KOLAR Document ID: 1370988

Confidentiality Requested:

Yes No

Kansas Corporation Commission Oil & Gas Conservation Division

Form ACO-1
November 2016
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.:		
Name:	Spot Description:		
Address 1:	SecTwp S. R		
Address 2:	Feet from North / South Line of Section		
City: State: Zip:+	Feet from		
Contact Person:	Footages Calculated from Nearest Outside Section Corner:		
Phone: ()	□NE □NW □SE □SW		
CONTRACTOR: License #	GPS Location: Lat:, Long:, Long:		
Name:	Datum: NAD27 NAD83 WGS84		
Wellsite Geologist:			
Purchaser:	County:		
Designate Type of Completion:	Lease Name: Well #:		
☐ New Well ☐ Re-Entry ☐ Workover	Field Name:		
□ Oil □ WSW □ SWD	Producing Formation:		
Gas DH EOR	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 EOR ☐ Conv. to SWD	Drilling Fluid Management Plan		
☐ Plug Back ☐ Liner ☐ 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:		
Dual Completion Permit #:	Leading of field Paragraph Charles and Market		
EOR Permit #:	Location of fluid disposal if hauled offsite:		
GSW Permit #:	Operator Name:		
	Lease Name: License #:		
Canad Date on Date Decembed TD Completing Date on	Quarter Sec TwpS. R		
Spud Date or Date Reached TD Completion Date or 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 ☐ Drill Stem Tests Received				
Geologist Report / Mud Logs Received				
UIC Distribution				
ALT I II III Approved by: Date:				

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Page Two

Operator Name:					Lease Nam	ne:			Well #:	
Sec Tw	pS.	R	East	West	County:					
open and closed and flow rates if	, flowing and s gas to surface ty Log, Final L	shut-in pressu test, along wi ogs run to ob	res, whe ith final c tain Geo	ther shut-in pre hart(s). Attach physical Data a	essure reached extra sheet if a and Final Elect	station more ric Lo	level, hydrosta space is needed	tic pressures, d.	bottom hole tempe	val tested, time tool trature, fluid recovery, Digital electronic log
Drill Stem Tests 7			Ye	es No		Lo	og Formatio	n (Top), Dept	h and Datum	Sample
Samples Sent to	Geological Su	urvey	Y	es No		Name	•		Тор	Datum
TCores a Electric Lo Geologist		Logs	Ye	es No es No es No						
List All E. Logs F	Run:									
					RECORD [Ne				
	0	i=a Hala				e, inte	mediate, producti		# Coaks	Time and Developt
Purpose of St		ize Hole Drilled		e Casing (In O.D.)	Weight Lbs. / Ft.		Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
				ADDITIONAL	CEMENTING	SQU	EEZE RECORD			
Purpose: Perforate Protect Ca Plug Back	ısing	Depth op Bottom	Туре	of Cement	# Sacks Use	ed		Type a	nd Percent Additives	
Plug Back										
Did you perform Does the volume Was the hydraul	e of the total bas	se fluid of the hy	draulic fra	cturing treatmen		•	Yes Service Yes Yes Yes	No (If No	o, skip questions 2 an o, skip question 3) o, fill out Page Three o	
Date of first Produ	ction/Injection or	r Resumed Prod	duction/	Producing Meth			D1#	M (5 (-1.)		
,		0.11		Flowing	Pumping			other (Explain)	0 0" 5 "	
Estimated Production Per 24 Hours		Oil Bl	ols.	Gas	Mcf	Wate	r Bi	ols.	Gas-Oil Ratio	Gravity
	OSITION OF GA			N Open Hole	METHOD OF CO	MPLE Dually		nmingled	PRODUCTIO Top	N INTERVAL: Bottom
Vented	」Sold	sed on Lease		open noie _		,		mit ACO-4)		
(in voluce, cashin need to.)										
Shots Per Foot	Perforation Top	Perforati Botton		Bridge Plug Type	Bridge Plug Set At		Acid,		Cementing Squeeze Kind of Material Used)	Record
TUBING RECORI	D: Size	:	Set At:		Packer At:					

Form	ACO1 - Well Completion
Operator	Vess Oil Corporation
Well Name	MILLS A 41
Doc ID	1370988

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement		Type and Percent Additives
Surface	12.25	8.625	23	263	Class A	150	3% cc

ROGER L. MARTIN

INDEPENDENT PETROLEUM GEOLOGIST 316-250-6970

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY VESS OIL COR LEASE MILLS 'A' #41 FIELD EL DORADO LOCATION 1980' FSL & 33 SECTION 22 TOWNSH COUNTY BUTLER	ELEVATIONS KB 1376' GL 1370' Measurements Are All From KB		
CONTRACTOR C&G DRILLING, RIG #1 SPUD 08/21/2017 COMP 08/28/2017 RTD 2468' (-1092) LTD 2468' (-1092) ELECTRICAL SURVEYS ELI: DIL, CDNL/PE, MEL			CASING SURFACE 8-5/8" set @ 263' w/150 sx Class A, 3% CC PRODUCTION n/a- P&A
FORMATION TOPS LOG SAMPLES			CHRONOLOGY
ADMIRE 550	NP	NP	08/21/2017- Start drilling on rathole @ 12PM. Kelly

FORMATION TOPS	LOG	SAMPLES	CHRONOLOGY
ADMIRE 550	NP	NP	08/21/2017- Start drilling on rathole @ 12PM. Kelly
ADMIRE 650	615' (+761)	615' (+761)	down started @ 2PM.
WHITE CLOUD LS	863' (+513)	865' (+511)	
WHITE CLOUD SD	876' (+500)	877' (+499)	08/22/2017- Start back drilling @ 7AM, 10:45AM
HOWARD	915' (+461)	40501 (00)	drilling @ 155'. TD @ 264' @ 1PM. Run 6 its of 8-5/8"
OREAD	1348' (+28)	1350' (+26)	23#/Ft L.S. casing, Tally= 252.9', Set @ 263'KB. QES
HEEBNER	1385' (-9)	1387' (-11)	Services cemented w/150 sx Class A, 3%CC. Circulate
DOUGLAS SH	1420' (-44)	1420' (-44)	cement.
DOUGLAS SD	NP	NP	00/00/00 / T. D. L. O. 000/ D. III
IATAN	1590' (-214)	1590' (-214)	08/23/2017- Drlg @ 800'. Drill out under surface @
LANSING	1649' (-273)	1649' (-273)	1AM. 10AM, Drilg @ 900', 4:30PM 1585'.
BASE LANSING	1784' (-408)	40001 / 500)	00/04/0047 Duly C 4007/ Dit bis C 4000/ Common
KANSAS CITY	1938' (-562)	1938' (-562)	08/24/2017- Drlg @ 1997'. Bit trip @ 1893'. Survey=
STARK	2039' (-663)	2039' (-663)	1 deg. MW 9.2, VIS 35, LCM 2#.
BASE KANSAS CITY CHECKERBOARD	2098' (-722)	2100' (-724)	00/05/0017 Dula G 04001 MM 0 0 M/10 40 M/1 0 1
0.10010100100	2171' (-795)	2172' (-796)	08/25/2017- Drlg @ 2400'. MW 9.2, VIS 48, WL 8.1
HEPLER SD ALTAMONT	2202' (-826)	2200' (-824)	LCM 2#, DST #1 2371-2464.
CHEROKEE	2218' (-842)	2218' (-842)	08/26/2017- 2426 Pull DST #1. DST #2 2427-2438
ARDMORE LS	2297' (-921)	2297' (-921)	
	2365' (-989)	2365' (-989)	MW 9.3, VIS 73, WL 6.1, LCM 2
BASAL SIMPSON SD	2390' (-1014)	2390' (-1014)	00/07/0047 03/2 0 04401 DD to 04001 ELL
EROS ARBUCKLE CHERT	04001 / 1004)	2395' (-1019)	08/27/2017- Circ @ 2442'. DD to 2468', ELI run logs.
ARBUCKLE DOLOMITE LTD/RTD	2400' (-1024)	2400' (-1024)	Logger TD= 2468'. Decision to plug well.
LID/RID	2468' (-1092)	2468' (-1092)	

REMARKS:	

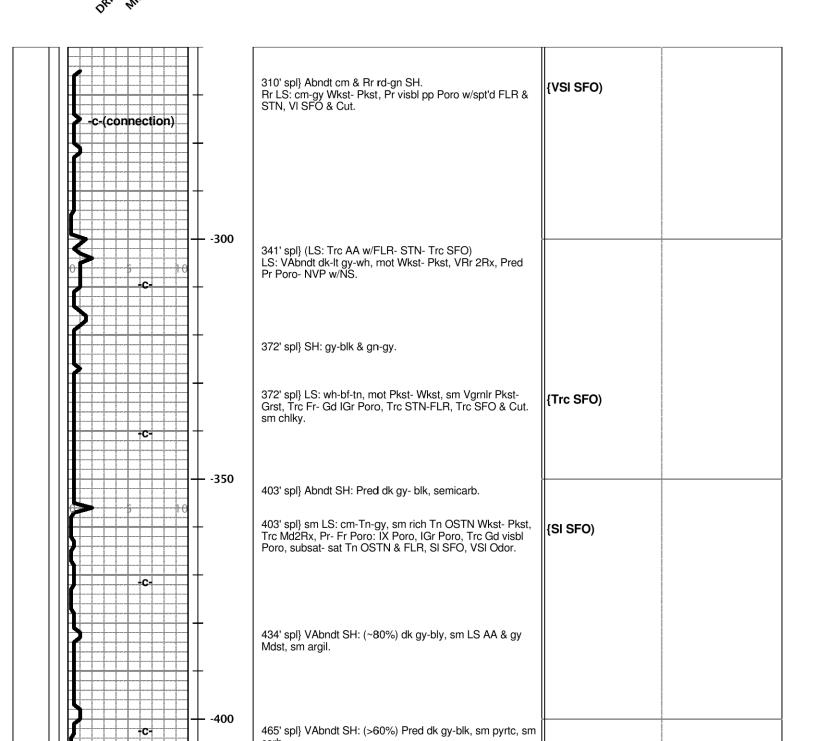
The decision was made to P&A the VOC Mills 'A' #41:

Plugs set avove Arbuckle: 35 sx: 50' below surface casing: 35 sx, 60'-0: 20 sx,	
Rathole: 20 sx; Finished 3:30 AM 08/28/2017.	
Log tops by P. Ramondetta, Geologist, Vess Oil Corporation	
Respectfully submitted,	-
Roger L. Martin, Geologist (Wellsite)	
(Page Length = 128")	
(age zonga zer)	

LITH ROROSITY ILLING INN

SAMPLE DESCRIPTION

REMARKS



	caro. LS: lt-dk gy, dn Mdst- Wkst, sm argil, Rr Pkst, Trc Pkst w/Poro, Trc FLR- STN- SFO & Cut.	
	496' spl} LS: It gy-wh-cm-tn, Pred dn- ux (microcrystaline)	
-450	& Mdst- Wkst, sm argil, Trc uFrc 2Rx, Pred VPr- NVP, NS.	
+C -		
	496' spl} Trc Sd Clust: Vfn- Trc fn Gr'd, silty w/Fr Poro, fribl w/sat STN-FLR, VSI SFO.	(VSI SFO)
	527' spl} Trc LS AA w/STN. sm LS: tn-gy-bn, dn ux Y Mdst- Wkst w/Pred VPr- NVP	
	w/NS. & SH: AA.	
0		
	527' spl}(~50%) VRr SILTS- SS- SD CLUST: Gy-Tn OSTN, Vfn Gr'd, silty, VPr- Fr Poro, subsat- sat STN & FLR, VSI SFO & Cut, VSI Odor.	(VSI SFO)
	1 21, 13, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3	
	558' spl} ~50% SH: blk subcarb- carb & gn-gy. Abndt LS: lt gy-tn & cm-gy-wh, dn- ux & Mdst- argil, sm	
	argil, sm pyrtc, Pred VPr Poro- NVP, NS.	
-550	589' spl} SH: AA, gy-bk & gn-gy, sm silty, micac, sm calc. LS: AA, gy-tn, dn hd, ux- Rr fnx, sm argil, dn Mdst.	
-		
	620' spl} SH- SILTS: sm gn-gy, calc & lmy. LS: gy-tn, dn- ux & argil- dn Mdst w/Pred VPr- NVP w/NS.	
	Pred SH: AA w/SILTS: AA.	
+C-		
	620' spl} Trc Sndy SILTS: gy-Tn OSTN & FLR, SI- Fr SFO- filmy, gsy F.Oil and milky Cut. Trc Silty SD CLUST: gy-Tn STN, Vfn Gr'd, Fr Poro w/sat	{SI- Fr SFO)
0 5 10	FLR- STN, SFO & Cut, VSI Odor.	
	651' spl} {ADMIRE 650} SILTY SS- SILTY SD CLUST &	615' (+761) ADMIRE 650
	fribl SD CLUST: (>5% ~10% Sd Clust w/STN & FLR- SFO)	{Fr- Gd SFO)

	651' spl} SS- SD CLUST: gy-bf-Tn OSTN, Vfn- fn Gr'd, Rnd'd- subanglr, Sl- Vsilty & micac, subfribl to Vfribl w/Fr-Gd IGr Poro w/subsat- sat brt FLR & Fr- Gd SFO- Gsy & filmy & Fr- Gd strmg milky Cut, Frly strng Odor.	{Fr- Gd SFO)
-650 650	682'&714'spls} VRr (~5%) sat Sd Clust: AA, Vfn- fn Gr'd w/Fr- Gd Poro, FLR- STN, SFO & Cut, & Rr SILTS: gy-Tn OSTN, micac, sm sndy, Vfn Gr'd w/VPr- Pr Poro w/FLR- SFO- STN- Cut. Abndt SILTS- SH: It-dk gy, micac.	
	744' spl} LS: gy-tn, argil Wkst- Pkst, VPr- NVP. Abndt SILTS- SH: AA, Rr SILTS: AA w/FLR- SFO- STN & Cut. sm gy-blk SH & gy, silty micac SH.	
	744' spl} sm LS: tn-gy-wh, mot Wkst- Pkst, sm fos & ux-fnx, VPr- NVP, NS. 775' spl} Rr SH: gy-blk, sm carb. Abndt LS: wh-gy-tn, dn Mdst- Wkst, Rr Pkst w/VPr- NVP, NS.	
-750 -750	806' spl} Incrs SH: (~50% SH) gy-blk & blk carb & gn-gy. dn LS: AA. 806' spl} Frly Abndt LS: wh-gy-tn, prt chlky, ux- fnxln w/VRr Mdx- Crsx- 2Rx, Rr fos Wkst- Pkst. Rr Pr- Fr visbl	
	Poro w/NS.	
	838' spl} Abndt LS: gy-tn-wh, sm mot Wkst- Pkst & ux- fnx w/Pred VPr- NVP w/NS; sm argil Wkst. 838' spl} SH: dk-lt gy.	
	868' spl} LS: tn-dk gy-bn, Wkst- Pkst & dn- ux-fnx w/VPr- NVP w/NS. Abndt It-dk SH- SILTS: micac, VRr (<5%) gy- Tn SILTS w/FLR- STN- SFO & Cut	{Trc SFO)

-850	899' spl} SH: AA, It-dk gy, sm silty & micac.	
	899' spl} {WHITE CLOUD LS} sm LS: tn-gy-bn, dn- ux & argil- shly mdst- Wkst, VPr- NVP, NS. SH- SILTS: dk-lt gy, sm micac. 899' spl} {WHITE CLOUD SD} VRr (~5%) SS-Silty SD CLUST: gy-Tn OSTN, Vfn Gr'd, well sort'd, rnd'd- subrnd, well cmt'd- fribl w/Pr- Fr visbl & aprnt Poro w/sat- subsat FLR & STN, VSI-SI SFO- filmy, Gsy.	865' (+511) WHITE CLOUD LS 877' (+499) WHITE CLOUD SD {VSI-SI SFO)
-c-jet900	930' spl} SILTY SH: It-dk gy, sm micac.	
	962' spl} Abndt LS: gy-wh & tn, dn Mdst- Wkst, sm fn-mdx- 2Rx, subchlky to grnlr- dn Pkst.	
-950	993' spl} SH: gy & It gy SILTS & LS: gy, dn Mdst- Wkst & tn-gy mot Pkst, prt argil, VPr- NVP.	
-c-	1024' spl} SH- SILTS: dk-lt gy, micac, sm sndy, VRr OSTN- FLR- SFO & Cut.	
-1000	1024' spl} VRr (<5%) Silty SD CLUST: gy-Tn OSTN, Vfn Gr'd, silty, well sort'd, well cmt'd- subfribl w/Pr visbl Porosilty w/spt'd- sat FLR & It Tn OSTN, VSI- SI SFO-flmy,Gsy & SI Odor.	{VSI- SI SFO)
	1055' spl} ~40% SH: md gy, micac & silty.	
	1055' spl} Abndt (~60%) LS: wh-gy-tn, fos, prt chlky Pkst-Wkst, fusl w/Pr fosmldc Poro w/NSFO.	
-1050	1086' spl} LS: AA, sm gy, argil & pyrtc Wkst- Pkst.	

	1086' spl} SILTS- SH: dk-lt gy, micac, sm calc.	
	1086' spl} SH- SILTS: gy-blk.	
	1119' spl} LS: tn-gy-bn, sm mot, ux- fnx Wkst- Pkst, Sl	{VSI SFO}
-1100	fos, Pred dn & argil, VRr (<5%) w/Pr- Fr pp- vug Poro, IGr Poro, IX Poro w/spt'd- subsat STN- FLR, VSI SFO & Cut. SH: gy-blk, micac, sm calc.	
1100	on. gy bik, micac, sin calc.	
0		
	1148' spl} LS: tn-wh, sm mot, Pred dn Wkst- Pkst, ux- fnx, sm fos. Pr- VPr visbl Poro: pp- vug & mldc Poro w/ VRr	(Trc SFO)
	sm fos, Pr- VPr visbl Poro: pp- vug & mldc Poro w/ VRr <2% w/spt'd- subsat STN-FLR, Trc SFO & Cut. >50% SH: gy-blk & gn-gy.	
	3. 3 3.	
-1150		
	1179' spl} VAbndt LS: wh-gy-tn, sm mot, prt chlky Wkst- Pkst w/VPr- Pr visbl IGr Poro: pp Poro w/VRr FLR & Trc	(Trc SFO)
	SFO- STN- Cut.	
- Charles		
	LS: QV-tn-wn, Sm most vvkst- ios Pkst & ux- inxin w/ix	VSI SFO)
	Poro, IGr Poro, VRr <5% w/spt'd- subsat FLR & STN, VSI SFO & Cut.	
-1200		
0		
		
	1241' spl} ~30% SH: Pred dk gy-blk, sm carb.	
	1241 Spij "30 /0 SFI. Fled ak gy-bik, SIII Carb.	
	1241' spl} & LS: gy-tn-wh, sm mot Wkst- fos Pkst & ux-	(1/0/070)
	fnx, Pred Pr visbl Poro & ux- fnxln w/IX Poro & IGr Poro, VRr <5% w/spt'd- subsat FLR- STN, VSI SFO & Cut.	(VSISFO)
	The 1070 World Subsact Lift Strik, Vol Of O & Out.	
	1272' spl} (VRr SH: AA)	
-1250	Abndt LS: wh-tn-gy, prt chlky (sm Vchlky) Wkst- Pkst, sm finx- Mdx's- Trc Crsx- 2Rx; sm Pr- Fr Poro: IX Poro, IGr	(VSISFO)
0 1 1 5 1 1 1 0	Poro, pp- vug Poro, ~10% w/FLR, VSI SFO & STN, Cut.	
	1303' spl} LS: wh-tn-gy, prt chlky & ux- Mdxln, Rr prt	(VCI CI CEO)
	Crsxln- VCrsx- 2Rx, fos Pkst, Fr- VGd Aprint Poro: IX Poro, IGr Poro, vug Poro, aprint Frac Poro, 2Rx, ~20%	(VSI-SI SFO)
	w/ontid ant FLD VCL CLCEO It CTN 9 Cut CLOdox	

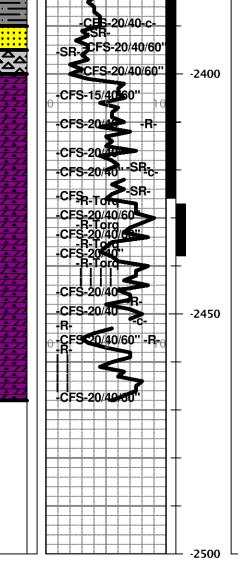
	1300	1334' spl} VAbndt SH & SILTS: (>80%) dk-lt gy, sm micac, sm pyrtc & sm calc. (Rr LS: AA)	
-tc-	-	1365' spl} SH: Pred dk gy- blk, sm gn-gy.	
0 5 10	1350	1365' spl} {OREAD} LS: cm-tn & gy-wh, sm mot Wkst-Pkst, prt chlky, sm dn Mdst, Pred Pr- NVP, NS.	1350' (+26) OREAD
	-	1396' spl} VAbndt LS: wh-tn-gy, prt chlky Pkst- sm grnlr & Wkst & ux- Mdxln w/Crs- VCrs 2Rx w/Pr- Fr visbl Poro: pp- vug Poro, IGr Poro, IX Poro w/sm Gd aprnt Poro-2Rx, Trc STN-FLR & Cut, Trc SFO, Pred NSFO, NO. SI Cherty.	{Trc SFO)
-cLost Girc	1400	1458' spl} {HEEBNER} SH: Abndt blk carb & Vcarb. (sm LS AA) sm LS: gy-bn, cryptrox- ux, dn hd, sm argil- shly & dk gy & gn-gy SH.	1387' (-11) HEEBNER
0 5 10	-	1458' spl} LS: cm-tn, gy-wh, ux- fnx, VRr Mdx- Crsx's-2nd Rx, sm ool & fos Pkst, sm Fr- Gd Poro: pp- vug Poro, mldc Poro, IX Poro, IGr Poro, spt'd- sat FLR, VSI- SI SFO, spt'd- subsat STN, Fr strmg milky Cut.	{VSI- SI SFO)
-c-	-	1489' spl} {DOUGLAS} VAbndt SH: (>90% SH) Pred dk gy, sm blk carb.	1420' (-44) DOUGLAS SH
	1450	1489' spl} sm LS: dk gy, dn Mdst & cryptox- ux argil.	
• -c- • •	-	1489' spl} SH: gy-blk, pyrtc, sm calc & lmy, sm dn & argil LS- Mdst, AA.	
	-		
10-10-10-10-10-10-10-10-10-10-10-10-10-1	1500	1520' & 1551' spls} sm SILTS: dk-lt gy, sm sndy, Vfn- fn Gr'd, sm calc. Abndt dk gy SH: sm calc, sm micac. Sndy calc SILTS: dk-lt gy.	

		{SI SFO)	1590' (-214) IATAN {SI- Fr SFO)		1649' (-273)	LANSING {VSI SFO)	(VSI SFO)	
	1582' spl} SH- SILTS: dk gy- blk, sm calc, sm sndy.	1582' spl} Rr (~10%) LS: wh-gy-tn, sm mot- prt chlky Pkst & ux- Mdxln, VRr Crsx's- 2Rx, Pr- Fr Poro: pp- vug Poro, IX Poro, IGr Poro, spt'd- subsat FLR & It Tn STN, SI SFO. VRr SD CLUST: gy, Vfn- fn Gr'd, silty, Fr Poro, SI- Fr SFO, FLR.		1644' spl} VRr LS: AA w/SFO- FLR- STN- Cut. Pred SH: dk gy, sm dn & argil Mdst- LS w/VPr- NVP.	1675' spl} ~70% SH: dk gy to blk, sm Silts, AA.	1675' spl}~30% {LANSING} LS: wh-gy-tn, prt chlky Wkst-Pkst & ux- fnxln w/Md- VCrsx's- 2Rx, Rr Pr- Fr Poro: pp-vug Poro & IX Poro w/spt'd- sat STN & FLR, VSI SFO& Cut, VSI Odor. 1706' spl} sm SH (~30%): Pred dk gy- blk, AA.	1706' spl} ~70% LS" gy-tn-wh, prt chlky, Pred dn to VPr visbl Poro, <10% w/Pr- Fr Poro: pp Poro, IX Poro, IGr Poro, spt'd- sat STN- FLR, VSI SFO.	
-	-1550	+	1600 	+		+	+	
-C-	10	+C-	10	-C-	C		TC-	
						# H H H H H H H H H H H H H H H H H H H	15 11 11 11 11 11 11 11 11 11 11 11 11 1	
0	0							
			•					

	1768' spl} (VRr LS: AA w/FLR-STN-SFO & Cut) Pred LS: wh-bf-tn, prt chlky Wkst- Pkst, SI Cherty w/Pr- NVP, Pred barren.	
-1750 	1799' spl} LS: wh-tn-gy, mot, prt chlky Wkst- Pkst, sm ux-fnx, Pred VPr- Pr Poro, VRr Fr Poro: pp Poro, IGr Poro, IX Poro, Trc FLR, Trc STN, Trc SFO & Cut. >99% barren w/Pr- NVP.	{Trc SFO)
-1800	1830' spl} ~90% SH & SILTS: gy-blk, sm calc & lmy, SI micac & pyrtc.	
0 5 10	1861' spl} SH-SILTS: dk-md gy, calc, Vfnly sndy.	
	1893' spl} SH: md-dk gy, sm calc.	
	1893' circ spl} SH: AA.	
	1900' spl} SH: dk gy- blk.	
-c-CFS	SH: dk gy, AA, sm calc. SH: AA, VRr pyrtc.	*BIT TRIP* SHS= 1 deg.
· C-	SH: md-dk gy, sm calc, SH: AA, sm pyrtc, sm blk carb.	
	{KANSAS CITY} LS: gy-tn-wh, mot Wkst & dn Mdst, sm	1938' (-562) KANSAS CITY {Trc SFO)

			SFO & Cut.		
	-19	50	LS: wh-bf-Tn OSTN, Pkst- Grst, sm fos, sm ux- fnxln, Fr-Gd IGr Poro, pp Poro, vug Poro, IX Poro w ~ 50% subsat-sat rich It Tn OSTN, spt'd- sat FLR, Fr SFO,Rr Md- Crxs-2Rx w/STN, Fr- Gd strmg to milky Cut, frly Strng Odor.	(Fr SFO)	
	-c-		CHERTY LS: mx- vfnx, Fr pp Poro, IX Poro, ~30 % w/Fr-Gd Poro, subsat- sat STN- FLR- SI SFO & Cut. LS: wh-gy-tn, mot Pkst & Wkst & mx- fnxln. ~10% w/sat STN- FLR, SI SFO. CHERTY: Md 2Rx w/Pr- Fr Poro w/Rr spt'd- sat STN- FLR. Abndt dn to chlky LS & Chert. Pred Barren.	{SI SFO) {SISFO)	
	-20	00	LS: wh-gy-tn, sm rich Tn OSTN, prt chlky, fos Pkst, ux-fnxln, Pr- Fr Poro: pp- vug Poro, IGr Poro, IX Poro, ~5% <10% spt'd- sat STN, VSI - SI SFO. Abndt dn to chlky w/VPr- NVP & barren.	{VSI-SI SFO)	MUD CHECKS by TWISTER MUD
			LS: cm-gy-tn, ux- fnxln, Rr prt Mdx- Crsx- 2Rx, sm Pkst- fos, ~5%-10% w/Fr- VGd Poro: vug Poro, spt'd- subsat STN & FLR, VSI- SI SFO, Abndt dn, sm barren.	{VSI-SI SFO)	Wt 9.55, Vis 33 PV 8, YP 3 pH 9.65, WL 11.9 LCM 2, CI 1480
	-20	50	{STARK} SH: blk carb- Vcarb & gy-blk subcarb. LS: tn-wh, sm dn, ux w/NVP, sm Wkst- Pkst & ux- fnxln w/Pr- Fr Poro: IGr Poro, IX Poro, pp- vug Poro, Trc STN-	2039' (-663) STARK (Trc SFO)	
	0		FLR, Trc SFO & Cut. VCHERTY: wh-cm-tn & blu-gy, opq, shrp. {HUSHPUCKNEY} SH: blk carb & Vcarb. LS: gy-tn-wh, sm Pkst, fn ool & fos & ux- fnxln w/Pr- Fr Poro: IGr Poro, IX Poro, pp Poro, spt'd- subsat FLR & It Tn OSTN, VSI SFO & Cut. Pred dn to chlky w/Pr- NVP,		Wt 9.05, Vis 38.81 PV 11, YP 9 pH 10.22, WL 10.3 LCM 3.5, CI 880
000	-C-		NS. SILTS & SH: It to dk gy, sm calc, sm sndy, Vfn Gr'd. & SH: gy-blk.		
000000000000000000000000000000000000000	SR (SI Rough)	00	LS: wh-tn-gy, mot lt- dk gy ool Pkst w/VPr- Pr visbl Poro. NS. {BASE KANSAS CITY} Abndt SH & SILTS: gy-blk & gn-gy, sm fis, sm calc, sm blk carb, sm pyrtc. (sm LS: AA w/NS)	2100' (-724) BASE KANSAS CITY	
			Incrs blk carb & dk gy SH, AA, pyrtc. SILTS: It-dk gy, Vcalc & sm pyrtc. Pred dk gy SH. SH- SILTS: md-dk gy, sm calc.		
	-21	50	SH: md-dk gy, micac. SILTS- SH: md-dk gy, sm calc & micac & SI pyrtc, Rr blk		
	0 5 10		carb SH.		

	on. gy a girgy, sin pyrte, sin bik caib.		
-cSR- -SR- -SR-	{CHECKERBOARD} LS: tn-gy, dn- ux- Mdx, sm argil-shly, VPr- NVP, Lithogr Mdst.	2172' (-796) CHECKERBOARD	
	SH: gn-gy & gy-blk. SILTY SH & SILTS: lt-dk gy, micac, sm Sl calc.		
-2200 0 5 10	{HEPLER} SILTY SS- SNDY SILTST- SD CLUST: It-md gy, Vfn Gr'd, Pred Vsilty & fn Gr'd, well cmt'd to subfribl, Pr- Fr visbl aprnt Poro. ~40% w/FLR, Fr SFO- filmy Gsy,	2200' (-824) HEPLER SD {Fr SFO)	
	SI- Fr Cut, Fr Odor. {ALTAMONT} LS: cm-gy-tn, Pred dn Mdst & Wkst & Rr Pkst w/Pr- NVP, NS.	2218' (-842) ALTAMONT	
	Abndt SH: dk gy & gn-gy & sm blk carb SH.		
	SH: dk gy & gn-gy, Incrs blk carb.		Wt 9.25, Vis 34.41 PV 9, YP 6 pH 9.81, WL 11.1 LCM 2, CI 950
-2250	SH: Pred dk gy- blk & blk carb.		
-c-	{PAWNEE} LS: gy-tn-wh, Pred dn, sm chlky Mdst & Wkst, Rr mot ool Pkst, Pr- NVP,NS.		
	SH: dk gy-blk & gn-gy, sm calc & lmy SH. LS: dk gy-blk, dn hd ux- cryptox & sm shly. SH: blk carb- Vcarb. (shrp incrs in 2290' spl)		
C-	LS: gy-tn, dn hd, ux- Mdst, sm argil- shly. LS: tn-gy, Pred dn- ux, sm Wkst- Pkst, VPr- NVP, NS.	2297' (-921)	
-2300	{CHEROKEE} SH: blk carb- Vcarb. LS: gy-tn, dn Mdst. SH: gy-blk & gn-gy, fis. SILTY SH: lt-md gy, micac.	CHEROKEE	
	SILTY SH: It-md gy, micac.		
	SILTY micac SH: AA & SH: dk gy- blk , Rr carb SH.		
2250	SD CLUST- SS: tn & cm, Vfn- fn Gr'd, Pred well cmt'd-calc & silty, micac, VPr- Pr visbl Poro, VRr <5% w/FLR, VSI SFO- STN, Cut. (Rr Sd Clust AA w.Pr visbl Poro, subsat STN- SFO- FLR- Cut)	(VSI SFO)	
-2350 0 -c- 10	Pred SH: gy-blk, micac, SI pyrtc, sm blk carb.		DST #1 SIMPSON/ARB 2371'-2426' 30-45-45-60
	SH: AA, Incrs dk gy-blk carb & pyrtc. {ARDMORE} LS: cm-tn-gy, dn Mdst- Wkst, Rr Pkst.	2365' (-989) ARDMORE	1st Op: 2" bldg blo in 6min, 6" in 30 min, no BB
R:	LS: AA & tn-gy dn ux Mdst, sm pyrtc & argil. SH: shrp Incrs blk carb- Vcarb.		2nd Op: 6" in 45 min, No BB
	SILTS: It-md gy, sm calc, sndy, micac. SH: It-dk gy, sm silty, micac, pyrtc, sm blk carb- Vcarb SH		Rec: 120'TF: 45'CO (36 grav) 45' OCM



14%0,86%(() 2390' (-1014) 30'O&WCM {BASAL SIMPSON SD} SS- SD CLUST: bf-Tn-STN, Vfn-B.SIMPSON'SD (10%O,5%W Md Gr'd, well rnd'd- subanglr, subsat- sat FLR- STN, Fr-Gd SFO- Gsy & Cut, VAbndt F. Sd. (Fr-Gd SFO) 75%M) {EROS ARBUCKLE} VAbndt CHERT: It-dk blu-gy-blk & 2395' (-1019) Tool Spl: tn, transl, opq, shrp. {ARBUCKLE} DOLO: bf-tn, Vfn-fnxln, sucro- grnlr, VRr prt Mdxln, Pr- Fr IX Poro, IGr Poro w/subsat- sat FLR & EROS. ARB 19%O,6%W 2400' (-1024) 75%M ARB DOLO IHP: 1143 STN, Fr- Gd SFO & Cut. CHERTY: AA DOLO: cm-bf-Tn-(Fr- Gd SFO) IFP: 28-44 STN, ux- fnxln, grnlr, <5% w/Fr- Gd Poro, fn- mdxln, spt'd-ISIP: 803 sat STN- FLR. VCHERTY: >20% ool w/ STN- FLR- SFO & Cut. CHERTY DOLO: Pred dn, ux- fnx, ~20% fnxln-FFP: 47-71 Mdx 2Rx w/Fr- Gd IX Poro, vug Poro, mldc Poro, subsat-**FSIP: 807** sat FLR-& STN, Fr- Gd SFO- Cut, Abndt uFrc & Edg FLR FHP: 1092 & SISFO & Cut. ool CHERT: AA ~20% Fr- Gd IX Poro, **BHT: 103F** vug Prop, mldc Poro w/sat- subsat STN- FLR- SFO- Cut. DOLO: AA ~10% fnxln, Fr- Gd Poro, SFO- FLR, Cherty. DST#2 Pred dn- ux- fnx, uFrc- Edg, ~20% Pr- Fr IX Por w/STN-**ARBUCKLE** FLR.-FO. DOLO: bf-tn, Pred ux-fnx- dn, ~10% fn- Mdxln, Wt 9.35, Vis 73 Fr Poro, STN- Cut. 2427'-2438' PV 25, YP 23 DOLO: gy-bf-Tn-STN, fn-MdxIn, VRr Crsx-2Rx, 10-30% 30-45-45-60 pH 10.01, WL 6.1 Fr- Gd IX & vug Poro, spt'd- sat STN- FLR, ~30% Fr- Gd 1st Op: few SFO, Odor. DOLO: cm-tn-gy, Pred dn- ux- fnxln w/uFrc & -CM 2, CI 1020 bubbles Edg FLR, <10% fnxln- Mdxln, sucro w/Fr-Gd IX Poro, vug on open & mldc Poro, spt'd-sat STN & FLR, Fr SFO & Cut, Odor. DOLO: cm-bf-gy-tn, ux- fnx, Pred dn, Pr Porp: uIX Poro, 2nd Op: NB (surf.conn.problem) uFrc Poro FLR- SFO. DOLO: bf-gy-tn, ux- fnx, ~10% prt Rec: 65' TF oomldc w/Fr mldc Poro & Pr- Fr IX Poro, spt'd lt STN-40' CO (36.7 grav) FLR, SI- Fr SFO- Cut. DOLO: gy-tn-bf, Pred dn, ux- fnx, sm uFrc & Edg FLR & STN, sm silic DOLO, CHERTY: 25' OCM cm-blu-gy, Pred shrp, ~10% Chert. VRr Edg 2Rx STN. (17%O.83%M) DOLO: AA & dk gy-bn, ux- fnxln, Pred dn- Pr Poro, VSI Tool Spl: pyrtc, CHERTY: AA, sm mot ool Chert, ~10% DOLO 61%O,39%M w/STN- FLR- SI SFO, Pr- Fr Poro: IX & mldc Poro, sm 2468' (-1092) IHP: 1165 uFrc & Edg FLR w/VSI SFO, SI Odor. RTD/LTD IFP: 32-40 ISIP: 388 VESS OIL CORP FFP: 1120 MILLS 'A' #41 FSIP: 201 1980'FSL&330'FWL FHP: 1120 Sec 22-25S-05E **BHT: 104F BUTLER CO., KS** API#15-015-24088



DRILL STEM TEST REPORT

Vess Oil Corp.

22/25S/5E Butler, KS

Mills A #41

1700 Waterfront Parkway Building 500 Wichita, KS 67206

Job Ticket: 63591

DST#: 1

ATTN: Csey Coats/Roger Mar

Test Start: 2017.08.25 @ 23:44:00

GENERAL INFORMATION:

Formation: Simpson Sand & Arbuc

Deviated: Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial) No

Time Tool Opened: 02:10:20

Time Test Ended: 07:38:50 Unit No:

Tester: Jimmy Ricketts

80

Interval: 2371.00 ft (KB) To 2426.00 ft (KB) (TVD)

Total Depth: 2426.00 ft (KB) (TVD)

7.88 inches Hole Condition: Fair

Reference ⊟evations: 1376.00 ft (KB) 1370.00 ft (CF)

Capacity:

6.00 ft KB to GR/CF:

8000.00 psig

Serial #: 9124 Inside

Hole Diameter:

Press@RunDepth: 71.07 psig @ 2372.00 ft (KB)

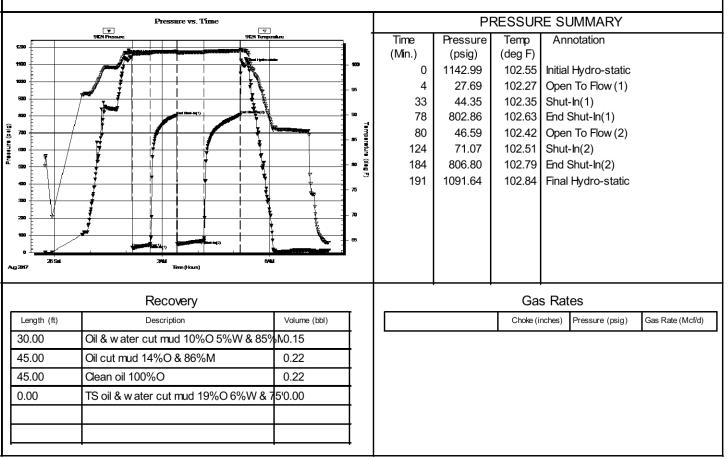
Start Date: 2017.08.25 End Date: 2017.08.26 Last Calib.: 1899.12.30 Start Time: Time On Btm: 23:44:05 End Time: 07:38:50 2017.08.26 @ 02:06:40

Time Off Btm: 2017.08.26 @ 05:16:50

TEST COMMENT: IF - Weak blow building to 6 inches initial flow period.

FF - Weak blow building to 6 inches final flow period.

TS - Oil and water cut mud 19% oil, 6% water and 75% mud.



Ref. No: 63591 Trilobite Testing, Inc Printed: 2017.08.26 @ 08:16:50



DRILL STEM TEST REPORT

Vess Oil Corp.

Mills A #41

1700 Waterfront Parkway Building 500 Wichita, KS 67206

ATTN: Csey Coats/Roger Mar

Job Ticket: 63591

22/25S/5E Butler, KS

Test Start: 2017.08.25 @ 23:44:00

GENERAL INFORMATION:

Formation: Simpson Sand & Arbuc

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)

Time Tool Opened: 02:10:20 80

Time Test Ended: 07:38:50 Unit No:

Tester: Jimmy Ricketts

DST#: 1

Interval: 2371.00 ft (KB) To 2426.00 ft (KB) (TVD)

Total Depth: 2426.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF:

Serial #: 8679 Outside

Press@RunDepth: 2372.00 ft (KB) 8000.00 psig psig @ Capacity:

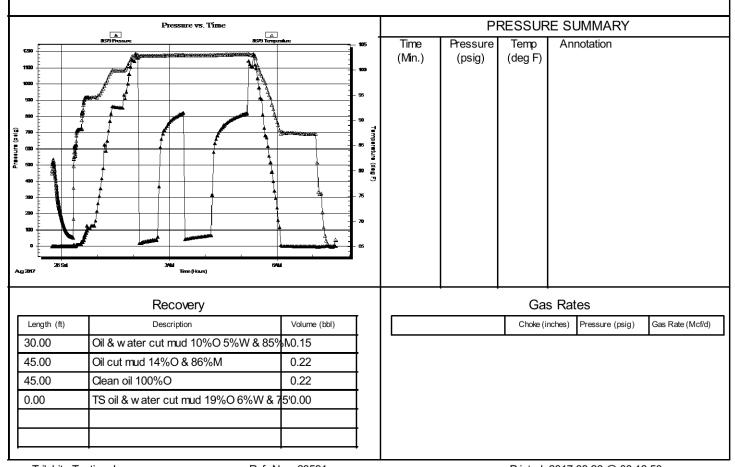
Start Date: 2017.08.25 End Date: 2017.08.26 Last Calib.: 1899.12.30

Start Time: End Time: Time On Btm: 23:44:01 07:38:50 Time Off Btm:

TEST COMMENT: IF - Weak blow building to 6 inches initial flow period.

FF - Weak blow building to 6 inches final flow period.

TS - Oil and water cut mud 19% oil, 6% water and 75% mud.



Ref. No: 63591 Trilobite Testing, Inc Printed: 2017.08.26 @ 08:16:50



DRILL STEM TEST REPORT

TOOL DIAGRAM

Vess Oil Corp.

22/25S/5E Butler, KS

Reference ⊟evations:

1376.00 ft (KB)

1370.00 ft (CF)

6.00 ft

1700 Waterfront Parkway

Mills A #41

Building 500 Wichita, KS 67206

Job Ticket: 63591 **DST#: 1**

ATTN: Csey Coats/Roger Mar Test Start: 2017.08.25 @ 23:44:00

Tool Information

Drill Pipe: 3.34 inches Volume: Length: 2144.00 ft Diameter: 23.23 bbl Tool Weight: 2300.00 lb Heavy Wt. Pipe: Length: 0.00 ft Diameter: inches Volume: 0.00 bbl Weight set on Packer: 22000.00 lb Drill Collar: Length: 207.00 ft Diameter: 2.25 inches Volume: 1.02 bbl Weight to Pull Loose: 45000.00 lb Tool Chased 0.00 ft Total Volume: 24.25 bbl

Drill Pipe Above KB: 8.00 ft String Weight: Initial 42000 00 lb Depth to Top Packer: 2371.00 ft Final 44000.00 lb

Depth to Bottom Packer: ft Interval between Packers: 55.00 ft Tool Length: 83.00 ft

Number of Packers: 2 Diameter: 6.75 inches

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			2344.00		
Shut In Tool	5.00			2349.00		
Hydraulic tool	5.00			2354.00		
Jars	5.00			2359.00		
Safety Joint	3.00			2362.00		
Packer	4.00			2366.00	28.00	Bottom Of Top Packer
Packer	5.00			2371.00		
Stubb	1.00			2372.00		
Recorder	0.00	8679	Outside	2372.00		
Recorder	0.00	9124	Inside	2372.00		
Perforations	15.00			2387.00		
Change Over Sub	0.50			2387.50		
Blank Spacing	29.50			2417.00		
Change Over Sub	1.00			2418.00		
Perforations	3.00			2421.00		
Bullnose	5.00			2426.00	55.00	Bottom Packers & Anchor
Total Tool Length	: 83.00					

Trilobite Testing, Inc Ref. No: 63591 Printed: 2017.08.26 @ 08:16:51



DRILL STEM TEST REPORT

FLUID SUMMARY

Vess Oil Corp.

22/25S/5E Butler, KS

1700 Waterfront Parkway

Mills A #41

bbl

Building 500 Wichita, KS 67206

Job Ticket: 63591

DST#: 1

ATTN: Csey Coats/Roger Mar

Test Start: 2017.08.25 @ 23:44:00

Mud and Cushion Information

Mud Type:Gel ChemCushion Type:Oil API:36.1 deg APIMud Weight:9.00 lb/galCushion Length:ftWater Salinity:ppm

Viscosity:58.00 sec/qtCushion Volume:Water Loss:8.19 in³Gas Cushion Type:

Resistivity: ohm.m. Gas.Qushion.Pressure: ps

Gas Cushion Type:
Gas Cushion Pressure: psig

Salinity: 850.00 ppm
Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Oil & w ater cut mud 10%O 5%W & 85%M	0.148
45.00	Oil cut mud 14%O & 86%M	0.221
45.00	Clean oil 100%O	0.221
0.00	TS oil & water cut mud 19%O 6%W & 75%N	0.000

Total Length: 120.00 ft Total Volume: 0.590 bbl

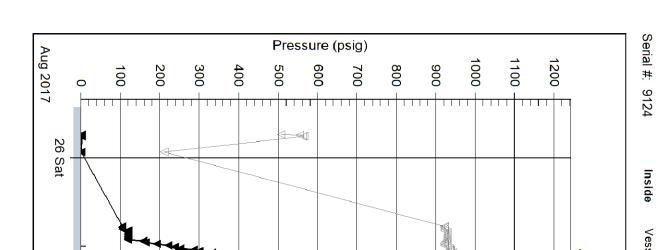
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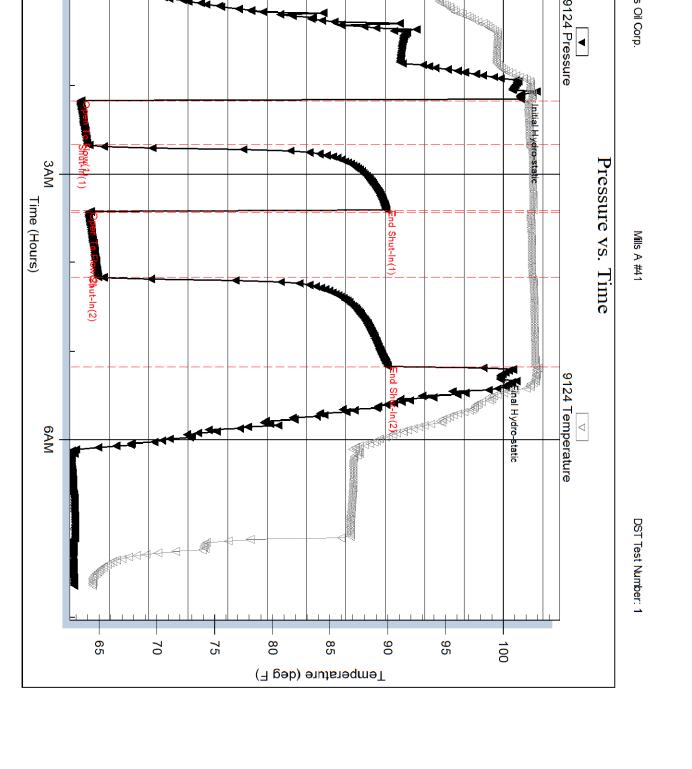
Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 63591 Printed: 2017.08.26 @ 08:16:51



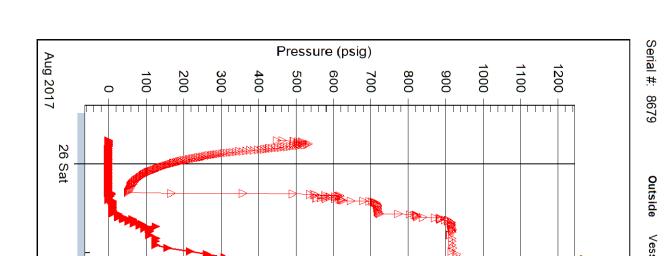


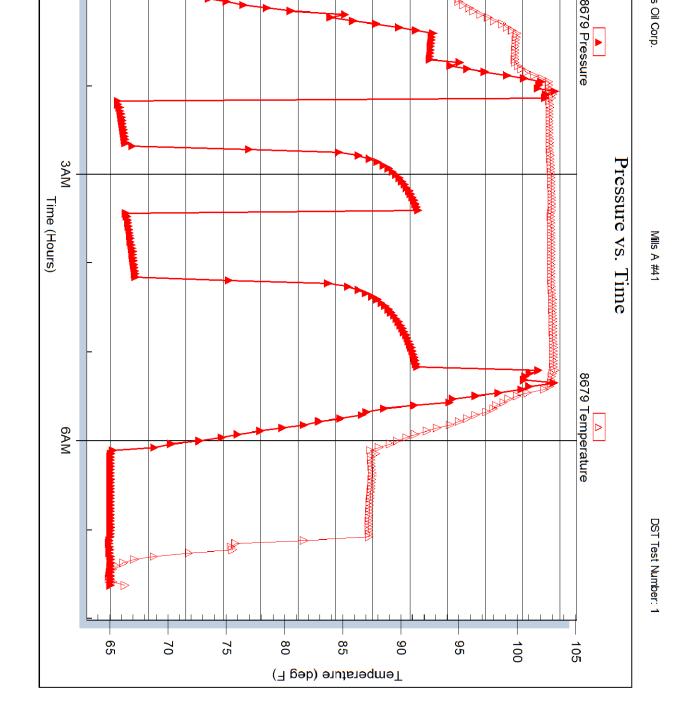


Ref. No: 63591

Printed: 2017.08.26 @ 08:16:51

Trilobite Testing, Inc







Vess Oil Corp.

1700 Waterfront Parkway Building 500

ft (KB)

Wichita, KS 67206

ATTN: Csey Coats/Roger Mar

22/25S/5E Butler, KS

Mills A #41

Job Ticket: 63592

DST#: 2

Test Start: 2017.08.26 @ 18:02:00

GENERAL INFORMATION:

Formation:

Arbuckle

Deviated: No Whipstock:

Time Tool Opened: 19:54:40

Time Test Ended: 01:25:20

Test Type: Conventional Bottom Hole (Initial)

Tester: Jimmy Ricketts

Unit No: 80

Interval: 2427.00 ft (KB) To 2438.00 ft (KB) (TVD)

Total Depth: 2438.00 ft (KB) (TVD)

7.88 inches Hole Condition: Fair

Reference Bevations: 1376.00 ft (KB)

KB to GR/CF:

1370.00 ft (CF) 6.00 ft

Serial #: 9124

Hole Diameter:

Inside

Press@RunDepth: 46.93 psig @ 2428.00 ft (KB)

2017.08.26

End Date:

2017.08.27

Capacity: Last Calib.: 8000.00 psig

1899.12.30

Start Date: Start Time:

18:02:05

End Time:

01:25:20

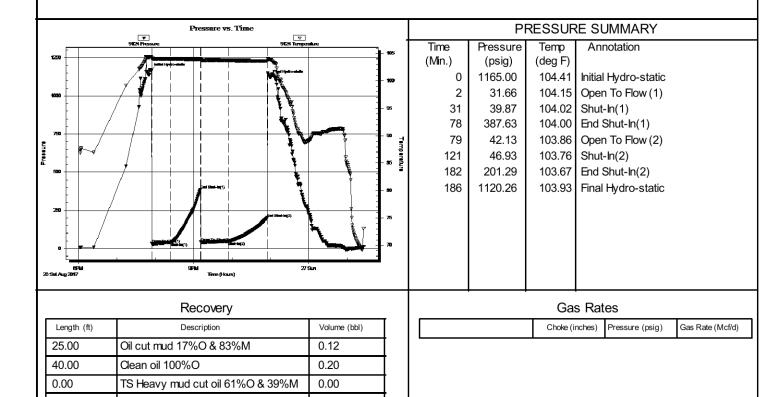
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2017.08.26 @ 19:53:00 2017.08.26 @ 22:59:00

TEST COMMENT: IF - Weak blow dying to no blow initial flow period.

FF - No blow.

TS - Heavy mud cut oil - 61% oil and 39% mud.



Trilobite Testing, Inc Ref. No: 63592 Printed: 2017.08.27 @ 06:37:42



DRILL STEM TEST REPORT

Vess Oil Corp.

Mills A #41

1700 Waterfront Parkway Building 500

Wichita, KS 67206

Job Ticket: 63592

22/25S/5E Butler, KS

DST#: 2

ATTN: Csey Coats/Roger Mar

Test Start: 2017.08.26 @ 18:02:00

GENERAL INFORMATION:

Formation:

Arbuckle

Deviated: Whipstock: No Time Tool Opened: 19:54:40

ft (KB)

Test Type: Conventional Bottom Hole (Initial) Tester: Jimmy Ricketts

Unit No: 80

Time Test Ended: 01:25:20

Interval: 2427.00 ft (KB) To 2438.00 ft (KB) (TVD) Reference Elevations:

1376.00 ft (KB) 1370.00 ft (CF)

Total Depth: 2438.00 ft (KB) (TVD) Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 6.00 ft

Serial #: 8679 Outside

Press@RunDepth: psig @ 2428.00 ft (KB) Capacity: 8000.00 psig

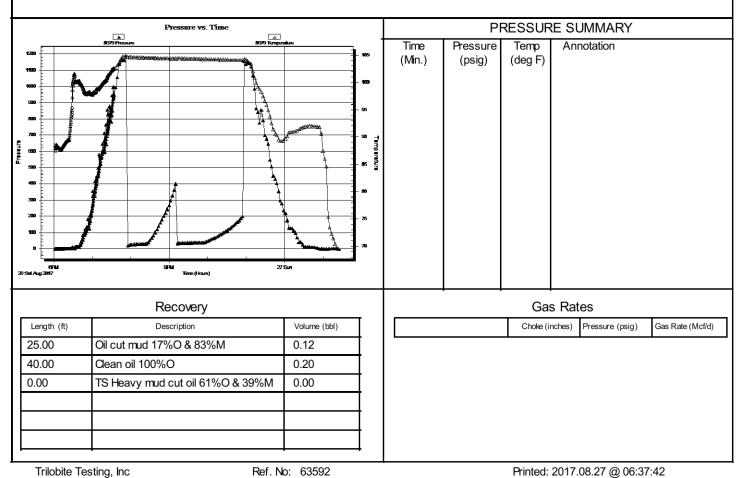
Start Date: 2017.08.26 End Date: 2017.08.27 Last Calib.: 1899.12.30 Start Time: 18:02:01 End Time: 01:25:20 Time On Btm:

Time Off Btm:

TEST COMMENT: IF - Weak blow dying to no blow initial flow period.

FF - No blow.

TS - Heavy mud cut oil - 61% oil and 39% mud.





DRILL STEM TEST REPORT

FLUID SUMMARY

DST#: 2

Vess Oil Corp.

22/25S/5E Butler, KS

1700 Waterfront Parkway Building 500

Mills A #41

Wichita, KS 67206

Job Ticket: 63592

Test Start: 2017.08.26 @ 18:02:00 ATTN: Csey Coats/Roger Mar

Mud and Cushion Information

Mud Type: Gel Chem Cushion Type: Oil API: 36.7 deg API Mud Weight: 9.00 lb/gal **Cushion Length:** ft Water Salinity: ppm

Viscosity: 52.00 sec/qt Cushion Volume: bbl

7.40 in³ Water Loss: Gas Cushion Type: Resistivity:

ohm.m

Gas Cushion Pressure:

Salinity: 940.00 ppm
Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
25.00	Oil cut mud 17%O & 83%M	0.123
40.00	Clean oil 100%O	0.197
0.00	TS Heavy mud cut oil 61%O & 39%M	0.000

Total Length: 65.00 ft Total Volume: 0.320 bbl

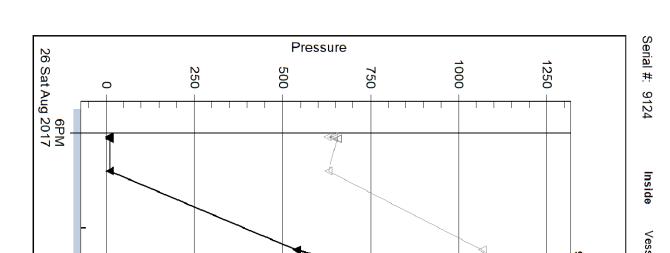
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

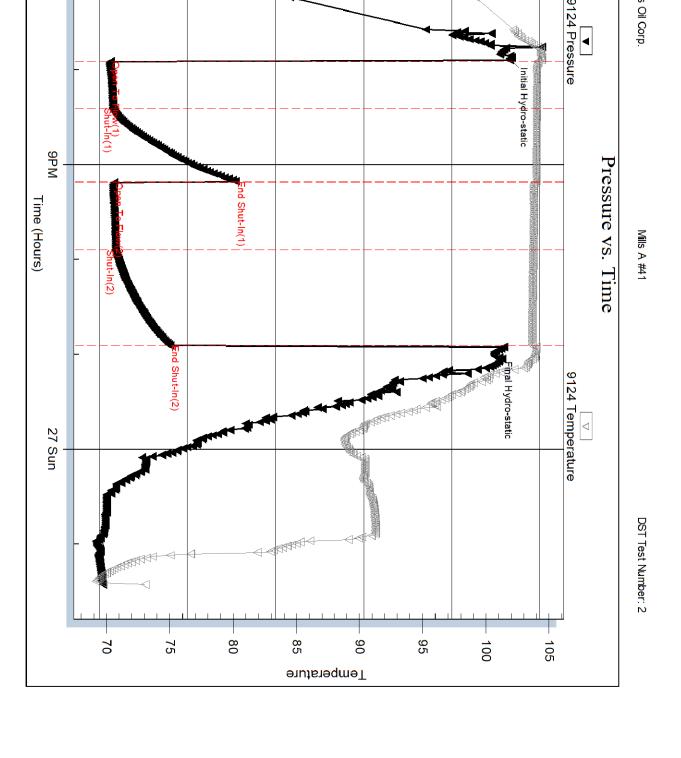
Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 63592 Printed: 2017.08.27 @ 06:37:42





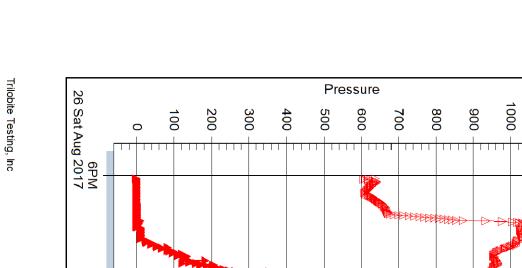


Serial #: 8679

Outside Ves

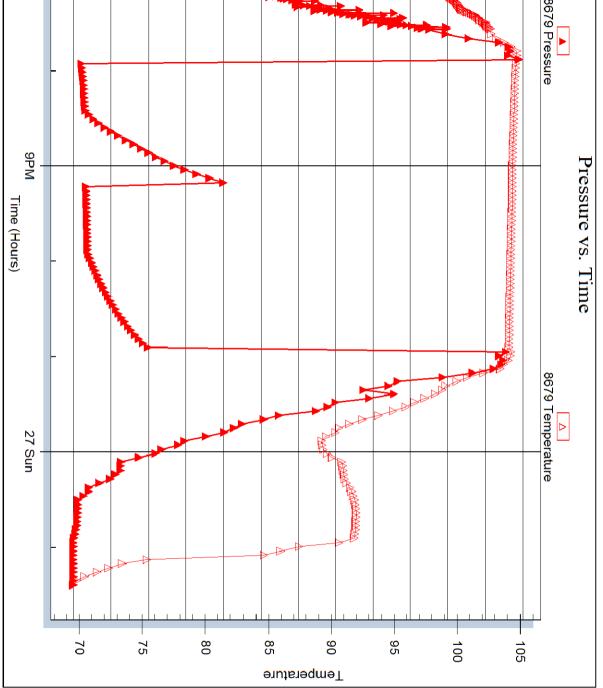
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1200



Ref. No: 63592

Printed: 2017.08.27 @ 06:37:42



Ref. No:

63592



Vess Oil Corp.

Building 500

Wichita, KS 67206

1700 Waterfront Parkway

ATTN: Csey Coats/Roger Mar

22/25S/5E Butler, KS

Mills A #41

Tester:

Job Ticket: 63591

DST#: 1

Test Start: 2017.08.25 @ 23:44:00

GENERAL INFORMATION:

Formation: Simpson Sand & Arbuc

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)

Time Tool Opened: 02:10:20 Time Test Ended: 07:38:50

Interval: 2371.00 ft (KB) To 2426.00 ft (KB) (TVD)

Total Depth: 2426.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Unit No: 80

Jimmy Ricketts

Reference Elevations: 1376.00 ft (KB)

1370.00 ft (CF) KB to GR/CF: 6.00 ft

Serial #: 9124 Inside

Press@RunDepth: 71.07 psig @ 2372.00 ft (KB) Capacity: 8000.00 psig

 Start Date:
 2017.08.25
 End Date:
 2017.08.26
 Last Calib.:
 1899.12.30

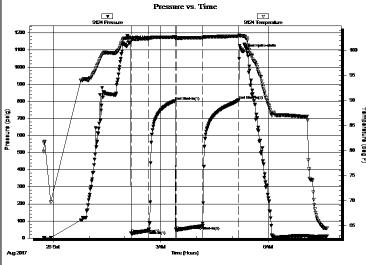
 Start Time:
 23:44:05
 End Time:
 07:38:50
 Time On Btm:
 2017.08.26 @ 02:06:40

 Time Off Btm:
 2017.08.26 @ 05:16:50

TEST COMMENT: IF - Weak blow building to 6 inches initial flow period.

FF - Weak blow building to 6 inches final flow period.

TS - Oil and water cut mud 19% oil, 6% water and 75% mud.



		Г	\L330I\	L SUIVIIVIAITI
	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
	0	1142.99	102.55	Initial Hydro-static
	4	27.69	102.27	Open To Flow (1)
	33	44.35	102.35	Shut-In(1)
	78	802.86	102.63	End Shut-In(1)
	80	46.59	102.42	Open To Flow (2)
	124	71.07	102.51	Shut-In(2)
Ġ.	184	806.80	102.79	End Shut-In(2)
9	191	1091.64	102.84	Final Hydro-static
	1	i .	1	

PRESSURE SUMMARY

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Oil & w ater cut mud 10%O 5%W & 85%	N0.15
45.00	Oil cut mud 14%O & 86%M	0.22
45.00	Clean oil 100%O	0.22
0.00	TS oil & w ater cut mud 19%O 6%W & 7	50.00

Cas rai	.00	
Choko (inohoo)	Drocoure (poig)	Coo Roto (Mof/d)

Gas Rates

Trilobite Testing, Inc Ref. No: 63591 Printed: 2017.08.26 @ 08:16:50



Vess Oil Corp.

1700 Waterfront Parkway

22/25S/5E Butler, KS

DST#: 1

Mills A #41

Building 500 Wichita, KS 67206 Job Ticket: 63591

ATTN: Csey Coats/Roger Mar Test Start: 2017.08.25 @ 23:44:00

GENERAL INFORMATION:

Formation: Simpson Sand & Arbuc

Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)

Time Tool Opened: 02:10:20 Tester: Jimmy Ricketts
Time Test Ended: 07:38:50 Unit No: 80

Interval: 2371.00 ft (KB) To 2426.00 ft (KB) (TVD) Reference Elevations: 1376.00 ft (KB)

Total Depth: 2426.00 ft (KB) (TVD) 1370.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 6.00 ft

Serial #: 8679 Outside

 Press@RunDepth:
 psig
 @
 2372.00 ft (KB)
 Capacity:
 8000.00 psig

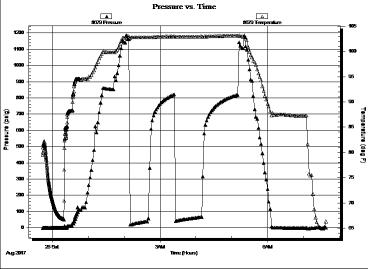
Start Date: 2017.08.25 End Date: 2017.08.26 Last Calib.: 1899.12.30

Start Time: 23:44:01 End Time: 07:38:50 Time On Btm: Time Off Btm:

TEST COMMENT: IF - Weak blow building to 6 inches initial flow period.

FF - Weak blow building to 6 inches final flow period.

TS - Oil and water cut mud 19% oil, 6% water and 75% mud.



Pl	RESSUR	RE SUI	MMARY

				_
Ī	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
ľ				
Tamparatura (dag F)				
2				
3				

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Oil & w ater cut mud 10%O 5%W & 85%	M0.15
45.00	Oil cut mud 14%O & 86%M	0.22
45.00	Clean oil 100%O	0.22
0.00	TS oil & w ater cut mud 19%O 6%W & 7	50.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Trilobite Testing, Inc Ref. No: 63591 Printed: 2017.08.26 @ 08:16:50



TOOL DIAGRAM

Vess Oil Corp.

22/25S/5E Butler, KS

1700 Waterfront Parkway Building 500

Job Ticket: 63591

Mills A #41

DST#: 1

Wichita, KS 67206 ATTN: Csey Coats/Roger Mar

Test Start: 2017.08.25 @ 23:44:00

Tool Information

Drill Pipe: Length: 2144.00 ft Diameter: Heavy Wt. Pipe: Length: 0.00 ft Diameter:

3.34 inches Volume: 23.23 bbl inches Volume: 0.00 bbl Tool Weight: 2300.00 lb Weight set on Packer: 22000.00 lb

Drill Collar: Length: 207.00 ft Diameter: Drill Pipe Above KB: 8.00 ft

2.25 inches Volume: 1.02 bbl Total Volume:

Weight to Pull Loose: 45000.00 lb Tool Chased 0.00 ft

Depth to Top Packer: 2371.00 ft 24.25 bbl

String Weight: Initial 42000.00 lb

Depth to Bottom Packer: ft Interval between Packers: 55.00 ft Final 44000.00 lb

Tool Length: 83.00 ft

Number of Packers: 2 Diameter: 6.75 inches

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			2344.00		
Shut In Tool	5.00			2349.00		
Hydraulic tool	5.00			2354.00		
Jars	5.00			2359.00		
Safety Joint	3.00			2362.00		
Packer	4.00			2366.00	28.00	Bottom Of Top Packer
Packer	5.00			2371.00		
Stubb	1.00			2372.00		
Recorder	0.00	8679	Outside	2372.00		
Recorder	0.00	9124	Inside	2372.00		
Perforations	15.00			2387.00		
Change Over Sub	0.50			2387.50		
Blank Spacing	29.50			2417.00		
Change Over Sub	1.00			2418.00		
Perforations	3.00			2421.00		
Bullnose	5.00			2426.00	55.00	Bottom Packers & Anchor

Total Tool Length: 83.00

Trilobite Testing, Inc Ref. No: 63591 Printed: 2017.08.26 @ 08:16:51



FLUID SUMMARY

Vess Oil Corp.

22/25S/5E Butler, KS

Mills A #41

1700 Waterfront Parkw ay Building 500

ATTN: Csey Coats/Roger Mar

Job Ticket: 63591

DST#: 1

Wichita, KS 67206

Test Start: 2017.08.25 @ 23:44:00

Mud and Cushion Information

Mud Type: Gel Chem Cushion Type: Oil API: 36.1 deg API

Mud Weight: 9.00 lb/gal Cushion Length: ft Water Salinity: ppm

Viscosity: 58.00 sec/qt Cushion Volume: bbl

Water Loss: 8.19 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 850.00 ppm
Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Oil & w ater cut mud 10%O 5%W & 85%M	0.148
45.00	Oil cut mud 14%O & 86%M	0.221
45.00	Clean oil 100%O	0.221
0.00	TS oil & w ater cut mud 19%O 6%W & 75%N	0.000

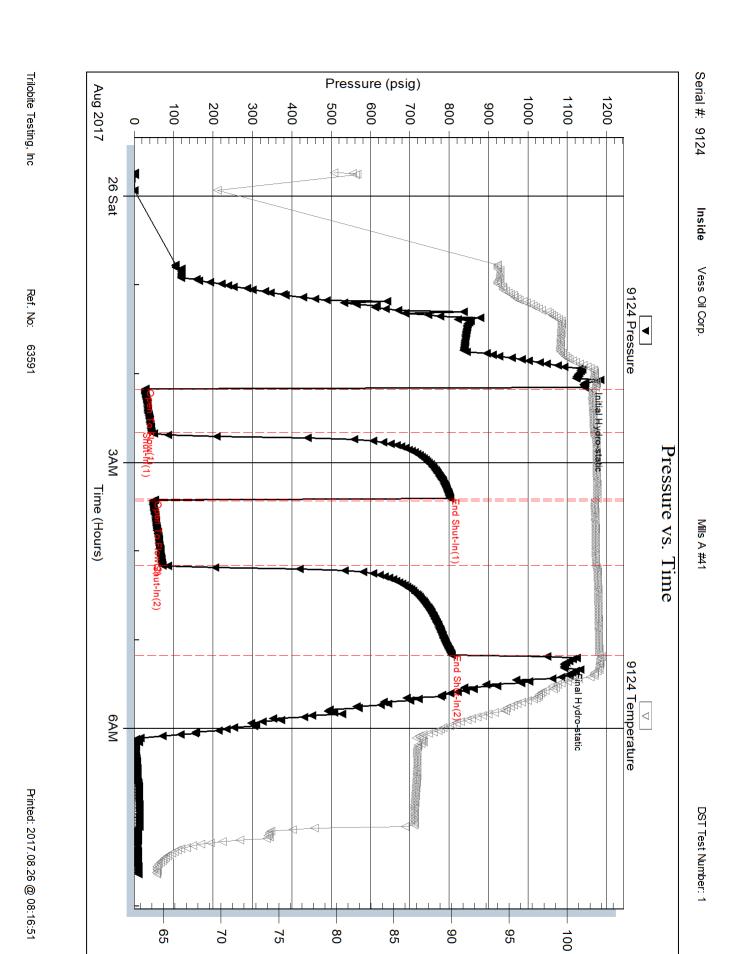
Total Length: 120.00 ft Total Volume: 0.590 bbl

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

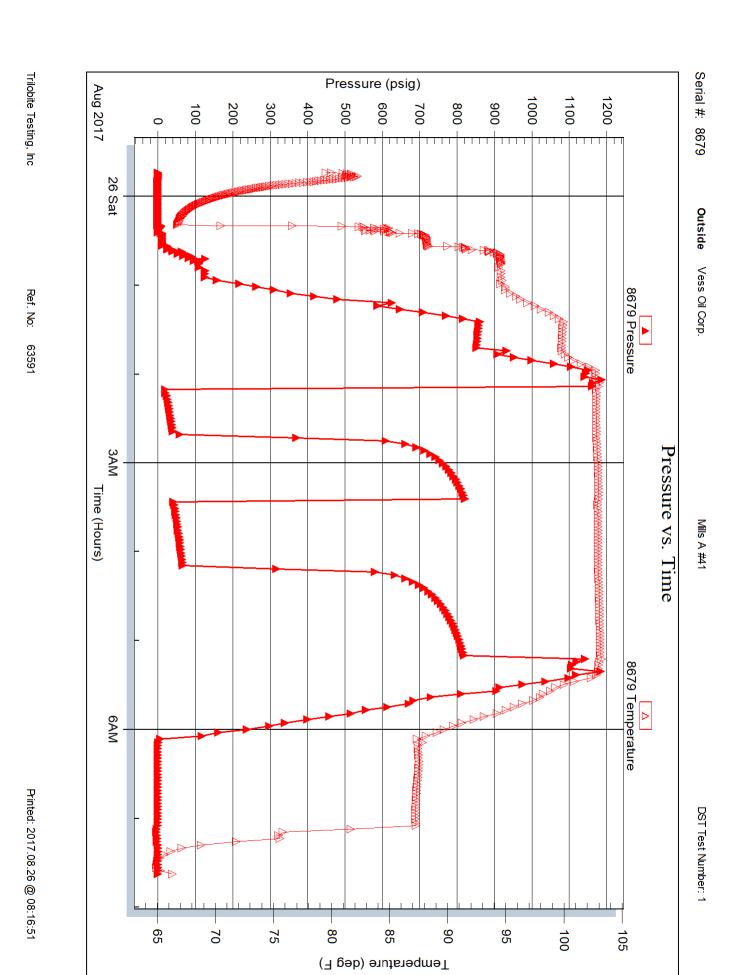
Laboratory Name: Laboratory Location:

Recovery Comments:

Trilobite Testing, Inc Ref. No: 63591 Printed: 2017.08.26 @ 08:16:51



Temperature (deg F)



ATTACHMENT TO ACO-1

Mills A-41 - API #15-015-24088-0000 1980'FSL, 330'FWL

Sec. 22-25S-05E Butler County, KS

	Geo Samples	Log Top
Admire 650	615 +761 GSO	615 +761
White CD LM	865 +511	863 +513
White CD SD	877 +499 SO	876 +500
Howard		915 +461
Oread	1350 +26	1348 + 28
Heebner	1387 -11	1385 -9
Douglas SH	1420 -44	1420 -44
Iatan	1590 -214 SO	1590 -214
Lansing	1649 -273	1649 -273
Lansing Base		1784 -408
KC	1938 -562 SO	1938 -562
Stark	2039 -663	2039 -663
B/KC	2100 -724	2098 -722
Checkerboard	2172 -796	2171 -795
Hepler SD	2200 -824 SO	2202 -826
Altamont	2218 -842	2218 -842
Cherokee	2297 - 921	2297 -921
Ardmore LM	2365 -989	2365 -989
Basal Simp SD	2390 -1014 SO	2390 -1014
Arb eros chert		2395 -1019
Arbuckle Dolo	2400 -1024 SO	2400 -1024
PTD	2468 -1092	2468 -1092

								
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I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



REMIT TO

QES Pressure Pumping LLC Dept:970 P.O.Box 4346 Houston,TX 77210-4346



MAIN OFFICE

P.O.Box884 Chanute, KS 66720 620/431-9210,1-800/467-8676 Fax 620/431-0012

Invoice# 811039

Invoice Date: 08/24/17 Terms: Net 30 Page 1

VESS OIL CORPORATION

1700 WATERFRONT PKWAY BLD 500 WICHITA KS 67206

USA

3166821537

MILLS A #41

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Part No	Description	Quantity	Unit Price	Discount(%)	Total
CE0450	Cement Pump Charge 0 - 1500'	1.000	1,500.0000	45.000	825.00
CE0002	Equipment Mileage Charge - Heavy Equipment	2.000	0.0000	0.000	0.00
CE0711	Minimum Cement Delivery Charge	1.000	660.0000	45.000	363.00
CC5800A	Class A Cement - Sack	150.000	20.0000	45.000	1,650.00
CC5325	Calcium Chloride	350.000	1.2500	45.000	240.63
CC6075	Celloflake	75.000	2.0000	45.000	82.50
				Subtotal ed Amount	5,747.50 2,586.38
			SubTotal Afte		3,161.12
	.======================================	=========	Amount L	:========	aid after 09/23/17

Tax:

133.18

Total:

3,294.31



PRESSURE PUMPING LLC PO Box 884, Chanute, KS 66720

FIELD TICKET & TREATMENT REPO

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account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.