



HOLE 1186-53  
55-2

S.S.  
& CONG

CLAYSTONE  
w/ MINOR  
SILTSTONE

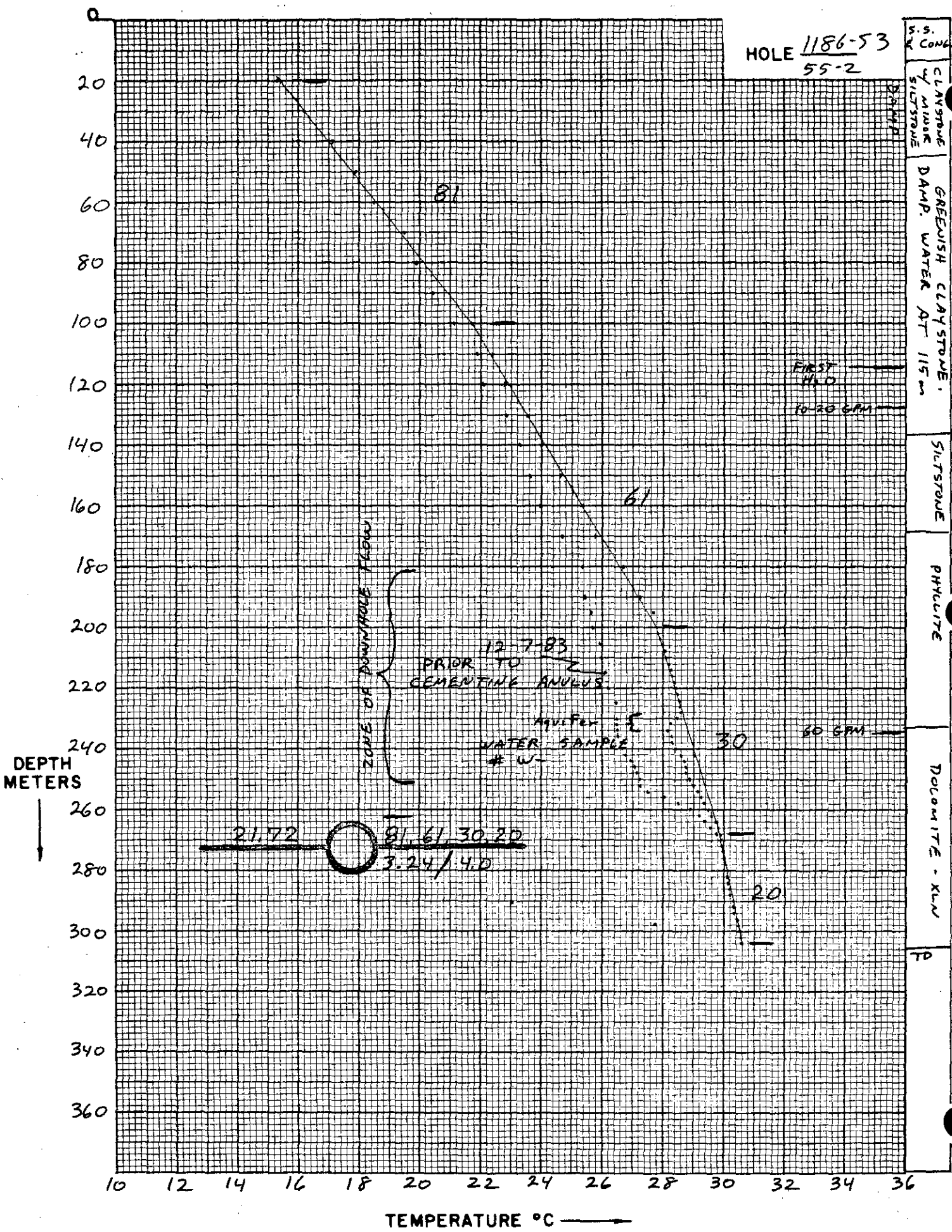
DAMP.  
GREENISH CLAYSTONE.  
WATER AT 115 m

SILTSTONE

PHYLITE

DOLOMITE - XLV

TD



Date Logged: 1-10-84

AT Well No. 1186-53

55-2

Depth (meters)	Instr. Reading	Temp. °C	ΔT	Grad. °C/km	K (Est.)	H <sub>2</sub> O Air	Lithology, etc.
< 20	123.01	15.28				AIR	
30	119.26	16.18	0.90	90		?	
40	115.54	17.10	0.92	92			
50	112.31	17.91	0.81	81			
60	110.14	18.47	0.56	56			
70	106.41	19.45	0.98	98			
80	104.81	19.88	0.43	43			
90	102.82	20.42	0.54	54			
< 100	98.14	21.72	1.30	130			
110	95.89	22.37	0.65	65			
120	94.41	22.80	0.43	43			
130	91.87	23.56	0.76	76			
140	90.49	23.98	0.42	42			
150	88.43	24.61	0.63	63			
160	85.92	25.40	0.79	79			
170	84.73	25.78	0.38	38			
180	81.93	26.70	0.92	92			
190	80.31	27.25	0.55	55			
195	79.13	27.65	0.40	40			H <sub>2</sub> O
< 200	78.69	27.80	0.15	30			C
202	78.54	27.85	0.05	25		L	
204	78.37	27.91	0.06	30			
206	78.17	27.98	0.07	35			
208	77.98	28.05	0.07	35			
210	77.80	28.11	0.06	30			
212	77.58	28.19	0.08	40			
214	77.38	28.26	0.07	35			

K=Conductivity

Date Logged: 1-10-84AT Well No. 1186-53  
55-2

Depth (meters)	Instr. Reading	Temp. °C	$\Delta T$	Grad. °C/km	K (Est.)	H <sub>2</sub> O Air	Lithology, etc.
216	77.25	28.30	0.04	20			
			0.07	35			
218	77.06	28.37					
			0.06	30			
220	76.89	28.43					
			0.07	35			
222	76.69	28.50					
			0.05	25			
224	76.56	28.55					
			0.03	15			
226	76.46	28.58					
			0.00	0			
228	76.46	28.58					
			-0.11	-55			
230	76.78	28.47					
			-0.20	-100			
232	77.36	28.27					
			-0.09	-45			
234	77.60	28.18					
			0.09	45			
236	77.35	28.27					
			0.05	25			
238	77.19	28.32					
			0.11	55			
240	76.90	28.43					
			0.16	80			
242	76.44	28.59					
			0.12	60			
244	76.11	28.71					
			0.06	30			
246	75.93	28.77					
			0.02	10			
248	75.87	28.79					
			0.10	50			
250	75.61	28.89					
			0.10	50			
252	75.32	28.99					
			0.18	90			
254	74.81	29.17					
			0.07	35			
256	74.64	29.24					
			0.12	60			
258	74.31	29.36					
			0.15	75			
260	73.88	29.51					
			0.10	50			
262	73.61	29.61					
			0.12	60			
264	73.29	29.73					
			0.08	40			
266	73.08	29.81					
			0.06	30			
268	72.92	29.87					

K=Conductivity

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LITHOLOGIC LOG

Project: Alum  
 Hole: 55-2 1186-53

Elevation: 5,020' Date Drilled: 9/11/83  
 Location: SWSE Sec 2 T1S R39E Method: rotary air 0-395', foam inj. 395-1005  
 Geologist: Deymonaz Gamma: NA

Depth (m)	Description
	Surface outcrop 30 feet south of hole composed of lt. colored sandstones and angular conglomerates. Altitude N75°E, 19°S.
0 - 50 ( 0-15)	<u>Sandstone and Conglomerate</u> - As in surface outcrop with minor med. gray soft shales and thin beds of light tan siltstone.
50 - 148 ( 15-45)	<u>Claystone</u> - Lt. brown silty claystone, poorly consolidated, damp, with minor siltstone and sandstone.
148 - 450 ( 45-137)	<u>Claystone</u> - Med. greenish-gray, massive, very uniform, damp, primarily kaolinitic. Moderately well indurated. First water encountered at 380', no flow, just mixes with clay to form tacky slop. At 420'-430' water increases to 10-20 gpm.
450 - 555 (137-169)	<u>Siltstone</u> - Dk. gray, light grayish green and pale green, hard, common bedding planes. Dark gray appears more massive. Trace of pyrite and thin quartz veins. Minor yellow limonite staining in some quartz veins. 1-5% dark green siltstone with slight phyllitic shear.
555 - 580 (169-177)	<u>Phyllite</u> - Med. gray with common white calcite along foliation planes. Often has mottled appearance. 1-3% pyrite along foliation and fractures.
580 - 765 (177-233)	<u>Phyllite</u> - Similar to above except medium greenish gray and veining mostly quartz. White quartz veins 2-3mm thick common. Some smaller veins of calcite.
765 - 865	<u>Dolomite (Reed Domomite)</u> - V. white to very pale gray, finely crystalline. Small (0.1-0.5mm) pyrite disseminated but 1% total. Increase in water to 60 gpm at 765'.
865 - 965 (264-294)	<u>Dolomite</u> - As above except pale pinkish gray.
965 - 985 (294-300)	<u>Dolomite and Phyllite</u> - Tan, green and pale pinkish gray 30-50% phyllite as in 580-765, dolomite as above.
985 - 990 (300-302)	<u>Dolomite</u> - As 865-965'.
990 - 1005 (302-306)	<u>Dolomite</u> - As above with 50% light gray montmorillonitic claystone and minor phyllite.

**DAILY DRILLING REPORT**

Project - Hole: 55-2 Date: 9/9-9/11/83

Location: SW 1/4 of SE 1/4 Sec. 5 T 1S R 39E Spud Date: \_\_\_\_\_

County, State: \_\_\_\_\_ Day #: \_\_\_\_\_

Prog. Depth: 1000' Contractor: Stevens & Harris

Geologist: \_\_\_\_\_ Rig.: Failing 1500

Drilled 0' to 1005' Mud/Air/ foam injection

Footage Cut 1005' Temp: In \_\_\_\_\_ Out \_\_\_\_\_

Hole Size 6 1/8" Wt \_\_\_\_\_

Dev. Survey @ Vis \_\_\_\_\_

Casing 20' of 7" Ph \_\_\_\_\_

Bits, stabs, etc. & ser. # \_\_\_\_\_

Lithology Sandstone & conglomerate 0-148'; claystone 148-555'; phyllite 555-765';

Additional Report dolomite 765-1005' 9/9: Moved to site, drill 8 3/4" hole 0-20',

set and cement 20' of 7" casing. Shutdown in afternoon for repairs. 9/11: Drill

from 860-1005' with 6 1/8" hammer. Set 1 1/4" tubing to TD and moved rig to 45-4.

Water entries at 420', 765' and 900'. 60 gal. per min. @ 765' and 120 gal. @ 900'.

Collected water samples @800'.

**Well History**

Interval	Hole Size	Casing	Expenditures
0-20'	8 3/4"	7"	Total to date _____
20-1005'	6 1/8"	"	Projected _____
_____	_____	_____	Cost/Ft _____
_____	_____	_____	Budgeted _____