

Z 278 184 442

**US Postal Service  
Receipt for Certified Mail**

**MR AND MRS HAROLD WARREN  
403 N JACKSON STREET  
CRYSTAL SPRINGS MS 39059**

**PS Form 3800, April 1995**

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
<b>TOTAL Postage &amp; Fees</b>	<b>\$</b>
Postmark or Date	

**Stick postage stamps to article to cover First-Class postage, certified mail fee, and charges for any selected optional services (See front).**

1. If you want this receipt postmarked, stick the gummed stub to the right of the return address leaving the receipt attached, and present the article at a post office service window or hand it to your rural carrier (*no extra charge*).
2. If you do not want this receipt postmarked, stick the gummed stub to the right of the return address of the article, date, detach, and retain the receipt, and mail the article.
3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to back of article. Endorse front of article **RETURN RECEIPT REQUESTED** adjacent to the number.
4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse **RESTRICTED DELIVERY** on the front of the article.
5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in item 1 of Form 3811.
6. Save this receipt and present it if you make an inquiry.

102595-97-B-0145

UNITED STATES POSTAL SERVICE

First-Class Mail  
Postage & Fees Paid  
USPS  
Permit No. G-10

PM

• Sender: Please print your name, address, and ZIP+4 in this box •

MS DEPT OF ENVIRONMENTAL QUALITY  
PO BOX 10385  
JACKSON MS 39289-0385  
ATTENTION: GRETCHEN ZMITROVICH

39289-0385



## SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

MR AND MRS HAROLD WARREN  
403 N JACKSON STREET  
CRYSTAL SPRINGS MS 39059

2. Article Number (Copy from service label)

Z 278 184 442

## COMPLETE THIS SECTION ON DELIVERY

Received by (Please Print Clearly)

Harold Warren

B. Date of Delivery

10-13-00

C. Signature

X HAROLD WARREN

 Agent Addressee

D. Is delivery address different from item 1?

 Yes

If YES, enter delivery address below:

 No

3. Service Type

 Certified Mail Express Mail Registered Return Receipt for Merchandise Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee)

 Yes



STATE OF MISSISSIPPI  
DAVID RONALD MUSGROVE, GOVERNOR  
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY  
CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

October 11, 2000

**CERTIFIED LETTER NO. Z 278 184 442 RETURN RECEIPT REQUESTED**

Mr. and Mrs. Harold Warren  
403 N. Jackson Street  
Crystal Springs, Mississippi 39059

RE: 403 N. Jackson Street  
Crystal Springs, Copiah County, Mississippi

Dear Mr. and Mrs. Warren:

The Uncontrolled Sites Section of the Mississippi Department of Environmental Quality (MDEQ) has completed a review of the sampling report prepared by Ogden Environmental and Engineering for the above referenced property. The MDEQ requires no further action at this site at this time.

If cleanup standards change or additional data becomes available for the site, then MDEQ will notify the appropriate parties of the need for any additional investigation(s) or remedial action(s). These actions will be consistent with our need to protect human health, welfare, and/or the environment.

If you have any questions, concerning this matter, please contact Gretchen Zmitrovich at (601) 961-5240.

Sincerely,

A handwritten signature in black ink that reads "Tony Russell".

Tony Russell, Chief  
Uncontrolled Sites Section

Kuhlman Electric-403 N. Jackson (Warren) SNFA\_10-11-00 (gz)



**FILE COPY**

STATE OF MISSISSIPPI  
DAVID RONALD MUSGROVE, GOVERNOR  
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY  
CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

October 11, 2000

Mr. and Mrs. Harold Warren  
403 N. Jackson Street  
Crystal Springs, Mississippi 39059

RE: soil and wipe sampling

Dear Mr. and Mrs. Warren:

Please find attached the report for the soil and wipe sampling recently conducted at 403 N. Jackson, Crystal Springs, MS. The report includes the following:

1. a map showing the sampling locations, and
2. a table containing the sample results for the analysis conducted by the mobile laboratory, Environmental Chemistry Consulting Services.

In addition, please find enclosed a letter from the MDEQ stating that, based on the information collected to date, no further investigative or remedial action is required on your property in regard to contamination from the Kuhlman facility.

Please contact Gretchen Zmitrovich at 601-961-5240 if you have any questions regarding this report.

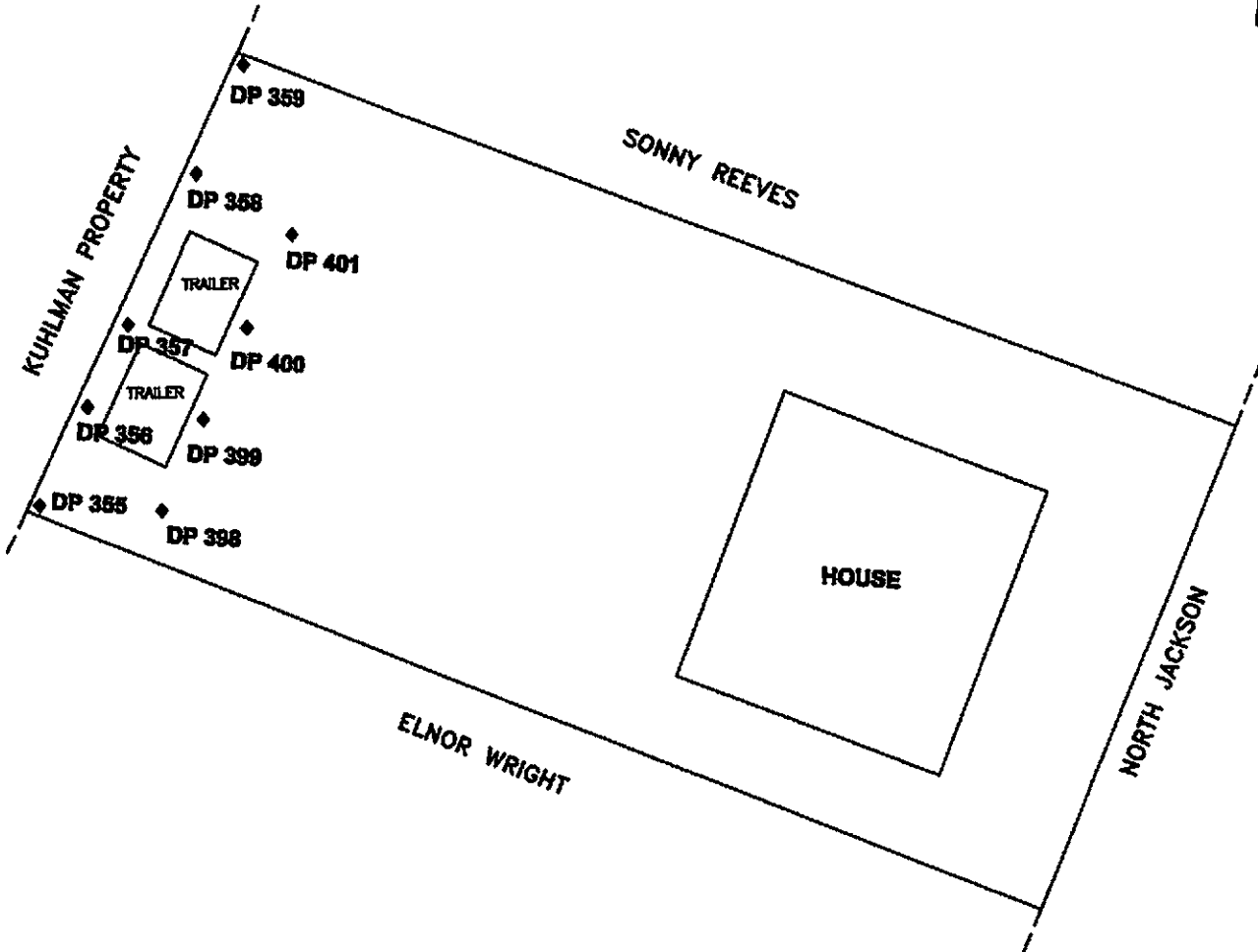
Sincerely,

A handwritten signature in black ink that reads "Tony Russell".

Tony Russell, Chief  
Uncontrolled Sites Section

Enclosures

# COPY



**LEGEND**

- ◆ SAMPLE POINT
- DP 392 SAMPLE POINT NUMBER



## SAMPLE LOCATIONS FOR HAROLD & SUZANNE WARREN 403 NORTH JACKSON

SCALE: AS SHOWN

DR MDI ORK TF REV BPS

PREPARED BY:

**OGDEN** ENVIRONMENTAL AND ENGINEERING SERVICES

200 SOUTH OLD STATEVILLE ROAD • HUNTERSVILLE, NC 28078 • 704-875-3370

PROJ: 073350000 DATE: 09/24/00 SHEET 1 OF 1

- 1) ALL DISTANCES ARE ESTIMATED
- 2) THIS MAP WAS PREPARED FROM RECORD MAPS
- 3) THIS MAP HAS BEEN PREPARED FOR PRESENTATION PURPOSES ONLY

Soil and Wipe Sample Results  
 Harold and Suzanne Warren Property  
 403 North Jackson  
 Crystal Springs, Mississippi

SOIL SAMPLES (MG/KG)										
Target Analyte	DP-355	DP-355	DP-356	DP-357	DP-357	DP-358	DP-358	DP-358	DP-358	DP-358
	0.5	4	0.5	4	0.5	4	0.5	4	0.5	4
	131	132	133	134	135	137	138	138	137	138
	0.33	<0.10	0.20	<0.10	0.17	<0.10	<0.10	<0.10	<0.10	<0.10
	8/18/00	8/18/00	8/19/00	8/18/00	8/19/00	8/18/00	8/18/00	8/18/00	8/18/00	8/18/00
	10:34	10:36	10:38	10:40	10:43	10:47	10:45	10:49	10:47	10:49
	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00

WIPE SAMPLES (TOTAL UG)					
Target Analyte	WAW-1	WAW-2	WAW-3	WAW-4	WAW-5
	727	728	729	730	731
	<0.50	<0.50	<0.50	<0.50	<0.50
	8/30/00	8/30/00	8/30/00	8/30/00	8/30/00
	9:03	9:05	9:08	9:10	9:14
	8/30/00	8/30/00	8/30/00	8/30/00	8/30/00

LOCATION: WAW1: Rear door, right of doorknob.  
 WAW2: Handrail of stairs to rear deck, right side, second step from bottom.  
 WAW3: Door of northernmost trailer, right of handle.  
 WAW4: Door of southernmost trailer, right of handle.  
 WAW5: Lawn chair on southern fence, easternmost chair, right armrest.



Soil and Wipe Sample Results  
 Harold and Suzanne Warren Property  
 403 North Jackson  
 Crystal Springs, Mississippi

SOIL SAMPLES (MG/KG)		DP-359	DP-359	DP-398	DP-398	DP-398	DP-398	DP-399	DP-400	DP-400
Target Analyte	Sample #	0.5	4	0.5	4	0.5	4	4	0.5	4
	Depth (ft)	139	140	217	218	219	220	220	221	222
	Lab #									
PCB as 1260		<0.10	<0.10	<0.10	NA	<0.10	NA	NA	<0.10	NA
	Collection Date	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00
	Collection Time	11:06	11:08	11:33	11:34	11:36	11:37	11:37	11:38	11:40
	Injection Date	8/19/00	8/19/00	8/19/00	NA	8/19/00	NA	NA	8/19/00	NA

Notes:  
 NA Indicates Sample Not Analyzed

SOIL SAMPLES (MG/KG)		DP-401	DP-401	DP-355	DP-356
Target Analyte	Sample #	0.5	4	0.1	0.1
	Depth (ft)	223	224	1136	1137
	Lab #				
PCB as 1260		<0.10	NA	0.57 X	0.64 X
	Collection Date	8/19/00	8/19/00	8/19/00	9/19/00
	Collection Time	11:42	11:43	15:40	15:44
	Injection Date	8/19/00	NA	9/20/00	9/20/00

Notes:  
 NA Indicates Sample Not Analyzed  
 X - Many unknowns. Quantitation questionable. May be pesticides.

BorgWarner  
Inc.

200  
South  
Michigan  
Avenue

Chicago  
Illinois  
60604

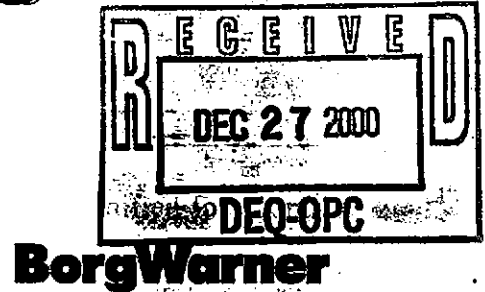
Telephone  
312 322 8500

AH-00-1638

VIA UPS NEXT DAY AIR

December 20, 2000

Ms. Gretchen Zmitrovich  
Mississippi Department of Environmental Quality  
Office of Pollution Control  
101 West Capitol Street  
Jackson, Mississippi 39201



Anastasia Hamel  
Director, Environmental Programs  
BorgWarner Inc.  
11955 East Nine Mile Road  
Warren, Michigan 48099

Re: **Progress Report of Assessment and Remediation Activities  
Kuhlman Electric Corporation and Residential Properties  
Crystal Springs, Mississippi**

**FILE COPY**

Dear Ms. Zmitrovich:

This is a progress report to summarize the assessment and remediation activities related to PCB contamination at Crystal Springs, Mississippi. BorgWarner's last update was October 31, 2000. As you are aware, pursuant to the indemnity agreement between Kuhlman Electric Corporation (KEC) and BorgWarner Inc., BorgWarner has continued the assessment at the KEC plant and began the assessment of residential properties along a drainage channel downgradient of the plant. BorgWarner has also been actively remediating those properties adjacent to the KEC plant for which access was previously granted and sampling was complete.

BorgWarner, as it stated in its October 31, 2000 letter to the Mississippi Department of Environmental Quality (MDEQ), remains committed to working closely with MDEQ, USEPA, local government and KEC in a cooperative manner to accomplish the tasks necessary for the protection of human health and the environment, to the extent that the circumstances are covered by its contractual indemnity to KEC. BorgWarner will continue to seek MDEQ's guidance and direction in its current and future intended activities and to promptly share information.

### ACTIONS TAKEN AND PLANNED

#### **1. Delineation of Residential Properties along Jackson and Lee Avenues**

BorgWarner promptly and voluntarily began sampling and delineation activities at the residential and commercial properties, adjoining the KEC plant that appeared to or reportedly have been affected by runoff or by the removal of soil from the KEC plant prior to October 6, 1999.

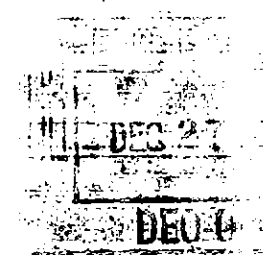
Under MDEQ's supervision, BorgWarner conducted delineation activities of these properties during the month of August, 2000. A total of eighteen (18) properties were investigated, which were:

1. Perry Smith, 219 North Jackson Street
2. Stringer Funeral Home, 301 North Jackson Street
3. Stringer Rental Property, 303 North Jackson Street
4. Harold and Suzanne Warren, 403 North Jackson Street
5. Elnor Wright, 401 North Jackson Street
6. Sonny Reeves, 405 North Jackson Street
7. Brent Property, 403 Lee Avenue
8. Louie Lang/David Vinson, 407 North Jackson Street
9. Jerry Youngblood, 100 Lamar St.
10. Medical Clinic, Lee Avenue
11. Edwards Property, 406 Lee Avenue
12. Garment Shop, 414 Lee Avenue
13. Frazier Property, 405 Lee Avenue
14. Duplex Property, 408/410 Lee Avenue
15. Kellum Property, 412 Lee Avenue
16. Dabney/Smith Property, 215 North Jackson
17. Cooper Property, 409 North Jackson
18. Larry and Carol Wright, 305 North Jackson

BorgWarner acted under the continuous guidance and direction of the MDEQ with respect to delineation activities at the residential and commercial properties adjoining the KEC plant. Split samples were analyzed and QA/QC procedures were implemented by two laboratories experienced with polychlorinated biphenyl analysis. Samples were frequently split with on-site MDEQ representatives for MDEQ's independent analysis, which to our knowledge consistently correlated with BorgWarner's on-site and off-site laboratory analytical results.

The delineation activities were conducted utilizing the "US EPA, Region IV Environmental Investigations Standard Operating Procedures and Quality Assurance Manual," May 1996 (EISOPQAM), sampling and analytical protocols. A copy of the work plan with procedures used in the field and applicable sections of the EISOPQAM are attached to this report for reference purposes.

Upon completing the delineation activities, BorgWarner compiled and submitted the analytical results on October 2, 2000 to MDEQ and US EPA, Region IV. Subsequently, BorgWarner began to schedule the remediation of residential and commercial properties adjacent to the KEC plant and along Jackson and Lee Avenues for which access was granted with the assistance of MDEQ and City of Crystal Springs Mayor Webb and where an attorney and/or an independent consultant were not involved in performing conflicting sampling activities.



## 2. Remediation of Residential Properties

On October 16, 2000 BorgWarner initiated remediation activities at the Medical Center and the Dabney/Smith properties, which are adjacent to the KEC plant. Remediation of the Newman Duplex, on Lee Avenue, began on November 30, 2000. Remediation of these properties involved excavation and disposal of all soil containing 1.0 part per million (ppm) or greater of PCBs in accordance with MDEQ's established clean-up criteria for residential properties. All soils containing greater than 1 ppm PCBs but less than 50 ppm PCBs were profiled and disposed of at the BFI's "Little Dixie" Subtitle D Landfill in Madison County, Mississippi after MDEQ and US EPA, Region IV approvals were obtained.

Following excavation, all excavated areas were sampled to confirm that impacted soil had been removed. In correspondence regarding disposal requirements, Craig Brown of US EPA, Region IV, stated that the excavated soils did not meet the definition of "PCB remediation waste." Under this definition, the remediation activities fell under the management criteria and guidelines set by MDEQ. As a result, the remediation and confirmation of clean-up standards established by MDEQ guidance were adopted and implemented in all of BorgWarner's residential remediation activities. A grid with ten-foot (10) sampling point centers was used to confirm that impacted soils had been removed at each site.

The remediation of the Dabney/Smith, the Medical Center and the Newman duplex property resulted in the removal of 1400 tons of soil, which was disposed of at the BFI "Little Dixie" Subtitle D Landfill and replaced with 1500 tons of certified clean soil. During the remediation activities, the on-site laboratory analyzed 324 soil samples in the month of November and the fixed-base laboratory analyzed 32 quality control samples.

Vegetation, such as live oak trees, was treated with specialty equipment for maximum protection and to minimize damage to the root systems. Soil surrounding the live oak tree roots was removed using an "Air Shovel"<sup>™</sup>, a unique technology adopted specifically for this purpose. The Air Shovel<sup>™</sup> uses a pressure spray to dislodge soil from around the roots while a vacuum system removes the soil and water by vacuuming into a tank. This method of soil removal has performed effectively with minimal damage to the tree's root system as was confirmed by the landscaping contractor and arborist. However, this process, regardless of its effectiveness, is very tedious and as a result only the tree on the Dabney/Smith property was completed during the second half of November. One other live oak tree, located on the Medical Center property, remains to be treated in a similar fashion and is scheduled for January 2001.

Landscaping and replacement of structures (sheds, car ports, etc.) on both the Medical Center and the Dabney/Smith properties are continuing and will most likely be completed by the end of December 2000. Both properties have been surveyed and the fence between the Dabney/Smith and Medical Center properties is currently being re-installed. Landscaping has been completed on the Newman duplex property.

Third party independent sampling activities commissioned by the Nutt & Associates Law Firm have interfered with planned remediation activities along Lee Avenue, specifically at the Frazier's, Edward's, and Kellum's properties. The Garment Shop is a more complicated matter for two reasons. First, the impacted soil at the Garment Shop is located at the property line between it and the Kellum residence and second, the Kellum elm tree roots extend to the Garment Shop property itself. BorgWarner has filed a Freedom of Information Act request to MDEQ in an effort to obtain a copy of the recently submitted report generated by these independent parties.

BorgWarner, after its evaluation of the sampling results and data contained within the third party report, will begin discussions with the attorney(s) representing each resident (mentioned above) along Lee Avenue in an attempt to resolve the matter, including confirmation that all sampling results have been disclosed, and whether further sampling is necessary, and confirm access to then remediate those properties. BorgWarner also plans to keep MDEQ apprised of any developments and any progress or if no progress is being made with the attorney(s) involved.

BorgWarner will schedule delineation activities for the Gas Station, which is at the corner of Lee Avenue next to the Garment Shop, Mayor Webb's residence and the drainage pathway to the south. BorgWarner will inform MDEQ of the timing for those activities.

### **3. Drainage Channel Properties**

Beginning on October 30<sup>th</sup> through the end of November, BorgWarner collected and analyzed soil samples from nine properties situated along the drainage channel leading from the north side of KEC's plant site to Lake Chautauqua. The properties were:

1. Sojourner Property, 111 M<sup>s</sup>Pherson Street
2. Weathersby Property, 101 Forest Street
3. Robert Williams Property (Lonnie Williams' residence), 103 Forest Street
4. Flossie M<sup>s</sup>Murray Property (Ralph Williams residence), 104 Forest Street
5. Ralph Williams Rental Property, 107 Forest Street
6. Richard Williams Property, 102 Forest Street
7. Roberta Fitzgerald Estate Property, (R.P Edwards point of contact) 108 Tucker Street  
Property currently is being rented to the Kendrick family.
8. Welch Property, 501 Camp Street
9. Orister Harris Property, 311 West Railroad Avenue

A total of 650 soil samples was collected from these properties and analyzed by the on-site laboratory. The fixed-base laboratory analyzed an additional 65 samples for confirmation and quality control purposes. These preliminary assessment activities were conducted in the same manner as the Kuhlman plant preliminary site assessment and the KEC plant adjacent residential properties; and utilizing the "EPA, Region IV Environmental Investigations Standard Operating

Procedures and Quality Assurance Manual", May 1996 (EISOPQAM), **sampling and analytical protocols.**

Preliminary results available at this time indicate that six of the nine **properties that were** sampled will require certain remediation. Four properties, including the **Sojourner, Williams' rental, Harris and Welch properties,** will require remediation under the MDEQ **guidelines** since the highest concentrations detected are less than 50 ppm. Two properties, including the **M<sup>c</sup>Murray and R. P. Edwards properties,** have soil with PCB concentrations **greater than 50 ppm** and therefore will require remediation under the TSCA rules. The following is a list of properties where concentrations greater than 1.0 ppm PCB were detected as well as the highest detected concentration on each property:

<u>Property</u>	<u>Highest Detected Concentration</u>
Sojourner	2.6 ppm
Williams rental	30.0 ppm
Harris	1.2 ppm
Welch	8.4 ppm
M <sup>c</sup> Murray	70.0 ppm
R. P. Edwards	51.0 ppm

Data from this sampling event are being evaluated and once quality control measures are completed the data will be tabulated. Site-specific reports containing collected data, maps of sampling locations, and work plans for remediation, if required, for each individual site are also being prepared and will be submitted to MDEQ and US EPA, Region IV by January 12, 2001.

It is anticipated that additional sampling will be required along the drainage channel. Several undeveloped properties, either abutting the drainage channel or through which the drainage channel runs, will be sampled to delineate the extent of possibly impacted soil and determine the potential for future runoff to Lake Chautauqua. The Department will be kept apprised as to the timing for this additional investigation and sampling activity.

#### **4. KEC Plant**

After an initial phase of sampling in the areas identified by KEC's construction activities and the related equipment decontamination zone, BorgWarner conducted further, substantial sampling activities in the south and north parking lot areas as well as the former above ground storage tank area. These delineation activities, other than any possible data gaps, have been completed. The results are currently being tabulated and compared for correlation purposes between the on-site and off-site laboratories, prior to being issued to MDEQ. Should any data gaps exist, BorgWarner will conduct further sampling activities.

This additional data will be incorporated as an addendum to the *Preliminary Site Assessment Report*, submitted to MDEQ in July 2000. Comments to the *Preliminary Site Assessment Report* made by MDEQ will also be addressed and included in the addendum submittal. It is anticipated that the addendum report will be submitted to MDEQ by February 12, 2001.

#### **5. Lake Chautauqua**

BorgWarner intends to consider delineation of the sediments at Lake Chautauqua, ecological assessment, and surface water sampling, to the extent appropriate after receipt of the pending "Task Force" report. These activities will not begin on any great scale until the Task Force report is evaluated.

#### **6. Groundwater Delineation**

BorgWarner intends to delineate the nature and extent of any groundwater contamination relative to the KEC plant. Groundwater delineation will take place at the time that remediation at the KEC plant commences. It is critical that the protective cover at the KEC plant site is not disturbed for the time being and that the groundwater investigation is addressed when BorgWarner is actively remediating on the KEC plant property. This approach will ensure that sediments from the KEC Plant do not travel to the drainage channel and Lake Chautauqua.

BorgWarner remains dedicated to continuing its open communication with MDEQ and US EPA, Region IV and looks forward to the meeting with MDEQ and City of Crystal Springs Mayor Webb and other Crystal Springs representatives on January 17, 2001 (at 8:30 a.m.) to further discuss any of the above and share its plans for future activities.

Should you have any questions or comments, please contact me directly at (810) 497-4503 at your earliest convenience.

Very truly yours,



Anastasia Hamel  
Director, Environmental Programs  
BorgWarner Inc.

**Attachments:**

1. Work Plan – Preliminary Assessment and Remediation
2. Craig Brown, US EPA, Region IV letter to BFI

cc: J. Banks, MDEQ  
T. Russell, MDEQ  
K. Dowell, Esq., MDEQ  
C. Brown, US EPA Region IV  
H. Webb, Mayor Crystal Springs  
Laurene H. Horiszny, Esq.  
Robert Martin, MSGA  
Thomas D. Lupo, Esq.  
Scott E. Schang, Esq.  
Mickey Crockett, KEC  
Al Thomas, KEC



**WORKPLAN FOR THE PRELIMINARY  
ASSESSMENT AND REMEDIATION OF PCB CONTAMINATION IN SOIL  
KUHLMAN ELECTRIC CORPORATION FACILITY  
AND RESIDENTIAL COMMERCIAL PROPERTIES  
IN CRYSTAL SPRINGS, MISSISSIPPI**

As established by the Mississippi Department of Environmental Quality (MDEQ) guidelines in connection with this project, all work related to the preliminary assessment of the extent of contamination at the Kuhlman Electric Corporation (KEC) facility and work related to the preliminary assessment and confirmation of remedial actions at KEC adjacent residential/commercial properties and residential properties along the drainage channel (leading from the north side of KEC's facility to Lake Chautauqua) has been performed in accordance with the *Environmental Protection Agency (EPA), Region IV "Environmental Investigations, Standard Operating Procedures and Quality Assurance Manual"*, May 1996 (EISOPQAM).

Copies of relevant and applicable portions of the EISOPQAM are maintained on site during all field activities and all field personnel are trained in its implementation. Remedial action confirmation sampling grids were established using *MDEQ Guidance Document, Verification of Soil Remediation, Environmental Response Division, Waste Management Division, April 1994, Revision 1*. Specifically, sampling grids were based on Part 2-Medium and Large Site Soil Cleanup Verification, "Establishing Grid Interval."

Field operations were performed under the site-specific Health and Safety Plan guidelines. Modified Level "D" Personal Protective Equipment (PPE) was utilized by all personnel working within the investigative area.

### Sampling Objectives

The soil-sampling objective is to establish the vertical and horizontal extent of contamination resulting from historical facility operations. In the KEC facility case, the soil-sampling objective included historical use of polychlorinated biphenyl (PCB). All sampling procedures were conducted in accordance with the US EPA, Region IV EISOPQAM. Sampling procedures included the collection of soil samples on a twenty foot triangular grid, where possible, at discreet depth intervals. Surface and subsurface soil samples were collected using GeoProbe® MacroProbe™ direct push sampling equipment. The GeoProbe® system uses a hydraulically driven hammer to advance a hollow, split-barrel sampler to the desired depth. The sampler contains an acetate liner in which a sample of the cored soil is retained. The MacroProbe™ corer retains a 1.25-inch diameter continuous 4 feet in length core sample. Once sampling is completed, the direct-push boring holes are backfilled with bentonite chips in unpaved areas, and with grout in parking lots and other paved areas.

Throughout the delineation activities each direct-push boring was sampled at 0.5-3.0 feet below ground surface (bgs) and at 3.0-6.0 feet bgs. Selected borings were completed to depths varying from 8-12 feet bgs and sampled in these deeper intervals to evaluate the vertical distribution of contaminants.

Additional sampling of dust, stream and drainage ditch sediments, surface water and ground water were collected, as warranted, in accordance with applicable EISOPQAM guidelines.

### Analytical Methods

Samples that were collected were analyzed for PCBs by the on-site mobile laboratory, Environmental Chemistry Consulting Services (ECCS) of Madison, Wisconsin. Initially soil samples were also analyzed for chlorinated benzenes until data confirmed that chlorinated benzene contamination is not at issue in samples with low concentrations of PCBs (generally <20 ppm). At least 10% of all samples were split and sent to a fixed-base laboratory, Paradigm Analytical Laboratories, Inc. (PAL) of Wilmington, North Carolina for analysis of the same parameters as for the on-site mobile laboratory to corroborate the results of laboratory analyses for quality control and quality assurance measures. Both the on-site and fixed-base laboratories used the same standard EPA approved analytical methods. PCBs were analyzed by Modified Environmental Protection Agency (EPA) Method 8080/81 and chlorinated benzene compounds were analyzed by EPA Method 8270. Volatile organic compounds (VOCs) were analyzed by EPA Method 8260 for samples suspected of being impacted by other industrial processes solvents unrelated to PCBs. Select soil samples were also analyzed for silver, by EPA Method 6010B, and cyanide, by EPA Method 9012A.

Surface water samples were analyzed by PAL for PCBs using EPA Method 8080/81. Semivolatile organic compounds (SVOCs) were analyzed by EPA Method 8270, Volatile Organic Compounds (VOCs) were analyzed by EPA Method 8260, silver by EPA Method 6010B, and cyanide using Standard Method 4500 Cn-E. Perched ground water was analyzed for PCBs, SVOCs, and VOCs by the same methods as indicated above for surface water.

**Quality Control**

The following is the list of key personnel dedicated to this project:

**Project Manager:**

Mr. Robert Martin, Martin & Slagle GeoEnvironmental Associates, LLC

**Duties:**

Responsible for management of project **including** all field coordination efforts.

**Field Sample Custodian:**

Mr. Robert Martin, Christine Slagle, Martin & Slagle GeoEnvironmental Associates, LLC

**Duties:**

Maintaining custody of samples, completing sample labels, Chain-of-Custody record.

**Field Team Leader:**

Mr. Robert Martin, Martin & Slagle GeoEnvironmental Associates, LLC

**Duties:**

Responsible for all activities related to the collection of samples.

**Samplers:**

Tim Fitzpatrick, Christine Slagle, Robert Martin

**Duties:**

Individuals responsible for the actual collection of samples.

**Laboratory Sample**

**Custodian:**

Mr. Michael Linskens, ECCS  
Mr. Nicolas Schertz, ECCS  
Ms. Erin Staagard, PAL

**Duties:**

Individuals responsible for accepting custody of samples from the field sample custodian.

## Quality Assurance Objectives for Data

Data for this project is being generated by two separate entities. The on-site data is generated by ECCS in their mobile laboratory. The fixed-base laboratory, PAL in Wilmington, North Carolina, generates the analytical results for the split samples.

The data quality objectives are pre-defined for the ECCS data in that Mississippi considers all mobile lab data screening level data. ECCS uses the same equipment and methodology as the fixed-base laboratories with the exception of the mini-extraction modification. Mobile laboratory data is validated by comparison of a minimum of 10% split samples with PAL. Following this procedure, the data qualifies as screening data with definitive confirmation under US EPA, Region IV EISOPQAM guidelines.

All samples sent to PAL were collected as follows: The sample was transferred from the GeoProbe® clean, unused, acetate sample liner into the labeled 4 ounce (oz) amber glass soil jar. The sample jar was then transferred to the mobile lab where ECCS personnel homogenized the sample prior to taking an aliquot for analysis. Due to the limited sample volume required by the ECCS mini-extraction and the low volatility of the chemicals of concern, the initial sampling jar was resealed (after ECCS personnel removed the amount of sample needed for their analysis), refrigerated and then sent to PAL; meaning PAL analyzed the sample from the exact same sample jar as ECCS.

Equipment rinsate samples were collected for evaluation of cross-contamination potential from ineffective decontamination procedures. These were prepared by pouring distilled water over the sampling equipment after decontamination and collecting and preserving the rinsate that was generated. Equipment rinseate samples were collected in accordance with the EPA, Region IV EISOPQAM guidelines.

Field blank samples were collected by filling sampling containers that were kept in the transition zone with distilled water. Field blanks determine the presence of ambient contaminants that may not be directly related to concentrations of contaminants in the sample media.

Blind duplicate soil samples were collected for analysis and sent to both laboratories. Blind duplicates were collected by homogenizing an aliquot of sample in a disposable plastic container and splitting the homogenized sample into two containers. After ECCS took their aliquot of these samples, the remainder of the sample was sent to PAL for analysis.

## **SAMPLE CONTROL AND FIELD RECORDS**

### **Sample Identification**

All samples sent to PAL for analysis conform to the labeling requirements under section 3.2.1 of the EISOPQAM.

#### **8.3.1 Chain of Custody Procedures**

Samples were logged as they were collected from the geoprobe liners. Date, time and sample lithology were recorded on each log. Samples were then transferred to 4 oz amber glass jars and the jars transferred to a small sample cooler, which was taken to the mobile lab by field personnel in charge of sample handling. Sample identification (ID), date and time sampling occurred were recorded in the field logbook before transferring the samples to the mobile lab. Upon arrival at the mobile lab, the samples were transferred to the ECCS sample custodian who logged each sample on ECCS chain of custody forms. Each sample was assigned a unique ECCS internal ID number for tracking purposes. After analysis, the samples were transferred to either a sample refrigerator in the mobile lab or stored in coolers with ice until they were either shipped to PAL for confirmation analysis or readied for disposal. For samples sent to PAL, a new chain of custody form was completed by field personnel in charge of sample handling.

#### **8.3.2 Field Records**

Field records were kept in accordance with procedures and guidelines specified in section 3.5 of EISOPQAM.

#### **8.4 Analytical Procedures**

For analysis of samples in the field, ECCS used EPA Method 8082m, modified for quantitation of chlorinated benzenes and the mini extraction procedure.

PAL used EPA Method 8082 for quantitation of PCBs. For chlorinated benzenes, it used EPA Method 8270. While Method 8270 does not cover all the chlorinated benzenes, it provides confirmation of the ones it does detect and has the added benefit of supplying an analysis of a broad range of other semivolatile organic compounds.

For the analysis of cyanide EPA Method 9012A was employed and for silver EPA Method 6010B.

Selected samples were analyzed by EPA Method 8260, primarily to confirm that volatile organic compounds were not present in the samples or part of the site contaminants.

#### **8.5 Laboratory Quality Assurance/Quality Control (QA/QC)**

QA/QC procedures for both labs were found to be virtually identical. Summaries of each laboratory procedures follow.

##### *ECCS:*

- ◆ Continuous calibration standards analyzed every ten samples or less and at the end of a run.
- ◆ Blank samples and laboratory control samples (LCS) analyzed every twenty samples or less with a minimum of one per day.
- ◆ Matrix Spike/Matrix Spike Duplicate (MS/MSD) samples analyzed every twenty samples or less with a minimum of one per day.

PAL:

- ◆ Continuous calibration standards analyzed at least once every 12 hour shift plus a minimum of every 20 samples gas chromatography/mass spectroscopy (GC/MS) criteria follows method specific tuning requirements per EPA Method 8270.
- ◆ Blank and LCS samples analyzed every 20 samples or less with a minimum of one per day.
- ◆ MS/MSD samples analyzed every 20 samples or less with a minimum of one per day.

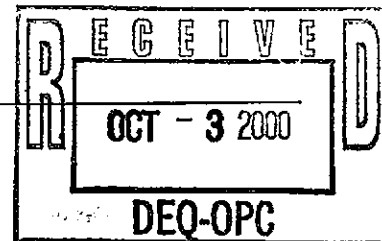
### **8.6 Data Validation and Reporting**

As discussed in section 8.2, the primary validation of the ECCS data was accomplished through comparison with the data from PAL.

Since Hexachlorobenzene and 1,2,4-Trichlorobenzene are the only chlorinated benzenes on the standard Method 8270 list, these two compounds and total PCBs were the parameters tracked for the data validation procedure.

Overall, the correlation to this point of the investigation and remediation activities has been excellent with the majority of sample splits showing Relative Percent Differences (RPDs) of less than 100. Considering the inherent variability of soil as a matrix, achieving 93% acceptable split data spanning several orders of magnitude of concentration serves to justify the use of the on-site data as definitive quality.





October 2, 2000

Ms. Gretchen Zmitrovich  
Office of Pollution Control  
Mississippi Department of  
Environmental Quality  
P.O. Box 10385  
Jackson, Mississippi 39289-0385

**FILE COPY**

**SUBJECT: Transmittal of Analytical Data for Residences  
Kuhlman Electric Corporation  
Crystal Springs, Mississippi**

---

Dear Ms. Zmitrovich:

Attached are site plans and spreadsheets showing sampling locations and analytical results from sampling of soils by Ogden Environmental and Energy Services. The soil samples were collected from residential properties surrounding Kuhlman Electric Corporation. Samples were collected from various depths ranging from ground surface to 4 feet below grade and analyzed by an on-site laboratory. Split samples were sent to Paradigm Analytical Laboratories for confirmation of on-site lab results.

The following properties have concentrations of PCB 1260 less than 1 mg/kg.

1. Perry Smith Property at 219 North Jackson Street
2. Stringer Funeral Home at 301 North Jackson Street
3. Stringer Rental Property at 303 North Jackson Street
4. Harold and Suzanne Warren Property at 403 North Jackson Street
5. Elnor Wright Property at 401 North Jackson Street
6. Sonny Reeves Property at 405 North Jackson Street

October 2, 2000

Page 2

---

7. Brent Property at 403 Lee Avenue
8. Louie Lang / David Vinson at 407 North Jackson
9. Jerry Youngblood at 100 Lamar Street

Please contact me at 828-669-3929 if you have any questions or comments concerning these results.

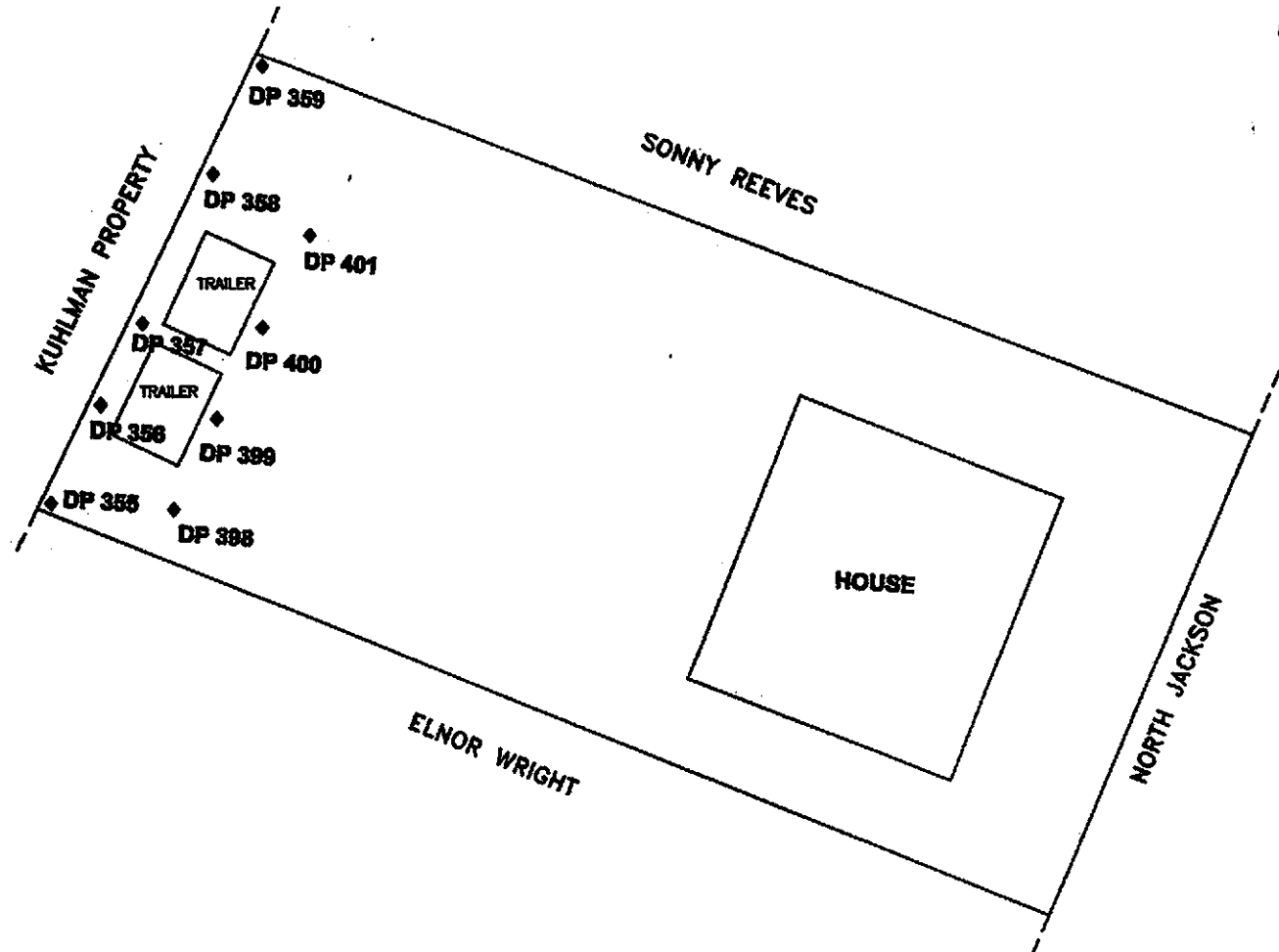
Sincerely,

Martin and Slagle GeoEnvironmental Associates, LLC



Robert L. Martin, P.G.  
Project Manager

Cc: Anastasia Hamel, BorgWarner Inc.



**LEGEND**  
 ◆ SAMPLE POINT  
 DP 392 SAMPLE POINT NUMBER



**SAMPLE LOCATIONS FOR  
 HAROLD & SUZANNE WARREN  
 403 NORTH JACKSON**

SCALE: AS SHOWN      DR MDI    CHK TP    REV BPS

PREPARED BY:  
**OGDEN** ENVIRONMENTAL AND ENGINEERING SERVICES

200 SOUTH OLD STATEVILLE ROAD • HUNTERVILLE, NC 28078 • 704-875-3370

PROJ: 073350000    DATE: 09/24/00    SHEET 1 OF 1

- 1) ALL DISTANCES ARE ESTIMATED
- 2) THIS MAP WAS PREPARED FROM RECORD MAPS
- 3) THIS MAP HAS BEEN PREPARED FOR PRESENTATION PURPOSES ONLY

Soil and Wipe Sample Results  
 Harold Suzanne Warren Property  
 403 North Jackson  
 Crystal Springs, Mississippi

SOIL SAMPLES (MG/KG)		DP-355	DP-355	DP-356	DP-357	DP-357	DP-357	DP-358	DP-358
Target Analyte	Sample #	Depth	Lab #	Collection Date	Collection Time	Injection Date	DP-355	DP-356	DP-357
PCB as 1260	0.5	4	131	8/18/00	10:34	8/19/00	0.5	4	0.5
	131	132	133	10:36	10:38	8/19/00	133	134	135
	0.33	<0.10	0.20	8/18/00	10:38	8/19/00	<0.10	<0.10	0.17
	Collection Date	8/18/00	8/18/00	8/18/00	10:40	8/19/00	8/18/00	8/18/00	8/18/00
	Collection Time	10:34	10:36	10:38	10:40	8/19/00	10:45	10:47	10:49
	Injection Date	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00

WIPE SAMPLES (TOTAL UG)		WAW-1	WAW-2	WAW-3	WAW-4	WAW-5
Target Analyte	Sample #	Depth	Lab #	Collection Date	Collection Time	Injection Date
PCB as 1260	727	728	729	8/30/00	9:05	8/30/00
	<0.50	<0.50	<0.50	8/30/00	9:08	8/30/00
	731	730	731	8/30/00	9:14	8/30/00
	Collection Date	8/30/00	8/30/00	8/30/00	8:10	8/30/00
	Collection Time	9:03	9:05	9:08	8:10	9:14
	Injection Date	8/30/00	8/30/00	8/30/00	8/30/00	8/30/00

LOCATION:  
 WAW1: Rear door, right of doorknob.  
 WAW2: Handrail of stairs to rear deck, right side, second step from bottom.  
 WAW3: Door of northernmost trailer, right of handle.  
 WAW4: Door of southernmost trailer, right of handle.  
 WAW5: Lawn chair on southern fence, easternmost chair, right armrest.

Soil and Wipe Sample Results  
 Harold Suzanne Warren Property  
 403 North Jackson  
 Crystal Springs, Mississippi

SOIL SAMPLES (MG/KG)		DP-359	DP-359	DP-388	DP-388	DP-398	DP-398	DP-400	DP-400
Target Analyte	Sample #	0.5	4	0.5	4	0.5	4	0.5	4
	Depth	139	140	217	218	219	220	221	222
	Lab #								
PCB as 1260		<0.10	<0.10	<0.10	NA	<0.10	NA	<0.10	NA
	Collection Date	8/18/00	8/18/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00
	Collection Time	11:06	11:08	11:33	11:34	11:38	11:37	11:39	11:40
	Injection Date	8/19/00	8/19/00	8/19/00	NA	8/19/00	NA	8/19/00	NA

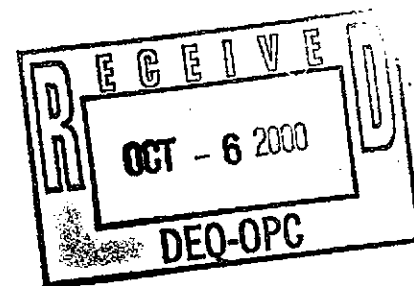
Notes:  
 NA Indicates Sample Not Analyzed

SOIL SAMPLES (MG/KG)		DP-401	DP-401	DP-355	DP-356
Target Analyte	Sample #	0.5	4	0.1	0.1
	Depth	223	224	1136	1137
	Lab #				
PCB as 1260		<0.10	NA	0.57 X	0.64 X
	Collection Date	8/19/00	8/19/00	9/19/00	9/19/00
	Collection Time	11:42	11:43	15:40	15:44
	Injection Date	8/19/00	NA	9/20/00	9/20/00

X - Many unknowns. Quantitation questionable. May be pesticides.

October 5, 2000

Ms. Gretchen Zmitrovich  
Office of Pollution Control  
Mississippi Department of  
Environmental Quality  
Office of Pollution Control  
P.O. Box 10385  
Jackson, Mississippi 39289-0385



**SUBJECT: Transmittal of Revised Analytical Data Tables for Residences  
Kuhlman Electric Corporation  
Crystal Springs, Mississippi**

---

Dear Ms. Zmitrovich:

Attached is one complete set of revised spreadsheets showing analytical results from sampling of soils by Ogden Environmental and Energy Services. The tables were revised based on your review and comments. Results for split samples are being prepared into tables and will be forwarded to you by Monday at the latest.

Please contact me at 828-669-3929 if you have any questions or comments concerning these results.

Sincerely,

**Martin and Slagle GeoEnvironmental Associates, LLC**

*Robert L. Martin*

Robert L. Martin, P.G.  
Project Manager

Cc: Anastasia Hamel, BorgWarner Inc.

Soil and Wipe Sample Results  
 Harold and Suzanne Warren Property  
 403 North Jackson  
 Crystal Springs, Mississippi

SOIL SAMPLES (MG/KG)										
Target Analyte	DP-355	DP-355	DP-356	DP-357	DP-357	DP-357	DP-358	DP-358	DP-358	DP-358
	0.5	4	0.5	4	0.5	4	0.5	4	0.5	4
	131	132	133	134	135	136	137	138	137	138
PCB as 1280	0.33	<0.10	0.20	<0.10	0.17	<0.10	<0.10	<0.10	<0.10	<0.10
Collection Date	8/18/00	8/18/00	8/18/00	8/18/00	8/18/00	8/18/00	8/18/00	8/18/00	8/18/00	8/18/00
Collection Time	10:34	10:36	10:38	10:40	10:43	10:45	10:47	10:49	10:47	10:49
Injection Date	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00

WIPE SAMPLES (TOTAL UG)						
Target Analyte	WAW-1	WAW-2	WAW-3	WAW-4	WAW-5	WAW-5
	727	728	728	730	731	731
PCB as 1280	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Collection Date	8/30/00	8/30/00	8/30/00	8/30/00	8/30/00	8/30/00
Collection Time	9:03	9:05	9:08	9:10	9:14	9:14
Injection Date	8/30/00	8/30/00	8/30/00	8/30/00	8/30/00	8/30/00

LOCATION:

- WAW1: Rear door, right of doorknob.
- WAW2: Handrail of stairs to rear deck, right side, second step from bottom.
- WAW3: Door of northernmost trailer, right of handle.
- WAW4: Door of southernmost trailer, right of handle.
- WAW5: Lawn chair on southern fence, easternmost chair, right armrest.

Soil and Wipe Sample Results  
 Harold and Suzanne Warren Property  
 403 North Jackson  
 Crystal Springs, Mississippi

SOIL SAMPLES (MG/KG)		DP-389	DP-398	DP-399	DP-399	DP-399	DP-400	DP-400
Target Analyte	Sample #	0.5	0.5	4	0.5	4	0.5	4
	Depth (ft)	139	217	140	219	220	221	222
	Lab #							
PCB as 1260		<0.10	<0.10	<0.10	<0.10	NA	<0.10	NA
	Collection Date	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00	8/19/00
	Collection Time	11:06	11:33	11:08	11:36	11:37	11:39	11:40
	Injection Date	8/19/00	8/19/00	8/19/00	8/19/00	NA	8/19/00	NA

Notes:  
 NA Indicates Sample Not Analyzed

SOIL SAMPLES (MG/KG)		DP-401	DP-401	DP-355	DP-356
Target Analyte	Sample #	0.5	4	0.1	0.1
	Depth (ft)	223	224	1136	1137
	Lab #				
PCB as 1260		<0.10	NA	0.57 X	0.64 X
	Collection Date	8/19/00	8/19/00	8/19/00	8/19/00
	Collection Time	11:42	11:43	16:40	16:44
	Injection Date	8/19/00	NA	8/20/00	8/20/00

Notes:  
 NA Indicates Sample Not Analyzed  
 X - Many unknowns. Quantitation questionable. May be pesticides.



19 pages w/cover

To:  
Gretchen Zmitrovich  
MDEQ

From:  
Tim Fitzpatrick  
Ogden Environmental

Gretchen: Following are my field maps - I hope  
you can read them! Data will follow shortly.

Please call after you receive this fax.

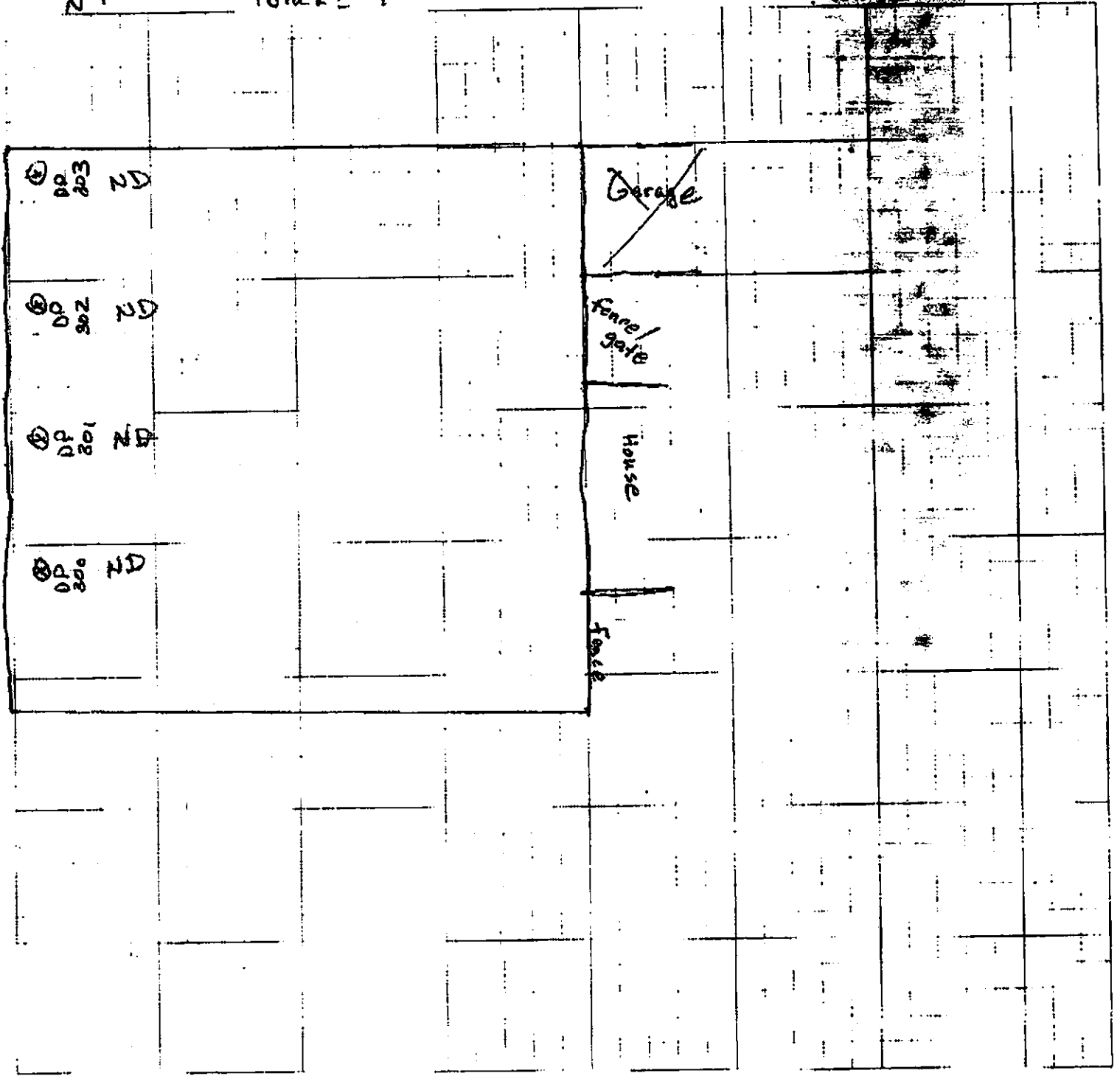
Thanks,

Tim



Job Name: Crystal Springs  
Job Number:  
Title: Sony Reeves back yard 405 Jackson  
Computed by:  
Date: 2/16/2000

N ↑ block = 4'



⊕ DP 303 ND

⊕ DP 302 ND

⊕ DP 301 ND

⊕ DP 300 ND

~~Garage~~

fence gate

House

Fence



Handwritten scribbles and numbers: 200, 7

Job Name: Crystal Springs

Job Number:

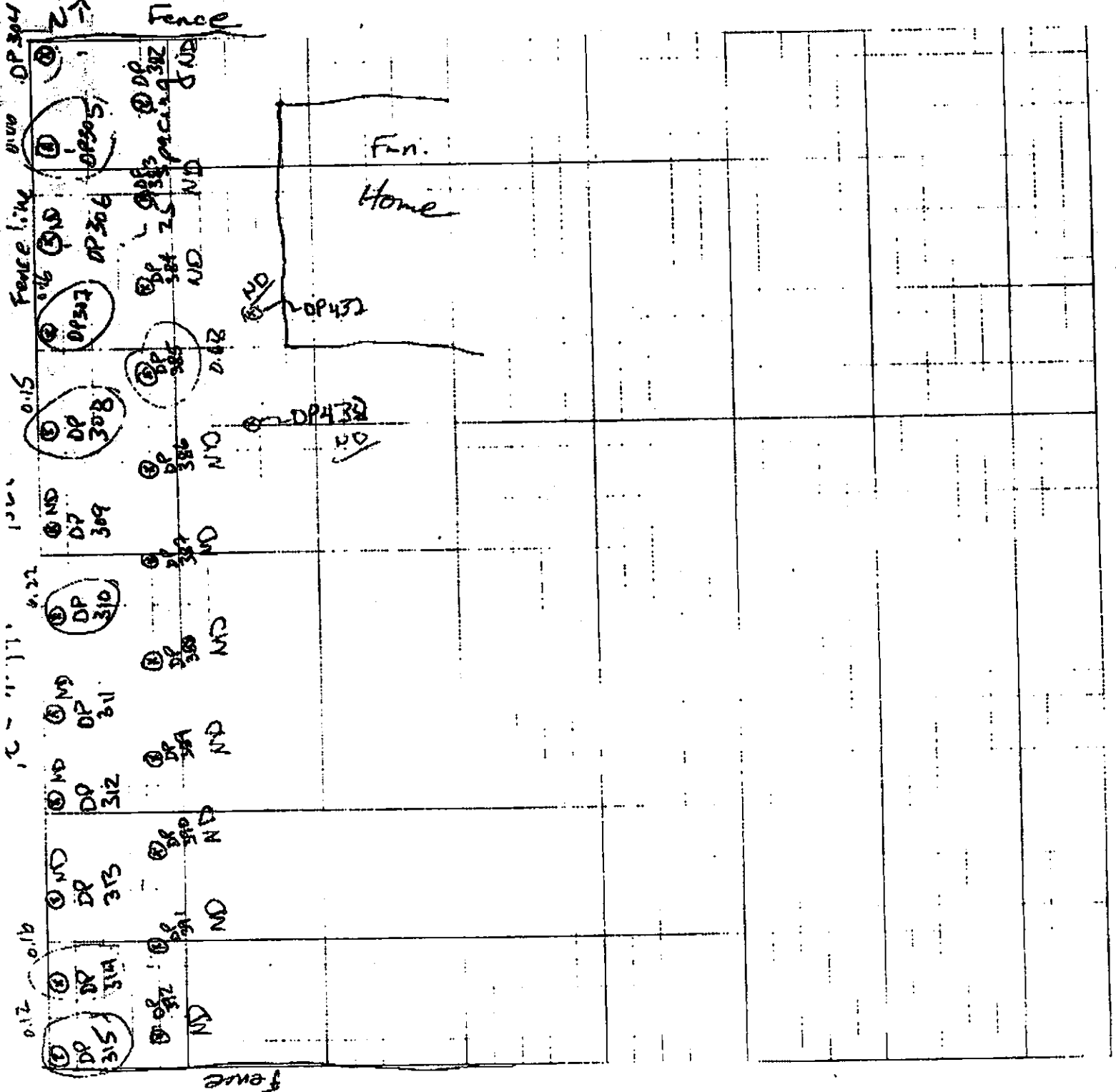
Title: Stringer Funeral Home

Computed by:

Checked by:

Date: 8-16-2000

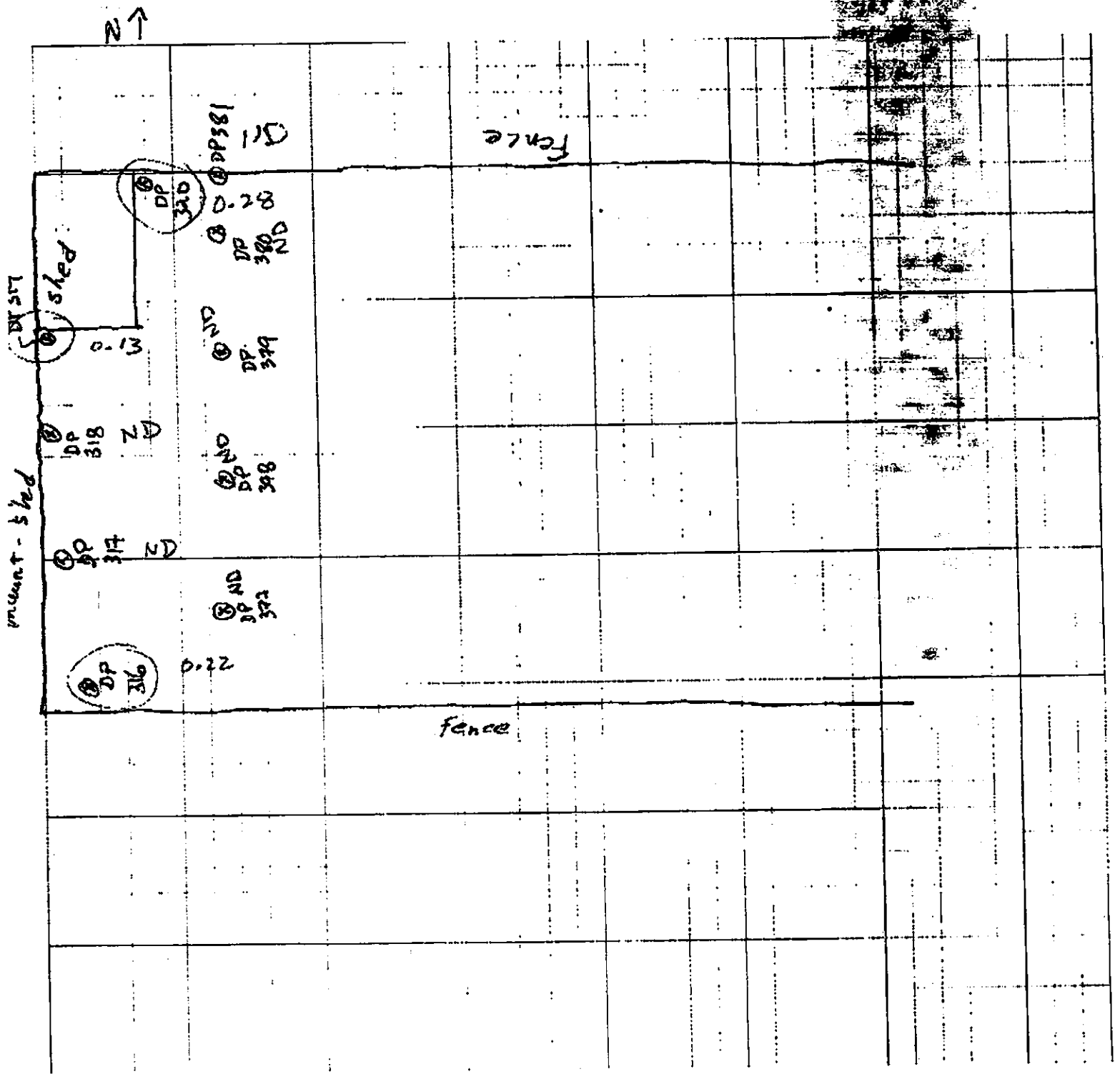
Sheet: 2 Of: 11





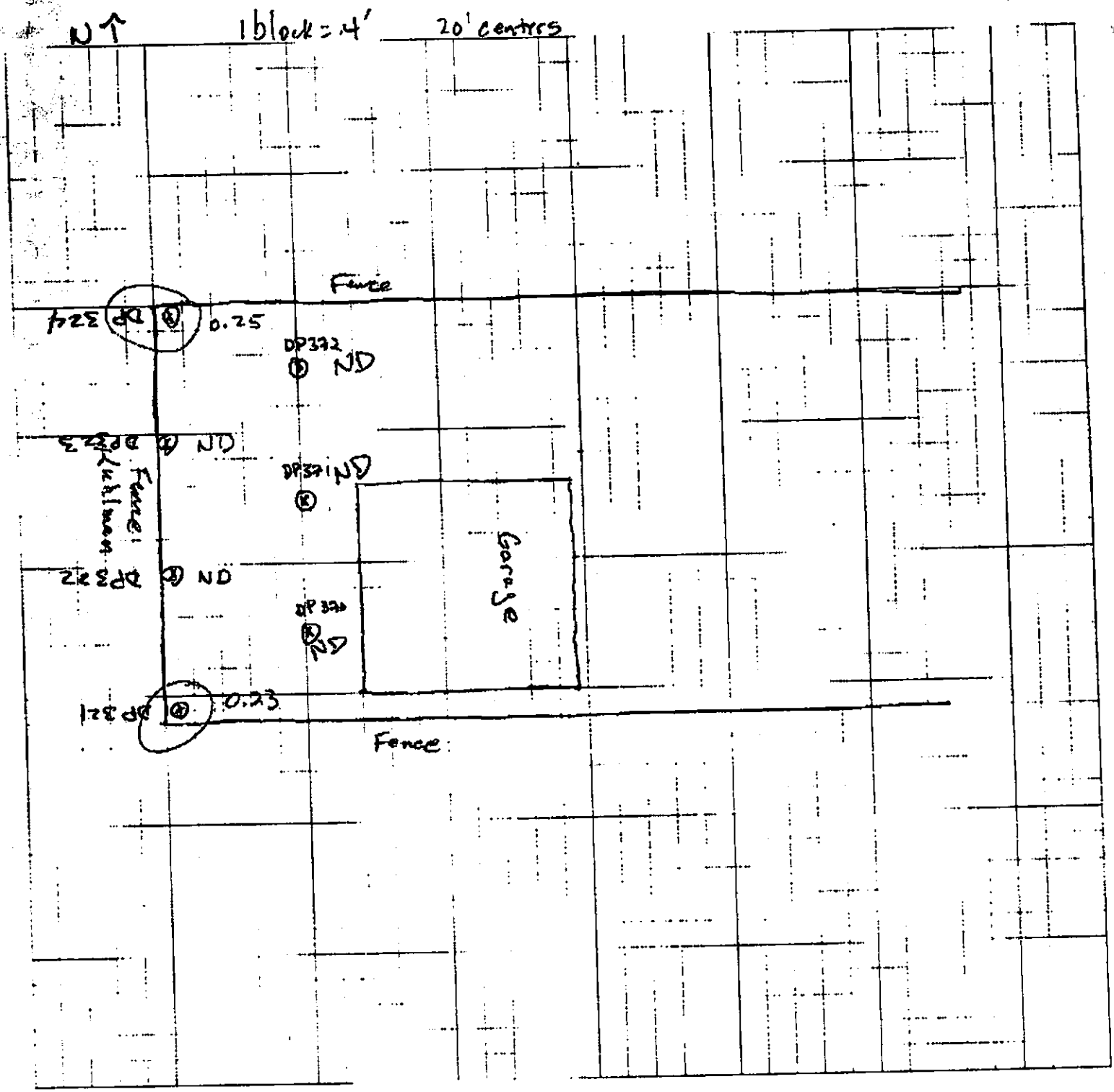
Job Name: Crystal Springs  
Job Number:  
Title: 401 N. Jackson, Blue Knight  
Computed by:  
Date: 8-16-2000

1 block = 4'





Job Name: Crystal Springs  
Job Number: \_\_\_\_\_  
Title: 407 N. Jackson Louie Lang  
Computed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
Date: 8-16-00 Sheet: 4 of: 11



# OGDEN

Job Name:

*Crystal Springs*

Job Number:

Title:

*Lee St. Medical*

Computed by:

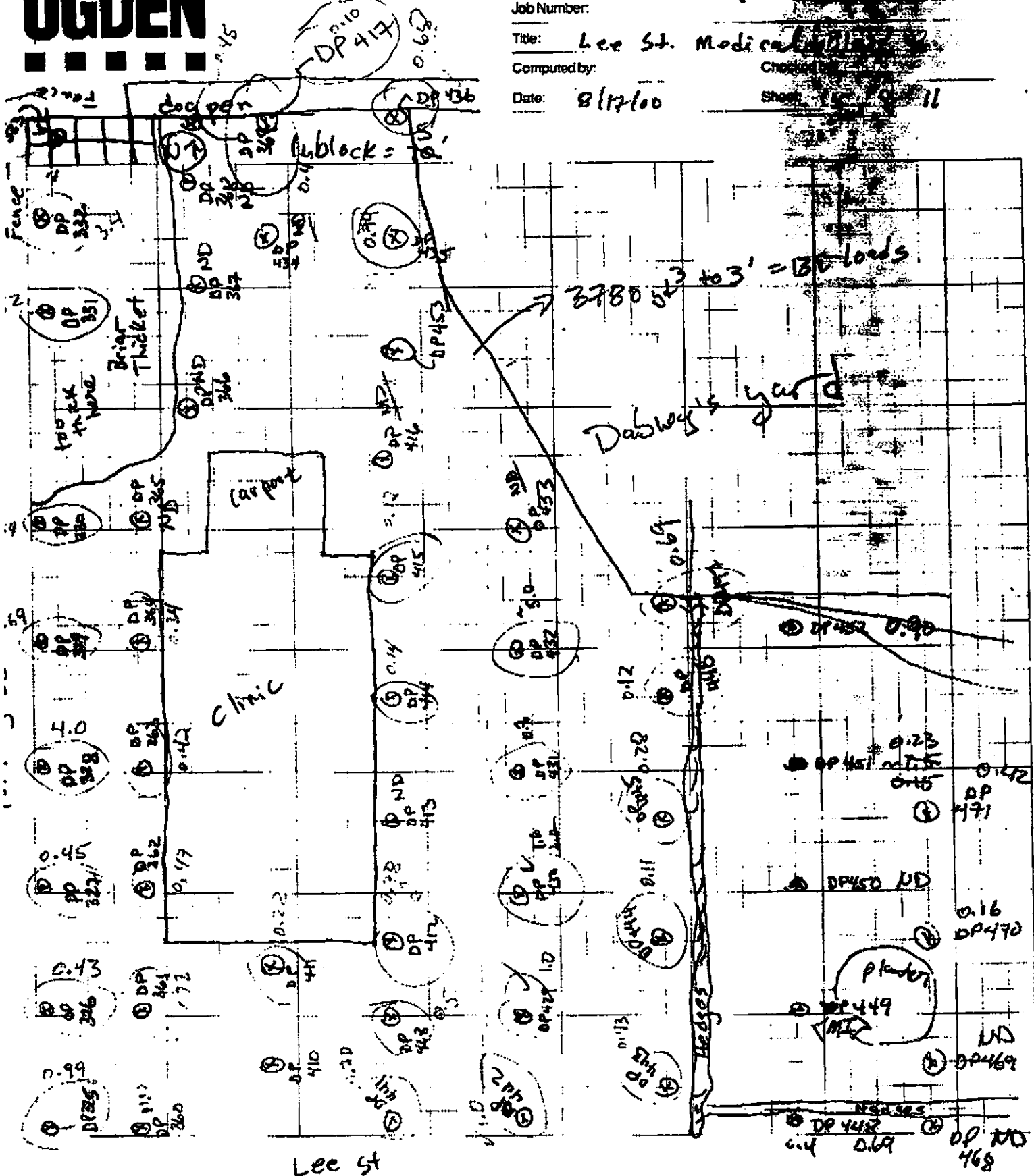
Checked by:

Date:

*8/17/00*

Sheet:

*11 of 11*

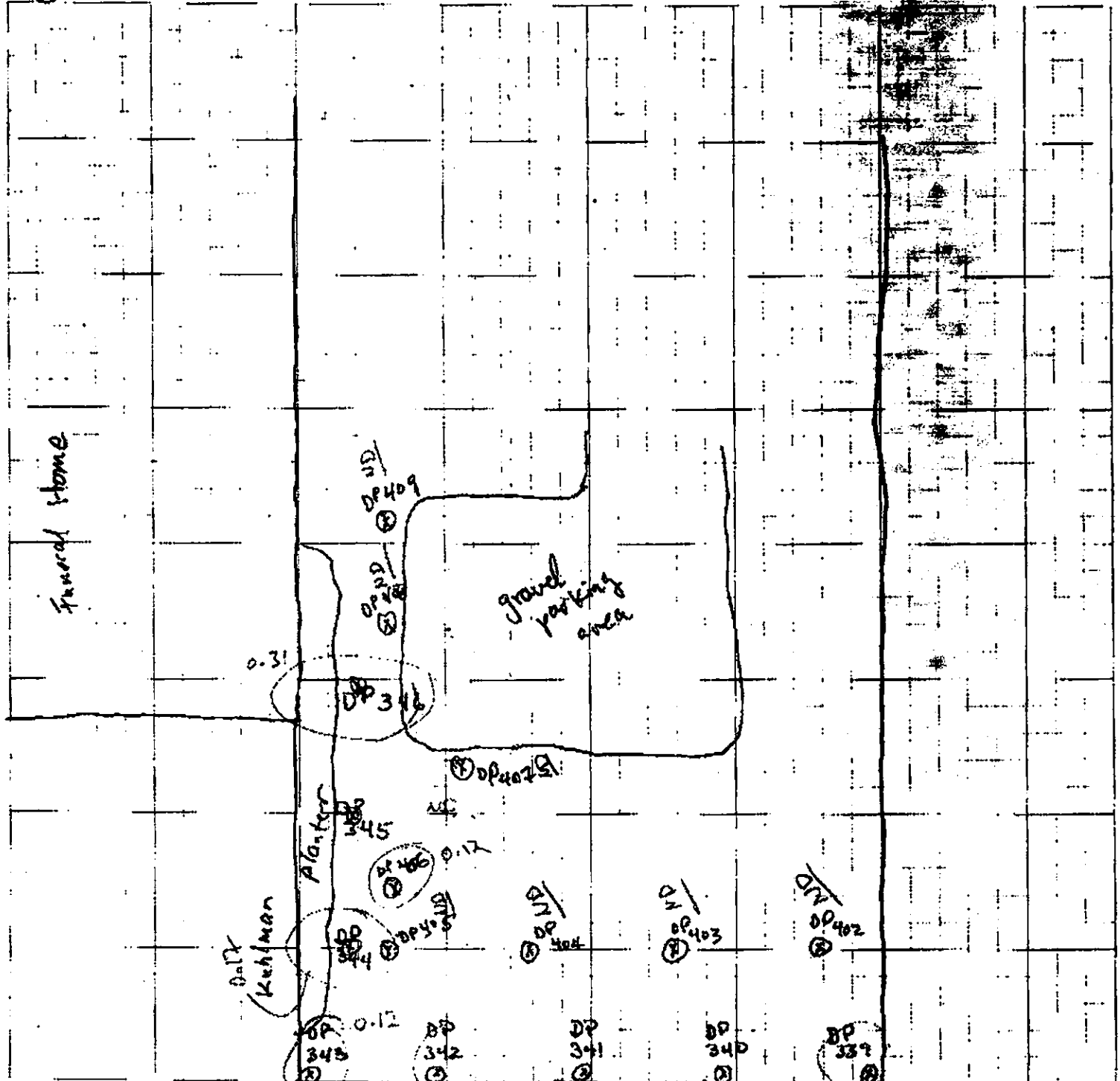






Job Name: Crystal Springs  
Job Number: \_\_\_\_\_  
Title: 219 N-Jackson Chris Smith  
Computed by: TJF  
Date: 8-17-00

1 block = 5'



Funeral Home

gravel parking area

Planter  
Kuhlman

Kuhlman





Job Name: Crystal Springs

Job Number:

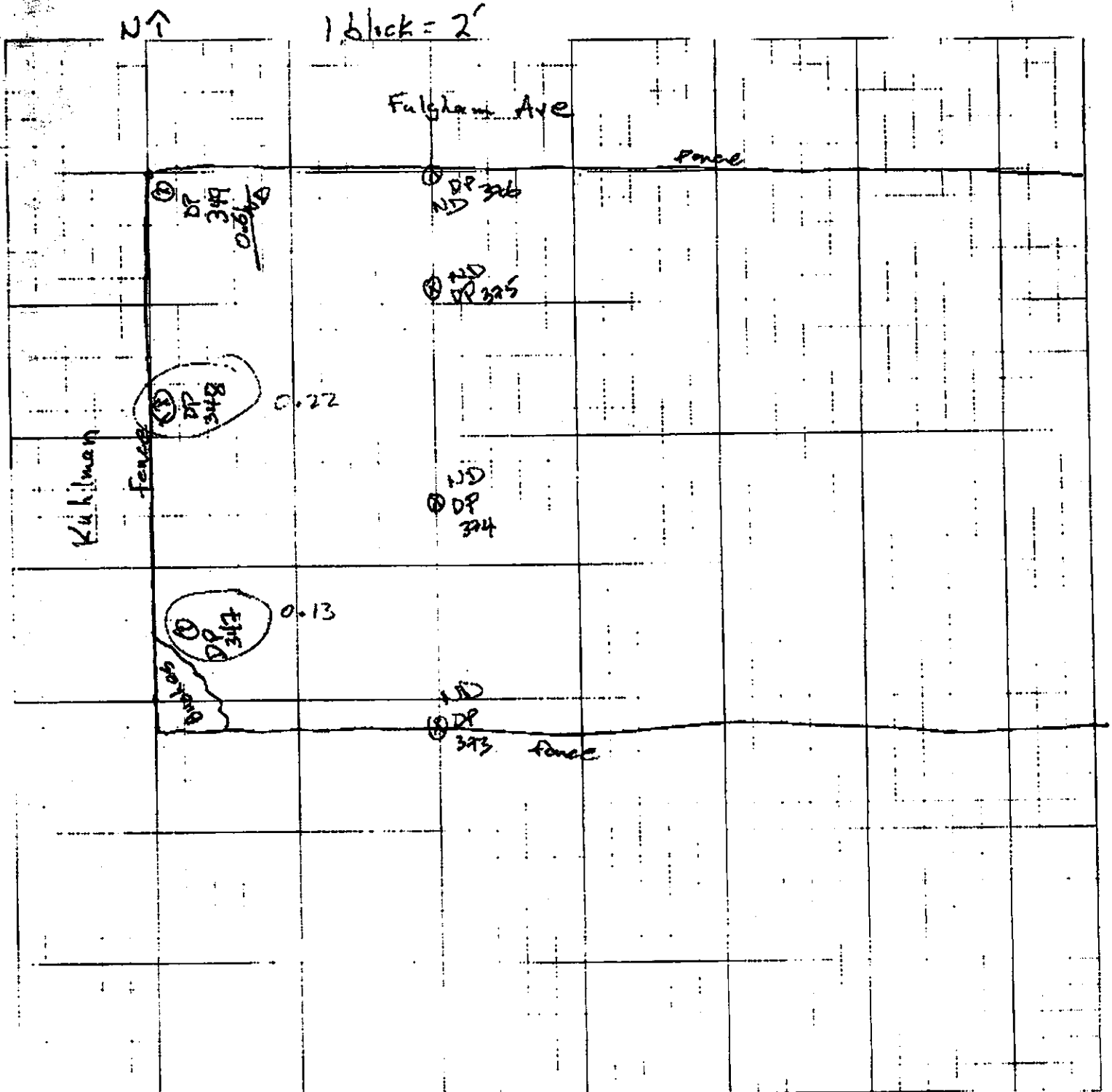
Title: 409 N. Jackson (Amy Cooper)

Computed by: BF

Checked by:

Date: 8-17-00

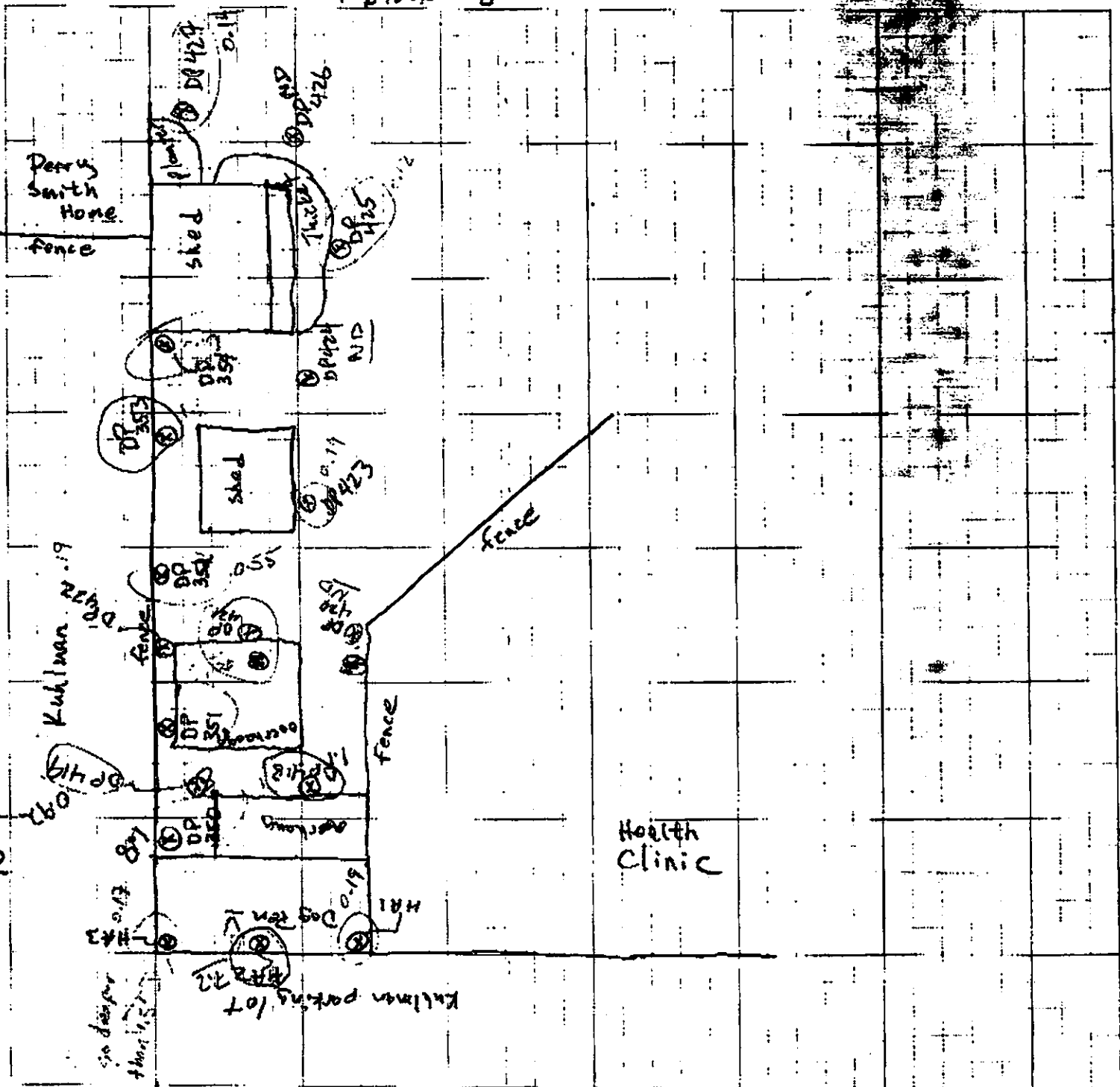
Sheet: 8 of 11





Job Name: *Crystal Springs*  
Job Number:  
Title: *Dabney Home*  
Computed by: *TJE*  
Date: *8-17-00*

*1 block = 5'*

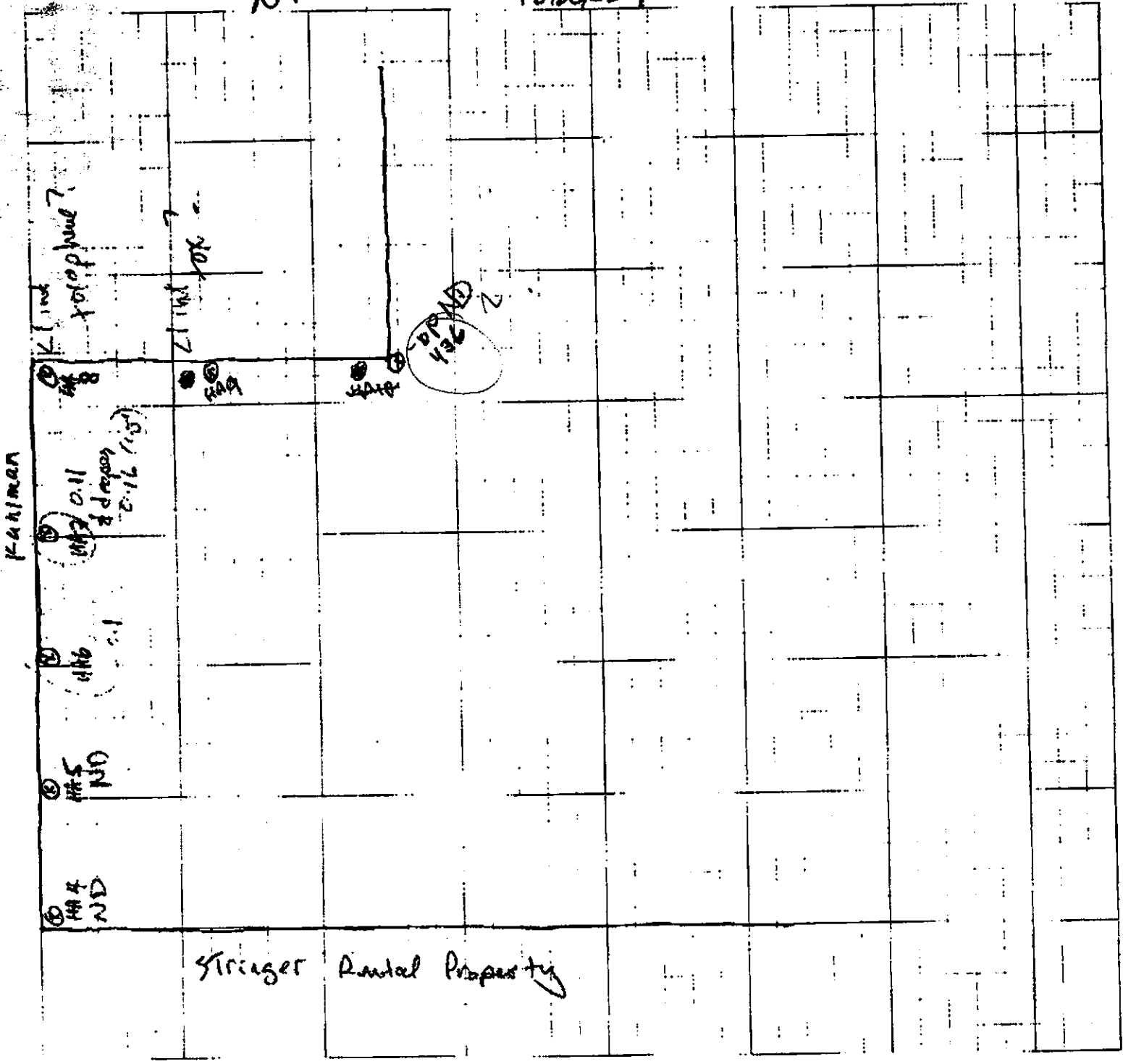




Job Name: Crystal Springs  
Job Number: \_\_\_\_\_  
Title: Wright House  
Computed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
Date: 8-18-00 Sheet: 10 of 11

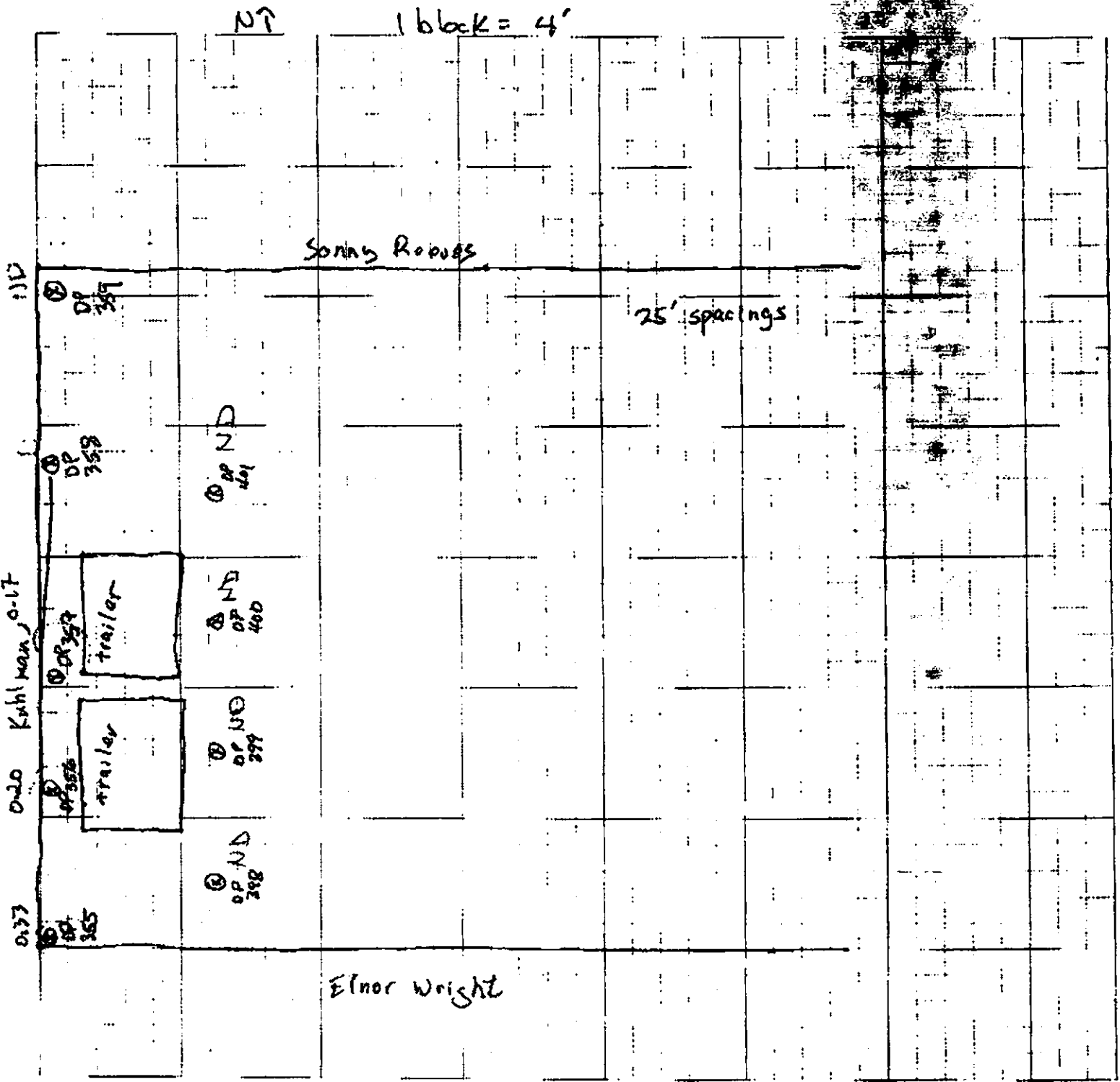
NT

1 block = 4'





Job Name: Crystal Springs  
Job Number:  
Title: Harold & Suzanne  
Computed by: TBF  
Date: 8-18-00





Job Name:

Job Number:

Title: Dabney yard - south side

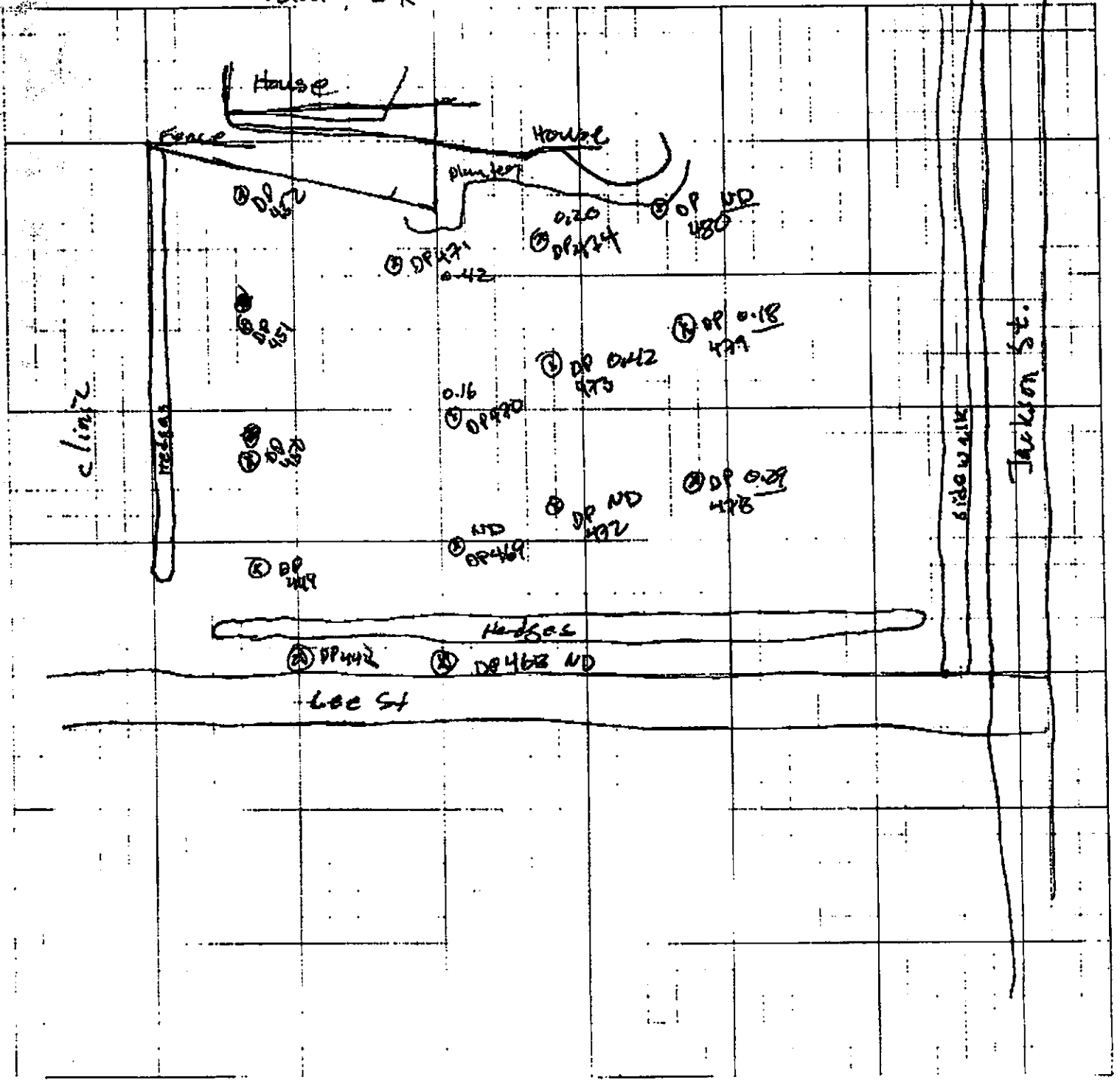
Computed by:

Checked by:

Date: 8/23/00

Sheet: 12 Of:

1 block = 5'













Job Name:

Job Number:

Title: Brent Property Lee St.

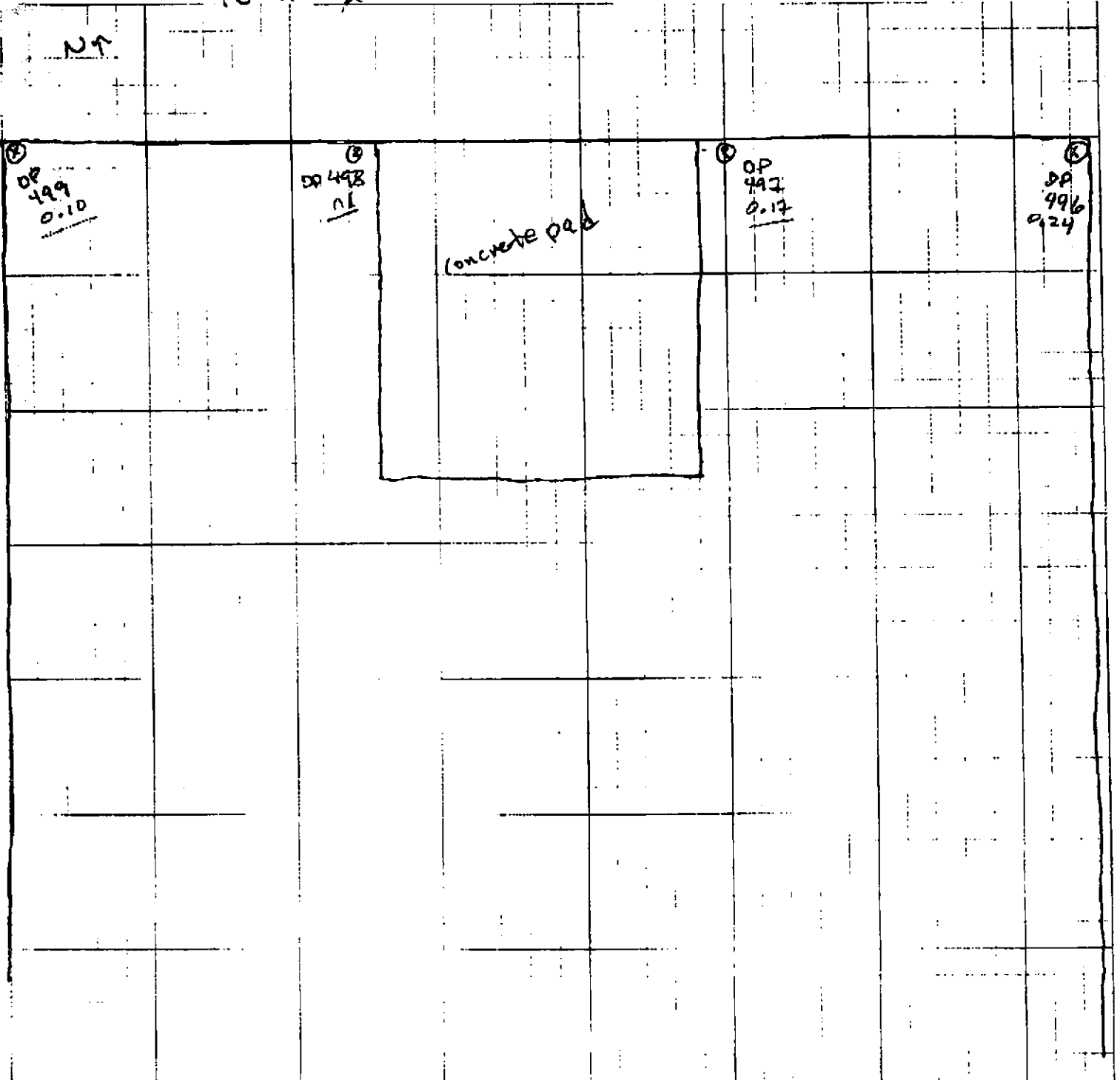
Computed by: T J F

Checked by:

Date: 8/24/00

Sheet: 16 Of:

1 block = 2'





Job Name:

Job Number:

Title: Frazier Property

Computed by: TJF

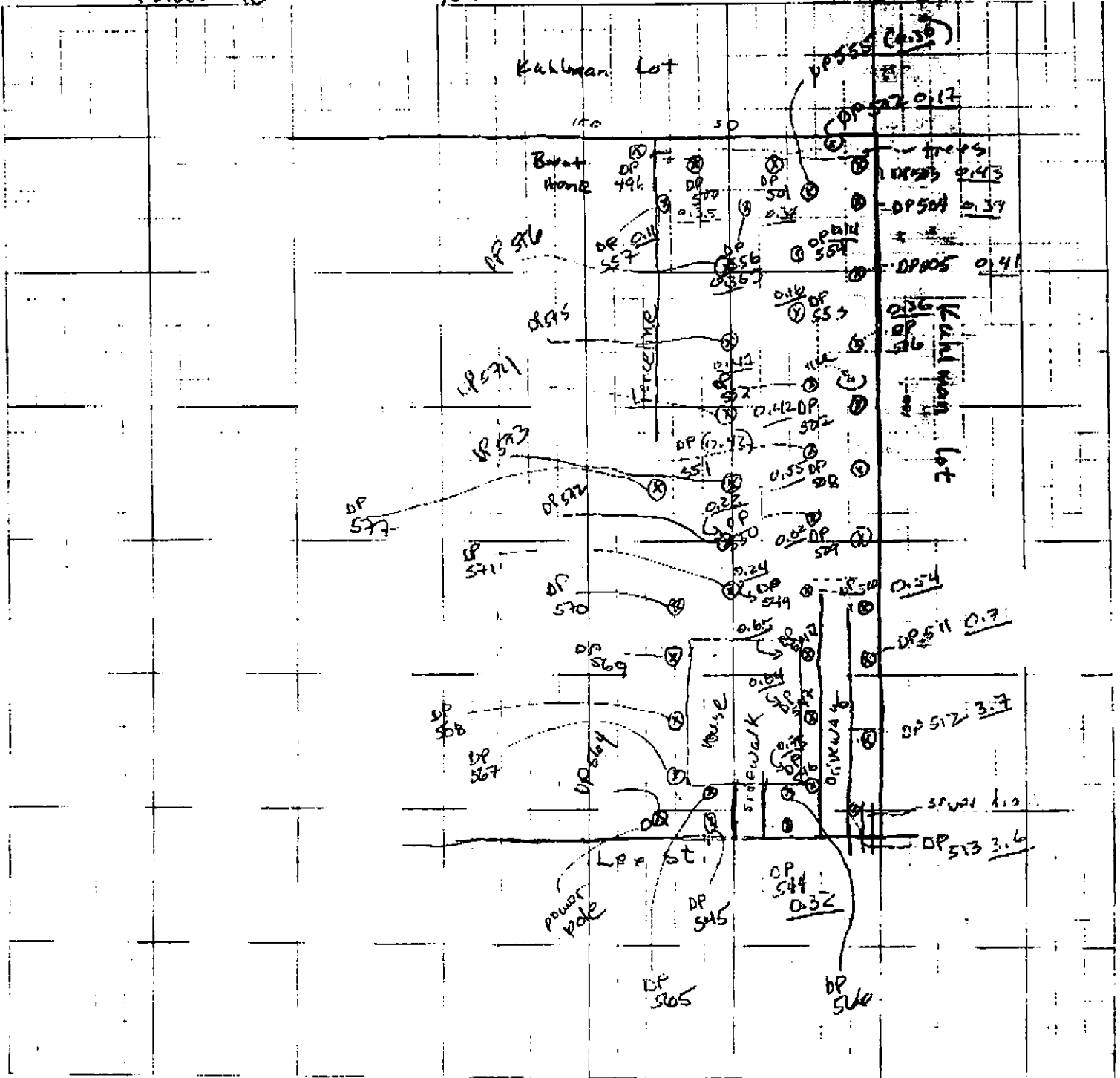
Date: 8/25/00

Checked by:

Sheet: 17

1 block = 10'

NT





Job Name:

Job Number:

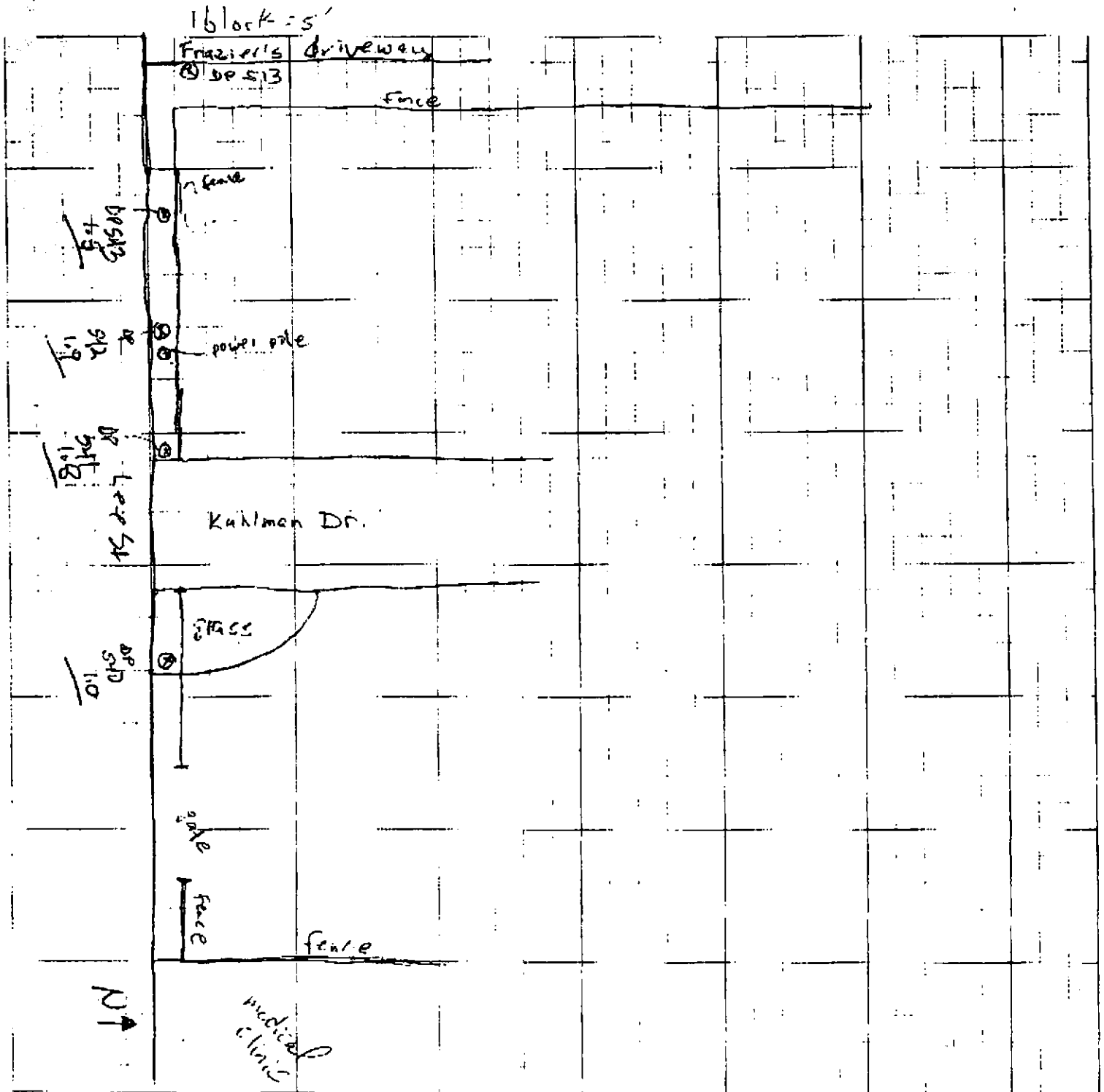
Title: Kuhlman South Parking Lot

Computed by:

Checked by:

Date: 8/26/2000

Sheet: 18 Of:

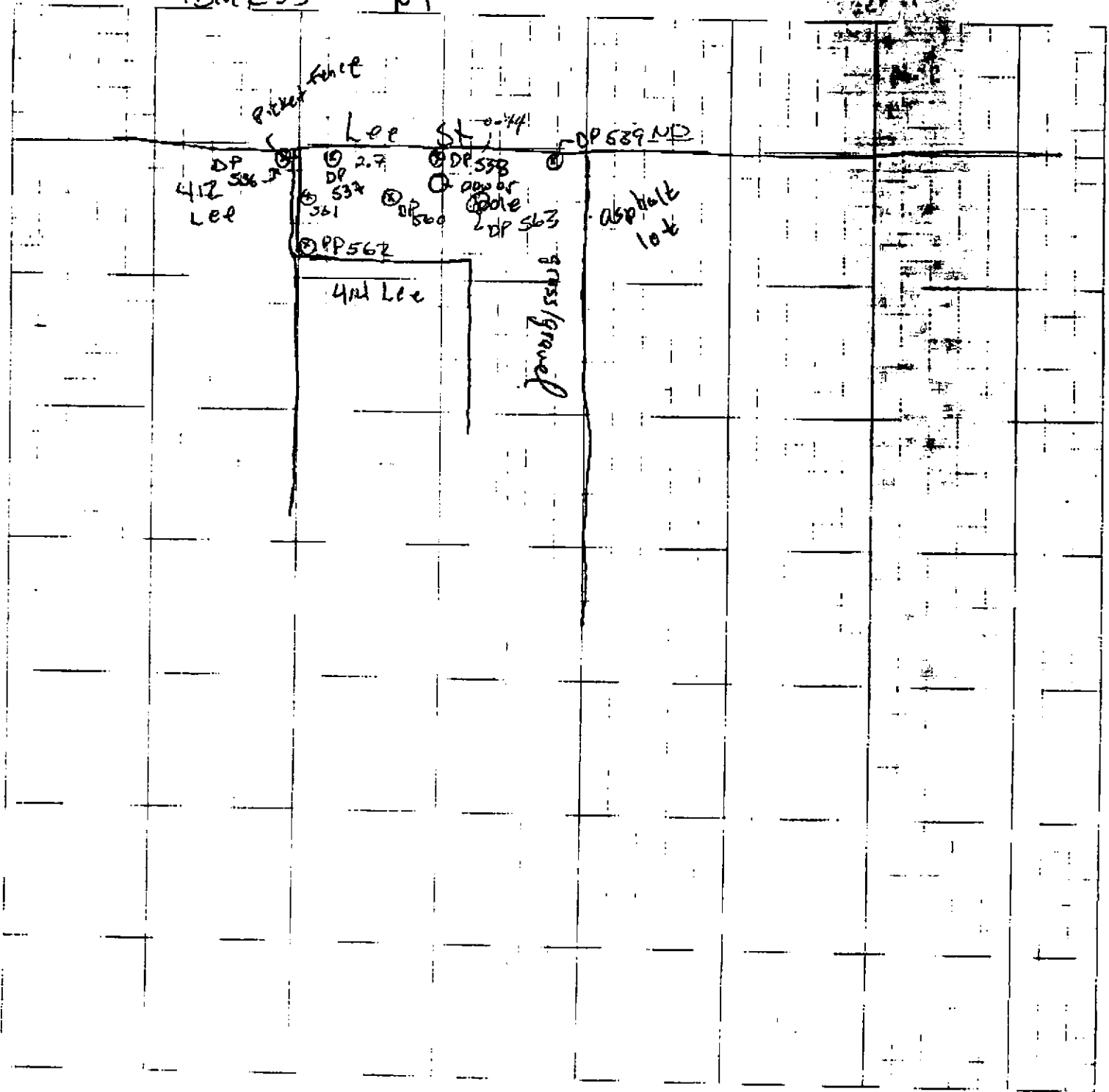




Job Name:  
Job Number:  
Title: 414 Lee St  
Computed by: JF  
Date: 8/26/2000

(Check out ship)  
Checked by:  
Shore: 195 of

1 block = 5' NT





Job Name:  
Job Number  
Title:  
Computed by:  
Date

FILE COPY

Checked by:  
Start: PG Of

To: Gretchin Zmitrovich

From Tim Fitzpatrick

RE: Crystal Springs

31 pages total

Ms. Zmitrovich:

Following ~~are~~<sup>are</sup> data & maps from our investigation.  
We are complete at this time. Please forward the  
data to Mr. Robert Martin & Ms. Anastasio Hamel  
as well. Thank you

Tim Fitzpatrick

704 236 3496 (cell)

Sample Tracking Form

Date: 15 Aug 02

1-20 1-20 1-20

Target Analyte	1	2	3	Sample Description	Blank #	LCS #	MS #	MSD #
1,3,5-TrCB	1010	1010	1020		101	101	101	101
1,2,4-TrCB						105		
1,2,3-TrCB						102		
1,2,3,5,8,1,2,4,5						104		
1,2,3,4,TeCB						104		
Penta-CB						106		
Hexa-CB						111		
PCB as 1260	1010	1015	1012		1010	106	51	417
Surrogate-TCH	116	114	110		103	109	152	104
DEBP	125	111	120		118	109		142
Comp/105								
1254								
15700								
1215								
INT Data	15	15	15		15	15	15	15

J = Estimated  
E = Exceeds calibration range

Date: 16 AUG 00

Sample Tracking Form

Target Analyte	ACID		ACID		ACID		ACID		ACID		ACID		ACID		ACID		ACID		ACID		ACID		ACID		ACID																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
	DP300	DP301	DP302	DP303	DP308	DP309	DP312	DP313	DP314	DP315	DP316	DP317	DP318	DP319	DP320	DP321	DP322	DP323	DP324	DP325	DP326	DP327	DP328	DP329	DP330	DP331	DP332	DP333	DP334	DP335	DP336	DP337	DP338	DP339	DP340	DP341	DP342	DP343	DP344	DP345	DP346	DP347	DP348	DP349	DP350																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
1,3,5-TrCB	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000

AUGUST

J = Estimated  
E = Exceeds calibration range

17482  
1260  
17

Page 2 of 3  
 Date: Aug 16, 2000

### Sample Tracking Form

D830

Target Analyte	RSD Sample Description										MS #	MSD #													
	310	311	312	313	314	315	316	317	318	319			Blank #	LCS #											
1,3,5-TrICB	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	4	30	30		
1,2,4-TrICB																									
1,2,3-TrICB																									
1,2,3,5,8,1,2,4,5																									
1,2,3,4-TeCB																									
Penta-CB																									
Hexa-CB																									
PCB as 1260																									
Surrogate PCB	101	832	96	74	111	93	110	107	112	99	134	107	127	980	107	103	109	102	106	112	104	100	100	103	107
DCBP	115	102	91	79	103	106	109	114	117	105	128	112	129	101	106	107	106	111	108	120	112	107	109	109	107







Page 1 of 2

### Sample Tracking Form

Date: August 11, 2000

SENT BY: KUHLMAN ELECTRIC CORPORATION

601 8926496  
601 8926496;

AUG-11 10:11AM;

Target Analyte	ACID			ACID			ACID			ACID			ACID			ACID			MSD #																				
	MS	#	MSD	MS	#	MSD	MS	#	MSD	MS	#	MSD	MS	#	MSD	MS	#	MSD																					
1,3,5-TrCB	335	4	75	336	4	78	337	4	80	338	4	82	339	4	84	340	4	85	341	4	87	341	4	88	342	4	89	343	4	91	343	4	92	344	4	94	344	4	95
1,2,4-TrCB	335	4	75	336	4	78	337	4	80	338	4	82	339	4	84	340	4	85	341	4	87	341	4	88	342	4	89	343	4	91	343	4	92	344	4	94	344	4	95
1,2,3-TrCB	335	4	75	336	4	78	337	4	80	338	4	82	339	4	84	340	4	85	341	4	87	341	4	88	342	4	89	343	4	91	343	4	92	344	4	94	344	4	95
1,2,3,5,8,1,2,4,5	335	4	75	336	4	78	337	4	80	338	4	82	339	4	84	340	4	85	341	4	87	341	4	88	342	4	89	343	4	91	343	4	92	344	4	94	344	4	95
1,2,3,4-TeCB	335	4	75	336	4	78	337	4	80	338	4	82	339	4	84	340	4	85	341	4	87	341	4	88	342	4	89	343	4	91	343	4	92	344	4	94	344	4	95
Penta-CB	335	4	75	336	4	78	337	4	80	338	4	82	339	4	84	340	4	85	341	4	87	341	4	88	342	4	89	343	4	91	343	4	92	344	4	94	344	4	95
Hexa-CB	335	4	75	336	4	78	337	4	80	338	4	82	339	4	84	340	4	85	341	4	87	341	4	88	342	4	89	343	4	91	343	4	92	344	4	94	344	4	95
PCB as 1250	335	4	75	336	4	78	337	4	80	338	4	82	339	4	84	340	4	85	341	4	87	341	4	88	342	4	89	343	4	91	343	4	92	344	4	94	344	4	95
Suitgate TETA	113	107	105	111	105	111	110	103	109	162	139	110	143	102	105	106	135	98	133	96	102	983	104	103	100	982	14	140	102	114	108	139	101	107	114	108	110	167	158
DCBP	142	117	115	112	115	112	117	153	112	115	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116
195 Data	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18

J = Estimated  
E = Exceeds calibration range



Date: 17 AUG 08

Sample Tracking Form

Target Analyte	Sample Description		ACID		Sample	Sample	Blank	LCS	MS #	MSD #
	345	346	347	348						
1,3,5-TrCB	0.5	0.5	0.5	0.5	4	4	<0.01	982	90	95
1,2,4-TrCB	0.5	0.5	0.5	0.5	4	4	<0.01	984	88.8	96
1,2,3-TrCB	0.5	0.5	0.5	0.5	4	4	<0.01	972	87.6	96
1,2,3,5&1,2,4,5	0.5	0.5	0.5	0.5	4	4	<0.01	970	92.1	97.3
1,2,3,4-TeCB	0.5	0.5	0.5	0.5	4	4	<0.01	965	91.0	94.8
Penta-CB	0.5	0.5	0.5	0.5	4	4	<0.01	975	98.2	97.6
Hexa-CB	0.5	0.5	0.5	0.5	4	4	<0.01	100	101	102
PCB as 1260	0.5	0.5	0.5	0.5	4	4	<0.01	104	110	98.9
Surrogate TCX	0.5	0.5	0.5	0.5	4	4	<0.01	983	76.9	99.8
DBP	0.5	0.5	0.5	0.5	4	4	<0.01	114	103	90.9
	0.5	0.5	0.5	0.5	4	4	<0.01	118	114	103

J = Estimated  
E = Exceeds calibration range

17

Sample Tracking Form

Date: 18 Aug 00

Acid

Acid

Acid

Acid

Acid

Target Analyte	Sample Description		Blank	LCS	MS #	MSC #
	Sample ID	Concentration				
1,3,5-TrICB	350	0.5	107	107	107	137
1,2,4-TrICB	352	0.5	112	112	112	135
1,2,3-TrICB	351	0.5	110	110	110	131
1,2,3,5,8,1,2,4,5	351	0.5	110	110	110	131
1,2,3,4-TeCB	351	0.5	110	110	110	131
Penta-CB	351	0.5	110	110	110	131
Hexa-CB	351	0.5	110	110	110	131
PCB as 1260	352	0.5	112	112	112	135
Surrogate TEW	352	0.5	112	112	112	135
Surrogate KRP	352	0.5	112	112	112	135
	353	0.5	115	115	115	135
	354	0.5	116	116	116	135
	354	0.5	117	117	117	135
	354	0.5	118	118	118	135
	354	0.5	119	119	119	135
	354	0.5	120	120	120	135
	354	0.5	121	121	121	135
	354	0.5	122	122	122	135
	354	0.5	123	123	123	135
	354	0.5	124	124	124	135
	354	0.5	125	125	125	135
	354	0.5	126	126	126	135
	354	0.5	127	127	127	135
	354	0.5	128	128	128	135
	354	0.5	129	129	129	135
	354	0.5	130	130	130	135
	354	0.5	131	131	131	135
	354	0.5	132	132	132	135
	354	0.5	133	133	133	135
	354	0.5	134	134	134	135
	354	0.5	135	135	135	135
	354	0.5	136	136	136	135
	354	0.5	137	137	137	135
	354	0.5	138	138	138	135
	354	0.5	139	139	139	135
	354	0.5	140	140	140	135
	354	0.5	141	141	141	135
	354	0.5	142	142	142	135
	354	0.5	143	143	143	135
	354	0.5	144	144	144	135
	354	0.5	145	145	145	135
	354	0.5	146	146	146	135
	354	0.5	147	147	147	135
	354	0.5	148	148	148	135
	354	0.5	149	149	149	135
	354	0.5	150	150	150	135
	354	0.5	151	151	151	135
	354	0.5	152	152	152	135
	354	0.5	153	153	153	135
	354	0.5	154	154	154	135
	354	0.5	155	155	155	135
	354	0.5	156	156	156	135
	354	0.5	157	157	157	135
	354	0.5	158	158	158	135
	354	0.5	159	159	159	135
	354	0.5	160	160	160	135
	354	0.5	161	161	161	135
	354	0.5	162	162	162	135
	354	0.5	163	163	163	135
	354	0.5	164	164	164	135
	354	0.5	165	165	165	135
	354	0.5	166	166	166	135
	354	0.5	167	167	167	135
	354	0.5	168	168	168	135
	354	0.5	169	169	169	135
	354	0.5	170	170	170	135
	354	0.5	171	171	171	135
	354	0.5	172	172	172	135
	354	0.5	173	173	173	135
	354	0.5	174	174	174	135
	354	0.5	175	175	175	135
	354	0.5	176	176	176	135
	354	0.5	177	177	177	135
	354	0.5	178	178	178	135
	354	0.5	179	179	179	135
	354	0.5	180	180	180	135
	354	0.5	181	181	181	135
	354	0.5	182	182	182	135
	354	0.5	183	183	183	135
	354	0.5	184	184	184	135
	354	0.5	185	185	185	135
	354	0.5	186	186	186	135
	354	0.5	187	187	187	135
	354	0.5	188	188	188	135
	354	0.5	189	189	189	135
	354	0.5	190	190	190	135
	354	0.5	191	191	191	135
	354	0.5	192	192	192	135
	354	0.5	193	193	193	135
	354	0.5	194	194	194	135
	354	0.5	195	195	195	135
	354	0.5	196	196	196	135
	354	0.5	197	197	197	135
	354	0.5	198	198	198	135
	354	0.5	199	199	199	135
	354	0.5	200	200	200	135

J = Estimated  
E = Exceeds calibration range

Date: 18 Aug 00

Sample Tracking Form

Target Analyte	ACID																														
	HA-6	6	7	7	355	355	356	356	357	357	358	358	359	359	360	360	360	361	361	361	361	362	362	362	Blank	LCS	MS	MSD			
	0.5	2.5	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	
1,3,5-TrCB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
1,2,4-TrCB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
1,2,3-TrCB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
1,2,3,5,8,1,2,4,5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
1,2,3,4-TeCB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Penta-CB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Hexa-CB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
PCB as 1260	0.10	0.10	0.11	0.16	0.35	0.10	0.20	0.10	0.17	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.22	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	
Surrogate TCM	0.7	7.53	10.3	9.62	130	141.3	120	12.5	9.61	165.4	101.9	102.2	99.2	60.5	93	96	103	123	123	145	146	147	148	149	150	151	152	153	154	155	
DCBP	12.9	9.77	130	123	73.8	99.4	2.81	10.0	130	91.6	91.4	91.8	107	92.6	101	108	120	135	135	150	151	152	153	154	155	156	157	158	159	160	
				MIX																											
				155.2																											
				12.0																											
				111																											
INS Date	18	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19	18	19	18	18	19	18	19	19	19	19	19	19	19	19	19

J = Estimated  
E = Exceeds calibration range

# Sample Tracking Form

Date: 18 Aug 00

SENT BY: KUHLMAN ELECTRIC CORPORATION

601 8926496

601 8926496;

AUG-20 10:13AM;

PAGE 11

Target Analyte	Acid			Acid			Acid			Acid			Acid			Acid			Acid		
	363	364	365	366	367	368	369	370	371	372	Blank #	LCS #	MS #	MSD #	373	374	375	376	377	378	379
1,3,5-TrCB	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167
1,2,4-TrCB																					
1,2,3-TrCB																					
1,2,3,5,8,1,2,4,5																					
1,2,3,4-TeCB																					
Penta-CB																					
Hexa-CB																					
PCB as 1280	1642	1643	1644	1645	1646	1647	1648	1649	1650	1651	1652	1653	1654	1655	1656	1657	1658	1659	1660	1661	1662
Surrogate TCMY	112	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138
DXBP	129	129	129	129	129	129	129	129	129	129	129	129	129	129	129	129	129	129	129	129	129

J = Estimated  
E = Exceeds calibration range

Date: 18 Aug 00

Sample Tracking Form

Target Analyte	Aug				Aug				Aug				Blank #	LCS #	MS #	MSD #	
	373 0.5	374 0.5	375 4	376 4	377 0.5	378 4	379 4	380 0.5	381 4	382 4	383 4	384 4					385 4
1,3,5-TrICB	167	169	171	174	175	176	177	178	179	180	181	182	183	184	91	87	88
1,2,4-TrICB																	
1,2,3-TrICB																	
1,2,3,5,8,1,2,4,5																	
1,2,3,4-TeCB																	
Penta-CB																	
Hexa-CB																	
PCB as 1260	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221
Surrogate TCM 82	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98
DU8P 99	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115

J = Estimated  
E = Exceeds calibration range











Sample Tracking Form

Date: 19 Aug 00

Target Analyte	Sample Description	Blank #	LCS #	MS #	M #
1,3,5-TrCB	422 0.5 265	422 0.5 265	422 0.5 265	422 0.5 265	422 0.5 265
	422 4 266	422 4 266	422 4 266	422 4 266	422 4 266
	423 0.5 267	423 0.5 267	423 0.5 267	423 0.5 267	423 0.5 267
	423 4 268	423 4 268	423 4 268	423 4 268	423 4 268
	424 0.5 269	424 0.5 269	424 0.5 269	424 0.5 269	424 0.5 269
	424 4 270	424 4 270	424 4 270	424 4 270	424 4 270
	425 0.5 271	425 0.5 271	425 0.5 271	425 0.5 271	425 0.5 271
	425 4 272	425 4 272	425 4 272	425 4 272	425 4 272
	426 0.5 273	426 0.5 273	426 0.5 273	426 0.5 273	426 0.5 273
	426 4 274	426 4 274	426 4 274	426 4 274	426 4 274
	427 0.5 275	427 0.5 275	427 0.5 275	427 0.5 275	427 0.5 275
	427 4 276	427 4 276	427 4 276	427 4 276	427 4 276
1,2,3-TrCB	428 0.12 <LOI	428 0.12 <LOI	428 0.12 <LOI	428 0.12 <LOI	428 0.12 <LOI
	428 84.2 83.3	428 84.2 83.3	428 84.2 83.3	428 84.2 83.3	428 84.2 83.3
	429 0.19 <LOI	429 0.19 <LOI	429 0.19 <LOI	429 0.19 <LOI	429 0.19 <LOI
	429 84.2 83.3	429 84.2 83.3	429 84.2 83.3	429 84.2 83.3	429 84.2 83.3
	430 0.12 <LOI	430 0.12 <LOI	430 0.12 <LOI	430 0.12 <LOI	430 0.12 <LOI
	430 84.2 83.3	430 84.2 83.3	430 84.2 83.3	430 84.2 83.3	430 84.2 83.3
Surrogate TCMK	119 70.3 81.9	119 70.3 81.9	119 70.3 81.9	119 70.3 81.9	119 70.3 81.9
	119 86.1 85.2	119 86.1 85.2	119 86.1 85.2	119 86.1 85.2	119 86.1 85.2
DCBP	115 81.9 81.9	115 81.9 81.9	115 81.9 81.9	115 81.9 81.9	115 81.9 81.9
	115 86.1 85.2	115 86.1 85.2	115 86.1 85.2	115 86.1 85.2	115 86.1 85.2
1,2,3,4-TbCB	20 20 20	20 20 20	20 20 20	20 20 20	20 20 20
Penta-CB	20 20 20	20 20 20	20 20 20	20 20 20	20 20 20
Hexa-CB	20 20 20	20 20 20	20 20 20	20 20 20	20 20 20
PCB as 1260	20 20 20	20 20 20	20 20 20	20 20 20	20 20 20

800 Revision Log  
Row

J = Estimated  
E = Exceeds calibration range





Sample Tracking Form

Date: 20 Aug 00

Target Analyte	MS #	LCS #	Blank #	MS #	MSC #	Sample Description
1,3,5-TrCB	446	446	447	447	447	<p>NO LCS/MS/MSD</p> <p>Blank</p>
1,2,4-TrCB	445	445	447	447	447	
1,2,3-TrCB	4	4	4	4	4	
1,2,3,5&1,2,4,5	317	318	319	320	321	
1,2,3,4-TeCB	401	401	401	401	401	
Penta-CB						
Hexa-CB						
PCB as 1260	0.12	0.12	0.12	0.12	0.12	
Surrogate TCMX	112	112	112	112	112	
D-BD	112	112	112	112	112	
1,2,3,4,5,6	20	20	20	20	20	

J = Estimated  
E = Exceeds calibration range

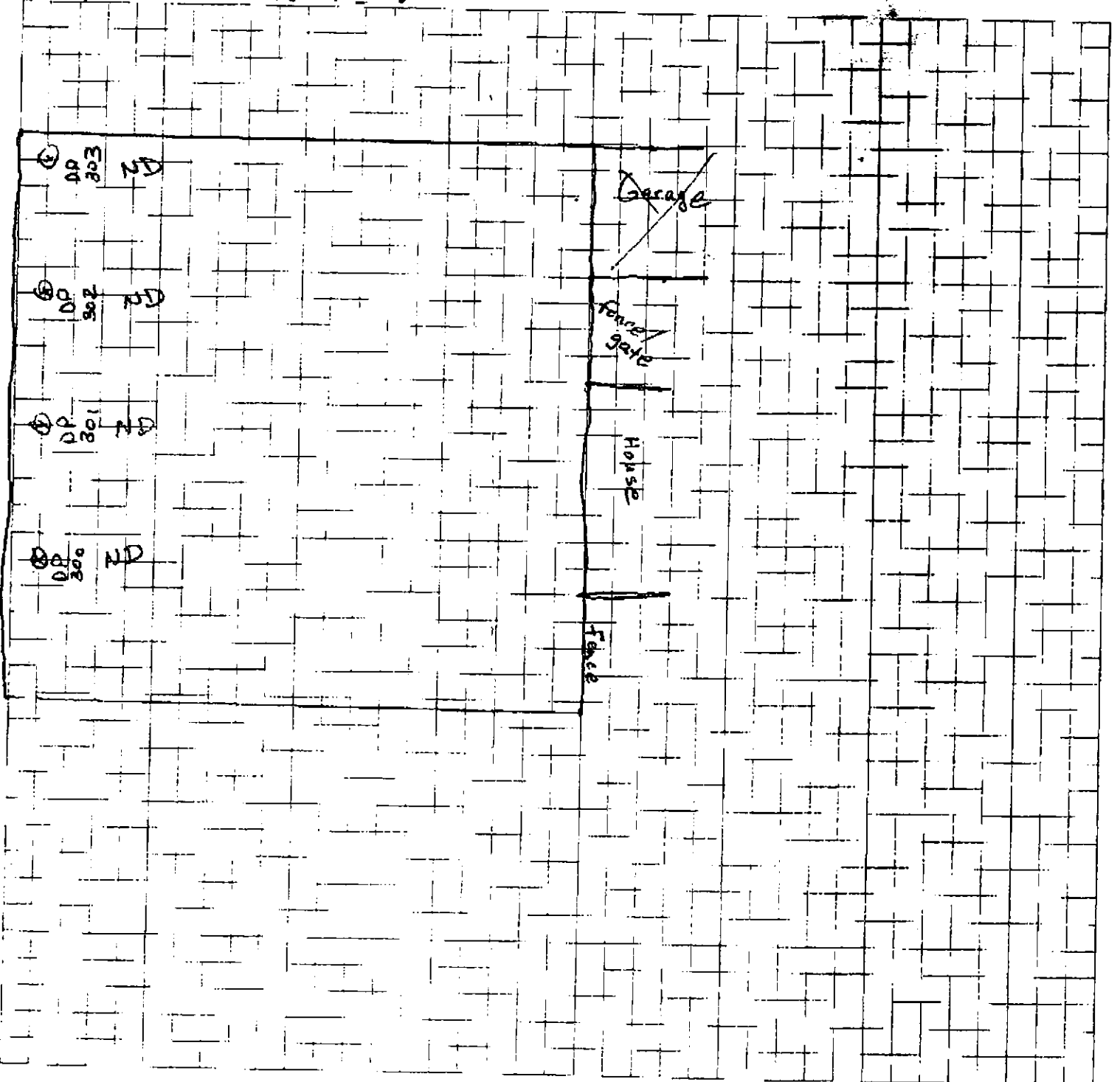




Job Name: Crystal Springs  
 Job Number: \_\_\_\_\_  
 Title: Sony Reeves backyard 405 Jackson  
 Computed by: Crutcher  
 Date: 2/16/2000 Sheet 1 of 11

N ↑

1 block = 4'

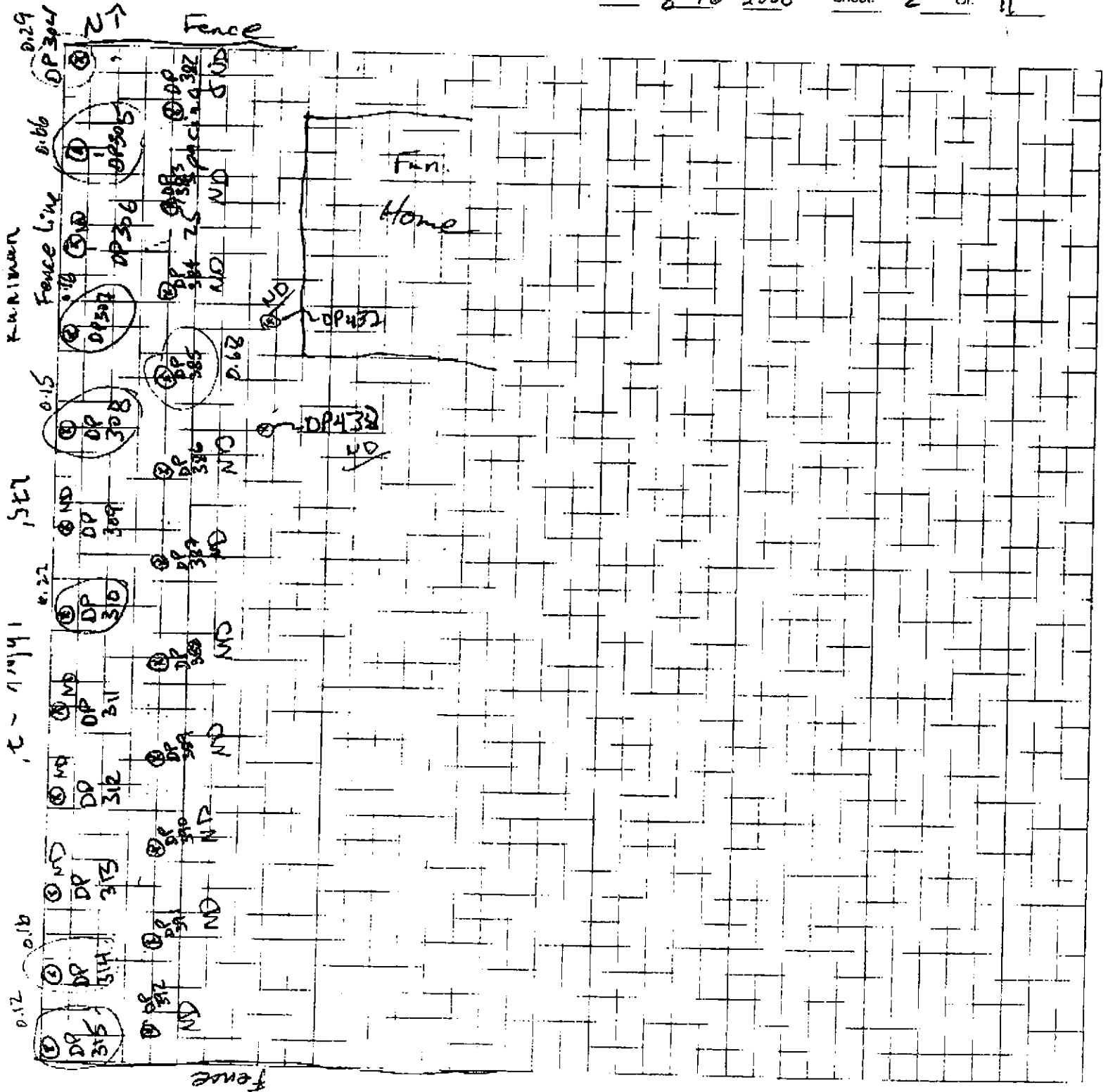


Washington



280  
200  
7

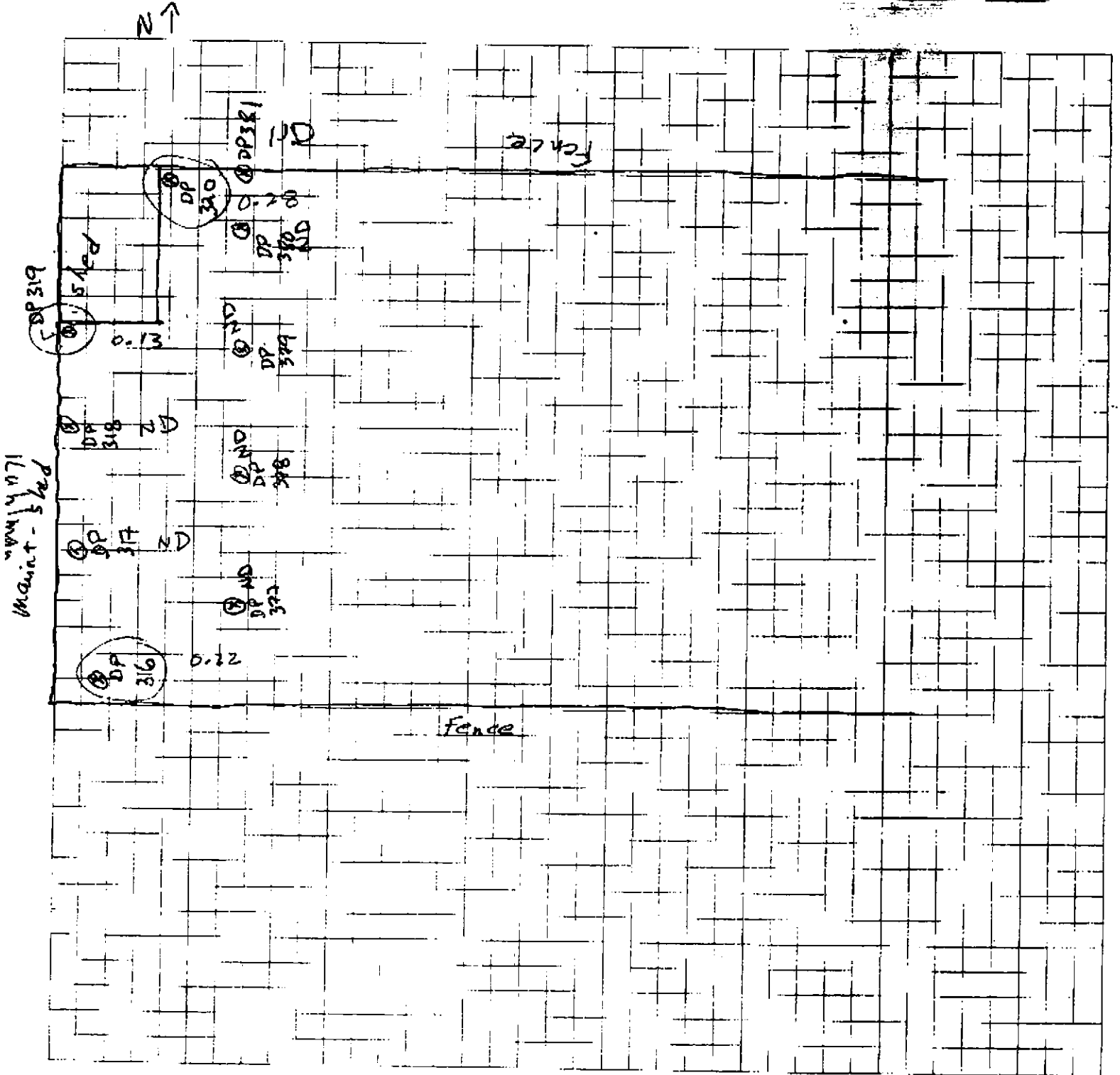
Job Name: Crystal Springs  
Job Number: \_\_\_\_\_  
Title: Stringer Funeral Home  
Computed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
Date: 8-16-2000 Sheet: 2 Of: 11





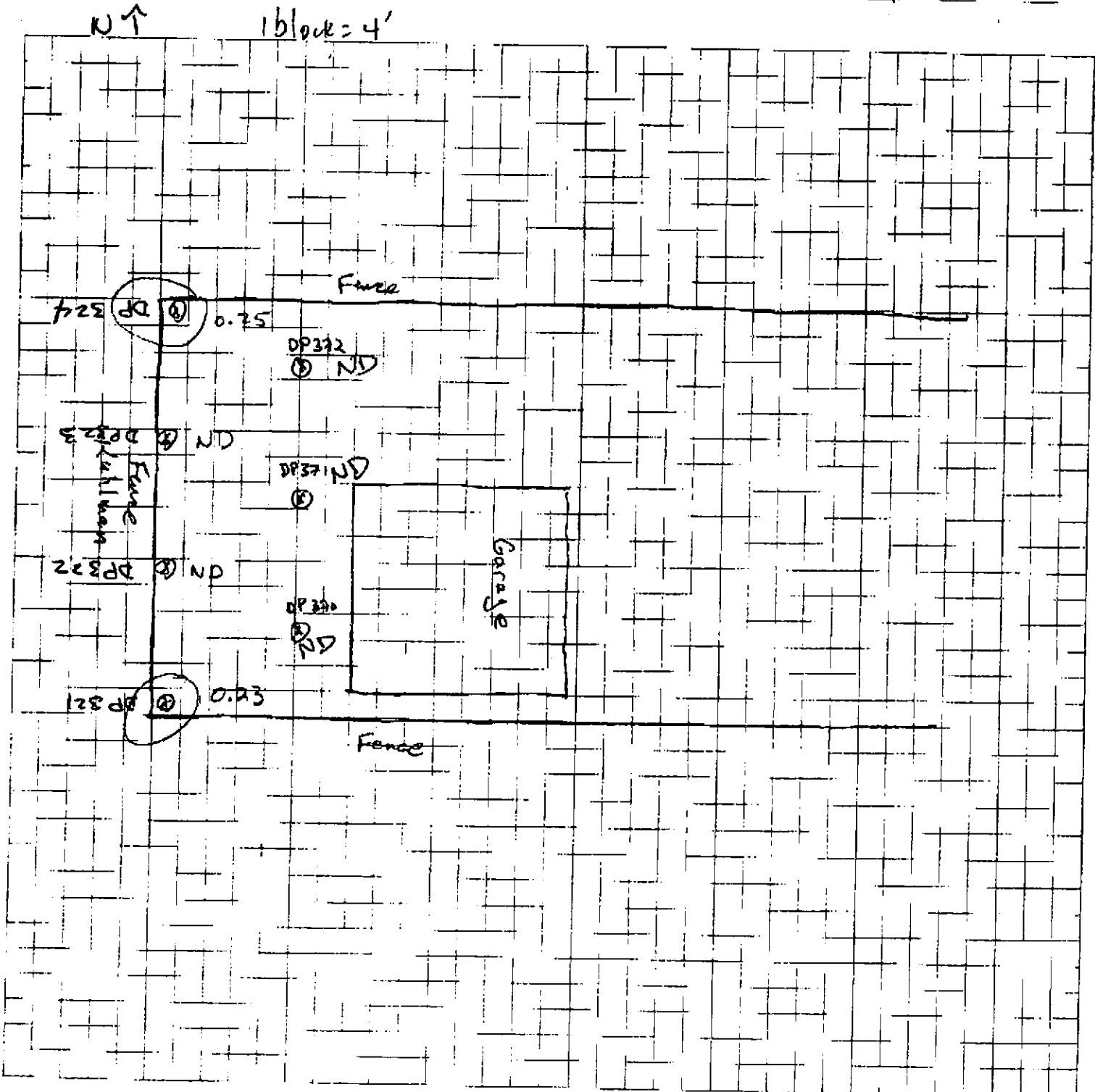
Job Name: Crystal Springs  
Job Number:  
Title: 401 N. Jackson, Elnor Wright  
Computed by: Checked by:  
Date: 8-16-2000 Sheet 3 of 11

1 block = 4'



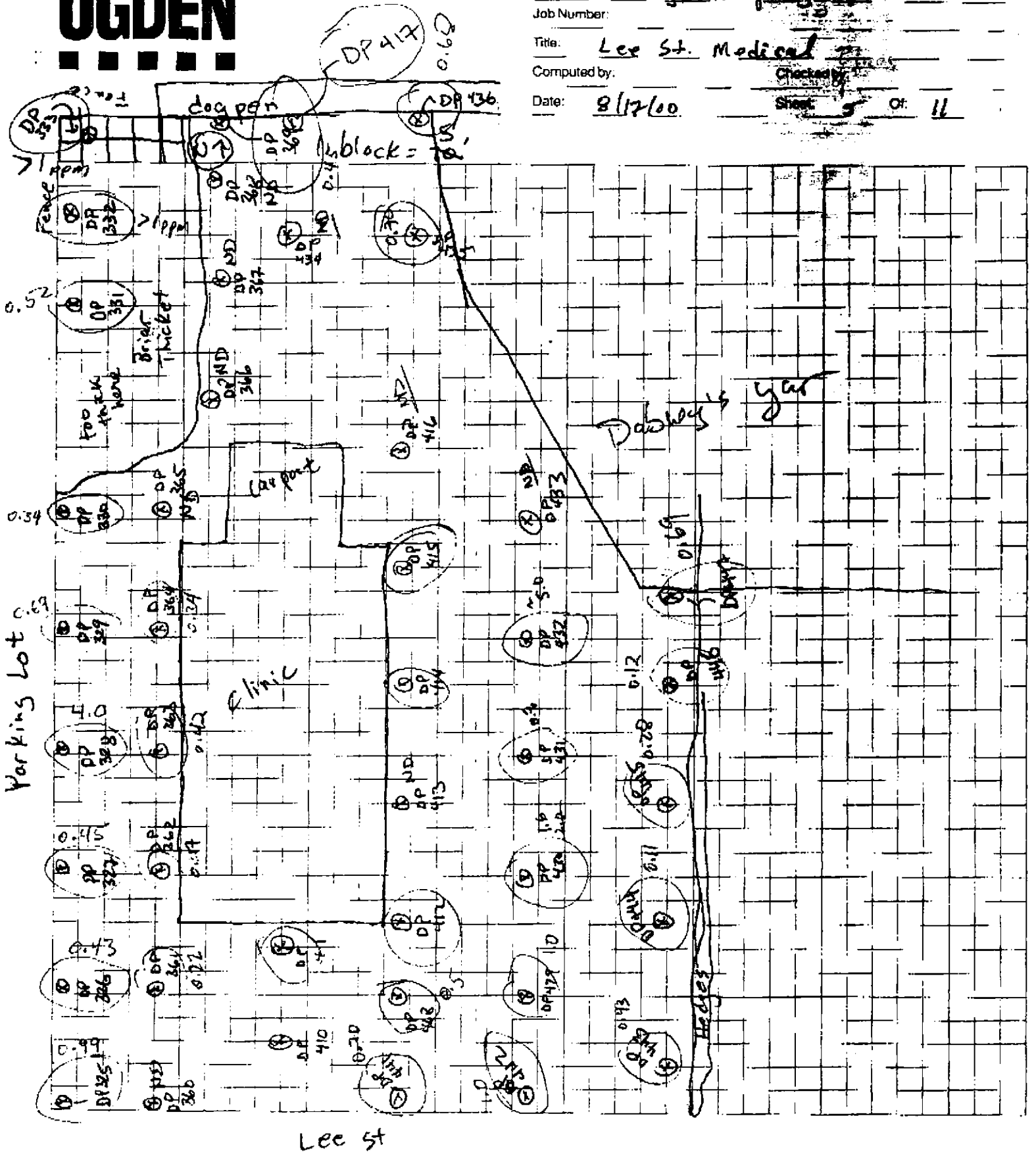


Job Name: Crystal Springs  
 Job Number: \_\_\_\_\_  
 Title: 407 N. Jackson Louie Lang  
 Computed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
 Date: 8-16-00 Sheet: 4 Of: 11



# OGDEN

Job Name: Crystal Springs  
 Job Number: \_\_\_\_\_  
 Title: Lee St. Medical  
 Computed by: \_\_\_\_\_  
 Date: 8/17/00 Sheet 5 of 11





Job Name: Crystal Springs

Job Number: \_\_\_\_\_

Title: 303 N. Jackson (stringer)

Computed by: \_\_\_\_\_

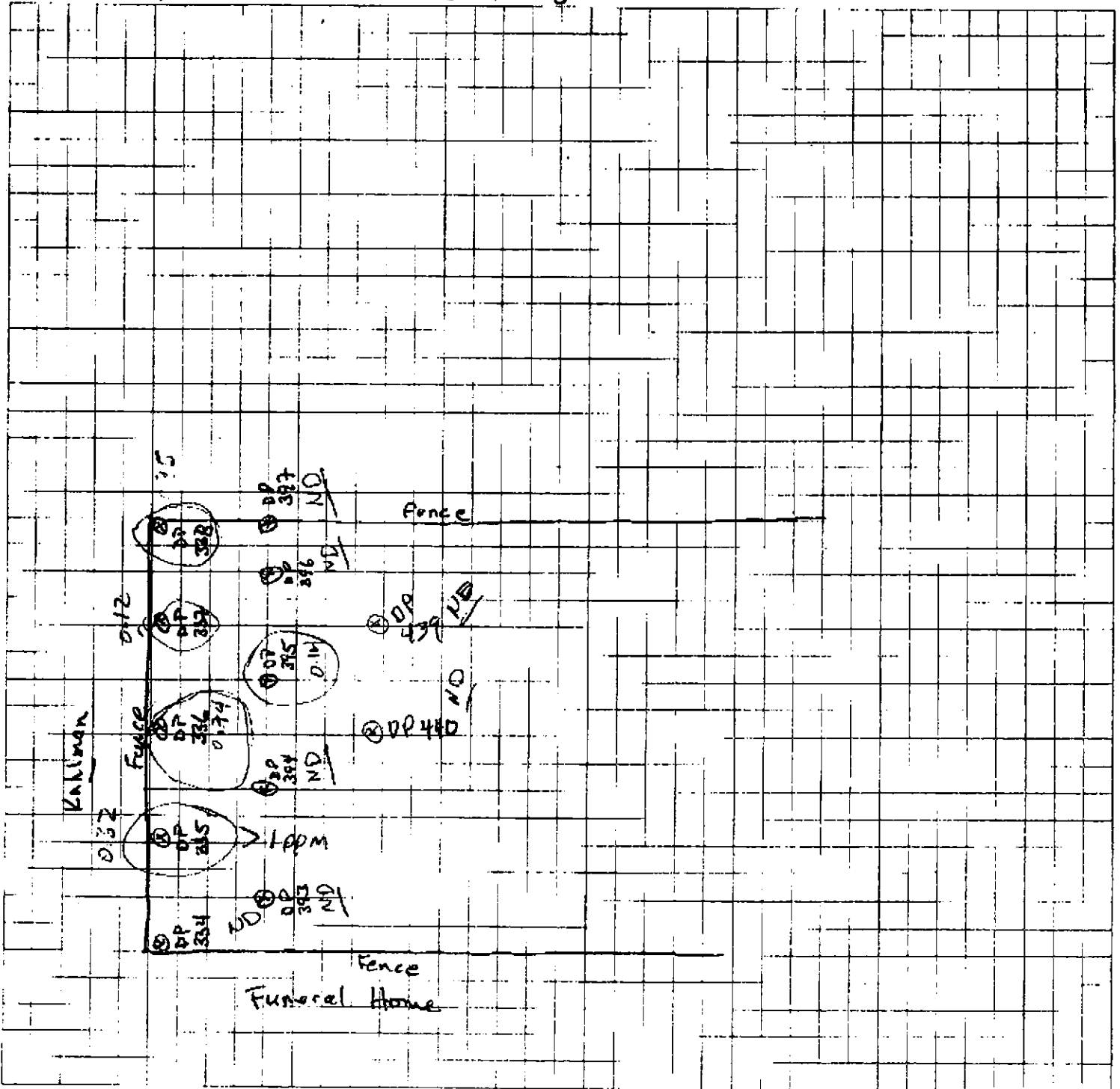
Checked by: \_\_\_\_\_

Date: 8-17-00

Sheet: 6 Of 11

NT

1 block = 5'

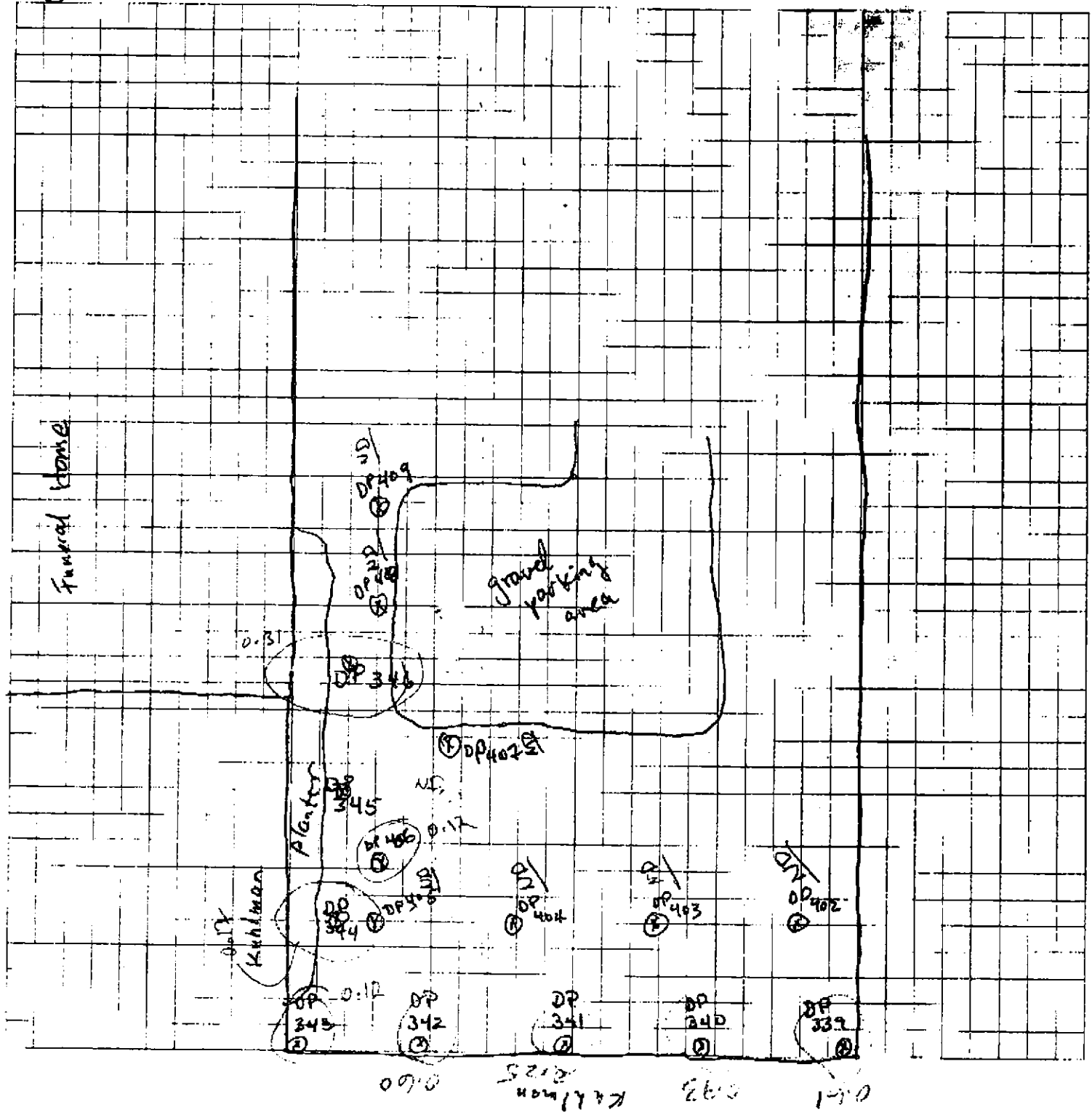




Job Name: Crystal Springs  
Job Number: \_\_\_\_\_  
Title: 219 N. Jackson - Perry Smith  
Computed by: TJF Checked by: \_\_\_\_\_  
Date: 8-17-00 Sheet 7 of 11

1 block = 5'

②





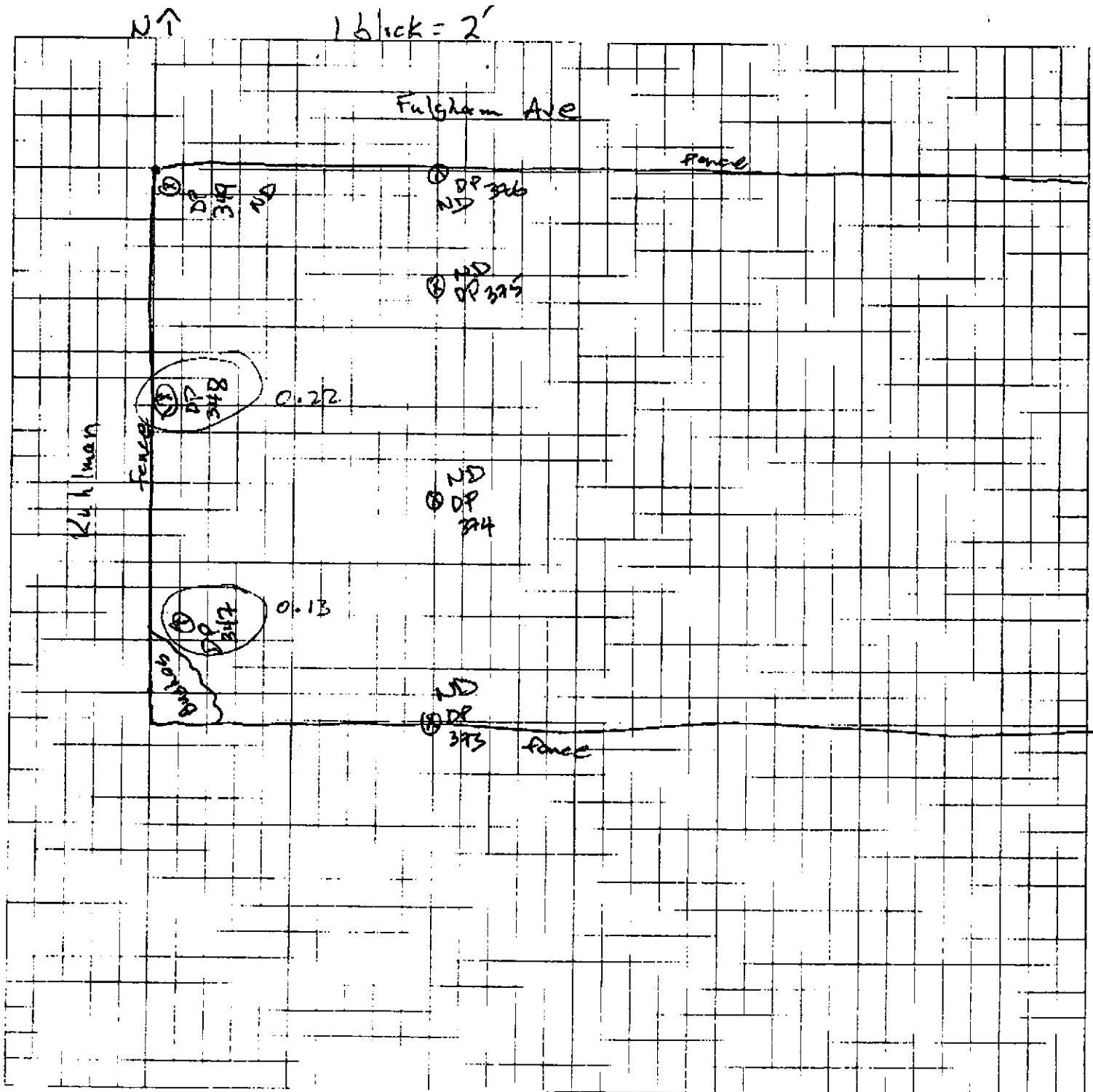
Job Name: Crystal Springs

Job Number: \_\_\_\_\_

Title: 409 N. Jackson (Army Cooper)

Computed by: RF Checked by: \_\_\_\_\_

Date: 8-17-00 Sheet: 8 of 11

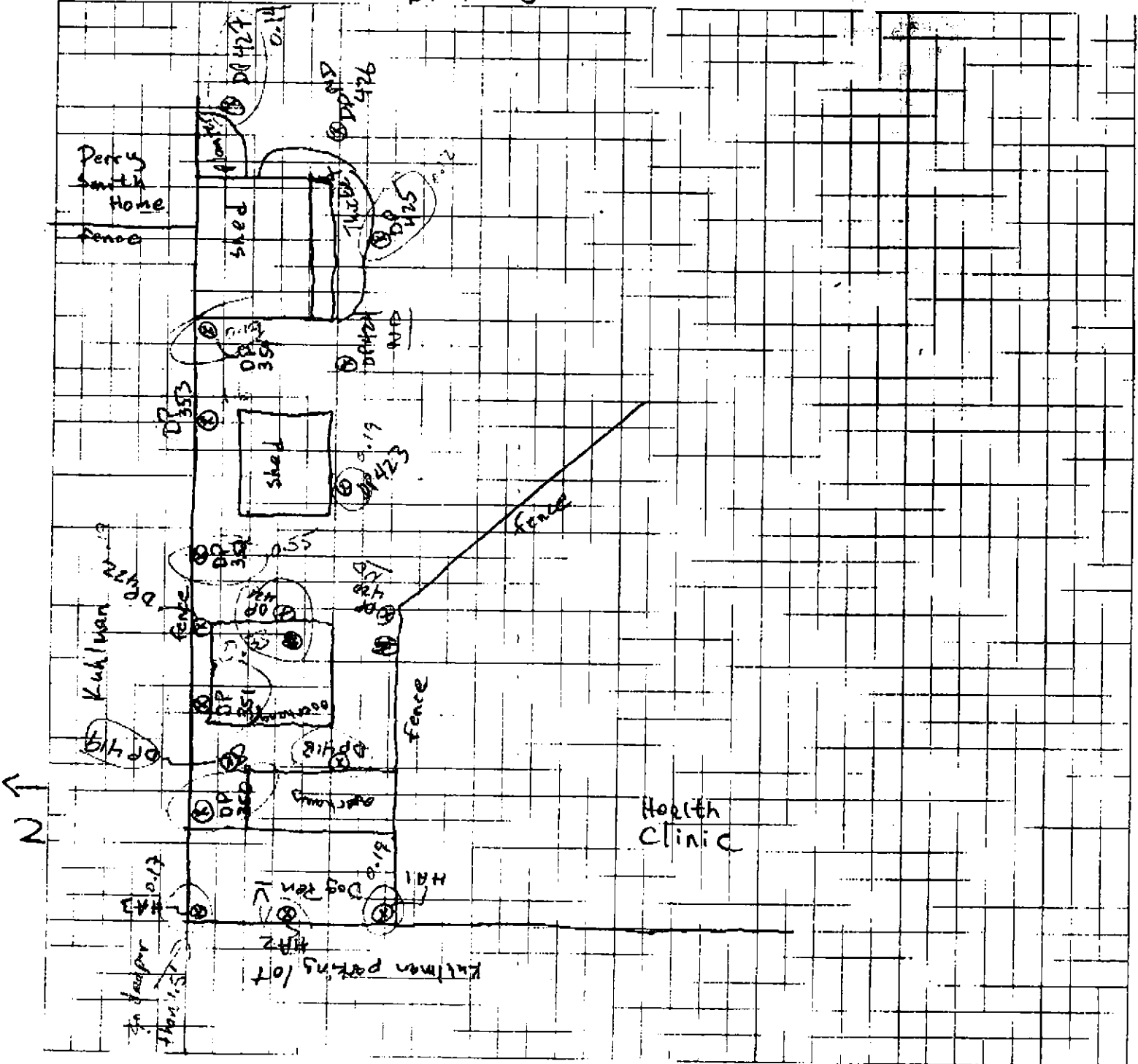






Job Name: Crystal Springs  
 Job Number: \_\_\_\_\_  
 Title: Dabney Home Plans  
 Computed by: TJE Checked by: \_\_\_\_\_  
 Date: 8-17-00 Sheet 9 of 11

1 block = 5'





Job Name: Crystal Springs

Job Number: \_\_\_\_\_

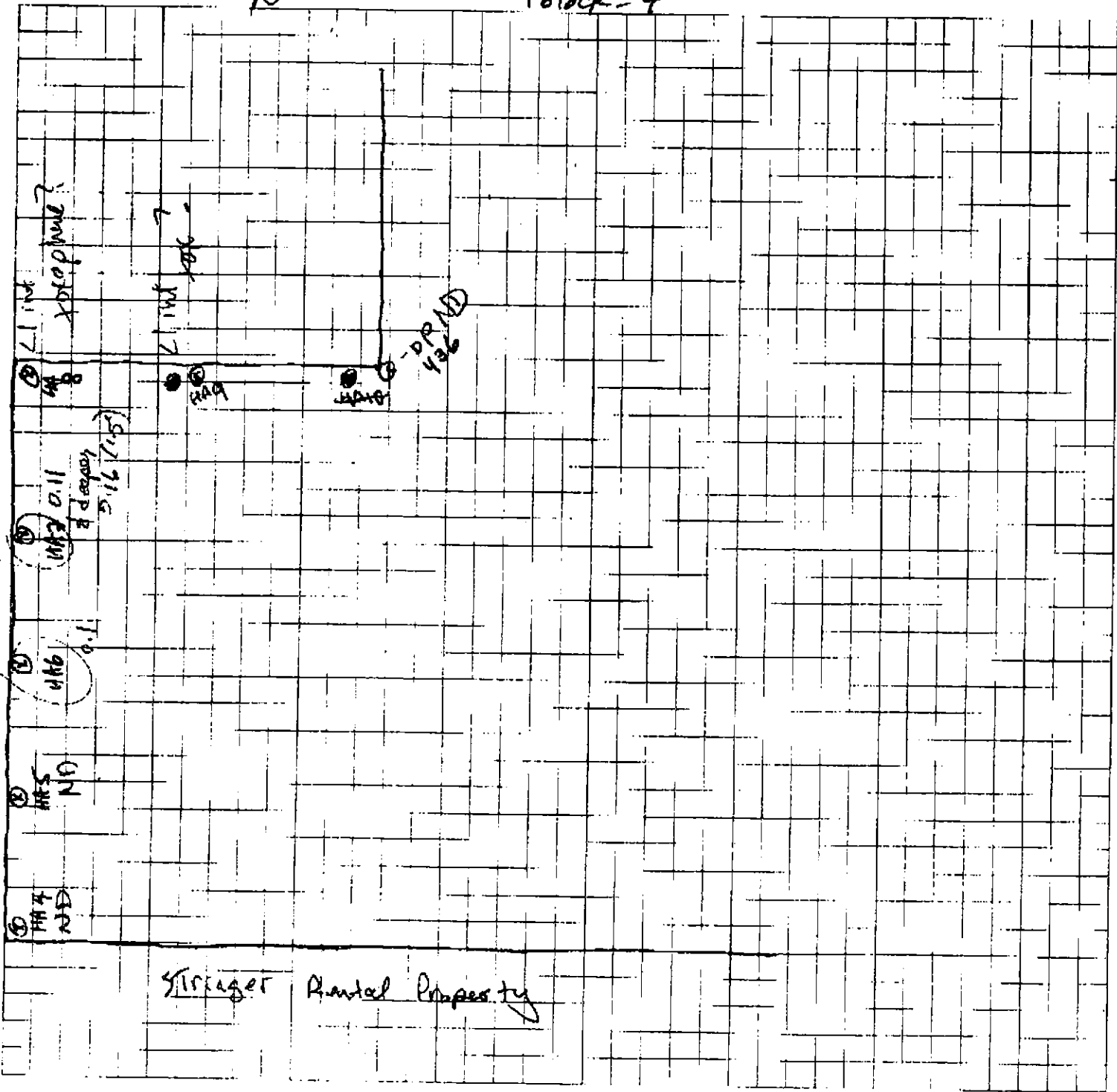
Title: Wright House

Computed by: \_\_\_\_\_ Checked by: \_\_\_\_\_

Date: 8-18-00 Sheet: 10 Of: 11

NT

1 block = 4'



Kuhlman

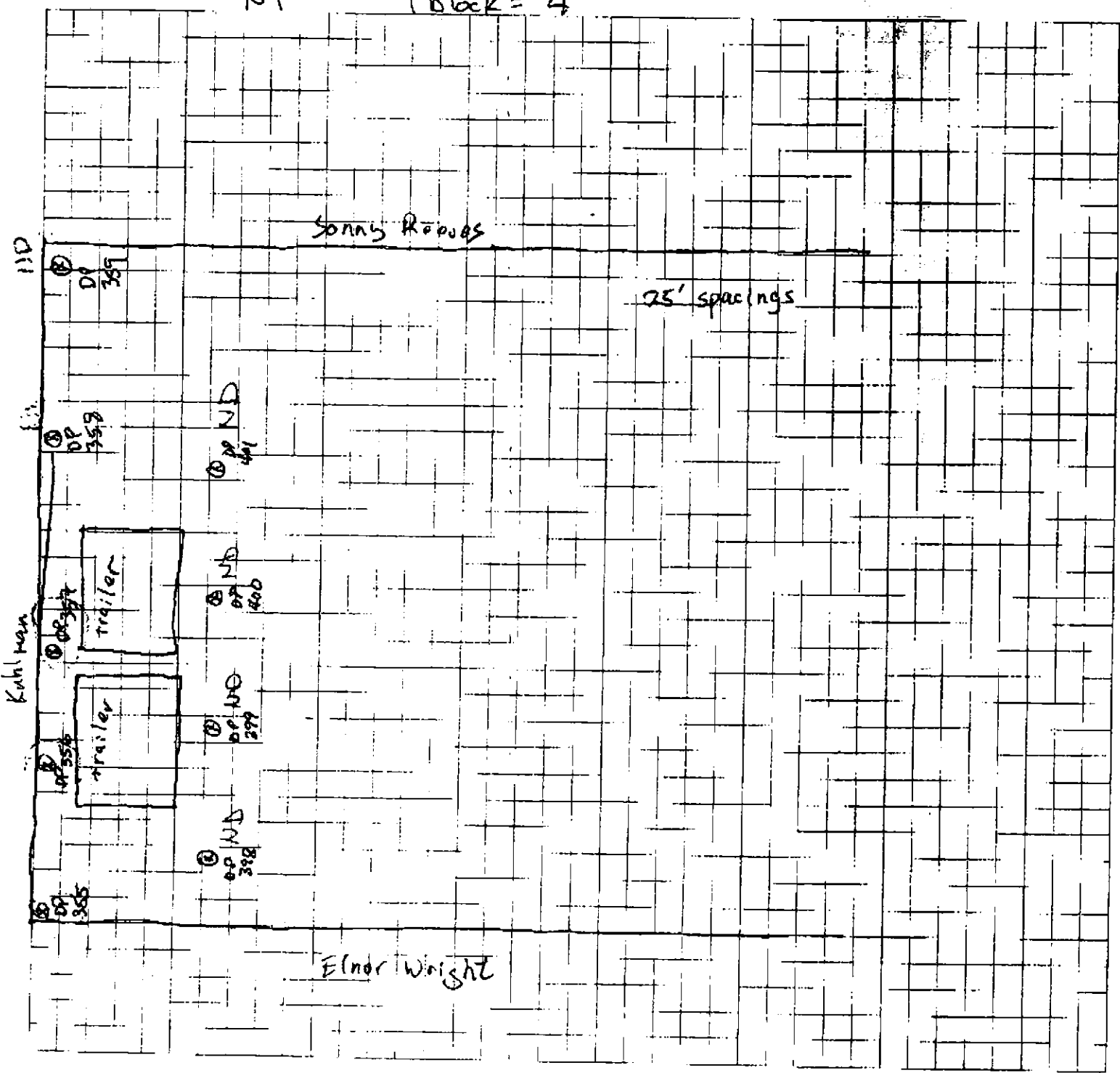
① 17 int  
② 18  
③ 19  
④ 20  
⑤ 21  
⑥ 22  
⑦ 23  
⑧ 24  
⑨ 25  
⑩ 26  
⑪ 27  
⑫ 28  
⑬ 29  
⑭ 30  
⑮ 31  
⑯ 32  
⑰ 33  
⑱ 34  
⑲ 35  
⑳ 36  
㉑ 37  
㉒ 38  
㉓ 39  
㉔ 40  
㉕ 41  
㉖ 42  
㉗ 43  
㉘ 44  
㉙ 45  
㉚ 46  
㉛ 47  
㉜ 48  
㉝ 49  
㉞ 50  
㉟ 51  
㊱ 52  
㊲ 53  
㊳ 54  
㊴ 55  
㊵ 56  
㊶ 57  
㊷ 58  
㊸ 59  
㊹ 60  
㊺ 61  
㊻ 62  
㊼ 63  
㊽ 64  
㊾ 65  
㊿ 66

Stranger Rental Property



Job Name: Crystal Springs  
 Job Number: \_\_\_\_\_  
 Title: Harold & Suzanne Womern  
 Computed by: TBF Checked by: \_\_\_\_\_  
 Date: 8-18-00 Sheet 11 of 11

NT 1 block = 4'





Job Name:  
Job Number:  
Title:  
Computed by:  
Date:

FILE COPY  
COPY

Checked by:  
Sheet: Of:

# Fax Coversheet

To: Gretchin Zmitrovich  
MDECR

From: Tim Fitzpatrick  
Ogden Environmental

Re: Crystal Springs Data Summary

19 pages  
total

Ms. Zmitrovich:

Following is all the data available as of 5:30 PM on Friday Aug 18. The mobile lab had autosampler malfunctions the previous two nights and are thus still somewhat behind.

We will be working through the weekend and you can reach me on my cell at 704-236-3496 if you like.

Best Regards,  
Tim Fitzpatrick



Sample Tracking Form

Page 2 of 3  
Date: Aug 14, 2000

D310

Target Analyte	D310		D31		311		312		313		313		314		314		315		315		316		316		317		317		318		318		319		319		Blank		LCS		MS		MSD									
	05	4	05	4	4	05	4	05	4	05	4	0.5	4	4	0.5	4	0.5	4	0.5	4	0.5	4	4	0.5	4	0.5	4	0.5	4	0.5	4	#3	#3	#30	#30	#30	#30															
1,3,5-TrCB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓									
1,2,4-TrCB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓								
1,2,3-TrCB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
1,2,3,5,8,1,2,4,5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
1,2,3,4-TeCB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓							
Penta-CB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓						
Hexa-CB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓					
PCB as 1260	0.22	0.10	0.12	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.16	0.10	0.12	0.10	0.12	0.10	0.12	0.10	0.12	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10					
Surrogate mix	101	838	96	74	11	93	110	107	112	99	134	107	127	129	98.0	107	103	109	102	106	112	108	112	104	100	103	107	109	109	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107				
D310	115	102	91	79	103	106	109	114	112	105	128	112	129	101	106	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107	107			

J = Estimated  
E = Exceeds calibration range

Sample Tracking Form

Target Analyte	A410		A410		Sample Description										A410 A410			
	320 0.5	320 4	321 0.15	321 2	321 4	322 0.5	322 4	323 0.5	323 4	324 0.15	324 4	Blank # A	LCS # A	MS # 44	MSD # 44			
1,2,4-TCDF	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
1,2,3-TCDF	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
1,2,3,6,8,12,4,5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
1,2,3,4-TCDF	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Penta-CB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Hexa-CB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
PCB as 1260	0.23	0.10	0.23	0.10	0.10	0.10	0.10	0.10	0.10	0.25	0.10	0.10	0.10	0.10	0.10			
Surrogate TCMX	141	112	134	107	937	103	105	106	104	916	102	111	101	139	133			
DLBP	155	117	137	111	105	110	116	109	113	104	107	122	104	147	149			
								TCM 1260										
								PEAK BY										
								CHARGE										

J = Estimated  
E = Exceeds calibration range

### Sample Tracking Form

PK# 1-2 P# 1-5

Page 1 of 5  
Date: August 17, 2000

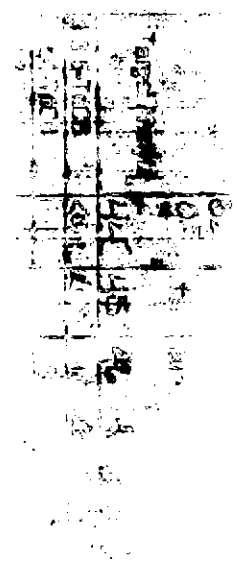
Target Analyte	Sample Description														Blank		LCS		MS		MSD					
	325	325	326	326	327	327	328	328	329	329	330	330	331	331	332	332	333	333	334	334	# 5	# 5	# 6	# 6		
1,3,5-TrCB	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	49.01	
1,2,4-TrCB																										
1,2,3-TrCB																										
1,2,3,5,6,1,2,4,5																										
1,2,3,4,TeCB																										
Penta-CB																										
Hexa-CB																										
PCB as 1260	0.07	0.10	0.43	0.43	0.45	0.45	4.0	4.0	0.81	0.81	0.34	4.0	0.52	0.52	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Surrogate TDM	143	143	108	108	109	109	145	104	103	108	107	107	132	104	100	137	103	104	104	105	103	97.4	147	147	143	
D, BP	132	103	107	117	113	115	156	107	103	110	105	110	134	110	108	127	113	110	110	114	116	128	152	137		
<p>Acid: 325 0.5 5.6 5.7 5.8 5.9 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0</p> <p>Acid: 328 0.5 4 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4</p> <p>Acid: 332 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4</p> <p>Acid: 333 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4</p> <p>Acid: 334 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4 0.5 4</p> <p>Acid: 334 4</p>																										
<p>PK# 1-2 P# 1-5</p> <p>Date: August 17, 2000</p> <p>Page 1 of 5</p>																										

J = ESIL

1

1





Sample Tracking Form

Date: August 11 2000  
 Page 1 of 2

Target Analyte	ACID										ACID										ACID										ACID									
	335	335	335	336	336	337	337	338	338	339	339	340	340	341	341	342	342	343	343	344	344	344	344	Blank	LCS	MS	MSD													
1,3,5-TrICB	75	70	70	78	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	94	# 10	# 10	# 15	# 15														
1,2,4-TrICB	<LOI	<LOI	<LOI	<LOI	<LOI	<LOI	<LOI	<LOI	<LOI									<LOI	<LOI	<LOI	<LOI	<LOI	<LOI		976	148	146													
1,2,3-TrICB																										982	144	143												
1,2,3,5,8,1,2,4,5																										979	146	144												
1,2,3,4-TeCB																										976	144	142												
Penta-CB																										986	144	142												
Hexa-CB																										978	139	138												
PCB as 1260	0.32	<LOI	<LOI	<LOI	0.74	0.12	<LOI	0.75	<LOI									0.12	<LOI	0.17	<LOI	<LOI	970				134													
Surrogate TEHA	128	107	105	111	110	103	139	110										102	983	104	103	100	982	141	140															
DCBP	142	117	115	112	123	109	162	117																				158												
105 Date	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18												

J = Estima  
 C = Environmental Corporation







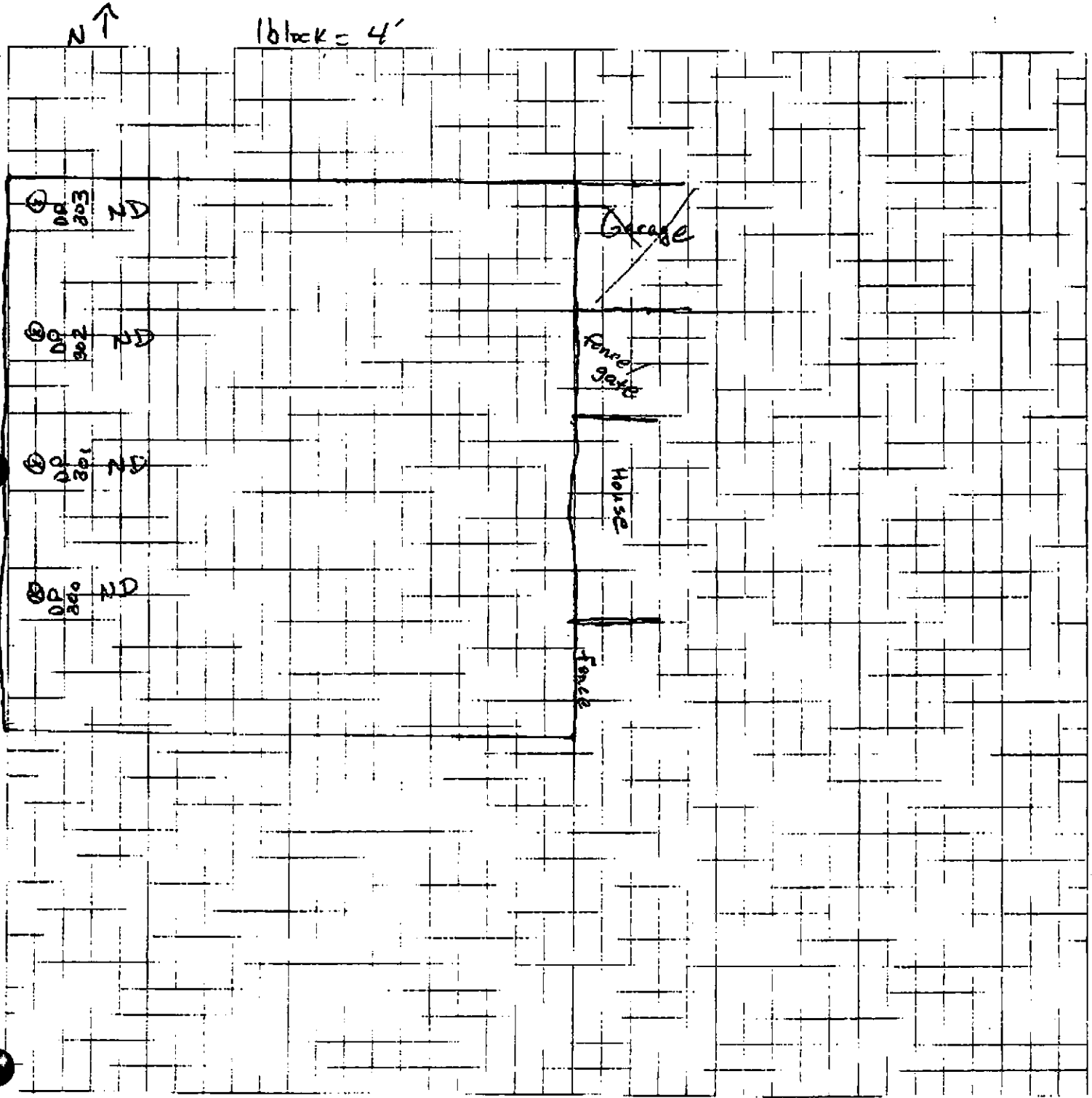
Job Name: Crystal Springs-

Job Number: \_\_\_\_\_

Title: Sony Reeves backyard 405 Jackson

Computed by: \_\_\_\_\_ Checked by: \_\_\_\_\_

Date: 2/16/2000 Sheet: 1 Of: 11



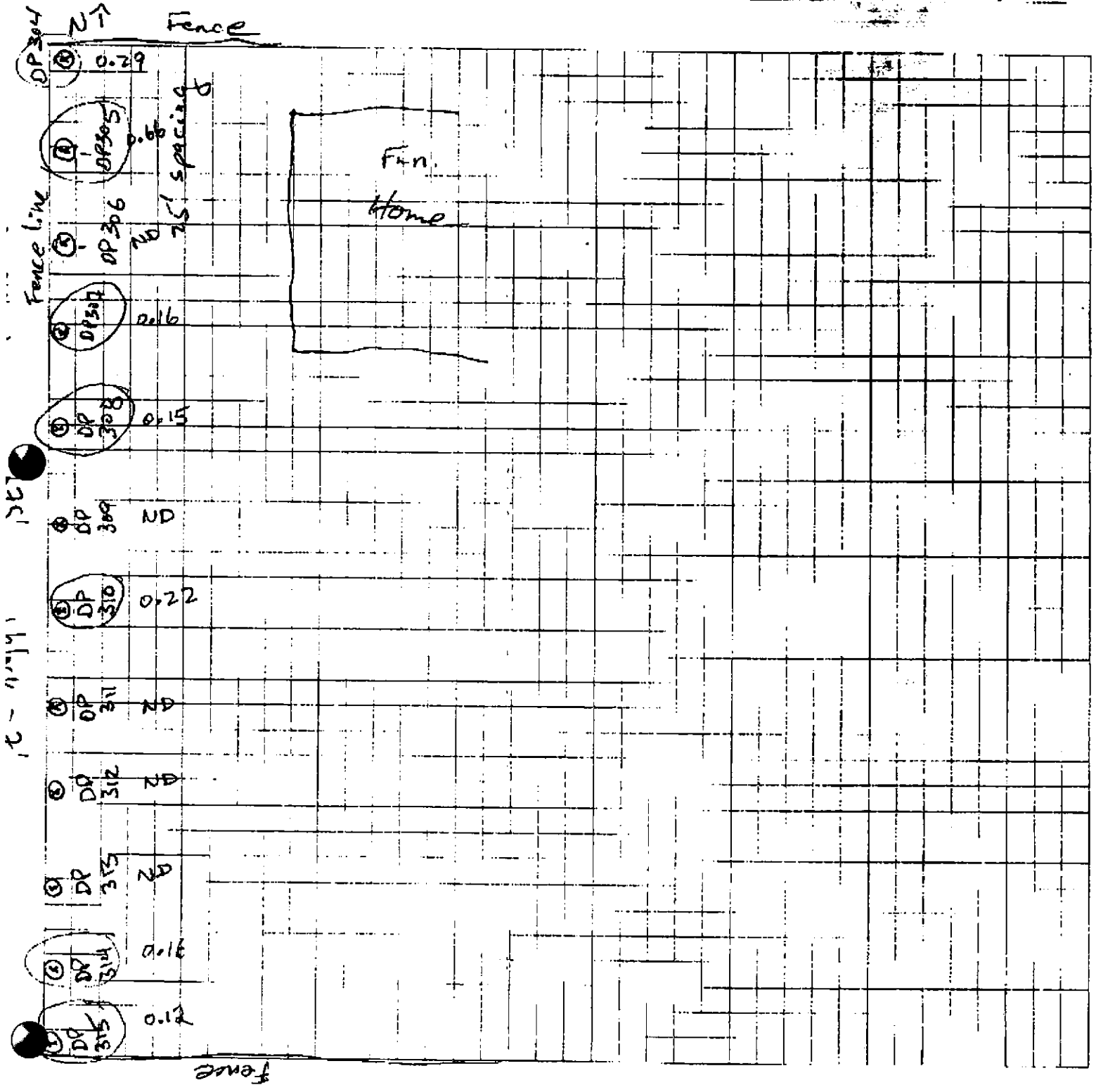


DP 280  
200  
7

Job Name: Crystal Springs  
Job Number: \_\_\_\_\_  
Title: Stringer Funeral Home  
Computed by: \_\_\_\_\_  
Date: \_\_\_\_\_

Checked by: \_\_\_\_\_

Sheet: 2 Of: 11





Job Name: Crystal Springs

Job Number:

Title: 401 N. Jackson Elnor Wright

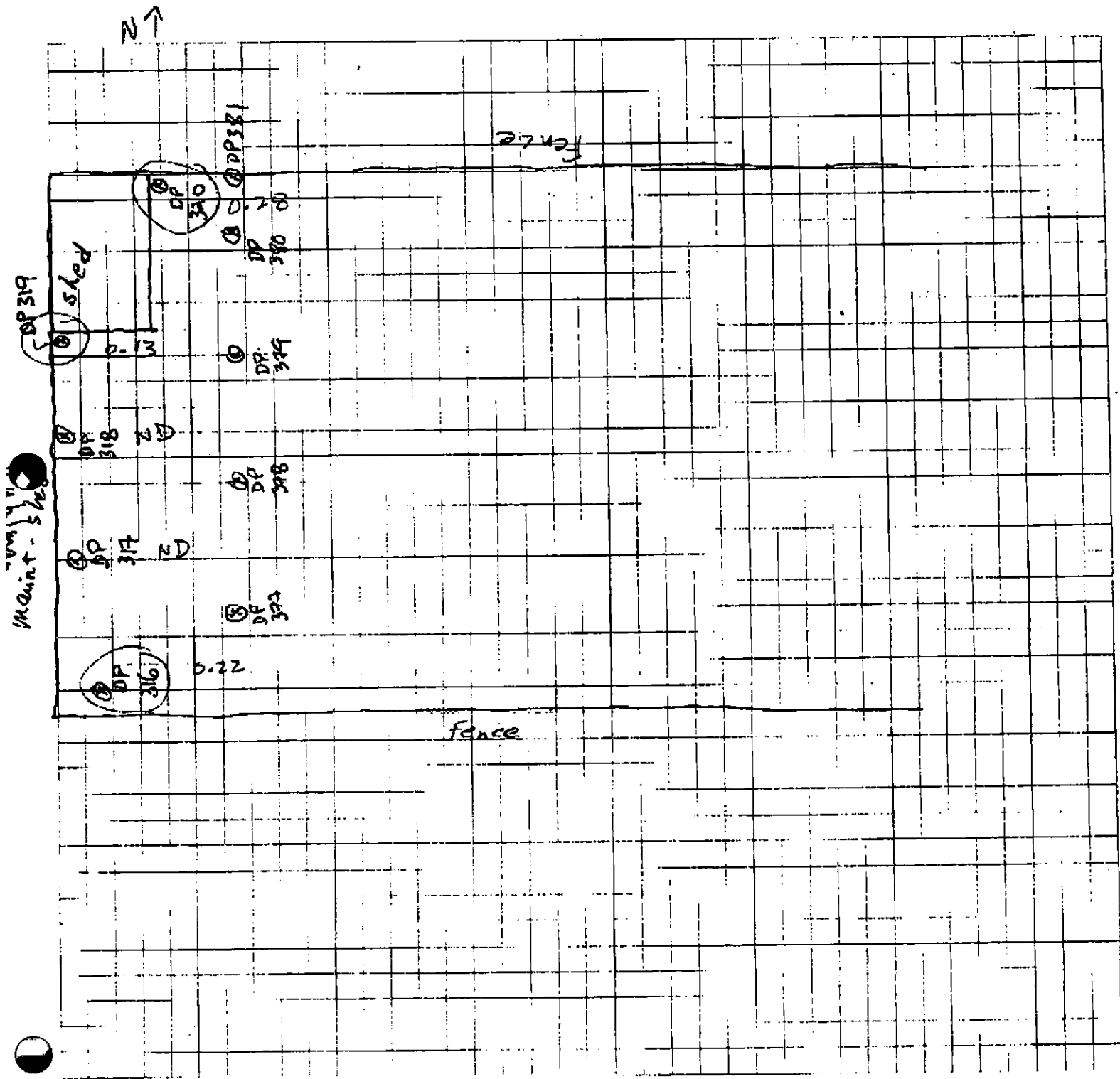
Computed by:

Checked by:

Date: 8-16-2000

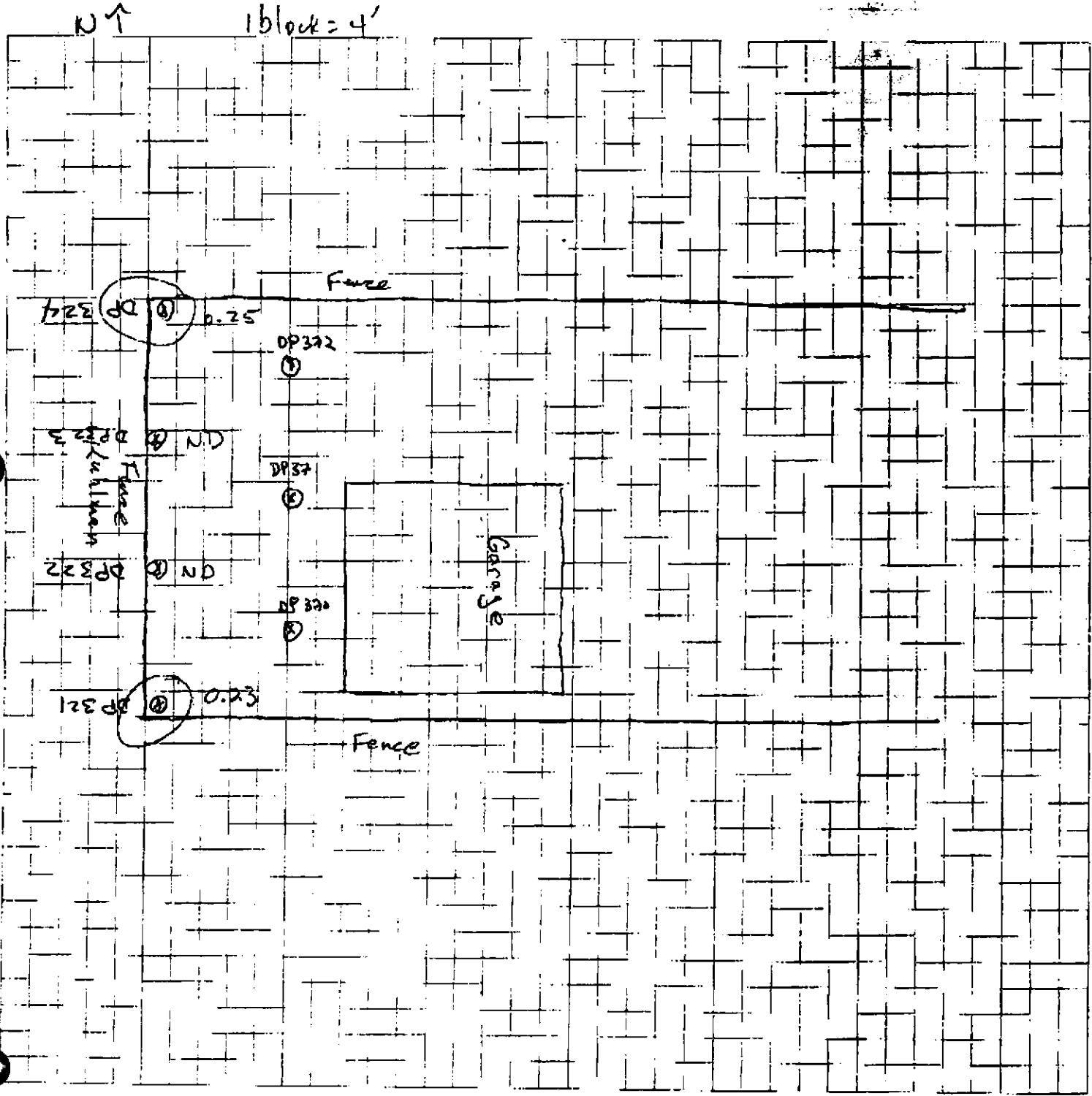
Sheet: 3 Of: 11

1 block = 4'





Job Name: Crystal Springs  
Job Number: \_\_\_\_\_  
Title: 407 N. Jackson Louie Lang  
Computed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
Date: 8-16-00 Sheet 4 of 11





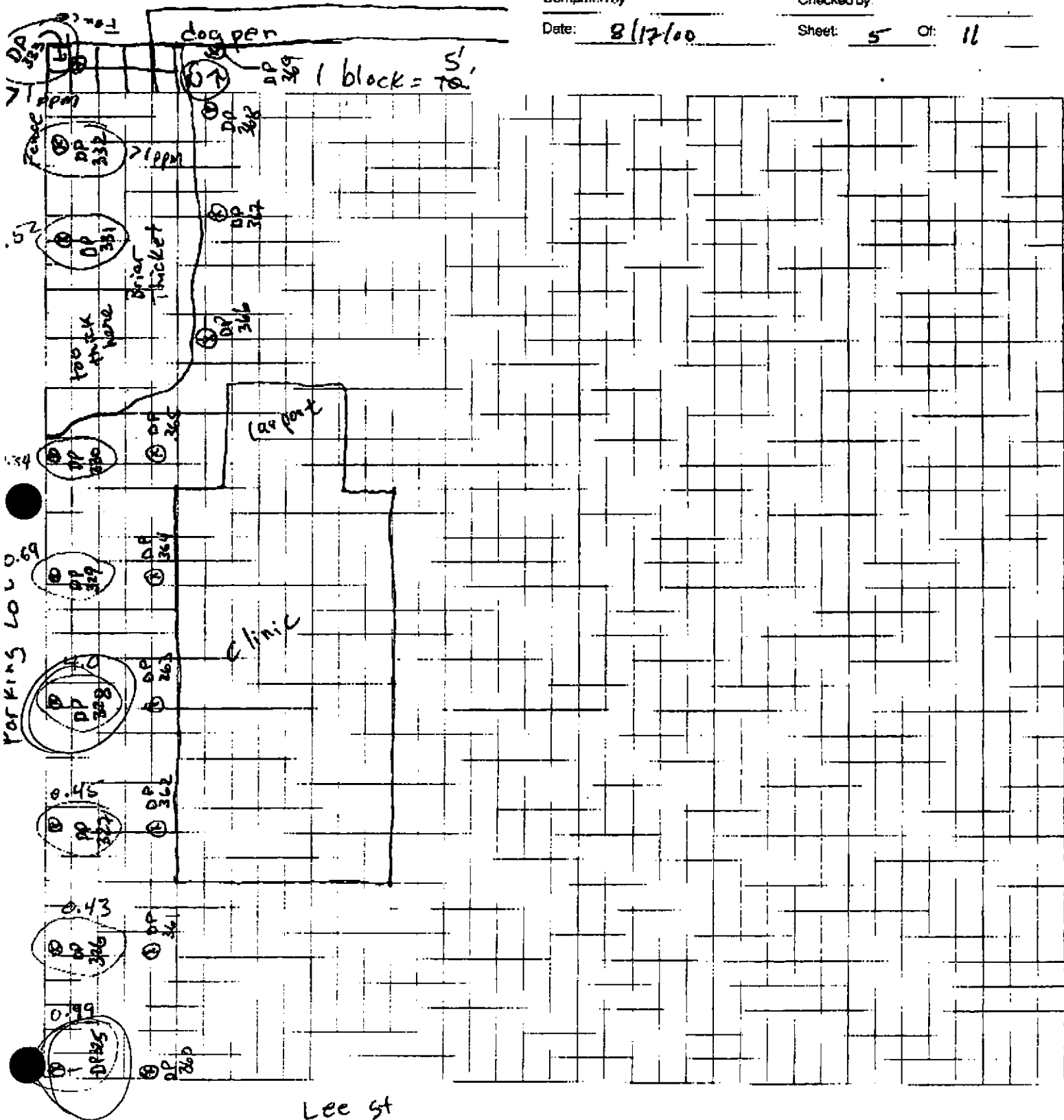
Job Name: Crystal Springs

Job Number: \_\_\_\_\_

Title: Lee St. Medical

Computer by: \_\_\_\_\_ Checked by: \_\_\_\_\_

Date: 8/17/00 Sheet: 5 Of: 11



Lee St





Job Name: Crystal Springs

Job Number:

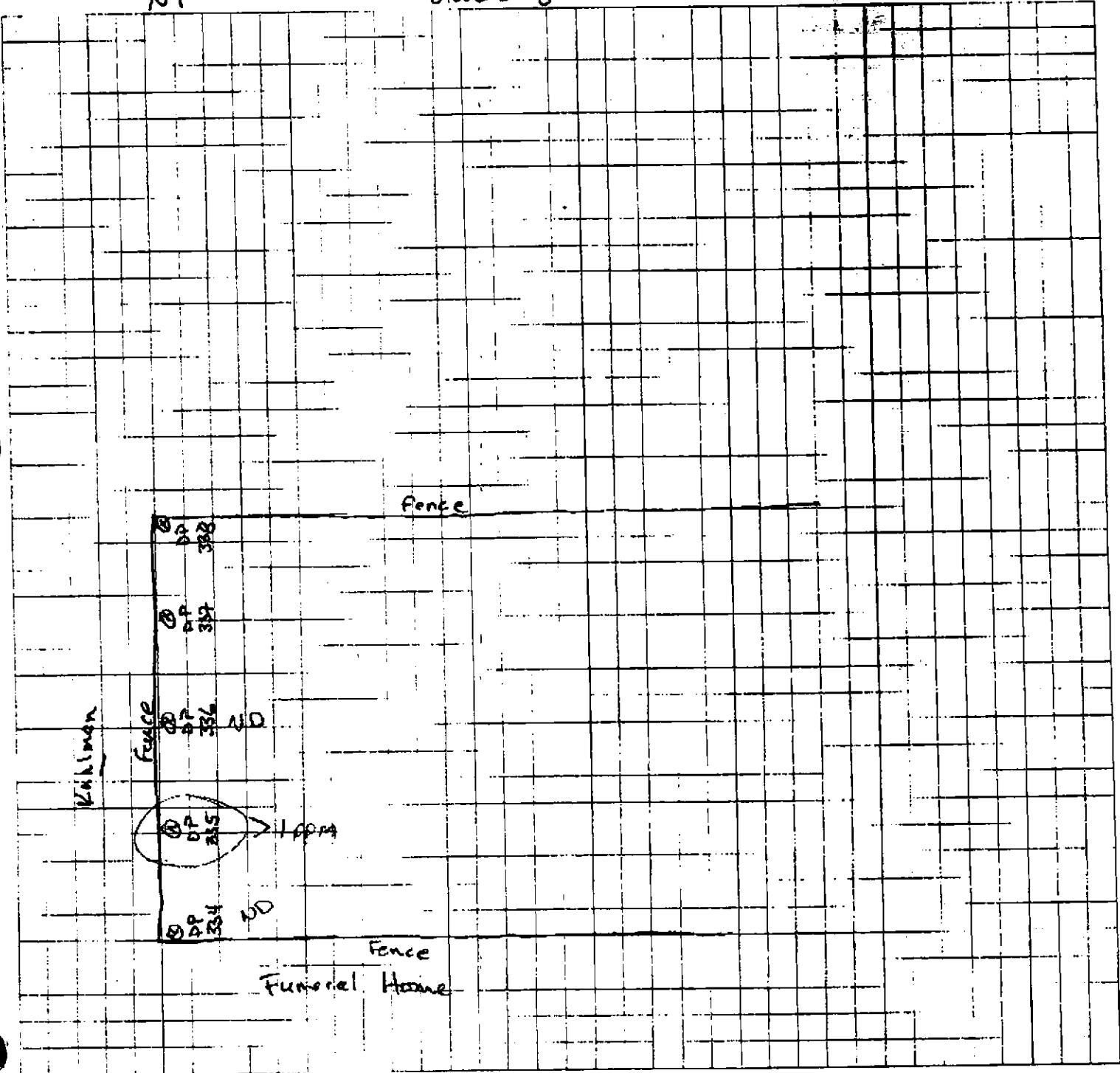
Title: 303 N. Jackson (stringer)

Computed by: Checked by:

Date: 8-17-00 Sheet 6 of 11

NT

1 block = 5'

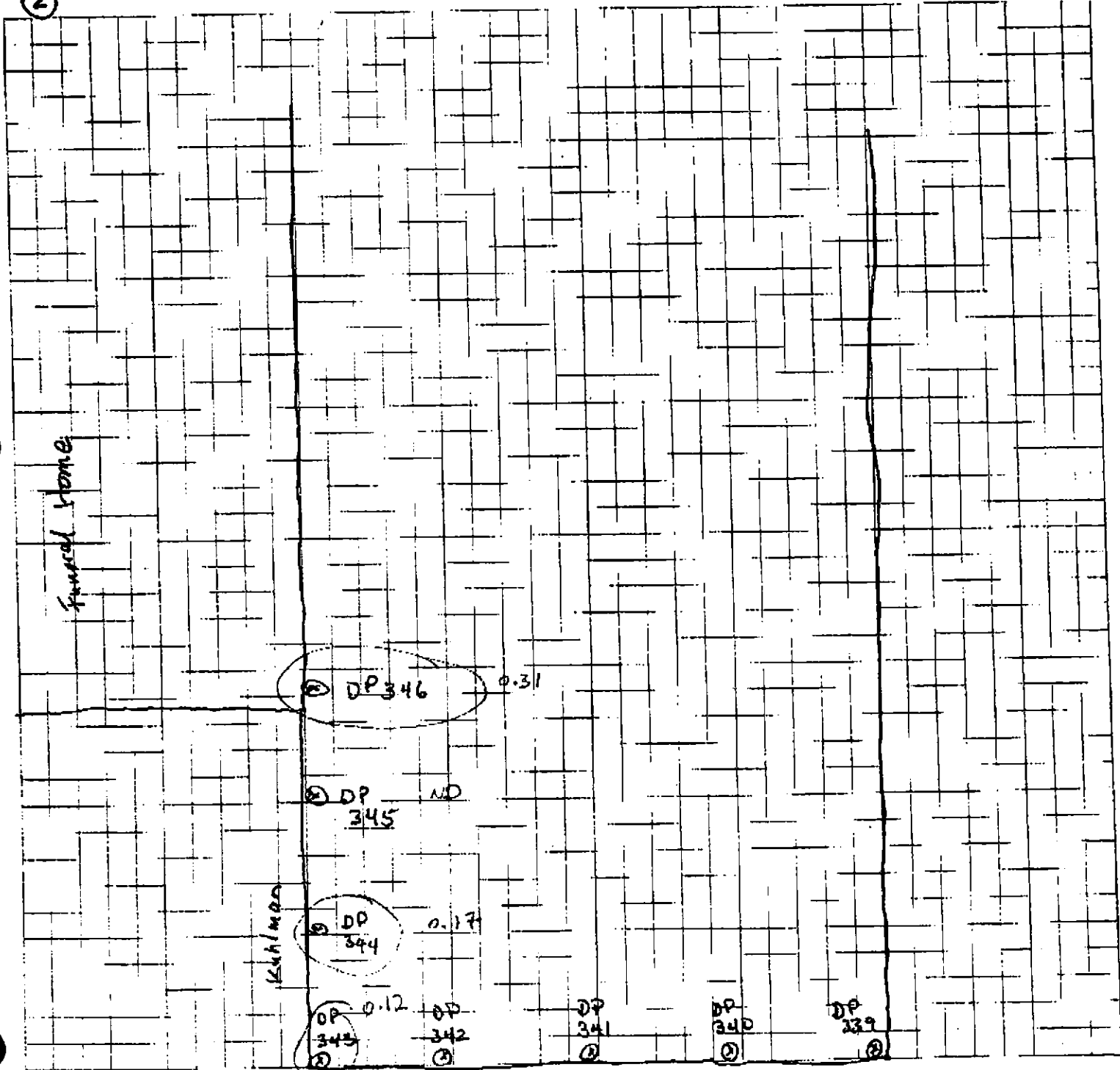




Job Name: Crystal Springs  
Job Number: \_\_\_\_\_  
Title: 219 N. Jackson - Percy Smith  
Computed by: TJF Checked by: \_\_\_\_\_  
Date: 8-17-00 Sheet: 7 Of: 11

1 block = 5'

② ↑



Fenced Home

Kuhlman

② DP 346 0.31

② DP 345 ND

② DP 344 0.17

② DP 343 0.12 DP 342 ②

DP 341 ②

DP 340 ②

DP 339 ②

Kuhlman



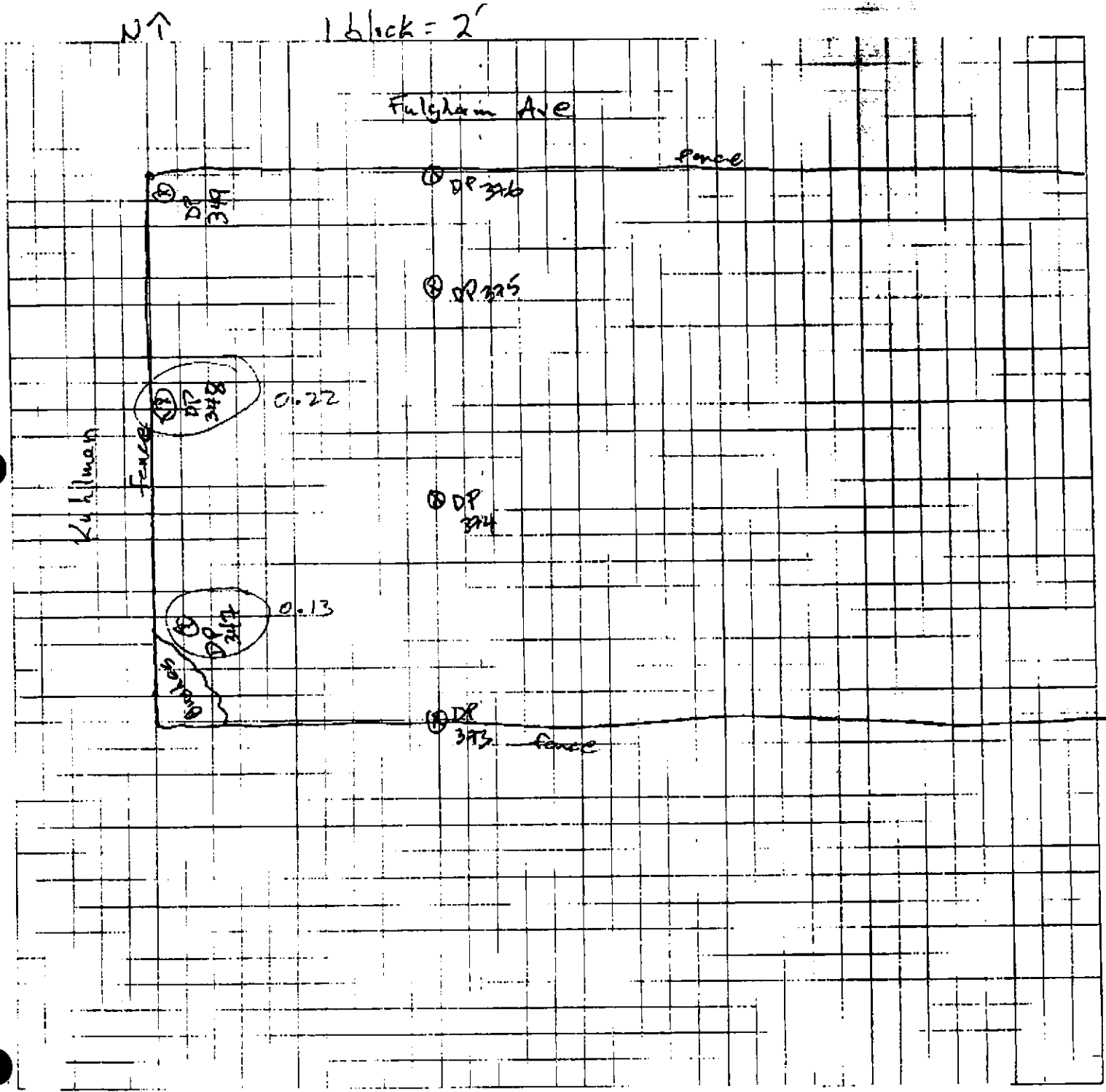
Job Name: Crystal Springs

Job Number: \_\_\_\_\_

Title: 409 N. Jackson (Andy Cooper)

Computed by: RF Checked by: \_\_\_\_\_

Date: 8-17-00 Sheet: 8 Of: 11





Job Name: Crystal Springs

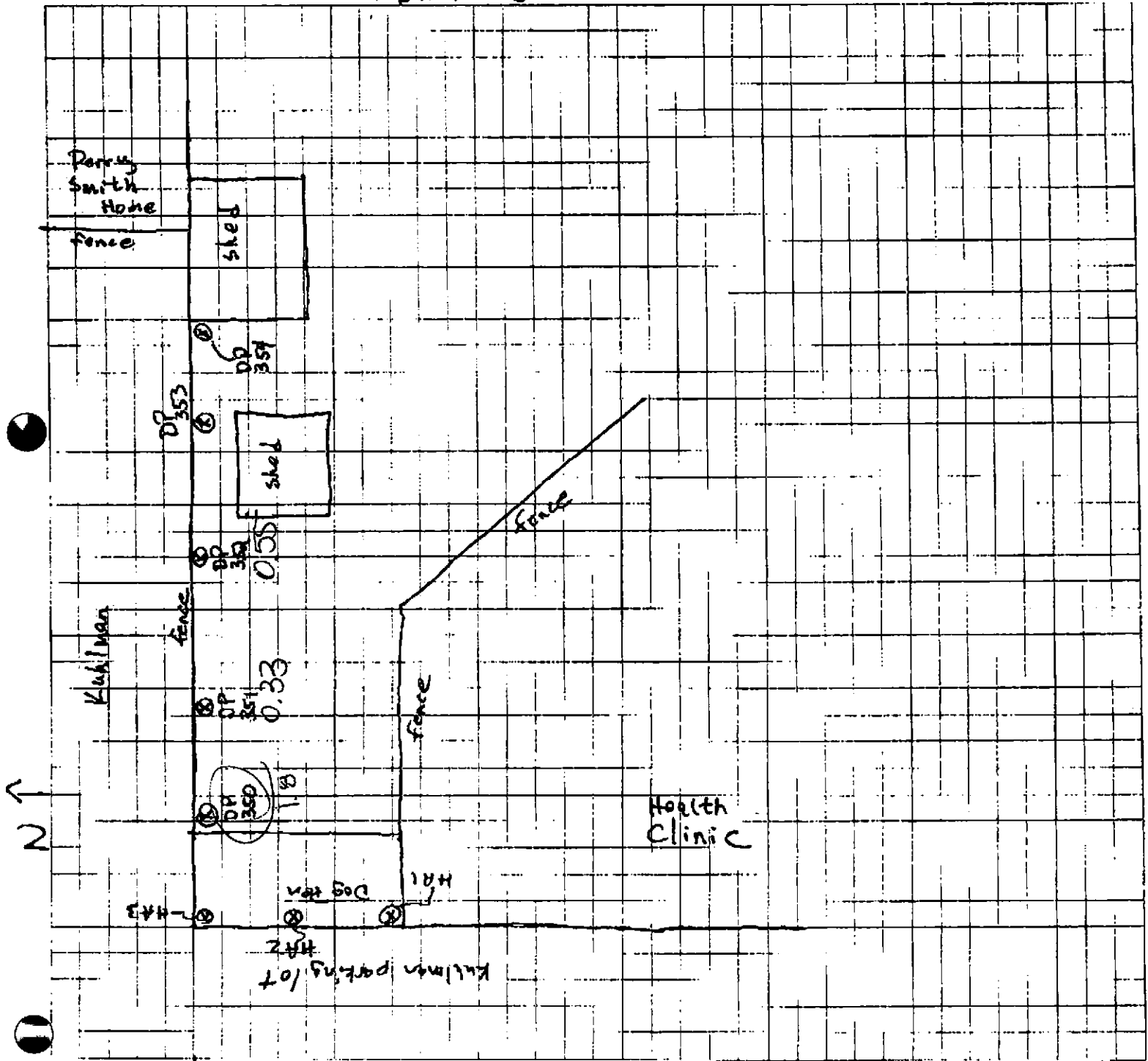
Job Number: \_\_\_\_\_

Title: Dabney Home

Computed by: TJF Checked by: \_\_\_\_\_

Date: 8-17-00 Sheet: 9 Of: 11

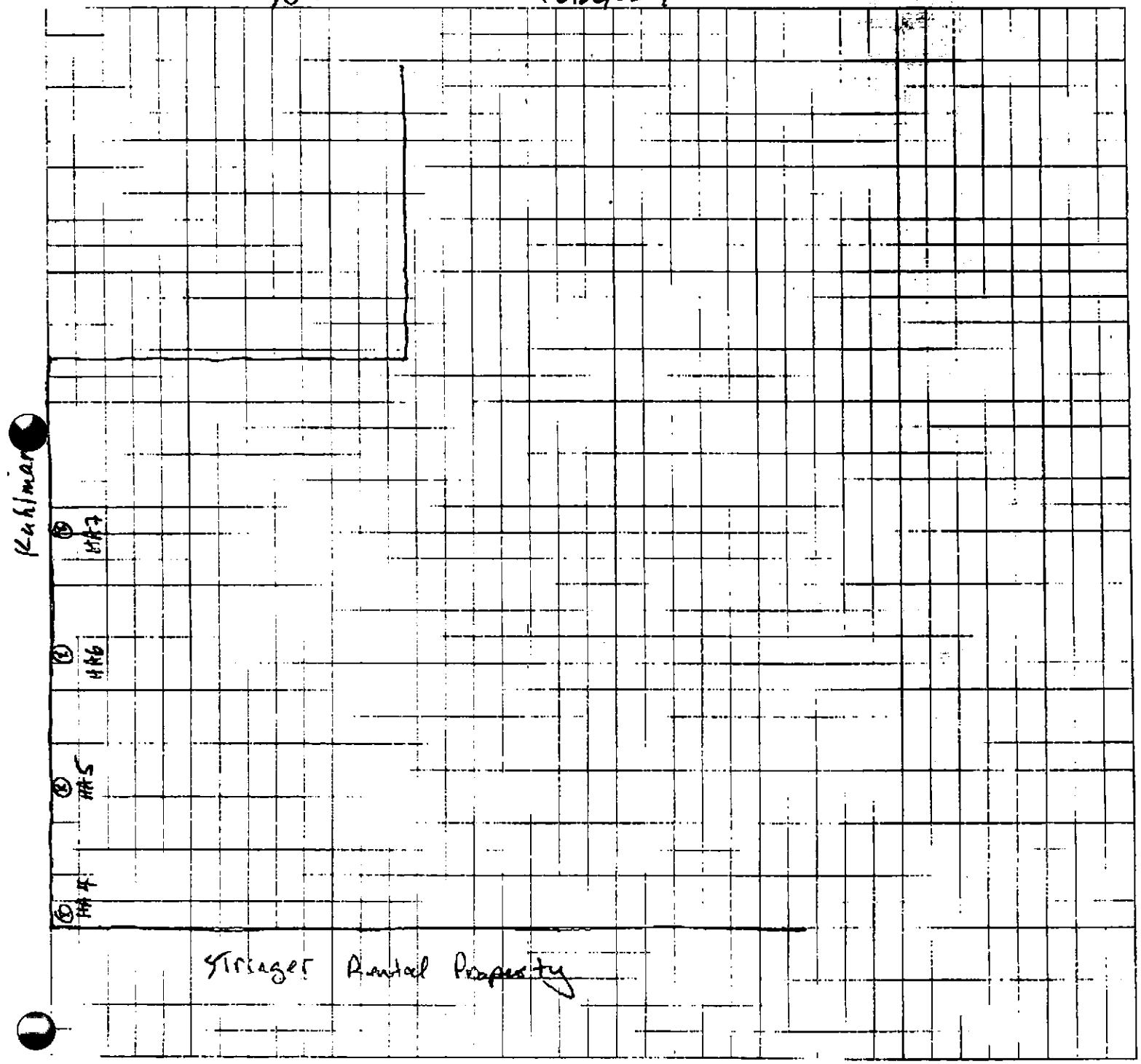
1 block = 5'





Job Name: Crystal Springs  
 Job Number: \_\_\_\_\_  
 Title: Wright House Plan  
 Computed by: \_\_\_\_\_ Checked by: \_\_\_\_\_  
 Date: 8-18-00 Sheet: 10 of 11

*N ↑* *1 block = 4'*





Job Name: Crystal Springs

Job Number: \_\_\_\_\_

Title: Harold & Suzanne Warren

Computed by: TJF Checked by: \_\_\_\_\_

Date: 8-18-00 Sheet: 11 Of: 11

NT 1 block = 4'

Spring Rods

75' spacings

① DP 359

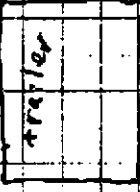
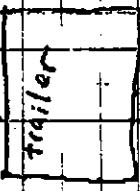
② DP 359

③ DP 357

④ DP 356

⑤ DP 355

Kuhlman



Elmer Wright