PROPERTY of: MI-0282-24

ECOLOGY & ENVIRONMENT
111 W. JACKSON
Chicago IL. 60609

NORTHEAST GRAVEL
COMPANY RDS 8504-12
MI0282
Book 2 pp. 1-83

ALSO SEE Book 1 under
GULF AND WESTERN STAMPING
DIVISION PLANT #22 Mancelona, MI
RDS 8303-03C/MI0336
pp. 76-160

US EPA RECORDS CENTER REGION 5
544652

March 26, 1986 Northeast Gravel Co.

Cool, Rain 55°F. TPO. RDS-3504-12

Mesteco Drilling Co. Team Members

Jerry Goode T.L

Steve LaVay S.O

8:00 am Arrived at site and met drillers.

8:00 am (Rain delay) Drillers will meet back at site at 9:30 am.

9:30 am The rain has stopped, Drillers not at site.

10:15 Drillers arrive on site.

10:45 - 10:45 installed protective bumper guard in area of MI 0282-3 and MI 0282-9 wells. Guard cemented in ~4' stickup. Hole dug with shovel.

NO. 455 TELEDYNE

10:50 - 11:10 Installed protective bumper in area of MI 0282-2. Hole dug with shovel. PVC casing cemented in. ~4' stick-up. Departed area for bore hole MI 0282-10

11:30 pm Arrived at location for MI 0282-10.

11:45 Lunch

12:15 lunch over.

12:15 Drillers left to fetch pea gravel for possible use in screen installation

12:35 Drillers return.

12:40 Began bore hole for MI 0282-10

12:55. Hit a boulder at ~9'. will move bore hole

2

over 3' and continue drilling and sampling of bore hole [illegible]

1:45 Began installation of PVC pipe.

(2) 3' screens = 10.8'

(3) 10' sections 10.06' = 30.18

total PVC down bore hole = 40.98'

3' stick up puts tip of screen at 37.98'

top of screen at 27.18'

1:50 pm Began pulling Hollow stem auger is.

Natural cave in Measured at 24'. Pea Gravel added from 21-24'. Weight attached to tape meas

NO. 455 TELEDYNE

fell off when measuring depth to pea gravel. Metal weight should be above the water table in the gravel.

2:05 Began mixing bentonite slurry.

2:10. Began pulling augers.

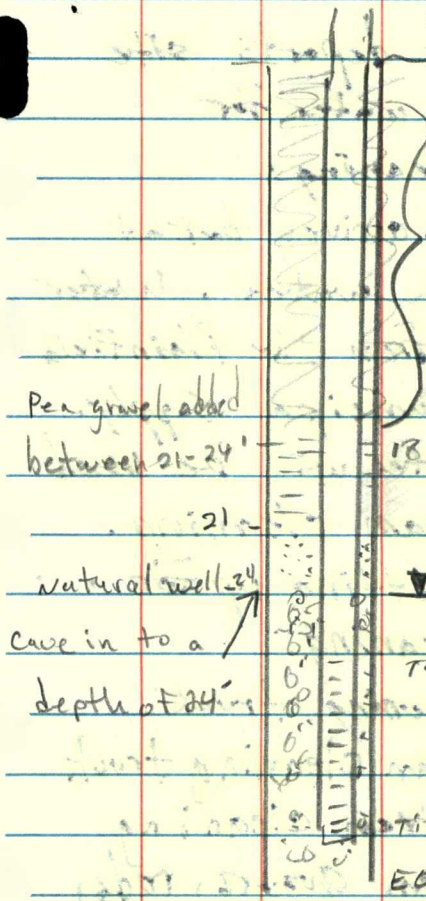
2:15 Augers pulled, bentonite slurry poured down bore hole.

2:20 Began mixing bentonite & cement (grout) bentonite seal from 13-21'

2:30 Poured grout.
Top of PVC pipe cut to leaving 2.5' stick up

2:40 Protective casing put into place., casing locked.

MI 0282-10


PVC stick up = 2.5'
G/L
Bentonite & Cement Grout to surface
Pea gravel added between 21-24'
18-21' bentonite seal
21
natural well 24'
~24'
Cave in to a depth of 24'
Top of Screen at 27.18'
Tip of Screen 37.98'
EOB 38'

2:45 Driller departs site to fetch water for steam cleaning.

3:10pm Driller arrives back at site with water. Water obtained from the Plainfield TWP. Municipal supply. This water will be used for steam cleaning.

3:15 Begin setting up ~~for~~ steam cleaning.

3:20 Steam cleaning truck.

3:25 Done steam cleaning truck. Began steam cleaning Hollow stem augers, rods, and tools.

3:40 Applied acetone and final hot steam

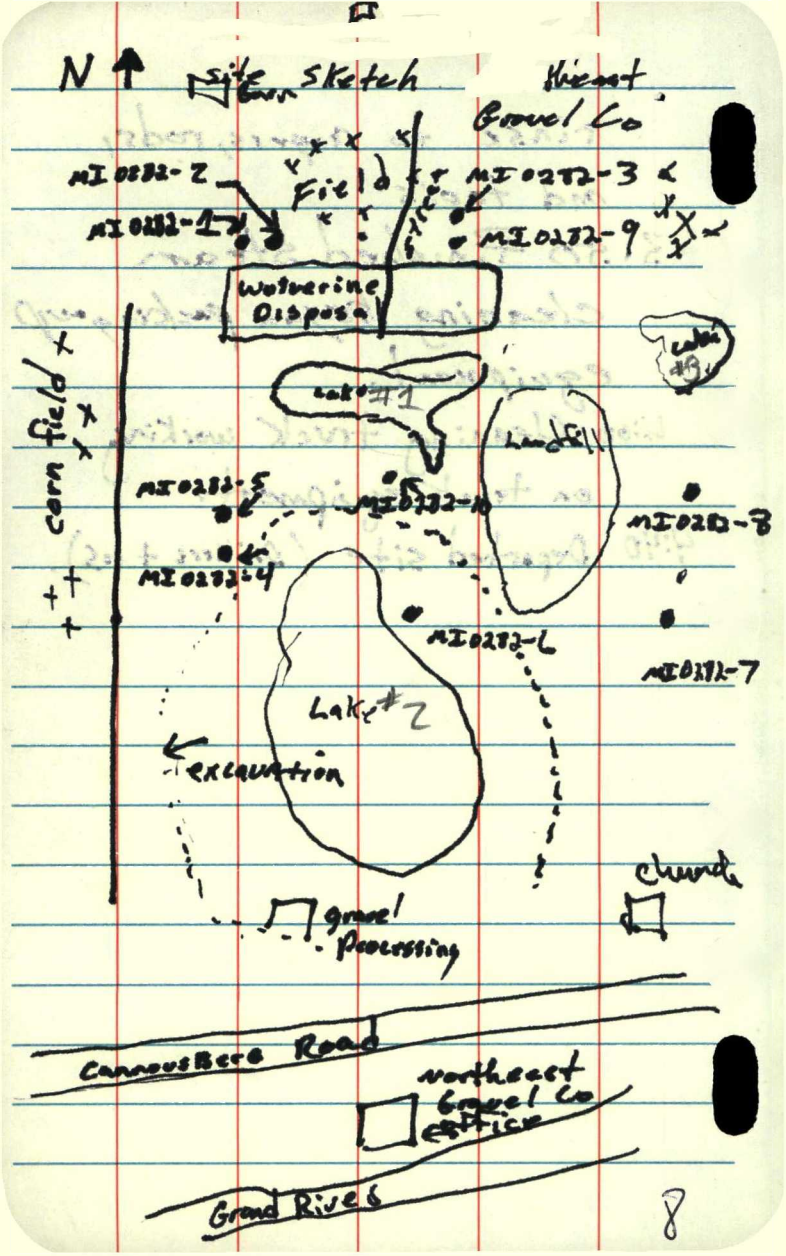
rinse to augers, rods, and tools

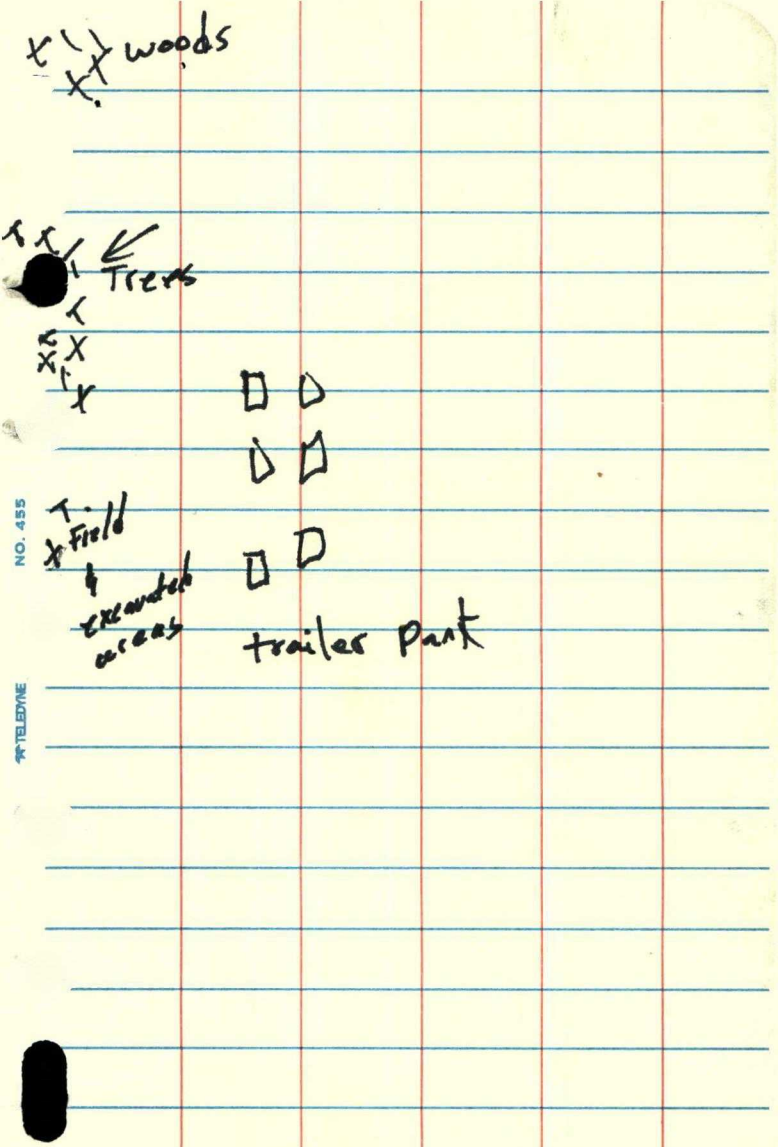
3:50 Finished steam cleaning, began packing up equipment.

4:00 Cleaning truck working on truck equipment.

4:40 Departed site (Drillers + us).

NO. 135 TELEDYNE


N
Site Sketch
Northeast Gravel Co
MI 0282-2
MI 0282-1
Field
MI 0282-3
MI 0282-9
Wolverine Disposal
corn field
Lake #1
Landfill
MI 0282-5
MI 0282-10
MI 0282-8
MI 0282-4
MI 0282-6
MI 0282-7
Lake #2
excavation
gravel processing
church
Cannonsburg Road
northeast Gravel Co office
Grand River


woods
Trees
Field
excavated areas
trailer Park

Northeast Gravel Co.

Belmont, MI March 27, 1986

STA	(+) BS	HI	(−) FS	ELEV
BM	4.63	104.63		100.00
MW ~~MI 0282-3~~			0.10	104.53
MI 0282-3 ground			2.92	101.71
MW ~~MI 0282-9~~			0.49	104.14
MI 0282-9 ground			2.97	101.66
MW ~~MI 0282-1~~			2.05	102.58
ground			4.42	100.21
TP_1	2.07	102.28	12.54	~~87.67~~ 89.74
TP_2	2.07	~~87.74~~ 89.81	13.98	~~73.69~~ 75.83

JG ~~X~~
SV

Overcast,
40°F,
10 MPH

BM Stake located in Field between wells MI0282-3, MI0282-9, and MI0282-1

MW MI0282-3
~~TP1~~ TOP of PVC Casing (well) of (Monitoring well MI0282-3) Ground

MW MI0282-9 TOP of PVC Casing (well)

TP1. Positioned in NW Corner of fill over wolverine Disposal

TP2 NE Corner of Fill area downslope of Wolverine Dr.

NO. 455
TELEDYNE

STA	(BS)	HI	FS	ELEV
TP3 South Side of ~~North~~ Lake #1	2.54	~~76.26~~ 78.37		
			5.91	~~70.35~~ 72.46
MW MW 0282-10			3.51	~~72.75~~ ~~73.75~~ 60.75
Ground			5.69	70.57 66.77
TP4	6.31	~~76.87~~ 73.08	8.51	62.06 64.57
TP5	~~0.07~~ ~~0.77~~	62.85 65.36		
MW 0282-4			1.81	~~61.04~~ 63.55
Ground			4.56	~~58.29~~ 60.80
MW 0282-5			2.69	60.16 62.67
Ground			5.03	~~57.82~~ 60.33
TP6 Stake			11.03	~~51.82~~ 54.33

TP3 South side of North Lake.
From TP3 took shot of Elv. of
North Lake.
MW MI 0282-10 TOP of PVC
casing (well).

TP4 Located in canyon between
wells MI 0282-10 and wells MI 0282-4,5

MW 0282-4 TOP of PVC casing (well)

MW 0282-5 TOP of PVC casing (well)

~~TP6~~ Stake in ~~Canyon~~ valley cut
looking NE.

STA	BS	HI	FS	ELV	
TP6	1.25	~~53.07~~ 55.58			
			10.33	~~47.74~~ 45.25	
TP7	0.35	~~43.09~~ 45.60			
Lake #2 MW 0282-6			10.83	~~32.26~~	(34.77)
~~MW~~			2.56	~~40.53~~	(43.04)
Ground			5.10	37.99	(40.50)
TP8	8.88	~~46.87~~ (49.38)			
			2.07	~~44.80~~ 47.31	
TP9	14.88	~~59.68~~ 62.19			
			1.64	~~58.04~~ 60.55	
TP10 MW ~~MW 0282-7~~	10.92	~~68.95~~ 71.47			
			2.14 ~~4.92~~ 4.69	~~66.81~~ ~~63.49~~	(69.33) (66.78)
Ground					

TP6 Located at end of Valley Cut facing NW. Shooting at state

TP7 Down in excavated area north of Lake #2.

Lake # water elevation.

MI 0282-6 Top of PVC casing (well)

TP8 Located at toe of hill (road) leading to east side of site

TP2 Top of hill shooting down slope

MI 0282-7 Top of PVC casing

NO. 455 TELEDYNE

STA	+ BS	HI	FS	elev.
Stake in SE Field			1.51	~~67.44~~ (69.96)
TP 11	4.03	71.47 / 73.99		
MW MT 0272-8			4.25	~~67.22~~ (69.74)
Ground			6.66	~~64.81~~ (67.33)
Stake in SE Field			4.12	~~67.35~~ 69.87
TP 12 ~TP 10	2.28	69.63 / 72.15		
MW MT 0272-7			2.91	~~66.72~~ (69.24)
Ground			5.47	~~64.16~~ (66.68)

Stake in SE Field

MW MI 0282-8 TOP of PVC
Casing (well)

Completed ~~½ of well~~ Survey of all wells.
will shot back to complete the
loop and check work.

MW 0282-8 TOP of PVC Casing
well

STA	+ BS	HI	− FS	ELV	
TP 13 ~7	3.09	67.25 69.77			
			9.27	~~57.98~~ (60.5)	
TP 14 ~8	0.21	58.19 60.71			
			13.34	~~44.85~~ 47.37	
TP 15	.74	45.59 48.11			
NEI 02232-6			5.03	~~40.56~~	(43.08)
Ground			7.52	~~38.07~~	(40.59)
Tp 16	6.95	~~45.02~~ (47.54)			
stake			2.41	~~42.61~~ 45.13	
Tp 17	9.58	~~52.19~~ 54.71			
stake on end of valley cut			.54	~~51.65~~ 54.17	

TP14 TOP of slope road

TP15 Base of Toe of slope road

MW 0282-6 TOP of PVC Casing well

TP16 Down in excavated area North of Lake #2 in valley cut facing NW. shooting at stake at end of valley cut

TP17 in middle of valley cut shooting at stake at NE end of cut.

STA	+ BS	HI	− FS	ELEV	
TP 18	9.91	~~61.56~~ 64.08			
Stake			.49	~~61.07~~ 63.59	
TP 19	1.71	62.78 65.30			
MW MI 0222-4			1.90	~~60.88~~	(63.40)
Ground			4.63	~~58.15~~	(60.67)
MW MI 0222-5			2.78	~~60.00~~	(62.52)
Ground			5.18	57.60	(60.12)
Stake			.88	~~61.90~~	(64.42)
TP 20	8.01	69.91 72.43			
MW MI 0222-10			3.65	~~66.26~~	(68.78)
Ground			5.84	~~63.81~~	(66.59)

Tp18 Top of Valley Cut
Shooting at stake at SE end

Shooting at stake between ~~wells~~ valley cut
and wells MI 0282-4, 5

Tp 19 TOP of Valley shooting
at stake

MW 0282-4 TOP of PVC casing
(well)

MW 0282-5 TOP of PVC casing
(well).

Stake South of Valley
cut top of Valley

Tp 20 Located in Canyon between
MI 0282-10 and wells MI 0282-4, 5

MI 0282-10 TOP of PVC casing
well

NO. 455
TELEDYNE

STA	BS +	HI	FS −	ELEV.	
TP21	~~3.14~~ 5.36	~~69.17~~ (71.95)			
*Stake			3.16	~~66.01~~ (68.79)	
TP22	12.76	~~78.77~~ (81.55)			
Stake			.66	~~78.11~~ (80.89)	
TP23	11.96	~~90.07~~ 92.85	~~11.96~~		
Stake in field			2.02	~~88.05~~ 90.83	
Tp. 24	6.63	~~94.68~~ (97.46)			
MW MD0220-1			1.96	~~92.72~~ ~~92.78~~	(95.50)
Ground			4.37	~~90.31~~	(93.09)
BM.			4.61	90.07	
MW 0222-3			.10	94.58	
Ground			2.88	91.80	

Tp 21 ~~North of Lake~~ #

~~North si~~ South side of

Lake # 1.

— Shooting at stake on

north side of Lake # 1

Tp 22 NE Corner of fill area

down slope of Wolverine Disp.

→ stake - slope of Wolverine

Disposal west side

→ Stake located in Wolverine Disp.

area Northwest end.

TP24 Located North of MI 0282-1

Bench Marck Stake between

wells MI 0282-1 and MI 0282-3 & 9

MW 0282-3 Top of PVC casing

NO. 455 TELEDYNE

STA	BS +	HI	FS −	ELEV
MW MI 0212-9			.49	94.19
			2.95	91.73

March 28, 1986

Team Members

9:00 Called (Birc) reported results of well survey. Talked with Tim McDermont. Must resurvey the wells.

10:00 Arrived at NE Gravel talked with Don Long (Mag.). We will resurvey the wells on tues april 1, 1986. Mateco Drilling will develope the wells on Wed. april 2. (Also Picked-up cylinder of H_2 to ship back)

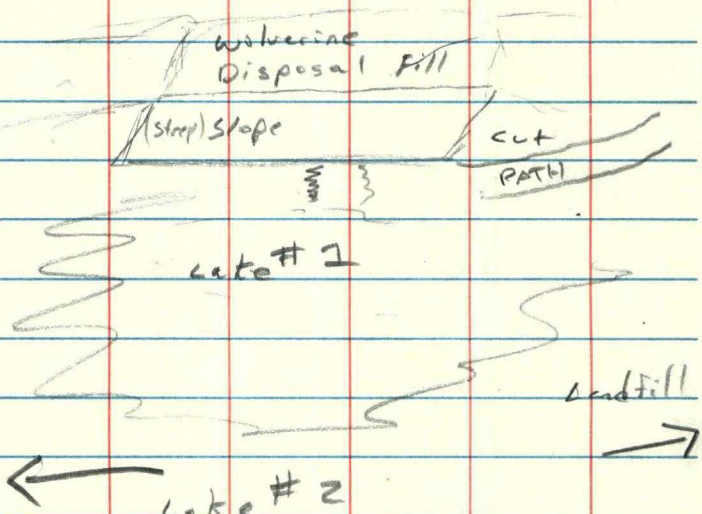
10:30 went to the community church located south of

NO. 455 TELEDYNE

site to see if permission will be granted to sample their wells. (No one home). will check-back next week.

10:40 - 11:30 walked the site and picked up debris near wells. Took pictures of all the wells. While walking the site we found a leachate seep north of Lake #1 on the South slope of Wolverine Disposal. Toe of slope. Slope eroding to steep of cut. Also noticed an oily film

on south edge of
Lake #2.



11:45 Checked out of
Holiday Inn - Stored
Equipment (OVA, cooler, 2
Survey Eqp.) in Private
Closet

12:50 Shipped H_2 Cylinder
Federal Express.

error = $.05\sqrt{\text{miles}}$

NO. 455
TELEDYNE

~~March~~ April, 2, 1976
Sunny 60° F

Team Members
Jerry Goode
Steve VeVeng

8:00 Arrived on site and met driller.

8:25 Began developing well MI 0282-1
water table measured at 25.25'
Used stainless steel bailer and nylon rope. Took 25 gal out of well.
9:05 Switched development method. Going to use compressed air
9:25am Done developing well using compressed air. Took an additional 10 gallons out of well. Total 35 gallons.
9:30am Began ~~acetone~~ applying

acetone to bailer, rinse
with distilled water
9:35 Finished ~~decontamin~~
decontamination of bailer
9:40 Driller and I depart site
to call base offices.
10:00 Driller and I arrive back
at site
10:05 Begin Developing MW0250-9
using compressed air (Water Table TOC 26.75')
10:17 Switched over to using bailer
stainless steel (Green nylon rope).
11:05 Finished bailing developing
well. Took out 35 gallons
11:05 - 11:10 Decontaminated
bailer with acetone and
distilled water. Air hose
will be cleaned at shop. Two
air hose sections. One of them

was used for each well.
11:25. Arrived at monitoring well MI0282-6. Water table (TOC) measured at 4.9' Began Developing the well
~~11:50~~ used stainless steel bailer and clean rope.
11:50 Finished developing MI0282-6. Took out 35 gals.
11:50. Depart site driller will have bailer and air hose cleaned at shop. Driller needs to fill air tanker. He will be back at 1:30 pm.
12:25 arrived back at site and waited for driller.
2:35. Driller arrives on site.

NO. 455
TELEDYNE

steam cleaning of air hose sections and bailer ~ 5 min.

2:40pm Began well development for well MI0282-3. Water table measured at 15.04'. Method used to develope well will be compressed air.

3:30 Finished developing well MI 0282-3. (Used compressed air). Removed 90 gallons

3.45 Began developing well MI0282-8. Water table measured at 22.33'

4:35 Finished developing well MI 0288-7. Removed 30 gallons of water.

4:35-4:40 Decontaminated stainless steel bailer and stainless steel cable. The cable replaced the nylon rope.

4:45. Began developing well MI 0282-7 water table measured (from TOC) at 25.64'

5:30 pm Finished developing MI 0282-7. Removed 30 gallons of water. Used stainless steel bailer.

5:34. Driller, Steve and I depart from site.

NO. 455 TELEDYNE

April 3, 1986 Sunny 55°F

Team members: Jerry Goode and Stan Valley.

7:00am Arrived on site and met driller. He spent ½ hour steamcleaning air hose and stainless steel bailer and stainless steel cable. Hot clean water used on air hose and bailer and cable. Bailer and cable rinsed with acetone and water.

8:05 Began developing well MI 0272-10. Water table measured at 25.8'. Developing well using stainless steel bailer and stainless steel

cable.

8:50am Finished developing well MI 0282-10. Removed 30 gallons of water.

8:55. Rinsed bailer and cable with acetone and distilled water.

9:00am Began Developing well MI 0282-5 (used compressed air and air hose). Water table (TOC) measured at 24.60'

9:95. Completed well development for well MI 0282-5. Removed 125 gallons.

9:55. Hook-up steam cleaner.

10:10 Done steam cleaning air hose.

10:15 Began developing

NO. 455 TELEDYNE

well MI0282-4 (Used compressed air) water table measured (from TOC) at 25.7'

10:35 Finished developing well MI 0282-4. Removed 45 gallons of water.

10:45am Driller Departs from site. He will steam clean air hose back at the shop. He will be credited with 15min decontamination time.

April 3, 1986 Water table measurements
From (TOC of PVC)

well	Depth in ft.
MI0282-1	25.21'
MI0282-2	———
MI0282-3	24.63'
MI0282-4	25.71'
MI0282-5	25.63'
MI0282-6	4.88'
MI0282-7	27.63'
MI0282-8	22.02'
MI0282-9	27.60'
MI0282-10	25.67'

NO. 455
TELEDYNE

Northeast
Gravel Company
Belmont, MI

April 3, 1986

STA	(BS)	HI	(FS)	ELEV
BM	0.24	100.24		100.00
MI0282-3 (TOC)			0.42	99.82
Gnd.			3.22	97.02
MI0282-9 (TOC)			0.80	99.44
Gnd.			3.24	97.00
MI0282-1 (TOC)			3.36	96.88
Gnd			4.72	~~95.48~~ 95.52
	1.62	98.50		
TP1	2.03	93.75	6.78	91.72
TP2	2.06	89.83	5.98	87.77
TP3	1.50	83.79	7.54	82.29

J.G ⊼ Overcast
S.V. 50° F wind ~ 20 mph

BM Top of protective steel casing
for well MI0282-3

TOC = Top of well Casing
gnd = ground. Wells MI0282-3
MI0282-9, and MI0282-1

Positioned in Cornfield. NW of
site shooting at TOC of MI0282-1
Tp, stake in Cornfield West
of Wolverine Disposal.

NO. 455
TELEDYNE

STA	+ BS	HI	− FS	DEV
Tp4	.70	75.21	9.28	74.51
MI0227-5 (TOC)			12.25	62.96
gnd			14.66	60.55
MI0227-4			11.39	63.82
gnd			14.12	61.09
Tp5	2.53	~~80.62~~ 80.62	3.12	~~78.53~~ 72.09
MI0222-10 TOC			11.44	69.18
gnd			12.85	67.77
Tp6	0.12	68.26	12.48	68.14
Tp7	10.54	77.96	.84	67.42

Tp4 West slope of site between wells MI0282-4, 5, and corn Fld.

{TOC of well MI0282-5
{gnd

{TOC of well MI0282-4
{gnd

Tp5 Slope (west) of hill between wells MI0282-4, 5, and 10.

{TOC of well MI0282-10
{gnd.

Tp6 SW. side of landfill between landfill and gravel pit.

Tp7 East side of gravel cut between cut and L.F.

NO. 455
TELEDYNE

STA	+ (BS)	HI	− FS	ELEV
M10287 TOC			8.48	69.48
gnd			10.94	67.02
Tp8	5.50	75.09	8.37	69.59
M10287-8 TOC			5.15	69.94
gnd.			7.55	67.54
	1.11	71.05		
Tp9	2.09	60.69	12.45	58.60
Lake #3			8.81	51.88
Tp9	11.72	70.32	2.09	58.60

{ TOC of well MI0282-7
{ gnd.

Tp8 Field South east of Hill

{ TOC of well MI0282-8
{ gnd.

Shooting at well (TOC) of well MI0282

Tp9 Stake on Southside of Lake #3

Lake on NE side of site.

Tp9 (back shooting)

STA	BS	HI	FS	ELEV.
MI0232-7 TOC	5.98	75.92	.38	69.94
Tp8	2.41	72.01	6.32	69.60
MI0232-7 TOC	2.21	71.71	2.51	69.50
Tp10	.83	62.30	10.24	61.47
Tp11	.50	51.13	11.67	50.63
Tp12	4.72	47.02	8.83	42.30
MI0232-6 TOC			3.65	43.37
gnd			5.96	41.06
Tp13	3.44	42.63	7.83	39.19

TOC of well MI0282-8

(Tp8)

TOC of well MI0282-7

Tp10 Road leading to LF. east side of gravel pit.

Tp11 Located in gravel pit east of lake #2

TOC of well MI0282-6
gnd

Tp13 Located between lake #2 and well MI0282-6

STA	BS	HI	FS	ELEV.
Lake #2			7.67	~~39.35~~ 34.96
Tp13	12.56	61.03	3.44	39.19
MI0282-6 TOC			3.69	~~57.34~~
Tp13	6.81	46.00		39.19
MI0282-6 TOC			2.63	43.37
Tp10	9.47	51.12	3.69	~~49.69~~ 42.31

Shooting at Lake #2

Tp13 (back shooting)

TOC of well MI0222-6)

Rain delay

April 4, 1986 cloudy and

min 50°F

wind 15mph

JG ⊼

SV

TOC of well MI0812-6

Tp12 (back shooting)

NO. 455
TELEDYNE

STA	BS	HI	FS	ELEV
Tp11	11.17	61.77	1.12	50.60
Tp10	9.51	70.95	.33	61.44
Tp7	1.03	68.42	3.56	67.39
Tp6	12.40	80.52	.30	68.12
MIO282-10 (TOC)			11.37	69.15
Lake #1			14.45	66.07
Tp5	3.32	75.38	8.46	72.06
MIO282-4 TOC			11.59	63.79
MIO282-5 TOC			12.45	62.93

Tp11 (back shooting)

Tp10 " "

Tp7 " "

Tp8 " "

TOC of well #I0282-10
(back shooting)
Shooting at Leka #1

TOC of well #I0282-4

TOC of well #I0282-5

NO. 455
TELEDYNE

STA	+BS	HI	−FS	ELEV.
Tp4	13.56	88.05	.89	77.49
Tp3			5.77	82.28
Tp2	4.93	92.66	.32	87.73
Tp1	5.83	97.49	1.00	91.66
MI0282-1 TOC			.65	96.84
	3.28	100.12		
~~MI0282-9~~				
MI0282-9 TOC			.72	99.40
MI0282-5 TOC			.34	99.78

Tpy (back shooting)

Tp3 " "

Tp2 " "

Tp1 " "

TOC of well MI0282-1

shooting at TOC of well MI0282-1

TOC of well MI0282-9

TOC of well MI0282-3

TELEDYNE NO. 455

April 16, 1996 NK Gravel Co
overcast TDD. R05 8504-12
Rain, 35°F.

Team Members
Jerry Goode T.L
Steve VeVang S.O
Randy Livingston SA
Sue Kowski SA Res.
Jane Anderson
Mike Selway

2:40pm Arrived on site and notified Mag.

MI0282-1 Remove 10 gallons.
5 vol.

MI0282-3 Remove 24 gal
3 vol

April 15 water table TOC

Depth from TOC

MI0282-1 = 25.08'

MI0282-3 = 24.74'

MI0282-9 = 26.39'

MI0282-4 = 26.00'

MI0282-5 = 24.90'

MI0282-10 = 26.64

MI0282-6 = 4.86

MI0282-7 = 26.67

MI0282-8 = 21.06

DIETZGEN NO. 385-5

MI0282-9 remove 15 gal
3 vol.

MI0282-4 remove 15 gal
5 vol.

MI0282-5 remove 24 gal
5 vol.

MI0282-10 remove 18 gal
~5 vol.

MI0282-6 Remove 15 gal
6 vol.

MI0282-7 Remove 10 gal
~5 vol.

MI0282-8 Remove 10 gal
~5 vol.

* All bailers were washed with distilled water,

Acetone, and distilled water before being put down well. Bailers were tied with nylon rope.

Bailers, ~~ro~~ and rope were left down well. Rope was tied to protective casing. (well was locked with bailer and rope inside).

Departed site E&E crew at 7:00 pm.

DIETZGEN NO. 385-5

April 16, 1986 - NG Gravel Co
TDD. R05 8504-12
Overcast, 45°F

Team Members
Jerry Goode T.L
Steve VeVang S.O
Sue Kowalski Sampler residential
Randy Livingston Sampler well
Jane Anderson
Mike Schway

Arrived at site 8:20am.

8:25 Crew splits
begin sampling of wells.

(All metals filtered)
HNO_3
CN → NaOH
Residential Mercury
Sample → KCr_2

Pictures taken of
wells and sampling times
↓
(VeVang photographer facing
south in pictures.)

ICE added to ~~OUT~~ VOA'
Coolers.

(See chain of Custody,
tags - Sampling paper work)

DIETZGEN NO. 385-5

Shipped Coolers Federal Express. 4:45 pm.

April 23, 1986 65°F
N.E. Gravel Co. TDP. R053504-12
Departed From Warehouse (Chicago) 8:30 am

Team Members
Jerry Goode T.L
Steve VeVay S.O

12:30 - Checked into Holiday Inn Grand Rapids.
1:00 - Picked up supplies water, towels & tape

8504-12, MI0282

1.30 Arrived at NE Gravel and checked in with management.

Slug test.

Slug length = 5'
Slug dia. (ID) = 1"
Slug dia. (OD) = 1.2"

MI0222-1

Depth to water table = 25.59'

50	25.58	44	25.58
49	25.58	43	25.58
48	25.58	42	25.58
47	25.58	41	25.58
46	25.58	40	25.58
45	25.58	39	25.58

DIETZGEN NO. 385-5

38	25.58	20.	26.31
37	25.58	19.	26.49
36	25.58	18	25.80
35	25.58	17	25.60
34.	25.58	16.	25.61
33	25.58	15.	25.62
32.	25.58	14	25.63
31.	25.58	13	25.68
30.	25.59	12	25.74
29.	25.59	11	25.85
28	25.62	10.	26.10
27.	25.63	9	26.20
26.	25.63	8	26.28
25.	25.63	7	26.44
24.	25.67	6	26.61
23.	25.71	5	26.86
22.	25.63	4	26.64
21	26.07	3	27.01

2	26.10			
1	26.25			

Re run test some parameters.

transducer measures 12.27

45	25.56			
44	25.56	-	32	25.56
43	25.56		31	25.56
42	25.56		30	25.56
41	25.56	*	29	25.56
40	25.51		28	25.57
39	25.56		27	5.57
38	25.56		26	25.56
37	25.56		25.	25.57
36	25.56		24	25.57
35	25.56		23	25.57
34	25.56		22	25.57
33	25.56		21	25.57

DIETZGEN NO. 385-5

20	25.57		2	26.54	
19	25.57		1	25.98	
18	25.57		0	26.92	
17	25.58				
16	25.59				
15.	25.59				
14.	25.61				
13.	25.63				
12.	25.69				
11	25.79				
10.	25.98				
9.	26.07				
8.	26.15				
7.	26.28				
6.	26.41				
5.	26.58				
4.	26.79				
3.	26.94				

well MI0282-9

water depth = 27.06'

60	27.07		45		
59	27.07		44		
58	27.07		43		
57	27.07		42		
56	27.07		41		
55			40		
54			39		
53			38		
52			37		
51			36		
50			35		
49			34	27.	08
48			33	27.	08
47			32	27.	08
46			31	27.	07

DIETZGEN NO. 385-5

30	27.08	12	27.29
29	27.08	11	27.44
28	27.07	10	27.71
27	27.07	9	27.82
26	27.07	8	27.95
25	27.07	7	28.11
24	27.07	6	28.21
23	27.07	5	28.20
22	27.07	4	28.20
21	27.07	3	28.02
20	27.07	2	27.56
19	27.08	1	27.42
18	27.08	0	28.06
17	27.09		
16	27.10		
15	27.12		
14	27.15		
13	27.20		

well # MIC282-3

water table depth = 27.45'

60	29.32	42	29.31
59	29.31	41	29.31
58	29.32	40	29.31
57	29.31	39	29.31
56	29.31	38	29.31
55	29.31	37	29.31
54	29.31	36	29.31
53	29.31	35	29.31
52	29.31	34	29.33
51	29.31	33	29.34
50	29.31	32	29.34
49	29.31	31	29.35
48	29.32	30	29.38
47	29.31	29	29.41
46	29.32	28	29.47
45	29.32	27	29.49
43	29.32	26.	29.51

DIETZGEN NO. 385-5

25	29.54	7	31.03
24	29.57	6	31.09
23	29.60	5	31.16
22	29.64	4	31.22
21	29.69	3	30.99
20	29.73	2	30.41
19	29.78	1	29.79
18	29.83	0	30.27
17	29.92		
16	29.98		
15	30.08		
14	30.19		
13	30.31		
12	30.46		
11	30.63		
10	30.82		
9	30.90		
8	30.95		

MI0287-6

water table 5.0'

63	5.00	48	5.00
62	5.00	47	5.00
61	5.00	46	5.00
60	5.00	45	5.00
59	5.00	44	5.00
58	5.00	43	5.00
57	5.00	42	5.00
56	5.00	41	5.00
55	5.00	40	5.00
54	5.00	39	5.00
53	5.00	38	5.00
52	5.00	37	5.00
51	5.00	36	5.00
50	5.00	35	5.00
49	5.00	34	5.00

DIETZGEN NO. 385-5

33	5.00	15	5.13
32	5.00	14	5.17
31	5.00	13	5.23
30	5.00	12	5.32
29	5.01	11	5.47
28	5.01	10	5.69
27	5.01	9	5.77
26	5.02	8	5.86
25	5.02	7	5.97
24	5.02	6	6.10
23	5.03	5	6.26
22	5.03	4	6.46
21	5.03	3	6.56
20	5.04	2	6.13
19	5.05	1	5.87
18	5.06	0	5.40
17	5.08		
16	5.10		

MI 0232-10

Depth to water table = 26.25

66	26.99		
65	26.99	50	26.99
64	26.99	49	26.99
63	26.99	48	26.99
62	26.99	47	26.99
61	26.99	46	26.99
60	26.99	45	26.99
59	26.99	44	26.99
58	26.99	43	26.99
57	26.99	42	26.99
56	26.99	41	26.99
55	26.99	40	26.99
54	26.99	39	26.99
53	26.99	38	26.99
52	26.99	37	26.99
51	26.99	36	26.99

DIETZGEN NO. 385-5

35	26.99	17	27.00	
34	26.99	16	27.01	
33	26.99	15	27.01	
32	26.99	14	27.02	
31	26.99	13	27.03	
30	26.99	12	27.07	
29	27.00	11	27.14	
28	27.00	10	27.34	
27	27.00	9	27.44	
26	27.00	8	27.57	
25	27.00	7	27.76	
24	27.00	6	28.00	
23	27.00	5	28.03	
22	27.01	4	27.90	
21	27.00	3	27.48	
20	27.00	2	28.00	
19	27.00	1	27.56	
18	27.00	0	27.01	

Departed site at 7:00pm

April 24, 1986 Sunny 70°F

NE Gravel Co

slug testing of wells

Team Members

Jerry Goode TL

Steve VeVang S.O

TDD. R05 8504-12

7:15 Checked in with site Management.

Well MI0282-8

Depth to water 22.10'

66.	22.08	63	22.07
65	22.08	62	22.07
64	22.08	61	22.07

DIETZGEN NO. 385-5

60	22.08		42	22.08	
59	22.08		41	22.08	
58	22.08		40	22.08	
57	22.08		39	22.08	
56	22.08		38	22.08	
55	22.08		37	22.08	
54	22.08		36	22.08	
53	22.08		35	22.08	
52	22.08		34	22.08	
51	22.08		33	22.08	
50	22.08		32	22.08	
49	22.08		31	22.08	
48	22.08		30	22.08	
47	22.08		29	22.08	
46	22.08		28	22.08	
45	22.08		27	22.08	
44	22.08		26	22.08	
43	22.08		25	22.08	

24	22.08	6	23.09
23	22.08	5	23.47
22	22.08	4	23.69
21	22.09	3	23.57
20	22.09	2	23.80
19	22.09	1	23.36
18	22.10	0	22.08
17	22.10		
16	22.11		
15	22.12		
14	22.15		
13	22.19		
12	22.26		
11	22.38		
10	22.88		
9	22.93		
8	23.01		
7	23.05		

DIETZGEN NO. 385-5

Well MI0282-7

Depth to water 27.75'

65	27.75		
64	27.74	49	27.74
63	27.75	48	27.74
62	27.75	47	27.74
61.	27.75	46	27.74
60.	27.74	45	27.74
59.	27.74	44	27.74
58	27.74	43	27.74
57	27.74	42	27.74
56	27.74	41	27.74
55	27.74	40	27.74
54	27.74	39	27.74
53	27.74	38	27.74
52	27.74	37	27.74
51	27.74	36	27.74
50	27.74	35	27.74

34	27.74	16	27.76
33	27.74	15	27.77
32	27.74	14	27.78
31	27.74	13	27.79
30	27.74	12	27.83
29	27.75	11	27.89
28	27.74	10	28.05
27	27.75	9	28.12
26	27.75	8	28.21
25	27.75	7	28.33
24	27.75	6	28.47
23	27.75	5	28.68
22	27.75	4	28.87
21	27.75	3	28.89
20	27.75	2	28.45
19	27.75	1	28.40
18	27.75	0	28.36
17	27.76		

DIETZGEN NO. 385-5

well MI 0222-4
water depth: 26.40'

65	26.41	50	26.40
64	26.40	49	26.41
63	26.41	48	26.41
62	26.41	47	26.41
61	26.40	46	26.41
60	26.40	45	
59	26.41	44	
58	26.41	43	
57	26.41	42	
56	26.41	41	
55	26.41	40	26.40
54	26.40	39	26.40
53	26.41	38	26.40
52	26.41	37	26.41
51	26.41	36	26.41

35	26.41	17	26.42
34	26.40	16	26.42
33	26.41	15	26.42
32	26.41	14	26.42
31	26.41	13	26.42
30	26.41	12	26.41
29	26.41	11	26.43
28	26.41	10	26.62
27	26.41	9	26.75
26	26.41	8	26.92
25	26.41	7	27.12
24	26.41	6	27.26
23	26.41	5	27.27
22	26.41	4	27.21
21	26.41	3	26.96
20	26.41	2	26.92
19	26.41	1	26.95
18	26.41	0	26.37

DIETZGEN NO. 385-5

well MI0282-5
Depth to water 25.20'

67	25.17	52	25.18
66	25.17	51	25.18
65	25.17	50	25.18
64	25.17	49	25.18
63	25.17	48	25.18
62	25.17	47	25.19
61	25.17	46	25.18
60	25.17	45	25.19
59	25.17	44	25.18
58	25.17	43	25.19
57	25.17	42	25.18
56	25.17	41	25.19
55	25.18	40	25.19
54	25.18	39	25.19
53	25.18	38	25.19

37	25.19	19	26.39
36	25.19	18	25.44
35	25.19	17	25.49
34	25.19	16	25.56
33	25.19	15	25.65
32	25.19	14	25.76
31	25.19	13	25.90
30	25.20	12	26.06
29	25.20	11	26.26
28	25.22	10	26.55
27	25.23	9	26.57
26	25.24	8	26.69
25	25.25	7	26.77
24	25.26	6	26.86
23	25.28	5	26.96
22	25.30	4	27.01
21	25.32	3	26.82
20	25.35	2	26.45
		1	25.99
		0	26.24

DIETZGEN NO. 385-5

well MI0282-10

Depth to water = 27.28'

(rerun of test)

65	27.26	49	27.27
64	27.26	48	27.27
63	27.26	47	27.27
62	27.26	46	27.27
61	27.26	45	27.27
60	27.26	44	27.27
59	27.26	43	27.27
58	27.26	42	27.27
57	27.26	41	27.27
56	27.26	40	27.27
55	27.26	39	27.27
54	27.26	38	27.27
53	27.26	37	27.26
52	27.77	36	27.26
51	27.26	35	27.27
50	27.26	34	27.27

33	27.27	15	27.28
32	27.27	14	27.29
31	27.27	13	27.30
30	27.27	12	27.32
29	27.27	11	27.37
28	27.27	10	27.49
27	27.27	9	27.55
26	27.27	8	27.62
25	27.27	7	27.73
24	27.27	6	27.85
23	27.27	5	28.04
22	27.27	4	28.27
21	27.27	3	28.33
20	27.27	2	28.04
19	27.27	1	27.83
18	27.28	0	28.24
17	27.28		
16	27.28		

DIETZGEN NO. 385-5

Water Table Depths

measurements taken April 24, 1986.
Depths measured from Top of inner PVC well Casings.

Well	Water Depth
MI0282-1	25.49'
MI0282-2	—
MI0282-3	27.45'
MI0282-4	26.40'
MI0282-5	25.20'
MI0282-6	5.00'
MI0282-7	27.75'
MI0282-8	22.10'
MI0282-9	27.09'
MI0282-10	27.28'