



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1206212
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- New Well Re-Entry Workover
- Oil WSW SWD SIOW
- Gas 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
- Plug Back Conv. to GSW Conv. to Producer
- Commingled Permit #: _____
- Dual Completion Permit #: _____
- SWD Permit #: _____
- ENHR Permit #: _____
- GSW Permit #: _____

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
-----------------------------------	-----------------	---

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes 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: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

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.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested
Date: _____
- Confidential Release Date: _____
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT I II III Approved by: _____ Date: _____

1206212

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
--	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
----------------	-------	---------	------------	---

Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
---	--

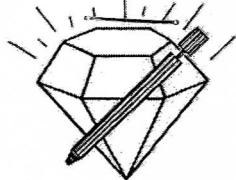
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
--	--	---

Form	ACO1 - Well Completion
Operator	Range Oil Company, Inc.
Well Name	Snyder 1
Doc ID	1206212

Tops

Name	Top	Datum
Iatan	1903	-635
Layton	2378	-1110
KC	2518	-1250
BKC	2649	-1381
Cherokee	2846	-1578
Mississippian chert	3108	-1840
Mississippian lime	3137	-1869
LTD	3340	-2072



DIAMOND TESTING, LLC
P.O. Box 157
HOISINGTON, KANSAS 67544
(620) 653-7550 • (800) 542-7313
Snyder1DST1

Company Range Oil Company, Inc. Lease & Well No. Snyder No. 1
Elevation 1271 EGL Formation Mississippi Effective Pay Ft. Ticket No. RR012
Date 3-22-14 Sec. 28 Twp. 32S Range 5E County Cowley State Kansas
Test Approved By Ken Wallace Diamond Representative Ricky Ray

Formation Test No. 1 Interval Tested from 3,117 ft. to 3,127 ft. Total Depth 3,127 ft.
Packer Depth 3,112 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 3,117 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set ft.

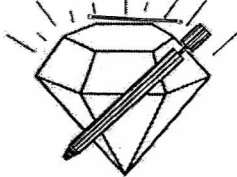
Top Recorder Depth (Inside) 3,098 ft. Recorder Number 5515 Cap. 5,000 psi.
Bottom Recorder Depth (Outside) 3,119 ft. Recorder Number 5586 Cap. 5,000 psi.
Below Straddle Recorder Depth ft. Recorder Number Cap. psi.

Drilling Contractor Summit Drilling Company - Rig 1 Drill Collar Length 314 ft. I.D. 2 1/4 in.
Mud Type Chemical Viscosity 46 Weight Pipe Length ft. I.D. in.
Weight 9.5 Water Loss 8.0 cc. Drill Pipe Length 2,770 ft. I.D. 3 in.
Chlorides 1,300 P.P.M. Test Tool Length 33 ft. Tool Size 3 1/2-IF in.
Pumps: Make Sterling Serial Number 4 Anchor Length 10 ft. Size 4 1/2-FH in.
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
Main Hole Size 7 7/8 in. Tool Joint Size 3 1/2-XH in.

Blow: 1st Open: Weak, 1/4 in. blow. Died in 15 mins. No blow back during shut-in.
2nd Open: No blow. No blow back during shut-in.

Recovered 28 ft. of mud = .137760 bbls. (Grind out: 100%-mud)
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Recovered ft. of
Remarks Tool Sample Grind Out: 100%-mud

Time Set Packer(s) 10:45 P.M. Time Started off Bottom 12:25 A.M. Maximum Temperature 111°
Initial Hydrostatic Pressure.....(A) 1494 P.S.I.
Initial Flow Period.....Minutes 30 (B) 24 P.S.I. to (C) 75 P.S.I.
Initial Closed In Period.....Minutes 30 (D) 186 P.S.I.
Final Flow Period.....Minutes 10 (E) 30 P.S.I. to (F) 61 P.S.I.
Final Closed In Period.....Minutes 30 (G) 158 P.S.I.
Final Hydrostatic Pressure.....(H) 1489 P.S.I.



DIAMOND TESTING, LLC
 P.O. Box 157
HOISINGTON, KANSAS 67544
 (620) 653-7550 • (800) 542-7313
 Snyder1DST2

Company Range Oil Company, Inc. Lease & Well No. Snyder No. 1
 Elevation 1271 EGL Formation Mississippi Effective Pay _____ Ft. Ticket No. RR013
 Date 3-23-14 Sec. 28 Twp. 32S Range 5E County Cowley State Kansas
 Test Approved By Ken Wallace Diamond Representative Ricky Ray

Formation Test No. 2 Interval Tested from 3,117 ft. to 3,132 ft. Total Depth 3,132 ft.
 Packer Depth 3,112 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
 Packer Depth 3,117 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
 Depth of Selective Zone Set _____ ft.

Top Recorder Depth (Inside) 3,098 ft. Recorder Number 5515 Cap. 5,000 psi.
 Bottom Recorder Depth (Outside) 3,118 ft. Recorder Number 5586 Cap. 5,000 psi.
 Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ psi.

Drilling Contractor Summit Drilling Company - Rig 1 Drill Collar Length 314 ft I.D. 2 1/4 in.
 Mud Type Chemical Viscosity 45 Weight Pipe Length _____ ft I.D. _____ in.
 Weight 9.3 Water Loss 7.2 cc. Drill Pipe Length 2,770 ft I.D. 3 in.
 Chlorides 1,300 P.P.M. Test Tool Length 33 ft Tool Size 3 1/2-IF in.
 Jars: Make Sterling Serial Number 4 Anchor Length 15 ft. Size 4 1/2-FH in.
 Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
 Main Hole Size 7 7/8 in. Tool Joint Size 3 1/2-XH in.

Blow: 1st Open: Weak, 1/4 in. blow increasing to 1 in. in 30 mins. No blow back during shut-in.
 2nd Open: Weak, 1/4 in. blow increasing to 1 1/4 ins. in 60 mins. No blow back during shut-in.

Recovered 15 ft. of oil specked mud = .073800 bbls. (Grind out: 100%-mud w/ a few oil specks)
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____

Remarks Tool Sample Grind Out: 100%-mud

Time Set Packer(s) 1:30 P.M. Time Started off Bottom 4:30 P.M. Maximum Temperature 105°
 Initial Hydrostatic Pressure.....(A) 1520 P.S.I.
 Initial Flow Period.....Minutes 30 (B) 10 P.S.I. to (C) 16 P.S.I.
 Initial Closed In Period.....Minutes 30 (D) 54 P.S.I.
 Final Flow Period.....Minutes 60 (E) 16 P.S.I. to (F) 20 P.S.I.
 Final Closed In Period.....Minutes 60 (G) 70 P.S.I.
 Final Hydrostatic Pressure.....(H) 1513 P.S.I.

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY	RANGE OIL COMPANY		ELEVATIONS	
LEASE	SNYDER #1		KB	1268'
FIELD			DF	
LOCATION	2300' FNL + 2380' FEL, NE/4		GL	1258'
SEC	28	TWSP 32 S RGE 5e	Measurements Are All From K.B.	
COUNTY	COWLEY STATE K5		CASING SURFACE 8 5/8" @ 233'	
CONTRACTOR	SUMMIT DRLG CO		PRODUCTION NONE	
SPUD	3/12/14	COMP 3/25/14	ELECTRICAL SURVEYS	
RTD	3350'	LTD 3340'	DI/GR / Dual Por	
MUD UP	1800'	TYPE MUD CHEM		
SAMPLES SAVED FROM	1800'	TO	RTD	
DRILLING TIME KEPT FROM	1800'	TO	RTD	
SAMPLES EXAMINED FROM	1800'	TO	RTD	
GEOLOGICAL SUPERVISION FROM	1900'	TO	RTD	
GEOLOGIST ON WELL <u>KEN WALLACE</u>				
FORMATION TOPS	LOG	SAMPLES		
ITAN	1903 (-635)	1911 (-643)		
STALNAKER	1948 (-680)	1951 (-683)		
LAYTON	2378 (-1110)	2386 (-1118)		
KANSAS CITY	2518 (-1250)	2525 (-1257)		
B/KC	2649 (-1381)	2658 (-1390)		
ALTA MOUNT	2726 (-1458)	2736 (-1468)		
CHEKOKEE	2846 (-1578)	2855 (-1587)		
MISS A	3108 (-1846)	3110 (-1842)		
MISS LS	3137 (-1869)	3144 (-1876)		
RTD	3340 (-2672)	3350 (-2002)		

REMARKS SNYDER #1 RAN LOW TO KEY WELL WITH NEGATIVE DST RESULTS & WAS P&A.

Ken Wallace

3-12-14 MIRT

3-13-14 Drlg @ 63'

3-14-14 PTD 238'; 3/4" @ 238'

3-15-14 Drlg @ 721'; 3/4" @ 605'

3-16-14 Drlg @ 1170'; 1/4" @ 1170'; BT @ 880'

3-17-14 Drlg @ 1485'; 1/2" @ 1485'; REPAIR MUD PUMP

3-18-14 Drlg @ 1862'; 3/4" @ 1861'

3-19-14 Drlg @ 2265'; BT @ 1893'

3-20-14 Drlg @ 2531'; 1" @ 2364'

3-21-14 Drlg @ 2737'; RT @ 2578'; 1/4" @ 2578'

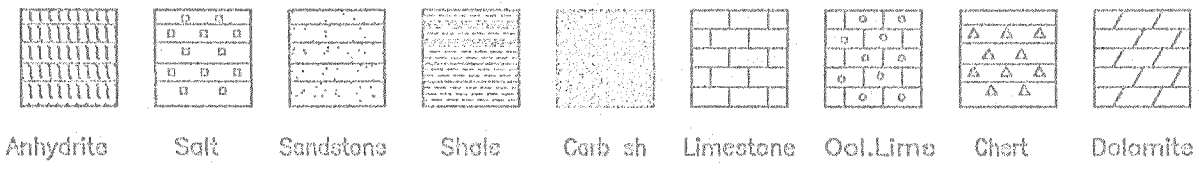
3-22-14 Drlg @ 3084'; 1 1/4" @ 3127'

3-23-14 PTD 3132'; Running DST #2

3-24-14 Drlg @ 3243'

3-25-14 RTD 3350' / LTD 3340'

LEGEND



SCALE " = 100'

DEPTH	DST #	DRILLING TIME - Minutes Per Foot Rate of Penetration Decreases	SAMPLE DESCRIPTIONS	REMARKS
-------	-------	---	---------------------	---------

1800

20

40

60

80

1900

20

40

60

80

2000

20



SH, GY, SM BRN, SLTY

AA, SM VFG SS

SH, GY, MIC, SLTY

LS, BRN, FXLN-SUCRO, CKY, 4ty **IATAN**
1911 (-643)

SH, GY, MIC, PYR, SDY

STALNAKER
1951 (-683)

SS, LT GY, VFG, WSOR/ROD, NS, NO, NF

Fud Mud: 1972'
V40, wt. 9.3, LCMZ

AA

SH, GY w/ BL LAM

SS, MLKY WH, MGR, WSOR/
ROD, NS, NO, NF

AA

40
60
80
2100
20
40
60
80
2200
20
40



SH, GY

AA

LS, dk BR, FXL, CKY, NS

SS, LTGY, VFG, ARG, PSOR/
ROD, NS, NO, NF

AA, HARD

SS, AA

SH, GY

AA

PERRY LS
2125 (-857)
PERRY SS
2136 (-868)

Fud Mud: 2212'
V 42, wt. 9.3, LCM 4

60

80

2300

20

40

60

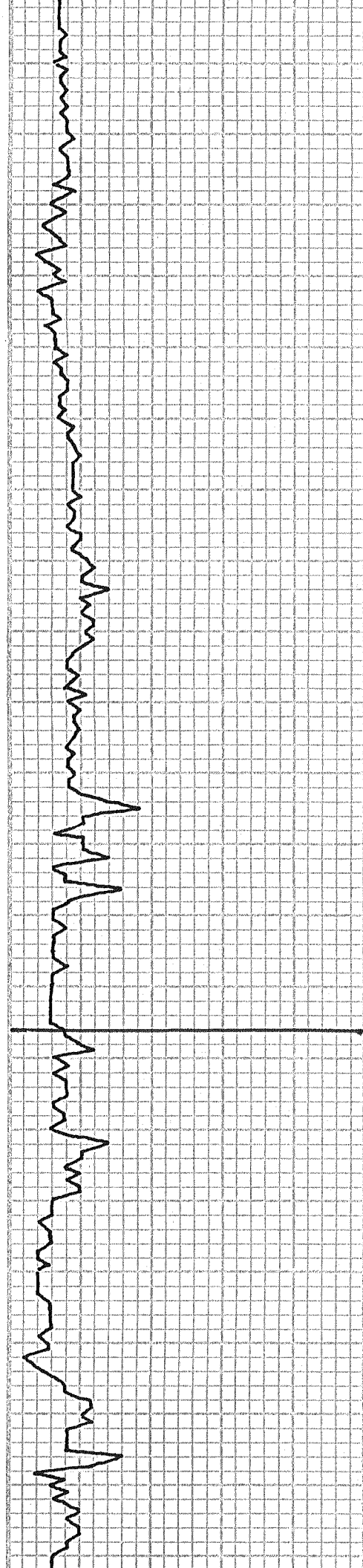
80

2400

20

40

60



AA

SS, DKG, ARG, PSOR/ROD,
SL FOSS, NS, NO, NF

SH, GY, MIC, SLTY

LAYTON

SS, LTGY, FGD, P-FSOR/PROD,
FIGØ, NS, NO, NF

2386 (-1118)

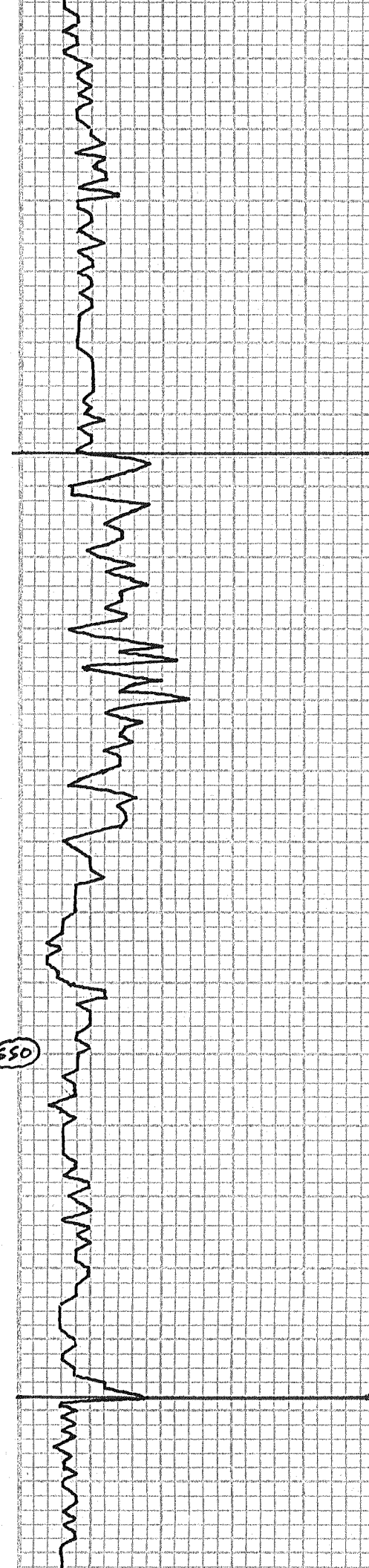
SHLY

SS, CL, VFG, WSOR/ROD,
S&P TEX, NS, NO, NF

AA, SM DKG SH

SS, AA

80
2500
20
40
60
80
2600
20
40
60
80



SH, GY, SM BRN

AA

LS, DKG, BRN, CXLN, FOSS,

LS, TAN, OOL, FOSS, NS, NO, NF

SH, BL

LS, BRN-TAN, FXLN, SL OOL, FOSS, CKY, NS, NO, NF

SH, GY

LS, TAN, FXLN, FOSS, NS, NO, NF

SH, BL

LS, TAN, FXLN-CKY, TR PPO, TR OOL, SL FL, TR SED

LS, CRM, OOL, FOSS, NS, NO, NF

LS, BRN, FXLN-DSE, SL CKY, NS, NO, NF

SH, BL-DKG

LS, CRM, FOSS, FXLN, CKY

SS, GRN, VFG, GLAU, PSDR/ PROD, NS, NO, NF

SH, BRN, SLTY, SM GY

Fud Mud: 2516'
V 45, wt. 9.3, LCM 4
KANSAS CITY
2525 (-1257)

(550)

BKC
2658 (-1390)

2700

AA; SM SS, VFG, NS, NO, NF

SH, GRN, SDY

Fud Mud: 2712'
V49, wt. 9.4, LCM4

20

AA

ALTAMONT

40

LS, TAN, FXLN, CKY, NS, NO, NF

2736 (-1468)

60

LS, AA

80

LS, TAN-BRN, FXLN, CKY,
NS, NO, NF

SH, BL

2800

LS, BRN-TAN, FXLN, CKY, NS,
NO, NF

LS, CRM, VF OOL, CKY, FOSS,
NS, NO, NF

20

SH, BL

LS, TAN, FXLN, SL FOSS,
CKY, NS, NO, NF

40

AA, CKY

SH, BL

CHEROKEE

60

SH, BL

2855 (-1587)

80

SH, GY, SLTY

2900

SH, GY

20
46
66
80
3000
20
40
60
80
3100
20



50

50

AA, PYR

SH/COAL, BL

SS, CL-MILKY, FG, PSOR/PROB,
1% FL, PIGG, SSFO, NO

AA, SLFL, NSFO, NO

SH, BL

SH, GY, SM LTGRN, SLTY

AA

SH, DK GY

SS, to SDY LS, BL ORG INCL,
NS, NO, NF

SH, GY, SLTY

SH, VC

Δ, WH, DPA, GRN, GLAU, 70% FR, NS,
NO, NF

Δ, WH, 60% TRIP, 40% FR, GSO W/STN
80% TRIP Δ, BRITFL, FO IN TRAY

CATTLEMAN

2951(-1685)

SHORT TRIP @ 3057'

Fnd Mud: 3074
V 46, wt. 9.5, LCM2

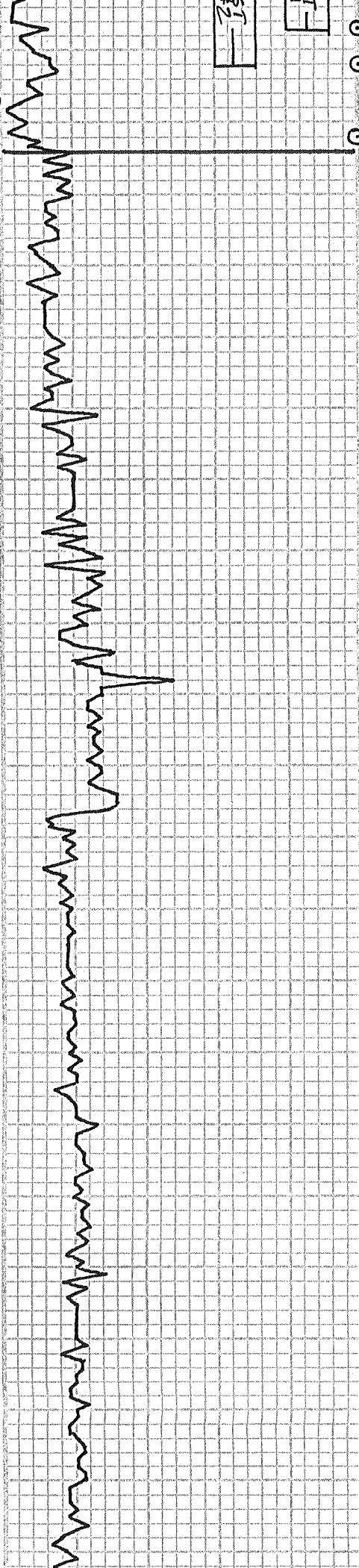
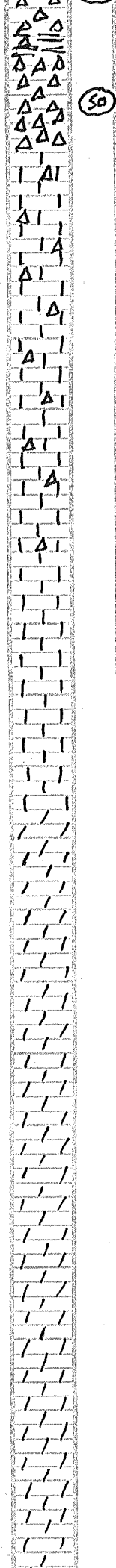
MISS CT

3110(-1842)

#D

#D

40
60
80
3200
20
40
60
80
3300
20
40



GD ODOR, GB, GD CUT
 VLSH w/ AAA
 A, WH, 90% TRIP, 10% FR, SSFO/FL 80% of A, STN, FODOR, GD CUT
 LS TAN, SMLTGY, FXLN, GLAU, w/ AAA & SO/FL, NO CUT IN LS
 LS, TAN, OOL, SL GLAU, PUBP, SL FOSS, SL STN & FL, NUIS FO, FOD PCUT, AAA w/ SO AA
 LS, DK BRN, FOSS, CKY, PPPP, NFO, NSTN, NF, SL ODOR, 5% TRIP, A w/ SSFO/FL, NO CUT IN LS
 LS, AA, A (GY/WH), NSFO INLS, NOODOR, NF, FAIR CUT LS
 LS, AA, sm DK BRN A, NSO, NF, NO, FAIR CUT
 LS, AA, SI FOSS, GLAU, NOODOR, NS, NF, NO CUT, SI A
 LS, AA, SL CUT
 LS, AA, GD CUT
 Dol, DK BRN-TAN (MTLD), SUCR, FOSS, CKY, NS, NF, NO, GD CUT
 Dol, AB, GD CUT
 AA, GD CUT, SL GLAU
 AA, GD CUT
 AA, GD CUT
 AA, sm Lt Brn/Brn LAME GD CUT
 Dol, DR BRN, SUCR, NS, NFO, NO, GD CUT
 AA, GD CUT
 AA, POOR CUT
 AA, POOR CUT

MISS LS
 3144 (-1876)

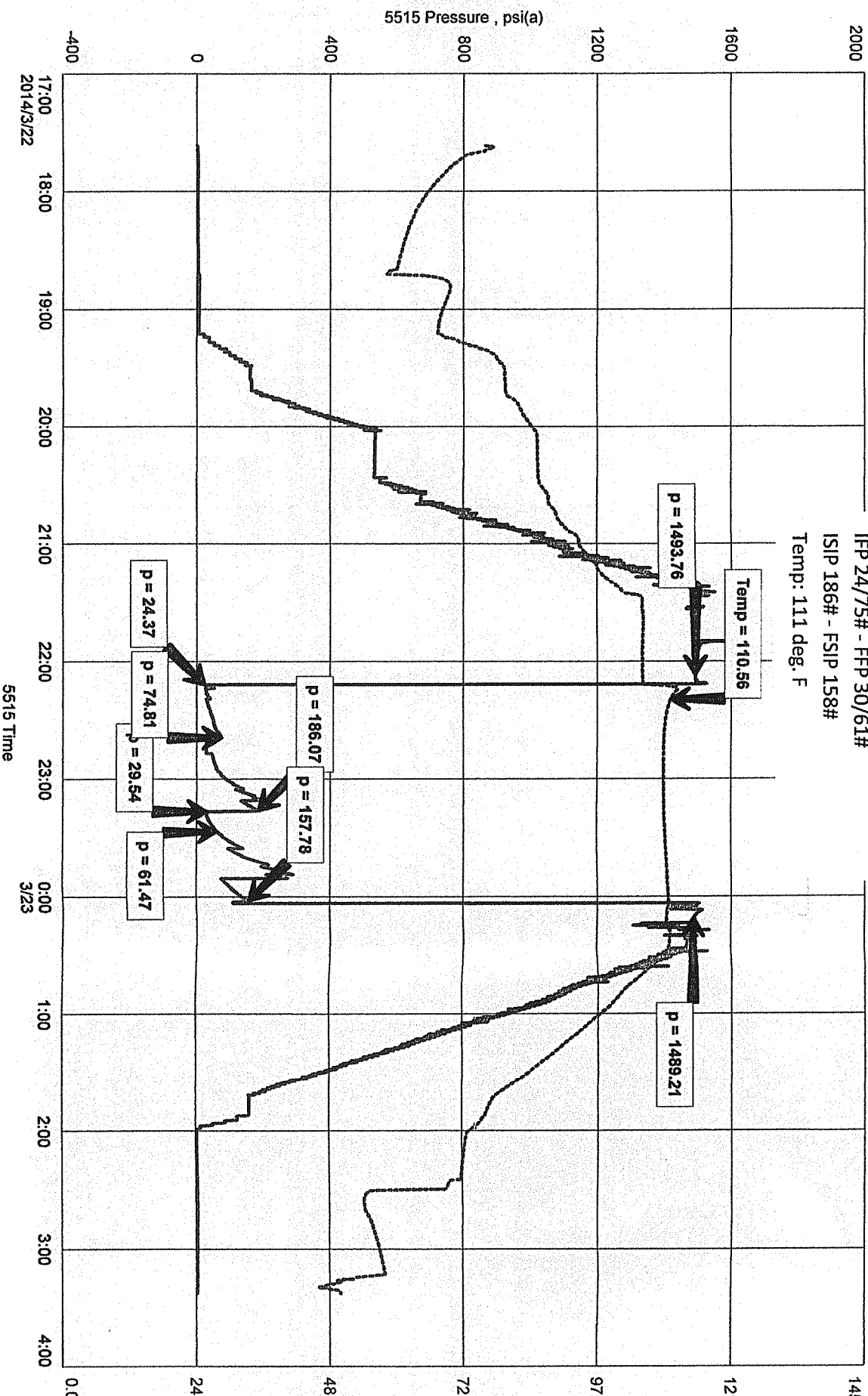
Fud Mud: 3132'
 V45, wt. 9.3, LCM 2

Fud Mud: 3251'
 V46, wt. 9.5, LCM 2

Range Oil Co
 Dst 1 Mississippi (3117-3127)
 Start Test Date: 2014/03/22
 Final Test Date: 2014/03/23

DST #1 3117-3127 (Miss Ct)
 Hit Bridge TH, Tool Opened (Misrun)
 30-30-10-30
 IF 1/2" blow died in 15" - FF No Blow
 Rec: 28' Mud

SNYC
 Formation: Dst 1 Mississippi (3117-3
 Pool: Poo
 Job Number: RF



AA, GD cut

Range Oil Co
 Dst 2 Mississippi (3117-3132)
 Start Test Date: 2014/03/23
 Final Test Date: 2014/03/23

DST #2 3117-3132 (Miss Ct)
 30-30-60-60
 IF ½" blow built to 1" in 30"
 FF ¾" blow built to 11/4" in 60"
 Rec: 15' OSM
 IFP 10/16# - FFP 16/20#
 ISIP 54# - FSIP 70#
 Temp: 105 deg. F

Snyder 1
 Formation: Dst 2 Mississippi (3117-3132)
 Pool: Pool Ext
 Job Number: RR013

