

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of
ANR EATON COMPANY and SEMCO GAS STORAGE
COMPANY for a certificate of public
convenience and necessity (Eaton Rapids
36 Storage Field).

Case No. U-9355

At a session of the Michigan Public Service Commission held at its offices
in the city of Lansing, Michigan, on the 9th day of November, 1989.

PRESENT: Hon. William E. Long, Chairperson
Hon. Steven M. Fetter, Commissioner
Hon. Ronald E. Russell, Commissioner

ORDER APPROVING SETTLEMENT AGREEMENT

On April 3, 1989, ANR Eaton Company (ANR Eaton) and SEMCO Gas Storage Company (SEMCO) filed an application, pursuant to Section 2, as amended, of 1923 PA 238, MCL 486.252, for a certificate of public convenience and necessity authorizing the acquisition of certain property or interests for use as an underground natural gas storage field to be known as the Eaton Rapids 36 Storage Field.

Pursuant to due notice, prehearing conferences were held May 24 and June 15, 1989 and hearings were held August 3 and September 25, 1989 before Administrative Law Judge James N. Rigas (ALJ). ANR, SEMCO, the Commission Staff (Staff), Neil R. and Ardeth M. Carpenter, Willis D. and Barbara J. Spalding, Mark J. and Pamela S. McQuay, Wayne and Holly Smith, Robert G. and Juanita Brenke, Kenneth and Linda Preston, Jonathan E. Brenke and Michigan GeoSearch, Inc. participated in the proceedings.

All of these intervenors, except Michigan GeoSearch withdrew as parties prior to the August 3, 1989 hearing. Michigan GeoSearch withdrew prior to the September 25, 1989 hearing. As a result, the only parties who participated throughout the hearings were the applicants and the Staff. At the August 3, 1989 hearing, the applicants presented the testimony of Michael J. Whims, Robert J. Cadorin, Derrick M. Jacewicz, G. Robert Lange, Edward R. Scarpace, and George C. Hass, and Exhibits A-1 through A-22. During cross-examination of the applicants' case, Exhibits AS-23 through AS-26 also were admitted. At the September 25, 1989 hearing, the Staff presented the testimony of Mark C. Nida and Patricia M. Poli, and the applicants and the Staff presented Exhibit AS-27, a settlement agreement (Exhibit A to this order). All remaining parties waived the provisions of Section 81 of the Administrative Procedures Act, 1969 PA 306, as amended, MCL 24.281.

Pursuant to MCL 486.252, this Commission must determine whether the proposed natural gas storage field will serve the present or future public convenience and necessity and whether the field is safe for development and operation as a gas storage facility.

Evidence presented by the applicants shows that the Eaton Rapids 36 gas reservoir is located southeast of the City of Eaton Rapids in parts of Sections 30 and 31, T2N, R2W, Aurelius Township, Ingham County; parts of Sections 6, 7 and 18, T1N, R2W, Onondaga Township, Ingham County; parts of Sections 25 and 36, T2N, R3W, Eaton Rapids Township, Eaton County; and parts of Sections 1 and 12, T1N, R3W, Hamlin Township, Eaton County. The Eaton Rapids 36 gas reservoir is a Salina-Niagaran dry-gas reef discovered in 1971. Six productive dry-gas wells were drilled, one of which (the Ledergerber #1) was plugged and abandoned in 1983. The field, with approximately 14.4 Bcf of original gas in place, is now

almost completely depleted, total production being more than 14.3 Bcf. The original reservoir pressure was 1,800 pounds per square inch absolute at an average depth of 2,747 feet below sea level, indicating a normal pressure versus depth gradient of 0.5 psi per foot of depth.

ANR Eaton and SEMCO propose to drill nine additional gas storage wells to convert the five remaining productive gas wells to storage, and to re-enter and replug the abandoned Ledergerber #1 well and three other plugged and abandoned wells within the reservoir's zero gas outline (the Wilcox #1-36, the W. Wilcox #1-36, and the VFW-Miller "A" #1 wells).

The resulting Eaton Rapids 36 Gas Storage Field will have a working storage capacity of 12.0 Bcf, with a maximum operating pressure at the cap rock of 1,938 psia (1,745 psig at the well head).

The surface facilities will consist of approximately 2.1 miles of 12" gathering header, approximately 0.7 miles of 4" well connection pipeline, two 2,650 horsepower compressors, 0.2 miles of 6" pipeline, and related facilities including a supervisory control system. All facilities will be constructed according with the Michigan Gas Safety Code.

The proposed gas storage boundary is shown on the map attached to the settlement agreement. Subject to certain minor exceptions, the boundary includes the 40 acre quarter-quarter sections intersected by a line drawn equidistant 1/4 mile outside the zero gas line of the reservoir. The applicants' evidence shows that the result is a storage boundary that is consistent with well spacing practices and includes only the lands that are necessary to protect the integrity of the storage operations.

ANR Eaton and SEMCO initially proposed to monitor the groundwater quality within the gas storage boundary by taking one water sample from wells of cooper-

ating landowners, analyzing the samples to establish the background groundwater quality base, and to sample annually for those characteristics that could conceivably be affected by gas storage operations (natural gas, chloride, and pH levels).

By use of the Eaton Rapids 36 Gas Storage Field, the applicants propose to provide storage service, commencing April 1, 1990, to Battle Creek Gas Company, Michigan Gas Company, Southeastern Michigan Gas Company, and others.

Mr. Hass referred to the fact that as a result of recent Federal Energy Regulatory Commission policies and orders and other factors, gas supply practices are rapidly and radically changing. Historically, the gas producers sold to the interstate pipelines who then transported the gas and resold it to the local distribution companies (LDCs) at the city gate. Today the interstate pipelines provide separate transportation and sales service permitting LDCs the option to purchase gas supplies directly from producers and arrange delivery through the transporting pipeline.

To take maximum advantage of these unbundled services and to achieve the lowest unit gas cost, the LDCs must position themselves to take gas at high load factors year-round. At the same time, in Michigan, the demands on the LDCs for sales service is seasonal, with approximately 70% of gas consumption occurring in November through March. Gas storage provides an economical means to accommodate daily and seasonal swings.

In addition, the availability of the Eaton Rapids 36 Gas Storage Reservoir will permit the LDCs to take advantage of lower summer producer prices and lower summer transportation charges, allow a greater diversity of transportation and supply options (the storage facility will be interconnected with Panhandle Eastern Pipe Line Company and Consumers Power Company), and will provide

increased security of gas supply on peak days or in force majeure situations on interstate pipelines.

The applicants presented an Environmental Impact Assessment showing that the facilities will be sited and designed in an environmentally sensitive manner, and have demonstrated that Commission approval of the proposed storage field would not constitute a major state activity. Therefore, a formal environmental impact statement has not been prepared for the project.

Mr. Nida, on behalf of Staff, supports the applicants' positions as to safety, necessity, and environmental impact; subject, however, to the applicants undertaking to abide by the gas inventory monitoring and oversight program set forth in Paragraph I of the settlement agreement.

Ms. Poli recommended that the applicants' proposed groundwater monitoring program be improved by first developing a background groundwater quality base with more than one sampling event; second, by installation of a groundwater monitoring system; and third, by sampling in the follow-up program more frequently than annually. The applicants and the Staff agree to a groundwater monitoring program consistent with Ms. Poli's recommendations, as set forth in Paragraph J of the settlement agreement.

Both Rule 33 of the Commission's Rules of Practice and Procedure, R 460.43, and Section 78 of the APA of 1969, MCL 24.278, provide for the disposition of matters by stipulation and agreement. Those provisions do not relieve the Commission of its responsibility to determine whether the stipulation of the parties is in the public interest.

After a review of the settlement agreement in this case, we find it is reasonable and in the public interest and should be approved.

Although the process of settlement involves compromise, the Commission

views it as an opportunity for parties to resolve their disputes fairly and expeditiously. A solution devised by the parties themselves is more likely to fit their needs and circumstances. A settlement also conserves the scarce resources of the parties and the Commission. For these reasons, and as long as it can be demonstrated that the public interest is served by a particular settlement, the Commission encourages parties to settle their disputes.

The Commission FINDS:

a. Jurisdiction is pursuant to Section 2, as amended, 1923 PA 238, MCLA 486.252; 1919 PA 419, as amended, MCLA 460.51 et seq; 1939 PA 3, as amended, MCLA 460.1 et seq; 1969 PA 306, as amended, MCLA 24.201 et seq; and the Commission's Rules of Practice and Procedure, 1979 Administrative Code, R 460.11 et seq.

b. The settlement agreement is reasonable and in the public interest.

c. The proposed Eaton Rapids 36 Gas Storage Field will serve the present or future public convenience and necessity.

d. The acquisition of any property or interest within the gas storage boundary as outlined in Figure 3 of Exhibit A-4 for use as a natural gas storage field is required for the present or future public convenience and necessity.

e. The Eaton Rapids 36 Gas Storage Field will be safe for development and operation as a gas storage facility.

THEREFORE, IT IS ORDERED that:

A. The settlement agreement, attached as Exhibit A, is approved.

B. A certificate of public convenience and necessity is granted to ANR Eaton Company and to SEMCO Gas Storage Company pursuant to Section 2, as amended, of 1923 PA 238, to develop and operate the proposed Eaton Rapids 36 Gas

Storage Field and to acquire any property or interest within the proposed gas storage boundary for use as a natural gas storage field.

C. The Eaton Rapids 36 gas reservoir may be developed and operated as a gas storage field with a maximum allowable reservoir pressure of 1,938 psia.

D. ANR Eaton Company and SEMCO Gas Storage Company shall abide by the gas inventory monitoring and oversight program and groundwater monitoring program, as agreed.

E. The development and operation of the Eaton Rapids 36 Gas Storage Field by ANR Eaton Company and SEMCO Gas Storage Company shall remain subject to orders and continuing supervision, including filing of reports, as from time to time are required by this Commission.

The Commission specifically reserves jurisdiction of the matters herein contained and the authority to issue such further order or orders as the facts and circumstances may require.

MICHIGAN PUBLIC SERVICE COMMISSION

(S E A L)

/s/ William E. Long
Chairperson

By the Commission and pursuant to
its action of November 9, 1989.

/s/ Steven M. Fetter
Commissioner

/s/ Dorothy Wideman
Its Executive Secretary

/s/ Ronald E. Russell
Commissioner

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the Application
of ANR Eaton Company and SEMCO Gas
Storage Company for a Certificate
of Public Convenience and Necessity
(Eaton Rapids 36 Storage Field)

Case No. U-9355

SETTLEMENT AGREEMENT

Encouraged by Rule 33 of the Michigan Public Service Commission's ("Commission") Rules of Practice and Procedure, R 460.43, a favorable Commission policy toward settlement of contested cases, and Commission precedent, the remaining parties have resolved all issues in this case.

The terms of the settlement are embodied in this Settlement Agreement and are subject to the approval of the Commission, without modification, and without prejudice to the pre-negotiation positions of the parties.

On April 3, 1989, ANR Eaton Company (ANR Eaton) and SEMCO Gas Storage Company (SEMCO) (herein collectively referred to as Applicants) filed an application with the Michigan Public Service Commission (Commission) pursuant to Section 2, as amended, of 1923 PA 238, MCLA 486.252, for a certificate of public convenience and necessity authorizing the acquisition of certain property or interests therein for use as an underground natural gas storage field to be known as the Eaton Rapids 36 Storage Field.

Pursuant to due notice, pretrial hearings were held May 24 and June 15, 1989. Hearings were held August 3, 1989 (at

which time Applicants' case was presented and cross examined) and September 25, 1989 (at which time the Staff's prefiled case was presented and this Settlement Agreement was entered into the record), all before Administrative Law Judge James M. Rigas (ALJ).

At the June 15, 1989 second pretrial hearing, the ALJ granted the Amended Petitions for Leave to Intervene of Neil R. and Ardeth M. Carpenter, Willis D. and Barbara J. Spalding, Mark J. and Pamela S. McQuay, Wayne and Holly Smith, Robert G. and Juanita Brenke, Kenneth and Linda Preston, Jonathan E. Brenke and Michigan GeoSearch, Inc.; and ruled on certain issues raised by such Amended Petitions for Leave to Intervene. [On August 29, 1989 this Commission granted Intervenors' Application for Leave to Appeal the ALJ's June 15, 1989 rulings, but denied relief.]

All of these Intervenors, except Michigan GeoSearch, Inc. withdrew as parties prior to the August 3, 1989 hearing. Michigan GeoSearch, Inc. withdrew prior to the September 25, 1989 hearing. As a result, the only parties who participated throughout the hearings were Applicants and Staff. On various dates, the Staff and Applicants engaged in settlement discussions as to the issues raised by Staff's prefiled testimony. As a result of such settlement discussions, agreement was reached as stated above and as follows:

A. The proposed Eaton Rapids 36 Gas Storage Field will serve the present or future public convenience and necessity.

B. The acquisition of any property or interest within the gas storage boundary as outlined in Figure 3 of Exhibit A-4

(copy attached) for use as said natural gas storage field is required for the present or future public convenience and necessity.

C. The Eaton Rapids 36 gas field will be safe for development and operation of gas storage.

D. The requirements of Executive Order 1974-4 have been met.

E. More than 75% of the original recoverable reserves have been produced.

F. A Certificate of Public Convenience and Necessity should be granted to ANR Eaton Company and to SEMCO Gas Storage Company pursuant to Section 2, as amended, of 1923 PA 238, for their proposed Eaton Rapids 36 Gas Storage Field to acquire any property or interest within the proposed gas storage boundary for use in said natural gas storage field.

G. The Eaton Rapids 36 gas reservoir may be developed and operated as a gas storage field with a maximum allowable reservoir pressure of 1,938 psia.

I. Applicants will abide by the following gas inventory monitoring and oversight program: Applicants will provide to Staff, as soon as possible after completion of the initial injection cycle and again after completion of the initial withdrawal cycle, and then annually thereafter for the next five (5) years, a copy of Applicants' reservoir pressure-gas inventory data. A meeting between Applicants and Staff will be held after the first full year of cycling to review data and to reach a determination whether gas migration is occurring which would

require the installation of an observation well(s). If gas migration occurs, the Staff will be notified immediately of any known gas loss due to migration and the Applicants shall submit to the Staff within thirty (30) days its proposed plan to rectify the migration. In addition, if at any time the storage field incurs problems that are or could be potentially damaging to the general public, the Michigan Public Service Commission Staff will be immediately notified.

J. Applicants shall abide by the following ground water monitoring program: Prior to commencement of gas storage injection operations, Applicants will conduct two initialization sampling events from all domestic water wells of cooperating landowners within the storage boundary and determine the on-site regional groundwater flow direction in order to propose and install a monitoring program consented to by Staff. Prior to the regional flow studies being completed, the parties currently estimate that approximately eight (8) monitoring wells will be required for this program. Semi-annual sampling for pH, natural gas and chlorides will be conducted by Applicants from their (approximately) eight (8) water monitoring wells. Each domestic water well of cooperating landowners within the proposed storage boundary will be sampled by Applicants for pH, natural gas and chlorides, once each five (5) years.

K. All storage facilities will be constructed according with the Michigan Gas Safety Code.

This Settlement Agreement is intended to finally dispose of this proceeding, and the parties respectfully request its

prompt approval by the Commission. The Staff certifies that this Settlement Agreement is reasonable and in the public interest. Each party agrees not to appeal the certificate of public convenience and necessity issued by the Commission if the same is the result of a Commission order approving this Settlement Agreement without modification. If the Commission does not accept this Settlement Agreement without modification, the Agreement shall be withdrawn and shall not constitute any part of the record in this proceeding or be used for any other purposes whatsoever.

This Settlement Agreement has been made for the sole and express purpose of reaching a settlement of these proceedings and this Agreement, and the Commission order adopting it, and all offers of settlements and discussions are privileged and shall not be used as precedent or in any other manner, nor be admissible, for any other purpose in connection with this or any other proceeding, except to enforce the Settlement Agreement or prove its form and content.

All remaining parties waive Section 81 of the Administrative Procedures Act, MCL 24.281.

It is the opinion of the parties that this Settlement Agreement will promote the public interest, will aid the expeditious conclusion of this case, and will minimize the time and expense which would otherwise have to be devoted to this matter by the Commission and Applicants.

ANR EATON COMPANY
SEMCO GAS STORAGE COMPANY

Dated: September 25, 1989

By: Rodger T. Ederer
Rodger T. Ederer (P13100)
Their Attorney

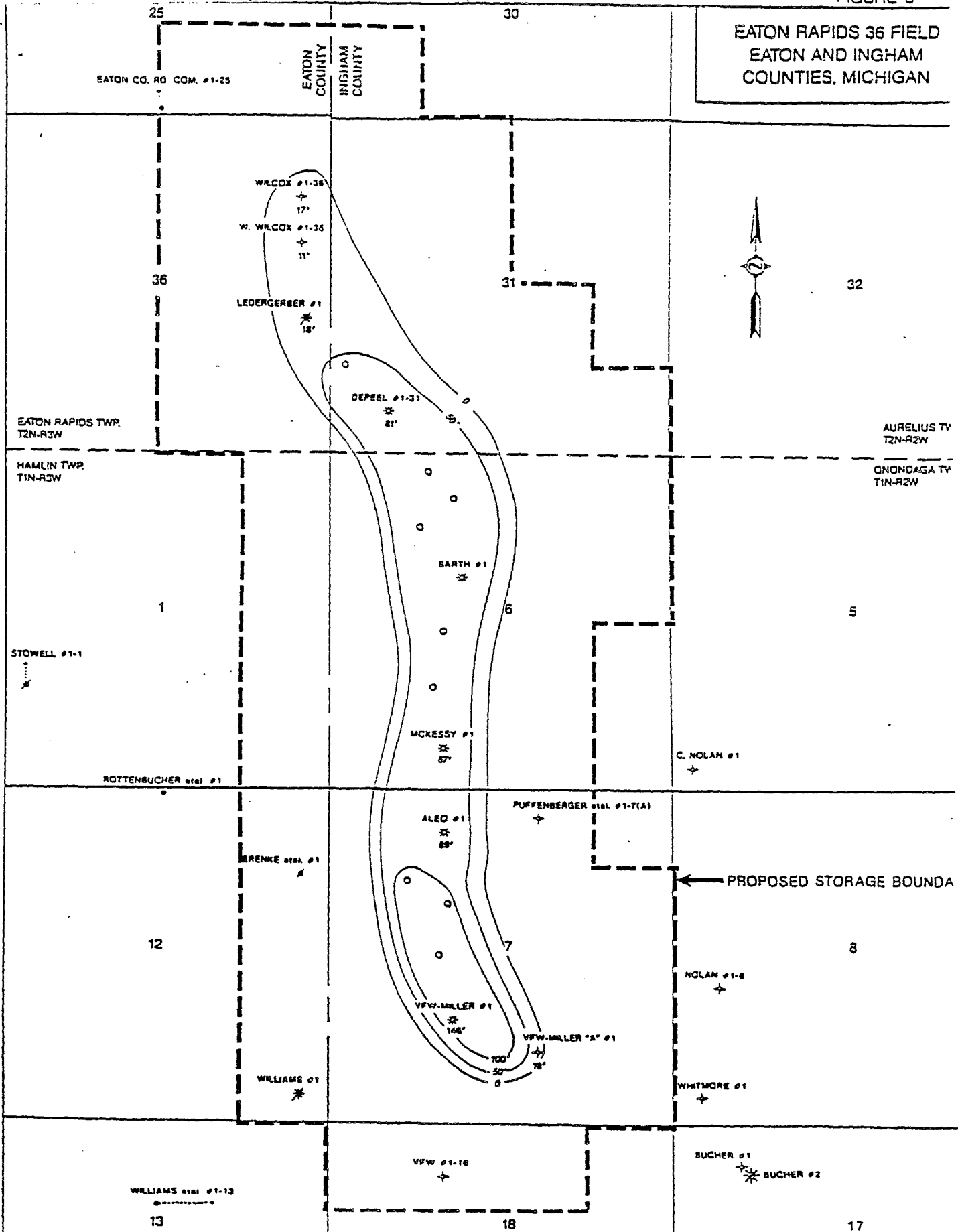
MICHIGAN PUBLIC SERVICE
COMMISSION STAFF

Dated: September 25, 1989

By: Phillip J. Smith
Phillip J. Smith (P20699)

RTE: 427.7

EATON RAPIDS 36 FIELD EATON AND INGHAM COUNTIES, MICHIGAN



SYMBOLS

○	WATER-BEARING WELLS	✱	PROPOSED BOTTOM HOLE LOCATIONS
●	WELLS	+	WELLS
✱	WELLS	○	WELLS
✱	WELLS		

**NET PAY ISOPACH
SHOWING PROPOSED BOTTOM HOLE LOCATIONS**

CI=50'

FWI THICKNESSES FROM WELL LOGS WHERE AVAILABLE

