

COPY TYPE ONE

KCC FEB 23 6-35-33W

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

API NO. 15- 175-21,216
County Seward
NE-NE Sec. 6 Twp. 35S Rgo. 33 X^E_W

Operator: License # 04782

4425 Feet from (S)N (circle one) Line of Section

Name: Ensign Operating Co.

761 Feet from (E)W (circle one) Line of Section

Address 621 17th St.

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

Suite 1800

City/State/Zip Denver, CO 80293

Lease Name Liberal Well # 2-6

Purchaser: Hewco

Field Name Salley SW

Operator Contact Person: J. C. Simmons

Producing Formation Chester

Phone (303) 293-9999

Elevation: Ground 2855' KB 2864.5'

Contractor: Name: Gabbert-Jones #3

Total Depth 6950 PBDT 6630

License: 5842

Amount of Surface Pipe Set and Cemented at 1640 Feet

Wellsite Geologist: John D. Pruitt

Multiple Stage Cementing Collar Used? Yes XX No

Designate Type of Completion
 New Well Re-Entry Workover

If yes, show depth set _____ Feet

Oil SWD SLOW Temp. Abd.
 Gas ENHR SIGV
 Dry Other (Core, WSV, Expl., Cathodic, etc)

If Alternate II completion, cement circulated from _____

feet depth to _____ w/ _____ sx cmt.

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

Drilling Fluid Management Plan Alt
(Data must be collected from the Reserve Pit)

Operator: _____

Chloride content 1925 ppm Fluid volume 12000 bbls

Well Name: _____

Deviating method used evaporation

Comp. Date _____ Old Total Depth _____

Location of fluid disposal if hauled offsite: _____

Deepening Re-perf. Conv. to Inj/SWD
 Plug Back _____ PBDT
 Casing/leg _____ Bucket No. _____
 Dual Completion _____ Bucket No. _____
 Other (SWD or Inj?) _____ Bucket No. _____

Operator Name RELEASED

Lease Name _____ License No. _____

11/21/91 12/5/91 1/8/92
Spud Date Date Reached TD Completion Date

Quarter _____ Sec. _____ Twp. 3 Rng. _____ E/W

County 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 Conni Smith
Title Sr. Engineering Technician Date 1/27/92
Subscribed and sworn to before me this 27th day of January, 19 92.
Notary Public Pamela F. Campbell
Date Commission Expires 9/30/94

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

Operator Name Ensign Operating Co.

Lease Name Liberal

Well # 2-6

Sec. 6 Twp. 35S Rge. 33

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 end 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.)

List All E.Logs Run:
See attached

Log Formation (Top), Depth and Datum Sample

Name Top Datum

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 Additi
Surface	12-1/4	8-5/8	24	1640	HLC	650	2% CaCl ₂
			Tailed in		Class "C"	150	2% CaCl ₂
Production	7-7/8	4-1/2	10.5#	6925	HLC Class "H"	350	.7% Halad 322

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
4	6634-6640 (L. Chester)	7-1/2% NCA, .1% LoSurf 300,	6564-94
2	6564-6594 (Chester)	.2% HA1-60 & 20#/1000 Gal Ferchek A. Displ w/26 Bbls 2% KCl Wtr, .1% LoSurf 300 & 1% Clasta XP. 18000 Gal 70% CO ₂ Foam & 35000# 20/40 Mesh Frac Sd.	6634-6640 6564-6594

TUBING RECORD		Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		2-3/8"	6540'	6540'	
Date of First, Resumed Production, SWD or Inj.			Producing Method		
1/28/92			<input checked="" 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
	5	1,000	0	200	

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: Chester

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FEB 03

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RELEASED

MAR 11 1994

Ensign Operating Company
#2-6 Liberal
Page 3

WELL HISTORY: (continued)

<u>Date</u>	<u>Depth</u>	<u>Formation</u>	<u>Operation</u>
12-03-91	6585'	Chester Sand	Drilling. Made 306' in 24 hrs. VIS 45, MW 9.0, CI 800, pH 8.5 WL 9.4, FC 2/32, LCM 4#, CA 40 WOB 40, RPM 70, PP 1100, SPM 60
12-04-91	6622'	Chester Sand	DST #3. Made 37' in 24 hrs. VIS 50, MW 8.8, CI 900, pH 9.0 WL 8.6, FC 2/32, LCM 6#, CA 20 WOB 40, PRM 70, PP 1100, SPM 60 Lost 10 bbl at 6622' on short trip.
12-05-91	6862'	Spergen	Drilling. Made 240' in 24 hrs. VIS 47, MW 9.0, CI 2400, pH 9.5 WL 9.0, FC 2/32, LCM 4#, CA 80 WOB 45, RPM 70, PP 1150, SPM 60
12-06-91	6950' DTD 6931' LTD 6946.03' STD	Spergen	Logging. Made 88' in 24 hrs. VIS 47, MW 9.0, CI 2400, pH 9.5 WL 9.0, FC 2/32, LCM 4#, CA 80 WOB 45, RPM 70, PP 1550, SPM 60

FROM CONFIDENTIAL

FORMATION TOPS:

<u>Formation</u>	<u>Sample</u>	<u>Datum</u>	<u>E. Log</u>	<u>Datum</u>
Herrington			2612'	(+ 254')
Council Grove			3050'	(- 184')
Heebner	4340'	(-1474')	4345'	(-1479')
Toronto	4360'	(-1494')	4357'	(-1491')
Lansing	4473'	(-1607')	4493'	(-1627')
Kansas City	4780'	(-1914')	4782'	(-1916')
Marmaton	5192'	(-2326')	5191'	(-2327')
Cherokee	5504'	(-2638')	5499'	(-2633')
Atoka	5684'	(-2818')	5678'	(-2812')
Morrow	5865'	(-2999')	5860'	(-2994')
Lower Morrow	6144'	(-3278')	6140'	(-3274')
Chester	6173'	(-3307')	6178'	(-3312')
Chester	6496'	(-3630')	6491'	(-3625')
St. Louis	6702'	(-3836')	6696'	(-3830')
Spergen	6830'	(-3964')	6825'	(-3959')

COPY

GABBERT-JONES, INC.
WICHITA, KANSAS
DRILLERS' WELL LOG

KCC
FEB 03
CONFIDENTIAL

WELL NAME: LIBERAL # 2-6
SEC: 6-35S-33W
SEWARD COUNTY, KS

COMMENCED: 11-21-91

RELEASED

COMPLETED: 12-7-91

MAR 11 1994

OPERATOR: ENSIGN OPERATING CO.

FROM CONFIDENTIAL

Depth		Formation	Remarks
From	To		
0	770	Sand-Clay-Redbed	Ran 38jts of 24# 8 5/8" csg LD@ 1640' w/650sks
770	2350	Redbed	
2350	2530	Lime-Shale	Litwt 1/4 #FS 2% CC 150sks Class C 2%CC
2530	2988	Shale-Lime	
2988	3213	Lime-Shale	PD@ 12:00Noon 11-22-91
3213	3595	Shale-Lime	
3595	3769	Lime-Shale	Ran 157jts of 10 1/2 # 4 1/2" csg LD@ 6925'w/360
3769	3953	Shale-Lime	
3953	4205	Lime-Shale	sks class H PD@ 4:00am 12-7-91
4205	4534	Shale-Lime	
4534	4672	Lime-Shale	
4672	5038	Shale-Lime	
5038	5181	Lime-Shale	
5181	5465	Shale-Lime	
5465	5586	Lime-Shale	
5586	5888	Shale-Lime	
5888	6099	Lime-Shale	
6099	6322	Shale-Lime	
6322	6455	Lime-Shale	
6455	6862	Shale-Lime	
6862	6950	Lime	

6950-TD

STATE OF KANSAS
COUNTY OF SEDGWICK

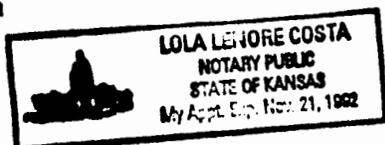
) I, the undersigned, being duly sworn on oath,
) state that the above Drillers' Well Log is true
) and correct to the best of my knowledge and
belief and according to the records of this office.

GABBERT-JONES, INC.


James S. Sutton, II. -- President

Subscribed & sworn to before me this
December 9TH 1991


Lola Lenore Costa



My commission expires Nov.21, 1992