

SWD-81

Nov 6 + 26

RICE Engineering & Operating, Inc.

Post Office Box 1142

Telephone (505) 393-9174

HOBBS, NEW MEXICO 88240

October 9, 1968

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico 87501

Re: Rule 701, Injection of
Fluids into Reservoirs
(Salt Water Disposal)

Gentlemen:

Rice Engineering & Operating, Inc., of Hobbs, New Mexico, hereby makes application for approval of the New Mexico Oil Conservation Commission for a permit under Rule 701 to re-complete the plugged and abandoned Ohio Oil Company State NLA #1 well, located in the NW/4 SW/4 of Section 3, Township 10 South, Range 34 East, NMPM, Lea County, New Mexico, as a salt water disposal well. The proposed salt water disposal well will be known as the Rice Engineering & Operating, Inc. Vada SWD Well L-3.

Rice Engineering & Operating, Inc. respectfully requests the Secretary-Director of the Oil Conservation Commission to grant an exception to the requirements of Rule 701-A for water disposal wells only, without notice and hearing, in that the waters to be disposed of are mineralized to such a degree as to be unfit for domestic, stock, irrigation, or other general use, and the said waters are to be disposed of into a formation older than Triassic which is non-productive of oil or gas within a radius of two miles from the proposed injection well, and that the water occurring naturally within said disposal formation (Devonian) is mineralized to such a degree as to be unfit for domestic, stock, irrigation, and/or other general uses.

Rice Engineering & Operating, Inc. further deposes and states the following:

- A. That said well is located 1980 feet from the south line and 660 feet from the west line of Section 3, Township 10 South, Range 34 East, NMPM, Lea County, New Mexico. (See Exhibit "A")
- B. That said well was drilled, plugged and abandoned as a dry hole on August 26, 1961, by the Ohio Oil Company, being non-productive in any zone.

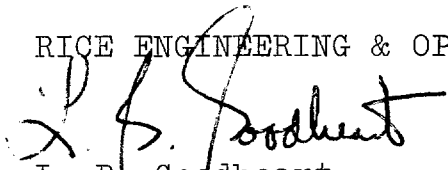
- C. That said well has 9-5/8" O.D. casing set at 4,355 feet and 8-3/4" open hole to the present total depth of 12,385 feet.
- D. That said well will be completed as a disposal well in the Devonian formation by (1) cleaning out to the present total depth of 12,385 feet, (2) drilling new hole to 13,280 feet, (3) setting a 7" O.D. casing liner, bottom at 13,080 feet, top at 4,255 feet, (4) disposing of produced brine in the open hole interval from 13,080 feet to 13,280 feet.
- E. That the salt water to be injected is produced in the Vada Pennsylvanian area from the Bough "C" Vada Penn Pool.
- F. That the volume of salt water to be disposed shall be approximately 3,700 barrels per day.

Rice Engineering & Operating, Inc. does hereby submit, in triplicate, Commission Form C-108, Application to Dispose of Salt Water by Injection Into a Porous Formation, together with the following:

- (1) Exhibit "A" - Location Plat Vada SWD Well L-3
- (2) Exhibit "B" - A diagrammatic sketch of the proposed completion of Vada SWD Well L-3
- (3) Exhibit "C" - Productive formation of wells within a two-mile radius of proposed Vada SWD Well L-3
- (4) Copies of receipts for Certified Mail dispatch of: Copies of the Application sent to all offset operators and to the surface lessee of the land upon which the well is located.
- (5) Commission Forms C-101 and C-102

Respectfully submitted,

RICE ENGINEERING & OPERATING, INC.


L. B. Goodheart
Division Manager

VR/jp

Enclosures

NEW MEXICO OIL CONSERVATION COMMISSION
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR Rice Engineering & Operating, Inc.		ADDRESS Box 1142, Hobbs, New Mexico 88240	
LEASE NAME Vada SWD	WELL NO. L-3	FIELD Vada Penn	COUNTY Lea
LOCATION UNIT LETTER L ; WELL IS LOCATED 1980 FEET FROM THE south LINE AND 660 FEET FROM THE west LINE, SECTION 3 TOWNSHIP 10 South RANGE 34 East NMPM.			

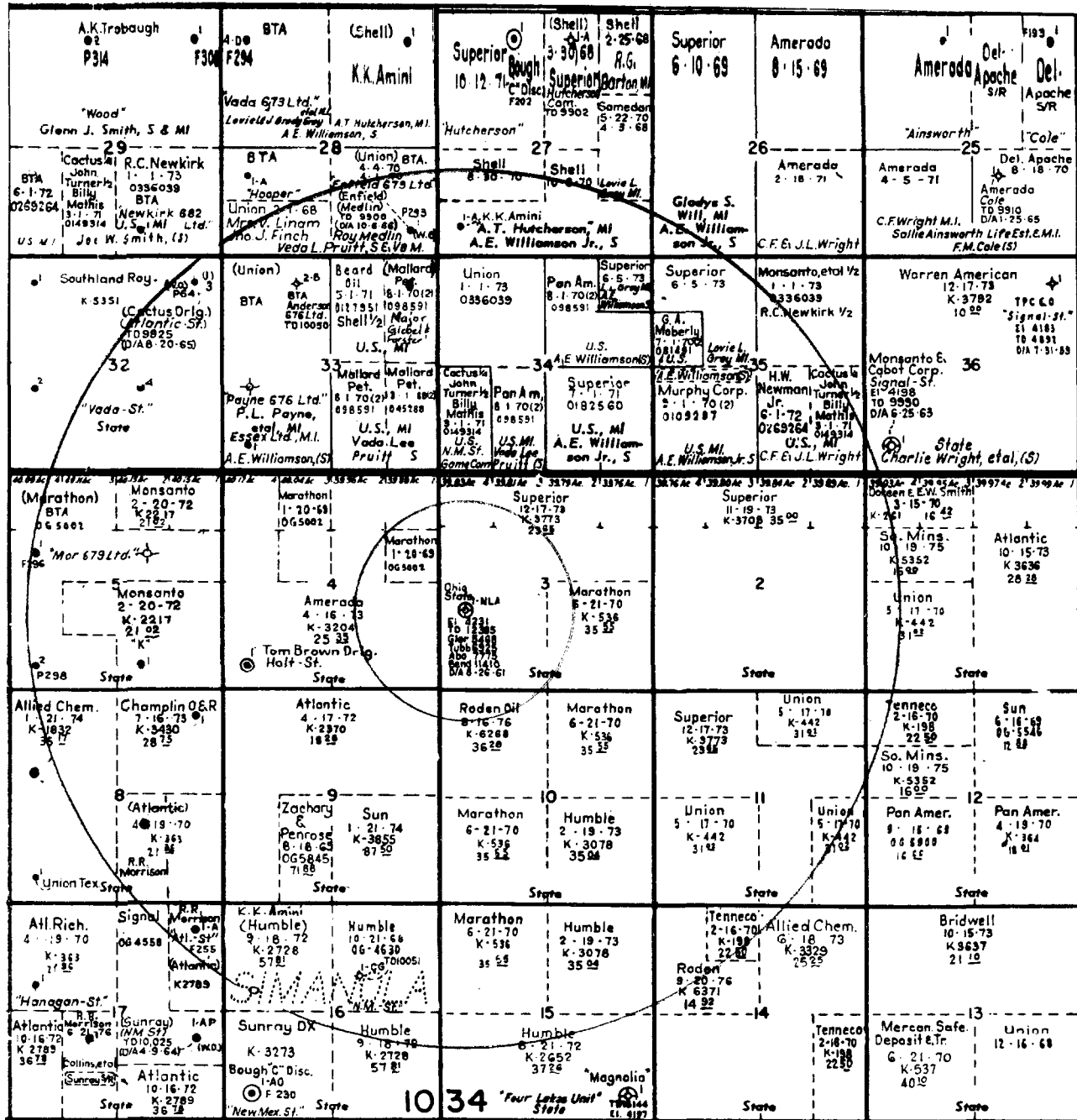
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	13-3/8"	362'	350	circ.	
INTERMEDIATE	9-5/8"	4355'	2000	circ.	
LONG STRING Liner	7"	4255' - 13,080'	880	tie back into base Abo	
TUBING	3 1/2"	13,080'	NAME, MODEL AND DEPTH OF TUBING PACKER None		
NAME OF PROPOSED INJECTION FORMATION Devonian			TOP OF FORMATION 13,080' est.		BOTTOM OF FORMATION 13,280'
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLES Open hole	PROPOSED INTERVAL(S) OF INJECTION 13,080' - 13,280'		
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Oil			HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? No	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH None					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 150'		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 9,800'		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA -	
ANTICIPATED DAILY INJECTION VOLUME (BBLS.) 3,700	MINIMUM 3,700	MAXIMUM 3,700	OPEN OR CLOSED TYPE SYSTEM Closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Gravity	APPROX. PRESSURE (PSI) -
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - Salt			WATER TO BE DISPOSED OF Salt	NATURAL WATER IN DISPOSAL ZONE Saline	ARE WATER ANALYSES ATTACHED? No
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Carl Johnson, Jr., P. O. Box 787, Lovington, New Mexico 88260					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL Amerada Petroleum Corporation, P. O. Box 668, Hobbs, New Mexico 88240 Marathon Oil Company, P. O. Box 220, Hobbs, New Mexico 88240 Roden Oil Company, 1st Savings & Loan Bldg., Midland, Texas 79701 The Superior Oil Company, P. O. Box 1900, Midland, Texas 79701					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL	
		Yes		Yes	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		PLAT OF AREA		ELECTRICAL LOG	
		Yes		No	
				THE NEW MEXICO STATE ENGINEER	
				No	
				DIAGRAMMATIC SKETCH OF WELL	
				Yes	

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

(Signature) **L. B. Goodheart**Division Manager
(Title)October 8, 1968
(Date)

NOTE: Should waivers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.

R34

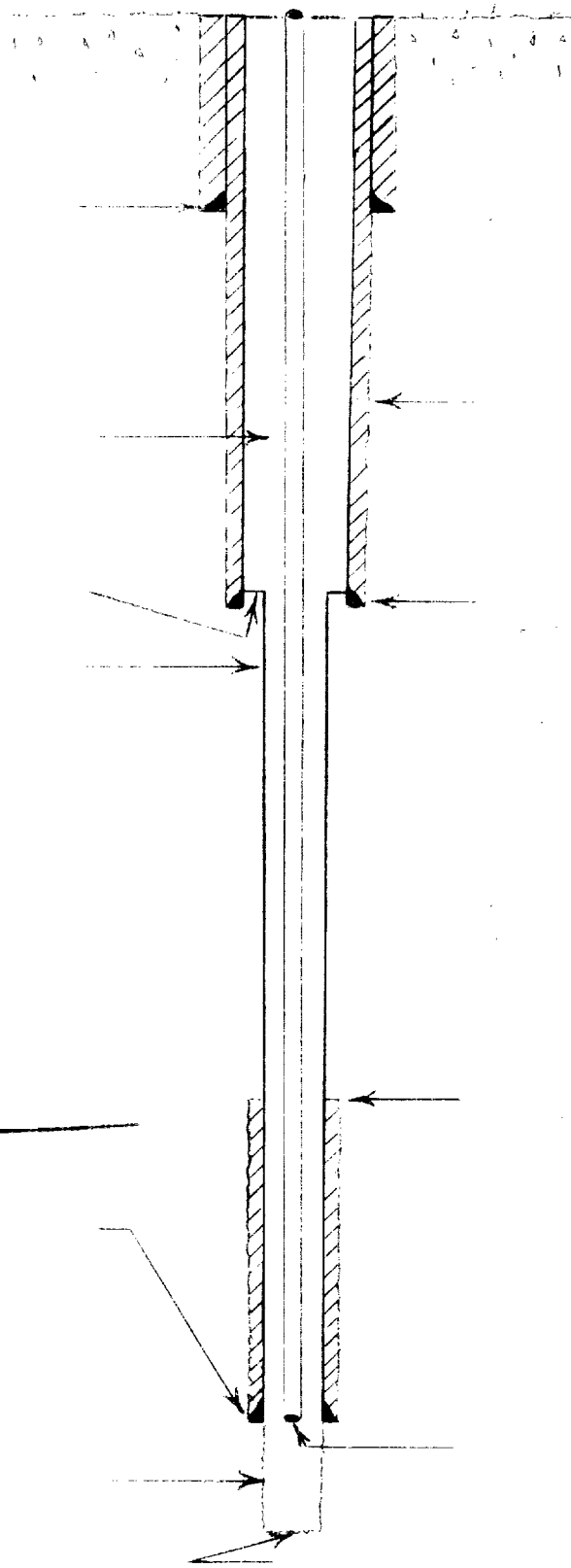


Lea, County New Mexico

Exhibit "A"

DWN.	PMT	10-68	Location Plat Vada SWD Well L-3	SCALE 1" - 4000'
				DWG. NO. A-427
RICE ENGINEERING & OPERATING, INC.			HOBBS, NEW MEXICO	

ILLEGIBLE



DWN			SCALE
		Rice Engineering & Operating, Inc. Hobbs, New Mexico	DWG NO.

EXHIBIT "C"

PRODUCTIVE FORMATIONS OF WELLS WITHIN A
TWO-MILE RADIUS OF PROPOSED VADA SWD WELL L-3

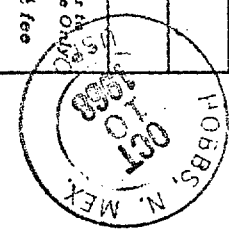
<u>COMPANY</u>	<u>LEASE</u>	<u>WELL NO.</u>	<u>FORMATION</u>
Amini	Hutcherson "A"	1-M	Bough "C" -5612' to -5622'
"	Humble State	1-E	Bough "C" not available
Tom Brown Drilling	Holt State	1-M	Bough "C" -5680' to -5691'
BTA	Enfield 679 Ltd.	1-P	Bough "C" -5578' to -5588'
"	Payne 676 Ltd.	1-M	Bough "C" -5608' to -5622'
"	Mor 679 Ltd.	1-E	Bough "C" -5633' to -5641'
"	Mor 679 Ltd.	2-M	Bough "C" -5644' to -5651'
Champlin	State "8"	1-A	Bough "C" -5665' to -5673'
Major, Giebel & Forster	Mallard Fed.	1-A	Bough "C" -5543' to -5549'
Morrison	Atlantic "A"		
	State	1-A	Bough "C" -5707' to -5716'
"	State "B"	1-J	Bough "C" -5657' to -5661'
Monsanto	State "K"	1-O	Bough "C" -5608' to -5618'
Southland	Vada State	3-A	Bough "C" -5586' to -5596'
"	Vada State	4-J	Bough "C" -5695' to -5605'

No. 324869

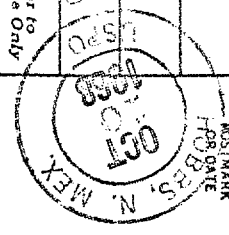
No. 324847

No. 324846

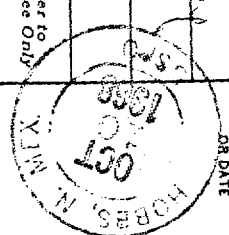
RECEIPT FOR CERTIFIED MAIL—30¢

SENT TO <i>Arnold Rott, Corp.</i>		POSTMARK OR DATE 
STREET AND NO. <i>1668</i>		
P. O., STATE, AND ZIP CODE <i>Hobbs, N.M.</i>		
EXTRA SERVICES FOR ADDITIONAL FEES		
Shows to whom and date delivered <input type="checkbox"/> 10¢ fee	Return Receipt Shows to whom, date, and where delivered <input type="checkbox"/> 35¢ fee	Deliver to Addressee Only <input type="checkbox"/> 50¢ fee
POD Form 3800 NO INSURANCE COVERAGE PROVIDED— (See other side) Mar. 1966 NOT FOR INTERNATIONAL MAIL		

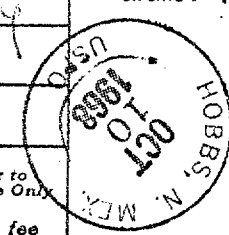
RECEIPT FOR CERTIFIED MAIL—30¢

SENT TO <i>Mr. Carl Johnson Jr.</i>		POSTMARK OR DATE 
STREET AND NO. <i>P.O. Box 787</i>		
P. O., STATE, AND ZIP CODE <i>Hobbs, N.M. 88260</i>		
EXTRA SERVICES FOR ADDITIONAL FEES		
Shows to whom and date delivered <input type="checkbox"/> 10¢ fee	Return Receipt Shows to whom, date, and where delivered <input type="checkbox"/> 35¢ fee	Deliver to Addressee Only <input type="checkbox"/> 50¢ fee
POD Form 3800 NO INSURANCE COVERAGE PROVIDED— (See other side) Mar. 1966 NOT FOR INTERNATIONAL MAIL		

RECEIPT FOR CERTIFIED MAIL—30¢

SENT TO <i>The Superior Oil Company</i>		POSTMARK OR DATE 
STREET AND NO. <i>Box 1900</i>		
P. O., STATE, AND ZIP CODE <i>Midland, Texas 79701</i>		
EXTRA SERVICES FOR ADDITIONAL FEES		
Shows to whom and date delivered <input type="checkbox"/> 10¢ fee	Return Receipt Shows to whom, date, and where delivered <input type="checkbox"/> 35¢ fee	Deliver to Addressee Only <input type="checkbox"/> 50¢ fee
POD Form 3800 NO INSURANCE COVERAGE PROVIDED— (See other side) Mar. 1966 NOT FOR INTERNATIONAL MAIL		

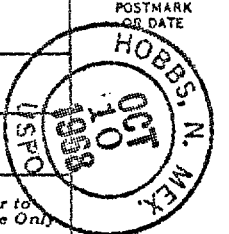
RECEIPT FOR CERTIFIED MAIL—30¢

SENT TO <i>RODEN OIL COMPANY</i>		POSTMARK OR DATE 
STREET AND NO. <i>1st Savings & Loan Bldg.</i>		
P. O., STATE, AND ZIP CODE <i>MIDLAND TEXAS 79701</i>		
EXTRA SERVICES FOR ADDITIONAL FEES		
Shows to whom and date delivered <input type="checkbox"/> 10¢ fee	Return Receipt Shows to whom, date, and where delivered <input type="checkbox"/> 35¢ fee	Deliver to Addressee Only <input type="checkbox"/> 50¢ fee

POD Form 3800 NO INSURANCE COVERAGE PROVIDED— (See other side)
Mar. 1966 NOT FOR INTERNATIONAL MAIL

No. 324848

RECEIPT FOR CERTIFIED MAIL—30¢

SENT TO <i>Marathon Oil Co.</i>		POSTMARK OR DATE 
STREET AND NO. <i>Box 220</i>		
P. O., STATE, AND ZIP CODE <i>Box 665 NM</i>		
EXTRA SERVICES FOR ADDITIONAL FEES		
Shows to whom and date delivered <input type="checkbox"/> 10¢ fee	Return Receipt Shows to whom, date, and where delivered <input type="checkbox"/> 35¢ fee	Deliver to Addressee Only <input type="checkbox"/> 50¢ fee

POD Form 3800 NO INSURANCE COVERAGE PROVIDED— (See other side)
Mar. 1966 NOT FOR INTERNATIONAL MAIL

No. 324845

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator Rice Engineering & Operating, Inc.			Lease Vada SWD		Well No. L-3
Unit Letter L	Section 3	Township 10 South	Range 34 East	County Lea	
Actual Footage Location of Well: 1980 feet from the South line and 660 feet from the West line					
Ground Level Elev. 4,221' GL	XXXXXX Formation Devonian		Pool Vada Penn		Dedicated Acreage: - Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.

CERTIFICATION

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

L. B. Goodheart
Name
L. B. Goodheart
Position
Division Manager
Company
Rice Eng. & Oper., Inc.
Date
October 8, 1968

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
John W. West
Registered Professional Engineer
and/or Land Surveyor

Certificate No.

