

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1158710

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 #		API No. 15
Name:		Spot Description:
Address 1:		
Address 2:		Feet from North / South Line of Section
City: Sta	ate: Zip:+	Feet from East / West Line of Section
		Footages Calculated from Nearest Outside Section Corner:
		County:
		Lease Name: Well #:
		Field Name:
0		
		Producing Formation:
Designate Type of Completion:		Elevation: Ground: Kelly Bushing:
New Well	Entry Workover	Total Depth: Plug Back Total Depth:
Oil WSW	SWD SIOW	Amount of Surface Pipe Set and Cemented at: Feet
Gas D&A	ENHR SIGW	Multiple Stage Cementing Collar Used? Yes No
OG OG	GSW Temp. Abd.	If yes, show depth set: Feet
CM (Coal Bed Methane)		If Alternate II completion, cement circulated from:
Cathodic Other (Core,	, Expl., etc.):	feet depth to:w/sx cmt.
If Workover/Re-entry: Old Well Info	o as follows:	
Operator:		Drilling Eluid Management Plan
Well Name:		Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)
Original Comp. Date:	Original Total Depth:	Chlorida contanti nom Elvidualuma
Deepening Re-perf.	Conv. to ENHR Conv. to SWD	Chloride content: ppm Fluid volume: bbls
	Conv. to GSW	Dewatering method used:
Plug Back:	Plug Back Total Depth	Location of fluid disposal if hauled offsite:
Commingled	Permit #:	Operator Name:
Dual Completion	Permit #:	Lease Name: License #:
SWD	Permit #:	
ENHR	Permit #:	Quarter Sec TwpS. R East West
GSW	Permit #:	County: Permit #:
Spud Date or Date Read Recompletion Date	ched TD Completion Date or Recompletion Date	

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

	Side Two	1158710
Operator Name:	Lease Name:	Well #:
Sec TwpS. R East _ West	County:	

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 (Attach Additional She	eets)	Yes No)	☐ Log Name	Formatior	n (Top), Depth an		Sample
Samples Sent to Geolog	gical Survey	Yes No)	Name			Тор	Datum
Cores Taken Electric Log Run Electric Log Submitted B (If no, Submit Copy)	Electronically	Yes No Yes No Yes No	>					
List All E. Logs Run:								
		CAS	ING RECORD	New	Used			
		Report all strings	set-conductor, surfa	ace, interm	nediate, productio	on, etc.		
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / F		Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD

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

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated					e			ement Squeeze Record of Material Used)	Depth
TUBING RECORD:	Siz	ze:	Set At:		Packe	r At:	Liner R	un:	No	
Date of First, Resumed	Product	ion, SWD or ENHF	ł.	Producing M	lethod:	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	s.	Gas	Mcf	Wate	er	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITIO	DISPOSITION OF GAS: METHOD OF COMPLE			TION:		PRODUCTION INT	ERVAL:			
Vented Sold Used on Lease				Open Hole Perf. Dually (Submit A			Comp. ACO-5)	Commingled (Submit ACO-4)		
(If vented, Sul	bmit ACC)-18.)		Other (Specify)						<u></u>

Form	ACO1 - Well Completion
Operator	H & D Exploration LLC
Well Name	Walrafen 1
Doc ID	1158710

Tops

Name	Тор	Datum
Heebner	3425	-1524
Toronto	3439	-1538
Douglas	3471	-1570
Brown Lime	3583	-1682
Lansing	3606	-1705
Base KC	3895	-1994
Mississippi	4016	-2115
Viola	4058	-2157
Simpson Shale	4147	-2246
Simpson Sand	4178	-2277
Arbuckle	4125	-2314



COMPANY: <u>H&D Exploration LLC</u>

LEASE: Walrafen #1

FIELD: wildcat

LOCATION: SW-NW-NE-NW 358' FNL & 1331' FWL

SEC: 20 TWSP: 25s RGE: 12w

COUNTY: Stafford STATE: Kansas

KB: <u>1901</u> GL: <u>1891</u>

API # 15-185-23817-00-00

CONTRACTOR: Southwind Drilling Company (Rig #8)

Spud: 07-09-2013 Comp: 07-27-2013

RTD: <u>4270'</u> LTD: <u>4274'</u>

Mud Up: 2800' Type Mud: Chemical was displaced

Samples Saved From: <u>3200'to RTD</u> Drilling Time Kept From: <u>3200'to RTD</u> Samples Examined From: <u>3200'to RTD</u> Geological Supervision From: <u>3300'to RTD</u> Geologist on Well: <u>Josh Austin</u>

Surface Casing: <u>8 5/8" @ 717'</u> Production Casing: <u>none D&A</u>

Electronic Surveys: By Pioneer Energy Services

NOTES

On the basis of the poor structural position, lack of shows and after reviewing the electric log, it was recommended by all parties involved in the Walrafen #1 that it be plugged and abandoned at the rotary total depth 4270



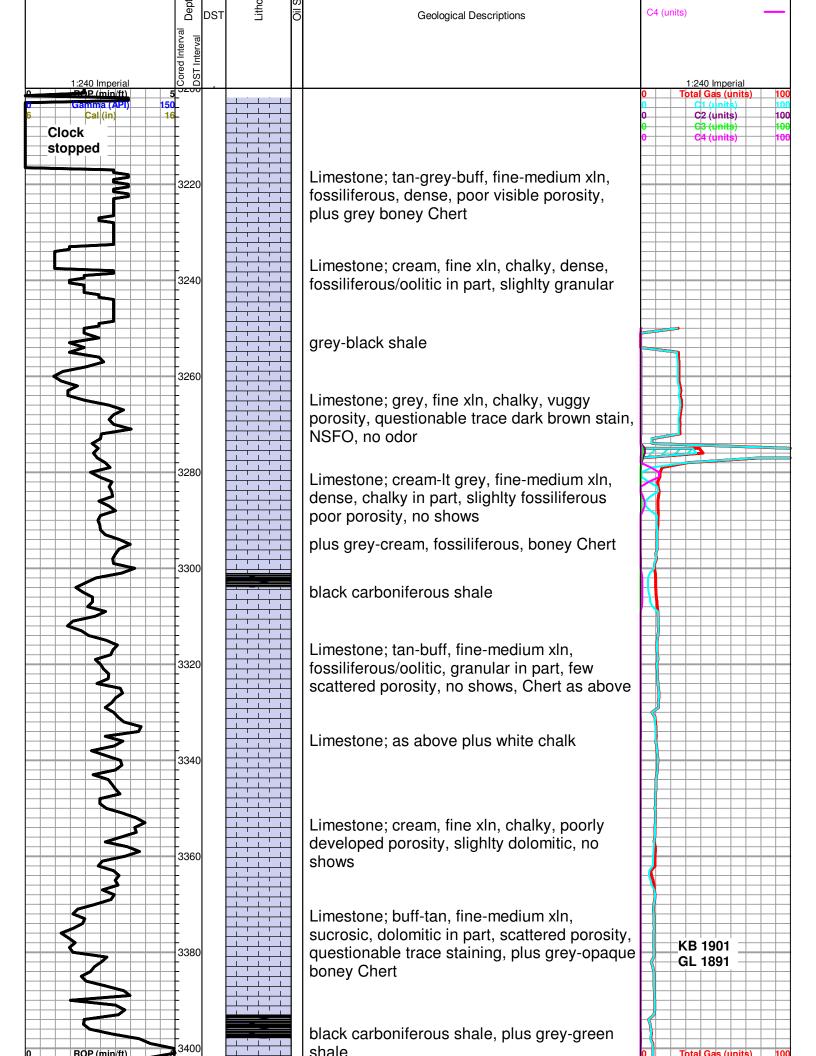


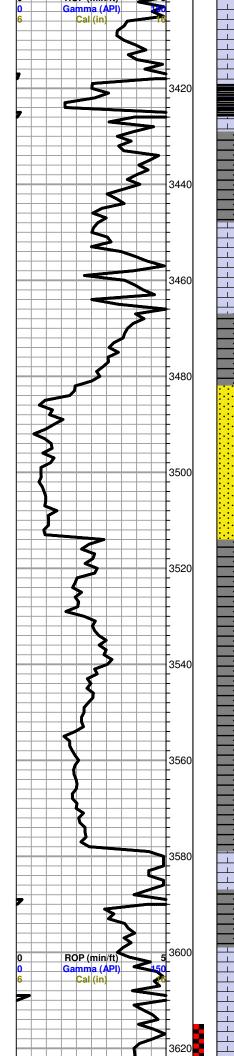
H&D Exploration, LLC Sample and Log Tops

	DRILLING WELL Walrafen #1									
		SW-NW-	NE-NW							
	Se	c: 20 Twp:2	5s Rge:	12w						
	1901	KB								
Formation	Sample	Sub-Sea	Log	Sub-Sea						
Heebner	3419	-1518	3425	-1524						
Toronto	3442	-1541	3439	-1538						
Douglas	3466	-1565	3471	-1570						
Brown Lime	3579	-1678	3583	-1682						
Lansing	3601	-1700	3606	-1705						
Base KC	3892	-1991	3895	-1994						
Mississippi	4007	-2106	4016	-2115						
Viola	4056	-2155	4058	-2157						
Simpson Shale	4143	-2242	4147	-2246						
Simpson Sand	4173	-2272	4178	-2277						
Arbuckle	4210	-2309	4215	-2314						
Total Depth	4270	-2369	4274	-2373						

See 1	P.O. Box 157	TIME ON:	2025 (7/24))
	HOISINGTON, KANSAS 67544 (800) 542-7313	TIME OFF:	0525 (7/25)	
	DRILL-STEM TEST TICKET FILE: WLRFN1DST1			
Company H & D EXPLORATION LLC	Lease & Well No. WALRAS	FEN #1		
Contractor SOUTHWIND DRILLING, INC. RIG	68 Charge to H&D EXPLOR	ATION LLC		
Elevation 1901 KB Formation	LANSING B-F Effective Pay	FI.	Ticket No	M525
Date 7/24/2013 Sec. 20 Twp.	25 S Range12 w d	County ST/	AFFORD State	KANSAS
Test Anomund Bu JOSH AUSTIN	Diamond Representation	MIKE	E COCHRAN	

	Inderval Lesbed Inc	om 36	616 ft. to	3704 ft. Total De	ath	3704 ft
Packer Depth 3611	ft. Size 6 3/4	A 4			Size 6 3/4	in.
	ft. Size 6 3/4		Packer depth		Size 6 3/4	n.
	IC 3/280	in.	Packer depth	- ACTIL	3128_0.3.4	n.
Depth of Selective Zone Set		3603 n.		0052	280	2
Top Recorder Depth (Inside)			Recorder Number	0063 Ca		3P.S.I.
Bottom Recorder Depth (Outside)		3701 ft.	Recorder Number	6884 C		⁵ P.S.I.
Below Straddle Recorder Depth		ft.	Recorder Number	Ca		P.S.I.
Mud Type CHEM Visco		51 	Drill Collar Length		I.D. 2 1/	
Weight 9.3 Water Lo	100		Weight Pipe Length_		LD. 27	
Chlorides	1999-1998	DP.P.M.	Drill Pipe Length		I.D3 1/	
Jars: Make STERLING Serial N		N/A	Test Tool Length		Tool Size 3 1.	
	eversed Out	NO	Anchor Length (63'DP)	88 n.		2-FH in
	and the second se	and the second se	(63'DP) Surface Choke Size_	in.	Bottom Choke Si	ze_5/8_in
Blow: 1st Open: WSB, BOB 3 N	MIN	(2"E	BB)			
2nd Open: WSB, BOB 11 M	MIN	(2"BE	B)	No. No. No. No.	WALKALL	
Recovered 1375 ft. of GIP				-	NA-Ker sh	FI
Recovered 60 ft. of GWM 20%	6 GAS, 1% WTR,	79% MUD W/	A THIN SCUM OF O	L	· 7	- From
Recovered 315 ft. of GMW 29	% GAS, 96% WT	TR, 2% MUD			l- T-	
Recovered 375 ft. of TOTAL F	LUID				1 /1	< T- 1
Recovered ft. of CHLOR: 4				1.	1 1	
Recovered ft. of RW: 0.14	and the second se					1
Remarks: PH: 7.0				- /	1-1-3	
our marries.					1.4	
nitial Hydrostatic Pressure			(A)	1726 P.S.I.		
	Minutes	30	(B)	26 P.S.L to (C)	96	P.S.I.
nitial Flow Period		30 45	(B)(D)	26 P.S.I. to (C) 1200 P.S.I.		
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10.10.0

HEEBNER 3419 (-1518)

black carboniferous shale

grey-green shale

TORONTO 3442 (-1541)

Limestone; cream-white, fine xln, chalky, few pin point porosity, no shows

DOUGLAS 3466 (-1565)

Shale; grey-green-maroon, soft, silty in part, few micaceous pieces

DOUGLAS SAND

Sand; grey, micaceous, silty, dense, few sub angular, sub rounded, poor porosity

Sand and Shale; as above

Shale; grey, micaceous, soft, few silty pieces

Shale; grey-dark grey

BROWN LIME 3579 (-1678)

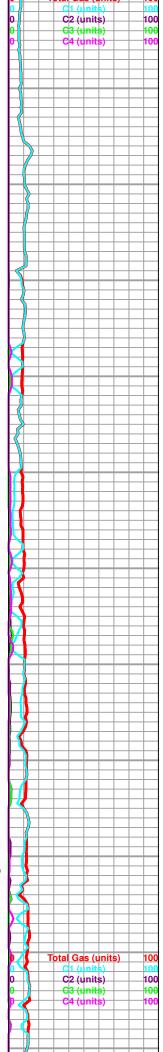
Limestone; tan-brown, fine xln, dense, cherty, fossiliferous in part

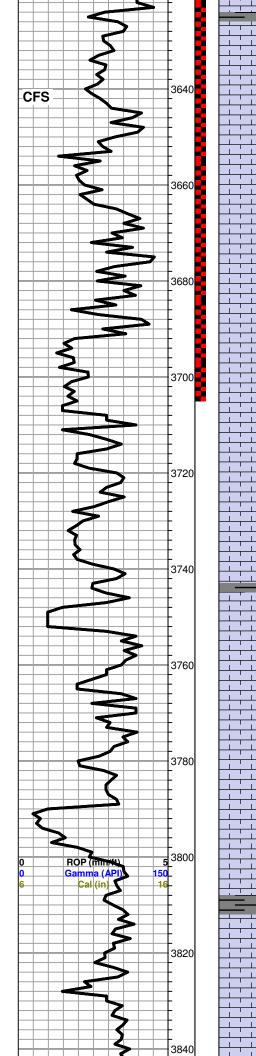
grey shale

LANSING 3601 (-1700)

Limestone; cream-grey, fossiliferous, dense, cherty in part, poor porosity, no shows

Limestone as above, tan-cream, cherty





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Limestone; cream-grey, fine-medium xln, slightly oolitic, dense in part, chalky, trace dark brown stain, trace spotty free oil, faint odor

Limestone; grey-cream, oolitic, chalky, trace oolicatic porosity, golden brown-grey stain, lt. rainbow SFO, faint odor

Limestone; tan-grey-cream, fine xln, dense, cherty in part, few sparry calcite, plus greywhite-opaque chert, no shows

Limestone; grey-buff, fine-medium xln, finely fossiliferous-oolitic, fair inter xln type porosity, brown stain, trace free oil, faint-fair odor

Limestone; cream-tan, fine xln, fossiliferous in part, chalky, dense, poorly developed porosity, trace brown stain, NSFO, no odor

Limestone; cream-It. grey-buff, fine xln, dense, cherty, finely oolitic-fossiliferous, cherty, plus Chert; grey-smokey grey, boney

Limestone; cream, fine xln, chalky, oomoldic, fair oomoldic porosity, barren

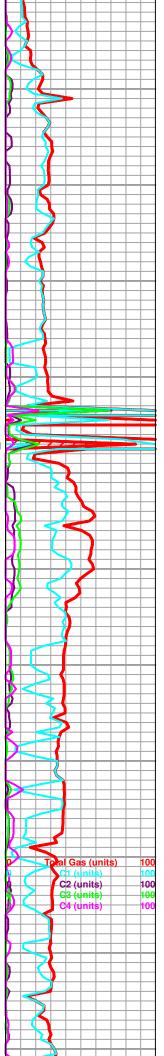
Limestone; cream, fine xIn, dense, cherty, plus Chert; white-grey, boney

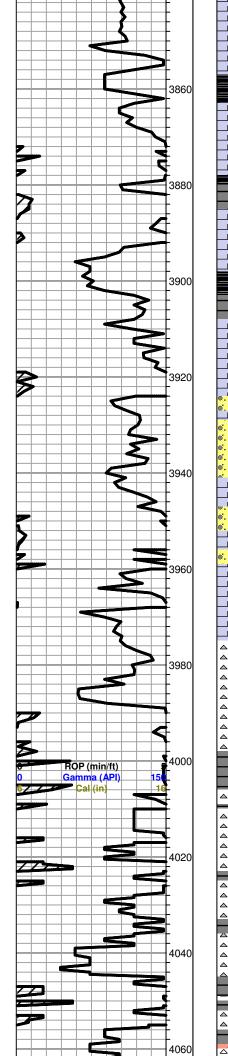
Limestone; cream, fine xln, chalky, highly oolitic, trace black-dark brown stain, NSFO, no odor

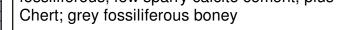
Limestone; cream, chalky, oomoldic porosity, (barren)

Limestone; cream-grey, fine xln, fossiliferous, dense, chalky in part, poor visible porosity, no shows, plus Chert; grey, boney, fossiliferous

Limestone; cream-tan, fine xIn, slighty







plus black carboniferous shale

Shale; grey-green, micaceous, soft

Limestone; cream-tan, fine xln, dense, chalky in part, poor visible porosity, cherty in part, no shows

BASE KANSAS CITY 3892 (-1991)

black carboniferous shale

grey-green waxey micaceous shale

Limestone; cream-grey-buff, fine xln, dense, cherty, poor porosity, fossiliferous in part, no shows

Chert; Orange-cream, grey, boney, slightly fossiliferous

Limestone; cream, fine xln, chalky, dense, slighlty oolitic in part, no shows

Chert; white-buff-grey, semi tripolitic, brownblack stain, trace free oil, very faint odor, plus abundant shale variety of colors

MISSISSIPPI 4007 (-2106)

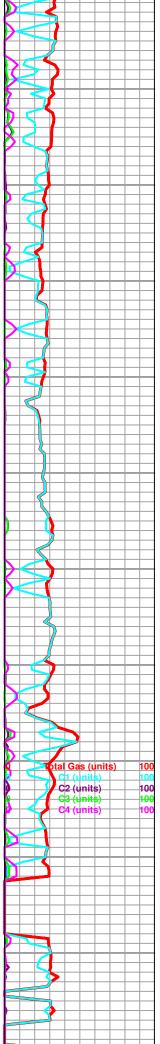
Chert; as above, semi tripolitic in part, trace brown-black stain, NSFO, no odor, plus abundant Shale; variety of colors

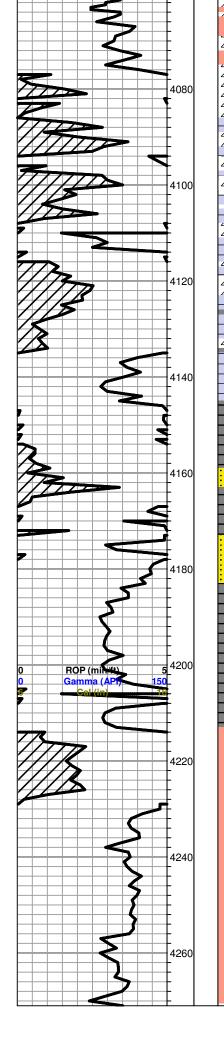
Chert as above, boney variety of colors, black-dark brown edge stainig

Chert; as above poorly developed, trace spotty black stain, NSFO, no odor

Shale; green-maroon, soft, waxey

VIOLA 4056 (-2155)





Dolomite; cream-It. grey, sucrosic, trace It. brown stain, spotty SFO, very faint odor

Chert; It. grey-white, boney/fresh, black edge staining, NSFO, no odor

Chert; cream-It. grey-white, boney, plus Limestone; cream, fine xIn, chalky, dense

Chert and Limestone; as above

SIMPSON SHALE 4143 (-2242)

Shale; grey-maroon-green, soft

Shale; as above silty in part

SIMPSON SAND

Sand; clear-cream, sub angular, sub rounded, friable, fair inter granular porosity, no shows

Shale; grey-dark grey-green, waxey, micaceous, silty in part

Plus Sand; grey, medium grained, dense, caclerous, micaceous in part, no shows

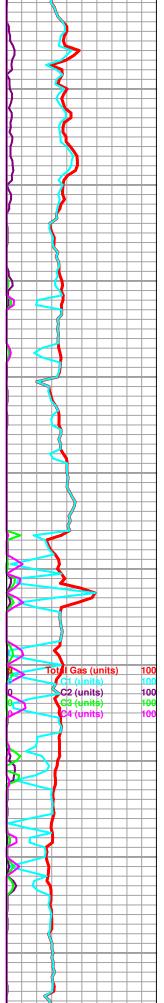
ARBUCKLE 4210 (-2309)

Dolomite; grey-cream, fine xln, sucrosic, few oomoldic porosity, no shows

Dolomite; grey-cream, fine xln, sucrosic, few scattered porosity, dense, no shows, plus white, boney Chert

Dolomite; and Chert as above

ROTARY TOTAL DEPTH 4270 (-2369)



DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	H & D EXPLORATION LLC	Job Number	M525
Well Name	WALRAFEN #1	Representative	MIKE COCHRAN
Unique Well ID	DST#1 3616-3704 LANSING B-F	Well Operator	H & D EXPLORATION LLC
Surface Location	SEC.20-25S-12W STAFFORD CO.KS.	Report Date	2013/07/25
Field	WILDCAT	Prepared By	MIKE COCHRAN
Well Type	Vertical	Qualified By	JOSH AUSTIN
		Test Unit	NO. 1

Test Information

Test Type	CONVENTIONAL
Formation	DST#1 3616-3704 LANSING B-F
Test Purpose (AEUB)	Initial Test

2013/07/24 Start Test Time	20:25:00
2013/07/25 Final Test Time	05:25:00
Well Fluid Type	01 Oil
	2013/07/25 Final Test Time

0063

Gauge Name Gauge Serial Number

Test Results

Remarks RECOVERED:

1375' GIP 60' GWM 20% GAS, 1% WTR, 79% MUD W/ A THIN SCUM OF OIL 315' GMW 2% GAS, 96% WTR, 2% MUD 375' TOTAL FLUID

CHLOR: 49,000 PPM PH:7.0 RW: 0.14 @ 72 DEG

TOOL SAMPLE: 100% WTR W/ A FEW SPOTS OF OIL & GASSY BUBBLES



DIAMOND TESTING P.O. Box 157 HOISINGTON, KANSAS 67544 (800) 542-7313 DRILL-STEM TEST TICKET FILE: WLRFN1DST1

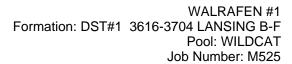
TIME ON: 2025 (7/24)

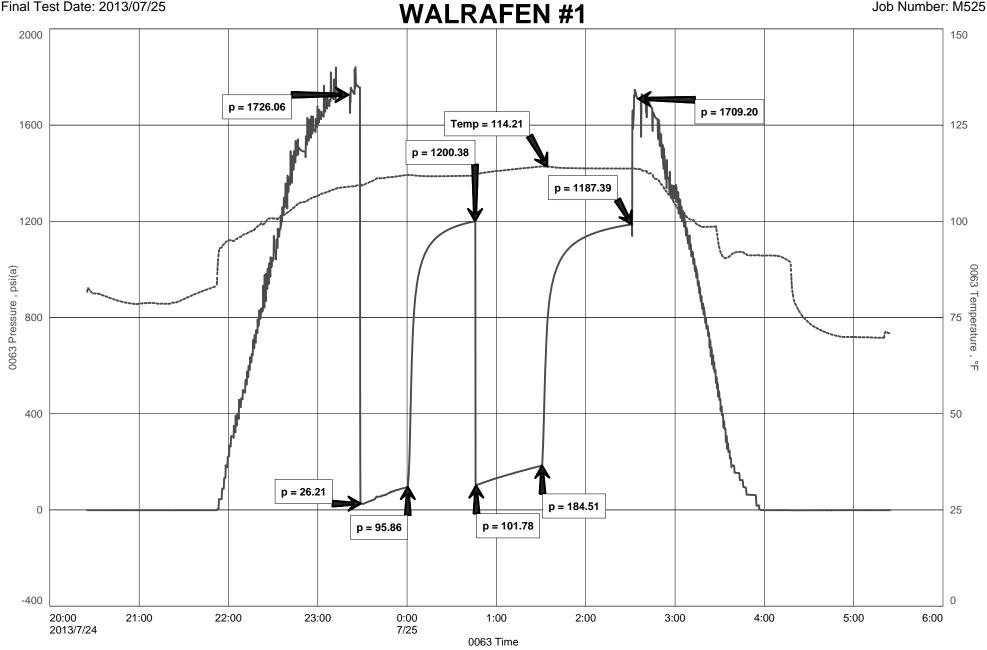
TIME OFF: 0525 (7/25)

Company H & D EXPLORATION LLC	Lease & Well No. WALRAFEN #1	
Contractor SOUTHWIND DRILLING, INC. RIG 8	Charge to_H & D EXPLORATION LLC	
	B-F_Effective PayFt. Ticket NoM525	
Date 7/24/2013 Sec. 20 Twp. 25 S	Range12 W CountySTAFFORD State_KAN	SAS
Test Approved By_JOSH AUSTIN	Diamond Representative MIKE COCHRAN	
Formation Test No1 Interval Tested from	3616 ft. to 3704 ft. Total Depth 3704	ft.
Packer Depth 3611 ft. Size6 3/4 in.	Packer depth N/A ft. Size_ 6 3/4 in.	•
Packer Depth 3616 ft. Size6 3/4 in.	Packer depth NA_ft. Size6 3/4 in.	
Depth of Selective Zone Set		
Top Recorder Depth (Inside) 3603 ft.	Recorder Number0063 Cap3603 P.S.	l.
Bottom Recorder Depth (Outside) 3701 ft.	Recorder Number6884_CapP.S.	Л.
Below Straddle Recorder Depthft.		
Mud Type CHEM Viscosity 51		in
Weight 9.3 Water Loss 8.8	cc. Weight Pipe Length0 ft. I.D 2 7/8	ir
Chlorides 2,900 P.P.M.	Drill Pipe Length 3591 ft. I.D 3 1/2	in
Jars: Make STERLING Serial Number N/A	Test Tool Length 25 ft. Tool Size3 1/2-IF	in
Did Well Flow? NO Reversed Out NO	Anchor Length 88 ft. Size 4 1/2-FH	ir
Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH ii	(63'DP) n. Surface Choke Size1in. Bottom Choke Size_5/8	3in
Blow: 1st Open: WSB, BOB 3 MIN (2	2"BB)	
2nd Open: WSB, BOB 11 MIN (2"	BB)	
Recovered 1375 ft. of GIP		
Recovered60 ft. of _GWM 20% GAS, 1% WTR, 79% MUD *		
Recovered315 ft. ofGMW 2% GAS, 96% WTR, 2% ML	JD	
Recovered 375 ft. of TOTAL FLUID	p	
Recoveredft. of CHLOR: 49,000 PPM	Price Job	
Recoveredft. of _RW: 0.14 @ 72 DEG	Other Charges	
Remarks: PH: 7.0	Insurance	
TOOL SAMPLE: 100% WTR W/ A FEW SPOTS OF OIL & GASS	Δ Μ.	
Time Set Packer(s) 11:30 P.M. P.M. Time Started Off		
Initial Hydrostatic Pressure	(A) 1726 P.S.I.	
Initial Flow Period Minutes 3	(D)P.S.I. 10 (C)P.S.I.	
Initial Closed In Period Minutes4	(U)F.S.I.	
Final Flow Period Minutes 4		
Final Closed In Period		
Final Hydrostatic Pressure	(H)1709 P.S.I.	

Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

H & D EXPLORATION LLC DST#1 3616-3704 LANSING B-F Start Test Date: 2013/07/24 Final Test Date: 2013/07/25







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

FIELD SERVICE TICKET

1718 08569 A

		PING & WIRELINE					DATE TICKET NO		
DATE OF JOB - 2013 DISTRICT				NEW OLD PROD INJ WDW CUSTOMER WELL WELL ORDER NO.:					
CUSTOMER HED EXPLORATION LLC			LEASE WALRAFENI WELL NO. /						
ADDRESS			COUNTY STAFFORD STATE KS.						
CITY STATE			SERVICE CREW LESLEY, MARQUEZ, PIERSON, JONES						
AUTHORIZED BY			JOB TYPE: CNW - P.T.A.						
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQU	IPMENT#	HRS	TRUCK CALLED 7-29-13 AM 2:00		
37586	3.5						10115 0.00		
19889-19843	3.5		-				(PM 3.30		
19831-19862	3.5						START OPERATION		
							FINISH OPERATION		
							RELEASED AM //:30		
র বি							MILES FROM STATION TO WELL		

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered). The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP. SIGNED:

(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.			01101			
	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT	
CP 103	60/40 POZ	SK	210		2,52000	
CC 200	CEMENT GEL	16	362		90.50	
E 100	PICKUP MILEAGE	MT	20		050	
E 101	HEAVYEQUIPMENT MILEAGE	MI	40		28000	
E 113	BULK DELIVERY CHARGE	TM	181		10000	
CE 205	DEPTH CHARGE, 4001-5000	HR	1-4		152000	
CE 240	BLENDING MIXING CHARGE	SIL	210		2,52000	
Smz	SERVICE SUPERING	EA	010		29400	
	SCHVICE SUPERADUR	CH	1	- 0-	175 00	
-						
				SUB TOTAL	1 05	
CHE	EMICAL / ACID DATA:			SUB TO FALL	419747	
	SERVICE & EQUI	PMENT	%TA)	KON\$	1,1.10	
	MATERIALS			CON \$		
				TOTAL		
				TOTAL	manifester in the	
SERVICE REPRESENTATIV	E I Juh July THE ABOVE MATERIAL AND SEF		BY.	19 11 Walter for		
FIELD SERVICE ORDER NO. (WELL OWNER OPERATOR CONTRACTOR OR AGENT)						