

COMPANY: Nahama & Weagant Energy Company
WELL: "Buzzard" #12-35-65
FIELD: Mist
COUNTY: Columbia
STATE: Oregon
LOCATION: 1780'S AND 290'E
WELL: "Buzzard" #12-35-65
COMPANY: Nahama & Weagant Energy Company
LOCATION: 1780'S AND 290'E
COUNTY: Columbia
STATE: Oregon
Other Services:
AP SERIAL NO: 36-009-00301
GL: 800.0 F
Elev: 800.0 F
Log Measured From: KB
Elev: 800.0 F
D.F.: G.L. 800.0 F
Date: 18-JUN-1993
Run No: ONE
Depth: 1675.0 F
Depth Logger (Soni): 1670.0 F
Btm Log Interval: 652.0 F
Top Log Interval: 633.0 F
Type Fluid in Hole: LEAST WATER
Sensitivity Mecl: 8.30 I/F/G
Density: 8.30 I/F/G
Field Level: 8.30 I/F/G
Max. Rec. Temp.:
Deviation:
Logger on Bottom: 09:32 18 JUN 1993
Equip. Location: 8504 SACHAMENTO
Recorded By: SCOTT PILCH
Witnessed By: ROB LUCAS
BOREHOLE RECORD
Bit Size: 7 7/8"
Depth: 377.0 F
CASING & TUBING RECORD
Size: 4 1/2"
Weight: 10.5000 LB/F
Casing Top-Logger: 1675.0 F
Casing Shoe-Driver: 1675.0 F

The well name, location and borehole reference data were furnished by the customer.

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretations made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our General Terms and Conditions as set out in our current Price Schedule.

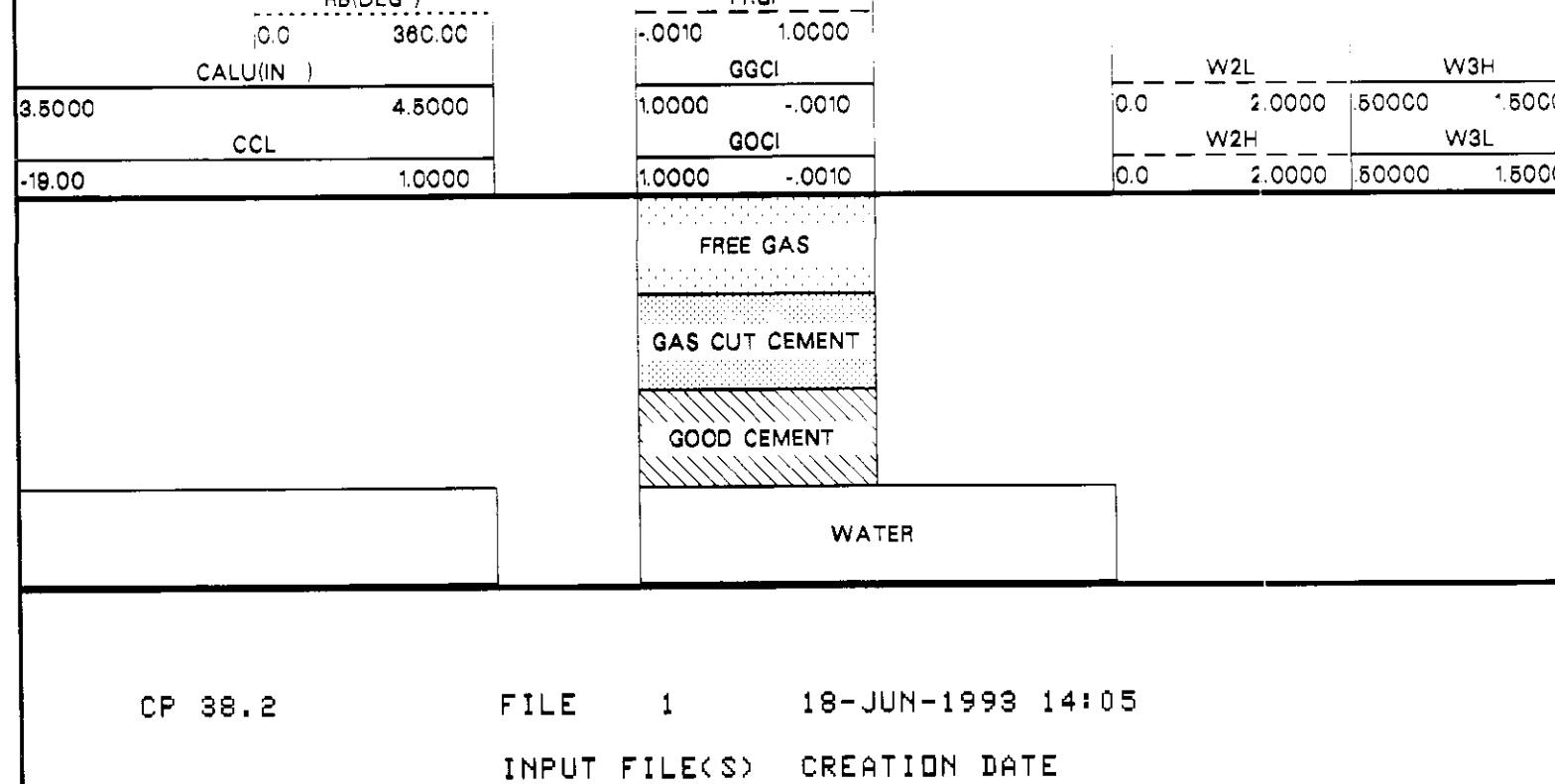
Run No.	ONE
Service Order No.	454615
Logging Speed	3600.0 F/HR
EQUIPMENT DATA	
Tool Number 1	SLS-WC 1335
Tool Number 2	SLC-MA 88
Tool Number 3	CNT-MA 2524
Tool Number 4	CAL-4 433
Tool Number 5	SLM-DA 443
Tool Number 6	NLM-BC 418
Tool Number 7	
Tool Number 8	
Tool Number 9	
Tool Number 10	
Tool Number 11	
Tool Number 12	

REMARKS:
RB PRESENTATION DISALLOWED WHEN DEVI IS LESS THAN .500000 DEG

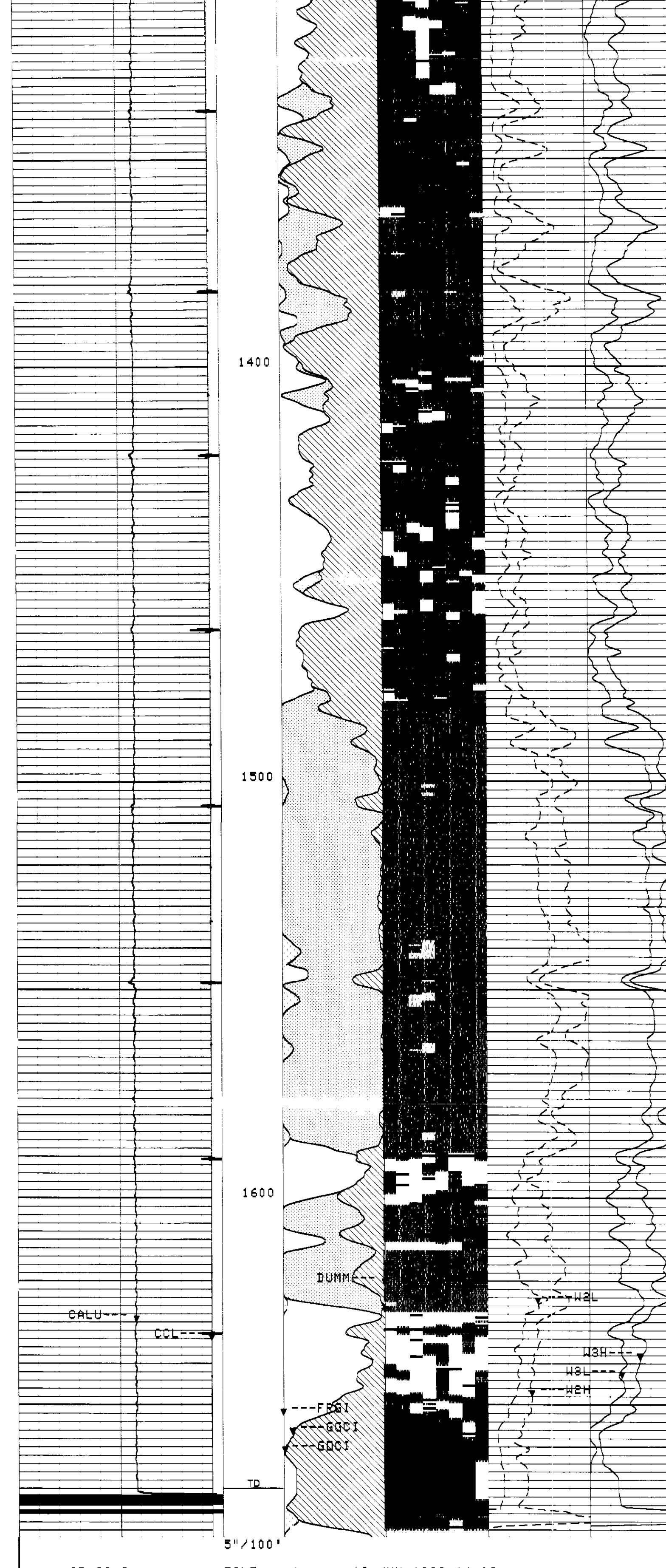
CET INTERPRETATION

CET TRANSDUCER READINGS ARE INTERPRETED IN TERMS OF THE ACOUSTIC IMPEDANCE Z OF THE MATERIAL BEHIND THE CASING. THREE MATERIALS ARE DISCRIMINATED AND MAPPED IN TRACK 2 OF THE DISPLAY. PERCENTAGE CURVES, GOOD CEMENT INDEX CURVES, GOOD AND GASEOUS CEMENT INDEX (GGCI) AND FREE GAS INDEX (FRGI) ARE PRESENTED ON THE LEFT END SIDE AND THE CEMENT MAP ON THE RIGHT.
ACCEPTABLE CEMENTATION IS INDICATED :
WHEN Z > 2.60000
FREE GAS IS INDICATED :
WHEN Z < .200000
UNACCEPTABLE CEMENTATION IS INDICATED :
WHEN .200000 < Z < 2.60000
THE MAP SHADING IS :
BLACK - ACCEPTABLE CEMENT
LIGHT GREY DENSITY - FREE GAS
WHITE - SIGNIFICANT UNACCEPTABLE CEMENT
DARK GREY DENSITY - ISOLATED OCCURRENCE OF UNACCEPTABLE CEMENT OR DEGRADED BY GAS INTRUSION (IF GAS LOGIC ON).

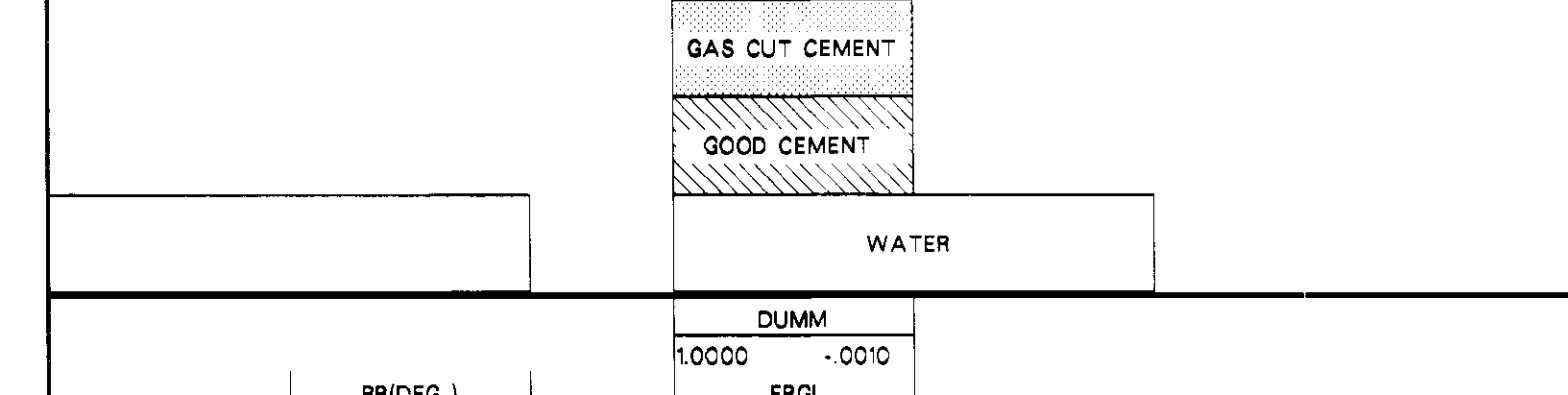
CBL / CBT INTERPRETATION



CP 38.2 FILE 1 18-JUN-1993 14:05
INPUT FILE(S) CREATION DATE
7 18-JUN-1993 12:50



CP 38.2 FILE 1 18-JUN-1993 14:02
INPUT FILE(S) CREATION DATE
7 18-JUN-1993 12:50



SENSOR MEASURE POINT TO TOOL ZERO

PARAMETERS

PARAMETER	VALUE	UNIT
PADT - Presentation Allow Disallow Threshold	.500000	DEG
FP - Playback Processing	NDRM	
DD - Depth Offset for Logical Unit LI1	0.0	F
WD - Weight of Mud	8.30000	LB/G
IMAR - Inase Rotation	CSID	
CSCD - Compressive Strength Conversion Offset	3300.00	
CSCG - Compressive Strength Conversion Gain	1520.00	
MCSF - Minimum Compression Strength if Formation	10000.00	
IDSL - Defn not found	CSID	
LAD1 - Log Amplitude Offset for Transducer 1	0.0	
LAD2 - Log Amplitude Offset for Transducer 2	0.0	
LAD3 - Log Amplitude Offset for Transducer 3	0.0	
LAD4 - Log Amplitude Offset for Transducer 4	0.0	
LAD5 - Log Amplitude Offset for Transducer 5	0.0	
LAD6 - Log Amplitude Offset for Transducer 6	0.0	
LAD7 - Log Amplitude Offset for Transducer 7	0.0	
LAD8 - Log Amplitude Offset for Transducer 8	0.0	
ASUH - Allowed Statistical Uncertainty on W2	.200000	
ECST - Estimated Compressive Strength	1500.00	
CMTY - Cement Type	N	
FGRL - Free Gas Ratio for Logic	.300000	
W2FA - W2/W1 in Free Pipe A	6.90000	
W2DA - W2/W1 Offset A	0.0	
W3FA - W3/W1 in Free Pipe A	1.06000	
W3DA - W3/W1 Offset A	0.0	
CDDA - Casing Outer Diameter A	41/2	IN
CIDA - Casing Inner Diameter A	4.05200	IN
CSWA - Casing Weight A	10.5	LB/F
W3FB - W3/W1 in Free Pipe B	1.00000	
W3DB - W3/W1 Offset B	0.0	
W2FB - W2/W1 in Free Pipe B	1.00000	
W2DB - W2/W1 Offset B	0.0	
CDDB - Casing Outer Diameter B	7	IN
CIDB - Casing Inner Diameter B	0.0	IN
CSWB - Casing Weight B	20	LB/F
CETS - Cement Evaluation Tool Sonde	SA	
WIS1 - W1 Smooth Pipe Transducer 1	1.00000	
WIS2 - W1 Smooth Pipe Transducer 2	1.00000	
WIS3 - W1 Smooth Pipe Transducer 3	1.00000	
WIS4 - W1 Smooth Pipe Transducer 4	1.00000	
WIS5 - W1 Smooth Pipe Transducer 5	1.00000	
WIS6 - W1 Smooth Pipe Transducer 6	1.00000	
WIS7 - W1 Smooth Pipe Transducer 7	1.00000	
WIS8 - W1 Smooth Pipe Transducer 8	1.00000	
BS - Bit Size	7.87500	IN
BHS - BoreHole Status (Open or Cased)	CASE	
CSIZ - Casing Size	4.50000	IN

COMPANY	Nahama & Weagant Energy Company	SCHL. FR	1652.0 F
WELL	"Buzzard" #12-35-65	SCHL. TD	1670.0 F
FIELD	Mist	DRLR. TD	1675.0 F
COUNTY	Columbia	Elev:	810.0 F
		DF	
		GL	800.0 F