

Confidentiality Requested:

Yes No

**KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION**

Form ACO-1

January 2018

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

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

Cathodic Other (Core, Expl., etc.): _____

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

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

Deepening Re-perf. Conv. to EOR Conv. to SWD
 Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

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 Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

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

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				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

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> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
---	---	------------------------------------

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

TUBING RECORD:	Size:	Set At:	Packer At:	
----------------	-------	---------	------------	--

Form	ACO1 - Well Completion
Operator	Chieftain Oil Co., Inc.
Well Name	ECK 3
Doc ID	1434664

All Electric Logs Run

Dual Induction Log
Micro Log
Sonic Cement Bond Log
Geological Log
Compensated Density Neutron Log
Sonic Log

Form	ACO1 - Well Completion
Operator	Chieftain Oil Co., Inc.
Well Name	ECK 3
Doc ID	1434664

Tops

Name	Top	Datum
Onega Shale	2531	-1060
Wabaunsee	2579	-1107
Zndale	2724	-1252
Heebner Shale	3551	-2079
Haskel	3727	-2255
Stark Shale	4155	-2683
Cherokee SD	4402	2930
Mississippian	4421	-2949
Mississippian Lime	4489	-3026
Kinderhook Shale	4614	-3142
Viola	4708	-3236
Base Viola	4802	-3330
Simpson SD	4818	-3346
Arbuckle	DNP	DNP

Form	ACO1 - Well Completion
Operator	Chieftain Oil Co., Inc.
Well Name	ECK 3
Doc ID	1434664

Perforations

Shots Per Foot	Perforation Top	Perforation Bottom	BridgePlugType	BridgePlugSet At	Material Record
4	4709	4720	CIBP Cast Iron Bridge Plug	4700	1500 Gal 15% MCU Acid, 1 Tank Gelled Acid Frac
2	4426	4430			1000 Gal 7.5%MCU Acid
2	4436	4442			1500 Gal 15% NEFF Acid
2	4449	4451			25 Tank Slickwater Frac
2	4454	4458			216,000# Sand
2	4474	4498			



**Company: Chieftain Oil
Company, Inc.
Lease: Eck #3**

SEC: 30 TWN: 32S RNG: 10W
County: BARBER
State: Kansas
Drilling Contractor: Fossil Drilling, Inc.
- Rig 3
Elevation: 1460 GL
Field Name: Antrim
Pool: Infield
Job Number: 221

Operation:
Test Complete

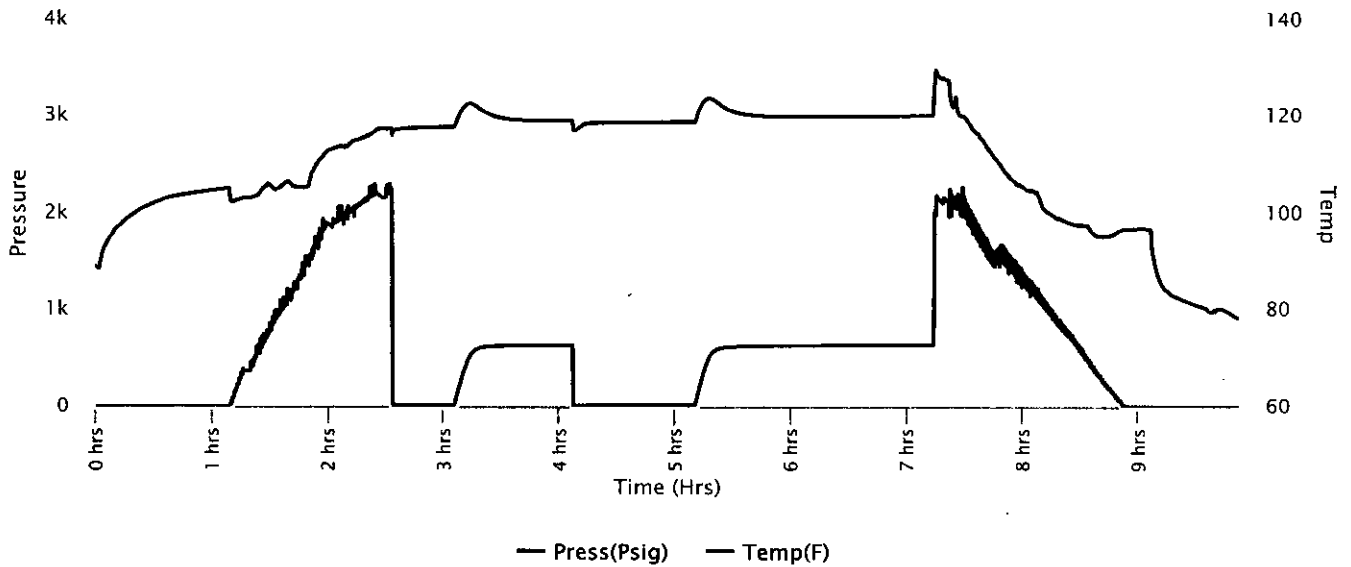
DATE
August
27
2018

DST #1 **Formation: Cherokee Sand** **Test Interval: 4390 - 4410'** **Total Depth: 4410'**
Time On: 15:43 08/27 Time Off: 01:19 08/28
Time On Bottom: 18:13 08/27 Time Off Bottom: 22:43 08/27

Electronic Volume Estimate:
3647'

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 30	Minutes: 60	Minutes: 60	Minutes: 120
Current Reading: 77.4" at 30 min	Current Reading: 0" at 60 min	Current Reading: 299.4" at 60 min	Current Reading: 24.8" at 120 min
Max Reading: 77.4"	Max Reading: 0"	Max Reading: 299.4"	Max Reading: 27.8"

Inside Recorder





**Company: Chieftain Oil
Company, Inc.
Lease: Eck #3**

SEC: 30 TWN: 32S RNG: 10W
County: BARBER
State: Kansas
Drilling Contractor: Fossil Drilling, Inc.
- Rig 3
Elevation: 1460 GL
Field Name: Antrim
Pool: Infield
Job Number: 221

Operation:
Test Complete

DATE
August
27
2018

DST #1 **Formation:** Cherokee Sand **Test Interval:** 4390 - 4410' **Total Depth:** 4410'
Time On: 15:43 08/27 Time Off: 01:19 08/28
Time On Bottom: 18:13 08/27 Time Off Bottom: 22:43 08/27

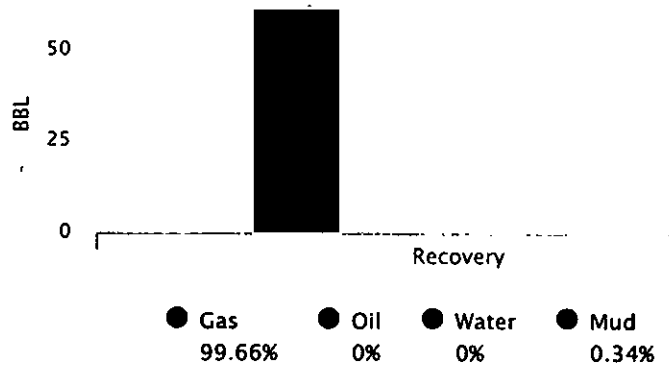
<u>Recovered</u>		<u>Description of Fluid</u>	<u>Gas %</u>	<u>Oil %</u>	<u>Water %</u>	<u>Mud %</u>
<u>Foot</u>	<u>BBLs</u>					
4357	62.00011	G	100	0	0	0
15	0.21345	M	0	0	0	100

Total Recovered: 4372 ft
Total Barrels Recovered: 62.21356

Reversed Out
NO

Initial Hydrostatic Pressure	2165	PSI
Initial Flow	10 to 14	PSI
Initial Closed in Pressure	639	PSI
Final Flow Pressure	8 to 22	PSI
Final Closed in Pressure	640	PSI
Final Hydrostatic Pressure	2163	PSI
Temperature	124	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance





**Company: Chieftain Oil
Company, Inc.
Lease: Eck #3**

SEC: 30 TWN: 32S RNG: 10W
County: BARBER
State: Kansas
Drilling Contractor: Fossil Drilling, Inc.
- Rig 3
Elevation: 1460 GL
Field Name: Antrim
Pool: Infield
Job Number: 221

Operation:
Test Complete

DATE
August
27
2018

DST #1	Formation: Cherokee Sand	Test Interval: 4390 - 4410'	Total Depth: 4410'
	Time On: 15:43 08/27	Time Off: 01:19 08/28	
	Time On Bottom: 18:13 08/27	Time Off Bottom: 22:43 08/27	

BUCKET MEASUREMENT:

1st Open: 1/4 in. blow building. BOB in 10 1/4 mins.
1st Close: No blow back.
2nd Open: BOB immediately.
2nd Close: BOB blow back. GTS in 10 mins.

REMARKS:

Gas to surface came 10 mins. into final shut-in.
Tool Sample: 0% Gas 0% Oil 0% Water 100% Mud



**Company: Chieftain Oil
Company, Inc.
Lease: Eck #3**

SEC: 30 TWN: 32S RNG: 10W
County: BARBER
State: Kansas
Drilling Contractor: Fossil Drilling, Inc.
- Rig 3
Elevation: 1460 GL
Field Name: Antrim
Pool: Infield
Job Number: 221

Operation:
Test Complete

DATE
August
27
2018

DST #1 **Formation:** Cherokee Sand **Test Interval:** 4390 - 4410' **Total Depth:** 4410'
Time On: 15:43 08/27 Time Off: 01:19 08/28
Time On Bottom: 18:13 08/27 Time Off Bottom: 22:43 08/27

Down Hole Makeup

Heads Up: 15.23 FT	Packer 1: 4385 FT
Drill Pipe: 4372.66 FT <i>ID-3 1/2</i>	Packer 2: 4390 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4374.42 FT
Collars: 0 FT <i>ID-2 1/4</i>	Bottom Recorder: 4395 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 20	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 3 FT <i>4 1/2-FH</i>	
Change Over: 0 FT	
Drill Pipe: (in anchor): 0 FT <i>ID-3 1/2</i>	
Change Over: 0 FT	
Perforations: (below): 16 FT <i>4 1/2-FH</i>	



**Company: Chieftain Oil
Company, Inc.
Lease: Eck #3**

SEC: 30 TWN: 32S RNG: 10W
County: BARBER
State: Kansas
Drilling Contractor: Fossil Drilling, Inc.
- Rig 3
Elevation: 1460 GL
Field Name: Antrim
Pool: Infield
Job Number: 221

Operation:
Test Complete

DATE
August
27
2018

DST #1 **Formation:** Cherokee Sand **Test Interval:** 4390 - 4410' **Total Depth:** 4410'
Time On: 15:43 08/27 Time Off: 01:19 08/28
Time On Bottom: 18:13 08/27 Time Off Bottom: 22:43 08/27

Mud Properties

Mud Type: Chemical **Weight:** 9.4 **Viscosity:** 57 **Filtrate:** 9.6 **Chlorides:** 4,000 ppm



**Company: Chieftain Oil
Company, Inc.
Lease: Eck #3**

SEC: 30 TWN: 32S RNG: 10W
County: BARBER
State: Kansas
Drilling Contractor: Fossil Drilling, Inc.
- Rig 3
Elevation: 1460 GL
Field Name: Antrim
Pool: Infield
Job Number: 221

Operation:
Test Complete

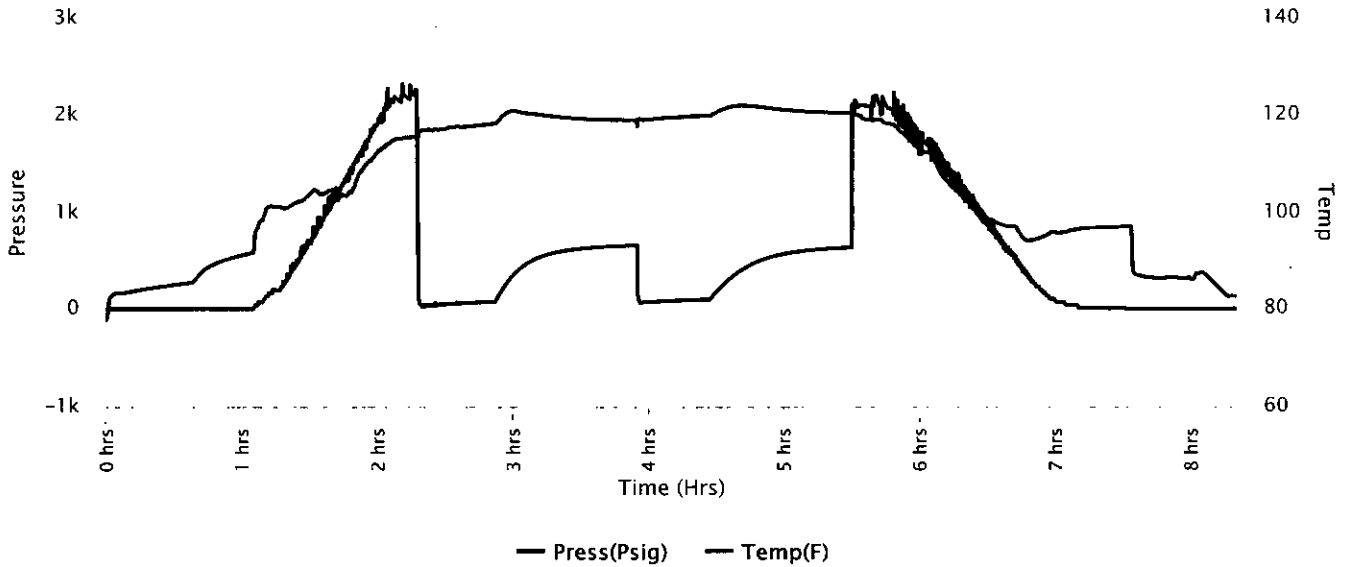
DATE
August
28
2018

DST #2 **Formation: Mississippi** **Test Interval: 4453 - 4516'** **Total Depth: 4516'**
Time On: 11:47 08/28 Time Off: 19:54 08/28
Time On Bottom: 14:02 08/28 Time Off Bottom: 17:02 08/28

Electronic Volume Estimate:
N/A

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 30	Minutes: 60	Minutes: 30	Minutes: 60
Current Reading: 342" at 30 min	Current Reading: 21" at 60 min	Current Reading: GTS" at 30 min	Current Reading: 0" at 60 min
Max Reading: 342"	Max Reading: 24.7"	Max Reading: GTS"	Max Reading: 0"

Inside Recorder





Company: Chieftain Oil Company, Inc.
Lease: Eck #3

SEC: 30 TWN: 32S RNG: 10W
 County: BARBER
 State: Kansas
 Drilling Contractor: Fossil Drilling, Inc.
 - Rig 3
 Elevation: 1460 GL
 Field Name: Antrim
 Pool: Infield
 Job Number: 221

Operation:
 Test Complete

DATE
 August
28
 2018

DST #2 **Formation: Mississippi** **Test Interval: 4453 - 4516'** **Total Depth: 4516'**
 Time On: 11:47 08/28 Time Off: 19:54 08/28
 Time On Bottom: 14:02 08/28 Time Off Bottom: 17:02 08/28

Recovered

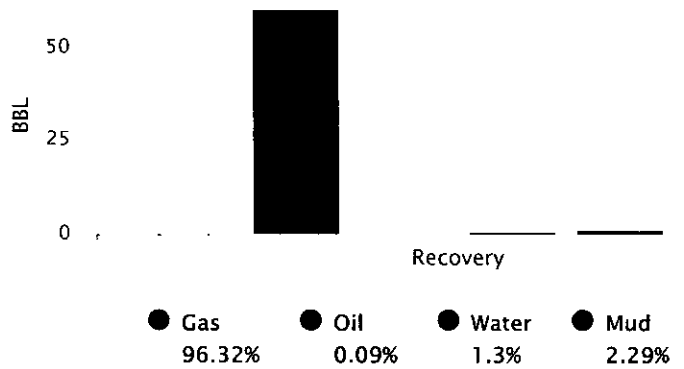
Foot	BBLS	Description of Fluid	Gas %	Oil %	Water %	Mud %
4243	60.37789	G	100	0	0	0
192	2.73216	SLOCSLGCHWCM	15	2	30	53

Total Recovered: 4435 ft
 Total Barrels Recovered: 63.11005

Reversed Out
 NO

Initial Hydrostatic Pressure	2139	PSI
Initial Flow	28 to 70	PSI
Initial Closed in Pressure	658	PSI
Final Flow Pressure	61 to 98	PSI
Final Closed in Pressure	636	PSI
Final Hydrostatic Pressure	2123	PSI
Temperature	123	°F
Pressure Change Initial Close / Final Close	3.2	%

Recovery at a glance





**Company: Chieftain Oil
Company, Inc.
Lease: Eck #3**

SEC: 30 TWN: 32S RNG: 10W
County: BARBER
State: Kansas
Drilling Contractor: Fossil Drilling, Inc.
- Rig 3
Elevation: 1460 GL
Field Name: Antrim
Pool: Infield
Job Number: 221

Operation:
Test Complete

DATE
August
28
2018

DST #2	Formation: Mississippi	Test Interval: 4453 - 4516'	Total Depth: 4516'
	Time On: 11:47 08/28	Time Off: 19:54 08/28	
	Time On Bottom: 14:02 08/28	Time Off Bottom: 17:02 08/28	

BUCKET MEASUREMENT:

1st Open: 2 in. blow building. BOB in 30 secs.
1st Close: BOB blow back.
2nd Open: BOB immediately.
2nd Close: No blow back.

REMARKS:

Tool sample blown out.
Gas sample taken 10 mins. into 2nd Opening. Blow too weak to measure.

Ph: 7

Measured RW: .13 @ 91 degrees °F

RW at Formation Temp: 0.098 @ 123 °F

Chlorides: 47,000 ppm



**Company: Chieftain Oil
Company, Inc.
Lease: Eck #3**

SEC: 30 TWN: 32S RNG: 10W
County: BARBER
State: Kansas
Drilling Contractor: Fossil Drilling, Inc.
- Rig 3
Elevation: 1460 GL
Field Name: Antrim
Pool: Infield
Job Number: 221

Operation:
Test Complete

DATE
August
28
2018

DST #2 **Formation:** Mississippi **Test Interval:** 4453 - 4516' **Total Depth:** 4516'
Time On: 11:47 08/28 Time Off: 19:54 08/28
Time On Bottom: 14:02 08/28 Time Off Bottom: 17:02 08/28

Down Hole Makeup

Heads Up: 15.29 FT	Packer 1: 4447.68 FT
Drill Pipe: 4435.4 FT <i>ID-3 1/2</i>	Packer 2: 4452.68 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4437.1 FT
Collars: 0 FT <i>ID-2 1/4</i>	Bottom Recorder: 4491 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 63.32	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 3 FT <i>4 1/2-FH</i>	
Change Over: 1 FT	
Drill Pipe: (in anchor): 31.32 FT <i>ID-3 1/2</i>	
Change Over: 1 FT	
Perforations: (below): 26 FT <i>4 1/2-FH</i>	



**Company: Chieftain Oil
Company, Inc.
Lease: Eck #3**

SEC: 30 TWN: 32S RNG: 10W
County: BARBER
State: Kansas
Drilling Contractor: Fossil Drilling, Inc.
- Rig 3
Elevation: 1460 GL
Field Name: Antrim
Pool: Infield
Job Number: 221

Operation:
Test Complete

DATE
August
28
2018

DST #2 **Formation:** **Test Interval: 4453 -** **Total Depth: 4516'**
Mississippi **4516'**
Time On: 11:47 08/28 Time Off: 19:54 08/28
Time On Bottom: 14:02 08/28 Time Off Bottom: 17:02 08/28

Gas Volume Report

Remarks: Gas sample taken 10 mins into 2nd Opening.

1st Open

2nd Open

Time	Orifice	PSI	MCF/D
------	---------	-----	-------

Time	Orifice	PSI	MCF/D
10	0.125	Too weak to measure	Weak
30	0.125	Too weak to measure	Weak

MCF/D



**Company: Chieftain Oil
Company, Inc.
Lease: Eck #3**

SEC: 30 TWN: 32S RNG: 10W
County: BARBER
State: Kansas
Drilling Contractor: Fossil Drilling, Inc.
- Rig 3
Elevation: 1460 GL
Field Name: Antrim
Pool: Infield
Job Number: 221

Operation:
Test Complete

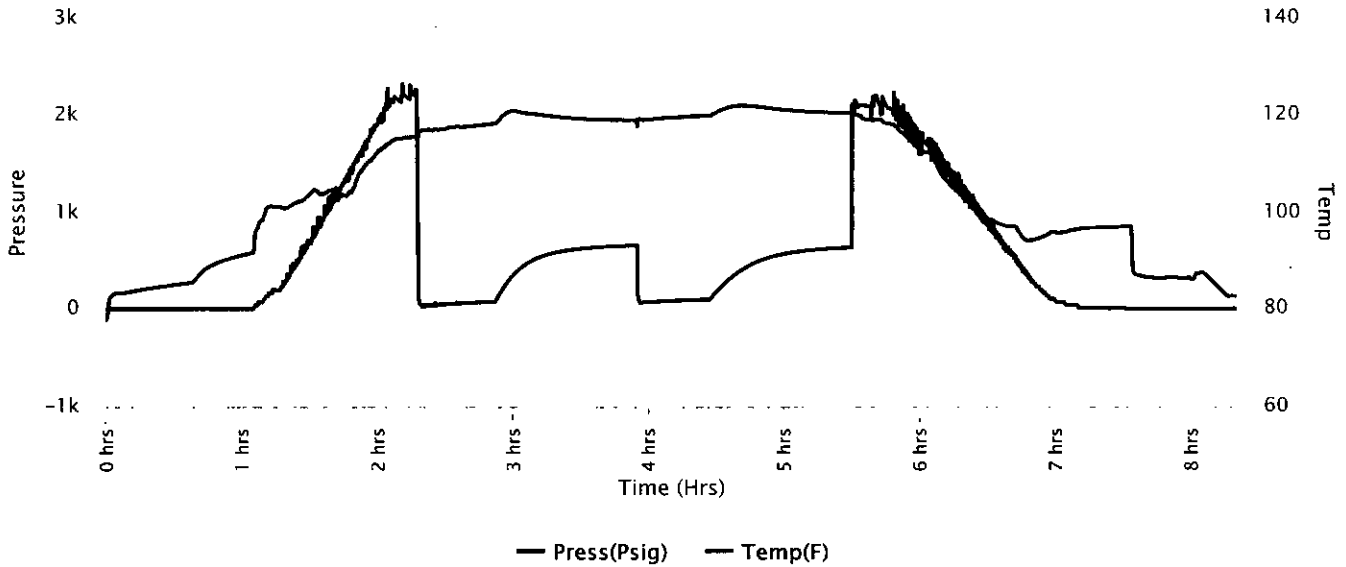
DATE
August
28
2018

DST #2 **Formation: Mississippi** **Test Interval: 4453 - 4516'** **Total Depth: 4516'**
Time On: 11:47 08/28 Time Off: 19:54 08/28
Time On Bottom: 14:02 08/28 Time Off Bottom: 17:02 08/28

Electronic Volume Estimate:
N/A

<u>1st Open</u>	<u>1st Close</u>	<u>2nd Open</u>	<u>2nd Close</u>
Minutes: 30	Minutes: 60	Minutes: 30	Minutes: 60
Current Reading: 342" at 30 min	Current Reading: 21" at 60 min	Current Reading: GTS" at 30 min	Current Reading: 0" at 60 min
Max Reading: 342"	Max Reading: 24.7"	Max Reading: GTS"	Max Reading: 0"

Inside Recorder





Company: Chieftain Oil Company, Inc.
Lease: Eck #3

SEC: 30 TWN: 32S RNG: 10W
 County: BARBER
 State: Kansas
 Drilling Contractor: Fossil Drilling, Inc.
 - Rig 3
 Elevation: 1460 GL
 Field Name: Antrim
 Pool: Infield
 Job Number: 221

Operation:
 Test Complete

DATE
 August
28
 2018

DST #2 **Formation: Mississippi** **Test Interval: 4453 - 4516'** **Total Depth: 4516'**
 Time On: 11:47 08/28 Time Off: 19:54 08/28
 Time On Bottom: 14:02 08/28 Time Off Bottom: 17:02 08/28

Recovered

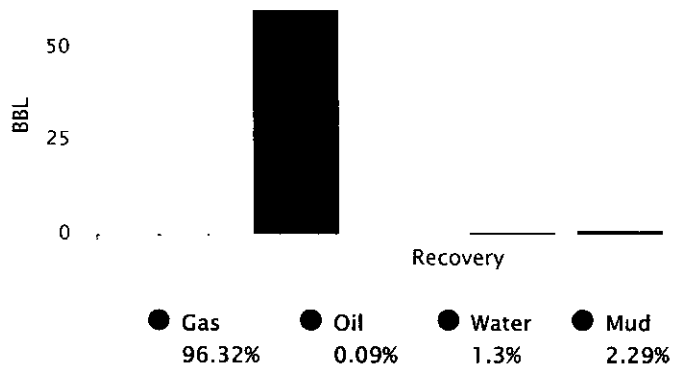
Foot	BBLS	Description of Fluid	Gas %	Oil %	Water %	Mud %
4243	60.37789	G	100	0	0	0
192	2.73216	SLOCSLGCHWCM	15	2	30	53

Total Recovered: 4435 ft
 Total Barrels Recovered: 63.11005

Reversed Out
 NO

Initial Hydrostatic Pressure	2139	PSI
Initial Flow	28 to 70	PSI
Initial Closed in Pressure	658	PSI
Final Flow Pressure	61 to 98	PSI
Final Closed in Pressure	636	PSI
Final Hydrostatic Pressure	2123	PSI
Temperature	123	°F
Pressure Change Initial Close / Final Close	3.2	%

Recovery at a glance





**Company: Chieftain Oil
Company, Inc.
Lease: Eck #3**

SEC: 30 TWN: 32S RNG: 10W
County: BARBER
State: Kansas
Drilling Contractor: Fossil Drilling, Inc.
- Rig 3
Elevation: 1460 GL
Field Name: Antrim
Pool: Infield
Job Number: 221

Operation:
Test Complete

DATE
August
28
2018

DST #2	Formation: Mississippi	Test Interval: 4453 - 4516'	Total Depth: 4516'
	Time On: 11:47 08/28	Time Off: 19:54 08/28	
	Time On Bottom: 14:02 08/28	Time Off Bottom: 17:02 08/28	

BUCKET MEASUREMENT:

1st Open: 2 in. blow building. BOB in 30 secs.
1st Close: BOB blow back.
2nd Open: BOB immediately.
2nd Close: No blow back.

REMARKS:

Tool sample blown out.
Gas sample taken 10 mins. into 2nd Opening. Blow too weak to measure.

Ph: 7

Measured RW: .13 @ 91 degrees °F

RW at Formation Temp: 0.098 @ 123 °F

Chlorides: 47,000 ppm



**Company: Chieftain Oil
Company, Inc.
Lease: Eck #3**

SEC: 30 TWN: 32S RNG: 10W
County: BARBER
State: Kansas
Drilling Contractor: Fossil Drilling, Inc.
- Rig 3
Elevation: 1460 GL
Field Name: Antrim
Pool: Infield
Job Number: 221

Operation:
Test Complete

DATE
August
28
2018

DST #2 **Formation:** Mississippi **Test Interval:** 4453 - 4516' **Total Depth:** 4516'
Time On: 11:47 08/28 Time Off: 19:54 08/28
Time On Bottom: 14:02 08/28 Time Off Bottom: 17:02 08/28

Down Hole Makeup

Heads Up: 15.29 FT	Packer 1: 4447.68 FT
Drill Pipe: 4435.4 FT <i>ID-3 1/2</i>	Packer 2: 4452.68 FT
Weight Pipe: FT <i>ID-2 7/8</i>	Top Recorder: 4437.1 FT
Collars: 0 FT <i>ID-2 1/4</i>	Bottom Recorder: 4491 FT
Test Tool: 33.57 FT <i>ID-3 1/2-FH</i> <i>Jars</i> <i>Safety Joint</i>	Well Bore Size: 7 7/8
Total Anchor: 63.32	Surface Choke: 1"
Anchor Makeup	Bottom Choke: 5/8"
Packer Sub: 1 FT	
Perforations: (top): 3 FT <i>4 1/2-FH</i>	
Change Over: 1 FT	
Drill Pipe: (in anchor): 31.32 FT <i>ID-3 1/2</i>	
Change Over: 1 FT	
Perforations: (below): 26 FT <i>4 1/2-FH</i>	



**Company: Chieftain Oil
Company, Inc.
Lease: Eck #3**

SEC: 30 TWN: 32S RNG: 10W
County: BARBER
State: Kansas
Drilling Contractor: Fossil Drilling, Inc.
- Rig 3
Elevation: 1460 GL
Field Name: Antrim
Pool: Infield
Job Number: 221

Operation:
Test Complete

DATE
August
28
2018

DST #2 **Formation:** **Test Interval: 4453 -** **Total Depth: 4516'**
Mississippi **4516'**
Time On: 11:47 08/28 Time Off: 19:54 08/28
Time On Bottom: 14:02 08/28 Time Off Bottom: 17:02 08/28

Gas Volume Report

Remarks: Gas sample taken 10 mins into 2nd Opening.

1st Open

2nd Open

Time	Orifice	PSI	MCF/D
------	---------	-----	-------

Time	Orifice	PSI	MCF/D
10	0.125	Too weak to measure	Weak
30	0.125	Too weak to measure	Weak

MCF/D



PAGE	CUST NO	YARD #	INVOICE DATE
1 of 1	1000719	1718	08/31/2018
INVOICE NUMBER			
92794380			

Pratt (620) 672-1201
 B CHIEFTAIN OIL COMPANY
 L PO Box: 124
 L KIOWA
 T KS US 67070
 O ATTN: ACCOUNTS PAYABLE

J LEASE NAME Eck 3
 O LOCATION
 B COUNTY Barber
 S STATE KS
 I JOB DESCRIPTION Cement-New Well Casing/Pi
 T JOB CONTACT
 E

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
41130715	19843		Net - 30 days	09/30/2018

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
<i>For Service Dates: 08/31/2018 to 08/31/2018</i>				
0041130715				
171817136A Cement-New Well Casing/Pi 08/31/2018 Cement/Production Casing				
A-Serv Lite	50.00	EA	7.93	396.50 T
AA2 Cement	150.00	EA	10.37	1,555.50 T
A-Serv Lite	50.00	EA	7.93	396.50 T
Celloflake	62.00	EA	2.26	139.93 T
C-41P	71.00	EA	2.44	173.24 T
Salt	722.00	EA	0.31	220.21 T
BES: C-MagChem 10 CR	423.00	LB	1.65	696.68
C-17	85.00	LB	12.20	1,037.00 T
Gilsonite	751.00	EA	0.41	306.93 T
"Auto Fill Float Shoe 5 1/2" (Blue)"	1.00	EA	219.60	219.60
"Latch Down Plug & Baffle, 5 1/2" (Blu	1.00	EA	244.00	244.00
"5 1/2" Basket (Blue)"	2.00	EA	176.90	353.80
"Turbolizer, 5 1/2" (Blue)"	7.00	EA	67.10	469.70
Super Flush	500.00	EA	1.49	747.25 T
Super Flush II	500.00	EA	0.93	466.65 T
"Unit Mileage Chg (PU, cars one way)"	25.00	MI	2.74	68.62
Heavy Equipment Mileage	50.00	MI	4.58	228.75
284--Propp & Bulk Del Chgs., per ton mil	1.00	EA	432.73	432.73
Depth Charge; 4001'-5000'	1.00	EA	1,537.20	1,537.20
Blending & Mixing Service Charge	250.00	BAG	0.85	213.50
Plug Container Util. Chg.	1.00	EA	152.50	152.50
"Service Supervisor, first 8 hrs on loc.	1.00	EA	106.75	106.75

PLEASE REMIT TO:	SEND OTHER CORRESPONDENCE TO:	SUB TOTAL	10,163.54
BASIC ENERGY SERVICES, LP	BASIC ENERGY SERVICES, LP	TAX	407.98
PO BOX 841903	801 CHERRY ST, STE 2100	INVOICE TOTAL	10,571.52
DALLAS, TX 75284-1903	FORT WORTH, TX 76102		



BASICSM
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

TANK-35

FIELD SERVICE TICKET
1718 17136 A

DATE _____ TICKET NO. _____

DATE OF JOB: 8-31-16		DISTRICT: Pratt Kansas		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/> PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/> CUSTOMER ORDER NO.:					
CUSTOMER: Chickfain Oil Co. Inc		LEASE: ECK		WELL NO. 3					
ADDRESS:		COUNTY: Barber		STATE: KS					
CITY:		STATE:		SERVICE CREW: Ferris, Darin, Mike					
AUTHORIZED BY:		JOB TYPE: 5 1/2" production 2-42							
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	(AM/PM)	TIME
19843	7.5						8-29-16	AM	0630
19862	7.5							AM	
						ARRIVED AT JOB		AM	
						START OPERATION		AM	1310
						FINISH OPERATION		AM	1430
						RELEASED		AM	1500
						MILES FROM STATION TO WELL			25

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: (WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CP106	A serv lite	SK	50		650.00
CP105	AA2 cement	SIC	150		2550.00
CP106	A serv lite	SK	50		650.00
CC102	cellaflake	lb	62		229.40
CC105	C-411P	lb	71		284.00
CC111	Sart	lb	722		361.00
CC149	Manchem 1000	lb	423		1192.10
CC146	C-17	lb	85		1700.00
CC201	Gilsonite	lb	761		503.17
CF1251	5 1/2" Auto Fill Float shoe (blue)	EA	1		360.00
CF607	5 1/2" Latchman Plug/Baffle (Blue)	EA	1		4100.00
CF1901	5 1/2" Basket (Blue)	EA	2		540.00
CF1651	5 1/2" T. ch. 1.70 (Blue)	EA	7		770.00
CC154	Super Flush	gal	500		1225.00
CC155	Super Flush II	gal	500		765.00
E100	Pickup mileage	mi	25		112.50
E101	Heavy equip. limit mileage	mi	50		375.00
E113	Bulk Delivery Charge Per Ton mile	Ton	284		709.38
CE208	Depth charge 4001'-5001'	Yhr	1		2520.00
SUB TOTAL					16,661.54

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		10163.54

SERVICE REPRESENTATIVE:	THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY:
FIELD SERVICE ORDER NO. _____	(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

Customer Chieftain Oil Co. LLC	Lease No.	Date 8-31-18
Lease ECK	Well # 3	
Field/Order # 17136	Station Pratt Kansas	Casing 5.5 15.5
		Depth 4144
Type Job 5/2 Production casing 2-412	Formation	County Bo. Ker
		State KS
		Legal Description 30-37.5-101 U

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size 5 1/2 15.5	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
Depth 41490	Depth	From	To	Pre Pad	Max		5 Min.
Volume 116	Volume	From	To	Pad	Min		10 Min.
Max Press 2000	Max Press	From	To	Frac.	Avg		15 Min.
Well Connection 411	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush	Gas Volume		Total Load

Customer Representative	Station Manager	Treater
Service Units 76666 76992 19843 70959 14662		
Driver Names Ferris Darin Darin Mike Mike		

Time	Casing Pressure	Tubing Pressure	Bbbs. Pumped	Rate	Service Log
0800					Archive on location / safety meeting
0830					Tack fertilizer / 10 sacks
					fertilizers 3, 5, 7, 9, 10, 11, 12
					Backwash 3, 9
1310	100		24	4	Pump super flush
1322	200		17	3	Pump soft Acrylic @ 12.6 gpphr
1325	100			4	Start 1500x AA2 cement @ 15 gpphr
1333	100		14	5	250x AA2 cement @ 15 gpphr away
1336			345	5	1500 x AA2 cement @ 15 gpphr away / S/D wash
1346	0			3.5	Start H2O displacement
1409	150		76	3.5	same lift pressure
1417	500		105	3	slow to land plug
1420	1500		115	3	Land Plug
1422	0				check floats, float held out 25 bbls Acid
1430					Plug Rate - 300x min 4.16 700x
1500					Rig down leave location
					HOT-1197.41' TOT-3136.59
					Hot-550.16' TOT-3136.43
					Total Hot-1747.57' ac-3136.43'
					Thank you!! Ferris Galvão



BASICSM
ENERGY SERVICES

PAGE	CUST NO	YARD #	INVOICE DATE
1 of 1	1000719	1718	08/26/2018
INVOICE NUMBER			
92788584			

Pratt (620) 672-1201
 B CHIEFTAIN OIL COMPANY
 L PO Box: 124
 L KIOWA
 T KS US 67070
 O ATTN: ACCOUNTS PAYABLE

J LEASE NAME Eck 3
 O LOCATION
 B COUNTY Barber
 S STATE KS
 I JOB DESCRIPTION Cement-New Well Casing/Pi
 T JOB CONTACT
 E

JOB #	EQUIPMENT #	PURCHASE ORDER NO.	TERMS	DUE DATE
41129076	20920		Net - 30 days	09/25/2018

	QTY	U of M	UNIT PRICE	INVOICE AMOUNT
<i>For Service Dates: 08/22/2018 to 08/22/2018</i>				
0041129076				
171817128A Cement-New Well Casing/Pi 08/22/2018 Cement 8 5/8 Surface				
60/40 POZ	275.00	EA	7.32	2,013.00 T
Celloflake	69.00	LB	2.26	155.73 T
Calcium Chloride	711.00	LB	0.64	455.40 T
8 5/8" Basket (Blue)	1.00	EA	192.15	192.15
Wooden Cement Plug, 8 5/8"	1.00	EA	97.60	97.60
"Unit Mileage Chg (PU, cars one way)"	25.00	MI	2.74	68.62
Heavy Equipment Mileage	50.00	MI	4.58	228.75
296---Propp & Bulk Del.Chgs per ton mil	1.00	EA	451.78	451.78
Blending & Mixing Service Charge	275.00	SK	0.85	234.85
Plug Container Utilization Charge	1.00	EA	152.50	152.50
Depth Charge; 0-500'	1.00	EA	610.00	610.00
"Service Supervisor, first 8 hrs on loc.	1.00	EA	106.75	106.75

PLEASE REMIT TO:	SEND OTHER CORRESPONDENCE TO:	SUB TOTAL	4,767.13
BASIC ENERGY SERVICES, LP	BASIC ENERGY SERVICES, LP	TAX	196.81
PO BOX 841903	801 CHERRY ST, STE 2100	INVOICE TOTAL	4,963.94
DALLAS, TX 75284-1903	FORT WORTH, TX 76102		

Customer <i>Christal</i>	Lease No.	Date <i>6-2-18</i>
Lease <i>202</i>	Well # <i>3</i>	
Field Order # <i>1712</i>	Station <i>Pratt</i>	Casing <i>5.5</i>
	Depth <i>240</i>	County <i>Pratt</i>
Type Job <i>6.125 5.5" 2-40</i>	Formation	Legal Description <i>132</i>

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size <i>5.5</i>	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
Depth <i>398</i>	Depth	From	To	Pre Pad	Max		5 Min.
Volume <i>25.117</i>	Volume	From	To	Pad	Min		10 Min.
Max Press <i>500</i>	Max Press	From	To	Frac	Avg		15 Min.
Well Connection <i>5.5</i>	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush	Gas Volume		Total Load

Customer Representative <i>Ryan Moltz</i>	Station Manager <i>Justin Westerman</i>	Treater <i>Ferris</i>
Service Units <i>7000 5000 2000 14539 21000</i>		
Driver Names <i>1.100Y 1.100Y 1.100Y 1.100Y 1.100Y</i>		

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
1400					Arrive on location / safety meeting
1515					Rig up / equipment
1915					Test / clean - 1 shot in joint 1
2032	50		10	4.5	Pump H2O ahead
2035	50			4	Start mix / cement / clean / 500
2055			7		Due to rock in well / truck clogging / head
2105	80			4	Exit / start mix / again @ 14.4 / ft
2110	100		30	3	300 Bbls / mix @ 14.4 / ft
2120	100		55	3	Arrive 27' / start mix / ahead
2125	50			3	Drop / plug / start / displacement / failure
2130	110		24		Exit / displacement - 5/0 shot in line
2200					Displacement / clean / ahead
					First 7000 / 5000 / 2000 / 14539 / 21000
					Due to rock in well / truck clogging / head
					Exit / start mix / again @ 14.4 / ft
					300 Bbls / mix @ 14.4 / ft
					Arrive 27' / start mix / ahead
					Drop / plug / start / displacement / failure
					Exit / displacement - 5/0 shot in line
					Displacement / clean / ahead