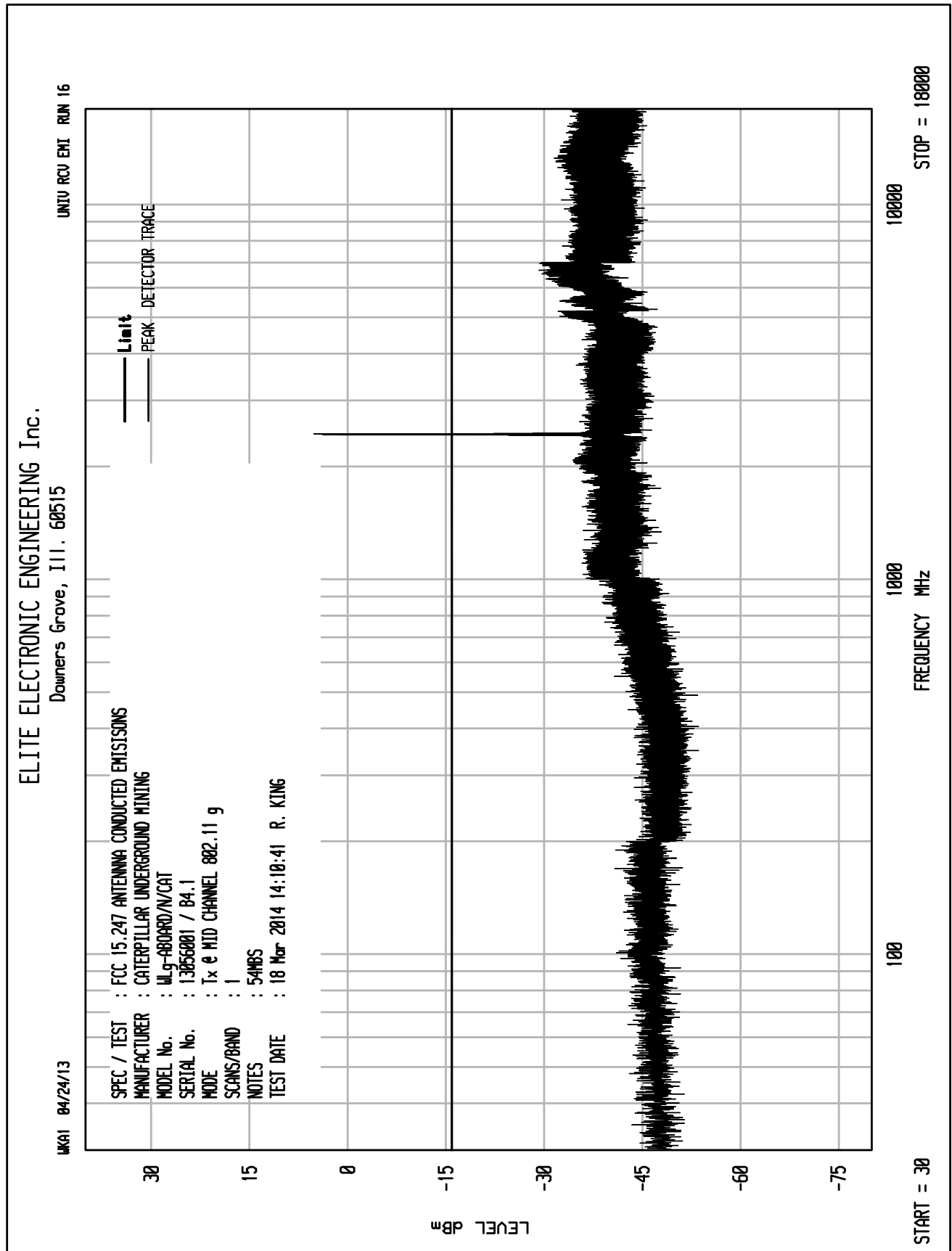
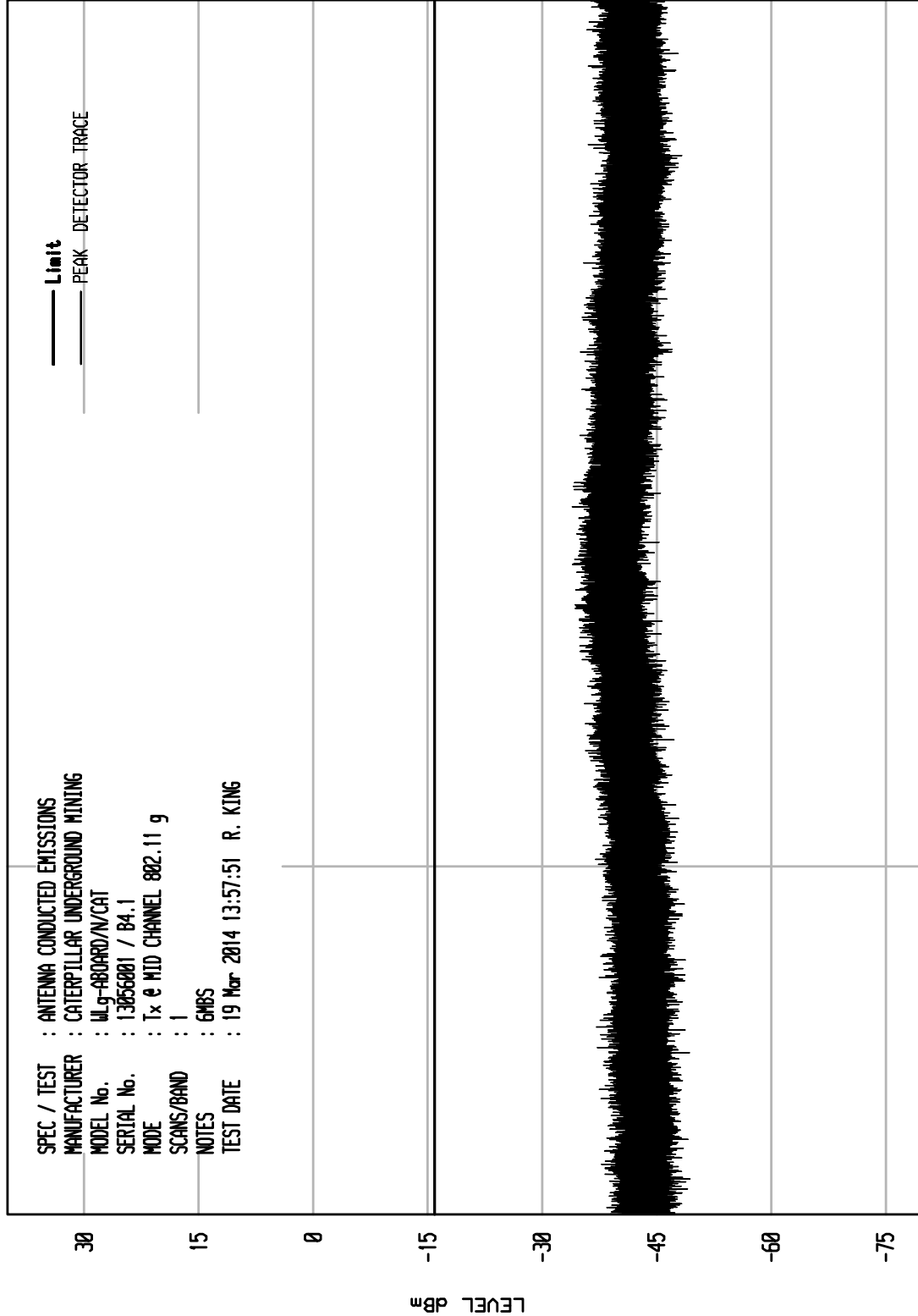




ELITE ELECTRONIC ENGINEERING Inc.
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UNIT: RCU ENI RUN 33

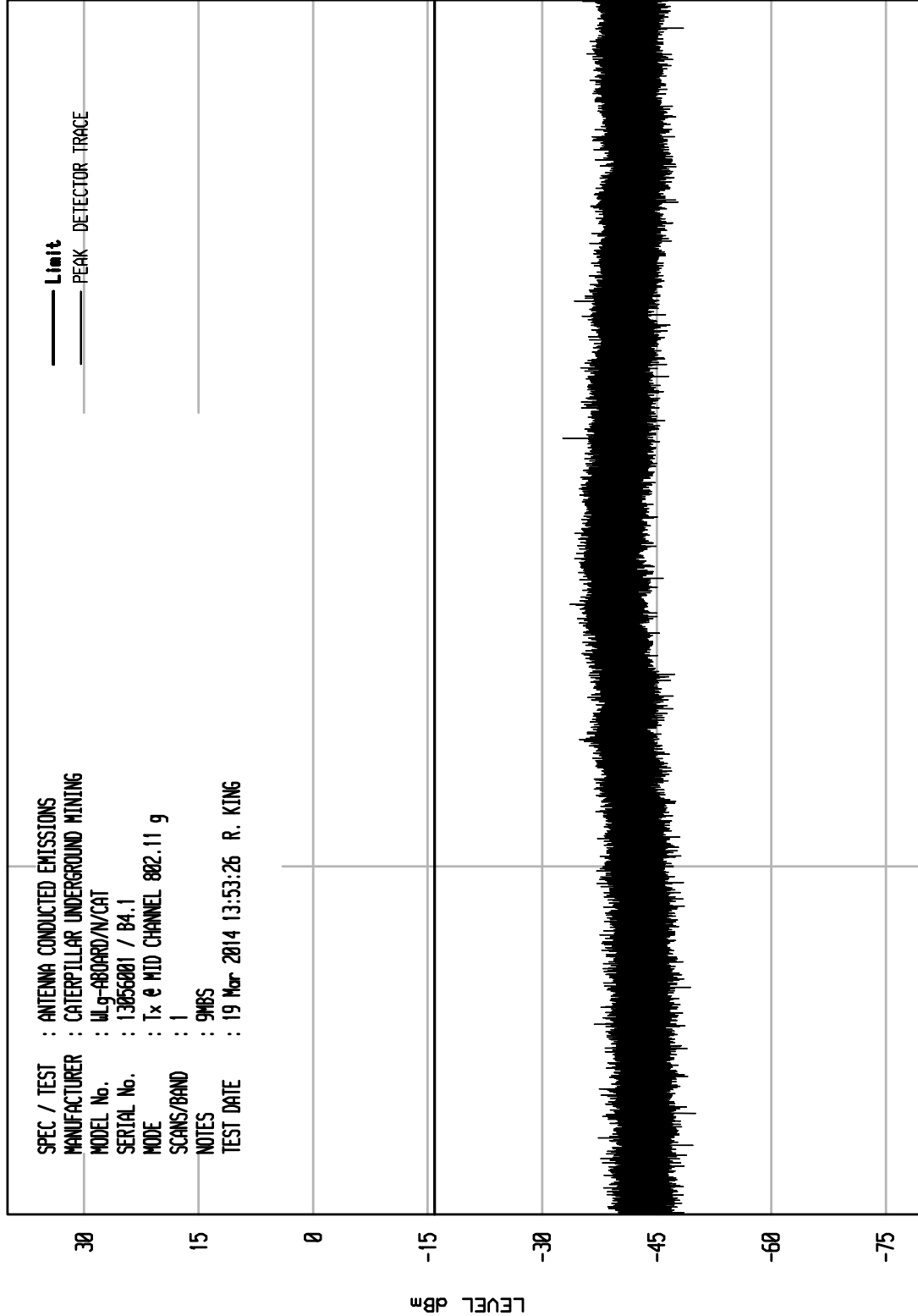
UKA1 04/24/13



ELITE ELECTRONIC ENGINEERING Inc.
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UNIT: RCU ENI RUN 32

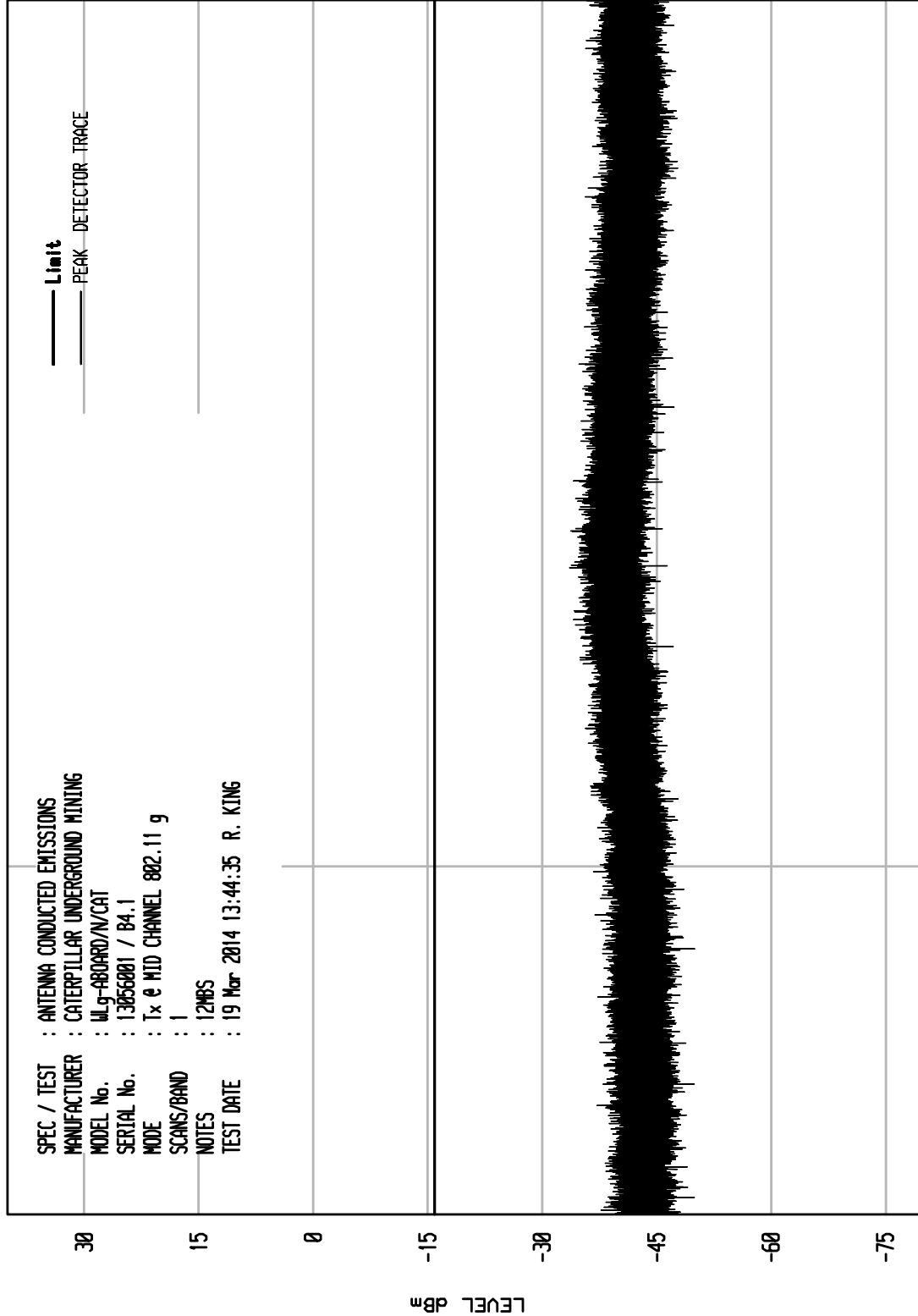
UKA1 04/24/13



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UNIT: RCU ENI RUN 31

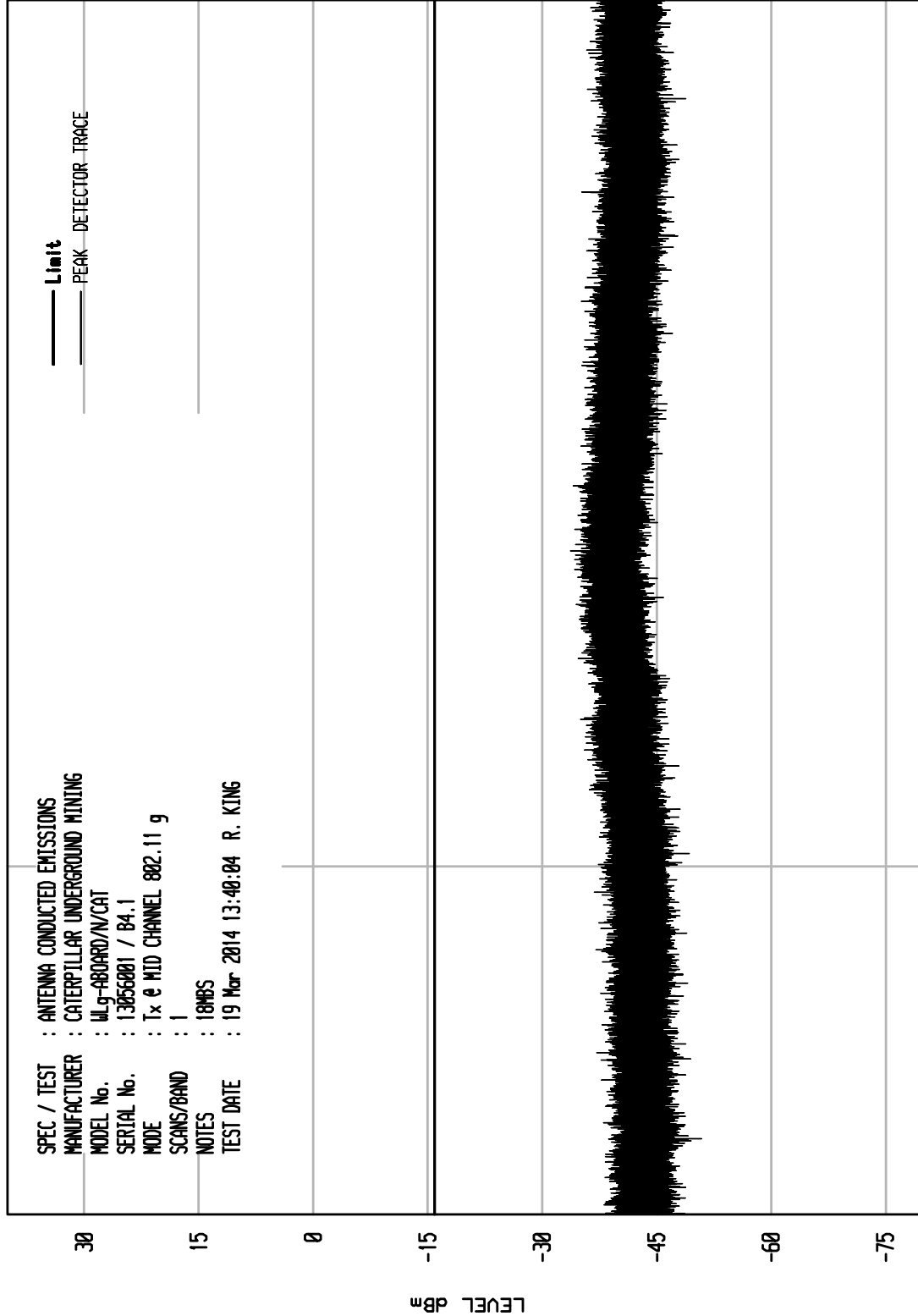
UKA1 04/24/13



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UNIT: RCU ENI RUN 30

UKA1 04/24/13



STOP = 26000

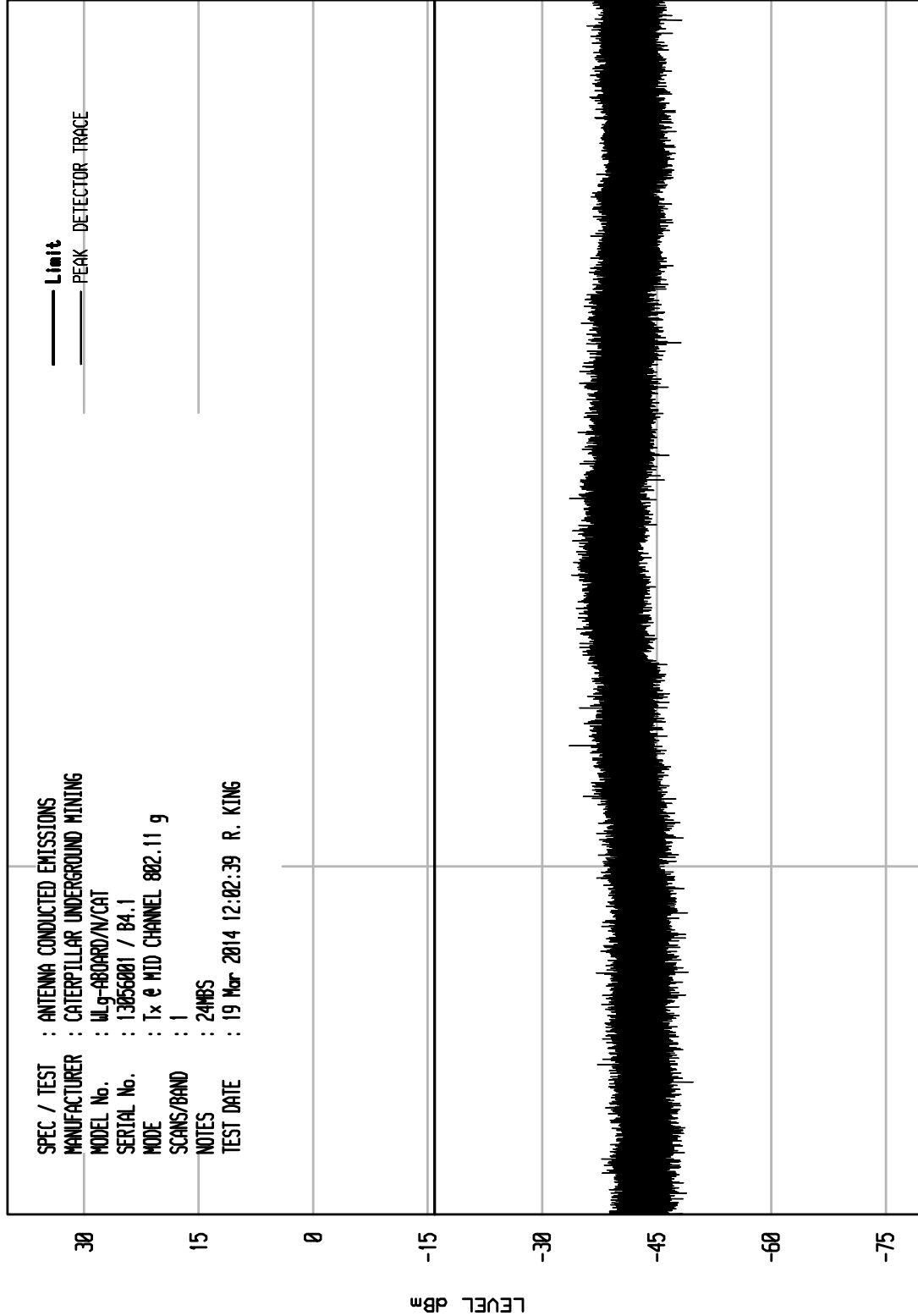
START = 18000



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UNIT: RCU ENI RUN 28

UKA1 04/24/13

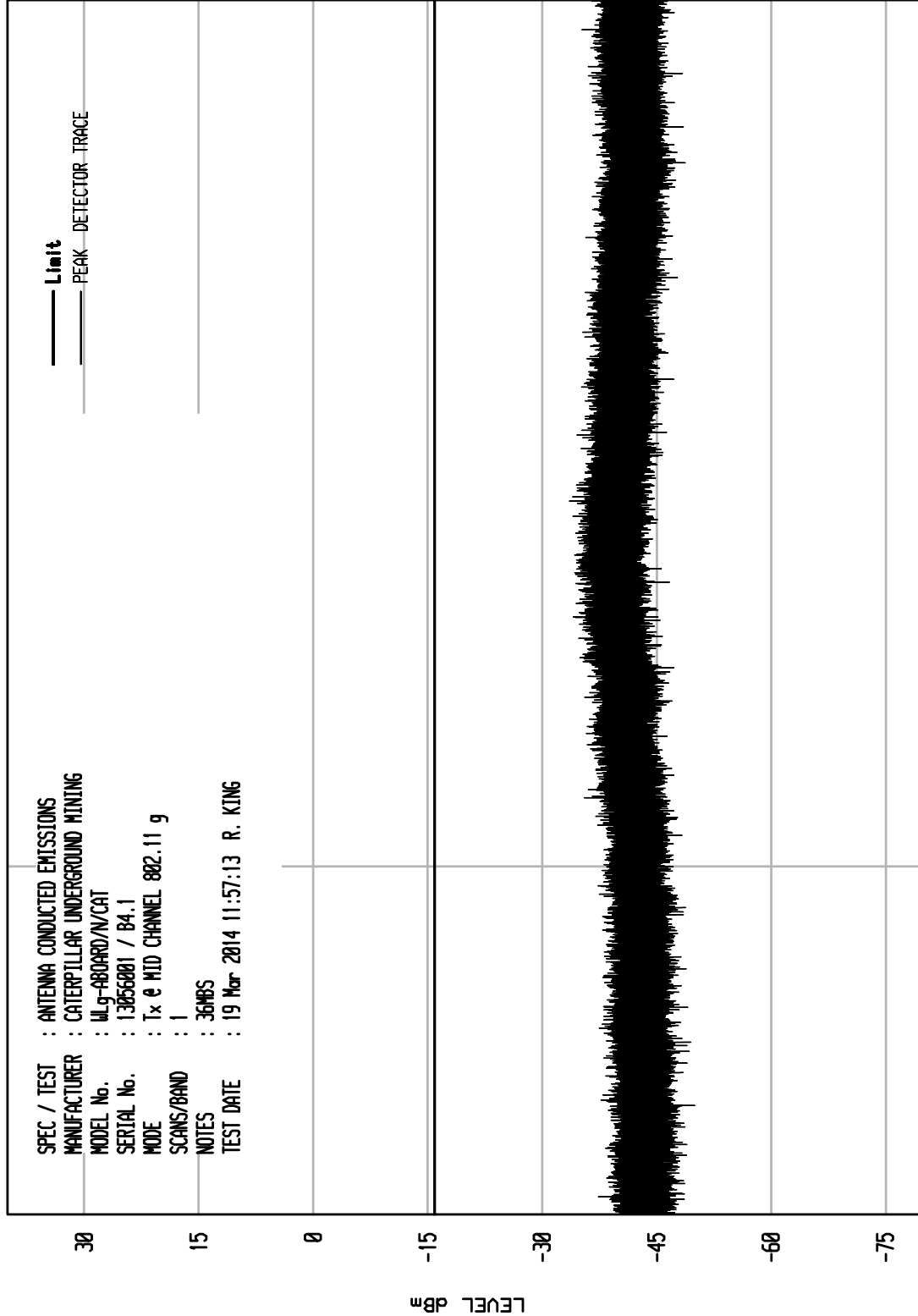




ELITE ELECTRONIC ENGINEERING Inc.
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UNIT: RCU ENI RUN 27

UKA1 04/24/13

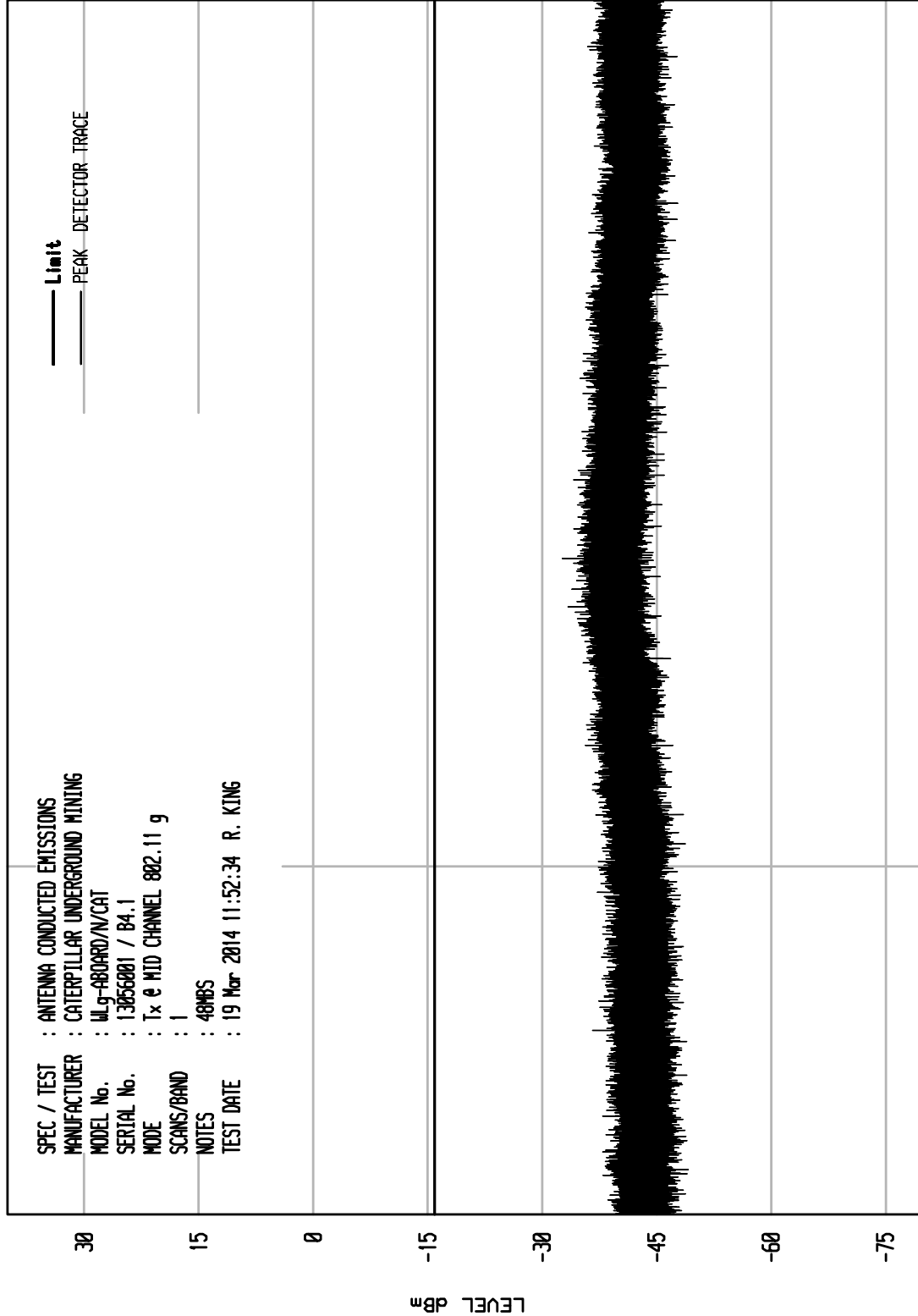




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UNIT: RCU ENI RUN 26

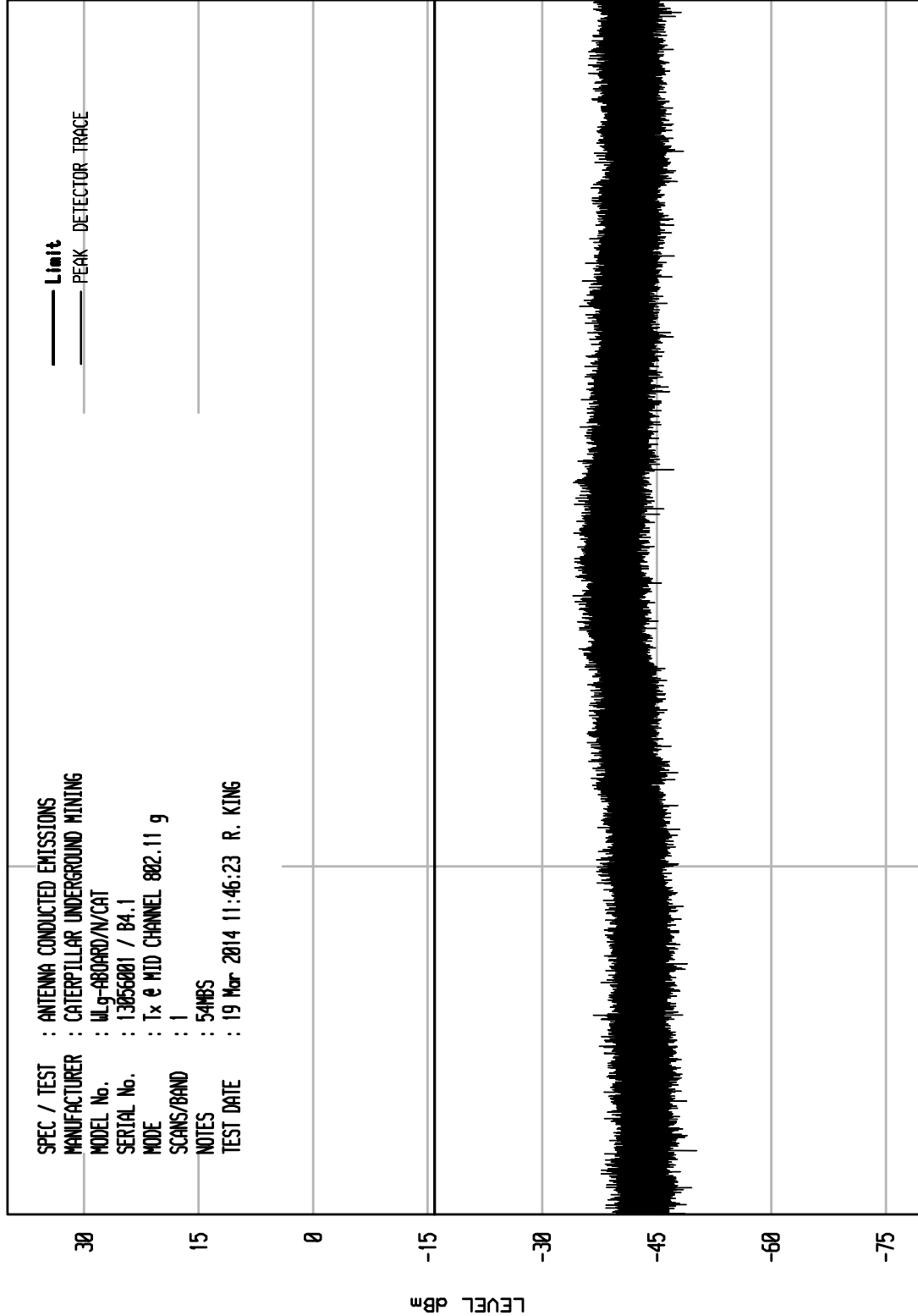
UKA1 04/24/13

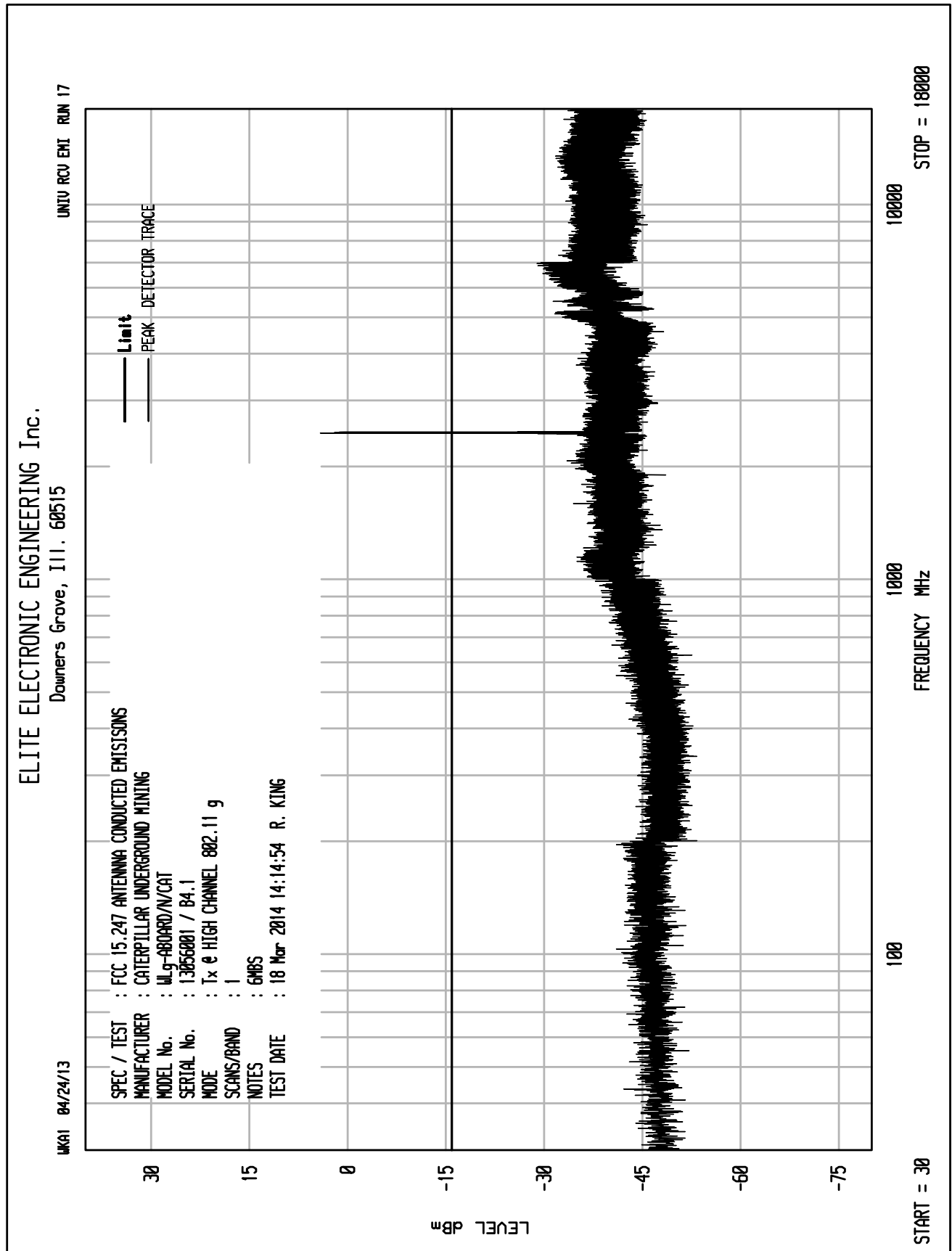


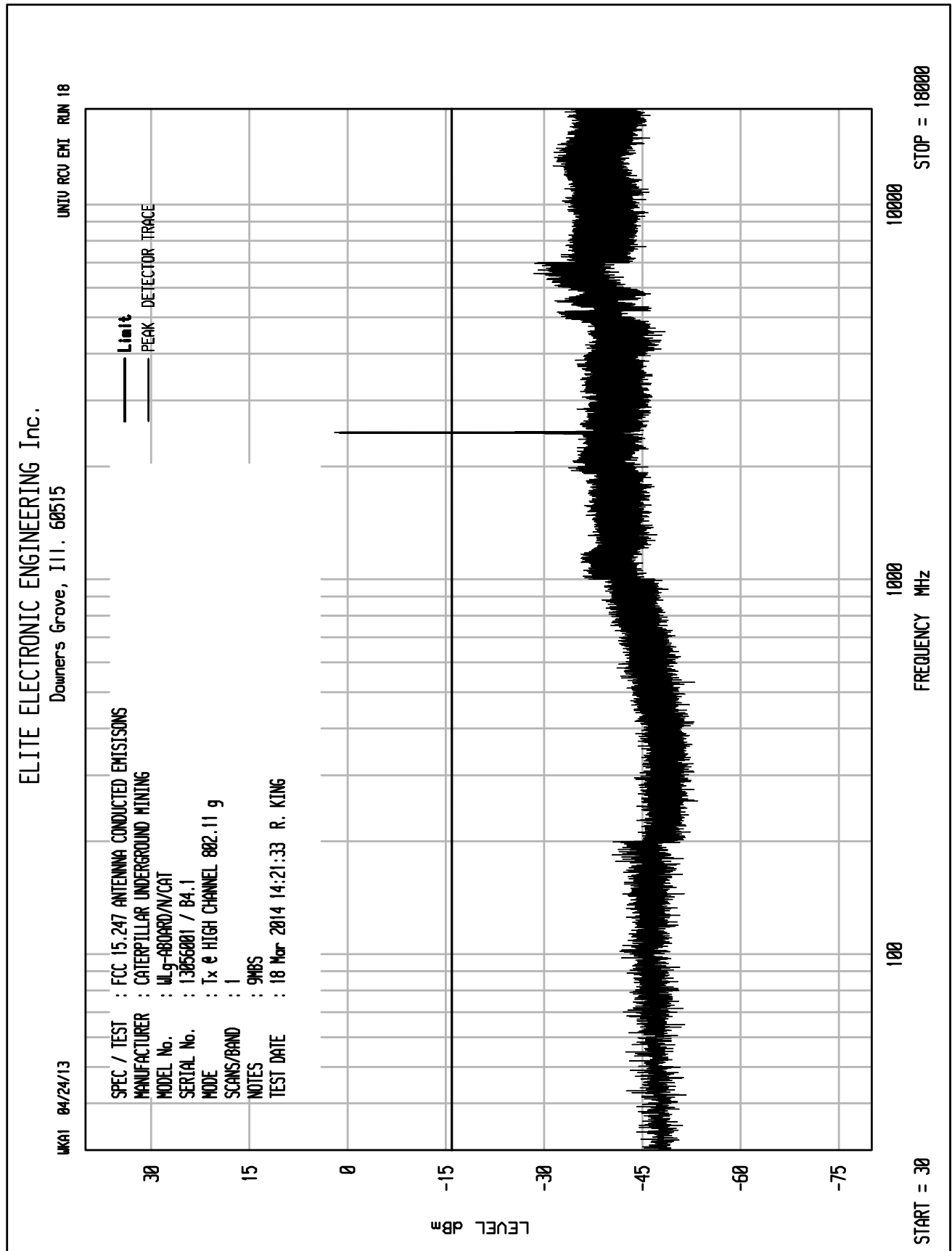
ELITE ELECTRONIC ENGINEERING Inc.
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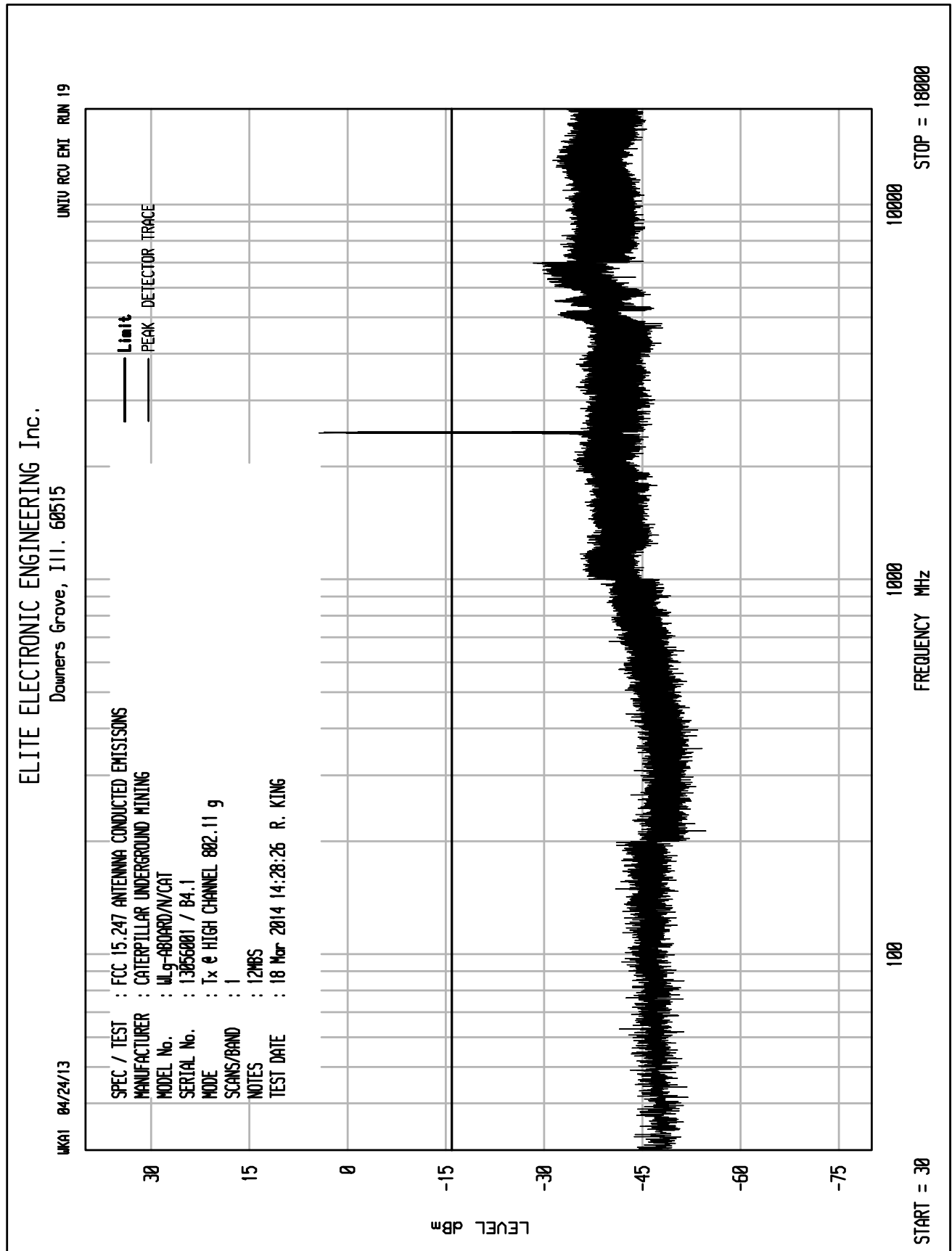
UNIT: RCU ENI RUN 25

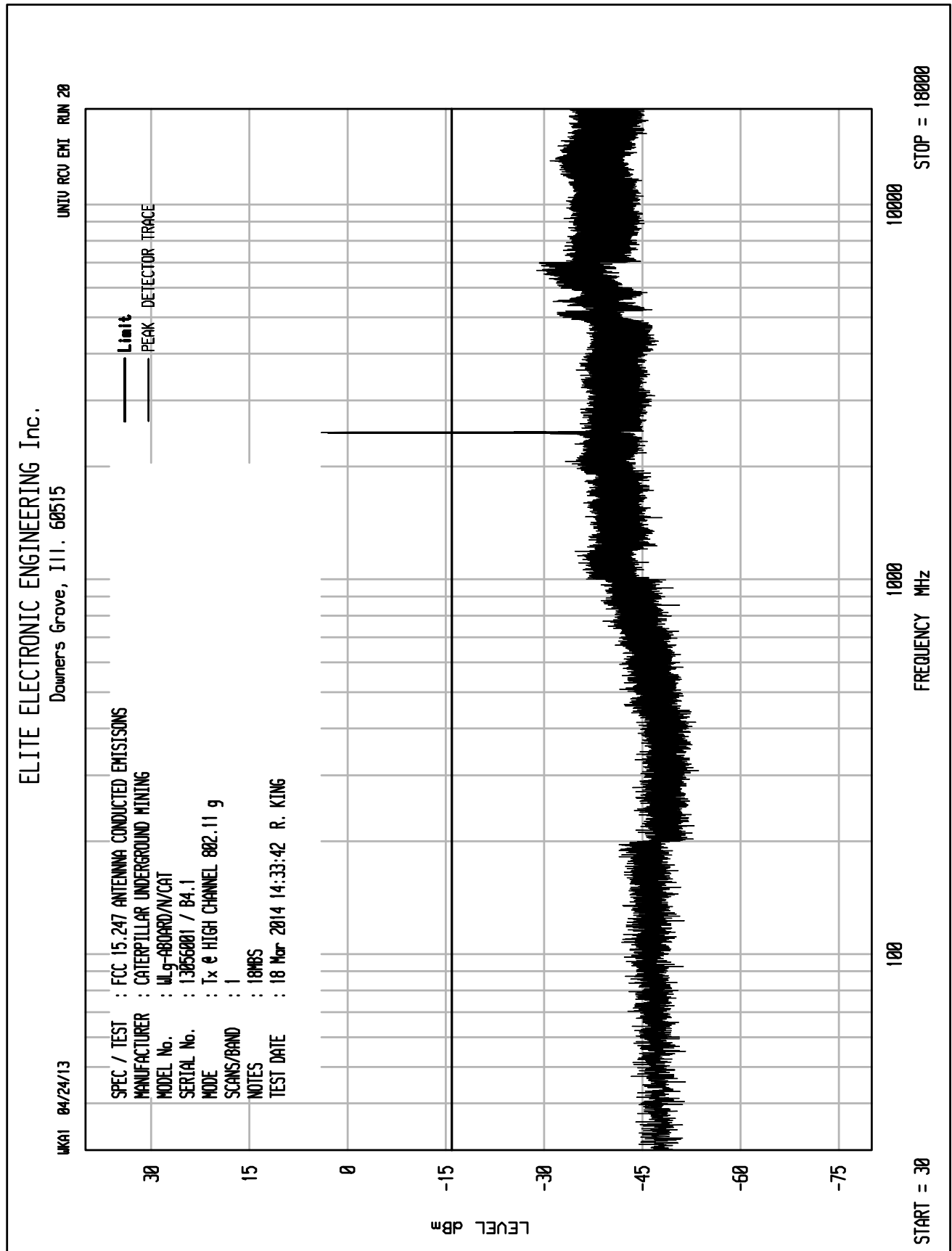
UKA1 04/24/13

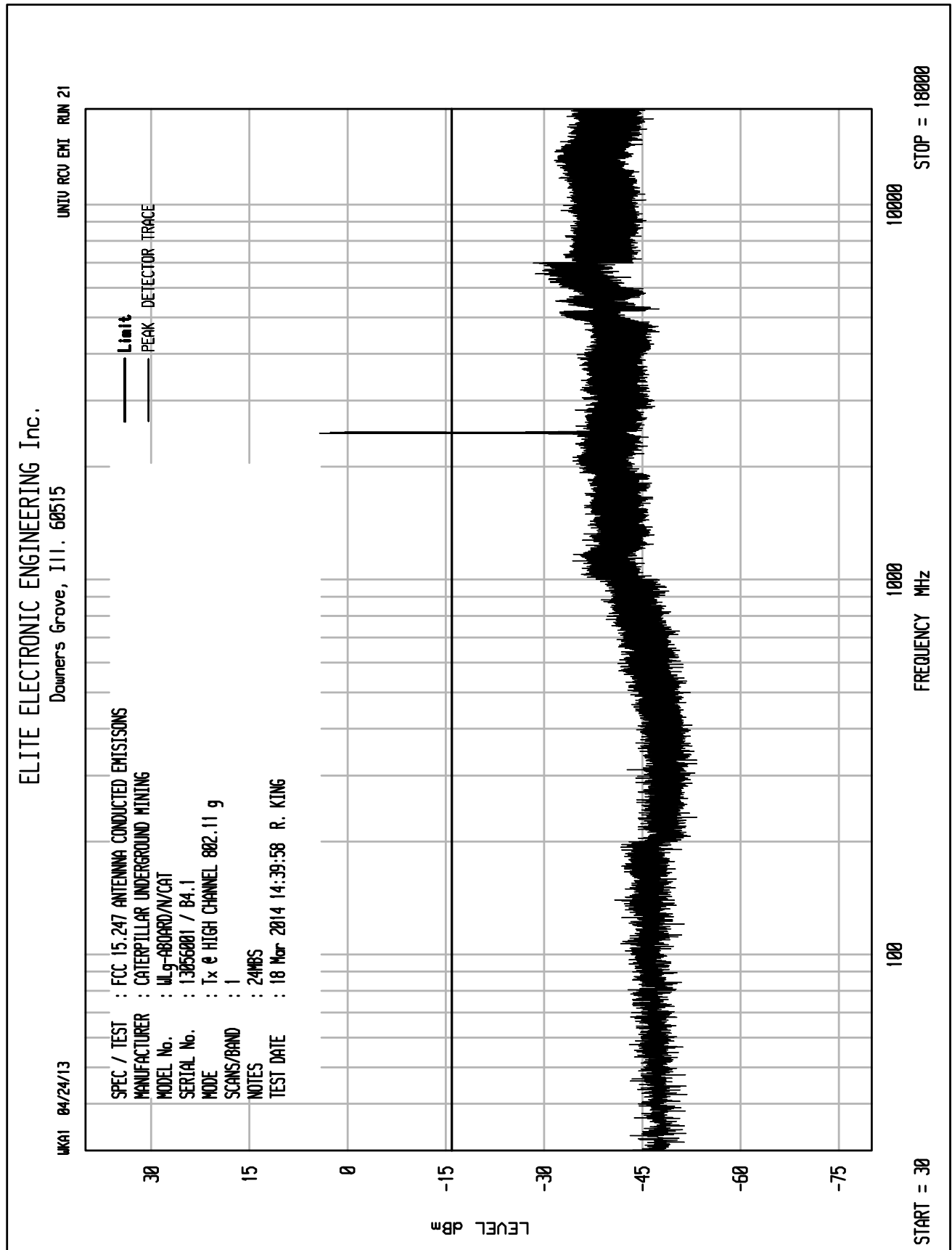


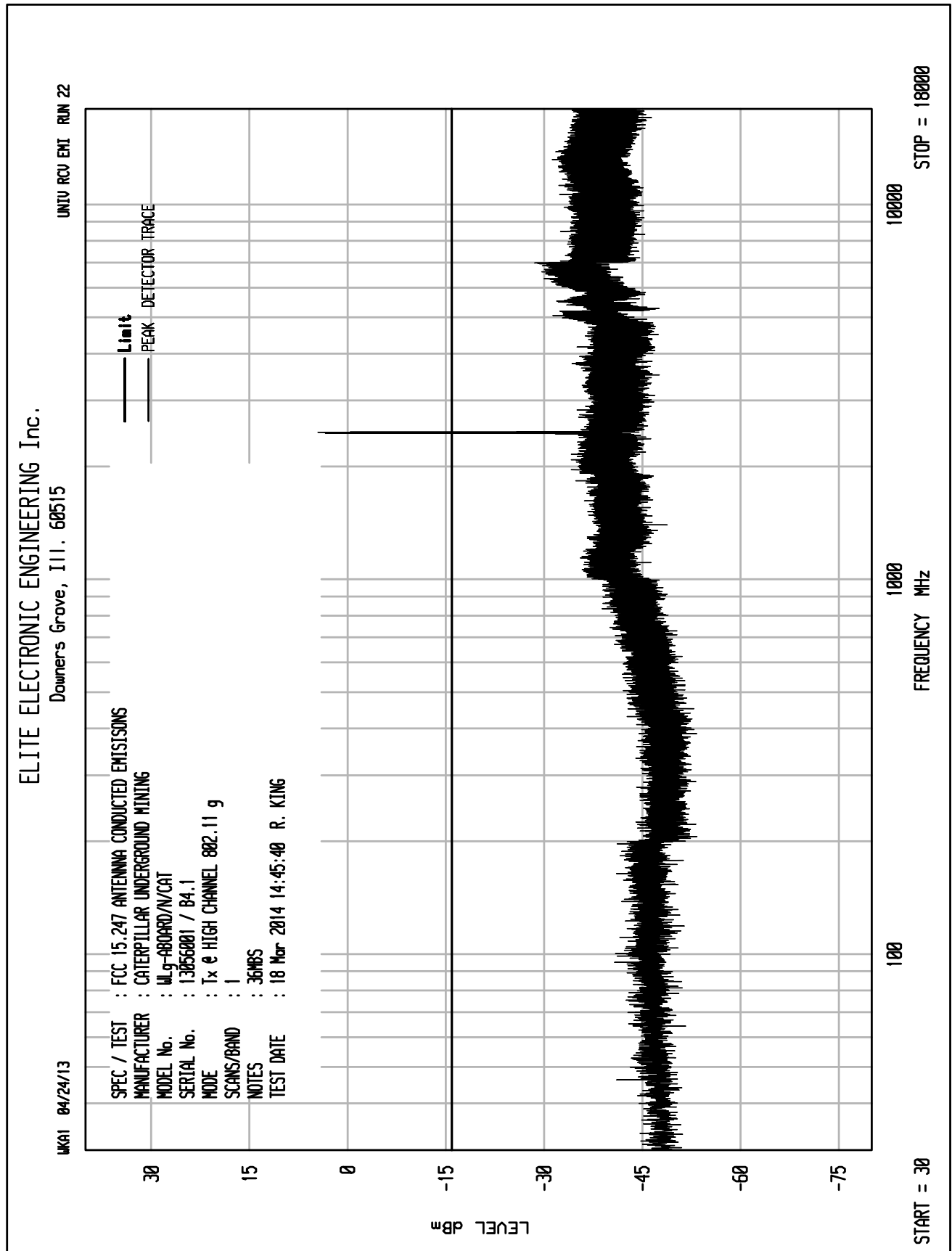








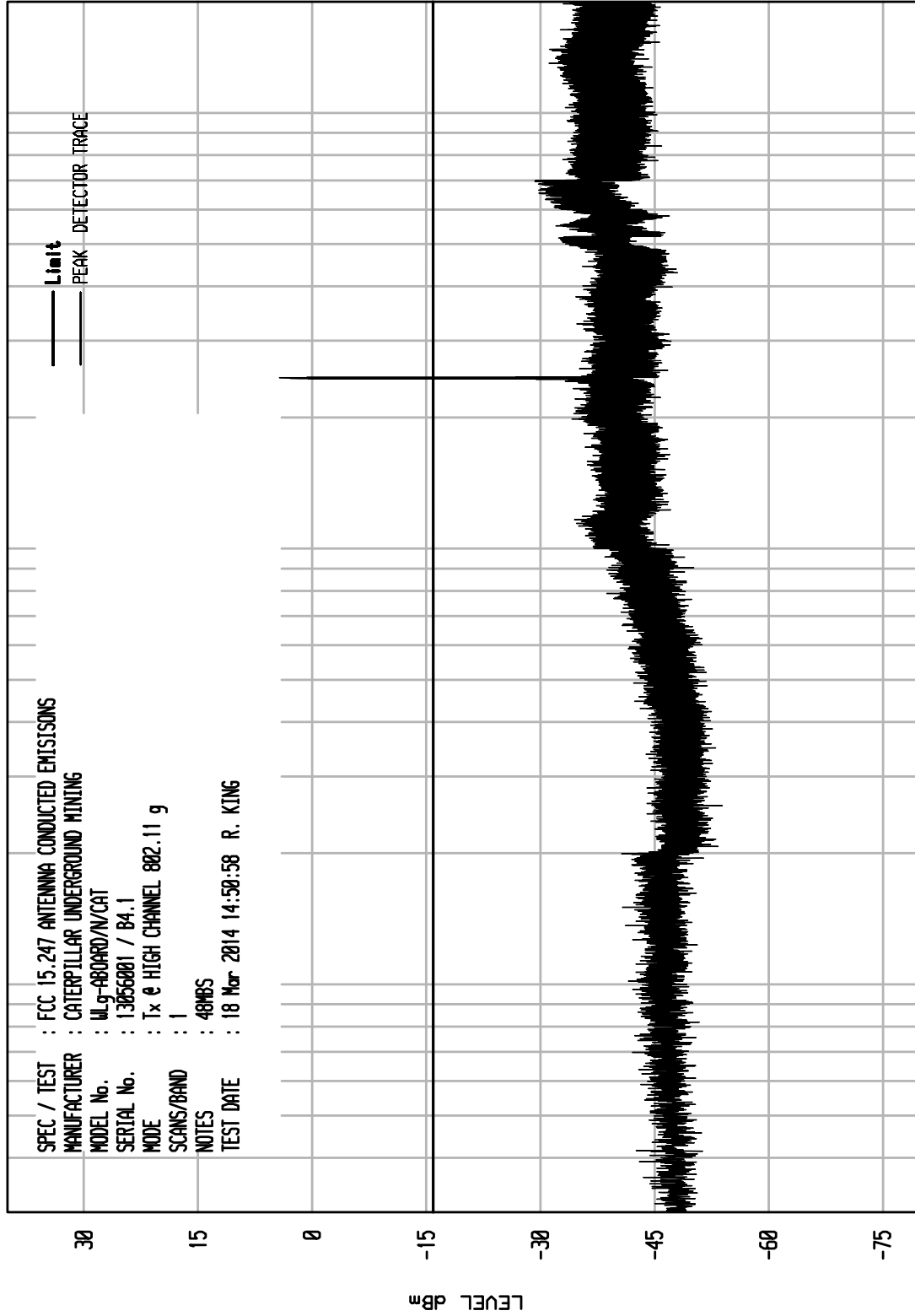




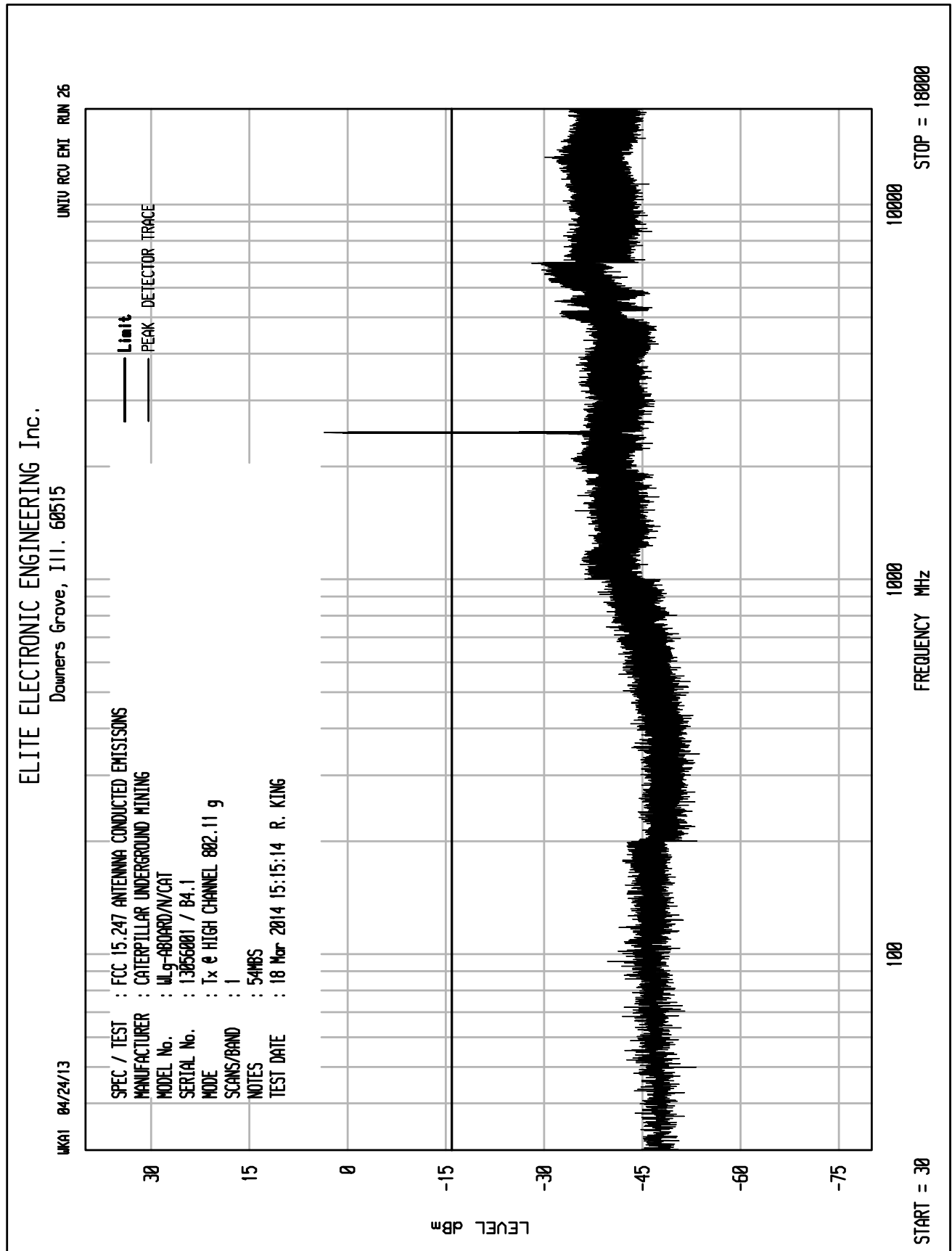
ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515

UNIT: RCU ENI RUN 23

UKA1 04/24/13



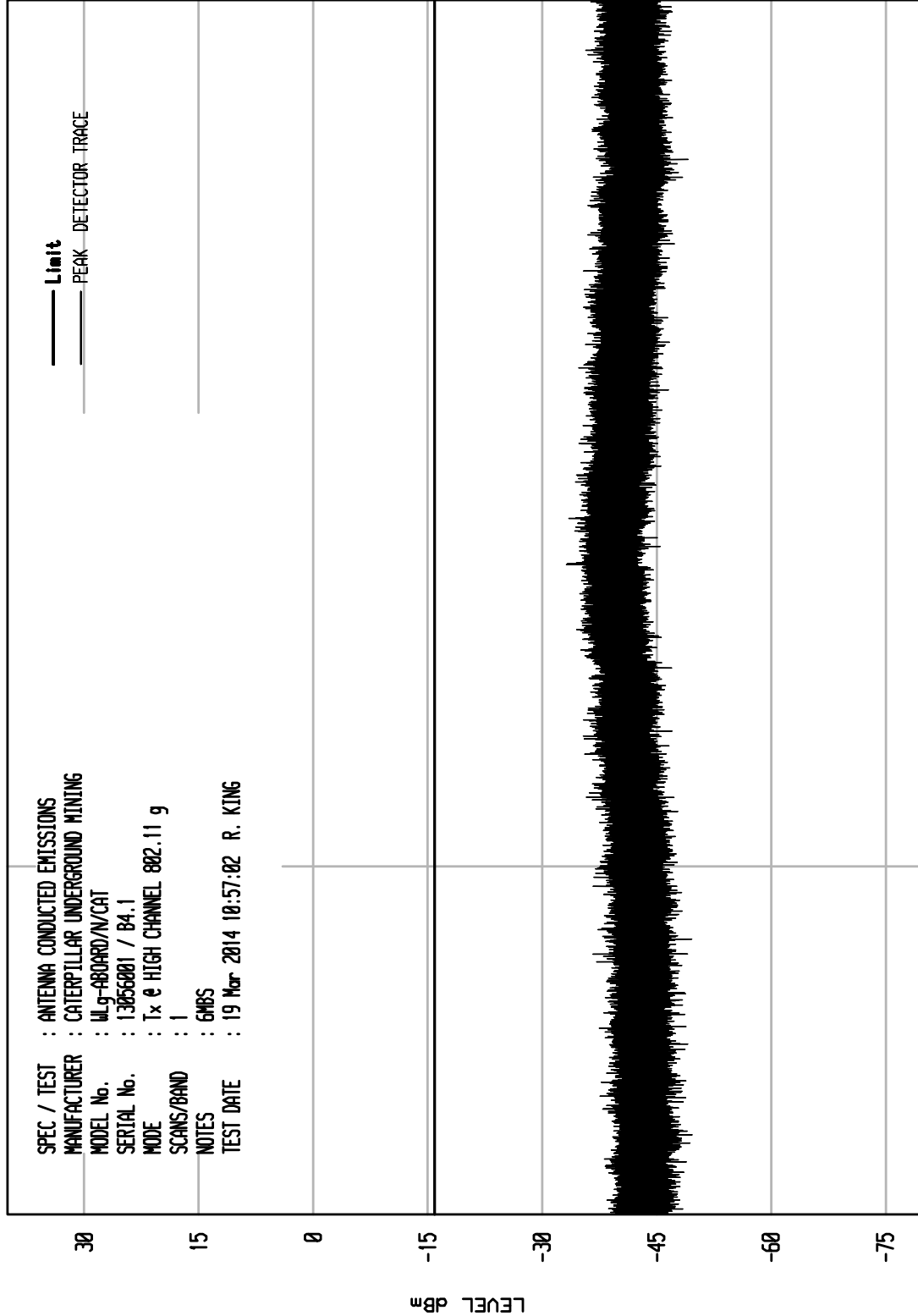
START = 30
 STOP = 18000
 FREQUENCY MHz



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UNIT: RCU ENI RUN 15

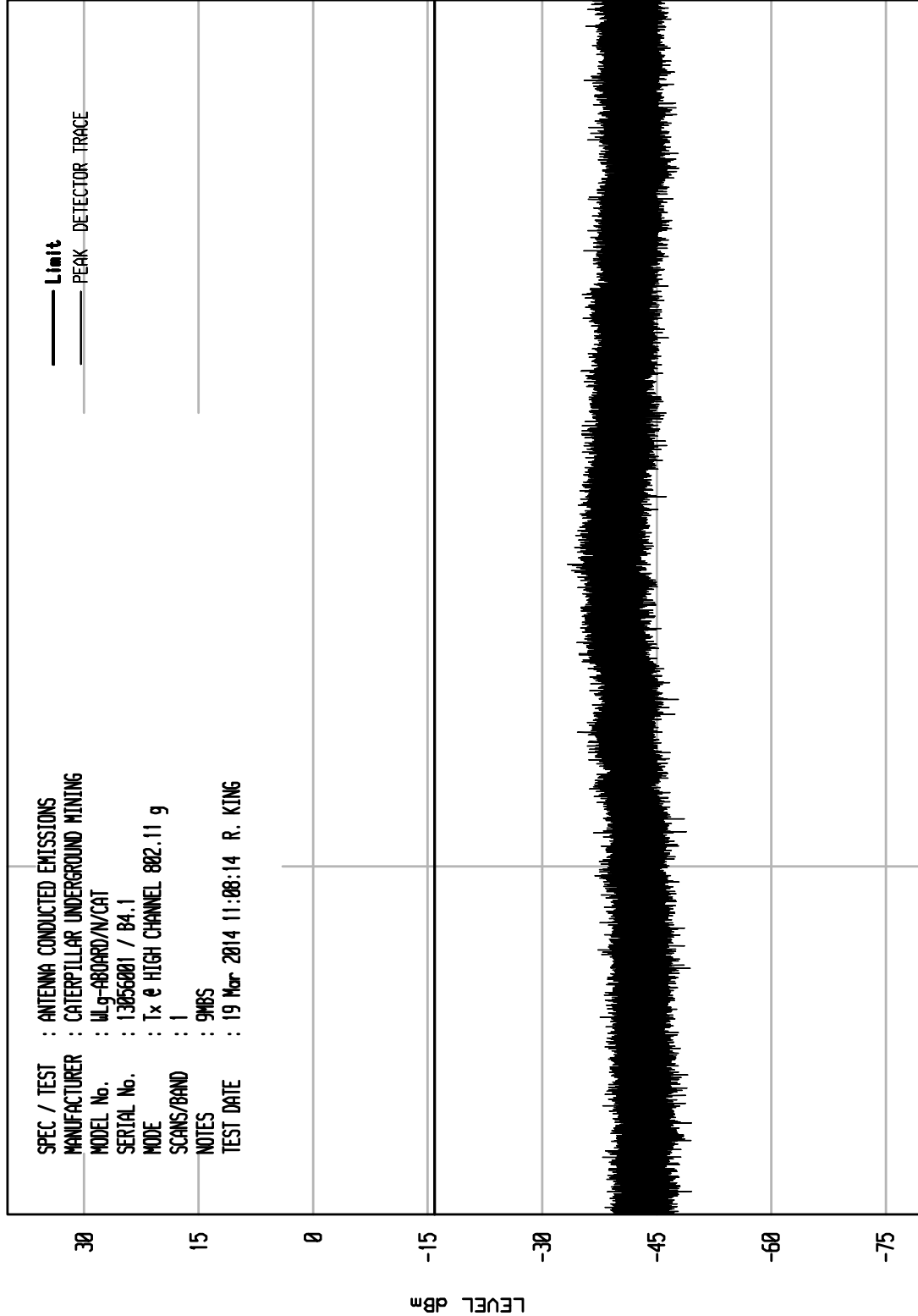
UKA1 04/24/13



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Downers Grove, Ill. 60515

UNIT: RCU ENI RUN 16

UKA1 04/24/13

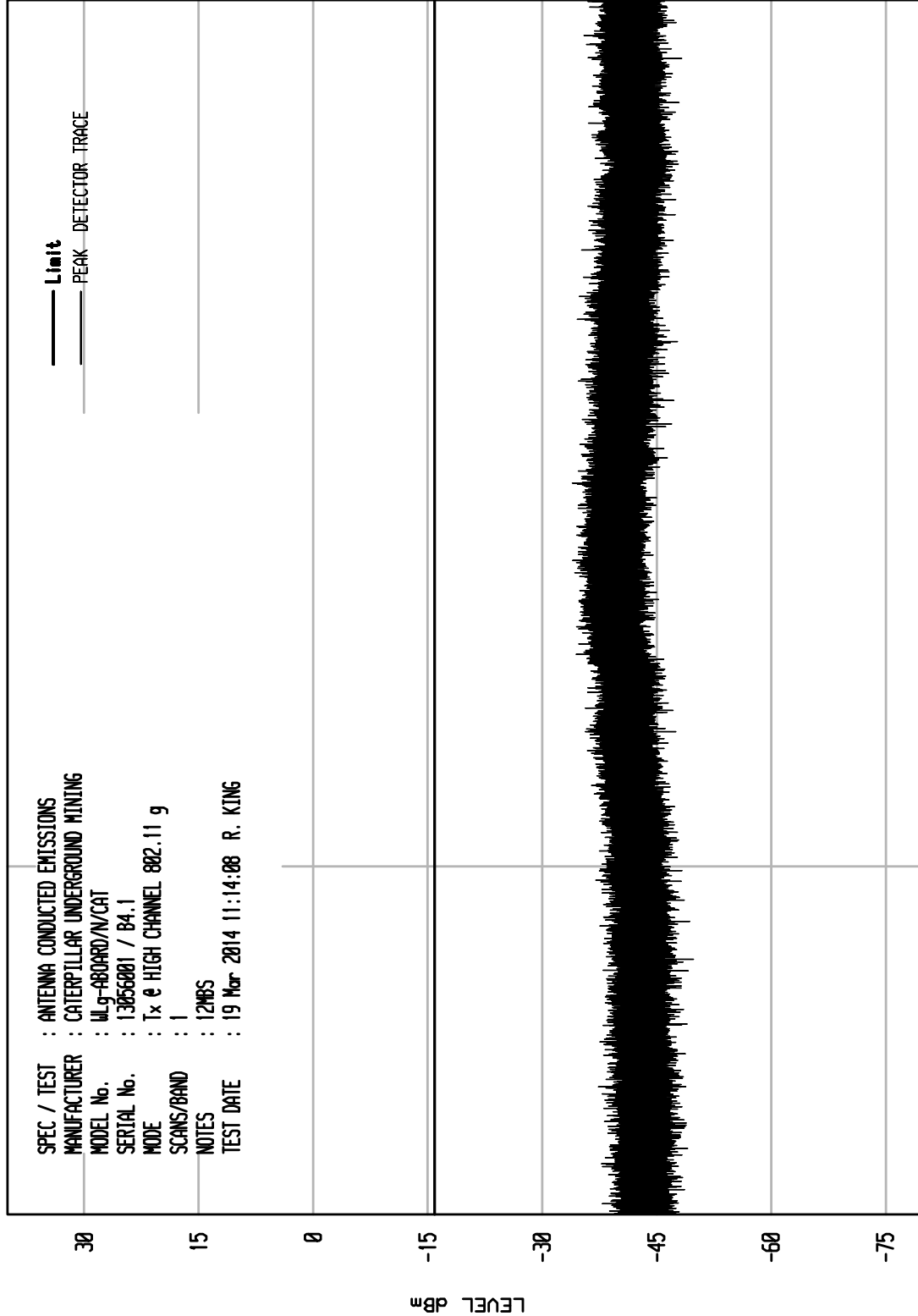




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UNIV RCU ENI RUN 17

UKA1 04/24/13

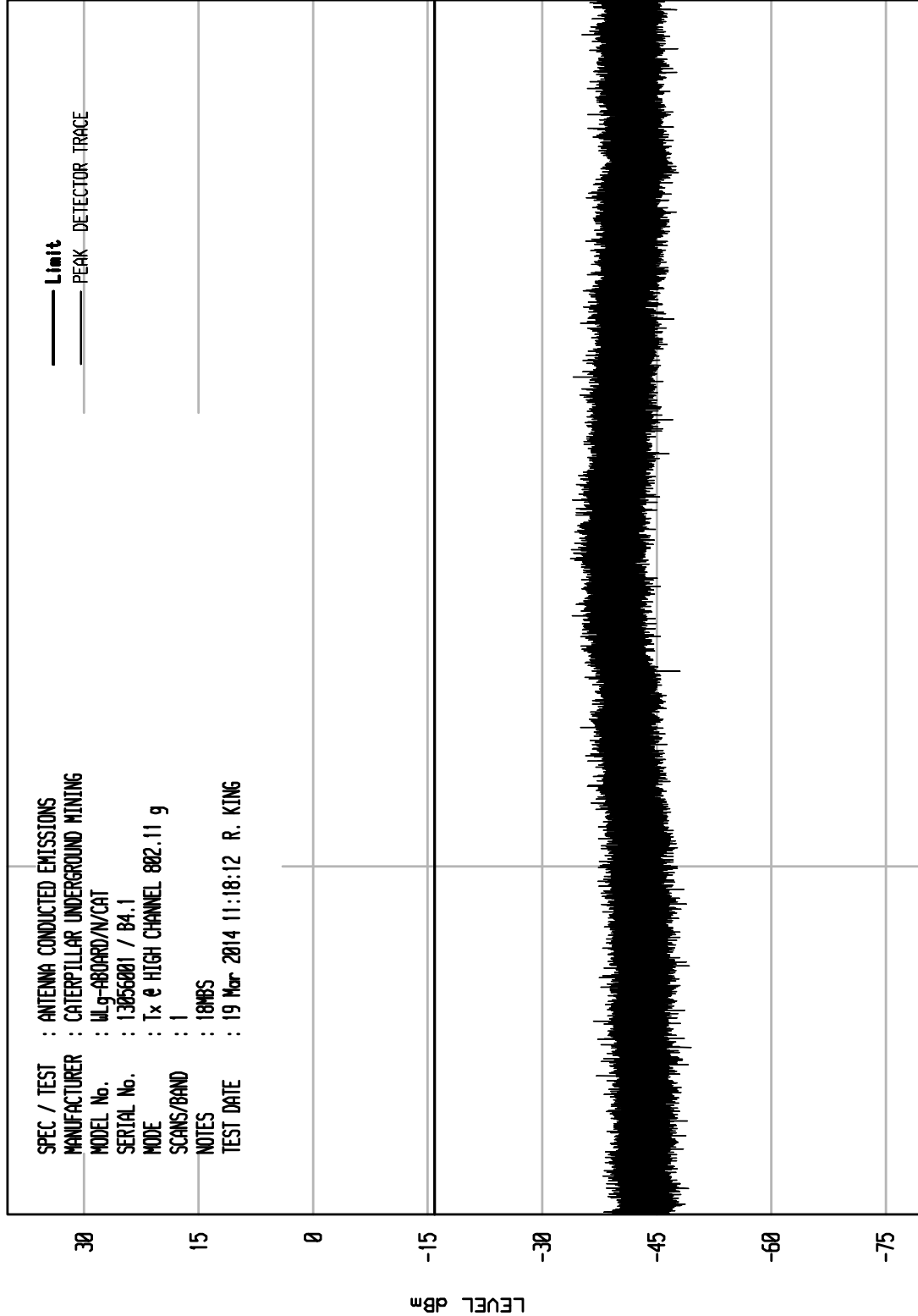




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UNIT: RCU ENI RUN 18

UKA1 04/24/13

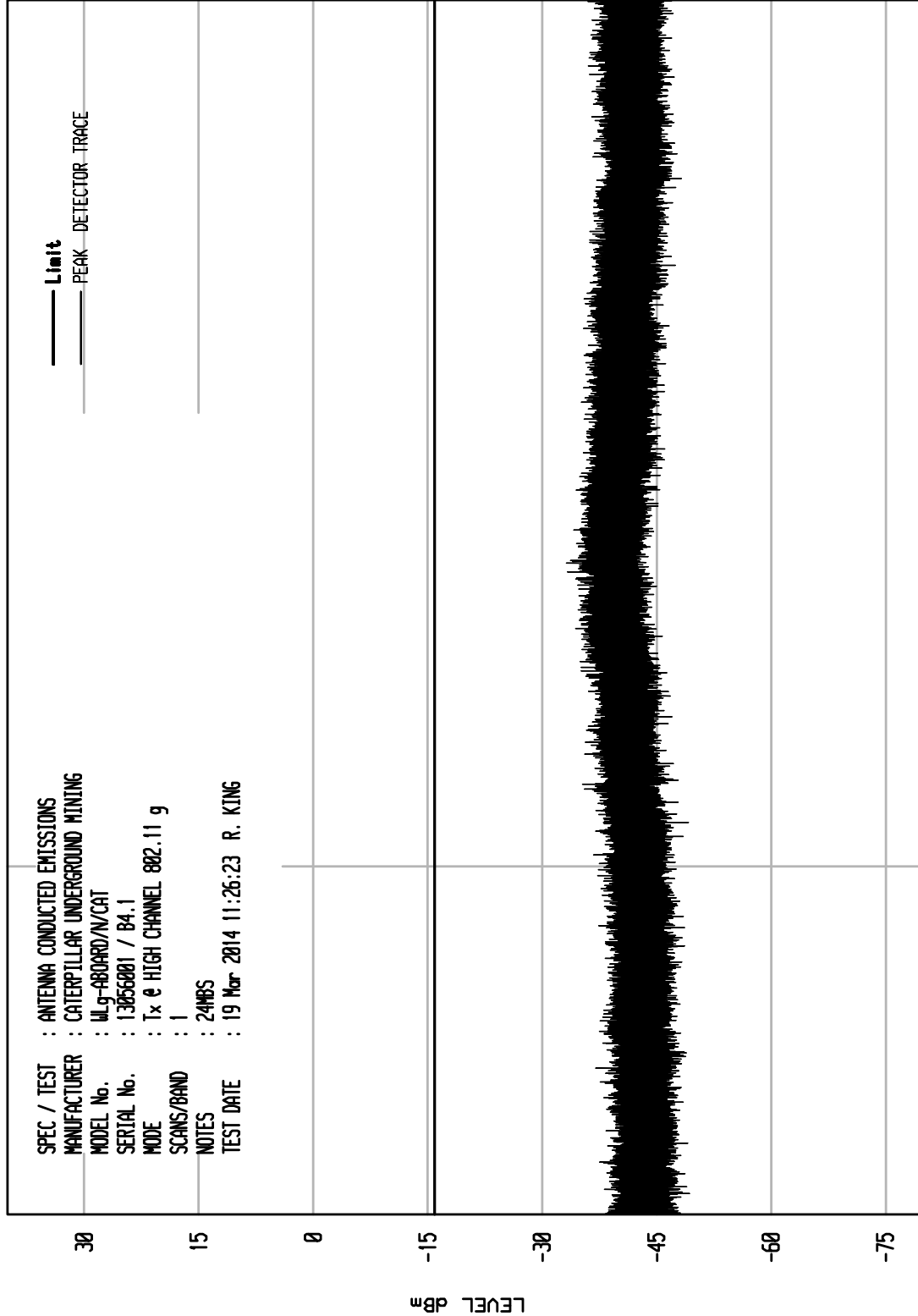




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UNIV RCU ENI RUN 28

UKA1 04/24/13

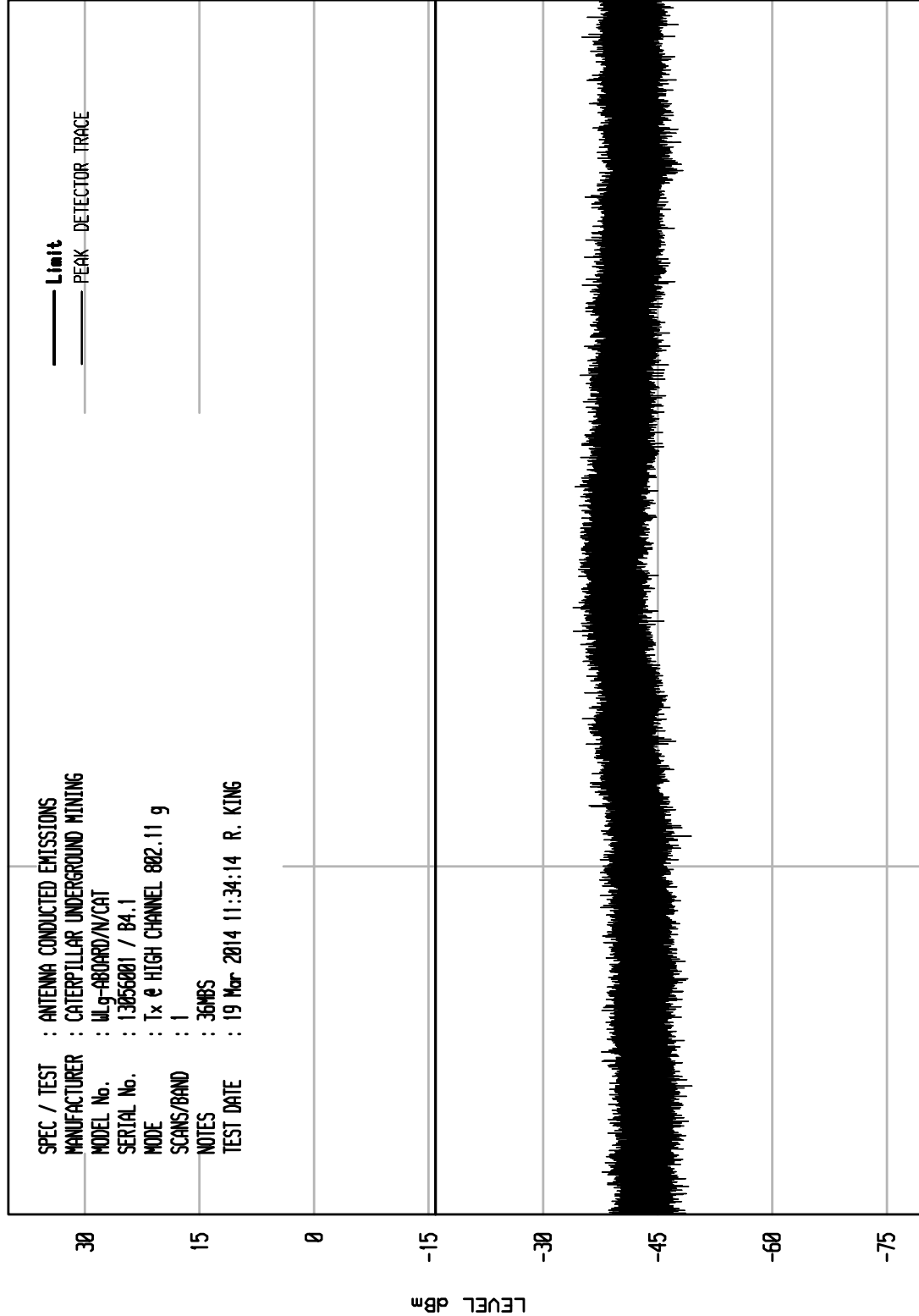


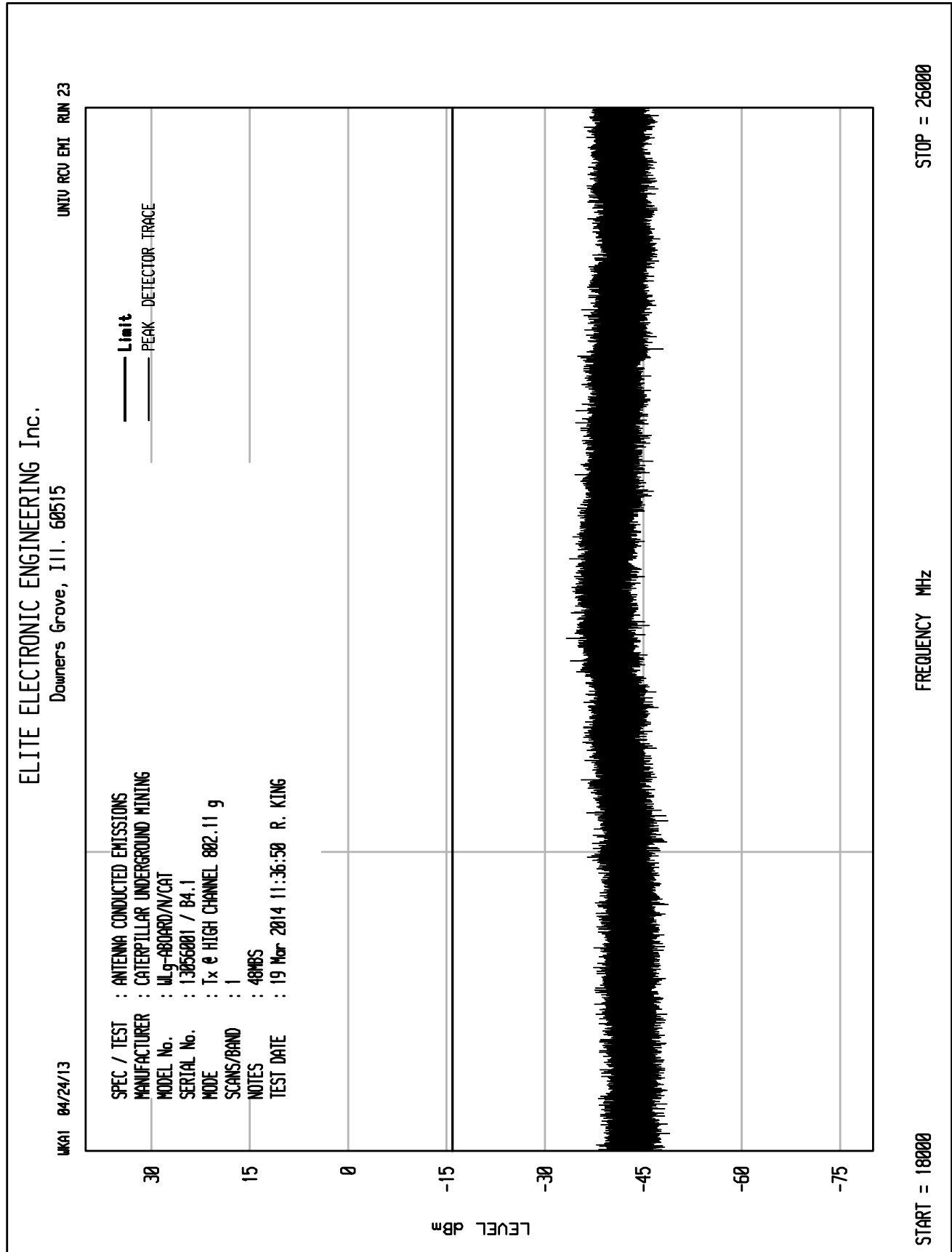
ELITE ELECTRONIC ENGINEERING Inc.

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UNIT: RCU ENI RUN 22

UKA1 04/24/13

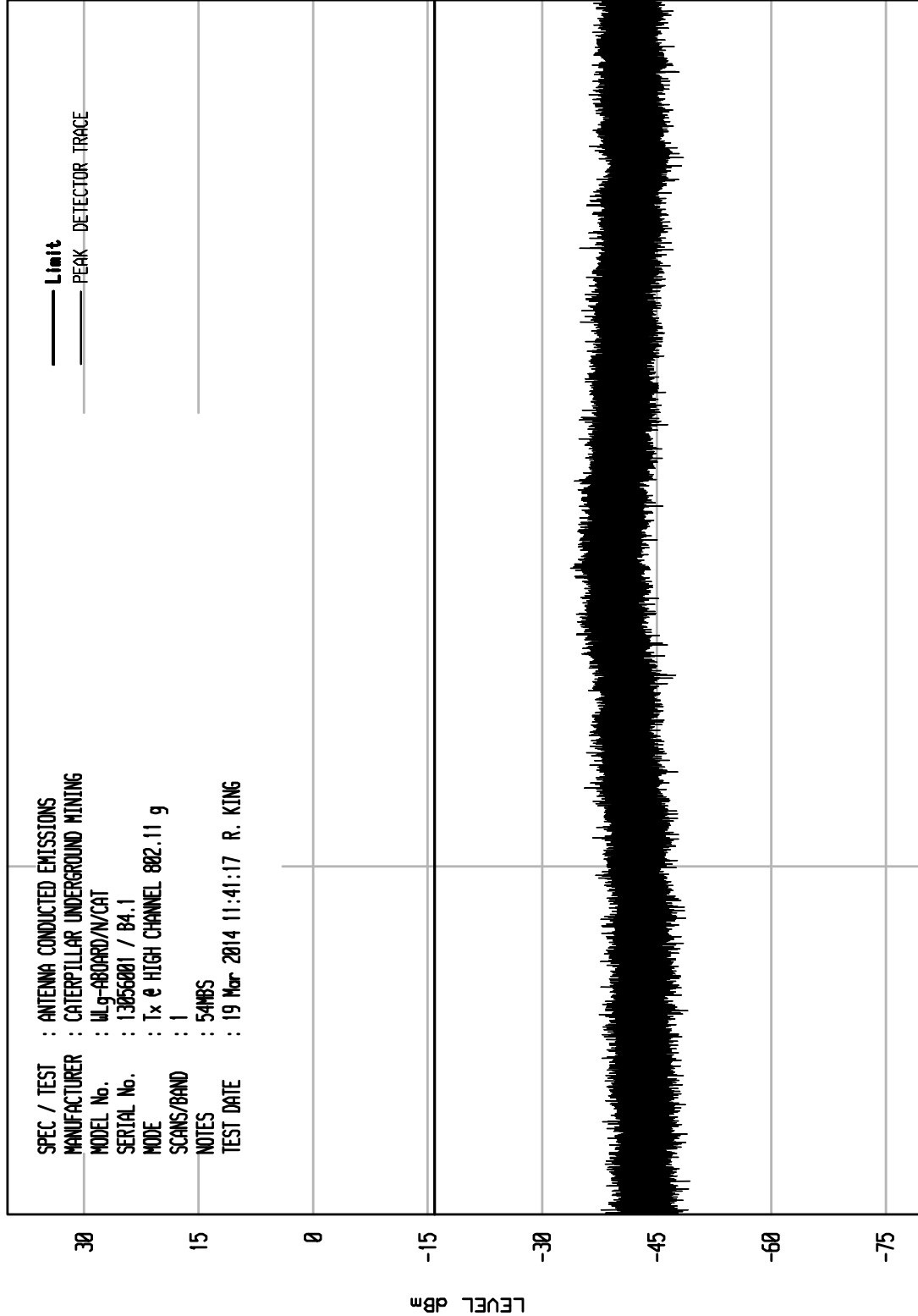


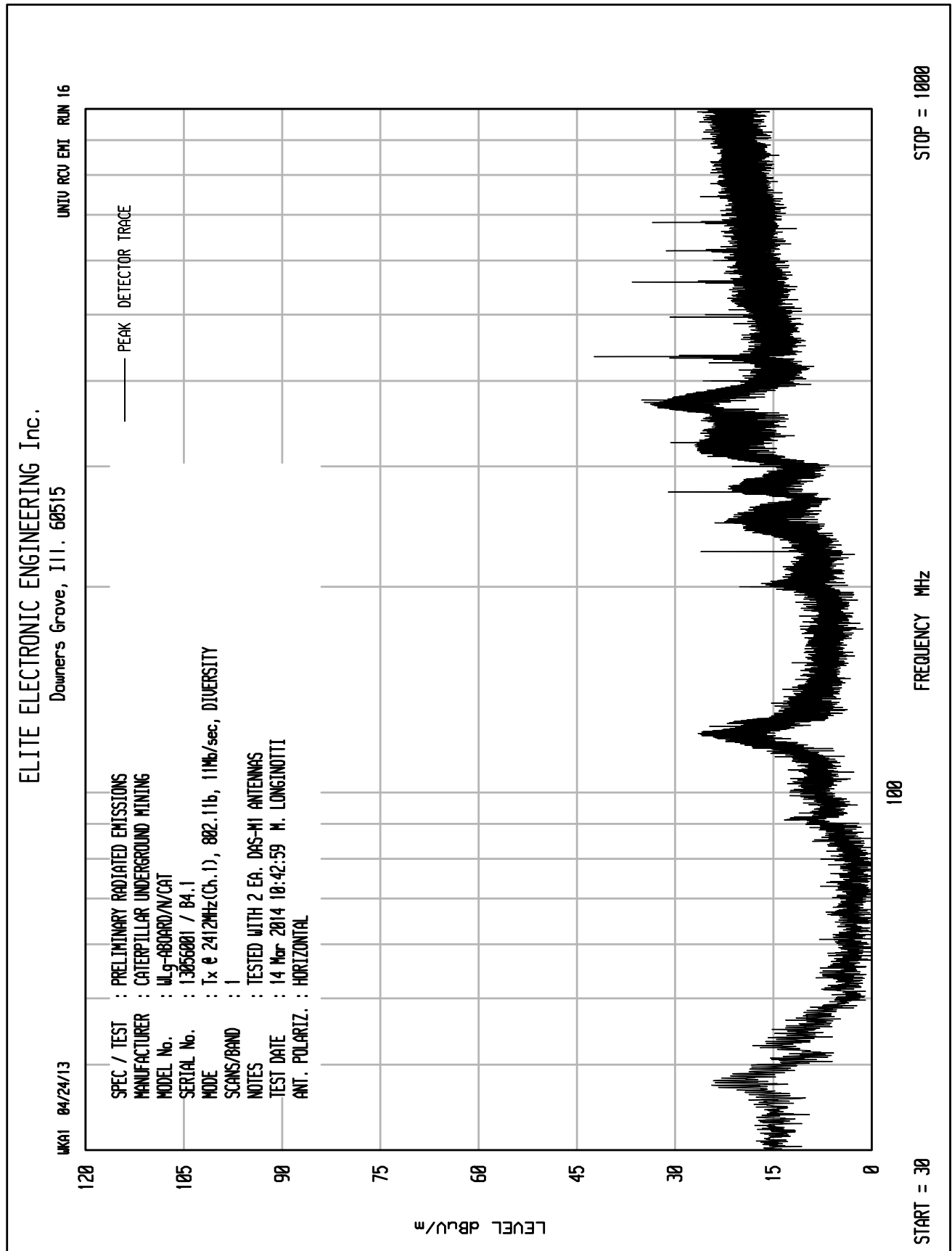


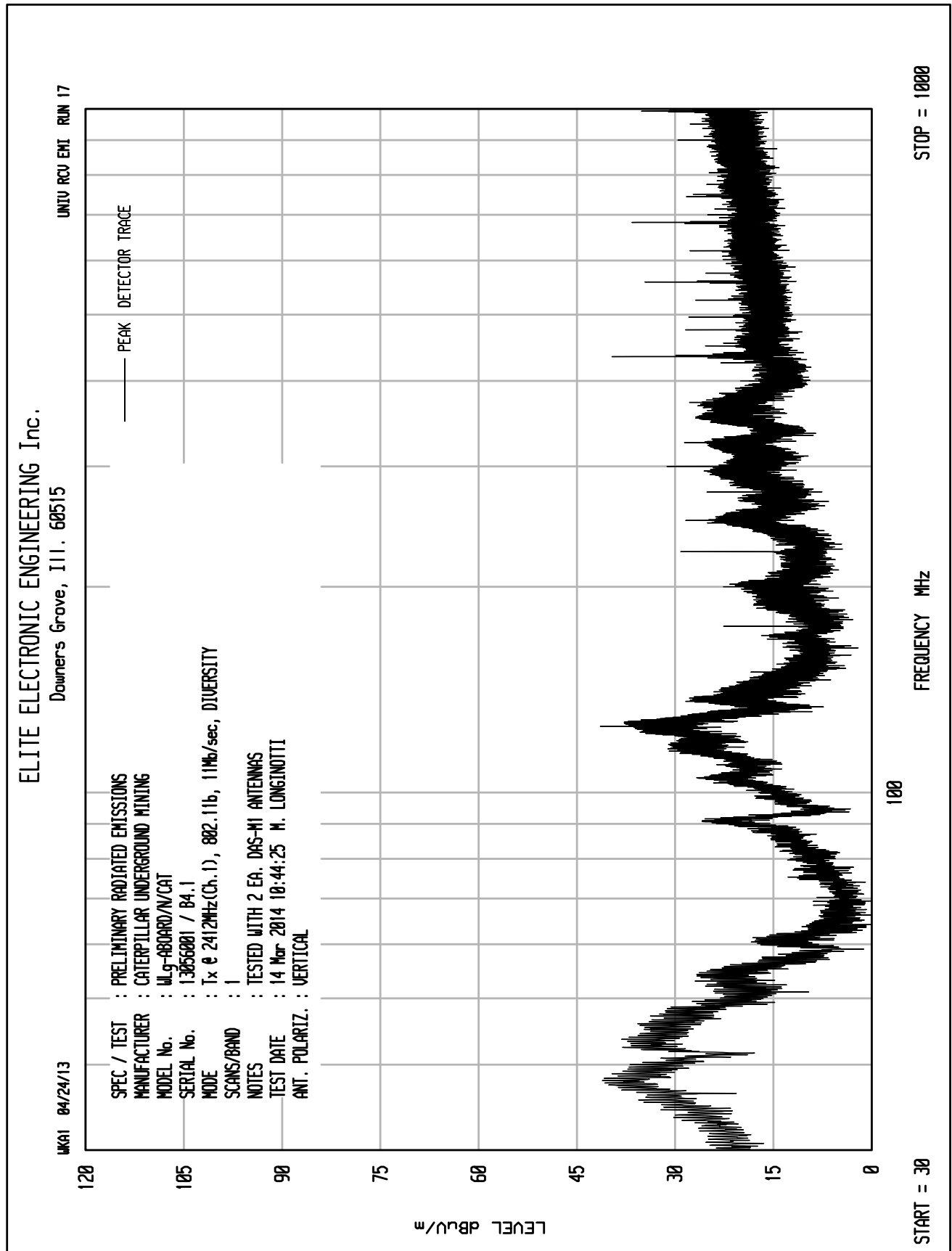
ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515

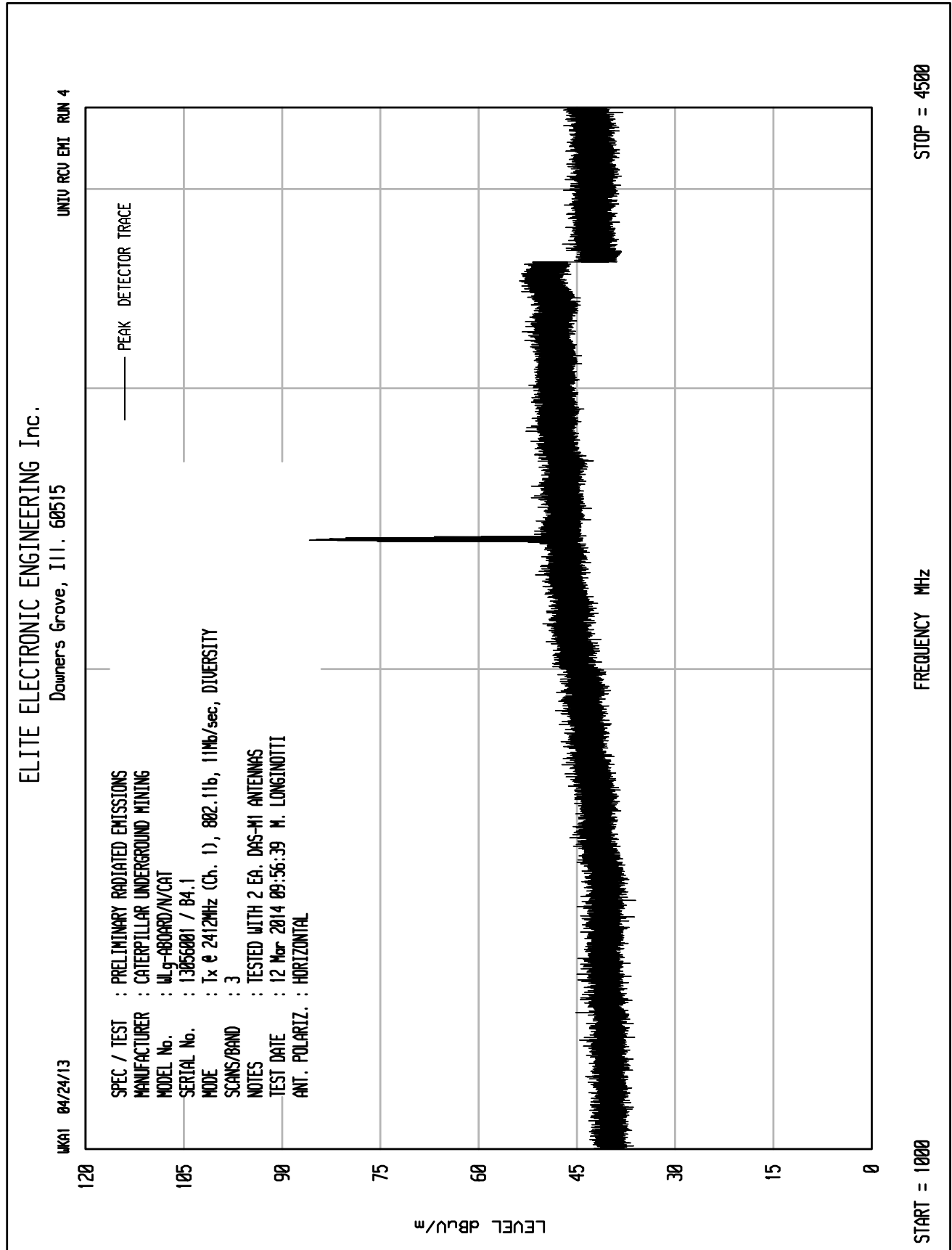
UNIT: RCU ENI RUN 24

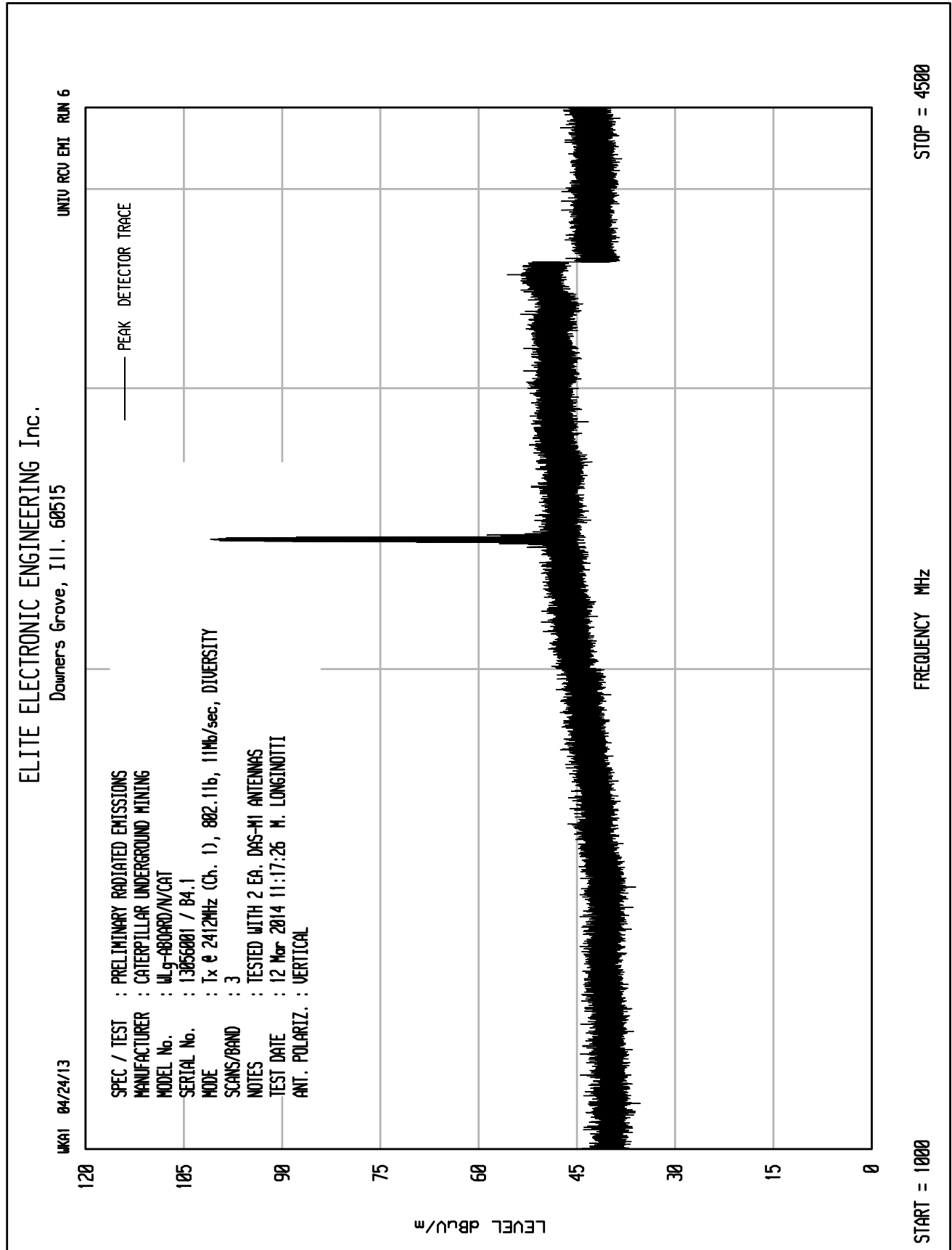
UKA1 04/24/13

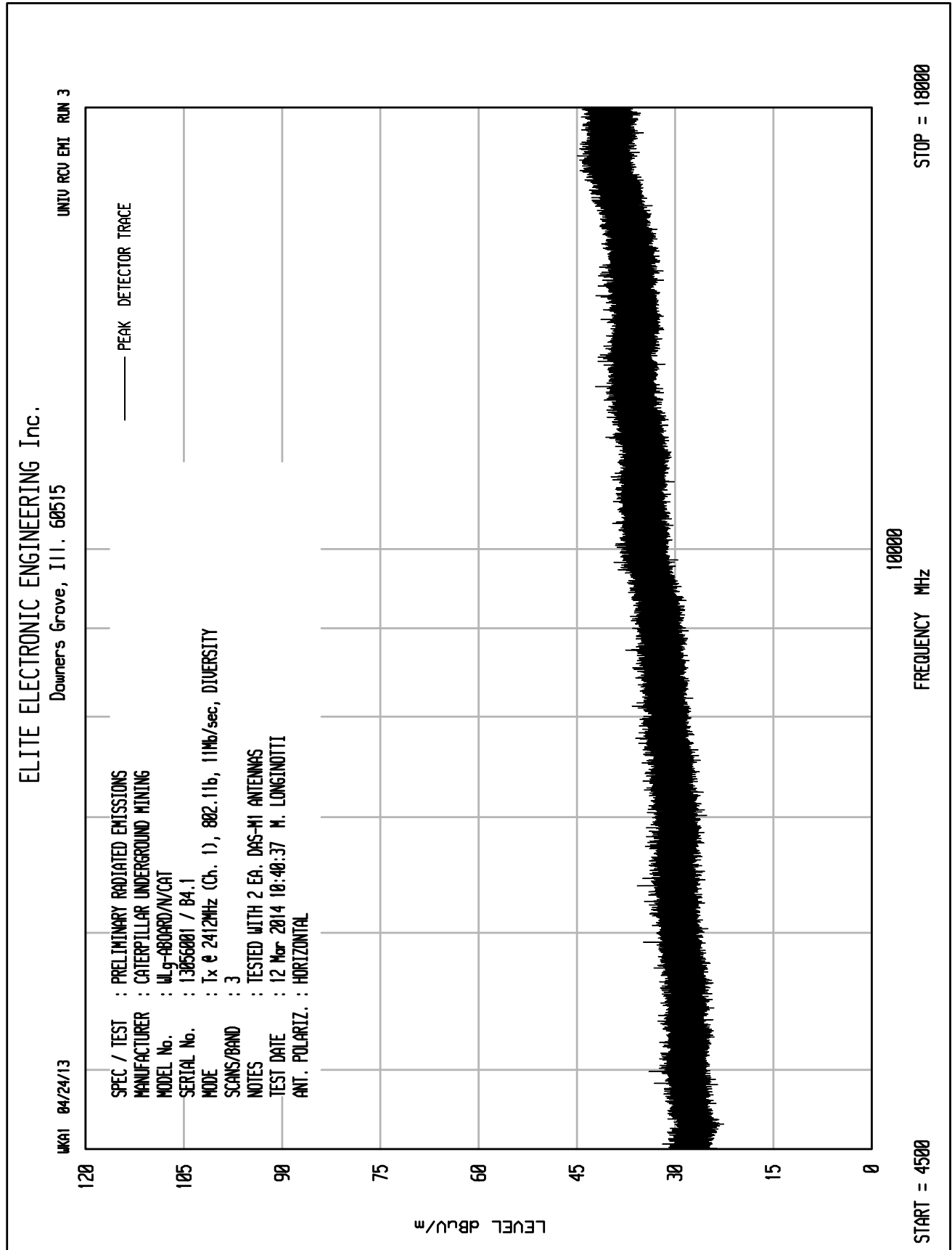


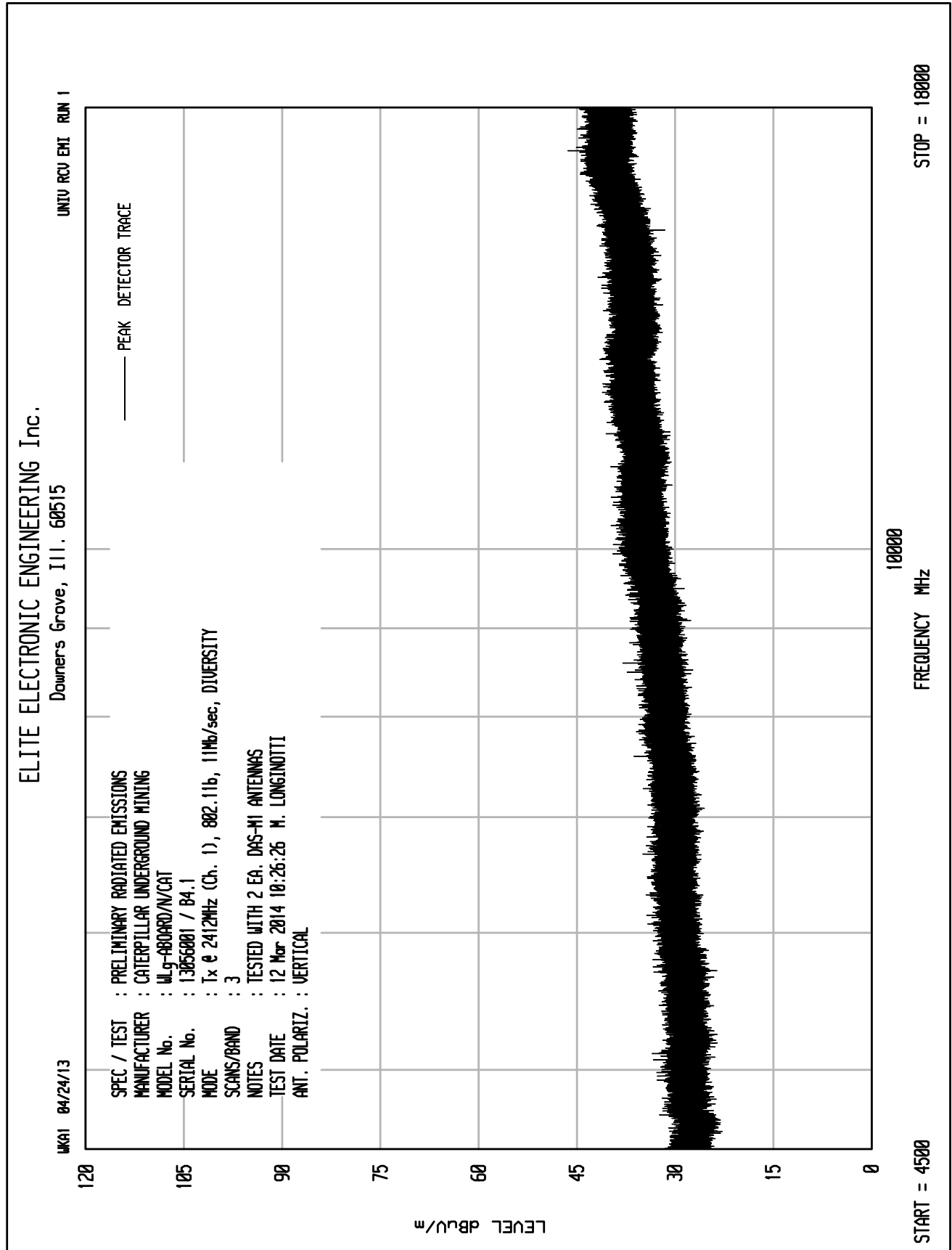


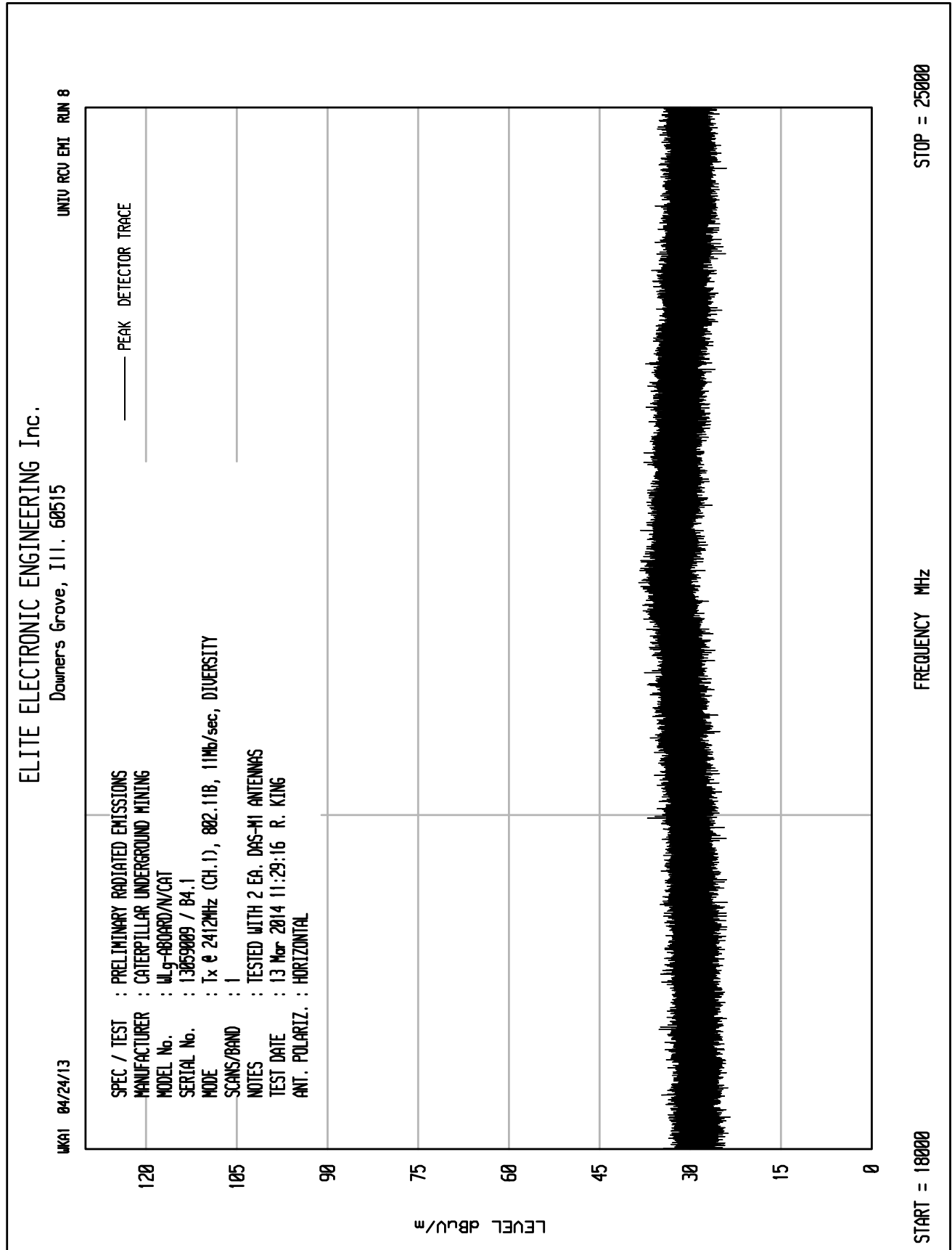


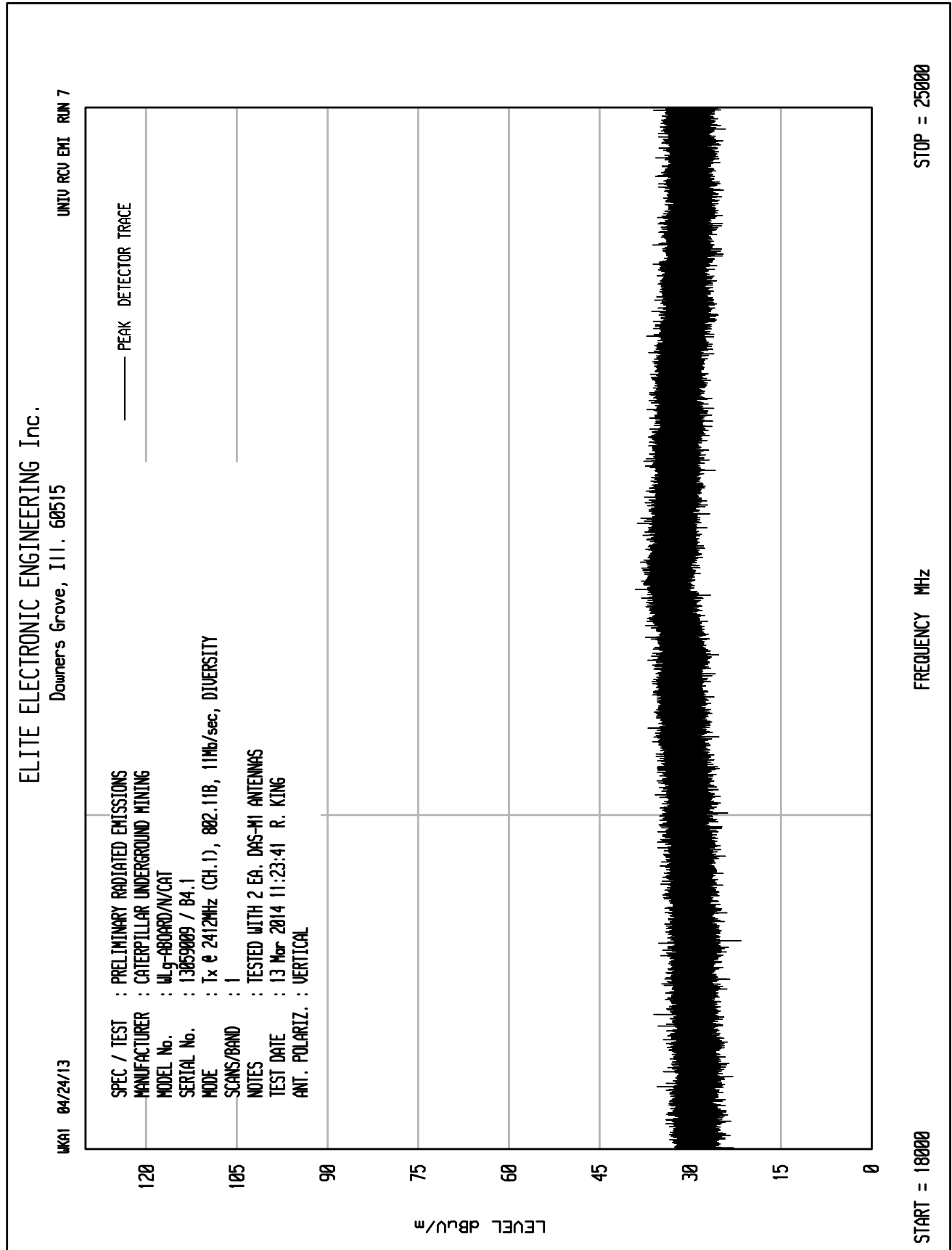


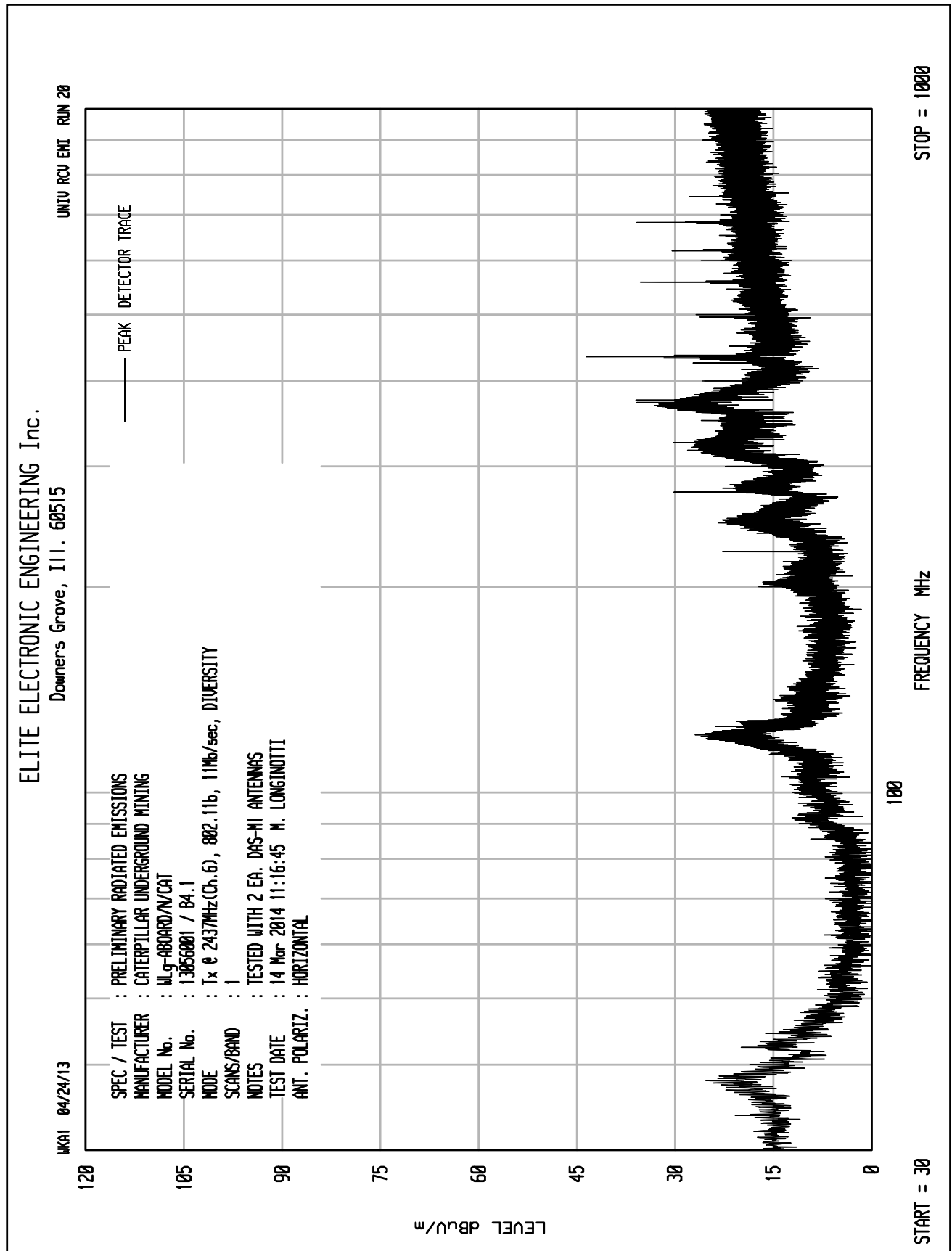


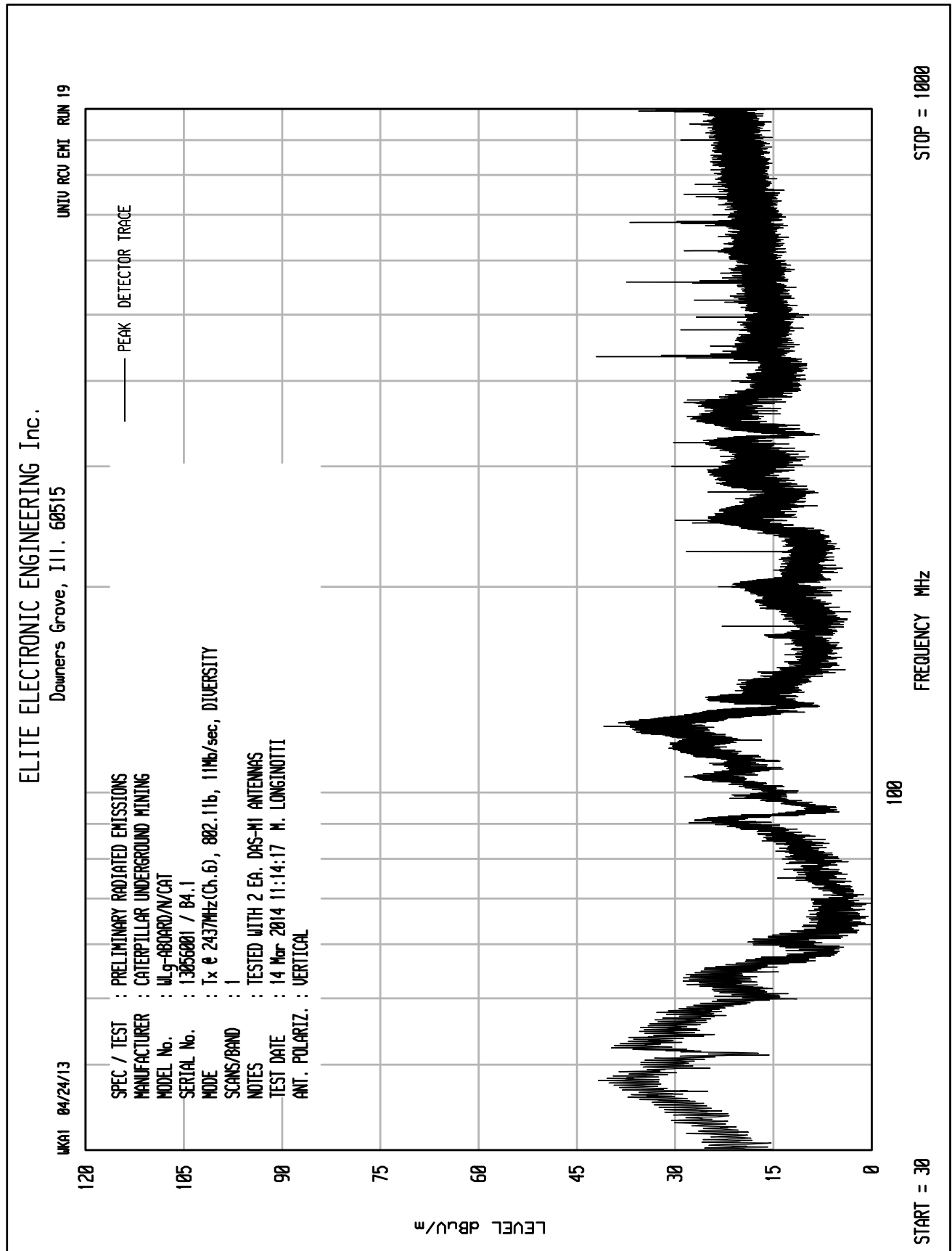


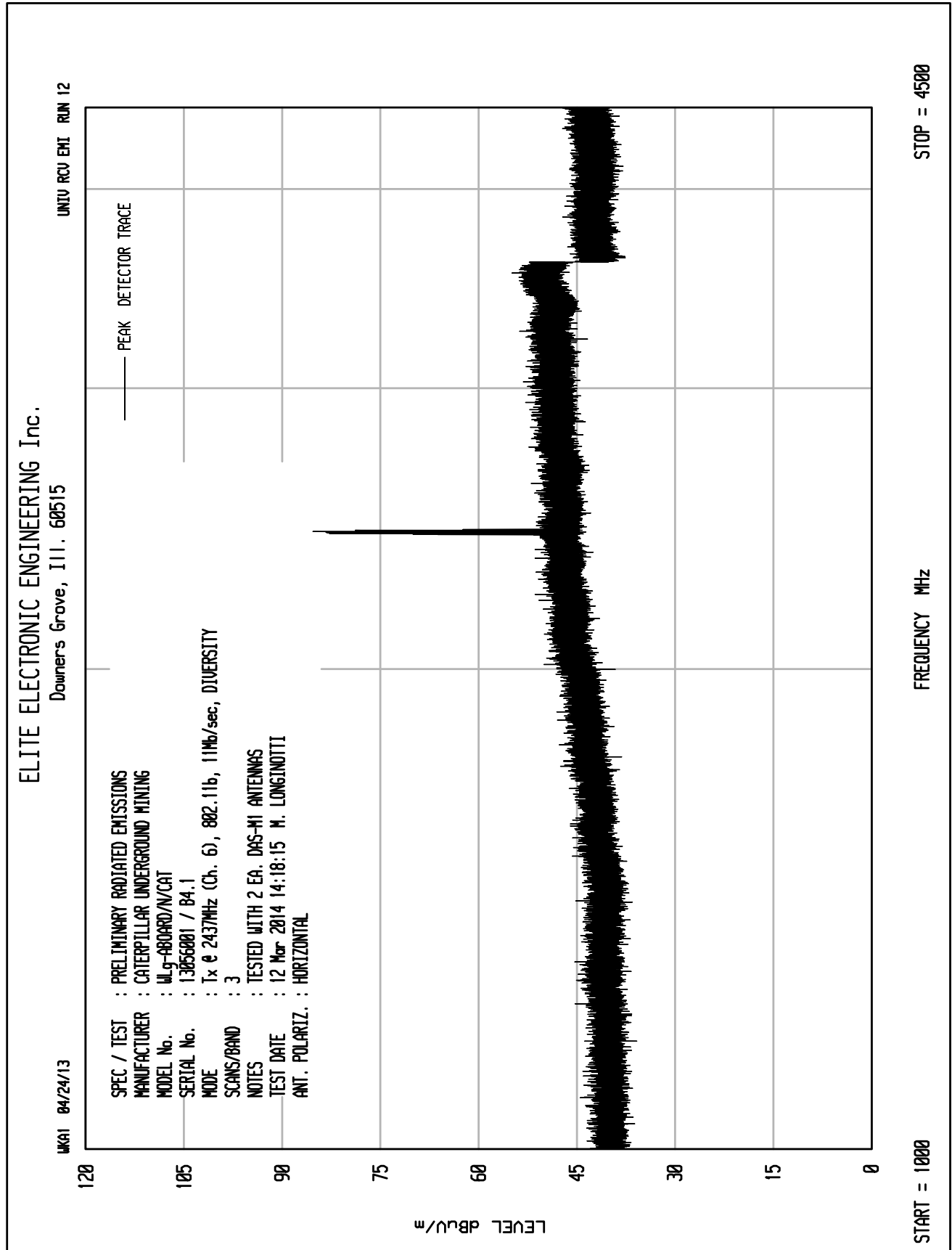


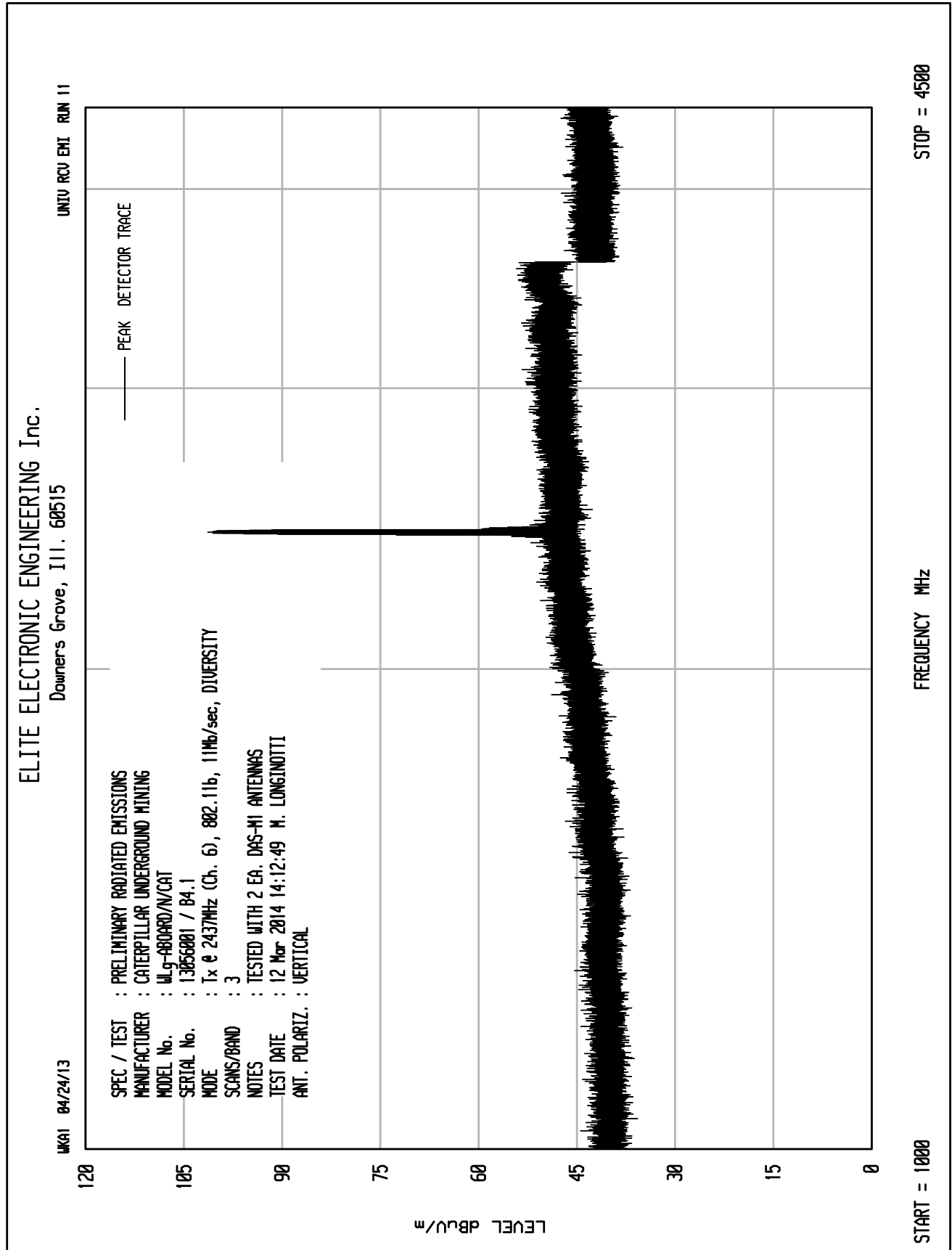


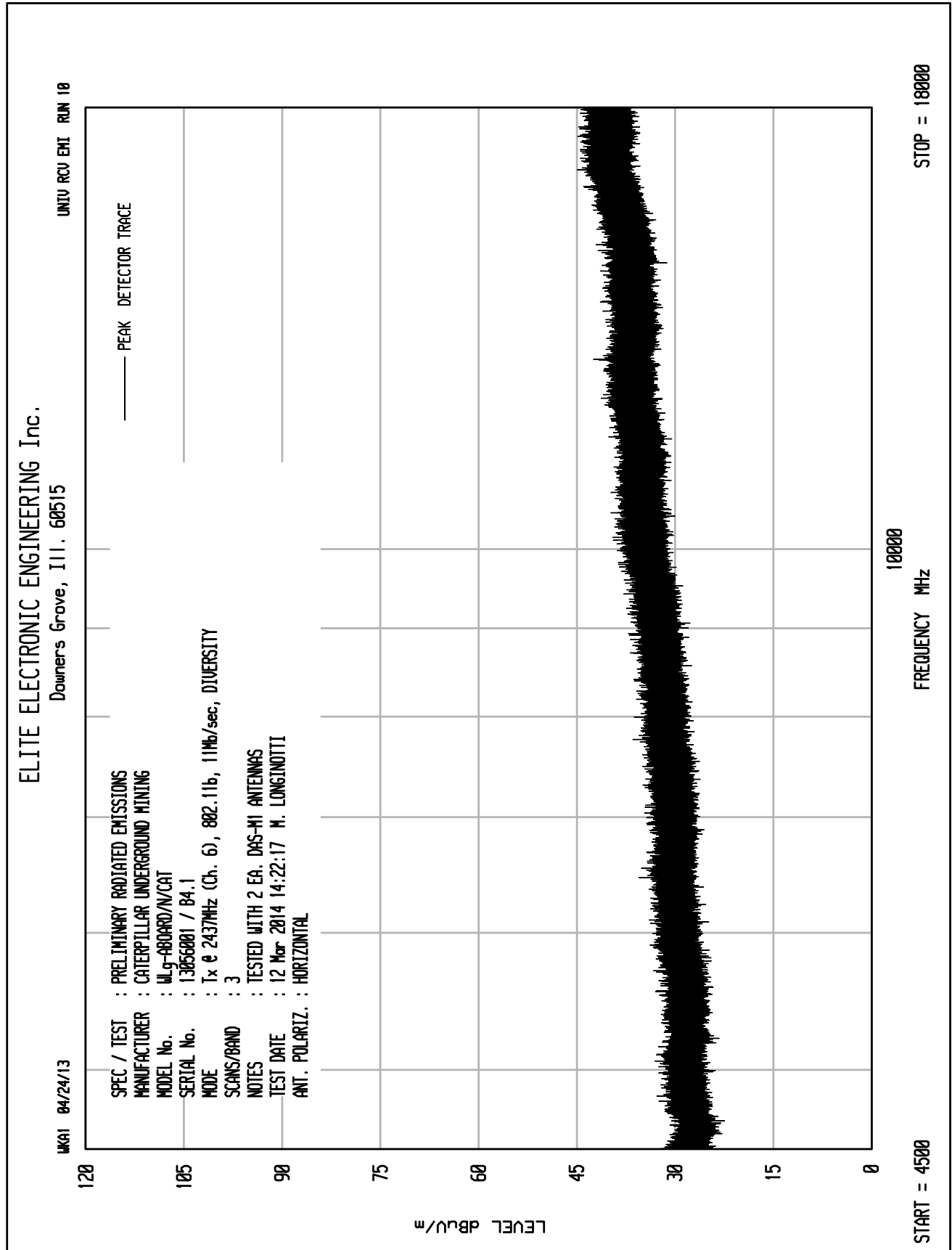


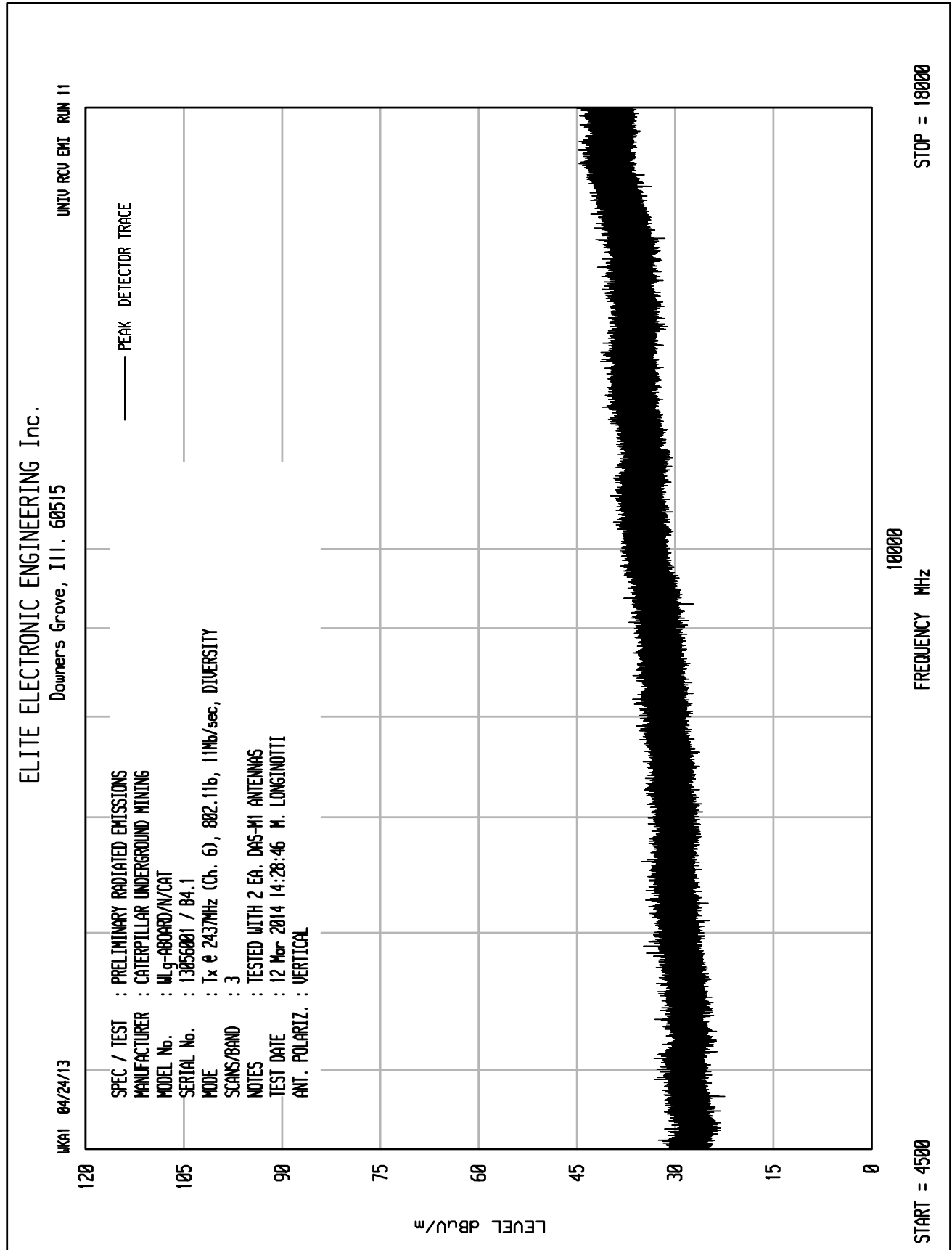










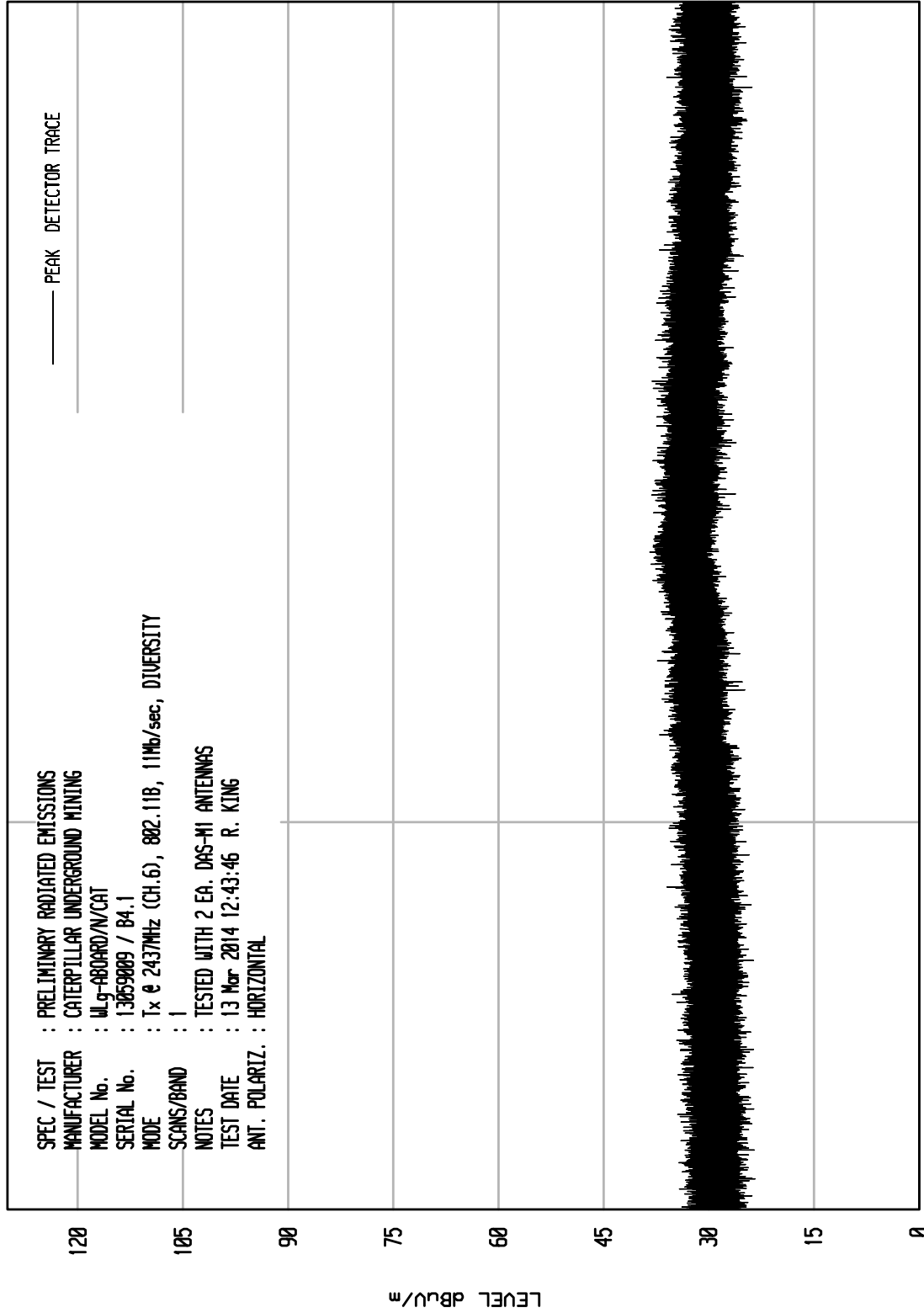


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UNITV RCU ENI RUN 9

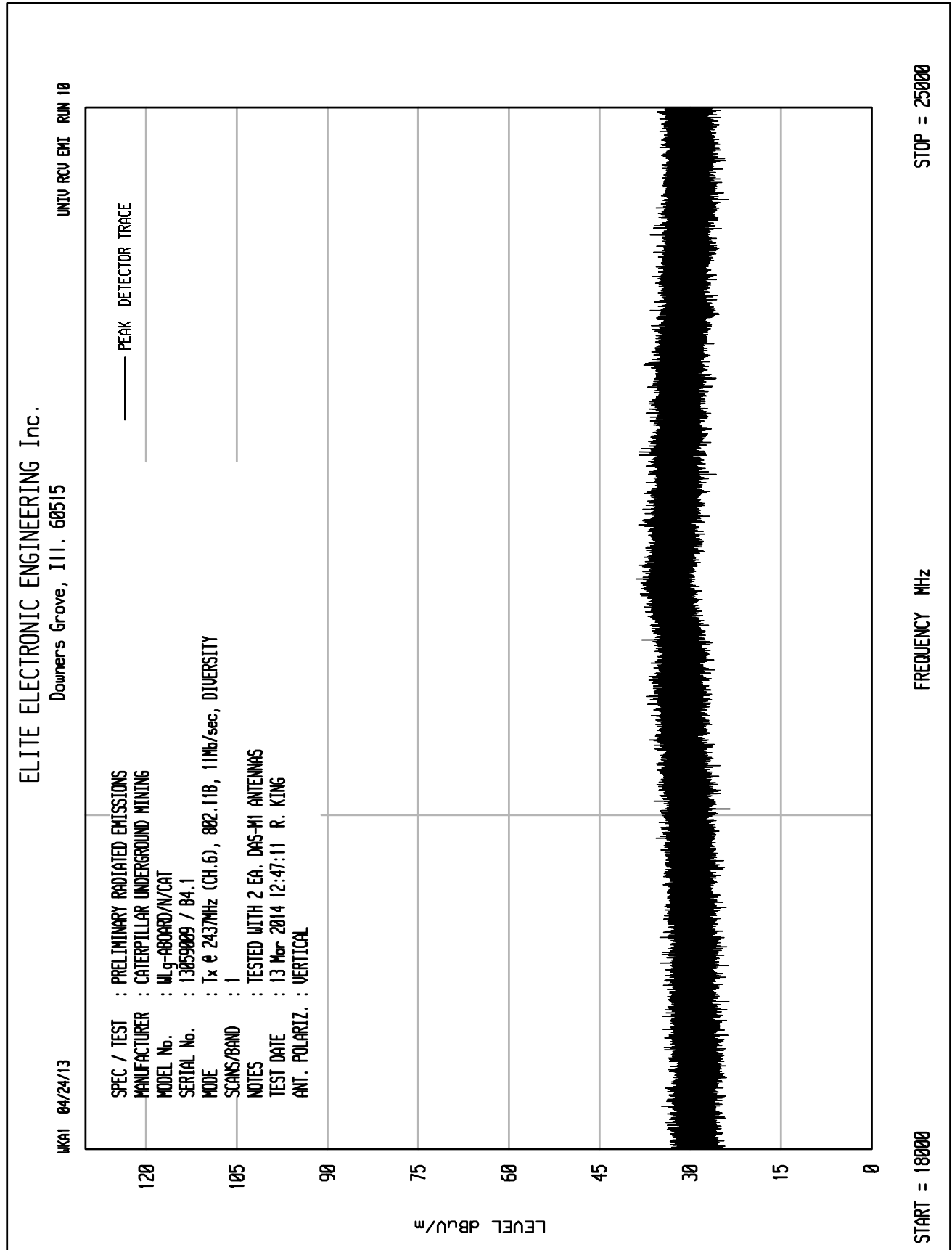
UKA1 04/24/13

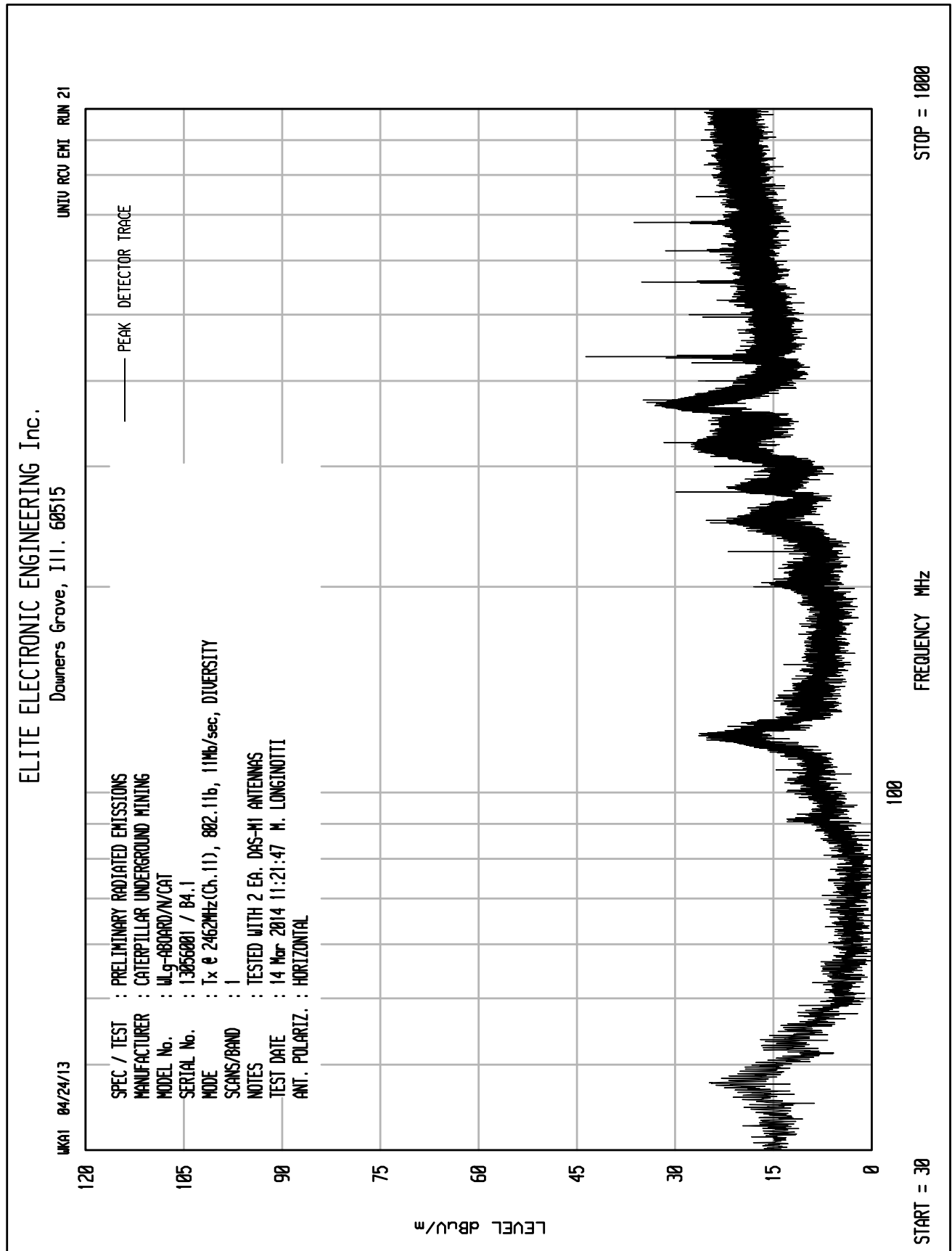


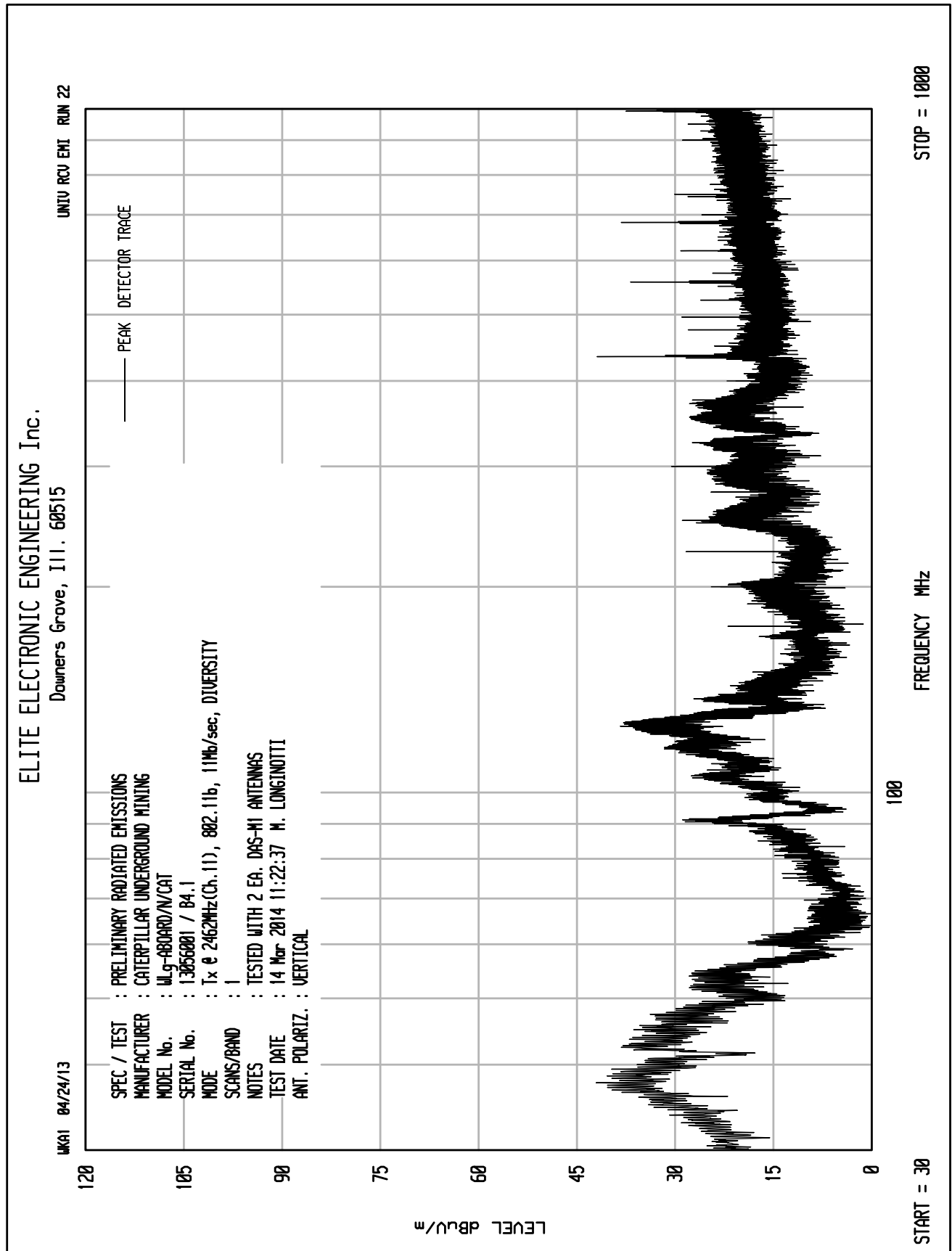
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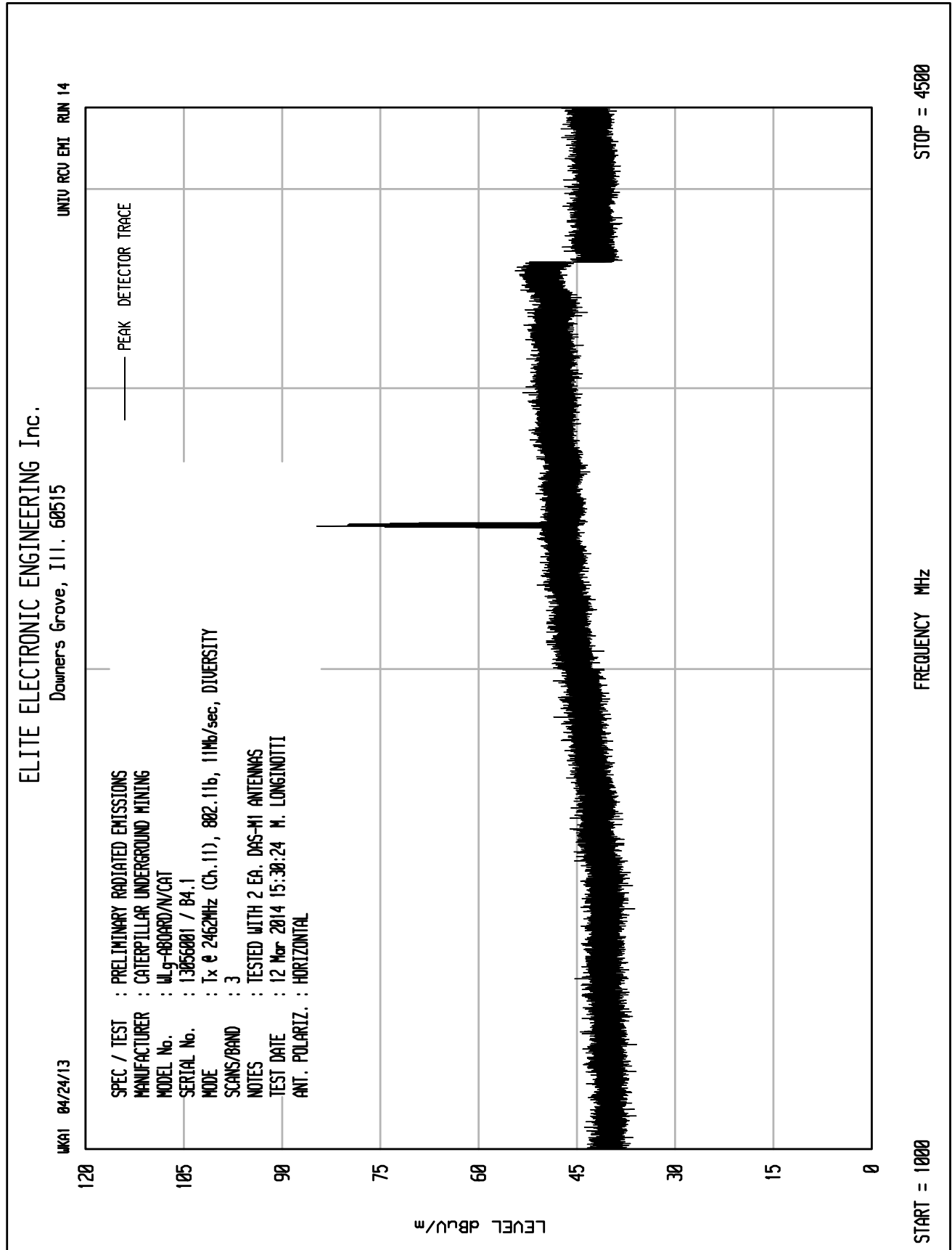
FREQUENCY MHz

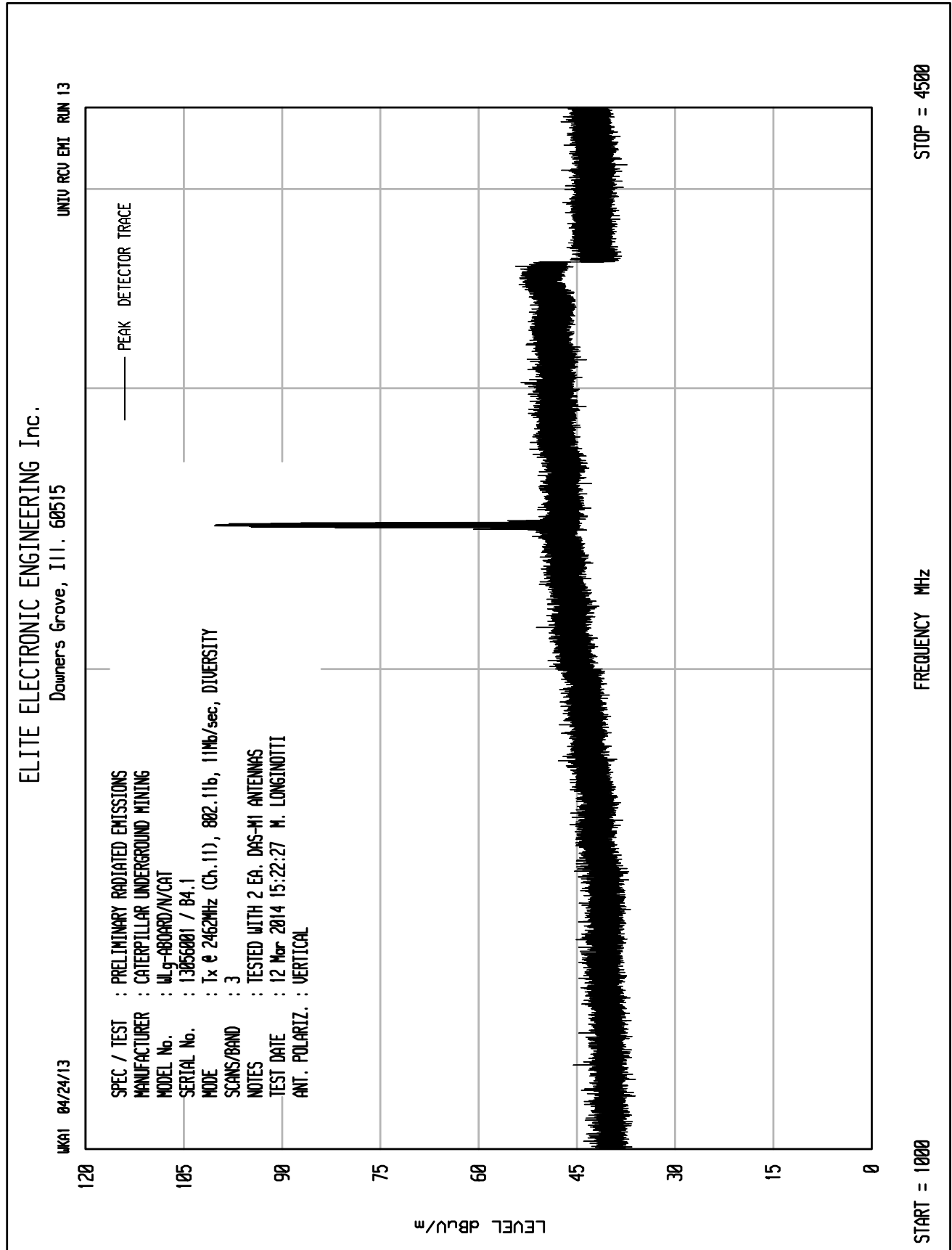
START = 18000









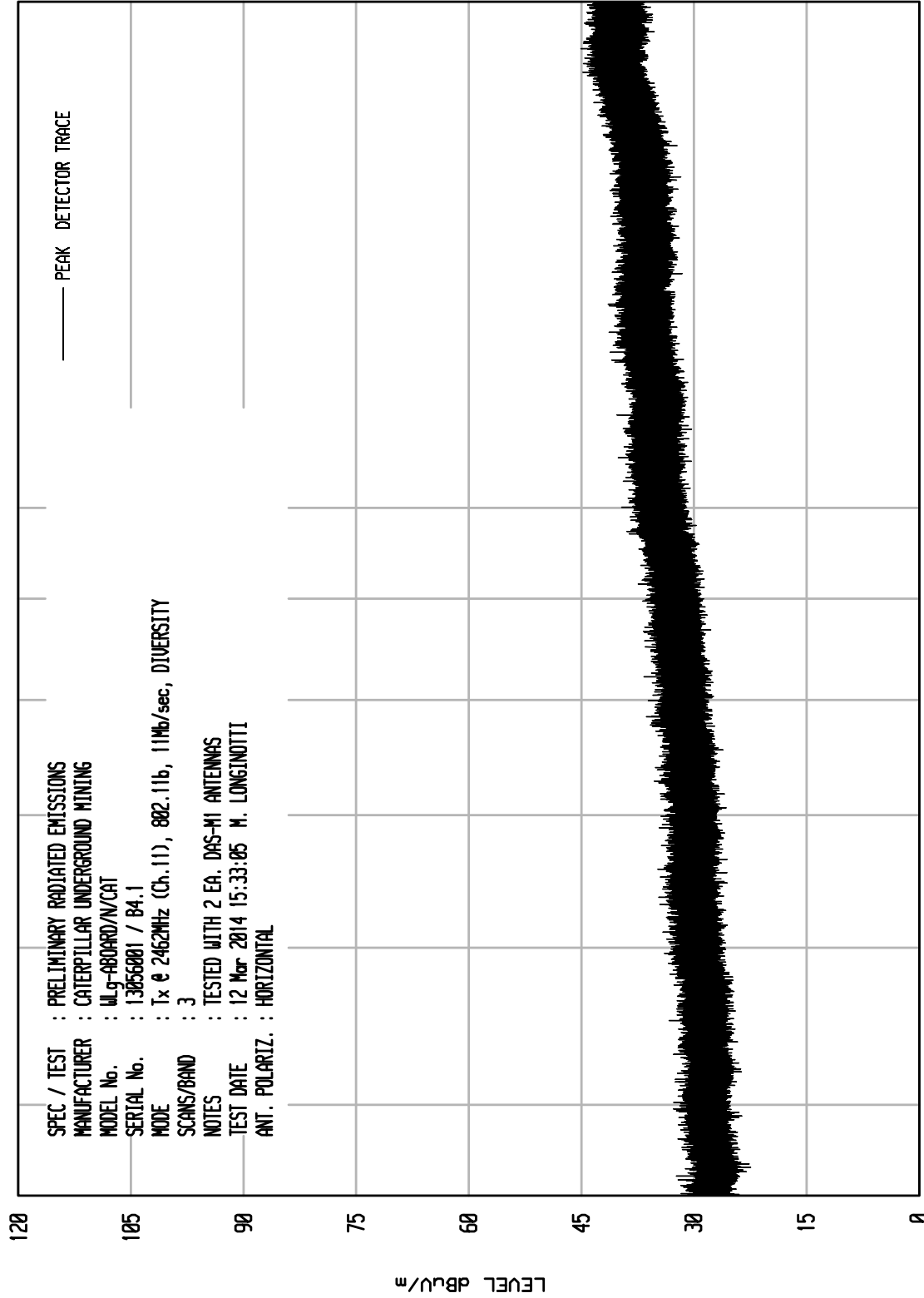




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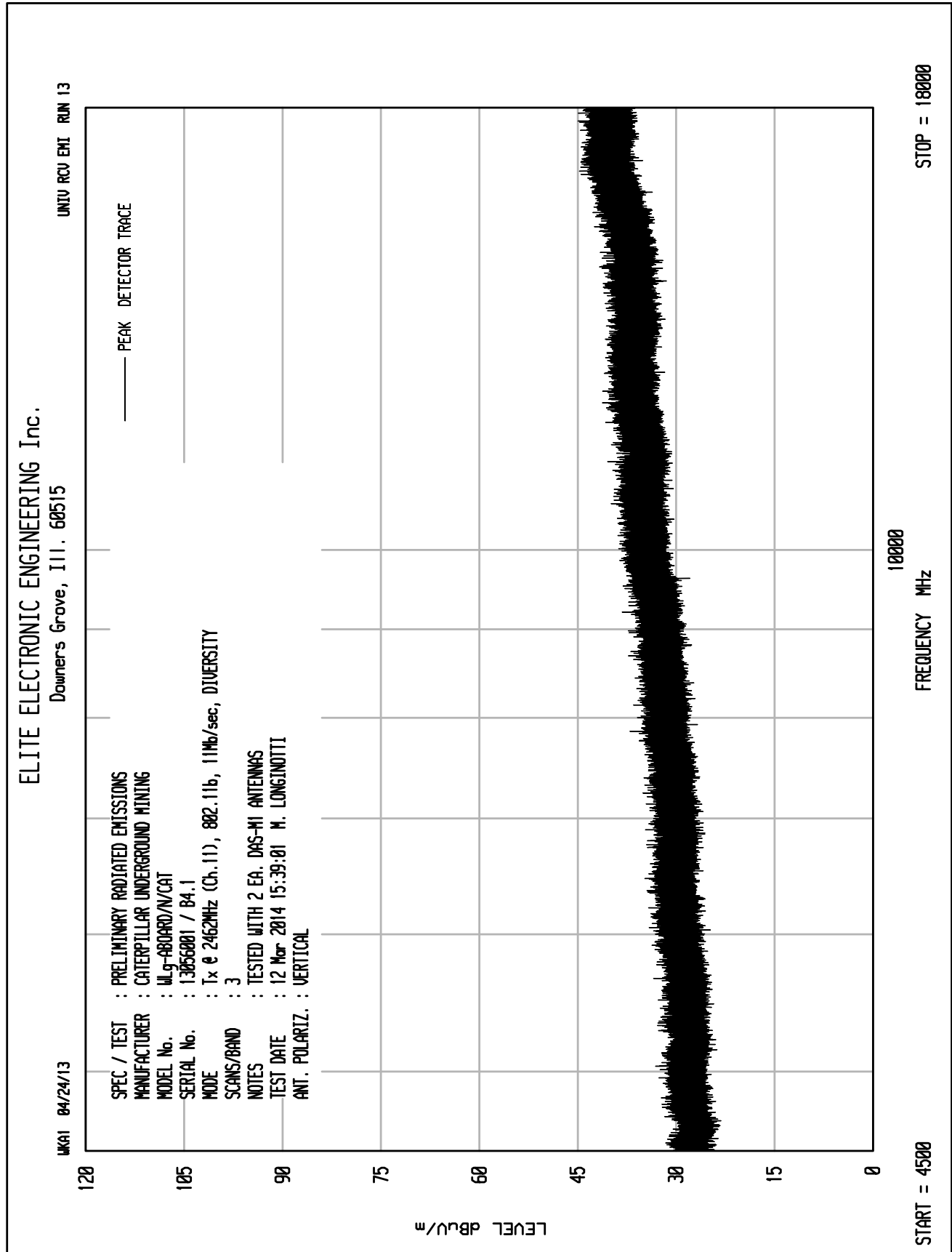
UNIU RCU ENI RUN 12

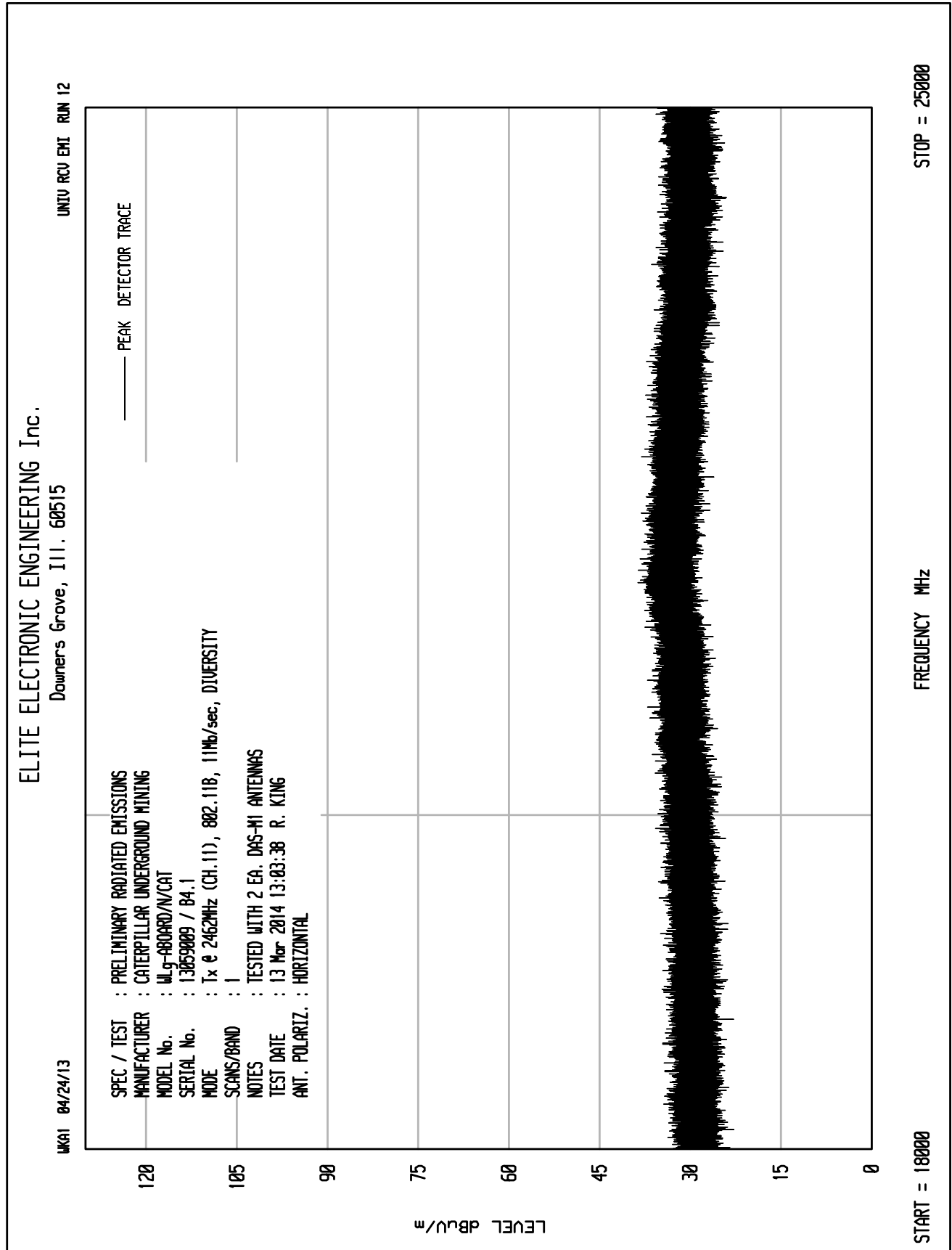
UKA1 04/24/13

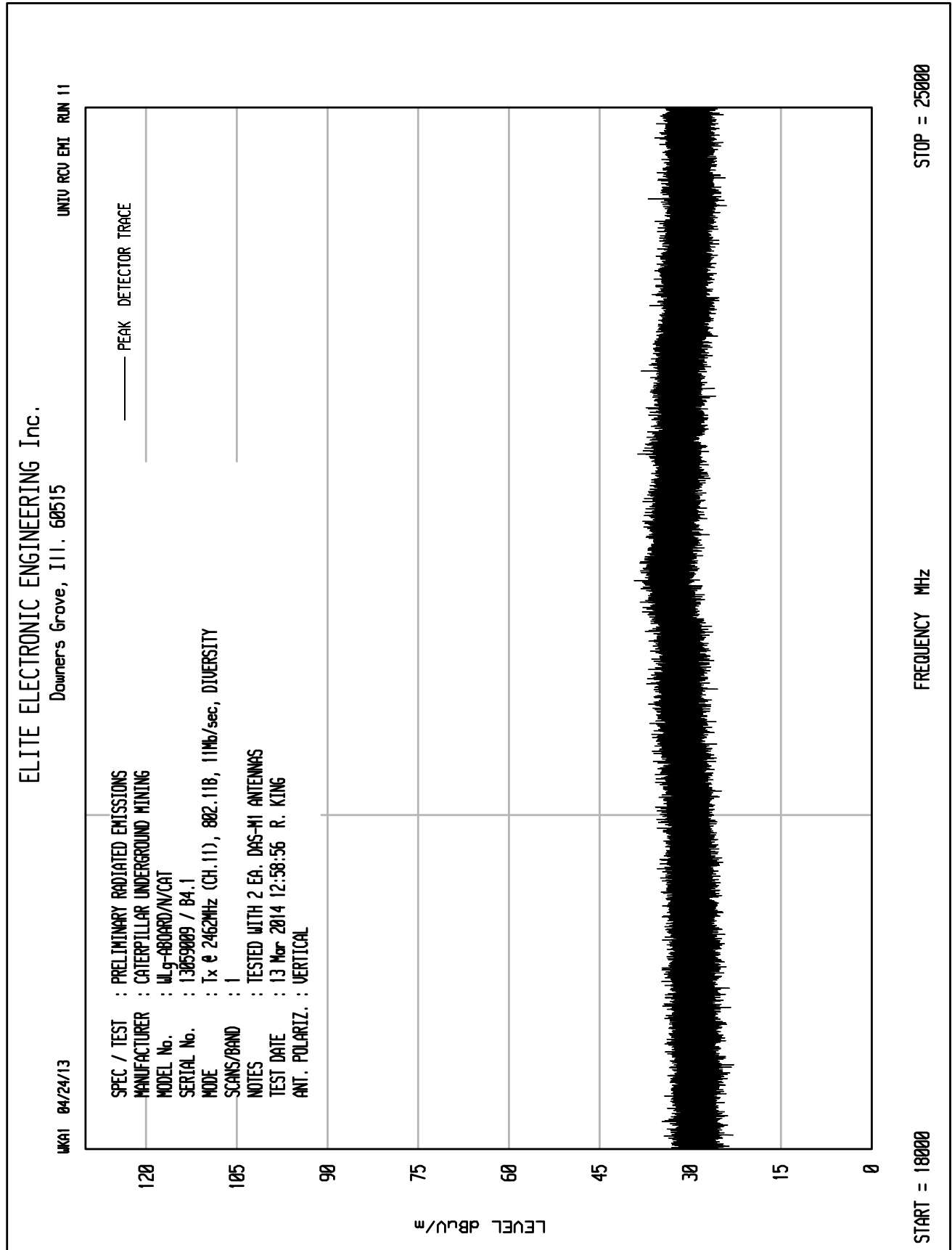


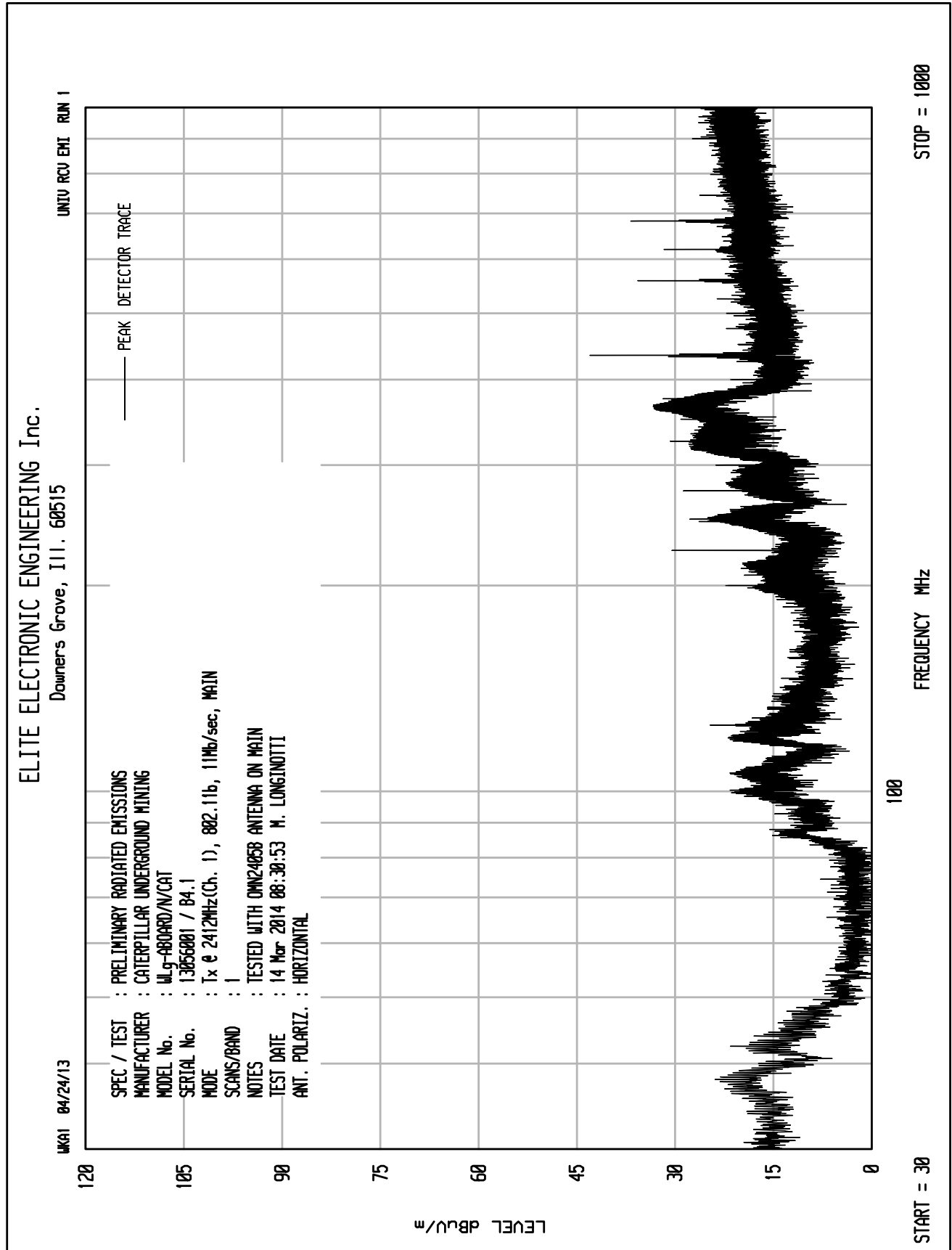
STOP = 18000

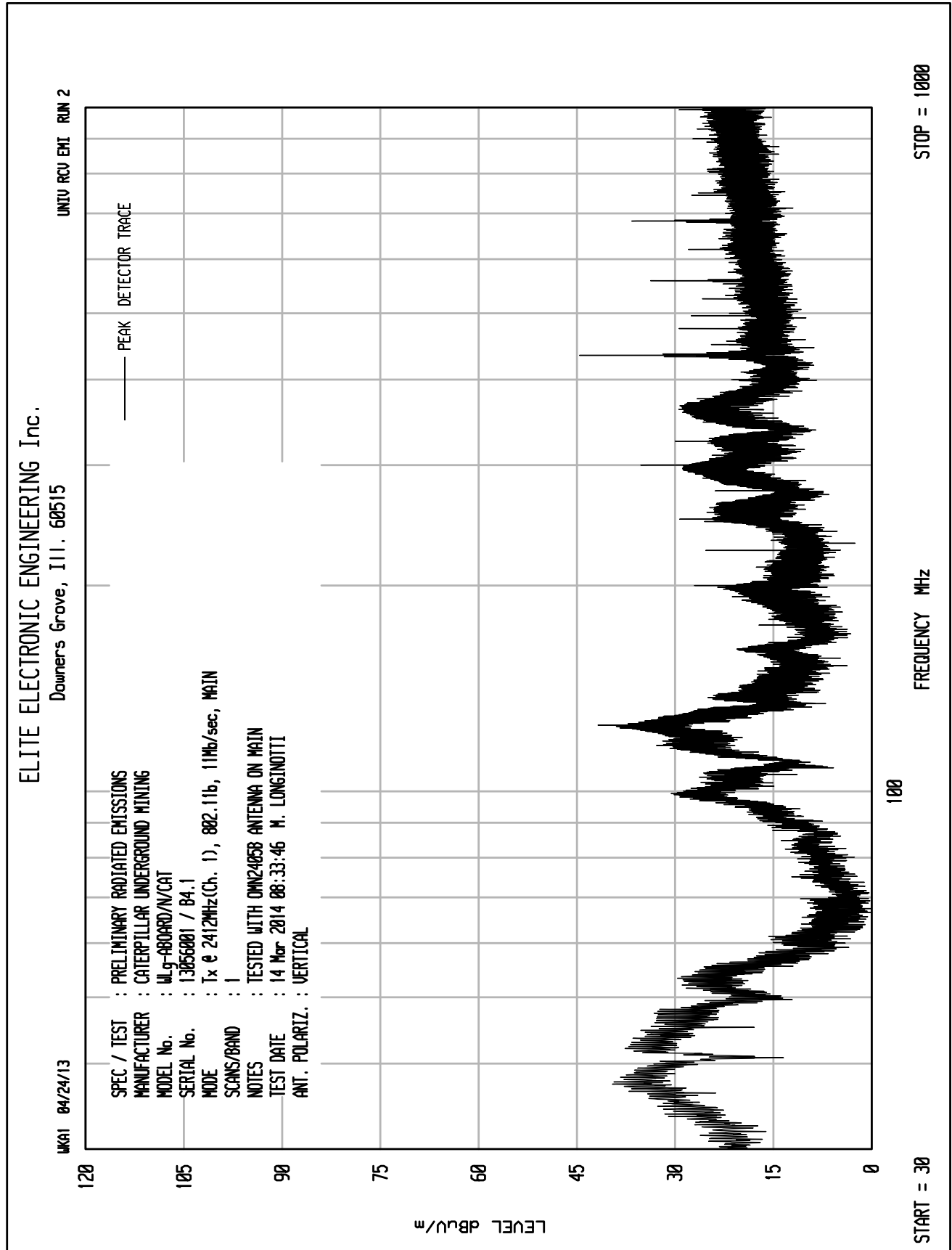
START = 4500

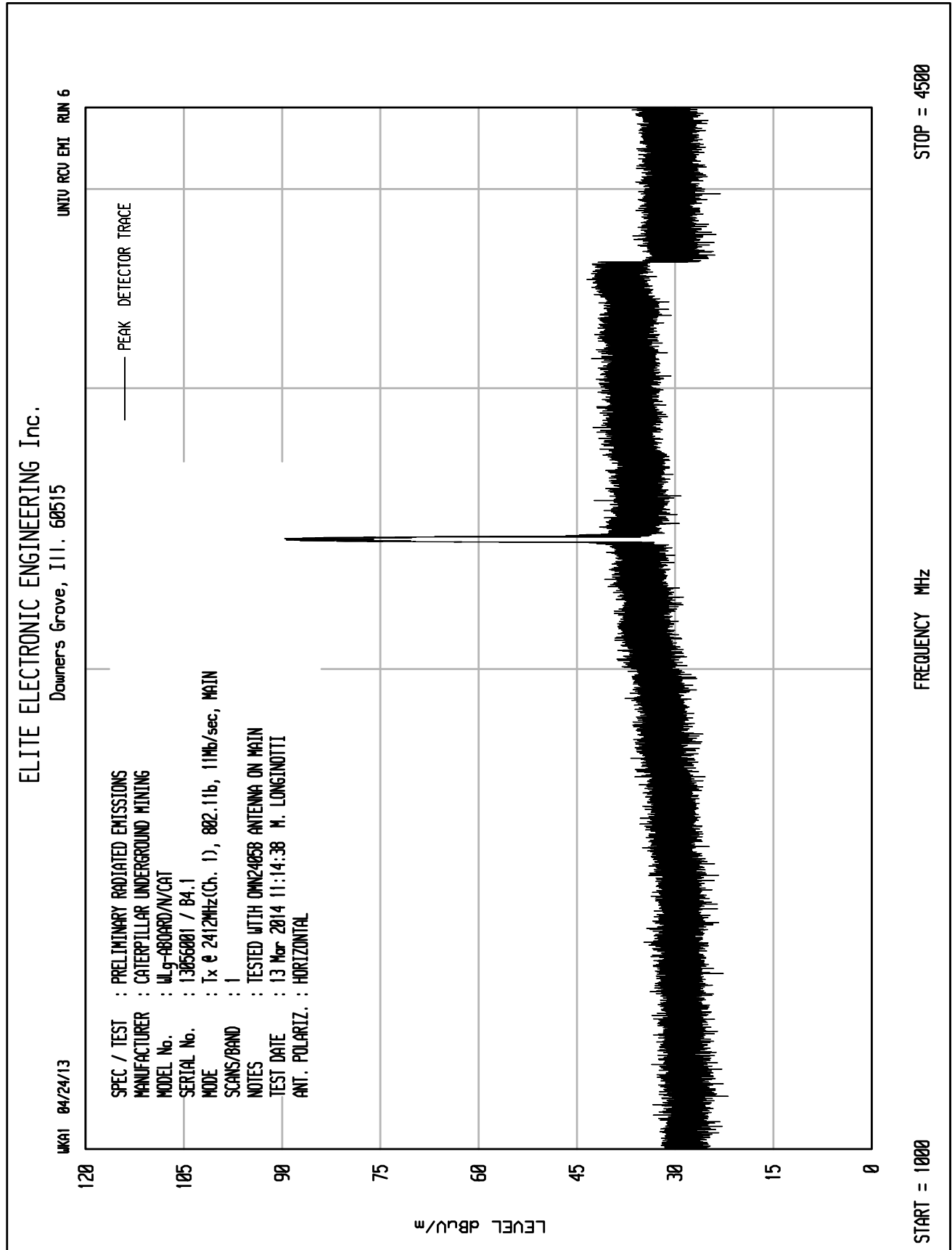


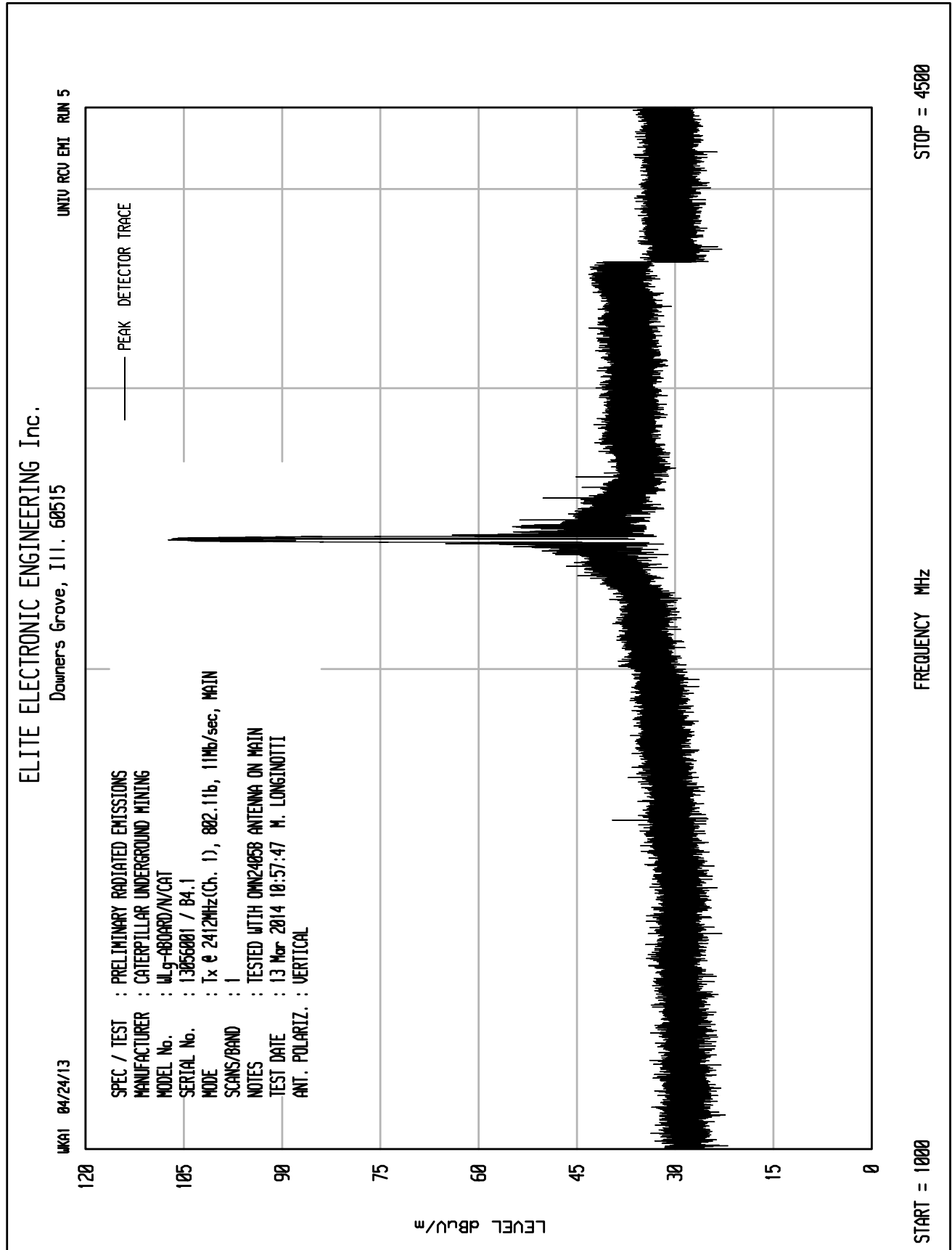


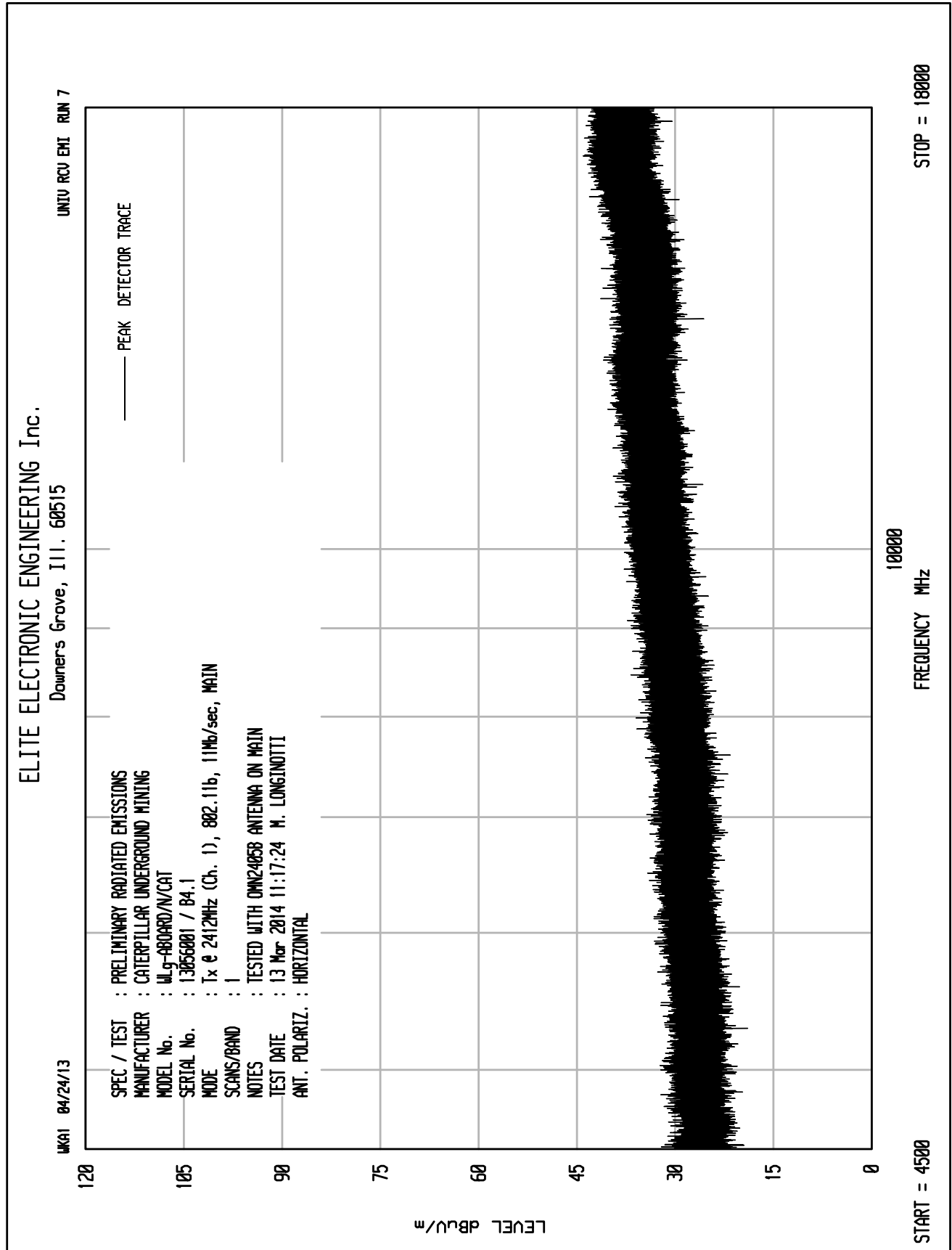


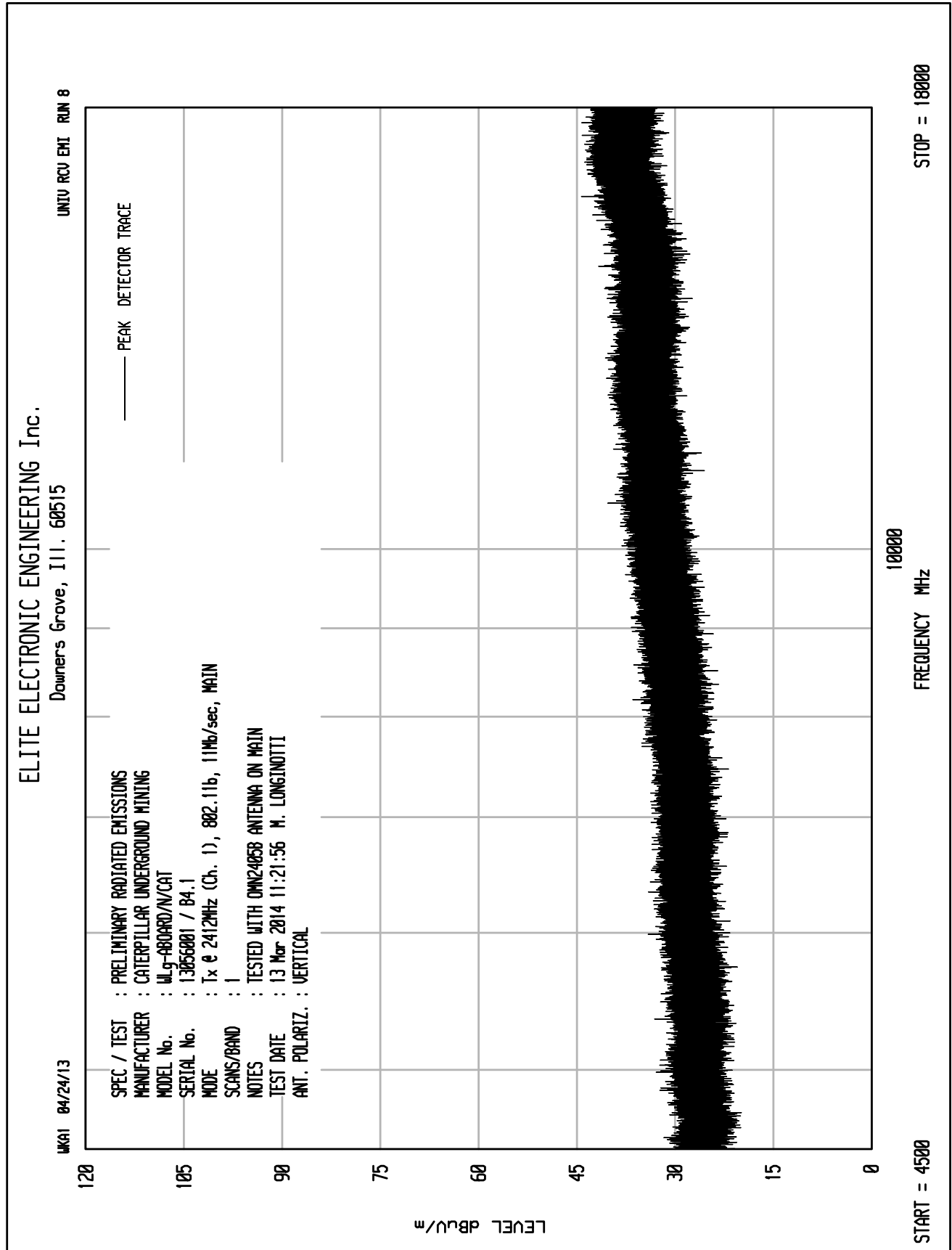










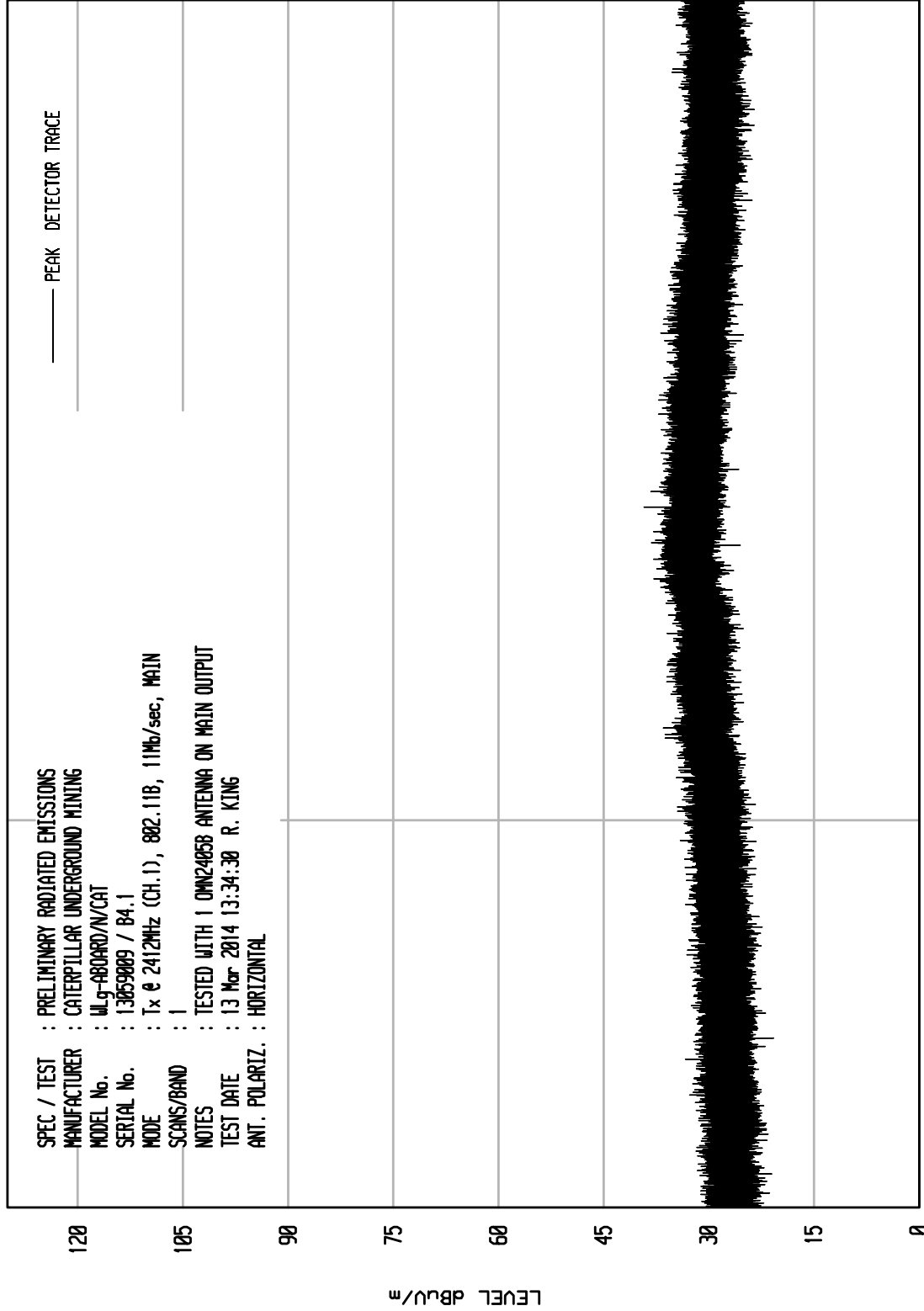


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UNIT: RCU ENI RUN 14

UKA1 04/24/13



START = 18000

FREQUENCY MHz

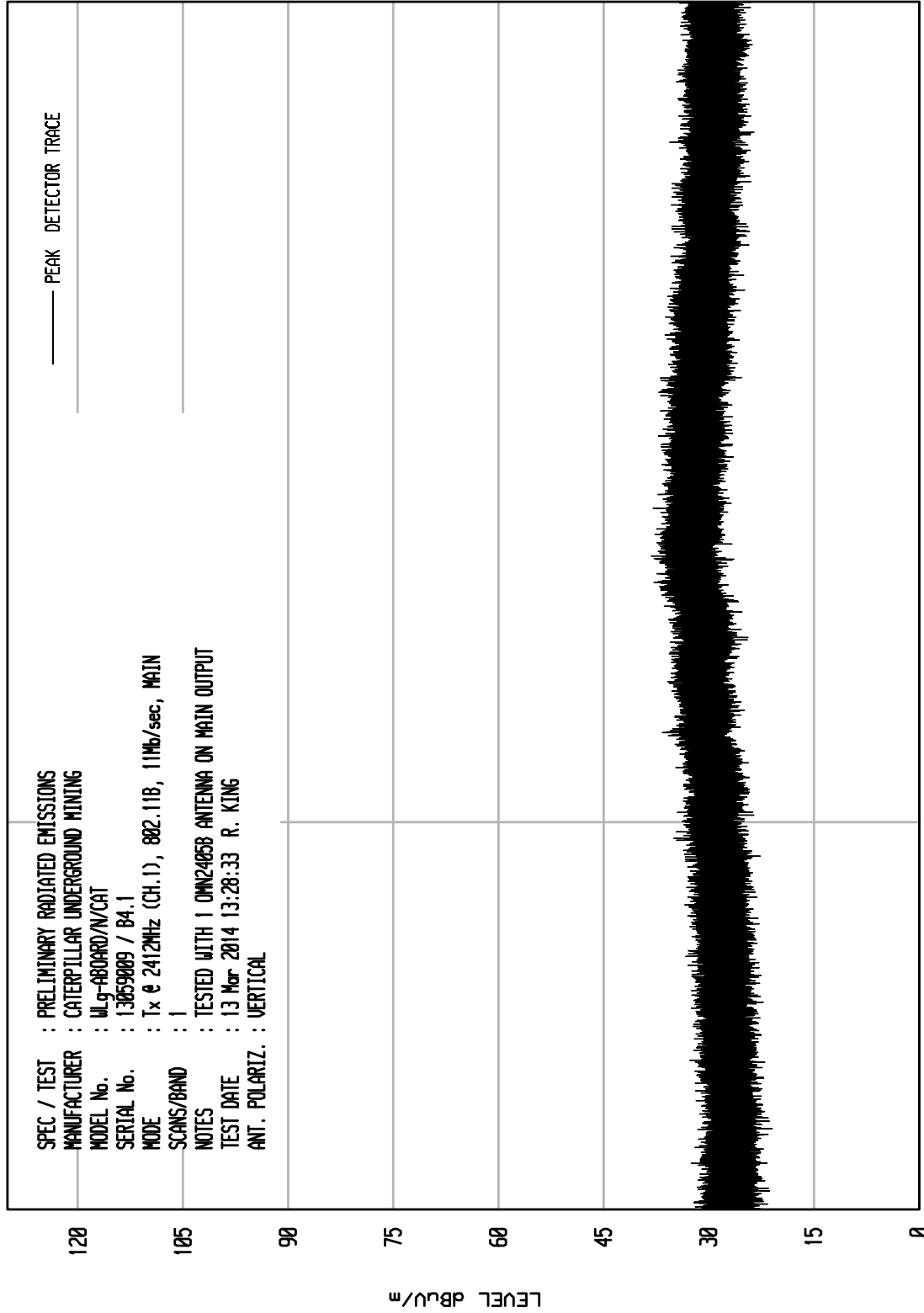
STOP = 25000

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UNIV RCU ENI RUN 13

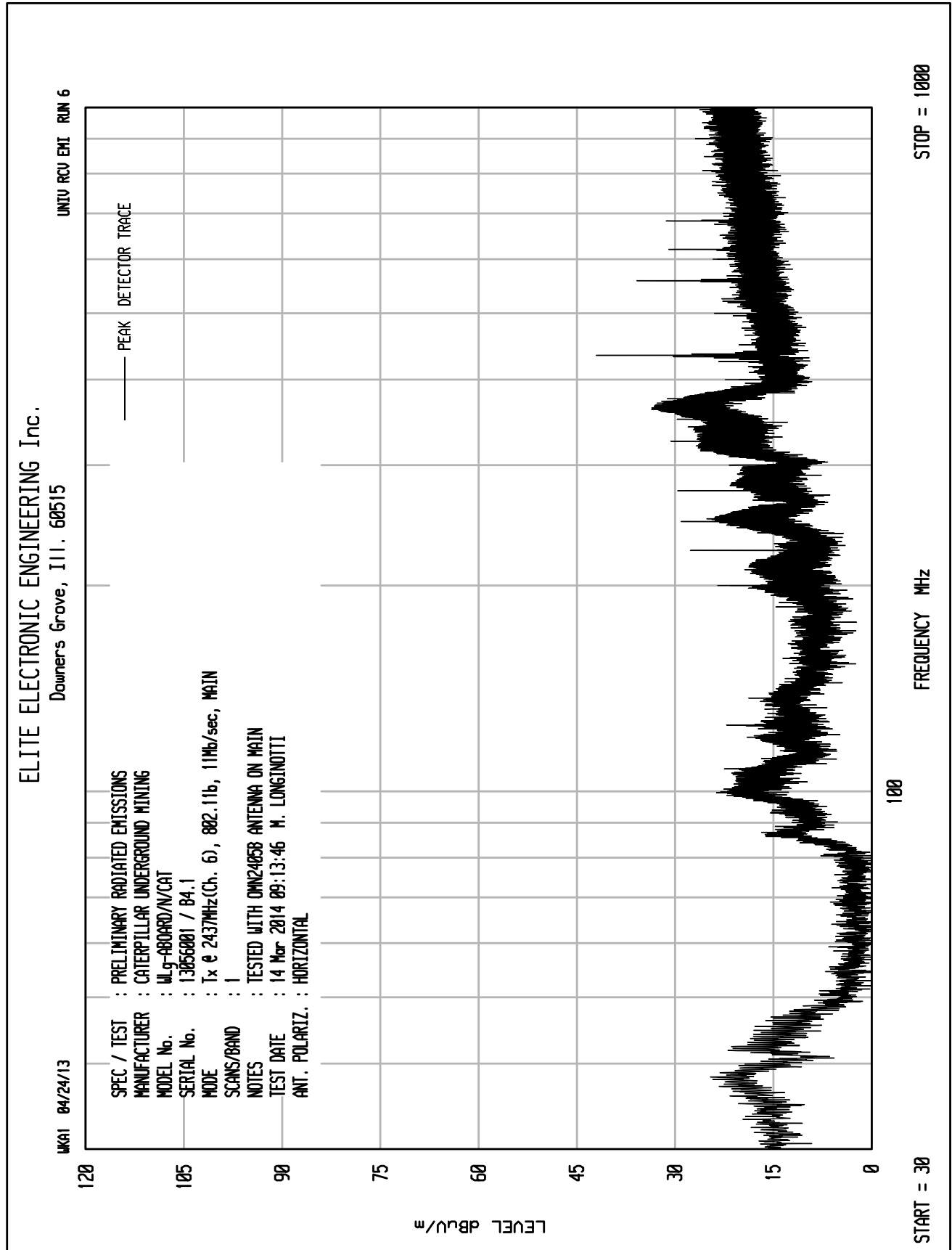
UKA1 04/24/13

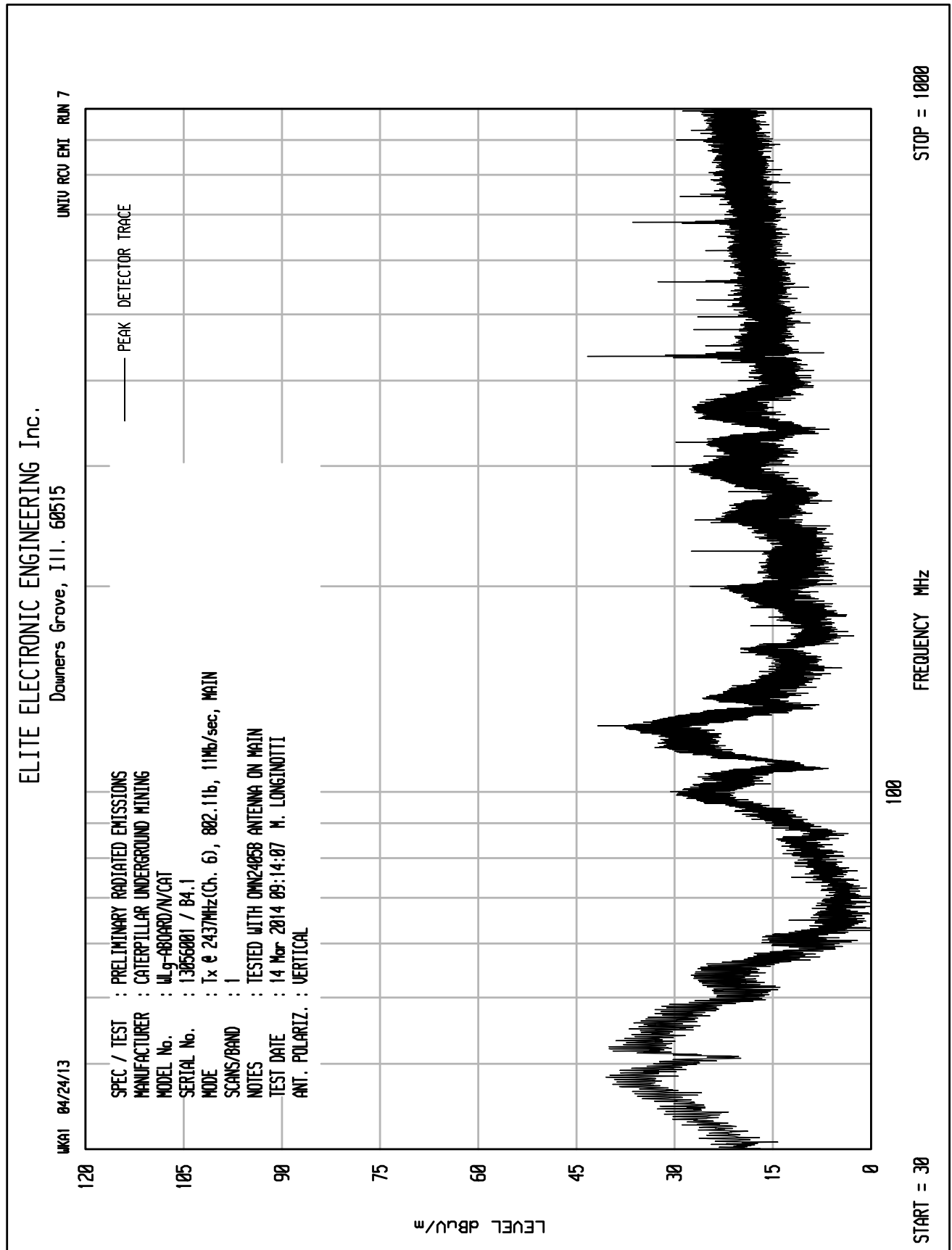


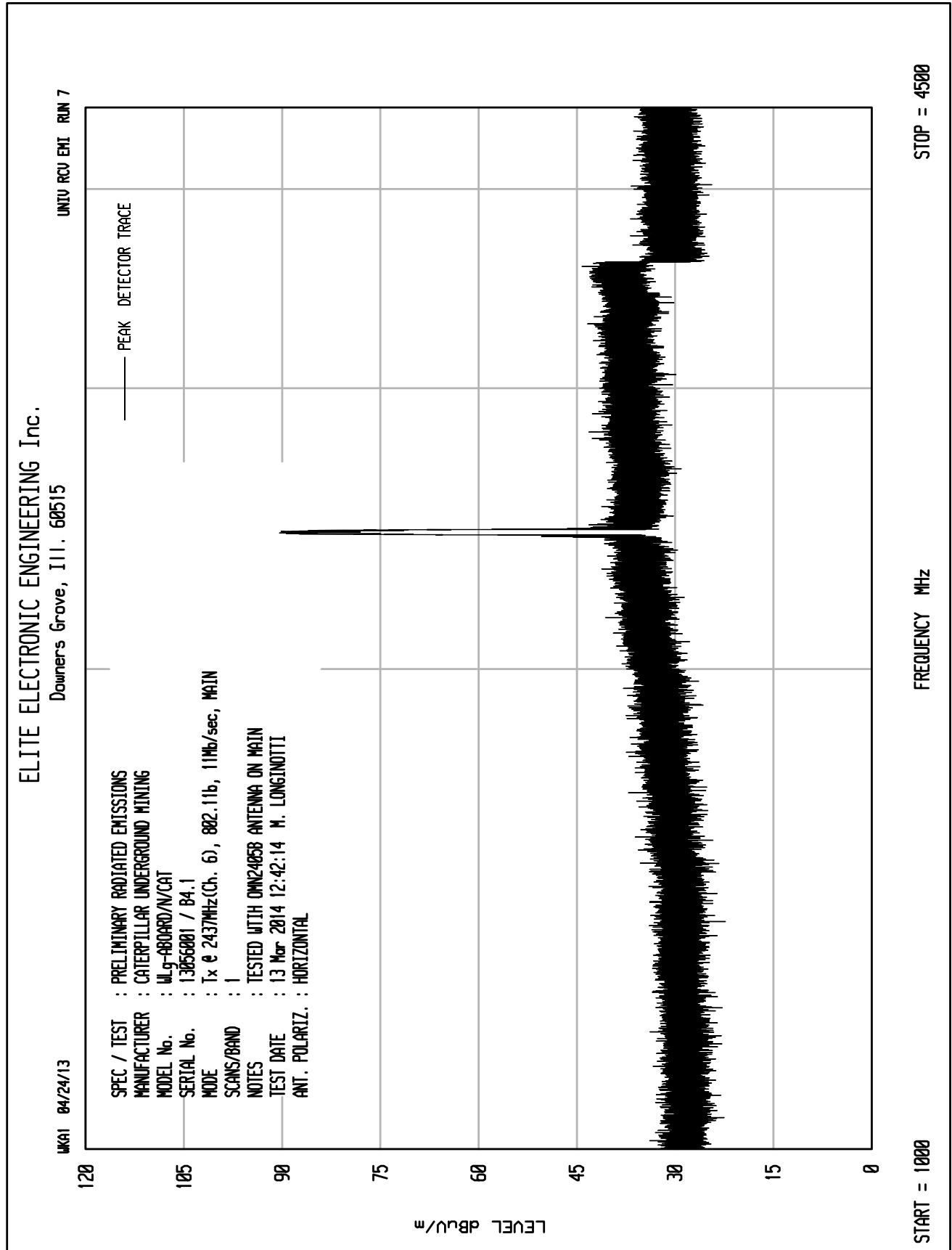
STOP = 25000

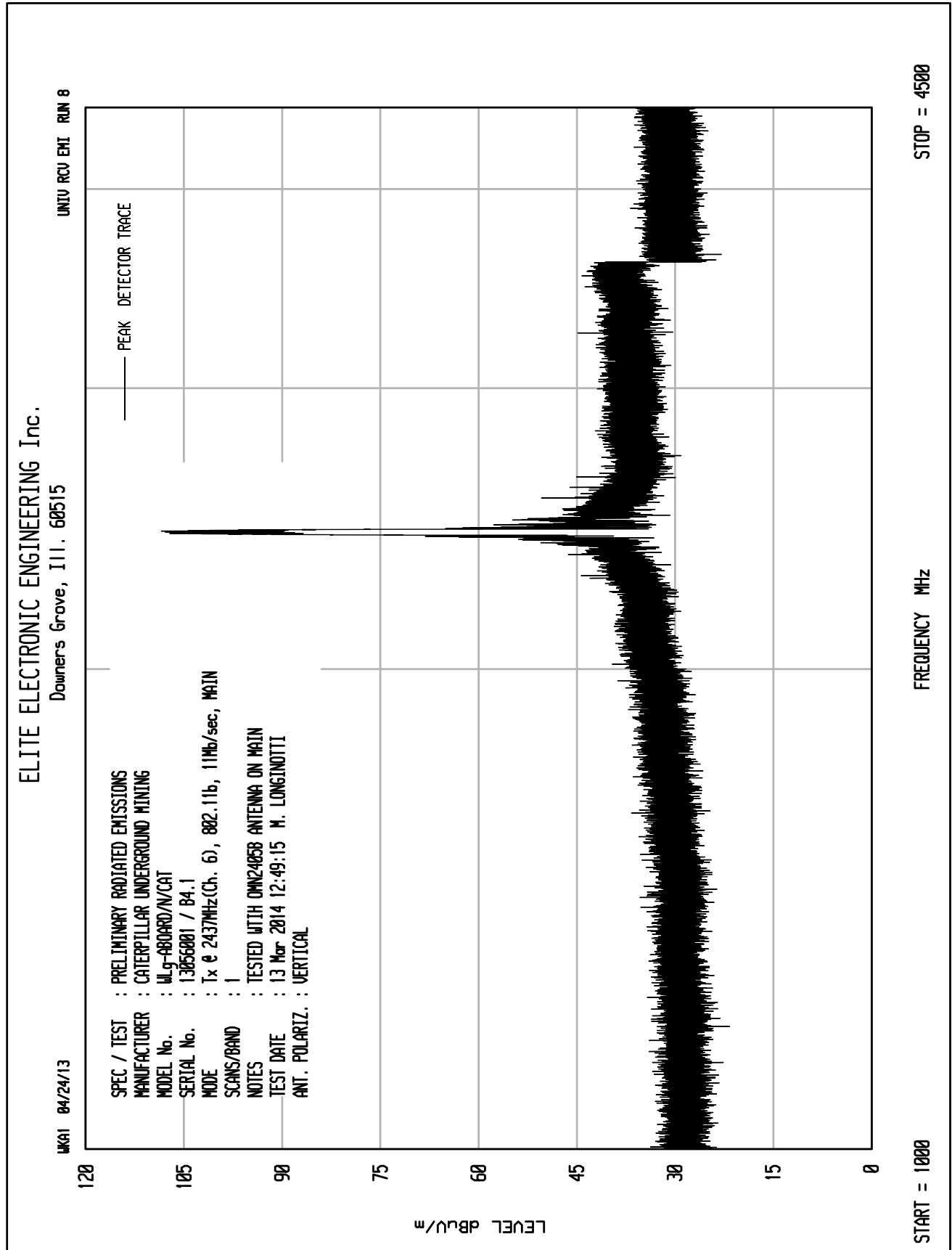
FREQUENCY MHz

START = 18000







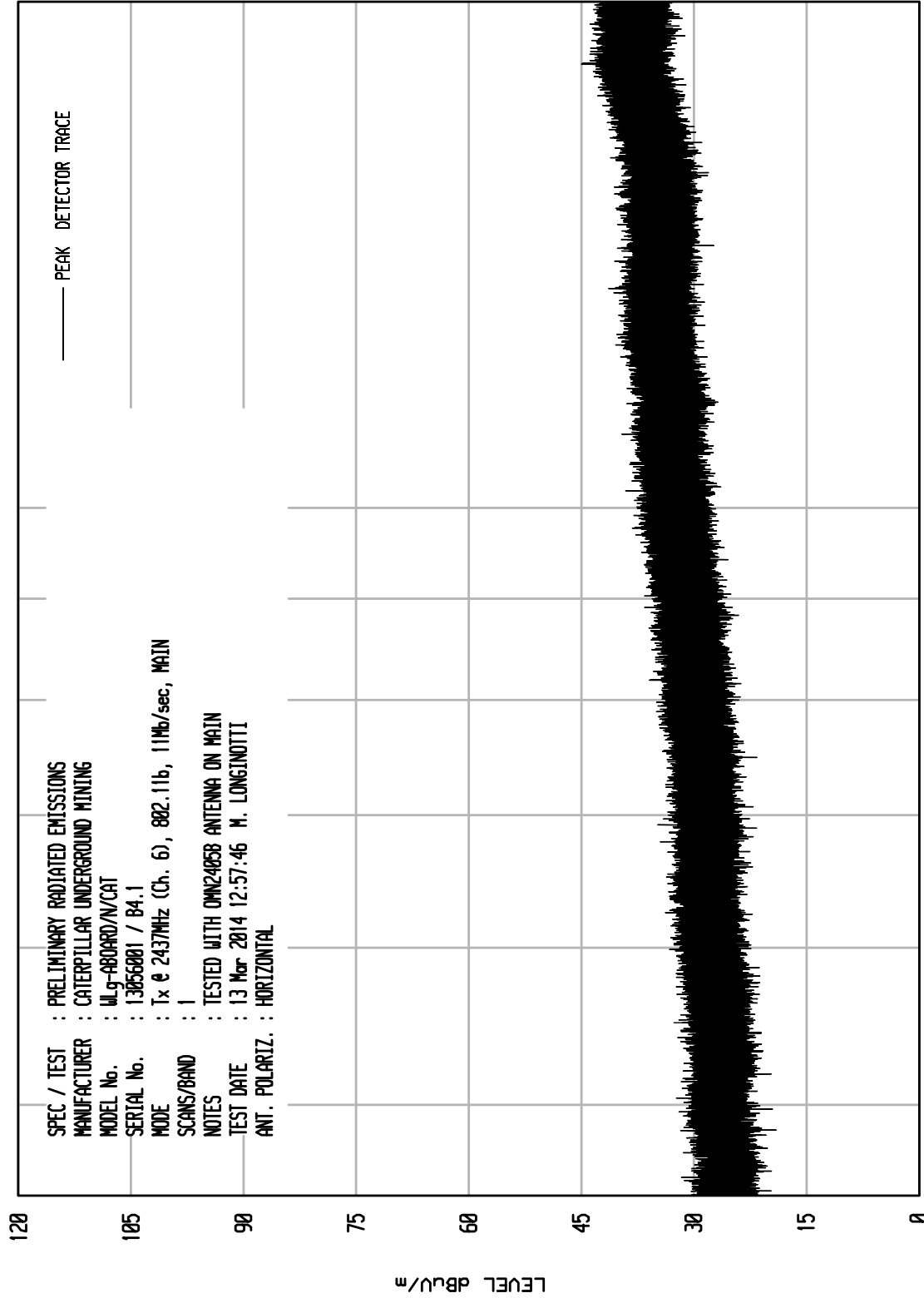




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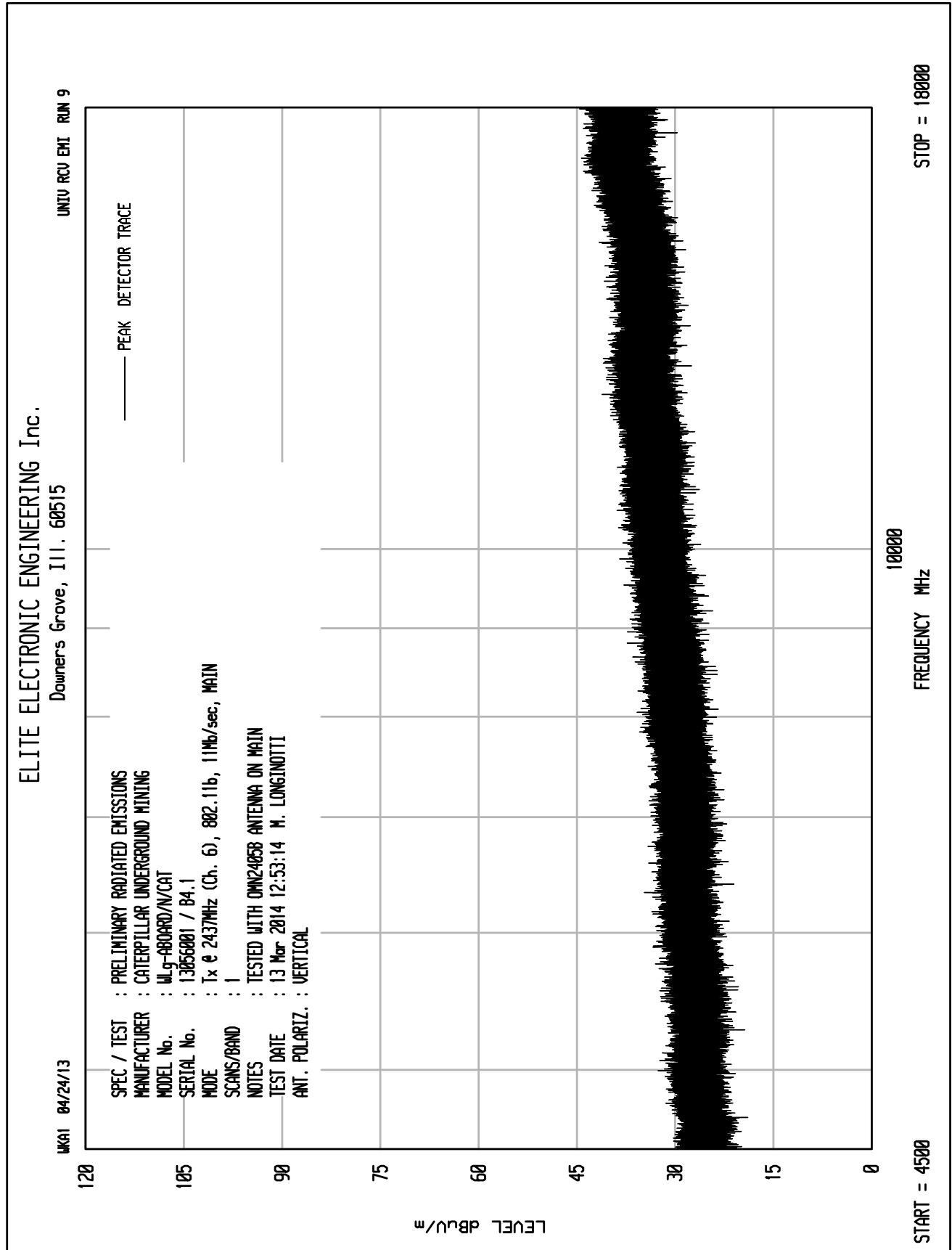
UNIU RCU ENI RUN 18

UKA1 04/24/13



STOP = 18000

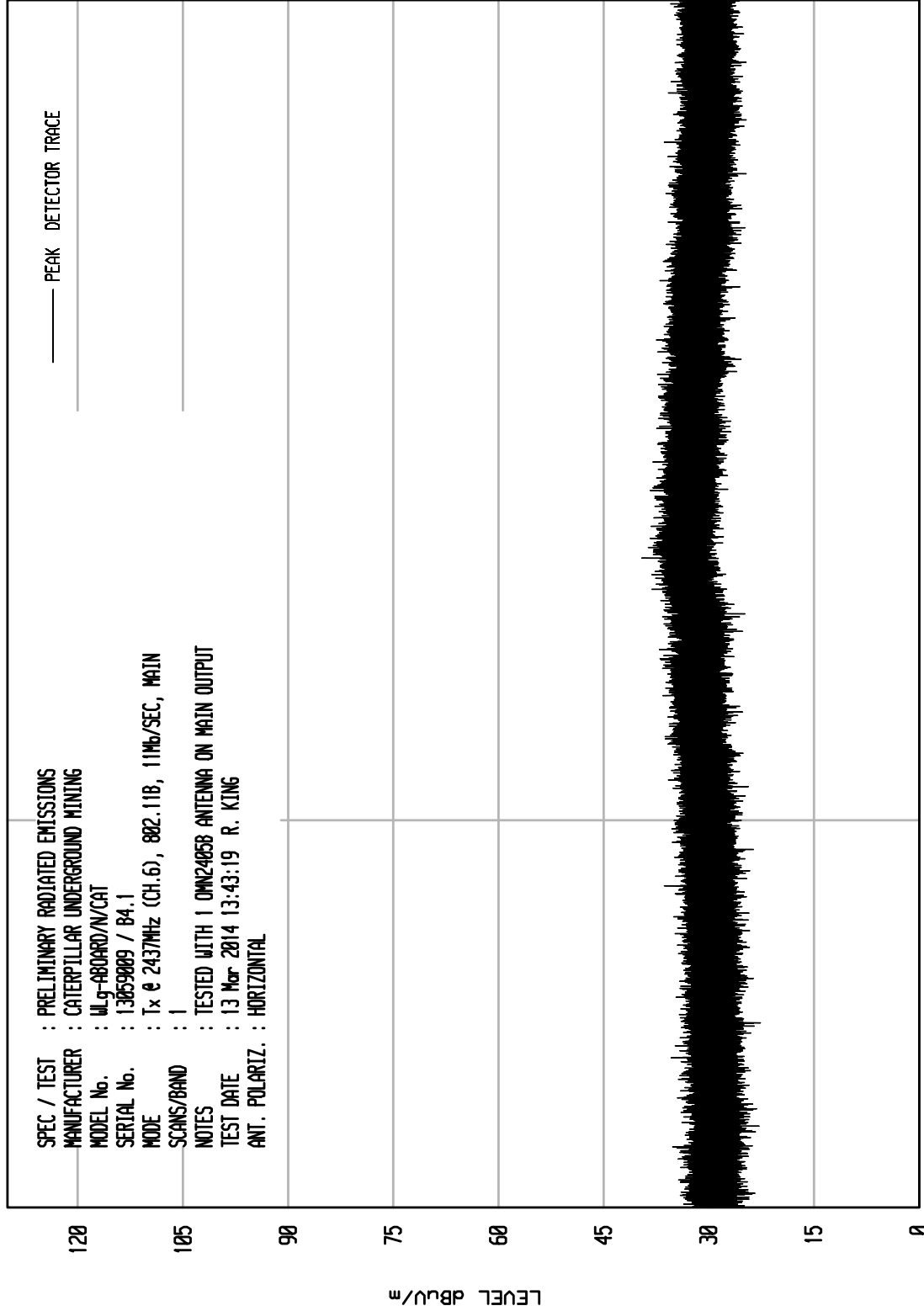
START = 4500



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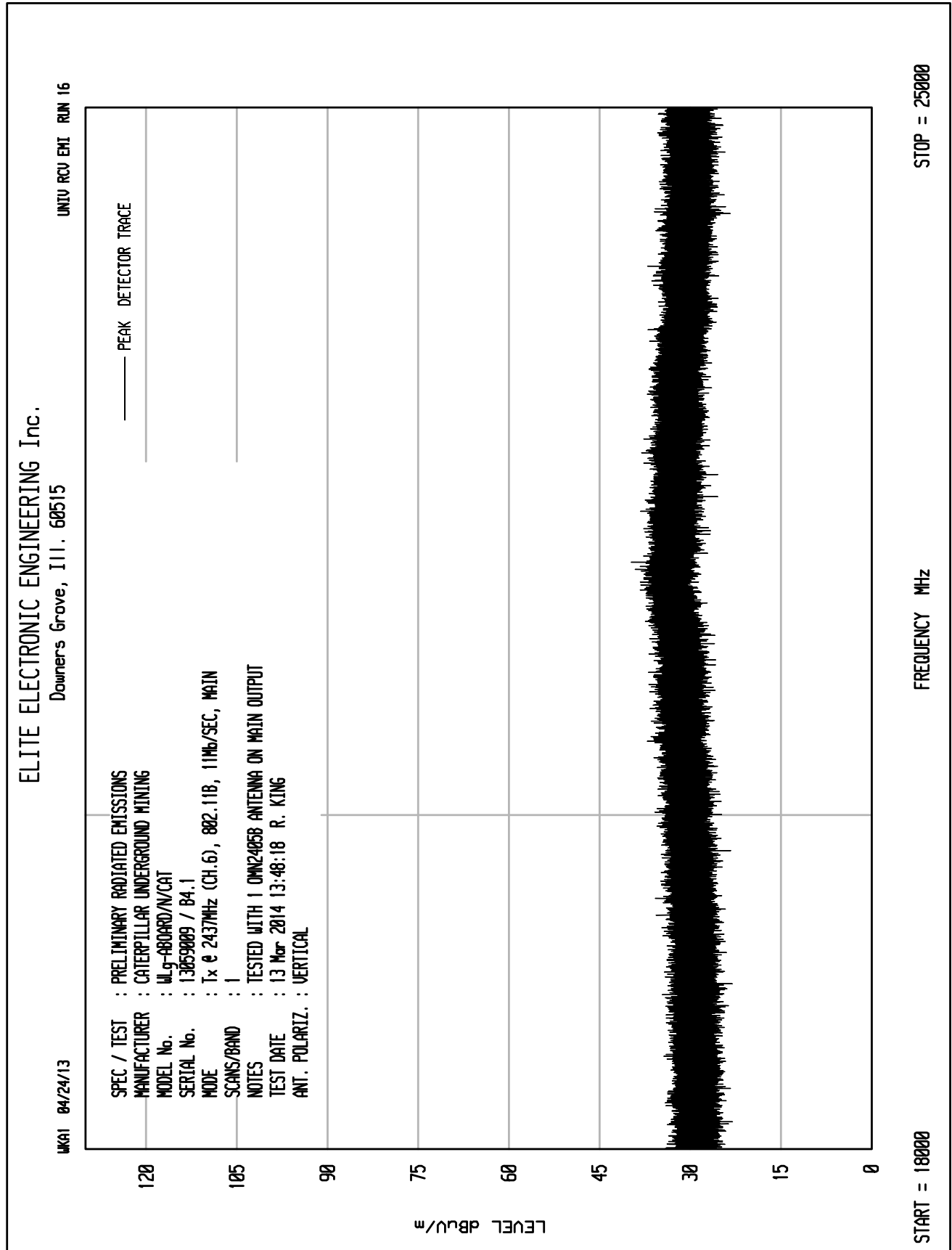
UNIV RCU ENI RUN 15

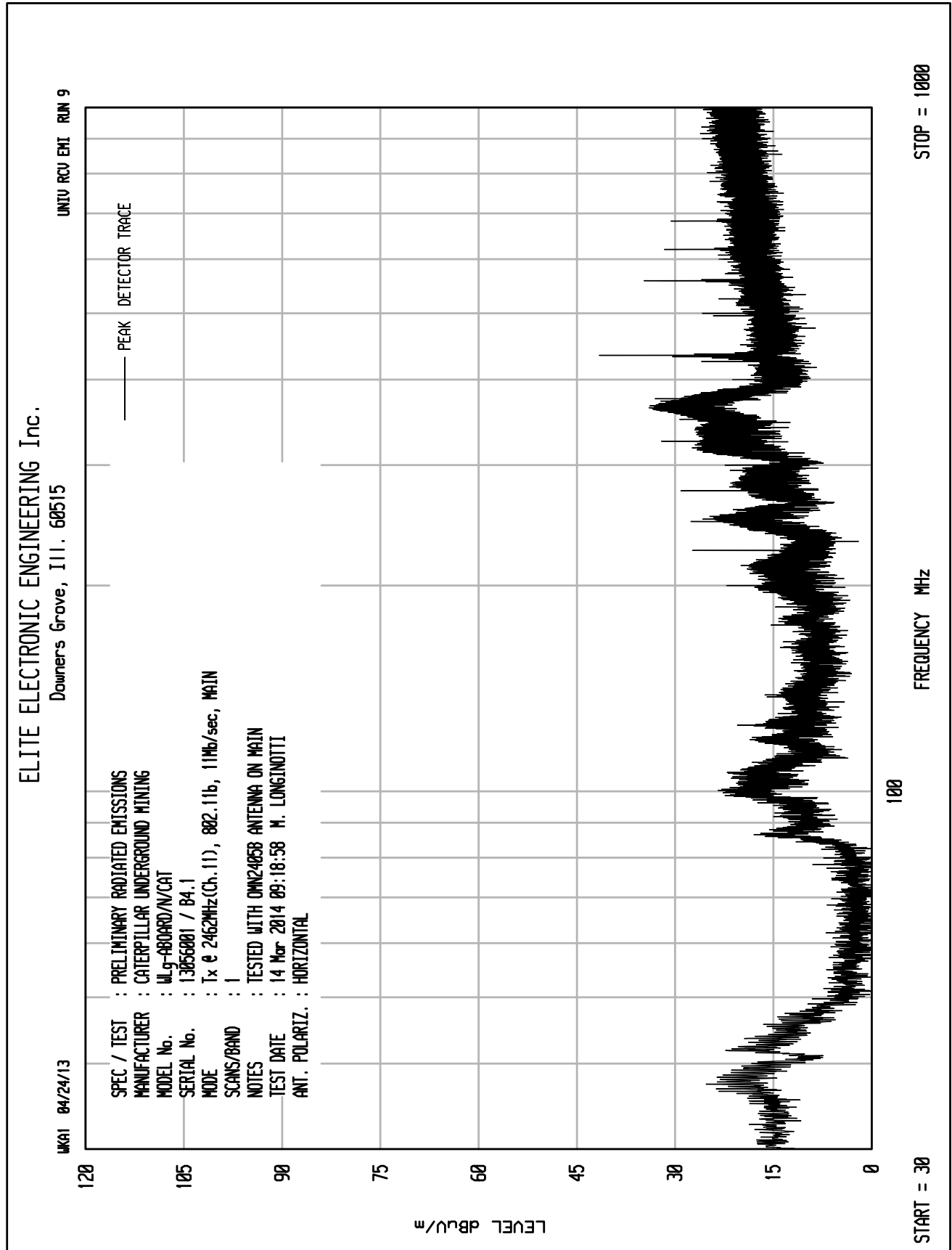
UKA1 04/24/13



STOP = 25000

START = 18000



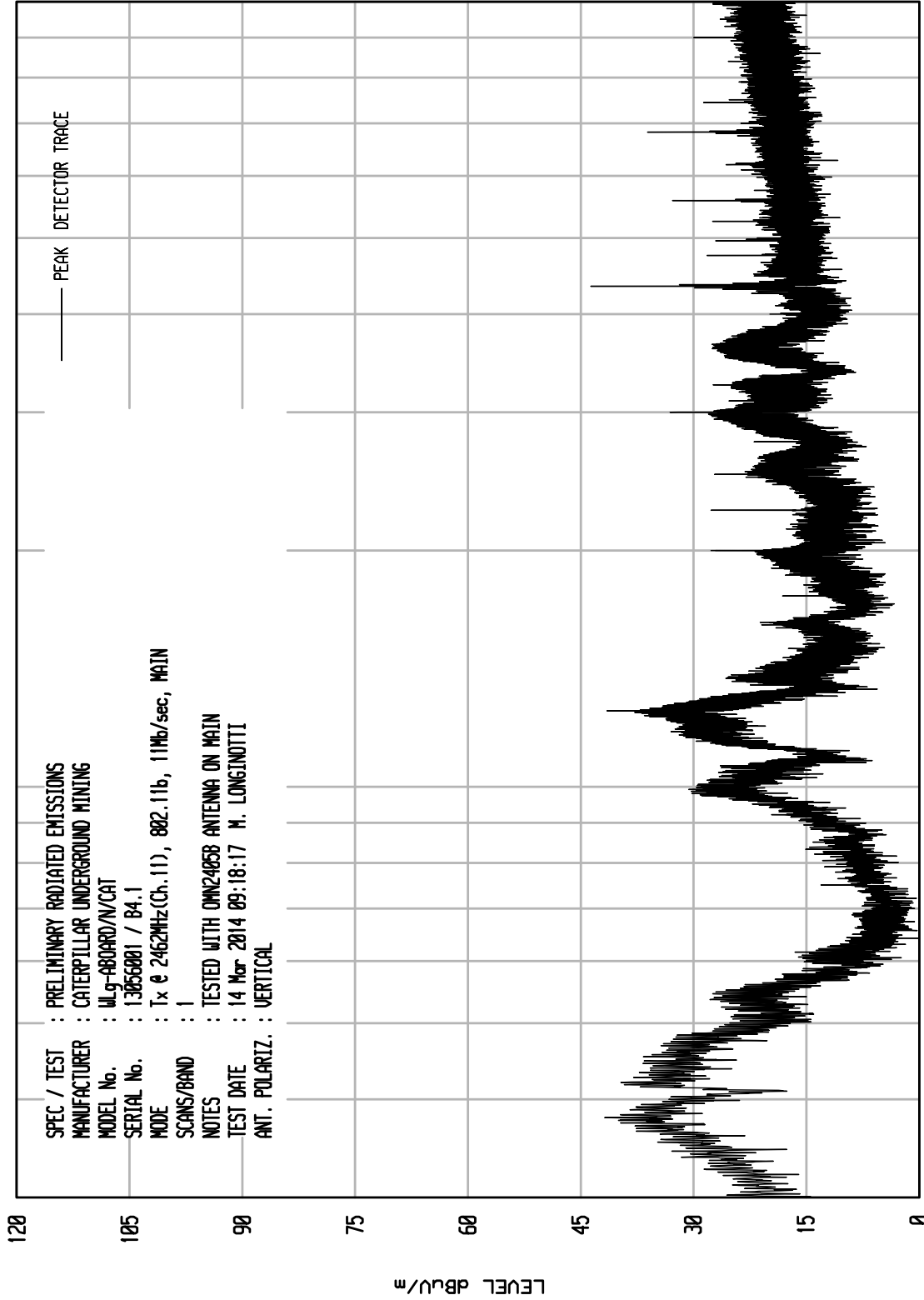


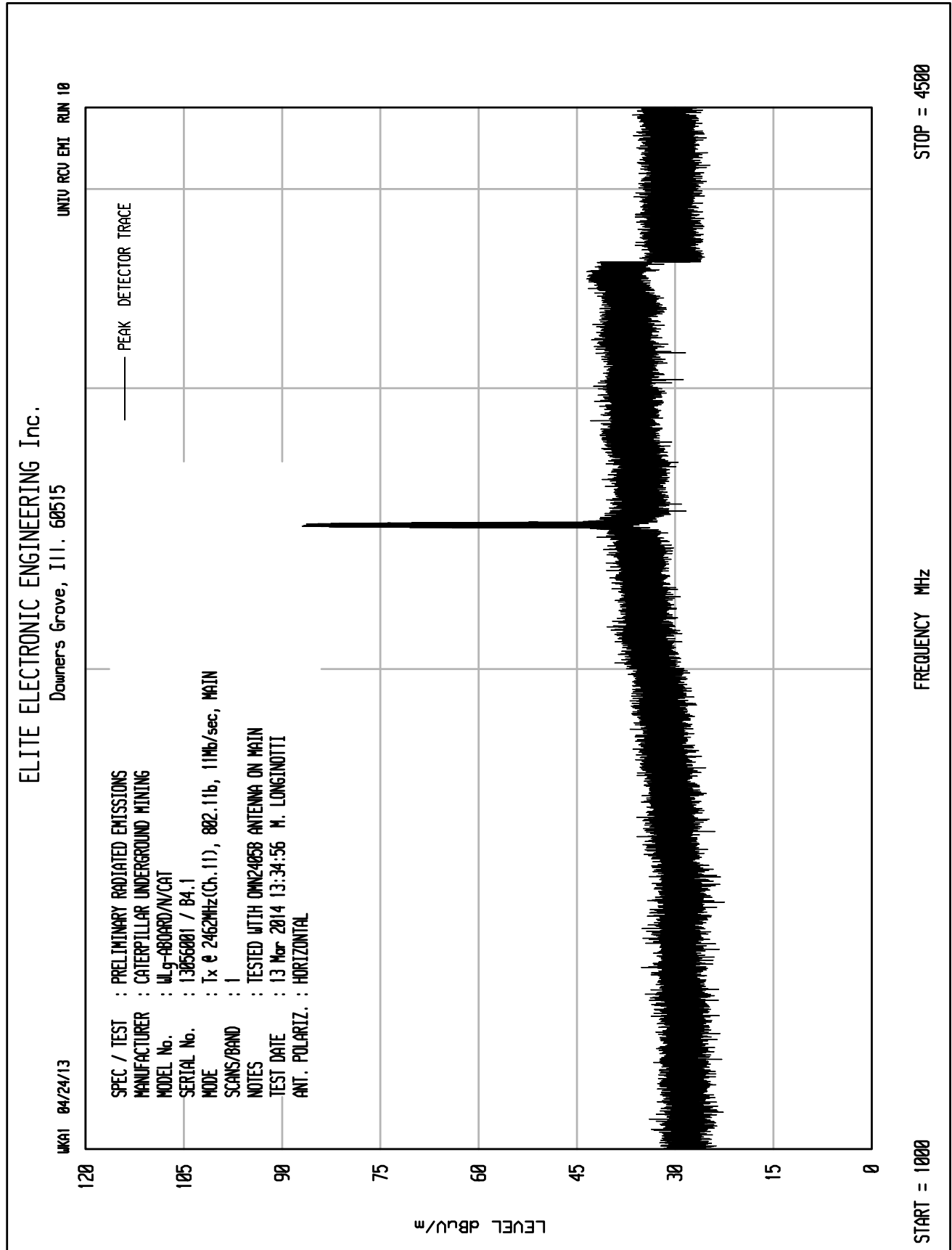


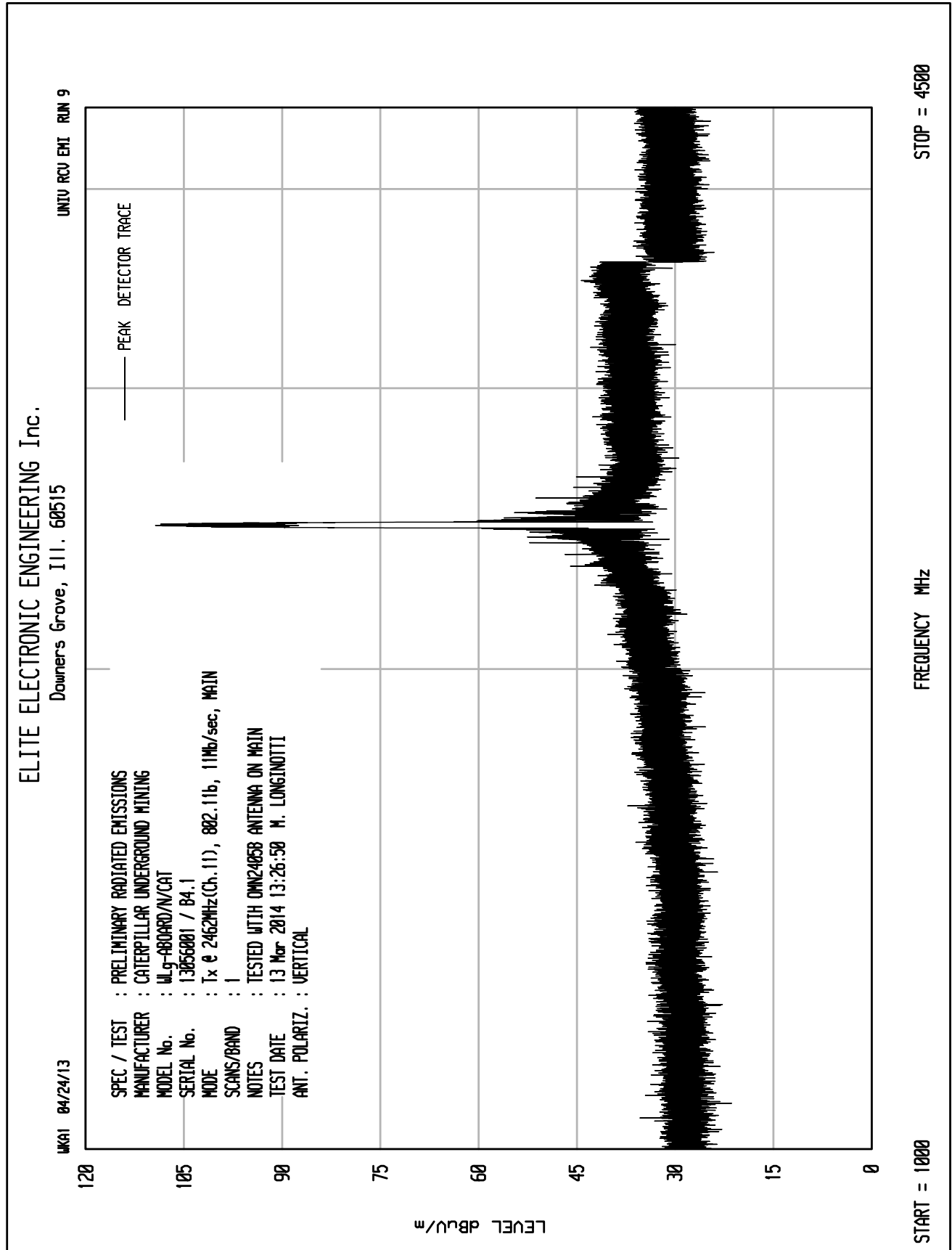
ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515

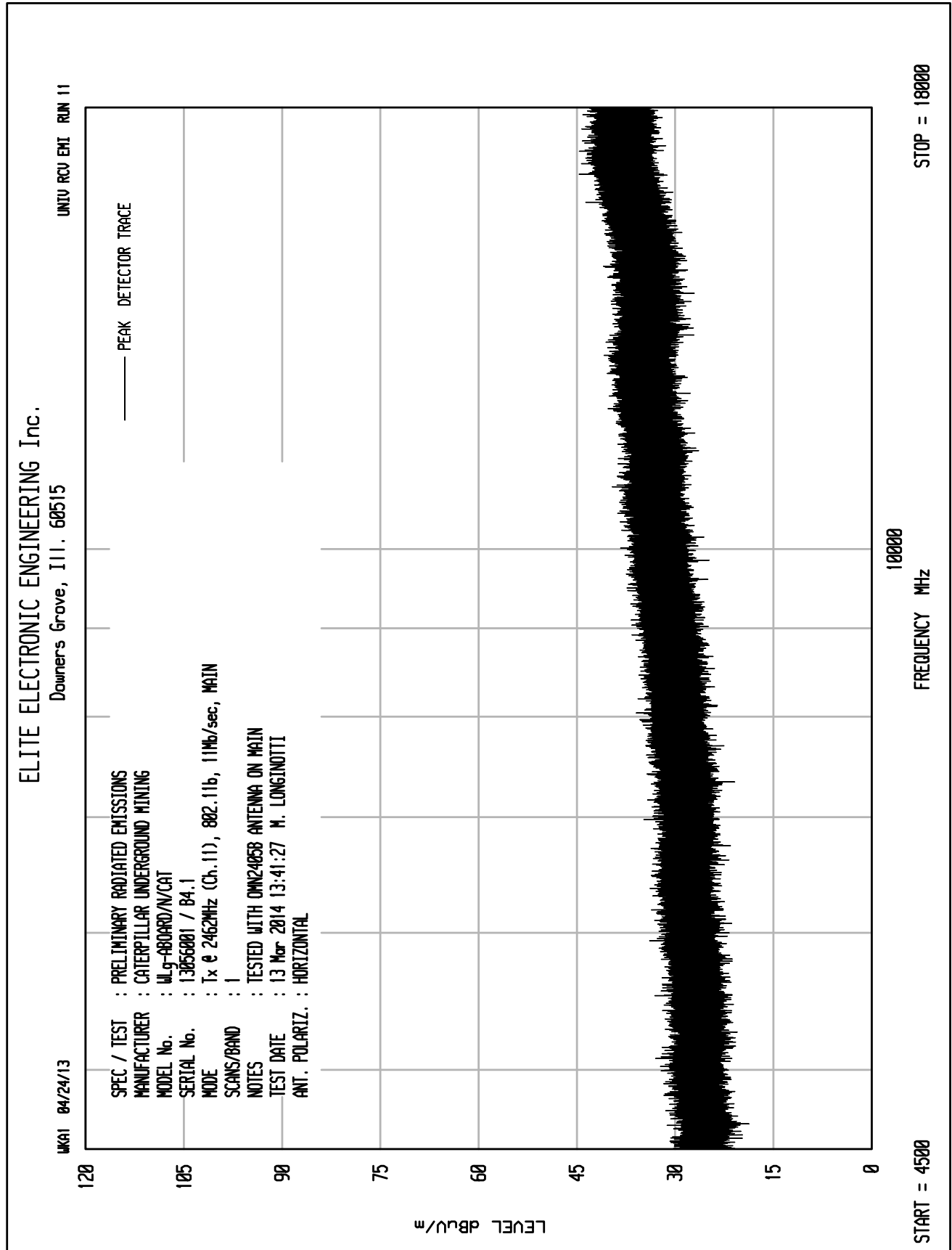
UNITV RCU ENI RUN 8

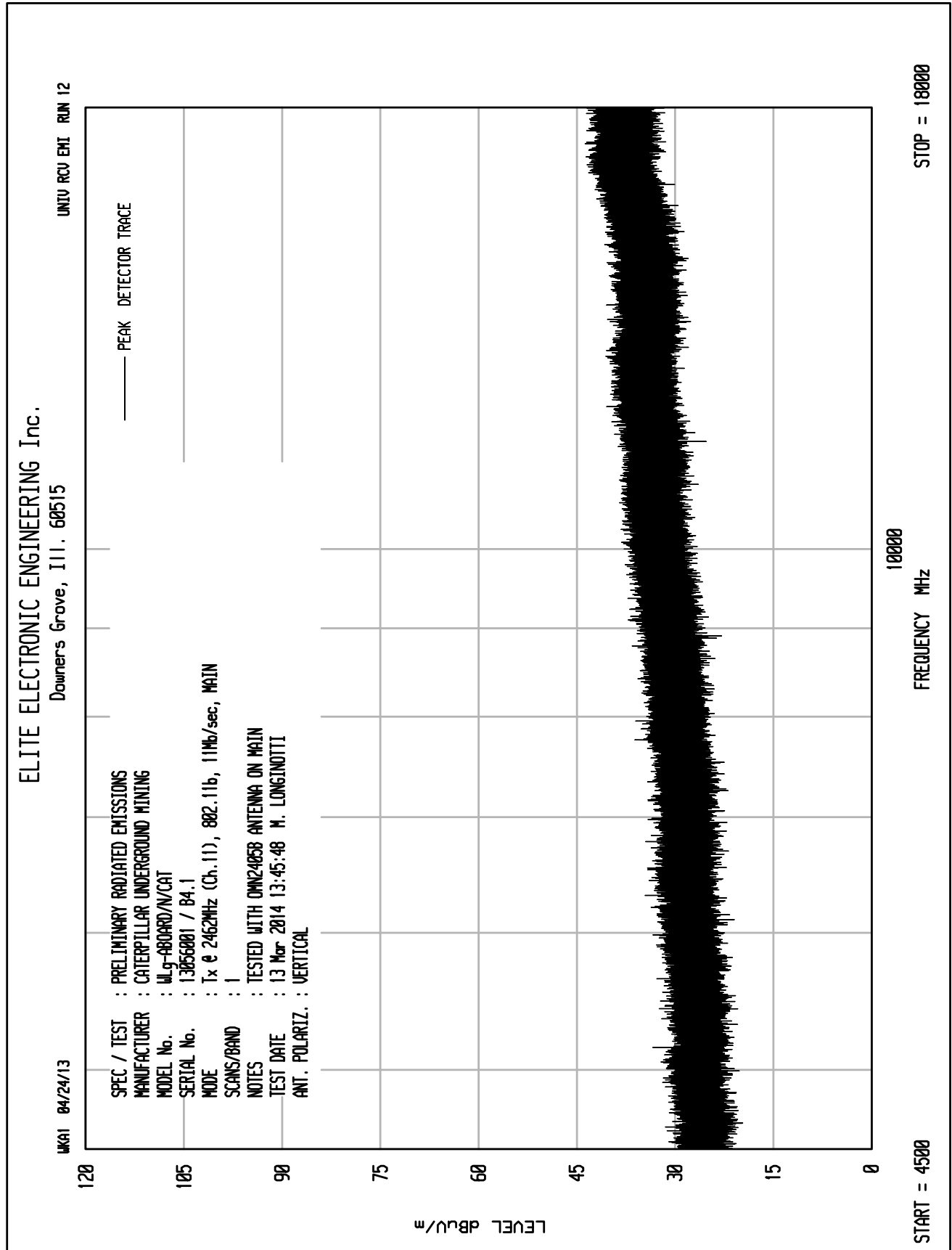
UKA1 04/24/13







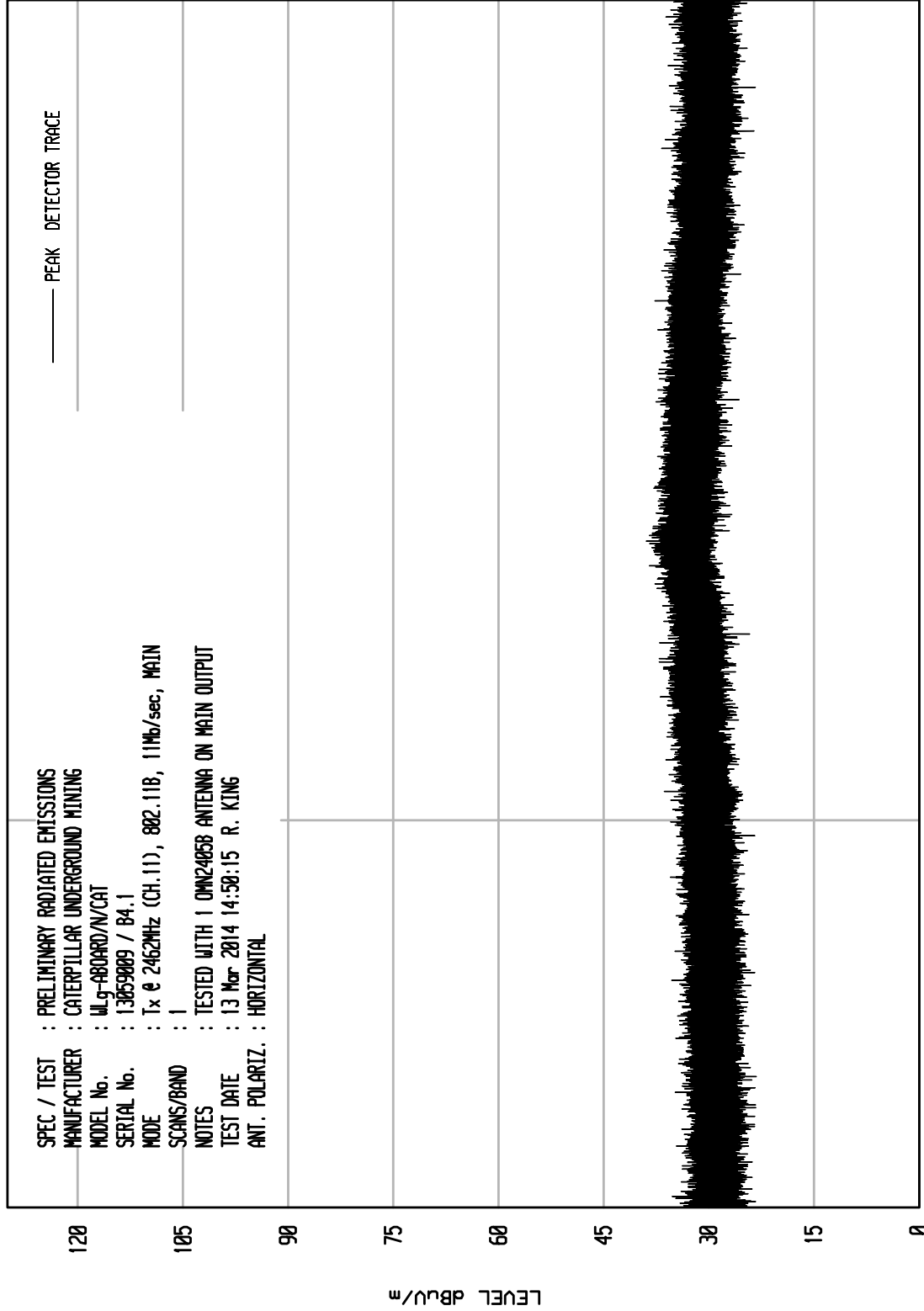




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UNIV RCU ENI RUN 23

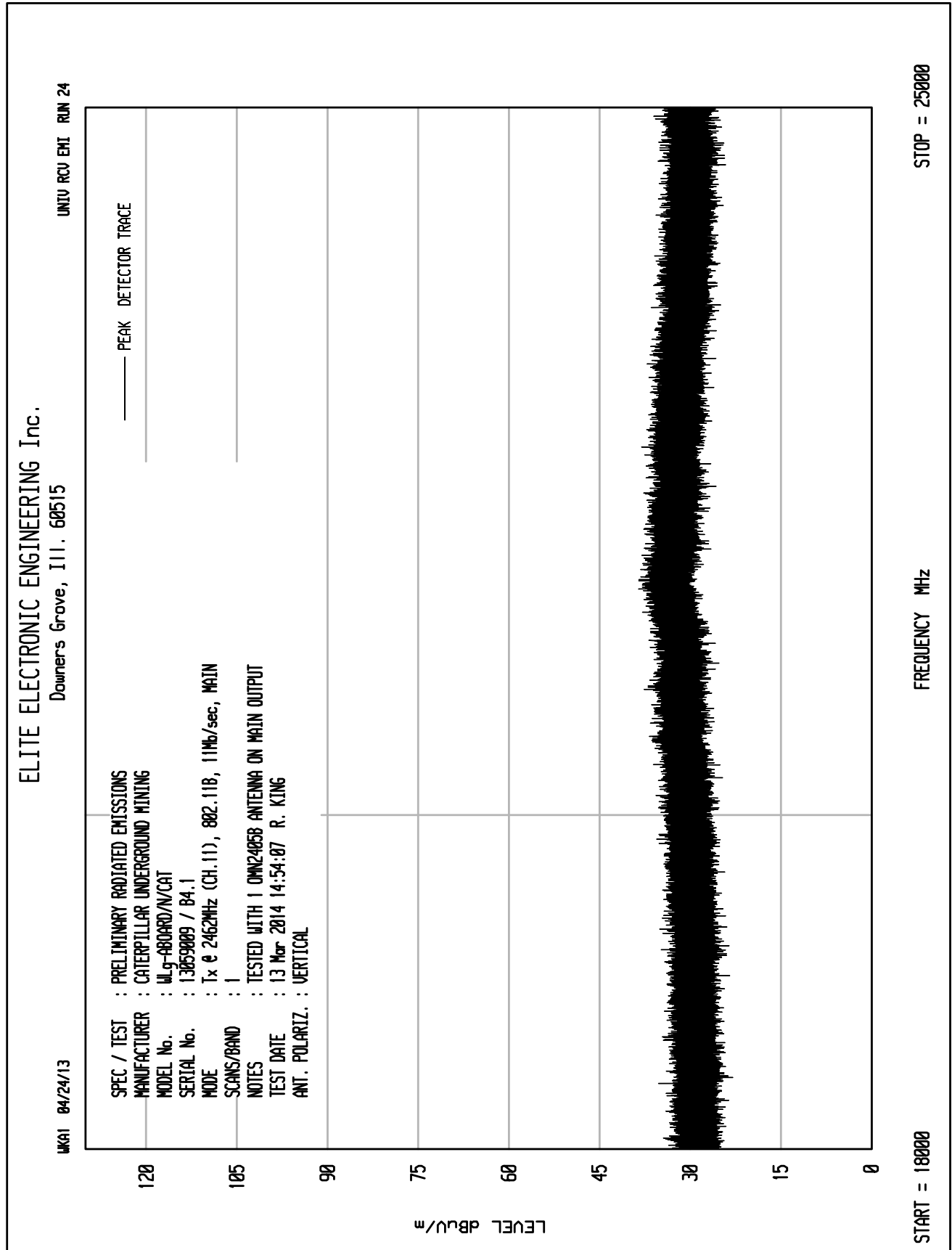
UKA1 04/24/13

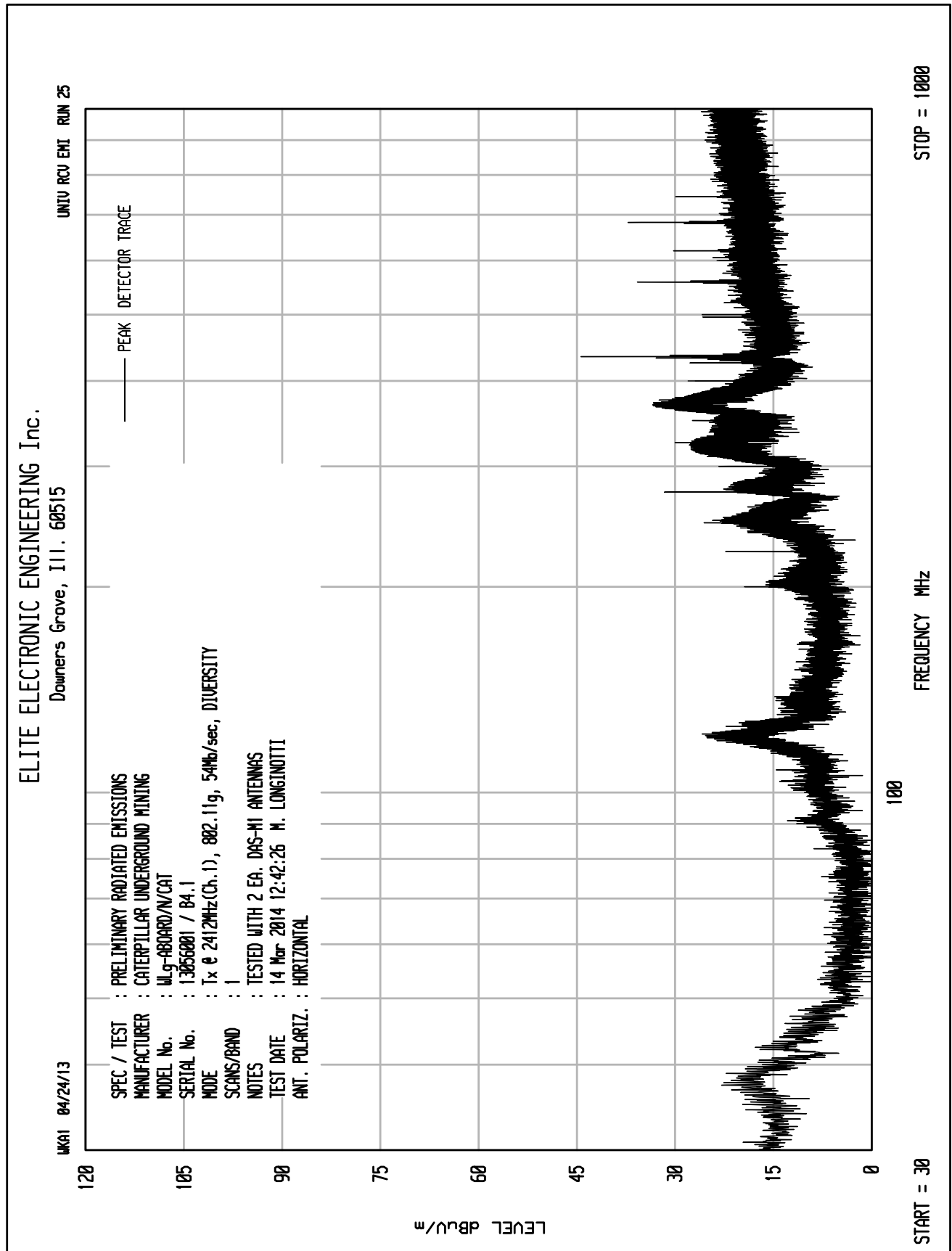


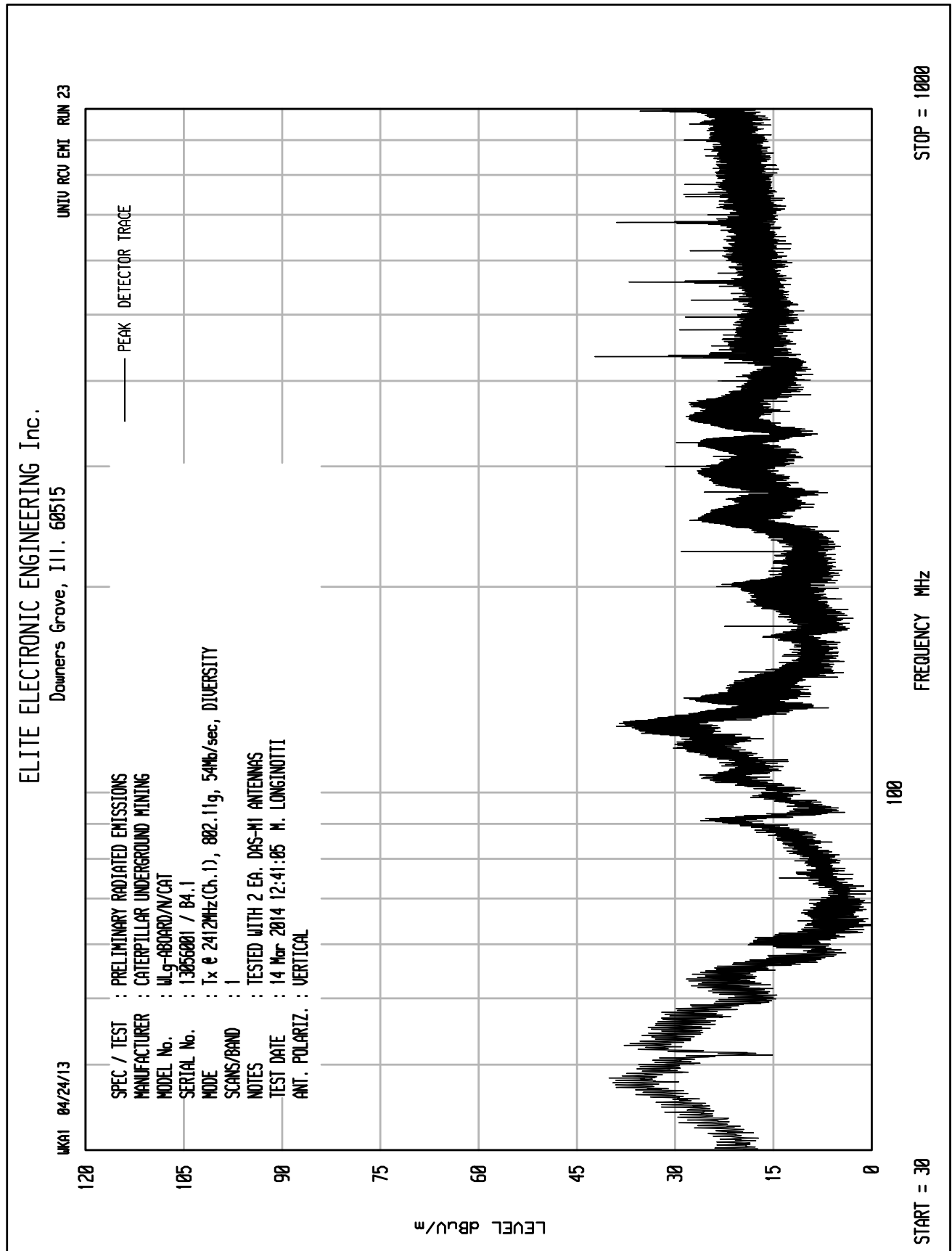
STOP = 25000

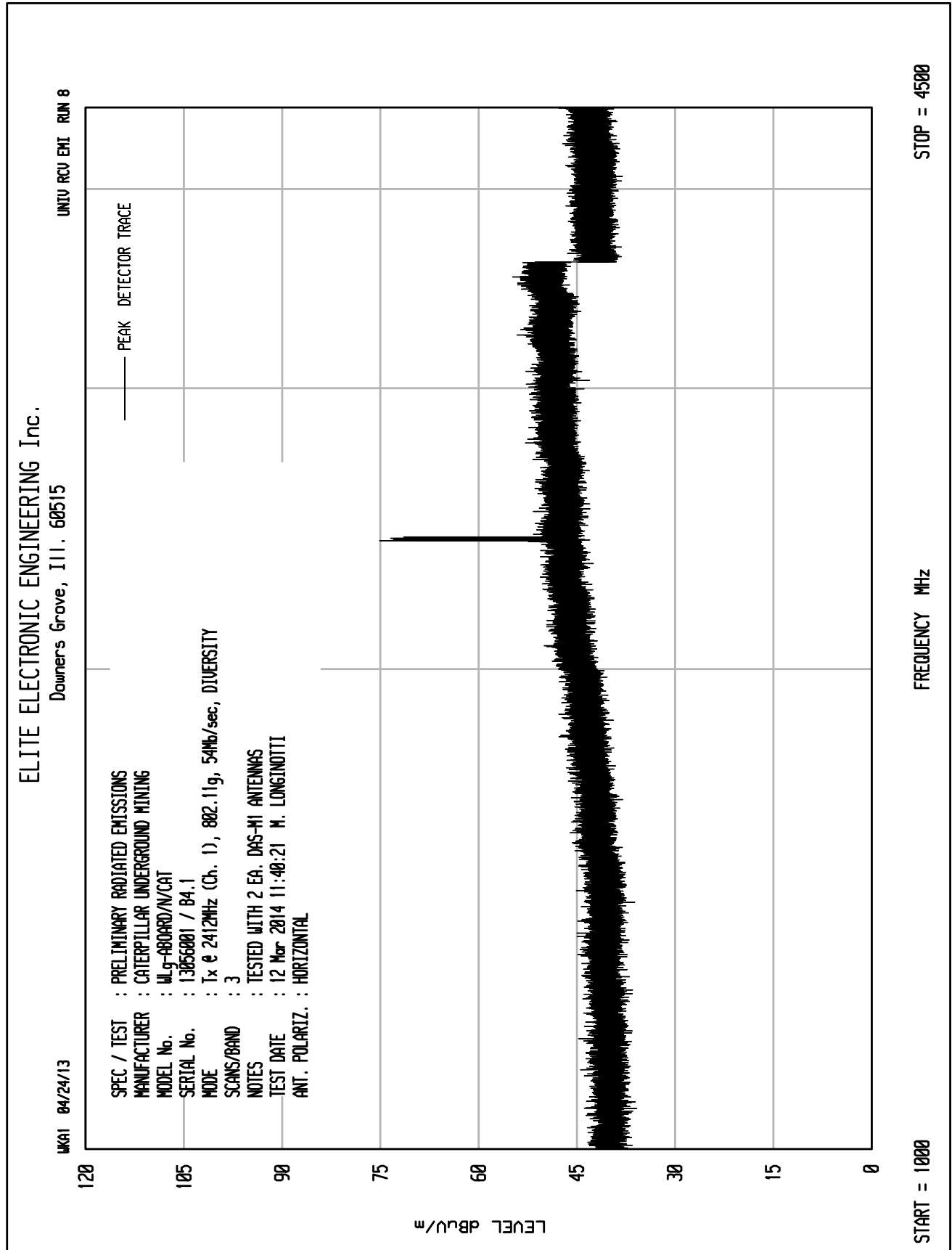
FREQUENCY MHz

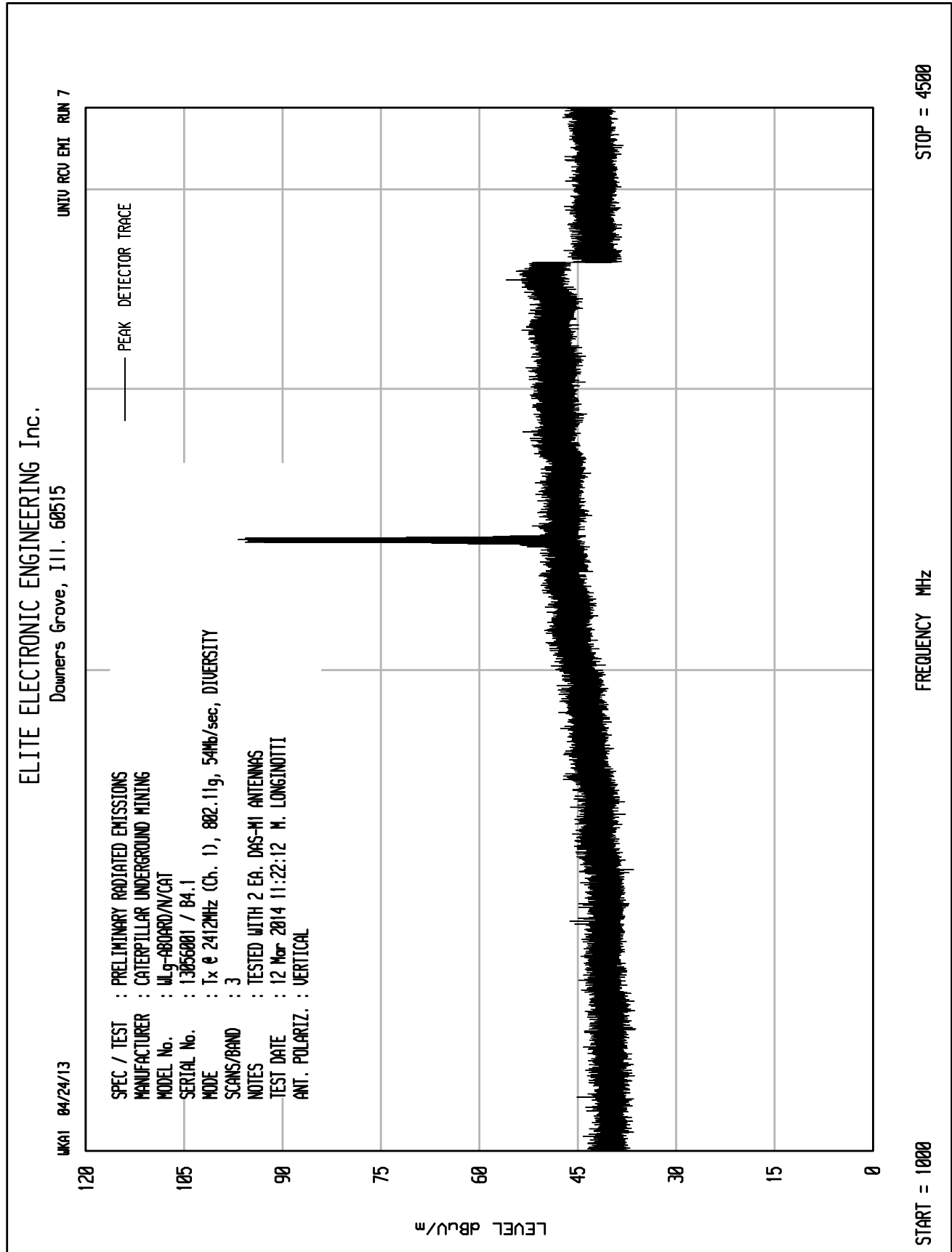
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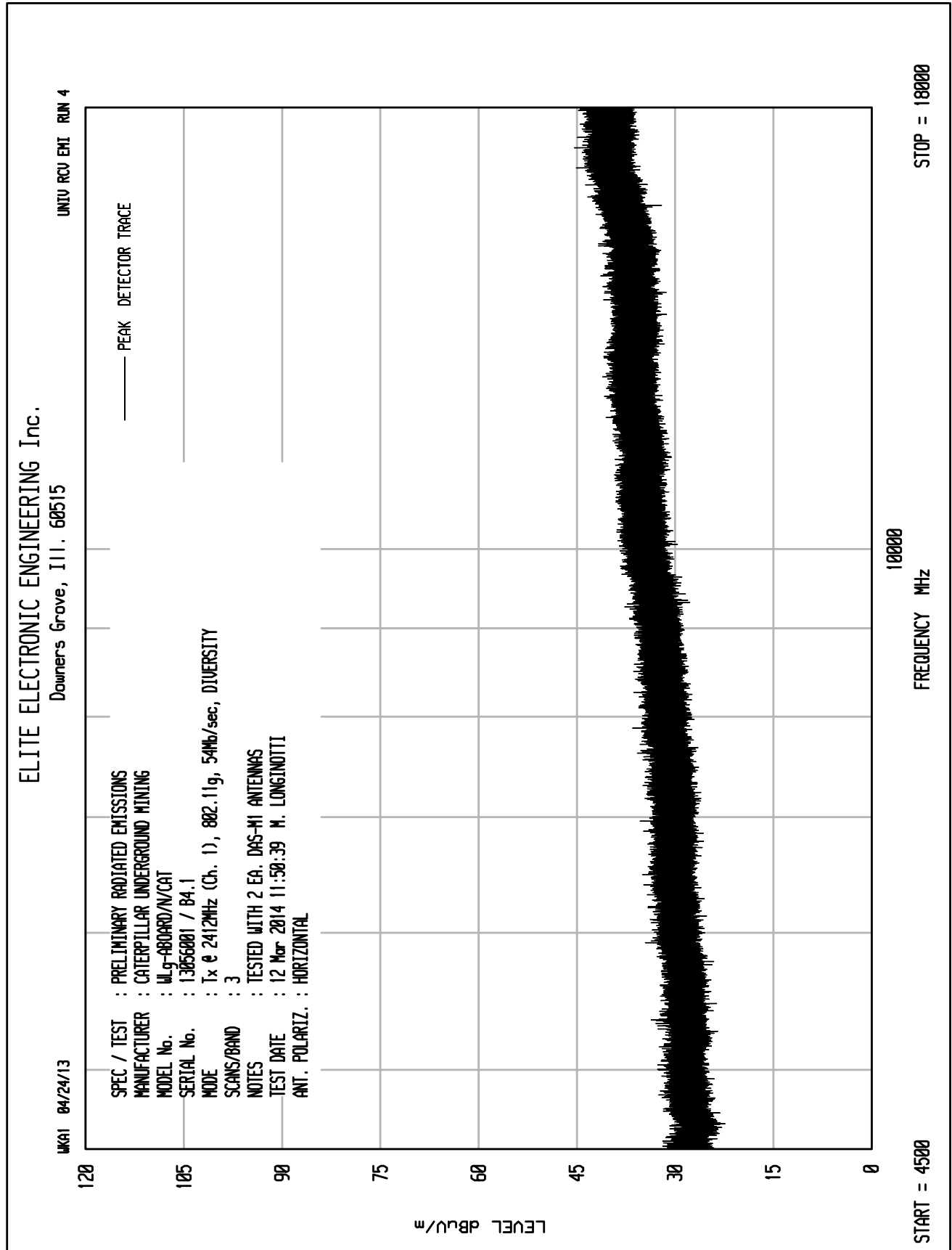


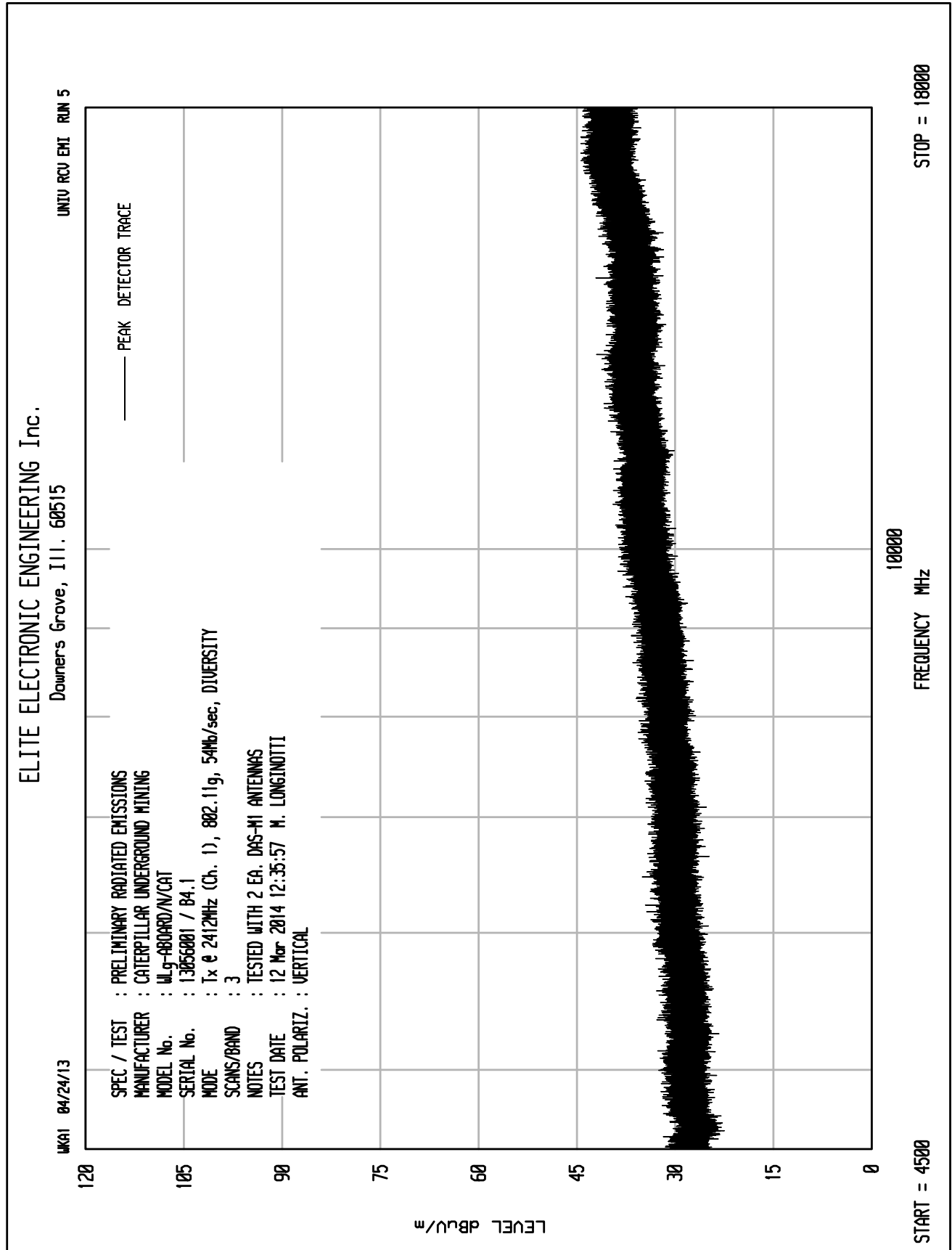


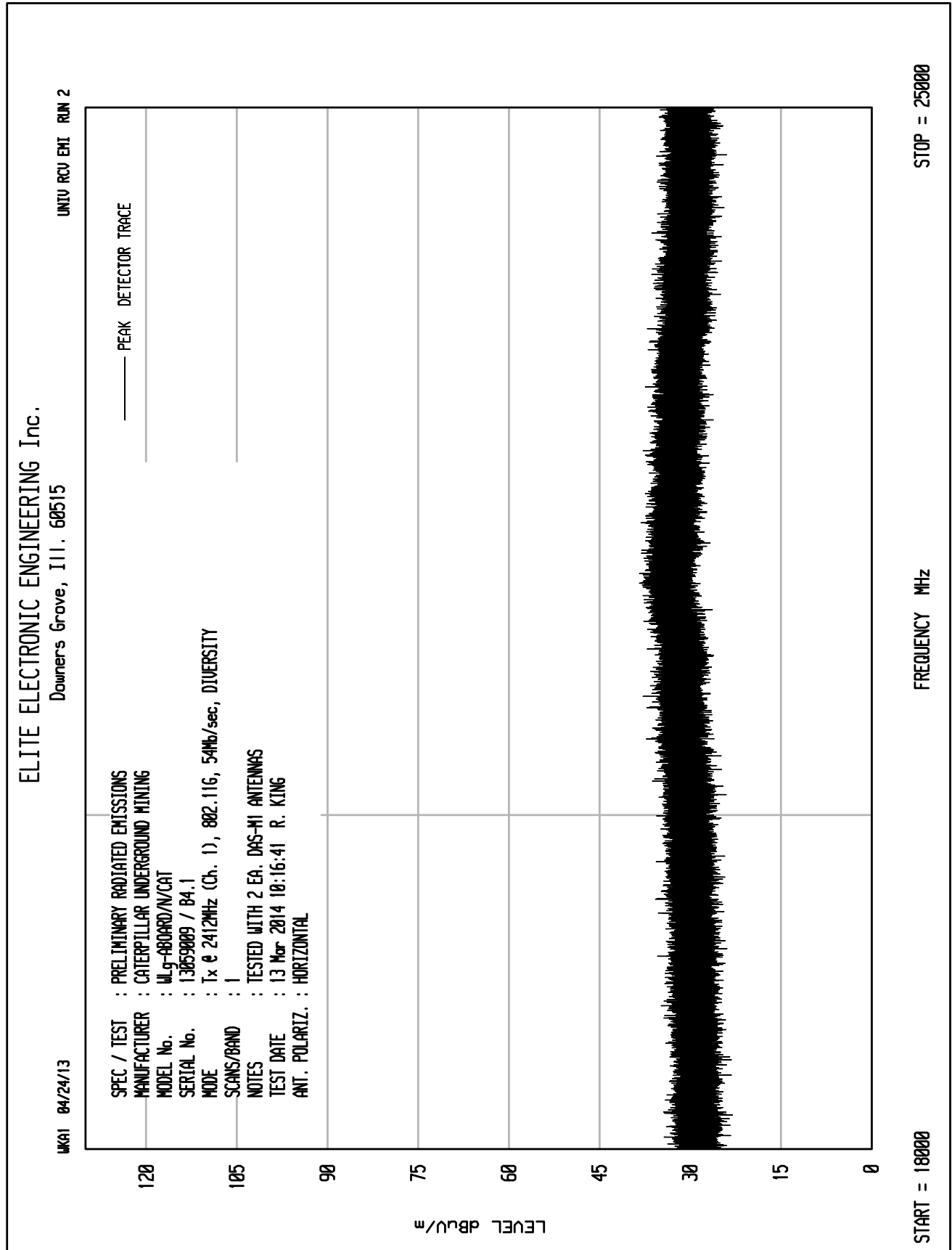


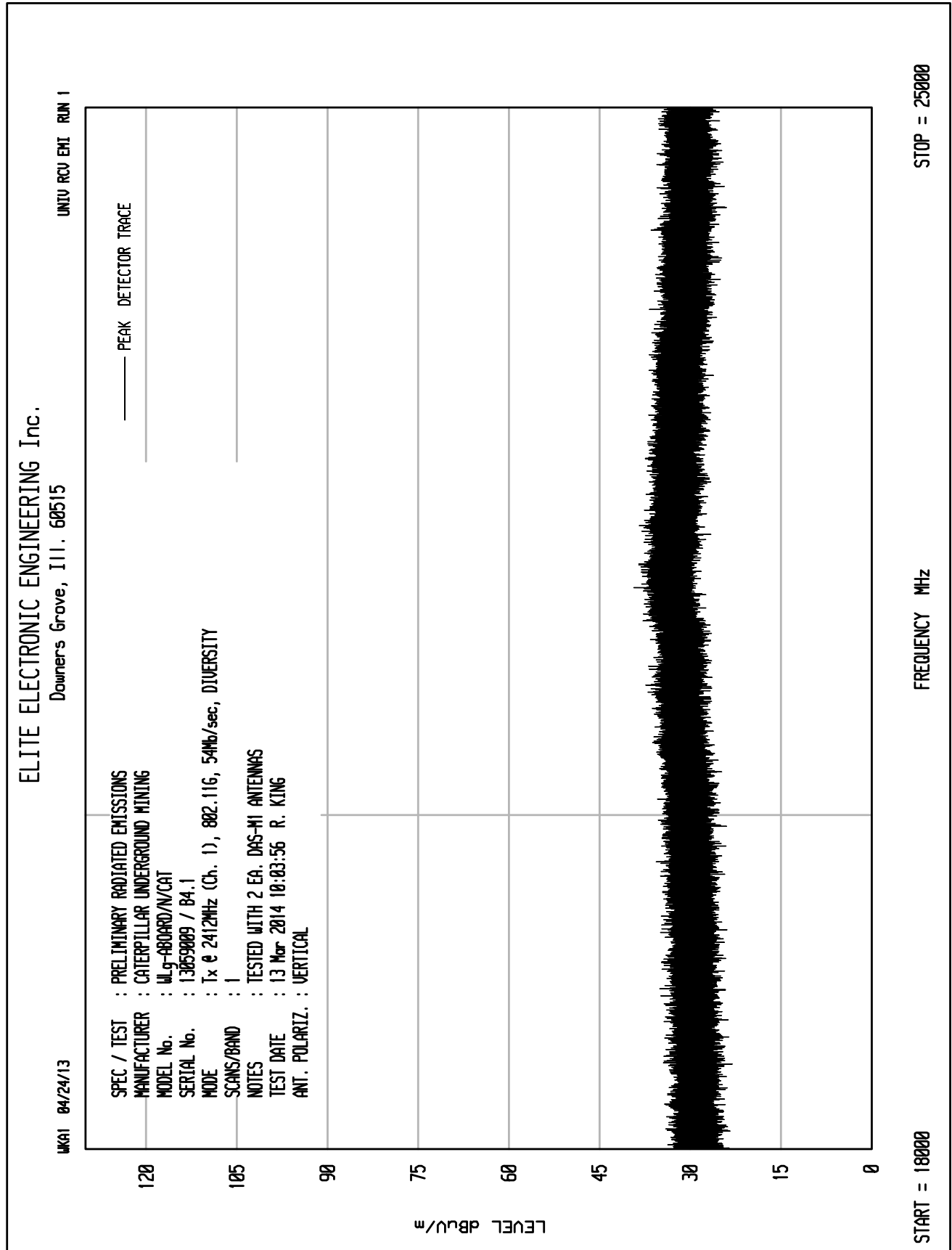


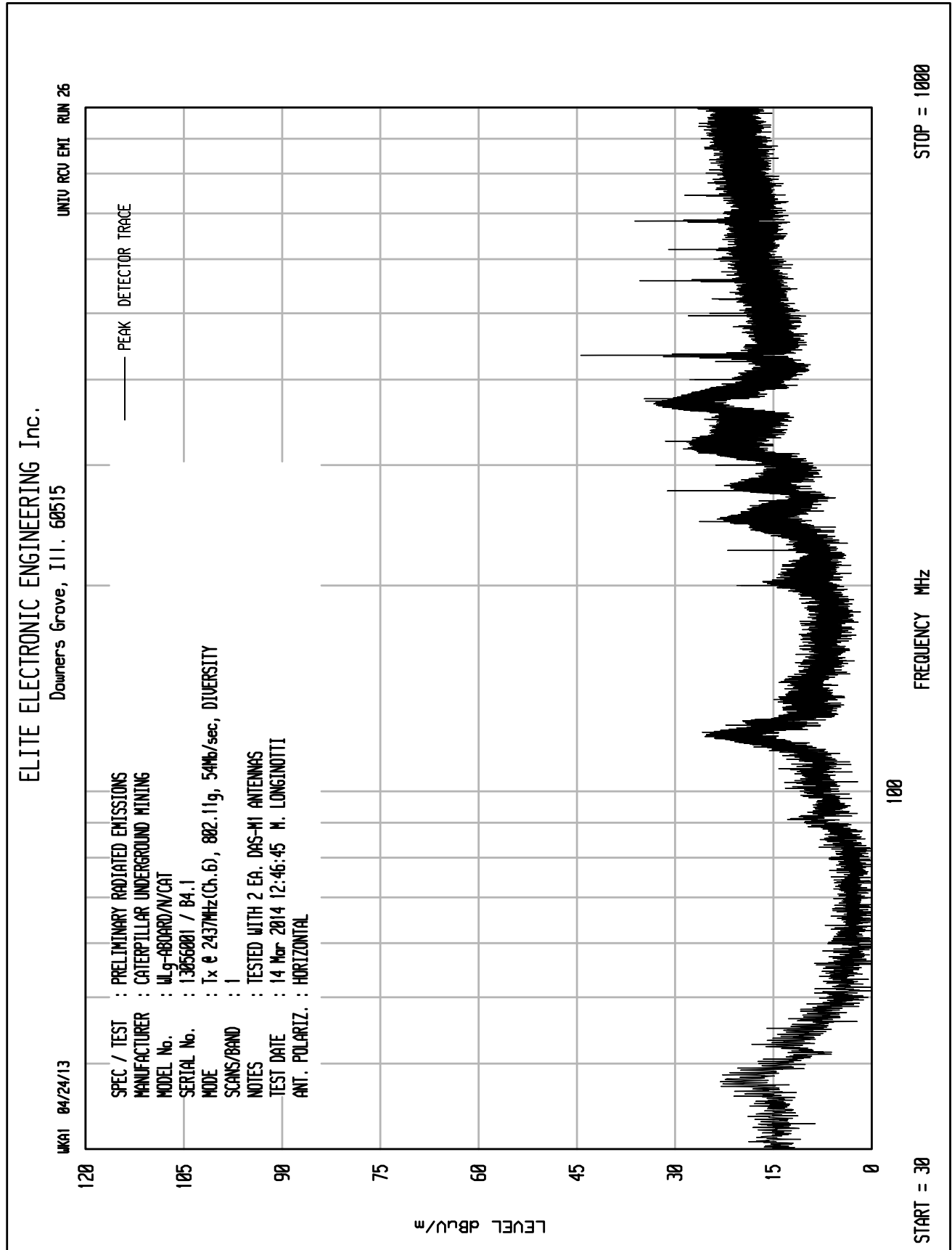


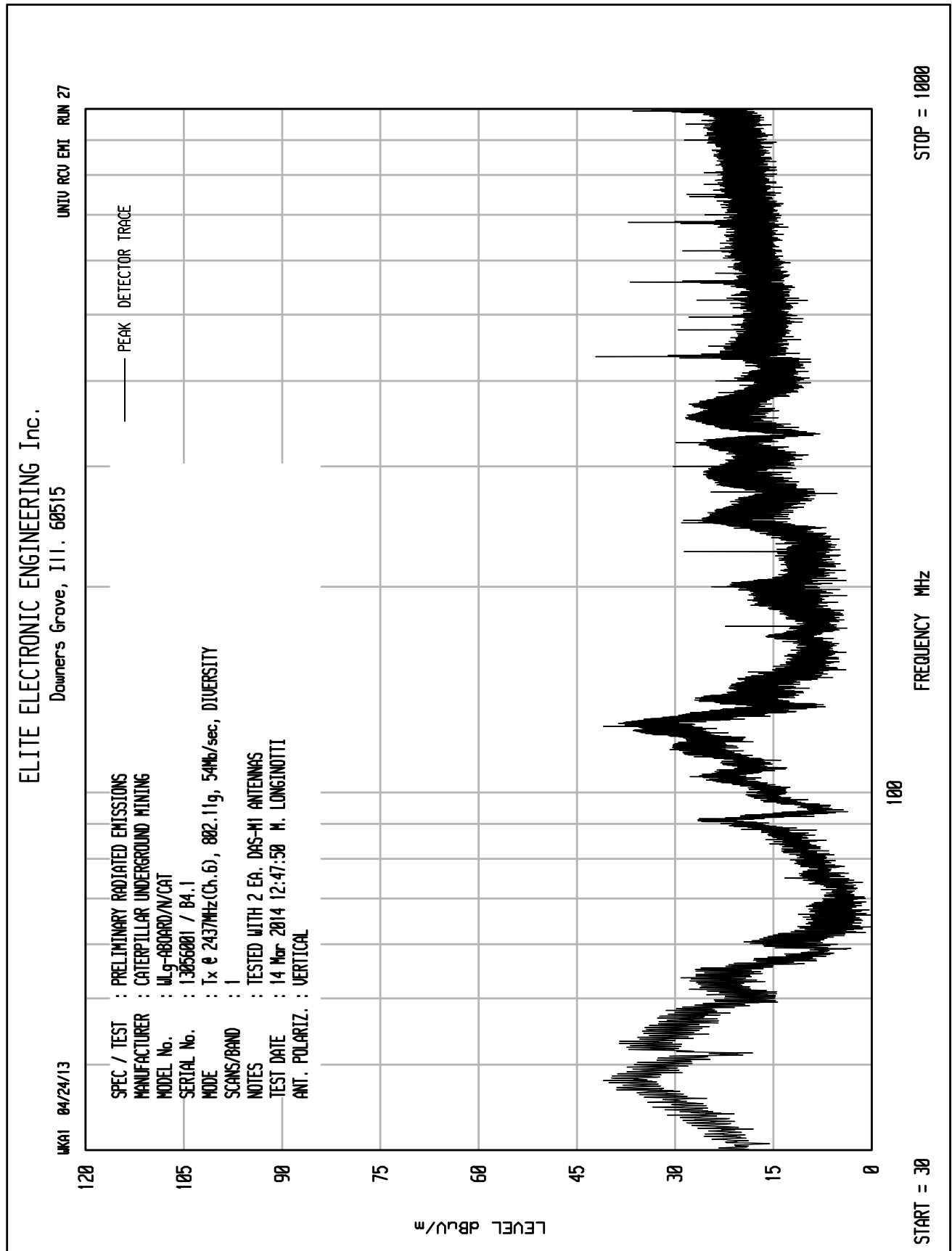


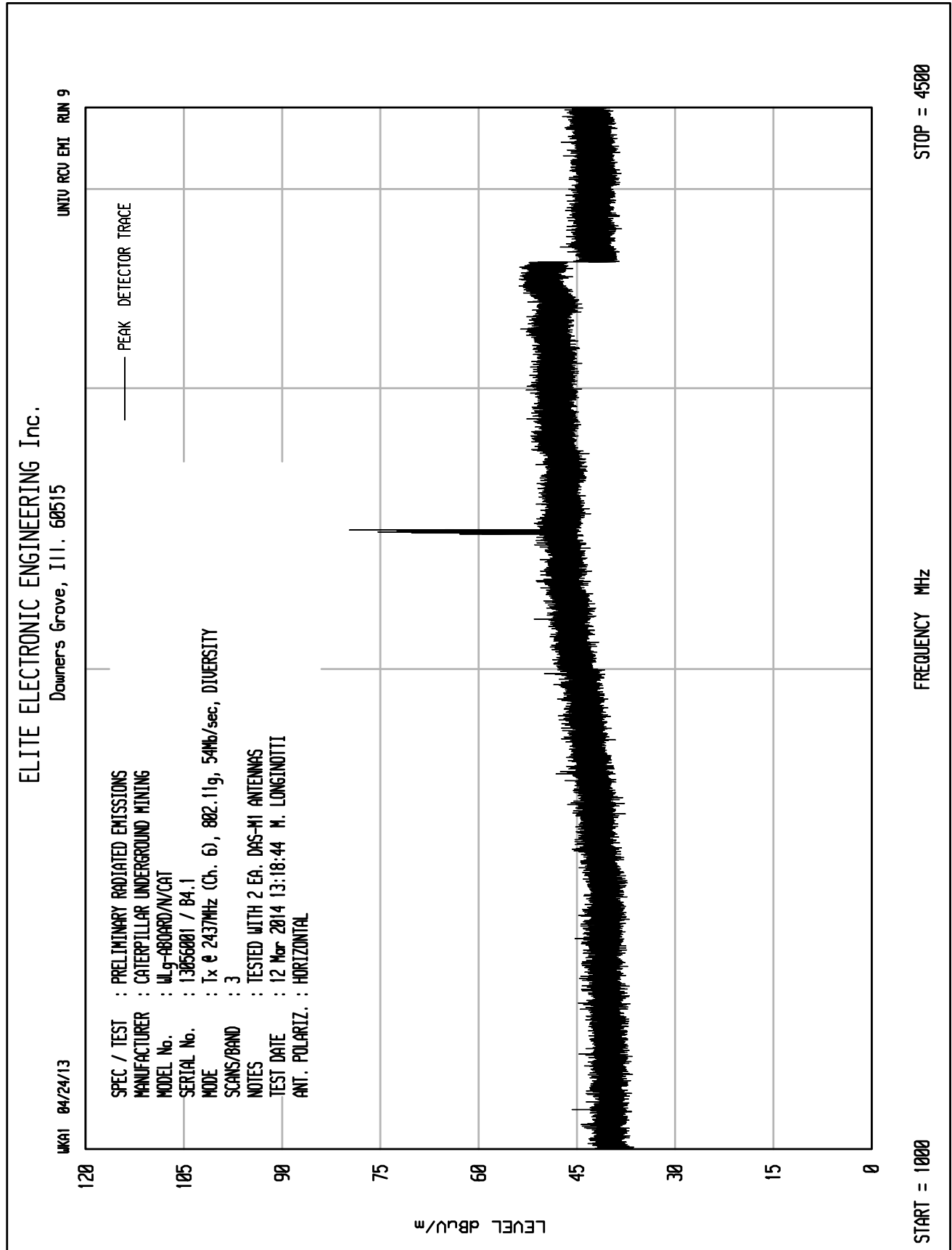


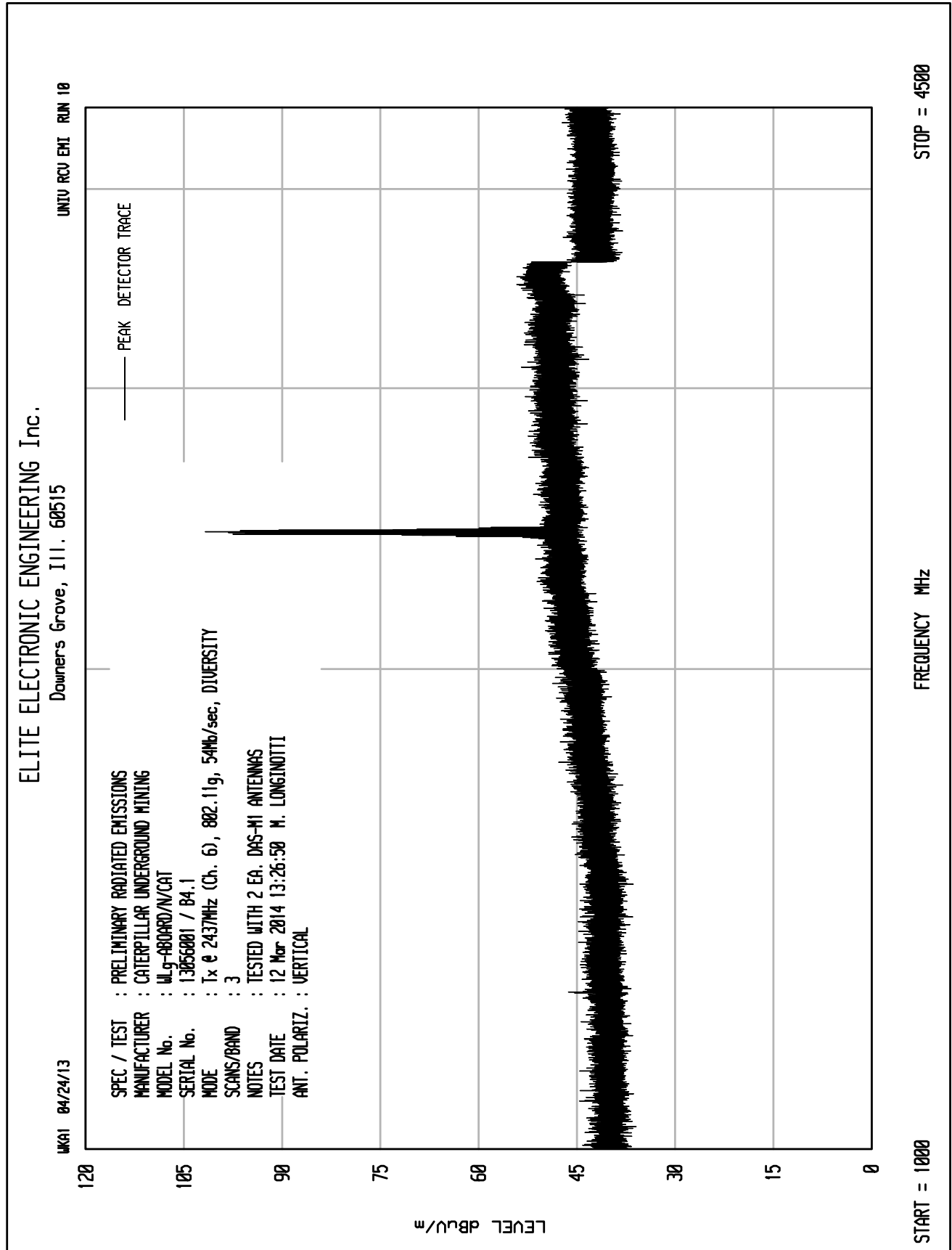


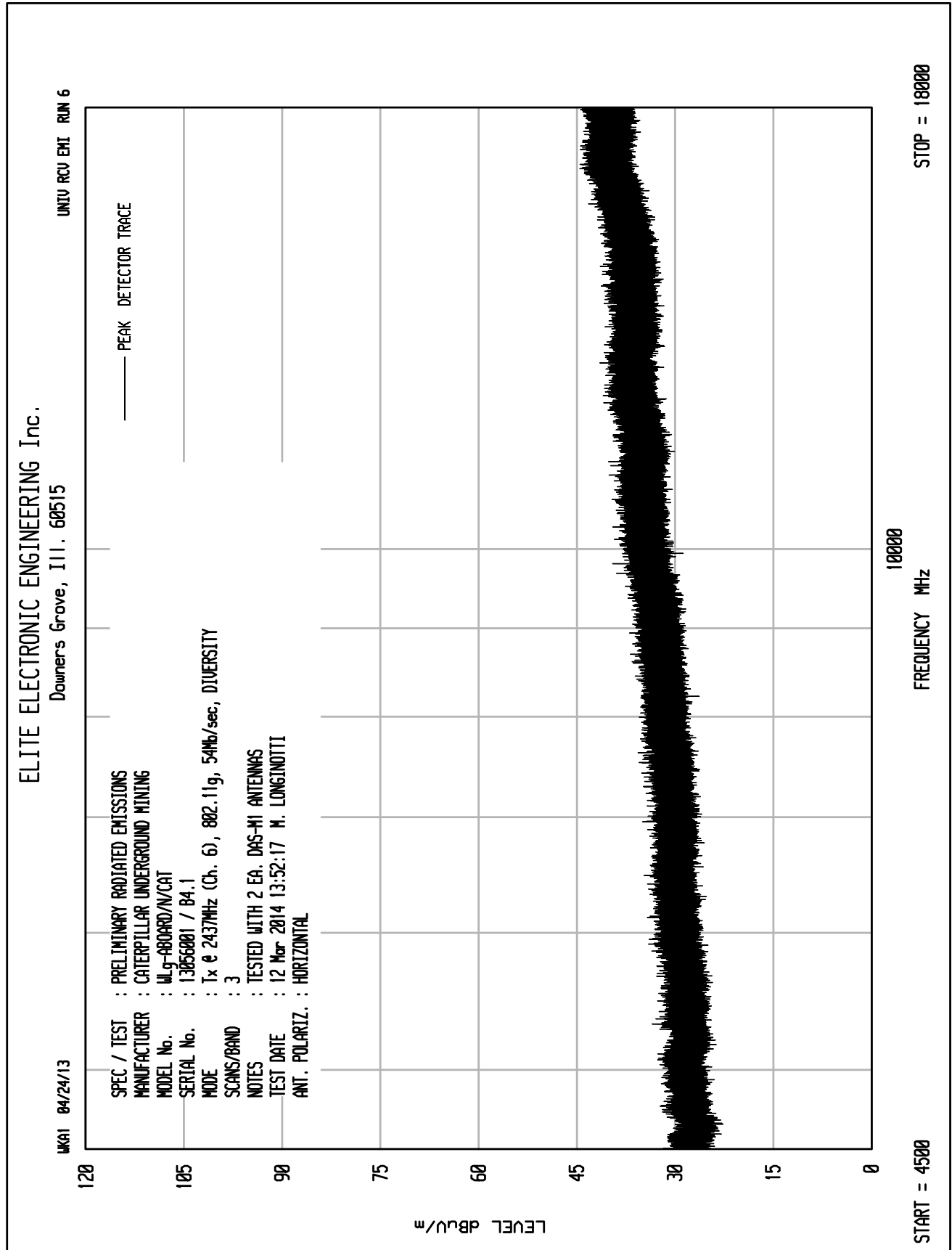


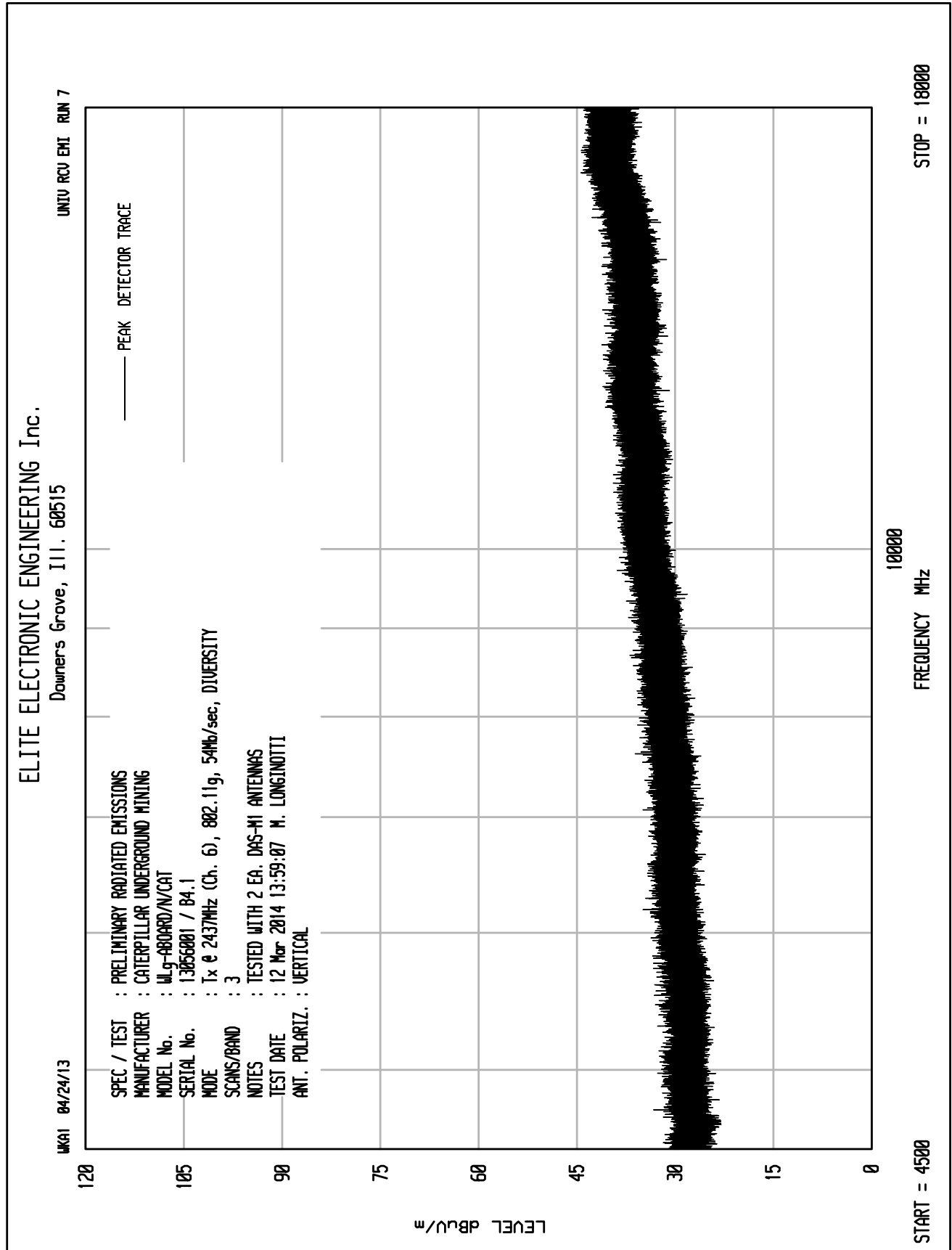


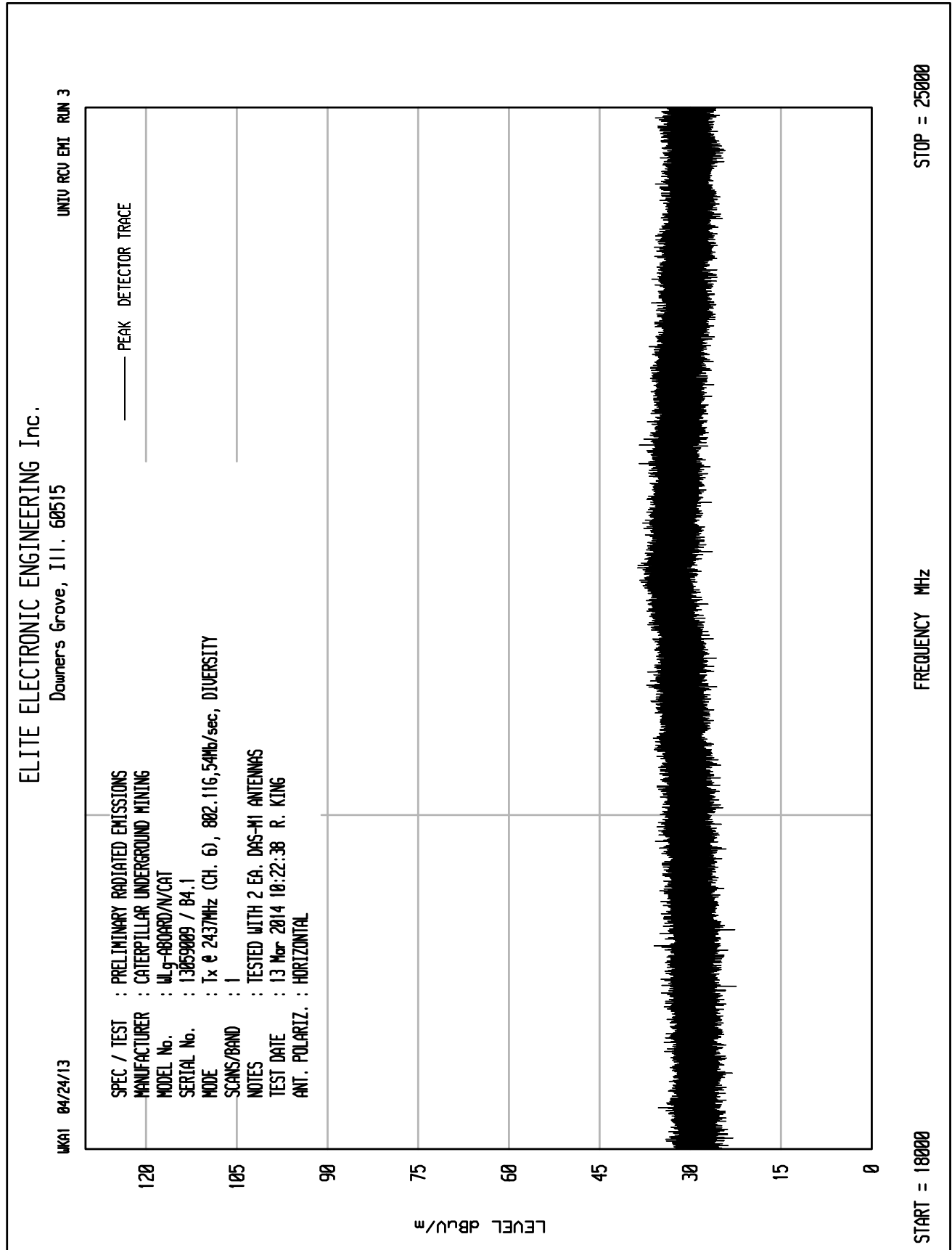


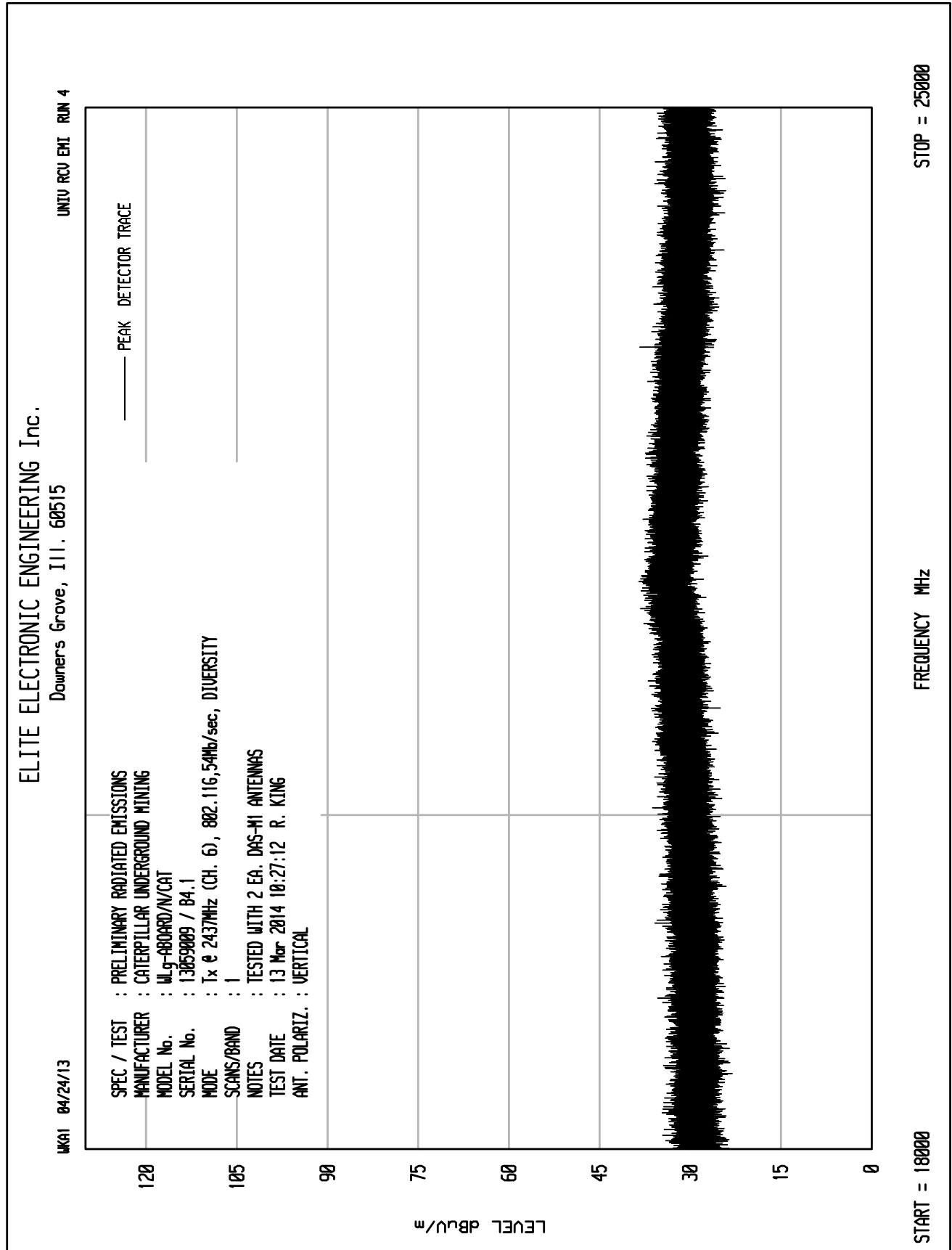


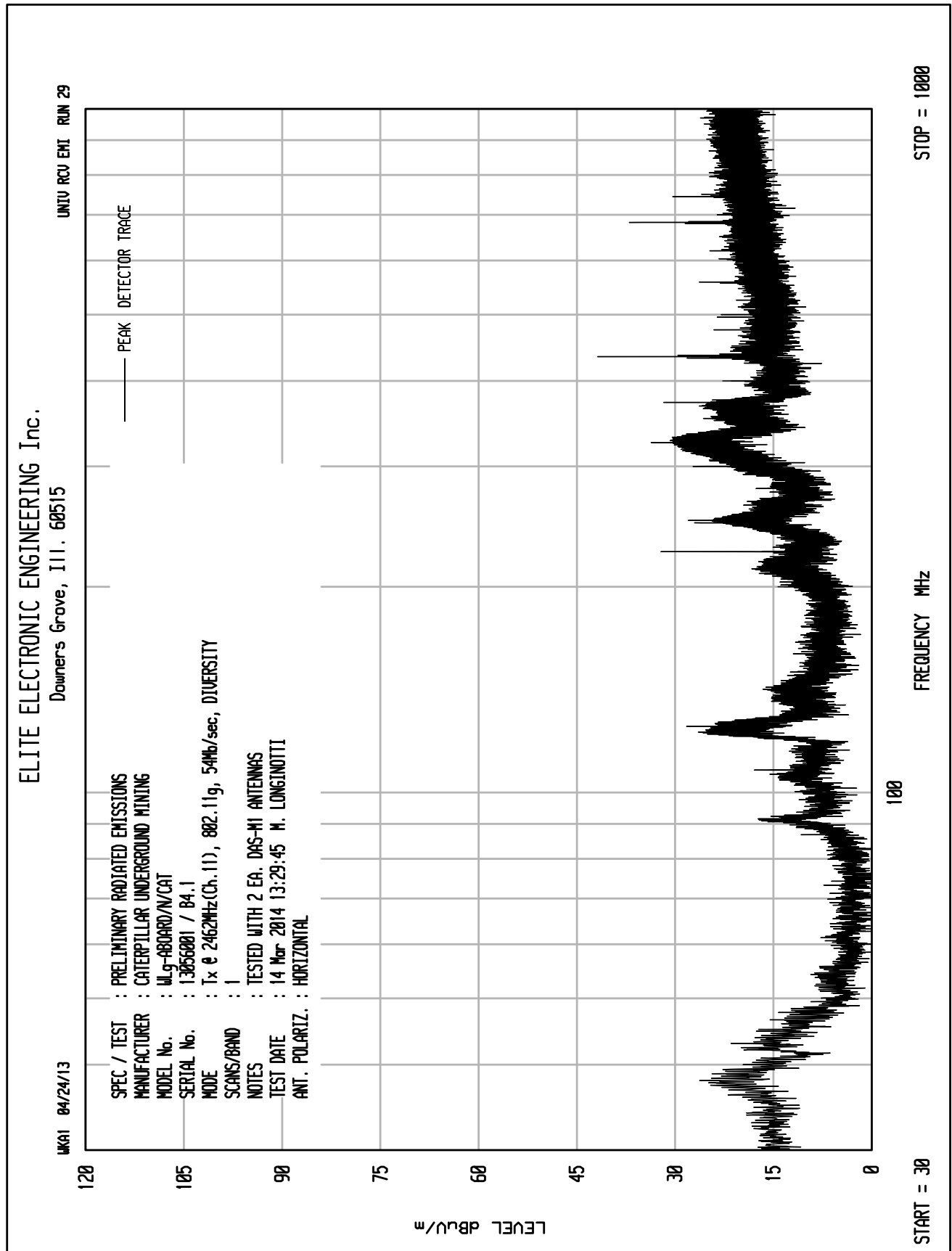


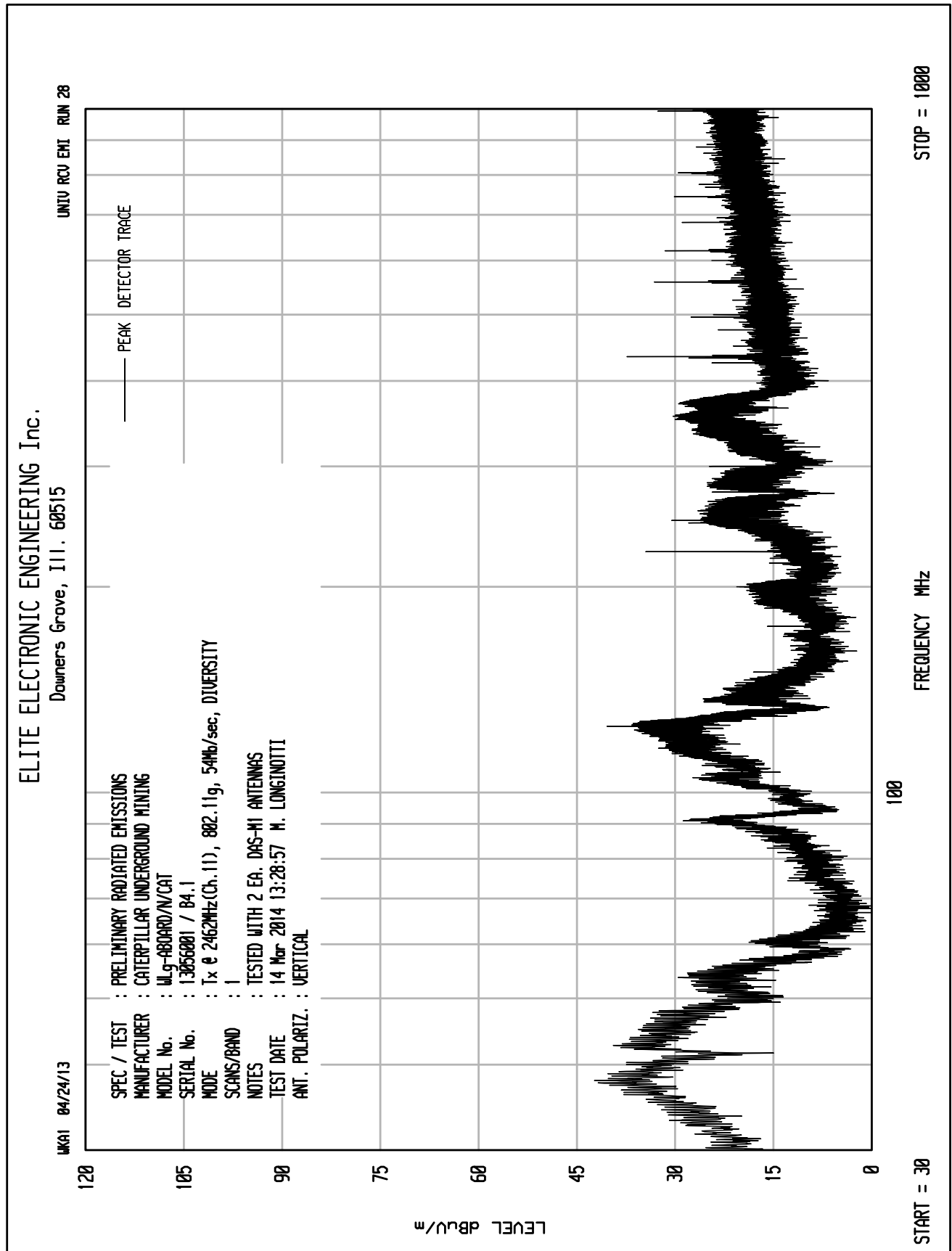


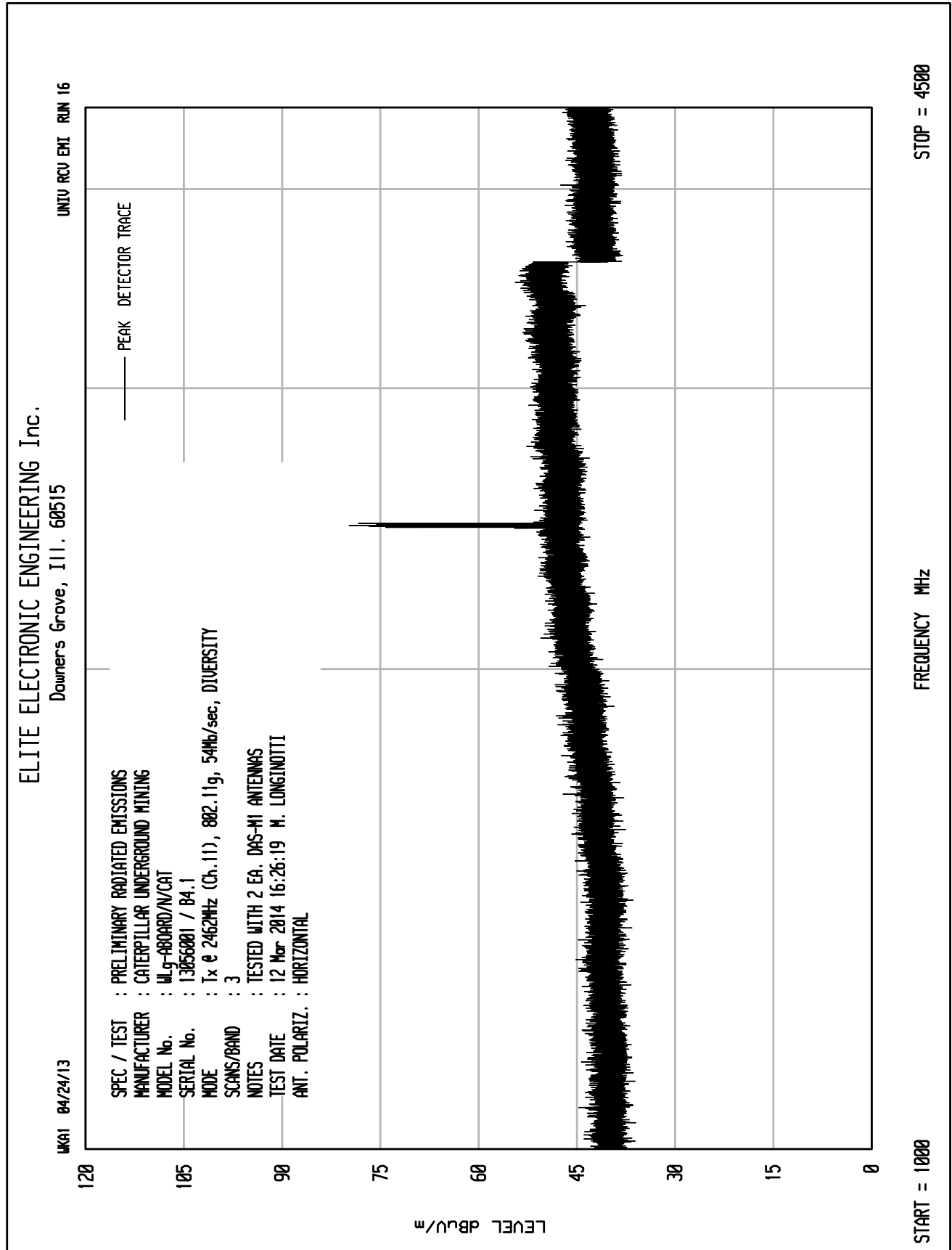


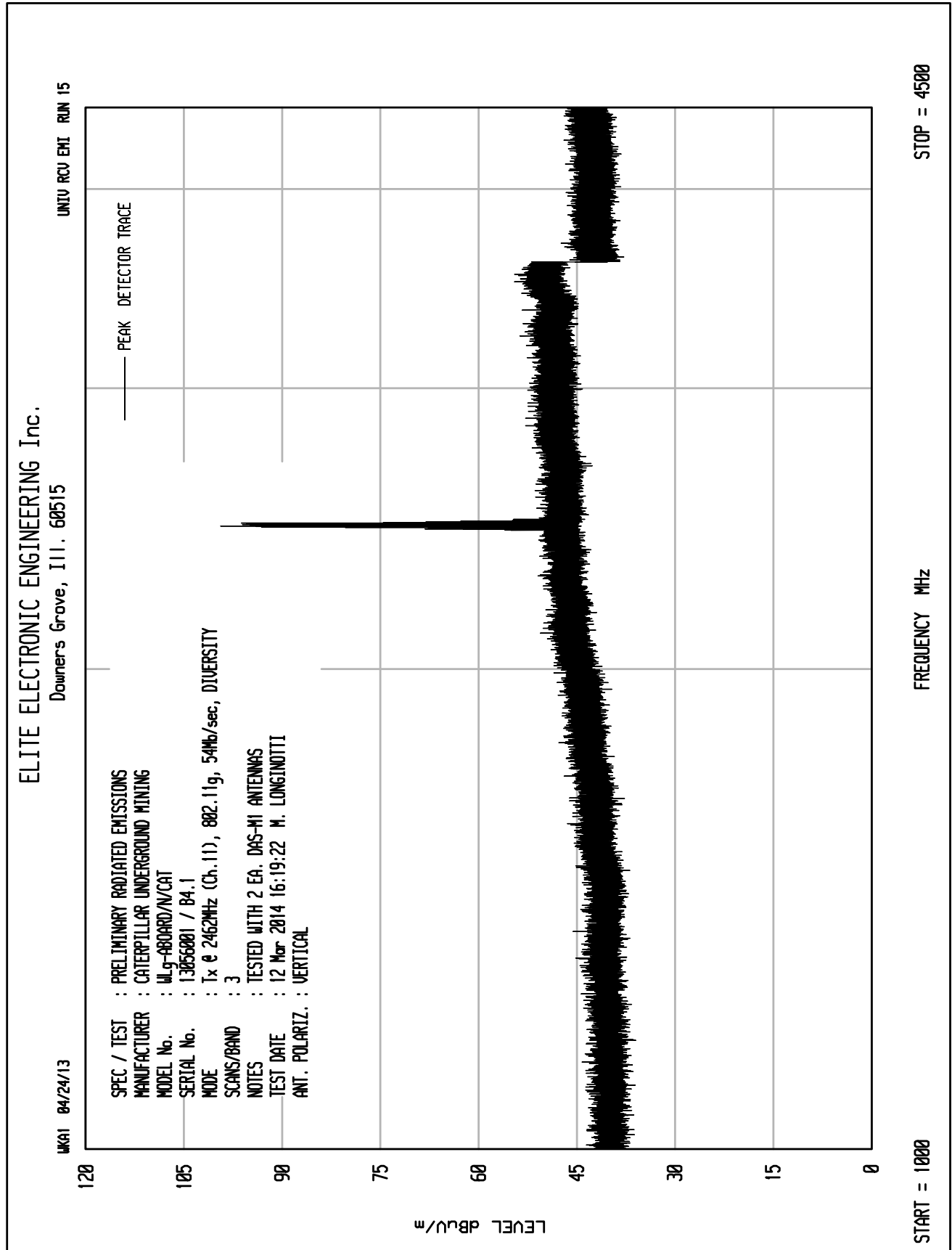


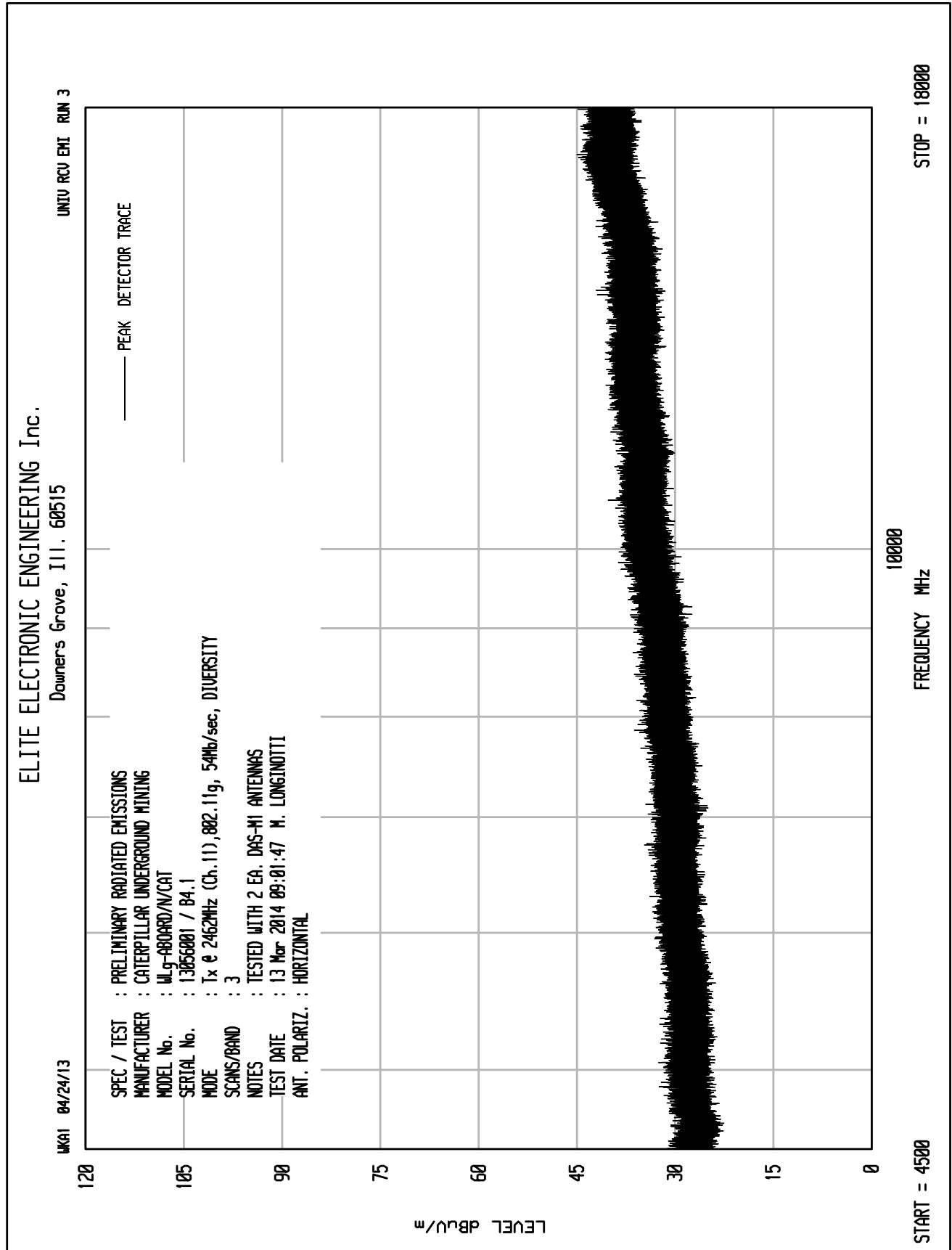


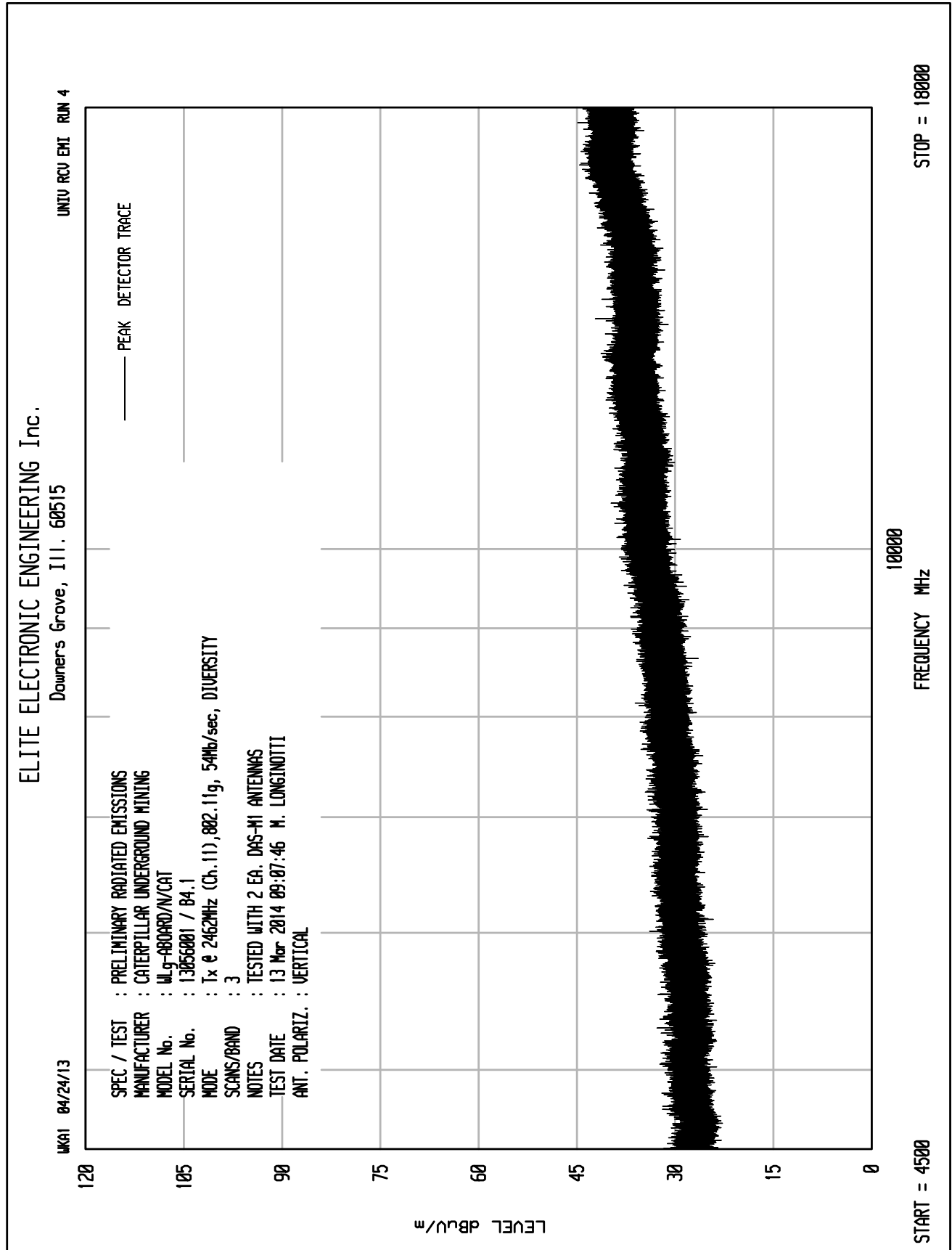


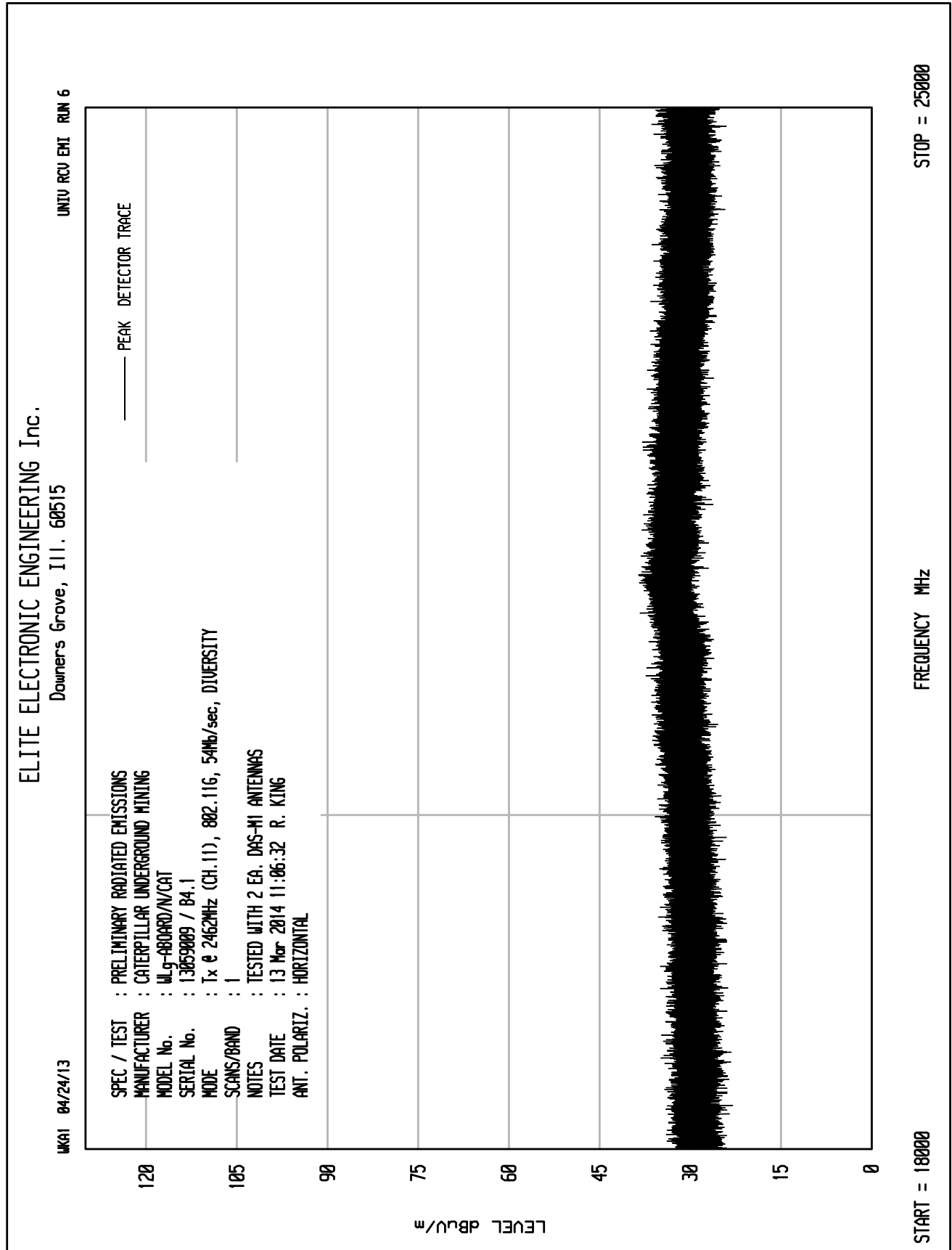


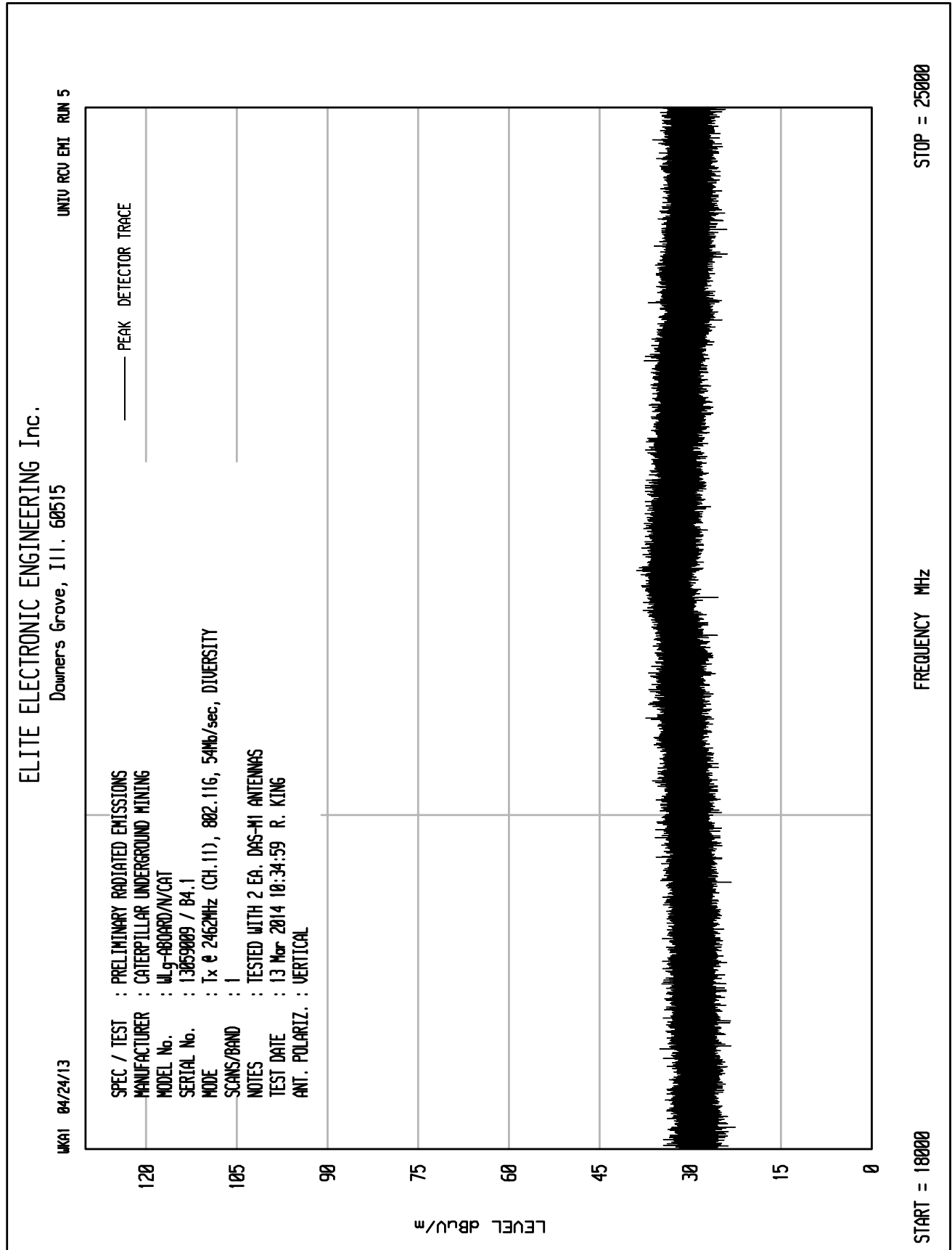


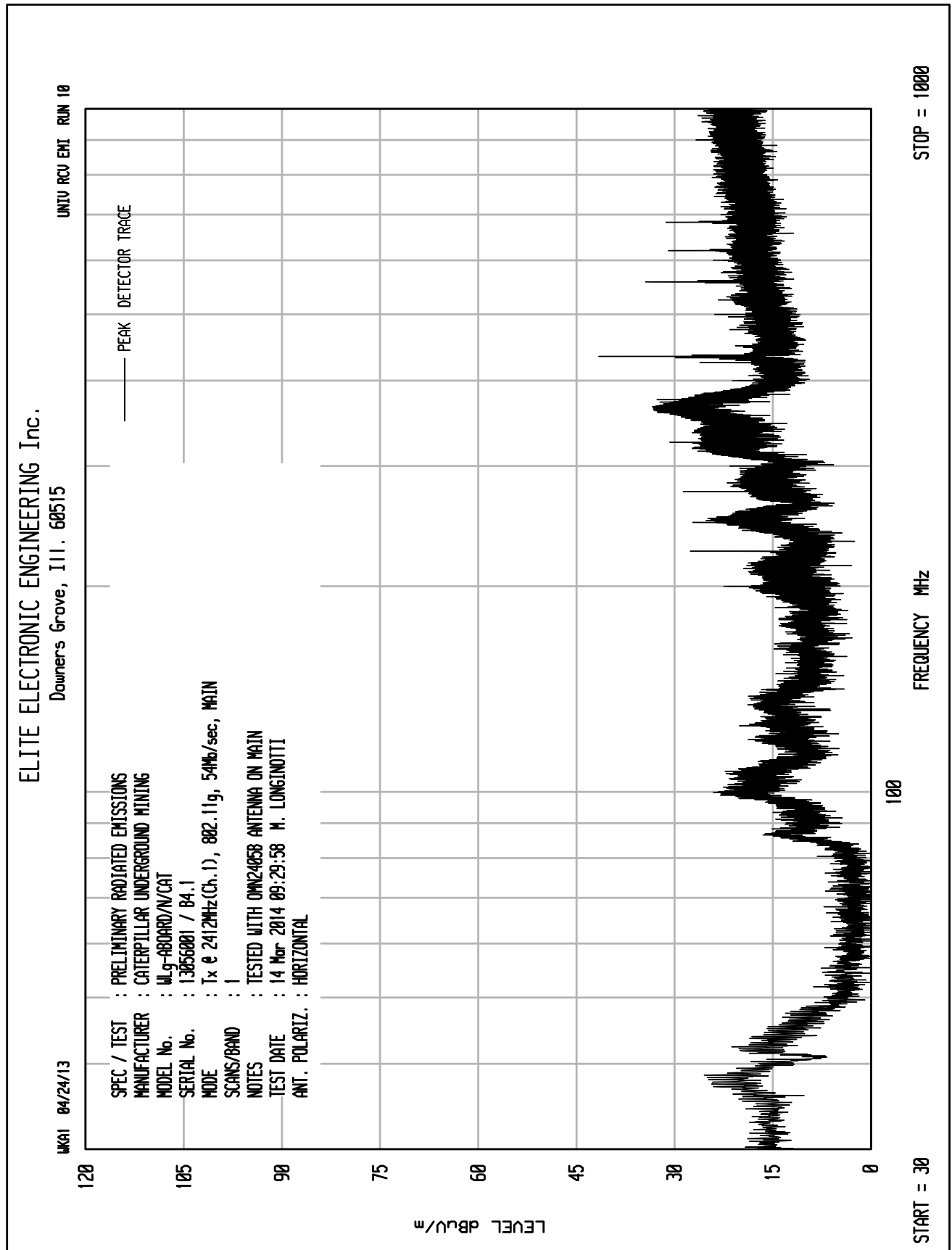








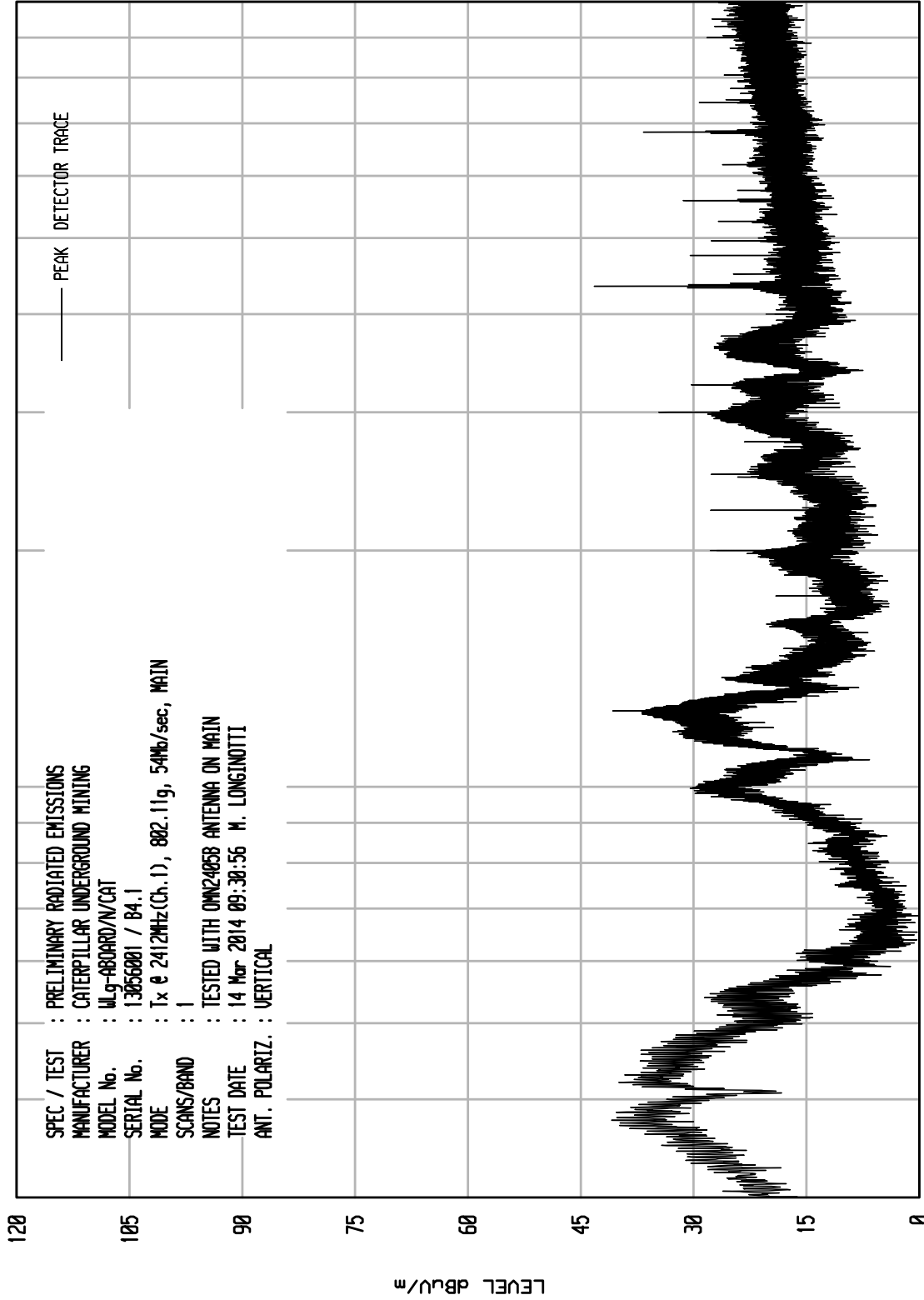




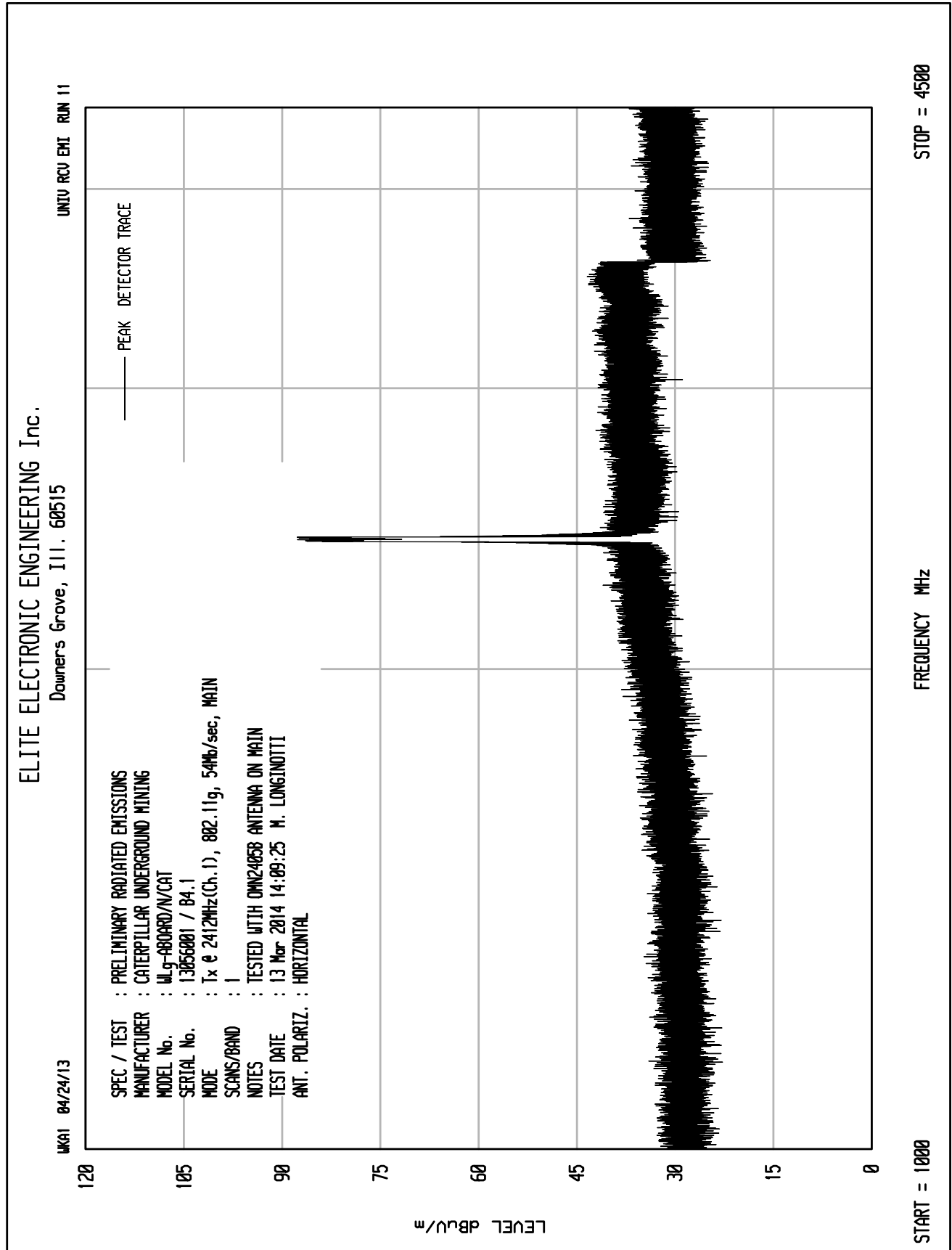
ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515

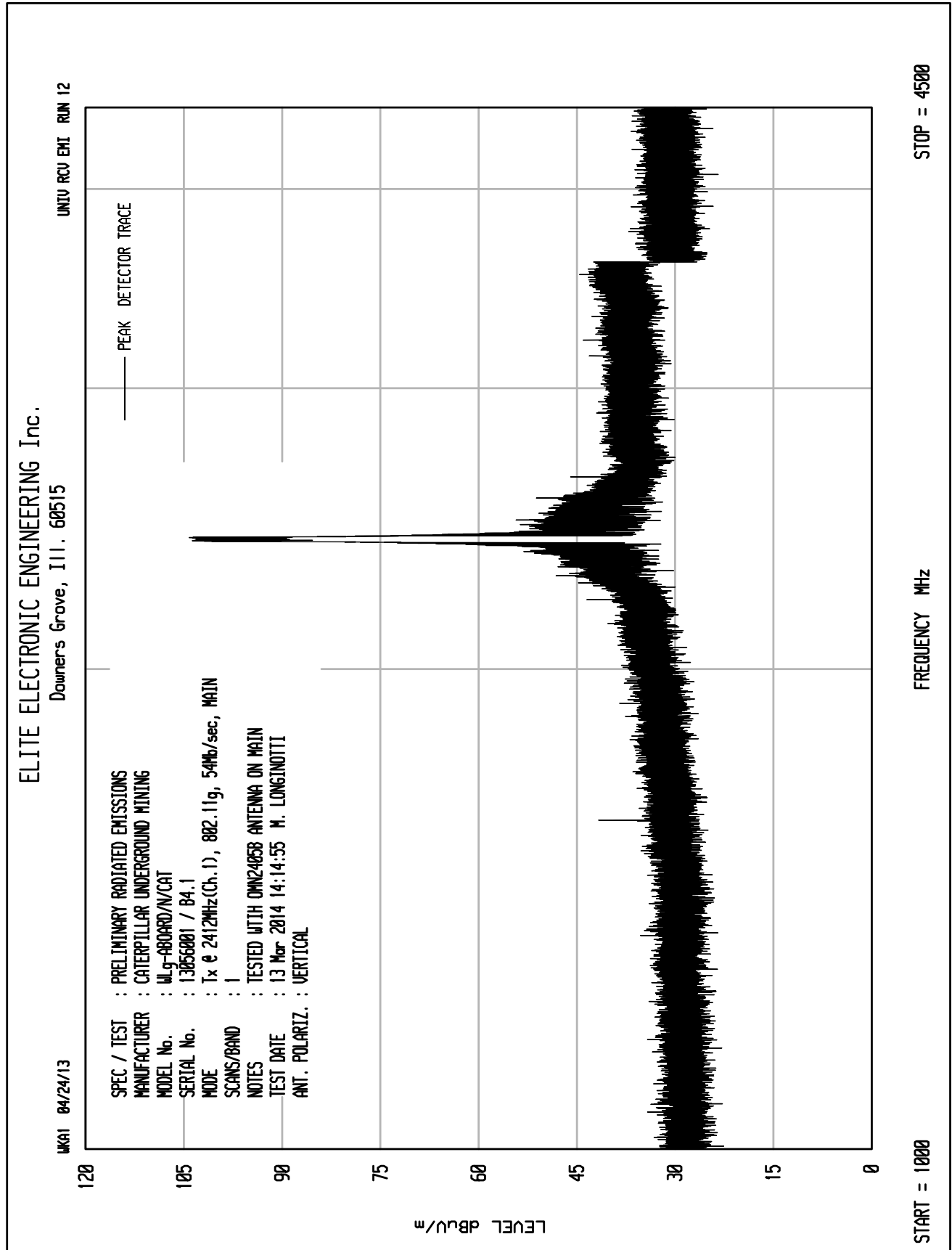
UNIV RCU ENI RUN 11

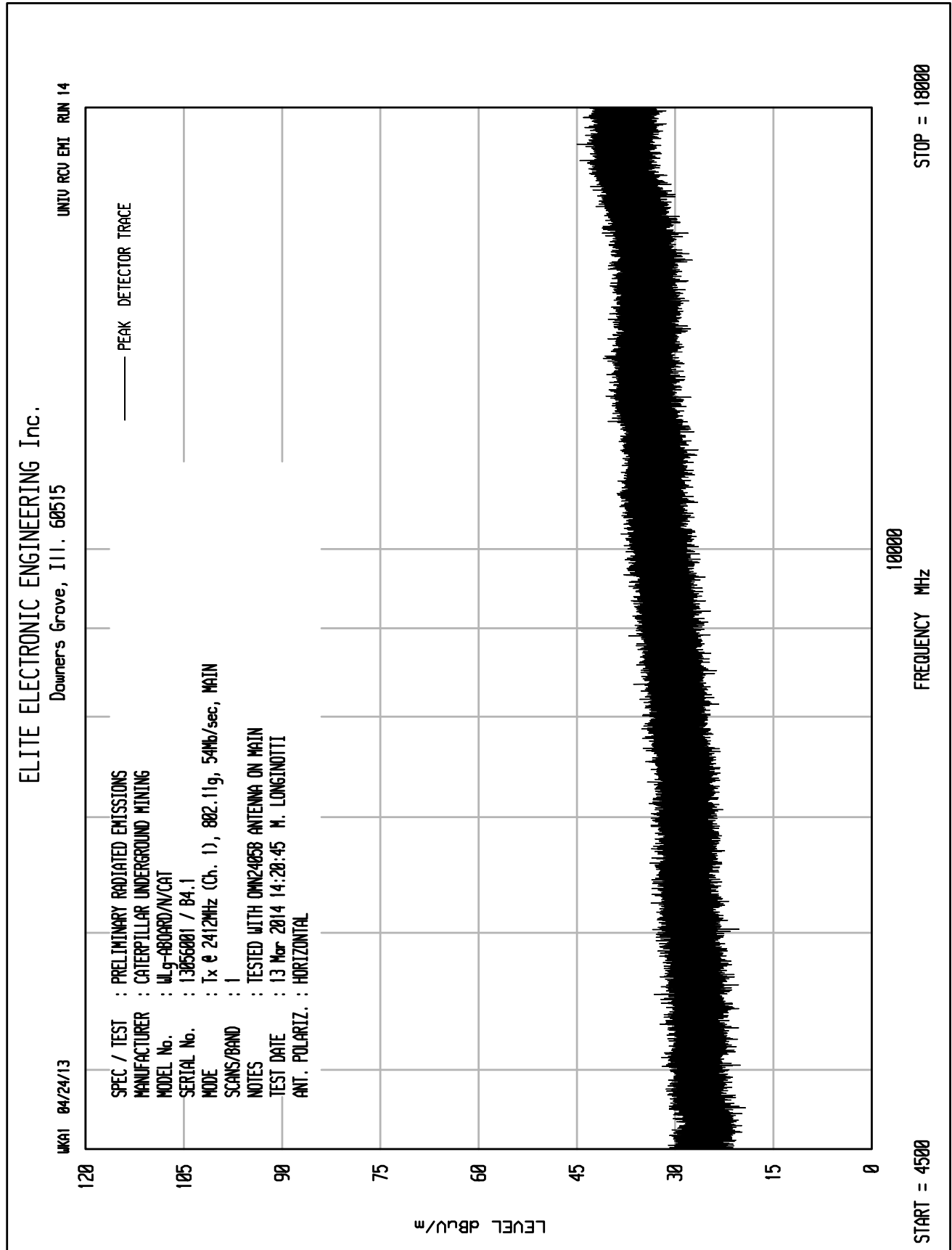
UKA1 04/24/13

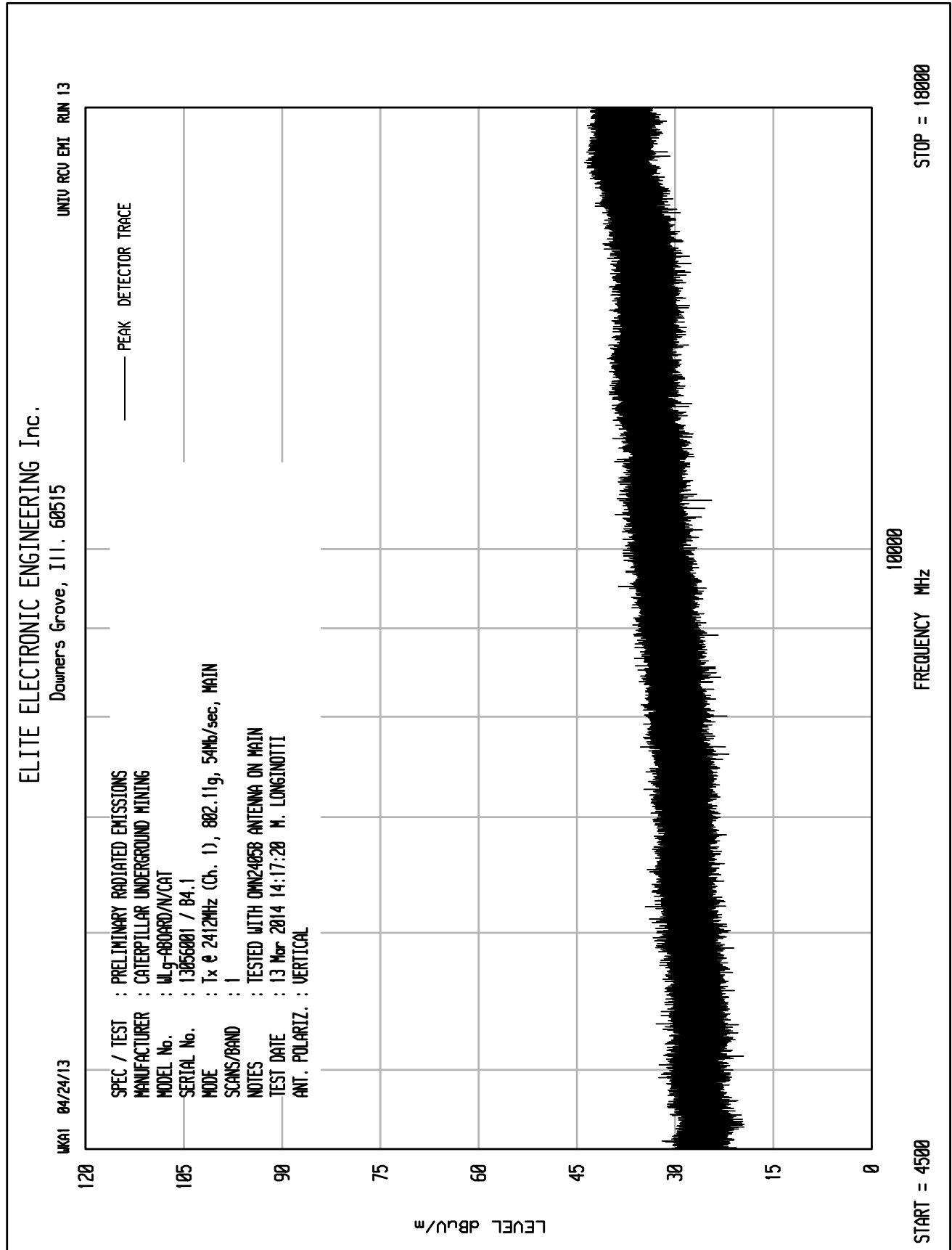


SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : CATERPILLAR UNDERGROUND MINING
MODEL No. : 4Lg-480ARD/N/CAT
SERIAL No. : 13056001 / B4.1
MODE : Tx @ 2412MHz (Ch. 1), 802.11g, 54Mb/sec, MAIN
SCANS/BAND : 1
NOTES : TESTED WITH OMN2405B ANTENNA ON MAIN
TEST DATE : 14 Mar 2014 09:30:56 M. LONGINOTTI
ANT. POLARIZ. : VERTICAL







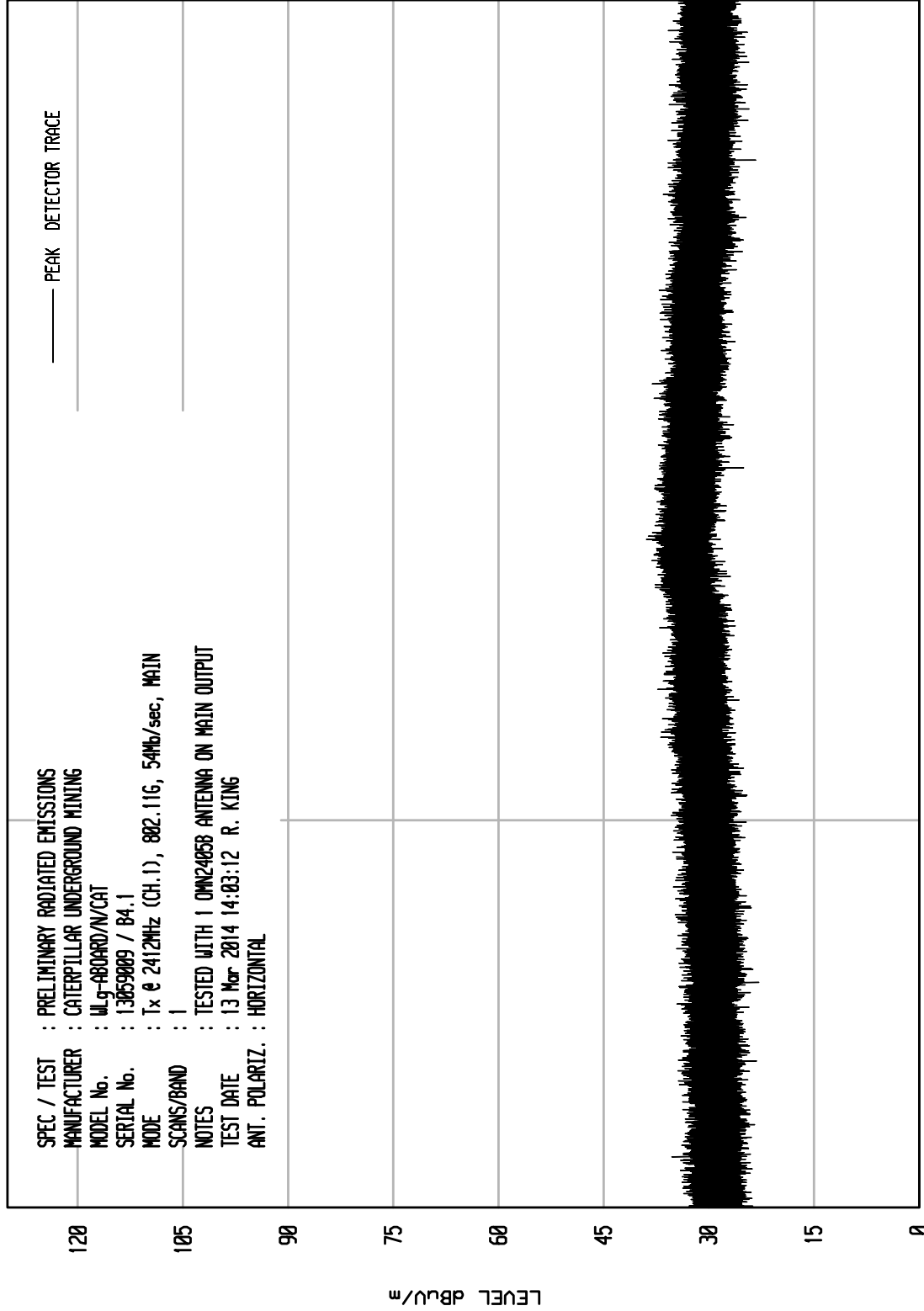


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIV RCU ENI RUN 18

UKA1 04/24/13



STOP = 25000

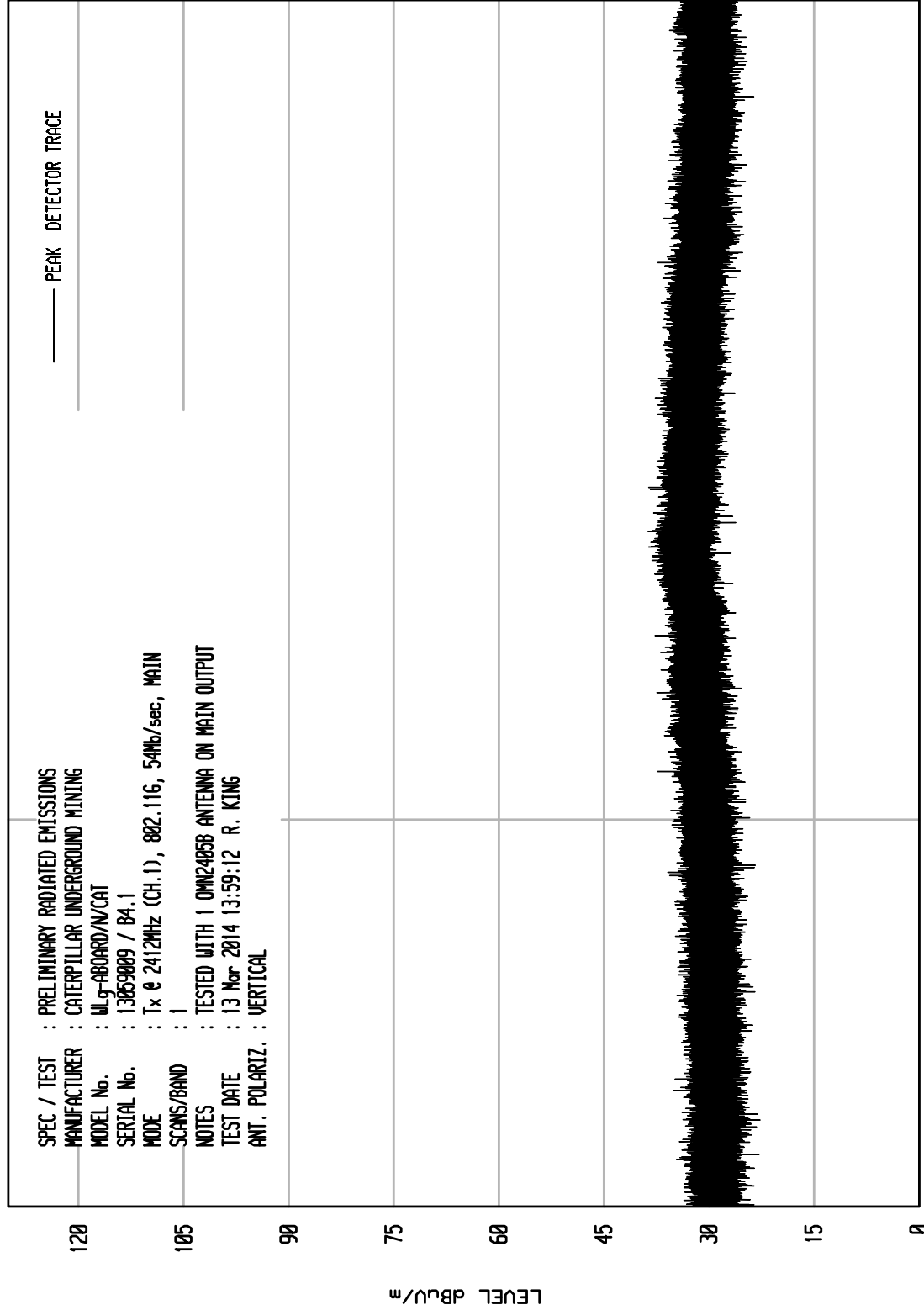
START = 18000

ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIT: RCU ENI RUN 17

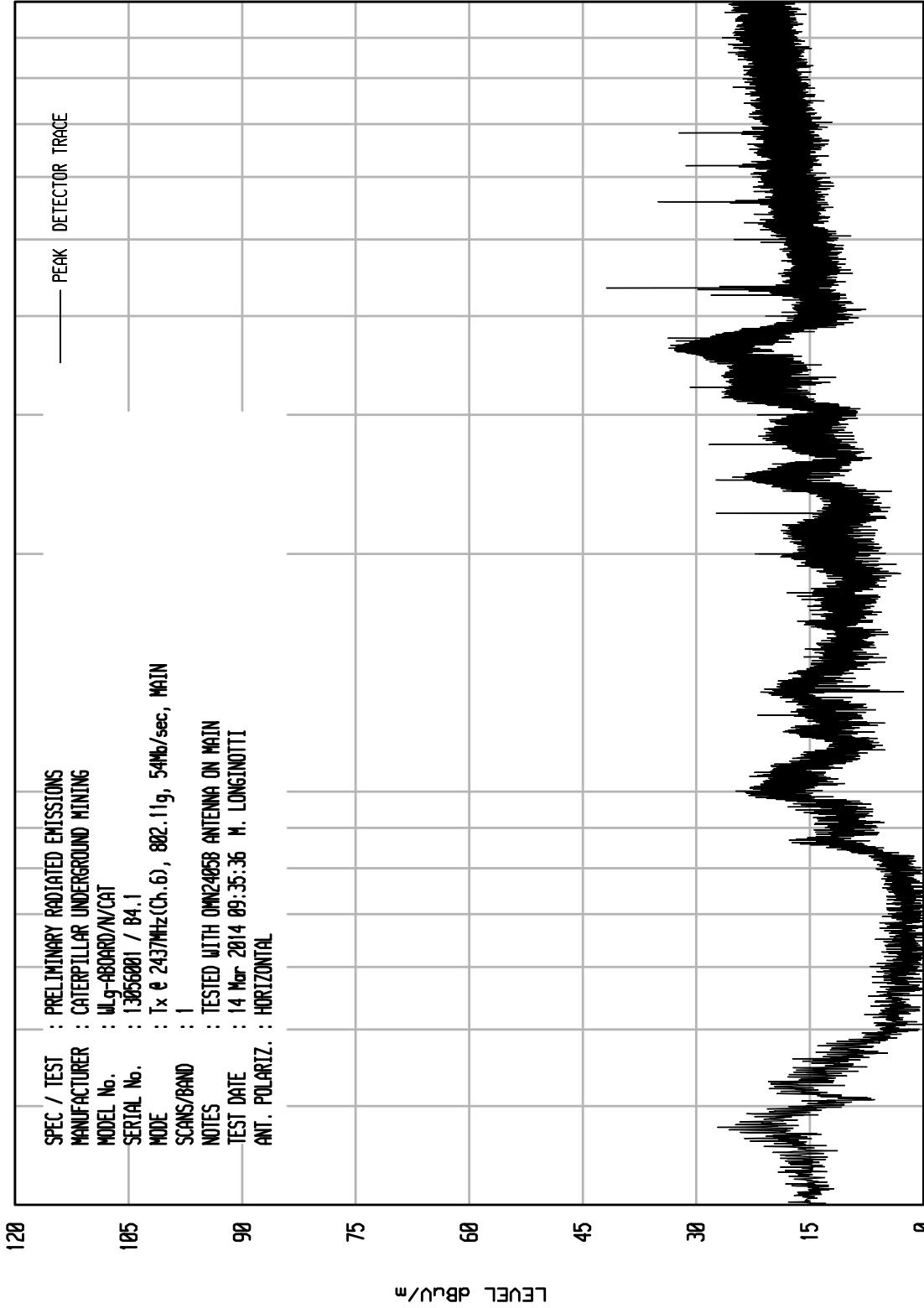
UKA1 04/24/13



ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515

UNIU RCU ENI RUN 13

UKA1 04/24/13

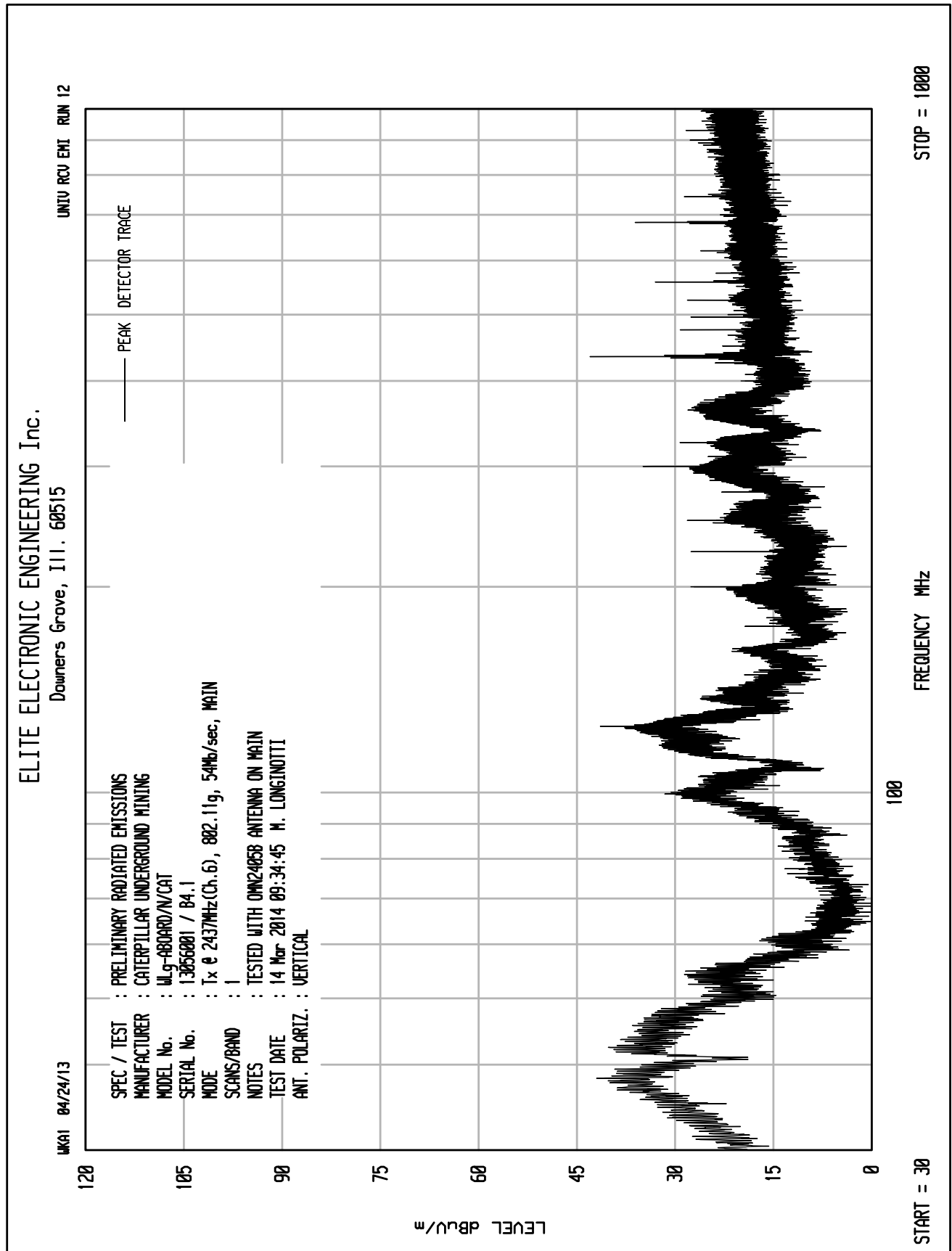


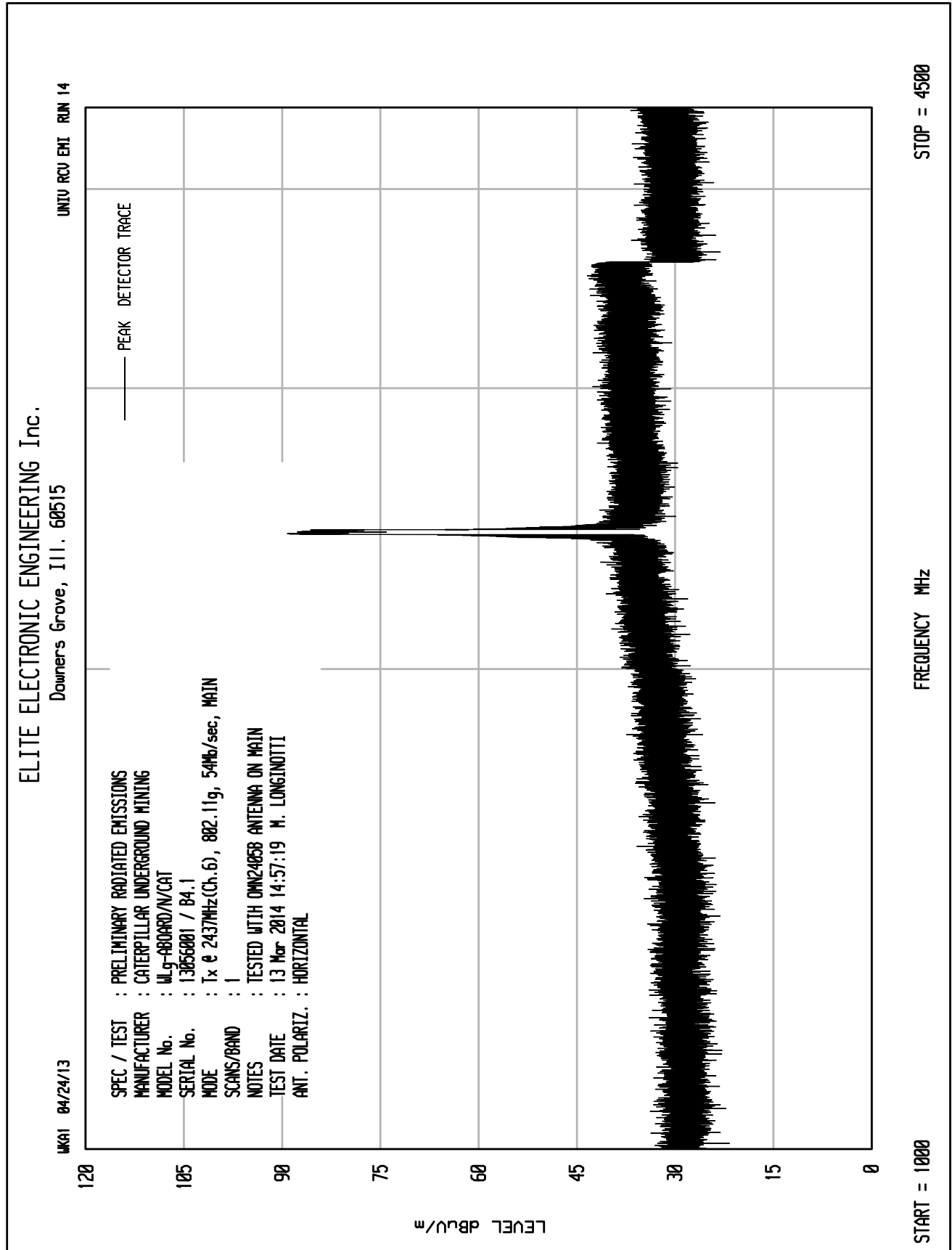
STOP = 1000

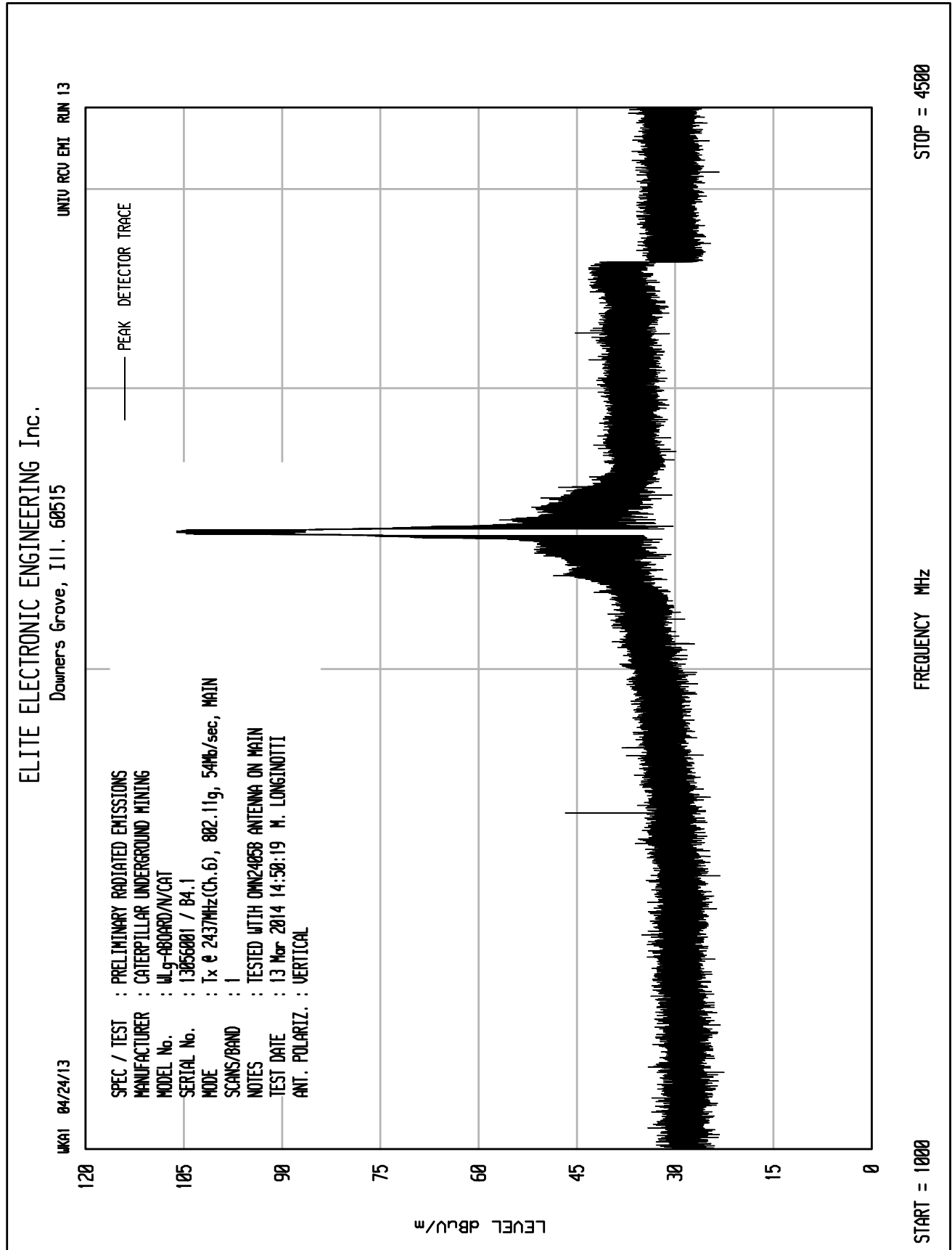
FREQUENCY MHz

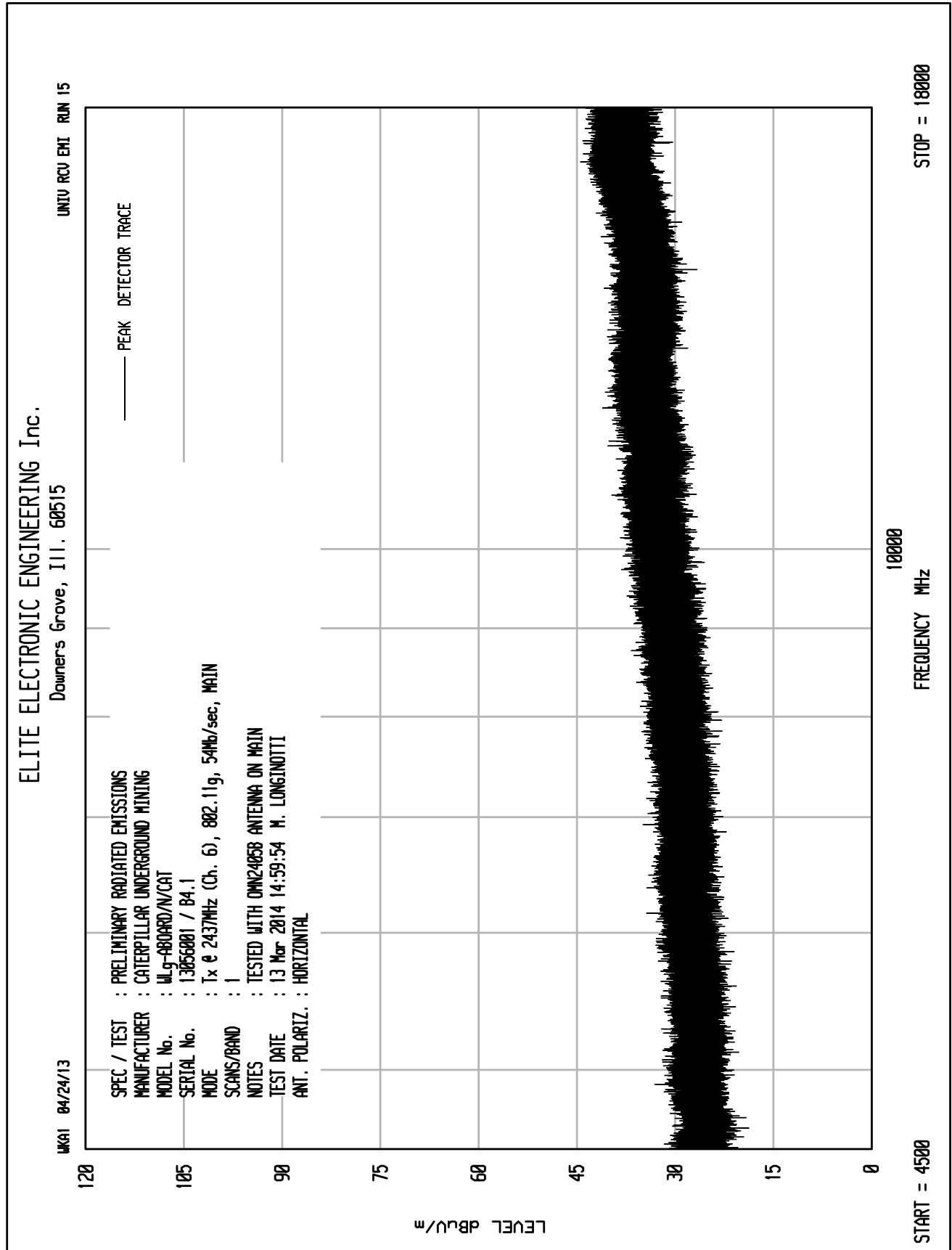
START = 30

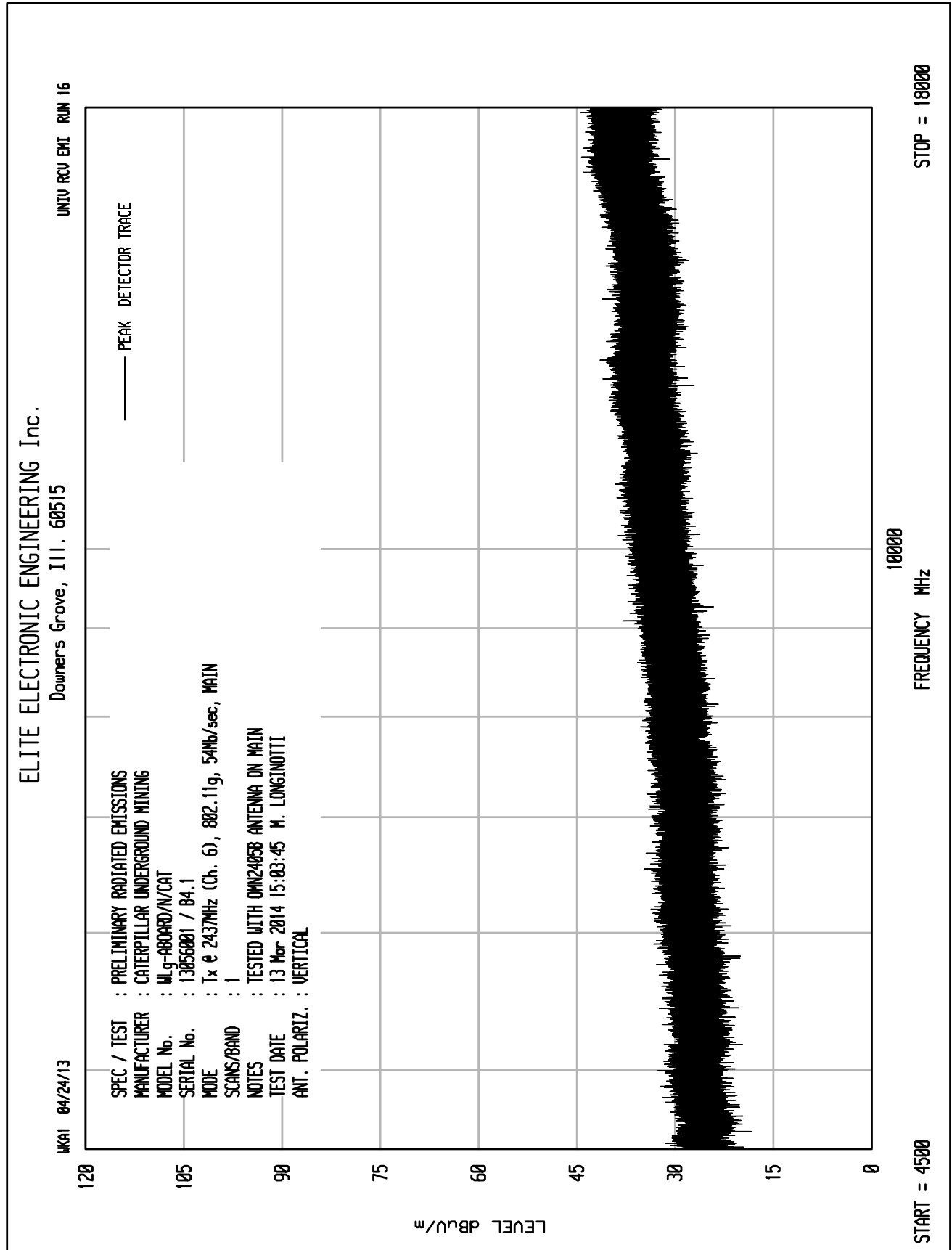
SPEC / TEST : PRELIMINARY RADIATED EMISSIONS
MANUFACTURER : CATERPILLAR UNDERGROUND MINING
MODEL No. : ULg-480ARD/N/CAT
SERIAL No. : 13056001 / B4.1
MODE : Tx @ 2437MHz (Ch. 6), 802.11g, 54Mb/sec, MAIN
SCANS/BAND : 1
NOTES : TESTED WITH OMN2405B ANTENNA ON MAIN
TEST DATE : 14 Mar 2014 09:35:36 M. LONGINOTTI
ANT. POLARIZ. : HORIZONTAL







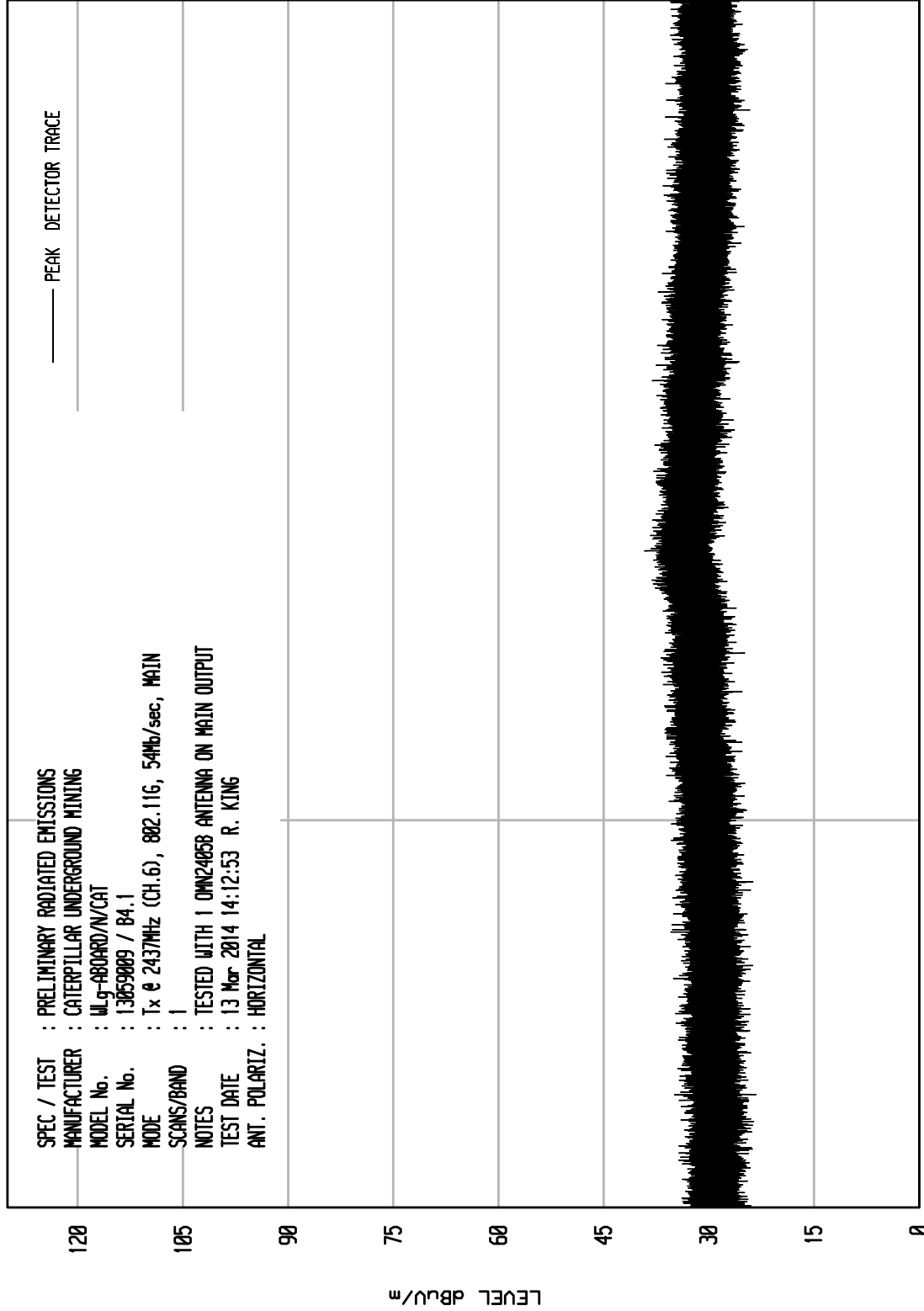




ELITE ELECTRONIC ENGINEERING Inc.
Downers Grove, Ill. 60515

UNIV RCU ENI RUN 19

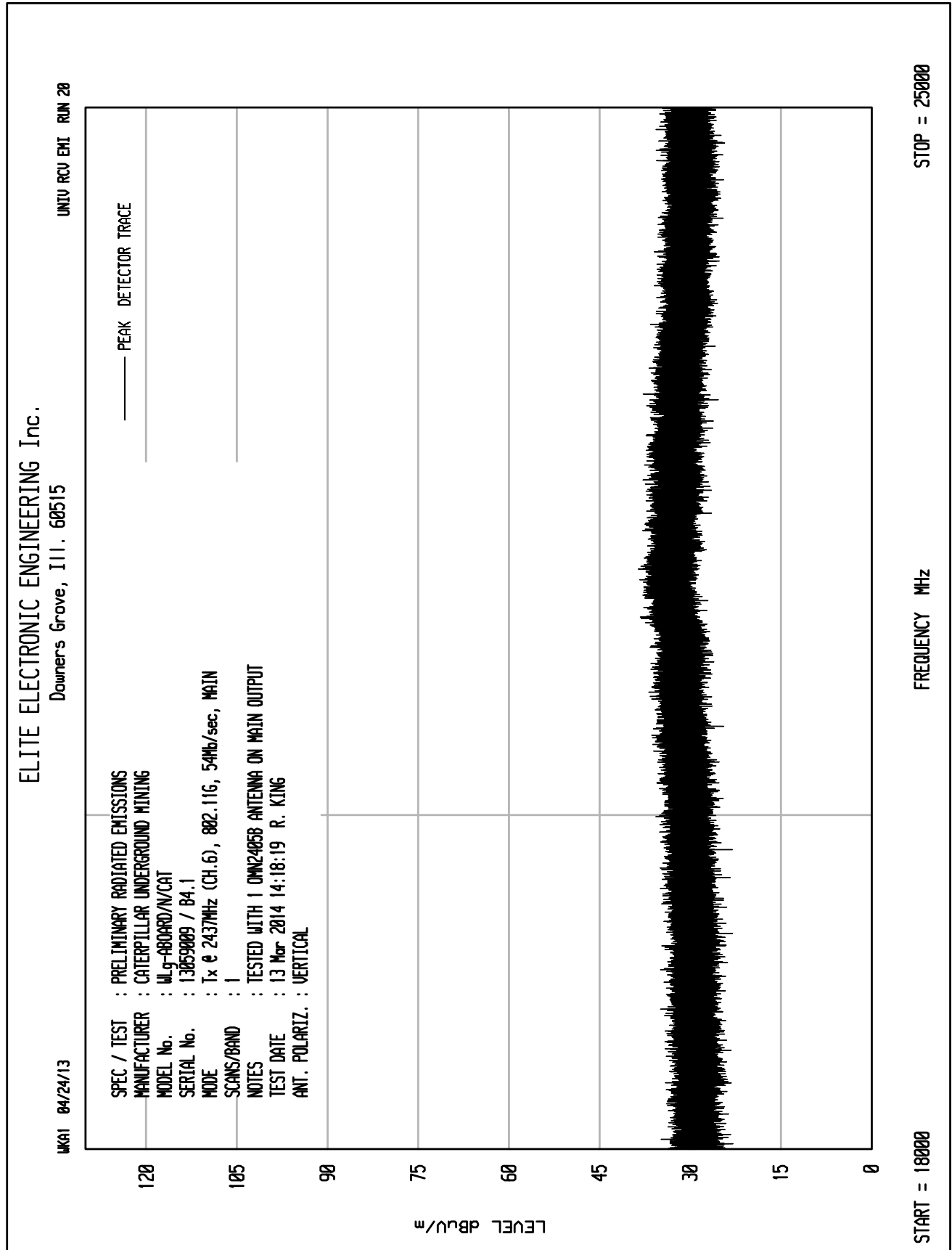
UKA1 04/24/13

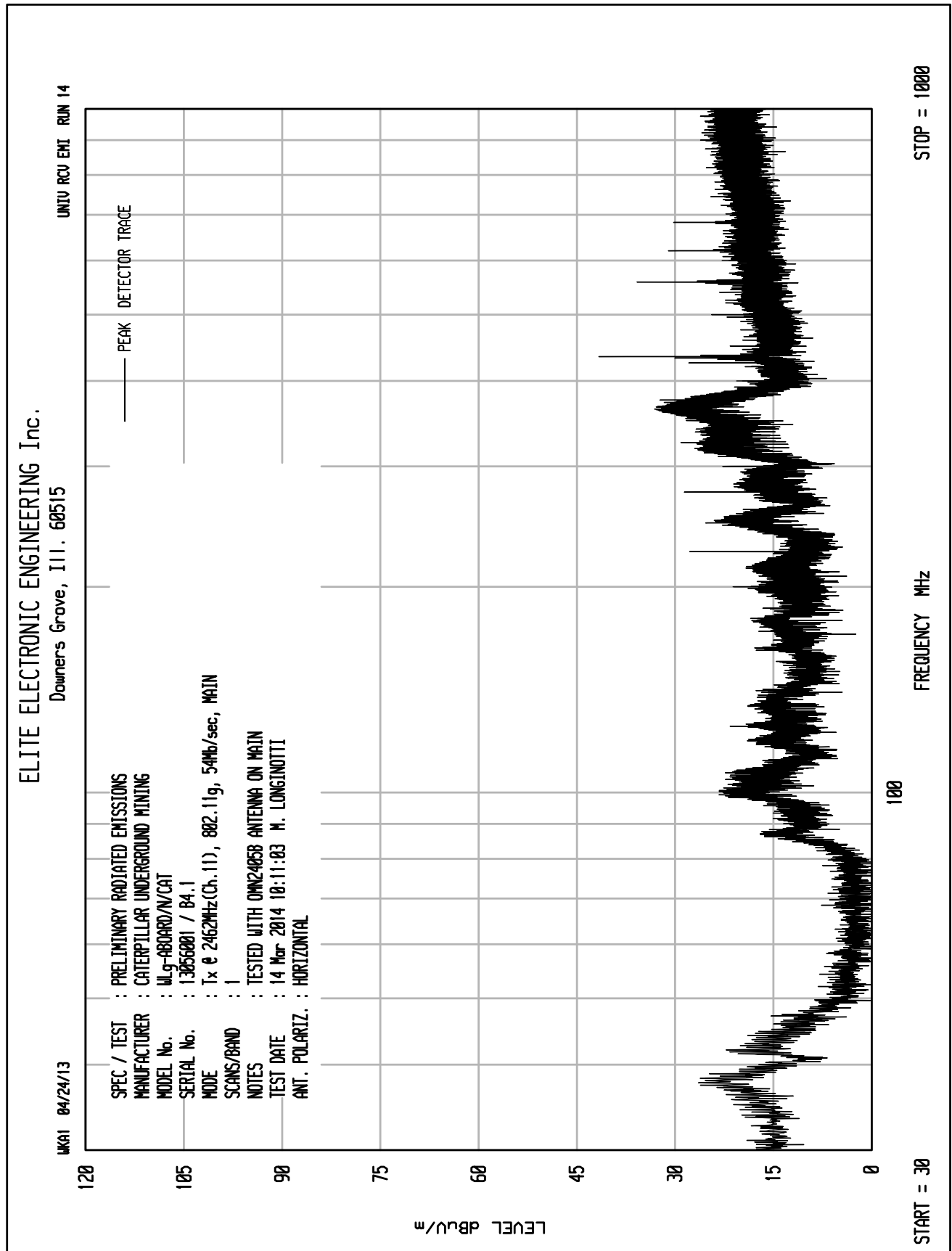


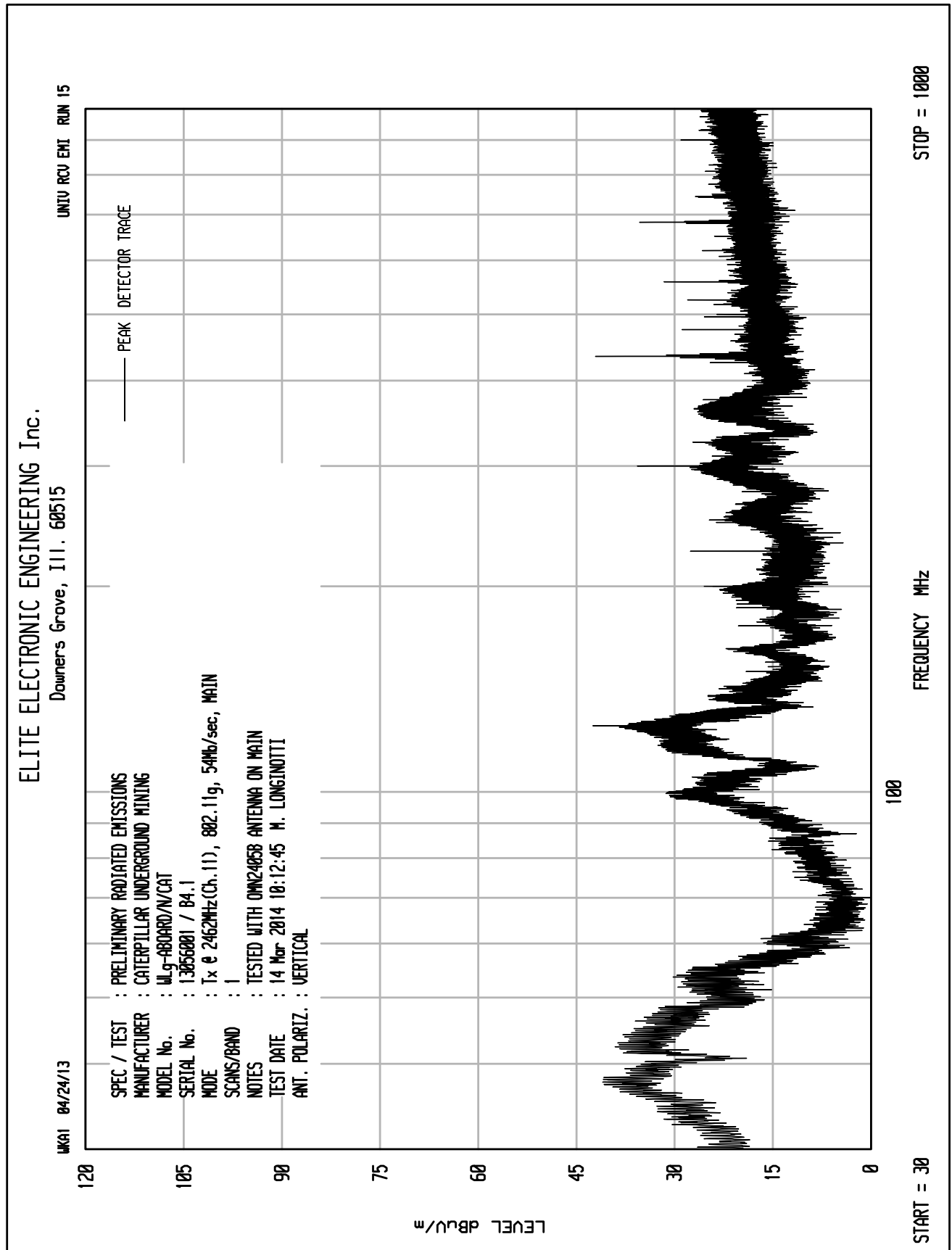
STOP = 25000

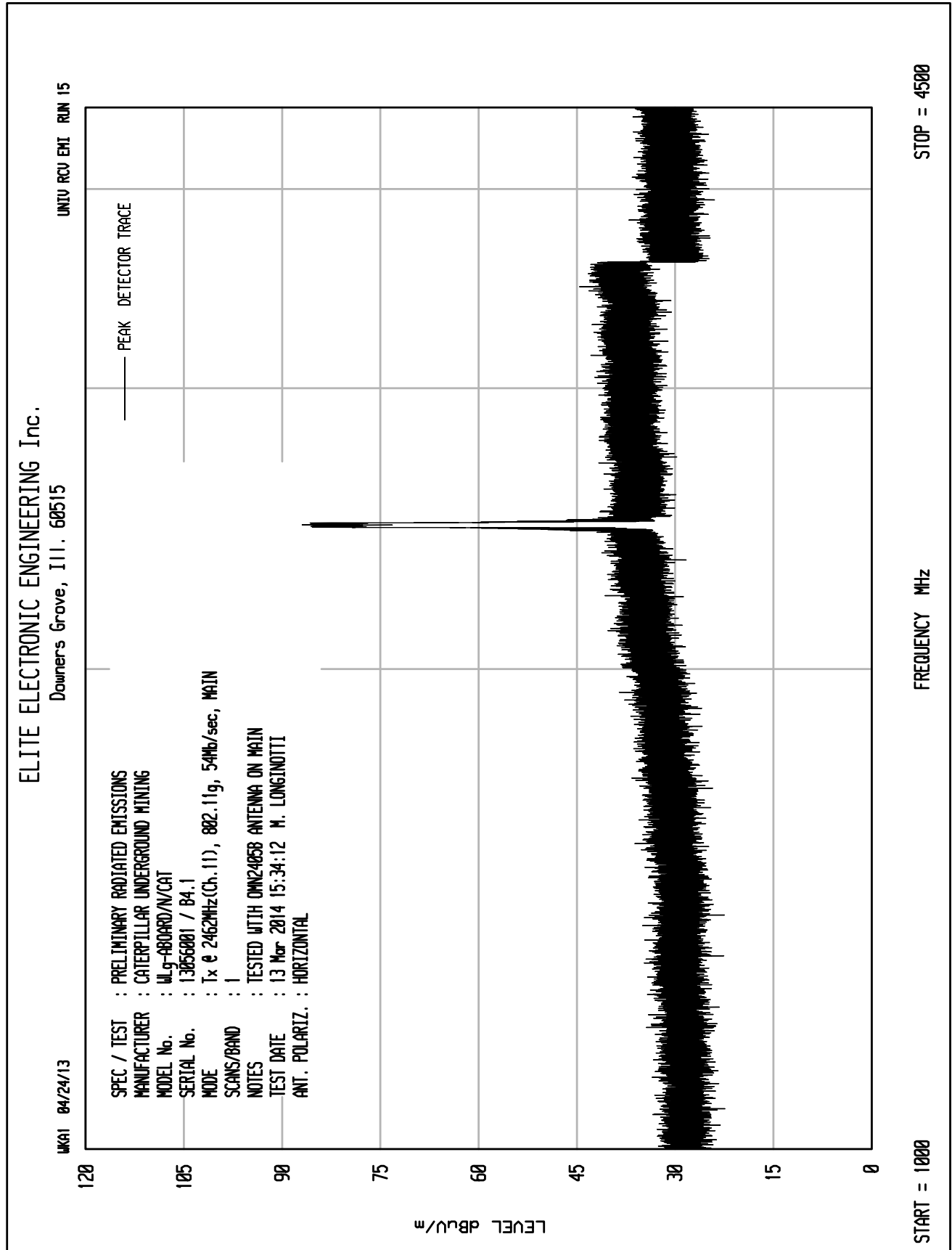
FREQUENCY MHz

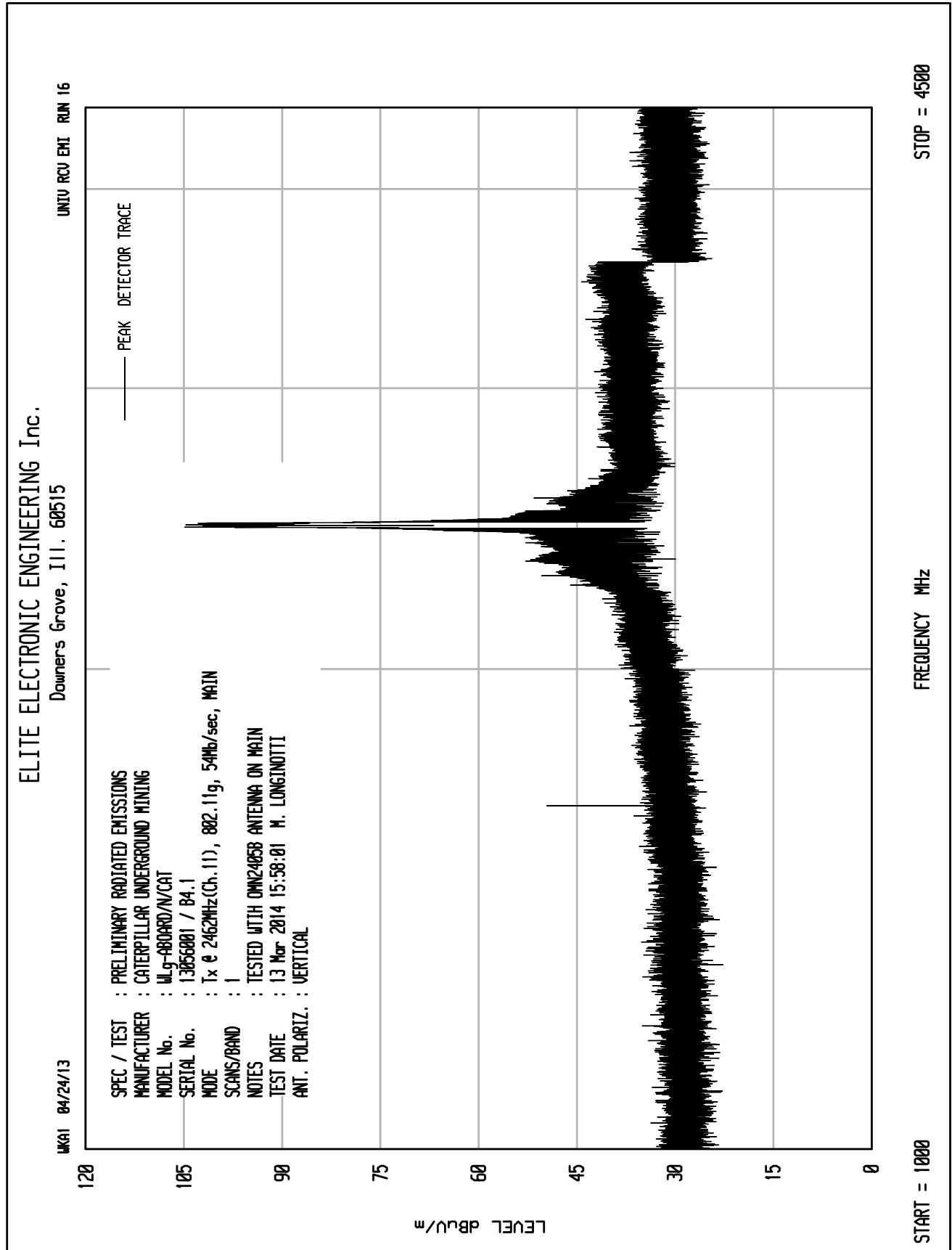
START = 18000

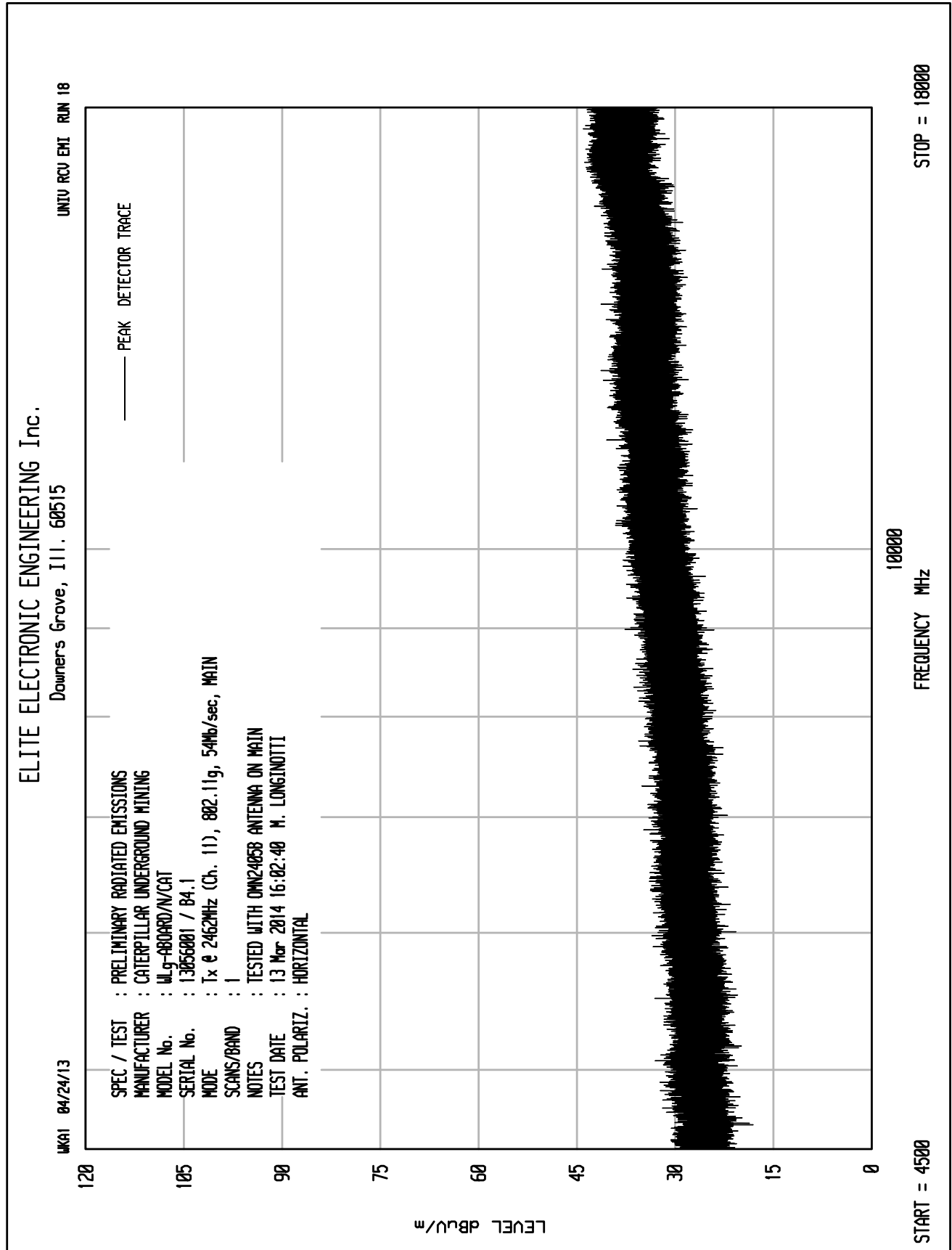


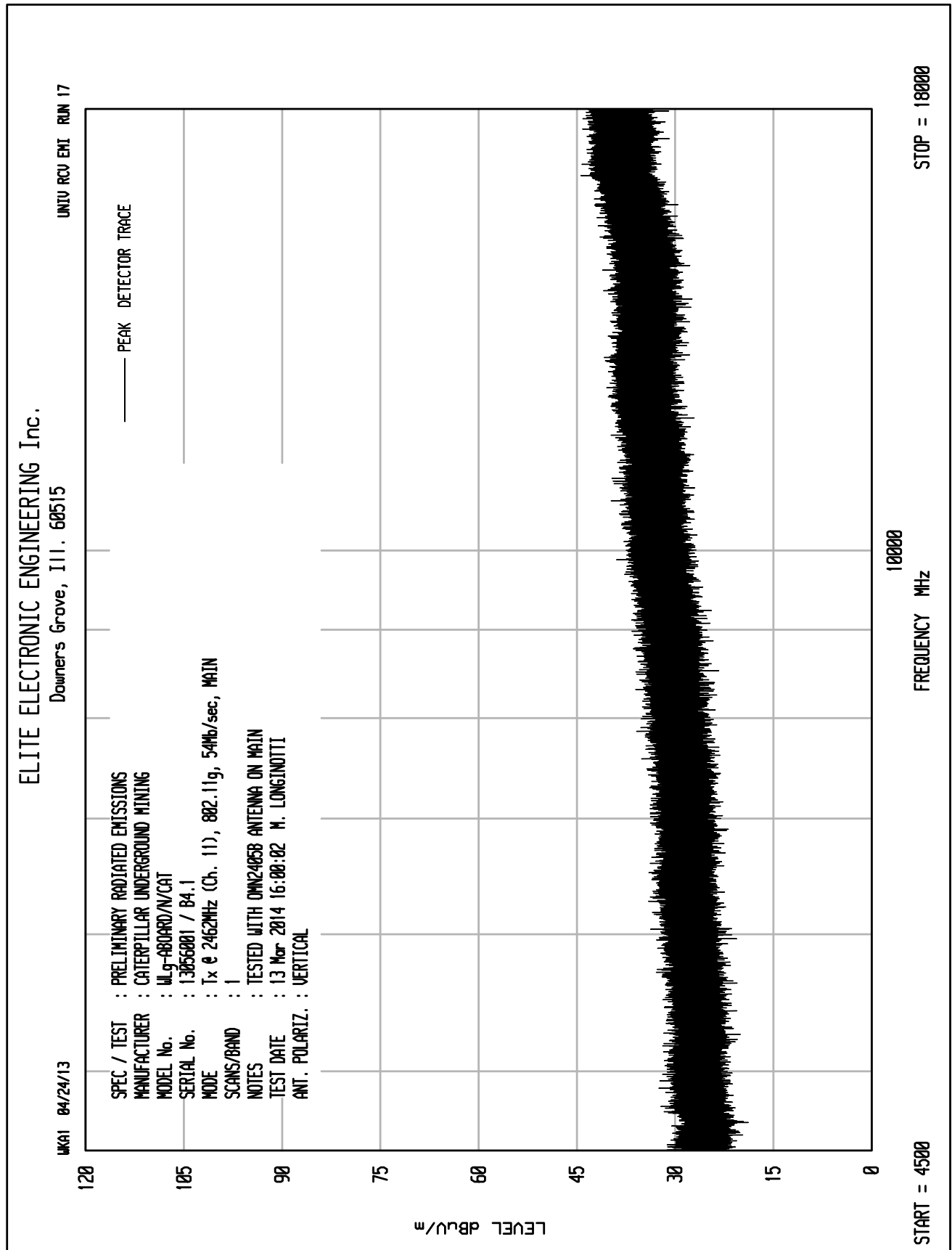










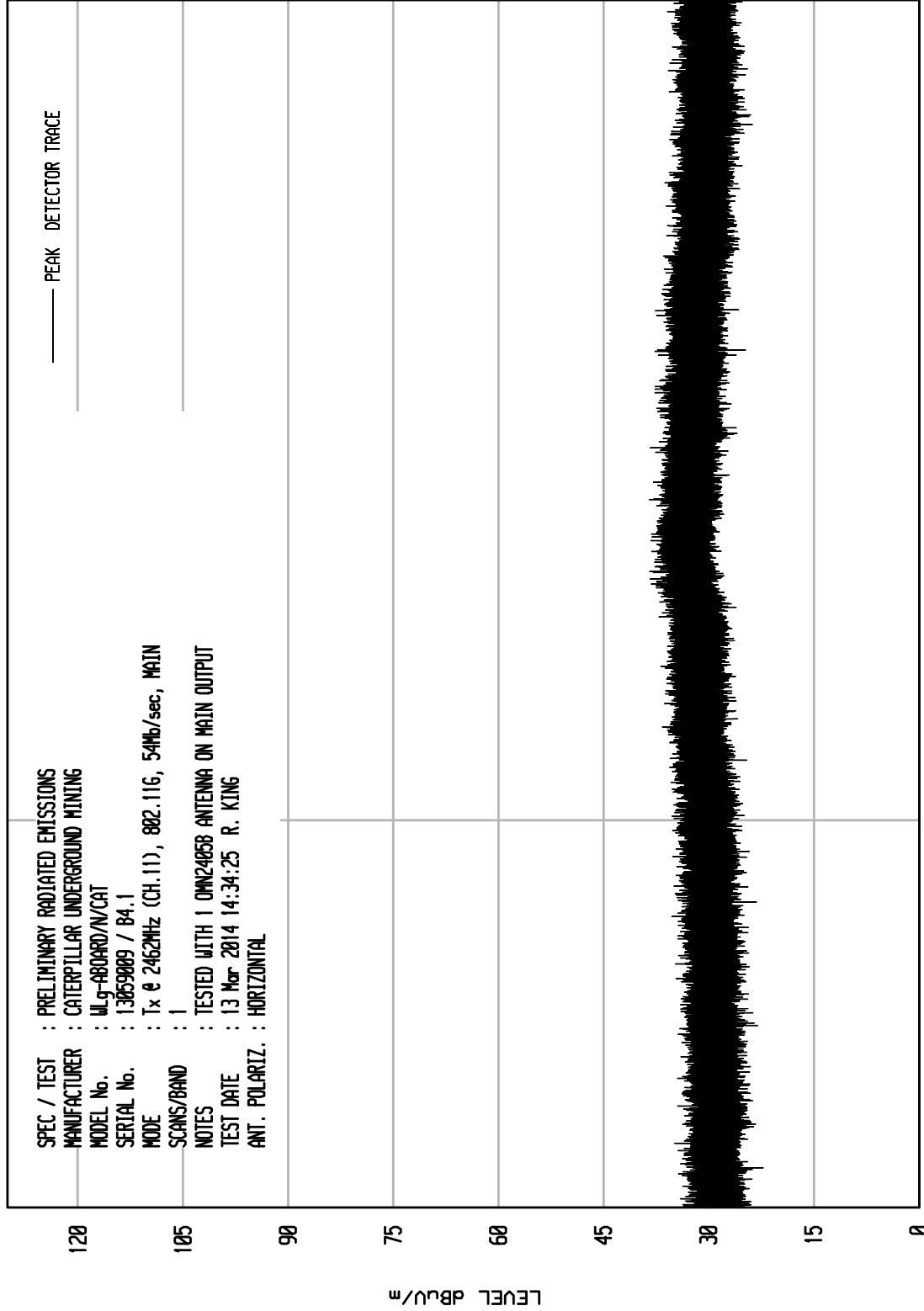


ELITE ELECTRONIC ENGINEERING Inc.

Downers Grove, Ill. 60515

UNIT: RCU ENI RUN 22

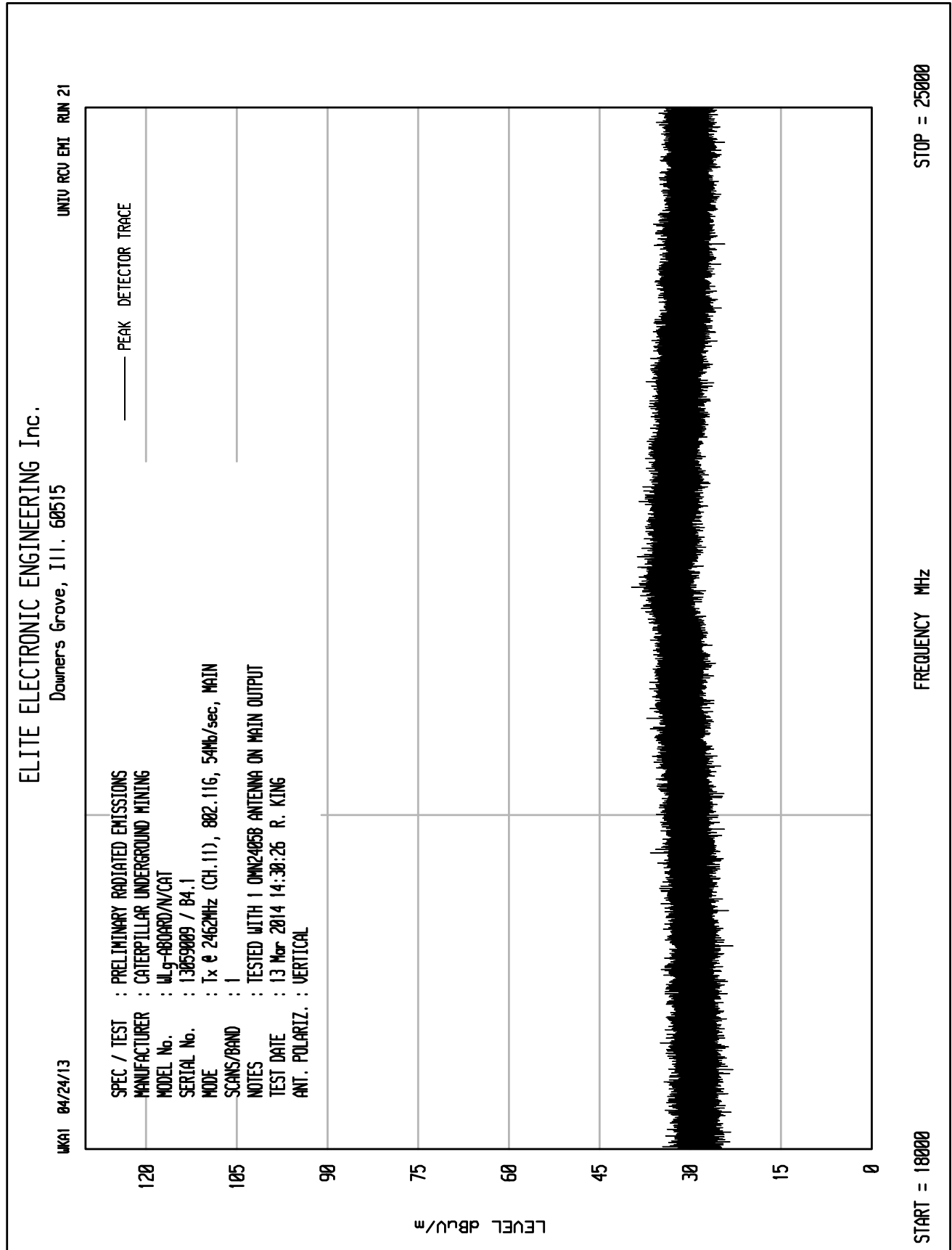
UKA1 04/24/13



STOP = 25000

FREQUENCY MHz

START = 18000





Manufacturer : Caterpillar Underground Mining
Model No. : WLg-ABOARD/N/CAT
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands (below 1GHz)
Date : March 10, 2014 through April 1, 2014
Mode : Tx @ 2412MHz (Ch. 1), 802.11b, 11Mb/sec, Diversity
Notes : Tested with RFI Model No. DAS-M1 on Main Antenna Port and Auxiliary Antenna Port
Notes : Test Distance is 3 meters
Notes : Maximized Quasi-peak Readings in a 120kHz bandwidth

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	QP Total dBuV/m at 3m	QP Total uV/m at 3 m	QP Limit uV/m at 3 m	Margin (dB)
37.90	H	10.5		0.3	14.0	0.0	24.9	17.5	100.0	-15.1
37.90	V	25.4		0.3	14.0	0.0	39.8	97.2	100.0	-0.2
121.70	H	24.3		0.6	12.1	0.0	37.0	70.6	150.0	-6.5
121.70	V	22.6		0.6	12.1	0.0	35.3	58.0	150.0	-8.2
125.00	H	25.0		0.6	12.0	0.0	37.6	75.7	150.0	-5.9
125.00	V	26.8		0.6	12.0	0.0	39.4	93.2	150.0	-4.1
250.00	H	12.6		0.8	12.2	0.0	25.6	19.1	200.0	-20.4
250.00	V	18.1		0.8	12.2	0.0	31.1	36.0	200.0	-14.9

Quasi-Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (db) + Pre Amp Gain (dB)

Quasi-Peak Total uV/m = $10^{((\text{Quasi-Peak Total (dBuV/m)})/20)}$



Manufacturer : Caterpillar Underground Mining
 Model No. : WLg-ABOARD/N/CAT
 Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
 Date : March 10, 2014 through April 1, 2014
 Mode : Tx @ 2412MHz (Ch. 1), 802.11b, 11Mb/sec, Diversity
 Notes : Tested with RFI Model No. DAS-M1 on Main Antenna Port and Auxiliary Antenna Port
 Notes : Test Distance is 3 meters
 Notes : Maximized Peak Readings in a 1MHz bandwidth

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
4824.00	H	48.6	Ambient	3.7	34.4	-40.1	46.5	212.0	5000.0	-27.5
4824.00	V	48.1	Ambient	3.7	34.4	-40.1	46.0	200.2	5000.0	-28.0
12060.00	H	48.6	Ambient	6.1	39.0	-39.6	54.0	502.5	5000.0	-20.0
12060.00	V	48.2	Ambient	6.1	39.0	-39.6	53.6	479.9	5000.0	-20.4
14472.00	H	48.7	Ambient	6.6	39.5	-39.9	54.9	558.5	5000.0	-19.0
14472.00	V	48.4	Ambient	6.6	39.5	-39.9	54.6	539.5	5000.0	-19.3
19296.00	H	29.2	Ambient	2.2	40.4	-27.9	43.9	156.1	5000.0	-30.1
19296.00	V	28.7	Ambient	2.2	40.4	-27.9	43.3	146.8	5000.0	-30.6

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : Caterpillar Underground Mining
Model No. : WLg-ABOARD/N/CAT
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : March 10, 2014 through April 1, 2014
Mode : Tx @ 2412MHz (Ch. 1), 802.11b, 11Mb/sec, Diversity
Notes : Tested with RFI Model No. DAS-M1 on Main Antenna Port and Auxiliary Antenna Port
Notes : Test Distance is 3 meters
Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4824.00	H	48.6	Ambient	3.7	34.4	-40.1	-29.2	17.4	7.4	500.0	-36.6
4824.00	V	48.1	Ambient	3.7	34.4	-40.1	-29.2	16.9	7.0	500.0	-37.1
12060.00	H	48.6	Ambient	6.1	39.0	-39.6	-29.2	24.9	17.5	500.0	-29.1
12060.00	V	48.2	Ambient	6.1	39.0	-39.6	-29.2	24.5	16.7	500.0	-29.5
14472.00	H	48.7	Ambient	6.6	39.5	-39.9	-29.2	25.8	19.5	500.0	-28.2
14472.00	V	48.4	Ambient	6.6	39.5	-39.9	-29.2	25.5	18.8	500.0	-28.5
19296.00	H	29.2	Ambient	2.2	40.4	-27.9	-29.2	14.7	5.4	500.0	-39.3
19296.00	V	28.7	Ambient	2.2	40.4	-27.9	-29.2	14.2	5.1	500.0	-39.8

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$



Manufacturer : Caterpillar Underground Mining
Model No. : WLg-ABOARD/N/CAT
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : March 10, 2014 through April 1, 2014
Mode : Tx @ 2437MHz (Ch. 6), 802.11b, 11Mb/sec, Diversity
Notes : Tested with RFI Model No. DAS-M1 on Main Antenna Port and Auxiliary Antenna Port
Notes : Test Distance is 3 meters
Notes : Maximized Peak Readings in a 1MHz bandwidth

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
4874.00	H	47.9	Ambient	3.7	34.4	-40.2	45.9	196.5	5000.0	-28.1
4874.00	V	47.8	Ambient	3.7	34.4	-40.2	45.8	194.2	5000.0	-28.2
7311.00	H	48.2	Ambient	4.7	35.4	-39.8	48.5	265.9	5000.0	-25.5
7311.00	V	47.8	Ambient	4.7	35.4	-39.8	48.1	254.0	5000.0	-25.9
12185.00	H	48.4	Ambient	6.1	39.0	-39.5	53.9	497.7	5000.0	-20.0
12185.00	V	48.3	Ambient	6.1	39.0	-39.5	53.8	492.0	5000.0	-20.1
19496.00	H	28.5	Ambient	2.2	40.4	-27.8	43.2	145.1	5000.0	-30.7
19496.00	V	28.3	Ambient	2.2	40.4	-27.8	43.1	142.9	5000.0	-30.9

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : Caterpillar Underground Mining
Model No. : WLg-ABOARD/N/CAT
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : March 10, 2014 through April 1, 2014
Mode : Tx @ 2437MHz (Ch. 6), 802.11b, 11Mb/sec, Diversity
Notes : Tested with RFI Model No. DAS-M1 on Main Antenna Port and Auxiliary Antenna Port
Notes : Test Distance is 3 meters
Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4874.00	H	47.9	Ambient	3.7	34.4	-40.2	-29.2	16.7	6.9	500.0	-37.3
4874.00	V	47.8	Ambient	3.7	34.4	-40.2	-29.2	16.6	6.8	500.0	-37.4
7311.00	H	48.20	Ambient	4.7	35.4	-39.8	-29.2	19.3	9.3	500.0	-34.6
7311.00	V	47.8	Ambient	4.7	35.4	-39.8	-29.2	18.9	8.9	500.0	-35.0
12185.00	H	48.4	Ambient	6.1	39.0	-39.5	-29.2	24.8	17.4	500.0	-29.2
12185.00	V	48.3	Ambient	6.1	39.0	-39.5	-29.2	24.7	17.2	500.0	-29.3
19496.00	H	28.5	Ambient	2.2	40.4	-27.8	-29.2	14.1	5.1	500.0	-39.9
19496.00	V	28.3	Ambient	2.2	40.4	-27.8	-29.2	13.9	5.0	500.0	-40.1

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$



Manufacturer : Caterpillar Underground Mining
Model No. : WLg-ABOARD/N/CAT
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : March 10, 2014 through April 1, 2014
Mode : Tx @ 2462MHz (Ch. 11), 802.11b, 11Mb/sec, Diversity
Notes : Tested with RFI Model No. DAS-M1 on Main Antenna Port and Auxiliary Antenna Port
Notes : Test Distance is 3 meters
Notes : Maximized Peak Readings in a 1MHz bandwidth

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
4924.00	H	48.4	Ambient	3.7	34.5	-40.2	46.4	208.9	5000.0	-27.6
4924.00	V	47.8	Ambient	3.7	34.5	-40.2	45.8	195.0	5000.0	-28.2
7386.00	H	47.8	Ambient	4.7	35.4	-39.8	48.2	255.9	5000.0	-25.8
7386.00	V	48.4	Ambient	4.7	35.4	-39.8	48.8	274.2	5000.0	-25.2
12310.00	H	48.6	Ambient	6.1	38.9	-39.4	54.2	513.8	5000.0	-19.8
12310.00	V	48.6	Ambient	6.1	38.9	-39.4	54.2	513.8	5000.0	-19.8
19696.00	H	28.0	Ambient	2.2	40.4	-27.8	42.7	137.0	5000.0	-31.2
19696.00	V	28.3	Ambient	2.2	40.4	-27.8	43.1	143.3	5000.0	-30.9
22158.00	H	30.0	Ambient	2.2	40.6	-28.5	44.3	164.9	5000.0	-29.6
22158.00	V	29.8	Ambient	2.2	40.6	-28.5	44.1	160.1	5000.0	-29.9

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : Caterpillar Underground Mining
 Model No. : WLg-ABOARD/N/CAT
 Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
 Date : March 10, 2014 through April 1, 2014
 Mode : Tx @ 2462MHz (Ch. 11), 802.11b, 11Mb/sec, Diversity
 Notes : Tested with RFI Model No. DAS-M1 on Main Antenna Port and Auxiliary Antenna Port
 Notes : Test Distance is 3 meters
 Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4924.00	H	48.4	Ambient	3.7	34.5	-40.2	-29.2	17.2	7.3	500.0	-36.7
4924.00	V	47.8	Ambient	3.7	34.5	-40.2	-29.2	16.6	6.8	500.0	-37.3
7386.00	H	47.80	Ambient	4.7	35.4	-39.8	-29.2	19.0	8.9	500.0	-35.0
7386.00	V	48.4	Ambient	4.7	35.4	-39.8	-29.2	19.6	9.6	500.0	-34.4
12310.00	H	48.6	Ambient	6.1	38.9	-39.4	-29.2	25.1	17.9	500.0	-28.9
12310.00	V	48.6	Ambient	6.1	38.9	-39.4	-29.2	25.1	17.9	500.0	-28.9
19696.00	H	28.0	Ambient	2.2	40.4	-27.8	-29.2	13.6	4.8	500.0	-40.4
19696.00	V	28.3	Ambient	2.2	40.4	-27.8	-29.2	14.0	5.0	500.0	-40.0
22158.00	H	30.0	Ambient	2.2	40.6	-28.5	-29.2	15.2	5.8	500.0	-38.8
22158.00	V	29.8	Ambient	2.2	40.6	-28.5	-29.2	15.0	5.6	500.0	-39.0

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$



Manufacturer : Caterpillar Underground Mining
 Model No. : WLg-ABOARD/N/CAT
 Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands (below 1GHz)
 Date : March 10, 2014 through April 1, 2014
 Mode : Tx @ 2412MHz (Ch. 1), 802.11b, 11Mb/sec, Main
 Notes : Tested with PacSat OMN2405B on Main Antenna Port
 Notes : Test Distance is 3 meters
 Notes : Maximized Quasi-peak Readings in a 120kHz bandwidth

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	QP Total dBuV/m at 3m	QP Total uV/m at 3 m	QP Limit uV/m at 3 m	Margin (dB)
37.92	H	10.5		0.3	14.0	0.0	24.8	17.5	100.0	-15.2
37.92	V	25.3		0.3	14.0	0.0	39.6	96.0	100.0	-0.4
119.90	H	18.5		0.6	12.2	0.0	31.3	36.6	150.0	-12.3
119.90	V	11.3		0.6	12.2	0.0	24.1	16.0	150.0	-19.5
125.00	H	15.5		0.6	12.0	0.0	28.1	25.4	150.0	-15.4
125.00	V	30.7		0.6	12.0	0.0	43.3	145.9	150.0	-0.2
250.00	H	19.2		0.8	12.2	0.0	32.2	40.8	200.0	-13.8
250.00	V	20.0		0.8	12.2	0.0	33.0	44.8	200.0	-13.0

Quasi-Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Quasi-Peak Total uV/m = $10^{((\text{Quasi-Peak Total (dBuV/m)})/20)}$



Manufacturer : Caterpillar Underground Mining
Model No. : WLg-ABOARD/N/CAT
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : March 10, 2014 through April 1, 2014
Mode : Tx @ 2412MHz (Ch. 1), 802.11b, 11Mb/sec, Main
Notes : Tested with PacSat OMN2405B on Main Antenna Port
Notes : Test Distance is 3 meters
Notes : Maximized Peak Readings in a 1MHz bandwidth

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
4824.00	H	46.7	Ambient	3.7	34.4	-40.1	44.6	170.4	5000.0	-29.4
4824.00	V	48.3	Ambient	3.7	34.4	-40.1	46.2	204.8	5000.0	-27.8
12060.00	H	48.5	Ambient	6.1	39.0	-39.6	53.9	496.8	5000.0	-20.1
12060.00	V	47.9	Ambient	6.1	39.0	-39.6	53.3	463.6	5000.0	-20.7
14472.00	H	47.9	Ambient	6.6	39.5	-39.9	54.1	509.3	5000.0	-19.8
14472.00	V	48.0	Ambient	6.6	39.5	-39.9	54.2	515.2	5000.0	-19.7
19296.00	H	29.4	Ambient	2.2	40.4	-27.9	44.0	158.6	5000.0	-30.0
19296.00	V	30.2	Ambient	2.2	40.4	-27.9	44.9	175.7	5000.0	-29.1

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$



Manufacturer : Caterpillar Underground Mining
Model No. : WLg-ABOARD/N/CAT
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : March 10, 2014 through April 1, 2014
Mode : Tx @ 2412MHz (Ch. 1), 802.11b, 11Mb/sec, Main
Notes : Tested with PacSat OMN2405B on Main Antenna Port
Notes : Test Distance is 3 meters
Notes : Maximized Average Readings

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Duty Cycle (dB)	Average Total dBuV/m at 3m	Average Total uV/m at 3 m	Average Limit uV/m at 3 m	Margin (dB)
4824.00	H	46.7	Ambient	3.7	34.4	-40.1	-29.2	15.5	5.9	500.0	-38.5
4824.00	V	48.3	Ambient	3.7	34.4	-40.1	-29.2	17.1	7.1	500.0	-36.9
12060.00	H	48.5	Ambient	6.1	39.0	-39.6	-29.2	24.8	17.3	500.0	-29.2
12060.00	V	47.9	Ambient	6.1	39.0	-39.6	-29.2	24.2	16.2	500.0	-29.8
14472.00	H	47.9	Ambient	6.6	39.5	-39.9	-29.2	25.0	17.8	500.0	-29.0
14472.00	V	48.0	Ambient	6.6	39.5	-39.9	-29.2	25.1	18.0	500.0	-28.9
19296.00	H	29.4	Ambient	2.2	40.4	-27.9	-29.2	14.9	5.5	500.0	-39.1
19296.00	V	30.2	Ambient	2.2	40.4	-27.9	-29.2	15.7	6.1	500.0	-38.2

Average Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB) + Duty Cycle Correction Factor (dB)

Average Total uV/m = $10^{((\text{Average Total (dBuV/m)})/20)}$



Manufacturer : Caterpillar Underground Mining
Model No. : WLg-ABOARD/N/CAT
Specification : FCC-15.247 Spurious Radiated Emissions in Restricted Bands
Date : March 10, 2014 through April 1, 2014
Mode : Tx @ 2437MHz (Ch. 6), 802.11b, 11Mb/sec, Main
Notes : Tested with PacSat OMN2405B on Main Antenna Port
Notes : Test Distance is 3 meters
Notes : Maximized Peak Readings in a 1MHz bandwidth

Freq. MHz	Ant Pol	Meter Reading (dBuV)	Ambient	CBL Fac (dB)	Ant Fac (dB)	Pre Amp (dB)	Peak Total dBuV/m at 3m	Peak Total uV/m at 3 m	Peak Limit uV/m at 3 m	Margin (dB)
4874.00	H	47.6	Ambient	3.7	34.4	-40.2	45.6	189.8	5000.0	-28.4
4874.00	V	47.7	Ambient	3.7	34.4	-40.2	45.7	192.0	5000.0	-28.3
7311.00	H	47.8	Ambient	4.7	35.4	-39.8	48.1	254.0	5000.0	-25.9
7311.00	V	47.7	Ambient	4.7	35.4	-39.8	48.0	251.1	5000.0	-26.0
12185.00	H	48.9	Ambient	6.1	39.0	-39.5	54.4	527.2	5000.0	-19.5
12185.00	V	48.3	Ambient	6.1	39.0	-39.5	53.8	492.0	5000.0	-20.1
19496.00	H	30.2	Ambient	2.2	40.4	-27.8	44.9	176.7	5000.0	-29.0
19496.00	V	29.6	Ambient	2.2	40.4	-27.8	44.4	165.3	5000.0	-29.6

Peak Total (dBuV/m) = Meter Reading (dBuV) + Cable Factor (dB) + Antenna Factor (dB) + Pre Amp Gain (dB)

Peak Total uV/m = $10^{((\text{Peak Total (dBuV/m)})/20)}$