



# Discovery Drilling

P.O. Box 763 • Hays, KS 67601 • OFFICE (785) 623-2920 • CELLULAR (785) 635-1511

## DRILLER'S LOG

Operator: John O. Farmer, Inc. Lic# 5135 Contractor: Discovery Drilling Co., Inc. LIC#31548  
370 West Wichita Avenue - P.O. Box 352 PO Box 763  
Russell, KS 67665 Hays, KS 67601

Lease: A. Wasinger # 8 Location: SW-NE-SW-SE  
Section 15/ 15S/ 18W  
Ellis County, KS

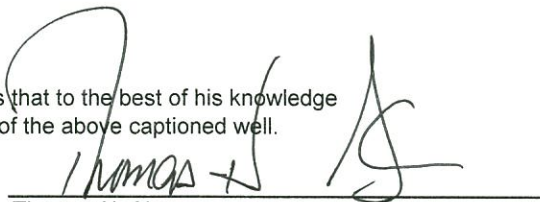
Loggers Total Depth: 3681' API#15- 051-26,361-00-00  
 Rotary Total Depth: 3680' Elevation: 2016 GL / 2024 KB  
 Commenced: 8/7/2012 Completed: 8/13/2012  
 Casing: 8 5/8" @ 1186'W/450sks Status: Oilwell  
5 1/2" @ 3677'W/130sks

### DEPTHS & FORMATIONS (All from KB)

Surface, Sand & Shale	<u>0'</u>	Shale	<u>1218'</u>
Dakota Sand	<u>552'</u>	Shale & Lime	<u>1847'</u>
Shale	<u>580'</u>	Shale	<u>2161'</u>
Cedar Hill Sand	<u>626'</u>	Shale & Lime	<u>2582'</u>
Red Bed Shale	<u>824'</u>	Lime & Shale	<u>3240'</u>
Anhydrite	<u>1178'</u>	RTD	<u>3680'</u>
Base Anhydrite	<u>1218'</u>		

STATE OF KANSAS )  
 ) ss  
 COUNTY OF ELLIS )

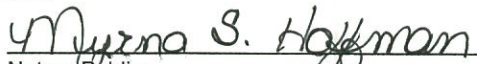
Thomas H. Alm of Discovery Drilling states that to the best of his knowledge the above and foregoing is a true and correct log of the above captioned well.

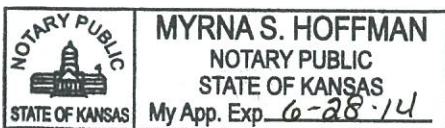
  
 \_\_\_\_\_  
 Thomas H. Alm

Subscribed and sworn to before me on 8-14-12

My Commission expires: 6-28-14

(Place stamp or seal below)

  
 \_\_\_\_\_  
 Notary Public





# 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. 714

Date	8-8-12	Sec.	15	Twp.	15	Range	18	County	ELLIS	State	KS	On Location		Finish	7.30 pm
Lease	A. Wasinger			Well No.	8			Location	Haystack 1E 1/2 N West 1/2						

Contractor	Discoy Rig 4			Owner	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.										
Type Job	Seiface			T.D.	11 86										
Hole Size	12 1/4			Depth	8 3/4										
Csg.	8 3/4			Charge To	John O Farner										
Tbg. Size				Street											
Tool				City	State										
Cement Left in Csg.	32.16			Shoe Joint	32.15										
Meas Line				Displace	73.5 BL										
				Cement Amount Ordered	430 3% CC 4% gel										

**EQUIPMENT**

Pumptrk	#15	No.	Cementer	Matt	Common	430
			Helper			
Bulktrk		No.	Driver	Nick	Poz. Mix	
			Driver			
Bulktrk		No.	Driver	Layne	Gel.	9
			Driver			

**JOB SERVICES & REMARKS**

Remarks:	A - Wasinger # 8					Hulls	
Rat Hole						Salt	
Mouse Hole						Flowseal	
Centralizers	2, 8 5/8					Kol-Seal	
Baskets	2, 8 5/8					Mud CLR 48	
D/V or Port Collar						CFL-117 or CD110 CAF 38	
						Sand	
						Handling	475
						Mileage	

**FLOAT EQUIPMENT**

	Guide Shoe	
	Centralizer	<del>#17</del> #2 #23
	Baskets	31 #24
	AFU Inserts	
	Float Shoe	
	Latch Down	
	Baffle plate	
	Ballhead plug	
	Pumptrk Charge	Long Surface
	Mileage	11

Cement did Circulate

Signature	<i>[Signature]</i>	Tax	
		Discount	
		Total Charge	



JOB LOG

SWIFT Services, Inc.

DATE 8-13-12 PAGE NO. 7

CUSTOMER John D. Farmer WELL NO. #8 LEASE Wessinger JOB TYPE Cement Lining Ticket No. 21856

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	1945							On location w/ Fract Equip
	1940							Start 14 #/ft 5 1/2" casing to 3680'
								200' Rot Wall Scrubbers
								Insert Fract Shoe w/ Anti-Ball
								LD. Pottle - 5J-18' @ 3662' = 89.4
								Cent 1-3-5-7-9-11 cut Bats #2 #12
	2110							Drop Ball - 2 Jb out
	2130							Fin Fin casing - Tag & LD JT
								St. cir / Rotate Casing
								Fin cir -
								Plug RH 30 SKS / MH-20 SKS cut
			12					Pump 500 gal M Flush
			20					Pump 20 BBI KCL Flush
				32				(Start 130 SKS BH-2 cut above hole)
			35					Fin cut - Washout pump & line
								Drop LD - Plug -
								Start Disp
		9	15				300	First 15 BBI KCL wtr
								Cont Disp H <sub>2</sub> O
		9	60				400	Caught press
		6	70					Gradually slow rate to 6 BPM
		6	89				700	Lost cir press
	2245	0	89 1/2				1500	Plug Down - Hold - Release & Hold
	2330							Job Complete
								Washup & Leakup
								<i>[Signature]</i> Dan Brian & Rob
								Had some difficulty
								with rate bit - Need operator
								on location to run with bit
								<i>[Signature]</i>