### KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

1327662

Form ACO-1 August 2013 Form must be Typed Form must be Signed All blanks must be Filled

### WELL COMPLETION FORM WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License #	API No. 15
Name:	Spot Description:
Address 1:	
Address 2:	Feet from  North / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.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:
Gas D&A ENHR SIGW	Total Vertical Depth: Plug Back Total Depth:
G G GSW Temp. Abd.	Amount of Surface Pipe Set and Cemented at: Feet
CM (Coal Bed Methane)	Multiple Stage Cementing Collar Used? Yes No
	If yes, show depth set: Feet
If Workover/Re-entry: Old Well Info as follows:	If Alternate II completion, cement circulated from:
Operator:	
Well Name:	feet depth to:w/sx cmt.
Original Comp. Date: Original Total Depth:	
Deepening Re-perf. Conv. to ENHR Conv. to SWD	Drilling Fluid Management Plan
Plug Back Conv. to GSW Conv. to Producer	(Data must be collected from the Reserve Pit)
Commingled Permit #:	Chloride content: ppm Fluid volume: bbls
Dual Completion     Permit #:	Dewatering method used:
SWD     Permit #:	Location of fluid disposal if hauled offsite:
ENHR Permit #:	
GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or         Date Reached TD         Completion Date or	Quarter Sec Twp S. R East West
Recompletion Date Recompletion Date	County: Permit #:

#### AFFIDAVIT

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

### Submitted Electronically

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

	1327662			
Operator Name:	Lease Name: Well #:			
Sec TwpS. R East _ West	County:			
	. Detail all asses. Depart all final assiss of drill stamp tests siving interval tested, time test			

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 (Attach Additional She	eets)	Yes No		-	on (Top), Depth ar		Sample
Samples Sent to Geolog	ical Survey	Yes No	Name	9		Тор	Datum
Cores Taken Electric Log Run		Yes No					
List All E. Logs Run:							
			RECORD Ner		tion, etc.		
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
		ADDITIONAL	CEMENTING / SQU	EEZE RECORD	)		

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

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

Yes	No
Yes	No
Yes	No

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

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

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated							ement Squeeze Record I of Material Used)	Depth	
TUBING RECORD:	Si	ze:	Set At:		Packe	r At:	Liner R		No	
Date of First, Resumed	d Product	tion, SWD or ENHI	٦.	Producing Me	ethod:	ping	Gas Lift	Other (Explain)		
Estimated Production Per 24 Hours		Oil Bb	ls.	Gas	Mcf	Wate	er	Bbls.	Gas-Oil Ratio	Gravity
DISPOSITION OF GAS: METHOD OF COMPLE					PRODUCTION INTE	RVAL:				
Vented Sol	d 🗌	Used on Lease		Open Hole	Perf.	Uually (Submit)	Comp. 4 <i>CO-5</i> )	Commingled (Submit ACO-4)		
(If vented, Su	ıbmit ACC	D-18.)		Other (Specify)		(//		(300		<u> </u>

Form	ACO1 - Well Completion
Operator	Staab Oil Co., a General Partnership
Well Name	HAINES 1
Doc ID	1327662

## Tops

Name	Тор	Datum
anhydrite	1360	582
base	1395	547
topeka	2869	-927
heeb	3075	-1133
toronto	3097	1155
lansing	3116	-1174
bkc	3335	-1393
arbuckle	3379	-1437
T.D.	3444	-1502

Form	ACO1 - Well Completion
Operator	Staab Oil Co., a General Partnership
Well Name	HAINES 1
Doc ID	1327662

### Casing

	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	20	214	common	150	
Production	8.625	5.5	14	3443	common multi density	550	

シモリ	RILOBITE	Staab Oil Company		8-8s-18w	Rooks, KS		
	ESTING , INC	1607 Hopew ell Rd Hays, KS 67601		Haines #1		DST#:1	
		ATTN: Janel Staab			2016.08.13 @		
GENERAL I	NFORMATION:						
Formation:	Oread - Toronto						
Deviated:	No Whipstock:	ft (KB)		Test Type:		al Bottom Hole	(Initial)
-	ned: 09:35:45			Tester:	Bradley Wa	alter	
ime Test Ende	ed: 15:32:15			Unit No:	78		
nterval:	3018.00 ft (KB) To 31			Reference I	∃evations:	1942.00 f	
otal Depth:	3110.00 ft (KB) (TV			1/1		1937.00 f 5.00 f	
lole Diameter:	7.88 inchesHole	Condition: Good		KE	3 to GR/CF:	5.UU f	L
Serial #: 8	365 Inside						
ress@RunDe	<ul> <li>A second s</li></ul>			Capacity:		8000.00 p	osig
Start Date:	2016.08.13	End Date:	2016.08.13	Last Calib.:		1899.12.30	
Start Time:	07:31:05	End Time:	15:32:14	Time On Btm: Time Off Btm:			
EST COM	FF: BOB @ 8 min FSI: 4" return @ 4	n, died @ 25 minutes. uutes. 45 min. receded to 1"		PRESSU	JRE SUMN	/ARY	
TEST COM	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4 Pressure vs. T	n, died @ 25 minutes. uutes. 45 min. receded to 1"		PRESSU	JRE SUMN	/ARY	
	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ /	n, died @ 25 minutes. lutes. 45 min. receded to 1"	Time	Pressure Temp	Annotat		
<b>133</b>	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4 Pressure vs. T	n, died @ 25 minutes. uutes. 45 min. receded to 1"	Time (Min.)		Annotat		
	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4 Pressure vs. T	n, died @ 25 minutes. uutes. 45 min. receded to 1"	(Min)	Pressure Temp	Annotat		
<b>133</b>	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4 Pressure vs. T	n, died @ 25 minutes. uutes. 45 min. receded to 1"	na (Min.)	Pressure Temp	Annotat		
1339	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4 Pressure vs. T	n, died @ 25 minutes. uutes. 45 min. receded to 1"	•••• (Min.)	Pressure Temp	Annotat		
1339	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4 Pressure vs. T	n, died @ 25 minutes. uutes. 45 min. receded to 1"	110 (Min.) 185 180 195 195	Pressure Temp	Annotat		
<ul> <li>1000</li> <li>-</li> <li>-<td>ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4 Pressure vs. T</td><td>n, died @ 25 minutes. uutes. 45 min. receded to 1"</td><td>•••• (Min.)</td><td>Pressure Temp</td><td>Annotat</td><td></td><td></td></li></ul>	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4 Pressure vs. T	n, died @ 25 minutes. uutes. 45 min. receded to 1"	•••• (Min.)	Pressure Temp	Annotat		
1339	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4	n, died @ 25 minutes. uutes. 45 min. receded to 1"	110 (Min.) 185 180 195 195	Pressure Temp	Annotat		
<ul> <li>1000</li> <li< td=""><td>ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4</td><td>n, died @ 25 minutes. uutes. 45 min. receded to 1"</td><td>110 (Min.) 185 180 195 195</td><td>Pressure Temp</td><td>Annotat</td><td></td><td></td></li<></ul>	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4	n, died @ 25 minutes. uutes. 45 min. receded to 1"	110 (Min.) 185 180 195 195	Pressure Temp	Annotat		
1000 100 1000 1	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4	n, died @ 25 minutes. uutes. 45 min. receded to 1"	110 (Min.) 185 180 195 195	Pressure Temp	Annotat		
1000         -           1000         -           1000         -           770         -           1000         -      <	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4	rn, died @ 25 minutes. autes. 45 min. receded to 1"	(Min.) 1935 1935 1937	Pressure Temp	Annotat		
533       773       773       773       1       273       273       1       274       1       275	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4	rn, died @ 25 minutes. autes. 45 min. receded to 1"	(Min.) 1935 1935 1937	Pressure Temp	Annotat		
1000         -           1000         -           1000         -           770         -           1000         -      <	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4	rn, died @ 25 minutes. autes. 45 min. receded to 1"	(Min.) 1935 1935 1937	Pressure Temp (psig) (deg F	Annotat	ion	
500 500 500 500 500 500 500 500	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4 Pressure vs. T CTERNUS Description	rn, died @ 25 minutes. autes. 45 min. receded to 1"	(Min.) 1935 1935 1937	Pressure Temp (psig) (deg F	Annotat	ion	Rate (Mcf.
233 233 233 233 234 234 234 234	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ - Pressure vs. T COMPANY Pressure vs. T COMPANY Pressure vs. T COMPANY Pressure vs. T COMPANY Pressure vs. T COMPANY COMPANY Recovery Description Omcw 10 9m 90w	rn, died @ 25 minutes. autes. 45 min. receded to 1"	(Min.) 1935 1935 1937	Pressure Temp (psig) (deg F	Annotat	ion	Rate (Mcf.
273 273 273 273 273 273 273 273	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4 Pressure vs. T Pressure vs. T Recovery Description omcw 10 9m 90w gow cm 10g 10o 30w 50	rn, died @ 25 minutes. autes. 45 min. receded to 1"	(Min.) 1935 1935 1937	Pressure Temp (psig) (deg F	Annotat	ion	Rate (Mcf
500 700 700 700 700 700 700 170.00 120.00	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4 Pressure vs. T COMPANY Pressure vs. T COMPANY Pressore vs. T COMPANY Pressore vs. T COMPANY Pressore vs. T	rn, died @ 25 minutes. autes. 45 min. receded to 1"	(Min.) 1935 1935 1937	Pressure Temp (psig) (deg F	Annotat	ion	Rate (Mof
533 533 533 533 533 533 533 533	ISI: Surface retur FF: BOB @ 8 min FSI: 4" return @ 4 Pressure vs. T Pressure vs. T Recovery Description omcw 10 9m 90w gow cm 10g 10o 30w 50	rn, died @ 25 minutes. autes. 45 min. receded to 1"	(Min.) 1935 1935 1937	Pressure Temp (psig) (deg F	Annotat	ion	Rate (Mofi

Trilobite Testing, Inc

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Printed: 2016.08.17 @ 16:39:45

|                                                                       | DRILL STEM TES          | ST REP                 | ORT                     |                  |                            |                          |               |
|-----------------------------------------------------------------------|-------------------------|------------------------|-------------------------|------------------|----------------------------|--------------------------|---------------|
|                                                                       | Staab Oil Company       |                        | 8-85                    | 5-18w R          | ooks,KS                    |                          |               |
| ESTING , INC                                                          | 1607 Hopew ell Rd       |                        | Hai                     | nes#1            |                            |                          |               |
|                                                                       | Hays, KS 67601          |                        | Job                     | Ticket: 65       | 543                        | DST#: 2                  |               |
|                                                                       | ATTN: Janel Staab       |                        | Test                    | Start: 20        | 16.08.13 @                 | 23:23:00                 |               |
| GENERAL INFORMATION:                                                  | 2                       |                        |                         |                  |                            |                          |               |
| Formation: LKC A - D<br>Deviated: No Whipstock:                       | ft (KB)                 |                        | Test                    | Туре: С          | Conventional               | Bottom Hole              | e (Reset)     |
| Time Tool Opened: 01:57:15                                            |                         |                        | Test                    | er: E            | Bradley Walt               |                          | ,             |
| Time Test Ended: 07:39:15                                             | 1                       |                        | Unit                    |                  | '8                         |                          |               |
| Interval: 3108.00 ft (KB) To 318<br>Total Depth: 3184.00 ft (KB) (TV  |                         |                        | Refe                    | erence Ee        | vations:                   | 1942.00<br>1937.00       |               |
|                                                                       | Condition: Good         |                        |                         | KB te            | o GR/CF:                   | 5.00                     |               |
| Serial #: 8845 Outside                                                |                         |                        |                         |                  |                            |                          |               |
| Press@RunDepth: 122.97 psig (                                         |                         |                        | Capacity:               |                  |                            | 8000.00                  | psig          |
| Start Date:         2016.08.13           Start Time:         23:23:05 | End Date:<br>End Time:  | 2016.08.14<br>07:39:14 | Last Calib<br>Time On f |                  | 2016.08.14 (               | 2016.08.14<br>@ 01:57:00 |               |
| otart Hine. 23.23.03                                                  |                         | 07.00.14               | Time Off                |                  | 2016.08.14 (               | 11.00                    |               |
| TEST COMMENT: IF: 5" blow . slid 4                                    |                         |                        | *                       |                  |                            |                          |               |
| ISI: No return.                                                       |                         |                        |                         |                  |                            |                          |               |
| FF: 3" blow .<br>FSI: No return.                                      |                         |                        |                         |                  |                            |                          |               |
|                                                                       |                         |                        |                         |                  |                            |                          |               |
| Pressure vs. Ti                                                       | CBC<br>2005 Temperature |                        |                         |                  | E SUMM                     |                          |               |
|                                                                       | 100 comparate           | Time<br>(Min.)         | Pressure<br>(psig)      | Temp<br>(deg F)  | Annotatio                  | n                        |               |
|                                                                       |                         | 0                      | 1496.46                 | 103.11           | Initial Hydro              |                          |               |
|                                                                       |                         | 1                      | 34.15<br>52.53          | 102.36<br>102.98 | Open To Fl<br>Shut-In(1)   | low (1)                  |               |
|                                                                       |                         | 72                     | 1131.11                 | 102.30           | End Shut-I                 | n(1)                     |               |
|                                                                       |                         | 73                     | 53.68                   | 104.06           | 1946                       | low (2)                  |               |
|                                                                       |                         | 133                    | 122.97                  | 106.82           | -2007-002 AUST 10          | (0)                      |               |
|                                                                       |                         | 226                    | 1124.03<br>1470.43      | 108.91<br>109.10 | End Shut-li<br>Final Hydro |                          |               |
|                                                                       |                         | 220                    | 1470.43                 | 103.10           | Tinariyur                  | J-Static                 |               |
|                                                                       |                         |                        |                         |                  |                            |                          |               |
|                                                                       |                         |                        |                         |                  |                            |                          |               |
| 143an 344                                                             |                         |                        |                         | •                |                            |                          |               |
| Ag286 Time(Han)                                                       |                         |                        |                         |                  |                            |                          |               |
| Recovery                                                              | 1                       |                        |                         | 1                | s Rates                    |                          |               |
| Length (ft) Description                                               | Volume (bbl)<br>1.69    |                        |                         | Choke (          | inches) Pressu             | ure (psig) G             | as Rate (Mcfi |
| 230.00 socm 2o 98m                                                    | 1.09                    |                        |                         |                  |                            |                          |               |
|                                                                       |                         |                        |                         |                  |                            |                          |               |
| v                                                                     |                         |                        |                         |                  |                            |                          |               |
|                                                                       |                         |                        |                         |                  |                            |                          |               |
|                                                                       |                         |                        |                         |                  |                            |                          |               |
| * Recovery from multiple tests                                        |                         |                        | which do to a           | Printed:         |                            |                          |               |

| N H R A                                                                            | RILOBITE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | DRILL STEM 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| 産業                                                                                 | And a state of the                                                                                                                                                                                                                                   | Staab Oil Company                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                          |                                                 | 8-8                                                                                        | 3s-18w F                                                                                        | Rooks,KS                                                                                                                        |                                                                  |
|                                                                                    | ESTING , INC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1607 Hopew ell Rd<br>Hays, KS 67601                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                          |                                                 |                                                                                            | ines #1                                                                                         | FEAA                                                                                                                            | <b>D</b> 07711                                                   |
| 1.                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ATTN: Janel Staab                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                          |                                                 |                                                                                            | Ticket: 6                                                                                       |                                                                                                                                 | DST#: 3                                                          |
|                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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                                                            | st Start: 2                                                                                     | 016.08.15 @                                                                                                                     | y 10:00:00                                                       |
|                                                                                    | INFORMATION:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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                                                            |                                                                                                 |                                                                                                                                 |                                                                  |
|                                                                                    | Arbuckle<br>No Whipstock:<br>Sened: 12:17:00<br>nded: 18:58:00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                          |                                                 | Tes                                                                                        | ster:                                                                                           | Conventiona<br>Bradley Wa<br>78                                                                                                 | al Bottom Hole (Reset)<br>Iter                                   |
| n <b>terval:</b><br>otal Depth:<br>lole Diamete                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                          |                                                 | Ref                                                                                        | erence E                                                                                        | evations:<br>to GR/CF:                                                                                                          | 1942.00 ft (KB)<br>1937.00 ft (CF)<br>5.00 ft                    |
| erial #:                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                          |                                                 |                                                                                            |                                                                                                 |                                                                                                                                 | 5.00 TL                                                          |
| ress@Run[<br>tart Date:<br>tart Time:                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <ul> <li>3368.00 ft (KB)</li> <li>End Date:</li> <li>End Time:</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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On<br>Time Off                                               | b.:<br>Btm:                                                                                     | 2016.08.15<br>2016.08.15                                                                                                        |                                                                  |
|                                                                                    | F31. BOB @ 20 m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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                                                                  | RE SUMM                                                                                                                         |                                                                  |
| 709                                                                                | Pressare vs. Th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | пес                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | - 115                                                    | Time<br>(Min.)                                  | PI<br>Pressure<br>(psig)                                                                   | RESSUF<br>Temp<br>(deg F)                                                                       | RE SUMM                                                                                                                         |                                                                  |
| 500                                                                                | Pressare vs. Th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | пес                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | - 115                                                    | (Min.)<br>0                                     | Pressure<br>(psig)<br>1737.53                                                              | Temp<br>(deg F)<br>111.80                                                                       | Annotatio                                                                                                                       | on<br>o-static                                                   |
| 599                                                                                | Pressare vs. Th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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Pressure<br>(psig)<br>1737.53<br>75.71                                                     | Temp<br>(deg F)<br>111.80<br>111.55                                                             | Annotatio<br>Initial Hydro<br>Open To F                                                                                         | on<br>o-static                                                   |
| 599                                                                                | Pressare vs. Th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | пес                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | - 110                                                    | (Min.)<br>0                                     | Pressure<br>(psig)<br>1737.53                                                              | Temp<br>(deg F)<br>111.80<br>111.55<br>112.70                                                   | Annotatio<br>Initial Hydro<br>Open To Fi<br>Shut-In(1)                                                                          | o-static<br>low (1)                                              |
| 220                                                                                | Pressare vs. Th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | пес                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | - 110<br>- 125<br>- 129 Temps                            | (Min.)<br>0<br>1<br>5                           | Pressure<br>(psig)<br>1737.53<br>75.71<br>123.46                                           | Temp<br>(deg F)<br>111.80<br>111.55<br>112.70<br>114.25                                         | Annotatio<br>Initial Hydro<br>Open To F                                                                                         | o-static<br>low (1)<br>n(1)                                      |
| 220                                                                                | Pressare vs. Th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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Pressure<br>(psig)<br>1737.53<br>75.71<br>123.46<br>1117.60<br>153.60<br>462.40            | Temp<br>(deg F)<br>111.80<br>111.55<br>112.70<br>114.25<br>114.05<br>114.70                     | Annotation<br>Initial Hydro<br>Open To Fl<br>Shut-In(1)<br>End Shut-Ir<br>Open To Fl<br>Shut-In(2)                              | on<br>o-static<br>low (1)<br>n(1)<br>low (2)                     |
| 770                                                                                | Pressare vs. Th                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | пес                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | - 110<br>- 125<br>- 129 Temps                            | (Min.)<br>0<br>1<br>5<br>65<br>66               | Pressure<br>(psig)<br>1737.53<br>75.71<br>123.46<br>1117.60<br>153.60                      | Temp<br>(deg F)<br>111.80<br>111.55<br>112.70<br>114.25<br>114.05                               | Annotatic<br>Initial Hydro<br>Open To F<br>Shut-In(1)<br>End Shut-Ir<br>Open To F                                               | on<br>o-static<br>low (1)<br>n(1)<br>low (2)<br>n(2)             |
|                                                                                    | Pressure vs. The                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | пес                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | - 119<br>Temparature (deg F)<br>- 5<br>- 5<br>- 5<br>- 5 | (Min.)<br>0<br>1<br>5<br>65<br>66<br>126<br>217 | Pressure<br>(psig)<br>1737.53<br>75.71<br>123.46<br>1117.60<br>153.60<br>462.40<br>1084.96 | Temp<br>(deg F)<br>111.80<br>111.55<br>112.70<br>114.25<br>114.05<br>114.70<br>115.70<br>116.07 | Annotatic<br>Initial Hydro<br>Open To F<br>Shut-In(1)<br>End Shut-Ir<br>Open To F<br>Shut-In(2)<br>End Shut-Ir<br>Final Hydro   | on<br>o-static<br>low (1)<br>n(1)<br>low (2)<br>n(2)             |
|                                                                                    | Pressare vs. The<br>product of the second seco                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | - 119<br>Temparature (deg F)<br>- 5<br>- 5<br>- 5<br>- 5 | (Min.)<br>0<br>1<br>5<br>65<br>66<br>126<br>217 | Pressure<br>(psig)<br>1737.53<br>75.71<br>123.46<br>1117.60<br>153.60<br>462.40<br>1084.96 | Temp<br>(deg F)<br>111.80<br>111.55<br>112.70<br>114.25<br>114.05<br>114.70<br>115.70<br>116.07 | Annotatic<br>Initial Hydro<br>Open To Fi<br>Shut-In(1)<br>End Shut-Ir<br>Open To Fi<br>Shut-In(2)<br>End Shut-Ir<br>Final Hydro | on<br>o-static<br>low (1)<br>n(1)<br>low (2)<br>n(2)<br>o-static |
| 530<br>530<br>530<br>530<br>530<br>530<br>530<br>530                               | Pressure vs. The                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | THE<br>BET Treparation<br>The set<br>of the set                                                                                                                    | - 119<br>Temparature (deg F)<br>- 5<br>- 5<br>- 5<br>- 5 | (Min.)<br>0<br>1<br>5<br>65<br>66<br>126<br>217 | Pressure<br>(psig)<br>1737.53<br>75.71<br>123.46<br>1117.60<br>153.60<br>462.40<br>1084.96 | Temp<br>(deg F)<br>111.80<br>111.55<br>112.70<br>114.25<br>114.05<br>114.70<br>115.70<br>116.07 | Annotatic<br>Initial Hydro<br>Open To Fi<br>Shut-In(1)<br>End Shut-Ir<br>Open To Fi<br>Shut-In(2)<br>End Shut-Ir<br>Final Hydro | on<br>o-static<br>low (1)<br>n(1)<br>low (2)<br>n(2)<br>o-static |
| 770<br>770<br>770<br>770<br>770<br>770<br>770<br>770                               | Pressare vs. The<br>pressare vs. | THE<br>BET Trependen                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | - 119<br>Temparature (deg F)<br>- 5<br>- 5<br>- 5<br>- 5 | (Min.)<br>0<br>1<br>5<br>65<br>66<br>126<br>217 | Pressure<br>(psig)<br>1737.53<br>75.71<br>123.46<br>1117.60<br>153.60<br>462.40<br>1084.96 | Temp<br>(deg F)<br>111.80<br>111.55<br>112.70<br>114.25<br>114.05<br>114.70<br>115.70<br>116.07 | Annotatic<br>Initial Hydro<br>Open To Fi<br>Shut-In(1)<br>End Shut-Ir<br>Open To Fi<br>Shut-In(2)<br>End Shut-Ir<br>Final Hydro | on<br>o-static<br>low (1)<br>n(1)<br>low (2)<br>n(2)<br>o-static |
| 270<br>270<br>270<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0<br>0 | Presseare vs. The<br>Presseare vs.             | DBC<br>BC Mexpension<br>The set<br>The set<br>T | - 119<br>Temparature (deg F)<br>- 5<br>- 5<br>- 5<br>- 5 | (Min.)<br>0<br>1<br>5<br>65<br>66<br>126<br>217 | Pressure<br>(psig)<br>1737.53<br>75.71<br>123.46<br>1117.60<br>153.60<br>462.40<br>1084.96 | Temp<br>(deg F)<br>111.80<br>111.55<br>112.70<br>114.25<br>114.05<br>114.70<br>115.70<br>116.07 | Annotatic<br>Initial Hydro<br>Open To Fi<br>Shut-In(1)<br>End Shut-Ir<br>Open To Fi<br>Shut-In(2)<br>End Shut-Ir<br>Final Hydro | on<br>o-static<br>low (1)<br>n(1)<br>low (2)<br>n(2)<br>o-static |

**GLGJAL CEMENTING, L.L.C.** 2683 1958 E. Highway 40 SERVICE POINT: **REMIT TO** Russell, KS 67665 Ussell TWP. . CALLED OUT ON LOCATION SEC. RANGE JOB START JOB FINISH 7:00 A DATE 180 COUNTY STATE Aines WELL #. #/ QINISILE LEASE LOCATION ook OLD OR NEW CIRCLE ONE) THTO George" CONTRACTOR GHIELDS OWNER TYPE OF JOB STRING ego. Comon 2% 000 RODUCTION HOLE SIZE T.D. CEMENT DISALT 22 Gel CASING SIZE DEPTH 3439 AMOUNT ORDERED om ISO D TURING SIZE 8 5/8 Hes DEPTH 400 SX MUL - Densi TV DRILL PIPE DEPTH SX Sopium MetasiLicATE "ANHYDROUS" TOOL LATCH DOWN ASS DEPTH 34 MINIMUM PRES. MAX COMMON @ MEAS. LINE SHOE JOINT POZMIX a CEMENT LEFT IN CSG. 2 GEL @ PERFS CHLORIDE a DISPLACEMENT ASC (a) EQUIPMENT a a CEMENTER GLOWN GU PUMP TRUCK @ HELPER CODV @ RIIK TRUCK @ DRIVER Heat B-2 @ RITE TRUCK a, DRIVER T @ HANDLING @. MILEAGE TOTAL \_ REMARKS: , 23439 RCULATION Keepur ( DROD" CIRC I HR. PEMP MUD Flush SERVICE 30 EX @ RATHOLE, 20 3X @ Mouse Hale 400 SX FOILOWED BY 1505X Comey NOD DEPTH OF JOB\_ LCAR-2:NE DOUR HUG PUMP TRUCK CHARGE\_\_\_ 0 pisplaced EXTRA FOOTAGE Reloase MILEAGE \_ \_\_\_\_\_ @\_\_\_ 0 MANIFOLD-TAXAS \_ @ -(a) General Parmersi ip CHARGE TO: TOTAL -STREET . ZIP STATE VIRCULATO PLUG & FLOAT EQUIPMENT ement DiDC TO SURFace Global Cementing, L.L.C., @\_\_\_ You are hereby requested to rent cementing equipment and <u>Centralizers</u> (a) furnish cementer and helper(s) to assist owner or contractor to ATCH DOWN Plag do work as is listed. The above work was done to satisfaction Plate Fhe @\_\_ and supervision of owner agent or contractor. I have read and @ understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side. TOTAL \_ PRINTED NAME SALES TAX (If Any) TOTAL CHARGES SIGNATURE . IF PAID IN 30 DAYS DISCOUNT

| GLOBAL CEMENTING, L.L.C.     2679       REMIT TO     1958 E. Highway 40<br>Russell, KS 67665     SERVICE POINT     2679       DATE 3-9-20/6 SEC     TWP & RANGE     CALLED OUT     ON LOCATION     JOB FINSH<br>CONTY     2679       DATE 3-9-20/6 SEC     TWP & RANGE     CALLED OUT     ON LOCATION     JOB FINSH<br>CONTY     CONTRACTOR     CONTY     CONTRACTOR     CONTRA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         |            |            |
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| REMIT TO       1958 E. Highway 40<br>Russell, KS 67665       SERVICE POINT       2679         DATE 8: 9-20/6 SEC       TWP:       MANGE S       CALLED OUT       ON LOCATION       Destrat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | gioral CFM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | FNTING                                  |                                         |            |            |
| REMIT TO 1958 E. Highway 40<br>Russell, KS 67665  SERVICE POINT Russell, KS 67665  SERVICE SER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         | f Han ở liku ở Nại ô                    | 15.7 67.05 | 2679       |
| Russell, KS 67665       Mark 2-9-20/6 SEC       DATE 2-9-20/6 SEC       CONTRACTOR       CONTRACTOR       DATE 2-9-20/6 SEC       DEPTH       CONTOR       CONTOR       CONTOR       CONTOR       CONTOR       CONTOR <td>REMIT TO 1958 E. Highway 40</td> <td>SEF</td> <td>RVICE POINT</td> <td>D</td> <td></td>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | REMIT TO 1958 E. Highway 40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | SEF                                     | RVICE POINT                             | D          |            |
| DATE C 7 - 20/6 S S S IS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         | <pre>cricLion(c)</pre>                  | 1 455EI    | 1          |
| DATE C 7 - 20/6 S S S IS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         | >          |            |
| LEASE HAILAGES       WELL 441       LOCATION $P_{A2}$ with 444       COUNTY 5       Style 10         OLD OR (SEW) CIRCLE ONE)       V4E       V4E       V4E       V4E         CONTRACTOR       SHIELD'S       DALGER RIST       SHIELD'S       SHIELD'S         DERIT       DEPTH       COMMON       SHIELD'S       SHIELD'S         DRUL UPR       DEPTH       DOMON       SHIELD'S       SHIELD'S         DRUL UPR       DEPTH       DOMON       SHIELD'S       SHIELD'S         POMONT DEPT IN CSG.       SHOE JOINT       COMMON       SHIELD'S       SHIELD'S         RESS INSE       SHOE JOINT       SHOE JOINT       SHOE JOINT       SHOE JOINT       SHOE JOINT         POMONT ORDERED       SHOE JOINT       COMMON       SHOE JOINT       SHOE JOINT       SHOE JOINT         SHOE JOINT       COMONT SHOE SHOE SHOE JOINT       SHOE JOINT       SHOE JOINT       SHOE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | RANGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CALLED OUT                              | ON LOCATION                             | JOB START  | JOB FINISH |
| LEASE PIG: ALCS       WELL # # J       LOCATION       P & 2 & 4 & 4 & 4 & 4 & 4 & 4 & 4 & 4 & 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | AND | 10144                                   | COUNTY     | STATE      |
| The of Not Senter of Selface         OWNER         THE OF NOT Senter of Selface         OWNER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Ville 4W                                | 9 14N                                   | Rook's     | KANSAS     |
| COMMARTOR     DALLER N.G. P     OWNER       TIPE OF DOR     DALLE IS. PALE 2C.     TD.     2/17       CASING SIZE     C.S. C. DEPTH     AMOUNT ORDERED     150 SX. C.a.m.       TUBINS SIZE     S. C.S.G.     DEPTH     AMOUNT ORDERED     150 SX. C.a.m.       TORN SIZE     S.G. C.S.G.     DEPTH     AMOUNT ORDERED     150 SX. C.a.m.       TORN SIZE     S.G. DEPTH     D.S.C.C.     MINIMUM       TOOL     DEPTH     D.S.C.C.     C.G.C.       TOOL     DEPTH     C.G.C.     C.G.C.       TOOL     DEPTH     C.G.C.     C.G.C.       TOOL     DEPTH     C.G.C.     C.G.C.       TOOL     DEPTH     C.G.C.     C.G.C.       PRIMERY     GEL     C.G.C.     C.G.C.       DISPLACEMENT     I.G.C.C.     C.G.C.     C.G.C.       EQUIPMENT     C.G.C.C.     C.G.C.     C.G.C.       FUNCK     CEMENT R. C.G.C.     C.G.C.     C.G.C.       BULK TRUCK     E.G.C.     C.G.C.     C.G.C.       # D-2     DRIVER     G.G.C.     C.G.C.       BULK TRUCK     E.G.C.     C.G.C.     C.G.C.       # D.C. COMPARY     C.G.C.     C.G.C.     C.G.C.       BULK TRUCK     G.G.C.     C.G.C.     C.G.C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ater gille                              | VAE                                     |            |            |
| TYPE 0.7 JONG Cantern T. Self Face       TD.       2.17         CASING SIZE S. S. Marked DEPTH       TD.       2.17         CASING SIZE S. S. Marked DEPTH       CIEMENT         AMOUNT ORDERED 1.50 SX. Corm.       Size Coc.         DRIL PUP       DEPTH       AMOUNT ORDERED 1.50 SX. Corm.         TOOL       DEPTH       COMMON       @         CEMENT LIFT IN CSO.       SHOE JOINT       GEL       @         CEMENT LIFT IN CSO.       SHOE JOINT       GEL       @         CEMENT LIFT IN CSO.       SHOE JOINT       GEL       @         GEN ALEMENT       J. J                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | CONTRACTOR SHIPLD'S DALG RIST "Ge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | OWNER                                   |                                         |            |            |
| CASING SIZE S. S. S. Communication of the second sector of contractor to the second sector of the sector sector of the second sector of the sector sector sector of the sector sector of the sector sector sector of the sector sector of the sector sector sector sector of the sector secto                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | TYPE OF JOB COMENT SALFace                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                         |                                         | ·····      |            |
| TUBING SIZE 20 # CSG, DEPTH         DRUL PRE         PREMIL PRE         AX         MINIMUM         CEMERT LEFT IN CSG.         FERS         DISPLACEMENT         EQUIPMENT         FOMP TRUCK         CEMERTER // COMMON         EQUIPMENT         EQUIPMENT         FOMP TRUCK         CEMENTER // COMMON         EQUIPMENT         <                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | CEMENT                                  | 1 ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | 1          |            |
| DRILL PPE       DEPTH         TOOL       DEPTH         PRES_MAX       MINIMUM         RES_MAX       MINIMUM         RES_MAX       MINIMUM         COMMON       @         CEMENT LEPT IN CSG.       @         FERS       Image: Stop JOINT         CEMENT LEPT IN CSG.       @         FERS       Image: Stop JOINT         FOUP TRUCK       CEMENTER Stop Image: Stop JOINT         FOUP TRUCK       CEMENTER Stop Image: Stop JOINT         FULX TRUCK       CEMENTER Stop Image: Stop JOINT         PUMP TRUCK       CEMENTER Stop Image: Stop JOINT         FULX TRUCK       CEMENTER Stop Image: Stop JOINT         BULX TRUCK       EMILER He.a TH L         BULX TRUCK       @         #       DRIVER         HANDLING       @         #       DRIVER         HANDLING       @         SERVICE       TOTAL         Disclassing       SERVICE         Disclassing       SERVICE         Disclassing       SERVICE         Disclassing       SERVICE         Disclassing       SERVICE         Orment       DISC CHARGE         @       DISC Place Stop Th <td></td> <td>AMOUNT ORI</td> <td>DERED 100</td> <td>SXCOM</td> <td>N ,</td>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | AMOUNT ORI                              | DERED 100                               | SXCOM      | N ,        |
| TOOL       DEPTH         PRES_MAX       MINIMUM         PRES_MAX       MINIMUM         PRES_MAX       MINIMUM         PRES_MAX       MINIMUM         PRES_MAX       MINIMUM         PRES_MAX       MINIMUM         CEMENT LEFT IN CSG.       @         PERPS       DISPLACEMENT         DISPLACEMENT       ID         PUMP TRUCK       CEMENTER Status         #       D-2         BULK TRUCK,       #         #       DRIVER         BULK TRUCK,       @         #       DRIVER         BULK TRUCK,       #         BULK TRUCK,       # <t< td=""><td>the second second</td><td></td><td>297000</td><td>est.</td><td></td></t<> | the second |                                         | 297000                                  | est.       |            |
| PRES. MAX       MINIMUM         MEAS. LINE       SHOE JOINT         MEAS. LINE       SHOE JOINT         CEMENT LEFT IN CSG.       GE         PERFS       GS         DISPLACEMENT       ISSTERMARKS         PUMP TRUCK       CEMENTIER         EQUIPMENT       GS         PUMP TRUCK       CEMENTIER         EQUIPMENT       GS         #       D-2         HELFER       HELFER         #       D-2         # B-5       DRIVER         BULK TRUCK       GE         #       DRIVER         #       DRIVER         #       DRIVER         HANDLING       GE         GE       MILEAGE         TOTAL       SERVICE         Ser S %3       GE SERVICE         DEPTH OF JOB       MILEAGE         GHUT T. I H (G. ASSOFF.       MILEAGE         GHUT T. I H (G. ASSOFF.       MILEAGE         CHARGE TO:       FRAAKK STAAB         OIL       Comp Shut         GIVER       MILEAGE         GIVER       STREET         CITY       STATE         STREET       ZIP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <del></del>                             | sto act                                 | ¢397       |            |
| MEAS_LINE       SHOE JOINT       POZMIX       @         CHEMENT LIFT IN CSG.       @       @                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | COMMON                                  |                                         | (a)        |            |
| PERFS       Image: Constraint of the constr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         |            |            |
| DISPLACEMENT       IQUIPMENT       ASC       Image: Constraint of the sport o                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | GEL                                     |                                         | @          |            |
| EQUIPMENT         FUMP TRUCK       CEMENTER Claum C.         # $HELPER Aea tH L.         BULK TRUCK       #       HELPER Aea tH L.         BULK TRUCK       #       HEMARKS:         BULK TRUCK       HEMARKS:         BULK TRUCK       HEMARKS:         TOTAL         TOTAL         DEPTH OF JOB         PUMP TRUCK CHARGE         EXTRA FOOTAGE         EXTRA FOOTAGE         EXTRA FOOTAGE         EXTRA FOOTAGE         EXTRA FOOTAGE         EXTRA FOOTAGE         EXTRA FOOTAE QUIPMENT         $                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         |            |            |
| PUMP TRUCK       CEMENTER Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ASC                                     |                                         |            |            |
| PUMP TRUCK       CEMENTER Glown G.         #       Deliver Glown G.         #       Deliver Glown G.         #       BS.         DRIVER Glown G.       @         #       DRIVER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         | -          |            |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | PUMPIRUCK CEMENTER CARALAN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1000 C                                  |                                         |            |            |
| #       B-5       DRIVER       BULK TRUCK         BULK TRUCK       @       @       @         #       DRIVER       @       @         #       DRIVER       @       @       @         #       DRIVER       @       @       @       @         #       DRIVER       @       @       @       @       @         #       DRIVER       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @       @ <t< td=""><td># P-2 HELPER Heatth L.</td><td></td><td></td><td>4</td><td></td></t<>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | # P-2 HELPER Heatth L.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                         |                                         | 4          |            |
| BULK TRUCK                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         | . @        |            |
| #       DRIVER       @                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         | . @        |            |
| HANDLING       @         Set       \$ % @         Set       \$ % @         Remarks:       TOTAL         Recided Circulation       \$ \$ % @         Discide of Ulists       \$ \$ \$ \$ \$ \$ \$ @         Discide of 13/80       \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         | <b>v</b>   |            |
| MILEAGE       TOTAL         Set 878 @ 214       TOTAL         Recise 0 C.RCULATISH       SERVICE         Disclere 0 13/864       H2°         SHUT. 14 @ 450F.       DEPTH OF JOB         PUMP TRUCK CHARGE       EXTRA FOOTAGE         @ MILEAGE       @                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | HANDING                                 |                                         |            |            |
| Set S% @ 214       TOTAL         Recieve Circulation       SERVICE         Comment W/150 SX Com 24-3       DEPTH OF JOB         Displace D/13/EBL       H2         SHUT. IN @ ASOFF.       DEPTH OF JOB         SHUT. IN @ ASOFF.       DEPTH OF JOB         SHUT. IN @ ASOFF.       PUMP TRUCK CHARGE         Comment DiD CifficulATE       MILEAGE         Markes       Markes         Markes       MILEAGE         CHARGE TO: FRAAK STAAB OIL Company       @         STREET       It company         CITY       STATE         STATE       ZIP         PLUG & FLOAT EQUIPMENT         Global Cementing, L.L.C.,       @         You are hereby requested to rent cementing équipment and furnish cementer and helper(s) to assist owner or contractor to do work as is bisted. The above work was done to estisfaction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         | . @        |            |
| Set 8% @ 214         Recieded C.RCULATION         Comment W/150 SX.Com 2+3         Disolere 0/13/22L       H2         SHUT. 14 @ 2507F.         Disolere 0/13/22L       H2         SHUT. 14 @ 2507F.         Disolere 0/13/22L       H2         Depth of IOB         PUMP TRUCK CHARGE         Extra footage       @         MILEAGE       @         Charge to: FRAAK STAAB Oil Company       Mantfold         Street                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         | TOTA       | L          |
| Comment W/150 SX Com 243       Displece D       13/844 H2         Displece D       13/844 H2       DEPTH OF JOB         SHUT IN @ ASOTH       DEPTH OF JOB         With Total       PUMP TRUCK CHARGE         Comment Did CifficultATE       MILEAGE         Wanifold       @         Charge to: FRAMK STAAB OIL Company       Manifold         Street       @         City       State         Street       ZIP         PLUG & FLOAT EQUIPMENT         Global Cementing, L.L.C.,         You are hereby requested to rent cementing équipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to setification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Sar \$5/2 a 214                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         |            |            |
| Comment W/150 SX Com 243       Displece D       13/844 H2         Displece D       13/844 H2       DEPTH OF JOB         SHUT IN @ ASOTH       DEPTH OF JOB         With Total       PUMP TRUCK CHARGE         Comment Did CifficultATE       MILEAGE         Wanifold       @         Charge to: FRAMK STAAB OIL Company       Manifold         Street       @         City       State         Street       ZIP         PLUG & FLOAT EQUIPMENT         Global Cementing, L.L.C.,         You are hereby requested to rent cementing équipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to setification                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Reprieved C. Prill AT ON                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                         | 000                                     | a nor      |            |
| SHUT. IN @ ASOFF.       PUMP TRUCK CHARGE.         Image: Shut Company       PUMP TRUCK CHARGE.         Image: Shut Company       Image: Shut Company         CHARGE TO: FRANK STAAB OIL Company       Image: Shut Company         STREET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | CEMENT WI 150 SX Com 243                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                         | SEI                                     | RVICE      |            |
| SHUT. IN @ 18504F,       PUMP TRUCK CHARGE         Zemment DiD CIACULATE       MILEAGE         MILEAGE       @         MANIFOLD       @         CHARGE TO: FRANK STAAB OIL Company       @         STREET       @         CITY       STATE         STATE       ZIP         PLUG & FLOAT EQUIPMENT         Global Cementing, L.L.C.,         You are hereby requested to rent cementing équipment and         furnish cementer and helper(s) to assist owner or contractor to         @         @         @         @         @         @         @         @                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | DEPTH OF JOE                            | 3                                       |            |            |
| Charge to: ERANK STAAB Oil Company       MILEAGE       @         CHARGE TO: ERANK STAAB Oil Company       @                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | SHUT. IN @ ASOTTI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                         |                                         |            |            |
| CHARGE TO: ERAAIK STAAB OIL Company       MANIFOLD       @         CHARGE TO: ERAAIK STAAB OIL Company       @                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ·····                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | EXTRA FOOTA                             | AGE                                     | @          |            |
| CHARGE TO: ERANK STAAB OIL Company         STREET         CITY       STATE         STATE       STATE         STATE       PLUG & FLOAT EQUIPMENT         Global Cementing, L.L.C.,       (a)         You are hereby requested to rent cementing équipment and         furnish cementer and helper(s) to assist owner or contractor to         do work as is listed       The above work was done to satisfaction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Cement Pup CIACULATE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                         |                                         | ~          |            |
| CHARGE TO: ERANK STAAB OIL Company         STREET         CITY         STATE         ZIP         PLUG & FLOAT EQUIPMENT         Global Cementing, L.L.C.,         You are hereby requested to rent cementing équipment and         furnish cementer and helper(s) to assist owner or contractor to         do work as is listed         The above work was done to satisfaction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | THISICE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                         |                                         | 0          |            |
| CHARGE TO: LRAAK STAAB OIL COMPANY         STREET         CITY       STATE         CITY       STATE         CITY       STATE         CITY       STATE         CITY       PLUG & FLOAT EQUIPMENT         Global Cementing, L.L.C.,       PLUG & FLOAT EQUIPMENT         You are hereby requested to rent cementing équipment and       @         furnish cementer and helper(s) to assist owner or contractor to       @         do work as is listed.       The above work was done to satisfaction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         | Ç          |            |
| STREET       TOTAL         CITY       STATE       ZIP         PLUG & FLOAT EQUIPMENT         Global Cementing, L.L.C.,       PLUG & FLOAT EQUIPMENT         You are hereby requested to rent cementing équipment and       @         furnish cementer and helper(s) to assist owner or contractor to       @         do work as is listed       The above work was done to satisfaction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | CHARGE TO FRANK STAAB OIL COMPANY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | /                                       |                                         | . @        |            |
| CITYSTATEZIP PLUG & FLOAT EQUIPMENT  Global Cementing, L.L.C., You are hereby requested to rent cementing équipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         | TOTAL      | L          |
| Global Cementing, L.L.C.,<br>You are hereby requested to rent cementing équipment and<br>furnish cementer and helper(s) to assist owner or contractor to<br>do work as is listed. The above work was done to satisfaction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         |            |            |
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| You are hereby requested to rent cementing equipment and<br>furnish cementer and helper(s) to assist owner or contractor to<br>do work as is listed. The above work was done to satisfaction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Global Cementing I. I. C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | •                                       |                                         |            |            |
| furnish cementer and helper(s) to assist owner or contractor to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         |            |            |
| do work as is listed. The above work was done to satisfaction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | furnish cementer and helper(s) to assist owner or contractor to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                         |                                         |            |            |
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do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

Ert.

PRINTED NAME Jeorae and will design SIGNATURE 20

TOTAL \_\_\_\_\_\_
SALES TAX (If Any)\_\_\_\_\_\_
TOTAL CHARGES \_\_\_\_\_\_
DISCOUNT \_\_\_\_\_\_ IF PAID IN 30 DAYS

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## Janel Staab Consulting Petroleum Geologist

2428 Toulon Ave Hays, KS 67601 Phone: 785-625-4311 Cell Phone: 785-635-1660

## **GEOLOGIST'S WELL REPORT**

10189

COMPANY Staab Oil Company (6037) WELL Haines #1 FIELD Webster View Southeast LOCATION (legal) NW-SE · NW-NW 765 FNL 975 FWL Section 8 TWP 85 RGE 18W (Map) From Plaunile 9 north 1W, 1/25 - 21/2 W 3/4 M. COUNTY Books STATE Kansas ELEVATION: 1942 K.B., 1937 G.L.

Depths measured from Kelly Bushing

A. P. I. NUMBER 15-163-24315 GEOLOGY BY Janel Staab

# PERTINENT WELL DATA

| CONTRACTOR Shields Drilling Co. (5184)          |
|-------------------------------------------------|
| RIG HYDRAULICS Beth 225 6X14                    |
| RIGHYDRAULICS 6214                              |
| DRILL PIPE 41/2 XH COLLARS 6/4 233              |
| CASING: SURFACE 85/8 @ 214 W/150 SXCOM          |
| PRODUCTION 51/2" @ 3443 W/150 SXCOMM            |
| DRILLING FLUID: COMPANY Mud. Co/Service Mud Inc |
| TYPE: Chemical Gary Schmidtber                  |
| REMARKS: Full Service                           |
| DRILL STEM TESTS: COMPANY Trilobite Testing Inc |
| NUMBER OF TESTS                                 |
| ELECTIC LOGS: COMPANY                           |
| DETAIL (5") _ 2800 - RTO                        |
| TYPE DI, COMONO, Micro                          |
| DRILLING TIME FROM 2830 TO RTD                  |
| SAMPLE TIME FROM _2830 TO RTD                   |
| SUPERVISION FROM _2830 TO RTD                   |
| VERTICAL DEVIATION 3/4 @ 3110                   |
|                                                 |
| PLUGGING REPORT                                 |
| RESERVE PIT                                     |
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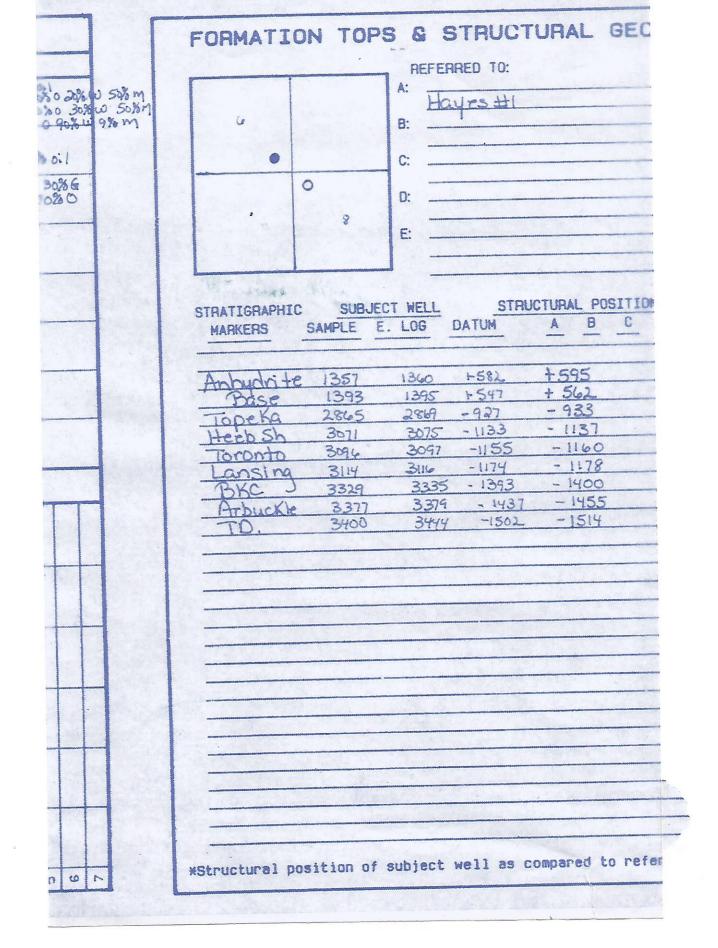
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| 8.12.16     2540'     Orilling sh + s       8.13.16     3110'     OST #1 Topek       8.13.16     3184'     OST #2 LKC       8.14.16     3184'     DST #2 LKC       8.15.16     3440'     Logging                                                                                                                           | 8.09.16       SP.U.D         8.10-16       217'         8.10-16       217'         8.11.16       1517'         0rilling Anhydr         8.12.16       2540'         8.13.16       310'         8.14.16       3184'         8.14.16       3184'         8.15.16       3440'         2.15.16       3440'         2.14.16       3440' |                    |                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------|
| 8.09.16       SP.U.O         8.10-16       217'         8.10-16       217'         8.11.16       1517'         0rilling Anhydr         8.12.16       2540'         8.13.16       310'         8.13.16       3184'         0ST #1 Topek         8.14.16       3184'         0ST #2 LKC         8.15.16       3440'          | 8.09.16     SP.U.O       8.10-16     217'       8.10-16     217'       8.11.16     1517'       0rilling Anhydr       8.12.16     2540'       8.13.16     3110'       8.13.16     3184'       0ST #1 Topeto       8.14.16     3184'       0ST #2 LKC       8.15.16     3440'                                                       |                    |                 |
| 8.10-16       217'       W.O.C.         8.11.16       1517'       Drilling Anhydr         8.12.16       2540'       Orilling sh + s         8.13.16       310'       Ost #1 Topek         8.14.16       3184'       Ost #2 LKC         8.15.16       3440'       Logging                                                   | 8.10-16       217'       W.O.C.         8.11.16       1517'       Orilling Anhydr         8.12.16       2540'       Orilling sh + si         8.13.16       310'       Ost #1 Topeko         8.13.16       3184'       Ost #2 LKC         8.14.16       3440'       Logging                                                        | DATE: 7 a.m. Depth | RIG ACTIVITY    |
| 8.11.16       1517       Orilling Anhydr         8.12.16       2540       Orilling sh + s         8.12.16       2540       Orilling sh + s         8.13.16       3110       OST #1 Topeko         8.13.16       3184       OST #2 LKC         8.14.16       3184       OST #2 LKC         8.15.16       3440       Logging | 8.11.16       1517       Orilling Anhydr         8.12.16       2540'       Orilling sh + si         8.12.16       2540'       Orilling sh + si         8.13.16       310'       OST #1 Topeka         8.14.16       3184'       OST #2 LKC         8.15.16       3440'       Logging                                              | 8-09-16            | SP.U.D          |
| 8.12.16     2540'     Orilling sh + s       8.13.16     3110'     OST #1 Topek       8.13.16     3184'     OST #2 LKC       8.14.16     3184'     DST #2 LKC       8.15.16     3440'     Logging                                                                                                                           | 8. 12.110       2540'       Orilling sh + sl         8. 13.16       3110'       OST #1 Topeka         8. 13.16       3184'       OST #2 LKC         8. 14.16       3184'       DST #2 LKC         8. 15.16       3440'       Logging                                                                                              | 8-10-16 217        | W.O.C.          |
| 8.13.16 3110' OST #1 Topek<br>8.14.16 3184' DST #2 LKC<br>8.15.16 3440' Logging                                                                                                                                                                                                                                            | 8.13.16 3110' OST #1 Topeko<br>8.14.16 3184' DST #2 LKC<br>8.15.16 3440' Logging                                                                                                                                                                                                                                                  | 8.11.16 1517       | Orilling Anhydr |
| 8.14.16 31841 DST #2 LKC<br>8.15.16 3440 Logging                                                                                                                                                                                                                                                                           | 8.14.16 31841 DST #2 LKC<br>8.15.16 3440 Logging                                                                                                                                                                                                                                                                                  | 8.12.16 2540       |                 |
| 8-15-16 3440 Logging                                                                                                                                                                                                                                                                                                       | 8-15-16 3440 Logging                                                                                                                                                                                                                                                                                                              | 8.13.16 3110       |                 |
|                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                   | 8.14.16 31841      | DST #2 LKC      |
|                                                                                                                                                                                                                                                                                                                            | 8.16.16 3440' Cementing Co                                                                                                                                                                                                                                                                                                        | 8-15-16 3440       |                 |
| 8.16.16 3440' Cementing (C                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                   | 8.16.16 3440'      | Cementing CC    |
|                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                   |                    |                 |
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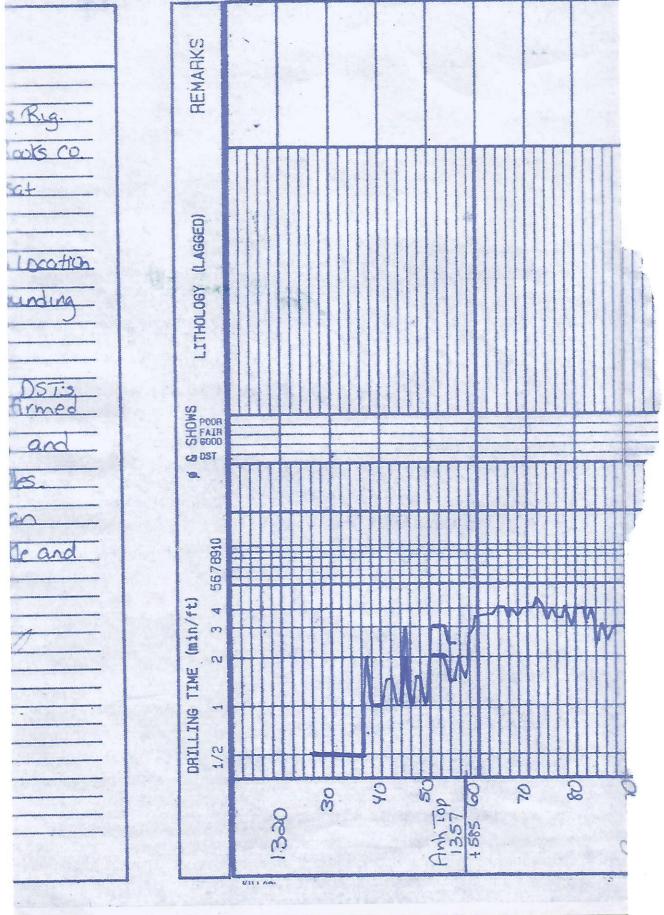
| m    | TTETA AL             | 100                  | -/                  | -                   |                                 |                 | ST           |    | and the second second |     |                   | and the second second second | R                   | ECO                | VE  |
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|      | Topela-<br>Toronto   | and a second         | 5-12                | 1                   | 1087                            | 1               | 30.325       | 10 | 82                    | 14  | 164               | 120                          | Gu                  | 30) 30)            | 266 |
| 2    | 3018-<br>LKC- A-D    | 3                    | 10<br>H-5           | 1                   | 113                             |                 | 60<br>54-123 | 1  | 10                    | 10  | 196               |                              | 300                 | SO                 | TC  |
| -    | 3108-<br>3184<br>Arb | -                    | 10                  | 3                   | 60                              |                 | 153.46       | 1  | 90                    | -   | <u>470</u><br>737 | 12                           | 20'0                | am                 | 10  |
| 3    | 3369.<br>3409        | 1.                   | 5                   | -                   | 60                              | 1               | 60           |    | 10                    | 1.0 | 643               | 118                          | 80'                 | GO<br>GI           | P   |
| 4    |                      |                      |                     |                     |                                 |                 |              |    |                       |     |                   |                              |                     |                    |     |
| 5    |                      |                      |                     | in a                | 9                               |                 | 12           |    |                       |     |                   |                              | ******              |                    |     |
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|      |                      |                      |                     |                     |                                 |                 |              |    |                       |     |                   | HOURS                        | 7 34                | 4 Jy               |     |
|      |                      |                      |                     |                     |                                 |                 |              |    |                       |     |                   |                              |                     |                    |     |
|      | Mal                  |                      |                     | 2                   | 20                              | 1               |              |    |                       |     | 0                 | FEET                         | 217                 | 8223               |     |
|      | AP LC                | I S                  | I S                 | R                   | 2S<br>27                        | 5               |              |    |                       |     | CORD              | n-DUT FEET                   |                     | 322                | -   |
| 00   | TH AP LC             | I S                  | I S                 | 1600 30             | 2S<br>27                        | 5               |              |    |                       |     | RECORD            | DEPTHOUT                     |                     | 322                |     |
| 0000 | TH AP LC             | NC 17000 - Ni        | I S                 | 7.2 1800 30         | 6.8 1900 25<br>3 7 4 1800 25    | 5               |              |    |                       |     | T RECORD          | DEPTHOUT                     |                     | 322                |     |
|      | TH AP LC             | 29 NC 17000 - Ni     | I S                 | 604 7.2 1800 30     | 57 6.8 1900 25<br>59 74 1910 25 | 1 11 100 01     |              |    |                       |     | BIT RECORD        | TYPE DEPTHON                 | Mull Tooth 217 "    | S.52 3440 322      |     |
|      | WT VIS FIL CHL YP LC | 9.2 29 NC 17000 - Ni | 9.3 29 NC 3000 - Ni | 8.9 604 7.2 1800 30 | 91 57 6.8 1900 25               | 10 001 11 10 01 |              |    |                       |     | BIT RECORD        | NAKE TYPE DEPTHOUT           | Reed Mill Touth 217 | Reed S.52 3440 322 |     |
|      | WT VIS FIL CHL YP LC | 29 NC 17000 - Ni     | 9.3 29 NC 3000 - Ni | 604 7.2 1800 30     | 91 57 6.8 1900 25               | 1 11 100 01     |              |    |                       |     | BIT RECORD        | TYPE DEPTHON                 | Mull Tooth 217 "    | Reed S.52 3440 322 |     |

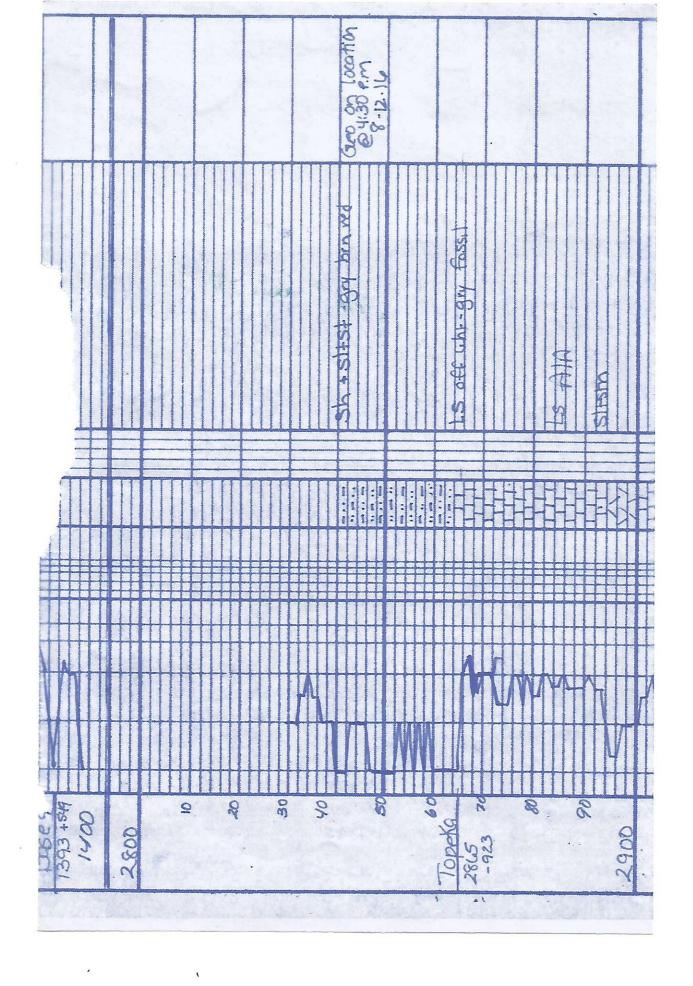
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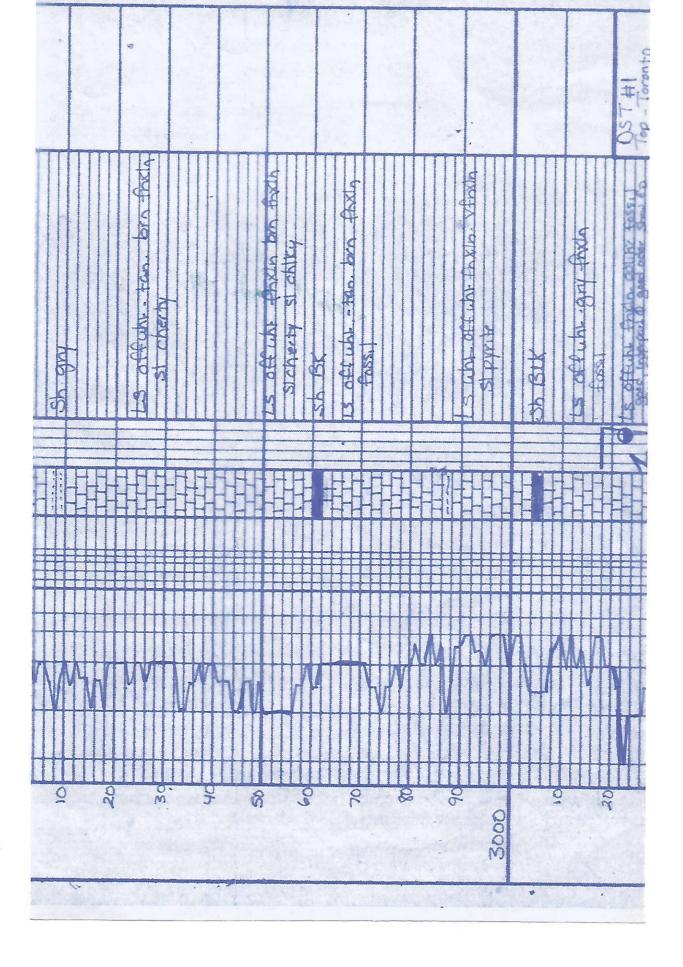


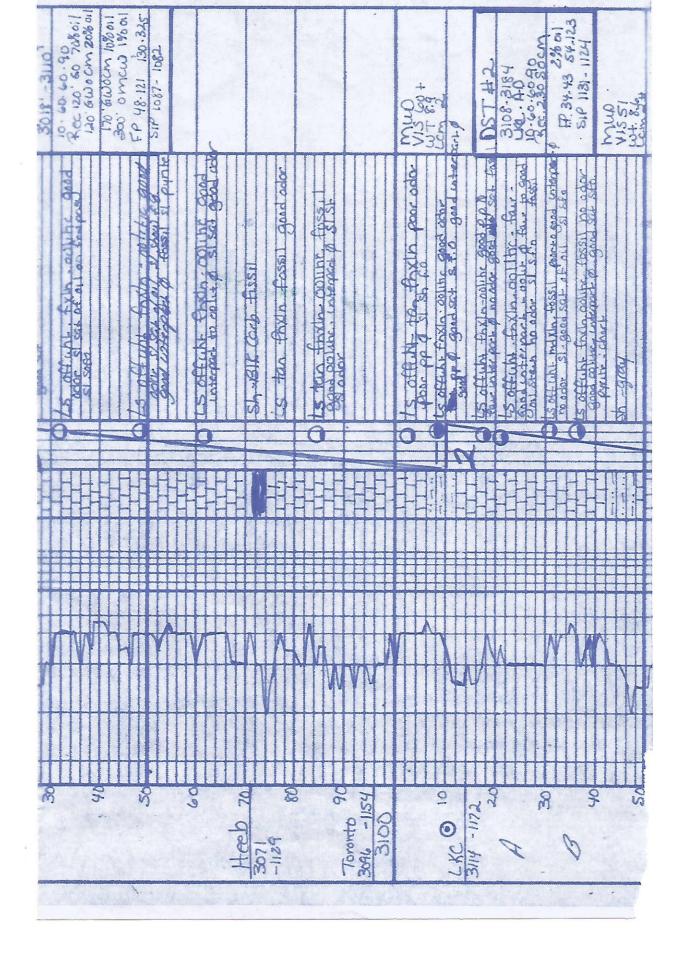
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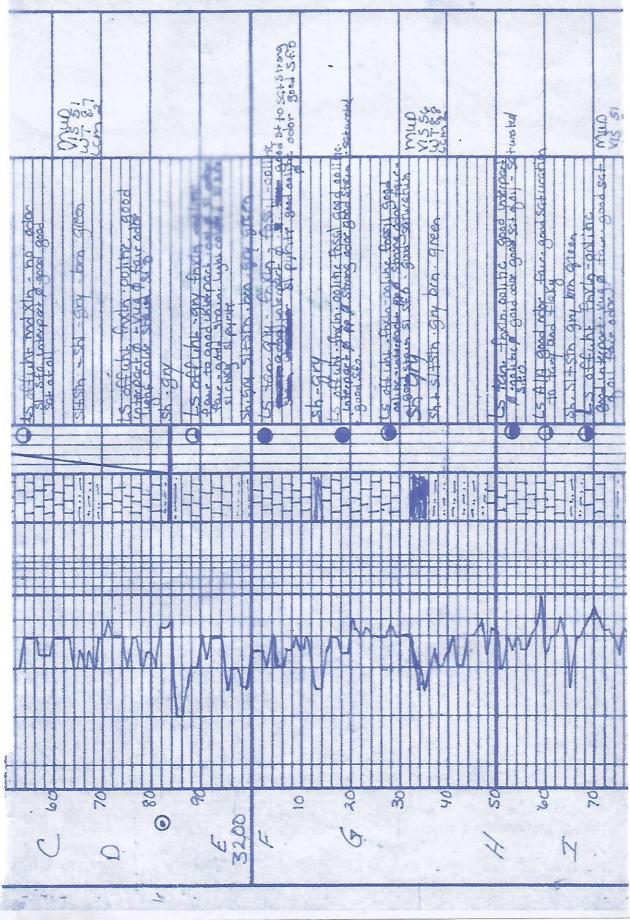
SUMMARY LOGY The Haines #1 was drilled using Shield Location was Sec 8, T 85, R 18W in A Kanses starting on August 9 2016 and pipe on August 16 2016 3.0 Setsmic had indicated that this had a Arbuckle high compared to surre <u>3</u> 0 drilled locations. 3- DST:s and loss were ran #1 + #3 had upositive results. Logs con that this wation was structurally high confirmed DST-results as well as same As a result production pipe was n And focus areas will be in the Arbuc Lower tupeka + Toronto + FZone of LKC nor red well.



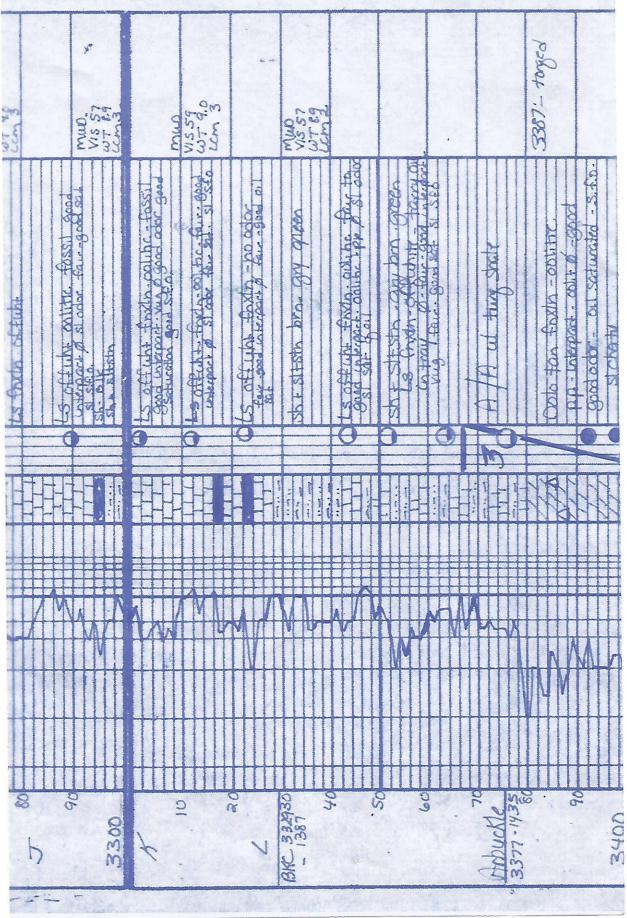




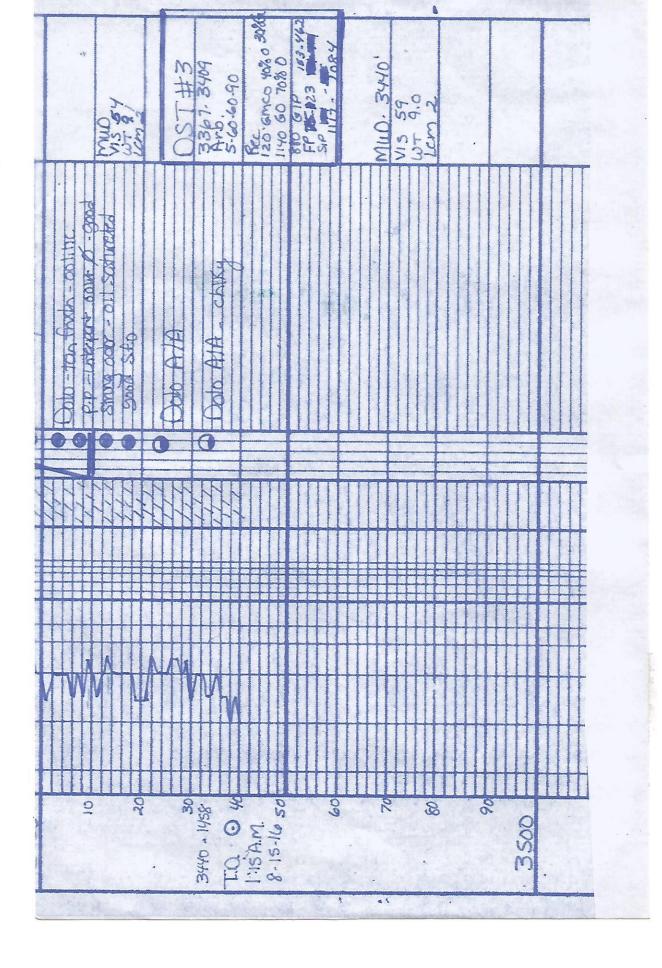




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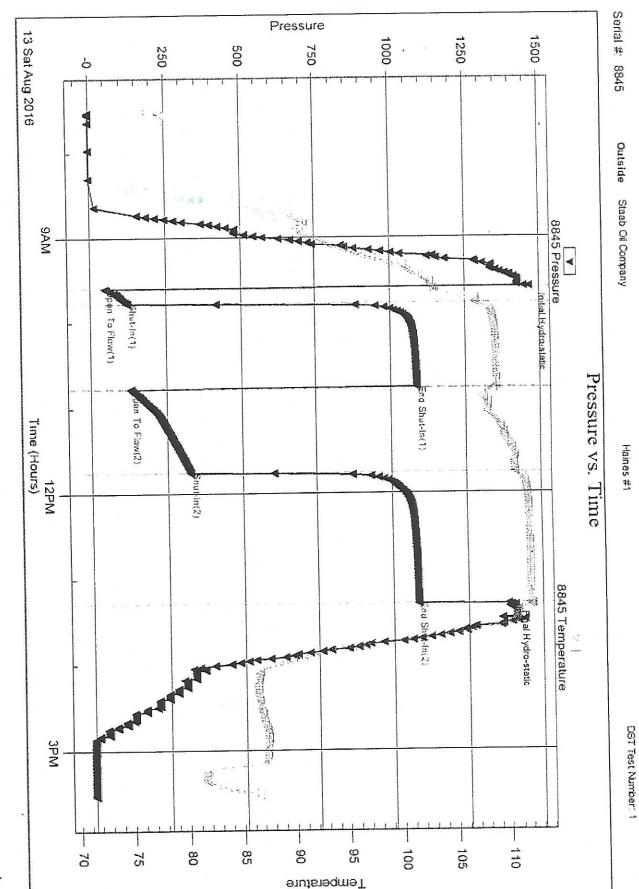
| RILOBITE                                                                                                 | Staab Oil Compar                                                                                                                                                                                                            | ıy                                   |                                                        | 8-8s-                                                                                      | 18w Ro                                                                                          | oks,KS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                 |                |
|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------|
| TESTING, M                                                                                               | in                                                                                                                                                                                                                          |                                      |                                                        | Hain                                                                                       | nes#1                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                 |                |
|                                                                                                          | 1607 Hopew ell R<br>Hays, KS 67601                                                                                                                                                                                          | U                                    |                                                        |                                                                                            | icket: 655                                                                                      | 42                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DST#:1                                                          |                |
|                                                                                                          | ATTN: Janel Sta                                                                                                                                                                                                             | aab                                  |                                                        |                                                                                            |                                                                                                 | 6.08.13 @ (                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 07:31:00                                                        |                |
| ENERAL INFORMATION:                                                                                      |                                                                                                                                                                                                                             |                                      |                                                        |                                                                                            |                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                 |                |
| ormation: Oread - Toronto<br>eviated: No Whipstoc<br>me Tool Opened: 09:35:45<br>me Test Ended: 15:32:15 |                                                                                                                                                                                                                             |                                      |                                                        | Test<br>Teste<br>Unit N                                                                    | er: Br                                                                                          | onventional<br>radley Walte<br>8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                 | e (Initial)    |
| otal Depth: 3110.00 ft (KB)                                                                              | <b>3110.00 ft (KB) (TVI</b><br>(TVD)<br>Hole Condition: Good                                                                                                                                                                | )                                    |                                                        | Refe                                                                                       | rence Elev<br>KB to                                                                             | vations:<br>GR/CF:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1942.00<br>1937.00<br>5.00                                      | ft (CF)        |
| Gerial #:8845Outsideress@RunDepth:325.28 psstart Date:2016.08.Start Time:07:31:                          | 13 End Date:                                                                                                                                                                                                                | (KB)                                 | 2016.08.13<br>15:32:14                                 | Capacity:<br>Last Calib<br>Time On E<br>Time Off I                                         | o.:<br>3tm: 2                                                                                   | 2<br>016.08.13 (<br>016.08.13 (                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                 | psig           |
| FF: BOB @                                                                                                | return, died @ 25 minu<br>8 minutes.<br>2 @ 45 min_receded to                                                                                                                                                               |                                      |                                                        |                                                                                            |                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                 |                |
| FF: BOB @<br>FSI: 4" retur                                                                               |                                                                                                                                                                                                                             |                                      |                                                        |                                                                                            |                                                                                                 | E SUMM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                 |                |
| FF: BOB @<br>FSI: 4" retur                                                                               | 8 minutes.<br>n @ 45 min. receded to                                                                                                                                                                                        |                                      | Time<br>(Min.)<br>0                                    | Pressure<br>(psig)<br>1463.83                                                              | Temp<br>(deg F)<br>103.28                                                                       | Annotatio                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | on<br>o-static                                                  |                |
| FF: BOB @<br>FSI: 4" retur                                                                               | 8 minutes.<br>n @ 45 min. receded to                                                                                                                                                                                        | o 1"                                 | (Min.)                                                 | Pressure<br>(psig)                                                                         | Temp<br>(deg F)<br>103.28<br>103.05<br>107.03                                                   | Annotatio<br>Initial Hydr<br>Open To F<br>Shut-In(1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | on<br>o-static<br>Flow (1)                                      |                |
| FF: BOB @<br>FSI: 4" retur                                                                               | 8 minutes.<br>n @ 45 min. receded to                                                                                                                                                                                        | 0 1"                                 | (Min.)<br>0<br>1<br>11<br>71                           | Pressure<br>(psig)<br>1463.83<br>48.01<br>121.39<br>1086.65                                | Temp<br>(deg F)<br>103.28<br>103.05<br>107.03<br>108.95                                         | Annotation<br>Initial Hydr<br>Open To F<br>Shut-In(1)<br>End Shut-I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | o-static<br>Flow (1)<br>In(1)                                   |                |
| FF: BOB @<br>FSI: 4" retur                                                                               | 8 minutes.<br>n @ 45 min. receded to                                                                                                                                                                                        | 0 1"<br>                             | (Min.)<br>0<br>1<br>11<br>71<br>72                     | Pressure<br>(psig)<br>1463.83<br>48.01<br>121.39<br>1086.65<br>130.45                      | Temp<br>(deg F)<br>103.28<br>103.05<br>107.03<br>108.95<br>108.64                               | Annotatio<br>Initial Hydr<br>Open To F<br>Shut-In(1)<br>End Shut-I<br>Open To F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | o-static<br>Flow (1)<br>In(1)<br>Flow (2)                       |                |
| FF: BOB @<br>FSI: 4" retur                                                                               | B minutes.<br>n @ 45 min. receded to<br>to vs. Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time<br>Time | 0 1"<br>                             | (Min.)<br>0<br>1<br>11<br>71                           | Pressure<br>(psig)<br>1463.83<br>48.01<br>121.39<br>1086.65                                | Temp<br>(deg F)<br>103.28<br>103.05<br>107.03<br>108.95<br>108.64<br>110.61<br>111.95           | Annotation<br>Initial Hydr<br>Open To F<br>Shut-In(1)<br>End Shut-I                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | o-static<br>Flow (1)<br>In(1)<br>Flow (2)<br>In(2)              |                |
| FF: BOB @:<br>FSI: 4" retur                                                                              | 8 minutes.<br>n @ 45 min. receded to<br>e vs. Time                                                                                                                                                                          |                                      | (Min.)<br>0<br>1<br>11<br>71<br>71<br>72<br>130<br>222 | Pressure<br>(psig)<br>1463.83<br>48.01<br>121.39<br>1086.65<br>130.45<br>325.28<br>1081.98 | Temp<br>(deg F)<br>103.28<br>103.05<br>107.03<br>108.95<br>108.64<br>110.61<br>111.95<br>112.02 | Annotation<br>Initial Hydr<br>Open To F<br>Shut-In(1)<br>End Shut-In(2)<br>End Shut-In(2)<br>End Shut-<br>Final Hydr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | o-static<br>Flow (1)<br>Flow (2)<br>In(2)<br>ro-static          |                |
| FF: BOB @<br>FSI: 4" retur                                                                               | 8 minutes.<br>n @ 45 min. receded to<br>e vs. Time                                                                                                                                                                          | Volume (bbl)                         | (Min.)<br>0<br>1<br>11<br>71<br>71<br>72<br>130<br>222 | Pressure<br>(psig)<br>1463.83<br>48.01<br>121.39<br>1086.65<br>130.45<br>325.28<br>1081.98 | Temp<br>(deg F)<br>103.28<br>103.05<br>107.03<br>108.95<br>108.64<br>110.61<br>111.95<br>112.02 | Annotation<br>Initial Hydr<br>Open To F<br>Shut-In(1)<br>End Shut-In(2)<br>End Sh | o-static<br>Flow (1)<br>In(1)<br>Flow (2)<br>In(2)<br>ro-static | Gas Rate (Mcfr |
| FF: BOB @<br>FSI: 4" retur                                                                               | 8 minutes.<br>n @ 45 min. receded to<br>e vs. Time                                                                                                                                                                          |                                      | (Min.)<br>0<br>1<br>11<br>71<br>71<br>72<br>130<br>222 | Pressure<br>(psig)<br>1463.83<br>48.01<br>121.39<br>1086.65<br>130.45<br>325.28<br>1081.98 | Temp<br>(deg F)<br>103.28<br>103.05<br>107.03<br>108.95<br>108.64<br>110.61<br>111.95<br>112.02 | Annotation<br>Initial Hydr<br>Open To F<br>Shut-In(1)<br>End Shut-In(2)<br>End Shut-In(2)<br>End Shut-<br>Final Hydr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | o-static<br>Flow (1)<br>Flow (2)<br>In(2)<br>ro-static          | Gas Rate (Mcfr |
| FF: BOB @<br>FSI: 4" retur                                                                               | B minutes.<br>n @ 45 min. receded to<br>e vs. Time:                                                                                                                                                                         | Volume (bbl)                         | (Min.)<br>0<br>1<br>11<br>71<br>71<br>72<br>130<br>222 | Pressure<br>(psig)<br>1463.83<br>48.01<br>121.39<br>1086.65<br>130.45<br>325.28<br>1081.98 | Temp<br>(deg F)<br>103.28<br>103.05<br>107.03<br>108.95<br>108.64<br>110.61<br>111.95<br>112.02 | Annotation<br>Initial Hydr<br>Open To F<br>Shut-In(1)<br>End Shut-In(2)<br>End Shut-In(2)<br>End Shut-<br>Final Hydr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | o-static<br>Flow (1)<br>Flow (2)<br>In(2)<br>ro-static          | Gas Rate (Mcfi |
| FF: BOB @<br>FSI: 4" return                                                                              | B minutes.<br>n @ 45 min. receded to<br>rever Time<br>revery<br>on<br>Dw 50m<br>00 50m                                                                                                                                      | Volume (bbl)<br>2.20<br>1.27<br>1.68 | (Min.)<br>0<br>1<br>11<br>71<br>71<br>72<br>130<br>222 | Pressure<br>(psig)<br>1463.83<br>48.01<br>121.39<br>1086.65<br>130.45<br>325.28<br>1081.98 | Temp<br>(deg F)<br>103.28<br>103.05<br>107.03<br>108.95<br>108.64<br>110.61<br>111.95<br>112.02 | Annotation<br>Initial Hydr<br>Open To F<br>Shut-In(1)<br>End Shut-In(2)<br>End Shut-In(2)<br>End Shut-<br>Final Hydr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | o-static<br>Flow (1)<br>Flow (2)<br>In(2)<br>ro-static          | Gas Rate (Mcfi |
| FF: BOB @<br>FSI: 4" return                                                                              | B minutes.<br>n @ 45 min. receded to<br>e vs. Time<br>very<br>on<br>wery<br>on<br>wery<br>on                                                                                                                                | Volume (bbl)<br>2.20<br>1.27         | (Min.)<br>0<br>1<br>11<br>71<br>71<br>72<br>130<br>222 | Pressure<br>(psig)<br>1463.83<br>48.01<br>121.39<br>1086.65<br>130.45<br>325.28<br>1081.98 | Temp<br>(deg F)<br>103.28<br>103.05<br>107.03<br>108.95<br>108.64<br>110.61<br>111.95<br>112.02 | Annotation<br>Initial Hydr<br>Open To F<br>Shut-In(1)<br>End Shut-In(2)<br>End Shut-In(2)<br>End Shut-<br>Final Hydr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | o-static<br>Flow (1)<br>Flow (2)<br>In(2)<br>ro-static          | Gas Rate (Mcfr |

Trilobite Testing, Inc

| (IN TOUGOUR                                                                                                                                                                             | D                    | RILL STEM TEST REPO                                                                               | DT                |                             |                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|---------------------------------------------------------------------------------------------------|-------------------|-----------------------------|-------------------------|
| RILOBITE                                                                                                                                                                                | Sta                  | ab Oil Company                                                                                    |                   |                             | LUID SUMMARY            |
| ESTING , I                                                                                                                                                                              | <b>₩C</b> 160<br>Hay | 7 Hopew ell Rd<br>s, KS 67601<br>N: Janel Staab                                                   | Haines #          | 65542                       | DST#: 1                 |
| Mud and Cushion Information                                                                                                                                                             |                      |                                                                                                   | Test Start:       | 2016.08.13 @ 07:            | 31:00                   |
| Mud Type: Gel Chem<br>Mud Weight: 9.00 lb/gal<br>Viscosity: 55.00 sec/qt<br>Water Loss: 7.18 in <sup>3</sup><br>Resistivity: ohm.m<br>Salinity: 1800.00 ppm<br>Filter Cake: 1.00 inches | n                    | Cushion Type:<br>Cushion Length:<br>Cushion Volume:<br>Gas Cushion Type:<br>Gas Cushion Pressure: | ft<br>bbl<br>psig | Oil API:<br>Water Salinity: | 38 deg API<br>28000 ppm |
| Recovery Information                                                                                                                                                                    |                      |                                                                                                   |                   |                             |                         |
|                                                                                                                                                                                         |                      | Recovery Table                                                                                    |                   |                             |                         |
| Len<br>fi                                                                                                                                                                               | t                    | Description                                                                                       | Volume<br>bbl     | ]                           |                         |
|                                                                                                                                                                                         | 300.00<br>170.00     | omcw 10 9m 90w                                                                                    | 2.204             |                             |                         |
|                                                                                                                                                                                         | 120.00               | gow cm 10g 10o 30w 50m<br>gw ocm 10g 20w 20o 50m                                                  | 1.269             | 1                           |                         |
|                                                                                                                                                                                         | 120.00               | go 30g 70o                                                                                        | 1.683             |                             |                         |
|                                                                                                                                                                                         | 0.00                 | 300' GIP                                                                                          | 0.000             |                             |                         |
| Total Length:                                                                                                                                                                           |                      | 0.00 ft Total Volume: 6.839 bb                                                                    | bl                |                             |                         |
| Num Fluid Sam<br>Laboratory Nar<br>Recovery Com                                                                                                                                         | ne:                  | Num Gas Bombs: 0<br>Laboratory Location:<br>v is .212 @ 80f = 28,000ppm                           | Serial #:         |                             |                         |
|                                                                                                                                                                                         |                      |                                                                                                   |                   |                             |                         |
|                                                                                                                                                                                         |                      |                                                                                                   |                   |                             |                         |
|                                                                                                                                                                                         |                      |                                                                                                   |                   |                             |                         |
|                                                                                                                                                                                         |                      |                                                                                                   |                   |                             |                         |
|                                                                                                                                                                                         |                      |                                                                                                   |                   |                             |                         |
|                                                                                                                                                                                         |                      |                                                                                                   |                   |                             |                         |

Trioble Testing, Inc.

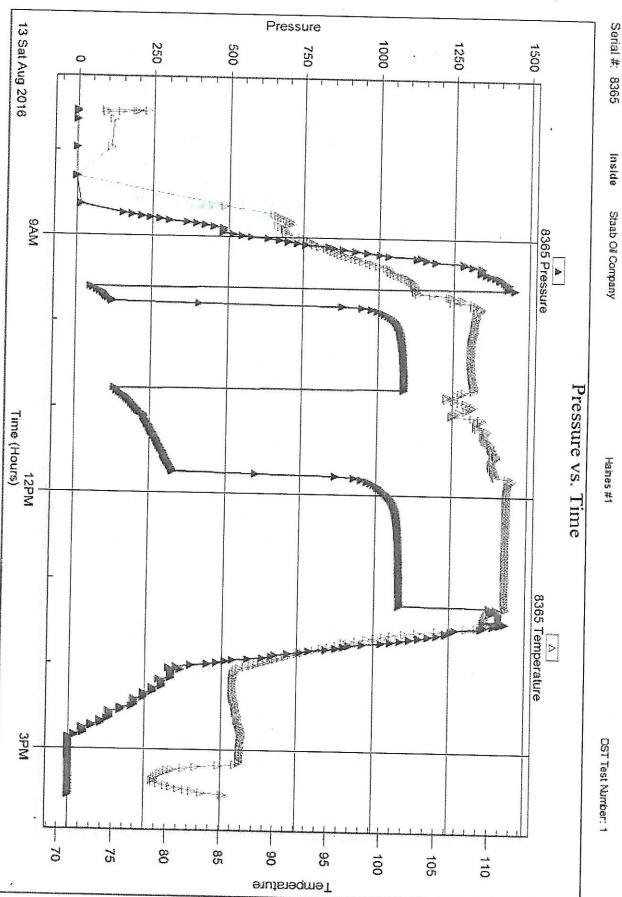
Ref. No: 65542



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Ref. No: 65542

Tritobite Testing, Inc



| RILOBITE -                                              | DRILL STEM TE                            | 31          | KEP(        |                        |                   |                             |                       |                |
|---------------------------------------------------------|------------------------------------------|-------------|-------------|------------------------|-------------------|-----------------------------|-----------------------|----------------|
| 5-14                                                    | Staab Oil Company                        |             |             | 8-8:                   | s-18w R           | ooks,KS                     |                       |                |
| ESTING , INC                                            | 1607 Hopew ell Rd                        |             |             | Hai                    | nes #1            |                             |                       |                |
|                                                         | Hays, KS 67601                           |             |             | Job                    | Ticket: 65        | 543                         | DST#: 2               |                |
|                                                         | ATTN: Janel Staab                        |             |             | Test                   | Start: 20         | 16.08.13 @                  | 23:23:00              |                |
| ENERAL INFORMATION:                                     | 1.<br>1.                                 |             |             |                        |                   |                             | ١,                    |                |
| ormation: LKC A - D                                     |                                          |             |             | _                      |                   |                             |                       | (              |
| eviated: No Whipstock:<br>me Tool Opened: 01:57:15      | ft (KB)                                  |             |             | Test                   |                   | Sonventiona<br>Bradley Wali | l Bottom Hol<br>ter   | e (Reset)      |
| me Test Ended: 07:39:15                                 | 1 1.83                                   |             |             | Unit                   |                   | 78                          |                       |                |
| nterval: 3108.00 ft (KB) To 318                         | 4.00 ft (KB) (TVD)                       |             |             | Refe                   | erence Ele        | vations:                    | 1942.00               |                |
| otal Depth: 3184.00 ft (KB) (TVI                        |                                          |             |             |                        | KD +              | o GR/CF:                    | 1937.00<br>5.00       |                |
| lole Diameter: 7.88 inches Hole                         | Lonaltion: Good                          |             | 102410-00   |                        |                   | U GRUCF.                    | 5.00                  | 11             |
| Serial #: 8845 Outside                                  |                                          |             |             | ~ ·                    |                   |                             | 0000.00               | 1120020 • 1121 |
| Press@RunDepth: 122.97 psig @<br>Start Date: 2016.08.13 | 3109.00 ft (KB)<br>End Date:             | 2           | 016.08.14   | Capacity<br>Last Calil |                   |                             | 8000.00<br>2016.08.14 | psig           |
| Start Time: 23:23:05                                    | End Time:                                |             | 07:39:14    | Time On                |                   |                             | @ 01:57:00            |                |
|                                                         |                                          |             |             | Time Off               | Btm: 2            | 2016.08.14                  | @ 05:45:00            |                |
| FF: 3" blow .<br>FSI: No return.<br>Pressure vs. Tin    |                                          |             |             | Pf                     | RESSUF            | RE SUMM                     | ARY                   |                |
| 2945 Prosente<br>                                       | 2045 Tempasking<br>Partition and the 110 | . †         | Time        | Pressure               | Temp              | Annotatio                   |                       |                |
|                                                         |                                          |             | (Min.)<br>0 | (psig)<br>1496.46      | (deg F)<br>103.11 | Initial Hydr                | o-static              |                |
|                                                         |                                          |             | 1           | 34.15                  | 102.36            | 1 - 1 - 1 - 1               |                       |                |
|                                                         |                                          |             | 13          | 52.53                  | 102.98            |                             |                       |                |
|                                                         |                                          | -           | 72<br>73    | 1131.11<br>53.68       | 104.71<br>104.06  | End Shut-I<br>Open To F     |                       |                |
|                                                         | 50                                       | Temperature | 133         | 122.97                 |                   | Shut-In(2)                  |                       |                |
|                                                         |                                          | 18          | 226         | 1124.03                | 108.91            |                             |                       |                |
|                                                         |                                          |             | 228         | 1470.43                | 109.10            | Final Hydr                  | o-static              |                |
|                                                         |                                          |             |             |                        |                   |                             |                       |                |
|                                                         |                                          |             |             |                        |                   |                             |                       |                |
| 143m 34M                                                | ۲۵                                       |             |             |                        |                   |                             |                       |                |
| ng 3916 Time (Hours)                                    |                                          |             |             |                        | 0                 |                             |                       |                |
| Recovery                                                |                                          |             |             |                        |                   | s Rates                     |                       |                |
| Length (ft) Description                                 | Volume (bbl)                             |             |             |                        | Choke (           | inches) Press               | ure (psig) G          | as Rate (Mcf/  |
| 230.00 socm 2o 98m                                      | 1.69                                     |             |             |                        |                   |                             |                       |                |
|                                                         |                                          |             |             |                        |                   |                             |                       |                |
|                                                         |                                          |             |             |                        |                   |                             |                       |                |
|                                                         |                                          |             |             |                        |                   |                             |                       |                |
|                                                         |                                          |             |             |                        |                   |                             |                       |                |
| * Recovery from multiple tests                          |                                          |             |             |                        |                   |                             |                       |                |

| RILOBITE -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | DRILL STEM TE                                                             | STREPC                                                                |                                                            |                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------|-------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Staab Oil Company                                                         |                                                                       | 8-8s-18w R                                                 | ooks,KS                                                           |
| TESTING, INC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1607 Hopew ell Rd<br>Hays, KS 67601                                       |                                                                       | Haines #1<br>Job Ticket: 65                                | 543 DST#: 2                                                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ATTN: Janel Staab                                                         |                                                                       | Test Start: 20                                             | 16.08.13 @ 23:23:00                                               |
| ENERAL INFORMATION:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 12                                                                        |                                                                       |                                                            | <b>`</b>                                                          |
| ormation: LKC A - D<br>eviated: No Whipstock:<br>me Tool Opened: 01:57:15<br>me Test Ended: 07:39:15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ft (KB)                                                                   |                                                                       | Tester:                                                    | Conventional Bottom Hole (Reset)<br>Bradley Walter<br>78          |
| iterval:3108.00 ft (KB) To31otal Depth:3184.00 ft (KB) (TVole Diameter:7.88 inchesHole                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                           |                                                                       | Reference ⊟e                                               | evations: 1942.00 ft (KB)<br>1937.00 ft (CF)<br>to GR/CF: 5.00 ft |
| Serial #: 8365Insideress@RunDepth:psigstart Date:2016.08.13start Time:23:23:05                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <ul> <li>3109.00 ft (KB)</li> <li>End Date:</li> <li>End Time:</li> </ul> | 2016.08.14<br>07:39:14                                                | Capacity:<br>Last Calib.:<br>Time On Btm:<br>Time Off Btm: | 8000.00 psig<br>2016.08.14                                        |
| FF: 3" blow .<br>FSI: No return.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                           |                                                                       |                                                            |                                                                   |
| Pressure vs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                           |                                                                       | PRESSU                                                     | RE SUMMARY                                                        |
| ESO Figure 45.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ROS Youppendage                                                           | Time<br>(Min.)                                                        | PRESSU<br>Pressure Temp<br>(psig) (deg F)                  | Annotation                                                        |
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| EXPROLATION AND AND AND AND AND AND AND AND AND AN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                           | 1900<br>1905<br>1909<br>196<br>196<br>197<br>197<br>197<br>197<br>197 | Pressure Temp<br>(psig) (deg F)                            | Annotation<br>as Rates                                            |

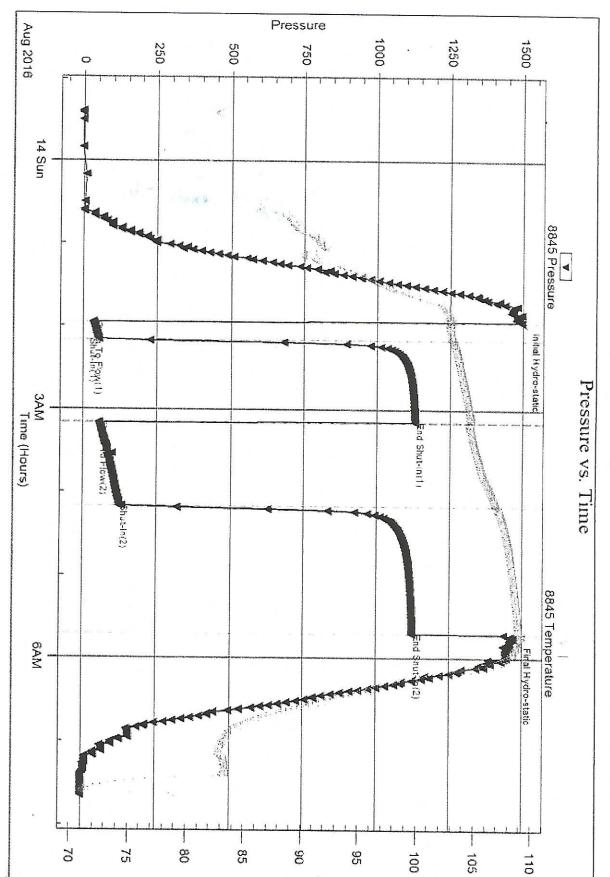
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| TONT                                                                                                                                                                                       | RILOE         | RITE       | DRII                                                                                                                           | LL STE                 | EM TEST       | REPOR                                                                                                      | T                      | TOOL DIAGRAI         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------|--------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------|------------------------------------------------------------------------------------------------------------|------------------------|----------------------|
| ·第二                                                                                                                                                                                        |               |            | Staab C                                                                                                                        | il Company             |               |                                                                                                            | 8-8s-18w Rooks,        | (S                   |
|                                                                                                                                                                                            | <b> </b> ES1  | TING , INC | 1001110                                                                                                                        | opew ell Rd<br>S 67601 |               |                                                                                                            | Haines #1              |                      |
|                                                                                                                                                                                            |               |            | Tidy5, IX                                                                                                                      | 0/001                  |               |                                                                                                            | Job Ticket: 65543      | DST#:2               |
|                                                                                                                                                                                            |               |            | ATTN:                                                                                                                          | Janel Staat            | )             |                                                                                                            | Test Start: 2016.08.1  | 3 @ 23:23:00         |
| Tool Informatio                                                                                                                                                                            | on            |            |                                                                                                                                | -                      |               |                                                                                                            |                        |                      |
| Drill Pipe:                                                                                                                                                                                | Length:       | 2638.00 ft | Diameter:                                                                                                                      | 3.80 ir                | nches Volume: | 37.00 bbl                                                                                                  | Tool Weight:           | 2000.00 lb           |
| Heavy Wt. Pipe:                                                                                                                                                                            | Length:       | 467.00 ft  | Diameter:                                                                                                                      | 2.75 ir                | nches Volume: | 3.43 bbl                                                                                                   | Weight set on Pacl     |                      |
| Drill Collar:                                                                                                                                                                              | Length:       | 0.00 ft    | Diameter:                                                                                                                      | 2.25 ir                | nches Volume: | 0.00 bbl                                                                                                   | Weight to Pull Loos    |                      |
| Drill Pipe Above K                                                                                                                                                                         | KB:           | 17.00 ft   |                                                                                                                                |                        | Total Volume: | 40.43 bbl                                                                                                  | Tool Chased            | 4.00 ft              |
| Depth to Top Pac                                                                                                                                                                           |               | 3108.00 ft |                                                                                                                                |                        |               |                                                                                                            | String Weight: Initia  | al 53000.00 lb       |
| Depth to Bottom F                                                                                                                                                                          | Packer:       | ft         |                                                                                                                                |                        |               |                                                                                                            | Fina                   | al 53000.00 lb       |
| Interval between                                                                                                                                                                           | Packers:      | 76.00 ft   |                                                                                                                                |                        |               |                                                                                                            |                        |                      |
| Tool Length:                                                                                                                                                                               |               | 96.00 ft   |                                                                                                                                |                        |               |                                                                                                            |                        |                      |
| Number of Packer                                                                                                                                                                           | ro.           | 2          | 0.                                                                                                                             | 0 75 :                 | 20            |                                                                                                            |                        |                      |
| Tool Comments:                                                                                                                                                                             | 15.           | Z          | Diameter:                                                                                                                      | 6.75 ir                | nches         |                                                                                                            |                        |                      |
| Tool Comments:                                                                                                                                                                             |               |            |                                                                                                                                |                        |               | Depth (ft) A                                                                                               | cours Longtha          |                      |
| Tool Comments:<br>Tool Descriptio                                                                                                                                                          | n             |            |                                                                                                                                | 6.75 ir<br>Serial No.  | Position      |                                                                                                            | ccum. Lengths          |                      |
| Tool Comments:<br><b>Tool Descriptio</b><br>Change Over Sub                                                                                                                                | n             |            | ngth (ft)                                                                                                                      |                        |               | 3089.00                                                                                                    | ccum. Lengths          |                      |
| Tool Comments:<br>Tool Descriptio<br>Change Over Sub<br>Shut In Tool                                                                                                                       | n             |            | <b>ngth (ft)</b>                                                                                                               |                        |               | 3089.00<br>3094.00                                                                                         | ccum. Lengths          |                      |
| Tool Comments:<br><b>Tool Descriptio</b><br>Change Over Sub<br>Shut In Tool<br>Hydraulic tool                                                                                              | n             |            | ngth (ft)<br>1.00<br>5.00                                                                                                      |                        |               | 3089.00                                                                                                    |                        | Bottom Of Top Packer |
| Tool Comments:<br>Tool Descriptio<br>Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Packer                                                                                           | n             |            | ngth (ft)<br>1.00<br>5.00<br>5.00                                                                                              |                        |               | 3089.00<br>3094.00<br>3099.00                                                                              | ccum. Lengths<br>20.00 | Bottom Of Top Packer |
| Tool Comments:<br><b>Tool Descriptio</b><br>Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Packer<br>Packer                                                                          | n             |            | ngth (ft)<br>1.00<br>5.00<br>5.00<br>5.00                                                                                      |                        |               | 3089.00<br>3094.00<br>3099.00<br>3104.00                                                                   |                        | Bottom Of Top Packer |
|                                                                                                                                                                                            | n             |            | ngth (ft)<br>1.00<br>5.00<br>5.00<br>5.00<br>4.00                                                                              |                        |               | 3089.00<br>3094.00<br>3099.00<br>3104.00<br>3108.00                                                        |                        | Bottom Of Top Packer |
| Tool Comments:<br><b>Tool Descriptio</b><br>Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Packer<br>Packer<br>Stubb<br>Recorder                                                     | n             |            | ngth (ft)<br>1.00<br>5.00<br>5.00<br>5.00<br>4.00<br>1.00                                                                      | Serial No.             | Position      | 3089.00<br>3094.00<br>3099.00<br>3104.00<br>3108.00<br>3109.00                                             |                        | Bottom Of Top Packer |
| Tool Comments:<br><b>Tool Descriptio</b><br>Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Packer<br>Packer<br>Stubb<br>Recorder<br>Recorder                                         | n             |            | ngth (ft)<br>1.00<br>5.00<br>5.00<br>4.00<br>1.00<br>0.00                                                                      | Serial No.<br>8365     | Position      | 3089.00<br>3094.00<br>3099.00<br>3104.00<br>3108.00<br>3109.00<br>3109.00                                  |                        | Bottom Of Top Packer |
| Tool Comments:<br>Tool Descriptio<br>Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Packer<br>Packer<br>Stubb<br>Recorder<br>Recorder<br>Perforations                                | <b>n</b>      |            | ngth (ft)<br>1.00<br>5.00<br>5.00<br>4.00<br>1.00<br>0.00<br>0.00                                                              | Serial No.<br>8365     | Position      | 3089.00<br>3094.00<br>3099.00<br>3104.00<br>3108.00<br>3109.00<br>3109.00<br>3109.00                       |                        | Bottom Of Top Packer |
| Tool Comments:<br>Tool Descriptio<br>Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Packer<br>Packer<br>Stubb<br>Recorder<br>Recorder<br>Recorder<br>Perforations<br>Change Over Sub | <b>n</b>      |            | ngth (ft)<br>1.00<br>5.00<br>5.00<br>4.00<br>1.00<br>0.00<br>0.00<br>7.00                                                      | Serial No.<br>8365     | Position      | 3089.00<br>3094.00<br>3099.00<br>3104.00<br>3108.00<br>3109.00<br>3109.00<br>3109.00<br>3116.00            |                        | Bottom Of Top Packer |
| Tool Comments:<br><b>Tool Descriptio</b><br>Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Packer<br>Packer<br>Stubb                                                                 | <b>n</b><br>) |            | ngth (ft)         1.00         5.00         5.00         4.00         1.00         0.00         0.00         7.00         1.00 | Serial No.<br>8365     | Position      | 3089.00<br>3094.00<br>3099.00<br>3104.00<br>3108.00<br>3109.00<br>3109.00<br>3109.00<br>3116.00<br>3117.00 |                        | Bottom Of Top Packer |

| ACEN TOHOD                                            | 170          | DRILL                               | STEM TEST RE                                            | PORT      |                                | F               | LUID SUMMAR |
|-------------------------------------------------------|--------------|-------------------------------------|---------------------------------------------------------|-----------|--------------------------------|-----------------|-------------|
| RILOBI                                                | 1            | Staab Oil Con                       | npany                                                   |           | 8-8s-18w                       | Rooks,KS        |             |
| ESTI                                                  | ING , INC    | 1607 Hopew ell Rd<br>Hays, KS 67601 |                                                         |           | Haines #1<br>Job Ticket: 65543 |                 | DST#:2      |
|                                                       |              | ATTN: Jane                          | l Staab                                                 |           | Test Start: 2016.08 13 @       |                 |             |
| Mud and Cushion Info                                  |              |                                     |                                                         |           |                                | <u> </u>        | 1           |
| Mud Type: Gel Chem                                    | ormation     |                                     | Cushion Type:                                           |           |                                | Oil API:        | 0 deg API   |
| Mud Weight:9.00 ltViscosity:55.00 sWater Loss:7.18 ir | ec/qt        |                                     | Cushion Length:<br>Cushion Volume:<br>Gas Cushion Type: |           | ft<br>bbl                      | Water Salinity: | 0 ppm       |
| Resistivity:oSalinity:1800.00 pFilter Cake:1.00 ir    |              |                                     | Gas Cushion Pressure:                                   |           | psig                           |                 |             |
| Recovery Information                                  | 1            |                                     |                                                         |           |                                |                 |             |
|                                                       |              |                                     | Recovery Table                                          |           |                                | -1              |             |
|                                                       | Length<br>ft |                                     | Description                                             |           | Volume<br>bbl                  |                 |             |
|                                                       | 2            | 30.00 socr                          | n 2o 98m                                                |           | 1.69                           | 0               |             |
| Tot                                                   | al Length:   | 230.00 ft                           | Total Volume:                                           | 1.690 bbl |                                |                 |             |
| Re                                                    | covery Comm  | ents:                               |                                                         |           |                                |                 |             |
|                                                       |              |                                     |                                                         |           |                                |                 |             |

Ref. No: 65543

Trilobile Testing, Inc



Temperature

DST Test Number: 2

Haines #1

Serial # 8845

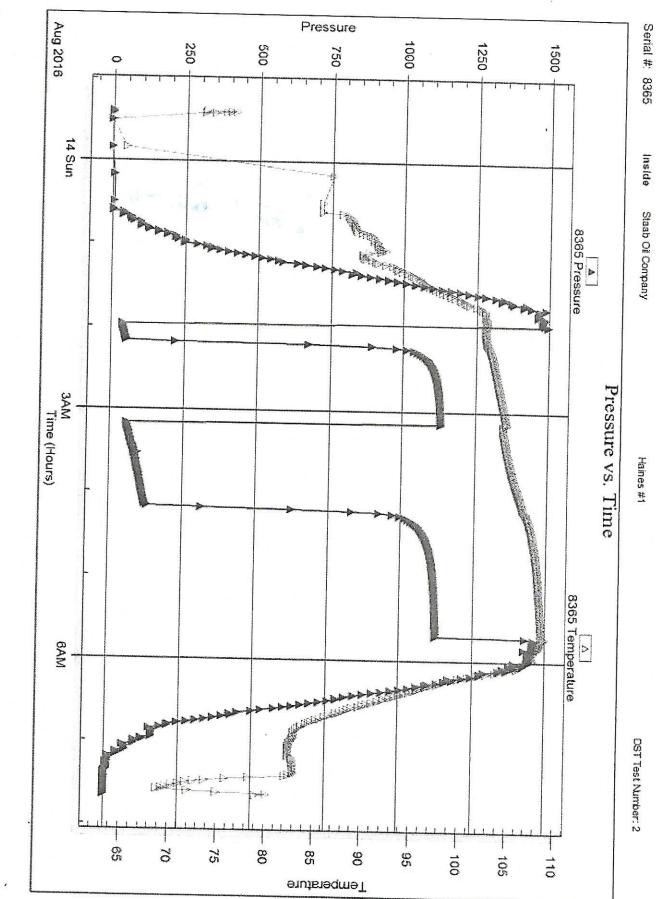
Outside

Staab Oil Company









| RILOBITE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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| TESTING, INC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| I LOTING, MU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| GENERAL INFORMATION:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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| Formation: Arbuckle<br>Deviated: No Whipstock:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         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| ime Tool Opened: 12:17:00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| īme Test Ended: 18:58:00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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| oterval:         3367.00 ft (KB) To         340           otal Depth:         3444.00 ft (KB) (TVI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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| lole Diameter: 7.88 inches Hole                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| Serial #: 8845 Inside                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  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| ress@RunDepth: 462.40 psig @                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| Agazo Eration<br>Recovery<br>ength (#) Description<br>20.00 gmco 30g 30m 40o                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| Agazy Examples of the second s                                                                                                                                                                                                                                                                                                                           | Volume (bbl)<br>0.88<br>13.67                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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| Ag 385 Test 10                                                                                                                                                                                                                                                                                                                           | Important         Important                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | (Min.)<br>0<br>1<br>5<br>5<br>65<br>66<br>66<br>126<br>217                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Pressure<br>(psig)<br>1737.53<br>75.71<br>123.46<br>1117.60<br>153.60<br>462.40<br>1084.96 | Temp<br>(deg F)<br>111.80<br>111.55<br>112.70<br>114.25<br>114.05<br>114.70<br>115.70<br>116.07<br>Gas | Annotation<br>Open To F<br>Shut-In(1)<br>End Shut-In<br>Open To F<br>Shut-In(2)<br>End Shut-In<br>Final Hydro     | on<br>Fo-static<br>Flow (1)<br>In(1)<br>Flow (2)<br>n(2)<br>D-static | Gas Rate (Mcf/d) |
| Agaza Erad Signature<br>Recovery<br>ength (ft) Description<br>20.00 gmco 30g 30m 40o<br>40.00 go 30g 70o                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               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| 泽                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                  | Staab Oil Company                                                                                                 |                                                                                         | 8-8s-18w                          | Rooks,K                      | S                                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ESTING , INC                                                     | reper ripper cirru                                                                                                |                                                                                         | Haines#                           |                              |                                  |
| 163                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1                                                                | Hays, KS 67601                                                                                                    |                                                                                         | Job Ticket:                       | 65544                        | DST#: 3                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                  | ATTN: Janel Staab                                                                                                 |                                                                                         | Test Start:                       | 2016.08.15                   | @ 10:00:00                       |
| GENERA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | L INFORMATION:                                                   |                                                                                                                   |                                                                                         |                                   |                              |                                  |
| Time Test E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Arbuckle<br>No Whipstock:<br>Opened: 12:17:00<br>Ended: 18:58:00 | 17 State 19                                                                                                       |                                                                                         | Test Type:<br>Tester:<br>Unit No: | Conventio<br>Bradley W<br>78 | nal Bottom Hole (Reset<br>/alter |
| Interval:<br>Total Depth:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3367.00 ft (KB) To 340                                           | 09.00 ft (KB) (TVD)                                                                                               |                                                                                         | Reference I                       | Bevations.                   | 1942.00 ft (KB)                  |
| Hole Diamet                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                  |                                                                                                                   |                                                                                         |                                   |                              | 1937.00 ft (CF)                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                  | Condition: Good                                                                                                   |                                                                                         | KE                                | B to GR/CF:                  | 5.00 ft                          |
| Serial #:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | D                                                                |                                                                                                                   |                                                                                         |                                   |                              |                                  |
| Press@Run<br>Start Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Depth: psig @<br>2016.08.15                                      | - (· · )                                                                                                          |                                                                                         | Capacity:                         |                              | 8000.00 psig                     |
| Start Time:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 10:00:05                                                         | End Date:<br>End Time:                                                                                            | 2016.08.15                                                                              | Last Calib.:                      |                              | 2016.08.15                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                  |                                                                                                                   | 18:54:45                                                                                | Time On Btm:<br>Time Off Btm:     |                              |                                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | FF: BOB @ 2 min.<br>FSI: BOB @ 20 min<br>Pressure vs. Tim        |                                                                                                                   |                                                                                         |                                   |                              |                                  |
| 679                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | FSI: BOB @ 20 mir                                                | ic<br>807 Tempadan                                                                                                | Time                                                                                    | PRESSU<br>Pressure Temp           | Annotati                     |                                  |
| 773<br>773<br>773<br>773<br>773<br>773<br>773<br>773                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | FSI: BOB @ 20 mir                                                | RC RC Trapadan                                                                                                    | 115 (Min.)<br>119<br>180<br>180<br>180<br>180<br>180<br>180<br>180<br>180<br>180<br>180 |                                   | Annotati                     |                                  |
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| 1000<br>1200<br>700<br>700<br>700<br>700<br>700<br>700<br>700<br>700<br>700                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | FSI: BOB @ 20 mir                                                | Volume (bbl)                                                                                                      | 115 (Min.)<br>119<br>180<br>180<br>180<br>180<br>180<br>180<br>180<br>180<br>180<br>180 | Pressure Temp<br>(psig) (deg F)   | Annotati<br>s Rates          |                                  |
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| Hole Diameter: 7.88 inches Hole Condition: Good                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| <b>Tool Description</b><br>Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Jars<br>Safety Joint                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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3341.00<br>3346.00<br>3351.00<br>3356.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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Lengths   |           |                        |     |
| Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Jars                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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3341.00<br>3346.00<br>3351.00<br>3356.00<br>3358.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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| Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Jars<br>Safety Joint<br>Packer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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3341.00<br>3346.00<br>3351.00<br>3356.00<br>3358.00<br>3363.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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Lengths   |           | Bottom Of Top Pac      | ker |
| Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>lars<br>Safety Joint<br>Packer<br>Packer                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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| Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Jars<br>Safety Joint<br>Packer<br>Packer<br>Stubb<br>Recorder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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| Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>lars<br>Safety Joint<br>Packer<br>Packer<br>Stubb<br>Recorder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     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| Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Jars<br>Safety Joint<br>Packer<br>Packer<br>Stubb<br>Recorder<br>Recorder<br>Recorder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Jars<br>Safety Joint<br>Packer<br>Packer<br>Recorder<br>Recorder<br>Recorder<br>Perforations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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| Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Jars<br>Safety Joint<br>Packer<br>Packer<br>Stubb<br>Recorder<br>Recorder<br>Recorder<br>Perforations<br>Ihange Over Sub                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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| Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>ars<br>Safety Joint<br>Packer<br>Packer<br>Acker<br>Stubb<br>Recorder<br>Recorder<br>Recorder<br>Recorder<br>Recorder<br>Recorder<br>Shange Over Sub<br>rill Pipe<br>Shange Over Sub                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| Change Over Sub<br>Shut In Tool<br>dydraulic tool<br>ars<br>Safety Joint<br>backer<br>tubb<br>ecorder<br>ecorder<br>ecorder<br>erforations<br>hange Over Sub<br>rill Rpe<br>hange Over Sub<br>erforations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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| Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>lars<br>Safety Joint<br>Packer<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Acker<br>Ach 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 27.00            |           |                        |     |
| Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>ars<br>Safety Joint<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Pack                                                                                                                                              | 5<br>5<br>2<br>5<br>4<br>4<br>1<br>0<br>0<br>1<br>0<br>30.<br>0.<br>5.<br>1.<br>3.                                                  | 1.00<br>5.00<br>5.00<br>2.00<br>5.00<br>4.00<br>4.00<br>1.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 8845              | Inside                     | 3341.00<br>3346.00<br>3351.00<br>3356.00<br>3358.00<br>3363.00<br>3367.00<br>3368.00<br>3368.00<br>3368.00<br>3369.00<br>3369.50<br>3399.50<br>3400.00<br>3405.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |           | Bottom Of Top Pac      |     |
| Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>lars<br>Safety Joint<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Packer<br>Pac                                                                                                                                              | 5<br>5<br>2<br>5<br>4<br>4<br>1<br>0<br>0<br>1<br>0<br>30.<br>0.<br>5.<br>1.<br>3.<br>1.                                            | 1.00<br>5.00<br>5.00<br>5.00<br>2.00<br>5.00<br>4.00<br>1.00<br>0.00<br>0.00<br>0.00<br>0.50<br>0.00<br>0.50<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 8845              | Inside                     | 3341.00<br>3346.00<br>3351.00<br>3356.00<br>3358.00<br>3363.00<br>3367.00<br>3368.00<br>3368.00<br>3368.00<br>3369.00<br>3369.50<br>3399.50<br>3400.00<br>3405.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 27.00            |           |                        |     |
| Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Jars<br>Safety Joint<br>Packer<br>Packer<br>Packer<br>Recorder<br>Recorder<br>Recorder<br>Recorder<br>Reforations<br>thange Over Sub<br>rill Pipe<br>hange Over Sub<br>erforations<br>Jank Off Sub<br>Jacker<br>ank Spacing<br>erforations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 5<br>5<br>2<br>5<br>4<br>4<br>1<br>0<br>0<br>1<br>0<br>30.<br>0.<br>5.<br>1.<br>3.                                                  | 1.00<br>5.00<br>5.00<br>5.00<br>2.00<br>5.00<br>4.00<br>1.00<br>0.00<br>0.00<br>0.00<br>0.50<br>0.00<br>0.50<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 8845              | Inside                     | 3341.00<br>3346.00<br>3351.00<br>3356.00<br>3358.00<br>3363.00<br>3367.00<br>3368.00<br>3368.00<br>3368.00<br>3368.00<br>3369.00<br>3369.50<br>3399.50<br>3400.00<br>3406.00<br>3406.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 27.00            |           |                        |     |
| Change Over Sub<br>Shut In Tool<br>Hydraulic tool<br>Jars<br>Safety Joint<br>Packer<br>Packer<br>Recorder<br>Recorder<br>Recorder<br>Recorder<br>Recorder<br>Subb<br>Recorder<br>Subb<br>Recorder<br>Recorder<br>Recorder<br>Recorder<br>Subb<br>Recorder<br>Subb<br>Recorder<br>Subb<br>Recorder<br>Subb<br>Recorder<br>Subb<br>Recorder<br>Subb<br>Recorder<br>Subb<br>Recorder<br>Subb<br>Subb<br>Subb<br>Subb<br>Subb<br>Subb<br>Subb<br>Sub                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 5<br>5<br>5<br>5<br>5<br>5<br>5<br>4<br>1<br>0<br>0<br>1<br>0<br>0<br>1<br>0<br>0<br>5<br>5<br>1.<br>3<br>1.<br>3<br>1.<br>3<br>1.0 | 1.00<br>5.00<br>5.00<br>5.00<br>2.00<br>5.00<br>4.00<br>1.00<br>0.00<br>0.00<br>0.00<br>0.50<br>0.00<br>0.50<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 8845              | Inside                     | 3341.00<br>3346.00<br>3351.00<br>3356.00<br>3358.00<br>3363.00<br>3367.00<br>3368.00<br>3368.00<br>3369.00<br>3369.00<br>3369.50<br>3399.50<br>3400.00<br>3405.00<br>3405.00<br>3405.00<br>3409.00<br>3410.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 27.00            |           |                        |     |

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| 10h          | TRILOBITE            | DRILL STEM TEST REPOR |                                   | FLUID SUMMARY   |            |
|--------------|----------------------|-----------------------|-----------------------------------|-----------------|------------|
| 新た           | Compression .        | Staab Oil Company     | 8-8s-18w Rooks,KS<br>Haines #1    |                 |            |
|              | ESTING , INC.        |                       |                                   |                 |            |
|              |                      | Hays, KS 67601        | Job Ticke                         | et: 65544       | DST#: 3    |
|              |                      | ATTN: Janel Staab     | Test Start: 2016.08.15 @ 10:00:00 |                 | 0:00:00    |
| Mud and Cu   | shion Information    |                       |                                   |                 |            |
| Mud Type: G  | el Chem              | Cushion Type:         |                                   | Oil API:        | 39 deg API |
| Mud Weight:  | 9.00 lb/gal          | Cushion Length:       | ft                                | Water Salinity; | 0 ppm      |
| Viscosity:   | 55.00 sec/qt         | Cushion Volume:       | bbl                               |                 |            |
| Water Loss:  | 7.39 in <sup>3</sup> | Gas Cushion Type:     |                                   |                 |            |
| Resistivity: | ohm.m                | Gas Cushion Pressure: | psig                              |                 |            |
| Salinity:    | 1800.00 ppm          |                       | . 0                               |                 |            |
| Filter Cake: | 1.00 inches          |                       |                                   |                 |            |

### **Recovery Information**

### Recovery Table

| Ler | ngth<br>ft | Description      | Volume<br>bbl |
|-----|------------|------------------|---------------|
|     | 120.00     | gmco 30g 30m 40o | 0.882         |
|     | 1140.00    | go 30g 70o       | 13.673        |
|     | 0.00       | 880' GIP         | 0.000         |

Total Length:

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

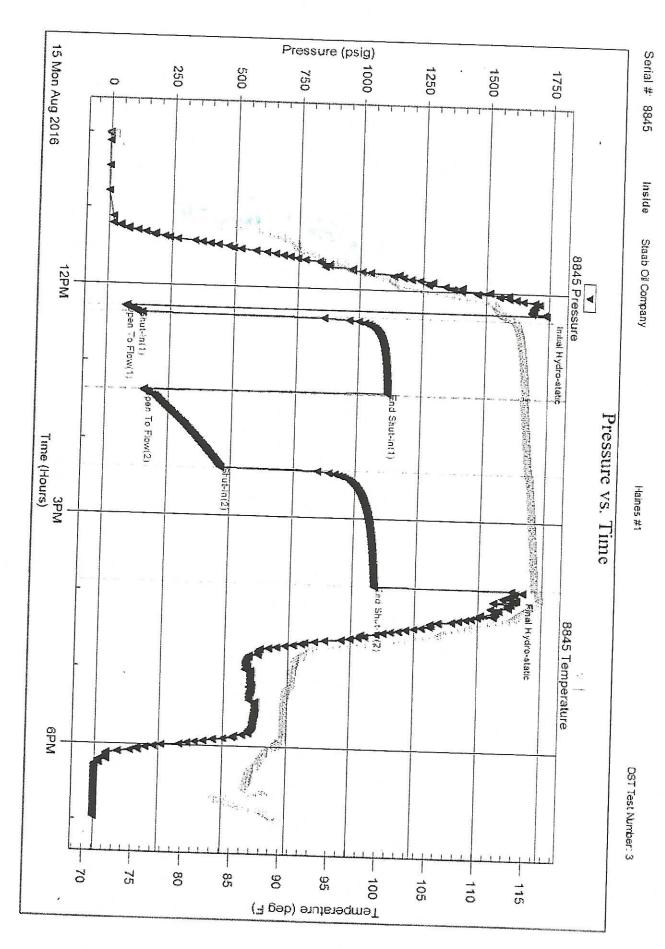
Laboratory Name: Recovery Comments: Laboratory Location:

Trilobite Testing, Inc

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Triobite Testing, Inc

Ref. No: 65544



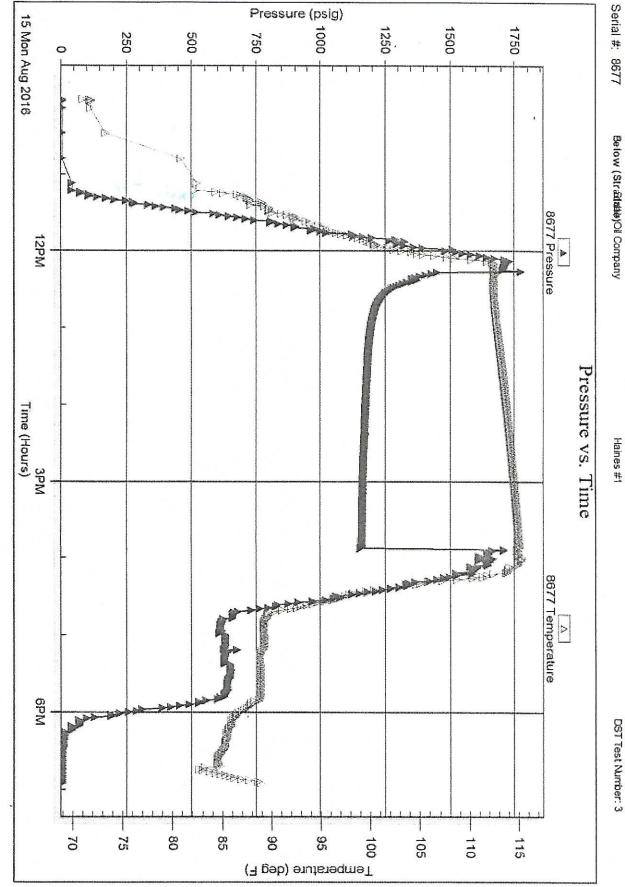


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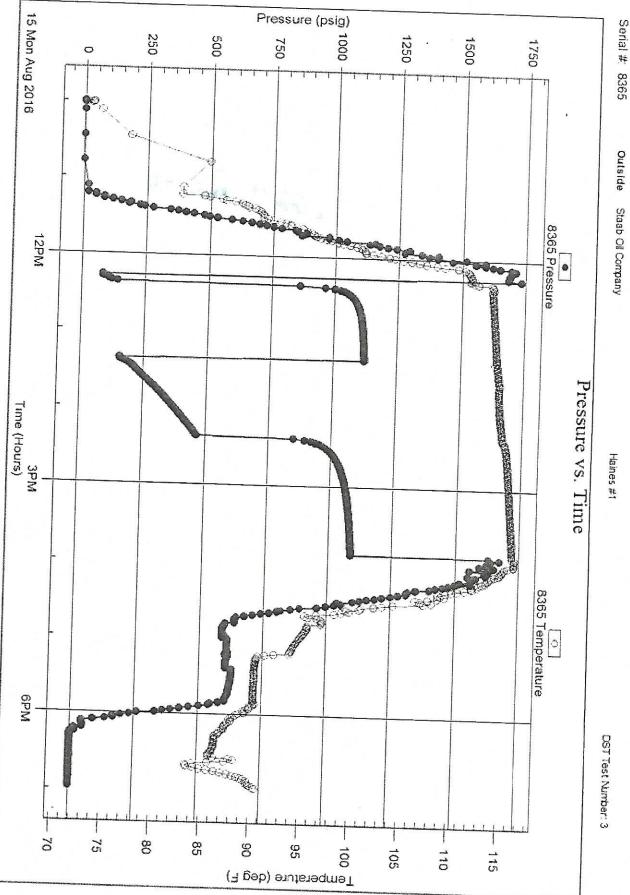






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