

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

ORIGINAL

Operator: License # 04782
Name: Ensign Operating Co.
Address P.O. Box 2161
Liberal, Kansas 67905
Purchaser: Panhandle Eastern Pipeline
Operator Contact Person: Reed Wacker
Phone (316, 626-8131
Contractor: Name: Cheyenne Drilling, Inc.
License: 5382
Wellsite Geologist: None
Designate Type of Completion
 New Well Re-Entry Workover
 Oil SWD SLOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

API NO. 15- 175-21358-0000
County Seward
NE - NW - SE Sec. 12 Twp. 33S Rge. 32 W
2310' Feet from S/W (circle one) Line of Section
1650' Feet from E/W (circle one) Line of Section
Footages Calculated from Nearest Outside Section Corner:
NE, SE, NW or SW (circle one)
Lease Name Langacher Well # 1-12
Field Name Hugoton
Producing Formation Chase
Elevation: Ground 2760 KB 2771
Total Depth 2700' PBDT 2668'
Amount of Surface Pipe Set and Cemented at 634' 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 cnt.

If Workover/Re-Entry: old well info as follows
Operator: FEB 24
Well Name: _____
Comp. Date _____ Old Total Depth _____
 Deepening Re-perf. Conv. to PBDT
 Plug Back Docket No. _____
 Commingled Docket No. _____
 Dual Completion Docket No. _____
 Other (SWD or Inj?) Docket No. _____
1/11/94 1/13/94 2/3/94
Spud Date Date Reached TD Completion Date

Drilling Fluid Management Plan ALT 1 5-19-94
(Data must be collected from the Reserve Pit)
Chloride content 5000 ppm Fluid volume 12,000 bbls
Dewatering method used Evaporation
Location of fluid disposal if hauled offsite:
RELEASED
Operator Name _____
Lease Name _____
Quarter Sec. _____ Twp. _____ Rng. _____ E/W
FROM CONFIDENTIAL
Docket No. _____

RECEIVED
STATE CORPORATION COMMISSION
FEB 28 1994
CONSERVATION DIVISION
Wichita, Kansas
County _____

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 [Signature]
Title Prod. Supt. Date 2/24/94
Subscribed and sworn to before me this 24 day of FEBRUARY,
19 94.
Notary Public [Signature]
Date Commission Expires 9/14/97

NOTARY PUBLIC, State of Kansas
HERB BRADY
My Appt. Exp. 9/14/97

K.C.C. OFFICE USE ONLY
F Letter of Confidentiality Attached
C Wireline Log Received
G Geologist Report Received
Distribution
 KCC SWD/Rep NGPA
 KGS Plug Other (Specify)

Operator Name Ensign Operating Co. Lease Name Langacher Well # 1-12
 Sec. 12 Twp. 33S Rge. 32 East County Seward
 West

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
 (Attach Additional Sheets.)
 Samples Sent to Geological Survey Yes No
 Cores Taken Yes No
 Electric Log Run Yes No
 (Submit Copy.)

Log Formation (Top), Depth and Datum Sample
 Name Top Datum

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#	634'	HLC/C	350	1/4#PS Flocele 2% CC
Production	7-7/8"	4-1/2"	10.5#	2702'	HLC/50/50 POZ	375	1/4#PS Flocele 3% KCL, 6% Halad 322

ADDITIONAL CEMENTING/SQUEEZE RECORD					
Purpose:	Depth		Type of Cement	#Sacks Used	Type and Percent Additives
	Top	Bottom			
<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
1 JSPF	@ 2620', 2622', 2624' & 2626'	250 Gal 7 1/2% MCA(60 Gal PerFt) 2620-2626
1 JSPF	@ 2552', 2555', 2558', 2560', 2581', 2584', 2587', 2590', 2593', 2596', 2599'	750 Gal 7 1/2% MCA(68 Gal PerFt) 22,300 Gal 50/50 28% FE-HCL N2 2552-2626

TUBING RECORD Size 2-3/8" Set At 2576' Packer At None Liner Run Yes No

Date of First, Resumed Production, SWD or Inj. 2/17/94 Initial gas sales Producing Method Flowing Pumping Gas Lift Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	0	280	0	0	

Disposition of Gas: Vented Sold Used for Lease (If vented, submit ACO-1) METHOD OF COMPLETION: Open Hole Perf. Dually Comp. Commingled Production Interval 2552 TO 2626

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DRILLERS LOG

CONFIDENTIAL

ENSIGN OPERATING COMPANY
LANGACHER #1-12
SECTION 12-T33S-R32W
SEWARD COUNTY, KANSAS

ORIGINAL

API#15-175-21358

COMMENCED: 01-10-94
COMPLETED: 01-14-94

SURFACE CASING: 640' OF 8 5/8"
CMTD W/200 SX LT "C", 2% C.C.,
1/4#/SX FLO-CELE; TAILED IN W/
150 SX "C", 2% C.C., 1/4#/SX FLO-CELE

FORMATION	DEPTH
SURFACE HOLE	0- 640
RED BED & ANHYDRITE	640-1565
RED BED	1565-2439
LIME & SHALE	2439-2700 RTD

KCC

FEB 24

CONFIDENTIAL

RELEASED

MAY 24 1995

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.

A.J. Jacques

A.J. JACQUES

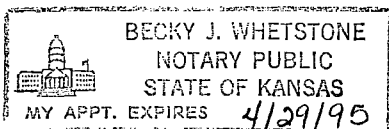
RECEIVED
STATE CORPORATION COMMISSION

FEB 28 1994

CONSERVATION DIVISION
Wichita, Kansas

STATE OF KANSAS :ss:

SUBSCRIBED AND SWORN TO BEFORE ME THIS 17TH DAY OF JANUARY, 1994.


 BECKY J. WHETSTONE
 NOTARY PUBLIC
 STATE OF KANSAS
 MY APPT. EXPIRES 4/29/95

Becky J. Whetstone

BECKY J. WHETSTONE, NOTARY PUBLIC

FIELD _____ SEC 12 TWP. 33S RANG. DW 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	N		4 1/2	KB	2780	
LINER						
TUBING						
OPEN HOLE			7 7/8	KB	2700	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>1-14-94</u>	DATE <u>1-14-94</u>	DATE <u>1-14-94</u>	DATE _____
TIME <u>1100</u>	TIME <u>0130</u>	TIME <u>0300</u>	TIME _____

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE	1	HCO
CENTRALIZERS	6	WCO
BOTTOM PLUG		
TOP PLUG	5W	
HEAD	Fac Grip	
PACKER	Insert	
OTHER	Full UP	

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
B. Sauber	64781	Liberal
T. Poye	48120	Liberal
Sumner	53576-76900	Liberal
	Bulk	
	52857-75817	Houston
RELEASED		
MAY 24 1995		
FROM CONFIDENTIAL		
FEB 24		
CONFIDENTIAL		

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.-LB. _____ IN.
GELLING AGENT TYPE _____ GAL.-LB. _____ IN.
FRIC. RED. AGENT TYPE _____ GAL.-LB. _____ IN.
BREAKER TYPE _____ GAL.-LB. _____ IN.
BLOCKING AGENT TYPE _____ GAL.-LB. _____
PERFFAC BALLS TYPE _____ QTY. _____
OTHER _____
OTHER _____

DEPARTMENT Cement
DESCRIPTION OF JOB Cement 1/2 prod. CSS
JOB DONE THRU: TUBING CASING ANNULUS TBG/ANN.
CUSTOMER REPRESENTATIVE X Bill Sauber
HALLIBURTON OPERATOR Bill Sauber COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	225	HLC	H	B	1/2# Flac 1/4	1.84	12.7
	150	50/50 Pwr.	H	B	3% KCl	1.28	14.3

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FEB 28 1994

PRESSURES IN PSI

CIRCULATING _____ DISPLACEMENT _____
BREAKDOWN _____ MAXIMUM _____
AVERAGE _____ FRACTURE GRADIENT _____
SHUT-IN: INSTANT _____ 5-MIN. _____ 15-MIN. _____
HYDRAULIC HORSEPOWER _____
ORDERED _____ AVAILABLE _____ USED _____
AVERAGE RATES IN BPM _____
TREATING _____ DISPL. _____ OVERALL _____
CEMENT LEFT IN PIPE _____
FEET 33 REASON Shoe JT

SUMMARY

PRESLUSH: BBL.-GAL. _____
LOAD & BKDN: BBL.-GAL. _____
TREATMENT: BBL.-GAL. _____
CEMENT SLURRY: BBL.-GAL. 1 x 90 73.7 Tall 34
TOTAL VOLUME: BBL.-GAL. _____
VOLUMES TYPE FW
CONSERVATION DIVISION
Wichita, Kansas
DISPL. BBL.-GAL. 408

REMARKS

CUSTOMER: Ensign Operations
LEASEE: Lanacher
WELL NO.: 1-12
JOB TYPE: W/O L.S.I.
DATE: 1-14-94

CUSTOMER **Ensign Operating** WELL NO. **1-12** LEASE **Langacher** JOB TYPE **4 1/2 LIS** TICKET NO. **648 162**

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	2300							Called out
	0130							on loc Rig LDDP
	0300							start CSG
	0505							CSG on Bottom CONFIDENTIAL
	0520							circulate w/ris
	0545	7	73.7					mix lead
	0557	4	34					mix tail
	0604	0	0				0	wash up pumps + lines DROP Plug
	0608	6				200 < 600		start Disp
	0623	1	4.3			600 < 1100		Bump Plug
	0630							Release Pressure Float Held.
								KCO
								FEB 24
								CONFIDENTIAL
								ORIGINAL
								ORIGINAL
								RELEASED
								MAY 24 1995
								FROM CONFIDENTIAL
								RECEIVED
								STATE CORPORATION COMMISSION
								FEB 28 1994
								CONSERVATION DIVISION Wichita, Kansas
								Job complete Thank You For Calling Halliburton! Bill Gault and crew.



JOB SUMM/ Y

HALLIBURTON DIVISION
HALLIBURTON LOCATION

Midland
Liberal KS

BILLED ON TICKET NO. 574585

WELL DATA

FIELD _____ SEC. 12 TWP. 33^W RNG. 32^W 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 Speed MUD WT. 910
PACKER TYPE _____ SET AT _____
BOTTOM HOLE TEMP. _____ PRESSURE _____
MISC. DATA _____ TOTAL DEPTH 640

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	N	24	8 7/8	KB	635	1300
LINER						
TUBING						
OPEN HOLE			12 1/4	BL	640	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

JOB DATA

CALLER	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE 1-11-94	DATE 1-11-94	DATE 1-11-94	DATE 1-11-94
TIME 11:00	TIME 13:30	TIME 14:50	TIME 15:30

TOOLS AND ACCESSORIES		
TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR	1	
FLOAT-SHOE 8 1/2	1	Hawco
GUIDE SHOE TX		
CENTRALIZERS 3-4	2	
BOTTOM PLUG		
TOP PLUG 5-0	1	
HEAD 02PC	1	
PACKER 4000	1	
OTHER		

PERSONNEL AND SERVICE UNITS		
NAME	UNIT NO. & TYPE	LOCATION
T Bohannon 87748	40076 HU	Liberal KS
N Tate 20568	52823 P 75374 P	" "
M Howe F 7343	4673 B 7620 B	Hugoton KS

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.-LB. _____ IN
GELLING AGENT TYPE _____ GAL.-LB. _____ IN
FRIC. RED. AGENT TYPE _____ GAL.-LB. _____ IN
BREAKER TYPE _____ GAL.-LB. _____ IN
BLOCKING AGENT TYPE _____ GAL.-LB. _____ IN
PERFPAC BALLS TYPE _____ QTY. _____
OTHER _____
OTHER _____

DEPARTMENT 5001
DESCRIPTION OF JOB 010
JOB DONE THRU: TUBING CASING ANNULUS TBG/ANN.
CUSTOMER REPRESENTATIVE X TADAVIS
HALLIBURTON OPERATOR T. Bohannon COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
1	200	HBC P+		B	2% EC, 1/4" PLACER	2.06	12.3
2		P+		B	2% EC	1.32	14.8

SUMMARY

PRESSURES IN PSI _____ 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. 38
SHUT-IN: INSTANT _____ 5-MIN _____ 15-MIN _____ CEMENT SLURRY: BBL.-GAL. 73.3 + 35.2
HYDRAULIC HORSEPOWER _____ TOTAL VOLUME: BBL.-GAL. _____
ORDERED _____ AVAILABLE _____ USED _____
AVERAGE RATES IN BPM _____
TREATING _____ DISPL. _____ OVERALL _____
CEMENT LEFT IN PIPE _____
FEET 42 REASON JAC

CONFIDENTIAL

ORIGINAL

FEB 2 4 1994
CONFIDENTIAL

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CORPORATION COMMISSION

FEB 2 8 1994

CONSERVATION DIVISION
Wichita, Kansas

CUSTOMER: Ensign Operations
LEASE: Langacker
WELL NO.: 1-12
JOB TYPE: 010
DATE: 1-11-94

JOB LOG FORM 2013 R-4

CUSTOMER <i>Ensign Op.</i>	WELL NO. <i>1-12</i>	LEASE <i>Lengachrr</i>	JOB TYPE <i>010</i>	TICKET NO. <i>574585</i>
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CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	<i>11:00</i>							<i>Call out</i>
	<i>13:30</i>							<i>on hoc</i>
	<i>13:45</i>							<i>Start 8 3/8 CSG in Hole</i>
								CONFIDENTIAL
	<i>15:00</i>	<i>6</i>				<i>200</i>		<i>200 3/4 HLC PL</i>
		<i>"</i>				<i>"</i>		<i>"</i>
	<i>15:13</i>	<i>"</i>				<i>"</i>		<i>150 3/4 PL</i>
		<i>"</i>				<i>"</i>		<i>"</i>
	<i>15:17</i>	<i>-</i>				<i>-</i>		<i>Stop Drop Plug</i>
	<i>15:15</i>	<i>6</i>				<i>100</i>		<i>Displ w Hg</i>
		<i>2</i>	<i>28</i>			<i>150</i>		<i>REC FEB 24</i>
	<i>15:30</i>	<i>✓</i>	<i>38</i>			<i>150</i>		<i>CONFIDENTIAL</i>
								<i>Plug Down Float Holding</i>
								ORIGINAL
								<i>Com T To Surface 12 bbls</i>
								RELEASED
								MAY 24 1995
								FROM CONFIDENTIAL
								RECEIVED
								STATE CORPORATION COMMISSION
								FEB 28 1994
								CONSERVATION DIVISION
								Wichita, Kansas
								<i>Thank You Tim & Crew</i>