

Kansas Corporation Commission Oil & Gas Conservation Division

1151165

Form ACO-1
June 2009
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:	SecTwpS. R 🔲 East 🗌 West					
Address 2:	Feet from North / South Line of Section					
City:	Feet from East / West Line of Section					
Contact Person:	Footages Calculated from Nearest Outside Section Corner:					
Phone: ()	□ NE □ NW □ SE □ SW					
CONTRACTOR: License #	County:					
Name:	Lease Name: Well #:					
Wellsite Geologist:	Field Name:					
Purchaser:	Producing Formation:					
Designate Type of Completion:	Elevation: Ground: Kelly Bushing:					
New Well Re-Entry Workover	Total Depth: Plug Back Total Depth:					
Oil WSW SWD SIOW Gas D&A ENHR SIGW OG GSW Temp. Abd. CM (Coal Bed Methane) Cathodic Other (Core, Expl., etc.):	Amount of Surface Pipe Set and Cemented at: Feet Multiple Stage Cementing Collar Used?					
If Workover/Re-entry: Old Well Info as follows:						
Operator: Well Name:	Drilling Fluid Management Plan (Data must be collected from the Reserve Pit)					
Original Comp. Date: Original Total Depth: Deepening Re-perf. Conv. to ENHR Conv. to SWD Conv. to GSW	Chloride content: ppm Fluid volume: bbls Dewatering method used:					
Plug Back: Plug Back Total Depth	Location of fluid disposal if hauled offsite:					
Commingled Permit #:	Operator Name:					
☐ ENHR Permit #: ☐ GSW Permit #:	County: Permit #:					
Spud Date or Date Reached TD Completion Date or Recompletion Date						

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.

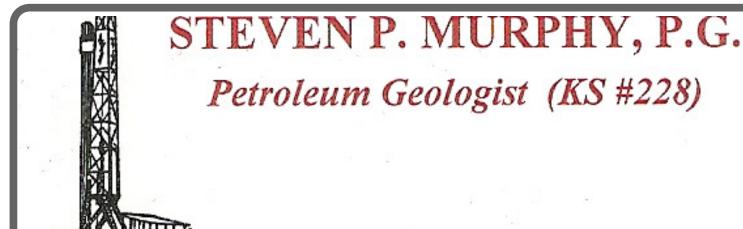
Submitted Electronically

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

Side Two



Operator Name:			Lease Name: _			_ Well #:			
Sec Twp	S. R	East West	County:						
time tool open and clo	osed, flowing and shu es if gas to surface te	d base of formations pen t-in pressures, whether s st, along with final chart(well site report.	hut-in pressure rea	ched static level,	hydrostatic press	sures, bottom h	nole temperature, fluid		
Drill Stem Tests Taken Yes No (Attach Additional Sheets)				og Formatio	n (Top), Depth ar	nd Datum	Sample		
Samples Sent to Geological Survey		Nam	е		Тор	Datum			
Cores Taken Electric Log Run Electric Log Submitte (If no, Submit Copy	d Electronically	Yes No Yes No Yes No							
List All E. Logs Run:									
		Report all strings set-		ermediate, producti	<u> </u>				
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	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives					
Plug Back TD Plug Off Zone									
	DEDEODATI	ON DECORD - Deider Blue	- O-4/T	Acid Fro	cture, Shot, Cemen	t Causana Dagar			
Shots Per Foot PERFORATION RECORD - Bridge Plugs Specify Footage of Each Interval Performance Perforation Record - Bridge Plugs Specify Footage of Each Interval Performance Perforation Record - Bridge Plugs Specify Footage of Each Interval Performance Perforation Record - Bridge Plugs			forated		mount and Kind of Ma		Depth		
TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:	Yes No				
Date of First, Resumed	Production, SWD or EN	HR. Producing Meth		Gas Lift C	Other (Explain)				
Estimated Production Per 24 Hours	Oil	Bbls. Gas	Mcf Wat	er B	bls.	Gas-Oil Ratio	Gravity		
DISPOSITI	ON OF GAS:		METHOD OF COMPLE	METHOD OF COMPLETION:			PRODUCTION INTERVAL:		
Vented Solo		Open Hole	Perf. Dually	Comp. Cor	nmingled				
(If vented, Su	bmit ACO-18.)	Other (Specify)	(Submit)	4CO-5) (Sub	mit ACO-4)		_		



Cell 620.639.3030 Fax 785.387.2400

RR#1, Box 69 Otis, Kansas 67565 geomurphy@gbta.net

Scale 1:240 (5"=100") Imperial **Measured Depth Log**

Well Name: Knopp #5

Location: Logan County

License Number: API # 15-109-21165-00-00

Spud Date: 3/22/13

Region: Kansas Drilling Completed: 4/4/13

Surface Coordinates:

1645' FNL & 330' FWL (N2 NW SW NW)

Section 13-T14S-R32W

Bottom Hole Coordinates: Vertical well w/minimal deviation

Ground Elevation (ft): 2802'

K.B. Elevation (ft): 2807'

Logged Interval (ft): 3500'

To: TD

Total Depth (ft): RTD - 4600

Formation: Topeka through Mississippian

Type of Drilling Fluid: Chemical (Mudco, Inc)

Printed by STRIP.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Pioneer Resources

Address: 80 Windmill Drive

Phillipsburg, KS 67661-9622

GEOLOGIST

Name: Steven P. Murphy, PG (Ks License #339)

Company: Consulting Petrolrum Geologist

Address: 3365 CR 390

Otis, KS 67565

LogTops (Datum)

The open-hole logging was performed by Jeff Luebbers with Superior Well Services (Hays, KS shop). Logs included Compensated Neutron/Compensated Density, Dual Induction & Microlog.

Formation tops and datums from the open-hole logs include the following:

Anhydrite Top - 2230 (+577)

Anhydrite Base - 2288 (+519)

Heebner - 3787 (-980)

Toronto - 3806 (-999)

Lansing - 3823 (-1016)

Muncie Creek Sh - 3980 (-1173)

Stark Sh - 4069 (-1262)

Hushpuckney Sh - 4103 (-1296)

Base KC - 4141 (-1334)

Pawnee 4276 (-1469)

Myrick Station - 4316 (-1509)

Ft. Scott - 4335 (-1528)

Cherokee Sh - 4361 (-1554)

Johnson Zone - 4402 (-1595)

Morrow Sh - 4440 (-1633)

Basal Penn Sandstone - 4452 (-1645)

Mississippian - 4464 (-1657)

DRILL STEM TESTS #1-4

Drillstem testing was performed by Trilobite Testing (Scott City shop). The following are the results of DSTs:

```
DST #1 3848-3874 (LKC "B")
```

30:30:45:45

IF: Wk blow built to 1/2", no return

FF: NB, no return

Recovery: 10' Mud w/oil spots IHP: 1838 FHP: 1830

IFP: 12-15 ISIP: 691 FFP: 18-16 FSIP: 820

BHT - 102 F

DST #2 3976-4014 (LKC "H")

30:30:30:30

IF: 1/4" blow, no return

FF: NB, no return

Recovery: 5' Mud w/oil spots

IHP: 1943 FHP: 1939 IFP: 17-18 ISIP: 371 FFP: 18-19 FSIP: 275

BHT - 108 F

DST #3 4028-5054 (LKC "I, J")

15:15:15:15

IF: Died in 7 min, no return FF: No blow, no return

Recovery: 2' Mud

IHP: 1970 FHP: 1906 IFP: 14-14 ISIP: 25 FHP: 14-15 FSIP: 21

BHT - 105 F

DST #4 4076-4104 (LKC "K")

30:45:30:60

IF: BOB 6 min, 1-3/4" return FF: BOB 9 min, 3-1/2" return

Recovery: 540' GIP, 80' Gsy O (10%G, 90%O), 60' GWMCO (10%G, 60%O, 5%W, 25%M), 60' GOMCW (10%G, 10%O, 50%W, 30%M),

60' GOMCW (5%G, 5%O, 85%W, 5%M)

IHP: 2019 FHP: 1992 IFP: 39-89 ISIP: 928 FFP: 97-126 FSIP: 928

Grav. - 32

Chlorides - 77,000 ppm

BHT - 118 F

DRILL STEM TESTS #5-8

DST #5 4266-4280 (Pawnee)

30:30:30:30

IFP: 1/4" blow, no return FFP: NB, no return

Recovery: 5' Mud IHP: 2115 FHP: 2085 IFP: 12-18 ISIP: 1124

FFP: 19-23 FSIP: 1093

BHT - 112 F

DST #6 4298-4324 (Myrick Station)

30:45:30:60

IF: BOB in 12 min, 1/2" return FF: BOB in 4 min, 2-1/2" return Recovery: 780' GIP, 60' GMCO (30%G, 40%O, 30%M), 60' GOCM (10%G, 35%O, 55%M), 30' GOCM (10%G, 20%O, 70%M)

IHP: 2138 FHP: 2103 IFP: 18-54 ISIP: 365 FFP: 41-64 FSIP: 370

BHT - 116 F

DST #7 4326-4378 (Ft. Scott-Cherokee LS)

30:45:30:60

IF: 9" blow, no return FF: 6-1/2" blow, no return

Recovery: 70' WM w/oil spots (20%W, 80%M), 60' WM (30%W, 70%M), 120' WM (45%W, 55%M)

IHP: 2193 FHP: 2152 IFP: 18-97 ISIP: 1015 FFP: 102-135 FSIP: 994

BHT - 118 F

Chlorides - 59,000 ppm

DST #8 4400-4436 (Johnson Zone)

30:45:30:60

IF: BOB 29-1/2 min, no return FF: 9-3/4" blow, no return

Recovery: 30' Cl Oil, 60' MCO (30%M, 70%O),

60' GOCM (10%G, 30%O, 60%M)

IHP: 2188 FHP: 2126 IFP: 18-49 ISIP: 995 FFP: 53-63 FSIP: 1009

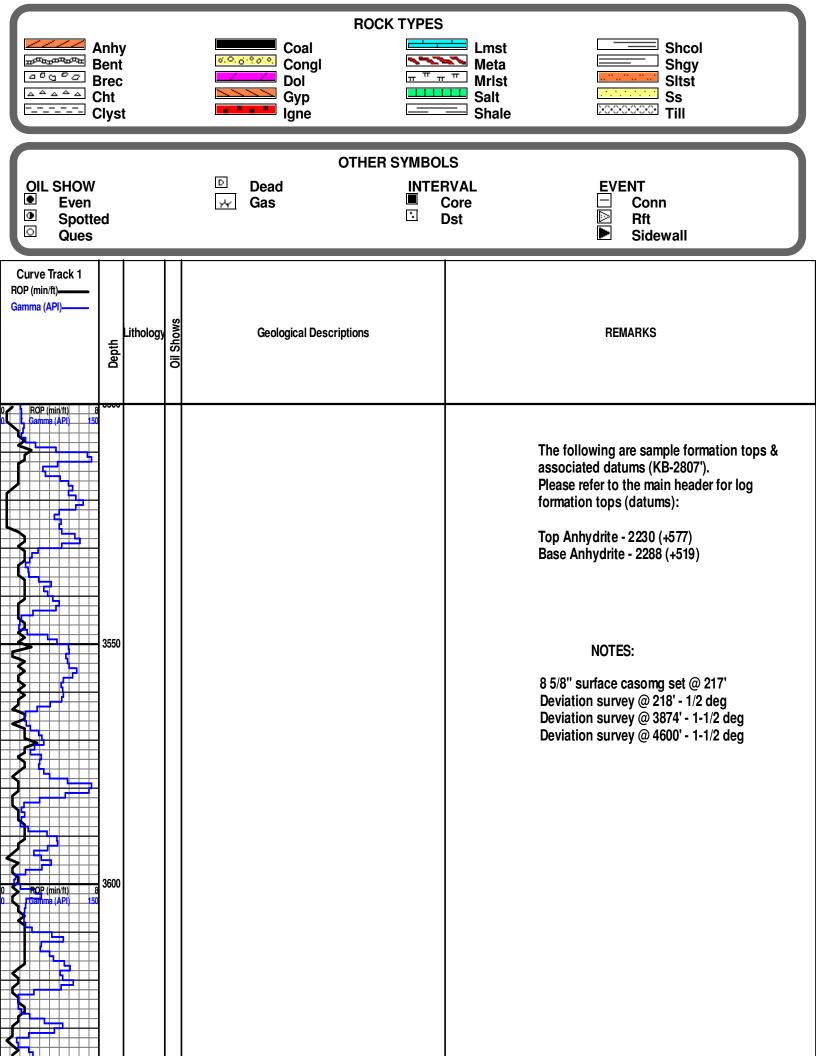
BHT - 119 F Gravity - 25

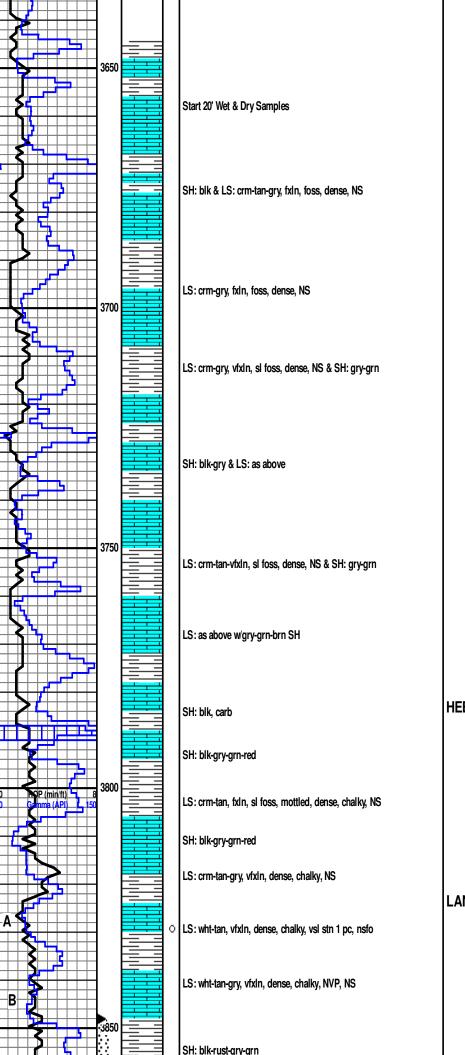
COMMENTS

Based on the results of DSTs, as well as sample & log analysis, it was recommended that casing be run to produce the Morrow Sandstone, Johnson Zone, Myrick Station and the LKC "K" zone.

Respectfully submitted,

Steven P. Murphy, PG (KS License #228) Consulting Petroleum Geologist

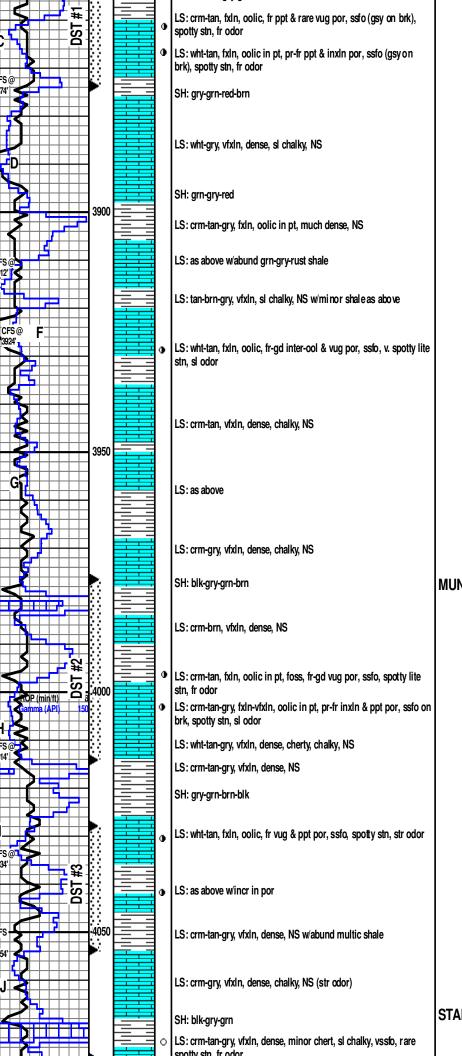




HEEBNER 3783 (-976)

LANSING 3823 (-1016)

DST #1 3848-3874 (LKC "B") 30:30:45:45 IF: Wk blow built to 1/2", no return FF: NB, no return



Hecovery: 10 Mud woll spots IHP: 1838 FHP: 1830 IFP: 12-15 ISIP: 691 FFP: 18-16 FSIP: 820 BHT - 102 F

Strap @ 3874' - 1.33' short to board

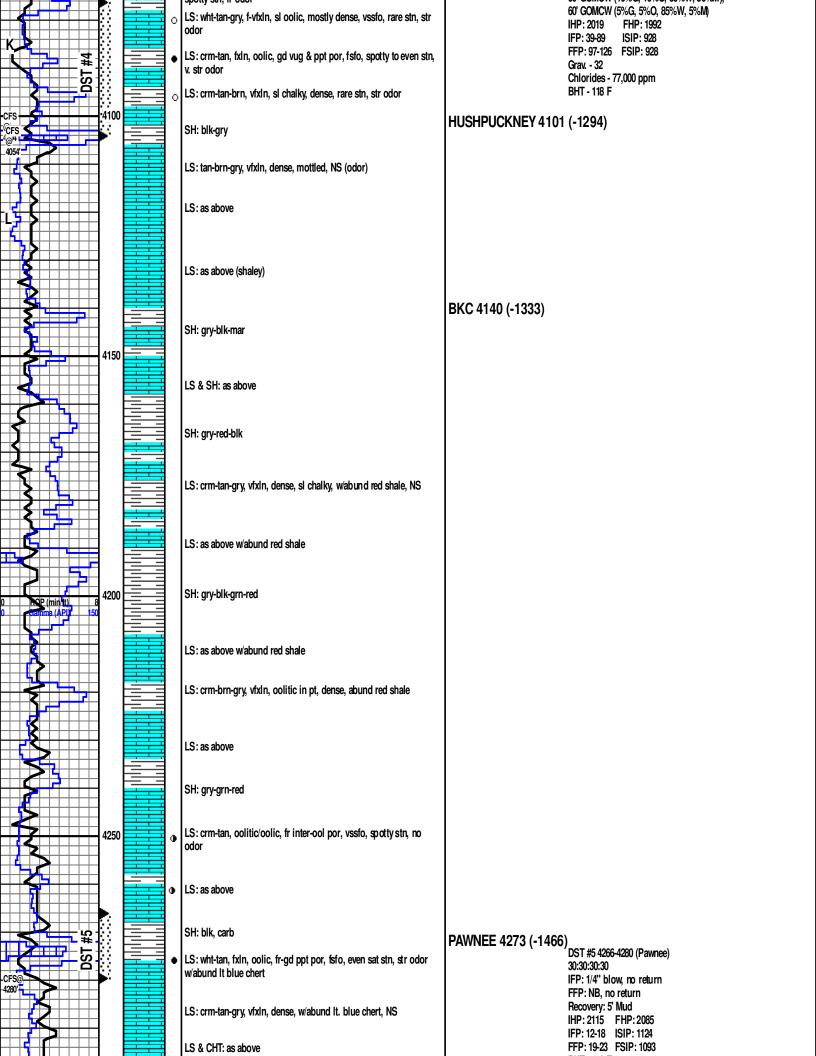
MUNCIE CRK 3978 (-1171)

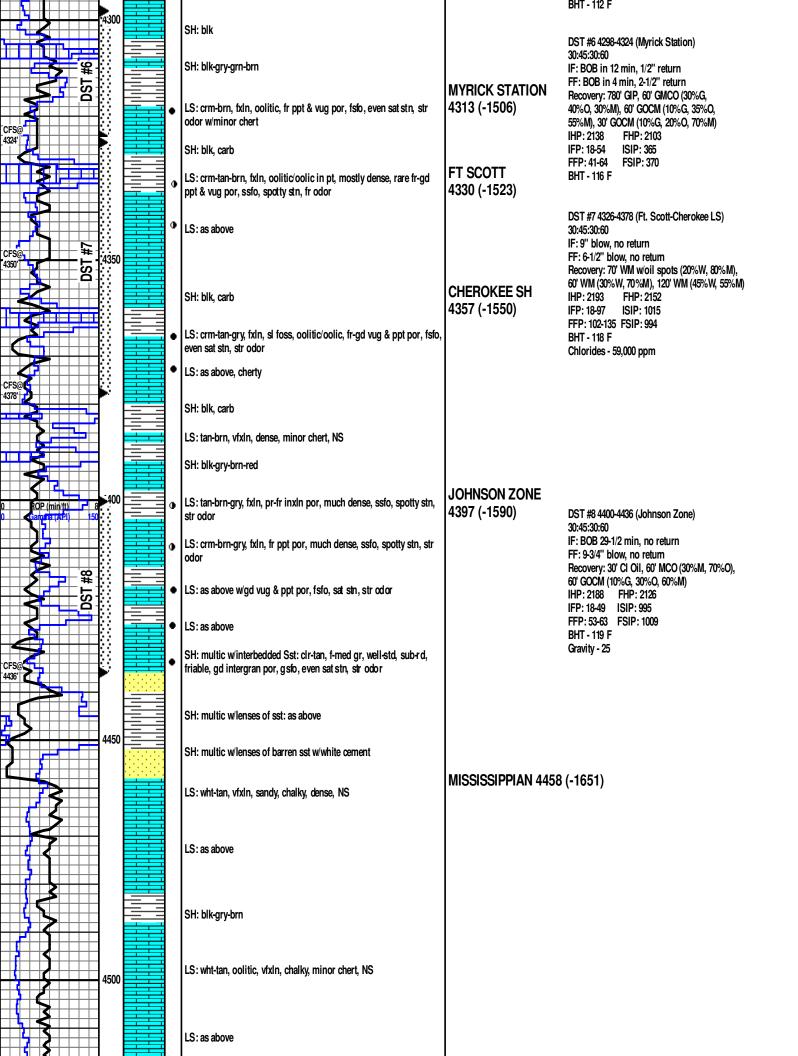
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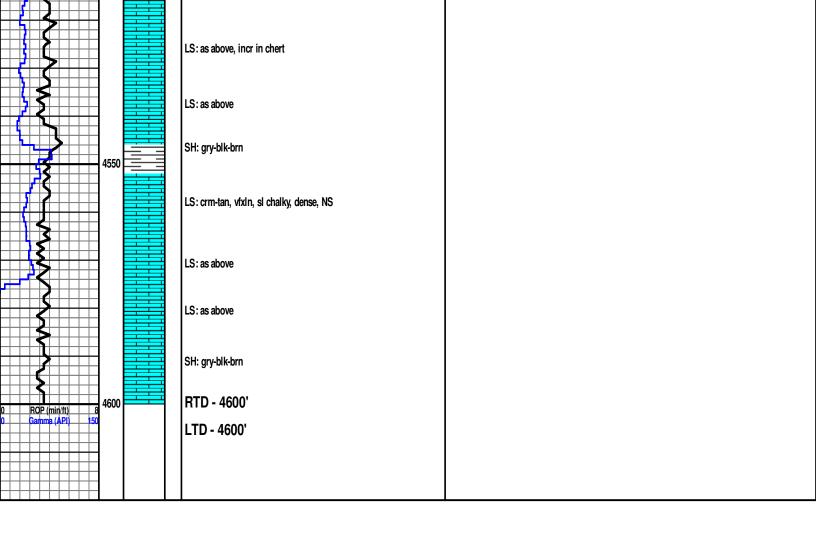
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15:15:15:15
IF: Died in 7 min, no return
FF: No blow, no return
Recovery: 2' Mud
IHP: 1970 FHP: 1906
IFP: 14-14 ISIP: 25
FHP: 14-15 FSIP: 21
BHT - 105 F

STARK 4057 (-1250)

DST #4 4076-4104 (LKC "K")
30:45:30:60
IF: BOB 6 min, 1-3/4" return
FF: BOB 9 min, 3-1/2" return
Recovery: 540' GIP, 80' Gsy O (10%G, 90%O),
60' GWMCO (10%G, 60%O, 5%W, 25%M),
60' GOMCW (11%G, 10%O, 50%W, 30%M).









LOCATION ON HOLES FOREMAN FUZZY

DATE

AUTHORIZTION_____

DATE	CHOTOMES #	CEMENT		(52)
		L NAME & NUMBER SECTION TOWNSHIP	RANGE	COUNTY
ろ -22-13	6308 KNOPP	+5 13 14	32	Losan
	. 4.	Oakley	Transfer of the Control	September 1
AILING ADDRE	ER RESOUTERS	5-344 TRUCK# DRIVER	TRUCK#	DRIVER
		have 163 Travis w	7	
ITY	ISTATE	TIP CODE 16 466 Milet		
	SIAIE	3/4 ~	-	
		6 in		
	UNSACE HOLE SIZE	12'14 HOLE DEPTH 2 (8' CASING SIZE &	WEIGHT ろう	5/8
ASING DEPTH		TUBING	OTHER	
LURRY WEIGH		1.36 WATER gal/sk 6.5 CEMENT LEFT I	n CASING_2 <) ′
SPLACEMENT	12.6 DISPLACEMEN	IT PSI MIX PSI RATE		
MARKS: 54	salv meeting	~ w-w+6. Risup and cir	· applus	
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ACCOUNT				
CODE	QUANITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
54015	1	PUMP CHARGE	108500	10850
5406	20	MILEAGE :	500	1000
5407	7.840m	Tow miles a Dolivery (min)	41000	4100
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11045	165 5 KS	Class A cement	1765	2912
		A ,		1112
1102	465*	calcium chloride	189	413.85
1118B	310	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
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in 3737		505404A 1 = 5 10 070 505404A COM	pleted	प्रवश् ७ प्रवश ७

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

TITLE_



P. O. Box 466 Ness City, KS 67560 Off: 785-798-2300



Invoice

DATE	INVOICE#
4/4/2013	24306

BILL TO

Pioneer Resources, LLC 80 Windmill Drive Phillipsburg, KS 67661-9622

- Acidizing
- Cement
- Tool Rental

TERMS	Well N	o. Lease	County	Contractor	Well Type W		II Category	Job Purpose	Operator
Net 30	#5	Knopp	Knopp Gove WW Drilling		Oil	Oil Development		Cement LongStri	Don
PRICE REF. DESCRIPTION			QTY	QTY UM		UNIT PRICE	AMOUNT		
575D 579D 580 221 281 290 402-5 403-5 407-5 408-5 411-5 325 276 283 284 285 330 276 581D 583D	PRICE REF. DESCRIPTION				1 2 4 500 5 10 3 1 1 175 44 875 9 83 300 75 1475	Sack(s) Lb(s) Sacks Lb(s)	6.00 1,850.00 200.00 25.00 1.25 35.00 70.00 250.00 350.00 3,000.00 45.00 200.00 13.50 2.00 0.20 35.00 4.00 16.50 2.00 2.00 1.00	480.00 1,850.00 400.00 100.00T 625.00T 175.00T 700.00T 350.00T 3,000.00T 1,800.00T 2,362.50T 88.00T 175.00T 315.00T 315.00T 315.00T 4,950.00T 150.00T 950.00 1,925.12	

We Appreciate Your Business!

Total

\$22,971.46