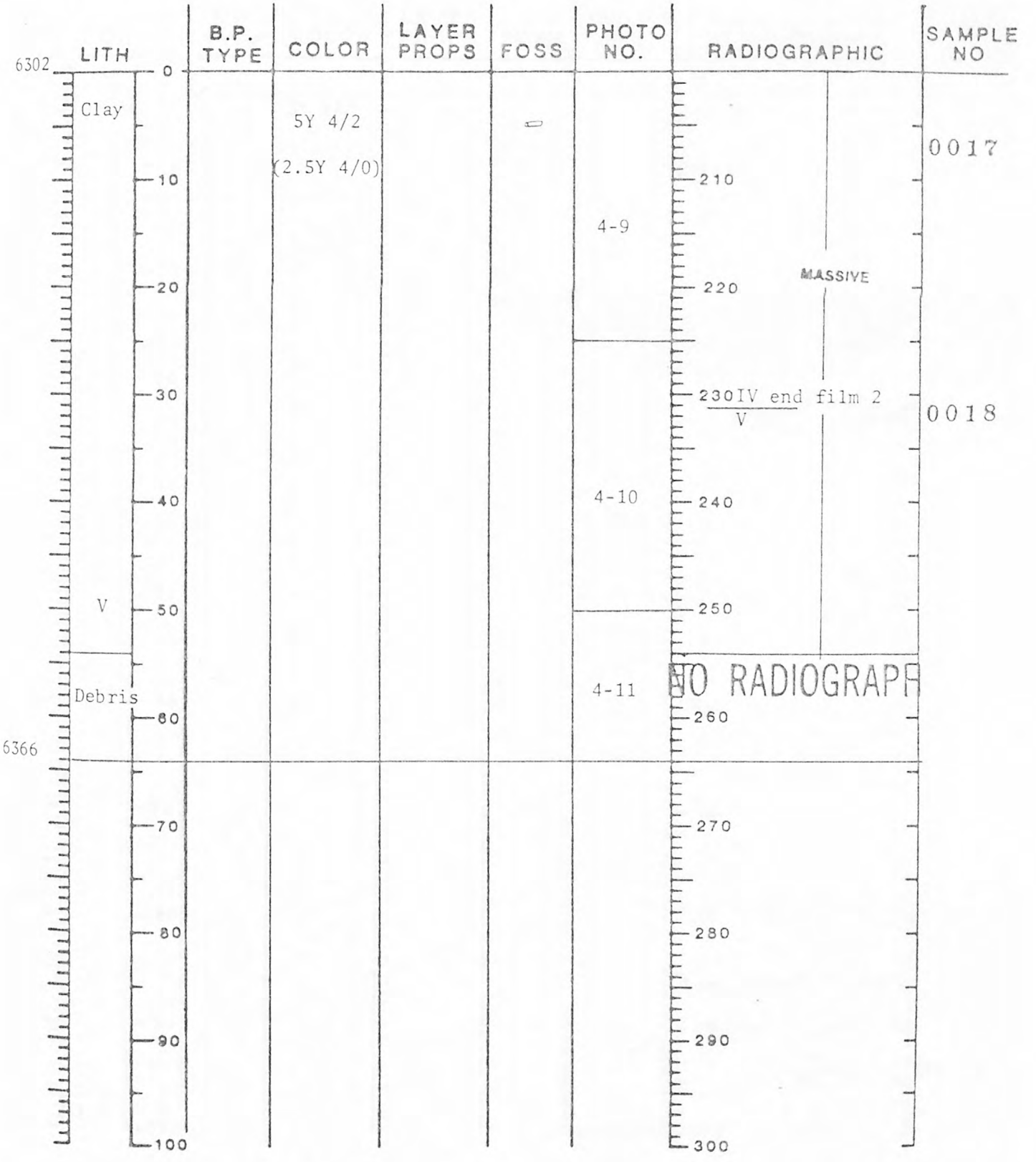
DESCRIBED BY LAF and JDS DATES JAN 19 81 and MAR 2 1981 SHEET 2 of 3



GRANULES THROUGHOUT.

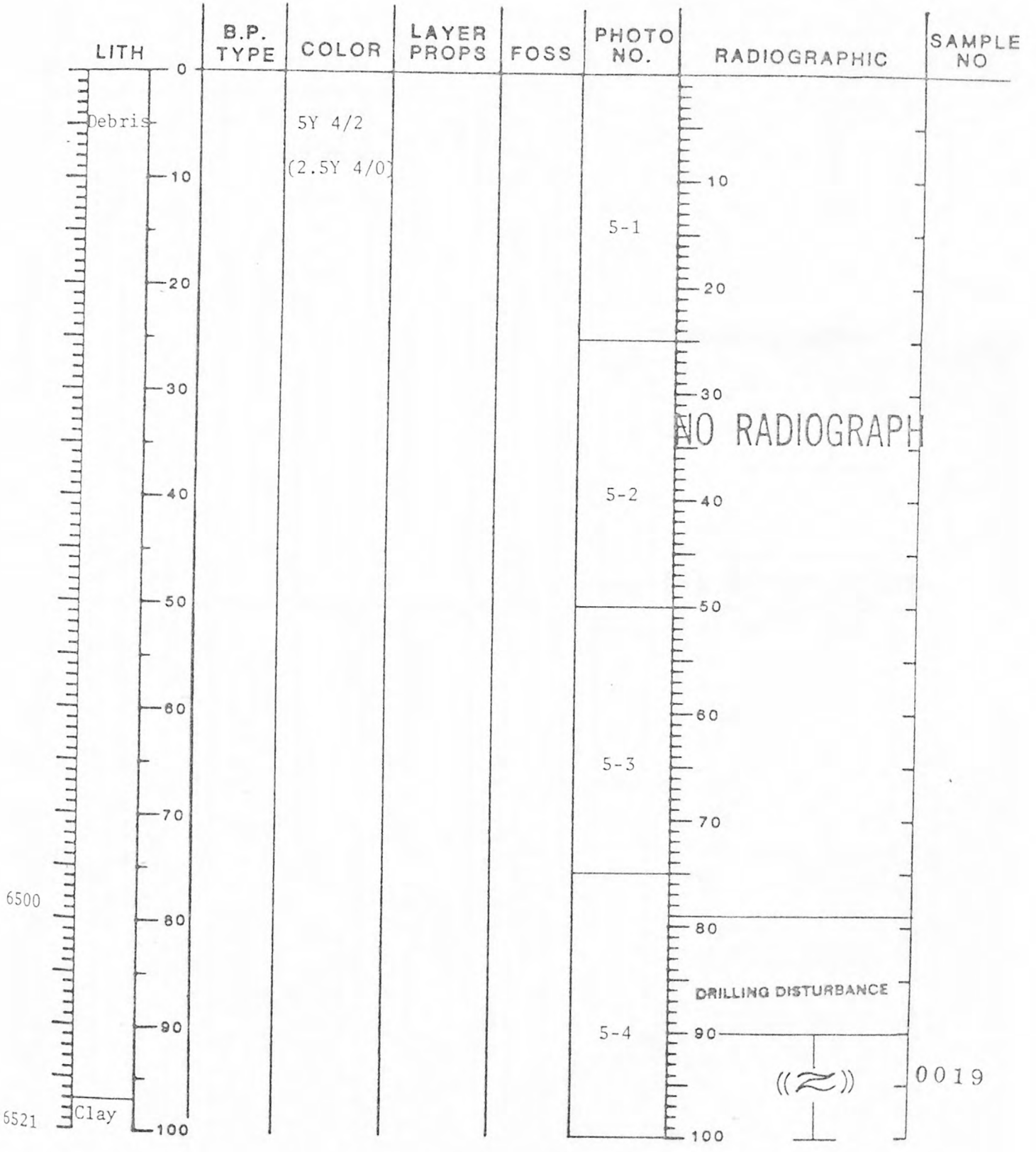
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 4 DEPTH 6302 to 6366 cm

DESCRIBED BY LAF and IDS DATES JAN 19 1981 and MAR 2 1981 SHEET 3 of 3



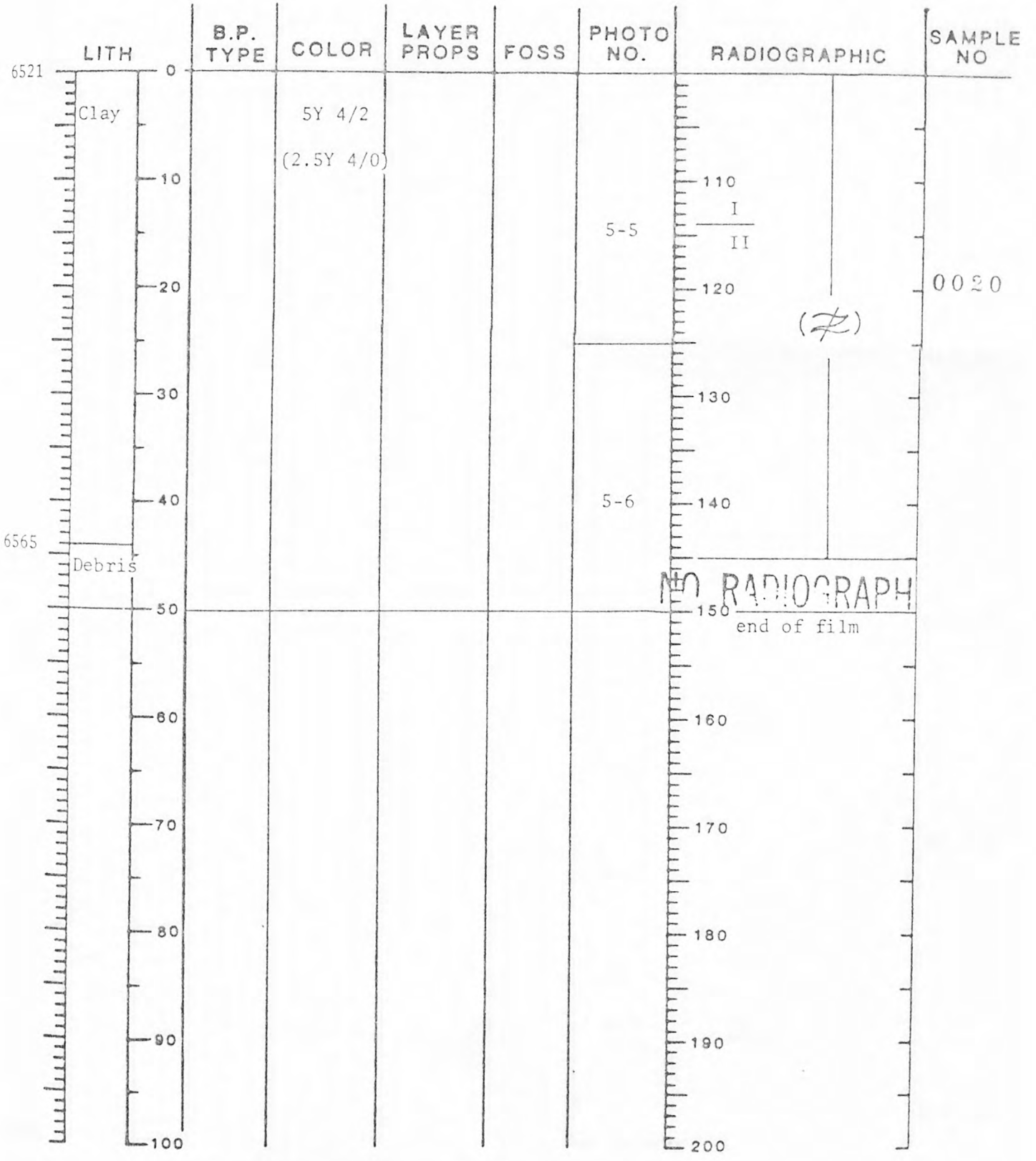
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 5 DEPTH 6500 to 6521 cm

DESCRIBED BY LAF and JDS DATES JAN 19 '81 and MAR 2 '81 SHEET 1 of 2



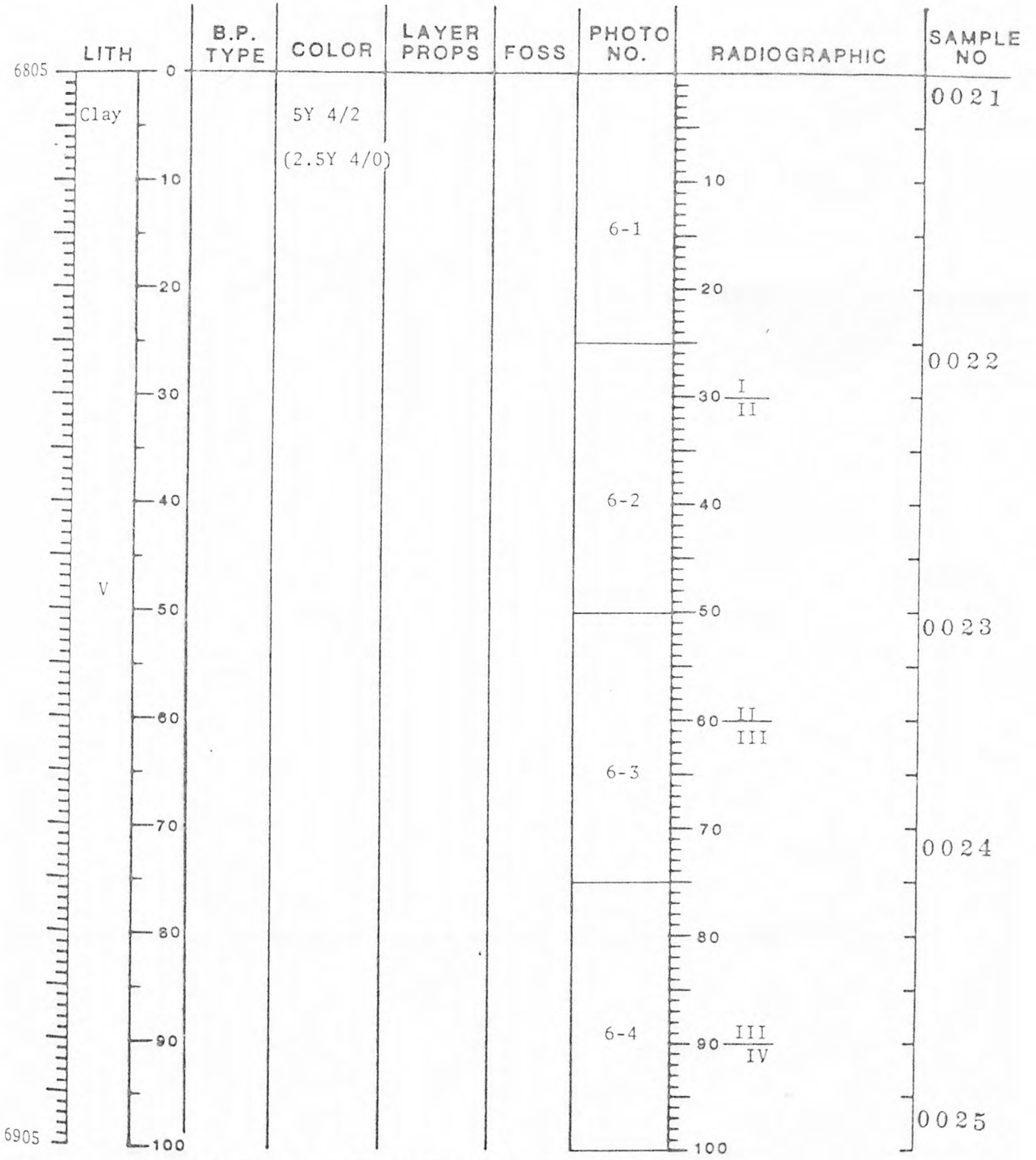
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 5 DEPTH 6521 to 6565 cm

DESCRIBED BY LAF and JDS DATES JAN 13 1981 and MAR 2 1981 SHEET 2 of 2



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 6 DEPTH 6805 to 6905 cm

DESCRIBED BY LAF and JDS DATES JAN 22 1981 and MAR 2 1981 SHEET 1 of 2

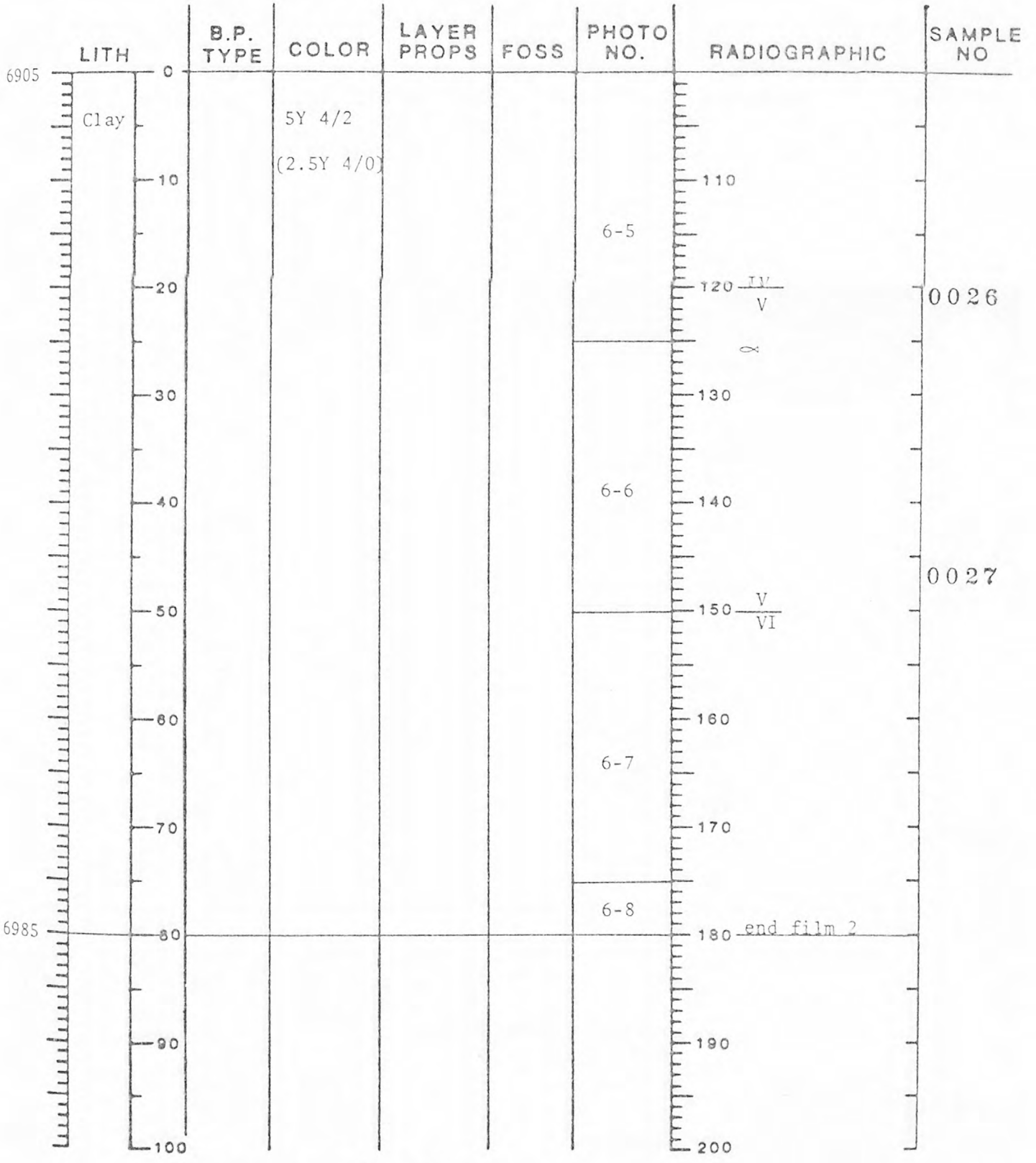


BARELY VISIBLE LENTICULAR WAVY LAMINATIONS THROUGHOUT.

VIVIANITE(?) VEINLETS THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 6 DEPTH 6905 to 6985 cm

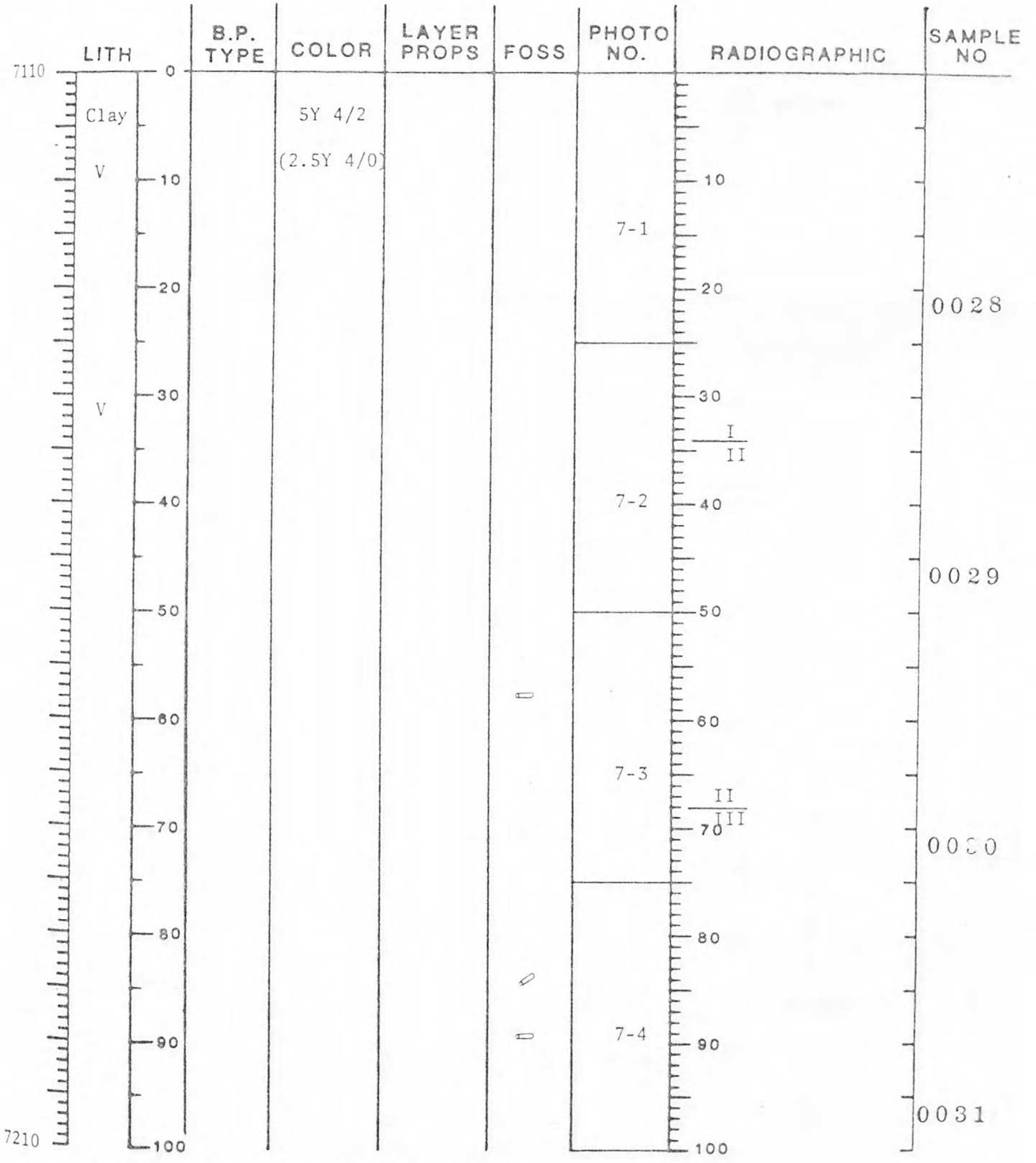
DESCRIBED BY LAF and JDS DATES JAN 22 1981 and MAR 2 1981 SHEET 2 of 2



VIVIANITE(?) VEINLETS THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 7 DEPTH 7110 to 7210 cm

DESCRIBED BY LAF and JDS DATES JAN 23 1981 and MAR 2 1981 SHEET 1 of 3

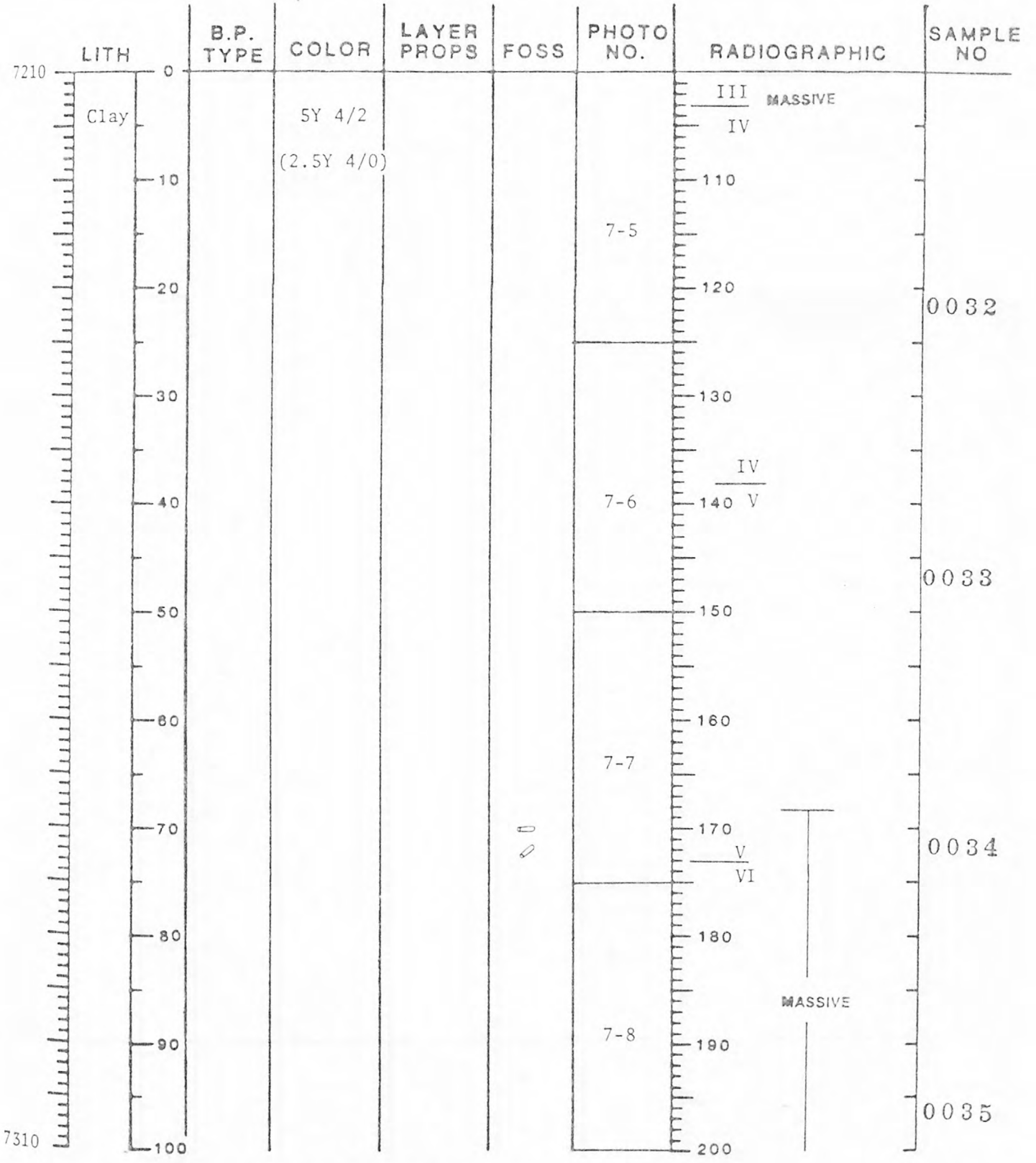


VIVIANITE(?) VEINLETS THROUGHOUT.

MASSIVE THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 7 DEPTH 7210 to 7310 cm

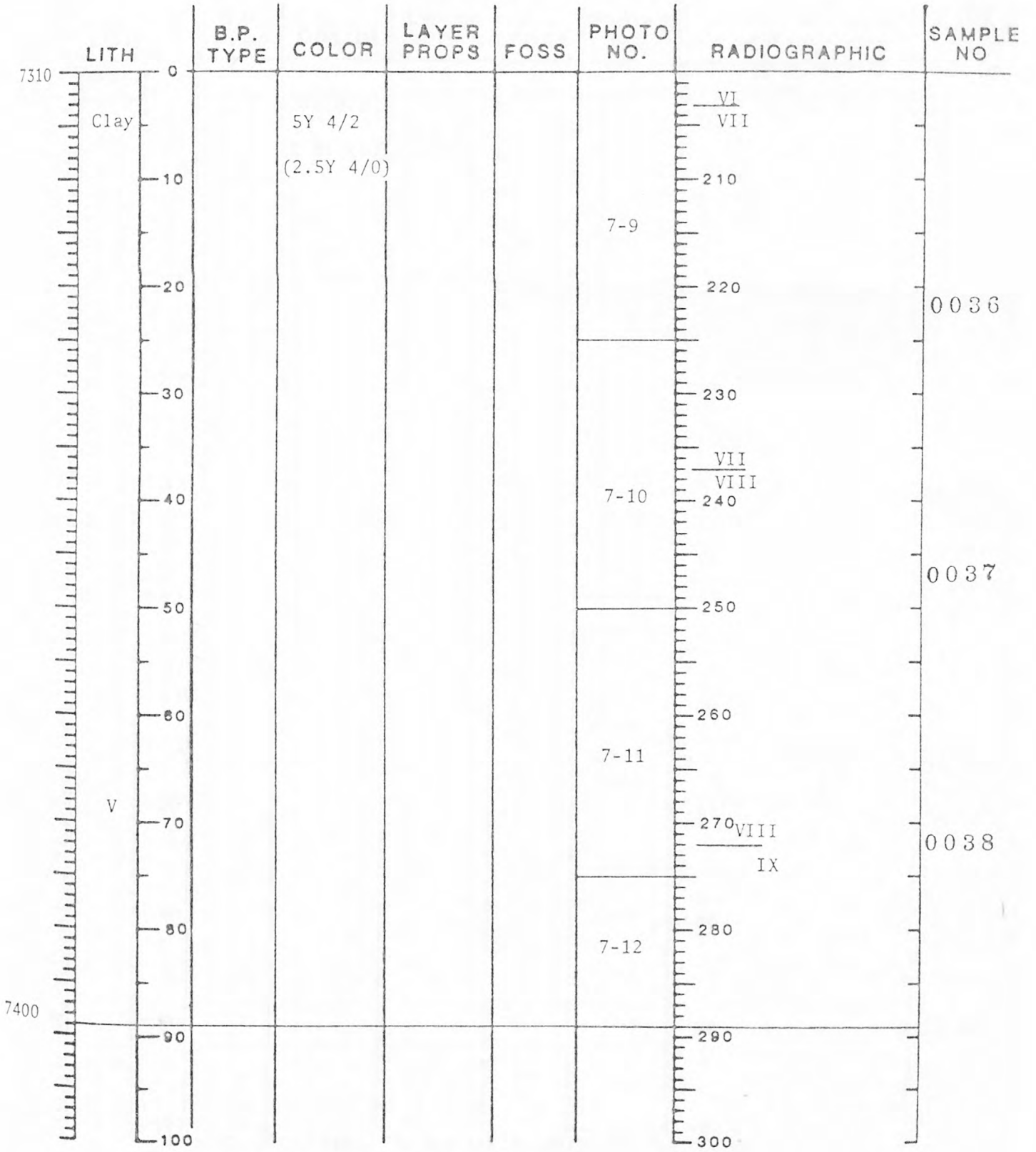
DESCRIBED BY LAF and JDS DATES JAN 23 1981 and MAR 2 1981 SHEET 2 of 3



VIVIANITE(?) VEINLETS THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 7 DEPTH 7310 to 7389 cm

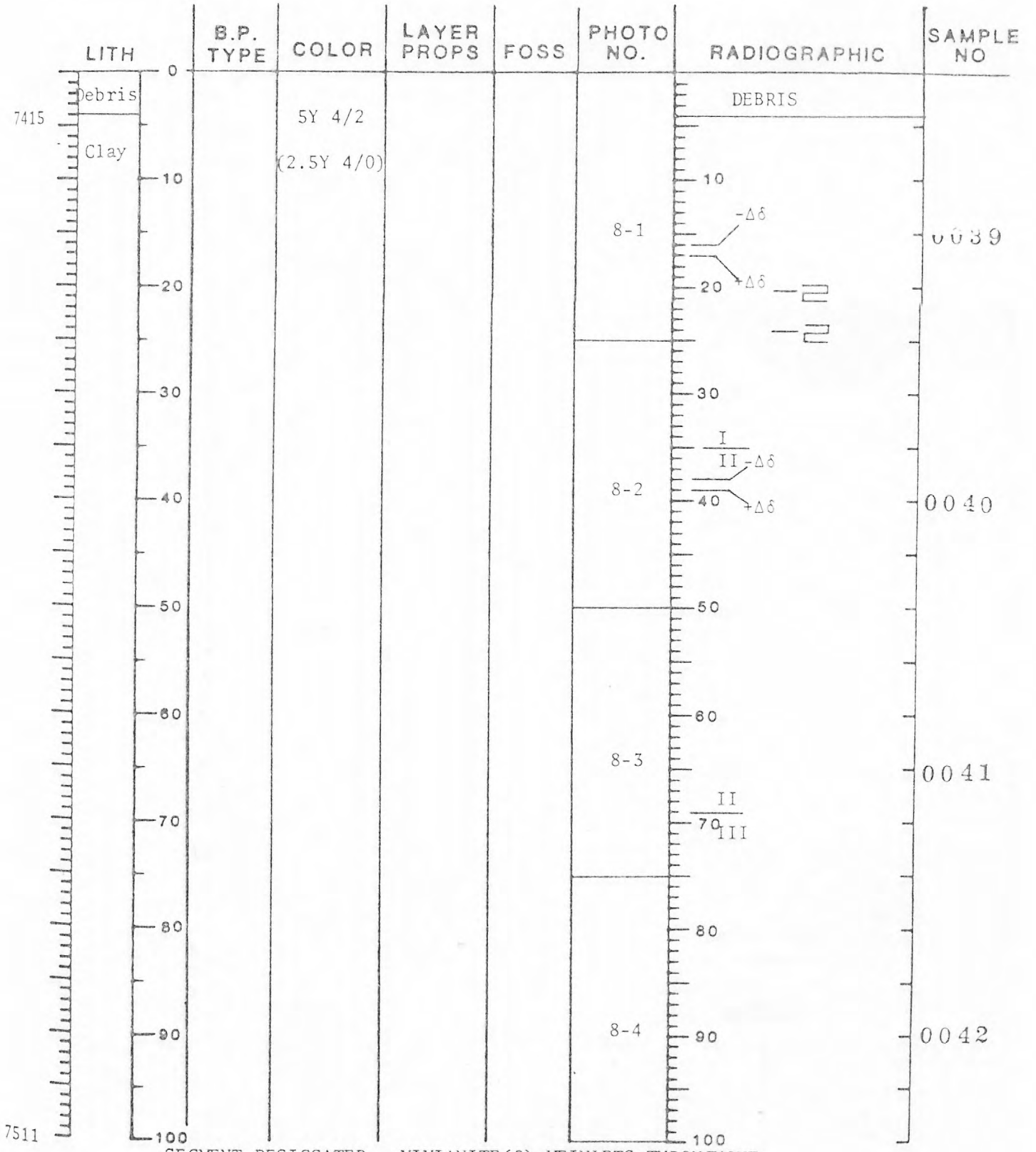
DESCRIBED BY LAF and JDS DATES JAN 23 1981 and MAR 2 1981 SHEET 3 of 3



VIVIANITE(?) VEINLETS THROUGHOUT.
MASSIVE THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 8 DEPTH 7415 to 7511 cm

DESCRIBED BY LAF and JDS. DATES JAN 29 1981 and [illegible] 1981 SHEET 1 of 3

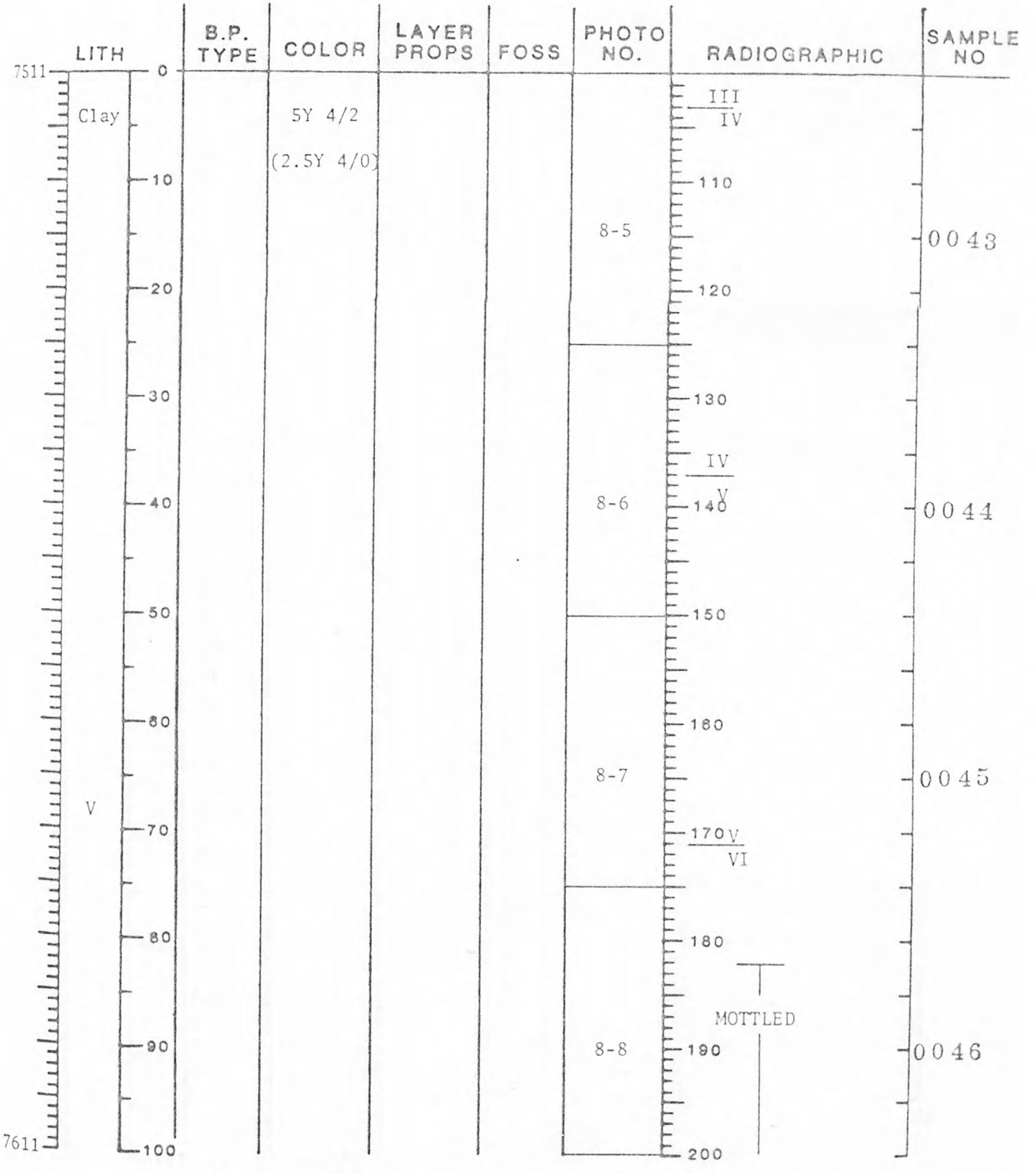


SEGMENT DESICCATED. VIVIANITE(?) VEINLETS THROUGHOUT.

MASSIVE THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 8 DEPTH 7511 to 7611 cm

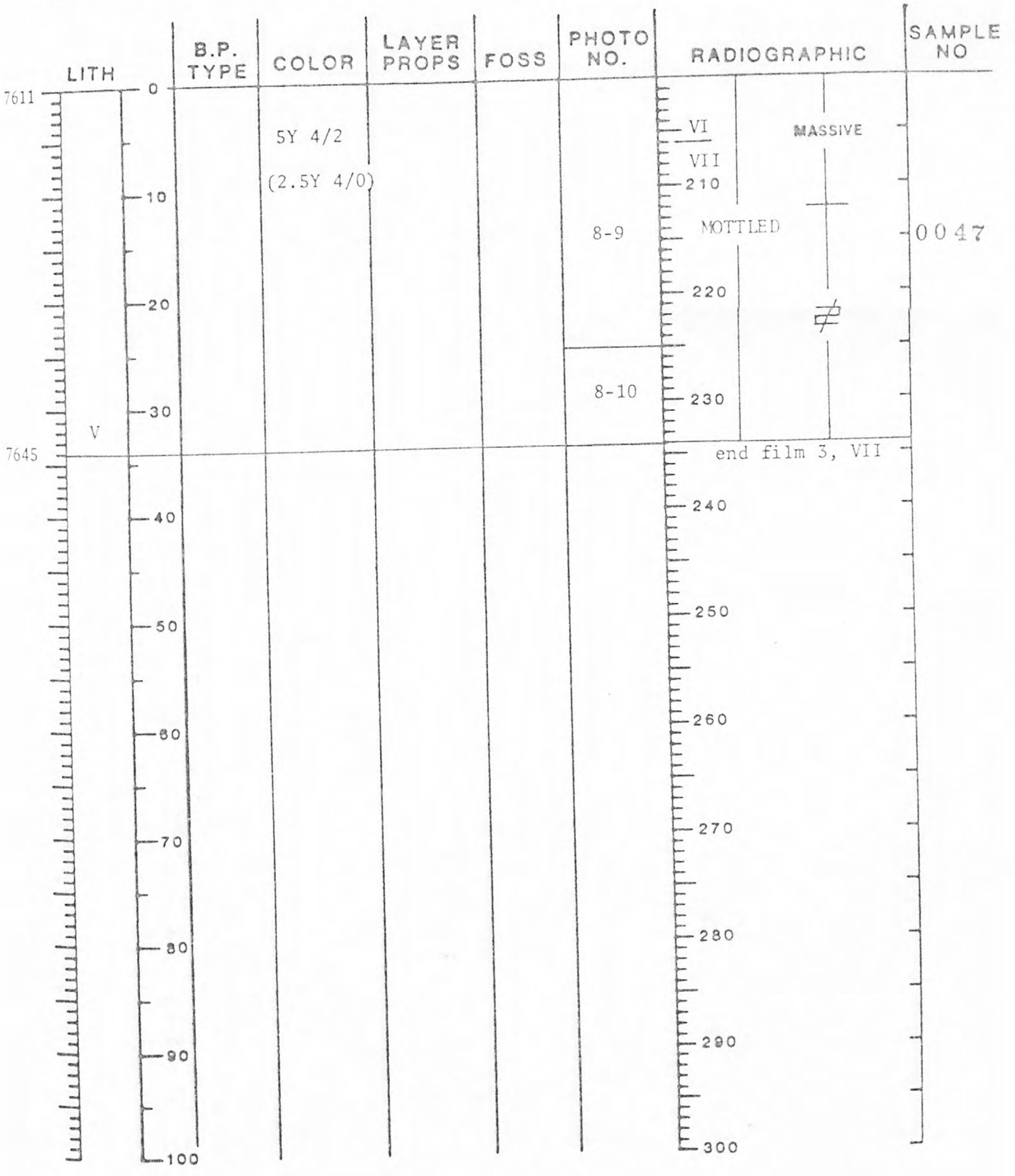
DESCRIBED BY LAF and JDS DATES JAN 2 & 1981 and MAR 2 1981 SHEET 2 of 3



MASSIVE THROUGHOUT.

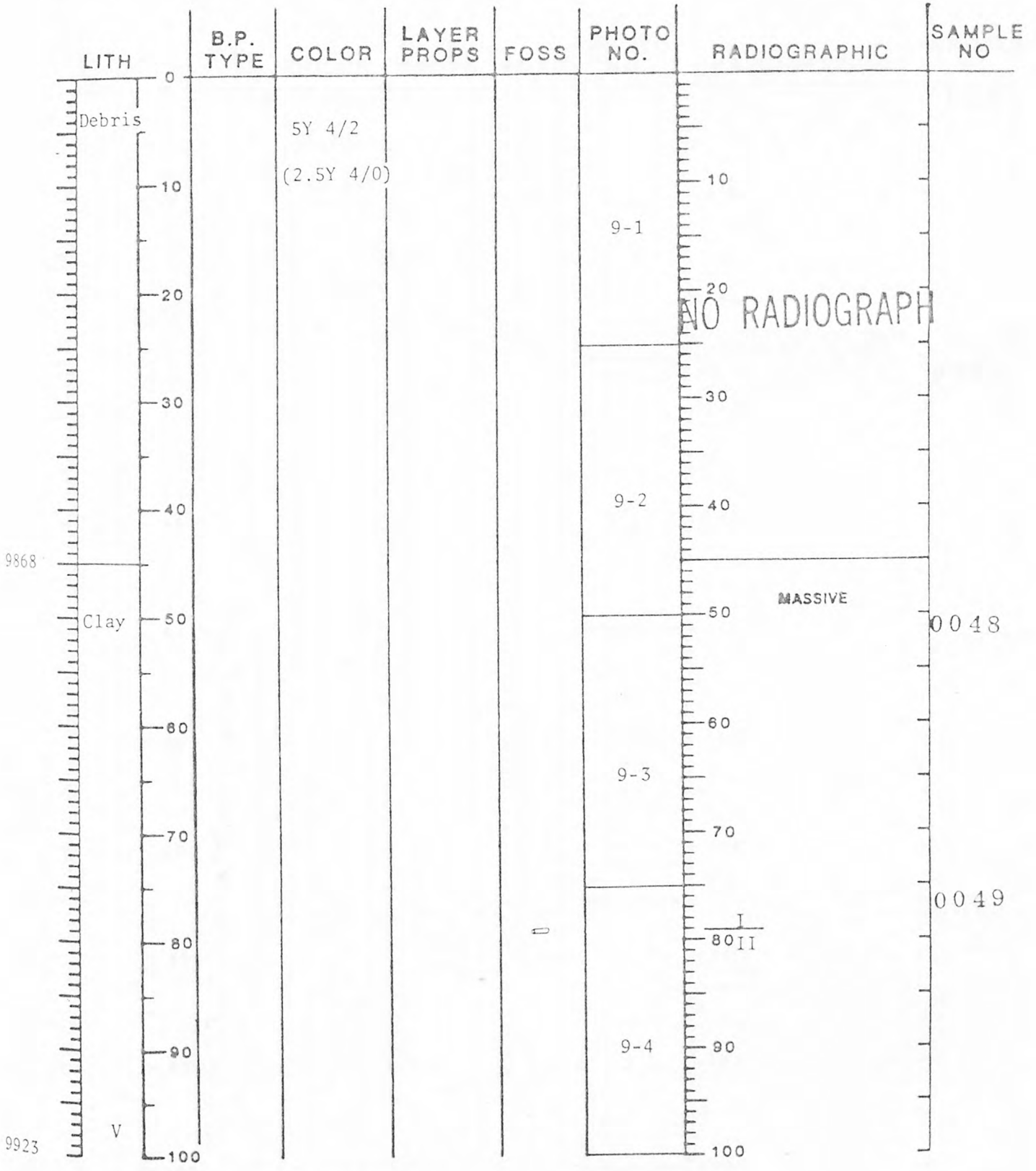
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 8 DEPTH 7611 to 7645 cm

DESCRIBED BY LAF and JDS DATES JAN 2 & 1981 and MAR 2 1981 SHEET 3 of 3



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 9 DEPTH 9868 to 9923 cm

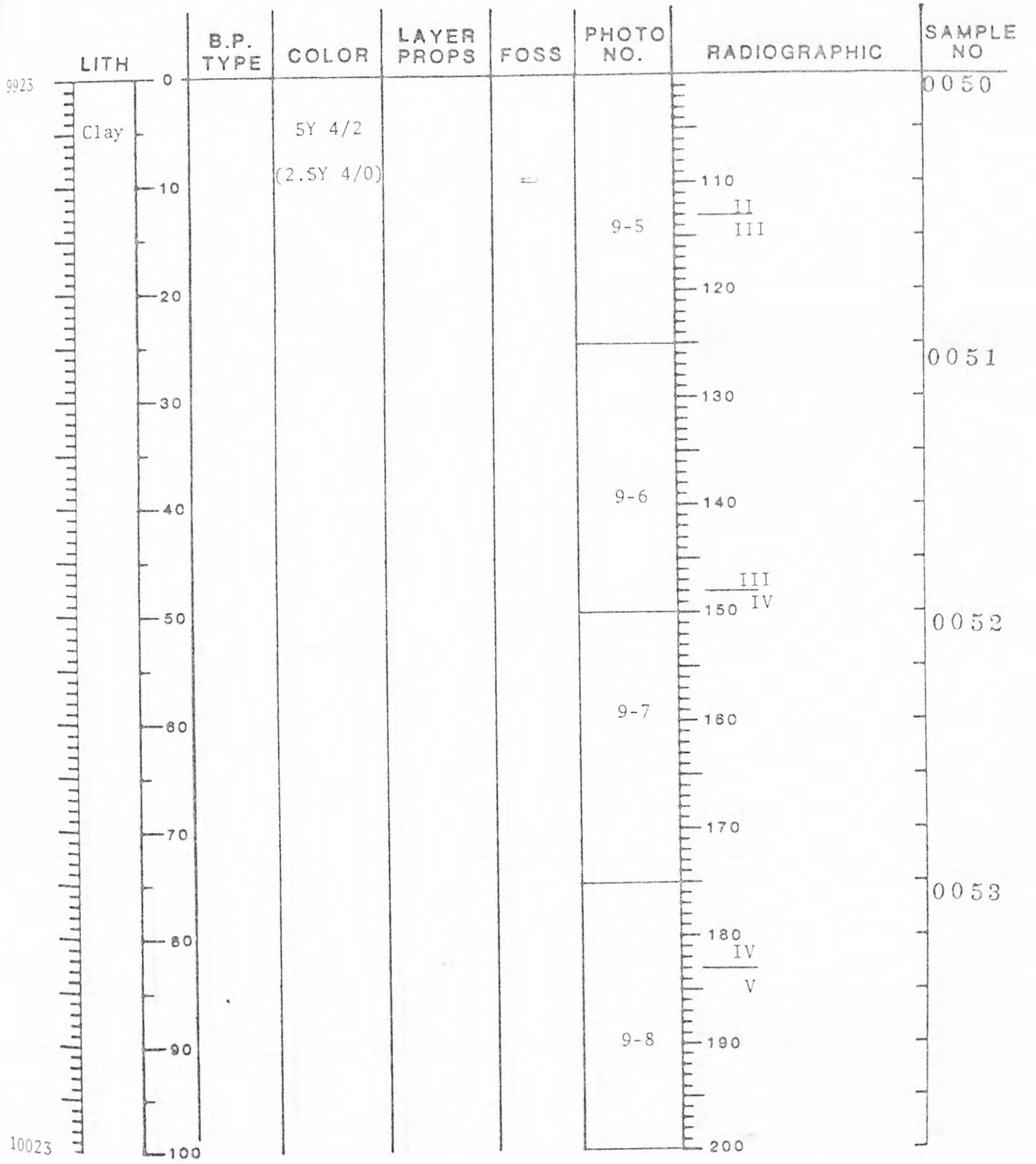
DESCRIBED BY LAF and IDS DATES JAN 30 1981 and MAR 2 1981 SHEET 1 of 3



BIOTURBATED THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 9 DEPTH 9923 to 10023 cm

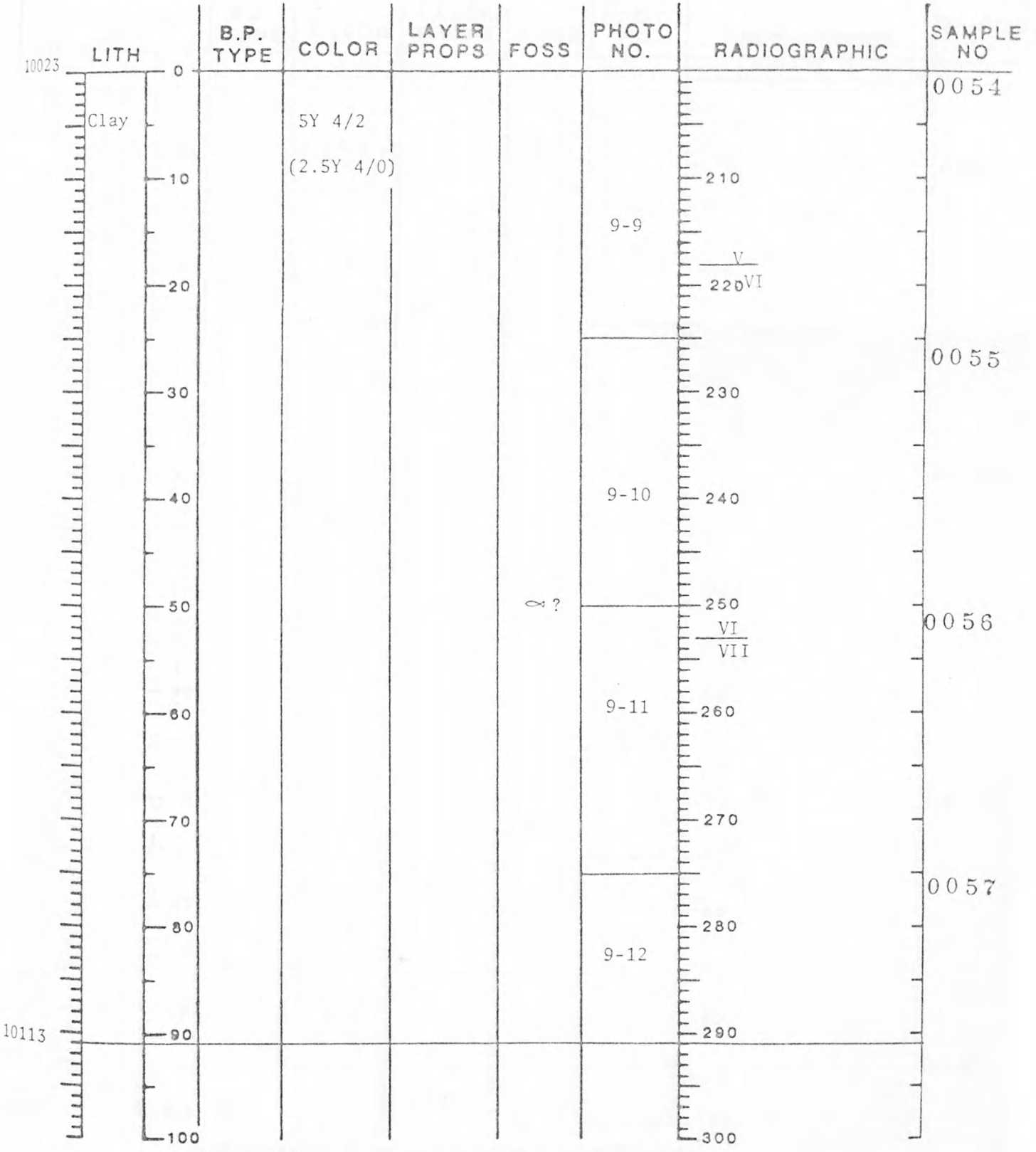
DESCRIBED BY LAF and JDS DATES JAN 30 1981 and MAR 2 1981 SHEET 2 of 3



BIOTURBATED THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 9 DEPTH 10023 to 10113 cm

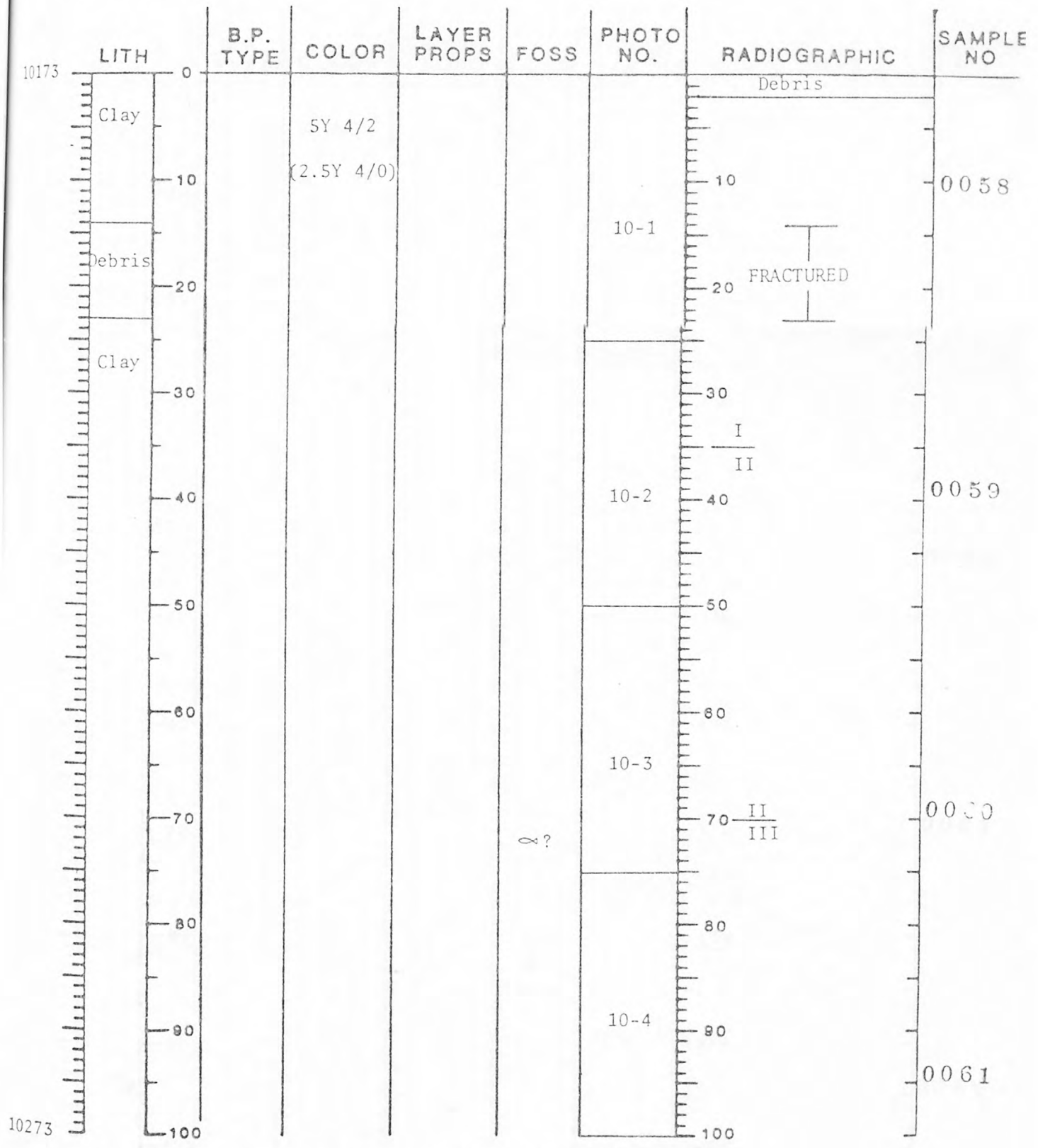
DESCRIBED BY LAF and JDS. DATES JAN 30 1981 and MAR 2 1981 SHEET 3 of 3



MASSIVE AND BIOTURBATED THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 10 DEPTH 10173 to 10273 cm

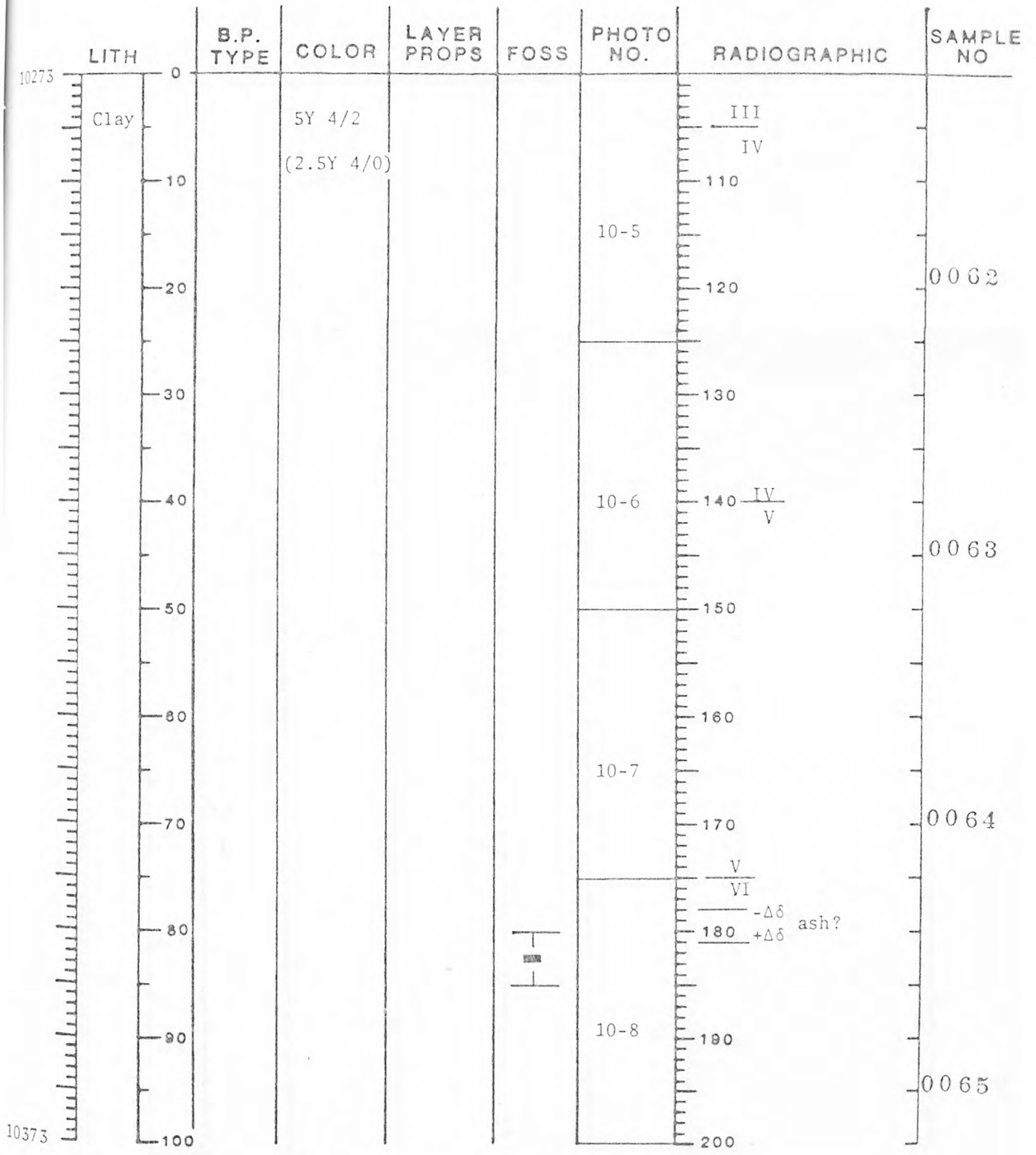
DESCRIBED BY LAF and JDS DATES FEB 6 1981 and MAR 2 1981 SHEET 1 of 4



VIVIANITE? VEINLETS AND BIOTURBATED THROUGHOUT.

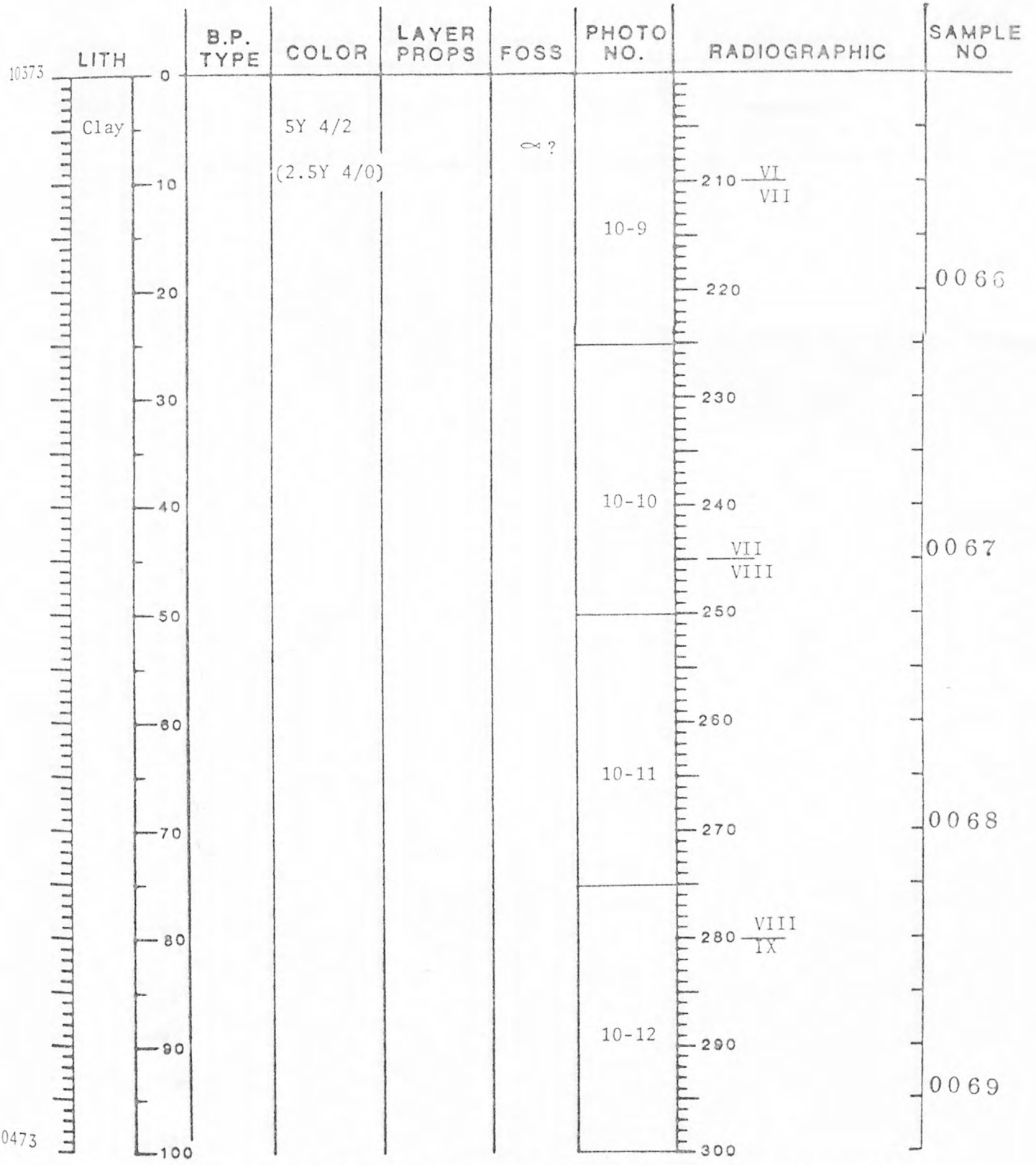
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 10 DEPTH 10273 to 10373 cm

DESCRIBED BY LAF and JDS DATES FEB 6 1981 and MAR 2 1981 SHEET 2 of 4



LAKE CLEAR LAKE, CALIF, CORE CL-80-2 SEGMENT 10 DEPTH 10373 to 10473 cm

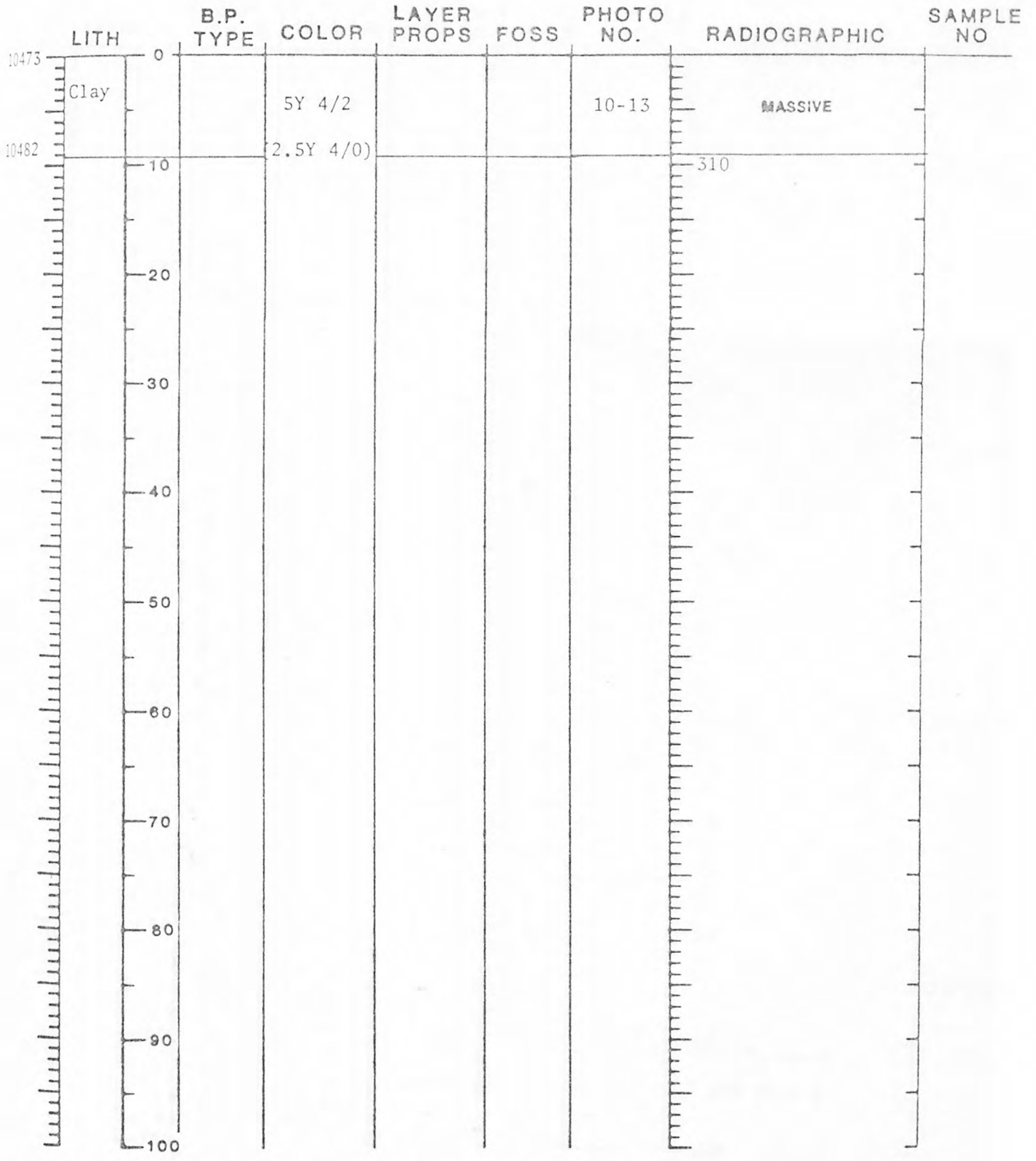
DESCRIBED BY LAF and JDS DATES FEB 6 1981 and MAR 2 1981 SHEET 3 of 4



MASSIVE THROUGHOUT. A SECTION FROM 205cm - 309cm IS DESSICATED.

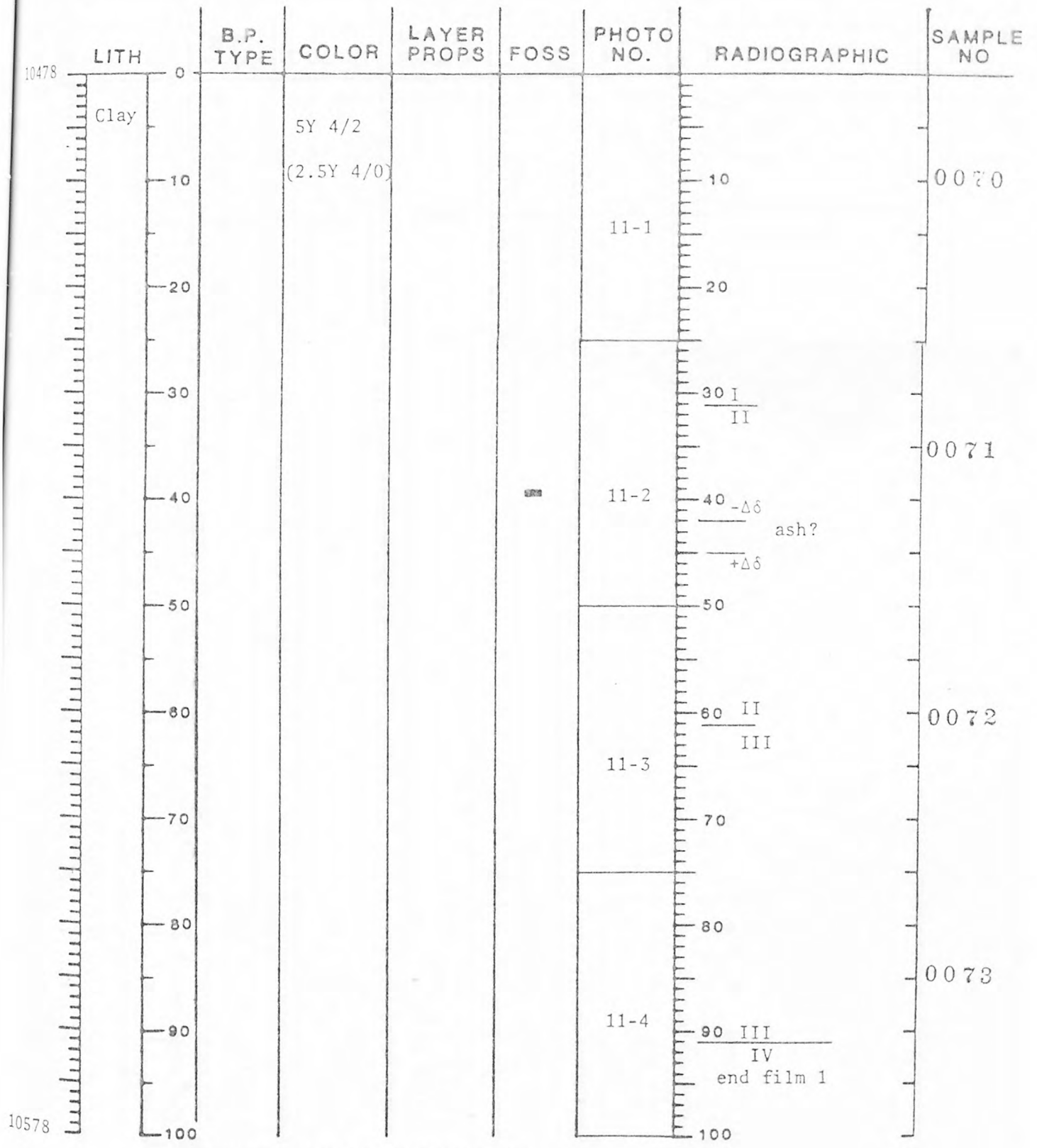
LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 10 DEPTH 10473 to 10482 cm

DESCRIBED BY LAE and JDS DATES FEB 6 1981 and MAR 2 1981 SHEET 4 of 4



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 11 DEPTH 10478 to 10578 cm

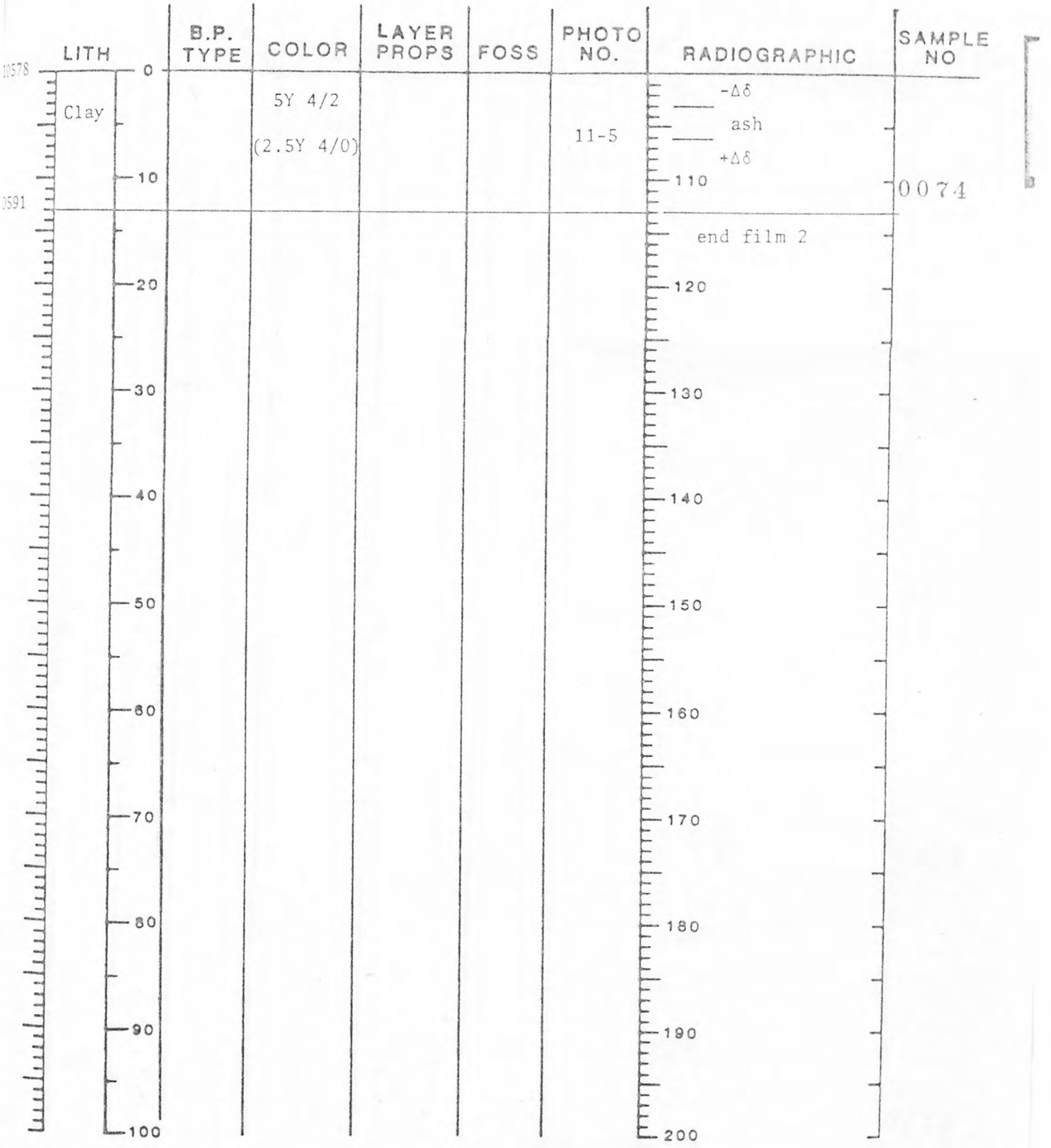
DESCRIBED BY LAF and JDS DATES FEB 12 1981 and MAR 2 1981 SHEET 1 of 2



STRONGLY BIOTURBATED THROUGHOUT.

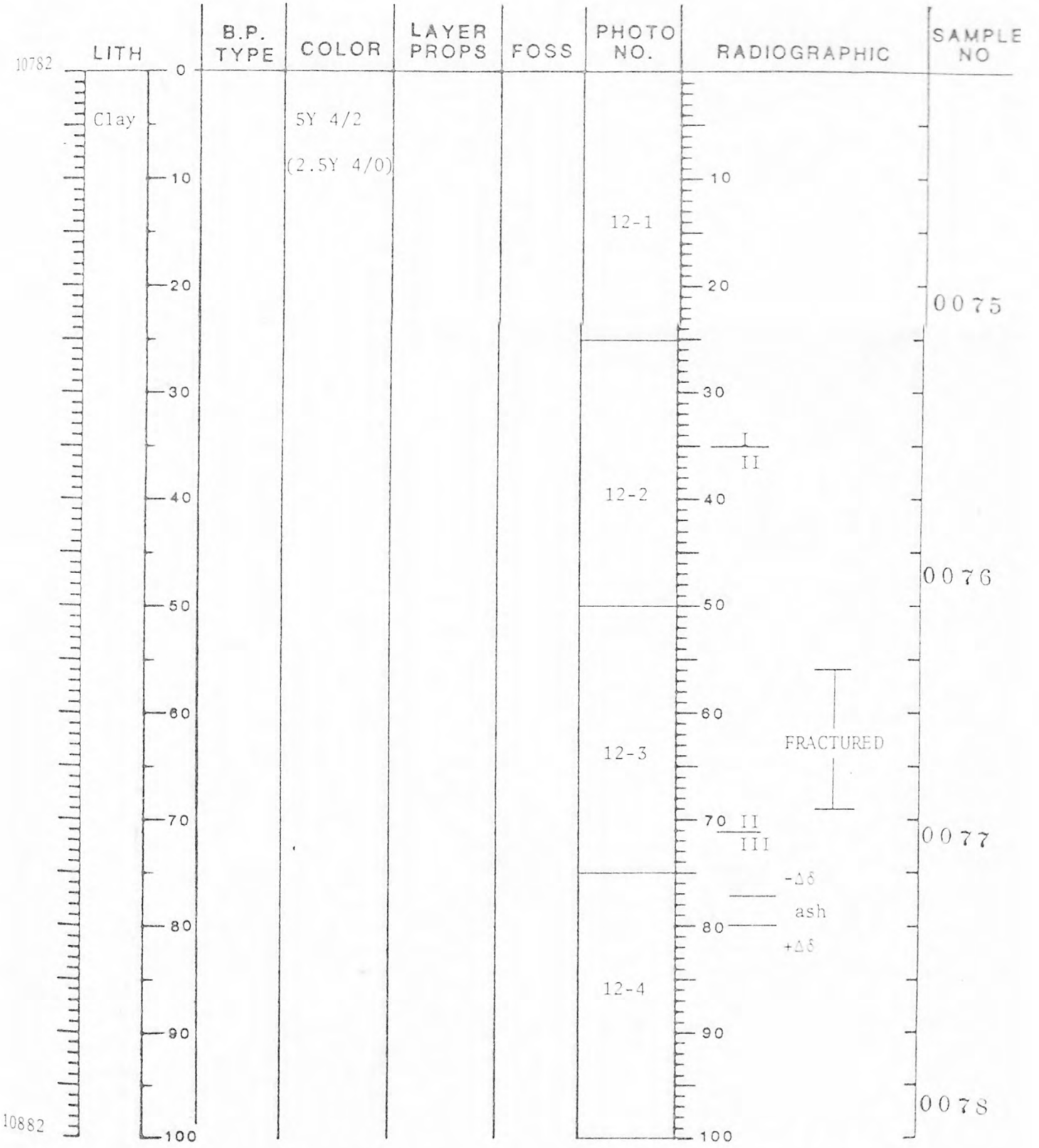
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 11 DEPTH 10578 to 10591 cm

DESCRIBED BY LAF and ____ DATES FEB 12 1981 and MAR 2 1981 SHEET 2 of 2



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 12 DEPTH 10782 to 10882 cm

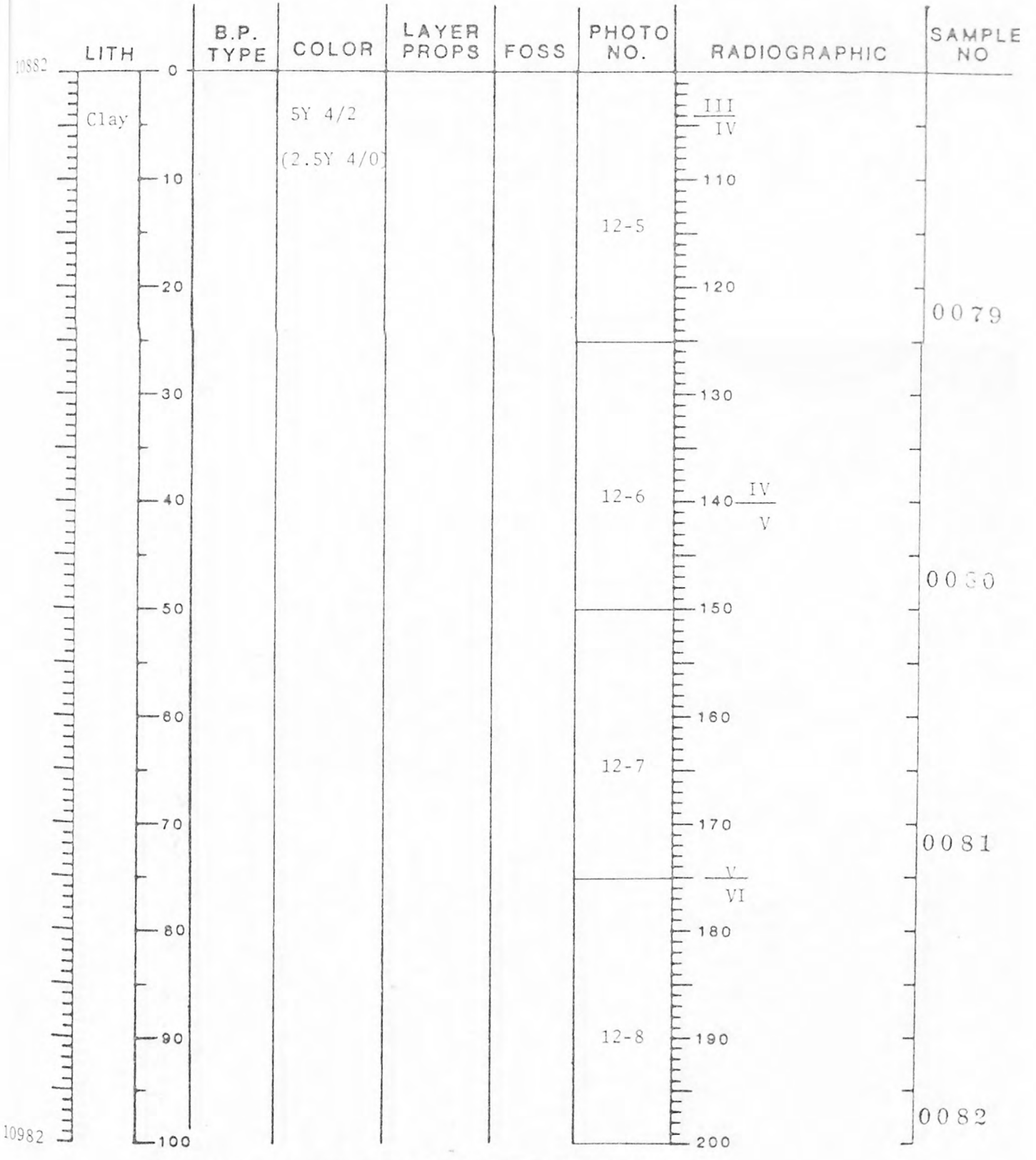
DESCRIBED BY LAF and JDS DATES FEB 12 1981 and MAR 2 1981 SHEET 1 of 4



MASSIVE AND STRONGLY BIOTURBATED THROUGHOUT. SEGMENT FRACTURED AND DESSICATED BETWEEN 0 - 81cm AND 161cm - 304cm.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 12 DEPTH 10882 to 10982 cm

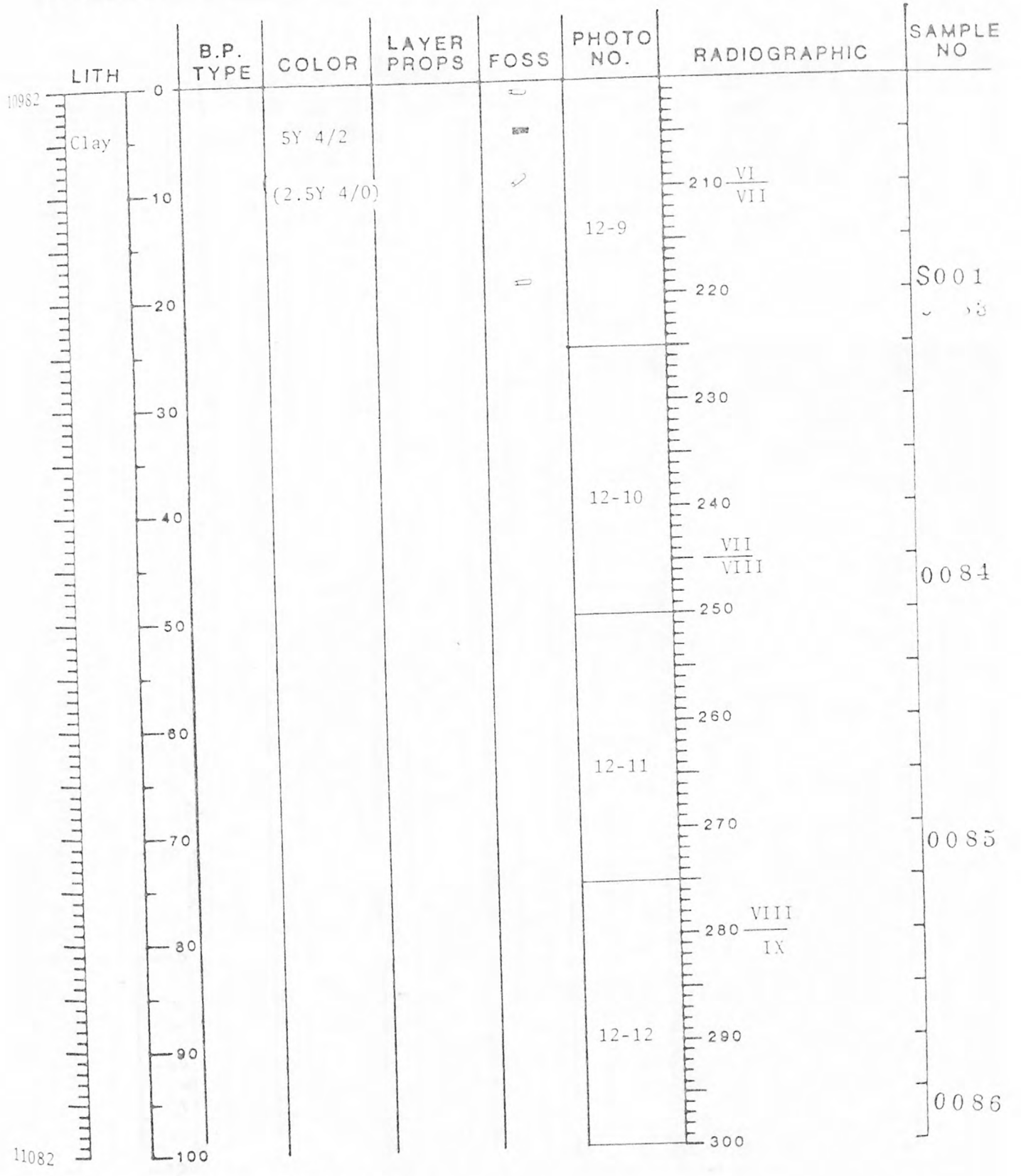
DESCRIBED BY LAF and JDS DATES FEB 12 1981 and MAR 2 1981 SHEET 2 of 4



MASSIVE AND STRONGLY BIOTURBATED THROUGHOUT.

LAKE CLEAR LAKE, CALIF, CORE CL-80-2 SEGMENT 12 DEPTH 10982 to 11082 cm

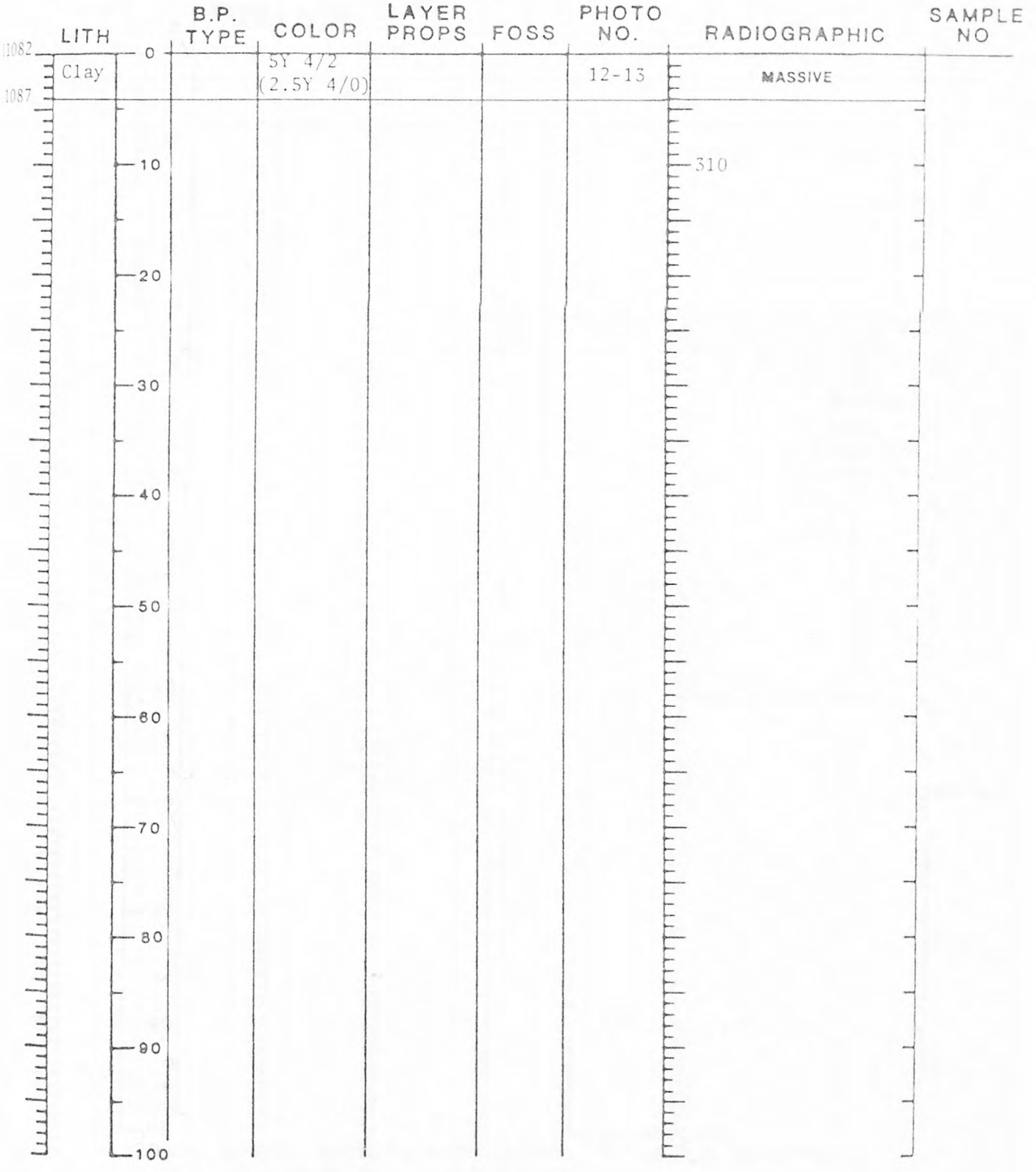
DESCRIBED BY LAF and JDS DATES FEB 1[illegible] 1981 and MAR 2 1981 SHEET 3 of 4



MASSIVE THROUGHOUT.

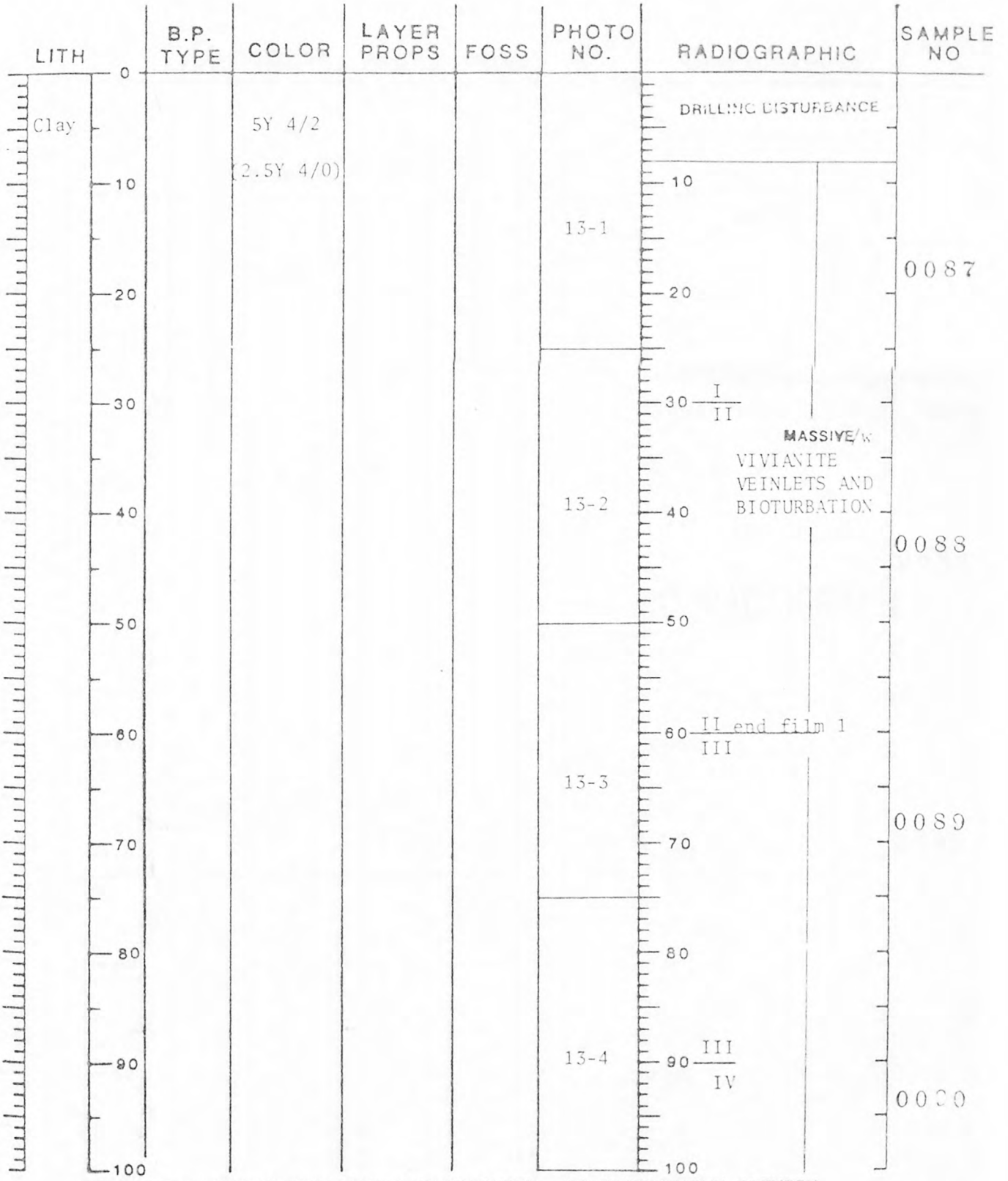
LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 12 DEPTH 11082 to 11087 cm

DESCRIBED BY LAF and JDS DATES ~~FEB 12 1981~~ and MAR 2 1981 SHEET 4 of 4



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 13 DEPTH 11087 to 11187 cm

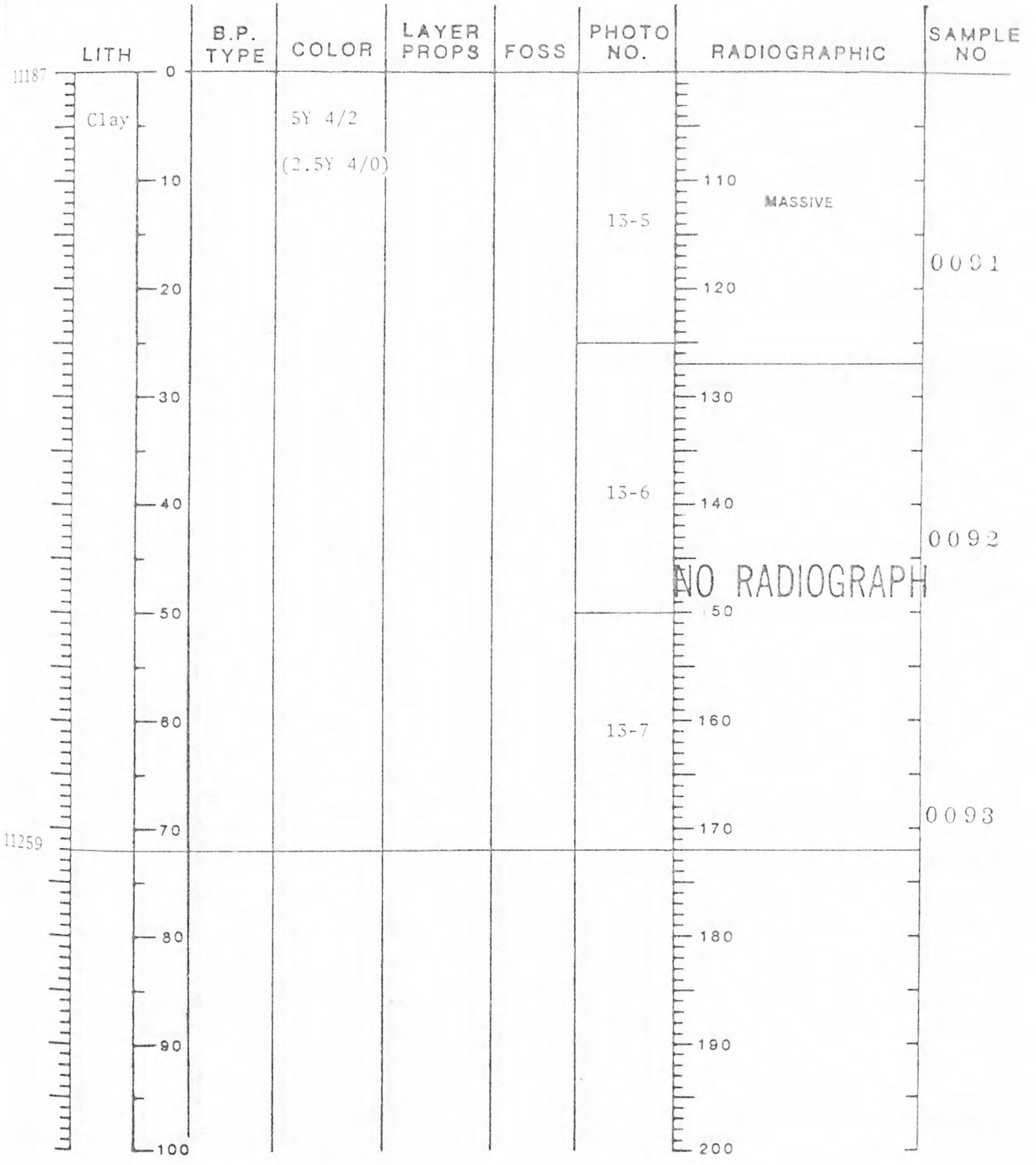
DESCRIBED BY LAF and JDS DATES FEB 13 1981 and MAR 2 1981 SHEET 1 of 2



SEGMENT SLIGHTLY DESSICATED THROUGHOUT. NO RADIOGRAPHY BETWEEN 127cm - 172cm DO TO SPLITTING DIFFICULTIES.

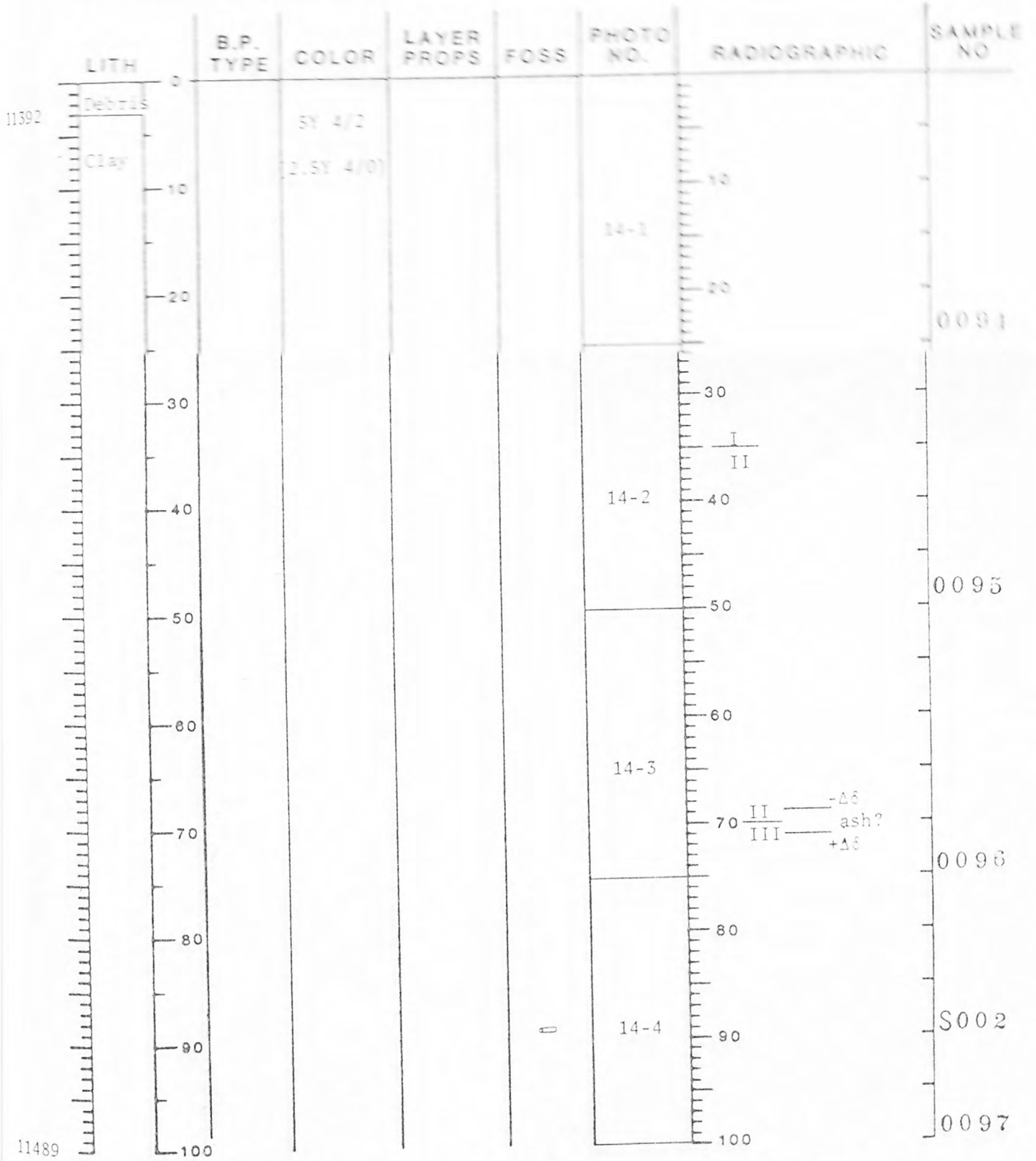
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 13 DEPTH 11187 to 11259 cm

DESCRIBED BY LAF and JDS DATES FEB 13 1981 and MAR 2 1981 SHEET 2 of 2



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 14 DEPTH 11382 to 11489 cm

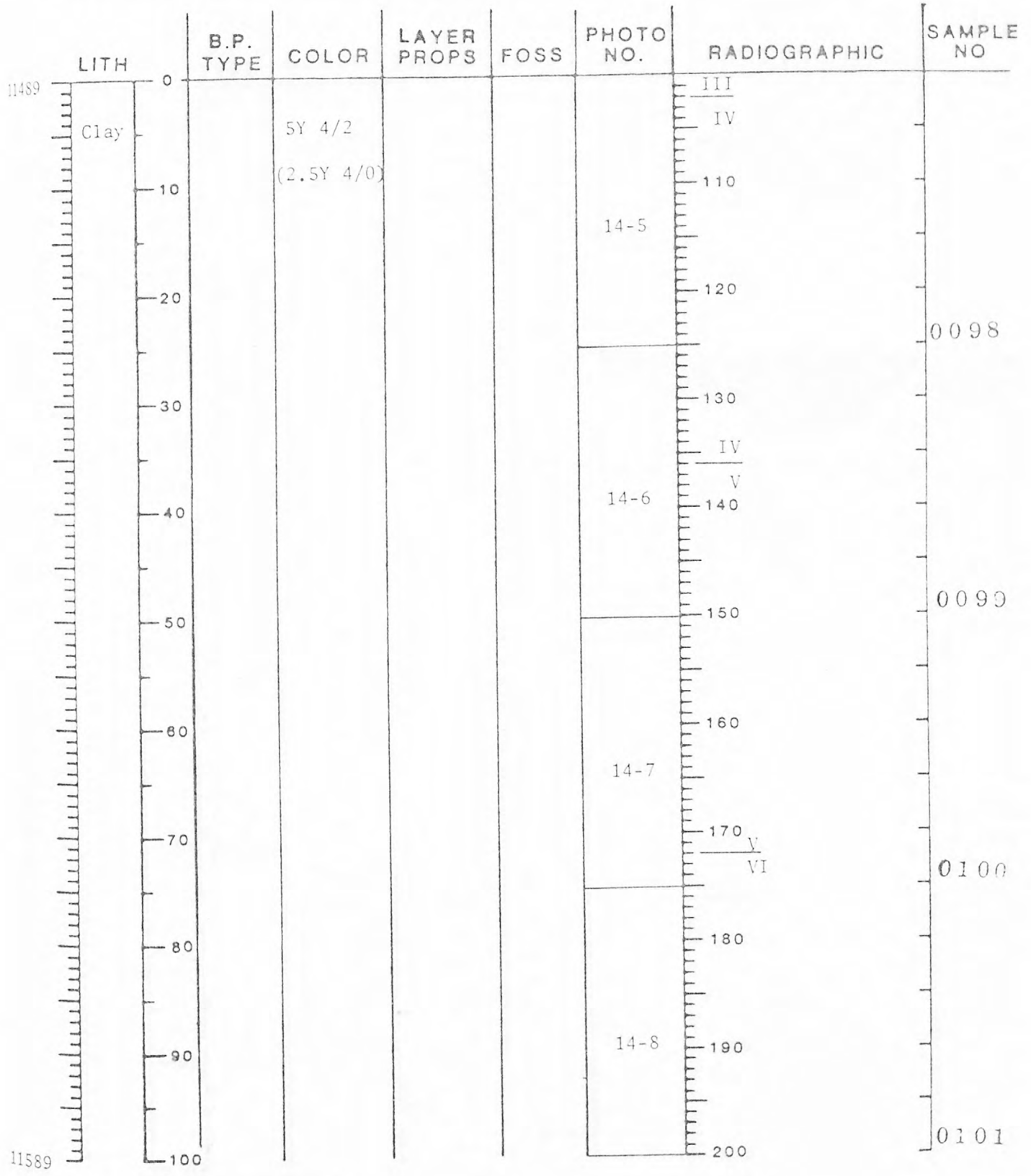
DESCRIBED BY LAF and JDS DATES FEB 11 80 and MAR 2 80 SHEET 1 of 4



MASSIVE WITH VIVIANITE VEINLETS AND BIOTURBATION THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 14 DEPTH 11489 to 11589 cm

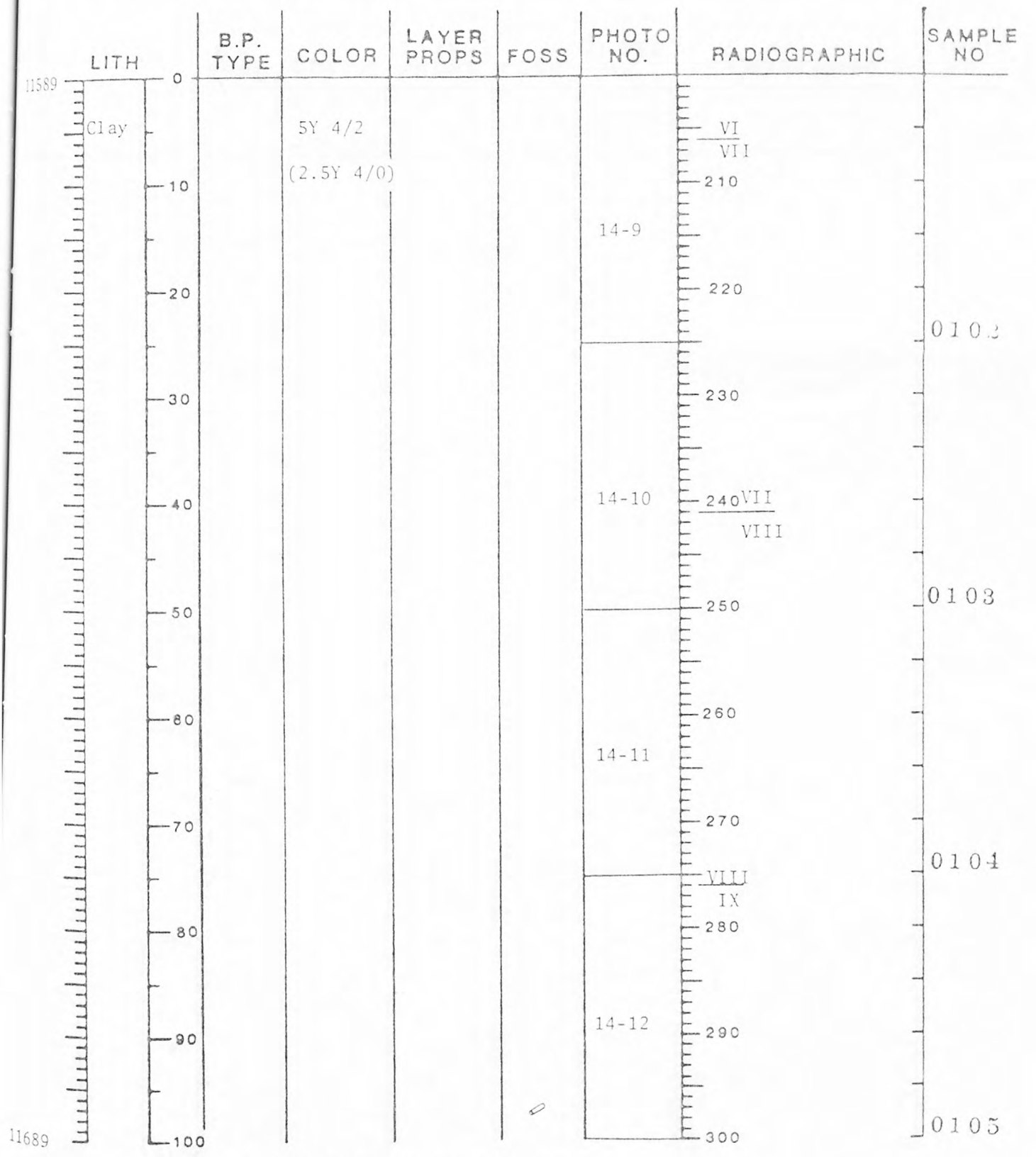
DESCRIBED BY LAF and JDS DATES FEB 1 3 1981 and MAR 2 1981 SHEET 2 of 4



MASSIVE THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 14 DEPTH 11589 to 11689 cm

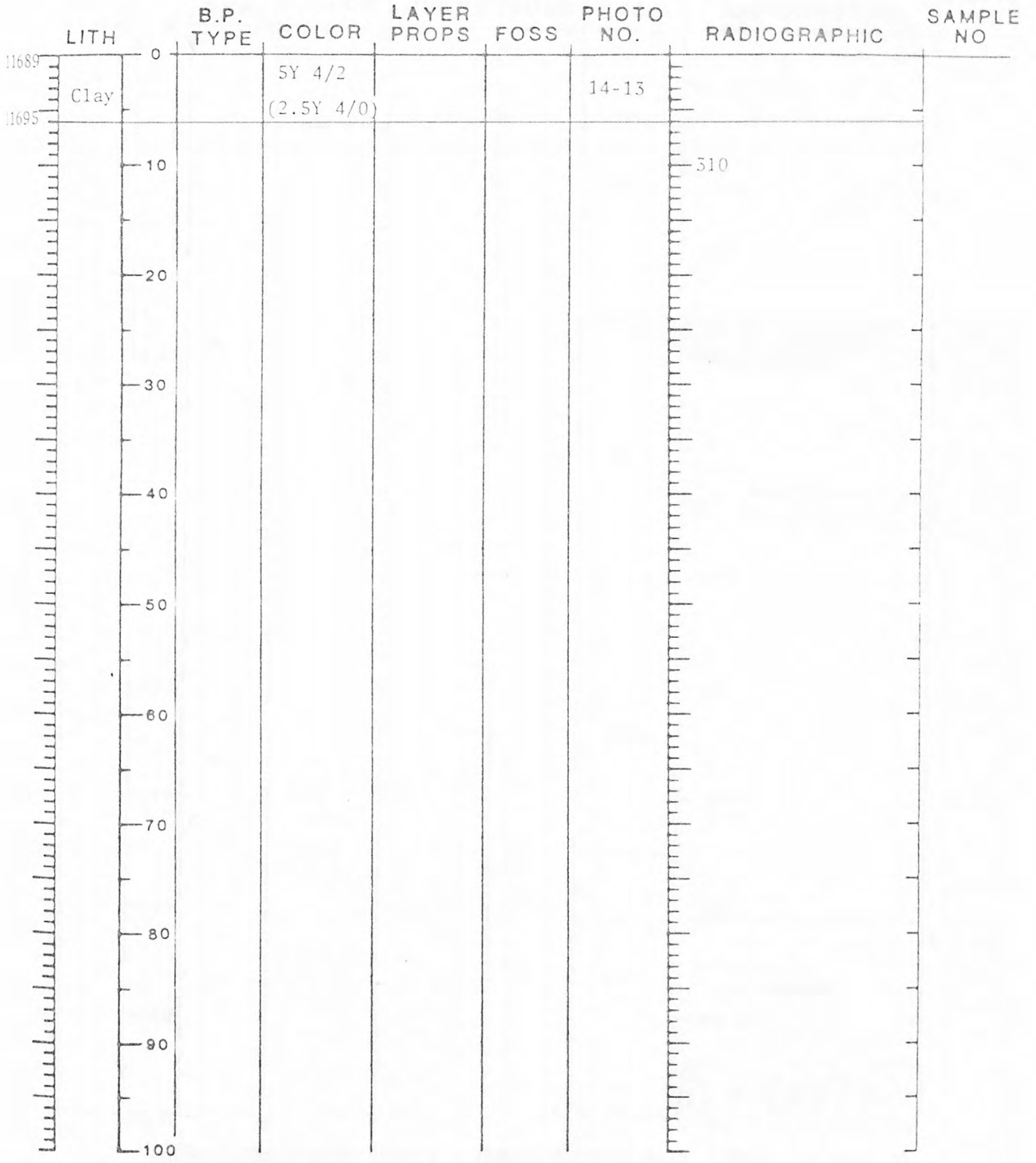
DESCRIBED BY LAF and JDS DATES FEB 16 1981 and MAR 2 1981 SHEET 3 of 4



MASSIVE AND BIOTURBATED THROUGHOUT.

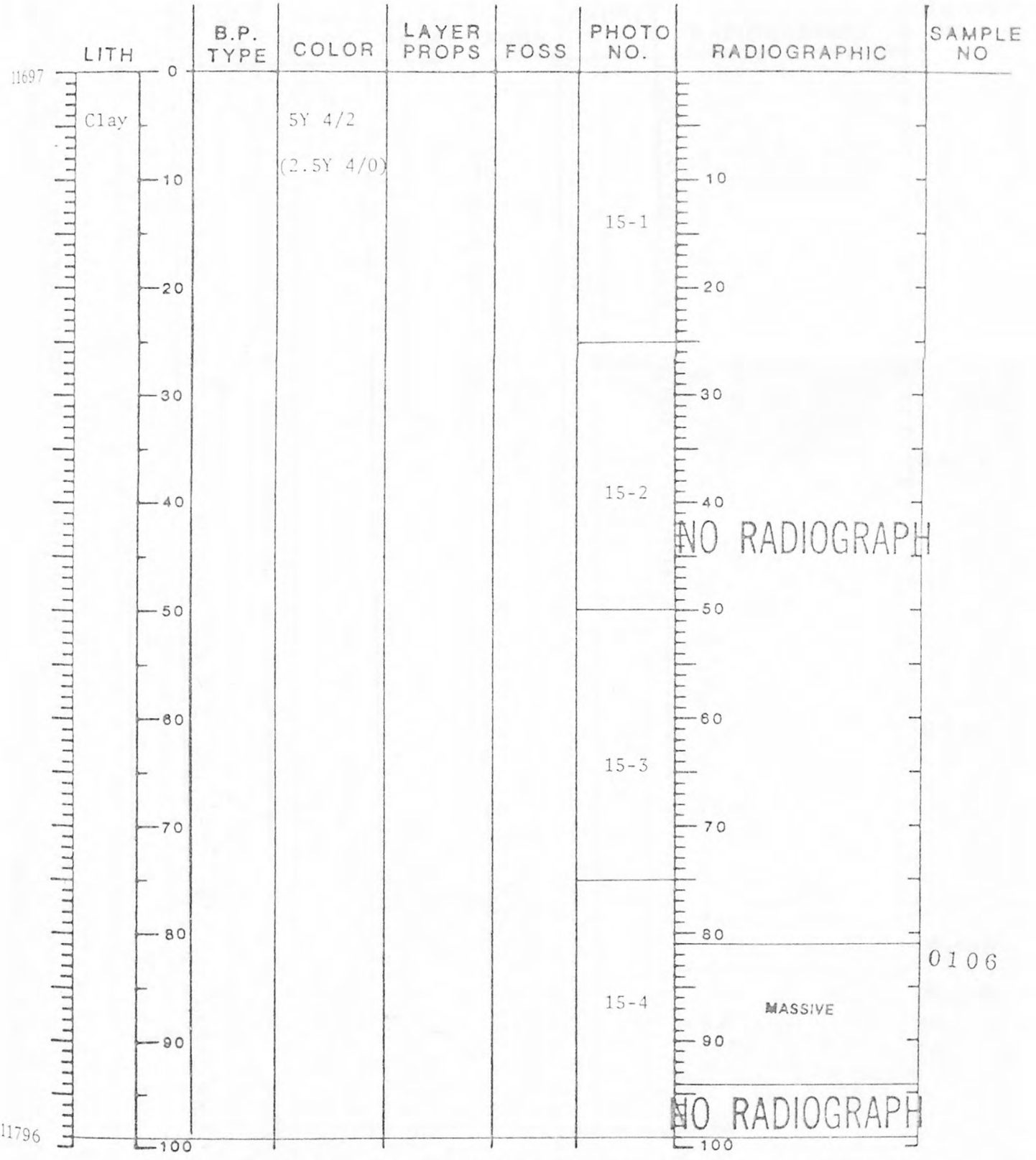
LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 14 DEPTH 11689 to 11695 cm

DESCRIBED BY LAE and JDS DATES FEB 18 1981 and MAR 2 1981 SHEET 4 of 4



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 15 DEPTH 11697 to 11796 cm

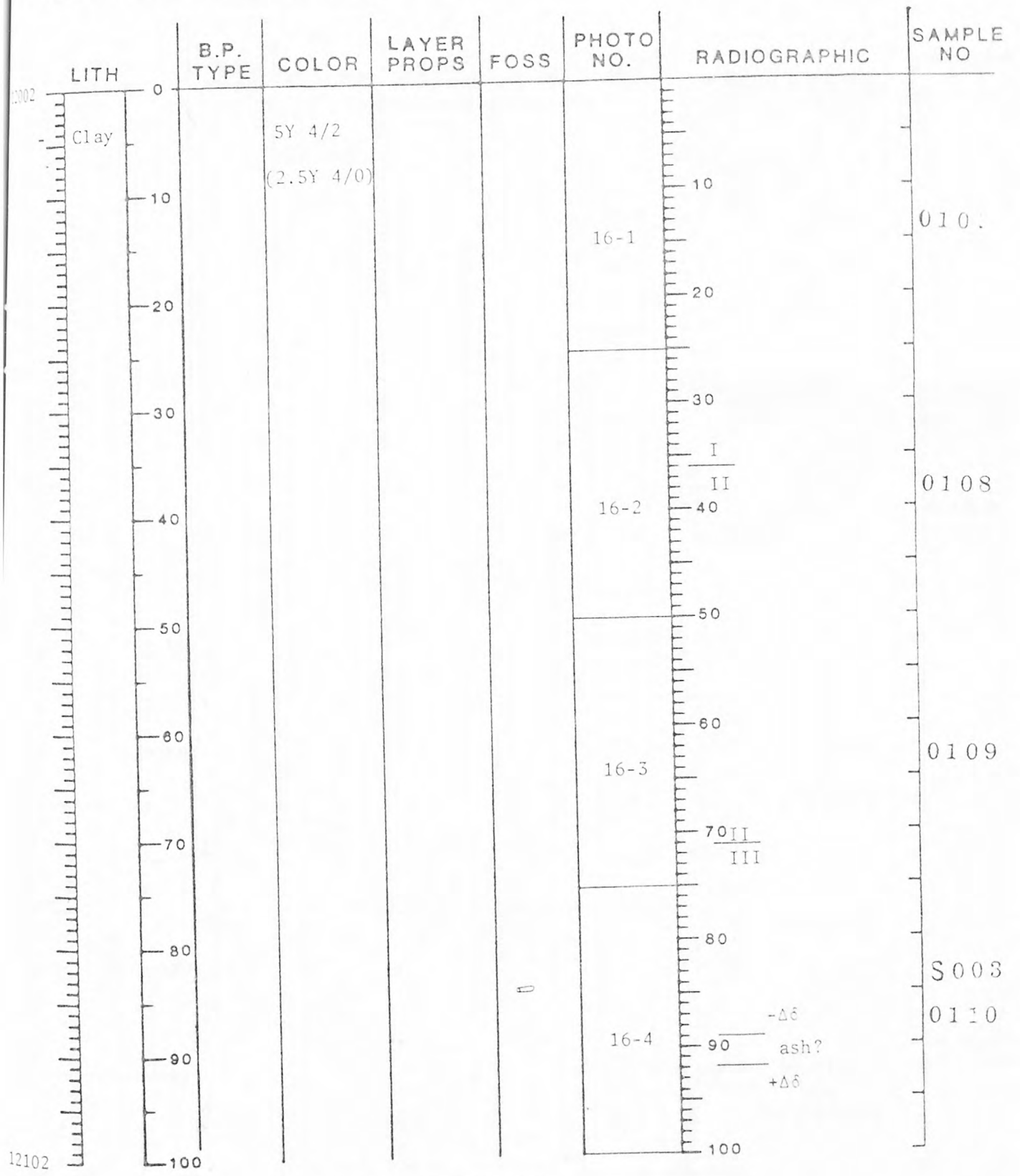
DESCRIBED BY LAF and JDS DATES FEB 19 1981 and MAR 2 1981 SHEET 1 of 1



SEGMENT DESSICATED EXCEPT INTERVAL BETWEEN 81cm - 94cm. UNABLE TO SPLIT OR SUBSAMPLE MOST OF THE SEGMENT DO TO DESSICATION.

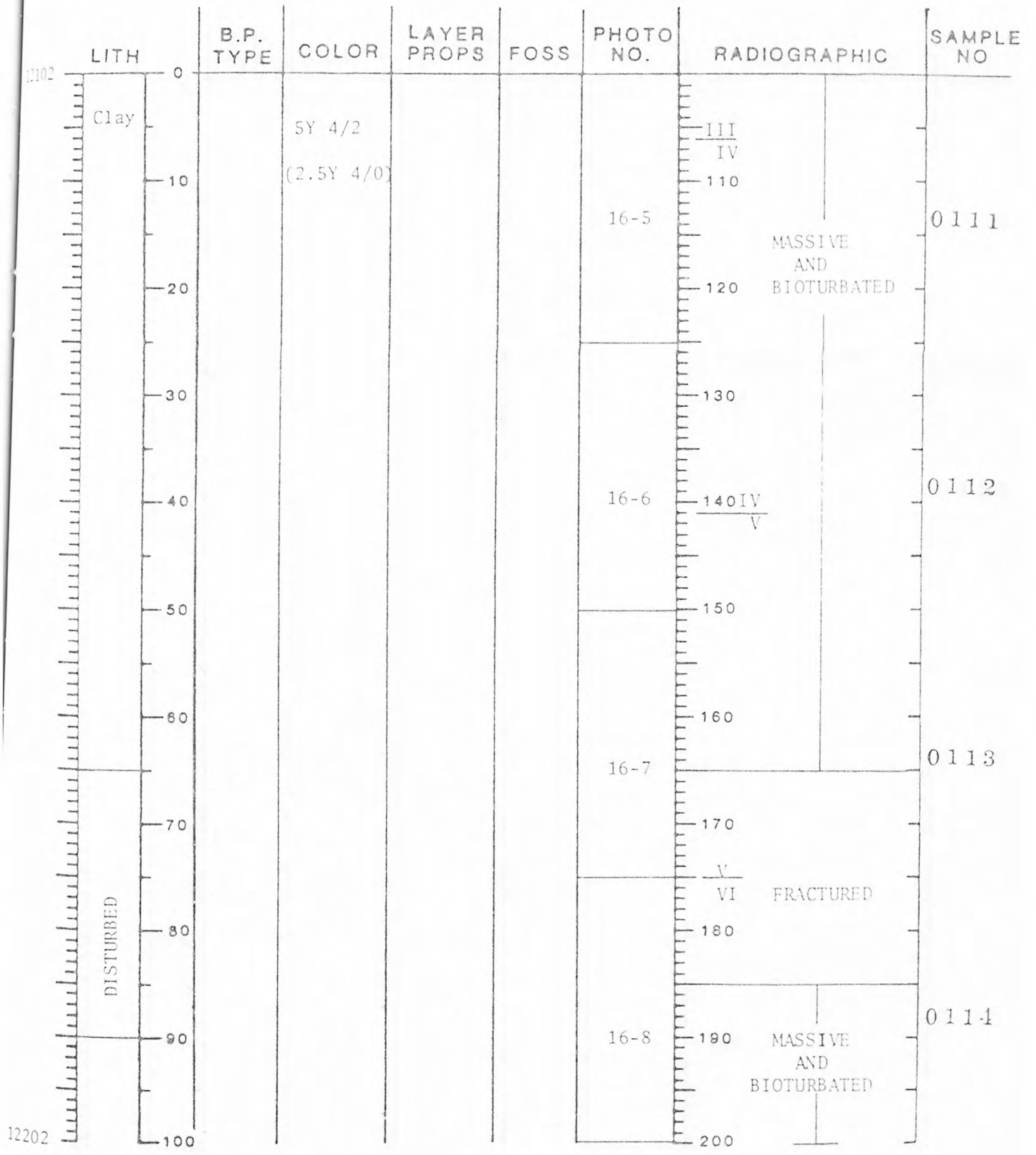
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 16 DEPTH 12002 to 12102 cm

DESCRIBED BY LAF and JDS DATES FEB 18 1981 and MAR 2 1981 SHEET 1 of 4



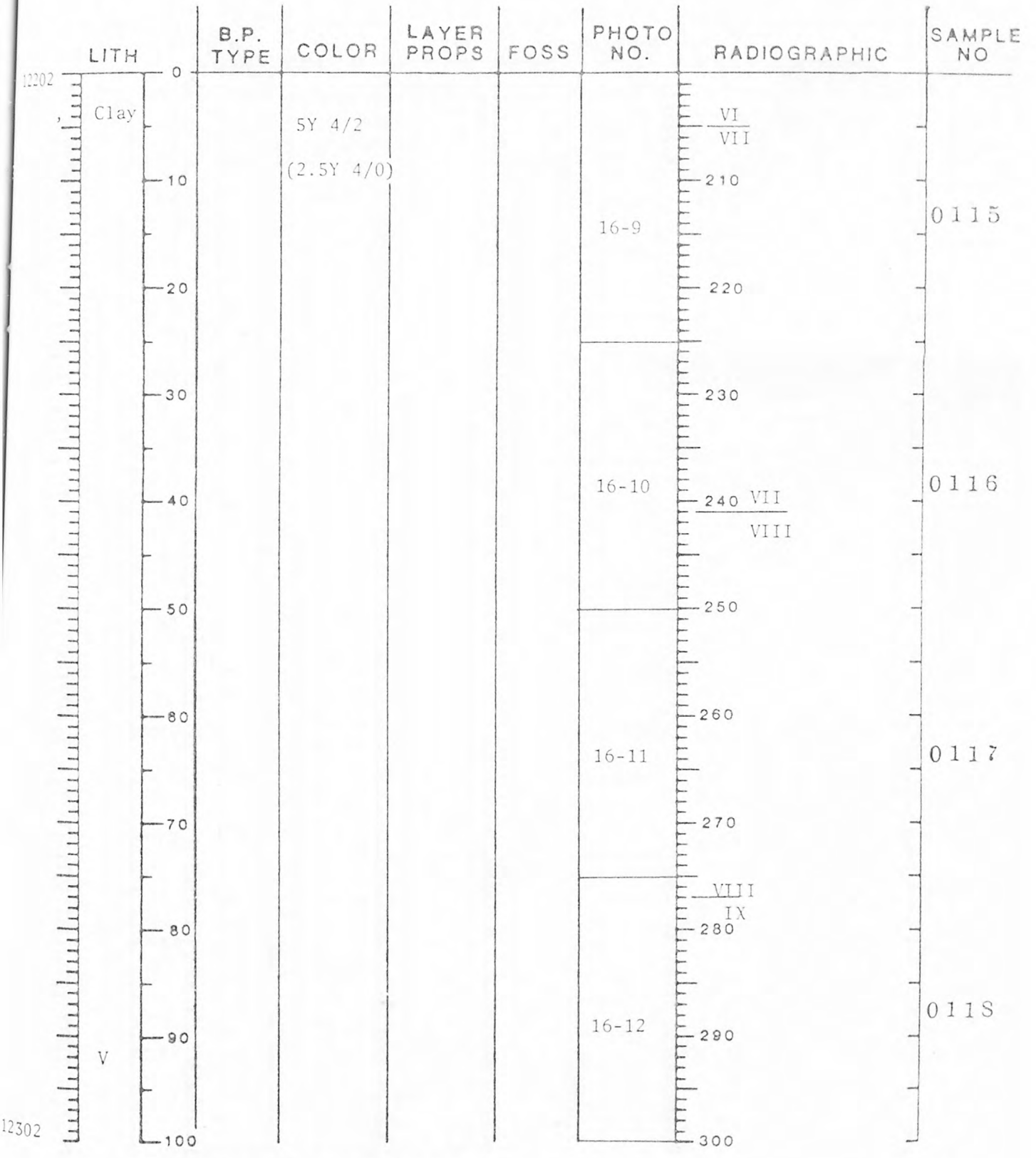
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 16 DEPTH 12102 to 12202 cm

DESCRIBED BY LAF and JDS DATES FEB 11 1981 and MAR 2 1981 SHEET 2 of 4



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 16 DEPTH 12202 to 12302 cm

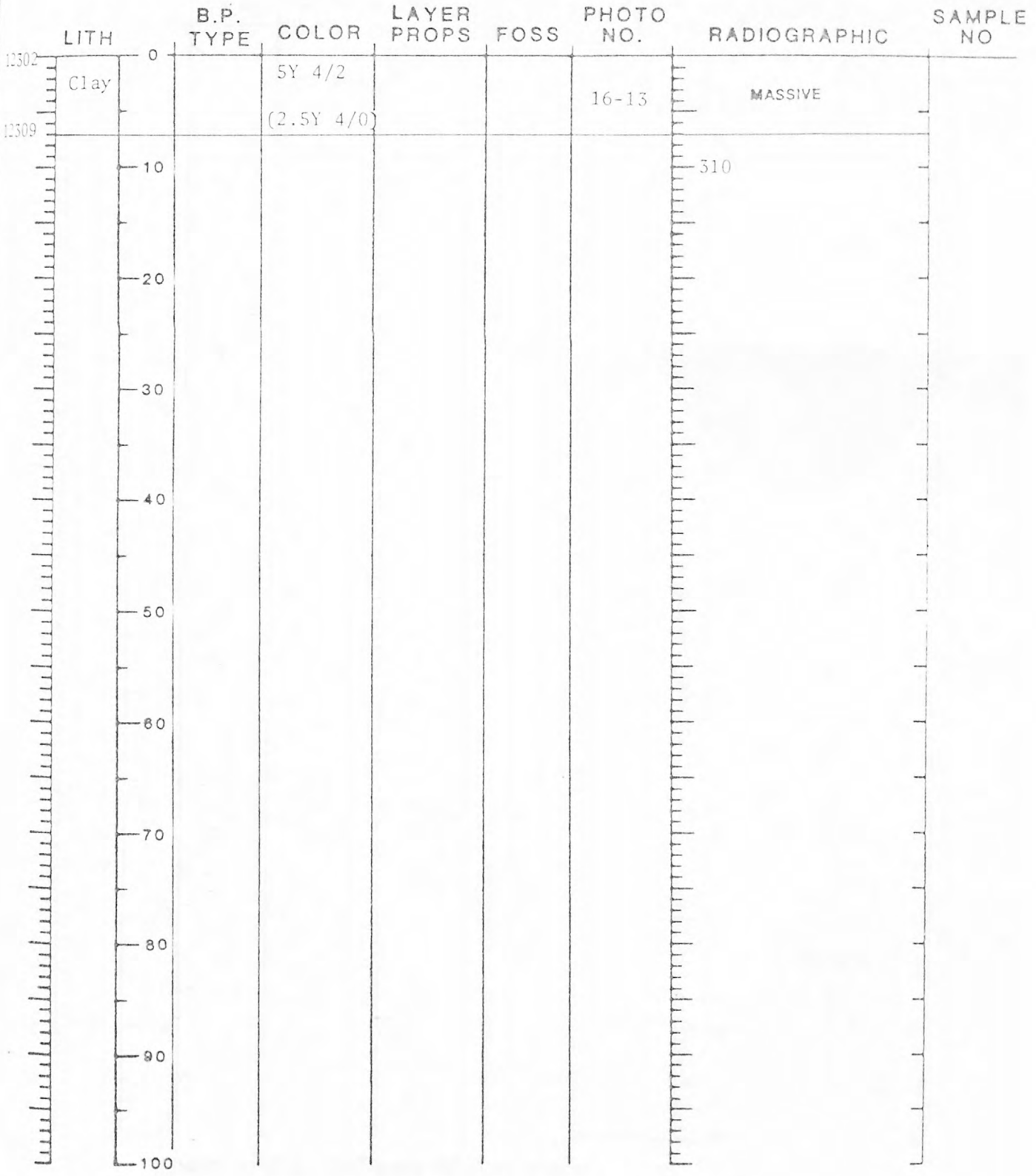
DESCRIBED BY LAF and JDS DATES FEB 1[illegible]-81 and MAR 2 1981 SHEET 3 of 4



MASSIVE AND BIOTURBATED THROUGHOUT.

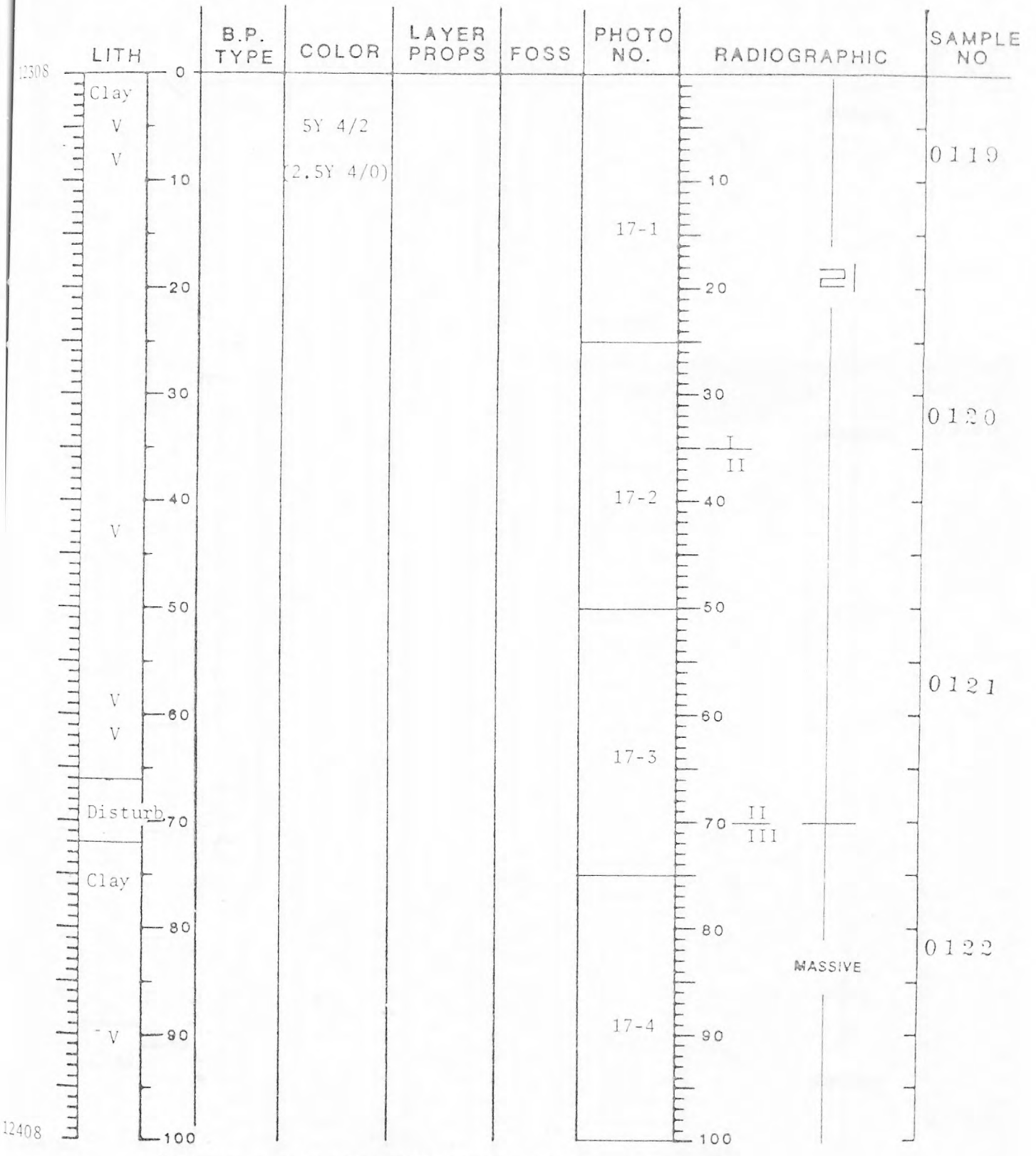
LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 16 DEPTH 12302 to 12309 cm

DESCRIBED BY LAE and JDS DATES FEB 19 1981 and MAR 2 1981 SHEET 4 of 4



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 17 DEPTH 12308 to 12408 cm

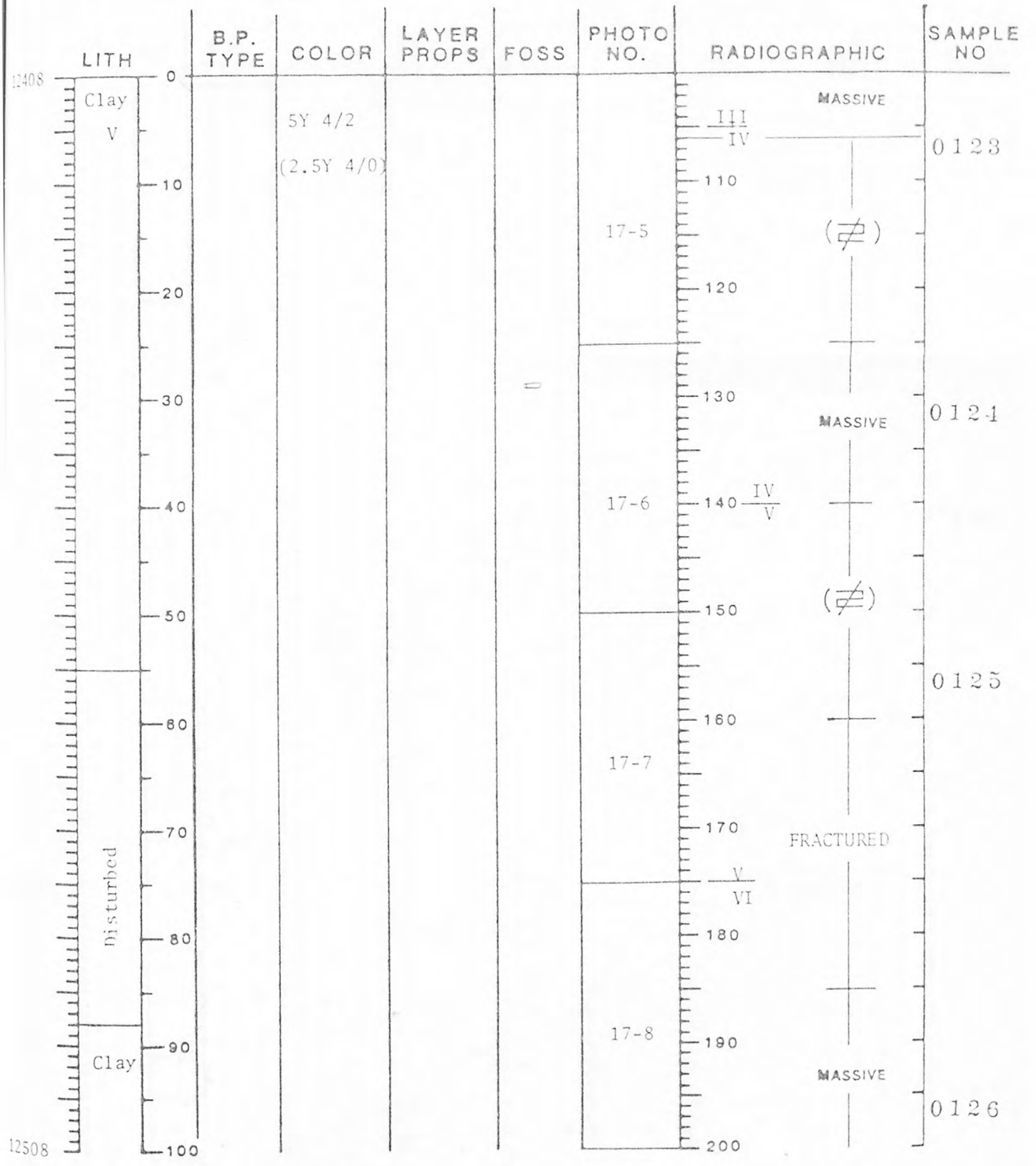
DESCRIBED BY LAF and JDS DATES FEB 2 6 1981 and M[illegible] 2 1981 SHEET 1 of 3



SEGMENT HIGHLY FRACTURED BETWEEN 155cm - 182cm.

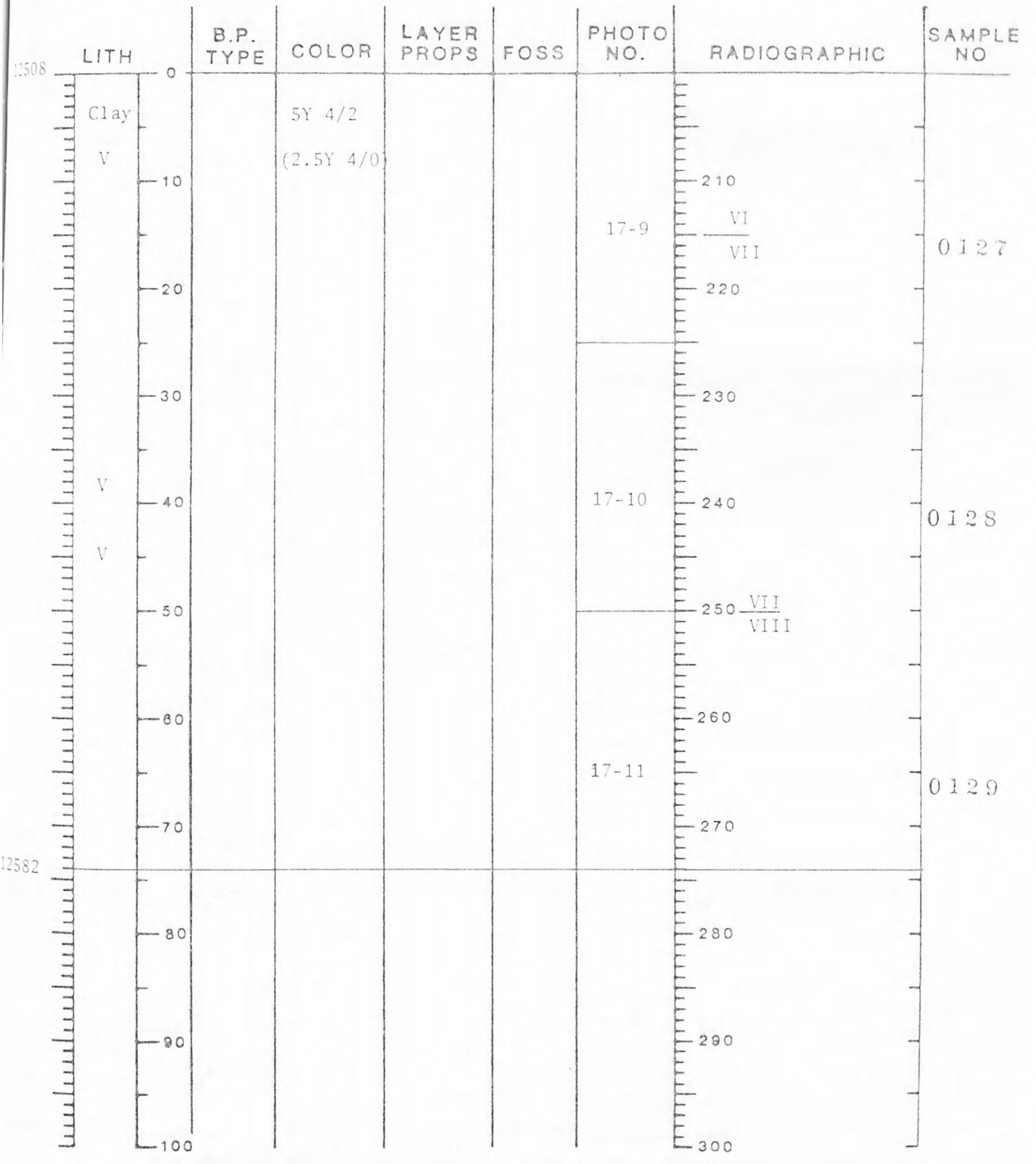
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 17 DEPTH 12408 to 12508 cm

DESCRIBED BY LAF and JDS DATES FEB 2 0 1981 and MAR 2 1981 SHEET 2 of 3



LAKE CLEAR LAKE, CALIF, CORE CL-80-2 SEGMENT 17 DEPTH 12508 to 12582 cm

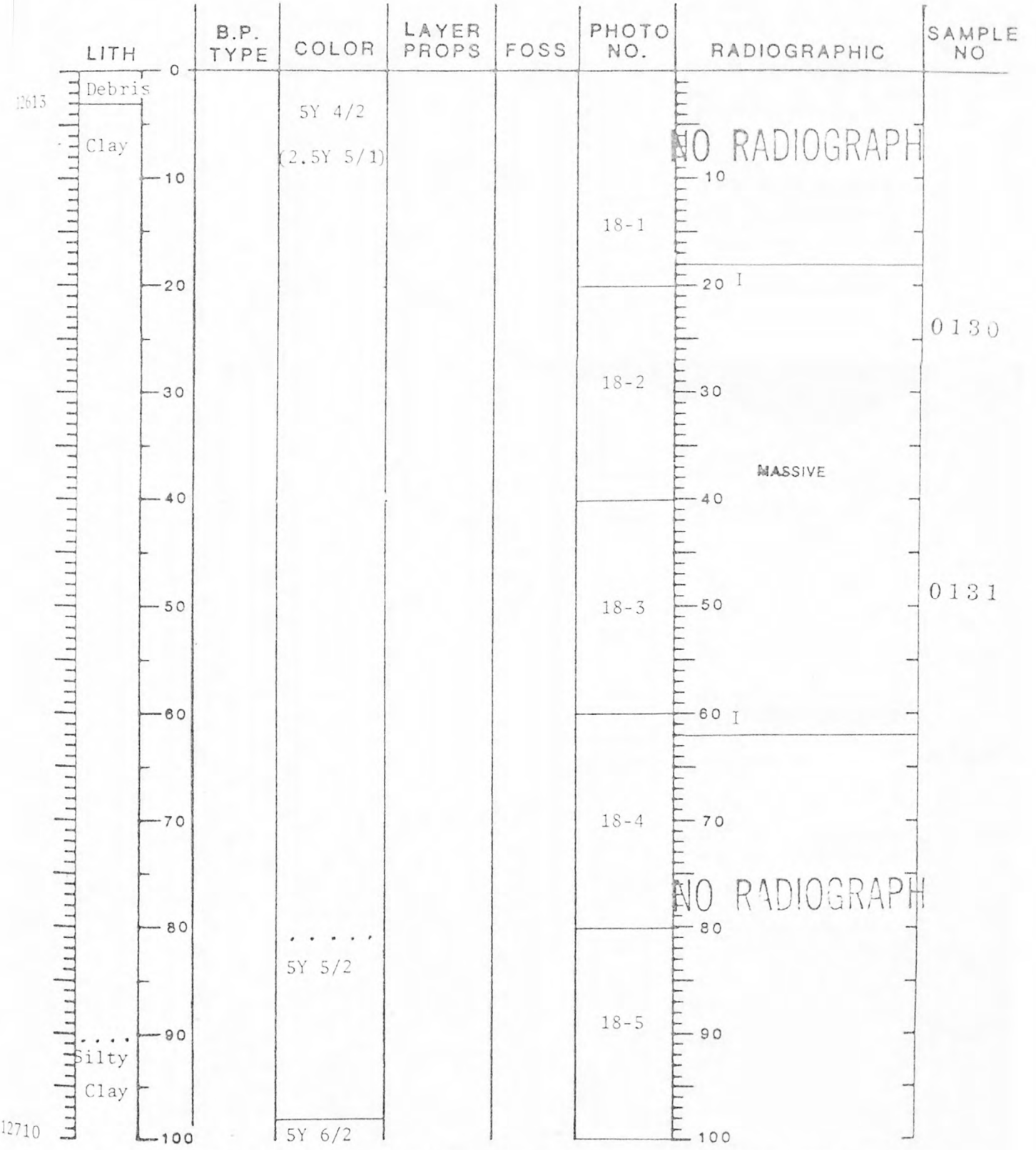
DESCRIBED BY LAF and JDS DATES Feb 28 1981 and Mar 2 1981 SHEET 3 of 3



MASSIVE THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 18 DEPTH 12615 to 12710 cm

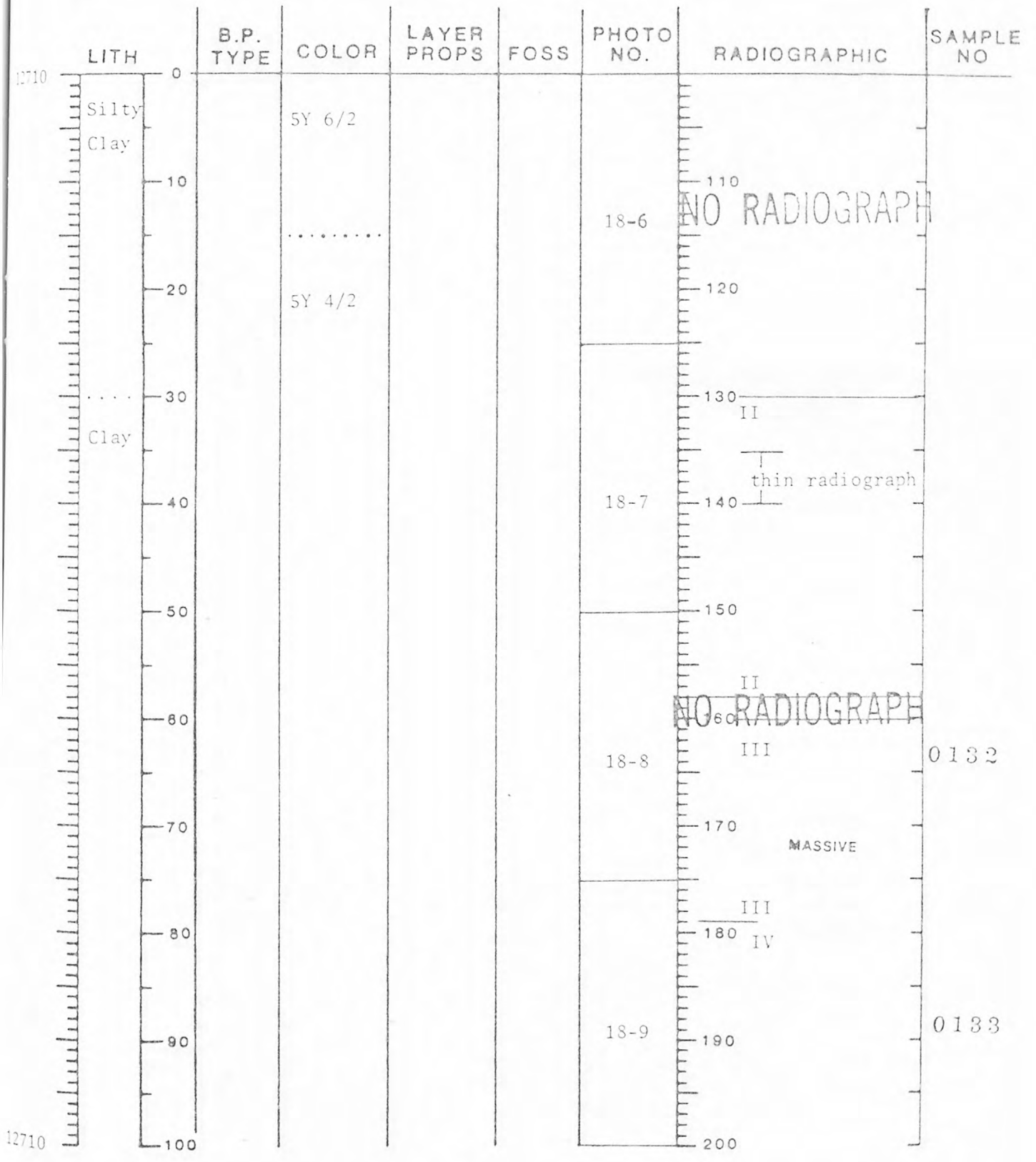
DESCRIBED BY LAF and JDS DATES MAR 2 1981 and MAR 2 1981 SHEET 1 of 4



PORTIONS OF THE SEGMENT SLIGHTLY DESSICATED. FRACTURING OCCURRED WHEN SEGMENT WAS SPLIT.

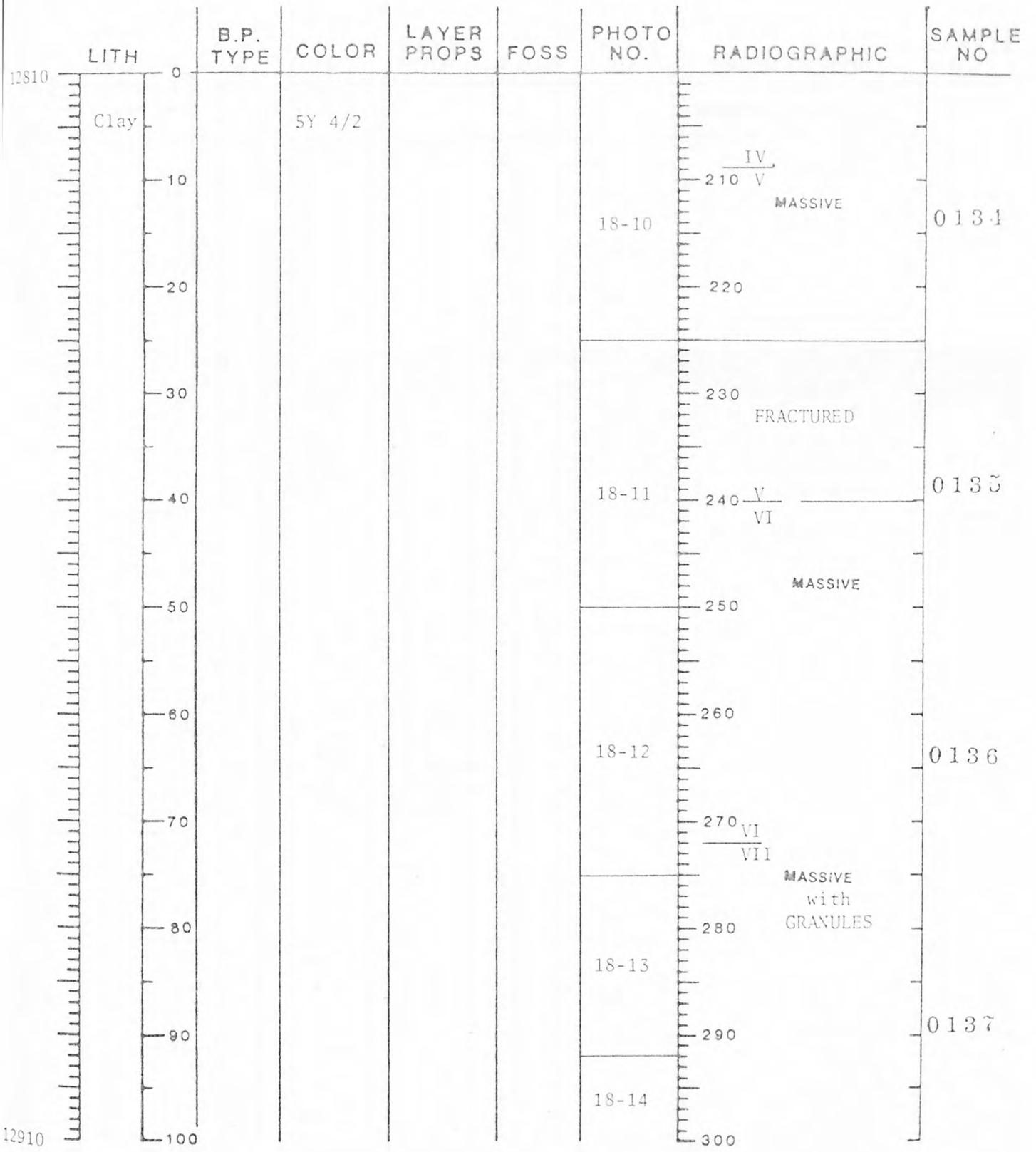
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 18 DEPTH 12710 to 12810 cm

DESCRIBED BY LAF and JDS DATES MAR 2 1981 and MAR 2 1981 SHEET 2 of 4



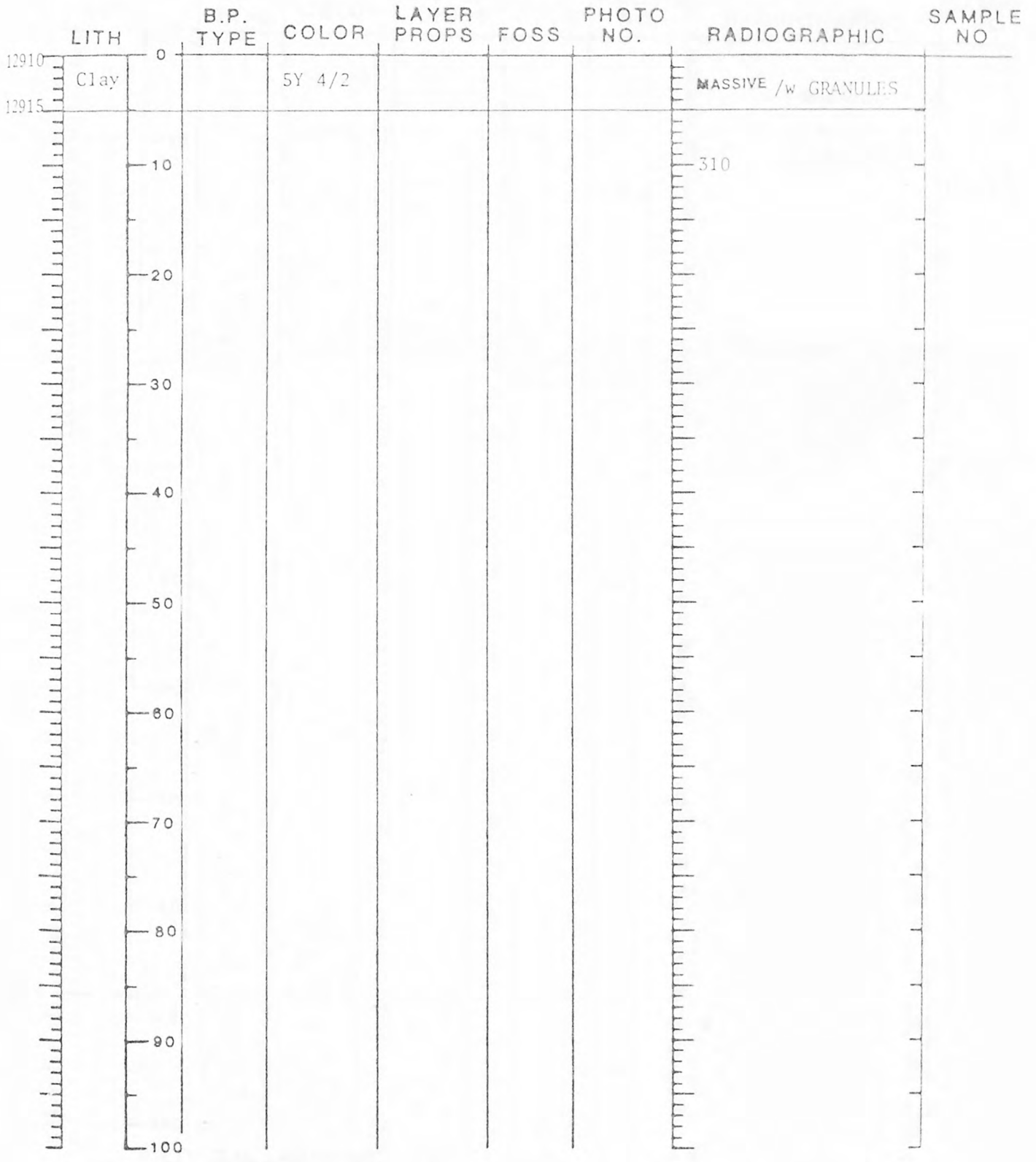
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 18 DEPTH 12810 to 12910 cm

DESCRIBED BY LAF and JDS. DATES MAR 2 1981 and MAR 2 1981 SHEET 3 of 4



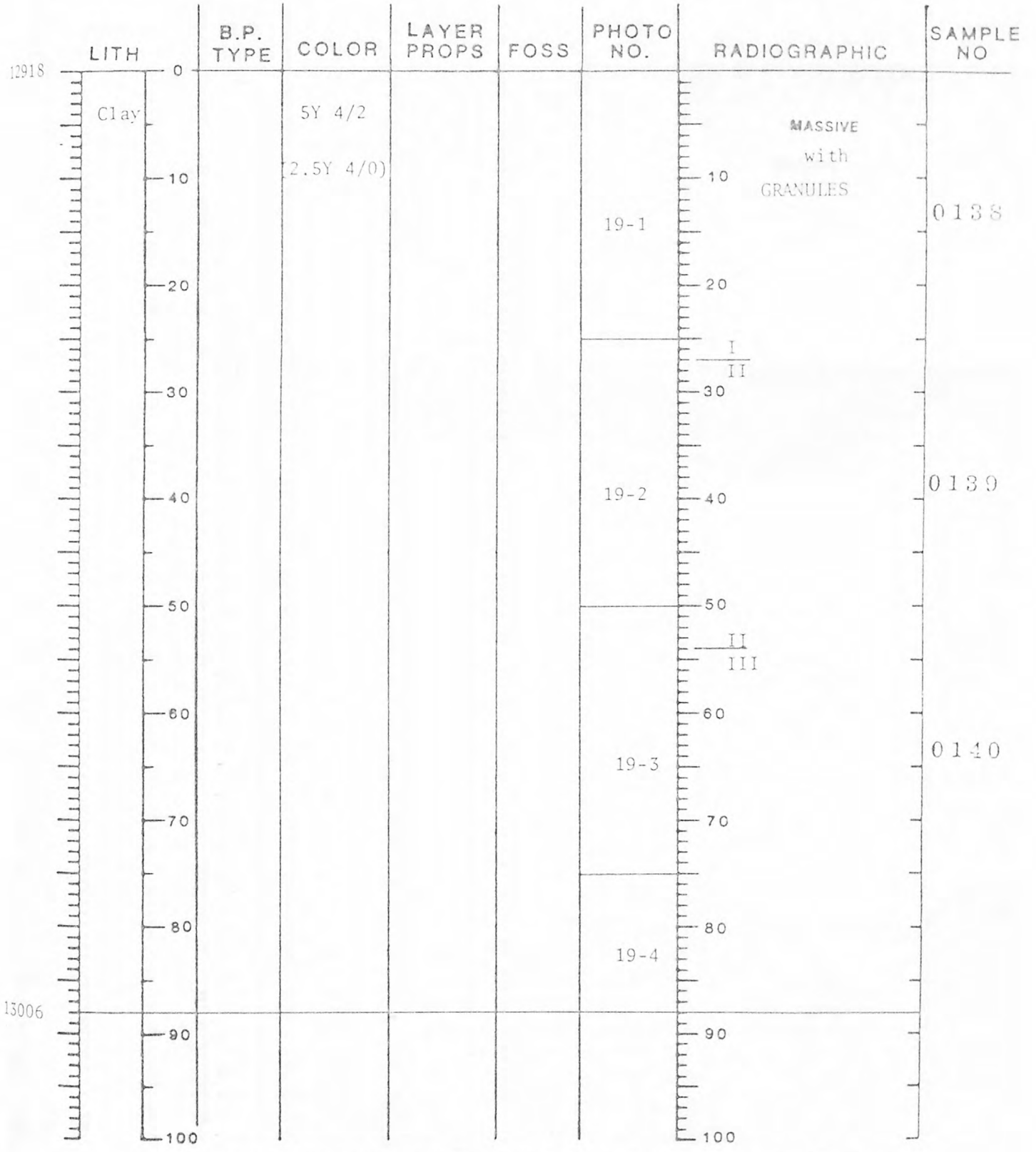
LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 18 DEPTH 12910 to 12915 cm

DESCRIBED BY LAE and JDS DATES MAR 2 1981 and MAR 2 1981 SHEET 4 of 4



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 19 DEPTH 12918 to 13006 cm

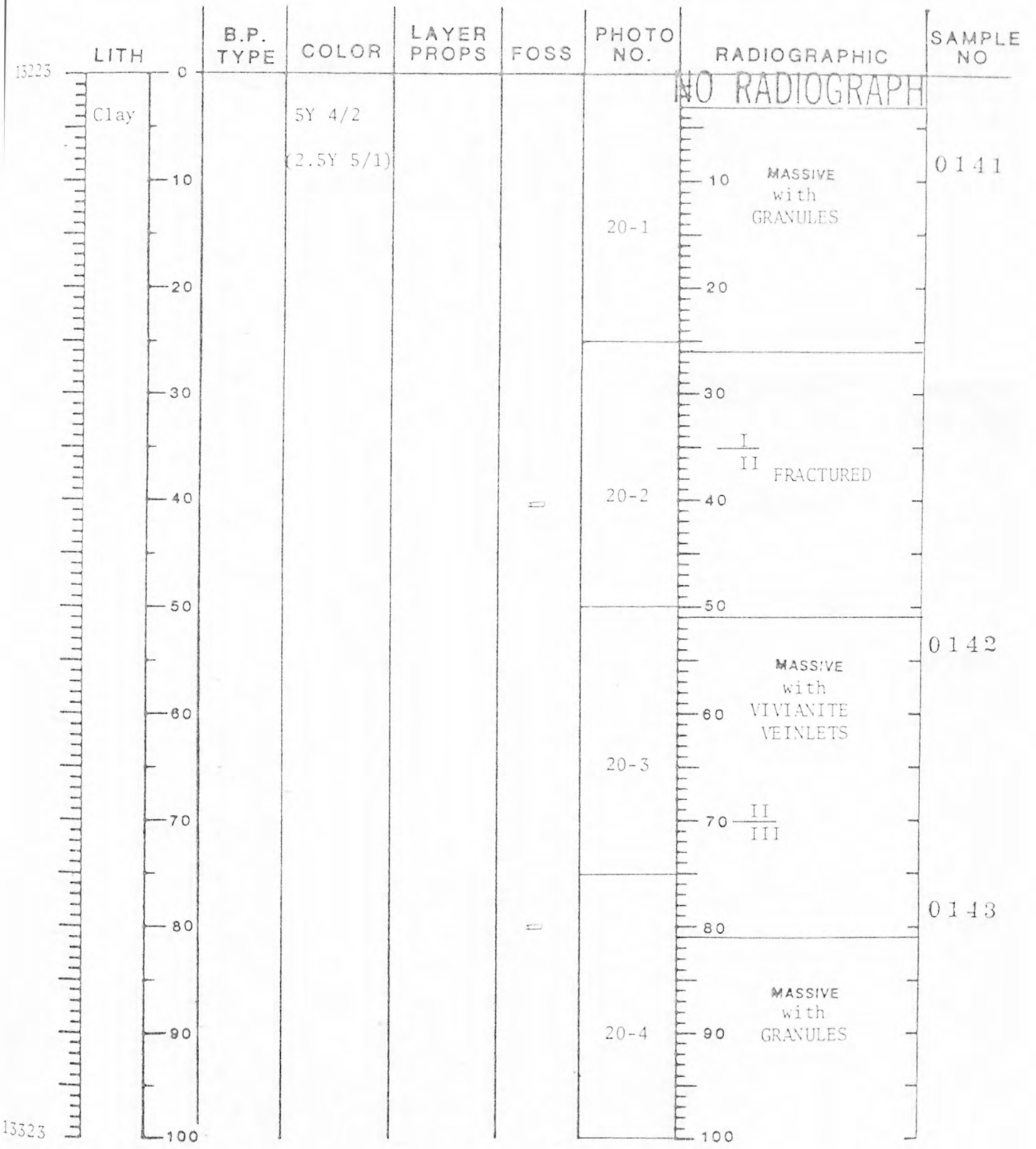
DESCRIBED BY LAF and JDS DATES MAR 2 1981 and MAR 2 1981 SHEET 1 of 1



SILTY CLAY LAMINATIONS @ 3.5, 5, 8-8.5, 9.5-10, 12, 19.5, 27, 34, 44, 50, 58, 64, 72, 78, 81cm.

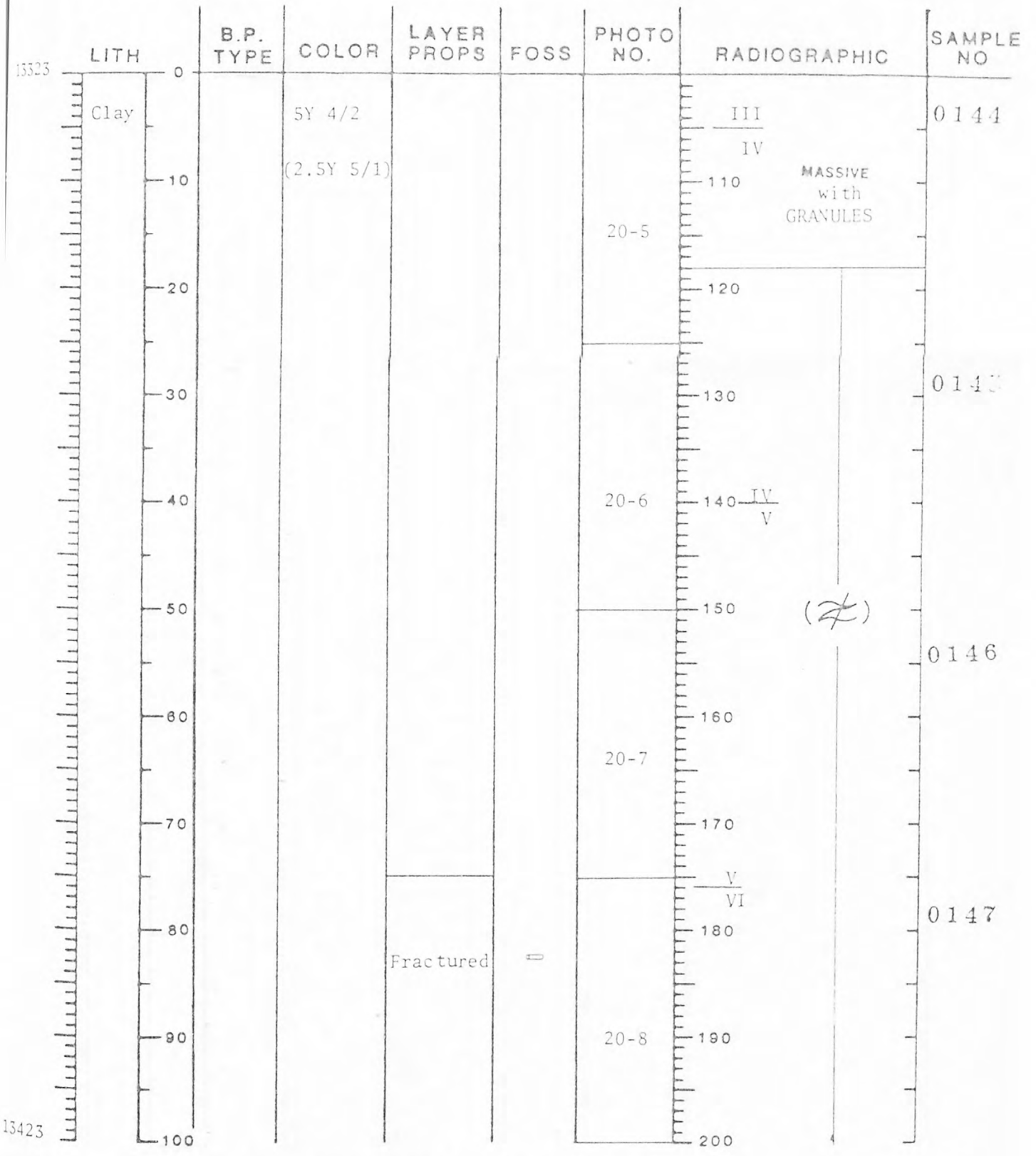
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 20 DEPTH 13223 to 13323 cm

DESCRIBED BY LAF and JDS DATES MAR [illegible] and MAR 9 1981 SHEET 1 of 4



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 20 DEPTH 13323 to 13423 cm

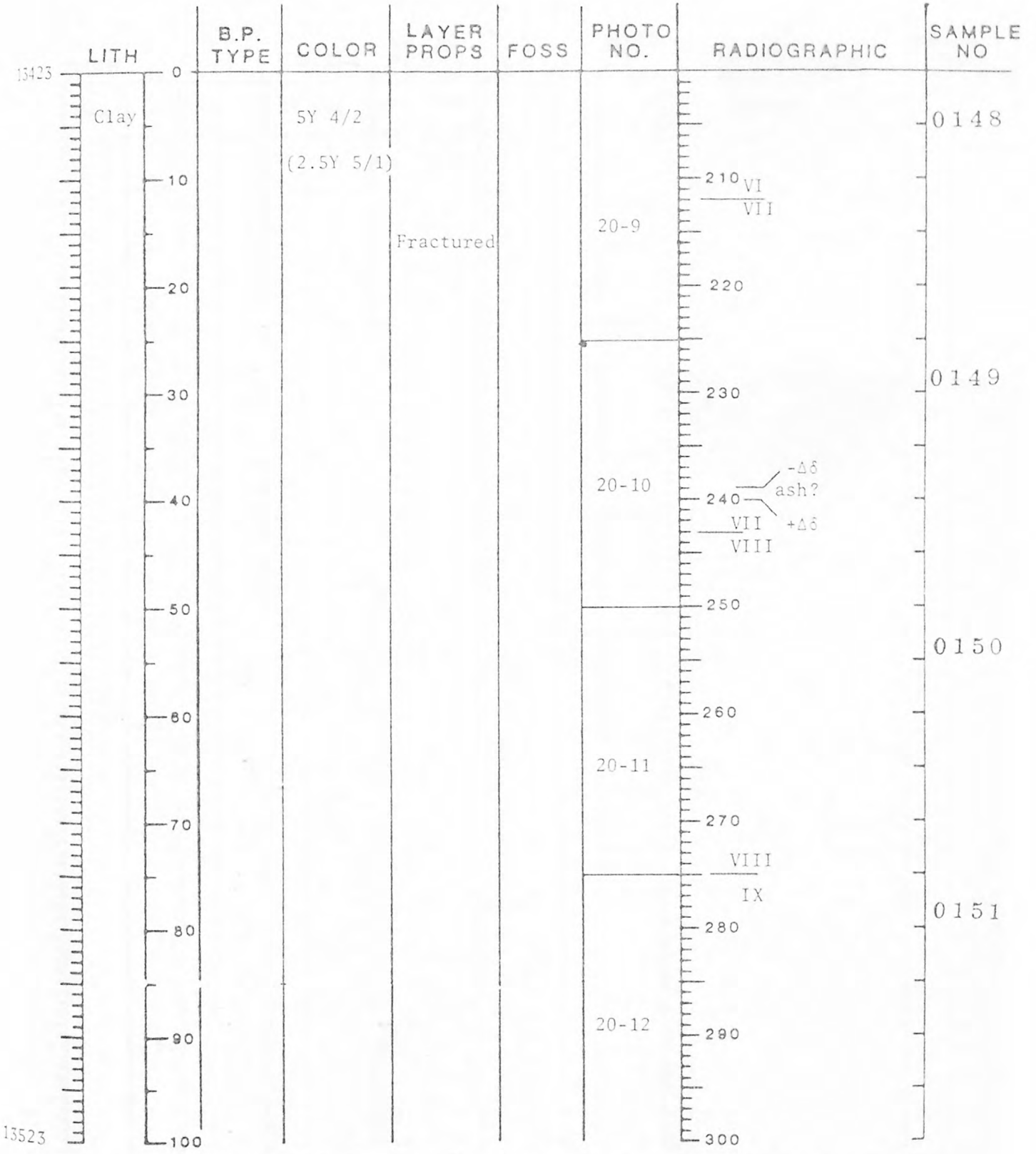
DESCRIBED BY LAF and JDS DATES MAR 3 1981 and MAR 3 1981 SHEET 2 of 4



FROM 75cm - 305cm VERTICAL FRACTURING IS PRESENT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 20 DEPTH 13423 to 13523 cm

DESCRIBED BY LAF and JDS DATES MAR 3 1981 and MAR 3 1981 SHEET 3 of 4

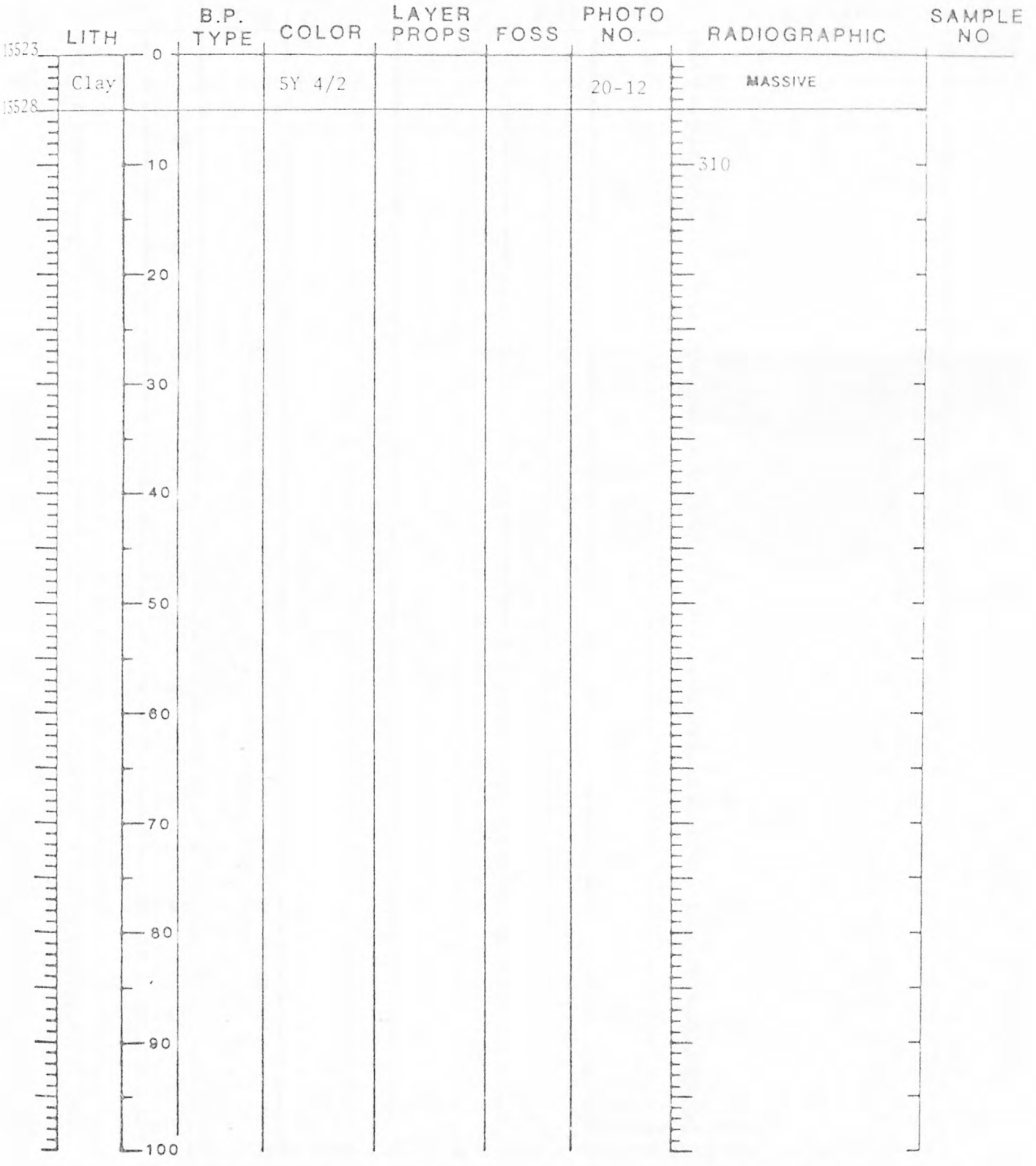


INDISTINCT SLIGHTLY DISTURBED LENTICULAR WAVY LAMINATION THROUGHOUT.

GRANULES THROUGHOUT.

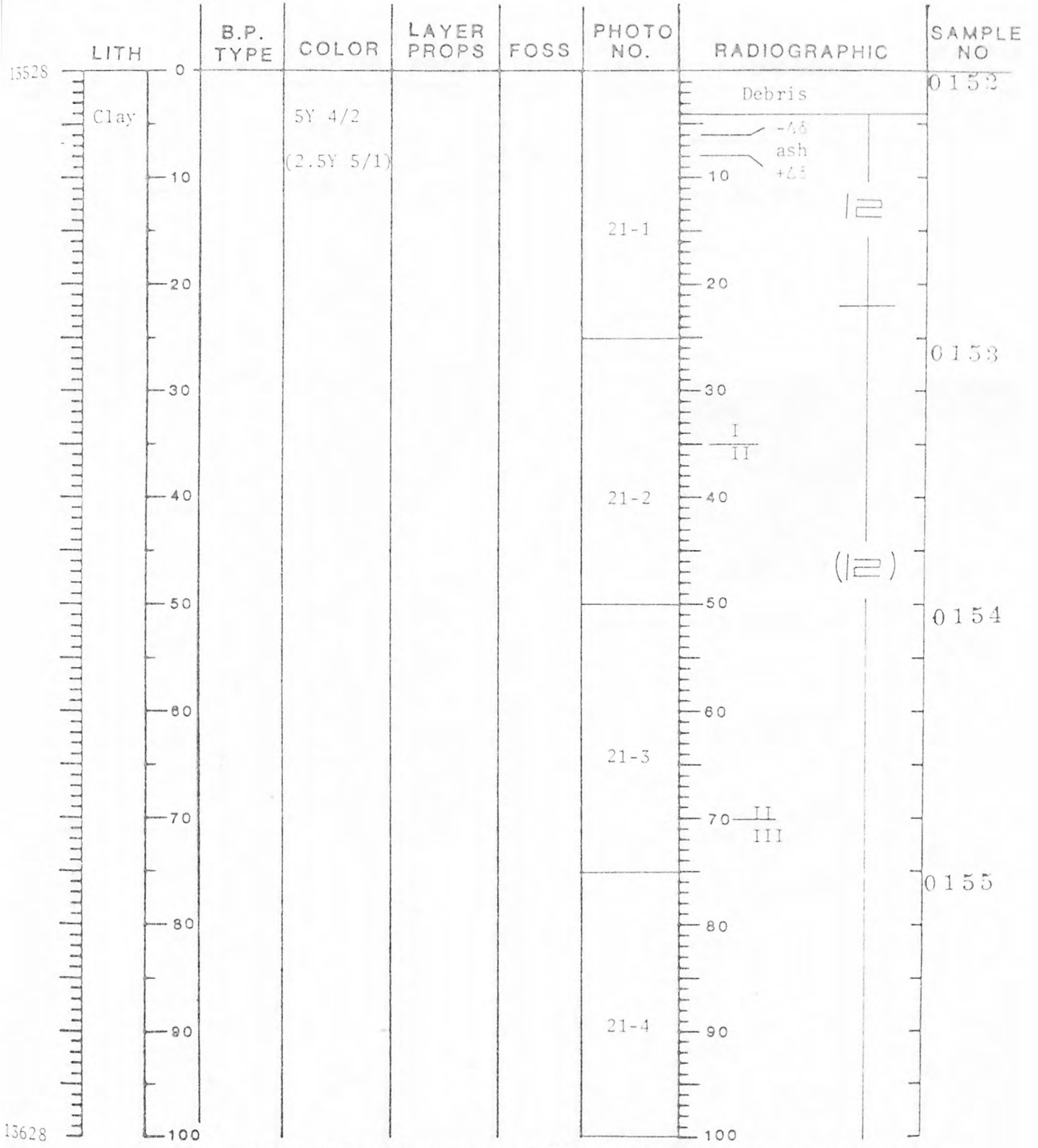
LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 20 DEPTH 13523 to 13528 cm

DESCRIBED BY LAF and JDS DATES MAR 3 1981 and MAR 3 1981 SHEET 4 of 4



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 21 DEPTH 13528 to 13628 cm

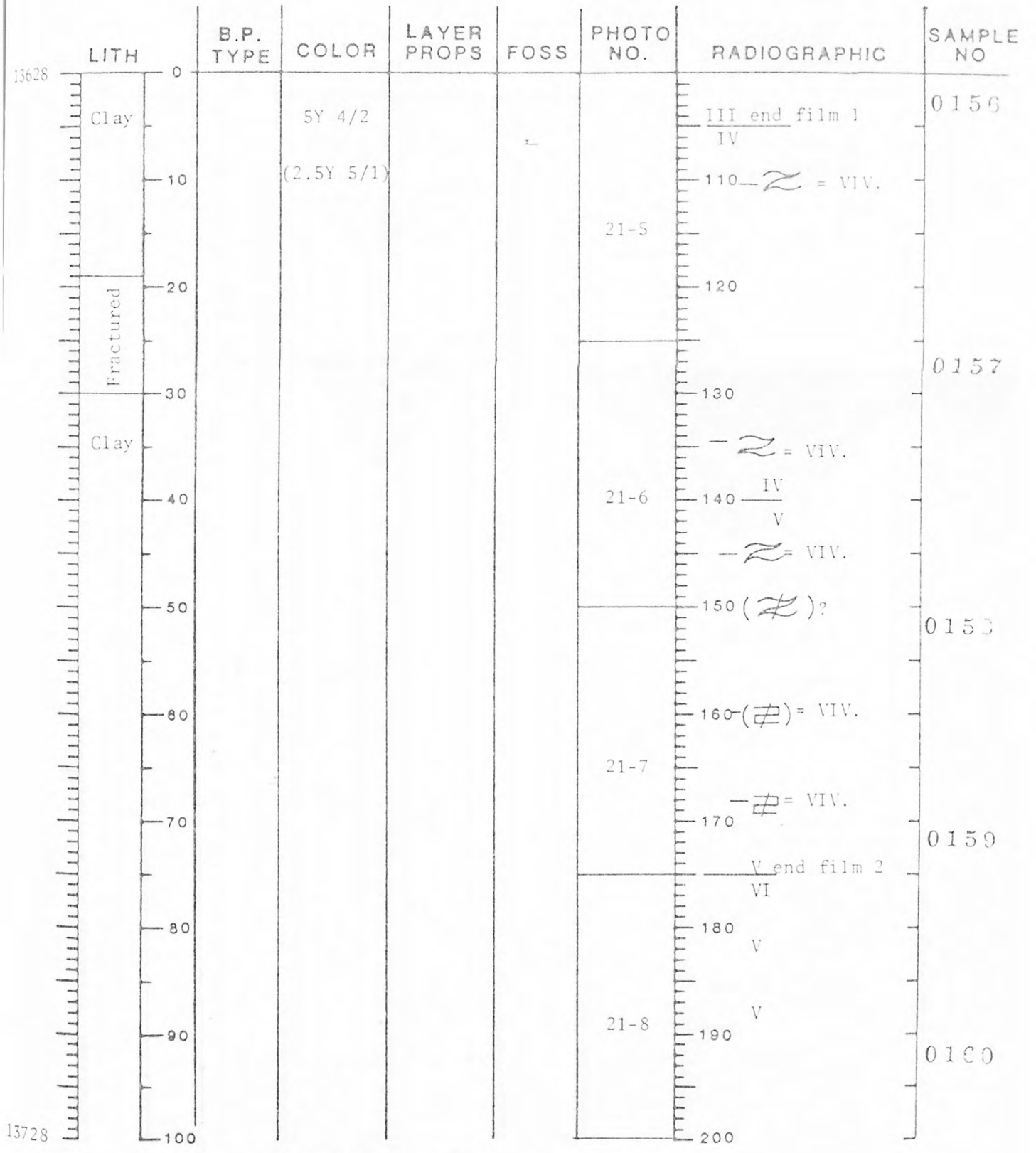
DESCRIBED BY LAF and JDS DATES MAR 6 1981 and MAR 6 1981 SHEET 1 of 3



CORE LINER HAND CUT, LINER DEBRIS DISSEMINATED THROUGHOUT SEGMENT.
LONG VERTICAL GROOVES IN SEGMENT CAUSED BY CORE SPLITTER.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 21 DEPTH 13628 to 13728 cm

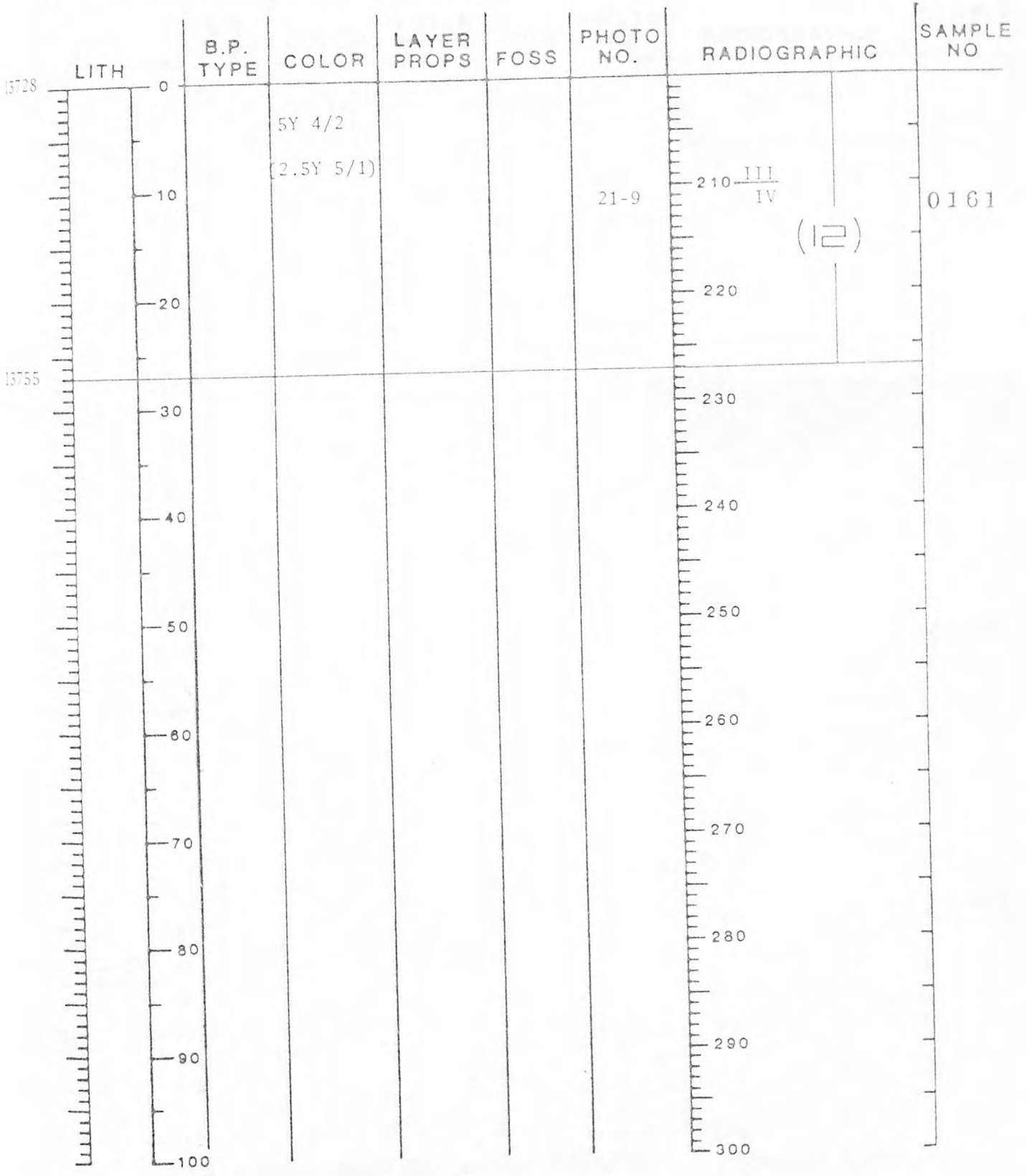
DESCRIBED BY LAF and JDS DATES MAR 6 1981 and MAR 6 1981 SHEET 2 of 3



BIOTURBATION THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 21 DEPTH 13728 to 13755 cm

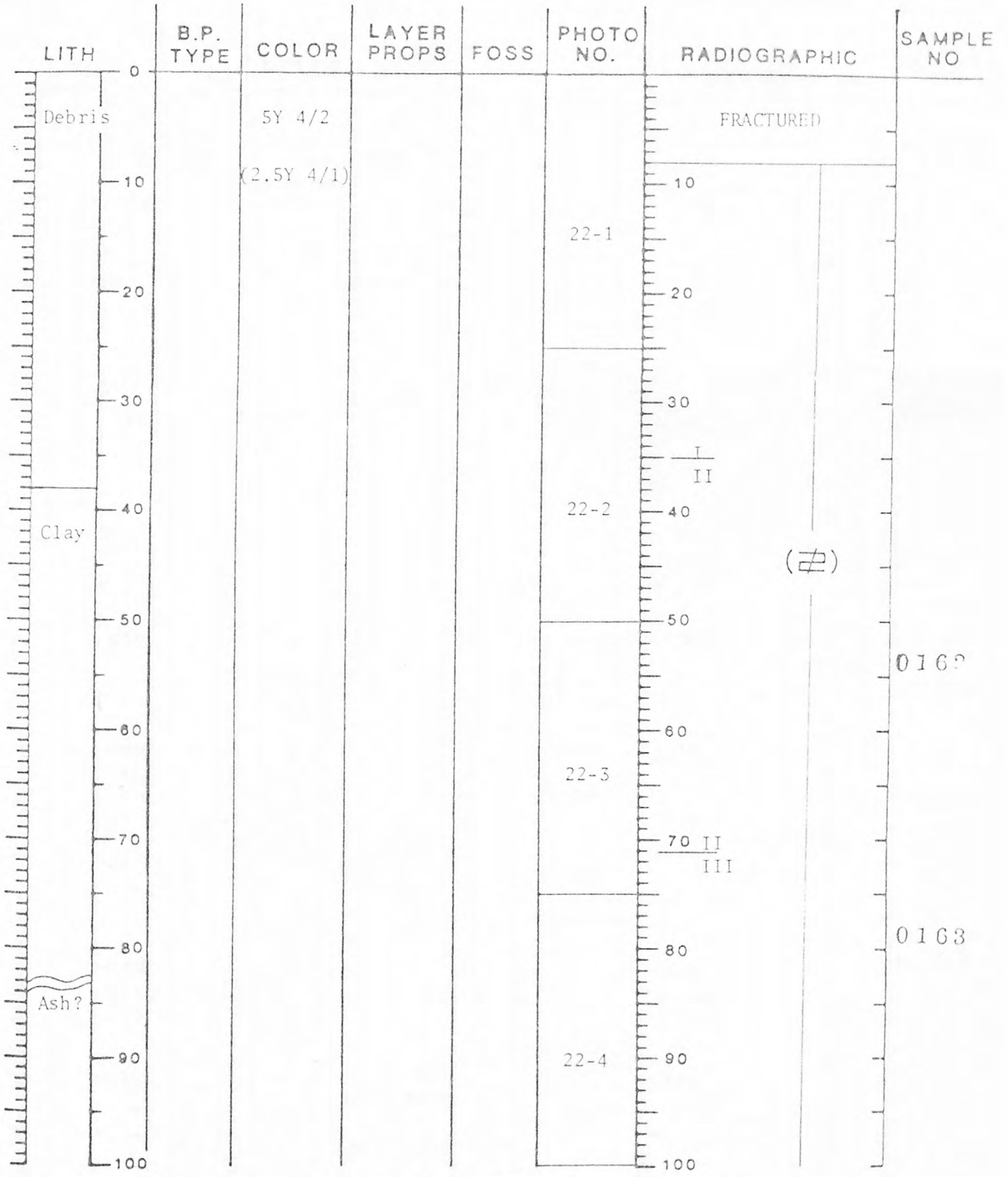
DESCRIBED BY LAF and JDS DATES MAR 6 1981 and MAR 6 1981 SHEET 3 of 3



BIOTURBATION THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 22 DEPTH 13822 to 13884 cm

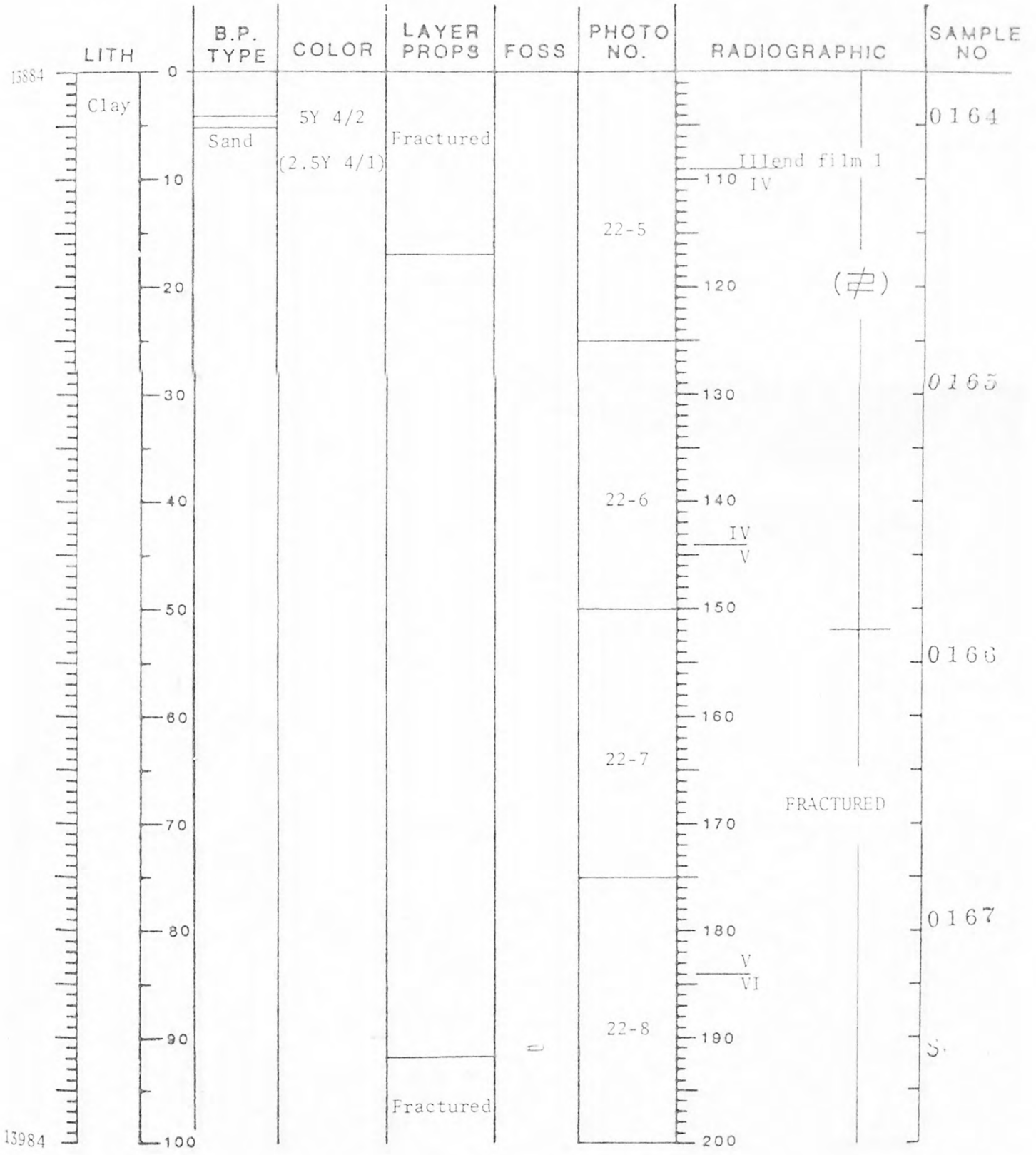
DESCRIBED BY LAF and JDS DATES MAR 6 1981 and MAR 6 1981 SHEET 1 of 4



VIVIANITE VEINLETS AND GRANULES THROUGHOUT. BIOTURBATION THROUGHOUT.

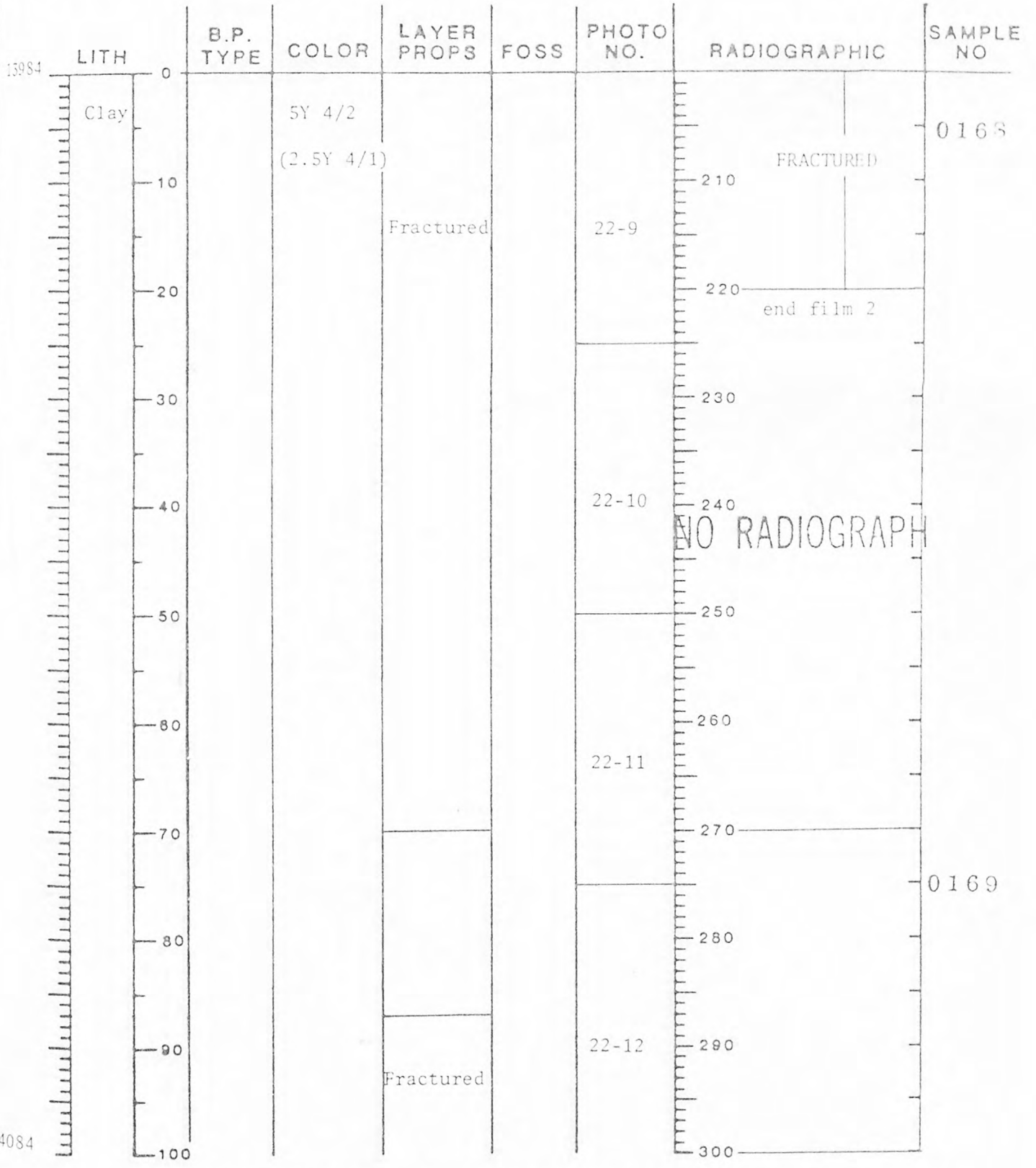
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 22 DEPTH 13884 to 13984 cm

DESCRIBED BY LAF and JDS DATES MAR 6 1981 and MAR 6 1981 SHEET 2 of 4



LAKE CLEAR LAKE, CALIF, CORE CL-80-2 SEGMENT 22 DEPTH 13984 to 14084 cm

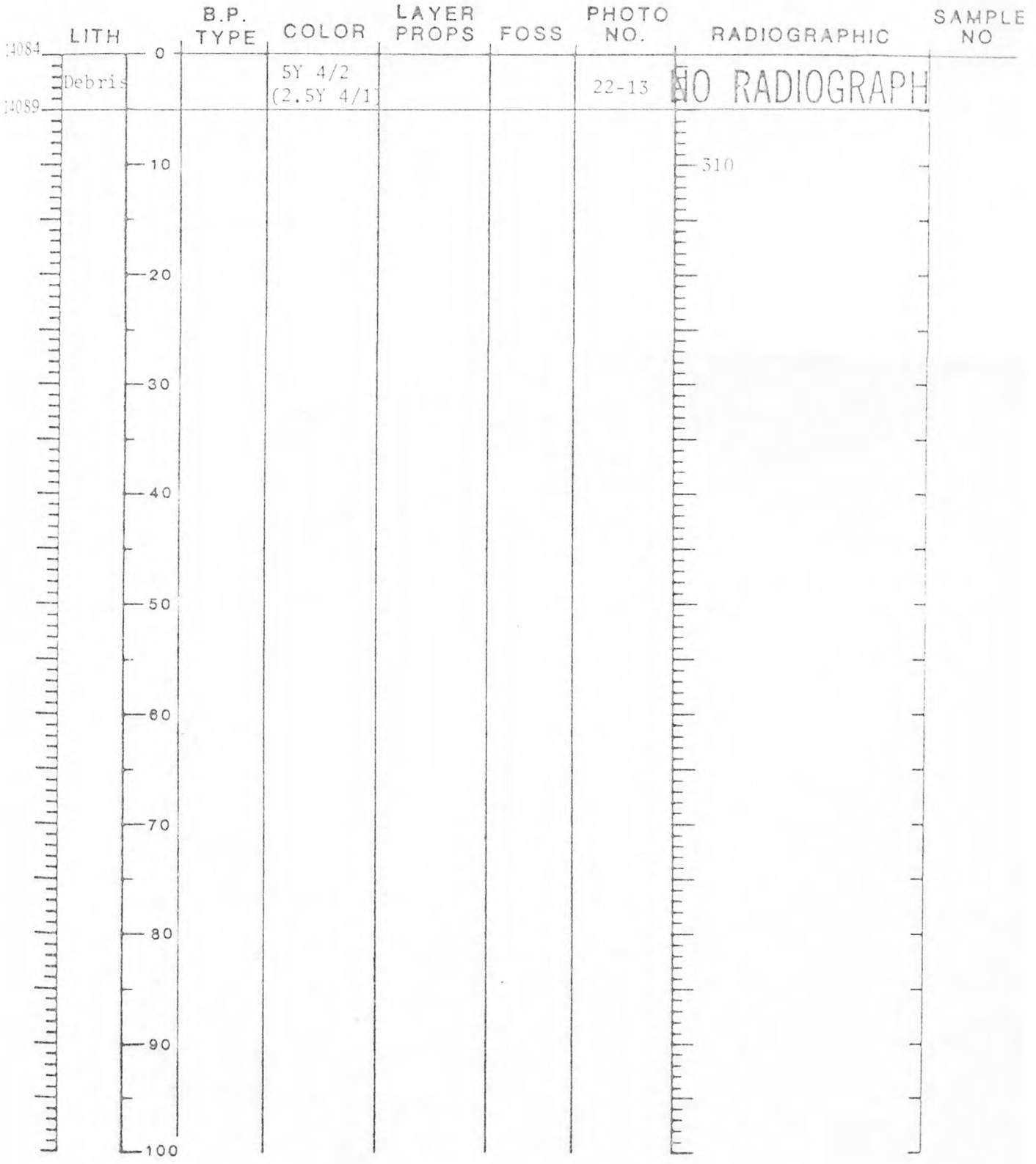
DESCRIBED BY LAF and JDS DATES MAR 6 1981 and [illegible] 6 1981 SHEET 3 of 4



INTERVAL FROM 287cm - 300cm WAS DIFFICULT TO CUT FOR RADIOGRAPH.

LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 22 DEPTH 14084 to 14089 cm

DESCRIBED BY LAE and JAP DATES MAR 6 1981 and MAR 6 1981 SHEET 4 of 4

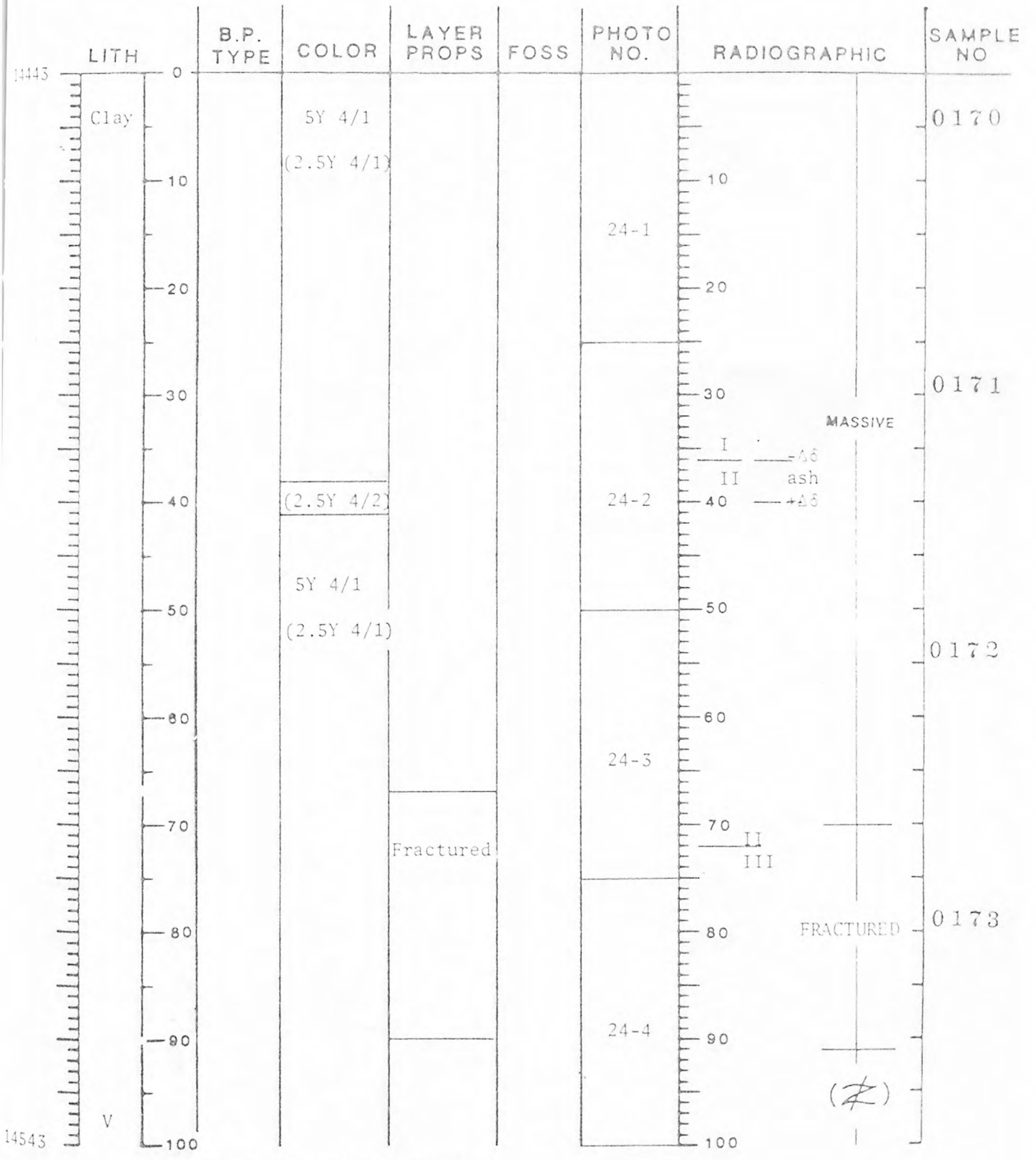


LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT ___ DEPTH ___ to ___ cm

DESCRIBED BY LAE and ___ DATES MAR 1 2 1981 and ___ SHEET ___ of ___

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 24 DEPTH 14443 to 14543 cm

DESCRIBED BY LAF and JDS DATES MAR 12 1981 and MAR 12 1981 SHEET 1 of 4

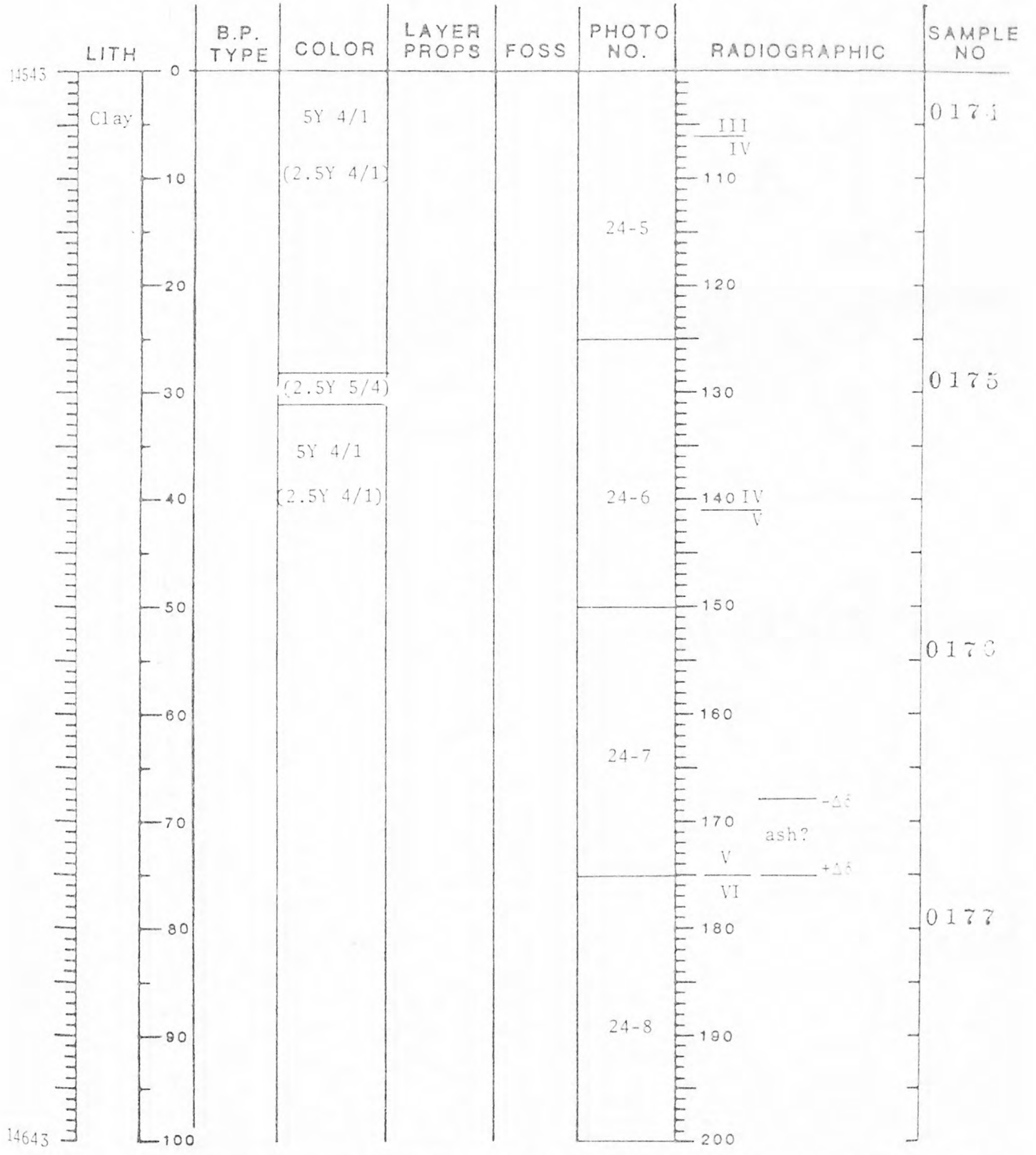


BIOTURBATION THROUGHOUT.

SLIGHT DESSICATION IN SEGMENT BETWEEN 0 - 50cm.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 24 DEPTH 14543 to 14643 cm

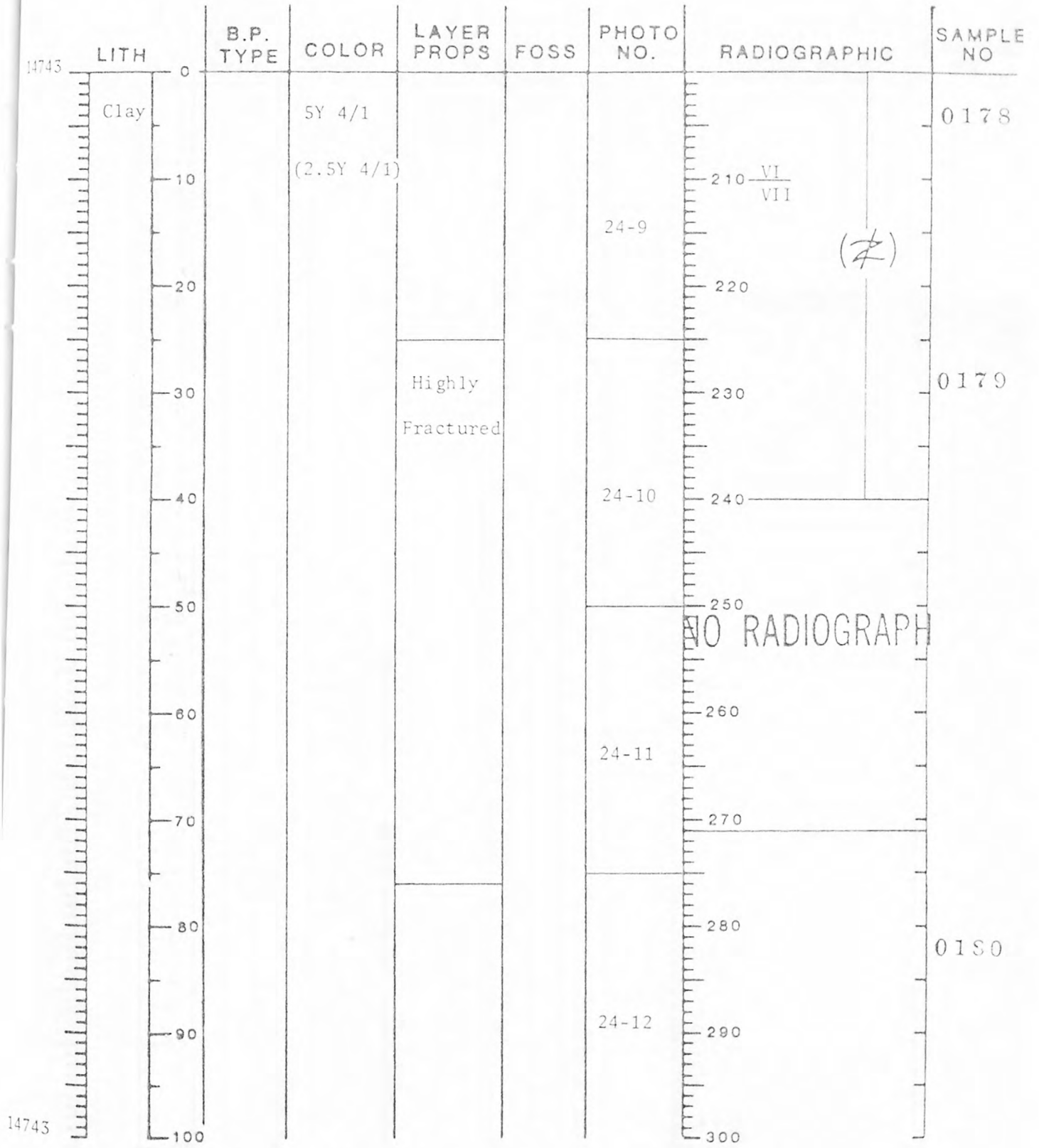
DESCRIBED BY LAF and JDS DATES MAR 12 1981 and [illegible] 12 [illegible] SHEET 2 of 4



BIOTURBATION AND INDISTINCT, SLIGHTLY DISTURBED LENTICULAR WAVY LAMINATION THROUGHOUT.

LAKE CLEAR LAKE, CALIF, CORE CL-80-2 SEGMENT 24 DEPTH 14643 to 14743 cm

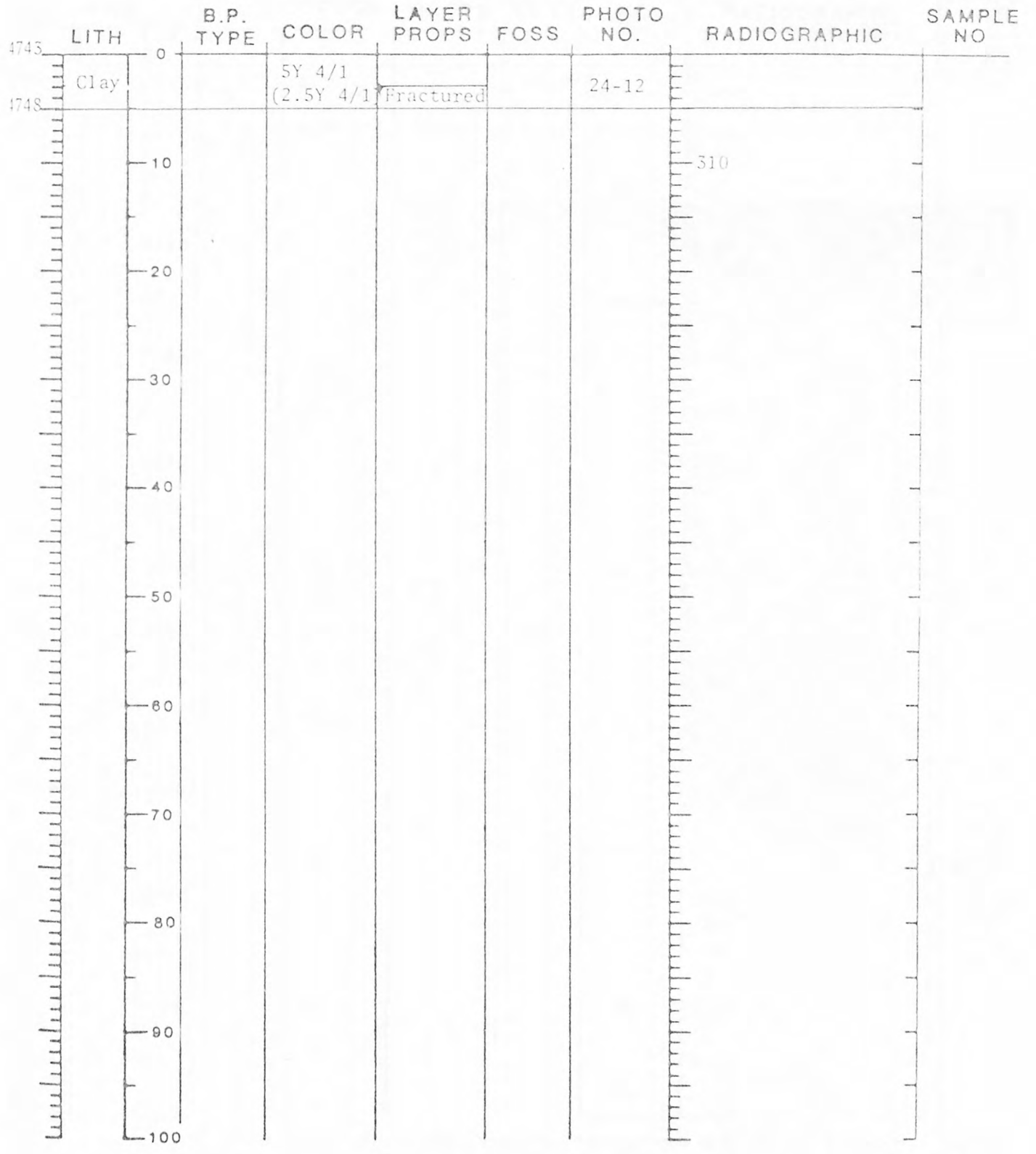
DESCRIBED BY LAF and JDS DATES MAR 12 1981 and [illegible] SHEET 3 of 4



INTERVAL BETWEEN 276cm - 305cm IS SLIGHTLY DESSICATED.

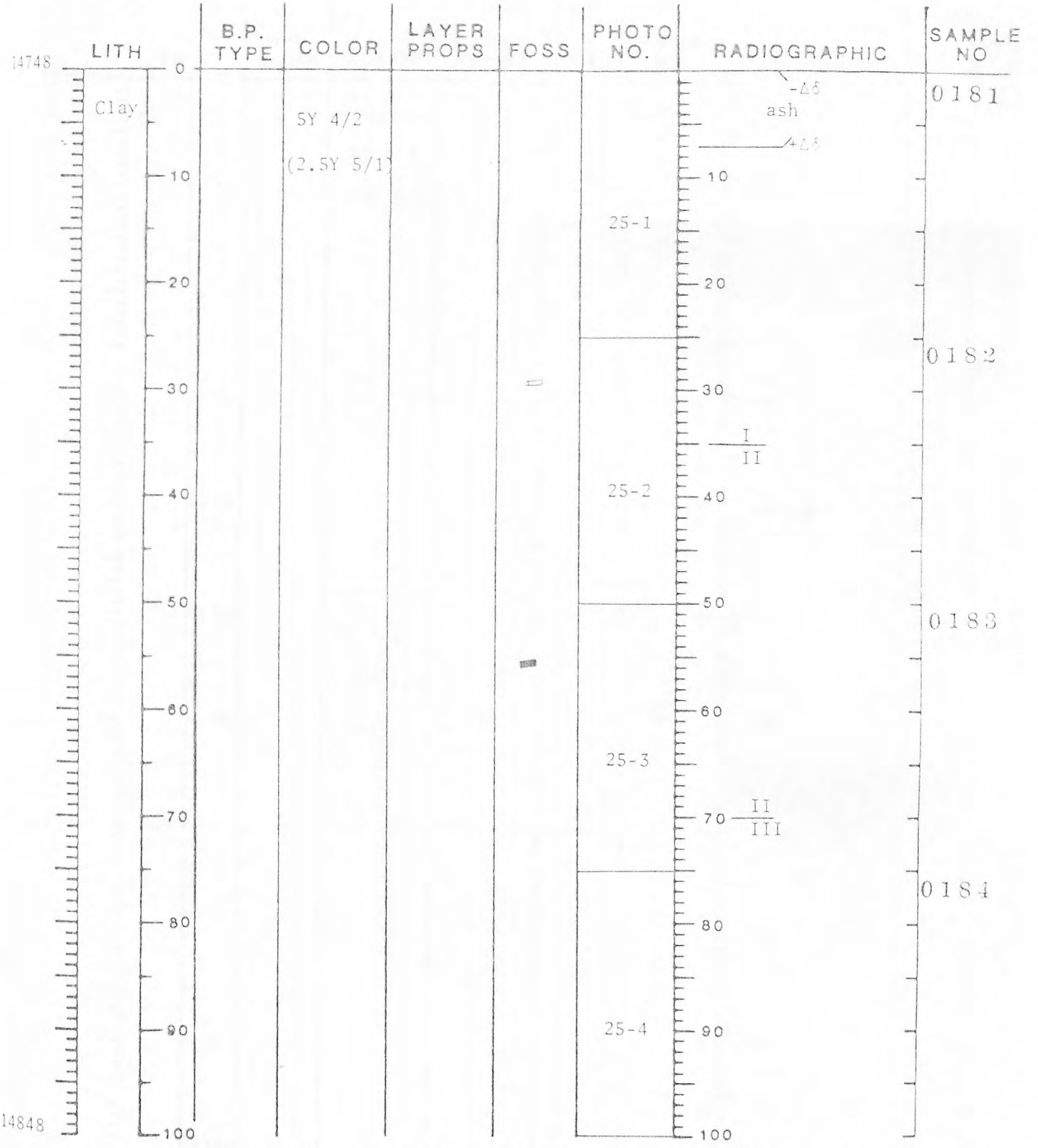
LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 24 DEPTH 14743 to 14748 cm

DESCRIBED BY LAF and JDS DATES MAR 12 1981 and MAR 12 1981 SHEET 4 of 4



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 25 DEPTH 14748 to 14848 cm

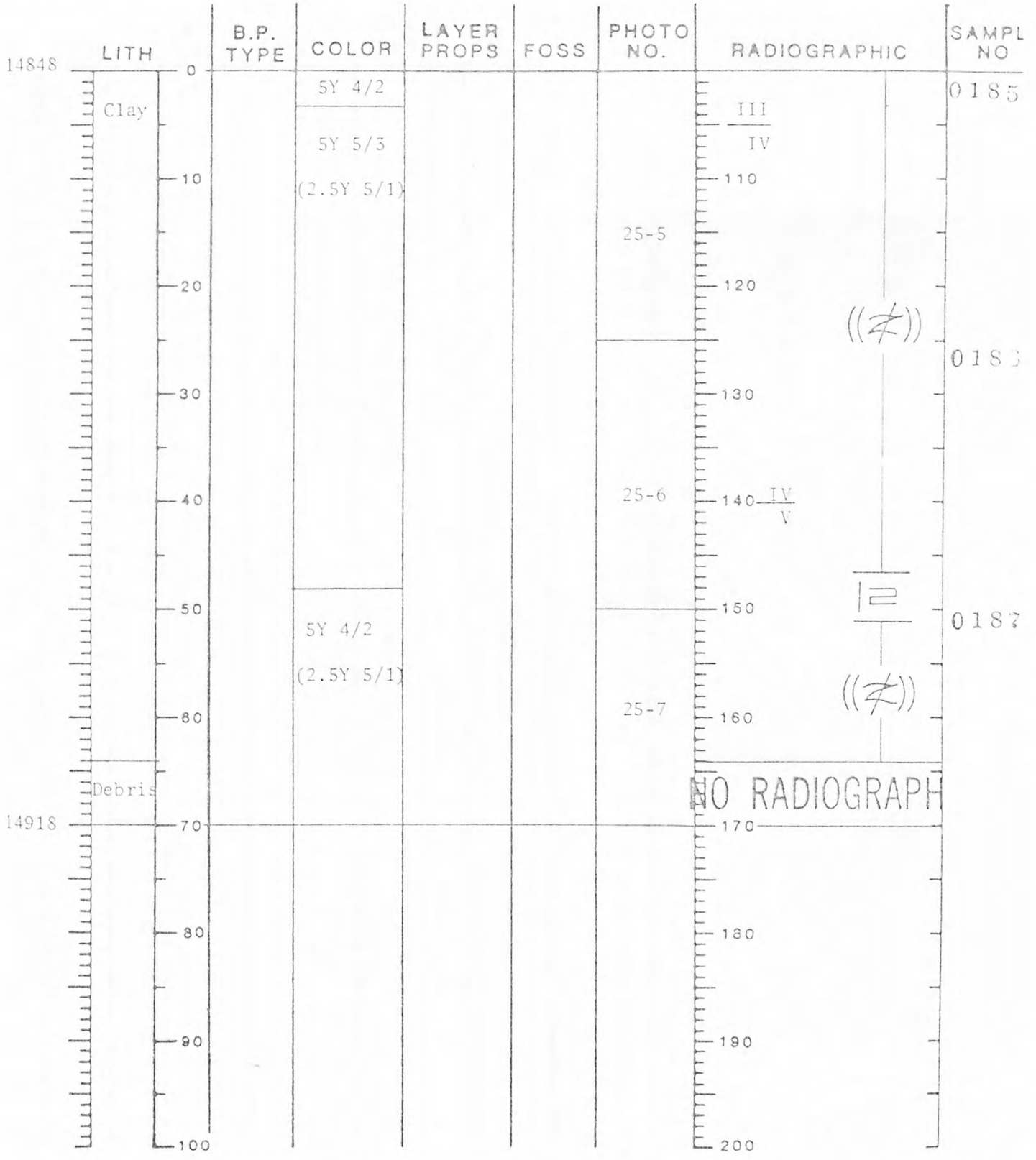
DESCRIBED BY LAF and JDS DATES MAR 12 1981 and [illegible] SHEET 1 of 2



CORE LINER HAND CUT, LINER DEBRIS DISSEMINATED THROUGHOUT SEGMENT. LONG VERTICAL GROOVES IN SEGMENT CAUSED BY CORE SPLITTER. MASSIVE THROUGHOUT.

LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 25 DEPTH 14848 to 14918 c

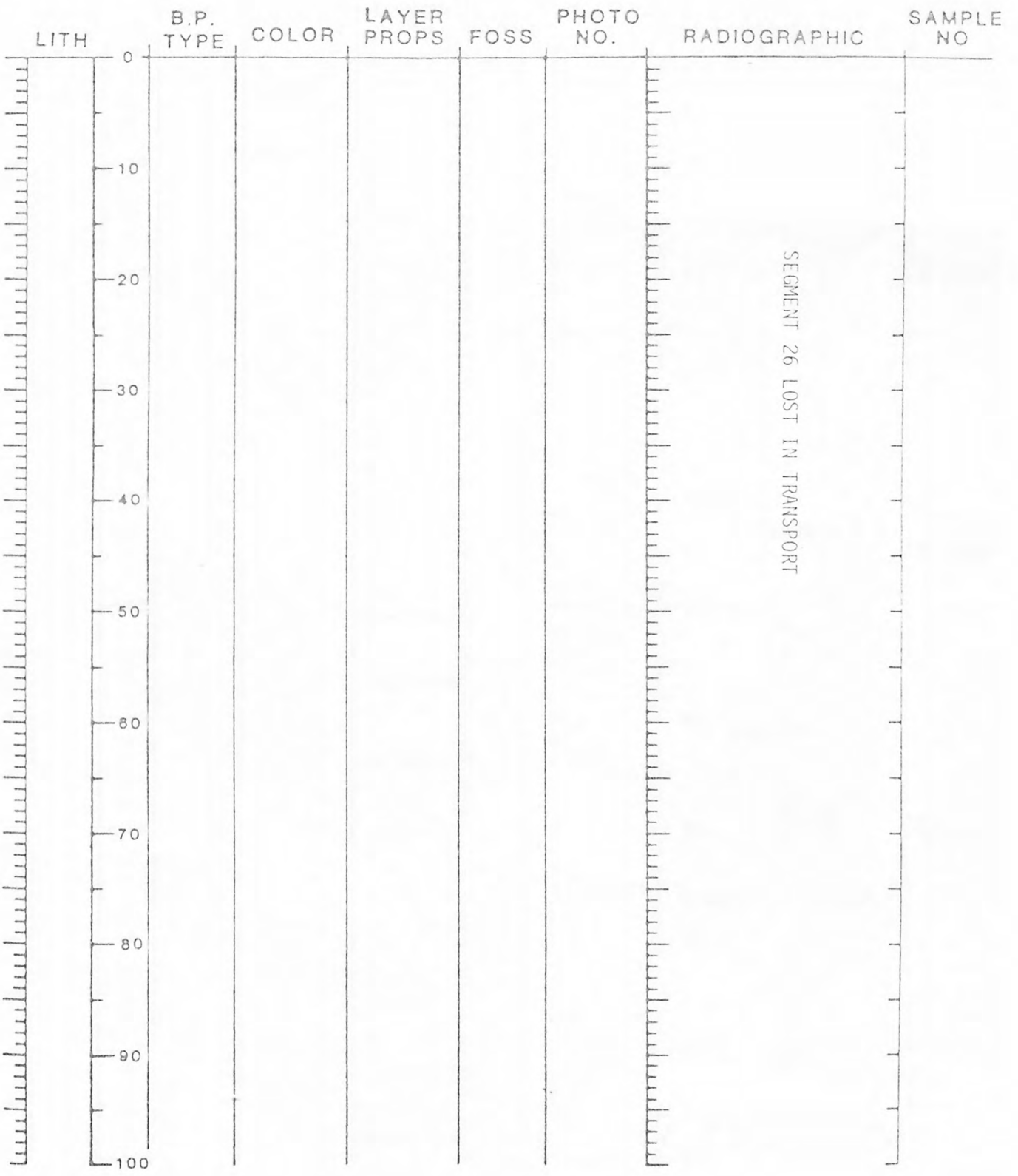
DESCRIBED BY LAF and JDS DATES [illegible] 1981 and [illegible] 1981 SHEET 2 of 2



MASSIVE AND BIOTURBATED THROUGHOUT.

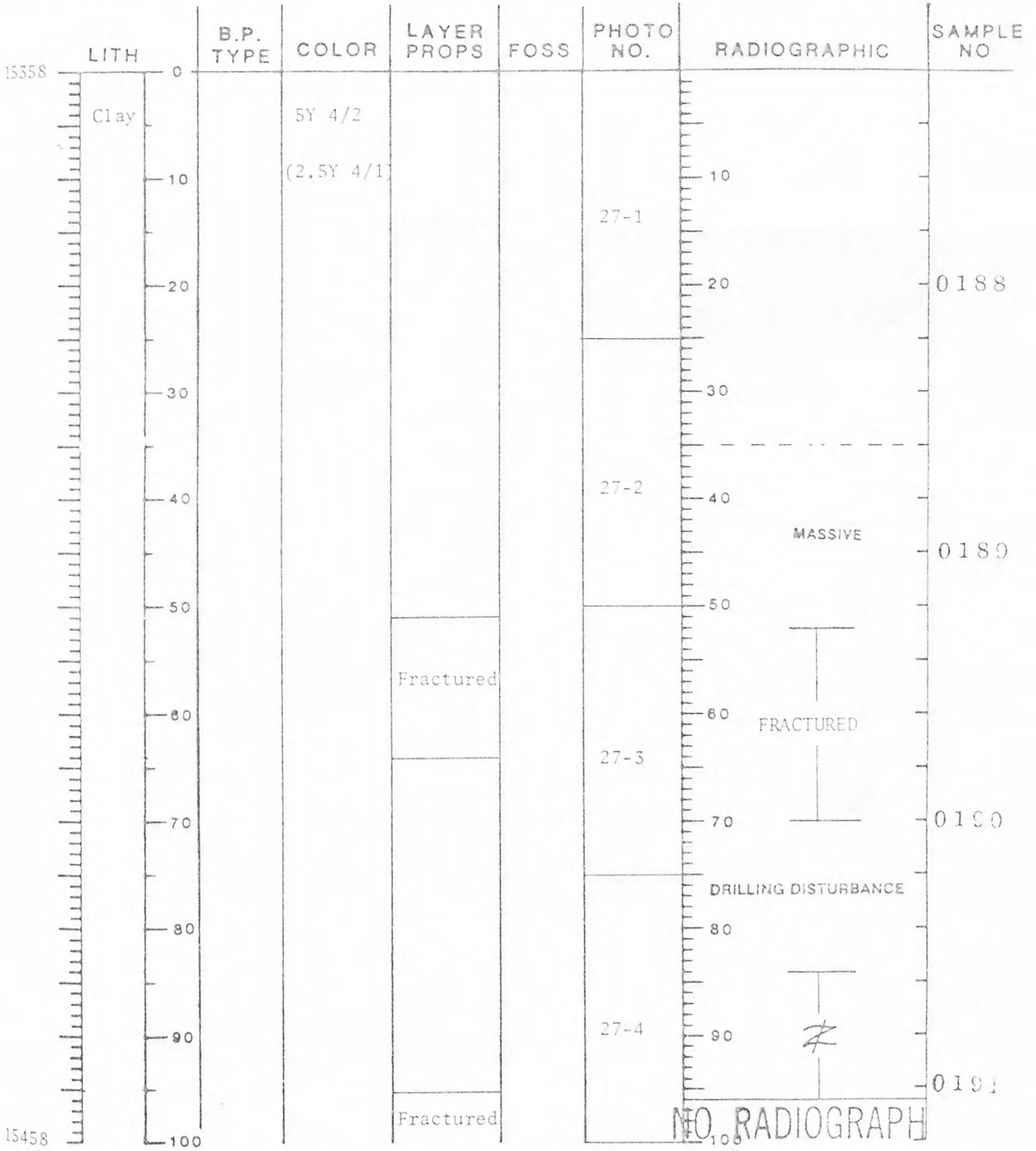
LAKE CLEAR LAKE, CALIF. CORE 2 SEGMENT 26 DEPTH ____ to ____ cm

DESCRIBED BY ____ and ____ DATES ____ and ____ SHEET ____ of ____



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 27 DEPTH 15358 to 15458 cm

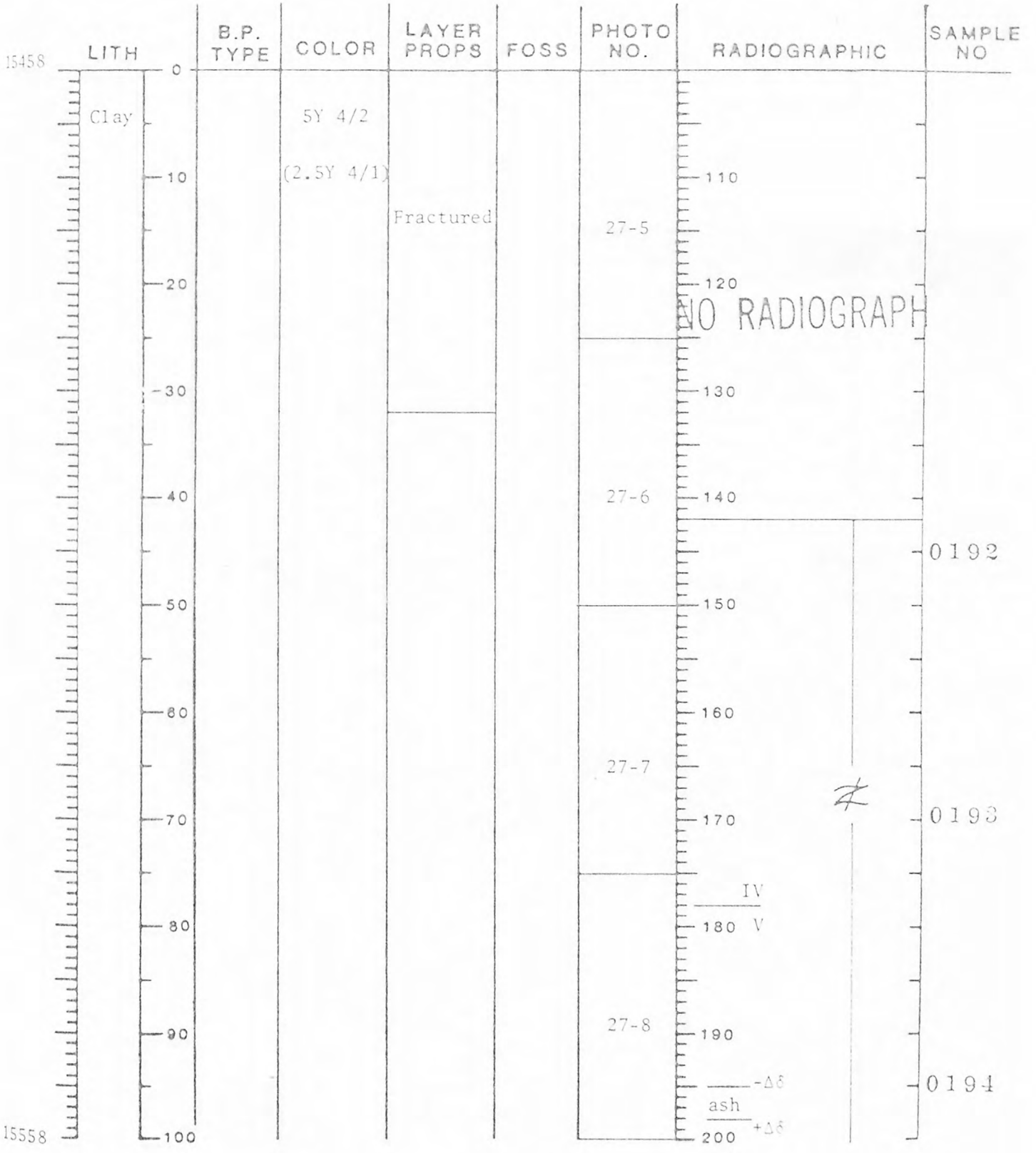
DESCRIBED BY LAF and JDS DATES MAR 12 1981 and [illegible] 12 [illegible] SHEET 1 of 4



CORE LINER HAND CUT, LINER DEBRIS DISSEMINATED THROUGHOUT SEGMENT. LONG VERTICAL GROOVES IN SEGMENT CAUSED BY CORE SPLITTER. SLIGHT DESSICATION BETWEEN INTERVAL 0cm - 51cm.

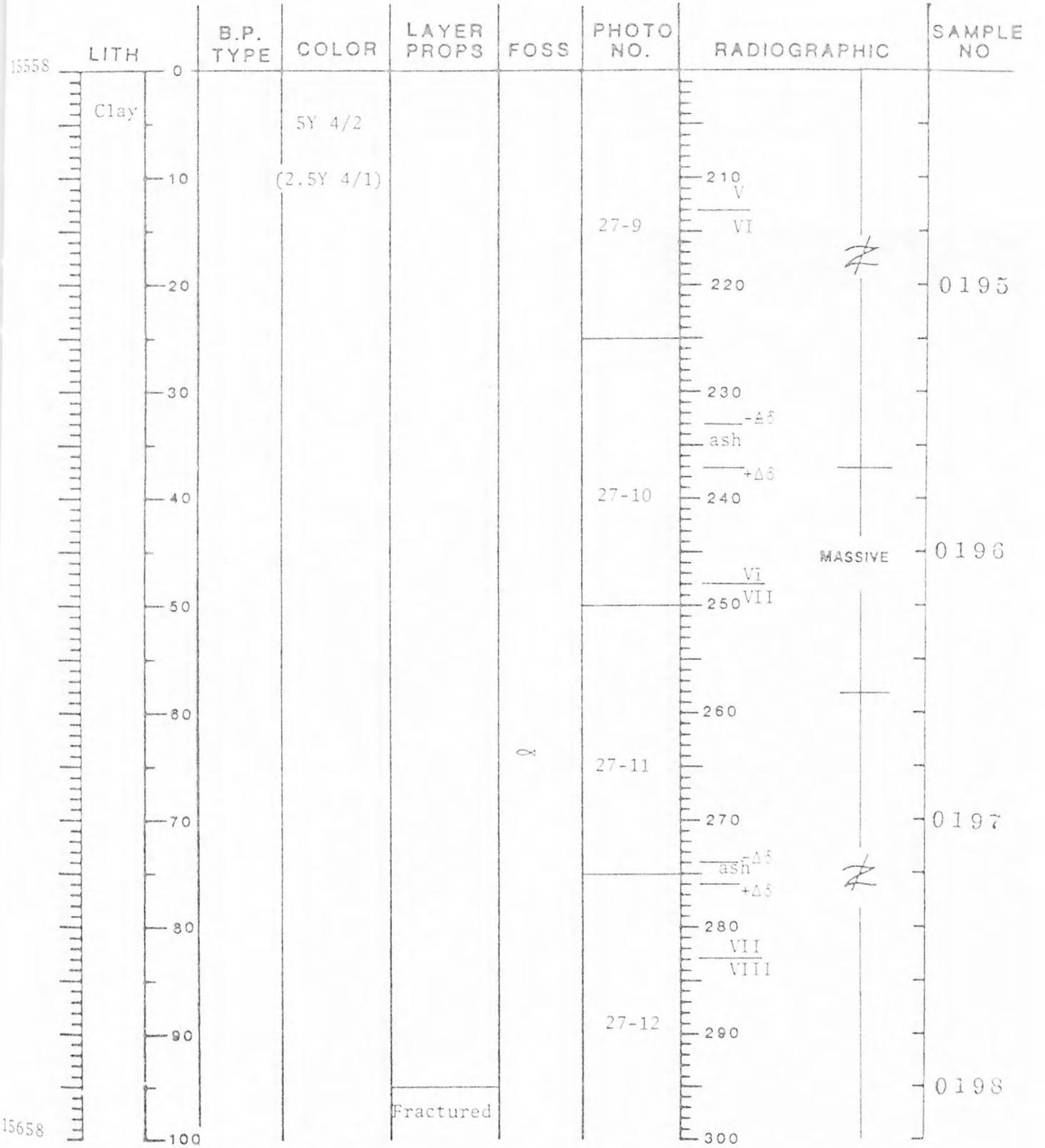
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 27 DEPTH 15458 to 15558 cm

DESCRIBED BY LAF and JDS DATES MAR 12 1981 and MAR 12 1981 SHEET 2 of 4



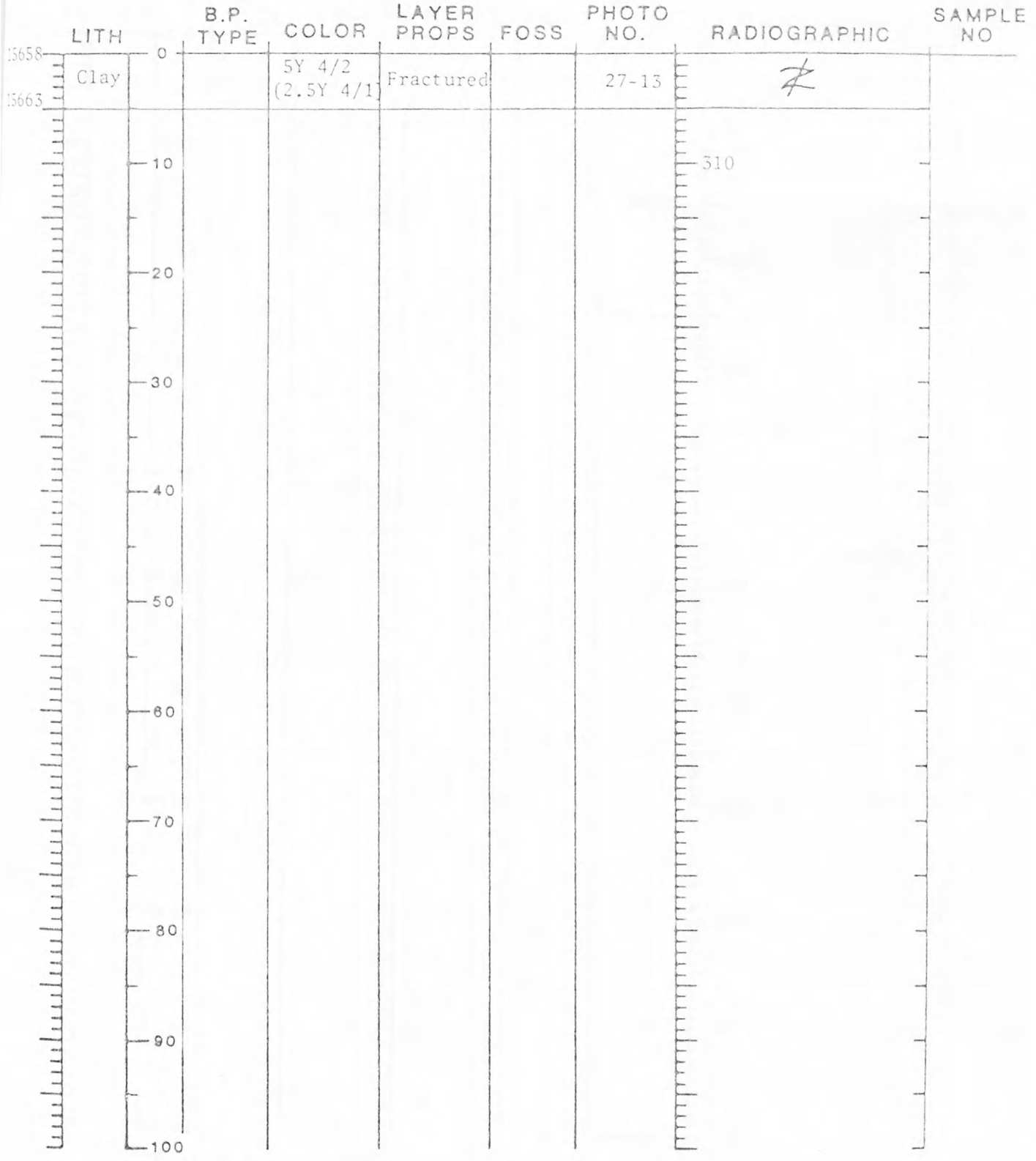
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 27 DEPTH 15558 to 15658 cm

DESCRIBED BY LAF and JDS. DATES MAR 12 1981 and MAR 12 1981 SHEET 3 of 4



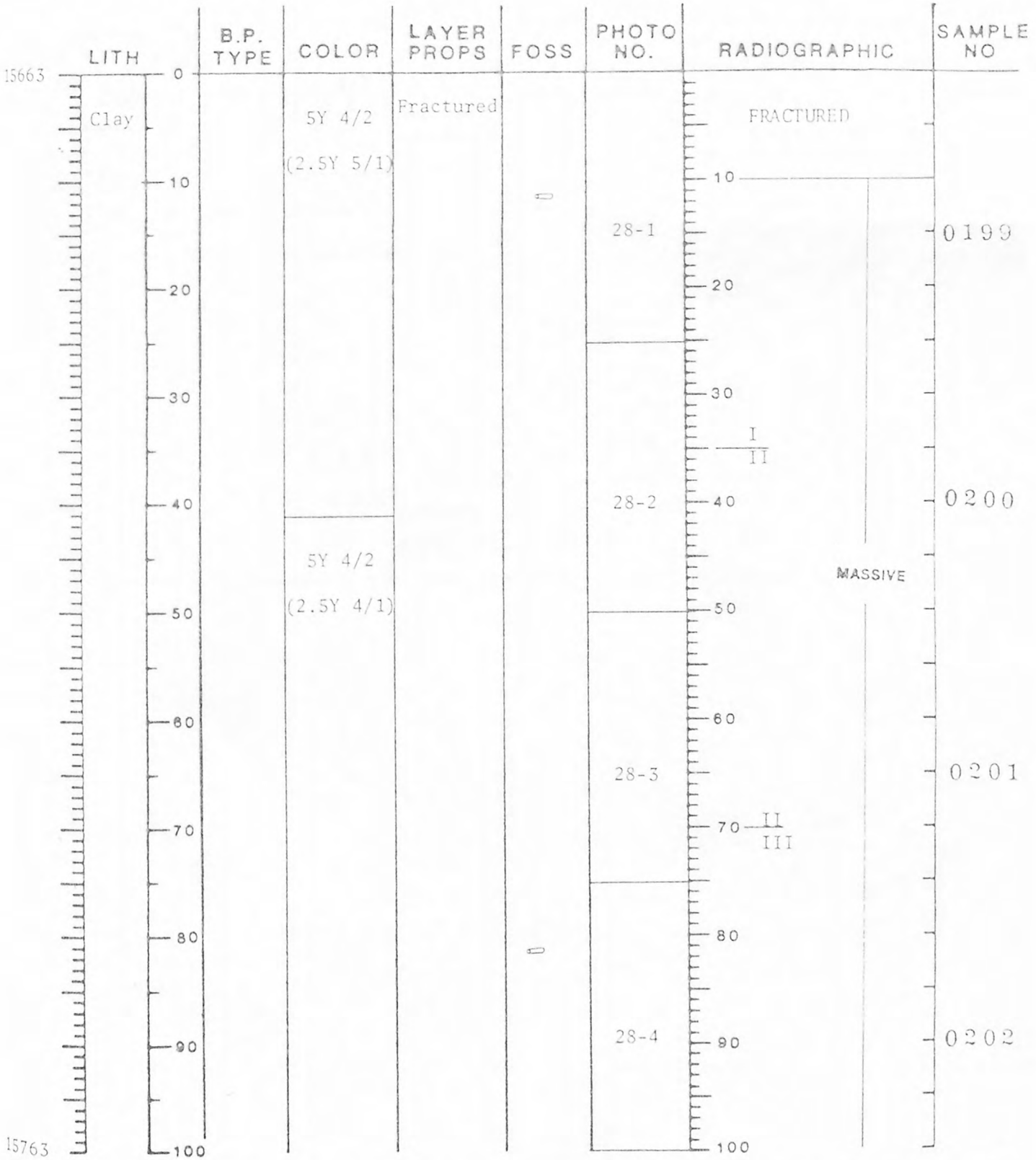
LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 27 DEPTH 15658 to 15663 cm

DESCRIBED BY LAF and JDS DATES MAR 12 1981 and MAR 12 1981 SHEET 4 of 4



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 28 DEPTH 15663 to 15763 cm

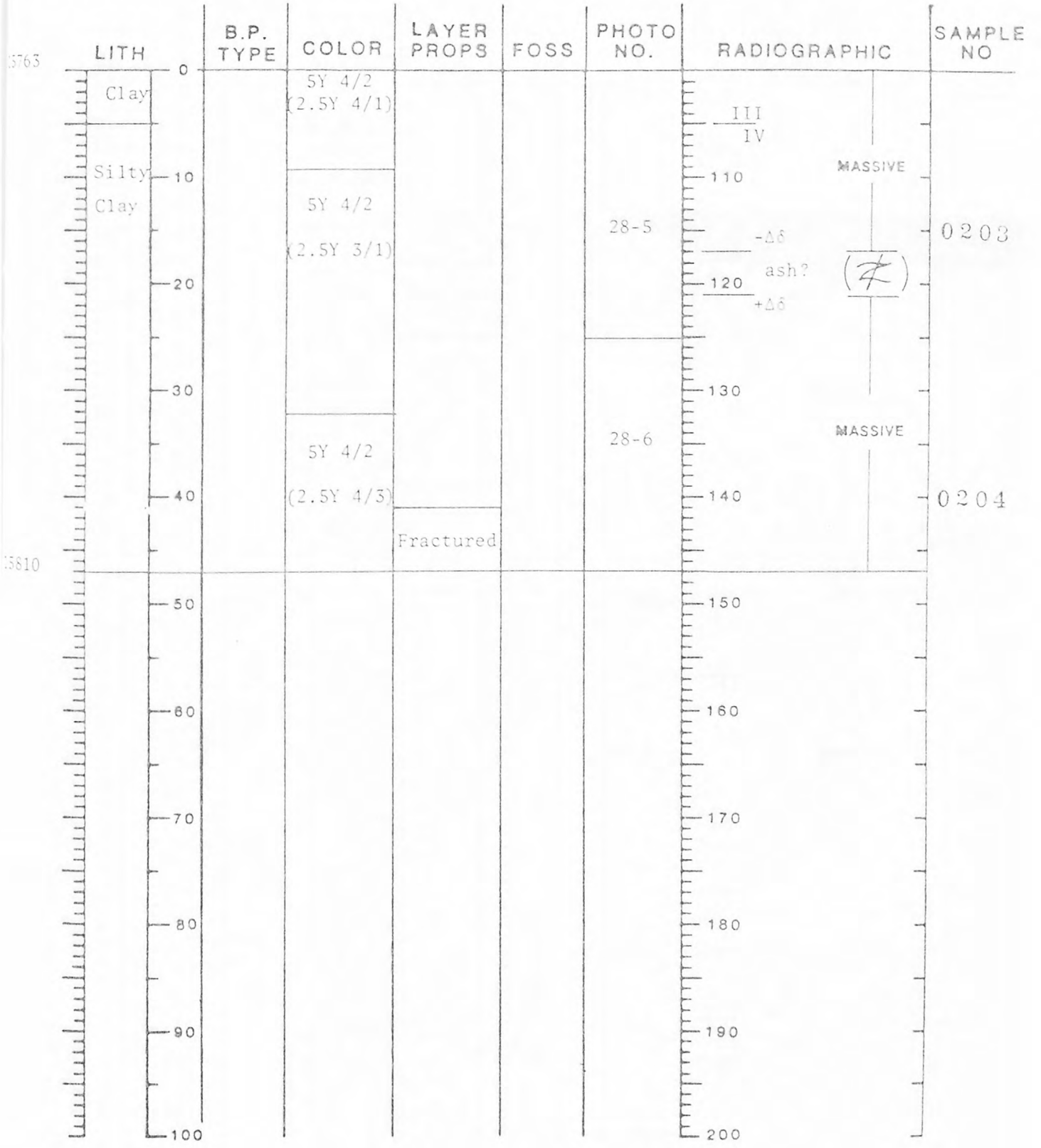
DESCRIBED BY LAF and JDS DATES MAR 13 1981 and MAR 13 1981 SHEET 1 of 2



SEGMENT BECOMES MORE CARBONACEOUS TOWARDS BOTTOM. BIOTURBATION THROUGHOUT.

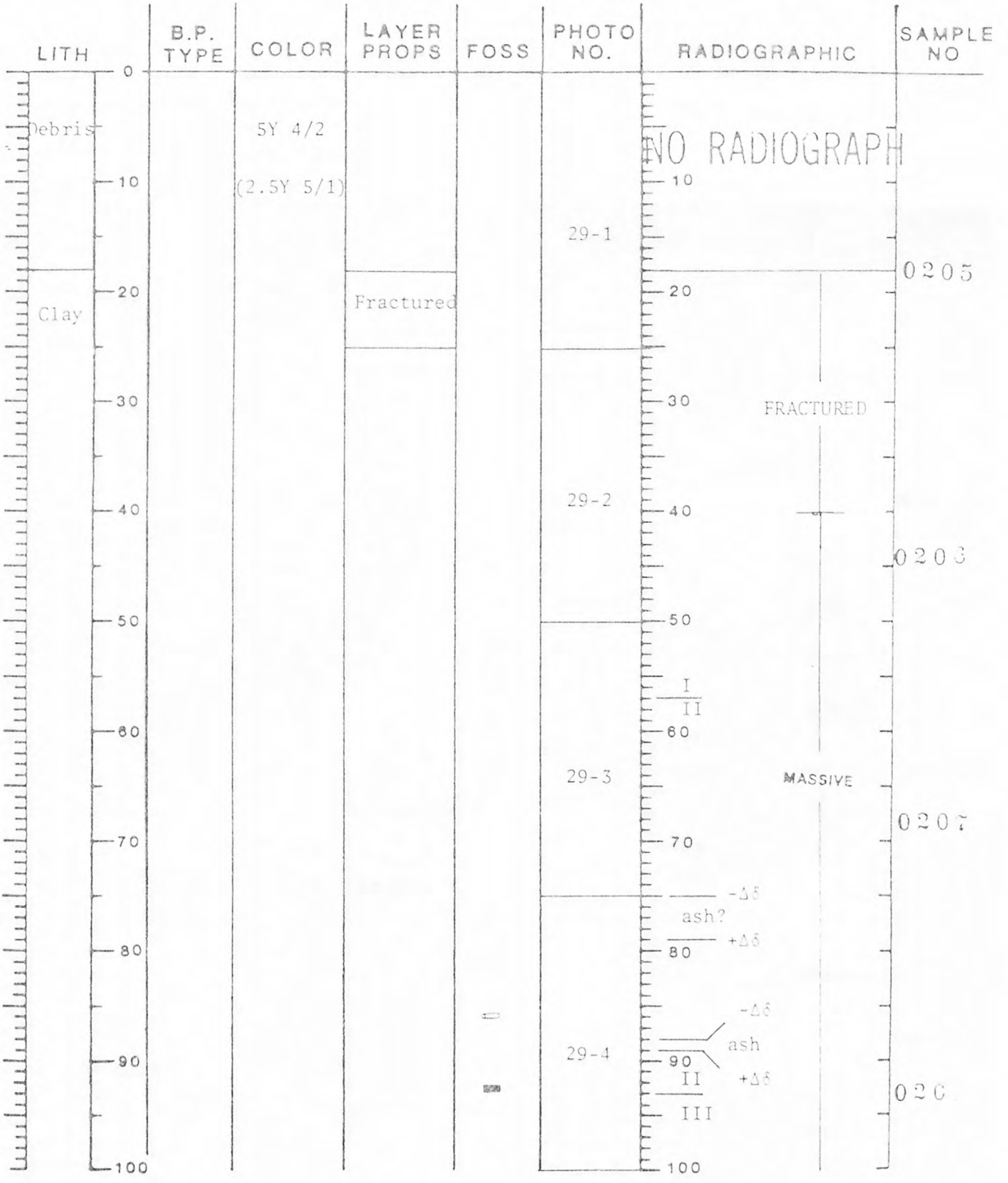
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 28 DEPTH 15763 to 15810 cm

DESCRIBED BY LAF and JDS DATES MAR 13 1981 and MAR 13 1981 SHEET 2 of 2



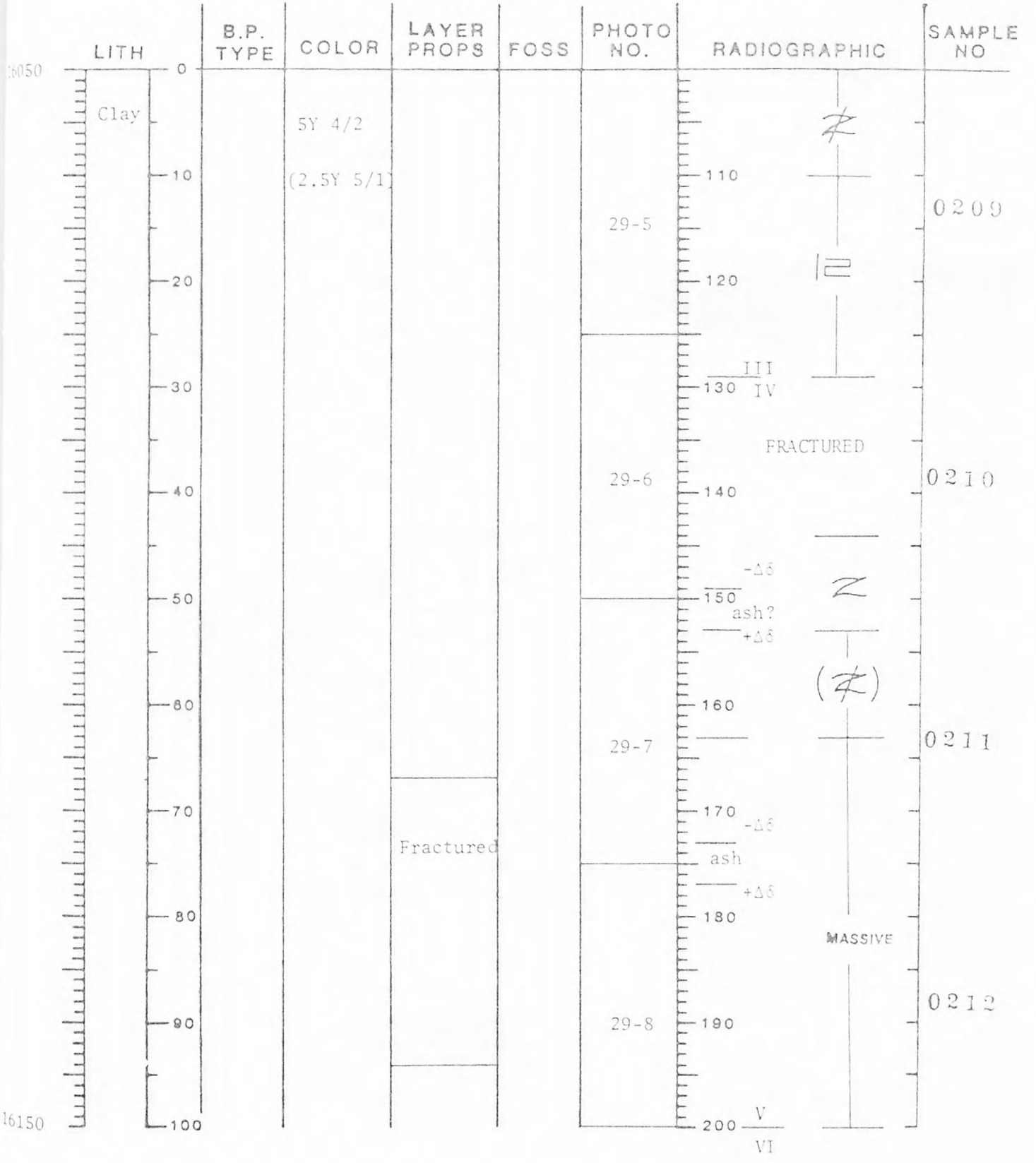
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 29 DEPTH 15968 to 16050 cm

DESCRIBED BY LAF and JDS DATES MAR 12 1981 and N 15 1981 SHEET 1 of 4



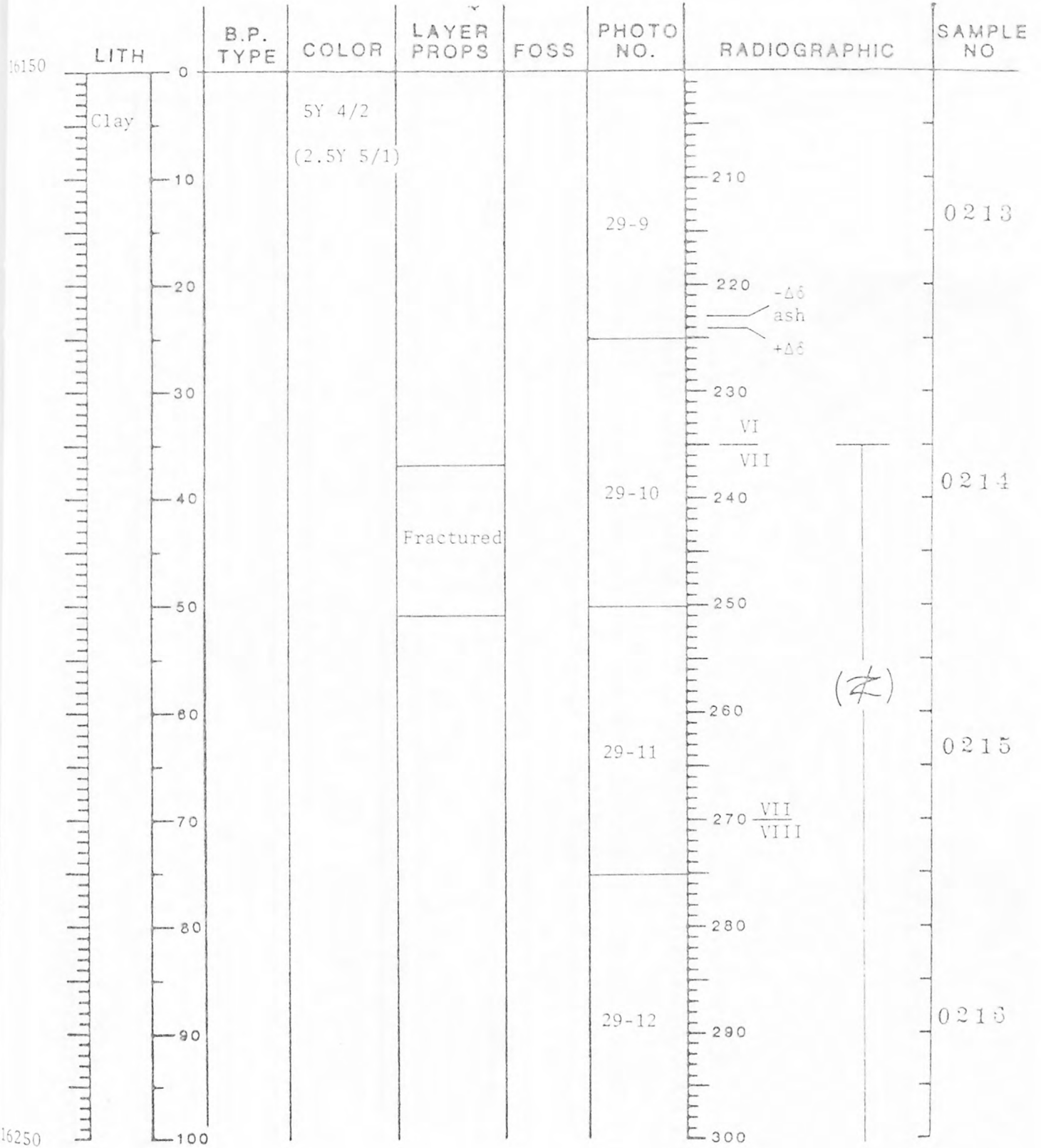
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 29 DEPTH 16050 to 16150 cm

DESCRIBED BY LAF and JDS DATES MAR 13 1981 and MAR 13 1981 SHEET 2 of 4



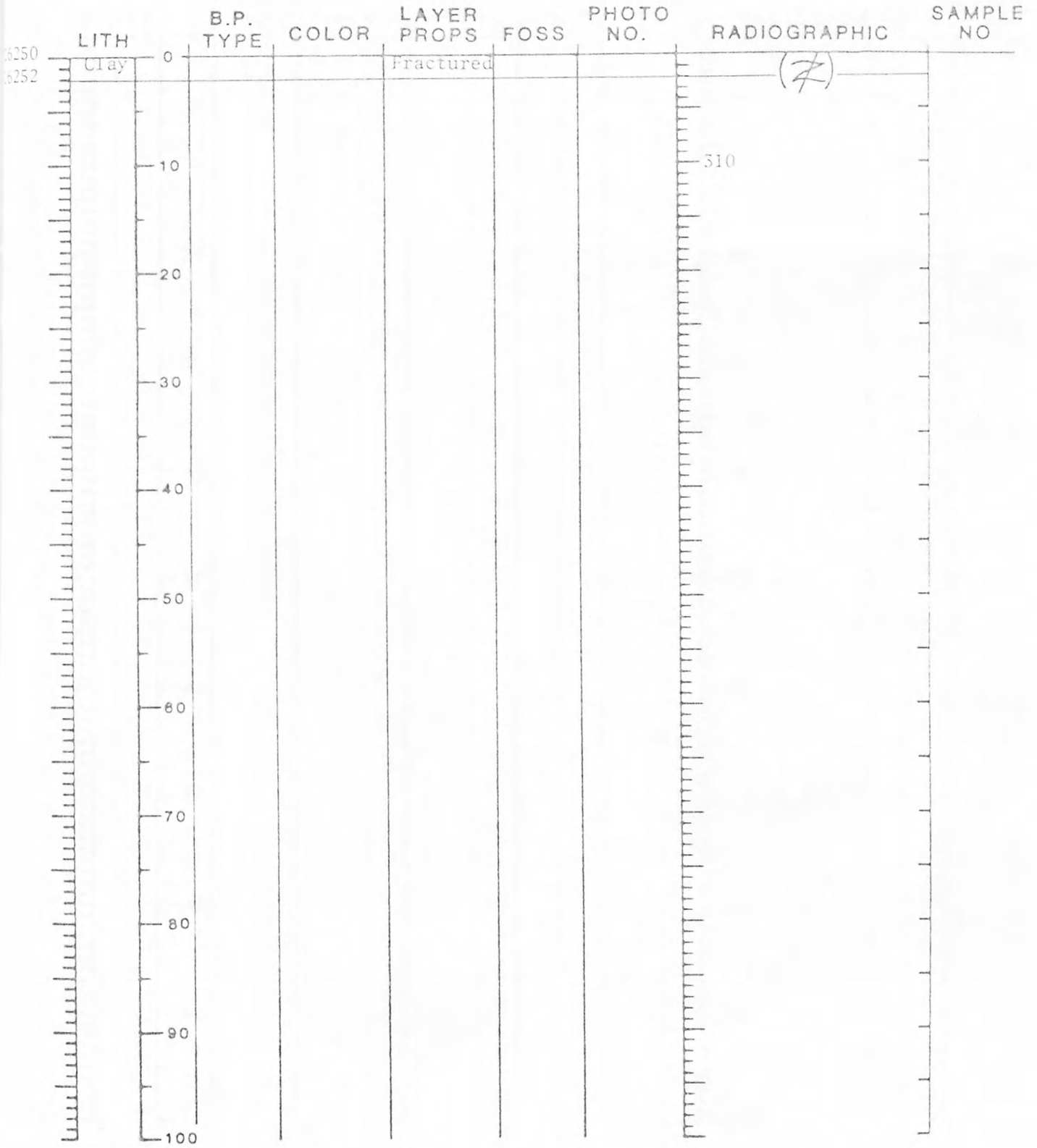
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 29 DEPTH 16150 to 16250 cm

DESCRIBED BY LAF and JDS DATES MAR 13 1981 and MAR 13 1981 SHEET 3 of 4



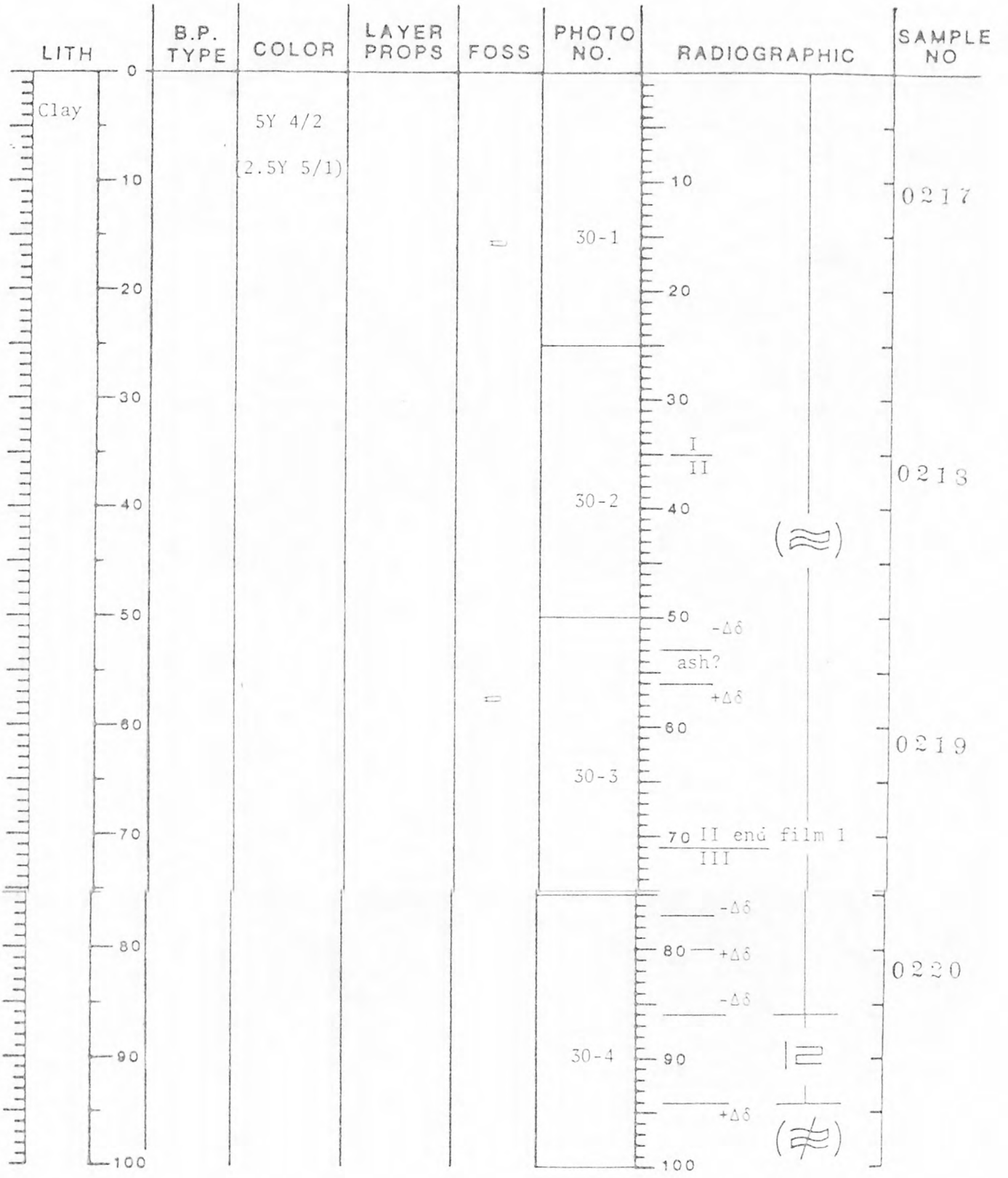
LAKE CLEAR LAKE, CALIF CORE CL-80-2 SEGMENT 29 DEPTH 16250 to 16252 cm

DESCRIBED BY LAE and JDE DATES MAR 13 1981 and MAR 13 1981 SHEET 4 of 4



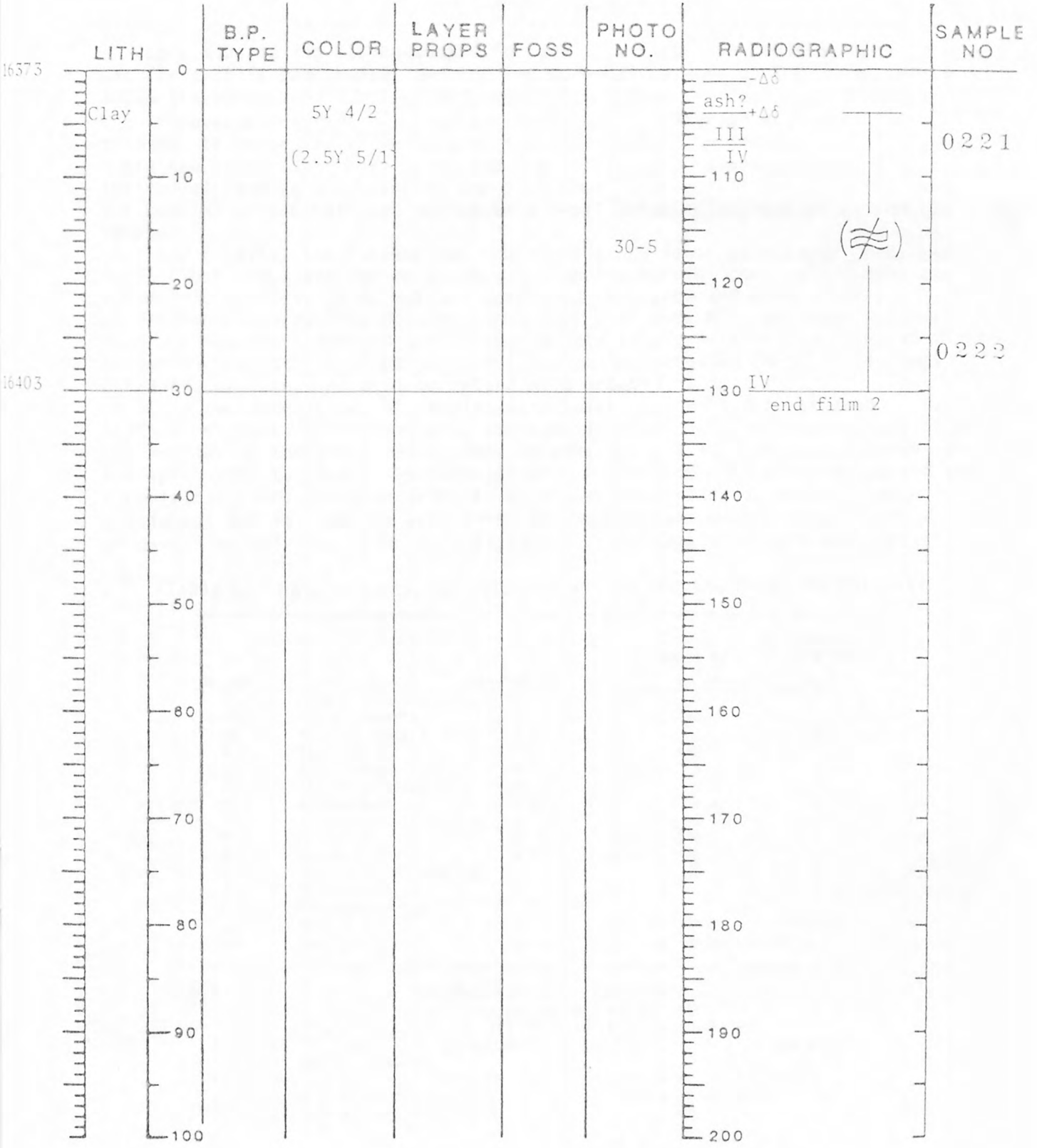
LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 30 DEPTH 16273 to 16373 cm

DESCRIBED BY LAF and JDS DATES MAR 13 1981 and MAR 13 1981 SHEET 1 of 2



LAKE CLEAR LAKE, CALIF. CORE CL-80-2 SEGMENT 30 DEPTH 16373 to 16403 cm

DESCRIBED BY LAF and JDS DATES MAR 13 1981 and MAR 13 1981 SHEET 2 of 2



APPENDIX B

SAMPLE CATALOG

Core subsampling was conducted for analyses listed in table 6. The core was first split lengthwise, and the two core halves were photographed on black and-white and color film. An 8-mm-thick slice from the center of the core was then removed and X-ray radiographed. After the radiograph was developed and examined to determine the extent of sediment disruption and the amount of contained debris, the core slice and one of the core halves were cut up for individual samples according to the plan shown in figure 6 (described below). The remaining core half was sealed in a 6-mil polyethylene bag as an archive sample.

Specifically, the subsampling proceeded as follows: palynology (Pln) and weight loss (WtL) samples were removed from the working core half; these are volumetric samples, using methods described in Beaver and others (1976). Other samples (Org, PPg, Hg, AAc, GrS, Cly, Dtm, Ost, MFs, and Xbm) shown in figure 6 were then removed at the appropriate sample intervals and sealed in polyethylene bags. Both palynology (Pln) and macrofossil (MFs) sample bags contain added ethyl alcohol to retard mold growth.

Only two other types of samples were taken, volcanic ash (ash) and special, or extra (EX). Volcanic ash samples were removed from the core after examination of the X-ray radiographs because not all ash beds are apparent on the split core surfaces. Ash samples were taken from both core halves and the core (radiograph) slice in order to obtain as much volcanic material as possible. Special samples were taken for woody plant fragments and for unidentified objects. Four special samples have sample numbers that begin

Table 6. Sample types, status, and volume and the sampling interval.

Mnemonic	Analysis	Status[1/]	Sample Vol. (cm^3)[2/]	Sample Interval (m)[3/]
Org	Organic geochemistry	F	10	1
PPg	Plant pigments	F	10	1
Hg	Mercury content	F	5	1
AAc	Amino Acid	F	140	10
GrS	Grain size	W	5	1
Cly	Clay Mineralogy	W	5	1
Pln	Palynology	W [4/]	4.4	0.25
Dtm	Diatoms	W	5	2
Ost	Ostracods	W	140	2
MFs	Macrofossils	W [4/]	140	1
Xbm	X-ray bulk mineralogy	W	5	1
WtL	Weight loss	D	1.7	1
C14	Radiocarbon date [5/]			
ash	Ash	W	variable	variable
EX	Extra	W	variable	variable

[1/] F = frozen, W = wet and unrefrigerated, D = dry.
[2/] Approximate volumes except for palynology and weight loss.
[3/] Sample intervals are to closest stated distance between samples. Adjustment of sample interval was made for unrecovered core. See catalog for exact sample locations.
[4/] Palynology and macrofossil samples have 10 ml and 40 ml, respectively, of 95 percent denatured ethyl alcohol added to retard mold growth.
[5/] No radiocarbon samples were taken.

with an "S"; these are the woody samples.

In one case the length of core segment recovered is greater than the length of the interval cored owing to sediment expansion after retrieval of the segment. The increased length results in overlap with the subjacent segment. However, the apparent stratigraphic reversal is solely due to the sediment expansion. The segment involved is number 11, and no samples are affected by this apparent stratigraphic reversal.

Use of catalog

This catalog consists of segment by segment listings of sample types, their sample number, and respective depth. All samples from a given depth interval have the same sample number; the intended use of each sample is noted on the sample label (fig. 7), which is taped to the polyethylene bag containing the sample. The existence of a sample is noted in the catalog by an x-mark in the respective sample column and the depth and sample number are specified in the same row in the left-hand column of the page. All samples have a serial four-digit number, ranging from 1111 to 1222, except the four

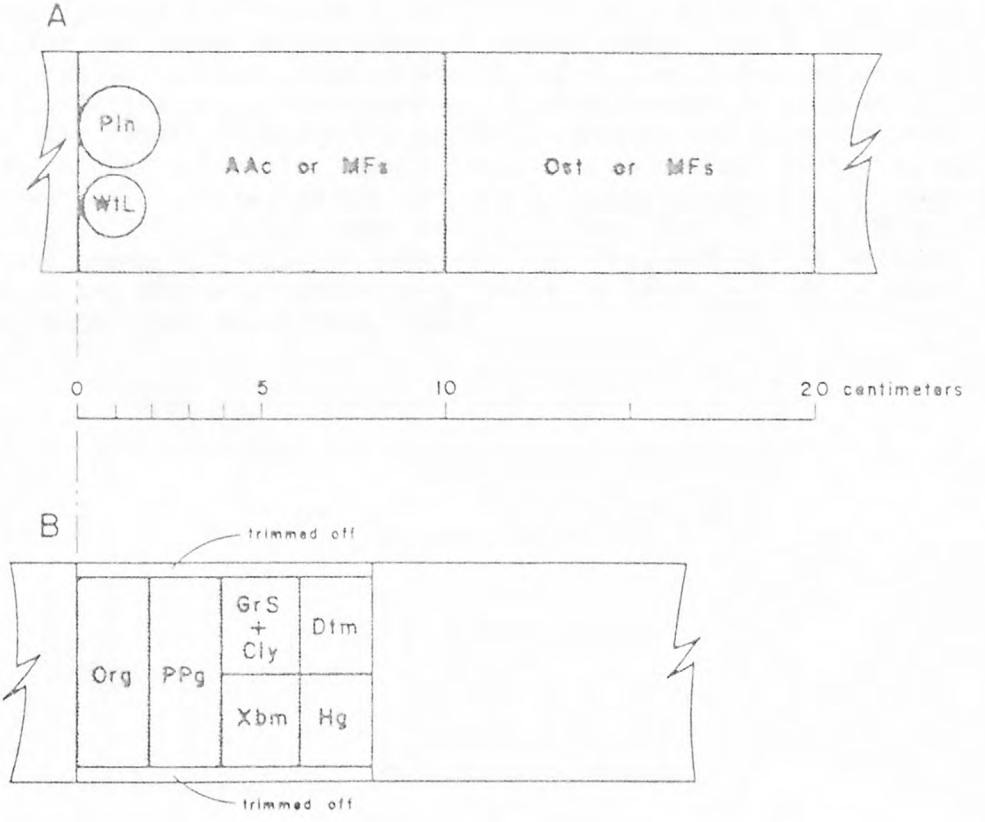


Figure 6. Plan view of a sampled interval from working core half (A) and 8-mm-thick core (radiograph) slice (B). Core top is to the left. At sample depth, here marked 1 cm on the scale, subsamples are taken in order shown. However, not all the samples in every sampled interval were necessarily taken; see table 6 for sample intervals. In the case where less than the maximum number of samples were taken then the samples are taken closer to the recorded depth (modified from Rymer and others, 1981).

special samples that have prefixes of "S". The number of radiographs required to cover a segment is noted in the far right-hand column, entitled "Radiograph", of each segment in the sample catalog.

To determine if a sample or sample suite exists for a specific interval first consult figure 2, which summarizes core recovery. If core was recovered for the interval in question, go to the catalog and search until the desired depth is found. Then, the mnemonic columns may be consulted to see what samples exist for the interval in question. If no samples exist, one may request additional sampling.

Figure 7. Example of sample label, showing blank spaces for core name (CL-81-2 for this core and catalog), segment number, and depth. Depths given are always relative to the top of core CL-81-2 (the mud-water interface) and not the top of the respective segment. Sample number is recorded at the bottom of the label. Between the depth and sample number spaces there are abbreviations for subsamples; the appropriate abbreviation is circled for each sample taken. The abbreviations respectively correspond to the mnemonics in the catalog as follows: Ost, Xbm, GrS, ash, Mag, Pln, Dtm, and MFs. The appropriate mnemonic for other samples (Org, PPg, and Hg) is written in the space below the abbreviations when a sample is taken for the respective analysis (from Rymer and others, 1981).

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 1 SAMPLED BY laf DATE 1/1/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs= 2
5386	0001							x												
5411	0002							x												
5436	0003							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 2 SAMPLED BY laf DATE 1/9/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs= 3
5607	0004	x	x	x		x	x	x			x		x	x						
5632	0005							x												
5657	0006							x												
5682	0007							x												
5707	0008	x	x	x		x	x	x	x	x	x		x	x						
5732	0009							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 3 SAMPLED BY laf DATE 1/16/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs= 2
5892	0010							x												
5917	0011							x												
5942	0012	x	x	x		x	x	x			x		x	x						
5967	0013							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 4 SAMPLED BY laf DATE 1/19/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs= 3
6209	0014							x												
6234	0015							x												
6284	0016	x	x	x		x	x	x	x	x	x		x	x						
6309	0017							x												
6334	0018							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 5 SAMPLED BY laf DATE 1/20/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs=
6515	0019							x												
6540	0020	x	x	x		x	x	x			x		x	x						

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 6 SAMPLED BY laf DATE 1/22/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs=
6807	0021							x												
6832	0022							x												
6857	0023	x	x	x		x	x	x	x	x	x		x	x						
6877	0024							x												
6902	0025							x												
6927	0026							x												
6952	0027							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 7 SAMPLED BY laf DATE 1/23/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs=
7132	0028	x	x	x		x	x	x			x		x	x						
7157	0029							x												
7182	0030							x												
7207	0031							x												
7232	0032	x	x	x		x	x	x			x		x	x						
7257	0033							x												
7282	0034							x												
7307	0035							x												
7332	0036	x	x	x		x	x	x	x	x	x		x	x						
7357	0037							x												
7382	0038							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 8 SAMPLED BY laf DATE 1/29/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	WtL	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs= 3
7426	0039							x												
7451	0040	x	x	x	x	x	x	x			x		x	x						
7476	0041							x												
7501	0042							x												
7526	0043							x												
7551	0044	x	x	x		x	x	x	x	x	x		x	x						
7576	0045							x												
7601	0046							x												
7626	0047							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 9 SAMPLED BY laf DATE 1/30/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	WtL	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs= 3
9874	0048	x	x	x		x	x	x			x		x	x						
9899	0049							x												
9924	0050							x												
9949	0051							x												
9974	0052	x	x	x		x	x	x	x	x	x		x	x						
9999	0053							x												
10024	0054							x												
10049	0055							x												
10074	0056	x	x	x		x	x	x			x		x	x						
10099	0057							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 10 SAMPLED BY laf DATE 2/6/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	WtL	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs= 3
10183	0058							x												
10213	0059							x												
10243	0060	x	x	x		x	x	x	x	x	x		x	x						
10268	0061							x												
10293	0062							x												
10318	0063							x												
10343	0064	x	x	x		x	x	x			x		x	x						
10378	0065							x												
10393	0066							x												
10418	0067							x												
10443	0068	x	x	x		x	x	x	x	x	x		x	x						
10468	0069							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 11 SAMPLED BY laf DATE 2/12/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	WtL	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs= 2
10488	0070							x												
10513	0071							x												
10538	0072	x	x	x		x	x	x			x		x	x						
10563	0073							x												
10588	0074							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 12 SAMPLED BY laf DATE 2/12/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	WtL	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs= 3
10804	0075							x												
10829	0076	x	x	x		x	x	x	x	x	x		x	x						
10854	0077							x												
10879	0078							x												
10904	0079							x												
10929	0080	x	x	x	x	x	x	x			x		x	x						
10954	0081							x												
10979	0082							x												
11001	S001																		x----wood	
11004	0083							x												
11029	0084	x	x	x		x	x	x	x	x	x		x	x						
11054	0085							x												
11079	0086							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 13 SAMPLED BY laf DATE 2/13/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	WET GrS	Cly	Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs= 2
11105	0087							x												
11130	0088	x	x	x		x	x	x			x		x	x					x	-----gray powdery object
11155	0089							x												
11180	0090							x												
11205	0091							x												
11230	0092	x	x	x		x	x	x	x	x	x		x	x						
11255	0093							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 14 SAMPLED BY laf DATE 2/16/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	WET GrS	Cly	Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs= 3
11413	0094							x												
11438	0095							x												
11463	0096	x	x	x		x	x	x			x		x	x						
11478	S002																		x	-----wood
11488	0097							x												
11513	0098							x												
11538	0099							x												
11563	0100	x	x	x		x	x	x	x	x	x		x	x						
11588	0101							x												
11613	0102							x												
11638	0103							x												
11663	0104	x	x	x		x	x	x			x		x	x						
11688	0105							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 15 SAMPLED BY laf DATE 2/19/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	WET GrS	Cly	Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs= 1
11780	0106	x	x	x		x	x	x	x	x	x		x	x						

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 16 SAMPLED BY laf DATE 2/19/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	WET GrS	Cly	Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs= 3
12015	0107							x												
12040	0108							x												
12065	0109							x												
12085	S003																		x	-----wood
12090	0110	x	x	x		x	x	x			x		x	x						
12115	0111							x												
12140	0112							x												
12165	0113							x												
12190	0114	x	x	x		x	x	x	x	x	x		x	x						
12215	0115							x												
12240	0116							x												
12265	0117							x												
12290	0118	x	x	x	x	x	x	x			x		x	x						

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 17 SAMPLED BY laf DATE 2/26/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	WET GrS	Cly	Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	C14	ash	IW	EX	Number of Radiographs= 3
12315	0119							x												
12340	0120							x												
12365	0121							x												
12390	0122	x	x	x		x	x	x	x	x	x		x	x						
12415	0123							x												
12440	0124							x												
12465	0125							x												
12505	0126	x	x	x		x	x	x			x		x	x						
12565	0127							x												
12550	0128							x												
12575	0129							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 18 SAMPLED BY laf DATE 3/5/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	WET GrS	Cly	Pln	Dtm	Ost	MFs	Xbm	WtL	Iso	SPECIAL Mag	CT4	ash	IW	EX	Number of Radiographs= 3
12633	0130	x	x	x		x	x	x	x	x	x		x	x						
12658	0131							x												
12773	0132							x												
12798	0133							x												
12823	0134	x	x	x		x	x	x			x		x	x						
12848	0135							x												
12873	0136							x												
12898	0137							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 19 SAMPLED BY laf DATE 3/5/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	WET GrS	Cly	Pln	Dtm	Ost	MFs	Xbm	WtL	Iso	SPECIAL Mag	CT4	ash	IW	EX	Number of Radiographs= 1
12931	0138	x	x	x		x	x	x	x	x	x		x	x						
12956	0139							x												
12981	0140							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 20 SAMPLED BY laf DATE 3/5/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	WET GrS	Cly	Pln	Dtm	Ost	MFs	Xbm	WtL	Iso	SPECIAL Mag	CT4	ash	IW	EX	Number of Radiographs= 3
13231	0141							x												
13276	0142	x		x		x	x	x			x		x	x						
13301	0143							x												
13326	0144							x												
13351	0145							x												
13376	0146	x	x	x		x	x	x	x	x	x		x	x						
13401	0147							x												
13426	0148							x												
13451	0149							x												
13476	0150	x	x	x		x	x	x			x		x	x						
13501	0151							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 21 SAMPLED BY laf DATE 3/9/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	WET GrS	Cly	Pln	Dtm	Ost	MFs	Xbm	WtL	Iso	SPECIAL Mag	CT4	ash	IW	EX	Number of Radiographs= 3
13529	0152							x												
13554	0153							x												
13580	0154	x	x	x		x	x	x	x	x	x		x	x						
13605	0155							x												
13630	0156							x												
13655	0157																			
13680	0158	x	x	x	x	x	x	x			x		x	x						
13705	0159							x												
13730	0160							x												
13755	0161							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 22 SAMPLED BY laf DATE 3/6/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	WET GrS	Cly	Pln	Dtm	Ost	MFs	Xbm	WtL	Iso	SPECIAL Mag	CT4	ash	IW	EX	Number of Radiographs= 2
13837	0162	x	x	x		x	x	x	x	x	x		x	x						
13862	0163							x												
13887	0164							x												
13912	0165							x												
13937	0166	x	x	x		x	x	x			x		x	x						
13962	0167							x												
13975	S004																		x-----→	wood
13987	0168							x												
14057	0169	x	x	x		x	x	x	x	x	x		x	x						

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 24 SAMPLED BY laf DATE 3/12/81

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	Cl4	ash	IW	EX	Number of Radiographs= 3
14447	0170	x	x	x		x	x	x			x		x	x						
14472	0171							x												
14497	0172							x												
14522	0173							x												
14547	0174	x	x	x		x	x	x	x	x	x		x	x						
14572	0175							x												
14597	0176							x												
14622	0177							x												
14647	0178	x	x	x		x	x	x			x		x	x						
14672	0179							x												
14725	0180	x	x	x		x	x	x	x	x	x		x	x						

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 25 SAMPLED BY laf DATE not recorded

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	Cl4	ash	IW	EX	Number of Radiographs= 2
14749	0181							x												
14774	0182							x												
14799	0183							x												
14825	0184	x	x	x		x	x	x			x		x	x						
14850	0185							x												
14875	0186							x												
14900	0187							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 27 SAMPLED BY laf DATE not recorded

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	Cl4	ash	IW	EX	Number of Radiographs= 3
15378	0188	x	x	x		x	x	x	x	x	x		x	x						
15403	0189							x												
15428	0190							x												
15453	0191							x												
15503	0192	x	x	x	x	x	x	x			x		x	x						
15528	0193							x												
15553	0194							x												
15578	0195							x												
15603	0196	x	x	x		x	x	x	x	x	x		x	x						
15628	0197							x												
15653	0198							x												

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 28 SAMPLED BY laf DATE not recorded

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	Cl4	ash	IW	EX	Number of Radiographs= 2
15678	0199							x												
15703	0200	x	x	x		x	x	x			x		x	x						
15728	0201							x												
15753	0202							x												
15778	0203							x												
15803	0204	x	x	x		x	x	x	x	x	x		x	x						

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 29 SAMPLED BY laf DATE not recorded

DEPTH (cm)	SPL. NO.	FROZEN Org	PPg	Hg	AAc	GrS	Cly	WET Pln	Dtm	Ost	MFs	Xbm	Wtl	Iso	SPECIAL Mag	Cl4	ash	IW	EX	Number of Radiographs= 3
15968	0205							x												
15993	0206							x												
16018	0207							x												
16043	0208	x	x	x		x	x	x			x		x	x						
16068	0209							x												
16093	0210							x												
16118	0211							x												
16143	0212	x	x	x		x	x	x	x	x	x		x	x						
16168	0213							x												
16193	0214							x												
16218	0215							x												
16243	0216	x	x	x		x	x	x			x		x	x						

LAKE Clear Lake, Calif. CORE CL-80-2 SEGMENT NO. 30 SAMPLED BY laf DATE not recorded

DEPTH (cm)	SPL. NO.	FROZEN						WET								SPECIAL				Number of Radiographs× 2
		Org	PPg	Hg	AAc	Grs	Cly	Pln	Dtm	Ost	MFs	Xbm	WtL	Iso		Mag	C14	ash	IW	EX	
16284	0217							x													
16309	0218							x													
16334	0219							x													
16354	0220	x	x	x		x	x	x	x	x	x		x	x							
16379	0221							x													
16400	0222							x													