104919

COLMAN UPPER KLAMATH LAKE UPPER KLAMATH LAKE, OR
UKLM 96-1 (96033)
JULY 10-JULY 17, 1996
CRUISE & CHIEF SCIENTIST LOG

ATT 800-433-3273

Jake -
541 - 783 - 2573 home
541 - 783 - 2095 work

Klamath tribe people
Jake Kann - limnologist
Ken Knight - tech

Larry Dunsmoor - head of lab
(fishery + biologist)
Dominic Herrera - fisheries foreman
Les - tech

Brian Emmons - GIS Manager

Main one by lodge
left past Dead Indian Rd:
2nd right

Cruise: Upper Klamath Lake
July, 1996 UKL96-1

Steve Colman - Chief Sci.
Dave Nichols - E.T.

Monday 7/8/96
5:20 bus 8:10 plane
two late flights, missed connection
in Portland, luggage left in
Portland Ar. Klamath Falls 6:30
Arrive Ft. Klamath 8:00

Tues 7/9/96

Mob @ KT fish hatchery labs

3.5 KHZ system – 4 ducer side-mo
ORE Amp / Power source
Model 140 tranceiver
Sony DAT tape recorder
TrueTime GPS time code generator
Data Marine Fathometer
EPC 1086 Graphic recorder
Rockwell p-code GPS receiver
Barry Irwin Nav system

Boat: 20' Boston Whaler
from Klamath Indian tribe
"KT Whaler

Seismic set up
Key off EPC @ 1/4 sec

sweep 1/16 (0.625) sec.
1/32 (0.312)
2 transducers firing, 2 receiving
DAT recorder LChan 3.5 KHZ + Key
RChan IRIG B

Wed 7/10/96 Day 192

Complete Mob in morning

Launch boat at Agency Lake ~2pm
testing, tune-up

SOL 1 2219:30 mid Agency Lake
EOL 1 2340 mouth of Ball Bay
(1640 local)

→ 42 26.43 122 0.9199
almost no penetration –
shallow water, bottom & multiples

Tape #1

7/11/96 Thurs

NAV Disk 1 Line 2-214
JDAY 193 7/11/96 Thursday
(7:45)
SOL #2 @ 14:45 WP 15 → 16
1449 42°29.0020 122 0.5600
DAT Recorder L CHAN = 3.5kHz + key
R CHAN = IPIX 3
TAPE* 2 START 14:45
END 16:40

EOL2 - SOL 3 1537:30
- Getting occasional subbottom reflections, but mostly transparent

NAV off line 16:18
NAV on line 16:34
TAPE* 3 START 16:41
18:42 gas @ end of line 3

EOL3 - SOL 4 17:20
mostly gas

EOL4 - SOL 5 17:33
Strange change in bottom off Eagle R.

TAPE 4 START 18:43
END 20:42
Change paper: Roll 1 → Roll 2

7/11/96 (cont)

EOL 5 SOL 6 1915

EOL 6 SOL 7 1921

7-9
Shoalwater Bay

SOL 8 19:45
EOL 8 19:53

SOL 9 19:53 (4-5)

2000 - Finally - some Subbottom
MAYBE !!

EOL 9 @ 20:29

10-12
Ball Bay

JD 193 SOL 10 20:29

START TAPE 5 @ 20:43

JD193 EOL 10 20:48

JD193 SOL 11 @ 20:48
EOL 11 @ 20:58

SOL 12 @ 20:58
EOL 12 @ 21:46

SOL 13 2146
EOL 13 2228
@ #7
SOL 14 2228
EOL 14 2239
→ #13

"Search Track 2"
2800 - 2830
Comment out

42 28.2
121 59.5

7/12/96 JDay 194

(EOL 42) - 5	15	28-29	23
5 - 8	16	29 - 1	24
8 - 13	17	31-30-33	25
13 - 1	18	33-32	26
1 - 12	19		
12 - 26	20		
26 - 27	21		
27 - 28	22		

JD 194 SOL 15 Tape 6 Nav Disk 2
Roll 3 → S 14:46
E 16:49

SOL 15 @ 14:46

EOL 15 } 15:06
SOL 16 }

EOL 16 } 15:33
SOL 17 }

EOL 17 } 15:49
SOL 18 }

EOL 18 } 16:12
SOL 19 }

EOL 19 } 16:33
SOL 20 }

Tape 7 S 16:46
E 18:47

EOL 20 } 16:58
SOL 21 }

JD 194 UKL 96-1 NAV Dist 2 1/17/96 (cont.)

EOL 21 } 18:23
SOL 22 }

EOL 22 } 18:36
SOL 23 } TAPE 8 S18:47 E20:47

EOL 23 } was [illegible] as c/c
SOL 24 }

EOL 24 } 20:05
SOL 25 }

c/c on 25

EOL 25 } 20:32
SOL 26 }

TAPE 9

EOL 26 } 20:53 S 2047 E 2314
SOL 27 }

paper change 3→4

EOL 27 } 21:24
SOL 28 }

EOL 28 } 21:50
SOL 29 }

UKL96-1 JD 194 7/12/96 (cont.)

EOL 29 } 2234
SOL 30 }

EOL 30 23:26:30

UKL 96-1 Sat 7/13/96 JD 195

17-33 : 31
33-35 : 32 ✓33→35
~~34-35 : 30~~
35-36 : 33
36-37 : 34
37-38 : 35
38-39 : 36

39-46 : 37
46-40 : 38
40-41 : 39
41-47 : 40
47-18 : 41
18-29 : 42
29-33 : 43

JD 195 Roll #4 Nov Disk 34
SOL 31 14:41 Tape 10 S 14:39
E 16:36

EOL 31 } ~~[illegible]~~ 15:18
SOL 32 }

EOL 32 } ~~[illegible]~~ 15:54
SOL 33 }

EOL 33/SOL 34 16:19:30

EOL 34/SOL 35 16:38:45

Tape 11 S 16:37
E 18:40

EOL 35/S-L36 16:55

EOL 36/S-L37 17:11:30

Sat 7/14/96 JD 195 (cont.)

EOL 37/SOL 38 17:37

EOL 38/SOL 39 17:46:30

EOL 39/sol 40 18:07

eol 40/sol 41 18:17

~~tape 11 end~~

eol 41/sol 42 18:37:30

eol 42/sol 43 19:10:45

eol 43/ 19:33 TAPE 2
S 18:41
E 19:33

42° 19' 14.52
121° 54' 32.10
UKL 96-W1

WATER Sample for PLATT middle of Howard Bay

7/13/96 JD 195 (Cont.)

SOL 44 20:25:30
(12-48) (Start tape 12, nav #3 (cont))

EOL 44 SOL 45 20:47:30
(48-13)

EOL 45 SOL 46 21:08
(13-5+)

EOL 46 21:34:30

Sunday 7/14/96

rp. rig boat for coring.

Core Sites

1. Off Shoalwater Bay, WP 13 (17:8)
   42 26.7 -121 59.7 (3.0)
2. Off Eagle Ridge, on Line 30 23:7[illegible]
   42. 23.867 -121 54.13 (12.8)
3. Howard Bay on Line 25 20:23
   42 9.1 -121 54.1 (2.4)
4. Mid Lake, On Line 29 22:05
   42 23.3599 -121 52.6249 (2.5)
5. Southern Lake L33x37
   42 16.7 -121 50.5 (2.6)
6. Southern Lake L35x37
   42 15.0 -121 49.5
7. Shoalwater Bay L7x9 L7 1346
   42 24.8 121 58.1 (2.8)

Notes - early seismics

L5 1535 42 23.1 121 54.75
Bottom disappears, then hard return w/ steps - (faults?)
bottom returns higher, abruptly into gas

L7 end, L8, most of 9 - very soft, transparent bottom w/ strong reflector below

L9 20:03 ~ 42 25.0 121 58.53
Strong channel-like subbottom reflector

L12 21:03 42 24.6 122/0.83
similar to above

L12 to end - small pockets gas-free

L3 1616 42 24.2 121 54.03
V. good pocket gas free, w/ strong subbottom reflector

L3 1621 - 1650 42 21.9 121 51.6
lost bottom - v. soft
good subbottom reflectors w/ several steps (faults?)

L3 End - another good hole in gas w/ good reflector below

Monday 7/15/96 JD 197

Surface core sampling w/ Tom Minkley

Site 3 (WP 103) - 17:15
42 19.1
121 54.1

Site 4 42° 23.367 18:13 1st
121° 52.637 18:18 2nd

Site 2 42 23.8[illegible] 18:3[illegible]
121 56.13

Site 1 42 26.7 1856:30
121 59.5

Coring attempted in Elkalwater Bay - core head did not seal and mud ran out through catcher.

Core head rebuilt to plug screw holes and create better seal!

Tues. 7/16/95 [illegible] '98

Core site #1 [illegible] ated [illegible]
Core [illegible] different catch[illegible],
tape, valve, etc.

Everything [illegible] but no recovery – sediment [illegible] too watery and runs out of core catcher

Bottom samples w/ Shipeck
~ top 5cm sampled

	B1	15:55	42 16.7 ?	121	50.5
	B2	16:21	42 15.3	121	49.8
	B3	16:28	42 14.4	121	48.95
	B4	16:43.5	42 [illegible]	121	[illegible].9
	B5	16:53	42 [illegible].4	121	51.6
toward Bay	B6	17:03.5	42 20.1	121	[illegible].6
	B7	17:15	42 22.1	121	[illegible].6

7/16/96 (cont.)

		42	23.1420	121	53.477
B8	17:27	42	23.4	121	53.5
W2		d.40			
B9	17:41	42	24.4	121	56.6
B10	~~17:45~~	~~42~~	~~24.4~~	~~121~~	~~56.5~~
	17:48	42	24.4	121	56.4
B11	17:58	42	26.3	121	54.6
B12	18:07.5	42	27.35	121	56.
B13	18:19.5	42	25.7	122	0.3
B14	18:29.5	42	27.25	122	3.6
B15	18:40	42	28.0	122	0.85

Wed 7/17/96 JD 199 Wed.

Lake of the Woods

B16 16:12.5 42 21.6 122 12.9
WD = 48 ft
Coring attemped · very soupy, ran out core catcher – no recovery

B17 16:34.5 42 21.2 122 12.8
very soupy WD = 36 ft

B18 16 43.5 42 21.1 122 12.8
coring attempted - no penetration
muddy sand w/ pebbles WD = 9.5 ft

B19 17:03 42 21.0 122 12.8
change in bottom going out (weed line?) ~ 10 ft

B20 17:13.5 42 21.3 122 12.7
weedy, mucky, few lithics WD 15'

B21 17:22 42 21.6 122 12.6
drifted in to 16' ~~WD~~ 36'
grassy, organic

B22 17:28.5 42 21.6 122 12.6
WD 37'

— 17:37.5 42 21.6 122 12.6
core attempt, no recovery

7/17/96 cont.

B23	1810	42	22.4	122	12.55
				WD	13'
B24	1817.5	42	22.8	122	13.1
				WD	40'
B25	1823	42	22.8	122	13.0
				WD	~ 30'
B26	1834.5	42	22.8+	122	13.0

core attempt – v. little penetration
stiff gray-brown clay sampled from core cutter

B27	1904	42	22.9	122	13.05
	~~1904~~			WD	16'
B28	1910	42	23.0	122	13.0
				WD	9.5'
B29	1915	42	23.1	122	13.1
				WD	6'
	1925	42	22.7	122	13.2
				WD	39'

→ core attempt – clearly buried the head in soft sediment, most of it made it to the surface, but immediately ran out

W3	1935	42	22.2	122	13.05

7/18/96 - Demob and packing in Chiloquin

7/19/96 - Travel home

Publications - re-read:

Sanville, Powers, Gahler 1974
EPA report
Entranco Engineers, 1982
COE Contract report (big)

Dan Snyder - USGS, Portland
- has info on cores & pollen in lake

Jake's Corer: Wildco Instruments
3d Cass St.
Saginaw, Mich. 48602
Core 2420