

3R - 293

**GENERAL
CORRESPONDENCE**

YEAR(S):
1990



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

May 31, 1990

R. E. Mathis
Mesa Limited Partnership
One Mesa Square
P. O. Box 2009
Amarillo, Texas 79189-2009

Dear Mr. Mathis:

The New Mexico Oil Conservation Division (NMOCD) has reviewed and approves of Mesa Limited Partnership's May 23, 1990 proposal to install cathodically protected, double-lined steel underground tanks with a leak detection system for on-site storage of produced hydrocarbons at the Scott 1 and Scott 1E well sites located in Section 2. Township 29 North, Range 13 West.

The NMOCD requests that you notify the Aztec NMOCD office prior to installation of the tanks such that NMOCD may be given the opportunity to witness the installation.

Please be advised that NMOCD approval of this proposal does not relieve you of liability should your operation result in actual pollution of surface water, ground water or the environment which may be actionable under other laws and/or regulations. If you have any questions, please call me at (505) 827-5885.

Sincerely,

William C. Olson
Hydrogeologist

WCO/si

cc: F. Chavez, NMOCD Aztec Office



30 MAY 29 AM 10 02

May 23, 1990

New Mexico Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Attention: David G. Boyer, Chief
Environmental Bureau

Subject: Underground Tank Installation
Scott 1 & 1E, Section 2, T29N, R13W
San Juan County, New Mexico

Mesa is required by the City of Farmington Fire Code Regulations to install below ground tanks for produced hydrocarbons at the subject well sites.

Mesa proposes to install two "Sti-P₃ Horizontal Type I Double-Wall", steel cathodically protected underground tanks with a "soil sentry" leak detection system as per the attached using licensed installers. It is anticipated that a 6,000 gallon tank will be installed at the Scott 1E and a 4,000 gallon tank at the Scott 1 well site.

Please advise as soon as possible if this installation meets the requirements of NMOCC regulations.

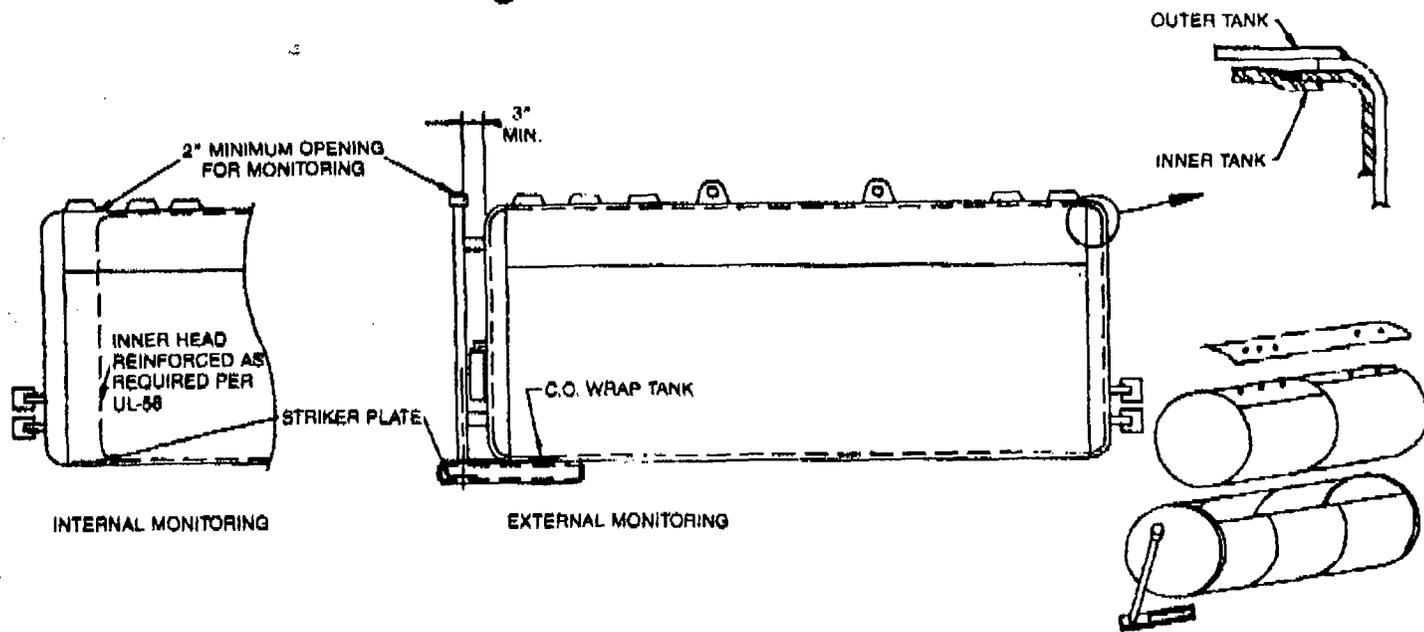
Sincerely,

R. E. Mathis, C.E.P.
Regulatory Agent

dp

xc: NMOCD - Aztec
Production Engineering
Regulatory

sti-P® Horizontal Type I Double-Wall Underground Tanks



sti-P3 Horizontal Type I Double-Wall Underground Tanks

CAPACITY (Gallons)	INNER TANK		MIN. THK.	OUTER TANK		WEIGHT POUNDS
	DIAMETER	LENGTH		SHELL MIN. THK.	HEAD MIN. THK.	
580	4'	6'	10 ga.	.135"	.135"	1100
1000	64"	6'	10 ga.	.135"	.135"	1600
2000	64"	12'	7 ga.	.135"	.179"	2895
3000	64"	18'	7 ga.	.135"	.179"	4700
4000	7'	13'10"	7 ga.	.135"	.179"	4980
6000	8'	16'	1/4"	.135"	.179"	7570
8000	8'	21'	1/4"	.135"	.179"	10060
10000	8'	27'	1/4"	.135"	.179"	12430
12000	8'	32'	1/4"	.135"	.179"	14410
15000	11'	21'	5/16"	.179"	1/4"	18940
15000	10'	25'6"	5/16"	.179"	1/4"	19700
20000	11'	28'	5/16"	.179"	1/4"	22580
20000	10'	34'	5/16"	.179"	1/4"	25060
25000	11'	36'	3/8"	.179"	1/4"	38820
30000	11'	42'	3/8"	.179"	1/4"	37690
50000	12'	60'	3/8"	.179"	1/4"	56950

OTHER TANK SIZES AVAILABLE UPON REQUEST.

STANDARD SPECIFICATIONS

- Built per UL Type I Double Wall Tanks and sti-P3. Tanks will bear Underwriter and sti-P3 Labels.
- BMT Standard 88 Opening Locations and (2) lifting lugs.
- Exterior is painted and sandblasted per sti-P3 requirements.

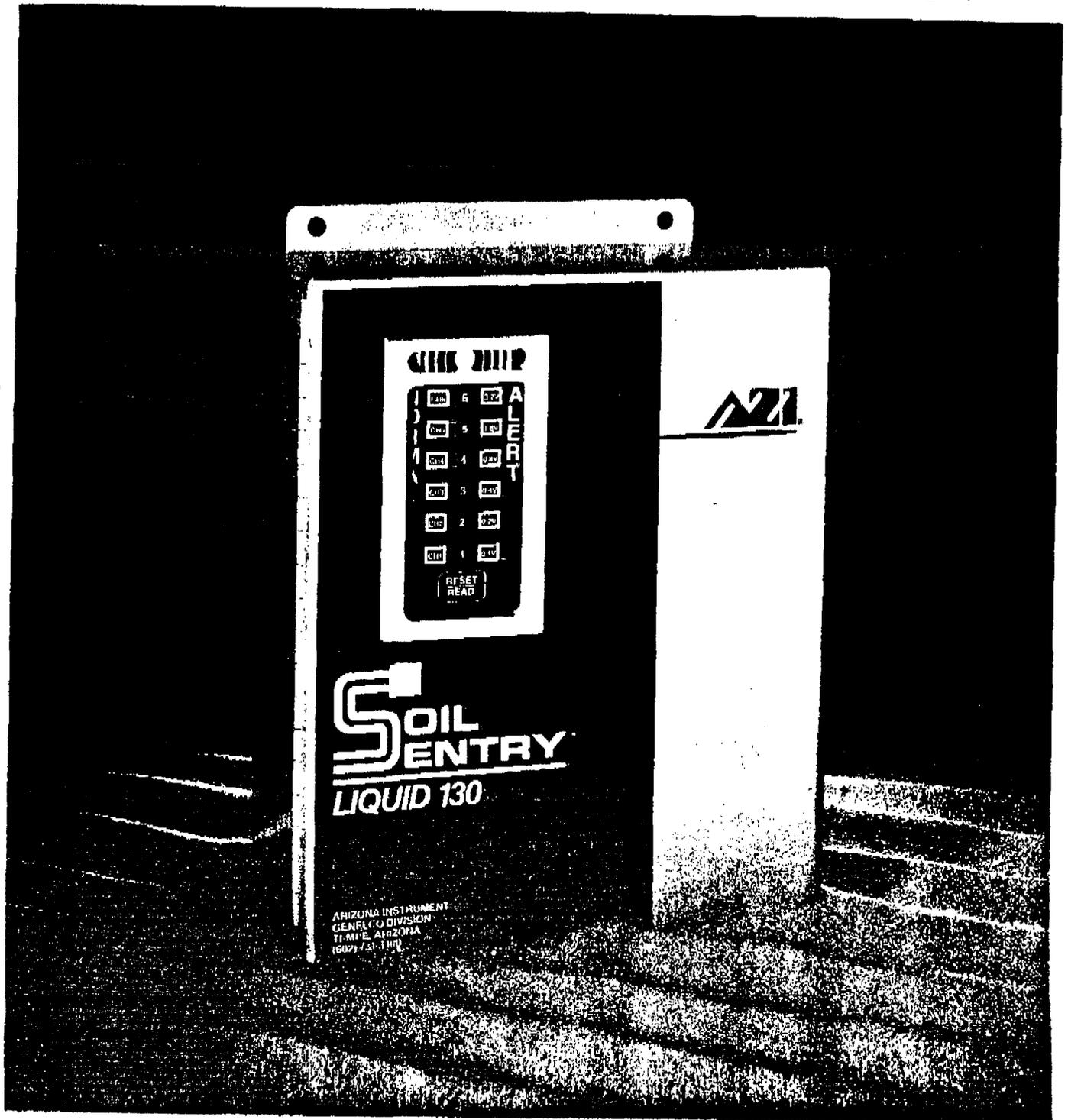
PRO-88



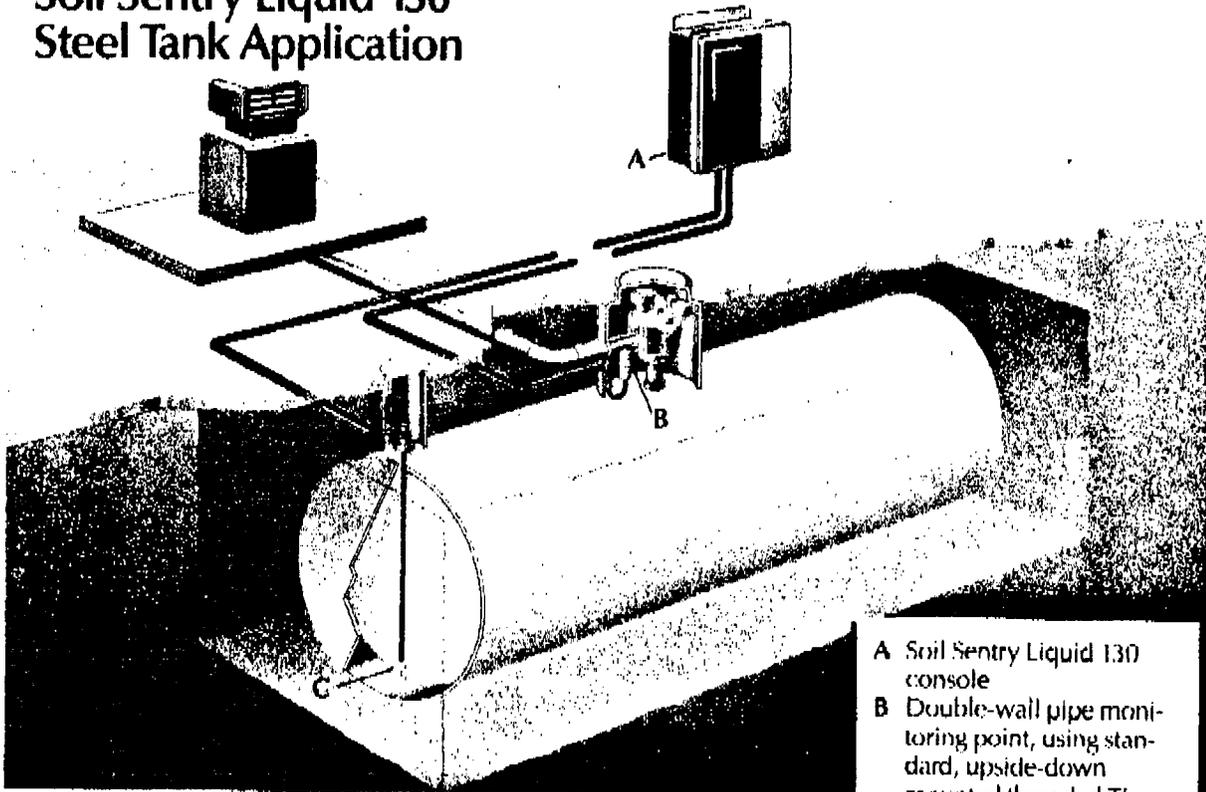
SOIL SENTRY

LIQUID 130

Double-wall storage tank
annular space monitoring system

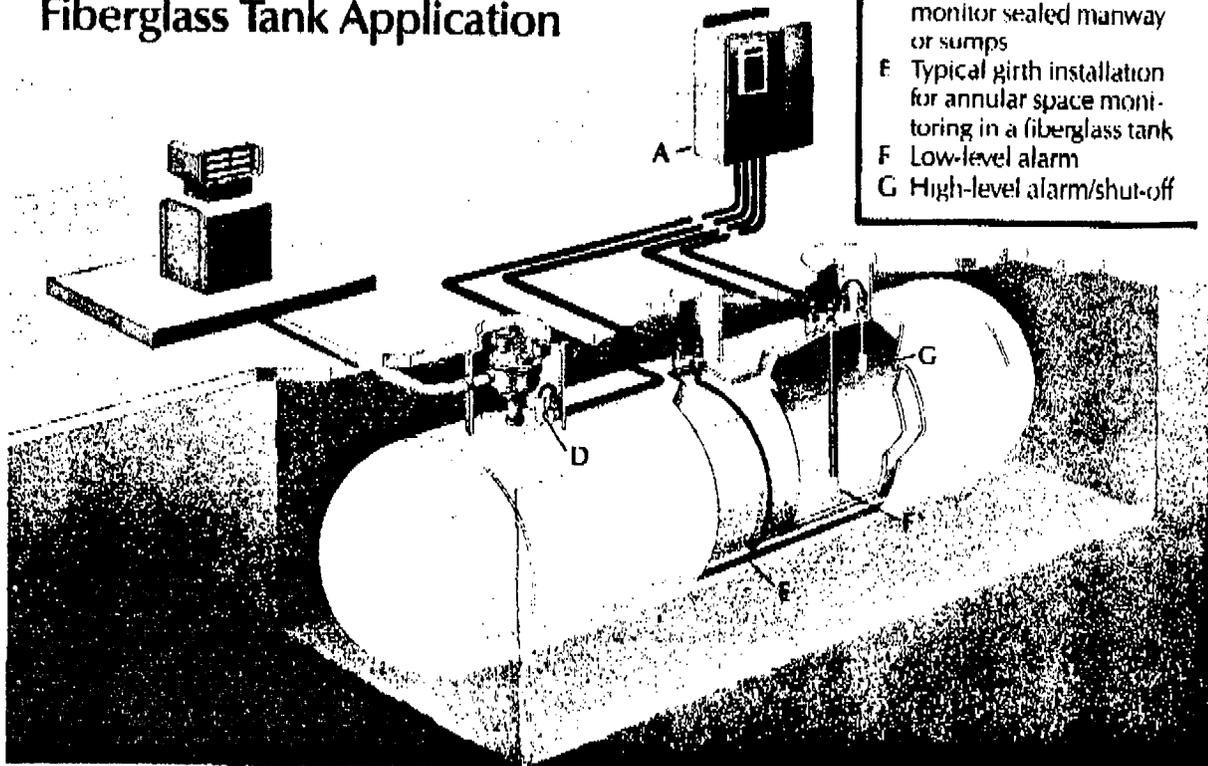


Soil Sentry Liquid 130 Steel Tank Application



- A Soil Sentry Liquid 130 console
- B Double-wall pipe monitoring point, using standard, upside-down mounted threaded T's
- C Typical end mounting of a double-wall steel tank
- D Sensor mounted to monitor sealed manway or sumps
- E Typical girth installation for annular space monitoring in a fiberglass tank
- F Low-level alarm
- G High-level alarm/shut-off

Soil Sentry Liquid 130 Fiberglass Tank Application



Soil Sentry Liquid 130: Advanced optical sensing for reliable liquid detection

The Soil Sentry Liquid 130 is the leak monitoring system you don't spend all your time monitoring.

A fully self-checking, intrinsically safe system, the Soil Sentry accurately monitors the annular space of your tanks for the presence of liquid, notifying you at the first sign of trouble.

Advanced optical sensors

Each liquid sensor in the U.L.-Listed Liquid 130 system is an advanced optical probe, providing reliable, worry-free liquid detection. Optical detection means you don't have to worry about moving parts to wear out, floats to jam or hang up or temperature changes that could confuse thermal probes.

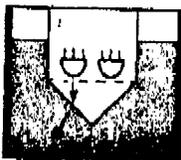
The Soil Sentry probes detect liquid using infra-red light. In use, a pulsed beam of light is aimed at the tip of the probe. If the tip is dry, the light is reflected off the sides of the tip and back to an optically matched phototransistor, completing an optical circuit and sending a "dry" signal to the controller. If the tip is wet, however, light is refracted out from the probe, breaking the circuit with the phototransistor causing a "wet" signal to be relayed to the controller.

Inside the annular space of a double-wall tank, optical sensing provides immediate detection of even small accumulations of liquid at the tip of the probe. The same probe can be used as a high-level alarm. In addition, a "dry" signal probe can be used as a low-level alarm inside the tank to notify you when the product inventory dips below a specified level.

The Soil Sentry system is designed for easy installation. Liquid sensors are placed either inside the tank for product level sensing, or in the annular space for leak detection. A two-conductor cable is routed from the probes to the controller, mounted on a wall inside your facility. Two controllers are available; the 130A for one or two probes and the 130C for up to six.



Dry



Wet

Simple operation

On-going monitoring is equally as simple. A series of LED's on the front panel of the controller allow you to check the system status at a glance. Continuously flashing LED's tell you the microprocessor is on duty and the system is functioning properly. If a regulator wants to verify the operation of the system, an automated test routine takes just the push of a button and will report the status of up to six sensors in just a few minutes.

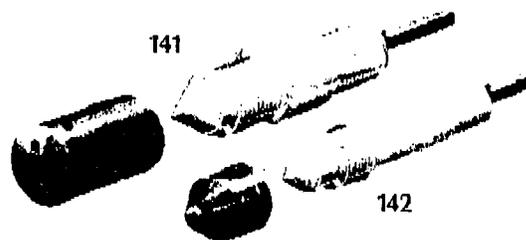
To verify operation of many other systems, sensors must be removed from the tank, manually tested and then repositioned. And there is no way to be certain the sensors are working once they are re-installed in the tank.

Optical Probe Options

The Liquid 130 system requires optical sensing probes, which communicate "wet" or "dry" messages from the annular space of your tank to the system controller. Two basic types of probes are available, and should be specified depending upon the size of the annular space.

The 141 probe is threaded, allowing for easy mounting into standard threaded pipe fittings. It is available in two styles, one to signal an alarm when the probe registers as "wet" (the 141A) and one to signal an alarm when it registers as "dry" (the 141B).

The 142 probe is a lower profile probe, designed for use in smaller annular spaces. It is also available in two styles, one to signal a "wet" alarm (the 142A) and one to signal a "dry" alarm (142B).



For more information about Soil Sentry annular space or active vapor underground monitoring systems, contact Arizona Instrument, Genelco Division at 1-800-528-7411. In Arizona, 1-731-3400.

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1:35-8	Date 4/27/90
<u>Originating Party</u> Bill Olson, OCD Santa Fe		<u>Other Parties</u> Mike Kelley - Farmington UST contractor 326-1118	
<u>Subject</u> Mesa Farmington Condensate Leak site			
<u>Discussion</u> I told him OCD requires secondary containment and leak detection on below grade tanks approved by OCD He is proposing to Mesa a double walled tank with a vapor detection system + cathodic protection for this site and one other in Farmington I told him when UST at second site is removed it must be inspected by OCD After to determine any leaks			
<u>Conclusions or Agreements</u> He will prepare specs for Mesa			
<u>Distribution</u>		Signed Bill Olson	

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone	<input type="checkbox"/> Personal	Time 1354	Date 4/27/90
---	-----------------------------------	-----------	--------------

<u>Originating Party</u>	<u>Other Parties</u>
Frank Chavez - OCD Aztec	Bill Olson - OCD Santa Fe

Subject
Mess Farmington Condensate Leak site

Discussion
Asked me to call Mike Polley (326-1118) about
OCD requirements on WST's

Conclusions or Agreements
I will call

Distribution Signed Bill Olson

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Personal	Time <u>0835</u>	Date <u>4/25/90</u>
<u>Originating Party</u> <u>Bill Olson - OCP</u>		<u>Other Parties</u> <u>Mark Foreman</u>
<u>Subject</u> <u>Mesa Petroleum Farmington Condensate Leak Site</u>		
<u>Discussion</u> <u>I informed Mr. Foreman of OCP rules & regarding</u> <u>below grade tanks & underground tanks and that</u> <u>tank will need leak detection approved by OCP</u> <u>He will prepare specs. on tank and submit</u> <u>to OCP.</u>		
<u>Conclusions or Agreements</u> <u>Mark Foreman</u> <u>Mesa Operating Ltd. Partnership</u> <u>P.O. Box 2009</u> <u>Amesillo, TX 79189</u>		
<u>Distribution</u> <u>I will send him a copy of OCP guidelines for below grade</u> <u>tanks and R-2940</u>		
<u>Signed</u> <u>Bill Olson</u>		

MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Personal	Time 3800	Date 4/25/90
<u>Originating Party</u> Charles Cronson - OGD Astor		<u>Other Parties</u> Bill Olson - OGD
<u>Subject</u> Mesa Petroleum Farmington Leak, EPNG Turley Cathodic Well Blowout		
<u>Discussion</u> Farmington will not allow Mesa an above ground tank at the site. Charles asked that we call Mesa to inform of regulations regarding underground tanks Mark Foreman (Amarillo) - (806) 378-1000 Geron Brown (Farmington) 327-6173 Charles + Ernie have begun broader level testing of wells surrounding the EPNG Turley Cathodic Well Blowout. There are 67 wells to be tested		
<u>Conclusions or Agreements</u> I will call Mesa on tanks		
<u>Distribution</u> DGB	Signed Bill Olson	

MEMORANDUM OF MEETING OR CONVERSATION

Telephone Personal

Time 9:30 AM

Date 4/9/90

Originating Party

Other Parties

Richard Mathis - Mesa Petroleum
(806) 378-4886

David Boyer NMOC/O

Subject NST Leak - Scott #1

K-2-29N 13 W

Discussion

Mathis called to report apparent leak in below grade production storage tank. Condensate level went from 3' 11" to 9" since last checked late March. Gas well is Basin 6402 (15 tank is 10-12 ft in diameter loss would be 50-60 barrels. He wanted to know if O&G wanted to be present for excavation.

Conclusions or Agreements

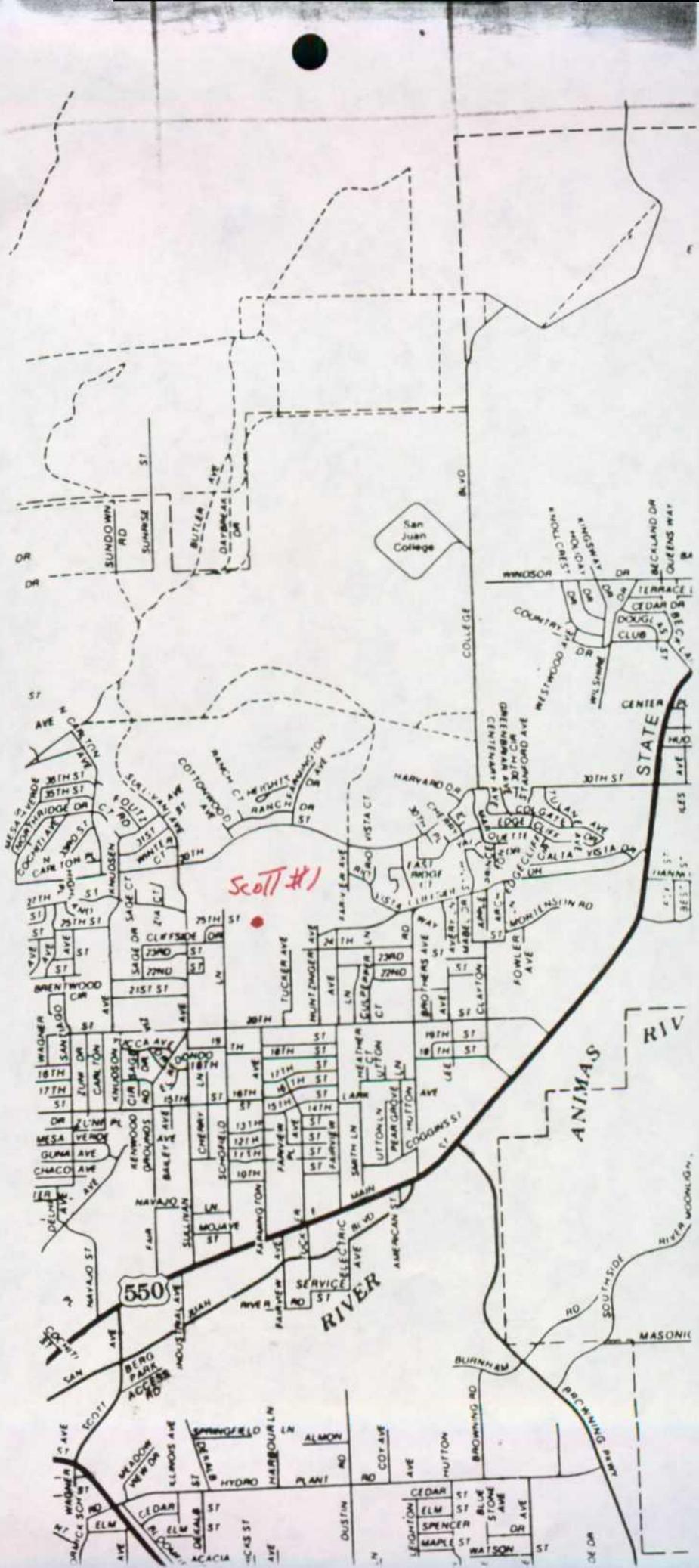
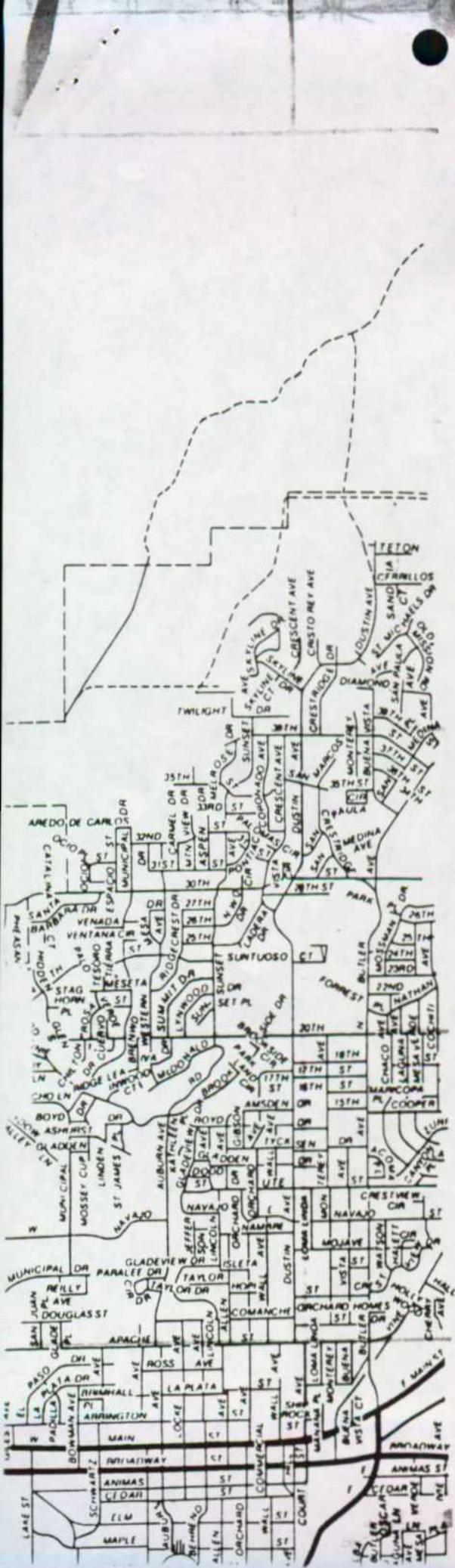
Told him to empty remainder of tank and ENV. Bureau or District Office would come on site to view "Tank yank."

Distribution

Dist 3 file.

Signed

David H. Boyer



MEMORANDUM OF MEETING OR CONVERSATION

<input checked="" type="checkbox"/> Telephone <input type="checkbox"/> Personal	Time 0800	Date 4/25/90
---	-----------	--------------

<u>Originating Party</u> Charles Chanson - OCD Astec	<u>Other Parties</u> Bill Olson - OCD
---	--

Subject
Mess Petroleum Farmington Leak , EPNG Turley Catholic Well Blowout

Discussion
Farmington will not allow Mess on above ground tanks at the site. Charles asked that we call Mess to inform of regulations regarding underground tanks
Mark Foreman (Amercillo) - (806) 378-1000
Geron Brown (Farmington) 327-6173

Charles + Ernie have begun broader based testing of wells surrounding the EPNG Turley Catholic Well Blowout. There are 67 wells to be tested

Conclusions or Agreements
I will call Mess on tanks

Distribution DGB Signed Bill Olson