Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1235908

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 # 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: Edwin H. Grieves
Purchaser: Central Crude Corporation

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 #:

09/11/2014 — Spud Date or Recompletion Date
09/25/2014 — Date Reached TD
10/23/2014 — Completion Date or Recompletion Date

API No. 15 - 15-055-22344-00-00
Spot Description:
SE - SE - NE - NW Sec. 19 Twp. 26 S. R. 33 ☐ East ☑ West
1043 Feet from ☑ North / ☐ South Line of Section
2455 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: Finney
Lease Name: Stone Well #: 3-19
Field Name: Ivanhoe Extension
Producing Formation: Morrow
Elevation: Ground: 2926 Kelly Bushing: 2938
Total Vertical Depth: 5351 Plug Back Total Depth: 5308
Amount of Surface Pipe Set and Cemented at: 1750 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 3211 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: 7300 ppm Fluid volume: 900 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: 12/18/2014
☑ **Confidential Release Date:** 12/17/2016
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 12/19/2014

[redacted] 1235908

Operator Name: BEREXCO LLC Lease Name: Stone Well #: 3-19

Sec. 19 Twp. 26 S. R. 33 ☐ East ☑ West County: Finney

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ 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 Csg	12.25	8.625	23	1750	65/35 POZ, Class A	775	6% gel, 1/4# flakes, 3% CC
Production Csg	7.875	5.50	15.5	5350	65/35 POZ, ASC	330	6% gel, 1/4# flakes, 10% salt, 6# Gilsonit
Prod. Csg. DV Tool	7.875	5.50	15.5	3211	65/35 POZ, ASC	375	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	-			
	-			

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
4	4982 - 4992 Morrow	1500 gallons 7.5% MCA, 75 ball sealers	4982 - 4992
4	4997 - 5002 Morrow	37,000 gallons gelled water, 49,500# 20/40 sand	4997 - 5002
		(frac pumped to both sets of perfs)	

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:
	2.375	SN @ 4953	no packer	☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR.	Producing Method:
10/23/2014	☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	79	0	17		21

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)* ☐ Other *(Specify)*	4982 - 5002

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Stone 3-19
Doc ID	1235908

All Electric Logs Run

Array Compensated True Resistivity Log
Spectral Density Dual Spaced neutron Log
Borehole Compensated Sonic Array Log
Microlog

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Stone 3-19
Doc ID	1235908

Tops

Name	Top	Datum
Heebner (base)	3925	-987
Toronto	3940	-1002
Lansing	3970	-1032
KS City A	4391	-1453
KS City B	4430	-1492
KS City (base)	4525	-1587
Marmaton	4545	-1607
Pawnee	4624	-1686
Ft. Scott	4666	-1728
Cherokee	4681	-1743
Morrow	4930	-1992
Chester	5073	-2135
St. Genevieve	not present	-------
St. Louis	5136	-2198
RTD	5351	
LTD	5357	

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	Stone 3-19
Doc ID	1235908

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 Csg	12.25	8.625	23	1750	65/35 POZ, Class A	775	6% gel, 1/4# flakes, 3% CC
Production Csg	7.875	5.50	15.5	5350	65/35 POZ, ASC	330	6% gel, 1/4# flakes, 10% salt, 6# Gilsonite
Prod. Csg. DV Tool	7.875	5.50	15.5	3211	65/35 POZ, ASC	375	6% gel, 1/4# flakes, 3% CC

ALLIED OIL & GAS SERVICES, LLC 064095

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Oakley KS

DATE 9-12-14	SEC. 19	TWP. 26	RANGE 33	CALLED OUT	ON LOCATION 4:30pm	JOB START 7:00pm	JOB FINISH 10:30pm
LEASE Stone	WELL # 3-17		LOCATION Plymell 5 to TURN, 5 1/2 W, 5 into			COUNTY Haskell	STATE KS
OLD OR NEW (Circle one)							

CONTRACTOR Beredco 1
TYPE OF JOB Surface
HOLE SIZE 12 1/4 T.D. 1960'
CASING SIZE 8 5/8 DEPTH 1950'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT 42'
CEMENT LEFT IN CSG. 42'
PERFS.
DISPLACEMENT 109.3 bbl

OWNER Same

CEMENT
AMOUNT ORDERED 625sks Lite Type I
1/4 # Flo Seal 150sks Com 3%CC

EQUIPMENT

PUMP TRUCK CEMENTER Kahana Edwards
423/281 HELPER Wayne McGinley
BULK TRUCK
391/310 DRIVER Juan Tamon (JWS)
BULK TRUCK
566/595 DRIVER George Grant

COMMON	150sks	@ 17.80	2685.00
POZMIX		@	
GEL		@	
CHLORIDE	2055 #	@ 1.10	2260.50
ASC		@	
ALW Type I	625sks	@ 19.88	12,425.00
		@	
Flo-Seal	157#	@ 2.77	466.29
		@	
Material Total		@	17,836.79
	(6,242.87 / @ 35%)		
		@	
		@	
HANDLING	880.47 cuft	@ 2.48	2183.57
MILEAGE	1498.26 ton miles	2.95	4067.14
		TOTAL	

REMARKS:
Pump ball through
MIX 625 sks ALW Type I
mix 150 sks Com
Displace with water.
Cement did circulate
25 sks to pit
Thank you

SERVICE

DEPTH OF JOB			
PUMP TRUCK CHARGE			2213.75
EXTRA FOOTAGE		@	
MILEAGE Pickup	40	@ 7.50	300.00
MANIFOLD Head		@ 275.00	NC
MIU	40	@ 4.40	176.00
		@	
	(313.96 / 35%)	TOTAL	8,948.46

CHARGE TO: Beredco
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

Industrial Rubber

Guide Shoe		@	460.00
Insert		@	442.00
Rubber plug		@	131.00
Centralizers	(3)	@ 75.00	225.00
		@	
BLD	(378.90 / 30%)	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 28,048.25
DISCOUNT 9,753.72 (35% / 30%) IF PAID IN 30 DAYS
18,294.52 Net.

PRINTED NAME
SIGNATURE Robert Chilcoat

ALLIED OIL & GAS SERVICES, LLC

CEMENTING LOG

STAGE NO.

Date 9-12-14 District Oakley, KS Ticket No. 64095
Company Berexco Rig Beredco 1
Lease Stone Well No. 3-19
County Haskell State KS
Location 19-26-33 Field
Plymell 25 CTR Rd) 5½ west 5 into

CASING DATA: Conductor ☐ PTA ☐ Squeeze ☐ Misc ☐
Surface ☑ Intermediate ☐ Production ☐ Liner ☐
Size 8 5/8 Type New Weight 23# Collar

Casing Depths: Top KB Bottom 1750'

Drill Pipe: Size Weight Collars
Open Hole: Size 12¼ T.D. 1760' ft. P.B. to ft.

CAPACITY FACTORS:
Casing: Bbls/Lin. ft. .064 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 Lite Typel
¼ #Flo-seal Excess
Amt. 625 Sks Yield 1.97 ft³/sk Density 12.52 PPG
TAIL: Pump Time hrs. Type Comm 38cc
Excess
Amt. 150 Sks Yield 1.18 ft³/sk Density 15.8 PPG
WATER: Lead gals/sk Tail gals/sk Total Bbls.

Pump Trucks Used 423/281 - Wayne
Bulk Equip. 591/310 - Judd T
546/585 - George

Float Equip: Manufacturer Industrial Rubber
Shoe: Type Guide Shoe Depth
Float: Type Insert Depth
Centralizers: Quantity 3 Plugs Top 1 Btm.
Stage Collars
Special Equip.
Disp. Fluid Type Water Amt. 109.3 Bbls. Weight PPG
Mud Type Weight PPG

COMPANY REPRESENTATIVE
CEMENTER LaRoue

TIME AM/PM	PRESSURES PSI DRILL PIPE CASING	ANNULUS	FLUID PUMPED DATA TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	REMARKS
9:00						Held Safety meeting.
						Rig up to all through csg rig up comp
						Circulate 30 mins.
						Start water.
						Start cement 625 sks Lite
						weigh cement 3 times 12.5#
						Start cement 150 sks comm
						weigh cement 3 times 15.8#.
						Stop cement.
						Release plug.
	0			3.0		Wash up pump & lines
	0			20.0		Start water Disp to cement
	0			20.0		
	300#			20.0		
	500#			10.0		
	600#			10.0		
	700#			10.0		
	800#			10.0		
10:00	1600#			9.3		Stop water Land plug
						float held.
						Cement did circulate
						25 sks to pit
	Robert Ellard					Held Safety meeting
						Thank You

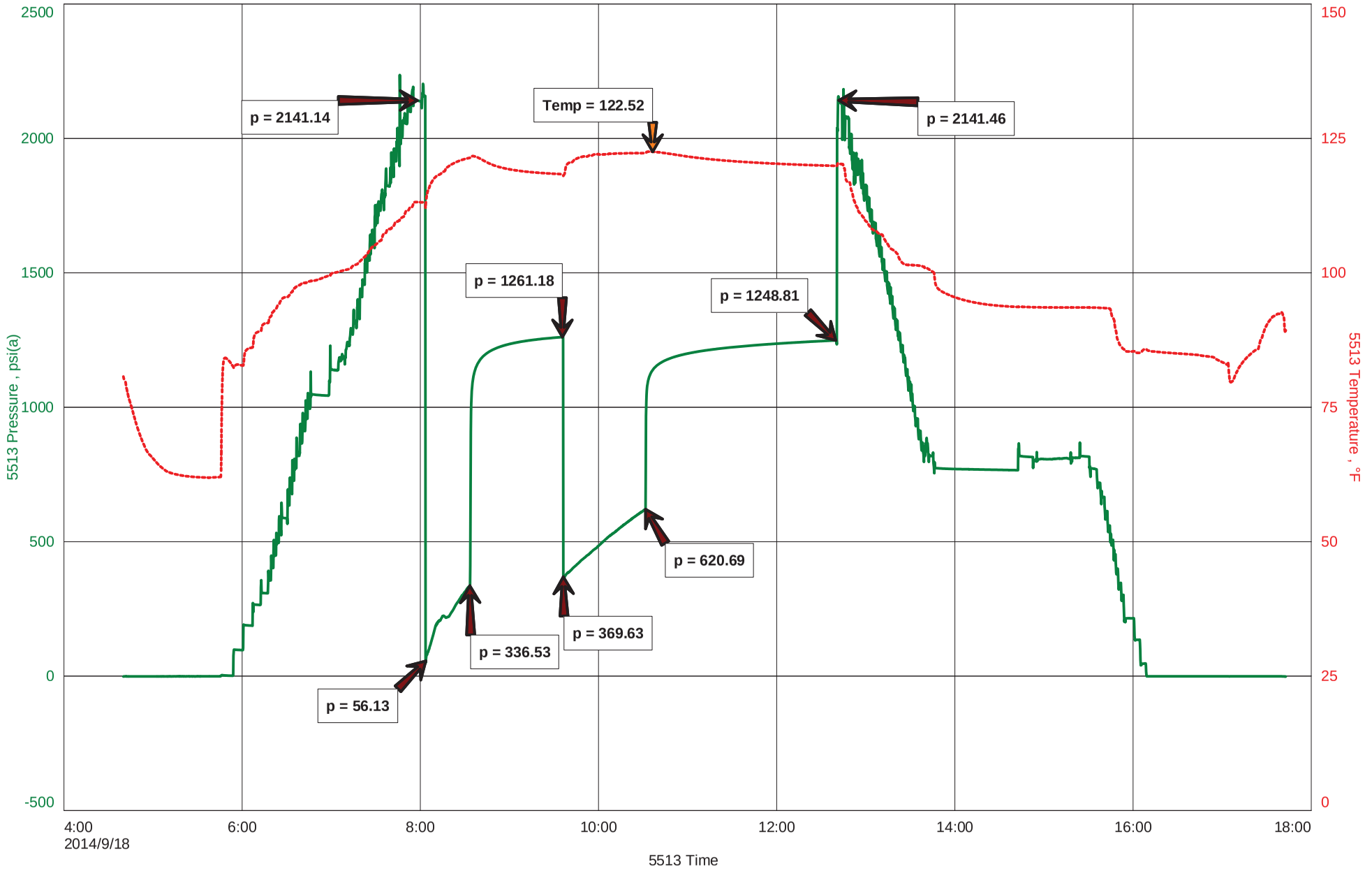
FINAL DISP. PRESS: PSI BUMP PLUG TO PSI BLEEDBACK BBLS. THANK YOU

ALLIED COMPANIES INC. Great Bend KS

Berexco LLC
DST #1 Kansas City B 4416-4452
Start Test Date: 2014/09/18
Final Test Date: 2014/09/18

Stone #3-19
Formation: Kansas City B
Pool: Wildcat
Job Number: K172

Stone #3-19



DIAMOND TESTING
P. O. Box 157
HOISINGTON, KANSAS 67544
(316) 653-7550

GAS VOLUME REPORT

Company Berexco LLC Lease & Well No. Stone #3-19

Date 9-18-14 Sec. 19 Twp. 26S Rge. 33W Location County Finney State KS

Drilling Contractor Beredco #1 Formation Kansas City B DST No. 1

Remarks: Gas To Surface on Initial Shut In, Sample Taken On Second Flow

INITIAL FLOW

Time O'Clock	Orifice Size	Gauge	CF/D
	1 in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	

FINAL FLOW IW

Time O'Clock	Orifice Size	Gauge	CF/D
15	1/4 in.	30 in.	9.2
30	1/4 in.	32 in.	9.5
45	1/4 in.	36 in.	10.1
60	1/4 in.	36 in.	10.1
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	
	in.	in.	

FINAL FLOW

JASON MCLEMORE

CELL # 620-617-0527

General Information

Company Name	Berexco LLC		
Contact		Job Number	K172
Well Name	Stone #3-19	Representative	Jason McLemore
Unique Well ID	DST #1 Kansas City B 4416-4452	Well Operator	Berexco LLC
Surface Location	19-26s-33w-Finney	Prepared By	Jason McLemore
Field	Ivanhoe Extension	Qualified By	Edwin Grieves
Well Type	Vertical	Test Unit	6

Test Information

		Representative	Jason McLemore
Test Type	Drill Stem Test	Well Operator	Berexco LLC
Formation	Kansas City B	Report Date	2014/09/18
Well Fluid Type	01 Oil	Prepared By	Jason McLemore
Test Purpose (AEUB)	Initial Test		

Start Test Date	2014/09/18	Start Test Time	04:40:00
Final Test Date	2014/09/18	Final Test Time	17:44:00

Test Results

RECOVERED:

1570	Gassy Oil, 50% Gas, 50% Oil
180	Salt Water
1750	TOTAL FLUID

Gas To Surface on Initial Shut-in
GRAVITY: 39

CHLORIDES: 65000
PH: 7
RW-.360 @ 90

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

DRILL-STEM TEST TICKET

FILE: stone3dst1

TIME ON: 4:40 AM
TIME OFF: 5:44 PM

Company Berexco LLC — Lease & Well No. Stone #3-19
Contractor Beredco #1 — Charge to Berexco LLC
Elevation GL 2931 Formation Kansas City B Effective Pay ____ Ft. Ticket No. K172
Date 9-18-14 Sec. 19 Twp. 26 S Range 33 W County Finney State KANSAS
Test Approved By Edwin Grieves — Diamond Representative Jason McLemore

Formation Test No. 1 Interval Tested from 4416 ft. to 4452 ft. Total Depth 4452 ft.
Packer Depth 4411 ft. Size 6 3/4 in. — Packer depth ____ ft. Size 6 3/4 in.
Packer Depth 4416 ft. Size 6 3/4 in. — Packer depth ____ ft. Size 6 3/4 in.
Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 4397 ft. — Recorder Number 5513 Cap. 5000 P.S.I.
Bottom Recorder Depth (Outside) 4398 ft. — Recorder Number 5588 Cap. 6000 P.S.I.
Below Straddle Recorder Depth ____ ft. — Recorder Number ____ Cap. ____ P.S.I.

Mud Type Chemical Viscosity 43 — Drill Collar Length 619 ft. I.D. 2 1/4 in.
Weight 9.2 Water Loss 8.8 cc. — Weight Pipe Length 0 ft. I.D. 2 7/8 in
Chlorides 3700 P.P.M. — Drill Pipe Length 3764 ft. I.D. 3 1/2 in
Jars: Make STERLING Serial Number 6 — Test Tool Length 33 ft. Tool Size 3 1/2-IF in
Did Well Flow? No Reversed Out ____ — Anchor Length 36 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: Strong Blow, BOB in 90 Seconds, Blowback BOB, Gas To Surface on Shut in
2nd Open: Strong, BOB in 60 Seconds, Gaging Gas

Recovered 1570 ft. of Gassy Oil, 50% Gas, 50% Oil
Recovered 180 ft. of Salt Water
Recovered 1750 ft. of TOTAL FLUID
Recovered ____ ft. of ____
Recovered ____ ft. of GRAVITY: 39
Recovered ____ ft. of CHLORIDES: 65000
Remarks: PH: 7
RW: .360 @ 90

Price Job	
Other Charges	
Insurance	
Total	

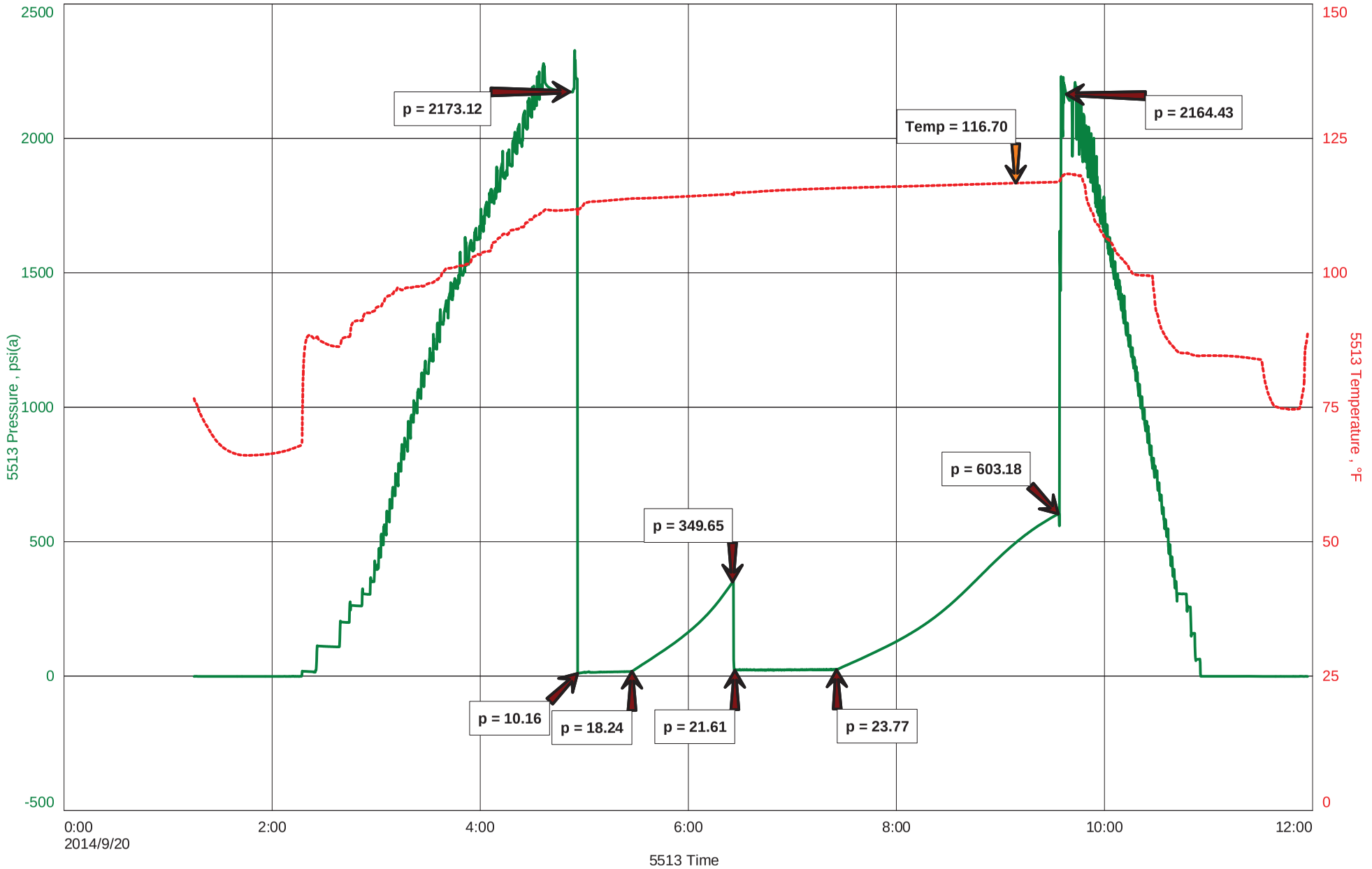
Time Set Packer(s) 8:10 A.M. P.M. Time Started Off Bottom 12:40 P.M. A.M. P.M. Maximum Temperature 123

Initial Hydrostatic Pressure ..... (A) 2141 P.S.I.
Initial Flow Period ..... Minutes 30 (B) 56 P.S.I. to (C) 337 P.S.I.
Initial Closed In Period ..... Minutes 60 (D) 1261 P.S.I.
Final Flow Period ..... Minutes 60 (E) 370 P.S.I. to (F) 621 P.S.I.
Final Closed In Period ..... Minutes 120 (G) 1249 P.S.I.
Final Hydrostatic Pressure ..... (H) 2141 P.S.I.

Berexco LLC
DST #2 marmaton 4568-4578
Start Test Date: 2014/09/20
Final Test Date: 2014/09/20

Stone #3-19
Formation: Marmaton
Pool: Wildcat
Job Number: K173

Stone #3-19



JASON MCLEMORE

CELL # 620-617-0527

General Information

Company Name	Berexco LLC		
Contact		Job Number	K173
Well Name	Stone #3-19	Representative	Jason Mclemore
Unique Well ID	DST #2 marmaton 4568-4578	Well Operator	Berexco LLC
Surface Location	19-26s-33w-Finney	Prepared By	Jason Mclemore
Field	Ivanhoe Extension	Qualified By	Edwin Grieves
Well Type	Vertical	Test Unit	6

Test Information

		Representative	Jason Mclemore
Test Type	Drill Stem Test	Well Operator	Berexco LLC
Formation	Marmaton	Report Date	2014/09/20
Well Fluid Type	01 Oil	Prepared By	Jason Mclemore
Test Purpose (AEUB)	Initial Test		

Start Test Date	2014/09/20	Start Test Time	01:15:00
Final Test Date	2014/09/20	Final Test Time	11:58:00

Test Results

RECOVERED:

20	Gas Oil Cut Mud, 15% Gas, 10% Oil, 85% Mud
20	TOTAL FLUID

405' Gas In Pipe

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

DRILL-STEM TEST TICKET

FILE: stone3dst2

TIME ON: 1:15 AM

TIME OFF: 11:58 AM

Company Berexco LLC — Lease & Well No. Stone #3-19

Contractor Beredco #1 — Charge to Berexco LLC

Elevation GL 2931 Formation Marmaton Effective Pay ____ Ft. Ticket No. K173

Date 9-20-14 Sec. 19 Twp. 26 S Range 33 W County Finney State KANSAS

Test Approved By Edwin Grieves — Diamond Representative Jason McLemore

Formation Test No. 2 Interval Tested from 4568 ft. to 4578 ft. Total Depth 4578 ft.

Packer Depth 4563 ft. Size 6 3/4 in. — Packer depth ____ ft. Size 6 3/4 in.

Packer Depth 4568 ft. Size 6 3/4 in. — Packer depth ____ ft. Size 6 3/4 in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 4549 ft. — Recorder Number 5513 Cap. 5000 P.S.I.

Bottom Recorder Depth (Outside) 4550 ft. — Recorder Number 5588 Cap. 6000 P.S.I.

Below Straddle Recorder Depth ____ ft. — Recorder Number ____ Cap. ____ P.S.I.

Mud Type Chemical Viscosity 50 — Drill Collar Length 619 ft. I.D. 2 1/4 in.

Weight 9.4 Water Loss 8.8 cc. — Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 3800 P.P.M. — Drill Pipe Length 3916 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 6 — Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? No Reversed Out No — Anchor Length 10 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: Weak Surface Blow Building to 4-1/2", No Blowback

2nd Open: Fair Blow, BOB in 49 Min., No Blowback

Recovered 20 ft. of Gas Oil Cut Mud, 155 Gas, 10% Oil, 85% Mud

Recovered 20 ft. of TOTAL FLUID

Recovered ____ ft. of ____

Recovered ____ ft. of 405' Gas In Pipe

Recovered ____ ft. of ____

Recovered ____ ft. of ____

Remarks: Shale Packer on Bottom
Ruined Shale Packer

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 5:02 AM A.M. P.M. Time Started Off Bottom 9:32 AM A.M. P.M. Maximum Temperature 117

Initial Hydrostatic Pressure ..... (A) 2173 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 10 P.S.I. to (C) 18 P.S.I.

Initial Closed In Period ..... Minutes 60 (D) 350 P.S.I.

Final Flow Period ..... Minutes 60 (E) 22 P.S.I. to (F) 24 P.S.I.

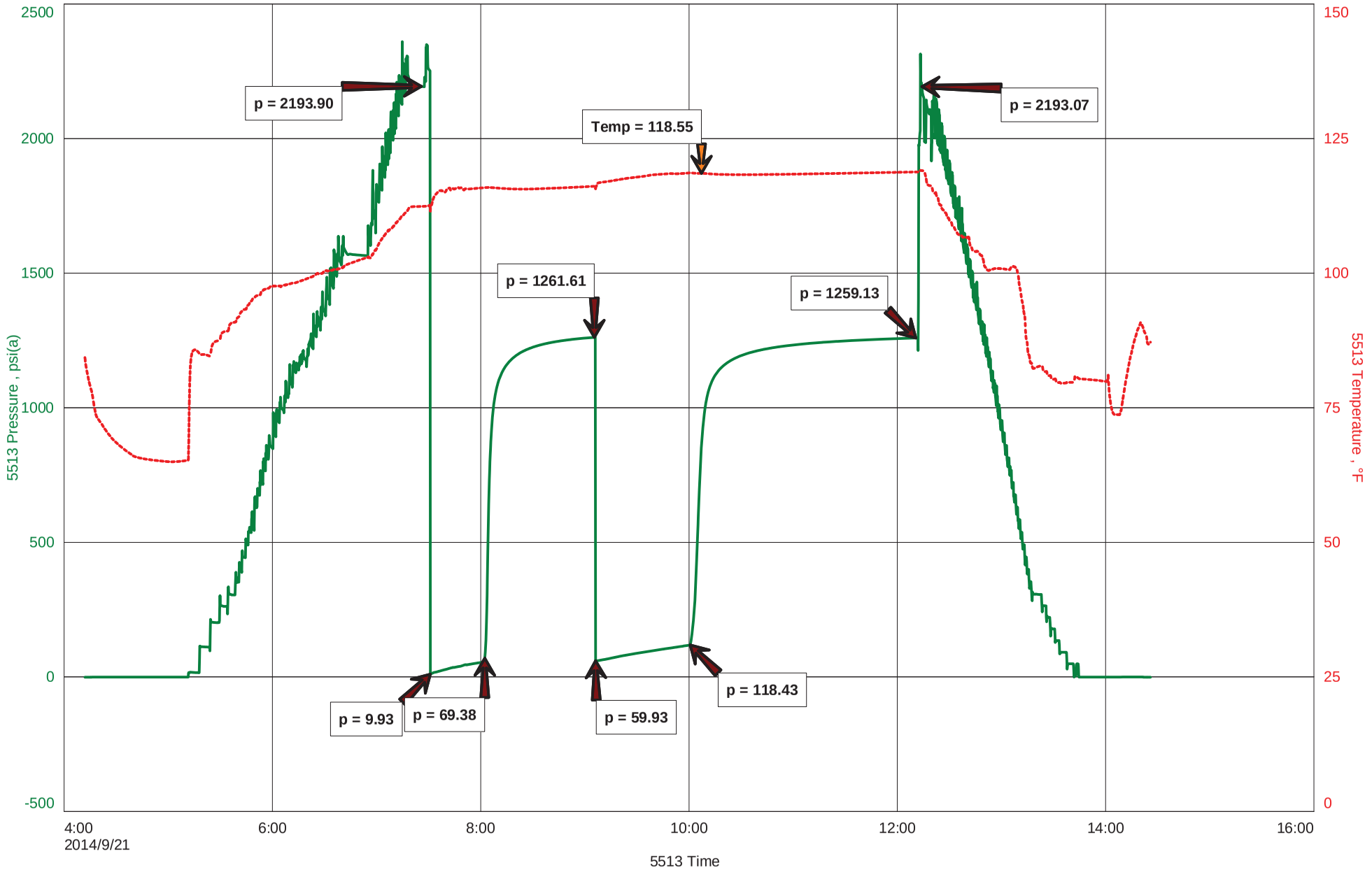
Final Closed In Period ..... Minutes 120 (G) 603 P.S.I.

Final Hydrostatic Pressure ..... (H) 2164 P.S.I.

Berexco LLC
DST #3 Pawnee 4608-4630
Start Test Date: 2014/09/21
Final Test Date: 2014/09/21

Stone #3-19
Formation: Pawnee
Pool: wildcat
Job Number: K174

Stone #3-19



JASON MCLEMORE

CELL # 620-617-0527

General Information

Company Name	Berexco LLC		
Contact	Evan Mayhew	Job Number	K174
Well Name	Stone #3-19	Representative	Jason McLemore
Unique Well ID	DST #3 Pawnee 4608-4630	Well Operator	Berexco LLC
Surface Location	19-26s-33w-Finney	Prepared By	Jason McLemore
Field	Ivanhoe Extension	Qualified By	Edwin Grieves
Well Type	Vertical	Test Unit	6

Test Information

		Representative	Jason McLemore
Test Type	Drill Stem Test	Well Operator	Berexco LLC
Formation	Pawnee	Report Date	2014/09/21
Well Fluid Type	01 Oil	Prepared By	Jason McLemore
Test Purpose (AEUB)	Initial Test		

Start Test Date	2014/09/21	Start Test Time	04:12:00
Final Test Date	2014/09/21	Final Test Time	14:28:00

Test Results

RECOVERED:

10	Mud With Oil Specks, <1% Oil,
180	Muddy Water, 65% Water, 35% Mud
190	TOTAL FLUID

CHLORIDES: 42,000
PH: 7
RW: .480 @ 80

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

DRILL-STEM TEST TICKET

FILE: stone3dst3

TIME ON: 4:12 AM

TIME OFF: 2:28 PM

Company Berexco LLC — Lease & Well No. Stone #3-19

Contractor Beredco #1 — Charge to Berexco LLC

Elevation GL 2931 Formation Pawnee Effective Pay ____ Ft. Ticket No. K174

Date 9-21-14 Sec. 19 Twp. 26 S Range 33 W County Finney State KANSAS

Test Approved By Edwin Grieves — Diamond Representative Jason McLemore

Formation Test No. 3 Interval Tested from 4608 ft. to 4630 ft. Total Depth 4630 ft.

Packer Depth 4603 ft. Size 6 3/4 in. — Packer depth ____ ft. Size 6 3/4 in.

Packer Depth 4608 ft. Size 6 3/4 in. — Packer depth ____ ft. Size 6 3/4 in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 4589 ft. — Recorder Number 5513 Cap. 5000 P.S.I.

Bottom Recorder Depth (Outside) 4590 ft. — Recorder Number 5588 Cap. 6000 P.S.I.

Below Straddle Recorder Depth ____ ft. — Recorder Number ____ Cap. ____ P.S.I.

Mud Type Chemical Viscosity 50 — Drill Collar Length 619 ft. I.D. 2 1/4 in.

Weight 9.4 Water Loss 8.8 cc. — Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 3800 P.P.M. — Drill Pipe Length 3956 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 6 — Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? No Reversed Out No — Anchor Length 22 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: Weak Blow, Built to 2-1/2", No Blowback

2nd Open: Weak Blow, Built to 2-1/4", No Blowback

Recovered 10 ft. of Mud With Oil Specks, <1% Oil

Recovered 180 ft. of Muddy Water, 65% Water, 35% Mud

Recovered 190 ft. of TOTAL FLUID

Recovered ____ ft. of CHLORIDES: 42,000

Recovered ____ ft. of PH: 7

Recovered ____ ft. of RW: .490 @ 80

Remarks: Shale Packer on Bottom

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 7:39 AM A.M. P.M. — Time Started Off Bottom 12:09 PM A.M. P.M. — Maximum Temperature 119

Initial Hydrostatic Pressure ..... (A) 2194 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 10 P.S.I. to (C) 64 P.S.I.

Initial Closed In Period ..... Minutes 60 (D) 1262 P.S.I.

Final Flow Period ..... Minutes 60 (E) 60 P.S.I. to (F) 118 P.S.I.

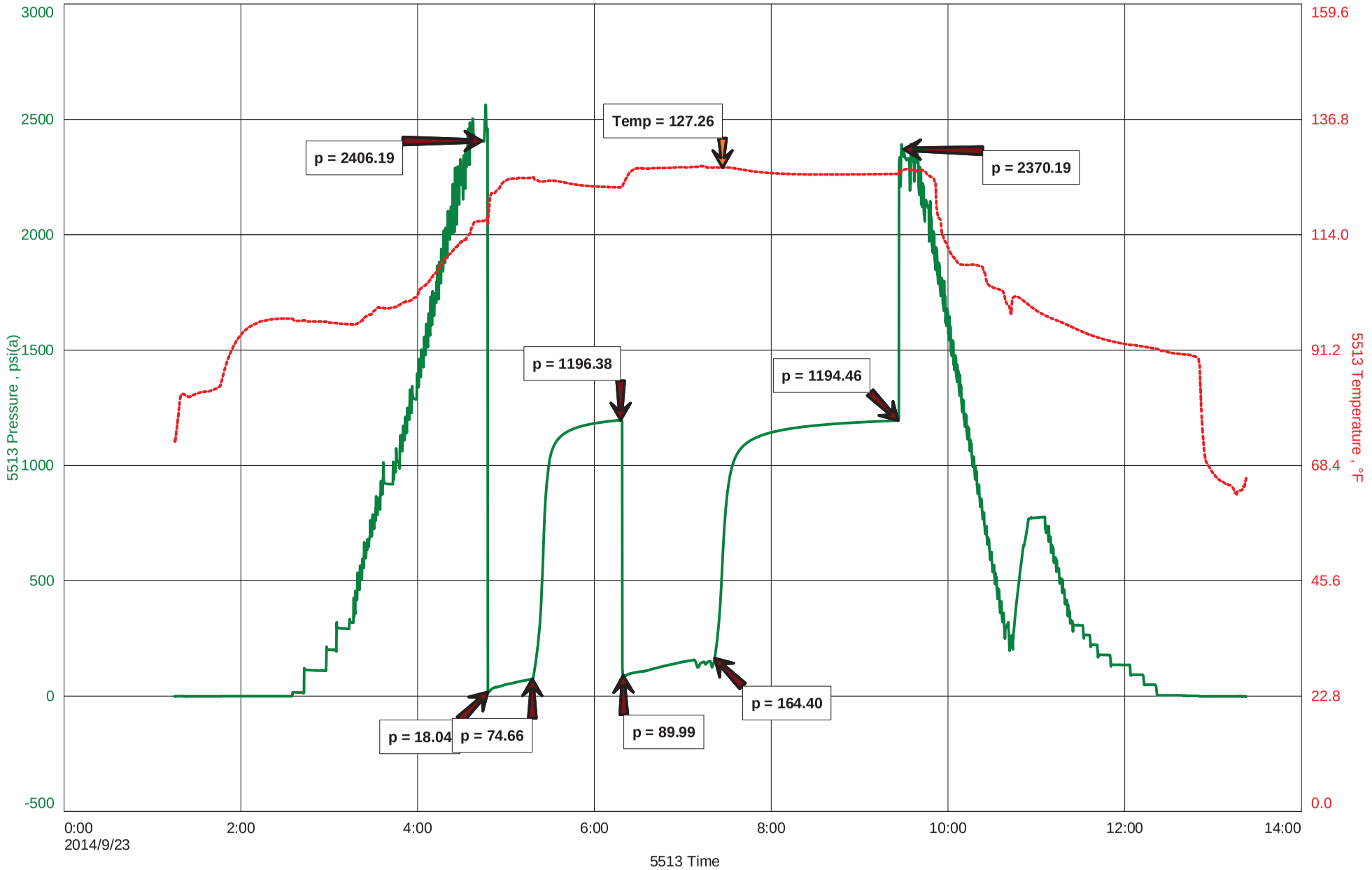
Final Closed In Period ..... Minutes 120 (G) 1259 P.S.I.

Final Hydrostatic Pressure ..... (H) 2193 P.S.I.

Berexco, LLC
DSt #4 Morrow Sand 4977-5000
Start Test Date: 2014/09/23
Final Test Date: 2014/09/24

Stone #3-19
Formation: Morrow Sand
Pool: Wildcat
Job Number: K175

Stone #3-19



JASON MCLEMORE

CELL # 620-617-0527

General Information

Company Name	Berexco, LLC		
Contact	Evan Mayhew	Job Number	K175
Well Name	Stone #3-19	Representative	Jason McLemore
Unique Well ID	DSt #4 Morrow Sand 4977-5000	Well Operator	Berexco LLC
Surface Location	19-26s-33w-Finney	Prepared By	Jason McLemore
Field	Ivanhoe Extension	Qualified By	Edwin Grieves
Well Type	Vertical	Test Unit	6

Test Information

		Representative	Jason McLemore
Test Type	Drill Stem Test	Well Operator	Berexco LLC
Formation	Morrow Sand	Report Date	2014/09/24
Well Fluid Type	01 Oil	Prepared By	Jason McLemore
Test Purpose (AEUB)	Initial Test		

Start Test Date	2014/09/23	Start Test Time	13:15:00
Final Test Date	2014/09/24	Final Test Time	01:23:00

Test Results

RECOVERED:

260	Gassy Oil, 50% Gas, 50% Oil
180	Gas&Oil Cut Mud, 20% Gas, 55% Oil, 25% Mud
440	TOTAL FLUID

GRAVITY: 28

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

DRILL-STEM TEST TICKET

FILE: stone3dst4

TIME ON: 1:15 PM

TIME OFF: 1:23 AM

Company Berexco LLC — Lease & Well No. Stone #3-19

Contractor Beredco #1 — Charge to Berexco LLC

Elevation GL 2931 Formation Morrow Sand Effective Pay ____ Ft. Ticket No. K175

Date 9-23-14 Sec. 19 Twp. 26 S Range 33 W County Finney State KANSAS

Test Approved By Edwin Grieves — Diamond Representative Jason McLemore

Formation Test No. 4 Interval Tested from 4977 ft. to 5000 ft. Total Depth 5000 ft.

Packer Depth 4972 ft. Size 6 3/4 in. — Packer depth ____ ft. Size 6 3/4 in.

Packer Depth 4977 ft. Size 6 3/4 in. — Packer depth ____ ft. Size 6 3/4 in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 4958 ft. — Recorder Number 5513 Cap. 5000 P.S.I.

Bottom Recorder Depth (Outside) 4959 ft. — Recorder Number 5588 Cap. 6000 P.S.I.

Below Straddle Recorder Depth ____ ft. — Recorder Number ____ Cap. ____ P.S.I.

Mud Type Chemical Viscosity 53 — Drill Collar Length 619 ft. I.D. 2 1/4 in.

Weight 9.2 Water Loss 10.0 cc. — Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 2000 P.P.M. — Drill Pipe Length 4325 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 6 — Test Tool Length 33 ft. Tool Size 3 1/2-IF in

Did Well Flow? No Reversed Out No — Anchor Length 23 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: Good Blow, BOB in 9 Min., Blowback BOB in 44 Min.

2nd Open: Good Blow, BOB in 3-1/2 Min., Blowback Built to 9"

Recovered 260 ft. of Gassy Oil, 50% Gas, 50% Oil

Recovered 180 ft. of Gas Cut Muddy Oil, 20% Gas, 55% Oil, 25% Mud

Recovered 440 ft. of TOTAL FLUID

Recovered ____ ft. of ____

Recovered ____ ft. of GRAVITY: 28

Recovered ____ ft. of ____

Remarks: Shale Packer on Bottom

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 4:55 PM A.M. P.M. Time Started Off Bottom 9:25 PM A.M. P.M. Maximum Temperature 127

Initial Hydrostatic Pressure ..... (A) 2406 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 18 P.S.I. to (C) 75 P.S.I.

Initial Closed In Period ..... Minutes 60 (D) 1196 P.S.I.

Final Flow Period ..... Minutes 60 (E) 90 P.S.I. to (F) 164 P.S.I.

Final Closed In Period ..... Minutes 120 (G) 1194 P.S.I.

Final Hydrostatic Pressure ..... (H) 2370 P.S.I.

ALLIED OIL & GAS SERVICES, LLC 063760

Federal Tax I.D. # 20-8651475

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

SERVICE POINT: Oakley KS

DATE 9/27/14	SEC. 19	TWP. 26	RANGE 33	CALLED OUT	ON LOCATION	JOB START 9:30 Am	JOB FINISH 11:30 Am
LEASE Magnolia #319	WELL # ~~2228~~		LOCATION Garden City S to TV Rd 5½ W Sinto			COUNTY Finney	STATE KS
OLD OR ~~NEW~~ (Circle one)							

CONTRACTOR Bordeaux
TYPE OF JOB Prod. 2-STage
HOLE SIZE 7 7/8 TD.
CASING SIZE 5½ 15½/16 DEPTH 5352
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DV DEPTH 3212
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT 43.65
CEMENT LEFT IN CSG. 43.65
PERFS. Bottom - H20 50 BBL 77 BBL KCl Mud
DISPLACEMENT Top - BBL H20

OWNER Same

CEMENT
AMOUNT ORDERED 110 ALW 65/35 6% 1/4 Flo
220 ASC 10% Salt 2% gel ¼# Cello-flake, .3% FL160 .15% SMS
325 ALW 65/35 6% gel ¼ Flo-50 ASC 10% Salt 2% gel ¼# Cello-flake, .3% FL160 .15% SMS Balance

EQUIPMENT					
PUMP TRUCK CEMENTER	Allen Ryan				
# 423-281 HELPER	Kevin Ryan				
BULK TRUCK					
# 566 DRIVER	George Grant				
BULK TRUCK					
# 373 DRIVER	Juan S (TLOS)				

COMMON ALW 65/35 6% gel ¼# Flo	488 sk	@ 19.80	10,993.60
POZMIX		@	
GEL		@	
CHLORIDE		@	
ASC 220 SK		@ 23.50	6345.00
Defoamer	68 lb	@ 3.80	258.40
Cello-flake	1620 lb	@ .98	1587.60
Flo Seal	123 lb	@ 2.97	365.31
FL160	126 lb	@ 18.20	2293.20
		@	
Mileage Total (3707.33 | 31%)		@	10,903.71
		@	
		@	
HANDLING 675.93 sk		@ 2.40	2222.52
MILEAGE 2 Ton/mile			5795.52
		TOTAL	

REMARKS:
Ran Csg, Circ w/ 110 SK ALW 1/4 Flo Test w/ 220 ASC
Wash Truck, Displace Plug w/ 50 BBL H2O, 77 BBL KCl Mud w/ 1000 PSI Lift, Land Plug @ 2000 psi Tool - Circ 6 BBL MX-20 BBL to Pit 36 BBL Mix 325 ALW 1/4 Flo down 5½ Test w/ 50 ASC Wash Truck, Release Plug w/ 77 BBL H2O w/ 900 PSI Lift Land Plug @ 1800 Tool Closed Circ 6 BBL out Circulate
Top Stage
Mix, Hourly, George, Juan S

SERVICE			
DEPTH OF JOB			
PUMP TRUCK CHARGE	3099.25		
EXTRA FOOTAGE		@	
MILEAGE 50		@ 7.70	385.00
MANIFOLD Head		@ 235.00	no charge
Light Vehicle	50	@ 4.20	no charge
Top Stage		@	2400.25
(4534.90 | 34%)		TOTAL	13,308.57

CHARGE TO: Bonanza
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

DV Tool	1	@	5335.00
AFU Float Shoe	1	@	640.00
Latch Down Assembly	1	@	660.00
Centralizers	16	@ 59.00	952.00
Baskets	3	@ 385.00	1185.00
(3056.90 | 35%)		TOTAL	8,732.00

Weth

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 32,944.46
DISCOUNT 11,288.42 (34%) IF PAID IN 30 DAYS

PRINTED NAME Gilbert Davila
SIGNATURE

Bid 21,656.04 Net

ALLIED OIL & GAS SERVICES, LLC

CEMENTING LOG

STAGE NO.

Date 9/22/14 District Oakley Ticket No 063760
Company Berexco Rig Beredco 1
Lease ~~Magnolia~~ STONE #3-19 Well No ~~2-28~~
County Finney State KS
Location _____ Field _____

CASING DATA: Conductor ☐ PTA ☐ Squeeze ☐ Misc ☐
Surface ☐ Intermediate ☐ Production ☒ Liner ☐
Size 5 1/2 Type New Weight 15 1/2 Collar _____

Casing Depths: Top KB Bottom _____

Drill Pipe: Size 4 1/2 Weight _____ Collars _____
Open Hole: Size 7 7/8 T.D. 5350 ft. P.B. to _____ ft.

CAPACITY FACTORS:
Casing: Bbls/Lin. ft. .0238 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 Bottom hrs. Type ALW 1/4 Flo 65/35 6%
Excess _____
Amt. _____ Sks Yield _____ ft³/sk Density _____ PPG
TAIL: Pump Time _____ hrs. Type ASC 10% salt 2% gel
6# Gil. .3-170 FL160 .15/16/SK Defoamer Excess _____
Amt. _____ Sks Yield _____ ft³/sk Density _____ PPG
WATER: Lead _____ gals/sk Tail _____ gals/sk Total _____ Bbls.

Pump Trucks Used 423-281
Bulk Equip. 566
377
5350 T Pipe in Hole
4 1/2 13.63 55
Float Equip: Manufacturer _____
Shoe: Type _____ Depth _____
Float: Type AFU Depth _____
Centralizers: Quantity 16 Plugs Top _____ Btm. _____
Stage Collars DV @ 3212
Special Equip. Baskets, Latch Down Assembly
Disp. Fluid Type H2O Amt. _____ Bbls. Weight 8.34 PPG
Mud Type Dig Mud Weight 9.4 PPG

DOP Stage Cement
375 ALW 1/4 Flo
50 ASC 10% salt 2% gel
6# Gilsonite .3 FL160
.15/16/SK Defoamer

Top Bottom H2O Dig Mud

COMPANY REPRESENTATIVE Greg Klaus CEMENTER AR

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
						On location, SM, mtg, safety
						Run Csg, Circulate
	0			25.0	3.0	Mix 110 SK ALW 1/4 Flo
	0			35.0	3.0	Mix 220 SK ASC
						Wash Truck & Line
				50.0	7.0	Displace Plug w/ H2O
	300			20	4.0	Rig Mud
	500			30	4.0	
	700			40	4.0	
	800			50	4.0	
	1000			55	4.0	
	1000			77	4.0	
	2000					Land Plug
	800					Open Tool - Circulate 4 hrs
				8.0	3.0	Mix 30 SK RH 20 SK MH ALW
				76.5	3.0	Mix 325 SK ALW 1/4 Flo Down 5 1/2
				80	3.0	Mix 50 SK ASC 10% salt 2% gel 6# Gilsonite FL160 .15/16/SK Defoamer
						Wash Truck
					6.0	Displace Plug w/ H2O
	0			20		
	300			25		
	400			30		
	700			40		
	800			60		
	1200					Land Plug & Tool Closed
	1100 Psi					DOP Complete

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

WELL FILE

GEOLOGIST'S REPORT

DRILLING TIME & SAMPLE LOG

COMPANY Berexco LLC

LEASE Stone NO. 3-19

LOCATION 1000' FNL + 2497' FWL

SEC. 19 TWP. 26S RNG. 33W

COUNTY Finney, STATE Kansas

FIELD Ivanhoe Extension

CONTRACTOR Beredco Dalg. Rig # 1

COMM. 9-10-2014 COMP. 9-26-2014

RTD 5351 LTD 5357

No. of DST's FOUR No. of CORES None

ELEVATIONS

KB 2938

DF 2936

GL 2926

MEASUREMENTS ARE ALL FROM KB

CASING RECORD

8 5/8" @ 1750' w/ ___ sx.

___ @ ___ w/ ___ sx.

___ @ ___ w/ ___ sx.

___ @ ___ w/ ___ sx.

EL. LOG AC. Res. Sp. GR Den. Neut. GR. Caliper ML. Sonic. XRMI.

SAMPLES SAVED FROM 3800 TO TD

DRILLING TIME KEPT FROM 3800 TO TD

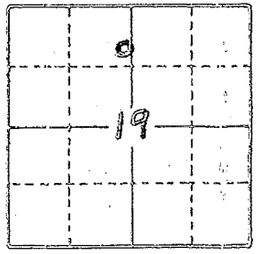
SAMPLES EXAMINED FROM 3800 TO TD

GEOLOGICAL SUPERVISION FROM 3800 TO TD

GEOLOGIST ON WELL Edwin H. Grieves

FORMATION TOPS

	SAMPLE	LOG	SUBSEA
Base Heebner	3919	3925	-987
Toronto	3934	3940	-1002
Lansing Fm	3965	3970	-1032
Kansas City "A"	4383	4391	-1453
Kansas City "B"	4424	4430	-1492
BKC	4510	4525	-1587
Marmaton	4532	4546	-1607
Pawnee	4616	4624	-1686
Ft Scott	4649	4666	-1728
Cherokee	4667	4681	-1743
Morrow Fm	4917	4930	-1992
Chester	5060	5073	-2135
St Genevieve	5110	Not Present	
St Louis	5139	5136	-2198
TD	5351	5357	



API# 15-055-22344

REMARKS Earth-Tech (1-888-543-8378) had an unmanned gasdetection trailer on this well from 3800 to total depth.

Thank You
Edwin's
Geologist

LITHOLOGY

SANDSTONE
LIMESTONE
SHALE
CHERT
SLTSTONE
DOLOMITE
GRANITE WASH
ANHY & GYP

CHROMATOGRAPHY

C1 = METHANE
C2 = ETHANE
C3 = PROPANE
C4 = BUTANE
C5 = PENTANE

HOT WIRE BY TOTAL GAS VOLUME

GAS SCALE 10 100 1000

DRILL TIME SCALE 5 10 15

SAMPLE DESCRIPTION

3800

Lms. crm. tan & tan. Mgry. crypto to v.fn.xln. frs. subchalk, frs. sub-sucrosic

LITHOLOGY

SANDSTONE
LIMESTONE
SHALE
CHERT
SILTSTONE
DOLOMITE
GRANITE WASH
ANHY & GYP

CHROMATOGRAPH

HOT WIRE BY TOTAL GAS VOLUME

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

3800

Lms. crm. to tan & trs lt. gry. crypto to v.fn.xln. trs. sub-chlk, trs. sub-sucrosi packstn.; dul. yel. fluor; No Cut; No Vis Por

Trap Check

C

C

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

C

Basc Heebner 3919-981

3900

Trap Check

Lms. H. gry; crypto to v.v.fn.xln; sub-chlk to packstn.; No fluor.; No Cut; No Vis Por

C

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

Lms. grayish tan; crypto xln; packstn to sub-l. thogr dul. yel. fluor; No Cut; No Vis Por

Blk Sh. Bu

WOB 32000
RPM 70
SPM 58
PP 1200

Sh. H. gry to H. green, silty IP's

Toron to 3934-996

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

C

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

Sh. med. to dk. gry-sl. to fely. calc.

Lms similar 4944-4956

Lansing Fm. 3965-1027

Lms. hvy. trs. wht. to crm-chlk & crm to tan crypto to v.v.fn.xln. w/trs v.fn. to fn. xln.; dul. yel. to dul H. yel. fluor; No Cut; hvy. trs. poor micro-pp. por.

C

Trap Check

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

4000

Lms. tan spkd brn to brn; crypto to v.v.fn.xln.; phantom ool. & to rexlzd ooliticto sub-sucro & sucro; matrix sub-sucro to sucro.; trs foss.; dul. gldn to gldn. yel. fluor; No Cut; abn. pr to fr & trs gd micro-pp por & poss inter xln por

C

Trap Check

C

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

C

Lms. hvy. trs. wht. to crm-chlk & tan, gryish lt. cryp. to v.v.fn.xln.; v. to extrly ool. & oosic to rsl. to fely. oolitic; matrix sub-sucro to v. sucro & packstn yel. to gldn. yel. fluor.; No Cut; abn. pr, fr, gd to trs. extrl. ool. & oosic por w/trs pr to fr & sl. trs gd micro-pp to inter xln por

Lms. Similar 4044-4065 w/much less

Lms. lt. gry., grayish tan to tan; crypto. to v.v. fn. xln.; sub-chlk, sub-sucro. to packstn.; dul. lt. yel. fluor.; No Cut; No Vis. Por.

Lms. hvy. trs. wht. to crm-chlk & tan, grayish. lt. cryp. to v.v. fn. xln.; v. to extrly oolicastic & or sl. to fely. oolitic; matrix sub-sucro to v. sucro to packstn. yel. to gldn. yel. fluor.; No Cut; abn. pr., fr. gd to fr. & sl. trs. gd micro-pp to interxln por. excel. oolicastic por. w/ trs. gd to fr. & sl. trs. gd micro-pp to interxln por

Lms. similar 4044-4055 w/ much less oolicastic & much more oolitic

Lms. trs. to abn. wht. to crm-chlk & tan, grayish. lt's; crypto. to v.v. fn. xln. sub-chlk, sub-sucro to packstn; dul. lt. to lt. yel. fluor.; No Cut; No Vis Por

4100

WOB 32000
RPM 65
SPM 60
PP 1300

Lms. abn. wht. to crm-chlk & tan; crypto. to v.v. fn. xln; sub-chlk, sub-sucro to sucro; dul. yel. fluor.; No Cut; abn. pr., fr. gd to excel. micro-pp to interxln porosity

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

Trip Check

Lms. abn. wht. to crm.-chlk & tan; crypto. to v.v. fn. xln.; v. to extrly. oolicastic and/or sl. to v. oolitic; matrix sub-sucro to packstn.; dul. yel. to yel. fluor.; No Cut; abn. pr. to excl. oolicastic porosity

4200

Very Quest. Perm.

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

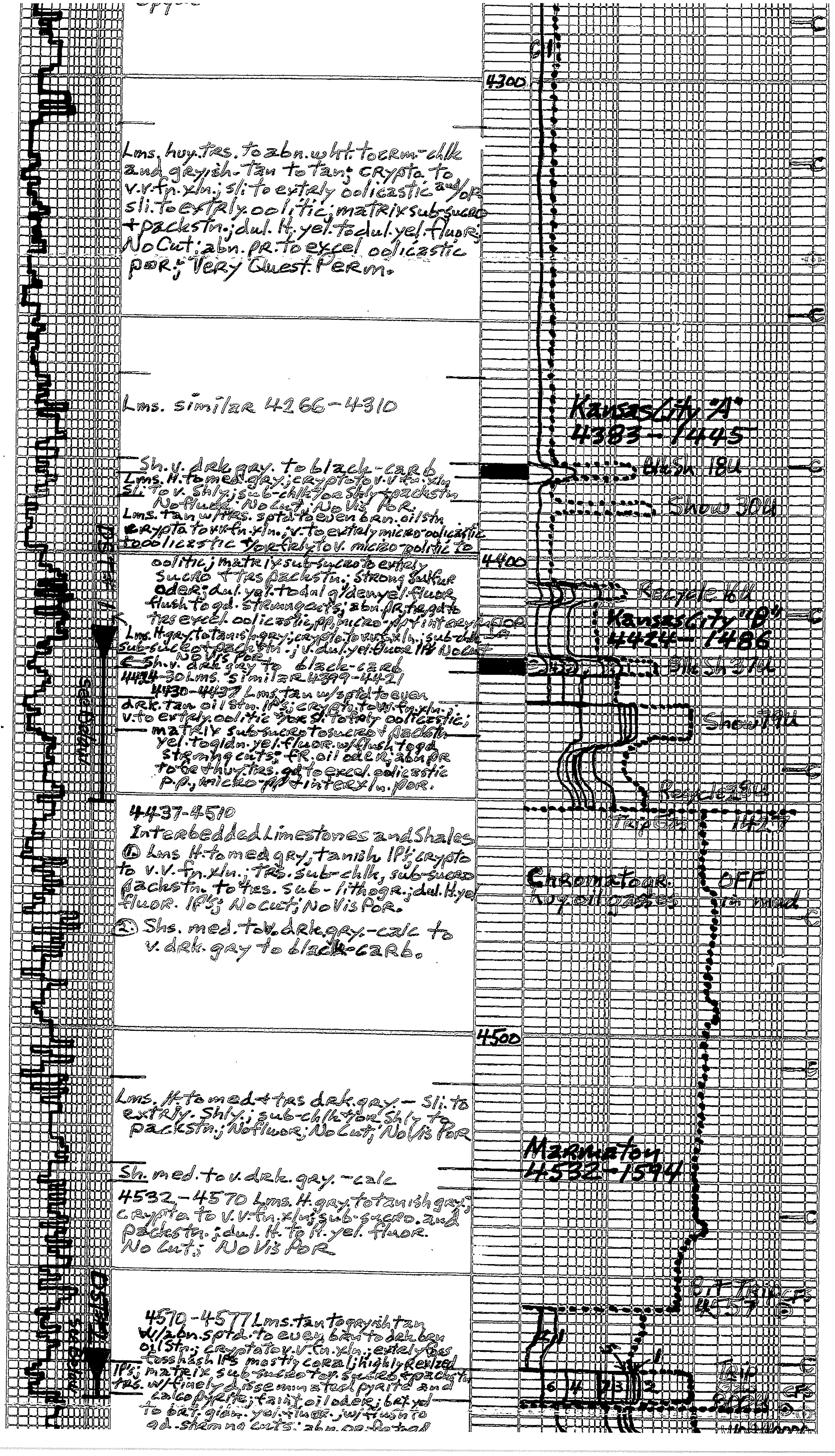
Lms. similar 4182-4205

Lms lt. gry. to tan; crypto to v.v. fn. xln. sub-chlk; sub-sucro to packstn. dul yel. to dul lt. yel. fluor; No Cut No Vis. Por.; Sl. trs. chert lt. gray. opque

Trip Check

4300

Lms. hvy. trs. to abn. wht. to crm-chlk and grayish-tan to tan; crypto. to v.v. fn. xln.; sl. to extrly. oolicastic and/or



Lms. hvy. trs. to abn. wht. to crm.-chlk and greyish-tan to tan; crypta. to v.v.fn.xln.; sli. to extrly oolicastic and/or sli. to extrly. oolitic; matrix sub-sucro + packstn.; dul. lt. yel. to dul. yel. fluor; No Cut; abn. pr. to excel oolicastic por; Very Quest. Perm.

Lms. similar 4266-4310

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

Lms. lt. to med. gry.; crypto to v.v.fn.xln. Sl. to v. Shly.; sub-chlk and/or Shly packstn. No fluor; No Cut; No Vis. POR.

Lms. tan w/trs. sptd to even brn. oilstn. crypta to v.v.fn.xln.; v. to extrly micro-oolicastic to oolicastic and/or extrly to v. micro-oolitic to oolitic; matrix sub-sucro to extrly sucro & trs packstn.; Strong Sulfur oder; dul. yel. to dul gld/den yel. fluor flush to gd. strmng cuts; abn. pr. to gd to trs excel. oolicastic, pp, micro-pp & intercryln. POR

Lms. lt. gry. to tanish gry.; crypto. to v.v.fn.xln.; sub-chlk. and sub-sucro packstn.; v. dul. yel. fluor. IP's No Cut No Vis POR.

Sh. v. drk. gry to black-carb

4424-30 Lms. similar 4399-4421

4430-4437 Lms. tan w/sptd to even drk. tan oil stn. IP's; crypto. to v.v.fn.xln.; v. to extrly. oolitic and/or sl. to frly oolicastic; matrix sub-sucro to sucro & packstn. yel. to gldn. yel. fluor. w/flush to gd. strmng cuts; fr. oil oder; abn. pr to fr. & hvy. trs. gd to excel. oolicastic p.p., micro-pp & intercryln. por.

4437-4510

Interbedded Limestones and Shales

① Lms lt. to med gry, tanish IP's; crypto to v.v.fn.xln.; trs. sub-chlk, sub-sucro packstn. to trs. sub-lithogr.; dul. lt. yel fluor. IP's; No cut; No Vis Por.

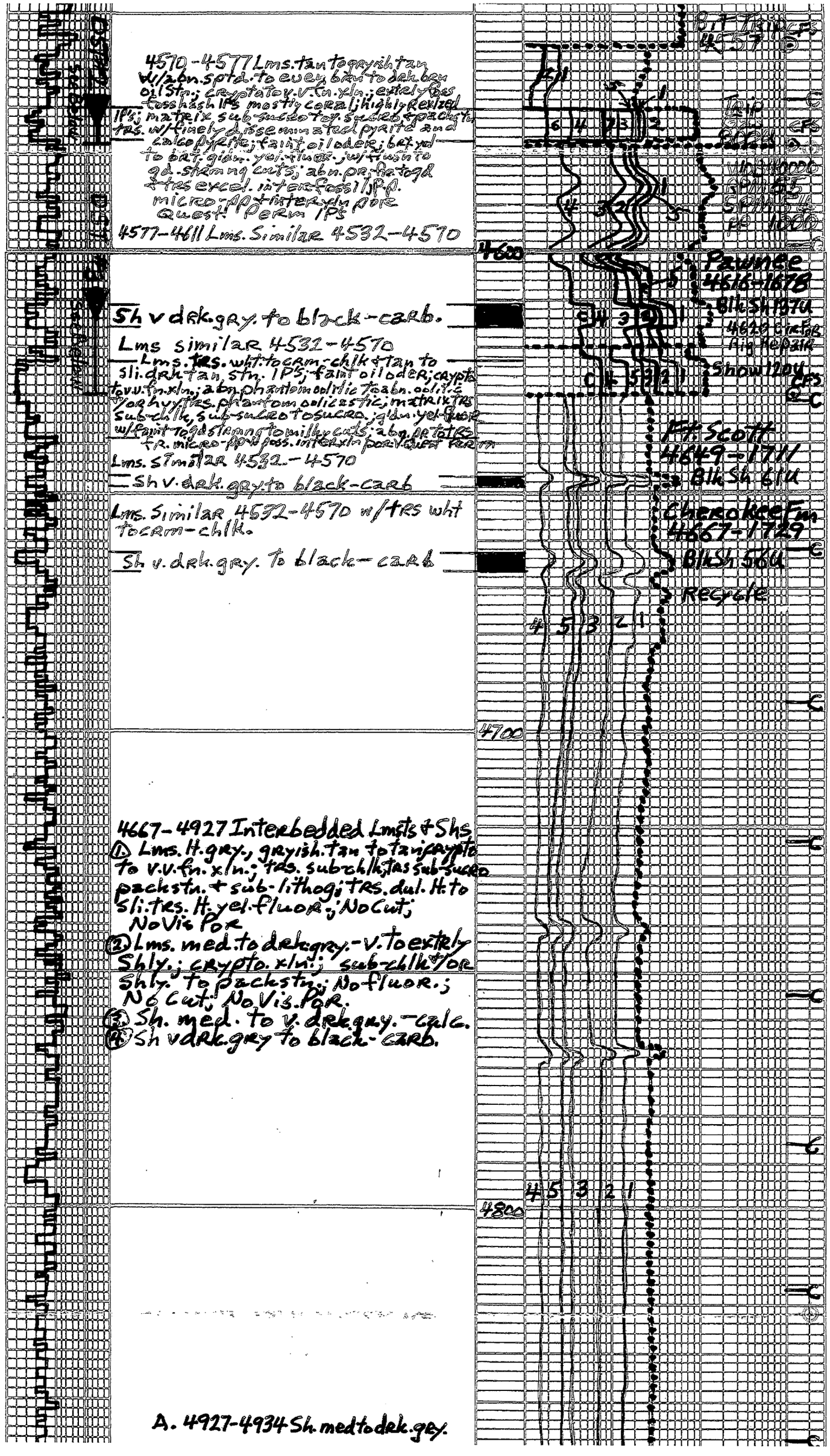
② Shs. med. to v. drk. gry.-calc to v. drk. gray to black-carb.

Lms. lt. to med & trs drk. gry.- sli. to extrly. Shly.; sub-chlk and/or Shly to packstn; No fluor; No Cut; No Vis Por

Sh. med. to v. drk. gry. -calc

4532-4570 Lms. lt. gry. to tanish gry.; crypta to v.v.fn.xln.; sub-sucro. and packstn.; dul. lt. to lt. yel. fluor. No Cut; No Vis Por

4570-4577 Lms. tan to greyish tan w/abn. sptd. to even brn to drk brn oil stn.; crypta to v.v.fn.xln.; extrly foss hash IP's mostly coral; highly rexlzed IP's; matrix sub-sucro to v. sucro & packstn. trs. w/finely dissemminated pyrite and calcopyrite; faint oil oder; brt. yel to brt. gldn. yel. fluor.; w/flush to gd. strmng cuts; abn. pr. to


4570-4577 Lms. tan to grayish tan w/abn. spkd. to even brn to dah. brn oil stn; crypto to v.v.fn.xln; extrly fos fossiliferous IPs mostly coral; highly Rexized IPs; matrix sub-sucro to p. sucro packstn trs. w/finely disseminated pyrite and chalcopyrite; faint oil odor; brt yel to brt. glow. yel. fluor. w/ instnt to gd. streaming cuts; abn. pr-fr to gd trs excel. interfossil IP. micro-PP+interxln por. Quest. perm IPs
4577-4611 Lms. Similar 4532-4570
Sh v drk. gry. to black-carb.
Lms similar 4532-4570
Lms. trs. wht. to crm-chlk & tan to sli. drk tan, stn. IPs; faint oil odor; crypto to v.v.fn.xln; abn. phantom oolitic to abn. ool. i.c. &/or hvy trs. phantom oolicastic; matrix trs sub-chlk, sub-sucro to sucro.; glow. yel fluor w/faint to gd streaming to milky cuts; abn. pr to fr trs. micro-PP+ poss. interxln por. Quest perm
Lms. similar 4532-4570
Sh v. drk. gry to black-carb
Lms. Similar 4532-4570 w/trs wht to crm-chlk.
Sh. v. drk. gry. to black-carb
4667-4927 Interbedded Lmsts & Shs
① Lms. H. gry., grayish. tan to tan crypto to v.v.fn.xln.; trs. sub chlk, trs sub-sucro packstn. + sub-lithog; trs. dul. H. to sli. trs. H. yel. fluor.; No Cut; No Vis Por
② Lms. med. to drk. gry. - v. to extrly Shly.; crypto. xln.; sub-chlk &/or Shly. to packstn.; No fluor.; No Cut, No Vis. Por.
③ Sh. med. to v. drk. gry. - calc.
④ Sh v drk. gry to black - carb.
A. 4927-4934 Sh. med to drk. gry.
Bit Tbn
4557
Pawnee
4616-4678
Blk Sh 1370
4629 Cracker Fm Hepatic
Show 120 gas
Ft. Scott
4649-4711
Blk Sh 61u
Cherokee Fm
4667-4729
Blk Sh 56u
Recycle
4600
4700
4800

A. 4927-4934 Sh. med to dek. gry.

B. 4934-4954 Lms. med. gry; cryptoxln.; packstn.; Np Fluor No Cut No Vis Por w/TRS Fragm. Lms tan, w/Sl. tr. brn oil stn.; v.fn. to med. gr. (foss fragm. Lmstn. grs.) (cryptotovfnx/ln) matrix sub-chlk, sub-fnucgr to sucro + packstn.; dul. gldn. yel fluor w/flush to gd Strmng Cuts TRS. pr. micro-pp. por IPs

C. 4954-4960 Sh. med to dek. gry. + TRS. greenish to TRS olive grn

D. 4960-4964 Lms. similar 4934-54

E. 4964-4968 Qtz Sdst, brn to dek. brn. from oil stn.; v.v.fn. to vfngr. sug. pr. to gd sort.; hvy. TRS. to 2bn glauc. to chlorite; some lt. gry to lt. green. clay Cement; dul gldn. to gldn. yel. fluor. w/ flush to excel. Strmng cuts; TRS. pr. micro-pp. por + poss intergr. por; friable IPs

A

B

F. 4968-4995 Qtz Sdst similar 4964-4968 w/2bn. pr to fr. + hvy TRS gd. micro-pp por + prob. intergr por; very friable IPs w/interbeds Sh med to dek gry, silty + Sdy IPs

C

D

E

F

G. 4995-5006 Sh med to dek gry; silty + Sdy IPs

H. 5006-5014 Qtz Sdst brn to dark. brn from oil stn.; vv.fn, v fn to fn. gr. - sug; pr to gd. sort.; TRS glauc + or chlorite; yel. to dul yel. fluor w/flush to excel. Strmng Cuts.; 2bn. pr to fr. + trs. gd. micro-pp + prob. intergr por

G

H

I

I 5014-5024 Qtz Sdst. lt. to dek. gry. - sl. to extrly sh. filled w/hvy trs. brn to dark. brn. from oil stn.; sl. oil oder; v.v.fn. to v.fn. gr. stn. has gldn. yel. fluor. w/flush to gd strmng cuts; trs. pr to fr. micro-pp + poss intergr por. IPs

J

J. 5024-5060 Sh. med to v. dark. gry.; splintery IPs becoming calc w/depth

K

K Lms. lt. gry., cryptox ln.; packstn to trs. sub-lithogr. dul. lt. yel. fluor. IPs; No Cut No Vis Por

Siltstn to v.v.fn gr Qtz Sdst off wht gry to green (5092-95 hvy trs brn from oil stn; sli to v. glauc + or chloritic; sug. pr to gd sort.; stn has dul. gldn. yel. fluor pr. w/flush to good strmng cuts; sl. to extrly calc. IPs No Vis Por.

5110-5139 Samples Composed:

4900

5000

5100

Morrow Fm 4927-1989

Show 4414

Show 6644

Show 2254

Show 1864

Tripeas 7000

Gate Left Open No Gas Readings

Chester Sdst 5040 -2122

Show 4744

C

4 5 3 2 1

6 7 4 5 3 2 1

C 4 5 3 2 1

C 4 5 3 2 1

CFS

K K Lms. lt. gry, crypto x ln.; packstn to trs. sub-lithogr. dul. lt. yel. fluor. IP's; No Cut No Vis Por

Siltstn to v. v. fn gr Qtz Sdst off wht gry to green (5092-95 huy trs brn from oil stn) sl: to v. glauc/cr chl pritic; zng.; pr to good sort.; stn has dul. gldn. yel. fluor. w/flush to good streaming cuts; sl. to estly calc. IP's No Vis Por.

5100

5110-5139 Samples Composed:
88% Sh med to dkh gry
10% Sh brick red w/trs grn, maroon + brn
2% Various uphole Lmsts and trs. Lms. lt. gry; crypto. to v. fn x ln.; v. to estly mitrd-oolitic/por Qtz Sdy-zng v. v. fn gr.; matrix sub-chlk + sub-sucro dul. lt. yel. fluor; No Cut; No Vis Por

5139-5227 Lms. trs to huy trs wht to crm-chlk + tan, gryish IP's crypto. to v. v. fn. x ln.; frly to estly oolitic (sm, med + lg.) matrix chlk sub-chlk, sub-sucro + packstn dul. lt. yel. fluor; No Cut; No Vis Por

5200

Lms. huy trs. wht to crm-chlk. + tan estly oolitic (sm, med + lg) matrix chlk sub-chlk + sub-sucro; dul. yel. fluor; No Cut; No Vis Por; abn. med to lg loose oolites

5238-5260 Lms. similar 5139-5227 w/huy. trs Lms. tan; crypto. x ln.; packstn to sub-lithogr.; dul. yel. fluor; No Cut No Vis Por

5260-65 Dolo. lt. gry; v v fn x ln; v. sucro yel. fluor.; No Cut; No Vis Por

5265-5351 Lms. tan, gryish. IP's crypto. to v. v. fn. x ln.; sub chlk, trs sub-sucro., packstn + abn. sub-lithogr.; huy. trs. oolitic (sm med + lg). trs s/; to v. dolomitic increasing w/depth; dul. yel. fluor.; No Cut; No Vis Por w/trs Chert off wht., gry to tan; transl to opque

5300

TD 5351

7 7/8 inch Bit Info:
#1 New Smith FH i 18 YVPS
in 1750 out 4457
#2 New Sec. H FH: 12 VII DS

C 4 5 3 2 1
Show 47u
C
CFS
St. Genevieve
5110-2172
St. Louis
5139-2201
C 3 2 1
Gate Left Open
No Gas Readings
C
C 3 2 1
C
CFS
CFS
C
C
C 3 2 1
CFS

TD 5351

7⅞ inch Bit Info:
#1 New Smith FHi 18 YVPS
in 1750 out 4457
#2 New Smith FHi 18 YVPS
in 4457 out 5351 TD

Dev. Surv.:

1.	1132	¾°	4.	4272	1°
2.	1760	1°	5.	4452	¾°
3.	2292	1°	6.	5351	¾° TD

Cir Points

1.	4017	8.	5000
2.	4452	9.	5030
3.	4557	10.	5112
4.	4578	11.	5230
5.	4630	12.	5240
6.	4900	13.	5351 TD
7.	4950		

Daily Drlg. Progress:

1.	3712	7:00 AM	9-16-2014
2.	3800	10:51 AM	9-16-2014
3.	4229	7:00 AM	9-17-2014
4	4451	7:00 AM	9-18-2014
5.	4531	7:00 AM	9-19-2014
6.	4578	7:00 AM	9-20-2014
7.	4630	7:00 AM	9-21-2014
8	4725	7:00 AM	9-22-2014
9.	4965	7:00 AM	9-23-2014
10.	5000	7:00 AM	9-24 2014
11.	5230	7:00 AM	9-25-2014
12.	5351	7:00 AM	9-26-2014

DST #1 Kansas City "B" 4416-4452
IO Strong Blow BOB 90 sec GTS During SI
FO Strong Blow BOB 60 sec Flowing Gas
Rec 1750' Total Fluid Pipe Full of Gas
1570' Gassy Oil 50% G + 50% O
180' Salt water chl 65000 ppm
pH 7 Rw .360 @ 90° pitchl 3700 ppm
oil grav 39 Max Temp 123°F
IHP 2141#
IFP 56-337# in 30 min
ISIP 1261# in 60 min
FFP 370-621# in 60 min
FSIP 1249# in 120 min
FHP 2141#

Final Flow Min	Choke	Inches	MCF/D
15	¼	30	9.2
30	¼	32	9.5
45	¼	36	10.1
60	¼	36	10.1

DST #2 Marmaton 4568-4578
ID weak surf blow built to 4½ inches
FD fr. blow BOB 49 min
Rec 20 ft Gtocut Mud 15% G 10% O 75% Mud
405 ft Gas in Pipe Max Temp
IHP 2173# 117°F
IFP 10-18# in 30 min
ISIP 350# in 60 min
FFP 22-24# in 60 min
FSIP 603# in 120 min
FHP 2164#

DST #3 Pawnee 4608-4630
ID Weak blow built to 2½ inches

IHP 2113# 111°F
IFP 10-18# in 30 min
ISIP 350# in 60 min

FFP 22-24# in 60 min
FSIP 603# in 120 min
FHP 2164#

DST #3 Pawnee 4608-4630
IO Weak blow built to 2½ inches
FO Weak blow built to 2¼ inches
190ft Total Fluid
10ft Mud w/oil specks <1% oil
180ft Muddy Wtr 65% wtr 35% Mud
Chl 42000 ppm pH 7 Rw .490 @ 80°
Pit Chl 38000 ppm Max Temp 119°F
IHP 2194#
IFP 10-64# in 30 min
ISIP 1262# in 60 min
FFP 60-118# in 60 min
FSIP 1259# in 120 min
FHP 2193#

DST #4 Morrow Sd. 4977-5000
ID Gd Blow BOB 9 min SI has blow back
FO Gd Blow BOB 3½ min SI has blow back
1800 ft GIP
Total Fluid 440 ft
260 ft Gassy Oil 50% Gas 50% Oil
180 ft Gas cut Muddy Oil 25% G 55% O + 20% Mud
oil Grav 28
IHP 2406#
IFP 18-75# in 30 min
ISIP 1196# in 60 min
FFP 90-164# in 60 min
FSIP 1194# in 120 min
FHP 2370#

Mud Info:

Date	9-15 6:35A	9-16 6:25A	9-17 12:45P	9-18 2:45P	9-19 10:30A	9-20 9:30A	9-21 1:00P	9-22 8:00A
Depth	3217	3714	4359	4452	4551	4578	4650	4736
Wt.	9.25	8.9	9.15	9.2	9.2	9.4	9.3	9.2
Vis	28	42	43	48	44	50	51	41
PV	1	13	13	15	12	20	20	15
YP	2	14	14	16	12	14	10	10
GS	1/2	13/37	13/40	16/47	13/34	16/44	13/41	13/38
WL	N/C	8.8	8.8	8.8	8.8	8.8	8.8	8.5
Cake	—	1/32	1/32	1/32	1/32	1/32	1/32	1/32
pH	7.0	11.0	11.0	11.0	11.0	11.0	10.5	8.5
Chl	15500	2000	3700	2400	4000	3800	4000	4400
Ca	HVY	20	20	20	60	60	60	80
LCM	1	2	3	2	2	2	2	2

Date	9-23 10:15A	9-24 10:05A	9-25 7:15A					
Depth	5000	5031	5130					
Wt.	9.2	9.1	9.15					
Vis	53	50	49					
PV	17	16	14					

YP	2	14	14	16	12	14	10	10
GS	1/2	13/37	13/40	16/47	13/34	16/44	13/42	12/38
WL	N/C	8.8	8.8	8.8	8.8	8.8	8.8	8.5
Cake	—	1/32	1/32	1/32	1/32	1/32	1/32	1/32
pH	7.0	11.0	11.0	11.0	11.0	11.0	10.5	8.5
Chl	15500	2000	3700	2400	4000	3800	4000	4000
Ca	HVY	20	20	20	60	60	60	80
LCM	1	2	3	2	2	2	2	2

Date	9-23 10:15A	9-24 10:05A	9-25 7:15A					
Depth	5000	5031	5130					
Wt.	9.2	9.1	9.15					
Vis	53	50	49					
PV	17	16	14					
YP	17	18	16					
GS	16/50	17/50	15/46					
WL	10.0	9.6	9.2					
Cake	1/32	1/32	1/32					
pH	10.5	11.0	11.0					
Chl	1000	3300	2300					
Ca	40	20	20					
LCM	2	2	2½					

OPERATOR Berexco LLC
LEASE Stone NO. 3-19
ELEVATION 2938KB RTD 5351

LOCATION 1000' FNL & 2497' FWL
SEC 19 TWP. 26S RNG. 33W
COUNTY Finney STATE Kansas