

Vitrinite reflectance data of cuttings (6000' - 14870') from the Pan American Napatuk Creek No. 1 well. See GMC Data Report No. 5.

Received 27 September 1990

Total of 17 pages in report

Alaska Geologic Materials Center Data Report No. 169

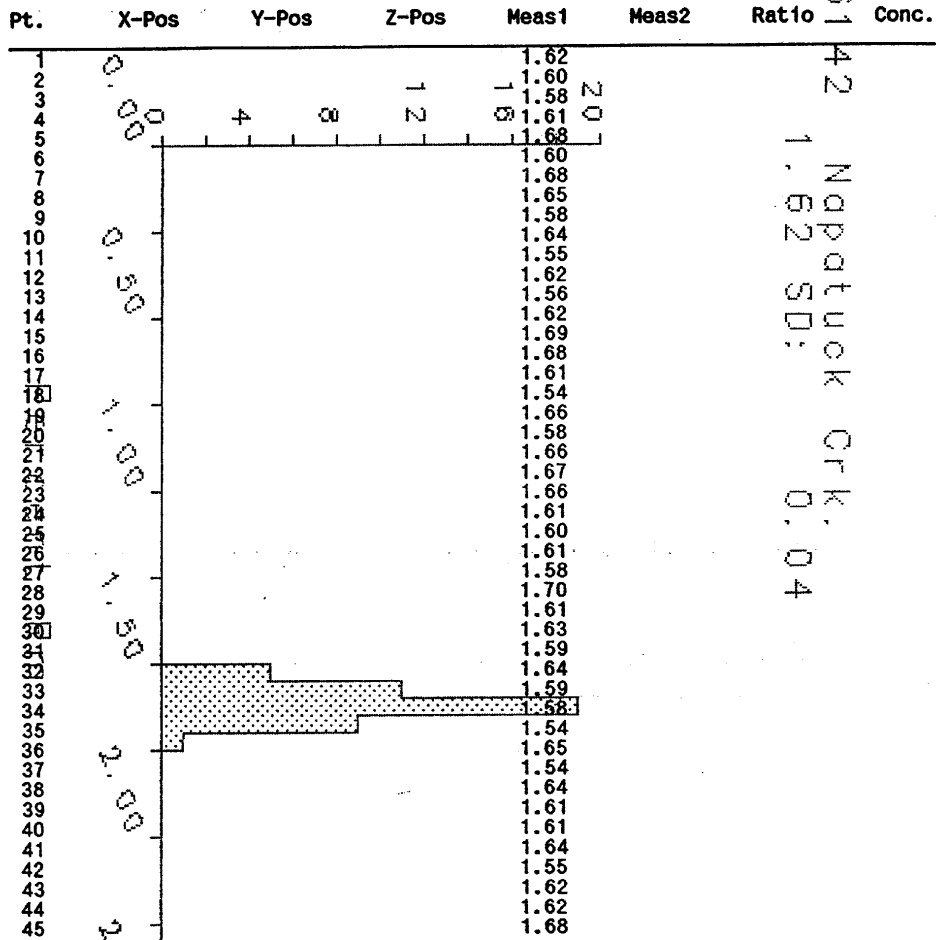
File Name: 90016142  
 Channel Name: Point 9  
 Description: 90016142 Napatuck Crk. 6,000' Alaska mjp V90

Frequency

Min: 1.54  
 Max: 1.70  
 Mean: 1.62  
 StDev: 0.04



Mn: 90016142  
 Napatuck Crk.  
 SD: 0.04



File Name: 90016143  
 Channel Name: Point 9  
 Description: 90016143 Napatuck Crk. 6,600' Alaska mjp V90

Min: 1.49  
 Max: 1.76  
 Mean: 1.62  
 StDev: 0.06

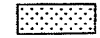


90016143  
 MN:  
 43  
 Napatuck Crk.  
 1.62 SD: 0.06

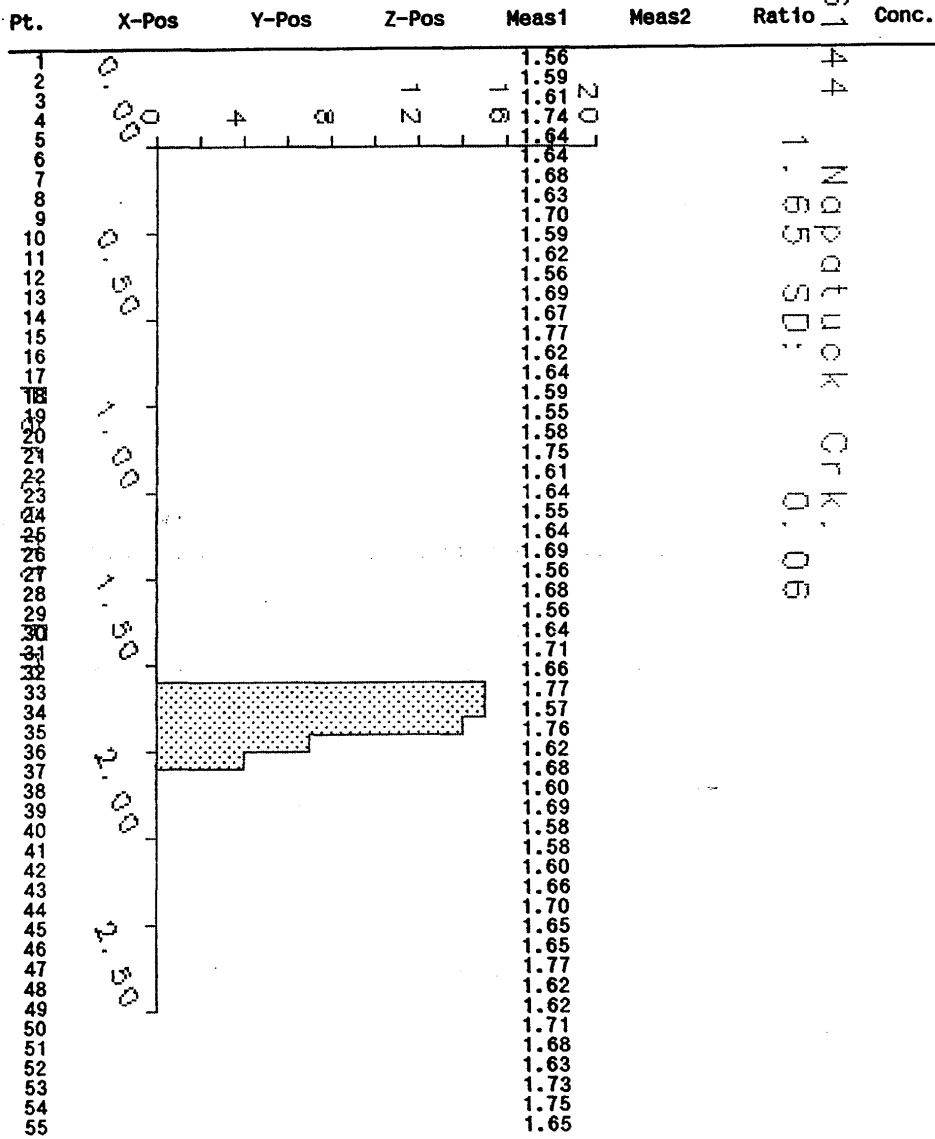
Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				1.59			
2				1.52			
3				1.60			
4				1.63			
5				1.63			
6				1.63			
7				1.59			
8				1.76			
9				1.56			
10				1.60			
11				1.59			
12				1.56			
13				1.64			
14				1.58			
15				1.64			
16				1.62			
17				1.67			
18				1.56			
19				1.52			
20				1.62			
21				1.61			
22				1.73			
23				1.63			
24				1.66			
25				1.49			
26				1.63			
27				1.66			
28				1.55			
29				1.58			
30				1.52			
31				1.54			
32				1.57			
33				1.66			
34				1.54			
35				1.54			
36				1.65			
37				1.60			
38				1.58			
39				1.68			
40				1.63			
41				1.68			
42				1.61			
43				1.73			
44				1.58			
45				1.56			
46				1.63			
47				1.61			
48				1.75			
49				1.72			
50				1.75			
51				1.70			
52				1.58			
53				1.60			
54				1.64			
55				1.61			
56				1.71			
57				1.71			
58				1.61			
59				1.59			
60				1.49			
61				1.64			
62				1.62			
63				1.64			
64				1.73			
65				1.64			

File Name: 90016144  
 Channel Name: Point 9  
 Description: 90016144 Napatuck Crk. 7,200' Alaska mjp V90

Min: 1.55  
 Max: 1.77  
 Mean: 1.65  
 StDev: 0.06



90016144  
 Mean: 1.65  
 SD: 0.06  
 Napatuck Crk.

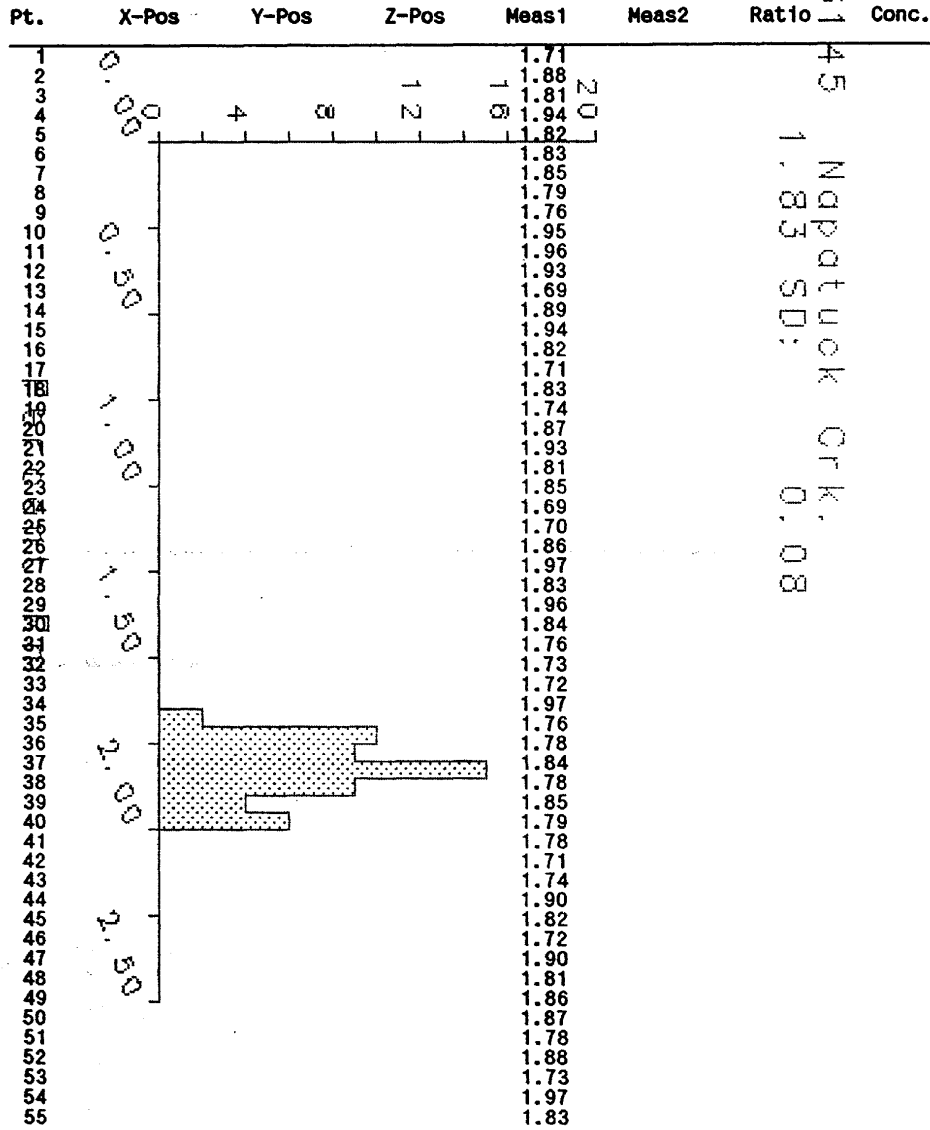


File Name: 90016145  
 Channel Name: Point 9  
 Description: 90016145 Napatuck Crk. 7,800' Alaska mjp V90

Min: 1.69  
 Max: 1.97  
 Mean: 1.83  
 StDev: 0.08



90016145  
 Napatuck Crk.  
 SD: 0.08



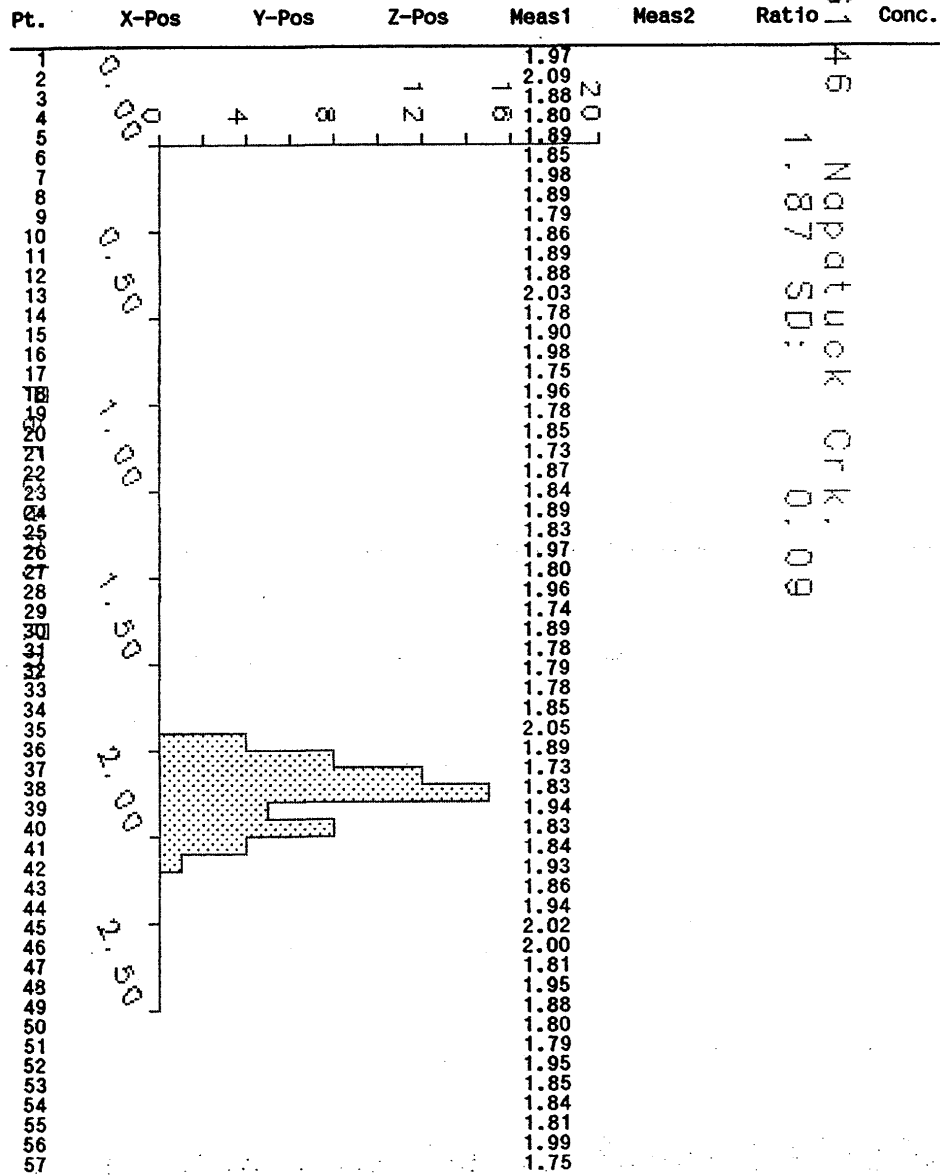
File Name: 90016146  
 Channel Name: Point 9  
 Description: 90016146 Napatuck Crk. 8,400' Alaska mjp V90

Frequency

Min: 1.73  
 Max: 2.09  
 Mean: 1.87  
 StDev: 0.09



90016146  
 Mn: 1.87  
 SD: 0.09  
 Napatuck Crk.

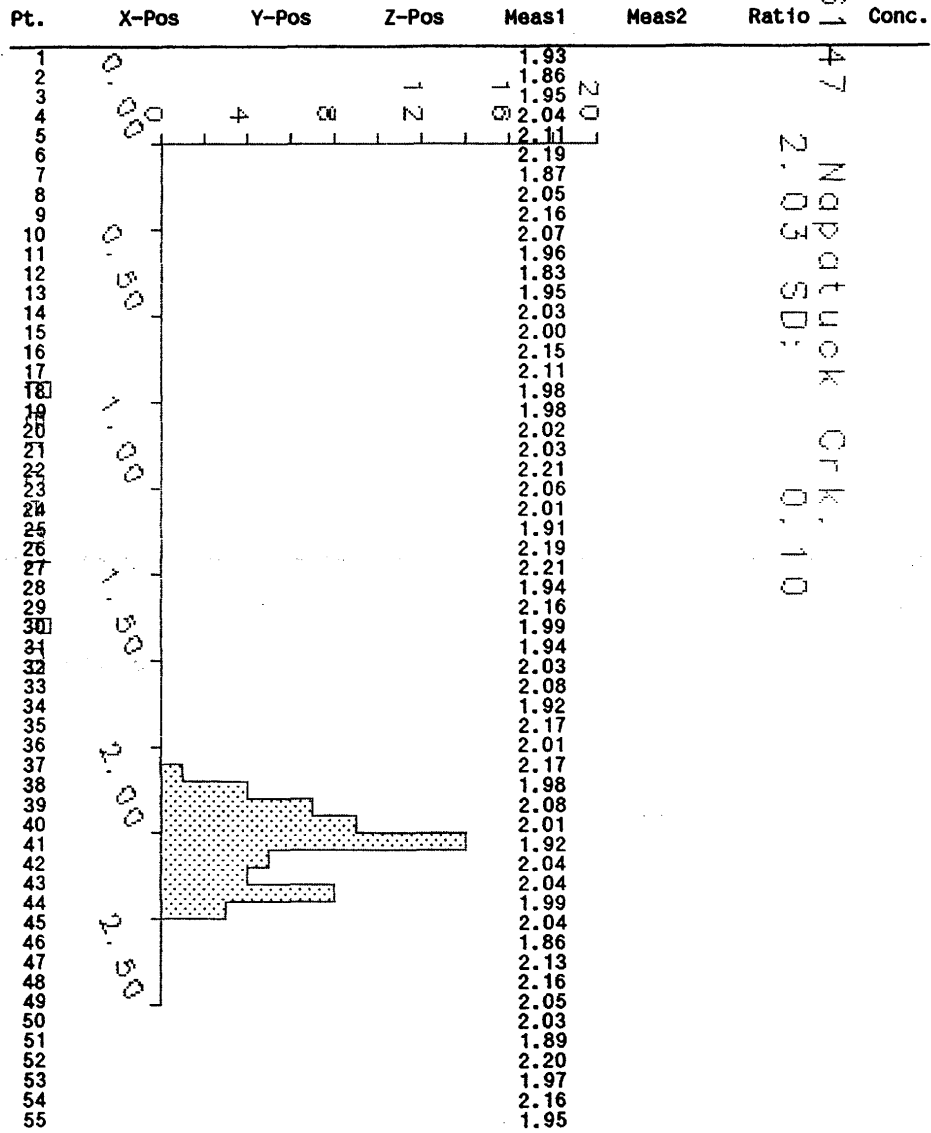


File Name: 90016147  
 Channel Name: Point 9  
 Description: 90016147 Napatuck Crk. 9,000' Alaska mjp V90

Min: 1.83  
 Max: 2.21  
 Mean: 2.03  
 StDev: 0.10



90016147  
 Mn: 2.03  
 SD: 0.10  
 Napatuck Crk.



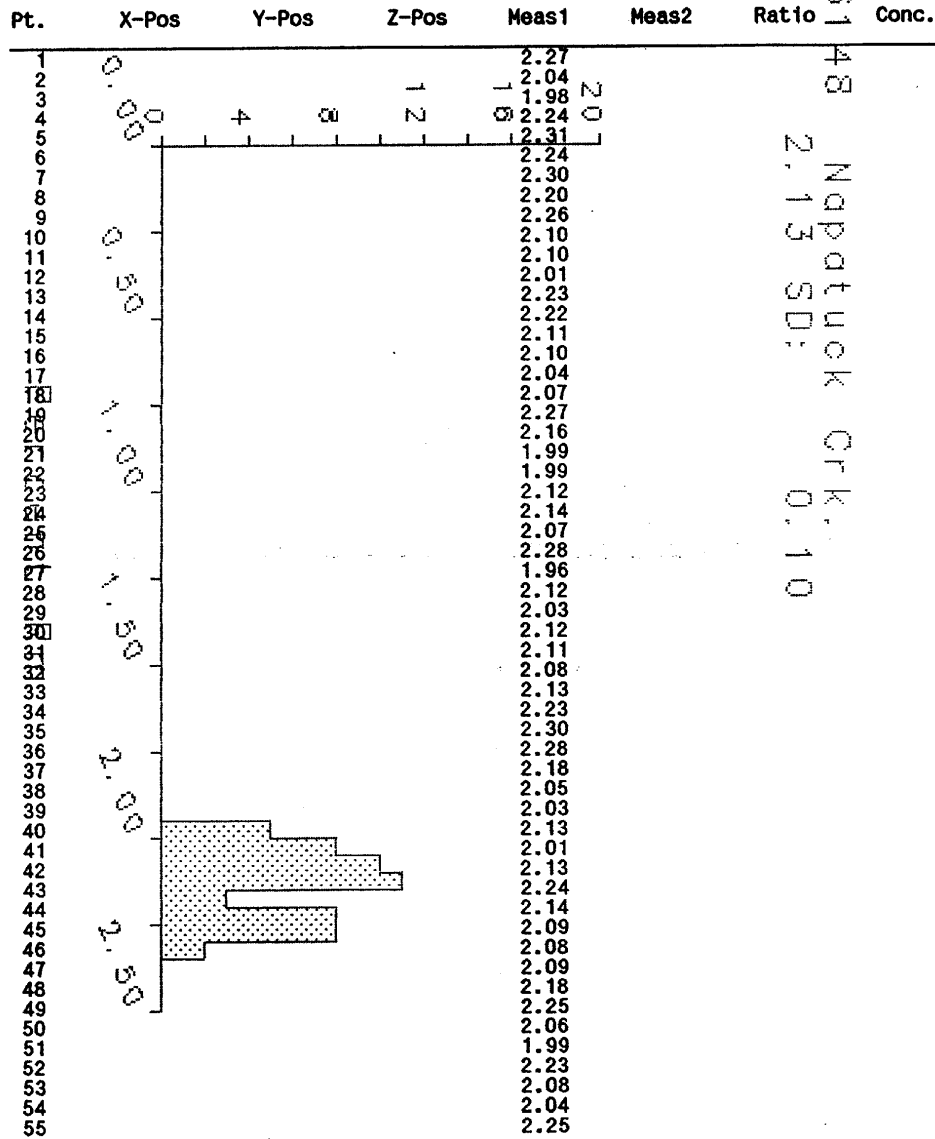
File Name: 90016148  
 Channel Name: Point 9  
 Description: 90016148 Napatuck Crk. 9,600' Alaska mjp V90

Frequency

Min: 1.96  
 Max: 2.31  
 Mean: 2.13  
 StDev: 0.10



90016148  
 Napatuck Crk.  
 SD: 0.10



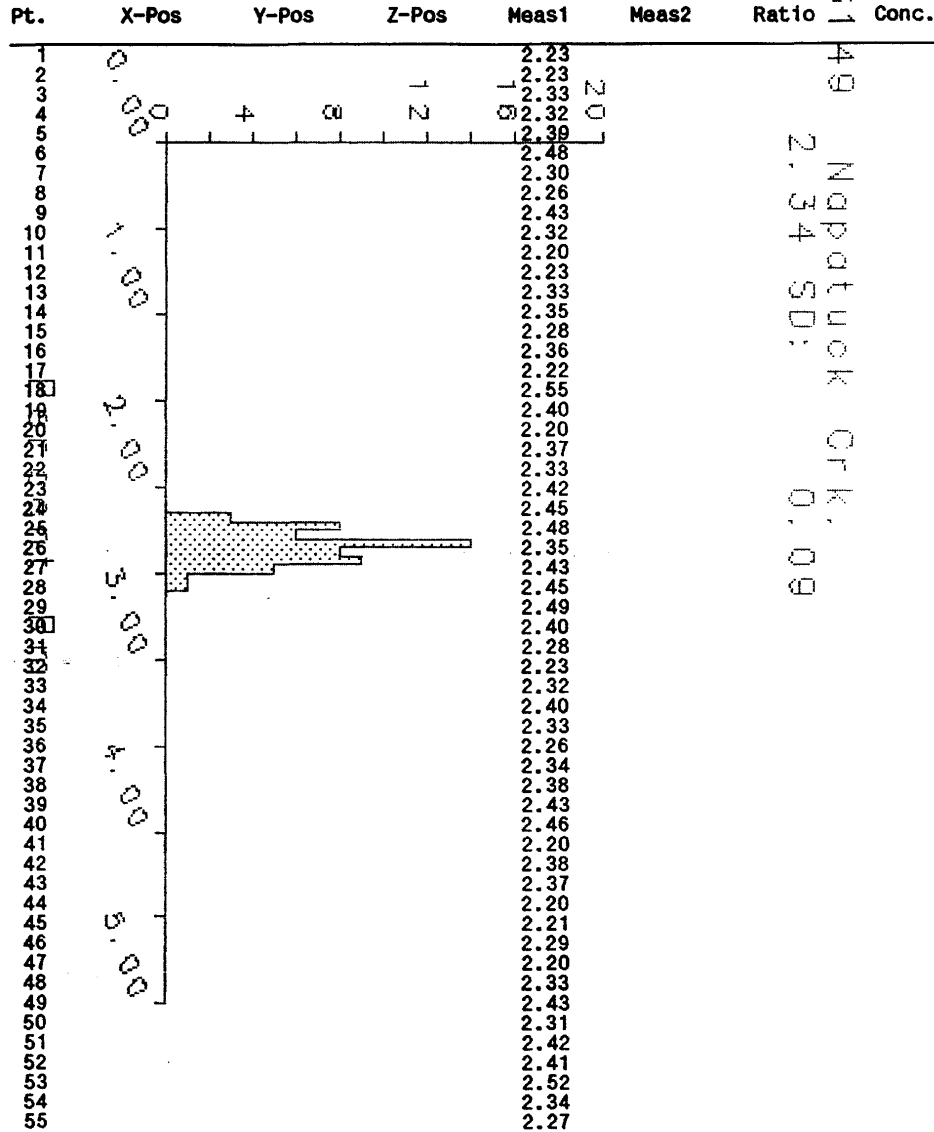


File Name: 90016149  
 Channel Name: Point 9  
 Description: 90016149 Napatuok Crk. 10,200' Alaska mjp V90

Min: 2.20  
 Max: 2.55  
 Mean: 2.34  
 StDev: 0.09

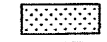


90016149  
 Mean:  
 2.34 SD:  
 0.09  
 Napatuok Crk.

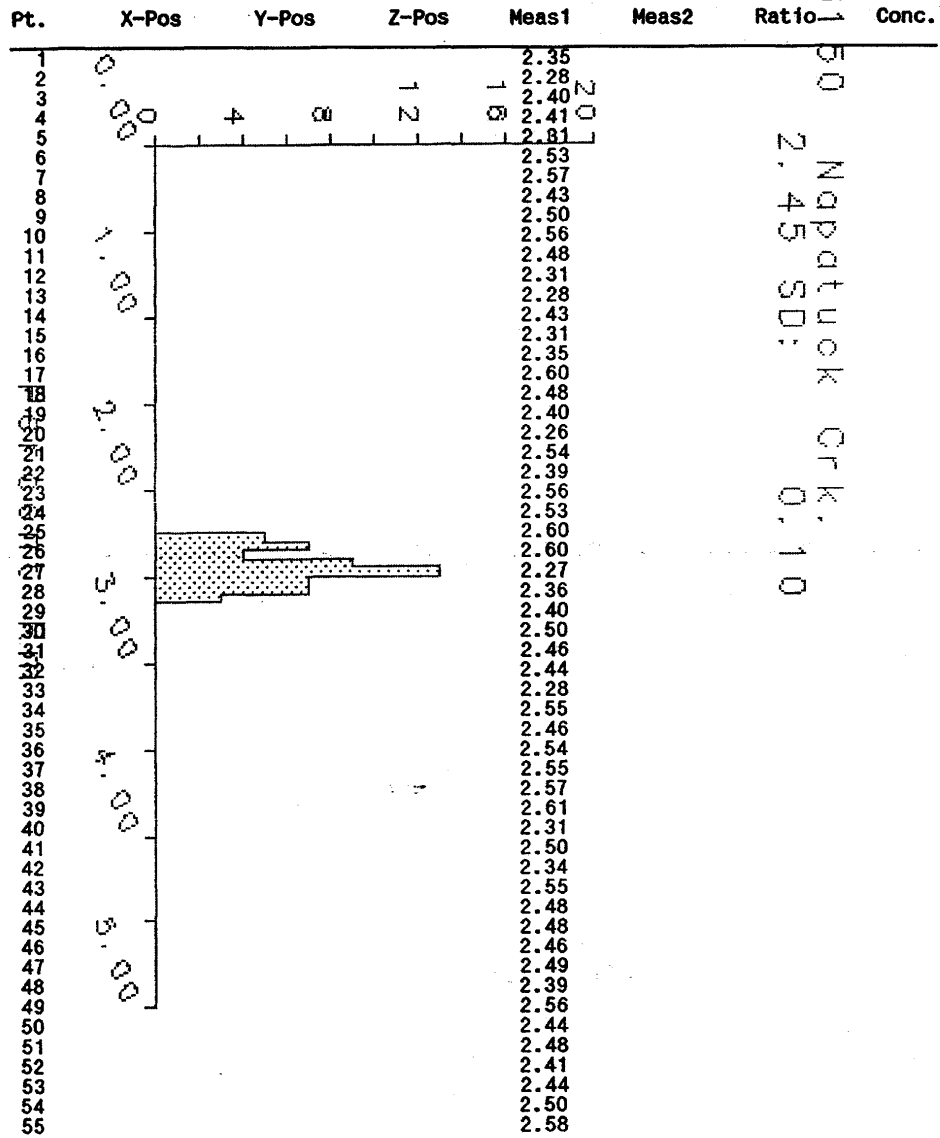


File Name: 90016150  
 Channel Name: Point 9  
 Description: 90016150 Napatuck Crk. 10,800' Alaska mjp V90

Min: 2.26  
 Max: 2.61  
 Mean: 2.45  
 StDev: 0.10



90016150  
 Mn:  
 50  
 2.45 SD:  
 Napatuck Crk.  
 0.10

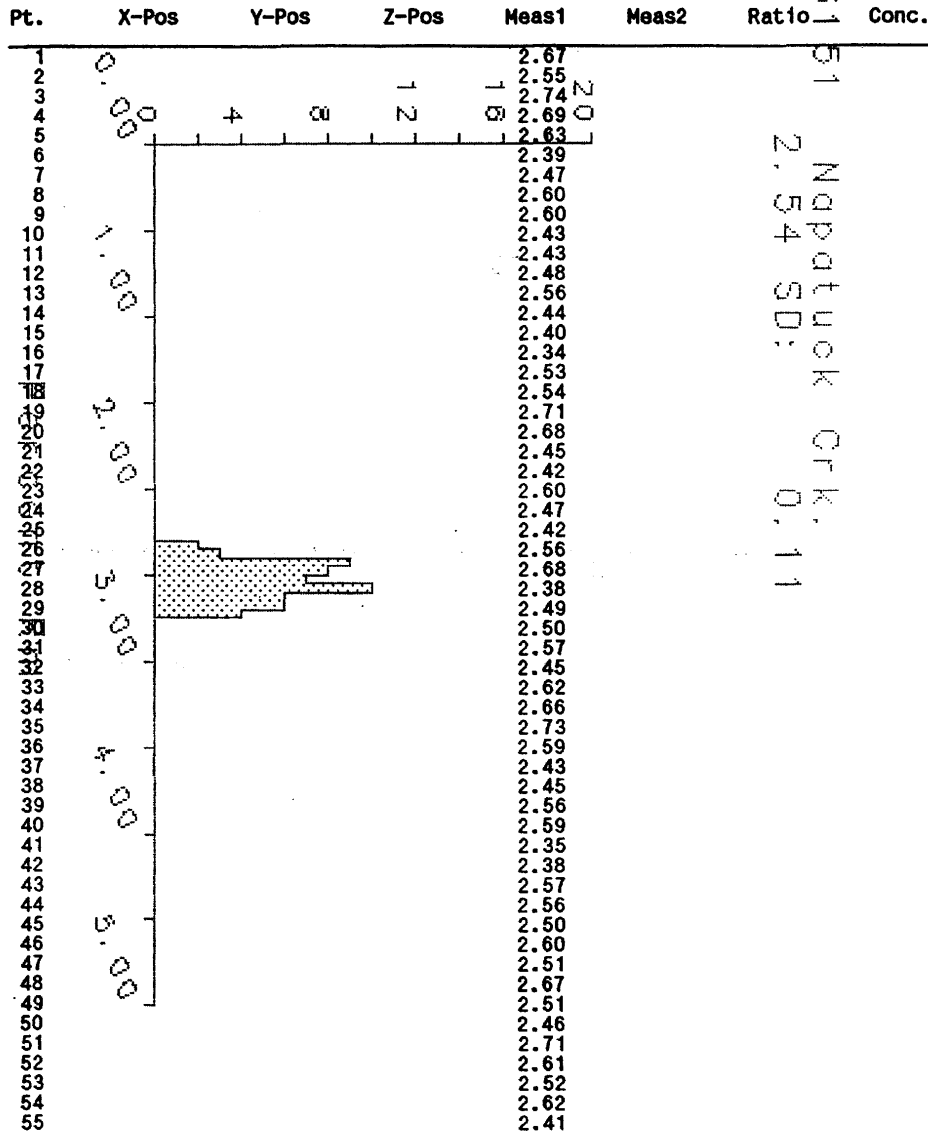


File Name: 90016151  
 Channel Name: Point 9  
 Description: 90016151 Napatuck Crk. 11,400' Alaska mjp V90

Min: 2.34  
 Max: 2.74  
 Mean: 2.54  
 StDev: 0.11



90016151  
 Mn:  
 2.54  
 SD:  
 0.11  
 Napatuck Crk.



File Name: 90016152  
 Channel Name: Point 9  
 Description: 90016152 Napatuck Crk. 12,000' Alaska mjp V90

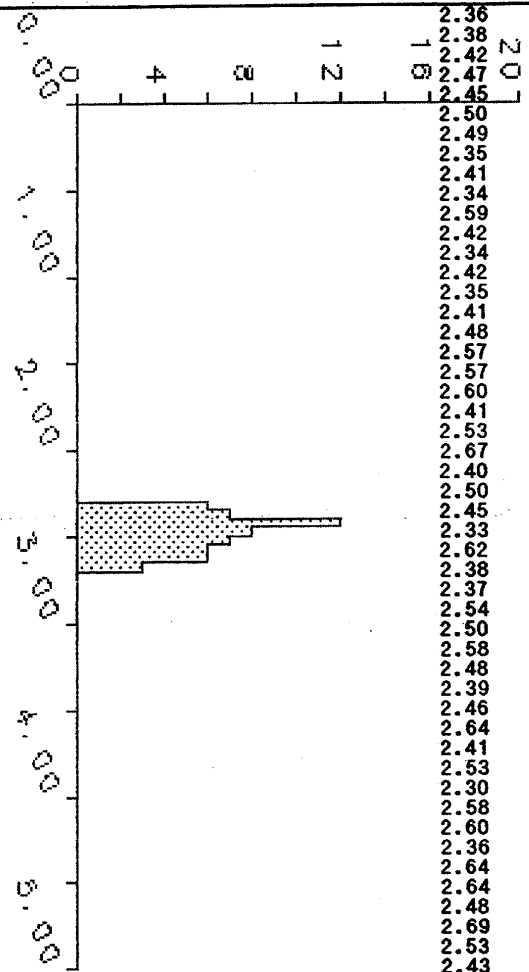
Frequency

Min: 2.30  
 Max: 2.69  
 Mean: 2.48  
 StDev: 0.10

90016152  
 Mn:

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				2.36			
2				2.38			
3				2.42			
4				2.47			
5				2.45			
6				2.50			
7				2.49			
8				2.35			
9				2.41			
10				2.34			
11				2.59			
12				2.42			
13				2.34			
14				2.42			
15				2.35			
16				2.41			
17				2.48			
18				2.57			
19				2.57			
20				2.60			
21				2.41			
22				2.53			
23				2.67			
24				2.40			
25				2.50			
26				2.45			
27				2.33			
28				2.62			
29				2.38			
30				2.37			
31				2.54			
32				2.50			
33				2.58			
34				2.48			
35				2.39			
36				2.46			
37				2.64			
38				2.41			
39				2.53			
40				2.30			
41				2.58			
42				2.60			
43				2.36			
44				2.64			
45				2.64			
46				2.48			
47				2.69			
48				2.53			
49				2.43			
50				2.40			
51				2.59			
52				2.45			
53				2.55			
54				2.69			
55				2.33			

52  
 2.48 SD:  
 0.10  
 Napatuck Crk.

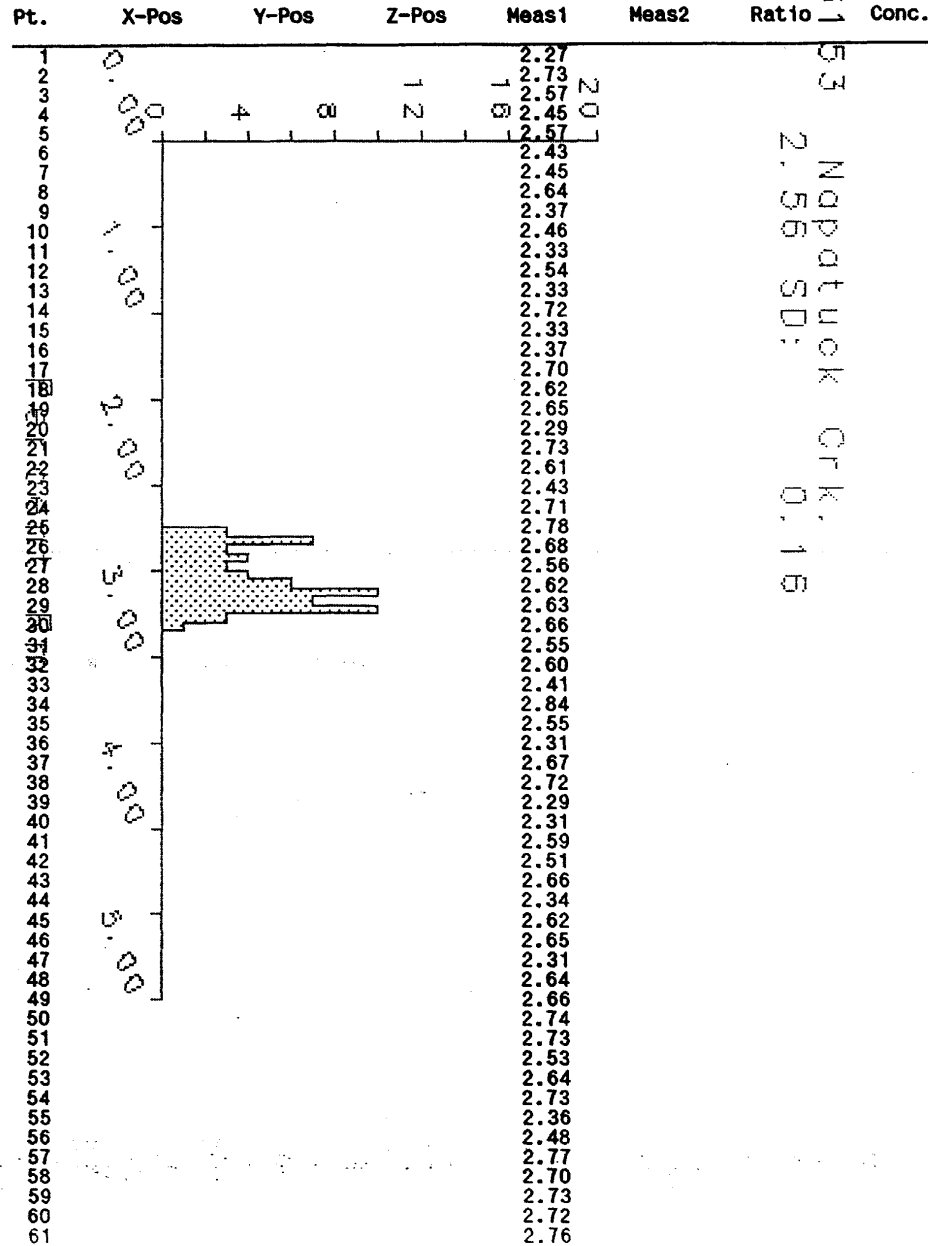


File Name: 90016153  
 Channel Name: Point 9  
 Description: 90016153 Napatuck Crk. 12,600' Alaska mjp V90



Min: 2.27  
 Max: 2.84  
 Mean: 2.56  
 StDev: 0.16

90016153



90016153  
 Mean: 2.56  
 SD: 0.16  
 Napatuck Crk.

File Name: 90016154  
 Channel Name: Point 9  
 Description: 90016154 Napatuck Crk 13,200' Alaska mjp V90

Min: 2.45  
 Max: 2.86  
 Mean: 2.66  
 StDev: 0.12

90016154  
 Mn:

Pt.	X-Pos	Y-Pos	Z-Pos	Meas1	Meas2	Ratio	Conc.
1				2.76			
2				2.58			
3				2.80			
4				2.85			
5				2.70			
6				2.67			
7				2.52			
8				2.79			
9				2.56			
10				2.78			
11				2.86			
12				2.59			
13				2.49			
14				2.49			
15				2.75			
16				2.76			
17				2.45			
18				2.72			
19				2.52			
20				2.50			
21				2.46			
22				2.56			
23				2.81			
24				2.54			
25				2.85			
26				2.56			
27				2.64			
28				2.60			
29				2.76			
30				2.61			
31				2.78			
32				2.74			
33				2.63			
34				2.68			
35				2.76			
36				2.80			
37				2.51			
38				2.78			
39				2.72			
40				2.55			
41				2.61			
42				2.65			
43				2.62			
44				2.49			
45				2.71			
46				2.66			
47				2.85			
48				2.77			
49				2.80			
50				2.56			
51				2.77			
52				2.48			
53				2.75			
54				2.66			
55				2.58			

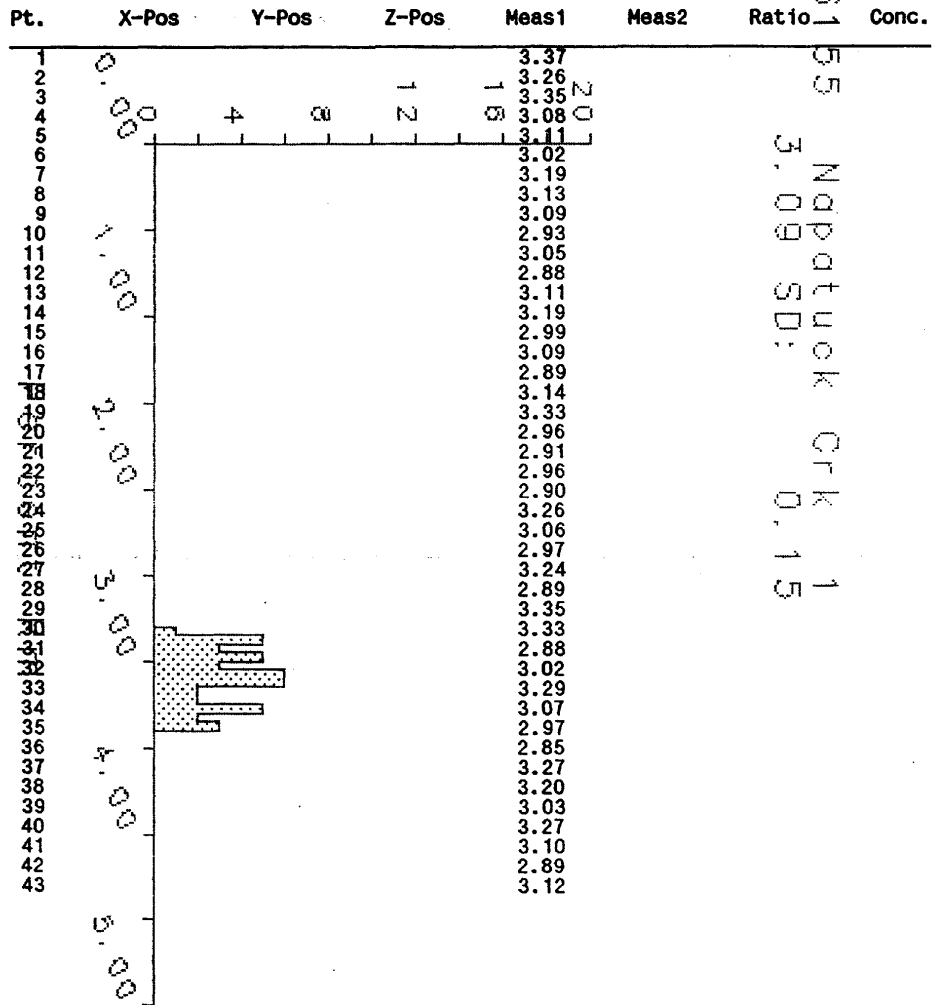
54  
 2.66 SD: 0.12  
 Napatuck Crk 1

File Name: 90016155  
 Channel Name: Point 9  
 Description: 90016155 Napatuck Crk 13,800 Alaska mjp V90

Min: 2.85  
 Max: 3.37  
 Mean: 3.09  
 StDev: 0.15



90016155  
 Mean: 3.09  
 SD: 0.15  
 Napatuck Crk 1

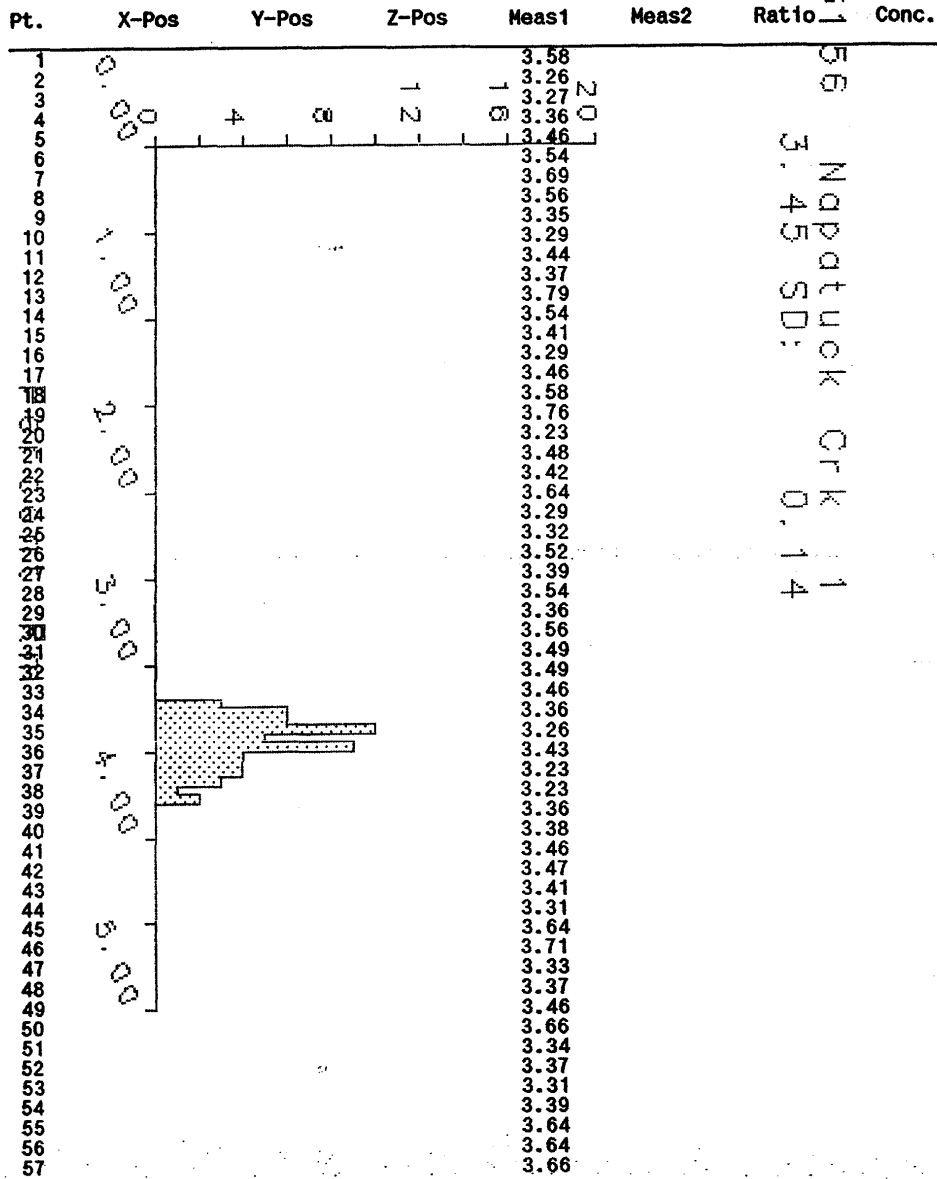


File Name: 90016156  
 Channel Name: Point 9  
 Description: 90016156 Napatuck Crk 14,400 Alaska mjp V90

Min: 3.23  
 Max: 3.79  
 Mean: 3.45  
 StDev: 0.14



90016156  
 Napatuck Crk  
 3.45 SD: 0.14

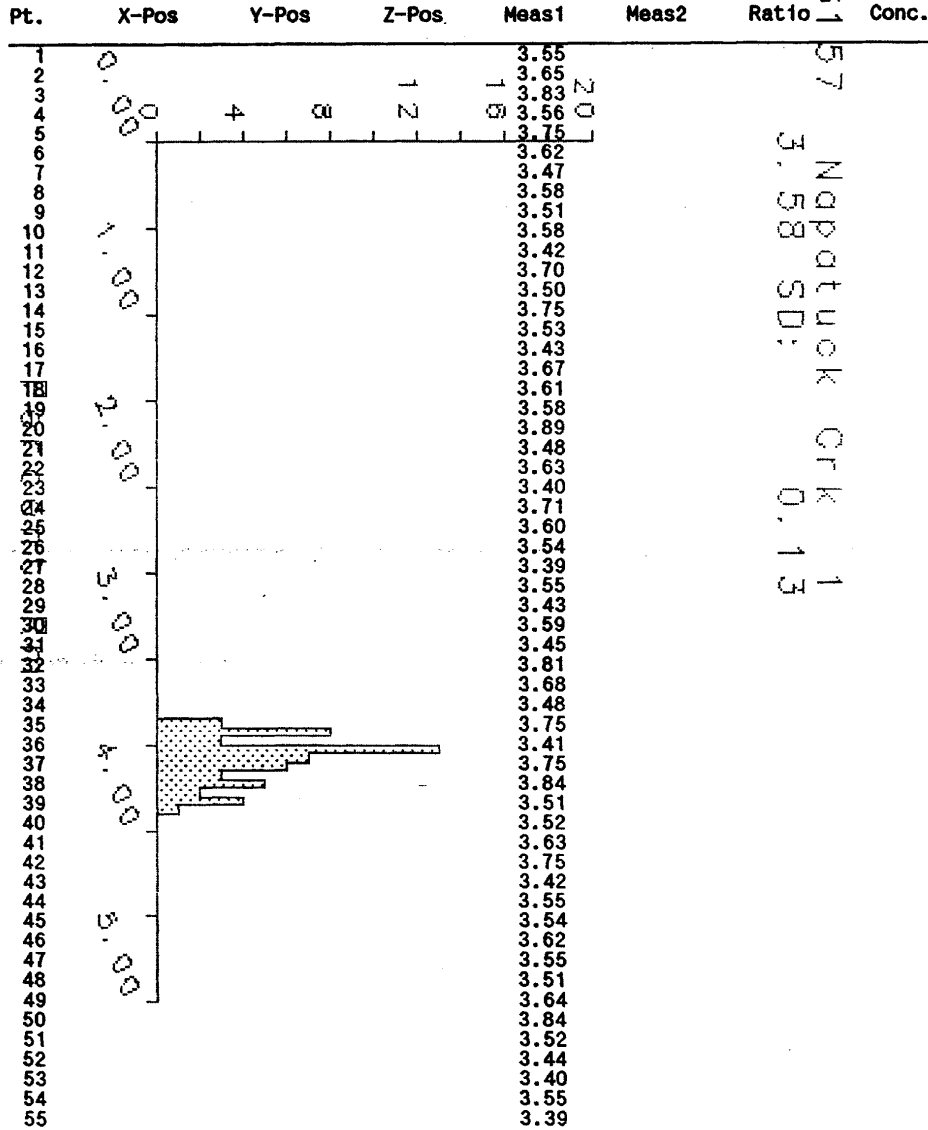




File Name: 90016157  
 Channel Name: Point 9  
 Description: 90016157 Napatuck Crk 14,870 Alaska mjp V90

Min: 3.39  
 Max: 3.89  
 Mean: 3.58  
 St.Dev: 0.13

90016157  
 Min: 3.39





# United States Department of the Interior

GEOLOGICAL SURVEY  
BOX 25046 M.S. 940  
DENVER FEDERAL CENTER  
DENVER, COLORADO 80225



IN REPLY REFER TO:

17 September, 1990

John Reeder  
P.O. Box 772116  
Eagle River, AK  
99577-2116

John:

I am returning the prepared samples I borrowed from the state back in January. Enclosed, also, you will find data and histogram sheets for almost all the samples.

Some samples did have organic material I deemed good enough to measure. For the most part, the samples were good and the results are evident, at least individually. Taken on a well-by-well basis several were difficult to make good sense out of from an organic petrology point of view. The shape of the histograms is a good general indicator of consistency of the organics contained within and in the confidence I had while examining the samples. My technique was to measure at least 50 organic grains, while trying to stay within a narrow range. This becomes difficult with increased vitrinite reflectance, and the histogram spread increases. With adequate material and consistent rank (contamination from uphole cavings can introduce diverse groups of organics) the histogram will have some kind of a bell curve shape. Gaps in the histogram, relating to multiple populations of organics, are a problem and dilute the strength of the mean value as a good measure of the thermal maturity. These gaps are more common at the higher ranks, (> 1.5% reflectance), but occur at lower ranks when insufficient material exists or there is contamination in the sample. I admit to certain biases against samples prepared by people other than myself, and these samples were made by several different companies. I feel I lose too much control over the processing of the cuttings and do not have the confidence in other people's dedication to the work.

I hope these data can be of some use to you. If I can help by providing additional information, please let me know.

Thank you for providing the samples, and for your assistance while I was visiting.

*Mark Pawlewicz*

Mark Pawlewicz