KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
September 1999
Form Must Be Typed

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

COPY

Operator: License # 6194
Name: ESP Development, Inc.
Address: 17746 177th. Boulevard
City/State/Zip: Paradise, Kansas 67658
Purchaser: EOTT
Operator Contact Person: Bud Eulert
Phone: (785) 998-4413
Contractor: Name: Vonfeldt Drilling, Inc.
License: 9431
Wellsite Geologist: Randy Kilian

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Designate Type of Completion:
✓ New Well ___ Re-Entry ___ Workover
✓ Oil ___ SWD ___ SIOW ___ Temp. Abd.
___ Gas ___ ENHR ___ SIGW
___ Dry ___ Other (Core, WSW. Expl., Cathodic, etc)

If Workover/Re-entry: Old Well Info as follows:
Operator:
Well Name:
Original Comp. Date: ___ Original Total Depth: ___
___ Deepening ___ Re-perf. ___ Conv. to Enhr./SWD
___ Plug Back ___ Plug Back Total Depth
___ Commingled Docket No.
___ Dual Completion Docket No.
___ Other (SWD or Enhr.?) Docket No.

05/07/2003	05/15/03	05/15/03
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 167-23229-0000
County: Russell
N/2 SW SW Sec. 27 Twp. 11 S. R. 15 ☐ East ☑ West
1075 feet from (S) / N (circle one) Line of Section
4515 feet from (E) W (circle one) Line of Section
Footages Calculated from Nearest Outside Section Corner:
(circle one) NE SE NW (SW)
Lease Name: Hagaman Well #: 1
Field Name: Hagaman North
Producing Formation: Arbuckle
Elevation: Ground: 1823 Kelly Bushing: 1828
Total Depth: 3377 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at 213 Feet
Multiple Stage Cementing Collar Used? [X] Yes ☐ No
If yes, show depth set 905' Feet
If Alternate II completion, cement circulated from
feet depth to w/ sx cmt.

Drilling Fluid Management Plan (Data must be collected from the Reserve Pit) ALT II WR 10-8-03
Chloride content 56000 ppm Fluid volume 400 bbls
Dewatering method used Allow to dry and backfill
Location of fluid disposal if hauled offsite:
Operator Name:
Lease Name: License No.:
Quarter Sec. Twp. S. R. ☐ East ☐ West
County: Docket No.:

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, 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 of 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: Lewis Eulert
Title: President Date: 8-18-03
Subscribed and sworn to before me this 18th day of August, 2003.
Notary Public: Donna Super
Date Commission Expires: 2/9/2005

DONNA SUPER
Notary Public - State of Kansas
My Appt. Expires 2/9/2005

KCC Office Use ONLY
N Letter of Confidentiality Attached
If Denied, Yes ☐ Date:
✓ Wireline Log Received
✓ Geologist Report Received
___ UIC Distribution

Side Two

Operator Name: ESP Development, Inc. Lease Name: Hagaman Well #: 1

Sec. 27 Twp. 11 S. R. 15 ☐ East ☑ West County: Russell

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems 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 test, along with final chart(s). Attach extra sheet if more space is needed. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken (Attach Additional Sheets) ☒ Yes ☐ No

Samples Sent to Geological Survey ☐ Yes ☒ No

Cores Taken ☐ Yes ☒ No

Electric Log Run (Submit Copy) ☒ Yes ☐ No

List All E. Logs Run: Compensated density/neuron log
Dual indction log
Micro log
Cement bond log

☒ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Anhydrite	900'	+928
Base	937'	+891
Topeka	2670'	-842
Heeb. Sh.	2921'	-1093
Toronto	2940'	-1112
Lansing	2973'	-1145
Base Kc.	3227'	-1399
Arbuckle	3284'	-1456
T.D.	3377'	-1549

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	# Sacjs Used	Type and Percent Additives
Surface	12¼"	8 5/8"new	20#	212'	60/40 Poz	150	2% cc 2% gel
Bot. Stage Production	7 7/8"	5 ½" used	14#	3374'	ASC	150	500Gal WFR
Top stage Production	7 7/8	5½" used	14#	905'	60/40	275	6%gel ¼#Flo seal

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose: ___ Perforate ___ Protect Casing ___ Plug Back TD ___ Plug Off Zone	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives

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
2 shots	3290-96'	250 gal. 15% NE Acid	

TUBING RECORD Size 8 7/8 Set At 3333' Packer At — Liner Run ☐ Yes ☒ No

Date of First, Resumerd Production, SWD or Enhr. First Prod. 6-12-03 Producing Method ☐ Flowing ☒ Pumping ☐ Gas Lift ☐ Other (Explain)

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
42 BBls.	42 BBls.	0	0		28

Disposition of Gas n/a ☐ Vented ☐ Sold ☐ Used on Lease (If vented, Submit ACO-18.)

METHOD OF COMPLETION ☐ Open Hole ☒ Perf. ☐ Dually Comp. ☐ Commingled ☐ Other (Specify)

Production Interval

DRILL STEM TESTS

COPY

NO	INTERVAL	IFP/TIME	ISIP/TIME	FFP/TIME	FSIP/TIME	IHP/FHP	RECOVERY
2	LKc D 3012- 3035'	14# 20# 30"	468# 30"	20# 34# 60"	475# 60"	1446# 1407#	380' GIP 50' H,O,G,W,C,Mud
1	LKc A-D 2954- 3006'	18# 51# 30"	475# 30"	54# 83# 30"	465# 60"	1421# 1394#	75' GIP 90' Mud w/ S.O. 60' M,Wtr.
3	LKc J-K 3145- 3200'	16# 29# 30"	570# 30"	29# 53# 60"	609# 60"	1532# 1492#	350' GIP 90' O,G,Mud 30% Oil
4	Arb. 3282- 3303'	20# 71# 30"	902# 45"	76# 145# 60"	879# 90"	1613# 1568#	325' G,Oil grav 28°
5							
6							
7							
8							

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ORIGINAL

DRILLERS WELL LOG

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Date Commenced: May 7, 2003
Date Completed: May 15, 2003

ESP Development, Inc.
Hagaman #1
85'N & 105'E N/2 SW SW
Sec. 27-11S-15W
Russell County, Kansas

Elevation: 1823' G.L.
1828' K.B.

0 – 165' Lime
165 – 903' Sand & Shale
903 – 933' Anhydrite
933 – 1248' Sand & Shale
1248 – 2135' Shale
2135 – 3377' Shale & Lime
3377 R.T.D.

FORMATION DATA

Anhydrite	**903'**
Base Anhydrite	**933'**
Topeka	**2675'**
Heebner	**2920'**
Lansing Kansas City	**2970'**
Arbuckle	**3377'**

Surface Pipe: **Set 23#, new, 8 5/8" casing @ 213' with 150 sacks 60/40 Poz., 2% Gel., 3% CC.**

Production Pipe: **Set 14#, used, 5 ½" casing @ 3374' with 275 sacks 60/40 Poz., 6% Gel., ¼# flocele per sack. 2nd Stage – 150 sacks ASC, 2% Gel., 500 gallon WFR/2.**

