

NORTHWEST NEW MEXICO PACKER-LEAKAGE TEST

Operator Pacific Northwest Pipeline Corp., Lease San Juan 28-5 Well No. 34-18
Location
of Well: Unit M Sec. 18 Twp. 28N Rge. 5W County Rio Arriba

Name of Reservoir or Pool	Type of Prod. (Oil or Gas)	Method of Prod. (Flow or Art. Lift)	Prod. Medium (Tbg. or Csg.)
Upper Completion <u>Mesa Verde</u>	<u>Gas</u>	<u>Flow</u>	<u>Tubing 1 1/2"</u>
Lower Completion <u>Dakota</u>	<u>Gas</u>	<u>Flow</u>	<u>Tubing 2"</u>

PRE-FLOW SHUT-IN PRESSURE DATA

Upper Compl	Hour, date <u>11:30 P.M.</u> Shut-in <u>7-27-59</u>	Length of time shut-in <u>9 Days</u>	SI press. psig <u>1082</u>	Stabilized? (Yes or No) <u>No</u>
Lower Compl	Hour, date <u>11:30 P.M.</u> Shut-in <u>7-27-59</u>	Length of time shut-in <u>9 Days</u>	SI press. psig <u>2639</u>	Stabilized? (Yes or No) <u>No</u>

FLOW TEST NO. 1

Commenced at (hour, date)* <u>10:00 A.M. 8-5-59</u>				Zone producing (<u>Upper</u> or Lower):	
Time (hour, date)	Lapsed time since*	Pressure		Prod. Zone Temp.	Remarks
<u>8-5-59</u> <u>10:15 A.M.</u>	<u>15 Min.</u>	<u>1091</u>	<u>650</u>	<u>62°F</u>	<u>Spray of Water</u>
<u>8-5-59</u> <u>10:30 A.M.</u>	<u>30 Min.</u>	<u>1092</u>	<u>560</u>	<u>64°F</u>	<u>Spray of Water</u>
<u>8-5-59</u> <u>10:45 A.M.</u>	<u>45 Min.</u>	<u>1091</u>	<u>512</u>	<u>65°F</u>	<u>Spray of Water</u>
<u>8-5-59</u> <u>11:00 A.M.</u>	<u>1 Hour</u>	<u>1091</u>	<u>490</u>	<u>67°F</u>	<u>Spray of Water</u>
<u>8-5-59</u> <u>12:00 A.M.</u>	<u>2 Hours</u>	<u>1091</u>	<u>432</u>	<u>69°F</u>	<u>Spray of Water</u>
<u>8-5-59</u> <u>1:00 P.M.</u>	<u>3 Hours</u>	<u>1090</u>	<u>382</u>	<u>69°F</u>	<u>Spray of Water</u>

Production rate during test
Oil: _____ BOPD based on _____ Bbls. in _____ Hrs. Grav. _____ GOR _____
Gas: 4817 MCFPD; Tested thru (Orifice or Meter): 3/4" Choke - T.C.
5279 CAOF

MID-TEST SHUT-IN PRESSURE DATA

Upper Compl	Hour, date <u>11:30 P.M.</u> Shut-in <u>7-27-59</u>	Length of time shut-in <u>16 Days</u>	SI press. psig <u>1094</u>	Stabilized? (Yes or No) <u>Yes</u>
Lower Compl	Hour, date <u>1:00 P.M.</u> Shut-in <u>8-5-59</u>	Length of time shut-in <u>7 Days</u>	SI press. psig <u>2649</u>	Stabilized? (Yes or No) <u>Yes</u>

FLOW TEST NO. 2

Commenced at (hour, date)** <u>9:00 A.M. 8-12-59</u>				Zone producing (<u>Upper</u> or Lower):	
Time (hour, date)	Lapsed time since **	Pressure		Prod. Zone Temp.	Remarks
<u>8-12-59</u> <u>9:15 A.M.</u>	<u>15 Mins.</u>	<u>587</u>	<u>2646</u>	<u>57°</u>	<u>Dry</u>
<u>8-12-59</u> <u>9:30 A.M.</u>	<u>30 Mins.</u>	<u>443</u>	<u>2649</u>	<u>56.5°</u>	<u>Dry</u>
<u>8-12-59</u> <u>9:45 A.M.</u>	<u>45 Mins.</u>	<u>331</u>	<u>2650</u>	<u>58°</u>	<u>Dry</u>
<u>8-12-59</u> <u>10:00 A.M.</u>	<u>1 Hour</u>	<u>286</u>	<u>2652</u>	<u>59°</u>	<u>Dry</u>
<u>8-12-59</u> <u>11:00 A.M.</u>	<u>2 Hours</u>	<u>215</u>	<u>2655</u>	<u>62°</u>	<u>Dry</u>
<u>8-12-59</u> <u>12:00 A.M.</u>	<u>3 Hours</u>	<u>199</u>	<u>2657</u>	<u>63°</u>	<u>Dry</u>

Production rate during test
Oil: _____ BOPD based on _____ Bbls. in _____ Hrs. Grav. _____ GOR _____
Gas: 2749 MCFPD; Tested thru (Orifice or Meter): 3/4" Choke - T. & C.
2044 CAOF

REMARKS: _____

I hereby certify that the information herein contained is true and complete to the best of my knowledge.

Approved: _____ 19_____
New Mexico Oil Conservation Commission

By _____

Title _____

Operator Pacific Northwest Pipeline Corp.

By J. F. Stone

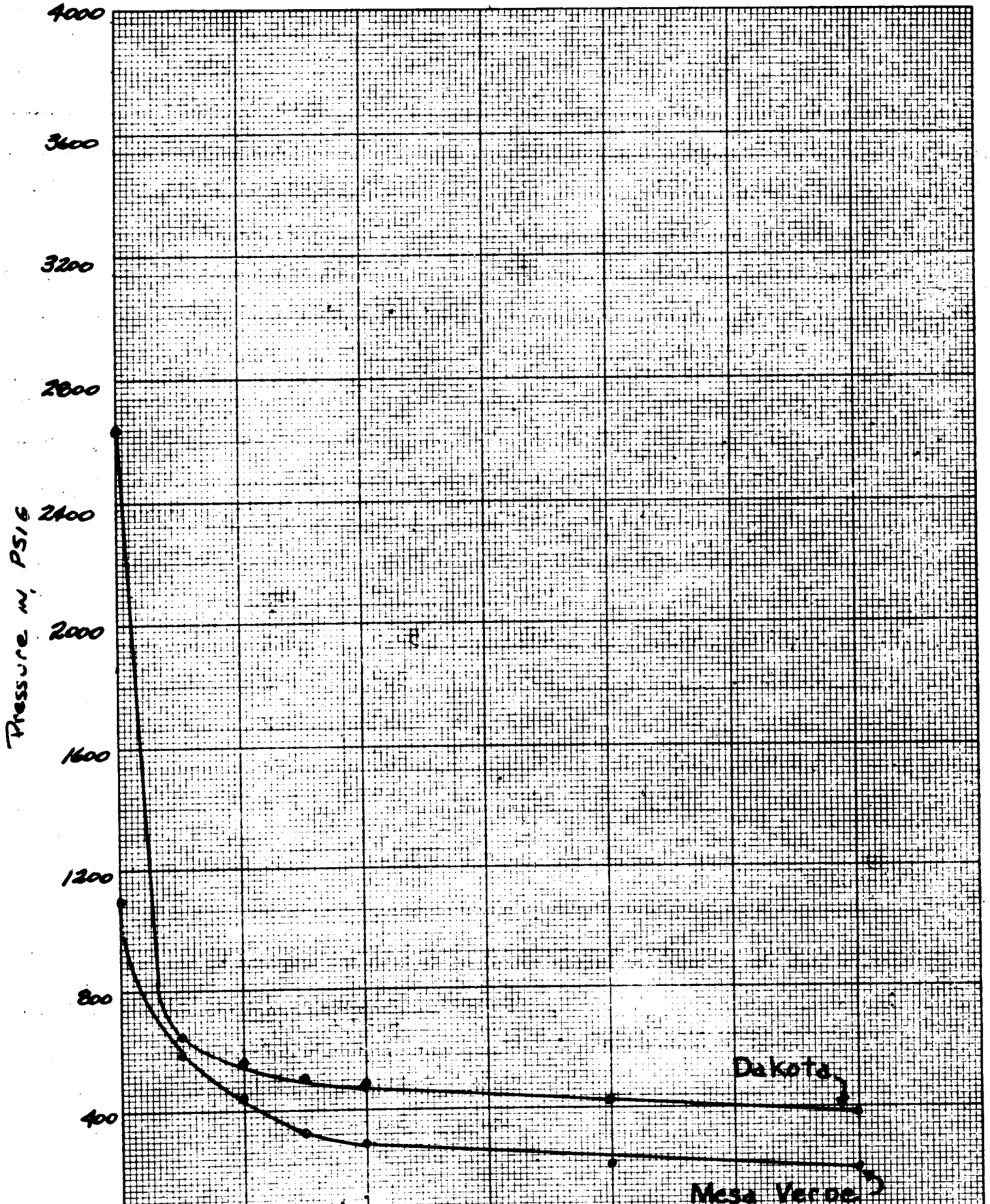
Title Drilling Superintendent

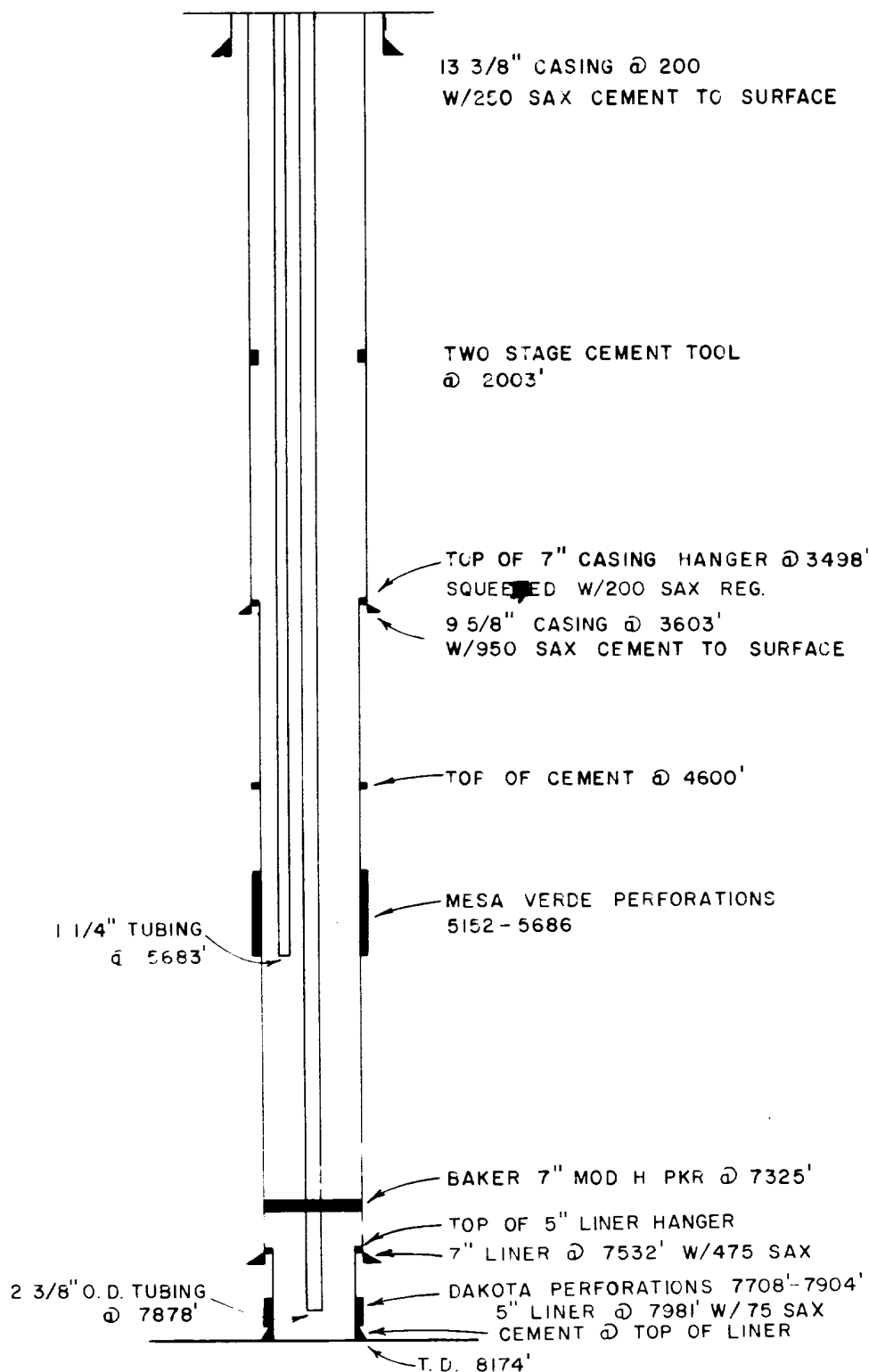
Date 8-13-59

NORTHWEST NEW MEXICO PACKER LEAKAGE TEST INSTRUCTIONS

1. A packer leakage test shall be commenced on each multiply completed well within seven days after actual completion of the well, and annually thereafter as prescribed by the order authorizing the multiple completion. Such tests shall also be commenced on all multiple completions within seven days following recompletion and/or chemical or fracture treatment, and whenever remedial work has been done on a well during which the packer or the tubing have been disturbed. Tests shall also be taken at any time that communication is suspected or when requested by the Commission.
2. At least 72 hours prior to the commencement of any packer leakage test, the operator shall notify the Commission in writing of the exact time the test is to be commenced. Offset operators shall also be so notified.
3. The packer leakage test shall commence when both zones of the dual completion are shut-in for pressure stabilization. Both zones shall remain shut-in until the well-head pressure in each has stabilized, provided however, that they need not remain shut-in more than seven days.
4. For Flow Test No. 1, one zone of the dual completion shall be produced at the normal rate of production while the other zone remains shut-in. Such test shall be continued for seven days in the case of a gas well and for 24 hours in the case of an oil well. Note: If, on an initial packer leakage test, a gas well is being flowed to the atmosphere due to the lack of a pipeline connection the flow period shall be three hours.
5. Following completion of Flow Test No. 1, the well shall again be shut-in, in accordance with Paragraph 3 above.
6. Flow Test No. 2 shall be conducted even though no leak was indicated during Flow Test No. 1. Procedure for Flow Test No. 2 is to be the same as for Flow Test No. 1 except that the previously produced zone shall remain shut-in while the zone which was previously shut-in is produced.

7. Pressures for gas-zone tests must be measured on each zone with a deadweight pressure gauge at time intervals as follows: 3-hour tests: immediately prior to the beginning of each flow period, at fifteen-minute intervals during the first hour thereof, and at hourly intervals thereafter, including one pressure measurement immediately prior to the conclusion of each flow period. 7-day tests: immediately prior to the beginning of each flow period, at least one time during each flow period (at approximately the midway point) and immediately prior to the conclusion of each flow period. Other pressures may be taken as desired, or may be requested on wells which have previously shown questionable test data.
- 24-hour oil zone tests: All pressures, throughout the entire test, shall be continuously measured and recorded with recording pressure gauges, the accuracy of which must be checked at least twice, once at the beginning and once at the end of each test, with a deadweight pressure gauge. If a well is a gas-oil or an oil-gas dual completion, the recording gauge shall be required on the oil zone only, with deadweight pressures as required above being taken on the gas zone.
8. The results of the above-described tests shall be filed in triplicate within 15 days after completion of the test. Tests shall be filed with the Astec District Office of the New Mexico Oil Conservation Commission on Northwest New Mexico Packer Leakage Test Form Revised 11-1-58, with all deadweight pressures indicated thereon as well as the flowing temperatures (gas zones only) and gravity and GOR (oil zones only). A pressure versus time curve for each zone of each test shall be constructed on the reverse side of the Packer Leakage Test Form with all deadweight pressure points taken indicated thereon. For oil zones, the pressure curve should also indicate all key pressure changes which may be reflected by the recording gauge charts. These key pressure changes should also be tabulated on the front of the Packer Leakage Test Form.





MESA VERDE DATA

PERFORATION INTERVALS:

(5152-56) (5158-61) (5164-68)
(5172-78) (5182-88) (5192-95)
(5218-32) (5480-86) (5490-98)
(5558-68) (5590-5606) (5632-38)
(5650-58) (5664-67) (5678-86)
ALL INTERVALS PERFORATED
2 SHOTS /ft.

DAKOTA DATA

PERFORATION INTERVALS:

(7708-26) (7754-70) (7788-94)
2 SPFT
(7802-08) (7814-22) (7894-7904)
4 SPFT

VERTICAL SCALE
1" = 1000'

PACIFIC NORTHWEST PIPELINE CORP FARMINGTON, NEW MEXICO

Diagrammatic Sketch Of Dual Gas Completion
For San Juan 28-5 Well No. 34-18 In Mesa
Verde And Dakota Formations 990 FSL And
990 FWL, Sec. 18, T 28 N, R 5 W, N.M. PM.
Rio Arriba County, New Mexico.



August 15, 1959

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas

Attention: Mr. Norman Woodruff

Gentlemen:

This is to notify you, as an offset operator, that Pacific Northwest Pipeline Corporation has dually completed the Unit 28-5 Well No. 34-18 in the Dakota and Mesa-Verde Formations.

This well is located 990' FSL and 990' FML Section 18, Township 28 North, Range 5 West, Rio Arriba County, New Mexico.

The Dakota Formation was tested on August 5, 1949, and had a calculated absolute open flow of 5,279 MCF/D after flowing 3 hours through a $3/4"$ choke.

The Mesa Verde Formation was tested August 12, 1959, and had a calculated absolute open flow of 2,644 MCF/D after flowing 3 hours through a $3/4"$ choke.

Enclosed is a copy of the application to the Commission of the proposed dual.

Very truly yours,

L. F. Stone
Drilling Superintendent

LFS:ps

cc - 4 - N.M.O.C.C.
1 - W. G. Cutler

August 15, 1929

El Paso Natural Gas Company
P. O. Box 1492
El Paso, Texas

Attention: Mr. Norman Woodruff

Gentlemen:

This is to notify you, as an offset operator,
that Pacific Northwest Pipeline Corporation has
dualy completed the Unit 28-5 Well No. 34-18 in
the Dakota and Mesa-Verde Formations.

This well is located 900' E21 and 900' E21
Section 18, Township 28 North, Range 2 West, Rio
Arriba County, New Mexico.

The Dakota Formation was tested on August 5,
1929, and had a calculated absolute open flow of
2,279 MCF/D after flowing 3 hours through a 3/4"
choke.

The Mesa Verde Formation was tested August 12,
1929, and had a calculated absolute open flow of
2,644 MCF/D after flowing 3 hours through a 3/4"
choke.

Enclosed is a copy of the application to the
Commission of the proposed dual.

Very truly yours,

L. F. Stone
Drilling Superintendent

LEB:ps

cc - A - N.M.O.C.C.
1 - W. G. Cutler