

Confidentiality Requested:

☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1094669

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 # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

- ☐ New Well ☐ Re-Entry ☐ Workover
- ☐ Oil ☐ WSW ☐ SWD ☐ SIOW
- ☐ Gas ☐ D&A ☐ ENHR ☐ SIGW
- ☐ OG ☐ GSW ☐ Temp. Abd.
- ☐ CM (Coal Bed Methane)
- ☐ Cathodic ☐ Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

- ☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD
- ☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

- ☐ Commingled Permit #: _____
- ☐ Dual Completion Permit #: _____
- ☐ SWD Permit #: _____
- ☐ ENHR Permit #: _____
- ☐ GSW Permit #: _____

Spud Date or
Recompletion Date

Date Reached TD

Completion Date or
Recompletion Date

API No. 15 - _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ ☐ East ☐ West

_____ Feet from ☐ North / ☐ South Line of Section

_____ Feet from ☐ East / ☐ West Line of Section

Footages Calculated from Nearest Outside Section Corner:

☐ NE ☐ NW ☐ SE ☐ SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? ☐ Yes ☐ No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite: _____

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ ☐ East ☐ West

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: _____

Sec. _____ Twp. _____ S. R. _____ ☐ East ☐ West County: _____

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes	<input type="checkbox"/> No			
Electric Log Run	<input type="checkbox"/> Yes	<input type="checkbox"/> No			
List All E. Logs Run:					

<div style="text-align: center;"> CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used </div> <div style="text-align: center;">Report all strings set-conductor, surface, intermediate, production, etc.</div>							
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 / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☐ No (If No, skip questions 2 and 3)

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No (If No, skip question 3)


Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No (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	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth

TUBING RECORD:		Size:	Set At:	Packer At:	Liner Run:			<input type="checkbox"/> Yes	<input type="checkbox"/> No
Date of First, Resumed Production, SWD or ENHR.			Producing Method:						
			<input type="checkbox"/> Flowing	<input type="checkbox"/> Pumping	<input type="checkbox"/> Gas Lift	<input type="checkbox"/> Other (Explain) _____			
Estimated Production Per 24 Hours	Oil	Bbbs.	Gas	Mcf	Water	Bbbs.	Gas-Oil Ratio	Gravity	

<p>DISPOSITION OF GAS:</p> <p><input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease</p> <p><i>(If vented, Submit ACO-18.)</i></p>		<p>METHOD OF COMPLETION:</p> <p><input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled</p> <p><i>(Submit ACO-5)</i></p> <p><input type="checkbox"/> Other <i>(Specify)</i> _____</p>	<p>PRODUCTION INTERVAL:</p> <p>_____</p> <p>_____</p>
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OPERATOR			
Company:	TDI, INC		
Address:	1310 BISON ROAD HAYS, KANSAS 67601		
Contact Geologist:	TOM DENNING		
Contact Phone Nbr:	785-259-3141		
Well Name:	MUNSCH # 6		
Location:	SE NE NW SE Sec.9-15s-19w	API:	15-051-26,382-00-00
Pool:	INFIELD	Field:	SCHOENCHEN
State:	KANSAS	Country:	USA

			
1310 BISON ROAD HAYS, KANSAS 67601 (785) 628-2593			
Scale 1:240 Imperial			
Well Name:	MUNSCH # 6		
Surface Location:	SE NE NW SE Sec.9-15s-19w		
Bottom Location:			
API:	15-051-26,382-00-00		
License Number:	4787		
Spud Date:	9/11/2012	Time:	5:00 PM
Region:	ELLIS COUNTY		
Drilling Completed:	9/16/2012	Time:	7:40 PM
Surface Coordinates:	2250' FSL & 1560' FEL		
Bottom Hole Coordinates:			
Ground Elevation:	2029.00ft		
K.B. Elevation:	2039.00ft		
Logged Interval:	2900.00ft	To:	3755.00ft
Total Depth:	3750.00ft		
Formation:	ARBUCKLE		
Drilling Fluid Type:	CHEMICAL/FRESH WATER GEL		

SURFACE CO-ORDINATES			
Well Type:	Vertical		
Longitude:		Latitude:	
N/S Co-ord:	2250' FSL		
E/W Co-ord:	1560' FEL		

LOGGED BY			
			
Company:	SOLUTIONS CONSULTING		
Address:	108 W 35TH HAYS, KS 67601		
Phone Nbr:	(785) 639-1337		
Logged By:	Geologist	Name:	HERB DEINES

CONTRACTOR			
Contractor:	SOUTHWIND DRILLING INC.		
Rig #:	1		
Rig Type:	MUD ROTARY		
Spud Date:	9/11/2012	Time:	5:00 PM
TD Date:	9/16/2012	Time:	7:40 PM
Rig Release:	9/17/2012	Time:	10:45 AM

ELEVATIONS			
K.B. Elevation:	2039.00ft	Ground Elevation:	2029.00ft
K.B. to Ground:	10.00ft		

NOTES			
RECOMMENDATION TO PLUG AND ABANDON WELL DUE TO LOW STRUCTURE OF ARBUCKLE AND LACK OF DEVELOPMENT IN THE LANSING-KANSAS CITY.			
WELL LOGGED BY PIONEER ENERGY SERVICES: DUAL INDUCTION LOG, DUAL COMPENSATED POROSITY LOG			
NO DRILL STEM TESTS WERE RAN ON THIS WELL			


FORMATION TOPS SUMMARY AND CHRONOLOGY OF DAILY ACTIVITY			


MUNSCH # 6
SE NE NW SE
Sec.9-15s-18w
2029' GL 2139' KB


FORMATION	SAMPLE TOP	LOG TOP
Anhydrite	1208+ 831	1208+ 831
B-Anhydrite	1244+ 795	1244+ 795
Topeka	2997- 958	3006- 962
Heebner Shale	3277-1238	3279-1240
Toronto	3297-1258	3299-1260
LKC	3323-1284	3326-1287
BKC	3548-1509	3552-1513
Marmaton Mkr.	3608-1569	3611-1572
Arbuckle	3657-1618	3660-1621
RTD	3750-1711	
LTD		3755-1716


9-11-12	RU, Spud, set surface casing to 223.03' w/150 sxs. Common, 2%gel, 3%CC, Slope survey 3/4 degree
9-12-12	225' WOC, kick off 8:15AM
9-13-12	1575' drilling
9-14-12	2388' drilling
9-15-12	3100' drilling, displaced @ 2800'
9-16-12	3445' drilling, RTD 3750' @ 7:40 PM, slope 2 1/4 degrees
9-17-12	3750', logs, plug and abandon, plugging completed at 10:45 AM, RD

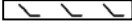
ROCK TYPES


 Cht vari


 Clystgy


 Chtcongl


 Dolprim


 Dol Lime


 Lmst fw<7


 Lmst fw7>


 Lscongl

 shale, grn

 shale, gry

 Carbon Sh

 shale, red

 Shcol

ACCESSORIES

MINERAL

 Chert, dark

 Nodules

 Pyrite

 Chert White


FOSSIL


 Oolite

 Oomoldic

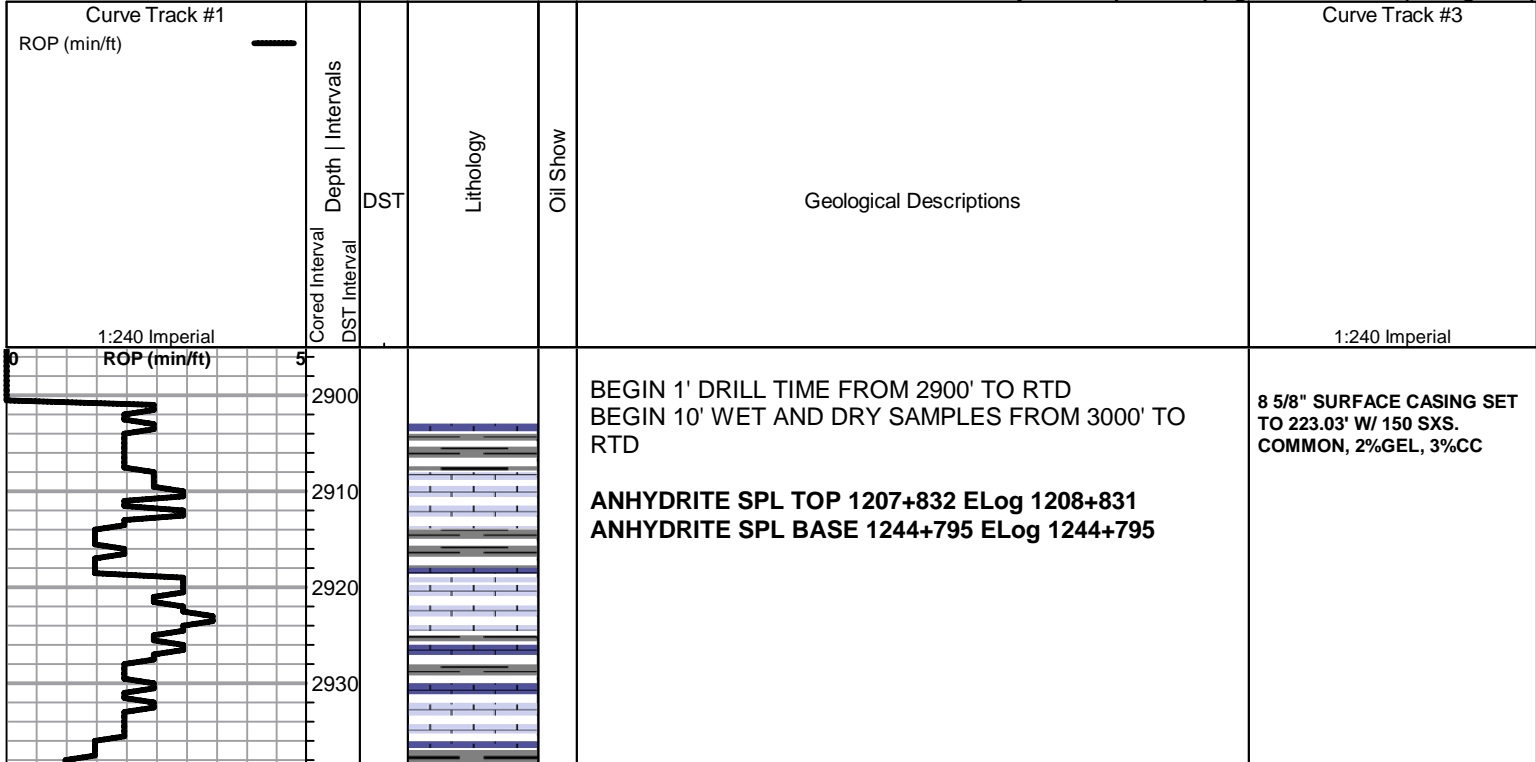
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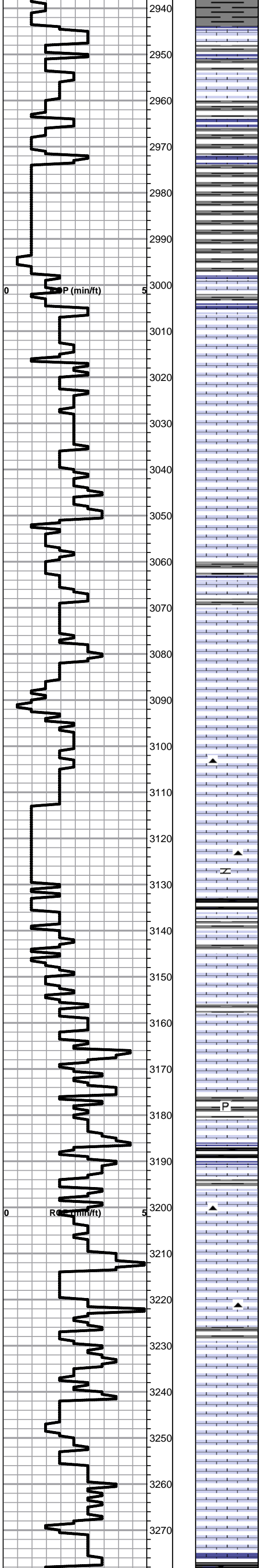
DST

 DST Int

 DST alt

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)





Lime, med brn-gray, fnxln, slightly fossiliferous
Shalelt-med gray, argillaceous forming sticky clumps

Lime, lt-med brn, fnxln, fossiliferous

Shale, lt-med gray, soft blocky to forming soft mud

TOPEKA 2997-958 ELog 3006

Lime, crm-lt brn, fnxln, slightly fossiliferous

Lime, lt-med brn, fnxln, slightly fossiliferous

Lime, med brn-grayish brn, fnxln, fossiliferous

Lime, lt-med brn, fnxln, slightly fossiliferous

Lime, lt-med brn-grayish brn, fnxln, slightly fossiliferous

Lime, lt brn-lt gray, fn-vfxln

Lime, lt brn-lt gray, slightly fossiliferous in part, slight chalk

Lime, tan-gray, fnxln, granular in part

Lime, lt gray, fnxln, slightly fossiliferous, bedded chalk

Lime, med brn-grayish brn,fnxln-granular, fossiliferous in part, bedded chalk in part

Lime, lt-med brn, fnxln

Lime, lt brn-lt gray, fnxln-granular in part, slightly fossiliferous, slight chalk in part, NS

Lime, lt-med brn w gray speckling in part, granular, slightly fossiliferous, scattered chert nodules

Shale, gray-black carbonaceous

Shale, dove gray, soft forming soft mud
Lime, tan-med brn, fnxln-granular with chalk

Lime, tan-lt brn, fnxln-granular with bedded chalk in part

Lime, crm, fn-vfxln

Shale, med gray, soft blocky, pyrite clusters
Lime, tan, fnxln, slightly chalky

Shale, gray-black carbonaceous

Shale, gray, calcareous with fossil fragments

Lime, tan-lt brn, fnxln, slight chalk

Lime-tan-lt brn, fnxln-granular, slight chalk in part

Lime, crm, granular, chalky, NS

Lime, tan-med brn, fnxln, fossiliferous in part

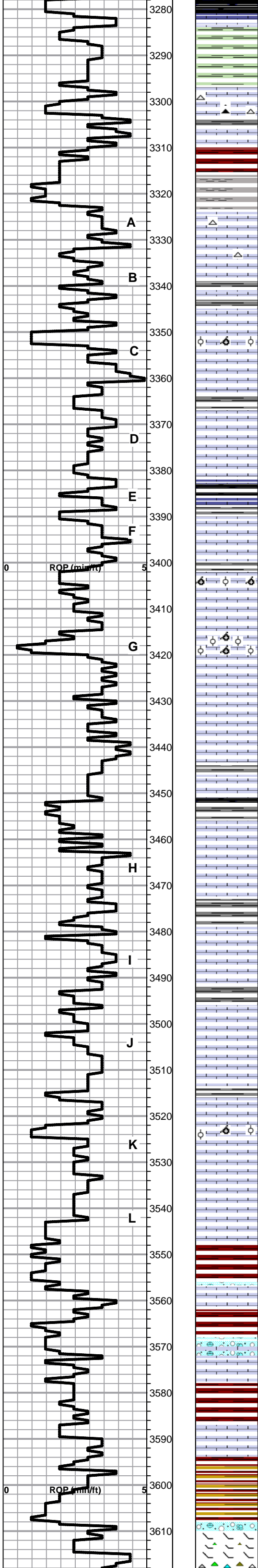
Lime, tan-lt brn, fn-vfxln

Lime, tan, fnxln-granular, chalk in part

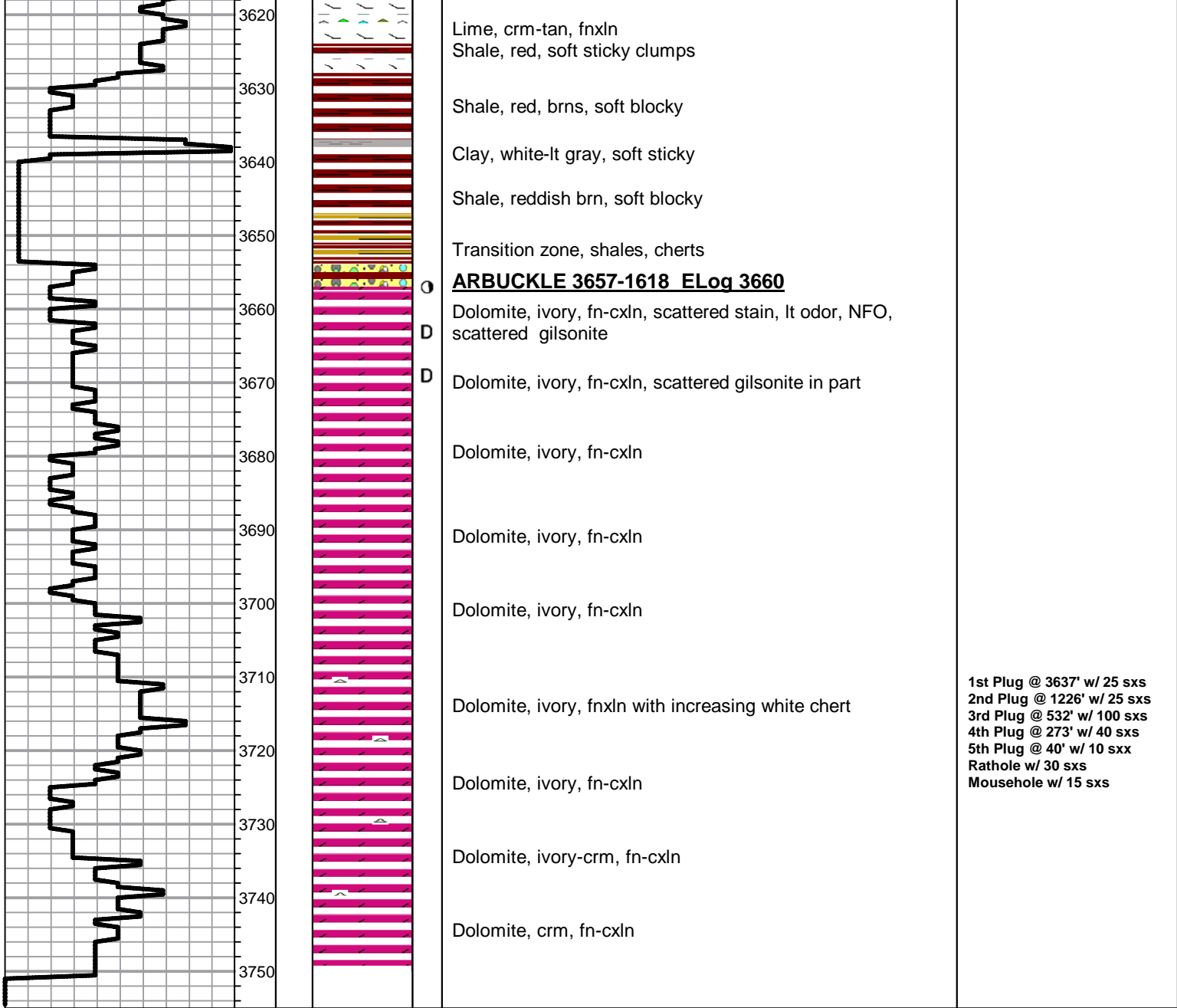
Lime, tan-lt brn, fn-vfxln

Lime, tan-grayish brn, fnxln
HEEBNER SHALE SPL 3277-1238 ELog 3279

LOG TD 5' DEEPER THAN
RTD. RESULT WAS
SAMPLE TOPS THAT WERE
HIGHER THAN LOG TOPS.



Shale, black carbonaceous Lime, med brn, fnxln Shale, lime green, soft, blocky
<u>TORONTO SPL 3297-1258 ELog 3299</u>
Lime, wht-lt brn, fn-vfxln with white chert
Shale, reddish brn-lt gray
<u>LKC SPL 3323-1284 ELog 3326</u>
Lime, crm-tan, fn-vfxln
Lime,tan-lt brn, fnxln
Lime, tan-lt gray, fnxln Shale, gray-grayish green, soft
● Lime, crm-tan, fnxln with oolitic-oomoldic in part, scattered staining in part, no odor, NFO
Lime, crm-tan, fnxln
Lime, crm-tan, fn-vfxln
Lime, crm-tan, fn-vfrxln Shale, gray-black carbonaceous
● Lime, crm-tan, fnxln, scattered vuggy porosity with lt staining, no odor, NFO
● Lime, crm-tan, fnxln w/ few chips of oolitic-oomoldic with scattered light staining, no odor, NFO
Lime, crm-tan, fnxln, bedded chalk
Lime, crm-tan, oomoldic, NS with chalk in part
Lime, crm-tan, fn-vfrxln, chalk in part
Lime, crm-tan, fnxln, bedded chalk
Lime, crm, fnxln, chalk in part
Lime, crm, fnxln Shale, gray-black carbonaceous in part
Lime, crm-brn, fnxln, NS
Lime, tan-grayish brn, fnxln, chalk in part
Lime, crm-tan, fnxln, bedded chalk, NS
Lime, wht-crm, fnxln, hard on crush, bedded chalk in part Shale, med gray, slivers
Lime, crm-tan, fnxln, bedded chalk, NS
Lime, crm-tan, fn-vfxln, chalk in part
Lime, crm-tan, fnxln, bedded chalk in part
Lime, crm-tan, fnxln with oolmoldic in part, barren, NS
Lime, crm, fn-vfxln, bedded chalk, NS
Lime, crm-tan, fn-vfxln, bed chalk, NS
<u>BKC SPL 3548-1509 ELog 3552</u>
Shale, reddish brn, soft, blocky
Lime, wht-crm, fnxln
Shale, red soft with lt red wash
Clastic mix of limes, chert and red shale
Shale, red, soft sticky mud clumps
Lime, crm, fnxln with bed chalk
Shale, vari color, brns, reds, maroons
<u>MARMATON MKR. SPL 3608-1569 ELog 3611</u>
Lime, crm-lt brn, dolomitic in part, fnxln, orange cherts



QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-2025
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 739

Date	9-11-12	Sec.	9	Twp.	15	Range	18	County	Ellis	State	KS	On Location		Finish	12:15AM
Lease	Muhseh	Well No.	#6	Location											
hays mach IN NE Ninto															
Contractor	Southwind Ris 1								Owner						
Type Job	Surface								To Quality Oilwell Cementing, Inc.						
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.															
Hole Size	12 1/4								T.D.						
Csg.	8 5/8								Depth						
								223.02							
Tbg. Size									Depth						
								Street							
Tool									City						
								State							
Cement Left in Csg.									Shoe Joint						
The above was done to satisfaction and supervision of owner agent or contractor.															
Meas Line									Displace						
								12.314							
Cement Amount Ordered															
150 390CC 2% gel															
EQUIPMENT															
Pumptrk	16	No.		Cement	matt										
Bulktrk	10	No.		Driver	Lewis										
Bulktrk	pu	No.		Driver	Jaysen										
JOB SERVICES & REMARKS															
Remarks:	Common														
Rat Hole	Poz. Mix														
Mouse Hole	Gel.														
Centralizers	3														
Baskets	Calcium														
D/V or Port Collar	5														
Hullis															
Salt															
Flowseal															
Kol-Seal															
Mud CLR 48															
CFL-117 or CD110 CAF 38															
Sand															
Handling															
158															
Mileage															
FLOAT EQUIPMENT															
Guide Shoe															
Centralizer															
Baskets															
AFU Inserts															
Float Shoe															
Latch Down															
Pumptrk Charge															
Surface															
Mileage															
9															
Tax															
Discount															
Total Charge															

X Signature *Ray*

Federal Tax I.D.# 20-2886107

No. 6541

Date	9-17-12	Sec.	9	Twp.	1518	Range	41-5	County	KS	State	On Location	Finish	10:45 A.M.		
							Location							HAYS MUCK 1/2 W 1/2 N 10	
Lease							Munsch		Well No.		6				
Contractor							Southwest #1		Owner						
Type Job							Rotary Plug		To Quality Oilwell Cementing, Inc. You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.						
Hole Size							7 7/8		T.D.		3250				
Csg.									Depth		Charge To				
Tbg. Size									Depth		Street				
Tool									Depth		City				
Cement Left in Csg.									Shoe Joint		State				
Meas Line									Displace		The above was done to satisfaction and supervision of owner agent or contractor.				
EQUIPMENT											Cement Amount Ordered				
Pumptrk							16		No.		Cement		245 60/40 4 1/2 6 1/4 1 1/2 1 1/2		
Bulktrk									No.		Helper		Common		
Bulktrk							10		No.		Driver		Poz. Mix		
									No.		Driver		Gel.		
									No.		Driver		Calcium		
									No.		Driver		Hulls		
JOB SERVICES & REMARKS													Salt		
Remarks:													Flowseal		
Rat Hole							30SK						Koi-Seal		
Mouse Hole							1.5SK						Mud CLR 48		
Centralizers													CFL-117 or CD110 CAF 38		
Baskets													Sand		
D/V or Port Collar													Handling		
1st							3637		25SK				Mileage		
2nd							1226		25SK				FLOAT EQUIPMENT		
3rd							532		100SK				Guide Shoe		
4th							273		40SK				Centralizer		
5th							40'		10SK				Baskets		
													AFU Inserts		
													Float Shoe		
													Latch Down		
													Pumptrk Charge		
													Mileage		
													Tax		
													Discount		
													Total Charge		
Signature							Sub								

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802



Phone: 316-337-6200
Fax: 316-337-6211
<http://kcc.ks.gov/>

Mark Sievers, Chairman
Thomas E. Wright, Commissioner
Shari Feist Albrecht, Commissioner

Sam Brownback, Governor

September 25, 2012

Tom Denning
TDI, Inc.
1310 BISON RD
HAYS, KS 67601-9696

Re: ACO1
API 15-051-26382-00-00
Munsch 6
SE/4 Sec.09-15S-18W
Ellis County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Tom Denning