

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.*

<b>SUBMIT IN TRIPLICATE - Other instructions on page 2</b>		5. Lease Serial No. NMNM06747
1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator XTO ENERGY, INC		7. If Unit or CA/Agreement, Name and/or No. NMNM68294X
Contact: ELIZABETH ZASTOUPIL E-Mail: elizabeth_zastoupil@xtoenergy.com		8. Well Name and No. BIG EDDY UNIT DI28 277H
3a. Address 801 HOUSTON ST FORT WORTH, TX 76102	3b. Phone No. (include area code) Ph: 817-885-6750	9. API Well No. 30-015-42568
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 15 T21S R29E NWNW 939FNL 889FWL		10. Field and Pool or Exploratory Area WC015G08S212915D;BONESPRI
		11. County or Parish, State EDDY COUNTY COUNTY, NM

## 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 recomple 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 stations, as it will be tied to a producing well.

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

RECEIVED

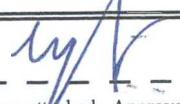
MAY 07 2018

SC 5-9-18  
Accepted for record - NMOC

DISTRICT II-ARTESIA O.C.D.

14. I hereby certify that the foregoing is true and correct. Electronic Submission #398850 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 AFM-RESOURCES	Date 02 May 2018
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 LLNMP02000

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**

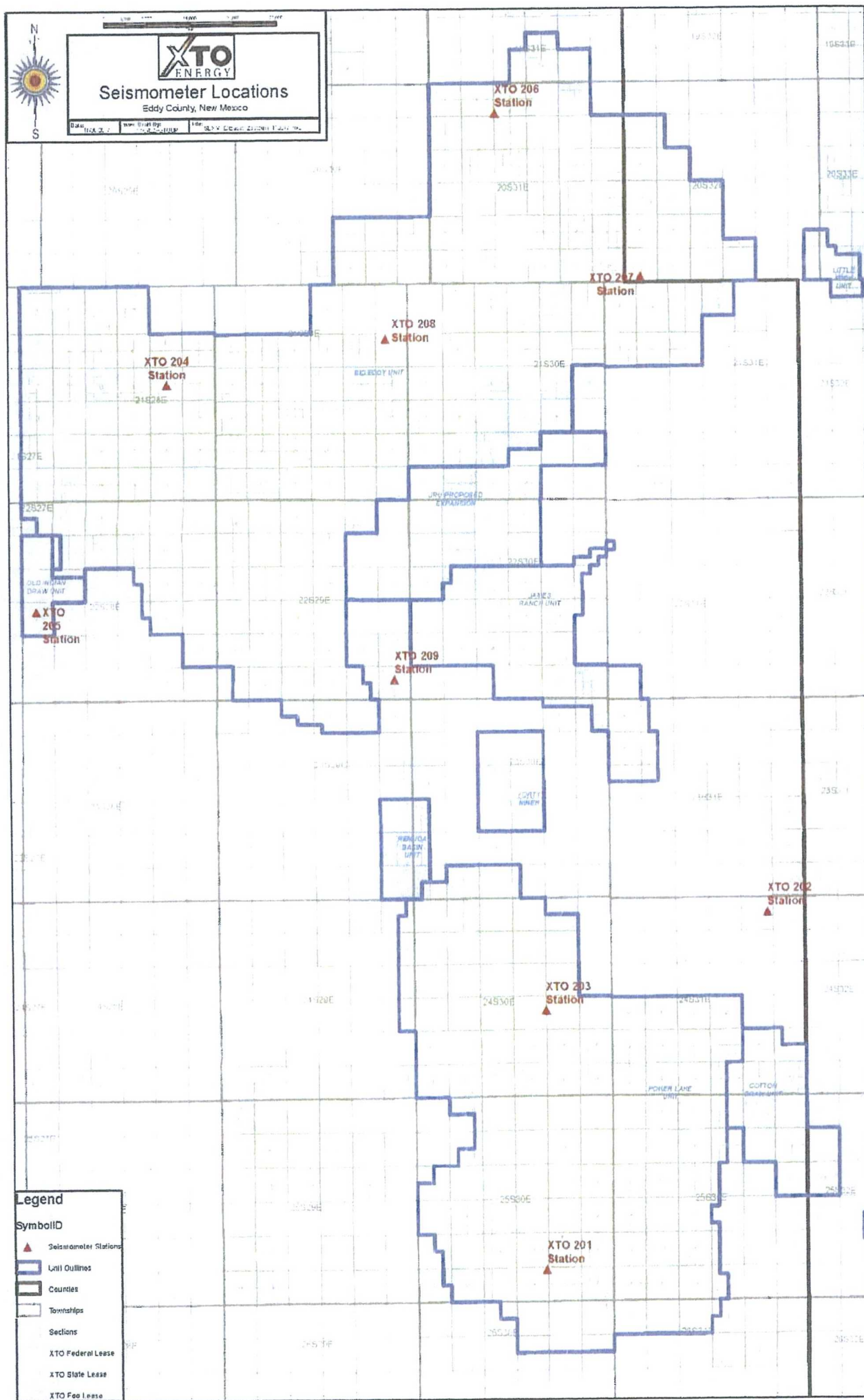
Seismic monitoring stations will retain their installed locations for 25 years, or until XTO's contract terminates with Spectraseis/ESG, whichever occurs first.

## **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.

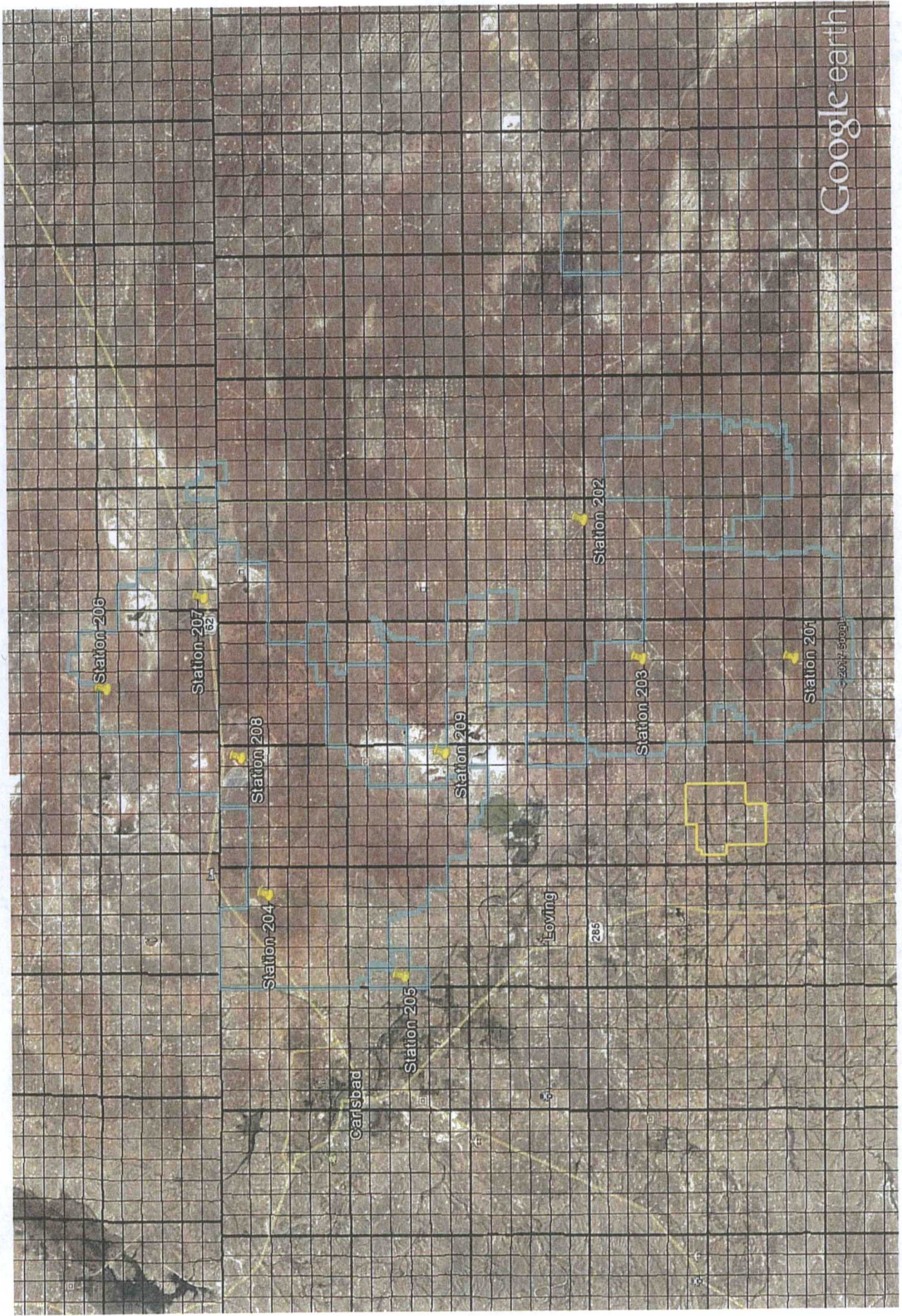
# Monitoring Station Information

Station Number	Latitude_83	Longitude_83	County	Township	Range	Section	XTO/BOPCO		BLM/State	Unit	Lease Num	Nearest Producing Well	API	Distance From Station (Ft)
							Lease							
201	32.093021	-103.861308	Eddy	25S	30E	34	Yes		BLM	Poker Lake	NMNM 0005039A	Poker Lake Unit 421H	30015410330000	1,122
203	32.204673	-103.860495	Eddy	24S	30E	22	Yes		BLM	Poker Lake	NMNM 0002862	Poker Lake Unit 324H	30015406850000	538
204	32.479605	-103.056895	Eddy	21S	28E	14	Yes		BLM	Big Eddy	NMLC 0069219	Big Eddy Unit 92	30015240830000	2,129
205	32.381146	-104.127381	Eddy	22S	28E	19	Yes		BLM	Old Indian Draw	NMNM 0415461	Big Eddy Unit 218	30015362970000	7,022
206	32.596577	-103.882583	Eddy	20S	31E	5	Yes		BLM	Big Eddy	NMLC 0068408	Big Eddy Unit DI4 270H	30015424790000	4,649
207	32.525056	-103.80624	Lea	20S	32E	31	Yes		BLM	Big Eddy	NMLC 0065751A	Big Eddy Unit DI5 4H	30015403970000	16,690
208	32.498793	-103.941386	Eddy	21S	29E	12	Yes		BLM	Big Eddy	NMNM 0006747	Big Eddy Unit DI28 277H	30015425680000	12,488





## XTO Seismometer Station – Project Overview





## Seismometer Station 201





## Seismometer Station 203



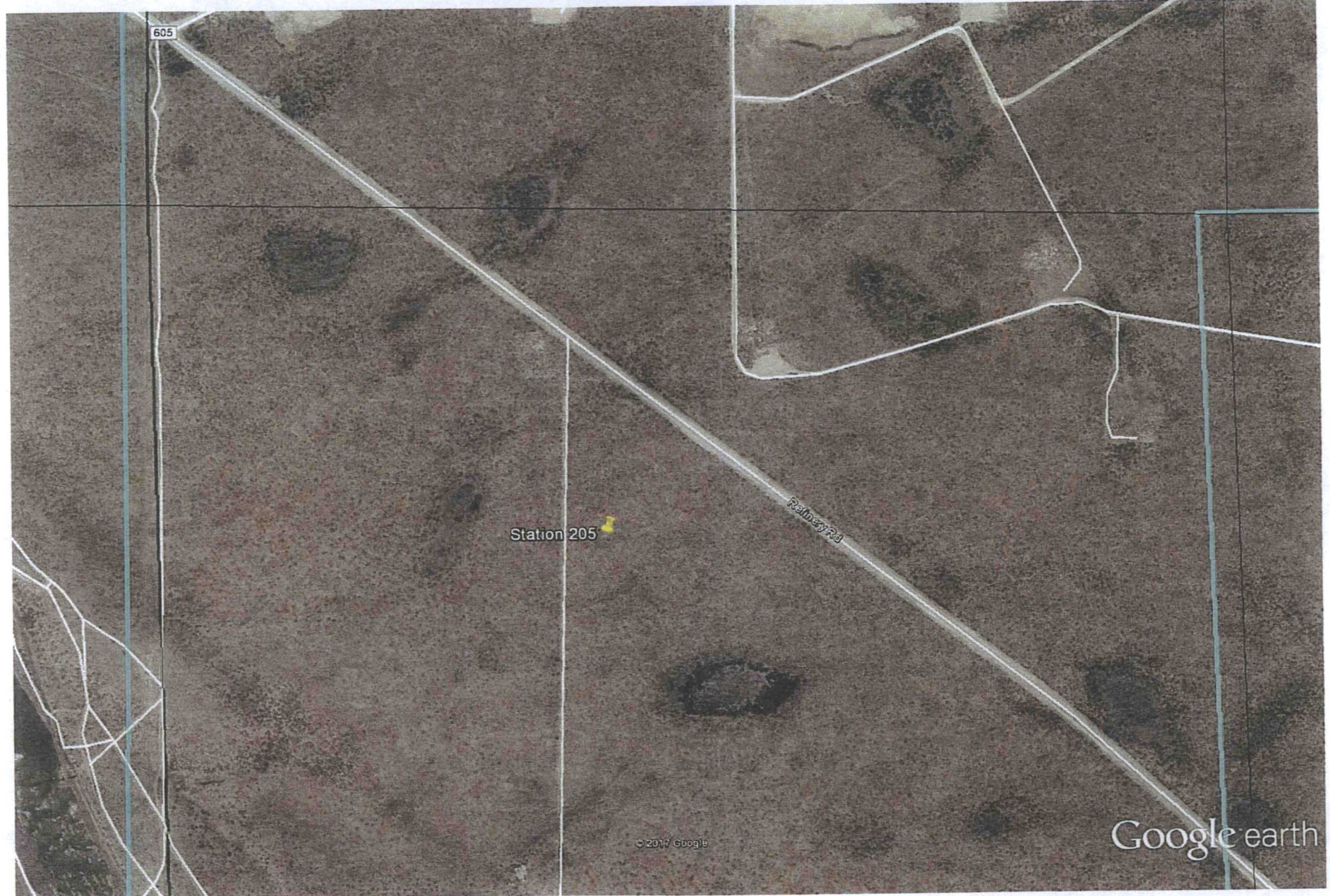


## Seismometer Station 204





## Seismometer Station 205





## Seismometer Station 206



BEU DI4 271H

Station 206

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Google earth



## Seismometer Station 207





## Seismometer Station 208

