KOLAR Document ID: 1472689

Confiden	tiality Requ	ested:
Yes	No	

KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION Form ACO-1 January 2018 Form must be Typed Form must be Signed All blanks must be Filled

WELL COMPLETION FORM

WELL	HISTORY	- DESCRIP	WEII &	IFASE
	INSIONI			LLASL

OPERATOR: License #	API No.:
Name:	Spot Description:
Address 1:	
Address 2:	Feet from Dorth / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxx) (e.gxxx.xxxx)
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 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 #: SWD Permit #:	
SWD Permit #: EOR Permit #:	Location of fluid disposal if hauled offsite:
GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud 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 Drill Stem Tests Received				
Geologist Report / Mud Logs Received				
UIC Distribution				
ALT I II III Approved by: Date:				

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Operator Nam	ne:			Lease Name:	Well #:
Sec	Twp	S. R	East West	County:	

Page Two

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	rill Stem Tests Taken Yes No (Attach Additional Sheets)				og Formatio	n (Top), Depth a	and Datum	Sample	
Samples Sent to Geolo			⁄es 🗌 No	1	Name	Э		Тор	Datum
Cores Taken Electric Log Run Geologist Report / Mud List All E. Logs Run:		□ Y □ Y	Yes ☐ No Yes ☐ No Yes ☐ No						
		Rep	CASING ort all strings set-c] Ne	w Used rmediate, productio	on. etc.		
Purpose of String	Size Hole Drilled	Siz	ze Casing et (In O.D.)	Weight Lbs. / Ft.		Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
[ADDITIONAL	CEMENTING /	SQU	EEZE RECORD			
Purpose:	Depth Top Bottom	Туре	e of Cement	# Sacks Use	d		Type and	Percent Additives	
Protect Casing Plug Back TD Plug Off Zone									
 Did you perform a hydra Does the volume of the Was the hydraulic fracture 	total base fluid of the	hydraulic fr	acturing treatment		-	☐ Yes ns? ☐ Yes ☐ Yes	No (If No, s	kip questions 2 ar kip question 3) ill out Page Three	
Date of first Production/Inj Injection:	jection or Resumed Pr	oduction/	Producing Meth	iod:		Gas Lift 🗌 O	ther <i>(Explain)</i>		
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wate	er Bb	ls.	Gas-Oil Ratio	Gravity
DISPOSITIO	N OF GAS:		Ν	IETHOD OF COM	F COMPLETION:			PRODUCTION INTERVAL:	
Vented Sold (If vented, Subn	Used on Lease		Open Hole		-	·	nit ACO-4)	Тор	Bottom
	foration Perform Top Botto		Bridge Plug Type	Bridge Plug Set At		Acid,		ementing Squeezend of Material Used)	
TUBING RECORD:	Size:	Set At:		Packer At:					

Form	ACO1 - Well Completion
Operator	Vess Oil Corporation
Well Name	MOLER A 37
Doc ID	1472689

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	252	Class A	150	3% cc 2% gel
Production	7.875	5.5	15.5	2455	HSC		2% gel 6% gyp 5# kolseal .3% FLA 10% salt

I	NDEPE		E R L. MAR oleum geologis		-6970	
	(GIST'S RE		Γ	
COMPANY <u>VESS OF</u> LEASE <u>MOLER 'A'</u> FIELD <u>EL DORAD</u>	#37	DRILLING PORATION	TIME AND SAMPL	KB Mea	asurements Are All	
LOCATION $\frac{1980' \text{ FN}}{32}$ SECTION $\frac{32}{70}$ TO	NL & 2310		RANGE 05E		From KB API # <u>15-015-24126-0000</u>	
$\frac{\text{BUTLER}}{\text{COUNTY}}$		STATE	WANGAG	_		
$\frac{07/16}{2010}$		LLING, RIG #2 COMP <u>07/19</u>	2 //2019	- SUR	CASING FACE 6 jts 8 5/8" 23#/ft LS set @ 252'	
$\frac{07/16/2019}{2467'}$			150 sx Class A 3%CC,2%gel			
EL No Open Hole E-logs	ECTRIC	CAL SURVEYS	5		W-55 set @ 2455' w/150 sx HSC	
FORMATION TOPS		LOG	SAMPLES		CHRONOLOGY	
ADMIRE SAND OREAD HEEBNER DOUGLAS LANSING KANSAS CITY BASE KANSAS CITY CHECKERBOARD HEPLER SD ALTAMONT CHEROKEE ARDMORE VIOLA RTD		650' (+739) 1378' (-10) 1415' (-47) 1452' (-84) 1690' (-322) 1984' (-616) 2145' (-777) 2145' (-777) 2219' (-851) NONE 2265' (-897) 2345' (-977) 2414' (-1046) 2454' (-1086) 2467' (-1099)		07/16/20: 11:30AM @ 252' a gel. Plug 07/17/20: depth: 51 07/18/20: Perform 07/19/20:	19- MIRU C&G Drilling, Rig #2. 19- Finish RU & SPUD 12 1/4" hole @ 1. DTD of 267", set 6 jts 8 5/8", 23#/ft casing nd cemented w/150 sx w/ 3% CC, 2% down @ 5:50PM. 19- Drilled out under surface. Current 15' @ 7:30 AM. 19- Current depth: 2336' @ 7:30AM. bit trip and TIH w/ tri-cone bit. 19- DTD of 2467'. POOH to run DST #1- ud properties: 9.2#/gal, 60 vis, 3#/bbl LCM.	
centralizer dropped ba w/ 150 sx H	s on jts #3, 3, 9 Il, set packer ISC. displaced	9, 11, 16, 25 and 28). Ta shoe, circulated 1.5 hou	", 15.5#/ft MW-55 casing (basket o gged bottom with landing it, picked rs, pumped 12 bbls mud flush and o lug w/1150# @ 11:30PM, 1/8th bbl si. Respectfully submitted, Roger L. Martin, Geologist (wo	l up ~12', cemented back to truck.		
	e s	SAL	MDI E DESCRIPTION		DEMADIZE	
LITE POROSITY DELLINGTONE	DET	SAT	MPLE DESCRIPTION		REMARKS	
0 5 10	250	286' SPL- Frly ab LS: cm-bf-tn, Wks chlky & dn LS- N	ndt metal- steel shavings & sm cr st- fos Pkst w/ sm Fr- Gd Poro w/ SO.	nt fragmnts. NFO & sm	**KELLY DOWN SAMPLES**	
0 5 10	300	319' SPL- LS: sm	AA, Abndt md gy Mdst & calc h	ny SH. NSO.		
		350' SPL- >90% \$ 382' SPL- Pred dk (VRr LS: AA- NS	: gy SH.			
0 5 10	350	414' SPL- Incrs to Poro w/ NFO.	~10% LS: cm-gy, Wkst- Mdst, I	Rr Pkst, Pr- NV		
0 5 10	400	445' SPL- sm LS: Poro w/ NSP, sm i	cm-gy-bf, Wkst- Pkst, sm chlky v Mdst & argil LS w/ Pr- NV Poro,	w/ VPr- Pr visbl NS. & SH, AA.		
	450	477' SPL- Pred SI & LS: cm-gy, Md: NS.	I: sm md gy, calc & lmy & dk gy st & semi-chlky & Rr Wkst- Pkst	- blk, sm pyrtc. , Pr- NV Poro,		
0 5 10		507' SPL- SH- SII sm LS: gy-tn, dn-	LTS- MDST: lt-md gy, sm calc & mx & Mdst, Pred VPr- NV Poro	t lmy. w/ NS.		
5 10	500	w/ Pr- NV Poro, N				
		sm LS: Wkst- Pks 603' SPL- sm LS:	gy-blk, sm pyrtc, sm calc & lmy t & argil Mdst w/ VPr- NV Poro, tn & gy, sm dn ux & sm argil Mo	NS.		
0 5 10 	550	w/ Pr- NV Poro, N	II & gy, sm cale & lmy. ∵ gy, sm cale & lmy.			
		634' DRLG SPL- sm SILTS: gy & g	Pred SH: gy-blk & gn-gy. gn-gy, VRr gy 4n-bn OSTN , sm s	ndy, Vfn- fn		

6 5 -C- 10	600	634' DRLG SPL- Pred SH: gy-blk & gn-gy. sm SILTS: gy & gn-gy, VRr gy :n-bn OSTN , sm sndy, Vfn- fn Gr'd, Rnd'd- subanglr, Pr- Fr visbl Poro in Sndy Silts & Silty Sd Clust: gy-tn-bn, Vfn- fn gr'd, AA, Rnd'd- subanglr, VRr fribl w/Fr- Gd Poro w/ spt'd- sat FLR & STN, SI- Fr SFO & mlky Cut, Trc Gd SFO & strmg Cut, Sl Odor.	Sl- Fr SFO
-C-		634' 15" CIRC SPL- (ADMIRE 650 SAND) Frly Abndt SD CLUST: gy w/ bf-Tn OSTN, Vfn- fn Gr'd, Rnd'd- anglr Gr's, silty, micac & SI calc, sm fribl w/ Fr- Gd IGr Poro w/ frly brt subsat- sat FLR & OSTN (in ~25%) w/ SI- Fr SFO & mlky Cut, Fr Odor. sm F. Sd Gr's.	629' (+739) ADMIRE 650' SAND Sl- Fr SFO
5 10 -cCFS-15"	650	 666' DRLG SPL- Pred gy SH, VRr Sd Clust, AA w/FLR- SFO-STN- Cut. SH: AA, Rr pyrtc. 666' 15" CIRC SPL- Pred SH: gy-blk, VRr LS: tn-gy, dn- ux & Mdst, Trc Sd Clust, AA, Trc FLR- SFO- STN- Cut. 	Trc SFO
-cCFS-15"	700	698' 15" CIRC SPL- SH: AA, Incrs LS: gy-bn, tn, Pred dn- cryptox- ux & argil Mdst w/ VPr- NV Poro, NS.	
-C-		761' SPL- SH: dk- lt gy & gn-gy & sm LS: cm-gy-tn, dn- mx & Mdst w/VPr- NV Poro.	
5 10	750	792' SPL- Shrp Incrs LS: (>60% LS) tn-cm-gy, Pred dn- ux- VRr fnx,, Pr- NV Poro, sm dull FLR, NSO. & SH: gy.	
-c-		824' SPL- VAbndt LS (>80%): bf-tn-wh, Pred dn- ux- Vfnx & chlky, VRr Wkst- Pkst w/VPr- Pr visbl Poro & uFrc & Edg w / FLR & trc SFO & trc Cut.	Trc SFO
• 5 10	800	855' SPL- >80% SH: gy, sm calc & lmy, Rr LS AA, Pred dn, sm argil- shly LS.	
• 5 <u>-c</u> - 10	850		
-C-		 887' SPL- >95% SH: Pred dk gy- blk. 918' SPL- ~30% LS: cm-gy-tn, ux- fnx, Pred dn, Rr wh-chlky, VRr Pkst w/VPr- Pr visbl Poro, Trc Fr- Gd IGr Poro, pp Poro w/ NSO, NC. <10% SS- SD CLUST: gy, silty, Pr- Fr Poro, NS. NC. 	
• 5 10 -c-	900	Pred SH: Vgt'd gy-blk, gn-gy, mrn-rd. 951' SPL- >95% SH: dk-md gy, sm micac.	
	950	982' SPL- Abndt (~50%) LS: gy-tn-wh, sm mot, sm Wkst- Pkst, sm grnlr- argil, Rr chlky, Pred Pr- VPr Poro w/ NS.	
• 5 10		 SH: AA, Vgt'd, Pred dk gy- blk. 1013' SPL- Pred SH- SILTS: dk- lt gy, micac, sm sndy, Vfn Gr'd, VRr SD CLUST: gy-bf, Vfn- fn Gr'd, silty, fribl w/Pr- Fr Poro w/ 	
	1000	NS. 1045' SPL- SILTS- SILTY SH: dk-lt gy, micac, sm sndy.	
-c-		1076' SPL- SILTS- SH: sm lmy, cale, Rr pyrte.	
• 5 10	1050	1108' SPL- Abndt (>60%) LS: tn-gy-wh, sm mot, ux- fnx, & grnlr- fos Pkst w/ sm Fr- Rr Gd Poro: IGr Poro, Ifos Poro w/ NS, prt chlky, NS.	
• 5 10 - c -	1100	1139' SPL- sm LS: AA Shrp Incrs SH: Pred gy- blk, sm micac, sm lmy & cale, VRr pyrtc.	
		1170' SPL- >50% LS: tn-gy-wh, ux- fnx, Sl fos- sm Wkst- Pkst, Pred Pr- NV Poro w/ NS. & SH: gy & sm blk carb SH.	
-c- 5 10	1150	1202' SPL- (~40%) SH: lt-dk gn-gy & blk. 60% LS: cm-tn & gy-wh, ux- fnxln w/VRr mdx's & Wkst- Pkst- fos, sm prt chlky, sm Pr- Fr Poro w/ NSO.	
	1200	1234' SPL- LS: AA & dk gy-bn & tn, ux & Mdst- Wkst, sm Sl fos, Pr- NV Poro, NS. SH: gn-gy, sm calc & lmy.	
5 -c- 10	U	1265' SPL- SH: Vgt'd gn-gy & blk carb & mrn-rd. & ~50% LS: cm-tn-gy-wh, sm mot, ux- fnx & fos Pkst- Wkst, sm chlky, Pred Pr- NV Poro w/ NSO.	
- c -	1250	1297' SPL- Abndt (~50%) SH: gn-gy & mrn-rd Vgt'd, & blk carb. & LS: gy-tn-wh, sm mot Pkst, sm fn ool & fos, Trc fn oomldc, Rr Fr Poro, trc Gd Poro, NSO, Rr wh-chlky, NSFO, trc wk, mlky Cut .	
		1329' SPL- LS: cm-tn-gy-wh, prt chlky & smi-chlky & ux- fnxln, VRr prt mdxln, Pr- Fr Poro: pp- vug Poro, fn moldc & IX poro w/ NSO. Trc mlky wk Cut & dull FLR (~40% Vgt'd SH: AA)	
-c- 0 5 10	1300		
-c-	1350	1360' SPL- VAbndt (~90%) SH: Pred dk gy-blk, sm micac, VSl pyrtc. 1391' SPL- Abndt (~75%) SH: Pred dk gy-blk.	
		25% (OREAD) LS: cm-bf-tn, ux- fnx, VRr prt mdx- 2Rx, sm fn ool & fos Pkst, Pred Pr- Fr Poro w/ NSO. Trc CHERT. Trc mlky Cut, VRr FLR, NSFO .	1378' (-10) OREAD
- c -	1400	1423' SPL- LS: cm-tn-gy, sm mot Pkst, sm fnly grnlr, sm chlky & sm ux- fnxln, VSI Cherty, sm Pr- Fr Poro, NSFO, Trc mlky Cut. 1454' SPL- (HEEBNER) SH: Frly abndt blk carb SH.	1415' (-47) HEEBNER
		 40% LS: cm-tn, ux- fnxln, & Pkst- Sl fos, sm Pr- Fr Poro, Rr Gd Poro: IX Poro, IGr Poro, pp- vug Poro, NSFO, VRR mdx- 2Rx, NSO. NC. 	HEEBNER
0 5 <u>-c-</u> 10	1450	 1484' SPL- (DOUGLAS) VAbndt (~90%) SH & SILTS: gy, sm micac, VRr sndy, sm Sl pyrtc SH & SILTS, Trc Sndy SILTS- Silty SD CLUST w/ VPr- Pr visbl Poro w/ NS. 1525' SPL- ~30% LS: gy-tn-cm, cryptox- ux & argil- shly Mdst, VPr- NV Poro, NS. 	1452' (-84) DOUGLAS
- c - 5 10	1500	 70% SH: gy-blk, sm calc & lmy. 1547' SPL- SH: Abndt blk- dk gy, sm blk carb, sm pyrtc, sm lmy & calc SH. sm LS: gy-blk & tn-bn, mot & argil- fos Wkst- Pkst, VPr- NV Poro, Trc Sndy Silts. NS. 	
-c-		1579' SPL- SH: AA, dk gy-blk & SILTY SH: md-dk gy & SNDY SILTS- SILTY SD CLUST: Vfn Gr'd, VPr- Pr Poro, NS.	
- c - 0 5 10	1550	1611' SPL- ~80% SH: dk gy-blk, micac.	
-C-	1600	Rr LS: cm-tn, ux- fnx, sm fos Pkst- Wkst, sm wh-chlky, VPr- Pr visbl Poro w/ NSO. NC. 1632' SPL- sm LS: AA, NSO. ~50% SH: AA, & Vgt'd & SILTS: AA.	
• 5 10 -c-		~50% SH: AA, & Vgťd & SIL1S: AA. ~50% LS: sm AA, & tn-gy-cm, ux- fnxln & Wkst- Pkst w/ sm VPr- Pr IX Poro, IGr Poro, sm dn- ux & Mdst, NSO. NC.	
- c - 0 5 10	1650	1674' SPL- (IATAN)~30% LS: cm-gy-tn, mot, ux- fnxln, VRr prt mdxln, ool & fos w/ Pred Vpr- Pr Poro w/ NSO. NC. & SH: AA, Pred dk gy- blk, sm pyrtc. trc IX Poro w/ OSTN & Cut. >99% barren. NSFO.	
-c-		1705' SPL- >90% SH: md- dk gy, micac, sm silty, & gy-bn SH. 1736' SPL- <10% SH: gy-blk. >90% (LANSING) LS: wh-ty-tn, mot Pkst- fos & ool, prt chlky, sm dn- mdst- Wkst, <5% w/ VPr- Pr visbl Poro, IGr Poro, Ifos	1690' (-322) LANSING VSI SFO
0 5 <u>-c-</u> 10	1700	Poro, spt'd- subsat FLR & OSTN, VSI SFO, SI Cut, SI Odor. 1769' SPL- ~95% LS: wh-tn, prt chlky & ux- fnxln, sm prt mdxln, sm fos & ool Pkst, Pred Pr- Fr Poro: pp Poro, IGr Poro, IX Poro & fos- mold Poro, <5% w/ spt'd FLR & OSTN, VSI SFO, Trc Gd visbl Poro. >95% barren.	VSI SFO
- c -	1750		
		1800' SPL- LS: Abndt gy-tn-wh, Pred dn- ux & sm argil- shly Mdst- Wkst, Pred Pr- NV Poro, NS. sm SH: dk gy & blk carb.	
- c - 0.510	1800	1832' SPL- ~90% LS: gy-tn-wh, prt chlky, sm Wkst- Pkst, sm Pr- Fr Poro & ux- fnxln, Pr- Fr IX Poro & IGr Poro & pp Poro w/ NSO; Abndt dn- ux & argil Mdst.	
-c-	1850	1863' SPL-~50% LS: gy-tn & wh, sm mot, ux- fnx & argil & dn Mdst, sm shly & argil Wkst- Pkst, VPr- NV Poro, NSO. (Trc FLR- Cut, AA). & SH: gy, calc & lmy.	
• 5 10 -c-		1895' SPL- ~90% SH: Pred gy, sm calc & lmy, sm pyrtc, sm argil- dn LS, AA.	
- C -	1900	1926' SPL- >95% SH: dk gy, calc, Sl micac. 1958' SPL- ~99% SH: dk gy, sm calc, Sl micac.	
-c-			
• 5 10 -c-	1950	1989' SPL- >90% SH: Pred dk gy, sm calc. 2021' SPL- >90% SH: Pred dk gy, sm calc.	
- 	2000	2021' SPL- >90% SH: Pred dk gy, sm calc. (KANSAS CITY) <5% LS: gy-tn-wh, mot Wkst- Pkst w/ Pr- NV Poro, sm chlky, VPr- Pr Poro: pp Poro, IGr Poro, Trc FLR, Trc STN, Trc Cut, NSFO. 2052' SPL- >80% LS: cm-tn, gy-wh, prt chlky, Wkst & Pkst, sm fos & ool, sm VPr- Pr visbl Poro: pp Poro, IGr Poro, Trc FLR, Trc Cut, NSFO. Abndt dn- ux & Mdst- Wkst w/ VPr- NV Poro. sm shly- argil LS.	1984' (-616) KANSAS CITY
		2084' SPL- LS: wh-tn-gy, prt chlky, sm ux- fnxln & fos Pkst & Wkst, sm prt ool, sm Pr- Fr visbl Poro, Trc Gd visbl Poro, NSFO; sm dn & sm argil- shly LS (<10% SH)	
0 5 -c- 10	2050		
-c-	2100	2115' SPL- (STARK) Shrp Incrs SH: Frly Abndt blk carb- VCarb SH. sm gy SH. ~80% LS: wh-gy-tn, prt chlky, sm ux- fnxln, VRr prt mdx- Vcrsx- 2Rx, sm Wkst- Pkst, VPr- Fr Poro, Trc dull FLR, NSFO. Sl CHERTY.	
0 5 10 -c-		2147' SPL- sm blk carb SH sm Cherty LS: wh-bf-gy, prt chlky & mx- fnln & CHERT: cm- lt gy, shrp, opq. Frly abndt SH & SILTS: gy, sm pyrtc.	
- c- 5 10	2150	2178' SPL- Abndt (~70%) LS: gy-tn-cm, mot Pkst & Wkst & ux- fnx, sm argil, Pr- NV Poro, NS.	2145' (-777) BASE KANSAS CITY
-c-		2242' SPL- SH- SILTS: gy-blk, sm calc, Rr pyrtc.	
• 5 10 • • • • •	2200	2272' SPL- (CHECKERBOARD) ~50% LS: tn-gy-wh, cryptox- ux, sm dn hd, sm Wkst- Pkst, ool & fos, sm argil- shly, Pr- NV Poro, NS.	2219' (-851) CHECKERBOARD
- C - 5 10	2250	Poro, NS. SH: gy-blk & gn-gy.	
-c-		2305' SPL- (ALTAMONT)<5% LS: AA, dn & argil. >95% SH: Pred gy, sm calc.	2265' (-897) ALTAMONT
5 <u>-c-</u> 10	2300	 2336' SPL- Pred SH: AA, & mrn-rd & gn-gy, Vgt'd. (PAWNEE)<5% LS; gy-tn Mdst, Trc Pkst. 2336' 20" CIRC SPL- ~40% LS: cm-tn-gy, dn- ux- Vfnx, Mdst-Wkst, VRr Pkst w/ VPr- NV Poro, NS. Abndt SH: gn-gy & blk carb- Vcarb. Abndt SH AA & gn-gy SILTS & LS: gy-tn-cm, Pred dn- ux & mdst- Wkst, VPr- NV Poro. 	
e CFS-20/40"	2350	 & LS: gy-tn-cm, Pred dn- ux & mdst- Wkst, VPr- NV Poro. 2336' 40" CIRC SPL- LS: AA, VPr- NV Poro & SH: AA, Pred LS: tn-gy-cm, dn- ux & Mdst- Wkst, VPr- NV Poro, NS. (CHEROKEE) SH: blk carb- Vcarb, VRr SH, AA. Abndt LS: tn-gy-cm, dn- ux, Mdst- Wkst, VPr- NV Poro, NS. 	**BIT TRIP- TRICONE IN** 2345' (-977) CHEROKEE
0 5 10	U	 Abndt LS: tn-gy-cm, dn- ux, Mdst- Wkst, VPr- NV Poro, NS. VRr blk carb SH. VAbndt SH- SILTS: lt- dk gn-gy, sm calc (VRr LS, AA) SH: AA & dn gy- blk, VRr blk carb. SH: Incrs dk gy- blk. SH: blk subcarb- carb & dk gy, AA. & SILTS: lt- md gy, calc, micac. 	
с- 0 5 10	2400	 SILTS: It- md gy, calc, micac. VRr LS: dn & argil. Pred SH: dk gy- blk, sm pyrtc. ~90% SH: dk gy- blk, subcarb, Rr blk carb. Rr LS: tn-gy, dn- ux- Vfnxln, Mdst- Wkst, VPr- NV Poro. 	241417 4017
-c- vis 33		 (ARDMORE) ~50% LS: tn-gy-cm, Pred dn- ux Mdst- Wkst, VPr-NV Poro, NS. sm dk gy argil Mdst & gy-blk SH- sm carb, VRr blk carb SH. LS: gy, Vargil- silty & SILTS: gy, calc, lmy, micac, & sm md- gy SH. Pred gy-blk SH, sm calc & lmy, sm Silts. Rr CHERT: orng-tn, sm shrp, sm wthr'd, Trc qtzc, NS. VRr dn-argil LS. Pred md gn-gy SH, sm mrn-rd, Rr Sndy Silts; NS. 2455' 20" CIEC SPL (MISENER) VPr (59%) SD CLUST: 	2414' (-1046) ARDMORE DST #1 VIOLA 2417'-2467' 30-45-45-60 1st Op: Wk blo bldg to 8'' 2nd Op: Wk blo bldg to 6'' REC: 225' TF:
	2450	w/Pr- Fr IX Poro, VRr Gd IX Poro, Pred subsat- sat OSTN, brt FLR, Fr- Gd SFO- Gsy & Lively F.Oil, Sl- Gd strmg mlky Cut, Fr Odor. (Abndt SH: AA). 2462' DRLG & 20" SPLS- ~70% (VIOLA) DOLO: Rich tn-bn OSTN, ux- fnxln, Pred Vfnxln, sucro w/Fr- Gd uIX Poro, IX Poro, VRr pp- vug Poro w/ sat Frly brt FLR (wet & dry) & OSTN, Fr- Gd SFO- Gsy & Lively, Fr- Gd strmg & mlky Cut, Strng Odor, SI Cherty. 2467' 20" CIRC SPL- ~70% (VIOLA) DOLO: Rich tn-bn sat OSTN,	90' CI OIL 135' OCM SI- Fr SFO (13%0,87%M) 2454' (-1086) TOOL SPL: VIOLA O&SWCM Fr- Gd SFO (24%0,7%W, 69%M) HP: 1175 RTD 2467' (-1099) HP: 1175 VESS OIL CORP ISIP: 213 MOL FP 'A' #37 FFP: 77-110
	2500	Lively, Fr- Gd strmg & miky Cut, Strng Odor, SI Cherty. 2467 20" CIRC SPL- ~70% (VIOLA) DOLO: Rich tn-bn sat OSTN, ux- fnxln, sucro- Pred Vfnxln w/ SI Incrs in Fr- Gd IX Poro, pp- vug Poro & SI 2nd ReX w/ brt FLR in wet & dry spls, Fr- Gd SFO- Gsy & Lively & sat OSTN- wet & dry, Fr- Gd strmg mlky cut, Strng Odor.	

RILOBITE		STEM TES	T REP	ORT				
		Vess Oil Corporation			32-25S-5E Butler, KS			
ESTING	, INC. 1700 N Wate Building 500	erfront Parkw ay		Мо	ler A #3	7		
		67206-6619		Job	Ticket: 63	3947	DST#: 1	
	ATTN: Dyla	an Klaus/Roger Ma		Test	t Start: 20)19.07.19 @	@ 02:43:00	
GENERAL INFORMATION:	ŀ							
Formation:ViolaDeviated:NoWhipstTime Tool Opened:04:32:00Time Test Ended:10:33:00	tock: ft	(КВ)		Tes Tes Unit	ter:	Convention Jimmy Ricke 85	al Bottom Hole (Ini etts	itial)
Total Depth: 2467.00 ft (K	o 2467.00 ft (KB) (B) (TVD) esHole Condition: Fa			Refe	erence Ele KB t	evations: o GR/CF:	1368.00 ft (K 1359.00 ft (C 9.00 ft	
Start Date: 2019.0 Start Time: 02:4 TEST COMMENT: IF - Weak	17.19 End Da 13:01 End Tin		2019.07.19 10:33:00	Capacity Last Calil Time On Time Off	o.: Btm: 2		8000.00 psig 2019.07.19 0@04:30:00 0@07:37:00	3
X 8369 Pressure	aure vs. Time 5339 Tenpa	nature 105		Pf	RESSUF	RE SUMM	1ARY	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Time (Min.) 0 2 32 77 78 122 183 183 187	Pressure (psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52 1162.17	Temp (deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut-	ro-static Flow (1)) -In(1) Flow (2)) -In(2)	
	Time (Huus)		(Min.) 0 2 32 77 78 122 183	(psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52	(deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut-	ro-static Flow (1)) -In(1) Flow (2)) -In(2)	
HILLIZEP	Time (Hus)		(Min.) 0 2 32 77 78 122 183	(psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52	(deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut- Final Hydr	ro-static Flow (1)) -In(1) Flow (2)) -In(2)	e (Mcf/d)
PEHLIZEP	Time (Hus)	- 50 - 50	(Min.) 0 2 32 77 78 122 183	(psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52	(deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut- Final Hydr	ro-static Flow (1)) ·ln(1) Flow (2)) ·ln(2) ro-static	e (Mcf/d)
spri Mare	Time (Hus)	Volume (bbl) 0.66 0.53	(Min.) 0 2 32 77 78 122 183	(psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52	(deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut- Final Hydr	ro-static Flow (1)) ·ln(1) Flow (2)) ·ln(2) ro-static	e (Mcf/d)
торичу торич	Time (Huus)	v - 55 v	(Min.) 0 2 32 77 78 122 183	(psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52	(deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut- Final Hydr	ro-static Flow (1)) ·ln(1) Flow (2)) ·ln(2) ro-static	: (Mcf/d)
100 1 1 100 1 1	Time (Huus)	Volume (bbl) 0.66 0.53	(Min.) 0 2 32 77 78 122 183	(psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52	(deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut- Final Hydr	ro-static Flow (1)) ·ln(1) Flow (2)) ·ln(2) ro-static	: (Mcf/d)
100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100	Time (Huus)	Volume (bbl) 0.66 0.53	(Min.) 0 2 32 77 78 122 183	(psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52	(deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut- Final Hydr	ro-static Flow (1)) ·ln(1) Flow (2)) ·ln(2) ro-static	: (Mcf/d)



DRILL STEM TEST REPORT

Prepared For: Vess Oil Corporation

1700 N Waterfront Parkway Building 500 Wichita, KS 67206-6619

ATTN: Dylan Klaus/Roger Ma

Moler A #37

32-25S-5E Butler, KS

Start Date:	2019.07.19 @	02:43:00	
End Date:	2019.07.19 @	10:33:00	
Job Ticket #:	63947	DST #:	1

Trilobite Testing, Inc 1515 Commerce Parkway Hays, KS 67601 ph: 785-625-4778 fax: 785-625-5620

RILOBITE		DRILL STEM TEST REPO				DRT			
	Vess Oil Co	rporation		32-	25S-5E	Butler, K	S		
ESTING	, INC. 1700 N Wate Building 500	erfront Parkw ay		Мо	ler A #3	7			
		67206-6619		Job Ticket: 63947			DST#: 1		
	ATTN: Dyla	an Klaus/Roger Ma		Test	t Start: 20)19.07.19 @	@ 02:43:00		
GENERAL INFORMATION:	ŀ								
Formation:ViolaDeviated:NoWhipstTime Tool Opened:04:32:00Time Test Ended:10:33:00	tock: ft	(КВ)		Tes Tes Unit	ter:	Convention Jimmy Ricke 85	al Bottom Hole (Ini etts	itial)	
Total Depth: 2467.00 ft (K	o 2467.00 ft (KB) (B) (TVD) esHole Condition: Fa			Refe	erence Ele KB t	evations: o GR/CF:	1368.00 ft (K 1359.00 ft (C 9.00 ft		
Start Date: 2019.0 Start Time: 02:4 TEST COMMENT: IF - Weak	17.19 End Da 13:01 End Tin		2019.07.19 10:33:00	Capacity Last Calil Time On Time Off	o.: Btm: 2		8000.00 psig 2019.07.19 0@04:30:00 0@07:37:00	3	
X 8369 Pressure	aure vs. Time 5339 Tenpa	ndure 105		Pf	RESSUF	RE SUMM	1ARY		
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Time (Min.) 0 2 32 77 78 122 183 183 187	Pressure (psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52 1162.17	Temp (deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut-	ro-static Flow (1)) -In(1) Flow (2)) -In(2)		
	Time (Huus)		(Min.) 0 2 32 77 78 122 183	(psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52	(deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut-	ro-static Flow (1)) -In(1) Flow (2)) -In(2)		
HILLIZEP	Time (Hus)		(Min.) 0 2 32 77 78 122 183	(psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52	(deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut- Final Hydr	ro-static Flow (1)) -In(1) Flow (2)) -In(2)	e (Mcf/d)	
PEHLIZEP	Time (Hus)	- 50 - 50	(Min.) 0 2 32 77 78 122 183	(psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52	(deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut- Final Hydr	ro-static Flow (1)) ·ln(1) Flow (2)) ·ln(2) ro-static	e (Mcf/d)	
spri Mare	Time (Hus)	Volume (bbl) 0.66 0.53	(Min.) 0 2 32 77 78 122 183	(psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52	(deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut- Final Hydr	ro-static Flow (1)) ·ln(1) Flow (2)) ·ln(2) ro-static	e (Mcf/d)	
торичу торич	Time (Huus)	v - 55 v	(Min.) 0 2 32 77 78 122 183	(psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52	(deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut- Final Hydr	ro-static Flow (1)) ·ln(1) Flow (2)) ·ln(2) ro-static	: (Mcf/d)	
100 1 1 100 1 1	Time (Huus)	Volume (bbl) 0.66 0.53	(Min.) 0 2 32 77 78 122 183	(psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52	(deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut- Final Hydr	ro-static Flow (1)) ·ln(1) Flow (2)) ·ln(2) ro-static	: (Mcf/d)	
100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100 100	Time (Huus)	Volume (bbl) 0.66 0.53	(Min.) 0 2 32 77 78 122 183	(psig) 1175.38 24.74 69.42 213.25 76.71 110.27 214.52	(deg F) 102.66 102.25 102.93 103.21 103.18 103.42 103.62 103.95	Initial Hydr Open To F Shut-In(1) End Shut- Open To F Shut-In(2) End Shut- Final Hydr	ro-static Flow (1)) ·ln(1) Flow (2)) ·ln(2) ro-static	: (Mcf/d)	

	ILOBITE	DRILL STEM TE	EST REP	DRT			
		Vess Oil Corporation		32-258-51	E Butler, K	S	
	ESTING , INC.	1700 N Waterfront Parkw ay		Moler A	#37		
		Building 500 Wichita, KS 67206-6619		Job Ticket:	63947	DST#: 1	
		ATTN: Dylan Klaus/Roger M	<i>l</i> a	Test Start:	2019.07.19 @	02:43:00	
GENERAL INFO	RMATION:						
		ft (KB)		Test Type: Tester: Unit No:	Convention Jimmy Ricke 65	al Bottom Hol etts	e (Initial)
	2467.00 ft (KB) (T	67.00 ft (KB) (TVD) /D) ∋ Condition: Fair		Reference K	Elevations: B to GR/CF:	1368.00 1359.00 9.00	ft (CF)
Serial #: 8846	Outside						
Press@RunDepth: Start Date: Start Time:	psig 2019.07.19 02:43:01	@ 2429.00 ft (KB) End Date: End Time:	2019.07.19 10:32:50	Capacity: Last Calib.: Time On Btm: Time Off Btm:		8000.00 2019.07.19	psig
1100	Pressure vs. 1	8846 Tempenture	Time (Min.)	PRESSU Pressure Temp (psig) (deg F			
				(1-3)	,		
			16				
	Time (Hours)				as Rates		
	OM THE (Han) Recovery Description				Gas Rates	ure (psig) Ga	s Rate (Mcf/d)
400 300 200 0 0 0 3764 PFri JJ 2079 200 100 100 100 100 100 100 100	Recovery					ure (psig) Ga	s Rate (Mcf/d)
оо о то о о с то о с то о с то о с то о с то о с то о с то о с то о с то о с то о с то то то то то то то то то то	Time (Huss) Recovery Description	verified and the second				ure (psig) Ga	s Rate (Mcf/d)
Length (ft) 135.00 OCM 90.00 Clean	Time (Huns) Recovery Description 133%O & 87% M	Volume (bbl) 0.66 0.53				ure (psig) Ga	s Rate (Mcf/d)
Length (ft) 135.00 OCM 90.00 Clean	Recovery Description 113%O & 87% M n Oil 100% O	Volume (bbl) 0.66 0.53				ure (psig) Ga	s Rate (Mcf/d)

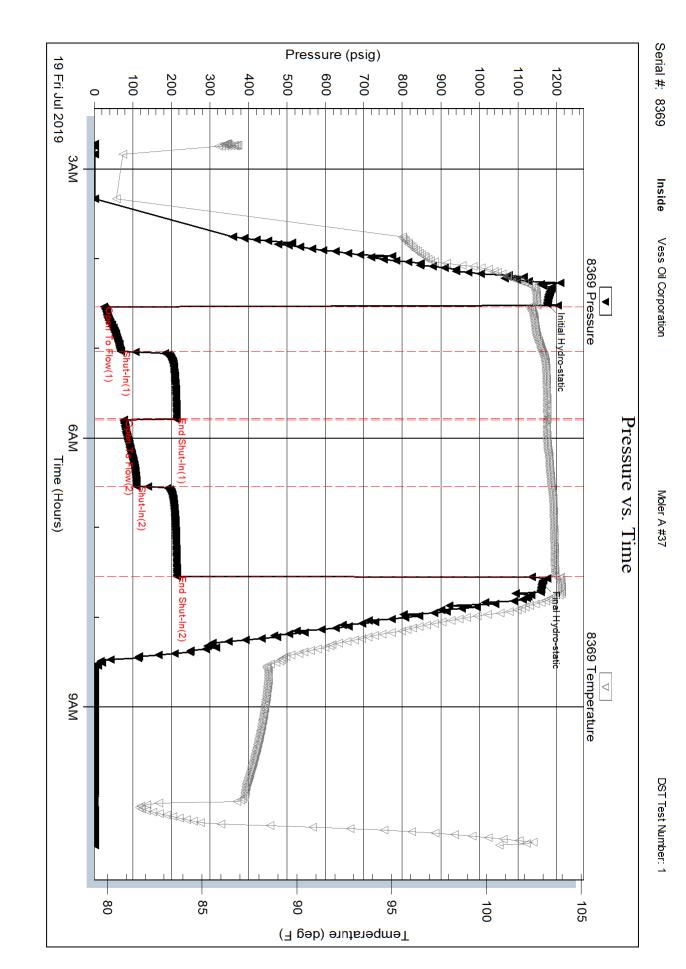
	RITE				REPOR			TOOL DIAGRA
		Vess O	il Corporation			32-25S-5E But	tler, K	S
ES I	TING , INC	17001	Waterfront Pa	arkw ay		Moler A #37		
		Building Wichita	500 KS 67206-66	619		Job Ticket: 63947	7	DST#:1
			Dylan Klaus/			Test Start: 2019.	.07.19 @	02:43:00
Tool Information		ļ						
Drill Pipe: Length:	2206.00 ft	Diameter:	3.80 ind	ches Volume:	30.94 bbl	Tool Weight:		2500.00 lb
Heavy Wt. Pipe: Length:	0.00 ft	Diameter:	inc	ches Volume:	0.00 bbl	Weight set on	Packer:	23000.00 lb
Drill Collar: Length:	215.00 ft	Diameter:	2.25 inc	ches Volume:	1.06 bbl	Weight to Pull	Loose:	59000.00 lb
	04.00.5		-	Total Volume:	32.00 bbl	- Tool Chased		1.00 ft
Drill Pipe Above KB:	31.00 ft					String Weight:	Initial	56000.00 lb
Depth to Top Packer:	2417.00 ft						Final	57000.00 lb
Depth to Bottom Packer: Interval betw een Packers:	ft 50.00 ft							
	50.00 ft 77.00 ft							
Tool Length: Number of Packers:	77.00 ft 2	Diameter:	6.75 ind	choc				
Tool Comments:	Z	Diameter.	0.75 110	ches				
T . I.B			0	D				
	Le	• • •	Serial No.	Position		Accum. Lengths		
Tool Description Change Over Sub Shut In Tool	Le	ngth (ft) 1.00 5.00	Serial No.	Position	Depth (ft) 2391.00 2396.00	Accum. Lengths		
Change Over Sub Shut In Tool	Le	1.00	Serial No.	Position	2391.00	Accum. Lengths		
Change Over Sub	Le	1.00 5.00	Serial No.	Position	2391.00 2396.00	Accum. Lengths		
Change Over Sub Shut In Tool Hydraulic tool Jars	Le	1.00 5.00 5.00	Serial No.	Position	2391.00 2396.00 2401.00	Accum. Lengths		
Change Over Sub Shut In Tool Hydraulic tool Jars Safety Joint	Le	1.00 5.00 5.00 5.00	Serial No.	Position	2391.00 2396.00 2401.00 2406.00	Accum. Lengths		Bottom Of Top Packe
Change Over Sub Shut In Tool Hydraulic tool Jars Safety Joint Packer	Le	1.00 5.00 5.00 5.00 2.00	Serial No.	Position	2391.00 2396.00 2401.00 2406.00 2408.00			Bottom Of Top Packe
Change Over Sub Shut In Tool Hydraulic tool	Le	1.00 5.00 5.00 5.00 2.00 5.00	Serial No.	Position	2391.00 2396.00 2401.00 2406.00 2408.00 2413.00			Bottom Of Top Packe
Change Over Sub Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer	Le	1.00 5.00 5.00 5.00 2.00 5.00 4.00	Serial No.	Position	2391.00 2396.00 2401.00 2406.00 2408.00 2413.00 2417.00			Bottom Of Top Packe
Change Over Sub Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb	Le	1.00 5.00 5.00 2.00 5.00 4.00 1.00	Serial No.	Position	2391.00 2396.00 2401.00 2406.00 2408.00 2413.00 2417.00 2418.00			Bottom Of Top Packe
Change Over Sub Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations	Le	1.00 5.00 5.00 2.00 5.00 4.00 1.00	Serial No.	Position	2391.00 2396.00 2401.00 2406.00 2408.00 2413.00 2417.00 2418.00 2428.00			Bottom Of Top Packe
Change Over Sub Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations change Over Sub Recorder	Le	1.00 5.00 5.00 2.00 5.00 4.00 1.00 1.00 1.00			2391.00 2396.00 2401.00 2406.00 2408.00 2413.00 2413.00 2417.00 2418.00 2428.00 2429.00			Bottom Of Top Packe
Change Over Sub Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations change Over Sub Recorder Recorder	Le	1.00 5.00 5.00 2.00 5.00 4.00 1.00 1.00 0.00	8369	Inside	2391.00 2396.00 2401.00 2406.00 2408.00 2413.00 2413.00 2417.00 2418.00 2428.00 2429.00 2429.00			Bottom Of Top Packe
Change Over Sub Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations change Over Sub Recorder Recorder Blank Spacing	Le	1.00 5.00 5.00 2.00 5.00 4.00 1.00 1.00 1.00 0.00 0.00	8369	Inside	2391.00 2396.00 2401.00 2406.00 2408.00 2413.00 2413.00 2417.00 2418.00 2428.00 2429.00 2429.00 2429.00			Bottom Of Top Packe
Change Over Sub Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations change Over Sub	Le	1.00 5.00 5.00 2.00 5.00 4.00 1.00 1.00 1.00 0.00 31.00	8369	Inside	2391.00 2396.00 2401.00 2406.00 2408.00 2413.00 2413.00 2413.00 2418.00 2428.00 2429.00 2429.00 2429.00 2429.00			Bottom Of Top Packe
Change Over Sub Shut In Tool Hydraulic tool Jars Safety Joint Packer Packer Stubb Perforations change Over Sub Recorder Recorder Blank Spacing Change Over Sub	Le	1.00 5.00 5.00 5.00 2.00 5.00 4.00 1.00 10.00 1.00 31.00 1.00	8369	Inside	2391.00 2396.00 2401.00 2406.00 2408.00 2413.00 2413.00 2417.00 2418.00 2428.00 2429.00 2429.00 2429.00 2429.00 2460.00 2461.00		Во	Bottom Of Top Packe

Rill	BITE TING , INC.		LL STEM TEST REPO			UID SUMMAR
		Vess	Dil Corporation	32-25S-5E	Butler, KS	
			Waterfront Parkw ay	Moler A #	\$37	
		Building 500 Wichita, KS 67206-6619		Job Ticket: (63947 [DST#: 1
			ATTN: Dylan Klaus/Roger Ma		2019.07.19 @ 02:4	3:00
ud and Cushion I	nformation					
ıd Type: Gel Chem			Cushion Type:		Oil API:	39 deg API
	0 lb/gal		Cushion Length:	ft	Water Salinity:	ppm
	0 sec/qt		Cushion Volume:	bbl		
ater Loss: 11.1			Gas Cushion Type:			
sistivity:	ohm.m		Gas Cushion Pressure:	psig		
linity: 1100.0	0 ppm			1 0		
er Cake:	inches					
covery Informati	on					
	·		Recovery Table		-	
	Leng ft	th	Description	Volume bbl		
		135.00	OCM 13%O & 87% M	0.66	-	
		90.00	Clean Oil 100% O	0.53		
		0.00	TS O&SWCM 24%O 7%W 69%M	0.00	0	
	Total Length:	225	5.00 ft Total Volume: 1.198 l	bbl		
	Total Length: Num Fluid Samp Laboratory Nar	oles: 0	Num Gas Bombs: 0	bbl Serial #	t:	
	Num Fluid Samp Laboratory Nan	oles:0 ne:			<i>t</i> :	
	Num Fluid Samp	oles:0 ne:	Num Gas Bombs: 0		<i>t</i> :	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ.	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ:	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ:	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ:	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ:	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ:	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		t :	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ:	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		<i>t</i> :	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ:	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		<i>t</i> :	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ:	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ:	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ:	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ:	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		<i>t</i> :	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		<i>t</i> :	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		<i>t</i> :	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		<i>t</i> :	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ:	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ:	
	Num Fluid Samp Laboratory Nan	oles:0 ne:	Num Gas Bombs: 0		ŧ:	

Printed: 2019.07.22 @ 15:47:46

Ref. No: 63947

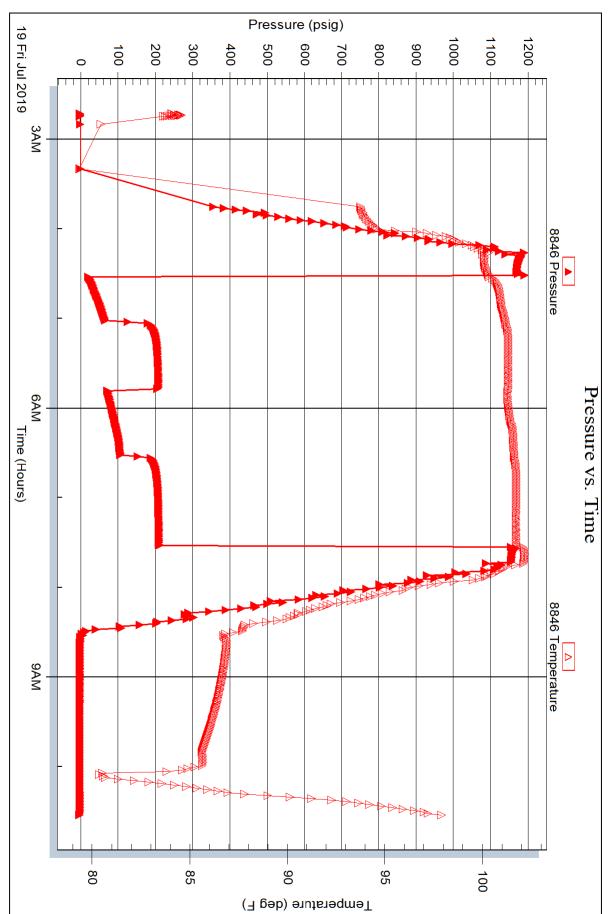




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Ref. No: 63947

Trilobite Testing, Inc



Outside Vess Oil Corporation

Serial #: 8846

Moler A #37

DST Test Number: 1

410 ATTE AND	NO	t Ticket 63947	
Co. Rep/Geo. Dylan Klaus/Roger Martin	Test No Elevation dg 500 Wich Rig C+6 H Co Co Co	_ Date <u>7-19</u> К <u>8</u> 1359 	- 19 GL G-GGI S
Anchor Length Sol Drill Pipe Run Top Packer Depth 2412 Drill Collars Run Bottom Packer Depth 2417 Wt. Pipe Run Total Depth 2467 Chlorides	8 inches IFP	Mud Wt. 9,3 Vis 44 WL <u>(1,2</u> LCM	
Rec 90 Feet of Clean Oil Rec 135 Feet of OCM Rec T5 Feet of D+SWCM Rec Feet of Feet of	%gas 100 %oil %gas 13 %oil %gas 24 %oil %gas %oil	%water %water 7 %water %water	%mud 7%mud 9%mud %mud

nec	100101	the second second	the second second second	70903	7801	7011/21(01	7011100
Rec_TS	Feet of	DtSWCN	1	%gas	24 %oil	7 %water 6	9 %mud
Rec	Feet of			%gas	%oil	%water	%mud
Rec	Feet of			%gas	%oil	%water	%mud
Rec Total	25	внт 104	Gravity 39.0	API RW	@°F Ch	lorides	ppm
(A) Initial Hydrosta	atic		Test 1200	· .	T-On Locati	ion 015	0
(B) First Initial Flo	w		E Jars 250		T-Started	0 24	3
(C) First Final Flor	w		Safety Joint	75	T-Open	043	12
(D) Initial Shut-In_			Circ Sub			073	
(E) Second Initial	Flow		D Hourly Standby		T-Out	103	ð
(F) Second Final	Flow		Mileage21	1 0	2 Comments		
(G) Final Shut-In							
						Shale Packer	×
						Packer	
Initial Open	30						
Initial Shut-In	45					opies 0	
Final Flow	45						
Final Shut-In	40	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	and -				
5	2	11	Sub Total 173			040	
Approved By	Soge	r 11/2	MAN 0	Our Representative_	Jung	purete	
						V	

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hele shall be paid for at cost by the party for whom the test's made.

ATTACHMENT TO ACO-1

Moler A #37 – API #15-015-24126-0000

1980' FNL & 2310' FEL Sec 32-25S-5E Butler Co, KS

DST #1: Depth:	Viola 2454 - 2467'			
1st Open:	Weak blow building to 8	11		
2nd Open:	Weak blow building to 6	0		
Rec:	90' of clean oil, 135' of C	CM (13%O & 87%M)		
	Tool sample: O&SWCM	(24%O, 7%W, 69%M)		
IHP:	1175	FHP:	1162 psi	
IFP:	25-69 psi	FFP:	77-110 psi	
ISIP:	213 psi	FSIP:	215 psi	
Temp:	104*			

	Moler 🗛 #	37 (sample)	Moler A	437 (logs)
Estimated Tops	КВ	1368	КВ	1368
Zone	Depth	(Datum)	Depth	(Datum)
ADMIRE SAND	629	(+739)	626	+ 742
OREAD	1378	(-10)	1376	-8
HEEBNER	1415	(-47)	1413	-45
DOUGLAS	1452	(-84)	1449	-81
LANSING	1690	(-322)	1691	-323
KANSAS CITY	1984	(-616)	1983	-615
B/KANSAS CITY	2145	(-777)	2145	-777
CHECKERBOARD	2219	(-851)	2216	-848
HEPLER SAND	NONE	NA	NONE	NONE
ALTAMONT	2265	(-897)	2262	-894
CHEROKEE	2345	(-977)	2344	-976
ARDMORE	2414	(-1046)	2414	-1046
VIOLA	2454	(-1086)	2454	-1086
SIMPSON SAND	NP	NP	NP	NP
PTD	2467	(-1099)	2467	-1099



HURRICANE SERVICES INC

Remit To: Hurricane Services, Inc. 250 N. Water, Suite 200 Wichita, KS 67202 316-303-9515

Customer: VESS OIL CORP. 1700 N WATERFRONT PKWY BLDG 500 WICHITA, KS 67206	Invoice Dat Invoice Lease Nam Well Coun Job Numb	7/16/2019 0342758 Moler A 37 (New) Butler ICT2146	
Date/Description	HRS/QTY	Rate	Total
	0.000	0.000	0.00
Surface	30.000	3.600	108.00
Heavy Eq Mileage	220.000	1.350	297.00
Ton Mileage	1 000	675.000	675.00
rump truck #271 I-325	150.000	18.000	2,700.00

Total 3,780.00

TERMS: Net 30 days. Interest may be charged on past due invoice at rate of 1 ½% per month or maximum allowed by applicable state or federal laws. HSI has right to revoke any discounts applied in arriving at net invoice price if invoice is past due. If revoked, full invoice price without discount plus additional sales tax, as applicable, is due immediately and subject to interest charges. Customer agrees to pay all collection costs directly or indirectly incurred by HSI in the event HSI engages a third party to pursue collection of past due invoice. **SALES TAX:** Services performed on oil, gas and water wells in Kansas are subject to sales tax, with certain exceptions. HSI relies on the well information provided by the customer in identifying whether the services performed on wells qualify for exemption.



Lease & Well # Molor A 37 Date 7/16/2019 Customer Vess Dil County & State Butler Co., KS Legals S/T/R 32-25s-5e ICT 2146 Job # Service District Madison New Well? []No Surface 12PROD IN [SWD WIES. Ticket # ICT 2146 Job Type Job Safety Analysis - A Discussion of Hazards & Safety Procedures Driver nt S Gloves Lockovi/Tagout Warning Signs & Flagging Harc hat 271 Kovin Eye Protection Required Permits Fall Protection T.C VH25 Monitor 240 Respiratory Protection Slip/Trip/Fall Hazards Specific Job Sequence/Expectations 77 Jake H Safety Footwear FRC/Protective Clothing Additional Chemical/Acid PPE Overheud Hazards Muster Point/Medical Locations Hearing Protection Fire Extinguisher Additional concerns or issues noted below Comments Cament 250" of 8 5/8" surface casing inside 12 25" note, Caculated excess. 100%. Water available on the rig Product/ Service Unit of Measure Quantity Code 2 Dane 1010 Heavy Equipment Mileage m 30.00 \$108.00 220.00 M020 Ton Mileage Im \$297.00 C010 Cament Pump 03 1.00 \$675.00 CP015 H-325 sack 150,00 \$2,700.00 Customer Section: On the following scale how would you rate Humcane Services inc 7 Net: \$3,780.00 Total Taxable S Tax Rate Based on this job, how likely is it you would recommend HSI to a colleague? State tax laws deem certain products and services used on new wells to be sales tax exempt. Hum can Sale Tax: Services relies on the customer provided we'll information above to make a determination services and/or products are tax exempt. ermination s 1, 1 2 3 4 5 6 7 8 9 10 Direna y Lie y Total: 3,780,00 HSI Representative: Jake Heard

TERMS; Cash in advance unless Hurricane Services Inc. (HSI) has approved credit phorits cale. Credit terms of sale for approved accounts are total involce due on or before the 30th day from the date of involce. Past due accounts shall ray intervest on the balance past due at the rate of 1.5% per month or the maximum allowable by applicable state or federal laws. In the event that customer needy agrees to pay all fees directly or indirectly hoursed for such order directly in a detail on a direct agree state at the rate of 1.5% per month or the maximum allowable by applicable state or federal laws. In the event that Customer needy agrees to pay all fees directly or indirectly hoursed for such ordering in the date of laws. Phone date or collection. Proceed accounts are total involce fee and subject to collection. Proceed agrees dimates only and are goed for 30 days from the date of issue. Phone does not indude federal, state, or fogatos and stated price adjustments. Actual charges may vary depending upon line, equipment, are marken si ulimately required to perform nore services. Any discounts based on 30 days for the information presented in good faith, but no warranty is stated or implied HSI assumes no libritly for active or recommandations made concerning the restite form the customer represents and warrants that well and all associated equipment in acceptable condition preceives any USI. Elikevise, the customer represents and warrants that well and all associated equipment in acceptable condition to receive services by HSI. Elikevise, the customer represents that well and all associated equipment in acceptable condition to receive services by HSI. Elikevise, the customer guarantees repert opational cast of all statemer owned acquipment and property while HSI is not service. The authorization below acknowledges the receipt and acceptance of all extended on services and service in determined acceptance of all extended as the set and to acceptance of all extender or services and extended acceptance of all extende

CUSTOMER AUTHORIZATION SIGNATURE

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CEMEN	T TRE	ATMEN	T REP	ORT	Torie Shill St	Sec.	12.100		A STATE		Car Netta
Cus	tomer:	Vess Oi	I	We	11:	Moler	A 37		Ticket	101	7 2146
Gity,	State:			Count	y:	Butler	, KS		Dates	7/1	6/2019
Fiel	d Rep:	Judd		S-T-	R:	8/25s			Services	Su	irface
	-Destroit -				Allow States		1	in the second		ment Êland	
P. Cont. on the	nnole II e Size:	nformati 12.25		Weigh	urry to 1/1	5 #/sx	{	Part of the second seco	roduct	ment Biend %	#
Hole	Man Children -	267		Water / S		4 gal/sx	l	Class /	dealers of the balance	100.0	14100
	g Size:	8.625		Yield		9 ft ³ /sx	1	Gel		2.0	282
Casing	A DISCHARGE -	254.91		Bbis / Fi				CaCl		3.0	423
Tubing / Liner: in			Depti		7 ft	1	Metso				
	Depth:		ft	Volume		4 bbls		KolSea	d		
Tool / P	acker:			Excess	100%	6 %		Phenos	Seal	0.5	75
s 1	Depth:		ft	Total Slurry	r 39.1	1 bbis		Salt			
Displace	ment	15.42	bbls	Total Sack	150	Jsx					
								0-0-0-		Totai	14,88
TIME	RATE	PSI	BBLS	REMARKS	TIME	RATE	PSI	BBLS		REMARKS	
3:00 PM				On location safety meeting							
				Spot in and rig up							
				Wait on rig							
5:15 PM				Hook up to casing							
	4.0	50.0	10.0	Break circulation							
	4.0	50.0	39.8	Mix and pump cement							
	4.0	40.0		Wash up pump Continue displacement							
	2.0	40.0	15.3	Stop	1						
5:50 PM	A.10	40.0	1010	Shut in well	1						
			n								
					<u> </u>						
										-	
	_										
		CREW	1.000	UNIT		理学	a dia s		SUMMARY		
Cem	enter:	Jake F	1	77		Average	Rate	Averag	e Pressure	Total Fluid	
Pump Ope	rator:	Kevin		271		3.6 b	pm	36.00	psi	65,10 bbl	\$
Bu	lik #1: lik #2:	T.C		240							



hit To: Hurricane Services, Inc. 250 N. Water, Suite 200 Wichita, KS 67202 316-303-9515

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7/19/2019

0342897

Invoice Date:

Invoice #:

Customer: VESS OIL CORP. 1700 N WATERFRONT PKWY BLDG 500

1700 N WATERFRONT PKWY BLDG 500 WICHITA, KS 67206	Lease Na We Cou Job Num	Moler A 37 (New) Butler ICT2164		
Date/Description	HRS/QTY	Rate	Total	_
Surface	0.000	0.000	0.00	-
Pump truck #271	1.000	1,275.000	1,275.00	
Heavy Eq Mileage	30.000	3.400	102.00	
Light Eq Mileage	30.000	1.700	51.00	
Ton Mileage	322.000	1.275	410.55	
H-Plug	50.000	11.050	552.50	
HSC Blend	150.000	20.400	3,060.00	
Mud flush	500.000	0.850	425.00	
Centralizers 5 1/2"	7.000	51.000	357.00	
Cement baskets 5 1/2"	1.000	255.000	255.00	
5 1/2" LD Plug & Baffle	1.000	297.500	297.50	
Type A Packer shoe 51/2"	1.000	1,570.000	1,570.00	

Total 8,355.55

<u>TERMS</u>: Net 30 days. Interest may be charged on past due invoice at rate of 1 ½% per month or maximum allowed by applicable state or federal laws. HSI has right to revoke any discounts applied in arriving at net invoice price if invoice is past due. If revoked, full invoice price without discount plus additional sales tax, as applicable, is due immediately and subject to interest charges. Customer agrees to pay all collection costs directly or indirectly incurred by HSI in the event HSI engages a third party to pursue collection of past due invoice. <u>SALES TAX</u>: Services performed on oil, gas and water wells in Kansas are subject to sales tax, with certain exceptions. HSI relies on the well information provided by the customer in identifying whether the services performed on wells qualify for exemption.

N Water St., Suite #200 nchita, KS 67202

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HURRICANE SERVICES INC

Customer	Vesa Oil		Lease & Wall	Moler A 37				Date		7/19/2019	
Service District				to Butler	Legals SIT/R			Job #	ICT 2164		
Job Type	Longstring	TPROD		SWD	New Well?	I√YES	No	Ticket #		ICT 2164	
Equipment #	Driver	Job Safety Analysis - A Discussion of Hazards & Safety Procedures									
271	Kevin	Gloves Lockout/Tagout Maring Signs & Flagging									
240	T.C	HIS Monitor		Systematic Strategies					Fall Protection		
77	Jake H	Safety Fool		Respiratory Protection					ob Sequence/Excectations		
	Garrett S.	FRC/Protect			Additional Chemical/Acid PPE				mt/Medical Locations		
	danten o.		Pearing Protection			Additional concerns or issues noted belo					
			Comments								
		Cemeni Langst	ring on C&G Rig #	2.							
roduct/ Service										en contrat	
Code	Control of the second	Des	cription		Unit of Measur	e Quantity	As Tenr Ali			Net Amou	
115	Cement Pump				ea	1,00				\$1,275	
010	Heavy Equipment Mileage				m;	30.00			1	\$102	
015	Light Equipment Mileage				mi	30.60				\$51	
020	Ton Mileage				lm	322.00		-	+	\$410	
055	H-Plug				sack	50.00			\$552.5		
	HISC				sack	150.00			\$3,060.0		
170	Mud Flush				gal	500.00			\$425.0		
125	S 1/2" Centralizer				ea	7.00				\$357.	
130	5 1/2" Cemeni Baskei				ea	1.00			\$255.0		
170	5 1/2" Latch Down Plug & Baffie				ea	1.00				\$297.	
175	5 1/2" Type A Packer Shoe			ea	1.00				\$1,570.		
			A TRACT PARTY								
		+)/2									
			20000000								
Sare bent	the states of the	STREET, STREET	FRE STATE								
Custon	ner Section : On I	ne following scale r	now would were core	Hurricane Con	uras inc 2						
Caston		ing realizing the short	New Yorking Toris I and			Total Truch			Net:	\$8,355	
Base	ed on this job, how likely is it you would recommend HSI to a colleague?				Total Taxable \$ - Tax Rate: State tax laws deem certain products and services			0.1.7			
		□ □ □ 3 4 5			Ū.	used on new wells Services relies on Information above services and/or pro-	to be sales ta: the customer p to make a deta	k exemp: Hurricane provided well ermination if	Sale Tax:	\$ 3,355.5	
Ut-						and a broad broad bro lak even br					

TERMS: Cann in advance unless Humbane Services Inc. (HSi) has approved treat prior to table. Oregit terms of sale for approved accounts are total invoice due on or before the 20th day from the date of invoice. Past due accounts shall pay interest on the balance past due at the rate of 13 km per monith or the maximum allowable by applicable state or federal faws, in the event it is necessary to employ an agency addres atomety to affect the collection. Cutomer heleby agrees to pay all tees directly or indirectly incurred for such collection. In the event that Dustomer's account with HSI becomes defiquent, HSI has the right to revoke any discounts are total invoice. Price queries defiguent, tees is an agency addres atomety to affect the collection. Cutomer heleby agrees to pay all tees directly or indirectly incurred for such collection. In the event that Dustomer's account with HSI becomes defiquent, HSI has the right to revoke any discounts are totale federal faws, or indirectly required to perform the date of invoice. Price queries definitions. Actual charges may any depending upon time, equipment, and meteral ultimately required to perform these services. Any discount is based on 30 days net carry realist and stated orice adjustments. Actual charges may any depending upon time, equipment, and meteral ultimately required to perform these services. Any discount is based on 30 days net carry entities to private the restrict a presented is a pest estimate of the actual results from the use of any product or service. The information performing services are determined in acceptable condition to receive services by HSI Understread and warrants in a well and all associated equipment in acceptable condition to receive services by HSI Understread end performing services. The automization below acknowledges the receiver and acceptance of all termsfoond/times and warrants in a well and presented is a pest estimate of the actual receives envices by HSI Understread ender to performance. Custometrice and property while HSI i

CUSTOMER AUTHORIZATION SIGNATURE