

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: MARTHA #1
Location: NE SE NW NE SECTION 17 12S 19W
License Number: 5663, API# 15-051-26619
Spud Date: 10/18/2013
Surface Coordinates: 900' FROM NORTH LINE OF SECTION
1450' FROM EAST LINE OF SECTION
Bottom Hole Coordinates: 900' FROM NORTH LINE OF SECTION
1450' FROM EAST LINE OF SECTION
Ground Elevation (ft): 2204' K.B. Elevation (ft): 2209'
Logged Interval (ft): 3200' To: 3814' Total Depth (ft): 3814'
Formation: ARBUCKLE
Type of Drilling Fluid: SELF SERVICE, CHEMICAL

Region: KINGMAN CO. KS.
Drilling Completed: 10/26/2013

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OPERATOR

Company: HESS OIL COMPANY
Address: PO BOX 1009
MCPHERSON, KANSAS 67460-1009
(316) 263-2243

GEOLOGIST

Name: DAVID GOULD (LOGGER)
Company: DMT COMPANY
Address: 532 SUNRISE
PRATT, KANSAS 67124
(620) 388-2847

Comments

CONTRACTOR:
MALLARD Rig #1

BIT RECORD:
#A 12 1/4", RT, RR, 0-217'
#1 7 7/8", F27, PY8284, 217'-3563'
#2 7 7/8", F27, RR, 3563-

SURVEYS:
217', 1 DEGREE
3265', 1 1/2 DEGREE
3600', 2 DEGREE

DAILY STATUS: (7:00 AM)
10/18/2013, RIG UP, SET 8 5/8" 2# @ 217'
10/19/2013, 230' DRILL AHEAD
10/20/2013, 2064, DRILL AHEAD
10/21/2013, 2724, DRILL AHEAD
10/22/2013, 3265, DST #1, DRILL AHEAD
10/23/2013, 3453 DRILL AHEAD, DST #2
10/24/2013, 3583' DRILL AHEAD TO 3600', LOSS FLUID, DST #3
10/25/2013, 3702', DST #4, DRILL AHEAD
10/26/2013, 3800, DST #5, DRILL AHEAD

Well Name & No.: Martha #1 Company: Hess Oil Co. Test No.: 1 Interval Tested: 3232 – 3265

Zone Tested: Topeka Times: 45-45-45-45

Blow Description: IFP: SSB, 1" Right Away, Built to 10 1/4" ISI: No BB FFP: No Blow, Ten After 2 Min A Very Weak Surface Blow That Increased To 8 1/2" FSI: No BB

Rec: 300' Feet of GMW 1% Gas 80% Water, 19% Mud Rec. Total: 300', BHT: 104 Gravity: N/A

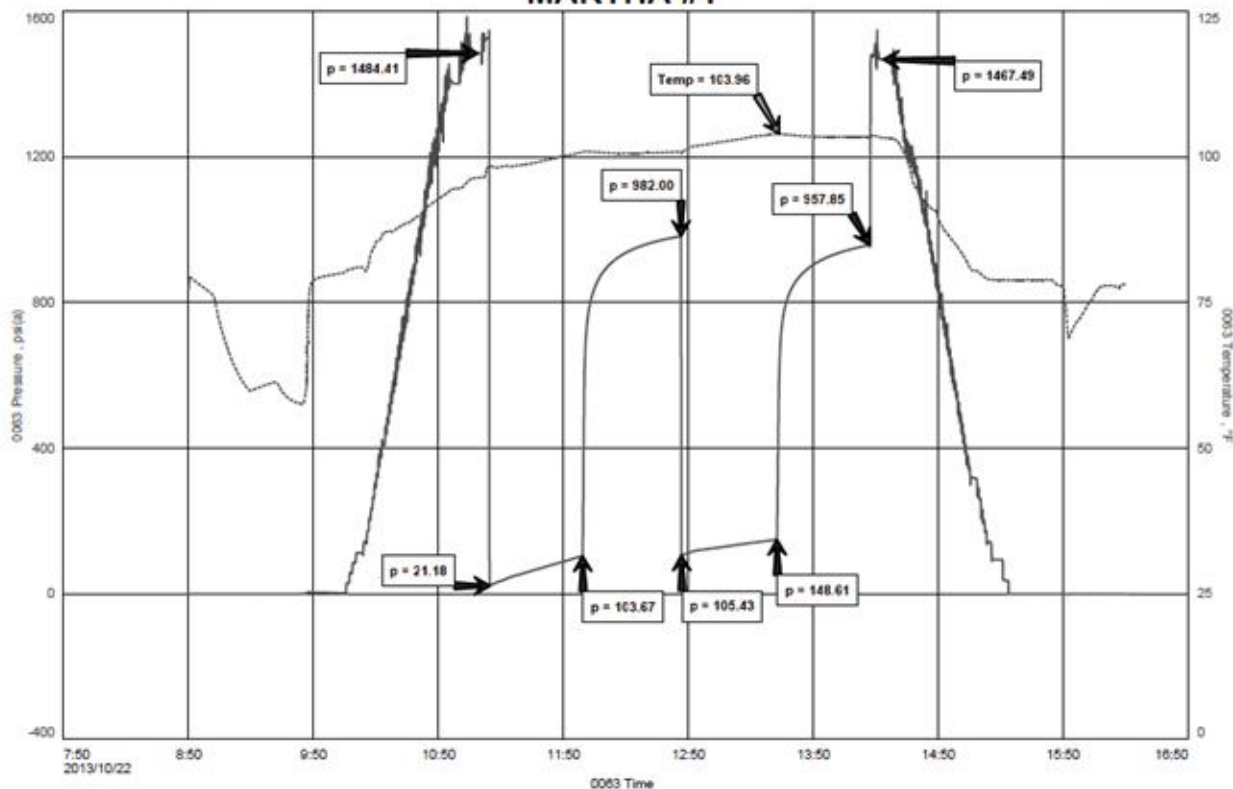
Initial Hydrostatic: 1484 First Initial Flow: 21 First Final Flow: 104 Initial Shut-In: 982

Second Initial Flow: 105 Second Final Flow: 149 Final Shut-In: 958 Final Hydrostatic: 1467

HESS OIL COMPANY
DST#1 3232-3265 TOPEKA
Start Test Date: 2013/10/22
Final Test Date: 2013/10/22

MARTHA #1
Formation: DST#1 3232-3265 TOPEKA
Pool: WILDCAT
Job Number: M567

MARTHA #1



Well Name & No.: Martha #1 Company: Hess Oil Co. Test No.: 2 Interval Tested: 3491 – 3563

Zone Tested: Lansing Times: 60-45-60-45

Blow Description: IFP: GSB, That Inc. To 1 1/4" in 15 Min., Then Diminishing Until Dead @ 41 Min. ISI: No BB FFP: No Blow FSI: No BB

Rec: 59' Feet of VSOSGM 100% Mud W/A Few Spots Of Oil & Gassy Bubbles & Odor Rec. Total: 59', BHT: 107 Gravity: N/A

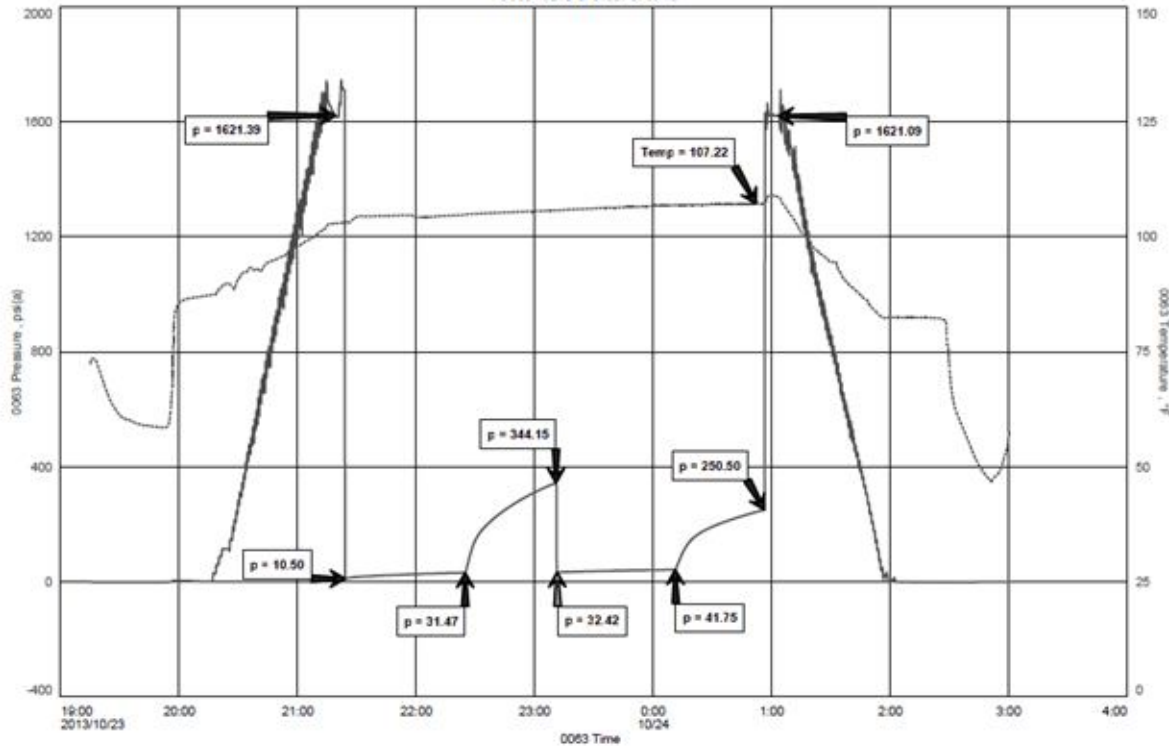
Initial Hydrostatic: 1621 First Initial Flow: 11 First Final Flow: 31 Initial Shut-In: 344

Second Initial Flow: 32 Second Final Flow: 42 Final Shut-In: 251 Final Hydrostatic: 1621

HESS OIL COMPANY
DST#2 3491-3563 LANSING
Start Test Date: 2013/10/23
Final Test Date: 2013/10/24

MARTHA #1
Formation: DST#2 3491-3563 LANSING
Pool: WILDCAT
Job Number: M568

MARTHA #1



Well Name & No.: Martha #1 Company: Hess Oil Co. Test No.: 3 Interval Tested: 3491 – 3600

Zone Tested: Lansing Times: 30-60-60-60

Blow Description: IFP: SSB, 6" Right Away, BOB 2 Min., ISI: No BB FFP: SSB, 2" Right Away, BOB 9 Min. FSI: No BB

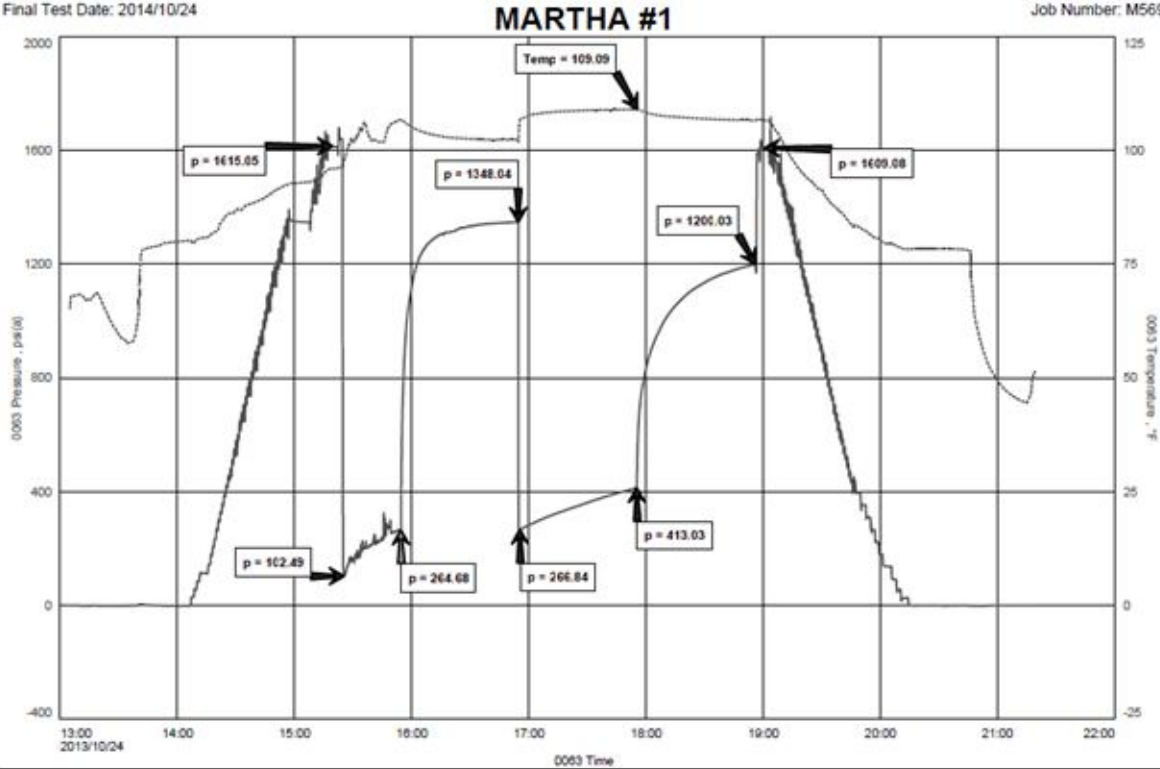
Rec: 325' Feet of DM 100% Mud, 126 Feet of GM 1% Gas, 99% Mud W/Some Specks of Oil, Slight Odor, 426 Feet of VSOSGWM 2% Gas, 76% WTR, 22% Mud W/a Scum of Oil Rec. Total: 877', BHT: 109 Gravity: N/A

Initial Hydrostatic: 1615 First Initial Flow: 102 First Final Flow: 265 Initial Shut-In: 1348

Second Initial Flow: 267 Second Final Flow: 413 Final Shut-In: 1200 Final Hydrostatic: 1609

HESS OIL COMPANY
DST#3 3491-3600 LANSING
Start Test Date: 2014/10/24
Final Test Date: 2014/10/24

MARTHA #1
Formation: DST#3 3491-3600 LANSING
Pool: WILDCAT
Job Number: M569



Well Name & No.: Martha #1 Company: Hess Oil Co. Test No.: 4 Interval Tested: 3611 – 3702

Zone Tested: Lansing Times: 60-45-60-45

Blow Description: IFP: SSB, Inc. to 1" in 9 Min. Then Maintained An Increasingly Intermittent 1" Blow,
ISI: No BB FFP: Maintained An Intermittent Surface Blow Throughout FSI: No BB

Rec: 59' Feet of VSOSGM 1% Gas, 99% Mud W/Some Specks of Oil, Slight Odor,

426 Feet of VSOSGWM 2% Gas, 99% Mud W/a Thin Scum of Oil & A Trace of WTR Rec. Total: 59',
BHT: 105 Gravity: N/A

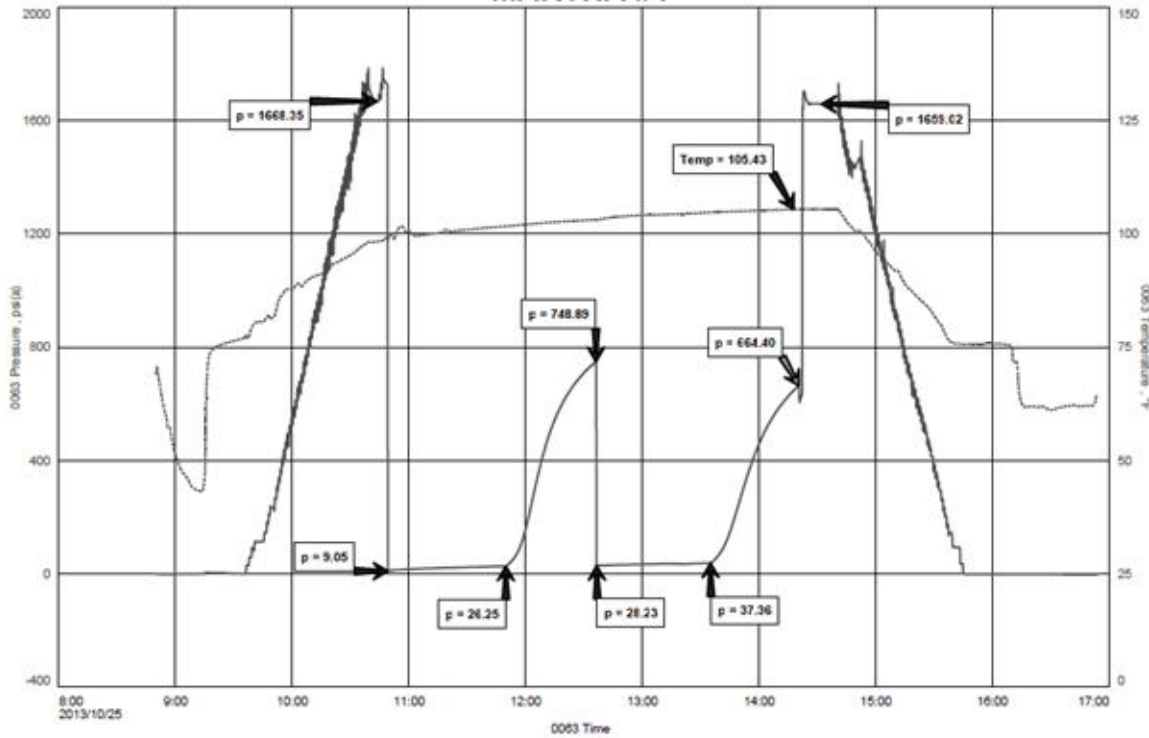
Initial Hydrostatic: 1668 First Initial Flow: 9 First Final Flow: 26 Initial Shut-In: 749

Second Initial Flow: 28 Second Final Flow: 37 Final Shut-In: 664 Final Hydrostatic: 1659

HESS OIL COMPANY
DST#4 3611-3702 LANSING/KC
Start Test Date: 2013/10/25
Final Test Date: 2013/10/25

MARTHA #1
Formation: DST#4 3611-3702 LANSING/KC
Pool: WILDCAT
Job Number: M570

MARTHA #1



Well Name & No.: Martha #1 Company: Hess Oil Co. Test No.: 5 Interval Tested: 3759– 3800

Zone Tested: Cong. Times: 30-30-3-Pulled

Blow Description: IFP: DM 100% Mud, ISI: No BB FFP: No Blow FSI: N/A

Rec: <1' Feet of DM 100% Mud, Rec. Total: <1', BHT: 106 Gravity: N/A

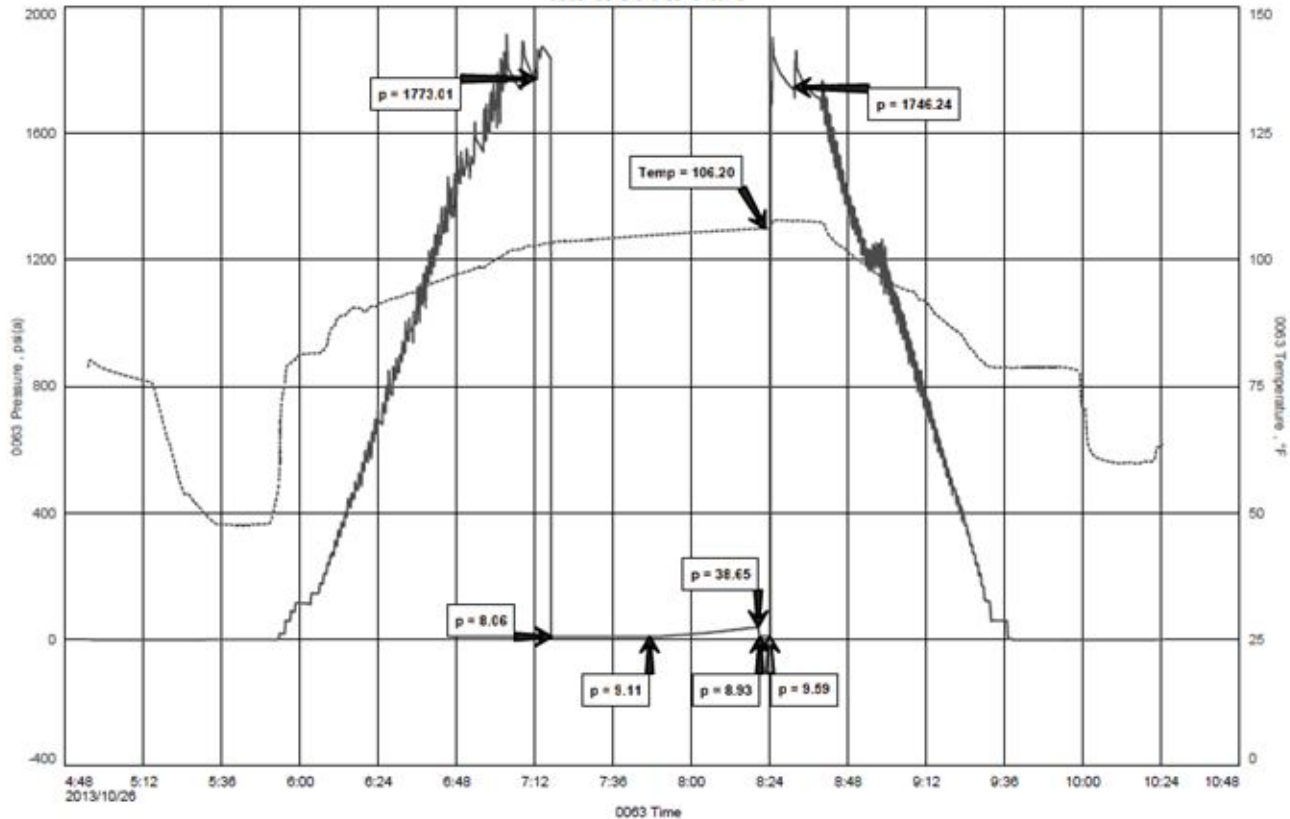
Initial Hydrostatic: 1773 First Initial Flow: 8 First Final Flow: 9 Initial Shut-In: 39

Second Initial Flow: 9 Second Final Flow: 10 Final Shut-In: Unknown Final Hydrostatic: 1746

HESS OIL COMPANY
DST#5 3789-3800 CONGL
Start Test Date: 2013/10/26
Final Test Date: 2013/10/26

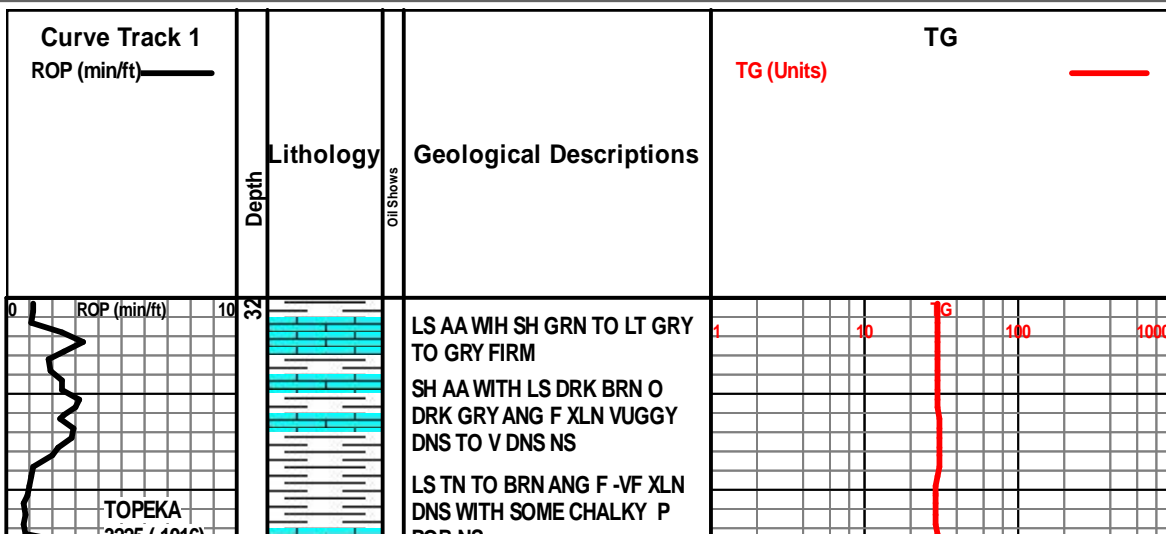
MARTHA #1
Formation: DST#5 3789-3800 CONGL
Pool: WILDCAT
Job Number: M571

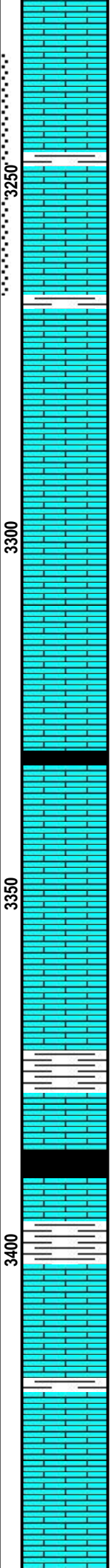
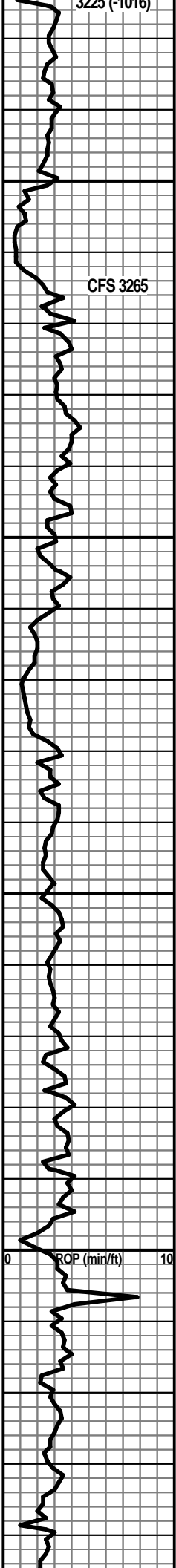
MARTHA #1



ROCK TYPES

	Anhy		Clyst		Gyp		Mrlst		Shgy
	Bent		Coal		Igne		Salt		Sltst
	Brec		Congl		Lmst		Shale		Ss
	Cht		Dol		Meta		Shcol		Till





POR NS
 NO SAMPLE
 LS TN TO BRN ANG F XLN DNS
 VERY SLIGHT STAIN N FLOR N
 CUT N ODOR

 LS TN TO BRN ANG DNS NS
 WITH LS OFF WHT TO CRM
 ANG CHALKY SOFT WITH LS
 OFF WHT TO LT TN ANG F XLN
 F POR SLIGHT STAIN F-G FLOR
 GOOD CUT WHEN BROKE N
 ODOR

 LS TN TO BRN ANG F XLN
 VUGGY FOSS DNS NS WITH LS
 GRY ANG F XLN DNS NS WITH
 TR PYRITE

 LS TN TO LT BRN ANG F XLN
 DNS WITH SOME CHALKY NS
 WITH SH GRY O DRK GRY FIRM

 LS TN TO LT BRN ANG F XLN
 DNS WITH F POR NS

 LS AA WH LS OFF WHT TO
 CRM VF XLN CHALKY SOFT

 LS TN TO BRN ANG F XLN DNS
 SOME SLIGHTLY VUGGY FOSS
 NS

 LS AA WITH SH DRK GRY TO
 BLK CARB

 LS BRN TO DRK BRN ANG F
 XLN DNS TO V DNS NS

 LS OFF WHT TO CRM ANG F
 XLN DNS SOME SLIGHTLY
 CHERTY NS

 LS AA WITH LS LT GRY ANG F
 XLN DNS NS WITH CHERT GRY
 SHARP V DNS

 LS TN TO LT GRY ANG F XLN
 DNS NS WITH R PYRITE

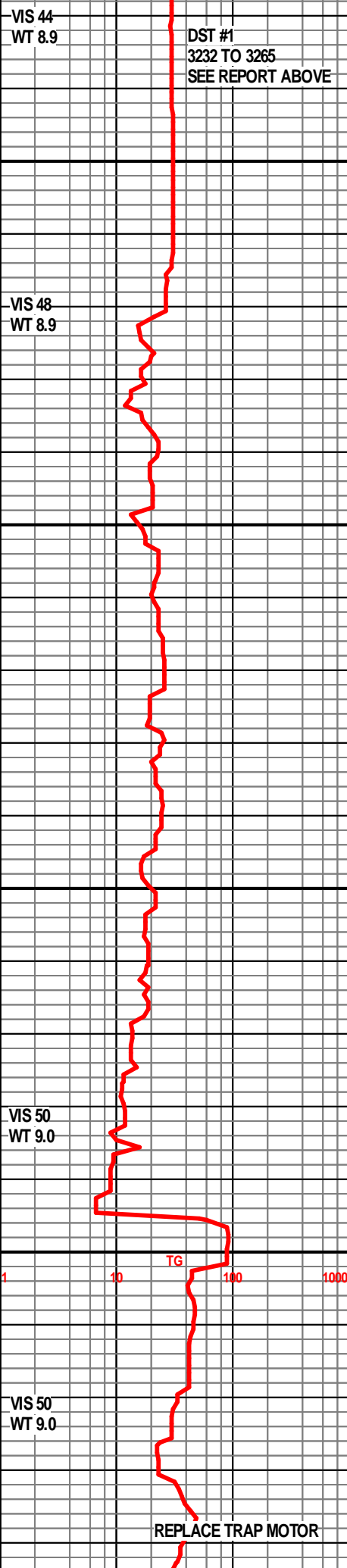
 LS AA WITH SH DRK GRY TO
 BLK CARB

 LS TN TO BRN TO DRK BRN
 ANG F XLN DNS TO V DNS
 WITH INERBEDED PYRITE NS

 LS AA WITH FOSS AND
 INERBEDED DRK GRY SH

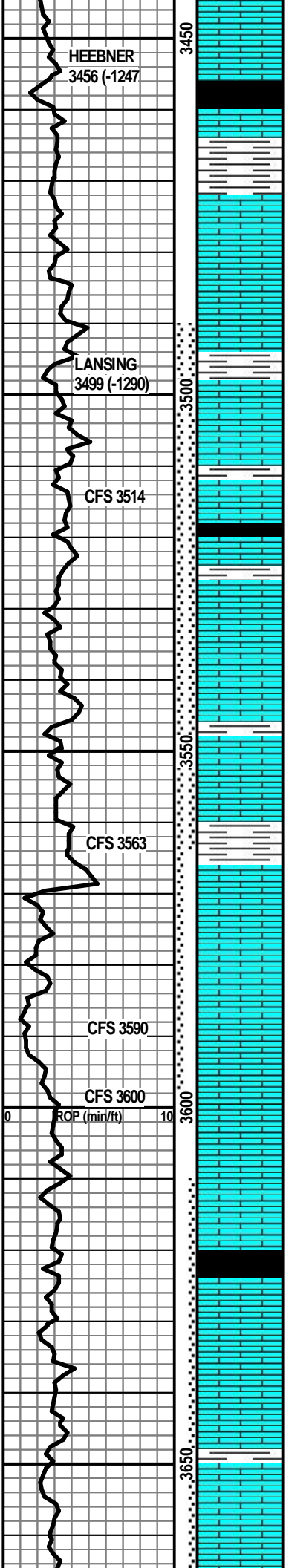
 LS TN TO OFF WHT ANG F XLN
 VP POR F-G FLOR G CUT
 WHEN BROKEN SLIGHT STAIN
 N FREE OIL V SLIGHT TO N
 ODOR

 LS TN TO OFF WHT ANG F XLN
 P-G POR WITH SOME
 INERBEDED CHERT F-G FLOR
 G CUT WHEN BROKEN SLIGHT
 STAIN N FREE OIL V SLIGHT TO
 N ODOR WITH CHERT DRK GRY
 SHARP V DNS



DST #1
 3232 TO 3265
 SEE REPORT ABOVE

REPLACE TRAP MOTOR



LS CRM TO TN ANG F XLN DNS WITH SH DRK GRY TO BLK CARB

LS AA WITH SH GRY FIRM

AA WITH LS OFF WHT TO CRM VF XLN CHALKY SOFT

LS TN TO LT GRY ANG F XLN DNS NS WITH TR PYRITE WITH SH GRN TO GRY FIRM MOSLY LS TN AA

LS CRM TO TN ANG F XLN DNS WITH SOME SLIGHTLY CHALKY SOFT NS

LS CRM TO LT TN ANG F XLN F-G POR F FLOR G CUT F STAIN V SLIGHT ODOR

LS CRM TO LT TN ANG F XLN P POR F FLOR G CUT P STAIN V SLIGHT ODOR WITH LS TN O BRN TO GRY ANG F XLN DNS FOS WITH SH DRK GRY TO BLK CARB

LS OFF WHT TO LT TN ANG F XLN DNS F-P POR GOOD SHOW OF FREE OIL SLIGHT STAIN F ODOR G FLOR G CUT

LS LT TN TO LT GRY ANG F XLN DNS SOME G POR GOOD ODER G SHOW OF FREE OIL G FLOR G CUT

LS CRM TO TN ANG F-M XLN G POR V GOOD STAIN VG SHOW OF FREE OIL VG FLOR VG CUT

LS TN ANG F-M XLN VERY FOSS DNS F-G STAIN F SHOW OF FREE OIL G FLOR G CUT G ODOR

LS AA WITH SH GRY TO DRK GRY FIRM WITH LOTS OF PYRITE WITH LS TN TO LT TN ANG F-M XLN DNS F-G POR G FLOR G CUT G SHOW OF FREE OIL F ODOR

LS AA WITH LS TN TO OFF WHT ANG F-M XLN DNS WITH LESS SHOW OF OIL

LS CRM TO TN TO LT GRY ANG F XLN DNS WITH SOME SLIGHTLY CHALKY SOFT

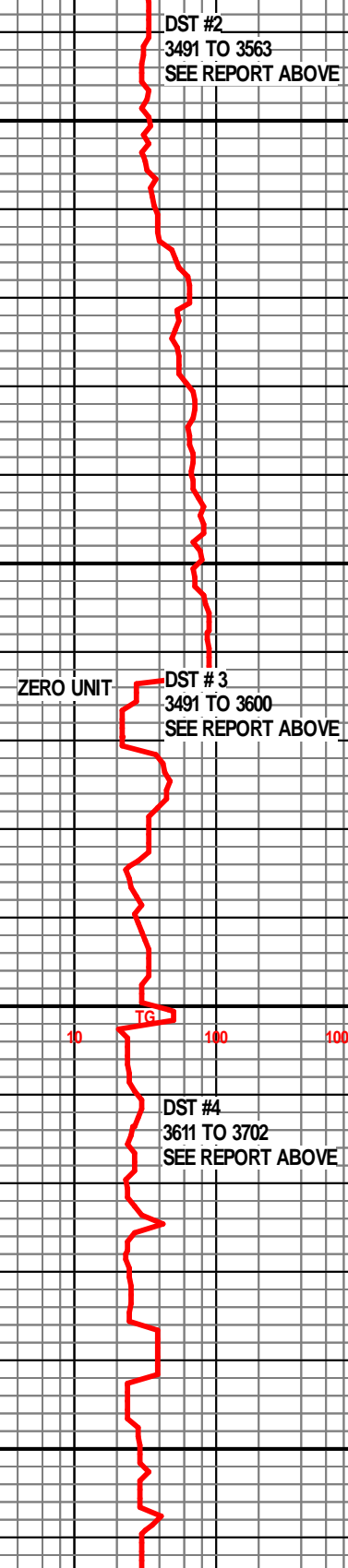
LS TN TO LT GRY ANG F XLN DNS NS

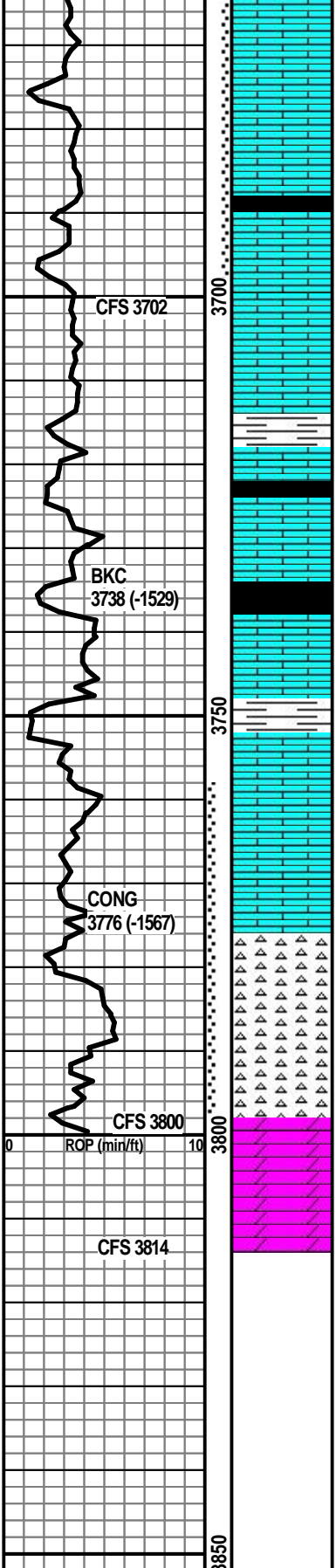
LS BRN TO DRK BRN ANG F XLN DNS TO V DNS NS WITH TR PYRITE WITH SH DRK GRY TO BLK

LS BRN TO DRK BRN ANG F XLN DNS P FLOR G CUT F ODOR F STAIN WITH CHERT WHT TO GRY SHARP WITH SH BLK CARB

LS TN TO LT BRN ANG DNS WITH P POR F-P STAIN SLIGHT SHOW OF FREE OIL SLIGHT ODOR INERBEDDED PYRITE

LS AA WITH SOME BEING FOSS





WITH G STAIN G FLOR F-G CUT
SLIGHT ODOR NO FREE OIL

LS AA WITH LS TN F XLN FOSS
F-P POR SOME G STAIN F-P
FLOR F CUT NO FREE OIL TR
PYRITE WITH SH BLK CARB

LS TN ANG F XLN SLIGHTLY
OOLIC DNS F STAIN FREE OIL
G FLOR G CUT F ODOR WITH
LS LT GRY ANG F XLN F-G POR
GOOD SHOW OF FREE OIL G
FLOR G CUT SLIGHT ODOR

LS CRM TO TN TO LT GRY ANG
F XLN DNS WITH SOME
SLIGHTLY CHALKY SOFT WITH
SH BLK CARB

LS LT GRY ANG F XLN DNS
WITH LS LT TN ANG F XLN
FOSS NS

LS AA WITH SH GRY TO BLK
FIRM

LS LT GRY ANG F XLN DNS
WITH LS LT TN ANG F XLN
FOSS NS WITH SH RED TO GRY
SOFT

SH AA WITH LS TN ANG F XLN
DNS NS

LOT OF SH RED TO BRN ANG
FIRM WIH SOME BEING SOFT
LS MULTI COLORED F-M XLN
SOME C XLN MOSTY DNS SOME
SLIGHTLY CHALKY NS WITH
CHERT GRY SHARP V HD

CHERT WHT TO GRY ANG
SHARP VG OIL STAIN V SLIGHT
ODOR V PAL FLOR G CUT
SOME FREE OIL

CHERT AA SLIGHT ODOR PAL
FLOR G CUT GOOD SHOW OF
FREE BLK OIL VG STAIN

DOL BRN ANG LIMLY F-VF XLN
V DNS NS

VIS 48
WT 8.9
WL 7
Ph 9.0
CL 7,000

DST #5
3759 TO 3800
SEE REPORT ABOVE

VIS 52
WT 9.0



