COMPANY: **Enerfin Resources Northwest**

WELL: **"Bascom Pacific LLC" 14-26-64 RD #1**

FIELD: **Mist Gas**

COUNTY: **Columbia** **STATE:** **Oregon**

COUNTY: Columbia
Field: Mist Gas
Location: 1329' N & 251' E from the SW co
Well: "Bascom Pacific LLC" 14-26-64 R
Company: Enerfin Resources Northwest

2" = 100'

Schlumberger

Platform Express
Array Induction
Borehole Compensated Sonic

LOCATION

1329' N & 251' E from the SW corner
of section 26

Elev.: K.B. 1047.7 ft
G.L. 1037.7 ft
D.F.

Permanent Datum: Ground Level Elev.: 1037.7 ft
Log Measured From: Kelly Bushing 10.0 ft above Perm. Datum
Drilling Measured From: Kelly Bushing

API Serial No.	SECTION	TOWNSHIP	RANGE
36-009-00287-01	26	6N	4W

Logging Date		29-JAN-2000			
Run Number		1			
Depth Driller		3050 ft			
Schlumberger Depth		3047 ft			
Bottom Log Interval		3039 ft			
Top Log Interval		517 ft			
Casing Driller Size @ Depth		9.625 in @	517 ft	@	
Casing Schlumberger		517 ft			
Bit Size		6.250 in			
Type Fluid In Hole		Accu-gauge			
MUD Density	Viscosity	8.8 lbm/gal	42 s		
Fluid Loss	PH	8.8 cm3	9.5		
Source Of Sample		Pitt			
RM @ Measured Temperature		2.890 ohm.m @	62 degF	@	
RMF @ Measured Temperature		2.970 ohm.m @	56 degF	@	
RMC @ Measured Temperature		3.110 ohm.m @	54 degF	@	
Source RMF	RMC	Press	Press		
RM @ MRT	RMF @ MRT	2.401 @ 76	2.252 @ 76	@	@
Maximum Recorded Temperatures		76 degF			
Circulation Stopped	Time	29-JAN-2000			
Logger On Bottom	Time	29-JAN-2000			
Unit Number	Location	3152	Sacramento		
Recorded By		Clayton Campbell			
Witnessed By		Rob Lucas			

		Run 1	Run 2	Run 3
Logging Date				
Run Number				
Depth Driller				
Schlumberger Depth				
Bottom Log Interval				
Top Log Interval				
Casing Driller Size @ Depth		@		
Casing Schlumberger				
Bit Size				
Type Fluid In Hole				
MUD Density	Viscosity			
Fluid Loss	PH			
Source Of Sample				
RM @ Measured Temperature		@		
RMF @ Measured Temperature		@		
RMC @ Measured Temperature		@		
Source RMF	RMC			
RM @ MRT	RMF @ MRT	@	@	@
Maximum Recorded Temperatures				
Circulation Stopped	Time			
Logger On Bottom	Time			
Unit Number	Location			
Recorded By				
Witnessed By				

@ @ @ @ @

Run 4

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 CLAUSE 4 OF OUR GENERAL TERMS AND CONDITIONS AS SET OUT IN OUR CURRENT PRICE SCHEDULE.

OTHER SERVICES1	OTHER SERVICES2
OS1:	OS1:
OS2:	OS2:
OS3:	OS3:
OS4:	OS4:
OS5:	OS5:

REMARKS: RUN NUMBER 1	REMARKS: RUN NUMBER 2
0.5 inch standoffs used on array induction	
Two 0.5 inch standoffs used on BHC sonic sonde	
log calulated on a sandstone matrix (2.65 g/cc 56 us/ft)	
cement volume calculated assuming 2.975 OD production casing	
First logging attempt made logged from 1702	
Centralizers and standoffs reduced to minimum possible for 2nd wireline attempt	
log spliced at 1600 feet to merge first pass with second logging run	
Rig: John Taylor #7	

	RUN 1		RUN 2
SERVICE ORDER #:	6137975	SERVICE ORDER #:	
PROGRAM VERSION:	9C0-413	PROGRAM VERSION:	
FLUID LEVEL:		FLUID LEVEL:	

LOGGED INTERVAL	START	STOP	LOGGED INTERVAL	START	STOP

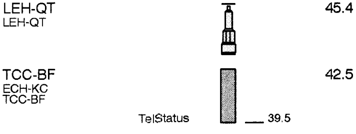
EQUIPMENT DESCRIPTION

RUN 1	RUN 2

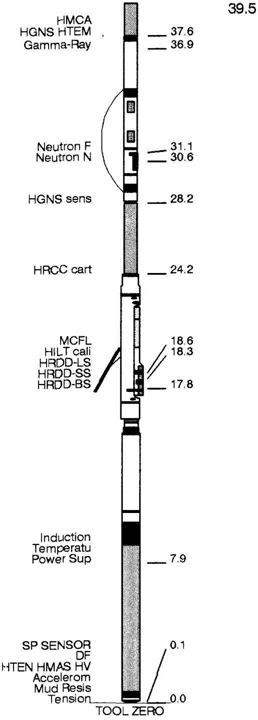
SURFACE EQUIPMENT

GSR-U/Y TCM-AB
NCT-B
CNB-AB
NCS-VB

DOWNHOLE EQUIPMENT



HILTB-DTB
HTBCC
HMCA
HGNS-CAN-B
HGNS-H
NLS-KL
NSR-F
HACCZ
HCNT
HGR
HRCC-B
HRMS-B
HRGD
GLS-VJ
MCFL Device
HILT Nucl. LS
HILT Nucl. SS
HILT Nucl. BS
AIT-H
AHIS-BA
BOW-SPR
NPV-N



MAXIMUM STRING DIAMETER 4.63 IN
MEASUREMENTS RELATIVE TO TOOL ZERO
ALL LENGTHS IN FEET

Input DLIS Files

DEFAULT	HILTB .016	FN:12	PRODUCER	29-Jan-2000 20:28	3051.0 FT	422.0 FT

Output DLIS Files

DEFAULT	HILTB .026	FN:20	PRODUCER	02-Feb-2000 10:49	3051.0 FT	422.0 FT

Integrated Hole/Cement Volume Summary

Hole Volume = 465.06 F3

Cement Volume = 384.51 F3 (assuming 2.88 IN casing O.D.)

Computed from 3050.0 FT to 1263.5 FT using data channel(s) HCAL

OP System Version: 9C0-413

MCM

HILTB-DTB	OP9-KP2	DSLT-TCC	OP9-KP2
TCC-BF	OP9-KP2		

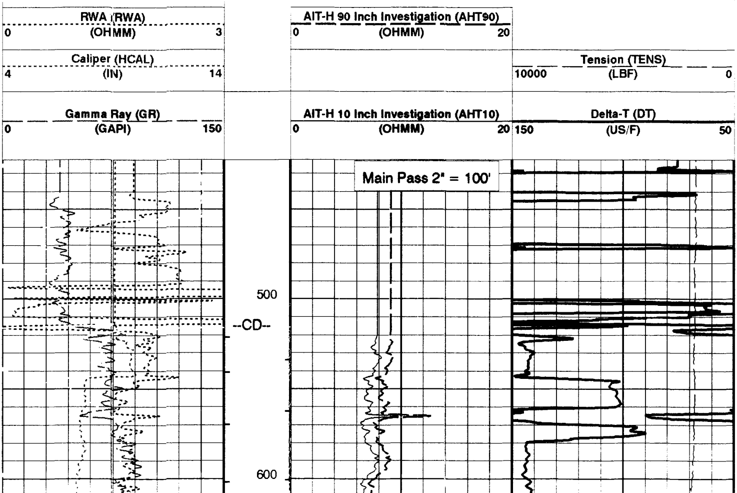
Changed Parameter Summary

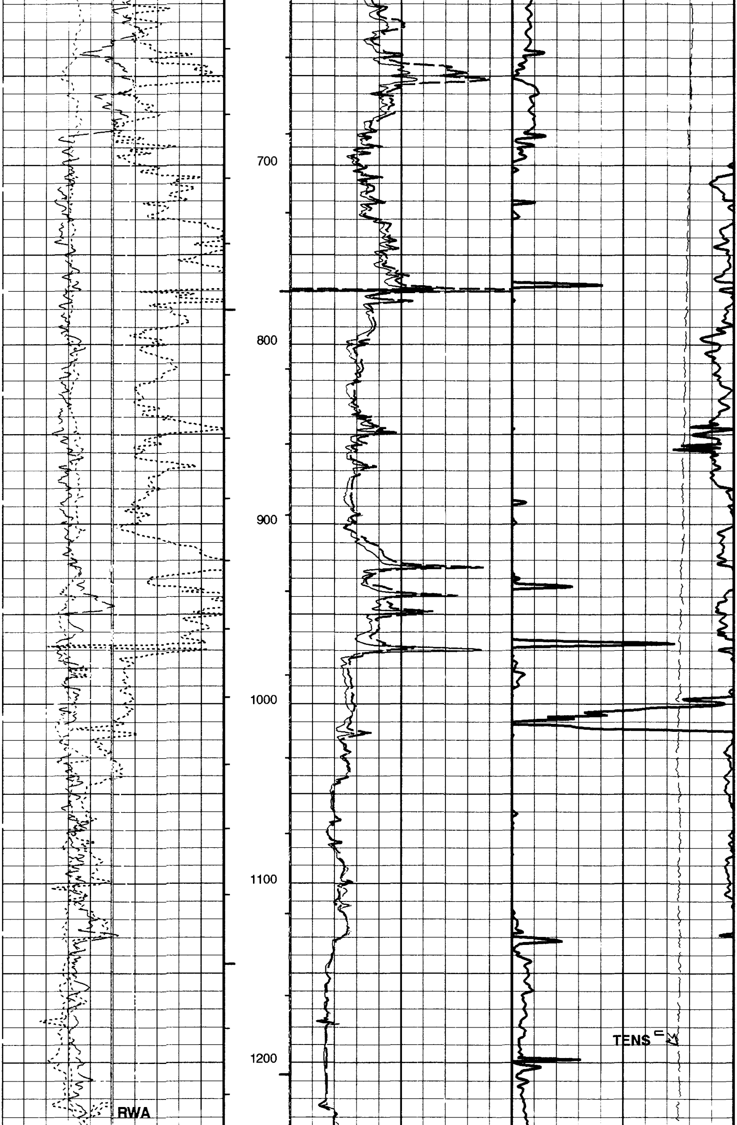
DLIS Name	New Value	Previous Value	Depth & Time
SPNV	-30 MV	-60 MV	1600.0 10:51:45

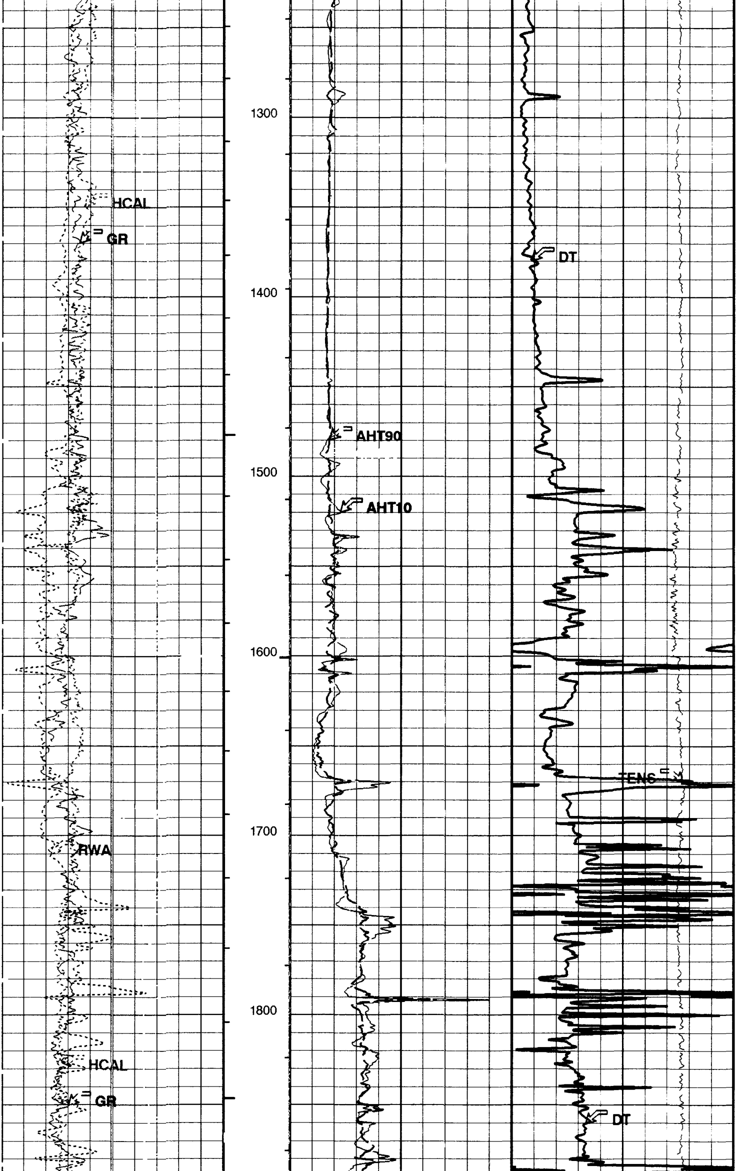
PIP SUMMARY

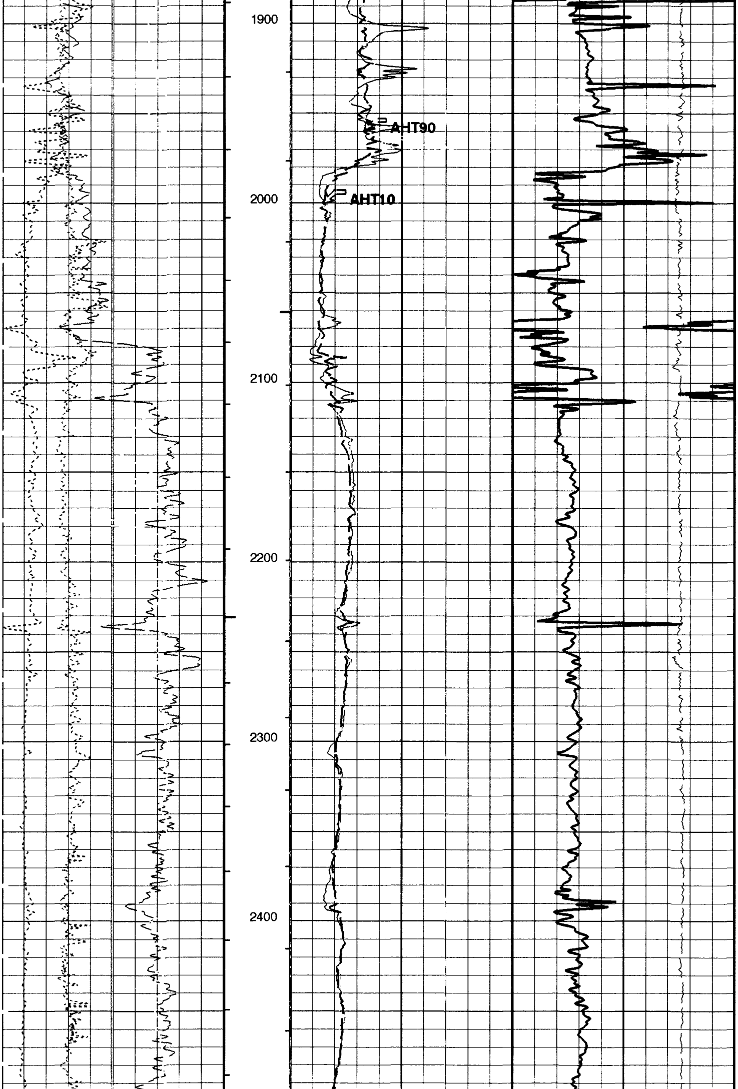
⊢ Integrated Hole Volume Minor Pip Every 10 F3
⊢ Integrated Hole Volume Major Pip Every 100 F3
⊣ Integrated Cement Volume Minor Pip Every 10 F3
⊣ Integrated Cement Volume Major Pip Every 100 F3

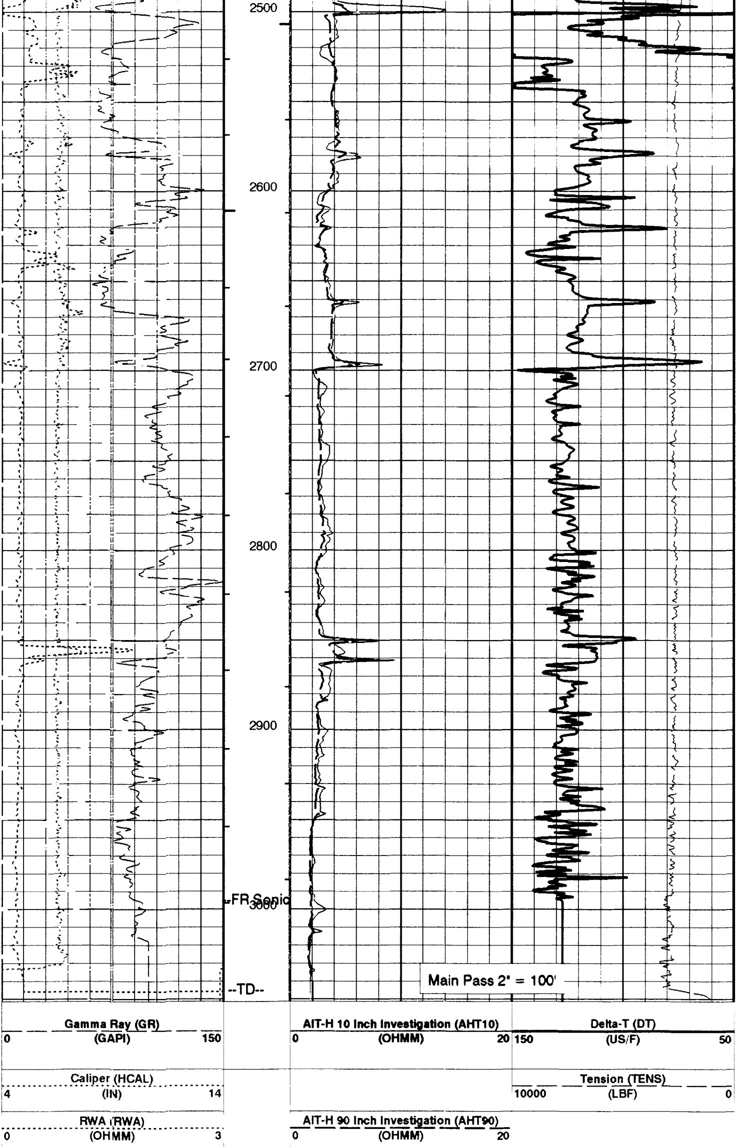
▶ Time Mark Every 60 S











PIP SUMMARY

⊢ Integrated Hole Volume Minor Pip Every 10 F3
⊢ Integrated Hole Volume Major Pip Every 100 F3
⊣ Integrated Cement Volume Minor Pip Every 10 F3
⊣ Integrated Cement Volume Major Pip Every 100 F3

▶ Time Mark Every 60 S

AIT-H Answer Product Processing Summary. Data taken with Tool # 112 (AHTNO)
...Acquired data from HILT/HAIT

***** Borehole Correction *****

Effective Tool Standoff computed. Borehole diameter and mud res. taken as input (see GCSE and GRSE parameters)
Tool is run in ECCENTERED mode with a tool stand-off of 0.50 IN. Bit Size is 6.25 IN.

***** Input Selections to AIT-H Answer Product Processing *****

Caliper (GCSE): HCAL Mud Resistivity (GRSE): AHMF Temperature (GTSE): LINEAR_ESTIMATE Porosity (FPHI): DPHZ

***** Other Parameters used by AIT-H Answer Product Processing *****

Surface Hole Temperature (SHT)	68.000 DEGF	Bottom Temperature (BHT)	76.000 DEGF
Total Depth (TD)	3050.000 FT		
Form Factor Exponent (FEXP)	2.000	Form Factor Numerator (FNUM)	1.000
Mud Filtrate Sample Resistivity (RMFS)	2.970 OHMM	Mud Filtrate Sample Temperature (MFST)	56.000 DEGF
Resitivity Connate Water (RW)	1.000 OHMM		

***** AIT-H Answer Product Processing Control Parameters *****

Playback Mode: OFF

Parameters

DLIS Name	Description	Value	
AHBHM	AIT-H Borehole Correction Mode	2_ComputeStandoff	
AHBHV	AIT-H Borehole Correction Code Version Number	870	
AHBLM	AIT-H Basic Logs Mode	6_One_Two_and_Four	
AHBLV	AIT-H Basic Logs Code Version Number	973	
AHBPO	AIT-H Basic Logs Processing Option	Standard_Processing	
AHCDE	AIT-H Casing Detection Enable	Yes	
AHCEN	AIT-H Tool Centering Flag (in Borehole)	Eccentered	
AHCSED	AIT-H Casing Shoe Estimated Depth	-50000	FT
AHFRSV	AIT-H Response Set Version for Four ft Resolution	30.66.23.11	
AHMRF	AIT-H Mud Resistivity Factor	1	
AHORSV	AIT-H Response Set Version for One ft Resolution	30.66.23.11	
AHRFV	AIT-H Radial Profiling Code Version Number	700	
AHRPV	AIT-H Radial Parametrization Code Version Number	710	
AHSTA	AIT-H Tool Standoff	0.5	IN
AHTRSV	AIT-H Response Set Version for Two ft Resolution	30.66.23.11	
ARTS	AIT Rt Selection (for ALLRES computation)	13_AHT90	
BHT	Bottom Hole Temperature (used in calculations)	76	DEGF
BS	Bit Size	6.250	IN
DFD	Drilling Fluid Density	8.80	LB/G
DHC	Density Hole Correction	BS	
DO	Depth Offset	0.0	FT
DTCM	Delta-T Computation Mode	FULL	
FEXP	Form Factor Exponent	2	
FNUM	Form Factor Numerator	1	
FPHI	Form Factor Porosity Source	DPHZ	
GCSE	Generalized Caliper Selection	HCAL	
GDEV	Average Angular Deviation of Borehole from Normal	0	DEG
GGRD	Geothermal Gradient	0.01	DF/F
GRSE	Generalized Mud Resistivity Selection	AITH_RESIST	
GTSE	Generalized Temperature Selection	LINEAR_ESTIMATE	
HSCM	HILT Speed Correction Mode	TSCD_SPEED_CORRECTION	
HSTI	STI Uses HILT Acceleration	YES	
MODE	Sonic Firing Mode	BHC	
MST	Mud Sample Temperature	62.00	DEGF
NMT	HILT Nuclear Mud Type	NOBARITE	
NPRM	HRDD Processing Mode	HiRes	
NSAR	HRDD Depth Sampling Rate	1	IN
PP	Playback Processing	OFF	
RMFS	Resistivity of Mud Filtrate Sample	2.9700	OHMM
RTCO	RTCO - Rt Invasion Correction	YES	
RW	Resistivity of Connate Water	1.0000	OHMM
SHT	Surface Hole Temperature	68	DEGF
SPNV	SP Next Value	-60	MV
SPVD	TVD of Starting Point	0	FT
TD	Total Depth	3050	FT
TIMD	Along-hole depth of Tie-in Point	500	FT
TIVD	TVD of Tie-in Point	500	FT
TWS	Temperature of Connate Water Sample	100.00	DEGF

Format: AITSON_S2 Vertical Scale: 2" per 100' Graphics File Created: 02-Feb-2000 10:49

OP System Version: 9C0-413

MCM

HILTB-DTB	OP9-KP2	DSLT-TCC	OP9-KP2
TCC-BF	OP9-KP2		

Speed Corrected - Depth Matched LOG

Input DLIS Files

DEFAULT	HILTB .016	FN:12	PRODUCER	29-Jan-2000 20:28	3051.0 FT	422.0 FT

Output DLIS Files

DEFAULT	HILTB .026	FN:20	PRODUCER	02-Feb-2000 10:49

Schlumberger

Main Pass 2" = 100'

MAXIS 500 Field Log

COMPANY:	**Enerfin Resources Northwest**
WELL:	**"Bascom Pacific LLC" 14-26-64 RD #1**
FIELD:	**Mist Gas**
COUNTY:	**Columbia**
STATE:	**Oregon**

BOTTOM LOG INTERVAL	3039 ft
SCHLUMBERGER DEPTH	3047 ft
DEPTH DRILLER	3050 ft
KELLY BUSHING	1047.7 ft
DRILL FLOOR	
GROUND LEVEL	1037.7 ft

Schlumberger

Platform Express
Array Induction
Borehole Compensated Sonic