

C 1 3438 SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND WELL COMPLETION REPORT

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

COUNTY NUMBER A 519063

ST/CO USE ONLY DATE Received MM DD YY 8 13

DATE WELL COMPLETED MM DD YY 5 24 04

Depth of Well 22 180' 26 (TO NEAREST FOOT) PERMIT NO. FROM "PERMIT TO DRILL WELL" Ho- 94-3953

OWNER: Nunan, Richard; STREET OR RFD: Forsythe Road; TOWN: Cooksville Md; SUBDIVISION: Swardfike Property; SECTION: ; LOT: 2

WELL LOG table with columns: DESCRIPTION (Use additional sheets if needed), FEET (FROM, TO), check if water bearing. Rows: Brown Shale (0-20), Yellow Clay (20-42), Gray Granite (42-180).

GROUTING RECORD: WELL HAS BEEN GROUTED (Y), TYPE OF GROUTING MATERIAL: CEMENT (CM), BENTONITE CLAY (BC), NO. OF BAGS: 24, NO. OF POUNDS: 2256, GALLONS OF WATER: 144, DEPTH OF GROUT SEAL: 0 to 43 ft.

CASING RECORD: MAIN CASING TYPE: ST (STEEL), CO (CONCRETE), PL (PLASTIC), OT (OTHER). Nominal diameter top (main) casing: 6 inch, Total depth of main casing: 46 feet.

OTHER CASING (if used) table with columns: diameter inch, depth (feet) from, to.

SCREEN RECORD: screen type or open hole: ST (STEEL), BR (BRASS), HO (OPEN HOLE), PL (PLASTIC), OT (OTHER). insert appropriate code below.

NUMBER OF UNSUCCESSFUL WELLS: 0; WELL HYDROFRACTURED: Y (yes), N (no)

CIRCLE APPROPRIATE LETTER: A (A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED), E (ELECTRIC LOG OBTAINED), P (TEST WELL CONVERTED TO PRODUCTION WELL)

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: MSD 024; DRILLERS SIGNATURE: [Signature]; LIC. NO.: MSD 024

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

C 2 DEPTH (nearest ft.) table with columns: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 15, 17, 21, 23, 24, 26, 30, 32, 36, 38, 39, 41, 45, 47, 51. Slot size 1, 2, 3. DIAMETER OF SCREEN (NEAREST INCH) 56 to 60.

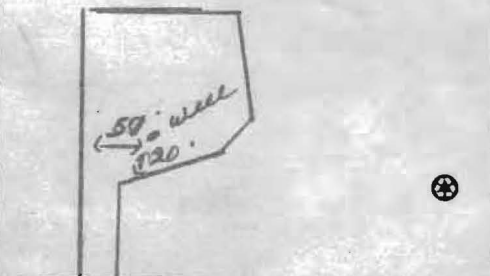
GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T (E.R.O.S.), W Q, 70, 72, 74, 75, 76, TELESCOPE CASING, LOG INDICATOR, OTHER DATA

C 3 PUMPING TEST: HOURS PUMPED (nearest hour) 3, PUMPING RATE (gal. per min.) 20, METHOD USED TO MEASURE PUMPING RATE: Bucket, WATER LEVEL (distance from land surface) BEFORE PUMPING 27 ft, WHEN PUMPING 32 ft, TYPE OF PUMP USED (for test): S (submersible)

PUMP INSTALLED: DRILLER INSTALLED PUMP YES (NO), IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS. TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 to 35. PUMP HORSE POWER 37 to 41. PUMP COLUMN LENGTH (nearest ft.) 43 to 47. CASING HEIGHT (circle appropriate box and enter casing height) + above, - below, LAND SURFACE 2 (nearest foot)

LOCATION OF WELL ON LOT: SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



Forsythe Road

B.1 2293

SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND APPLICATION FOR PERMIT TO DRILL WELL

STATE PERMIT NUMBER

520091 please type

40-94-3953 fill in this form completely

Date Received (APA)

03 11 04

OWNER INFORMATION

15 Last Name: Annan, Owner: H, First Name: Richard, 34
36 Street or RFD: 1815 Boka Valley Ct., 55
57 Town: Woodbine, 70 State: MD, 72 Zip: 21797, 76

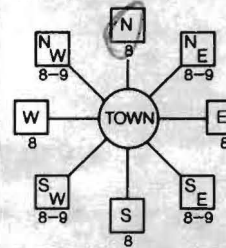
B 3 LOCATION OF WELL

8 COUNTY: Howard, 21
23 SUBDIVISION: Turnpike Property, 42
SECTION: 44 46, LOT: 2, 48 50
52 NEAREST TOWN: Crooksville, 71
MILES FROM TOWN (enter 0 if in town): 2 M I, 73 76 77 78

DRILLER INFORMATION

76 Driller's Name: Joseph E. Mayne, License No.: MSD 024, 81
Firm Name: Joseph E. Mayne Well Drilling
Address: 5512 Ridge Rd. Mt Airy Md. 21771
Signature: Joseph E. Mayne, Date: 3/9/04

B 4 DIRECTION OF WELL FROM TOWN (CIRCLE BOX)



11 NEAR WHAT ROAD: Frosty the Road, 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX): NORTH, WEST, SOUTH, EAST
34 DISTANCE FROM ROAD: 650, 37 ENTER FT OR MI: FT, 38 39
TAX MAP: 8, BLK: 12, PARCEL: 244

B 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.): 4, 8 12
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY): 500, 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
INDUSTRIAL, COMMERCIAL, DEWATERING
PUBLIC WATER SUPPLY WELL
TEST, OBSERVATION, MONITORING
GEO-THERMAL

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

COUNTY NAME: Howard, COUNTY NO.: A519063
STATE SIGNATURE: Mark E. Affkin, INSERT S
DATE ISSUED: 05 19 04, EXP. DATE: 5/19/05
NORTH GRID: 548, EAST GRID: 0797

APPROXIMATE DEPTH OF WELL: 300 FEET

APPROXIMATE DIAMETER OF WELL: 6 INCH

METHOD OF DRILLING (circle one)

BORED (or Augered), JETTED, Jetted & DRIVEN
AIR-ROTARY, AIR-PERCussion, ROTARY (Hydraulic Rotary)
CABLE, REVerse-ROTary, DRive-POINT

REPLACEMENT OR DEEPEMED WELLS (CIRCLE APPROPRIATE BOX)

THIS WELL WILL NOT REPLACE AN EXISTING WELL
THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
THIS WELL WILL DEEPEAN AN EXISTING WELL
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPEMED (IF AVAILABLE)

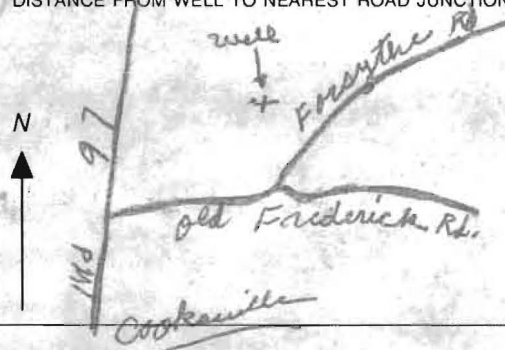
SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER
1. well
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE

E 7907, N 5488

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION



Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROX. PERMIT NUMBER: G
PERMIT No.: 40-94-3953

SPECIAL CONDITIONS

NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

**HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH
WATER AND SEWERAGE PROGRAM
TEL: (410)313-2640 FAX: (410)313-2648**

Information Form for the Installation of the Well Pump, Pitless Adapter, and Supply Piping

NOTE: The installer is responsible for requesting an inspection prior to 9 am on the day of the desired inspection. No work is to be covered until approved by the Health Department. All installations must comply with the National Standard Plumbing Code (NSPC, as amended locally) and COMAR 26.04.04 (MD Well Construction Regulations). Submission of a complete form is required prior to Use and Occupancy approval.

Company Name: Richard Nunn Telephone #: 410-489-4191
Address: 1815 Boka Valley Ct Cell # 410-977-7754
Woodhine, MD 21797

(Must circle one) Licensed Plumber Licensed Well Driller Licensed Well Pump Installer
License # and name of individual responsible for the field installation:

Name (Print): WALKER P. H. License# 6952

*A licensed individual must perform the actual installation. Apprentices must be under the direct supervision of a licensed journeyman or master plumber, pump installer or well driller. Licenses may be subjected to field verification.

Name of Property Owner: Richard Nunn Telephone #: 410-977-7754
Subdivision: TWARDZIK Lot #: 2 Well Tag #: HO-94-3953
Site Address: 14234 Forsythe Rd
Sykesville, MD 21784

Submersible Pump Data	Pitless Adapter	Well Cap and Electric Conduit
Make: <u>STARITE</u>	Make: <u>ROSHART</u>	Two piece watertight cap: _____
Model #: <u>5SP4CO2HC</u>	Model #: <u>P100</u>	Screened, vented well cap: <input checked="" type="checkbox"/> <u>YES</u>
Pump Capacity <u>5</u> GPM	Depth: <u>42"</u> (36" min)	Cap secured to casing: <input checked="" type="checkbox"/> <u>YES</u>
Well Yield: <u>20</u> GPM	NSF approved: <input checked="" type="checkbox"/> <u>YES</u>	Conduit min 18" B.G.: <input checked="" type="checkbox"/> <u>YES</u>
Depth of well encountered at time of pump installation: <u>189</u> (feet)		Conduit secured to well cap: <input checked="" type="checkbox"/> <u>YES</u>

If pump capacity exceeds well yield, a low water cut off switch is required by NSPC 1990 Section 17.8.4
Torque arrestors or Cable guards are required - Must circle one
Safety rope, if used, attached to inside of well casing with eye bolt _____

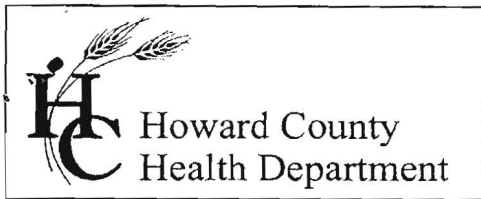
Piping to house	House Connection
Type: <u>polyethylene</u>	PVC sleeved to undisturbed soil at wall penetration: <input checked="" type="checkbox"/> <u>YES</u>
PSI: <u>20</u> (160 psi min)	Approximate length of sleeve: <u>6'</u>
Depth of supply line: <u>42"</u> (36" min)	Sleeve caulked and sealed properly: <input checked="" type="checkbox"/> <u>YES</u>

The water supply line is required to be at least ten feet from the septic tank, pump chamber, sewage piping, distribution box, drainfields, and sewage reserve area. If this cannot be accomplished, contact this office for approval prior to installation.

Signature of company representative responsible for installation: [Signature] date: 12-10-04

For Health Department Use Only - Not to be completed by Installer

Date Insp. Requested: _____ Date Insp. Approved: 12/31/04 **(50)**
Inspection Data: Pitless adapter and water supply line at least 36" below grade **BB**
Two piece cap installed and attached to casing securely
Elec. conduit extends at least 18" below grade/attached to cap properly
Safety rope installed inside of well casing
Correct well tag attached properly and casing 8" above finished grade
Water supply line sleeved adequately at house connection
Adequate grout observed below pitless adapter



3525 H Ellicott Mills Drive, Ellicott City, MD 21043
(410) 313-1771 Fax (410) 313-2648
TDD (410) 313-2323 Toll Free 1-866-313-6300
website: www.hchealth.org

Penny E. Borenstein, M.D., M.P.H., Health Officer

December 28, 2004

Mr. Richard Nunn
14234 Forsythe Road
Sykesville, MD 21784

SENT VIA FACSIMILE 410-465-5608

RE: Twardzik Property, Lot 2
14234 Forsythe Road
Sykesville, MD 21784
BP #: B00146843
Well Permit # HO-94-3953

Dear Sirs:

This is to advise you that the septic system for the above referenced property has been installed and inspected. **Final approval of the septic system was granted on 08/04/2004. Final approval of the well line connection to the dwelling was approved on 12/31/2004.**

The water sample results indicate that the water samples submitted for testing were free of coliform and fecal coliform bacteria at the time of sampling and are bacteriologically safe for drinking. The water sample results were found to be in compliance with COMAR water quality standards.

INTERIM CERTIFICATE OF POTABILITY

This certifies that the initial sampling requirements of COMAR 26.04.04 "Well Regulations" have been met for the water supply system installed under well permit #HO-94-3953. Although the submitted sample results are in compliance with COMAR standards, the Health Department does not guarantee water supplies. Based upon satisfactory investigation and evaluation, the Howard County Health Department as authorized by the Maryland Department of the Environment accepts this well system as required by COMAR 26.04.04.

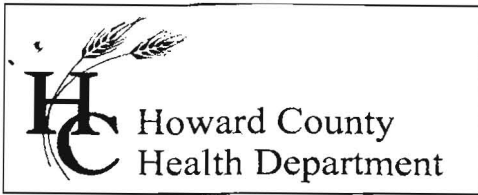
This certificate may become final upon completion of the second bacteriological test, which is to be taken by the county health department within six months of receipt of this letter. **Please contact (410) 313-1773 to schedule a final water sample appointment. Currently, there is no charge for this final sampling.**

Date of Water Sample: 12/13/2004 & 12/21/2004
Date of Well Completion: 05/24/2004

Approving Authority,

Brian Baker
Brian Baker, R. S.
Well & Septic Program

cc: Building Inspector's Office
Community Health Services
File



7178 Columbia Gateway Drive, Columbia MD 21046
 (410) 313-2640 Fax (410) 313-2648
 TDD (410) 313-2323 Toll Free 1-866-313-6300
 website: www.hchealth.org

Penny E. Borenstein, M.D., M.P.H., Health Officer

REQUEST FOR TEMPORARY DEVIATION TO
 BACTERIA STANDARDS FOR CERTIFICATE OF POTABILITY

DATE: 12.14.04 WELL PERMIT #: HO - 94 - 3953

PROPERTY OWNER: Richard NUNN
 SUBDIVISION & LOT #: TWARDZIK LOT 2
 PROPERTY ADDRESS: 14234 Folsythus Rd
Sykesville, MD 21784

The water sample results recently submitted for evaluation indicate that the water sample contained coliform bacteria. This bacteria is used as an indicator species which can help measure the sanitary protection of the well and water supply. Coliform bacteria by themselves do not usually cause disease, but their presence may indicate that surface contamination (insects, organic material, surface water, etc.) may have entered the water supply and the water may be potentially unsafe. Coliform bacteria are also good indicators because they are killed by disinfection the same way that most disease-causing organisms are killed. With a few exceptions, a well that is properly disinfected causes the coliform bacteria to disappear, and in most cases disease causing organisms have also been killed.

TESTIMONIAL: (Steps taken thus far by the well owner or agent to make the well water supply bacteriologically safe)

① ON 12/11/04 SHOCKED OR TREATED WELL
 WITH CHLORINE TABLETS. FAILED BACTERIA TEST.
 ② ON 12/13/04 REPEATED PROCESSED

PLEDGE: (Steps to be taken by the well owner or agent to bring the well water supply into compliance with COMAR 26.04.04.09 within fifteen (15) days)

(STEP # 2 ABOVE) WILL HAVE WELL
 RETESTED ON 12/15/04

CONDITIONS:

- 1) Within fifteen (15) days, the well installed under permit # HO - 94 - 3953 will meet the bacteria standard resulting from approved disinfection procedures.

2) If condition #1 is not met through disinfection techniques, then either:

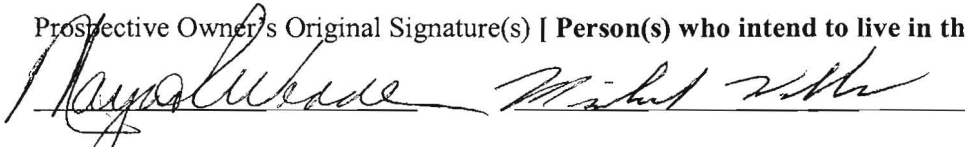
- a) **PRIOR HEALTH DEPARTMENT APPROVAL IS REQUIRED BEFORE AN ULTRAVIOLET DISINFECTION SYSTEM CAN BE INSTALLED (which must be maintained by the homeowner continuously to ensure a bacteriologically safe water supply)**

OR

- b) An order to abandon and seal the well will be issued

I hereby request that a Fifteen-Day Temporary Deviation to COMAR 26.04.04.09 B3a be granted for the well installed under permit # HO ~~44-393~~ I am fully aware of the conditions under which this deviation will be granted, and of my responsibilities as the well owner which will include advising any future buyer/tenant of the installation, condition and maintenance responsibilities of an appropriate disinfection device if applicable.

Prospective Owner's Original Signature(s) [Person(s) who intend to live in the dwelling]



Prospective Owner's Day Time Phone Number(s)

410 772 4643 410-884-7806
884 7806



HOWARD COUNTY HEALTH DEPARTMENT

Bureau of Environmental Health
7178 Columbia Gateway Drive, Columbia, MD 21046
(410) 313-2640 FAX (410) 313-2648
TDD (410) 313-2323 Toll Free 1-877-4MD-DHMH

Penny E. Borenstein, M.D., M.P.H., County Health Officer

December 15, 2004

Mr. Richard Nunn
14234 Forsythe Road
Sykesville, MD 21784

SENT VIA FACSIMILE 410-465-5608

RE: Twardzik Property, Lot 2
14234 Forsythe Road
Sykesville, MD 21784
BP # B00146843
Well Permit #HO-94-3953

Dear Sirs:

This is to advise you that the septic system for the above referenced property has been installed and inspected. Final approval of the septic system was granted on 08/04/2004.

This is a **Temporary Deviation** to the Code of Maryland Regulations (COMAR 26.04.04) to allow additional time for a well failing certificate of potability requirements to be brought into compliance with these regulations. This deviation requests that bottled water shall be used for drinking purposes in the interim period of time (**fifteen days**) to allow for additional disinfection procedures as described in Regulation COMAR 26.04.04.07N. **Documentation of a bacteria level below the limit shall be submitted to this office by a state certified lab within fifteen days of the date of this letter.**

By the end of the interim period (**fifteen days**), a determination shall be made by the Health Department whether to:

- a) accept the well as being in compliance with the bacteriological standard of Regulation 26.04.04.09B3a and issue a standard Interim Certificate of Potability or
- b) issue a Permanent Deviation under the condition that prior health department approval has been granted in order to install an ultraviolet light or other suitable disinfection system or
- c) issue an order that the well is abandoned and sealed

Fifteen Day Temporary Deviation for Bacteria

Issuance of this Temporary Deviation is based on information submitted by the potential occupant of the dwelling. By issuance of this letter, the Health Department recommends release of the Use and Occupancy permit for the above referenced property.

Date of Water Samples: 12/13/2004
Date of Well Completion: 05/24/2004
(HO-94-3953)

Approving Authority,



Brian Baker, R.S.
Well and Septic Program

mlb
cc: Building Inspector's office,
File

TEST DATA

NAME <u>twardzik lot</u>	FILE NO _____
LOCATION <u>Old Fred. Rd.</u>	COUNTY <u>Howard</u>
<u>S.M. 1</u>	DATE <u>12/29/03</u>
RECORDED BY <u>K. Bell</u>	GRID _____ E
	N

HOLE NO.	TEST NO.	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
606	Depth 4 1/2"	H₂O 8 1/2"	12:29	—	10"	→ 3/16
	Brown heavy	0'	12:45	16 min	9 13/16	→ 1/16
	Tan/Brown soft sil	1'	1:03	18 min	9 13/16	→ 1/16
	1/2" (mottling)	1 1/2'	1:17	14 min	9 11/16	→ 1/16 - too slow -
	Tan/Brown sil water	3 1/2'				

TEST DATA

NAME <u>Twardzik Lotz</u>	FILE NO _____
LOCATION <u>Old Fred Rd</u>	COUNTY _____
_____	DATE _____
RECORDED BY <u>M. Rifkin</u>	GRID _____ E N

HOLE NO.	TEST NO.	DEPTH	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
605	16"	7 1/2	11:09	—	10"	
0	brn-sact/m		11:28	19	9 10/16	> 6/16
16	red brn sticky cl/m		12:02	34	9 1/16	> 9/16
30						

TEST DATA

NAME <u>Twardzik Lot 2</u>	FILE NO _____
LOCATION <u>Old Fred Rd</u>	COUNTY <u>Howard</u>
<u>S.M. 3</u>	DATE <u>12/29/03</u>
RECORDED BY <u>M. Ripkin</u>	GRID _____ E N

HOLE NO.	TEST NO. DEPTH	DEPTH <small>H₂O</small>	CLOCK TIME	ELAPSED TIME	MEASUREMENT	REMARKS (Method, Moisture, Biopores)
604	14"	7"	10:37	—	10"	(F)
	0 brn tan		10:52	15	9 10/16 > 6/16	
	14 sacl lm		11:10	17	9 19/32 > 1/32	
	14 brn tan		11:25	18	9 16/32 > 3/32	
	23 sic lm		11:52	24	9 15/32 > 1/32	
35	red brn sacl lm					
608	24"	8"	10:57	—	9"	later review suggests denser @ 15"
	0 brn &		11:12	15	8 2 1/32 > 1 1/32	
	15 sacl lm		11:28	16	8 5/16 > 1 1/32	
	15 brn red cl lm		11:54	26	7 7/8 > 7/16	
	24 tan ye/sticky cl lm					
39						