KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1107566

Form ACO-1
June 2009
Form Must Be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 6768
Name: Carrie Exploration & Development, a General Partnership
Address 1: 210 W 22ND
Address 2:
City: HAYS State: KS Zip: 67601 + __ __ __ __
Contact Person: RON HEROLD
Phone: (913) 961-2760
CONTRACTOR: License # 34484
Name: Fossil Drilling, Inc.
Wellsite Geologist: HERB DEINES
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
☐ Conv. to GSW
☐ Plug Back: Plug Back Total Depth
☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

1/02/2013	1/09/2013	1/10/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-155-21618-00-00
Spot Description:
__ - SW - SW - SW Sec. 8 Twp. 22 S. R. 10 ☐ East ☑ West
330 Feet from ☐ North / ☑ South Line of Section
330 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☑ SW
County: Reno
Lease Name: Sara Well #: C-1
Field Name:
Producing Formation: NA
Elevation: Ground: 1764 Kelly Bushing: 1772
Total Depth: 3650 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 284 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: 22000 ppm Fluid volume: 400 bbls
Dewatering method used: Hauled to Disposal

Location of fluid disposal if hauled offsite:

Operator Name: Bobs Oil Service Inc
Lease Name: Teichmann License #: 32408
Quarter SW Sec. 16 Twp. 22 S. R. 12 ☐ East ☑ West
County: Stafford Permit #: D23722

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

☐ Letter of Confidentiality Received
Date:
☐ Confidential Release Date:
☑ Wireline Log Received
☑ Geologist Report Received
☐ UIC Distribution
ALT ☐ I ☑ II ☐ III Approved by: Deanna Garrison Date: 04/29/2013

Side Two

1107566

Operator Name: Carrie Exploration & Development, a General Partnership Lease Name: Sara Well #: C-1

Sec. 8 Twp. 22 S. R. 10 ☐ East ☑ West County: Reno

INSTRUCTIONS: Show important tops and base 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. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

Electric Log Submitted Electronically ☑ Yes ☐ No
(If no, Submit Copy)

List All E. Logs Run:

DUAL INDUCTION LOG
DUAL COMPENSATED POROSITY LOG
MICRORESISTIVITY LOG

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Attached	Attached	Attached

CASING RECORD ☑ New ☐ Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
SURFACE	12.25	8.625	24	284	COMMON	225	2%Gel, 3%CC

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ Plug Off Zone	-			
	-			

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

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

DISPOSITION OF GAS: ☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION: ☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)* ☐ Other *(Specify)*

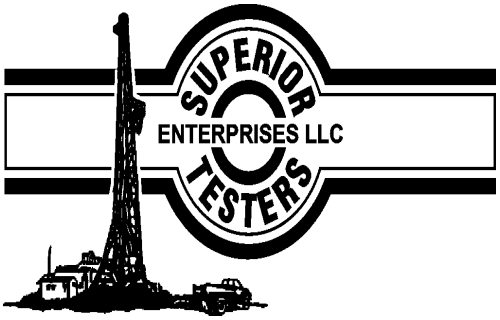
PRODUCTION INTERVAL:

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Carrie Exploration & Development, a General Partnership
Well Name	Sara C-1
Doc ID	1107566

Tops

Name	Top	Datum
HEEBNER SHALE	2985	-1213
DOUGLAS SHALE	3024	-1252
BROWN LIME	3121	-1349
LKC	3150	-1378
BKC	3437	-1665
VIOLA	3497	-1725
ARBUCKLE	3587	-1815
RTD	3650	-1878



DRILL STEM TEST REPORT

Prepared For: **Carrie Exploration**

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

Sara C-1

8-22s-10-w Reno

Start Date: 2013.01.06 @ 08:00:00

End Date: 2013.01.06 @ 15:18:00

Job Ticket #: 17723 DST #: 1

Superior Testers Enterprises LLC

PO Box 138 Great Bend KS 67530

1-800-792-6902

Printed: 2013.01.07 @ 03:38:21

DRILL STEM TEST REPORT

Carrie Exploration

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

8-22s-10-w Reno

Sara C-1

Job Ticket: 17723 **DST#: 1**

Test Start: 2013.01.06 @ 08:00:00

GENERAL INFORMATION:

Formation: **Lansing C-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:00:00
Time Test Ended: 15:18:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 3315-Great Bend-75

Interval: 3164.00 ft (KB) To 3240.00 ft (KB) (TVD)
Total Depth: 3240.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

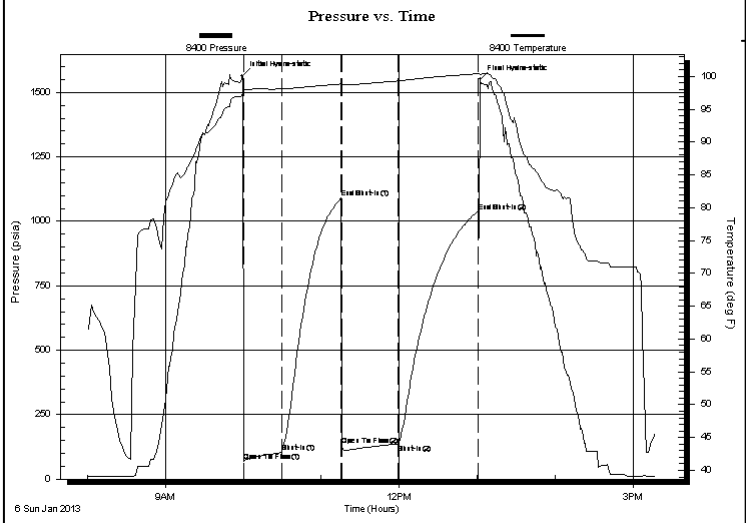
Reference Elevations: 1772.00 ft (KB)
1764.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8400 **Outside**

Press@RunDepth: 137.09 psia @ 3237.07 ft (KB)
Start Date: 2013.01.06 End Date: 2013.01.06
Start Time: 08:00:00 End Time: 15:18:00

Capacity: 5000.00 psia
Last Calib.: 2013.01.07
Time On Btm: 2013.01.06 @ 09:59:30
Time Off Btm: 2013.01.06 @ 13:02:30

TEST COMMENT: 1st Open 30 minutes Fair building blow blew bottom bucket 4 minutes.
1st Shut in 45 minutes No blow back
2nd Open 45 minutes Fair building blow blew bottom bucket 6 minutes.
2nd Shut in 60 minutes Yes blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1565.28	97.43	Initial Hydro-static
1	69.14	97.57	Open To Flow (1)
30	104.33	98.08	Shut-In(1)
76	1089.81	98.85	End Shut-In(1)
77	131.89	98.57	Open To Flow (2)
120	137.09	99.32	Shut-In(2)
182	1037.88	100.40	End Shut-In(2)
183	1550.57	100.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Oil cut mud Oil 10% Mud 90%	0.07
61.00	Oil pluse gas cut muddy w ater	0.30
0.00	Gas 65% Oil 15% Mud 10% Water 10%	0.00
61.00	Oil spotted muddy w ater	0.41
0.00	Mud 20% Water 80%	0.00
0.00	Chlorides 36,000 .3ohms	0.00

Gas Rates

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

DRILL STEM TEST REPORT

Carrie Exploration

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

8-22s-10-w Reno

Sara C-1

Job Ticket: 17723 **DST#: 1**

Test Start: 2013.01.06 @ 08:00:00

GENERAL INFORMATION:

Formation: **Lansing C-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:00:00
Time Test Ended: 15:18:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 3315-Great Bend-75

Interval: 3164.00 ft (KB) To 3240.00 ft (KB) (TVD)
Total Depth: 3240.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

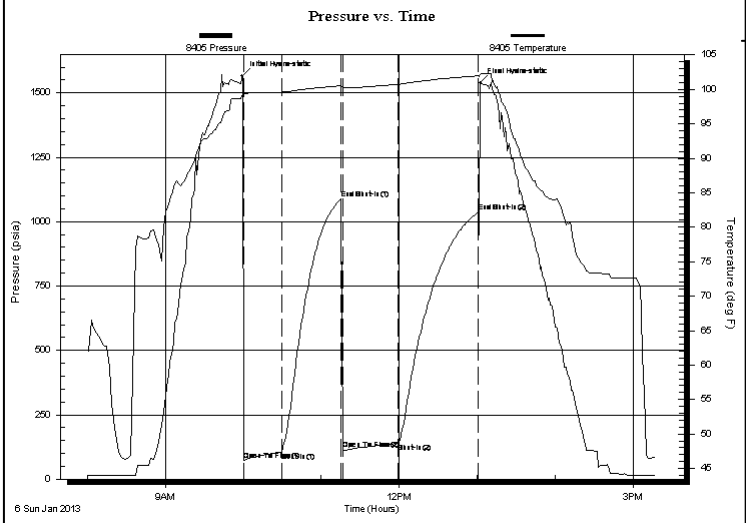
Reference Elevations: 1772.00 ft (KB)
1764.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8405 **Inside**

Press@RunDepth: 1037.60 psia @ 3236.07 ft (KB)
Start Date: 2013.01.06 End Date: 2013.01.06
Start Time: 08:00:00 End Time: 15:18:00

Capacity: 5000.00 psia
Last Calib.: 2013.01.07
Time On Btm: 2013.01.06 @ 09:59:30
Time Off Btm: 2013.01.06 @ 13:02:30

TEST COMMENT: 1st Open 30 minutes Fair building blow blew bottom bucket 4 minutes.
1st Shut in 45 minutes No blow back
2nd Open 45 minutes Fair building blow blew bottom bucket 6 minutes.
2nd Shut in 60 minutes Yes blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1565.54	99.24	Initial Hydro-static
1	72.09	98.96	Open To Flow (1)
30	105.21	99.60	Shut-In(1)
76	1089.48	100.53	End Shut-In(1)
77	117.00	100.22	Open To Flow (2)
120	138.99	100.74	Shut-In(2)
182	1037.60	101.97	End Shut-In(2)
183	1539.19	102.16	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Oil cut mud Oil 10% Mud 90%	0.07
61.00	Oil pluse gas cut muddy w ater	0.30
0.00	Gas 65% Oil 15% Mud 10% Water 10%	0.00
61.00	Oil spotted muddy w ater	0.41
0.00	Mud 20% Water 80%	0.00
0.00	Chlorides 36,000 .3ohms	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carrie Exploration

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

8-22s-10-w Reno

Sara C-1

Job Ticket: 17723 **DST#: 1**

Test Start: 2013.01.06 @ 08:00:00

Tool Information

Drill Pipe:	Length:	3034.00 ft	Diameter:	3.80 inches	Volume:	42.56 bbl	Tool Weight:		2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		20000.00 lb
Drill Collar:	Length:	124.62 ft	Diameter:	2.25 inches	Volume:	0.61 bbl	Weight to Pull Loose:		65000.00 lb
					Total Volume:	43.17 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		14.62 ft					String Weight:	Initial	55000.00 lb
Depth to Top Packer:		3164.00 ft						Final	56000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		76.07 ft							
Tool Length:		96.07 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut-In Tool	5.00			3149.00		
Hydrolic Tool	5.00			3154.00		
Packer	5.00			3159.00	20.00	Bottom Of Top Packer
Packer	5.00			3164.00		
Anchor	5.00			3169.00		
Change Over Sub	0.75			3169.75		
Drill Pipe	31.57			3201.32		
Change Over Sub	0.75			3202.07		
Anchor	33.00			3235.07		
Recorder	1.00	8405	Inside	3236.07		
Recorder	1.00	8400	Outside	3237.07		
Bullnose	3.00			3240.07	76.07	Bottom Packers & Anchor
Total Tool Length:	**96.07**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Carrie Exploration

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

8-22s-10-w Reno

Sara C-1

Job Ticket: 17723 **DST#: 1**

Test Start: 2013.01.06 @ 08:00:00

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:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.00 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psia		
Salinity:	5000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

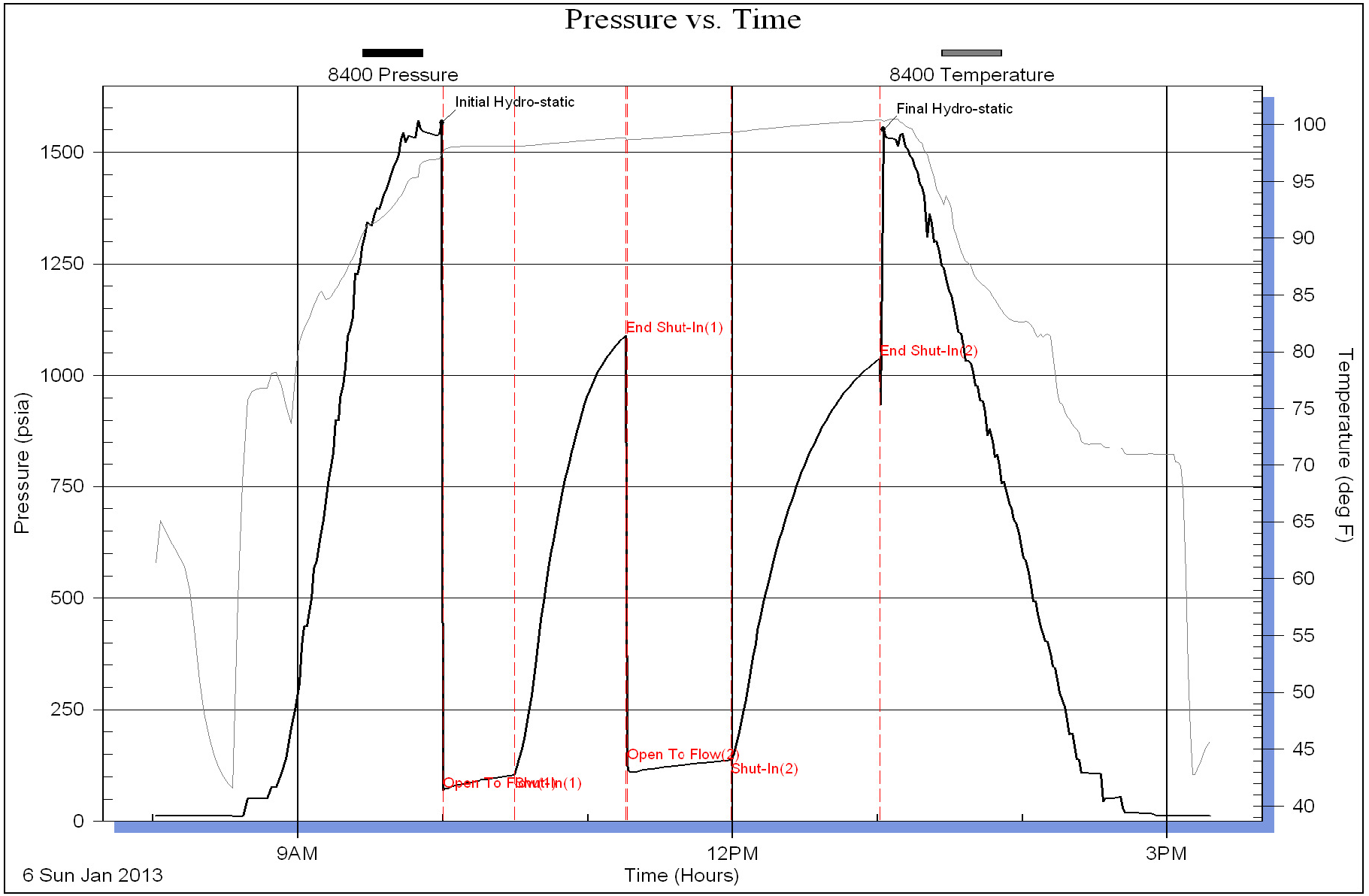
Recovery Table

Length ft	Description	Volume bbl
15.00	Oil cut mud Oil 10% Mud 90%	0.074
61.00	Oil pluse gas cut muddy w ater	0.300
0.00	Gas 65% Oil 15% Mud 10% Water 10%	0.000
61.00	Oil spotted muddy w ater	0.413
0.00	Mud 20% Water 80%	0.000
0.00	Chlorides 36,000 .3ohms	0.000

Total Length: 137.00 ft Total Volume: 0.787 bbl

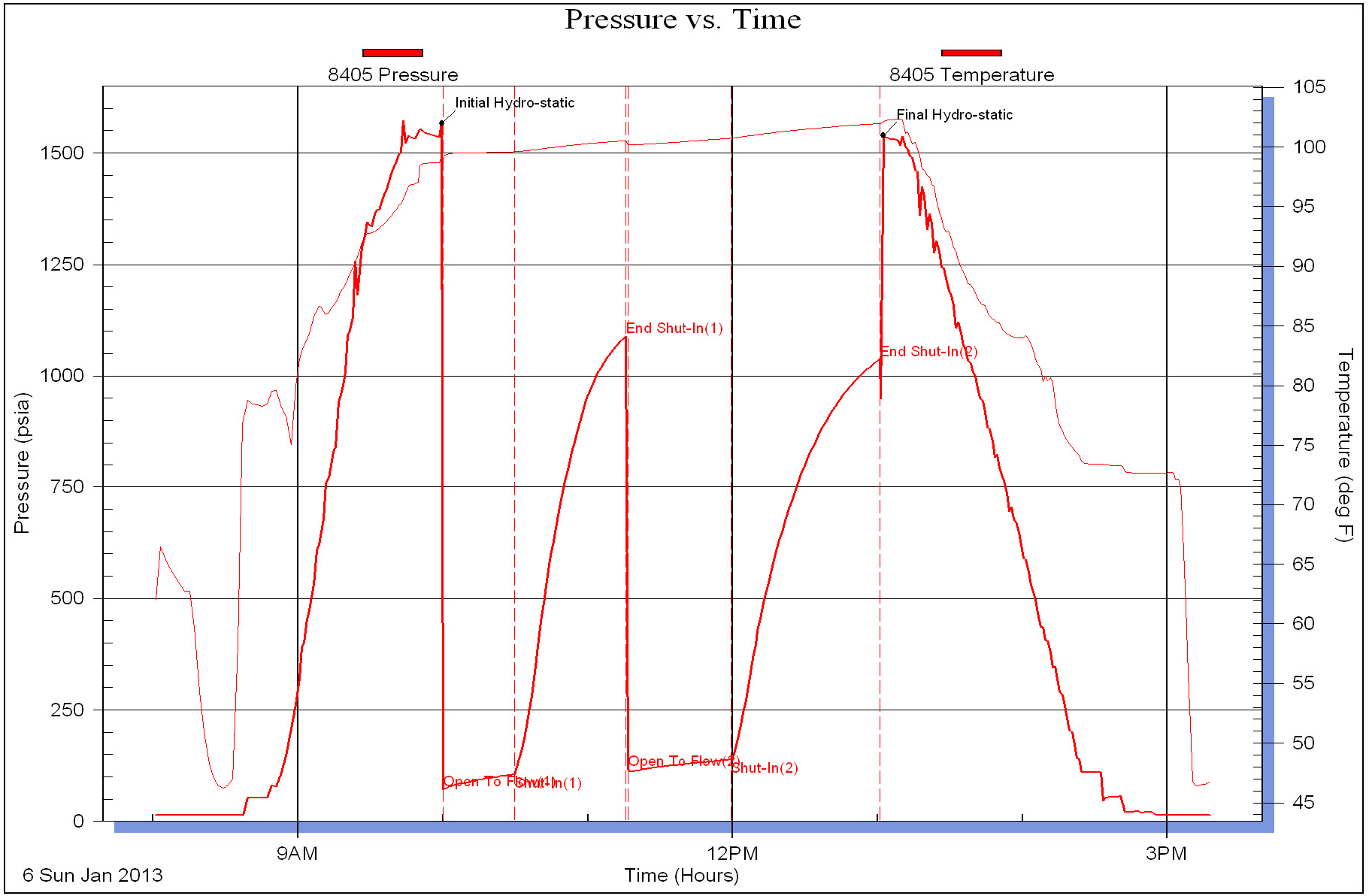
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8400 **Outside** Carrie Exploration Sara C-1 DST Test Number: 1

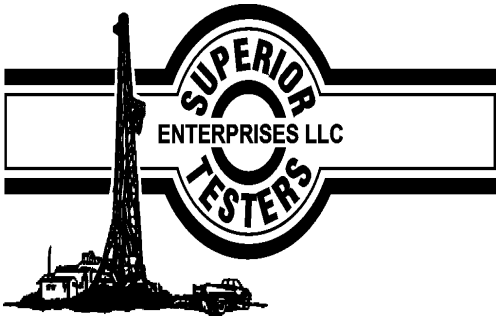


Superior Testers Enterprises LLC Ref. No: 17723 Printed: 2013.01.07 @ 03:38:22

Serial #: 8405 **Inside** Carrie Exploration Sara C-1 DST Test Number: 1



Superior Testers Enterprises LLC Ref. No: 17723 Printed: 2013.01.07 @ 03:38:22



DRILL STEM TEST REPORT

Prepared For: **Carrie Exploration**

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

Sara C-1

8-22s-10-w Reno

Start Date: 2013.01.08 @ 02:55:00

End Date: 2013.01.08 @ 09:27:30

Job Ticket #: 17724 DST #: 2

Superior Testers Enterprises LLC

PO Box 138 Great Bend KS 67530

1-800-792-6902

Printed: 2013.01.08 @ 09:44:54

DRILL STEM TEST REPORT

Carrie Exploration

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

8-22s-10-w Reno

Sara C-1

Job Ticket: 17724 **DST#: 2**

Test Start: 2013.01.08 @ 02:55:00

GENERAL INFORMATION:

Formation: **Simpson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:51:30
Time Test Ended: 09:27:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 3315-Great Bend-75

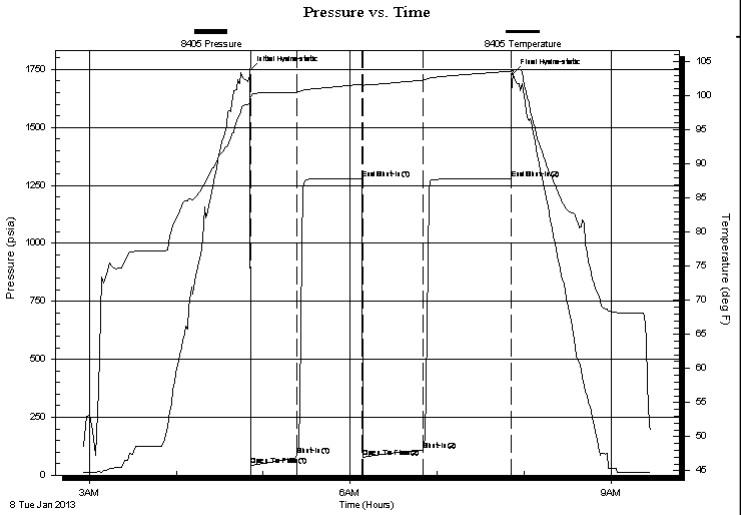
Interval: 3490.00 ft (KB) To 3530.00 ft (KB) (TVD)
Total Depth: 3530.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1772.00 ft (KB)
1764.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8405 **Inside**
Press@RunDepth: 107.92 psia @ 3526.00 ft (KB)
Start Date: 2013.01.08 End Date: 2013.01.08
Start Time: 02:55:00 End Time: 09:27:30

Capacity: 5000.00 psia
Last Calib.: 2013.01.08
Time On Btm: 2013.01.08 @ 04:51:00
Time Off Btm: 2013.01.08 @ 07:52:30

TEST COMMENT: 1st Open 30 minutes Fair building blow blew 4.5 inches .
1st Shut in 45 minutes No blow back.
2nd Open 45 minutes Fair building blow blew 5 inches.
2nd Shut in 60 minutes No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1746.49	100.00	Initial Hydro-static
1	41.36	99.86	Open To Flow (1)
33	84.68	100.51	Shut-In(1)
77	1278.93	101.66	End Shut-In(1)
78	77.40	101.53	Open To Flow (2)
120	107.92	102.30	Shut-In(2)
180	1278.03	103.57	End Shut-In(2)
182	1730.19	103.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
130.00	Oil spotted muddy w ater	0.64
0.00	Mud 20% Water 80%	0.00
0.00	Chlorides37,000 .4 ohms @59 Degrees	0.00

Gas Rates

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

DRILL STEM TEST REPORT

Carrie Exploration

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

8-22s-10-w Reno

Sara C-1

Job Ticket: 17724 **DST#: 2**

Test Start: 2013.01.08 @ 02:55:00

GENERAL INFORMATION:

Formation: **Simpson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:51:30
Time Test Ended: 09:27:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 3315-Great Bend-75

Interval: 3490.00 ft (KB) To 3530.00 ft (KB) (TVD)
Total Depth: 3530.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

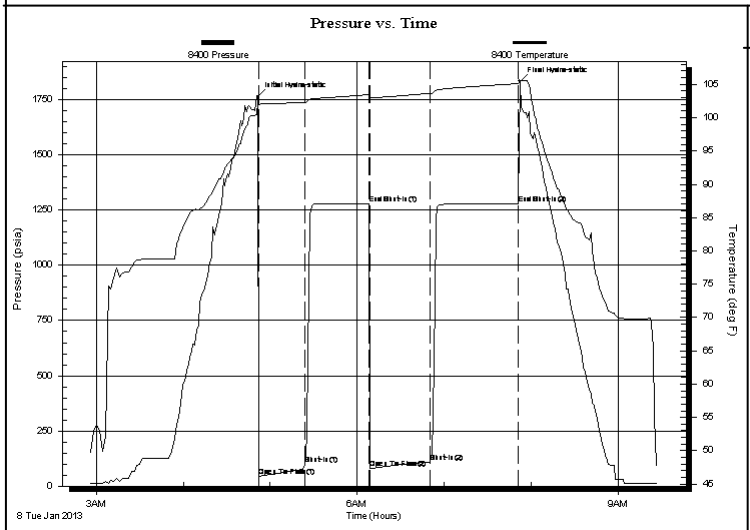
Reference Elevations: 1772.00 ft (KB)
1764.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8400 **Outside**

Press@RunDepth: 1278.27 psia @ 3527.00 ft (KB)
Start Date: 2013.01.08 End Date: 2013.01.08
Start Time: 02:55:00 End Time: 09:28:00

Capacity: 5000.00 psia
Last Calib.: 2013.01.08
Time On Btm: 2013.01.08 @ 04:51:30
Time Off Btm: 2013.01.08 @ 07:52:30

TEST COMMENT: 1st Open 30 minutes Fair building blow blew 4.5 inches .
1st Shut in 45 minutes No blow back.
2nd Open 45 minutes Fair building blow blew 5 inches.
2nd Shut in 60 minutes No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1762.06	102.37	Initial Hydro-static
1	44.03	101.97	Open To Flow (1)
33	96.86	102.29	Shut-In(1)
77	1279.15	103.45	End Shut-In(1)
78	79.36	103.05	Open To Flow (2)
119	109.63	103.64	Shut-In(2)
180	1278.27	105.11	End Shut-In(2)
181	1833.40	105.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
130.00	Oil spotted muddy w ater	0.64
0.00	Mud 20% Water 80%	0.00
0.00	Chlorides37,000 .4 ohms @59 Degrees	0.00

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carrie Exploration

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

8-22s-10-w Reno

Sara C-1

Job Ticket: 17724 **DST#: 2**

Test Start: 2013.01.08 @ 02:55:00

Tool Information

Drill Pipe:	Length:	3323.00 ft	Diameter:	3.80 inches	Volume:	46.61 bbl	Tool Weight:		2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		20000.00 lb
Drill Collar:	Length:	166.62 ft	Diameter:	2.25 inches	Volume:	0.82 bbl	Weight to Pull Loose:		60000.00 lb
					Total Volume:	47.43 bbl	Tool Chased		1.00 ft
Drill Pipe Above KB:		19.62 ft					String Weight:	Initial	58000.00 lb
Depth to Top Packer:		3490.00 ft						Final	58000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		40.00 ft							
Tool Length:		60.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut-In Tool	5.00			3475.00		
Hydrolic Tool	5.00			3480.00		
Packer	5.00			3485.00	20.00	Bottom Of Top Packer
Packer	5.00			3490.00		
Anchor	35.00			3525.00		
Recorder	1.00	8405	Inside	3526.00		
Recorder	1.00	8400	Outside	3527.00		
Bullnose	3.00			3530.00	40.00	Bottom Packers & Anchor
Total Tool Length:	**60.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Carrie Exploration

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

8-22s-10-w Reno

Sara C-1

Job Ticket: 17724 **DST#: 2**

Test Start: 2013.01.08 @ 02:55:00

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:	49.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.00 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psia		
Salinity:	5000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
130.00	Oil spotted muddy w ater	0.639
0.00	Mud 20% Water 80%	0.000
0.00	Chlorides37,000 .4 ohms @59 Degrees	0.000

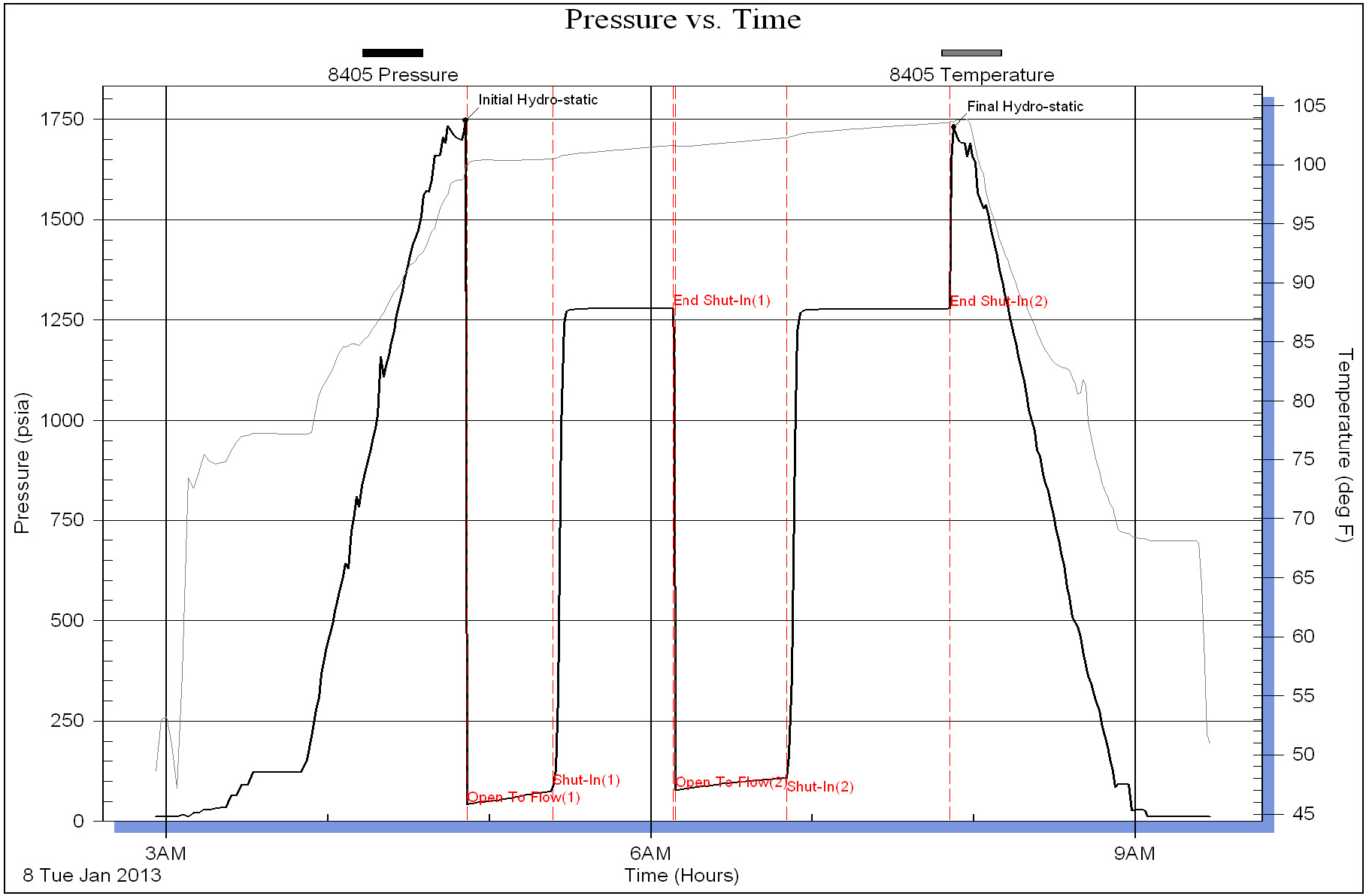
Total Length: 130.00 ft Total Volume: 0.639 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

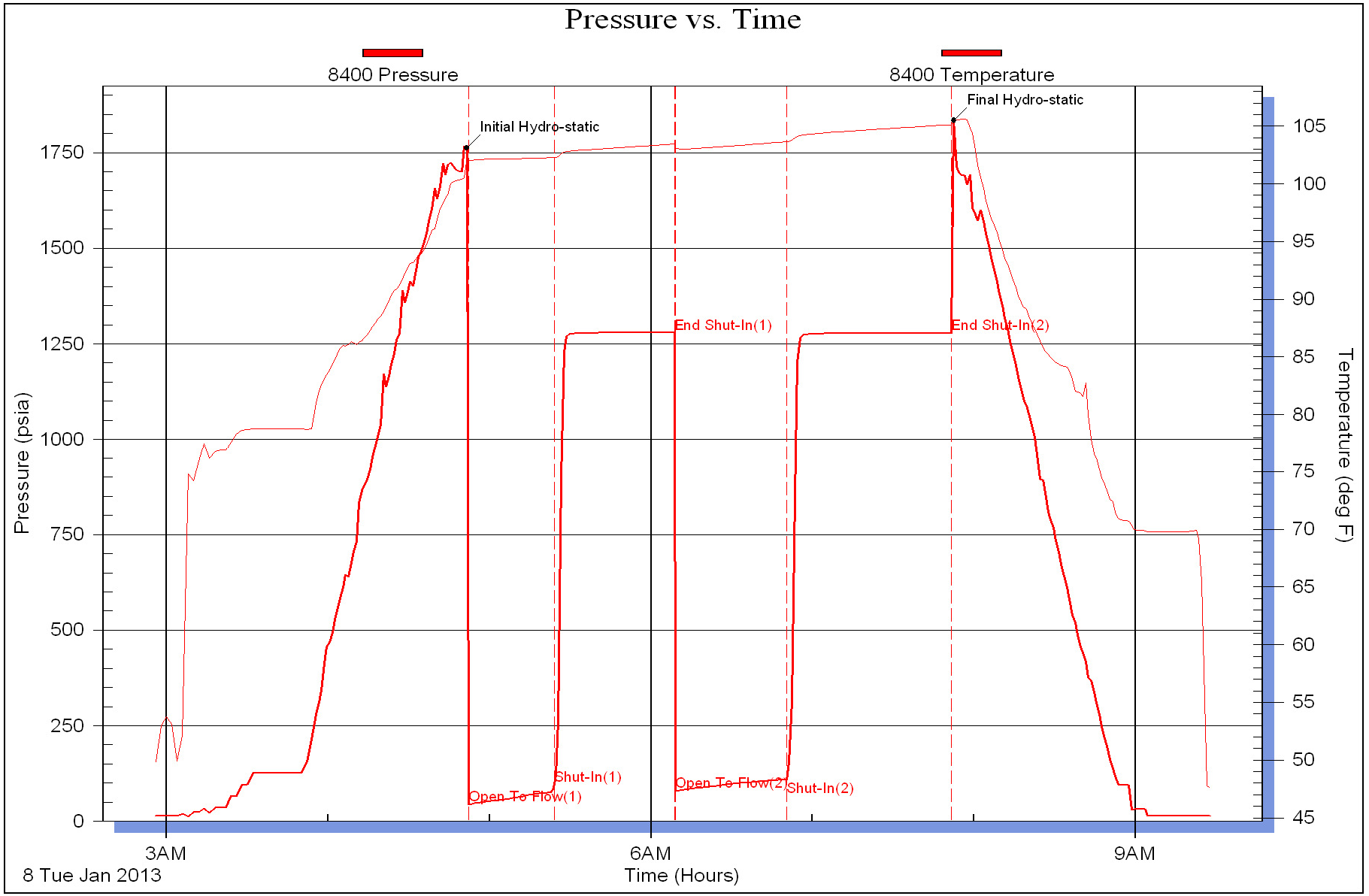
Recovery Comments:

Serial #: 8405 **Inside** Carrie Exploration Sara C-1 DST Test Number: 2

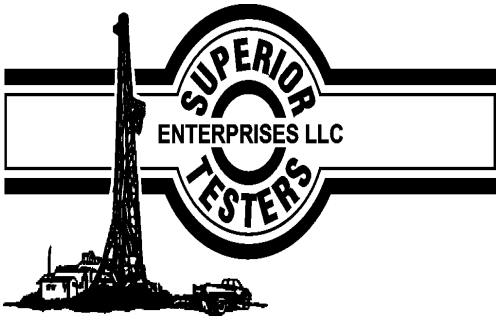


Superior Testers Enterprises LLC Ref. No: 17724 Printed: 2013.01.08 @ 09:44:55

Serial #: 8400 **Outside** Carrie Exploration Sara C-1 DST Test Number: 2



Superior Testers Enterprises LLC Ref. No: 17724 Printed: 2013.01.08 @ 09:44:55



DRILL STEM TEST REPORT

Prepared For: **Carrie Exploration**

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

Sara C-1

8-22s-10-w Reno

Start Date: 2013.01.08 @ 06:35:00

End Date: 2013.01.08 @ 13:01:00

Job Ticket #: 17725 DST #: 3

Superior Testers Enterprises LLC

PO Box 138 Great Bend KS 67530

1-800-792-6902

Printed: 2013.01.09 @ 01:16:23

DRILL STEM TEST REPORT

Carrie Exploration

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

8-22s-10-w Reno

Sara C-1

Job Ticket: 17725 **DST#: 3**

Test Start: 2013.01.08 @ 06:35:00

GENERAL INFORMATION:

Formation: **Lower Simpson sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:12:00
Time Test Ended: 13:01:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 3315-Great Bend-75

Interval: 3540.00 ft (KB) To 3572.00 ft (KB) (TVD)
Total Depth: 3572.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

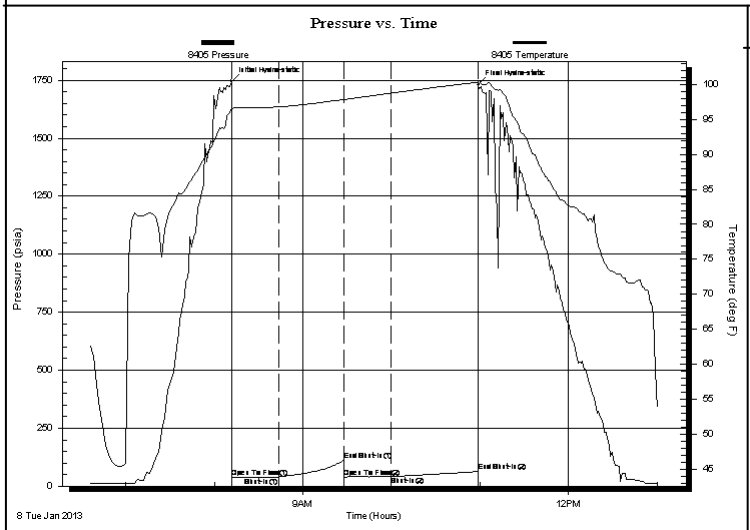
Reference Elevations: 1772.00 ft (KB)
1764.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8405 **Inside**

Press@RunDepth: 40.42 psia @ 3568.00 ft (KB)
Start Date: 2013.01.08 End Date: 2013.01.08
Start Time: 06:35:00 End Time: 13:01:00

Capacity: 5000.00 psia
Last Calib.: 2013.01.09
Time On Btm: 2013.01.08 @ 08:11:30
Time Off Btm: 2013.01.08 @ 10:59:00

TEST COMMENT: 1st Open 30 minutes Weak but steady blow 1/2 inch.
1st Shut in 45 minutes No blow back
2nd Open 30 minutes Dead Flushed tool 20 minutes in no help.
2nd Shut in 60 minutes No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1745.60	96.51	Initial Hydro-static
1	39.37	96.36	Open To Flow (1)
32	39.16	96.81	Shut-In(1)
76	112.35	97.86	End Shut-In(1)
77	39.74	97.85	Open To Flow (2)
108	40.42	98.76	Shut-In(2)
168	63.20	100.32	End Shut-In(2)
168	1729.35	100.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
7.00	Slightly oil cut mud 100% Mud	0.03

Gas Rates

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

DRILL STEM TEST REPORT

Carrie Exploration

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

8-22s-10-w Reno

Sara C-1

Job Ticket: 17725 **DST#: 3**

Test Start: 2013.01.08 @ 06:35:00

GENERAL INFORMATION:

Formation: **Lower Simpson sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:12:00
Time Test Ended: 13:01:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 3315-Great Bend-75

Interval: 3540.00 ft (KB) To 3572.00 ft (KB) (TVD)
Total Depth: 3572.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

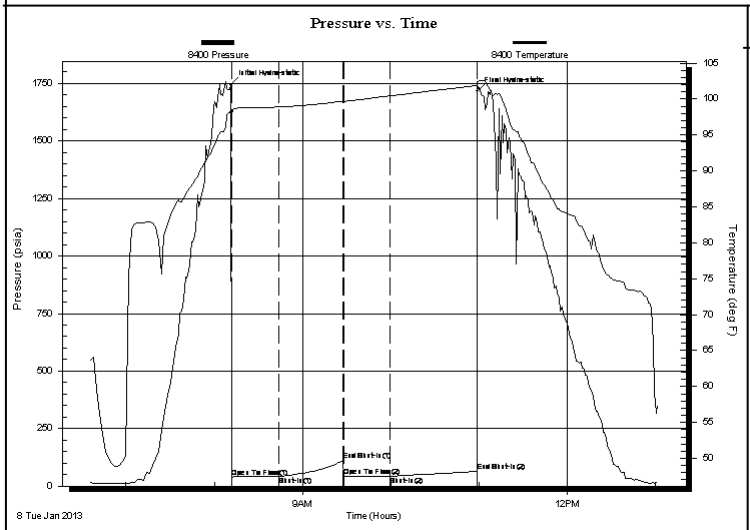
Reference Elevations: 1772.00 ft (KB)
1764.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8400 **Outside**

Press@RunDepth: 64.63 psia @ 3569.00 ft (KB)
Start Date: 2013.01.08 End Date: 2013.01.08
Start Time: 06:35:00 End Time: 13:01:30

Capacity: 5000.00 psia
Last Calib.: 2013.01.09
Time On Btm: 2013.01.08 @ 08:11:30
Time Off Btm: 2013.01.08 @ 10:59:00

TEST COMMENT: 1st Open 30 minutes Weak but steady blow 1/2 inch.
1st Shut in 45 minutes No blow back
2nd Open 30 minutes Dead Flushed tool 20 minutes in no help.
2nd Shut in 60 minutes No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1742.82	98.46	Initial Hydro-static
1	39.13	97.84	Open To Flow (1)
33	41.29	98.90	Shut-In(1)
76	113.69	99.70	End Shut-In(1)
77	41.57	99.66	Open To Flow (2)
108	42.41	100.44	Shut-In(2)
167	64.63	101.88	End Shut-In(2)
168	1715.79	102.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
7.00	Slightly oil cut mud 100% Mud	0.03

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Carrie Exploration

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

8-22s-10-w Reno

Sara C-1

Job Ticket: 17725 **DST#: 3**

Test Start: 2013.01.08 @ 06:35:00

Tool Information

Drill Pipe:	Length:	3379.00 ft	Diameter:	3.80 inches	Volume:	47.40 bbl	Tool Weight:		2000.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		20000.00 lb
Drill Collar:	Length:	166.62 ft	Diameter:	2.25 inches	Volume:	0.82 bbl	Weight to Pull Loose:		85000.00 lb
					Total Volume:	48.22 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		25.62 ft					String Weight:	Initial	58000.00 lb
Depth to Top Packer:		3540.00 ft						Final	58000.00 lb
Depth to Bottom Packer:		ft							
Interval betw een Packers:		32.00 ft							
Tool Length:		52.00 ft							
Number of Packers:		2	Diameter:	6.75 inches					

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut-In Tool	5.00			3525.00		
Hydrolic Tool	5.00			3530.00		
Packer	5.00			3535.00	20.00	Bottom Of Top Packer
Packer	5.00			3540.00		
Anchor	27.00			3567.00		
Recorder	1.00	8405	Inside	3568.00		
Recorder	1.00	8400	Outside	3569.00		
Bullnose	3.00			3572.00	32.00	Bottom Packers & Anchor
Total Tool Length:	**52.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Carrie Exploration

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

8-22s-10-w Reno

Sara C-1

Job Ticket: 17725 **DST#: 3**

Test Start: 2013.01.08 @ 06:35:00

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:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	8.00 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psia		
Salinity:	4500.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

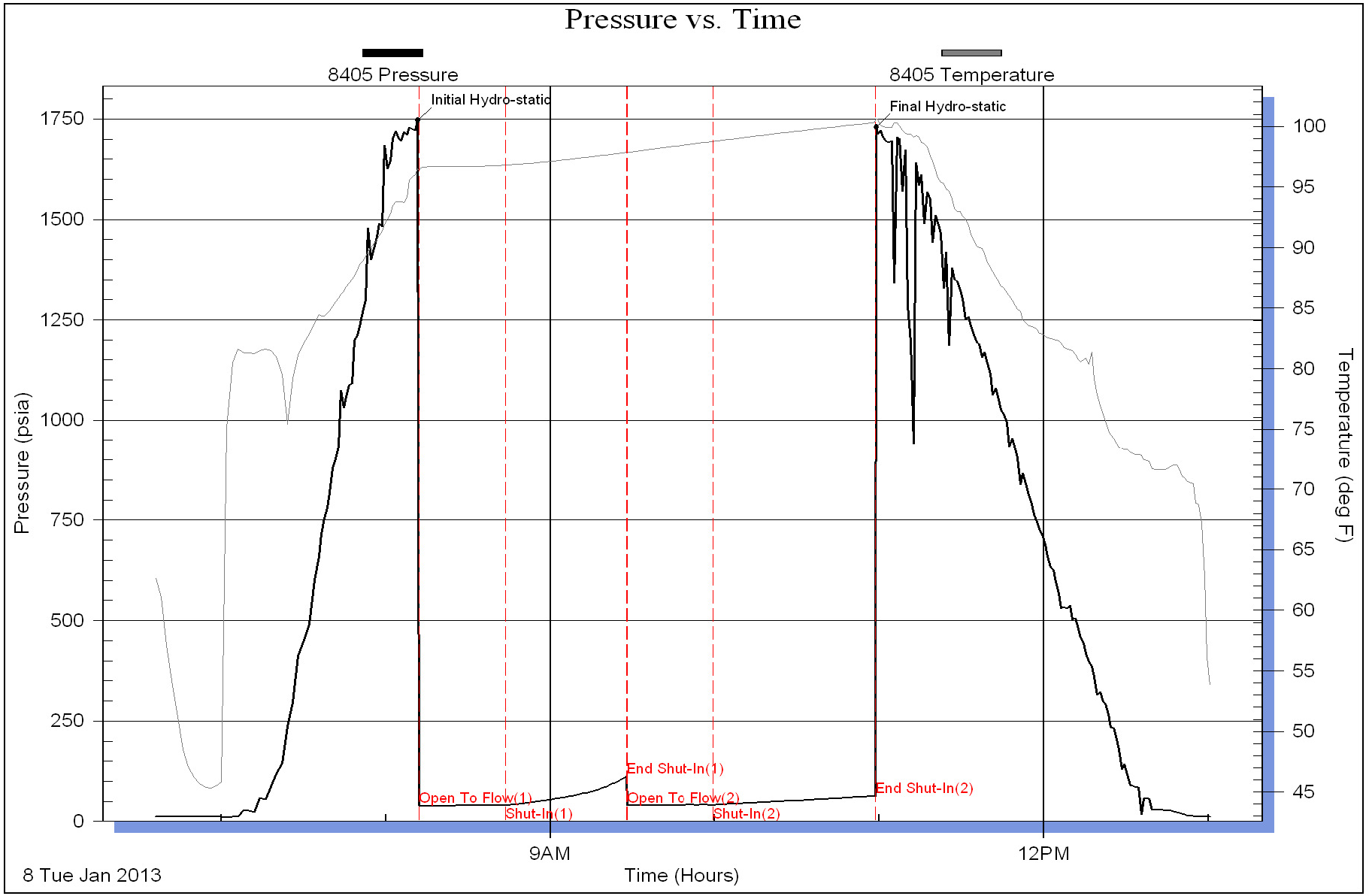
Recovery Table

Length ft	Description	Volume bbl
7.00	Slightly oil cut mud 100% Mud	0.034

Total Length: 7.00 ft Total Volume: 0.034 bbl

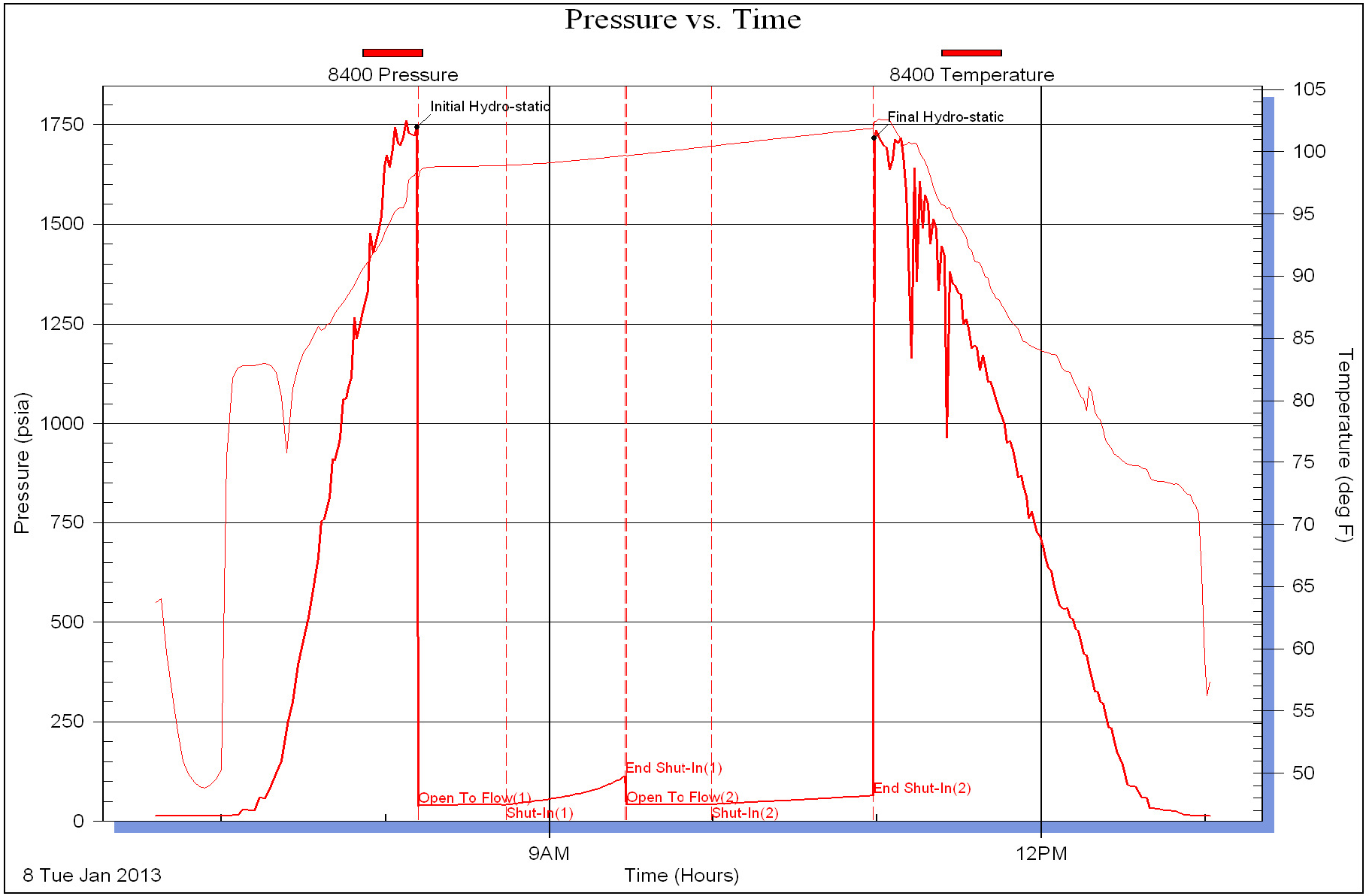
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8405 **Inside** Carrie Exploration Sara C-1 DST Test Number: 3



Superior Testers Enterprises LLC Ref. No: 17725 Printed: 2013.01.09 @ 01:16:24

Serial #: 8400 **Outside** Carrie Exploration Sara C-1 DST Test Number: 3



Superior Testers Enterprises LLC Ref. No: 17725 Printed: 2013.01.09 @ 01:16:24

OPERATOR

Company:	CARRIE EXPLORATION AND DEVELOPMENT		
Address:	210 W 22ND STREET HAYS, KANSAS 67601		
Contact Geologist:	RON HEROLD		
Contact Phone Nbr:	913-961-2760		
Well Name:	SARA C-1		
Location:	SW SW SW Sec 8-22s-10w	API:	15-155-21,618-00-00
Pool:	WILDCAT	Field:	UNNAMED
State:	KANSAS	Country:	USA

Scale 1:240 Imperial

Well Name:	SARA C-1		
Surface Location:	SW SW SW Sec 8-22s-10w		
Bottom Location:			
API:	15-155-21,618-00-00		
License Number:	6768		
Spud Date:	1/2/2013	Time:	11:00 PM
Region:	RENO COUNTY		
Drilling Completed:	1/9/2013	Time:	10:59 AM
Surface Coordinates:	330' FSL & 330' FWL		
Bottom Hole Coordinates:			
Ground Elevation:	1764.00ft		
K.B. Elevation:	1772.00ft		
Logged Interval:	2600.00ft	To:	3650.00ft
Total Depth:	3650.00ft		
Formation:	VIOLA		
Drilling Fluid Type:	CHEMICAL/FRESH WATER GEL		

SURFACE CO-ORDINATES

Well Type:	Vertical		
Longitude:		Latitude:	
N/S Co-ord:	330' FSL		
E/W Co-ord:	330' FWL		

LOGGED BY

SOLUTIONS CONSULTING

Company:	SOLUTIONS CONSULTING		
Address:	108 W 35TH HAYS, KS 67601		
Phone Nbr:	(785) 639-1337		
Logged By:	Geologist	Name:	HERB DEINES

CONTRACTOR

Contractor:	FOSSIL DRILLING INC.		
Rig #:	2		
Rig Type:	MUD ROTARY		
Spud Date:	1/2/2013	Time:	11:00 PM
TD Date:	1/9/2013	Time:	10:59 AM
Rig Release:	1/10/2013	Time:	6:30 AM

ELEVATIONS

K.B. Elevation:	1772.00ft	Ground Elevation:	1764.00ft
K.B. to Ground:	8.00ft		

NOTES

RECOMMENDATION TO PLUG AND ABANDON WELL BASED ON NEGATIVE RESULTS OF THREE DRILL STEM

TESTS OVER PRIMARY ZONES OF INTEREST.

OPEN HOLE LOGGING BY PIONEER ENERGY SERVICES: DUAL INDUCTION LOG, DUAL COMPENSATED POROSITY LOG, MICRORESISTIVITY LOG

DRILL STEM TESTING BY SUPERIOR TESTERS ENTERPRISES, LLC: THREE (3) CONVENTIONAL TESTS

FORMATION TOPS SUMMARY AND CHRONOLOGY OF DAILY ACTIVITY

SARA C # 1
330' FSL & 330' FWL, SW/4
Sec 8-22s-10w
1764' GL 1772' KB

FORMATION	SAMPLE TOPS	LOG TOPS
Heebner Shale	2986-1214	**2985-1213**
Toronto	3008-1236	**3007-1235**
Douglas Shale	3026-1254	**3024-1252**
Brown Lime	3123-1351	**3121-1349**
LKC	3149-1377	**3150-1378**
BKC		**3437-1665**
Viola		**3497-1725**
Simpson Shale		**3525-1753**
Simpson Dolomite		**3543-1771**
Simpson Sand		**3555-1783**
Arbuckle		**3587-1815**
RTD	3650-1878	
LTD		**3650-1878**

SUMMARY OF DAILY ACTIVITY

1-02-13	**Spud, set 8 5/8" surface casing to 284' w/ 225 sxs Common, 2%gel, 3%CC, plug down 8:30PM**
1-03-13	**291', replace drill line, drill plug, drilling**
1-04-13	**1504', drilling**
1-05-13	**2380', drilling**
1-06-12	**3125 ', drilling, short trip 20STDs, DST # 1 3164'-3240' "C-F" LKC**
1-07-13	**3240', drilling**
1-08-13	**3530', DST # 2 3490'-3530' Viola, DST # 3 3540'-3572', Simpson**
1-09-13	**3578', RTD 3650'@ 10:59AM, CCH, Logs, P&A**
1-10-13	**3650', finish laying down DP, last plug down 6:30AM**

DST # 1 3164' TO 3240' "C-F" LKC

DRILL STEM TEST REPORT

Carrie Exploration

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

8-22s-10-w Reno

Sara C-1

Job Ticket: 17723 **DST#: 1**

Test Start: 2013.01.06 @ 08:00:00

GENERAL INFORMATION:

Formation: **Lansing C-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:00:00
Time Test Ended: 15:18:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 3315-Great Bend-75

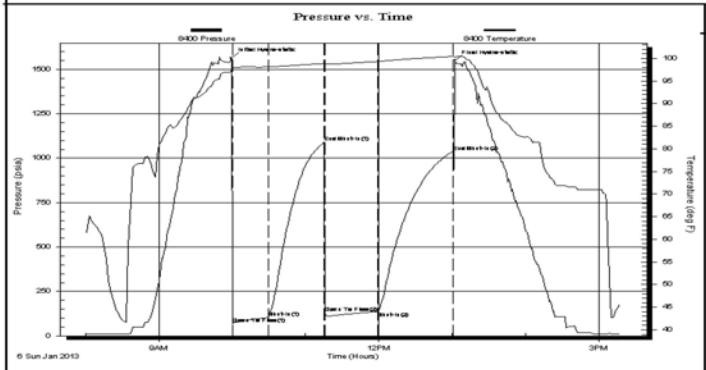
Interval: 3164.00 ft (KB) To 3240.00 ft (KB) (TVD)
Total Depth: 3240.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1772.00 ft (KB)
1764.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8400 **Outside**
Press@RunDepth: 137.09 psia @ 3237.07 ft (KB)
Start Date: 2013.01.06 End Date: 2013.01.06
Start Time: 08:00:00 End Time: 15:18:00

Capacity: 5000.00 psia
Last Calib.: 2013.01.07
Time On Btm: 2013.01.06 @ 09:59:30
Time Off Btm: 2013.01.06 @ 13:02:30

TEST COMMENT: 1st Open 30 minutes Fair building blow blew bottom bucket 4 minutes.
1st Shut in 45 minutes No blow back
2nd Open 45 minutes Fair building blow blew bottom bucket 6 minutes.
2nd Shut in 60 minutes Yes blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1565.28	97.43	Initial Hydro-static
1	69.14	97.57	Open To Flow (1)
30	104.33	98.08	Shut-In(1)
76	1089.81	98.85	End Shut-In(1)
77	131.89	98.57	Open To Flow (2)
120	137.09	99.32	Shut-In(2)
182	1037.88	100.40	End Shut-In(2)
183	1550.57	100.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	Oil cut mud Oil 10% Mud 90%	0.07
61.00	Oil pluse gas cut muddy w ater	0.30
0.00	Gas 65% Oil 15% Mud 10% Water 10%	0.00
61.00	Oil spotted muddy w ater	0.41
0.00	Mud 20% Water 80%	0.00
0.00	Chlorides 36,000 .3ohms	0.00

Gas Rates

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

Superior Testers Enterprises LLC Ref. No: 17723 Printed: 2013.01.07 @ 03:38:21

DST # 2 3490' TO 3530' VIOLA

DRILL STEM TEST REPORT

Carrie Exploration

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

8-22s-10-w Reno

Sara C-1

Job Ticket: 17724 **DST#: 2**

Test Start: 2013.01.08 @ 02:55:00

GENERAL INFORMATION:

Formation: **Simpson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 04:51:30
Time Test Ended: 09:27:30

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 3315-Great Bend-75

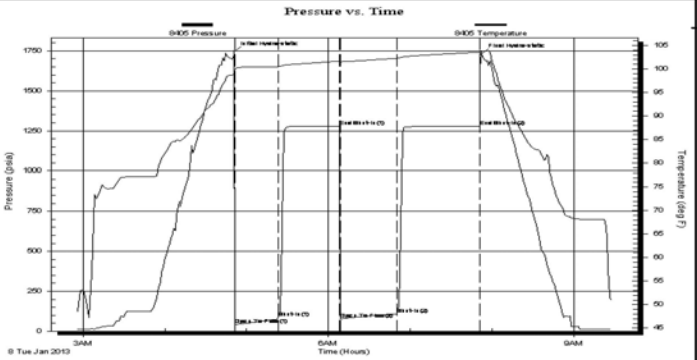
Interval: 3490.00 ft (KB) To 3530.00 ft (KB) (TVD)
Total Depth: 3530.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1772.00 ft (KB)
1764.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8405 **Inside**
Press@RunDepth: 107.92 psia @ 3526.00 ft (KB)
Start Date: 2013.01.08 End Date: 2013.01.08
Start Time: 02:55:00 End Time: 09:27:30

Capacity: 5000.00 psia
Last Calib.: 2013.01.08
Time On Btm: 2013.01.08 @ 04:51:00
Time Off Btm: 2013.01.08 @ 07:52:30

TEST COMMENT: 1st Open 30 minutes Fair building blow blew 4.5 inches .
1st Shut in 45 minutes No blow back.
2nd Open 45 minutes Fair building blow blew 5 inches.
2nd Shut in 60 minutes No blow back.



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1746.49	100.00	Initial Hydro-static
1	41.36	99.86	Open To Flow (1)
33	84.68	100.51	Shut-In(1)
77	1278.93	101.66	End Shut-In(1)
78	77.40	101.53	Open To Flow (2)
120	107.92	102.30	Shut-In(2)
180	1278.03	103.57	End Shut-In(2)
182	1730.19	103.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
130.00	Oil spotted muddy w ater	0.64
0.00	Mud 20% Water 80%	0.00
0.00	Chlorides37,000 .4 ohms @59 Degrees	0.00

Gas Rates

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

Superior Testers Enterprises LLC Ref. No: 17724 Printed: 2013.01.08 @ 09:44:55

DST # 3 3540' TO 3572' SIMPSON SAND

SUPERIOR ENTERPRISES LLC TESTERS

DRILL STEM TEST REPORT

Carrie Exploration

210 West 22nd Hays Kansas
67601

ATTN: Herb Deines

8-22s-10-w Reno

Sara C-1

Job Ticket: 17725 **DST#: 3**

Test Start: 2013.01.08 @ 06:35:00

GENERAL INFORMATION:

Formation: **Lower Simpson sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:12:00
Time Test Ended: 13:01:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Dustin Ellis
Unit No: 3315-Great Bend-75

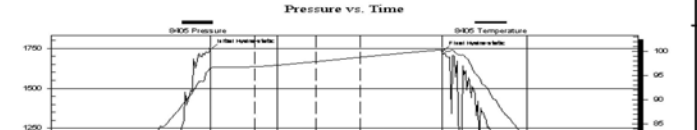
Interval: 3540.00 ft (KB) To 3572.00 ft (KB) (TVD)
Total Depth: 3572.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1772.00 ft (KB)
1764.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8405 **Inside**
Press@RunDepth: 40.42 psia @ 3568.00 ft (KB)
Start Date: 2013.01.08 End Date: 2013.01.08
Start Time: 06:35:00 End Time: 13:01:00

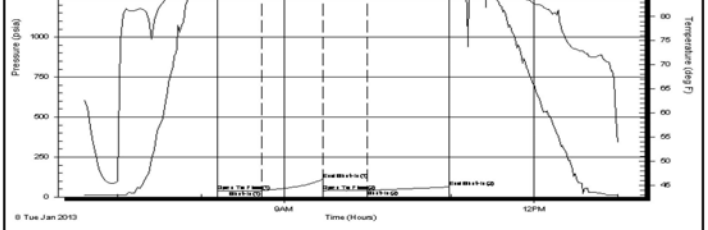
Capacity: 5000.00 psia
Last Calib.: 2013.01.09
Time On Btm: 2013.01.08 @ 08:11:30
Time Off Btm: 2013.01.08 @ 10:59:00

TEST COMMENT: 1st Open 30 minutes Weak but steady blow 1/2 inch.
1st Shut in 45 minutes No blow back
2nd Open 30 minutes Dead Flushed tool 20 minutes in no help.
2nd Shut in 60 minutes No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1745.60	96.51	Initial Hydro-static
1	39.37	96.36	Open To Flow (1)
32	39.16	96.81	Shut-In(1)



76	112.35	97.86	End Shut-In(1)
77	39.74	97.85	Open To Flow (2)
108	40.42	98.76	Shut-In(2)
168	63.20	100.32	End Shut-In(2)
168	1729.35	100.59	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
7.00	Slightly oil cut mud 100% Mud	0.03

Gas Rates

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

Superior Testers Enterprises LLC Ref. No: 17725 Printed: 2013.01.09 @ 01:16:23

ROCK TYPES

	Cht		Dolprim		shale, grn		Shcol
	Cht vari		Dolsec		shale, gry		Lscongl
	Clystcol		Lmst fw<7		Carbon Sh		CglSandy
	Chtcongl		Lmst fw7>		shale, red		

ACCESSORIES

MINERAL
- Chert, dark
- P Pyrite
- Sandy
- Chert White
- Euhed rhombs of dol or

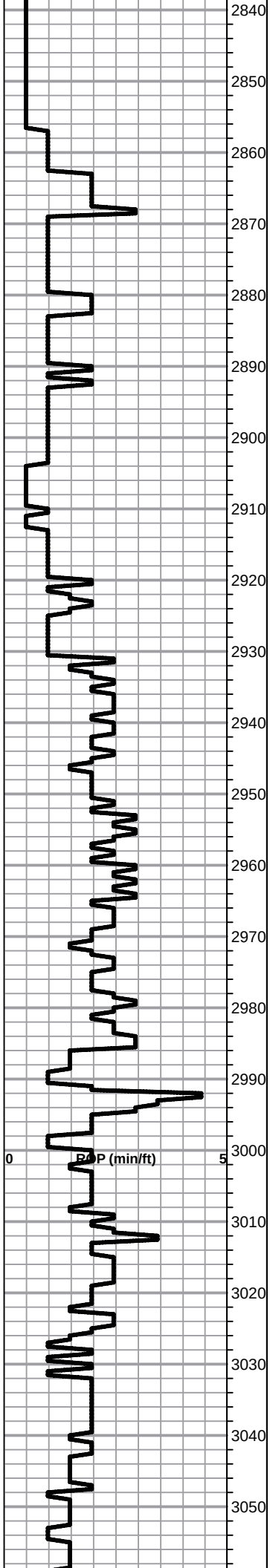
FOSSIL
- F Fossils < 20%
- Oolite
- Oomoldic

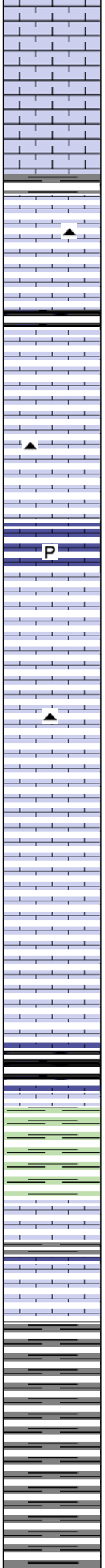
OTHER SYMBOLS

DST
- DST Int
- DST alt
- Core

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)

Curve Track #1 ROP (min/ft) 1:240 Imperial	Depth | Intervals Cored Interval DST Interval	DST	Lithology	Oil Show	Geological Descriptions	TG, C1 - C5 1:240 Imperial
0 ROP (min/ft) 5 0 ROP (min/ft) 5	2800 2810 2820 2830				BEGIN 1' DRILL TIME FROM 2800' TO RTD BEGIN 10' WET AND DRY SAMPLES FROM 2900' TO RTD	**8 5/8" SURFACE CASING SET TO 284' W/ 225 SXS COMMON, 2%GEL. 3%CC** **SURVEY @291' 1/4 DEGREE** **SURVEY @ 1411' 1/4 DEGR** **SURVEY @2446' 3/4 DEGR**





Lime, lt-med brn-grayish brn, fnxln

Lime, lt brn, granular, NS

Lime, lt-med brn, fnxln-granular, slightly fossiliferous

Shale, gray-black carbonaceous

Lime, crm-lt brn-lt grayish brn, fnxln-granular, slighlty fossiliferous

Lime, crm-lt brn, granular with scattered fususlinds

Lime, crm-lt brn, granular, scattered pyrite clusters

Lime, lt-med brn, fnxln

Lime, lt-med brn, fnxln, slightly fossiliferous

Lime, lt-med brn, fnxln, slightly fossilifeorus

Lime, lt-med brn, fn-vfxln grading into lt brn granular

Lime, lt-med brn, fnxln-granular

HEEBNER SHALE 2985-1213

Shale, black carbonaceous, blocky
Lime, lt-med brn fn-vfxln, hard on crush

Shale, grayish green, soft, blocky

TORONTO 3007-1235

Lime, white-crm, fnxln, NS

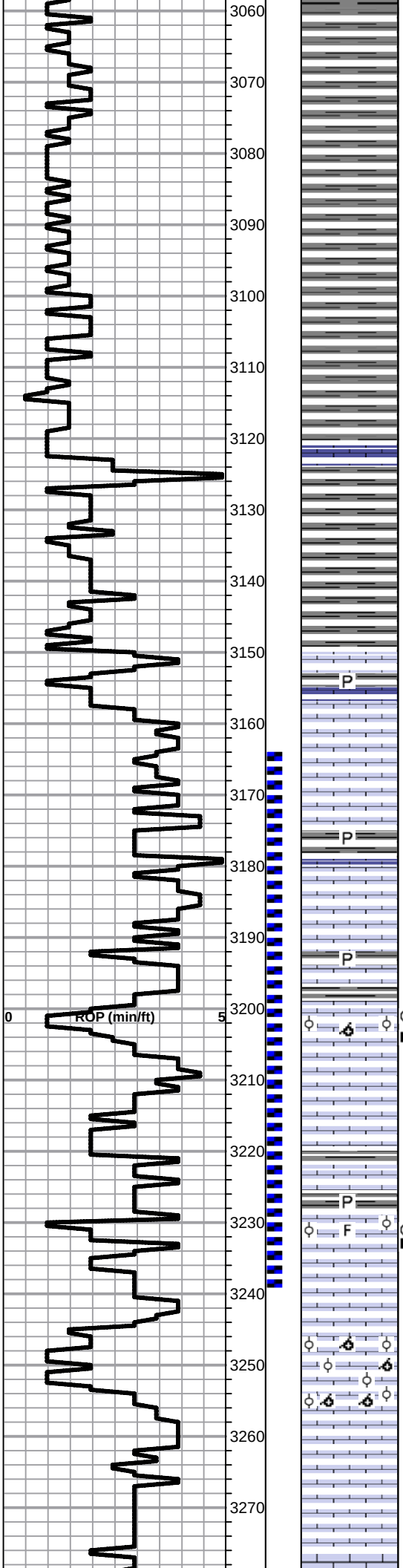
Lime, lt-med brn, fnxln, NS

DOUGLAS SHALE 3024-1252

Shale, lt gray, soft, blocky

Shale, lt-med gray, soft, blocky

Shale, lt-med gray, soft, blocky with scattered lt gray, fine, poorly sorted, glauconitic, gritty sandstone, NS or staining



Shale, lt-med gray, soft, blocky with mixed sandstone clusters as above

Shale, lt gray, soft, blocky, micaceous with scattered fine, green, glaconitic sandstone, NS

Shale, lt gray, soft, with sticky, argillaceous in part

Shale, lt gray, soft with sticky clumps in part

BROWN LIME 3121-1349

Lime, med-dark brn, fnxln

SHORT TRIP @ 3125'
PULLED 20 STDS

Shale, med gray, blocky

Shale, lt gray, soft, sticky clumps in part

LKC 3150-1378

Lime, lt-med brn, fnxln, fossiliferous in part
Shale, lt gray, pyritic clusters

Lime, lt-med brn, fnxln, fossiliferous, NS

Lime, med brn-grayish brn, fnxln, NS

Shale, lt gray, blocky, pyritic clusters

Lime, med brn-grayish brn, fnxln

Lime, med brn-grayish brn, fnxln, well cemented fossiliferous, NS

DST # 1 3164' TO 3240' SEE HEADER FOR TEST SUMMARY

Lime, crm, oolitic/oolmoldic in part, lt scattered staining in interoolitic porosity with scattered, fine vugs with fine crystal growth in pores.

CFS @ 3210'

Lime, med brn, fn-vfxln, slightly fossiliferous

Shale, dark gray, fossil fragments in part
Lime, med brn-grayish brn, fnxln, fine gray speckling in part

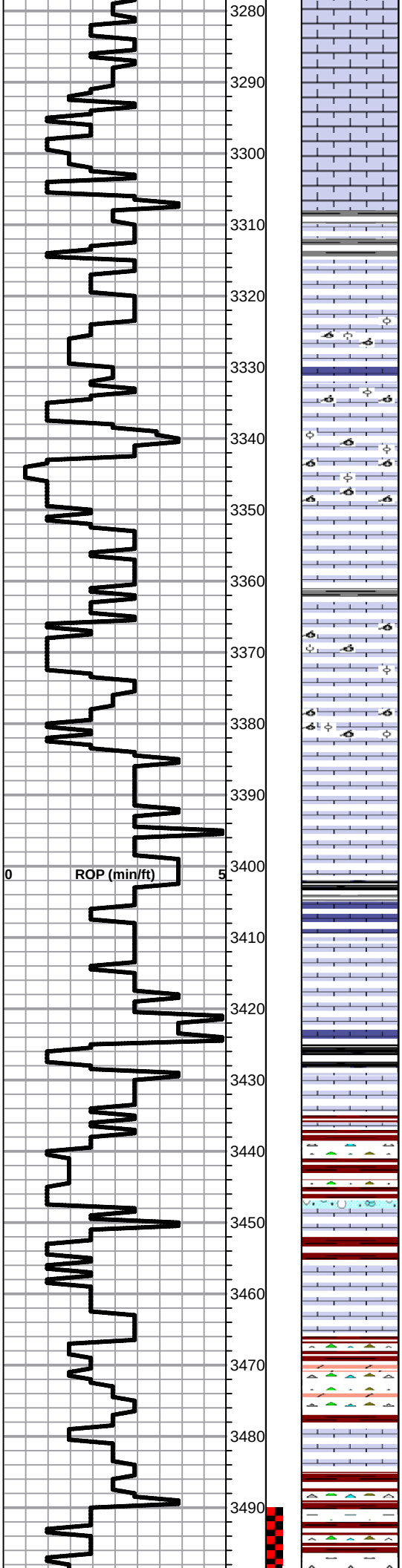
Lime, grayish brn, fnxln-granular with mixed oolites and fossil fragments, VMSFO on break, V Lt odor

CFS @ 3240'

Lime, lt-med brn, oolitic/oolmoldic, NS, No staining, much of fine oolitic material well cemented with no visible porosity

Lime, lt-med brn, fn-vfxln, hard on crush, thin fusulinid beds

Lime, lt brn, fnxln



Lime, lt-med brn, fnxln

Lime, lt-med brn, fn-vfxln, scattered fossils-fusulinids

Lime, lt-med brn, fnxln-oolmoldic, NS

CFS @ 3310'

Shale, dark gray, fossil fragments
Lime, lt-med brn, fnxln

Lime, crm, fnxln with scattered oolitic beds, NS

Lime, crm-lt brn, fnxln with scattered oolmoldic material, NS

Lime, crm-lt brn, fnxln with scattered oolmoldic material, NS

Lime, crm-lt brn, oolmolic grading to fnxln, NS

Lime, lt brn, fnxln

Lime, lt brn-lt grayish brn, fnxln-oolmoldic, NS

Lime, crm-lt brn, fnxln-oolmoldic, NS, slight bed chalk in part

Lime, crm-lt brn, fnxln, slight chalk in part

Lime, lt-med brn, fnxln, slight chalk in part

Shale, gray-black, soft, blocky
Lime, lt brn, fnxln

Lime, lt brn, fnxln

Shale, gray-black, soft, blocky
Lime, lt-med brn, fnxln

BKC 3437-1665

Shale, reddish brn, soft, blocky with scattered vari colored cherts and nodules

Lime, clastic mix in part to lt-med brn, fnxln

Shale, reddish brn

Lime, lt brn, fnxln

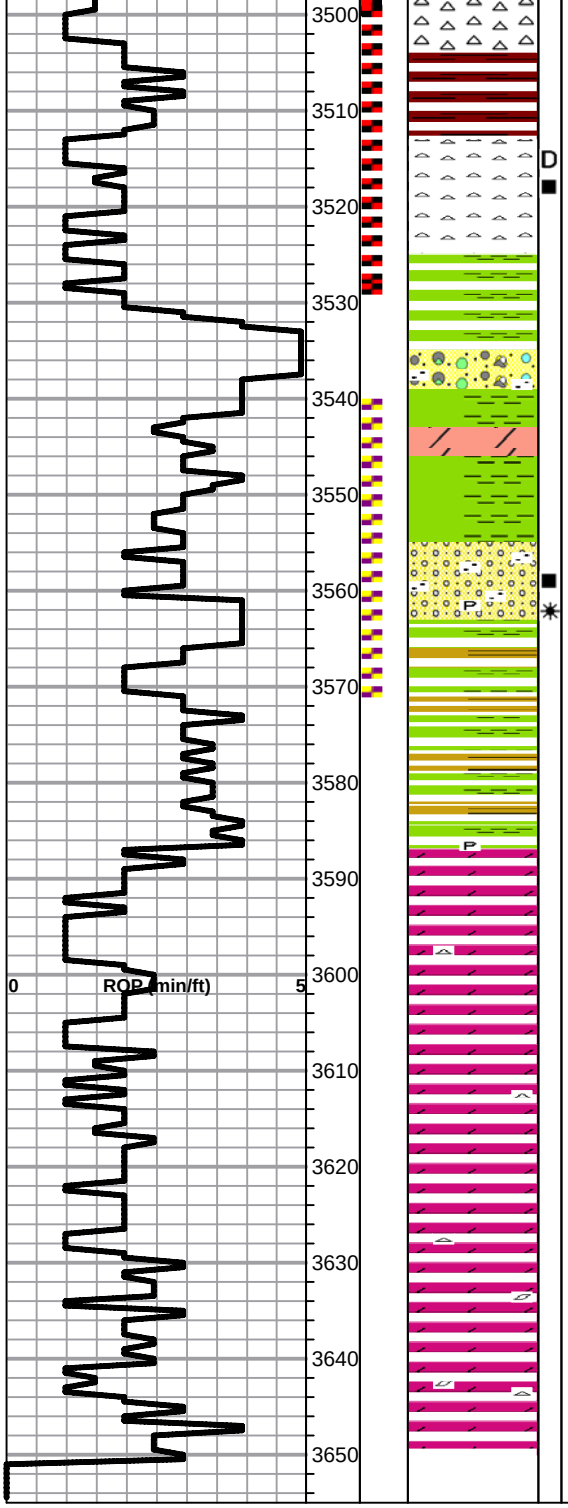
Shale, red wash, lime, pale green, fnxln

Lime, lt brn, fnxln

CFS @ 3487'

Shale, red wash, vari colored cherts

VIOLA 3497-1725



Cherts vari colored, fresh, sharp, NS

Shale, red wash, soft mud

DST # 2 3490' TO 3530' SEE HEADER FOR TEST SUMMARY

Cherts, vari colored with gilsonitic deposits, good, bright wet cut

CFS @ 3517'

SIMPSON SHALE 3525-1753

SURVEY @ 3530' 1 DEGREE

Shale, pale, blue green, waxy with quartz grain inclusions

CFS @ 3530'

Cherts, vari colored

SIMPSON DOLOMITE 3543-1771

Mix of cherts and dolomite chips, lt staining in one or two pcs of dolomite, No Odor

SIMPSON SAND 3555-1783

DST # 3 3540' TO 3572' SEE HEADER FOR TEST SUMMARY

Mix of cherts with increasing sand clusters, some coarse grained, angular, poorly sorted sand with lt staining and lt odor, NFO. Appears laminated with shale and fine grained sand beds

CFS @ 3572'

Shale, mixed colors

ARBUCKLE 3587-1815

Dlomite, lt brn, fnxln-granular, NS, no staining, pyritic at boundary

CFS @ 3593'

Dolomite, ivory- lt brn, fnxln-granular, scattered green tinted in part, scattered white, fresh, sharp chert

Dolomite, crm-ivory, fn-cxln, good interxln porosity, NS

Dolomite, lt brn, fine oolmoldic in part, NS

1st plug @ 3593' w/ 35 sxs
2nd plug @ 1350' w/ 35 sxs
3rd plug @ 900' w/ 35 sxs
4th plug @ 335' w/ 35 sxs
5th plug @ 60' w/ 25 sxs
Rathole w/ 25 sxs.
Plug down 6:30am 1-10-2013
Allied Cement ticket 059234

Dolomite, lt brn, fn-cxln, good visible porosity, NS

Dolomite, crm-ivory, fn-cxln, sucrosic in part,

RTD 3650-1878 **LTD 3650-1878**

ALLIED
OIL & GAS SERVICES, LLC

PO Box 93999
Southlake, TX 76092

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

INVOICE

Invoice Number: 134403
Invoice Date: Jan 9, 2013
Page: 1

P/# 35840 1-28-13

Now Includes:

Treat-Em-Rite Pressure Pumping Service, LLC

Bill To:
Carrie Exploration & Development LLC 210 West 22nd Street Hays, KS 67601

Customer ID	Well Name/# or Customer P.O.	Payment Terms	
Carrie	Sara C #1	Net 30 Days	
Job Location	**Camp Location**	**Service Date**	**Due Date**
KS2-03	Great Bend	Jan 9, 2013	2/8/13

Quantity	Item	Description	Unit Price	Amount
114.00	MAT	Class A Common	17.90	2,040.60
76.00	MAT	Pozmix Cement to	9.35	710.60
6.00	MAT	Gel	23.40	140.40
47.00	MAT	Flo Seal Plug	2.97	139.59
204.00	SER	Cubic Feet	2.48	505.94
298.20	SER	Ton Mileage	2.60	775.32
1.00	SER	Plug to Abandon	2,600.47	2,600.47
35.00	SER	Pump Truck Mileage	7.70	269.50
35.00	SER	Light Vehicle Mileage	4.40	154.00
1.00	CEMENTER	Dustin Chambers		
1.00	EQUIP OPER	Trint Hall		
1.00	OPER ASSIST	Charles Kinyon		

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

$1834.70

ONLY IF PAID ON OR BEFORE

Subtotal	7,336.42
Sales Tax	535.56
Total Invoice Amount	7,871.98
Payment/Credit Applied	
TOTAL	**7,871.98**

ALLIED OIL & GAS SERVICES, LLC 059234

Federal Tax I.D.# 20-5975804

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

SERVICE POINT: Great Bend, KS 1-10-13

DATE 1-9-13	SEC. 9	TWP. 22S	RANGE 10W	CALLED OUT	ON LOCATION 10:15 PM	JOB START 6:00 AM	JOB FINISH 7:00 AM
LEASE Sora	WELL # 1-1	LOCATION 281 & Hwy 19 165 1/2 E into				COUNTY Reno	STATE KS
OLD OR NEW (Circle one)							

2-03 T. 3 all

CONTRACTOR Fossil Drilling #2
TYPE OF JOB PTA
HOLE SIZE 12 1/4 T.D.
CASING SIZE 8 5/8 DEPTH
TUBING SIZE DEPTH
DRILL PIPE 4 1/2 DEPTH 3593
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. All
PERFS.
DISPLACEMENT Freshwater

OWNER

EQUIPMENT

PUMP TRUCK # 366 CEMENTER Dustin Chambers 1
HELPER Trent Hall 2
BULK TRUCK # 391 DRIVER Charles Kinyon 3
BULK TRUCK # DRIVER

CEMENT
AMOUNT ORDERED 190 sks 60% class A 4% gel 1/4 #FlO

COMMON	114	@ 17.90	2040.60
POZMIX	76	@ 9.35	710.60
GEL	6	@ 23.40	140.40
CHLORIDE		@	
ASC		@	
Flo Seal	47	@ 2.97	139.59
HANDLING	209.01	@ 2.48	505.94
MILEAGE	8.52 x 35 x 2.60		775.32
		TOTAL	4.312.45

298.20

SERVICE

DEPTH OF JOB	3593		
PUMP TRUCK CHARGE			2600.97
EXTRA FOOTAGE		@	
MILEAGE	Hum 35	@ 7.70	269.50
MANIFOLD		@	
	Hum 35	@ 4.40	154.00
		@	
		TOTAL	3.023.97

REMARKS:

Fill Hole with Brine
1 3593 - 35 sks
2 1350 - 35 sks
3 900 - 35 sks
4 335 - 35 sks
5 100 - 25 sks
6 RH - 25 sks
Plug Down 6:30 AM 1-10-13

CHARGE TO: Currie Exploration
STREET
CITY STATE ZIP

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.

SALES TAX (If Any) 535.55
TOTAL CHARGES 7.336.42
DISCOUNT 1.834.10 IF PAID IN 30 DAYS
5.502.31

PRINTED NAME X Travis Vest 25%

SIGNATURE

ALLIED
OIL & GAS SERVICES, LLC

INVOICE

Invoice Number: 134322

Invoice Date: Jan 2, 2013

Page: 1

PO Box 93999
Southlake, TX 76092

1-28-13 #3584

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

Now Includes:

Treat-Em-Rite Pressure Pumping Service, LLC

C

Bill To:

Carrie Exploration & Development LLC
210 West 22nd Street
Hays, KS 67601

Customer ID	Well Name/# or Customer P.O.	Payment Terms	
Carrie	Sara C #1	Net 30 Days	
Job Location	**Camp Location**	**Service Date**	**Due Date**
KS2-01	Great Bend	Jan 2, 2013	2/1/13

Quantity	Item	Description	Unit Price	Amount
275.00	MAT	Class A Common	17.90	4,922.50
5.00	MAT	Gel	23.40	117.00
10.00	MAT	Chloride	64.00	640.00
297.00	SER	Cubic Feet	2.48	736.50
472.50	SER	Ton Mileage	2.60	1,228.50
1.00	SER	Surface	1,512.25	1,512.25
35.00	SER	Pump Truck Mileage	7.70	269.50
35.00	SER	Light Vehicle Mileage	4.40	154.00
1.00	CEMENTER	Tim Dickson		
1.00	EQUIP OPER	Kevin Eddy		
1.00	OPER ASSIST	Alan Genereux		
1.00	OPER ASSIST	Charles Kinyon		

Cement for Surface

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

$2395.00

ONLY IF PAID ON OR BEFORE

Jan 27, 2013

Subtotal	9,580.25
Sales Tax	414.60
Total Invoice Amount	9,994.85
Payment/Credit Applied	
TOTAL	**9,994.85**

ALLIED OIL & GAS SERVICES, LLC 059172

Federal Tax I.D.# 20-5975804

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

SERVICE POINT: Great Bend, Ks

DATE	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
1-2-13	8	22	10	12:30 PM	2:30 PM	7:30 PM	8:30 PM

LEASE	WELL #	LOCATION	COUNTY	STATE
Sara	C-1	Hesston 8 East to Raymond Rd. 1 South East into	Reno	Ks.

OLD OR (NEW) (Circle one)

1-01 T.3

CONTRACTOR Foxhill
TYPE OF JOB Surface
HOLE SIZE 12¼" T.D. 291'
CASING SIZE 8⅝" DEPTH 284'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15'
PERFS.
DISPLACEMENT 17 bbls

OWNER Same

EQUIPMENT

PUMP TRUCK CEMENTER Tim Duchow
#3106 HELPER Kevin Eddy 2
BULK TRUCK
#344-170 DRIVER Alan Menereux 3
BULK TRUCK
DRIVER Charles Kemper 3

CEMENT

AMOUNT ORDERED 225 Class A 3%cc 2%Gel
50 lbs Class A 3%cc 2%Gel

COMMON	275	@ 17.90	4.922.50
POZMIX		@	
GEL	5	@ 23.40	117.00
CHLORIDE	10	@ 64.00	640.00
ASC		@	
HANDLING	297 X	@ 2.48	736.50
MILEAGE	13.5 X 35	2.60	1.228.50
		TOTAL	7.644.50

REMARKS:

Ran 284' of 8⅝ csg. Broke circulation Mixed 225 lbs Class A 3%cc 2%Gel Displaced with fresh H2O. 1172.50

Ran 60' of 1". Mixed 50 lbs Class A 3%cc 2%Gel & circulated cement to Surface.
Cement Did Not Circulate

SERVICE

DEPTH OF JOB 284'
PUMP TRUCK CHARGE 1512.35
EXTRA FOOTAGE @
MILEAGE Hum 35 @ 7.70 269.50
MANIFOLD @
Hum 35 @ 4.40 154.00
@
TOTAL 1935.75

CHARGE TO: Cornie Exploration
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

@
@
@
@
@
TOTAL

SALES TAX (If Any) 414.60
TOTAL CHARGES 9.580.25
DISCOUNT 2.395.00 IF PAID IN 30 DAYS
7185.25

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 Robert L. Saenders

SIGNATURE X Robert L. Saenders