SOUTHERN RESOURCE EXPLORATION
P.O. Box 14311
Gainesville, FL 32604
904/371-9501

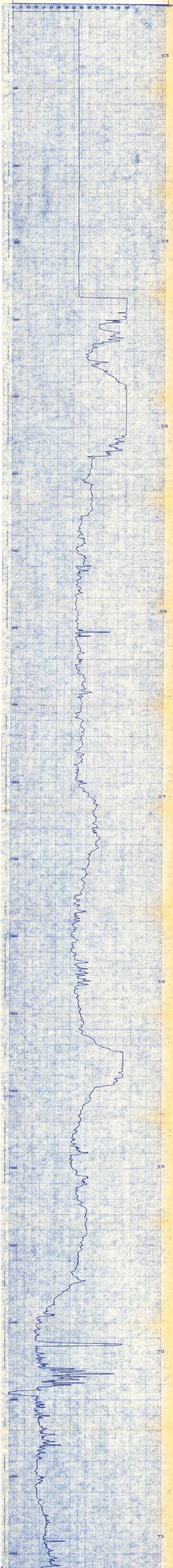
GEOPHYSICAL WELL SURVEY

Operator ALBAY INC. API/IC
Well No. OB-1 Lease or Unit PETERBILT
County FLORIDA State BROWARD
Elevation L.P. PDGC Datum

Rig Name HARRIS CORPORATION
Rig Number MUDSTON WELL #1
Drilling Contractor ALBAY INC.
Date Drilled
Total Depth 2022' Permanent Datum
Bottom Driller 2022' Elevation
Bottom Logger 2022' Log Measured From
Max. Temp. CASING 24" @ 370' Drilling Measured From
Time Since Circ.
Max. Rec. Temp.
Equip. Location
Recorded By
Witnessed By

Remarks

Sec. Twp. Rge.
Other Services



SOUTHERN RESOURCE EXPLORATION
P.O. Box 14311
Gainesville, FL 32604
904-372-5900

GEOPHYSICAL WELL SURVEY

Log
Depth: ☐ Driller ☐ Logger
☐ Both
Scale: ☐ 1" = 100'
☐ 1" = 50'
☐ 1" = 20'
☐ 5" = 100'

Type: ☐ Gamma ☐ Gamma-Density ☐ Gamma-Sonic ☐ Caliper ☐ Temperature

Date 2/11/80
Operator ALSAY, INC.
Well No. ROSEBUD
Location: Sec. Twn. Rge.
County FLORIDA
State
Elevation: K.B. D.F. G.L.
Permanent Datum
Log Measured From
Drilling Measured From

Run No. ONE
Type Log GAMMA
Depth-Driller 5400
Depth-Logger 5400
Bottom Logged Interval 5400
Top Logged Interval SURFACE
Type Fluid in Hole WATER
Salinity, PPM Cl
Density Lb/Gal
Level FULL
Max. Rec. Temp. Deg. F
Operating Rig Time
Recorded By J. PRICE
Witnessed By

Run No.
Type Log
Depth-Driller
Depth-Logger
Bottom Logged Interval
Top Logged Interval
Type Fluid in Hole
Salinity, PPM Cl
Density Lb/Gal
Level
Max. Rec. Temp. Deg. F
Operating Rig Time
Recorded By
Witnessed By

Source of Sample
Rm @ Meas. Temp.
Rmf @ Meas. Temp.
Rmc @ Meas. Temp.
Source of Rmf and Rmc
Rm @ BHT
Time Since Circ.
Time Since Circ.
Max. Rec. Temp. Deg. F
Equip. Location
Recorded By
Witnessed By

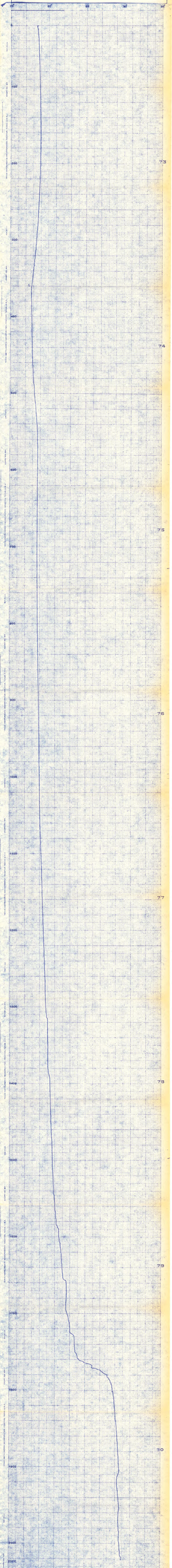
Run No. ONE
Bit From 0
To 5400
Size 7 7/8"
Type Fluid in Hole WATER
Density Lb/Gal
Viscosity
PH
Fluid Loss
Source of Sample
Rm @ Meas. Temp.
Rmf @ Meas. Temp.
Rmc @ Meas. Temp.
Source of Rmf and Rmc
Rm @ BHT
Time Since Circ.
Max. Rec. Temp. Deg. F
Equip. Location
Recorded By
Witnessed By

Run No.
Bit From
To
Size
Type Fluid in Hole
Density Lb/Gal
Viscosity
PH
Fluid Loss
Source of Sample
Rm @ Meas. Temp.
Rmf @ Meas. Temp.
Rmc @ Meas. Temp.
Source of Rmf and Rmc
Rm @ BHT
Time Since Circ.
Max. Rec. Temp. Deg. F
Equip. Location
Recorded By
Witnessed By

Scale Up Time 73 55
Scale Up Time 55

Equipment Number
Location
Recorded By
Witnessed By

Remarks



Schlumberger

DUAL INDUCTION-SFL WITH CORRELATION LOG

COUNTY BREVARD
FIELD PALM BAY
LOCATION
WELL HARRIS CORP. IW NO. 1
COMPANY ALSAY, INC.

COMPANY ALSAY, INC.
WELL HARRIS CORP. IW NO. 1
FIELD PALM BAY
COUNTY BREVARD STATE FLORIDA

LOCATION: API Serial No. | Sec. | Twp. | Range

Other Services: CBL VDL SONIC/GR

Permanent Datum: PAD LEVEL
Log Measured From: PAD LEVEL — Ft. Above Perm. Datum — Elev.: K.B. —
Drilling Measured From: PAD LEVEL — D.F. — G.L. —

	Run No.	Date	Depth-Driller	Depth-Logger	Bottom Logged Interval	Top Log Interval	Casing-Driller	Casing-Logger	Bit Size	Type Fluid in Hole	Dens.	Visc.	Source of Sample	Rm @ Meas. Temp	Rmf @ Meas. Temp	Rmc @ Meas. Temp	Source Rmf / Rmc	Rm @ BHT	Time Since Circ.	Max. Rec. Temp	Equip. Location	Recorded By	Witnessed By
	ONE	7-2-86	2026	2029	2024	373	24 @ 370	9 5/8 @ 2020	8 3/4	SALT WATER	10.0	40	MUD PIT	@ °F	@ °F	@ °F	- -	@ °F	8 HRS	91 °F	SEBASTIAN	R. KESSLER	J. HUGHES
	TWO	7-3-86	2327	2330	2324	2020			6 3/4	SALT WATER	10.0	40	MUD PIT	@ °F	@ °F	@ °F	- -	@ °F	5 HRS	91 °F	SEBASTIAN	R. KESSLER	J. HUGHES
														@ °F	@ °F	@ °F		@ °F		°F			

FOLD HERE JL/JW

The well name, location and borehole reference data were furnished by the customer.

	ONE	TWO
Run No.		
Service Order No.	451643	451651
Fluid Level		
Salinity ppm. cl		
Speed F.P.M.		
EQUIPMENT DATA		
ITEM	1123	
Cart No.	1123	1123
Sonde No.	504	504
Mem. Panel No.		
G.R. Panel No.	65	65
G.R. Cart No.	1288	1282
SLS	306	306
SLC	221	221
SLM	551	551
Type Centralizers		
Stand Off - Inches		
CALIBRATION DATA		
SBR	1.0	1.0
Sonde Error - ILM	6.2	6.2
Sonde Error - ILD	6.9	6.9
G.R. BKG. - CPS.		
G.R. Source - CPS.		
S.E. Set In Hole - Depth		
S.E. Corr. - Hole Size		
LOGGING DATA		
SBR	1.0	1.0
S.E. Log - ILM	6.2	6.2
S.E. Log - ILD	6.9	6.9
G.R. Scale per 100 Div.		
G.R. - T.C.		
G.R. Sens.		

SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole

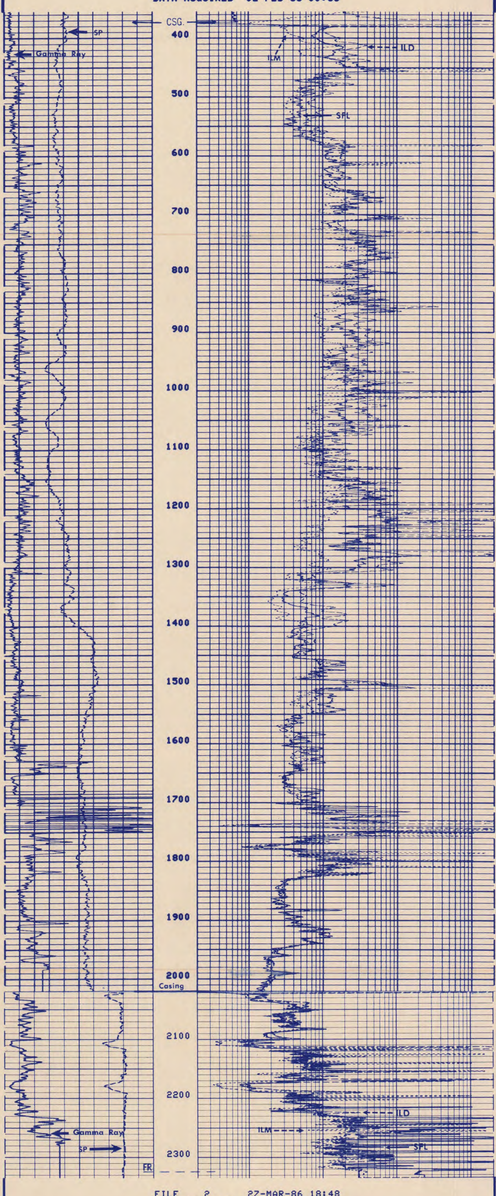
REMARKS

RUN 1) WELL DRILLED BY REVERSE AIR METHOD. NO MUD SAMPLE POSSIBLE. RAN THREE 1.5 INCH STAND OFFS.

All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our General Terms and Conditions as set out in our current Price Schedule.

GR (GAPI) 0.0 — 100.00
SP (MV) -160.0 — 40.000
ILD (OHMM) .20000 — 2000.0
ILM (OHMM) .20000 — 2000.0
SFLU(OHMM) .20000 — 2000.0

FILE 2 02-FEB-86 01:07
DATA ACQUIRED 02-FEB-86 00:58



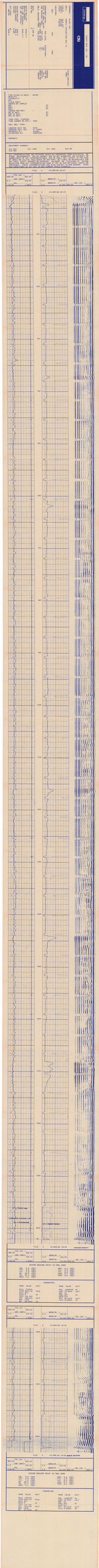
FILE 2 27-MAR-86 18:48
DATA ACQUIRED 27-MAR-86 18:32

GR (GAPI) 0.0 — 100.00
SP (MV) -160.0 — 40.000
ILD (OHMM) .20000 — 2000.0
ILM (OHMM) .20000 — 2000.0
SFLU(OHMM) .20000 — 2000.0

COMPANY ALSAY, INC.
WELL HARRIS CORP. IW NO. 1
FIELD PALM BAY
COUNTY BREVARD STATE FLORIDA

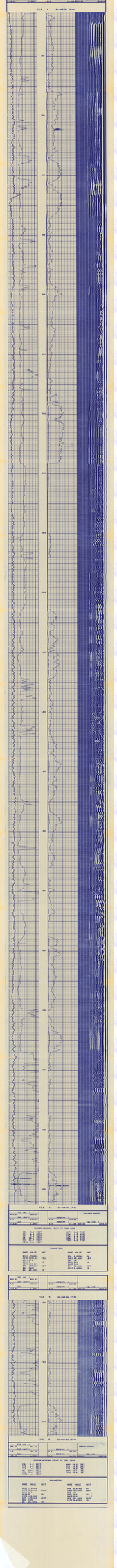
SCHL. FR 2324
SCHL. TD 2330
DRLR. TD 2332

Elev: KB —
DF —
GL —



COMPANY
WELL
FIELD
COUNTY
STATE
LOCATION
API NO.
OTHER SERVICES
SEC
TWP
RGE
PERMANENT DATUM
ELEV.
LOG MEASURED FROM
DRILLING MEASURED FROM
DATE
RUN NO.
DEPTH-DRILLER
DEPTH-LOGGER
BTM. LOG INTERVAL
TOP LOG INTERVAL
CASING-DRILLER
CASING-LOGGER
BIT SIZE
TYPE FLUID IN HOLE
DENS.
VISC.
PH
FLUID LOSS
SOURCE OF SAMPLE
RM @ MEAS. TEMP.
RMF @ MEAS. TEMP.
RMC @ MEAS. TEMP.
SOURCE OF RMF
SOURCE OF RMC
RM @ BHT
TIME CIRC. STARTED
TIME LOGGER ON BTM.
MAX. REC. TEMP.
EQUIP. NO.
LOCATION
RECORDED BY
WITNESSED BY

THE INFORMATION SET FORTH HEREIN IS GIVEN IN CONFIDENCE AND IS NOT TO BE DISCLOSED TO ANY OTHER PARTY WITHOUT THE CONSENT OF THE CLIENT. THE INTERPRETATIONS CONTAINED HEREIN ARE THE OPINION OF THE INTERPRETER BASED ON THE DATA AND MAY DIFFER FROM THE OPINIONS OF OTHER INTERPRETERS. THE INTERPRETER'S OPINIONS ARE NOT GUARANTEED BUT WILL BE EMPLOYED ACCORDING TO THE BEST OF THE INTERPRETER'S ABILITY AND EXPERIENCE. THE INTERPRETER'S OPINIONS ARE NOT TO BE RELIED UPON AS THE SOLE BASIS FOR ANY DRILLING, COMPLETION OR PRODUCTION DECISION.



SOUTHERN RESOURCE EXPLORATION
P.O. Box 14231
Gainesville, FL 32604
904-373-1990

GEOPHYSICAL WELL SURVEY

Type Log: Induction

Depths: Measured From: Ground Elevation; Drilling Measured From: Ground Elevation

Permanent Datum: Ground Elevation

Elevations: K.B.: ; D.F.: ; G.L.:

Date: 3/27/85

Run No.: ONE

Company: ALEXY, INC.

Well: ALEXY, INC. 1

Field: PINEHILL

County: BREVARD State: FLORIDA

Location: 1 FNSL & 1 FWEL Sec. 4 Twp. 30S Rge. 37E

Permanent Datum: GROUND LEVEL Elev.: 0

Log Measured From: KELLY BUSHING 25 Ft. Above Perm. Datum

Drilling Measured From: KELLY BUSHING

Elevations: K.B.: 25 Ft.; D.F.: ; G.L.: 0 Ft.

Date: 3/27/85

Run No.: ONE

Depth-Driller: 2162

Depth-Logger: 2161

Bottom Logged Interval: 2161

Top Logged Interval: 2140

Type Fluid in Hole: SALT WATER

Salinity: 10000 PPM

Density: 9.2 LB/GAL

Level: FULL

Max. Rec. Temp.: 100 DEG. F

Equipment No.: 1

Location: 1 FNSL & 1 FWEL

Recorded By: J. WHEATLEY

Witnessed By: MR. MITCHELL

Run No.: ONE

Bit Size: 7 7/8 IN.

Type Fluid in Hole: SALT WATER

Density: 9.2 LB/GAL

Viscosity: 38 SEC

pH: 10

Fluid Loss: 8 CC

Source of Sample: MUD PIT

Rm @ Meas. Temp.: .2 @ 100 DEG. F

Rmf @ Meas. Temp.: .2 @ 100 DEG. F

Rmc @ Meas. Temp.: .2 @ 100 DEG. F

Source: Rmf: MEASURED Rmc: MEASURED

Rm @ BHT: .1 @ 100 DEG. F

Time Since Circ.: 24 HRS.

Time on Bottom: 1 HR.

Max. Rec. Temp.: 100 DEG. F

Equipment: Location:

Recorded By: J. WHEATLEY

Witnessed By: MR. MITCHELL

Run No.: ONE

Service Order: Run No.:

Depth-Driller: Bit Size:

Depth-Logger: Type Fluid in Hole:

Bottom Logged Interval: Density:

Top Logged Interval: Viscosity:

Type Fluid in Hole: pH:

Salinity: Fluid Loss:

Density: Source of Sample:

Level: Rm @ Meas. Temp.:

Max. Rec. Temp.: Rmf @ Meas. Temp.:

Equipment: Location: Rmc @ Meas. Temp.:

Recorded By: Rm @ BHT:

Witnessed By: Time Since Circ.:

Time on Bottom:

Max. Rec. Temp.:

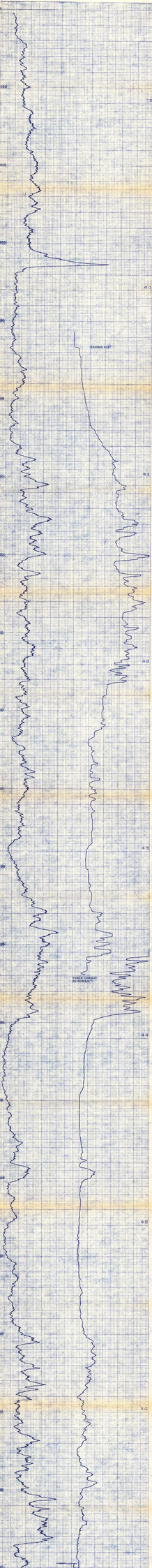
Equipment:

Location:

Recorded By:

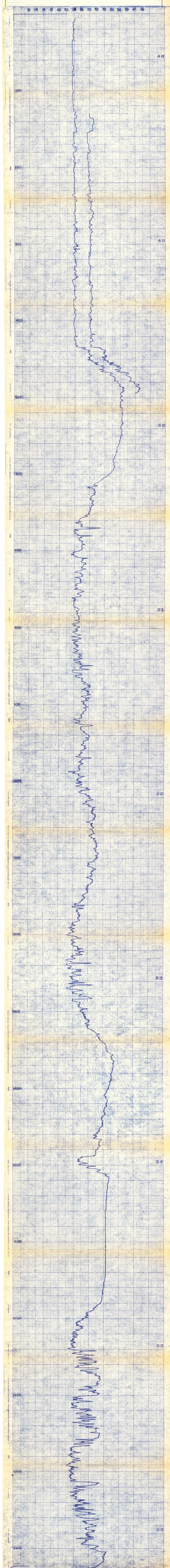
Witnessed By:

REMARKS:



SOUTHERN RESOURCE EXPLORATION
P.O. Box 14511
Gainesville, FL 32604
904-372-5993

GEOPHYSICAL WELL SURVEY

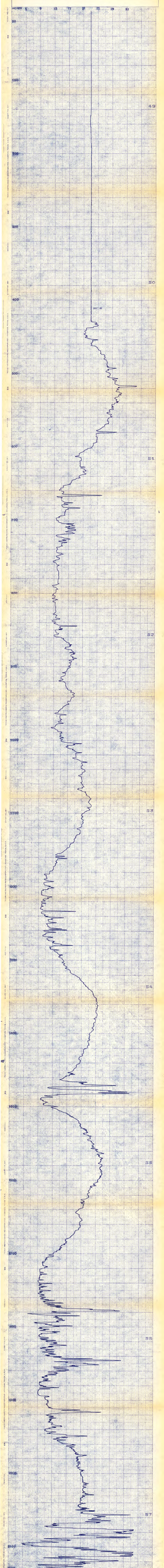


SOUTHERN RESOURCE EXPLORATION
P.O. Box 14011
Gainesville, FL 32604
904.372.0900

GEOPHYSICAL WELL SURVEY

Company: ALRAY, INC.
Well: LW 2
Field: PINEHILL
County: BREVARD
State: FLORIDA
Location: 1/4 PROC 1/4 Sec. 1/4 WHISTLEY
Permanent Datum: HARRIS CORPORATION
Log Measured From: PINEHILL 2
Drilling Measured From: ALRAY, INC.
Elevation: Perm. Datum 0 ft. above MSL
Log Date: 07/24
Run No.: 1
Depth-Driller: 6141
Depth-Logger: 6141
Bottom Log Interval: 6141
Top Log Interval: 4700
Casing-Driller: 0 @ 0
Casing-Logger: 4700
Bit Size: 7 7/8
Type Fluid in Hole: LIGNOSULFONATE
Density: 10.1
Viscosity: 48
Fluid Loss: 6.4
Source of Sample: CIRCULATION
Rm @ Meas. Temp.: .67 @ 80
Rmf @ Meas. Temp.: .54 @ 80
Rmc @ Meas. Temp.: .75 @ 80
Source of Rmf & Rmc: CALCULATED
Rm @ BHT: .37 @ 150
Time Since Circ.: 4 HRS
Max. Rec. Temp.: 150
Equip. Location: 30
Recorded By: J. WHISTLEY
Witnessed By: MR. ALRAY

Gamma Ray (API)
Caliper (Inches)
Resistivity (Ohms)
Spontaneous Potential (Millivolts)



GEOPHYSICAL WELL SURVEY

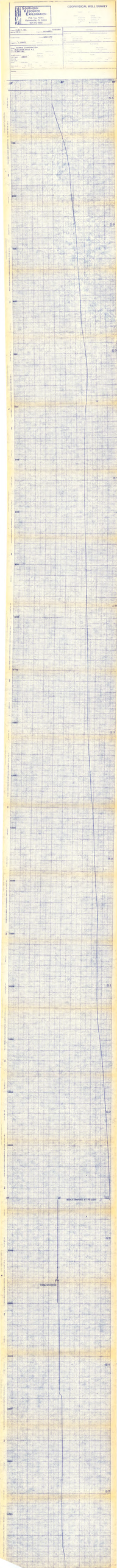
SOUTHERN RESOURCE EXPLORATION
P.O. Box 1670
Midland, Texas 79701
(915) 682-1626

Company: PLAINS, INC.
Well: #1
Field: WILDCAT
County: HOWARD
State: TEXAS
Elevation: 2,995'KB
Location: 1,980' FNL & 1,980' FEL
Sec. 2, T-1 North, R-1 East
Permanent Datum: GROUND LEVEL
Log Measured From: KELLY BUSHING
Drilling Measured From: KELLY BUSHING
Date: 7-1-2002
Run No.: ONE
Depth-Driller: 8,000'
Depth-Logger: 8,000'
Bottom Log Interval: 8,000'
Top Log Interval: SURFACE
Casing-Driller: 8 5/8" @ 1,400'
Casing-Logger: 1,400'
Bit Size: 7 7/8"
Type Fluid in Hole: CHEMICAL
Density: 9.2
Viscosity: 38
Ph: 10.5
Fluid Loss: 8.4
Source of Sample: FLOWLINE
Rm @ Meas. Temp.: .2 @ 80°
Rmf @ Meas. Temp.: .15 @ 80°
Rmc @ Meas. Temp.: .25 @ 80°
Source of Rmf & Rmc: CALCULATED
Rm @ BHT: .1 @ 160°
Time Since Circ.: 12 HRS
Max. Rec. Temp.: 160°
Equip. No. & Location: 1234 MIDLAND
Recorded By: J. SMITH
Witnessed By: MR. JONES

Run No. | Bit No. | Type | From | To | Size | Wt./Ft. | Grade | Type Joint
ONE | 1 | STC | SURFACE | 1,400' | 7 7/8" | 24# | J-55 | STC
ONE | 2 | STC | 1,400' | 8,000' | 7 7/8" | 24# | J-55 | STC

Run No. | Type | From | To | Size | Wt./Ft. | Grade | Type Joint
ONE | SURFACE | SURFACE | 1,400' | 8 5/8" | 24# | J-55 | STC

Run No. | Type | From | To | Size | Wt./Ft. | Grade | Type Joint
ONE | SURFACE | SURFACE | 1,400' | 8 5/8" | 24# | J-55 | STC



SOUTHERN RESOURCE EXPLORATION
P.O. Box 14311
Gainesville, FL 32604
904/372-5992

GEOPHYSICAL WELL SURVEY

Well
API Number
Sec Twnshp
Rge Meridian
Lat
Long

Operator
Field Name(s)
Drill Site(s)
Well Name
& Number(s)

Log Type(s)

Run No. 1 2 3
Log Interval(s) from
Log Interval(s) to
Bit Size(s)

Log Run No.
Log Interval(s) from
Log Interval(s) to
Bit Size(s)

Type Fluid in Hole

Density/Viscosity
Ph/Fluid Loss
Source of Sample

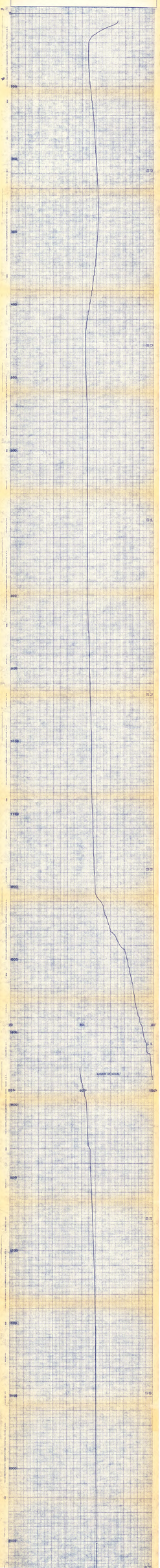
Rm @ Meas. Temp.
Rmf @ Meas. Temp.
Rmc @ Meas. Temp.
Source: Rmf Rmc

Rm @ BHT
Time Since Circ.
Max. Rec. Temp.
Equip. Location

Recorded By
Witnessed By

Remarks

Operator: ALPET, INC.
Well No.: OP 21
Location: Sec. 21 Twp. 27 Rge. 37 Mer. FLORIDA
County: BREVARD State: FLORIDA
Elevation: 7 Feet Above Perm. Datum
Log Measured From: KELLY BUSHING 21 Feet Above Perm. Datum
Drilling Measured From: KELLY BUSHING
Permanent Datum: GROUND LEVEL
Elevation: 21 Ft. K.B. 14 Ft. D.F. 7 Ft. G.L.
Date: 10-31-81
Run No.: ONE
Depth-Driller: 6100
Depth-Logger: 6100
Bottom Logged Interval: 6100
Top Logged Interval: SURFACE
Type Fluid in Hole: SALT WATER
Salinity, PPM Cl: 19000
Density: 9.2
Viscosity: 38
Fluid Loss: 8.4
Source of Sample: FLOWLINE
Rm @ Meas. Temp.: .65 @ 70°F
Rmf @ Meas. Temp.: .52 @ 70°F
Rmc @ Meas. Temp.: .78 @ 70°F
Source: Rmf Rmc: MEASURED CALCULATED
Rm @ BHT: .36 @ 150°F
Time Since Circ.: 12 HRS.
Max. Rec. Temp.: 150°F
Equip. Location: 2128
Recorded By: R. WHEATLEY
Witnessed By: MR. HARRIS
Run No.: TWO
Depth-Driller: 6100
Depth-Logger: 6100
Bottom Logged Interval: 6100
Top Logged Interval: 4000
Type Fluid in Hole: SALT WATER
Salinity, PPM Cl: 19000
Density: 9.2
Viscosity: 38
Fluid Loss: 8.4
Source of Sample: FLOWLINE
Rm @ Meas. Temp.: .65 @ 70°F
Rmf @ Meas. Temp.: .52 @ 70°F
Rmc @ Meas. Temp.: .78 @ 70°F
Source: Rmf Rmc: MEASURED CALCULATED
Rm @ BHT: .36 @ 150°F
Time Since Circ.: 12 HRS.
Max. Rec. Temp.: 150°F
Equip. Location: 2128
Recorded By: R. WHEATLEY
Witnessed By: MR. HARRIS
Remarks: RUN ONE: 6100-4000 RUN TWO: 6100-SURFACE



SOUTHERN RESOURCE EXPLORATION
P.O. Box 14311
Gainesville, FL 32604
904-372-5950

GEOPHYSICAL WELL SURVEY

Sheet _____ of _____

Electric
- ☐ 16" Normal
- ☐ 64" Normal
- ☒ Single Point
- ☐ S.P.

- ☐ Caliper
- ☐ Fluid Resistivity
- ☐ Fluid Velocity
- ☒ Gamma Ray
- ☐ Temperature

CLIENT: ALSAY INC. Date: 12/23/86
Well No.: IW-2 Project No.: P0769ML2

Location: State: FLORIDA County: BREVARD
_____ ¼ _____ ¼ NW ¼ Sec. 23 T. 28 ☒ N ☐ S R. 37 ☐ E ☐ W
Logged by: J. PRICE Observer:

Owner: HARRIS CORPORATION
Well: IW-2
Driller: ALSAY INC.
Date Drilled: 12/23/86

Surface Elevation: _____ ft. ☐ Estimated ☐ Measured Above MSL
T.D. Logged: 2794 T.D. Drilled: 2800
Hole Dia.: 14 3/4" 0-2020 18" DIAMETER CASING
Casing Dia.
Finish: ☒ Open Hole ☐ Screen ☐ Gravel ☐ Other
☐ Above
Water Level: _____ ft. ☐ Below MP: _____ ☐ Above ☐ Below Land Surface
Yield: Flow _____ gpm Pump _____ gpm

Log Scales

Electric Log
SP _____ millivolts/5 inches
Res _____ ohm-meters/inch
Res 20 ohms/5 inches

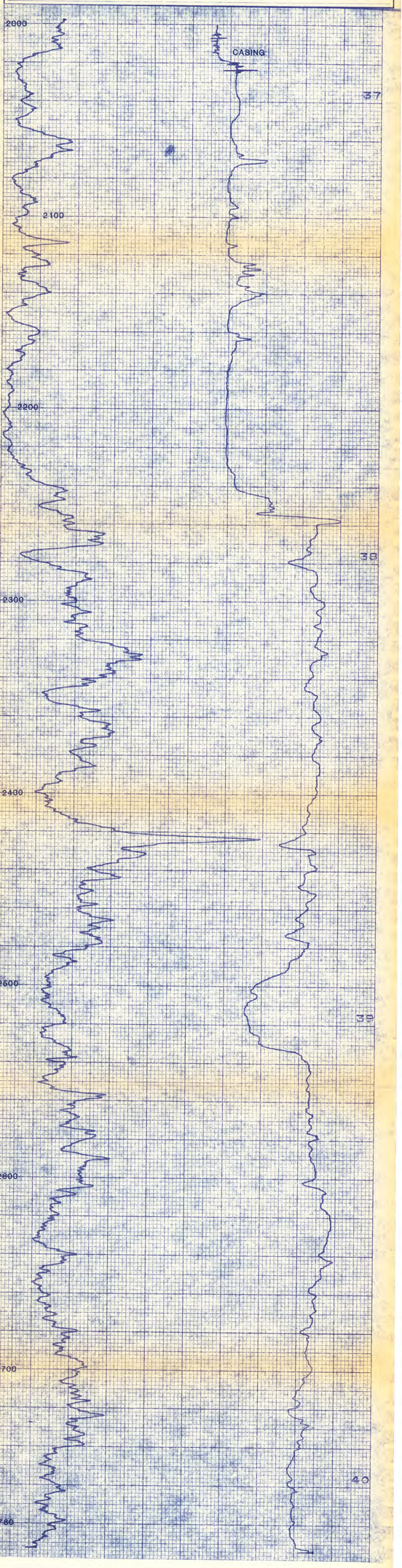
Fluid Resistivity/Conductivity
_____ ohm meters/inch
_____ to _____ m.mhos/cm.
@ _____ °F

Gamma Ray Log
4 Counts/sec/inch
Time Constant _____ sec
Logging speed _____ FPM

Fluid Velocity
_____ Rev./min/inch
_____ FPM (Continuous)
Q = _____ gpm

Temperature
_____ °F to _____ °F
Logging speed _____ FPM

Caliper
_____ inches to _____ inches
Logging speed _____ FPM

Water Samples
Depths sampled

Remarks: