Confidentiality Requested:

Yes No

Kansas Corporation Commission Oil & Gas Conservation Division

1362213

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 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	iemp. 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 III Approved by: Date:								

1362213

- 100	
	136221

Operator Name:			Lease Name: _			Well #:	
Sec Twp	S. R	East West	County:				
NSTRUCTIONS: Show open and closed, flowing and flow rates if gas to su	and shut-in pressu	res, whether shut-in pre	essure reached stati	c level, hydrosta	tic pressures, bott		
Final Radioactivity Log, Files must be submitted in				gs must be ema	iled to kcc-well-lo	gs@kcc.ks.go	v. Digital electronic lo
Orill Stem Tests Taken (Attach Additional She	ets)	Yes No		og Formatio	on (Top), Depth an	d Datum	Sample
Samples Sent to Geologi	cal Survey	☐ Yes ☐ No	Nam	е		Тор	Datum
Cores Taken Electric Log Run		☐ Yes ☐ No ☐ Yes ☐ No					
List All E. Logs Run:							
			RECORD Ne		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
-	Doreth		CEMENTING / SQU	EEZE RECORD	1	1	
Purpose: Perforate Protect Casing Plug Back TD Plug Off Zone	Depth Top Bottom	Type of Cement	# Sacks Used		Type and P	ercent Additives	
Did you perform a hydraulic to Does the volume of the total Was the hydraulic fracturing	base fluid of the hydra	aulic fracturing treatment e	_	? Yes	No (If No, ski	o questions 2 ar o question 3) out Page Three	•
Shots Per Foot		N RECORD - Bridge Plug potage of Each Interval Per			cture, Shot, Cement mount and Kind of Ma		d Depth
TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run:	Yes No		'
Date of First, Resumed Pro	duction, SWD or ENH	R. Producing Met		Gas Lift (Other (Explain)		
Estimated Production Per 24 Hours	Oil B	bls. Gas	Mcf Wate	er B	bls. G	as-Oil Ratio	Gravity
DISPOSITION Vented Sold (If vented, Submit	Used on Lease	Open Hole Other (Specify)	METHOD OF COMPLE Perf. Dually (Submit)	Comp. Cor	mmingled mit ACO-4)	PRODUCTIO	ON INTERVAL:

Form	ACO1 - Well Completion					
Operator	Deutsch, Kent A. dba Deutsch Oil Company					
Well Name	JORNS 2-4					
Doc ID	1362213					

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement		Type and Percent Additives
Surface	10.75	8.625	23	303	common		2% gel, 3% cc, 1/4# celflake
Production	7.875	5.5	15.5	4118	AA2	150	60/40 poz

gy services, L.P.

TREATMENT REPORT

customer	MIS	at (1)	1 COMPERSON	ę,			Date			
	7010		Well #	7 - 4			3	-2	3-17	7
Field Order		ion Pra	++	Casing	5 A Dept	h, // C	County D	fig. To	TS	tate 1/ (
Type Job	242	51/2"		109	Formation	1100		Legal D	Description 26	. 64
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asing Size	Tubing 9			Acid 15		AA-ZRA			ISIP	
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olume 6.	Volume		7 To	Pad	O JNJ	Min	70 570		10 Min.	
Max Press	Max Pre		To	Frac		Avg		,	15 Min.	
	ion Annulus	and the second s	То		٠	HHP Used	1, 2,		Annulus Press	sure
lug Depth	Packer [То	Flush 95	5.4	Gas Volume			Total Load	
	presentative					OTT	Treater /	1 ike	Matta	(-
Service Units	77511		27463	70959					T	
river lames	Martal		EMST	CIY	Mer.	10				
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TREATMENT REPORT

Lease	4+5C4 JUIN	5			_	Lease No Well #				Date	-) I	7 1	(4) 3
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Type Job	704		197	7			Ca	sing 85/ De	pth .	A CONTRACTOR OF THE PARTY OF TH	1.19,4+	10 10	
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ax Press	Max Pre	ess	From		То		- uu		Min	97	2,03	10 Min.	(F
ell Connec	ction Annulus	Vol	From		То		Frac		Avg			15 Min.	
g-Depth		N	From		To		20 139 and 20 10 10 10 10 10 10 10 10 10 10 10 10 10		HHP Used		(6)	Annulus	<u> </u>
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Fracture Start Date/Time:	5/15/17 12:19
Fracture End Date/Time:	5/15/17 14:07
State:	Kansas
County:	Pratt
API Number:	
Operator Number:	Deutsch Oil Company
Well Name:	Jorns #2-4
Federal Well:	Yes
Tribal Well:	No
Longitude:	0.1111
Latitude:	0.1111
Long/Lat Projection:	NAD27
True Vertical Depth (TVD):	
Total Clean Fluid Volume* (gal):	363,300



Additive	Specific Gravity
WATER	1.00
Sand	2.65
Pexcide P5	0.96
Plexcide P5	0.96
Plexslick 957	1.11
Clayplex 650	1.15
Plexgel Breaker XPA	1.03
Plexsurf 580 ME	1.04
Plexsurf 580 ME	1.04

Ingredients Section:

Trade Name	Supplier Purpose		Purpose Ingredients C		Maximum Ingredient Concentration in Additive (% by mass)**	
Water	Operator	Carrier/Base Fluid	Water	7732-18-5	100.00%	
Sand	Superior Silica Sand	Proppant	Crystalline Silica in the form of quartz	14808-60-7	100.00%	
Plexcide P5	Chemplex	Biocide	Tributyl Tetradecyl Phosphonium Chloride	81741-28-8	5.00%	
Plexcide P5	Chemplex	Biocide	Methanol	67-56-1	20.00%	
Plexslick 957	Chemplex	Friction Reducer	Petroleum Hydrotreated Light Distillate	64742-47-8	25.00%	
Chemplex 650	Chemplex	Clay Control	Ethanaminium 2-hydroxyN, N, N-trimethyl Chloride		35.00%	
Plexgel Breaker XPA	Chemplex	Slickwater Breaker	Hydrogen Peroxide	7722-84-1	7.00%	
Plexsurf 580 ME	Chemplex	Surfactant	Methyl Alcohol	67-56-1	25.00%	
Plexsurf 580 ME	Chemplex	Surfactant	2-Butoxyethanol	111-76-2	50.00%	

	_		

^{*}Total Water Volume sources may include fresh water, produced water, and/or recycled water
** Information is based on the maximum potential for concentration and thus the total may be over 100% All component information

Additive Quantity	Mass (lbs)	
363,300	3,031,739	gι
179,500	179,500	lb
40	320	ga
40	320	go
259	2,399	go
185	1,775	go
73	627	ga
93	807	ga
93	807	ga
		gι
		go
		ga
		go

Total Slurry Mass (Lbs) 3,218,296

Mass per Component (LBS)	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments	Claimant Company	Claimant First Name	Claimant Last Name	Claimant Email	Claimant Phone (nnn-nnn-nnnn)
3,031,739	94.20323%						
179,500	5.57749%						
16	0.00050%						
64	0.00199%						
600	0.01864%						
621	0.01931%						
44	0.00136%						
202	0.00627%						
404	0.01254%						
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