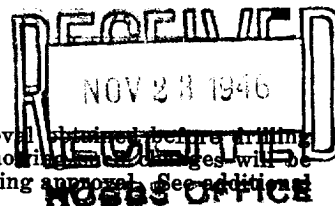


**DUPLICATE**

**NEW MEXICO OIL CONSERVATION COMMISSION**

Santa Fe, New Mexico

**NOTICE OF INTENTION TO DRILL**



Notice must be given to the Oil Conservation Commission or its proper agent and approval obtained before drilling begins. If changes in the proposed plan are considered advisable, a copy of this notice showing such changes will be returned to the sender. Submit this notice in triplicate. One copy will be returned following approval. See additional instructions in Rules and Regulations of the Commission.

Fort Worth, Texas

November 19, 1946

Place

Date

OIL CONSERVATION COMMISSION,  
Santa Fe, New Mexico,

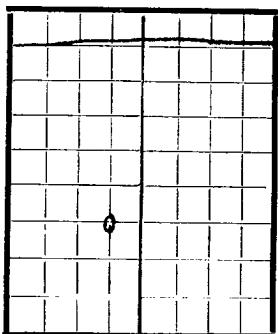
Gentlemen:

You are hereby notified that it is our intention to commence the drilling of a well to be known as Texas Pacific Coal and Oil Co. State New Mexico "A" No. 2 Well No. 38 in SW 1/4 of Sec. 9, T. 22-S, R. 36-E, N. M., P. M., So. Dunice Field, Lea County.

Company or Operator

Lease

N



AREA 640 ACRES

LOCATE WELL CORRECTLY

The well is 1980 feet (N.) of the South line and 1980 feet (E.) of the West line of Section

(Give location from section or other legal subdivision lines. Cross out wrong directions.)

If state land the oil and gas lease is No. \_\_\_\_\_ Assignment No. \_\_\_\_\_

If patented land the owner is \_\_\_\_\_

Address \_\_\_\_\_

If government land the permittee is \_\_\_\_\_

Address \_\_\_\_\_

The lessee is \_\_\_\_\_

Address \_\_\_\_\_

We propose to drill well with drilling equipment as follows: Rotary tools

The status of a bond for this well in conformance with Rule 39 of the General Rules and Regulations of the Commission is as follows: Required bond on file

We propose to use the following strings of casing and to land or cement them as indicated:

Size of Hole	Size of Casing	Weight Per Foot	New or Second Hand	Depth	Landed or Cemented	Sacks Cement
15	12 1/2	50#	S.H.	400	Cemented	185
11	8 5/8	32	New	1600	"	200
7 7/8	5 1/2	14	New	2800	"	500

If changes in the above plan become advisable we will notify you before cementing or landing casing. We estimate that the first productive oil or gas sand should occur at a depth of about \_\_\_\_\_ feet.

Additional information:

NOV 23 1946

Approved \_\_\_\_\_, 19\_\_\_\_

except as follows:

Sincerely yours,

TEXAS PACIFIC COAL AND OIL COMPANY

Company or Operator

By [Signature]

Position Agent

Send communications regarding well to

Name R. J. Fleckenstein

Address P. O. Box 2110, Fort Worth 1, Texas

OIL CONSERVATION COMMISSION,

By Roy Garbrouck

Title Oil & Gas Inspector

# 1. Introduction

The purpose of this report is to provide a comprehensive overview of the current state of the art in the field of artificial intelligence (AI) and its applications. This report will discuss the various sub-fields of AI, including machine learning, natural language processing, and computer vision, and will explore the challenges and opportunities associated with these technologies. The report will also discuss the ethical implications of AI and the need for responsible AI development.

The report is organized as follows:

## 2. Background

The field of artificial intelligence (AI) has a long and rich history, dating back to the early 20th century. The term "artificial intelligence" was first coined in 1956 at the Dartmouth Conference, which is widely considered to be the birth of AI as a formal academic discipline.

Over the years, AI has evolved from a purely theoretical pursuit to a practical technology that is now being used in a wide variety of applications, from healthcare to finance to transportation. This evolution has been driven by advances in computer hardware and software, as well as by the growing availability of data.

There are several key sub-fields of AI, each of which has its own unique challenges and opportunities:

- Machine learning (ML) is a subset of AI that focuses on the development of algorithms that can learn from data and make predictions or decisions based on that data.

- Natural language processing (NLP) is a subset of AI that focuses on the development of algorithms that can understand and generate human language.

- Computer vision (CV) is a subset of AI that focuses on the development of algorithms that can understand and interpret visual information from the world.

Each of these sub-fields has its own set of challenges and opportunities, and they often overlap with one another.

For example, machine learning is often used in natural language processing and computer vision, and computer vision is often used in machine learning.

Despite the challenges, the potential of AI is enormous, and it is expected that it will continue to play a major role in the development of technology in the years to come.

The following sections of this report will provide a more detailed overview of each of these sub-fields and the challenges and opportunities associated with them.

2.1 Machine Learning

Machine learning (ML) is a subset of artificial intelligence (AI) that focuses on the development of algorithms that can learn from data and make predictions or decisions based on that data.

There are three main types of machine learning: supervised learning, unsupervised learning, and reinforcement learning.

Supervised learning is the most common type of machine learning, and it involves training an algorithm on a dataset of labeled examples so that it can learn to make predictions on new, unlabeled data.

Unsupervised learning is a type of machine learning that involves training an algorithm on a dataset of unlabeled examples so that it can learn to find patterns or structure in the data.

Reinforcement learning is a type of machine learning that involves training an algorithm to learn how to take actions in an environment in order to maximize a reward.

Machine learning has a wide range of applications, from spam filtering to image recognition to recommendation systems.

One of the main challenges of machine learning is the need for large amounts of data to train the algorithms. This is because the algorithms need to learn from a wide variety of examples in order to be able to generalize to new data.

Another challenge of machine learning is the need for computational resources. Training machine learning algorithms can be very computationally intensive, and this can be a major barrier to their use in some applications.

Despite these challenges, machine learning is a rapidly growing field, and it is expected that it will continue to play a major role in the development of technology in the years to come.

2.2 Natural Language Processing

Natural language processing (NLP) is a subset of artificial intelligence (AI) that focuses on the development of algorithms that can understand and generate human language.

There are two main types of NLP: understanding and generation. Understanding NLP involves developing algorithms that can understand the meaning of human language, while generation NLP involves developing algorithms that can generate human language.

Understanding NLP is a much more difficult task than generation NLP, and it is the focus of much of the current research in the field.

One of the main challenges of understanding NLP is the need for large amounts of data to train the algorithms. This is because the algorithms need to learn from a wide variety of examples in order to be able to understand the meaning of human language.

Another challenge of understanding NLP is the need for computational resources. Training understanding NLP algorithms can be very computationally intensive, and this can be a major barrier to their use in some applications.

Despite these challenges, understanding NLP is a rapidly growing field, and it is expected that it will continue to play a major role in the development of technology in the years to come.

2.3 Computer Vision

Computer vision (CV) is a subset of artificial intelligence (AI) that focuses on the development of algorithms that can understand and interpret visual information from the world.

There are two main types of CV: understanding and generation. Understanding CV involves developing algorithms that can understand the meaning of visual information, while generation CV involves developing algorithms that can generate visual information.

Understanding CV is a much more difficult task than generation CV, and it is the focus of much of the current research in the field.

One of the main challenges of understanding CV is the need for large amounts of data to train the algorithms. This is because the algorithms need to learn from a wide variety of examples in order to be able to understand the meaning of visual information.

Another challenge of understanding CV is the need for computational resources. Training understanding CV algorithms can be very computationally intensive, and this can be a major barrier to their use in some applications.

Despite these challenges, understanding CV is a rapidly growing field, and it is expected that it will continue to play a major role in the development of technology in the years to come.

2.4 Ethical Implications of AI

As artificial intelligence (AI) continues to advance, it is important to consider the ethical implications of these technologies. There are several key ethical issues that are associated with AI, including privacy, security, and bias.

Privacy is a major concern because AI systems often collect and analyze large amounts of data, and this data can be used to track and identify individuals. This raises the question of how much data should be collected and how it should be used.

Security is another major concern because AI systems can be used to develop weapons or to carry out other malicious activities. This raises the question of how to ensure that AI systems are used for good and not for evil.

Bias is a third major concern because AI systems can learn from biased data and make biased decisions. This raises the question of how to ensure that AI systems are fair and unbiased.

These are just a few of the ethical issues that are associated with AI, and it is important to continue to research and discuss these issues as the technology continues to advance.