Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1197008

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 # 5399
Name: Trek AEC, LLC
Address 1: 155 N MARKET STE 710
Address 2:
City: WICHITA State: KS Zip: 67202 + 1821
Contact Person: Mindy Wooten
Phone: (316) 201-1134
CONTRACTOR: License # 5399
Name: Trek AEC, LLC
Wellsite Geologist: Aaron Young
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 #:

02/19/2014	02/28/2014	03/11/2014
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-163-24165-00-00
Spot Description:
SW SE SW SE Sec. 28 Twp. 6 S. R. 20 ☐ East ☑ West
150 Feet from ☐ North / ☑ South Line of Section
1950 Feet from ☑ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW

GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Rooks
Lease Name: Stice Hill Unit Well #: 1-28
Field Name: Wildcat
Producing Formation: Arbuckle, Kansas City "J", "I"
Elevation: Ground: 2234 Kelly Bushing: 2239
Total Vertical Depth: 3781 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 248 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 1866 Feet
If Alternate II completion, cement circulated from: 1866
feet depth to: 0 w/ 200 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 32000 ppm Fluid volume: 700 bbls
Dewatering method used: Evaporated

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: 04/11/2014
☑ **Confidential Release Date:** 04/10/2016
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** NAOMI JAMES **Date:** 04/11/2014

[redacted] 1197008

Operator Name: Trek AEC, LLC Lease Name: Stice Hill Unit Well #: 1-28

Sec. 28 Twp. 6 S. R. 20 ☐ East ☑ West County: Rooks

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

Dual Induction
Dual Compensated Porosity
Micro-Resistivity Log

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

Name: Attached Top: Attached Datum: 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	8.6250	23	248	Class A	200	2% Gel, 3% CC
Production	7.8750	5.5	15.5	3767	Standard - EA2	175	100# Flocele
DV Tool	7.8750	5.5	15.5	1866	SMD	200	50# Flakes

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	-			
	-			

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 *(Amount and Kind of Material Used)*	Depth
4	Arbuckle		3714-3716
4	Arbuckle		3702-3709
4	Kansas City "J"		3626-3630
4	Kansas City "I"		3612-3619
	Acid Treatment	250 gallons 15% MCA	3612 -3709

TUBING RECORD: Size: 2.8750 Set At: 3720.55 Packer At: Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 04/04/2014

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	92	0	4.00		32

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	Trek AEC, LLC
Well Name	Stice Hill Unit 1-28
Doc ID	1197008

Tops

Name	Top	Datum
Anhydrite	1830	+409
Base Anhydrite	1861	+378
Heebner	3425	-1186
Lansing	3464	-1225
Muncie Creek	3577	-1338
Stark Shale	3636	-1397
Base/KC	3660	-1421
Arbuckle	3700	-1461

Form	ACO1 - Well Completion
Operator	Trek AEC, LLC
Well Name	Stice Hill Unit 1-28
Doc ID	1197008

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.6250	23	248	Class A	200	2% Gel, 3% CC
Production	7.8750	5.5	15.5	3767	Standard - EA2	175	100# Flocele
DV Tool	7.8750	5.5	15.5	1866	SMD	200	50# Flakes

ALLIED OIL & GAS SERVICES, LLC 062664

Federal Tax I.D. # 20-8651475

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

316-263 1851

SERVICE POINT: Great Bend KS

Stice Hill Unit

DATE 2-19-14	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
LEASE Stice Hill	WELL # 16		LOCATION Ellinwood 4 Hwy 24 3N 1E 5N 1E 1/2S Into			COUNTY Barton	STATE KS
OLD OR NEW (Circle one)							

2-01 6:15

CONTRACTOR Mallard Drilling
TYPE OF JOB Surface
HOLE SIZE 12 1/4 T.D.
CASING SIZE 8 5/8 DEPTH 218
TUBING SIZE DEPTH
DRILL PIPE 4 1/2 DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15 Ft
PERFS.
DISPLACEMENT 14.5 Bbls Freshwater

OWNER

EQUIPMENT

PUMP TRUCK # 345 CEMENTER Dustin Chambers
HELPER Josh Ellis
BULK TRUCK # 671-172 DRIVER Kevin Wiegand
BULK TRUCK # DRIVER

CEMENT
AMOUNT ORDERED 200 sks class A

COMMON	200	@ 17.90	3580.00
POZMIX		@	
GEL	4	@ 23.40	93.60
CHLORIDE	564#	@ .80	451.20
ASC		@	
HANDLING	214.67	@ 2.46	532.38
MILEAGE	9 x 55 x 50 x 2.60		1234.40
		TOTAL	5946.58

494.

SERVICE

DEPTH OF JOB			
PUMP TRUCK CHARGE			1512.25
EXTRA FOOTAGE		@	
MILEAGE		@	
MANIFOLD		@	
HVA - 50		@ 7.70	385.00
LVM - 50		@ 4.40	220.00
		TOTAL	2117.25

REMARKS:

Break circulation with fresh water
Pump 5 bbls freshwater ahead
Mix 200 sks cement
Displace 14.5 bbls freshwater
Shut in
Cement did circulate
Plug RH Cement in cellar
Plug RM 60 sks

PLUG & FLOAT EQUIPMENT

TOTAL

CHARGE TO: Trek AEC
STREET
CITY STATE ZIP

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) 253.67
TOTAL CHARGES $8058.83
DISCOUNT 1611.77 IF PAID IN 30 DAYS

$6447.06

PRINTED NAME X Frank Szymank

SIGNATURE X Frank Szymank
Frank Szymank

P.001/005

SWIFT Services, Inc.

CHARGE TO: Trek AEC LLC

ADDRESS

CITY, STATE, ZIP CODE

TICKET 25298

PAGE 1 OF 2

SERVICE LOCATIONS	WELL/PROJECT NO.	LEASE	COUNTY/PARISH	STATE	CITY	DATE	OWNER
1. Hays KS	1-28	Stice Hill Unit	Rooks	KS		2-28-14	
2. Ness City KS	TICKET TYPE ☑ SERVICE ☐ SALES	CONTRACTOR	RIG NAME/NO.	SHIPPED VIA CT	DELIVERED TO Location	ORDER NO.	
3.	WELL TYPE Oil	WELL CATEGORY Development	JOB PURPOSE 5½ Two Stage Long String	WELL PERMIT NO.		WELL LOCATION Sec 28, Twp 6S, R20W	
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

(FAX)

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING LOC	ACCT	DF	DESCRIPTION	QTY.	U/M	QTY.	U/M	UNIT PRICE	AMOUNT
575		1			MILEAGE #112	70	mi			6 00	420 00
579		1			Pump Charge Two Stage	1	ea			2000 00	2000 00
221		1			Liquid KCL	4	gal			25 00	100 00
281		1			Mud Flush	500	gal			1 25	625 00
290		1			D-Air	5	gal			42 00	210 00
402		1			Centralizers	7	ea	5½		70 00	490 00
403		1			Cement Basket	1	ea			300 00	300 00
407		1			Insert Float Shoe w/ Auto Fill	1	ea			375 00	375 00
408		1			DV Tool + Plug Set	1	ea			3550 00	3550 00
417		1			DV Latch Down Plug + Baffle	1	ea			200 00	200 00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY,** and **LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

X Ted Stice

DATE SIGNED 2-28-14 TIME SIGNED 1930 ☐ A.M. ☑ P.M.

REMIT PAYMENT TO:

SWIFT SERVICES, INC.
P.O. BOX 466
NESS CITY, KS 67560
785-798-2300

SURVEY	AGREE	UN-DECIDED	DIS-AGREE
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?			
WE UNDERSTOOD AND MET YOUR NEEDS?			
OUR SERVICE WAS PERFORMED WITHOUT DELAY?			
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?			

ARE YOU SATISFIED WITH OUR SERVICE? ☐ YES ☐ NO

☐ CUSTOMER DID NOT WISH TO RESPOND

P1 PAGE TOTAL	8270 00
P2	6137 00
~~Subtotal~~	~~14407 00~~
subtotal	14,407 00
Rooks TAX 6.15%	608 70
TOTAL	15,015 70

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR John Burrell

APPROVAL

Thank You!

04/01/2014 11:54

RECEIVE: 04/01/2014/TUE 10:51AM NO.4417

(FAX)

SWIFT Services, Inc.
PO Box 466
Ness City, KS 67560
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 25298

CUSTOMER: Trek AEC LLC | WELL: Stice Hill Unit 1-18 | DATE: 2-28-14 | PAGE 2 OF 2

PRICE REFERENCE	SECONDARY REFERENCE / PART NUMBER	ACCOUNTING LOC	ACCT	DF	TIME	DESCRIPTION	QTY	U/M	QTY	U/M	UNIT PRICE	AMOUNT
325		2				Standard Cement EA-2	175	sks			14 50	2537 50
~~330~~		2				~~Swift Multi-Density~~	~~200~~	~~sks~~			~~18 50~~	~~3700 00~~
276		2				Flocele	100	lbs			2 50	250 00
283		2				Salt	900	lbs			20	180 00
284		2				Calseal	8	sks			35 00	280 00
292		2				Halad 322	100	lbs			8 00	800 00
581		2				SERVICE CHARGE	CUBIC FEET	375			2 00	750 00
583		2				MILEAGE CHARGE TOTAL WEIGHT 38270 LOADED MILES 70	TON MILES	1339.5			1 00	1339 50
											CONTINUATION TOTAL	~~4837 00~~ 4137 00

04/01/2014 11:54
RECEIVE: NO.4417 04/01/2014/TUE 10:51AM

JOB LOG — SWIFT Services, Inc.

DATE 2-28-14 PAGE NO.

CUSTOMER Tock AEC LLC | WELL NO. 1-28 | LEASE Stice Hill unit | JOB TYPE 5½ Flash Stage | TICKET NO. 25298

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	1930							on location
								TD 3780 SJ 37
								TP 3775 Insert 3738
								DV Top 45 1861 5½ x 15.5#
								Centralizers 2, 4, 6, 7, 9, 11, 46
								Basket 45
	2145							Start Pipe
	2345							Drop Ball Break Circulation
		4	7/4		✓		300	Plug RH 30 sks, MH 15 sks
		4	12		✓		300	Start Mud flush
		4	20		✓		300	Start KCL flush
		4	32		✓		200	Start cement 130 sks EA-2
								Aux motor Died Try to get started would not
								Wash out Pump lines Start
	0215				✓			Start Displacement w/ Mud Pump Rig out of fuel
	0230		88.9		✓		600/150	land Plug Try to get motor started
	0330							Drop Opening Plug Try to open Doesn't open
	0430							Go Get another Pump truck
	0730							Try to open DV Doesn't open
								Opening Plug Not falling through mud
								Set slips
								Run Tubing in to push Plug Down when Rig moves off
	0930							Job Complete
								Thank You
								Josh, Brian, Doug

P.004/005

SWIFT Services, Inc.

CHARGE TO: TREK Acc.
ADDRESS
CITY, STATE, ZIP CODE

TICKET 25344

PAGE 1 OF 1

SERVICE LOCATIONS	WELL/PROJECT NO.	LEASE	COUNTY/PARISH	STATE	CITY	DATE	OWNER
1. Hays, Ks.	#1-28	Stice Hill Unit	Rooks	Ks		3-5-14	same
2. Ness City, Ks.	TICKET TYPE ☑ SERVICE ☐ SALES	CONTRACTOR P.P.S.	RIG NAME/NO.	SHIPPED VIA 7	DELIVERED TO location	ORDER NO.	
3.	WELL TYPE oil	WELL CATEGORY Development	JOB PURPOSE 2nd Stage		WELL PERMIT NO.	WELL LOCATION	
4. REFERRAL LOCATION	INVOICE INSTRUCTIONS						

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING LOC	ACCT	DF	DESCRIPTION	QTY.	U/M	QTY.	U/M	UNIT PRICE	AMOUNT
575		1			MILEAGE #111	40	mi			6 co	240 co
576D		1			Pump Charge (2nd Stage)	1	ea	1866		1500 co	1500 co
221		1			KCL	2	gal			25 co	50 co
290		1			D-Air	2	gal			42 co	84 co
330		2			SMD Cement	200	sks			18 50	3700 co
276		2			Flocele	50	#			2 50	125 co
581		2			Cement Service Charge	200	sks			2 co	400 co
583		2			Drayage	391	TM			1 co	391 co

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY,** and **LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

X Thad Stice

DATE SIGNED 3-5-14 | TIME SIGNED 1615 ☐ A.M. ☑ P.M.

REMIT PAYMENT TO:

SWIFT SERVICES, INC.
P.O. BOX 466
NESS CITY, KS 67560
785-798-2300

SURVEY	AGREE	UN-DECIDED	DIS-AGREE
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?			
WE UNDERSTOOD AND MET YOUR NEEDS?			
OUR SERVICE WAS PERFORMED WITHOUT DELAY?			
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?			

ARE YOU SATISFIED WITH OUR SERVICE? ☐ YES ☐ NO

☐ CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL	6490 co
Rooks TAX 6.15%	243 48
TOTAL	6733 48

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

SWIFT OPERATOR Nick Rushek

APPROVAL

Thank You!

(FAX) 04/01/2014 11:54

04/01/2014/TUE 10:51AM NO.4417 RECEIVE:

JOB LOG — SWIFT Services, Inc.

DATE 3-5-14 PAGE NO.

CUSTOMER	WELL NO.	LEASE	JOB TYPE	TICKET NO.
TREK Acc.	#1-28	Stice Hill	2nd Stage	25344

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	1145							on loc set up Trks
								2⅞" x 5½"
	1200							Tbg @ 581' Turn Hole Over
								Run to 1400' Turn Hole Over
								Run to D.V Tool
								Stack out
								lay down 1 jt
								Press up well to Open D.V.
	1415					1700		D.V. Open
								TOOH w/ Tbg
								Hook up to 5½"
	1515	4	0					Start KCL flush
		4	20/0					Start 200sks SMD
	1540		110/-					End Cement + circ cmt 105 bbl
								Drop Closing Plug
								Wash Pt & L
	1550	5	0				200	Start Displacement
		4	15				250	catch Cement
	1600		45.5				450/1700	Land Plug
								Release Pressure
								D.V. Closed
								circ 90sks to pit
								Thank you
								Nick, David F, + Jarrod

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Trek AEU, Inc

155 N. Market STE 710
Wichita KS, 67202

ATTN: Aaron Young

28-6s-20w Rooks KS

Stice Hill Unit 1-28

Job Ticket: 56078 **DST#: 1**

Test Start: 2014.02.23 @ 09:04:00

GENERAL INFORMATION:

Formation: **Topeka**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 13:19:45
Time Test Ended: 18:12:45

Test Type: Conventional Bottom Hole (Initial)
Tester: Cody Bloedorn
Unit No: 73

Interval: 3353.00 ft (KB) To 3426.00 ft (KB) (TVD)
Total Depth: 3426.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

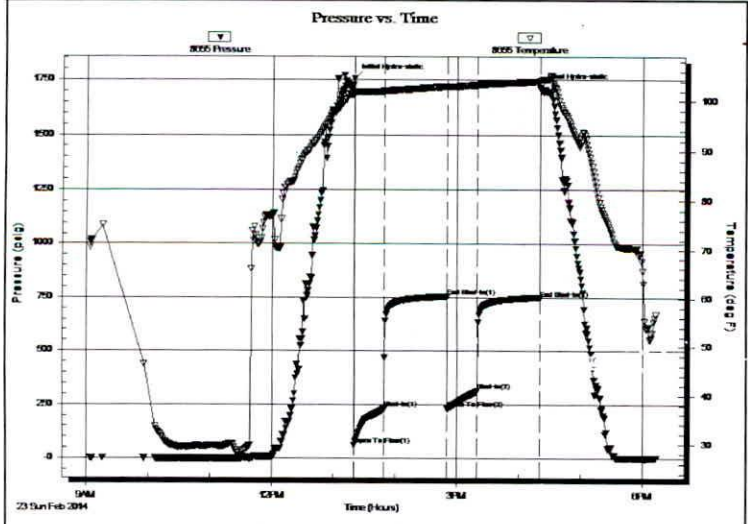
Reference Elevations: 2239.00 ft (KB)
2234.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8655 **Outside**

Press@RunDepth: 311.87 psig @ 3421.00 ft (KB)
Start Date: 2014.02.23 End Date: 2014.02.23
Start Time: 09:04:05 End Time: 18:12:45

Capacity: 8000.00 psig
Last Calib.: 2014.02.23
Time On Btm: 2014.02.23 @ 13:19:30
Time Off Btm: 2014.02.23 @ 16:20:15

TEST COMMENT: 30 - IF- B.O.B. in 7 minutes
60 - ISI- No return
30 - FF- B.O.B. in 15 minutes
60 - FSI-Surface blow for 5 minutes and then died.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1754.65	101.71	Initial Hydro-static
1	61.53	101.40	Open To Flow (1)
29	228.54	102.01	Shut-In(1)
90	754.35	102.95	End Shut-In(1)
91	231.66	102.85	Open To Flow (2)
120	311.87	103.27	Shut-In(2)
181	745.82	104.02	End Shut-In(2)
181	1712.17	104.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
403.00	MW, 50%M, 50%W	3.47
124.00	WM, 20%W, 80%M	1.74

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Trek AEU, Inc

155 N. Market STE 710
Wichita KS, 67202

ATTN: Aaron Young

28-6s-20w Rooks KS

Stice Hill Unit 1-28

Job Ticket: 56078 **DST#: 1**

Test Start: 2014.02.23 @ 09:04:00

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:	30000 ppm
Viscosity:	49.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.00 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
403.00	MW, 50%M, 50%W	3.467
124.00	WM, 20%W, 80%M	1.739

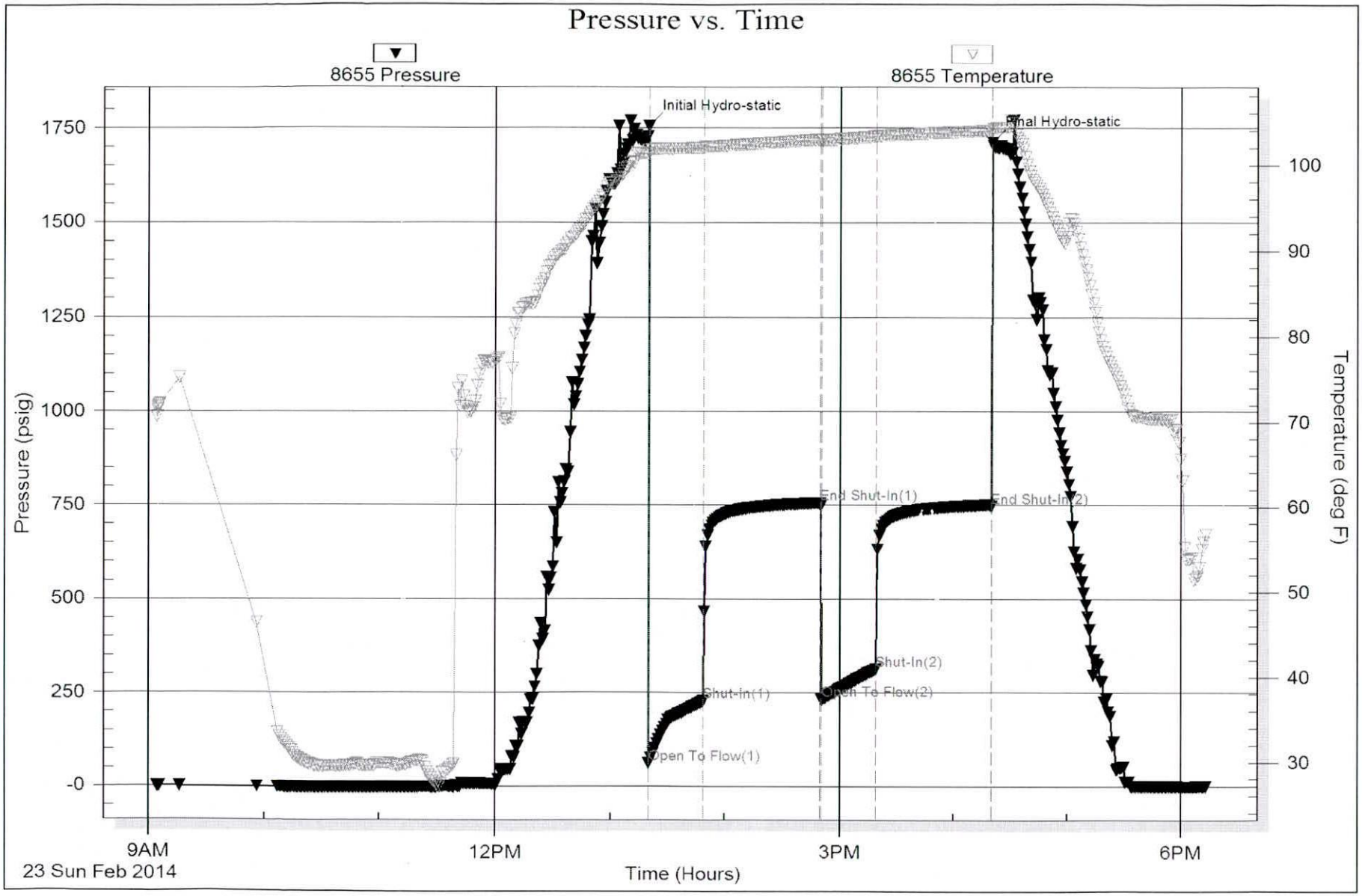
Total Length: 527.00 ft Total Volume: 5.206 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: .45 @ 40 Degrees = 30,000 Chlorides

Serial #: 8655 **Outside** Trek AEU, Inc Stice Hill Unit 1-28 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 56078 Printed: 2014.02.23 @ 23:03:04

DRILL STEM TEST REPORT

Trek AEC, Inc

155 N. Market STE 710
Wichita KS, 67202

ATTN: Aaron Young

28-6s-20w Rooks KS

Stice Hill Unit 1-28

Job Ticket: 56079 **DST#: 2**

Test Start: 2014.02.24 @ 04:37:00

GENERAL INFORMATION:

Formation: **Tor - LKC "A"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 08:04:15
Time Test Ended: 13:22:45

Test Type: Conventional Bottom Hole (Reset)
Tester: Cody Bloedorn
Unit No: 73

Interval: 3450.00 ft (KB) To 3474.00 ft (KB) (TVD)
Total Depth: 3474.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

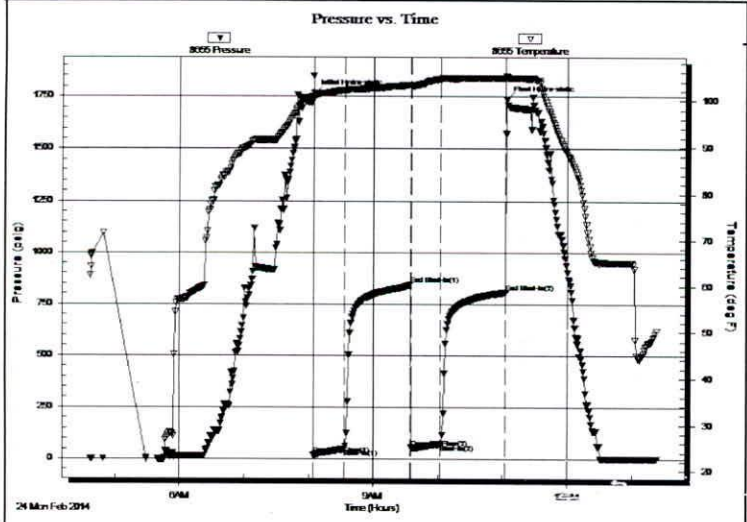
Reference Elevations: 2239.00 ft (KB)
2234.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8655 **Outside**

Press@RunDepth: 71.14 psig @ 3454.00 ft (KB)
Start Date: 2014.02.24 End Date: 2014.02.24
Start Time: 04:37:05 End Time: 13:22:45

Capacity: 8000.00 psig
Last Calib.: 2014.02.24
Time On Btm: 2014.02.24 @ 08:04:00
Time Off Btm: 2014.02.24 @ 11:03:15

TEST COMMENT: 30 - IF- 6 1/2" blow
60 - ISI- No return
30 - FF- 4" blow
60 - FSI- No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1762.79	100.92	Initial Hydro-static
1	20.49	100.44	Open To Flow (1)
29	46.59	102.20	Shut-In(1)
90	843.45	103.28	End Shut-In(1)
91	52.38	103.11	Open To Flow (2)
118	71.14	104.63	Shut-In(2)
179	806.08	104.84	End Shut-In(2)
180	1734.32	104.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	HOCM, 40%M, 60%O	0.61
31.00	GO, 10%G, 90%O	0.15
0.00	286' of G.I.P.	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Trek AEC, Inc

155 N. Market STE 710
Wichita KS, 67202

ATTN: Aaron Young

28-6s-20w Rooks KS

Stice Hill Unit 1-28

Job Ticket: 56079 **DST#: 2**

Test Start: 2014.02.24 @ 04:37:00

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:	52.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	5.99 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1000.00 ppm				
Filter Cake:	inches				

Recovery Information

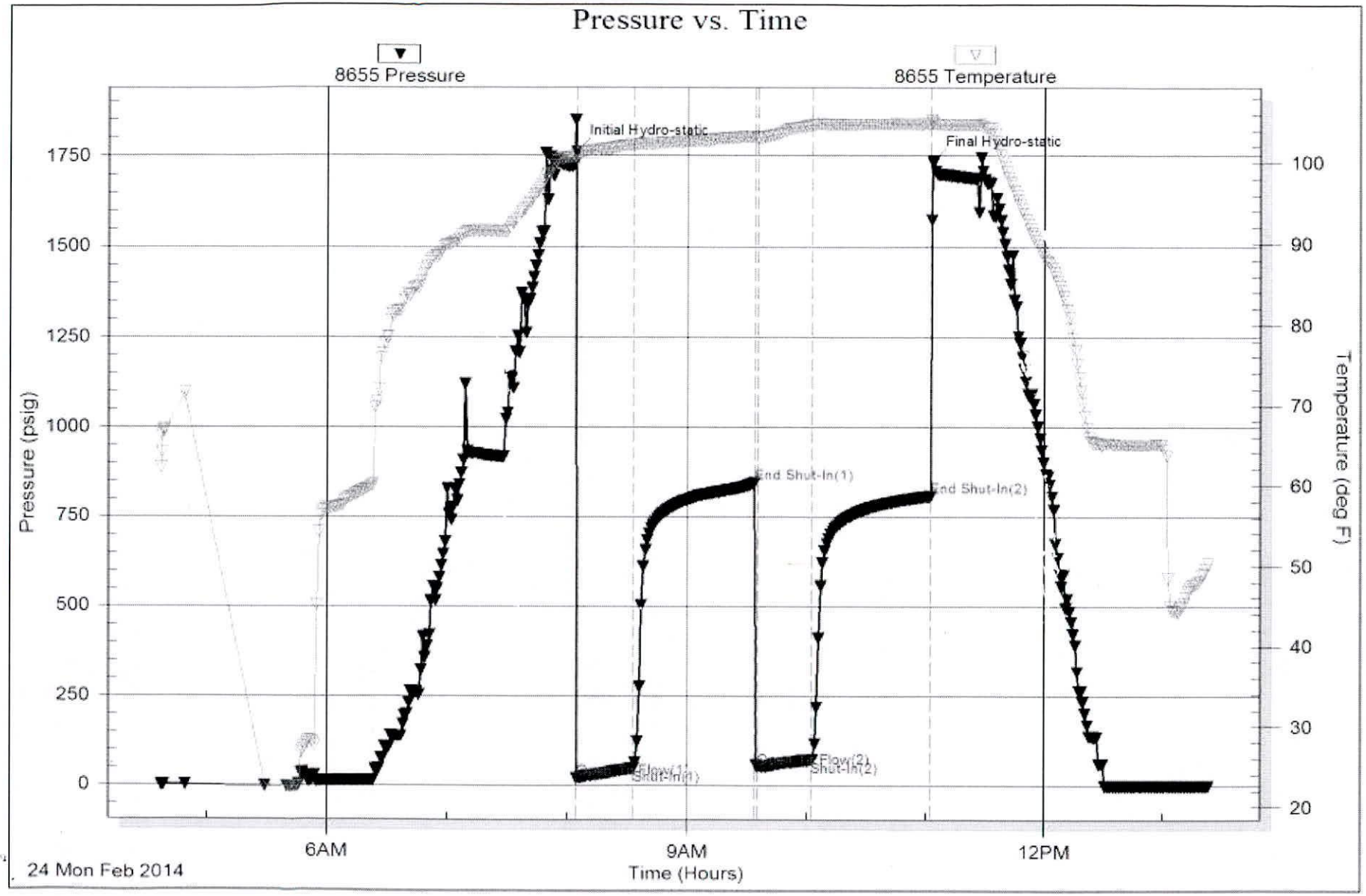
Recovery Table

Length ft	Description	Volume bbl
124.00	HOCM, 40%M, 60%O	0.610
31.00	GO, 10%G, 90%O	0.152
0.00	286' of G.I.P.	0.000

Total Length: 155.00 ft Total Volume: 0.762 bbl

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

Serial #: 8655 **Outside** Trek AEC, Inc Stice Hill Unit 1-28 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 56079 Printed: 2014 02 24 @ 13:54:22

DRILL STEM TEST REPORT

Trek AEC, Inc

155 N. Market STE 710
Wichita KS, 67202

ATTN: Aaron Young

28-6s-20w Rooks KS

Stice Hill Unit 1-28

Job Ticket: 56080 **DST#: 3**

Test Start: 2014.02.24 @ 21:32:00

GENERAL INFORMATION:

Formation: **Lansing "C"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 00:13:15
Time Test Ended: 06:27:30

Test Type: Conventional Bottom Hole (Reset)
Tester: Cody Bloedorn
Unit No: 73

Interval: 3487.00 ft (KB) To 3508.00 ft (KB) (TVD)
Total Depth: 3508.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

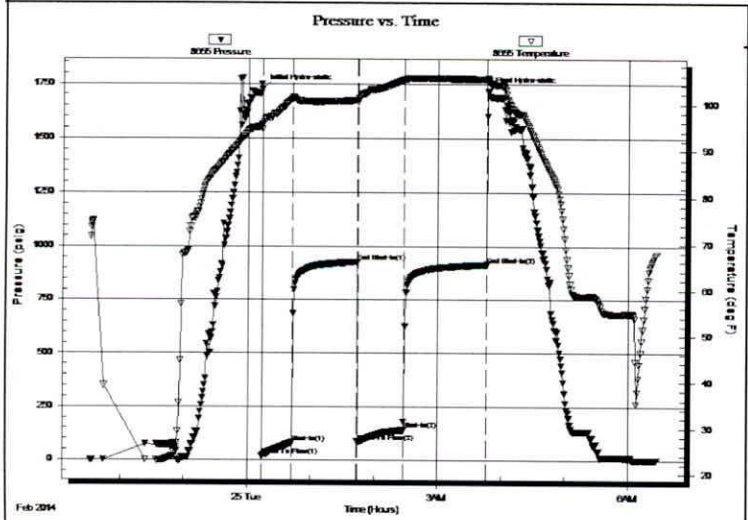
Reference Elevations: 2239.00 ft (KB)
2234.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8655 **Outside**

Press@RunDepth: 140.67 psig @ 3488.00 ft (KB)
Start Date: 2014.02.24 End Date: 2014.02.25
Start Time: 21:32:05 End Time: 06:27:30

Capacity: 8000.00 psig
Last Calib.: 2014.02.25
Time On Btm: 2014.02.25 @ 00:13:00
Time Off Btm: 2014.02.25 @ 03:47:15

TEST COMMENT: 30 - IF- 6" blow
60 - ISI- Surface return, died in 35 minutes
45 - FF- 8" blow
90 - FSI- Surface return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1725.94	95.56	Initial Hydro-static
1	17.43	94.67	Open To Flow (1)
29	80.02	101.10	Shut-In(1)
91	927.10	100.77	End Shut-In(1)
91	84.37	100.44	Open To Flow (2)
135	140.67	105.19	Shut-In(2)
214	915.32	105.36	End Shut-In(2)
215	1715.80	105.02	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	WM, 40%W, 60%M	0.30
186.00	MW - w ith oil spots, 30%M, 70%W	0.99
5.00	Free Oil, 100%O	0.07

* Recovery from multiple tests

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Trek AEC, Inc

155 N. Market STE 710
Wichita KS, 67202

ATTN: Aaron Young

28-6s-20w Rooks KS

Stice Hill Unit 1-28

Job Ticket: 56080 **DST#: 3**

Test Start: 2014.02.24 @ 21:32:00

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:	36000 ppm
Viscosity:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.00 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	WM, 40%W, 60%M	0.305
186.00	MW - with oil spots, 30%M, 70%W	0.988
5.00	Free Oil, 100%O	0.070

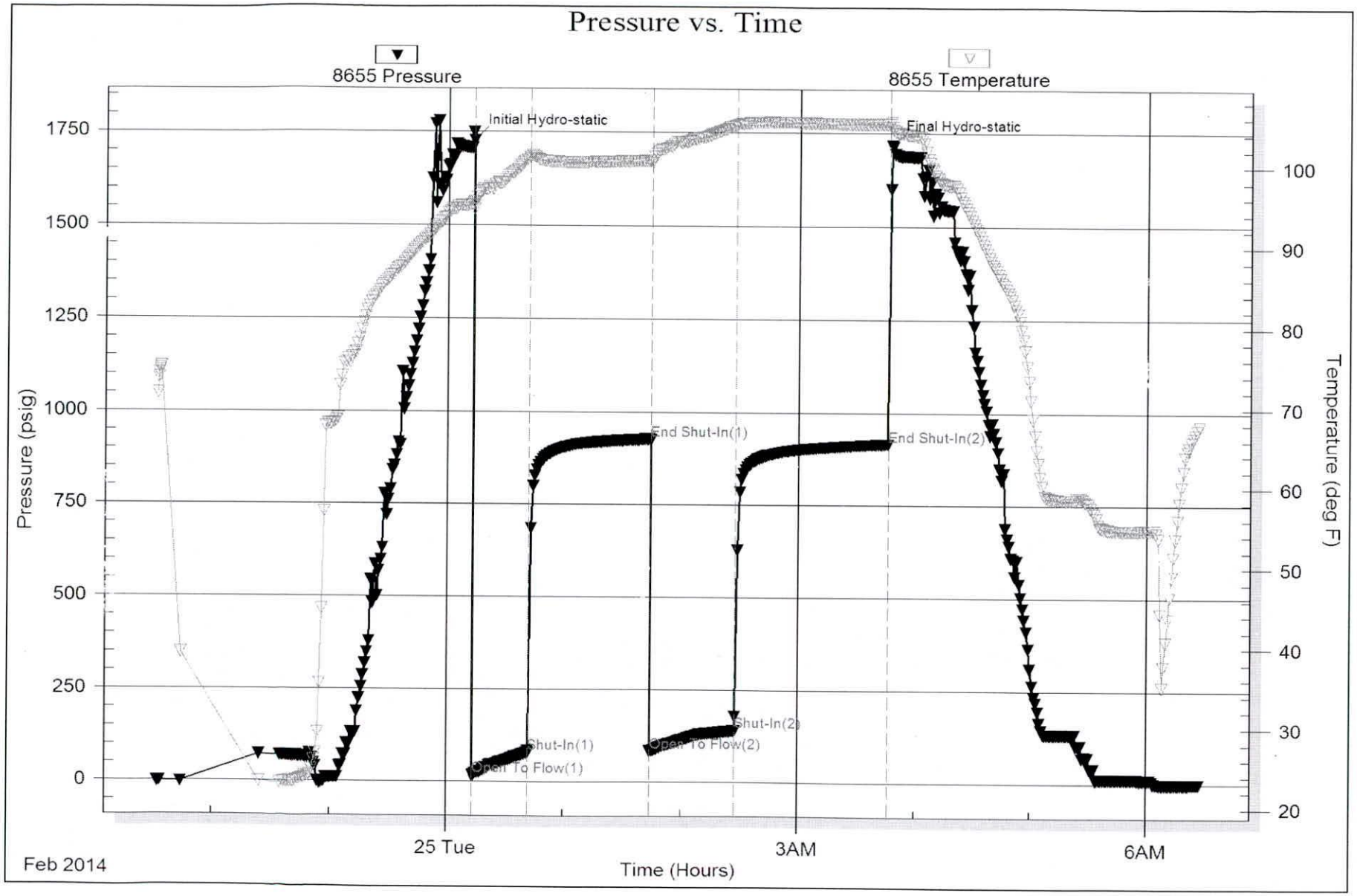
Total Length: 253.00 ft Total Volume: 1.363 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: Chlorides: .34 @ 41 Degrees = 36000

Serial #: 8655 **Outside** Trek AEC, Inc Stice Hill Unit 1-28 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 56080 Printed: 2014.02.25 @ 06:44:07

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Trek AEC, Inc

155 N. Market STE 710
Wichita KS, 67202

ATTN: Aaron Young

28-6s-20w Rooks KS

Stice Hill Unit 1-28

Job Ticket: 56081 **DST#: 4**

Test Start: 2014.02.25 @ 22:44:00

GENERAL INFORMATION:

Formation: **LKC "H-I"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:26:45
Time Test Ended: 08:51:15

Test Type: Conventional Bottom Hole (Reset)
Tester: Cody Bloedorn
Unit No: 73

Interval: 3592.00 ft (KB) To 3618.00 ft (KB) (TVD)
Total Depth: 3618.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

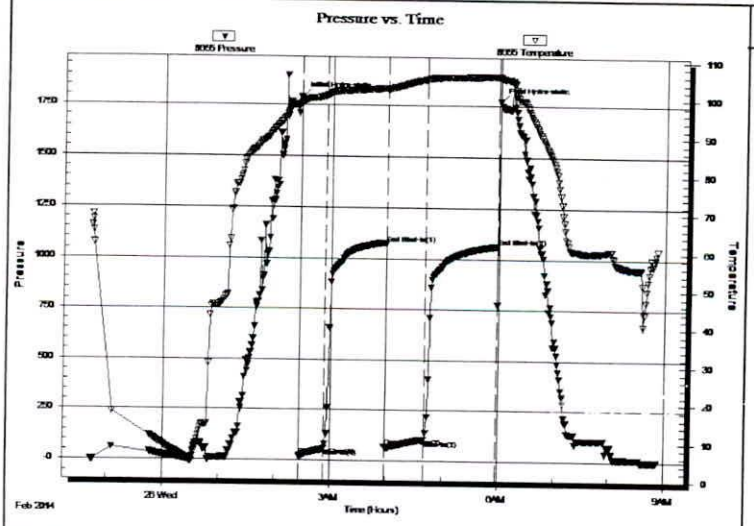
Reference Elevations: 2239.00 ft (KB)
2234.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8655 **Outside**

Press@RunDepth: 105.88 psig @ 3596.00 ft (KB)
Start Date: 2014.02.25 End Date: 2014.02.26
Start Time: 22:44:05 End Time: 08:51:15

Capacity: 8000.00 psig
Last Calib.: 2014.02.26
Time On Btm: 2014.02.26 @ 02:26:30
Time Off Btm: 2014.02.26 @ 06:00:00

TEST COMMENT: 30 - IF- 7" blow
60 - ISI- No return
45 - FF- B.O.B. in 28 minutes
75 - FSI- 1/4" return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1791.48	98.93	Initial Hydro-static
1	19.44	98.56	Open To Flow (1)
28	59.43	100.90	Shut-In(1)
93	1073.35	102.86	End Shut-In(1)
93	69.59	102.41	Open To Flow (2)
135	105.88	105.22	Shut-In(2)
212	1063.90	106.04	End Shut-In(2)
214	1770.90	105.64	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	OCM, 25%O, 75%M	0.30
186.00	GO, 30%G, 70%O	0.99
0.00	186' of G.I.P.	0.00

* Recovery from multiple tests

Gas Rates

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

TRILOBITE TESTING, INC

RILL STEM TEST REPORT

FLUID SUMMARY

Trek AEC, Inc

155 N. Market STE 710
Wichita KS, 67202

ATTN: Aaron Young

28-6s-20w Rooks KS

Stice Hill Unit 1-28

Job Ticket: 56081 **DST#: 4**

Test Start: 2014.02.25 @ 22:44:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	32 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.00 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	OCM, 25%O, 75%M	0.305
186.00	GO, 30%G, 70%O	0.988
0.00	186' of G.I.P.	0.000

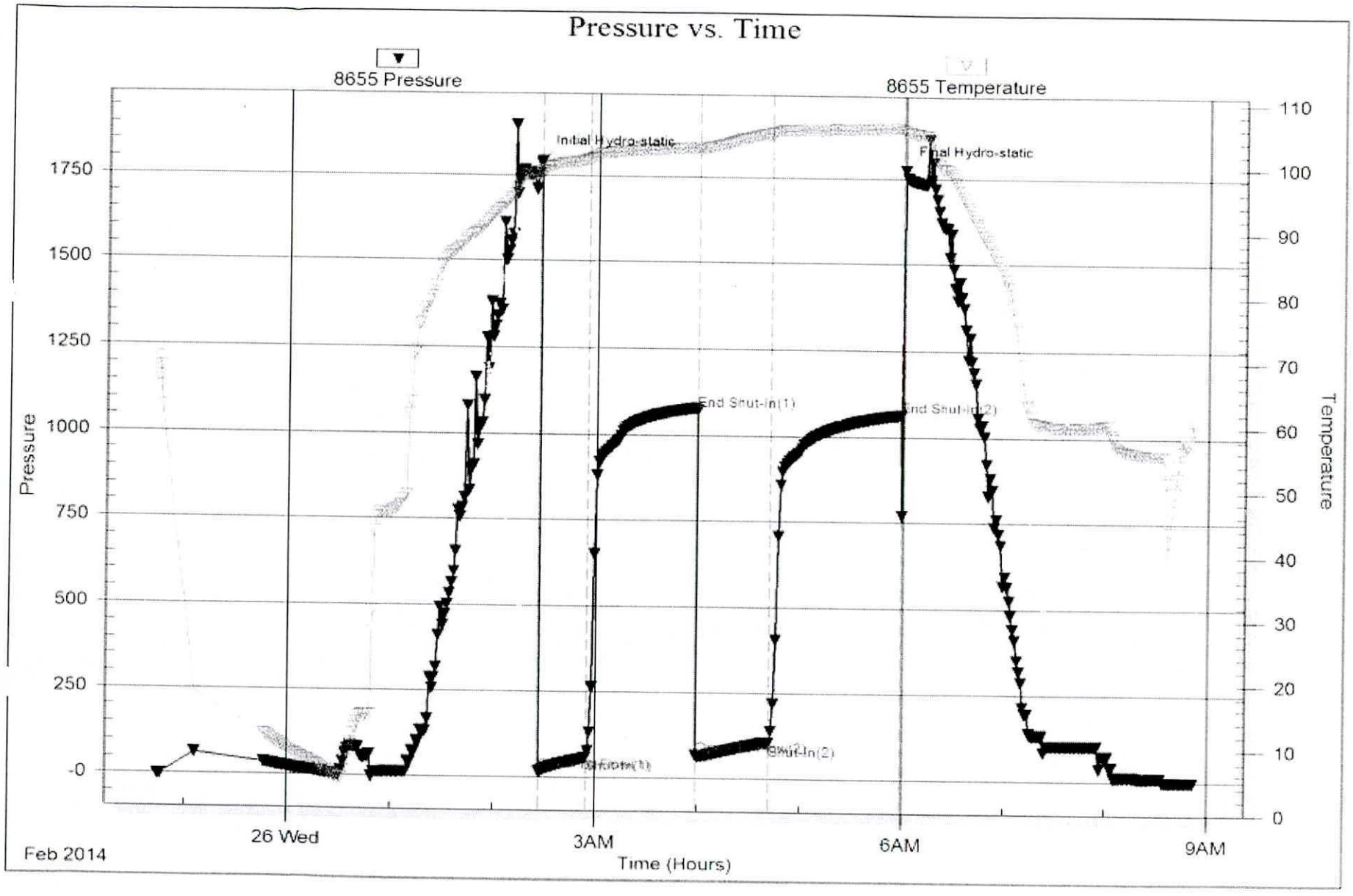
Total Length: 248.00 ft Total Volume: 1.293 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: 30 @ 40 Degrees = 32 Gravity

Serial #: 8655 **Outside** Trek AEC, Inc Stice Hill Unit 1-28 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 56081 Printed: 2014 02 26 @ 10 24 28

DRILL STEM TEST REPORT

Trek AEC, Inc

155 N. Market STE 710
Wichita KS, 67202

ATTN: Aaron Young

28-6s-20w Rooks KS

Stice Hill Unit 1-28

Job Ticket: 56082 **DST#: 5**

Test Start: 2014.02.26 @ 18:36:00

GENERAL INFORMATION:

Formation: **LKC "J-K"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 20:52:30
Time Test Ended: 02:17:45

Test Type: Conventional Bottom Hole (Reset)
Tester: Cody Bloedorn
Unit No: 73

Interval: 3624.00 ft (KB) To 3654.00 ft (KB) (TVD)
Total Depth: 3654.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

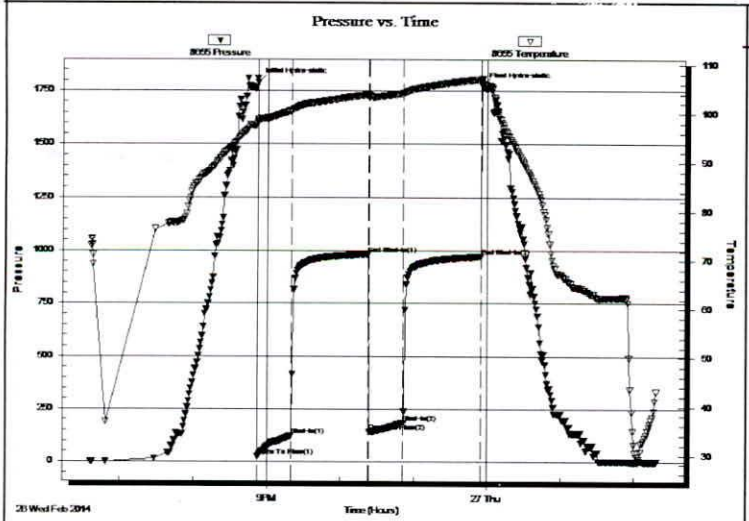
Reference Elevations: 2239.00 ft (KB)
2234.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8655 **Outside**

Press@RunDepth: 184.47 psig @ 3628.00 ft (KB)
Start Date: 2014.02.26 End Date: 2014.02.27
Start Time: 18:36:05 End Time: 02:17:44

Capacity: 8000.00 psig
Last Calib.: 2014.02.27
Time On Btm: 2014.02.26 @ 20:52:15
Time Off Btm: 2014.02.26 @ 23:55:30

TEST COMMENT: 30 - IF- B.O.B. in 5 minutes
60 - ISI- B.O.B. in 27 minutes
30 - FF- B.O.B. instantly
60 - FSI- 8" return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1786.78	98.85	Initial Hydro-static
1	23.84	98.28	Open To Flow (1)
28	121.97	100.66	Shut-In(1)
91	983.28	103.85	End Shut-In(1)
91	140.93	103.63	Open To Flow (2)
120	184.47	104.21	Shut-In(2)
183	972.08	107.04	End Shut-In(2)
184	1772.20	107.21	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
31.00	GHOCM, 20%G, 30%O, 50%M	0.15
434.00	GO, 30%G, 70%O	4.18
0.00	465' of G.I.P.	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Trek AEC, Inc

155 N. Market STE 710
Wichita KS, 67202

ATTN: Aaron Young

28-6s-20w Rooks KS

Stice Hill Unit 1-28

Job Ticket: 56082 **DST#: 5**

Test Start: 2014.02.26 @ 18:36:00

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:	47.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.00 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
31.00	GHOCM, 20%G, 30%O, 50%M	0.152
434.00	GO, 30%G, 70%O	4.184
0.00	465' of G.I.P.	0.000

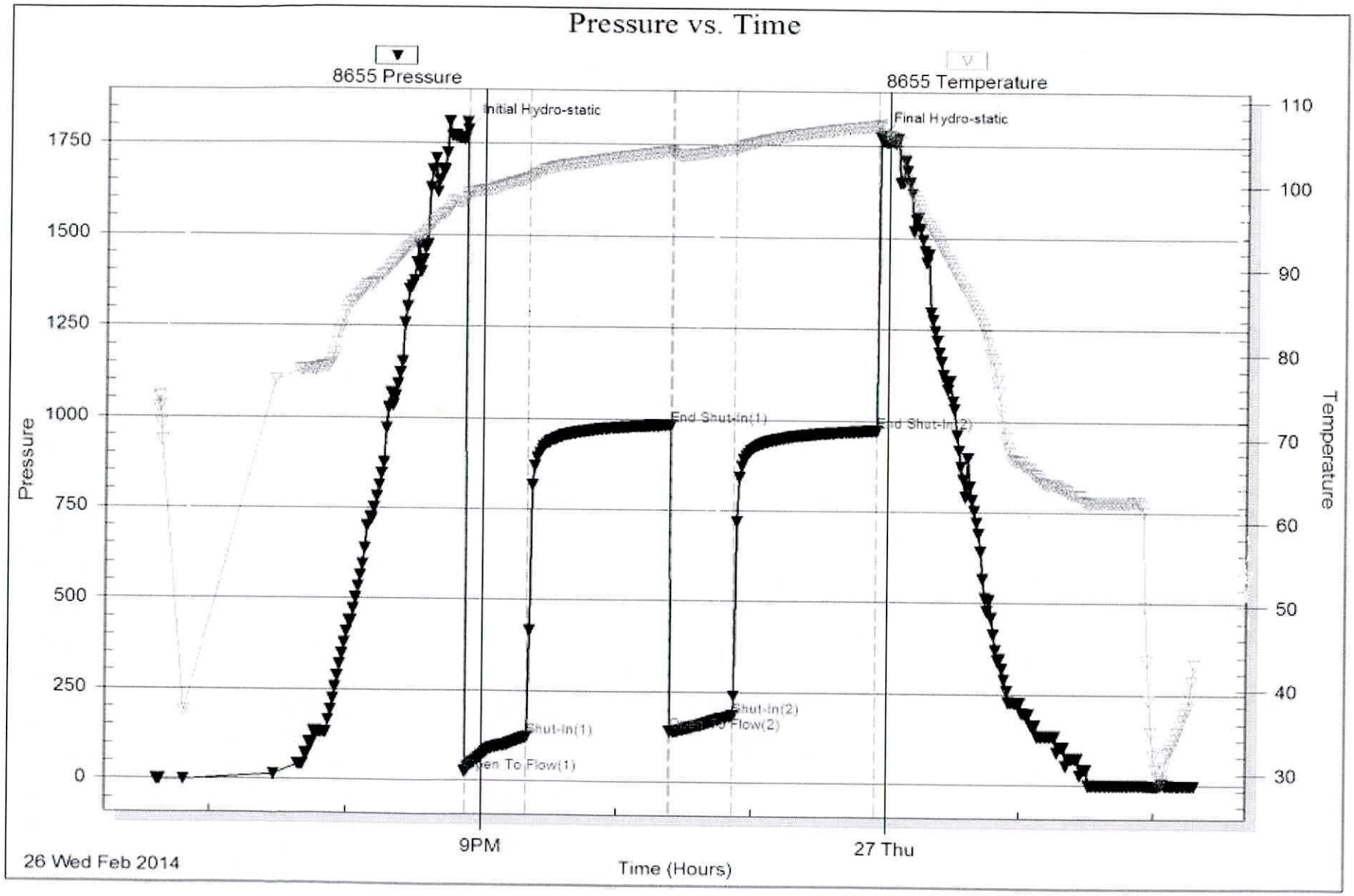
Total Length: 465.00 ft Total Volume: 4.336 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: 30 @ 50 Degrees = 31 Gravity

Serial #: 8655 **Outside** Trek AEC, Inc Stice Hill Unit 1-28 DST Test Number: 5



Trilobite Testing, Inc Ref. No: 56082 Printed: 2014.02.27 @ 08.02.06

DRILL STEM TEST REPORT

TRILOBITE TESTING, INC.

Trek AEC, Inc

155 N. Market STE 710
Wichita KS, 67202

ATTN: Aaron Young

28-6s-20w Rooks KS

Stice Hill Unit 1-28

Job Ticket: 56083 **DST#: 6**

Test Start: 2014.02.27 @ 14:58:00

GENERAL INFORMATION:

Formation: **Arbuckle**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 17:14:45
Time Test Ended: 21:53:15

Test Type: Conventional Bottom Hole (Reset)
Tester: Cody Bloedorn
Unit No: 73

Interval: 3684.00 ft (KB) To 3708.00 ft (KB) (TVD)
Total Depth: 3708.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

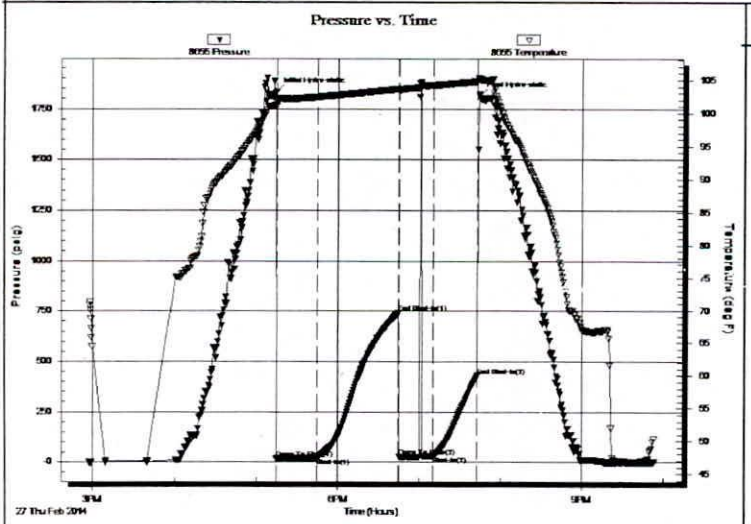
Reference Elevations: 2239.00 ft (KB)
2234.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8655 **Outside**

Press@RunDepth: 31.30 psig @ 3685.00 ft (KB)
Start Date: 2014.02.27 End Date: 2014.02.27
Start Time: 14:58:05 End Time: 21:53:14

Capacity: 8000.00 psig
Last Calib.: 2014.02.27
Time On Btm: 2014.02.27 @ 17:14:30
Time Off Btm: 2014.02.27 @ 19:43:30

TEST COMMENT: 30 - IF- 1 3/4" blow
60 - ISI- No return
30 - FF- No blow for 20 minutes, flushed tool, surged and died
30 - FSI- No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1830.59	101.93	Initial Hydro-static
1	17.62	101.05	Open To Flow (1)
30	22.04	102.40	Shut-In(1)
90	739.60	103.64	End Shut-In(1)
91	26.92	103.40	Open To Flow (2)
116	31.30	104.24	Shut-In(2)
148	427.54	104.79	End Shut-In(2)
149	1813.67	105.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	OCM, 20%O, 80%M	0.07

* Recovery from multiple tests

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Trek AEC, Inc

155 N. Market STE 710
Wichita KS, 67202

ATTN: Aaron Young

28-6s-20w Rooks KS

Stice Hill Unit 1-28

Job Ticket: 56083 **DST#: 6**

Test Start: 2014.02.27 @ 14:58:00

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:	51.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.00 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1000.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	OCM, 20%O, 80%M	0.074

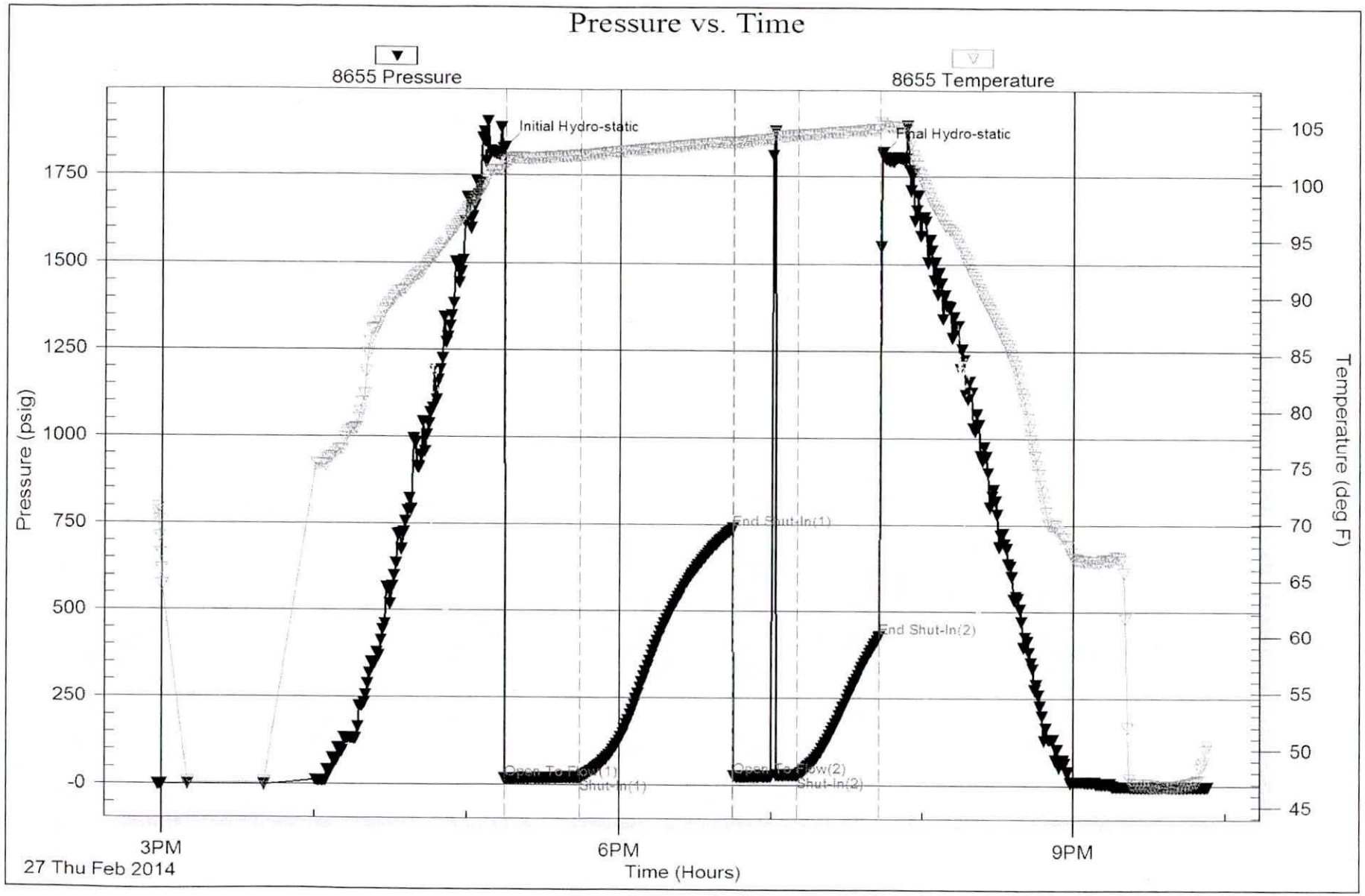
Total Length: 15.00 ft Total Volume: 0.074 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments: NOT enough oil to check gravity.

Serial #: 8655 **Outside** Trek AEC, Inc Stice Hill Unit 1-28 DST Test Number: 6



Trilobite Testing, Inc Ref. No: 56083 Printed: 2014.02.28 @ 00:13:47

Geologic Report

Aaron L. Young

Drilling Time and Sample Log

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

Well Name:	**Stice-Hill Unit #1-28**		
Location:	**Section 28 - T6S - R20W**		
License Number:	**API: 15-163-24165**	**Region:**	**Rooks Co., KS**
Spud Date:	**2 / 19 / 2014**	**Drilling Completed:**	**2 / 28 / 2014**
Surface Coordinates:	**150' FSL and 1950 FEL** **Approx. SW - SE - SW - SE**		
Bottom Hole Coordinates:			
Ground Elevation (ft):	**2234'**	**K.B. Elevation (ft):**	**2239'**
Logged Interval (ft):	**3300'** **To: 3780'**	**Total Depth (ft):**	**3780'**
Formation:	**Arbuckle**		
Type of Drilling Fluid:	**Chemical - Mud-Co**		

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

OPERATOR

Company: **Trek AEC, LLC**
Address: **155 N Market, Suite 710**
Wichita, KS 67202

GEOLOGIST

Name: **Aaron L. Young**
Company:
Address: **155 N. Market, Suite 710**
Wichita, Kansas 67202

General Info

CONTRACTOR: Mallard Drilling, Rig #1

BIT RECORD:

No.	Size	Make	Jets	Out	Feet	Hours
1	12-1/4	RR	----------	248	243	12.04
2	7-7/8	Smith F27	14-14-14	4780	4532	60

SURVEYS: 248'-.75, 3780'-1

GENERAL DRILLING AND PUMP INFORMATION:
Drilling with 35,000 lbs. on bit and approx 60 RPM.
Running 8 stands of collars; 537.04'
Pumping approx 800-900 psi at standpipe.

Daily Status

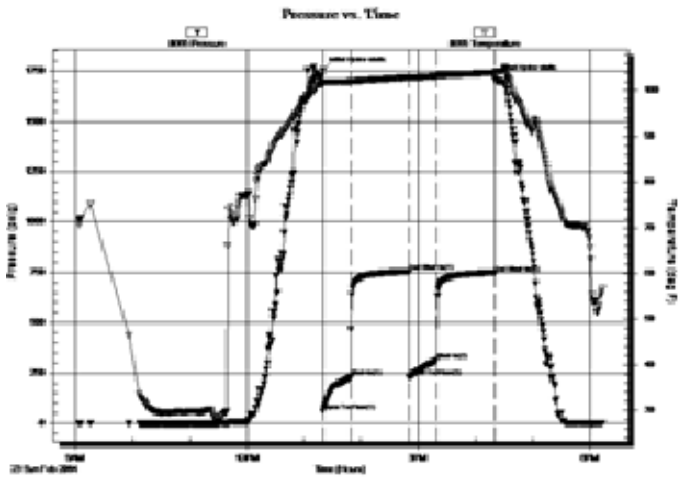
2/19/14 - Spud
2/20/14 - @ 248' WOC
2/21/14 - Drilling @ 2107'
2/22/14 - Drilling @ 2880'
2/23/14 - DST #1 3353'-3426'
2/24/14 - DST #2 3450'-4474'
2/25/14 - DST #3 3487'-3508'
2/26/14 - DST #4 3592'-3618'
2/27/14 - DST #5 3524'-3654'
2/28/14 - DST #6 3684'-3708', Reached TD @ 3780', Logged, Set casing

DST #1 Topeka 3,353'-3,426'
30"-60"-30"-60"

IF: BOB in 7min
ISI: No blow
FF: BOB in 15min
FSI: Surface Blow for 5min and then died

Rec': 403' ft MW (50% M, 50% W), 124' WM (20% W, 80% M)

SIP: 754-746; FP: 62-229, 232-312; HP: 1755-1712

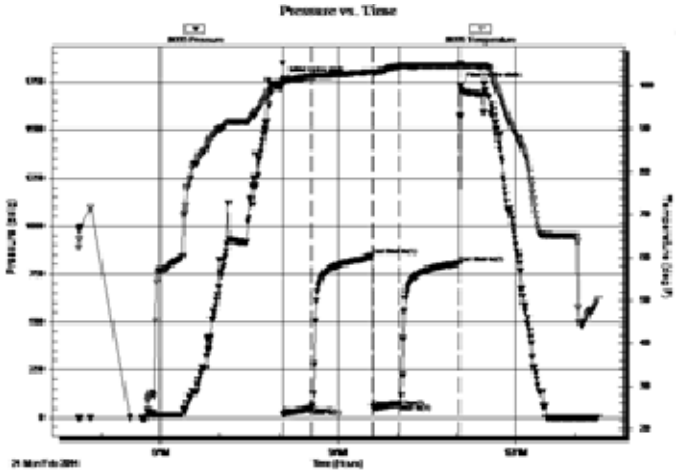


DST #2 Toronto / LKC "A" 3,450'-3,474'
30"-60"-30"-60"

IF: 6.5" blow
ISI: No return
FF: 4" blow
FSI: No return

Rec': 124' ft HOCM (40% M, 60% O), 31' GO (10% G, 90% O), 286' GIP

SIP: 843-846; FP: 20-47, 52-71; HP: 1762-1734

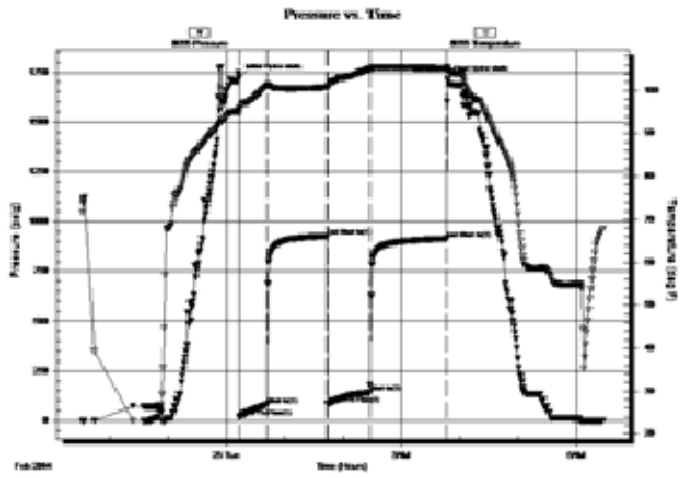


DST #3 LKC "C" 3,487'-3,508'
30"-60"-45"-75"

IF: 6" blow
ISI: Surface return, died in 35min
FF: 8" blow
FSI: Surface return

Rec': 62' WM (40% W, 60% M), 186' MW w/ oil spots (30% M, 70% W), 5' Free Oil (100% O)

SIP: 927-915; FP: 17-80, 84-141; HP: 1726-1716

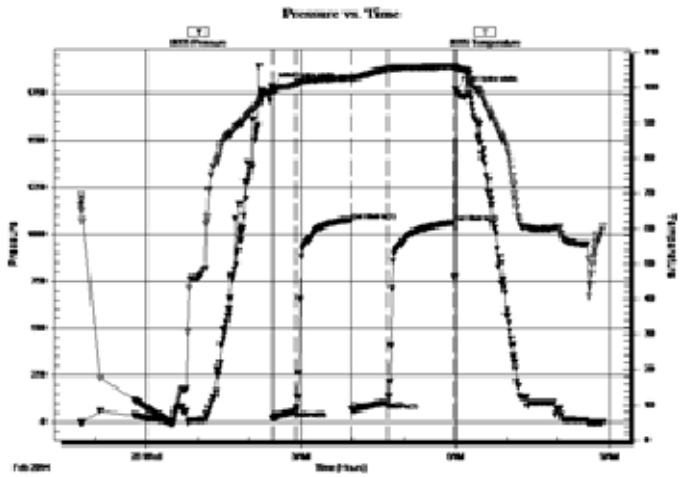


DST #4 LKC "H" & "I" 3,592'-3,618'
30"-60"-45"-75"

IF: 7" blow
ISI: No return
FF: BOB in 28 min
FSI: 1/4" return

Rec': 62' OCM (25% O, 75% M), 186' GO (30% G, 70% O), 186' GIP

SIP: 1073-1064; FP: 19-59, 70-106; HP 1791-1771

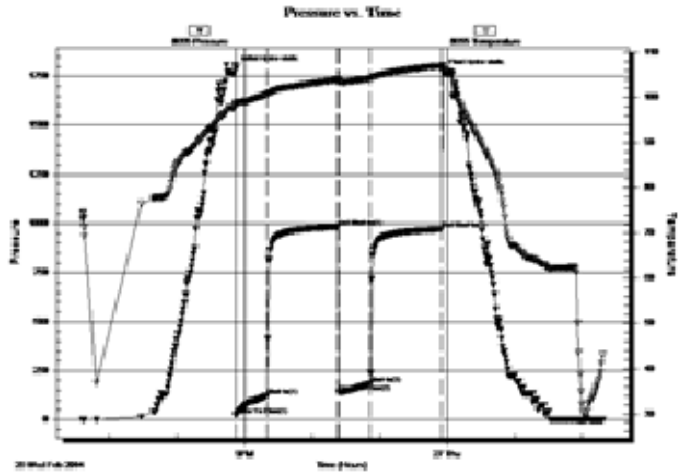


DST #5 LKC "J" & "K" 3,624'-3,654'
30"-60"-30"-60"

IF: BOB in 5min
ISI: BOB in 27min
FF: BOB in instantly
FSI: 8" return

Rec': 31' GHOCM (20% G, 30% O, 50% M), 434' GO (30% G, 70% O), 465' GIP

SIP: 983-972, FP: 24-122, 141-184; HP: 1787-1772

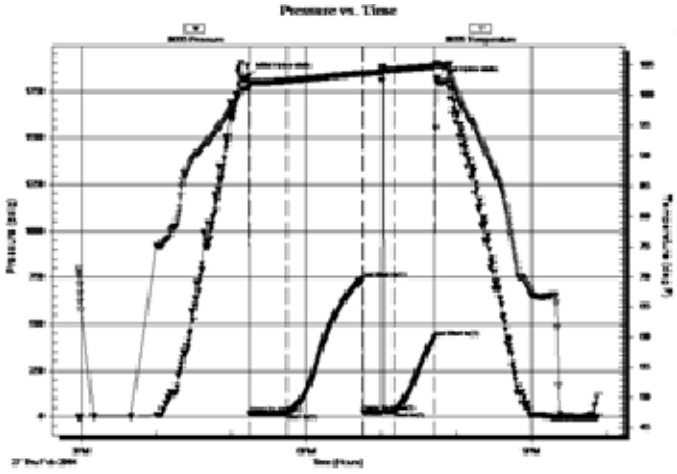


DST #6 Arbuckle 3,684'-3,708'
30"-60"-30"-30"

IF: 1 3/4" blow
ISI: No return
FF: No blow, waited 20" & flushed, surged and died
FSI: No return

Rec': 15' OCM (20% O, 80% M)

SIP: 740-428; FP: 18-22, 27-31; HP: 1831-1814



ROCK TYPES

- Anhy
- Bent
- Brec
- Cht
- Clyst
- Coal
- Congl
- Dol
- Gyp
- Igne
- Lmst
- Meta
- Mrlst
- Salt
- Shale
- Shcol
- Shgy
- Sltst
- Ss
- Till
- Carb sh
- Dol
- Dtd
- Gry sh
- Sandylms
- Shale
- Sltstn
- Shlyslts
- Sltysh
- Lms

ACCESSORIES

MINERAL
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Slty

FOSSIL
- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomold

STRINGER
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh
- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn

TEXTURE
- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OTHER SYMBOLS

POROSITY TYPE
- Earthy
- Fenest
- Fracture
- Inter
- Moldic
- Organic
- Pinpoint
- Vuggy

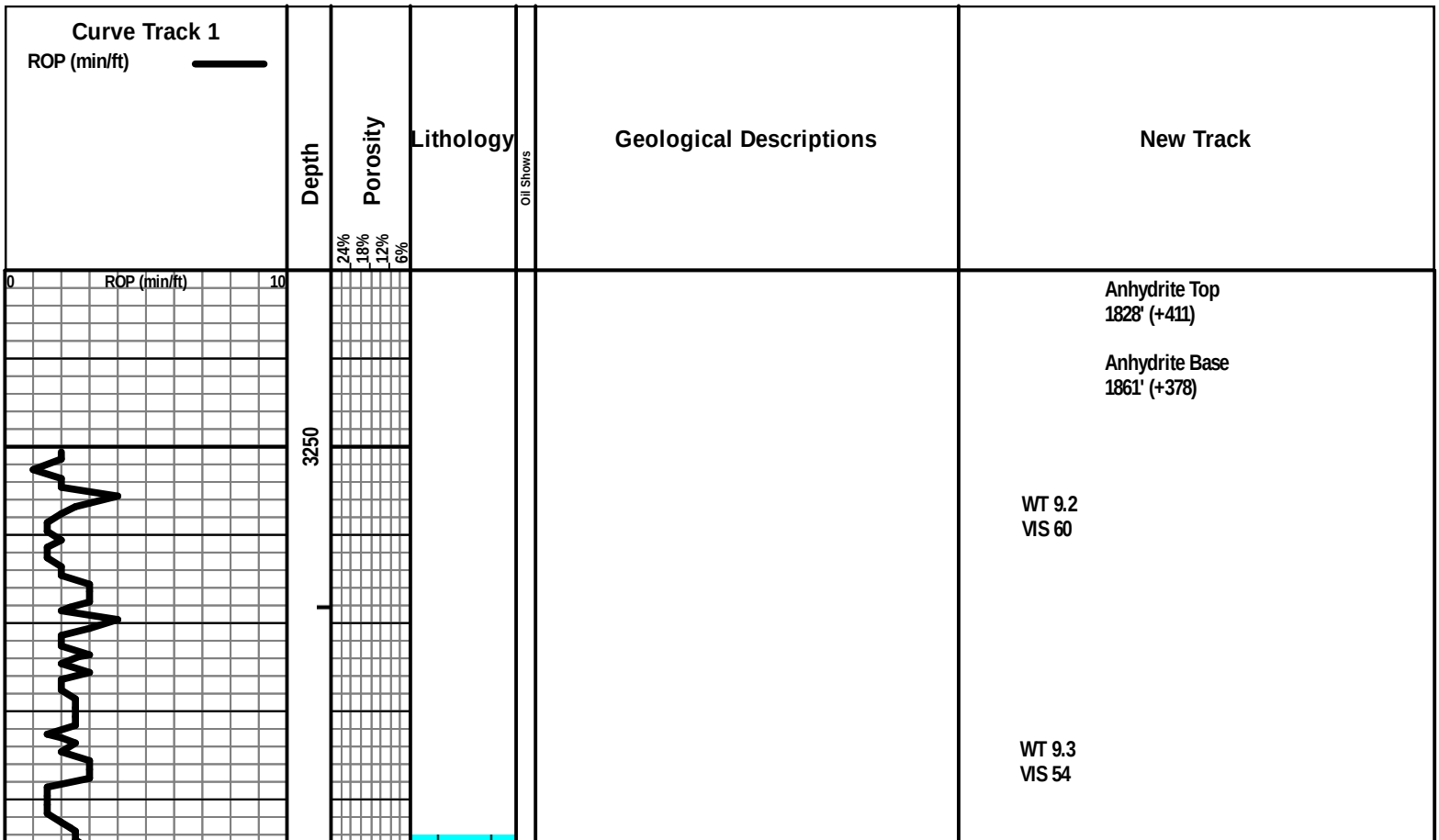
SORTING
- Well
- Moderate
- Poor

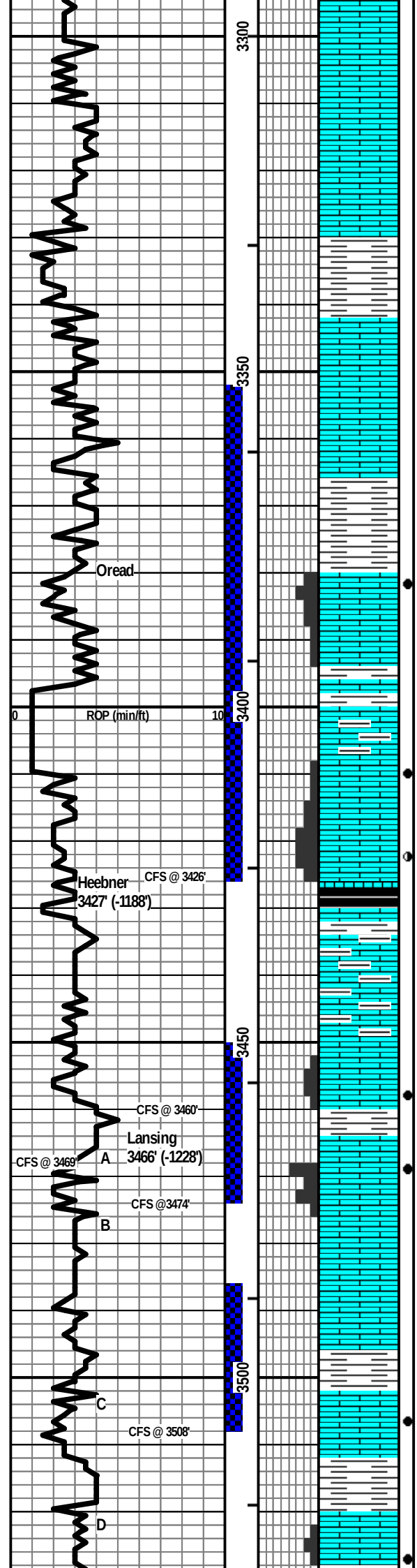
ROUNDING
- Rounded
- Subrnd
- Subang
- Angular

OIL SHOWS
- Even
- Spotted
- Ques
- Dead
- Gas show

INTERVALS
- Core
- Dst
- Dst

EVENTS
- Rft
- Sidewall
- Conn





LS - CRM / TAN, VF / F XLN, PRED MOD DNS, SUBSHCKY IN PT, W/ CHT - BRN OPQ

LS - CRM / TAN, VF XLN, SUBCHKY / CHKY

LS - TAN / GY, VF XLN, DNS, FOSS (CRI), STYLOLITIZED

LS - TAN, F XLN, DNS, FOSS (FUSUL, BRYZO), W/ SH - GRN / GY

SH - RD, W LS - TAN, F XLN, DNS, PYRITIZED IN PT

LS - WHT / CRM, VF XLN, CHKY

LS - CRM / TAN, F XLN, DNS, FOSS (FUSUL)

SH- GY / GRN / RD

LS - CRM / TAN, F XLN, F / G INTXLN POR, FSFO, SLI ODOR, LT BRN OIL, OIL SHEEN, SLI YEL FLUOR

LS - TAN, F XLN, P / F INXLN POR, NS

SH - GRN, LMY, W/ LS - TAN / GY, F XLN, DNS, FOSS

LS - TAN, F XLN, P INTXLN + VUG POR, FSFO, SLI ODOR, LT BRN OIL, OIL SHEEN, SLI YEL FLUOR

LS - TAN, F XLN, DNS, FOSS, NS

LS - TAN, F XLN, F / G INTXLN POR, SLI SFO, V SLI ODOR, LT BRN OIL, OIL SHEEN, V G YEL FLUOR

SH - BLK, CARB W/ SH - GY, GRN, MAR, ORNG-RD, W/ LS - WHT / CRM / GY, VF XLN, V CHKY

LS - WHT / CRM / GY, VF XLN, V CHKY, SHLY

SH - GRN , MAR, RD

LS- TAN / BRN, F XLN, P / F INTXLN POR, FSFO, LT BRN OIL, FOSS, SLI ODOR, SLI YEL FLUOR

LS - WHT / CRM, F XLN, F / G INTXLN + VUG POR, GSFO, LT BRN OIL, SLI YEL FLUOR

LS - CRM, VF XLN, SUBCHKY / CHKY, NS

LS - CRM / TAN, F XLN, PRED DNS, SUBCHKY IN PT, NS

SH - GY / GRN / RD, LMY IN PT

LS - CRM / TAN, F XLN, P / F / G INTXLN + VUG POR, GSFO, LT BRN OIL, OOL IN PT, SLI ODOR, G YEL FLUOR

60" LS - CRM / TAN, F XLN, DNS, NS, NO ODOR

SH - GY / GRN / RD

SH - RD

LS - CRM / TAN, F XLN, P / F INTXLN + VUG POR, FSFO, SLI ODOR, NO FLUOR

Drilling with 8 stands of collars and 35,000# of WOB @ 60 RPM with approx. 800-900 psi at standpipe

WT 9.1
VIS 52
LCM 1#

DST #1
Topeka
3353'-3426'
30"-60"-30"-60"

IF: BOB in 7min
ISI: No blow
FF: BOB in 15min
FSI: Surface Blow for 5min and then died

Rec': 403' ft MW (50% M, 50% W), 124' WM (20% W, 80% M)

IH: 1755#
IF: 62#-229#
ISI: 754#
FF: 232#-312#
FSI: 746#
FH: 1712#

WT 9.1
VIS 52
LCM 1#

DST #2
Toronto / LKC "A"
3450'-3474'
30"-60"-30"-60"

IF: 6.5" blow
ISI: No return
FF: 4" blow
FSI: No return

Rec': 124' ft HOCM (40% M, 60% O), 31' GO (10% G, 90% O), 286' GIP

IH: 1762#
IF: 20#-47#
ISI: 843#
FF: 52#-71#
FSI: 806#
FH: 1734#

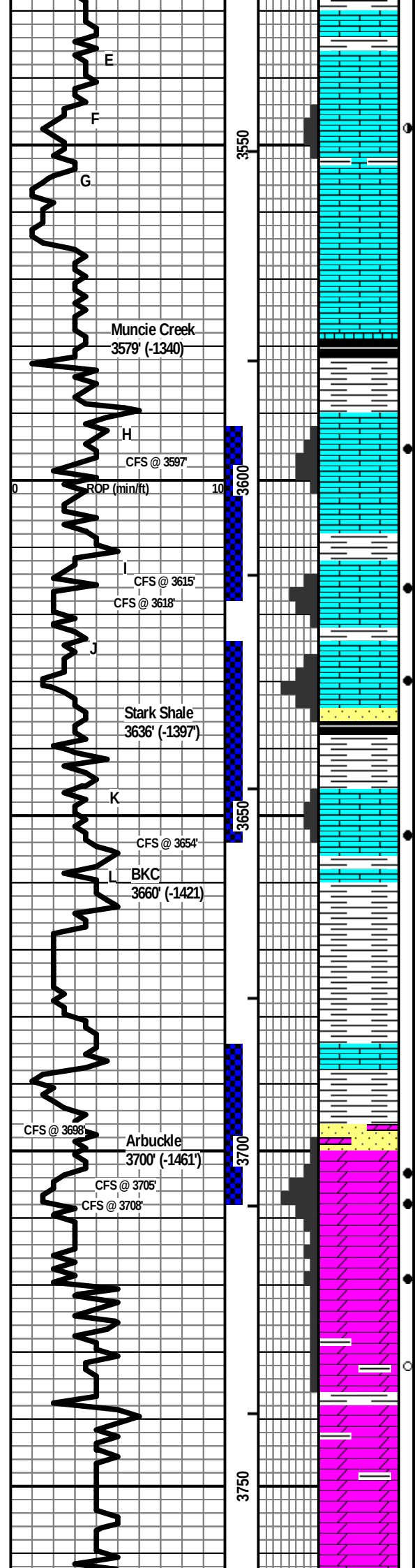
WT 9.1
VIS 50
LCM 1#

DST #3
LKC "C"
3487'-3508'
30"-60"-45"-75"

IF: 6" blow
ISI: Surface return, died in 35min
FF: 8" blow
FSI: Surface return

Rec': 62' WM (40% W, 60% M), 186' MW w/ oil spots (30% M, 70% W), 5' Free Oil (100% O)

IH: 1726#
IF: 17#-80#
ISI: 927#
FF: 84#-141#
FSI: 915#



ODOR, NO FLUOR

LS - CRM / TAN, F XLN, DNS, FOSS, NS

LS - CRM, VF / F XLN, P / F INTXLN POR IN PT, SUBCHKY IN PT, SLI SFO, SLI ODOR, YEL FLUOR IN PT

LS - WHT / CRM, VF XLN, V CHKY, NS, NO ODOR

LS - TAN / GY, F XLN, DNS, ABUND FOSS (BRACH, CRI)

SH - BLK, CARB, W/ LS - GY / LT BRN, VF / F XLN, SHLY

LS - CRM / TAN, F XLN, F / G INTXLN POR, FSFO, LT BRN OIL, G STN, YEL FLUOR

LS - CRM / TAN, F XLN, DNS, NS

SH - BLK / GY / GRN / MAR / RD

LS - CRM / TAN, F XLN, P / F / G INTXLN + VUG POR, XLCNT INTXLN POR IN PT, GSFO, G SAT, LT BRN OIL, G SAT, F ODOR, G YEL-GRN FLUOR

SH - GY / GRN, LMY

LS - WHT / CRM, VF XLN, CHKY

LS - TAN / LT BRN, F XLN, F / G / XLCNT POR, GSFO, COMP SAT, DK BRN OIL, V SLI YEL FLUOR

SS - F QTZ GR, W RND, LOOSE GR, NO SIGN OF CEMENT, ALL LOOSLY CONSOLIDATED

SH - BLK CARB, W/ SH - GY / GRN / RD

LS - CRM / TAN / LT GY, F XLN, P / F INTXLN POR IN PT, FSFO, F ODOR, NO FLUOR

LS - CRM / TAN, VF / F XLN, SUBCHKY IN PT, ABUND FOSS IN PT, NS

SH - GY / GRN / RD

LS - CRM / TAN, VF / F XLN, PRED DNS, FOSS, SUBCHKY IN PT

SS - CLR, VF / F GR, W SRTD, W RND, DOLOMITIC IN PT, GLAUC IN PT

DOLO, TAN / LT BRN, F XLN, SNDY IN PT, DNS IN PT, P / F INTXLN POR IN PT, GSFO, SLI YEL FLUOR, F ODOR

3708' - DOLO, TAN / LT BRN, F XLN, SLI RHOMBIC IN PT, PRED SUC, G / XLCNT INTXLN POR, VGSFO, COMP OIL SAT, DK BRN OIL, G ODOR, SLI YEL FLUOR

DOLO - WHT / CRM / TAN, PRED DNS, P / F INTXLN POR IN PT, FSFO, SPTY STN, V SLI ODOR, SLI YEL FLUOR

DOLO - CRM / TAN / GY, F XLN, DNS, SLI SPTY STN IN PT, NSFO, NO ODOR

SH - RD, DOLOMITIC IN PT

DOLO - CRM / TAN, F XLN, DNS, NS, NO ODOR

FH: 1716#

WT 9.0
VIS 48
LCM 1#

DST #4
LKC "H" & "I"
3592'-3618'
30"-60"-45"-75"

IF: 7" blow
ISI: No return
FF: BOB in 28 min
FSI: 1/4" return

Rec': 62' OCM (25% O, 75% M), 186' GO (30% G, 70% O), 186' GIP

IH: 1791#
IF: 19#-59#
ISI: 1073#
FF: 70#-106#
FSI: 1064#
FH: 1771#

WT 9.2
VIS 47
LCM 1#

DST #5
LKC "J" & "K"
3624'-3654'
30"-60"-30"-60"

IF: BOB in 5min
ISI: BOB in 27min
FF: BOB in instantly
FSI: 8" return

Rec': 31' GHOCM (20% G, 30% O, 50% M), 434' GO (30% G, 70% O), 465' GIP

IH: 1787#
IF: 24#-122#
ISI: 983#
FF: 141#-184#
FSI: 972#
FH: 1772#

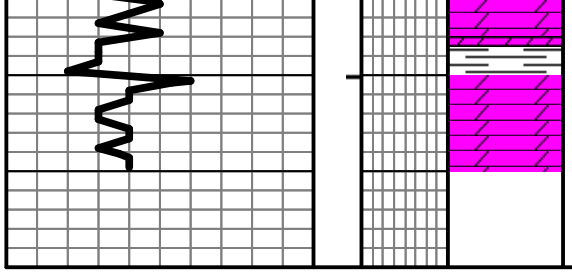
WT 9.0
VIS 51
LCM 1#

DST #6
Arbuckle
3684'-3708'
30"-60"-30"-30"

IF: 1 3/4" blow
ISI: No return
FF: No blow, waited 20" & flushed, surged and died
FSI: No return

Rec': 15' OCM (20% O, 80% M)

IH: 1831#
IF: 18#-22#
ISI: 740#
FF: 27#-31#
FSI: 428#
FH: 1814#



DOLO - YEL-TAN, F XLN, DNS, NS, W/ SH - GY / GRN

RTD 3780'

WT 9.3
VIS 57
LCM 1#