

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

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

Gas DH EOR

OG GSW

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 EOR Conv. to SWD
 Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

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 Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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 Geologist Report / Mud Logs <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				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/Injection:	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> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
---	---	------------------------------------

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
----------------	-------	---------	------------	--

JUN 21 2016



CEMENTING LOG

STAGE NO.

Date 6-2-16 District Oakley Ticket No. 066886
 Company Berexco Rig Beredco 1
 Lease Evelyn Well No. 1-7
 County Stanton State KS
 Location 7 30 40 Field _____
Johnson 6S 2E 1S WFS INT

CEMENT DATA:
 Spacer Type: Water
 Amt. _____ Skys Yield _____ ft³/sk Density _____ PPG _____

CASING DATA: Conductor PTA Squeeze Misc
 Surface Intermediate Production Liner
 Size _____ Type _____ Weight _____ Collar _____

LEAD: Pump Time _____ hrs. Type 6940 WAgel
14 PLO-seal Excess _____
 Amt. 160 Skys Yield 1.41 ft³/sk Density 14.1 PPG _____

Casing Depths: Top _____ Bottom _____

TAIL: Pump Time _____ hrs. Type _____
 Excess _____
 Amt. _____ Skys Yield _____ ft³/sk Density _____ PPG _____
 WATER: Lead _____ gals/sk Tail _____ gals/sk Total _____ Bbls. _____

Drill Pipe: Size 4 1/2 Weight _____ Collars _____
 Open Hole: Size 7 7/8 T.D. 5894 ft. P.B. to _____ ft.

Pump Trucks Used 431
 Bulk Equip. 891

CAPACITY FACTORS:
 Casing: Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Open Holes: Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Drill Pipe: Bbls/Lin. ft. 10142 Lin. ft./Bbl. _____
 Annulus: Bbls/Lin. ft. _____ Lin. ft./Bbl. _____
 Perforations: From _____ ft. to _____ ft. Amt. _____

Float Equip: Manufacturer _____
 Shoe: Type _____ Depth _____
 Float: Type _____ Depth _____
 Centralizers: Quantity _____ Plugs Top _____ Btm. _____
 Stage Collars _____
 Special Equip. _____
 Disp. Fluid Type _____ Amt. _____ Bbls. Weight _____ PPG _____
 Mud Type _____ Weight _____ PPG _____

COMPANY REPRESENTATIVE _____

CEMENTER Andrew

TIME AM/PM	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	
				0		
				85		Pump water 1740
				8		Mix cement
				5		Pump water
				16		Pump mud
				5		Pump water 2201
				6		Mix cement
				7		Pump water
				3		Mix cement 60'
				3		Mix cement Mouse hole
				3		Mix cement Rat hole

GEOLOGIST'S REPORT

DRILLING TIME & SAMPLE LOG

COMPANY Berexco LLC NO. L-7
 LEASE Evelyn
 LOCATION 580'EWL + 1980'FEL
 SEC. 7 TWP. 30S RNG. 40W
 COUNTY Stanton, STATE KANSAS
 FIELD Wildcat

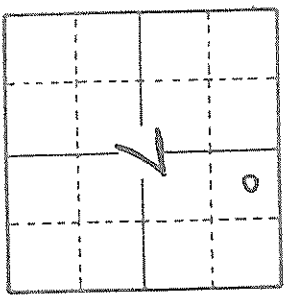
ELEVATIONS
 KB 3338
 DF 3336
 GL 3326
 MEASUREMENTS ARE ALL FROM KB

CONTRACTOR Beredco Drilling Rig #1
 COMM. 5-26-2016 COMP. 6-7-2016
 RTD 5894 LTD _____
 No. of DST'S NONE No. of CORES None

CASING RECORD
 8528' DI 17/15 W 730 SX.
 DI _____ W/ _____ SX.
 DI _____ W/ _____ SX.
 DI _____ W/ _____ SX.
 EL. LOG AORes. SP. GR
DEWLET. GR. Caliper
ML. Sonic

SAMPLES SAVED FROM 3500 TO TD
 DRILLING TIME KEPT FROM 3500 TO TD
 SAMPLES EXAMINED FROM 3500 TO TD
 GEOLOGICAL SUPERVISION FROM 3500 TO TD
 GEOLOGIST ON WELL Edwin H. Grieves

FORMATION TOPS	SAMPLE	LOG	SUBSEA
Base Heebnee	3669		
Lansing Fm	3735		
Marmaton	4366		
Et. Scott	4574		
Morrow Fm	5126		
Morrow "E"	5429		
Chester	5490		
St. Genevieve	?		
St. Louis	5573		
TD	5894		



ARKS Earth-Tech had an unmanned gas detection trailer on this well from 3500 feet to total depth.

Thank you
 Edwin H. Grieves
 Geologist

STRATIGRAPHY SANDSTONE LIMESTONE SHALE MERT		CHROMATOGRAPH HOT WIRE BY TOTAL GAS VOLUME	GAS SCALE 10 100 1000 3500
STRATIGRAPHY SLTSTONE DOLOMITE GRANITE WASH ANHY & GYP		C1 = METHANE C2 = ETHANE C3 = PROPANE C4 = ISOBUTANE C5 = BUTANE C6 = ISOPENTANE C7 = PENTANE	

DRILL TIME
SCALE 5 10 15

SAMPLE DESCRIPTION

GAS SCALE 10 100 1000

3500

Interbedded Limestones
 ① Lms. trs. to hvy. trs. wht. to cream-
 chlk + ff. tan to tau; crypto. to
 v.v. fn. xln; sub-chlk; sub-sucro. to
 sucro. trs. phantom oolites IP's;
 dud. H. yel. to trs. H. yel. fluor.;
 ② Lms. H. gray. to tau; crypto. to
 v.v. fn. xln; trs. sub-chlk; sub-sucro
 + packstn; dud. yel. fluor. IP's;
 No cut; No vis por.
 ③ scattered trs. Chert H. gray.
 opaque

3600

Sh v. drk. gray to black-carb
 Lms. grayish. tau; crypto. & r
 packstn to sub-lithogr. dud. yel.
 fluor.; No cut; No vis por.
 Sh H. gray. to H. green; soft & muddy
 when wet; silty IP's

Base Heebner
 3669-391

Interbedded Limestones
 ① Fast. Dalg Lms. trs. wht. to cream-
 + cream to H. tan; crypto. to v.v. fn. xln;
 sub-chlk; sub-sucro. to sucro.; dud. yel.
 fluor.; No cut; trs. to hvy. trs. pack
 micro - pp. por.
 ② Slow. Dalg Lms. grayish tau to tau;
 crypto. to v.v. fn. xln; trs. sub-chlk;
 sub-sucro. + packstn; dud. yel. fluor.
 IP's; No cut; No vis por.

3700

Sh med to drk. gray, sl. to crdly.
 calc. grdn. to Shly. Lmsts

Lansing Fm
 3735-397

T. to bedded Limestones

Interbedded Limestones
 ① Lms. trs. wht. to crm. - chlk + grayish tan to tan; crypto. to v. v. fin. xlin; sub-chlk, sub-sucro. to trs sucro. + trs. packstn; dul. H. yel. fluor. IP's; No cut; scattered trs poor micro-pp. por IP's
 ② Lms. lt. gray. to grayish tan; sl. to faly. shly. IP's; crypto to v. v. fin. xlin. trs. sub-chlk to rshly, sub-sucro. + packstn; dul. H. yel. fluor. IP's No cut; No vis por.

3800

Lms. trs. wht. to crm - chlk + tan grayish. IP's; crypto. to v. v. fin. xlin; zbn. w/ phantom oolites; trs. foss. frags. IP's; dul. yel. fluor IP's No cut; scattered trs poor to sl; trs fair micro-pp por.

3900

Lms. hvy. trs. wht to crm - chlk + crm. to tan; crypto. to v. v. fin. xlin v. to extly oolitic for sl. to faly. oolitic IP's; matrix sub-chlk, sub-sucro to trs, sucro. + packstn; H. yel. to yel fluor. mottled IP's; No cut; v. zbn. fair, good to excel. oolitic. por. w/ trs poor to fair micro-pp. por. IP's; Quest. Perm.

4000

ZEROED

WOR	12000
RPM	100
SFM	50
PA	1000

4000

Lms. lt. gray to grayish tan + trs tan; crypto. to v.v. fu. xln; trs. chlk.; sub-chlk.; sub-sucro + packstn.; dul. lt. yel. fluor. IP's No cut; scattered trs v. poor micro-pp. por.

4100

Lms. extr. zbn wht to cream-chlk. w/chlk oolites IP's + lt. tan to tan; crypto to v.v. fu. xln; v. to extly oolitic + or sl. to trly oolitic IP's matrix trs. chlk. trs sub-chlk.; trs. sub-sucro. + packstn.; dul. yel. to dul. lt. yel. + fluor.; No cut; zbn poor, fair, good to excel. oolitic por. Very Quest. Perm!

Lms. lt. gray, grayish tan to tan crypto to v.v. fu. xln; sl. shly IP's sub-chlk. + or shly; sub-sucro. + packstn.; No fluor.; No cut; No ls + or

Lms. similar 4102-4156

Lms similar 4156-4168

Lms similar 4102-4156

4200

Lms. similar 4156-4168

Lms. cream to wht.-chlk w/chlk oolites + trs. cream to lt. tan; crypto to v.v. fu. xln; v. to extly oolitic + or faly. to v. oolitic; matrix chlk.; sub-chlk.; sub-sucro. and packstn.; dul. lt. yel. + fluor.; No cut; zbn. poor to fair and trs good oolitic por. Very Quest. Perm.

But Trip 4215
Trip 625
104

v.v. tu. xln.; v. to extaly oolitic
 +/or faly. to v. oolitic; matrix
 chlk, sub-chlk, sub-sucro. 2nd
 packstn. idul. lt. yel. fluor.;
 No cut; abu. poor to fair
 2nd trs good oolitic por.
 Very Quest. Perm.

Lms. lt. to med. gray - slt to faly
 Shly. gradn. to grayish tan to tan
 crypto. to v.v. tu. xln.; grayish
 tan to tan - phantom oolitic
 trs. sub-chlk, sub-shly, sub-sucro
 + packstn. idul. lt. yel. fluor. 1P3

No cut; No vis por.

Lms. lt. to med. gray - slt to faly Shly.
 crypto. to v.v. tu. xln.; sub-chlk to shly
 sub-sucro + packstn w/ trs sub-litho

No fluor.; No cut; No vis por.;
 w/ trs. to hvy. trs flint
 from 4354 to 4366; dr. k. gray.
 opaque

Lms. trs. to hvy. trs. wht to crn -
 chlk + crn to lt. tan, grayish. 1P3
 crypto. to v.v. tu. xln.; sub-chlk,
 sub-sucro + packstn. idul. yel.
 fluor.; No cut; No vis por

Interbedded Limestones

① Slower Drlg. Lms similar
 4366 - 4403

② Faster Drlg. Lms. trs to hvy trs
 wht. to crn-chlk, trs w/ chlk oolites
 + lt. tan to tan; crypto. to
 v.v. tu. xln.; v. to extaly oolitic
 +/or faly to very oolitic;
 matrix trs. sub-chlk, sub-sucro
 + packstn. idul. lt. yel. fluor.;
 No cut; abu. prs to trs qd to
 slt trs. excel. oolitic por.
 Very Quest. Perm.

Lms. hvy. trs. crn-chlk + tan, gray 1P3
 v. to extaly oolitic + or slt to faly
 oolitic; matrix sub-sucro + packstn.
 idul. yel. fluor.; No cut; abu. pr. fa. qd.
 to excel. oolitic por.
 Quest. Perm

Interbedded Limestones w/
 scattered thin shales

① Slower. Drlg. Lms. lt. to med.
 gray - slt to faly. Shly. gradn to
 grayish tan to tan; crypto. to

v.v. tu. xln.; sub-chlk, sub-sucro
 + packstn. idul. yel. fluor. 1P3
 No cut; No vis porosity

② Faster Drlg. Lms. grayish tan to
 tan; crypto. to v.v. tu. xln.;
 v. to extaly oolitic +/or
 faly. to very oolitic; matrix

WOB Trip 4375
 Trip 525
 1000

WOB 40000
 RPM 70
 SPM 50
 1000

Marmaton
 4366-1018

4300

4400

4500

C1

C1

C2

C3

C

C

C

C

C

C

C

C

C

C

Microcrinoid impressions w scattered thin shales
 ① Slower. Dalg. Lms. lt. to med. gray. - sli. to finely. Shly. gradng to grayish tan to tan; crypto. to

WIND 70-175
 RAM 56
 SPM 900
 PP

V.V. fu. xln; sub-chlk; sub-sucro & pachstn; idul. yel. fluor. IP's No cut; No vis porosity

② Faster Dalg. Lms. grayish tan to tan; crypto. to v.v. fu. xln; v. to extly. oolitic or faly. to very oolitic; matrix sub-sucro & pachstn; idul. yel. fluor. IP's. No cut; zon. poor to fair & trsgood to excel. oolitic por.; V. Quest. Perm.

③ scattered thin sh. med. gray. sli. to extly calc

Sh. drk. gray. to black - carb

Interbedded Lmsts w scattered thin shs similar 4466-4588

Blk. Sh 610
 Ft Scott
 4574-1236

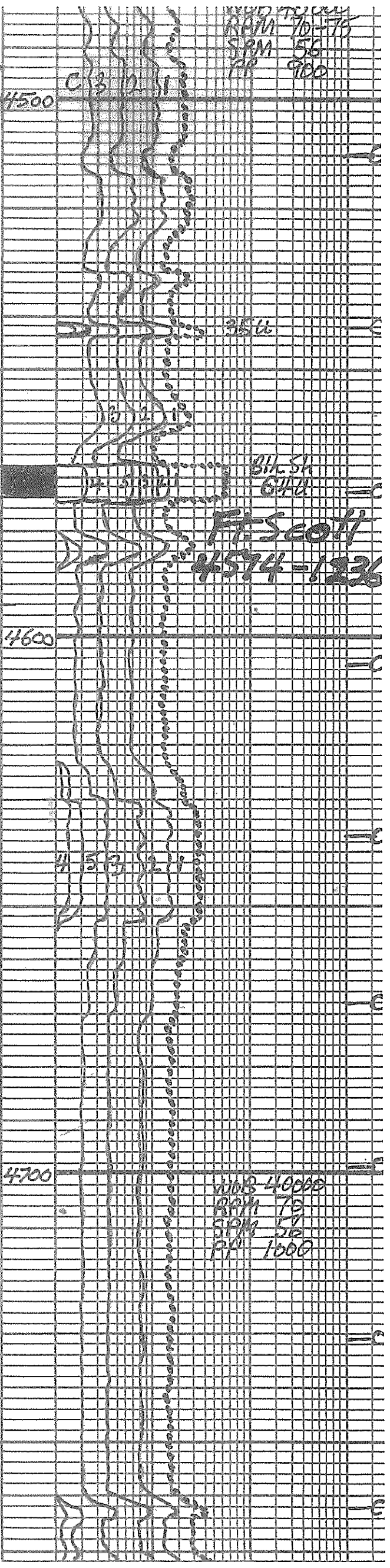
Interbedded or Gradational Limestones and Shales

① Lms. tan, grayish. IP's; crypto to v.v. fu. xln; sub-chlk, sub-sucro. & pachstn; idul. yel. fluor.; No cut; No vis por.

② Lms. lt, med. to drk. gray. - sli. to extly. Shly. gradng. to calc. Sh's; crypto. to v.v. fu. xln sub-chlk & for shln; trsgood to excel & pachstn; No fluor; No cut; No vis por.

③ Sh. med to v. drk. gray. - sli. to extly. calc. IP's gradng to shly. Lmsts.

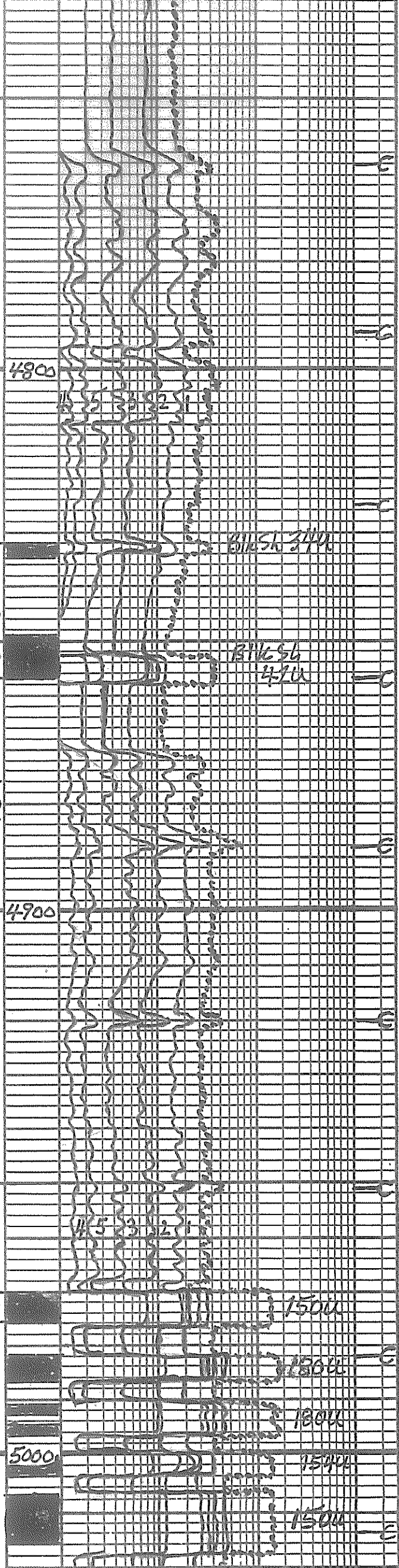
WIND 4000
 RAM 70
 SPM 56
 PP 1000



Interbedded Shs + Lmsts
 ① Sh med. to v. drk. gray; slt. to extly. calc. grading to shly Lmsts + v. drk. gray. to black-carb.
 ② Lms. med. to v. drk. gray; crypto xlu.; v. to extly shly grading to calc Shs; sub-chalky or shly. + packstr; No fluor; No cut; No vis Por

Interbedded Limestones + Shales
 ① Trstolytes. Lms. grayish-tan to tan. crypto. to v. v. faxlu.; trs. sub-chalky sub-succra, packstr. + sub-lithogr. dul. yel. fluor; No cut; No vis Por
 ② Est. zbn. Lms. med to drk. gray + trs. v. drk. gray; crypto. xlu; trly to extly shly grading to calc Shs; sub-chalky or shly. packstr. + trs sub-lithogr. No fluor; No cut; No vis Por.
 ③ Shs. med to v. drk. gray; zbn. slt to extly. calc. grading to shly Lmsts

Interbedded Limestones + Slates similar 4858-4970 with/ Faster Drlg Shs v. drk. gray-calc to v. drk gray to black, carb



6286

5000

1800

1500

1500

1500

1200

1400

1500

950

1400

5100

1800

1900

1750

2000

WOB 3400
APP 70
SPM 58
PP 1000

1850

Rec 1900
EPS
6

5200

Interbedded Limestones + Shales

① Trs. Lms. lt. gray, grayish tan to tan
crypto. to v.v. fu. xln; trs. sub-succ
pachstn + sub-lithogr. dul yel
fluor. No Lust; No Vis POR

② Lms. tan, med. to drk. to v. drk. gray
v. to extly shly; crypto. xln; j
sub-chl. for shly; pachstn +
sub-lithogr.; No fluor.; No Lust
No Vis POR. gradng to calc shs

③ Sh. drk. to v. drk. gray - very
to extly calc

④ Sh. v. drk. gray to black - carb.

Log Pick Morrow Top 5126-1788

Shales w/ widely scattered
thin limestone beds

- ① Sh. med. gray - soft w/ silky
luster. IP's to drk. gray.
soft to splintery; trs. pyr. IP's
- ② Lms. lt. gray to tan; crypto to
v.v. fu. xln; sub-chl. sub-succ
pachstn + trs. sub-lithogr.
tan. dul yel. fluor.; No Lust
No Vis POR
- ③ Fragm. Lms. tan gradng to trs.
lt. gray; v.v. fu. to calc segr.
grs. composed Lm grs. +
foss. fragm.; grs. crypto to
v.v. fu. xln; sub-chl.; sub-succ
pachstn + trs. sub-lithogr.
trs. w/ dul yel. fluor.; No Lust
No Vis POR.

SH 8 32.1

v.v. fu. xln.; sub-chll; sub-sucro
 pachstn + trs sub-lithogr.
 trs w/dul/yel. fluor; No cut
 No vis Por.

5319-5325
 Lms. H. gray. totan; cryptoto
 v.v. fu. xln.; sub-sucro + pachstn +
 fragm. Lm 10% v.v. fu. to coarse gr
 gr. composed lmgas + loss
 fragm.; gas cryptoto. Fou vfu
 xln; sub-sucro, pachstn
 sub-lithogr; No fluor
 No cut; No vis Por

5325-5417
 Shs w/widely scattered thin
 beds Limestone
 similar 5148-5319

A 5417-5429 Prob Sh med gray-
 soft w/trs w/silky luster
 + dark gray soft to splintery
 w/hvy trs Lm + Qtz sdst
 similar 5429-5453

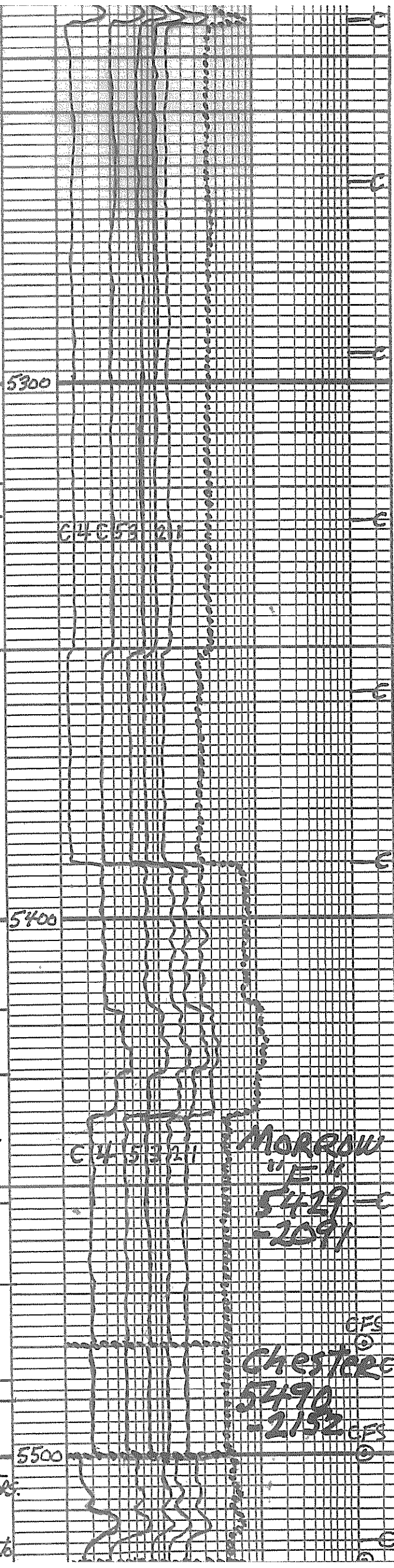
B 5429-5453 Lm + Qtz sdst
 0 to 90% Qtz. gas to 10 to
 100% lmgas; Lmgas. v.v. fu
 to coarse gr; composed
 Lmgas + loss fragm.
 gas. cryptoto + v.v. fu. xln.;
 sub-chll; sub-sucro
 pachstn + sub-lithogr.;
 Qtz. grs. v.v. fu. to coarse gr.
 ang. to abn sub-ang, sub-
 to trs rounded; pr. sort.
 scattered trs glaucor
 chlorite; sl. trs. yel. to
 hvy trs. dul. yel. fluor;
 No cut; No vis Por; abn loose

C 5453-5468 Sh med
 gray-soft-trs silty luster
 to dark gray-soft to
 splintery w/prob
 interbeds Lm + Qtz sdst
 similar 5429-5453
 Decreasing w/depth

D 5468-5486 Sh med gray
 soft w/silky luster 10% to dk
 gray-soft to splintery

E 5486-5490 Qtz sdst
 lt. gray; v.v. fu. to med gr w/
 trs. coarse grs; ang to abn
 sub-ang; sub-angled to round
 pr. sort; trs to abn. glauc.
 + or chlorite; trs Sh. grs. - round
 to ang.; trs. w/trs Lmgas. + loss
 fragm; trs. w/pyritic cement
 No fluor. No cut; No vis Por; Some coarse grs.

5490-5570 Interbedded and/or
 Gradational Limestones
 (A) Lms. reddish tans, reddish browns to



MORROW
 "E"
 5429 -
 2091

Chester
 5490
 -2152

(1) ymy, v.v. in some grains
 trs. coarse grs. ang to abn
 sub-ang, sub-ribbed to rounded
 PR. SORT; trs to abn. glauc.
 & or chlorite; trs sh. grc. - Rudel
 to ang.; trs. w/ trs. lmg grs. & fass
 & agm; trs. w/ pyritic cement
 No fluor. No cut; No vis for; Some locs etc.

CHESISTORE
 5790
 -2152 CFS

5490-5570 Interbedded and/or
 Gradational Limestones
 (1) Lms. Reddish tan, reddish brown to
 reds; crypto to v.v. f. xln, extly
 Qtz sdly IP's - v. v. f. gr, ang gradng
 to lmg siltstns; to extly micro-
 oolitic to tas. sm. oolites w/ trs
 to abn. Qtz sdst - v. v. f. gr - ang
 matrix chlk, sub-chlk, sub-sucro
 No fluor; No cut; No vis for

(2) Lms. wht, crm. to H. tan; crypto
 to v. v. f. xln; micro-oolitic to sm.
 oolites, slt to extly - Qtz sdly - v. v. f.
 gr. - ang; trs gradng to v. cal c
 siltstns; matrix chlk, sub-chlk,
 sub-sucro to sucro; dul H. yel.
 fluor.; No cut; slt trs. w/ v. pr.
 micro-pp por

5570-5573 Lms. w/ abn. Chert
 unconformity Deposit - St Louis
 Renewed lmg grayish. Tan to tan
 crypto to v. v. f. xln; v. to extly
 oolitic (sm., med + lg.) matrix
 sub-chlk, sub-sucro & packstn
 dul. H. yel. fluor. IP; No cut
 No vis for - w/ abn chert tan to
 orange; transl to opaque

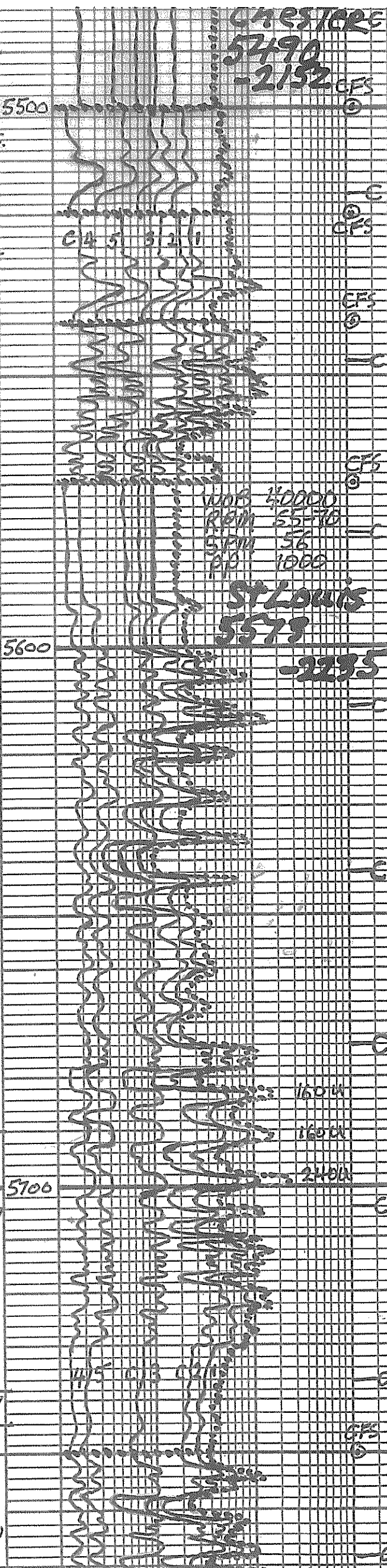
WIND 40000
 RAIN 55-70
 SPM 56
 PP 1000
 ST LOUIS
 5573
 -2135

5573-5690 Lms. trs. wht to crm chlk.
 w/ chlk oolites IP's & grayish tan to tan
 crypto. to v. v. f. xln; faly to extly.
 oolitic (sm., med + lg.); matrix
 trs. chlk, sub-chlk, sub-sucro
 & packstn; dul. H. yel. fluor. ;
 No cut; No vis for w/ trs. to
 hv trs. Chert tan to orange
 w/ trs wht to gry; transl to
 opaque

5690-5738 Lms. lgray, grayish tan
 to trs. tan; crypto. to v. v. f. xln;
 sub-sucro & packstn; hv trs.
 phantom oolitic to abn. slt to
 v. oolitic (sm., med + lg.); dul H. yel
 fluor. ; No cut; No vis for. w/ trs
 to hv trs chert gry, tan to
 orange & trs. wht; opaque to
 transl

5738-5744 Lms. abn. wht to crm-
 chlk & wht, crm to tan; crypto to
 trs. v. v. f. xln; v. oolitic (sm.,
 med to lg.) matrix chlk, sub-chlk
 trs sub-sucro & slt trs packstn; dul yel
 fluor. ; No cut; 2 pieces w/ v. poor
 micro-pp por; Prob No perm
 w/ trs chert gry, tan; transl
 to opaque

5744-5770 Interbedded Lmsts
 (1) Lms. similar 5690-5738
 (2) Lms. grayish tan to tan; crypto xln
 packstn & sub-lithogr. ; v. dul yel
 fluor. ; No cut; No vis for; chert aa

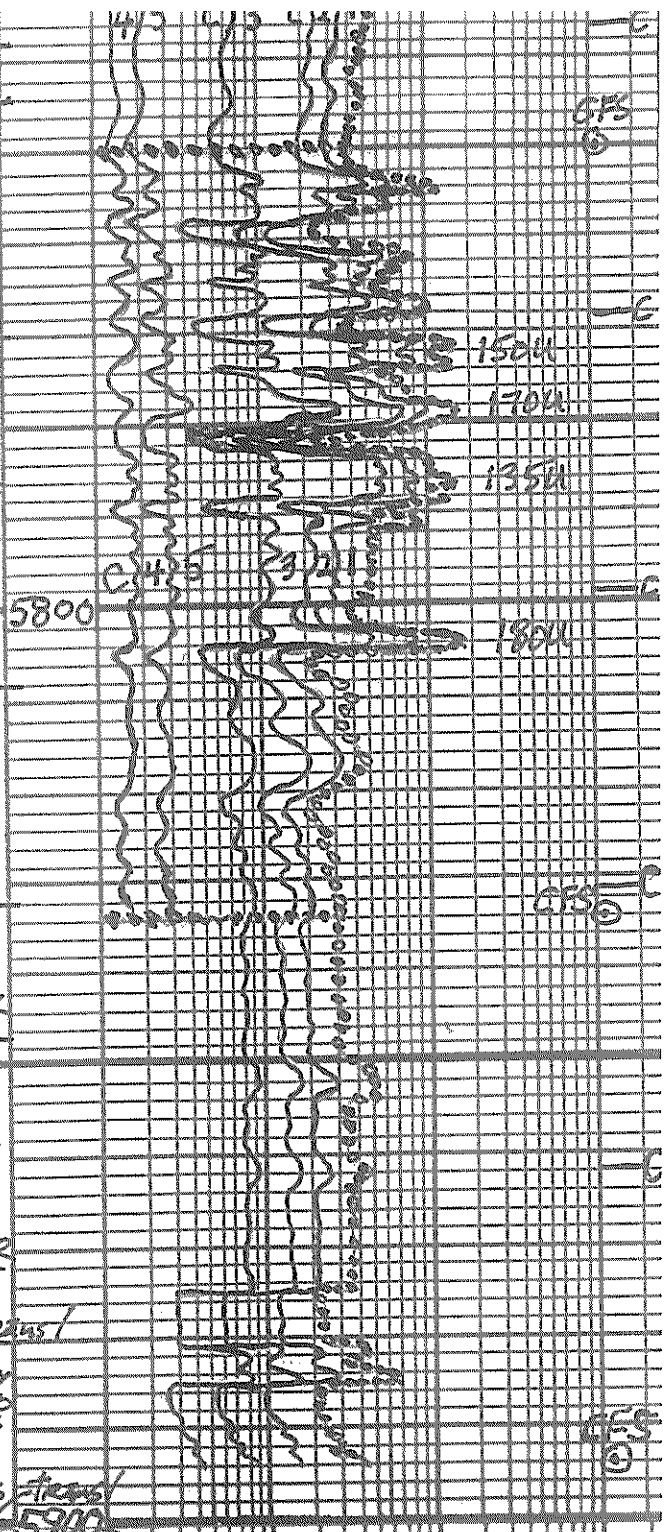


med to lg) matrix chlk, subdulk
 trs sub-sucro + sl; trs packstn; dul yel
 flu.or.; No cut; 2 pieces w/v. poor
 micro-pp/por. Prob no perm.
 w/trs chert gray totan; trns
 to opaque
 5744-5770 Interbedded Lmsts
 (1) Lms. similar 5690-5738
 (2) Lms. grayish tan totan; cryptoxln
 packstn + sub-litogrn.; v. dul yel
 flu.or.; No cut; No vis por; chert aa

5770-5808 Interbedded Lmsts
 similar in appearance 5744-5770
 but becoming sl; to fairly Dolomitic
 IP's w/hoy trs. Chert. gry. tan to
 orange + trs wht; opaque to trns
 also w/trs Anhydrite + Gypsum wh/
 to clear; cryptoxln + large clear x's

5808-5832 Dolomite w/lny Dolo. to
 Dolo. Lms; grayish tan totan; trs
 crypto. to v. v. fin. xln; Lmy. Dolo + Dolo. lms
 sub-chlk; sub-sucro + sl; Sucro w/
 phantom micro-oolites to v. micro-
 oolitic; Dolo. sub-sucro to sucro.;
 No flu.or. to trs. dul. gldn. yel. fluor.
 No cut; abu. pr. to fa + trs. g. micro-pp
 por + Prob interxln por. IP's; sl; trs
 Anhy. + Gyp. wht cry. to xln to clear
 large x's; w/trs chert
 wht. gry. tan to orange; opp. to trns.
 5832-47 Dolo. lt. to med. gry. crypto to
 v. v. fin. xln; Calc. IP's; sub-sucro to v. sucro
 + packstn; pure Dolo - dul. gldn. yel. fluor.
 No cut; v. sucro. Prob. has interxln por; sl;
 trs. chert. dul. gry. totan. opaque
 sl; trs Anhy + Gyp. wht; cry. to xln
 to clear. large x's + wh. fragm

5847-5880 Dolo. Lm to lmy Dolo. ch. gry
 to grayish tan; crypto to v. v. fin. xln;
 sub-sucro + packstn; Dolo. lt. gry.
 crypto. to v. v. fin. xln; sub-sucro and
 packstn; pure Dolo - dul. gldn. yel. fluor.
 No cut; No vis por; w/trs to abu. Anhy +
 Gyp. wht - cry. to xln to wht to clear
 large x's + fragm; sl; trs chert orange trns
 Samples similar 5847-80w/abu. Anhy
 + Gyp. + abu. Dolo tan, grayish IP's crypto
 to v. v. fin. xln; sub-sucro to sucro + trs
 packstn; dul yel. flu.or. IP's; No cut
 abu. pr. to fa + trs admicro-pp por
 + Prob interxln por IP's w/hoy trs
 chert wht or tan to orange; opa to



7 7/8 inch Bit Info:
 #1 PDC 1715 to 4275
 #2 Rerun Smith F271Y
 4275 to 5894 TD

Dev. Surv. S
 1. 1527 1/4° 3. 5894 TD
 2. 4271 1 1/2°

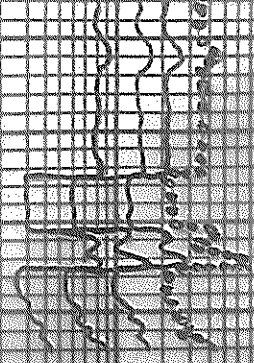
Cir. Points
 1. 4275 6. 5540
 2. 5160 7. 5570
 3. 5480 8. 5750
 4. 5500 9. 5834
 5. 5520 10. 5894 TD

No DST's were Run
 Daily Dalg Progress
 1. 3500 At 6:55 PM 5-30-16
 2. 3890 At 7:00 AM 5-31-16
 3. 4346 At 7:00 AM 6-1-16
 4. 4699 At 7:00 AM 6-2-16
 5. 5026 At 7:00 AM 6-3-16
 6. 5347 At 7:00 AM 6-4-16
 7. 5550 At 7:00 AM 6-5-16
 8. 5756 At 7:00 AM 6-6-16
 9. 5894 At 7:00 AM 6-7-16

Mud Info.:

Date	5-30	5-31	6-1	6-2	6-3	6-4	6-5	6-6
	8:55A	7:35A	8:45A	7:40A	7:40A	7:50A	7:30A	7:55A
Depth	2911	3890	4388	4732	5056	5396	5569	5800
	0 0 0 75	0 2	0 3	0 15	0 35	0 2	0 35	

5847-5890 Dolo. Lin to Lm Dolo; clayey
 foggyish tan; crypto to v. b. fine; silty
 sub-succo + p. ch. stn; Dolo. 14. gr. v.
 crypto. to v. b. fine; silty sub-succo and
 p. ch. stn; pure Dolo - dw. gl. d. yel. flow
 loc. cut; Al. v. is foggy tan to z. b. tan; y.
 5 y. wht - crypto tan to wht to clear
 layers w/ sharp, silty chert orange to tan
 Samples similar 5847-80 w/ abn. Anhy
 + Gyp + abn. Dolo tan; grayish 1/3 crypto
 tan; fine; silty sub-succo + succo + ch. stn
 p. ch. stn; silty yel. flow 1/3; Al. cut
 + abn. p. ch. stn + tan + dw. gl. d. yel. flow
 + p. ch. stn + tan + dw. gl. d. yel. flow + chert
 chert wht. to tan to orange; dol. to



7 7/8 inch Bit Info:
 #1 PDC 1715 to 4275
 #2 Rerun Smith F27 IY
 4275 to 5894 TD
 Dev. Surv. S
 1. 1527 1/4° 3.5894 TD
 2. 4271 1 1/2°
 Cir. Points
 1. 4275 6. 5540
 2. 5160 7. 5570
 3. 5480 8. 5750
 4. 5500 9. 5834
 5. 5520 10. 5894 TD

No DST's were Run
 Daily Drlg Progress
 1. 3500 At 6:55 PM 5-30-16
 2. 3890 At 7:00 AM 5-31-16
 3. 4346 At 7:00 AM 6-1-16
 4. 4699 At 7:00 AM 6-2-16
 5. 5026 At 7:00 AM 6-3-16
 6. 5347 At 7:00 AM 6-4-16
 7. 5550 At 7:00 AM 6-5-16
 8. 5756 At 7:00 AM 6-6-16
 9. 5894 At 7:00 AM 6-7-16

Mud Info.:								
Date	5-30	5-31	6-1	6-2	6-3	6-4	6-5	6-6
	8:55A	7:35A	8:45A	7:40A	7:40A	7:50A	7:30A	7:55A
Depth	2911	3890	4388	4732	5056	5396	5569	5800
Wt.	9.0	8.75	9.3	9.3	9.15	9.35	9.2	9.35
Vis	29	43	48	42	49	50	49	80
PV	2	11	14	12	15	17	16	18
YP	2	13	14	13	17	17	16	22
GS	2/3	12/35	13/40	13/37	16/47	16/49	16/47	19/56
NL	N/C	8.8	7.2	9.2	8.8	9.2	9.2	9.2
Cake	-	1/32	1/32	1/32	1/32	1/32	1/32	1/32
pH	7.0	11.0	10.5	10.5	9.5	9.0	9.0	9.5
chl	3800	400	300	450	300	500	900	700
Ca	HVY	20	20	20	20	20	20	110
LCM	3.0	5.0	4.0	3.0	8.0	8.0	11.0	15.0

OPERATOR Berexco LLC LOCATION 580' FNL & 1980' FEL
 LEASE Evelyn NO. 1-7 SEC. 7 TWP. 30S RANG. 40W
 ELEVATION 3338 KB RTD 5894 COUNTY Stanton STATE Kansas



CEMENTING LOG

STAGE NO. _____

Date 9/28/16 District Cadley Ticket No. 267580
 Company Bureau Rig 267580
 Lease Eglyn Well No. 1-1
 County Stanton State K3
 Location _____ Field _____

CEMENT DATA:

Spacer Type: _____
 Amt. _____ Skys Yield _____ ft³/sk Density _____ PPG _____

LEAD: Pump Time _____ hrs. Type NEW 65/35 0.74 gal
1/4 Flt 370cc Excess _____

Amt. 580 Skys Yield 2.2 ft³/sk Density 12.07 PPG _____

TAIL: Pump Time _____ hrs. Type _____
 Excess _____

Amt. 150 Skys Yield 1.33 ft³/sk Density 19.9 PPG _____

WATER: Lead 12.5 gals/sk Tail 6.5 gals/sk Total _____ Bbls. _____

Pump Trucks Used 566-281
 Bulk Equip. 891
Librad?

Float Equip: Manufacturer _____
 Shoe: Type _____ Depth _____
 Float: Type _____ Depth _____
 Centralizers: Quantity _____ Plugs Top _____ Btm. _____
 Stage Collars _____
 Special Equip. _____
 Disp. Fluid Type H₂O Amt. 108 Bbls. Weight 8.37 PPG _____
 Mud Type _____ Weight _____ PPG _____

CASING DATA: Conductor PTA Squeeze Misc
 Surface Intermediate Production Liner
 Size 8 5/8 Type _____ Weight _____ Collar _____

Casing Depths: Top KB Bottom 209

Drill Pipe: Size 4 1/2 Weight _____ Collars _____
 Open Hole: Size 12 1/4 T.D. _____ ft. P.B. to _____ ft.

CAPACITY FACTORS:
 Casing: Bbbs/Lin. ft. 0.633 Lin. ft./Bbl. _____
 Open Holes: Bbbs/Lin. ft. _____ Lin. ft./Bbl. _____
 Drill Pipe: Bbbs/Lin. ft. _____ Lin. ft./Bbl. _____
 Annulus: Bbbs/Lin. ft. _____ Lin. ft./Bbl. _____
 Bbbs/Lin. ft. _____ Lin. ft./Bbl. _____
 Perforations: From _____ ft. to _____ ft. Amt. _____

COMPANY REPRESENTATIVE _____

CEMENTER AB1

TIME AM/PM	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	
						Calculation, SET mix, Setup
						Drill Hole
						Run Log Circulate
				174	4.0	Amt 25/35
				22.0	4.0	Mix Com
				108.0		Displace Plug w/ H ₂ O
						Lead Plug
0:130						JOB Complete