TATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE
E210

perator: License	5210
Lek	esack Oil Production Inc.
	P.O. Box 11 489
	Hays, Kansas 67601
City/State	/Zip
rchaser:	
	Rex Curtis
Phone (<u>9</u>]	13 ₎ 625-5444
intractor: Name:	Sterling Drilling Co.
	#5142
License: _	#5142
ilaite Sectoriat	. Steve McClain
Andusta tabe of	Completion
X Dry	SWD SIOW Temp. Abd. ENHR SIGW Other (Core, WSW, Expl., Cathodic, etc) ry: old well info as follows:
Òperator:	·
Well Name:	
Comp. Date	Old Total Depth
Despening	Re-perf Conv. to Inj/SWD
Plug Back	d Docket No.
Commingle	d Docket No
Dual Comp	letion Docket No
OTHER (5M	u or inj?) Docket No.
1 20 07	2 4 62 7-4-4/ (476)
	Date Reached TD Completion Date
	Date Reached TD Completion Date
pud Date	Date Reached TD Completion Date
oud Date	

API NO. 15- 047-21420,0000 Edwards County _____C _NW, sec. 13 _ Twp. 26 _ Rge. 17 14201 Feet from S(N) (circle one) Line of Section 1150 Feet from E(V) (circle one) Line of Section Footages Calculated from Nearest Outside Section Corner: NE. SE. (NV or SV (circle one) - , Parker Lease Name Field Name D & A Producing Formation ° 2113 2104 Elevation: Ground _ Total Bepth ____ 4670' PBTD Amount of Surface Pipe Set and Cemented at $_442\,$ KB Multiple Stage Cementing Collar Used? ______ Yes ___X If yes, show depth set _____ If Alternate II completion, cement circulated from Drilling Fluid Management Plan D+A, 3-25-98 U.C. (Data must be collected from the Reserve Pit) Chloride content 48,000 ppm Fluid volume 760 bbls Dewatering method used Vac. Truck (Grt.Plains) Location of fluid disposal if hauled offsite: Oill Production Inc. of Ksli License No. 8061 Palmatire -SWD Twp. 25s s Rng. 16W E/W Quarter Sec. 16 D-20983 County <u>Edward</u>s _ Docket No.

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	ex lentio
Title Sec-Treas	Date 3/16/97
Subscribed and sworn to 19 97. Notary Public Atella	before se this 13 day of March ESTELLA YUNK Notary Public, State of warrs, My Appt. Exp. 1012198
Date Commission Expires	6/2/98

DMLY islity Attached ed :elved
PPNGPA Other (Specify)
1

ORIGINAL

Sterling Drilling Company, Rig #4

Box 1006, Pratt, Kansas 67124-1006 Office Phone (316) 672-9508, Fax 672-9509

SAMPLE LOG

15-047-21420

Parker 1-13

LOCATION:

170' West and 100' South of C

Section

3 T 26S R 17W

Edwards

County, Kansas

OWNER:

Lebsack Oil Production, Inc.

COMMENCED:

28-Jan-97

CONTRACTOR:

Sterling Drilling Company, Rig #4

COMPLETED:

04-Feb-97

TOTAL DEPTH:

DRILLER

4670 FEET

LOGGER

445 FEET

1140 FEET

1155 FEET

4515 FEET

4574 FEET

4669 FEET

LOG

0 - 195 FEET

Top Soil and Sand

195 -

Shale

445 -

Clay and Sandstones

1140 -

Anhvdrite

Chert

1155 -

Lime and Shale

4515 -

4== 4

4574 - 4669 FEET

Shale and Sandstone and Chert

CASING RECORDS

SPUD @ 9:45 am on 1-28-97. Drilled 12-1/4" hole to 445'. Ran 10 joints of New 23# 8-5/8" surface casing, 428.36' set at 442'KB. Cemented with 275 Sacks 60/40 Poz, 2% Gel, 3% CC. Plug down @ 5:00pm 1-28-97 by Allied with good returns, Ticket # 4798.

The well was plugged by Allied, ticket # 4750.

Heavy mud from 4670' to 1160' then 50 sacks,

heavy mud to 450' then 40 sacks,

heavy mud to 40' then 10 sacks,

15 sacks in the rathole and 10 sacks in the mousehole.

Plug down at 4:45 am on 2-5-97 using 60/40 Poz, 6% Gel,

Plugging orders received from Kevin Straub on 1-30-97.

DEVIATION SURVEYS

3/4 DEG. @

445 FEET

1-1/2 DEG.

4540 FEET

ALLIED CEMENTING CO., INC. -4798

REMIT TO	P.O. BOX 31
	RUSSELL, KANSAS 67665

CONDITIONS" listed on the reverse side.

ORIGINAL SERVICE POINT:

·		=
DATE - 28-97 SEC. TWP. RANGE 17	CALLED OUT ON LOCATION 3:00 PM	JOB START JOB FINISH
LEASE Parker WELL# 1-13, LOCATION Palm	SINDE 2/2011, 2/45 E/5	COUNTY STATE
OLD OR NEW (Circle one)	-	
CONTRACTOR Sterling Dole.	OWNER Same	. 0
TYPE OF IOR Such a (OWNER	CEMENT
HOLE SIZE 13/4"\ T.D. 445'	-	CLIMENT
CASING SIZE 85% NAM 23 DEPTH445'	AMOUNT ORDERED 275	0. 60/Ja 230 had
TUBING SIZE DEPTH	3% (, C.	
DRILL PIPE DEPTH	£100 (, C.)	
TOOL DEPTH		
PRES. MAX MINIMUM	COMMON	@
MEAS. LINE SHOE JOINT	POZMIX	@ []
CEMENT LEFT IN CSG. 15'	GEL	@ 13
PERFS. Ding = 27 1/2 bbl s.	CHLORIDE	
1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
		<u> </u>
EQUIPMENT		
	-	
PUMP TRUCK CEMENTER 1	· · · · · · · · · · · · · · · · · · ·	
# 181 HELPER Box B	HANDLING	
BULK TRUCK	MILEAGE	
#,26 DRIVER Keiner R.	- MILLAGE	
BULK TRUCK		
# DRIVER	_	TOTAL
10/40 312. Pumped Plus with your	DEPTH OF JOB <u>445</u> 'PUMP TRUCK CHARGE	
water.	EXTRA FOOTAGE	
	MILEAGE PLUG 85/8 u2003.8 A	@
Chroma Gid toward	brogle 9-58 mp093 V)	
1		@
- X market		@
		TOTAL
CHARGE TO: Labrach. Oil Production Inc	-	10 M D
STREET P.O P. W. 489		UIPMENT
CITY Hous STATE No ZIP 67601-	<u>.</u>	
1040		@
·		@
		@
		@
		TOTAL
	TAX	
To Allied Cementing Co., Inc.		
You are hereby requested to rent cementing equipment	TOTAL CHARGE	
and furnish cementer and helper to assist owner or	DISCOUNT	IF PAID IN 30 DAYS
contractor to do work as is listed. The above work was		1, 11110 111 00 11110
done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND		

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 wilful 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.

4750 SERVICE POINT: REMIT TO P.O. BOX 31 RUSSELL, KANSAS 67665 11 ORIGINAL ON LOCATION JOB FINISH RANGE 7w 8:00 m STATE LOCATION Trousdale Lot 2/200 2/45 = 5 Edware WELL# 1-13 OLD OR NEW (Circle one) . T.D. 445 AMOUNT ORDERED 1256/40 6/0 del .. DEPTH **TUBING SIZE** DRILL PIPE DEPTH Land Bridge & State & Commence See Sterre - DEPTH _@_610_457.50 _____ COMMON_____75 PRES. MAX SHOE JOINT POZMIX @ 3.15_ 157.50 MEAS. LINE GEL @ 9,50 57,00 CEMENT LEFT IN CSG. CHLORIDE Contraction of the Contraction **EQUIPMENT** Bereger Removed as a refer to a first **PUMP TRUCK** 224 HANDLING_ **BULK TRUCK** Seas Francisco MILEAGE_ BULK TRUCK . TOTAL 1053,25 DRIVER Later Contract Contra Willey Jananing & Mart & Oak 11 1 1 1 1777 - 1 2017 1/1 m. 1 1 **SERVICE** REMARKS: the petrological of the graph of 1140 DEPTH OF JOB 505xe 450 PUMP TRUCK ! [ARGE EXTRA FOOTA E 40 @<u>_&\&</u>\ MILEAGE $R_{-}H_{-}$ DI y Hole domin no s

TOOL

116

40 Sx e 10 sxe 15 5x TOTAL 6/0.50 FLOAT EQUIPMENT

TOTAL _

at his expectly to the sur

Light to a March to be Ming to be on high a rightle

and the transfer of the state o

one to the first of the first of the formander we

ORIGINAL

GEOLOGICAL REPORT

Wayne Lebsack, Petroleum Geologist and Steve E. McClain, Geologist 01 21 C 11 EXI LMI 11130 2050 SVSTUN 1130 2050 SVSTUN

Lebsack Oil Production, Inc.

Parker 1-13 (Dry Hole)

170'W and 100'S of C NW/4 of Sec. 13 26s-17W Edwards County, Kansas API # 15-047-21,4200000

Contractor: Sterling Drilling Company, Rig #4

Date Commenced: January 28, 1997, Spud at 9:45 am

Date Rotary Completed: February 4, 1997, RTD at 3:00 am

Total Depth: RTD = 4670′, LTD = 4669′

Casing Record: Surface - 8-5/8" set at 442' KB cemented with 275 sx.

Elevations: Ground Level = 2104', Kelly Bushing = 2113'

All Measurements taken from KB

Drilling Time Logged: 2200' to 4670' (RTD)

Samples Logged: 3850' to 4670' (10' samples)

Open Hole Logs: Halliburton Logging Services, Inc. - Compensated Density

Dual Spaced Neutron Log, Dual Induction Laterlog, Fracture Finder Micro-Seismogram, Computer Analyzed

Log.

Cased Hole Log: Dry Hole.

Gas Detector: MBC Well Logging and Leasing, Meade, KS - Hotwire and

Chromatograph from 1900' to 4670' (RTD).

Mud Company: MUDCO, Chemical Mud, Displace at 3445'.

ORIGINAL

GEOLOGICAL FORMATION TOPS

FORMATION TOP	ELECTRIC LOG DEPTH	DRILLING TIME DEPTH	SUB-SEA DEPTH (E-LOG)
Anhydrite Top	1140	1146	+973
Anhydrite Base	1155	1157	+958
Heebner Shale	3854	3858	-1741
Brown Limestone	3990	3993	-18 <i>77</i>
Lansing	4002	4004	-1889
BKC	4306	4307	-2193
Cherokee Shale	4454	4459	-2341
Cherokee Sand	4492	4491	-2379
Erosional Miss. Chert	4514	4516	-2401
Mississippian Chert	4532	4528	-2419
Kinderhook Shale	4564	4566	-2451
Kinderhook Sand	4591	4592	-2478
Viola	4640	4640	-2527
Total Depth	4669	4670	-2556

INTERVALS CONTAINING HYDROCARBONS

II		
Herington to Topeka		
II Meringian ia Laneka		
Figure 1 opens		
"		

The gas detector unit was running from above the Herington through 3620', but it was rigged up in the wrong configuration. According to MBC a strong gas kick would have registered through this interval. No kicks were logged, but the shallow gas zones in this area should still be evaluated on a structurally higher well. The unit was functioning properly from 3620' to RTD and was checked every 8 hours.

Topeka to Top of Erosional Mississippian	3620' to 4514'	

No shows or gas kicks were observed through this interval.

Erosional Mississippian Chert	4514' to 4522'	9' Thick	Gas
Liosional Wilssissippian Cher	1511 10 1522	J IIIICK	l Cas

Samples from this conglomerate chert were yellow/white with some multi-colored, rounded and sandy. Some granular light yellow chert was noted with fair porosity. A tarry oil stain was observed in some of the chert samples and some bleeding gas was observed. A 16 unit hotwire, and a 4 unit chromatograph kick was noted. This zone was tested by DST #1.

E-log Calculations show a Water Saturation average of 70% in this interval.

Mississippian Chert	4532' to 4557'	25' Thick	Gas/Oil

Interval from 4532-4540'

Samples from this chert were white and mostly weathered. Intergranular and vuggy porosity was observed with a fair to good show of light gravity oil and bleeding gas. Some fresh bone white chert was also noted. The interval from 4537-40' seemed to have the best porosity and show.

A 40 unit hotwire, and a 19 unit chromatograph kick was noted. This zone was tested by DST #1.

E-log Calculations show a Water Saturation average of 60% (4532'-36') and an average of 80% from 4537' to 4540'.

INTERVALS CONTAINING HYDROCARBONS

Mississippian Chert	4532' to 4557'	25' Thick	Gas/Qil
THISSISSIPPIGHT CHIST	1882 (8 (88)		Gus/ O !!

Interval from 4541-4557'

Samples from this chert were white and only 50% weathered. Fair intergranular and vuggy porosity was observed in the weathered pieces with a fair show of light gravity oil and bleeding gas. Some edge staining was observed in this interval. Several pieces were fossiliferous. The show in this interval was not as good as the upper Mississippian.

A 30 unit hotwire, and a 19 unit chromatograph kick was noted. This zone was tested by DST #2

E-log Calculations show a Water Saturation average of 80% for the interval from 4532 - 4557'.

Kinderhook Sandstone	4592' to 4627'	35' Thick	No Show

Samples from this sandstone were brown to white and fine grained. Some samples were friable but most were cemented by calcite. Fair intergranular porosity was noted throughout this interval. Some dark white spicule chert and yellow/white opaque chert was observed from 4610' to 4626'. No shows or gas kicks were noted while drilling this interval.

E-log Calculations show a Water Saturation averages as follows:

```
from 4591-4600' average = 70%

4601'-4614' average = 78%

4615'-4620' average = 60%

4621'-4627' average = 65%
```

The interval from 4595' to 4623' was tested after logging by straddle DST #3.

Viola Chert	4640′ - 4670′	30' Thick	No Show

Samples from this chert were yellow/white with some multi-colored. No weathering or visible porosity was observed. An abundant rust red bleeding shale was noted throughout this chert interval. No gas kicks were logged.

DRILL STEM TEST RESULTS

DST #1 Upper Mississippian Chert (4475'-4540')

IFP	75-100	45 min.	Blow to bottom of bucket in 1.75 min.
ISIP	952	60 min.	No blow back
FFP	106-133	60 min.	Blow from bottom dec. to weak blow.
FSIP	981	90 min.	No blow back

Recovered 125' Mud with a show of oil between shut-in and hydraulic tools. No gas observed while breaking apart pipe, but the derrick hand smelled gas ½ of the way out with the test.

DST #2 Lower Mississippian Chert (4540'-4572')

IFP	63-63	45 min.
ISIP	1143	60 min.
FFP	94-105	60 min.
FSIP	1185	90 min.

Recovered 500' Gas-in-pipe, 150' total fluid made up of: 30' Slightly oil cut mud < 1% oil, 60' of thin mud with a show of oil, 60' of watery mud ~ 50% water (water chlorides 32,000).

DST #3 Kinderhook Sandstone (4595'-4623' E-log) Straddle after logging.

IFP	63-52	30 min.
ISIP	1268	30 min.
FFP	73-635	30 min.
FSIP	619	60 min.

Recovered 30' of drilling mud. No shows.

Parker 1-13 LOG STRUCTURAL COMPARISON

FORMATION TOPS	Parker 1-13	Rose Mathes 1-13	Mathes #1	Newsome 1-14
Anhydrite	+973	+977	Not logged	Not logged
Base of Anhydrite	+958	+966	Not logged	Not Logged
Heebner Shale	-1741	-1732	-1728	-1 <i>7</i> 37
Brown Ls	-1877	-1870	-1866	-1872
Lansing	-1889	-1881	-1880	-1886
BKC	-2193	-2188	-2183	-2193
Cherokee Shale	-2341	-2336	-2335	-2340
Cherokee Sandstone	-2379	-2364	. ?	?
Erosional Miss. Chert	-2401	Absent	-2380	Absent
Mississippian Chert	-2419	-2407	-2392	-2390
Kinderhook Shale	-2451	-2436	-2448	NDE
Kinderhook Sandstone	-2478	-2449	-2463	NDE
Viola Chert	-2527	-2503	-2552	NDE
Total Depth	-2556	-2535	-2476	-2411

PARKER 1-13 WELL SUMMARY

The Parker 1-13 well ran structurally low to the NE offset (Rose Mathes 1-13) and the SW offset (Mathes #1) from the Heebner Shale to the top of the Mississippian Chert. The Cherokee Sandstone was not developed and tight in this test well.

The Parker 1-13 Mississippian did contain good sample and gas detector shows, but drill stem tested tight without any gas to surface. Pressures recorded by DST #1 and #2 show that the Parker 1-13 had not been significantly affected (or drained) by the Mathes #1. DST #1 and #2 fluid recoveries were mainly drilling mud with some formation water, but no large water drive reservoir was encountered.

Due to the low Mississippian permeability, poor DST's and low structural position it was decided to plug and abandon the Parker 1-13.

RECOMMENDATION

After drilling this well it appears that the water recovered by the Rose Mathes 1-13 (Cherokee SS and Miss. Test) must have come primarily from the Cherokee Sand. This would make the Rose Mathes 1-13 a potential commercial Mississippian gas well. The plugging report for the Rose Mathes 1-13 is attached, but it is the opinion of Sterling Drilling Company that it could not be properly washed down due to the 50 sack cement plug set at 1130'.

As the Parker lease expires on November 11,1997 additional log and geological interpretation will conducted to determine if the Rose Mathes 1-13 well should be twined or offset. One must keep in mind that this quarter is irrigated and might not be available for drilling until the next crop is harvested.

Seismic data might also shed some light on this quarter as the low structure that the Parker 1-13 encountered was completely unexpected.

Submitted by,

Steve E. McClain, Geologist

Wayne Leosack, Petroleum Geologist