DATE: APRIL 29, 1985

SUBJECT: PRELIMINARY RICHNESS REPORT
CHEVRON, KONIAG #1
API #50-261-20001-00
SEC. 2-T38S-R49W
ALASKA PENINSULA, ALASKA

REQUESTOR: L. SLAGLE

Depth, ft	Lab no.	Sample Type Lithology	Form/Age	PYROLYSIS FID ANALYSIS D/P Ratio	Total HC Yield wt%	ORGANIC CARBON NCC wt %
3520-60	AKA-S-3255 F031379001	PD, dk brn to blk coaly shale	Naknek, U. Jurassic	0.176	3.041	*9.3 9.2
4640-80	AKA-S-3256 F031380001	", med to dk gry silic shale	"	0.348	0.016	0.29
5040-80	AKA-S-3257 F031381001	", med to dk gry shale	"	0.526	0.052	0.55
5440-80	AKA-S-3258 F031382001	", dk gry to blk shale	"	0.397	0.019	0.44
5960-6000	AKA-S-3259 F031383001	", "	"	0.488	0.036	0.67
6440-80	AKA-S-3260 F031384001	", "	M. Jurassic	0.431	0.045	0.98
6760-6800	AKA-S-3261 F031385001	", blk shale	"	0.401	0.021	1.32
7040-80	AKA-S-3262 F031386001	", "	"	0.380	0.042	1.71

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Anchorage

Refer to BRC request no.: 030841

*The sample was limited so that elemental carbon was run rather than NCC. The analysis was run on the leached sample but the data reported are on the basis of the original sample. The leaching factor was 0.8309.

This is a preliminary report of the richness (PFID and NCC) of the samples you have submitted for a complete evaluation of the source rock potential. No interpretation will be made of the source rock quality until the vitrinite reflectance analysis and the visual kerogen analysis are complete. This report simply provides you with results as they become available.

HARP was run on the bulk ditch samples from the interval 3480-7400 feet. The updated source rock log is attached.

HARP is a new technique used to screen samples for source rock quality. The HC% yield from HARP is roughly equivalent to the %HC yield by pyrolysis FID. The HC% is a direct measure of the sample richness, unlike the fluorescence units derived by the old pyrolysis fluorescence (PF) method.

SAMPLE TYPE

PD = picked ditch

ANF/MLW/PAS:smj

SHELL DEV. PYROLYSIS FID ANALYSIS

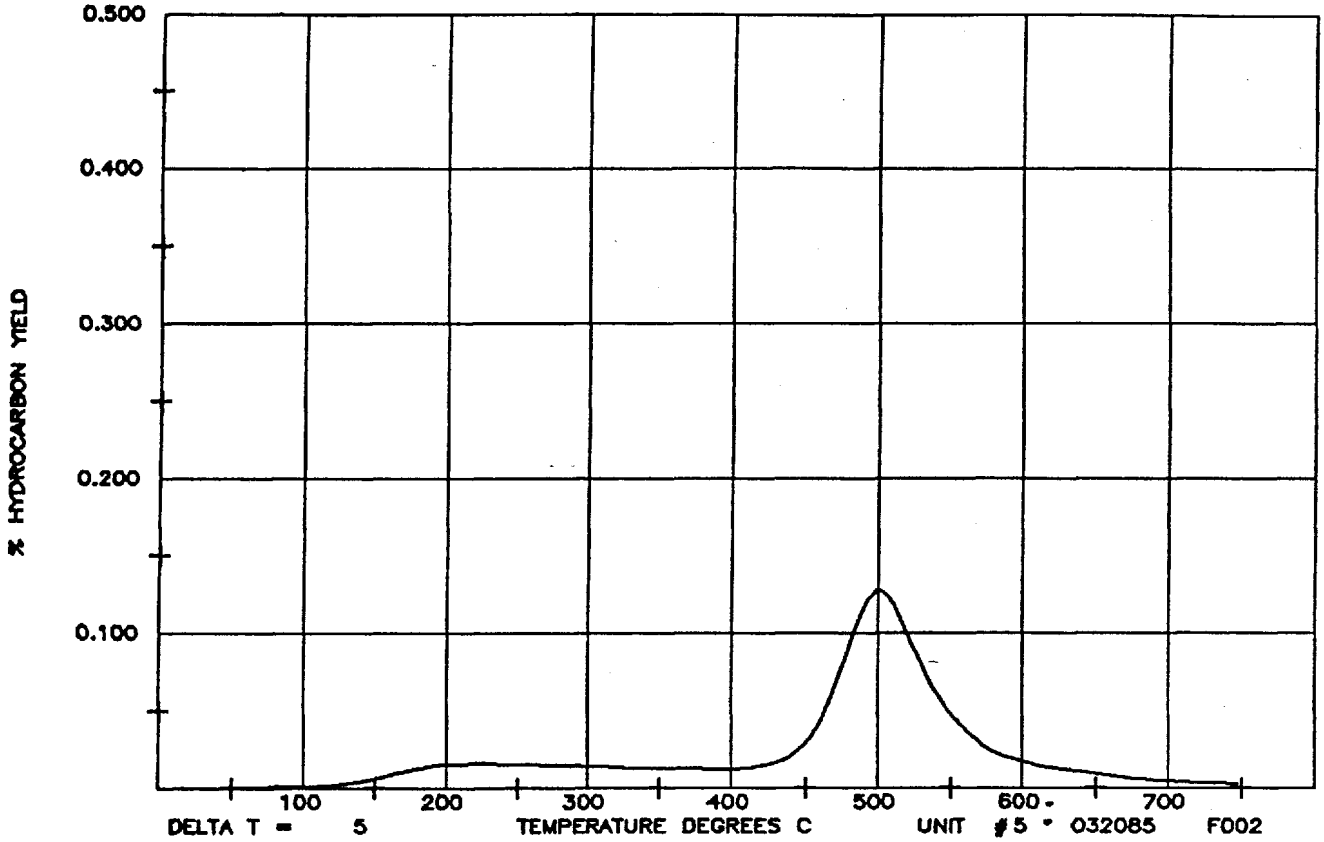
ID. NO. 502612000100

CHEVRON KONIAG 1

LOCATION 02 038S 049W AKA

DEPTH TOP 03520.00 BOTTOM 03560.00 F

F031379001



AKA-S-3255 /DK BRN TO BLK COALY SHALE

HYDROCARBON YIELD		PEAK TEMP.DEG.C	
DISTILLABLE (25-300C) %	0.435	DIST.PEAK	228
PYROLYZABLE (350-750C) %	2.476	PYRO.PEAK 1	500
DIST./PYRO. RATIO	0.176		
PYRO./TOTAL HC RATIO	0.814		
YIELD 0-195 DEG. C %	0.123		
YIELD 200-395 DEG. C %	0.552		
YIELD 400+ DEG. C %	2.367		
TOTAL HYDROCARBONS %	3.041		

PLFID VERSION 4.00

BR21GCS8 4/29/85 6:55:00 C.D.T. WAS THE ORIGIN**********

SHELL DEV. PYROLYSIS FID ANALYSIS

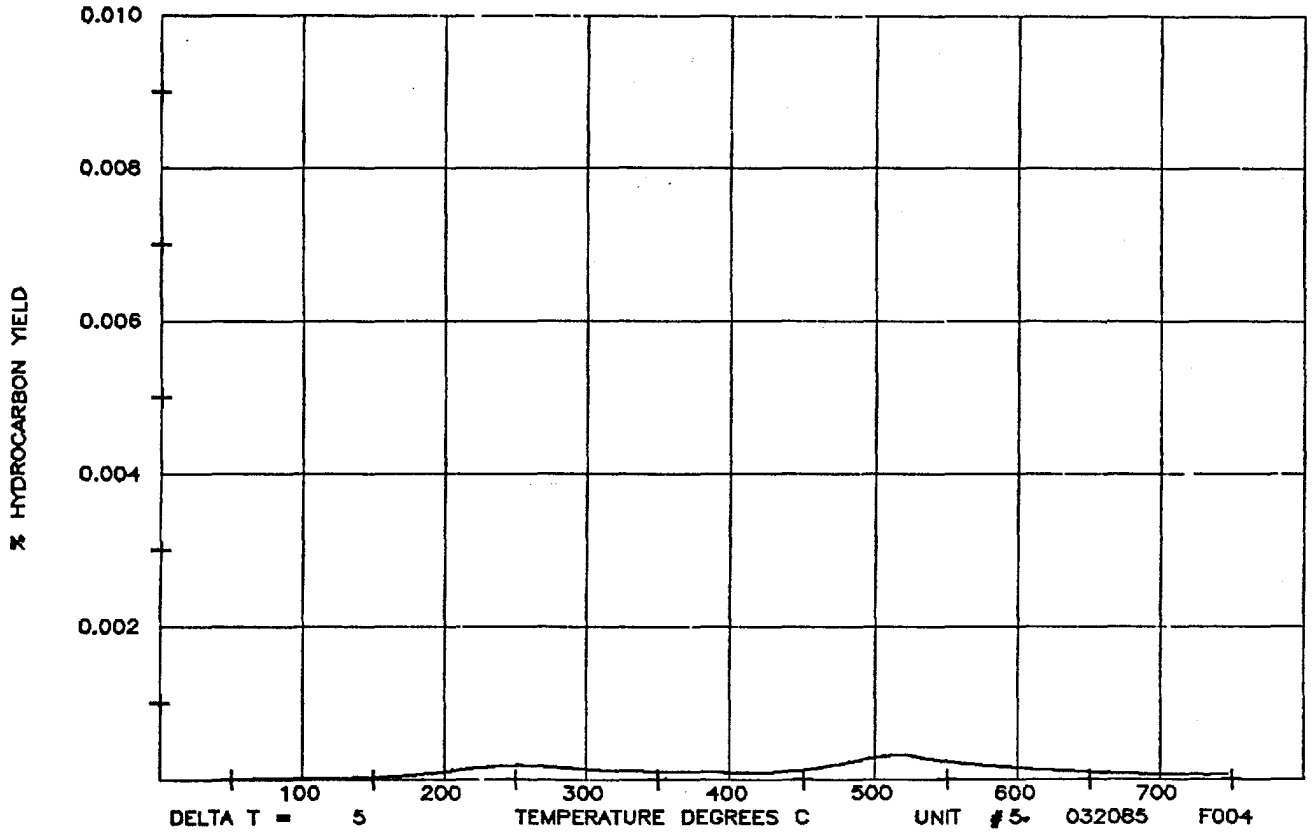
ID. NO. 502612000100

CHEVRON KONIAG 1

LOCATION 02 038S 049W AKA

DEPTH TOP 04640.00 BOTTOM 04680.00 F

F031380001



AKA-5-3256 /MED TO DK GRY SILIC SHALE

HYDROCARBON YIELD	
DISTILLABLE (25-300C) %	0.004
PYROLYZABLE (350-750C) %	0.011
DIST./PYRO. RATIO	0.348
PYRO./TOTAL HC RATIO	0.690
YIELD 0-195 DEG. C %	0.001
YIELD 200-395 DEG. C %	0.005
YIELD 400+ DEG. C %	0.010
TOTAL HYDROCARBONS %	0.016

PLFID VERSION 4.00

SHELL DEV. PYROLYSIS FID ANALYSIS

ID. NO. 502612000100

CHEVRON KONIAG 1

LOCATION 02 038S 049W AKA

DEPTH TOP 05040.00 BOTTOM 05080.00 F

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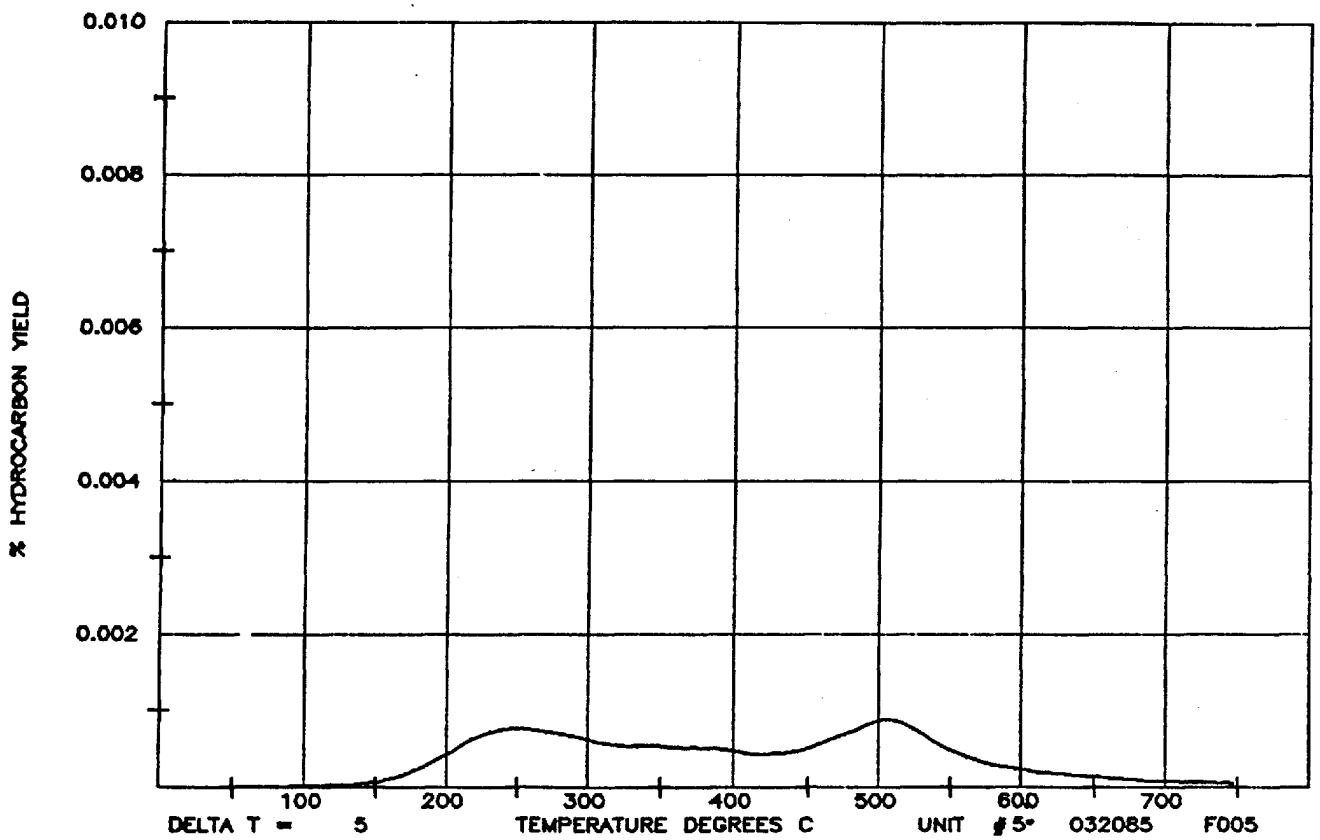


AKA-S-3257 /MED TO DK GRY SHALE

HYDROCARBON YIELD		PEAK TEMP.DEG.C	
DISTILLABLE (25-300C) %	0.016	DIST.PEAK	246
PYROLYZABLE (350-750C) %	0.030	PYRO.PEAK 1	505
DIST./PYRO. RATIO	0.526		
PYRO./TOTAL HC RATIO	0.585		
YIELD 0-195 DEG. C %	0.002		
YIELD 200-395 DEG. C %	0.024		
YIELD 400+ DEG. C %	0.026		
TOTAL HYDROCARBONS %	0.052		

PLFID VERSION 4.00

SHELL DEV. PYROLYSIS FID ANALYSIS

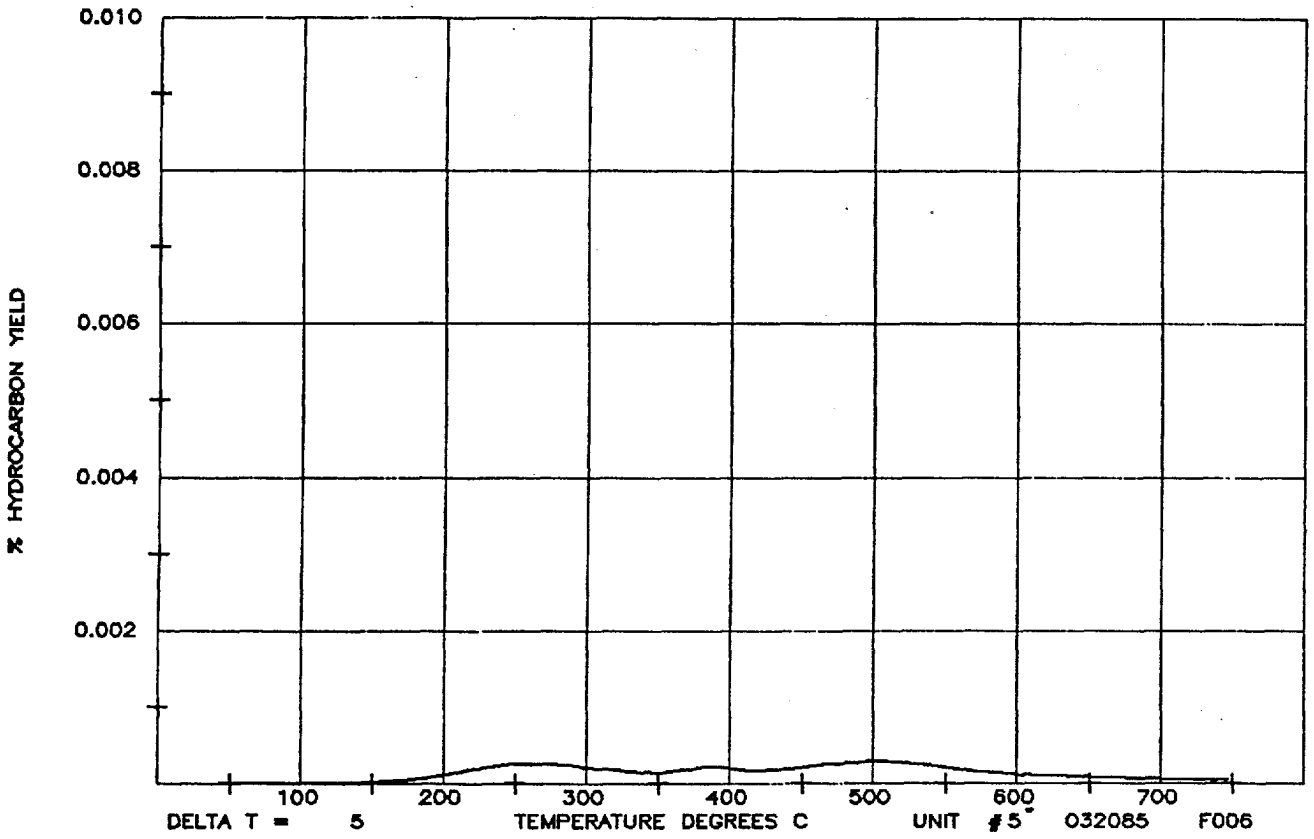
ID. NO. 502612000100

CHEVRON KONIAG 1

LOCATION 02 038S 049W AKA

DEPTH TOP 05440.00 BOTTOM 05480.00 F

F031382001



AKA-5-3258 /DK GRY TO BLK SHALE

HYDROCARBON YIELD	
DISTILLABLE (25-300C) %	0.005
PYROLYZABLE (350-750C) %	0.012
DIST./PYRO. RATIO	0.397
PYRO./TOTAL HC RATIO	0.653
YIELD 0-195 DEG. C %	0.001
YIELD 200-395 DEG. C %	0.008
YIELD 400+ DEG. C %	0.011
TOTAL HYDROCARBONS %	0.019

PLFID VERSION 4.00

SHELL DEV. PYROLYSIS FID ANALYSIS

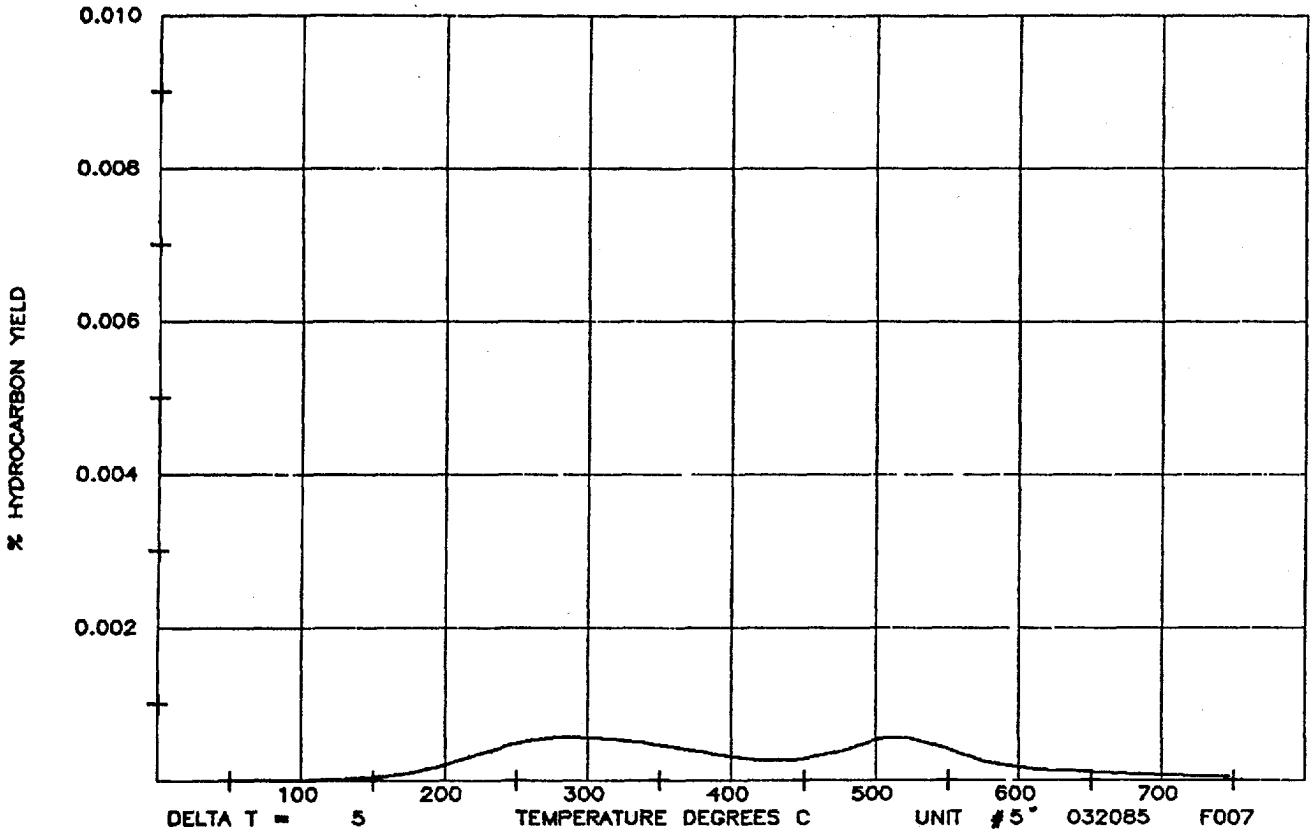
ID. NO. 502612000100

CHEVRON KONIAG 1

LOCATION 02 038S 049W AKA

DEPTH TOP 05960.00 BOTTOM 06000.00 F

F031383001



AKA-S-3259 /DK GRY TO BLK SHALE

HYDROCARBON YIELD	
DISTILLABLE (25-300C) %	0.010
PYROLYZABLE (350-750C) %	0.021
DIST./PYRO. RATIO	0.488
PYRO./TOTAL HC RATIO	0.576
YIELD 0-195 DEG. C %	0.001
YIELD 200-395 DEG. C %	0.018
YIELD 400+ DEG. C %	0.017
TOTAL HYDROCARBONS %	0.036

PLFID VERSION 4.00

SHELL DEV. PYROLYSIS FID ANALYSIS

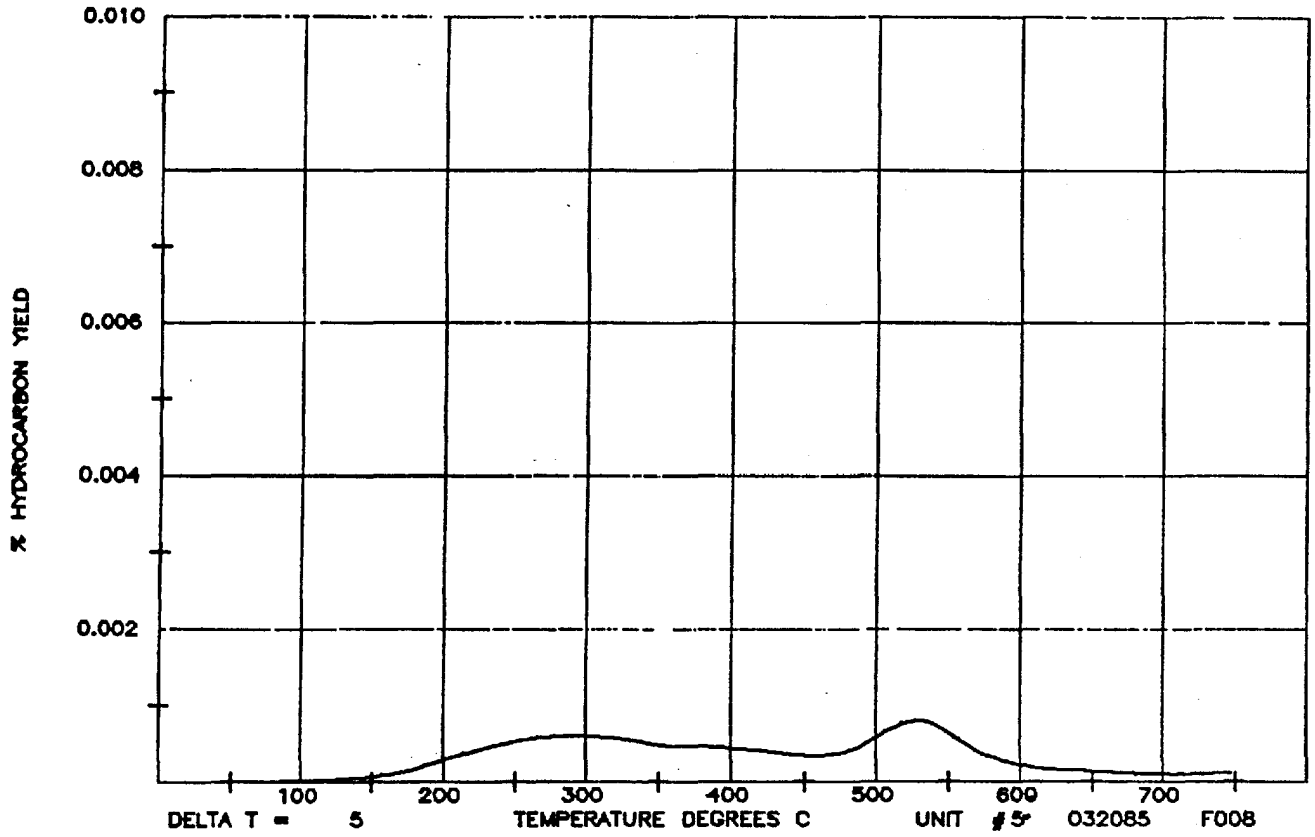
ID. NO. 502612000100

CHEVRON KONIAG 1

LOCATION 02 038S 049W AKA

DEPTH TOP 06440.00 BOTTOM 06480.00 F

F031384001



AKA-S-3260 /DK GRY TO BLK SHALE

HYDROCARBON YIELD		PEAK TEMP.DEG.C	
DISTILLABLE (25-300C) %	0.012	DIST.PEAK	293
PYROLYZABLE (350-750C) %	0.027	PYRO.PEAK 1	529
DIST./PYRO. RATIO	0.431		
PYRO./TOTAL HC RATIO	0.613		
YIELD 0-195 DEG. C %	0.002		
YIELD 200-395 DEG. C %	0.020		
YIELD 400+ DEG. C %	0.023		
TOTAL HYDROCARBONS %	0.045		

PLFID VERSION 4.00

SHELL DEV. PYROLYSIS FID ANALYSIS

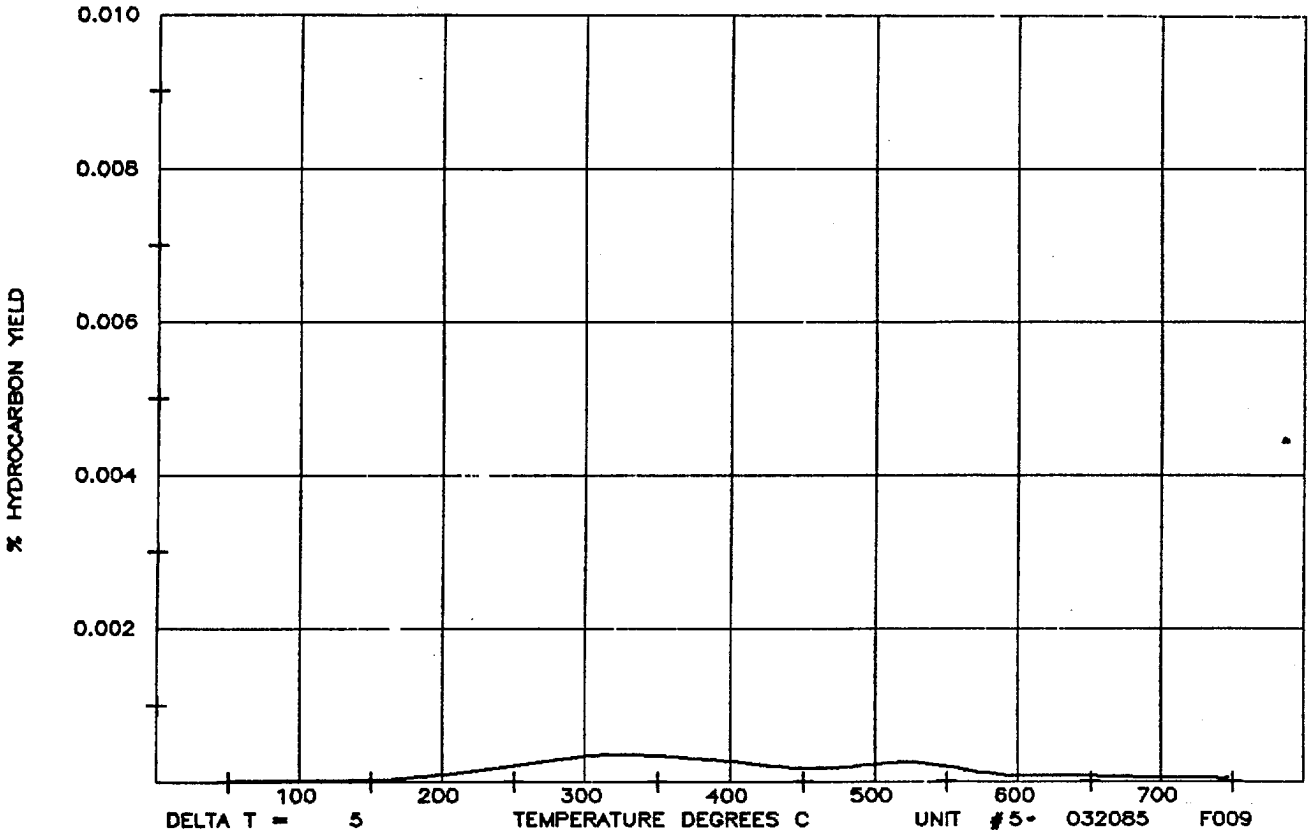
ID. NO. 502612000100

CHEVRON KONIAG 1

LOCATION 02 038S 049W AKA

DEPTH TOP 06760.00 BOTTOM 06800.00 F

F031385001



AKA-5-3261 /BLK SHALE

HYDROCARBON YIELD	
DISTILLABLE (25-300C) %	0.005
PYROLYZABLE (350-750C) %	0.012
DIST./PYRO. RATIO	0.401
PYRO./TOTAL HC RATIO	0.595
YIELD 0-195 DEG. C %	0.001
YIELD 200-395 DEG. C %	0.010
YIELD 400+ DEG. C %	0.010
TOTAL HYDROCARBONS %	0.021

PLFID VERSION 4.00

SHELL DEV. PYROLYSIS FID ANALYSIS

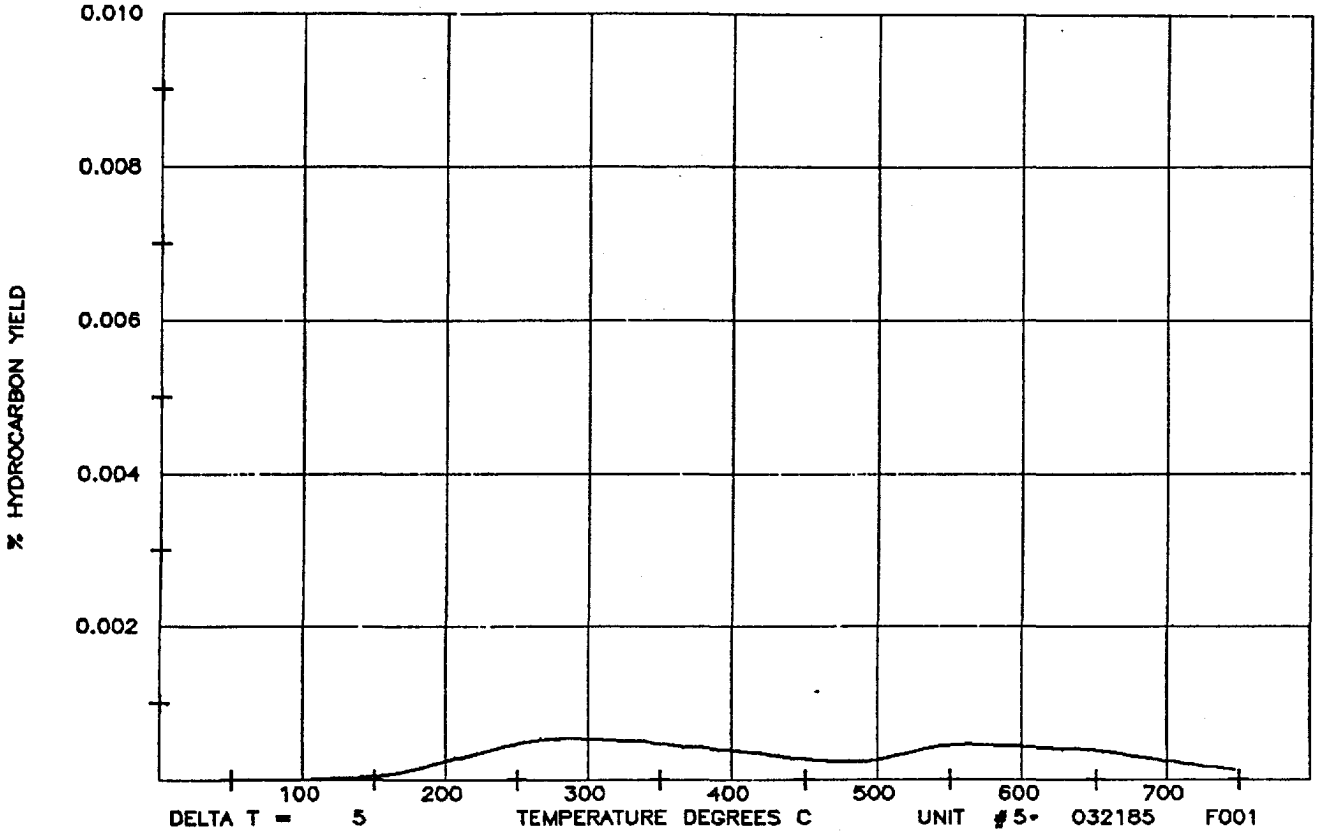
ID. NO. 502612000100

CHEVRON KONIAG 1

LOCATION 02 038S 049W AKA

DEPTH TOP 07040.00 BOTTOM 07080.00 F

F031386001



AKA-S-3262 /BLK SHALE

HYDROCARBON YIELD	
DISTILLABLE (25-300C) %	0.010
PYROLYZABLE (350-750C) %	0.027
DIST./PYRO. RATIO	0.380
PYRO./TOTAL HC RATIO	0.638
YIELD 0-195 DEG. C %	0.001
YIELD 200-395 DEG. C %	0.018
YIELD 400+ DEG. C %	0.023
TOTAL HYDROCARBONS %	0.042

PLFID VERSION 4.00

HARP SHORT CYCLE FINAL REPORT

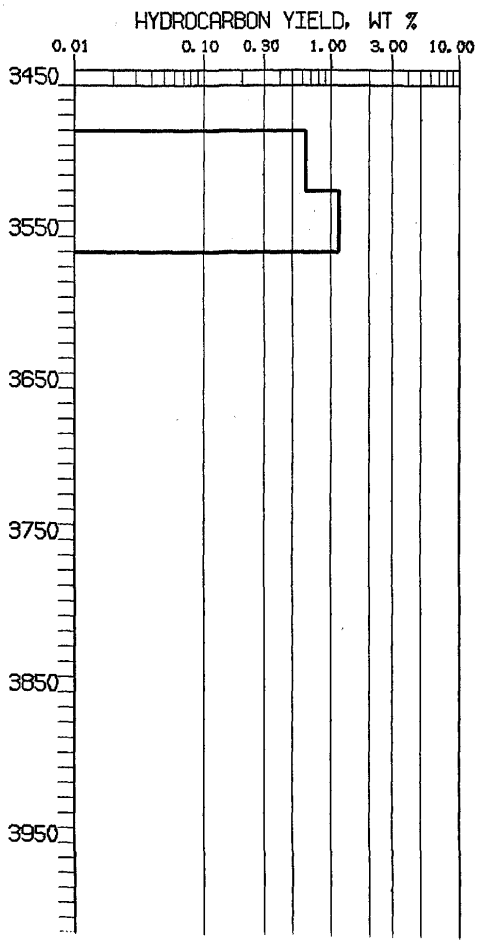
WELL = 5026120001 00 CHEVRON KONIAG 1 UNITS = F
AREA = LOCATION = AKA 0002 38 S 49 W

SEQ #	DEPTHS	TYPE	HC%	LITHOLOGY	REMARKS		
1	3480.00 - 3520.00	UD	0.63	SS(G.W.) SH DK BRN TO BLK TR COAL	LITH	FID	NCC
2	3520.00 - 3560.00	UD	1.15	A/A	PD:BRN BLK SH	3.04	9.3
3	4476.00 - 4520.00	UD	0.00	SS(G.W.) TR SLTST MED GRY			
4	4520.00 - 4560.00	UD	0.00	A/A			
5	4560.00 - 4600.00	UD	0.00	SH/SLTST MED GRY TR SS			
6	4600.00 - 4640.00	UD	0.00	SH/SLTST MED GRY TR SHC IN VEIN CALCITE			
7	4640.00 - 4680.00	UD	0.00	SH MED TO DK GRY TR SS	PD:GRY SILI SH	0.16	0.29
8	4680.00 - 4720.00	UD	0.00	A/A			
9	4720.00 - 4760.00	UD	0.00	A/A			
10	4760.00 - 4800.00	UD	0.00	A/A			
11	4800.00 - 4840.00	UD	0.00	A/A			
12	4840.00 - 4880.00	UD	0.00	A/A			
13	4880.00 - 4920.00	UD	0.00	A/A			
14	4920.00 - 4960.00	UD	0.00	SS(G.W.) SH MED TO DK GRY			
15	4960.00 - 5000.00	UD	0.00	A/A			
16	5000.00 - 5040.00	UD	0.00	A/A			
17	5040.00 - 5080.00	UD	0.01	SH MED TO DK GRY	PD:GRY SH	0.05	0.55
18	5080.00 - 5120.00	UD	0.01	A/A			
19	5120.00 - 5160.00	UD	0.00	SS(G.W.) SH MED TO DK GRY			
20	5160.00 - 5200.00	UD	0.00	A/A			
21	5200.00 - 5240.00	UD	0.00	SH MED TO DK GRY			
22	5240.00 - 5280.00	UD	0.01	A/A			
23	5280.00 - 5320.00	UD	0.00	A/A			
24	5320.00 - 5360.00	UD	0.00	A/A			
25	5360.00 - 5400.00	UD	0.00	A/A			
26	5400.00 - 5440.00	UD	0.00	A/A			
27	5440.00 - 5480.00	UD	0.00	SH MED TO DK GRY W/VEIN CALCITE? SHC	PD:GRY-BLK SH	0.02	0.44
28	5480.00 - 5520.00	UD	0.00	SH MED TO DK GRY W/VEIN CALCITE TR G.W.			
29	5520.00 - 5560.00	UD	0.00	A/A			
30	5560.00 - 5600.00	UD	0.00	A/A			
31	5600.00 - 5640.00	UD	0.00	A/A			
32	5640.00 - 5680.00	UD	0.00	A/A			
33	5680.00 - 5720.00	UD	0.00	A/A			
34	5720.00 - 5760.00	UD	0.00	A/A			
35	5760.00 - 5800.00	UD	0.00	A/A			
36	5800.00 - 5840.00	UD	0.00	A/A			
37	5840.00 - 5880.00	UD	0.01	A/A			
38	5880.00 - 5920.00	UD	0.02	A/A			
39	5920.00 - 5960.00	UD	0.00	A/A			
40	5960.00 - 6000.00	UD	0.01	A/A	PD:GRY-BLK SH	0.04	0.67
41	6000.00 - 6040.00	UD	0.04	A/A	PAINT CHIPS		
42	6040.00 - 6080.00	UD	0.02	A/A			
43	6080.00 - 6120.00	UD	0.00	A/A			
44	6120.00 - 6160.00	UD	0.01	A/A			
45	6160.00 - 6200.00	UD	0.01	A/A			
46	6200.00 - 6240.00	UD	0.02	A/A			
47	6240.00 - 6280.00	UD	0.01	A/A			
48	6280.00 - 6320.00	UD	0.02	A/A			
49	6320.00 - 6360.00	UD	0.01	A/A			
50	6360.00 - 6400.00	UD	0.00	A/A			
51	6400.00 - 6440.00	UD	0.01	A/A			

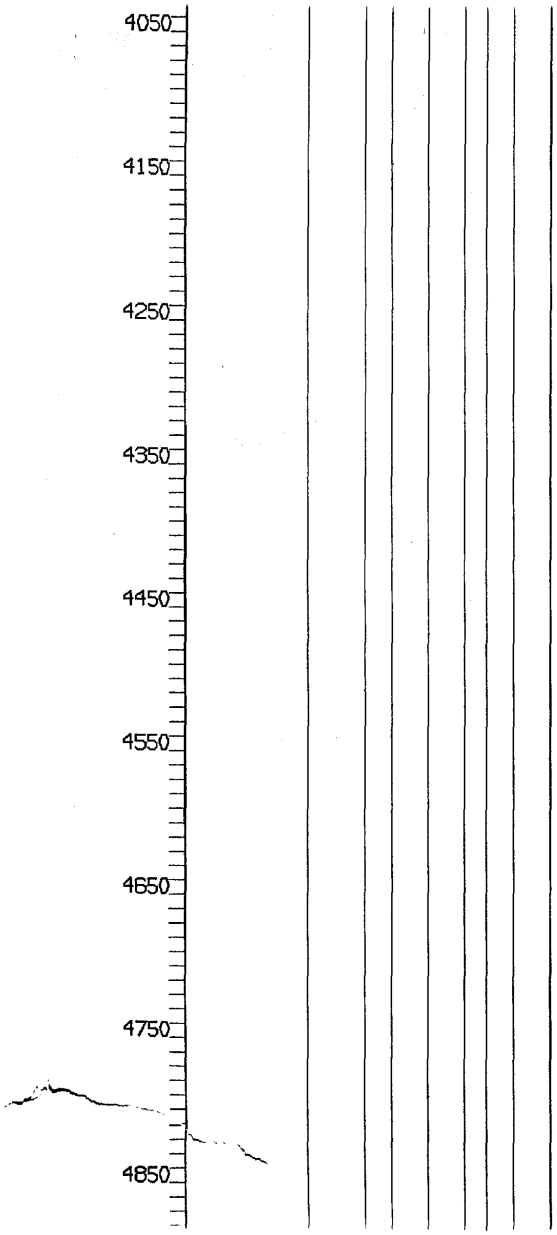
52	6440.00 -	6480.00	UD	0.02	A/A	PD:GRY-BLK SH	0.05	0.98
53	6480.00 -	6520.00	UD	0.01	A/A			
54	6520.00 -	6560.00	UD	0.00	SS(G.W.) SH DK GRY TO BLK			
55	6560.00 -	6600.00	UD	0.00	A/A			
56	6600.00 -	6640.00	UD	0.00	A/A			
57	6640.00 -	6680.00	UD	0.00	SH DK GRY TO BLK SS(G.W.)			
58	6680.00 -	6720.00	UD	0.00	A/A			
59	6720.00 -	6760.00	UD	0.00	A/A			
60	6760.00 -	6800.00	UD	0.00	A/A	PD:BLK SH	0.02	1.32
61	6800.00 -	6840.00	UD	0.00	A/A			
62	6840.00 -	6880.00	UD	0.00	A/A			
63	6880.00 -	6920.00	UD	0.00	A/A			
64	6920.00 -	6960.00	UD	0.01	A/A			
65	6960.00 -	7000.00	UD	0.00	A/A			
66	7000.00 -	7040.00	UD	0.01	A/A			
67	7040.00 -	7080.00	UD	0.02	A/A	PD:BLK SH	0.04	1.71
68	7080.00 -	7120.00	UD	0.00	A/A			
69	7120.00 -	7160.00	UD	0.00	A/A			
70	7160.00 -	7200.00	UD	0.00	A/A			
71	7200.00 -	7240.00	UD	0.00	A/A			
72	7240.00 -	7280.00	UD	0.00	A/A			
73	7280.00 -	7320.00	UD	0.00	SS(G.W.) SH BLK			
74	7320.00 -	7360.00	UD	0.00	A/A			
75	7360.00 -	7400.00	UD	0.00	A/A			

SHELL DEV HARP PLOT

API NO = 502612000100
OPER = CHEVRON
LEASE = KONIAG
WELL = 1 ELEV =
FIELD =
PROV =
LOC = AKA
0002 38S 49W
UNITS = FEET



LITH	FID	NCC
PD:BRN BLK SH	3.04	9.3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4150
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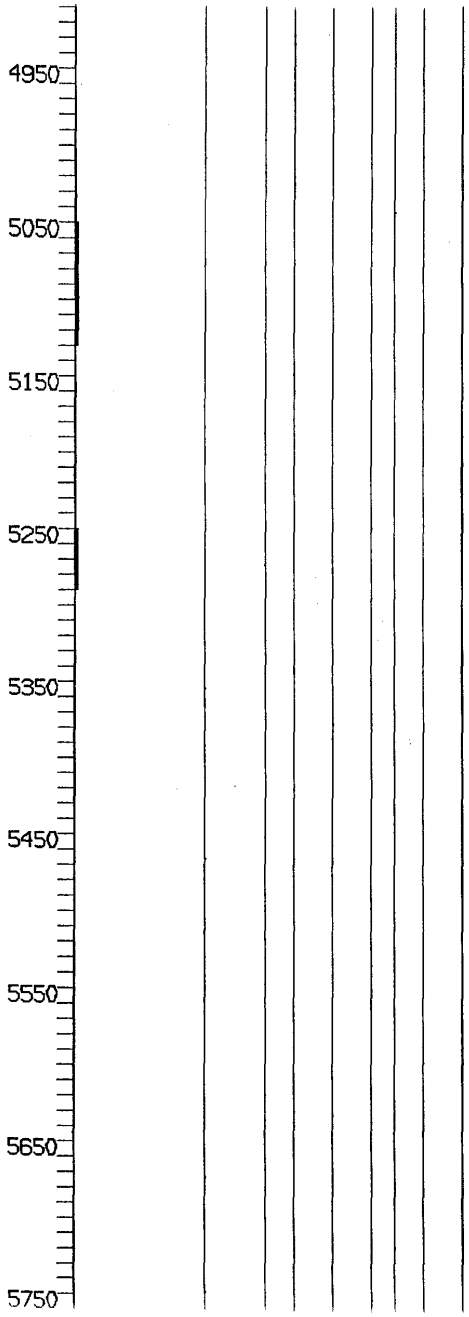
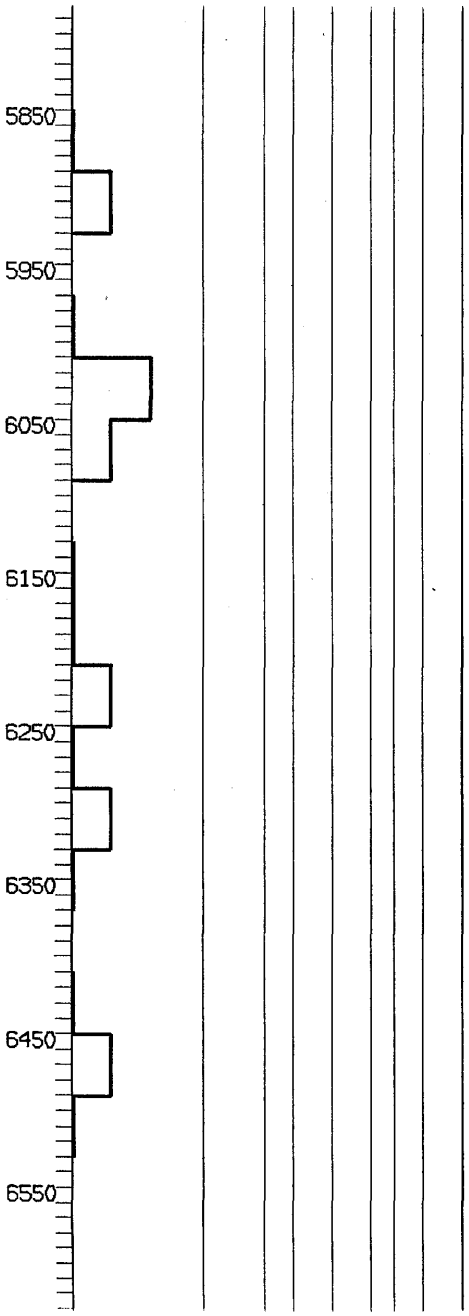
4850



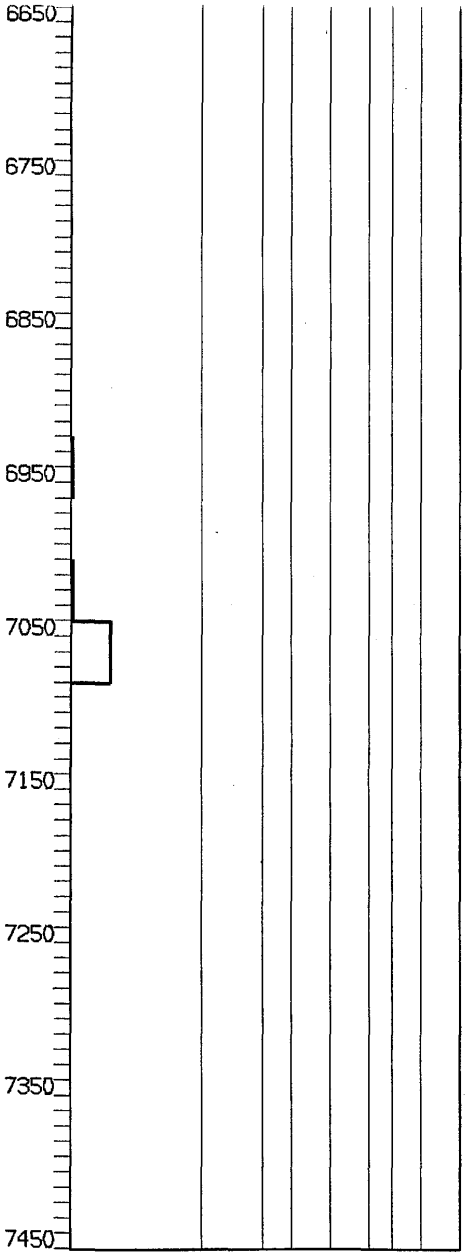
PD:GRY SH 0.05 0.55



PD:GRY-BLK SH 0.04 0.87

PAINT CHIPS

PD:GRY-BLK SH 0.05 0.98



PD:BLK SH 0.04 1.71

SHELL DEVELOPMENT DEPTH-REFLECTANCE PLOT

PRODUCED BY DEPTH PROGRAM VERSION 2.03

API NO.	502612000110	AKA	
	CHEVRON	KONIAG	1
LOCATION	2 38S 49W 7	LAT.	LONG.
AREA	PENINSULA	DATE	4 /23/85
ELEV.		T.D.	10907

REMARKS

SAMPLES EXAMINED ABOVE 6200 FT ARE IN NAKNEK/U. JURASSIC

MJ = MID. JURASSIC

PLOTTING SYMBOLS

BAR = BARREN

ND = NO DETERMINATION

DEPTH IN FEET

MEAN

-CONF +CONF

	CORE	DITCH
F I D	◊	⧗
G S C	✱	#
U. V. SCAN -REFLECTANCE	≈	∿
BITUMEN, SHC	B	b
VITRINITE	V	

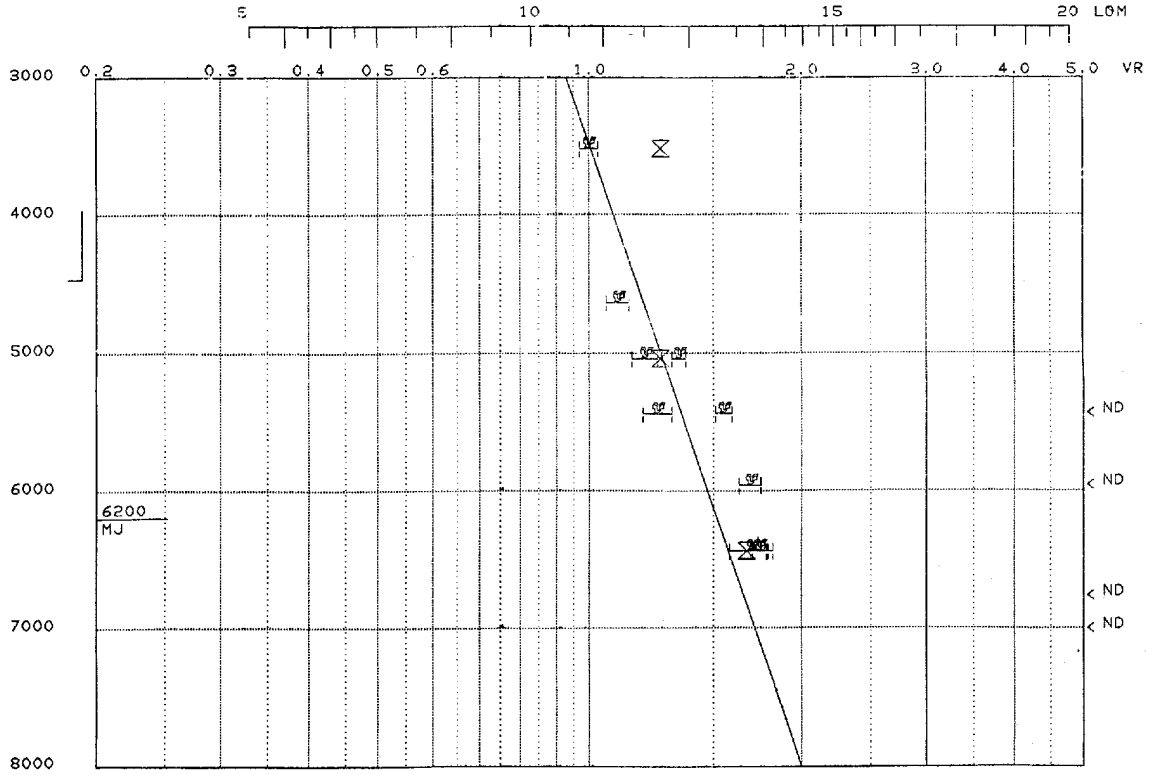


TABLE I

RECEIVED
MAY 0 3 1985
Alaska Oil & Gas Cons. Commission
Anchorage

Results of TOC Analysis with Leaching Factor

Sample No.	Depth (ft)	TOC (Wt. %)	Leaching Factor
1621-001	3480-3520	2.51	0.8298
1621-002	3520-3560	2.23	0.8665
1621-003	4476-4520	0.21	0.8742
1621-004	4520-4560	0.16	0.8775
1621-005	4560-4600	0.24	0.8795
1621-006	4600-4640	0.24	0.8980
1621-007	4640-4680	0.20	0.9008
1621-008	4680-4720	0.20/0.23	0.9132/0.9015
1621-009	4720-4760	0.20	0.9159
1621-010	4760-4800	0.21	0.8907
1621-011	4800-4840	0.26	0.8219
1621-012	4840-4880	0.20	0.9113
1621-013	4880-4920	0.16	0.8952
1621-014	4920-4960	0.17	0.9016
1621-015	4960-5000	0.17	0.9058
1621-016	5000-5040	0.17/0.20	0.9048/0.9021
1621-017	5040-5080	0.41	0.8868
1621-018	5080-5120	0.45	0.8531
1621-019	5120-5160	0.24	0.8942
1621-020	5160-5200	0.25	0.8615
1621-021	5200-5240	0.49	0.8641
1621-022	5240-5280	0.49	0.8624
1621-023	5280-5320	0.43	0.8723
1621-024	5320-5360	0.43/0.43	0.8787/0.8721
1621-025	5360-5400	0.42	0.8669
1621-026	5400-5440	0.42	0.8666
1621-027	5440-5480	0.37	0.8298
1621-028	5480-5520	0.38	0.7959
1621-029	5520-5560	0.39	0.8621
1621-030	5560-5600	0.33	0.8382
1621-031	5600-5640	0.40	0.8400
1621-032	5640-5680	0.37/0.39	0.8557/0.8521
1621-033	5680-5720	0.33	0.8493
1621-034	5720-5760	0.38	0.8473
1621-035	5760-5800	0.39	0.8156
1621-036	5800-5840	0.52	0.8577
1621-037	5840-5880	0.62	0.9036
1621-038	5880-5920	0.62	0.8979
1621-039	5920-5960	0.63	0.9137
1621-040	5960-6000	0.65/0.69	0.9037/0.9014
1621-041	6000-6040	0.64	0.8730
1621-042	6040-6080	0.56	0.8554
1621-043	6080-6120	0.57	0.8754

TABLE I

Results of TOC Analysis with Leaching Factor

Sample No.	Depth (ft)	TOC (Wt. %)	Leaching Factor
1621-044	6120-6160	0.74	0.8557
1621-045	6160-6200	0.65	0.8807
1621-046	6200-6240	0.67	0.8876
1621-047	6240-6280	0.72	0.8680
1621-048	6280-6320	0.77/0.82	0.8878/0.8801
1621-049	6320-6360	0.71	0.8809
1621-050	6360-6400	0.76	0.8748
1621-051	6400-6440	0.64	0.8434
1621-052	6440-6480	0.75	0.8678
1621-053	6480-6520	0.67	0.8710
1621-054	6520-6560	0.50	0.8390
1621-055	6560-6600	0.46	0.8204
1621-056	6600-6640	0.47/0.49	0.8595/0.8362
1621-057	6640-6680	0.59	0.8804
1621-058	6680-6720	0.80	0.8890
1621-059	6720-6760	0.72	0.8869
1621-060	6760-6800	1.04	0.8906
1621-061	6800-6840	0.85	0.8825
1621-062	6840-6880	0.86	0.8744
1621-063	6880-6920	0.91	0.8745
1621-064	6920-6960	0.87/0.91	0.8136/0.8106
1621-065	6960-7000	0.89	0.8217
1621-066	7000-7040	1.10	0.8224
1621-067	7040-7080	1.23/1.25	0.7379/0.7091
1621-068	7080-7120	0.70	0.8503
1621-069	7120-7160	0.77	0.8562
1621-070	7160-7200	0.65	0.8954
1621-071	7200-7240	0.57	0.9014
1621-072	7240-7280	0.64/0.64	0.8751/0.8840
1621-073	7280-7320	0.33/0.36	0.6970
1621-074	7320-7360	0.60	0.8430
1621-075	7360-7400	0.53/0.54	0.8892/0.8934

WELL = 5026120001 00 CHEVRON KONIAG 1 UNITS = F
AREA = LOCATION = AKA 0002 38 S 49

SEQ #	DEPTHS	TYPE	HC%	LITHOLOGY	REMARK
1	3480.00 - 3520.00	UD	0.63		
2	3520.00 - 3560.00	UD	1.15		
3	4476.00 - 4520.00	UD	0.00		
4	4520.00 - 4560.00	UD	0.00		
5	4560.00 - 4600.00	UD	0.00		
6	4600.00 - 4640.00	UD	0.00		
7	4640.00 - 4680.00	UD	0.00		
8	4680.00 - 4720.00	UD	0.00		
9	4720.00 - 4760.00	UD	0.00		
10	4760.00 - 4800.00	UD	0.00		
11	4800.00 - 4840.00	UD	0.00		
12	4840.00 - 4880.00	UD	0.00		
13	4880.00 - 4920.00	UD	0.00		
14	4920.00 - 4960.00	UD	0.00		
15	4960.00 - 5000.00	UD	0.00		
16	5000.00 - 5040.00	UD	0.00		
17	5040.00 - 5080.00	UD	0.01		
18	5080.00 - 5120.00	UD	0.01		
19	5120.00 - 5160.00	UD	0.00		
20	5160.00 - 5200.00	UD	0.00		
21	5200.00 - 5240.00	UD	0.00		
22	5240.00 - 5280.00	UD	0.01		
23	5280.00 - 5320.00	UD	0.00		
24	5320.00 - 5360.00	UD	0.00		
25	5360.00 - 5400.00	UD	0.00		
26	5400.00 - 5440.00	UD	0.00		
27	5440.00 - 5480.00	UD	0.00		
28	5480.00 - 5520.00	UD	0.00		
29	5520.00 - 5560.00	UD	0.00		
30	5560.00 - 5600.00	UD	0.00		
31	5600.00 - 5640.00	UD	0.00		
32	5640.00 - 5680.00	UD	0.00		
33	5680.00 - 5720.00	UD	0.00		
34	5720.00 - 5760.00	UD	0.00		
35	5760.00 - 5800.00	UD	0.00		
36	5800.00 - 5840.00	UD	0.00		
37	5840.00 - 5880.00	UD	0.01		
38	5880.00 - 5920.00	UD	0.02		
39	5920.00 - 5960.00	UD	0.00		
40	5960.00 - 6000.00	UD	0.01		
41	6000.00 - 6040.00	UD	0.04		
42	6040.00 - 6080.00	UD	0.02		
43	6080.00 - 6120.00	UD	0.00		
44	6120.00 - 6160.00	UD	0.01		
45	6160.00 - 6200.00	UD	0.01		
46	6200.00 - 6240.00	UD	0.02		
47	6240.00 - 6280.00	UD	0.01		
48	6280.00 - 6320.00	UD	0.02		
49	6320.00 - 6360.00	UD	0.01		
50	6360.00 - 6400.00	UD	0.00		
51	6400.00 - 6440.00	UD	0.01		
52	6440.00 - 6480.00	UD	0.02		
53	6480.00 - 6520.00	UD	0.01		
54	6520.00 - 6560.00	UD	0.00		
55	6560.00 - 6600.00	UD	0.00		
56	6600.00 - 6640.00	UD	0.00		
57	6640.00 - 6680.00	UD	0.00		
58	6680.00 - 6720.00	UD	0.00		
59	6720.00 - 6760.00	UD	0.00		
60	6760.00 - 6800.00	UD	0.00		
61	6800.00 - 6840.00	UD	0.00		
62	6840.00 - 6880.00	UD	0.00		
63	6880.00 - 6920.00	UD	0.00		
64	6920.00 - 6960.00	UD	0.01		
65	6960.00 - 7000.00	UD	0.00		
66	7000.00 - 7040.00	UD	0.01		
67	7040.00 - 7080.00	UD	0.02		
68	7080.00 - 7120.00	UD	0.00		
69	7120.00 - 7160.00	UD	0.00		
70	7160.00 - 7200.00	UD	0.00		
71	7200.00 - 7240.00	UD	0.00		
72	7240.00 - 7280.00	UD	0.00		
73	7280.00 - 7320.00	UD	0.00		

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36	5800.00	-	[illegible]		
37	5840.00	-	5880.00	UD	0.01
38	5880.00	-	5920.00	UD	0.02
39	5920.00	-	5960.00	UD	0.00
40	5960.00	-	6000.00	UD	0.01
41	6000.00	-	6040.00	UD	0.04
42	6040.00	-	6080.00	UD	0.02
43	6080.00	-	6120.00	UD	0.00
44	6120.00	-	6160.00	UD	0.01
45	6160.00	-	6200.00	UD	0.01
46	6200.00	-	6240.00	UD	0.02
47	6240.00	-	6280.00	UD	0.01
48	6280.00	-	6320.00	UD	0.02
49	6320.00	-	6360.00	UD	0.01
50	6360.00	-	6400.00	UD	0.00
51	6400.00	-	6440.00	UD	0.01

52	6440.00	-	6480.00	UD	0.02
53	6480.00	-	6520.00	UD	0.01
54	6520.00	-	6560.00	UD	0.00
55	6560.00	-	6600.00	UD	0.00
56	6600.00	-	6640.00	UD	0.00
57	6640.00	-	6680.00	UD	0.00
58	6680.00	-	6720.00	UD	0.00
59	6720.00	-	6760.00	UD	0.00
60	6760.00	-	6800.00	UD	0.00
61	6800.00	-	6840.00	UD	0.00
62	6840.00	-	6880.00	UD	0.00
63	6880.00	-	6920.00	UD	0.00
64	6920.00	-	6960.00	UD	0.01
65	6960.00	-	7000.00	UD	0.00
66	7000.00	-	7040.00	UD	0.01
67	7040.00	-	7080.00	UD	0.02
68	7080.00	-	7120.00	UD	0.00
69	7120.00	-	7160.00	UD	0.00
70	7160.00	-	7200.00	UD	0.00
71	7200.00	-	7240.00	UD	0.00
72	7240.00	-	7280.00	UD	0.00
73	7280.00	-	7320.00	UD	0.00
74	7320.00	-	7360.00	UD	0.00
75	7360.00	-	7400.00	UD	0.00

VMØ8 BR21GCS8 3/Ø9/85 15:Ø1:Ø7 C.S.T. WAS THE ORIGIN**********

SHELL DEV HARP PLOT

APINO = 502612000100
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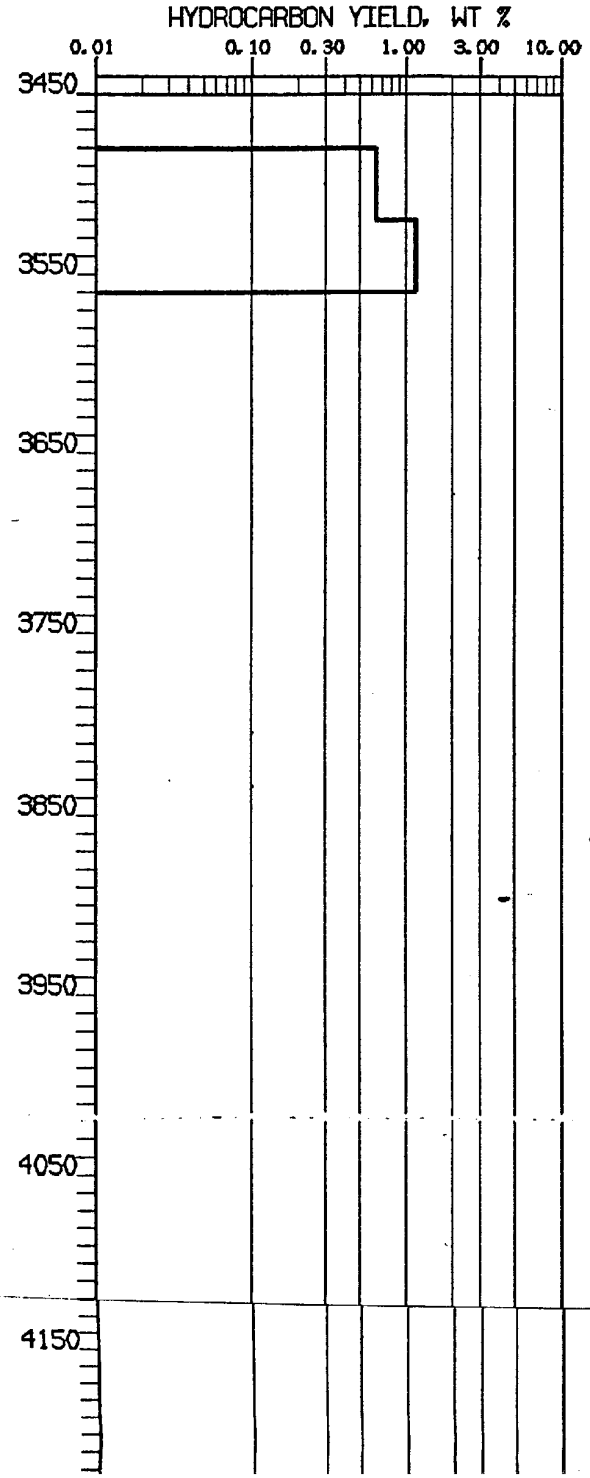
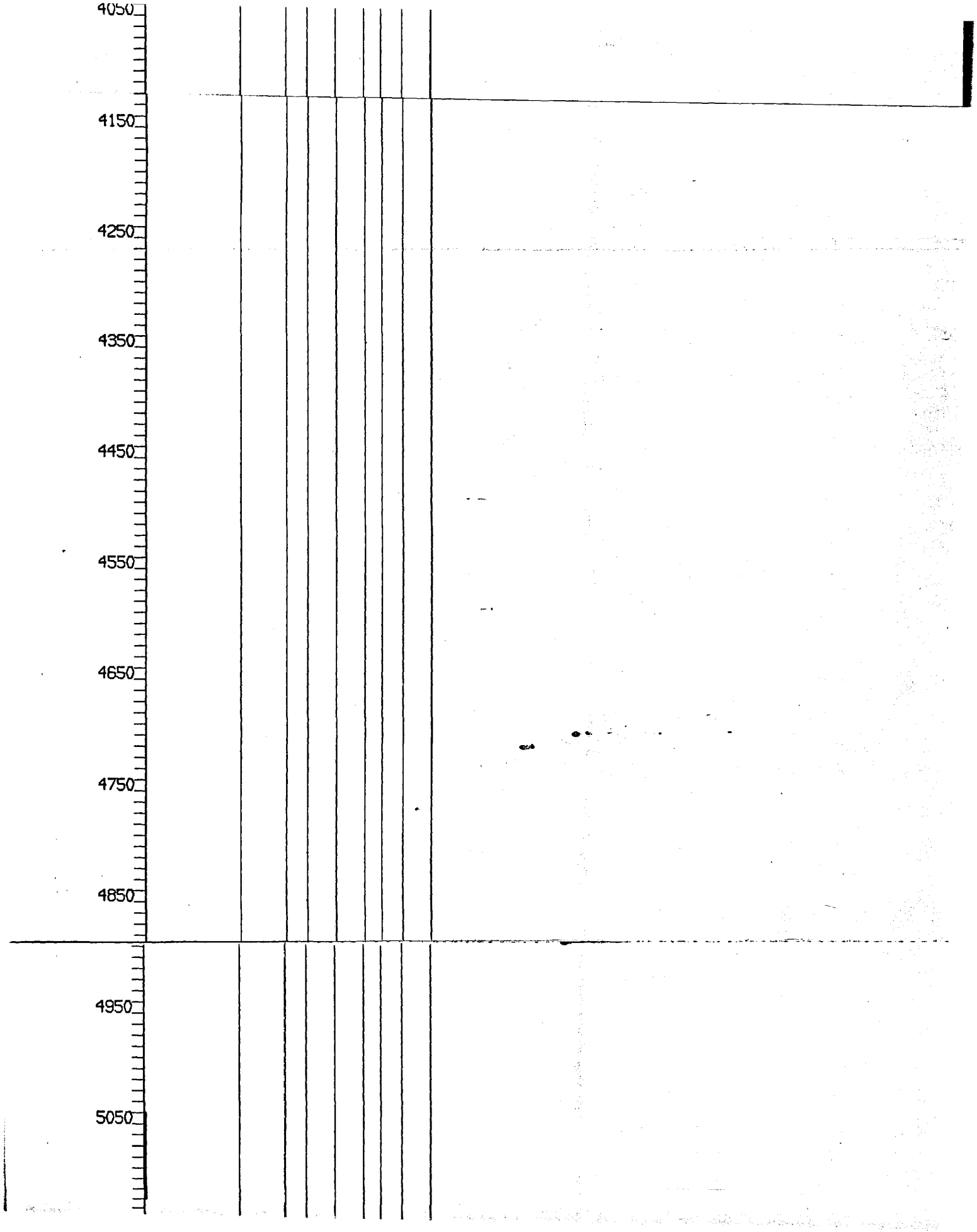
LEASE = KONIAG
WELL = 1 ELEV =
FIELD =
PROV =
LOC = AKA
0002 38S 49W
UNITS = FEET

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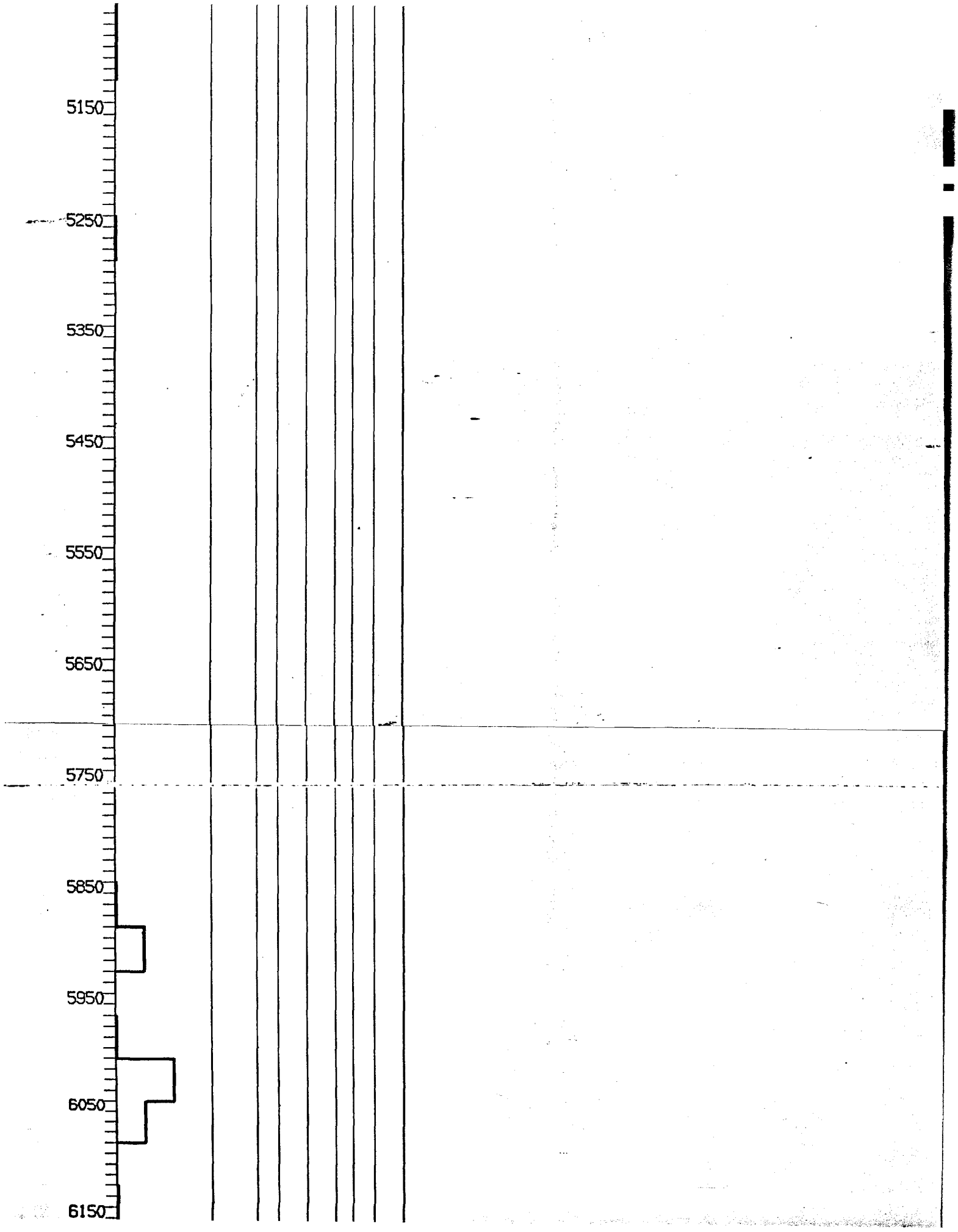
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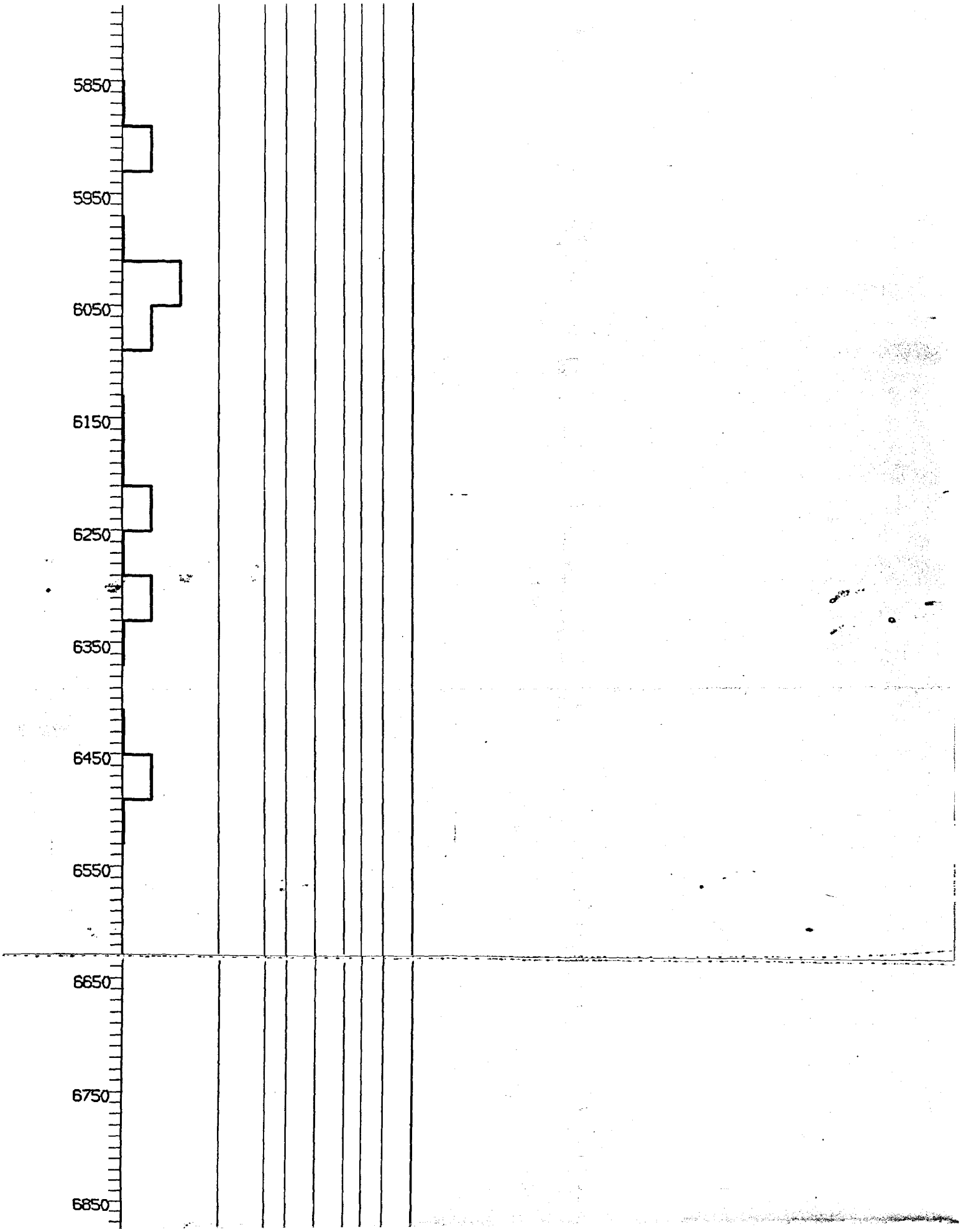
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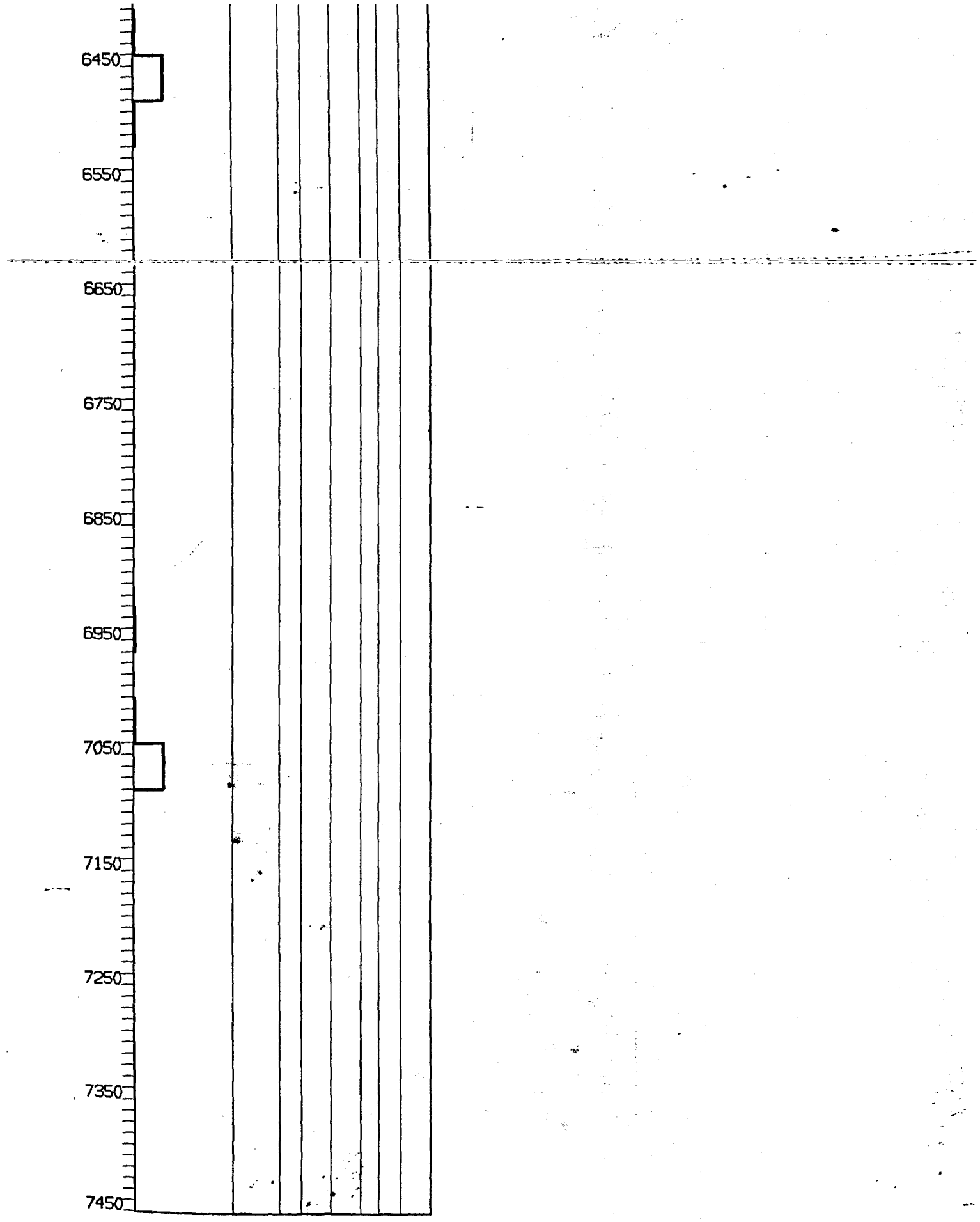
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DATE: APRIL 22, 1985

PRELIMINARY MATURITY REPORT

SUBJECT: CHEVRON
KONIAG #1
API #50-261-20001-00
ALASKA PENINSULA

REQUESTOR: L. SLAGLE

DEPTH FT SPL. NO.	LAB NO. V-	SPL. TYPE LITHOLOGY	FORMATION AGE	TYPE RO	REFLECTANCE ANALYSIS MEAN + 95% CONF. LMTS	LOM	VISUAL KEROGEN ANALYSIS BI	BK	KM	KI	VI	UK	IN
3520-3560	40982	PD(KC)sh dk br to blk coaly	Naknek/U. Jurassic	V	A1.00±0.03 X1.01±0.04	10.6-10.9 10.6-11.0			25		75		
4640-4680	40983	PD(KC)sh silic m to dk gy	" " "	V	A1.10±0.04 X1.08±0.04	11.0-11.4 11.0-11.3			5		93	<1	2
5040-5080	40984	PD(CP)sh m to dk gy	" " "	V	A1.20±0.05 X1.14±0.07	11.4-11.7 11.1-11.5					98		2
5040-5100	40985	UD(KC)	" " "	V	A1.34±0.03 X1.30±0.04	11.8-12.0 11.7-11.9	<1		25		73		2
5440-5480	40986	PD(CP)sh dk gy to blk	" " "	V	A1.25±0.06 X1.22±0.08	11.5-11.8 11.4-11.8	1				97		2
5440-5480	40987	PD(RM)vein calcite w/ shc	" " "	V BK	1.36 2.18±0.28	ND Not used for LOM determ.	<1	99			<1		
5440-5520	40988	UD(KC)	" " "	V	A1.55±0.04 X1.50±0.05	12.3-12.4 12.1-12.4	40	<1	15		41		4
5960-6000	40989	PD(KC)sh dk gy to blk	" " "	V	A1.69±0.06 X1.67±0.07	12.5-12.9 12.5-12.9	5	<1		89	3		2
5960-6000	40990	PD(CP)sh dk gy to blk	" " "	V B	1.53±0.25 1.29±0.53	ND ND	1			98	1		
6440-6480	40991	PD(CP)" " " " "	Middle Jurassic	V	A1.70±0.12 X1.74±0.13	12.4-13.2 12.5-13.4	4	1		94	<1		<1

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Anchorage

DEPTH FT. SPL. NO.	LAB NO. V-	SPL. TYPE LITHOLOGY	FORMATION AGE	REFLECTANCE ANALYSIS TYPE RO	MEAN + 95% CONF. LMTS	LOM	VISUAL KEROGEN ANALYSIS BI	BK	KM	KI	VI	UK	IN
6440-6520	40992	UD(KC)	" "	V	A1.74±0.05	12.7-13.1	30	5		54	10		1
					X1.76±0.06	12.7-13.2							
				BK	2.37±0.13	Not used for LOM determ.							
6760-6800	40993	PD(CP)sh blk	" "	V	1.84±0.15	ND	5			94	1		<1
7000-7080	40994	UD(KC)	" "	V	2.06±0.28	ND	10	15		74	<1		<1
						LOM determ.							
7040-7080	40995	PD(CP)sh blk	" "	B	A1.72±0.09	-	5	2		93			<1
					B0.95±0.07	-							
					X1.30±0.13	-							
				BK	2.04±0.19	Not used for LOM determ.							

CHEVRON KONIAG #1, API #50-261-20001-00 ALASKA PENINSULA, ALASKA

Preparation methods for reflected light analysis include the following: 1) Rock Mount (RM) - a piece of whole rock mounted perpendicular to bedding, 2)Crushed Pellet or Coal Pellet (CP) - crushed pieces of rock or coal, and 3) Kerogen Concentrate (KC) - The HF-HCl-insoluble portion of a rock in which organic matter is concentrated relative to the whole rock. All three sample types are mounted (or mixed) with epoxy and polished.

The standard measure of maturity is vitrinite reflectance.

Where two or more mean reflectance values are presented for a particular maceral, the A mean is preferred and the X group refers to all the reflectance values measured on this maceral in the sample.

Visual kerogen analysis refers to the relative amounts of each type of kerogen to the total kerogen. It does note indicate quantitatively the amount of kerogen in the sample.

Liptinite attains a reflectance similar to that of vitrinite at around LOM 11.5-12 and can no longer be distinguished from vitrinite.

SAMPLE TYPES
PD = Picked ditch
UD = Bulk ditch
C = Core
OT = Outcrop
SW = Sidewall core

PREP. TYPES
RM = Rock mount
CP = Crushed pellet
KC = Kerogen concentrate

MACERAL TYPES
B = Solid Hydrocarbon
BK = Coked Solid Hydrocarbon
KM = Massive Kerogen
KI = Micrin. Kerogen
V = Vitrinite
UK = Undiff. Coked Org. Mat.
IN = Inertinite

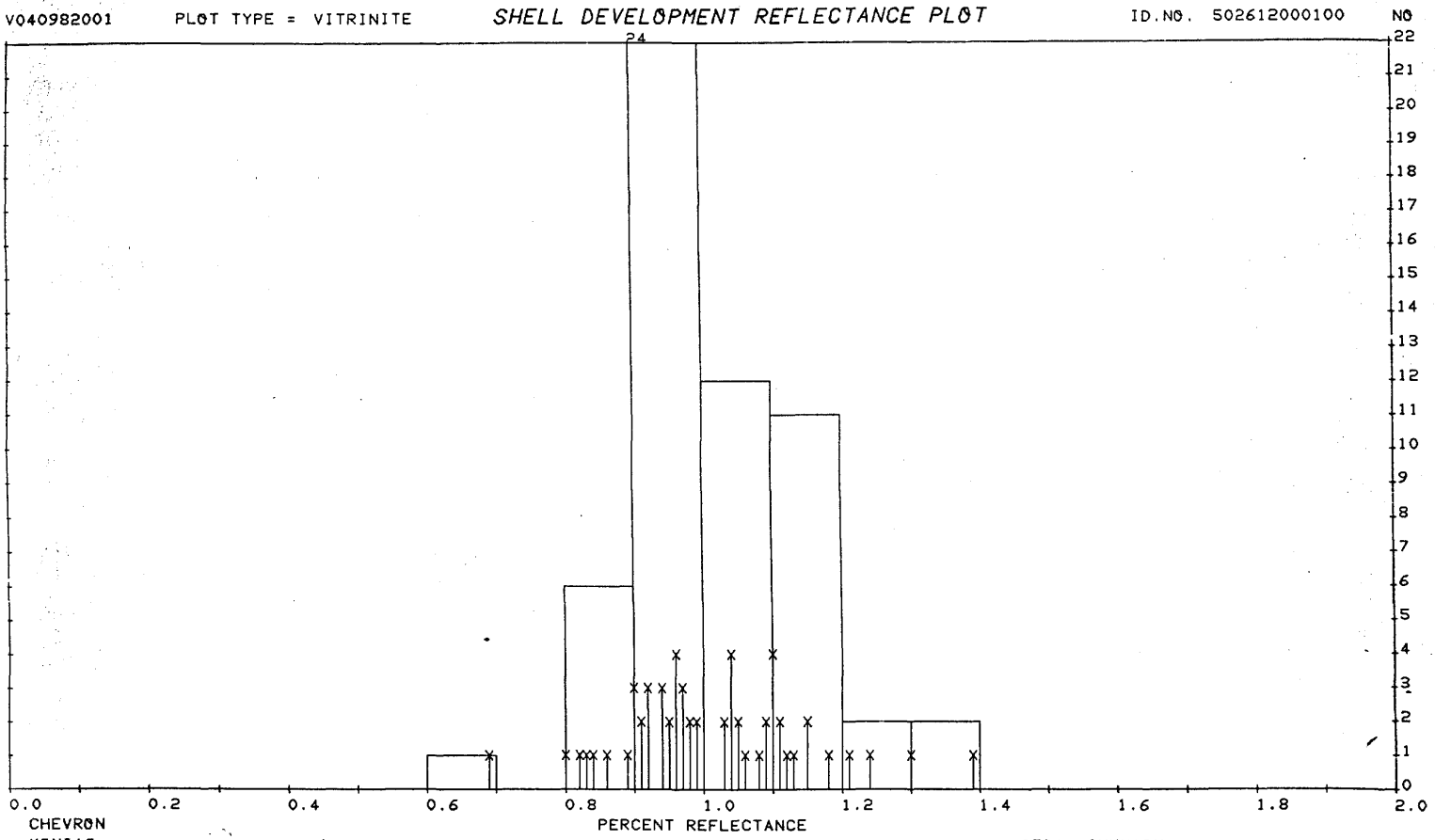
ANF/JAT/LFHP:SMJ

CHEVRON KONIAG #1, API #50-261-20001-00 ALASKA PENINSULA, ALASKA

V040982001 PLOT TYPE = VITRINITE

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 03520.00 BOT 03560.00 FT

PLOT TYPE = VITRINITE SPL TYPE = PD

SPLT	N	MAX	MIN	RANG	MEAN	CONF	STDV	LOM
	58	1.39	0.69	0.70	1.01	±0.036	0.12	10.85
A	55	1.24	0.80	0.44	1.00	±0.030	0.10	10.82

MACERAL SUMMARY

	VKA%	N	MIN	MAX
VITRINITE	75	58	0.69	1.39
CAVED VITRIN	0	2	0.63	0.74
MASSIVE KERO	25	0		

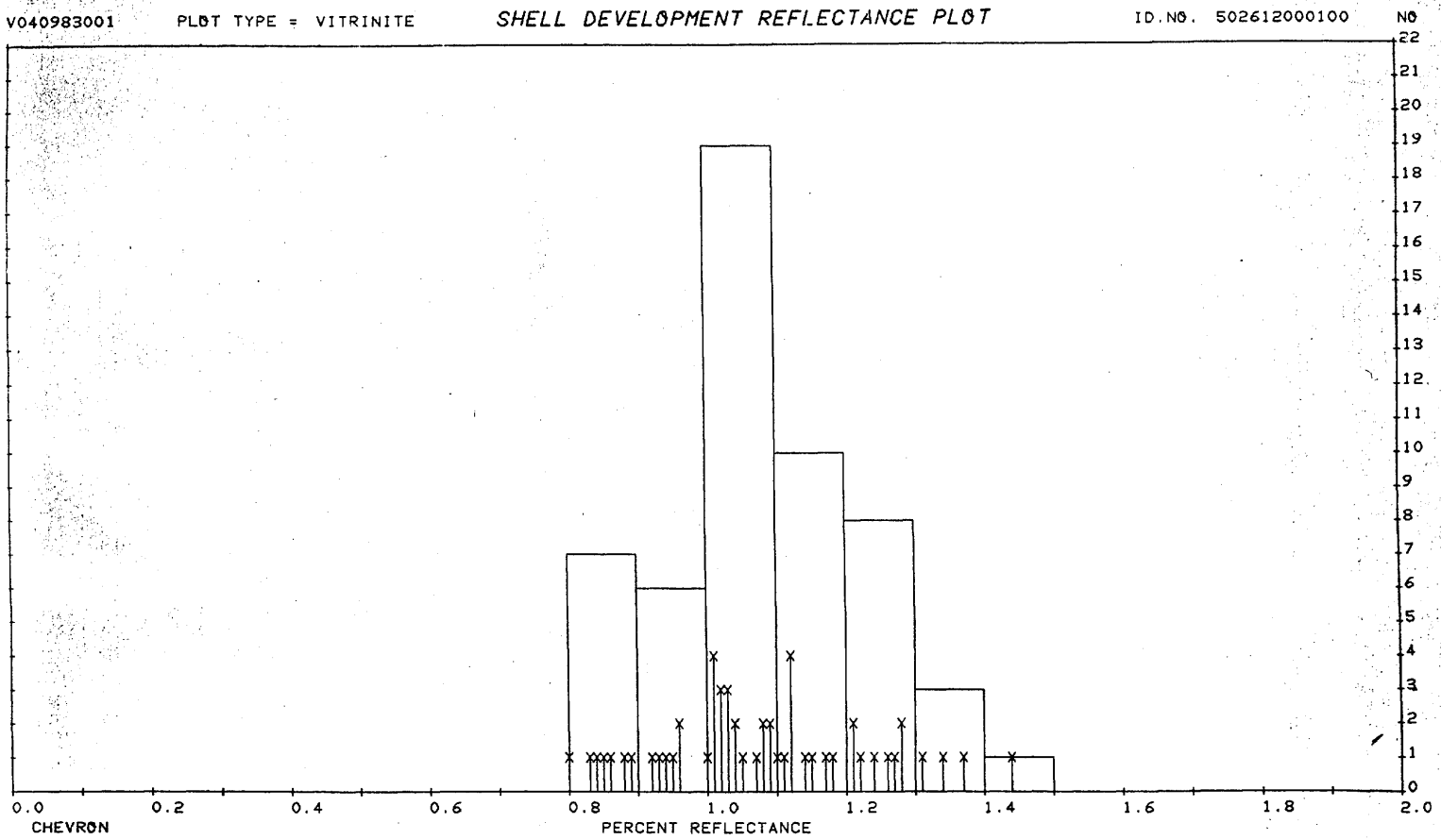
KC AKA-S-3255-- SH DK BR TO BLK COALY NAKNEK/U. JURASSIC

2LP041585V008 VITAL VERSION 1.22

V040983001 PLOT TYPE = VITRINITE

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100



CHEVRON
KONIAG 1

AKA LOCATION 2 38S 49W TOP 04640.00 BOT 04680.00 FT

PLOT TYPE = VITRINITE SPL TYPE = PD

SPLT	N	MAX	MIN	RANG	MEAN	CONF	STDV	LOM
	54	1.44	0.80	0.64	1.08	±0.043	0.14	11.09
A	46	1.37	0.92	0.45	1.10	±0.035	0.11	11.24

MACERAL SUMMARY

	VKA%	N	MIN	MAX
VITRINITE	93	54	0.80	1.44
FUSINITE	1	2	2.35	3.45
SEMIFUSINITE	1	2	1.44	2.16
COKED VITRIN	0	1	5.68	5.68
COKED,UNDIFF	<1	0		
MASSIVE KERO	5	0		

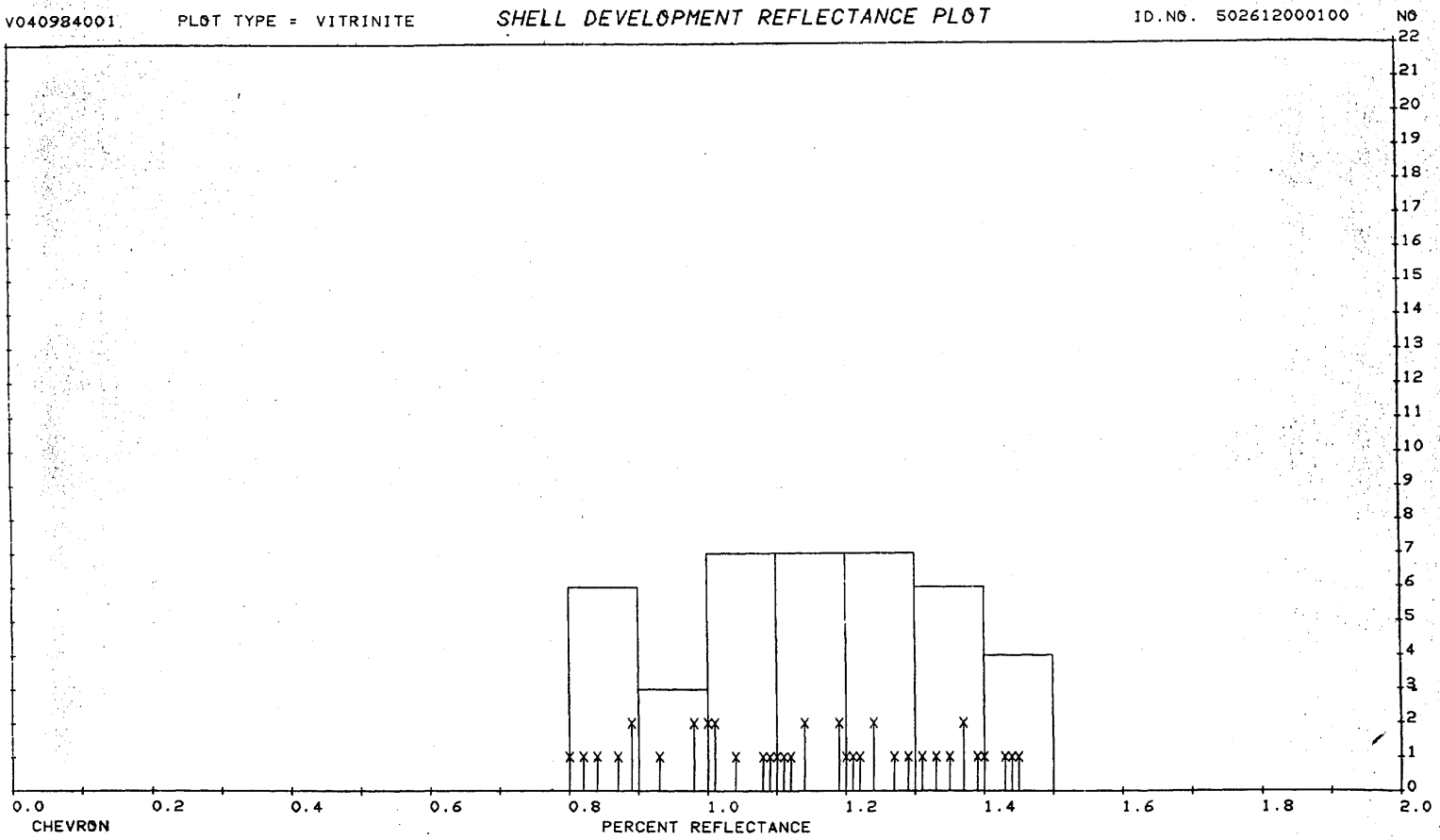
KC AKA-S-3256-- SH SILIC M TO DK GY NAKNEK/U. JURASSIC

2LP041585V009 VITAL VERSION 1.22

V040984001 PLOT TYPE = VITRINITE

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100



CHEVRON
KONIAG 1

AKA LOCATION 2 38S 49W TOP 05040.00 BOT 05080.00 FT

PLOT TYPE = VITRINITE SPL TYPE = PD

SPLT	N	MAX	MIN	RANG	MEAN	CONF	STDV	LOM
	40	1.45	0.80	0.65	1.14	±0.066	0.19	11.36
A	33	1.45	0.98	0.47	1.20	±0.053	0.15	11.51

MACERAL SUMMARY

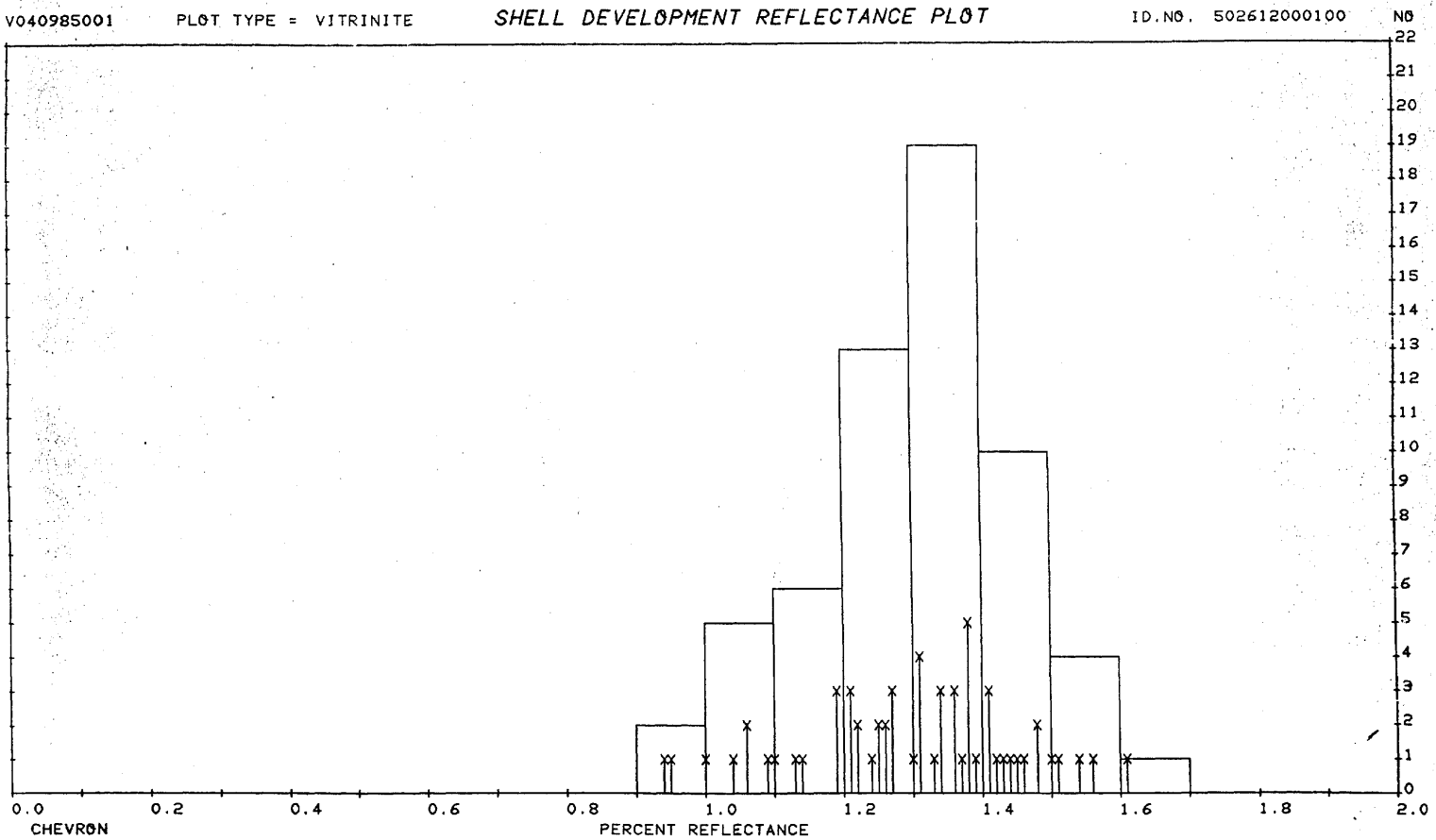
	VKA%	N	MIN	MAX
VITRINITE	98	40	0.80	1.45
SEMIFUSINITE	2	3	1.57	1.89

CP AKA-S-3257-- SH M TO DK GY NAKNEK/U. JURRASSIC ▼▼▼ 2LP041685V001 VITAL VERSION 1.22

V040985001 PLOT TYPE = VITRINITE

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 05040.00 BOT 05100.00 FT
PLOT TYPE = VITRINITE SPL TYPE = UD

SPLT	N	MAX	MIN	RANG	MEAN	CONF	STDV	LOM
	60	1.61	0.94	0.67	1.30	±0.042	0.15	11.80
A	52	1.61	1.13	0.48	1.34	±0.032	0.11	11.88

MACERAL SUMMARY

	VKA%	N	MIN	MAX
VITRINITE	73	60	0.94	1.61
BITUMEN, SHC	<1	2	0.62	0.63
FUSINITE	1	2	2.47	4.00
SEMIFUSINITE	1	3	1.70	1.93
CAVED VITRIN	0	1	0.76	0.76
MASSIVE KERO	25	0		

KC ----------

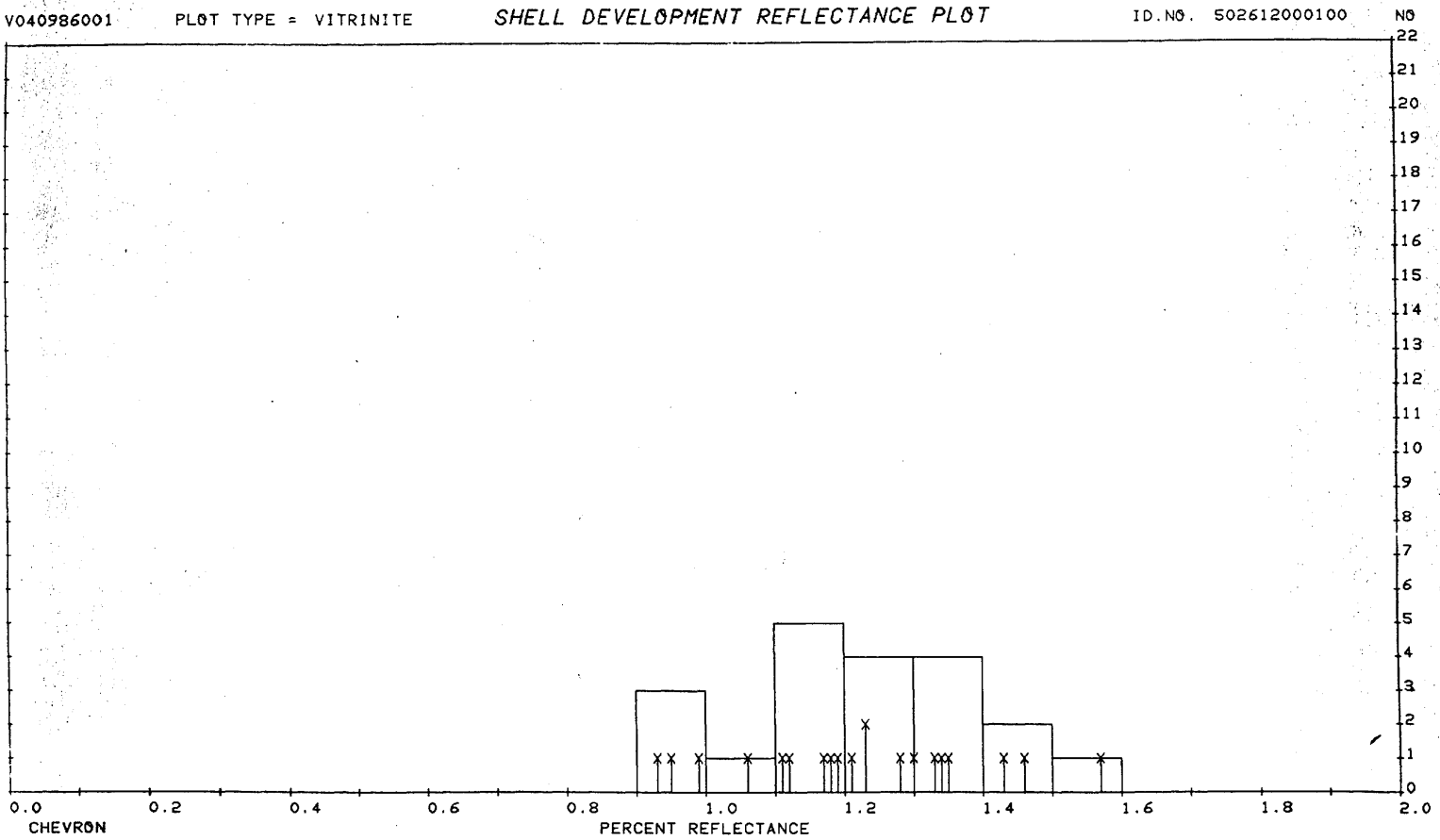
NAKNEK/U. JURASSIC

2LP041685V002 VITAL VERSION 1.22

V040986001 PLOT TYPE = VITRINITE

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 05440.00 BOT 05480.00 FT
PLOT TYPE = VITRINITE SPL TYPE = PD

SPLT	N	MAX	MIN	RANG	MEAN	CONF	STDV	LOM
	20	1.57	0.93	0.64	1.22	±0.079	0.16	11.57
A	16	1.46	1.06	0.40	1.25	±0.061	0.11	11.65

MACERAL SUMMARY

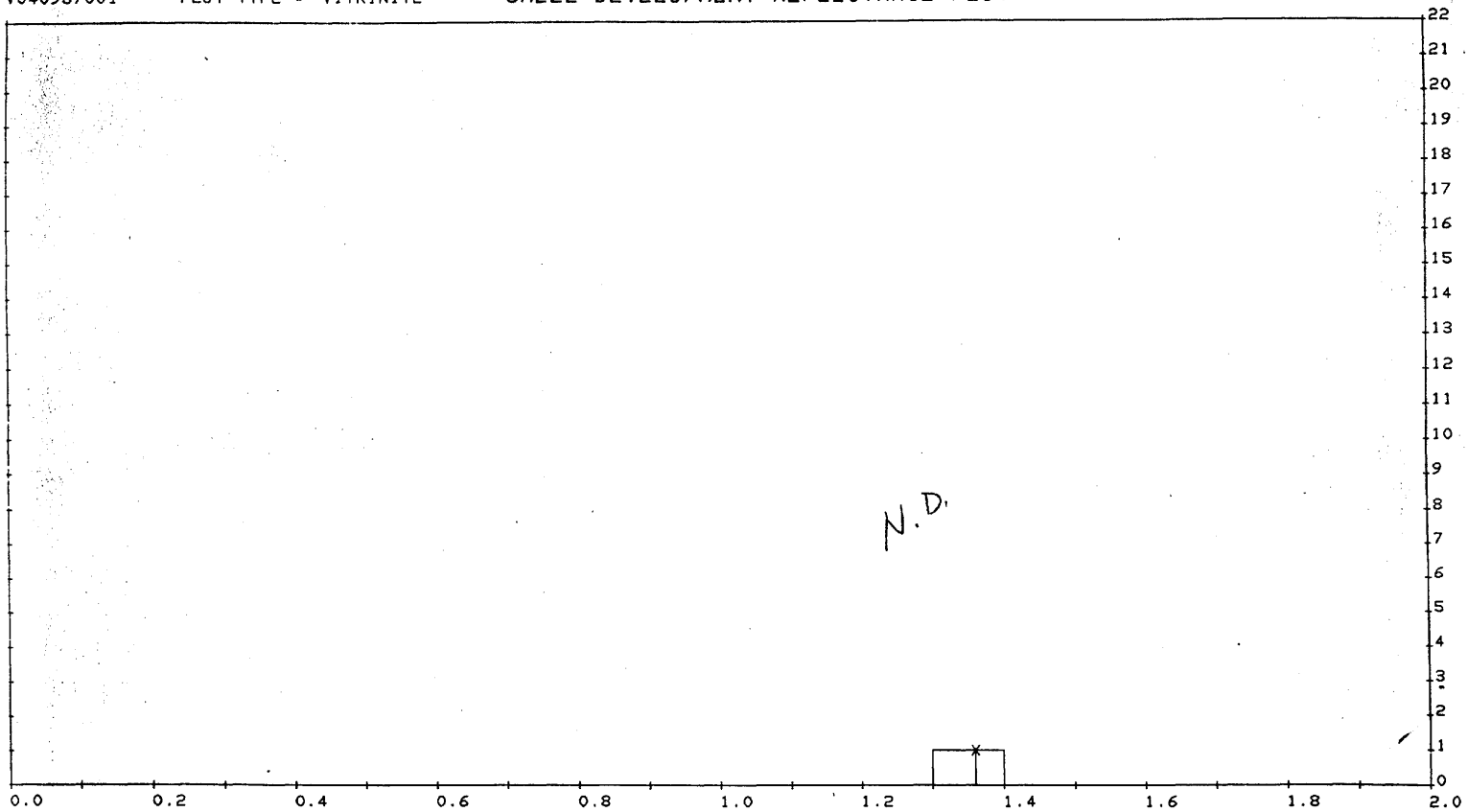
	VKA%	N	MIN	MAX
VITRINITE	97	20	0.93	1.57
BITUMEN, SHC	1	5	0.77	1.00
FUSINITE	1	3	3.05	4.42
SEMIFUSINITE	1	1	2.44	2.44

CP AKA-S-3258-- SH DK GY TO BLK NAKNEK/U. JURASSIC 2LP041685V003 VITAL VERSION 1.22

V040987001 PLOT TYPE = VITRINITE

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 05440.00 BOT 05480.00 FT

PLOT TYPE = VITRINITE SPL TYPE = PD

N	MAX	MIN	RANG	MEAN	CONF	STDV	LOM
1	1.36	1.36	0.00	1.36	±0.000	0.00	11.92

MACERAL SUMMARY

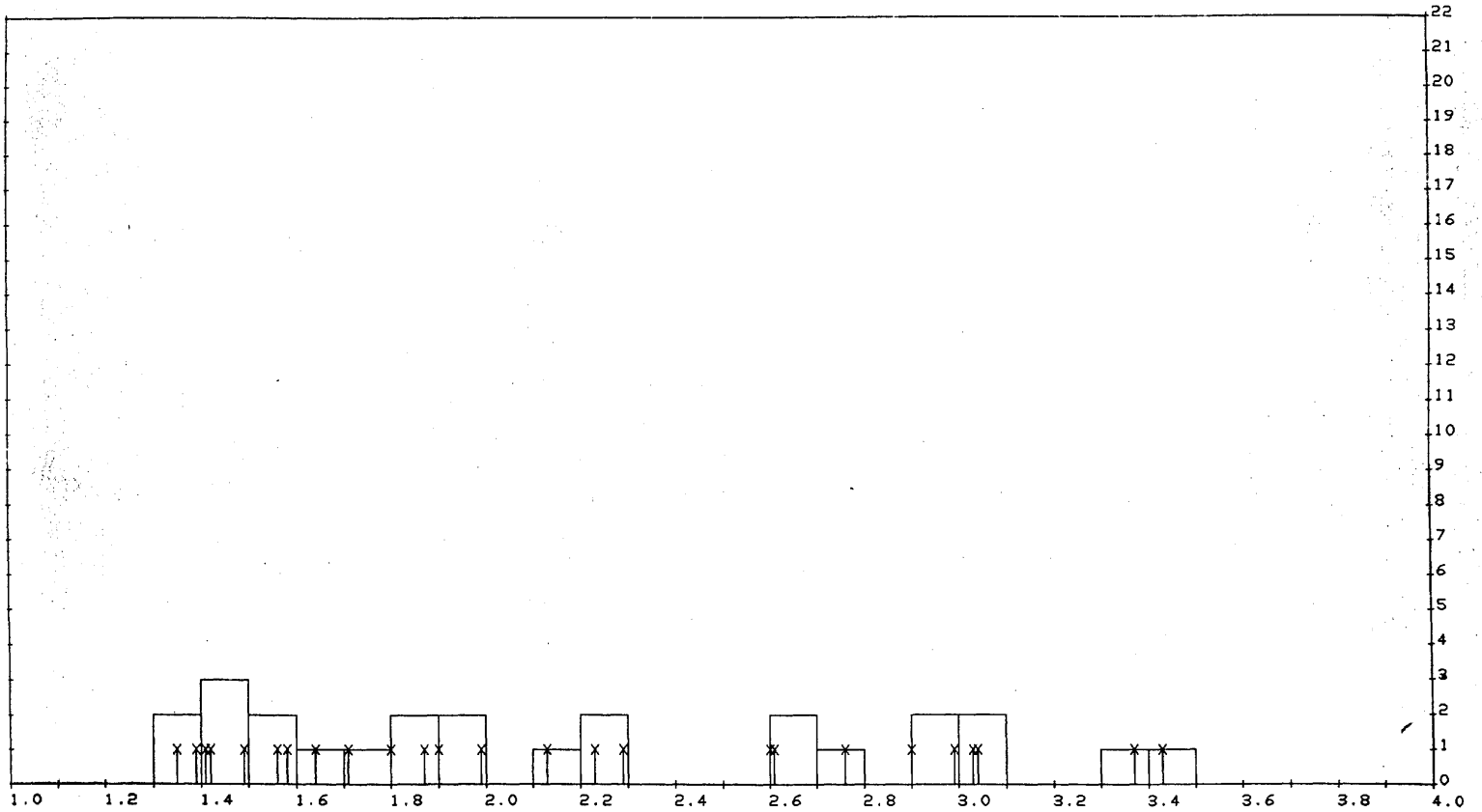
	VKA%	N	MIN	MAX
VITRINITE	<1	1	1.36	1.36
BITUMEN, SHC	<1	2	0.83	1.02
COKED SHC	99	25	1.35	3.43

RM ---------- VEIN CALCITE W/SHC NAKNEK/U. JURASSIC 2LP041685V004 VITAL VERSION 1.22

V040987001 PLOT TYPE = COKED SHC

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100 NO



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 05440.00 BOT 05480.00 FT
PLOT TYPE = COKED SHC SPL TYPE = PD

N	MAX	MIN	RANG	MEAN	CONF	STDV
25	3.43	1.35	2.08	2.18	±0.278	0.66

MACERAL SUMMARY

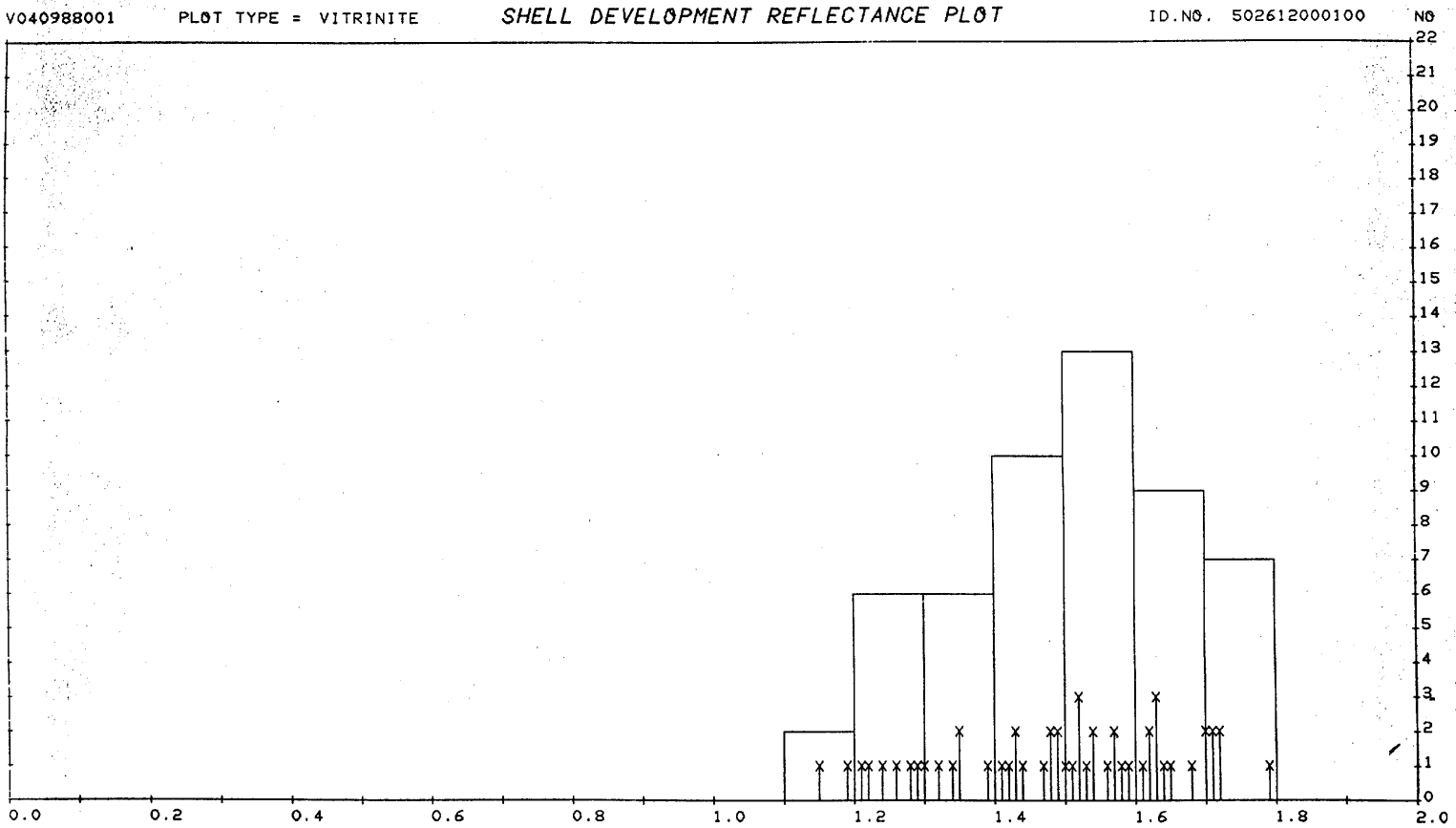
	VKA%	N	MIN	MAX
COKED SHC	99	25	1.35	3.43
BITUMEN, SHC	<1	2	0.83	1.02
VITRINITE	<1	1	1.36	1.36

RM ---------- VEIN CALCITE W/SHC NAKNEK/U. JURASSIC 2LP041685V004 VITAL VERSION 1.22

V040988001 PLOT TYPE = VITRINITE

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 05440.00 BOT 05520.00 FT
PLOT TYPE = VITRINITE SPL TYPE = UD

SPLT	N	MAX	MIN	RANG	MEAN	CONF	STDV	LOM
	53	1.79	1.15	0.64	1.50	±0.047	0.16	12.23
A	44	1.79	1.32	0.47	1.55	±0.036	0.12	12.34

MACERAL SUMMARY

	VKA%	N	MIN	MAX
VITRINITE	41	53	1.15	1.79
BITUMEN, SHC	40	35	0.90	1.45
COKED SHC	<1	2	2.14	2.46
FUSINITE	2	5	3.11	3.56
SEMIFUSINITE	2	4	1.88	2.47
MASSIVE KERO	15	0		

KC ----------

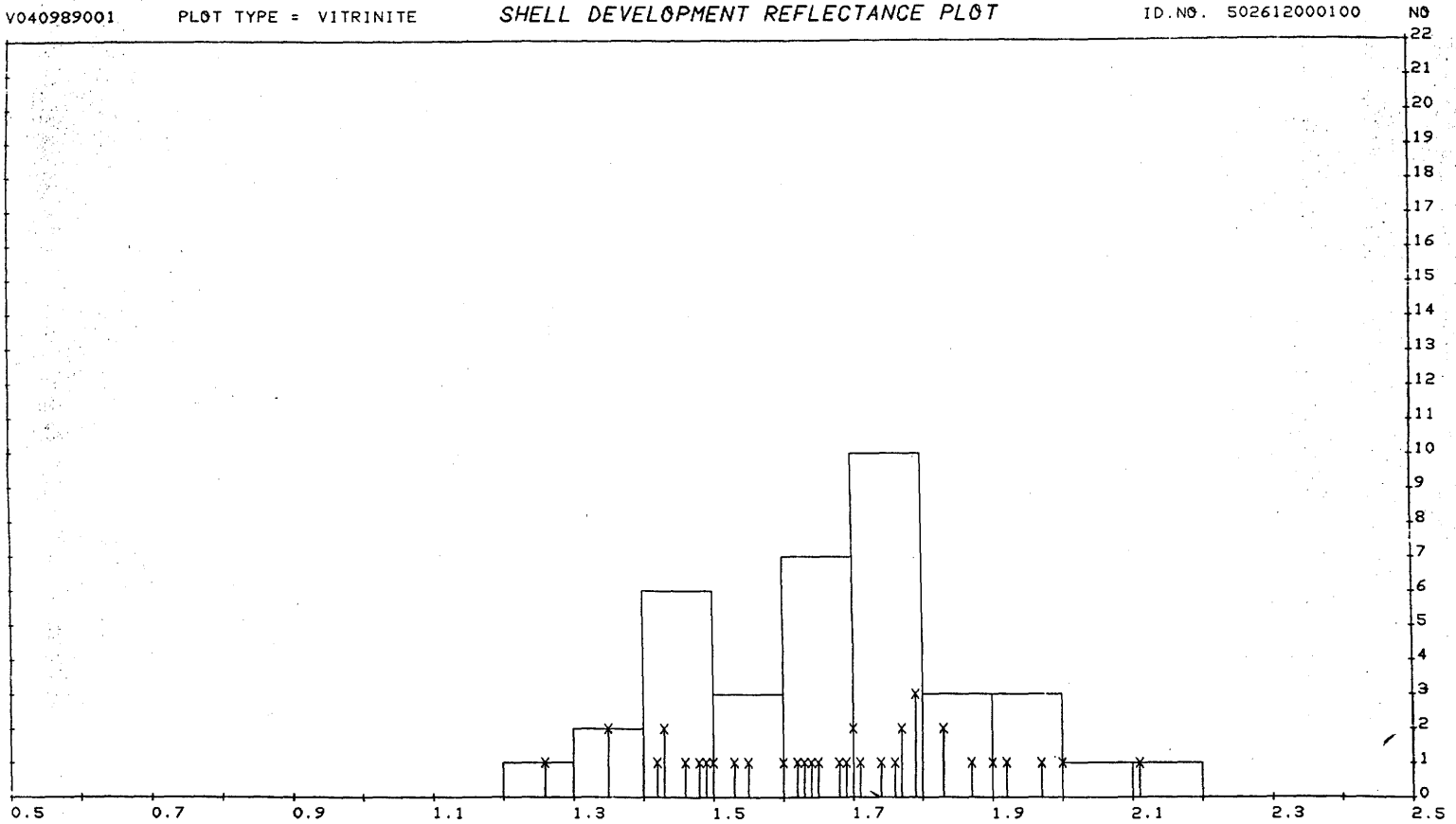
NAKNEK/U. JURASSIC

2LP041685V005 VITAL VERSION 1.22

V040989001 PLOT TYPE = VITRINITE

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100 NO



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 05960.00 BOT 06000.00 FT
PLOT TYPE = VITRINITE SPL TYPE = PD

SPLT	N	MAX	MIN	RANG	MEAN	CONF	STDV	LOM
	37	2.11	1.26	0.85	1.67	±0.070	0.20	12.63
A	33	2.00	1.42	0.58	1.69	±0.058	0.16	12.69

MACERAL SUMMARY

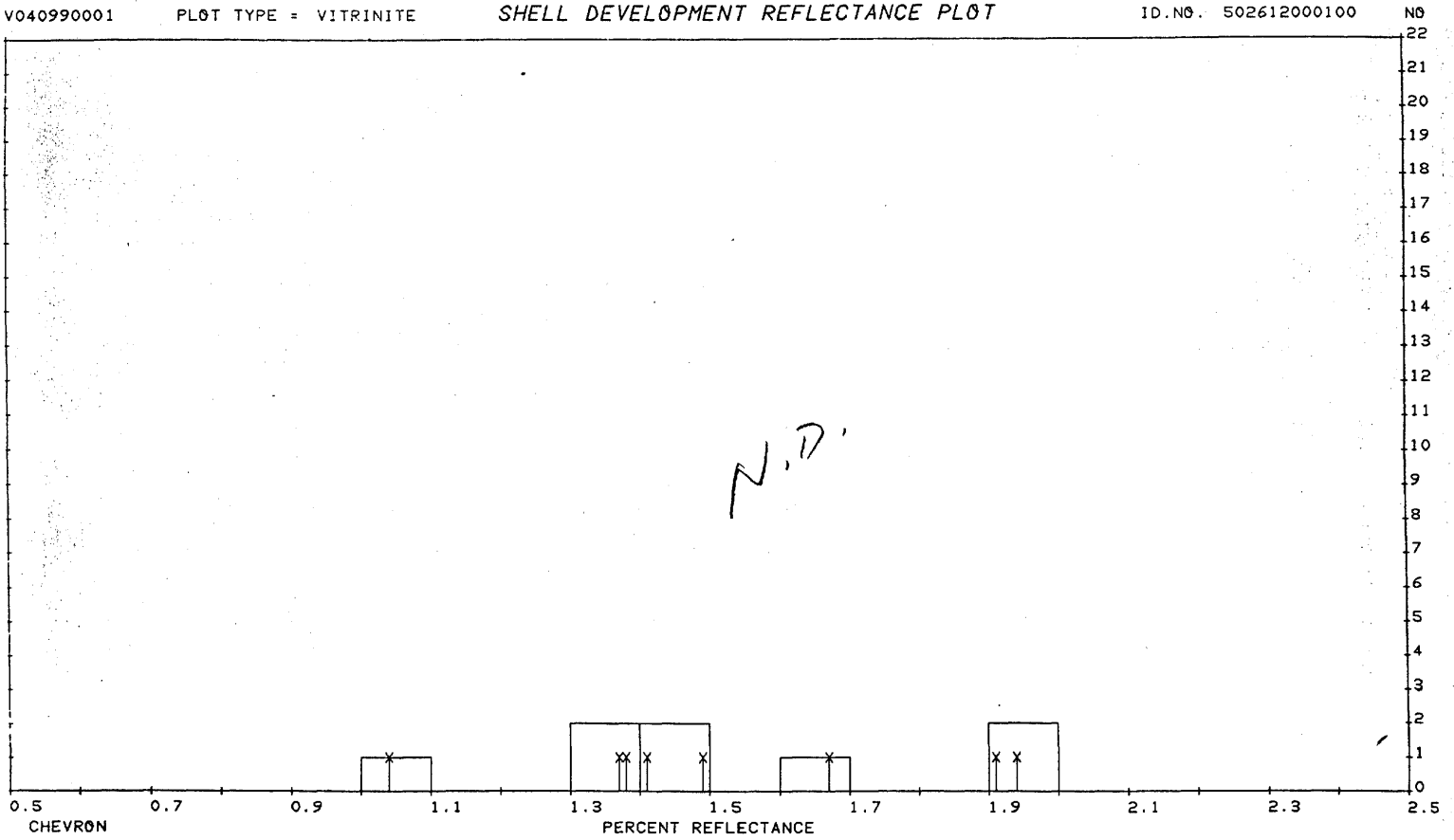
	VKA%	N	MIN	MAX
VITRINITE	3	37	1.26	2.11
BITUMEN, SHC	5	39	0.64	1.90
COKED SHC	<1	8	1.73	2.74
FUSINITE	2	5	2.55	5.42
SEMIFUSINITE	<1	4	2.09	2.52
MICRIN. KERO	89	0		

KC AKA-S-3259-- SH DK GY TO BLK • NAKNEK/U. JURASSIC♥♥♥ 2LP041685V006 VITAL VERSION 1.22

V040990001 PLOT TYPE = VITRINITE

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 05960.00 BOT 06000.00 FT
PLOT TYPE = VITRINITE SPL TYPE = PD

N	MAX	MIN	RANG	MEAN	CONF	STDV	LOM
8	1.94	1.04	0.90	1.53	±0.252	0.28	12.29

MACERAL SUMMARY

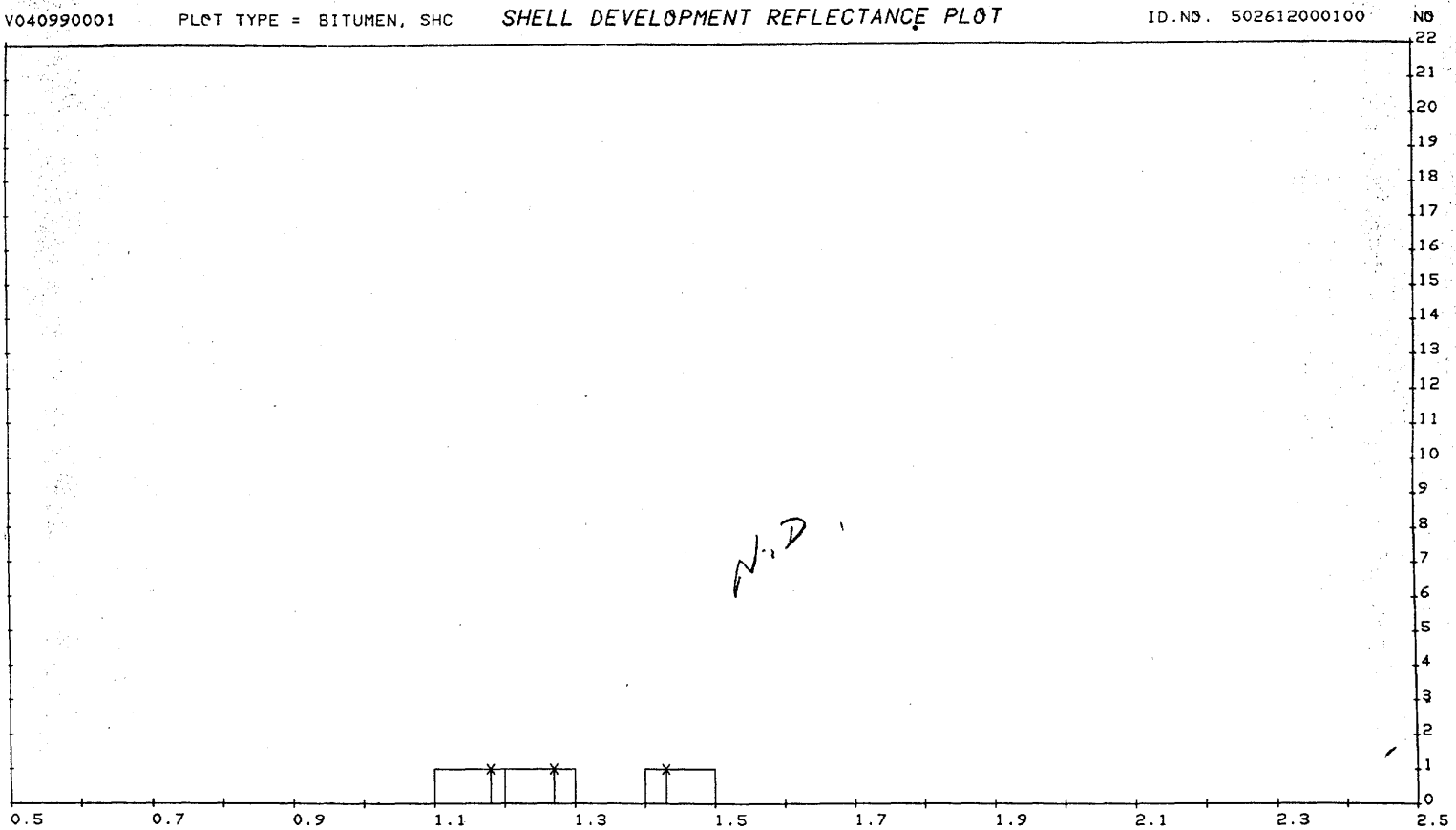
	VKA%	N	MIN	MAX
VITRINITE	1	8	1.04	1.94
BITUMEN, SHC	1	3	1.18	1.43
MICRIN. KERO	98	0		

CP AKA-S-3259-- SH DK GY TO BLK NAKNEK/U. JURASSIC 2LP041685V007 VITAL VERSION 1.22

V040990001 PLOT TYPE = BITUMEN, SHC

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 05960.00 BOT 06000.00 FT
PLOT TYPE = BITUMEN, SHC SPL TYPE = PD

N	MAX	MIN	RANG	MEAN	CONF	STDV	LOM
3	1.43	1.18	0.25	1.29	±0.315	0.10	

MACERAL SUMMARY

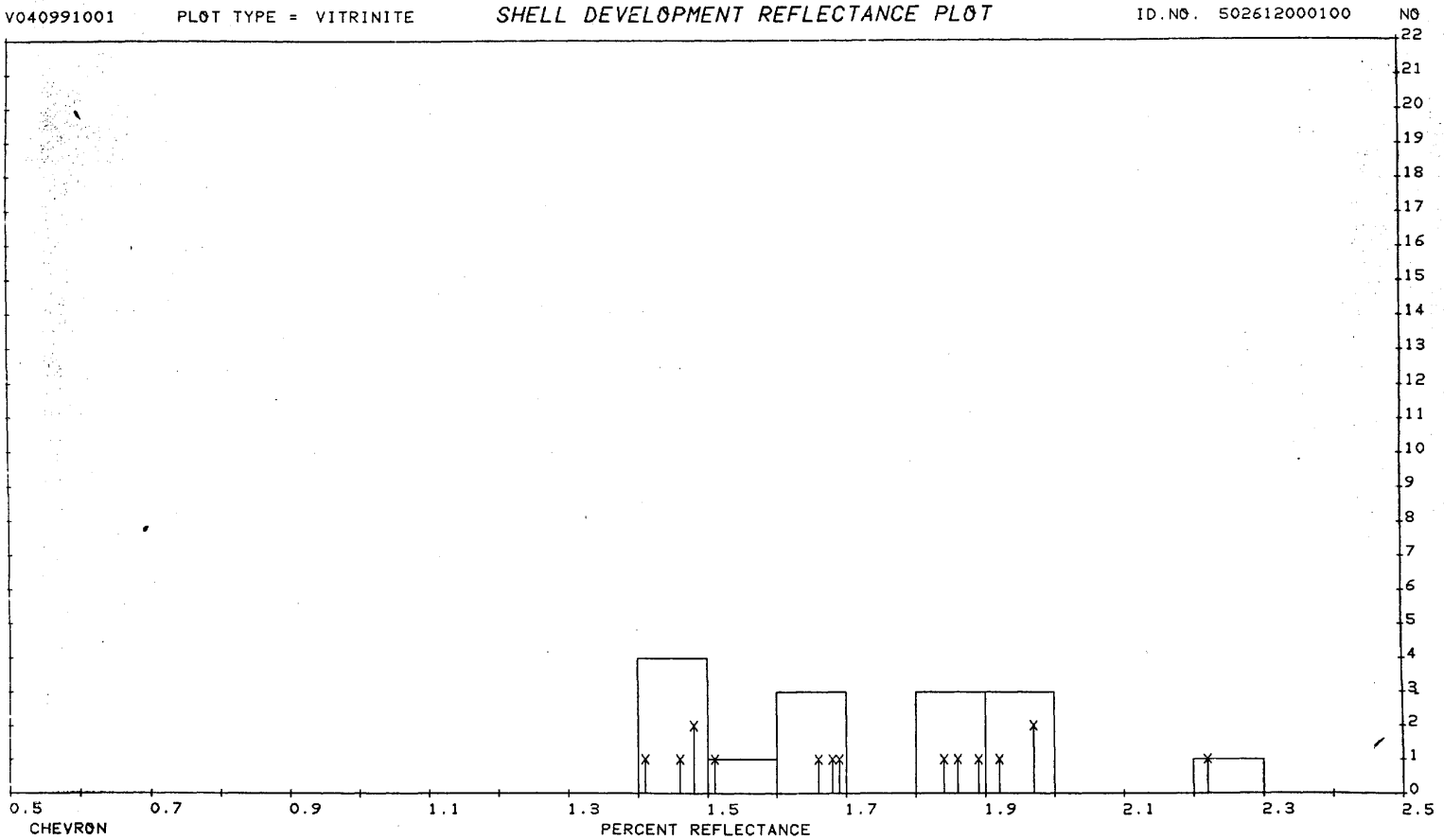
	VKA%	N	MIN	MAX
BITUMEN, SHC	1	3	1.18	1.43
VITRINITE	1	8	1.04	1.94
MICRIN. KERO	98	0		

CP AKA-S-3259-- SH DK GY TO BLK NAKNEK/U. JURASSIC 2LP041685V007 VITAL VERSION 1.22

V040991001 PLOT TYPE = VITRINITE

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 06440.00 BOT 06480.00 FT

PLOT TYPE = VITRINITE SPL TYPE = PD

SPLT	N	MAX	MIN	RANG	MEAN	CONF	STDV	LOM
	15	2.22	1.41	0.81	1.74	±0.133	0.23	12.85
A	14	1.97	1.41	0.56	1.74	±0.119	0.20	12.74

MACERAL SUMMARY

	VKA%	N	MIN	MAX
VITRINITE	<1	15	1.41	2.22
BITUMEN, SHC	4	33	0.56	2.40
COKED SHC	1	5	2.29	4.57
FUSINITE	<1	1	3.50	3.50
SEMIFUSINITE	<1	1	2.77	2.77
MICRIN. KERO	94	0		

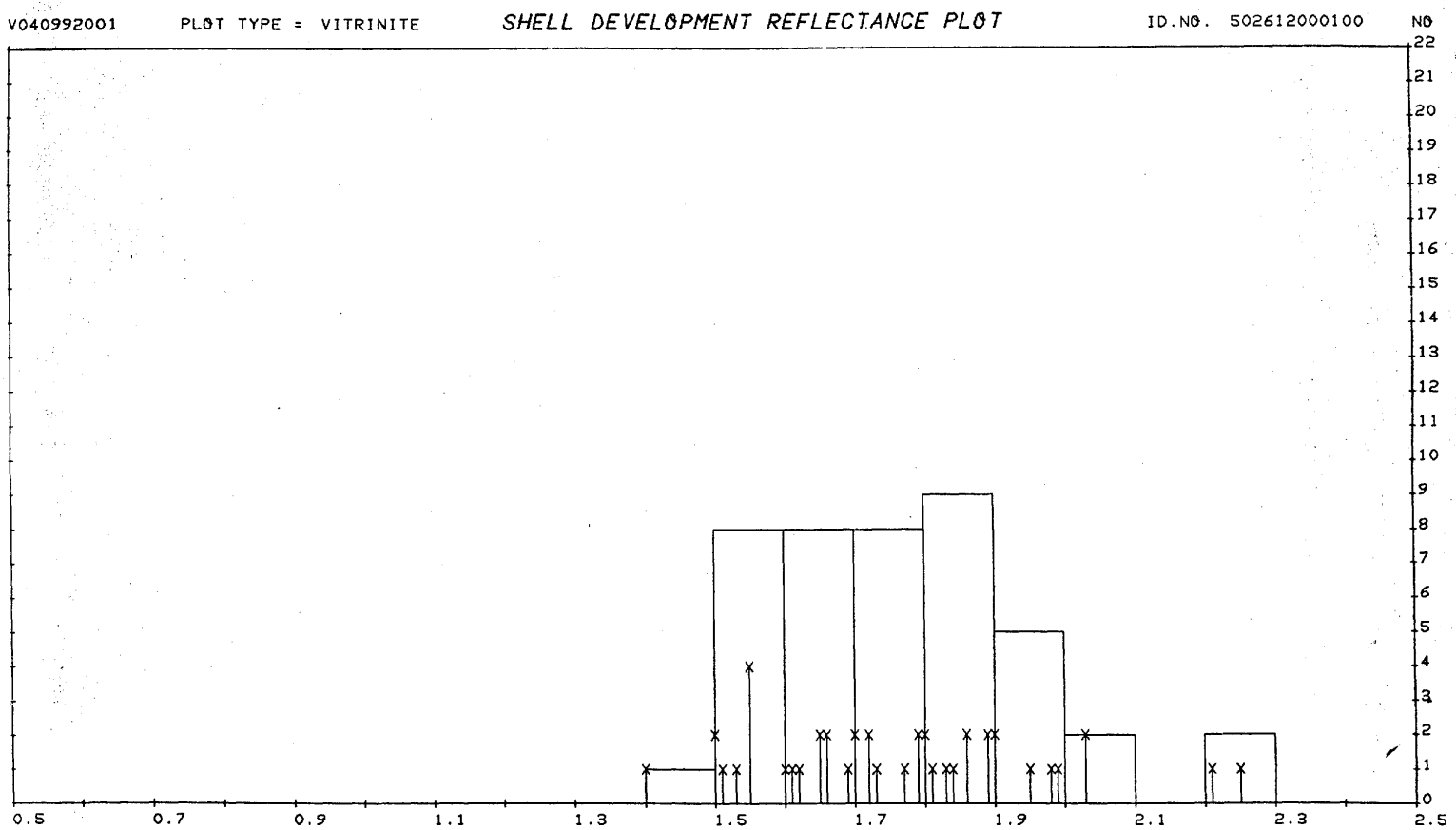
CP AKA-S-3260-- SH DK GY TO BLK MIDDLE JURASSIC ***

2LP041685V008 VITAL VERSION 1.22

V040992001 PLOT TYPE = VITRINITE

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 06440.00 BOT 06520.00 FT

PLOT TYPE = VITRINITE SPL TYPE = UD

SPLT	N	MAX	MIN	RANG	MEAN	CONF	STDV	LOM
	43	2.25	1.40	0.85	1.76	±0.059	0.19	12.93
A	40	2.03	1.50	0.53	1.74	±0.054	0.15	12.87

MACERAL SUMMARY

	VKA%	N	MIN	MAX
VITRINITE	10	43	1.40	2.25
BITUMEN, SHC	30	52	0.51	2.21
COKED SHC	5	16	2.02	2.74
FUSINITE	1	4	3.43	4.52
SEMIFUSINITE	<1	2	2.56	2.82
MICRIN. KERO	54	0		

KC ----------

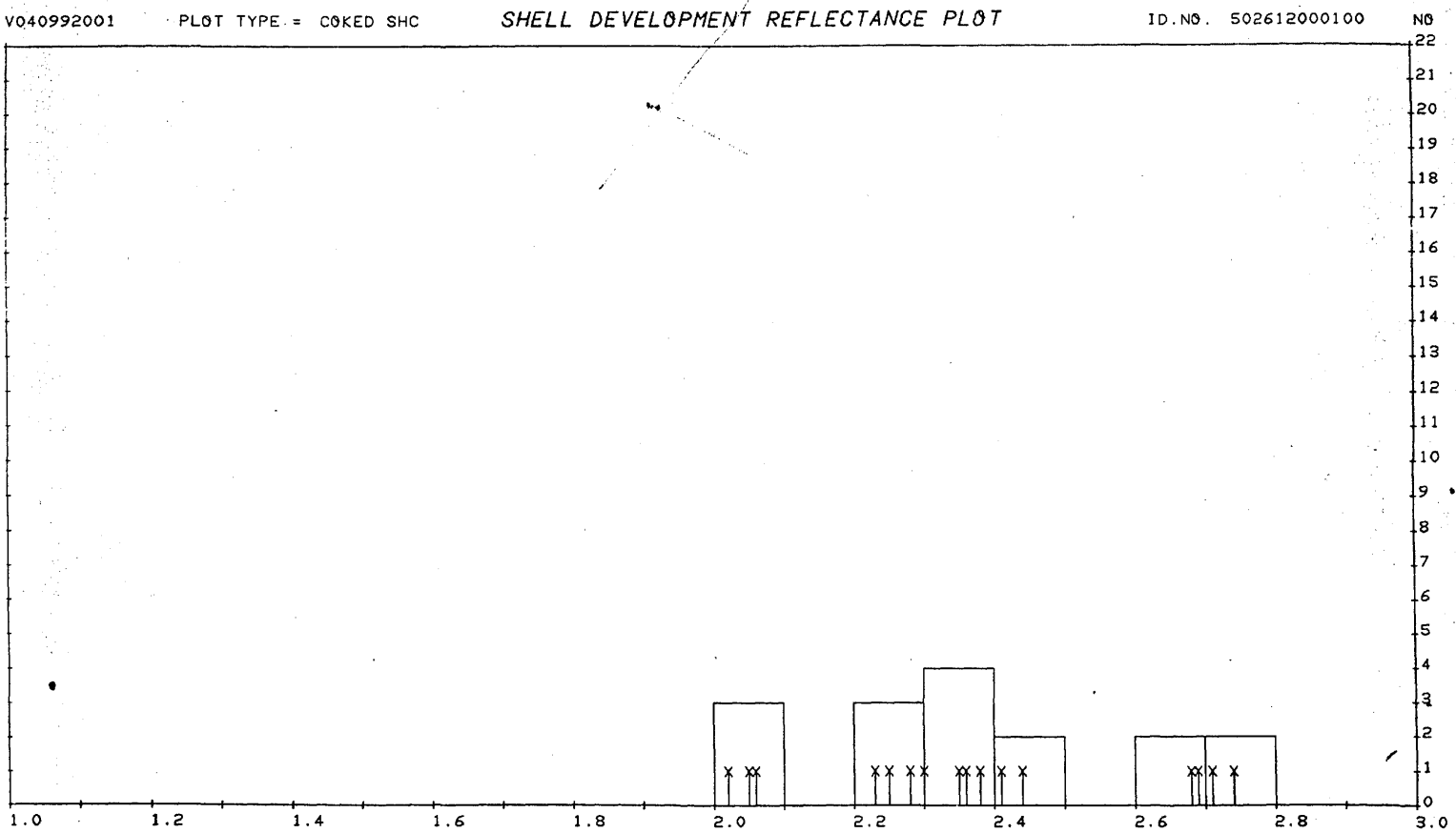
MIDDLE JURASSIC ♥♥♥

2LP041685V009 VITAL VERSION 1.22

V040992001 PLOT TYPE = COKED SHC

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 06440.00 BOT 06520.00 FT

PLOT TYPE = COKED SHC SPL TYPE = UD

N	MAX	MIN	RANG	MEAN	CONF	STDV
16	2.74	2.02	0.72	2.37	±0.125	0.23

MACERAL SUMMARY

	VKA%	N	MIN	MAX
COKED SHC	5	16	2.02	2.74
BITUMEN, SHC	30	52	0.51	2.21
FUSINITE	1	4	3.43	4.52
SEMIFUSINITE	<1	2	2.56	2.82
VITRINITE	10	43	1.40	2.25

	VKA%	N	MIN	MAX
MICRIN. KERO	54	0		

KC ----------

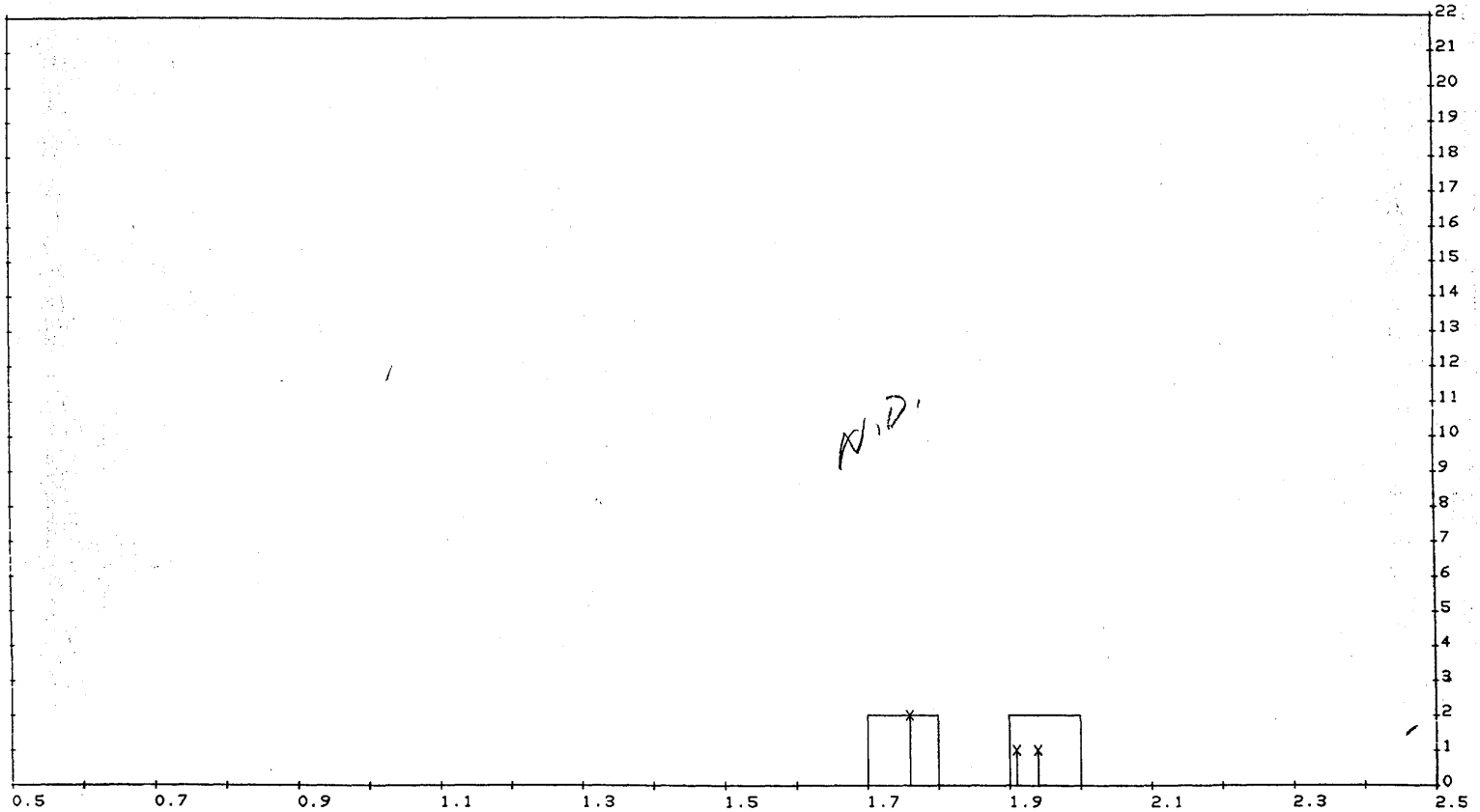
MIDDLE JURASSIC ***

2LP041685V009 VITAL VERSION 1.22

V040993001 PLOT TYPE = VITRINITE

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100 NO



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 06760.00 BOT 06800.00 FT
PLOT TYPE = VITRINITE SPL TYPE = PD

N	MAX	MIN	RANG	MEAN	CONF	STDV	LOM
4	1.94	1.76	0.18	1.84	±0.153	0.08	13.24

MACERAL SUMMARY

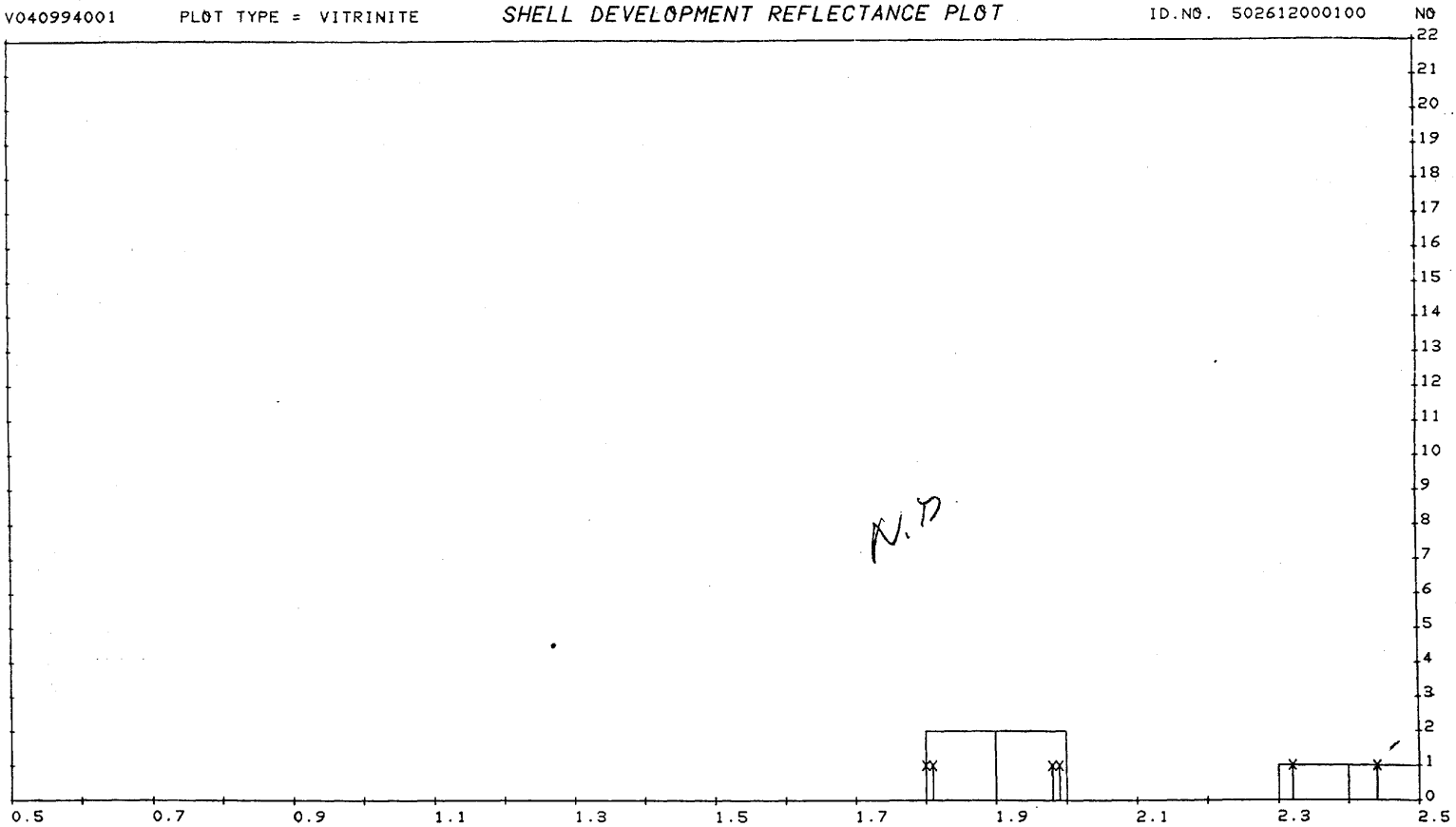
	VKA%	N	MIN	MAX
VITRINITE	1	4	1.76	1.94
BITUMEN, SHC	5	32	0.51	2.09
SEMIFUSINITE	<1	1	2.56	2.56
MICRIN. KERO	94	0		

CP AKA-S-3261-- SH BLK MIDDLE JURASSIC ▼▼▼ 2LP041785V001 VITAL VERSION 1.22

V040994001 PLOT TYPE = VITRINITE

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 07000.00 BOT 07080.00 FT
PLOT TYPE = VITRINITE SPL TYPE = UD

N	MAX	MIN	RANG	MEAN	CONF	STDV	LOM
6	2.44	1.80	0.64	2.06	±0.279	0.24	14.22

MACERAL SUMMARY

	VKA%	N	MIN	MAX
VITRINITE	<1	6	1.80	2.44
BITUMEN, SHC	10	56	0.68	2.37
COKED SHC	15	33	1.90	3.68
FUSINITE	<1	2	3.55	4.09
SEMIFUSINITE	<1	3	2.51	2.90

	VKA%	N	MIN	MAX
MICRIN. KERO	74	0		

KC ----------

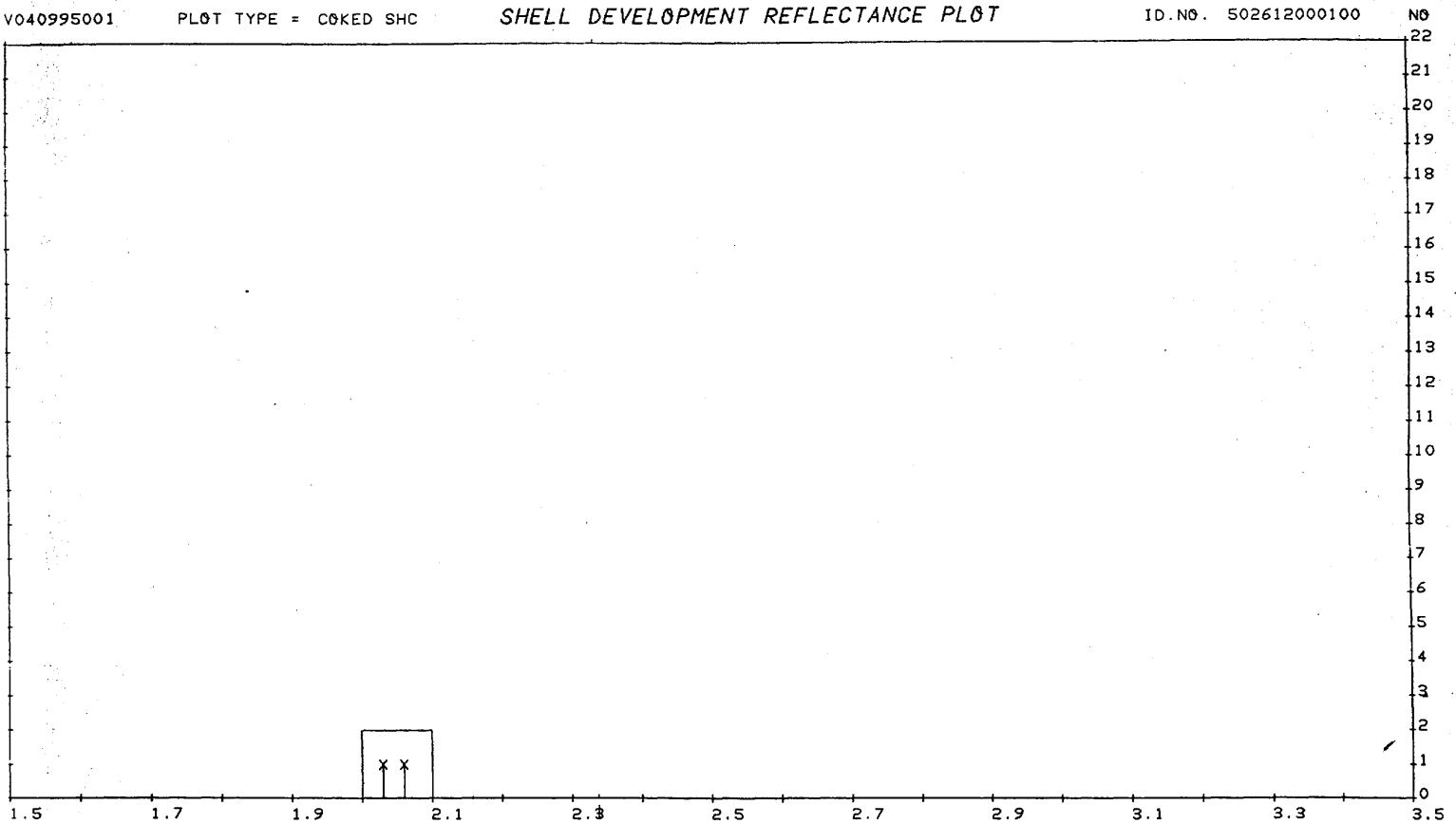
MIDDLE JURASSIC ***

2LP041785V002 VITAL VERSION 1.22

V040995001 PLOT TYPE = COKED SHC

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 07040.00 BOT 07080.00 FT
PLOT TYPE = COKED SHC SPL TYPE = PD

N	MAX	MIN	RANG	MEAN	CONF	STDV
2	2.06	2.03	0.03	2.04	±0.191	0.01

MACERAL SUMMARY

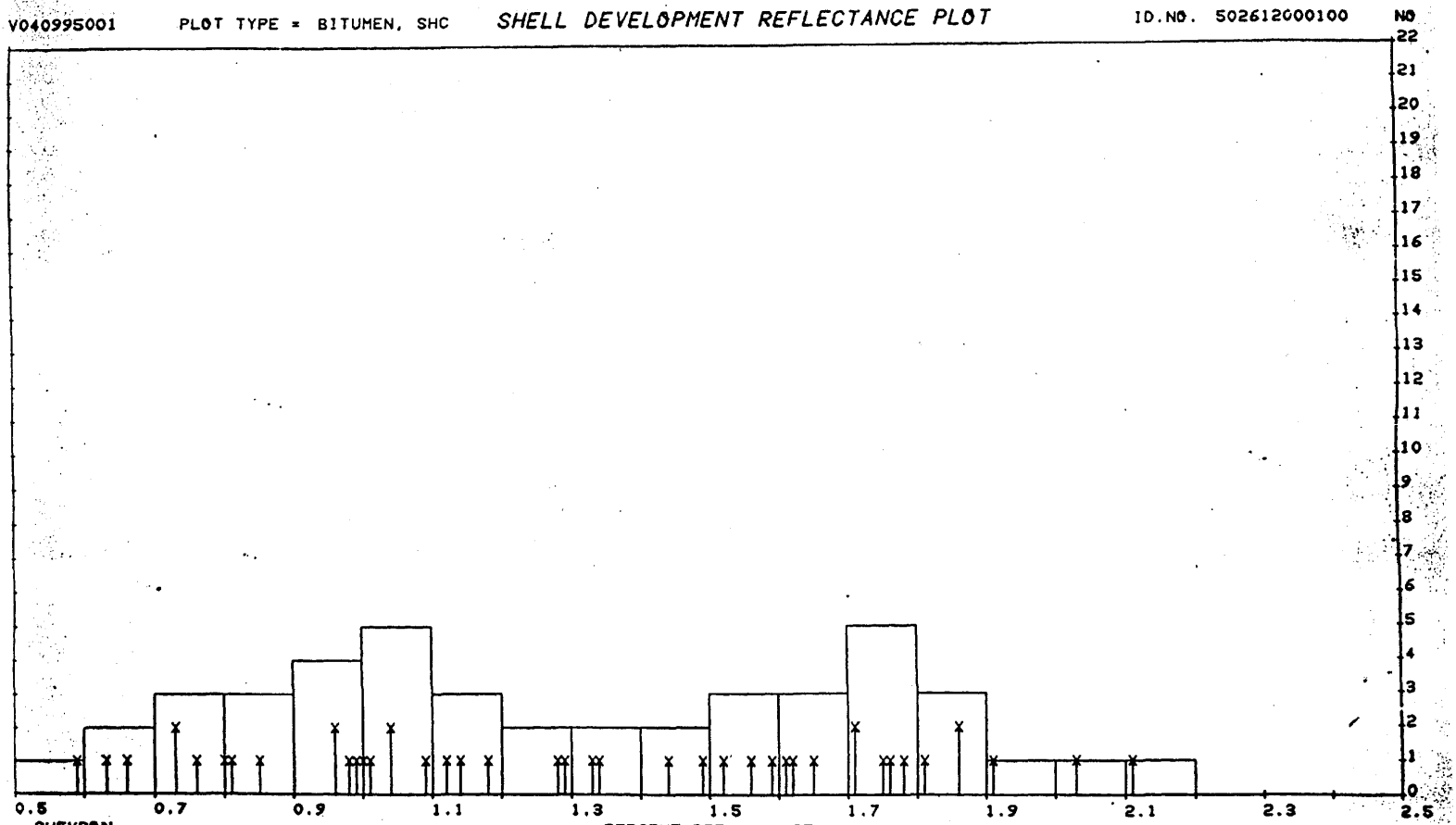
	VKAX	N	MIN	MAX
COKED SHC	2	2	2.03	2.06
BITUMEN, SHC	5	44	0.59	2.11
SEMIFUSINITE	<1	1	2.48	2.48
MICRIN. KERO	93	0		

CP AKA-S-3262-- SH BLK MIDDLE JURASSIC ♥♥♥ 2LP041785V003 VITAL VERSION 1.22

V040995001 PLOT TYPE = BITUMEN, SHC

SHELL DEVELOPMENT REFLECTANCE PLOT

ID.NO. 502612000100



CHEVRON
KONIAG 1
AKA LOCATION 2 38S 49W TOP 07040.00 BOT 07080.00 FT
PLOT TYPE = BITUMEN, SHC SPL TYPE = PD

SPLT	N	MAX	MIN	RANG	MEAN	CONF	STDV
	44	2.11	0.59	1.52	1.30	±0.131	0.42
A	19	2.11	1.44	0.67	1.72	±0.086	0.17
B	18	1.18	0.73	0.45	0.95	±0.071	0.14

MACERAL SUMMARY

	VKA%	N	MIN	MAX
BITUMEN, SHC	5	44	0.59	2.11
COKED SHC	2	2	2.03	2.06
SEMIFUSINITE	<1	1	2.48	2.48
MICRIN. KERO	93	0		

CP AKA-S-3262-- SH BLK MIDDLE JURASSIC ***

2LP041785V003 VITAL VERSION 1.22

Shell Oil Company

P.O. Box 481
Houston, Texas 77001

March 14, 1985

Mr. Michael T. Minder
Alaska Oil and Gas Conservation Commission
3001 Porcupine Dr.
Anchorage, Alaska 99501-3192

Dear Mr. Minder:

SUBJECT: PALYNOLOGICAL MACERATIONS AND
MOUNTED SLIDES OF CHEVRON-KONIAG #1

Further to our telephone conversations regarding subject, I appreciate very much the extension to March 15th for filing materials with you. In accordance with policy Shell has retained nothing. I am asking Shell's Shipping Department to forward to you fastest way this date macerated residues and mounted slides per the attached manifest.

As we discussed on the phone it is my opinion that many of these samples, particularly the cores and the deeper ditch, are not worth looking at. I believe it is in violation of no one's confidence that we share with your office the observations that are made in the right hand column of the slide list. I do this in order to explain the wider sampling interval, which we talked about, below 5560 feet, and in the hope that we might save some time for your visitors.

Additionally, please find enclosed photographs which you requested. These photographs accurately represent our experience but are not necessarily made from the permanent mounts sent to you. We use wet mounts for most of our work so things can be moved about. In keeping with the policy of not retaining material, the wet slides are destroyed after examination.

Regarding cores (2316-2358 feet) note the following: Our examination of the sample at 2316 feet revealed only questionable fragments (Pl. I, Fig. 1). Typical smaller macerals from six feet deeper are shown in Pl. I, Fig. 2. At 2336-2337 feet representative macerals are shown on Pl. I, Fig. 3 and these are mixed with a few spores. Unfortunately, all of these spores are preserved like those shown in Pl. I, Fig. 4, and are useless for palynostratigraphic work. The sample at 2343-2345 generally looks like Pl. II, Fig. 7. Two spores were observed on an entire wet slide, and these are illustrated on Pl. II, Figs. 5 and 6. The sample at 2356-2358 is no better (Pl. II, Fig. 8).

The maceration of a deeper core at 5105-5106 feet looks like Pl. III, Fig. 9 and contained no palynomorphs.

Our deepest core materials at 5995, 6000, and 6009 contained nothing of any palynomorphic significance, although the verrucate blob near the center of Figure 11 may once have been a spore (Pl. III, Figs. 10, 11 and 12).

The majority of the ditch samples were not much better (Pl. IV, Figs. 13-16). Fine grained structureless organic material (Fig. 13) was easily filtered out to permit Figure 14, but no palynomorphs were seen. Shallower ditch may yield fossils, but nearly all of them are either destroyed through contact with minerals (Fig. 15) or arrive too poorly preserved for meaningful use (Fig. 16).

Charles L. Trotter

For: T. D. Cook, Manager
Stratigraphic Services

CLT:tat

Enclosures: (1) List of slides and residues shipped
(4) Plates of photographs

CHEVRON KONIAG -1

DEPTH (FEET)	SAMPLE TYPE	SLIDE MADE?	? RESIDUE		NOTES
500-540	DITCH	YES	YES		
540-620					
620-700					
700-780					
780-860					
860-940					DINOS PRESENT,
940-1020					POORLY PRESERVED,
1020-1100					BUT WORTH THE
1100-1180					LOOK.
1180-1260					
1260-1340					
1340-1400					
1400-1480					
1480-1560					
1560-1640				*	
1640-1720					
1720-1800					
1800-1880					
1880-1960					OF 36 SAMPLES [IN-
1960-2040					CLUDING 5 CORE] STUDIED
2000-2080				*	IN THIS INTERVAL, 5
2080-2160					ARE WORTH THE TIME.
2160-2240				*	THESE ARE MARKED *.
2240-2320					
2316-2318	CORE	YES	YES		
2321-2323	CORE		YES		
2336-2337	CORE		YES		
2343-2345	CORE		YES		

RECEIVED

CHEVRON-KODIAK - 1

DEPTH (FEET)	SAMPLE TYPE	SLIDE MADE?	? RESIDUE		NOTES
2356-2358	CORE	YES	YES		
2360-2440	DITCH	YES	YES		
2440-2480					
2480-2560				*	
2560-2640					
2640-2720					
2720-2800					
2800-2880					
2880-2960				*	
2960-3000					
3000-3080					SEE ABOVE
3080-3160					COMMENT
3160-3240					
3240-3320					
3320-3400					
3400-3480					
3480-3560					
3560-3640					
3640-3720					
3720-3800					
3800-3880					
3880-3960					
3960-4000					
4000-4080					
4080-4160					
4160-4240					
4240-4320					
4320-4340					

CHEVRON - KONIAG - 1

DEPTH (FEET)	SAMPLE TYPE	SLIDE MADE?	? RESIDUE	NOTES
4400-4476	DITCH	YES	YES	
4476-4520				
4520-4600				ABOUT HALF OK.
4600-4680				
4680-4760				
4760-4840				
4840-4920				
4920-5000				
5000-5080				
5105-5106	CORE	YES	YES	
5080-5160	DITCH	YES	YES	
5160-5240				
5240-5320				
5320-5400				INCREASING CARBONIZATION;
5480-5560				FEW IF ANY PALYNOMORPHS
5720-5800				PER SAMPLE, POORLY
5995	CORE	YES	YES	PRESERVED. SEE TEXT.
6000	CORE	YES	YES	
6000-6080	DITCH	YES	YES	
6009	CORE	YES	YES	
6240-6320	DITCH	YES	YES	
6480-6560				
6720-6800				
7000-7080				
7160-7240				
7360-7400				

CHEVRON KONIAG -1
PLATE IV

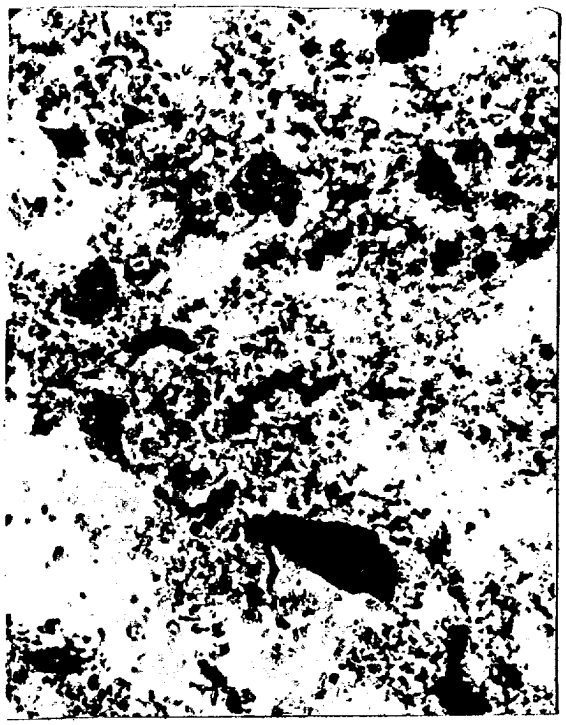


FIG. 13 6480-6560'
DITCH

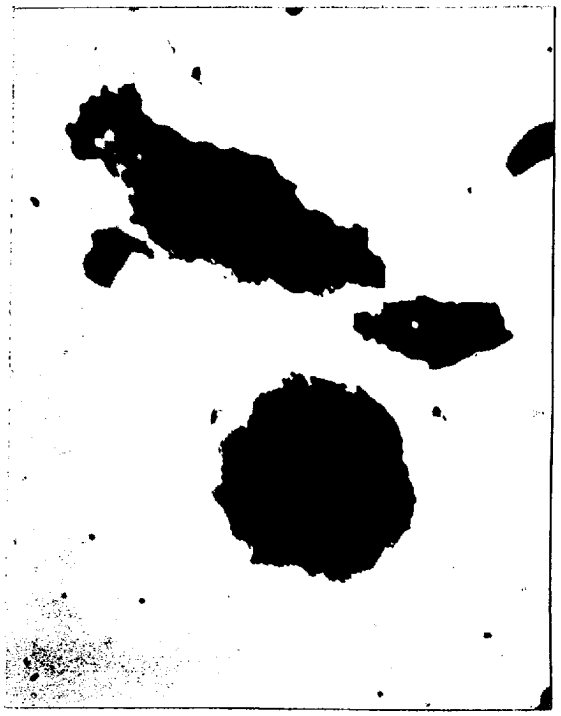


FIG. 14 6480-6560'
DITCH, FILTERED 15μ.

FIG. 15 2440-2480'
DITCH. TYPICAL PRESERVATION. DINO: 82μ;
PYRITE SQUARES ± 7μ

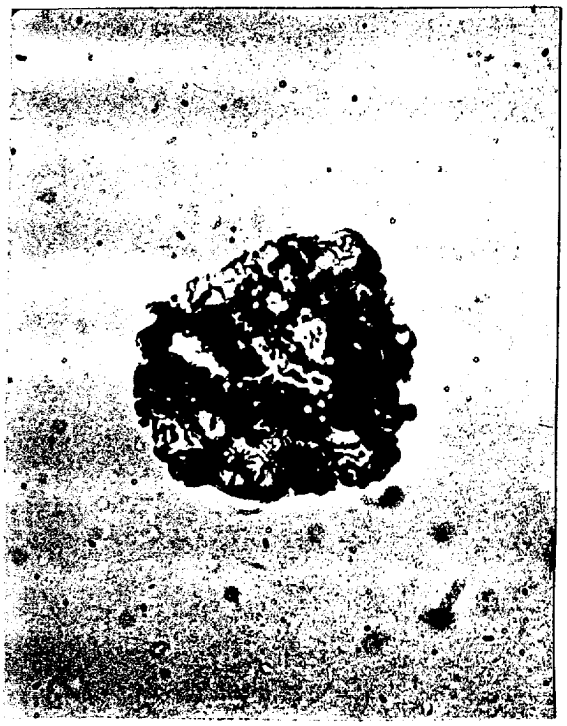


FIG. 16 2800-2880'
DITCH. TYPICAL PRESERVATION. SPORE: 64μ.

CHEVRON KONIAG-1
PLATE III

FIG. 9 CORE 5105-6'

FIG. 10 CORE 5995'

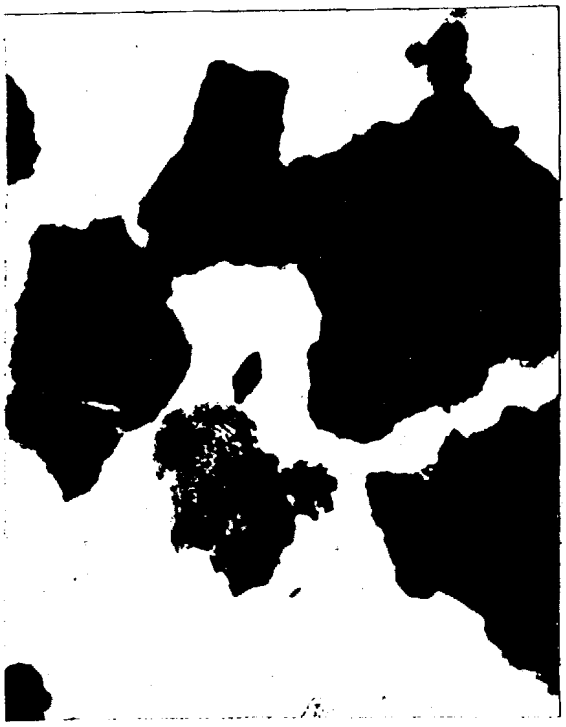


FIG. 11 CORE 6009'

FIG. 12 CORE 6000'

PICTURES ARE ABOUT 184 μ WIDE.

CHEVRON KONIAG-1
PLATE II

FIG. 5

FIG. 6

CORE 2343-45' ONLY TWO SPORES ON SLIDE

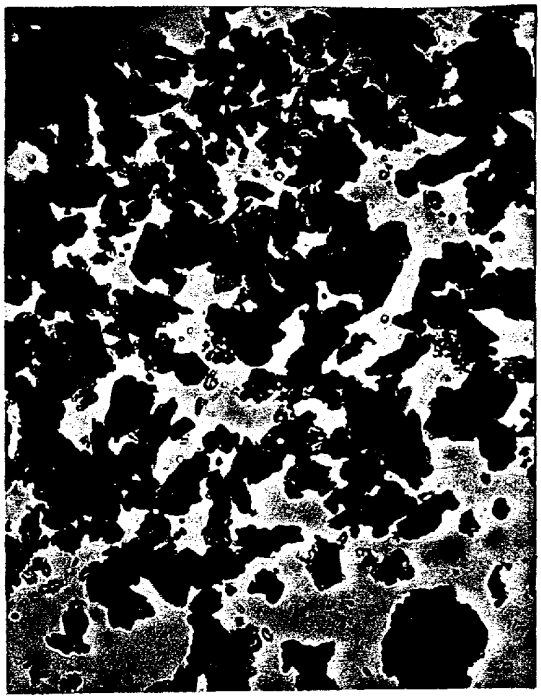


FIG. 7 CORE 2343-45' MACERALS IN 25x OBJ. FIELD.

FIG. 8 CORE 2356-58' PICTURE ABOUT 184μ WIDE

CHEVRON KONIAG -1

PLATE I

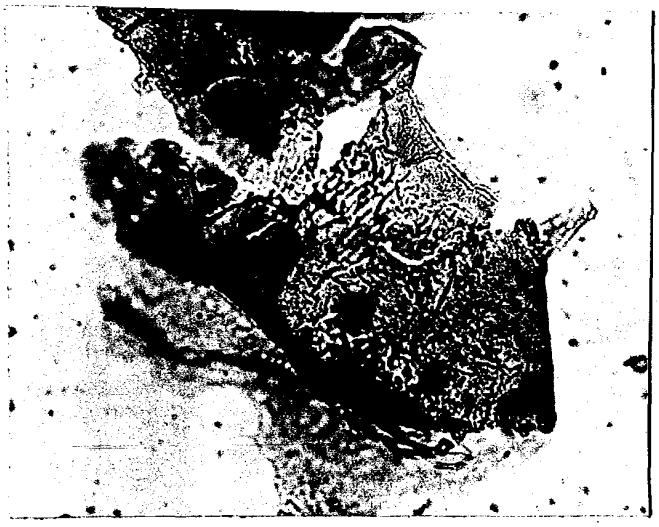


FIG.1 CORE 2316'
? DIND FRAGMENT

FIG.2 CORE 2321-23'
TYPICAL MACERALS

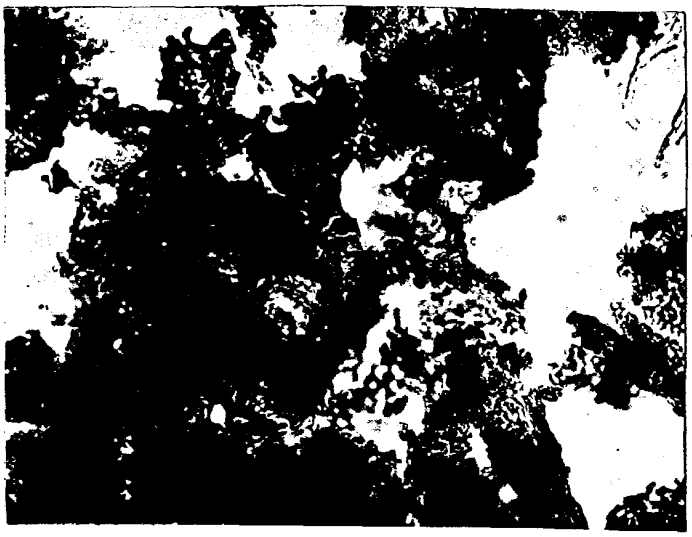


FIG. 3 CORE 2336-37'
TYPICAL MACERALS

FIG. 4 CORE 2336-37'
TYPICAL PRESERVATION OF SPORES.