

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED  
OMB NO. 1004-0137  
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*5. Lease Serial No.  
NMLC068408

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.  
NNNM68294X8. Well Name and No.  
BIG EDDY UNIT D14 270H9. API Well No.  
30-015-4247910. Field and Pool or Exploratory Area  
GATUNA CANYON; BONE SPRING11. County or Parish, State  
EDDY COUNTY COUNTY, NM**SUBMIT IN TRIPLICATE - Other instructions on page 2**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other2. Name of Operator  
XTO ENERGY, INCContact: ELIZABETH ZASTOUPIL  
E-Mail: elizabeth\_zastoupil@xtoenergy.com3a. Address  
801 HOUSTON ST  
FORT WORTH, TX 761023b. Phone No. (include area code)  
Ph: 817-885-67504. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 5 T20S R31E NWNE 700FNL 2220FEL**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

XTO Energy, Inc respectfully requests a sundry approval to place 7 seismometer stations throughout Big Eddy Unit, Old Indian Draw Unit, and Poker Lake Unit.

A separate sundry will be submitted for each station, as it will be tied to a producing well.

I have attached documents and maps that detail location and surface information.

RECEIVED

MAY 07 2018

DISTRICT II-ARTESIA O.C.D.

5-9-18  
Accepted for record - NMOCD

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #398848 verified by the BLM Well Information System  
For XTO ENERGY, INC, sent to the Carlsbad  
Committed to AFMSS for processing by DEBORAH MCKINNEY on 04/19/2018 ()

Name (Printed/Typed) ELIZABETH ZASTOUPIL

Title GEOLOGY TECHNICIAN

Signature (Electronic Submission)

Date 12/21/2017

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\***

## **Purpose of Project**

The purpose of the interactive seismic monitoring array to be provided by Spectraseis/ESG is to provide a fast, accurate, and reliable means for XTO to monitor their field development operations in New Mexico for seismic activity. Spectraseis/ESG will install a nine-station (seven stations on federal acreage) interactive seismic monitoring array, designed to accurately monitor the area for seismic activity. XTO will be renting from Spectraseis/ESG nine complete monitoring stations consisting of: nine sensors, nine digitizers, solar panels and fencing. Spectraseis/ESG will incorporate public stations into the array, as they become available, to enhance the array's recording capability. In summary, Spectraseis/ESG will design interactive seismic monitoring to detect earthquakes to a magnitude of completeness of Mw 1.5 within XTO's area of interest.

## **Description of Equipment Installation**

Installation of nine (seven on BLM acreage) rented broadband interactive seismic monitoring stations surrounding XTO's area of interest will proceed as follows:

1. Walk to station location from nearest access road (longest distance from access road will be 183' at Station 203). All seismometer locations were scouted beforehand to ensure no brush clearing would be needed.
2. Dig ~30" deep hole and place barrel in the hole at station location.
3. Pour cement into the barrel until half way full; let dry for 12 hours.
4. Place sensor with cable and mount on top of cement in barrel.
5. Set up batteries, digitizer, modem, solar panel, and cell booster into standalone junction box and connect all equipment to power.
6. Set up GPS and cell antennae next to junction box.
7. Once all equipment is connected and functioning, seal off cable holes in junction box and barrel with water protectant.
8. Set up perimeter fencing around station to protect from wildlife and other hazards (10'x10' footprint). Round pipe fencing panels made of steel will be used around the perimeter. Approximate distance between the fence and equipment will be 2.5 feet.
9. Installation will take approximately 12-24 hours for each station.

## **Maintenance**

Spectraseis/ESG performs maintenance on each station quarterly in order to keep the sensors level and all equipment functional. Should unforeseen equipment issues arise (i.e. unusual readings due to equipment failure), Spectraseis/ESG will be performing maintenance on an as-needed basis. This is the only additional traffic anticipated to each seismometer location.

## **Additional Noise**

All of the seismometer equipment will operate well below 75 decibels of noise.

## **Lifetime**

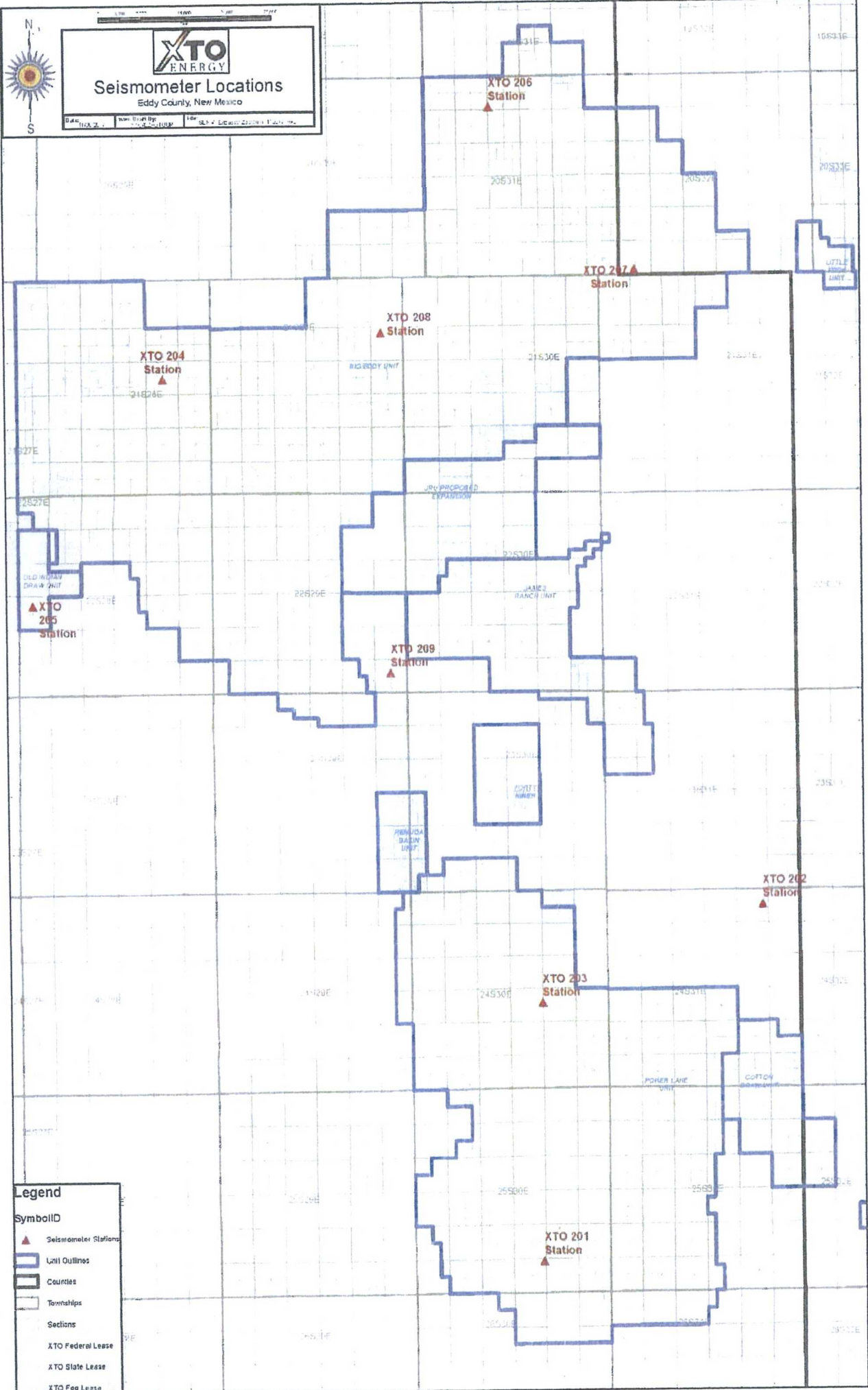
Seismic monitoring stations will retain their installed locations for 25 years, or until XTO's contract terminates with Spectraseis/ESG, whichever occurs first.

## **XTO's Area of Interest**

XTO's area of interest is depicted in the overview map on the next page. Individual Google Earth images of each station have also been included.

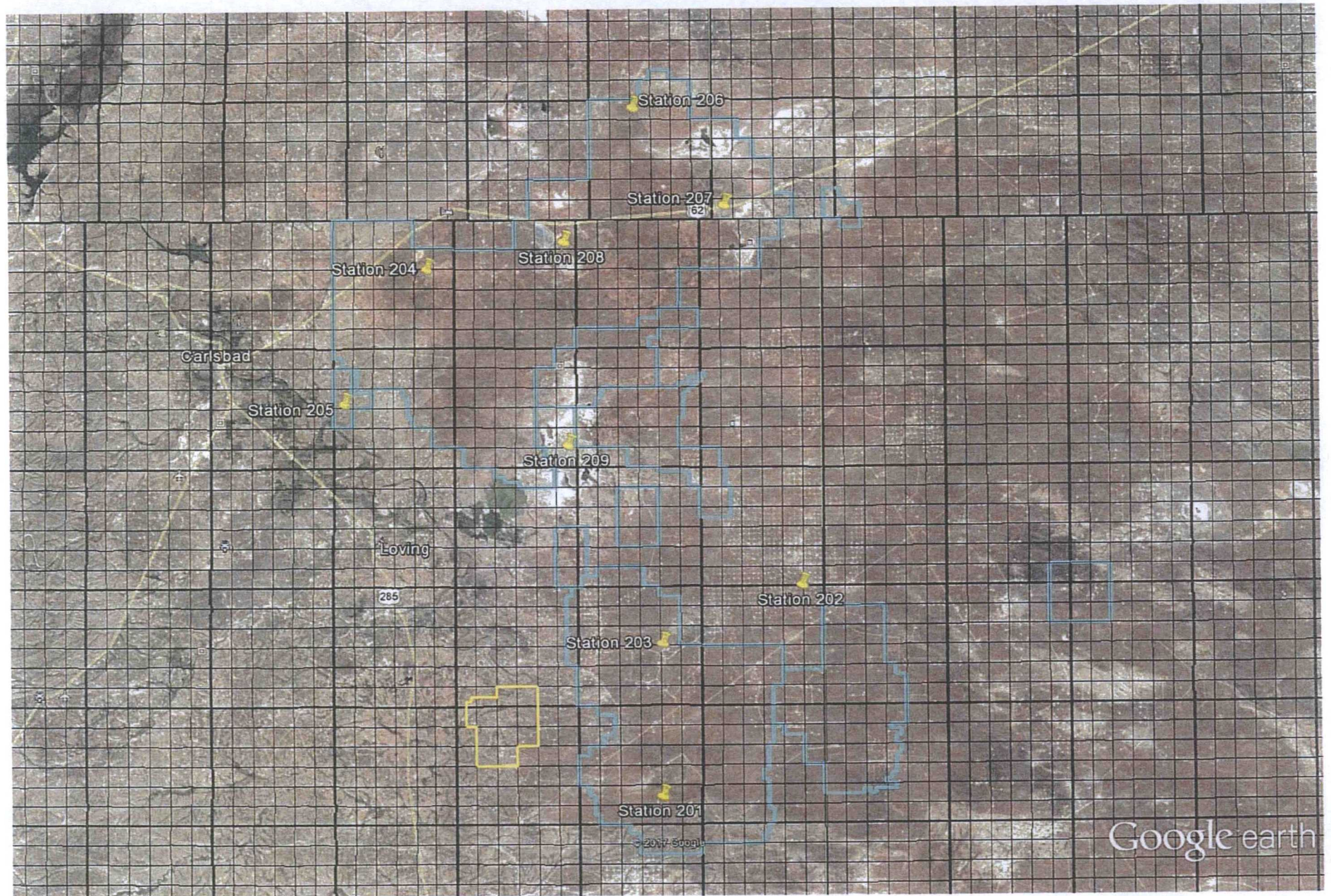
### Monitoring Station Information

Station		XTO/BOPCO										Distance From	
Number	Latitude_83	Longitude_83	County	Township	Range	Section	Lease	BLM/State	Unit	Lease Num	Nearest Producing Well	API	Station (Ft)
201	32.093021	-103.861308	Eddy	25S	30E	34	Yes	BLM	Poker Lake	NMNM 0005039A	Poker Lake Unit 421H	30015410330000	1,12
203	32.204673	-103.860495	Eddy	24S	30E	22	Yes	BLM	Poker Lake	NMNM 0002862	Poker Lake Unit 324H	30015406850000	53
204	32.479605	-103.056895	Eddy	21S	28E	14	Yes	BLM	Big Eddy	NMLC 0069219	Big Eddy Unit 92	30015240830000	2,12
205	32.381146	-104.127381	Eddy	22S	28E	19	Yes	BLM	Old Indian Draw	NMNM 0415461	Big Eddy Unit 218	30015362970000	7,02
206	32.596577	-103.882583	Eddy	20S	31E	5	Yes	BLM	Big Eddy	NMLC 0068408	Big Eddy Unit D14 270H	30015424790000	4,64
207	32.525056	-103.80624	Lea	20S	32E	31	Yes	BLM	Big Eddy	NMLC 0065751A	Big Eddy Unit D15 4H	30015403970000	16,69
208	32.498793	-103.941386	Eddy	21S	29E	12	Yes	BLM	Big Eddy	NMNM 0006747	Big Eddy Unit D128 277H	30015425680000	12,48





## XTO Seismometer Station – Project Overview





## Seismometer Station 201





## Seismometer Station 203



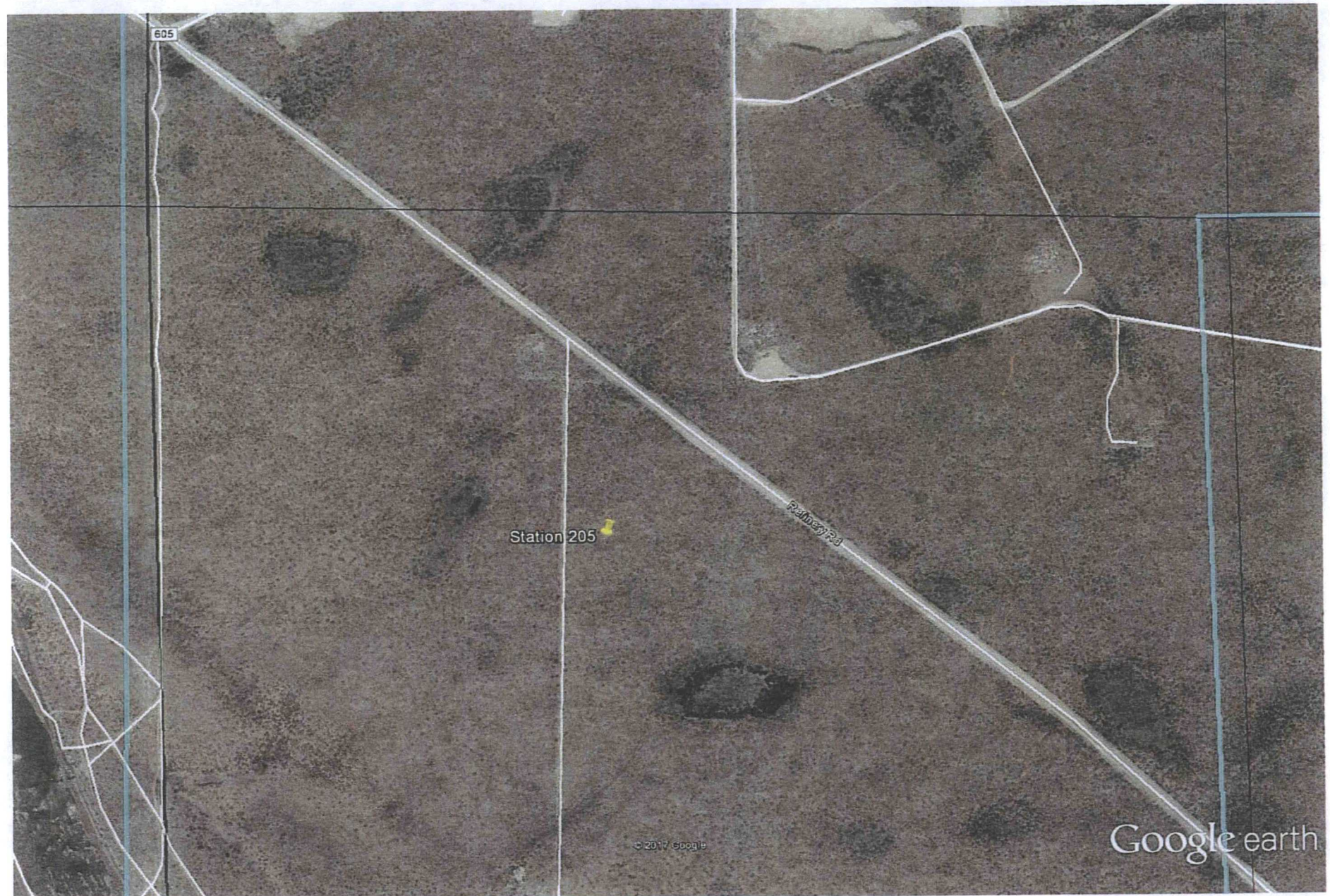


## Seismometer Station 204



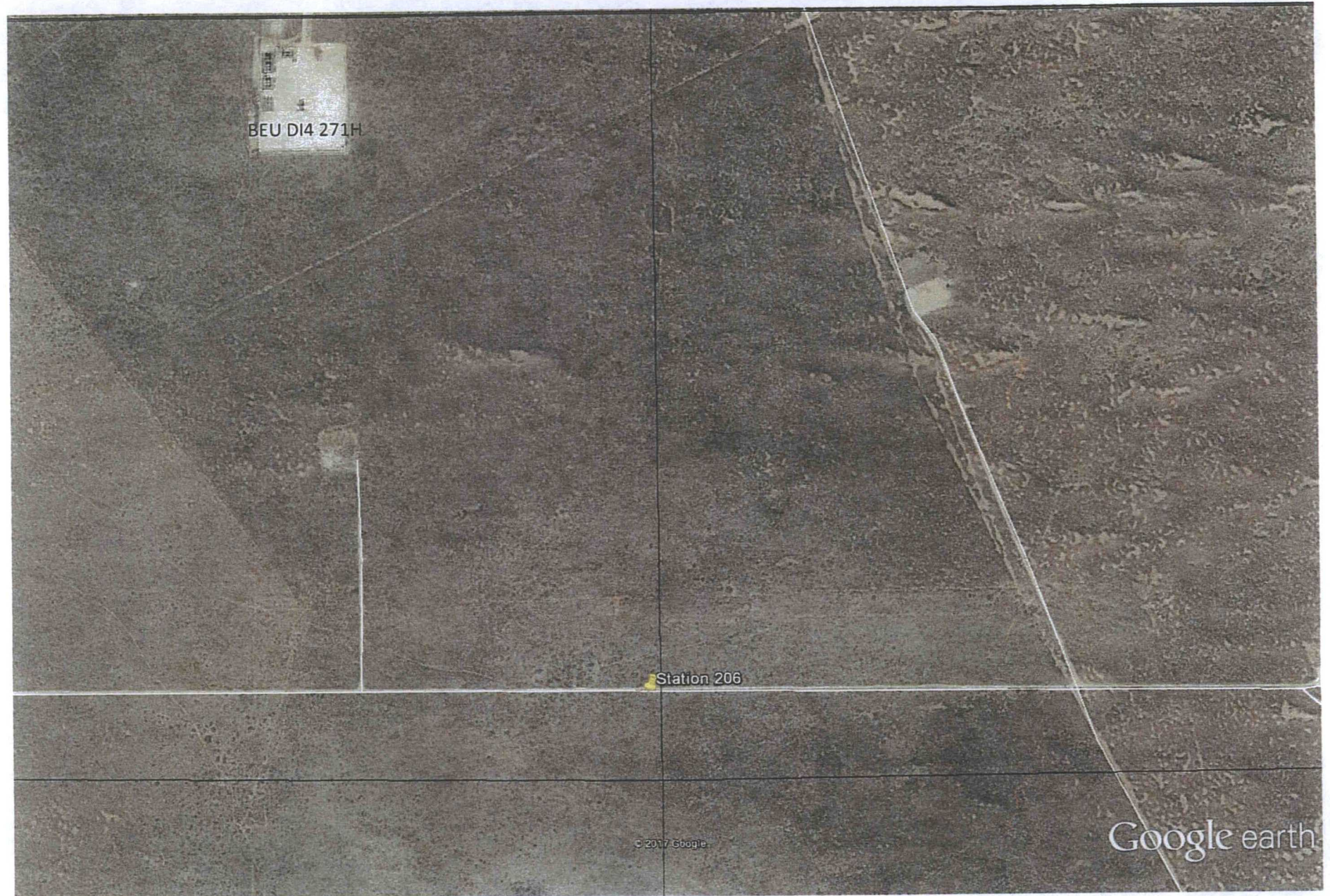


## Seismometer Station 205





## Seismometer Station 206





## Seismometer Station 207





## Seismometer Station 208

