



KANSAS CORPORATION COMMISSION 1104043
OIL & GAS CONSERVATION DIVISION

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 # 31725
Name: Shelby Resources LLC
Address 1: 445 Union Boulevard
Address 2: Suite 208
City: LAKEWOOD State: CO Zip: 80228 +
Contact Person: Chris Gottschalk
Phone: (720) 274-4682
CONTRACTOR: License # 5142
Name: Sterling Drilling Company
Wellsite Geologist: Charlie Sturdavant
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 #: _____
01/31/2012 02/09/2012 04/17/2012
Spud Date or Date Reached TD Completion Date or
Recompletion Date Recompletion Date

API No. 15 - 15-145-21668-00-00
Spot Description: _____
NE_NW_NE_SW Sec. 13 Twp. 21 S. R. 16 East West
2530 Feet from North / South Line of Section
1803 Feet from East / West Line of Section
Footages Calculated from Nearest Outside Section Corner:
 NE NW SE SW
County: Pawnee
Lease Name: F-N Unit Well #: 1b
Field Name: _____
Producing Formation: N/A
Elevation: Ground: 1964 Kelly Bushing: 1973
Total Depth: 3900 Plug Back Total Depth: _____
Amount of Surface Pipe Set and Cemented at: 965 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: 25000 ppm Fluid volume: 1000 bbls
Dewatering method used: Haul Off Pit
Location of fluid disposal if hauled offsite:
Operator Name: Shelby Resources/ Captiva II
Lease Name: Eakin #2-7 License #: 31725
Quarter NE Sec. 7 Twp. 22 S. R. 16 East West
County: Pawnee Permit #: D-30,939-1-1772772

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: Deanne Garrisor Date: 12/12/2012



1104043

Operator Name: Shelby Resources LLC Lease Name: F-N Unit Well #: 1b
 Sec. 13 Twp. 21 S. R. 16 East West County: Pawnee

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 <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Submitted Electronically <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(If no, Submit Copy)</i> List All E. Logs Run: Attached	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:60%;">Name</td> <td style="width:20%;">Top</td> <td style="width:20%;">Datum</td> </tr> <tr> <td>Heebner</td> <td>3340</td> <td>-1367</td> </tr> <tr> <td>Lansing</td> <td>3448</td> <td>-1475</td> </tr> <tr> <td>Base KC</td> <td>3675</td> <td>-1702</td> </tr> <tr> <td>Viola</td> <td>3728</td> <td>-1755</td> </tr> <tr> <td>Simpson Sand</td> <td>3782</td> <td>-1809</td> </tr> <tr> <td>Arbuckle</td> <td>3798</td> <td>-1825</td> </tr> </table>	Name	Top	Datum	Heebner	3340	-1367	Lansing	3448	-1475	Base KC	3675	-1702	Viola	3728	-1755	Simpson Sand	3782	-1809	Arbuckle	3798	-1825
Name	Top	Datum																				
Heebner	3340	-1367																				
Lansing	3448	-1475																				
Base KC	3675	-1702																				
Viola	3728	-1755																				
Simpson Sand	3782	-1809																				
Arbuckle	3798	-1825																				

CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	965	60/40 Poz	450	2% gel/ 3%cc
Production	7.875	5.5	15.5	3878	AA2	150	2%gel/ 3% cc

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input checked="" type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone	3814-3816	AA2	50	D.O.C.

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	3820-22	CIBP	3819'
4	3820-22	CIBP	3819
4	3814-16	250 20% INS	

TUBING RECORD: Size: <u>2.387</u> Set At: <u>3816</u> Packer At: _____		Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Date of First, Resumed Production, SWD or ENHR. <u>04/17/2012</u>		Producing Method: <input checked="" type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____	
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.
		200	60
Gas-Oil Ratio		Gravity	

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i> <input type="checkbox"/> Other (Specify) _____	PRODUCTION INTERVAL: _____ _____
---	---	--

Form	ACO1 - Well Completion
Operator	Shelby Resources LLC
Well Name	F-N Unit 1b
Doc ID	1104043

All Electric Logs Run

Dual Induction
Compensated Neutron
Micro
Sonic

QUALITY OILWELL CEMENTING, INC.

785-483-2025

Home Office P.O. Box 32 Russell, KS 67665

No. 359

785-324-1041

Date	2-1-12	Sec.	13	Twp.	21	Range	16	County	PAWNEE	State	KANSAS	On Location		Finish	9:00 pm
------	--------	------	----	------	----	-------	----	--------	--------	-------	--------	-------------	--	--------	---------

Lease	F-N UNIT	Well No.	1B	Location	LARNED E. 3 MILES SW 156 HWY 5 INTO
-------	----------	----------	----	----------	-------------------------------------

Contractor	STERLING #4	Owner	SHELBY RESOURCES/CAPTIVA II
------------	-------------	-------	-----------------------------

Type Job	LONG SURFACE	To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.	
----------	--------------	--	--

Hole Size	12 1/4	T.D.	970'
-----------	--------	------	------

Csg.	8 5/8	Depth	964.78	Charge To	SHELBY RESOURCES
------	-------	-------	--------	-----------	------------------

Tbg. Size		Depth		Street	2717 CANAL BLVD, SUITE C
-----------	--	-------	--	--------	--------------------------

Tool		Depth		City	HAYS	State	KANSAS
------	--	-------	--	------	------	-------	--------

Cement Left in Csg.		Shoe Joint	41.12	The above was done to satisfaction and supervision of owner agent or contractor.		
---------------------	--	------------	-------	--	--	--

Meas Line		Displace	58.5	Cement Amount Ordered	450 SKS - 40' 3 1/2" 2% GEL - 4 1/2" 5% GEL
-----------	--	----------	------	-----------------------	---

EQUIPMENT

Pumptrk	15	No.	Cementor Helper	6500	Common	390
---------	----	-----	-----------------	------	--------	-----

Bulktrk	13	No.	Driver	CORY	Poz. Mix	180
---------	----	-----	--------	------	----------	-----

Bulktrk	P/U	No.	Driver	RECK #14 MIKE	Gel.	10
---------	-----	-----	--------	---------------	------	----

JOB SERVICES & REMARKS

Remarks:	Hulls
Rat Hole	Salt
Mouse Hole	Flowseal 120#
Centralizers	Kol-Seal
Baskets	Mud CLR 48
D/V or Port Collar	CFL-117 or CD110 CAF 38
	Sand

CEMENT DID NOT CIRCULATE
1" INCH BARKSIDE WITH
40 FT 0" 1 INCH DEPT TAGGED CEMENT
@ 50 FT - PLUMBED 180 SK COMB 5% GEL
FILLED CELLAR HALF FULL, DID NOT
FALL BACK AFTER 20 MIN PERIOD.
FINISHED @ 9:00 pm.

THANK YOU!

FLOAT EQUIPMENT

Guide Shoe	1- 8 7/8
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	
	1- 8 5/8 RUBBER PLUG
	1- 8 5/8 BREELE PLATE
Pumptrk Charge	Long Surface
Mileage	19

X Signature *Tracy A. Holroyd*

Tax	
Discount	
Total Charge	



TREATMENT REPORT

Customer: Shelby Resources	Lease No.	Date: 2-9-2012
Lease: F-N UNIT	Well # 1	
Field Order # 5075	Station Pratt	Casing 2 1/2
		Depth 3888'
Type Job CNW 5 1/2 LS	Formation	County Pawnee State KS
		Legal Description 73-21-16

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
5 1/2								5 Min.
Depth 3888'	Depth	From	To	Pre Pad	Max			10 Min.
Volume 92	Volume	From	To	Pad	Min			15 Min.
Max Press 2,000	Max Press	From	To	Frac	Avg			Annulus Pressure
Well Connection P.C.	Annulus Vol.	From	To		HHP Used			Total Load
Plug Depth 3867.53	Packer Depth	From	To	Flush	Gas Volume			

Customer Representative: _____ Station Manager: **DAVE SCOTT** Treater: **Robert J. [Signature]**

Service Units	Driver Names	Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
33708 20920	Melton Phye Sullivan	4:20					ON BOX SAFETY MEETING
19460 14915							Run 92 575 529 155 CSG
37400							Centralizers 1, 3, 5, 7, 9
							Basket
		6:40					Casing and Bottom
		6:50					Hook Rig case
		7:05	200		5	4	At spacer
					12	2.5	mix 50 st seawater @ 14,000
					36		mix 150 st Adz cont @ 15,000
					3		Shut down water pump, lines
							Release Plug
						4	At pump
			400		67		lift 15
			450			2.5	Shut Rig
		8:30	1850		92		plug down
					7	2	plug pull up 20 st seawater case
					7	2	plug pull up 20 st seawater case
							500 gal water
							Thank you

Taylor Printing, Inc. 620-672-3656

Scale 1:240 Imperial

Well Name: F-N Unit # 1-B
Surface Location: 2530' FNL, 1803' FWL, Sec. 13 T21S R16W
Bottom Location:
API: 15-145-21668-00-00
License Number:
Spud Date: 1/31/2012 Time: 3:00 PM
Region: Pawnee County
Drilling Completed: 2/8/2012 Time: 10:38 AM
Surface Coordinates: 567837 & 1846600
Bottom Hole Coordinates:
Ground Elevation: 1964.00ft
K.B. Elevation: 1973.00ft
Logged Interval: 3000.00ft To: 3901.00ft
Total Depth: 3900.00ft
Formation: Arbuckle
Drilling Fluid Type: Chemical/Fresh Water Gel

OPERATOR

Company: Captiva II
Address: 445 Union Blvd., Suite 208
Lakewood, CO 80228
Contact Geologist: Janine Sturdavant
Contact Phone Nbr: 303-907-2209
Well Name: F-N Unit # 1-B
Location: 2530' FNL, 1803' FWL, Sec. 13 T21S R16W
Pool: API: 15-145-21668-00-00
State: Kansas Field: Wildcat
Country: USA

LOGGED BY



Charlie Sturdavant Consulting

Company: Charlie Sturdavant Consulting
Address: 920 12th Street
Golden, CO 80401
Phone Nbr: 303-907-2295----303-384-9481
Logged By: Geologist Name: Charlie Sturdavant

NOTES

The Captiva II #1-B F-N Unit well was drilled to a LTD of 3900', bottoming in the Arbuckle. A TookeDAQ gas detector was employed during the drilling of all prospective formations. Gas was detected in the Viola and in the Arbuckle. Sample shows were noted in the Lansing "I" zone, Viola, and in the Arbuckle. Three drill stem tests were conducted in progressively deeper zones in the Arbuckle. Gas flowed to surface immediately during the first 2 tests, gauging as much as 396 MCFD.

After log analysis, sample evaluation, and the favorable DST's, it was determined by all parties involved, that production casing should be run, and that the Arbuckle should be further evaluated through perforations.

The dry samples were saved and will be available for review at the Kansas Geological Survey well sample library, located in Wichita, Kansas.

Respectfully submitted,
Charlie Sturdavant
Consulting Geologist

Daily Drilling Report

Charlie Sturdavant Consulting

DAILY DRILLING REPORT

Company: Charlie Sturdavant Consulting
920 12th Street
Golden, CO 80401

Well: #1-B F-N Unit
Location: 2530' FSL & 1803' FWL
Sec. 13 T21S R16W
Pawnee County, KS

Captiva II Office: 303-274-4682
Jim Waechter Cell: 303-478-3388

Wellsite Geologist: Charlie Sturdavant
Cell: (303) 907-2295
Office: (303) 384-9481

Elevation: 1973' KB 1964' GL
Field: Wildcat
API No.: 15-145-21668-0000
Surface Casing: 8 5/8" set @ 965' KB

Drilling Contractor: Sterling Drilling Rig #4 620-388-4192, Tool Pusher: Lanny Saloga, cell: 620-388-4193

DATE	7:00 AM DEPTH	REMARKS
1/31/2012	0 ft.	Skid rig 50' from the #1 F-N Unit location. Spud new hole @ 1500 hrs.
2/1/2012	770 ft.	Drilling ahead w/ 12-1/8" bit.
2/2/1012	965 ft.	WOC. Set 23 joints of new 24# 8-5/8" casing at 965'.
2/3/2012	1445 ft.	Drilling ahead.
2/4/2012	2530 ft.	Drilling ahead.
2/5/2012	3233 ft.	Drilling ahead.
2/6/2012	3739 ft.	Drilling ahead. To short trip at 3743'. DST #1: GTS 381 MCD, rec 65' mud.
2/7/2012	3820 ft.	To conduct DST #2, 3807-3820'.
2/8/2012	3833 ft.	CTCH. DST #3 recovered 450' OC, GC, MC, and clean oil, and 2468' water. Reach LTD of 3900' @ 1038 hrs. Logging completed @ 1930 hrs. Geologist off location @ 2000 hrs.

Charlie Sturdavant Consulting

WELL COMPARISON SHEET

DRILLING WELL Captiva II #1-B F-N Unit 2530' FSL & 1603' FWL Sec. 13, T21S R16W					COMPARISON WELL Captiva II #1-13 Fieske 2310' FSL & 1618' FEL Sec. 13, T21S R16W				COMPARISON WELL D. R. Lauck #1 Haney NW-SW-NW Sec. 13, T21S R16W			
1973 KB					1976 KB		Structural Relationship		1975 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Anhydrite	955	1018	1010	963	852	1024	-6	-61	968	1007	11	-44
Tarkio	2781	-808	2782	-809	2760	-804	-4	-5	2768	-813	5	4
Elmont	2841	-868	2840	-867	2836	-860	-8	-7	2846	-871	3	4
Howard	2988	-1018	2966	-1013	2962	-1006	-9	-7	2990	-1015	0	2
Topeka	3069	-1096	3068	-1095	3064	-1088	-8	-7	3070	-1095	-1	0
Queen Hill	3236	-1263	3234	-1261	3232	-1256	-7	-6	3233	-1258	-6	-3
Heebner	3340	-1367	3338	-1365	3335	-1359	-8	-6	3341	-1366	-1	1
Toronto	3368	-1395	3356	-1383	3362	-1386	-9	3	3360	-1385	-10	2
Douglas	3378	-1405	3374	-1401	3372	-1396	-9	-8	3374	-1399	-6	-2
Brown Lime	3436	-1463	3436	-1463	3434	-1458	-5	-6	3436	-1461	-2	-2
Lansing	3448	-1476	3445	-1472	3447	-1471	-4	-1	3442	-1467	-8	-5
Stark Shale	3636	-1663	3633	-1660	3632	-1656	-7	-4	3636	-1661	-2	1
Base KC	3675	-1702	3676	-1703	3673	-1697	-5	-6	3680	-1705	3	2
Conglomerate	3690	-1717	3698	-1725	3700	-1724	7	-1	3709	-1734	17	9
Viola	3728	-1755	3728	-1755	3714	-1738	-17	-17	3730	-1755	0	0
Simpson Shale	3767	-1794	3770	-1797	3760	-1784	-10	-13	3776	-1801	7	4
Simpson Sand	3782	-1809	3772	-1799	3782	-1806	-3	7	3788	-1813	4	14
Arbuckle	3798	-1825	3798	-1825	3802	-1826	1	1	3819	-1844	19	19
Total Depth	3900	-1927	3896	-1923	3927	-1951	24	28	4000	-2025	98	102

SURFACE CO-ORDINATES

Well Type: Vertical
 Longitude: Latitude:
 N/S Co-ord: 567837
 E/W Co-ord: 1846600


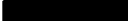

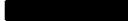








CONTRACTOR

Contractor: Sterling Drilling
 Rig #: 4
 Rig Type: mud rotary
 Spud Date: 1/31/2012
 TD Date: 2/8/2012
 Rig Release:
 Time: 3:00 PM
 Time: 10:38 AM
 Time:

ELEVATIONS

K.B. Elevation: 1973.00ft
 K.B. to Ground: 9.00ft
 Ground Elevation: 1964.00ft

ROCK TYPES

 Cht	 Lmst fw<7	 Shgy	 shale, red
 Dolprim	 Lmst fw>7	 shale, gry	 Shccl
 Dolsec	 shale, grn	 Carbon Sh	 Ss

ACCESSORIES

MINERAL	FOSSIL	STRAT./SED. STRUCTS	STRINGER	TEXTURE
⊥ Calcareous	∇ Algae	 Stylolite	 Shale	C Chalky
△ Chert White	∩ Bioclastic or Fragmental	 Stylolites	 green shale	L Lithogr
▲ Chert, dark	♢ Brachiopod		 red shale	
↖ Dolomitic	⊥ Bryozoa			

P Pyrite

- Crinoids
- F Fossils < 20%
- ◊ Fossilinid
- Oolites
- ◊ Oomoldic
- Peloids
- ♣ Pellets
- ▲ Spicules

OTHER SYMBOLS

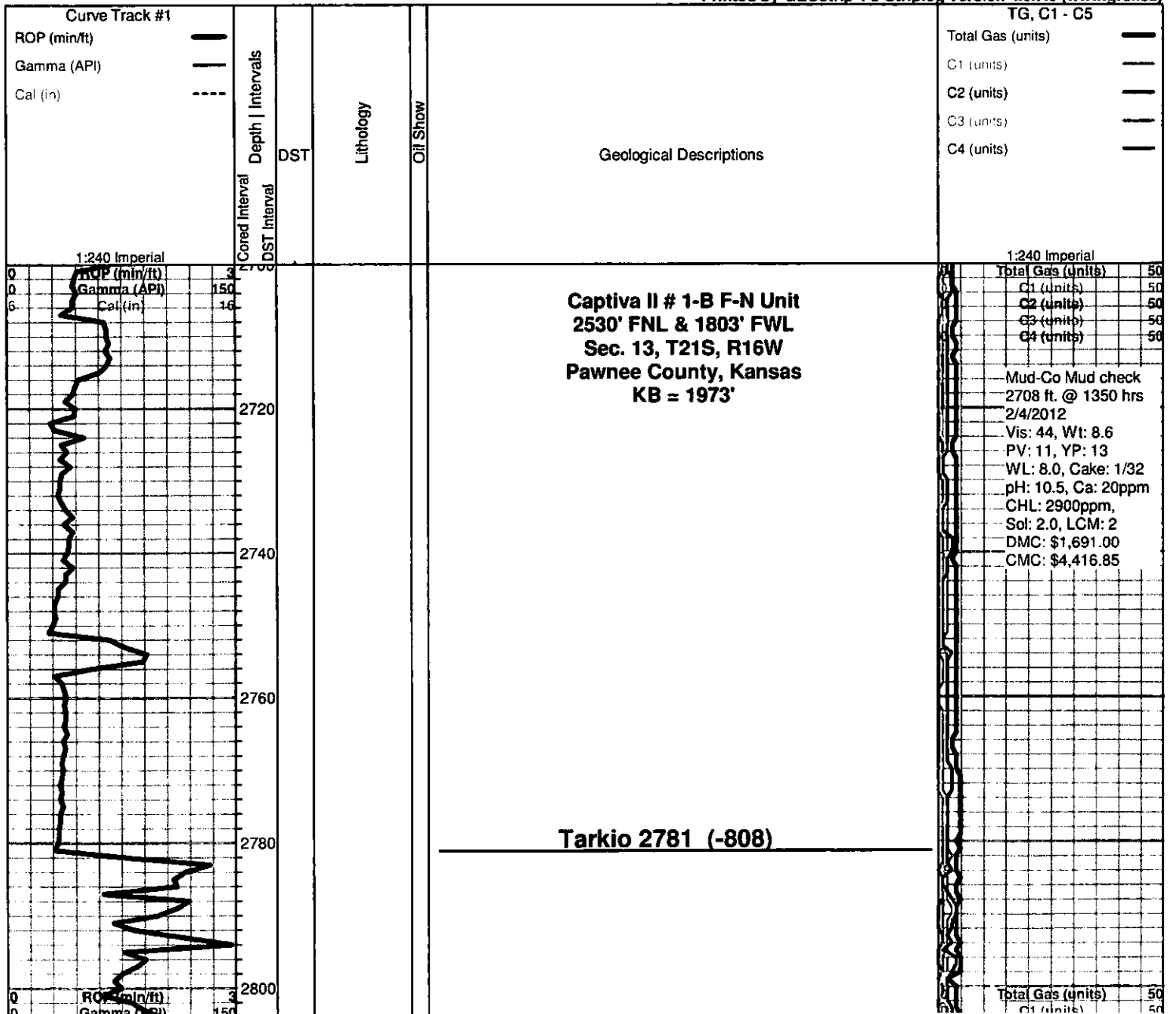
MISC

- Daily Report
- Digital Photo
- Document
- Folder
- Link
- Vertical Log File
- Horizontal Log File
- Core Log File
- Drill Cuttings Rpt

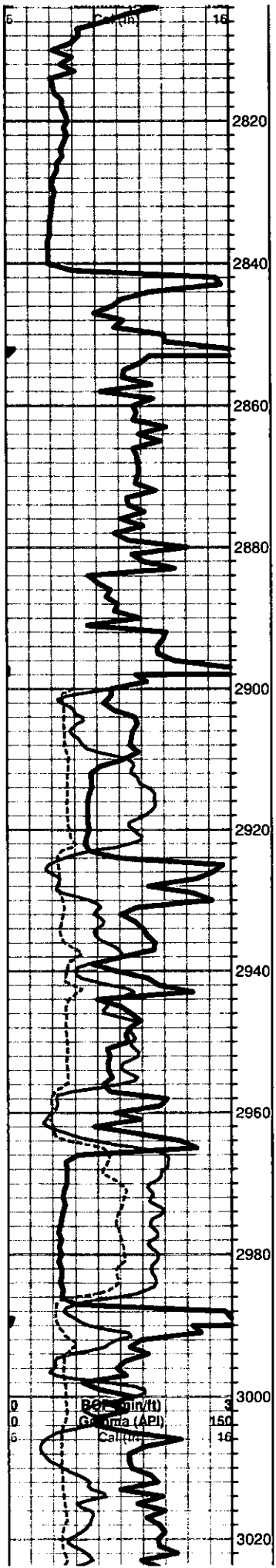
DST

- DST Int
- DST alt

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



Mud-Co Mud check
 2708 ft. @ 1350 hrs
 2/4/2012
 Vis: 44, Wt: 8.6
 PV: 11, YP: 13
 WL: 8.0, Cake: 1/32
 pH: 10.5, Ca: 20ppm
 CHL: 2900ppm,
 Sol: 2.0, LCM: 2
 DMC: \$1,691.00
 CMC: \$4,416.85



Elmont 2841 (-868)

20' samples begin at 3000'.

Shale: gray, calc., soft,

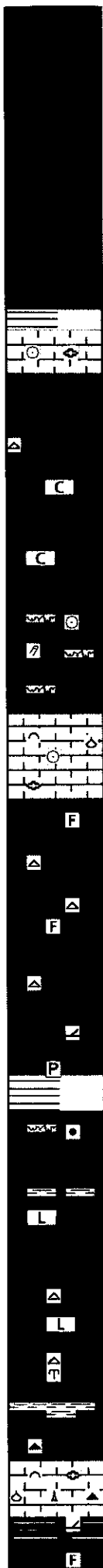
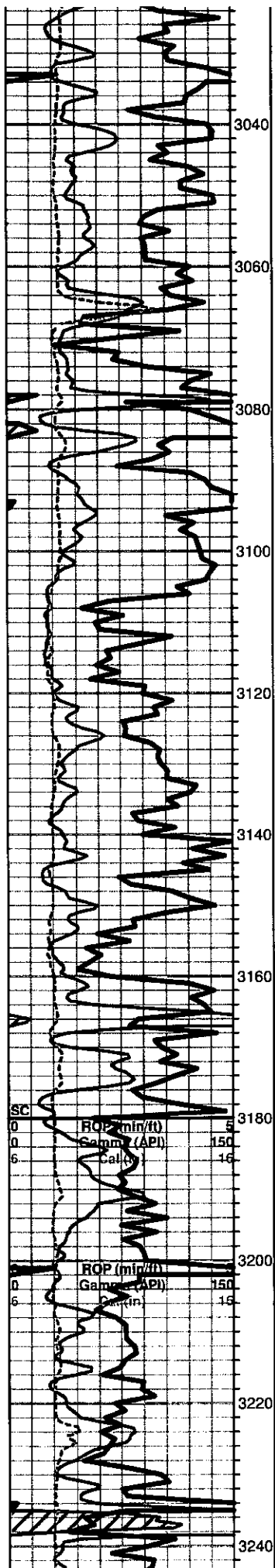
Howard 2988 (-1015)

Limestone: cream to tan to lt gray, brach, fussulinids, tr oolites, f-xln matrix, packstone.

Limestone: lt gray mudstone. micro-xln. very few fossil fraas.. tight. no

C2 (units)	50
C3 (units)	50
C4 (units)	50

Total Gas (units)	50
C1 (units)	50
C2 (units)	50
C3 (units)	50
C4 (units)	50



shows.

Limestone: lt gray to tan, mudstone w/ very few fossil frags. Tight, no shows.

Topeka 3069 (-1096)

Limestone: cream to vy lt gray, fossil frags, fussulinids, crinoids, packstone to mainly wackestone, vf-xln matrix. No shows.

Limestone: cream, vf-xln, tr fossiliferous, chalky, soft, crin., wackestone to mudstone, tr lt gray vitreous chert.

Limestone: cream to vy lt gray, vf-xln, tr fossiliferous, crin., fuss., some algal laminations, packstone to mudstone, tr stylolites.

Limestone: cream to vy lt gray, vf-xln matrix, fossiliferous to non-foss., brach, crin, fuss, packstone to mudstone, tight, no shows.

Limestone: vy lt gray to lt tan, vf-xln matrix w/ few fossil frags, wackestone to mudstone. Chert: vy lt gray to lt grayish-tan, vitreous.

King Hill 3166 (-1193)

Tr Black shale, carbonaceous, dolomitic.

Limestone: cream to white to lt tan, vf-xln, weakly fossiliferous, wackestone to mudstone, tr stylolites, tr pyrite, tr pellets, mostly hard and dense, no shows.

Limestone: white to tan crypto-xln micrite, tr lithographic sparry calcite. Also shaley, laminated mudstone.

Limestone: lt tan, tr foss., micro-xln, dense, mudstone, spotty sparry calcite (lithographic), very tight, no shows. Tr chert: cream to vy lt gray, vitreous, conchoidal fractured surfaces, fossiliferous (bryozoans).

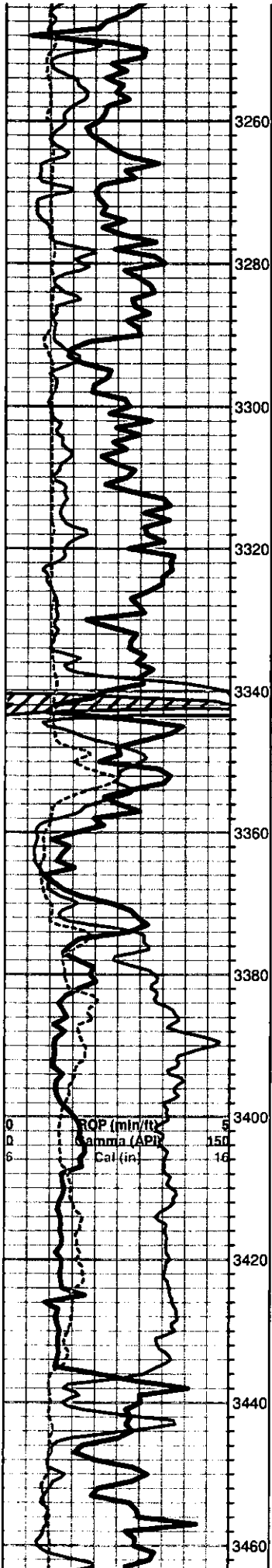
Limestone: lt tan, fossiliferous, fussulinids, spicules, brach., f-xln matrix, packstone. Tr dark brown to gray chert.

Queen Hill 3236 (-1263)

Shale: black, carbonaceous, dolomitic.

Total Gas (units)	50
C1 (units)	50
C2 (units)	50
C3 (units)	56
C4 (units)	56

Mud Properties:
Wt 9.0, Vis 43,
LCM 1#



Limestone: tan, vf-xln mudstone, tr foss., tight, no shows. Some is chalky. Some is f-xln/succrosic w/ some porosity. Gray, vitreous, fossiliferous chert.

Limestone: tan, somewhat fossiliferous, bryo., fuss., spicules, sparry calcite patches, vf- to micro-xln matrix, wackestone to mudstone, tr micrite. Tr gray, fossiliferous, vitreous chert.

Limestone: cream to lt tan, crypto-xln, micrite, to vf-xln, sli foss., mudstone, tight, no shows. Tr lt gray to dark gray chert.

10' samples begin at 3300'.

Limestone: cream to lt tan, micro-xln, stylolitic mudstone. No shows.

Limestone: cream to lt tan, micro-xln, stylolitic mudstone, tr lt gray fresh to detrital, frosted chert.

Limestone: cream to tan, micro-xln mudstone to recrystallized f-xln/succrosic, tr gray to dk brown, fossiliferous, vitreous chert.

Heebner 3340 (-1367)

Shale: black, carbonaceous, dolomitic.

Shale: gray, calc, soft.

Toronto 3368 (-1395)

Limestone: cream, recrystallized, finely succrosic w/ sparry patches, to micro-xln mudstone. No shows.

Douglas 3378 (-1405)

Shale: lt gray, lt greenish-gray, mottled w/ maroon spots locally, maroon, brown, pyrite layers, gray with black organic streaks. Non-calc to sli dolomitic.

Shale: predominantly gray with increasing depth. Micaceous laminations.

Brown Lime 3436 (-1463)

Limestone: brown, fossil frags set in micro-xln matrix, wackestone.

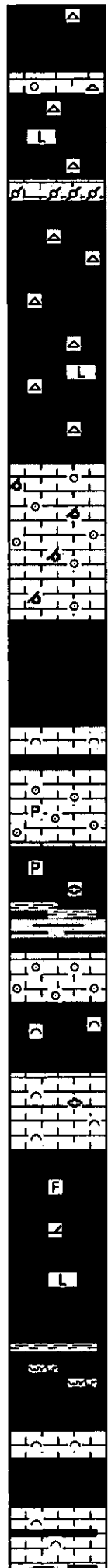
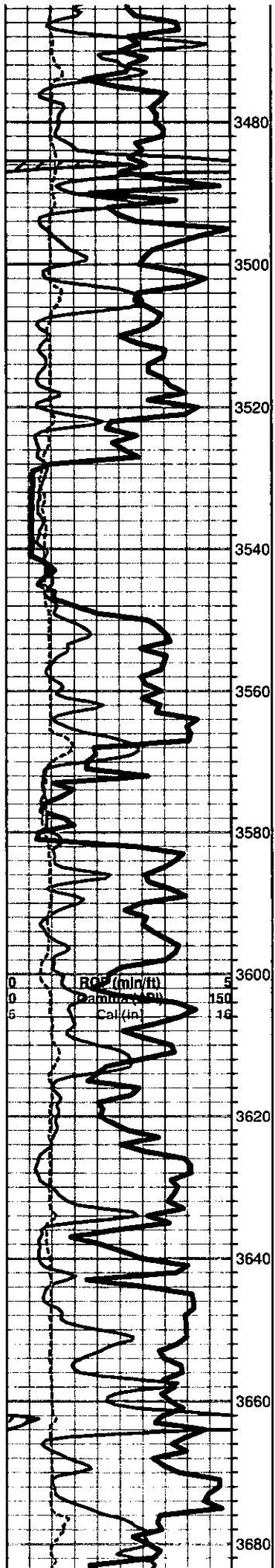
Lansing 3448 (-1475)

Limestone: white to cream, vf-xln to crypto-xln, mudstone/micrite, tight, no shows.

Limestone: cream to vy lt gray, chalky, vf-xln matrix, mostly mudstone,

Mud-Co Mud check
2708 ft. @ 0955 hrs
2/5/2012
Vis: 46, Wt: 9.0
PV: 12, YP: 16
WL: 7.2, Cake: 1/32
pH: 9.5, Ca: 20ppm
CHL: 4800ppm
Sol: 4.7, LCM: 1
DMC: \$1,233.85
CMC: \$5,650.70

Total Gas (units)	50
C1 (units)	50
C2 (units)	50
C3 (units)	50
C4 (units)	50



some frags have fossil frags, no visible porosity, no shows. Tr honey-colored vitreous chert.

Limestone: white to lt cream, elongate oolites (compressed before lithification), well-cemented, Dominated by lithographic micrite, dense, no shows. Tr white chert.

Limestone: mixed micrite, mottled tan/gray pelletal packstone, tan fossiliferous wackestone, all tight w/ no vis por. No shows. Tr honey-colored chert.

Limestone: cream to vy lt gray micrite, mottled pelletal packstone, slight hydrocarbon aroma in sample cup, but no show of oil. Brown, fossiliferous, arg wackestone. Chert of same colors.

Limestone: cream, f-xln, tr fossil debris, sparry patches, micritic in parts, wackestone, weak porosity, oolitic fossiliferous chert.

Limestone: cream micrite, lithographic, some ghost fossils, probably recrystallized grainstone. Tight, no shows. Light-colored chert.

Limestone: cream to vy lt gray, tight micrite to vf-xln, sli foss. mudstone, sub-chalky, sparry patches, no shows.

Limestone: lt tan, oolitic grainstone w/ excellent oomoldic porosity, oolites are 0.1 to 0.75mm in dia., vf-xln cement w/ weak porosity, no shows of oil.

Limestone: cream to lt tan, crypto-xln, micrite, sub-chalky, no porosity, no shows.

Limestone: tan to lt brown, vf-xln, fossil frags, tr pellets, tr oolites, packstone, tight, no shows.

Limestone: tan to brown, oolitic grainstone, tightly-cemented to oomoldic w/ good porosity, tr pyrite, no shows. Tr black shale.

Limestone: tan to brown, arg., fossil frags, fusulinids, laminated, vf-xln matrix, wackestone, no shows, tr pyrite.

Sample is comprised of vari-colored shales, brown green, gray, maroon. One fragment of oolitic grainstone was found that had fair inter-oolite vf-xln porosity and dead? oil staining, no fluor, but cuts instantly with a dull yellow color. Leaves a dark oil scum in the tray.

Sample is flooded w/ shale cavings. Limestone: fossil debris set in a vf-xln matrix, wackestone, tight, no shows.

Limestone: cream to mottled w/ reddish-brown, vf-xln, bioclastic packstone to mudstone. No shows, weak porosity.

Limestone: cream crypto- to micro-xln, tr fossil., mudstone to micrite, tight, no shows.

Stark Shale 3636 (-1663)

Shale: black, carbonaceous, dolomitic.

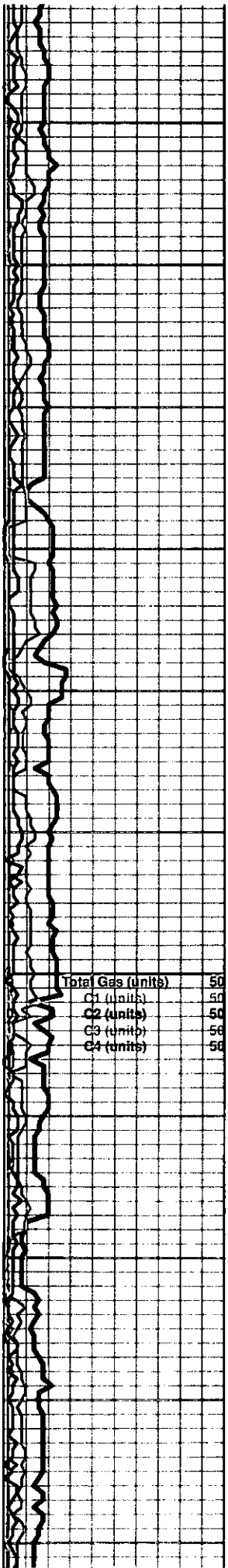
Limestone: cream, crypto-xln micrite w/ lithographic patches that have f- to med-xln, inter-xln porosity, but no shows.

Styloilites.

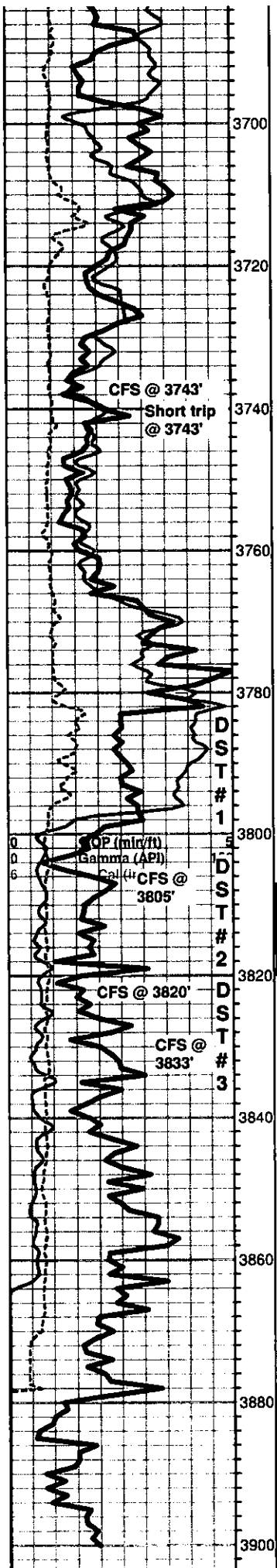
Limestone: lt cream, f-xln fossiliferous sli porous packstone to micrite, no shows.

Base KC 3675 (-1702)

Limestone: cream to tan to lt gray, f-xln, bioclastic, packstone, fair inter-xln porosity, no shows. Tr reddish shale laminations and mottling.



Total Gas (units)	50
C1 (units)	50
C2 (units)	50
C3 (units)	50
C4 (units)	50



Limestone as above w/ micrite and pyrite laminations. Mixed w/ vari-colored shales: gray lt gray lt grayish-green, maroon. Sample washes reddish-brown.

Vari-colored shales as above, some are mottled red and lt gray, calc.

Viola 3728 (-1755)

30 min sample: Oil floating on the surface of the water in the sample cup accompanied by a strong aroma. Cherty limestone w/ abundant, spotty dead oil staining, very slow weak cut. Lt blue flour of cut fluid. Chert is vitreous, white to tan to lt yellow.

60 min: Chert mixed w/ white limestone, interlayered w/ chert. One fragment of ls had live oil staining, dull yellow flour, instant streaming bright yellow cut. More were found deeper. Vuggy por.

Chert is slightly frosted, somewhat detrital in appearance, but not tripolitic. Some fragments are total saturated w/ black, heavy oil, weak flour, very slow to no cut. Most of the dark oil staining in the chert seems to be part of the rock with dendritic-like growths.

Simpson Shale 3767 (-1794)

Shale: gray, maroon, brown, mustard, soft.

Free sand grains in the bottom of the tray. Well-rounded, vf-gr, no shows.

Aqua-colored shale along with multi-colors as above.

F-N Unit #1-B Dst#1p20001.jpg

Arbuckle 3798 (-1825)

Dolomite: tan, oolitic grainstone, gas bubbles in the pores, strong hydrocarbon aroma in the sample cup, bright yellow flour., won't cut without first adding HCl. Oomoldic porosity, w/ voids up to 0.5mm in dia., vf-xln cement.

F-N Unit #1-B Dst#2p20001.jpg

Dolomite: cream to lt tan, f-xln, succrosic, spots of micro-vugular porosity filled w/ live oil, bright yellow flour, strong aroma, instant streaming cut. Some fragments are brown w/ total oil saturation. Tr aqua-green shale w/ spotty oil-saturated patches.

Dolomite: tan, f- to med-xln, good vugular and inter-xln porosity w/ spotty to total oil saturation, strong aroma, gas bubbles, oil cuts out slowly after acid application. Mixed rhombs .05-.5mm in width in same frag create good por.

F-N Unit #1-B Dst#3p20001.jpg

Dolomite: cream to lt tan, f-xln succrosic to micro-xln mudstone, tighter than above rocks. Still carrying fragments w/ spotty oil shows, but I think they are cavings.

Dolomite: cream to lt tan, f-xln succrosic w/ fair inter-xln porosity, streaks of micritic dolo, tr stylolites.

Tr pyrite.

Dolomite: cream to lt tan, coarsely-xln, rhombs up to 1mm, good inter-xln porosity, some vugs, tr pyrite stylolites, no shows.

Oolitic fragments w/ oomoldic porosity, voids 0.1 to 0.75mm in dia.

RTD 3900' @ 1038 hrs.

Scale Change

Total Gas (units)	200
C1 (units)	200
C2 (units)	200
C3 (units)	200
C4 (units)	200

Mud-Co Mud check
3743 ft. @ 1000 hrs
2/6/2012
Vis: 44 Wt: 9.2
PV: 11, YP: 13
WL: 7.2, Cake: 1/32
pH: 9.5, Ca: 20ppm
CHL: 6800ppm,
Sol: 6.0, LCM: 1
DMC: \$2,547.80
CMC: \$8,198.50

Mud-Co Mud check
3820 ft. @ 0915 hrs
2/7/2012
Vis: 56 Wt: 9.4
PV: 19, YP: 15
WL: 7.2, Cake: 1/32
pH: 9.5, Ca: 20ppm
CHL: 7200ppm,
Sol: 7.4, LCM: tr
DMC: \$881.95
CMC: \$9,080.45

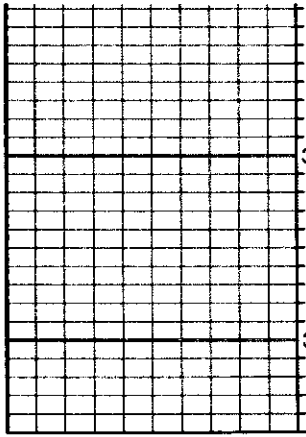
Strap was 0.55
short to board.
Deviation: 1/2 deg.

Total Gas (units)	200
C1 (units)	200
C2 (units)	200
C3 (units)	200
C4 (units)	200

Mud-Co Mud check
3853 ft. @
0850 hrs
2/8/2012
Vis: 44 Wt:
9.1
PV: 13, YP: 12
WL: 8.0,
Cake: 1/32
pH: 9.5, Ca:
20ppm
CHL:
6300ppm,
Sol: 5.4, LCM:
2
DMC: \$16.11
CMC:
\$9,096.55

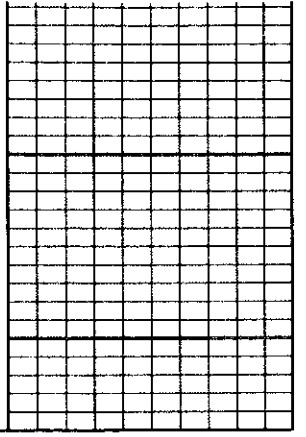
**Rotary TD 3900' @ 1038 hrs, 2/8/2012
Superior well Services Logging TD 3896'
Completed logging operations 1930 hrs, 2/8/2012**

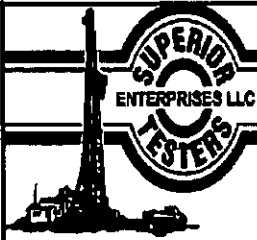
**Geologist: Charlie Sturdavant off location
2000 @ hrs, 2/8/2011**



3920

3940





DRILL STEM TEST REPORT

Captiva 2
 2717 Canal Blvd. Hays
 Kansas 67601
 ATTN: Charlie Sturdavant

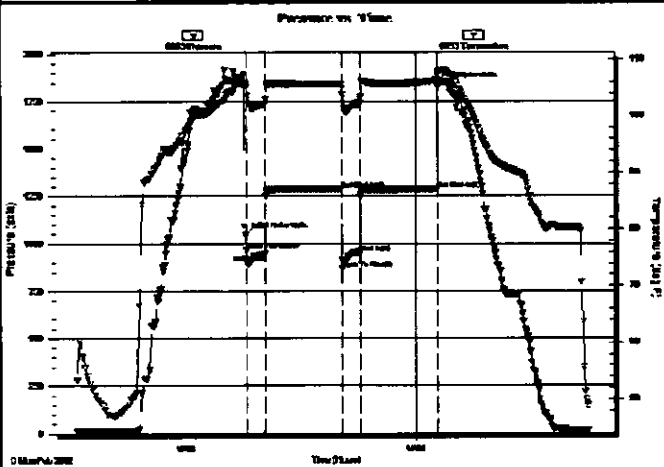
13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17181 **DST#: 1**
 Test Start: 2012.02.06 @ 04:35:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: **No** Whipstock: ft (KB)
 Test Type: **Conventional Bottom Hole (Initial)**
 Time Tool Opened: **06:46:30**
 Tester: **Dustin Ellis**
 Time Test Ended: **11:17:00**
 Unit No: **3315-Great Bend -30**
 Interval: **3760.00 ft (KB) To 3805.00 ft (KB) (TVD)**
 Reference Elevations: **1973.00 ft (KB)**
Total Depth: 3805.00 ft (KB) (TVD)
 Reference Elevations: **1964.00 ft (CF)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**
 KB to GR/CF: **9.00 ft**

Serial #: 6663 **Outside**
 Press@RunDepth: **954.78 psia @ 3802.00 ft (KB)** Capacity: **5000.00 psia**
 Start Date: **2012.02.06** End Date: **2012.02.06** Last Calib: **2012.02.06**
 Start Time: **04:35:00** End Time: **11:17:00** Time On Btm: **2012.02.06 @ 06:46:00**
 Time Off Btm: **2012.02.06 @ 09:17:00**

TEST COMMENT: 1st Open 15 minutes Strong blow bottom bucket instantly
 1st Shut in 60 minutes Yes blow back
 2nd Open 15 minutes Strong blow bottom bucket instantly
 2nd Shut in 60 minutes Yes blow back



PRESSURE SUMMARY

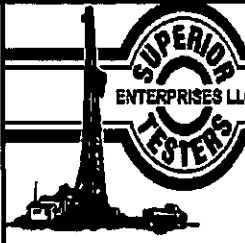
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1044.60	106.07	Initial Hydro-static
1	965.26	105.29	Open To Flow (1)
15	945.07	102.08	Shut-in(1)
75	1285.32	105.59	End Shut-in(1)
75	868.41	105.19	Open To Flow (2)
89	954.78	102.22	Shut-in(2)
151	1283.68	106.28	End Shut-in(2)
151	1832.52	107.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud 100%	0.32

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mc/d)
First Gas Rate	1.00	12.00	344.99
Last Gas Rate	1.00	13.20	379.48
Max. Gas Rate	1.00	13.20	379.48

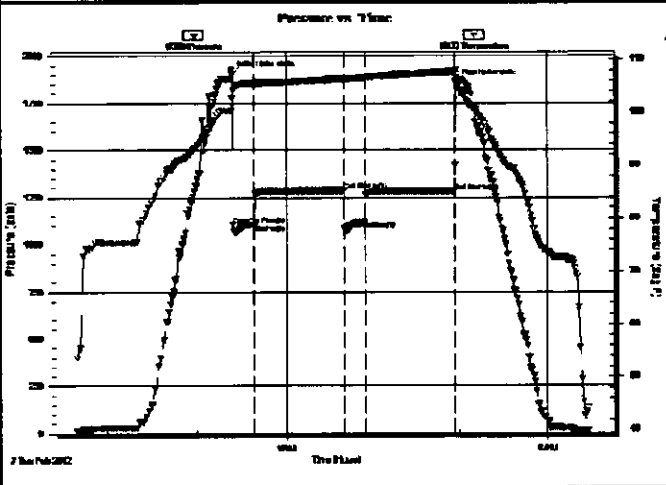
	DRILL STEM TEST REPORT	
	Captiva 2	13-21s-16w-Pawnee
	2717 Canal Blvd. Hays Kansas 67601	F-N Unit # 1-B
ATTN: Charlie Strudavant	Job Ticket: 17182	DST#: 2
	Test Start: 2012.02.07 @ 06:39:00	

GENERAL INFORMATION:

Formation: Arbuckle Deviated: No Whipstock: ft (KB) Time Tool Opened: 08:24:30 Time Test Ended: 12:28:30 Interval: 3807.00 ft (KB) To 3820.00 ft (KB) (TVD) Total Depth: 3820.00 ft (KB) (TVD) Hole Diameter: 7.88 inches Hole Condition: Fair	Test Type: Conventional Bottom Hole (Initial) Tester: Dustin Ellis Unit No: 3315-Great Bend -30 Reference Elevations: 1973.00 ft (KB) 1964.00 ft (CF) KB to GR/CF: 9.00 ft
--	---

Serial #: 6999 Inside Press@RunDepth: 1119.38 psia @ 3816.00 ft (KB) Start Date: 2012.02.07 End Date: 2012.02.07 Start Time: 06:39:00 End Time: 12:28:30	Capacity: 5000.00 psia Last Calib.: 2012.02.07 Time On Btm: 2012.02.07 @ 08:24:00 Time Off Btm: 2012.02.07 @ 10:57:00
---	--

TEST COMMENT: 1st Open 15 minutes Strong blow blew bottom bucket instantly.
 1st Shut in 60 minutes Yes blow back
 2nd Open 15 minutes Strong blow blew bottom bucket instantly.
 2nd Shut in 60 minutes Yes blow back

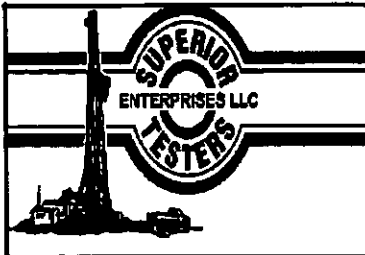


PRESSURE SUMMARY			
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1903.92	102.61	Initial Hydro-static
1	1103.75	104.18	Open To Flow (1)
15	1105.57	105.45	Shut-in(1)
76	1284.31	106.37	End Shut-in(1)
76	1083.60	106.32	Open To Flow (2)
90	1119.38	106.59	Shut-in(2)
152	1282.60	107.76	End Shut-in(2)
153	1858.12	108.18	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
2.00	Clean oil 100%	0.01

Gas Rates			
	Choke (inches)	Pressure (psia)	Gas Rate (Mc/d)
First Gas Rate	1.00	13.80	396.73
Last Gas Rate	1.00	13.80	396.73

F-N Unit #1-B Dst#3p20001.jpg



DRILL STEM TEST REPORT

Captiva 2
 2717 Canal Blvd. Hays
 Kansas 67601
 ATTN: Charlie Sturdivant

13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17183 **DST#: 3**
 Test Start: 2012.02.07 @ 07:30:00

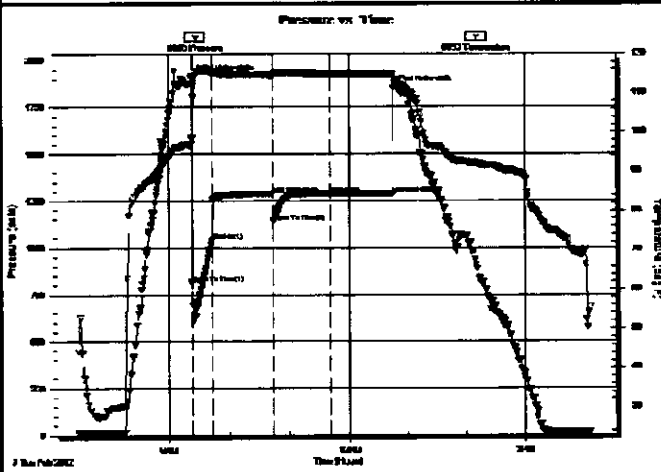
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: **No** Whipstock: **ft (KB)**
 Time Tool Opened: 09:22:53
 Time Test Ended: 16:06:53
 Interval: **3820.00 ft (KB) To 3833.00 ft (KB) (TVD)**
 Total Depth: **3820.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**
 Test Type: **Conventional Bottom Hole (Initial)**
 Tester: **Dustin Ellis**
 Unit No: **3315-Great Bend-30 m**
 Reference Elevations: **1973.00 ft (KB)**
1964.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6669

Press@RunDepth: **1285.71 psia @ ft (KB)** Capacity: **5000.00 psia**
 Start Date: **2012.02.07** End Date: **2012.02.07** Last Calib.: **2012.02.08**
 Start Time: **07:30:00** End Time: **16:06:53** Time On Btm: **2012.02.07 @ 09:22:23**
 Time Off Btm: **2012.02.07 @ 12:44:53**

TEST COMMENT: 1st Open 20 minutes Strong blow bottom bucket instantly.
 1st Shut in 60 minutes Yes blow back
 2nd Open 60 minutes Strong blow bottom bucket instantly
 2nd Shut in 60 minutes Yes blow back



PRESSURE SUMMARY

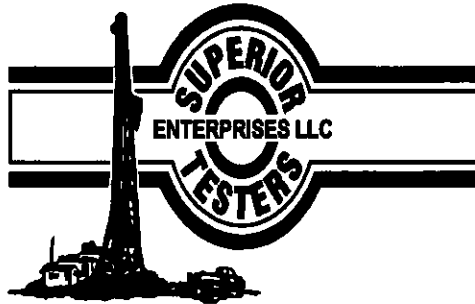
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1904.18	97.16	Initial Hydro-static
1	812.64	98.38	Open To Flow (1)
21	1039.22	115.45	Shut-in(1)
81	1286.47	114.62	End Shut-in(1)
82	1139.21	114.72	Open To Flow (2)
138	1285.71	114.92	Shut-in(2)
202	1287.02	114.83	End Shut-in(2)
203	1850.41	114.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Oil cut mud 20% Oil 80% Mud	0.30
90.00	Oil and gas cut mud 20% gas 40% oil 50% 0.44	0.44
60.00	Clean oil 100%	0.30
90.00	Oil cut muddy water 10% oil 70% mud 20% 0.88	0.88
150.00	Mud cut oil 5% oil 95% mud	2.10
2468.00	Salt water 100%	34.62

Gas Rates

Choke (inches)	Pressure (psia)	Gas Rate (Mcfd)



DRILL STEM TEST REPORT

Prepared For: **Captiva 2**

2717 Canal Blvd. Hays
Kansas 67601

ATTN: Charlie Strurdavant

F-N Unit # 1-B

13-21s-16w-Pawnee

Start Date: 2012.02.06 @ 04:35:00

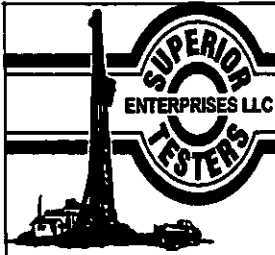
End Date: 2012.02.06 @ 11:17:00

Job Ticket #: 17181 DST #: 1

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2012.02.06 @ 23:32:39

Captiva 2 13-21s-16w-Pawnee F-N Unit # 1-B DST # 1 Arbuckle 2012.02.06



DRILL STEM TEST REPORT

Captiva 2
 2717 Canal Blvd. Hays
 Kansas 67601
 ATTN: Charlie Strurdavant

13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17181 **DST#: 1**
 Test Start: 2012.02.06 @ 04:35:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:46:30
 Time Test Ended: 11:17:00

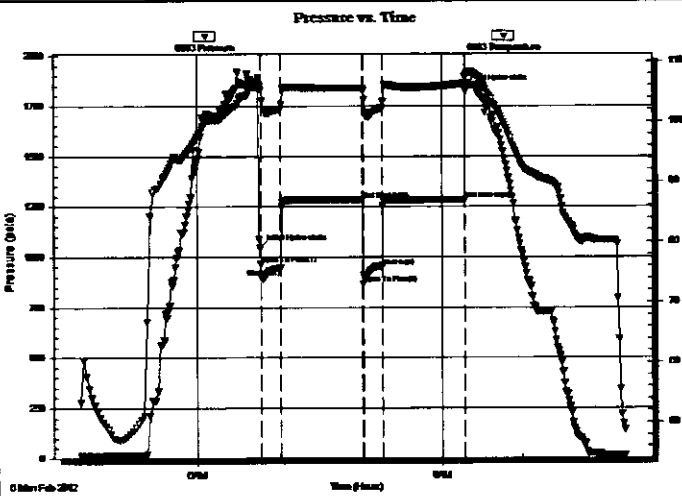
Interval: **3760.00 ft (KB) To 3805.00 ft (KB) (TVD)**
 Total Depth: 3805.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair

Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend -30

Reference Elevations: 1973.00 ft (KB)
 1964.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 6663 Outside
 Press@RunDepth: 954.78 psia @ 3802.00 ft (KB)
 Start Date: 2012.02.06 End Date: 2012.02.06 Capacity: 5000.00 psia
 Start Time: 04:35:00 End Time: 11:17:00 Last Calib.: 2012.02.06
 Time On Btm: 2012.02.06 @ 06:46:00
 Time Off Btm: 2012.02.06 @ 09:17:00

TEST COMMENT: 1st Open 15 minutes Strong blow bottom bucket instantly .
 1st Shut in 60 minutes Yes blow back
 2nd Open 15 minutes Strong blow bottom bucket instantly
 2nd Shut in 60 minutes Yes blow back



PRESSURE SUMMARY

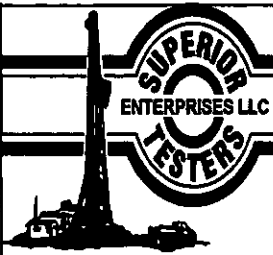
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1044.60	106.07	Initial Hydro-static
1	965.26	105.29	Open To Flow (1)
15	945.07	102.08	Shut-in(1)
75	1285.32	105.59	End Shut-in(1)
75	868.41	105.19	Open To Flow (2)
89	954.78	102.22	Shut-in(2)
151	1283.68	106.28	End Shut-in(2)
151	1832.52	107.45	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud 100%	0.32

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	12.00	344.99
Last Gas Rate	1.00	13.20	379.48
Max. Gas Rate	1.00	13.20	379.48



DRILL STEM TEST REPORT

Captiva 2
 2717 Canal Blvd. Hays
 Kansas 67601
 ATTN: Charlie Strudavant

13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17181 **DST#: 1**
 Test Start: 2012.02.06 @ 04:35:00

GENERAL INFORMATION:

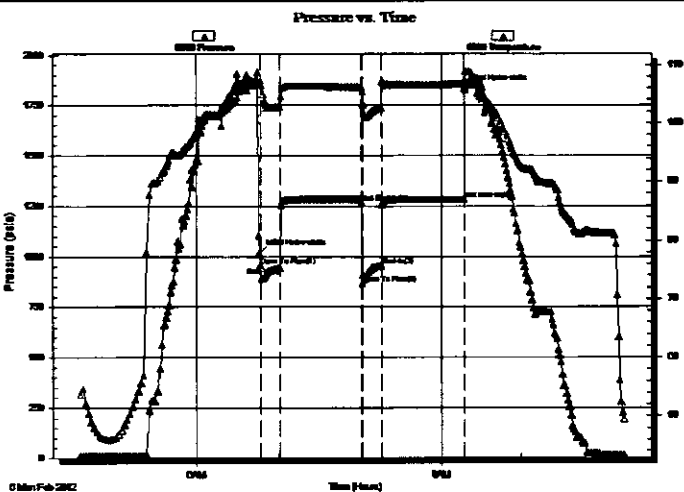
Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:46:30
 Time Test Ended: 11:17:00
 Interval: **3760.00 ft (KB) To 3805.00 ft (KB) (TVD)**
 Total Depth: **3805.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend -30
 Reference Elevations: 1973.00 ft (KB)
 1964.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 6999

Inside

Press@RunDepth: 1283.49 psia @ 3801.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.02.06 End Date: 2012.02.06 Last Calib.: 2012.02.06
 Start Time: 04:35:00 End Time: 11:16:30 Time On Btm: 2012.02.06 @ 06:46:00
 Time Off Btm: 2012.02.06 @ 09:17:00

TEST COMMENT: 1st Open 15 minutes Strong blow bottom bucket instantly .
 1st Shut in 60 minutes Yes blow back
 2nd Open 15 minutes Strong blow bottom bucket instantly
 2nd Shut in 60 minutes Yes blow back



PRESSURE SUMMARY

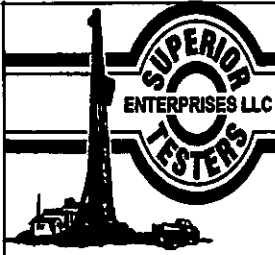
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1017.50	107.17	Initial Hydro-static
1	955.75	107.36	Open To Flow (1)
15	944.26	102.75	Shut-in(1)
75	1268.79	106.17	End Shut-in(1)
75	865.42	105.41	Open To Flow (2)
89	953.93	102.64	Shut-in(2)
151	1283.49	106.72	End Shut-in(2)
151	1830.56	107.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	Mud 100%	0.32

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	12.00	344.99
Last Gas Rate	1.00	13.20	379.48
Max. Gas Rate	1.00	13.20	379.48



DRILL STEM TEST REPORT

TOOL DIAGRAM

Captiva 2
 2717 Canal Blvd. Hays
 Kansas 67601
 ATTN: Charlie Strurdavant

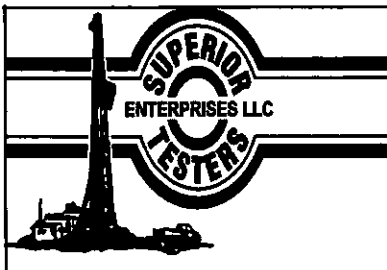
13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17181 **DST#: 1**
 Test Start: 2012.02.06 @ 04:35:00

Tool Information

Drill Pipe:	Length: 3497.00 ft	Diameter: 3.80 inches	Volume: 49.05 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: 252.50 ft	Diameter: 2.25 inches	Volume: 1.24 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 50.29 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.50 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3760.00 ft			Final 71000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	45.00 ft			
Tool Length:	73.00 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			3737.00	
Hydrolic Tool	5.00			3742.00	
Jars	6.00			3748.00	
Safety Joint	2.00			3750.00	
Packer	5.00			3755.00	28.00 Bottom Of Top Packer
Packer	5.00			3760.00	
Perforations	40.00			3800.00	
Recorder	1.00	6999	Inside	3801.00	
Recorder	1.00	6663	Outside	3802.00	
Bull Plug	3.00			3805.00	45.00 Bottom Packers & Anchor
Total Tool Length:	73.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Captiva 2
 2717 Canal Blvd. Hays
 Kansas 67601
 ATTN: Charlie Strurdavant

13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17181 **DST#: 1**
 Test Start: 2012.02.06 @ 04:35:00

Mud and Cushion Information

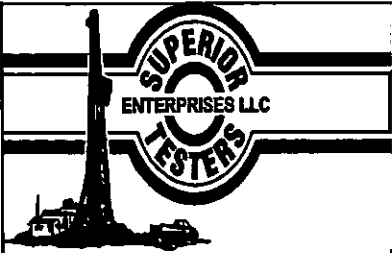
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 44.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.20 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 6800.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
65.00	Mud 100%	0.320

Total Length: 65.00 ft Total Volume: 0.320 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: Gas to surface.



DRILL STEM TEST REPORT

GAS RATES

Captiva 2
2717 Canal Blvd. Hays
Kansas 67601
ATTN: Charlie Strurdavant

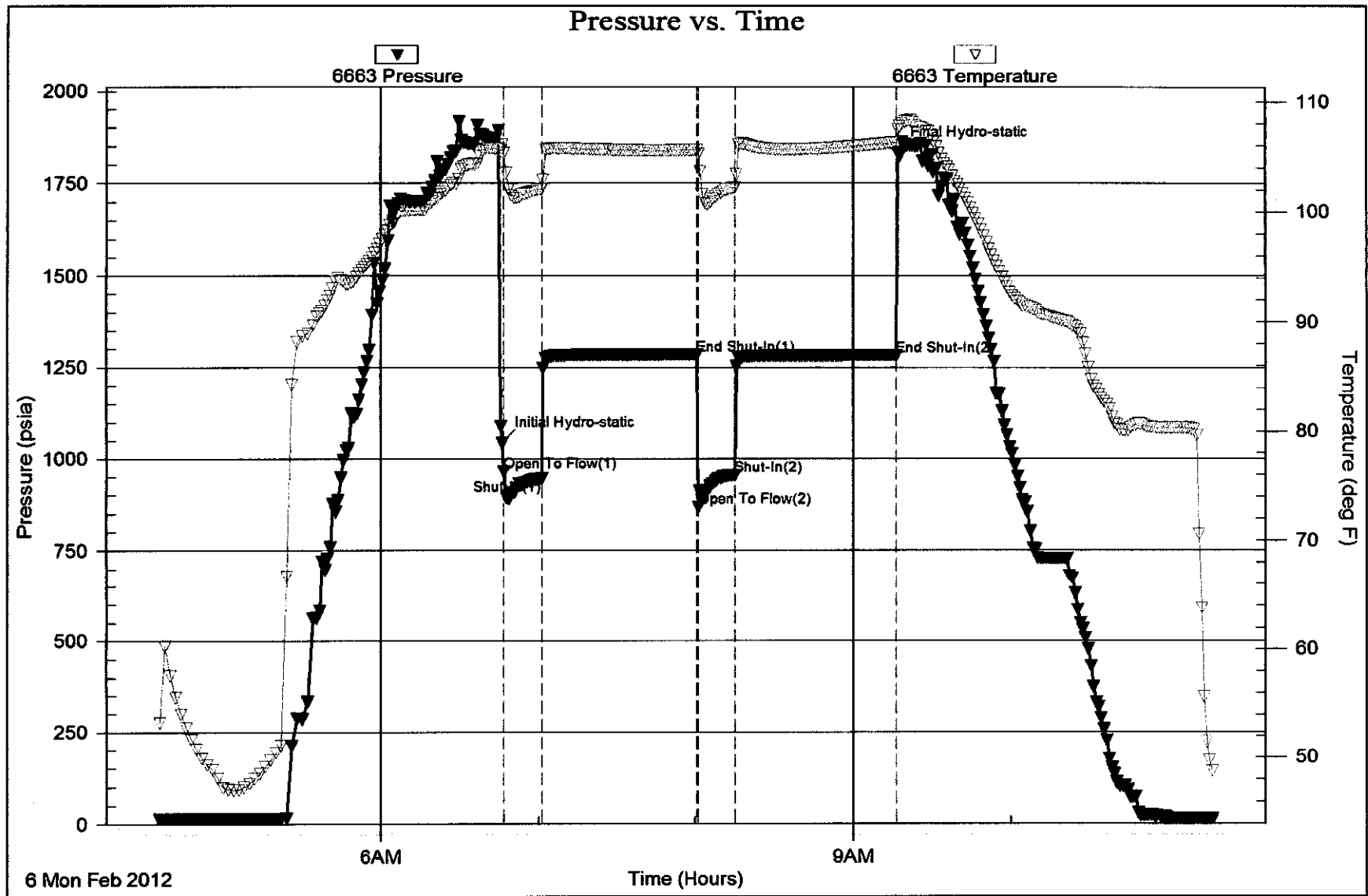
13-21s-16w-Pawnee
F-N Unit # 1-B
Job Ticket: 17181 **DST#: 1**
Test Start: 2012.02.06 @ 04:35:00

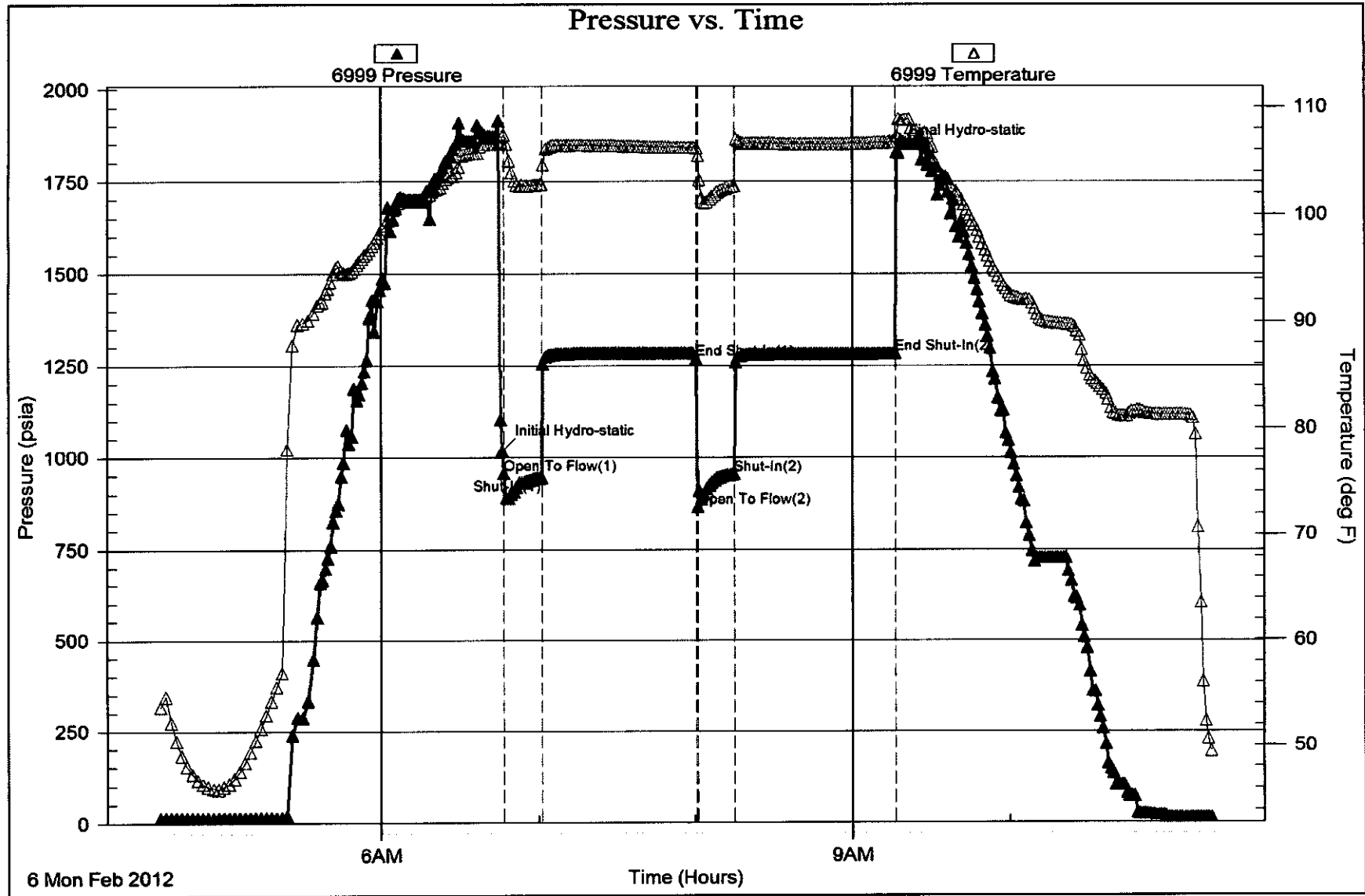
Gas Rates Information

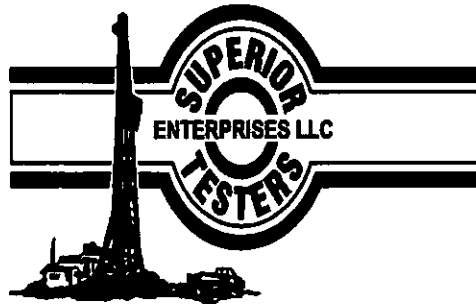
Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
1	10	1.00	12.00	344.99
2	20	1.00	12.00	344.99
3	30	1.00	13.20	379.48
4	40	1.00	13.20	379.48







DRILL STEM TEST REPORT

Prepared For: **Captiva 2**

2717 Canal Blvd. Hays
Kansas 67601

ATTN: Charlie Strurdavant

F-N Unit # 1-B

13-21s-16w-Pawnee

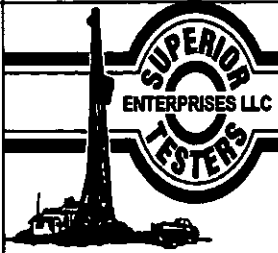
Start Date: 2012.02.07 @ 06:39:00

End Date: 2012.02.07 @ 12:28:30

Job Ticket #: 17182 DST #: 2

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2012.02.07 @ 12:41:52



DRILL STEM TEST REPORT

Captiva 2
 2717 Canal Blvd. Hays
 Kansas 67601
 ATTN: Charlie Strurdavant

13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17182 DST#: 2
 Test Start: 2012.02.07 @ 06:39:00

GENERAL INFORMATION:

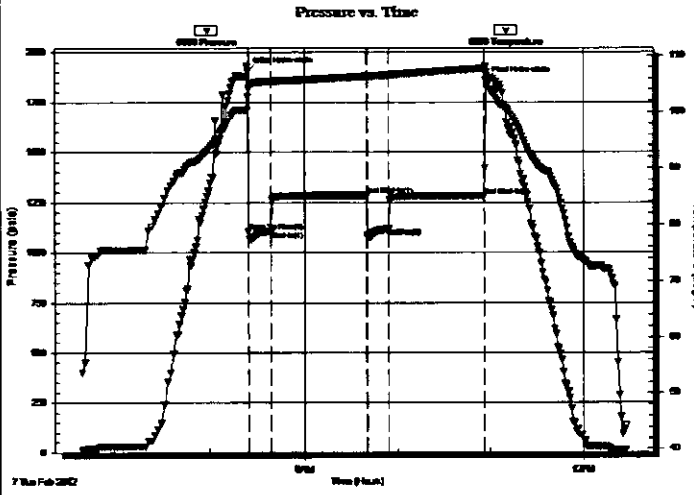
Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:24:30
 Time Test Ended: 12:28:30
 Interval: **3807.00 ft (KB) To 3820.00 ft (KB) (TVD)**
 Total Depth: **3820.00 ft (KB) (TVD)**
 Hole Diameter: **7.88 inches** Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend -30
 Reference Elevations: 1973.00 ft (KB)
 1964.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 6999

Inside

Press@RunDepth: 1119.38 psia @ 3816.00 ft (KB)
 Start Date: 2012.02.07 End Date: 2012.02.07
 Start Time: 06:39:00 End Time: 12:28:30
 Capacity: 5000.00 psia
 Last Calib.: 2012.02.07
 Time On Btm: 2012.02.07 @ 08:24:00
 Time Off Btm: 2012.02.07 @ 10:57:00

TEST COMMENT: 1st Open 15 minutes Strong blow blew bottom bucket instantly.
 1st Shut in 60 minutes Yes blow back
 2nd Open 15 minutes Strong blow blew bottom bucket instantly.
 2nd Shut in 60 minutes Yes blow back



PRESSURE SUMMARY

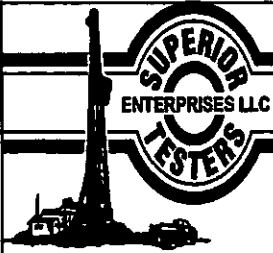
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1903.92	102.61	Initial Hydro-static
1	1103.75	104.18	Open To Flow (1)
15	1105.57	105.45	Shut-in(1)
76	1284.31	106.37	End Shut-in(1)
76	1083.60	106.32	Open To Flow (2)
90	1119.38	106.59	Shut-in(2)
152	1282.60	107.76	End Shut-in(2)
153	1858.12	108.18	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2.00	Clean oil 100%	0.01

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	13.80	396.73
Last Gas Rate	1.00	13.80	396.73



DRILL STEM TEST REPORT

Captiva 2
 2717 Canal Blvd. Hays
 Kansas 67601
 ATTN: Charlie Strurdavant

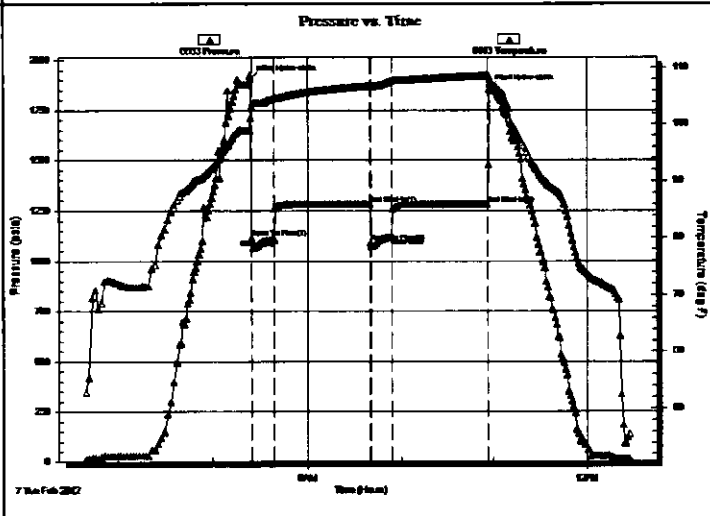
13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17182 **DST#: 2**
 Test Start: 2012.02.07 @ 06:39:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 08:24:30
 Time Test Ended: 12:28:30
 Interval: **3807.00 ft (KB) To 3820.00 ft (KB) (TVD)**
 Total Depth: 3820.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend -30
 Reference Elevations: 1973.00 ft (KB)
 1964.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 6663 **Outside**
 Press@RunDepth: 1282.65 psia @ 3817.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.02.07 End Date: 2012.02.07 Last Calib.: 2012.02.07
 Start Time: 06:39:00 End Time: 12:28:30 Time On Btm: 2012.02.07 @ 08:24:00
 Time Off Btm: 2012.02.07 @ 10:57:00

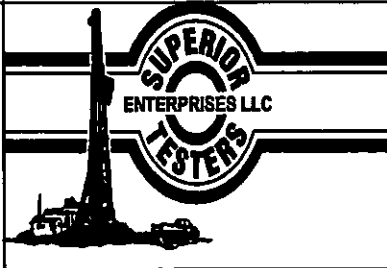
TEST COMMENT: 1st Open 15 minutes Strong blow blew bottom bucket instantly.
 1st Shut in 60 minutes Yes blow back
 2nd Open 15 minutes Strong blow blew bottom bucket instantly.
 2nd Shut in 60 minutes Yes blow back



PRESSURE SUMMARY			
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1905.36	101.19	Initial Hydro-static
1	1115.43	103.07	Open To Flow (1)
15	1106.37	104.66	Shut-in(1)
76	1284.20	106.75	End Shut-in(1)
76	1094.22	106.68	Open To Flow (2)
90	1119.27	107.68	Shut-in(2)
152	1282.65	108.60	End Shut-in(2)
153	1856.99	108.45	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
2.00	Clean oil 100%	0.01

Gas Rates			
	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	13.80	396.73
Last Gas Rate	1.00	13.80	396.73



DRILL STEM TEST REPORT

TOOL DIAGRAM

Captiva 2
 2717 Canal Blvd. Hays
 Kansas 67601
 ATTN: Charlie Strurdavant

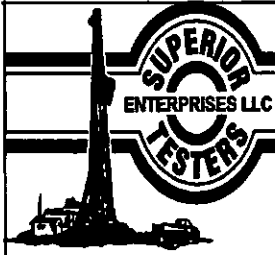
13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17182 **DST#: 2**
 Test Start: 2012.02.07 @ 06:39:00

Tool Information

Drill Pipe:	Length: 3535.00 ft	Diameter: 3.80 inches	Volume: 49.59 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: 252.50 ft	Diameter: 2.25 inches	Volume: 1.24 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 50.83 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.50 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3807.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	13.00 ft			
Tool Length:	41.00 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			3784.00	
Hydraulic Tool	5.00			3789.00	
Jars	6.00			3795.00	
Safety Joint	2.00			3797.00	
Packer	5.00			3802.00	28.00 Bottom Of Top Packer
Packer	5.00			3807.00	
Perforations	8.00			3815.00	
Recorder	1.00	6999	Inside	3816.00	
Recorder	1.00	6663	Outside	3817.00	
Bull Plug	3.00			3820.00	13.00 Bottom Packers & Anchor
Total Tool Length:	41.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Captiva 2

13-21s-16w-Pawnee

2717 Canal Blvd. Hays
Kansas 67601

F-N Unit # 1-B

Job Ticket: 17182

DST#: 2

ATTN: Charlie Strudavant

Test Start: 2012.02.07 @ 06:39:00

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: 44.00 sec/qt

Cushion Volume:

bbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psia

Salinity: 6800.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Clean oil 100%	0.010

Total Length: 2.00 ft Total Volume: 0.010 bbl

Num Fluid Samples: 0

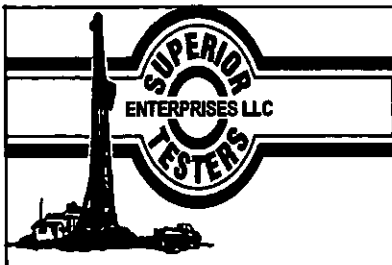
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



DRILL STEM TEST REPORT

GAS RATES

Captiva 2
2717 Canal Blvd. Hays
Kansas 67601
ATTN: Charlie Strurdavant

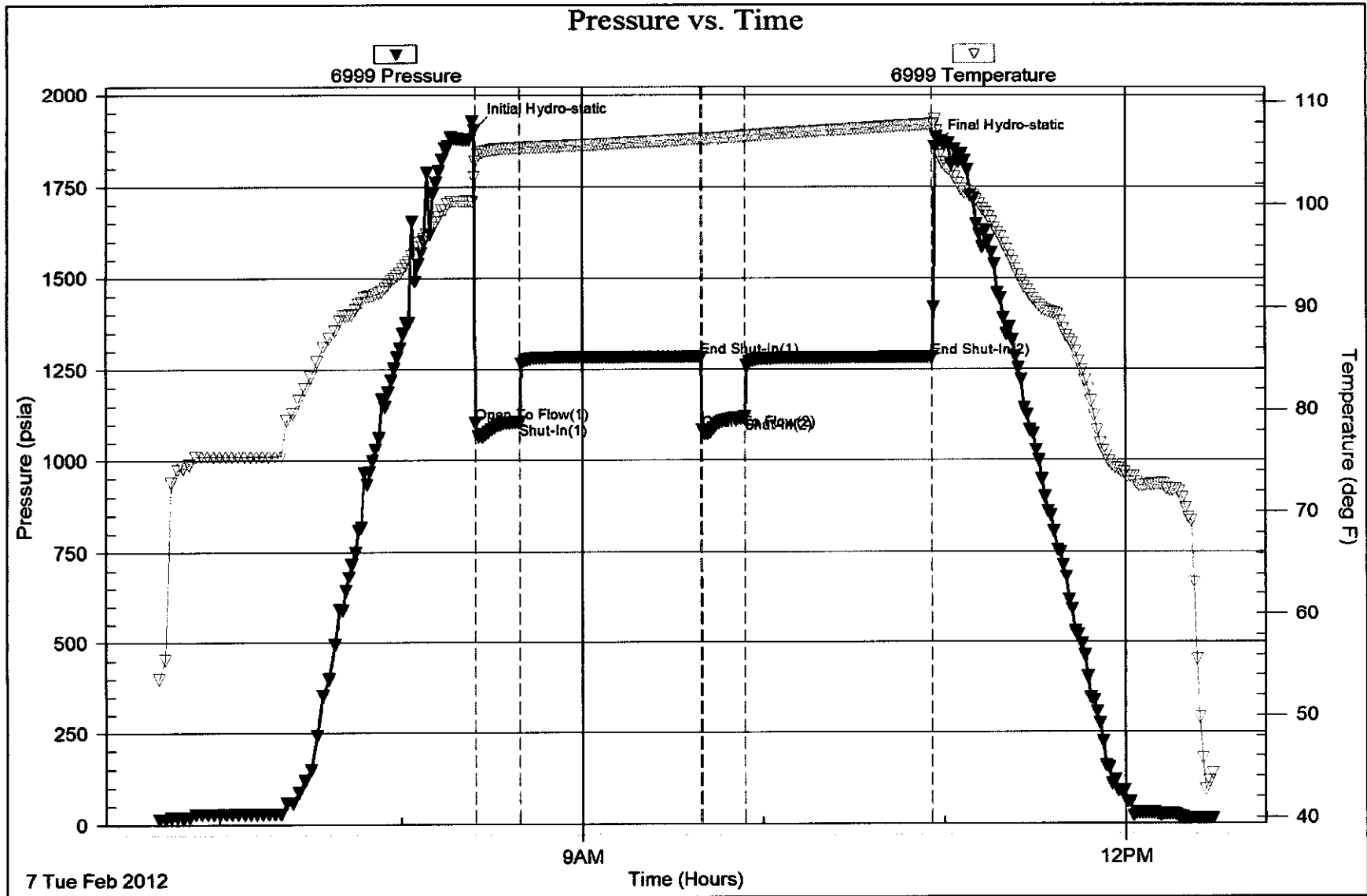
13-21s-16w-Pawnee
F-N Unit # 1-B
Job Ticket: 17182 **DST#: 2**
Test Start: 2012.02.07 @ 06:39:00

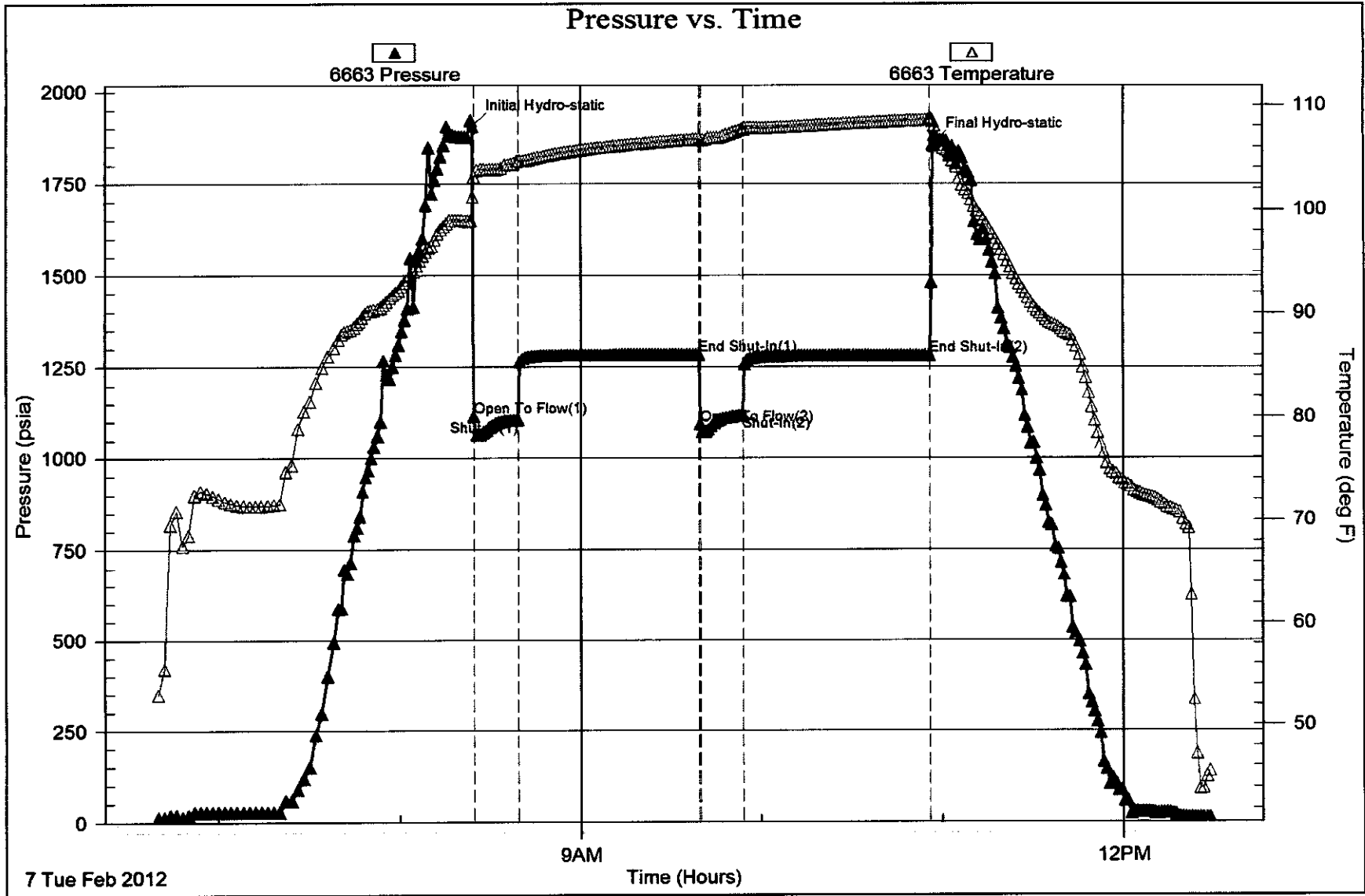
Gas Rates Information

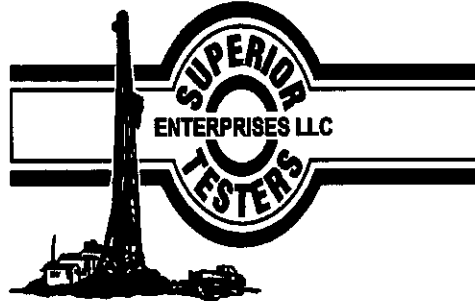
Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
1	10	1.00	13.80	396.73
1	10	1.00	13.80	396.73







DRILL STEM TEST REPORT

Prepared For: **Captiva 2**

2717 Canal Blvd. Hays
Kansas 67601

ATTN: Charlie Strurdavant

F-N Unit # 1-B

13-21s-16w-Pawnee

Start Date: 2012.02.07 @ 07:30:00

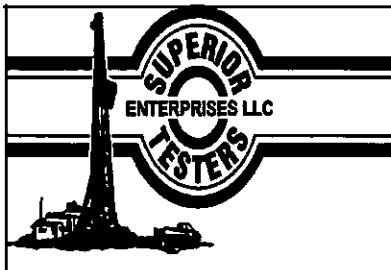
End Date: 2012.02.07 @ 16:06:53

Job Ticket #: 17183 DST #: 3

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2012.02.08 @ 05:00:22

Captiva 2 13-21s-16w-Pawnee F-N Unit # 1-B DST # 3 Arbuckle 2012.02.07



DRILL STEM TEST REPORT

Captiva 2
 2717 Canal Blvd. Hays
 Kansas 67601
 ATTN: Charlie Strurdavant

13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17183 **DST#: 3**
 Test Start: 2012.02.07 @ 07:30:00

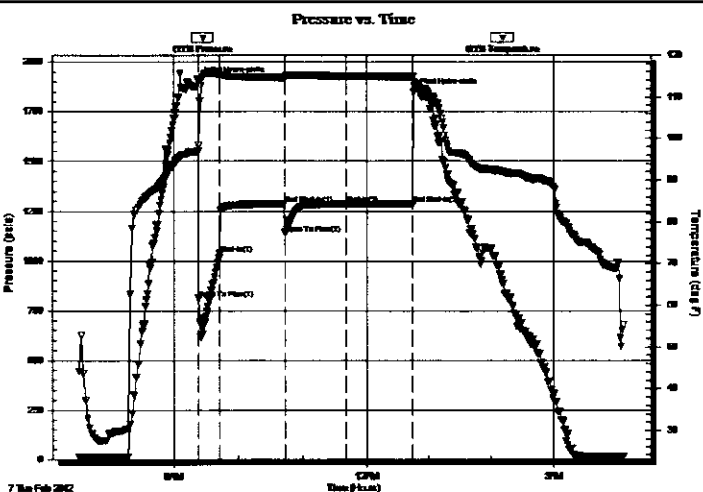
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:22:53
 Time Test Ended: 16:06:53
 Interval: **3820.00 ft (KB) To 3833.00 ft (KB) (TVD)**
 Total Depth: 3820.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend-30 m
 Reference Elevations: 1973.00 ft (KB)
 1964.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 6669

Press@RunDepth: 1285.71 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.02.07 End Date: 2012.02.07 Last Calib.: 2012.02.08
 Start Time: 07:30:00 End Time: 16:06:53 Time On Btm: 2012.02.07 @ 09:22:23
 Time Off Btm: 2012.02.07 @ 12:44:53

TEST COMMENT: 1st Open 20 minutes Strong blow bottom bucket instantly.
 1st Shut in 60 minutes Yes blow back
 2nd Open 60 minutes Strong blow bottom bucket instantly
 2nd Shut in 60 minutes Yes blow back



PRESSURE SUMMARY

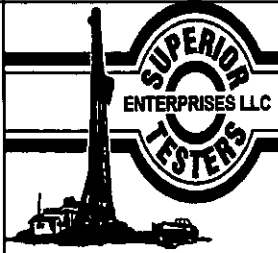
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1904.18	97.16	Initial Hydro-static
1	812.64	98.38	Open To Flow (1)
21	1039.22	115.45	Shut-In(1)
81	1286.47	114.62	End Shut-In(1)
82	1139.21	114.72	Open To Flow (2)
138	1285.71	114.92	Shut-In(2)
202	1287.02	114.83	End Shut-In(2)
203	1850.41	114.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Oil cut mud 20%Oil 80% Mud	0.30
90.00	Oil and gas cut mud 20%gas 40%oil 50%	0.44
60.00	Clean oil 100%	0.30
90.00	Oil cut muddy w ater 10%oil70%mud20%	0.88
150.00	Mud cut oil 5%oil 95%mud	2.10
2468.00	Salt w ater 100%	34.62

Gas Rates

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



DRILL STEM TEST REPORT

Captiva 2
 2717 Canal Blvd. Hays
 Kansas 67601
 ATTN: Charlie Strurdavant

13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17183 **DST#: 3**
 Test Start: 2012.02.07 @ 07:30:00

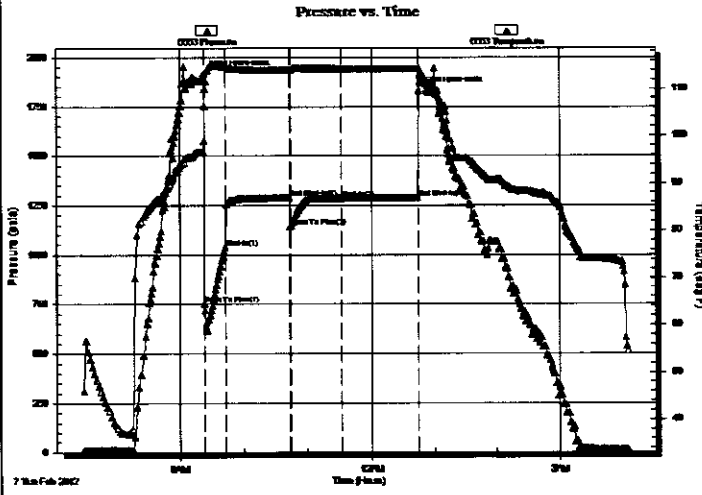
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 09:22:53
 Time Test Ended: 16:06:53
 Interval: **3820.00 ft (KB) To 3833.00 ft (KB) (TVD)**
 Total Depth: 3820.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend-30 m
 Reference Elevations: 1973.00 ft (KB)
 1964.00 ft (CF)
 KB to GR/CF: 9.00 ft

Serial #: 6663

Press@RunDepth: 1288.72 psia @ ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.02.07 End Date: 2012.02.07 Last Calib.: 2012.02.08
 Start Time: 07:30:00 End Time: 16:06:23 Time On Btm: 2012.02.07 @ 09:22:53
 Time Off Btm: 2012.02.07 @ 12:44:53

TEST COMMENT: 1st Open 20 minutes Strong blow bottom bucket instantly.
 1st Shut in 60 minutes Yes blow back
 2nd Open 60 minutes Strong blow bottom bucket instantly
 2nd Shut in 60 minutes Yes blow back



PRESSURE SUMMARY

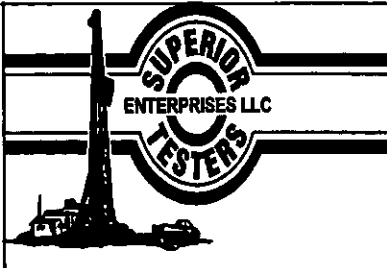
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1917.13	98.88	Initial Hydro-static
1	753.58	106.32	Open To Flow (1)
20	1037.97	114.60	Shut-In(1)
81	1288.14	113.96	End Shut-In(1)
81	1143.46	113.94	Open To Flow (2)
129	1285.95	114.17	Shut-In(2)
202	1288.72	114.17	End Shut-In(2)
202	1831.00	114.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	Oil cut mud 20%Oil 80% Mud	0.30
90.00	Oil and gas cut mud 20%gas 40%oil 50%0.44	
60.00	Clean oil 100%	0.30
90.00	Oil cut muddy w ater 10%oil70%mud20%0.88r	
150.00	Mud cut oil 5%oil 95%mud	2.10
2468.00	Salt w ater 100%	34.62

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Captiva 2
 2717 Canal Blvd. Hays
 Kansas 67601
 ATTN: Charlie Strurdavant

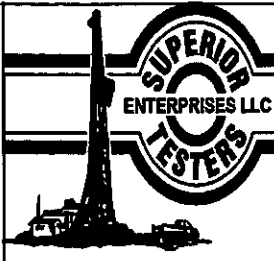
13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17183 **DST#: 3**
 Test Start: 2012.02.07 @ 07:30:00

Tool Information

Drill Pipe:	Length: 3568.00 ft	Diameter: 3.80 inches	Volume: 50.05 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: 252.50 ft	Diameter: 2.25 inches	Volume: 1.24 bbl	Weight to Pull Loose: 95000.00 lb
			<u>Total Volume: 51.29 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.50 ft			String Weight: Initial 70000.00 lb
Depth to Top Packer:	3820.00 ft			Final 84000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	13.00 ft			
Tool Length:	41.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: Gas to surface.

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3797.00	
Hydrolic Tool	5.00			3802.00	
Jars	6.00			3808.00	
Safety Joint	2.00			3810.00	
Packer	5.00			3815.00	28.00 Bottom Of Top Packer
Packer	5.00			3820.00	
Perforations	8.00			3828.00	
Recorder	1.00	6999	Inside	3829.00	
Recorder	1.00	6663	Outside	3830.00	
Bull Plug	3.00			3833.00	13.00 Bottom Packers & Anchor
Total Tool Length:	41.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Captiva 2
 2717 Canal Blvd. Hays
 Kansas 67601
 ATTN: Charlie Strurdavant

13-21s-16w-Pawnee
F-N Unit # 1-B
 Job Ticket: 17183 **DST#: 3**
 Test Start: 2012.02.07 @ 07:30:00

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: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 7.20 in ³	Gas Cushion Type:		
Resistivity: 0.40 ohm.m	Gas Cushion Pressure: psia		
Salinity: 72000.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	Oil cut mud 20%Oil 80% Mud	0.295
90.00	Oil and gas cut mud 20%gas 40%oil 50%mud	0.443
60.00	Clean oil 100%	0.295
90.00	Oil cut muddy w ater 10%oil70%mud20%w atk	0.875
150.00	Mud cut oil 5%oil 95%mud	2.104
2468.00	Salt water 100%	34.620
0.00	Chlorides 18000	0.000

Total Length: 2918.00 ft Total Volume: 38.632 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments:

