

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

**ORIGINAL** KCC  
APR 21  
**CONFIDENTIAL**

20,787-00-00  
153-20,788

Operator: License # 6875  
Name: Marmik Oil Company  
Address 200 N. Jefferson, Suite 500  
City/State/Zip El Dorado, AR 71730  
Purchaser: None

Operator Contact Person: Curtis Morrill  
Phone (501) 862-8546

Contractor: Name: Abercrombie  
License: 5422 5-13-93

Wellsite Geologist: Curtis Morrill

Designate Type of Completion  
 New Well  Re-Entry  Workover  
 Oil  SWD  S10W  Temp. Abd.  
 Gas  ENHR  SIGW  
 Dry  Other (Core, WSW, 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. \_\_\_\_\_  
4/1/92 4/7/92 4/8/92  
Spud Date Date Reached TD Completion Date

API NO. 15- 153-20,788  
County Rawlins  
S/2 - SW - NE - \_\_\_\_\_ Sec. 16 Twp. 1 Rge. 35  E  W  
2970 Feet from (S/N (circle one) Line of Section  
1980 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 Berdean Well # 1  
Field Name Wildcat  
Producing Formation None  
Ground 3183 KB 3188

RELEASED

Total Depth 4439 PBSD \_\_\_\_\_  
Amount of Surface Pipe Set and Cemented at 296 Feet  
Cementing Collar Used?  Yes  No  
If yes, show depth set \_\_\_\_\_ Feet  
If Alternate II completion, cement circulated from \_\_\_\_\_  
feet depth to \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

MAY 13 1993

FROM CONFIDENTIAL

Drilling Fluid Management Plan AITZ DFM  
(Data must be collected from the Reserve Pit)  
Chloride content 550 ppm Fluid volume 350 bbls  
Dewatering method used evaporation  
Location of fluid disposal if hauled offsite: \_\_\_\_\_  
Operator Name \_\_\_\_\_  
Lease Name \_\_\_\_\_ License No. \_\_\_\_\_  
Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S Rng. \_\_\_\_\_ E/W  
County \_\_\_\_\_ 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 Curtis Morrill  
Title Geologist Date 4/16/92  
Subscribed and sworn to before me this 16 day of April, 1992.  
Notary Public Kay B. Risor  
Date Commission Expires 2-2-01

K.C.C. OFFICE USE ONLY  
F  Letter of Confidentiality Attached  
C  Wireline Log Received  
S  Geologist Report Received  
RECEIVED  
APR 23 1992  
STATE CORPORATION COMMISSION  
DISTRIBUTION  
KCC \_\_\_\_\_ SWD/Rep \_\_\_\_\_ NGPA  
KGS \_\_\_\_\_ Plug \_\_\_\_\_ Other \_\_\_\_\_  
(Specify)  
Wichita, Kansas

4-23-92

Operator Name Marmik Oil Company Lease Name Berdean Well # 1

Sec. 16 Twp. 1 Rge. 35  
 East  
 West

County Rawlins

**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 (Attach Additional Sheets.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Log	Formation (Top), Depth and Datums	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Anhydrite	3080 + 108	
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Oread	4014 - 826	
List All E.Logs Run:	Dual Induction Radiation Guard Comp. Den/Comp. Neu.	Lansing	4127 - 939	
		DST #1 4147-4250 40-30-30-30	Rec 80'm w/os	
		IFF 66-67# SIP 779-594#		
		FFP 70-70# HP 2067-2054#		

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"	20#	296	60/40 poz	205	3%cc 2%gel

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

TUBING RECORD	Size	Set At	Packer At	Liner Run <input type="checkbox"/> Yes <input type="checkbox"/> No

Date of First, Resumed Production, SWD or Inj.	Producing Method
	<input 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

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 \_\_\_\_\_

ORIGINAL



KCC

REMIT TO: P.O. BOX 951046 DALLAS, TX 75395-1046

INVOICE

HALLIBURTON SERVICES

APR 21

A Halliburton Company

CONFIDENTIAL

INVOICE NO.	DATE
163849	04/06/1992

WELL LEASE NO./PLANT NAME		WELL/PLANT LOCATION		STATE	WELL/PLANT OWNER	
BENJAMIN 1		RAWLINS		KS	HARNIK OIL CO.	
SERVICE LOCATION		CONTRACTOR	JOB PURPOSE		TICKET DATE	
OBERLIN		AMERICAN OIL DRUG	PLUGGING A WELL		04/06/1992	
ACCT. NO.	CUSTOMER AGENT	VENDOR NO.	CUSTOMER P.O. NUMBER	SHIPPED VIA	FILE NO.	
543450	HAROLD KALL			COMPANY TRUCK	32379	

DIRECT CORRESPONDENCE TO:

MAIL BOX 1000000000  
2000 WEST PARK AVENUE  
SUITE 2050  
OKLAHOMA CITY, OK 73102-5601

MAIL BOX 1000000000  
2000 WEST PARK AVENUE  
SUITE 2050  
OKLAHOMA CITY, OK 73102-5601

PRICE REF. NO.	DESCRIPTION	QUANTITY	U/M	UNIT PRICE	AMOUNT
000-07	MATERIAL	40	KL	2.60	104.00
090-00	MATERIALS FOR DRILLING JOB	1	TRK	370.00	370.00
090-08	MATERIALS FOR DRILLING JOB-ADD	12	HR	84.00	840.00
090-07	CONCRETE FOR CEMENT	10	YD	90.00	900.00
500-00	STEEL PIPE	115	LB	7.14	813.96
500-00	POPEYE	75	EA	3.90	296.40
500-00	HALLIBURTON 4% SLOTTED	7	EA	14.75	103.25
500-00	HALLIBURTON 4% SLOTTED	0	EA	.00	N/C
500-00	FLUOR	23	LB	1.30	32.50
500-00	BURR	195	FT	1.15	236.90
500-00	MATERIALS FOR DRILLING JOB	345	MI	.80	277.04
500-00	STEEL PIPE	38	EA	7.14	278.46
500-00	POPEYE	26	EA	3.90	101.40
500-00	HALLIBURTON 4% SLOTTED	0	EA	.00	N/C
500-00	HALLIBURTON 4% SLOTTED	3	EA	14.75	44.25
500-00	FLUOR	16	LB	1.30	20.80
500-00	BURR	71	FT	1.15	81.65
500-00	MATERIALS FOR DRILLING JOB	119	MI	.80	94.50
TOTAL					3,785.11
TAX (8%)					1,059.80
TOTAL DUE					2,725.31

RELEASED  
5-13-93  
MAY 13 1993

FROM CONFIDENTIAL

RECEIVED  
STATE CORPORATION COMMISSION  
APR 27 1992  
4-23-92

TERMS INVOICES PAYABLE NET BY THE 20TH OF THE FOLLOWING MONTH AFTER DATE OF INVOICE, UPON CUSTOMER'S DEFAULT IN PAYMENT OF CUSTOMER'S ACCOUNT BY THE LAST DAY OF THE MONTH FOLLOWING THE MONTH IN WHICH THE INVOICE IS DATED, CUSTOMER AGREES TO PAY INTEREST THEREON AFTER DEFAULT AT THE HIGHEST LAWFUL CONTRACT RATE APPLICABLE BUT NEVER TO EXCEED 18% PER ANNUM. IN THE EVENT IT BECOMES NECESSARY TO EMPLOY AN ATTORNEY TO ENFORCE COLLECTION OF SAID ACCOUNT, CUSTOMER AGREES TO PAY ALL COLLECTION COSTS AND ATTORNEY FEES IN THE AMOUNT OF 20% OF THE AMOUNT OF THE UNPAID ACCOUNT.



BULK MATERIALS DELIVERY

ORIGINAL AND TICKET CONTINUATION

FOR INVOICE AND TICKET NO. 163849-4

APR 2 1

DATE <b>4-29-92</b>	CUSTOMER ORDER NO.	WELL NO. AND FARM <b>Borden #1</b>	COUNTY <b>LeFlore</b>	STATE <b>Ks</b>
CHARGE TO <b>Marmik Oil Co</b>	OWNER <b>Marmik Oil Co.</b>	CONTRACTOR <b>Abercrombie</b>	No. <b>B 113947</b>	
MAILING ADDRESS	DELIVERED FROM <b>Oberlin, Ks</b>	LOCATION CODE <b>25329</b>	PREPARED BY <i>[Signature]</i>	
CITY & STATE	DELIVERED TO <b>W/Atwood, Ks</b>	TRUCK NO. <b>4718</b>	RECEIVED BY <i>[Signature]</i>	

PRICE REFERENCE	SECONDARY REF. OR PART NO.	CODE		DESCRIPTION	UNITS 1		UNITS 2		UNIT PRICE	AMOUNT	
		L	D		QTY.	MEAS.	QTY.	MEAS.			
<del>504308</del>				<del>18 Std. Cont</del>	<del>50</del>	<del>sk</del>			<del>7.14</del>	<del>357.00</del>	
504308				18 Std. Cont	39	sk			7.14	278.46	
506105				18 202 Mix 'A'	26	sk			3.90	101.40	
506121				18 Halliburton Tan Gel Added 2%	1	sk				N/C	
507277				18 Halliburton Gel Added 4%	3	sk			14.50	44.25	
507210				18 Flocele 1/4#1sk	16	lb			1.30	20.80	
<del>509406</del>				<del>18 Calcium Chloride In S. Sk</del>	<del>20</del>	<del>sk</del>			<del>2.65</del>	<del>53.00</del>	
<p>RELEASED 9-13-93 MAY 13 1993</p> <p>FROM CONFIDENTIAL</p> <p style="text-align: center; font-size: 2em; opacity: 0.5;">THIS IS NOT AN INVOICE</p> <p style="text-align: right;">RECEIVED KANSAS CORPORATION COMMISSION APR 23 1992 4-23-92 CONSERVATION DIVISION WICHITA, KS</p>											
				Returned Mileage Charge	TOTAL WEIGHT	LOADED MILES	TON MILES				
				SERVICE CHARGE ON MATERIALS RETURNED				CU. FEET			
500207				SERVICE CHARGE				<del>71</del> 71 1/2		81.65	
500306				Mileage Charge	<del>10,600</del> 5906	40		<del>2,113</del> 12	1.80	94.50	
					TOTAL WEIGHT	LOADED MILES	TON MILES			<del>1,677.70</del>	
No. <b>B 113947</b>					CARRY FORWARD TO INVOICE			SUB-TOTAL		<del>621</del> 06	

CUSTOMER

**ORIGINAL AND PRE-TREATMENT DATA KCC**

ATTACH TO INVOICE & TICKET NO. 163846-1

DISTRICT Pratt, Ks. DATE APR 21 3-31-92

TO: **HALLIBURTON SERVICES** YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO: Marmik Oil (CUSTOMER) AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

WELL NO. #1 LEASE Berdean SEC. 16 TWP. 1 RANGE 35  
FIELD \_\_\_\_\_ COUNTY Rawlins STATE Ks. OWNED BY \_\_\_\_\_

**THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT**

FORMATION NAME \_\_\_\_\_ TYPE \_\_\_\_\_  
FORMATION THICKNESS \_\_\_\_\_ FROM \_\_\_\_\_ TO \_\_\_\_\_  
PACKER: TYPE \_\_\_\_\_ SET AT \_\_\_\_\_  
TOTAL DEPTH 298' MUD WEIGHT \_\_\_\_\_  
BORE HOLE 12 1/4"  
INITIAL PROD: OIL \_\_\_\_\_ BPD, H<sub>2</sub>O \_\_\_\_\_ BPD, GAS \_\_\_\_\_ MCF  
PRESENT PROD: OIL \_\_\_\_\_ BPD, H<sub>2</sub>O \_\_\_\_\_ BPD, GAS \_\_\_\_\_ MCF

	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
CASING	N	20"	8 5/8"	KB	296	
LINER						
TUBING						
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

**RECEIVED**  
KANSAS CORPORATION COMMISSION  
APR 23 1992  
4-23-92  
CONSERVATION DIVISION  
WICHITA, KS

PREVIOUS TREATMENT: DATE \_\_\_\_\_ TYPE \_\_\_\_\_ MATERIALS \_\_\_\_\_

TREATMENT INSTRUCTIONS: TREAT THRU TUBING  ANNULUS  CASING  TUBING/ANNULUS  HYDRAULIC HORSEPOWER ORDERED \_\_\_\_\_  
Cement 8 5/8" Surface Csg. w/ 205 sks. 60/40-28 Gel-3% C.C.

*As directed*

**CUSTOMER OR HIS AGENT WARRANTS THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES**

- As consideration, the above-named Customer agrees: **THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED**
- To pay Halliburton in accord with the rates and terms stated in Halliburton's current price list. Invoices are payable NET by the 20th of the following month after date of invoice. Upon Customer's default in payment of Customer's account by the last day of the month following the month in which the invoice is dated, Customer agrees to pay interest thereon after default at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event it becomes necessary to employ attorneys to enforce collection of said account, Customer agrees to pay all collection costs and attorney fees in the amount of 20% of the amount of the unpaid account.
  - To defend, indemnify, release and hold harmless Halliburton, its divisions, subsidiaries, parent and affiliated companies and the officers, directors, employees, agents and servants of all of them from and against any claims, liability, expenses, attorneys fees, and costs of defense to the extent permitted by law for:
    - Damage to property owned by, in the possession of, or leased by Customer, and/or the well owner (if different from Customer), including, but not limited to, surface and subsurface damage. The term "well owner" shall include working and royalty interest owners.
    - Reservoir, formation, or well loss or damage, subsurface trespass or any action in the nature thereof.
    - Personal injury or death or property damage (including, but not limited to, damage to the reservoir, formation or well), or any damages whatsoever, growing out of or in any way connected with or resulting from pollution, subsurface pressure, losing control of the well and/or a well blowout or the use of radioactive material.

The defense, indemnity, release and hold harmless obligations of Customer provided for in this Section b) and Section c) below shall apply to claims or liabilities contributed to by Halliburton's negligence, strict liability, or the unseaworthiness of any vessel owned, operated, or furnished by Halliburton or any defect in the data, products, supplies or materials furnished by Halliburton whether in the preparation, design, manufacture, distribution, or marketing thereof, or from a failure to warn any person of such defect. Such defense, indemnity, release and hold harmless obligations of Customer shall not apply where the claims or liability are caused by the gross negligence or willful misconduct of Halliburton. The term "Halliburton" as used in said Sections b) and c) shall mean Halliburton, its divisions, subsidiaries, parent and affiliated companies, and the officers, directors, employees, agents and servants of all of them.
  - That because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, Halliburton is unable to guarantee the effectiveness of the products, supplies or materials, nor the results of any treatment or service, nor the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by Halliburton. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be liable for and Customer shall indemnify Halliburton against any damages arising from the use of such information.
  - That Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.
  - That Customer shall, at its risk and expense, attempt to recover any Halliburton equipment, tools or instruments which are lost in the well and if such equipment, tools or instruments are not recovered, Customer shall pay Halliburton its replacement cost unless such loss is due to the sole negligence of Halliburton. If Halliburton equipment, tools or instruments are damaged in the well, Customer shall pay Halliburton the lesser of its replacement cost or the cost of repairs unless such damage is caused by the sole negligence of Halliburton. In the case of equipment, tools or instruments for marine operations, Customer shall, in addition to the foregoing, be fully responsible for loss of or damage to any of Halliburton's equipment, tools or instruments which occurs at any time after delivery to Customer at the landing until returned to the landing, unless such loss or damage is caused by the sole negligence of Halliburton.
  - To waive the provisions of the Deceptive Trade Practices - Consumer Protection Act, to the extent permitted by law.
  - That this contract shall be governed by the law of the state where services are performed or materials are furnished.
  - That Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.

SIGNED [Signature] CUSTOMER  
DATE 3-31-92  
TIME 1600 A.M. P.M.

We certify that the Fair Labor Standards Act of 1938, as amended, has been complied with in the production of goods and/or with respect to services furnished under this contract.

**CUSTOMER**

ORIGINAL

WELL DATA

FIELD \_\_\_\_\_ SEC. 16 TWP. 1 RNG. 35 COUNTY Rawlins 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 298

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	N	20"	8 5/8"	KB	296	
LINER						
TUBING						
OPEN HOLE						SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

JOB DATA

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		KCC
FLOAT SHOE		APR 21
GUIDE SHOE		CONFIDENTIAL
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG	LA-10	5 5/8" 1ea. Haico
HEAD		
PACKER		
OTHER		

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>3-31-92</u>	DATE <u>3-31-92</u>	DATE <u>3-31-92</u>	DATE <u>3-31-92</u>
TIME <u>1330</u>	TIME <u>1535</u>	TIME <u>1829</u>	TIME <u>1905</u>

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
E. Reynolds	KLm HT-400	
K. Legg	3243 Bm	Oberlin, Ks.
J. Moore		Oberlin, 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. 513.93 %

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. \_\_\_\_\_

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

OTHER \_\_\_\_\_

OTHER \_\_\_\_\_

RECEIVED KANSAS CORPORATION COMMISSION

APR 23 1992 4-23-92

CONSERVATION DIVISION WICHITA, KS

DEPARTMENT Cementing

DESCRIPTION OF JOB Cement 8 5/8" Surface Csg.

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

CUSTOMER REPRESENTATIVE [Signature]

HALLIBURTON OPERATOR [Signature] COPIES REQUESTED \_\_\_\_\_

CEMENT DATA

STAGE	NUMBER OF SACKS	CEMENT	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
	205	60140		286eL-38C.C.		1.28	14.4

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 15 REASON Requested

SUMMARY

VOLUMES

PRESLUSH: BBL-GAL 5.0 TYPE water

LOAD & BKDN: BBL-GAL \_\_\_\_\_ PAD: BBL-GAL \_\_\_\_\_

TREATMENT: BBL-GAL \_\_\_\_\_ DISPL. BBL-GAL 18.3

CEMENT SLURRY: BBL-GAL 46.7

TOTAL VOLUME: BBL-GAL \_\_\_\_\_

REMARKS

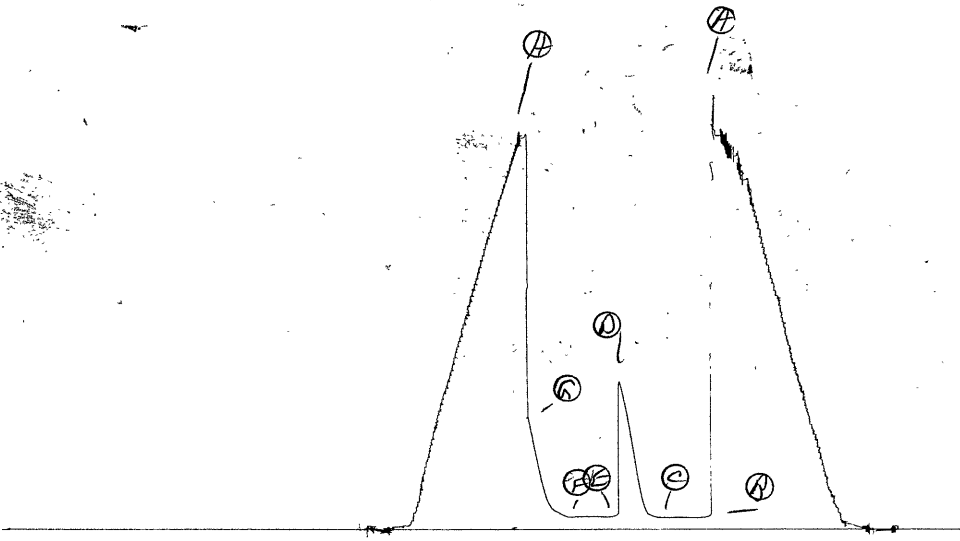
See Job log  
Cement did Circulate  
Thank you

CUSTOMER: Marmak Oil  
LEASE: Berdand  
WELL NO: #1  
JOB TYPE: 8 5/8" Surface Csg  
DATE: 3-31-92

6233

KT 18874

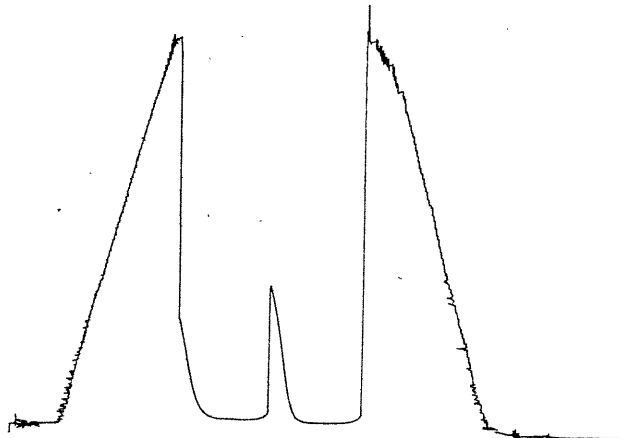
7



Bill

KT 18874

0



KCC  
APR 21  
CONFIDENTIAL

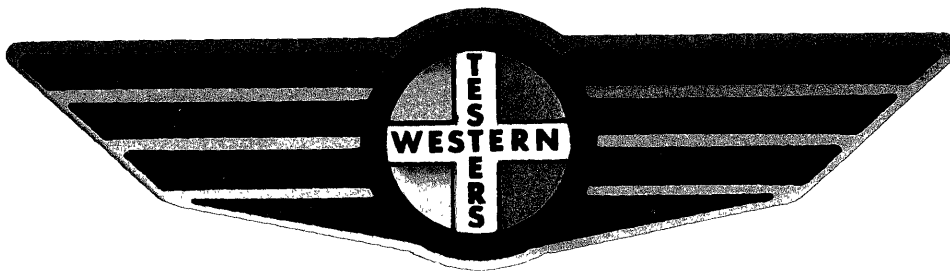
# FORMATION

# TEST

# REPORT

RELEASED

APR 13 1993  
5-13-93  
FROM CONFIDENTIAL



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone (316) 262-5861

**RECEIVED**  
KANSAS CORPORATION COMMISSION

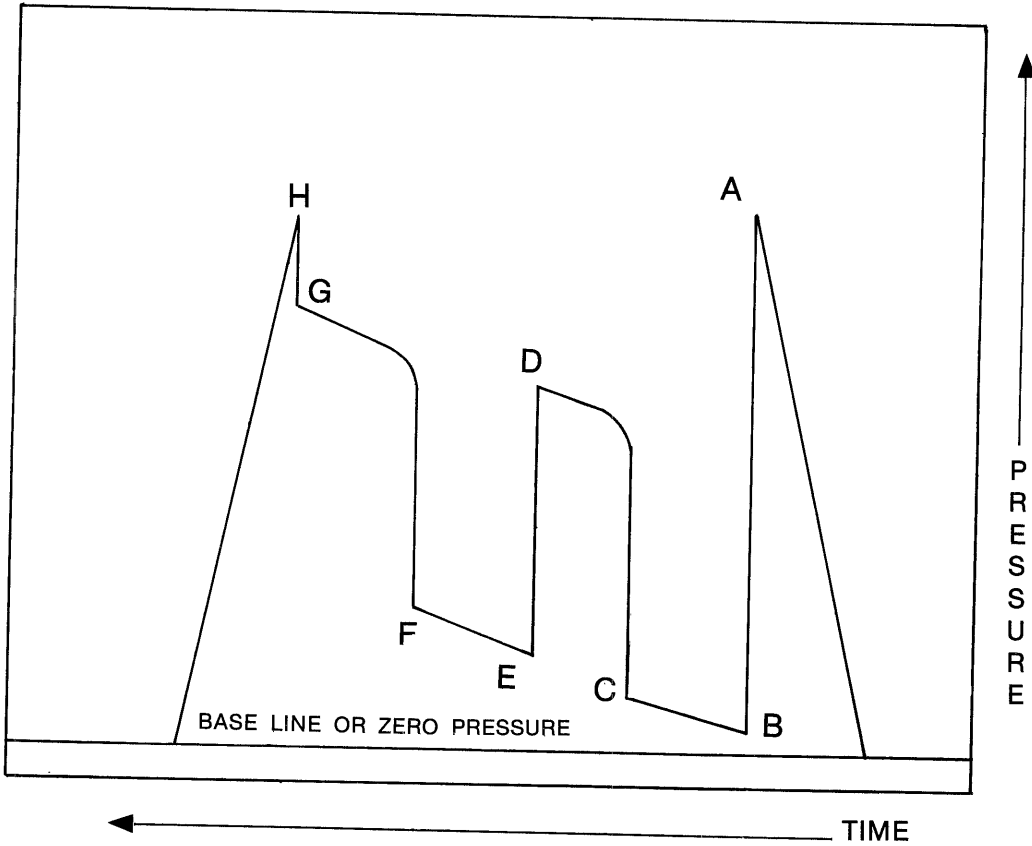
APR 23 1992  
4-23-92  
CONSERVATION DIVISION  
WICHITA, KS



### COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

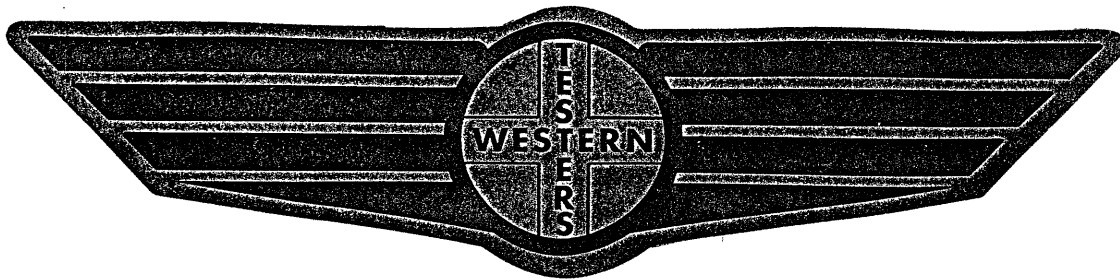
### AK-1 Recorders



- A - Initial Hydrostatic
- B - First Initial Flow
- C - First Final Flow
- D - Initial Shut-In

- E - Second Initial Flow
- F - Second Final Flow
- G - Final Shut-In
- H - Final Hydrostatic

# FORMATION TEST REPORT



Home Office:

Wichita, Kansas 67201

P.O. Box 1599

Phone 1 - 800-688-7021

COMPANY MARMIT OIL COMPANY

LEASE & WELL NO. BERDEAN 1

SEC. 16 TWP. 1S RGE. 35W TEST NO.

1 DATE 4/5/92

DST REPORT

GENERAL INFORMATION

DATE : 4/5/92  
CUSTOMER : MARMIK OIL COMPANY  
WELL : 1 TEST: 1  
ELEVATION: 3183 KB  
SECTION : 16  
RANGE : 35W COUNTY: RAWLINS  
GAUGE SN#: 6233 RANGE : 4000  
TICKET : 18874  
LEASE : BERDEAN  
GEOLOGIST: ?  
FORMATION: L K.C. B&C  
TOWNSHIP : 1S  
STATE : KS  
CLOCK : 12

WELL INFORMATION

PERFORATION INTERVAL FROM: 4147.00 ft TO: 4250.00 ft TVD: 4250.0 ft  
DEPTH OF SELECTIVE ZONE: TEST TYPE: OIL  
DEPTH OF RECORDERS: 4175.0 ft 4178.0 ft  
TEMPERATURE: 128.0  
DRILL COLLAR LENGTH: 0.0 ft I.D.: 0.000 in  
WEIGHT PIPE LENGTH : 538.0 ft I.D.: 3.200 in  
DRILL PIPE LENGTH : 3581.0 ft I.D.: 3.800 in  
TEST TOOL LENGTH : 28.0 ft TOOL SIZE : 5.500 in  
ANCHOR LENGTH : 103.0 ft ANCHOR SIZE: 5.500 in  
SURFACE CHOKE SIZE : 0.750 in BOTTOM CHOKE SIZE: 0.750 in  
MAIN HOLE SIZE : 7.785 in TOOL JOINT SIZE : 4.5XH  
PACKER DEPTH: 4142.0 ft SIZE: 6.750 in  
PACKER DEPTH: 4147.0 ft SIZE: 6.750 in  
PACKER DEPTH: 0.0 ft SIZE: 0.000 in  
PACKER DEPTH: 0.0 ft SIZE: 0.000 in

MUD INFORMATION

DRILLING CON. : ABERCROMBIE RIG 4  
MUD TYPE : CHEMICAL VISCOSITY : 50.00 cp  
WEIGHT : 9.200 ppg WATER LOSS: 8.000 cc  
CHLORIDES : 550 ppm  
JARS-MAKE : W.T.C. SERIAL NUMBER: 414  
DID WELL FLOW?: NO REVERSED OUT?: NO

COMMENTS

Comment

INITIAL FLOW PERIOD WEAK STEADY BLOW - 1/2 INCH  
BLOW IN WATER.  
FINAL FLOW PERIOD VERY WEAK BLOW - TOP OF WATER.

DST REPORT (CONTINUED)

FLUID RECOVERY

Feet of Fluid	% Oil	% Gas	% Water	% Mud	Comments
80.0	0.0	0.0	0.0	100.0	MUD W/FEW OIL SPOTS ON TOP, OIL LESS THAN 1%
0.0	0.0	0.0	0.0	0.0	

RATE INFORMATION

OIL VOLUME:	0.0000	STB	TOTAL FLOW TIME:	70.0000	min.
GAS VOLUME:	0.0000	SCF	AVERAGE OIL RATE:	16.3694	STB/D
MUD VOLUME:	0.7957	STB	AVERAGE WATER RATE:	0.0000	STB/D
WATER VOLUME:	0.0000	STB			
TOTAL FLUID :	0.7957	STB			

FIELD TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2067.00

Description	Duration	p1	p End
INITIAL FLOW	40.00	60.00	60.00
INITIAL SHUT-IN	30.00		776.00
FINAL FLOW	30.00	60.00	60.00
FINAL SHUT-IN	30.00		587.00

FINAL HYDROSTATIC PRESSURE: 2057.00

OFFICE TIME & PRESSURE INFORMATION

INITIAL HYDROSTATIC PRESSURE: 2067.00

Description	Duration	p1	p End
INITIAL FLOW	40.00	66.00	67.00
INITIAL SHUT-IN	27.00		779.00
FINAL FLOW	30.00	70.00	70.00
FINAL SHUT-IN	36.00		594.00

FINAL HYDROSTATIC PRESSURE: 2054.00

PRESSURE TRANSIENT REPORT

GENERAL INFORMATION

DATE : 4/5/92	TICKET : 18874
CUSTOMER : MARMIK OIL COMPANY	LEASE : BERDEAN
WELL : 1                      TEST: 1	GEOLOGIST: ?
ELEVATION: 3183 KB	FORMATION: L K.C. B&C
SECTION : 16	TOWNSHIP : 1S
RANGE : 35W                      COUNTY: RAWLINS	STATE : KS
GAUGE SN#: 6233                      RANGE : 4000	CLOCK : 12

INITIAL FLOW

<u>Time</u> <u>(min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	66.00	66.00
5.00	66.00	0.00
10.00	66.00	0.00
15.00	66.00	0.00
20.00	67.00	1.00
25.00	67.00	0.00
30.00	67.00	0.00
35.00	67.00	0.00
40.00	67.00	0.00

INITIAL SHUT IN

<u>Time</u> <u>(min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	75.00	75.00	0.00
6.00	87.00	12.00	0.00
9.00	140.00	53.00	0.00
12.00	234.00	94.00	0.00
15.00	356.00	122.00	0.00
18.00	478.00	122.00	0.00
21.00	593.00	115.00	0.00
24.00	692.00	99.00	0.00
27.00	779.00	87.00	0.00

FINAL FLOW

<u>Time</u> <u>(min)</u>	<u>Pressure</u>	<u>Delta P</u>
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PRESSURE TRANSIENT REPORT (CONTINUED)

FINAL FLOW (CONTINUED)

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>
0.00	70.00	70.00
5.00	70.00	0.00
10.00	70.00	0.00
15.00	70.00	0.00
20.00	70.00	0.00
25.00	70.00	0.00
30.00	70.00	0.00

FINAL SHUT IN

<u>Time (min)</u>	<u>Pressure</u>	<u>Delta P</u>	<u>Horner T</u>
3.00	70.00	70.00	0.00
6.00	70.00	0.00	0.00
9.00	72.00	2.00	0.00
12.00	84.00	12.00	0.00
15.00	95.00	11.00	0.00
18.00	107.00	12.00	0.00
21.00	136.00	29.00	0.00
24.00	188.00	52.00	0.00
27.00	280.00	92.00	0.00
30.00	374.00	94.00	0.00
33.00	476.00	102.00	0.00
36.00	594.00	118.00	0.00