

# WELL STATION IDENTIFICATION

FORM RP-37 - Rev. 10/78

PAGE 1 OF 2

(COMPLETE THIS FORM ONLY FOR THE INITIAL SURVEY OF EACH WELL)

## WELL LOCATION CARD ONE

1	10	16	20	37	54	57	59	63	66	68	71
STATION I. D.	SURVEY DATE	A CARD C	WELL NO.	COUNTY	LAT DEG	LAT MIN	LAT SEC	LO N DEG	LO N MIN	LO N SEC	
055000015	102982	W11	HIF-55	HIGHLANDS	087	15	59	081	20	RA	

## WELL LOCATION CARD TWO

1	17	20	37	39	42	45	61
STATION I. D.	SURVEY DATE	A CARD C	QUARTERSECTIONS	SEC	TOWN-SHIP	RANGE	WATER MANAGEMENT DISTRICT PLANNING AREA
		W12	SW1/4; SW1/4; SE1/4	08	37S	30E	K.P.A.

## WELL DATUM CARD

1	17	20	26	32	38	44	59
STATION I. D.	SURVEY DATE	A CARD C	KELLY BUSH-ING (FEET)	LAND SUR-FACE (FT)	TOP OF CASING (FT)	OTHER (FT) (SEE NOTES)	DATUM (CHECK ONE)
		W21		325			MSL- ; LS- ; TOC-X

## WELL OWNERSHIP CARD

1	17	20	37	54	57	64	80
STATION I. D.	SURVEY DATE	A CARD C	NAME OF OWNER	GROVE/PROPERTY NAME	AREA CODE	TELEPHONE	WELL USE
		W31	S. W. F. W. M. D.				MONITOR

## WELL ORIGIN CARD

1	17	20	37	54	71	76
STATION I. D.	SURVEY DATE	A CARD C	DRILLER/ DRILLING COMPANY	OFFICE OF DRILLER (CITY)	DRILLING METHOD	DATE COMPLETED
		W41	PUGH DRILLING			

NOTES: COLUMNS 1-16 ARE DUPLICATED IN EACH CARD.  
 COLUMN 16 IS AN ACTION CODE WITH THE FOLLOWING PERMISSABLE STATES - 1 (CREATE NEW RECORD),  
 2 (CHANGE ALL VALUES), OR 9 (DELETE OLD RECORD).

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# WELL STATION IDENTIFICATION

FORM RP-38 - Rev. 10/78

PAGE 2 OF 2

(COMPLETE THIS FORM ONLY FOR THE INITIAL SURVEY OF EACH WELL)

## WELL DESCRIPTION - CONSTRUCTION CARD ONE

1	10	16	20	27	34	41	48	54	59	68
STATION I. D.	SURVEY DATE	CARD C	TOTAL DEPTH -DRILLER (FT)	TOTAL DEPTH -LOGGER (FT)	CASING DEPTH -DRILLER (FT)	CASING DEPTH -LOGGER (FT)	CASING I.D. (INCHES)	BIT SIZE (INCHES)	DRILLER LOG AVAIL.	
0550000015	102982	W51	1385	1380		585	770		YES-X;NO-	

## WELL DESCRIPTION - CONSTRUCTION CARD TWO

1	17	20	37	54	59	64	69	73
STATION I. D.	SURVEY DATE	CARD C	TYPE OF SCREEN	TYPE OF PACKING	DIA. OF SCREEN	SLOT SIZE (INCHES)	SCREEN BEGINS	SCREEN ENDS (FT)
		W52	OPEN HOLE					

## WELL DESCRIPTION - CONFIGURATION CARD, SECTION ONE (TOP)

1	17	20	22	39	44	49	54	59	75
STATION I. D.	SURVEY DATE	CARD C	SEC	TYPE OF CASING	NOM. DIA. (INCHES)	BEGIN DEPTH	END DEPTH (FEET)	THICKNESS (INCHES)	TYPE OF ANNULUS FILL
		W610		P.V.C.	80	0	585	03	CEMENT

## WELL DESCRIPTION - CONFIGURATION CARD, SECTION TWO

1	17	20	22	39	44	49	54	59	75
STATION I. D.	SURVEY DATE	CARD C	SEC	TYPE OF CASING	NOM. DIA. (INCHES)	BEGIN DEPTH	END DEPTH (FEET)	THICKNESS (INCHES)	TYPE OF ANNULUS FILL
		W6202							

## WELL DESCRIPTION - CONFIGURATION CARD, SECTION THREE

1	17	20	22	39	44	49	54	59	75
STATION I. D.	SURVEY DATE	CARD C	SEC	TYPE OF CASING	NOM. DIA. (INCHES)	BEGIN DEPTH	END DEPTH (FEET)	THICKNESS (INCHES)	TYPE OF ANNULUS FILL
		W6303							

NOTES: COLUMNS 1-16 ARE DUPLICATED IN EACH CARD.  
 COLUMN 16 IS AN ACTION CODE WITH THE FOLLOWING PERMISSABLE STATES - 1 (CREATE NEW RECORD),  
 2 (CHANGE ALL VALUES), OR 9 (DELETE OLD RECORD).  
 CARD TYPES <W64>, <W65>, .... <W69> MAY ALSO BE USED TO PROVIDE DATA FOR A TOTAL OF NINE SECTIONS.

# WELL SURVEY REPORT

FORM RP-39 -- Rev. 10/78

(USE ONE FORM/DAY/WELL)

## SURVEY CARD

1	10	16	20	37	54	56	58	60	62	64	66	68	70	72										
STATION	SURVEY	CARD	LOGGED BY	WITNESSED BY	*	*	*	*	*	*	*	*	*	*										
I. D.	DATE	C			A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
05500.0015	10.29.82	W71	S. ANDERSON	P. DAUENHAUER	X	X	X	X	X					X	X	X	X	X						

\*INSERT AN <X> IN EACH COLUMN FOR WHICH A SURVEY WAS CONDUCTED. SURVEY CODES ARE LISTED BELOW:

A = CALIPER	F = NATURAL GAMMA	K = TEMPERATURE GRADIENT
B = FLOWMETER	G = FLUID RESISTIVITY	L = DELTA TEMPERATURE
C = 16-INCH NORMAL RESISTIVITY	H = GAMMA GAMMA DENSITY	M = SPONTANEOUS POTENTIAL
D = 64-INCH NORMAL RESISTIVITY	I = CASING COLLAR LOCATOR	N = POINT RESISTANCE
E = NEUTRON POROSITY	J = FLUID SAMPLER	O = 6-FOOT LATERAL RESISTIVITY

## FLUID QUALITY CARD ONE

1	17	20	37	54	60	63
STATION	SURVEY	CARD	SAMPLE SOURCE	TYPE	DATE	TIME
I. D.	DATE	C	(WELLHEAD, ETC.)	FLUID	SAMPLED	SAMPLED
		W81	WELLHEAD	FORMATION WATER	10.29.82	1.400

## FLUID QUALITY CARD TWO

1	17	20	25	32	35	41	47	53	60	64	70	75
STATION	SURVEY	CARD	TEMP. OF	FIELD SP.	FIELD	CHLORIDE	DISSOLVED	SPEC. COND.	STATIC WATER	W/L REF	FLOW RATE	PUMP RATE
I. D.	DATE	C	SAMPLE	F GRAVITY	PH	(MG/L)	SOLIDS	(U-MHO/CM)	LEVEL (FEET)	FROM	(GAL/MIN)	(GAL/MIN)
		W82	74.0	F				24.380				

## COMMENT CARDS

1	17	20	40	60	76
STATION	SURVEY	CARD	COMMENTS	COMMENTS	COMMENTS
I. D.	DATE	C	- LINE 1	- LINE 2	- LINE 3
		W91			

1	17	20	40	60	76
STATION	SURVEY	CARD	COMMENTS	COMMENTS	COMMENTS
I. D.	DATE	C	- LINE 4	- LINE 5	- LINE 6
		W92			

NOTES: COLUMNS 1-16 ARE DUPLICATED IN EACH CARD.  
 COLUMN 16 IS AN ACTION CODE WITH THE FOLLOWING PERMISSABLE STATES - 1 (CREATE NEW RECORD),  
 2 (CHANGE ALL VALUES), OR 9 (DELETE OLD RECORD).  
 CARD TYPES <W93>, <W94>, .... <W99> MAY ALSO BE USED TO PROVIDE UP TO A TOTAL OF TWENTY-SEVEN COMMENT LINES.

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WELL LOG

WELL LOCATION

County HIGHLANDS  
 Station I. D. 055000015  
 Date 10-29-82 Well No. HIF-55  
 Latitude 027°15'59" Longitude 081°20'24"  
 NE 1/4 NW 1/4 Section 17 Township 37S Range 30E  
 Owner S.W.F.W.M.D. Phone \_\_\_\_\_  
 Driller Pugh Drilling Co. Date Drilled \_\_\_\_\_  
 WELL CONSTRUCTION  
 Drilling Method: Rot.  Air  CT  Auger  Other \_\_\_\_\_  
 T. Depth - Driller 1385' T. Depth - Logger 1380'  
 Casing Depth Driller \_\_\_\_\_ Casing Depth Logger 585'  
 Bit Size \_\_\_\_\_ Casing Dia. I.D. 7.8"  
 Hole Dia. 8" From 0' To 1380' Dia. \_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_  
 Type of Casing P.V.C. Casing Thickness 0.2"  
 Type of Screener Open Hole Screen Int. From \_\_\_\_\_ To \_\_\_\_\_  
 Type of Packing \_\_\_\_\_ Well Use MONITOR  
 Static Water Level \_\_\_\_\_ Date \_\_\_\_\_  
 Yield Flow \_\_\_\_\_ Pump \_\_\_\_\_

DATUM

K.B. \_\_\_\_\_ L.S. \_\_\_\_\_ T.O.C. 3.25"

FLUID QUALITY

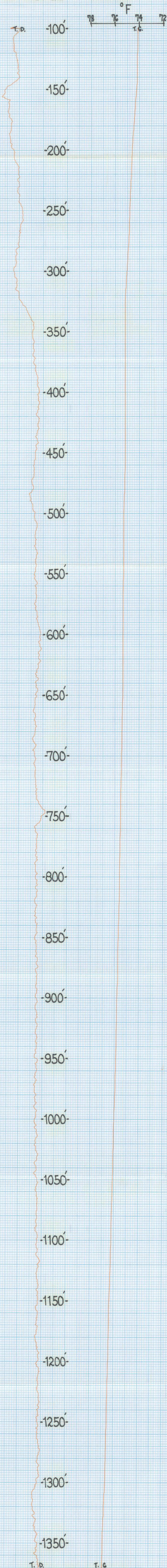
Date 10-29-82 Time 1400 Source of Sample WELL HEAD  
 Cl \_\_\_\_\_ mg/l Type of Fluid FORMATION WATER  
 Temp. 74.0°F Field Density @ \_\_\_\_\_ °C  
 T.D.S. \_\_\_\_\_ mg/l Spec. Cond. 2438.0  $\mu$ mhos/cm  
 Logged By: S. Anderson Witnessed By: P. Dawenbauer  
 Comments: \_\_\_\_\_

TYPE OF SURVEYS RUN

Lateral 6' Caliper  
 Flow meter  
 16' 64" normals  
 Neutron  
 Natural Gamma  
 Fluid Resistivity  
 Density  
 Cell  
 Fluid Sampler  
 Temperature  
 Delta Temp.  
 SP

HIF-55  
TEMPERATURE DIFFERENTIAL

TEMPERATURE GRADIENT



TEMPERATURE DIFFERENTIAL TEMPERATURE GRADIENT  
HIF-55

WELL LOG

WELL LOCATION

County HIGHLANDS  
 Station I. D. Q55000015  
 Date 10-29-82 Well No. HIF-55  
 Latitude 027°15'59" Longitude 081°20'24"  
 NE 1/4 NW 1/4 Section 17 Township 37S Range 30E  
 Owner S.W.F.W.M.D. Phone \_\_\_\_\_  
 Driller PUGH DRILLING CO. Date Drilled \_\_\_\_\_  
 WELL CONSTRUCTION  
 Drilling Method: Rot. CT Auger \_\_\_\_\_ Other \_\_\_\_\_  
 T. Depth - Driller 1385' T. Depth - Logger 1380'  
 Casing Depth Driller \_\_\_\_\_ Casing Depth Logger 585'  
 Bit Size \_\_\_\_\_ Casing Dia. I.D. 7.8"  
 Hole Dia. 8" From 0' To 1380' Dia. From \_\_\_\_\_ To \_\_\_\_\_  
 Type of Casing P.V.C. Casing Thickness 0.2"  
 Type of Screen Open Hole Screen Int. From \_\_\_\_\_ To \_\_\_\_\_  
 Type of Packing \_\_\_\_\_ Well Use MONITOR  
 Static Water Level \_\_\_\_\_ Date \_\_\_\_\_  
 Yield Flow \_\_\_\_\_ Pump \_\_\_\_\_

DATUM

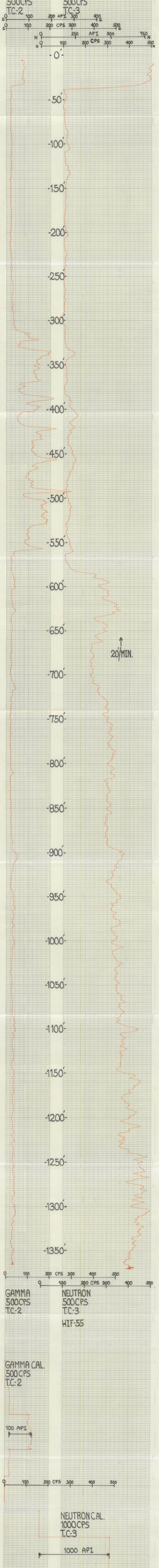
K.B. \_\_\_\_\_ L.S. \_\_\_\_\_ T.O.C. 3.25"

FLUID QUALITY

Date 10-28-82 Time 1400 Source of Sample WELL HEAD  
 Cl \_\_\_\_\_ mg/l Type of Fluid FORMATION WATER  
 Temp. 74.0° F Field Density \_\_\_\_\_ @ \_\_\_\_\_ °C  
 T.D.S. \_\_\_\_\_ mg/l Spec. Cond. 2438.0 umhos/cm  
 Logged By: S. Anderson Witnessed By: P. Dauenbauer  
 Comments: \_\_\_\_\_

TYPE OF SURVEYS RUN

Lateral 6"  Density \_\_\_\_\_  
 Caliper  col \_\_\_\_\_  
 Flow meter  Fluid Sampler \_\_\_\_\_  
 16" 64" normals  Temperature \_\_\_\_\_  
 Neutron  Neutron  Delta Temp. \_\_\_\_\_  
 Natural Gamma  SP \_\_\_\_\_  
 Fluid Resistivity  \_\_\_\_\_





WELL LOG

WELL LOCATION

County HIGHLANDS  
 Station I. D. 05.5000015  
 Date 10-29-82 Well No. HIF-55  
 Latitude 027°-15'-59" Longitude 081°-20'-24"  
 NE 1/4 NW 1/4 Section 17 Township 37S Range 30E  
 Owner S.W.F.W.M.D. Phone \_\_\_\_\_  
 Driller PUGH DRILLING CO. Date Drilled \_\_\_\_\_  
 Drilling Method: Rot. CT Auger \_\_\_\_\_ Other \_\_\_\_\_  
 T. Depth - Driller 1385' T. Depth - Logger 1380'  
 Casing Depth Driller \_\_\_\_\_ Casing Depth Logger 585'  
 Bit Size \_\_\_\_\_ Casing Dia. I.D. 7.8"  
 Hole Dia. 8" From 0' To 1380' Dia. From \_\_\_\_\_ To \_\_\_\_\_  
 Type of Casing P.V.C. Casing Thickness 0.2"  
 Type of Screen OPEN HOLE Screen Int. From \_\_\_\_\_ To \_\_\_\_\_  
 Type of Packing \_\_\_\_\_ Well Use MONITOR  
 Static Water Level \_\_\_\_\_ Date \_\_\_\_\_  
 Yield Flow \_\_\_\_\_ Pump \_\_\_\_\_

DATUM

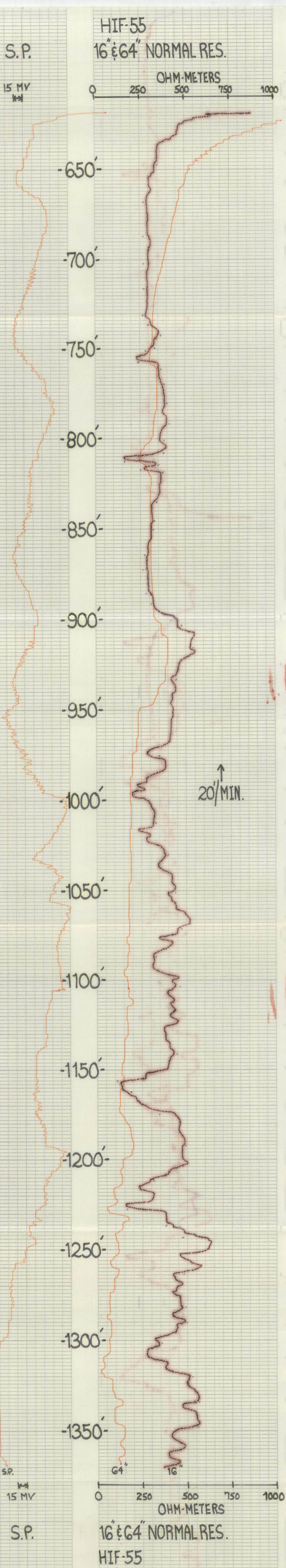
K.B. \_\_\_\_\_ L.S. \_\_\_\_\_ T.O.C. 3.25"

FLUID QUALITY

Date 10-29-82 Time 1400 Source of Sample WELL HEAD  
 Cl \_\_\_\_\_ mg/l Type of Fluid FORMATION WATER  
 Temp. 74.0°F Field Density \_\_\_\_\_ @ \_\_\_\_\_ °C  
 T.D.S. \_\_\_\_\_ mg/l Spec. Cond. 2438.0  $\mu$ mhos/cm  
 Logged By: S. Anderson Witnessed By: P. Dauenbauer  
 Comments: \_\_\_\_\_

TYPE OF SURVEYS RUN

- |                   |     |               |     |
|-------------------|-----|---------------|-----|
| Lateral 6'        | (X) | Density       | ( ) |
| Caliper           | (X) | ccl           | ( ) |
| Flow meter        | ( ) | Fluid Sampler | ( ) |
| 16', 64" normals  | (X) | Temperature   | (X) |
| Neutron           | (X) | Delta Temp.   | (X) |
| Natural Gamma     | (X) | SP            | (X) |
| Fluid Resistivity | (X) |               |     |





WELL LOG

WELL LOCATION

County HIGHLANDS  
 Station I. D. 055000015  
 Date 10-29-82 Well No. HIF-55  
 Latitude 027°15'59" Longitude 081°20'24"  
 NE  $\frac{1}{4}$  NW  $\frac{1}{4}$  NE  $\frac{1}{4}$  Section 17 Township 37S Range 30E  
 Owner S.W.F.W.M.D. Phone \_\_\_\_\_  
 Driller PUGH DRILLING CO. Date Drilled \_\_\_\_\_  
 Drilling Method: Rot. CT Auger \_\_\_\_\_ Other \_\_\_\_\_  
 T. Depth - Driller 1385' T. Depth - Logger 1380'  
 Casing Depth Driller \_\_\_\_\_ Casing Depth Logger 585'  
 Bit Size \_\_\_\_\_ Casing Dia. I.D. 7.8"  
 Hole Dia. 8" From 0' To 1380' Dia. \_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_  
 Type of Casing P.V.C. Casing Thickness 0.2"  
 Type of Screen Open Hole Screen Int. From \_\_\_\_\_ To \_\_\_\_\_  
 Type of Packing \_\_\_\_\_ Well Use MONITOR  
 Static Water Level \_\_\_\_\_ Date \_\_\_\_\_  
 Yield Flow \_\_\_\_\_ Pump \_\_\_\_\_

DATUM

K.B. \_\_\_\_\_ L.S. \_\_\_\_\_ T.O.C. 3.25"

FLUID QUALITY

Date 10-29-82 Time 1400 Source of Sample WELL HEAD  
 Cl \_\_\_\_\_ mg/l Type of Fluid FORMATION WATER  
 Temp. 74.0°F Field Density \_\_\_\_\_ @ \_\_\_\_\_ °C  
 T.D.S. \_\_\_\_\_ mg/l Spec. Cond. 2438<sup>o</sup>  $\mu$ mhos/cm  
 Logged By: S. Anderson Witnessed By: P. Dauenhauser  
 Comments: \_\_\_\_\_

TYPE OF SURVEYS RUN

Lateral 6'	<input checked="" type="checkbox"/>	Density	( )
Caliper	<input checked="" type="checkbox"/>	chl	( )
Flow meter	( )	Fluid Sampler	( )
16", 64" normals	<input checked="" type="checkbox"/>	Temperature	<input checked="" type="checkbox"/>
Neutron	<input checked="" type="checkbox"/>	Delta Temp.	<input checked="" type="checkbox"/>
Natural Gamma	<input checked="" type="checkbox"/>	SP	<input checked="" type="checkbox"/>
Fluid Resistivity	<input checked="" type="checkbox"/>		

HIF-55

6' LATERAL NORMAL RES.

OHM-METERS  
0 500 1000 1500 2000

-650'

-700'

-750'

-800'

-850'

-900'

-950'

-1000'

↑  
20'/MIN.

-1050'

-1100'

-1150'

-1200'

-1250'

-1300'

-1350'

-1380'

OHM-METERS  
0 500 1000 1500 2000

6' LATERAL  
HIF-55



WELL LOG

**WELL LOCATION**  
County HIGHLANDS  
Station I.D. 055000015  
Date 10-29-82 Well No. HIF-55  
Latitude 027°-15'-59" Longitude 081°-20'-24"  
NE 1/4 NW 1/4 Section 17 Township 37S Range 30E  
Owner S.W.F.W.M.D. Phone \_\_\_\_\_  
Driller PUGH DRILLING Co. Date Drilled \_\_\_\_\_

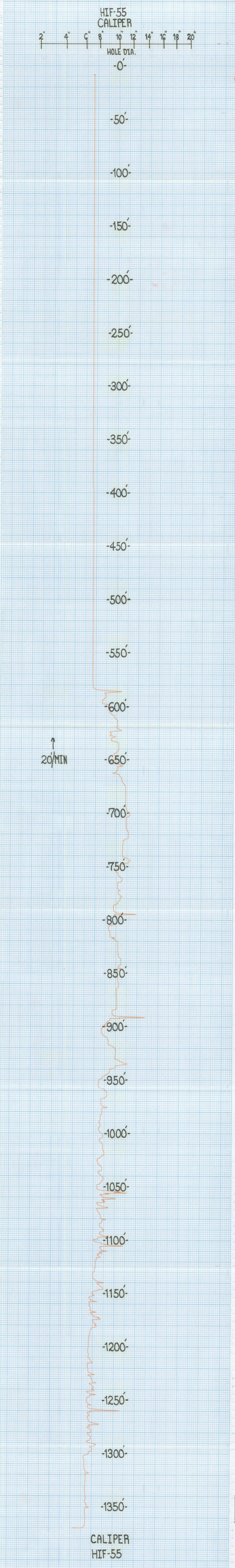
**WELL CONSTRUCTION**  
Drilling Method: Rot. Air CT Auger Other \_\_\_\_\_  
T. Depth - Driller 1385' T. Depth - Logger 1380'  
Casing Depth Driller \_\_\_\_\_ Casing Depth Logger 585'  
Bit Size \_\_\_\_\_ Casing Dia. I.D. 7.8"  
Hole Dia. 8" From 0' To 1380' Dia. From \_\_\_\_\_ To \_\_\_\_\_  
Type of Casing P.V.C. Casing Thickness 0.2"  
Type of Screen Open Hole Screen Int. From \_\_\_\_\_ To \_\_\_\_\_  
Type of Packing \_\_\_\_\_ Well Use MONITOR  
Static Water Level \_\_\_\_\_ Date \_\_\_\_\_  
Yield Flow \_\_\_\_\_ Pump \_\_\_\_\_

**DATUM**  
K.B. \_\_\_\_\_ L.S. \_\_\_\_\_ T.O.C. 3.25"

**FLUID QUALITY**  
Date 10-29-82 Time 1400 Source of Sample WELL HEAD  
Cl \_\_\_\_\_ mg/l Type of Fluid FORMATION WATER  
Temp. 74.0°F Field Density \_\_\_\_\_ °C  
T.D.S. \_\_\_\_\_ mg/l Spec. Cond. 2438.0 umhos/cm  
Logged By: S. Anderson Witnessed By: P. Daubauer  
Comments: \_\_\_\_\_

**TYPE OF SURVEYS RUN**

Lateral G' Caliper	(X)	Density	( )
Flow meter	( )	cc	( )
16" 64" normals	(X)	Fluid Sampler	( )
Neutron	(X)	Temperature	(X)
Natural Gamma	(X)	Delta Temp.	(X)
Fluid Resistivity	(X)	SP	(X)



6339 RECORDING CHARTER GRAPHIC CONTROLS CORPORATION BUFFALO, NEW YORK





WELL LOG

WELL LOCATION

County HIGHLANDS  
Station I. D. 055000015  
Date 10-29-82 Well No. HIF-55  
Latitude 027°-15'-59" Longitude 081°-20'-24"  
NE 1/4 NW 1/4 NE 1/4 Section 17 Township 37S Range 30E  
Owner S.W.F.W.M.D. Phone \_\_\_\_\_  
Driller PUGH DRILLING CO. Date Drilled \_\_\_\_\_

WELL CONSTRUCTION

Drilling Method: Rot.  Air  CT  Auger  Other \_\_\_\_\_  
T. Depth - Driller 1385' T. Depth - Logger 1380'  
Casing Depth Driller \_\_\_\_\_ Casing Depth Logger 585'  
Bit Size \_\_\_\_\_ Casing Dia. I.D. 7.8"  
Hole Dia. 8" From 0' To 1380' Dia. From \_\_\_\_\_ To \_\_\_\_\_  
Type of Casing P.V.C. Casing Thickness 0.2"  
Type of Screen OPEN BORE Screen Int. From \_\_\_\_\_ To \_\_\_\_\_  
Type of Packing \_\_\_\_\_ Well Use MONITOR  
Static Water Level \_\_\_\_\_ Date \_\_\_\_\_  
Yield Flow \_\_\_\_\_ Pump \_\_\_\_\_

DATUM

K.B. \_\_\_\_\_ L.S. \_\_\_\_\_ T.O.C. 3.25"

FLUID QUALITY

Date 10-29-82 Time 1400 Source of Sample WELL HEAD  
Cl \_\_\_\_\_ mg/l Type of Fluid FORMATION WATER  
Temp. 74.0°F Field Density \_\_\_\_\_ @ \_\_\_\_\_ °C  
T.D.S. \_\_\_\_\_ mg/l Spec. Cond. 2438.0 umhos/cm  
Logged By: S. Anderson Witnessed By: P. Dauenbauer  
Comments: \_\_\_\_\_

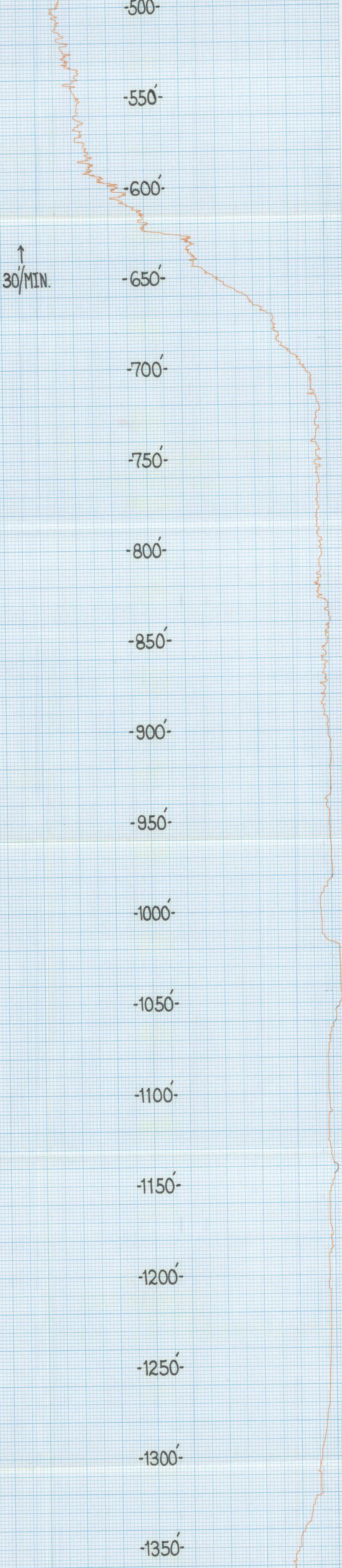
TYPE OF SURVEYS RUN

Lateral 6'	<input checked="" type="checkbox"/>	Density	<input type="checkbox"/>
Caliper	<input checked="" type="checkbox"/>	ccf	<input type="checkbox"/>
Flow meter	<input type="checkbox"/>	Fluid Sampler	<input type="checkbox"/>
16', 64" normals	<input checked="" type="checkbox"/>	Temperature	<input checked="" type="checkbox"/>
Neutron	<input checked="" type="checkbox"/>	Delta Temp.	<input checked="" type="checkbox"/>
Natural Gamma	<input checked="" type="checkbox"/>	SP	<input checked="" type="checkbox"/>
Fluid Resistivity	<input checked="" type="checkbox"/>		

HIF-55  
FLUID RESISTIVITY

OHM-METERS

0 2 4 6 8 10 12 14 16 18 20 22 24 26



0 2 4 6 8 10 12 14 16 18 20 22 24 26 28 30

OHM-METERS

FLUID RESISTIVITY

HIF-55

RECORDING CHART BUFFALO, NEW YORK  
GRAPHIC CONTROLS CORPORATION  
6339  
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