



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: Dreiling "B" # 1 Location: NE-SW-SW-SE
Section 15/ 13S/ 17W
Ellis County, KS

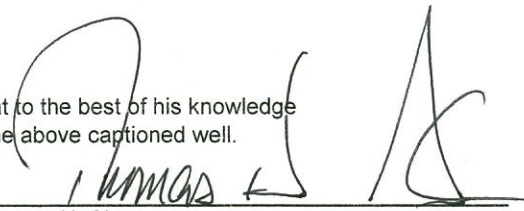
Loggers Total Depth: 3603' API#15- 051-26,355-00-00
 Rotary Total Depth: 3600' Elevation: 1995 GL 2003 KB
 Commenced: 8/23/2012 Completed: 8/29/2012
 Casing: 8 5/8" @ 226.29'W/170sks Status: D & A

DEPTHS & FORMATIONS (All from KB)

Surface, Sand & Shale	<u>0'</u>	Shale	<u>1244'</u>
Dakota Sand	<u>563'</u>	Shale & Lime	<u>1838'</u>
Shale	<u>606'</u>	Shale	<u>2164'</u>
Cedar Hill Sand	<u>681'</u>	Shale & Lime	<u>2620'</u>
Red Bed Shale	<u>861'</u>	Lime & Shale	<u>3276'</u>
Anhydrite	<u>1200'</u>	RTD	<u>3600'</u>
Base Anhydrite	<u>1244'</u>		

STATE OF KANSAS)
) ss
 COUNTY OF ELLIS)

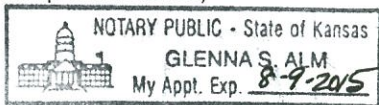
Thomas H. Alm of Discovery Drilling states that to the best of his knowledge the above and foregoing is a true and correct log of the above captioned well.



 Thomas H. Alm

Subscribed and sworn to before me on 8-30-12

My Commission expires: 8-9-2015

(Place stamp or seal below)




 Notary Public

ALLIED OIL & GAS SERVICES, LLC 056509

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

Russell KS

DATE <u>8-23-12</u>	SEC. <u>15</u>	TWP. <u>13</u>	RANGE <u>17</u>	CALLED OUT	ON LOCATION	JOB START <u>2:00 pm</u>	JOB FINISH <u>3:30 pm</u>
LEASE <u>Drilling B</u>	WELL # <u>1</u>	LOCATION <u>Victoria KS 3rd 2 1/2 W 1/4 into</u>			COUNTY <u>Ellis</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)							

CONTRACTOR Discovery #4

TYPE OF JOB surface

HOLE SIZE 12 1/4 T.D. 2225

CASING SIZE 8 7/8 2 3/4 DEPTH 226.29

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT 15'

CEMENT LEFT IN CSG. 15'

PERFS.

DISPLACEMENT 13 1/4 bbl

OWNER

CEMENT AMOUNT ORDERED 170 con 320 cc 29 gal

COMMON	<u>170</u>	@ <u>16.25</u>	<u>\$2762.50</u>
POZMIX		@	
GEL	<u>23</u>	@ <u>2.75</u>	<u>63.75</u>
CHLORIDE	<u>6</u>	@ <u>58.20</u>	<u>349.20</u>
ASC		@	
		@	
		@	
		@	
		@	
		@	
		@	
HANDLING	<u>183.51 FT³</u>	@ <u>2.10</u>	<u>385.37</u>
MILEAGE	<u>117.32</u>	@ <u>2.35</u>	<u>275.70</u>
			<u>TOTAL 3836.52</u>

EQUIPMENT

PUMP TRUCK CEMENTER Robert V

417 HELPER Woody O

BULK TRUCK

416 DRIVER Kevin R.

BULK TRUCK

DRIVER

REMARKS:

run 5 jts of new 8 7/8 2 3/4 casing receive circulation mix 170 sts con 320 cc 29 gal displace 13 1/4 bbl of water shut in wash up

Cement circulate

SERVICE

DEPTH OF JOB 230

PUMP TRUCK CHARGE 1125.00

EXTRA FOOTAGE @

MILEAGE 14 LVM @ 4.00 56.00

MANIFOLD @

14 HVML @ 7.00 98.00

CHARGE TO: John O'Farmer

STREET

CITY STATE ZIP

5115.52
-1023.10 20% discount
4092.42 TOTAL 1279.00

PLUG & FLOAT EQUIPMENT

@

@

@

@

@

TOTAL 0

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME

SIGNATURE [Signature]

SALES TAX (if Any) 200.05

TOTAL CHARGES 5115.52

DISCOUNT 20% 1152.01 IF PAID IN 30 DAYS

Net 3963.51 BS 8-24
before tax

ALLIED OIL & GAS SERVICES, LLC 053783

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:
Cement Pumps

DATE <u>8/24/12</u>	SEC. <u>15</u>	TWP. <u>13</u>	RANGE <u>17W</u>	CALLED OUT	ON LOCATION <u>11</u>	JOB START <u>7:30</u>	JOB FINISH <u>4:30</u>
LEASE <u>Discourt B</u>			WELL# <u>1</u>	LOCATION <u>Victoria 15 4 2 1/2 W north into</u>		COUNTY <u>Ellis</u>	STATE <u>Ks</u>
OLD OR NEW (Circle one) 2-03 3 bill							

CONTRACTOR Discourt Drilling
 TYPE OF JOB Robey Plug
 HOLE SIZE 12 1/2 T.D.
 CASING SIZE 8 5/8 DEPTH
 TUBING SIZE DEPTH
 DRILL PIPE 4 1/2 DEPTH 3500
 TOOL DEPTH
 PRES. MAX MINIMUM
 MEAS. LINE SHOE JOINT
 CEMENT LEFT IN CSG. All
 PERFS.
 DISPLACEMENT fresh water

OWNER
 CEMENT
 AMOUNT ORDERED 60% class & 40% for 496 gal 3/4 flow seal
245.54
 COMMON 147 @ 14.25 2,388.75
 POZMIX 98 @ 8.50 833.00
 GEL 8 @ 21.25 170.00
 CHLORIDE @
 ASC @
flow seal 62 @ 2.70 167.40
 @
 @
 @
 @
 @
 @
 HANDLING 262.45 @ 2.10 551.16
 MILEAGE 10.94 x 148 2.35 360.58
153.43 TOTAL 4,470.87

EQUIPMENT
 PUMP TRUCK CEMENTER Dustin Chambers 1
 # 392 HELPER Josh Isaac
 BULK TRUCK
 # 344-170 DRIVER Alan Generous 3
 BULK TRUCK
 # DRIVER

REMARKS:

<u>fill hole with rig mud</u>	
<u>1 3500 @ 2.55 \$8925</u>	
<u>2 1250 25</u>	
<u>3 725 100</u>	
<u>4 275 40</u>	
<u>5 @ 100 10</u>	
<u>RH 30</u>	
<u>MH 15</u>	
<u>Plug Down 4:15</u>	

CHARGE TO: SD Energy Oil Co
 STREET _____
 CITY _____ STATE _____ ZIP _____

SERVICE
 DEPTH OF JOB 3500
 PUMP TRUCK CHARGE 1250.00
 EXTRA FOOTAGE @
 MILEAGE Hum 14 @ 7.00 98.00
 MANIFOLD @
Lum 14 @ 4.00 56.00
 @
 TOTAL 1404.00

PLUG & FLOAT EQUIPMENT
 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____
 _____ @ _____

To: Allied Oil & Gas Services, LLC.
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PRINTED NAME X
 SIGNATURE Michael Smith
Thank you!!!

TOTAL _____
 SALES TAX (if Any) 370.11
 TOTAL CHARGES 5,874.89
25% 1,468.72
 DISCOUNT _____ IF PAID IN 30 DAYS
4,406.17