

Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1241452  
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: \_\_\_\_\_

1241452

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

<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> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	HT A 1-16
Doc ID	1241452

All Electric Logs Run

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

Form	ACO1 - Well Completion
Operator	BEREXCO LLC
Well Name	HT A 1-16
Doc ID	1241452

Tops

Name	Top	Datum
Heebner (base)	3878	-968
Toronto	3892	-982
Lansing	3921	-1011
Kansas City	4263	-1353
Kansas City (base)	4401	-1491
Marmaton	4426	-1516
Pawnee	4495	-1585
Ft. Scott	4523	-1613
Cherokee	4540	-1630
Morrow (not present)	-----	-----
St Genevieve	4721	-1811
St. Louis	4762	-1852
RTD	4975	-2065
LTD	4974	-2064



# ALLIED OIL & GAS SERVICES, LLC 063793

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:

Clayton, Ky

DATE <u>11/25/14</u>	SEC. <u>11</u>	TWP. <u>23</u>	RANGE <u>32</u>	CALLED OUT	ON LOCATION	JOB START <u>5:30 PM</u>	JOB FINISH <u>7:00 PM</u>
LEASE <u>HT A</u>	WELL# <u>7-27</u>	LOCATION <u>Gooda City N TO Garfield Rd</u>			COUNTY <u>Fairfax</u>	STATE <u>Ky</u>	
OLD OR NEW (Circle one)		<u>ETO Jerry brother 1/2 S W 1/4</u>					

CONTRACTOR <u>Buraco 1</u>	OWNER <u>Some</u>
TYPE OF JOB <u>Surface - lay</u>	
HOLE SIZE <u>8 1/4"</u>	T.D.
CASING SIZE <u>8 1/4"</u>	DEPTH
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG.	
PERFS.	
DISPLACEMENT	

CEMENT	AMOUNT ORDERED <u>650 ALW Type 1 Class A 1/4 Pro Sol</u>
	<u>150 lb 390CC</u>

COMMON <u>150</u>	@ <u>17.20</u>	<u>2580.00</u>
POZMIX	@	
GEL	@	
CHLORIDE <u>2120 lb</u>	@ <u>1.10</u>	<u>2332.00</u>
<u>250 lb 1/4 Class A</u>	@ <u>19.00</u>	<u>4750.00</u>
<u>Flo Seal 100 lb</u>	@ <u>4.84</u>	<u>484.00</u>
Material Total		<u>18,423.11</u>
<u>(390.05/300)</u>		
HANDLING <u>909.35</u>	@ <u>2.40</u>	<u>2255.20</u>
MILEAGE <u>2.75 miles</u>	TAN	<u>5247.24</u>

**EQUIPMENT**

PUMP TRUCK # <u>423-281</u>	CEMENTER <u>M Ryan</u>	HELPER <u>Kevin Ryan</u>
BULK TRUCK # <u>600</u>	DRIVER <u>Oscar (TWS)</u>	
BULK TRUCK # <u>890</u>	DRIVER <u>Wayne Messalle</u>	

**REMARKS:**

By City, Gooda, max ALW max 390CC  
Drill pipe 113' all 1/2" O.D. 600 LBS  
Bring Plug & 800 PSI  
Cement Add Circulats  
T Frank  
After placing Wayne Oscar

**SERVICE**

DEPTH OF JOB		
PUMP TRUCK CHARGE	<u>2013.25</u>	
EXTRA FOOTAGE	@	
MILEAGE <u>50 miles</u>	@ <u>7.24</u>	<u>3620.00</u>
MANIFOLD <u>2 bleed</u>	@ <u>275.00</u>	<u>550.00</u>
<u>50 1/2 inch 50 miles</u>	@ <u>4.24</u>	<u>2120.00</u>

(3535.45/300)  
TOTAL 10,101.29

CHARGE TO: Bureau  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

**PLUG & FLOAT EQUIPMENT**

<u>2 1/2" Lead Pipe</u>	@	<u>46.00</u>
<u>2 1/2" API Fast Valve</u>	@	<u>447.00</u>
<u>2 1/2" Rubber Plug</u>	@	<u>121.00</u>
<u>2 1/2" Control Valve</u>	@ <u>75.00</u>	<u>225.00</u>

(378.90/350)  
TOTAL 1,269.00

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 Gilbert Davila Jr  
 SIGNATURE [Signature]

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES 29,787.90  
 DISCOUNT 10,362.43 (35%) PAID IN 30 DAYS  
19,424.97 Net



16-23-32

# CEMENTING LOG

STAGE NO.

Date 11/25/14 District Coalinga Ticket No. 063793  
 Company Borealis Rig Borealis 1  
 Lease HT A Well No. 227  
 County San Diego State CA  
 Location \_\_\_\_\_ Field \_\_\_\_\_

CEMENT DATA:  
 Spacer Type: \_\_\_\_\_  
 Amt. \_\_\_\_\_ Skys Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG \_\_\_\_\_

LEAD: Pump Time \_\_\_\_\_ hrs. Type ALW type 1 class  
 Excess \_\_\_\_\_  
 Amt. 650 Skys Yield 1.78 ft<sup>3</sup>/sk Density 17.20 PPG  
 TAIL: Pump Time \_\_\_\_\_ hrs. Type 150 class 3911C6  
 Excess \_\_\_\_\_  
 Amt. 150 Skys Yield 1.62 ft<sup>3</sup>/sk Density 15.2 PPG  
 WATER: Lead 8.40 gals/sk Tail 5.21 gals/sk Total \_\_\_\_\_ Bbls.

CASING DATA: Conductor  PTA  Squeeze  Misc   
 Surface  Intermediate  Production  Liner   
 Size 8 5/8" Type Meer Weight 24 Collar \_\_\_\_\_

Casing Depths: Top 123 Bottom 1740'

Drill Pipe: Size 4 1/2 Weight \_\_\_\_\_ Collars \_\_\_\_\_  
 Open Hole: Size 10 1/4 T.D. \_\_\_\_\_ ft. P.B. to \_\_\_\_\_ ft.

CAPACITY FACTORS:  
 Casing: Bbls/Lin. ft. 0.0637 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. \_\_\_\_\_  
 Perforations: From \_\_\_\_\_ ft. to \_\_\_\_\_ ft. Amt. \_\_\_\_\_

Pump Trucks Used 423-281  
 Bulk Equip. \_\_\_\_\_

Float Equip: Manufacturer \_\_\_\_\_  
 Shoe: Type Guide Depth \_\_\_\_\_  
 Float: Type APU Transit Depth \_\_\_\_\_  
 Centralizers: Quantity 3 Plugs Top Rubber Btm. \_\_\_\_\_  
 Stage Collars \_\_\_\_\_  
 Special Equip. JOHNSON  
 Disp. Fluid Type H<sub>2</sub>O Amt. 113 Bbls. Weight \_\_\_\_\_ PPG \_\_\_\_\_  
 Mud Type \_\_\_\_\_ Weight \_\_\_\_\_ PPG \_\_\_\_\_

COMPANY REPRESENTATIVE \_\_\_\_\_

CEMENTER AR

TIME	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	
1:00						substitution, SPN, N <sub>2</sub> , Seals down Coz Circulates
				145.0	3.0	MAX ALW
				10.0	3.0	MAX COZ
				113.0	5.0	Airline Plug w/ H <sub>2</sub> O
						Control Plug w
						Float Held
2:00						JOB COMPLETE

# ALLIED OIL & GAS SERVICES, LLC 064370

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:  
Oakley, TX  
12-19-14

DATE <u>12-9-14</u>	SEC. <u>16</u>	TWP. <u>23</u>	RANGE <u>32</u>	CALLED OUT	ON LOCATION <u>3:30 pm</u>	JOB START <u>12:30 am</u>	JOB FINISH <u>11:30 am</u>
LEASE <u>H/A</u>	WELL # <u>1-16</u>	LOCATION <u>Cardon City N 6 mile Rd</u>			COUNTY <u>Ft. Bend</u>	STATE <u>TX</u>	
OLD OR NEW (Circle one)			<u>East To Jeremy Parker Rd 1/2 S. White</u>				

CONTRACTOR Beredco 1  
 TYPE OF JOB Production 2 stage  
 HOLE SIZE 7 7/8 T.D. 4975  
 CASING SIZE 5 1/2 DEPTH 4969'  
 TUBING SIZE DEPTH  
 DRILL PIPE DEPTH  
 TOOL D.O. DEPTH 3220'  
 PRES. MAX MINIMUM  
 MEAS. LINE SHOE JOINT 43.90  
 CEMENT LEFT IN CSG. 43.90  
 PERFS.  
 DISPLACEMENT 117.32 bbl

OWNER same  
 CEMENT  
 AMOUNT ORDERED 2305# ASC 18.20 @ 27.45  
6# sulfate. FL160, Portlander  
450 # 65135 6 bags 1/4 4# 60 sand

EQUIPMENT  
 PUMP TRUCK CEMENTER Wahne Eckardt  
 # 373/281 HELPER Wayne McHugh  
 BULK TRUCK  
 # 566/575 DRIVER Juan Tamer (TAS)  
 BULK TRUCK  
 # 890/241 DRIVER Jeff Ortiz (TWS)  
George Grant

COMMON	@		
POZMIX	@		
GEL	@		
CHLORIDE	@		
ASC	<u>2305#</u>	@ <u>23.50</u>	<u>5405.00</u>
ALW Type I	<u>3505#</u>	@ <u>19.88</u>	<u>6959.00</u>
Deframer	<u>58 #</u>	@ <u>3.50</u>	<u>203.00</u>
FL160	<u>109 #</u>	@ <u>18.90</u>	<u>2060.10</u>
Colsonite	<u>1320 #</u>	@ <u>.78</u>	<u>1352.40</u>
Fla-seal	<u>113 #</u>	@ <u>2.97</u>	<u>335.61</u>
<del>Fla-seal</del>	@		
Material Total	@		<u>16,314.11</u>
	@	<u>15,546.79 / 348</u>	
HANDLING	<u>803.9 #</u>	@ <u>2.48</u>	<u>1993.68</u>
MILEAGE	<u>1674.47 ton</u>	@ <u>2.75</u>	<u>4602.79</u>
			<u>rate</u>
			TOTAL

REMARKS:  
Pump ball through 600#, Circ 2 hrs  
Mix 100 #s Kite, Mix 180 #s ASC  
Displace with water & mud plug  
Plug 2305# open DUTool. Circ 2 hrs  
Plug M.H. 205# Plug R# 305#  
Mix 300 #s Litz, Mix 505# ASC  
Displace with water - mud plug  
Flatt weld. Cement did circulate  
Thank you!

SERVICE

DEPTH OF JOB	<u>4969</u>		
PUMP TRUCK CHARGE			<u>2768.25</u>
EXTRA FOOTAGE	@		<u>2406.25</u>
MILEAGE MFAV	<u>50</u>	@ <u>7.20</u>	<u>360.00</u>
MANIFOLD Head	@	<u>225.00</u>	<u>NC</u>
MFAV	<u>50</u>	@ <u>4.40</u>	<u>NC</u>
	@		

CHARGE TO: Beredco  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

(4151.55 / 348)

TOTAL 12,210.46

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.

PLUG & FLOAT EQUIPMENT

(W) DUTool		<u>5335.00</u>	
(W) AFU Float Shoe	@	<u>640.00</u>	
(W) Hatchdown Plug	@	<u>660.00</u>	
(LR) (15) Central rears	@	<u>3850</u>	<u>780.00</u>
(LR) (2) Baskets	@	<u>57.00</u>	<u>755.00</u>
	@		

Bid (3129.00 / 35%)

TOTAL 8,940.00

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

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES 37,464.57  
 DISCOUNT 12,827.34 / 24/35! IF PAID IN 30 DAYS  
24,637.23 Net.





# CEMENTING LOG

STAGE NO. \_\_\_\_\_

Date 12-8-14 District Oakley KS Ticket No. 64370  
 Company Barexco Rig Beredco1  
 Lease HT A Well No. 1-16  
 County Finney State KS  
 Location 16-23-32 Field \_\_\_\_\_  
Garden City 6 mile Rd, E to Jenny Barker Rd  
 CASING DATA: Conductor  PTA  10.5" dump Squeeze  Misc   
 Surface  Intermediate  Production  Liner   
 Size 5 1/2 Type new Weight 15.5# Collar \_\_\_\_\_  
Bottom Stage

Casing Depths: Top K.B Bottom 49691

Drill Pipe: Size \_\_\_\_\_ Weight \_\_\_\_\_ Collars \_\_\_\_\_  
 Open Hole: Size 7 7/8 T.D. 49751 ft. P.B. to \_\_\_\_\_ ft.

CAPACITY FACTORS:  
 Casing: Bbls/Lin. ft. 10238 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. \_\_\_\_\_ Skys Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG

LEAD: Pump Time \_\_\_\_\_ hrs. Type ALL 1400  
14# 410-900 Excess \_\_\_\_\_  
 Amt. 100 Skys Yield 1.97 ft<sup>3</sup>/sk Density 12.42 PPG  
 TAIL: Pump Time \_\_\_\_\_ hrs. Type ASC 1000  
6 1/2" 1500 FC160 Dater Excess \_\_\_\_\_  
 Amt. 180 Skys Yield 1.59 ft<sup>3</sup>/sk Density 14.58 PPG  
 WATER: Lead \_\_\_\_\_ gals/sk Tail \_\_\_\_\_ gals/sk Total \_\_\_\_\_ Bbls.

Pump Trucks Used 393/281 - Wayne  
 Bulk Equip. 564/595 - Juan T.  
870/241 - Jeff

Float Equip: Manufacturer Weatherford / Industrial Rubb  
 Shoe: Type AFU Depth \_\_\_\_\_  
 Float: Type Latexdown Plug Depth \_\_\_\_\_  
 Centralizers: Quantity 15 Plugs Top \_\_\_\_\_ Btm. \_\_\_\_\_  
 Stage Collars DU TOOL  
 Special Equip. (2) Baskets  
 Disp. Fluid Type Water Amt. 117 Bbls. Weight \_\_\_\_\_ PPG  
 Mud Type 401 27 Weight \_\_\_\_\_ PPG

COMPANY REPRESENTATIVE \_\_\_\_\_

CEMENTER LaRane

TIME	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	
<del>9:30</del> 9:30	<del>1600#</del> 1600#					Hold Safety meeting Pump ball through Circ 1 hr Start Cement 100SKs Lita Weigh Cement 3 times 12.4# Start Cement 180SKs ASC Weigh Cement 3 times 14.5# Stop Cement Washing pump & lines Release plug Start water displacement Stop water Start mud displacement
	0			20.0		
	100#			20.0		
	300#			10.0		
	500#			10.0		
	700#			10.0		
	900#			10.0		
	1100			10.0		
	1300			10.0		
	1500#			7.7		
10:30	2300#					



# CEMENTING LOG

STAGE NO. \_\_\_\_\_

**CEMENT DATA:**

Spacer Type: \_\_\_\_\_  
 Amt. \_\_\_\_\_ Sks Yield \_\_\_\_\_ ft<sup>3</sup>/sk Density \_\_\_\_\_ PPG \_\_\_\_\_

LEAD: Pump Time \_\_\_\_\_ hrs. Type ALW 6535  
 Amt. 350 Sks Yield 1.97 ft<sup>3</sup>/sk Density 12.42 PPG  
 Excess \_\_\_\_\_

TAIL: Pump Time \_\_\_\_\_ hrs. Type ASC 10750 112  
 Amt. 50 Sks Yield 1.39 ft<sup>3</sup>/sk Density 14.58 PPG  
 Excess \_\_\_\_\_

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

Pump Trucks Used 373/281 - Wayne  
 Bulk Equip. 566/595 - Deacon  
890/241 - Jeff

Float Equip: Manufacturer \_\_\_\_\_  
 Shoe: Type \_\_\_\_\_ Depth \_\_\_\_\_  
 Float: Type \_\_\_\_\_ Depth \_\_\_\_\_  
 Centralizers: Quantity \_\_\_\_\_ Plugs Top \_\_\_\_\_ Btm. \_\_\_\_\_  
 Stage Collars \_\_\_\_\_  
 Special Equip. \_\_\_\_\_  
 Disp. Fluid Type Water Amt. 20.78 Bbls. Weight \_\_\_\_\_ PPG  
 Mud Type \_\_\_\_\_ Weight \_\_\_\_\_ PPG

Date 12-9-14 District Oakley, KS Ticket No. 64370  
 Company Borexco Rig Borexco 1  
 Lease HTA Well No. 1-16  
 County Finney State KS

Location 16-23-32 Field \_\_\_\_\_  
Carroll City Guide Rd, E to Jenny Baskin Ave

CASING DATA: Conductor  PTA  Squeeze  Misc   
 Surface  Intermediate  Production  Liner   
 Size 5 1/2 Type New Weight \_\_\_\_\_ Collar \_\_\_\_\_

TOP Stage  
D-D Tool  
 Casing Depths: Top K.B Bottom 39201

Drill Pipe: Size \_\_\_\_\_ Weight \_\_\_\_\_ Collars \_\_\_\_\_  
 Open Hole: Size 7 7/8 T.D. \_\_\_\_\_ 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. \_\_\_\_\_

COMPANY REPRESENTATIVE \_\_\_\_\_

CEMENTER Loraine

TIME	PRESSURES PSI		FLUID PUMPED DATA			REMARKS
	DRILL PIPE CASING	ANNULUS	TOTAL FLUID	Pumped Per Time Period	RATE Bbls Min.	
1:30						Hold Safety meeting <del>Start</del> <del>Start Pump</del> Plug M.H. 20 sks Plug R.H. 30 sks Start water 300 sks Lita weigh cement 12.4 # Start cement 50 sks ASC weigh cement 14.5 #. Stop cement Wash up pump & lines Release plug. Start water Displacement
				10.0		S S S S S
				10.0		
				10.0		
				10.0		
				10.0		
2:30				6.?		Stop water Load plug float held
						Hold Safety meeting



**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: HTA1-16DST1

TIME ON: 1545 (12/1)  
TIME OFF: 0535 (12/2)

Company BEREXCO LLC Lease & Well No. HT A #1-16  
Contractor BEREDCO LLC RIG 1 Charge to BEREXCO LLC  
Elevation 2898 GL Formation PAWNEE Effective Pay \_\_\_\_\_ Ft. Ticket No. M731  
Date 12/1/2014 Sec. 16 Twp. 23 S Range 32 W County FINNEY State KANSAS  
Test Approved By EDWIN H. GRIEVES Diamond Representative MIKE COCHRAN

Formation Test No. 1 Interval Tested from 4492 ft. to 4512 ft. Total Depth 4512 ft.  
Packer Depth 4487 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.  
Packer Depth 4492 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set \_\_\_\_\_  
Top Recorder Depth (Inside) 4474 ft. Recorder Number 0063 Cap. 5,000 P.S.I.  
Bottom Recorder Depth (Outside) 4494 ft. Recorder Number E1150 Cap. 5,000 P.S.I.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type CHEM Viscosity 64 Drill Collar Length 630 ft. I.D. 2 1/4 in.  
Weight 9.4 Water Loss 8.0 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
Chlorides 1,800 P.P.M. Drill Pipe Length 3830 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 20 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, BOB 17 1/2 MIN. (NO BB)  
2nd Open: SSB, BOB 12 MIN. (NO BB)

Recovered 1183 ft. of GIP  
Recovered 105 ft. of GMCO 2% GAS, 92% OIL, 6% MUD (105' DC)  
Recovered 105 ft. of TOTAL FLUID

Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of <u>GRAVITY: 31.2 @ 60°</u>	Other Charges
Recovered _____ ft. of _____	Insurance
Remarks: _____	
<u>TOOL SAMPLE: 1% GAS, 30% OIL, 69% MUD</u>	Total

Time Set Packer(s) 8:45 P.M. <sup>A.M.</sup>/<sub>P.M.</sub> Time Started Off Bottom 1:15 A.M. <sup>A.M.</sup>/<sub>P.M.</sub> Maximum Temperature 111°F

Initial Hydrostatic Pressure..... (A) 2146 P.S.I.  
Initial Flow Period..... Minutes 30 (B) 12 P.S.I. to (C) 41 P.S.I.  
Initial Closed In Period..... Minutes 60 (D) 1174 P.S.I.  
Final Flow Period..... Minutes 60 (E) 46 P.S.I. to (F) 82 P.S.I.  
Final Closed In Period..... Minutes 120 (G) 1169 P.S.I.  
Final Hydrostatic Pressure..... (H) 2051 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

# DIAMOND TESTING

## Pressure Survey Report

### General Information

Company Name	BEREXCO LLC	Job Number	M731
Well Name	HT A #1-16	Representative	MIKE COCHRAN
Unique Well ID	DST#1 4492-4512 PAWNEE	Well Operator	BEREXCO LLC
Surface Location	SEC.16-23S-32W FINNEY CO.KS.	Report Date	2014/12/02
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 4492-4512 PAWNEE		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2014/12/01	Start Test Time	15:45:00
Final Test Date	2014/12/02	Final Test Time	05:35:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

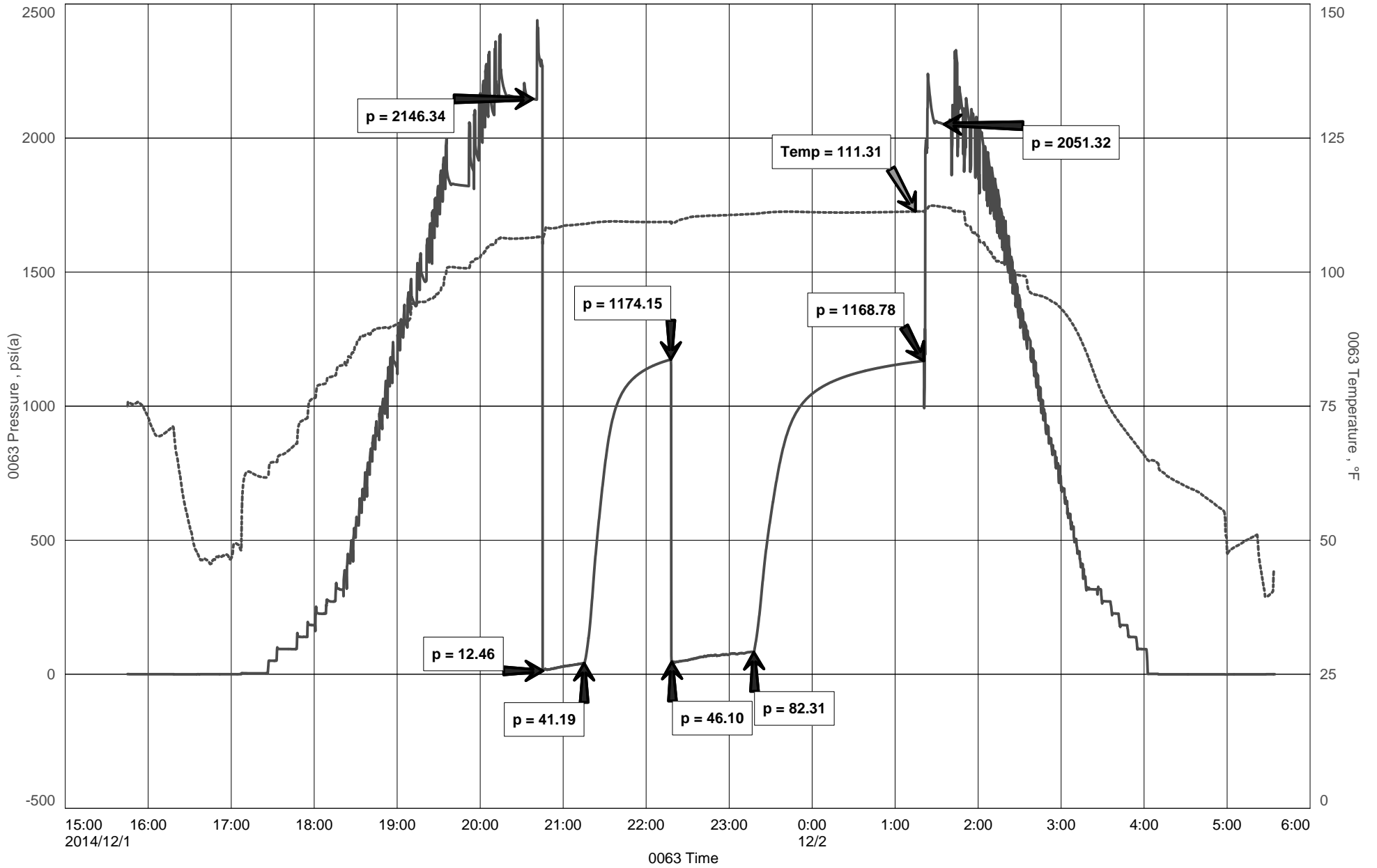
### Test Results

Remarks RECOVERED:  
1185' GIP  
105' GMCO 2% GAS, 92% OIL, 6% MUD (105' DC)  
105' TOTAL FLUID

GRAVITY: 31.2 @ 60 DEG

TOOL SAMPLE: 1% GAS, 30% OIL, 69% MUD

# HT A #1-16





**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: HTA1-16DST2

TIME ON: 2110 (12/2)  
TIME OFF: 0920 (12/3)

Company BEREXCO LLC Lease & Well No. HT A #1-16  
Contractor BEREDCO LLC RIG 1 Charge to BEREXCO LLC  
Elevation 2898 GL Formation FT.SCOTT Effective Pay \_\_\_\_\_ Ft. Ticket No. M732  
Date 12/2/2014 Sec. 16 Twp. 23 S Range 32 W County FINNEY State KANSAS  
Test Approved By EDWIN H. GRIEVES Diamond Representative MIKE COCHRAN

Formation Test No. 2 Interval Tested from 4518 ft. to 4537 ft. Total Depth 4537 ft.  
Packer Depth 4513 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.  
Packer Depth 4518 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set \_\_\_\_\_  
Top Recorder Depth (Inside) 4500 ft. Recorder Number 0063 Cap. 5,000 P.S.I.  
Bottom Recorder Depth (Outside) 4520 ft. Recorder Number E1150 Cap. 5,000 P.S.I.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type CHEM Viscosity 55 Drill Collar Length 630 ft. I.D. 2 1/4 in.  
Weight 9.1 Water Loss 8.4 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
Chlorides 1,900 P.P.M. Drill Pipe Length 3856 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 19 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 IN ~20 MIN (NO BB)  
2nd Open: NO BLOW (NO BB)

Recovered <u>5</u> ft. of <u>DM 100% MUD</u>	Price Job Other Charges Insurance Total
Recovered <u>5</u> ft. of <u>TOTAL FLUID</u>	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Recovered _____ ft. of _____	
Remarks: _____	
TOOL SAMPLE: <u>100% MUD</u>	

Time Set Packer(s) 1:30 A.M. <sup>A.M.</sup>/<sub>P.M.</sub> Time Started Off Bottom 5:30 A.M. <sup>A.M.</sup>/<sub>P.M.</sub> Maximum Temperature 107°F

Initial Hydrostatic Pressure..... (A) 2156 P.S.I.  
Initial Flow Period..... Minutes 30 (B) 9 P.S.I. to (C) 13 P.S.I.  
Initial Closed In Period..... Minutes 60 (D) 1071 P.S.I.  
Final Flow Period..... Minutes 30 (E) 14 P.S.I. to (F) 16 P.S.I.  
Final Closed In Period..... Minutes 60 (G) 1068 P.S.I.  
Final Hydrostatic Pressure..... (H) 2132 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

# DIAMOND TESTING

## Pressure Survey Report

### General Information

Company Name	BEREXCO LLC	Job Number	M732
Well Name	HT A #1-16	Representative	MIKE COCHRAN
Unique Well ID	DST#2 4518-4537 FT.SCOTT	Well Operator	BEREXCO LLC
Surface Location	SEC.16-23S-32W FINNEY CO.KS.	Report Date	2014/12/03
Field	WILDCAT	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	EDWIN H. GRIEVES
		Test Unit	NO. 3

### Test Information

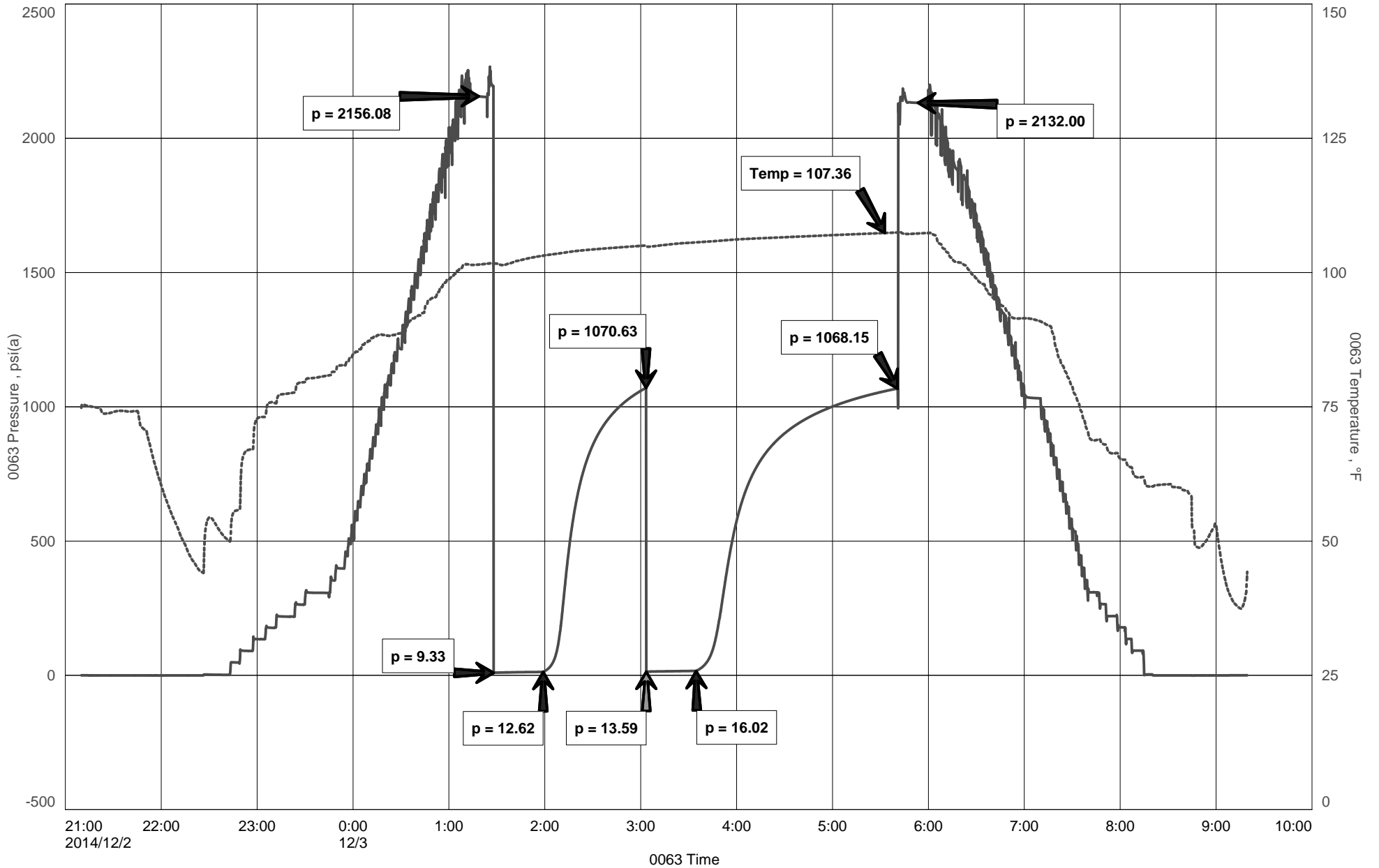
Test Type	CONVENTIONAL		
Formation	DST#2 4518-4537 FT.SCOTT		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2014/12/02	Start Test Time	21:10:00
Final Test Date	2014/12/03	Final Test Time	09:20:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

### Test Results

Remarks RECOVERED:  
5' DM 100% MUD  
5' TOTAL FLUID

TOOL SAMPLE: 100% MUD

# HT A #1-16







**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: HTA1-16DST3

TIME ON: 1245 (12/4)  
TIME OFF: 0105 (12/5)

Company BEREXCO LLC Lease & Well No. HT A #1-16  
Contractor BEREDCO LLC RIG 1 Charge to BEREXCO LLC  
Elevation 2898 GL Formation UNCONFORMITY ZONE Effective Pay \_\_\_\_\_ Ft. Ticket No. M733  
Date 12/4/2014 Sec. 16 Twp. \_\_\_\_\_ 23 S Range \_\_\_\_\_ 32 W County FINNEY State KANSAS  
Test Approved By EDWIN H. GRIEVES Diamond Representative MIKE COCHRAN

Formation Test No. 3 Interval Tested from 4683 ft. to 4720 ft. Total Depth 4720 ft.  
Packer Depth 4678 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.  
Packer Depth 4683 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 4665 ft. Recorder Number 0063 Cap. 5,000 P.S.I.  
Bottom Recorder Depth (Outside) 4685 ft. Recorder Number E1150 Cap. 5,000 P.S.I.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type CHEM Viscosity 57 Drill Collar Length 630 ft. I.D. 2 1/4 in.  
Weight 9.1 Water Loss 9.2 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in.  
Chlorides 1,400 P.P.M. Drill Pipe Length 4021 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 37 ft. Size 4 1/2-FH in.  
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. ALL PERF Surface Choke Size 1 in. Bottom Choke Size 5/8 in.

Blow: 1st Open: WSB, BOB 28 MIN (NO BB)  
2nd Open: SSB, BOB 27 MIN (NO BB)

Recovered ~100 ft. of GIP  
Recovered 1 ft. of FREE OIL 100% OIL GRAVITY: 26.6 @ 60°  
Recovered 99 ft. of GMCO 20% GAS, 55% OIL, 25% MUD  
Recovered 100 ft. of TOTAL FLUID

Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
TOOL SAMPLE: <u>MOSTLY GAS W/ SOME GASSY OIL</u>	Total

Time Set Packer(s) 4:45 P.M. A.M. P.M. Time Started Off Bottom 9:15 A.M. A.M. P.M. Maximum Temperature 114°F

Initial Hydrostatic Pressure..... (A) 2262 P.S.I.  
Initial Flow Period..... Minutes 30 (B) 16 P.S.I. to (C) 43 P.S.I.  
Initial Closed In Period..... Minutes 60 (D) 207 P.S.I.  
Final Flow Period..... Minutes 60 (E) 41 P.S.I. to (F) 55 P.S.I.  
Final Closed In Period..... Minutes 120 (G) 202 P.S.I.  
Final Hydrostatic Pressure..... (H) 2229 P.S.I.

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

# DIAMOND TESTING

## Pressure Survey Report

### General Information

Company Name	BEREXCO LLC	Job Number	M733
Well Name	HT A #1-16	Representative	MIKE COCHRAN
Unique Well ID	DST#3 4683-4720 UNCONFORMITY ZONE	Well Operator	BEREXCO LLC
Surface Location	SEC.16-23S-32W FINNEY CO.KS.	Report Date	2014/12/05
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#3 4683-4720 UNCONFORMITY ZONE		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2014/12/04	Start Test Time	12:45:00
Final Test Date	2014/12/05	Final Test Time	01:05:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

### Test Results

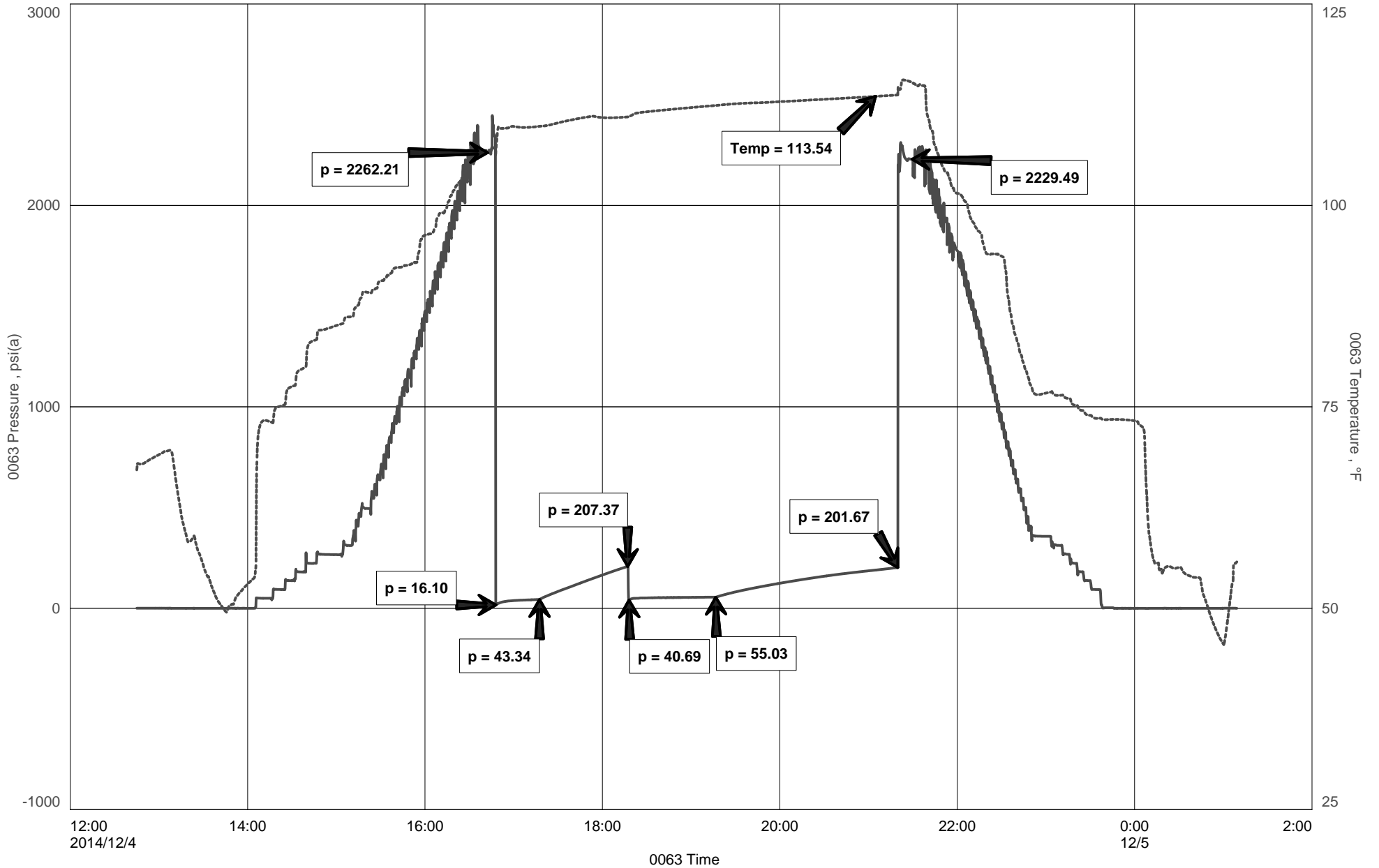
Remarks RECOVERED:

~100' GIP  
1' FREE OIL 100% OIL  
99' GMCO 20% GAS, 55% OIL, 25% MUD  
100' TOTAL FLUID

GRAVITY: 26.6 @ 60 DEG

TOOL SAMPLE: MOSTLY GAS W/ SOME GASSY OIL

# HT A #1-16



# DIAMOND TESTING

## Pressure Survey Report

### General Information

Company Name	BEREXCO LLC	Job Number	M734
Well Name	HT A #1-16	Representative	MIKE COCHRAN
Unique Well ID	SEC.16-23S-32W FINNEY CO.KS.	Well Operator	BEREXCO LLC
Surface Location	SEC.16-23S-32W FINNEY CO.KS.	Report Date	2014/12/06
Field	WILDCAT	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	EDWIN H. GRIEVES
		Test Unit	NO. 3

### Test Information

Test Type	CONVENTIONAL		
Formation	SEC.16-23S-32W FINNEY CO.KS.		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2014/12/05	Start Test Time	20:50:00
Final Test Date	2014/12/06	Final Test Time	11:10:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

### Test Results

Remarks **RECOVERED:**  
~2' VSOSDM ~100% MUD W/ A THIN SCUM OF OIL  
~2' TOTAL FLUID

**TOOL SAMPLE:** ~100% MUD W/ A THIN SCUM OF OIL



**DIAMOND TESTING**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(800) 542-7313  
**DRILL-STEM TEST TICKET**  
FILE: HTA1-16DST4

TIME ON: 2050 (12/5)  
TIME OFF: 1110 (12/6)

Company BEREXCO LLC Lease & Well No. HT A #1-16  
Contractor BEREDCO LLC RIG 1 Charge to BEREXCO LLC  
Elevation 2898 GL Formation ST.LOUIS "B" Effective Pay \_\_\_\_\_ Ft. Ticket No. M734  
Date 12/5/2014 Sec. 16 Twp. 23 S Range 32 W County FINNEY State KANSAS  
Test Approved By EDWIN H. GRIEVES Diamond Representative MIKE COCHRAN

Formation Test No. 4 Interval Tested from 4765 ft. to 4790 ft. Total Depth 4790 ft.  
Packer Depth 4760 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.  
Packer Depth 4765 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set \_\_\_\_\_  
Top Recorder Depth (Inside) 4747 ft. Recorder Number 0063 Cap. 5,000 P.S.I.  
Bottom Recorder Depth (Outside) 4767 ft. Recorder Number E1150 Cap. 5,000 P.S.I.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type CHEM Viscosity 70 Drill Collar Length 630 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 1,600 P.P.M. Drill Pipe Length 4103 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 25 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: NO BLOW (NO BB)  
2nd Open: NO BLOW (NO BB)

Recovered ~2 ft. of VSOSDM ~100% MUD W/ A THIN SCUM OF OIL  
Recovered ~2 ft. of TOTAL FLUID  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

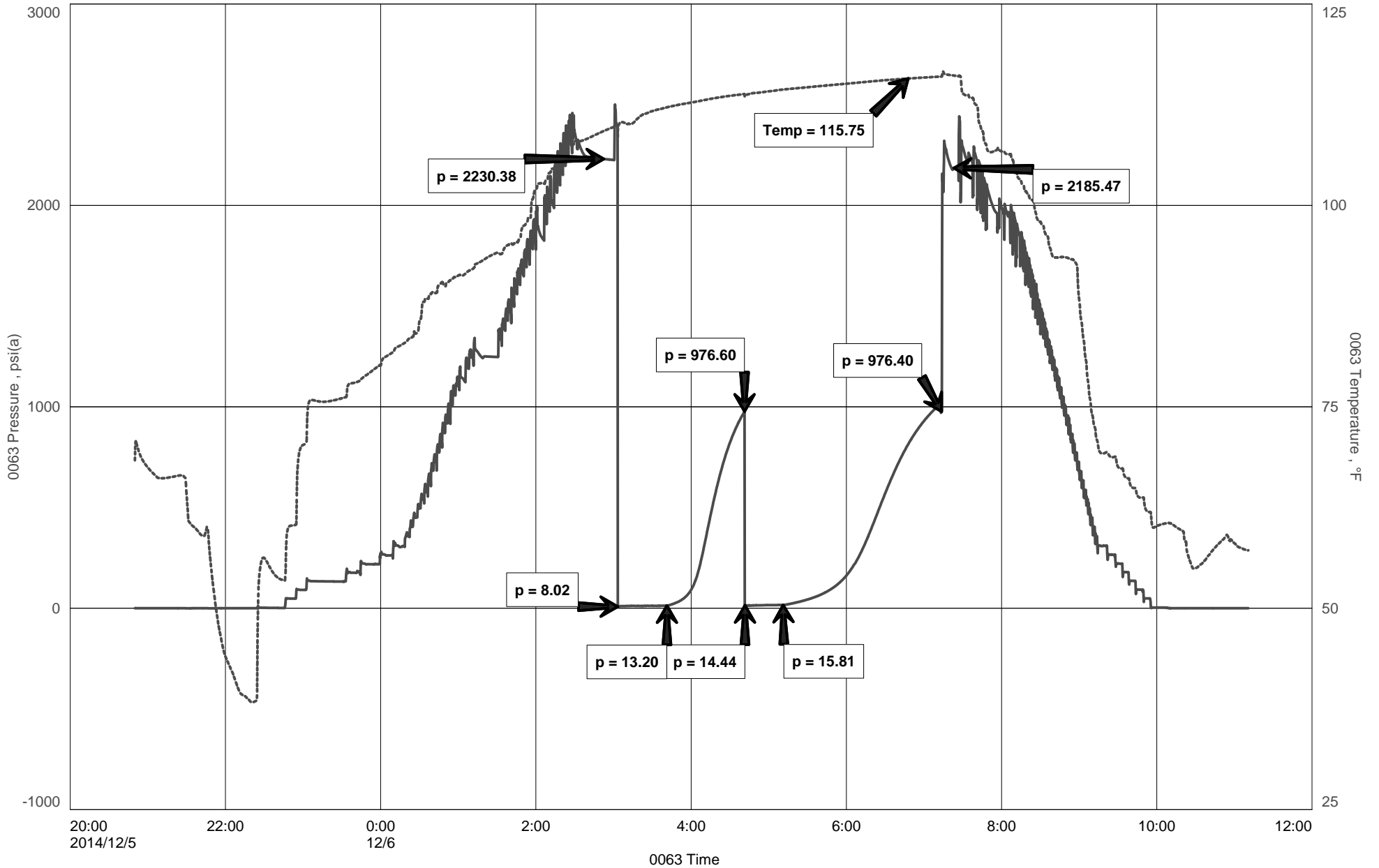
Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
TOOL SAMPLE: <u>~100% MUD W/ A THIN SCUM OF OIL</u>	Total

Time Set Packer(s) 3:00 A.M. <sup>A.M.</sup>/<sub>P.M.</sub> Time Started Off Bottom 7:00 A.M. <sup>A.M.</sup>/<sub>P.M.</sub> Maximum Temperature 116°F

Initial Hydrostatic Pressure..... (A) 2230 P.S.I.  
Initial Flow Period..... Minutes 30 (B) 13 P.S.I. to (C) 14 P.S.I.  
Initial Closed In Period..... Minutes 60 (D) 977 P.S.I.  
Final Flow Period..... Minutes 30 (E) 14 P.S.I. to (F) 16 P.S.I.  
Final Closed In Period..... Minutes 120 (G) 976 P.S.I.  
Final Hydrostatic Pressure..... (H) 2185 P.S.I.

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# HT A #1-16





**DIAMOND TESTING**  
 P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
 (800) 542-7313  
**DRILL-STEM TEST TICKET**  
 FILE: HTA1-16DST5

TIME ON: 0235  
 TIME OFF: 1830

Company BEREXCO LLC Lease & Well No. HT A #1-16  
 Contractor BEREDCO LLC RIG 1 Charge to BEREXCO LLC  
 Elevation 2898 GL Formation ST.LOUIS "C" Effective Pay \_\_\_\_\_ Ft. Ticket No. M735  
 Date 12/6/2014 Sec. 16 Twp. 23 S Range 32 W County FINNEY State KANSAS  
 Test Approved By EDWIN H. GRIEVES Diamond Representative MIKE COCHRAN

Formation Test No. 5 Interval Tested from 4810 ft. to 4829 ft. Total Depth 4829 ft.  
 Packer Depth 4805 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.  
 Packer Depth 4810 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set \_\_\_\_\_

Top Recorder Depth (Inside) 4792 ft. Recorder Number 0063 Cap. 5,000 P.S.I.  
 Bottom Recorder Depth (Outside) 4812 ft. Recorder Number E1150 Cap. 5,000 P.S.I.  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ P.S.I.

Mud Type CHEM Viscosity 62 Drill Collar Length 630 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 2,550 P.P.M. Drill Pipe Length 4148 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 19 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 IN 3 MIN (NO BB)  
 2nd Open: NO BLOW (NO BB)

Recovered ~2 ft. of VSOSM ~100% MUD W/ A THICK SCUM OF OIL  
 Recovered ~2 ft. of TOTAL FLUID  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered _____ ft. of _____	Price Job
Recovered _____ ft. of _____	Other Charges
Remarks: _____	Insurance
TOOL SAMPLE: 100% MUD	Total

Time Set Packer(s) 7:15 A.M. <sup>A.M.</sup>/<sub>P.M.</sub> Time Started Off Bottom 11:15 A.M. <sup>A.M.</sup>/<sub>P.M.</sub> Maximum Temperature \_\_\_\_\_ °F

Initial Hydrostatic Pressure..... (A) 2226 P.S.I.  
 Initial Flow Period..... Minutes 30 (B) 8 P.S.I. to (C) 11 P.S.I.  
 Initial Closed In Period..... Minutes 60 (D) 389 P.S.I.  
 Final Flow Period..... Minutes 30 (E) 10 P.S.I. to (F) 12 P.S.I.  
 Final Closed In Period..... Minutes 120/150 (G) 590/766 P.S.I.  
 Final Hydrostatic Pressure..... (H) \_\_\_\_\_ P.S.I.

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# DIAMOND TESTING

## Pressure Survey Report

### General Information

Company Name	BEREXCO LLC	Job Number	M735
Well Name	HT A #1-16	Representative	MIKE COCHRAN
Unique Well ID	DST#5 4810-4829 ST.LOUIS "C"	Well Operator	BEREXCO LLC
Surface Location	SEC.16-23S-32W FINNEY CO.KS.	Report Date	2014/12/07
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#5 4810-4829 ST.LOUIS "C"		
Test Purpose (AEUB)	Initial Test		
Start Test Date	2014/12/07	Start Test Time	02:35:00
Final Test Date	2014/12/07	Final Test Time	18:30:00
		Well Fluid Type	01 Oil
Gauge Name	0063		
Gauge Serial Number			

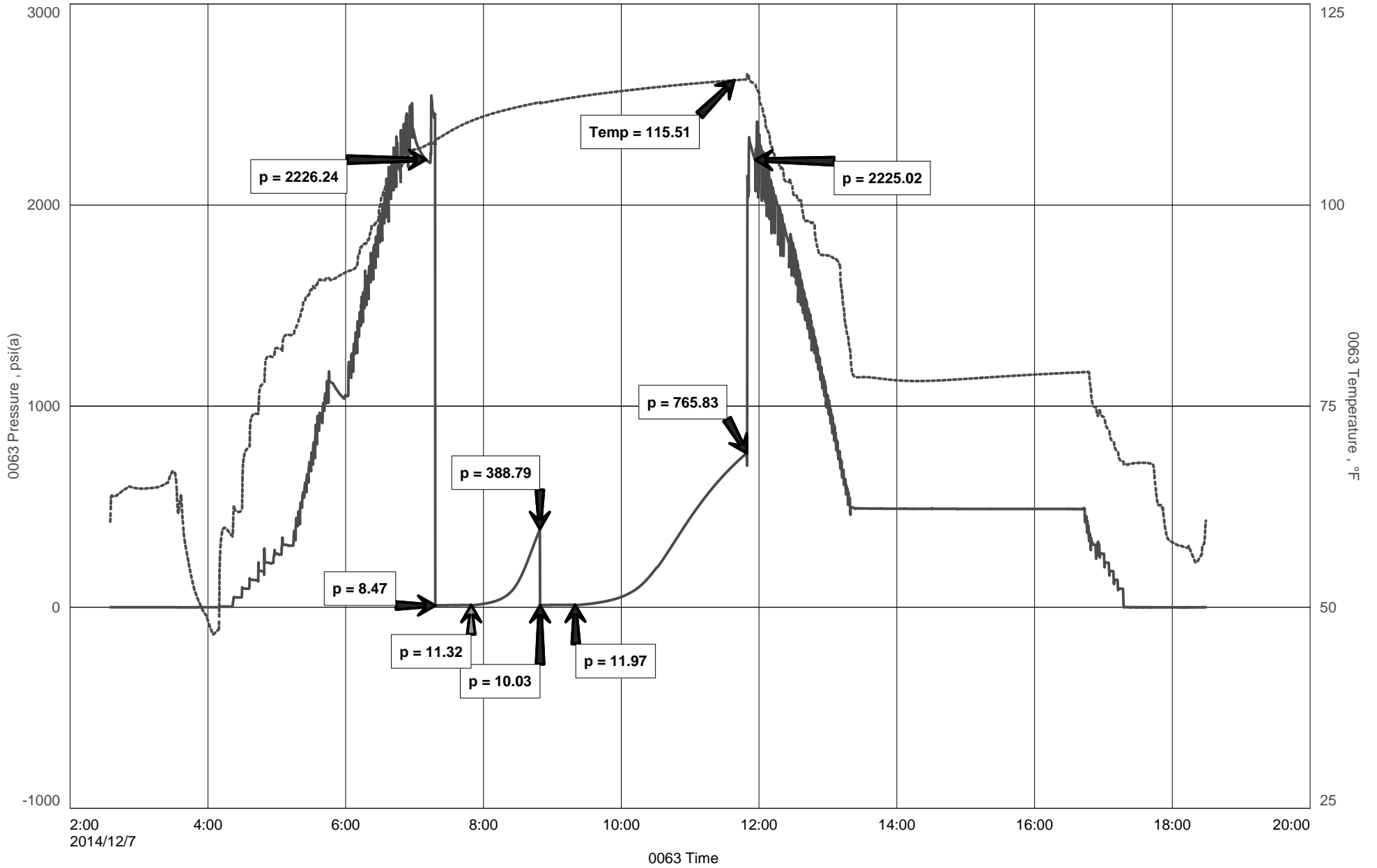
### Test Results

Remarks RECOVERED:  
~2' VSOSM ~100% MUD W/ A THICK SCUM OF OIL  
~2' TOTAL FLUID

TOOL SAMPLE: 100% MUD



# HT A #1-16



# GEOLOGIST'S REPORT

DRILLING TIME & SAMPLE LOG

COMPANY **Berexco LLC**  
 LEASE **HT A** NO. **1-16**  
 LOCATION **1992' FNL + 1991' FEL**  
 SEC. **16** TWP. **23S** RNG. **32W**  
 COUNTY **Finney** STATE **Kansas**  
 FIELD **Wildcat**

ELEVATIONS  
 KB **2910**  
 DF **2908**  
 GL **2898**  
 MEASUREMENTS ARE ALL FROM **KB**

CONTRACTOR **Berexco Delq Rig #1**  
 COMM. **11-23-2014** COMP. **12-9-2014**  
 RTD **4975** LTD **4974**  
 No. of DST'S **5** No. of CORES **None**

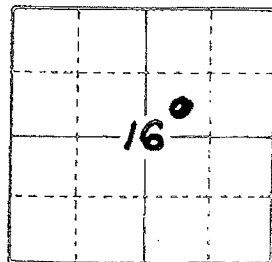
CASING RECORD  
**898'** of **1790** w/ **800** SH.  
 of w/ SH.  
 of w/ SH.  
 of w/ SH.

EL. LOG ACT Res: **SP GR**  
**DEN NEUT GR Caliper**  
**M.L. 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	3879	3878	- 968
Toronto	3893	3892	- 982
Lansing Fm.	3920	3921	- 1011
Kansas City Fm.	4262	4263	- 1353
BKC	4393	4401	- 1491
Marmaton Fm.	4416	4426	- 1516
Pawnee	4495	4495	- 1585
Ft. Scott	4525	4523	- 1613
Cheapeake	4545	4540	- 1630
Morrow Fm	Not Present		
St. Genevieve	4739	4721	- 1811
St. Louis	4768	4762	- 1852
TD	4975	4974	



API# 15-055-22359

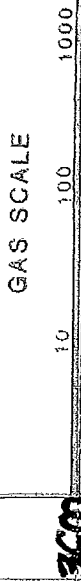
REMARKS Earth-Tech had an unmanned gas detection trailer on this well from 3600 to total depth.

Thank you for  
 Edwin H. Grieves  
 Geologist

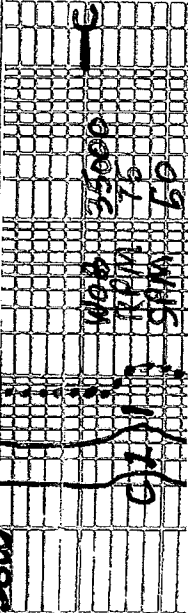
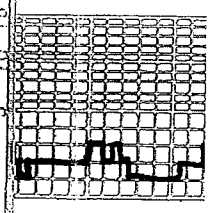
LITHOLOGY  
 SANDSTONE  
 LIMESTONE  
 SHALE  
 CHERT  
 SLTSTONE  
 DOLOMITE  
 GRANITE MASH  
 SAND & GYP  
 CHROMATOGRAPH  
 HOT WIRE BY  
 TOTAL GAS VOLUME

C1 = METHANE  
 C2 = ETHANE  
 C3 = PROPANE  
 C4 = ISOBUTANE  
 C5 = BUTANE  
 C6 = ISOPENTANE  
 C7 = PENTANE

SAMPLE DESCRIPTION



DRILL TIME SCALE



DRILL TIME SCALE

5 10 15

SAMPLE DESCRIPTION

GAS SCALE

10 100 1000

3600

3700

3800

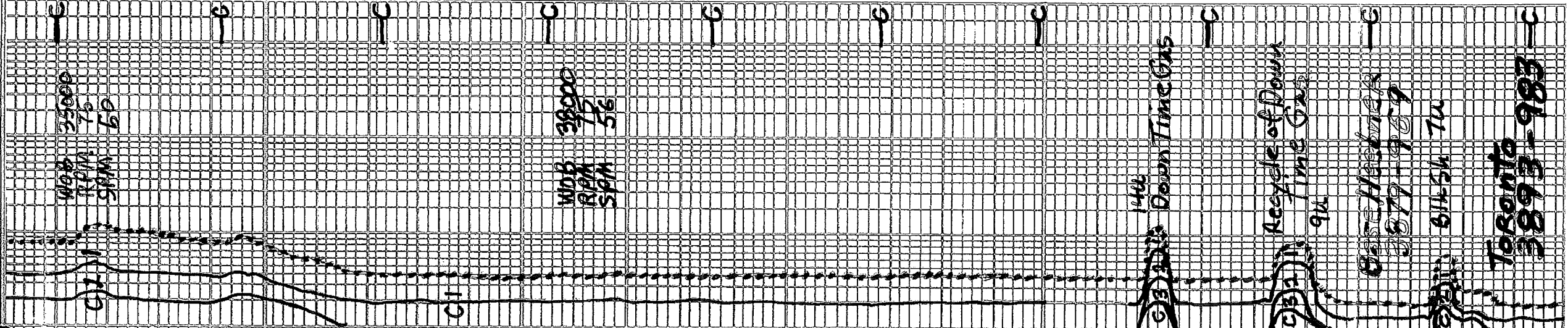
Interbedded Limestones

- ① Faster Drdg. Lms. a bn. wht. to cream. sh. + tan; crypto. to v.v. fn. xln.; sub-clk. Sub-succo. to v. succ. Ro.; H. yel. fluor. No cut; abn. p. to l. r. v. tan. gd. micro-p. to interxln. por.
- ② Slower Drdg. Lms. H. gray - sl. to fldy shly. and gd. yel. tan to tan; crypto. to v.v. fn. xln.; sub-clk. sub-succ. + p. z. ck. str. i. d. gel. H. to H. yel. fluor. No cut. No vis. por.

Interbedded Limestones Similar 3600 - 3795 w/ f. as top delg becoming oolitic ife

Sh. v. dk. gray. to black-carb. Sh. H. gray. to H. green; v. soft + mushy when wet

Lms. abn. wht. to cream. blk + cry. to H. tan; crypto. to v. fn. xln.; sub-clk.



WOB REM SPAN 35000 76 60  
WOB REM SPAN 38000 56  
Acycle of Down Time Gas  
GAS Scale  
1400  
Down Time Gas  
900  
GAS Scale  
3893-983

Toronto 3893-983

Sh. v. drk. gray. to black-carb.  
Sh. lt. gray. to lt. green; v. soft & mushy  
when wet

Lms. abn. wht. to cream-chalk & cream  
to lt. tan; crypto. to v. v. fn. xln.; subchlk  
sub-succro. to v. succro & trs. packsta; 3900

dul. lk. yel. to dul. yel. fluo.; No cut.  
hv. trs. pr. to fm. micro-pp. por. ip's  
& poss. interxln. por. ip's  
Lms. gray; crypto. to v. v. fn. xln.; sub-succro  
& packsta; dul. yel. fluo. ip's; No cut; No vis. No  
interbedded lms. st. & prob. thin shales

Lms. abn. wht. to cream-chalk & cream; lt.  
tan to tan; crypto. to v. v. fn. xln.; subchlk  
sub-succro. to v. succro; dul. lt. yel.  
fluo.; No cut; poss. interxln. por. in succro

Lms. lt. gray; grayish tan to tan; crypto  
to v. v. fn. xln.; sub-chlk; sub-succro &  
packsta; dul. yel. fluo.; No cut; No vis. No

prob. thin interbeds sh. med  
to v. drk. gray; sl. to fl. y. calc. to  
blk-carb. looking

Lms. lt. tan; v. v. fn. xln.; sub-succro  
to v. succro; dul. yel. to tan; yel. fluo.; No cut  
scattered trs. v. pr. micro-pp. por.

Lms. hv. trs. wht. to cream-chalk and  
lt. gray; grayish tan to tan; crypto  
to v. v. fn. xln.; sub-chlk; sub-succro  
& packsta; dul. yel. to dul. lk. yel. fluo.;  
No cut; No vis. No R.

Interbedded Limestones  
Faster Dalg. Lms. trs. to hv. trs.  
wht. to cream - chlk. lt. tan to tan;  
crypto. to v. v. fn. xln.; sub-chlk,  
sub-succro. to succro; phantom  
oolitic ip's; dul. yel. fluo.; No cut  
hv. trs. to abn. pr. fr. to g. micro-pp  
& prob. interxln. por.

Slower Dalg. Lms. lt. to med. gray -  
shly. ip's to grayish tan to tan;  
crypto. to v. v. fn. xln.; sub-chlk  
sub-succro & packsta; phantom  
oolitic ip's (gray & tan); dul. yel. fluo.;  
ip's; No cut; No vis. No R.

Sh. v. drk. gray. to black-carb.  
Sh. med to v. drk. gray; sl. to v. carb. ip's  
Lms. abn. wht. to cream-chalk & cream; ip's  
crypto. to v. v. fn. xln.; sub-chlk; sub-succro  
& packsta; dul. lt. yel. fluo.; No cut;  
trs. pr. micro-pp. por.

Interbedded Limestones Similar  
4032 - 4125

3893-983

Blksh 7u

Toronto  
3893-983

Lansing Fm  
3920-1010

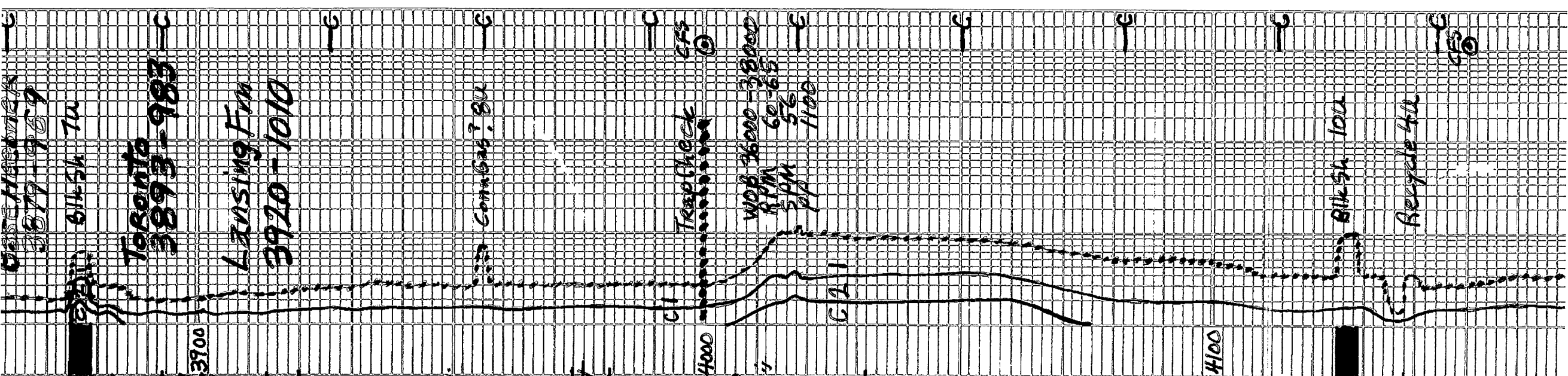
Comm Gas? BU

Tripp check 655

WOB 3600-38000  
RPM 62-65  
PPH 56  
1100

Blksh 10u

Recycle 4u



Sh. med to v. dk. grey; sl. to calc. lps  
Lms. a bn. wkt. to cream - chalked H. tan  
crypto. to v. tan. xln. sub-chalk, sub-succro  
In succro; dual. H. yel. fluor. No cut  
Tras. pr. micro-pp. por

Interbedded Limestones Similar  
4032 - 4125

4200  
Lms. tan wht to cream, chalk to tan greyish lps  
crypto. to v. tan. xln. y. to ext. y.  
oolitic  
matrix sub-succro to succro +  
pachstn; dual. yel. to yel. fluor.  
No cut; a bn. pr. pr. gd. to excel.  
oolitic por; Quest. Perm. lps

Lms. similar 4196 - 4234 w/ less  
oolitic + more oolitic w/ only pr  
le. tog d. oolitic por. + v. Quest Perm.  
Lms. greyish tan to tan; crypto to tan. xln  
sub-chalk, sub-succro + pachstn  
Phantom oolitic lps; dual. yel. fluor  
No cut; No Vis Por

Sh. v. drk. grey to black - carb  
Lms. H. to med. grey - sl. to v. shly grading to  
extly. calc. sh. crypto. xln. sub-chalk to  
shly + pachstn; No fluor; No cut; No Vis Por

Lusts similar 4196 - 4234

Lms. H. to med. grey; tanish lps; sl. to  
faly. shly. lps; crypto. xln. sub-chalky packst  
w/ tras. sub-litho gr. dual. yel. fluor. lps  
No cut; No Vis Por

4300  
Sh. v. drk grey to black - carb.

Interbedded Limestones  
① Slower Orig. Lms. H. to med. grey,  
tanish lps; sl. to faly. shly. lps;  
crypto. xln. sub-chalky or shly  
pachstn. + tras sub-litho gr. dual. yel  
to dual. H. yel. fluor. lps; No cut;  
No Vis. por.  
② Faster Delg. Lms. tan wht. to cream -  
chalk + H. grad. to tan; crypto. to v. tan  
xln. + tras. sl. to faly. oolitic por.  
tras. v. to ext. y. oolitic matrix  
sub-chalky sub-succro + pachstn;  
dual. yel. to yel. fluor. lps; tras.  
to fl. oolitic por; No Vis. por.

Lms. greyish tan to tan; crypto to tanish xln.  
v. to ext. y. oolitic por. sl. to shly oolitic  
matrix + tras. sub-chalk, sub-succro + pachstn  
dual. H. to H. yel. fluor. No cut; w/ tras. pr. to fl.  
+ tras. gd. oolitic por; No Vis. por.

Lms. similar 4302 - 4370 # 1  
Slower Delg description

4400  
Lms. H. to med grey - faly to extly. shly

grading lps to extly calc shs w/ tras  
v. drk. grey to black - carb

4416 - 4454 Lms H. to med grey - sl. to  
faly. shly + greyish tan to tan;  
crypto. to v. tan. xln. phantom oolitic  
lps; dual H. yel. fluor lps; No cut;  
No Vis por.

Receipt 411

Kansas City, Mo  
4262-1352

Trap Check

4371 - 4403

WIP 35000  
ROM 60  
SPM 56  
PP 1180

MARKS IN SECTION  
4416 1500

Trap Check

V. dk. gray. to black - carb

4416-4454 Lms H. to med. gray - sl. to faly. Shly + grayish. Tan to tan. crypto. to v. v. fh. xln.; phantom oolitic IP's; dull H. yel. fluor IP's; No Cut; No Vis pore.

4454-4458 Lms. tan. v. u. fa. xln.; sub-sucro to sucro; spid to even brn. oil str when dried; yel. to gl. yel. 4x4x4 w/ flush. to gl. steming cuts PR, R. to v. gd. micro-por to inter xln por.

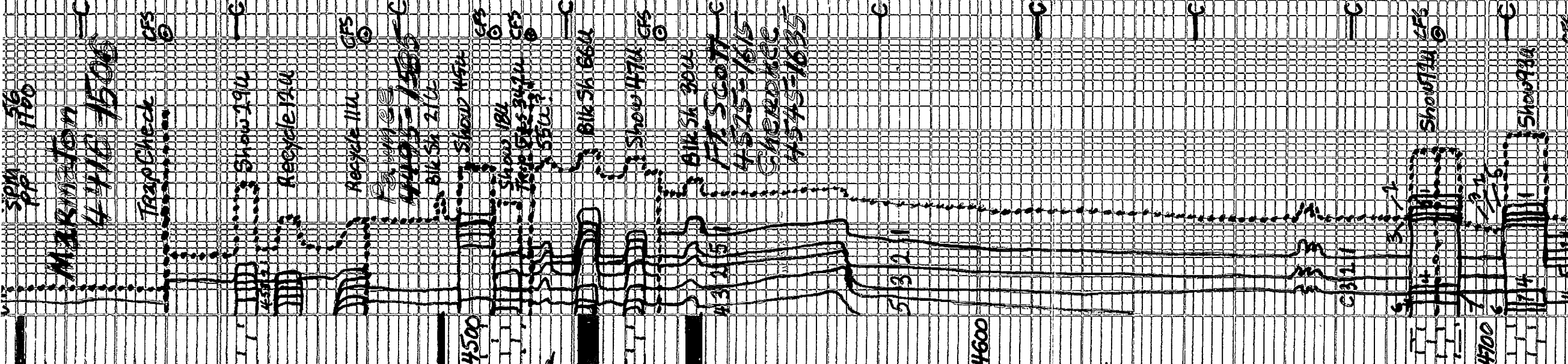
4458-4494 Lms similar 4416-4454

A Sh. med. to v. dk. gray - sl. to med. carb  
B 4498-4411 Lms. hvy. tan. white carb  
C v. H. tan w/ tan to brn. tan spid to even oil str; crypto. to v. v. fh. xln.; steming oil idea  
D Phantom to oolitic IP's; sub-chly  
E sub-sucro to v. sucro; tan. w/ calc. to  
F w/ tan. to med. calc. xln. v. u. fa. qn. bet. yel. gl. to yel. to d. w. gl. yel. to  
PR to tan. to gd. steming cuts; abn  
micro-por to inter xln. por

A. 4451-4452 Lms. similar 4416-4454  
B. 4451-25 Sh. dk. gray to blk. carb.  
C. 4452-30 Lms. similar 4416-4454  
D. 4450-34 Lms. H. gray w/ hvy. tan  
v. H. tan spid to even oil str; crypto. to v. v. fh. xln.; extra oolitic; matrix sub-sucro  
to sucro; dull yel. fluor.  
Sli. ring cuts IP's; abn. por to fr + tes. gd. micro-por  
V. Quest. Fern.

E. 44534-44541 Lms. similar 4416-4454  
F. 44541-44545 Sh. v. dk. gray to black - carb  
44545-4685 Interbedded Lms + Shs  
1 Lms. H., med. to tan. dk. gray - sl. to extra. Shly. qd. IP's to extra. Calc. Shs; crypto. to v. v. fh. xln.; sub-chly to shly. tes. sub-sucro; 44600  
Pac. chly. scatter. tes. oolitic (gray) trs. dull yel. fluor. IP's; No cut No Vis. por.  
2 Lms. H. gray to tan; crypto. to v. u. fh. xln.; tan. sub-chly; sub-sucro - pac. chly. scatter. tes. oolitic. tan + gray; dull yel. fluor. IP's; No cut; No Vis. por.  
3 Sh. med. to v. dk. gray - sl. to extra. Calc. IP's w/ tes. grading to extra. Shly. Lms.  
4 Sh. v. dk. gray to black - carb.

G. 4685-4695 Lms. H. gray, tanish IP's w/ hvy. tes. ban. spid to even. oil str; crypto. to v. u. fh. xln.; tes. foss; pac. chly w/ hvy. tes. sub-sucro to sucro. dull. gl. to gl. yel. fluor. w/ flush. to gd. stem. cuts; PR + gd. micro-por; prob. inter xln. por. in sucro. Prob. along fractures + hvy. tes solution pores.  
H. 4695-4704 Lms similar  
#1 Description 4415-4685  
I. 4704-4712 Lms. ban. from oil str; crypto. to xno. oolitic w/ v. v. fh. xln. sucro. matrix. dull. gl. to gl. yel. fluor. w/ flush. to med. stem. w. cuts



A  
B  
C  
D  
E  
F  
G  
H  
I

I. 4704-4712 Lms. bgn from oil str; crypto xln oolites w/ v. fn. xln sacc. matrix. dai. glen togly. w/ el. fluore w/ flash. to gpl. streaming abn. pr. fr. to gpl. micro-pp. Prob. excel. mter. xln. pp. huy. tres. to abn. loose oolites some shud. brown

J. 4712-4721 Lms. similar #1 description 4704-4712

K. 4721-4729 Sh. blue green waxy w/ huy. tres. reds + maroons w/ huy. tres. weathered luster

L. 4729-4742 Lms. wht, crn, hgy. to tan, crypto. to v. v. f. xln. extremely. micro pol. tres. 5:1 total Qtz. Sdy - v. v. fn. gr. anz. matrix chalks sub-chnl. sub-succ. to sub-dai. h. to h. yellow. fluore; no cat No vis. for

M. 4742-4768 Lms. similar #1 description 4704-4712

N. 4768-4774 Lms. wht, crn, hgy. to tan, crypto. to v. v. f. xln. extremely. micro pol. tres. 5:1 total Qtz. Sdy - v. v. fn. gr. anz. matrix chalks sub-chnl. sub-succ. to sub-dai. h. to h. yellow. fluore; no cat No vis. for

O. 4774-4781 Lms. similar #1 description 4704-4712

P. 4781-4789 Lms. wht, crn, hgy. to tan, crypto. to v. v. f. xln. extremely. micro pol. tres. 5:1 total Qtz. Sdy - v. v. fn. gr. anz. matrix chalks sub-chnl. sub-succ. to sub-dai. h. to h. yellow. fluore; no cat No vis. for

Q. 4789-4797 Lms. similar #1 description 4704-4712

R. 4797-4805 Lms. similar #1 description 4704-4712

S. 4805-4813 Lms. similar #1 description 4704-4712

T. 4813-4821 Lms. similar #1 description 4704-4712

U. 4821-4829 Lms. similar #1 description 4704-4712

V. 4829-4837 Lms. similar #1 description 4704-4712

W. 4837-4845 Lms. similar #1 description 4704-4712

X. 4845-4853 Lms. similar #1 description 4704-4712

Y. 4853-4861 Lms. similar #1 description 4704-4712

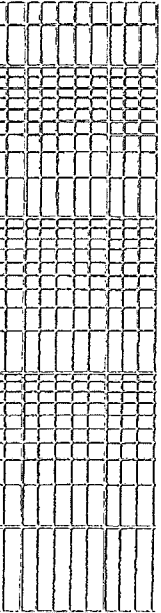
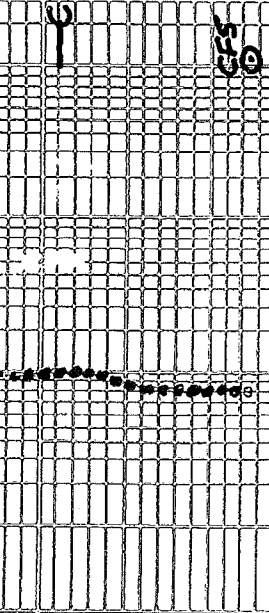
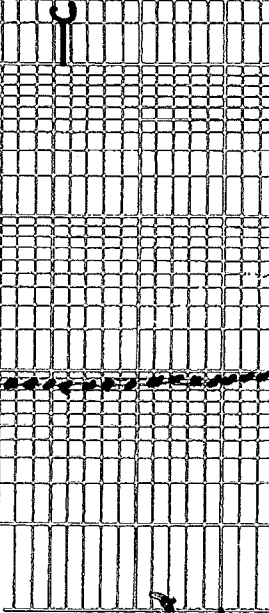
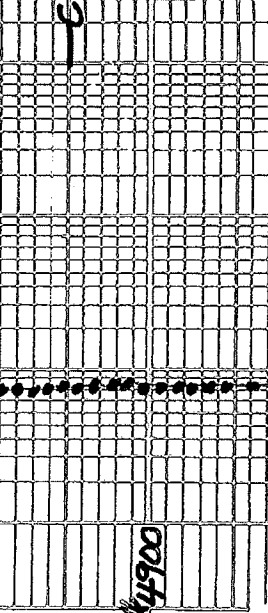
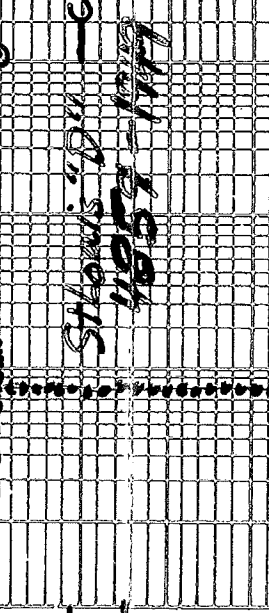
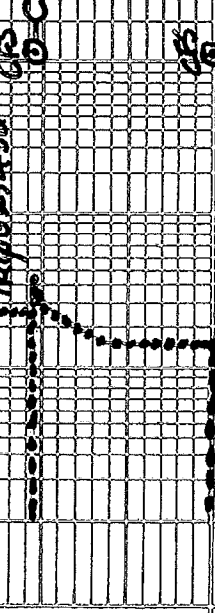
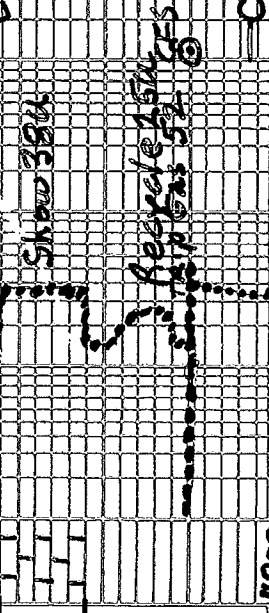
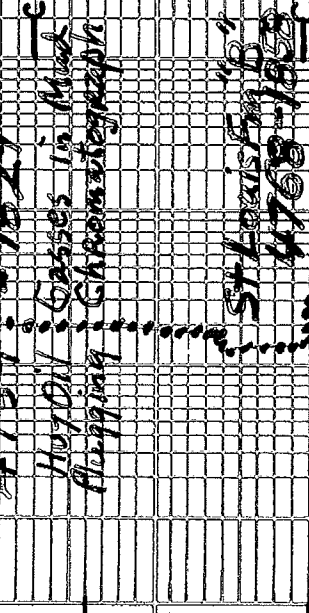
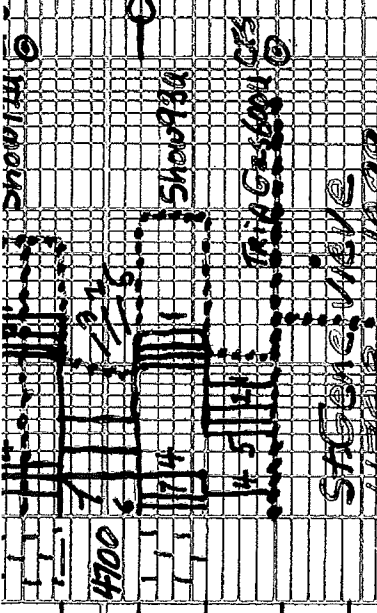
Z. 4861-4869 Lms. similar #1 description 4704-4712

AA. 4869-4877 Lms. similar #1 description 4704-4712

AB. 4877-4885 Lms. similar #1 description 4704-4712

AC. 4885-4893 Lms. similar #1 description 4704-4712

AD. 4893-4901 Lms. similar #1 description 4704-4712



# RTD 4975

1. New Smith TC FH: 184 in 1790 out 4572
2. Reen Smith TC F27I in 4512 out 4537
3. Reen Smith TC FH: 18 W.D.S.

4938-4975 Lms. Dol. Lms. Lay. Dol. similar 4865-4938 w/tes. to v. huy. tes chert w/tes. grey totan; opaque w/tes. Transl

SHOW 930

SHOW 380

STAGE VIEW  
4704-1829

Huy Oil Cosses in Mud  
Flapping Chromatograph

St. Louis Form  
4768-1829

Show 380

Recessed Lenses  
SHOW 320

St. Louis  
4874-1797

Show 380

TRIPATH

St. Louis "Dol"  
4859-1797

655

7 7/8 inch Bit Into

- 1. New Smith TC FHi 184 in 1790 out 4512
- 2. Acorn Smith TC F 271 I in 4512 out 4537
- 3. Ream Smith TC F Hi 18 44PS in 4537 out 4415 44PS

Cir. Points

- 1. 4000 4537
- 2. 4150 4690
- 3. 4380 4720
- 4. 4440 4790
- 5. 4480 4829
- 6. 4505 4850
- 7. 4512 4975 TP

Dev. Surf.

- 1. 867 10 4512 10
- 2. 1790 10 4720 20
- 3. 2580 10 4975 34 TD

Daily Drly Progress:

- 1. 3600 4:52 PM 11-28-14
- 2. 3916 7:00 AM 11-29-14
- 3. 4349 7:00 AM 11-30-14
- 4. 4512 7:00 AM 12-1-14
- 5. 4512 7:00 AM 12-2-14
- 6. 4537 7:00 AM 12-3-14
- 7. 4720 7:00 AM 12-4-14
- 8. 4720 7:00 AM 12-5-14
- 9. 4790 7:00 AM 12-6-14
- 10. 4829 7:00 AM 12-7-14
- 11. 4932 7:00 AM 12-8-14
- 12. 4975 7:00 AM 12-9-14

DST #1 Pawnee 4492-4512

IO Bob 117 min Fo Bob 12 min  
 Rec 1183' GIP  
 105' fluid 28 Gas 99.2 oil 62 mud  
 Tool Samp. 18 Gas; 30 oil; 69 mud  
 Oil Gravity 31.2 @ 60°F

Max Temp. 111°F  
 IHP 2146 FFP 46-82 in 60 min  
 IFP 12-41 in 30 min FSP 1169 in 120 min  
 ISIP 1174 in 60 min FHP 2051

DST #2 Ft. Scott 4518-4537  
 IO weak surf. blow 20 min Fo. No blow  
 Rec 5' Drly Mud Tool Samp. pushed  
 IHP 2156 FFP 14-16 in 30 min  
 IFP 9-13 in 30 FSP 1068 in 120 min  
 ISIP 1011 in 60 FHP 2132 Temp 107°F

DST #3 Unconf. Zn 4683-4720  
 IO weak surf. blow Bob 28 min  
 FO Strong surf. blow Bob 27 min  
 Rec 100' GIP

1 ft clean oil 100% oil Gas 166 @ 60°F  
 99 ft 20 gas; 55% oil + 25% mud  
 100 ft Total fluid Max Temp 114°F  
 Tool Sample Gasses w/ some Gassy Oil  
 IHP 2262 FFP 41-55 in 60 min  
 IFP 16-43 in 30 min FSP 202 in 120 min  
 ISIP 207 in 60 min FHP 2229

DST #4 St. Louis "B" 4765-4790

IO No Blow FO No Blow

Rec 2 ft 100% mud w/ A thin  
 sample of oil

Tool Sample Mud w/ A Thin  
 Sample of oil Max Temp 116°F  
 IHP 2230 FFP 14-16 in 30 min  
 IFP 13-40 in 30 min FSP 976 in 120 min  
 ISIP 977 in 60 min FHP 2185

DST #5 St. Louis "C" 4810-4829  
 IO weak surf. blow died 3 min  
 FO No Blow

Rec 2 ft Mud w/ A Thick sample  
 Tool Sample 100% mud; Max Temp 116°F  
 IHP 2226 FFP 10-12 in 30 min  
 IFP 8-11 in 30 min FSP 590/766 in 120/150 min

ISIP 389 in 60 min FHP 2225

Max Temp 116°F

Mud Info:

Date	11-28	11-29	11-30	12-1	12-2	12-3	12-4	12-5
	110A	745A	1105A	1135P	1105A	1130P	1100P	1100P

Depth	3461	3977	4490	4512	4512	4549	4720	4768
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Wt.	8.6	9.2	9.4	9.35	9.35	9.1	9.2	9.1
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Rec 2-ft Mud w/A Thick seam oil  
 Tool sample 1006 mud; Max Temp 116 of  
 IHP 2226 FFP 10-12 in 30 min  
 IEP 8-11 in 30 min FSP 590/766 in 120/150 min  
 ISIP 389 in 60 min FHP 2225  
 Max Temp 116 of

Mud Log:

Date	11-20 11:00A	11-19 11:30P	12-1 11:05A	12-2 11:35P	12-3 11:30P	12-4 11:00P	12-4 11:00P
Depth	3461	3977	4490	4512	4543	4720	4768
Wt.	8.6	9.2	9.4	9.35	9.4	9.2	9.2
Vis	47	45	56	64	55	60	58
PV	14	13	18	19	17	18	17
YP	15	14	18	22	18	20	19
GS	15/44	17/43	17/55	19/56	19/54	17/56	19/56
NL	10.8	10.8	8.4	8.0	8.4	9.2	8.0
Clay	1/32	1/32	1/32	1/32	1/32	1/32	1/32
PH	11.5	11.0	9.5	9.0	9.5	9.5	9.5
CHI	1800	3100	3400	1800	1900	1400	1550
CA	20	20	20	20	20	20	20
LCM	1	2	2	2	1 1/2	1	1 1/2

Date	11-20 11:50P	11-20 12:00P	11-20 12:05P				
Depth	4790	4829	4975				
Wt.	9.2	9.2	9.2				
Vis	57	56	55				
PV	16	17	17				
YP	18	18	18				
GS	17/50	17/53	17/50				
NL	7.2	7.6	7.6				
Clay	1/32	1/32	1/32				
PH	9.5	9.0	9.5				
CHI	2550	1500	1800				
CA	20	20	20				
LCM	2	2	2				

OPERATOR Berexco LLC LOCATION 1992' FNL-1991' FEL  
 LEASE HT A NO. 1-1-16 SEC 16 TWP. 23S RANG. 32W  
 ELEVATION 2910MB RTD 4975 COUR. STATE Finney Kansas