[redacted] 1262182

Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
November 2016
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 34318
Name: BEREXCO LLC
Address 1: 2020 N. Bramblewood
Address 2:
City: Wichita State: KS Zip: 67206 + 1094
Contact Person: Evan Mayhew
Phone: (316) 265-3311
CONTRACTOR: License # 34317
Name: BEREDCO LLC
Wellsite Geologist: Ed Grieves
Purchaser: Central Crude Corporation

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 #:

05/28/2015 Spud Date or Recompletion Date
06/11/2015 Date Reached TD
07/30/2015 Completion Date or Recompletion Date

API No.: 15-187-21321-00-00
Spot Description:
NW - SW - SE - SW Sec. 1 Twp. 29 S. R. 41 ☐ East ☑ West
335 Feet from ☐ North / ☑ South Line of Section
1400 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: Stanton
Lease Name: Arnold W Well #: 1-1
Field Name: Arroyo Northeast
Producing Formation: Morrow
Elevation: Ground: 3341 Kelly Bushing: 3353
Total Vertical Depth: 5655 Plug Back Total Depth: 5572
Amount of Surface Pipe Set and Cemented at: 1700 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 3198 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: 10100 ppm Fluid volume: 1300 bbls
Dewatering method used: Evaporated
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: 09/23/2015
☑ **Confidential Release Date:** 09/22/2017
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 09/28/2015

[redacted]

1262182

Operator Name: BEREXCO LLC Lease Name: Arnold W Well #: 1-1

Sec. 1 Twp. 29 S. R. 41 ☐ East ☑ West County: Stanton

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
Geolgist Report / Mud Logs	☐ Yes	☐ No

List All E. Logs Run: Attached

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

Name	Top	Datum
Attached	Attached	Attached

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	23	1700	65/35 POZ, Class A	745	6%gel, 1/4#flakes, 3%cc
Production	7.875	5.50	15.5	5651	65/35 POZ, ASC	345	6%gel, 1/4#flakes, 3%cc

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	-			
	-			

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

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

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL: Top	Bottom
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	5465 - 5482	

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

TUBING RECORD:	Size:	Set At:	Packer At:	
	2.875	SN @ 5540		

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Arnold W 1-1
Doc ID	1262182

All Electric Logs Run

Dual Spaced Neutron Spectral Density Log
Array Compensated True Resistivity Log
Dorehole Compensated Sonic Array Log
Microlog

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Arnold W 1-1
Doc ID	1262182

Tops

Name	Top	Datum
Heebner (base)	3710	-357
Lansing	3765	-412
KS City A	4190	-837
KS City (base)	4335	-982
Marmaton	4366	-1013
Ft Scott	4531	-1178
Morrow	5033	-1680
Chester	5506	-2153
St. Genevieve	5568	-2215
St. Louis	5618	-2265
RTD	5691	-2338
LTD	5653	-2300

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Arnold W 1-1
Doc ID	1262182

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	1700	65/35 POZ, Class A	745	6%gel, 1/4#flakes, 3%cc
Production	7.875	5.50	15.5	5651	65/35 POZ, ASC	345	6%gel, 1/4#flakes, 3%cc

ALLIED OIL & GAS SERVICES, LLC 064736

Federal Tax I.D. # 20-8651475

REMIT TO P.O. BOX 93999
SOUTHLAKE, TEXAS 76092

SERVICE POINT: Oakley

DATE 5-31-15	SEC. 1	TWP. 29S	RANGE 41W	CALLED OUT	ON LOCATION 8:00pm	JOB START 3:30Am	JOB FINISH 4:30Am
LEASE Arnold W	WELL # 1-1	LOCATION Johnson East Edge 2S 3/4W Winto				COUNTY Stanton	STATE KS
OLD OR NEW (Circle one)							

CONTRACTOR Beredco 1 OWNER Same
TYPE OF JOB Surface
HOLE SIZE 12 1/4 T.D. 1703'
CASING SIZE 8 5/8 DEPTH 1702.36
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT 41.82
CEMENT LEFT IN CSG. 41.82
PERFS.
DISPLACEMENT 105.77

CEMENT

AMOUNT ORDERED 645 sks Lite 3%cc 1/4# Flo-seal
150 sks com 3%cc

COMMON	150 sks	@ 17.90	2685.00
POZMIX		@	
GEL		@	
CHLORIDE	2107	@ 1.10	2317.70
ASC		@	
Lite	645 sks	@ 19.88	12,822.60
		@	
		@	
Flo-seal	162#	@ 2.97	481.14
		@	
Material Total		@	18,306.44
(8237.89/45%)		@	
HANDLING	904 cu/ft	@ 2.48	2241.92
MILEAGE	2.75 Ton/mile		3129.50
		TOTAL	

EQUIPMENT

PUMP TRUCK # 431 CEMENTER Andrew Forslund
HELPER Brandon Wilkinson
BULK TRUCK # 890 DRIVER Darren Pacette
BULK TRUCK # 457 DRIVER Paul Braver

REMARKS:

Start mixing Lite, Lite mixed start com, com mixed. Release Plug wash pump and start Displacement. 600# Lift Land Plug 1300#. Float held Cement Did circulate.

thank you

SERVICE

DEPTH OF JOB 1702.36
PUMP TRUCK CHARGE 2213.75

EXTRA FOOTAGE		@	
MILEAGE	30 miles	@ 7.70	231.00
MANIFOLD	head	@ 225.00	N/C
Light vehicle	50 miles	@ 4.40	220.00
		@	

(3616.28/45%) TOTAL 8,036.17

CHARGE TO: Berexco
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

8 5/8

1 Guide shoe	@	460.00
1 AFU Insert	@	447.00
1 Rubber Plug	@	131.00
3 Centralizers	@ 75.00	225.00
	@	

(568.35/45%) TOTAL 1,263.00

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any)
TOTAL CHARGES 27,605.61
DISCOUNT 12422.52 (45%) IF PAID IN 30 DAYS
15,183.08 Net
B.d.

PRINTED NAME

SIGNATURE [signature]

ALLIED OIL & GAS SERVICES, LLC

CEMENTING LOG

STAGE NO.

Date 5-31-15 District Oakley Ticket No. 064236

Company Beredco Rig Beredco 1

Lease Arnold W Well No. 1-1

County Stanton State KS

Location 1 29 41 Field

Johnson 2.5 3/4 W Into

CASING DATA: Conductor ☐ PTA ☐ Squeeze ☐ Misc ☐

Surface ☒ Intermediate ☐ Production ☐ Liner ☐

Size 8 5/8 Type Weight Collar

Casing Depths: Top KB Bottom

Drill Pipe: Size Weight Collars

Open Hole: Size 12 1/4 T.D. 1203 ft. P.B. to ft.

CAPACITY FACTORS:

Casing: Bbls/Lin. ft. .0637 Lin. ft./Bbl.

Open Holes: Bbls/Lin. ft. Lin. ft./Bbl.

Drill Pipe: Bbls/Lin. ft. Lin. ft./Bbl.

Annulus: Bbls/Lin. ft. Lin. ft./Bbl.

Bbls/Lin. ft. Lin. ft./Bbl.

Perforations: From ft. to ft. Amt.

CEMENT DATA:

Spacer Type:

Amt. Sks Yield ft³/sk Density PPG

LEAD: Pump Time hrs. Type C5/35 4% gel

3%CC 1/4# Flo-Seal Excess

Amt. 645 Sks Yield 1.99 ft³/sk Density 12.4 PPG

TAIL: Pump Time hrs. Type Com

Excess

Amt. 150 Sks Yield 1.33 ft³/sk Density 14.8 PPG

WATER: Lead gals/sk Tail gals/sk Total Bbls.

Pump Trucks Used 431

Bulk Equip. 457

890

Float Equip: Manufacturer Weather Ford

Shoe: Type Cement Nose Depth 1202.36

Float: Type AFU Insert Depth 1120.54

Centralizers: Quantity 3 Plugs Top Btm.

Stage Collars

Special Equip.

Disp. Fluid Type Water Amt. 105.77 Bbls. Weight PPG

Mud Type Weight PPG

COMPANY REPRESENTATIVE

CEMENTER Andrew

TIME AM/PM	PRESSURES PSI DRILL PIPE CASING	PRESSURES PSI ANNULUS	FLUID PUMPED DATA TOTAL FLUID	FLUID PUMPED DATA Pumped Per Time Period	FLUID PUMPED DATA RATE Bbls Min.	REMARKS
						Start mixing Lite
						Lite mixed start Com
						Com mixed
						Stop Pump
						Release Plug
						Start Displacement
				10		
				10		
				10		
				10		
				10		
				10		
				10		
				10		
				10		
	600			10		
	~~600~~ 1300			5		
						Plug landed
						Float held
						Cement did circulate

FINAL DISP. PRESS: PSI BUMP PLUG TO PSI BLEEDBACK BBLS. THANK YOU

MILLER PRINTERS, INC. - Great Bend, KS

DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: ARNLDW1-1DST1

TIME ON: 0720
TIME OFF: 1930

Company BEREXCO LLC — Lease & Well No. ARNOLD W #1-1
Contractor BEREDCO LLC RIG 1 — Charge to BLBEREXCO LLC
Elevation 3341 GL Formation MORROW SDST Effective Pay ____ Ft. Ticket No. M766
Date 6/10/2015 Sec. 1 Twp. 29 S Range 41 W County STANTON State KANSAS
Test Approved By EDWIN H. GRIEVES — Diamond Representative MIKE COCHRAN

Formation Test No. 1 Interval Tested from 5485 ft. to 5520 ft. Total Depth 5520* ft.
Packer Depth 5480 ft. Size 6 3/4 in. — Packer depth NA ft. Size 6 3/4 in.
Packer Depth 5485 ft. Size 6 3/4 in. — Packer depth NA ft. Size 6 3/4 in.
Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 5467 ft. — Recorder Number 5448 Cap. 5,000 P.S.I.
Bottom Recorder Depth (Outside) 5487 ft. — Recorder Number 0063 Cap. 5,000 P.S.I.
Below Straddle Recorder Depth ____ ft. — Recorder Number ____ Cap. ____ P.S.I.

Mud Type CHEM Viscosity 65 — Drill Collar Length 615 ft. I.D. 2 1/4 in.
Weight 9.2 Water Loss 7.2 cc. — Weight Pipe Length 0 ft. I.D. 2 7/8 in
Chlorides 500 P.P.M. — Drill Pipe Length 4838 ft. I.D. 3 1/2 in
Jars: Make STERLING Serial Number 3 — Test Tool Length 32 ft. Tool Size 3 1/2-IF in
Did Well Flow? NO Reversed Out NO — Anchor Length 35 ft. Size 4 1/2-FH in
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. — Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: WSB THAT DIED RIGHT AWAY (NO BB)
2nd Open: WSB THAT DIED RIGHT AWAY (NO BB)

Recovered ~2 ft. of VSOSWM 1% WATER, 99% MUD W/ A VERY THIN SCUM OF OIL
Recovered ~2 ft. of TOTAL FLUID
Recovered ____ ft. of ____
Recovered ____ ft. of ____
Recovered ____ ft. of ____
Recovered ____ ft. of ____
Recovered ____ ft. of ____
Remarks: *STRAP 36' SHORT
TOOL SAMPLE: ~100% MUD W/ A TR OF WTR & SOME OIL SPECKS

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 12:45 P.M. A.M. P.M. Time Started Off Bottom 3:45 P.M. A.M. P.M. Maximum Temperature 126°F

Initial Hydrostatic Pressure ..... (A) 2567 P.S.I.
Initial Flow Period ..... Minutes 30 (B) 14 P.S.I. to (C) 17 P.S.I.
Initial Closed In Period ..... Minutes 60 (D) 21 P.S.I.
Final Flow Period ..... Minutes 30 (E) 16 P.S.I. to (F) 16 P.S.I.
Final Closed In Period ..... Minutes 60 (G) 16 P.S.I.
Final Hydrostatic Pressure ..... (H) 2534 P.S.I.

DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	**BEREXCO LLC**	**Job Number**	**M766**
Well Name	**ARNOLD W #1-1**	**Representative**	**MIKE COCHRAN**
Unique Well ID	**DST#1 5485-5520 MORROW SDST**	**Well Operator**	**BEREXCO LLC**
Surface Location	**SEC.1-29S-41W STANTON CO.KS.**	**Report Date**	**2015/06/10**
Field	**WILDCAT**	**Prepared By**	**MIKE COCHRAN**
Well Type	**Vertical**	**Qualified By**	**EDWIN H. GRIEVES**
		Test Unit	**NO. 3**

Test Information

Test Type	**CONVENTIONAL**
Formation	**DST#1 5485-5520 MORROW SDST**
Test Purpose (AEUB)	**Initial Test**

Start Test Date	**2015/06/10**	**Start Test Time**	**07:20:00**
Final Test Date	**2015/06/10**	**Final Test Time**	**19:30:00**
		Well Fluid Type	**01 Oil**

Gauge Name	**5448**
Gauge Serial Number	

Test Results

Remarks **RECOVERED:**

~2' VSOSWM 1% WATER, 99% MUD W/ A VERY THIN SCUM OF OIL

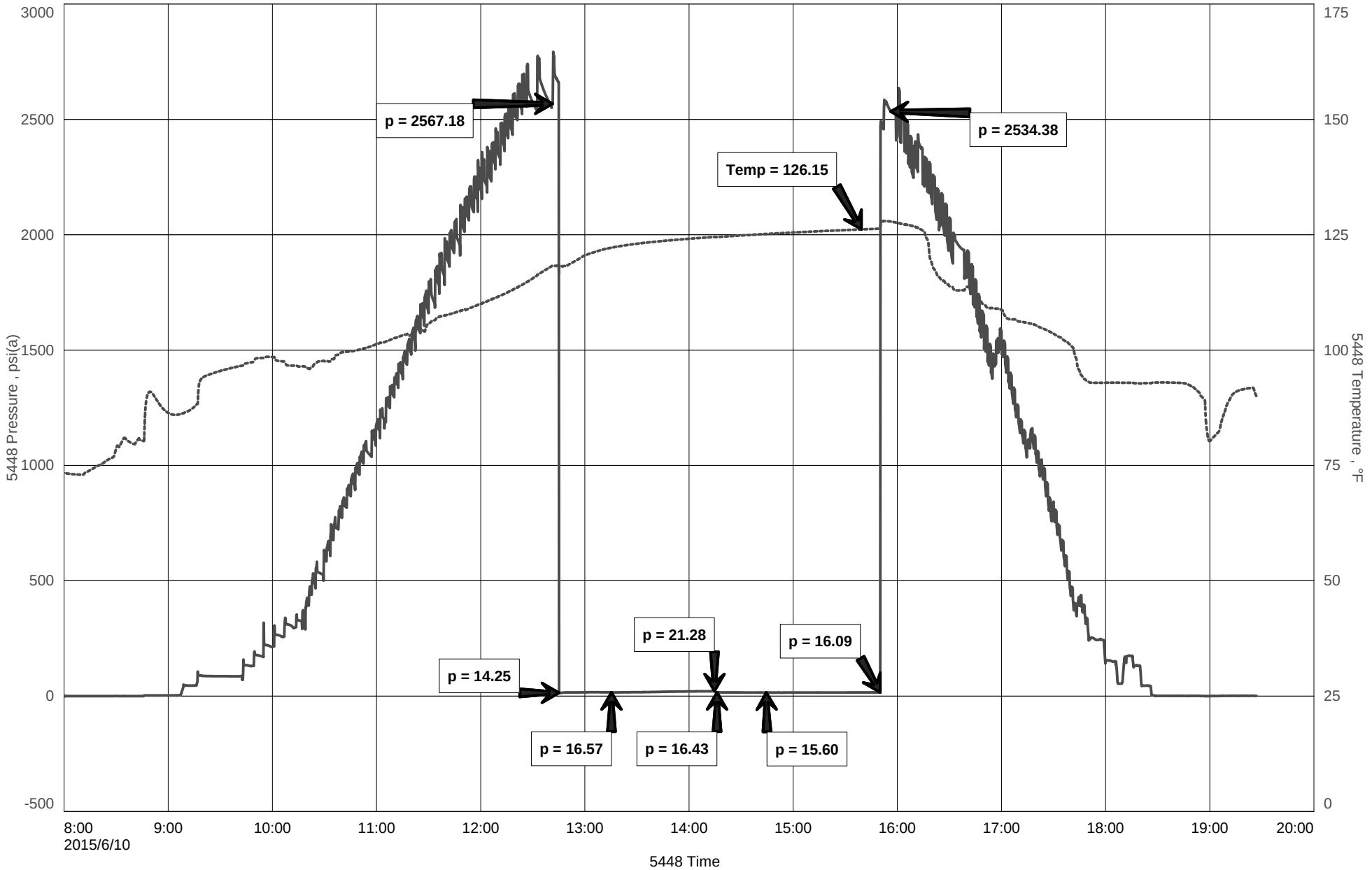
~2' TOTAL FLUID

TOOL SAMPLE: ~100% MUD W/ A TR OF WTR & SOME OIL SPECKS

BEREXCO LLC
DST#1 5485-5520 MORROW SDST
Start Test Date: 2015/06/10
Final Test Date: 2015/06/10

ARNOLD W #1-1
Formation: DST#1 5485-5520 MORROW SDST
Pool: WILDCAT
Job Number: M766

ARNOLD W #1-1



COMPANY BEREXCO

LEASE Arnold W NO. 1-1

LOCATION 335'FSL & 1400'FWL

SEC. ___ TWP. 29S RNG. 41W

COUNTY Stanton, STATE Kansas

FIELD Arroyo Northeast

CONTRACTOR BereExco Drlg. Rig #1

COMM. 5-27-2015 COMP. 6-12-2015

RTD 5691 LTD 5653

No. of DST'S 1 No. of CORES None

ELEVATIONS

KB 3353

DF 3351

GL 3341

MEASUREMENTS ARE ALL FROM KB

CASING RECORD

8 5/8" at 1701 w/ 795 sx.

___ at ___ w/ ___ sx.

___ at ___ w/ ___ sx.

___ at ___ w/ ___ sx.

EL. LOG A.C.T.Res.SP.GR DEN.NEUT.GR.Caliper ML.Sonic

SAMPLES SAVED FROM 3600 TO TD

DRILLING TIME KEPT FROM 3600 TO TD

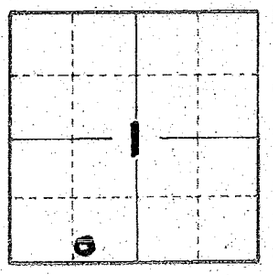
SAMPLES EXAMINED FROM 3600 TO TD

GEOLOGICAL SUPERVISION FROM 3600 TO TD

GEOLOGIST ON WELL Edwin H. Grieves

FORMATION TOPS

	SAMPLE	LOG	SUBSEA
Base Heebner	3749	3710	- 357
Lansing Fm.	3816	3765	- 412
Kansas City "A"	4232	4190	- 837
BKC	4379	4335	- 982
Marmaton Fm	4400	4366	- 1013
Ft Scott	4569	4531	- 1178
Morrow Fm	5066	5033	- 1680
Chester	5550	5506	- 2153
St. Genevieve	5614	5568	- 2215
St. Louis	5665	5618	- 2265
TD	5691	5653	

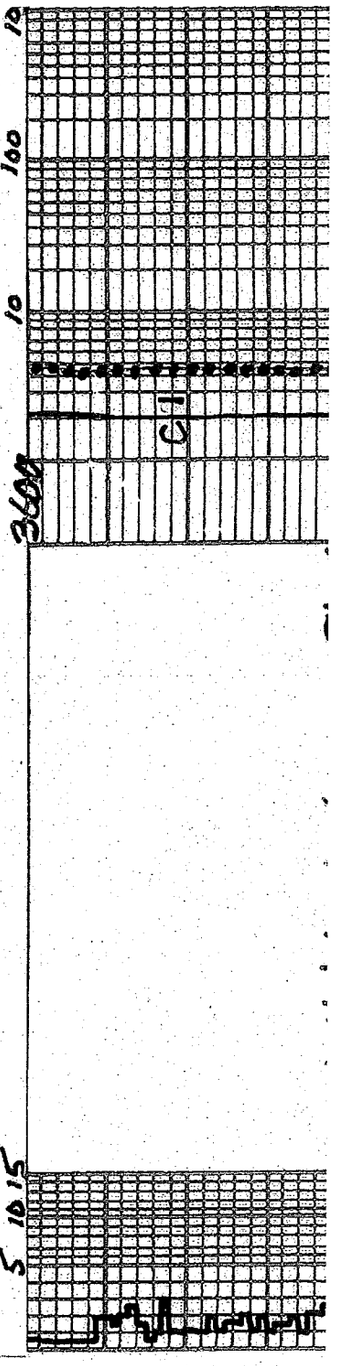


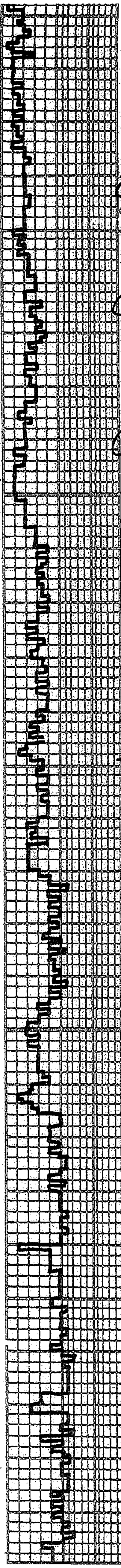
API# 15-187-21321

REMARKS Earth-Tech had an unmanned gas detection trailer on this well from 3600 feet to total depth.

Note: E-log Depths are 36 to 38 feet high to Sample Log Depths.

Thank You
Edwin H. Grieves
Geologist





Interbedded Lmsts w/scattered Chert

(1) Slower Dalg. Lms. lt.gry. grdng to tan crypto to v.v.fn. xln.; trs. sub-chlk sub-sucro & packstn; trs to abn w/phantom oolites to oolitic IP's; dul. lt. yel. to dul. yel. fluor.; No Cut; No Vis Por

(2) Faster Dalg. Lms. trs. to abn wht to crm.-chlk & gryish. tan to tan; crypto to v.v.fn. xln.; sub-chlk; sub-sucro. to sucro.; dul. yel to dul. lt. yel. fluor; No Cut, abn. pr to fr & trs. gd. to excel. micro-pp. to interxln. por

(3) scattered trs chert crm. to tan; opque

Sh. v. dk. gry. to black-carb.

Sh. lt. gry. to lt. green; musky & soft when wet; trs. silty

Lms. hvy. trs wht to crm-chlk & crm to tan crypto. to v.v.fn. xln.; sub-chlk, sub-sucro to trs. sucro.; dul. yel-fluor; No Cut scattered trs. v. pr. micro pp por.

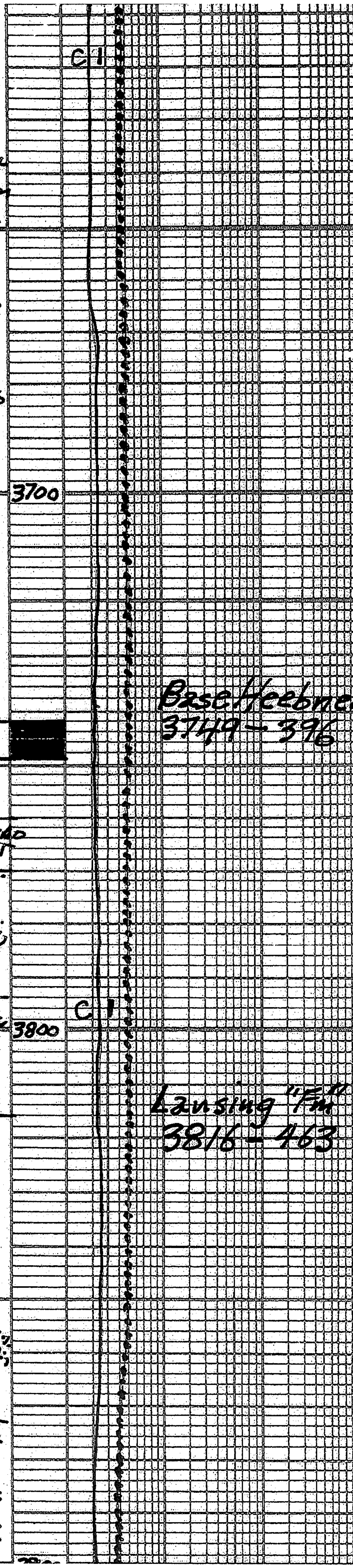
Lms. gryish. tan to tan; crypto to v.v.fn. xln., trs sub-chlk, sub-sucro & packstn; dul. yel. fluor.; No Cut; No Vis Por

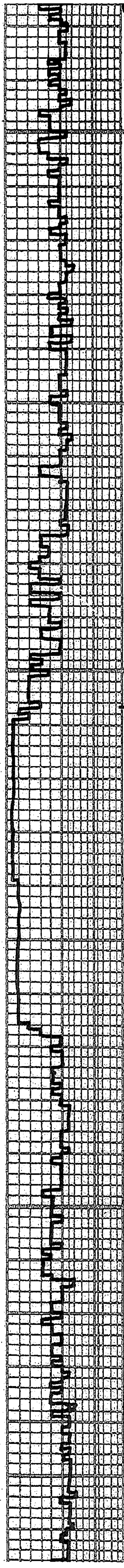
Sh. lt., med & trs dk. gry-sl. to v. calc

Interbedded Limestones

(1) Slower Dalg. Lms. lt. gry to tan; crypto. to v.v.fn. xln.; trs sub-chlk, sub-sucro, packstn & trs. sub-lithogr; scattered trs to trs w/phantom oolites to oolitic IP's; dul. lt. yel. to lt. yel. fluor.; No Cut; No Vis Por

(2) Faster Dalg. Lms. trs to hvy. trs. wht. to crm-chlk and gryish. tan to tan crypto. to v.v.fn. xln. sub-chlk; sub-sucro to sucro.; trs. foss. IP's scattered trs phantom oolitic to oolitic IP's; dul. yel. to dul. lt. yel. fluor.; No Cut; scattered trs





(2) Pasterwig. Lms. trs to huy. trs. wht. to crm-chlk and grayish. tan to tan crypto. to v.v.fn. xln.; sub-chlk; sub-sucro to sucro.; trs. foss. IP's scattered trs phantom oolitic to oolitic IP's; dul. yel. to dul. lt. yel. fluor.; No Cut; scattered trs to huy. trs. pr. to fr micro-pp. por w/ poss. interxln IP's

3900

WOB 3000
RPM 65-70
SPM 60
PP 1200

4000

Lms huy. trs to v. abn. wht. to crm-chlk and tan; crypto. to v.v.fn xln.; v. to extrly oolicastic &/or sli to v. oolitic; matrix trs. chlk, sub-sucro, to sucro & trs. packstn.; yel. to gldn. yel. fluor, mottled IP's; No Cut abn. pr to excel oolicastic por w/ trs pr to fr micro-pp por; Quest. Perm

Lms. similar 4007 - 4039 w/less oolicastic & more oolitic w/corresponding Reduction of por

Lms. tan to lt. gry. mottled IP's; crypto to v.v.fn. xln.; oolitic IP's (tan to lt. gry.); sub-chlk, sub-sucro & packstn dul. yel. fluor. IP's; No Cut, No Vis Por becoming shly IP's & abn sh. IP's med. to drk. gry., sli to v. calc.

4100

WOB 32000
340
RPM 75
SPM 58
PP 1000

Interbedded Limestones
① Slower Lms similar 4066–4176
② Faster Drlg Lms. hvy. trs. to abn. wht. to crm-chlk + tan; crypto to v.v.fn-xln.; politic IP's
sl. oolicastic IP's; sl. to v. foss. IP's;
dul. yel. to yel. fluor.; No Cut; hvy. trs
pr. to fr. + trs. gd. micro pp to pp por.

4200

Kansas City "A"
4232–879

Lms. similar 4066–4176

WOB 38000
RPM 70
SPM 60
PP 1100

Lms. abn. wht. to crm-chlk + crm to tan; crypto to v.v. fn xln.; v. to extrly oolicastic/or v. to extrly oolitic; matrix sub-chlky sub-sucro. to sucro. + packstn.
yel. to dul. yel. fluor.; No Cut; abn pr to excel oolicastic por. + trs. pr to fr + trs gd. micro-pp to inter xln. por. in matrix

C2 1

244?

Interbedded Limestones
① Lms. tan, grayish. IP's; crypto. to v.v. fn xln.; sub-chlk., sub-sucro + packstn.
dul. lt. yel. fluor. IP's; No Cut; No Vis Por

4300

C2 1

② Lms. lt. to med. gry., tanish IP's;
sl. to v. shly incr. w/depth;
crypto. xln.; sub-chlk. or shly
+ packstn.; No fluor; No Cut
No Vis Por

3 2 1

144?

BKC
4379–1026

C2 1

Sh med to v. drk. gry.- sl. to v. calc
in parts

Marmaton "A"
4400–1047

4400

Lms. lt. gry to tan, crypto. to v.v. fn xln.
sub-sucro., packstn + trs. sub-lithogr.
dul. yel. fluor. IP's; No Cut; No Vis Por

WOB 36000
RPM 80
SPM 60

4400-1047

4400

Lms. lt. gray to tan, crypto to v.f. xln.
sub-sucro., packstn + trs. sub-lithogr.
dul. yel. fluor. IP's; No Cut; No Vis Por.

WOB 36000
RPM 80
SPM 60
PP 1200

Lms. trs. wht. to crm-chlk + tan
greyish. IP's: crypto to v.v.fn. xln
v. to extely oolitic +/or sl. to trly.
oolicastic; matrix trs. sub-sucro +
packstn.; dul. yel. fluor.; No Cut; trs
to huy trs poor to trs. fr. oolicastic
Por.; Quest. Perm.

Lms. lt. to med. gry. - sl. to frly shly and
greyish. tan to tan; crypto. to v.v.fn. xln.
sub-chlk +/or shly. + packstn.;
phantom oolitic to oolitic IP's
trs. dul. yel. fluor.; No Cut; No Vis. Por.

4500 C 2 1

C 2 1

Sh. v. drk. gry. to black-carb.

4 5 3 2 — Blk Sh 3 1 U

WOB 40000
RPM 80
SPM 56
PP 1000

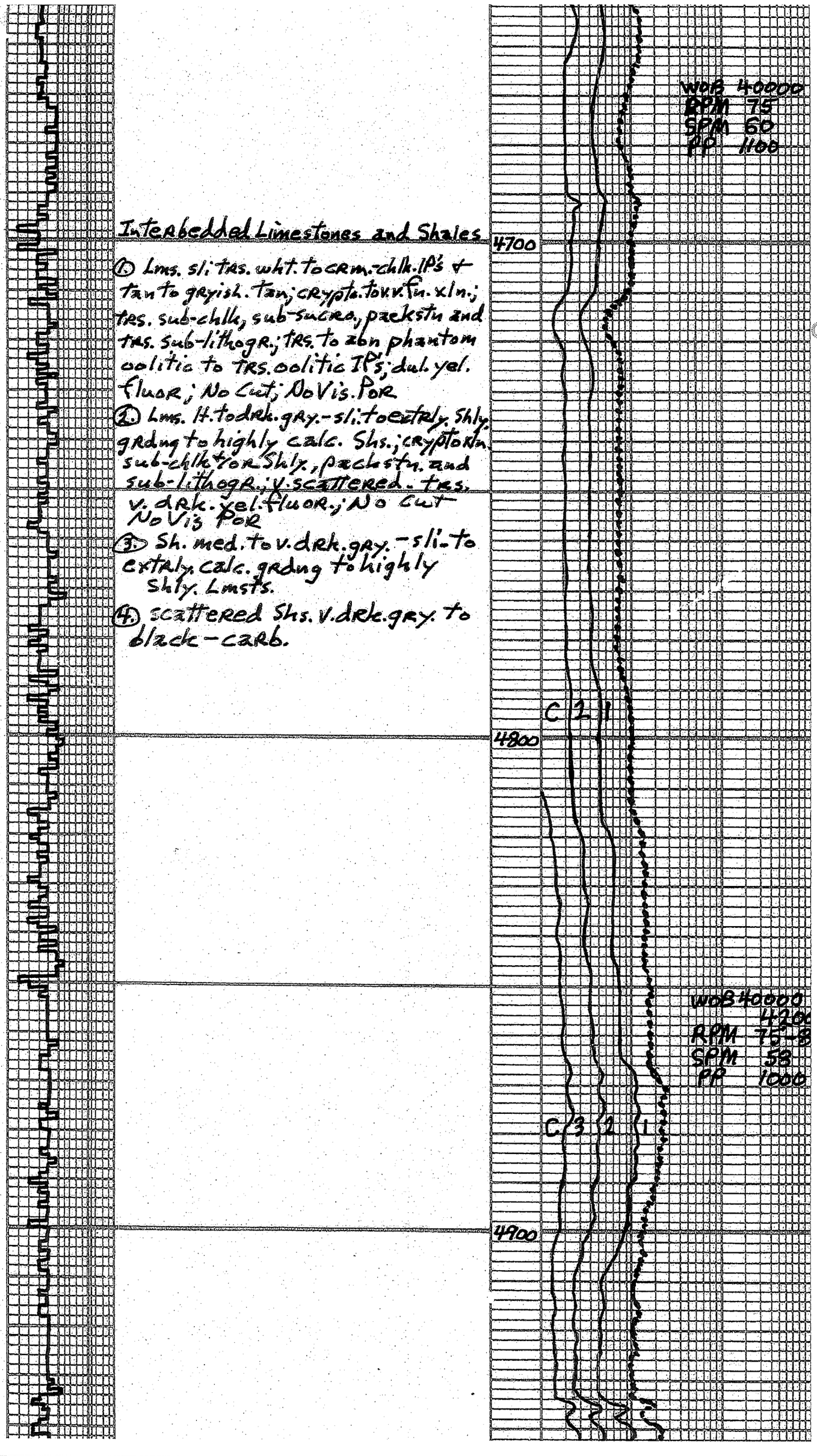
Lms. similar 4445-4566

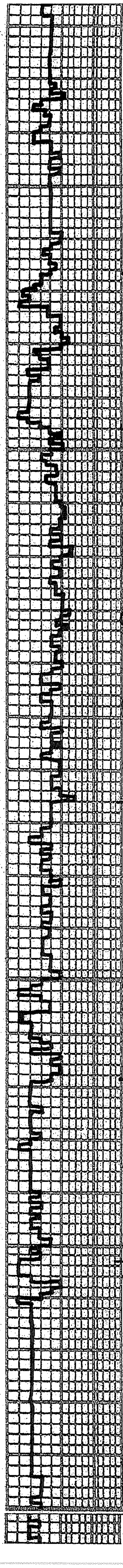
C3 2 1

4600

C 2 1

WOB 40000
RPM 75
SPM 60
PP 1100


WOB 40000
RPM 75
SPM 60
PP 1100
Interbedded Limestones and Shales
4700
① Lms. sl. trs. wht. to crm. chlk. lp's & tan to grysh. tan; crypto. to v. fn. x ln.; trs. sub-chlk, sub-sucro., packstn and trs. sub-lithogr.; trs. to abn phantom oolitic to trs. oolitic lp's; dul. yel. fluor; No Cut; No Vis. Por
② Lms. lt. to drk. gry. - sl. to extrly. shly. grdng to highly calc. Shs.; cryptonn. sub-chlk to or Shly., packstn. and sub-lithogr.; v. scattered. trs. v. drk. yel. fluor.; No Cut No Vis Por
③ Sh. med. to v. drk. gry. - sl. to extrly. calc. grdng to highly Shly. Lmsts.
④ scattered Shs. v. drk. gry. to black - carb.
C 2 1
4800
WOB 40000 42
RPM 75-8
SPM 58
PP 1000
C 3 2 1
4900



Lms. + Shs similar 4585-4967
Predominately Shs.-v.drk. gry to black carb.

Limestones w/thin interbeds Shales

(1) Lms. lt. to med. gry.-sl. to extrly Shly and hvy. trs. gryish-tan to tan; crypto to v.v.fn. xln; sub-chlk'y/or Shly., trs sub-sucro packstn. + trs. sub-lithogr.; No fluor.; No Cut; No Vis. Por

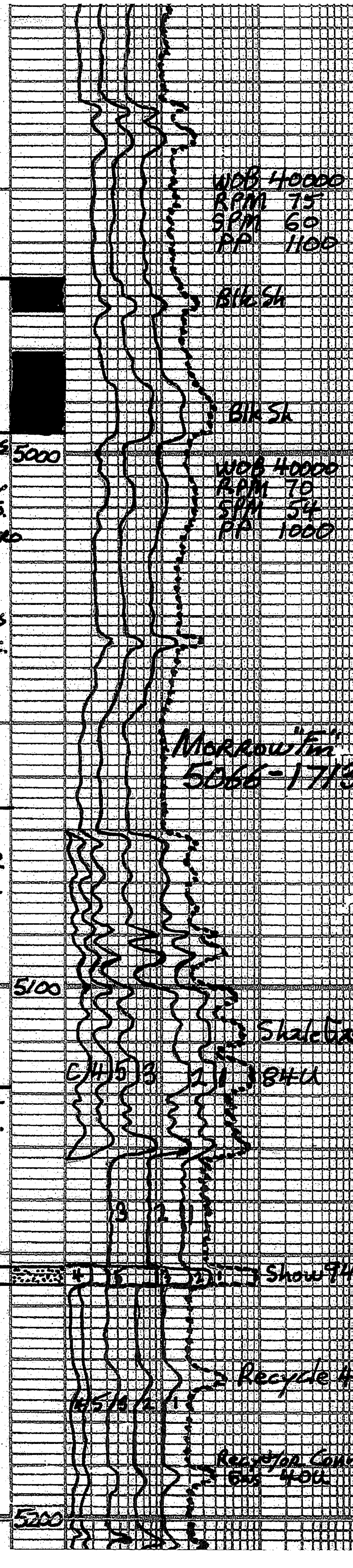
(2) scattered thin interbeds Shales med. to v.drk. gry.-v. to extrly. calc. grdng. to shly. Lmsts.

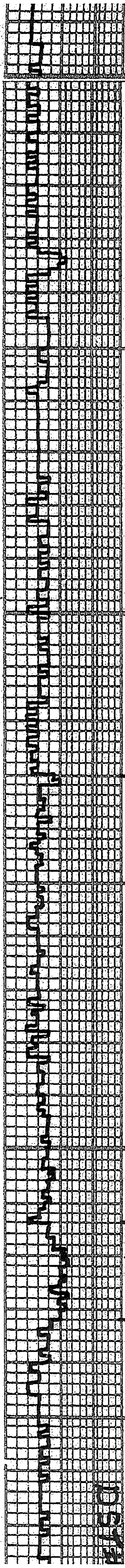
(3) scattered thin interbeds Shales v.drk. gry. to black-carb.

Lmsts. w/interbeds Shales similar 4996-5066 w/large increase in amount + thickness of carb. black Shales

5119-5153 Sh. trs. med. gry-soft w/silky luster IP's + drk to v.drk. gry. to trs. black-carb.

5153-5156 Siltstn v.lt. gry.; v.v. fn. to fn. gr. silt; scattered. sli. trs. glauc + /or chlorite
No fluor. No Cut; v.v. sl. trs v.v. fn. micro-p.p. por. IP's





Shs. trs. med.gry.-soft w/silky luster.; predominately drk to v.drk.gry., splintery IP's trs. pyrite w/scattered trs

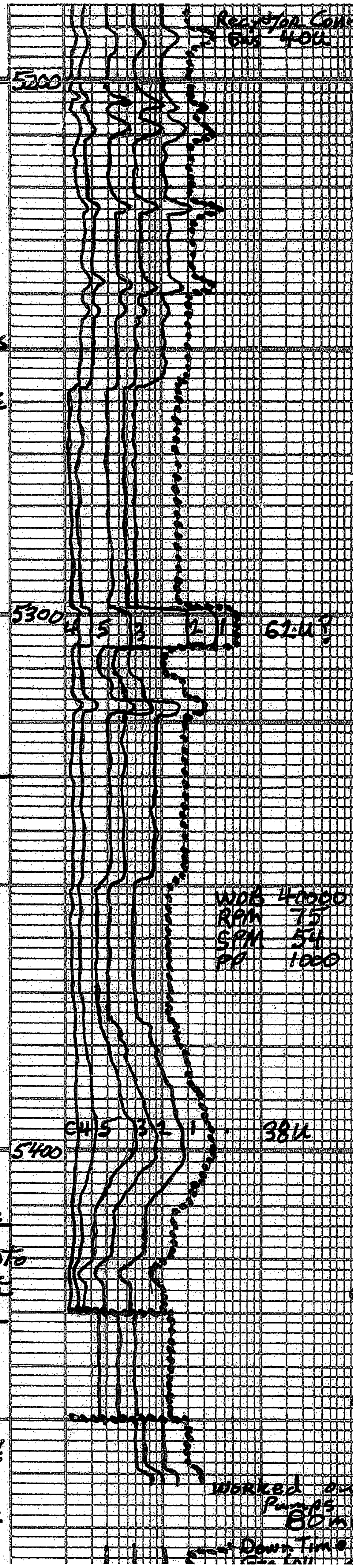
Lms. lt. to medgry. to grayish.tan to tan; crypto. to v.v.fn.xln.; trs. oolitic (tan+gry.); trs.foss.; sub. sucro., packstn.. to trs. sub-lithogr.; trs.dul. lt. yel.fluor; No Cut; NoVis. Por.

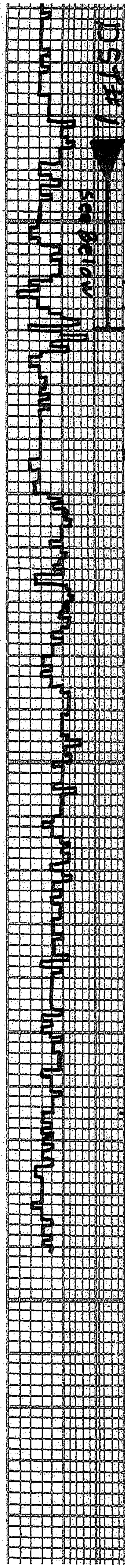
Shs. med.gry.-soft w/silky luster + drk.gry.-soft, splintery IP's w/trs lm grs. becoming Lm. Sdst w/ gry. Sh. cement. No fluor; NoCut; NoVis Por

Lm. Sdst. lt. to med.gry., tanish IP's v.fn. to med.gr.; composed Lm grs, foss frags. & oolites-gry) (grs crypto to v.v.fn.xln); scattered trs glauc &/or chlorite; matrix packstn & Sh.; trs. Qtz grs. fn. to med., ang; trs. dul.yel. fluor; NoCut NoVis Por.

5432-5481 Sh. sl. trs. med.gry-soft w/silky luster and drk. to v.drk gry.-splintery IP's

5481-5489 Qtz + Lm Sdst 0-100% Qtz grs to 0 to 100% Lm grs. lt.gry. to tan; v.v.fn to fn. + trs med.gr. Qtz grs ang.; all prly sort.; Lm grs





5481-5489 Qtz + Lm Sdst
0-100% Qtz grs to 0 to 100% Lm grs.
lt.gry. to tan; v.v.fn to fn. + trs med.gr.
Qtz grs ang.; all prly sort; Lm grs
composed Lm grs, foss. frags + trs
oolites; matrix sub-chlk, packstn and
hvy trs. Sh.; trs to hvy trs. glauc.
+/or Chlorite IP's; sl. trs dull lt yel
fluor.; No Cut; No Vis Por

5489-5511 Sh. similar 5432-5481

5511-5516 Qtz. sdstn. lt. tan from
oil stn.; v.v.fn to fn. w/hvy. trs med.
gr.; ang.; prly to gd. sort; gd oil
oder.; v. brt yel. fluor; flush to good
streaming cuts; abn. pr. fr to gd.
+ hvy. trs excel. micro-pp to intergr.
por; some loose Qtz grs, v.v.fn to
fn + trs med; ang. clear

5516-5529 Sh med. gry-soft w/silky
luster IP's + dark to v. dark gray, splintery
IP's w/hvy trs Qtz sdst similar
5511-5516 w/scattered trs Sh grs
med gry; med gr. ang to rnded
Sh med. gry-soft w/silky luster + dark
to v. dark gry, splintery IP's

Sh + Lms Conglomerate
(1) Sh. Reds + maroons-silty IP's
(w/abn med to drk gry Sh prob From
Morrow

(2) Lms. gry to tan, trs. pinkish, crypto
to v.v.fn. xln.; sub-sucro, packstn
+ trs sub-lithogr.; dul. yel. fluor;
No Cut; No Vis Por

Sh + Lm conglomerate similar 5550-87
w/trs to abn. Lms. lt. gry. to tan, pinkish
IP's; crypto to v.v.fn. xln; ext rly
micro-oolitic + sli Qtz sdy-v.v.fn gr
ang.; matrix chlk, sub-chlk and
sub sucro; trs. v. dul yel. fluor
No Cut; No Vis Por

Lms. lt gry. to tan; crypto. to v.v.fn. xln
v. to ext rly micro-oolitic + Qtz Sdy-
v.v. fn. gr.-ang.; matrix sub-chlk.,
sub-sucro + trs packstn;
dul. lt. to trs. lt. yel. fluor; No Cut
No Vis Por.

Lms. similar 5614-5652 w/trs
to abn wht. to crm-chlk; micro-oolitic
+ Qtz. Sdy-v.v.fn gr.-ang w/trs small
to med oolites; dul. lt. yel. fluor No Cut
No Vis Por

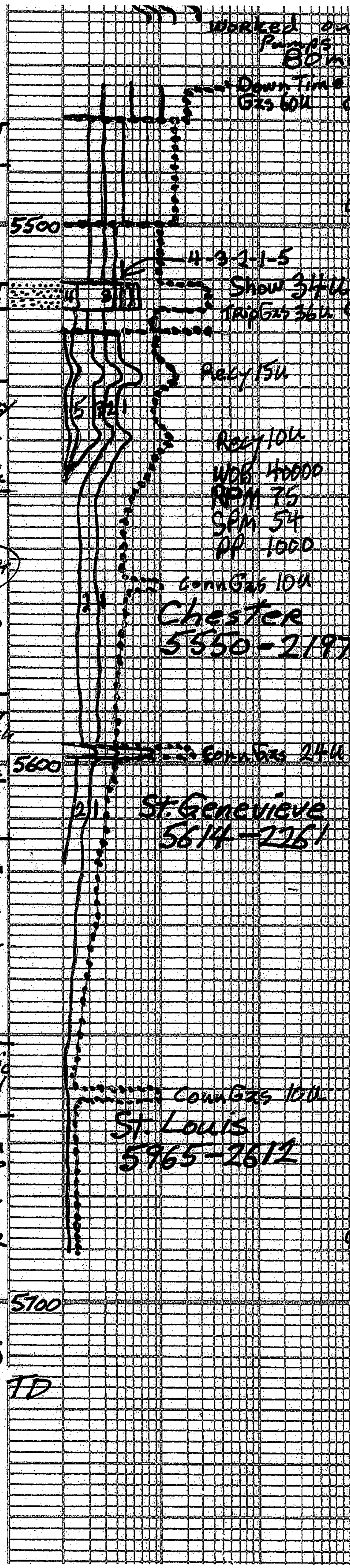
Lms. trs. to hvy. trs. wht to crm-chlk + tan
grayish IP's; crypto. to v.v.fn. xln very to
ext rly. oolitic (sm, med to lg) matrix
chlk, sub-chlk, sub-sucro + packstn.
dul. lt. yel. fluor.; No Cut; No Vis Por.
w/trs to abn. chert gry, tan to amber
transl. to opque

TD 5691

7 7/8" Bit Info:

			in	out
#1	New GT	GT25YG	1703	3312
#2	New GT	GT25YG	3312	5520
#3	Rerun Bit #1		5520	5691 TD

Dev. Surv.		Cir Points	
1. 502	1 1/4°	1	5430
2. 1000	1 1/4°	2	5450
3. 1703	1°	3	5480
4. 5489	5 1/4°	4	5500
5. 5691	1°? TD	5	5520



3. 1703 1° 3 5480
4. 5489 5¼° 4 5500
5. 5691 1°? TD 5 5520
6 5691 TD

DST#1 Morrow Sd 5485-5520
10 Weak Surf. blow died Right away
FO Weak Surf. blow died Right away
Rec ≈ 2 feet
1% wtr? 99% Mud w/
v. thin scum of oil
Tool Sample x 100% Mud w/ tas
wtr + some oil specks

IHP 2567#
IFP 14-17# in 30 min
ISIP 21# in 60 min
FFP 16-16# in 30 min
FSIP 16# in 60 min
FHP 2534#

Daily Drlg. Progress

1.	3600	6:51AM	6-4-15
2.	3611	7:00AM	6-4-15
3.	3962	7:00AM	6-5-15
4.	4327	7:00 AM	6-6-15
5.	4708	7:00AM	6-7-15
6.	5048	7:00AM	6-8-15
7.	5430	7:00AM	6-9-15
8.	5520	7:00 AM	6-10-15
9.	5599	7:00 AM	6-11-15
10.	5691	7:00AM	6-12-15

Date	6-4 7:30A	6-5 9:35A	6-6 10:15A	6-7 10:35A	6-8 5:40P	6-9 11:10A	6-10 12:15P	6-11 11:10A
Depth	3610	3997	4377	4760	5249	5474	5520	5691
Wt	9.0	9.15	9.15	9.05	9.3	9.2	9.3	9.25
Vis	50	49	94	46	54	62	64	51
PV	16	15	24	14	17	18	19	17
YP	15	16	26	13	19	18	22	18
GS	14/35	14/34	18/59	14/37	18/52	17/53	19/56	16/51
WL	7.2	6.4	7.6	8.0	8.4	8.4	8.4	8.4
Cake	1/32	1/32	1/32	1/32	1/32	1/32	1/32	1/32
pH	11.0	11.5	10.0	9.5	9.5	9.0	9.5	9.0
Chl	500	600	1400	1400	500	1100	700	500
Ca	20	20	60	20	20	40	40	20
LCM	5	5	4.5	18.0	13.0	15.5	14.5	12.0

OPERATOR Berexco LLC
LEASE Arnold W NO. 1-1
ELEVATION 3353 KB RTD 5691
LOCATION 335' FSL & 1400' FWL
SEC 1 TWP. 29S RNG. 41W
COUNTY Stanton STATE Kansas

IFP 14-17# in 30 min
ISIP 21# in 60 min
FFP 16-16# in 30 min
FSIP 16# in 60 min
FHP 2534#

Daily Drlg. Progress

1.	3600	6:51AM	6-4-15
2.	3611	7:00AM	6-4-15
3.	3962	7:00AM	6-5-15
4.	4327	7:00AM	6-6-15
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7.	5430	7:00AM	6-9-15
8.	5520	7:00AM	6-10-15
9.	5599	7:00AM	6-11-15
10.	5691	7:00AM	6-12-15

Date	6-4 7:30A	6-5 9:35A	6-6 10:35A	6-7 10:35A	6-8 5:40P	6-9 11:10A	6-10 12:15P	6-11 11:10A
Depth	3610	3997	4397	4760	5249	5474	5520	5691
Wt	9.0	9.15	9.15	9.05	9.3	9.2	9.3	9.25
Vis	50	49	94	46	54	62	64	51
PV	16	15	24	14	17	18	19	17
YP	15	16	26	13	19	18	22	18
GS	14/35	14/34	18/59	14/37	18/52	17/53	19/56	16/51
WL	7.2	6.4	7.6	8.0	8.4	8.4	8.4	8.4
Cake	1/32	1/32	1/32	1/32	1/32	1/32	1/32	1/32
pH	11.0	11.5	10.0	9.5	9.5	9.0	9.5	9.0
Chl	500	600	1400	1400	500	1100	700	500
Ca	20	20	60	20	20	40	40	20
LCM	5	5	4.5	18.0	13.0	15.5	14.5	12.0

OPERATOR Berexco LLC
LEASE Arnold W NO. 1-1
ELEVATION 3353KB RTD 5691
LOCATION 335'FSL + 1400'FWL
SEC 1 TWP. 29S RNG. 41W
COUNTY Stanton STATE Kansas