

Confidentiality Requested:

Yes No

Kansas Corporation Commission Oil & Gas Conservation Division

1221407

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:			Sec	TwpS. R
Address 2:			Feet	from North / South Line of Sectio
City: St	ate: Zip	D:+	Feet	from East / West Line of Section
Contact Person:			Footages Calculated from Ne	earest Outside Section Corner:
Phone: ()			□ NE □ NW	☐ SE ☐ SW
CONTRACTOR: License #			GPS Location: Lat:	, Long:
Name:				g. xx.xxxxx) (e.gxxx.xxxxx)
Wellsite Geologist:			Datum: NAD27 NAD27	
Purchaser:			County:	
Designate Type of Completion:			Lease Name:	Well #:
New Well Re-	·Fntrv	Workover	Field Name:	
	_		Producing Formation:	
☐ Oil ☐ WSW	SWD	SIOW	Elevation: Ground: Kelly Bushing:	
☐ Gas ☐ D&A ☐ OG	☐ ENHR	☐ SIGW ☐ Temp. Abd.	Total Vertical Depth:	Plug Back Total Depth:
CM (Coal Bed Methane)	G3W	Temp. Abd.	Amount of Surface Pipe Set a	and Cemented at: Fee
Cathodic Other (Core	Expl etc.)		Multiple Stage Cementing Co	
If Workover/Re-entry: Old Well Inf				Fee
Operator:				nent circulated from:
Well Name:			, ,	w/sx cm
Original Comp. Date:			loot doparto.	
	_	NHR Conv. to SWD		
Deepening Re-perf. Plug Back	Conv. to GS		Drilling Fluid Management F (Data must be collected from the	
Commingled	Permit #:		Chloride content:	ppm Fluid volume: bbl
Dual Completion	Permit #:		Dewatering method used:	
SWD	Permit #:		Location of fluid disposal if ha	auled offsite:
☐ ENHR	Permit #:		One water Name .	
GSW Permit #:				
				License #:
Spud Date or Date Rea	iched TD	Completion Date or		TwpS. R
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 Approved by: Date:			



Operator Name:			Lease Name: _			Well #:	
Sec Twp	S. R	East West	County:				
open and closed, flow	ing and shut-in pressu	ormations penetrated. Eures, whether shut-in preith final chart(s). Attach	essure reached stati	c level, hydrosta	atic pressures, bott		
		tain Geophysical Data a r newer AND an image		gs must be ema	ailed to kcc-well-lo	gs@kcc.ks.go	v. Digital electronic log
Drill Stem Tests Taken (Attach Additional S		Yes No			on (Top), Depth an		Sample
Samples Sent to Geol	logical Survey	☐ Yes ☐ No	Nam	е		Тор	Datum
Cores Taken Electric Log Run		Yes No					
List All E. Logs Run:							
		CASING	RECORD Ne	w Used			
		Report all strings set-			ion, etc.		
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
		ADDITIONAL	CEMENTING / SQL	JEEZE RECORD			
Purpose: Perforate Protect Casing Plug Back TD	Depth Top Bottom	Type of Cement	# Sacks Used		Type and P	ercent Additives	
Plug Off Zone							
Does the volume of the to		n this well? aulic fracturing treatment ex submitted to the chemical (_	Yes ? Yes Yes	No (If No, ski	p questions 2 ar p question 3) out Page Three	
Shots Per Foot	PERFORATIO	N RECORD - Bridge Plug	s Set/Type		cture, Shot, Cement		
	Specify Fo	ootage of Each Interval Per	forated	(A	mount and Kind of Ma	terial Used)	Depth
TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:	Yes No		
Date of First, Resumed	Production, SWD or ENH	IR. Producing Meth		Gas Lift (Other (Explain)		
Estimated Production Per 24 Hours	Oil B	bls. Gas	Mcf Wate	er B	bls. G	as-Oil Ratio	Gravity
DISPOSITIO	ON OF GAS:	Open Hole	METHOD OF COMPLE Perf. Dually (Submit)	Comp. Cor	mmingled	PRODUCTIO	ON INTERVAL:
(If vented, Sub	omit ACO-18.)	Other (Specify)	(Submit)	100-3) (SUB	omit ACO-4)		

Form	ACO1 - Well Completion
Operator	Valhalla Exploration LLC
Well Name	KK 1-22
Doc ID	1221407

All Electric Logs Run

DIL	
DUCP	
MEL	
BHCS	
FFL	

Form	ACO1 - Well Completion
Operator	Valhalla Exploration LLC
Well Name	KK 1-22
Doc ID	1221407

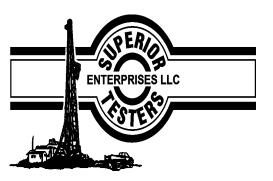
Tops

Name	Тор	Datum
TOP	2470	-716
PLATTS	2677	-923
HEEB	2732	-978
BR LM	2848	-1094
LANS	2869	-1115
STARK	3075	-1321
ВКС	3133	-1379
QTZ	3161	-1407

Form	ACO1 - Well Completion
Operator	Valhalla Exploration LLC
Well Name	KK 1-22
Doc ID	1221407

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	17.5	13.375	54.5	375	Common	360	3%cc 2%gel
Production	7.875	5.5	15.5	3263	60/40 Poz & Econo- O-Bond	175	



Prepared For: Valhalla Exploration LLC

8100 East 22nd Street North Building 1800-2

Wichita Kansas

ATTN: Derek Patterson

KK #1-22

22/18S/10W/Rice

Start Date: 2014.07.19 @ 17:30:00 End Date: 2014.07.19 @ 23:49:30 Job Ticket #: 18273 DST #: 1

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902



Valhalla Exploration LLC

22/18S/10W/Rice

8100 East 22nd Street North

Building 1800-2 Wichita Kansas

ATTN: Derek Patterson

KK #1-22

Unit No:

Job Ticket: 18273 DST#: 1

Test Start: 2014.07.19 @ 17:30:00

GENERAL INFORMATION:

Topeka-Plattsmouth

Deviated: Whipstock: Test Type: Conventional Bottom Hole (Initial) ft (KB)

Time Tool Opened: 19:08:30 Time Test Ended: 23:49:30

2668.00 ft (KB) To 2697.00 ft (KB) (TVD) Interval:

Total Depth: 2697.00 ft (KB) (TVD)

7.80 inches Hole Condition: Poor Hole Diameter:

Tester: Ken Sw inney

3325 Great Bend/54

1754.00 ft (KB) Reference Elevations:

1746.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6749 Inside

Press@RunDepth: 120.27 psig @ 2693.00 ft (KB) Capacity: 5000.00 psig

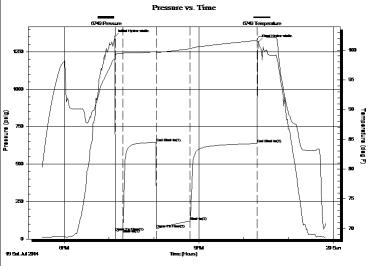
Start Date: 2014.07.19 End Date: 2014.07.19 Last Calib.: 2014.07.19 Start Time: 17:30:00 End Time: 23:49:30 Time On Btm: 2014.07.19 @ 19:08:00 Time Off Btm: 2014.07.19 @ 22:19:30

TEST COMMENT: 1ST Open 10 Minutes/Fair blow/Blow built to 7 inches

1ST Shut lin 45 Minutes/No blow back

2ND Open 45 Minutes/Fair blow /Blow built to bottom of bucket in 27 minutes

2ND Shut In 90 Minutes/No blow back



	Time	Pressure	Temp	Annotation
	(Min.)	(psig)	(deg F)	
	0	1351.15	99.02	Initial Hydro-static
	1	48.01	99.06	Open To Flow (1)
	11	64.98	99.44	Shut-In(1)
	55	645.45	99.75	End Shut-In(1)
	56	69.38	99.63	Open To Flow (2)
	100	120.27	100.23	Shut-In(2)
	190	637.15	101.64	End Shut-In(2)
,	192	1315.19	102.24	Final Hydro-static

PRESSURE SUMMARY

Recovery

Length (ft)	Description	Volume (bbl)
160.00	Muddy Water with show of oil	2.24
0.00	Mud 15% Water 85%	0.00
1.00	Clean Oil 100%	0.01
0.00	Recovery Chlorides 24,000 ppm	0.00

Gas Rat		
Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Superior Testers Enterprises LLC Ref. No: 18273 Printed: 2014.07.20 @ 00:05:01



Valhalla Exploration LLC

ation LLC 22/18S/10W/Rice

8100 East 22nd Street North

Building 1800-2 Wichita Kansas

ATTN: Derek Patterson

KK #1-22

Unit No:

Job Ticket: 18273 **DST#:1**

Test Start: 2014.07.19 @ 17:30:00

GENERAL INFORMATION:

Formation: Topeka-Plattsmouth

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

Time Tool Opened: 19:08:30 Time Test Ended: 23:49:30

Interval: 2668.00 ft (KB) To 2697.00 ft (KB) (TVD)

Total Depth: 2697.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Poor

Tester: Ken Sw inney

3325 Great Bend/54

Reference Elevations: 1754.00 ft (KB)

1746.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 6663 Outside

Press@RunDepth: 636.60 psig @ 2694.00 ft (KB) Capacity: 5000.00 psig

 Start Date:
 2014.07.19
 End Date:
 2014.07.19
 Last Calib.:
 2014.07.19

 Start Time:
 17:30:00
 End Time:
 23:49:30
 Time On Btm:
 2014.07.19 @ 19:08:00

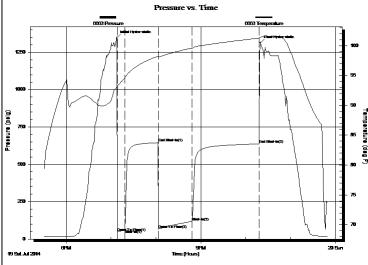
 Time Off Btm:
 2014.07.19 @ 22:19:30

TEST COMMENT: 1ST Open 10 Minutes/Fair blow/Blow built to 7 inches

1ST Shut lin 45 Minutes/No blow back

2ND Open 45 Minutes/Fair blow/Blow built to bottom of bucket in 27 minutes

2ND Shut In 90 Minutes/No blow back



	Time	Pressure	lemp	Annotation
	(Min.)	(psig)	" " \ "	
	0	1347.31	93.37	Initial Hydro-static
	1	47.48	93.17	Open To Flow (1)
	11	62.69	94.59	Shut-In(1)
	55	644.79	98.21	End Shut-In(1)
3	56	67.96	98.08	Open To Flow (2)
	100	117.95	99.56	Shut-In(2)
(1)	190	636.60	101.23	End Shut-In(2)
9	192	1314.40	101.42	Final Hydro-static

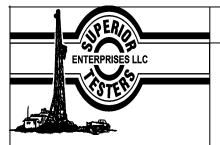
PRESSURE SUMMARY

Recovery

Length (ft)	Description	Volume (bbl)		
160.00	Muddy Water with show of oil	2.24		
0.00	Mud 15% Water 85%	0.00		
1.00	Clean Oil 100%	0.01		
0.00	Recovery Chlorides 24,000 ppm	0.00		

Gas Rat	es	
Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Superior Testers Enterprises LLC Ref. No: 18273 Printed: 2014.07.20 @ 00:05:01



TOOL DIAGRAM

Valhalla Exploration LLC

22/18S/10W/Rice

8100 East 22nd Street North Building 1800-2

KK #1-22

0.00 bbl

37.38 bbl

Wichita Kansas

Job Ticket: 18273 DST#: 1

ATTN: Derek Patterson

Test Start: 2014.07.19 @ 17:30:00

Tool Information

Drill Pipe: Length: 2665.00 ft Diameter: 3.80 inches Volume: 37.38 bbl 0.00 inches Volume: 0.00 bbl Heavy Wt. Pipe: Length: 0.00 ft Diameter: Drill Collar: Length: 0.00 ft Diameter: 0.00 inches Volume:

Tool Weight: 2000.00 lb Weight set on Packer: 20000.00 lb Weight to Pull Loose: 42000.00 lb

Total Volume: Drill Pipe Above KB: 24.00 ft Depth to Top Packer: 2668.00 ft

Tool Chased 0.00 ft String Weight: Initial 38000.00 lb

Depth to Bottom Packer: ft Interval between Packers: 29.00 ft Final 39000.00 lb

Printed: 2014.07.20 @ 00:05:01

56.00 ft Tool Length:

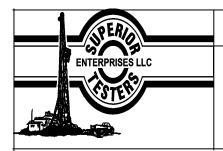
Number of Packers: 2 Diameter: 6.75 inches

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Shut-In Tool	5.00			2646.00		
Hydraulic tool	5.00			2651.00		
Jars	5.00			2656.00		
Safety Joint	2.00			2658.00		
Top Packer	5.00			2663.00		
Packer	5.00			2668.00	27.00	Bottom Of Top Packer
Anchor	24.00			2692.00		
Recorder	1.00	6749	Inside	2693.00		
Recorder	1.00	6663	Outside	2694.00		
Bullnose	3.00			2697.00	29.00	Anchor Tool

Ref. No: 18273

Total Tool Length: 56.00



FLUID SUMMARY

Valhalla Exploration LLC

22/18S/10W/Rice

8100 East 22nd Street North

Building 1800-2 Wichita Kansas

Job Ticket: 18273

KK #1-22

DST#:1

ATTN: Derek Patterson

Test Start: 2014.07.19 @ 17:30:00

Mud and Cushion Information

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

Viscosity: 57.00 sec/qt Cushion Volume: bbl

Water Loss: 8.79 in³ Gas Cushion Type:

Resistivity: ohm.m Gas Cushion Pressure: psig

Salinity: 6500.00 ppm Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl		
160.00	Muddy Water with show of oil	2.244		
0.00	Mud 15% Water 85%	0.000		
1.00	Clean Oil 100%	0.014		
0.00	Recovery Chlorides 24,000 ppm	0.000		

Total Length: 161.00 ft Total Volume: 2.258 bbl

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

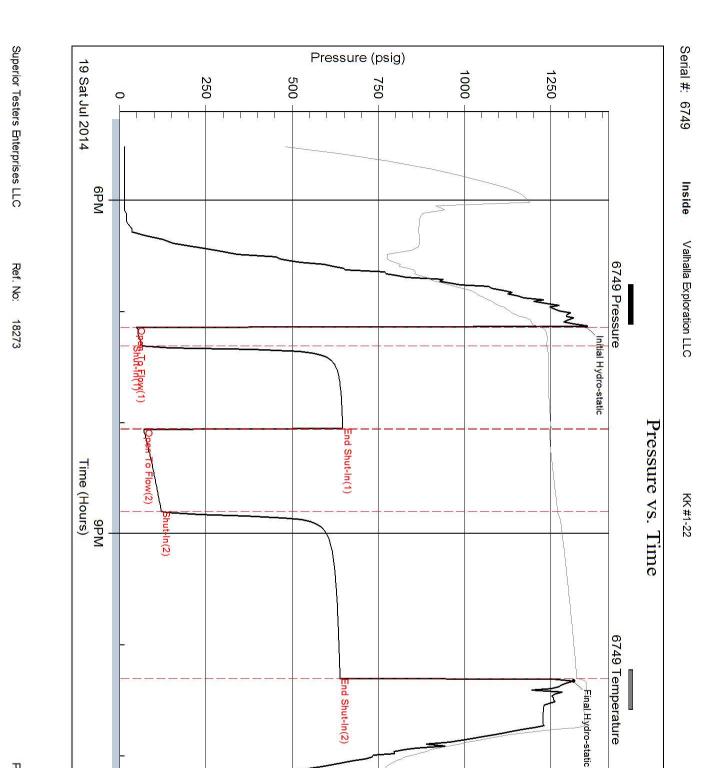
Laboratory Name: Laboratory Location:

Ref. No: 18273

Recovery Comments:

Superior Testers Enterprises LLC

Printed: 2014.07.20 @ 00:05:01



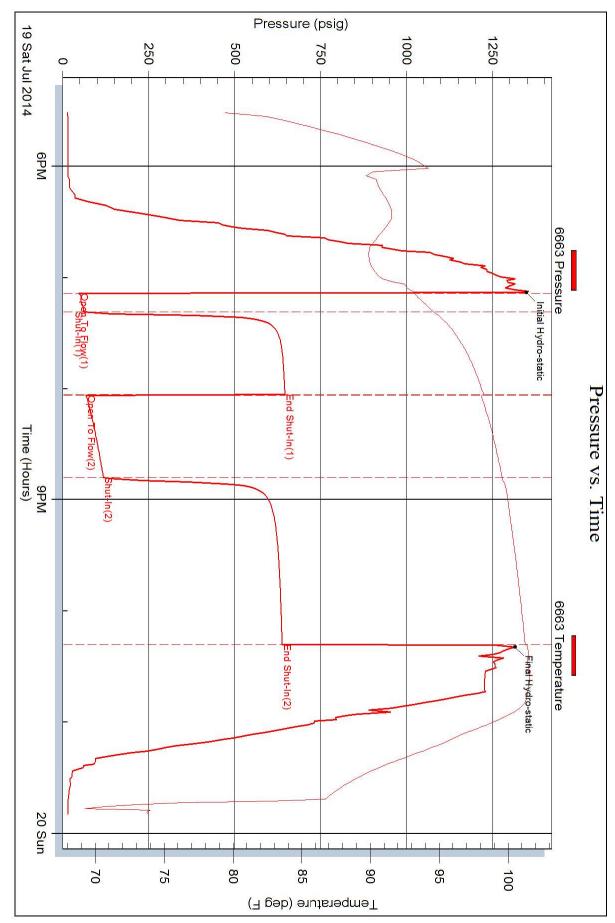
DST Test Number: 1

20 Sun

Temperature (deg F)

Printed: 2014.07.20 @ 00:05:01

Serial #: 6663



RECEIVED JUL 2 4 2014



CUST NO INVOICE DATE PAGE YARD # 1 of 1 1007761 1718 07/22/2014

INVOICE NUMBER

91547543

Pratt

(620) 672-1201

B VALHALLA EXPLORATION LLC

1 8100 EAST 22ND STREET N 1800-2

L WICHITA

KS US

67226

o ATTN:

KENNEDY

LEASE NAME

KK 1-22

LOCATION

S

B

COUNTY Rice

STATE KS

JOB DESCRIPTION Cement-New Well Casing/Pi

JOB CONTACT

JOB #	EQUIPMENT #	PURCHASE C	RDER NO.		TERMS	DUE DATE
40746147	19905				Net - 30 days	08/21/2014
			QTY	U of M	UNIT PRICE	INVOICE AMOUNT
For Service Dates	s: 07/17/2014 to 07/1	7/2014				
0040746147						
	ž.					
171810787A Cem	ent-New Well Casing/Pi 07/1	7/2014				
Cement 13 3/8 Cor		ATTEMENT OFFI	44		SEC MOTO	
Common Cement			360.00	EA	9.12	3,283.34
Celloflake			180.00	EA	2.11	379.64
Calcium Chloride			1,017.00	EA	0.60	608.70
Cement Gel			678.00	EA	0.14	96.62
"Unit Mileage Chg	(PU, cars one way)"		75.00	MI	2.42	181.6
Heavy Equipment M	/lileage		150.00	MI	3.99	598.5
"Proppant & Bulk D	el. Chgs., per ton mil		1,271.00	EA	1.25	1,593.9
Depth Charge; 0-50	00'		1.00		570.02	570.0
Blending & Mixing S	Service Charge		360.00	BAG	0.80	287.2
"Service Superviso	r, first 8 hrs on loc.	7	1.00	EA	99.75	99.7
			×			
					× ×	
	* > 70					
THE LANGE HOUSE					4	
ICT Post				j		
Common Car ent			196754		7.14	
			1 - 0-		11.1	P 392/265

PLEASE REMIT TO:

SEND OTHER CORRESPONDENCE TO:

PO BOX 841903

DALLAS, TX 75284-1903

BASIC ENERGY SERVICES, LP BASIC ENERGY SERVICES, LP 801 CHERRY ST, STE 2100 FORT WORTH, TX 76102

TAX

7,699.47 312.33

INVOICE TOTAL

SUB TOTAL

8,011.80



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

1718 10787 A

DATE TICKET NO. OLD PROD INJ ☐ WDW DISTRICT WELL NO. CUSTOMER LEASE **ADDRESS** COUNTY STATE Mc GIAN CITY STATE SERVICE CREW CUADUCTO **AUTHORIZED BY** JOB TYPE: DATE TIME **EQUIPMENT# EQUIPMENT# EQUIPMENT#** HRS HRS HRS TRUCK CALLED AM ARRIVED AT JOB START OPERATION 19901 776961 FINISH OPERATION AM PM RELEASED 00 70959/19918 MILES FROM STATION TO WELL CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered). The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP. SIGNED X (WELL OWNER, OPERATOR, CONTRACTOR OR AGENT) ITEM/PRICE REF. NO MATERIAL, EQUIPMENT AND SERVICES USED \$ AMOUNT UNIT QUANTITY UNIT PRICE 1000 760 Ce 110 F1A V4 102 66 < h 10/100 Miles 11 141 PIOP + BUTH -PTA Charge 0-500 4hr 000 240 360 PA SUB TOTAL CHEMICAL / ACID DATA: SERVICE & EQUIPMENT %TAX ON \$ **MATERIALS** %TAX ON \$ TOTAL THE ABOVE MATERIAL AND SERVICE REPRESENTATIVE ORDERED BY CUSTOMER AND RECEIVED BY: (WELL OWNER OPERATOR CONTRACTOR OR AGENT) FIELD SERVICE ORDER NO. Phone 620-672-1201 ENERGY SERVICES PRESSURE PUMPING & WIRELINE DATE TICKET NO OLD PROD INJ CUSTOMER LEASE WELL NO. **ADDRESS** STATE | COUNTY CITY STATE SERVICE CREW AUTHORIZED BY JOB TYPE DATE TIME **EQUIPMENT#** HRS **EQUIPMENT#** AM **EQUIPMENT#** HRS HRS TRUCK CALLED ARRIVED AT JOB START OPERATION **FINISH OPERATION** AM RELEASED MILES FROM STATION TO WELL CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered). The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP. SIGNED: (WELL OWNER, OPERATOR, CONTRACTOR OR AGENT) ITEM/PRICE REF. NO MATERIAL FOUIPMENT AND SERVICES LISED UNIT QUANTITY UNIT PRICE **S AMOUNT** SUB TOTAL CHEMICAL / ACID DATA: SERVICE & EQUIPMENT %TAX ON \$ MATERIALS %TAX ON \$ TOTAL

FIELD SERVICE ORDER NO.

REPRESENTATIVE

14 Kg 19 12 7 121

SERVICE

CLOUD LITHO'- Abiene, TX

ORDERED BY CUSTOMER AND RECEIVED BY: (WELL OWNER OPERATOR CONTRACTOR OR AGENT)

THE ABOVE MATERIAL AND SERVICE



TREATMENT REPORT

Customer	+1 HA11	A E	XM.	Lease No.					Date			1 .		
	K7-1			Well #	-	22				7 -1	1-1	4		
Field Order #			T			Casing 3/	§ Dept	h ₃ 75	County	Rice		State (/)		
Type Job	CNW		1040	TJ'			Formation	n		Legal D	escription_	-18- 10		
PIPE	DATA	PE	RFORAT	ING DATA		FLUID U	SED		TRE	ATMENT				
Casing Size/	Tubing Siz	e Shot	/Ft		Acid 360 CUMMO		on 25	RATE PRE		ESS ISIPI/2 CF				
Depth 3 7 5	Depth	From		То	Pre	HDSSC-01		Max			5 Min.			
Volume	Volume	From		То	Pad			Min			10 Min.			
Max Press	Max Press	From		То	Frac	Đ		Avg			15 Min.			
Well Connection	Annulus V			То				HHP Use	d		Annulus	Pressure		
Plug Depth	Packer De	epth From		То	Flus	h 54.	5	Gas Volu	me		Total Loa	ad		
Customer Repr	esentative		Brank	→ Station	Mana	iger Kev	in Go	UIDLOY	Treater	Mike	M 47T	LA 1		
Service Units	37586		77(86 1990	5		70959	19918						
Driver Names	MATTAI	1		c g (An			Gib.	507						
Time	Casing Pressure	Tubing Pressure		Pumped	F	Rate			Se	rvice Log				
10:00	1	-/		1)	01			15A1-	1cy1	1 Aering		
10:30	(1			1	/	/	Run	13 5	18 65.	1 9				
12:10)			(Sny on BOTTOM							
12:35	1) .	HOUK	TU <		BICAK	<1/6	. W. Ri		
15:42 500				3		0	Pump 3 1301 Hzu							
12.41	200		86		6		Mix 360 SKS COMMON CHI STATT DISP. Plus Down, Shut in Well							
1:04	300			54.5		5								
1:15			5											
							30	18815	70 8	', T				
									Z 100	y c				
									JUB					
-								MIKE MATIN						
					_					14/1/4	P4 47	1-11		
			-								1			
-			-	-			-				1567	5		
	-													
			-											
_	-									4				
				-										
			2							3	040			