Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1106925

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 # 5120
Name: Range Oil Company, Inc.
Address 1: 125 N MARKET ST STE 1120
Address 2:
City: WICHITA State: KS Zip: 67202 + 1711
Contact Person: John Washburn
Phone: (316) 265-6231
CONTRACTOR: License # 30141
Name: Summit Drilling Company
Wellsite Geologist: Ken Wallace
Purchaser: Coffeyville Resources

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 #:

11/23/2012	11/29/2012	12/21/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-115-21435-00-00
Spot Description:
SW SE NE NW Sec. 22 Twp. 21 S. R. 4 ☑ East ☐ West
1080 Feet from ☑ North / ☐ South Line of Section
2150 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☑ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Marion
Lease Name: Savage A Well #: 1
Field Name: new field
Producing Formation: Hunton
Elevation: Ground: 1294 Kelly Bushing: 1304
Total Vertical Depth: 2410 Plug Back Total Depth: 2402
Amount of Surface Pipe Set and Cemented at: 224 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: 1000 ppm Fluid volume: 300 bbls
Dewatering method used: Hauled to Disposal
Location of fluid disposal if hauled offsite:
Operator Name: Range Oil Co., Inc.
Lease Name: Wyss A License #: 5120
Quarter SW Sec. 34 Twp. 23 S. R. 5 ☑ East ☐ West
County: Butler Permit #: D 12798

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: 01/10/2013
☑ **Confidential Release Date:** 01/10/2015
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 01/10/2013

1106925

Operator Name: Range Oil Company, Inc. Lease Name: Savage A Well #: 1

Sec. 22 Twp. 21 S. R. 4 ☑ East ☐ West County: Marion

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 (Attach Additional Sheets)	☑ Yes	☐ No
Samples Sent to Geological Survey	☑ Yes	☐ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No

List All E. Logs Run:

Dual Porosity
Dual Induction

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

Name	Top	Datum
Heebner	1426	-122
Lansing	1681	-377
BKC	2040	-736
Mississippian	2192	-888
Kinderhook	2229	-925
Hunton	2379	-1075
Viola	2398	-1094

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	12.25	8.625	24	224	common	130	3% CaCl
Production	7.875	5.5	10.5	2408	ThixMix	150	

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ 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 *(Amount and Kind of Material Used)*	Depth
3	2382 to 2385	natural	2382-85

TUBING RECORD: Size: 2.375 Set At: 2395 Packer At:

Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 12/21/2012

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

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	38		1		

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: 2382 - 2385

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

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY Range Oil Co

LEASE Savage 'A' #1

FIELD

LOCATION 1,080' FNL/2,150' FWL, NW/4

SEC 22 TWSP 21S RGE 4E

COUNTY Marion STATE KS

CONTRACTOR Summit Drilling Co, Rig 1

SPUD 11/23/12 COMP 11/30/12

RTD 2410' LTD 2410'

MUD UP 1300 TYPE MUD Chem

ELEVATIONS

KB 1304'

DF

GL 1294'

Measurements Are All From KB

CASING

SURFACE 8 5/8" @ 224'

PRODUCTION 5 1/2" @ 2409'

ELECTRICAL SURVEYS

CN/CD, Sonic DI

SAMPLES SAVED FROM 1680' TO RTD

DRILLING TIME KEPT FROM 1300' TO RTD

SAMPLES EXAMINED FROM 1400' TO RTD

GEOLOGICAL SUPERVISION FROM 1400' TO RTD

GEOLOGIST ON WELL Ken Wallace

FORMATION TOPS	LOG	SAMPLES
Oread	1390 (-86)	1390 (-86)
Heebner	1426 (-122)	1426 (-122)
Lansing	1681 (-377)	1681 (-377)
Stark	1986 (-682)	1988 (-684)
BKC	2040 (-736)	2042 (-738)
Miss Δ	2192 (-888)	2191 (-887)
Misner Sd	2377 (-1073)	2373 (-1069)
Hunton	2379 (-1075)	2379 (-1075)
Viola	2398 (-1094)	2396 (-1092)
RTD	2410 (-1106)	2410 (-1106)
LTD		

0		
22		

REMARKS

11-21-12 MIRT
11-23-12 Drlg surface hole
11-24-12 PTD 232', preparing to drill cement, dev. 1/2° @ 232'
11-25-12 Drlg @ 1186', dev. 3/4° @ 669', 1° @ 1173'
11-26-12 Drlg @ 1830', dev. 1° @ 1673'
11-27-12 Cir @ 2200, dev. 1 1/4° @ 2174'
11-28-12 PTD 2379', Running DST #1 2365-2379'
11-29-12 RTD 2410', Prep to log, Ran DST #2 2370-2385
11-30-12 Set 5 1/2" casing @ 2409'

Pipe set to further evaluate DST #2 results.

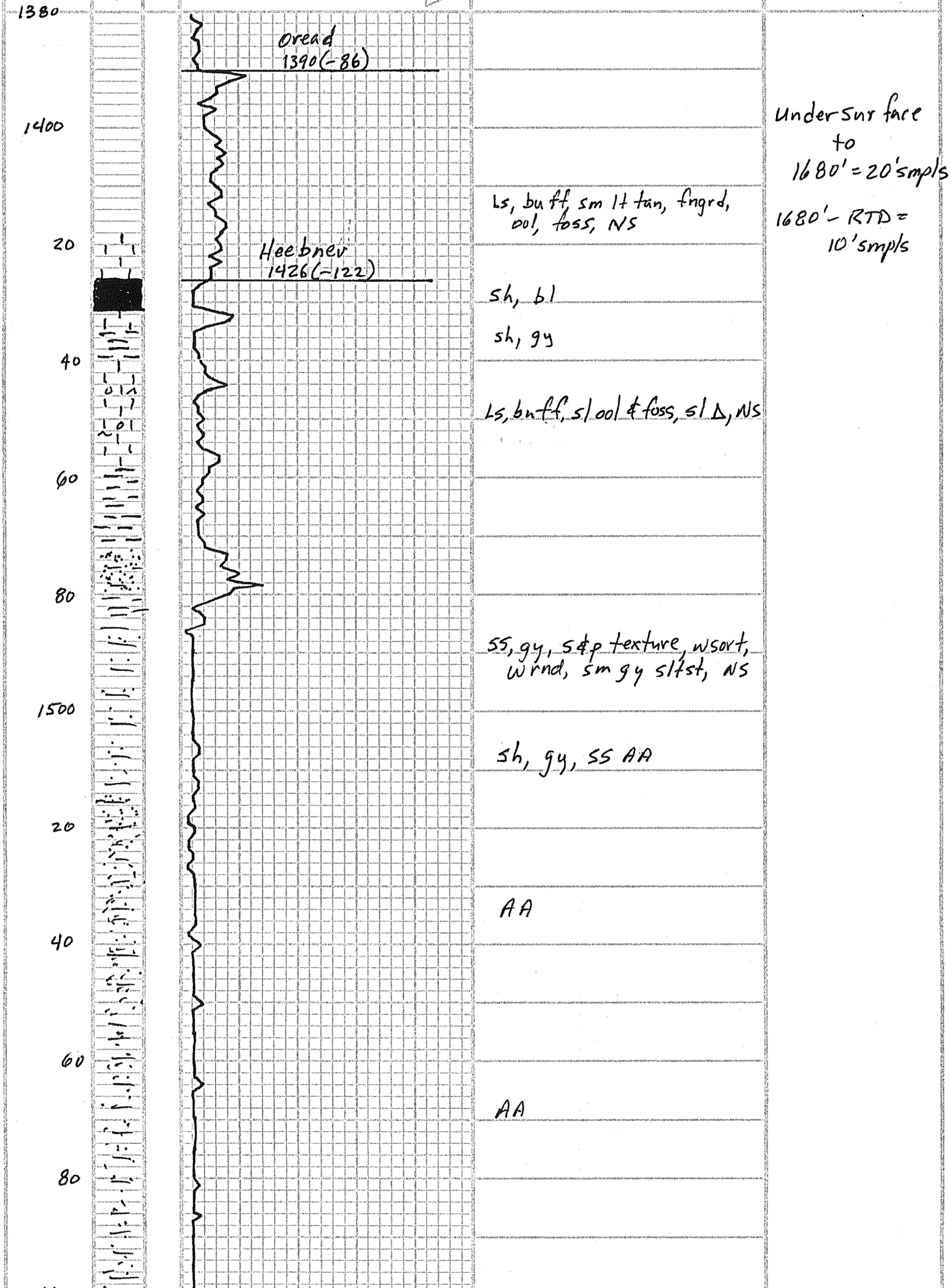
Ken Wallace

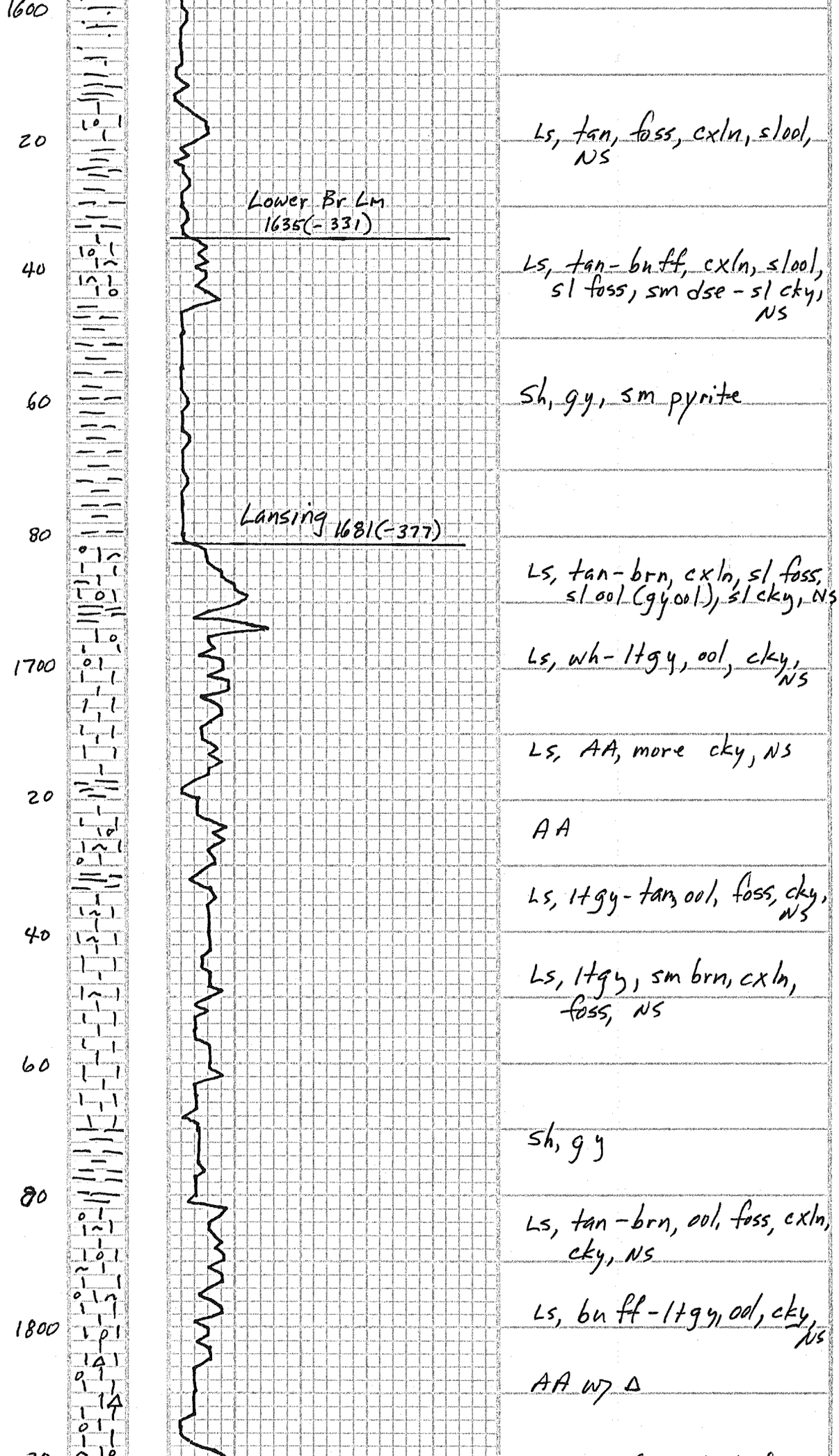
LEGEND

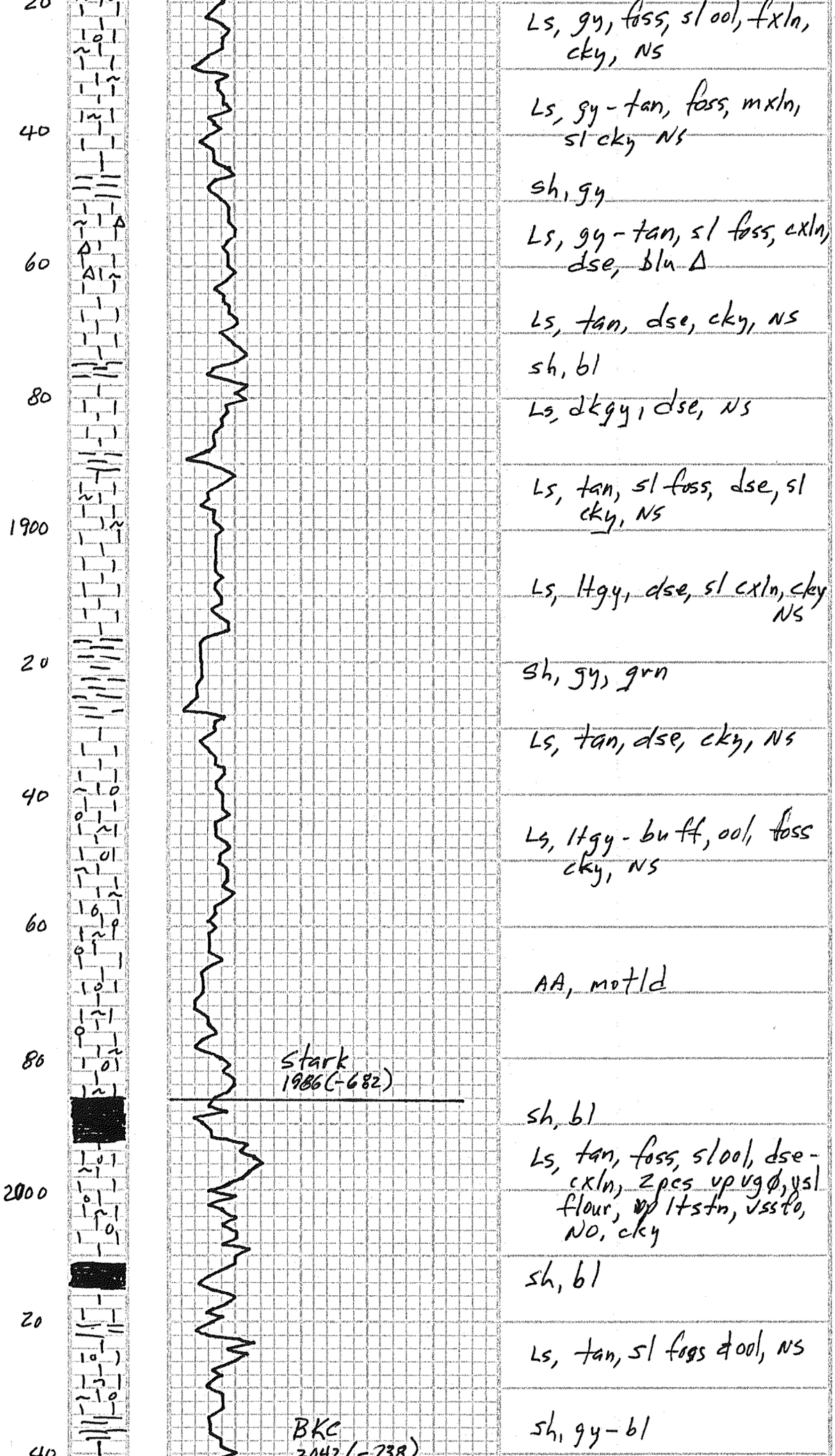
Anhydrite | Salt | Sandstone | Shale | Carb sh | Limestone | Ool. Lime | Chert | Dolomite

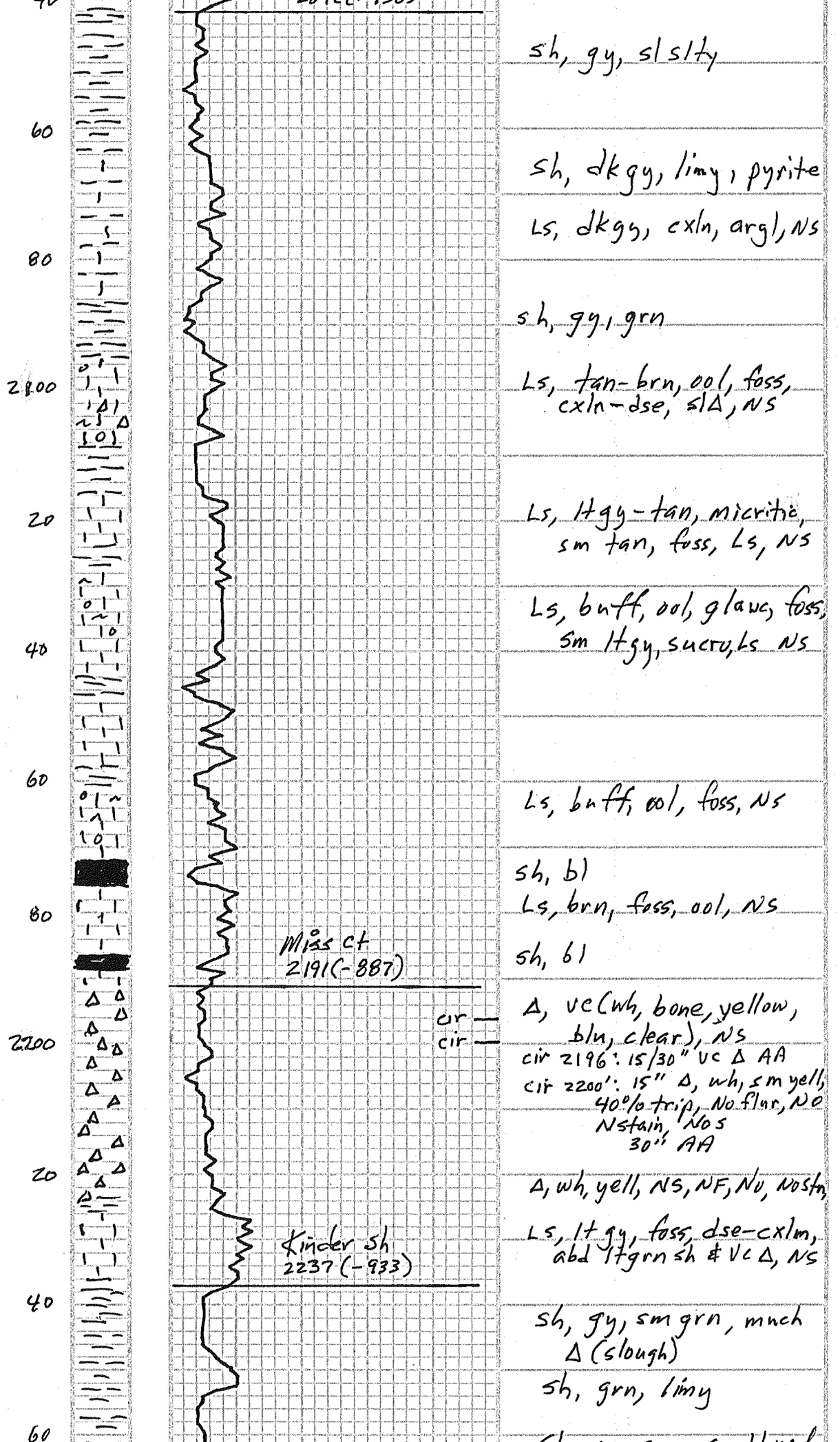
SCALE " = 100'

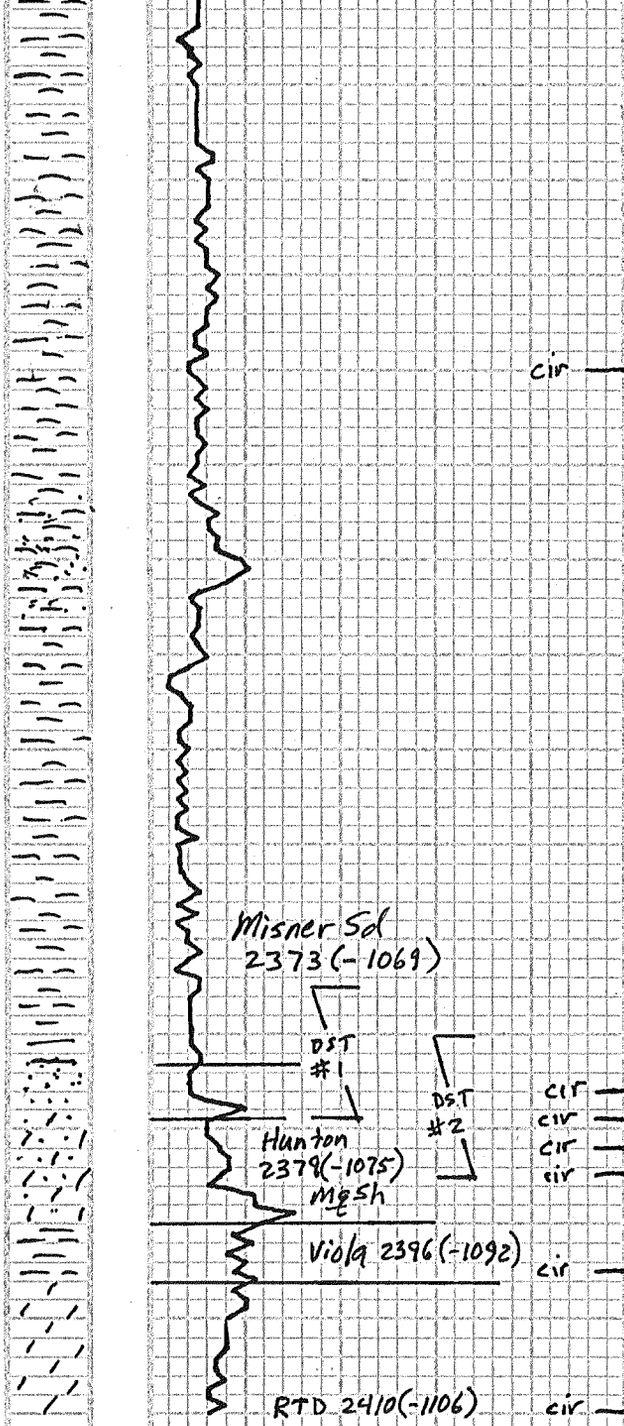
DEPTH	Lithology	ROP	DRILLING TIME – Minutes Per Foot Rate of Penetration Decreases	SAMPLE DESCRIPTIONS	REMARKS


1380
Oread
1390(-86)
1400
20
Heebner
1426(-122)
40
60
80
1500
20
40
60
80
Ls, buff sm lt tan, fngrd, ool, foss, NS
sh, bl
sh, gy
Ls, buff, s/ool & foss, s/Δ, NS
ss, gy, s&p texture, wsort, wrnd, sm gy s/st, NS
sh, gy, ss AA
AA
AA
Undersurface to 1680' = 20'smp/s
1680' - RTD = 10'smp/s


1600
20
40
60
80
1700
20
40
60
80
1800
Lower Br Lm
1635(-331)
Lansing 1681(-377)
Ls, tan, foss, cxln, slool, NS
Ls, tan-bn ff, cxln, slool, sl foss, sm dse-sl cky, NS
Sh, gy, sm pyrite
Ls, tan-brn, cxln, sl foss, sl ool (gy ool), sl cky, NS
Ls, wh-ltgy, ool, cky, NS
Ls, AA, more cky, NS
AA
Ls, ltgy-tan, ool, foss, cky, NS
Ls, ltgy, sm brn, cxln, foss, NS
Sh, gy
Ls, tan-brn, ool, foss, cxln, cky, NS
Ls, bn ff-ltgy, ool, cky, NS
AA w/ Δ


20
40
60
80
1900
20
40
60
80
2000
20
40
Stark
1986 (-682)
BKC
2042 (-738)
Ls, gy, foss, sl ool, fxln, cky, NS
Ls, gy-tan, foss, mxln, sl cky NS
sh, gy
Ls, gy-tan, sl foss, cxln, dse, blu Δ
Ls, tan, dse, cky, NS
sh, bl
Ls, dkgy, dse, NS
Ls, tan, sl foss, dse, sl cky, NS
Ls, ltgy, dse, sl cxln, cky NS
sh, gy, grn
Ls, tan, dse, cky, NS
Ls, ltgy-buff, ool, foss cky, NS
AA, motld
sh, bl
Ls, tan, foss, sl ool, dse-cxln, 2pcs vp vg ø, vsl flour, vp ltstn, vss to, NO, cky
sh, bl
Ls, tan, sl foss ool, NS
sh, gy-bl


sh, gy, sl slty
sh, dk gy, limy, pyrite
Ls, dk gy, cxln, argl, NS
sh, gy, grn
Ls, tan-brn, ool, foss, cxln-dse, sl Δ, NS
Ls, lt gy-tan, micritic, sm tan, foss, Ls, NS
Ls, buff, ool, glauc, foss, sm lt gy, sucru, Ls NS
Ls, buff, ool, foss, NS
sh, bl
Ls, brn, foss, ool, NS
sh, bl
Miss ct
2191 (-887)
cir
cir
Δ, vc (wh, bone, yellow, blu, clear), NS
cir 2196': 15/30" vc Δ AA
cir 2200': 15" Δ, wh, sm yell, 40% trip, No flur, NO Nstain, NOS 30": AA
Δ, wh, yell, NS, NF, NV, NOstn
Ls, lt gy, foss, dse-cxlm, abd lt grn sh & Vc Δ, NS
Kinder sh
2237 (-933)
sh, gy, sm grn, mnch Δ (slough)
sh, grn, limy
2100
2200
40
60
80
20
40
60
80
20
40
60



Sh, gy, grn, sm lt red, pyrite

Sh, bl, gy, sm red, grn sl pyrite

cir — 2300' short trip

Sh, gy, pyrite, sl sdy NS

Sh, gy, red, brn, grn, pyrite

AA

cir — cir — cir 2376'-15/30" ss, cl, few clusters, poor sort, frnd, gso, f fluor, Go, sm pyr cement.

cir — cir — cir 2379'-15" ss, cl, AA, bright fluor (40% of spls), app fe & pyrite cement in part, GSO, GO, p-f stn.

-30" AA, bright fluor (15% of spls) poorly sortd & prnd.

cir — cir 2382'-15/30" Dol, v sdy, tan, sm sucro, lt stn (20% spls), f fluor (15% of spls), f-g vg ϕ, SSFO fodor.

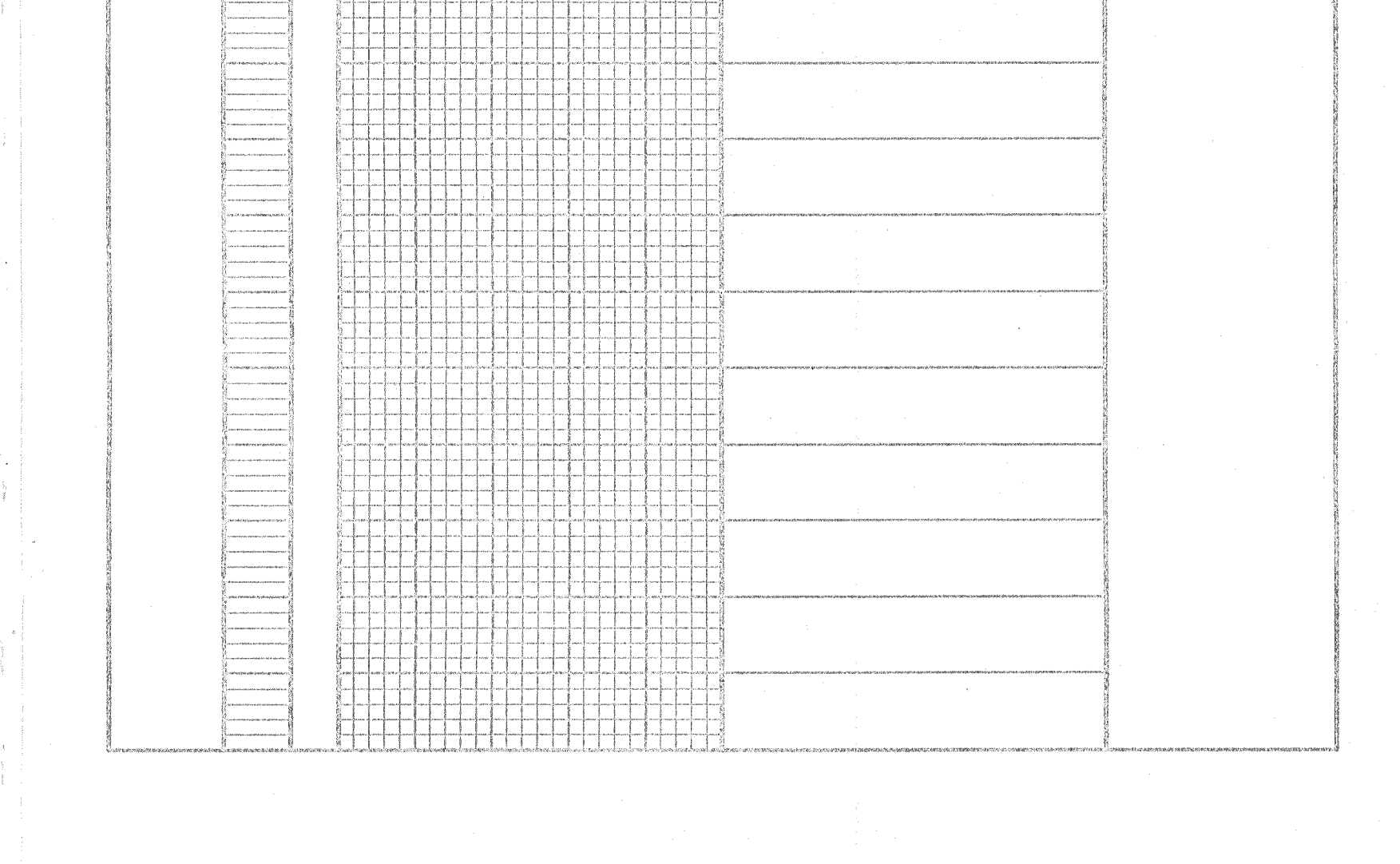
cir 2385'-15/30" Dol, lt gy, v sdy, G vg ϕ, appt hexgl qtz xyls in vugs, cx/n, sm f-med sucro do), sm sat stn, GSFO, GO, GFluor (20% of spls),

cir 2395' 15/30"- Sh, vc, Δty,

cir 2410' 15/30"-Dol, lt gy, f sucro, hard, NS, NO, NO fluro. -30" more s&P texture, m-cgrd, NS.

DST#1 2365-2379
30-30-30-30
Rec. 1' mud
IF 1/4" bl died 7"
FF NB
IF 5-6#
FF 7-7#
ISIP 11#
FSIP 16#

DST#2 2370-2385
30-30-60-60
Rec. 431' CO,
160' MCO (76% O, 24% M)
IF BB 11½ min
FF BB 13½ min
IF 9-133#
FF 140-233#
ISIP 895#
FSIP 889#



CONSOLIDATED
Oil Well Services, LLC

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

ENTERED

TICKET NUMBER 38294
LOCATION Eureka
FOREMAN Rick Ledford

FIELD TICKET & TREATMENT REPORT
CEMENT API # 15-115-21435

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
11/29/12	6942	Savage A # 1	22	21S	4E	Marion

CUSTOMER: Range Oil Company Inc.
MAILING ADDRESS: 125 N. Market ste 1120
CITY: Wichita | STATE: KS | ZIP CODE: 67202

Summit Drlg

TRUCK #	DRIVER	TRUCK #	DRIVER
520	John		
611	Jacy		
637	Merle		

JOB TYPE L/S 0 | HOLE SIZE 7 7/8" | HOLE DEPTH 2410' | CASING SIZE & WEIGHT 5 1/2" 14# new
CASING DEPTH 2409' | DRILL PIPE | TUBING | OTHER
SLURRY WEIGHT 13.6# | SLURRY VOL 47 Bbl | WATER gal/sk 9.0 | CEMENT LEFT in CASING 5.68
DISPLACEMENT 58 3/4 Bbl | DISPLACEMENT PSI 900 | MIX PSI 1400 Bump plug | RATE

REMARKS: Safety meeting - Rig up to 5 1/2" casing. Break circulation w/ 10 Bbl fresh water. Pump 100# metasilicate pre-flush, 10 Bbl water spacer. Mixed 150 sks thickset cement w/ 5# Kol-seal/sk @ 13.6#/gal. yield 1.75 Washout pump + lines, release latch down plug. Displace w/ 58 3/4 Bbl fresh water. Final pump pressure 900 PSI. Bump plug to 1400 PSI. wait 2 minutes, release pressure, float + plug held. Good circulation @ all times while cementing. Job complete. Rig down.

"THANK YOU"

RECEIVED
DEC 3 2012

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	1030.00	1030.00
5406	40	MILEAGE	4.00	160.00
1126A	150 sks	thickset cement	19.20	2880.00
1110A	750#	5# Kol-seal/sk	.46	345.00
1111A	100#	metasilicate pre-flush	2.00	200.00
5407A	8.25	ton mileage bulk trk	1.34	442.20
5502C	4 hrs	80 Bbl VAC. TRK	90.00	360.00
1123	3000 gals	city water	16.50/1000	49.50
4130	4	5 1/2" centralizers	48.00	192.00
4228B	1	5 1/2" AFU insert	172.00	172.00
4454	1	5 1/2" latch down plug	254.00	254.00
			Subtotal	6084.70
		254998 7.8%	SALES TAX	319.22
			ESTIMATED TOTAL	6403.92

Ravin 3737

AUTHORIZTION Gary L Reed TITLE X 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.

CONSOLIDATED
Oil Well Services, LLC

ENTERED

TICKET NUMBER 38244
LOCATION Eureka
FOREMAN Rick Ledford

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

FIELD TICKET & TREATMENT REPORT

CEMENT API # 15-115-21435

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
11-23-12	6942	Savage A #1	22	21S	4E	Marion

CUSTOMER: Range Oil Company Inc
MAILING ADDRESS: 125 N. Market ste 1120
CITY: Wichita | STATE: KS | ZIP CODE: 67202

Summit Orig

TRUCK #	DRIVER	TRUCK #	DRIVER
520	John		
515	Merle		

JOB TYPE Surface 0 | HOLE SIZE 12 1/4" | HOLE DEPTH 232' | CASING SIZE & WEIGHT 8 5/8"
CASING DEPTH 213' G.L. | DRILL PIPE | TUBING | OTHER
SLURRY WEIGHT 15# | SLURRY VOL 32 BBl | WATER gal/sk 6.5 | CEMENT LEFT in CASING 20'
DISPLACEMENT 13 1/2 BBl | DISPLACEMENT PSI | MIX PSI | RATE

REMARKS: Safety meeting: Rig up to 8 5/8" casing. Break circulation w/ 8 BBl fresh water. Mixed 130 sks class A cement w/ 3% cacl2, 2% gel & 1/4# flocele/sk @ 15#/gal. Displace w/ 13 1/2 BBl fresh water. Shut casing in w/ good cement returns to surface = 7 BBl slurry to pit. Job complete. Rig down.

"Thank You"

ACCOUNT CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
54015	1	PUMP CHARGE	825.00	825.00
5406	40	MILEAGE	4.00	160.00
11045	130 sks	class A cement	14.95	1943.50
1102	365#	3% cacl2	.74	270.10
1118B	245#	2% gel	.21	51.45
1107	32#	1/4# flocele/sk	2.35	75.20
5407	6.11	ton mileage bulk trk	m/c	350.00
4132	2	8 5/8" centralizers	69.00	138.00
			Subtotal	3813.25
		7.8%	SALES TAX	193.30
			ESTIMATED TOTAL	4006.55

Ravin 3737

25486

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.

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802

Kansas
Corporation Commission

Phone: 316-337-6200
Fax: 316-337-6211
http://kcc.ks.gov/

January 10, 2013

John Washburn
Range Oil Company, Inc.
125 N MARKET ST STE 1120
WICHITA, KS 67202-1711

Re: ACO1
API 15-115-21435-00-00
Savage A 1
NW/4 Sec.22-21S-04E
Marion County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
John Washburn