Confidentiality Requested: Yes No

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

1270988

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 North / 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:				
Name:	(e.g. xx.xxxxx) (e.gxxx.xxxxx)				
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84				
Purchaser:	County:				
Designate Type of Completion:	Lease Name: Well #:				
New Well Re-Entry Workover	Field Name:				
	Producing Formation:				
	Elevation: Ground: Kelly Bushing:				
	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)				
	Chloride content: ppm Fluid volume: bbls				
Commingled Permit #:	Dewatering method used:				
	Location of fluid disposal if hauled offsite:				
	Operator Name:				
	Lease Name: License #:				
Soud Date or Date Reached TD Completion Date or	Quarter Sec Twp S. 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	1270988
Operator Name:	Lease Name:	Well #:
Sec TwpS. R East West	County:	

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 Sheets)		Yes No		og Formatio	on (Top), Depth a	nd Datum	Sample	
Samples Sent to Geolog	gical Survey	Yes No	Nam	9		Тор	Datum	
Cores Taken Electric Log Run		☐ Yes ☐ No ☐ Yes ☐ No						
List All E. Logs Run:								
		CASING Report all strings set-c	RECORD Ne	w Used rmediate, product	ion, 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	EEZE RECORD				
Purpose:	Depth	Type of Cement	# Sacks Used		Type and F	Percent Additives		

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

Did you perform a hydraulic fracturing treatment on this well?	Yes
Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallou	ns? 🗌 Yes
Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?	Yes

 No
 (If No, skip questions 2 and 3)

 No
 (If No, skip question 3)

No

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

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated					e	/	Acid, Fracture, Shot, C (Amount and Kind	ement Squeeze Record d of Material Used)	Depth
TUBING RECORD:	Siz	ze:	Set At:		Packer	r At:	Liner R	un:	No	
Date of First, Resumed	Product	ion, SWD or ENHF	} .	Producing N	/lethod:	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wate	ər	Bbls.	Gas-Oil Ratio	Gravity
									I	
DISPOSITION OF GAS:				METHOD	OF COMPLE	ETION:		PRODUCTION INTERVAL:		
Vented Sold Used on Lease				Open Hole	Perf.	Dually	Comp. Commingled			
(If vented, Submit ACO-18.)				(Submit A			(Submit ACO-4)			

(B)	BASIC
C	ENERGY SERVICES

INVOICE NUMBER								
1 of 1	1007761	1718	06/18/2015					
PAGE	CUST NO	YARD #	INVOICE DATE	1				

	Pratt	(620)	672-1201	J	LEA	SE NAME	Воуе	1-16	
в	VALHALLA H	EXPLORATION LLC		B	LOC	ATION			
I T	8100 EAST	22ND STREET N	1800-2	~	COU	NTY 	Ellswor	th	
L	WICHITA			I	STA:	гв — — — — — — — — — — — — — — — — — — —	KS		
m	KS US	67226		Т	JOB	DESCRIPTION	Cement-	New Well	Casing/Pi
0	ATTN:	KENNEDY		Е	JOB	CONTACT			

JOB #	EQUIPMENT #	PURCHASE	ORDER NO.		TERMS	DUE DATE	
40850133	19843				Net - 30 days	07/18/2015	
			QTY	Uof	UNIT PRICE	INVOICE AMOUNT	
For Service Dates	· 06/15/2015 to 0	5/15/2015		M			
		J/15/2015					
0040850133							
						5	
						14 M	
171812267A Cemer	nt-New Well Casing/Pi C	06/15/2015					
Cement 5 1/2" Longs	string						
50/50 007		1.10					
50/50 POZ	1		125.00	EA	6.60	825.00 T	
60/40 POZ	χ	ame .	80.00	EA	7.20	576.00 T	
	V	0 9 6	32.00	EA	2.22	71.04 T	
Calcium Chloride		IN JUL	27.00	EA FA	2.40	64.80	
Cement Friction Redu			210.00		0.63	132.30 1	
Gypsum	BPRO.	0203	625.00		3.60	115.20 I 201.25 T	
FLA-322	3° ¥	· ·	84.00		4 50	201.201	
Mud Flush	1. • . •		500.00	EA	0.90	450.00 T	
Cement Gel			210.00	EA	0.15	31.50 T	
Gilsonite			625.00	EA	0.40	251.25 T	
Claymax KCL Substitu	ute		4.00	EA	21.00	84.00 T	
"Latch Down Plug &	Baffle, 5 1/2"" (Blu		1.00	EA	240.00	240.00	
"Auto Fill Float Shoe	5 1/2"" (Blue)"		1.00	EA	216.00	216.00	
"Turbolizer, 5 1/2"" (Blue)"		8.00	EA	66.00	528.00	
"5 1/2"" Basket (Blue)"		1.00	EA	174.00	174.00	
"Unit Mileage Chg (PL	J, cars one way)"		80.00	мі	2.70	216.00	
Heavy Equipment Mile	age		160.00	MI	4.50	720.00	
"Proppant & Bulk Del.	Chgs., per ton mil		696.00	EA	1.50	1,044.00	
Depth Charge; 3001-4	4000'		1.00	EA	1,296.00	1,296.00	
Biending & Wixing Ser	Vice Charge		205.00	BAG	0.84	172.20	
"Service Supervisor f	1g. irst 9 brs on los		1.00	EA	150.00	150.00	
dervice oupervisor, i	inst o fils office.		1.00	EA	105.00	105.00	
					191	M-M	
					Der n	NS 721124	
PLEASE REMIT T	'O: SEN	D OTHER CORRESP	ONDENCE TO):			
BASIC ENERGY S	ERVICES.LP BAS	SIC ENERGY SERVE	CES. LP		SUB TOTAL	8,121.54	
PO BOX 841903	801	CHERRY ST, STE	2100		TAX	233.11	
DALLAS, TX 7528	4-1903 FOR	RT WORTH, TX 761	02	INVO	ICE TOTAL	8,354.65	

a	BASIC
C	ENERGY SERVICES PRESSURE PUMPING & WIRELINE

FIELD SERVICE TICKET

1718 12267 A

PHESSURE PUIVIPING & WIRELINE 16-16-10							DATE TICKET NO.		
JOB 6-15-2015 DISTRICT Prstiks				NEW X				7).:	
CUSTOMER USIASIIS EXPLOISTION LLC				LEASE B	<i>cye</i>		WELL N	NO. 1 1/	
ADDRESS				COUNTY F	- IIs I	JO(Th STATE	165		
CITY STATE				SERVICE CREW DSrin, Et, Gibson					
AUTHORIZED BY				4	JOB TYPE:	CNh	1512 Longs	stling	
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQL	JIPMENT#	HRS	TRUCK CALLED	DATE M	TIME 8.00
1989 5				<u> </u>			ARRIVED AT JOB	6-15 AM	3'00
19860	12						START OPERATION	6-15 AM	8 30
							FINISH OPERATION	6 15 AM C	100
							RELEASED	6 15 AM/	000
100 and						1	MILES FROM STATION TO	WELL 82	-

10244 NE Hwy. 61 P.O. Box 8613

Pratt, Kansas 67124 Phone 620-672-1201

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. ×. Ayent 1 SIGNED:

(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT	г
CP104	50/50 POZ	SK	125-		1,375	00
CP103	60/40 802	SK	80 -		960	00
CC102	Cellofiske	46	32		118	40
((105	C-41P	62	27	2	108	00
CC109	esterion chlorise	46	210	<i>t.</i>	220	50
CC112	Cement Frickich Reducer	46	32	2	152	00
CC113	Gypsum	46	625		468	75
CC129	FLA-322	16	84		630	00
CL 200	Cement Gel	26	210	2 C	52	50
((201	Gilsonije	16	675 -	×	418	75
CF607	Latch Down Plug & BSCRIE, 51/2 (Blue)	ES	1		400	00
CF1251	Auto Fill Flost Shoe 51/2 (Blue)	Fq	1 -	e	360	00
CF1651	Turbolizer, 512 Blue	ES	8 -		880	00
CF1901	51/2 Bisker (Blue)	ES	_1 -		290	00
C704	Claumax KCL Subst ture	GSI	4 1		140	00
CLISI	mua Flush	651	500		750	00
E100	Unix milesse chaise Pickups Small usart cancer	m,	80		360	00
FIOI	Hesus Egupmen: Milesse	m;	166		1,200	00
E113	Roppins in a Bulk Deliver, Christipe, Jermie	1 h/m	696		1,740	00
				SUB TOTAL	2,160	6
CHE	EMICAL / ACID DATA:					-
	SERVICE & EQUIP	IENT	%TA	X ON \$		

CHEMICAL / ACID DATA.							

ren

Frank

	%TAX ON \$		
MATERIALS	%TAX ON \$	- x	
		TOTAL	

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY:

SERVICE

REPRESENTATIVE

(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

ENERGY SERVICES

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

FIELD SERVICE TICKET 1718 12267 A

8 PRE330		PING & WIRELINE	-16	10		1.12	DATE TICKET NO.			<u> 1</u>
DATE OF JOB DISTRICT								TOME ER NC	R).	
CUSTOMER VELASILG FYPRISI ON LIC				LEASE B	cye		v		NO. / //	
ADDRESS				No.	COUNTY	175 .	STATE	16 1		
CITY		STATE		ik.	SERVICE CR	EW	15 C.M. F. 4, 6.2	a wen		
AUTHORIZED BY	_			ň. –	JOB TYPE:	CNA	1512 10093	inn	5	
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQU	JIPMENT#	HRS	TRUCK CALLED	DATE		TIME
19843	4	1 1 1 1 1	100	1 36 1			ARRIVED AT JOB	4.03	AM PM	3 90
					-		START OPERATION	61	AM PM	8 30
a based a based							FINISH OPERATION	6 1	AM PM	130
							RELEASED	6 .	AM PM	1000
							MILES FROM STATION TO	WELL	52	

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. dere.

SIGNED: (WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

TEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICE	S USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUN	Т
# P104	50/50 Poz		SK	125.		1,375	Co
CP103	Lolus Put	Altyn	SIC	80		960	00
CC102	Crito CHART	A State of the Alex	66	32		118	10
6105	641P 200		L6	27		108	00
66109 -	Calcion Chloring		65	210	10000	220	30
66112	Comen Frank Reader	221 C 241 10 1	66	32		152	00
(2)13 =	Gypsum		66	625		468	75
(129	FLA . 322		4.5	84		630	00
12200	Cemens Gel		16	210		52	50
((201	Gisonge 371		45.	6155		. 418.	75
CF607	Letter Down Put a Betrie, :	S. L. CBLel	121	1) - 1	2 Acres 1 and	400	00
(11/51	ALIO FIL FICS- SACE 5% (Blue)	19	1		360	00
CI 1651.	Turboldre, 5 to Blue		1.9	8 -		880	00
611901	5/2 Basker (Blue)		1 9	1 -		290	00
C704	Claymer KGL Subservice		64	4	Contraction of the	140	a
CC1SI	mya Thush		381	500		750	00
FIDD	In more chair present son	went control 1	124	80		360	00
1-101	Herry Towpron, Mileson	Same and the	m	160		1,200	00
1-113 1	Royara and Bur Drig in, China	21- nel	blas	696		1,740	00
СНЕ	MICAL / ACID DATA:				SUB TOTAL	2,160	2
		SERVICE & EQUIPMI	ENT	%TA>	ON\$		
		MATERIALS		%TA>	(ON \$		1.2
		The second second second	154	1.1	TOTAL		

REPRESENTATIVE

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY:

(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

BASIC	10244 NE Hwy. 61 P.O. Box 8613 Pratt, Kansas 67124
ENERGY SERVICES	Phone 620-672-1201
PRESSURE PUMPING & WIRELINE	

FIELD SERVICE TIC	CKET
-------------------	------

1718	12	28	9	
IT I I U	and the second		~	7.7
Continus	, t un	12	26	7

DATE

PRESSURE PUMPING & WIRELINE 16 - 16 - 10							DATE TICKET NO	
JOB 6-15-2015 DISTRICT PESATIKS							STOMER DER NO.:	
CUSTOMER USIDSHIS FRENCHARTER HE				LEASE Be	sye		WELL NO. / -//	
ADDRESS	-			Hart H	COUNTY E	IISW	Oran STATE K	5
CITY		STATE		1. C.	SERVICE CR	IEW D	Sim, Ex, Gibson	
AUTHORIZED BY					JOB TYPE: (CNW	1 51/2 LongString	
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQL	JIPMENT#	HRS	TRUCK CALLED PATE	
	f.			100			ARRIVED AT JOB	AM PM
							START OPERATION	AM PM
							FINISH OPERATION	AM PM
							RELEASED	AM PM
							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. fully A

4964 SIGNED:_ (WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT	AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT	r
CEZOY	Deuth Charse 3001-	4000	4hr	1	-	2,160	00
(E 240	Blencins & Mixing Serv	he charge	SK	205		287	00
CESOY	PHS CONTSIDER HALLIST	on Charse	JUB	1		250	00
5003	Service Suderusoc, Pil	52 8 dis on loc	FS	1		175	00
-							·
						1	
					-		
					SUB TOTAL	13,535	90
CHE	MICAL / ACID DATA:						
_		SERVICE & EQUIPM	IENT	%TA)	CON \$		
		MATERIALS		%TA>	(ON \$		
				Disco	ODICE TOTAL	5,121	54
					Kal	l	2
SERVICE REPRESENTATIV	E Paris Frankle	THE ABOVE MATERIAL AND SERVI ORDERED BY CUSTOMER AND RE	CE CEIVED	ву: Ла	PB-	-Accest	
FIELD SERVICE C	RDER NO.	()	WELL OV	VNER OPERAT	OR CONTRACTOR OR	AGENT	

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

ENERGY

PRESSURE PUMPING & WIRELINE

SERVICES

FIELD SE	RV	ICE	TICKET	F
		-	-	

1718	Δ
T / T O	
CONTRACTOR	and the second second
CONTRACTOR	a second

CONTRA

TICKET NO

DATE

SIGNED.

	1000	16	1 Ein	10 -			DATE HORETNO		and the second	<u> </u>
DATE OF JOB DISTRICT					NEW C WELL V				TOMER ER NC	а).:
CUSTOMER USI have a provide the					LEASE BOY WELL NO. / 1					
ADDRESS					COUNTY /	HISW	STATE	Ks		
CITY STATE					SERVICE CR	EW D	51 a 1 + 6 bsc			
AUTHORIZED BY					JOB TYPE: Charles and the second se					
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQU	IIPMENT#	HRS	TRUCK CALLED	DATE	AM	TIME
and the state		t to A to t	Por 1	1 8 - 1	1.6	-	ARRIVED AT JOB	1 and	AM PM	
-							START OPERATION		AM PM	
							FINISH OPERATION		AM PM	
							RELEASED		AM PM	
The Contract of the							MILES FROM STATION TO	WELL	100	

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. -

(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

TTEM/PRICE REF. NO.	MATERIAL, EQUIPMEN	T AND SERVICE	ES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOU	NT
51 104	Depan Cherse Tool	4000		4hr	T	1	2.160	00
(1. 240	BARRONS & MIXING ST.	use the	isie	SK	205		251	00
67-504	ADSKERTER PLIZE	1.40 Ch5.	se	145	1		250	- 90
5003	Service Sarris ac. 1	1 5 A. 1 3	201110	15	1		175	00
	A CONTRACTOR OF A CONTRACTOR A CONTRA	North A.					La la la Mi	
			10 C C C C C C C C C C C C C C C C C C C		1-22 4 24		The second second	1
8 - A								
	And the state of the state of the							
	provent and the second	Are for	and the second s	1	The second	and the second s		1
		이는 철거나 불구가	J. J a Ange	Barry Fred	1	For the second	set set line and	
2			- 11 1 8 -					
			1.					
far and the								
					Stand?	State of the state	a reason of	
						New York Concerned	Dura and	
1			a de la companya de l		1.1			
				100				
					- 11 - L.	ale se tu i	VEN SHINE	
СНЕ	MICAL / ACID DATA:					SUB TOTA	L 15,575	70
			SERVICE & EQUIPM	IENT	%TA>	ON \$		
			MATERIALS	18 J	%TA>	ON \$	MULL PRIM	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					Date	TOTA	LEAT	5%
						ų la		1 1
SERVICE REPRESENTATIV	Ellera Franke	THE ABOVE M ORDERED BY	ATERIAL AND SERVI CUSTOMER AND RE	CE CEIVED	BY:	PR =	An	+
FIELD SERVICE C	PRDER NO.		(WELL OV	NER OPERATO	OR CONTRACTOR O	DR AGENT)	

CLOUD LITHO Abiene TX



TREATMENT REPORT

Customer Explanation 11/				Lease N	Lease No.				Date					
Lease B	GVE	170	un rr		Well #	Well # /-//				6-	15.20	015		
Field Order	# Statio	n f	Orst)	ive			Casing 5	1/2 Dep	th 3448	County E	Ilswo	rtn	State /CS	
Type Job	CNW	5	12 40	205.5	Frinc			Formatio	on TD-	3450	Legal De	escription	6-16-10	
PIP	E DATA		PERF	ORATI	NG DATA		FLUID U	JSED		TREA	TMENT	RESUME		
Casiling Size	Tubing S	ize	Shots/F	it [Acid			1	RATE PRESS			÷	
Depth 344	Depth		From		Το	Pre F	Pre Pad		Мах			5 Min.		
Volume 82	Volume		From		То	Pad	Pad M		Min			10 Min.		
Max Press	Max Pres	is	From		То	Frac	Frac		Avg			15 Min.		
Well Connecti	on Annulus	Vol.	From		То				HHP Used	I		Annulus F	ressure	
Plug Depth	Packer D	epth	From		То	Flust	KCL	Water	Gas Volun	ne		Total Load	Fotal Load	
Customer Re	presentative	Ke	114		Statio	on Mana	^{ger} Ke	uin Goi	(bley	Treater 1)grin	Frenk	clih	
Service Units	92911	81	1981	1984	3 199	031	9860		-					
Driver Names	Darin	Ē	5	Ea	Gibs	ion G	ibson				-			
Time	Casing Pressure	T Pr	ubing essure	Bbls.	Pumped	B	late			Serv	ice Log		- //-	
3'00 pm								on lo	ice hion	1SSPer.	mer	otins		
				0				51/2	Casins	15.5 H,	81 30	inas, S	Ser Gr 344	
		2						B - 14	1 , T-	1,3,5,7	8,11,	13		
								1255k	50/50	P02, 14#	+ CF, 1	25% D.	ofosmer,2	
	н							CG, 3°	6 CFR,	5% Gupso	in, . 8	% FLA	312,4% 60	
								5#6.13	sonite 1	3. 8 PPS,	1,49V	0,12, 6.3	5 Wster	
							,	80 SK 6	WHO POZ					
8.30Am	300	-		5		E	2	Pump 5 bhis water						
	300	-		1.	2	6	-	PUMP	12 bb1	5 Flush)			
	300			5		6		Pump	5 bhis	WSter			•)	
	300	-		1		6		miy 3	USK SC	guenser	Cemer	4 2	-	
	300				3	6		Mix I.	255K +	GII CEME	'n ←			
	~			6	2	0)	Shut de	DWN					
	150	-			>	~	-	WashP	IUMP & Im	rs & Rele	esse Ph	29		
	150	-		5	5	6	-	Start	2,5,pist	ement			v	
	400	-		7) ()		2	Lil+ P	lessure					
9.00×	300	-		8	0		3	STOW 1	Dia					
1.00 ph	1300	-					0	FLOOR	- Hell	5				
	100				7		3	Plue 6	292 101-	2)		6.64		
	100				5		3	Plus m	ause ha	10				
9:300m	700				_			Joh	COMPIPI	e/DSI.	ndci	100		
1024	4 NE Hiv	vav.	61 • E	P.O. Bo	ox 8613	• Pra	tt. KS 6	7124-86	513 • (620) 672-120	01 <u>• Fax</u>	x (620) 6	572-5383	

Taylor Printing, Inc. 620-672-3656

BASIC

PAGE	CUST NO	YARD #	INVOICE DATE
1 of 1	1007761	1718	06/10/2015
	INVOI	CE NUMB	ER

	Pratt	(620)	672-1201	J	LEASE NAME	Воуе	1-16	
В	VALHALLA I	EXPLORATION LLC		O B	LOCATION	Ellswo	rth	
Г	8100 EAST	00 EAST 22ND STREET N 18		S	STATE	KS		
L	WICHITA	67006		I T	JOB DESCRIPTION	Cement	-New Well	Casing/Pi
т	KS US	67226		Ē	JOB CONTACT			-
0	ATTN:	KENNEDY						

JOB #	EQUIPMENT #	PURCHASE	ORDER NO.		TER	1S	DUE DATE	
40848028	86779				Net - 3) days	07/10/2015	
			QTY	Uof	UNIT P	RICE	INVOICE AMOUNT	
For Service Dates.	: 06/09/2015 to 0	5/09/2015		м				
0040848028							1	
171812323A Cemer Cement 8 5/8" Surfa	nt-New Well Casing/Pi (ce	06/09/2015			E*			
Common Cement		×	325.00	EA		6.40	2,080.00 T	
Celloflake			82.00	EA	= = =	1.48	121.36 T	
Calcium Chloride			918.00	EA		0.42	385.56 T	
Cement Gel			612.00	EA		0.10	61.20 T	
"Wooden Cmt Plug, 8	3 5/8"""		1.00	EA		64.00	64.00	
"Unit Mileage Chg (P	U, cars one way)"		80.00	MI		1.80	144.00	
"Prophant & Bulk Del	Chas per top mil		1 224 00	FΔ		1.00	1 224 00	
Depth Charge: 0-500	, chga, per ton nin		1,224.00	FA		400.00	400.00	
Blending & Mixing Se	rvice Charge		325.00	BAG		0.56	182.00	
Plug Container Util. C	hg.		1.00	EA		100.00	100.00	
"Service Supervisor,	first 8 hrs on loc.		1.00	EA		70.00	70.00	
-	1617-15 NP	PROVED JUN 1 # 9208	5 2015					
PLEASE REMIT T BASIC ENERGY S PO BOX 841903 DALLAS,TX 7528	SERVICES,LP BA 80 84-1903 FO	ND OTHER CORRES SIC ENERGY SERV 1 CHERRY ST, ST RT WORTH, TX 76	PONDENCE TO ICES,LP E 2100 102): INV(SUB TOTA TA DICE TOTA	L X L	5,312.12 189.34 5,501.46	



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

FIELD SERVICE TICKET 1718 12323 A

PHESS		PING & WIHELINE					DATE TICKET NO
DATE OF JOB (19/15 DISTRICT					NEW WELL		PROD INJ WDW CUSTOMER ORDER NO.:
CUSTOMER Valhalla Exp., 11C				LEASE BOYT WELL NO.			
ADDRESS				COUNTY 5	1150	worth STATE JES	
CITY STATE					SERVICE CF	NEW 3	cott Sharen Acres
AUTHORIZED BY K-11, BCOMMAN				JOB TYPE:	85/8	Surfice Pipe CNUS	
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQL	JIPMENT#	HRS	TRUCK CALLED DATE AM TIME
86779	15						ARRIVED AT JOB 6/9/15 PM 4:00
19860	467						START OPERATION
							FINISH OPERATION
							RELEASED 6/9/15 PM 700
P1							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. Thom non

SIGNED (WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
CPROC	Common Cement	SK	325		520000
501 22	Cells + labe	16	82		30340
1019	Calcium Chlogide	16	918		96390
(1700	Cement Gel	16	617		15300
CF 153	Wouden Cement Plug	54		· · · · · · · · · · · · · · · · · · ·	160 00
E101	Henry Equipment Mileade	MI	160		120000
F100	Unit Mileage Pickups	11	80		36000
E113	Propt Ball Delivery	TM	1224		306000
15200	Death Charge 0-5001	4/13	1		1000 00
12240	Stending & Mixing Charge	SK	325		4/55 66
ESG4	Plug Container	Eb	1		25000
5003	Semuce Supervisor	54			11500
-		5			
Сня				SUB TOTAL	12741 3

CHEMICAL / ACID DATA:								

Kg\$,31 THE ABOVE MATERIAL AND SERVICE

SERVICE & EQUIPMENT

ORDERED BY CUSTOMER AND RECEIVED BY

MATERIALS

SERVICE REPRESENTATIVE

FIELD SERVICE ORDER NO.

(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

ETI

TOTAL

%TAX ON \$ %TAX ON \$



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

FIELD SERVICE TICKET 1718 12323 A

DATE TICKET NO.__

DATE OF JOB 6/9/15 DISTRICT					NEW OLD PROD INJ WDW CUSTOMER WELL WELL			
CUSTOMER Dalhalla Sadaulia				LEASE WELL NO.				
ADDRESS					COUNTY STATE			
CITY STATE					SERVICE CR	EW	off, Shaven, Acres	
AUTHORIZED BY					JOB TYPE:	8%	Surface Proc Coras	
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQL	JIPMENT#	HRS	TRUCK CALLED DATE AM TIME	
81.779	15	and the second second	1. 6 m / 1	A A HE	S al a the f		ARRIVED AT JOB	
19800	U (2	all services	t no b	and the	START OPERATION	
							FINISH OPERATION	
	-						RELEASED AM	
							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 OWNE	ER, OPERATOR, CONT	RACTOR OR AG	ENT)
ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES	USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT	г
CPROC	Compra Comment		5/0	325		5200	00
20:107	Colollabe		16	82		303	40
nr.1819	Calcion - chlende		16	918		963	90
(1700	Ceneral Carl		1h	612	CTY I Part .	153	20
	Section of the sectio	Providence in	-	a de la constante	Sector Sectors	Remains C.	
CE 153	Bouden Cement Place		54	1		160	00
1.101	Fleren ac aprent or	tense	eri	160		1700	00
EVO	Idn. I Mylende Picked	21 4 -	MI	80		310	00
113	Part Ball Delucar		Try	1274		3060	00
1726013	12 the Aride Office	- 1 - 1	espin	11:	1. 4. 1.	1. 1000.	NO
1.240	Stendary & Maria 1	the course	SK	325		4/55	60
15564	Phile Budgings	0	FA	1		250	æ
SACT	Samuel Sustering		50	1		175	00
State and	The second second second second second	State State State	1-24-2	1 Arriva	and the second second	High Barrier	
					a natan K ^{adi}		
*	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -						
	+ 1200		1.19				
19 - 19 A.M.		and the Robert of			SUB TOTAL	12 241	X
CHE				0/ 7 1	(0) (0)	12,000	-
11 12 12 12		SERVICE & EQUIPI	MENT	%TA)			
		MATERIALS	100	%1A)		H38 7 1.1	
					TOTAL	5312	15
	the second se				19	PPIC	

SERVICE	THE ABOVE MATERIAL AND SERVICE
REPRESENTATIVE	ORDERED BY CUSTOMER AND RECEIVED BY:

1

FIELD SERVICE ORDER NO.

(WELL OWNER OPERATOR CONTRACTOR OR AGENT)



TREATMENT REPORT

Customer	Ihr. I			2 111	Lease No.					Date			
Lease 3	HALLCON C	~	2.8/-		Well #	- 1/-	\			1.1	9/10	f an	
Field Order #	Statio	nD	at		/	110	Casing	Depth	761	County	worth	6	State
Type Job	12	Śv	itan	e P.	pe	<u>civ</u>	W	Formation	3.77	<u> </u>	Legal D	escription	1-5
PIPE	E DATA		PERF		NG DATA		FLUID U	SED		TREA	TMENT	RESUME	E
Casing Size	Tubing Si	ize	Shots/F	it 📘		Acid				RATE PRE	ESS	ISIP	
Depth	Depth		From	T	0	Pre	Pad		Max			5 Min.	-
Volume	Volume		From	Т	0	Pad			Min			10 Min.	
Max Press	Max Pres	s	From	Τ	0	Frac			Avg			15 Min.	
Well Connectio	n Annulus \	Vol.	From	T	0				HHP Used			Annulus F	Pressure
Plug Depth	Packer D	epth	From	т	D	Flus	h		Gas Volum	ie		Total Load	d
Customer Rep	resentative	13	anu	10	Station	Mana	ger Ken	in la	malle	Treater	ent-	Gu	arts
Service Units	J8971	86	774						/		- C		
Driver Names													
Time	Casing Pressure	Ti Pre	ubing essure	Bbls. P	umped	F	Rate			Serv	ice Log		1
4:00							/	Dn L	01011	in St	fel	Ma	tines Ricon
													.0.0.0
5:15								Sreak	Ca	cula	ion		5 K
5:36	150					5	. /	Miy	325	5 SKS	12	mmo	72-7
5:52	0			71.	2			Shi	1 ch	own			
								Relea	se,	Plug			
5:55	Ø					5	5 3	Stin	I D	spla	(em	rnt	
5:56	75	1.2		5		5	5 1	in	Inter	i c	me	pt :	to suiter
6:00	200			18.5			+	Displi	rem	ent	lon	10/01	6
								Shile	low	2		· · ·	
								Job	601	plet-	C		
										е п			
		1							_				
						_							
							-						
							2						
						_		-					
						<u>ې</u>							

10244 NE Hiway 61 • P.O. Box 8613 • Pratt, KS 67124-8613 • (620) 672-1201 • Fax (620) 672-5383

Conservation Division 266 N. Main St., Ste. 220 Wichita, KS 67202-1513



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

Shari Feist Albrecht, Chair Jay Scott Emler, Commissioner Pat Apple, Commissioner Sam Brownback, Governor

November 13, 2015

Brian J McCoy Valhalla Exploration LLC 8100 E 22ND ST N BLDG 1800-2 WICHITA, KS 67208-4022

Re: ACO-1 API 15-053-21326-00-00 Boye 1-16 NW/4 Sec.16-16S-10W Ellsworth County, Kansas

Dear Brian J McCoy:

K.A.R. 82-3-107 provides for all completion information to be filed within 120 days of the spud date. Subsection(e)(2) of that regulation states "All rights to confidentiality shall be lost if the filings are not timely."

The above referenced well was spudded on 6/08/2015 and the ACO-1 was received on November 13, 2015 (not within the 120 days timely requirement).

Therefore, your request for confidential treatment of data contained within the ACO-1 filing cannot be granted at this time.

If you should have any questions, please do not hesitate to contact me at (316)337-6200.

Sincerely,

Production Department



Scale 1:240 Imperial

	000.0 <u>_</u>			
Well Name:	Boye #1-16			
Surface Location:	Sec. 16 - T16S - R10W / SE N	W SW NW		
Bottom Location:				
API:	15-053-21326-0000			
License Number:	33483			
Spud Date:	6/8/2015	Time:	5:15 PM	
Region:	Ellsworth Co., KS			
Drilling Completed:	6/15/2015	Time:	2:00 AM	
Surface Coordinates:	1800' FNL & 430' FWL			
Bottom Hole Coordinates:				
Ground Elevation:	1874.00ft			
K.B. Elevation:	1884.00ft			
Logged Interval:	2600.00ft	To:	3450.00ft	
Total Depth:	3450.00ft			
Formation:	Arbuckle			
Drilling Fluid Type:	Chemical/Fresh Water Gel			

OPERATOR

		11		
Company:	Valhalla Exploration LLC			
Address:	8100 E 22nd St. N			
	Building 1800-2			
	Wichita, KS 67226			
Contact Geologist:	Adam T. Kennedy			
Contact Phone Nbr:	316.558.5202			
Well Name:	Boye #1-16			
Location:	Sec. 16 - T16S - R10W /	SE NW SW NWAPI:	15-053-21326-0000	
Pool:		Field:	Stoltenberg	
State:	Kansas	Country:	USA	

LOGGED BY

ALHALLA
EXPLORATION

Company: Address:	Valhalla Exploration, LLC 8100 E. 22nd St. North Building 1800-2 Wichita, KS 67226			
Phone Nbr:	316.210.1295			
Logged By:	Geologist	Name:	Adam G. Nighswonger	

REMARKS

After review of the geologic log, sample descriptions, DST results, and open hole electric logs of the Boye #1-16, the decision was made by operator to run 5 1/2" production casing for further evaluation of the Arbuckle section of said well.

NOTE: The drilling time and gas curves from 2600' to 3200' have been shifted 3' deeper/lower to correspond with electric log curves. All connection and circulation points in said interval have also been adjusted to match the overall shift. No such adjustments were made to the data 3201' to total depth 3450'.

The well samples were saved, submitted, and will be available for review at the Kansas Geologic Survey's Well Sample Library located in Wichita, KS.

Respectfully Submitted,

Adam G. Nighswonger

GENERAL INFORMATION

Service Companies

Drilling Contractor: Southwind Drilling - Rig #1 Tool Pusher: Larry Beavers Daylight Driller: Derek Petz Evening Driller: Gary Ledbetter Morning Driller: Ken Thompson Relief Driller:

Gas Detector: Bluestem Environmental Engineer: Keith Reevis Unit: 5279 Operational By: 2000'

Deviatio	n Survey
Depth	Survey
394'	1/4°
3353'	3/4°
RTD 3450'	1°

Drilling Fluid: Mud-Co/Service Mud Inc. Engineer: Gary Schmidtberger

Logging Company: Nabors Completion Service Engineer: Blake Waggoner Logs Ran: DIL, DUCP, MEL, BHCS

Testing Company: Eagle Testers LLC Tester: Gene Budig

Pipe Strap					
Depth	Pipe Strap				
3353'	2.94 short to board				

				Bit Record				
Bit #	Size	Make	Туре	Serial Number	Depth In	Depth Out	Feet	Hours
1	12 1/4"	Smith	RT	RR	0	394'	394	4
2	7 7/8"	Varel	HE-21	1346929	394'	3353'	2959	68
3	7 7/8"	Reed	J22	RR	3353'	3450'	97	3 1/2

	Surface Casing
6/9/2015	Ran 9 joints of new 23#, 8 5/8" surface casing, Tally @ 380', Set @ 392'. Used 325 sacks of
	Common, cement did circulate, by Basic (#12323), plug down @ 0600 hrs on 06.09.15.
	Production Casing
6/15/2015	Pan 82 joints of new 15.5# 5.1/2" production apping Tally @ 2420' Set @ 2448' Used 155 applys

6/15/2015	Ran 82 joints of new 15.5#, 5 1/2" production casing, Tally @ 3439', Set @ 3448'. Used 155 sacks
	total: 30 sacks 60/60 Poz, 125 sacks Econo Bond, 30 sacks for Rat hole, 20 sacks for Mouse
	hole; cement did circulate, by Basic (ticket # N/A), job completed 2100 hrs 06.15.15.

		DAILY DRILLING REPORT
Date	0700 Hrs Depth	Previous 24 Hours of Operations
6/12/2015	3035'	Drilling and connections Topeka. Geologist Adam G. Nighswonger on location 1720 hrs 06.11.15 drilling @ 2775'. Drilling and connections Topeka, Heebner, Douglas, Brown Lime, and into Lansing zones. Down for pump repairs @ 3035'. Made 620' in past 24 hrs of operations. DMC: \$905.23 CMC: \$6,080.40 WOB: 32,000 RPM: 80 PP: 950
6/13/2015	3353'	Resume drilling 0800 hrs 06.12.15. Drilling and connections Lansing zones. CFS @ 3070' (LKC B'). Drilling and connections Lansing zones and into basal Pennsylvanian. Stop and CTCH @ 3330'; conduct short trip for XX stands. Back to bottom and CTCH; resume drilling 0500 hrs 06.13.15. Drilling and connections basal Pennsylvanian, Simpson, and into Arbuckle. CFS @ 3353' (ARB). Made 318' in past 24 hrs of operations. DMC: \$1,300.26 CMC: \$7,380.66
6/14/2015	3361'	Shows warrant test. CTCH, drop survey and strap out for DST #1. TIH with tool and conduct test; test successful. TOH with tool and back to bottom with bit, CTCH; resume drilling 2100 hrs 06.13.15. Drilling Arbuckle. CFS @ 3361' (ARB). Shows warrant test. CTCH and TOH for DST #2. TIH with tool and conduct test; test successful. TOH with tool and back to bottom with bit. Made 8' in past 24 hrs of operations. DMC: \$160.33 CMC: \$7,540.99
6/15/2015	RTD 3450'	CTCH; resume drilling 0930 hrs 06.14.15. Drilling and connections Arbuckle. CFS @ 3369' & 3376' (ARB). Shows warrant test. CTCH and TOH for DST #3. TIH with tool and conduct test; test successful. TOH with tool and back to bottom with bit, CTCH; resume drilling 2315 hrs 06.14.14. Drilling and connections Arbuckle. Rotary total depth 3450' reached 0200 hrs 06.15.15. CTCH, drop survey and TOH for logs. Commence open hole logging operations. Made 89' in past 24 hrs of operations. DMC: \$333.80 CMC: \$7,874.79
6/16/2015	RTD 3450'	Logging completed 1100 hrs 06.15.15. Geologist off location 1200 hrs.

					v	VELL (COMPA	RISO	N SHEE	т						
	Drilling Well Valhalla Exploration - Boye #1-16 Sec. 16 - T16S - R10W 1800' FNL & 430' FWL				Comparison Well Cities Service Oil Co - Boye #4 Sec. 16 - T16S - R10W C W/2 W/2 NW			Comparison Well Ind Terr III Oil Co - Boye #1 Sec. 16 - T16S - R10W C SW SW NW			Berç	Comparison Well Bergman Oil Co Boye 'B' #1 Sec. 16 - T16S - R10W 915' FNL & 825' FWL				
	1004	KD			Oil - A	rb ('51)	Struc	ctural	Oil - A	rb ('38)	Struc	ctural	Oil - A	rb ('80)	Stru	ctural
Formation	1884 Sample	KB Sub-Sea	Log	Sub-Sea	1858 Sample	кв Sub-Sea	Sample	onsnip Loa	Sample	KB Sub-Sea	Sample	onsnip Loa	1864 Loa	KB Sub-Sea	Sample	onsnip Loa
Anhydrite	665	1219	670	1214				3	667	1218	1	-4	648	1216	3	-2
Topeka	2654	-770	2659	-775									2641	-777	7	2
Queen Hill Sh.	2825	-941	2828	-944									2812	-948	7	4
Heebner Shale	2910	-1026	2913	-1029									2894	-1030	4	1
Toronto Lms.	2929	-1045	2930	-1046									2914	-1050	5	4
Douglas Brown Lime	2938	-1054	2939	-1055									2923	-1059	5	4
Lansing-K.C.	3026	-1142	3033	-1149	2996	-1138	-4	-11	3025	-1140	-2	-9	3011	-1147	5	-2
LKC 'B'	3059	-1175	3061	-1177	2000	1100			0020	1140		- ů	3046	-1182	7	5
LKC 'F'	3108	-1224	3111	-1227									3092	-1228	4	1
Muncie Creek Sh.	3165	-1281	3167	-1283									3147	-1283	2	0
	3182	-1298	3179	-1295					<u> </u>				3162	-1298	0	3
Stark Shale	3241	-1320	3241	-1357									3221	-1357	4	0
LKC 'K'	3247	-1363	3243	-1359									3224	-1360	-3	1
Hushpuckney Shale	3275	-1391	3274	-1390									3256	-1392	1	2
	3282	-1398	3284	-1400					<u> </u>				3265	-1401	3	1
Base-K.C.	3303	-1419	3303	-1419									3284	-1420	1	1
Simpson	3334	-1450	3334	-1450	3306	-1448	-2	-2	00.45	1400	-		3320	-1456	6	6
Arbuckie	3346	-1462	3347	-1463	3319	-1461	-1	-2	3345	-1460	-2	-3	3334	-14/0	8	/
Total Depth	3450	-1566	3451	-1567	3324	-1466			3353	-1468			3335	-14/1		
	/IST1				3			HALE CA	AR		SHAL	E GRA				
 Argillaceous ⊥ Calcareous P Pyrite Sandy Silty △ Chert White 		○ B	ioclastic ephalop rinoids ossils < olite omoldic	or Fragmo od 20%	ental 🔹	Shal	e Green e Gray		С	Chalky						
						0	THER S	SYMBO	DLS							
MISC Daily Report Digital Photo Document Folder Cink Vertical Log F Horizontal Log Core Log File Digital Photo	ile g File Rpt	DST D D D C C I I ta	ST1 ST2 ST3 ore il pipe													
										Printed b	oy GEOs	trip VC S	Striplog v	version 4	.0.7.0 (v	/ww.grsi
Curve Track ROP (min/ft) Gamma (API) Cal (in)	< #1 	val Depth Intervals	DST	Lithology	Oil Show			Geolo	gical Des	criptions			T C C C	T otal Gas (r 1 (units) 2 (units) 3 (units) 4 (units)	G, C1 -) units)	C5





1:240 Imperial

Total Gas (units)

C2 (units)

C3 (units)

Total Gas (units)

C2 (units)

C3 (units)

7:00pm 06.11.15

100

10

100

10

Limestone: light gray and light tan dense sub-xlyn matrix fn-xlyn few



parts cherty, some fair inter-xlyn porosity, light even stain in part, trace light oil on break, faint milky forced cut, very dull yellow fluorescence, faint odor

Limestone: light gray and light tan, dense matrix, micro-fn-xlyn, sub fossiliferous to bioclastic in part, few parts chalky, poor visible porosity, no shows noted

С

F

F

F

1

1

F

F

Ó.

Ó

Limestone: light tan and light gray, dense sub-grainy matrix, fn-xlyn, sub fossiliferous in part, poor visible porosity, no shows noted

Heebner 2913' (-1029)

Shale: black carb, blocky and hard, slight show of gas building, with interbedded Limestone as above, and Shale: light to dark gray and greenish gray, blocky and hard, silty in part

Limestone: off white and light tan, dense tight sub-cherty matrix, microxlyn, poor inter-xlyn porosity, no shows noted

Douglas 2939' (-1055)

Shale: dark gray and brick red, blocky to rounded, few parts calcareous, with interbedded Limestone: light tan, dense, fn-xlyn, mostly fossiliferous, poor visible porosity, no shows noted

Shale: light gray and greenish gray, some red, blocky to rounded, mostly firm, silty in part

Shale: dark gray, some greenish gray and red, blocky to rounded, fissile, abundant silty to sandy material

Brown Lime 3015' (-1131)

Limestone: light tan to tan, dense tight sub-grainy matrix, micro-xlyn, sub-fossiliferous, poor visible porosity, no shows noted, and Shale: light gray and gray, some greenish gray, blocky and hard

Start 10' wet & dry samples @ 3050'

Lansing-Kansas City 3033' (-1149)

Limestone: light tan and cream white, dense tight sub-chalky matrix, micro-fn-xlyn, fossiliferous in part, trace compact oolitic, poor pinpoint porosity in part, no shows noted

Shale: light to dark gray and red, blocky and hard, with interbedded Limestone: tan and light gray, dense sub-grainy matrix, fn-xlyn, fossiliferous, poor visible porosity, no shows noted

cfs@3073' - Limestone: off white and light tan, dense, micro-fn-xlyn, some oolitic with scattered fair oomoldic dev. and assc. 2ndary-xlyn dev., some light staining, trace very light oil on break, no fluorescence, no cut, faint odor

Limestone: light tan, dense tight matrix, fn-xlyn, densely oolitic in part,

						-	-		
1									
-				-	-	-	-	-	_
	-						-		
1									
5									
4									
_									
-							-		
	\sim								_
_									
_					-e	hal	o ki	lok	_
-		<u> </u>		-	_3	llai			_
	1								
7									
_							-		
			\vdash				-	\vdash	
-	5		\square						
1									
	\square		\square					\square	
_(\square		\vdash				-	\vdash	
_									
-									
l					_	_	-		
						-	-	-	_
_									
_									
					-	_		-	
_						_	_		
_									
_									
_									
_									
									100
					s (it				100
				Ga 1 (1 2 (t	s (L				100
				Ga 1 (1 2 (t	s (L nit	المالية المالمالية مالمالية مالماليمالية مالماليماليماليماليماليماليماليماليماليم			100
				Ga 1 (1 2 (t 3 (t	s (L nit nit:	المالية ماليمالية ماليمالية ماليماليماليماليماليماليماليماليماليمالي	5)		100 100 100 100
				Ga 1 (1 2 (t 3 (t	s (L nit nit: nit:	المالية المالمالية مالية مالمالية مالمالية مالماليمالية مالماليماليماليماليماليماليماليماليماليم	5)		100 100 100 100
				Ga 1 (1 2 (t 3 (t 4 (t	s (L nit	(init: (init:	s)		100 100 100
				Ga 1 (1 2 (1 3 (t	s (L nit	المالية المالمالية ماليماليمالية مالماليماليماليماليماليماليماليماليماليم	5)		100 100 100 100
				Ga 1 (1 2 (t 3 (t 4 (t	s (L nit	init:	5)		100 100 100 100 100 100 100 100 100 100
				Ga 1 (1 2 (t 3 (t 4 (t	s (L nit nit	(init: s) s) s)	s)		100
				Ga 1 (1 2 (t 4 (t	s (L	s)	S)		100
				Ga 1 (1 2 (1 4 (t	s (L nit	الم	s)		
				Ga 1 (1 2 (t 4 (t	s (L	s)	s)		
					s (L	s)	5)		
				Ga 1 (1 2 (t 3 (t 4 (t	s (L pit nit nit	المالية الماليمالمالماليمالمالماليمالماليمالمالماليمالمالمالمالمالمالمالمالمالمالمالمالمالم	s)		
				Ga 1 (1 2 (t 4 (t	s (L pit nit nit	(6.1	s)		
				Ga 1 (1 2 (t 3 (t 4 (t	s (L	(6.1	s)		
				Ga 1 (1 2 (t 3 (t 4 (t	s (L	الم	s)		
				Ga 1 (1 2 (t 3 (t 4 (t	s (u nit nit:	s) s) s) s)	s)		
				Ga 1 (1 2 (t 3 (t 4 (t)	s (u nit nit nit	s) s) s) s)	s)		
				Ga 1 (i 3 (t 4 (t 4 (t	s (u mit mit mit	(6.1	s)		
				Ga 1 (µ 2 (µ 3 (t 4 (t)	s (L nit nit nit	s) s) s) s)	s)		
				Ga 1 (µ 2 (µ 3 (t 4 (t	s (L nit: nit: mit: mit:	s) s) s)	s)		
				Ga 1 (1 2 (t 4 (t	s (u pit mit mit	6.1	s)		
				Ga 1 (1 2 (t 3 (t 4 (t	s (u nit mit mit	(6.1	s)		
				Ga 1 (1 3 (t 4 (t 3 (t 4 (t 0 a)	s (L nit: mit: mit:	() () () () () () () () () ()	s)		
				Ga 1 (µ 2 (µ 3 († 4 (r	s (L nit: nit: mit: mit:	init:	s)		
				Ga 1 (1 2 (t 3 (t 4 (t)	s (u pit: nit: nit: nit: nit: nit: nit: nit: n	6.1	s)		
				Ga 1 (1 2 (t 3 (t 4 (t)	s (u	(6.1	s)		
				Ga 1 (µ 2 (ų 3 (t 4 (t)	s (lt mit mit mit mit	init:	s)		



poor inter-xlyn porosity, no shows noted, and Shale as above

Ρ

c

ó

ó

-Á

9

9

Q

φ<mark>π</mark> C

F

С

¢.

Limestone: light tan, dense matrix, fn-xlyn, fossiliferous with some 2ndary-xlyn dev., poor to fair inter-xlyn porosity, scattered light stains, trace pieces with good show of oil on break, very dull yellow fluorescence, very faint milky cut, faint odor, with interbedded Shale

Mostly Shale as above, with some Limesotne: light gray, dense subgrainy matrix, fn-xlyn, oolitic in part, poor visible porosity, no shows noted

Limestone: off white and light tan, dense sub-chalky matrix, micro-fnxlyn, some fossiliferous, poor visible porosity, no shows noted

Limestone: off white and cream white, dense chalky matrix, micro-fnxlyn, partly oolitic with some fair to good oomoldic dev. & assc. porosity, no shows noted

Limestone: light tan and cream white, dense matrix, fn-xlyn, partly oolitic with some fair oomoldic dev. & assc. porosity, very light edge staining in part (?), no free oil or gas, no fluorescence, very faint odor

Limestone: light tan and off white, dense sub-grainy matrix, micro-xlyn, few parts oolitic, poor visible porosity, no shows noted

Muncie Creek Shale 3167' (-1283)

Shale: black carb and light greenish gray, blocky and hard, very slight show of gas on break in black shale, with interbedded Limestone: light gray and tan, dense grainy matrix, micro-xlyn, sub-oolitic in part, poor visible porosity, no shows noted

Limestone: cream white and light tan, dense chalky matrix, micro-xlyn, mostly barren, poor visible porosity, no shows noted, with interbedded Shale as above

Limestone: cream white and light tan, dense chalky matrix, micro-xlyn, sub-fossiliferous and sub-oolitic in part, poor visible porosity, no shows noted, with Shale as above

Limestone: light tan and off white, dense sub-chalky matrix, fn-xlyn, scattered poor to fair oomoldic dev. & assc. porosity, very light edge stains (?), no free oil or gas, no fluorescence, no cut, faint odor

Limestone: cream white and light tan, dense chalky matrix, micro-xlyn, some oolitic, poor visible porosity, no shows noted, with some Shale as above

Stark Shale 3241' (-1357)

Shale: black carb and gray, some greenish gray and red, blocky and hard, very slight show of gas on break

Limestone: cream white and light tan, dense tight matrix, micro-xlyn, fossiliferous to oolitic in part, poor to fair inter-xlyn porosity, no shows noted

Limestone: cream white and light tan, dense chalky matrix, micro-xlyn, some oolitic, poor inter-xlyn porosity, no shows noted

Hushpuckney Shale 3274' (-1390)

Shale: black carb, light gray and greenish gray, blocky and hard, slight show of gas on break

Limestone: cream white and light tan, dense tight sub-grainy texture, micro-fn-xlyn, mostly barren, poor visible porosity, no shows noted, with some Shale as above





Base Kansas City 3303' (-1419)

Shale: light to dark gray, some greenish gray and red, blocky and hard, some fissile, with interbedded Limestone: light gray and tan, dense tight sub-grainy matrix, fn-xlyn, sub-cherty in part, poor visible porosity, no shows noted

Mostly Shale with some Limestone as above

Short trip for 20 stands @ 3330'

a

0

a

þ

Р

φ

C 🗖

Shale: light greenish gray and dark gray, blocky to rounded, mostly firm, sandy in part, with some Limestone as above

Arbuckle 3347' (-1463)

cfs@3353' - Dolomite: cream white and light tan, dense matrix, vf-xlyn, overall fair rhombic dev. & assc. porosity, scattered sucrosic material, fair show of light oil on break, scattered spotted stains, bright yellow fluorescence, faint milky forced cut, good odor

cfs@3361' - Dolomite: off white and light tan, dense matrix, vf-md-xlyn, fair to scattered good rhombic dev. & assc. porosity, few parts pyritic, fair show of light oil on break, even light staining in part, bright yellow fluorescence, faint milky cut, strong odor

cfs@3369' - Dolomite: light gray and light tan, dense matrix, vf-fn-xlyn, poor to fair rhombic dev. & assc. porosity, few parts oolitic, few parts pyritic, light edge staining, no free oil or gas, pale yellow fluorescence, no cut, good odor, with scattered Shale: light teal green, blocky and hard

cfs@3376' - Dolomite: off white and light tan, dense sub-chalky matrix, vf-xlyn, fair rhombic dev. & assc. porosity, cherty in part, scattered loose chalk, light edge staining, scattered fair show of light oil on break, pale yellow fluorescence, very faint milky forced cut, fair odor

(3377-88') Dolomite: light tan, dense matrix, fn-md-xlyn, fair to good rhombic dev. & assc. porosity, some light edge staining, no free oil or gas, pale green yellow fluorescence, no cut, good odor

(3389-95') Dolomite: light gray and light tan, dense tight matrix, poor rhombic dev. & assc. porosity, sub-oolitic in part, no visible shows noted, fair odor

(3396-3403') Dolomite: light tan, dense tight matrix, fn-md-xlyn, poor to fair rhombic dev. & poor porosity, some scattered fair vuggy porosity, no visible shows noted, fair odor

(3404-13') Dolomite: light tan, dense matrix, fn-md-xlyn, fair rhombic dev. & assc. porosity, few parts pyritic, scattered fair show of oil on break and assc. light edge staining, pale green yellow fluor., no cut, good odor

Rotary Total Depth 3450' (-1566)

Sample descriptions continued:

(3414-27') Dolomite: light tan, dense matrix, fn-md-xlyn, fair rhombic dev. & assc. porosity, no visible shows noted, fair odor

(3428-39') Dolomite: light tan and tan, dense matrix, fn-md-xlyn, fair rhombic dev. & poor porosity, few parts cherty, no visible shows noted, faint odor

(3440-50') Dolomite: light tan and tan, dense matrix, fn-xlyn, fair rhombic dev. & assc. porosity, oolitic in part, scattered fair vuggy porosity, no shows noted

Orders received to run 5 1/2" production casing

Respectfully submitted, Adam G. Nighswonger



DST#1.bmp

DRILL STEM TEST REPORT Varials Exploration IIC 6-16s-10w Ellsworth 100 East 22nd Street North Building 1800-2 Boye 1-16 Unclus Kansas 67226 Job Ticket: 01037 DST#:1 ATTN: Adam Nightswonger Test Start: 2015.06.13 @ 00.00.00 DST#:1 GENERAL INFORMATION: Formation: ATTN: Adam Nightswonger Test Start: 2015.06.13 @ 00.00.00 GENERAL INFORMATION: Formation: ATTN: Adam Nightswonger Test Type: Conventional Bottom Hole (initial) Three Tool Opendo 00.000 Test: Cance Buildig Unit No: 70 Reference Bevalutions:: 1884.00 ft (KB) Total Depth: 535.00 ft (KB) (TVD) Test: Food Depth: 1894.00 ft (KB) 1894.00 ft (KB) Total Depth: 1456 Bp pais @ 3347.34 ft (KB) Capacity: 5000.00 pais 1999.12.30 Start Date: 2015.06.13 @ 155.00 ft (MB) (TVD) Test Cold Bit 2.20 10.99 ft 2.20 10.99 ft 2.20 Start Date: 2015.06.13 @ 10.00 ft (MD) (TOD) Test Add MUTES-MO BLOW Bit T TO 4 INCHES NTO THE WATER 45 MUTES-MO BLOW Bit C TO A INCHES NTO THE WATER 220 SPMUTE 45 MUTES-MO BLOW Bit C TO MO F 5 CALLON BUCKET IN 22 MINUTES 2ND SEMUT 10 MUTES-MO BLOW Bit C TO MO F						
Valuate Exploration Ic 6-16s-10w Ellsworth 100 East 22nd Street North Buiking 1800-2 Wichia Kansas 67226 Boye 1.16 Job Ticket: 01037 DST#:1 ATTN: Adam Nghaw onger GENERAL INFORMATION: Formation: ATTN: Adam Nghaw onger Test Start: 2015.06.13 @ 00.00.00 GENERAL INFORMATION: Formation: ATTN: Adam Nghaw onger Test Type: Gene Budg Conventional Bottom Hole (initial) Tester: The Tool Doppin: No Winpstock: ft (KB) Test: Type: Gene Budg Conventional Bottom Hole (initial) Tester: The Tool Doppin: 355.00 ft (KB) TO 355.00 ft (KB) (TVD) Reference Beavaions:: 1884.00 ft (KB) 1087.00 ft (KB) Total Doph: 2355.00 ft (KB) (TVD) Tester: 2015.06.13 @ 12.19.30 1899.12.30 Start Date: 2015.06.13 @ 13.00 ft (KB) Time Off Bar: 2015.06.13 @ 15.31.00 1899.12.30 TEST COMMENT: 155 OPE NKC 10 MMUTES WEAK BLOW BLUE TTO 14 NCHES INTO THE WATER IST SHUT: N 45 MMUTES NO BLOW Back 2015.06.13 @ 15.31.00 1899.12.30 TEST COMMENT: 15T OPENKC 10 MMUTES WEAK BLOW BLUE TTO 14 INCHES INTO THE WATER IST SHUT: N 45 MMUTES NO BLOW Back 100.00 100.83 Shut-ht(1) </td <td></td> <td>DRILL STEM TES</td> <td>ST REP</td> <td>ORT</td> <td></td> <td></td>		DRILL STEM TES	ST REP	ORT		
Second Statute Statute <thstatute< th=""> <thstatute< th=""> <thst< td=""><td></td><td>Valhalla Exploration llc</td><td></td><td>6-16s-1</td><td>0w Ellswo</td><td>rth</td></thst<></thstatute<></thstatute<>		Valhalla Exploration llc		6-16s-1	0w Ellswo	rth
Wichita_Kansas 67226 Job Ticket: 01037 DST#:1 ATTN: Adam Nightsw enger Test Start: 2015.06.13 @ 00.00.00 GENERAL INFORMATION: Formatio: Arbuckle Dewitted: No Whystock ft (KB) Time Test Ended: 00.00.00 Test Start: 2015.06.13 @ 00.00.00 Time Test Ended: 00.00.00 Test Type: Conventional Bottom Hole (Initial) Time Test Ended: 00.00.00 Unit No: 7.0 Interval: 3330.00 ft (KB) (TVD) Reference Elevations: 1884.00 ft (KB) Total Depth: 3353.00 ft (KB) (TVD) 1874.00 ft (KB) 1874.00 ft (CF) Total Depth: 2015.06.13 gt 219.20 Sond Date: 2015.06.13 gt 219.20 Start Date: 2015.06.13 gt 12.93.00 Time OH Bitr: 2015.06.13 gt 12.93.00 Start Time: 10 MINUTES WEAK BLOW BULT TO 14 NOHES INTO THE WATER Start Date: 2015.06.13 gt 12.93.00 Start Time: 10 ST OPENING 10 MINUTES NO BLOW Back Time OH Bitr: 2015.06.13 gt 12.93.00 Test COMMENT: IST SHAT-N 45 MINUTES-NO BLOW Back Time OH Bitr: 2015	<u>lesters</u>	8100 East 22nd Street North Bu	ilding 1800-2	Boye 1	-16	
ATTN: Adam Nghaw onger Test Start: 2015 06.13 @ 00.00.00 GENERAL INFORMATION: Formation: Arbuckle Deviated: No. Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial) Time Tool Opened: 00.000 Unit No: 70 Interval: 3300.00 ft (KB) (To 3353.00 ft (KB) (TVD) Reference Bevalons: 1884.00 ft (KB) Total Depth: 2455.00 ft (KB) (TVD) Test T KB to GR/CF: 10.00 ft Serial #: 9119 Inside Sast.00 ft (KB) Test T 5000.00 paia Serial #: 9119 Inside 2015.06.13 Ead Callo: 1899.12.30 Time: 10.51.00 End Time: 17.16.00 Time Of Bim: 2015.06.13 @ 12.19.30 TIME: 10.51.00 End Time: 17.16.00 Time Of Bim: 2015.06.13 @ 12.19.30 TIME: 10.51.00 End Time: 17.16.00 Time Of Bim: 2015.06.13 @ 12.19.30 TIME: Start Delemanter 10.51.00 End Time: 17.16.00 Time Of Bim:	Conch Bond Konese	Wichita,Kansas 67226		Job Tick	et: 01037	DST#:1
GENERAL INFORMATION: Formation: Arbuckle Deviated: No. Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initia)) Time Tool Opened: 00:000 Unit No: 70 Gene Budg Interval: 3300.00 ft (KB) (TVD) Tester:: Gene Budg 1874.00 ft (CF) Total Depth: 3553.00 ft (KB) (TVD) Reference Bevations: 1884.00 ft (KB) Serial #: 9119 Inside 1074.00 ft (CF) KB to GRVCF: 10.00 ft Serial #: 9119 Inside 2015.06.13 Ead Date: 2015.06.13 Last Calib: 1898.12.30 Tree: 10.51:00 End Time: 17:16:00 Time Off Bim: 2015.06.13 @ 12:19:30 TEST COMMENT: 1ST OPENING 10 MINUTES-WD BLOW Back Time Off Bim: 2015.06.13 @ 15:31:00 TST SHUT-N 40 MINUTES-ND BLOW Back Tome Det Time: 2015.06.13 @ 16:31:00 TST SHUT-N 40 MINUTES-ND BLOW BACK Time Off Bim: 2016.06.13 @ 16:31:00 Test SHUT-N 90 MINUTES-ND BLOW BACK Time Off Bim: 2016.	Sherres Marines	ATTN: Adam Nighsw onger		Test Sta	rt: 2015.06.1	3 @ 00:00:00
Formation: Arbuckle Deviated: No Wihpstock: ft (KB) Test Type: Conventional Bottom Hole (Initia) Time Tool Opened: 00000 Unit No: 70 Interval: 3300.00 ft (KB) To 3353.00 ft (KB) (TVD) Reference Bevations: 1884.00 ft (KB) Total Dept: 7.88 inches-Hole Condition: Fair KB to GR/CF: 10.00 ft Start Date: 2015.06.13 Last Calib: 1999.12.30 Time On Bim: 2015.06.13 @ 12.19.30 Start Time: 10.51.00 End Date: 2015.06.13 Last Calib: 1999.12.30 TEST COMMENT: IST OPENING 10 MINUTES MEAK BLOW BULL TO 4 INCHES NTO THE WATER 199.01.20.30 Time Off Bim: 2015.06.13 @ 12.19.30 TST SHUT-N 46 MINUTES AR BLOW BULL TO 4 INCHES NTO THE WATER 190.000 (Fig. 100.000 Fig. 100.000 (Fig. 100.000 Fig. 100.000 (Fig. 100.0	GENERAL INFORMATION:	•				
Deviate: No Vimpstock: ft (RE) Test (ype: Conventional bottom Hole (initial) Time Tool Opened: 00:00:00 Time Tool Opened: 00:00:00 Time Set (ype: Conventional bottom Hole (initial) Time Tool Opened: 00:00:00 Time Set (ype: Conventional bottom Hole (initial) Time Set (Wpe: Conventional bottom Hole (initial) Time Set (Wpe: Conventional bottom Hole (initial) Time Co	Formation: Arbuckle					
Interval: 3300.00 ft (KB) To 3353.00 ft (KB) (TVD) Reference Bevations: 1884.00 ft (KB) Total Depti: 3553.00 ft (KB) (TVD) 1874.00 ft (KB) 10.00 ft Serial #: 9119 Inside Inside 10.00 ft Press@RunDept: 145.56 psia @ 3347.34 ft (KB) Capacity: 5000.00 psia Start Date: 2015.06.13 End Date: 2015.06.13 @ 12.19.30 Time On Bim: 2015.06.13 @ 12.19.30 Start Date: 2015.06.13 @ 12.19.30 Time On Bim: 2015.06.13 @ 15.31.00 Time On Bim: 2015.06.13 @ 15.31.00 TEST COMMENT: 15T OPENING 10 MINUTES WEAK BLOW BULL TO 4 INCHES INTO THE WATER 15T SHUT-IN: 45 MINUTES-NO BLOW Back: SND OPENING 45 MINUTES-NO BLOW Back: 2ND OPENING 45 MINUTES FAR BLOW BULL TO TO THE BOTTOM OF 5 GALLON BUCKET IN 22 MINUTES SND SHUT-IN: 90 MINUTES FAR BLOW BULL 100.00 100.86 (Doen To Flow (1) 107.42 (Doen To Flow (1) 12 72.80 Feesure (Intil Hydro-static 109.02 101.01 SI (Doen To Flow (2) 101.01 SI (Doen To Flow (2) 101 101.45 (Stub-In(1) 101.45 (Stub-In(1) 100.83	Time Tool Opened: 00:00:00 Time Test Ended: 00:00:00	ft (KB)		Test Typ Tester: Unit No:	Gene Bu 70	ional Bottom Hole (Initial) Idig
Total Depth: 355.00 ft (KB) (TVD) 1874.00 ft (CF) Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft Serial #: 9119 Inside Inside Final H: 9119 Inside Persei@RunDepth: 1145.56 psia @ 3347.34 ft (KB) Capacity: 5000.00 psia Start Date: 2015.06.13 End Date: 2015.06.13 @ 12:19:30 Time On Bim: 2015.06.13 @ 15:31:00 TEST COMMENT: 1ST OPENING 10 MINUTES WEAK BLOW BULL TO 4 INCHES INTO THE WATER 155:100 Edd (Gg F) Initial Hydro-static 1910 OPENING 45 MINUTES-NO BLOW BACK Time Off Bim: 2015.06.13 @ 12:19:30 Initial Hydro-static 100 OPENING 45 MINUTES-NO BLOW BACK Time (rpsia) Temp (rpsia) Annotation 112 17:28.20 108.44 Shut-h(1) 109.02 End Shut-h(1) 100 OPENING 10 1145.56 109.36 Open To Flow (2) 101 113.5 112 172.82 108.44 Shut-h(1) 109.02 End Shut-h(1) 109.02 End Shut-h(1) <td< td=""><td>Interval: 3300.00 ft (KB) To</td><td>3353.00 ft (KB) (TVD)</td><td></td><td>Referen</td><td>ce Elevations:</td><td>1884.00 ft (KB)</td></td<>	Interval: 3300.00 ft (KB) To	3353.00 ft (KB) (TVD)		Referen	ce Elevations:	1884.00 ft (KB)
Hole Dameter: 7.88 incheshole Condition: Fair KB to GRCF: 10.00 ft Serial #: 9119 Inside Serial #: 9119 Inside Source Sourc	Total Depth: 3553.00 ft (KB)	TVD)				1874.00 ft (CF)
Serial #: 9119 Inside Press@RunDepth: 1145.56 psis @::::::::::::::::::::::::::::::::::::	Hole Diameter: 7.88 inches H	ole Condition: Fair			KB to GR/CF	10.00 ft
Press@RunDepth: 1145.56 psia @ 3347.34 ft (KB) Capacity: 5000.00 psia Start Date: 2015.06.13 End Date: 2015.06.13 Last Calib: 1899.12.30 Start Date: 10.51:00 End Time: 17:16:00 Time On Bitm: 2015.06.13 @ 12:19:30 TIME: 10.51:00 End Time: 17:16:00 Time Off Bim: 2015.06.13 @ 12:19:30 TIME: 1ST SHUT=N 10 MINUTES NR BLOW BULT TO 4 INCHES INTO THE WATER 2015.06.13 @ 12:19:30 100.00 TIME: 1ST SHUT=N 45 MINUTES-NO BLOW Back 100.00 Priss 45 MINUTES AND BLOW BACK SND SHUT-IN 90 MINUTES AND BLOW BACK PRESSURE SUMMARY Annotation TIME PRESSURE SUMMARY 100.00 Initial Hydro-static Open To Flow (1) 1174.206 108.46 Shut-In(1) 12 72.82 108.38 Shut-In(1) 10 1145.56 109.38 Shut-In(1) 11 114.55 109.38 Shut-In(2) 11 115 109.31 Final Hydro-static 11 11 1114.55 109.38 Shut-In(2) </td <td>Serial #: 9119 Inside</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Serial #: 9119 Inside					
Start Date: 2015.06.13 End Date: 2015.06.13 End Date: 1005100 Time OF Btm: 2015.06.13 0010000000000000000000000000000000000	Press@RunDepth: 1145.56 psia	@ 3347.34 ft (KB)	0045 00 40	Capacity:		5000.00 psia
The off Bir 2015.06.13 @ 15.31.00 Time off Bir 2015.06.13 @ 15.31.00 TEST COMMENT: 1ST OPENING 1ST SHUT-IN 2ND OPENING 2ND OPENING 2ND OPENING 2ND OPENING 2ND OPENING 2ND OPENING 2ND OPENING 2ND OPENING 2ND OPENING 2ND OPENING 30 MINUTES-NO BLOW BULL T TO 14 INCHES INTO THE WATER 45 MINUTES-NO BLOW BACK 30 MINUTES-MINUTE 30 MINUTES-MINUTE 30 MINUTES-MINUTE 30 MINUTES-MINUTE 30 MINUTES-MINUTE 30 MINUTES-MINUTE 30 MINUTES-MINUTE 30 MINUTES-MINUTE 30 MINUTES-	Start Date: 2015.06.1. Start Time: 10:51:00	End Date:	2015.06.13 17:16:00	Last Calib.: Time On Btm:	2015.06	1899.12.30 13 @ 12:19:30
TEST COMMENT: 1ST OPENING 1ST SHUT-IN 2ND OPENING 45 MINUTES-NO BLOW Back 2ND SHUT-IN 90 MINUTES-NO BLOW BACK				Time Off Btm:	13 @ 15:31:00	
Impendentiation	Pressure v	s. Time IV.	Time	PRES	SURE SUN	/MARY
Image: Second	Pressure v 9169 Pasara	s. Time 909 Temperature	Timo	PRES	SURE SUN	
Image: Second	173		(Min.)	(psia) (de	eg F)	
Image: Second	****		0	1742.06 10	9.00 Initial H	lydro-static
End Shut-In(1) Open To Flow (2) 109.02 108.39 109.02 108.39 108.39 109.38 109.31 109.38 109.38 109.31 109.38 109.31 109.32 109.31 109.31 109.32		m	12	72.82 10	8.44 Shut-In	(1)
Early full Description Volume (bbl) 0.00 120 GAS IN THE PIPE 0.00 140.00 CLEAN GASSY OIL 40 GAS 60 OIL 1.96 40.00 0IL AND GAS CUT MUD 0.56 0.00 10 GAS 20 OIL 70 MUD 0.56 0.00 10 GAS 20 OIL 70 MUD 0.00			55	1145.37 10	9.02 End Sh	ut-In(1)
Image: Second			56	82.92 10	8.39 Open T	To Flow (2)
Image: State of the second	750		101	1145.56 10	9.38 End Sh	u(∠) ut-ln(2)
Image: Second constraints Image: Second constraints Image: Second constraints Image: Second constraints Recovery Image: Second constraints Image: Second constraints Image: Second constraints Length (ft) Description Volume (bbl) Image: Second constraints Image: Second constraints 140.00 CLEAN GASSY OIL 40 GAS 60 OIL 1.96 Image: Second constraints Image: Second constraints 40.00 OIL AND GAS CUT MUD 0.56 0.00 0.00 Image: Second constraints Image: Second constraints 0.00 IO GAS 20 OIL 70 MUD 0.00 0.00 0.00 0.00 Image: Second constraints Image: Second constraints <td< td=""><td></td><td></td><td>192</td><td>1634.20 10</td><td>9.51 Final H</td><td>ydro-static</td></td<>			192	1634.20 10	9.51 Final H	ydro-static
Image: server server (server) Secvery Recovery Gas Rates Image: server (server) Choke (inches) Pressure (psia) Gas Rate (Mcd/d) 140.00 CLEAN GASSY OIL 40 GAS 60 OIL 1.96 Gas Rate Gas Rate 40.00 OIL AND GAS CUT MUD 0.56 0.00 1.96 House House 0.00 10 GAS 20 OIL 70 MUD 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 GRAVITY 44 CORRECTED 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00						
Image: Set An 285						
Recovery Gas Rates Length (ft) Description Volume (bbl) 0.00 120 GAS IN THE PIPE 0.00 140.00 CLEAN GASSY OIL 40 GAS 60 OIL 1.96 40.00 OIL AND GAS CUT MUD 0.56 0.00 10 GAS 20 OIL 70 MUD 0.00 0.00 GRAVITY 44 CORRECTED 0.00						
Recovery Gas Rates Length (ft) Description Volume (bbl) 0.00 120 GAS IN THE PIPE 0.00 140.00 CLEAN GASSY OIL 40 GAS 60 OIL 1.96 40.00 OIL AND GAS CUT MUD 0.56 0.00 10 GAS 20 OIL 70 MUD 0.00 0.00 GRAVITY 44 CORRECTED 0.00	12764 13544 Jun 2015 Time () +	39M m)				
Length (ft) Description Volume (bbl) 0.00 120 GAS IN THE PIPE 0.00 140.00 CLEAN GASSY OIL 40 GAS 60 OIL 1.96 40.00 OIL AND GAS CUT MUD 0.56 0.00 10 GAS 20 OIL 70 MUD 0.00 0.00 GRAVITY 44 CORRECTED 0.00	Recover	/		ا	Gas Rates	S
0.00 120 GAS IN THE PIPE 0.00 140.00 CLEAN GASSY OIL 40 GAS 60 OIL 1.96 40.00 OIL AND GAS CUT MUD 0.56 0.00 10 GAS 20 OIL 70 MUD 0.00 0.00 GRAVITY 44 CORRECTED 0.00	Length (ft) Description	Volume (bbl)		(Choke (inches) Pr	ressure (psia) Gas Rate (Mcf/d
140.00 CLEAN GASSY OIL 40 GAS 60 OIL 1.96 40.00 OIL AND GAS CUT MUD 0.56 0.00 10 GAS 20 OIL 70 MUD 0.00 0.00 GRAVITY 44 CORRECTED 0.00	0.00 120 GAS IN THE PIPE	0.00				
40.00 OIL AND GAS CUT MUD 0.56 0.00 10 GAS 20 OIL 70 MUD 0.00 0.00 GRAVITY 44 CORRECTED 0.00	140.00 CLEAN GASSY OIL 40	GAS 60 OIL 1.96				
0.00 10 GAS 20 OIL 70 MUD 0.00 0.00 GRAVITY 44 CORRECTED 0.00	40.00 OIL AND GAS CUT MU	D 0.56				
0.00 GRAVITY 44 CORRECTED 0.00	0.00 10 GAS 20 OIL 70 MU	0.00				
	0.00 GRAVITY 44 CORREC	IED 0.00				
0.00 GRAVITY 44 CORRECTED 0.00	Error Error Recover Length (ft) 0.00 120 GAS IN THE PIPE 140.00 CLEAN GASSY OIL 40 40.00 0.00 10 GAS 20 OIL 70 MU	M Volume (bbl) 0.00 GAS 60 OIL 1.96 D 0.56 0 0.00			Gas Rates	S ressure (psia) Gas Rate
	0.00 GRAVITY 44 CORREC	TED 0.00				

Eagle Testers

Printed: 2015.06.13 @ 17:46:28

DST#2.bmp

	DRILL STEM TES	ORT					
	Valhalla Exploration llc		16-16s-10w Ellsworth				
	8100 East 22nd Street North Buik Wichita.Kansas 67226	Boy					
Great Bands Kanas			Job T	Job Ticket: 01038		3 DST#: 2	
	ATTN: Adam Nighsw onger		Test	Start: 201	5.06.14 @	00:00:00	
GENERAL INFORMATION:							
Formation:ArbuckleDeviated:NoWhipstock:Time Tool Opened:00:00:00Time Test Ended:00:00:00	ft (KB)		Test Type: Conventional Bottom Hole (Initial) Tester: Gene Budig Unit No:				
Interval: 3353.00 ft (KB) To 33 Total Depth: 3361.00 ft (KB) (T) 100 Hole Diameter: 7.88 inches Hole 100	6 61.00 ft (KB) (TVD) /D) e Condition: Fair		Refer	rence ⊟ev KB to	ations: GR/CF:	1884.(1874.(10.(00 ft(KB) 00 ft(CF) 00 ft
Serial #: 9139 Outside Press@RunDepth: 1427.50 psia Start Date: 2015.06.14 Start Time: 12:10:00	Capacity: 5000.00 psia 2015.06.14 Last Calib.: 2015.06.14 17:51:30 Time On Btm: 2015.06.14 @ 13:27:30 Time Off Btm: 2015.06.14 @ 16:38:00					00 psia 14 30 00	
1st Shut-in 45 2nd Opening 45 2nd Shut-in 90	5 Mnutes 5 Mnutes-no blow for 7 minutes the) Mnutes	n very weak	surface blow	v through (out		
Pressure vs. 1	ime		PR	ESSURE	SUMMA	\RY	
1750 1750	UBJ Torpordur Testesemi: 	Time (Min.) 0 10 57 57 101 190 191	Pressure (psia) 2103.39 105.81 109.08 1427.35 110.07 129.59 1427.50 2048.89	Temp (deg F) 84.39 83.90 84.01 84.85 84.50 85.23 87.44 87.61	Annotation Open To Flo Shut-In(1) End Shut-In Open To Flo Shut-In(2) End Shut-In Final Hydro	n -static ow (1) (1) (2) (2) -static	
Recovery			Gas	Rates			
Length (ft) Description	Volume (bbl)			Choke (inc	thes) Pressure	e (psia)	Gas Rate (Mct/d)
10.00 muddy water 20%mud 8 chlorides 12000	0.07 0.14						

Eagle Testers

Printed: 2015.06.14 @ 07:55:10

DST#3.bmp

	DRILL STEM TEST REPORT							
	Valhalla Exploration Ilc		16-16	16-16s-10w Ellsworth				
	8100 East 22nd Street North Buik Wichita,Kansas 67226	ding 1800-2	Boye Job Tic	#:3				
See Sens Manas	ATTN: Adam Nighsw onger		Test St	art: 2015.06	.14 @ 00:00:00	D		
GENERAL INFORMATION:								
Formation:ArbuckleDeviated:NoWhipstock:Time Tool Opened:00:00:00Time Test Ended:00:00:00	ft (KB)		Test Ty Tester: Unit No	rpe: Conve GENEI	ntional Bottom BUDIG	Hole (Initial)		
Interval:3368.00 ft (KB) To33Total Depth:3376.00 ft (KB) (ThHole Diameter:7.88 inches Hole	7 6.00 ft (KB) (TVD) /D) e Condition: Fair		Refere	NCE Elevation	s: 1884. 1874. CF: 10.	00 ft(KB) 00 ft(CF) 00 ft		
Serial #: 9139 Outside Press@RunDepth: 1156.90 psia Start Date: 2015.06.14 Start Time: 14:39:45	 3371.00 ft (KB) End Date: End Time: 	2015.06.14 20:41:45	Capacity: Last Calib.: Time On Btm Time Off Btn	n 2015.0 n: 2015.0	5000. 2015.06. 6.14 @ 16:05: 6.14 @ 19:12:	00 psia 14 45 15		
1 IST COMMENT: 1ST Opening 1 1st Shut-In 2nd Opening 3 2nd Shut-In	0 Minutes fair blow built to the botto 15 Minutes-No blow back 30 Minutes-Fair blow built to the bot 30 Minutes-no blow back	om of a 5 gall	on bucket in 5 n llon bucket in 7	minutes minutes				
Pressure vs. T	îme		PRE	SSURE SU	JMMARY			
173 173 173 173 173 173 175 175 175 175 175 175 175 175	0(53) (constants 955) 955 955 955 957 957 95 95 95 95 95 95 95 95 95 95	Time (Min.) 0 13 65 65 98 186 187	Pressure (psia) T 1767.41 1 1731.48 1 118.10 1 1156.67 1 333.90 1 1156.90 1 1637.93 1	Femp Ann deg F) Initial 103.33 Initial 103.29 Oper 104.26 Shut- 107.00 End S 106.82 Shut- 10.43 Shut- 10.66 End S 110.85 Final	hotation Hydro-static To Flow (1) In(1) Shut-In(1) In(2) In(3) Shut-In(2) Hydro-static			
Recovery				Gas Rat	es			
Length (ft) Description 675.00 w ater chlorides 12000	Volume (bbl) 9.47			Choke (inches)	Pressure (psia)	Gas Rate (McI/d)		

Eagle Testers

Printed: 2015.06.14 @ 21:03:10