



Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION 1218243
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: _____

1218243

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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DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	PRODUCTION INTERVAL: _____ _____
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Form	ACO1 - Well Completion
Operator	Shakespeare Oil Co., Inc.
Well Name	Bahm 1-21
Doc ID	1218243

All Electric Logs Run

Array Induction
Photo Density
Comp Neturon
Microlog
Sonic

Form	ACO1 - Well Completion
Operator	Shakespeare Oil Co., Inc.
Well Name	Bahm 1-21
Doc ID	1218243

Tops

Name	Top	Datum
Base Anhydrite	2471	+676
Heebner	3999	-852
Lansing	4041	-894
Muncie Creek	4227	-1080
Stark Shale	4324	-1177
Hushpuckney	4372	-1225
Pawnee	4548	-1401
L. Cherokee Shale	4629	-1482
Johnson	4674	-1527
Mississippian	4815	-1668



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Shakespeare Oil Co. Inc
202 W Main St.
Salem IL. 62881
ATTN: Steve Davis

21-16s-34w Scott Co. KS

Bahm #1-21

Job Ticket: 57224

DST#: 1

Test Start: 2014.07.03 @ 16:52:00

GENERAL INFORMATION:

Formation: **Marmanton " A "**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 19:23:25
 Time Test Ended: 01:42:40
 Interval: **4436.00 ft (KB) To 4500.00 ft (KB) (TVD)**
 Total Depth: 4500.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Will MacLean
 Unit No: 72
 Reference Elevations: 3147.00 ft (KB)
 3135.00 ft (CF)
 KB to GR/CF: 12.00 ft

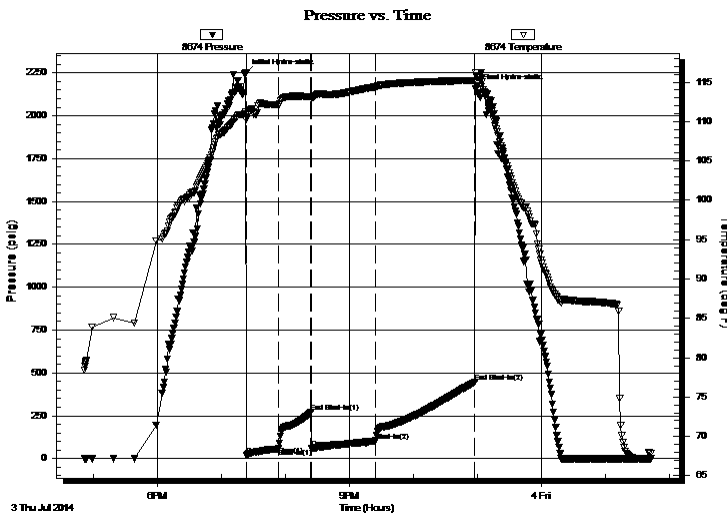
Serial #: 8674

Inside

Press @ Run Depth: 103.36 psig @ 4438.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.07.03 End Date: 2014.07.04 Last Calib.: 2014.07.04
 Start Time: 16:52:00 End Time: 01:42:40 Time On Btm: 2014.07.03 @ 19:23:10
 Time Off Btm: 2014.07.03 @ 22:58:39

TEST COMMENT: IF- Weak Surface Blow Built to BOB in 28min
 IS- Very Weak Surface Blow in 15min
 FF- Weak Surface Blow Built to 7"
 FS- Very Weak Surface Blow in 8min Died in 50min

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2246.72	111.24	Initial Hydro-static
1	20.76	110.20	Open To Flow (1)
31	57.46	112.08	Shut-In(1)
61	270.72	113.17	End Shut-In(1)
62	60.40	113.05	Open To Flow (2)
122	103.36	114.43	Shut-In(2)
215	445.65	115.25	End Shut-In(2)
216	2160.18	116.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	OGCM 11%oil 27%g 62%m	0.87
62.00	MGCO 12%m 34%g 54%oil	0.87
62.00	GO 24%g 76%oil	0.87
30.00	MGCO 3%m 4%g 93%oil	0.42
0.00	248' of Weak GIP	0.00

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)



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TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co. Inc

21-16s-34w Scott Co. KS

202 W Main St.
Salem IL. 62881

Bahm #1-21

Job Ticket: 57224

DST#: 1

ATTN: Steve Davis

Test Start: 2014.07.03 @ 16:52:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

31 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.56 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
62.00	OGCM 11%oil 27%g 62%m	0.870
62.00	MGCO 12%m 34%g 54%oil	0.870
62.00	GO 24%g 76%oil	0.870
30.00	MGCO 3%m 4%g 93%oil	0.421
0.00	248' of Weak GIP	0.000

Total Length: 216.00 ft Total Volume: 3.031 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API is 32 @ 70f = 31

Serial #: 8674

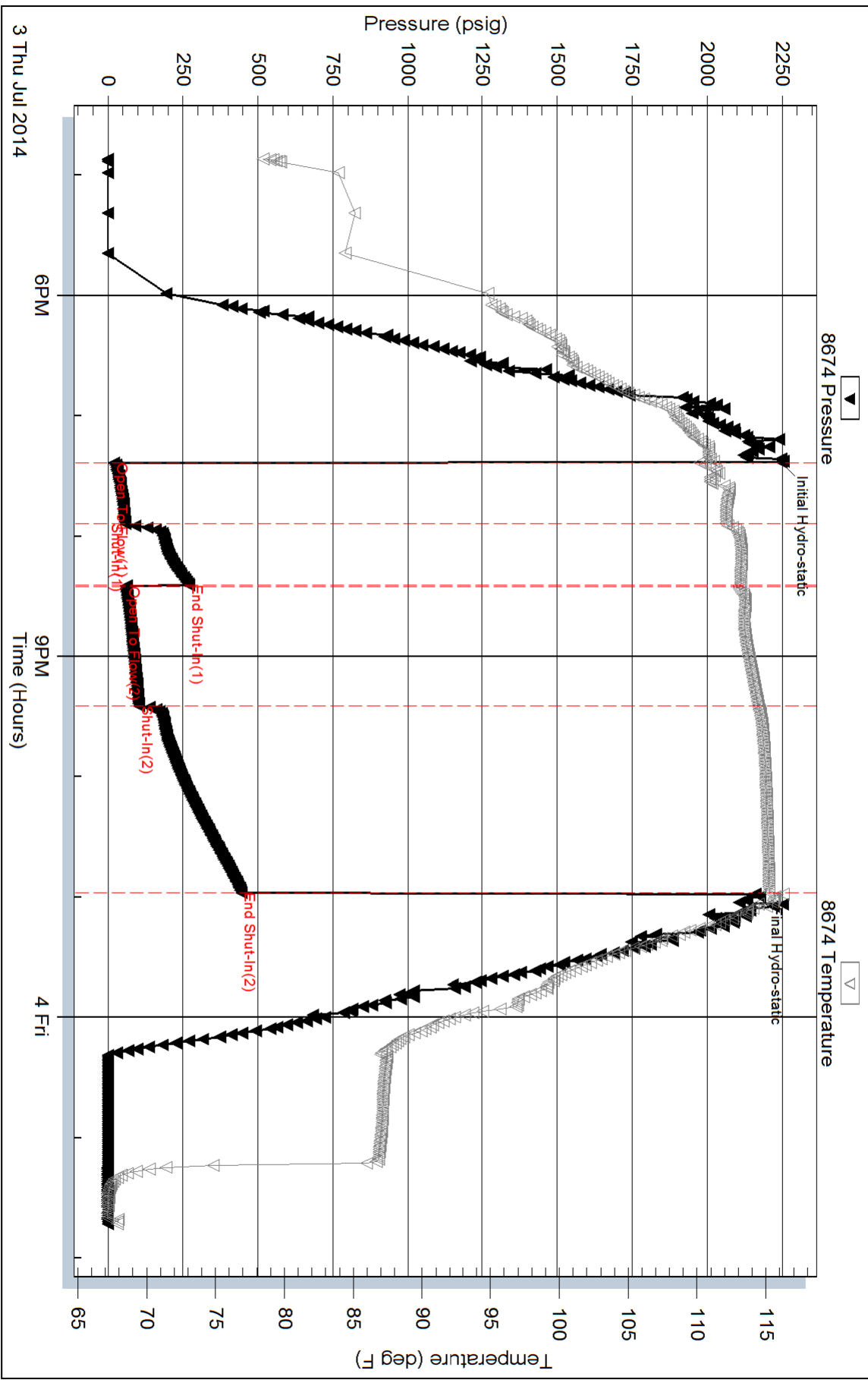
Inside

Shakespeare Oil Co. Inc

Bahm #1-21

DST Test Number: 1

Pressure vs. Time



Trilobe Testing, Inc

Ref. No: 57224

Printed: 2014.07.04 @ 05:10:55



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co. Inc

21-16s-34w Scott Co. KS

202 W Main St.
Salem IL. 62881

Bahm #1-21

Job Ticket: 57225

DST#: 2

ATTN: Steve Davis

Test Start: 2014.07.04 @ 13:20:00

GENERAL INFORMATION:

Formation: **Marmanton " B - C "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:52:25

Time Test Ended: 20:48:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Will MacLean

Unit No: 72

Interval: 4497.00 ft (KB) To 4541.00 ft (KB) (TVD)

Reference Elevations: 3147.00 ft (KB)

Total Depth: 4541.00 ft (KB) (TVD)

3135.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 12.00 ft

Serial #: 8674

Inside

Press @ Run Depth: 20.24 psig @ 4498.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2014.07.04

End Date:

2014.07.04

Last Calib.:

2014.07.04

Start Time: 13:20:00

End Time:

20:48:39

Time On Btm:

2014.07.04 @ 15:52:10

Time Off Btm:

2014.07.04 @ 18:58:54

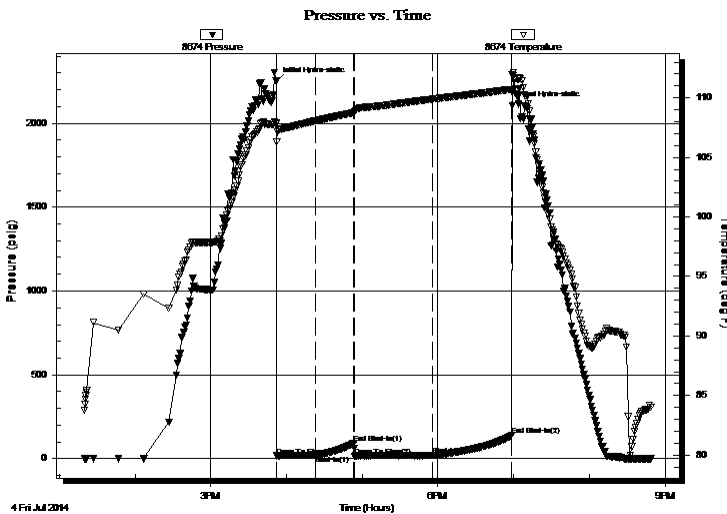
TEST COMMENT: IF- Weak Surface Blow Built to 1/4"

IS- No Blow

FF- Weak Surface Blow Built to 3/4"

FS- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2248.39	107.81	Initial Hydro-static
1	16.34	106.32	Open To Flow (1)
31	19.46	108.07	Shut-In(1)
62	92.57	108.74	End Shut-In(1)
62	13.45	108.83	Open To Flow (2)
124	20.24	109.90	Shut-In(2)
187	138.25	110.72	End Shut-In(2)
187	2106.43	111.91	Final Hydro-static

Recovery

Gas Rates

Length (ft)	Description	Volume (bbl)
20.00	WOCM 2%w 9%oil 89%m	0.28

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co. Inc

21-16s-34w Scott Co. KS

202 W Main St.
Salem IL. 62881

Bahm #1-21

Job Ticket: 57225

DST#: 2

ATTN: Steve Davis

Test Start: 2014.07.04 @ 13:20:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.18 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	WOCM 2%w 9%oil 89%m	0.281

Total Length: 20.00 ft Total Volume: 0.281 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

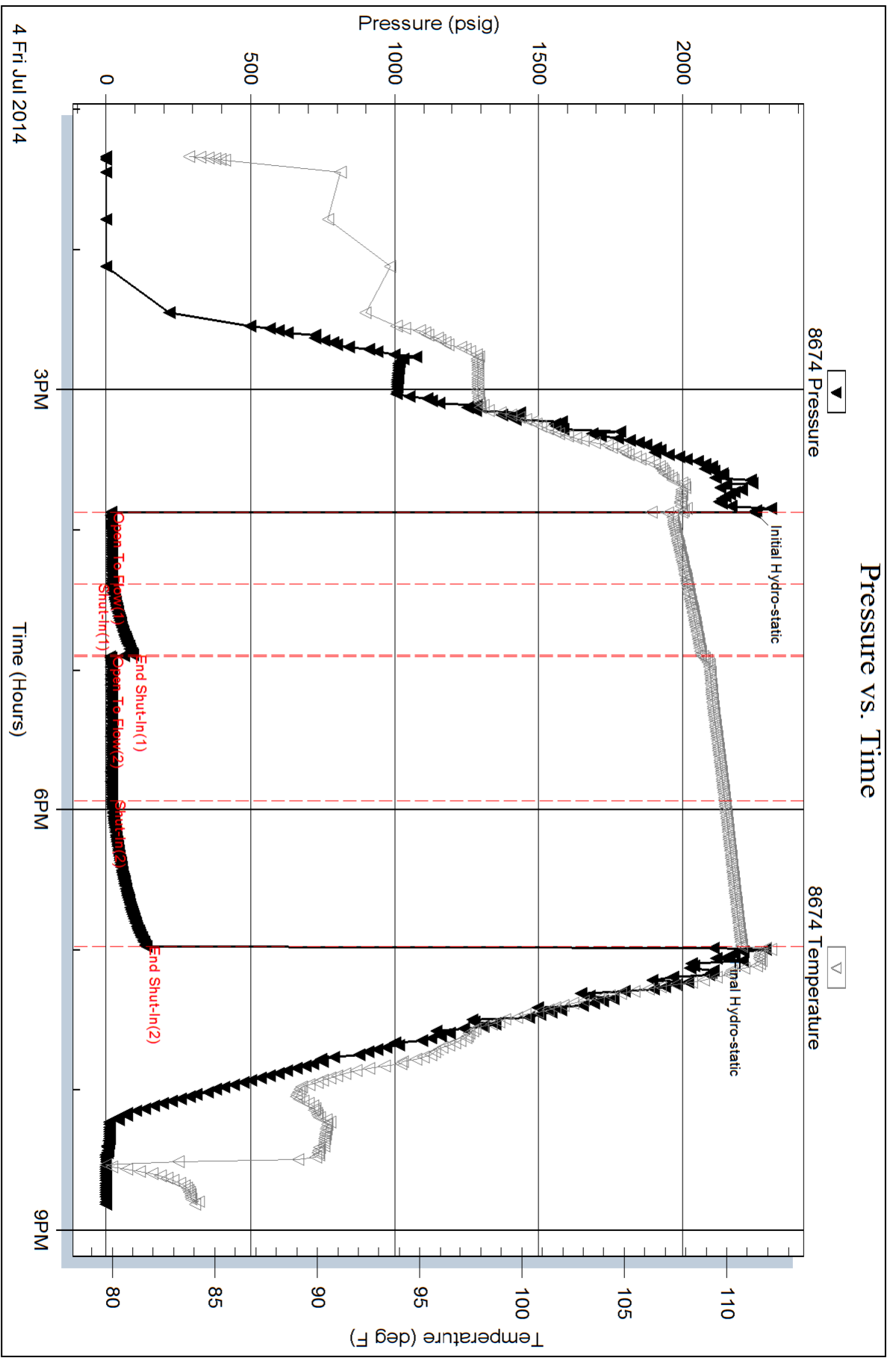
Serial #: 8674

Inside

Shakespeare Oil Co. Inc

Bahm #1-21

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 57225

Printed: 2014.07.04 @ 22:38:35



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Shakespeare Oil Co. Inc
 202 W Main St.
 Salem IL. 62881
 ATTN: Steve Davis

21-16s-34w Scott Co. KS

Bahm #1-21

Job Ticket: 57702

DST#: 3

Test Start: 2014.07.05 @ 16:58:00

GENERAL INFORMATION:

Formation: **Johnson**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 19:10:10
 Time Test Ended: 23:21:09
 Interval: **4650.00 ft (KB) To 4720.00 ft (KB) (TVD)**
 Total Depth: 4720.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Will MacLean
 Unit No: 72
 Reference Elevations: 3147.00 ft (KB)
 3135.00 ft (CF)
 KB to GR/CF: 12.00 ft

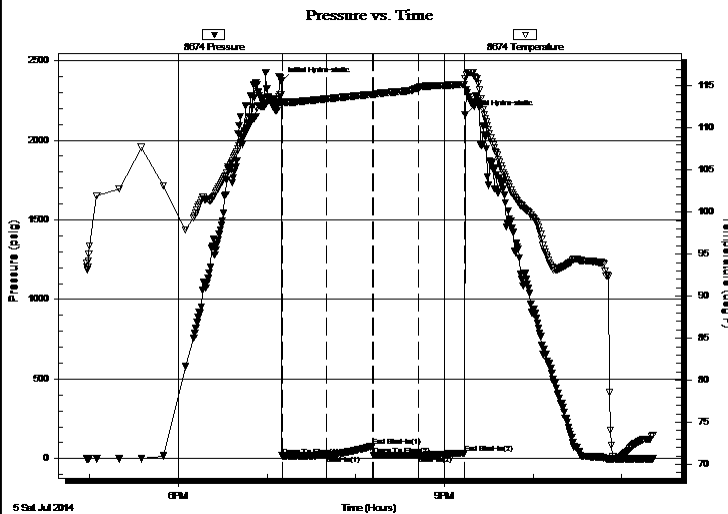
Serial #: 8674

Inside

Press @ Run Depth: 23.61 psig @ 4653.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2014.07.05 End Date: 2014.07.05 Last Calib.: 2014.07.05
 Start Time: 16:58:00 End Time: 23:21:09 Time On Btm: 2014.07.05 @ 19:09:55
 Time Off Btm: 2014.07.05 @ 21:13:55

TEST COMMENT: IF- Weak Surface Blow Dead in 10min
 IS- No Blow
 FF- No Blow
 FS- No Blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2370.44	113.95	Initial Hydro-static
1	18.08	112.91	Open To Flow (1)
30	19.48	113.45	Shut-In(1)
62	78.07	114.00	End Shut-In(1)
63	19.02	113.97	Open To Flow (2)
93	23.61	114.74	Shut-In(2)
124	35.01	115.19	End Shut-In(2)
124	2160.65	115.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	OCM 6%oil 94% m with a Skim of Oil on 0.07	

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Shakespeare Oil Co. Inc

21-16s-34w Scott Co. KS

202 W Main St.
Salem IL. 62881

Bahm #1-21

Job Ticket: 57702

DST#: 3

ATTN: Steve Davis

Test Start: 2014.07.05 @ 16:58:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 10.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 7000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	OCM 6%oil 94%m with a Skim of Oil on	0.070

Total Length: 5.00 ft Total Volume: 0.070 bbl

Num Fluid Samples: 0

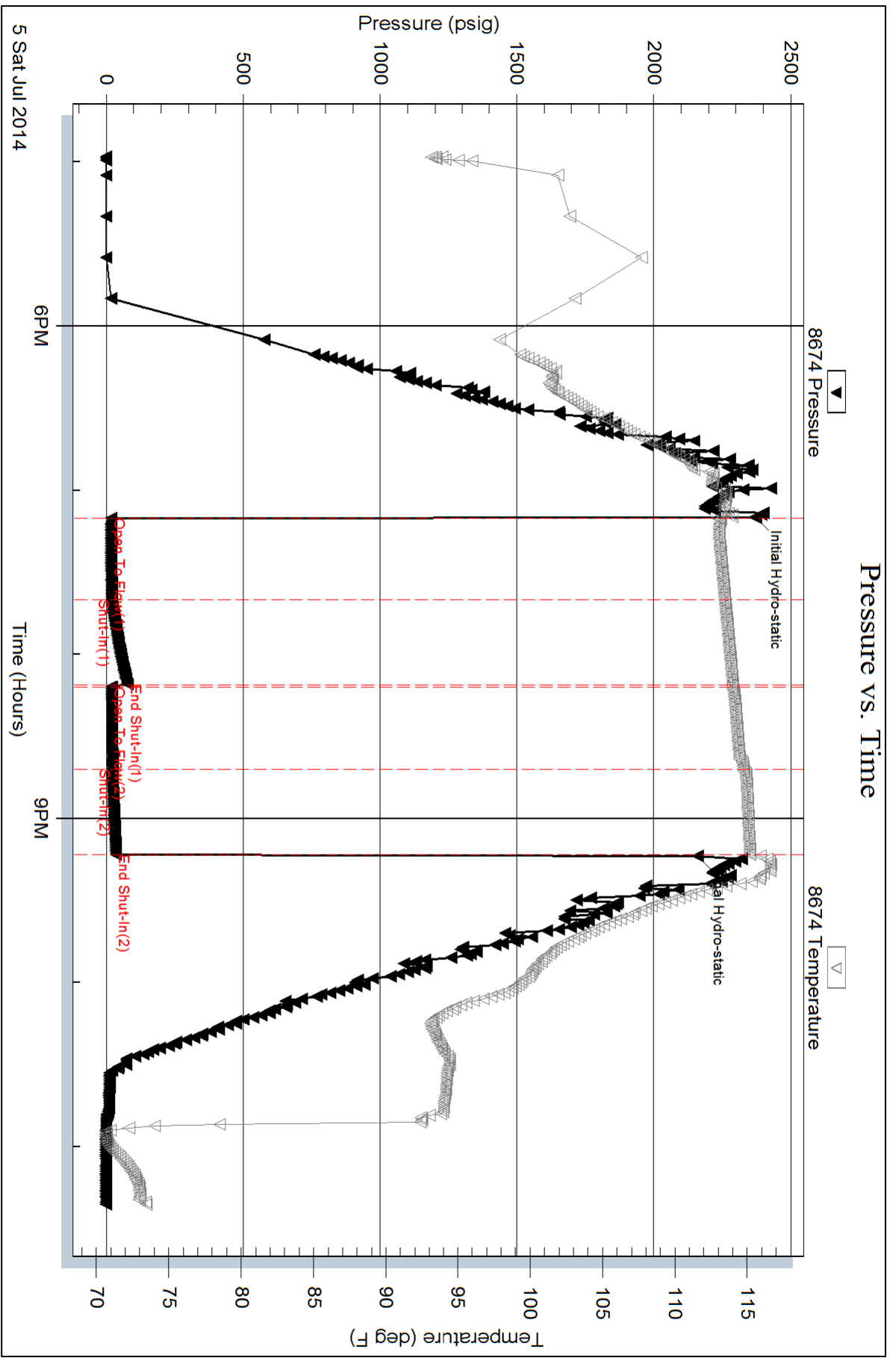
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





INVOICE

PO Box 93999
Southlake, TX 76092

Invoice Number: 144452

Invoice Date: Jul 15, 2014

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

Page: 1

Bill To:
Shakespeare Oil Co., Inc. 202 West Main St. Salem, IL 62881

Customer ID	Field Ticket #	Payment Terms	
Shak	64046	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-04	Oakley	Jul 15, 2014	8/14/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	Bahm #1-21		
221.00	CEMENT MATERIALS	Class A Common	17.90	3,955.90
119.00	CEMENT MATERIALS	Pozmix	9.35	1,112.65
2,450.00	CEMENT MATERIALS	Gel	1.05	2,572.50
85.00	CEMENT MATERIALS	Flo Seal	2.97	252.45
300.00	CEMENT MATERIALS	Cottonseed Hulls	0.99	297.00
586.33	CEMENT SERVICE	Cubic Feet Charge	2.48	1,454.10
1,082.25	CEMENT SERVICE	Ton Mileage Charge	2.75	2,976.19
1.00	CEMENT SERVICE	Port Collar ✓	2,483.59	2,483.59
45.00	CEMENT SERVICE	Pump Truck Mileage	7.70	346.50
45.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	198.00
1.00	CEMENT SUPERVISOR	LaRene Wentz		
1.00	CEMENT SUPERVISOR	Kelly Gabel		



INT

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

\$ 3,912.22

ONLY IF PAID ON OR BEFORE Aug 14, 2014

Subtotal	15,648.88
Sales Tax	667.53
Total Invoice Amount	16,316.41
Payment/Credit Applied	
TOTAL	16,316.41

DW
10502-5
KW

ALLIED OIL & GAS SERVICES, LLC 064046

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:
Saklay, TX

DATE <u>7-15-14</u>	SEC. <u>21</u>	TWP. <u>16</u>	RANGE <u>34</u>	CALLED OUT	ON LOCATION <u>1:00pm</u>	JOB START <u>1:30pm</u>	JOB FINISH <u>2:30pm</u>
LEASE <u>Baker</u>	WELL# <u>1.222</u>	LOCATION <u>Pence 15, Y2. W 14 N</u>	COUNTY <u>Scott</u>	STATE <u>TX</u>			
OLD OR <u>NEW</u> (Circle one)				<u>E. well</u>			

CONTRACTOR Wild West Well
 TYPE OF JOB Port Collar
 HOLE SIZE 7 7/8 T.D.
 CASING SIZE _____ DEPTH _____
 TUBING SIZE 2 7/8 DEPTH 2425'
 DRILL PIPE _____ DEPTH _____
 TOOL Port Collar DEPTH 2425
 PRES. MAX _____ MINIMUM _____
 MEAS. LINE _____ SHOE JOINT _____
 CEMENT LEFT IN CSG. _____
 PERFS. _____
 DISPLACEMENT 28 @ \$51
 EQUIPMENT _____

OWNER Same
 CEMENT
 AMOUNT ORDERED 5005 @ 65/33,
890 gal 1/4 # slurslab
1008 # balls
 COMMON 221 @ 17.90 3955.90
 POZMIX 1195 @ 7.85 1112.65
 GEL 2450 @ 1.05 2572.50
 CHLORIDE _____ @ _____
 ASC _____ @ _____
 RDCCPF 85 @ 2.97 252.45
 CLCCTH 300 @ .99 297.00
 Material (2042.63/25.00)
 HANDLING 586.33 @ 2.48 1454.10
 MILEAGE 24.05 hrs X 45 X 2.75 2976.19

PUMP TRUCK CEMENTER LaRene E. Wente
 # 422 HELPER Kelly Gabel
 BULK TRUCK
 # 890/241 DRIVER Juan Mendez (T&S)
 BULK TRUCK
 # _____ DRIVER _____

REMARKS:

Test Port Collar 1200'. Open of Break
Circ. Mix 340 slurslab Displace
with water. Cement Circulated.
Close port collar. Test 1200'.
Run in 4 jts. Reverse Clean.

Thank you.

CHARGE TO: Shakespeare.
 STREET _____
 CITY _____ STATE _____ ZIP _____

TOTAL _____

SERVICE

DEPTH OF JOB 2425'
 PUMP TRUCK CHARGE _____ 2483.59
 EXTRA FOOTAGE _____ @ _____
 MILEAGE M.F.W. 45 @ 7.70 346.50
 MANIFOLD _____ @ _____
M.F.W. 45 @ 4.40 198.00
 (1864.59 / 058) TOTAL 1458.30

PLUG & FLOAT EQUIPMENT

 @ _____
 @ _____
 @ _____
 @ _____
 @ _____
 TOTAL _____

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 15,648.88
 DISCOUNT (3,912.22 / 25%) IF PAID IN 30 DAYS
11,736.66 Net.



INVOICE

PO Box 93999
Southlake, TX 76092

Invoice Number: 144330

Invoice Date: Jul 7, 2014

Voice: (817) 546-7282

Page: 1

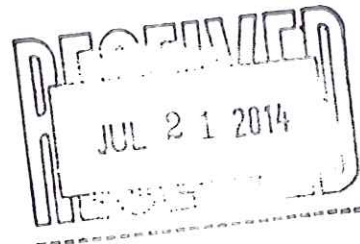
Fax: (817) 246-3361

Bill To:
Shakespeare Oil Co., Inc. 202 West Main St. Salem, IL 62881

Customer ID	Field Ticket #	Payment Terms	
Shak	64042	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-04	Oakley	Jul 7, 2014	8/6/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	<u>Bahm #1-21</u>		
291.00	CEMENT MATERIALS	Gel	1.05	305.55
155.00	CEMENT MATERIALS	ASC	23.50	3,642.50
791.00	CEMENT MATERIALS	Salt	0.68	537.88
775.00	CEMENT MATERIALS	Gilsonite	0.98	759.50
109.00	CEMENT MATERIALS	CD-31	7.73	842.57
22.00	CEMENT MATERIALS	Defoamer	3.50	77.00
12.00	CEMENT MATERIALS	Mud Clean	41.09	493.08
201.63	CEMENT SERVICE	Cubic Feet Charge	2.48	500.04
392.40	CEMENT SERVICE	Ton Mileage Charge	2.75	1,079.10
1.00	CEMENT SERVICE	<u>Port Collar</u> ✓	2,765.75	2,765.75
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	CEMENT SUPERVISOR	LaRene Wentz		
1.00	CEMENT SUPERVISOR	Andrew Forslund		

INT



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

\$ 2,955.61

ONLY IF PAID ON OR BEFORE Aug 6, 2014

Subtotal	11,822.47
Sales Tax	542.63
Total Invoice Amount	12,365.10
Payment/Credit Applied	
TOTAL	12,365.10

DW
10502-5
KS

ALLIED OIL & GAS SERVICES, LLC 064042

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:
Dakota, KS

DATE <u>7-7-14</u>	SEC. <u>21</u>	TWP. <u>16</u>	RANGE <u>34</u>	CALLED OUT	ON LOCATION <u>5:13 pm</u>	JOB START <u>8:00 pm</u>	JOB FINISH <u>7:00 pm</u>
LEASE <u>Bobin</u>	WELL # <u>1-21</u>	LOCATION <u>Peace V2S, V2W, 3/8N, Scott</u>			COUNTY <u>Scott</u>	STATE <u>KS</u>	
OLD OR <u>(NEW)</u> (Circle one)				<u>Emito</u>			

CONTRACTOR Southwind 70
 TYPE OF JOB Production (Part Collar)
 HOLE SIZE 2 7/8 T.D. 4900
 CASING SIZE 5 1/2 DEPTH 4895.22
 TUBING SIZE DEPTH
 DRILL PIPE DEPTH
 TOOL Part Collar DEPTH 2425.29
 PRES. MAX MINIMUM
 MEAS. LINE SHOE JOINT 43.15
 CEMENT LEFT IN CSG. 43.15
 PERFS.
 DISPLACEMENT 115.98 bbl

OWNER James
 CEMENT
 AMOUNT ORDERED 155 # to ASC 1020 sort
2.9 gal 5 # gel sulfate .175% CD31
.15% Defoamer 12 bbl mud clean
 COMMON _____ @ _____
 POZMIX _____ @ _____
 GEL 291 # @ 1.65 305.55
 CHLORIDE _____ @ _____
 ASC CD 1020 155 # @ 2.35 3642.50
Salt 791 # @ .68 537.88
Gelsolite 775 # @ .98 759.50
CD 31 (CD 100) 109 # @ 7.73 842.37
Defoamer 2.2 # @ 3.50 77.00
Mud Clean 12 bbl @ 41.09 493.08
(CD 700) _____ @ _____
Material _____ @ _____
 HANDLING 201.63 # @ 2.48 500.04
 MILEAGE 272 tank 45 x 2.75 1078.10
(1,664.50 / 25%) TOTAL _____

EQUIPMENT
 PUMP TRUCK CEMENTER Lakme E. Wade
 # 481 HELPER Andrew Forslund
 BULK TRUCK
 # 891/310 DRIVER John Poore (TWS)
 BULK TRUCK
 # DRIVER

REMARKS:
Plug R.H. 305 #
Mix 1.5 % cement down casing
Displace with water.
hand plug 1100 #. Foot Hold.

Thank you

CHARGE TO: Shakespeare Oil
 STREET _____
 CITY _____ STATE _____ ZIP _____

SERVICE
 DEPTH OF JOB 4895.22'
 PUMP TRUCK CHARGE 2765.75
 EXTRA FOOTAGE _____ @ _____
 MILEAGE M.I.H.U 45 @ 7.70 346.50
 MANIFOLD Head _____ @ _____
MFCU 45 @ 4.40 198.00
 _____ @ _____
(1291.03 / 25%) TOTAL 5,164.37

PLUG & FLOAT EQUIPMENT
 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____
 TOTAL _____

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 Jay Roberts
 SIGNATURE Jay Roberts

SALES TAX (If Any) _____
 TOTAL CHARGES 11,822.47
 DISCOUNT 2,955.61 (25%) IF PAID IN 30 DAYS
8,866.85 Net.



PO Box 93999
Southlake, TX 76092

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

INVOICE

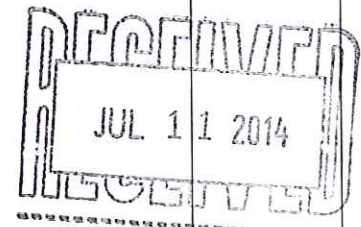
Invoice Number: 144087
Invoice Date: Jun 27, 2014
Page: 1

Bill To:
Shakespeare Oil Co., Inc. 202 West Main St. Salem, IL 62881

Customer ID	Field Ticket #	Payment Terms	
Shak	64023	Net 30 Days	
Job Location	Camp Location	Service Date	Due Date
KS1-01	Oakley	Jun 27, 2014	7/27/14

Quantity	Item	Description	Unit Price	Amount
1.00	WELL NAME	<u>Bahm #1-21</u>		
190.00	CEMENT MATERIALS	Class A Common	17.90	3,401.00
357.00	CEMENT MATERIALS	Gel	1.05	374.85
536.00	CEMENT MATERIALS	Chloride	1.10	589.60
205.45	CEMENT SERVICE	Cubic Feet Charge	2.48	509.52
422.10	CEMENT SERVICE	Ton Mileage Charge	2.75	1,160.78
1.00	CEMENT SERVICE	Surface ✓	1,512.25	1,512.25
45.00	CEMENT SERVICE	Pump Truck Mileage	7.70	346.50
1.00	CEMENT SERVICE	Swedge Manifold Rental	275.00	275.00
45.00	CEMENT SERVICE	Light Vehicle Mileage	4.40	198.00
1.00	EQUIPMENT OPERATOR	Paul Beaver		
1.00	EQUIPMENT OPERATOR	Tyler Flipse		

INT



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

\$ 2,091.87

ONLY IF PAID ON OR BEFORE Jul 27, 2014

Subtotal	8,367.50
Sales Tax	355.78
Total Invoice Amount	8,723.28
Payment/Credit Applied	
TOTAL	8,723.28

DW
10502-5
kw

ALLIED OIL & GAS SERVICES, LLC 064023

Federal Tax I.D. # 20-8651475

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

SERVICE POINT:
Oakley KS

DATE <u>6-27-14</u>	SEC. <u>21</u>	TWP. <u>16</u>	RANGE <u>34</u>	CALLED OUT	ON LOCATION <u>2:00pm.</u>	JOB START <u>4:00pm</u>	JOB FINISH <u>4:30pm</u>
LEASE <u>Bahn</u>	WELL# <u>1-21</u>	LOCATION <u>Pence Cherokee Rd 1/2 S</u>			COUNTY <u>Scott</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)			<u>1/2 W 1/4 N E into</u>				

CONTRACTOR Southwind 70 OWNER Same

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 266'

CASING SIZE 8 5/8 DEPTH 266.07'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

PERFS.

DISPLACEMENT 15.99 bbl water

EQUIPMENT

CEMENT AMOUNT ORDERED 190 sks Com 3% cc

2% gel

COMMON 190 sks @ 17.90 3401.00

POZMIX @

GEL 357# @ 1.05 374.85

CHLORIDE 536# @ 1.10 589.60

ASC @

PUMP TRUCK CEMENTER Paul Beaver

120 HELPER Tyler & Elise

BULK TRUCK DRIVER Juan 2 (TWS)

386/241

BULK TRUCK DRIVER

Montana 705 @ 9.20 6394.5

(1026.35/25)

HANDLING 205.45 ft³ @ 2.48 509.52

MILEAGE 9.38 hrs x 45 mlx 2.75 1160.78

REMARKS:
Mix 190 sks Com 3% cc 2% gel
Displace w/ water
cement did circulate

TOTAL _____

CHARGE TO: Shakespeare

STREET _____

CITY _____ STATE _____ ZIP _____

SERVICE

DEPTH OF JOB 266'

PUMP TRUCK CHARGE 1512.25

EXTRA FOOTAGE @

MILEAGE mi HV 45 @ 7.70 346.50

MANIFOLD Swedge @ 275.00

mi LV 45 @ 4.40 198.00

(1000.51/252)

TOTAL 4000.00

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.

PLUG & FLOAT EQUIPMENT

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

_____ @ _____

TOTAL _____

PRINTED NAME Gaw 58 9443

SIGNATURE [Signature]

SALES TAX (If Any) _____

TOTAL CHARGES 8,200.00

DISCOUNT 2100.00 (25%) IF PAID IN 30 DAYS

6,100.00 Net.



SHAKESPEARE OIL COMPANY, INC.

BAHM #1-21

940' FSL & 2000' FEL of Section 21-T16S-R34W
SCOTT COUNTY, KANSAS
API#15-171-21061-00-00

Geologist's Report WellSight Systems

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: Bahm #1-21

Location: 940' FSL & 2000' FEL of Section 21-T16S-R34W

License Number: API#15-171-21061-00-00

Spud Date: 6/26/2014

Surface Coordinates: 940' FSL & 2000' FEL of Section 21-T16S-R34W

Region: Scott County, Kansas
Drilling Completed: 7/06/2014

Bottom Hole Coordinates: Vertical Test

5 1/2" @ 4895'

Ground Elevation (ft): 3135

K.B. Elevation (ft): 3147

Logged Interval (ft): 3750

To: RTD Total Depth (ft): RTD 4900 LTD 4900

Formation: Mississippi

Type of Drilling Fluid: Chemical (Displacement complete @ 3535)

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

Operator

Company: Shakespeare Oil Company, Inc. KLN# 7311

Address: 202 W Main

Salem, IL 62881

Geologist

Name: Richard S.(Steve) Davis Jr.

Company: Consulting Petroleum Geologist

Address: 224 N. Main St. Suite 260

Company: Shakespere Oil Company, Inc. KLN# 7311
 Address: 202 W Main
 Salem, IL 62881

Geologist

Name: Richard S.(Steve) Davis Jr.
 Company: Consulting Petroleum Geologist
 Address: 221 N. Market, Suite 268
 Wichita, Kansas 67202

FORMATION TOPS

Formation	Sample	E-Log	Datum	Formation	Sample	E-Log	Datum
			KB	3147			
Anhydrite	2451	2452	+695	Hushpuckney	4373	4371	-1224
B/Anhydrite	2471	2471	+676	Lansing I	4383	4384	-1237
Topeka	3824	3826	-679	BKC	4425	4419	-1272
Heebner	4001	3999	-852	Marmaton	4472	4471	-1324
Toronto	4014	4014	-867	Pawnee	4563	4561	-1414
Lansing	4042	4041	-894	Fort Scott	4602	4602	-1455
Lansing D	4156	4156	-1009	Cherokee Sh	4630	4629	-1482
Muncie Creek	4227	4227	-1080	Johnson	4674	4675	-1528
Lansing H	4238	4239	-1092	Mississippi	4817	4815	-1668
Lansing I	4275	4276	-1129	Total Depth	4900	4900	-1753
Lansing J	4303	4301	-1154				
Stark	4325	4324	-1177				
Lansing K	4338	4339	-1192				

DAILY PENETRATION: 7:00 AM

Date	Depth	Activity
06/26/14	0	MIRU & Spud
06/27	267	WOC
06/28	1215	Drig
06/29	2138	Drig
06/30	3016	Drig
07/01	3535	Drig

CONTRACTOR:

Southwind Drilling, Rig #70
 Toolpusher: Sam Staggs
 MUD:
 Mud Co (displacement complete @ 3535')
 Reid Atkins & Tyler Lang
DRILL STEM TESTING: Trilobite Testing Inc.
 Will MacLean

DAILY PENETRATION: 7:00 AM

Date	Depth	Activity
06/26/14	0	MIRU & Spud
06/27	267	WOC
06/28	1215	Drig
06/29	2138	Drig
06/30	3016	Drig
07/01	3535	Drig
07/02	4080	Drig
07/03	4479	Drig
07/04	4520	Drig
07/05	4635	Drig
07/06	4771	Drig
07/07	4900	Run 5 1/2"

CONTRACTOR:

Southwind Drilling, Rig #70
 Toolpusher: Sam Staggs

MUD:

Mud Co (displacement complete @ 3535')
 Reid Atkins & Tyler Lang
DRILL STEM TESTING: Tribolite Testing Inc.

Will MacLean

ELECTRIC LOG: Weatherford

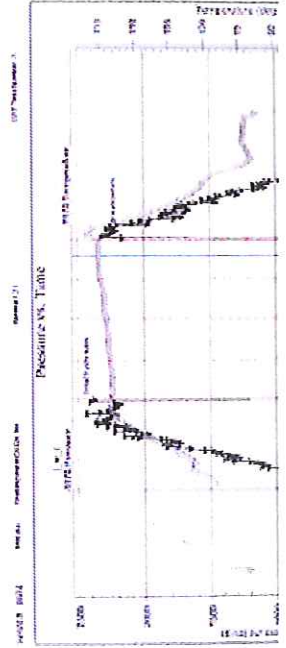
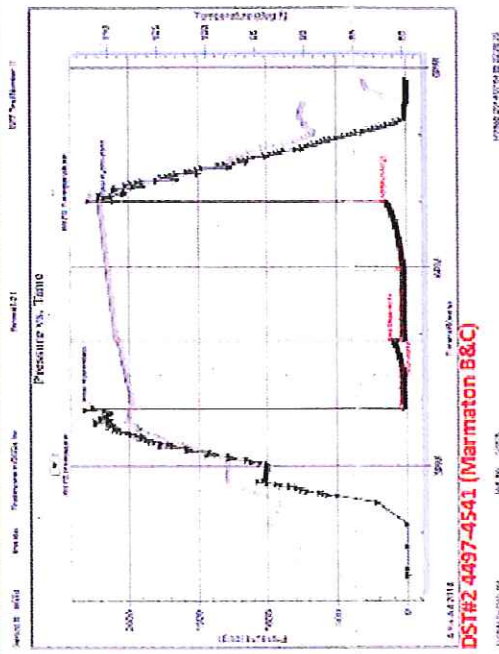
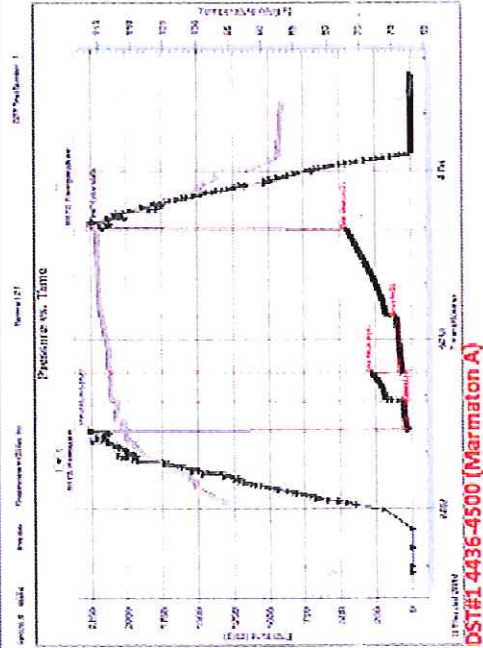
Ben Weldin
 (DIL, CDL/CNL, PE, MEL & Sonic)

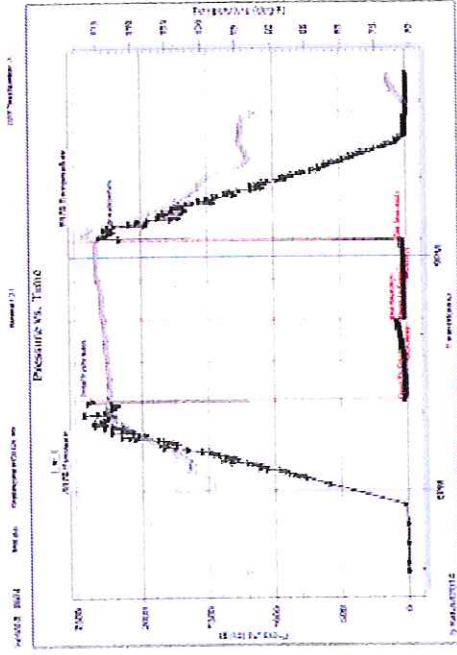
CASING RECORD:

Surface: 8 5/8" @ 267' w/190 sx
 Production: 5 1/2" @ 4895'

BIT RECORD:

Bit No./Size	Make/Type	Out	Fig	Hrs
#1/ 12 1/4"	RTC/RT	267	267	3 3/4
#2/ 7 7/8"	RTC/S52P	4900	4633	137 1/4





DST#3 4650-4720 (Johnson)

DATE: 10/15/03

LITHOLOGY

- Anhy
- Bent
- Brec
- Cht
- Clyst

Rock Types

- Meta
- Mrlst
- Salt
- Shale
- Shcol
- Shgy

LITHOLOGY

- Coal
- Congl
- Dol
- Gyp
- Igne
- Lmst

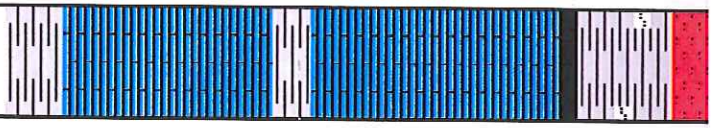
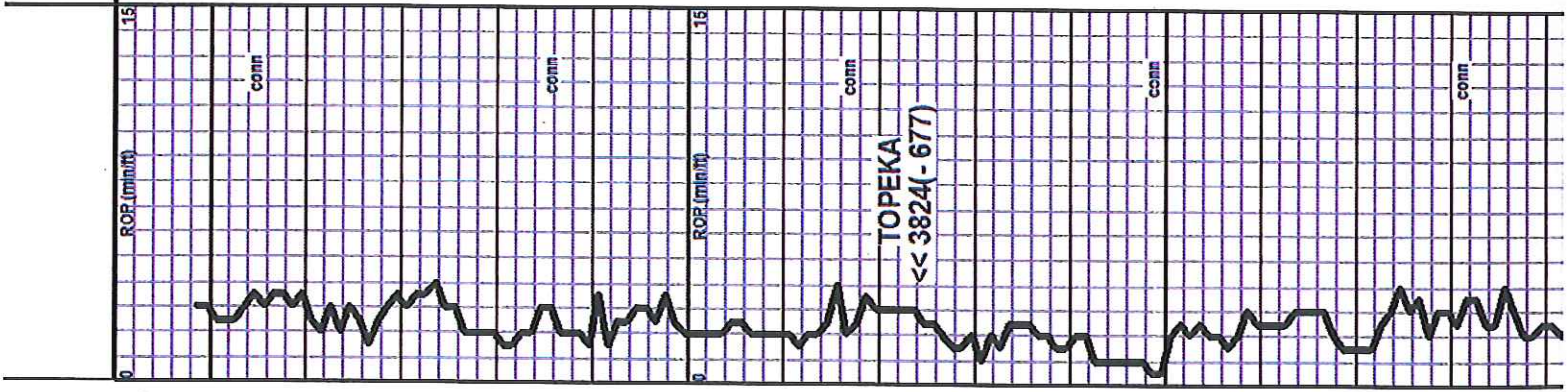
Spotted

- Ques
- Dead

OIL SHOW

- Even

ROP (min/ft)	Depth	Lithology	Geological Descriptions	Remarks
<p>ROP (min/ft)</p>	3750			



LS, crm-gray, fdln, chky IP, foss & ool, P por, NS, fd

LS, tan-gray, f-ykln, arg, silty foss, NW por, dense

Shale, black, dk gray

LS, crm-white, fdln, chky IP, foss & ool, rr P vgy por, NS

LS, tan-gray, f-ykln, silty foss, NW por dense

LS, crm-off white, fdln, foss & ool, chky IP, P ixln por, NS

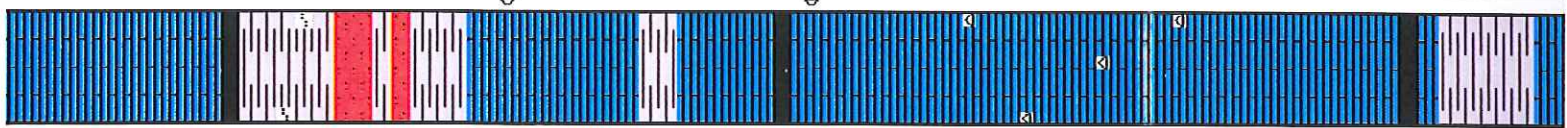
Shale, black carb

Shale, gray, black, gm & mar, silty

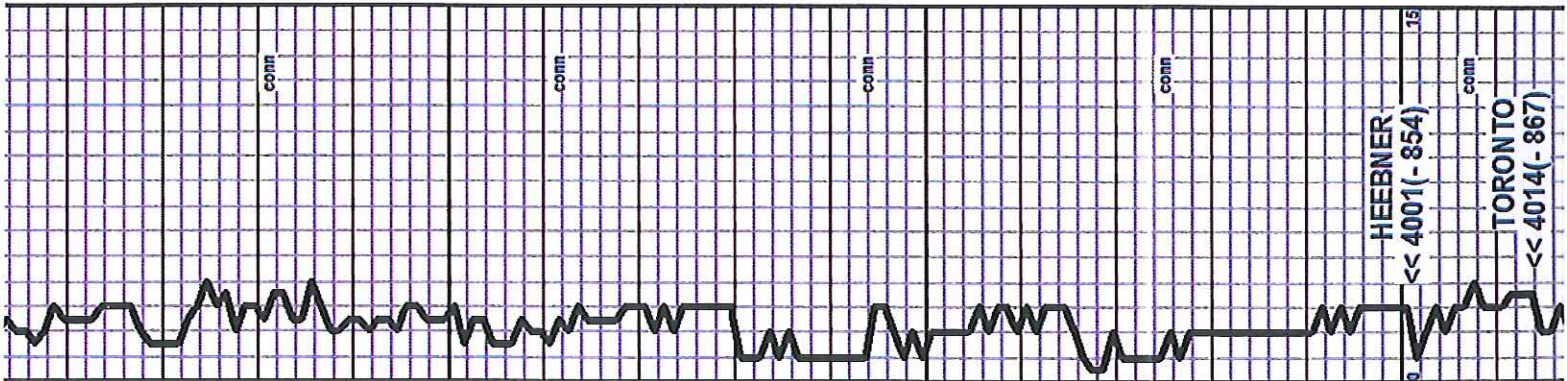
Start 10' Wet & Dry Spl's

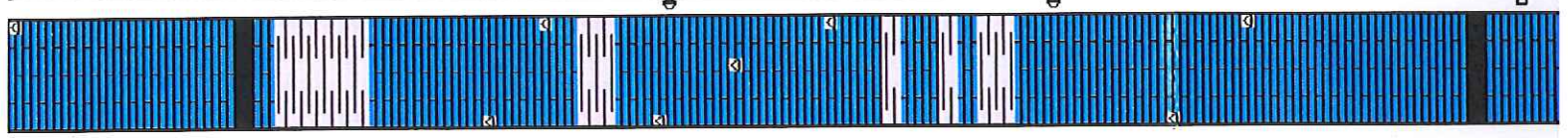
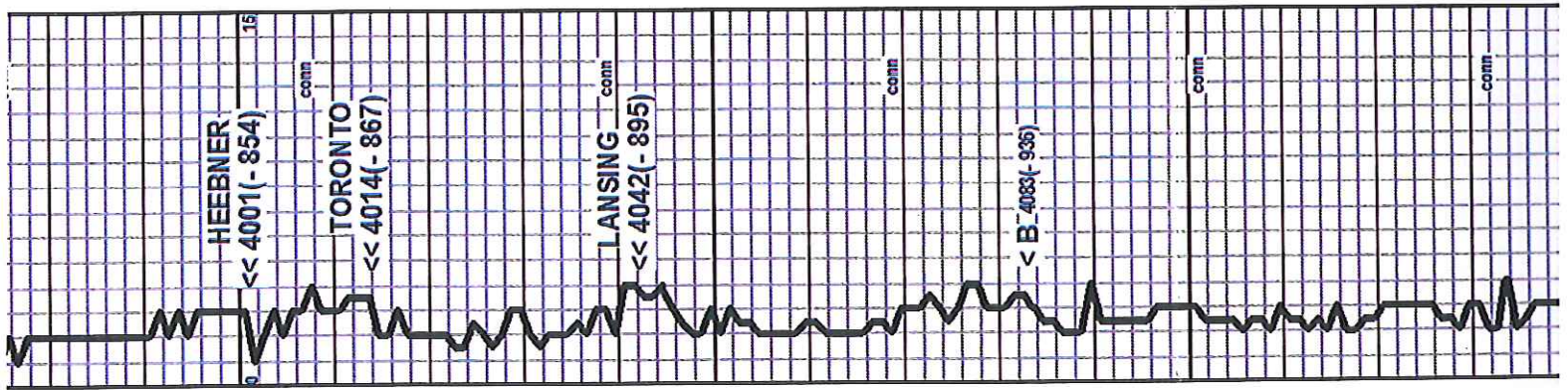
Scale

por, NS
 LS, tan-gray, f-xln, silty foss, NW por dense
 LS, crm-off white, f-xln, foss & ool, chky IP, P, ixln por, NS
 Shale, black carb
 Shale, gray, black, gm & mar, silty
 Shale AA + Silst, gray-gm
 LS, crm-white, f-xln, chky IP, silty foss, P vgy por, S SFO(hvy), spt'd dk stn, spt'd dull fluor, N odor
 LS, gray-tan, f-xln, silty foss, NW por, dense
 Shale, black-dk gray & rust
 LS, gray-tan, f-xln, silty foss, NW por, dense, NW por
 Shale, black carb + pyr
 LS, crm-tan, f-xln, foss & ool, F-P ipart por, SSFO(hvy), spt'd dk stn, spt'd dull fluor, N odor
 LS, gray-tan, f-xln, gran, silty foss, NW por, hd + Cht, gray, silty foss, opq
 LS, crm-off white, mot, f-xln, chky IP, foss, r P vgy por, NS + Cht, white-gray, opq
 LS, gray-tan, f-xln, silty foss, chky IP, NW por, mhd + few pc's Cht, gray, opq
 Shale, black carb
 LS, gray-tan, v-f-xln, silty foss, NW por, dense + Shale, mar, gray & gm



3900
 3950
 4000





4000

4050

4100

HEEBNER
 << 4001(- 854)

TORONTO
 << 4014(- 867)

LANSING
 << 4042(- 895)

< B. 4083(- 935)

conn

conn

conn

conn

conn

LS, gray-tan, f-vxin, silty foss, chky IP, NV por, mhd + few pc's Cht, gray, opq

Shale, black carb

LS, gray-tan, vf-m icxln, silty foss, NV por, dense + Shale, mar, gray & gm

LS, crm-off white, f-vxin, sub ool-foss, P ixln por, NS, chky-dense

LS, crm-off white, vf-m icxln, sub ool, NV por, dense + Cht, white, silty foss, opq

Shale, black, dk gm

LS, crm-tan, f-mxln, ool, P iool por & P ixln por, SSSO(hvy), spt'd str, spt'd fluor, N odor

LS, crm-tan, f-vxin, chky IP, sub ool, rr P oom por, NS + Cht, white, opq

LS, crm-off white, f-vxin, sub ool, NV por, dense + Cht, white-crm, opq

LSAA w/ine Shale, black, gm & mar

LS, gray-tan, f-mxln, sub ool-foss, F-P ixln por & F-P vgy-pp por, VS SFO, spt'd str, spt'd dull fluor, N odor

LS, dolo, tan-crm, f-vxin, suc, P ixln por, NS + Cht, white, opq

LS, dolo, tan-brn, f-vxin, suc, P ixln por, NS

Shale, black carb

LS, crm-tan, f-mxln, foss & ool, P ipart por, spt'd asph str, NSFO, N odor

Vis 54 Wt 9.0 Fil 7.2 PH 11
 Chi 4,000 LCM 1#
 7/02/14 @ 4100

LS, dolo, tan-crm, f-vxin, suc, P ixin por, NS + Cnt, white, opq

LS, dolo, tan-brn, f-vxin, suc, P ixin por, NS

Shale, black carb

LS, crm-tan, f-mxin, foss & ool, P ipart por, spf d asph str, NSFO, N odor

LS, gray-brn, fxin foss, NV por, dense

LS, crm-tan, v-mxin, P ixin por & P pp por, SSFO, unf it str, unf dull fluor, frt odor + Cnt, gray, foss, trnsl

LS, crm-tan, f-vxin, sub ool, NV por, hd

LS, gray-white, fxin, ool, P iool por, NS + LS, lt gray-tan, v-mixin, NV por, hd & Cnt, white, ool, opq

LS, gray-tan, v-mixin, silty foss, NV por + Cnt, white, opq

LS, gray-off white, v-mixin, silty foss, hd, NV por + Cnt, white-tan, opq-trnsl

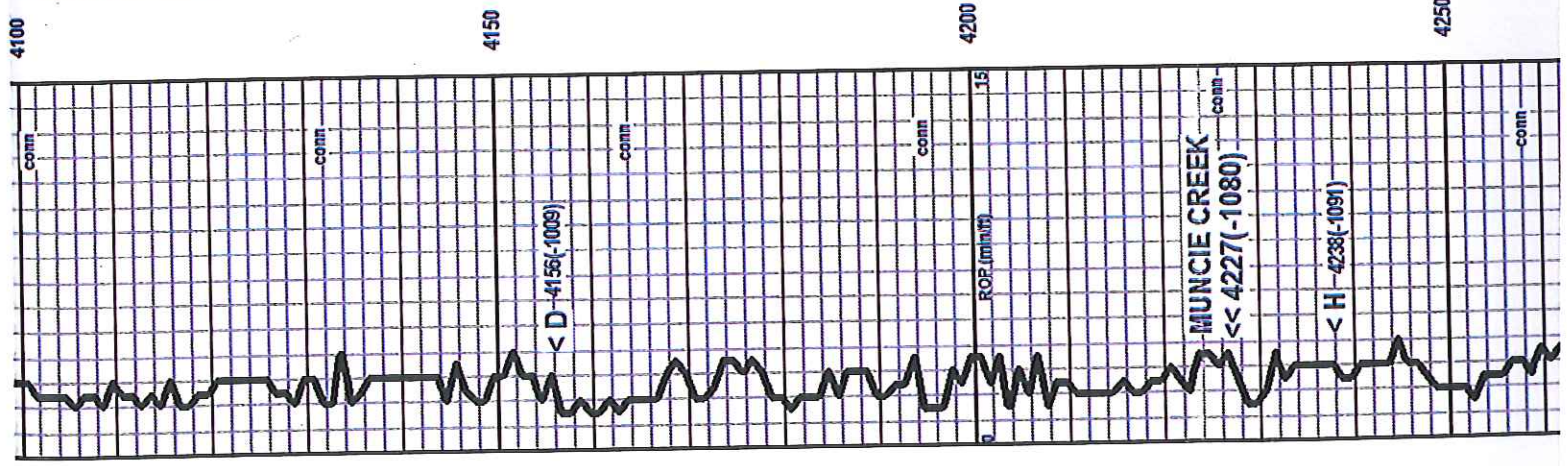
LSAA + LS, white-crm, f-vxin, chky & arg, sub ool-foss, NV por, m hd

Shale, black carb (4250 spl)

LS, gray-brn, f-mxin, silty foss, P ixin por, NS, hd + Shale, black, dk gray & mar

LS, crm-tan, f-vxin, chky, silty foss, rr P ixin por & P pp por, rr spf d str, NSFO + Cnt, gray-tan, sub ool

LS, gray-tan, v-mixin, sub ool-foss, NV por, dense

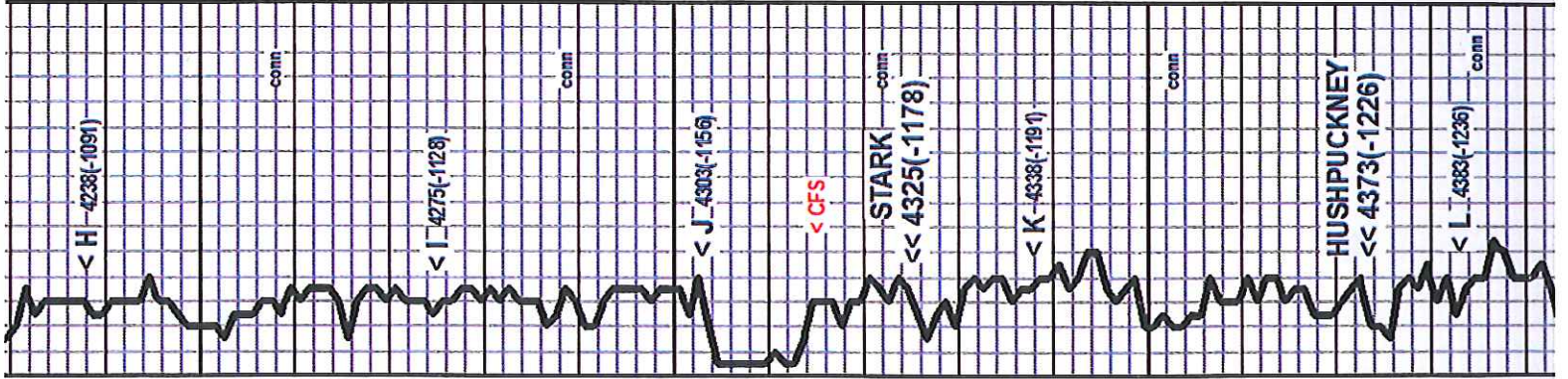


4100

4150

4200

4250



LS, gray-brn, f-mixln, silty foss, P ixln por, NS, hd + Shale, black, dk gray & mar

LS, crm-tan, f-mixln, chky, silty foss, rr P ixln por & P pp por, rr spt'd stn, NSFO + Chr, gray-tan, sub ool

LS, gray-tan, vf-mixln, sub ool-foss, NV por, dense

Shale, black carb

LS, brn-gray, m ixln, NV por, dense

Shale, dk gray, gm & mar

LS, lt gray-tan, vf-mixln, sub ool-foss, rr P ixln por, spt'd stn, NSFO, N odor

LS, tan-gray, vf-mixln, P ixln por & P vgy por, VSFO, spt'd-urf stn, dull fluor, int odor

LS, tan-gray, vf-mixln, silty foss, NV por, dense

Shale, black, gm & mar

LS, gray-tan, fxln, ool, F-G ooc & oom por, S-FFO(hvy), spt'd asph stn, spt'd dull fluor, F odor

LS, crm-lt gray, f-mixln, sub ool, NV por, dense

Shale, black carb

LS, dk brn, vfxln, silty foss, NV por, dense

Shale, rust, gm & black

LS, crm-off white, vf-mixln, foss-ool, NV por, dense

LS, tan-gray, fxln, ool, F-P bool por & F-P ooc por, SSFO(hvy), spt'd stn, N fluor, foul odor

LS, brn-gray, vf-mixln, foss, NV por, dense

Shale, black carb

LS, gray-brn, f-mixln, silty foss, NV por, dense

LS, gray-brn, f-mixln, arg, silty foss, NV por, dense

LS, tan-gray, fine, ool, F-F, sub por, N fluor, foul odor
 SSFO (nv), spt'd stn, N fluor, foul odor

LS, brn-gray, vf-mixln, foss, NV por, dense

Shale, black carb

LS, gray-brn, f-mixln, silty foss, NV por, dense

LS, gray-brn, f-vxln, arg, silty foss, NV por, dense

LS, crm-gray, f-m xln, chky IP, sub ool-foss, ir P
 pp por, spt'd stn, NSFO, N odor + Chl, gray, foss,
 opq

LS, crm-gray, f-m xln, sub ool-foss, few pc's P
 ipart por, NS

Shale, black carb

LS, crm-brn, xln, chky IP, foss & ool, NV por,
 mhd + Shale, mar, gm & gray

LS, dk brn-gray, vf-mixln, silty foss, NV por,
 dense

Shale, gm, gray & mar + Silty gray

Silty gray-gm + Shale, gray, gm, mar & black

Shale, mar, brn & gray + Silty gray

LS, gray-tan-crm, vf-xln, sub ool-foss, F-P ipart
 por, F-P vgy-pp por & few pc's P ocm por,
 S-FFO, spt'd-uf dk sh, dull spt'd fluor, V fnt
 odor + LS, gray-brown, xln, ool, NV por

Most LS, crm-brn-gray, vf-xln, silty foss, dense
 few pc's P pp por, SFO, spt'd stn, N fluor, V fnt
 odor

LS, tan-crm, vf-m xln, chky IP, F-P ixln por & F-P
 vgy-pp por, S-FFO (f), few gas bubb, unf it stn,
 unf dull fluor + LS, gray-crm, vf-xln, sub
 ool-foss, P pp por, SSFO, spt'd stn, dull spt'd
 fluor, chky IP-dense + Shale, brn, gm, gray &

Ran 25 stand short trip prior to DST #1.
 Very tight!

PIPE STRAP & SURVEY @ 4500
 Strap 1.93 short to board
 Survey 1 1/2 deg

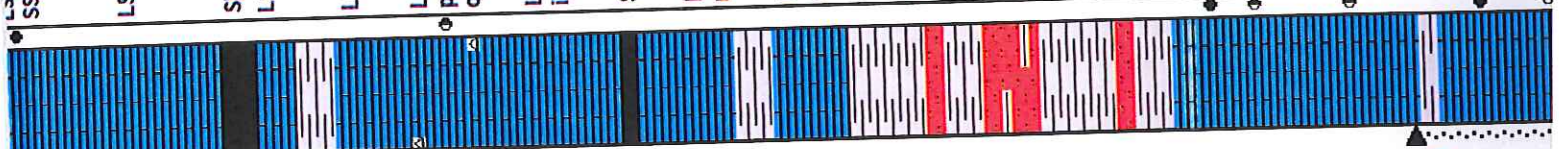
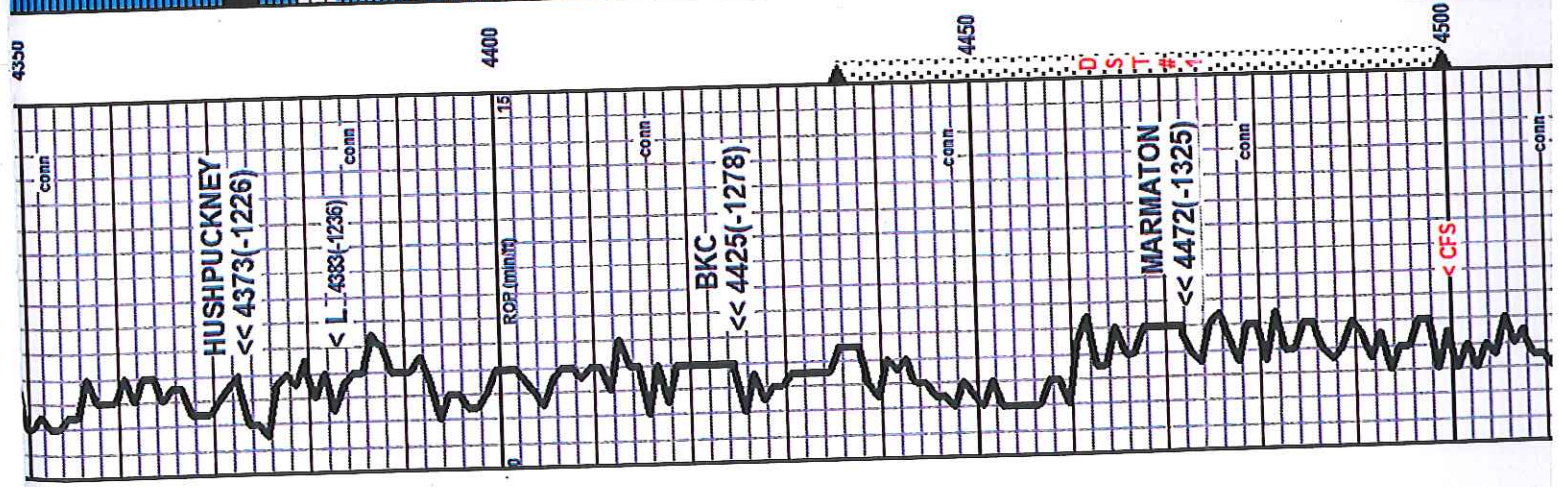
DST#1 4436 - 4500
 (Marmaton A)

30 30 60 90
 BLOW:
 IF Weak built to BOB in 29 min
 ISI Surface return
 FF Weak built to 7"
 FSI Surface return died 50 min
 RECOVERY: 248' GIP
 30' SM&GCO (4%g 99%o 3% m)
 62' GO (24%g 76%o)
 62' M&GCO (34%g 54%o 12% m)
 62' O&GCM (27%g 11%o 62% m)
 216' TOTAL FLUID (Gr 31 deg)

IHP 2245
 IFP 20 - 57
 ISIP 270
 FFP 60 - 103
 FSIP 445
 FHP 2160 BHT 116 deg F
 Vis 50 Wt 9.3 Fil 9.6 PH 10.5
 Chl 5,000 LCM #8
 7/03/14 @ 4494

DST#2 4497 - 4541
 (Marmaton B & C)

30 30 60 60
 BLOW:
 IF Built to 14"



LS, tan-gray, fine, ool, F-F, sub por, N fluor, foul odor
 SSFO (nv), spt'd stn, N fluor, foul odor

LS, brn-gray, vf-mixln, foss, NV por, dense

Shale, black carb

LS, gray-brn, f-mixln, silty foss, NV por, dense

LS, gray-brn, f-vxln, arg, silty foss, NV por, dense

LS, crm-gray, f-m xln, chky IP, sub ool-foss, ir P
 pp por, spt'd stn, NSFO, N odor + Chl, gray, foss,
 opq

LS, crm-gray, f-m xln, sub ool-foss, few pc's P
 ipart por, NS

Shale, black carb

LS, crm-brn, xln, chky IP, foss & ool, NV por,
 mhd + Shale, mar, gm & gray

LS, dk brn-gray, vf-mixln, silty foss, NV por,
 dense

Shale, gm, gray & mar + Silty gray

Silty gray-gm + Shale, gray, gm, mar & black

Shale, mar, brn & gray + Silty gray

LS, gray-tan-crm, vf-xln, sub ool-foss, F-P ipart
 por, F-P vgy-pp por & few pc's P ocm por,
 S-FFO, spt'd-uf dk sh, dull spt'd fluor, V fnt
 odor + LS, gray-brown, xln, ool, NV por

Most LS, crm-brn-gray, vf-xln, silty foss, dense
 few pc's P pp por, SFO, spt'd stn, N fluor, V fnt
 odor

LS, tan-crm, vf-m xln, chky IP, F-P ixln por & F-P
 vgy-pp por, S-FFO (f), few gas bubb, unf it stn,
 unf dull fluor + LS, gray-crm, vf-xln, sub
 ool-foss, P pp por, SSFO, spt'd stn, dull spt'd
 fluor, chky IP-dense + Shale, brn, gm, gray &

FSIP 445
 FHP 2160 BHT 116 deg F
 Vis 50 Wt 9.3 Fil 9.6 PH 10.5
 Chl 5,000 LCM 1#
 7/03/14 @ 4494

DST#2 4497 - 4541
 (Marmaton B & C)

30 30 60 60
 BLOW:
 IF Built to 1/4"
 FF Built to 3/4"

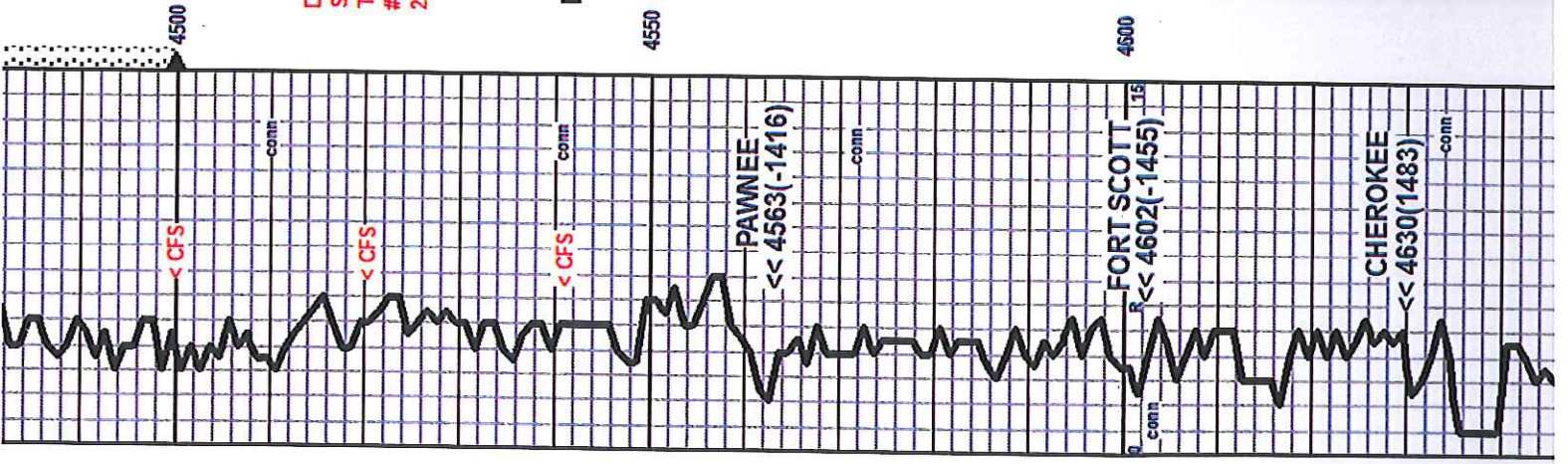
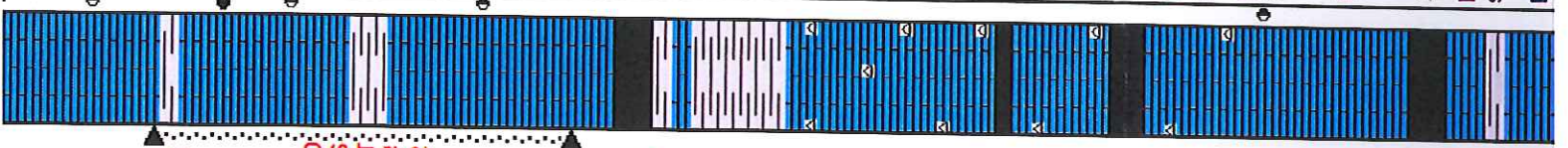
RECOVERY:
 20' W&OCM
 (9%o 2%w 89% m)

IHP 2248
 IFP 16 - 19
 ISIP 92
 FFP 13 - 20
 FSIP 138

FHP 2106 BHT 112 deg F
 Vis 46 Wt 9.2 Fil 11.2 PH 10
 Chl 6,800 LCM 1#

7/04/14 @ 4541

odor + LS, gray-brown, v. xln, ool, NV por
 Most LS, crm-brn-gray, v. xln, silty foss, dense, few pc's P pp por, S SFO, spt'd stn, N fluor, V frnt odor
 LS, tan-crm, v. m. xln, chky IP, F-P ixln por & F-P vgy-pp por, S SFO (f), few gas bubb, unf il stn, unf dull fluor + LS, gray-crm, v. xln, sub ool-foss, P pp por, SSFO, spt'd stn, dull spt'd fluor, chly IP-dense + Shale, brn, grm, gray & mar (4520 cfs spl's F odor)
 Shale, mar(silty), dk gray & grm
 LS, gray-tan, v. m. xln, sub ool-foss, NV por, dense + Shale vol A A
 LS, brn-gray-tan, v. xln, ool & foss, rr P ipart por, spt'd dk stn, NSFO, most NV por, dense V frnt odor
 LS, lt gray-tan, m. xln, silty foss, dense, NV por
 Shale, black carb
 Shale, black, grm, gray & mar + LS, gray, v. m. xln, arg, NV por
 LS, lt gray-off white, v. xln, few pc's sub ool, P pp por, spt'd gi stn, NSFO, N odor + Cht, gray-tan, trnsl
 LS, tan-off white, v. xln, sub ool-foss, NV por, chky IP-dense, + Cht gray-tan, trnsl
 Shale, black carb + pyr
 LS, gray-tan, v. xln, chky-arg IP, sub ool-foss, NV por + Cht, tan-brn, silty foss, opq
 Shale, black carb
 LS, brn-tan, v. m. xln, ool, NV por, dense + Cht gray-tan, ool, opq-trnsl
 LS, gray-brn, v. xln, ool, F-P fool por, SS scummy res oil, spt'd stn, N fluor, N odor
 LS, brn-gray, m. xln, NV por, dense
 Shale, black carb
 LS, crm-white, v. xln, chky, foss & ool, NV por, st
 LS, gray-tan, v. m. xln, foss & ool, rr P vgy por,



LS, brn-tan, vf-m icxn, ool, NV por, dense + Cht
gray-tan, ool, opq-trnsl

LS, gray-brn, vf-fxn, ool, F-P iool por, SS
scummy res oil, spf'd stn, N fluor, N odor

LS, brn-gray, m icxn, NV por, dense

Shale, black carb

LS, crm-white, f-vxin, chky, foss & ool, NV por,
sft

LS, gray-tan, vf-m icxn, foss & ool, rr P vgy por,
NS, most NV por, dense

Shale, black carb

LS, dk brn-gray, m icxn, NV por, dense

Shale, brn, dk gray & gm

LS, brn-gray, vxln, foss & ool, NV por, dense +
Shale, black carb

Shale, black, gray, m ar & gm

LS, tan-gray, vf-m icxn, sub ool, few pc's P pp
por, V SSFO, spf'd dk stn, N fluor, N odor + Cht,
brn-gray, trnsl-opq

Most LS, brn-gray, vf-m icxn, silty foss, NV por,
chky IP-dense + LS, brn-gray, vf-m icxn, silty
foss, rr P vgy-pp por, V SSFO, spf'd asph stn, N
fluor N odor + Cht, dk gray-brn, trnsl-opq

LS, brn-gray, vf-m icxn, silty foss, NV por, dense
+ Cht, brn-gray, silty foss, trnsl

LS, brn-off white, f-m icxn, sub ool-foss, NV por,
chky IP-dense + Shale, mar, gm & black

LS, gray-tan, f-vxin, silty foss, NV por, dense +
Shale, black & dk gm

LS, gray-off white, f-m icxn, arg, silty foss, P ixln
por, rr spf'd stn, NSFO, N odor + LS & Shale AA

LS, gray-brn, arg, f-vxin, silty foss, NV por +
Shale, black, dk gray, gm & mar

LS, gray-tan, f-m icxn, silty foss, rr P pp por, spf'd
stn, NSFO + Shale, black, gm & mar

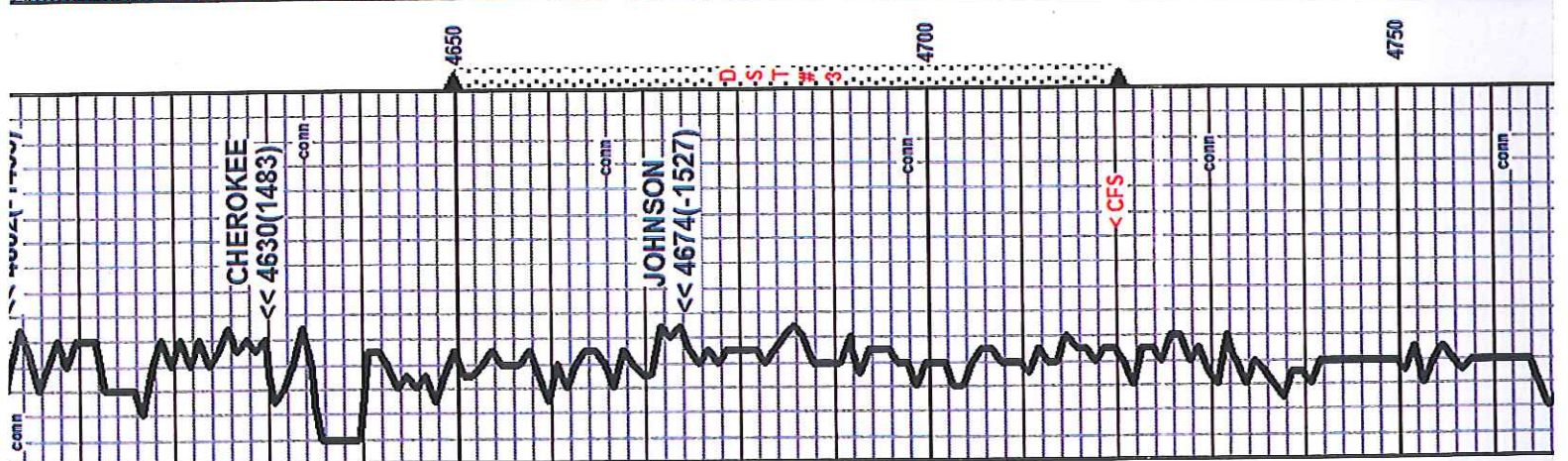
DST#3 4650 - 4720
(Johnson Zone)
30 30 30 30

BLOW:
IF Surface died 10 min
FF No blow

RECOVERY:
5 OCM (6% @ 94% m)

IHP 2370
IFP 18 - 19
ISIP 78
FFP 19 - 23
FSIP 35
FHP 2160 BHT 116 deg F

Vis 58 Wt 9.3 Fil 10.4 PH 10.5
Cht 7,000 LCM 2#
7/05/14 @ 4696



Shale, black & dk grn

LS, gray-off white, f-mxln, arg, silty foss, P ixln por, r sp'd stn, NSFO, N odor + LS & Shale AA

LS, gray-brn, arg, f-vfxln, silty foss, NV por + Shale, black, dk gray, gm & mar

LS, gray-tan, f-mxln, silty foss, r P pp por, sp'd stn, NSFO + Shale, black, gm & mar

Most Shale vol w/few clus SS gray-clr qtz, f-vfgm, mod sort, rd-sub rd, comp P ig por, NS & LS, gray-tan, f-vfxln, arg silty foss, NV por

Most Shale, mar, gray, gm & black + LS, brn-gray, vfxln, arg, NV por

Shale, mar, gray, gm & black, some silty + few clus SS, gray-gm, vfgm, some clus V pyr, sub rd, comp, NV por, NS

SS, white-gray-clr qtz, silty glauc, v-fngm, mod sort, sub rd-sub ang, fri, F-P ig por, NS + abnd pyr & Shale, black, gm, gray & mar

SS, white, v-fgm, calc, sub rd, mod sort, P igpor, NS, silty glauc + LS, white-gray, fxln, scdy, v-fgm, NV por

LS, white-gray, fxln, scdy, vfgm, NV por

LS, white-erm, fxln, scdy, v-fngm, chky IP, NV por

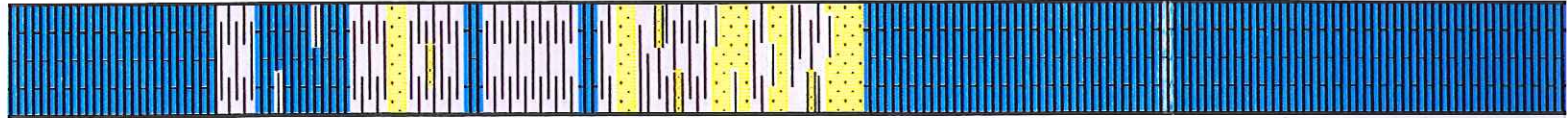
LSAA + LS, erm-tan, v-fmixln, silty scdy, NV por, dense

LS, white-erm, fxln, scdy-sub ool, f-mgm, chky IP, NV por

LS, white-erm, f-vfxln, scdy-sub ool, f-mgm, chky, NV por

LS, white-erm, fxln, scdy-sub ool, f-mgm, chky IP, NV por + LS, lt gray-white, vfxln, sub ool, NV por

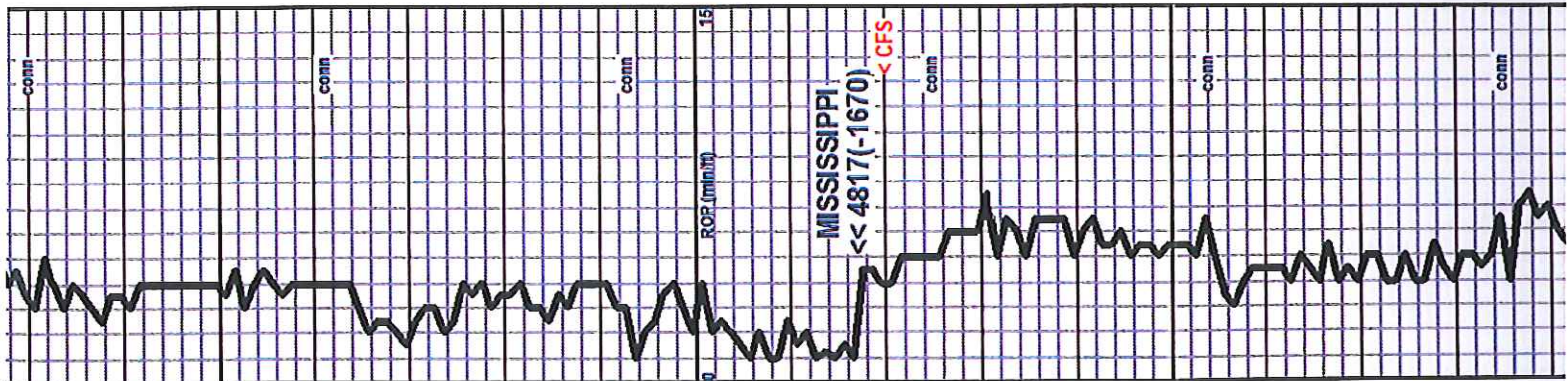
Vis 56 Wt 9.3 Fil 15.6 PH 9.5
Cnl 9,000 LCM 1#
7/06/14 @ 4820



4750

4800

4850



LS, white-crm, fxl n, soy-sub ool, f-m gm, chky IP,
NW por

LS, white-crm, f-vxl n, soy-sub ool, f-m gm, chky,
NW por

LS, white-crm, fxl n, soy-sub ool, f-m gm, chky IP,
NW por + LS, lt gray-white, vxl n, sub ool, NW por
dense

Survey @ 4900, 2 deg



4900

4950

