



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1219985  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
August 2013

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

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

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

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

*(Data must be collected from the Reserve Pit)*

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

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

1219985

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

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

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

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

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

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

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

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR. \_\_\_\_\_ Producing Method:  
 Flowing     Pumping     Gas Lift     Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
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<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <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> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Abercrombie Energy, LLC
Well Name	Cox 7-12
Doc ID	1219985

All Electric Logs Run

COMPENSATED DENSITY NEUTRON PE
DUAL INDUCTION
SONIC
MICROLOG

Form	ACO1 - Well Completion
Operator	Abercrombie Energy, LLC
Well Name	Cox 7-12
Doc ID	1219985

Tops

Name	Top	Datum
HEEBNER SH	4124	-1153
LANSING	4208	-1237
MARMATON	4752	-1781
PAWNEE	4856	-1885
FT SCOTT	4882	-1911
ATOKA	4995	-2024
MORROW SH	5162	-2191
CHESTER SS	5316	-2345
ST GEN	5422	-2451
ST LOU	5462	-2491





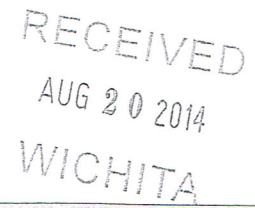
PO Box 93999  
Southlake, TX 76092

Voice: (817) 546-7282  
Fax: (817) 246-3361

# INVOICE

Invoice Number: 144881  
Invoice Date: Aug 6, 2014  
Page: 1

<b>Bill To:</b>
Abercrombie Energy, LLC 5510 Oil Center RD South Great Bend, KS 67530



Customer ID	Field Ticket #	Payment Terms	
Aber	64072	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Aug 6, 2014	9/5/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Cox #7-12		
200.00	CEMENT MATERIALS	Class A Common	17.90	3,580.00
2,391.00	CEMENT MATERIALS	Chloride	1.10	2,630.10
700.00	CEMENT MATERIALS	Class A Light Weight	19.88	13,916.00
225.00	CEMENT MATERIALS	Flo Seal	2.97	668.25
1,023.00	CEMENT SERVICE	Cubic Feet Charge	2.48	2,537.04
1,934.00	CEMENT SERVICE	Ton Mileage Charge	2.75	5,318.50
1.00	CEMENT SERVICE	Surface	2,213.75	2,213.75
45.00	CEMENT SERVICE	Pump Truck Mileage	7.70	346.50
1.00	CEMENT SERVICE	Manifold Head Rental	275.00	275.00
45.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	198.00
1.00	EQUIPMENT SALES	8-5/8 Guide Shoe	460.00	460.00
1.00	EQUIPMENT SALES	8-5/8 AFU Float Valve	447.00	447.00
1.00	EQUIPMENT SALES	8-5/8 Basket	560.00	560.00
5.00	EQUIPMENT SALES	8-5/8 Centralizer	75.00	375.00
1.00	EQUIPMENT SALES	8-5/8 Top Rubber Plug	131.00	131.00
1.00	EQUIPMENT OPERATOR	Paul Beaver		
1.00	OPERATOR ASSISTANT	Adam Flipse		
1.00	EQUIPMENT OPERATOR	Daniel Casper		

VENDOR NUMBER  
VOUCHER NUMBER  
DATE OF RECEIPT  
JOB NO. & L.R.  
1352062  
COX #7  
CEMENT SURFACE CSG  
APPROVAL  
VERIFIED ACCURACY

ALL PRICES ARE NET, PAYABLE 30 DAYS FOLLOWING DATE OF INVOICE. 1 1/2% CHARGED THEREAFTER. IF ACCOUNT IS CURRENT, TAKE DISCOUNT OF

\$ 6,336.62

ONLY IF PAID ON OR BEFORE  
Sep 5, 2014

Subtotal	33,656.14
Sales Tax	1,514.03
Total Invoice Amount	35,170.17
Payment/Credit Applied	
<b>TOTAL</b>	<b>35,170.17</b>

SCJ 8-19-14

# ALLIED OIL & GAS SERVICES, LLC 064072

Federal Tax I.D. # 20-S651475

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

SERVICE POINT:  
Oakley KS

DATE <u>8-6-14</u>	SEC. <u>12</u>	TWP. <u>28</u>	RANGE <u>33</u>	CALLED OUT	ON LOCATION <u>8:30am</u>	JOB START <u>1:00am</u>	JOB FINISH <u>2:00am</u>
LEASE <u>COV</u>	WELL# <u>7-12</u>	LOCATION <u>Garden City S to Rd 80</u>		COUNTY <u>Haskell</u>	STATE <u>KS</u>		
OLD OR <u>NEW</u> (Circle one)			<u>3/4w, 1/4s, w into</u>				

CONTRACTOR Val J OWNER Same

TYPE OF JOB Surface

HOLE SIZE 12 1/2" T.D. 1857'

CASING SIZE 8 5/8 (24#) DEPTH 1857.38 CEMENT AMOUNT ORDERED 700 sks 65/35 6%

TUBING SIZE DEPTH gel, 3 1/2" CC, 1/4" Flo-seal, 200 sks

DRILL PIPE DEPTH Com, 3 1/2" CC, 1/4" Flo-seal

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT 41.88'

CEMENT LEFT IN CSG. 41.88'

PERFS.

DISPLACEMENT 115.65 bbl water

EQUIPMENT

PUMP TRUCK CEMENTER Paul Beaver

# 423/281 HELPER Adam Flipse

BULK TRUCK DRIVER Ramiro (TWS)

# 373/308

BULK TRUCK DRIVER Dan Casper (Great Bend)

# 870/844

REMARKS:

Run Pipe / Float equip / Break care. Drop ball, pumped ball through @ 400 ft, mix 700 sks Class A Lite, tail by 200 sks Com 3 1/2 CC, Release plug. Displace w/ water, plug did land @ 900 ft. With pressure, 700 cement did circulate (20 bbl top it) Thank you! Paul + crew

CHARGE TO: Abercrombie Energy

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

PLUG & FLOAT EQUIPMENT

8 5/8 Weatherford

Guide shoe @ 460.00

API Float Valve @ 447.00

Basket @ 560.00

Control Gears 5 @ 75.00 375.00

Top Rubber plug @ 131.00

TOTAL 1973.00

SALES TAX (If Any) \_\_\_\_\_

TOTAL CHARGES 33,056.14

DISCOUNT 6,316.62 (20%) IF PAID IN 30 DAYS

PRINTED NAME \_\_\_\_\_

SIGNATURE [Signature]

27,319.51 Net

# ALLIED OIL & GAS SERVICES, LLC 064072

Federal Tax I.D. # 20-3651475

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

SERVICE POINT: Oakley KS

DATE <u>8-6-14</u>	SEC. <u>12</u>	TWP. <u>28</u>	RANGE <u>33</u>	CALLED OUT	ON LOCATION <u>8:30am</u>	JOB START <u>7:00am</u>	JOB FINISH <u>2:00am</u>
LEASE <u>COV</u>	WELL # <u>7-12</u>	LOCATION <u>Garden City S to Rd 80</u>			COUNTY <u>Harrell</u>	STATE <u>KS</u>	
OLD OR NEW (Circle one) <u>NEW</u>				<u>3/4w, 1/4 S, w into</u>			

CONTRACTOR Val J OWNER Same

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 1857' CEMENT

CASING SIZE 8 5/8 (24") DEPTH 1857.38 AMOUNT ORDERED 700 sks 6.5/35 6.1

TUBING SIZE \_\_\_\_\_ DEPTH \_\_\_\_\_ gel, 3' CC, 1/4" Flo-seal, 200 sks

DRILL PIPE \_\_\_\_\_ DEPTH \_\_\_\_\_ Com, 3' CC, 1/4" Flo-seal

TOOL \_\_\_\_\_ DEPTH \_\_\_\_\_

PRES. MAX \_\_\_\_\_ MINIMUM \_\_\_\_\_

MEAS. LINE \_\_\_\_\_ SHOEJOINT 41.88'

CEMENT LEFT IN CSG. 41.88'

PERFS. \_\_\_\_\_

DISPLACEMENT 115.65 bbl water

**EQUIPMENT**

PUMP TRUCK CEMENTER Paul Beaver  
# 423/281 HELPER Adam Flipse  
BULK TRUCK  
# 373/308 DRIVER Ramiro (Tus)  
BULK TRUCK  
# 870/844 DRIVER Dan Casper (Great Bend)

COMMON	<u>200 sks @ 17.90</u>	<u>3580.00</u>
POZMIX	@	
GEL	@	
CHLORIDE	<u>2391 # @ 1.10</u>	<u>2630.10</u>
ASC	@	
Class A Lite	<u>700 sks @ 19.88</u>	<u>13916.00</u>
Flo-seal	<u>225 # @ 2.97</u>	<u>668.25</u>
Material Total		<u>23794.00</u>
( <u>4158.88 / 200</u> )		
HANDLING	<u>1623 # @ 2.48</u>	<u>2537.64</u>
MILEAGE	<u>1934 ton/mi x 2.75</u>	<u>5318.50</u>
TOTAL:		

**REMARKS:**

Run Pipe / Float equip / Break core. Drop ball, pumped ball through @ 400 #, mix 700 sks Class A Lite, foiled by 200 sks Com 3' CC, Release plug. Displace w/ water, plug did land @ 900 #, lost pressure. 700 # cement did circulate. (20 bbl top it)  
Thank you! Paul + Crew

CHARGE TO: Abercrombie Energy  
STREET \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**SERVICE**

DEPTH OF JOB	<u>1857'</u>	
PUMP TRUCK CHARGE	<u>2215.75</u>	
EXTRA FOOTAGE	@	
MILEAGE MILV	<u>45 @ 7.70</u>	<u>346.50</u>
MANIFOLD Head	@	<u>275.00</u>
MILV	<u>45 @ 4.40</u>	<u>198.00</u>
TOTAL		<u>10,788.79</u>

**PLUG & FLOAT EQUIPMENT**

<u>8 5/8 Weather Ford</u>		
Guide shoe	@	<u>460.00</u>
AFV Float Valve	@	<u>447.00</u>
Basket	@	<u>560.00</u>
Centralizers	<u>5 @ 75.00</u>	<u>375.00</u>
Top Rubber plug	@	<u>131.00</u>
TOTAL		<u>1973.00</u>

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.

PRINTED NAME \_\_\_\_\_  
SIGNATURE [Signature]

SALES TAX (If Any) \_\_\_\_\_  
TOTAL CHARGES 33,656.14  
DISCOUNT 6,376.02 (20%) IF PAID IN 30 DAYS  
27,319.51 net

COPY





# INVOICE

PO Box 93999  
Southlake, TX 76092

Invoice Number: 145227

Invoice Date: Aug 18, 2014

Page: 1

Voice: (817) 546-7282  
Fax: (817) 246-3361



<b>Bill To:</b>
Abercrombie Energy, LLC 5510 Oil Center RD South Great Bend, KS 67530

Customer ID	Field Ticket #	Payment Terms	
Aber	52794	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-02	Liberal	Aug 18, 2014	9/17/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Cox #7-12		
175.00	CEMENT MATERIALS	ASC Class A	23.50	4,112.50
275.00	CEMENT MATERIALS	Light Weight	19.88	5,467.00
70.00	CEMENT MATERIALS	Flo Seal	2.97	207.90
875.00	CEMENT MATERIALS	Kol Seal	0.98	857.50
83.00	CEMENT MATERIALS	FL-160	18.90	1,568.70
12.00	CEMENT MATERIALS	Super Flush	25.00	300.00
480.00	CEMENT SERVICE	Cubic Feet Charge	2.48	1,190.40
912.00	CEMENT SERVICE	Ton Mileage Charge	2.75	2,508.00
1.00	CEMENT SERVICE	Production -- Bottom Stage	3,099.25	3,099.25
1.00	CEMENT SERVICE	Production -- Top Stage	2,406.25	2,406.25
45.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	198.00
45.00	CEMENT SERVICE	Pump Truck Mileage	7.70	346.50
1.00	CEMENT SERVICE	Manifold Rental	275.00	275.00
2.00	CEMENT SERVICE	Waiting on Location	440.00	880.00
1.00	EQUIPMENT SALES	5-1/2 AFU Float Shoe	545.00	545.00
1.00	EQUIPMENT SALES	5-1/2 Latch Down Plug	660.00	660.00
3.00	EQUIPMENT SALES	5-1/2 Basket	395.00	1,185.00
17.00	EQUIPMENT SALES	5-1/2 Centralizer	57.00	969.00
1.00	EQUIPMENT SALES	5-1/2 Stage Collar	5,335.00	5,335.00
1.00	CEMENT SUPERVISOR	Lenny Baeza		

Subtotal	Continued
Sales Tax	Continued
Total Invoice Amount	Continued
Payment/Credit Applied	
<b>TOTAL</b>	<b>Continued</b>

ALL PRICES ARE NET, PAYABLE  
30 DAYS FOLLOWING DATE OF  
INVOICE. 1 1/2% CHARGED  
THEREAFTER. IF ACCOUNT IS  
CURRENT, TAKE DISCOUNT OF

\$ 8,027.75

ONLY IF PAID ON OR BEFORE  
Sep 17, 2014

SCJ 9-3-14



# INVOICE

PO Box 93999  
Southlake, TX 76092

Invoice Number: 145227  
Invoice Date: Aug 18, 2014  
Page: 2

Voice: (817) 546-7282  
Fax: (817) 246-3361

<b>Bill To:</b>
Abercrombie Energy, LLC 5510 Oil Center RD South Great Bend, KS 67530

RECEIVED  
SEP - 5 2014  
WICHITA

Customer ID	Field Ticket #	Payment Terms	
Aber	52794	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-02	Liberal	Aug 18, 2014	9/17/14

Quantity	Item	Description	Unit Price	Amount
1.00	CEMENT SUPERVISOR	Edgar Rodriguez		
1.00	EQUIPMENT OPERATOR	Victor Corona		
1.00	OPERATOR ASSISTANT	Daniel Rosales		
1.00	OPERATOR ASSISTANT	Jaime Maldonado		
		VENDOR NUMBER _____		
		VOUCHER NUMBER _____		
		DATE OF RECEIPT _____		
		CREDIT AMOUNT _____		
		1332062 _____		
		COX 7 _____		
		2 STAGE CEMENT JOB _____		
		APPROVAL SS _____		
		VERIFIED ACCURACY _____		

Subtotal	32,111.00
Sales Tax	1,410.31
Total Invoice Amount	33,521.31
Payment/Credit Applied	
<b>TOTAL</b>	<b>33,521.31</b>

ALL PRICES ARE NET, PAYABLE  
30 DAYS FOLLOWING DATE OF  
INVOICE. 1 1/2% CHARGED  
THEREAFTER. IF ACCOUNT IS  
CURRENT, TAKE DISCOUNT OF

\$ 8,027.75

ONLY IF PAID ON OR BEFORE

Sep 17, 2014

SCJ 9-3-14

# ALLIED OIL & GAS SERVICES, LLC 052794

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
Liberia KS

DATE <u>8-18-14</u>	SEC. <u>60</u>	TWP. <u>7-12</u>	RANGE	CALLED OUT	ON LOCATION <u>7:00am</u>	JOB START <u>13am</u>	JOB FINISH <u>3:30am</u>
LEASE <u>COX</u>	WELL#	<u>7-12</u>	LOCATION <u>Vec Sublette KS</u>		COUNTY <u>Haskell</u>	STATE <u>KS</u>	
OLD OR <input checked="" type="radio"/> NEW (Circle one)							

CONTRACTOR <u>Val Rig #2</u>	OWNER
TYPE OF JOB <u>2 Stage</u>	
HOLE SIZE <u>7 1/8</u>	T.D. <u>5600</u>
CASING SIZE <u>5 1/2</u>	DEPTH <u>5588</u>
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT <u>43.17</u>
CEMENT LEFT IN CSG.	
PERFS.	
DISPLACEMENT	

EQUIPMENT	
PUMP TRUCK # <u>549-550</u>	CEMENTER <u>Cenny Baeza Edger R.</u>
	HELPER <u>Alex Corona (Victor)</u>
BULK TRUCK # <u>956-841</u>	DRIVER <u>Daniel Riosdes</u>
BULK TRUCK #	DRIVER <u>Jaime Maldonado</u>

CEMENT AMOUNT ORDERED	<u>28SSK 65-35 @ 2gal 1/4# Flo seal</u>	
Trail	<u>17SSK class A @ 6# Naci 5# 6# 2# 5# Flo seal</u>	
Tail	<u>50SSK 65-35 @ 2gal 1/4# Flo seal</u>	<u>5# Kof seal</u>
		<u>5# RL-16</u>
ASA Class A 17SSK	@	23.50
Alfred light weight 27SSK	@	19.88
Flo seal 70#	@	2.97
Nof seal 875#	@	1.98
FL-160 63#	@	16.40
	@	
	@	
	@	
	@	
Super Flush 1266l	@	25.00
3128.40 / 25%	TOTAL	12813.60

REMARKS:

CHARGE TO: Abercrombie Energy

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SERVICE		
DEPTH OF JOB	<u>5001-6000'</u>	
PUMP TRUCK CHARGE	<u>3099.25</u>	<u>2406.25</u>
light vehicle	<u>45 @ 4.40</u>	<u>198</u>
MILEAGE	<u>45 @ 7.70</u>	<u>346.50</u>
MANIFOLD	<u>1 @</u>	<u>275.00</u>
Handlings	<u>400 @ 2.48</u>	<u>1190.40</u>
Drayage	<u>912 @ 2.60</u>	<u>2371.20</u>
addition hours	<u>2 @ 440.00</u>	<u>880.00</u>
2725.85 / 25%	TOTAL	10903.40

PLUG & FLOAT EQUIPMENT		
AFU Float shoe	@	545.00
Catch down plug	@	660.00
Cement basket v3	@	395.00
Centralizer 17	@	57.00
Stage collar	@	5335.00
	@	
2173.50 / 25%	TOTAL	8694.00

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.

PRINTED NAME Jason Schulte

SIGNATURE Jason Schulte

SALES TAX (if Any) \_\_\_\_\_

TOTAL CHARGES \$ 32,111.00

DISCOUNT 8007.75 / 25% IF PAID IN 30 DAYS

Net \$ 24,083.25

# ALLIED OIL & GAS SERVICES, LLC 052794

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
Cibola KS

DATE <u>6-18-14</u>	SEC. <u>440</u>	TWP. <u>7-12</u>	RANGE	CALLED OUT	ON LOCATION <u>7:00am</u>	JOB START <u>8am</u>	JOB FINISH <u>3:30am</u>
LEASE <u>Cox</u>	WELL#	LOCATION <u>Vec Sublette KS</u>	COUNTY <u>Haskell</u>	STATE <u>KS</u>			
OLD OR NEW (Circle one)							

CONTRACTOR <u>Val Rig #2</u>	OWNER
TYPE OF JOB <u>2 Stage</u>	
HOLE SIZE <u>7 7/8</u>	T.D. <u>5600</u>
CASING SIZE <u>5 1/2</u>	DEPTH: <u>5588</u>
TUBING SIZE	DEPTH <u>1mi</u>
DRILL PIPE	DEPTH <u>3/4</u>
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT <u>43.17</u>
CEMENT LEFT IN CSG.	
PERFS.	
DISPLACEMENT	

EQUIPMENT	
PUMP TRUCK # <u>549-SSO</u>	CEMENTER <u>Cany Baeza Edge R.</u>
BULK TRUCK # <u>956-841</u>	HELPER <u>Alex Correa (Victor)</u>
BULK TRUCK #	DRIVER <u>Daniel Rosales</u>
BULK TRUCK #	DRIVER <u>Jaime Maldonado</u>

CEMENT	AMOUNT ORDERED <u>20SSK GS-35 60gal 1/4" Flseal</u>	
	<u>17SSK Class A #1 aci S/S 60gal 5# Flseal</u>	
	<u>50SSK GS-35 60gal 1/4" Flseal</u>	
COMMON	@	
AS A Class A 17SSK	@ <u>23.50</u>	<u>412.50</u>
Allied light weight 27SSK	@ <u>19.88</u>	<u>546.70</u>
Flseal 70#	@ <u>2.97</u>	<u>207.90</u>
Flseal 875#	@ <u>1.98</u>	<u>857.50</u>
Fl-160 83#	@ <u>18.90</u>	<u>1568.70</u>
Super Flush 1266l	@ <u>25.00</u>	<u>300.00</u>
		<u>3128.40 / 25%</u>
TOTAL		<u>12513.60</u>

REMARKS:

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CHARGE TO: Abercrombie Energy

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SERVICE		
DEPTH OF JOB	<u>5001-6000'</u>	
PUMP TRUCK CHARGE	<u>3099.25 / 2406.25</u>	
light vehicle	<u>45 @ 4.40</u>	<u>198</u>
MILEAGE	<u>45 @ 7.70</u>	<u>346.50</u>
MANIFOLD	<u>1 @</u>	<u>275.00</u>
Handling	<u>400 @ 2.48</u>	<u>990.40</u>
Drillage	<u>912 @ 2.60</u>	<u>2380.00</u>
addition hours	<u>2 @ 440.00</u>	<u>880.00</u>
		<u>2725.85 / 25%</u>
TOTAL		<u>10903.40</u>

PLUG & FLOAT EQUIPMENT		
AFU Float Shoe	@	<u>545.00</u>
Catch down plug	@	<u>600.00</u>
Cement basket 13	@	<u>395.00</u>
Centralizer 17	@	<u>57.00</u>
Stage collar	@	<u>5335.00</u>
		<u>2173.50 / 25%</u>
TOTAL		<u>8694.00</u>

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 \$ 32,111.00

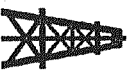
DISCOUNT 8027.75 / 25% IF PAID IN 30 DAYS

Net \$ 24,083.25

PRINTED NAME Jason Schulte

SIGNATURE Jason Schulte





# JERRY A. SMITH

CERTIFIED PETROLEUM GEOLOGIST

## GEOLOGIST'S REPORT

### DRILLING TIME and SAMPLE LOG

COMPANY: ABERCROMBIE ENERGY, LLC			ELEVATIONS		
LEASE: COX #7-12			K.B. 2971		
FIELD: SANTA FE NORTH			D.F.		
LOCATION: 1089' FNL & 991' FWL			G.L. 2961		
SEC. 12	TWSP. 28	RNG. 33W	Measurements Are All From: KB		
COUNTY: HASKELL	STATE: KANSAS		CASING		
CONTRACTOR: VAL ENERGY, RIG #2					
SPUD: 8/3/14	COMP. 8/17/14		SURFACE: 8 5/8" @ 1845'		
RTD. 5640	LTD. 5637		PRODUCTION : 5 1/2" @ TD		
MUD UP: 3561	TYPE MUD: CHEMICAL		ELECTRICAL SURVEYS NABORS: DIL, FDC-CNL, MICRO, SONIC		
API No. 15-081-22072		TO: RTD			
SAMPLES SAVED FROM: 4000		TO: RTD			
DRILLING TIME KEPT FROM: 3800		TO: RTD			
SAMPLES EXAMINED FROM: 4000		TO: RTD			
GEOLOGICAL SUPERVISION FROM: 4060		TO: RTD			
GEOLOGIST ON WELL: JERRY A. SMITH					

FORMATION TOPS	LOG	SAMPLES
HEEBNER	4124 (-1153)	4122 (-1151)
LANSING	4208 (-1237)	4206 (-1235)
KANSAS CITY 'A'	4626 (-1655)	4624 (-1653)
MARMATON	4752 (-1781)	4750 (-1779)
PAWNEE	4856 (-1885)	4855 (-1884)
FT. SCOTT	4882 (-1911)	4886 (-1915)
ATOKA	4995 (-2024)	4999 (-2028)
MORROW SH	5162 (-2191)	5164 (-2193)
CHESTER SS	5316 (-2345)	5312 (-2341)
STE GENEVIEVE	5422 (-2451)	5421 (-2450)
ST. LOUIS	5462 (-2491)	5461 (-2490)

## LEGEND

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

DEPTH	LITHOLOGY	DRILLING TIME IN MINUTES PER FOOT Rate of Penetration Increases	SAMPLE DESCRIPTIONS		REMARKS
			FT.	DIAMETER	
0		5"	S.H.T.'S		GAS DETECTOR: MBC WELL LOGGING DST'S (4): TRILOBITE MUD: MUD-CO
		10"	1032' 2 1/2"	1808' 1 3/4"	
		15"	1125' 2 1/2"	1857' 1 1/2"	
		20"	1402' 4"	2489' 3/4"	
		25"	1434' 4"	4074' 3/4"	

70LL 301

1464' 5° 4866' ¼°  
1621' 3 ¼° 5640' 1°  
1715' 2°

VERT. LOG SCALE: 5" = 100'

3800

20

40

60

80

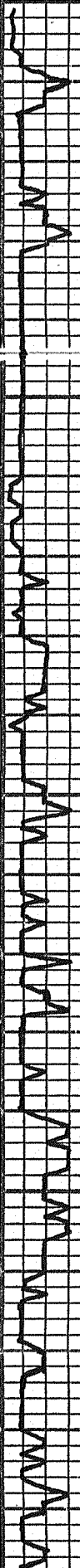
3900

20

40

60

80



4000

20

LM - GY - M GY - FX  
DSE. w/ ABD WH  
SET CHRY LA. SEAT  
RD SH.

40

LM - GY - M GY - GY -  
M. FX. DSE. -  
SEAT VGY. NS. w/  
ABD WH, SET CHRY.

MUD @ 4046':  
8.85 WT, 46 VIS, 9.2 FILT,  
3800 CHLOR, 1# LCM

60

LM & CHK - AA.

LM - AA w/ GY GY - FX  
DSE. LM & CHK. CHA  
SHD, DSE CHY.

80

LM - GY - M GY - FX. DSE  
CHRY. CHA. LA - OK  
GY - GY. DSE. CHRY  
CHRY. SH - GY GY,  
GY - GY.

LM - M GY, GY - TA. FX  
DSE. Dolo IN PT?

4100

20

LM - AA.

LM - GY - TA. FX. DSE.

HEEBNER  
4122 (-1151) SMPL  
4124 (-1153) LOG

40

SH - BLK, CARB.

SH - GY, GY - GY.

60

LM - GY - M GY - FX. No KIS  
D. ABD WH, SET  
CHK.

80

LM - GY - M TA. FX  
SPSLY CASE. DSE.  
SEAT M - DK GY  
SH.

LM - M TA. FX. DSE.  
TR. CRD. OPA, SHD,  
DSE CHY.

ABD SH - M - DK GY,  
GY - GY.

4200

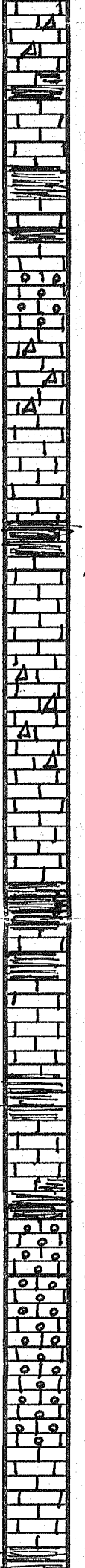
20

LM - M GY, GY - TA. FX  
DSE. ABD GY, GY - WH  
SH.

LM - GY - M TA. FX  
CASE. DSE. SEAT  
CRD. OPA, SHD, DSE  
CHK.

LANSING  
4206 (-1235) SMPL  
4208 (-1237) LOG

LM - CRD. FX. ABD -  
GY. VGY & INXAN,  
NS.



20  
40  
60  
80  
4300  
20  
40  
60  
80  
4400  
20  
40

Ln - AA, LOSING Q.  
CRN & LK GY  
CHT - OPG, JHP, DSE.

SH - M - DR GY.

SHLY LN / LMP SH - AA

Ln - CRN, LN GY - TN,  
FX, DR, DONLD Q.  
NS. No ODR. KARE  
VNH CLK.

Ln - M, TN, FX, No  
VLS Q. SEATT. LMP -  
LT GY, OPG, JHP, DSE.

Ln - AA.

INC LN DR GY SH.

Ln - M, TN, FX, SEATT.  
DR, VGY, INKXAN  
Q. NS.

Ln - AA / SEATT.  
CHT - CRN, OPG, JHP,  
DSE.

Ln - TN, FX, DSE.

Ln - AA, CHERTY.

Ln - CRN, FX, SHLY  
Q. NS. SEATT. INKXAN,  
VGY, OPG,  
NS. ABB VNH CLK.

Ln - LT GY, LT TN, FX,  
DSE.

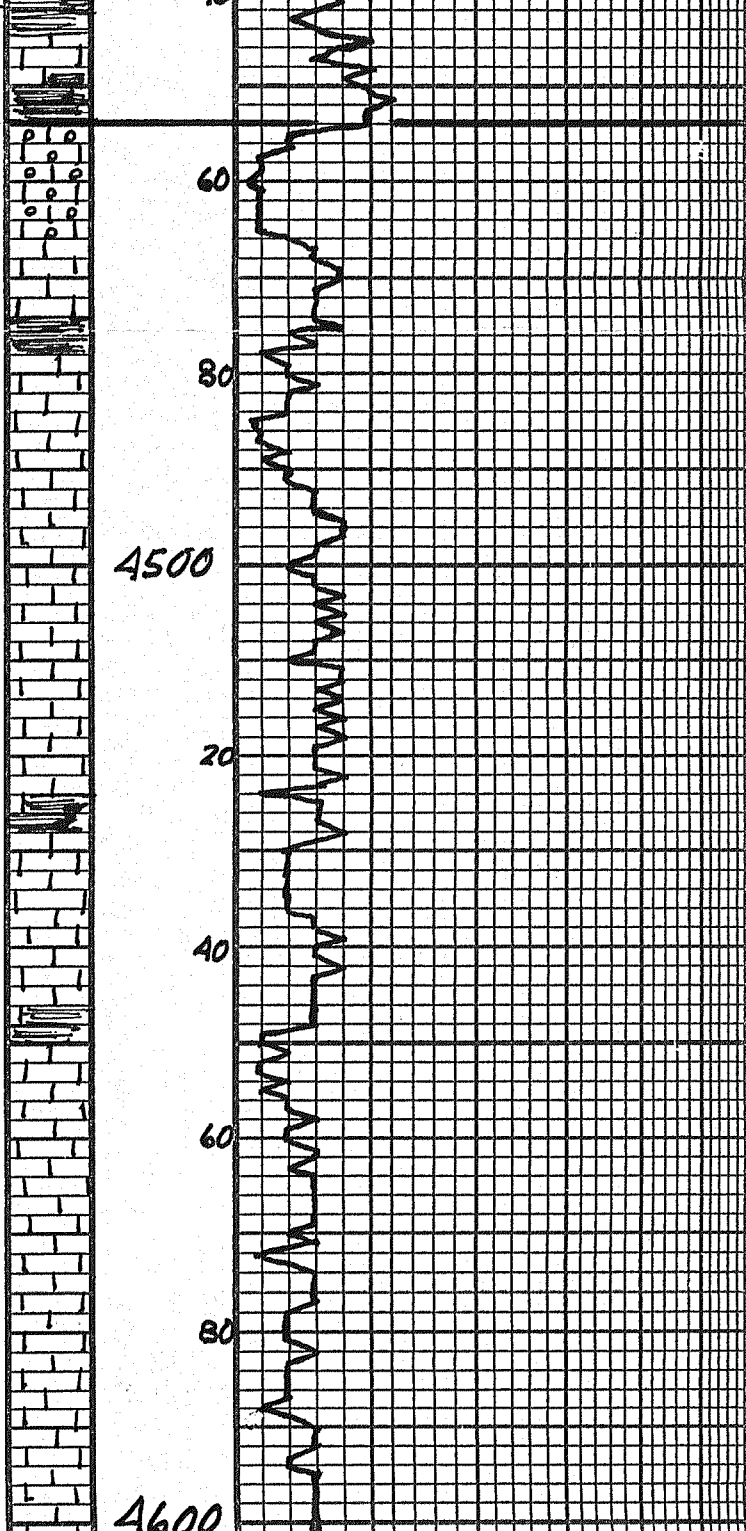
Ln - LT - M, TN, FX,  
Q. DONLD Q. No  
ODR, No VLS SHQ.

Ln - AA.

Ln - AA.

Ln - LT GY, LT - M, TN,  
FX, DSE.





SH-BLK, CARB.

SH-GY-GRN. CALC.

LM-M-TN, GY-TN, FX  
 GR DARK, D. NS. NO  
 ODR.

LM-GY-TN, FX. SPSTY  
 FOSS. DSE.

SH-DK GY → BLK, CARB

LM-M-TN, FX. FOSS. DSE  
 → CHRY.

LM-TN, FX. FOSS. CHRY. IN  
 FT. → RARE VGT, D. NS.

LM-LT GY, LT TN, FX, DSE.

LM-AA.

LM-AA.

LM-LM, LT TN, FX  
 CHRY. FT.

LM-AA. DSE.

LM-LM, LT TN, FX. GR  
 VGT. IN TAN. D. NS.

LM-LT → M GY, GY-TN.  
 FX. DSE. HD.

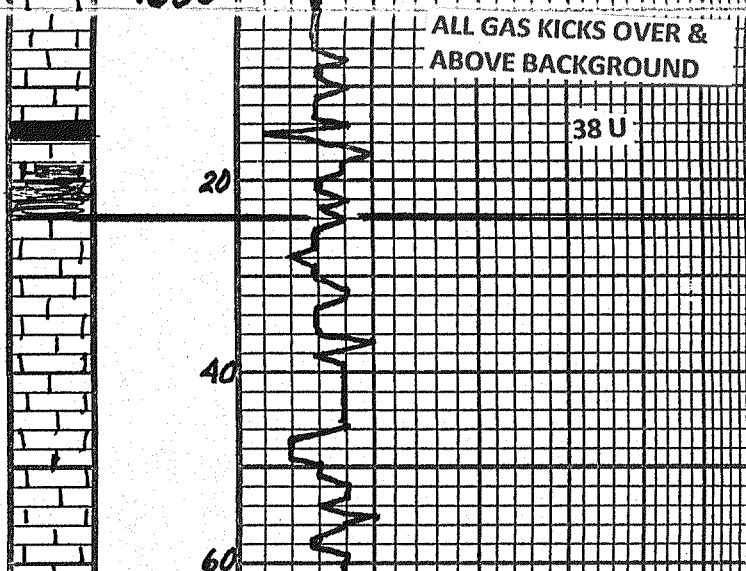
LM-M-TN, GY-TN, FX  
 DSE. HD.

LM-AA.

LM-M-TN, GY-TN, FX  
 DSE. NO VIS. SPSTY  
 FOSS.

LANSING 'G'  
 4454 (-1483) SMPL  
 4456 (-1485) LOG

MUD @ 4577':  
 9.25 WT, 57 VIS, 9.2 FILT,  
 4300 CHLOR, 2# LCM



ALL GAS KICKS OVER &  
 ABOVE BACKGROUND

38 U

LM-DK GY-TN, FX.  
 DSE. HD.

SH-BLK, CARB.

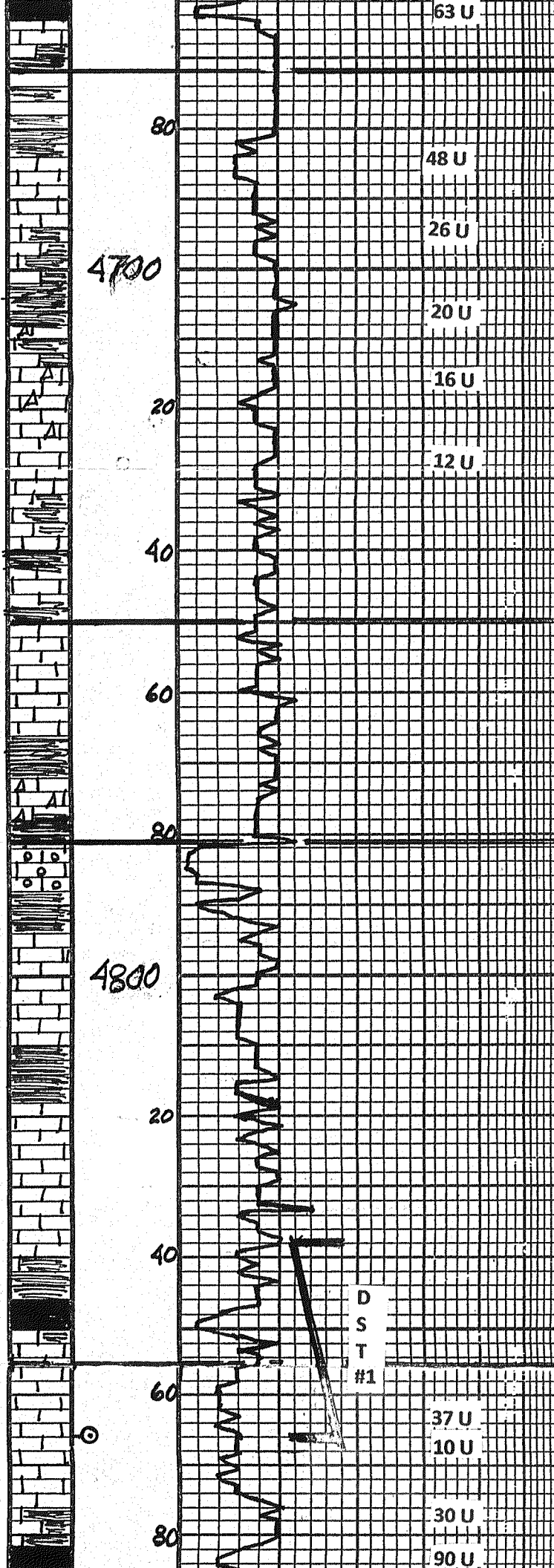
LM-M-TN, FX. FOSS  
 CHRY. MOSTLY DSE.  
 D. NS. VGT. FOSS. M&O

LM-M GY, GY-TN, FX.  
 DSE. HD.

LM-AA. SPSTY BLK. DEAD  
 FLAKY FOSS. JRN.

LM-AA.

KANSAS CITY 'A'  
 4624 (-1653) SMPL  
 4626 (-1655) LOG



63 U SH - BLK, CARB.  
 Lm - DR Gy - TA. FX. ARGILL. DSE.

48 U Lm - DR TB Gy - TA. FX. DSE - CHRY IN PT.

26 U Lm - AA. TR. LT. Gy. OPO, SHP, DSE CNT.

20 U SH - DR Gy - BLK, CARB.  
 Lm - LT. - M Gy, Gy - TA. FX. TR. SCATT. CO. LIFES. No VIS. ⌀.

16 U Lm - AA, DSE w/ SCATT. CNT. M Gy, OPO, SHP, DSE.  
 Lm - DR Gy. FX. DSE. ARGILL.

12 U SHLY Lm - AA.  
 SHLY Lm - AA.  
 SHLY Lm - AA.

Lm - GRM. FX. DSE. HD.  
 Lm - AA.  
 Lm - AA. BECOMING CNTY.

Lm - GRM. LT. Gy. FX. DSE. POLY. w/ GR. COAR. ⌀. NS. ADD'N CHK.  
 Lm - AA. LOSING ⌀.  
 Lm - GRM. LT. Gy. FX. DSE. POLY. DOLITIC. DSE - CHRY.

Lm - DR Gy. FX. DSE - CHRY. w/ ADD. RD, Gy, GRN SH.

FREDON SH - Gy, Gy-GRN. SCATT BROKEN Lm.

Lm - GRM. LT. Gy. FX. DSE - CHRY. w/ ADD. RD, Gy, GRN SH.

Lm - AA. DEC IN SH.

SH - BLK, CARB.  
 SH - M Gy Gy - GRN. TA. - TA. M Gy. FX. DSE.

37 U Lm - LT - M Gy FX. SCATT - NO VIS. ⌀. DR SH IN SOME ⌀.  
 10 U SOME ⌀ BARREN. W/ COAR. SCATT. W/ CHK. ⌀. Lm - AA. No VIS. SHOW. TAG DUAL. YAL. F. W. R. V. W. O. ⌀.

30 U Lm - AA. NS. No COAR.  
 Lm - LT. Gy. FX. DSE. HD - CHRY IN PT.

90 U SH - BLK, CARB.

KANSAS CITY 'B'  
 4662 (-1691) SMPL  
 4672 (-1701) LOG

MARMATON  
 4750 (-1779) SMPL  
 4752 (-1781) LOG

MARMATON 'B'  
 4781 (-1810) SMPL & LOG

PAWNEE  
 4855 (-1884) SMPL  
 4856 (-1885) LOG

PIPE STRAP @ 4866':  
 4883.20 BOARD  
 4878.32 STRAP  
 4.88 SHORT

FT. SCOTT

D  
 S  
 T  
 #1

4900

75 U

HIGH BACKGROUND  
CHEROKEE TO STE. GEN.

LM - GY - TA - FX - DSE. No  
V.D.

SH - BLK, CARB.

LM - M - DK GY - TA - FX - MX  
FR WTKLN Q. FR VGY Q.  
BLK DEAD STN. No DOOR,  
No L.S., No FLOOR.

LM - GY - M - DK GY - FX.  
DSE w/ ABD SH - M -  
DK GY - GY - GRN.

LM 1/2 SH - AA.

LM - M GY, FX DSE HD  
w/ SCAT SH - DK GY -  
GY - GRN SH.

LM 1/2 SH - AA w/ ABD  
FR WTKLN, DSE LHT.

LM - AA w/ ABD SH - M -  
DK GY, DK GY - GRN.

LM 1/2 SH - AA w/ ABD  
FR WTKLN, FR, TIRE,  
MIC SD - NS.

LM - GRN, LR GRN, FX,  
SH. w/ SCAT MGY

LM - LR GY, LR TA, FX, GRN.  
FRITTA IN IT. DSE.

SH - BLK, CARB w/ DK GY, GY -  
GRN SH.

LM - GRN, GY - TA, FX, GRN  
DSE. WTKLN DOOR. NS.  
No VIS Q.

SH - BLK, CARB.

LM - LR GY, LR TA, FX, FR WTKLN  
Q. FR - VGY Q. FR  
DOOR, GR SH, DK STAIN Q.  
CPL FR, BROKE DK EQ. FR  
GO SCAT FLOOR.

LM - M - DK GY, FX, DSE.  
HD.

LM - AA. w/ ABD DK GY SH.

LM - LR - M - DK GY, FX - MX.  
SPLY FOSS. FR - FR INT -  
XEN Q. FR - GR VGY FOSS  
MID Q. FR DOOR. GR DK  
STN Q. FR FLOOR. No  
FO. CPL GAS BUBB.

LM - LR - M GY, FX, DSE.  
FR GR LHT - DK GY  
WTKLN SH, DSE, SCAT  
DK GY, GY - GRN SH.

LM - GY - TA, FX, DSE. No  
VIS Q. w/ SCAT LHT.  
DK GY - TA, CPL, SH, DSE.

LM 1/2 LHT - AA.

SH - DK GY.

D  
S  
T  
#2

140 U

120 U

5000

MUD @ 4915':  
9.1 WT, 50 VIS, 9.2 FILT,  
3500 CHLOR, 2# LCM

ATOKA  
4999 (-2028) SMPL  
4995 (-2024) LOG

MUD @ 5055':  
9.2 WT, 47 VIS, 9.2 FILT,  
3200 CHLOR, 2# LCM

5100

52 U

LM - DK GY, DK GY - TA, FX.  
DSE HD.

20 84 U

SH-BLK, CARB.

40 100 U

SH-DK GY → BLK, CARB.

Lm-M GY → GY-GRN. F.S.  
SPSLY FOS. DISE. HAD  
SCAT. DK GY. DK GR. IN  
DQB, SH, DSE CNT.

Lm & SCAT CNT-AA.

Lm & SCAT CNT-AA.

Lm & SCAT CNT-AA BE-  
COMING SHY.

60

SH-BLK, CARB.

SH-DK GY, GY-GRN. SUFF  
CALC IN PT. 1/2" PRITE.

SH-AA. w/ SCAT DK RD  
SH.

SH-M → DK GY, GY-GRN, RD.  
BLK. SUFF IN PT. 1/2" PRITE.  
SCAT Lm → M GY Lm. F.S.  
DSE.

SH & SCAT Lm-AA.

5200

SH & SCAT Lm-AA w/ QUER CAR  
LOOK STRAINS IN TRAY. NO  
DQB.

SH & SCAT Lm-AA.

20 60 U

SH-DK GY → GY-GRN. SUFF  
GRITTY. HAD LOOSE Lm.  
DQB. NO VIS SH.

PREDOM SH-M → DK GY, GY-GRN  
BLK. RD. w/ SCAT Lm-GRN.  
Lm GY. F.S. DSE. SH IS GRITTY.

SH & SCAT Lm-AA.

SH-AA. SUFF IN Lm-GRN.  
F.S. DSE. MICROFRACS.

60

SH & Lm-AA w/ SCAT  
Lm GY. F.S. DSE. LITE,  
MIC SH.

PREDOM M GY SH. CALC  
IN PT.

PREDOM Lm → M GY SH.  
w/ SCAT Lm GY. F.S. DSE. CHKY IN PT.

SH & Lm-AA.

80

SH-M → DK GY. w/ SCAT  
Lm, SUB-CHKY Lm.

SH & Lm-AA.

5300

20

SH-AA w/ SD - GR. Qtz. 1/2"  
F.S. W. RD. W. JRT. F.S. F.S.  
DQB. GR. SH. F.S. GR. Lm. GR.  
RARE GR. SUBB.

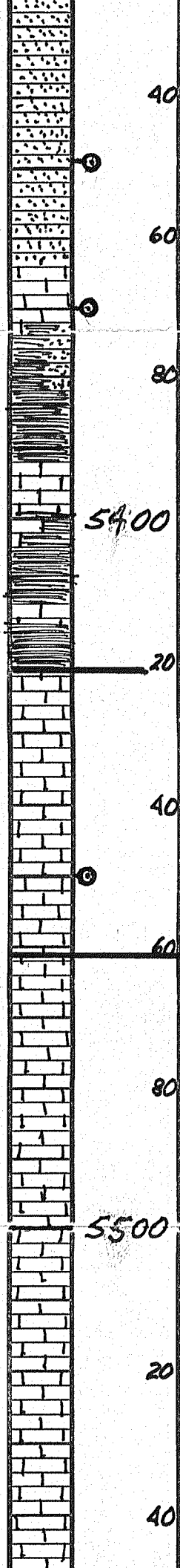
SD-AA w/ LESS SHALE-AA  
F.S. W. RD. W. JRT. F.S. F.S.

MORROW SHALE  
5164 (-2193) SMPL  
5162 (-2191) LOG

CHESTER SANDSTONE  
5312 (-2341) SMPL  
5316 (-2345) LOG

MUD @ 5332':

D  
S  
T  
D



#4  
S  
T  
#3  
35 U  
35 U  
15 U

9.2 WT, 52 FILT,  
5400 CHLOR, 3# LCM

No GAS BURB?

So - AA, W.C. IN MUD, W.C. W.D.  
STR ODOR, CO. J.H. F.G.O.

So - CR, CR. L.F. IN SAT. F.G. W.D.  
W.C. IN MUD, W.C. W.D.  
STR ODOR, CO. J.H. F.G.O.

PREDOM SH - LF - M BY BY - GRAY  
RED. - SCAT WH CHK. FAL  
SP - LF BY, V.G., M.G. No  
VIS Q. NS.

ABD SO - LF BY F.G. W.D. W.C. W.D.  
FAL. CO. ODOR. CO. J.H. DK  
F.G.O.

PREDOM LF - LF BY - GRAY VEX. SUB-  
ANHY. DISE. - SCAT LF BY SH.

PREDOM SH - LF - GRAY BY - GRAY  
GRAY DK BY DK BY - SCAT  
LF - M BY F.G. M.G.  
HO. NS.

SH & SO - AA.

SH - VARICOL. SURTYE' PVR.  
- SCAT LF - LF - LF BY  
FX. DSE. HO.

LM - LF - M BY. FX. DSE.  
- SCAT SP - M BY F.G.  
HO. NS. ABD LF - M BY  
SH.

LM - GRAY LF BY. FX. DSE.  
- AA.

LM & SO - AA. ABD SH - AA.

PREDOM LM - GRAY. FX.  
SUB-ANHY - DSE. No  
VIS Q. NS.

SH - LF M. DK BY. -  
SCAT LF - AA.

SH - M - DK BY / BY - GRAY  
BY SH - SCAT LF -  
GR. M BY VEX. DSE. No VIS  
Q. NS.

SH - LF - M - DK BY / BY - GRAY  
BY SH - SCAT LF - GRAY  
LF BY VEX. DSE.  
SPY IN FE.

SH - BY GRAY REAR. IN  
LM - LF - LF - GRAY  
DSE. No VIS Q.

SH & GRAY LM - AA.

SH & GRAY LM - AA.

LM - GRAY WH LF BY F.G. SPY  
IN FE. W.C. W.D. W.C. W.D.  
DSE. No VIS Q. NS. DEC  
IN SH.

LM - GRAY WH. FX. SPY IN FE.  
AA. SPSLY CALIC. No  
VIS Q. NS. SUB-ANHY IN  
FE.

LM - AA.

LM - WH, GRAY. FX. DSE.

LM - WH, GRAY. FX. CALIC.  
DSE. SPSLY FALS.  
No VIS Q. NS.

LM - GRAY. FX. SPSLY  
CALIC. DSE. NS.

LM - GRAY FX SPSLY CALIC.

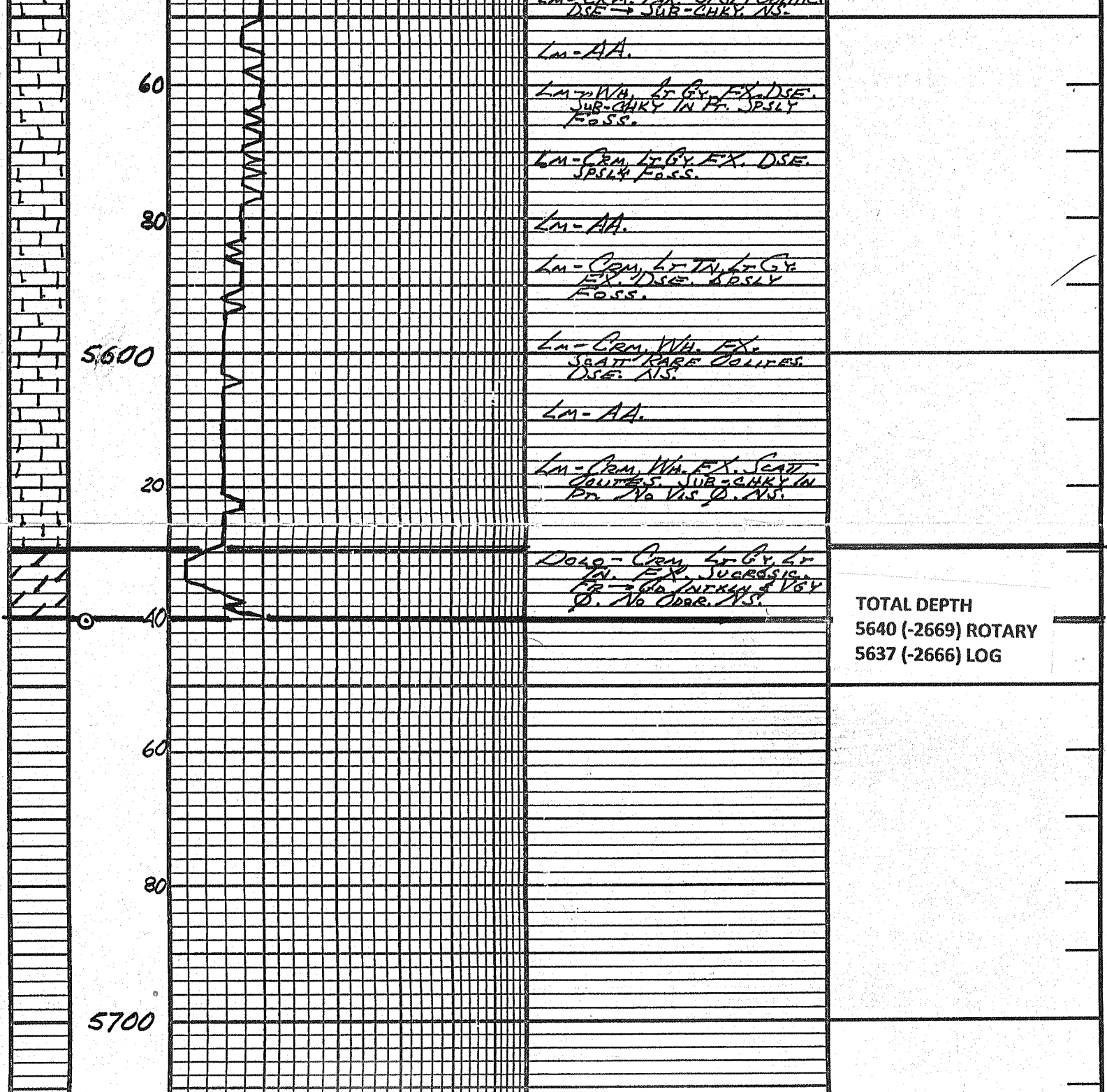
STE. GENEVIEVE  
5421 (-2450) SMPL  
5422 (-2451) LOG

ST. LOUIS  
5461 (-2490) SMPL  
5462 (-2491) LOG

MUD @ 5485':  
9.1 WT, 54 VIS, 10.0 FILT,  
6600 CHLOR, 3# LCM

54:00

55:00



TOTAL DEPTH  
5640 (-2669) ROTARY  
5637 (-2666) LOG

DST #1: 4838-66  
30-60-60-90

IF: BOB IN 3 SECS  
ISI: GTS IN 1 MIN  
WHILE BLEEDING OFF  
NO BLOW BACK

FF: BOB IMMED.  
GAUGED GAS (1/4" CHK)  
10 MIN 1.5 PSI 25.2 MCF/D  
20 MIN 1.5 PSI 25.2 MCF/D  
30 MIN 1.5 PSI 25.2 MCF/D  
40 MIN 1.5 PSI 25.2 MCF/D

DST #2: 5005-55  
30-45-30-30

IF: 3/4" BLOW  
ISI: NO BLOW BACK  
FF: 1/2" BLOW  
FSI: NO BLOW BACK

RECOVERY:  
90' GIP  
150' GCM (2% G, 98% M)

SIP'S: 271-137#  
FP'S: 96-110/104-104#  
HP'S: 2516-2470#

DST #3: 5312-49

PACKER FAILURE  
RECOVERY:  
630' DRLG MUD

BHT: 130° F

50 MIN 1.5 PSI 25.2 MCF/D  
 60 MIN 1.5 PSI 25.2 MCF/D

FSI: NO BLOW BACK

**RECOVERY:**

40' SGCM (3% G, 97% M)  
 NO WATER

SIP'S: 989-944#

FP'S: 18-19/21-20#

HP'S: 2340-2301#

BHT: 124°

TIP S: 2310-2170#  
 BHT: 126° F

DST #4: 5300-49

30-60-60-90

IF: BOB IN 30 SECS

GTS IN 10 MINGAUGED GAS

15 MIN ¼" CHK 72 PSI 137.065 MCF/D

20 MIN ¼" CHK 96 PSI 175.139 MCF/D

30 MIN ¼" CHK 110 PSI 197.34% MCF/D

ISI: 6" BLOW BACK

FF: GAUGED GAS

10 MIN ¼" CHK 69 PSI 125.960 MCF/D

20 MIN ¼" CHK 115 PSI 205.281 MCF/D

30 MIN ¼" CHK 140 PSI 244.941 MCF/D

40 MIN ½" CHK 55 PSI 468.151 MCF/D

50 MIN ½" CHK 25 PSI 265.780 MCF/D

60 MIN ½" CHK 26 PSI 272.526 MCF/D

**RECOVERY:**

4885' GIP

83' OCM (10% O, 90% M)

189' GOCM (25% G, 33% O, 40% M)

126' GOCM (20% G, 20% O, 60% M)

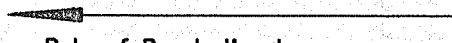
NO WATER

SIP'S: 491-489#

FP'S: 190-276/229-244#

HP'S: 2712-2642#

BHT: 131°

LITHOLOGY	DEPTH	DRILLING TIME MINUTES/FOOT	SAMPLE DESCRIPTIONS	REMARKS
		 Rate of Penetration Increases		
		5" 10" 15" 20" 25"		

COMPANY: ABERCROMBIE ENERGY, LLC		ELEVATION: 2971 KB		
LEASE: COX #7-12				
LOCATION: 1089' FNL & 991' FWL	SEC 12	TWP 28	RGE 33 W	
COUNTY: MCKENNA				

COUNTY: HASSELL

STATE: KANSAS