Confidentiality Requested: Yes No

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

1078047

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 #	API No. 15
Name:	Spot Description:
Address 1:	
Address 2:	Feet from Dorth / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	
CONTRACTOR: License #	GPS Location: Lat:, Long:, (e.gxxx.xxxxx)
Name:	Datum: NAD27 NAD83 WGS84
Wellsite Geologist:	
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
Gas D&A ENHR SIGW	Elevation: Ground: Kelly Bushing:
☐ GG ☐ GSW ☐ Temp. Abd.	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used?
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name:	feet depth to:w/sx cmt.
Original Comp. Date: Original Total Depth:	
Deepening Re-perf. Conv. to ENHR Conv. to SWD	Drilling Fluid Management Plan
Plug Back Conv. to GSW Conv. to Producer	(Data must be collected from the Reserve Pit)
Commingled Permit #:	Chloride content: ppm Fluid volume: bbls
Dual Completion Permit #:	Dewatering method used:
SWD Permit #:	Location of fluid disposal if hauled offsite:
ENHR Permit #:	
GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R East West
Recompletion Date Recompletion Date	County: Permit #:

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY
Confidentiality Requested
Date:
Confidential Release Date:
Wireline Log Received
Geologist Report Received
UIC Distribution
ALT I II III Approved by: Date:

	Page Two	1078047
Operator Name:	_ Lease Name:	Well #:
Sec TwpS. R East _ West	County:	
INCTRUCTIONS. Chain important tang of formations papetrated	stail all agree Bapart all final	apping of drill stome tools giving interval toolad, time tool

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 (Attach Additional Sh	eets)	Yes No		-	on (Top), Depth an		Sample
Samples Sent to Geolog	gical Survey	Yes No	Nam	e		Тор	Datum
Cores Taken Electric Log Run		Yes No					
List All E. Logs Run:							
			RECORD Ne				
		Report all strings set-o	conductor, surface, inte	ermediate, producti	on, etc.		
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
		ADDITIONAL	CEMENTING / SQU	JEEZE RECORD			
Purpose: Perforate	Depth Top Bottom	Type of Cement	# Sacks Used		Type and Pe	ercent Additives	
Protect Casing Plug Back TD							
Plug Off Zone							

Did you perform a hydraulic fracturing treatment on this well?	Yes	No	(
Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?	Yes	No	(
Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?	Yes	No	(

(If No, skip questions 2 and 3)
(If No, skip question 3)

(If No, fill out Page Three of the ACO-1)

Shots Per Foot		PERFORATION Specify Foo		RD - Bridge P Each Interval		e	A		ement Squeeze Record I of Material Used)	Depth
TUBING RECORD:	Siz	e:	Set At:		Packer	r At:	Liner Rı	un:	No	
Date of First, Resumed	Productio	on, SWD or ENHR		Producing N	/lethod:	oing	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bbl:	S.	Gas	Mcf	Wate	er	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITIO		AS: Jsed on Lease		Open Hole	METHOD		Comp.	Commingled	PRODUCTION IN	TERVAL:
(If vented, Sub	omit ACO-	-18.)		Other <i>(Specify)</i>	·	(Submit)	,	(Submit ACO-4)		

Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita, KS 67202-3802



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Mark Sievers, Chairman Ward Loyd, Commissioner Thomas E. Wright, Commissioner Sam Brownback, Governor

April 04, 2012

Charles Ramsay H & C Oil Operating Inc. PO BOX 86 PLAINVILLE, KS 67663-0086

Re: ACO1

Sec.-S-County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully, Charles Ramsay

o dahan Canto, KB				: 800; Rec: 20" mud; IF: 1 10; Rec: 1" mud; IF: dead in	the second secon	Shgy Shar 8 2 2 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Table Serving Serving Serving Serving Serving Serving Services Ser	Event En en Sofewall	Remarks	8	100	8, 8 8 8 8 8	09	000 X000	t chig	chieg			ee' ee	00 X04 1	9 30	035 52	dity.	\$	8,8		2		000, 00 1/1d 1/1d	und Life of three	661, 100 24, 25	al chilty	ct and	1) bird jir	res SPO, e SEO, Meex 2004-042 Meex 2004-042 SPD, IT27 LI27-044	Bec that the test and tes	2011 E2 Mile amb 2004 K-20 2011 E2 Mile amb 2004 K-20 2014 E4 Mile 2014 E2 2014 E4 Mile 2014 E2 2014 E4 Mile 2014 E2	c, pr Branch mad Preserved a train 151: dead 517: dead F SII: dead		08500		
STRIP LOG STRIP LOG (00) Invested phi Log Drifting Complete Drifting Complete Drifti	10R	12	Tops	1 8 1319- 844 FFP- 28-27 F519- 6 1319- 27 FFP- 16-15 F519-	elogs I ncommand plugg	State	Ress Contraction Press P	ABOLS Sported Const ATERVAL ATERVAL Oste	sectogical Descriptions	aller, m égit sit, no 44 por, no cécel to	i, mówit tit, is vis por, is edor, no S	6. cem, fa stil, på din, novia por, no od Level i stil, på din, pr PP por, na odo	n, pikejm sith, no via pot, no odoć sio S	grey, findta, jagen stu, eo Vis pol, eo	m star, no via joc, no odoć no 570, vra	en m stat, no via joc, no odoc, no 570, sil			t. an , hi dh gn dh, no và pot, no o	en ou vasp mi van 'n ne en oort	an An An Ann, gar site, pri inti grans por, no o	, v this succ, year int effit por, no odde,	tert, si ditiliy nı dis, jar P.P. par, no odari, no S.F.O, si i	A, plagmath, to via por, to adu; no 5	t-om dan, mbro-fo sdir, pit shr, so Va	m star, na vis yor, na edor, na 540 5, nel	s was not under a state of the under	m dts, na vis joc, na edoc, na 19-0, chi	men pau, m.u.n. gan en, so en por so mjól A. gan ska, print stin por, wi scár voga P.O. sti citikýjou reji, mostři Jamen w	n, gra Ma, sovis por, ao ador, no 200, astra, gra Ma oo Va por, no ador, no 3	ang, fin attin, skipikatin, na via por, no odi Bi ang, fin attin, pic atti, no via por, no odi	kgm tite, no ki pot, na odot no SPO, n	at mit di leç in din, pirgmain, no via po n, gra din, and ways, poss int als poç i si bit, and	ીન, છેને હુલા કરી, જ બંધ કરી છેલાં, છતાં, છત બંધા, ઈંડી, જોઈપુ, દલા ખાંધની છૂલ્પું છેલાં કલાની છુ કોઈન, ભારતવ દૂર્શોલ	di sila, jak shkurpe ini sifa pos, no odos oon n, gra sita, pose ini zita pos, no odos, u pr sita sita	t, gan stat, ti ist afte por, fret odor, v pr p	en, nei bere el L.S. am, la Alta nèg	m sta, pe år incelh int gran por, to edo	k aht, no Via joc, na odor, no SFO 5. naliteren	In affe, m Gest affe, no Via por, no odde	tigk ett, to vis poc. no ofer, no 5FO	
LITHOLOGIC WeilSight 8 WeilSight 8 WeilSight 8 Weissurd D. Measured D. Measure	OPERAT I Operating Inc. 2x 69 bit, K5 67963	dEOLOC n Erickson on Well Site Geology Inner Street ox. NE 69958	Formation 8ample 2230(+519) 2230(+1290) 3766(+1226) 300(+1226) 300(+1520) 4037(+1520)	DS1 bo: 2020-1942; FP: 27-2 ad FSt, ched bo: 1992-1945; FP: 15-1 fo: 1992-1945; FP: 15-1	Comme amples, DST results and ROCK T	ACCESSO NO.	Accessed processed processed and and accessed and accesse	OTHER SYNCHIONS ROUNDING Rounder Rounder Baband to Angular Angular Cont. SHOW	, Konour	LS. om Light, h	Lis. cm day, h rd	SH-grey color viru	140	1.5. cm, heijaho 190 190 190 190 190 190 190 190 190 190	LS-UN, MICA 9	Shi ref. gray biger	at above at above at above es def		214 bit, one 214 bit, one 214 pro, moler L1 214 pro, moler L1 214 pro, moler L1	LL-mtbox	Ski net, grej bliges	LS. cm, downed	LS-ON-AND PATHO	LS- am glog four	294 MK, oath 294 MK, oath 294 MK, gray M/L1	Liston, frant g	the second	11:00,000,000	SFO w1 SH gray gray gray gray gray gray gray gray	L.S. ahlom, h of 	L.S. on How A show A sh	LLS. orm, Math, p Market Mark, p Market Market Market Market Market Ma Market Market	L13. em 41 gray, ac odor, no 970 L13. anticem, fit at to 950, chily at 9	L. and head of the second s	LS. cm day, here at 2H propagato at 2H propagato tar sph bernall s LS. cm, h dt, p	Com borne of fade (14) white born of fade (14) white born of the	as abore, oli Offer SH-ds prog program Us poor, rea adar, na	LL-on-h dA-p	Listom, friender p	Skiedfreit, pro-	11.00.000	ford Youngper 145
Wali Manuel. Distal Loostidon. Net Manuel. Distal Loostidon. Net Manuel. 2020 Sea Manuer. 2020. Sea Manuer. 2020. Sea Condisatora: 1192 F. F. Condisatora: Canada	Company: H&C O Address: P.O. Bo	Name: Clayton E Company: Erickson Address: 402 Pahr PO. Box	Ebg 2191(+2910) 2220(+2910) 2220(+256) 3784(+2250) 3784(+224) 4034(+1282) 4034(+1282)	-3969 30-60-39-60; Myd 14 min 131: dead FF: de -815 30-60-39-30; Myd ad FF: dead F31: dead	examination of rock to	0008 1	or and or	C Vuppy SORTHO B Roderal Poortal				6950				10/547 \$49		0000								TITAL CUTO TITAL CUTO TURKENO TURKENO TURKENO			0220		8 9 9	0096			6				84 (12) (12)	0500		
Lk Burfaon Beotrom Hold Cround Loga			Anhydrite Base Anhy HEEBNER TORDAR LANSING EKC TD	D51 #1 395 1/2" deed in D51 #2 3990 6 min Bit de	Eased upon		Interesting to the second seco			83 Ar Ar 24	Avr	١	wW	Ŵ		144	www.		∽wħ	u.M		M	~M~	<u>м</u> /л	v w v	Ŵ		v.w	ι ΛΛ		γÅη	M	∧ <i>∿ \</i> /	Ŵ	M				1/m Nr	W A	₩ \	N



DRILL STEM TEST REPORT

Prepared For: H & C Oil Operations Inc

PO Box 86 Plainville KS 67663

ATTN: Clayton Erickson

Dinkel #3-1

3-9s-25w Graham,KS

Start Date: 2012.03.17 @ 06:30:00 End Date: 2012.03.17 @ 11:42:00 Job Ticket #: 47376 DST #: 1

Trilobite Testing, Inc PO Box 362 Hays, KS 67601 ph: 785-625-4778 fax: 785-625-5620

	DRILL STEM TES	TREP	ORT				
RILOBITE	H & C Oil Operations Inc		3-9s	-25w G	raham,K	S	
ESTING , INC.	PO Box 86		Din	kel #3-1	l		
	Plainville KS 67663		Job T	Ticket: 47	376	DST#	<i>ŧ</i> :1
	ATTN: Clayton Erickson		Test	Start: 20)12.03.17 @	06:30:00	
GENERAL INFORMATION:							
Formation:LKC " I & J"Deviated:NoWhipstock:Time Tool Opened:08:41:30Time Test Ended:11:42:00	2510.00 ft (KB)		Test Teste Unit N	er: J	Conventiona Jim Svaty 61	al Bottom H	Hole (Initial)
Interval:3950.00 ft (KB) To39Total Depth:3990.00 ft (KB) (TVHole Diameter:7.88 inches Hole	(D)		Refe	rence Ele KB te	evations: o GR/CF:	2505.0	00 ft(KB) 00 ft(CF) 00 ft
Serial #: 8736InsidePress@RunDepth:28.94 psigStart Date:2012.03.17Start Time:06:30:05TEST COMMENT:30-IFP- 1.5 in Blo 60-ISIP- No Blow 30-FFP- No Blow	End Date: End Time:	2012.03.17 13:18:59	Capacity: Last Calib. Time On B Time Off E	itm: 2	2012.03.17 2012.03.17	2012.03.1 @ 08:41:0	00
60-FSIP- No Blow Pressure vs. Tr 8738 Pressure		Time	PR Pressure	ESSUR Temp	RE SUMM		
	10 10 10 10 10 10 10 10 10 10	(Min.) 0 1 31	2020.50 26.75 28.04	(deg F) 107.28 106.93 107.78	Open To F Shut-In(1)	1) Tow (1)	
		90 90	844.12 28.24		End Shut-I Open To F		
	апреление почисо почисо общество с состато с с с с с с с с с с с с с с с с с с с	123 181 181	28.94 890.33 1842.55	110.63 112.22 112.56			
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	12PM						
Recovery				Gas	s Rates		
Length (ft) Description 28.00 MUD	Volume (bbl) 0.39			Choke (ir	nches) Pressu	ure (psig)	Gas Rate (Mcf/d)
	Ref No: 47376				2012 03 19		

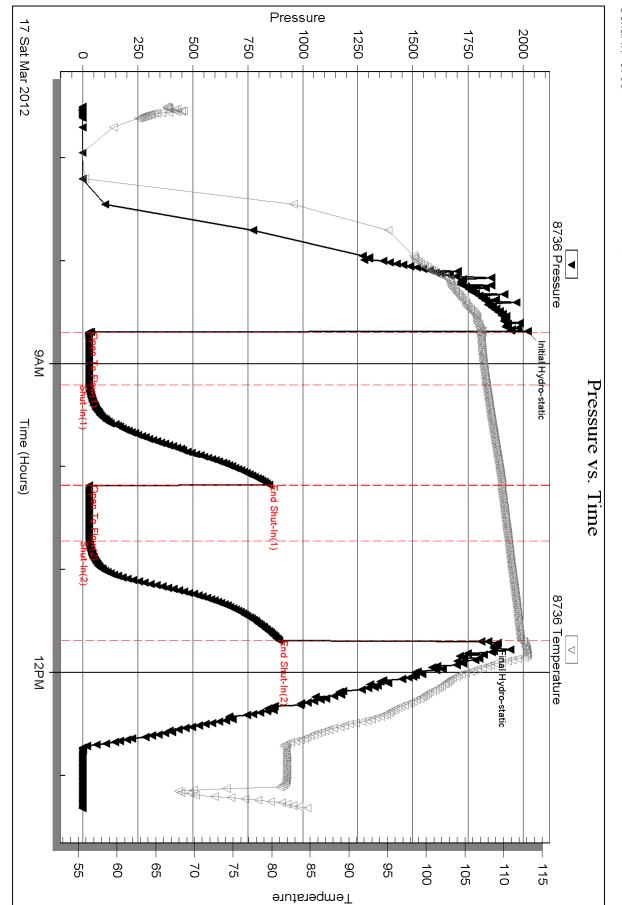
() - () KILUBI			il Operations			2 On 2Eur Oreham	Ve
RILOBI	NO NO	пасо	ii Operations	Inc		3-9s-25w Graham,	K5
	VC , INC.	PO Box				Dinkel #3-1	
		Plainville	e KS 67663			Job Ticket: 47376	DST#:1
		ATTN:	Clayton Eric	kson		Test Start: 2012.03.17	@ 06:30:00
Tool Information	Į						
Drill Pipe: Length: 3	3930.00 ft Di	Diameter:	3.80 in	ches Volume:	55.13 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe: Length:	0.00 ft Di	Diameter:	2.75 in	ches Volume:	0.00 bbl	Weight set on Packe	er: 25000.00 lb
Drill Collar: Length:	0.00 ft Di	Diameter:	2.25 in	ches Volume:	0.00 bbl	Weight to Pull Loose	
Drill Pipe Above KB:	8.00 ft			Total Volume:	55.13 bbl	Tool Chased	0.00 ft
	3950.00 ft					String Weight: Initial	
Depth to Bottom Packer:	ft					Final	59000.00 lb
nterval between Packers:	40.00 ft						
	68.00 ft						
	00.00 11						
Tool Length: Number of Packers: Tool Comments:	2 D	Diameter:	6.75 in				
Fool Length: Number of Packers: Fool Comments: Fool Description	2 Di	gth (ft)	6.75 in Serial No.	ches Position		ccum. Lengths	
Fool Length: Number of Packers: Fool Comments: Fool Description	2 Di Leng	gth (ft) 1.00		Position	3923.00	ccum. Lengths	
Tool Length: Number of Packers: Tool Comments: Tool Description Change Over Sub Shut In Tool	2 Di	gth (ft) 1.00 5.00			3923.00 3928.00	ccum. Lengths	
Fool Length: Number of Packers: Fool Comments: Fool Description Change Over Sub Shut In Tool Hydraulic tool	2 Di	gth (ft) 1.00 5.00 5.00		Position	3923.00 3928.00 3933.00	ccum. Lengths	
Fool Length: Number of Packers: Fool Comments: Fool Description Change Over Sub Shut In Tool Hydraulic tool lars	2 Di	gth (ft) 1.00 5.00 5.00 5.00		Position	3923.00 3928.00 3933.00 3938.00	ccum. Lengths	
Fool Length: Number of Packers: Fool Comments: Fool Description Change Over Sub Shut In Tool Hydraulic tool lars Safety Joint	2 Di Leng	gth (ft) 1.00 5.00 5.00 5.00 3.00		Position	3923.00 3928.00 3933.00 3938.00 3941.00		Rottom Of Ton Packa
Fool Length: Number of Packers: Fool Comments: Fool Description Change Over Sub Shut In Tool Hydraulic tool lars Safety Joint Packer	2 Di Leng	gth (ft) 1.00 5.00 5.00 5.00 3.00 5.00		Position	3923.00 3928.00 3933.00 3938.00 3941.00 3946.00	accum. Lengths	Bottom Of Top Packe
Fool Length: Number of Packers: Fool Comments: Fool Description Change Over Sub Shut In Tool Hydraulic tool lars Safety Joint Packer Packer	2 Di	gth (ft) 1.00 5.00 5.00 5.00 3.00 5.00 4.00		Position	3923.00 3928.00 3933.00 3938.00 3941.00 3946.00 3950.00		Bottom Of Top Packe
Fool Length: Number of Packers: Fool Comments: Fool Description	2 Di	gth (ft) 1.00 5.00 5.00 5.00 3.00 5.00		Position	3923.00 3928.00 3933.00 3938.00 3941.00 3946.00		Bottom Of Top Packe
Fool Length: Number of Packers: Fool Comments: Fool Description Change Over Sub Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb	2 Di Leng	gth (ft) 1.00 5.00 5.00 5.00 3.00 5.00 4.00 1.00		Position	3923.00 3928.00 3933.00 3938.00 3941.00 3946.00 3950.00 3951.00		Bottom Of Top Packe
Tool Length: Jumber of Packers: Tool Comments: Tool Description Change Over Sub Shut In Tool Hydraulic tool lars Safety Joint Packer Stubb Perforations Change Over Sub	2 Di	gth (ft) 1.00 5.00 5.00 5.00 3.00 5.00 4.00 1.00 3.00		Position	3923.00 3928.00 3933.00 3938.00 3941.00 3946.00 3950.00 3951.00 3954.00		Bottom Of Top Packe
Fool Length: Number of Packers: Fool Comments: Fool Description Change Over Sub Shut In Tool Hydraulic tool lars Safety Joint Packer Packer Stubb Perforations Change Over Sub Recorder	2 Di Leng	gth (ft) 1.00 5.00 5.00 3.00 5.00 4.00 1.00 3.00 1.00	Serial No.	Position	3923.00 3928.00 3933.00 3938.00 3941.00 3946.00 3950.00 3951.00 3954.00 3955.00		Bottom Of Top Packe
Fool Length: Number of Packers: Fool Comments: Fool Description Change Over Sub Shut In Tool Hydraulic tool lars Safety Joint Packer Packer Stubb Perforations Change Over Sub Recorder Recorder	2 Di Leng	gth (ft) 1.00 5.00 5.00 3.00 5.00 4.00 1.00 3.00 1.00 0.00	Serial No.	Position	3923.00 3928.00 3933.00 3938.00 3941.00 3946.00 3950.00 3951.00 3955.00 3955.00		Bottom Of Top Packe
Fool Length: Number of Packers: Fool Comments: Fool Description Change Over Sub Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations	2 Di Leng	gth (ft) 1.00 5.00 5.00 3.00 5.00 4.00 1.00 3.00 1.00 0.00 0.00	Serial No.	Position	3923.00 3928.00 3933.00 3938.00 3941.00 3946.00 3950.00 3951.00 3955.00 3955.00 3955.00		Bottom Of Top Packe

		DRI	LL ST	FEM TEST F	REPORT	-		FLUID S	UMMARY
		H&CC	Dil Operati	ons Inc		3-9s-25w (Graham,K	6	
	RILOBITE TESTING , INC.	PO Box	86		Dinkel #3-1				
			e KS 6766	63		Job Ticket: 4		DST#:1	
		ATTN:	Clayton I	Erickson		Test Start: 2	2012.03.17 @	06:30:00	
Mud and Cush	ion Information								
Mud Type: Gel C	hem		С	ushion Type:			Oil API:		deg API
Mud Weight:	9.00 lb/gal			ushion Length:		ft	Water Salinit	y:	ppm
Viscosity: Water Loss:	59.00 sec/qt 5.78 in³			ushion Volume: Sas Cushion Type:		bbl			
Resistivity:	ohmm			as Cushion Pressure	:	psig			
Salinity:	500.00 ppm					P0.9			
Filter Cake:	inches								
Recovery Info	rmation			· -··					
			R	Recovery Table			7		
	Lengt ft	'n		Description		Volume bbl			
		28.00	MUD			0.393	3		
	Total Length:	28	.00 ft	Total Volume:	0.393 bbl				
	Num Fluid Samp	les: 0		Num Gas Bombs:	0	Serial #	:		
	Laboratory Nam Recovery Comn			Laboratory Location	n:				
Trilohite Testing			ef No: 4				+ 2012 03 19		

Printed: 2012.03.19 @ 16:37:52

Ref. No: 47376





Dinkel #3-1

DST Test Number: 1

Serial #: 8736 Inside H & C Oil Operations Inc



DRILL STEM TEST REPORT

Prepared For: H & C Oil Operations Inc

PO Box 86 Plainville KS 67663

ATTN: Clayton Erickson

Dinkel #3-1

3-9s-25w Graham,KS

Start Date: 2012.03.17 @ 20:15:00 End Date: 2012.03.18 @ 03:11:30 Job Ticket #: 47377 DST #: 2

Trilobite Testing, Inc PO Box 362 Hays, KS 67601 ph: 785-625-4778 fax: 785-625-5620

RILOBITE	DRILL STEM TES	T REPO	ORT				
	H & C Oil Operations Inc		3-9 5-	25w Gi	raham,K	S	
ESTING , INC	PO Box 86 Plainville KS 67663			el #3-1 cket: 47;		DST#	+- 2
	ATTN: Clayton Erickson				12.03.17 @		
GENERAL INFORMATION:							
Formation:LKC "K"Deviated:NoWhipstock:Time Tool Opened:22:40:00Time Test Ended:03:11:30	2510.00 ft (KB)		Test T Tester Unit N	r: J	Conventiona lim Svaty 31	I Bottom I	Hole (Reset)
Interval:3990.00 ft (KB) To40Total Depth:4015.00 ft (KB) (TvHole Diameter:7.88 inches Hole	/D)		Refere	ence Elev KB to	vations: o GR/CF:	2505.0	00 ft(KB) 00 ft(CF) 00 ft
Serial #: 8736 Inside Press@RunDepth: 15.59 psig Start Date: 2012.03.17 Start Time: 20:15:05 TEST COMMENT: 30-IFP- Surface F 60-ISIP- No Blow 30-FFP- No Blow 30-FFP- No Blow	End Date: End Time: Blow Died in 6 min	2012.03.18 03:11:29	Capacity: Last Calib.: Time On Bt Time Off Bt	m: 2	2012.03.17 2012.03.18	2012.03.4 @ 22:39:4	45
Pressure vs. Ti	me		PRE	ESSUR	E SUMM	ARY	
200 17 Stt Mar 2012	Transformer Trans	Time (Min.) 0 1 31 90 90 121 151 151	Pressure (psig) (1982.50 15.32 16.30 27.53 15.91 15.59 18.68 18.68	Temp (deg F) 106.94 106.47 108.27 110.93 110.95 112.06 112.99	Annotatic Open To F Shut-In(1) End Shut-In Open To F Shut-In(2) End Shut-In Final Hydro	on o-static low (1) n(1) low (2) n(2)	
Recovery					s Rates		
Length (ft) Description 1.00 MUD	Volume (bbl) 0.01			Choke (in	icnes) Pressu	re (psig)	Gas Rate (Mct/d)
* Recovery from multiple tests Trilobite Testing, Inc	Ref. No: 47377			<u> </u>	2012.03.19	0 10	10

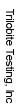
	DRILL STEM TES	T REPO	ORT			
RILOBITE	H & C Oil Operations Inc		3-9 s- 25w	Graham,	(S	
ESTING , INC.	PO Box 86 Plainville KS 67663		Dinkel # Job Ticket:	-	DST#:	2
	ATTN: Clayton Erickson			2012.03.17	_	-
GENERAL INFORMATION:						
Formation:LKC "K"Deviated:NoWhipstock:Time Tool Opened:22:40:00Time Test Ended:03:11:30	2510.00 ft (KB)		Test Type: Tester: Unit No:	Convention Jim Svaty 61	nal Bottom Ho	le (Reset)
Interval:3990.00 ft (KB) To40Total Depth:4015.00 ft (KB) (TVHole Diameter:7.88 inches Hole	/D)		Reference K	Elevations: B to GR/CF:	2510.00 2505.00 5.00	ft (CF)
Serial #: 8166 Outside Press@RunDepth: psig Start Date: 2012.03.17 Start Time: 20:15:05 TEST COMMENT: 30-IFP- Surface I 60-ISIP- No Blow 30-FFP- No Blow 30-FSIP- No Blow	End Date: End Time: Blow Died in 6 min	2012.03.18 03:11:44	Capacity: Last Calib.: Time On Btm: Time Off Btm:		8000.00 2012.03.18	
Pressure vs. T			PRESS	URE SUMN	/ARY	
Clicp Presure 200 0 0 0 0 0 0 0 0 0 0 0 0	BYO Temperature	Time (Min.)	Pressure Temp (psig) (deg		ion	
Recovery	<u>,</u>		(Gas Rates		
Length (ft) Description Length (ft) MUD 1.00 MUD	Volume (bbl) 0.01		Cho	ke (inches) Press	sure (psig) G	as Rate (Mcf/d)
* Recovery from multiple tests Trilobite Testing, Inc	Ref. No: 47377			ed: 2012.03.1	0 @ 46.07.4	<u></u>

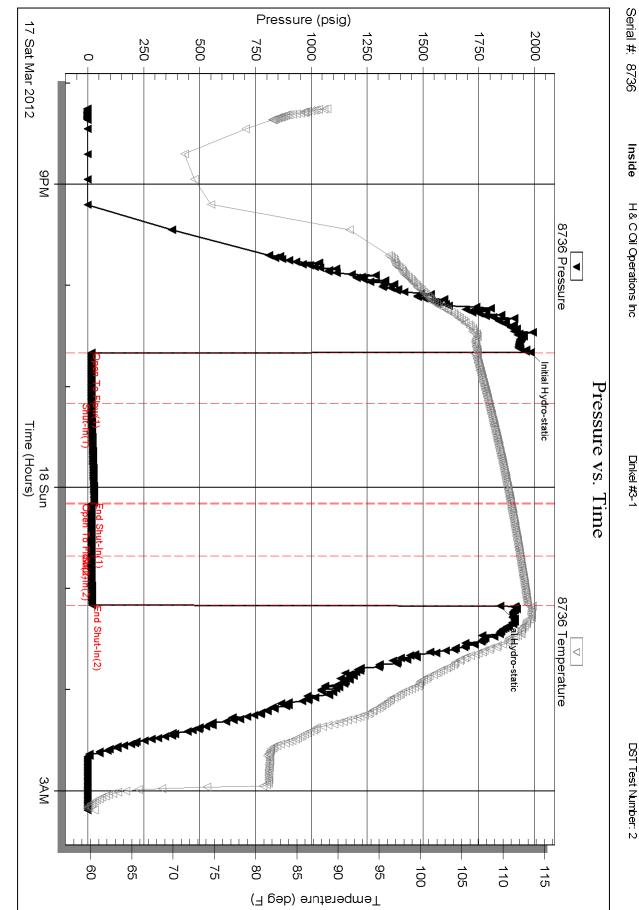
			DRI	LL STE	MTEST	REPO	RT	TOOL DIAGRAM
		BITE T <mark>ING</mark> , INC	H&CC	Dil Operations	Inc		3-9s-25w Graham,	ĸs
	 ES7	TNG , INC					Dinkel #3-1	
			Plainville	e KS 67663			Job Ticket: 47377	DST#:2
			ATTN:	Clayton Ericl	kson		Test Start: 2012.03.17	@ 20:15:00
Tool Informati	on		l					
Drill Pipe:	Length:	3993.00 ft	Diameter:	3.80 in	ches Volume:	56.01 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	2.75 in	ches Volume:	0.00 bbl	Weight set on Packer	: 25000.00 lb
Drill Collar:	Length:	0.00 ft	Diameter:	2.25 in	ches Volume:	0.00 bbl	Weight to Pull Loose:	62000.00 lb
		04.00.00			Total Volume:	56.01 bbl	Tool Chased	0.00 ft
Drill Pipe Above		31.00 ft					String Weight: Initial	59000.00 lb
Depth to Top Pac		3990.00 ft ft					Final	59000.00 lb
Depth to Bottom		25.00 ft						
Tool Length:	I Fachers.	23.00 ft						
Number of Pack	ore.	33.00 m 2	Diameter:	6.75 in	ches			
Tool Comments:	ci3.	2	Daneter.	0.75 11	01103			
isoi commento.								
Tool Descripti	on	Le	ngth (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
		Le	ngth (ft) 1.00	Serial No.	Position	Depth (ft) 3963.00	Accum. Lengths	
Tool Descripti		Le	• • •	Serial No.	Position Inside	,	Accum. Lengths	
Tool Descripti Change Over Su		Le	1.00	Serial No.		3963.00	Accum. Lengths	
Tool Descripti Change Over Su Shut In Tool		Le	1.00 5.00	Serial No.		3963.00 3968.00	Accum. Lengths	
Tool Descripti Change Over Su Shut In Tool Hydraulic tool		Le	1.00 5.00 5.00	Serial No.		3963.00 3968.00 3973.00	Accum. Lengths	
Tool Descripti Change Over Su Shut In Tool Hydraulic tool Jars		Le	1.00 5.00 5.00 5.00	Serial No.		3963.00 3968.00 3973.00 3978.00	Accum. Lengths	Bottom Of Top Packer
Tool Descripti Change Over Su Shut In Tool Hydraulic tool Jars Safety Joint		Le	1.00 5.00 5.00 5.00 3.00	Serial No.		3963.00 3968.00 3973.00 3978.00 3981.00		Bottom Of Top Packer
Tool Descripti Change Over Su Shut In Tool Hydraulic tool Jars Safety Joint Packer		Le	1.00 5.00 5.00 5.00 3.00 5.00	Serial No.		3963.00 3968.00 3973.00 3978.00 3981.00 3986.00		Bottom Of Top Packer
Tool Descripti Change Over Su Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer		Le	1.00 5.00 5.00 5.00 3.00 5.00 4.00	Serial No. 8736		3963.00 3968.00 3973.00 3978.00 3981.00 3986.00 3990.00		Bottom Of Top Packer
Tool Descripti Change Over Su Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb		Le	1.00 5.00 5.00 5.00 3.00 5.00 4.00 1.00		Inside	3963.00 3968.00 3973.00 3978.00 3981.00 3986.00 3990.00 3991.00		Bottom Of Top Packer
Tool Descripti Change Over Su Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Recorder		Le	1.00 5.00 5.00 3.00 5.00 4.00 1.00 0.00	8736	Inside	3963.00 3968.00 3973.00 3978.00 3981.00 3986.00 3990.00 3991.00 3991.00		Bottom Of Top Packer
Tool Descripti Change Over Su Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Recorder Recorder		Le	1.00 5.00 5.00 3.00 5.00 4.00 1.00 0.00 0.00	8736	Inside	3963.00 3968.00 3973.00 3978.00 3986.00 3986.00 3990.00 3991.00 3991.00	28.00	Bottom Of Top Packer

ALAAN IRII	ORITE		LL STEM TE		PORI	-	I	FLUID SI	JMMAR
	OBITE STING , INC	H&C0	Dil Operations Inc			3-9s-25w (Graham,KS		
	:STING , INC		e KS 67663			Dinkel #3- Job Ticket: 4		DST#:2	
		ATTN:	Clayton Erickson				2012.03.17 @ 20		
Mud and Cushion	Information								
Aud Type: Gel Chem Aud Weight: S /iscosity: 56 Vater Loss: 6 Resistivity:			Cushion Type Cushion Leng Cushion Volu Gas Cushion Gas Cushion	jth: me: Type:		ft bbl psig	Oil API: Water Salinity:		deg API ppm
Recovery Informa	ition								
	Len		Recovery T Descriptio			Volume bbl]		
		1.00	MUD			0.014	1		
	Total Length:	1	.00 ft Total Volu	me:	0.014 bbl				

Printed: 2012.03.19 @ 16:37:42

Ref. No: 47377





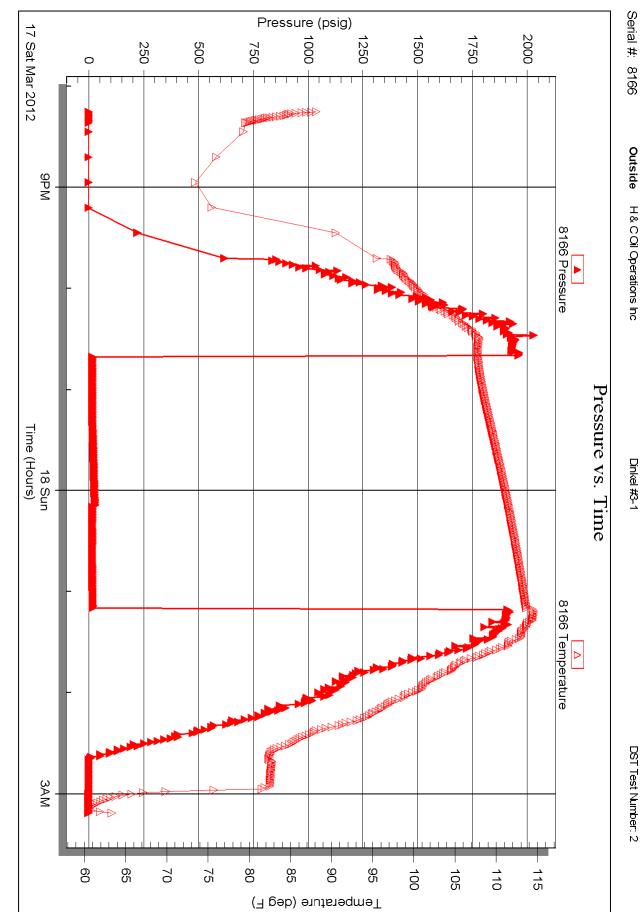
Dinkel #3-1

DST Test Number: 2

Printed: 2012.03.19 @ 16:37:42

Ref. No: 47377

Trilobite Testing, Inc



DST Test Number: 2

4/10	RILOBITE ESTING INC. P.O. Box 1733 • Hays	1.010	AR 1 9 2012	NO. 47		
Well Name & No. Company Address Address Co. Rep / Geo. Location: Sec. Interval Tested Anchor Length Top Packer Depth Bottom Packer Depth Blow Description	2:NKe/ # 0°/ Operatic Box 86 4 Agton Ericks 3 TWP. 95 350 - 3990 40° 3950 3950 3990 30- IFP- 1 D- TETP- 1	2-/ IN IN IN BANNIE CON Rge. 25 ^W Zone Tested Drill Pipe Run Drill Collars Run Wt. Pipe Run Chlorides SIN BIOM	Test No/ Elevation Rig America Co. LANA LK C 3930 -CO 00 ppm S DOO ppm S	510KE 63 ACAN 60 AMA N_T 4 Mud W Vis WL	Acyle 7 State <u>K</u> <u>5</u> 11 M. <u>8</u> , 9 <u>5</u> , 8 2	-12 GL #3 5
Rec F	$\frac{1}{2} - FFP - N$ $\frac{1}{2} - FSFP - N$ $\frac{1}{2} $	o Blow o Blow	%gas %gas %gas	%oil %oil %oil	%water %water %water	8 %mud %mud %mud
Rec F	Feet of		%gas %gas	%oil %oil	%water %water	%mud %mud
Rec Total (A) Initial Hydrostatic (B) First Initial Flow (C) First Final Flow (D) Initial Shut-In (E) Second Initial Flow (F) Second Final Flow (G) Final Shut-In	внт 2020 3727 28 844 28 27 27 890	Test 1125 Jars Safety Joint Circ Sub Hourly Standby	5′	Commonto	04:30	ppm 2
(H) Final Hydrostatic Initial Open Initial Shut-In Final Flow Final Shut-In	1842 0 0 30 60	 Straddle Shale Packer Extra Packer Extra Recorder Day Standby Accessibility 		Ruined Pa	3.20	
Approved By	\	Sub Total <u>(50</u> 3	r Representative)a	(val)	the use of its

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered of sustained, directly or indirectly, through the use of equipment, or its statements or opinion concerning the results 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.

4/10 RILOBITE STING INC P.O. Box 1733 • Ha	THE ME	EIVE 1 9 2012	Test 1 No. ' 4	ficket 7377	
Location: Sec. 3 Twp. 9^{5} Interval Tested $3990 - 4015$ Anchor Length 25 Top Packer Depth 3985 Bottom Packer Depth 3990 Total Depth 4015	1 01 -	Co. S. A. L. K. C. 2993 OO ppm	5/0 3 0/CAN & A M ¹ /K ¹¹ Mu Vis WL System LC	6,2	-12 5 GL 3 5
Blow Description 30-1-FF- Jun 60-ISTR-NO 30-FFP-NO 30-FSTP-NO Rec Feet of MUP	Blow Blow Blow	%gas	mille %oil	%water /	c O‰mud
Rec Feet of		%gas	%oil	%water	%mud
Rec Feet of		%gas	%oil	%water	%mud
Rec Feet of		%gas	%oil	%water	%mud
Rec Feet of		%gas	%oil	%water	%mud
1 112	GravityA	PIRW@	0	nlorides	ppm
(A) Initial Hydrostatic	Test_1225		T-On Locat	0.0	
(B) First Initial Flow	Jars 250		T-Started	2011	and the second s
11	Safety Joint 75		T-Open	22:4	10
(C) First Final Flow <u>76</u> (D) Initial Shut-In <u>27</u>			T-Pulled	01:10	9
(b) Initial Orlat III	Circ Sub		T-Out	03:12	2
	Hourly Standby	222 2 22	Comments		
10	Mileage 38RT				
18115					
(H) Final Hydrostatic / 0 9	Straddle		C Ruined	Shale Packer	
20	Shale Packer		Ruined	Packer	
Initial Open	Extra Packer		🛛 Extra C	Copies	
Initial Shut-In	Extra Recorder		Sub Total	1725 (F. 1725) - 552 (R.	
Final Flow	Day Standby		Total	603.20	
Final Shut-In	Accessibility		MP/DST I	Disc't	4
Approved By		3.20 Representative	Ju	nor	9

Trilobite Testing Inc. shall not be liable for damaged of any kind of 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 statements or opinion concerning the results 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.

ニコてつび	Feder	Federal Tax I.D.# 20-2886107			
Phone 785-483-2025 Cell 785-324-1041	Home Office P.O. Box 32		Russell, KS 67665	No.	24 73
Date 3-19-12 Sec.	Twp. Range	County	State	On Location	Finish
· Dinkel	No.	X aCL	2014 Ks -	C to Rebline	RN. W
ctor Americo	Eadle #3		IND KA. 4A	3 3 4 0	IInto
Type Job Plux	っ	To Quality Oi	well Cernenting, Inc.	To Quality Oilwell Cementing, Inc.	nd furnish
"8/Lah	T.D. Honer	cementer and	I helper to assist own	cementer and helper to assist owner or contractor to do work as listed	/ork as listed.
	Depth	Charge 10		ع	
size 45° D.P.	Depth 2000'	Street			
	Depth	City		State	
Cement Left in Csg.	Shae Joint	The above was	s done to satisfaction an	d supervision of owner a	jent or contractor.
Meas Line	HZ.01	Mud Cement Amount Ordered	unt Ordered 20 S	, or lot in the	N
EQUIPM		N4 F	10-50al		
S No. Cementer	iSco	Common	53		
8 No. DriverCod		Poz. Mix	82		
BUTTER D. U. No. Driver Rick		Gel. 7			
	REMARKS	Calcium			
Remarks:		Hulls			
Rat Hole 30 5X		Salt			
Mouse Hole		Flowseal \mathcal{S}	04		
Centralizers		Kol-Seal			
Baskets		Mud CLR 48			
D/V or Port Collar		CFL-117 or 0	or CD110 CAF 38		
J200' - 255X		Sand			
		Handling	12-		
1350' - 100 SX		Mileage			
			FLOAT EQUIPMENT	TN	
305' - 40 54		Guide Shoe			
	• • • •	Centralizer	ya dada kanaya kana ang ang ang ang ang ang ang ang ang		
40-105x w	1 pluck	Baskets			
	2	AFU Inserts			
Kethole - 30 5X		Float Shoe	*		
-		Latch Down			
(ement did (Circulate.	`	Dry hole	plus	
and a second	stand and and a stand and a stand and a standard a	Primotrk Charge	nde Oliv		
		Mileade 3	hand t		
		7		Тах	
11 U	11.1			Discount	
Signature K, M. C. C. H. U. C.	16 Mal			Total Charge	

QUALITY	Ī	LL CEMENTING, INC.
Phone 785-483-2025 Cell 785-324-1041	Home Office P.O. Box 32	Office P.O. Box 32 Russell, KS 67665 No. 648
-		
Date 3-11-1 2	Wp. Hange	
01) . aker	1-2-0	2. 1. V. (20. 0) 11 Doll 100 11 1. (20. 2) 2
ctor AMENYEN E	643	1000 100 100 10 Keeling 10 10 10
N P		To Quality Oilwell Cementing, Inc.
1214	T.D. 27 /	You are nereby requested to rent cementing equipment and turnish cementer and helper to assist owner or contractor to do work as listed.
858	Depth 271	Charge Hr C
Size	Depth	Street
Tool	Depth	City State
Cement Left in Csg. L	Shoe Joint	The above was done to satisfaction and supervision of owner agent or contractor.
	Displace // BC	Cement Amount Ordered 1 20 com 3 2/2000 2 2/2000
EQUIPMENT	ENT.	
Pumptrk S No. Cementer	6.3	- Common 170
Bulktrk No. Driver Cold		Poz. Mix
Bulktrk SNO. Driver LUND	4	Gel. 3
2	& REMARKS	Calcium Ó
Remarks:		Hulls
Rat Hole		Salt
Mouse Hole		Flowseal
Centralizers		Kol-Seal
Baskets		Mud CLR 48
D/V or Port Collar		CFL-117 or CD110 CAF 38
8% on 12+ tem.	Est Carlador.	Sand
sice Dish	lac.	
Conent Circu	Intec)!	Mileage
		FLOAT EQUIPMENT
		Guide Shoe
ng bayan mu nu		Centralizer
a den a casa		Baskets
and the second se		AFU Inserts
		Float Shoe
		Latch Down
2 2	بيديني مرتبع المرتبة المرتبة والمرتبة والمرتبة والمرتبة والمرتبة والمرتبة والمرتبع والمرتبع والمرتبع	
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Signatures & CML & LARE	CLUCHARTAN L	