

STATE CORPORATION COMMISSION OF KANSAS  
OIL & GAS CONSERVATION DIVISION  
WELL COMPLETION FORM  
ACO-1 WELL HISTORY  
DESCRIPTION OF WELL AND LEASE

0000 ORIGINAL

API NO. 15- 175-21424

County Seward

C - NW - NW - Sec. 18 Twp. 33 Rge. 31 X W

660 Feet from S (circle one) Line of Section

660 Feet from E (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:  
NE, SE, NW or SW (circle one)

Lease Name Dudrey Well # 1-18

Field Name None

Producing Formation Chase

Elevation: Ground 2752' KB 2763'

Total Depth 2800' PBSD 2742'

Amount of Surface Pipe Set and Cemented at 642 Feet

Multiple Stage Cementing Collar Used? Yes X No

If yes, show depth set Feet

If Alternate II completion, cement circulated from

feet depth to w/ sx cmt.

Drilling Fluid Management Plan ALT 1 12-19-95 JK  
(Data must be collected from the Reserve Pit)

Chloride content 48,000 ppm Fluid volume 2,000 bbls

Dewatering method used Waste Water Transfer &

Evaporation.  
Location of fluid disposal if hauled offsite:

Operator Name Ensign Operating Co.

Lease Name NK44-17 SWD License No. 04782

SE Quarter Sec. 17 Twp. 32 S Rng. 32 E

County Seward Docket No. D-25,049

Operator: License # 04782

Name: Ensign Operating Co.

Address P. O. Box 2161

City/State/Zip Liberal, KS. 67905-2161

Purchaser:

Operator Contact Person: Reed Wacker

Phone (316) 626-8131

Contractor: Name: Cheyenne Drilling Inc.

License: #5382

Wellsite Geologist: N/A

Designate Type of Completion

X New Well Re-Entry

Oil SWD S10W Temp. Abd.

X Gas ENHR S10W

Dry Other (Core, MSW, Expl., Cathodic, etc)

If Workover/Re-Entry: old well info as follows:

Operator:

Well Name:

Comp. Date Old Total Depth

Deepening Re-perf. Conv. to Inj/SWD

Plug Back PBSD

Commingled Docket No.

Dual Completion Docket No.

Other (SWD or Inj?) Docket No.

10/4/94 10/6/94 10/26/94  
Spud Date Date Reached TD Completion Date

CONFIDENTIAL

RELEASED

JAN 1 1996

FROM CONFIDENTIAL

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

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.

Signature Reed Wacker

Title Prod. Supt. Date 12/15/94

Subscribed and sworn to before me this 15th day of December 19 94.

Notary Public William L. Waldorf

Date Commission Expires Sept. 19, 1998

NOTARY PUBLIC - State of Kansas  
WILLIAM L. WALDORF  
My Appt. Exp. 9-19-98

RECEIVED K.C.C. OFFICE USE ONLY  
STATE CORPORATION COMMISSION  
Letter of Confidentiality Attached  
C Wireline Log Received  
C Geologist Report Received  
DEC 16 1994  
Distribution  
KCC SWD/Rep NGPA  
KCS Plug Other  
WICHITA, KANSAS (Specify)

Operator Name Ensign Operating Co. Lease Name Dudrey Well # 1-18

Sec. 18 Twp. 33 Rge. 31  East  West  
 County Seward

**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  Yes  No  Log Formation (Top), Depth and Datum  Sample

Samples Sent to Geological Survey  Yes  No

Cores Taken  Yes  No

Electric Log Run (Submit Copy.)  Yes  No

List All E.Logs Run:  
 GAMMA NEUTRON  
 CEMENT BOND LOG

Name	Top	Datum
Herrington	2544'	+219
U. Krider	2576'	+187
L. Krider	2608'	+155
Winfield	2672'	+91

**CASING RECORD**  New  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"	24#	642'	65/35 Cl.C/Poz Class C	185 150	6% Gel, 2% Sl, 1/4#/Sx. D29 2% Sl, 1/4#/Sx. D29
Production	7-7/8"	4 1/2"	10.5#	2788'	Prem.+Lite Class C	425 150	1/4#/Sx Flocele

**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 Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used) Depth
1 SPF	2546, 2550, 2554, 2558'	800 G. 7 1/2% MCA & 22,300 G. 50% quality, 28% FE-HCL acid
"	2577, 2581, 2583, 2585, 2587, 2589, 2591, 2593'	" " "
"	2610, 2614, 2618, 2622'	" " "
2 SPF	2672-82'	1000 G. 7 1/2% HCL

**TUBING RECORD** Size 2-3/8" Set At 2600' Packer At \_\_\_\_\_ Liner Run  Yes  No

Date of First, Resumed Production, SWD or [Inj.] 12/4/94 Producing Method  Flowing  Pumping  Gas Lift  Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
		446	33		

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 2546-2682'

DRILLERS LOG

ORIGINAL

ENSIGN OPERATING COMPANY  
DUDREY 1-18  
SECTION 18-T33S-R31W  
SEWARD COUNTY, KANSAS

CONFIDENTIAL

COMMENCED: 10-04-94  
COMPLETED: 10-06-94

SURFACE CASING: 642' OF 8 5/8" CMTD  
W/185 SKS 65:35 C:POZ + 6% D20 + 2% S1  
+ 1/4 #/SK D29. TAILED IN W/ 150 SKS  
CLASS C + 2% S1 + 1/4 #/SK D29.

API # 15-175-21424-0000

FORMATION

DEPTH

SURFACE HOLE	0 - 645
RED BED	645 - 1035
SANDSTONE	1035 - 1160
RED BED	1160 - 1613
RED BED	1613 - 1950
CHASE	1950 - 2800 RTD

RELEASED  
JAN 11 1996  
FROM CONFIDENTIAL

I DO HEREBY CERTIFY THAT THE FOREGOING STATEMENTS ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

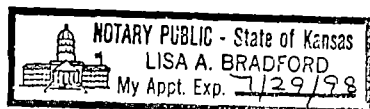
CHEYENNE DRILLING, INC.

*Wray Valentine*

WRAY VALENTINE

STATE OF KANSAS : ss:

SUBSCRIBED AND SWORN TO BEFORE ME THIS 11TH DAY OF OCTOBER, 1994



LISA A. BRADFORD

*Lisa A Bradford*

RECEIVED  
STATE COMMISSION  
NOTARY PUBLIC

DEC 16 1994

CONSERVATION DIVISION  
WICHITA, KANSAS

CEMENTING SERVICE REPORT



DOWELL SCHLUMBERGER INCORPORATED

TREATMENT NUMBER 0312-6516	DATE 10/4/94
STAGE DS	DISTRICT OKS 03-12

DS-496 PRINTED IN U.S.A.

WELL NAME AND NO. DUDREI 1-18	LOCATION (LEGAL) SEC 18-33S-31W	RIG NAME: CHETENNE # 5
FIELD-POOL HUGOTON	FORMATION SURFACE	WELL DATA: BOTTOM TOP
COUNTY/PARISH SEWARD	STATE KANSAS	BIT SIZE 12 1/4 CSG/Liner Size 8 5/8
NAME ENSGN	APL. NO.	TOTAL DEPTH 145' WEIGHT 24'
AND CONFIDENTIAL		<input type="checkbox"/> ROT <input type="checkbox"/> CABLE FOOTAGE
ADDRESS		MUD TYPE GRADE ORIGINAL
ZIP CODE		<input type="checkbox"/> BHST <input type="checkbox"/> BHCT THREAD 3rd
		MUD DENSITY LESS FOOTAGE SHOE JOINT(S) TOTAL
		MUD VISC. Disp. Capacity

NOTE: Include Footage From Ground Level To Head In Disp. Capacity

Float	TYPE SAFFLE Plate	DEPTH	TYPE	DEPTH
SHOE	TYPE	DEPTH	TYPE	DEPTH

SPECIAL INSTRUCTIONS: New and pump 185 or lead slug @ 12.2 gpm followed by 150 or tail slug @ 14.8 gpm. Big place behind top roller plug with BBL water as instructed by company representative.

IS CASING/TUBING SECURED?  YES  NO

LIFT PRESSURE 265 PSI CASING WEIGHT + SURFACE AREA (3.14 x R<sup>2</sup>)

PRESSURE LIMIT PSI BUMP PLUG TO 500 over PSI

ROTATE RPM RECIPROCATATE FT No. of Centralizers 3

Head & Plugs  TBG  D.P. SQUEEZE JOB

Double  WEIGHT  GRADE  THREAD  NEW  USED

Single  SWAGE  KNOCKOFF  TOP OR OW  BOT OR OW

TOTAL TYPE DEPTH TAIL PIPE: SIZE DEPTH TUBING VOLUME Bbls CASING VOL. BELOW TOOL Bbls TOTAL Bbls ANNUAL VOLUME Bbls

TIME	PRESSURE		VOLUME PUMPED BBL		JOB SCHEDULED FOR			ARRIVE ON LOCATION		LEFT LOCATION	
	TBG OR D.P.	CASING	INCREMENT	CUM	TIME	DATE	TIME	DATE	TIME	DATE	
0001 to 2400											
22:50											
22:55	2000						H <sub>2</sub> O	8.3			PRE-JOB SAFETY MEETING
23:00		40	20		6.0		H <sub>2</sub> O	8.3			Pump water spacer
23:03		60	69		6.0		Lead	12.2			Start lead slug
23:15		140	38		6.0		tail	14.8			Start tail slug
23:24		0	0		0			1			Drop top plug
23:25		0	15		4.1		H <sub>2</sub> O	8.3			Start displacement
23:28		70	15		6.1		H <sub>2</sub> O	8.3			psi check
23:31		100	8		2.3		H <sub>2</sub> O	8.3			Cement to surface
23:34		120	0		0						Bump plug
23:35		560	0		0						Start returnflow in
23:36		0	0		0						Bled off pressure - end job! 1 1996

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REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED	
			1	2	3	4	BBLs	DENSITY
1.	185	2.1	65/35	C/P02 + 2% SI + 6% D20	1/4" H/LK	D29	69	12.2
2.	150	1.32	Class C	+ 2% SI + 1/4" H/LK	D29		38	14.8
3.								
4.								
5.								
6.								

DEC 1 8 1994

BREAKDOWN FLUID TYPE VOLUME DENSITY PRESSURE MAX. MIN.

HESITATION SQ.  RUNNING SQ. CIRCULATION LOST  YES  NO Cement Circulated To Surf.  YES  NO 8 Bbls

BREAKDOWN PSI FINAL PSI DISPLACEMENT VOL. Bbls TYPE OF WELL  OIL  STORAGE  BRINE WATER  GAS  INJECTION  WILDCAT

Washed Thru Perfs  YES  NO TO FT. MEASURED DISPLACEMENT  WIRELINE

PERFORATIONS TO TO CUSTOMER REPRESENTATIVE DS SUPERVISOR

# DOWELL SCHLUMBERGER INCORPORATED

P.O. BOX 4378 HOUSTON, TEXAS 77210

SPECIAL HANDLING

## OILFIELD SERVICES

DSI SERVICE ORDER  
RECEIPT AND INVOICE NO.  
**0312-6516**

DSI SERVICE LOCATION NAME AND NUMBER  
**UKS 03-13**

CUSTOMER NUMBER CUSTOMER P.O. NUMBER TYPE SERVICE CODE BUSINESS CODES

CUSTOMER'S NAME  
**ENSIGN**

ADDRESS  
**ORIGINAL**

CITY, STATE AND ZIP CODE  
**RELEASED**  
DSI will furnish and customer shall purchase materials and services required in the performance of the following SERVICE INSTRUCTIONS in accordance with the general terms and conditions as printed on the reverse side of this service order and/or attached to this service order. This service order is subject to alternative dispute resolution.

WORKOVER  NEW WELL  OTHER  API OR IC NUMBER

ARRIVE LOCATION **10 4 94 2000**  
MO. DAY YR. TIME

SERVICE ORDER I authorize work to begin per service instructions in accordance with terms and conditions printed on the reverse side of this form and/or attached to this form and represent that I have authority to accept and sign this order.

SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENTATIVE  
*[Signature]*

**FROM CONFIDENTIAL CONFIDENTIAL**

JOB COMPLETION **10 4 94 2335**  
MO. DAY YR. TIME

SERVICE RECEIPT I certify that the materials and services listed were received and all services performed in a workmanlike manner.

SIGNATURE OF CUSTOMER OR AUTHORIZED REPRESENTATIVE  
*[Signature]*

STATE **KANSAS** CODE COUNTY / PARISH **SEWARD** CODE CITY **LIBERAL**  
WELL NAME AND NUMBER / JOB SITE **DUDEBI 1-18** LOCATION AND POOL / PLANT ADDRESS **SEC 18-335-31W** SHIPPED VIA **DOWELL**

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
059200-002	MILEAGE	mi	61	2.95	179.95
102871-010	PUMP CHARGE	EA	1	840.00	840.00
049107-000	DELIVERY CHARGE	EA	970	1.00	970.00
049100-000	SERVICE CHARGE	EA	364	1.36	495.04
059697-000	TACK CHARGE	EA	1	159.00	159.00
040003-000	CLASS C CRT D 903	EA	271	9.06	2455.26
045008-000	DSS Etch 3	EA	65	4.39	285.35
045014-050	D20 Bentonite	EA	960	0.17	163.20
067005-100	S1 Calcium Chloride	EA	604	0.40	241.60
044003-025	D79 Cellaphane Flaker	EA	84	1.77	148.68
056702-085	Top Rubber Plug 8 5/8	EA	1	109.00	109.00
056011-085	8 5/8 Cent Plug	EA	3	87.00	261.00
056015-085	8 5/8 Buffer Plate	EA	1	89.00	89.00
057499-001	W232 Thread Lock Kit	EA	1	28.00	28.00
	Field Estimate				6,410.08

Thanks for calling Dowell  
SUB TOTAL  
LICENSE/REIMBURSEMENT FEE STATE CORP. TAX COMMISSION

REMARKS: STATE **DEC 1** COUNTY **WICHITA, KANSAS** CITY **WICHITA, KANSAS** SIGNATURE OF DSI REPRESENTATIVE *[Signature]* TOTAL \$



INVOICE

INVOICE NO.	DATE
635629	10/07/1994

WELL LEASE NO./PROJECT		WELL/PROJECT LOCATION		STATE	OWNER
DUDREY 1-8		SEWARD		KS	SAME
SERVICE LOCATION		CONTRACTOR		JOB PURPOSE	
LIBERAL		CHEYENNE		CEMENT PRODUCTION CASING	
TICKET DATE		10/07/1994			
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.
273943	REED WACKER			COMPANY TRUCK	78447

ENSIGN OPERATING COMPANY  
1515 AIR PARK AVENUE  
P.O. BOX 2161  
LIBERAL, KS 67905-2161

**ORIGINAL**

DIRECT CORRESPONDENCE TO:  
OKLAHOMA TOWER  
210 WEST PARK AVENUE  
SUITE 2000  
OKLAHOMA CITY, OK 73102-5601

REFERENCE NO.	DESCRIPTION	QUANTITY	UM	UNIT PRICE	AMOUNT
PRICING AREA - MID CONTINENT					
000-117	MILEAGE CEMENTING ROUND TRIP	36 MI		2.75	99.00
		1 UNT			
001-016	CEMENTING CASING	2789 FT		1,455.00	1,455.00
		1 UNT			
12A	GUIDE SHOE - 4 1/2" BRD THD.	1 EA		95.00	95.00
925.201					
50	CENTRALIZR-TURBO-4-1/2 X 7-7/8	5 EA		57.00	285.00
806.60104					
66	CLAMP-LIMIT-4-1/2 HINGED	1 EA		11.20	11.20
806.72020					
593	3-WIPER L-D PLUG - 4 1/2"	1 EA		159.00	159.00
801.0373					
594	4 1/2" LATCH DOWN BAFFLE	1 EA		100.00	100.00
801.03734					
504-050	CEMENT - PREMIUM PLUS	150 SK		11.19	1,678.50
504-120	CEMENT - HALL. LIGHT PREM PLUS	425 SK		10.02	4,258.50
507-210	FLOCELE	107 LB		1.65	176.55
500-207	BULK SERVICE CHARGE	582 CFT		1.35	785.70
500-306	MILEAGE CMTG MAT DEL OR RETURN	1148.1 TNI		.95	1,090.70

RELEASED

JAN 11 1996

FROM CONFIDENTIAL

INVOICE SUBTOTAL

10,194.15

DISCOUNT-(BID)  
INVOICE BID AMOUNT

**CONFIDENTIAL**

2,466.06  
7,728.09

\*-KANSAS STATE SALES TAX  
\*-LIBERAL CITY SALES TAX  
\*-SEWARD COUNTY SALES TAX

317.75  
64.84  
64.84

RECEIVED  
STATE CORPORATION COMMISSION

DEC 16 1994

INVOICE TOTAL - PLEASE PAY THIS AMOUNT

\$8,175.52

TERMS: If Customer does not have an approved open account with Halliburton, all sums due are payable in cash at the time of performance of services or delivery of equipment, products or materials. If customer has an approved open account, invoices are payable on the twentieth day after date of invoice. Customer agrees to pay interest on any unpaid balance from the date payable until paid at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event Halliburton employs an attorney for collection of any account, Customer agrees to pay attorney fees of 20% of the unpaid account, plus all collection and court costs.



# JOB SUMMARY

HALLIBURTON DIVISION  
HALLIBURTON LOCATION

OK CITY  
Liberal KS

BILLED ON TICKET NO. 635629

## WELL DATA

FIELD \_\_\_\_\_ SEC \_\_\_\_\_ TWP. \_\_\_\_\_ RNG. \_\_\_\_\_ COUNTY Seward STATE KS

FORMATION NAME \_\_\_\_\_ TYPE \_\_\_\_\_

FORMATION THICKNESS \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_

INITIAL PROD: OIL \_\_\_\_\_ BPD. WATER \_\_\_\_\_ BPD. GAS \_\_\_\_\_ MCFD

PRESENT PROD: OIL \_\_\_\_\_ BPD. WATER \_\_\_\_\_ BPD. GAS \_\_\_\_\_ MCFD

COMPLETION DATE \_\_\_\_\_ MUD TYPE \_\_\_\_\_ MUD WT. \_\_\_\_\_

PACKER TYPE \_\_\_\_\_ SET AT \_\_\_\_\_

BOTTOM HOLE TEMP. \_\_\_\_\_ PRESSURE \_\_\_\_\_

MISC. DATA \_\_\_\_\_ TOTAL DEPTH \_\_\_\_\_

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING		10.5	4 1/2	KB	2789	
LINER						
TUBING						
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

## JOB DATA

### TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE	1	Hawco
CENTRALIZERS	5	Reg Fluidmaster
BOTTOM PLUG		
TOP PLUG	1	LD
HEAD	1	PC
PACKER		
OTHER	1	LD Baffle

### MATERIALS

TREAT. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL. °API

DISPL. FLUID \_\_\_\_\_ DENSITY \_\_\_\_\_ LB/GAL. °API

PROP. TYPE \_\_\_\_\_ SIZE \_\_\_\_\_ LB.

PROP. TYPE \_\_\_\_\_ SIZE \_\_\_\_\_ LB.

ACID TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ %

ACID TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ %

ACID TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ %

SURFACTANT TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ IN

NE AGENT TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ IN

FLUID LOSS ADD. TYPE \_\_\_\_\_ GAL. \_\_\_\_\_ IN

GELLING AGENT TYPE \_\_\_\_\_ GAL.-LB. \_\_\_\_\_ IN

FRIC. RED. AGENT TYPE \_\_\_\_\_ GAL.-LB. \_\_\_\_\_ IN

BREAKER TYPE \_\_\_\_\_ GAL.-LB. \_\_\_\_\_ IN

BLOCKING AGENT TYPE \_\_\_\_\_ GAL.-LB. \_\_\_\_\_

PERFPAC BALLS TYPE \_\_\_\_\_ QTY. \_\_\_\_\_

OTHER \_\_\_\_\_

OTHER \_\_\_\_\_

CALLER OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE 10-7-95	DATE 10-7-95	DATE 10-7-95	DATE 10-7-94
TIME 0130	TIME 0435	TIME 0200	TIME 0750

### PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
O Nicholas	41525	Liberal
W Fox	50404	"
D Hamilton	7131	"
S Porter	3625	Hugoton
	7620	"
	4461	"
	4515	"

ORIGINAL

DEPARTMENT Cement

DESCRIPTION OF JOB 4 1/2 Long String

JOB DONE THRU: TUBING  CASING  ANNULUS  TBG./ANN.

CUSTOMER REPRESENTATIVE X [Signature]

HALLIBURTON OPERATOR Orville Nichols COPIES REQUESTED \_\_\_\_\_

## CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	425	C Lite WT			1/4 # Floccle	2.06	12.3
	150	C				1.32	14.8

### PRESSURES IN PSI

### SUMMARY

### VOLUMES

CIRCULATING \_\_\_\_\_ DISPLACEMENT \_\_\_\_\_ PRESLUSH: BBL.-GAL. \_\_\_\_\_ TYPE \_\_\_\_\_

BREAKDOWN \_\_\_\_\_ MAXIMUM \_\_\_\_\_ LOAD & BKDN: BBL.-GAL. \_\_\_\_\_ PAD: BBL.-GAL. \_\_\_\_\_

AVERAGE \_\_\_\_\_ FRACTURE GRADIENT \_\_\_\_\_ TREATMENT: BBL.-GAL. \_\_\_\_\_ DISPL: BBL.-GAL. 43.6

SHUT-IN: INSTANT \_\_\_\_\_ 5-MIN \_\_\_\_\_ 15-MIN. \_\_\_\_\_ CEMENT SLURRY: BBL.-GAL. 153.9 - 35.2

HYDRAULIC HORSEPOWER \_\_\_\_\_ TOTAL VOLUME: BBL.-GAL. \_\_\_\_\_

ORDERED \_\_\_\_\_ AVAILABLE \_\_\_\_\_ USED \_\_\_\_\_ REMARKS float held

AVERAGE RATES IN BPM \_\_\_\_\_

TREATING \_\_\_\_\_ DISPL. \_\_\_\_\_ OVERALL \_\_\_\_\_

CEMENT LEFT IN PIPE \_\_\_\_\_

FEET 4500 REASON Baffle

CUSTOMER Esigna operating  
LEASE Durdney  
WELL NO. 1-18  
JOB TYPE 415  
DATE 10-7-94

**JOB LOG** HAL-2013-C

 CUSTOMER **Ensign Open** WELL NO. **1-18** LEASE **Dodney** JOB TYPE **4 1/2 Longstring** TICKET NO. **635629**

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0130							Called out for 0500
	0435							on location Safety meeting Rig up
								<b>CONFIDENTIAL</b>
								<b>ORIGINAL</b>
	0630							Run pipe
	0655							Circulate with Rig Pump
	0701	6	10			400		Hook up cement line
	0704	6	155.9			300		START Water spacer
	0726	6	35.2			300		START Lead cement
	0732							START Tail cement
	0735							Wash up Truck
	0736	6	43.6			200 600		Release Plug
	0746	1				1500		Displace plug
	0747							Land Plug
								Release psi check float OK
								Circulated 10 bbl cement

**RELEASED**

JAN 11 1996

FROM CONFIDENTIAL

 RECEIVED  
STATE COMMISSION

DEC 16 1994

 COMMERCIAL DIVISION  
WICHITA, KANSAS