KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 34226
Name: Yale Oil Association, Inc.
Address 1: 6 NE 63rd Street, Suite 425
Address 2:
City: Oklahoma City State: OK Zip: 73105 +
Contact Person: Greg Cox
Phone: (405) 840-1811 ext. 107 RECEIVED
CONTRACTOR: License # 34428 NOV 0 5 2012
Name: Discovery Drilling
Wellsite Geologist: KCC WICHITA
Purchaser:

Designate Type of Completion:
- [x] New Well [ ] Re-Entry [ ] Workover
- [ ] Oil [ ] WSW [ ] SWD [ ] SIOW
- [ ] Gas [x] D&A [ ] ENHR [ ] SIGW
- [ ] OG [ ] GSW [ ] Temp. Abd.
- [ ] CM (Coal Bed Methane)
- [ ] Cathodic [ ] Other (Core, Expl., etc.):

If Workover/Re-entry: Old Well Info as follows:
Operator:
Well Name:
Original Comp. Date: Original Total Depth:
- [ ] Deepening [ ] Re-perf. [ ] Conv. to ENHR [ ] Conv. to SWD
- [ ] Conv. to GSW
- [ ] Plug Back: Plug Back Total Depth
- [ ] Commingled Permit #:
- [ ] Dual Completion Permit #:
- [ ] SWD Permit #:
- [ ] ENHR Permit #:
- [ ] GSW Permit #:

7/30/10 (Spud Date or Recompletion Date) | 8/7/10 (Date Reached TD) | 8/19/11 (Completion Date or Recompletion Date)

API No. 15 - 035-24365-00-00
Spot Description:
E/2 SE SW SE Sec. 18 Twp. 35 S. R. 7 [x] East [ ] West
330 Feet from [ ] North / [x] South Line of Section
1,500 Feet from [x] East / [ ] West Line of Section
Footages Calculated from Nearest Outside Section Corner:
[ ] NE [ ] NW [x] SE [ ] SW
County: Cowley
Lease Name: Charles Well #: 1-18
Field Name: unnamed
Producing Formation: na
Elevation: Ground: 1210 Kelly Bushing: 1224
Total Depth: 3050 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 3050 Feet
Multiple Stage Cementing Collar Used? [ ] Yes [x] No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)
Chloride content: 683 ppm Fluid volume: 1500 bbls
Dewatering method used: tank truck hauling
Location of fluid disposal if hauled offsite:
Operator Name: Ford Tank Truck Services
Lease Name: Gray Mud Disposal License #:
Quarter Sec. Twp. S. R. [ ] East [ ] West
County: Kay, Oklahoma Permit #:

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

AFFIDAVIT
I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature:
Title: Geologist Date: 11-1-12

KCC Office Use ONLY
- [ ] Letter of Confidentiality Received
  Date:
- [ ] Confidential Release Date:
- [x] Wireline Log Received
- [x] Geologist Report Received
- [ ] UIC Distribution

ALT [x] I [ ] II [ ] III Approved by: DLG Date: 11/13/12

Side Two

Operator Name: Yale Oil Association, Inc. Lease Name: Charles Well #: 1-18

Sec. 18 Twp. 35 S. R. 7 ☑ East ☐ West County: Cowley

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken *(Attach Additional Sheets)*	☐ Yes	☑ No
Samples Sent to Geological Survey	☑ Yes	☐ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No
Electric Log Submitted Electronically *(If no, Submit Copy)*	☐ Yes	☑ No

List All E. Logs Run:

Spectral Density-Neutron, Microlog, Compensated Resistivity

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Checkerboard	2419	-1195
Big Lime	2532	-1308
Peru	2602	-1378
Oswego	2658	-1434
Skinner	2766	-1542
Miss Chat	2958	-1734
Miss Lime	2988	-1764

CASING RECORD ☑ New ☐ Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12 1/4"	8 5/8"	24	301	Class H	225	3% CC, 1/4# flo-cel
Production	7 7/8"	5 1/2"	17	3050	Regular	105	10% salt,.02% Fla,1/4# flo-cel

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose: ____ Perforate ____ Protect Casing ____ Plug Back TD ____ Plug Off Zone	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)*	Depth
4	2959 - 2969	1000 gals. 15% HCL NE/FE acid	2959 - 2969
1	2969, 2966, 2965, 2965, 2965, 2965	jetted 1/2" holes 600' w/ 28% HCL acid	2965 - 2969
4	2766 - 2773	750 gals. 7 1/2% HCL NE/FE acid	2766 - 2773

TUBING RECORD: Size: 2 3/8" Set At: 2996 Packer At: Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 5/16/11

Producing Method: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	1	0	50		

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*

METHOD OF COMPLETION: ☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)* ☐ Other *(Specify)*

PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

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Oct. 22. 2010 1:22PM Consolidated Oil No. 1428 P. 4

CONSOLIDATED
Oil Well Services, LLC

#235660

TICKET NUMBER 27828
LOCATION Bartlesville OK
FOREMAN Donnie Tate

FIELD TICKET & TREATMENT REPORT
CEMENT

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
8/1/10	9413	CHARLES [illegible] 1-18	18	35S	7E	Cowley Ks

CUSTOMER Yale Oil
MAILING ADDRESS
CITY | STATE | ZIP CODE

TRUCK #	DRIVER	TRUCK #	DRIVER
419	John N		
496	NATE		

JOB TYPE Surf HOLE SIZE 12¼ HOLE DEPTH CASING SIZE & WEIGHT 8⅝
CASING DEPTH 301' DRILL PIPE TUBING OTHER
SLURRY WEIGHT 15.6 SLURRY VOL 1.18 WATER gal/sk 5.2 CEMENT LEFT in CASING 20'
DISPLACEMENT 17.5 DISPLACEMENT PSI 200# MIX PSI 200# RATE 4/2

REMARKS: RIG UP - EST CIRC - RUN 225 SX w/3% CAL AND 1/4 Pheno. - WASH OUT PUMP AND LINES - RELEASE PLUG - DISPLACING 17.5 leaving Approx 20' in CASING - Shut well in - WASH UP - RACK up.

CMT TO SURF

PLUG Down 9:30pm

Samples taken

Thank You

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ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
				1030.00
540/5	1	PUMP CHARGE		200.00
5406	1	MILEAGE		1237.50
5407	1	Bulk Truck		
				2812.49
1104	225sx	CLASS A CMT		270.00
1102	600#	Calcium		87.50
1107A	50#	PHENO		80.00
4432	1	8⅝ wooden Plug		[illegible]
		20% Disc.		
		Total $4750.79		
			SALES TAX	221.00
			ESTIMATED TOTAL	$5938.48

Ravin 3737

AUTHORIZTION [signature] TITLE DATE

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form

ORIGINAL

OILWELL CEMENTERS,INC

P.O. BOX 510 - PHONE (580) 229 - 1776
HEALDTON, OKLAHOMA 73438

P.O. NO. _____
DATE 8/9/2010

YALE OIL ASSOCIATES,INC. 6 N.E. 63RD STE.425 OKLAHOMA CITY, OKLAHOMA 73102
NAME OF COMPANY MAILING ADDRESS

WELL OWNER MAILING ADDRESS

NAME OF CONTRACTOR MAILING ADDRESS

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TERMS: Accounts Due and Payable Upon Receipt. 1.5% (18% per yr) Finance charge Added to Accounts 30 Days Past Due.
This cementing equipment and service men are to be under the control and supervision of the well owner or his representative and as a part of the consideration therof, it is expressly stated the OILWELL CEMENTERS,INC shall not be liable or responsible for any loss or damage to this well.

Well owner or his Representative

FARM CHARLES WELL NO. 1-18
COUNTY COWLEY,KS. SEC TWN RGE
KIND OF JOB LONGSTRING
SIZE OF PIPE 5 1/2" SIZE OF HOLE 7 7/8"
DEPTH OF WELL 3055 WELL CEMENTED 3051 DEPTH PLUG STOPPED 3051
KIND OF CEMENT REG,10%SALT,2/10 OF 1% FLA,1/4#FLOCELE
ASH MIX
AMOUNT 105SKS
PRESSURE MAXIMUM 750 MINIMUM 350
TIME OUT 11:00PM ON LOC 1:00AM
JOB STARTED 2:00AM COMPLETE 3:00AM
TYPE FLOATING EQUIPMENT IR

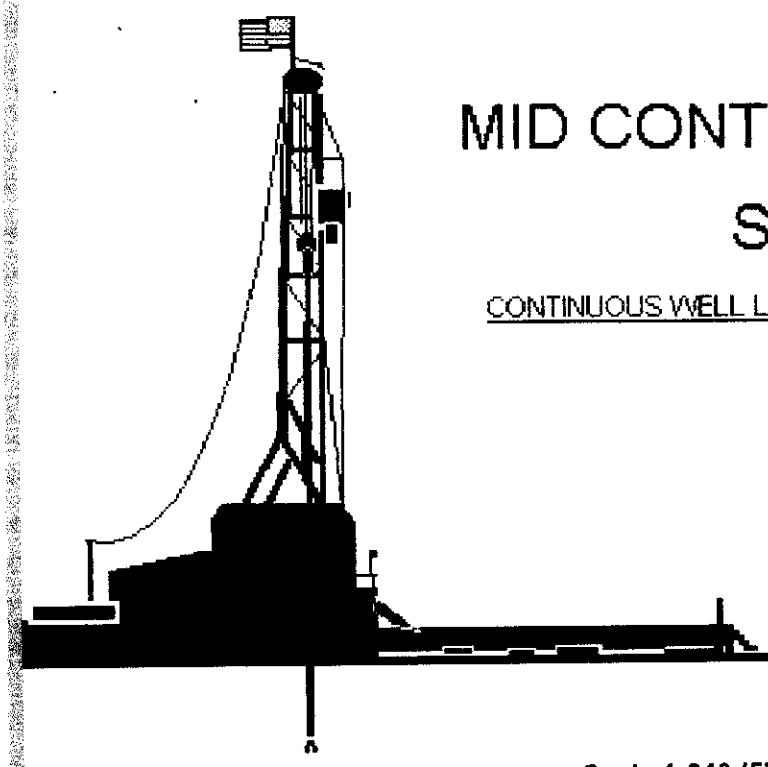
PRICE REF.NO. 1		@	$695.00	$695.00
3051	FEET	@	$0.25	$762.75
172	TRUCK MILES	@	$2.00	$344.00
	PICKUP MILES	@	$2.00	$0.00
	CONN.OVER 6 FT.	@	$650.00	$0.00
	EXTRA HRS ON LOC.	@	$250.00	$0.00
	PLUG CONTAINER	@		$0.00
		@		$0.00
		@		$0.00
		@		$0.00
		@		$0.00
		@		$0.00
		@		$0.00
		@		$0.00
PUMP TRUCK CHARGES				$1,801.75

TRUCK NO. 241 BULK CEMENT

CEMENT	105 SACKS	@	$10.50	$1,102.50
ASH MIX	SACKS	@	$10.50	$0.00
% GEL	SACKS	@		$0.00
	CACL	@	$0.60	$0.00
25	FLO-CELE	@	$2.50	$62.50
450	SALT	@	$0.50	$225.00
20	FLA	@	$9.25	$185.00
500	MUD FLUSH	@	$1.00	$500.00
	THREAD LOCK	@	$60.00	$0.00
	KOLITE	@	$0.75	$0.00
1	TRP-TWP	@	$80.00	$80.00
6	CENTRALIZERS	@	$60.00	$360.00
	BASKETS	@		$0.00
1	FLOAT SHOE	@	$260.00	$260.00
15	KCL	@	$40.00	$600.00
		@		$0.00
		@		$0.00
		@		$0.00
		@		$0.00
		@		$0.00
MATERIAL COST				$3,375.00
OKLA. SALE TAX			4.50%	$151.88
COUNTY SALE TAX				$0.00
DUMPING CHARGE	105		$4.00	$420.00
TOTAL MATERIALS				$3,946.88
PUMP TRUCK				$1,801.75
TOTAL				$5,748.63
	MINUS		10%	$574.86
	TOTAL			$5,173.77

TRUCK NO. 223
CEMENTER M.D. HOLDERFIELD HELPER: K.KRAISINGER, H.STOKES
REMARKS: PUMP 5 BBLS. F/W ,PUMP 500 GAL MUD FLUSH, PUMP 5 BBLS. F/W. MIX AND PUMP 105 SKS REG CEMENT,WASH PUMP AND LINES, DISPLACE W/71 BBLS KCL 4% WATER. BUMPED PLUG, FLOAT HELD.

INVOICE NO. 29595



MID CONTINENT WELL LOGGING SERVICES, INC.

CONTINUOUS WELL LOGGING / COMPLETE HYDROCARBON ANALYSIS

2222 WESTPARK DR. STE. A
NORMAN, OK 73069
OFFICE (405) 360-7333
OPERATIONS (405) 590-3655
SALES (405) 203-9989

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

Well Name:	**CHARLES # 1-18**
Location:	**SEC 18-35S-7E**
License Number:	**34428**
Spud Date:	**7-29-2010**
Surface Coordinates:	**330' SSL, 1500' ESL**
Bottom Hole Coordinates:	**REPORT FOR MR. FRANK THOMPSON**
	LOGGER MR. BILL DEAL
Ground Elevation (ft):	**1205**
Logged Interval (ft):	**323' To: 3050'**
Formation:	
Type of Drilling Fluid:	**FRESH WATER AND NATIVE GEL**

YALE OIL ASSOCIATION
COWLEY COUNTY KS

Region: **COWLEY**
Drilling Completed: **8-7-2010**
K.B. Elevation (ft): **1219**
Total Depth (ft): **3050'**

OPERATOR

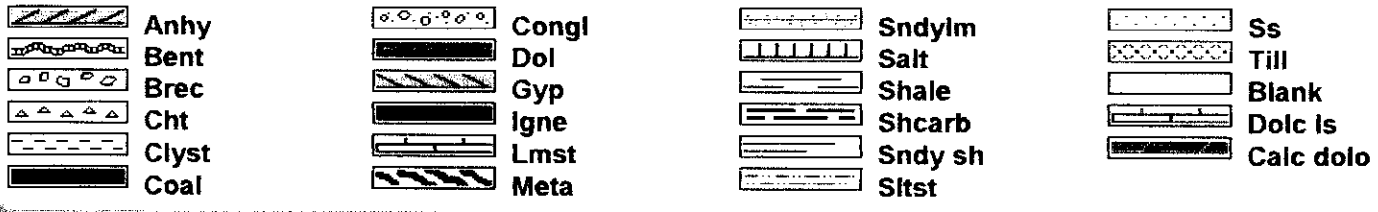
Company: YALE OIL ASSOCIATION
Address: 6 N E 63RD ST SUITE 425
OKC, OK 73105

GEOLOGIST

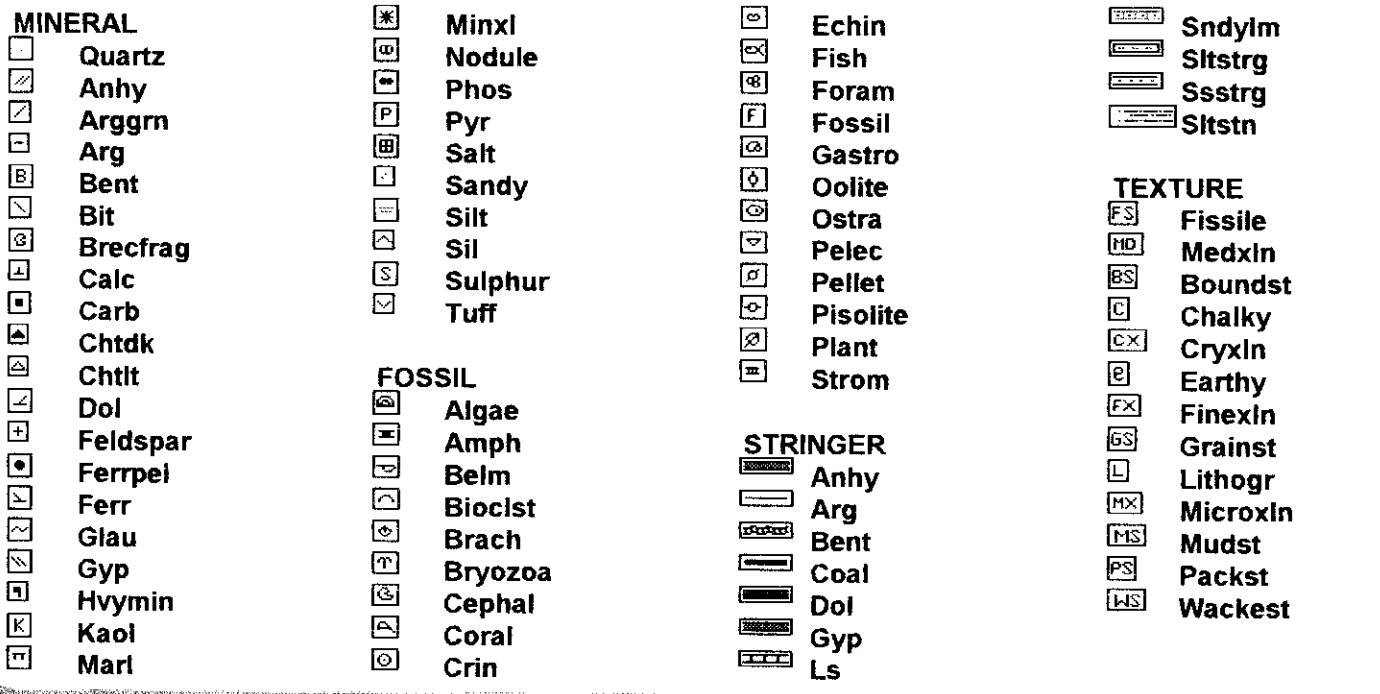
Name: MR. GREGG COX
Company: YALE OIL ASSOCIATION
Address: 6 N E 63RD ST SUITE 425
OKC, OK 73105

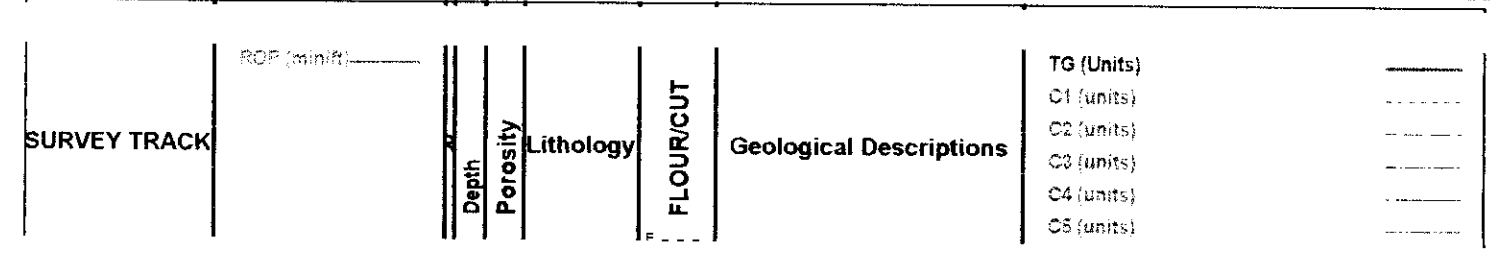
Comments

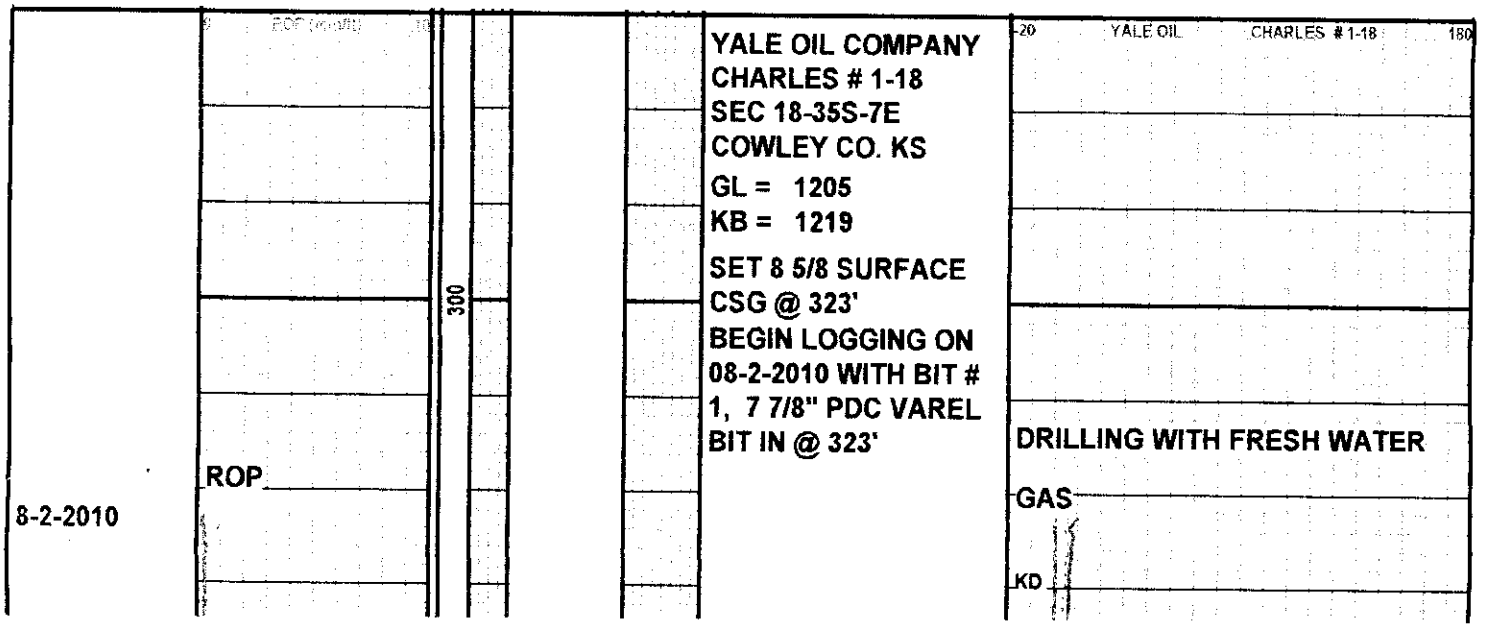
ROCK TYPES

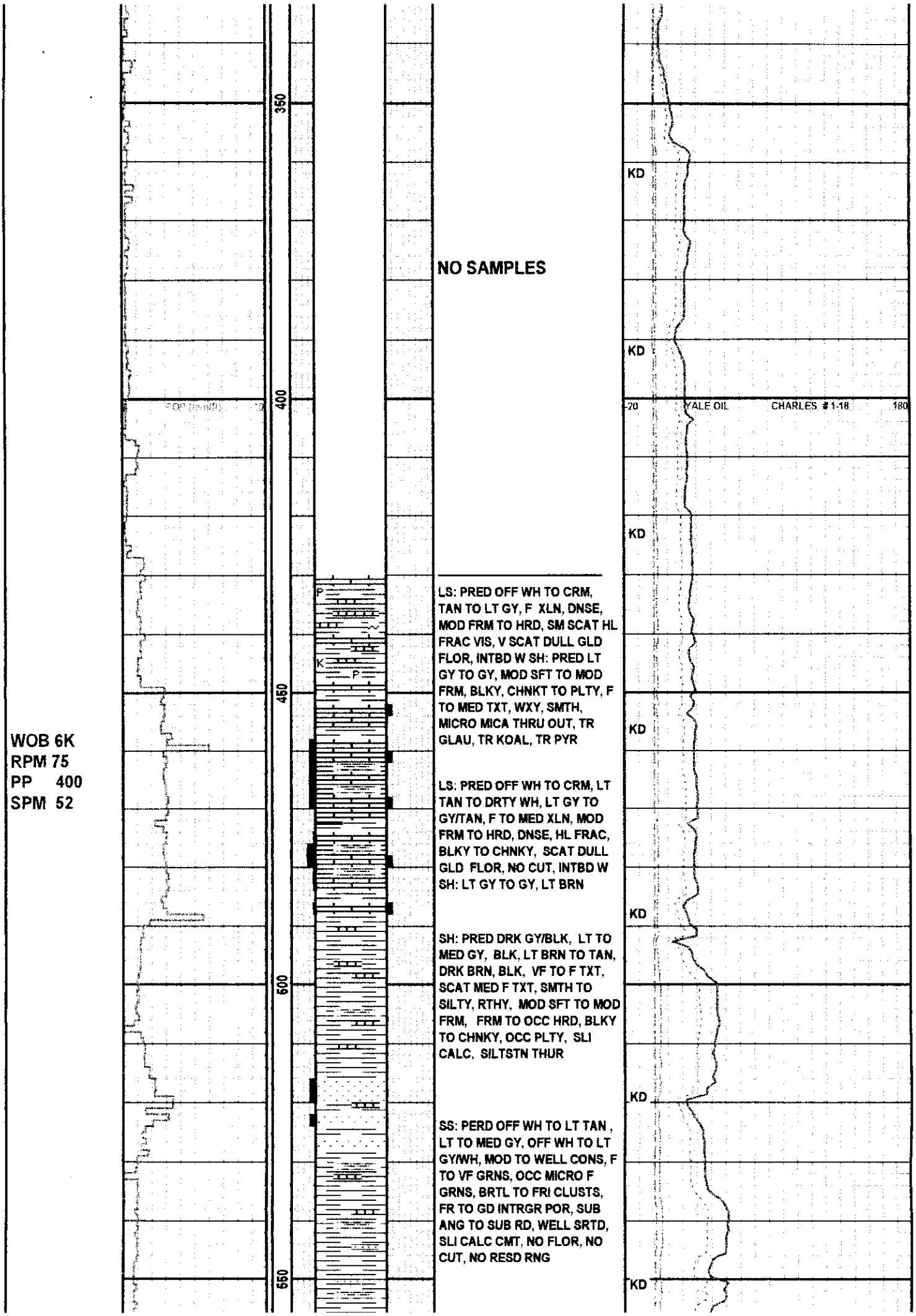


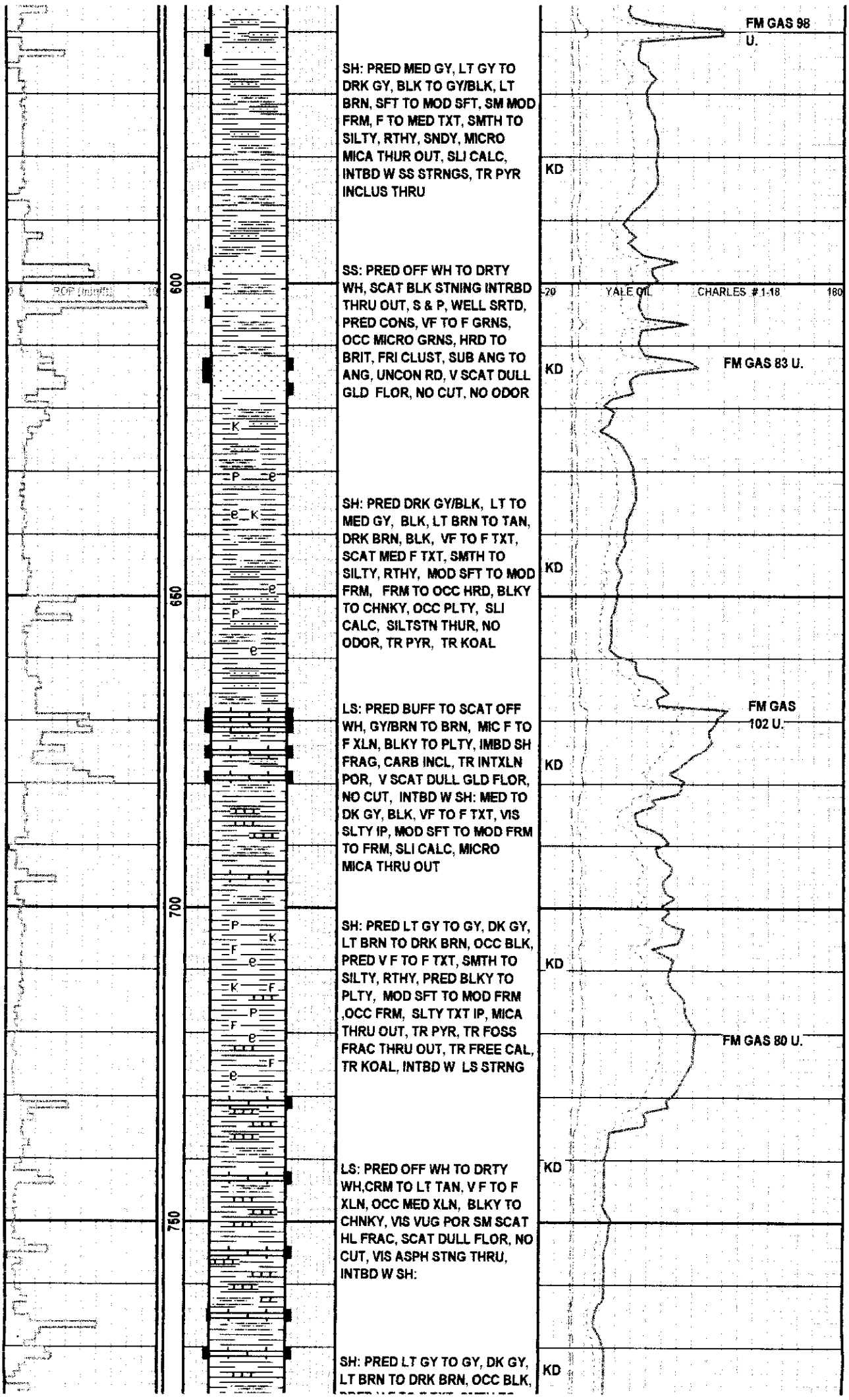
ACCESSORIES

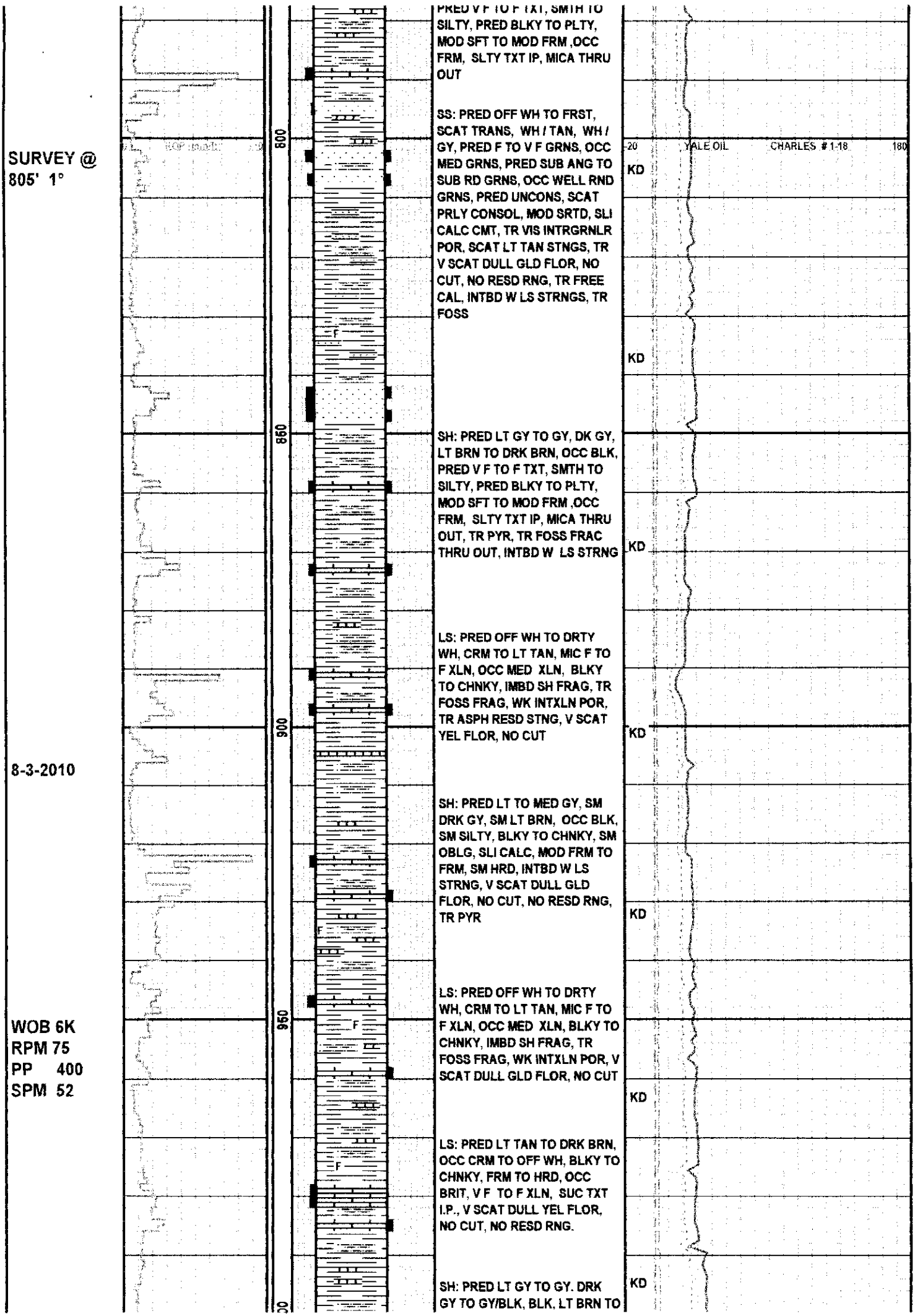







350
400
450
500
550
NO SAMPLES
KD
KD
-20
YALE OIL
CHARLES # 1-18
180
KD
KD
KD
KD
KD
P
K
P
LS: PRED OFF WH TO CRM, TAN TO LT GY, F XLN, DNSE, MOD FRM TO HRD, SM SCAT HL FRAC VIS, V SCAT DULL GLD FLOR, INTBD W SH: PRED LT GY TO GY, MOD SFT TO MOD FRM, BLKY, CHNKT TO PLTY, F TO MED TXT, WXY, SMTH, MICRO MICA THRU OUT, TR GLAU, TR KOAL, TR PYR
LS: PRED OFF WH TO CRM, LT TAN TO DRTY WH, LT GY TO GY/TAN, F TO MED XLN, MOD FRM TO HRD, DNSE, HL FRAC, BLKY TO CHNKY, SCAT DULL GLD FLOR, NO CUT, INTBD W SH: LT GY TO GY, LT BRN
SH: PRED DRK GY/BLK, LT TO MED GY, BLK, LT BRN TO TAN, DRK BRN, BLK, VF TO F TXT, SCAT MED F TXT, SMTH TO SILTY, RTHY, MOD SFT TO MOD FRM, FRM TO OCC HRD, BLKY TO CHNKY, OCC PLTY, SLI CALC, SILTSTN THUR
SS: PERD OFF WH TO LT TAN , LT TO MED GY, OFF WH TO LT GY/WH, MOD TO WELL CONS, F TO VF GRNS, OCC MICRO F GRNS, BRTL TO FRI CLUSTS, FR TO GD INTRGR POR, SUB ANG TO SUB RD, WELL SRTD, SLI CALC CMT, NO FLOR, NO CUT, NO RESD RNG
WOB 6K
RPM 75
PP 400
SPM 52

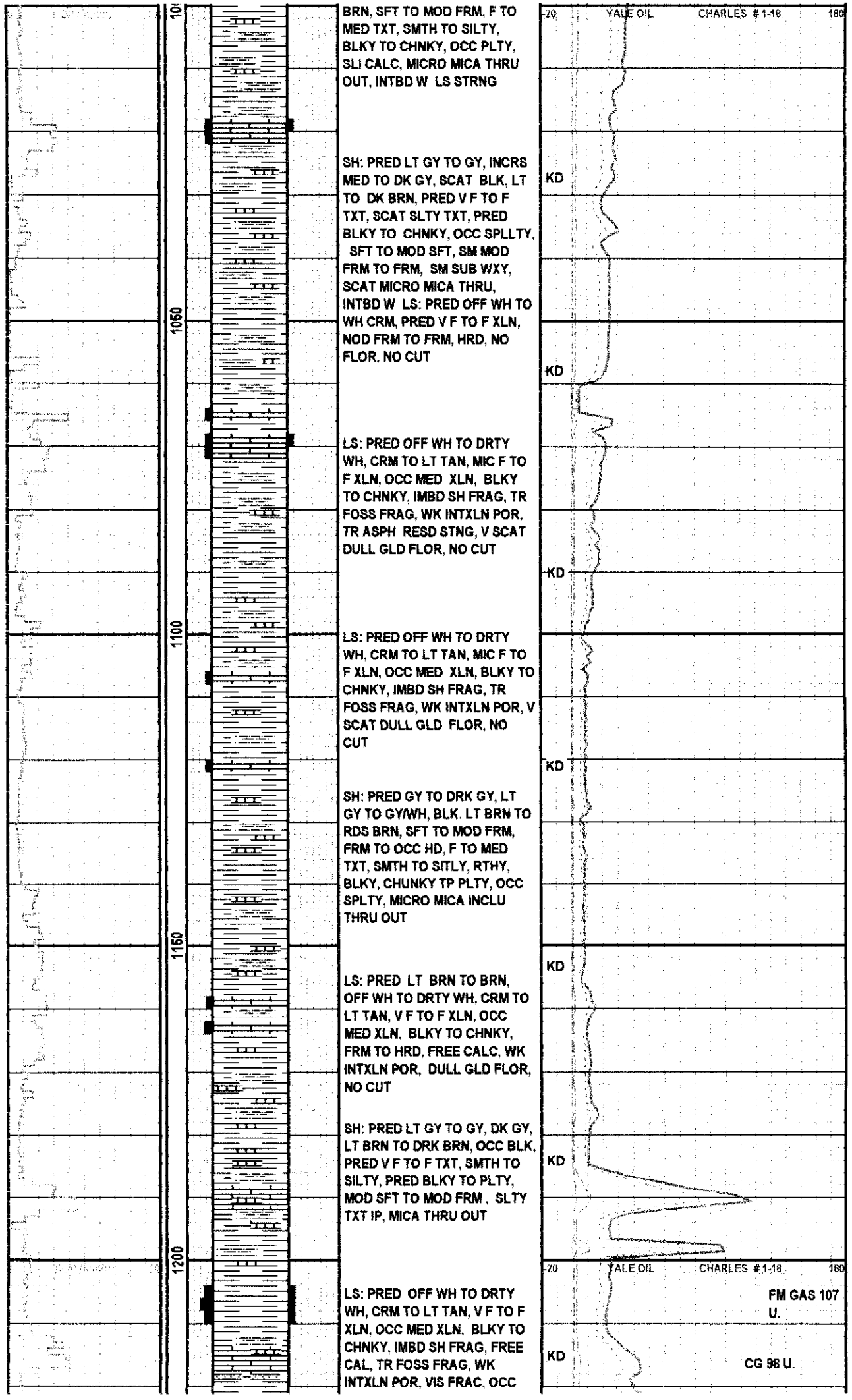

ROP (min/ft)
600
650
700
750
K
P
e
K
e
P
e
P
K
F
e
K
F
P
F
e
F
e
SH: PRED MED GY, LT GY TO DRK GY, BLK TO GY/BLK, LT BRN, SFT TO MOD SFT, SM MOD FRM, F TO MED TXT, SMTH TO SILTY, RTHY, SNDY, MICRO MICA THUR OUT, SLI CALC, INTBD W SS STRNGS, TR PYR INCLUS THRU
SS: PRED OFF WH TO DRTY WH, SCAT BLK STNING INTRBD THRU OUT, S & P, WELL SRTD, PRED CONS, VF TO F GRNS, OCC MICRO GRNS, HRD TO BRIT, FRI CLUST, SUB ANG TO ANG, UNCON RD, V SCAT DULL GLD FLOR, NO CUT, NO ODOR
SH: PRED DRK GY/BLK, LT TO MED GY, BLK, LT BRN TO TAN, DRK BRN, BLK, VF TO F TXT, SCAT MED F TXT, SMTH TO SILTY, RTHY, MOD SFT TO MOD FRM, FRM TO OCC HRD, BLKY TO CHNKY, OCC PLTY, SLI CALC, SILTSTN THUR, NO ODOR, TR PYR, TR KOAL
LS: PRED BUFF TO SCAT OFF WH, GY/BRN TO BRN, MIC F TO F XLN, BLKY TO PLTY, IMBD SH FRAG, CARB INCL, TR INTXLN POR, V SCAT DULL GLD FLOR, NO CUT, INTBD W SH: MED TO DK GY, BLK, VF TO F TXT, VIS SLTY IP, MOD SFT TO MOD FRM TO FRM, SLI CALC, MICRO MICA THRU OUT
SH: PRED LT GY TO GY, DK GY, LT BRN TO DRK BRN, OCC BLK, PRED V F TO F TXT, SMTH TO SILTY, RTHY, PRED BLKY TO PLTY, MOD SFT TO MOD FRM ,OCC FRM, SLTY TXT IP, MICA THRU OUT, TR PYR, TR FOSS FRAC THRU OUT, TR FREE CAL, TR KOAL, INTBD W LS STRNG
LS: PRED OFF WH TO DRTY WH,CRM TO LT TAN, V F TO F XLN, OCC MED XLN, BLKY TO CHNKY, VIS VUG POR SM SCAT HL FRAC, SCAT DULL FLOR, NO CUT, VIS ASPH STNG THRU, INTBD W SH:
SH: PRED LT GY TO GY, DK GY, LT BRN TO DRK BRN, OCC BLK,
FM GAS 98 U.
KD
20
YALE OIL
CHARLES # 1-18
180
KD
FM GAS 83 U.
KD
FM GAS 102 U.
KD
KD
FM GAS 80 U.
KD
KD

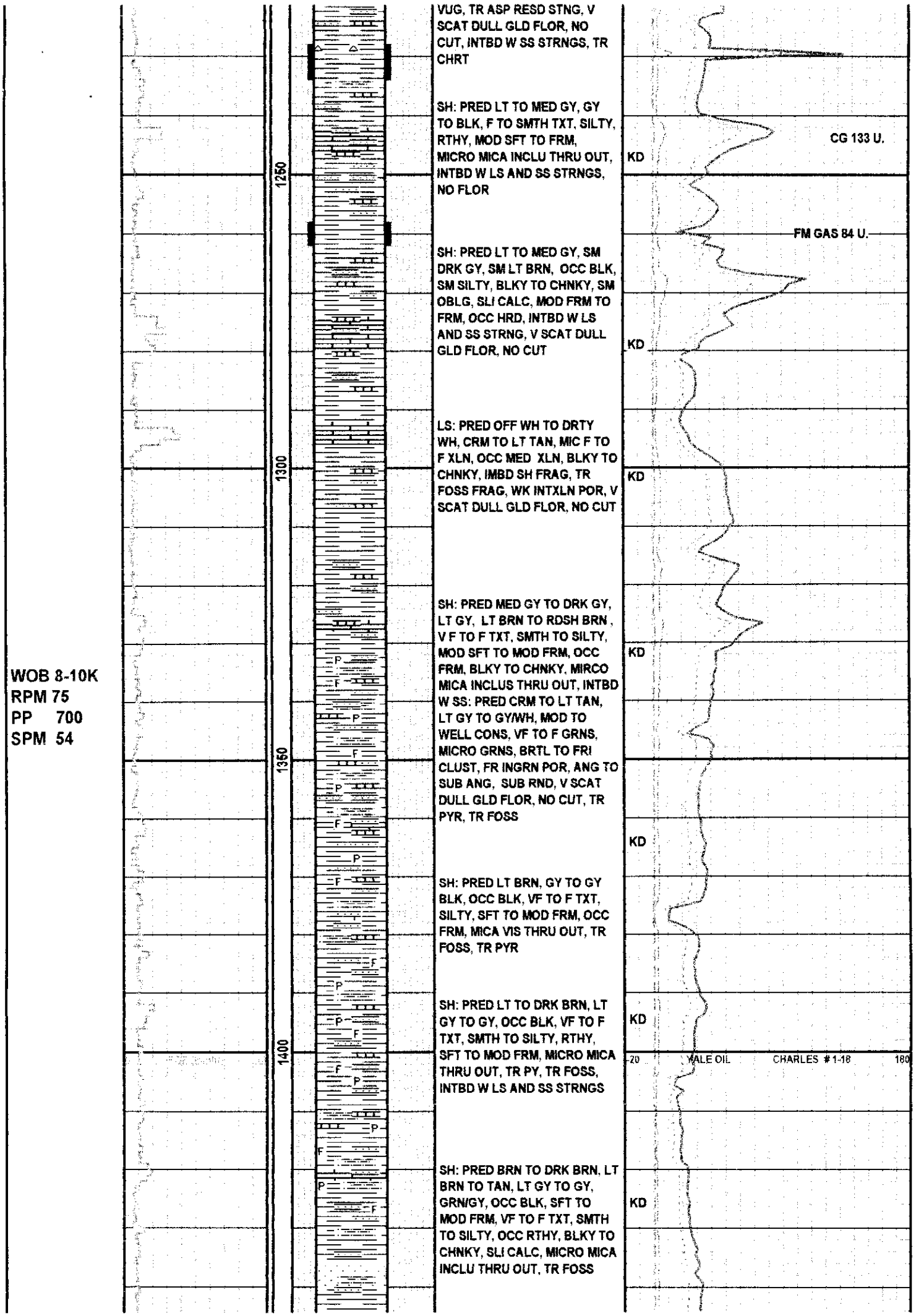


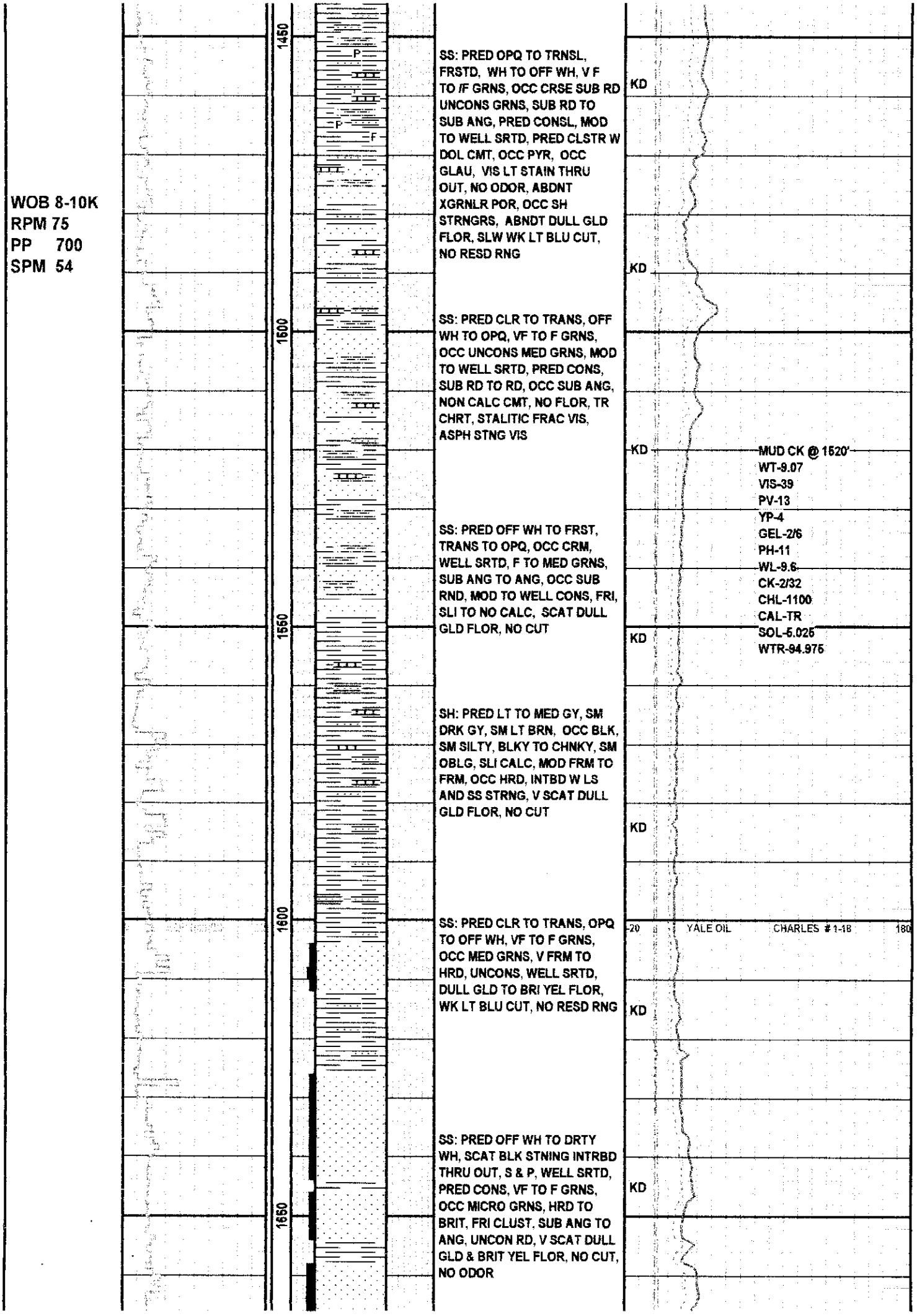
SURVEY @
805' 1°

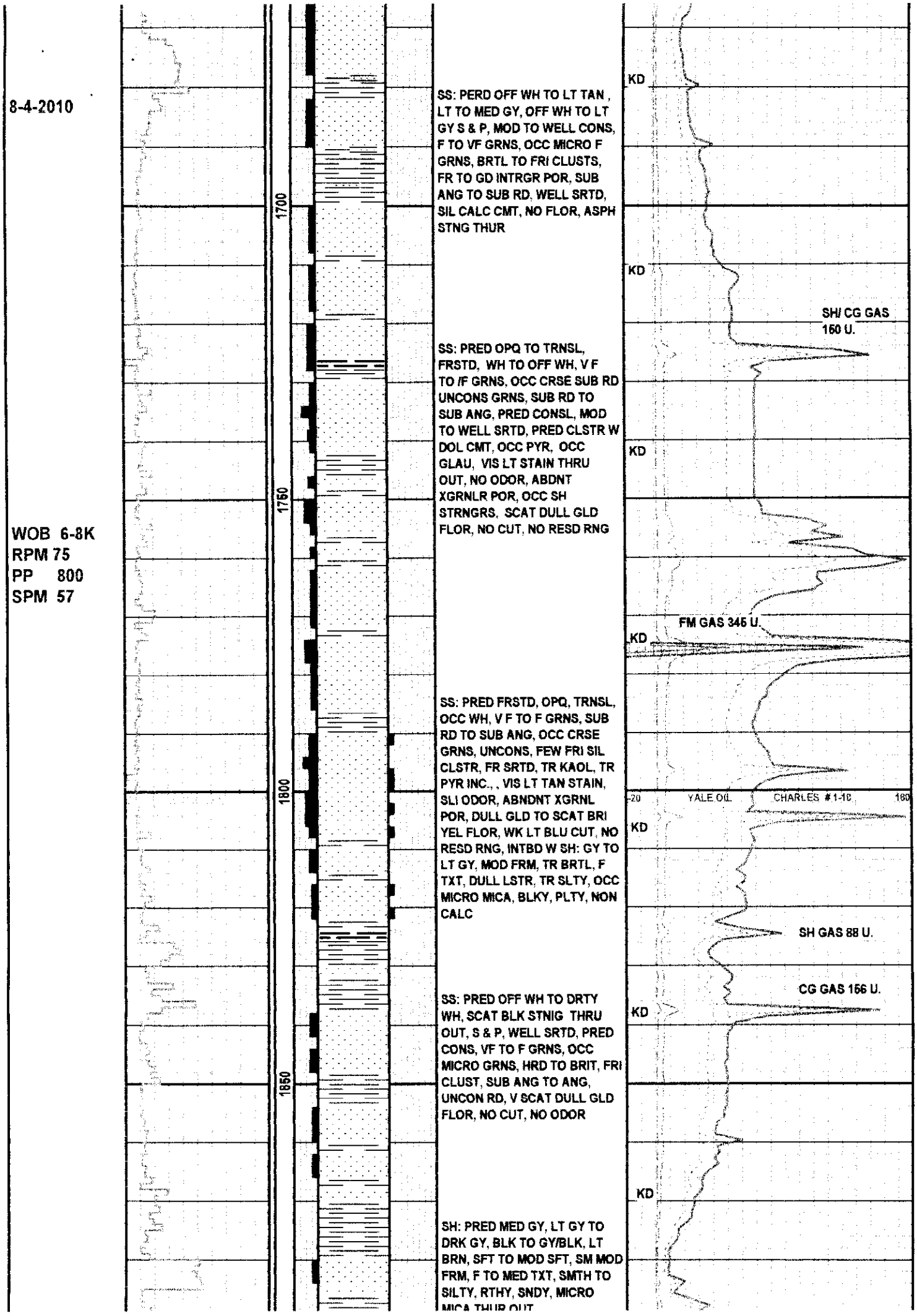
8-3-2010

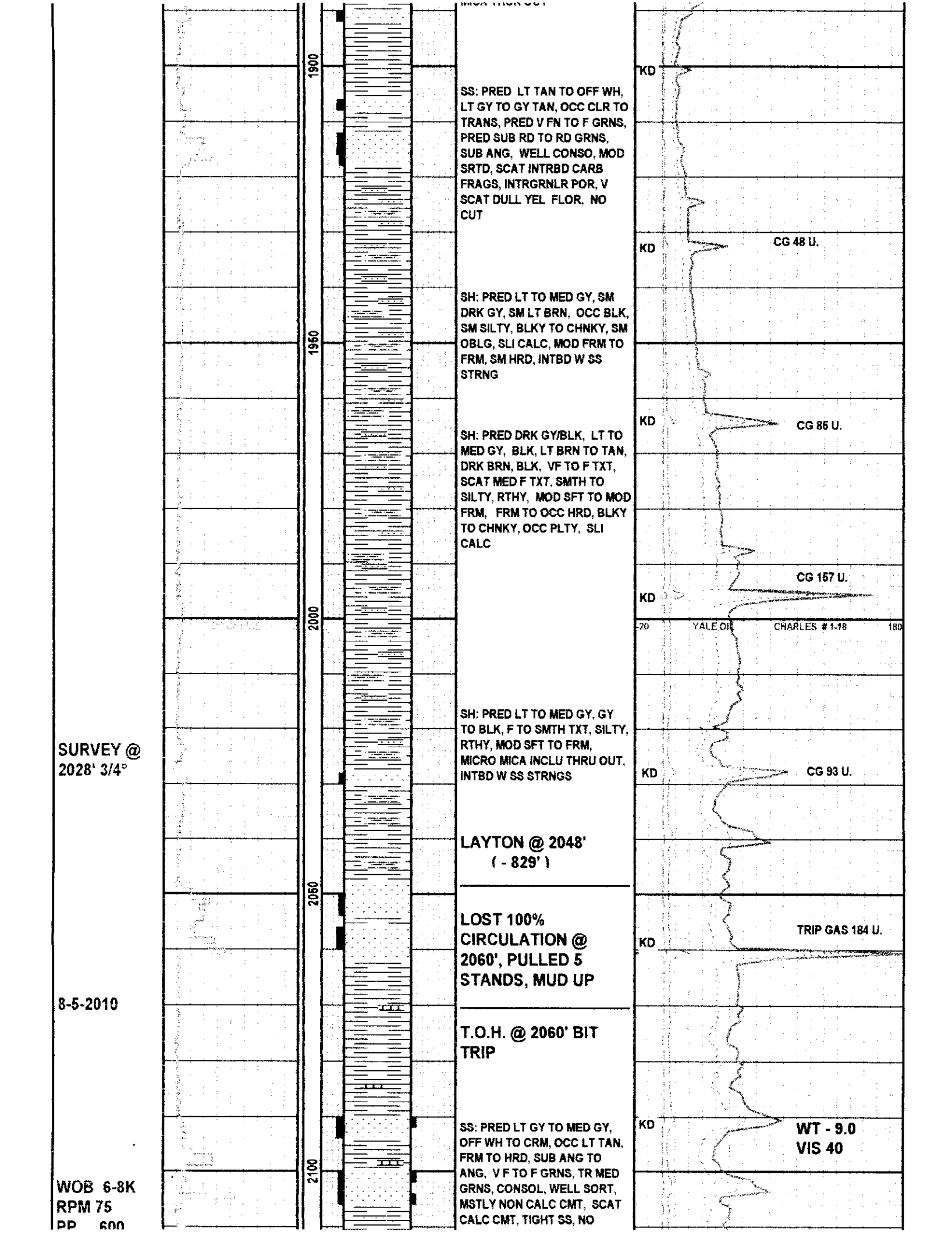
WOB 6K
RPM 75
PP 400
SPM 52


1050
1100
1150
1200
BRN, SFT TO MOD FRM, F TO MED TXT, SMTH TO SILTY, BLKY TO CHNKY, OCC PLTY, SLI CALC, MICRO MICA THRU OUT, INTBD W LS STRNG
SH: PRED LT GY TO GY, INCRS MED TO DK GY, SCAT BLK, LT TO DK BRN, PRED V F TO F TXT, SCAT SLTY TXT, PRED BLKY TO CHNKY, OCC SPLLTY, SFT TO MOD SFT, SM MOD FRM TO FRM, SM SUB WXY, SCAT MICRO MICA THRU, INTBD W LS: PRED OFF WH TO WH CRM, PRED V F TO F XLN, NOD FRM TO FRM, HRD, NO FLOR, NO CUT
LS: PRED OFF WH TO DRTY WH, CRM TO LT TAN, MIC F TO F XLN, OCC MED XLN, BLKY TO CHNKY, IMBD SH FRAG, TR FOSS FRAG, WK INTXLN POR, TR ASPH RESD STNG, V SCAT DULL GLD FLOR, NO CUT
LS: PRED OFF WH TO DRTY WH, CRM TO LT TAN, MIC F TO F XLN, OCC MED XLN, BLKY TO CHNKY, IMBD SH FRAG, TR FOSS FRAG, WK INTXLN POR, V SCAT DULL GLD FLOR, NO CUT
SH: PRED GY TO DRK GY, LT GY TO GY/WH, BLK, LT BRN TO RDS BRN, SFT TO MOD FRM, FRM TO OCC HD, F TO MED TXT, SMTH TO SITLY, RTHY, BLKY, CHUNKY TP PLTY, OCC SPLTY, MICRO MICA INCLU THRU OUT
LS: PRED LT BRN TO BRN, OFF WH TO DRTY WH, CRM TO LT TAN, V F TO F XLN, OCC MED XLN, BLKY TO CHNKY, FRM TO HRD, FREE CALC, WK INTXLN POR, DULL GLD FLOR, NO CUT
SH: PRED LT GY TO GY, DK GY, LT BRN TO DRK BRN, OCC BLK, PRED V F TO F TXT, SMTH TO SILTY, PRED BLKY TO PLTY, MOD SFT TO MOD FRM, SLTY TXT IP, MICA THRU OUT
LS: PRED OFF WH TO DRTY WH, CRM TO LT TAN, V F TO F XLN, OCC MED XLN, BLKY TO CHNKY, IMBD SH FRAG, FREE CAL, TR FOSS FRAG, WK INTXLN POR, VIS FRAC, OCC
-20
YALE OIL
CHARLES # 1-18
180
KD
KD
KD
KD
KD
KD
-20
YALE OIL
CHARLES # 1-18
180
FM GAS 107 U.
CG 98 U.
WOB 8-10K
RPM 75
PP 700
SPM 54

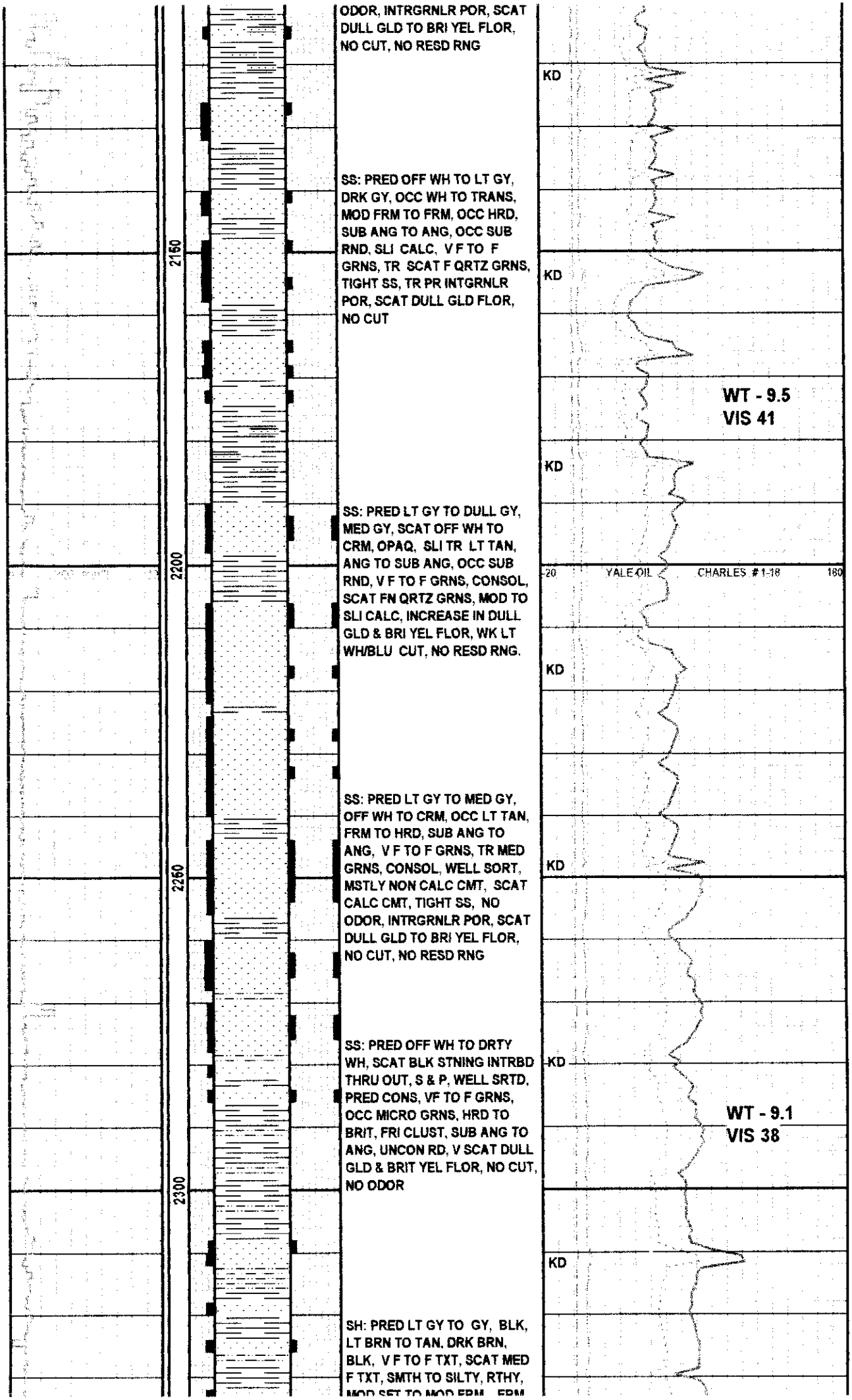

VUG, TR ASP RESD STNG, V SCAT DULL GLD FLOR, NO CUT, INTBD W SS STRNGS, TR CHRT
SH: PRED LT TO MED GY, GY TO BLK, F TO SMTH TXT, SILTY, RTHY, MOD SFT TO FRM, MICRO MICA INCLU THRU OUT, INTBD W LS AND SS STRNGS, NO FLOR
CG 133 U.
KD
FM GAS 84 U.
SH: PRED LT TO MED GY, SM DRK GY, SM LT BRN, OCC BLK, SM SILTY, BLKY TO CHNKY, SM OBLG, SLI CALC, MOD FRM TO FRM, OCC HRD, INTBD W LS AND SS STRNG, V SCAT DULL GLD FLOR, NO CUT
KD
LS: PRED OFF WH TO DRTY WH, CRM TO LT TAN, MIC F TO F XLN, OCC MED XLN, BLKY TO CHNKY, IMBD SH FRAG, TR FOSS FRAG, WK INTXLN POR, V SCAT DULL GLD FLOR, NO CUT
KD
SH: PRED MED GY TO DRK GY, LT GY, LT BRN TO RDSH BRN, V F TO F TXT, SMTH TO SILTY, MOD SFT TO MOD FRM, OCC FRM, BLKY TO CHNKY, MIRCO MICA INCLUS THRU OUT, INTBD W SS: PRED CRM TO LT TAN, LT GY TO GY/WH, MOD TO WELL CONS, VF TO F GRNS, MICRO GRNS, BRTL TO FRI CLUST, FR INGRN POR, ANG TO SUB ANG, SUB RND, V SCAT DULL GLD FLOR, NO CUT, TR PYR, TR FOSS
KD
SH: PRED LT BRN, GY TO GY BLK, OCC BLK, VF TO F TXT, SILTY, SFT TO MOD FRM, OCC FRM, MICA VIS THRU OUT, TR FOSS, TR PYR
SH: PRED LT TO DRK BRN, LT GY TO GY, OCC BLK, VF TO F TXT, SMTH TO SILTY, RTHY, SFT TO MOD FRM, MICRO MICA THRU OUT, TR PY, TR FOSS, INTBD W LS AND SS STRNGS
KD
SH: PRED BRN TO DRK BRN, LT BRN TO TAN, LT GY TO GY, GRN/GY, OCC BLK, SFT TO MOD FRM, VF TO F TXT, SMTH TO SILTY, OCC RTHY, BLKY TO CHNKY, SLI CALC, MICRO MICA INCLU THRU OUT, TR FOSS
KD
1250
1300
1350
1400
WOB 8-10K
RPM 75
PP 700
SPM 54
20
VALE OIL
CHARLES # 1-18
180

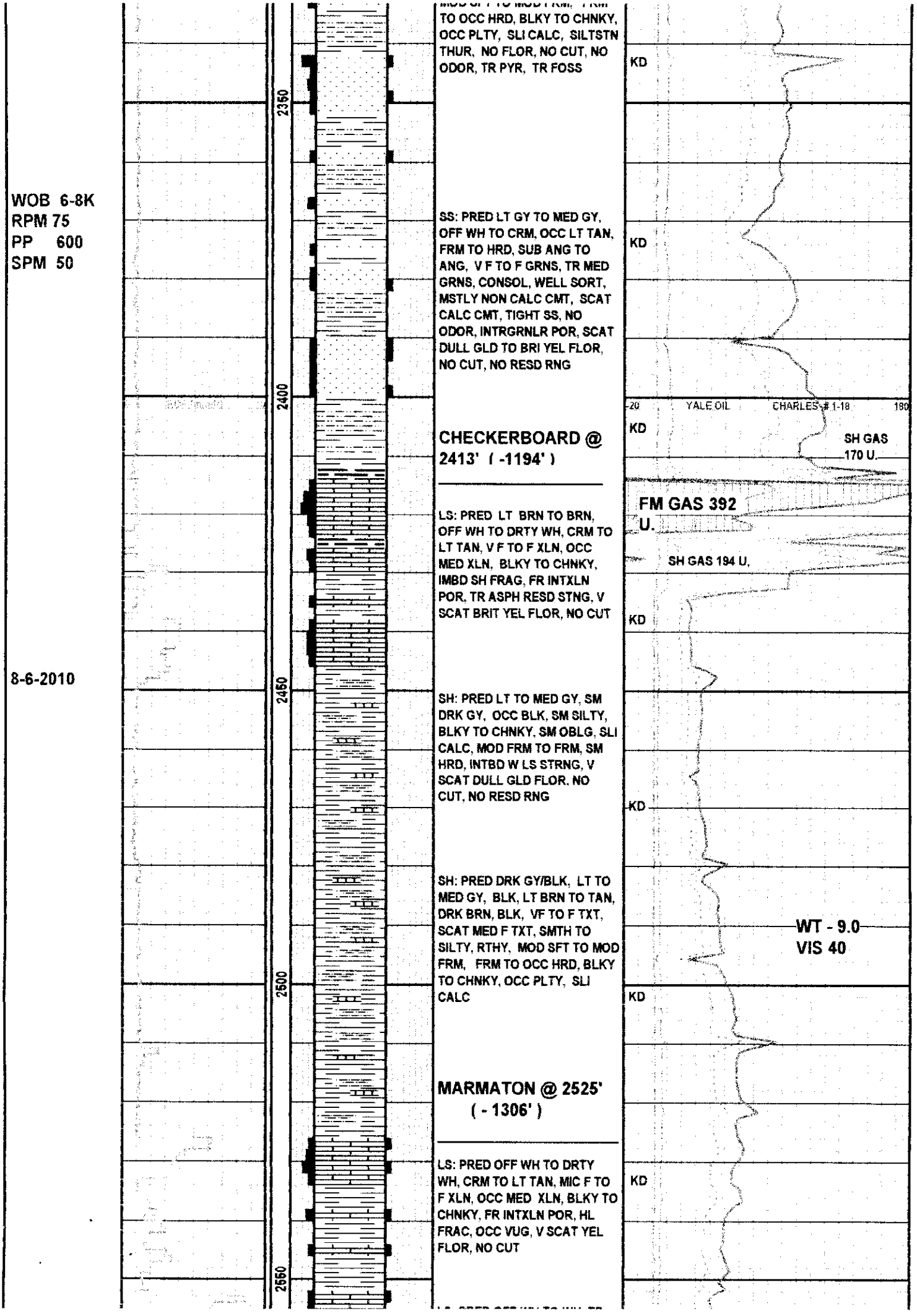

WOB 8-10K
RPM 75
PP 700
SPM 54
1450
1600
1560
1600
1650
P
P
F
SS: PRED OPQ TO TRNSL, FRSTD, WH TO OFF WH, V F TO /F GRNS, OCC CRSE SUB RD UNCONS GRNS, SUB RD TO SUB ANG, PRED CONSL, MOD TO WELL SRTD, PRED CLSTR W DOL CMT, OCC PYR, OCC GLAU, VIS LT STAIN THRU OUT, NO ODOR, ABDNT XGRNLR POR, OCC SH STRNGRS, ABNDT DULL GLD FLOR, SLW WK LT BLU CUT, NO RESD RNG
SS: PRED CLR TO TRANS, OFF WH TO OPQ, VF TO F GRNS, OCC UNCONS MED GRNS, MOD TO WELL SRTD, PRED CONS, SUB RD TO RD, OCC SUB ANG, NON CALC CMT, NO FLOR, TR CHRT, STALITIC FRAC VIS, ASPH STNG VIS
SS: PRED OFF WH TO FRST, TRANS TO OPQ, OCC CRM, WELL SRTD, F TO MED GRNS, SUB ANG TO ANG, OCC SUB RND, MOD TO WELL CONS, FRI, SLI TO NO CALC, SCAT DULL GLD FLOR, NO CUT
SH: PRED LT TO MED GY, SM DRK GY, SM LT BRN, OCC BLK, SM SILTY, BLKY TO CHNKY, SM OBLG, SLI CALC, MOD FRM TO FRM, OCC HRD, INTBD W LS AND SS STRNG, V SCAT DULL GLD FLOR, NO CUT
SS: PRED CLR TO TRANS, OPQ TO OFF WH, VF TO F GRNS, OCC MED GRNS, V FRM TO HRD, UNCONS, WELL SRTD, DULL GLD TO BRI YEL FLOR, WK LT BLU CUT, NO RESD RNG
SS: PRED OFF WH TO DRTY WH, SCAT BLK STNING INTRBD THRU OUT, S & P, WELL SRTD, PRED CONS, VF TO F GRNS, OCC MICRO GRNS, HRD TO BRIT, FRI CLUST, SUB ANG TO ANG, UNCON RD, V SCAT DULL GLD & BRIT YEL FLOR, NO CUT, NO ODOR
KD
KD
KD
KD
KD
KD
KD
MUD CK @ 1520'
WT-9.07
VIS-39
PV-13
YP-4
GEL-2/6
PH-11
WL-9.6
CK-2/32
CHL-1100
CAL-TR
SOL-5.025
WTR-94.975
-20
YALE OIL
CHARLES # 1-18
180

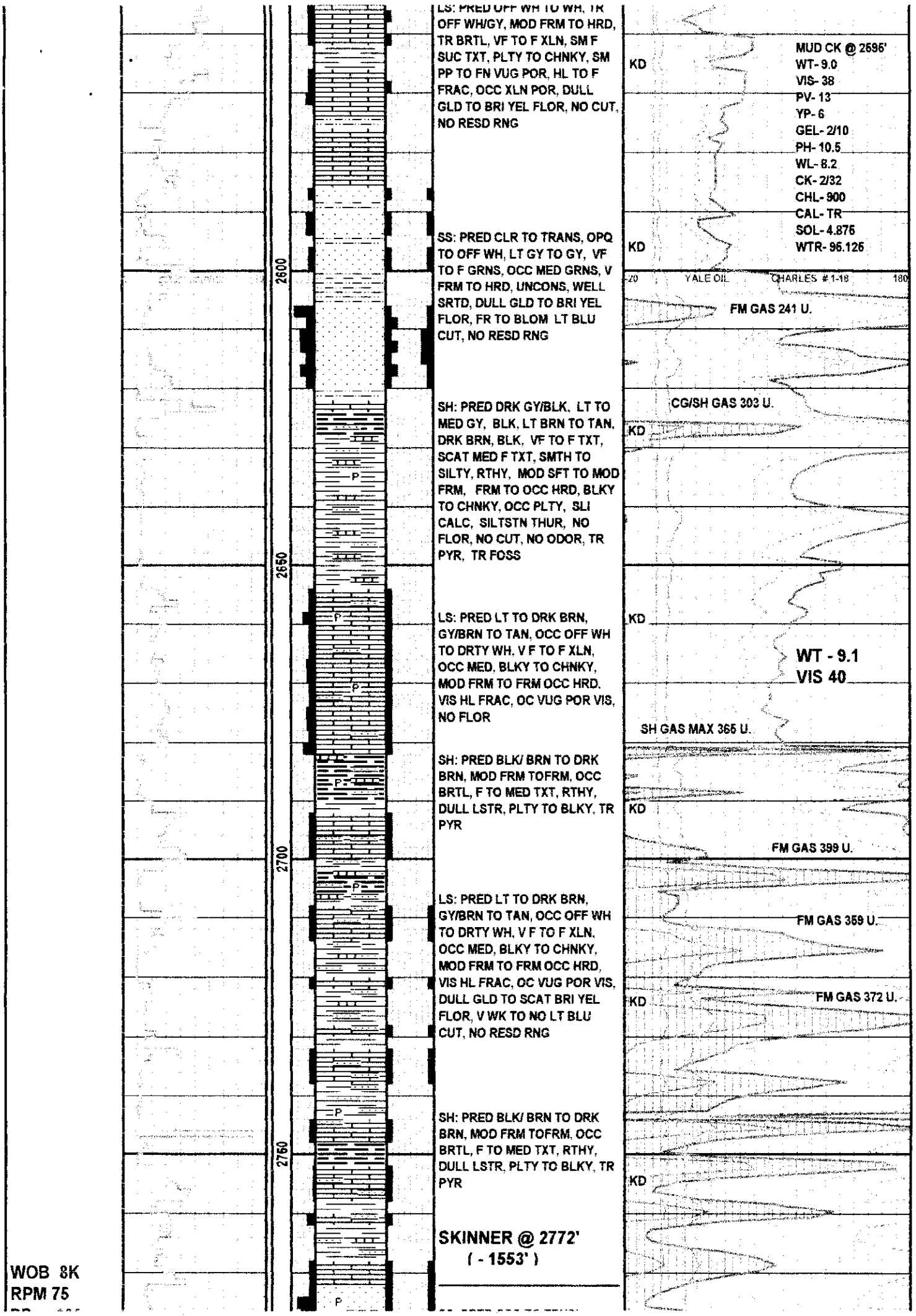

8-4-2010
WOB 6-8K
RPM 75
PP 800
SPM 57
1700
1750
1800
1850
SS: PERD OFF WH TO LT TAN , LT TO MED GY, OFF WH TO LT GY S & P, MOD TO WELL CONS, F TO VF GRNS, OCC MICRO F GRNS, BRTL TO FRI CLUSTS, FR TO GD INTRGR POR, SUB ANG TO SUB RD, WELL SRTD, SIL CALC CMT, NO FLOR, ASPH STNG THUR
SS: PRED OPQ TO TRNSL, FRSTD, WH TO OFF WH, V F TO /F GRNS, OCC CRSE SUB RD UNCONS GRNS, SUB RD TO SUB ANG, PRED CONSL, MOD TO WELL SRTD, PRED CLSTR W DOL CMT, OCC PYR, OCC GLAU, VIS LT STAIN THRU OUT, NO ODOR, ABDNT XGRNLR POR, OCC SH STRNGRS, SCAT DULL GLD FLOR, NO CUT, NO RESD RNG
SS: PRED FRSTD, OPQ, TRNSL, OCC WH, V F TO F GRNS, SUB RD TO SUB ANG, OCC CRSE GRNS, UNCONS, FEW FRI SIL CLSTR, FR SRTD, TR KAOL, TR PYR INC., , VIS LT TAN STAIN, SLI ODOR, ABNDNT XGRNL POR, DULL GLD TO SCAT BRI YEL FLOR, WK LT BLU CUT, NO RESD RNG, INTBD W SH: GY TO LT GY, MOD FRM, TR BRTL, F TXT, DULL LSTR, TR SLTY, OCC MICRO MICA, BLKY, PLTY, NON CALC
SS: PRED OFF WH TO DRTY WH, SCAT BLK STNIG THRU OUT, S & P, WELL SRTD, PRED CONS, VF TO F GRNS, OCC MICRO GRNS, HRD TO BRIT, FRI CLUST, SUB ANG TO ANG, UNCON RD, V SCAT DULL GLD FLOR, NO CUT, NO ODOR
SH: PRED MED GY, LT GY TO DRK GY, BLK TO GY/BLK, LT BRN, SFT TO MOD SFT, SM MOD FRM, F TO MED TXT, SMTH TO SILTY, RTHY, SNDY, MICRO
KD
KD
SH/ CG GAS 160 U.
KD
FM GAS 345 U.
KD
-20
YALE OIL
CHARLES # 1-18
160
KD
SH GAS 88 U.
CG GAS 156 U.
KD
KD

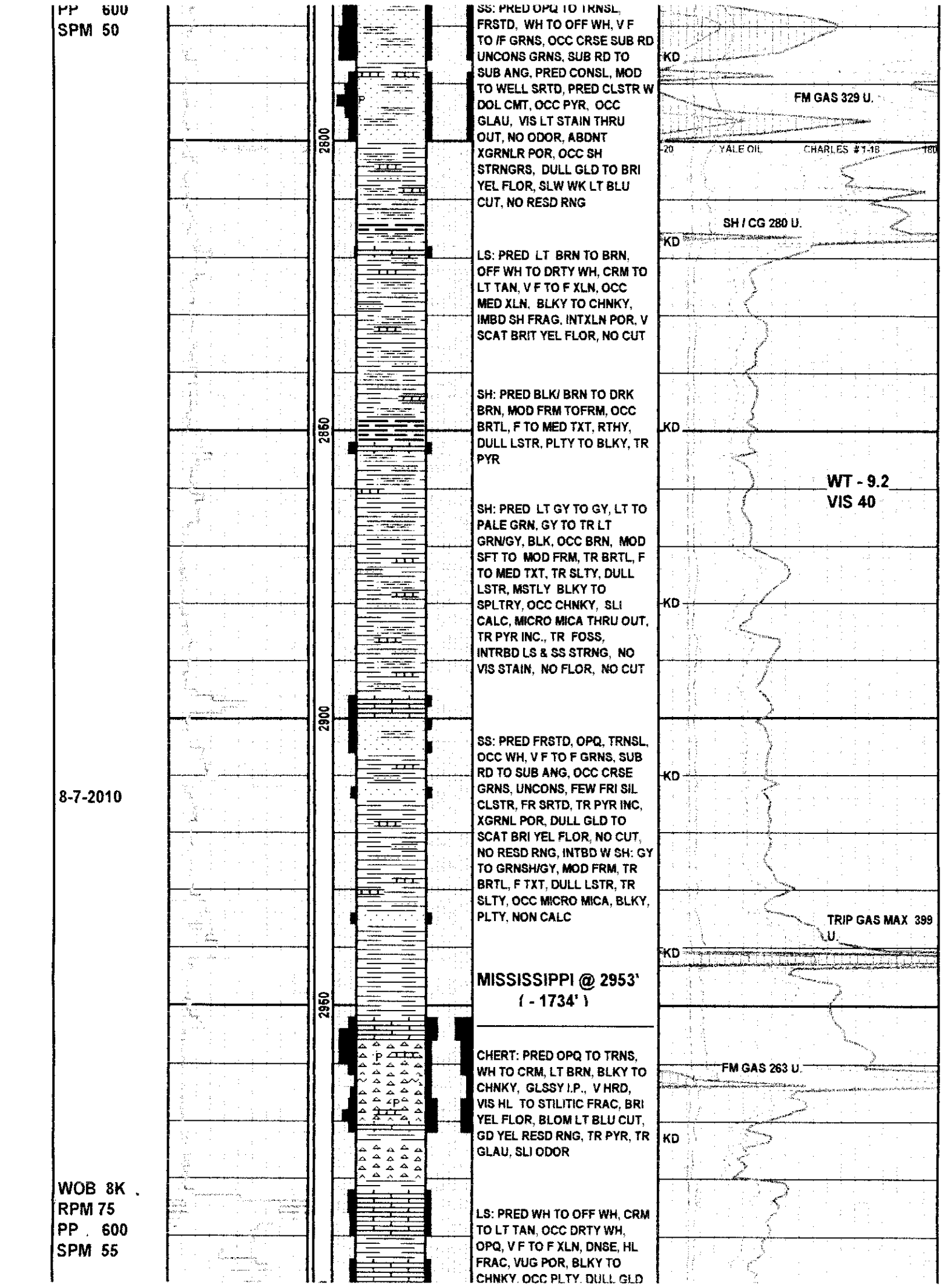

1900
1950
2000
2050
2100
SS: PRED LT TAN TO OFF WH, LT GY TO GY TAN, OCC CLR TO TRANS, PRED V FN TO F GRNS, PRED SUB RD TO RD GRNS, SUB ANG, WELL CONSO, MOD SRTD, SCAT INTRBD CARB FRAGS, INTRGRNLR POR, V SCAT DULL YEL FLOR, NO CUT
SH: PRED LT TO MED GY, SM DRK GY, SM LT BRN, OCC BLK, SM SILTY, BLKY TO CHNKY, SM OBLG, SLI CALC, MOD FRM TO FRM, SM HRD, INTBD W SS STRNG
SH: PRED DRK GY/BLK, LT TO MED GY, BLK, LT BRN TO TAN, DRK BRN, BLK, VF TO F TXT, SCAT MED F TXT, SMTH TO SILTY, RTHY, MOD SFT TO MOD FRM, FRM TO OCC HRD, BLKY TO CHNKY, OCC PLTY, SLI CALC
SH: PRED LT TO MED GY, GY TO BLK, F TO SMTH TXT, SILTY, RTHY, MOD SFT TO FRM, MICRO MICA INCLU THRU OUT, INTBD W SS STRNGS
LAYTON @ 2048'
(- 829')
LOST 100% CIRCULATION @ 2060', PULLED 5 STANDS, MUD UP
T.O.H. @ 2060' BIT TRIP
SS: PRED LT GY TO MED GY, OFF WH TO CRM, OCC LT TAN, FRM TO HRD, SUB ANG TO ANG, V F TO F GRNS, TR MED GRNS, CONSOL, WELL SORT, MSTLY NON CALC CMT, SCAT CALC CMT, TIGHT SS, NO
KD
CG 48 U.
KD
CG 85 U.
KD
CG 157 U.
KD
-20
YALE OIL
CHARLES # 1-18
180
KD
CG 93 U.
KD
TRIP GAS 184 U.
KD
WT - 9.0
VIS 40
SURVEY @ 2028' 3/4°
8-5-2010
WOB 6-8K
RPM 75
PP 600

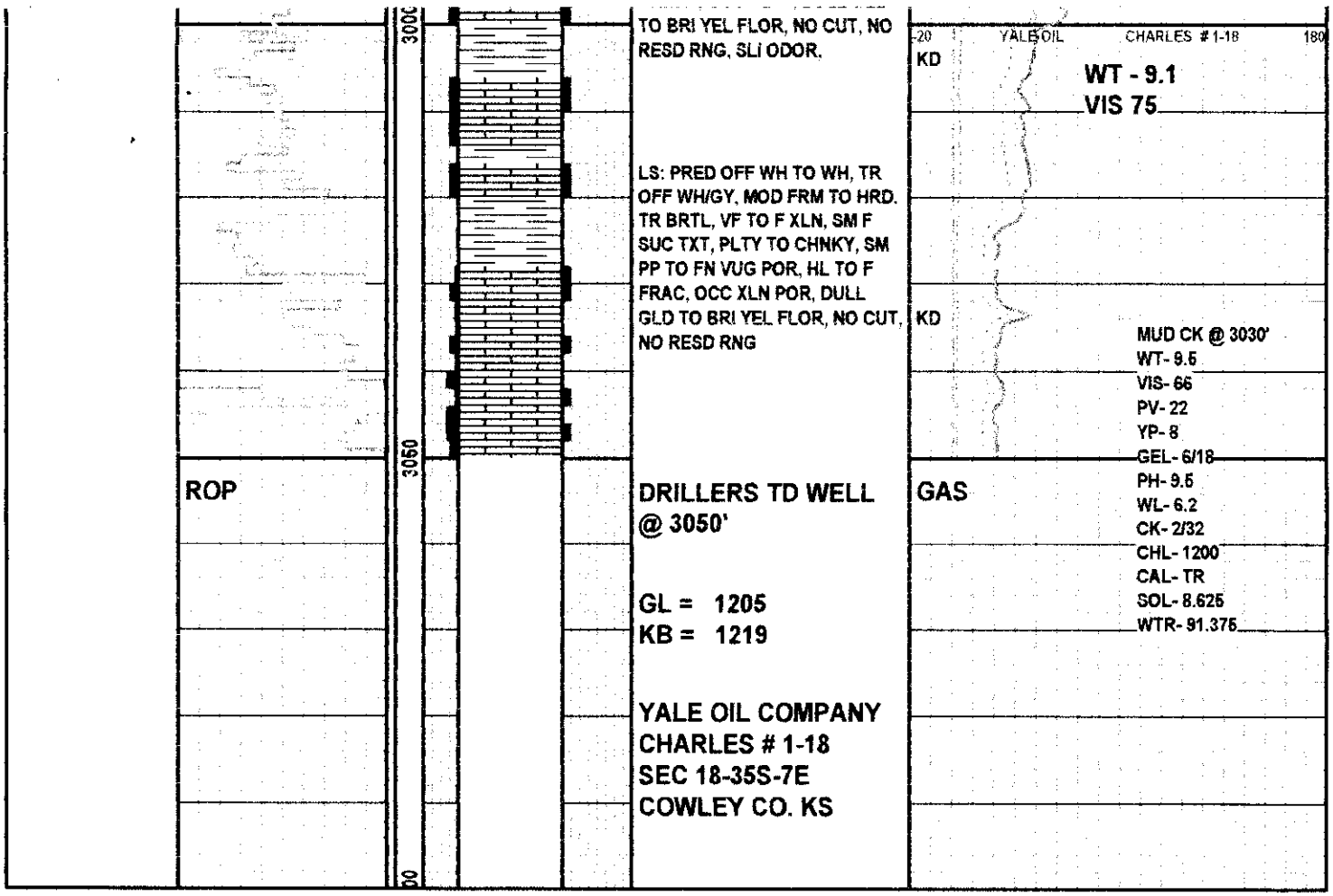
SPM 50


ODOR, INTRGRNLR POR, SCAT DULL GLD TO BRI YEL FLOR, NO CUT, NO RESD RNG
SS: PRED OFF WH TO LT GY, DRK GY, OCC WH TO TRANS, MOD FRM TO FRM, OCC HRD, SUB ANG TO ANG, OCC SUB RND, SLI CALC, V F TO F GRNS, TR SCAT F QRTZ GRNS, TIGHT SS, TR PR INTGRNLR POR, SCAT DULL GLD FLOR, NO CUT
SS: PRED LT GY TO DULL GY, MED GY, SCAT OFF WH TO CRM, OPAQ, SLI TR LT TAN, ANG TO SUB ANG, OCC SUB RND, V F TO F GRNS, CONSOL, SCAT FN QRTZ GRNS, MOD TO SLI CALC, INCREASE IN DULL GLD & BRI YEL FLOR, WK LT WH/BLU CUT, NO RESD RNG.
SS: PRED LT GY TO MED GY, OFF WH TO CRM, OCC LT TAN, FRM TO HRD, SUB ANG TO ANG, V F TO F GRNS, TR MED GRNS, CONSOL, WELL SORT, MSTLY NON CALC CMT, SCAT CALC CMT, TIGHT SS, NO ODOR, INTRGRNLR POR, SCAT DULL GLD TO BRI YEL FLOR, NO CUT, NO RESD RNG
SS: PRED OFF WH TO DRTY WH, SCAT BLK STNING INTRBD THRU OUT, S & P, WELL SRTD, PRED CONS, VF TO F GRNS, OCC MICRO GRNS, HRD TO BRIT, FRI CLUST, SUB ANG TO ANG, UNCON RD, V SCAT DULL GLD & BRIT YEL FLOR, NO CUT, NO ODOR
SH: PRED LT GY TO GY, BLK, LT BRN TO TAN, DRK BRN, BLK, V F TO F TXT, SCAT MED F TXT, SMTH TO SILTY, RTHY,
2160
2200
2260
2300
KD
KD
KD
KD
KD
KD
KD
WT - 9.5
VIS 41
WT - 9.1
VIS 38
-20
YALE OIL
CHARLES # 1-18
180


TO OCC HRD, BLKY TO CHNKY, OCC PLTY, SLI CALC, SILTSTN THUR, NO FLOR, NO CUT, NO ODOR, TR PYR, TR FOSS
WOB 6-8K
RPM 75
PP 600
SPM 50
SS: PRED LT GY TO MED GY, OFF WH TO CRM, OCC LT TAN, FRM TO HRD, SUB ANG TO ANG, V F TO F GRNS, TR MED GRNS, CONSOL, WELL SORT, MSTLY NON CALC CMT, SCAT CALC CMT, TIGHT SS, NO ODOR, INTRGRNLR POR, SCAT DULL GLD TO BRI YEL FLOR, NO CUT, NO RESD RNG
CHECKERBOARD @ 2413' (-1194')
LS: PRED LT BRN TO BRN, OFF WH TO DRTY WH, CRM TO LT TAN, V F TO F XLN, OCC MED XLN, BLKY TO CHNKY, IMBD SH FRAG, FR INTXLN POR, TR ASPH RESD STNG, V SCAT BRIT YEL FLOR, NO CUT
8-6-2010
SH: PRED LT TO MED GY, SM DRK GY, OCC BLK, SM SILTY, BLKY TO CHNKY, SM OBLG, SLI CALC, MOD FRM TO FRM, SM HRD, INTBD W LS STRNG, V SCAT DULL GLD FLOR, NO CUT, NO RESD RNG
SH: PRED DRK GY/BLK, LT TO MED GY, BLK, LT BRN TO TAN, DRK BRN, BLK, VF TO F TXT, SCAT MED F TXT, SMTH TO SILTY, RTHY, MOD SFT TO MOD FRM, FRM TO OCC HRD, BLKY TO CHNKY, OCC PLTY, SLI CALC
MARMATON @ 2525' (- 1306')
LS: PRED OFF WH TO DRTY WH, CRM TO LT TAN, MIC F TO F XLN, OCC MED XLN, BLKY TO CHNKY, FR INTXLN POR, HL FRAC, OCC VUG, V SCAT YEL FLOR, NO CUT
2350
2400
2450
2500
2550
KD
-20
YALE OIL
CHARLES # 1-18
180
SH GAS 170 U.
FM GAS 392 U.
SH GAS 194 U.
WT - 9.0
VIS 40


LS: PRED OFF WH TO WH, TR OFF WH/GY, MOD FRM TO HRD, TR BRTL, VF TO F XLN, SM F SUC TXT, PLTY TO CHNKY, SM PP TO FN VUG POR, HL TO F FRAC, OCC XLN POR, DULL GLD TO BRI YEL FLOR, NO CUT, NO RESD RNG
SS: PRED CLR TO TRANS, OPQ TO OFF WH, LT GY TO GY, VF TO F GRNS, OCC MED GRNS, V FRM TO HRD, UNCONS, WELL SRTD, DULL GLD TO BRI YEL FLOR, FR TO BLOM LT BLU CUT, NO RESD RNG
SH: PRED DRK GY/BLK, LT TO MED GY, BLK, LT BRN TO TAN, DRK BRN, BLK, VF TO F TXT, SCAT MED F TXT, SMTH TO SILTY, RTHY, MOD SFT TO MOD FRM, FRM TO OCC HRD, BLKY TO CHNKY, OCC PLTY, SLI CALC, SILTSTN THUR, NO FLOR, NO CUT, NO ODOR, TR PYR, TR FOSS
LS: PRED LT TO DRK BRN, GY/BRN TO TAN, OCC OFF WH TO DRTY WH, V F TO F XLN, OCC MED, BLKY TO CHNKY, MOD FRM TO FRM OCC HRD, VIS HL FRAC, OC VUG POR VIS, NO FLOR
SH: PRED BLK/ BRN TO DRK BRN, MOD FRM TOFRM, OCC BRTL, F TO MED TXT, RTHY, DULL LSTR, PLTY TO BLKY, TR PYR
LS: PRED LT TO DRK BRN, GY/BRN TO TAN, OCC OFF WH TO DRTY WH, V F TO F XLN, OCC MED, BLKY TO CHNKY, MOD FRM TO FRM OCC HRD, VIS HL FRAC, OC VUG POR VIS, DULL GLD TO SCAT BRI YEL FLOR, V WK TO NO LT BLU CUT, NO RESD RNG
SH: PRED BLK/ BRN TO DRK BRN, MOD FRM TOFRM, OCC BRTL, F TO MED TXT, RTHY, DULL LSTR, PLTY TO BLKY, TR PYR
SKINNER @ 2772'
(- 1553')
2600
2650
2700
2760
P
KD
MUD CK @ 2596'
WT- 9.0
VIS- 38
PV- 13
YP- 6
GEL- 2/10
PH- 10.5
WL- 8.2
CK- 2/32
CHL- 900
CAL- TR
SOL- 4.875
WTR- 96.125
20
YALE OIL
CHARLES # 1-18
180
FM GAS 241 U.
CG/SH GAS 303 U.
WT - 9.1
VIS 40
SH GAS MAX 365 U.
FM GAS 399 U.
FM GAS 359 U.
FM GAS 372 U.
WOB 8K
RPM 75


PP 600
SPM 50
2800
2850
2900
2950
SS: PRED OPQ TO TRNSL, FRSTD, WH TO OFF WH, V F TO /F GRNS, OCC CRSE SUB RD UNCONS GRNS, SUB RD TO SUB ANG, PRED CONSL, MOD TO WELL SRTD, PRED CLSTR W DOL CMT, OCC PYR, OCC GLAU, VIS LT STAIN THRU OUT, NO ODOR, ABDNT XGRNLR POR, OCC SH STRNGRS, DULL GLD TO BRI YEL FLOR, SLW WK LT BLU CUT, NO RESD RNG
LS: PRED LT BRN TO BRN, OFF WH TO DRTY WH, CRM TO LT TAN, V F TO F XLN, OCC MED XLN, BLKY TO CHNKY, IMBD SH FRAG, INTXLN POR, V SCAT BRIT YEL FLOR, NO CUT
SH: PRED BLK/ BRN TO DRK BRN, MOD FRM TOFRM, OCC BRTL, F TO MED TXT, RTHY, DULL LSTR, PLTY TO BLKY, TR PYR
SH: PRED LT GY TO GY, LT TO PALE GRN, GY TO TR LT GRN/GY, BLK, OCC BRN, MOD SFT TO MOD FRM, TR BRTL, F TO MED TXT, TR SLTY, DULL LSTR, MSTLY BLKY TO SPLTRY, OCC CHNKY, SLI CALC, MICRO MICA THRU OUT, TR PYR INC., TR FOSS, INTRBD LS & SS STRNG, NO VIS STAIN, NO FLOR, NO CUT
SS: PRED FRSTD, OPQ, TRNSL, OCC WH, V F TO F GRNS, SUB RD TO SUB ANG, OCC CRSE GRNS, UNCONS, FEW FRI SIL CLSTR, FR SRTD, TR PYR INC, XGRNL POR, DULL GLD TO SCAT BRI YEL FLOR, NO CUT, NO RESD RNG, INTBD W SH: GY TO GRNSH/GY, MOD FRM, TR BRTL, F TXT, DULL LSTR, TR SLTY, OCC MICRO MICA, BLKY, PLTY, NON CALC
MISSISSIPPI @ 2953'
(- 1734')
CHERT: PRED OPQ TO TRNS, WH TO CRM, LT BRN, BLKY TO CHNKY, GLSSY I.P., V HRD, VIS HL TO STILITIC FRAC, BRI YEL FLOR, BLOM LT BLU CUT, GD YEL RESD RNG, TR PYR, TR GLAU, SLI ODOR
LS: PRED WH TO OFF WH, CRM TO LT TAN, OCC DRTY WH, OPQ, V F TO F XLN, DNSE, HL FRAC, VUG POR, BLKY TO CHNKY, OCC PLTY, DULL GLD
8-7-2010
WOB 8K
RPM 75
PP 600
SPM 55
KD
FM GAS 329 U.
20
YALE OIL
CHARLES #1-18
180
SH / CG 280 U.
WT - 9.2
VIS 40
TRIP GAS MAX 399 U.
FM GAS 263 U.


TO BRI YEL FLOR, NO CUT, NO RESD RNG, SLI ODOR.
LS: PRED OFF WH TO WH, TR OFF WH/GY, MOD FRM TO HRD. TR BRTL, VF TO F XLN, SM F SUC TXT, PLTY TO CHNKY, SM PP TO FN VUG POR, HL TO F FRAC, OCC XLN POR, DULL GLD TO BRI YEL FLOR, NO CUT, NO RESD RNG
DRILLERS TD WELL @ 3050'
GL = 1205
KB = 1219
YALE OIL COMPANY
CHARLES # 1-18
SEC 18-35S-7E
COWLEY CO. KS
-20
YALE OIL
CHARLES # 1-18
180
KD
WT - 9.1
VIS 75
KD
MUD CK @ 3030'
WT- 9.5
VIS- 66
PV- 22
YP- 8
GEL- 6/18
PH- 9.5
WL- 6.2
CK- 2/32
CHL- 1200
CAL- TR
SOL- 8.625
WTR- 91.375
ROP
GAS
3050