

Operator Name Ensign Operating Co. Lease Name Dolph Family Trust Well # 1-9

Sec. 9 Twp. 16S Rge. 30 East West
 County Lane

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken (Attach Additional Sheets.)	<input checked="" 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			
List All E.Logs Run:				
See attached	See attached			

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, 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
Surface	12-1/4	8-5/8	23	324	60/40 Pozmix	225	2% Gel & 3% CaCl2

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				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type		Acid, Fracture, Shot, Cement Squeeze Record	
	Specify Footage of Each Interval Perforated		(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, SMD or Inj.	Producing Method
D&A 9/19/92	<input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

Disposition of Gas: Vented Sold Used on Lease (If vented, submit ACO-18.)

METHOD OF COMPLETION: Open Hole Perf. Dually Comp. Commingled Other (Specify) _____

Production Interval: _____

ORIGINAL TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name DOLL FAMILY Test No. 1 Date 9/18/92
Company ENSIGN OPERATING Zone CHEROKEE
Address 621 17th ST #1800 DENVER CO 80293 Elevation 2684 G.L.
Co. Rep./Geo. DUANE MOREDOCK Cont. MURFIN RIG #3 Est. Ft. of Pay _____
Location: Sec. 9 Twp. 16S Rge. 30W Co. LANE State KS

Interval Tested	<u>4321-4392</u>	Drill Pipe Size	<u>4.5" XH</u>
Anchor Length	<u>71</u>	Wt. Pipe I.D. - 2.7 Ft. Run	<u>500</u>
Top Packer Depth	<u>4316-4321</u>	Drill Collar - 2.25 Ft. Run	<u>290</u>
Bottom Packer Depth	<u>4392</u>	Mud Wt.	<u>9.1</u> lb/Gal.
Total Depth	<u>4448</u>	Viscosity	<u>40</u>
		Filtrate	<u>11.2</u>

Tool Open @ 8:15 Initial Blow WEAK BLOW DEAD IN 2 MINUTES

Final Blow WEAK SURGE AND THEN DEAD

Recovery - Total Feet 20 Flush Tool? NO

RELEASED

Rec. <u>20</u>	Feet of	<u>DRILLING MUD</u>	
Rec. _____	Feet of	<u>OCT 1 2</u>	<u>NOV 1 8 1993</u>
Rec. _____	Feet of	<u>CONFIDENTIAL</u>	<u>FROM CONFIDENTIAL</u>
Rec. _____	Feet of		
Rec. _____	Feet of		

BHT 130 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW 3.5 @ 70 °F Chlorides 1600 ppm Recovery Chlorides 1500 ppm System

(A) Initial Hydrostatic Mud	<u>2140.6</u> PSI	AK1 Recorder No.	<u>13849</u>	Range	<u>4375</u>
(B) First Initial Flow Pressure	<u>91.2</u> PSI	@ (depth)	<u>4309</u>	w / Clock No.	<u>28528</u>
(C) First Final Flow Pressure	<u>96.7</u> PSI	AK1 Recorder No.	<u>13754</u>	Range	<u>4000</u>
(D) Initial Shut-in Pressure	<u>1060.4</u> PSI	@ (depth)	<u>4313</u>	w / Clock No.	<u>8376</u>
(E) Second Initial Flow Pressure	<u>92.3</u> PSI	AK1 Recorder No.	<u>7437</u>	Range	<u>4200</u>
(F) Second Final Flow Pressure	<u>92.3</u> PSI	@ (depth)	<u>OCT 1 0 4493</u>	w / Clock No.	<u>27567</u>
(G) Final Shut-in Pressure	<u>1040.2</u> PSI	Initial Opening	<u>30</u>	Final Flow	<u>15</u>
(H) Final Hydrostatic Mud	<u>2115.9</u> PSI	Initial Shut-in	<u>30</u>	Final Shut-in	<u>30</u>

Our Representative JOHN RIEDL

ORIGINAL
FORMATION TOPS No. 1-9 DOLL FAMILY TRUST

15-101-21630-0000

	Landmark No. 1-8 Doll SW NE NE 8-16S-30W K.B. 2735'	Drill Time and Samples	Wire Line Geophysical Logs
Tertiary	Surface +2731'	Surface +2684'	Surface +2684'
Cretaceous			
Turonian			
Niobrara			
Fort Hays**	330' +2391'	NDT	294' +2395'
Cenomanian			
Greenhorn	621' +2100'	NDT	578' +2111'
Graneros	732' +1989'	NDT	695' +1994'
Albian			
Dakota	770' +1951'	NDT	728' +1961'
Kiowa	1011' +1710'	NDT	936' +1753'
Cheyenne	1156' +1565'	NDT	1104' +1585'
Permian			
Leonardian			
Nippewalla Gr.			
Blaine			
Cedar Hills	NP 1621' +1100'	NP 1691' +998'	NP 1684' +1005'
Sumner Gr.			
Stone Corral	2128' +593'	2092' +597'	2090' +599'
Ninnescah	2157' +564'	2121' +568'	2118' +571'
Wellington	2411' +310'	2400' +289'	2394' +295'
Wolfcampian			
Chase Gr.			
Herington	2578' +143'	2547' +142'	2545' +144'
Krider	2602' +119'	2572' +117'	2570' +119'
Winfield	2644' +77'	2619' +70'	2616' +73'
Towanda	2710' +11'	2674' +15'	2676' +13'
Wreford	2818' -97'	2784' -95'	2788' -99'
Council Grove Gr.	2840' -119'	2810' -121'	2812' -123'
Pennsylvanian			
Virgilian			
Wabaunsee**	3382' -647'	3354' -665'	3348' -659'
Douglas Gr.			
Heebner	3764' -1029'	3737' -1048'	3732' -1043'
Missourian			
Lansing-Kansas City	3800' -1065'	3774' -1085'	3768' -1079'
B	3826' -1091'	3800' -1111'	3794' -1105'
C	3846' -1111'	3820' -1131'	3814' -1125'
D	3880' -1145'	3848' -1159'	3844' -1155'
E	3911' -1176'	3882' -1193'	3878' -1189'
F	3969' -1234'	3944' -1255'	3940' -1251'
G	3977' -1242'	3956' -1267'	3950' -1261'
H	4005' -1270'	3976' -1287'	3972' -1283'
I	4039' -1304'	4009' -1320'	4004' -1315'
Stark Shale	4066' -1331'	4035' -1346'	4031' -1342'

RELEASED

NOV 18 1995

FROM CONFIDENTIAL

OCT 12

CONFIDENTIAL

** Formation tops above Wabaunsee are from Landmark 011 Exploration No. 2-8 Doll, NW SE NE Sec. 8, T16S, R30W. KB 2721'.

ORIGINAL

FORMATION TOPS No. 1-9 DOLL FAMILY TRUST

G.L. 2684' K.B. 2689'	Comparison Well SW NE NE 8-16S-30W K.B. 2735'	Drill Time and Samples	Wire Line Geophysical Logs
Pennsylvanian			
Kansas City Gr.			
Hushpuckney Shale	4100' -1365'	4069' -1380'	4065' -1376'
Base Kansas City Gr	4140' -1405'	4108' -1419'	4104' -1415'
Desmoinesian			
Marmaton Gr.	4170' -1435'	4137' -1448'	4134' -1445'
Shale Marker	4260' -4260'	4224' -1535'	4224' -1535'
Pawnee	4296' -4296'	4262' -1573'	4256' -1567'
Fort Scott	4315' -1580'	4284' -1595'	4278' -1589'
Cherokee Gr.	4342' -1607'	4308' -1619'	4304' -1615'
Mississippian			
Meramecian			
St. Louis	4410' -1689'	4392' -1703'	4389' -1700'
Total Depth	4455' -1720'	4450' -1793'	4448' -1791'

RELEASED

NOV 1 8 1993

OCT 1 2
CONFIDENTIAL

FROM CONFIDENTIAL

RECEIVED
STATE GEOLOGICAL COMMISSION

OCT 1 6 1993

CONSERVATION DIVISION
Topeka, Kansas

Phone 913-483-2627, Russell, Kansas

Phone 316-793-5861, Great Bend, Kansas

Phone Plainville 913-434-2812

Phone Ness City 913-798-3843

15-101-21630-0000

No 3269

ALLIED CEMENTING CO., INC.

Home Office P. O. Box 31

Russell, Kansas 67665

New

Date	9-19-92	Sec.	9	Fwp.	16	Range	30	Called Out	2 AM	On Location	5:30 AM	Job Start	6 AM	Finish	8 AM
Lease	Dohk Family		Well No.	#1-9		Location	Healy 1 1/2 W 3 N 2 W 1 1/2 N - 8 1/2 E			County	LANE		State	KS	
Contractor	Munfin Drilling Rls #3														
Type Job	Rotary Plug														
Hole Size	7 3/4		T.D.	4450 #											
Csg.	Depth														
Tbg. Size	Depth														
Drill Pipe	4 1/2		Depth	2140 #											
Tool	Depth														
Cement Left in Csg.	Shoe Joint														
Press Max.	Minimum														
Meas Line	Displace														
Perf.	OCT 12														

Owner
 To Allied Cementing Co., Inc.
 You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Charge To *Ensign Operating Company*
 Street *621 17th Suite 1806*
 City *Denver* State *Colo. 80293*

The above was done to satisfaction and supervision of owner agent or contractor.

Purchase Order No.

X *Keith Brady* Thank you
 CEMENT

Amount Ordered *195 6/10 6 1/2 gal 1/4 # Flo Seal Pro sock*

Consisting of

Common	117	5.50	643.50
Poz. Mix	78	2.50	195.00
Gel.	12	6.75	81.00
Chloride			
Quickset			
<i>Flo Seal 49 #</i>		1.00	49.00

Handling *195* RELEASED 1.00 195.00
 Mileage *55* 429.00

NOV 18 1993

FROM CONFIDENTIAL

Total 1592.50

Floating Equipment

TOTAL \$ 2197.50
 DISC 439.50
 STATE CORPORATION COMMISSION

OCT 1 1992 1758.00

CONSERVATION DIVISION
 Wichita Kansas

CONFIDENTIAL

EQUIPMENT

Account Based

Pumptrk	No.	Cementer	<i>Mike</i>
	<i>154</i>	Helper	<i>Dave</i>
Pumptrk	No.	Cementer	
		Helper	
Bulktrk	<i>199</i>	Driver	<i>Yancy</i>
Bulktrk		Driver	

DEPTH of Job *2140 #*

Reference:	<i>Pump truck charge</i>	<i>475.00</i>
	<i>55 Mileage charge</i>	<i>110.00</i>
	<i>1 8 1/2 old Hole Plug</i>	<i>20.00</i>
	Total	<i>605.00</i>

Remarks: *Mixed 50' at 2140 #
 80' at 1700 #
 40' at 360 #
 10' at 40 #
 15' at Rod Hole*

*Allied Cementing Co Inc
 Mike Munnik*

*Thank you
 49*

GENERAL TERMS AND CONDITIONS

DEFINITIONS: In these terms and conditions, "Allied" shall mean Allied Cementing Co., Inc., and "Customer" shall refer to the party identified by that term on the front of this contract. As applicable, "Job" relates to the services described on the front side of this contract, "merchandise" refers to the material described on the front of this contract and to any other materials, products, or supplies used, sold, or furnished under the requirements of this contract.

—**TERMS:** Unless satisfactory credit has been established, "CUSTOMER" must tender full cash payment to "ALLIED" before the job is undertaken or merchandise is delivered. If satisfactory credit has been established, the terms of payment for the job and/or merchandise, including bulk cement, are net cash, payable in 30 days from the completion of the job and/or delivery of the merchandise. For all past due invoices, "CUSTOMER" agrees to pay interest on amounts invoiced at a rate of 18 percent per annum until paid. Notwithstanding the foregoing, in no event shall this Contract provide for interest exceeding the maximum rate of interest that "CUSTOMER" may agree to pay under applicable law. If any such interest should be provided for, it shall be and hereby is deemed to be a mistake, and this contract shall be automatically reformed to lower the rate of interest to the maximum legal contract rate, any amounts previously paid as excess interest shall be deducted from the amounts owing from the "CUSTOMER" or at the option of "ALLIED," refunded directly to "CUSTOMER." For purposes of this paragraph, ALLIED and CUSTOMER agree that KANSAS law shall apply. Any discounts granted with this contract are null and void if the charges are not paid when due.

—**ATTORNEY FEES:** In any legal action or proceeding between the parties to enforce any of the terms of this Service Contract, or in any way pertaining to the terms of this Contract, the prevailing party shall be entitled to recover all expenses, including, but not limited to, a reasonable sum as and for attorney's fees.

—**PRICES AND TAXES:** All merchandise listed in "ALLIED'S" current price schedule are F.O.B. ALLIED'S local station and are subject to change without notice. All prices are exclusive of any federal, state, local, or special taxes for the sale or use of the merchandise or services listed. The amount of taxes required to be paid by ALLIED shall be added to the quoted prices charged to CUSTOMER.

—**TOWING CHARGES:** ALLIED will make a reasonable attempt to get to and from each job site using its own equipment. Should ALLIED be unable to do so because of poor or inadequate road conditions, and should it become necessary to employ a tractor or other pulling equipment to get to or from the job site, the tractor or pulling equipment will be supplied by CUSTOMER or, if furnished by ALLIED, will be charged to and paid by CUSTOMER.

—**PREPARATION CHARGES:** If a job and/or merchandise is ordered and CUSTOMER cancels the order after preparation of a chemical solution or other material, CUSTOMER will pay ALLIED for the expenses incurred by ALLIED as a result of the cancellation.

—**DEADHAUL CHARGES:** Unless otherwise specified on the front of this Contract, a deadhaul charge as set forth in ALLIED'S current price book will be charged each way for each service unit which is ordered by CUSTOMER but not used.

—**SERVICE CONDITIONS AND LIABILITIES:** 1. ALLIED carries public liability and property damage insurance, but since there are so many uncertain and unknown conditions beyond ALLIED'S control, ALLIED shall not be liable for injuries to property or persons or for loss or damage arising from the performance of the job or delivery of the merchandise. Customer shall be responsible for and indemnify, defend, and hold harmless ALLIED, its officers, agents and employees, from and against any and all claims or suits for:

(A) Damage to property or for bodily injury, sickness, disease, or death, brought by any person, including CUSTOMER and/or the well owner; and:

(B) Oil spills, pollution, surface or sub-surface damage, injury to the well, reservoir loss, or damage arising from a well blowout arising out of or in connection with ALLIED'S performance of the job or furnishing of merchandise in accordance with this contract, unless such loss or damage is caused by the willful misconduct or gross negligence of ALLIED or its employees.

2. With respect to any of ALLIED'S tools, equipment, or instruments which are lost in the well or damaged when performing or attempting to perform the job or, in the case of marine operations, are lost or damaged at any time after delivery to the landing for CUSTOMER and before return to ALLIED at the landing, CUSTOMER shall either recover the lost item without cost to ALLIED or reimburse ALLIED the current replacement cost of the item unless the loss or damage results from the sole negligence of ALLIED or its employees.

3. ALLIED does not assume any liability or responsibility for damages or conditions resulting from chemical action in cements caused by contamination of water or other fluids.

WARRANTIES: 1. ALLIED warrants all merchandise manufactured or furnished by it to be free from defects in material and workmanship under normal use and service when installed, and used, and/or serviced in the manner provided and intended. ALLIED'S obligation under this warranty is expressly limited to repair, replacement, or allowance for credit, at its option, for any merchandise which is determined by ALLIED to be defective. THIS IS THE SOLE WARRANTY OF ALLIED AND NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESS OR OTHERWISE IMPLIED, IN FACT OR IN LAW, INCLUDING ANY WARRANTY AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE, CUSTOMER'S sole and only remedy with regard to any defective merchandise shall be the repair or replacement thereof or allowance for credit as herein provided, and ALLIED shall not be liable for any consequential, special, incidental, or punitive damages resulting from or caused by defective materials, products or supplies.

2. More specifically:

(A) Nothing in this contract shall be construed as a warranty by ALLIED of the success or the effectiveness of the result of any work done or merchandise used, sold, or furnished under this contract.

(B) Nothing in this contract shall be construed as a warranty of the accuracy or correctness of any facts, information, or data furnished by ALLIED or any interpretation of tests, meter readings, chart information, analysis of research, or recommendations made by ALLIED, unless the inaccuracy or incorrectness is caused by the willful misconduct or gross negligence of ALLIED or its employees in the preparation or furnishing of such facts, information or data.

(C) Work done by ALLIED shall be under the direct supervision and control of the CUSTOMER or his agent and ALLIED will accomplish the job as an independent contractor and not as an employee or agent of the CUSTOMER.