GW - 12

GENERAL CORRESPONDENCE

YEAR(S): 1989-1982

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

February 21, 1989

CERTIFIED MAIL
RETURN RECEIPT NO. P-106 675 547

Mr. R. J. Cinq-Mars
OXY-NGL INCORPORATED
Box 300
Tulsa, Oklahoma 74102

RE: Discharge Plan GW-12
Abo Gas Processing Plant
Eddy County, New Mexico

Dear Mr. Cinq-Mars:

The Oil Conservation Division (OCD) has received your letter dated February 10, 1989, stating OXY-NGL Incorporated does not wish to renew the previously approved discharge plan for the above referenced facility. The facility is currently shut down and is not expected to be placed in operation in the near future.

Based on your request provided in your letter, discharge plan GW-12 for the Abo Gas Processing Plant located in the SE/4, SW/4, Section 35, Township 17 South, Range 27 East, NMPM, Eddy County, New Mexico will not be renewed. The discharge plan and all correspondence pertaining to the plan will be retained by the OCD in an inactive file. Failure to renew this discharge plan mandates that all discharges at the facility have ceased and there will be no future activity that can cause discharges, spills or leaks at the facility.

Please be aware if OXY NGL Incorporated decides to reactivate the plant or transfer the facility to another company to operate, a discharge plan must be approved by the Director of the OCD prior to start up.

Be advised that failure to renew this discharge plan does not relieve you of liability if any past practices have resulted in actual pollution of surface or ground waters that may be actionable under other laws and/or regulations.

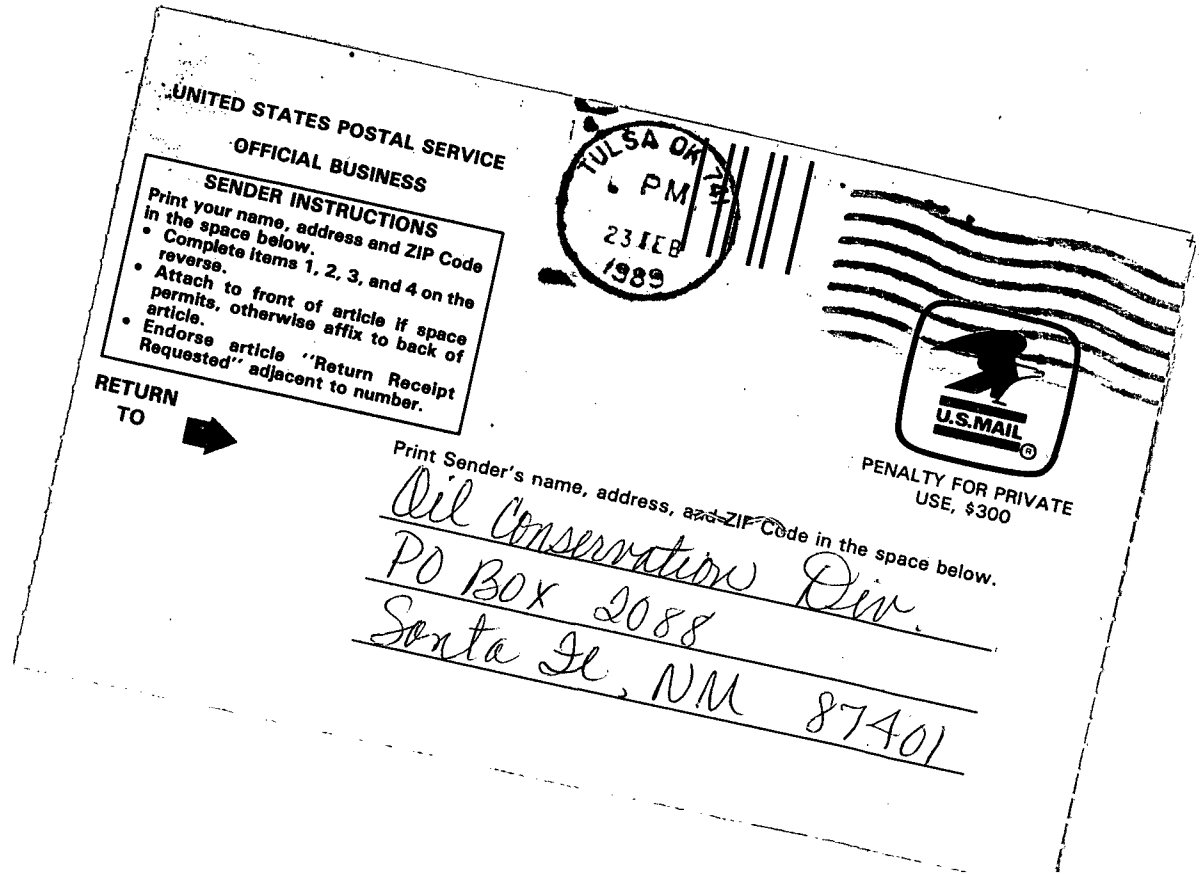
If you have any questions, please contact me at (505) 827-5884.

Sincerely,

Roger C. Anderson
Environmental Engineer

RCA/sl

cc: OCD Artesia Office



UNITED STATES POSTAL SERVICE

OFFICIAL BUSINESS

SENDER INSTRUCTIONS

Print your name, address and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.

RETURN TO

TULSA OK
PM
23 FEB
1989

U.S.MAIL

PENALTY FOR PRIVATE USE, $300

Print Sender's name, address, and ZIP Code in the space below.

Oil Conservation Div.
PO Box 2088
Santa Fe, NM 87401

OXY NGL INC.
Box 300, Tulsa, OK 74102

February 10, 1989

Mr. David Boyer
State of New Mexico
Oil Conservation Division
P.O. Box 2088
State Land Office Building
Santa Fe, NM 87504

Dear Mr. Boyer:

Subject: Discharge Plan GW-12
Abo Gas Processing Plant
Eddy County, New Mexico

Per our discussion of February 7, 1989, the Abo Gas Processing Plant of OXY NGL Inc., successor to Cities Service Company, is currently temporarily shut down. The plant will probably not be started up in the near future. Prior to such a start-up, it will be necessary to reinstall two recently removed engine-driven compressors. At the present, there is no continuing source of effluent or leachate discharge at this site. Accordingly, OXY does not wish to renew this plan at this time.

At such time as OXY reapplies for the discharge plan, the following items discussed in your December 1 visit will be addressed in the plan:

- Repair of an apparent blow case piping leak.
- Installation of dikes or curbs in the compressor area to prevent runoff of oil onto the ground.
- Installation of a drip pan at the amine skid and pump to contain spills.
- Construction of a dike or some other containment for the amine storage tank.
- Installation of an impervious pad for drum storage.
- Inspection and probably replacement of the liner in the existing pit prior to bringing the plant on-line since there is a very obvious hole in the side of the current pit liner.
- Installation of drip pans on the process skid and in the air compressor area to prevent soil contamination.

G3/375

Please be aware that your requested cleanup of an area inside the slop oil tank and removal of the drums immediately adjacent to the plant site will be completed no later than July 1, 1989. Please feel free to contact the undersigned if you have any further questions on this matter.

Very truly yours,

R. J. Cinq-Mars
Environmental Compliance Manager

RJC/nca

cc: C. Mattoon - West Seminole Plant
D. Kemp
B. Malek
H. Schuster
File E&V - Abo - Plans - Discharge

G3/375

Notes of Boyd
12/1/88
[signature]

(7) Pond single liner - 3 yrs of Hypalon - OK if pumped out on regular basis when in use, before gets higher than 2-3'

Inspection for visual leak when empty

(8) Solvent Tank unlined - has "mineral spirits"

(9) Slop oil Tank diked as in lube oil, & pump out & cover vent.

(10) Find GW Data for site - BLM or Jones info.

OXY ABO Plant - Shutdown
990 SSL 1880 FWL 35-17S-27E

(1) Fluids contained X-time after start up on compressor pads

(2) Blow case/piping tested prior to start-up. Leak repaired. Leak detection of tank replaced

(3) Drums - remove empty ones / proper storage on full ones by Spring

(4) Drip pans under pumps or other leaking areas

(5) Amine storage berm-ed or padded.

(6) Review lined pit integrity pump out at 2' Level

(7) Empty slop pit diked area by spring

(8) Will "police" area by Spring

(9) Expander Lube Oil pan catchment needed

Emprise Abo

Field Compression Unit Oxy - USA - Oil drains to backhoe pits from 2 units. Some oil in Dehy pit.

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

August 19, 1988

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Harlie Adams, Manager
OXY NGL INC.
Box 939
Carlsbad, New Mexico 88220

RE: **Discharge Plan GW-12**
Abo Gas Processing Plant
Eddy County, New Mexico

Dear Mr. Adams:

On February 20, 1984, the ground water discharge plan, GW-12 for the Abo Gas Processing Plant located in Section 35, Township 17 South, Range 27 East, NMPM, Eddy County, New Mexico, was approved by the Director of the Oil Conservation Division (OCD). This discharge plan was required and submitted pursuant to Water Quality Control Commission (WQCC) regulations and was approved for a period of five years. The approval will expire on February 20, 1989.

If your facility continues to have effluent or leachate discharges and you wish to continue discharging, please submit your application for renewal of plan approval as quickly as possible. The OCD is reviewing discharge plan submittals and renewals carefully and the review time can often extend for several months. Please indicate whether you have made, or intend to make, any changes in your discharge system, and if so, include an application for plan amendment with your application for renewal. To assist you in preparation of your renewal application, I have enclosed a copy of the OCD's guidelines for preparation of ground water discharge plans at natural gas processing plants. These guidelines will be used in review of your renewal application.

If you no longer have such discharges and discharge plan renewal is not needed, please notify this office.

If you have any questions, please do not hesitate to contact Roger Anderson or me at (505) 827-5812.

Sincerely,

David G. Boyer, Hydrogeologist
Environmental Bureau Chief

DGB:RA:sl

Enclosure

cc: OCD - Artesia

OXY NGL INC.
Box 300, Tulsa, OK 74102

April 29, 1988

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Oil Conservation Division
P.O. Box 2088
State Land Office Building
Santa Fe, NM 87504

Gentlemen:

Subject: Name Change Notification

This is to advise you that effective April 1, 1988, Oxy Cities Service NGL Inc. changed its name to OXY NGL Inc. and Cities Service Oil and Gas Corporation changed its name to OXY USA Inc. OXY USA Inc. operates all natural gas liquid facilities owned by OXY NGL Inc. There is no change in ownership of the OXY NGL Inc. natural gas liquid facilities and they will continue to be operated by the same personnel and management. The address remains the same.

As a result of these name changes and in order for your records to reflect the proper name, OXY wishes to change the name on the following natural gas liquid facilities Discharge Plans to the name of the owner, OXY NGL Inc.:

Facility

Bluitt Plant, Milnesand, NM 88125

Burton Flats Plant & Empire Abo Plant
Box 939, Carlsbad, NM 88220

We would appreciate your written acknowledgement of this notice by signing in the place provided below and returning a signed copy to the undersigned. Should you require any additional information or wish to discuss this matter, please do not hesitate to contact R. J. Cinq-Mars at (918) 561-8411. Thank you for your prompt attention to this matter.

Sincerely,

Robert J. Cinq-Mars
Environmental Compliance Manager

RJC/nca

Received this 2 day of May, 1988 by:

Roger C. Anderson
Environmental Engineer

cc: B. Malek
1988 Name Change File

G5/273

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

TONEY ANAYA
GOVERNOR

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-5800

February 20, 1984

Cities Service Company
Box 300
Tulsa, Oklahoma 74102

Attention: Mr. Steve Innes

Re: GWR-12
Discharge Plan

Gentlemen:

The discharge plan submitted pursuant to the Water Quality Control Commission Regulations for the controlled discharge of waste water and associated fluids from the Abo Gas Processing Plant located in Section 35, Township 17 South, Range 27 East, Eddy County, New Mexico, is hereby approved.

The discharge plan was submitted pursuant to Section 3-106 and is approved pursuant to Section 3-109 of the Water Quality Control Commission Regulations. The plan is approved on February 20, 1984, and is in effect for five years.

Yours very truly,

JOE D. RAMEY
Director

JDR/fd

NOTICE OF PUBLICATION

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

SANTA FE, NEW MEXICO

Notice Dates: 12-1-83 (ALB & ARTESIA

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following proposed discharge plan has been submitted for approval to the Director of the Oil Conservation Division, P. O. Box 2088, State Land Office Building, Santa Fe, New Mexico 87501, telephone (505) 827-5803.

CITIES SERVICE COMPANY, Abo Gas Processing Plant (Section 35, Township 17 South, Range 27 East, NMPM, Eddy County, New Mexico) P. O. Box 300, Tulsa, Oklahoma 74102, proposes to discharge approximately two barrels of waste water per day. The waste water is derived from the plant process. The waste water will be disposed of into a lined evaporation pit or hauled by truck to an approved disposal site. The total dissolved solids content of the waste water is approximately 61 mg/L.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. Prior to ruling on any proposed discharge plan or its modification, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted to him and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the Director determines there is significant public interest.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the Director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN Under the Seal of the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 1st day of December, 1983.

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

JOE D. RAMEY

Director

S E A L

CITIES SERVICE COMPANY
BOX 300
TULSA, OKLAHOMA 74102

October 1, 1982

Mr. Joe D. Ramey, Director
Energy and Minerals Department
Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87501

Dear Mr. Ramey:

SUBJECT: Discharge Plans for Abo, Burton Flats and Bluitt Plants

As required, herewith submitted are the discharge plans for the subject Cities Service plants located in New Mexico. I am sure you will find the plans complete, in depth and in accordance with the Oil Conservation Division guidelines.

If there are any questions regarding any of the plans, do not hesitate to call me at (918) 561-2498. We will be happy to meet with you at any time in your offices for discussion. Your Division's help in these matters have been greatly appreciated.

Sincerely,

NATURAL GAS LIQUIDS DIVISION

Steve Innes
Environmental Coordinator

SI/lw

Enclosure

cc: Oscar A. Simpson ✓

Cities Service Company

Abo

Gas Processing Plant

Discharge Plan

Submitted to:

New Mexico Oil Conservation Division

Santa Fe, New Mexico

Prepared by:

Natural Gas Liquids Division

September, 1982

K-6MS/D21/K1
9/29/82

Summary

Cities Service Company began its 4.0 MMCFD Abo cryogenic gas processing facility in 1976. There are no discharges off site and the 45 ft. by 45 ft. lined evaporation and spill containment pond on site receives wastewater flow from only the flare knockout. Its purpose is to receive the miniscule flare condensate flow and to catch spills from two unit processes and contain them for short periods. The pond is pumped dry and contents hauled off after any significant spill. There is no known obtainable groundwater in the plant's vicinity.

The pond will continue to be utilized in this capacity in the future, but with a more formalized inspection and maintenance program.

TABLE OF CONTENTS

I. Introduction

This report is submitted in accordance with Section 3-106 of the New Mexico Water Quality Control Commission Regulations, WQCC81-2, as required by the New Mexico Oil Conservation Division and includes a plan of containment for wastewater and materials associated with the operation of Cities Service Company's Abo Gas Processing Plant.

II. History and Background of the Plant

In the spring of 1976, Cities Service Company was actively planning the design and construction of a gas processing plant east of the City of Artesia for the purpose of serving its Empire-Abo Unit. Natural gas being used for an oil field pressure maintenance program operated next to this site was to be used as feedstock for the new plant to extract natural gas liquids which would be sent to a nearby pipeline.

It was decided that a skid-mounted prefabricated plant would provide optimal operation and minimal disturbance of the site. The selected cryogenic process precluded the need for cooling towers and boilers and wastewater would be negligible with only flare condensate as a continuous flow. The plant was completed and put into operation in November 1976. It was shut down from May 1977 through December 1979 because of market conditions and litigation. The plant has a design capacity of 4.0 million cubic feet per day (MMCFD).

III. Environmental Description

Geology

The plant is located in the Pecos River Valley on the Artesia Vacuum Trend. Figure 3.0 shows the generalized geology of the Eddy County area. Gypsiferous rocks of the Permian System underlie these plains. The Permian System is the oldest of the geologic systems in the Eddy County. The gypsiferous group includes the Rustler, Castile, Tansill and undifferentiated rocks of the Guadalupe Group. Of the underlying carbonatic rock formations, the Capitan consists of fossiliferous, calcitic limestone. The Dewey Lake Redbeds lie above and gypsum land is a representative land type. Figure 3.1 is a composite cross-section of Eddy County indicating the various units.

The Tertiary System is found northeast of Loco Hills where the Ogallala formation is prominently exposed in the Mescalero Escarpment. This escarpment is generally considered to be the zero line of saturated thickness and the well known Ogallala aquifer lies to the northeast with a thickness of up to 200 feet in the Lovington area.

Climate

Typical of the Southeastern plains of New Mexico, the Eddy County area has a semiarid, continental climate. There is abundant sunshine, erratic rainfall, low relative humidity and a wide deviation in

Figure 3.0
SOIL SURVEY

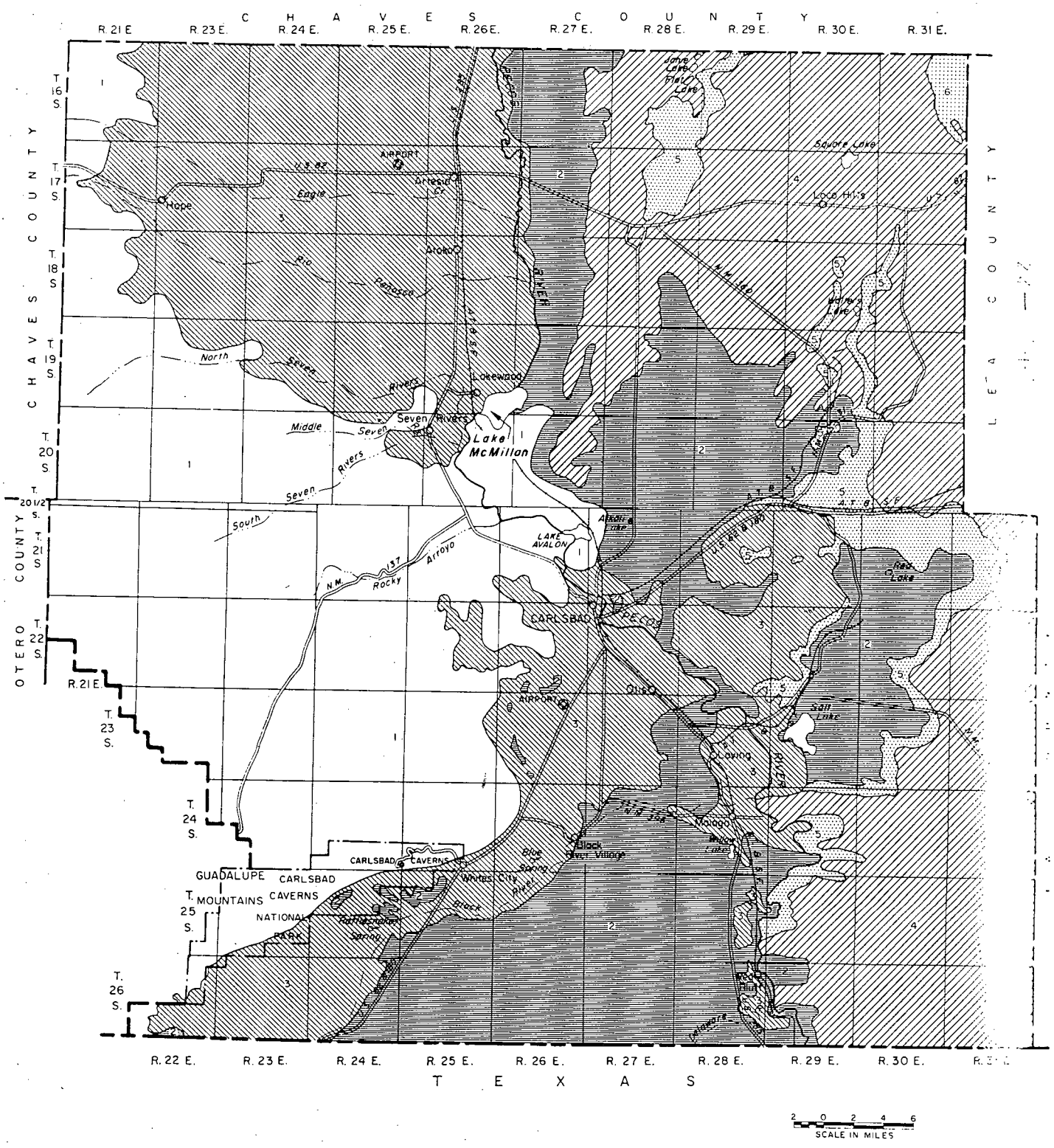
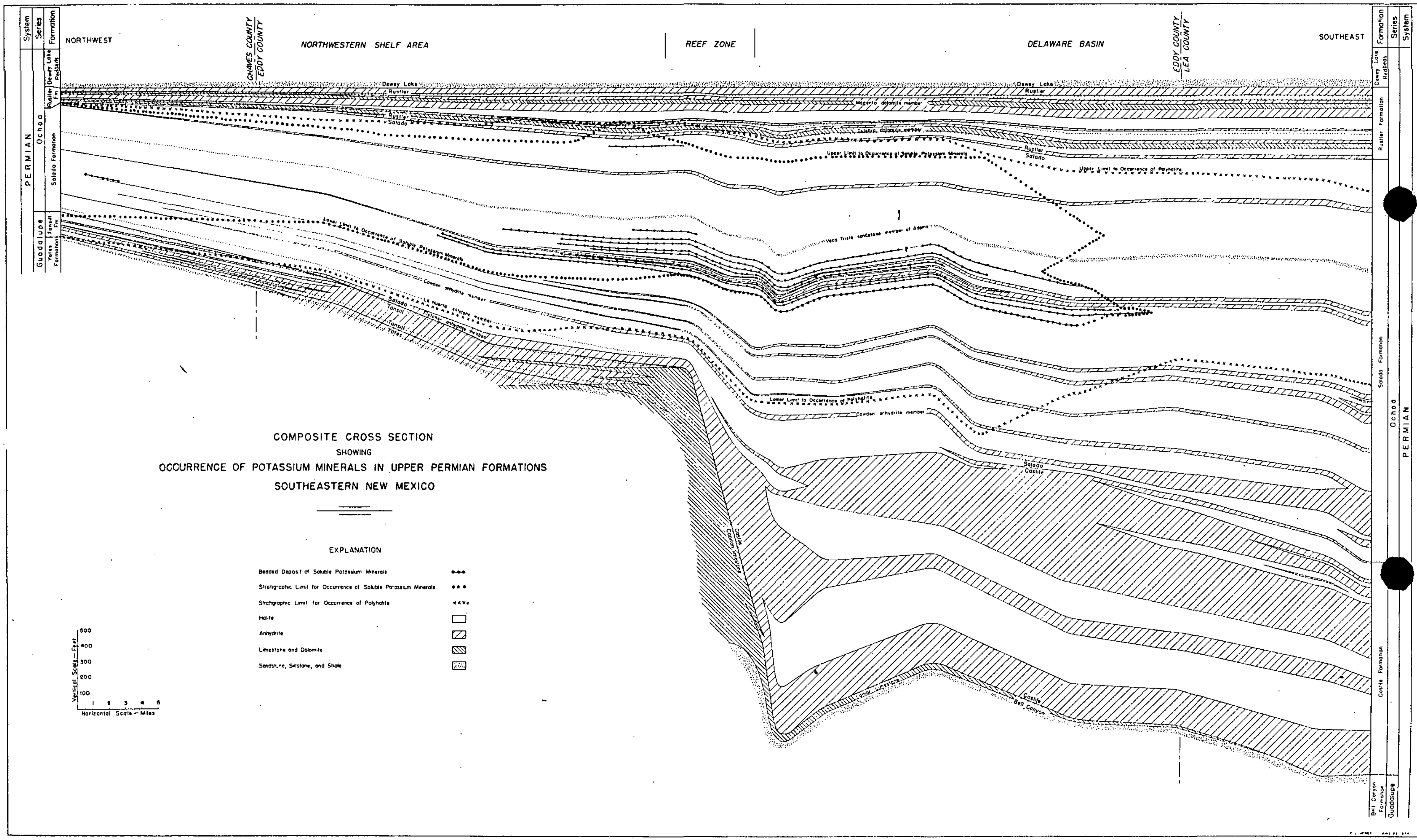


Figure 19.—Generalized geologic map of the Eddy Area, New Mexico:

1. Rocks of Permian age, primarily carbonatic.
2. Rocks of Permian age, primarily gypsiferous.
3. Loamy deposits of Quaternary age.
4. Sandy deposits of Quaternary age.
5. Rocks of Triassic age.
6. Rocks of Tertiary age.

Figure 3.1

The Occurrence and Distribution of Potassium Minerals in Southeastern New Mexico
Plate___ Page___



daily and seasonal temperatures. Winters are short and moderate while summers are long and hot. The average annual rainfall is 12 inches with most of the precipitation falling in summer. Brief, heavy thunderstorms occur frequently in June through August, and as many as forty can occur in a year. There is measurable rainfall 42 days per year, average. Evaporation is immense and most of it generally coincides with the months of the highest rainfall, May through October. It ranges from 100 to 110 inches per year from a Class A measuring pan and lake evaporation averages 69 inches.

The prevailing winds are from the southeast, but they generally shift to southwesterly in winter. Windspeeds range from an average of 10 miles per hour in September to 16 miles per hour in March.

Hydrogeology

With the general absence of the Tertiary System and the Ogallala Formation, there is little ground water of much importance in the northeast Eddy County area. Again, Figure 3.1 indicates the lack of good yielding water bearing formations. Figure 3.2 from the U.S. Soil Conservation Service Soil Survey for Eddy County illustrates the general soil association found in the plant vicinity. The Soil Conservation Service states, "there are few natural springs or seeps, and ground water is hard to locate" in this association. It further states that ground water "is of poor quality" in places where found. Ground-Water Levels in New Mexico, 1977 has none of

Figure 3.2

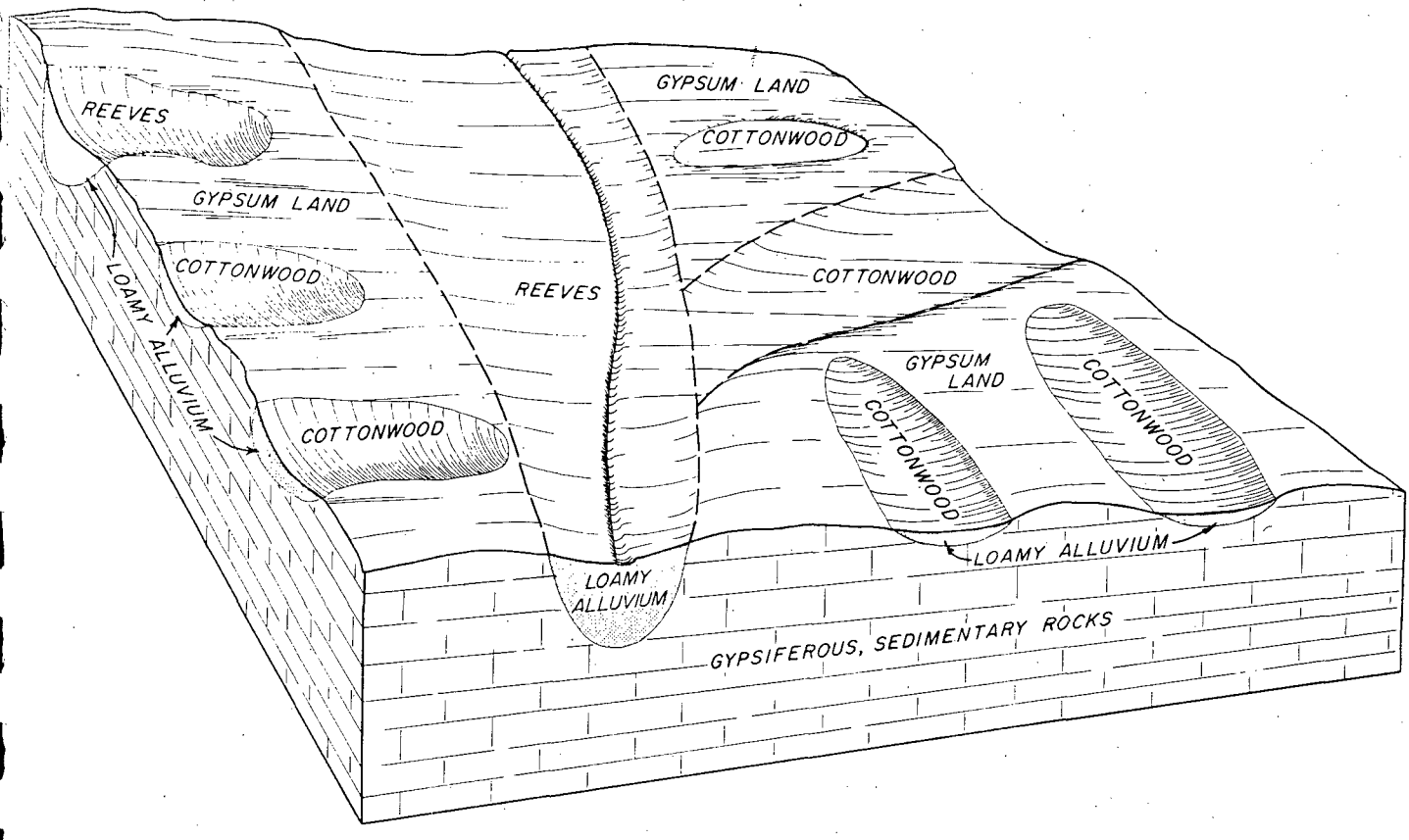


Figure 5.—Typical pattern of soils and Gypsum land in association 3.

its 5,000 wells in the plant's township while there are numerous wells in the Capitan Reef Area.

In June 1976, 7 test holes were made in various places on the Abo site. One hole was 6 feet deep, 5 were 10 ft. and 1 was 40 ft. The consulting engineer stated in his report, "No groundwater was encountered during the investigation." The Log of Borings may be found in the Appendix.

About 4 miles west of Abo there is an aquifer. This is the Roswell Basin "Shallow Aquifer" and it follows the Pecos River Valley from Roswell to the Lake McMillen area.

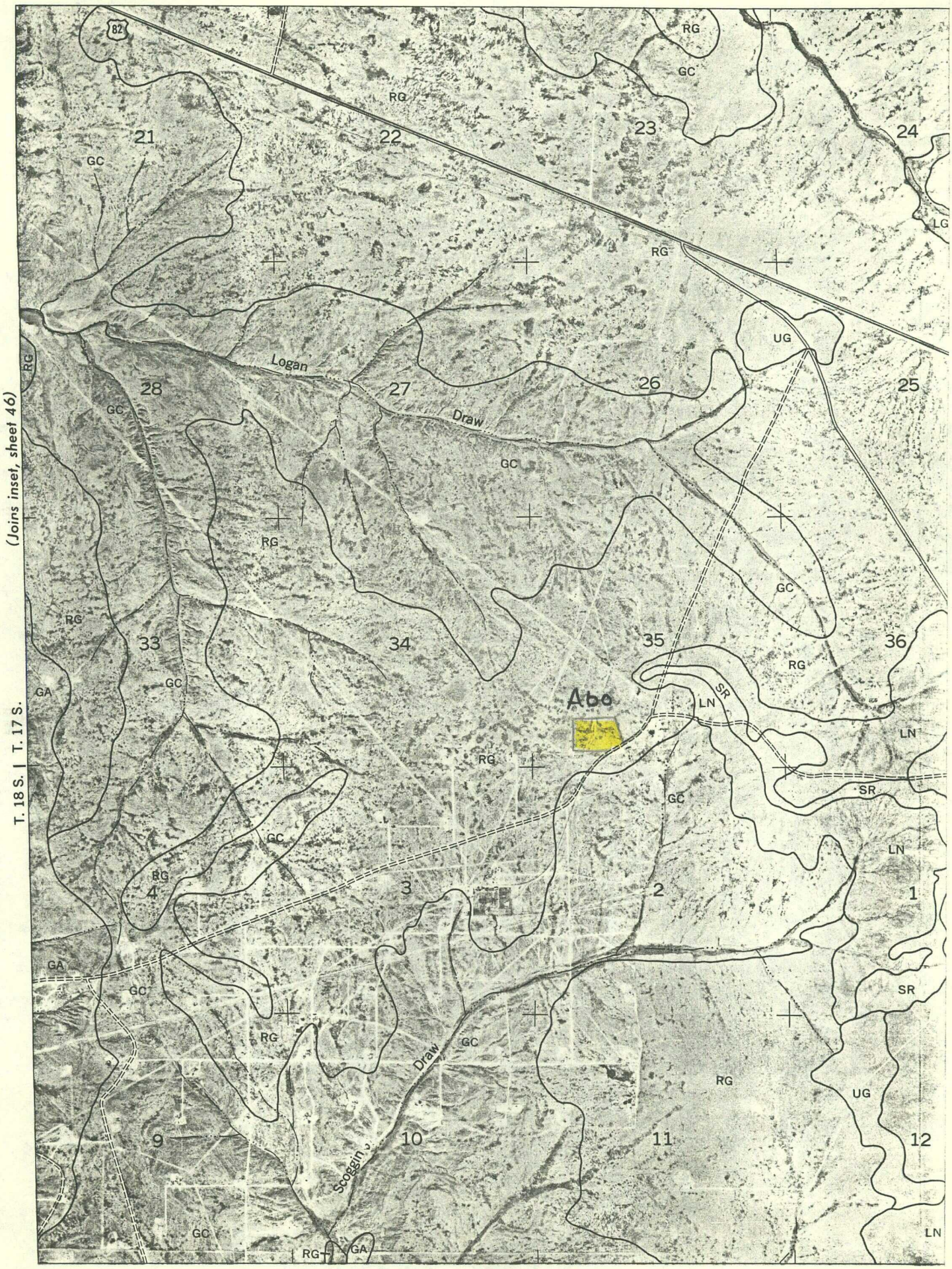
Surface Hydrology

Most all of Eddy County is in the Pecos River drainage basin. The general soils in the plant vicinity are given by the U.S. Soil Conservation Service as the "Reeves - Gypsum land - Cottonwood Association." This is characterized by "loamy soils that are very shallow to moderately deep over Gypsum beds and Gypsum land." There is little or no surface water in these areas except after a rain for short periods of time. Ranches cover many square miles because of the lack of water and sparse vegetation.

The specific soil on the plant site is Reeves - Gypsum land complex (RG), as can be seen in Figure 3.3. These soils are relatively flat with 0 to 3 percent slope. The SCS says the RG soil has a low

water-holding capacity, and permeability is rapid in the surface layer of the Reeves loam. There is only about four feet of elevation change across the site, and very little runoff, therefore, would be expected from the plant site during anything but the heaviest possible rainfall event.

Figure 3.3


82
RG
GC
21
22
23
24
LG
UG
Logan
Draw
28
27
26
25
33
34
35
36
GA
Abo
LN
SR
T. 18 S. | T. 17 S.
(Joins inset, sheet 46)
4
3
2
1
9
10
11
12
Scoggin
Draw

IV. Water Quality

Since there are only intermittant watercourses in the area which are normally dry and only a very few of them at that, surface water quality is indeterminate. The nearest well, as indicated by the U.S. Soil Conservation Service Soil Survey, is nearly 3 miles away. As mentioned previously, groundwater is difficult to locate and any water bearing formation is likely discontinuous. Therefore, no meaningful data was found to be generally available.

V. Plant Description

Location

The plant is situated 8½ miles east of Artesia in Eddy County off U.S. Highway 82. The site is on a relatively flat ridgetop in a terrain of low, gently rolling hills overlooking the Pecos River bottoms to the west. The property is irregularly shaped as can be seen in Fig. 5.0 and comprises 11.63 acres. The Plot Plan (Dwg. No. 607-100-E) in the Appendix shows the general facility layout. The evaporation pond and flare were actually built about 200' east of where shown.

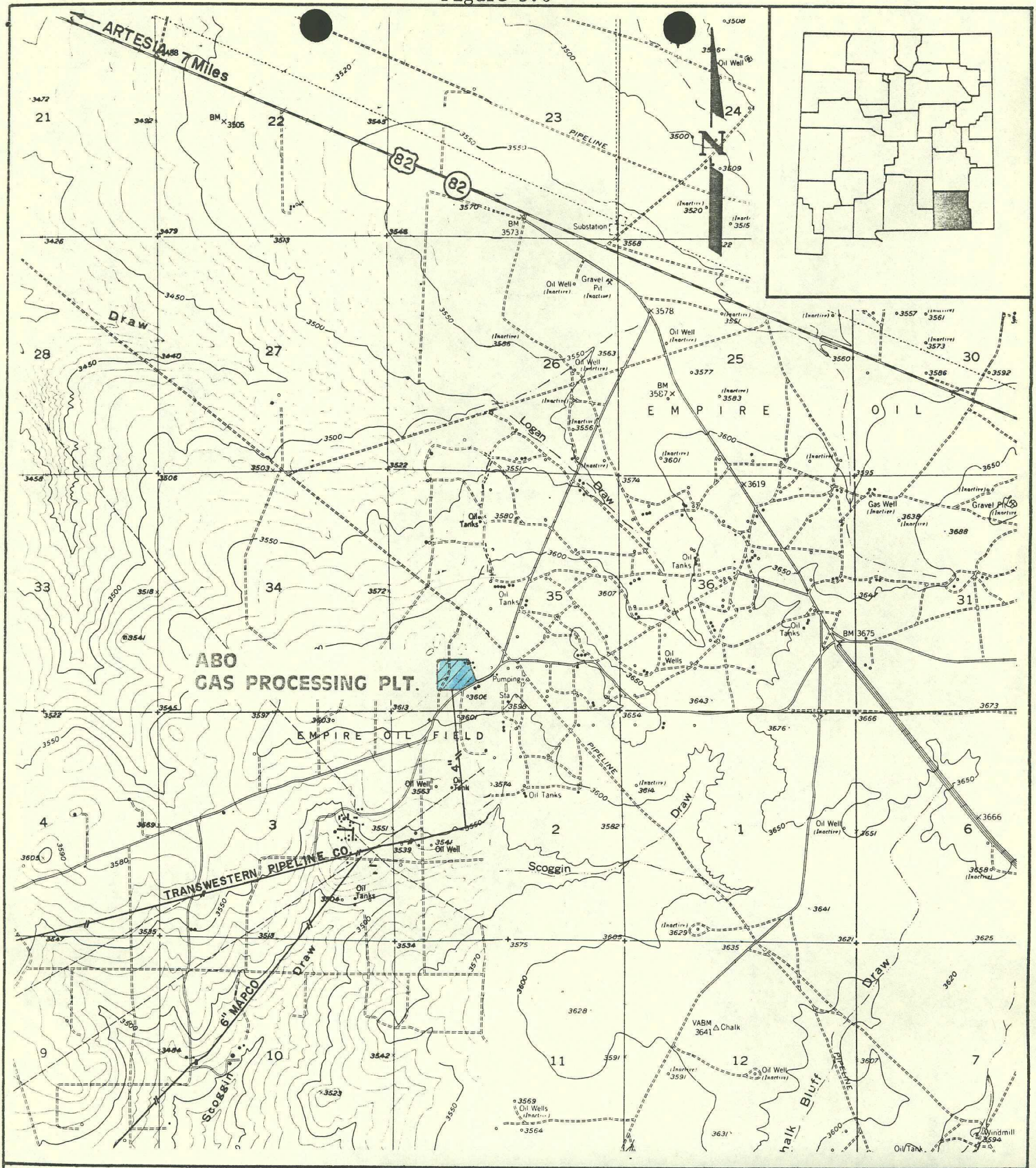
Process Description and Schematic

The Abo Plant utilizes a cryogenic process which produces a very low temperature to condense hydrocarbon liquids from gas.

The inlet gas is compressed, dehydrated and compressed again by the expander booster-compressor, and then chilled down by exchange with the cold residue gas from the top of the demethanizer and with the cold liquid in the demethanizer side and bottom reboilers. A propane refrigeration system and a gas chiller have been provided to condense the heavier hydrocarbons upstream of the expander. The liquid condensed during the inlet gas chilling is removed and sent to the demethanizer. The remaining gas is sent to the expander where the pressure is lowered through the turbine blades again causing the gas

to get colder and more liquid to condense. This liquid-gas stream is again sent to the demethanizer and brought back for exchange to warm it up before injection recompression.

Figure 5.0



PLANT LOCATION
SEC. 35, T-17-S, R-27-E
APPROX. EL. 3620'
APPROX. LAT. 32° 47' 08" N
APPROX. LONG. 104° 15' 02" W

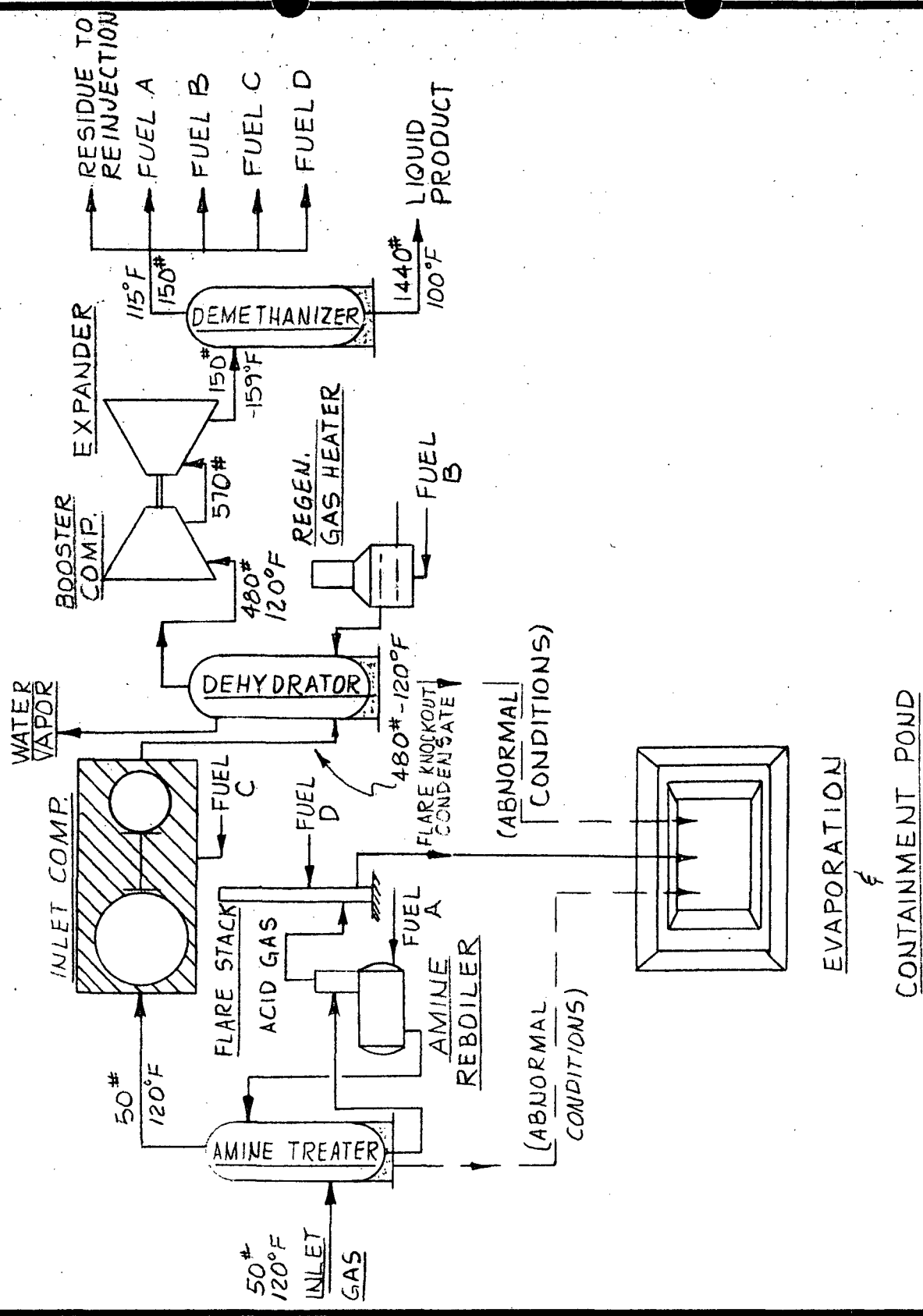
SCALE	DATE
1" = 3000'	1-1-82

CITIES SERVICE COMPANY

GENERAL ENGINEERING — TULSA, OKLAHOMA

ABO GAS PROCESSING PLT.,
EDDY COUNTY, NEW MEXICO

C. S. C.
CO. OWNED
CO. OPERATED
SOUTHERN
REGION



REV	DATE	SCALE N.T.S.	DATE
		DRAWN BY LJS	9/82
		INITIAL CK.	
		FINAL CK.	
		ENGR.	
		APPROVED	
		P.E. NO.	

GEN. ENGR. DEPT. TULSA, OKLA.

CITIES SERVICE COMPANY

ABO PLANT

TITLE	DWG. NO.	REV.
PROCESS FLOW WITH LIQUID WASTE CONNECTIONS	607-101-A	

Cooling Water

There are no open system cooling requirements in this type of gas plant and therefore no cooling tower. There is also no boiler blowdown. There are two closed cooling systems and those are the jacket water systems on the Waukesha compressors. Because the plant is unattended 16 hours per day, antifreeze (glycol) is used in the system and no corrosion inhibitors are used.

Water Supply

Since there are no wells on site or in the vicinity, water must be obtained commercially. Double Eagle Corporation supplies the Abo Plant and the Empire-Abo oilfield area by pipeline. The water wells are located on the caprock around Maljamar 25 miles east. The Caprock Water Company does the billing. Water is stored on site in an above ground 100 bbl. tank.

VI. Disposal Practices

There is only one continuous wastewater flow from the plant processes and this is very, very small, and therefore there is no need for any surface discharge from the plant site. This flow goes to the evaporation pond on site and is basically water condensate from the flare knockout. It is estimated to flow no more than 0.05 gpm on the average. The other purpose of the pond is to catch and contain possible upset flows and spills from the dehydrator area and the amine regeneration area.

The pond is in the southwest corner of the site and is 45' x 45' at the top inside of the dike. The slopes inside and outside are about 2 to 1 and the lining is nylon reinforced neoprene. Factory fabricated "boots" seal the locations where the two 2-inch inlet pipes come through the inside slope.

Sanitary sewage from the office goes to a septic tank - soil absorption system located on the property. With at most 2 employees on site each day there will be no more than 64 gallons per day using USEPA figures of 32 gallons per employee per day.

The slop oil tank receives liquids from the plant inlet separator. This tank has a capacity of 100 bbl. and is pumped and hauled by I&W Trucking, currently. It is regularly pumped when it reaches the two-thirds level leaving an adequate safety factor. The liquids are made up of condensed hydrocarbons, water and hydrocarbon-water emulsions. The tank has a 3 ft. high dike on all 4 sides to contain any tank leak. It is not connected to the pond.

There are no unusual or great amounts of solid waste generated on site. There is no caustic or other possibly hazardous waste. Besides the typical office waste, there is only spent dryer beads from the dehydrator which are handled in barrels and replaced about every 5 years and standard oil filters from the engine and compressors.

Wastewater analysis data for the flare condensate are given in the Appendix. Of the test results given, there was an exceedance of WQCC Regulations Section 3-103 only on phenols, and the pH was slightly out of the specified range at 5.6. Any exceedance here, however, is of small significance because of the extremely low flow rate of 0.05 gpm. At this rate the phenols amount to 2 millionths of a pound per day.

Metals in the condensate are very low to nonexistent. Total Dissolved Solids and cations are all very low as is to be expected. Except for phenols, none of the toxic pollutants listed under 1-101X and 3-103 are components of feedstock or materials used or are otherwise expected in any discharges.

As specified in the WQCC Regulations, samples were collected, preserved and analyzed in accordance with the techniques prescribed in Methods for Chemical Analysis of Water and Waste, EPA.

VII. Discharge Plan

Disposal Methods

The current method and procedures for waste liquid containment and disposal at Abo will continue. The flare knockout will continue to be connected to the pond with a very small flow of condensate. The drains from the dehydrator and amine regeneration area will remain connected to the pond. Discharges from these two units will continue to be only for abnormal conditions and in discrete amounts.

The pond will normally be kept free of all liquids and materials other than the flare condensate. In no case will it be allowed to have a freeboard of less than 3 feet. The pond will be pumped by the contract hauler for the slop oil tank or an equally capable and approved contractor. Continual efforts will be made by plant personnel to keep tumbleweeds, debris and other extraneous material out of the pond.

The slop oil tank will continue to be emptied well in advance of need and the contents taken by a contract hauler in compliance with the applicable state and federal regulations and disposed of or recycled. Procedures at the plant will continue to minimize conditions which would result in an overflow.

Contingency

Power failures at the plant occur no more than twice per month on an annual average with most clustered in the spring. These normally last only minutes with the longest being no more than an hour. However, when the power goes off and the plant goes down, feedstock gas bypasses the plant. Therefore, there can be no wastes generated during a failure and a power failure represents no special environmental problem.

There appears to be little probability of flash flooding being of particular concern at Abo. The flatness and higher elevation of the terrain, the permeability of the Reeves-Gypsum soil, and a 100-yr. 6-hr. rainfall event of less than 4.2 inches all add up to very little probability for the pond dikes (2 ft. high, avg.) to be overtopped by runoff water. Plant personnel recall no more than one inch of water on the plant site in a hard downpour.

In all reality, the containment pond on site is a contingency pond. It is available to receive most all plant liquids which do not readily evaporate for all plant upsets of any consequence whether they come from natural catastrophies or processing malfunction. If the contract hauler cannot pump the pond should the level become critical, there will be no problem in obtaining a backup since there is quite a lot of gas and oil field activity in the area.

Inspection and Reporting

Each year the pond will be emptied, if not already so, cleaned and inspected. The liner will be examined for rips, holes, cracks, compromised seals or anything which would allow liquid to pass through the liner. All leaks will be repaired in a professional manner before putting the pond back into service. Before the liner reaches the end of its useful life, it will be replaced with a liner of equal or better quality.

All spills of hazardous materials occurring on the plant site that are not caught by the containment pond will be reported to the Oil Conservation Division. Any instance where the pond would overflow or where there would be a significant leak through the liner would be reported also.

Plan Summary

1. All plant wastewater which may occur will be collected in an evaporation pond which will prevent any discharge from the plant property; all liquid waste will be contained in the pond.

2. The pond will be inspected daily. A minimum of a 3' freeboard will be maintained in the pond at all times. If severe storms or other abnormal events threaten to cause a pond overflow, vacuum trucks will be employed to haul off the contents to an approved disposal site.

3. The pond will be emptied completely on an annual basis, cleaned and the liner inspected. Any necessary repairs will be made promptly.

4. The slop oil tank will be emptied well in advance of need to preclude overflows and contents properly disposed of.

5. Drummed chemicals will be kept stored in an upright position to preclude any dripping or tap accidents.

VIII. Conclusions

The Abo Plant is a very safe and environmentally clean gas processing plant. Its cryogenic process allows it to operate without absorption oil and continuous wastewater streams other than flare water condensate.

By all information and data available, there is no ground water under the Abo Plant or in the general vicinity. However, without conclusive data in the form of deep dry holes in the immediate plant vicinity, we look past Section 3-109C.1 to Section 3-109C.3.b(1) of WQCC81-2 for alternative approval requirements. The first requirement is that an impoundment not have more than 0.5 acre-feet per acre-year enter the subsurface for plan approval. With Abo's 0.047 acre pond, this equates to 0.023 ac-ft/yr or 631 gal/mo. At 0.05 gpm the flare condensate amounts to 2160 gal/mo. Of this about 40% would evaporate, on the average, leaving some 1300 gallons. It would take considerable sized openings in the liner for 631 gallons of this to pass through to the subsurface. With the liner completely intact, only 0.5 gal/mo. would be allowed through (using manufacturer's data). It can be seen that the possibility of 631 gal/mo. reaching the subsurface is extremely remote. The second and third paragraphs under the same subsection do not have to be satisfied as long as the first is.

2 Bbls/Day

180 Gal/Day

In view of these factors, the Cities Service Abo operation should not be considered as having any significant potential for liquid waste reaching the subsurface, and it certainly constitutes no more than the remotest threat to closest groundwater.

IX. Bibliography

1. Cronin, J. G., Ground Water in the Ogallala Formation in the Southern High Plains of Texas and New Mexico, Hydrologic Investigations Atlas HA-330, U.S. Geological Survey, Washington, DC, 1969.

2. Hudson, J. D., Ground-Water Levels in New Mexico, 1977, New Mexico State Engineer, Santa Fe, NM, 1980.

3. McDougal, L. F. and C. M. Jackson, Peak Rates of Discharge for Small Watersheds, Chapter 2, Engineering Field Manual for Conservation Practices, U.S.D.A., Soil Conservation Service, Albuquerque, NM, 1973.

4. Miller, J. F., R. H. Frederick, and R. J. Tracey, NOAA Atlas 2, Precipitation-Frequency Atlas of the Western United States, Volume IV - New Mexico, U.S. Department of Commerce, National Weather Service, MD, 1973.

5. New Mexico Geological Society, Guidebook of Southeastern New Mexico, Fifth Field Conference, New Mexico Bureau of Mines and Mineral Resources, Socorro, NM, 1954.

6. Soil Conservation Service, Soil Survey Eddy County, New Mexico, United States Department of Agriculture, Washington, DC, 1971.

7. Tuan, Y., C. E. Everard, J. G. Widdison, and I. Bennett, The Climate of New Mexico, State Planning Office, Santa Fe, NM, 1973.

8. Weeks, J. B., E. D. Gutentag, Bedrock Geology, Altitute of Base, and 1980 Saturated Thickness of the High Plains Aquifer in Parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming, Hydrologic Investigations Atlas HA-648, U.S. Geological Survey, Reston, VA, 1981.

X. Appendix

SOILS AND FOUNDATION

INVESTIGATION

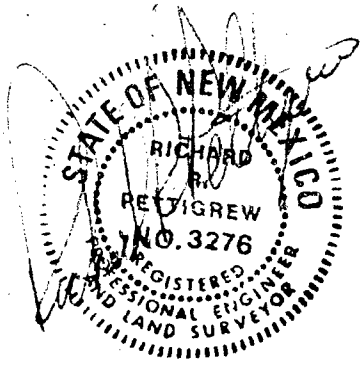
FOR

PROPOSED

EMPIRE-ABO GAS PROCESSING PLANT

AT

ARTESIA, NEW MEXICO



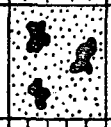
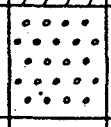
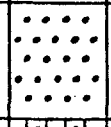
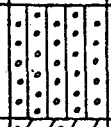
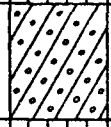
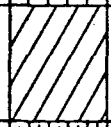
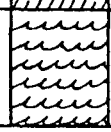
PREPARED FOR:

CITIES SERVICE COMPANY
P. O. Box 800
Tulsa, Oklahoma 74102

DATE: JUNE, 1976

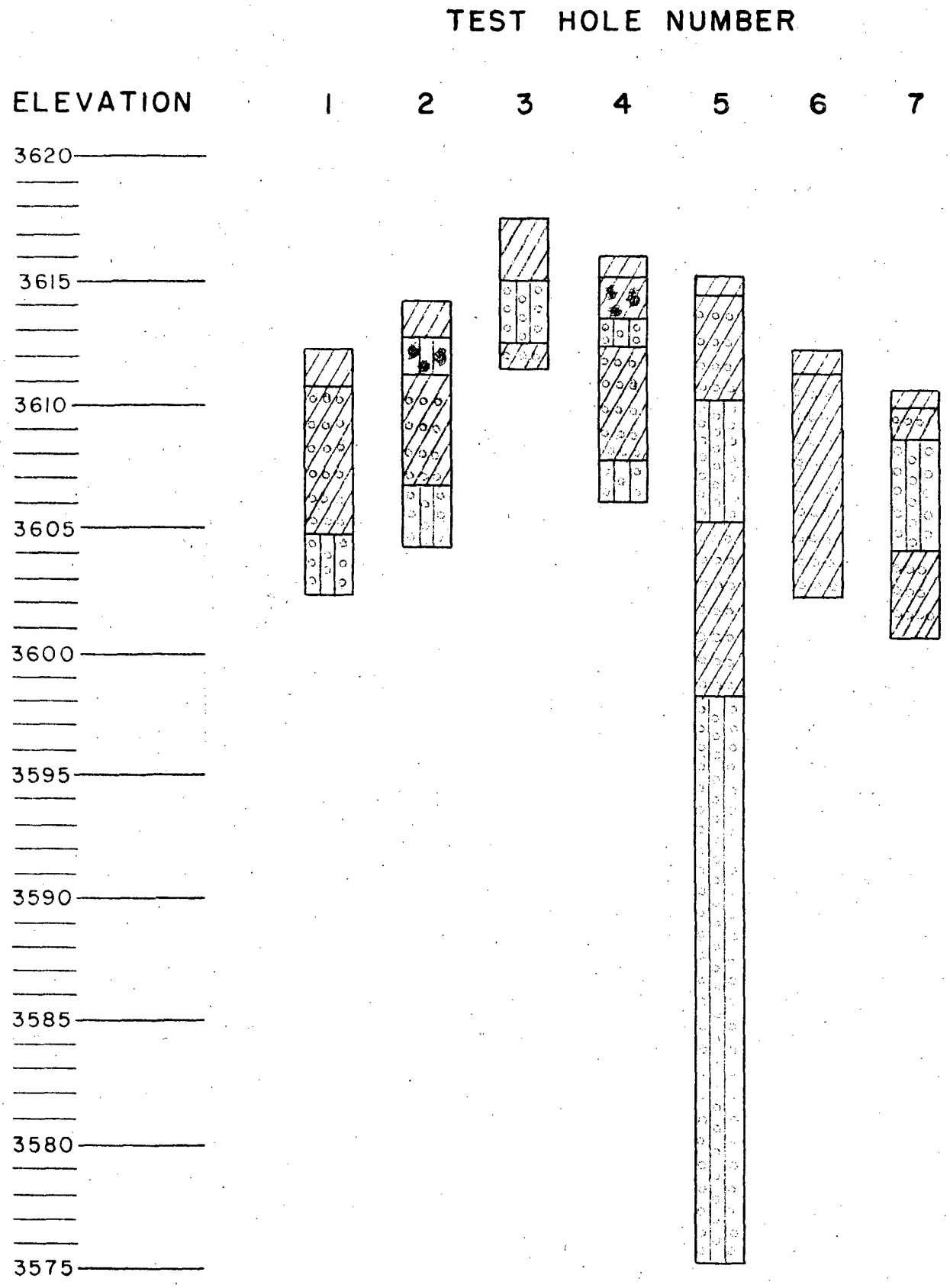
LAB NO. 76L-5233

KEY TO CLASSIFICATION USED ON LOGS

MAJOR DIVISIONS				GROUP SYMBOLS		DESCRIPTIONS
COARSE-GRAINED SOILS More Than Half of Material is LARGER Than No. 200 Sieve Size.	GRAVELS More Than Half of Coarse Fraction is LARGER Than No. 4 Sieve Size.	Clean Gravels (Little or no Fines)		GW		Well-Graded Gravels, Gravel-Sand Mixtures, Little or no Fines.
				GP		Poorly-Graded Gravels, Gravel-Sand Mixtures, Little or no Fines.
		Gravels With Fines (Appreciable Amount of Fines)		GM		Silty Gravels, Gravel-Sand-Silt Mixtures.
				GC		Clayey Gravels, Gravel-Sand-Clay Mixtures.
	SANDS More Than Half of Coarse Fraction is SMALLER Than No. 4 Sieve Size.	Clean Sands (Little or no Fines)		SW		Well-Graded Sands, Gravelly Sands, Little or no Fines.
				SP		Poorly-Graded Sands, Gravelly Sands, Little or no Fines.
		Sands With Fines (Appreciable Amount of Fines)		SM		Silty Sands, Sand-Silt Mixtures.
				SC		Clayey Sands, Sand-Clay Mixtures.
FINE-GRAINED SOILS More Than Half of Material is SMALLER Than No. 200 Sieve Size.	SILTS and CLAYS Liquid Limit Less Than 50			ML		Inorganic Silts & Very Fine Sands, Rock Flour, Silty or Clayey Fine Sands or Clayey Silts with Slight Plasticity.
				CL		Inorganic Clays of Low to Medium Plasticity, Gravelly Clays, Sandy Clays, Silty Clays, Lean Clays.
				OL		Organic Silts & Organic Silty Clays of Low Plasticity.
	SILTS and CLAYS Liquid Limit Greater Than 50			MH		Inorganic Silts, Micaceous or Diatomaceous Fine Sand or Silty Soils, Elastic Silts.
				CH		Inorganic Clays of High Plasticity, Fat Clays.
				OH		Organic Clays of Medium to High Plasticity, Organic Silts.
Highly Organic Soils				Pt		Peat & Other Highly Organic Soils

Ref. (Unified Soil Classification System) Corps of Engineers, U.S. ARMY, T.M. NO. 3-357

LOG OF BORINGS

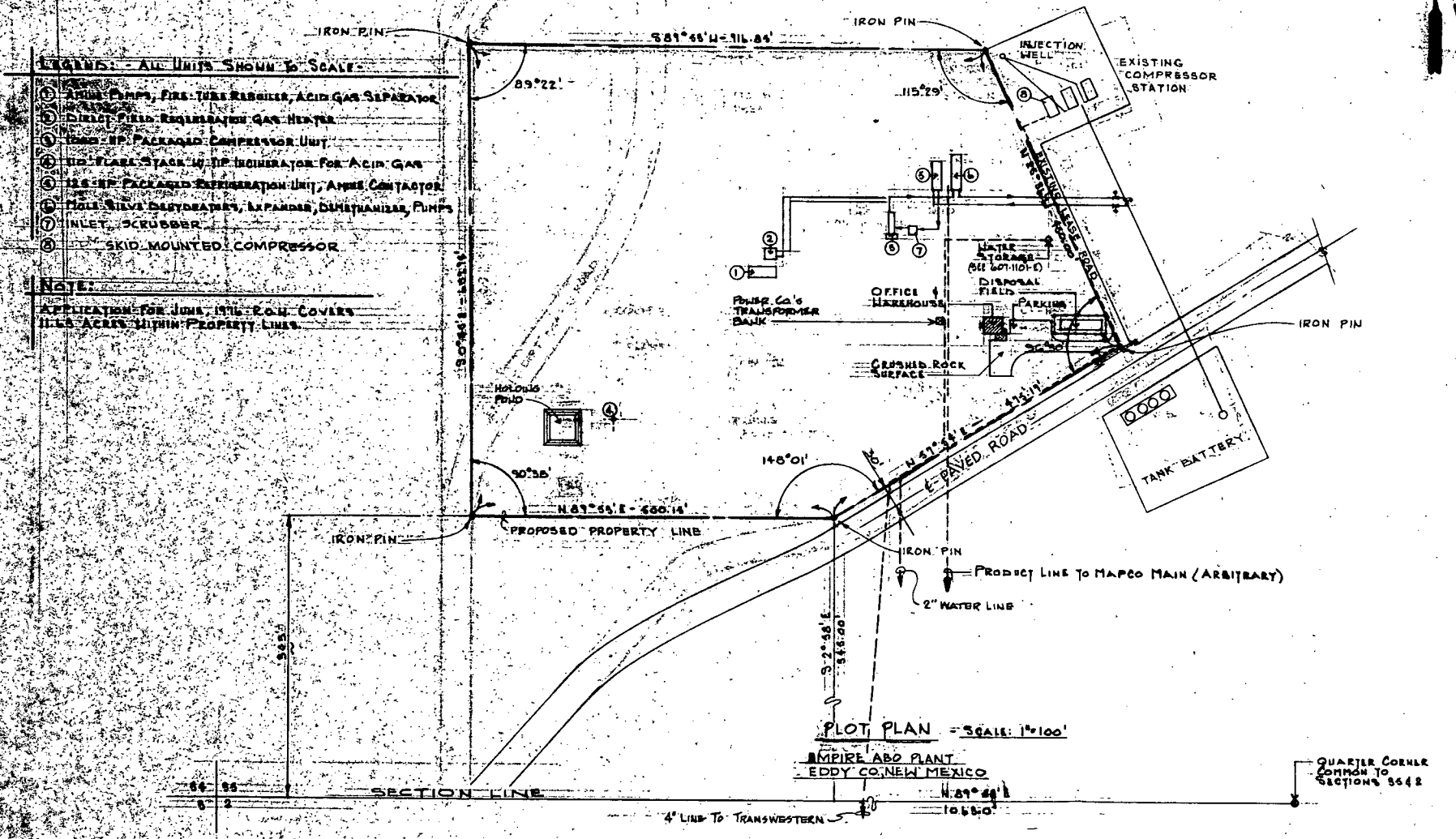


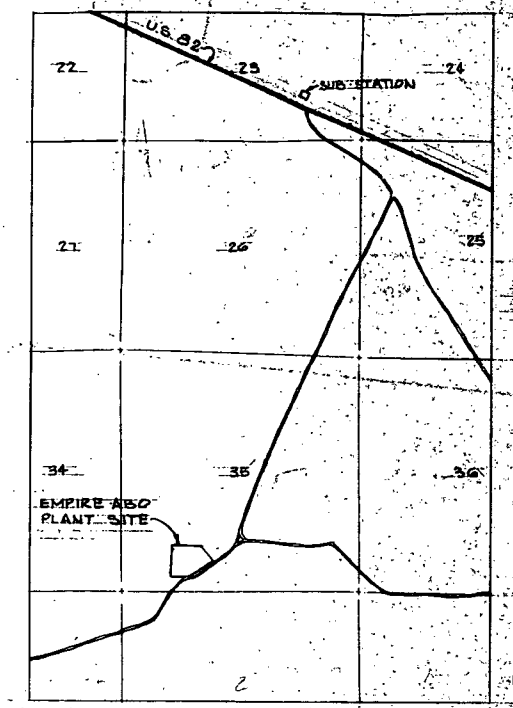
LEGEND: - ALL UNITS SHOWN TO SCALE -

1. ARMS PUMPS, FIRE-TUBE REBOILER, ACID GAS SEPARATOR
2. DIRECT FIRED REGENERATION GAS HEATER
3. 1000-HP PACKAGED COMPRESSOR UNIT
4. 110' FLARE STACK W/ TIP INCINERATOR FOR ACID GAS
5. 125-HP PACKAGED REFRIGERATION UNIT, ARMS CONTACTOR
6. TWIN SILICA DEHYDRATORS, EXPANDER, DEMETHANIZER, PUMPS
7. INLET SCRUBBER
8. SKID MOUNTED COMPRESSOR

NOTE:

APPLICATION FOR JUNE 1976 R.O.W. COVERS 11.65 ACRES WITHIN PROPERTY LINES.





VICINITY PLAT
1"=1000'

NO.	REVISION	ENGR.	P.E. NO.	JOB NO.	DRAWN BY	DRAWN DATE	INITIAL CK. BY	INITIAL CK. DATE	FINAL CK. BY	FINAL CK. DATE	APPROVED BY	APPROVED DATE
4	ADD ITEMS 7 & 8 PIPING				JER	5-5-76	CJV	5-5-76				
3	MOVE KEMP BLDG.				CS	4-5-76						
2	REV. DRIVE & HOLLOW RISE				CS	3-16-76						
1	REV. EQUIP. LAYOUT				R	1-16-76						

CITIES SERVICE COMPANY

GROUP: NGL OPERATIONS
DIVISION: NATURAL GAS LIQUIDS
PREPARED BY GENERAL ENGINEERING DEPARTMENT — TULSA, OKLAHOMA

REF. DRAWINGS

TITLE: PLOT PLAN

FOR: EMPIRE ABO PLANT

SCALE	DRAWN	DATE	ENGR.	P.E. NO.	DATE
AS SHOWN	L.J.GREEN	9-17-76	FINAL CK.		
	INITIAL CK.		APPROVED BY		

JOB NO. 76527 — DRAWING NO. 607-100-E — REV. NO. 4

CITIES SERVICE

INTEROFFICE LETTER - CA-206-82

June 25, 1982

TO: Mr. Steve Innes

FROM: Paul M. Kerschner

SUBJECT: Samples Water Effluent - Bluitt & Abo

Listed below are the analyses of the first set of water effluent samples from Bluitt and Abo. Sample size limited the number of tests run.

Test	Bluitt Sample 5/26/82	Abo Sample 5/27/82
Volatile Organic	None detected	Not enough sample
PCB	None detected	"
Chlordane & penta-chloro phenol	None detected	"
pH	7.1	5.6
Chloride (cl^-)	15.5 ppm	2.4 ppm
Sulfate($SO_4^=$)	2647 ppm	39 ppm
Total dissolved solids	5233 ppm	61 ppm
Nitrate (No_3^-)	12 ppm 2.7 ppm as NO_3-N	5.6 ppm 1.3 ppm as NO_3-N
Cyanide (CN^-)	1.8 ppm	N.E.S.
Fluoride (F^-)	0.4 ppm	0.2 ppm
Phenol	0.004 ppm	0.031 ppm
Metals		
Cadmium	None detected	None detected
Chromium	"	"
Lead	0.44 ppm	"
Copper	None detected	"
Silver	"	"
Nickel	"	"
Zinc	BDL (0.005 mg/l)	BDL
Arsenic	0.017 ppm	BDL (0.002 mg/l)
Selenium	0.07 ppm	0.004 ppm

Metals	Bluitt Sample	Abo Sample
Mercury	BDL (0.0002 mg/l	BDL
Barium	N. D.	N. D.
Iron	N. D.	N. D.
Manganese	N. D.	N. D.
Aluminum	N. D.	N. D.
Cobalt	N. D.	N. D.
Molybdenum	N. D.	N. D.

BDL - Below detection limit - response on instrument, but less than one would get at the lowest detection limit.

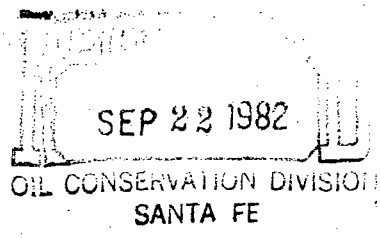
N. D. - NONE DETECTED; no instrument response.

If, after reviewing the data, you have any questions please call.

PMK:jcg

CITIES SERVICE COMPANY
BOX 300
TULSA, OKLAHOMA 74102

September 17, 1982



Mr. Joe D. Ramey, Director
Energy and Minerals Department
Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87501

Dear Mr. Ramey:

Subject: Monthly Progress Report - Discharge Plans
Abo, Burton Flats, Bluitt Plants

The fourth and last monthly reporting period for Cities Service Company has been primarily one of analysis, review, and drafting of report material. Several final pieces of reference material have come in.

The plans are in the last stages of development. One report is essentially complete, needing final review. The plans will all be complete and forwarded to your office by the end of the month.

If there are any questions, please don't hesitate to give me a call.

Sincerely,

NATURAL GAS LIQUIDS DIVISION

Steve Innes
Environmental Coordinator

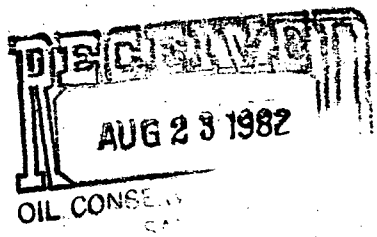
SI/bs

cc: Oscar A. Simpson

A5/008

CITIES SERVICE COMPANY
BOX 300
TULSA, OKLAHOMA 74102

August 17, 1982



Mr. Joe D. Ramey, Director
Energy and Minerals Department
Oil Conservation Division
P. O . Box 2088
Santa Fe, NM 87501

Dear Mr. Ramey:

Subject: Monthly Progress Report - Discharge Plans
Abo, Burton Flats, Bluitt Plants

The third monthly reporting period for Cities Service Company has been basically one of data analysis, literature review, and rough drafting of report material.

The results of samples collected June 15, 1982, from the Bluitt Plant have been received from our Central Analytical Laboratories. These have been put into tabular form and listed in the same order as given in Section 3-103 of the WQCC Regulations for ease of review.

We have received and reviewed two reports which have come in. One is on the climate of New Mexico and the other is on ground water levels in the state.

Also, we have received and reviewed two sets of U.S. Geological Survey maps. One shows the eight-state High Plains Aquifer at a 1:2,500,000 scale. The other shows the Ogallala Formation and its ground water at a scale of 1:500,000, but is discontinuous or nonexistent in the areas of our plants.

If there are any questions, please don't hesitate to give me a call.

Sincerely,

NATURAL GAS LIQUIDS DIVISION

Steve Innes
Environmental Coordinator

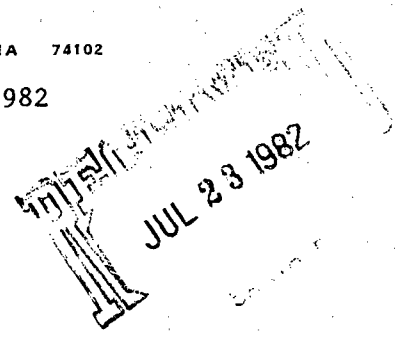
SI/sm

cc: Oscar A. Simpson

H2/070

CITIES SERVICE COMPANY
BOX 300
TULSA, OKLAHOMA 74102

July 20, 1982



Mr. Joe D. Ramey, Director
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Dear Mr. Ramey:

Subject: Monthly Progress Report - Discharge Plans
Abo, Burton Flats, Bluitt Plants

During the second monthly reporting period Cities Service Company has had accomplishments in several areas and continued progress in others in following a path toward compliance with the state regulations on discharge plans. The month was generally characterized by completion of some important onsite work, receipt of maps and continued research and correlation of information.

The ponds at both Burton Flats and Abo were completely cleaned by a contractor. The pond liner at Burton Flats was sealed professionally at the seams, and at the area where inlet pipes come through, "boot" kits were employed. At both Burton Flats and Abo, plant personnel built new storage racks for chemicals in 55-gallon drums. These racks are modeled after manufactured units which allow the drums to be stored vertically with the taps on top precluding dripping and spillage due to tap accidents.

At Bluitt, plant personnel constructed a three foot dike around the slop oil tank to contain any possible spillage. They re-routed a small interstage line (produced water) from the inlet gas scrubber so that it could not discharge south off the property. Also, the evaporative cooler water was redirected to stay on the property and it now goes to the flare pond.

We have received a number of maps which had been ordered. Soil survey maps of all three plant areas from the U.S. Soil Conservation Service have come in. Flood maps have come in for Eddy County and the City of Portales from the Federal Emergency Management Agency, but these may not be of much help. We have received our USGS topographic quadrangle maps from our library and some hydrogeologic maps from the New Mexico State Engineer Office. Most of the hydrogeologic maps were not of the correct areas and it seems that the State Engineer does not have any for Burton Flats or any showing the "Red Beds" near the Bluitt Plant. We are currently checking for these internally and with the USGS Office in Denver. Aerial photos of each plant were put on order early this month, but we were told they will take four to six weeks to obtain.

H2/095

All of the maps received have been studied and correlations made. We have met with our production group (Energy Resources Group) and discussed the different plant situations and avenues of information. But we have still not received returns on our literature search by our technical library and therefore have only the very beginnings of what is needed to analyze each plant from an informed, holistic viewpoint.

On testing, our Central Analytical Laboratories have sent us the results of our samples taken on May 26 and 27, 1982. The number of tests run at a collection point were limited by the sample size. Results on the samples collected June 15 are expected soon.

Let me know if there are questions or a need for additional information.

Sincerely,

NATURAL GAS LIQUIDS DIVISION

Steve Innes
Environmental Coordinator

SI/sm

cc: Oscar A. Simpson

H2/095

CITIES SERVICE COMPANY
BOX 300
TULSA, OKLAHOMA 74102

June 22, 1982

Mr. Joe D. Ramey, Director
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Dear Mr. Ramey:

Subject: Monthly Progress Report - Discharge Plans
Abo, Burton Flats, Bluitt Plants

Cities Service Company has proceeded with a number of activities during this first period which will lay a firm foundation for formulating discharge plans for each of our three plants. Primarily this has involved facility surveys, sampling, research and planning.

Facility surveys were conducted at each of the three plants on May 26 and 27, 1982 by the Manufacturing Services Environmental Section. These consisted basically of collecting current information on operations and equipment usage onsite. The information is essential and will be used later in conjunction with file information and sampling results. Also, the New Mexico Oil Conservation Division inspections of the three plants on June 8 and 9, further afforded us the opportunity to go over operations.

On sampling, we have completed the basic collection of samples and this has been accomplished in advance of the June 25 date which we stated in our letter of May 21, 1982. Samples were collected at Abo and Bluitt on May 26 and 27 and again at Bluitt on June 15. These are currently being analyzed at the Cities Service Central Analytical Laboratories in Tulsa. Additionally, samples were collected at Bluitt on June 8 by Bay Chemical, our water treating company, and the results have just become available. No samples were collected from Burton Flats since there are no continuous or intermittant flows going into the spill containment pond. Only emergency overflows are allowed into this pond.

Under research and planning we have done a number of things:

1. Soil, hydrogeological, and topographical quadrangle maps for the areas have been ordered. Plot plans from our drafting service have been ordered and received.

2. A formal request has been made internally for determinations on the possible usage or generation of toxic substances as listed under 1-101.X of the WQCC 81-2 regulations.

H1/073 1

3. A definitive timetable has been developed so that tasks may be accomplished in a sequence which will best assure compliance with the October 4, 1982, deadline.

4. A literature search for technical background information has been initiated.

In summary, we are on schedule and plan to continue devoting sufficient time and the resources necessary to assure compliance. Please contact me at (918) 561-2498 is you have any questions or comments.

Sincerely,

NATURAL GAS LIQUIDS DIVISION

Robert W Bonnell

for Steve Innes
Environmental Coordinator

SI/sm

H1/073 2

CITIES SERVICE

INTEROFFICE LETTER

June 11, 1982

To: Ken McDonnell

From: Clarence Patterson

Subject: Discharge Plans for Empire Abo and Burton Flats Plants.

On 6-9-82, Mr. Oscar Simpson from the New Mexico Oil Conservation Division, Energy and Minerals Department, made a tour of the Empire Abo and Burton Flats Plants. Also present were Mr. W. J. Templeton and Mr. Steve Innes from our Tulsa Office.

The purpose of this inspection was to inspect the Plant to aid in the assembling of the New Discharge Plans.

It was determined that Discharge Plans were necessary for both Burton and Abo. Mr. Innes and Mr. Templeton will take care of this.

It was also determined that we need to clean out and inspect the Evaporative Ponds annually.

There were no other problems located at Burton Flats or Empire Abo Plants.

cc: D. W. Kemp
W. J. Templeton
R. W. Bonnell
D. F. Southard
O. A. Simpson
file

CRP/jwf

40-108 (10-79)

INSPECTION INFORMATION FORM

CITIES SERVICE COMPANY WELCOMES YOU AS A VISITOR TO THIS PLANT. PROCEDURE NUMBER 20.00.0 REGULATES RELEASING INFORMATION BY OPERATING PERSONNEL TO VISITORS OR INSPECTORS OF CITI SERVICE FACILITIES. TO ENSURE AGAINST ENTRANCE OF UNAUTHORIZED AND UNQUALIFIED PERSONNE CITIES SERVICE REQUESTS THE FOLLOWING INFORMATION. YOUR COOPERATION WILL PERMIT THE RELEA OF DESIRED INFORMATION WITHOUT UNNECESSARY DELAY.

NAME Simpson (LAST), OSCAR (FIRST), A. (MIDDLE)

BUSINESS ADDRESS P.O Box 2088 (STREET OR BOX NUMBER), SANTA FE (TOWN)

N. M (STATE), 87501 (ZIP CODE)

ORGANIZATION REPRESENTING OIL CONSERVATION DIVISION (OCD)

PURPOSE OF VISIT OR INSPECTION? INSPECT PLANT FOR DISCHARGE PLAN TO BE SENT TO THE OCD

WHAT SPECIFIC AREA OF THE FACILITY DO YOU WANT TO INSPECT? ALL PLANT AREAS

UNDER WHAT AUTHORITY DO YOU MAKE THIS INSPECTION REQUEST? OCD RULES & REGULATIONS

WILL SAMPLES BE TAKEN? NONE IF SO, WHERE

DESCRIBE BRIEFLY EQUIPMENT USED TO TAKE SAMPLES, E.T., EXPLOSION PROOF OR NOT

NAME OF YOUR SUPERVISOR DICK STAMETS & JOE RAMEY

YOUR SUPERVISOR'S TITLE DIVISION DIRECTOR

YOUR SUPERVISOR'S PHONE NUMBER 827-2574

PLANT NAME Empire Abo

PLANT SUPERINTENDENT Clarence L Patterson

CITIES SERVICE COMPANY
BOX 300
TULSA, OKLAHOMA 74102

May 21, 1982

Mr. Joe D. Ramey, Director
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, N. M. 87501

RE: Discharge Plans for Abo, Burton Flats and Bluitt Plants

Dear Mr. Ramey:

In response to your letter dated May 7, 1982, Cities Service Company fully intends to comply with the provisions of Part 3 and other applicable parts of the Water Quality Control Commission Regulations adopted under the New Mexico Water Quality Act for our three New Mexico gas processing plants and intends to meet your October 4, 1982, deadline.

As indicated by our previous correspondence, these plants do not discharge contaminated water from our facilities; thus we thought that a discharge plan would not be required.

In order to meet your requirements, we shall proceed to formulate a discharge plan for each plant. We plan to properly sample our wastewaters as the first step in formulating our discharge plans for each of our plants as required in the regulations under Section 3-104. The sampling will be accomplished by June 25 and results will be available by July 21, 1982.

Review of the water analyses and assembling of the data will be completed and forwarded to your office for the required plans by October 4, 1982 as requested.

Your assistance in advising Cities Service Company of the discharge plan requirements and the laboratories available for testing has been greatly appreciated. We will proceed as expeditiously as possible to satisfy the regulatory requirements and will keep you informed with a monthly report of our progress.

Should you have any questions please call me at (918) 561-2641.

Very truly yours,

NATURAL GAS LIQUIDS DIVISION

W. J. Templeton
Measurement Manager

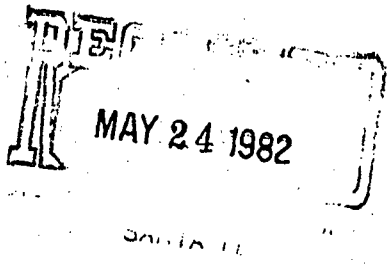
WJT/dg

cc: Mr. Oscar Simpson
Energy and Minerals Department
Oil Conservation Division

bcc: D. W. Kemp
K. G. McDonnell
D. V. Trew
D. F. Southard
D. G. Ellis
S. S. Innes

CITIES SERVICE COMPANY
BOX 300
TULSA, OKLAHOMA 74102

May 21, 1982



Mr. Joe D. Ramey, Director
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, N. M. 87501

RE: Discharge Plans for Abo, Burton Flats and Bluitt Plants

Dear Mr. Ramey:

In response to your letter dated May 7, 1982, Cities Service Company fully intends to comply with the provisions of Part 3 and other applicable parts of the Water Quality Control Commission Regulations adopted under the New Mexico Water Quality Act for our three New Mexico gas processing plants and intends to meet your October 4, 1982, deadline.

As indicated by our previous correspondence, these plants do not discharge contaminated water from our facilities; thus we thought that a discharge plan would not be required.

In order to meet your requirements, we shall proceed to formulate a discharge plan for each plant. We plan to properly sample our wastewaters as the first step in formulating our discharge plans for each of our plants as required in the regulations under Section 3-104. The sampling will be accomplished by June 25 and results will be available by July 21, 1982.

Review of the water analyses and assembling of the data will be completed and forwarded to your office for the required plans by October 4, 1982 as requested.

Your assistance in advising Cities Service Company of the discharge plan requirements and the laboratories available for testing has been greatly appreciated. We will proceed as expeditiously as possible to satisfy the regulatory requirements and will keep you informed with a monthly report of our progress.

Should you have any questions please call me at (918) 561-2641.

Very truly yours,

NATURAL GAS LIQUIDS DIVISION

W. J. Templeton
Measurement Manager

WJT/dg

cc: Mr. Oscar Simpson
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088

CITIES SERVICE COMPANY
BOX 300
TULSA, OKLAHOMA 74102

May 11, 1982

Mr. Oscar Simpson
New Mexico Oil Conservation Div.
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Simpson:

Subject: Bluitt, Abo and Burton Flats Plants
Discharge Plans

Cities Service would like to go ahead and get things in motion so that we may file discharge plans for our three New Mexico Gas Processing Plants as apparently required.

We need to know what specifically needs to be submitted in the plans, and especially what water quality parameters need to be sampled and tested. In our phone conversations of March 12 and March 30, 1982, you indicated that you would send us this type of information and also what laboratories were available and qualified in the area to run the required tests. We have not yet received this information.

Additionally, can you advise us of possible sources of information for our different sites on (a) ground water depths and compositions; (b) flooding potential and (c) rock depth and lithological description. We would certainly be most appreciative.

Sincerely,

NATURAL GAS LIQUIDS DIVISON

Steve Innes
Environmental Coordinator

SI:jk
G2/D/T

915 561-2405

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

May 7, 1982

Cities Service Company
Natural Gas Liquids Division
P.O. Box 300 (817-CSB)
Tulsa, OK 74102

ATTENTION: Mr. Steve Innes, Environmental Coordinator

RE: Discharge Plans for Abo, Bluit, and Burton Flats Plants

Dear Sir:

The Oil Conservation Division (OCD) has been patient and lenient with Cities Service Company in regards to the non-submittal of discharge plans for Abo, Bluit and Burton Flats Plants. The OCD will require discharge plans to be submitted within 150 days from the date of this letter, with the due date designated as October 4, 1982. The OCD will not grant Cities Service Company any extensions of time beyond the October 4, 1982, deadline. Cities Service Company is advised to submit complete and in depth discharge plans in accordance to the accompanying OCD recommended discharge plan guidelines.

Cities Service Company is required to submit monthly progress reports for each plant outlining accomplishments or progress towards fulfilling the OCD guidelines of the WQCC regulations for a discharge plan.

If Cities Service Company fails to meet the October 4, 1982, final deadline, the OCD will take legal action under the provisions of the New Mexico Oil and Gas Act (Section 70-2-31) and the New Mexico Water Quality Act (Section 74-6-10). Violations of these Acts are punishable by civil penalties of up to $1,000 per day for each day of each violation.

I request that you or other representatives of Cities Service Company demonstrate any solid reasons which you may have for your apparent disregard of the directions of the representatives of this agency and also provide to this agency a firm commitment to the October 4, 1982, deadline. This request for firm time frame commitment is necessitated by the failure of Cities Service Company to submit discharge plans on previously established deadlines. (Refer to photo copies of previous correspondence.)

cc Artesia
Hobbs

cc DW Kemp
WJ Templeton
RW Bonnell
DF Southard
DG Ellis
KG McDonnell
JS Eliot

y 7, 1982

Thank you for your prompt attention to this matter. If you have any questions regarding this letter, please do not hesitate to contact me or Oscar Simpson at (505) 827-2534.

Sincerely,

Joe D. Ramey
Director

JDR/OS/dp

Enc.

Letter received 5/17/82

3-12-82

Called 9:45 AM Cities Service Co
Natural Gas Liquids Div.
Stan Innes
Environmental Coordinator
P.O. Box 300 817 CSB
Tulsa OKLa 74102
PH 918-561-2498

Informed him haven't received DP for
Abo Plant
Bluit Plant
Barton Flats Plant

- will send revised WQCC regs, letter of explanation, + list of labs.

- Warned of seriousness of not sending DP

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

May 7, 1981

Cities Service Company
Box 300
Tulsa, Oklahoma 74102

Attention: Mr. R. H. Willison

Re: Cities Service Company
Abo and Burton Flats
Plants Discharge Plan

Gentlemen:

In response to your letter dated May 1, 1981, the Oil Conservation Division feels that a discharge plan as outlined in the Water Quality Control Commission Regulations particularly Part 3, Water Quality Control is required of Cities Service Company Abo and Burton Flats Plants and within the time limit of Section 3-106A.

The proposed discharge plans should be comprehensive and specific in all areas as outlined in Sections 3-106 (c) and 3-107.

Enclosed is a copy of Division Order R-3221-C and Specifications for the Design and Construction of Lined Evaporation Pits which will help clarify part of our telephone conversation of May 7, 1981.

If you have any questions or need any additional information please call me or Joe Ramey (Division Director) at (505) 827-2534.

Sincerely,

OSCAR A. SIMPSON III
Water Resources Specialist

OS/og
Encl.

CITIES SERVICE COMPANY
BOX 300
TULSA, OKLAHOMA 74102

May 1, 1981

Mr. Joe D. Ramey, Director
New Mexico Energy and Minerals Department
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Re: Cities Service Company
Abo and Burton Flats Plants
Discharge Plan

Dear Mr. Ramey:

In response to your letter dated April 9, 1981, Cities Service Company does not feel that a discharge plan as outlined in Section 1-101.1 of the New Mexico regulations, should be required for either the Abo or Burton Flats gas processing plants.

It is our understanding that a discharge plan is required for plants which have effluent discharges or leachate which may move directly or indirectly into the ground water. The ground water could not be contaminated from either of these locations since the effluent from both plants is discharged into evaporation lagoons which are lined with reinforced neoprene.

If you have any questions or need additional information, please contact me or Mr. W. J. Templeton at (918) 561-2498 or 561-2641.

Very truly yours,

NATURAL GAS LIQUIDS DIVISION

R. H. Willison
Environmental Coordinator

RHW:cl

Steve Ames 561-2498

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

Oscar

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

April 9, 1981

Cities Service Company
Box 300
Tulsa, Oklahoma 74102

Re: Request for Discharge Plan

Gentlemen:

Under the provisions of the regulations of the Water Quality Control Commission you are hereby notified that the filing of a discharge plan for Cities Service Company's Abo Plant (15-17S-27E) and Burton Flats Plant (14-20S-28E) is required. Discharge plans are defined in Section 1-101.1 of the regulations and a copy of the regulations is enclosed for your convenience.

These plans should cover all discharges of effluent at the plant sites or adjacent to the plant sites. Section 3-106A. of the regulations requires submittal of the discharge plans within 120 days of receipt of this notice unless an extension of this time period is sought and approved.

The discharge plan should be prepared in accordance with Part 3 of the Regulations. Due to a recent court decision references to "toxic pollutants" may be ignored.

If there are any questions on this matter, please do not hesitate to call me or Oscar Simpson at 827-3260. Mr. Simpson has been assigned responsibility for review of all discharge plans.

Very truly yours,

JOE D. RAMEY
Division Director

JDR/OS/og
enc.
cc: Oil Conservation Division - Hobbs
Cities Service Co. Abo Plant, P. O. Box 158, Artesia
Cities Service Co., Burton Flats Plant, P. O. Box 939
Carlsbad, N. Mex. 88220